

JCDecaux

Western Distributor, Pyrmont Vertical garden digital advertising screen



Methodology of Construction Works

Revision	Originator	Approved	Date	Comments
0	Dean Johns		24/07/2023	Issued for Review

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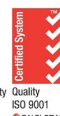


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1 INTRODUCTION

JCDecaux is in the planning approval process to construct and install a vertical garden with digital advertising within the light rail network adjacent the Western Distributor in Pymont. Hanlon Industries will undertake the construction of the sign as well and manage the material supply, installation and commissioning works once the final approval is obtained.

1.1 Location



Aerial View of Proposed Sign Location

1.2 Sign Design Overview

The development comprises the following works:

- Installation of a non-climbable concrete plinth with a diameter of 2.800m (situated approximately 7.645m from the light rail track);
- Installation of a digital advertising structure above the concrete plinth comprising the following features:
 1. Screen dimension of 12.48m x 3.2m, attached to a monopole with climbing plants and façade landscaping;
 2. JCDecaux logo of dimension 1.45m x 0.21m, located at the bottom left corner of the screen;
 3. Satin black powder coated galvanised steel mesh panels and climbing plants around the structure; and
 4. Lightweight planter boxes at 3m intervals in a vertical direction.

Refer to Appendix 1 – 'Tzannes Signage Proposal at Western Distributor Pymont'

2 SITE WORK METHODOLOGY

This work involves installation of new vertical garden and associated digital advertising screen inside the light rail network corridor. Works will be conducted from the Western Distributor with occasional access from the Light Rail corridor.

All works will occur at night time and in accordance with light rail network protocol. A rail protection Officer will be present on site to assist the crew during each shift.

2.1 Site Investigation Works

5. Transdev access approvals will be in place prior to commencement of works.
6. Undertake full dilapidation report of rock face and adjacent area.
7. Ensure that site is survey mapped and utilities are identified and mapped
8. Edge protection to be in place via static line and independent 'Preston' super scaffold system edge protection solution (Refer to 'Figure 1', Page 8) prior to investigation works undertaken
9. 'Dial Before You Dig' reports will be obtained to ensure all services are identified within the construction zone and non-destructive utility mapping will be conducted within the footing zone prior to works.
10. Hanlon will all rail infrastructure is protected prior to commencement of civil works. This includes signal trays.
11. In accordance with standard construction procedures, Hanlon will undertake a geotechnical drill to assess and evaluate the embankment conditions on site. Drill operations are to be conducted by a 2.5 tonne drill rig which will be lifted into position from the road.
12. Protection matting will be place on the embankment to ensure damage to rock surface does not occur.
13. An initial assessment of the site indicates that there is the presence of weeds. An assessment of the lantana will be undertaken by a certified Arborist. An arborist report will be produced by 'Naturally Trees' outlining the tree species encountered and what protective provisions will be required for the work area. Hanlon will then wrap the trees within the vicinity with approved tree protection measures and signage where required.
14. A general clean up of waste within the work zone is to be conducted to ensure the site is left in its original state.



Figure 1 - Example of super scaffolding to act as edge protection this would be set up on top of rock surface.

2.2 Site Preparation

The following steps are to be conducted prior to any construction works beginning on site

1. Hanlon will acquire all permits from relevant authorities and stakeholders including any land owners consents.
2. Pre Safety meeting & checks will be conducted on site with construction personnel prior to commencement of works.
3. Site personnel will sign in to the light rail site PICOW officer
4. Site personnel will sign onto Hanlon's SWMS.
5. The closure of roads as required by the traffic control plan will be undertaken as traffic management protocol.
6. Site personnel will accept drill, crane access equipment and trucks into the work zone.
7. The crane will be positioned as per lift study and then set up.

2.3 Site Protection Measures

The work area will require extensive clean up, rubbish and weed removal in the first instance to allow accurate dilapidation reports to be recorded. Once the report is completed the below site protection measures will be implemented to preserve the site embankment in pre-construction and during construction works.

1. Honcho construction matting to be placed over the entire work area (foot traffic zones) Item 1



2. Plastic encapsulation, rubber construction matting coverings item 2 and timbers as required for drill equipment positions.



3. Rubber matting Item 3 and plywood covering as required during steel installation and green wall installations.

2.4 Site Works

2.4.1 Civil works drilling of four piles

1. Civil works to be undertaken during possession.
2. PICOW officers to be used to access tracks.
3. Signal trays to be covered with protection.
4. Surveyor to set out location.
5. Drill 4 off 100 mm diameter holes.
6. Sediment controls to be in place during drill and installation.
7. Geo technical engineer to be on site at all times during drilling to monitor and provide advice during works.
8. 4 off 40mm high grade bars to be installed and grouted in the drilled pile once engineer provides approval.
9. Grout to be poured and allowed to cure to the correct strength nominated by engineer.
10. Circular Pile cap to be formed and then poured once signed off by engineer.
11. Pile cap to cure to required strength.
12. Stripping to take place.

Refer Appendix 2 – 'Footing design for the base works'

2.4.2 Install structural steel.

- Approved traffic management plan and correct ROL permits to be in place when installing the steel structure from road.
- Trans dev to be notified and works only to be undertaken after hours.
- Power out permits to be approved prior to commencement of works.
- Exclusion zone on the fish markets platform to be in place.
- A 90 tonne crane will be set up from the western distributor to install main structure steelworks (200 shs framework) and as built.
- An 80 ft knuckle boom to be used from miller lane to release slings
- Scaffold to be erected up around the structure to allow the planting element in commissioning works. Scaffold feet to have protection in place to ensure no interference to the rock surface.
- Transport perimeter fence requires modification (gate) to access the site location from Miller Street.
- Traffic management to be in place when installing the steel structure from Miller Street.



2.4.3 Install digital box

1. Traffic control to be set up as per traffic management plan.
2. The digital box will be picked up from the semi-truck using crane and slings.
3. The box will then be aligned and placed on the rails.
4. Bolt Z brackets will be affixed to the rails.
5. Anglengle brackets will be at the ends of box only.
6. Other Z brackets to be tek screwed where physically possible.
7. Install fascia, cladding frame & badge.
8. Install hatches.
9. Install camera and arm on top of the sign
10. Electrical connection to be established and commissioning to take place
11. Base ladder to be installed to allow maintenance access.

2.5 Site clean up

A site clean up will be conducted after each shift.

1. General tidy up of site including clearance of waste and construction materials.
2. Remove vehicles.
3. Ensure no equipment and rubbish is left onsite.
4. Photograph site and issue images to client and landowner.
5. Close Traffic Management.
6. Close out with client and exit site.

2.6 Final sign off

1. All final QA checks & certification
2. Engineer to sign off work.

3 PLANT AND EQUIPMENT**3.1 List of Equipment used on site**

1. 2.5 tonne drill rig
2. 90T Mobile Crane
3. Semi-trailer
4. Elevated Work Platforms
5. Wire and Cloth Slings
6. Electric power tools
7. Vehicles

Appendix 1 – ‘Tzannes Signage Proposal at Western Distributor Pymont’

DRAWING LIST

Drawing No.	Drawing Title	Revision
000	Proposed Site Plan	C
100	Plans	B
200	Elevations	C
300	Sections + Details	D
900	Materials and Finishes	B



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General Notes
 Verify dimensions on site prior to commencement of work. Check existing RL's on site. Advise Architect of any discrepancies before commencement. Allow for adjustments to suit discrepancies. Comply with relevant authorities requirements. Comply with Building Code of Australia requirements. Comply with relevant Australian Standards for materials and construction practice. Comply with Basix Certificate. Do not scale from drawings.

Rev	Date	For
A	09.05.22	FOR DEVELOPMENT APPLICATION - DRAFT
B	16.05.22	FOR DEVELOPMENT APPLICATION - DRAFT
C	23.05.22	FOR DEVELOPMENT APPLICATION - DRAFT

Client
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Structural Engineer
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Legend

- Protected street trees.
- Protected park trees.
- Unprotected trees on site.
- Refer to arborist report. All other park trees indicatively shown.
- Site access ladder and landings area

Tzannes

Scale North
 As indicated @ A1

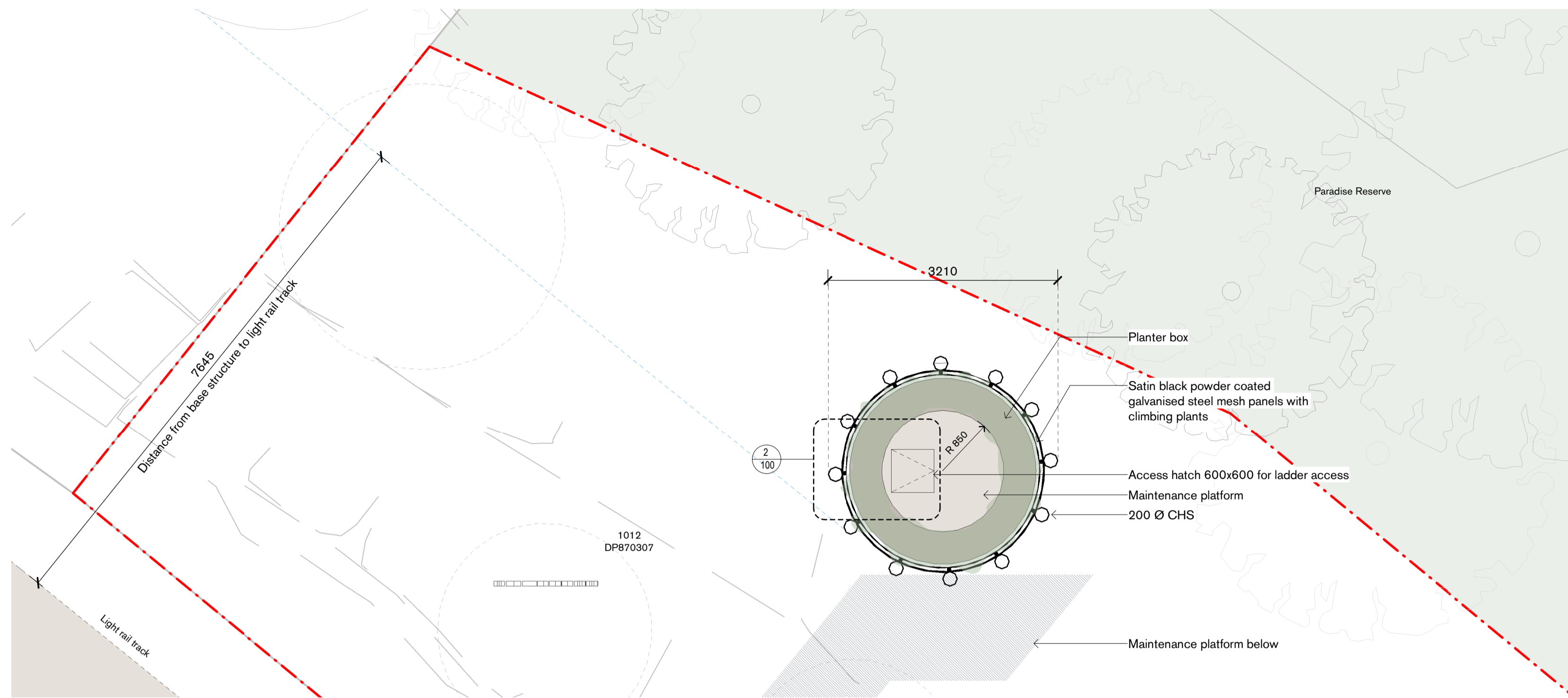
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 Signage Proposal at western Distributor, Pyrmont

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 Pyrmont Sydney NSW 2009

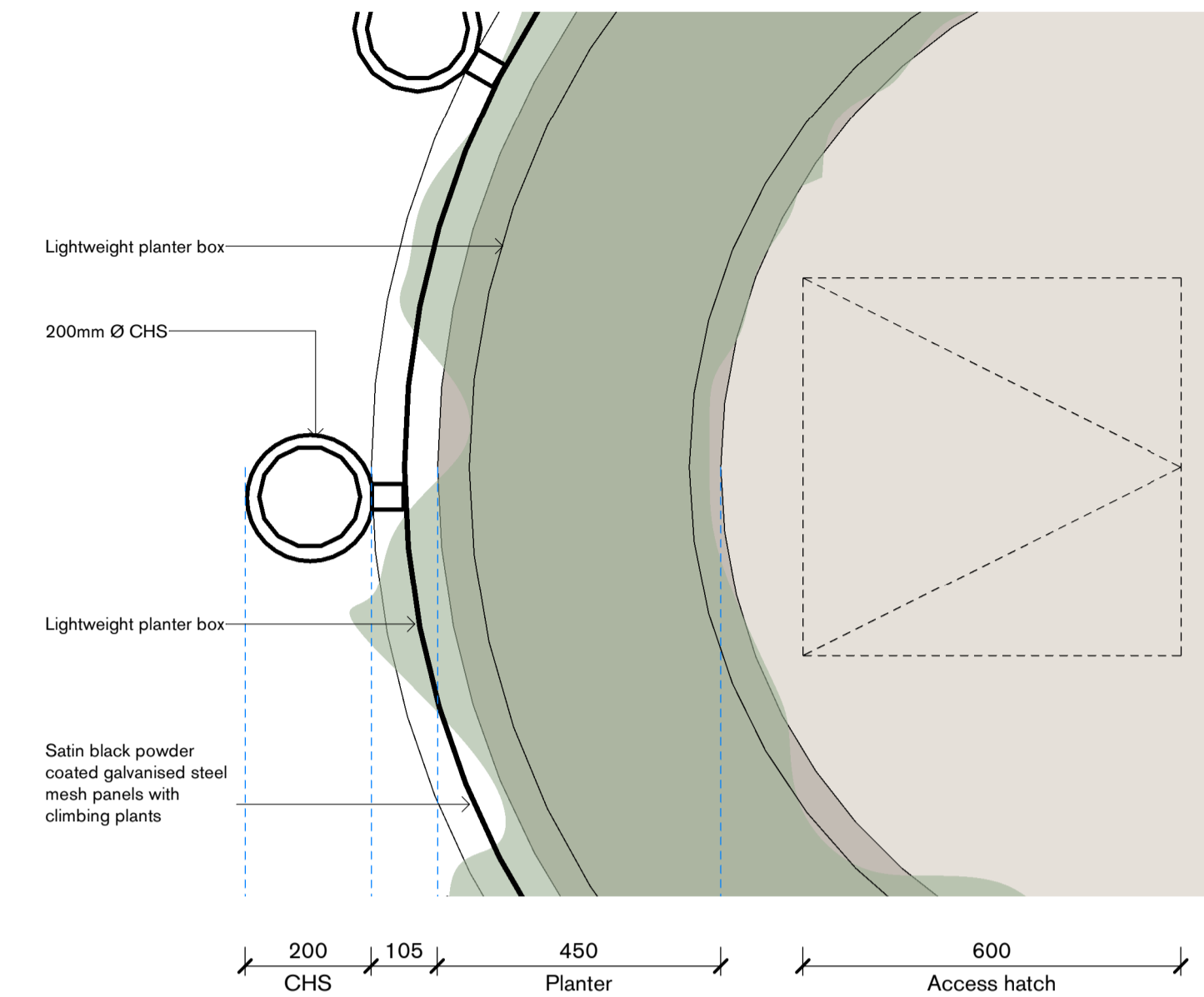
Status
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Drawing
 Proposed Site Plan

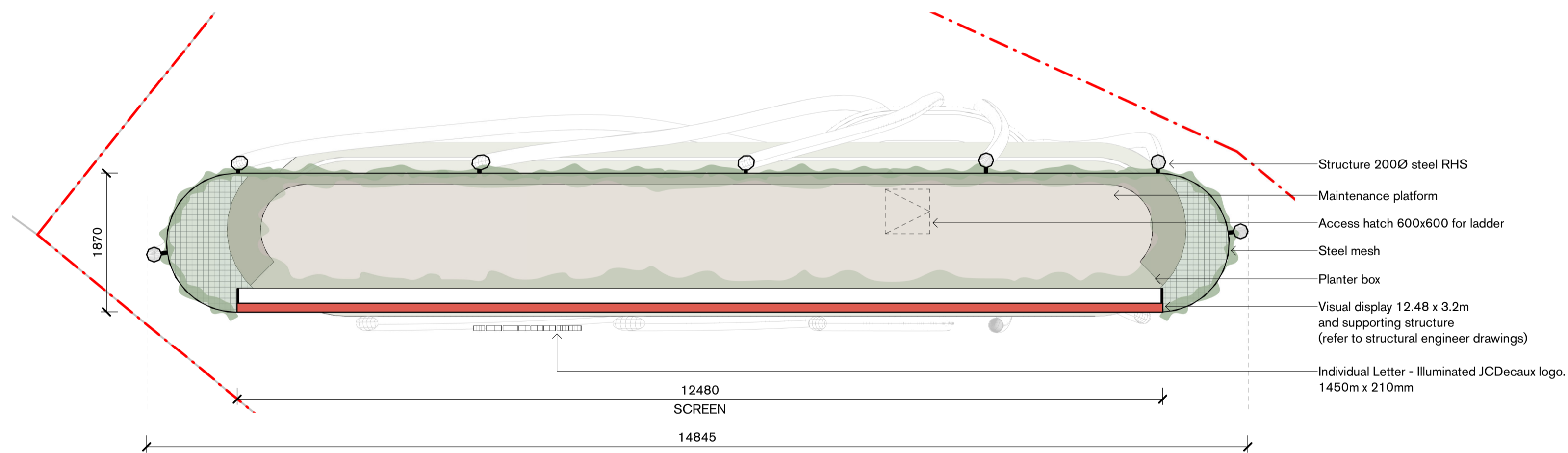
Date Created	Drawn	Checked
05/05/22	SB	TZ
Project No.	Drawing No.	Revision
21034	000	C



1 | Plan @ RL 12.00 - Base
 1:50



2 | Plan @ RL 19.07 - Base - Callout 1
 1:10



3 | Plan @ RL 28.50 - Screen
 1:50

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Legend

Scale North

As indicated @ A1

Project
 Signage Proposal at western Distributor, Pyrmont

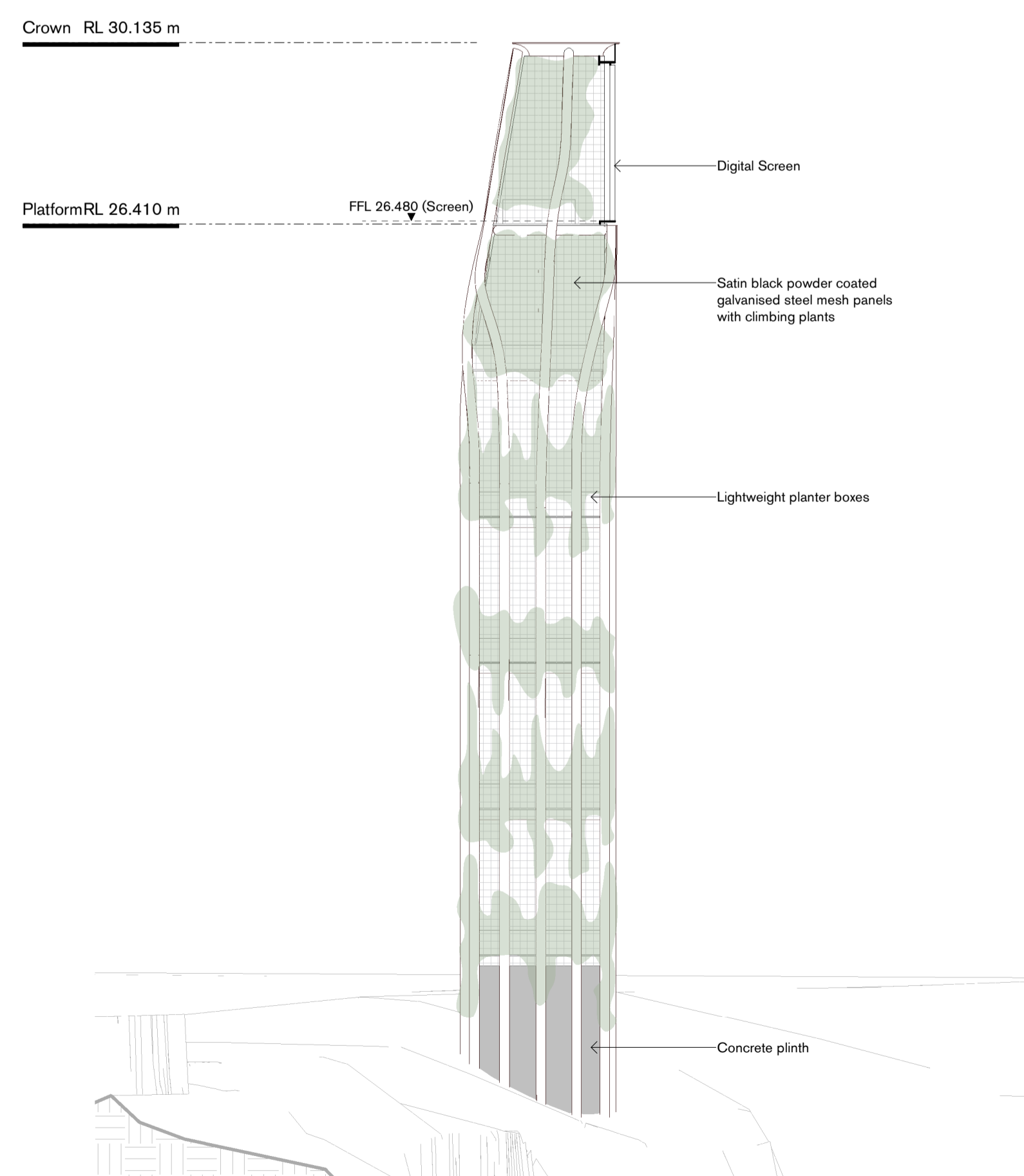
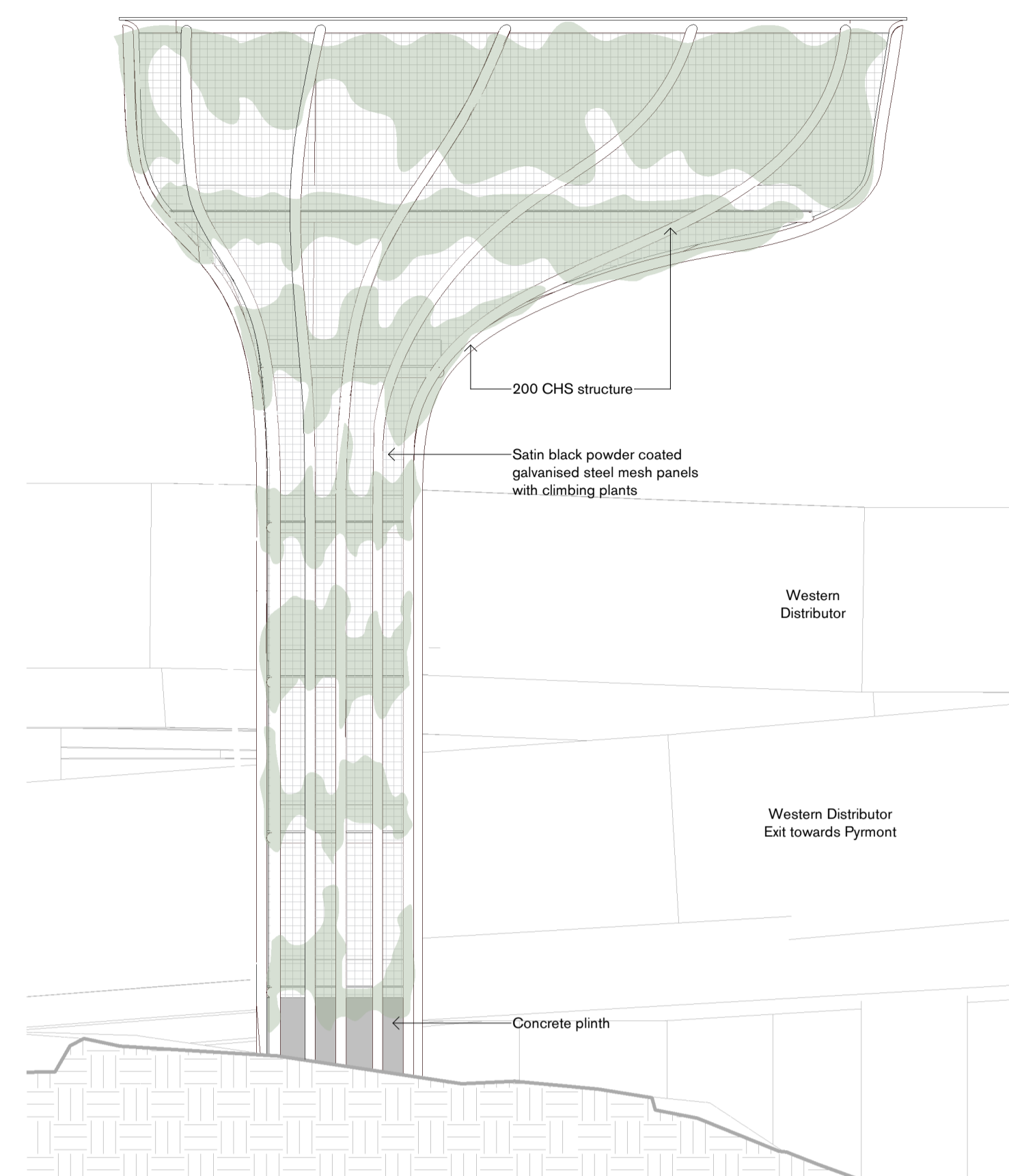
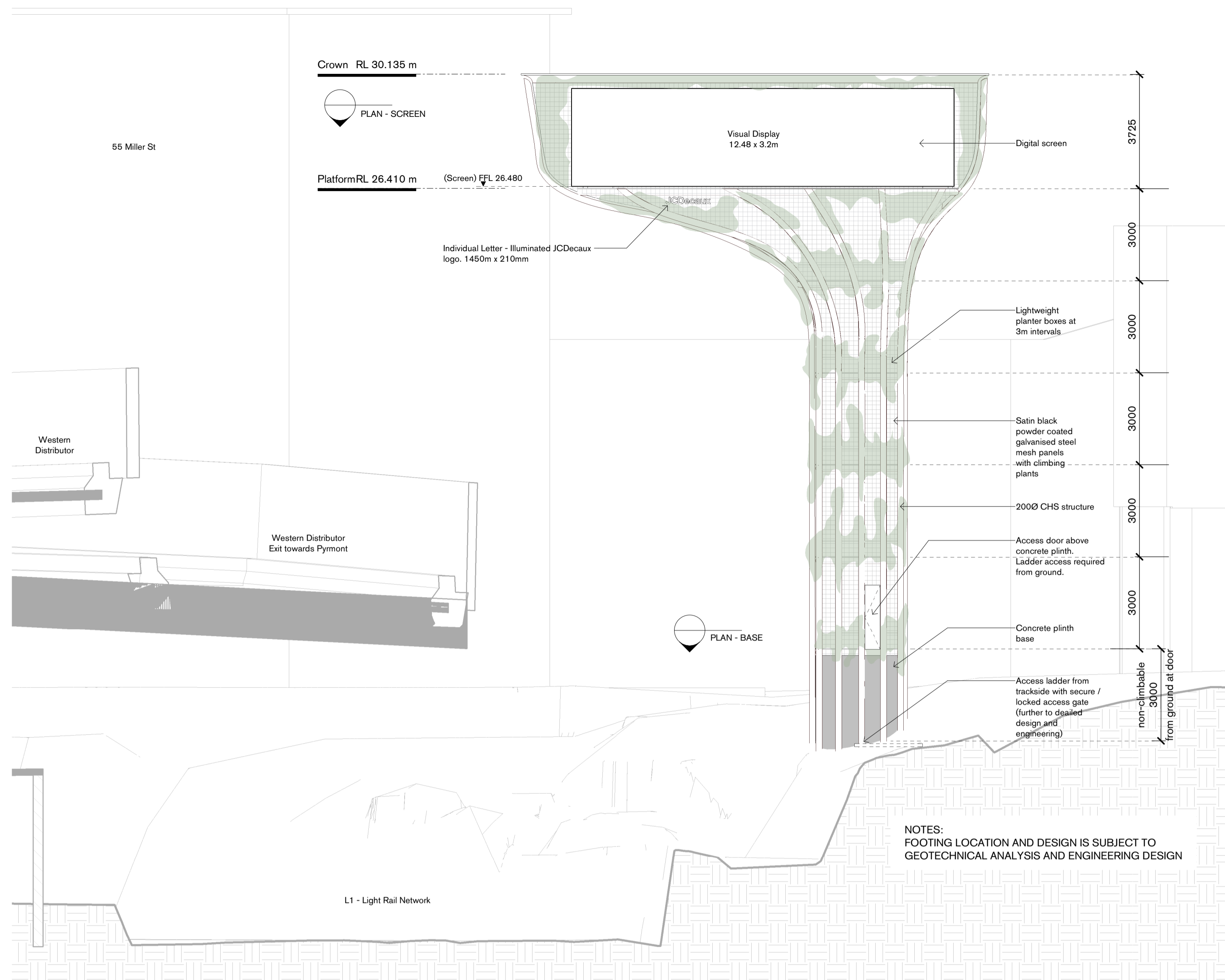
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Status
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Drawing
 Plans

Date Created 05/05/22
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Checked TZ

Project No. 21034
Drawing No. 100
Revision B



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Legend

Tzannes

Scale North

1 : 100 @ A1

Project
 Signage Proposal at western Distributor, Pymont

Address
 Lot 1012 DP870307
 Pymont Sydney NSW 2009

Status
 NOT FOR CONSTRUCTION

Drawing
 Elevations

Date Created	Drawn	Checked
05/05/22	SB	TZ

Project No.	Drawing No.	Revision
21034	200	C



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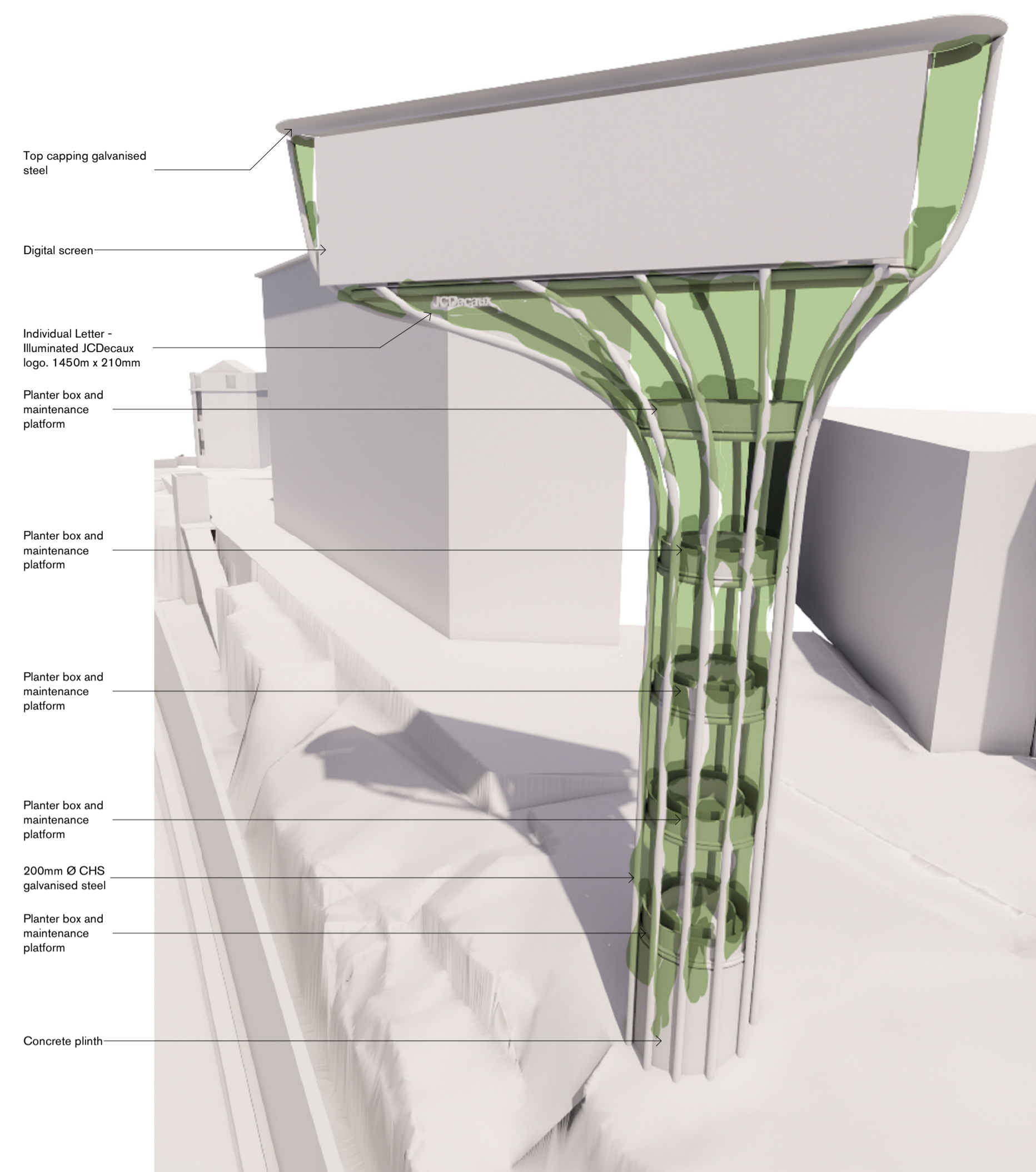
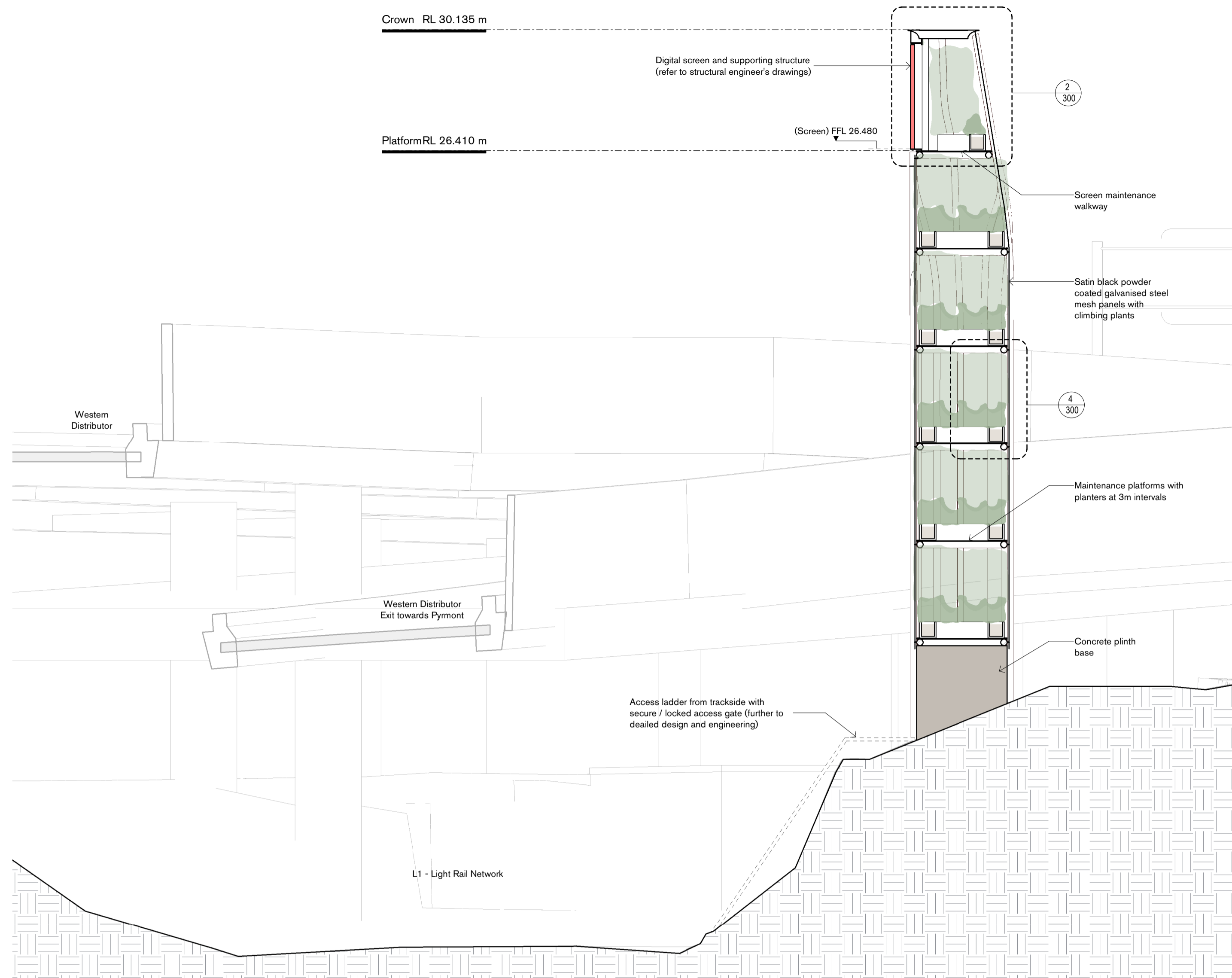
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D	23.05.22	FOR DEVELOPMENT APPLICATION - DRAFT

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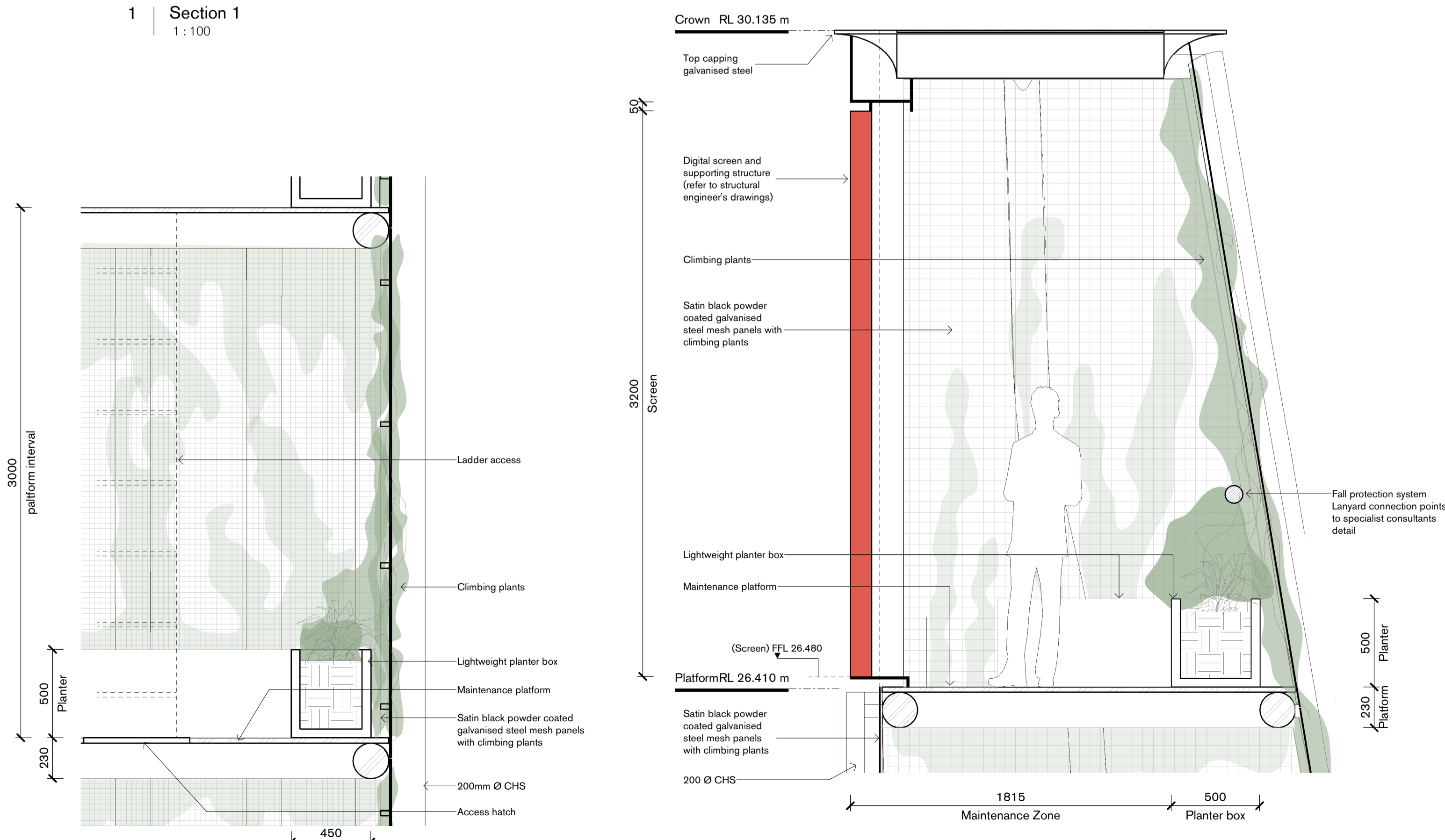
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Axonometric View

Legend

1 Section 1
 1:100



4 Detail Section 01
 1:20

2 Detail Section 02
 1:20

Tzannes

Scale North

As indicated @ A1

Project
 Signage Proposal at western
 Distributor, Pymont

Address
 Lot 1012 DP870307
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Status
 NOT FOR CONSTRUCTION

Drawing
 Sections + Details

Date Created 05/05/22
Drawn SB
Checked TZ

Project No. 21034
Drawing No. 300
Revision D



LED Display Screen



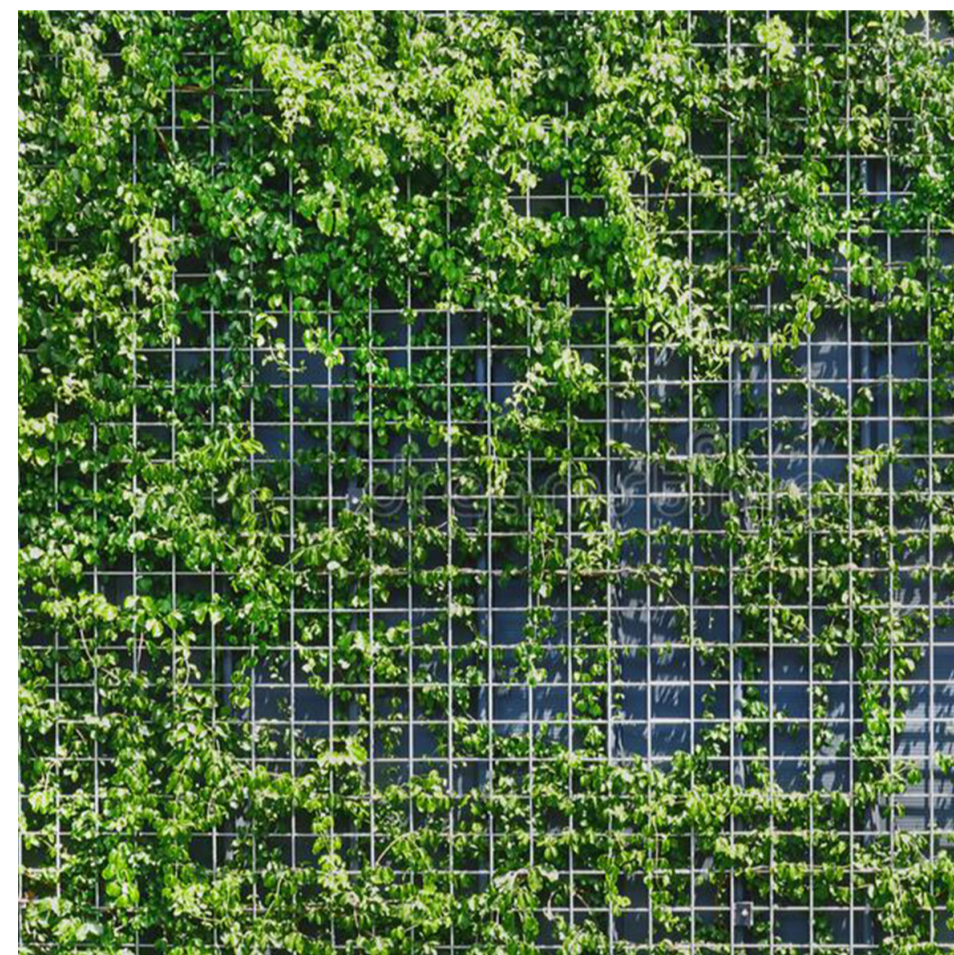
Climbing plants



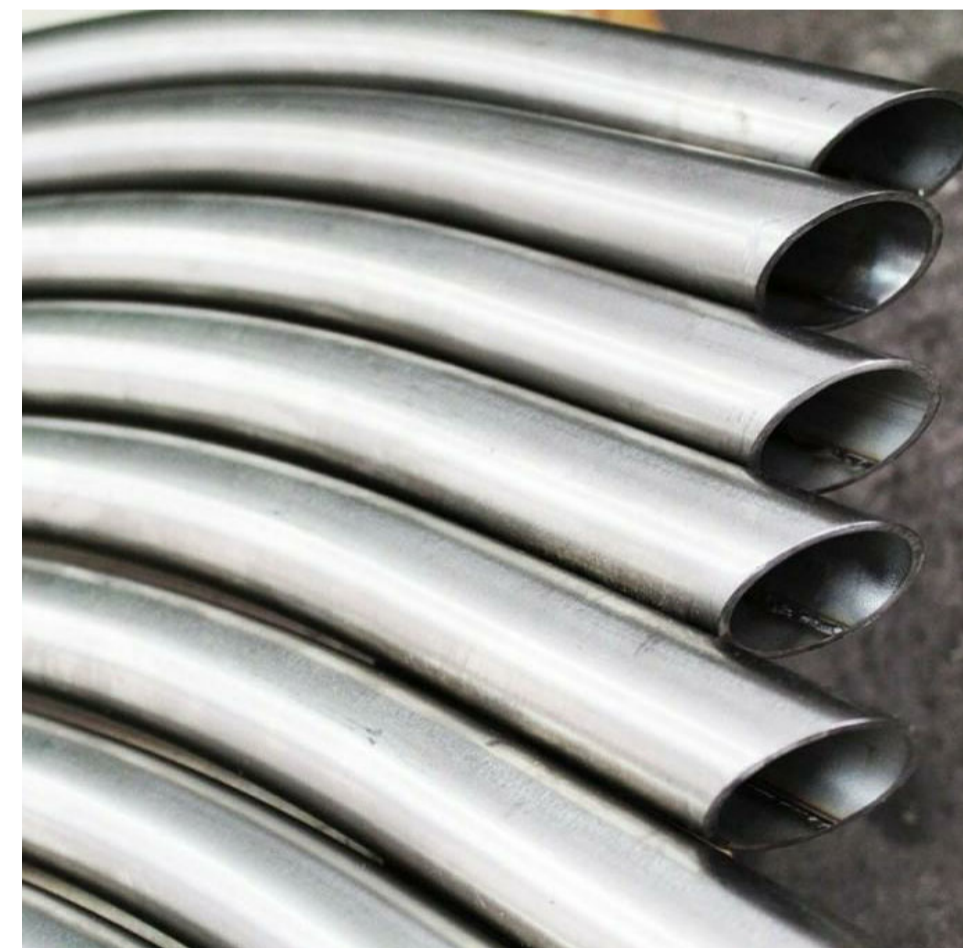
Photomontage – Proposed view from Miller Street
 Note: This is a computer generated artists impression only. Proposed landscaping illustrated is indicative only and may reveal elements otherwise obscured.



Satin black powder coated galvanised steel mesh panels



Climbing plants on mesh panel



Galvanised steel pipes 200 Ø External Structure



Exposed Concrete Plinth



Photomontage – Proposed view from Western Distributor
 Note: This is a computer generated artists impression only. Proposed landscaping illustrated is indicative only and may reveal elements otherwise obscured.



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Legend

Tzannes

Scale North
 @ A1

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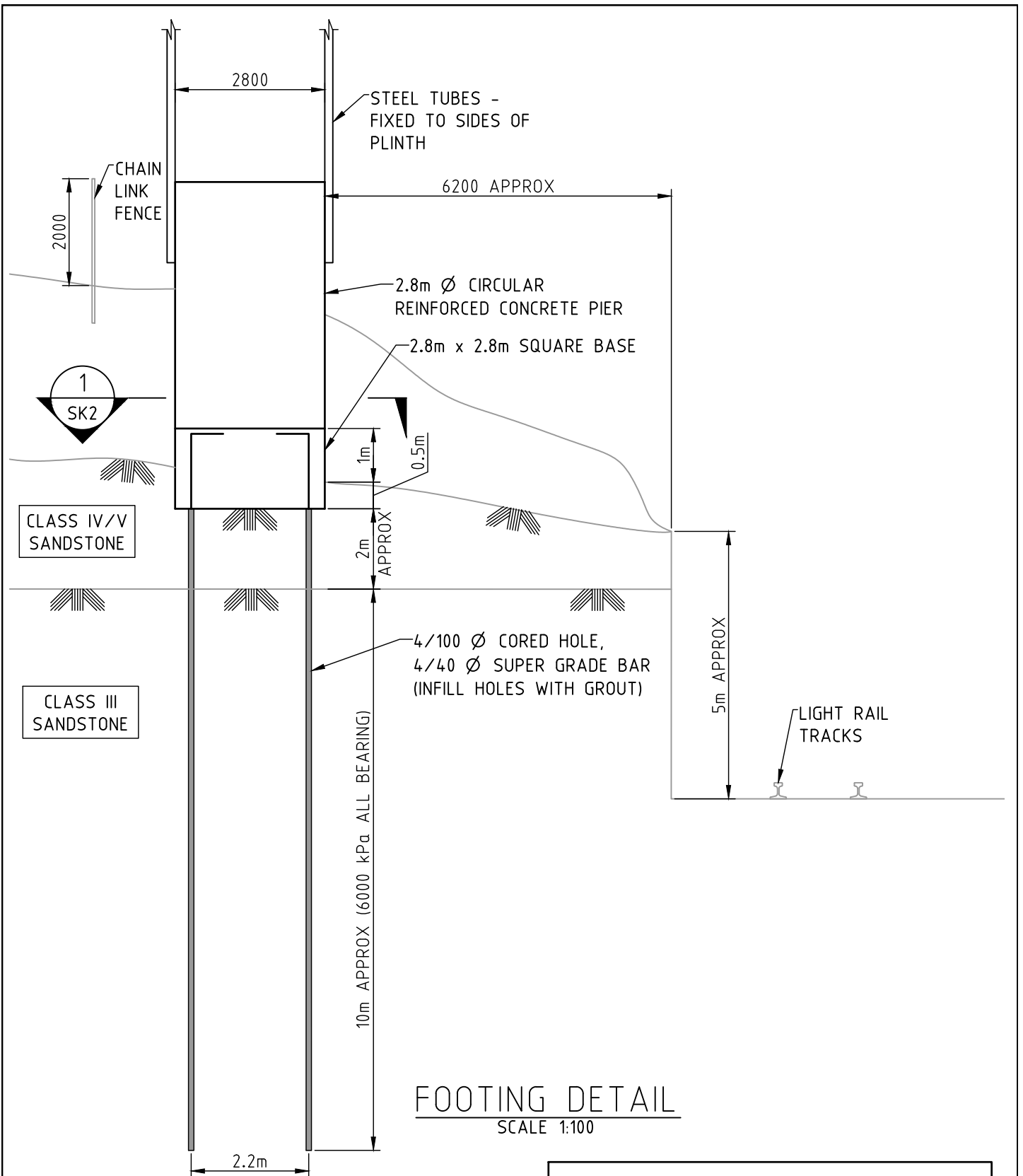
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Drawing
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05/05/22	SB	TZ

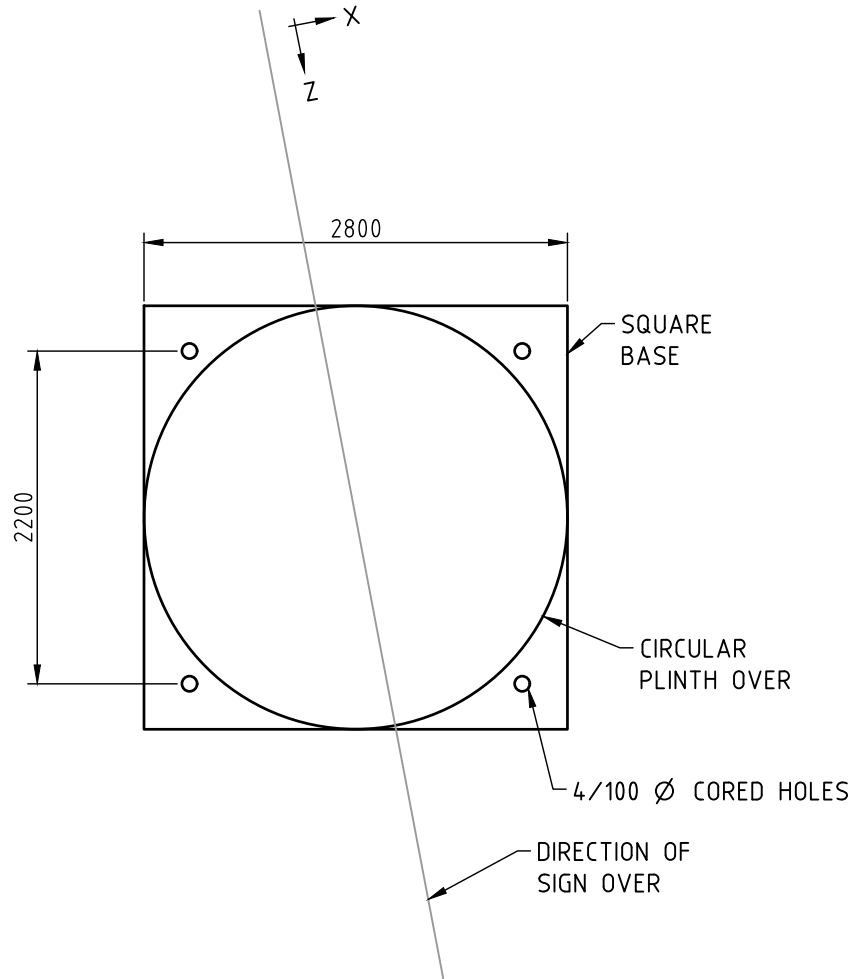
Project No.	Drawing No.	Revision
21034	900	B

Appendix 2 – ‘Footing design for the base works’



NOT FOR CONSTRUCTION

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		PROJECT: WESTERN DIST PYRMONT SIGN				
	Suite 5, Building 8, 49 Frenchs Forest Road East, Frenchs Forest, NSW 2086		DRAWN AT	DESIGN JL	CHECKED -	DATE: AUG 23
	P.O. Box 652, Forestville, NSW 2087		JOB NO: 22024		DWG NO: SK1	
	Ph: 02 9451 3455 Fax: 02 9451 3466		SCALE @ A4: AS SHOWN		REV: B	
Email: info@dbce.com.au		ABN 23 039 013 724				



SECTION 1
SCALE 1:50 SK1

NOT FOR CONSTRUCTION

TITLE: FOOTING CONCEPT	CLIENT: JCDecaux			
	PROJECT: WESTERN DIST PYRMONT SIGN			
 Suite 5, Building 8, 49 Frenchs Forest Road East, Frenchs Forest, NSW 2086 P.O. Box 652, Forestville, NSW 2087 Ph: 02 9451 3455 Fax: 02 9451 3466 Email: info@dbce.com.au ABN 23 039 013 724	DRAWN AT	DESIGN JL	CHECKED -	DATE: AUG 23
	JOB NO: 22024		DWG NO: SK2	
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