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## **WATER MANAGEMENT REPORT**

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Project:

Shop Top Housing SSDA  
194-214 Oxford Street & 2 Nelson Street,  
Bondi Junction NSW 2022

Prepared For:

**Stargate Properties**

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**Document History**

Project: 194-214 Oxford Street, 2 Nelson Street and part of Osmund Lane, Bondi Junction NSW 2022

Project Number: 221-1984

Revision	Author	File Name	Date	Issue	Approved
A	MG	SSDA Water Management Plan Rpt. 001	03.03.2025	Final	MG



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## 1.0 EXECUTIVE SUMMARY

This Water Management Report has been prepared by Greenarrow Hydraulics Pty Ltd to accompany a detailed State Significant Development Application (SSDA) for a shop top housing development at 194-214 Oxford Street, 2 Nelson Street and part of Osmund Lane, Bondi Junction. The site is made up of nine lots. The legal description of the site is outlined in Table 1.

Table 1 Legal Description

Property Address	Title Description
194 Oxford Street Bondi Junction	Lot 10 in DP260116
196 Oxford Street Bondi Junction	Lot 11 in DP260116
198 Oxford Street Bondi Junction	Lot 12 in DP260116
200 Oxford Street Bondi Junction	Lot 13 in DP260116
204 Oxford Street Bondi Junction	Lot 16 in DP68010 Lot 1 in DP79947
214 Oxford Street Bondi Junction	Lot 1 in DP708295
2 Nelson Street Bondi Junction	Lot 1 in DP583228
Part of Osmund Lane	Lot 1 in DP1300781

This report has been prepared to address the Secretary's Environmental Assessment Requirements (**SEARs**) issued for the project (SSD-77175998).

This report concludes that the proposed development is suitable and warrants approval subject to the implementation of the following mitigation measures.

- Compliance with Council Conditions of Consent including Council's Water Management Technical Manual 2021
- Compliance with the requirements of Basix
- Compliance with the requirements of the Water Quality Management report.
- Compliance with the requirements of Sydney Water Corporation.

Following the implementation of the above mitigation measures, the remaining impacts are appropriate.

## 2.0 INTRODUCTION

Following a design excellence competition, development consent was granted to DA-400/2021 (herein, referred to as the parent development consent) which authorised demolition of existing buildings and the construction of a shop top housing development comprising ground floor retail and 10 storeys of residential apartments above the retail podium, across two tower buildings (herein referred to as Building 1 and Building 2). Subsequently, an amending DA (DA-360/2023) was approved on 28 August 2024 which amended Basement, Levels 4, 3, 2 and 1 and the Ground Floor Level of the approved development under the parent development consent.

The proposed SSDA generally seeks approval for the redevelopment of 194-214 Oxford Street, 2 Nelson Street and part of Osmund Lane, Bondi Junction, proposing to retain key design principles in accordance with the parent consent. The proposal will provide additional residential dwellings, in accordance with the in-fill affordable housing provisions under the *State Environmental Planning Policy (Housing) 2021*, and incorporate a 30% increase in Gross Floor Area (GFA) and building height..

The development of the site has physically commenced pursuant to the development consent, with demolition and excavation completed. Construction Certification has been obtained and construction is intended to continue for the lower portion of the building (up to Level 8).

Simultaneously with the construction of the lower parts of the building, the proponent seeks approval for new works to the remaining levels of the building (above level 9) as well as the internal fit out and servicing for the whole of the building (Basement to Level 16).

It is intended that the relationship between the approval of the SSDA and the existing consents be managed through the imposition of a condition pursuant to s 4.17(1)(b) of the EP&A Act and lodgement of a Notice of Modification pursuant to cl. 67 of the EP&A Regulation to ensure consistency across all development consents.

Specifically, this SSDA seeks development consent for:

### **Proposed New Works:**

- Construction of Levels 9 – 16 of the residential towers including Buildings A (Western Tower) and Building B (Eastern Tower) comprising:
  - Building A (Western Tower, Residential Levels 9 -13) – with a maximum height of 42.5m
  - Building B (Eastern Tower, Residential Levels 9 -16) – with a maximum height of 54.0m
  - Communal open space on Level 11 (Building A)
  - Plant and lift overrun.
  - Public Domain Works
- Internal fit out of Levels 9 -16

### **Proposed Amendments to Existing Parent Development Consent**

- Internal fit out from basement Level 01- level 04
- Internal fit out from Ground Level to Level 08
- The allocation of 1,708m<sup>2</sup> of affordable housing on Levels 1,2 and 3 of Building A and Building B.
- Additional services to overall development including an additional plant area at ground floor and an addition of a second substation.
- Basement services including additional parking spaces and updated storage and waste storage areas.
- Awning over the ground retail along Oxford Street and addition of a glazing window to create visual continuation from the neighbouring retail.

### **Cumulative Development (Existing Parent Development Consent and Subject SSDA)**

- Construction of a shop-top housing development, comprising a podium with ground floor retail, two residential towers (Building A and Building B) as well as four levels of basement parking and associated public domain works.
  - The delivery of a total of 11,288m<sup>2</sup> of GFA.
  - 467m<sup>2</sup> of retail GFA.
  - 85 apartments, equating to a total residential GFA of 10,792m<sup>2</sup> including 1,708m<sup>2</sup> (17 apartments) of affordable housing GFA.
  - 29m<sup>2</sup> GFA for communal amenities, incl. WC, steam room and sauna
  - The apartments will comprise the following mix:
    - 1 bedroom 2 (2%)
    - 2 bedroom 35 (42%)
    - 3 bedroom 48 (56%)
  - 4 levels of basement for 138 car parking spaces, and 45 motorbikes, with vehicular access from Osmund Lane.
  - Storage areas and services.
  - Communal open space and associated landscaping.

### **Purpose of this Report**

The purpose of the project is to facilitate the delivery of (market and affordable) housing at a strategically located site and to deliver a built form outcome that is consistent with the outcomes of the design competition.

This report has been prepared in response to the requirements contained within the Secretary's Environmental Assessment Requirements (SEARs) dated 25/10/2024 and issued for the SSDA (SSD-77175998).

## **3.0 THE SITE**

The site is located at 194-214 Oxford Street and 2 Nelson Street, Bondi Junction within the Waverley local government area (LGA). The site is legally described as:

- 194-214 Oxford Street, Bondi Junction:
  - Lot 10, 11, 12, 13 & 16 / DP260116
  - Lot 1 / DP708295
  - Lot 1 / DP79947, and
- 2 Nelson Street:
  - Lot 1 / DP583228
- Part of Osmund Lane (Lot 1 in DP1300781)

The land size is 2,480m<sup>2</sup> (2,599.1m<sup>2</sup> including Part of Osmund Lane) with a northern frontage to Sydney Enfield Drive, an eastern frontage to Nelson Street, a southern frontage to Oxford Street and western frontage to York Road.

The immediate urban context surrounding the site is characterised by a mix of commercial, retail, residential, and recreational land uses with Centennial Park located to the west and south-west of the site.

The site is in proximity to the Bondi Junction shopping and transport hub to the east, comprising Bondi Junction Westfield Shopping Centre, a pedestrian shopping mall and Bondi Junction Train Station. The site is located within the Western Precinct of Bondi Junction. The site is closely located to two (2) bus stops recognised as ID 202260 'Oxford St before York Rd' approximately 57m from the site and ID 202238 'Oxford St after York Rd' approximately 96m from the site. The site is in proximity to the Bondi Junction Train Station being within 800m from the site (5-minute walk).

The lot at 2 Nelson Street contains a local landscape heritage item I506 'Norfolk Pine-Landscape'. The remainder of the site has recently been demolished in accordance with the existing development consents.

The site will be progressively developed under the existing approvals and the remaining works will be the subject of this application.

Figure 1 – Local Context



Source: Urbis GIS, 2023

Figure 2 – The Site



Source: Urbis GIS, 2024

## 4.0 ASSESSMENT AND FINDINGS

### Domestic Water Supply

The estimated daily water usage has been calculated to be approximately 42.51kl/day with a peak demand of approximately 7.75l/s.

Table 1. Water & Sewer Demand Calculations

Maximum Daily Demand Water & Sewer			
Residential			
Total No Apartments	85		
1 bedroom	2		
2 bedroom	35		
3 bedroom	48		
Equivalent Persons	217 EP	(1br x 1.5 + 2br x 2 + 3br x 3)	
Non Residential			
Commercial	467 m2	1 /10m2	
ent Persons	46.7 EP		
Litres / Ep /24hrs	180 l/ep	Residential allowance	
Litres / Ep /24hrs	60 l/ep	Non Residential	
Potable Water			
ADWD	41.86 KI/day		
MDWD	50.23 KI/day		
Peak Demand	6.7 l/sec		
Sewer (95% of water usage)			
ADWD	39.77 KI/day		
MDWD	47.72 KI/day		
Peak Demand	6.37 l/sec		

The Notice of Requirements (NOR) issued by Sydney Water Corporation (SWC) 18.01.2023 states the existing 250mm water main in Oxford Street can serve the proposed Building A & C. Proposed Building B can be served by the existing 150mm water main in Nelson Street. Refer Appendix I & Appendix II

Figure 3 Extract of SWC NOR

**3.1 Water**

Your development must have a frontage to a water main that is the right size and can be used for connection.

**We've assessed your application and found that:**

- **The existing 250mm water main in Oxford St can serve the proposed Building A & C. Proposed Building B can be served by the existing 150mm water main in Nelson St.**
- You must have a fitted Sydney Water Meter, that feeds the construction needs of the development throughout the construction of the project.

Water efficiency targets, proposed measures and results are set out within the BASIX certificate prepared by Vipac Engineers and Scientist Doc Number 20E-21-0065-TRP-16311-2. The current report demonstrates a 46% reduction in water usage which exceeds the minimum requirement of 40%.

Figure 4 Water Efficiency Score from Basix

Project summary	
Project name	194-214 Oxford St, Bondi Junction NSW_04
Street address	194-214 OXFORD STREET BONDI JUNCTION NSW 2022
Local Government Area	WAVERLEY
Plan type and plan number	Deposited Plan DP79947
Lot no.	Lot 10
Section no.	-
No. of residential flat buildings	2
No. of units in residential flat buildings	70
No. of multi-dwelling houses	0
No. of single dwelling houses	0
Project score	
Water	✓ 46 Target 40

In addition, the report requires a 2 x 4000L minimum rainwater tank collecting an area of roof no less than 500m<sup>2</sup>. Harvested Rainwater is required to serve no less than 361m<sup>2</sup> of landscaping area and the swimming pool. Refer Appendix III

Figure 6 Rainwater Tank Requirement from Basix

**Building A**

Central systems	Size	Configuration	Connection (to allow for...)
Swimming pool (No. 2)	Volume: 41.6 kLs	Location: Building B Pool shaded: no	-
Central water tank - rainwater or stormwater (No. 2)	4000.00	To collect run-off from at least: - 300.00 square metres of roof area of buildings in the development - 0.00 square metres of impervious area in the development - 0.00 square metres of garden/lawn area in the development - 0.00 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).	- irrigation of 200.00 square metres of common landscaped area on the site - car washing in 1 car washing bays on the site

**Building B**

Central systems	Size	Configuration	Connection (to allow for...)
Swimming pool (No. 2)	Volume: 41.6 kLs	Location: Building B Pool shaded: no	-
Central water tank - rainwater or stormwater (No. 2)	4000.00	To collect run-off from at least: - 300.00 square metres of roof area of buildings in the development - 0.00 square metres of impervious area in the development - 0.00 square metres of garden/lawn area in the development - 0.00 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).	- irrigation of 200.00 square metres of common landscaped area on the site - car washing in 1 car washing bays on the site

**Domestic Hot Water**

Domestic hot water will be reticulated throughout the development as a flow & return system. The Basix Certificate requires flow and return pipework the thermostatically insulated using no less than R0.6 insulation. The hot water plant will consist of 2 x Gas fired instantaneous with storage located on each buildings roof.

Figure 7 Hot Water Heating requirement from Basix

Central hot water system (No. 1)	gas-fired storage (manifolded)	Piping insulation (ringmain & supply risers): (a) Piping external to building: R0.6 (-25 mm); (b) Piping internal to building: R0.6 (-25 mm)
Central hot water system (No. 2)	gas-fired storage (manifolded)	Piping insulation (ringmain & supply risers): (a) Piping external to building: R0.6 (-25 mm); (b) Piping internal to building: R0.6 (-25 mm)

**Fire Services Water**

The building is protected by a combined fire sprinkler and hydrant system. The primary water supply will be provided via 2 x onsite 62m<sup>3</sup> fire tanks with another supply being from the existing 250mm CICL water main located in Oxford Street. The Fire water supply arrangement is in accordance with current and relevant Australian Standards and NCC 2022. Further, fire test water will be supplied from the fire tank and circulated back to the tank in a close looped system in accordance with the Basix certificate and industry best practice.

**Sewer**

The estimated daily sewer discharge has been calculated to be approximately 40.38kl/day with a peak discharge rate of approximately 7.36l/s (Refer to Table 1)

The Notice of Requirements issued by Sydney Water Corporation (SWC) 18.01.2023 states the existing 225mm sewer main and 225mm vent line within the site conflicts with the development and will be required to adjust/disuse/relocate those assets. Refer Appendix I & Appendix II

Figure 8 Sewer Requirement from of SWC NOR

### 3.2 Sewer

Your development must have a sewer main that is the right size and can be used for connection. That sewer must also have a connection point within your development's boundaries.

**We've assessed your application and found that:**

- **The existing 225mm Ventline and the 225mm sewer main located within the site is conflicting with the proposed development, the developer is required to adjust/delete/relocate those SW 'assets, at the Developer expense. The terms of the Deed define this extension as 'Major Works'. Your WSC can provide more information about this.**
- **The above requirements are based on information provided by your Water Servicing Coordinator.**
- **Further information can be provided at the Design stage, only**

### Stormwater Drainage

Waverly Council's Condition of Consent NO. 36 outlines the requirements for providing a stormwater drainage system for the site. (Appendix IV)

The significant items of the conditions include:

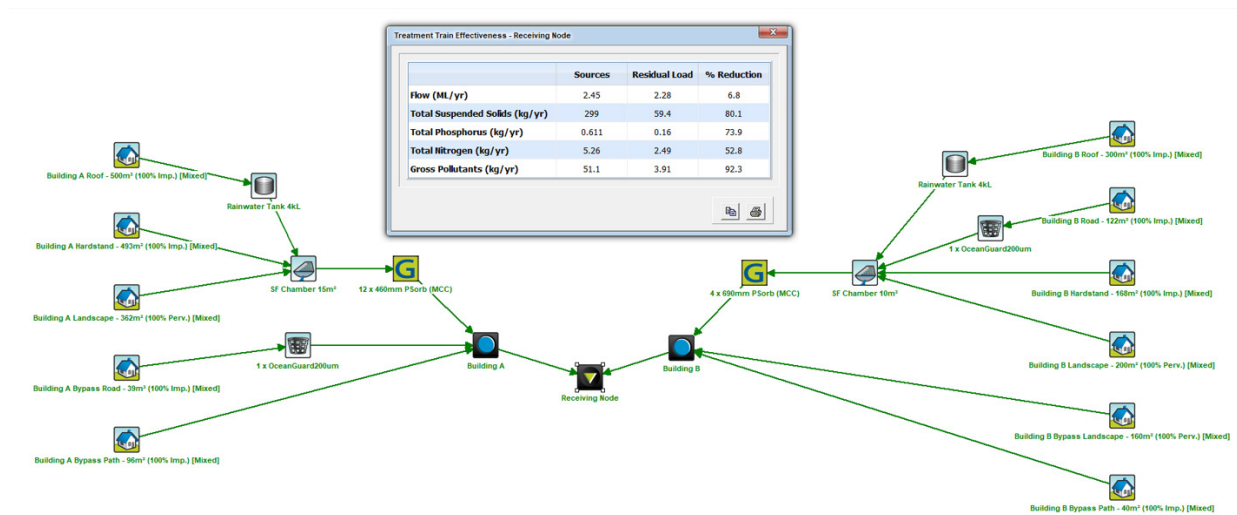
- The inclusion of 2x On-site Detention (OSD) systems designed to meet the requirements of Councils. '*Water Management Technical Manual 2021*'. Our calculations indicate a Site Storage Requirements (SSR) of 41m<sup>3</sup> for tank A and 36m<sup>3</sup> for Tank B contained within a cast-in-situ concrete tank and a maximum Permissible Site Discharge (PSD) of 41.52l/s for tank A and 34.46l/s for tank B, for all storms up to the 20yr storm event. (Appendix V)
- The Rainwater reuse system has a 50yr design life

## Water Quality Treatment

Council’s ‘Water Management Technical Manual 2021’ requires a reduction of 80% Suspended Solids, 55% Phosphorous, 40% Nitrogen and 90% Gross Pollutants from the sites stormwater discharge.

A water quality treatment model (MUSIC) was prepared by Urban Asset Solutions. In order to meet councils objectives a treatment train inclusive of Litter baskets, gross pollutant trap including reactive filter media pillows have been provided.

Figure 9 MUSIC Model Summary



## 5.0 CONCLUSION

The proposed development complies with the requirements set forth by the relevant authorities having jurisdiction over the project including the Basix Certificate and Water Quality Modelling Results.

Complying with Council DA Condition 36 will reduce the site's stormwater discharge rate, thereby lessening the load on Council's existing stormwater infrastructure. Additionally, constructing an extension of the existing system will help minimise gutter flows to adjacent properties.

The measures outlined in the BASIX Certificate aim to reduce water consumption by specifying low-water-usage tapware and fixtures, harvesting rainwater for reuse in irrigation, and recirculating fire test water from the fire tank.

Following the requirements outlined within Water Quality Modelling report will reduce contaminants in the receiving water ways.

With the implementation of the proposed mitigation measures, the remaining impacts associated with the development are appropriate and acceptable.

APPENDIX I – SWC NOTICE OF REQUIREMENTS

Case No 203215



**3. Water and sewer works**

**3.1 Water**

Your development must have a frontage to a water main that is the right size and can be used for connection.

**We've assessed your application and found that:**

- **The existing 250mm water main in Oxford St can serve the proposed Building A & C. Proposed Building B can be served by the existing 150mm water main in Nelson St.**
- You must have a fitted Sydney Water Meter, that feeds the construction needs of the development throughout the construction of the project.

**3.2 Sewer**

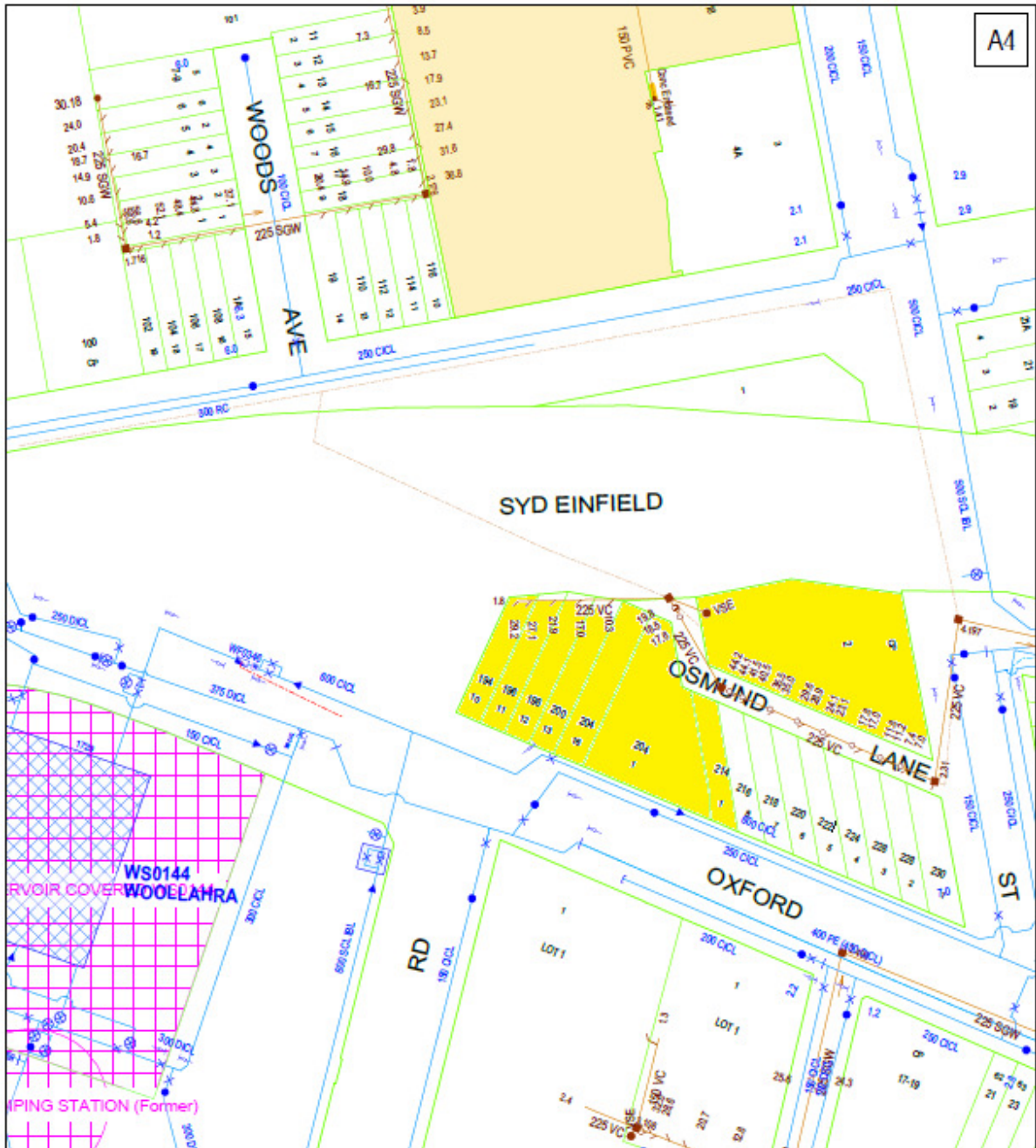
Your development must have a sewer main that is the right size and can be used for connection. That sewer must also have a connection point within your development's boundaries.

**We've assessed your application and found that:**

- **The existing 225mm Ventline and the 225mm sewer main located within the site is conflicting with the proposed development, the developer is required to adjust/delete/relocate those SW 'assets, at the Developer expense.** The terms of the Deed define this extension as 'Major Works'. **Your WSC can provide more information about this.**
- **The above requirements are based on information provided by your Water Servicing Coordinator.**
- **Further information can be provided at the Design stage, only**
- WSC must refer to the SW's Ventshaft Guidelines prior work commence.
- Because your development requires adjustment/deviation of a "live" wastewater main you must work with your WSC to ensure that:
  - Your Building Plans are approved prior to temporary pipework and excavation
  - You submit your temporary pipework design (if required) with your permanent wastewater deviation design for approval
  - Accept in writing to bonding conditions that will be provided in the Bond Agreement
  - Submit your Bond and signed Bond Agreement
  - Submit the Construction Commencement Notice for construction of the temporary pipework
  - Have your temporary pipework constructed by a listed provider, and then
  - Complete your permanent deviation works.

Source: Sydney Water Notice of Requirements dated 18.01.2023

APPENDIX II – SEWER AND WATER MAINS DIAGRAM



Source: Sydney Water Map, Dial Before You Dig 2021

**APPENDIX III – BASIX CERTIFICATE**

**BASIX<sup>®</sup>Certificate**

Building Sustainability Index www.basix.nsw.gov.au

**Multi Dwelling**

Certificate number: 1210967M\_04

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 10/09/2020 published by the Department. This document is available at www.basix.nsw.gov.au

This certificate is a revision of certificate number 1210967M lodged with the consent authority or certifier on 08 September 2021 with application DA-400/2021/B.

It is the responsibility of the applicant to verify with the consent authority that the original, or any revised certificate, complies with the requirements of Schedule 1 Clause 2A, 4A or 6A of the Environment Planning and Assessment Regulation 2000

Secretary  
Date of issue: Tuesday, 12 December 2023  
To be valid, this certificate must be lodged within 3 months of the date of issue.



Project summary		
Project name	194-214 Oxford St, Bondi Junction NSW_04	
Street address	194-214 OXFORD STREET BONDI JUNCTION NSW 2022	
Local Government Area	WAVERLEY	
Plan type and plan number	Deposited Plan DP79947	
Lot no.	Lot 10	
Section no.	-	
No. of residential flat buildings	2	
No. of units in residential flat buildings	70	
No. of multi-dwelling houses	0	
No. of single dwelling houses	0	
Project score		
Water	✓ 46	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 30	Target 25

If any changes to this BASIX certificate are required, please contact Vipac with following details:  
- Project reference: 194-214 Oxford Street, Bondi Junction NSW 2022  
- Contact number: 0430 108 801

Certificate Prepared by	
Name / Company Name:	VIPAC Engineers & Scientists Ltd
ABN (if applicable):	33005453627

Source: Vipac.

APPENDIX IV - DA CONDITION 19

STORMWATER

36. STORMWATER MANAGEMENT

- a) Amended stormwater plans and details shall be prepared in accordance with Council's *Water Management Technical Manual* and must be submitted to and approved by Council's **Executive Manager, Infrastructure Services (or delegate), prior to the issue of any Construction Certificate for works above existing ground level.**
  
- b) With respect to condition 29(a) of this development consent, the following is required to be considered when seeking approval of Council's Executive Manager, Infrastructure Services (or delegate):
  - (i) All stormwater drainage infrastructure is to be located to be outside the proposed land dedicated to Council for public spaces. The location of drainage features (e.g. OSD systems, rainwater tanks, dish drains, pits etc) are to be overlaid onto the architectural drawings to demonstrate consistency;

DA-400/2021/B

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- (ii) Under the current design specified in the drawing set (known as SWT-104 and SWT-112 Rev C) prepared by Green Arrow Engineering Consultants, the invert level of on-site stormwater detention (OSD) system B is RL 76.900 m, while the top of kerb at the discharge point is approx. 78.550 m. Therefore, OSD system B is currently drowned. OSD systems must be free draining with the invert level of the system higher than the top of kerb to prevent any backwater effects. The SMP shall be updated as necessary and may involve a redesign of the outlet/discharge point of the OSD system (no submerged conditions and/or the use of non-return valve will be permitted under any circumstance); and
  
- (iii) It is unclear how the proposed prefabricated rainwater reuse systems can be replaced once they fail, and the development has been built. The current location is supported provided it is noted that the systems to be a cast in-situ concrete based and structurally designed to adequately withstand all service loads and provide adequate service life (minimum 70 years). Alternatively, the tanks are to be relocated to allow for easy replacement of the system should they fail.

APPENDIX V – OSD CALCULATION SUMMARY

Stormwater Drainage Calculations

Mass curve technique for Waverley Council  
File: 221-194 194 Oxford & Nelson St Bondi Jet

Design parameter:	20 yr aif	In accordance with Table 5.1 ( surcharging system does not flow onto neighbouring properties)
Site area:	2542 m <sup>2</sup>	Plus 62m <sup>2</sup> from Ormand Lane
Site Area to Syd Erskild	2207 m <sup>2</sup>	Area modified for OSD
PSD Criteria	C/A <sup>1/3</sup> / 3600	
Intensity	212.00 mm/hr	In accordance with 6.3 PSD
C <sub>im</sub> ex pervious area	2542 m <sup>2</sup>	0.6 c
C <sub>im</sub> ex impervious area	0 m <sup>2</sup>	0.8 c
PSD	89.82 l/s	20 yr P1a Developed State.
OSD Bypass		
Previous area bypass	250 m <sup>2</sup>	8.67
Impervious bypass	85.0 m <sup>2</sup>	4.42
Bypass discharge	13.84 l/s	To Ormand Lane
Total area to OSD	2207 m <sup>2</sup>	
Required OSD Discharge	75.98 l/s	

Accumulated volume	time	min	3	4	5	6	7	8	9	10	15	20	30	60
	intensity	mm/hr	247	227	212	201	191	182	174	167	142	126	104	74
	co-efficient		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	area	m <sup>2</sup>	2542	2542	2542	2542	2542	2542	2542	2542	2542	2542	2542	2542
	peak inflow	l/s	174.409	160.287	149.696	141.928	134.867	128.512	122.863	117.921	100.268	88.970	73.496	52.252
	vol. Runoff	l	31204	30469	44939	51094	56644	61695	66346	70752	93241	106764	132194	189108
OSD Discharge	discharge	l/s	75.98	75.98	75.98	75.98	75.98	75.98	75.98	75.98	75.98	75.98	75.98	75.98
	vol. Discharged	l	13676.12	18294.83	22793.53	27352.24	31910.95	36469.65	41028.36	45987.07	68880.6	91174.13	136761.2	273522.4
Calculated storage	difference	l	17717.58	20294.11	22115.13	23741.96	24793.29	25216.21	25317.84	25165.27	21860.4	15889.87	-4577.2	-85414.4
	requ. Storage	m <sup>3</sup>	17.72	20.24	22.12	23.75	24.74	25.22	25.32	25.17	21.87	15.59	-4.58	-85.42

<b>OSD TANK A Design</b>			<b>Discharge Control</b>	
Area to tank	1206 m <sup>2</sup>	55% of total OSD Catchment	Max. PSD	41.52 l/s
Min. Required Volume	13.84 m <sup>3</sup>		orifice dia	0.135 mm
Tank Area	40 m <sup>2</sup>		IL	78.08 m AHD
IL Min	78.15 m AHD		CL	78.15 m AHD
IL Max	78.3 m AHD		RL	79.25 m AHD
IL Average	78.225 m AHD		head	1.1 m
Top of Water	79.25 m AHD		head centre orifice	1.0325 m
Storage Height	1.025 m		area o	0.01431 mm <sup>2</sup>
Volume	41 m <sup>3</sup>		discharge	38.30 l/s

<b>OSD TANK B Design</b>			<b>Discharge Control</b>	
Area to tank	1001 m <sup>2</sup>	45% of total OSD Catchment	Max. PSD	34.46 l/s
Min. Required Volume	11.48 m <sup>3</sup>		orifice dia	0.125 mm
Tank Area	36 m <sup>2</sup>		IL	77.0375 m AHD
IL Min	77.1 m AHD		CL	77.1 m AHD
IL Max	77.2 m AHD		RL	78.15 m AHD
IL Average	77.15 m AHD		head	1.05 m
Top of Water	78.15 m AHD		head centre orifice	0.9875 m
Storage Height	1 m		area o	0.01227 mm <sup>2</sup>
Volume	36.00 m <sup>3</sup>		discharge	32.9502 l/s

<b>TOTAL OSD STORAGE PROVIDED</b>	77.00 m <sup>3</sup> >	25.32 m <sup>3</sup>	Therefore OK
<b>COMBINED OSD PSD</b>	72.25 l/s	(to Syd Erskild Drive	
<b>TOTAL SITE DISCHARGE</b>	86.09 l/s <	89.82 l/s	Therefore OK

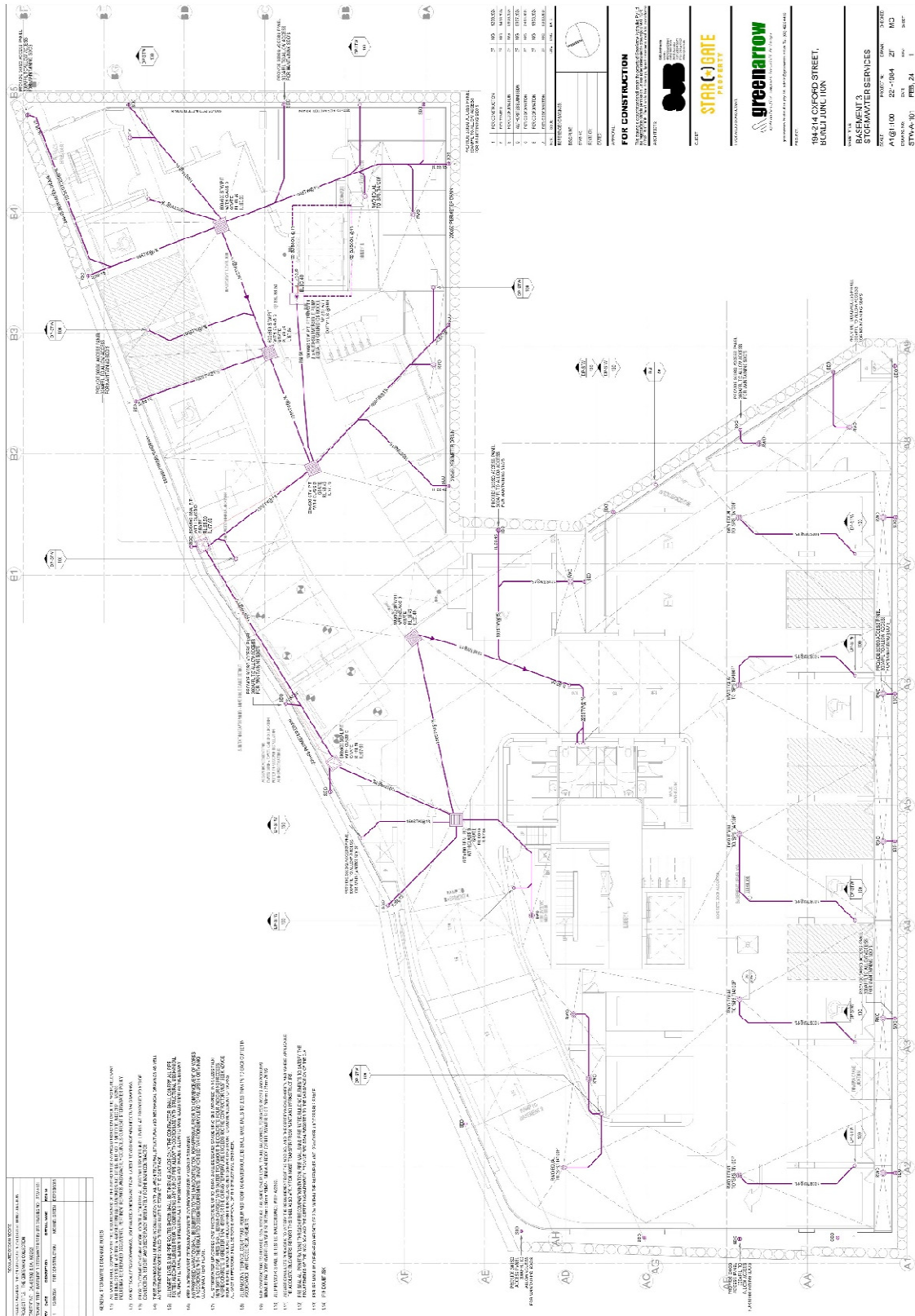
Discharge to Connection point 1	39.30
Discharge to Connection point 2	32.95
Discharge to Ormand Lane	13.84

2024.09.08, OSD Modelling For Council

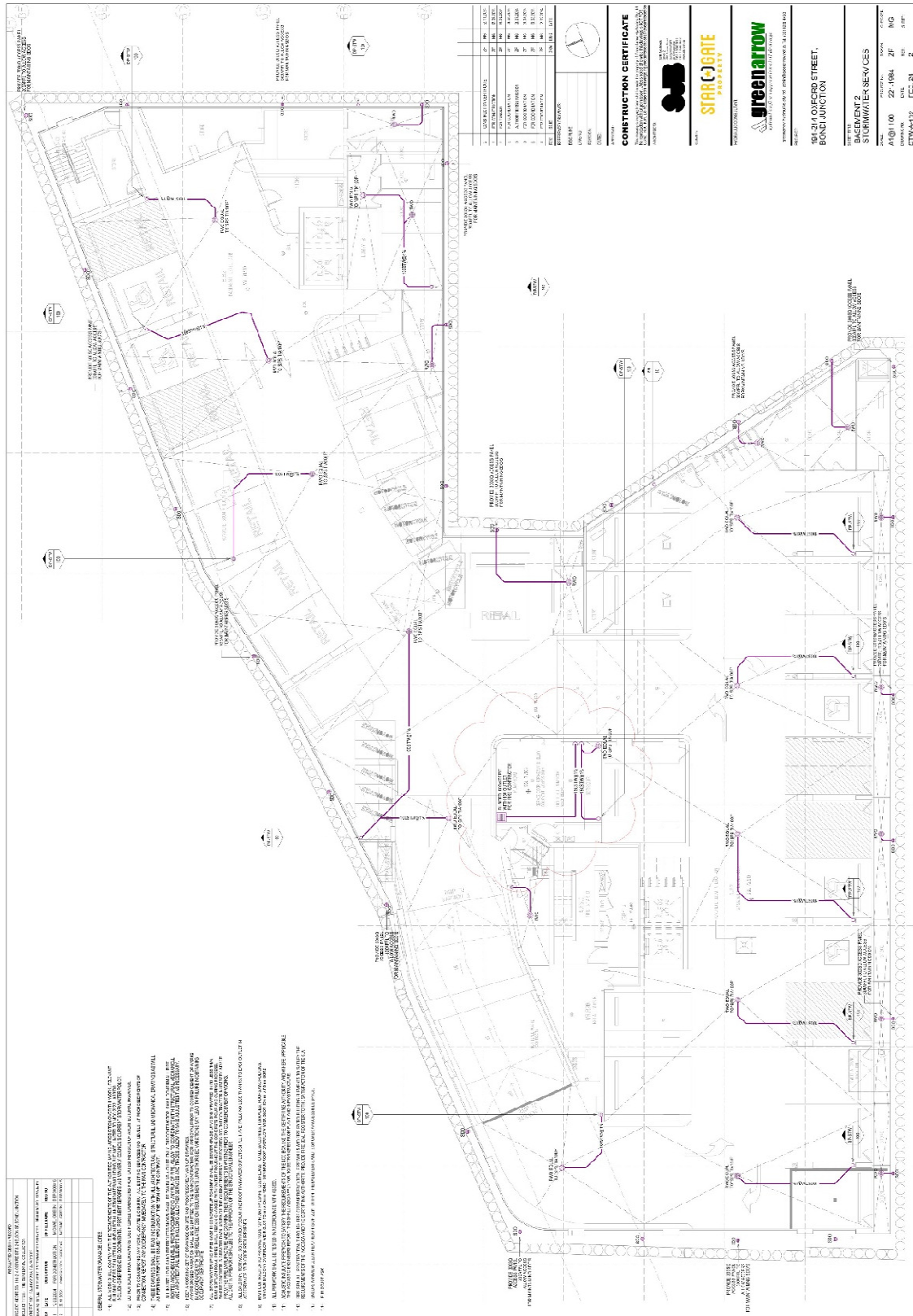




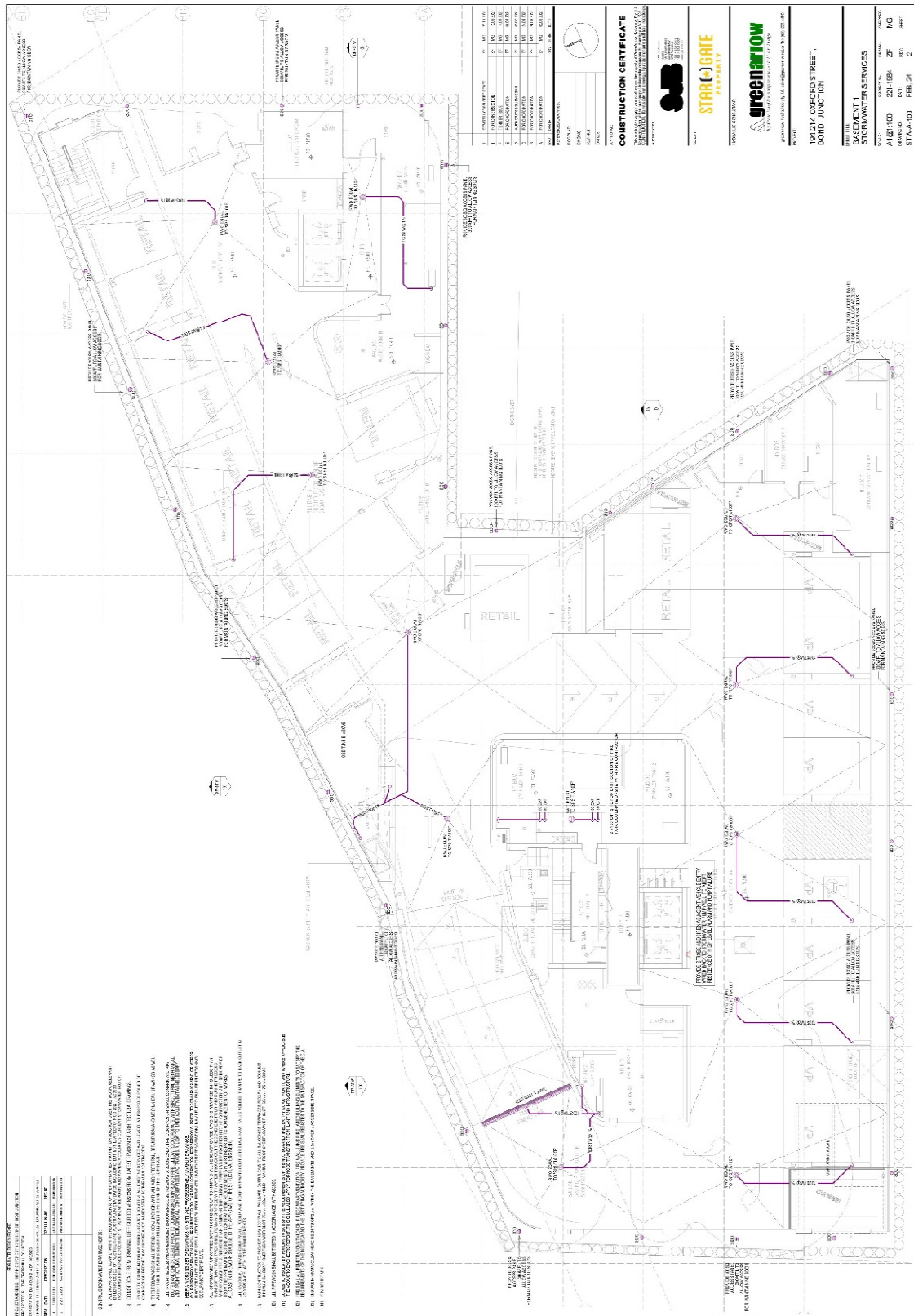




194-214 Oxford Street & 2 Nelson Street, Bondi Junction - Water Management Plan



194-214 Oxford Street & 2 Nelson Street, Bondi Junction - Water Management Plan



1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL COUNCIL AND OTHER RELEVANT AUTHORITIES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL COUNCIL AND OTHER RELEVANT AUTHORITIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL COUNCIL AND OTHER RELEVANT AUTHORITIES.
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15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL COUNCIL AND OTHER RELEVANT AUTHORITIES.

1. CONTRACTOR	2. DATE	3. SCALE
4. DRAWING NO.	5. PROJECT NO.	6. SHEET NO.
7. CLIENT	8. DESIGNER	9. CHECKED
10. APPROVED	11. DATE	12. SIGNATURE

**CONSTRUCTION CERTIFICATE**

THIS CERTIFICATE IS VALID FOR THE PERIOD OF 12 MONTHS FROM THE DATE OF ISSUANCE.

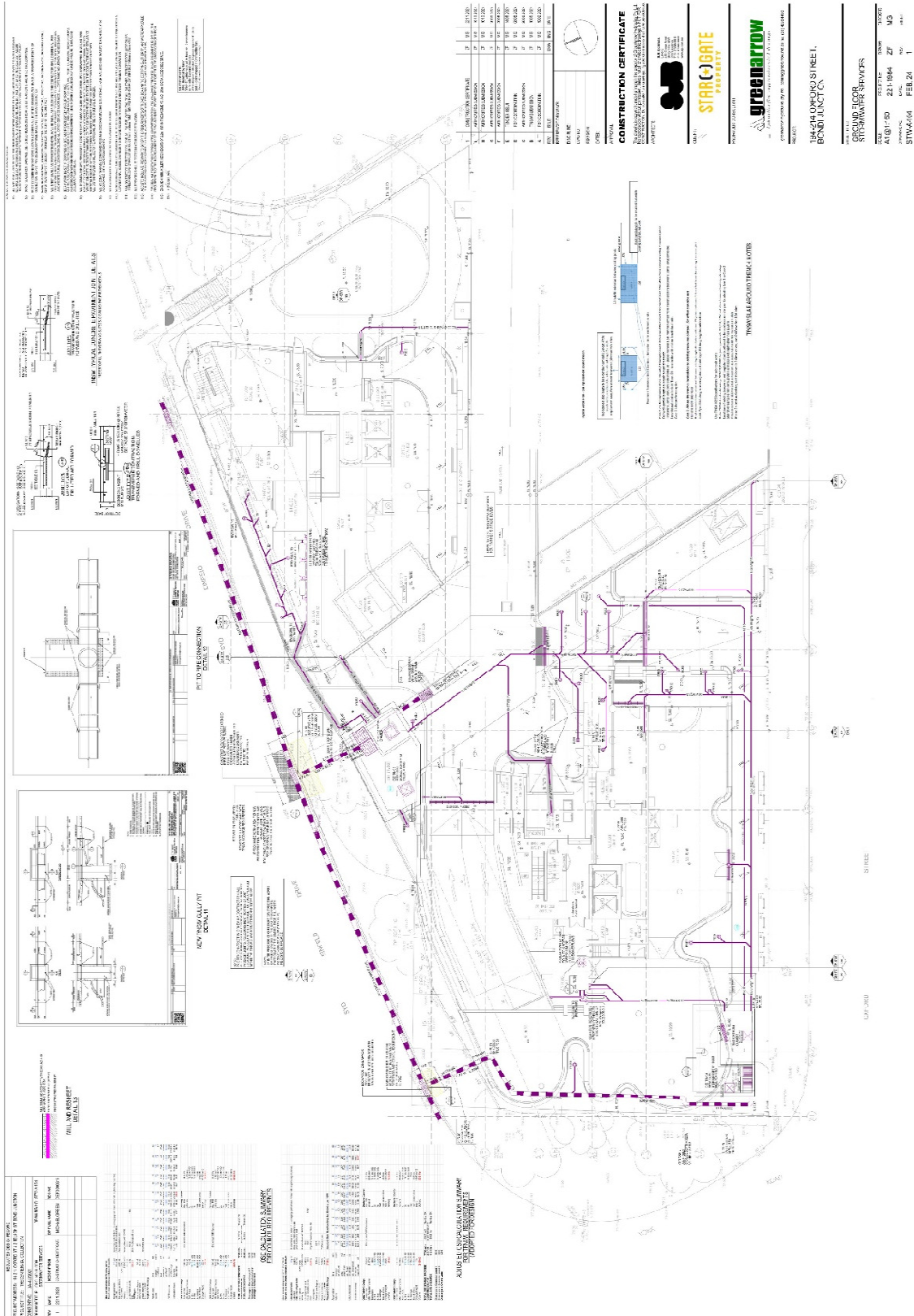
**STARTRACE**

**greenarrow**

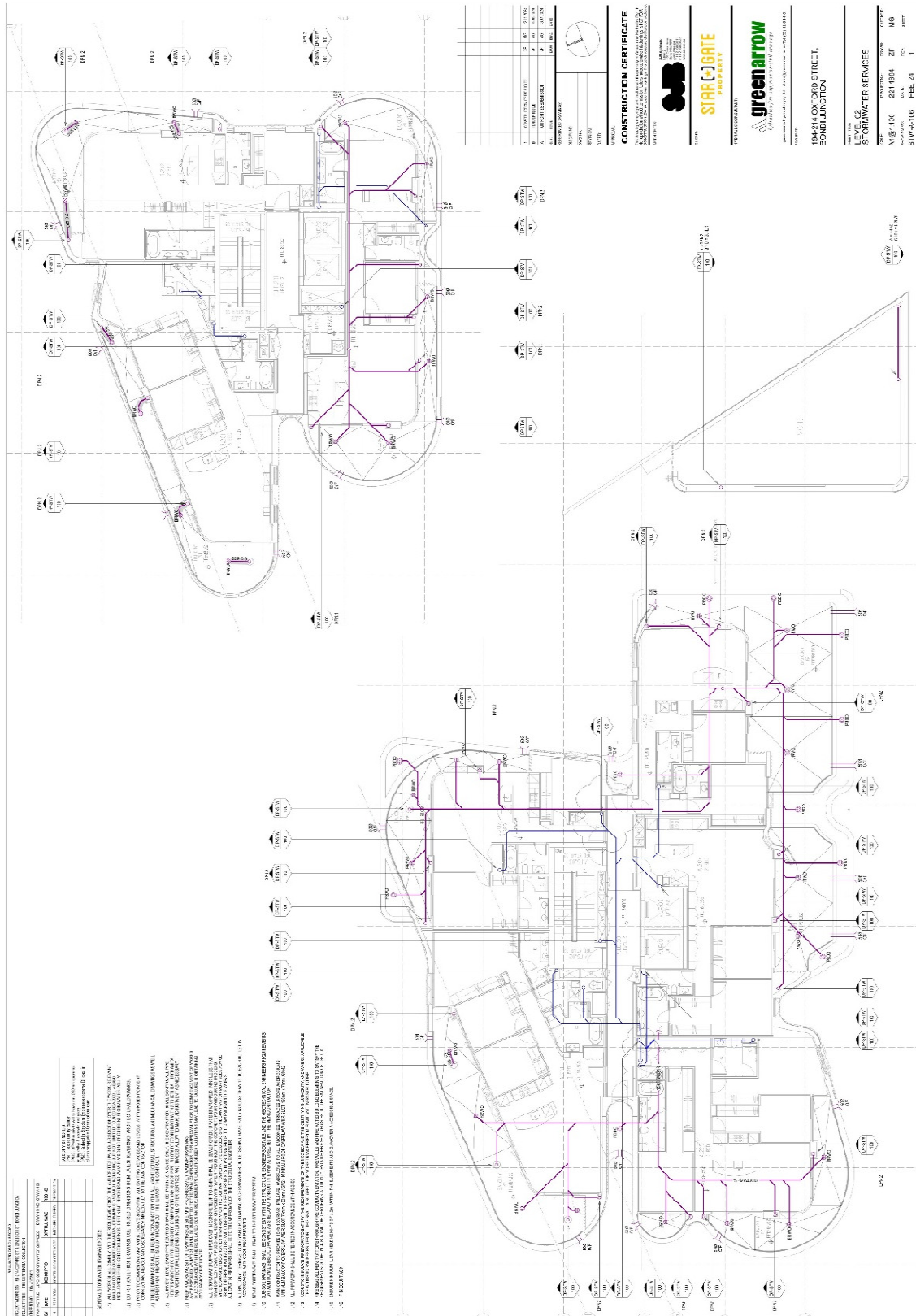
194-214 OXFORD STREET, BOND JUNCTION

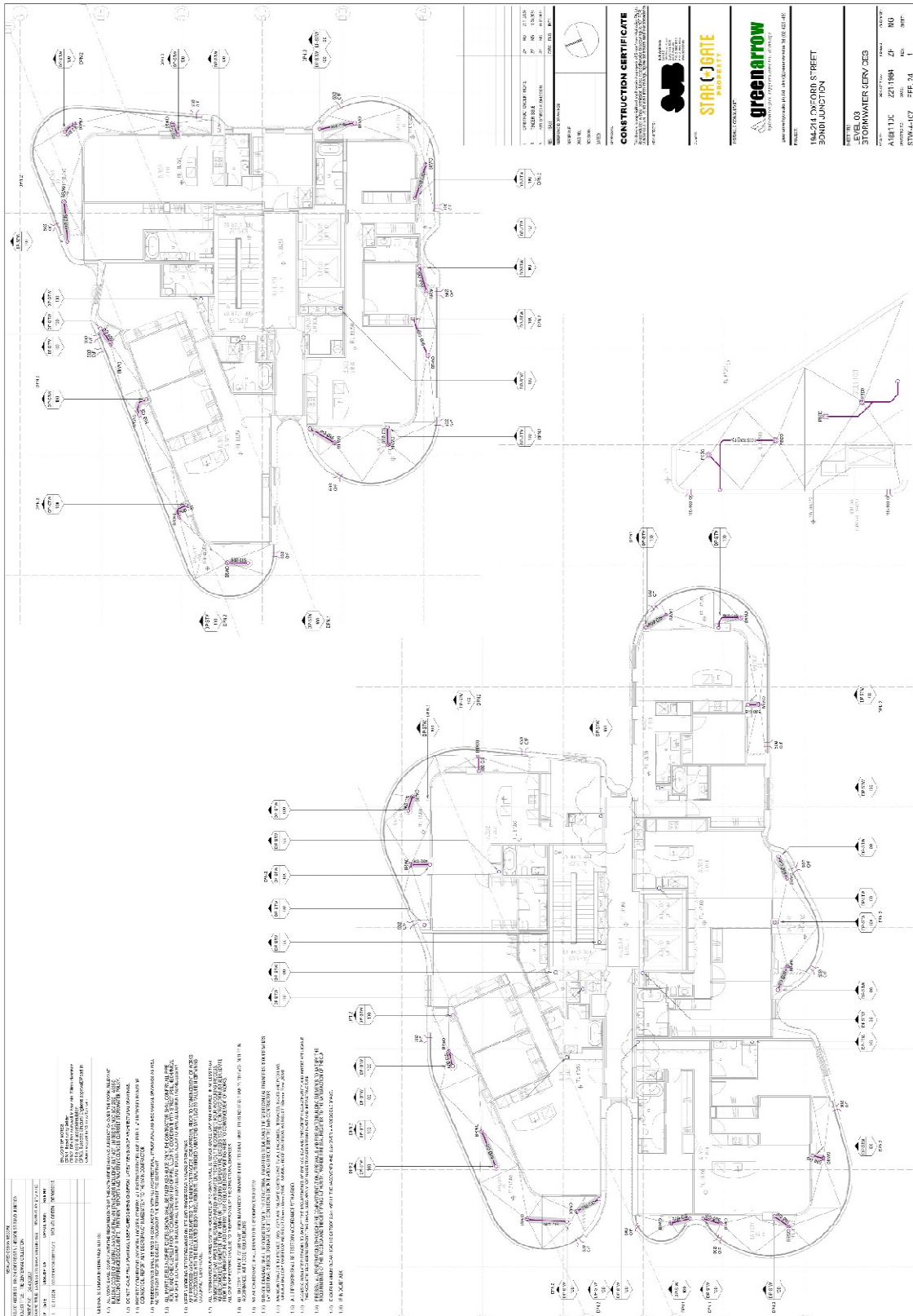
BASEMENT 1  
STAIRWELL SERVICES

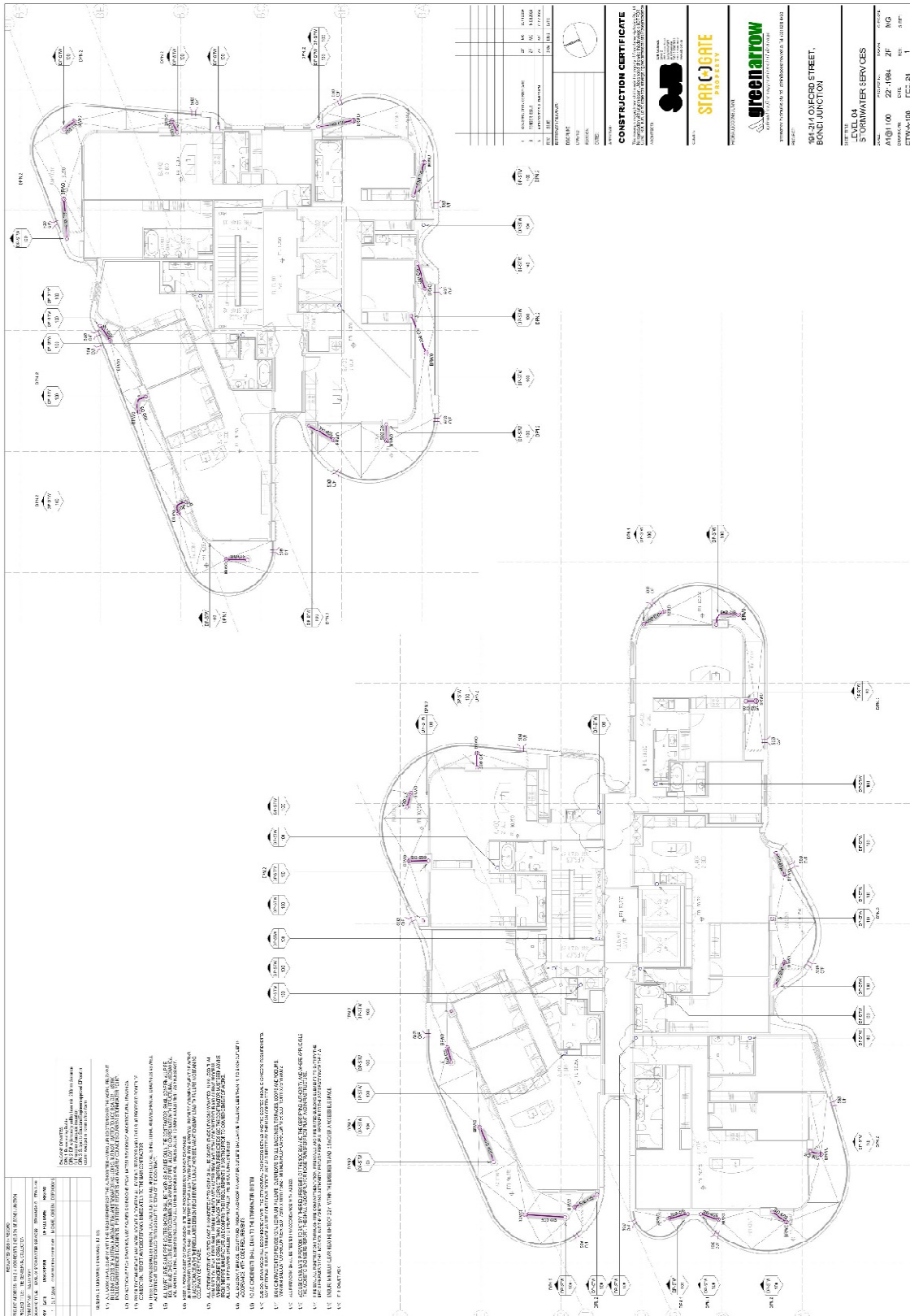
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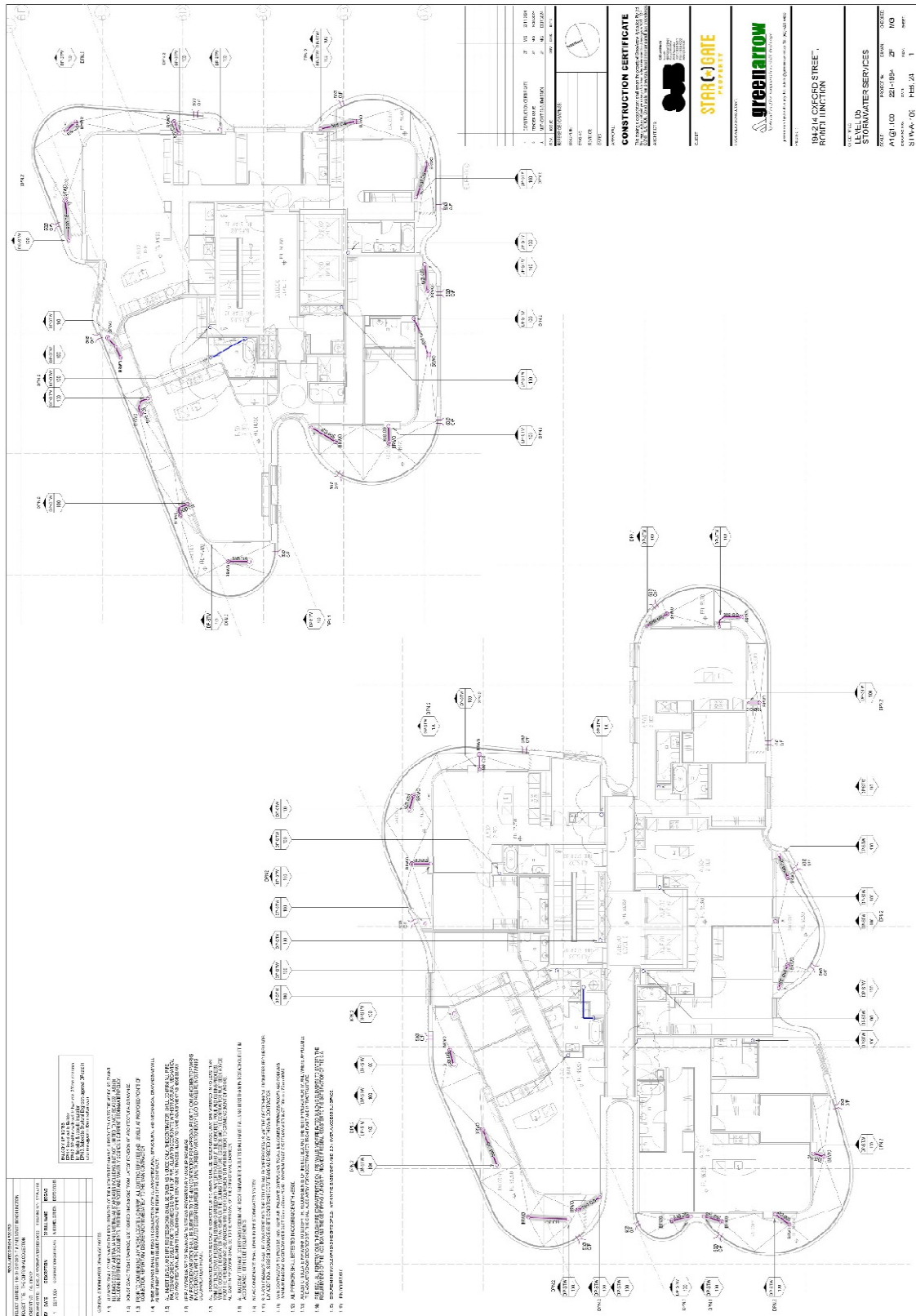


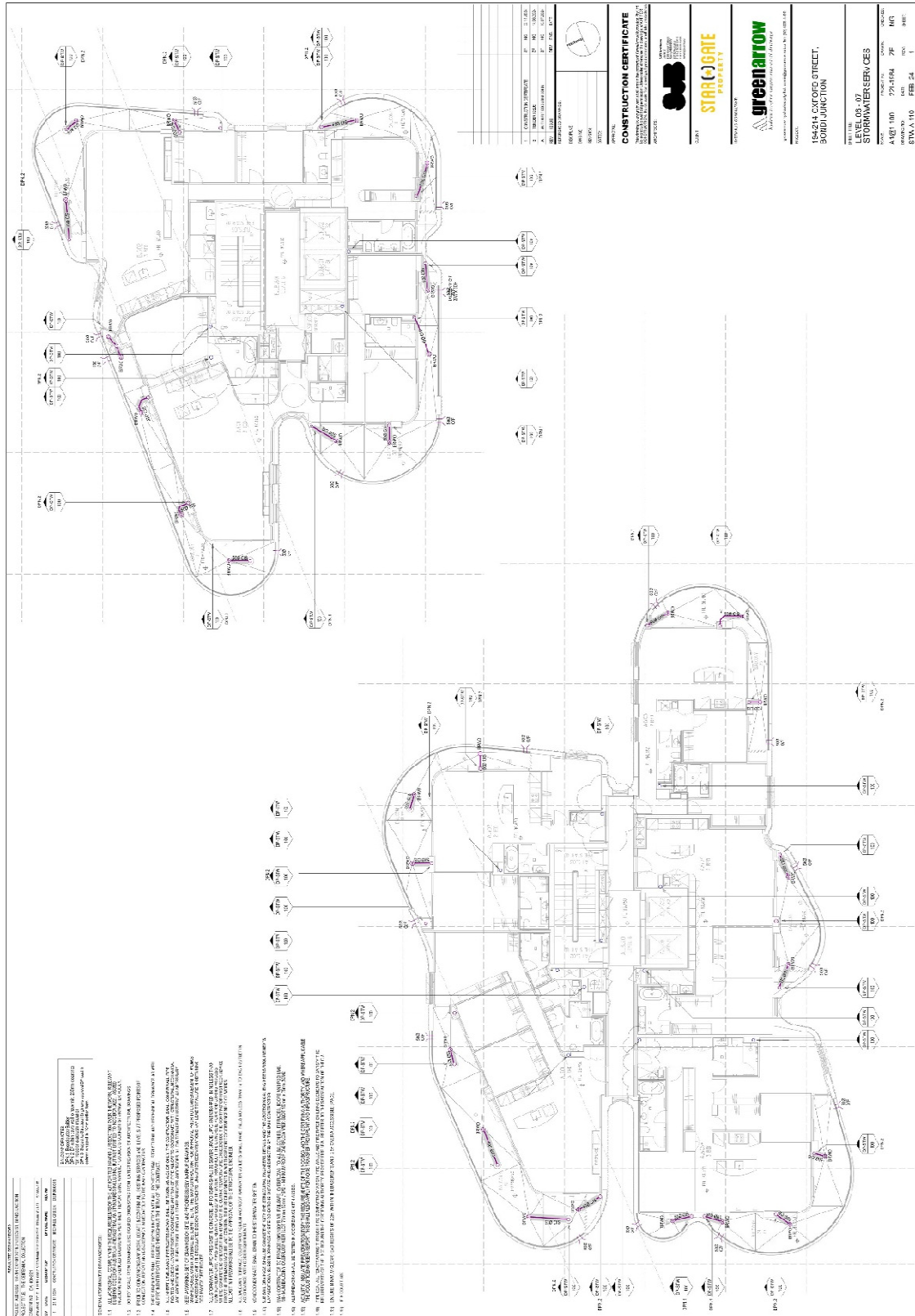






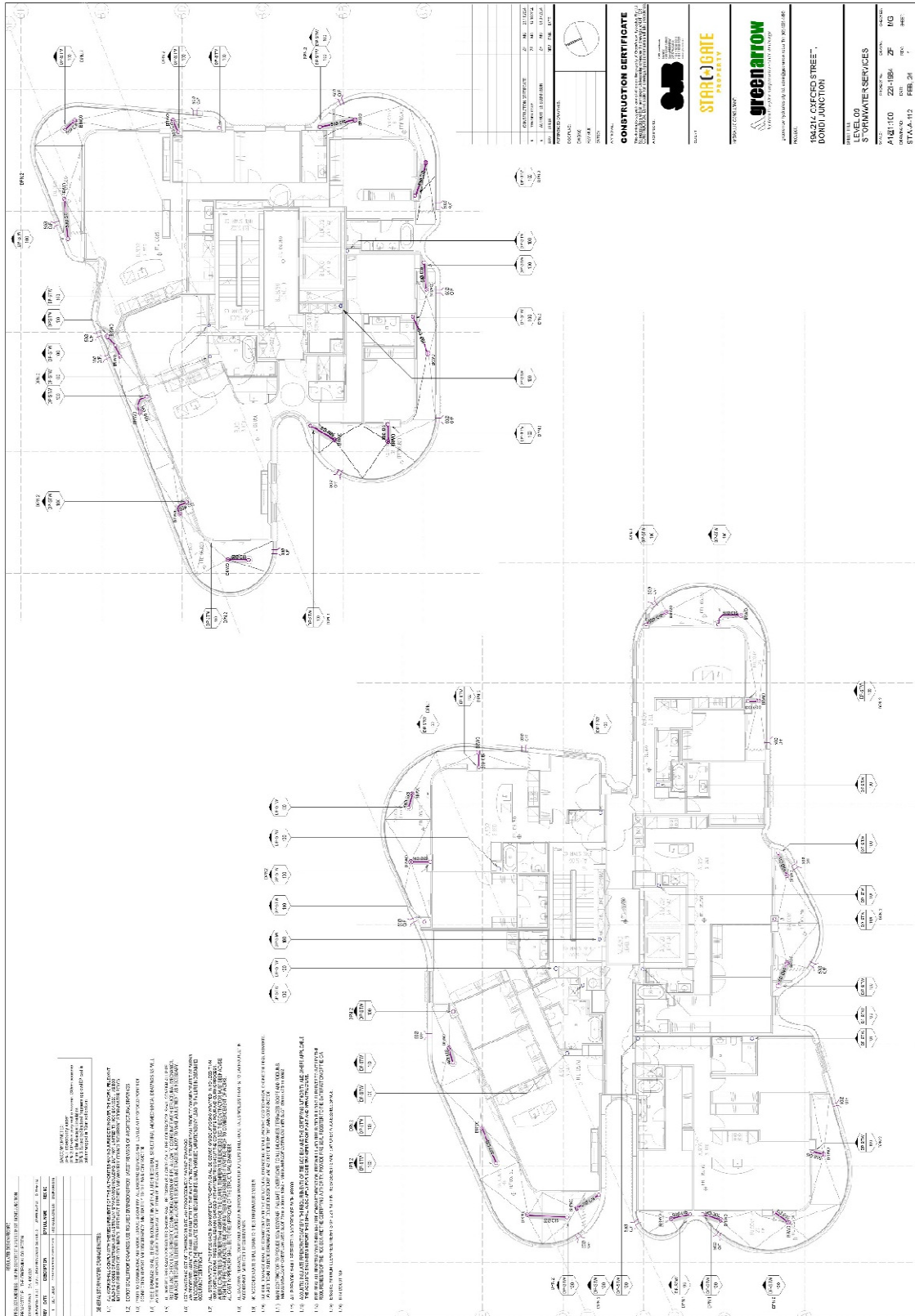
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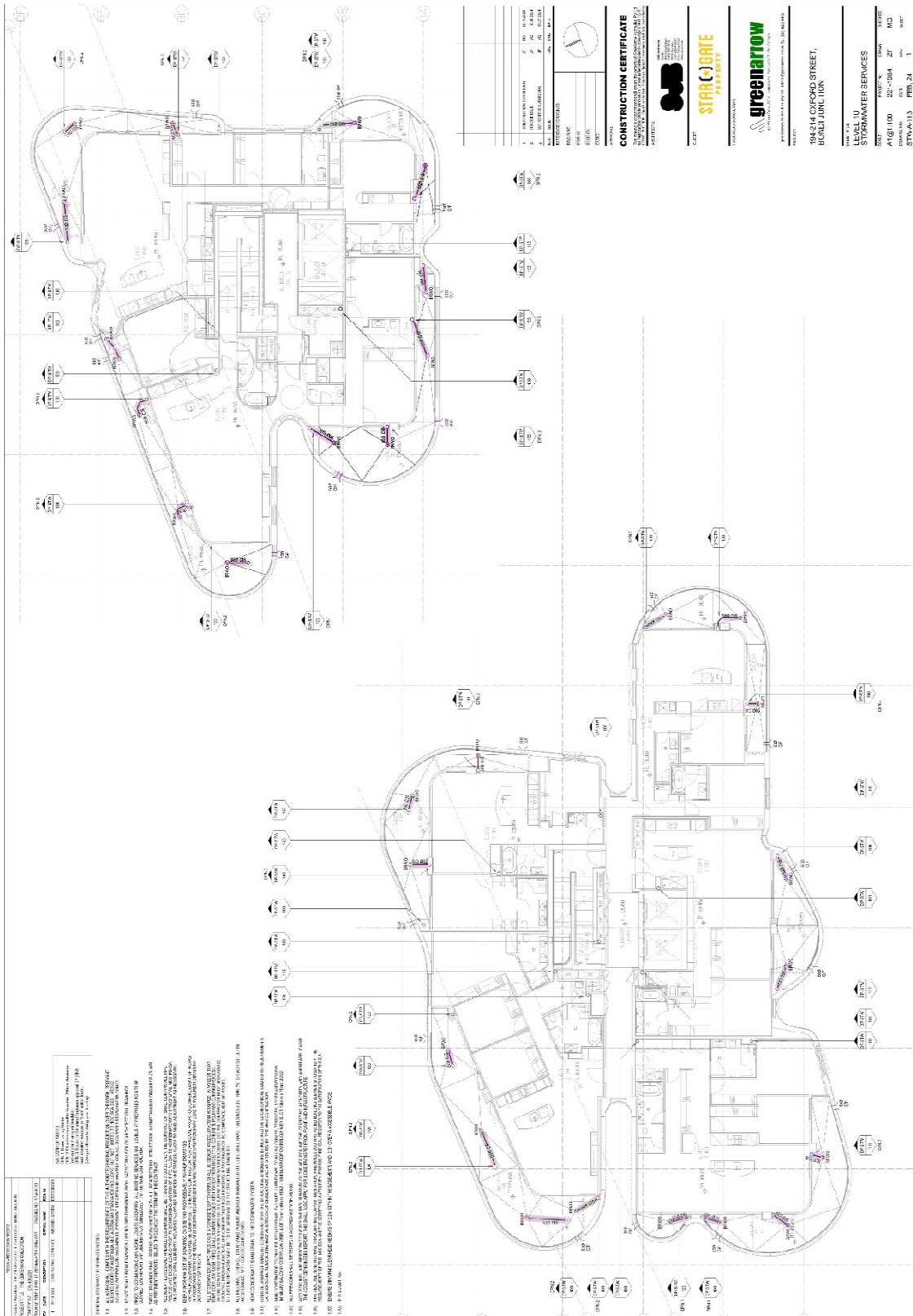




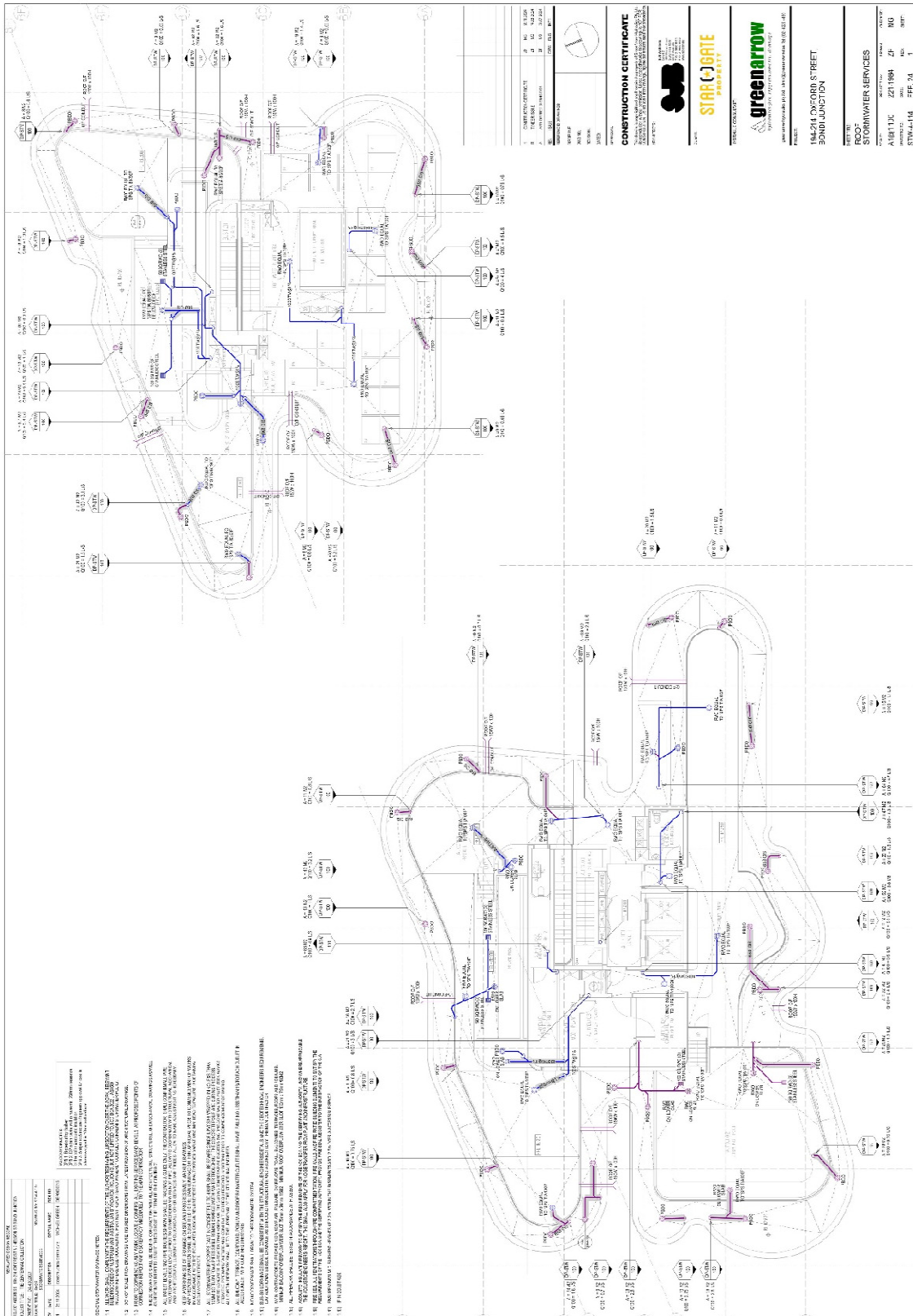
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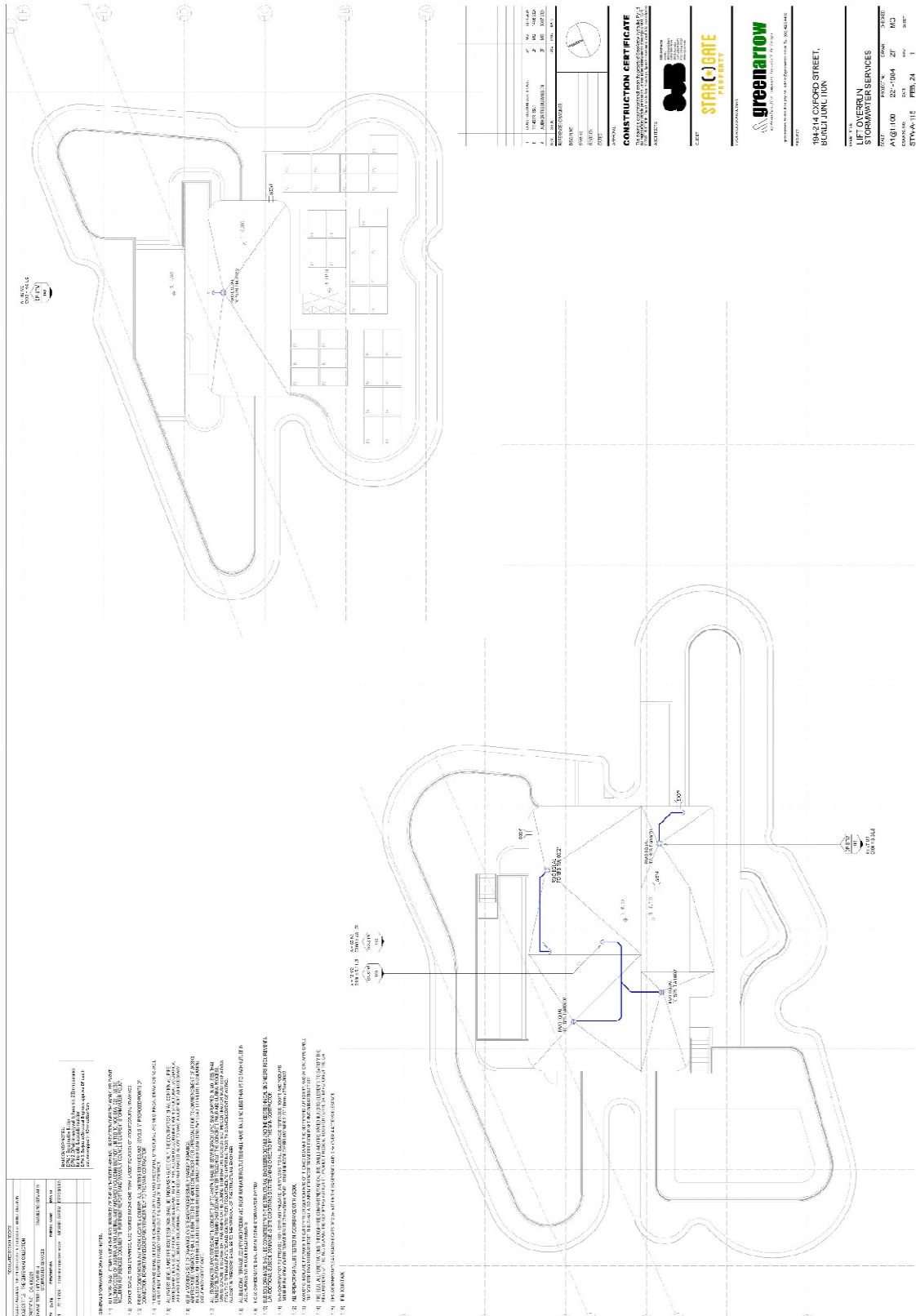


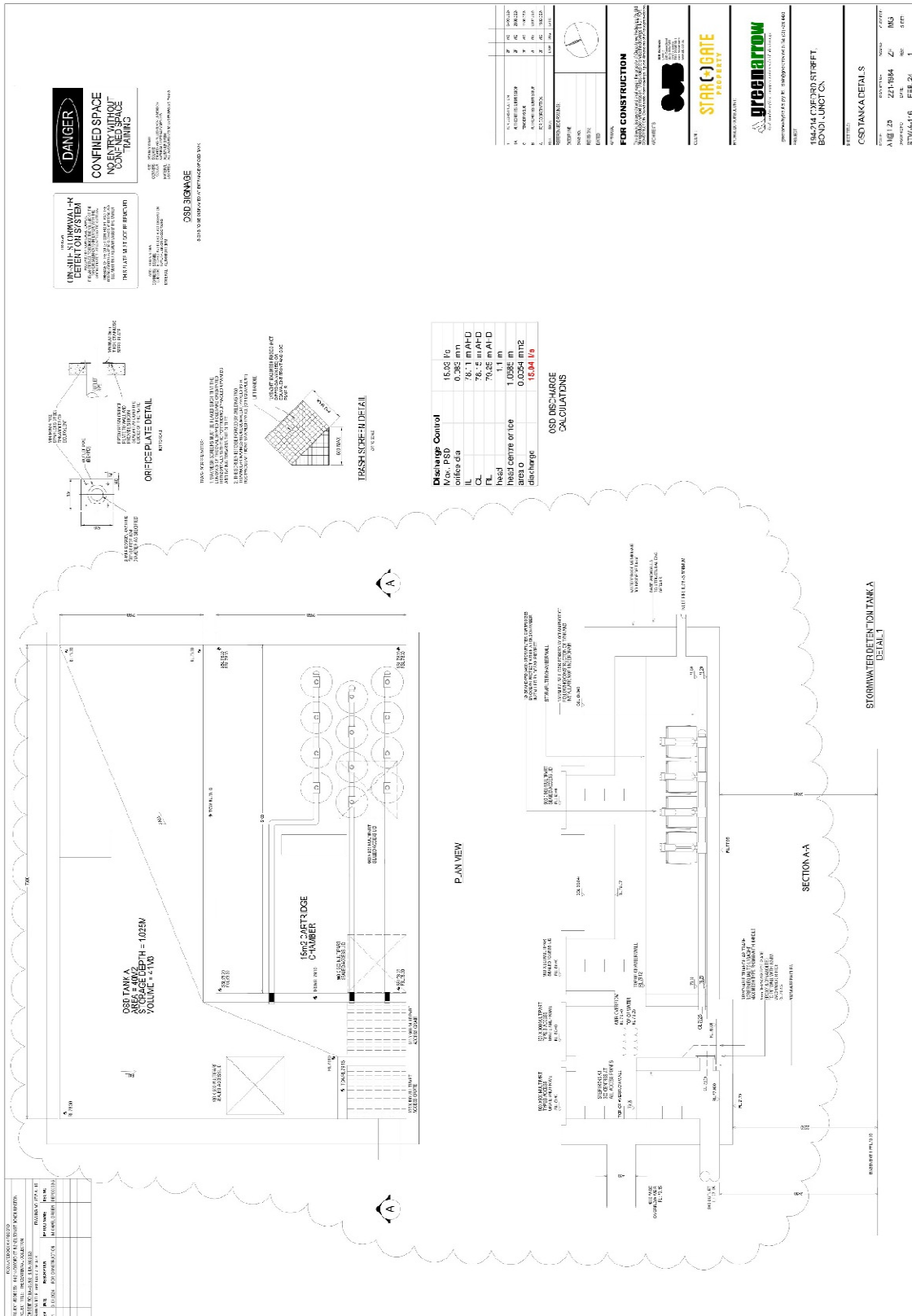


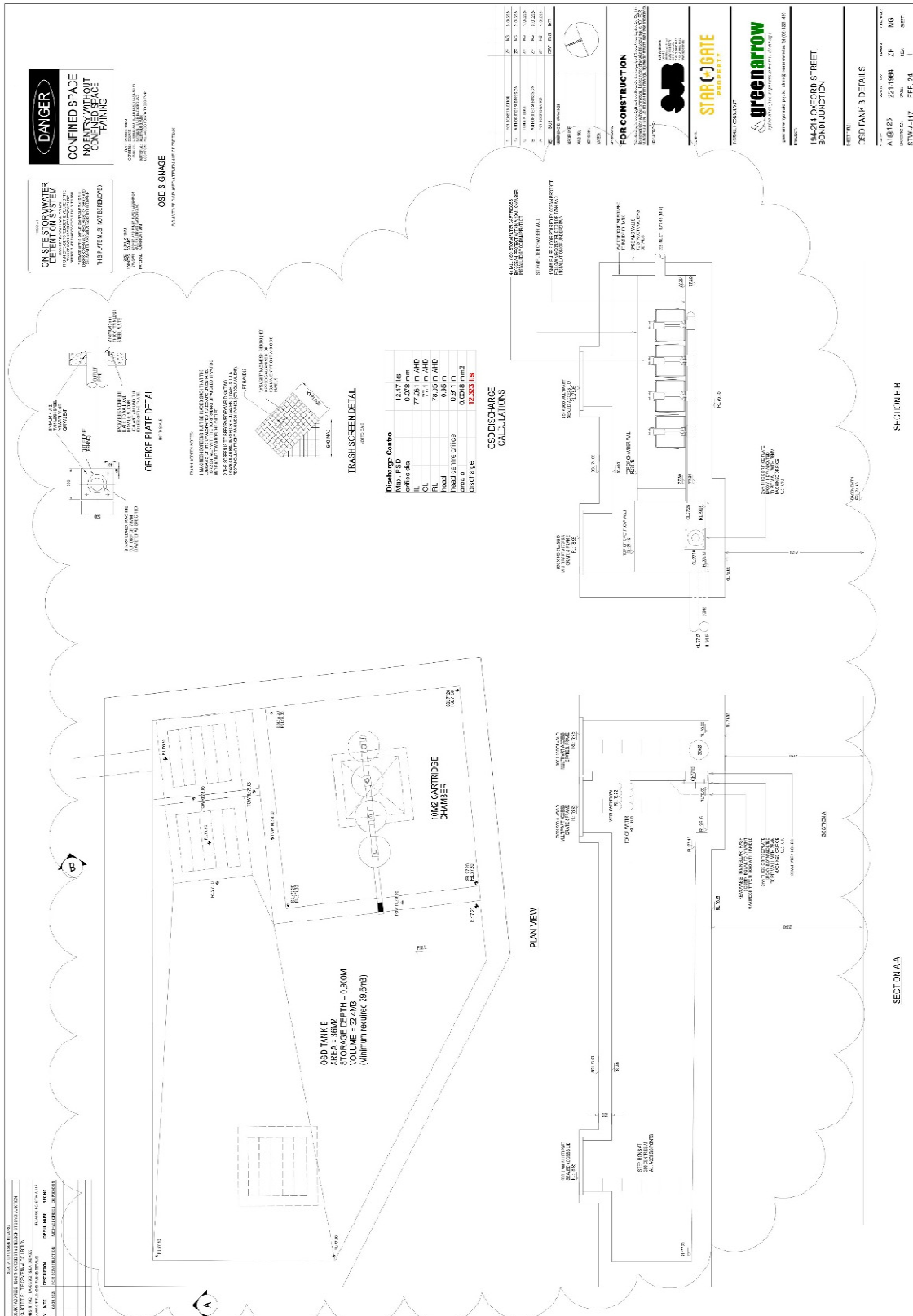


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**APPENDIX VII – SITE SERVICES DRAWING**

