

NSW Health Infrastructure  
**SCH-1/CCCC Redevelopment**  
Infrastructure and Integrated Water  
Management Plan  
Hydraulic & Fire Services

Rev.03 | 21 April 2021

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 274797-00

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Arup Pty Ltd ABN 18 000 966 165



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**ARUP**

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**Appendix A** - Sydney Water pressure and flow results

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# 1 Introduction

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The purpose of this Report is to support the State Significant Development Application (SSDA) No. 10831778 for the Sydney Children's Hospital Stage 1 (SCH-1)/ Children's Comprehensive Cancer Centre (CCCC) at Randwick Hospitals Campus (the project). The proposed development will be designed to comply with the BCA, DDA and all other relevant codes, standards and Authorities requirements.

The Randwick Health and Education Precinct (RHEP) is one of the most comprehensive health innovation districts in Australia. While health care at RHEP has been evolving for over 160 years, the last five years has seen a strengthening of collaboration amongst a wide range of organisations in the precinct, including with government, universities and community.

The project seeks to strengthen the precinct as a world-class centre for health, research and education, driving cutting edge, compassionate and holistic healthcare and wellness programs for the local community and other residents of NSW. The project will deliver brand new, state-of-the-art paediatric health, medical research and education facilities and will assist to transform paediatric services and a key step in realising the vision for the RHEP.

## 1.1 Proposed Development

The project scope includes construction and operation of a new 9 storey building plus 2 basement levels and a plant room to provide:

- A new Emergency Department
- A new Intensive Care Unit
- Short Stay Unit
- Day and Inpatient CCCC oncology units
- Children's Comprehensive Cancer Centre
- Ambulance access, parking, back of house and loading dock services accessed via the lowered Hospital Road
- Integration with the Prince of Wales Acute Services Building and Integrated Acute Services Building, both currently under construction
- Integration with the proposed Health Translation Hub (HTH) which is a facility being developed by UNSW for education, training and research
- Public domain and associated landscaping
- Utilities services works
- Site preparation and Civil works

The project is located on the corner of High Street and Hospital Road, Randwick. The figure below shows the indicative project site plan.

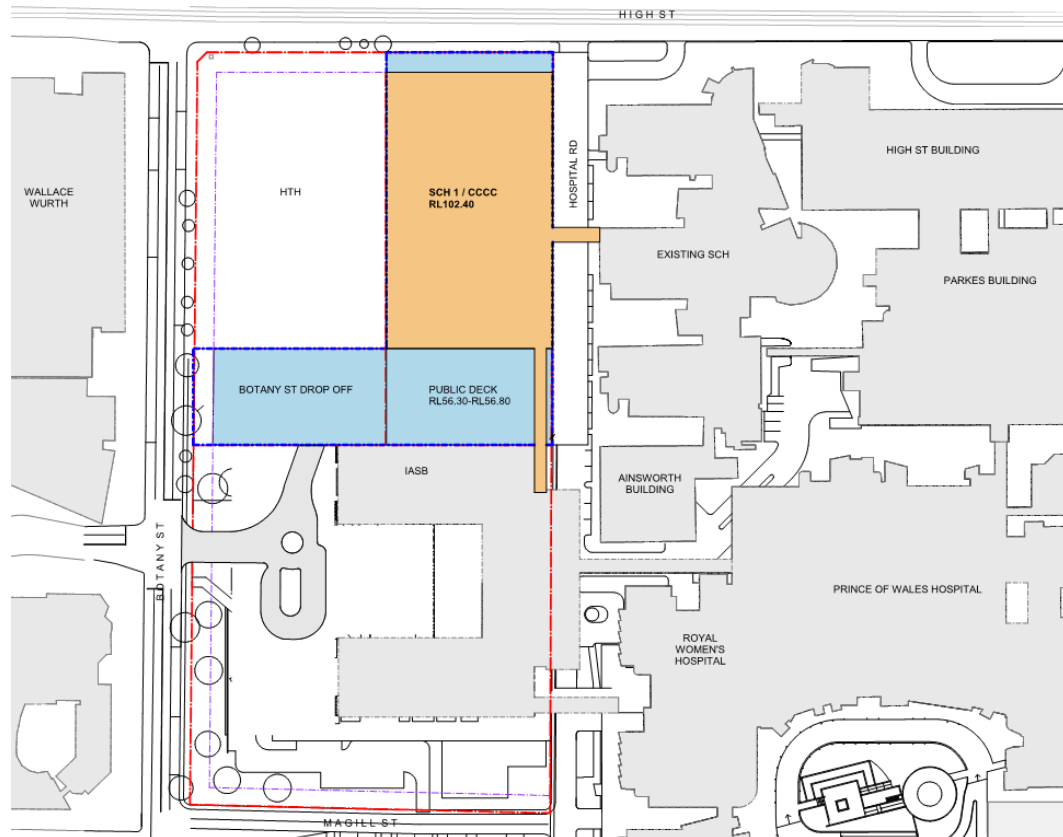


Figure 1 – Indicative project site plan

## 2 Hydraulic and Fire Services Infrastructure

### 2.1 Domestic Cold Water

Existing water mains are available running along roads adjacent to the site at the locations shown below:

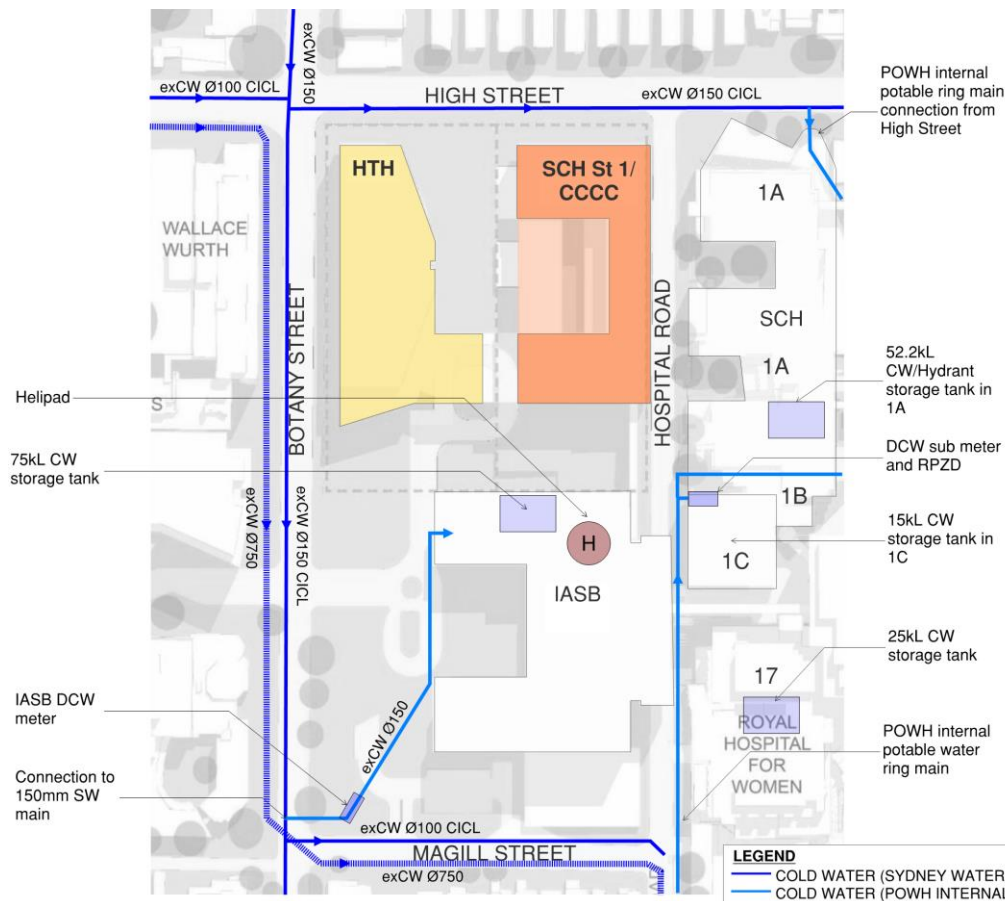


Figure 2 - Cold water infrastructure (utility and private) around the site

As part of the works it is proposed that connections to the 150mm Sydney Water water main in High Street are arranged with two (2) incoming water supplies, each fed off separate Sydney Water mains with an isolation valve in the main between the two connections. This will enable one connection to be shut down while water is supplied from the other side.

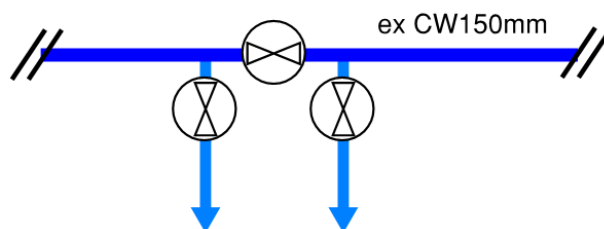


Figure 3 – Sketch of dual connection and separating main valve to provide for redundancy in the water supply.

## 2.2 Sanitary Drainage

Existing sewer mains (utility and private) are available running along adjacent streets at the locations shown below:

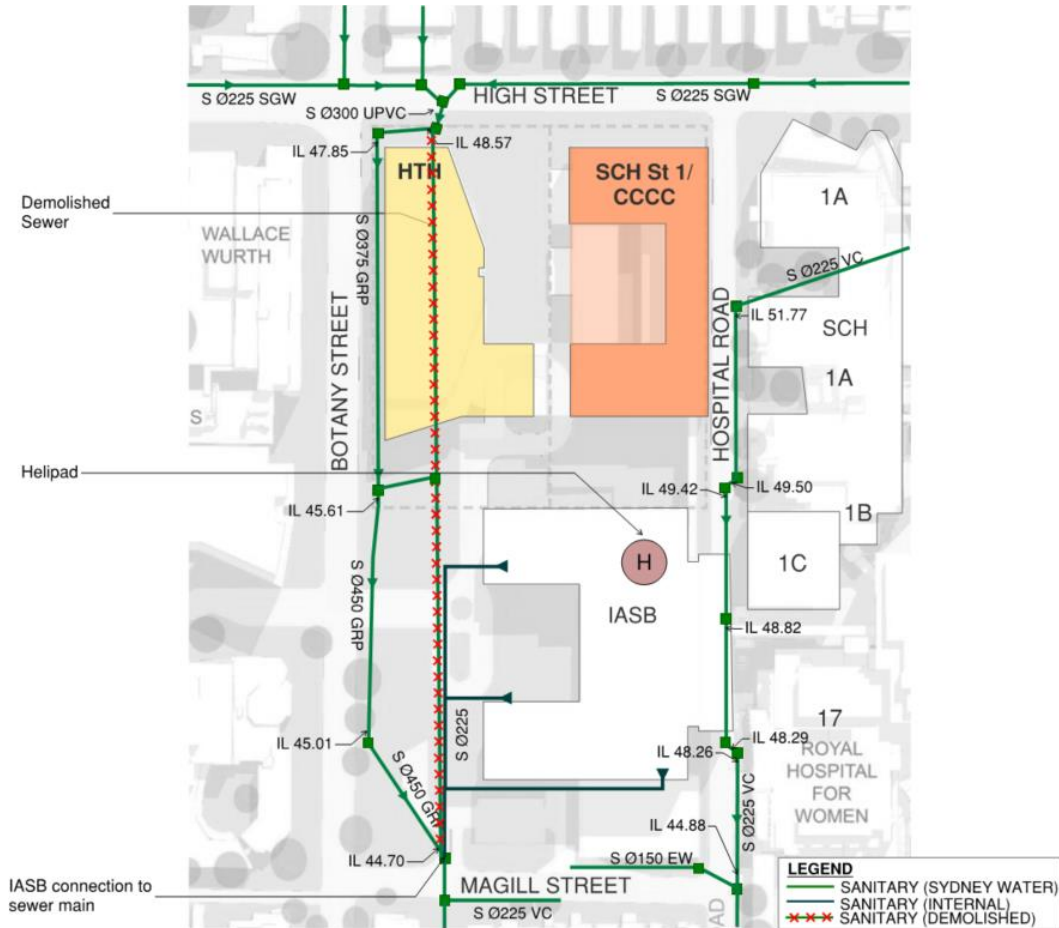


Figure 4 - Sewer infrastructure (utility and private) around the site

It is anticipated that the new sanitary drainage service for the facility of Ø225mm will be connected to the Ø375mm sewer main at Botany Street.

No new connection is anticipated to be required to the authority 225mm sewer main on Hospital Road, however it was noted that the current changes that are being undertaken in Hospital Road might limit the flexibility to redevelop the site in the future.

Assessment works and discussions with the Water Services Coordinator (WSC) were undertaken to assist in enabling future campus development.

As a result, a new sewer service is proposed to extend through to the eastern side of Hospital Road as part of the Stage 1 works. Based on preliminary information from the WSC, it is suggested that the sewer in Botany Street will have capacity to accept the sewer from the existing SCH site. The new sewer line will be designed and installed as an authority sewer service (Sydney Water owned),

therefore it is being further investigated and documented by the WSC.

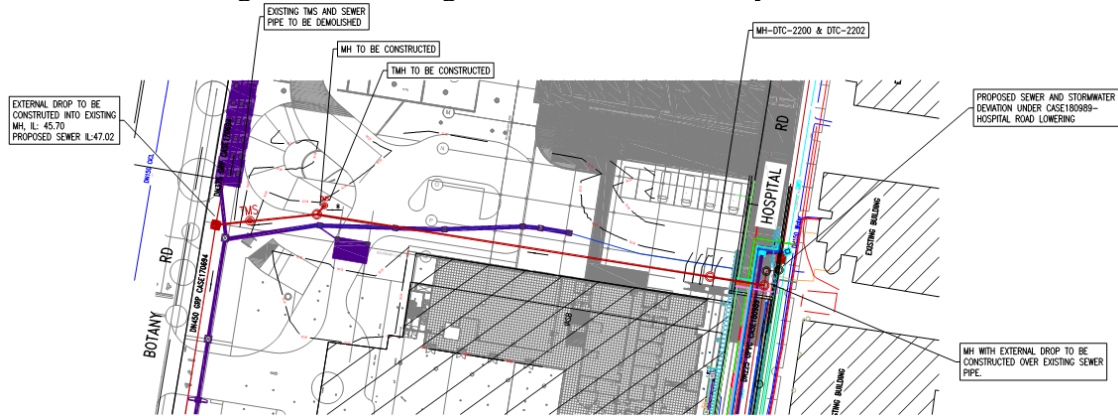


Figure 5 – Snapshot of schematic plan of sewer extension /deviation as preliminary documented by the WSC. Refer to **Appendix B** for full drawing.

## 2.3 Natural Gas Supply

Natural gas is supplied to the existing hospital site by a single Jemena 150mm high pressure 1,050kPa gas line located in Hospital Road. A dedicated gas line branches off the main supply to serve the POWH site via a ring main arrangement, with the main Jemena Authority gas meter and regulator located within the hospital area (outside Building 26).

Natural gas within the existing POWH site and the existing SCH (Building 1A, 1B and 1C) are supplied from the internal 160mm 100kPa hospital gas ring main.

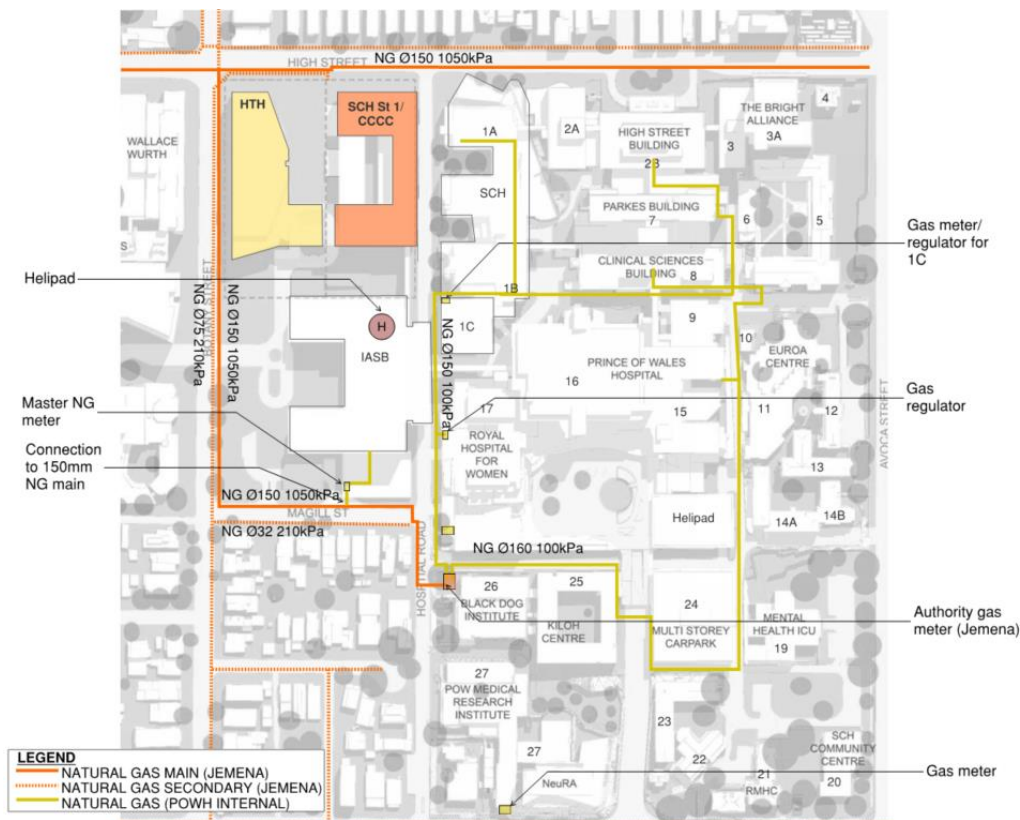


Figure 6 - Natural gas infrastructure (utility and private) around the site



A new natural gas service is proposed to be extended from the existing gas ring main supplied off the existing meter adjacent Building 26 on Hospital Road.

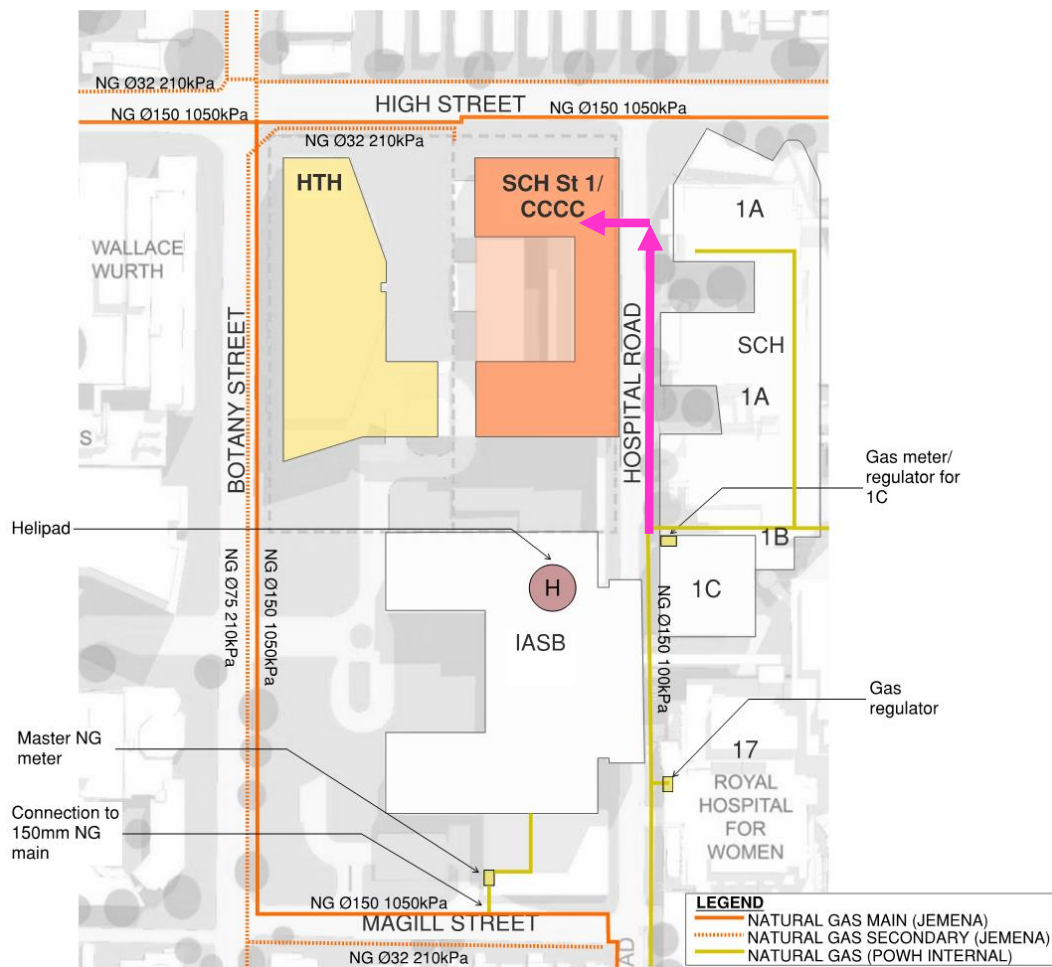


Figure 7 – Proposed natural gas supply strategy to SCH-1/CCCC

Further discussions with Jemena are currently underway to assess existing meter set capacity.



## 3 Outline of Proposed Water Management Systems

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### 3.1 Domestic Cold Water

The domestic cold water for the SCH-1/CCCC will be extended from Sydney Water main with dual connections and separating main valve to provide for redundancy in the water supply.

The incoming domestic cold water (DCW) will pass through the authority water meter assembly and dual backflow prevention device to the requirements of Sydney Water. A dedicated domestic cold water meter room to be located at Level B02 will house DCW water meter, RPZD, DCW transfer pumps and filters.

DCW storage tank, DCW booster pump sets and filtration plant will be located at roof plant room. DCW will serve all fixtures and fittings requiring potable water. It will also provide make-up water to cooling towers and to the rainwater harvesting and re-use system during times of insufficient rainfall.

DCW supplied to cooling towers, main plant equipment and high use areas will be individually sub-metered via pulse type water meters and monitored by the BMCS. This will provide a detailed understanding of water consumption over time and inform any future initiatives to further reduce water consumption.

Laboratory cold water to CCCC floors will be supplied off the building reticulated supply via registered backflow devices.

Backflow prevention will be provided as per AS3500.1-2018 and Health Infrastructure guidelines.

### 3.2 Domestic Hot Water

Domestic hot water (DHW) will be distributed from the roof level hot water plant via a flow and return system. The DHW system will be fed from the DCW supply.

Circulating hot water plant delivery temperatures will be between 60°C - 65°C. Thermostatic mixing valves and tempering valves will be provided at ablution fixtures in accordance with the statutory codes to prevent scalding.

Pressure reducing valves will be provided as required to protect against over pressure and ensure the desired pressure is available at all outlets.

Retail tenancies will be responsible for providing their own electric hot water heaters.

Where gas-fire hot water heaters will be used, gas flues from the heaters will be flued up to roof level to discharge to atmosphere.

Flow control regulators will be provided, where required to limit water consumption. Pipework will be insulated against heat loss and provided with adequate allowance for expansion.

Laboratory hot water to CCCC floors will be supplied off the building reticulated hot water supply via registered backflow devices. The laboratory hot water (after the backflow valve) will be electrically heat traced as a dead leg arrangement.

### 3.3 Fire Hydrant and Sprinkler Systems

A combined fire hydrant and sprinkler system will be provided throughout the building in accordance with the requirements of the NCC, AS2419, AS2118.1, AS2118.6, Fire Engineering requirements and FRNSW requirements.

A new fire protection water supply will be obtained via new connection into Ø150mm Sydney Water main at the High Street, subject to authority confirmation. The incoming fire water supply will be un-metered and pass through a double detector check valve with metered bypass to the requirements of Sydney Water.

A combined fire hydrant and sprinkler FRNSW booster assembly will be located at ground level parallel to High Street.

The building is over 25meters and thus a dual water supply will be required for the combined fire hydrant and sprinkler system. The proposed water supply configuration is comprised of a hydraulically calculated storage tank and a single connection to the town's main and dual electric duty / standby pump sets with emergency generator back up (or one diesel pump + one electric generator backed).

The total height of the building exceeds 50m effective height, therefore an additional fire brigade diesel relay pump will be required.

It is proposed to minimise fire testing water consumption by reusing/recirculating fire test drain water via dedicated fire test tank.

### 3.4 Sanitary Drainage and Trade Waste

The sanitary drainage system will convey wastewater from sanitary fixtures, floor wastes and water appliances through a fully vented modified system to the authority sewer main. All sanitary stack systems will be located within ducts and wet areas. Riser locations will be coordinated with acoustic requirements, with acoustic treatment being provided for all noise-sensitive spaces.

Wet areas that cannot drain by gravity to the sewer will be pumped to the gravity network via a wet well and sewer sump pump. Sewer pumps will be monitored by the BMCS and supported from the base building's back-up power supply.

The sewer drainage system will be provided with overflow relief gullies to protect the building from mains surcharge.

Laboratory trade waste and kitchen grease waste will be collected through a dedicated gravity trade waste drainage system, via a series of branch drains and fully vented modified stacks.

The laboratory trade waste will be connected to the dilution tank prior to discharging to the sewer system.

Wastewater from kitchens producing hot food will be collected via a dedicated gravity trade waste drainage system and pass through grease treatment device prior to connection to the Sydney Water infrastructure.

A holding tank and pump out facility will be provided for the decontamination shower within the ambulance bay.

### 3.5 Rainwater Drainage

The building will be provided with roof drainage design consisting of gravity and/or siphonic drainage systems and full flow emergency overflows discharging to a visible place via the facade.

Rainwater will be collected from roof gutters, balconies and terraces via gravity flow or siphonic rainwater downpipe systems. Multiple locations of rainwater downpipe risers are required to afford full coverage.

Where rainwater is collected for reuse it will be directed to the rainwater harvesting tank, otherwise rainwater will connect directly to the external stormwater drainage network and/or OSD tank (by Civil) via stormwater pits.

### 3.6 Rainwater Harvesting and Recycled Non-Potable Water

The building will be provided with a rainwater harvesting system to capture and treat rainwater landing on the building's roof areas. Rainwater will be captured from part of the roofs via a siphonic stormwater system and discharged into an above-ground rainwater tank located on Level 02. Water will be collected in storage tanks, treated and pumped into a dedicated non potable reticulation within the building to serve:

- Mechanical cooling tower top-up;
- Landscape irrigation.

The non-potable water supply will include pre-treatment via automatic backwash filtration prior to supply to cooling towers and irrigation to maintain water quality. The cooling towers are expected to utilise most of the total non-potable water harvested with the remaining supplied to irrigation.

The size of the rainwater harvesting system and the collected roof areas will be optimised to maximise water re-use without oversizing the system.

In the event of significant rainfall, overflow from the rainwater tank will discharge into the external stormwater infrastructure to ensure safe management of this water to downstream areas.

### 3.7 Sanitary Fixtures and Taps

Sanitary fixtures throughout the new building will be prepared by the Architect in line with NSW Health Guidelines and User Group requirements. Where possible, they will be water efficient to minimise potable water usage.

## 4 ESD Initiatives

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This section provides a brief description of the environmental aspirations proposed for the hydraulic and fire systems. They are subject to development of the overall ESD and sustainability strategy for the building.

The hydraulic and fire systems design will embrace water conservation measures and sustainable initiatives which include:

- Reducing town main water supply by:
  - Reuse / recirculation of fire test drain water.
  - Harvest and reuse building rainwater for irrigation and/or cooling tower supply.
- Reducing water usage at fixtures and fittings where possible, including consideration of low flow fixtures and fitting.
- Reducing water usage across the site by using:
  - Smart metering and monitoring of water use throughout the building
  - Pressure reducing devices on system reticulation.
- Using sustainable materials where appropriate to the project.
- Consideration of increased drainage capacities to reduce flooding of roofs and hard surfaces.

## Appendix A – Sydney Water pressure and flow results

# Statement of Available Pressure and Flow

Elena Longo  
201 Kent Street  
Sydney, 2000

Attention: Elena Longo

Date: 03/07/2020

Pressure & Flow Application Number: 894052  
Your Pressure Inquiry Dated: 2020-06-17  
Property Address: 1 Eurimbla Avenue, Randwick 2031

The expected maximum and minimum pressures available in the water main given below relate to modelled existing demand conditions, either with or without extra flows for emergency fire fighting, and are not to be construed as availability for normal domestic supply for any proposed development.

## ASSUMED CONNECTION DETAILS

Street Name: High Street	Side of Street: South
Distance & Direction from Nearest Cross Street	10 metres West from Hospital Road
Approximate Ground Level (AHD):	57 metres
Nominal Size of Water Main (DN):	150 mm (Target Point as per sketch provided)

## EXPECTED WATER MAIN PRESSURES AT CONNECTION POINT

Normal Supply Conditions	
Maximum Pressure	53 metre head
Minimum Pressure	41 metre head

WITH PROPERTY FIRE PREVENTION SYSTEM DEMANDS	Flow l/s	Pressure head m
Fire Hose Reel Installations (Two hose reels simultaneously)	0.66	41
Fire Hydrant / Sprinkler Installations (Pressure expected to be maintained for 95% of the time)	5	45
	10	44
	15	42
	20	41
	26	39
	30	37
	40	32
	50	25
Fire Installations based on peak demand (Pressure expected to be maintained with flows combined with peak demand in the water main)	5	40
	10	38
	15	37
	20	35
	26	32
	30	30
	40	25
	50	18
Maximum Permissible Flow	52	16

(Please refer to reverse side for Notes)

For any further inquiries regarding this application please email :

[swtapin@sydneywater.com.au](mailto:swtapin@sydneywater.com.au)

## General Notes

This report is provided on the understanding that (i) the applicant has fully and correctly supplied the information necessary to produce and deliver the report and (ii) the following information is to be read and understood in conjunction with the results provided.

1. Under its Act and Operating Licence, Sydney Water is not required to design the water supply specifically for fire fighting. The applicant is therefore required to ensure that the actual performance of a fire fighting system, drawing water from the supply, satisfies the fire fighting requirements.
2. Due to short-term unavoidable operational incidents, such as main breaks, the regular supply and pressure may not be available all of the time.
3. To improve supply and/or water quality in the water supply system, limited areas are occasionally removed from the primary water supply zone and put onto another zone for short periods or even indefinitely. This could affect the supply pressures and flows given in this letter. This ongoing possibility of supply zone changes etc, means that the validity of this report is limited to one (1) year from the date of issue. It is the property owner's responsibility to periodically reassess the capability of the hydraulic systems of the building to determine whether they continue to meet their original design requirements.
4. Sydney Water will provide a pressure report to applicants regardless of whether there is or will be an approved connection. Apparent suitable pressures are not in any way an indication that a connection would be approved without developer funded improvements to the water supply system. These improvements are implemented under the Sydney Water 'Urban Development Process'.
5. Pumps that are to be directly connected to the water supply require approval of both the pump and the connection. Applications are to be lodged online via Sydney Water Tap in™ system - Sydney Water Website – [www.sydneywater.com.au/tapin/index.htm](http://www.sydneywater.com.au/tapin/index.htm). Where possible, on-site recycling tanks are recommended for pump testing to reduce water waste and allow higher pump test rates.
6. Periodic testing of boosted fire fighting installations is a requirement of the Australian Standards. To avoid the risk of a possible 'breach' of the Operating Licence, flows generated during testing of fire fighting installations are to be limited so that the pressure in Sydney Water's System is not reduced below 15 metres. Pumps that can cause a breach of the Operating Licence anywhere in the supply zone during testing will not be approved. This requirement should be carefully considered for installed pumps that can be tested to 150% of rated flow.

## Notes on Models

1. Calibrated computer models are used to simulate maximum demand conditions experienced in each supply zone. Results have not been determined by customised field measurement and testing at the particular location of the application.
2. Regular updates of the models are conducted to account for issues such as urban consolidation, demand management or zone change.
3. Demand factors are selected to suit the type of fire-fighting installation. Factor 1 indicates pressures due to system demands as required under Australian Standards for fire hydrant installations. Factor 2 indicates pressures due to peak system demands.
4. When fire-fighting flows are included in the report, they are added to the applicable demand factor at the nominated location during a customised model run for a single fire. If adjacent properties become involved with a coincident fire, the pressures quoted may be substantially reduced.
5. Modelling of the requested fire fighting flows may indicate that local system capacity is exceeded and that negative pressures may occur in the supply system. Due to the risk of water contamination and the endangering of public health, Sydney Water reserves the right to refuse or limit the amount of flow requested in the report and, as a consequence, limit the size of connection and/or pump.
6. The pressures indicated by the modelling, at the specified location, are provided without consideration of pressure losses due to the connection method to Sydney Water's mains.



## Appendix B – Concept plan of sewer extension /deviation as documented by the WSC



A number line representing distance in metres. The line starts at 0 and ends at 50. Major tick marks are labeled at 0, 10, 20, 30, 40, and 50. Minor tick marks are present every 2 units. The segment from 0 to 10 is shaded with vertical lines.

1. WATER SERVICING COORDINATOR: ACOR CONSULTANTS  
SUITE 2, LEVEL 1, 33 HERBERT ST  
ST LEONARDS NSW 2065  
T +61 2 9438 5098 | F +61 2 9438 5398

HEALTH INFRASTRUCTURE  
LEVEL 14 77 PACIFIC HIGHWAY  
NORTH SYDNEY NSW 2059  
PH: 02 9978 5448

2. THE PROPOSED WORKS DETAILED HEREON ARE TO BE CONSTRUCTED IN ACCORDANCE WITH WSA 02-2002, VER. 2.2 (SYDNEY WATER EDITION) VER. 4, THE SYDNEY WATER SUPPLEMENT AND APPENDICES AND RETICULATION SEWERS IN BASEMENTS TECHNICAL GUIDELINES. THE CONTRACTOR MUST HAVE A COPY OF THESE ON SITE AT ALL TIMES. THE CONSTRUCTOR SHALL COMPLY WITH ALL REQUIREMENTS IN ANY REVIEW OF ENVIRONMENTAL FACTORS (REF) REPORT AND ABOVE STANDARDS.

3. ALL LEVELS ELECTRONICALLY GENERATED. NO LEVEL BOOK AVAILABLE.

4. SERVICES SHOWN HAVE BEEN LOCATED FROM CLASS 'C' SURVEY ONLY. CONTRACTOR IS REQUIRED TO PHYSICALLY LOCATE ALL EXISTING SERVICES IN CLOSE PROXIMITY TO EXCAVATION PRIOR TO COMMENCEMENT OF WORK & APPROPRIATE PROCEDURES, PRECAUTIONS & CARE TO BE TAKEN WHEN WORKING WITHIN CLOSE PROXIMITY TO THESE SERVICES.

5. CONSTRUCTOR TO VERIFY LEVELS AT CH 0.00 AND CH 127.53 PRIOR TO CONSTRUCTION. ACOR CONSULTANTS TO BE NOTIFIED IMMEDIATELY IF THERE IS A DISCREPANCY OF LEVEL FROM THAT WHICH IS SHOWN ON THIS DESIGN PLAN.

6. B.O.A/B.A.A APPLICATION (BUILDING PLAN APPROVAL) TO BE APPLIED FOR PRIOR TO COMMENCING CONSTRUCTION.

7. ALL EXCAVATION, SHORING EXCAVATION AND STABILITY OF ADJACENT STRUCTURES/SERVICES/DWELLINGS IS THE RESPONSIBILITY OF THE CONSTRUCTOR. USE OF SHORING BOXES IS NOT A FORM OF STABILITY CONTROL, NEITHER IS SAND CEMENT BACKFILL OR CONCRETE ENCASEMENT.

8. THE MINIMUM NUMBER OF FIELD COMPACTION TESTS REQUIRED TO SATISFY THE SEWERAGE CODE OF AUSTRALIA.

PIPE EMBEDMENT ZONE: 1 TEST PER 100 LINEAR METERS OF PIPE LAID FOR SEWERS UP TO DN300.

TRENCH FILL ZONE - TRAFFICABLE AREA: 1/300MM LAYER OF TRENCH FILL PER 50 LINEAL METERS OF PIPE LAID

TRENCH FILL ZONE - NON TRAFFICABLE AREA: 1/900MM LAYER OF TRENCH FILL PER 100 LINEAL METERS OF PIPE LAID.

TRENCH FILL ZONE (MAINTENANCE STRUCTURES): 1/1000MM DEPTH PER STRUCTURE

IF SAND/CEMENT BACKFILL IS USED AT ROAD CROSSINGS, THE NUMBER OF TRENCHFILL COMPACTION TESTS MAY BE REDUCED BY 0 IF THE CONSTRUCTOR PROVIDES DOCUMENTATION FROM THEM SELF AND THE TESTING COMPANY STATING EXTENTS AND COMPLIANCE.

NOTE: A HIGHER LEVEL OF COMPACTION MAY BE REQUIRED TO COMPLY WHICH THE CONSTRUCTOR WILL HAVE TO LIASE WITH THE CIVIL CONTRACTOR OR COUNCILS SPECIFICATION.

9. CONSTRUCTION METHODOLOGY TO BE CONFIRMED WITH THE PRINCIPAL CONTRACTOR. ALL STRUCTURES TO BE CONSTRUCTED TO PROPOSED FINISHED SURFACE LEVELS ON COMPLETION OF ROAD LINE.

10. CUSTOMER DRAIN CONNECTIONS CONSTRUCTED CONCURRENTLY WITH THE NEW SEWER MUST BE CONSTRUCTED BY A LICENSED PLUMBER. THE WORKS MUST BE INSTALLED IN ACCORDANCE WITH THE CURRENT NSW CODE OF PRACTICE FOR PLUMBING AND DRAINAGE AND AS/NZS3500. THE CUSTOMER DRAIN CONNECTION MUST BE INSPECTED BY A NSW FAIR TRADING PLUMBING INSPECTION ASSURANCE SERVICE (PIAS) OFFICER PRIOR TO BACKFILL.






12. PIPE BORED / CONCRETE ENCASED, SHOWN ACCORDINGLY.

13. THESE PLANS SHALL BE COORDINATED WITH THE STRUCTURAL ENGINEERING, ARCHITECTURAL, HYDRAULIC, CIVIL AND STORMWATRE DRAWINGS. ALL EXISTING SERVICES IN THIS AREA WILL BE DIVERTED AND ADJUSTED IN ACCORDANCE TO ASSOCIATED DESIGN PACKAGE.

DTC DRAWING TABLE		ISSUE	DATE
DRAWING	NAME		
DTC-2000	MAINTENANCE HOLES - CONSTRUCTION NOTES	C	18/03/15
DTC-2200	DN1200 MAINTENANCE HOLES - CAST IN-SITU CONCRETE WALL	F	18/05/15
DTC-2202	DN1200 MAINTENANCE HOLES - CAST IN-SITU CONCRETE WALL	E	18/03/15
DTC-2220	MAINTENANCE HOLES - DETAILS SHEET 1	D	18/03/15
DTC-2221	MAINTENANCE HOLES - DETAILS SHEET 2	B	01/03/13
DTC-2222	MAINTENANCE HOLES - DETAILS SHEET 3	C	18/03/15
DTC-2223	DN1200 MAINTENANCE HOLES - ROOF SLAB DESIGN	B	18/03/15

EXISTING SERVICES ALLOCATED IN FOOTPATH RESERVE ARE  
SUBJECT TO VARIABLE PLACEMENT. THE CONTRACTOR IS  
REQUIRED TO ACQUIRE THE LATEST SEARCH INFORMATION  
& FIELD CHECK AT THE TIME OF WORKS.

1	SCHEMATIC DESIGN	SD	03.11.20
No.	AMENDMENT DESCRIPTION	BY	DATE

PLAN TO BE READ IN CONJUNCTION WITH CURRENT SYDNEY WATER STANDARDS SYDNEY WATER CORPORATION		UTILITIES					
		TYPE	DATE	REF.	TYPE	DATE	REF.
PRIOR TO COMMENCEMENT OF EXCAVATION FOR PROPOSED AND EXISTING SERVICES CONTACT :-  DIAL BEFORE YOU DIG Ph. 1100. ELECTRICITY Ph. GAS Ph. TELECOMMUNICATIONS Ph. Ph. GIVING AT LEAST 48 HOURS NOTICE.		WATER 					
		ELECTRICAL CABLE 					
		GAS 					
		TELSTRA/OPTIC LINE 					
		STORM WATER 					

WORK AS CONSTRUCTED CERTIFICATION	
DEVELOPER	
WATER SERVICE CO-ORDINATOR	
CONSTRUCTOR	
COMPLETED	W.A.C. PREPARED
DESIGNER	
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS	

PIPE SCHEDULE				
SIZE DN	TYPE	CLASS	LENGTH	PIPE JOINING METHOD / NOTES
300	UPVC	SN6	130	
DESIGN HEAD . . . m			BOUNDARY TRAPS REQUIRED.	

[illegible]

NO AMENDMENTS ARE TO BE MADE TO THIS PLAN WITHOUT REFERENCE TO SYDNEY WATER. THIS PLAN IS NOT NECESSARILY UP TO DATE OR CORRECT AND SYDNEY WATER ACCEPTS NO RESPONSIBILITY.

U.S. DIRECTORY 20. Q14(41st ED)

SHEET. 1. OF 1.		File No. N/A
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**Sydney**  
**WATER**

SYDNEY WATER CORPORATION

Case No. 183443 WAW

RANDWICK  
SEWERAGE  
ADJUSTMENT/DEVIATION