LAND DEVELOPMENT CERTIFICATES

20 June 2022 Our Ref: 41/080/1

The Minister for Planning and Public Places
Department of Planning, Industry and Environment
Locked Bag 5022
Parramatta NSW 2124

Notification of Certificate Issue

Site Address:	Lot 100 DP 1262209, Lot 101 DP 1263727, Lot 200 DP 1274184 Ivanhoe Estate comprising Ivanhoe Place, Wilcannia Way, Nyngan Way, Narromine Way and Cobar Way, part of 2-4 Lyonpark Road and portions of Shrimptons Creek, Macquarie Park
Subdivision Works Certificate:	16897

In accordance with the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021, please accept notice of our certificate issued under Part 6 Environmental Planning and Assessment Act, 1979.

The Subdivision Works Certificate and associated documentation has been uploaded to the NSW Planning Portal as required by legislation.

Please do not hesitate to contact our office should you require any further information relating to the certification work undertaken or the documentation accompanying this notification.

Yours faithfully

Colette Murray
Office Coordinator

LAND DEVELOPMENT CERTIFICATES

Certificate Number:

16897

Subdivision Works Certificate

Environmental Planning and Assessment Act, 1979, Section 6.4 (b)

Determination:	Approved	
Determination Date:	20/06/2022	
Applicant:	Frasers Property Ivanhoe Pty Ltd	
Applicant Address:	Level 2, 1C Homebush Bay Drive, Rhodes NSW 2138	
Consent Authority:	Minister for Planning and Public Spaces	
Development Consent:	Ref: SSD-8903	Dated: 30/04/2020
Modification:	Ref: SSD-8903 MOD 3	Dated: 21/12/2021
Subject Land:	Lot 100 DP 1262209, Lot 101 DP 1263727, Lot 200 DP 1274184	
Site Address:	Ivanhoe Estate comprising Ivanhoe Place, Wilcannia Way, Nyngan Way, Narromine Way and Cobar Way, part of 2-4 Lyonpark Road and portions of Shrimptons Creek, Macquarie Park	
Description of Work:	Modification of Subdivision Works Certificate 16746 relating to Ivanhoe Stage 1B works including tree removal, earthworks, roads, bridge, drainage, landscaping and public domain works.	
Approved Documents:	Refer to Schedule 1 (attached) for a listing of the Approved Documents.	
Supporting Documents:	Refer to Schedule 2 (attached) for Supporting Documents applying to this certificate.	
Notes:	Refer to Schedule 3 (attached) for Notes applying to this certificate.	
Certification Statement:	I certify that work completed in accordance with the Approved Documents will comply with the relevant requirements of s 6.12 and s 6.14 of the Environmental Planning and Assessment Act 1979 and s 34 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021.	

Eric Hausfeld

Accredited Certifier

BPB Accreditation No. 2416

Schedule 1

Approved Documents:	ADW Johnson
Project Reference:	300001(2)

Drawing	Revision	Date	Description
001	2	16/05/2022	Cover Sheet, Index of Drawings & Locality Sketch
002	2	16/05/2022	General Notes
003	2	16/05/2022	Overall Site Plan
004	2	16/05/2022	Demolition Plan
005	2	16/05/2022	Survey Setout Plan
006	2	16/05/2022	Structural Notes
007	2	16/05/2022	Flood Extents Plan
101	2	16/05/2022	Detail Plan
151	2	16/05/2022	Pavement Plan
152	2	16/05/2022	Pavement Details
181	2	16/05/2022	Subsoil Drainage Plan
201	2	16/05/2022	Typical Road Profiles, Kerb Details & Road Setout Tables
202	2	16/05/2022	Kerb Ramp, Temporary Berm & Bin Footing Details
211	2	16/05/2022	Road Longitudinal Sections Road No. 01 – Sheet 1
212	2	16/05/2022	Road Longitudinal Sections Road No. 01 – Sheet 2
213	2	16/05/2022	Road Longitudinal Sections Road No. 02
231	2	16/05/2022	Road Cross Sections Road No. 01 – Sheet 1
232	2	16/05/2022	Road Cross Sections Road No. 01 – Sheet 2
233	2	16/05/2022	Road Cross Sections Road No. 01 – Sheet 3
234	2	16/05/2022	Road Cross Sections Road No. 01 – Sheet 4
235	2	16/05/2022	Road Cross Sections Road No. 01 – Sheet 5
236	2	16/05/2022	Road Cross Sections Road No. 01 – Sheet 6
237	2	16/05/2022	Road Cross Sections Road No. 01 – Sheet 7
238	2	16/05/2022	Road Cross Sections Road No. 01 – Sheet 8
239	2	16/05/2022	Road Cross Sections Road No. 01 – Sheet 9
240	2	16/05/2022	Road Cross Sections Road No. 02 – Sheet 1
241	2	16/05/2022	Road Cross Sections Road No. 02 – Sheet 2
242	2	16/05/2022	Road Cross Sections Road No. 02 – Sheet 3
243	2	16/05/2022	Road Cross Sections Road No. 02 – Sheet 4
244	2	16/05/2022	Road Cross Sections Road No. 02 – Sheet 5
301	2	16/05/2022	Intersection Details Kerb Returns KR03 & KR04
302	2	16/05/2022	Intersection Details Kerb Returns KR05 & KR06
303	2	16/05/2022	Intersection Details Kerb Returns KR10 & KR11
310	2	16/05/2022	MRV Turning Paths Details Plans
351	2	16/05/2022	Carpark Detail Plan CP07, CP08, CP10 & CP11
352	2	16/05/2022	Carpark Longitudinal Sections CP07, CP08, CP10 & CP11
353	2	16/05/2022	Carpark Detail Plan CP 02, CP03, CP04 & CP05
354	2	16/05/2022	Carpark Longitudinal Sections CP02, CP03 & CP04

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BPB Accreditation No. 2416

Schedule 1

Approved Documents:	ADW Johnson
Project Reference:	300001(2)

Drawing	Revision	Date	Description
355	2	16/05/2022	Carpark Setout Tables CP02, CP03, CP04 & CP05
361	2	16/05/2022	Overall LIF Carpark Plan
362	2	16/05/2022	LIF Carpark Detail Plan Carpark No. 1
363	2	16/05/2022	LIF Carpark Section Carpark CL No. 1
364	2	16/05/2022	Driveway Longitudinal Sections Driveway No. 1 & No. 2
365	2	16/05/2022	Kerb Return Longitudinal Sections KR101, KR101A, KR102, KR102A & KR102B
366	2	16/05/2022	Footpath No. 1 Longitudinal Section & Typical Carpark No. 1 Details
367	2	16/05/2022	LIF Carpark Detail Plan Carpark No. 2
368	2	16/05/2022	LIF Carpark Section Carpark CL No. 2
369	2	16/05/2022	Driveway Longitudinal Section Driveway No. 03
370	2	16/05/2022	Kerb Return Longitudinal Sections KR103 & KR103A
371	2	16/05/2022	Typical Details & Sections
401	2	16/05/2022	Stormwater Catchment Plan
411	2	16/05/2022	Stormwater Setout Table & Details
421	2	16/05/2022	Stormwater Calculation Charts 20 Year A.R.I.
422	2	16/05/2022	Stormwater Calculation Charts 100 Year A.R.I.
431	2	16/05/2022	Stormwater Longitudinal Sections – Sheet 1
432	2	16/05/2022	Stormwater Longitudinal Sections – Sheet 2
433	2	16/05/2022	Stormwater Longitudinal Sections – Sheet 3
434	2	16/05/2022	Stormwater Longitudinal Sections – Sheet 4
435	2	16/05/2022	Stormwater Longitudinal Sections – Sheet 5
451	2	16/05/2022	Basin Detail Plan
480	2	16/05/2022	Custom Stormwater Pit – Pit No. 1/12A
481	2	16/05/2022	Custom Stormwater Pit – Pit No. 1/14
482	2	16/05/2022	Custom Stormwater Pit – Pit No. 1/15
483	2	16/05/2022	Custom Stormwater Pit – Pit No. 1/16
484	2	16/05/2022	Custom Stormwater Pit – Pit No. 1/17
485	2	16/05/2022	Custom Stormwater Pit – Pit No. 3/9
486	2	16/05/2022	Custom Stormwater Pit – Pit No. 3/10
487	2	16/05/2022	Custom Stormwater Pit – Pit No. 3/11
488	2	16/05/2022	Custom Stormwater Pit – Pit No. 3/12
489	2	16/05/2022	Custom Stormwater Pit – Pit No. 3/13
490	2	16/05/2022	Custom Stormwater Pit – Pit No. 15/3
491	2	16/05/2022	Custom Stormwater Pit – Pit No. 15/4
492	2	16/05/2022	Custom Stormwater Pit – Pit No. 15/5
493	2	16/05/2022	Custom Stormwater Pit – Pit No. 100/3

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BPB Accreditation No. 2416

Schedule 1

Approved Documents:	ADW Johnson
Project Reference:	300001(2)

Drawing	Revision	Date	Description
494	2	16/05/2022	Custom Stormwater Pit – Pit No. 101/1
495	2	16/05/2022	Typical Custom Stormwater Pit Details – Sheet 1
496	2	16/05/2022	Typical Custom Stormwater Pit Details – Sheet 2
497	2	16/05/2022	Typical Custom Stormwater Pit Details – Sheet 3
498	2	16/05/2022	Stormwater Pit 101/2 Setout Plan
499	2	16/05/2022	Custom Stormwater Pit – Pit No. 1/10
501	2	16/05/2022	Site Regrade Plan
551	2	16/05/2022	Retaining Wall Detail Plan
561	2	16/05/2022	Retaining Wall Longitudinal Section RW100
562	2	16/05/2022	Retaining Wall Longitudinal Section Bridge Wall No. 1
563	2	16/05/2022	Retaining Wall Longitudinal Section Existing Retaining Wall
564	2	16/05/2022	Retaining Wall Longitudinal Section RW101
571	2	16/05/2022	Typical Retaining Wall Details & Notes
572	2	16/05/2022	Typical Gabion Wall Details & Notes
573	2	16/05/2022	Typical Gabion Wall Bridging Structure Details
574	2	16/05/2022	Typical Gabion Wall Notes
601	2	16/05/2022	Erosion & Sediment Control Plan
611	2	16/05/2022	Erosion & Sediment Control Details & Notes
701	2	16/05/2022	Bridge Detail Plan
711	2	16/05/2022	Footpath No. 2 Plan & Longitudinal Section
721	2	16/05/2022	Bridge Abutment Longitudinal Section & Headwall Outlet Details
722	2	16/05/2022	Headwall Outlet Details
801	2	16/05/2022	Tree Retention Plan

Approved Documents:	SMEC
Job Number:	30013046

Drawing	Revision	Date	Description
100	A	14/06/2022	Cover Sheet
101	A	14/06/2022	Drawing Schedule
105	A	14/06/2022	General Arrangement – Sheet A
106	A	14/06/2022	General Arrangement – Sheet B
107	A	14/06/2022	General Arrangement – Sheet C
111	A	14/06/2022	Piling Layout

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BPB Accreditation No. 2416

Schedule 1

Approved Documents:	SMEC
Job Number:	30013046

Drawing	Revision	Date	Description
112	A	14/06/2022	Pile Details – Sheet A
113	A	14/06/2022	Pile Details – Sheet B
115	A	14/06/2022	Abutment Concrete – Sheet A
116	A	14/06/2022	Abutment Concrete – Sheet B
117	A	14/06/2022	Abutment Concrete – Sheet C
121	A	14/06/2022	Abutment Reinforcement – Sheet A
122	A	14/06/2022	Abutment Reinforcement – Sheet B
123	A	14/06/2022	Abutment Reinforcement – Sheet C
124	A	14/06/2022	Abutment Reinforcement – Sheet D
131	A	14/06/2022	Pier Details – Sheet A
132	A	14/06/2022	Pier Details – Sheet B
133	A	14/06/2022	Pier Details – Sheet C
135	A	14/06/2022	Pier Reinforcement Details – Sheet A
136	A	14/06/2022	Pier Reinforcement Details – Sheet B
141	A	14/06/2022	Bearings
151	A	14/06/2022	Deck Setting Out
152	A	14/06/2022	Deck Concrete – Sheet A
153	A	14/06/2022	Deck Concrete – Sheet B
161	A	14/06/2022	Deck Post Tensioning – Sheet A
162	A	14/06/2022	Deck Post Tensioning – Sheet B
163	A	14/06/2022	Deck Post Tensioning – Sheet C
171	A	14/06/2022	Deck Reinforcement – Sheet A
172	A	14/06/2022	Deck Reinforcement – Sheet B
173	A	14/06/2022	Deck Reinforcement – Sheet C
174	A	14/06/2022	Deck Reinforcement – Sheet D
181	A	14/06/2022	On Structure Barrier Details – Sheet A
182	B	14/06/2022	On Structure Barrier Details – Sheet B
183	B	14/06/2022	On Structure Barrier Details – Sheet C
184	A	14/06/2022	On Structure Barrier Details – Sheet D
185	A	14/06/2022	On Structure Barrier Details – Sheet E
186	A	14/06/2022	Retaining Wall Concrete Details
187	A	14/06/2022	Retaining Wall Reinforcement Details
188	A	14/06/2022	Off Structure Barrier Details Sheet A
189	A	14/06/2022	Off Structure Barrier Details – Sheet B
190	A	14/06/2022	Off Structure Barrier Cycle Rail and Hand Rail Termination Details

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BPB Accreditation No. 2416

Schedule 1

Approved Documents:	SMEC
Job Number:	30013046

Drawing	Revision	Date	Description
191	A	14/06/2022	Approach Slab Concrete – Sheet A
192	A	14/06/2022	Approach Slab – Sheet B
195	A	14/06/2022	Approach Slab Reinforcement – Sheet A
196	A	14/06/2022	Approach Slab Reinforcement – Sheet B
201	A	14/06/2022	Expansion Joint Details – Sheet A
202	A	14/06/2022	Expansion Joint Details – Sheet B
205	A	14/06/2022	Cover Plate Details – Sheet A
206	A	14/06/2022	Cover Plate Details – Sheet B
211	A	14/06/2022	Scour Protection Details – Sheet A
212	A	14/06/2022	Scour Protection Details – Sheet B
213	A	14/06/2022	Maintenance Access
215	A	14/06/2022	Bar Shapes Diagrams
221	A	14/06/2022	Cladding Details – Sheet A
222	A	14/06/2022	Cladding Details – Sheet B
223	A	14/06/2022	Cladding Details – Sheet C
230	A	14/06/2022	Bridge and Approach Slab Pavement Details
235	A	14/06/2022	Rail Splice Details at Curve Location

Approved Documents:	Hassell
Project Number:	012092

Drawing	Revision	Date	Description
0001	A	16/08/2021	Cover Sheet
0002	C	18/10/2021	Drawing Index
0003	A	16/08/2021	Drawing Legend
0004	C	18/10/2021	Planting Schedule
0100	D	24/02/2022	Site Plan
1001	B	24/02/2022	General Arrangement
1002	C	24/02/2022	General Arrangement
1003	C	24/02/2022	General Arrangement
1004	B	24/08/2021	General Arrangement
1005	C	24/08/2021	General Arrangement

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BPB Accreditation No. 2416

Schedule 1

Approved Documents:	Hassell
Job Number:	012092

Drawing	Revision	Date	Description
1006	A	16/08/2021	General Arrangement
1007	A	16/08/2021	General Arrangement
1008	A	16/08/2021	General Arrangement
1009	A	16/08/2021	General Arrangement
1010	B	18/10/2021	General Arrangement
5001	A	16/08/2021	Detail Plan – Shrimptons Creek Bridge
5201	A	16/08/2021	Details – Furniture & Fixtures
5202	A	16/08/2021	Details – Furniture & Fixtures
5203	A	16/08/2021	Details – Furniture & Fixtures
5301	A	16/08/2021	Details – Paving
5302	A	16/08/2021	Details – Paving
5401	B	18/10/2021	Details - Planting
5403	A	16/08/2021	Details – Planting

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BPB Accreditation No. 2416

Schedule 2

Supporting Documents

- City of Ryde Development Control Plan 2014 Part 8.5

  https://www.ryde.nsw.gov.au/files/assets/public/development/dcp/dcp-2014-8.5-public-civil-works.pdf

- City of Ryde Development Control Plan 2014 Part 8.5

  https://www.ryde.nsw.gov.au/Business-and-Development/Planning-Controls/Development-Control-Plan/City-of-Ryde-Standard-Drawings

- Engineer's Design Certificate – Shrimptons Creek Crossing, dated 17/06/2022 as issued by Vishnu Balakrishnan of SMEC Australia Pty Ltd
- Design Compliance Certificate, dated 24/01/2022, as issued by Craig Bennett and Melissa-Paige Cooper of ADW Johnson Pty Ltd
- Slope Stability Assessment of Existing Retaining Wall, dated 20/04/2018 as issued by Douglas Partners Pty Ltd
- Structural Report Condition Assessment of Existing Retaining Wall, Revision A, dated 1/06/2021 as issued by ADW Johnson Pty Ltd
- Long Service Levy Receipt No. 00441550
- Letter (Condition B36 – Environmental Sustainability), dated 29/07/2021 as issued by Julia Halioua of Frasers Property Australia Pty Limited
- Letter (Condition B74 – Access Compliance), dated 17/07/2020 as issued by Peter Statham of Frasers Property Australia Pty Limited
- Letter (Condition B82 – Bicycle Facilities), dated 28/07/2021 as issued by Peter Statham of Frasers Property Australia Pty Limited
- Midtown Ivanhoe Landscape Specification, HSL-S1B-6003, Rev A, dated 16/08/2021 as issued by Hassell
- Midtown Materials & Finishes Schedule, L-S1B-6001, Rev Ab, dated 18/10/2021 as issued by Hassell
- Bond Documents receipted 12/10/2020
- Ryde City Council Concurrence (Condition B97) – email dated 03/09/2021
- Ryde City Council Concurrence (Condition 102) – email dated 9/10/2020
- Peer Review Shrimpton Creek Bridge, dated 2310/2021 as issued by Dr Gregg Klopp of Robert Bird Group.

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Accredited Certifier
BPB Accreditation No. 2416

Schedule 2

Supporting Documents

- Revised Pavement Thickness Design Advice, dated 13/08/2020 as issued by Douglas Partners
- Assessment of Pavement Subgrade Conditions Stage 1B, dated 12/08/2021 as issued by Douglas Partners
- Proposed Residential Development – Carpark, Rev 0, dated 30/06/2021 as issued by Douglas Partners
- Ivanhoe Estate Stage 1B – Civil Design Statement, dated 21/01/2022, as issued by Nathan Delaney of ADW Johnson Pty Ltd
- Ivanhoe Estate – Stage 1B Public Domain Landscape Works - Landscape Architectural Statement, dated 20//2022 as issued by Georgia darling of Hassell
- Shrimptons Creek Proposed Bridge Detailed Design Flood and Scour Assessment, Rev 2, dated 1/10/2021 as issued by BMT
- Flood Impact Assessment of the Proposed Pedestrian Pathway, dated 6/08/2021 as issued by BMT
- Utility Consultation

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BPB Accreditation No. 2416

Schedule 3

Notes

- This certificate modifies Subdivision Works Certificate 16746 to endorse amendments to the civil, bridge and landscape designs.
- This certificate does not approve or authorise any proposed works within Lyonpark Road which require a Roads Act approval to be issued by the City of Ryde.

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BPB Accreditation No. 2416

300001(2)-ENG-001

ENGINEERING PLANS OF INFRASTRUCTURE WORKS - STAGE 1B LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK, SSDA 8903

M.G.A.



LOCALITY SKETCH
NOT TO SCALE

INDEX OF DRAWINGS

DRAWING No.	NAME
300001(2)-ENG-001	COVER SHEET, INDEX OF DRAWINGS & LOCALITY SKETCH 2
300001(2)-ENG-002	GENERAL NOTES
300001(2)-ENG-003	OVERALL SITE PLAN
300001(2)-ENG-004	DEMOLITION PLAN
300001(2)-ENG-005	SURVEY SETOUT PLAN
300001(2)-ENG-006	STRUCTURAL NOTES
300001(2)-ENG-007	FLOOD EXTENTS PLAN
300001(2)-ENG-101	DETAIL PLAN 2
300001(2)-ENG-151	PAVEMENT PLAN
300001(2)-ENG-152	PAVEMENT DETAILS
300001(2)-ENG-181	SUBSOIL DRAINAGE PLAN
300001(2)-ENG-201	TYPICAL ROAD PROFILES, KERB DETAILS & ROAD SETOUT TABLES
300001(2)-ENG-202	KERB RAMP, TEMPORARY BERM & BIN FOOTING DETAILS
300001(2)-ENG-211	ROAD LONGITUDINAL SECTION - ROAD No.01 - SHEET 1
300001(2)-ENG-212	ROAD LONGITUDINAL SECTION - ROAD No.01 - SHEET 2
300001(2)-ENG-213	ROAD LONGITUDINAL SECTION - ROAD No.02
300001(2)-ENG-231	ROAD CROSS SECTIONS - ROAD No.01 - SHEET 1
300001(2)-ENG-232	ROAD CROSS SECTIONS - ROAD No.01 - SHEET 2
300001(2)-ENG-233	ROAD CROSS SECTIONS - ROAD No.01 - SHEET 3
300001(2)-ENG-234	ROAD CROSS SECTIONS - ROAD No.01 - SHEET 4
300001(2)-ENG-235	ROAD CROSS SECTIONS - ROAD No.01 - SHEET 5
300001(2)-ENG-236	ROAD CROSS SECTIONS - ROAD No.01 - SHEET 6
300001(2)-ENG-237	ROAD CROSS SECTIONS - ROAD No.01 - SHEET 7
300001(2)-ENG-238	ROAD CROSS SECTIONS - ROAD No.01 - SHEET 8
300001(2)-ENG-239	ROAD CROSS SECTIONS - ROAD No.01 - SHEET 9
300001(2)-ENG-240	ROAD CROSS SECTIONS - ROAD No.02 - SHEET 1
300001(2)-ENG-241	ROAD CROSS SECTIONS - ROAD No.02 - SHEET 2
300001(2)-ENG-242	ROAD CROSS SECTIONS - ROAD No.02 - SHEET 3
300001(2)-ENG-243	ROAD CROSS SECTIONS - ROAD No.02 - SHEET 4
300001(2)-ENG-244	ROAD CROSS SECTIONS - ROAD No.02 - SHEET 5 2
300001(2)-ENG-301	INTERSECTION DETAILS - KERB RETURNS KR03 & KR04
300001(2)-ENG-302	INTERSECTION DETAILS - KERB RETURNS KR05 & KR06
300001(2)-ENG-303	INTERSECTION DETAILS - KERB RETURNS KR10 & KR11
300001(2)-ENG-310	MRV TURNING PATHS - DETAIL PLANS
300001(2)-ENG-351	CARPARK DETAIL PLAN - CP07, CP08, CP10 & CP11
300001(2)-ENG-352	CARPARK LONGITUDINAL SECTIONS - CP07, CP08, CP10 & CP11
300001(2)-ENG-353	CARPARK DETAIL PLAN - CP02, CP03, CP04 & CP05
300001(2)-ENG-354	CARPARK LONGITUDINAL SECTIONS - CP02, CP03 & CP04
300001(2)-ENG-355	CARPARK SETOUT TABLES - CP02, CP03, CP04 & CP05
300001(2)-ENG-361	OVERALL LIF CARPARK PLAN
300001(2)-ENG-362	LIF CARPARK DETAIL PLAN - CARPARK No.1
300001(2)-ENG-363	LIF CARPARK SECTION - CARPARK CL No.1
300001(2)-ENG-364	DRIVEWAY LONGITUDINAL SECTIONS - DRIVEWAY No.1 & No.2
300001(2)-ENG-365	KERB RETURN LONGITUDINAL SECTIONS - KR101, KR101A, KR102, KR102A & KR102B
300001(2)-ENG-366	FOOTPATH No.1 LONGITUDINAL SECTION & TYPICAL CARPARK No.1 DETAILS
300001(2)-ENG-367	LIF CARPARK DETAIL PLAN - CARPARK No.2
300001(2)-ENG-368	LIF CARPARK SECTION - CARPARK CL No.2
300001(2)-ENG-369	DRIVEWAY LONGITUDINAL SECTION - DRIVEWAY No.03
300001(2)-ENG-370	KERB RETURN LONGITUDINAL SECTIONS - KR103 & KR103A
300001(2)-ENG-371	TYPICAL DETAILS & SECTIONS
300001(2)-ENG-401	STORMWATER CATCHMENT PLAN 2
300001(2)-ENG-411	STORMWATER SETOUT TABLE & DETAILS
300001(2)-ENG-421	STORMWATER CALCULATION CHARTS - 20 YEAR A.R.I.
300001(2)-ENG-422	STORMWATER CALCULATION CHARTS - 100 YEAR A.R.I.
300001(2)-ENG-431	STORMWATER LONGITUDINAL SECTIONS - SHEET 1
300001(2)-ENG-432	STORMWATER LONGITUDINAL SECTIONS - SHEET 2
300001(2)-ENG-433	STORMWATER LONGITUDINAL SECTIONS - SHEET 3

INDEX OF DRAWINGS

DRAWING No.	NAME
300001(2)-ENG-434	STORMWATER LONGITUDINAL SECTIONS - SHEET 4
300001(2)-ENG-435	STORMWATER LONGITUDINAL SECTIONS - SHEET 5 2
300001(2)-ENG-451	PASJN DETAIL PLAN
300001(2)-ENG-480	CUSTOM STORMWATER PIT - PIT No.1/12A
300001(2)-ENG-481	CUSTOM STORMWATER PIT - PIT No.1/14 2
300001(2)-ENG-482	CUSTOM STORMWATER PIT - PIT No.1/15
300001(2)-ENG-483	CUSTOM STORMWATER PIT - PIT No.1/16
300001(2)-ENG-484	CUSTOM STORMWATER PIT - PIT No.1/17
300001(2)-ENG-485	CUSTOM STORMWATER PIT - PIT No.3/9
300001(2)-ENG-486	CUSTOM STORMWATER PIT - PIT No.3/10
300001(2)-ENG-487	CUSTOM STORMWATER PIT - PIT No.3/11
300001(2)-ENG-488	CUSTOM STORMWATER PIT - PIT No.3/12
300001(2)-ENG-489	CUSTOM STORMWATER PIT - PIT No.3/13
300001(2)-ENG-490	CUSTOM STORMWATER PIT - PIT No.15/3
300001(2)-ENG-491	CUSTOM STORMWATER PIT - PIT No.15/4
300001(2)-ENG-492	CUSTOM STORMWATER PIT - PIT No.15/5
300001(2)-ENG-493	CUSTOM STORMWATER PIT - PIT No.100/4
300001(2)-ENG-494	CUSTOM STORMWATER PIT - PIT No.101/4
300001(2)-ENG-495	TYPICAL CUSTOM STORMWATER PIT DETAILS - SHEET 1 2
300001(2)-ENG-496	TYPICAL CUSTOM STORMWATER PIT DETAILS - SHEET 2
300001(2)-ENG-497	TYPICAL CUSTOM STORMWATER PIT DETAILS - SHEET 3
300001(2)-ENG-498	STORMWATER PIT 101\2 SETOUT PLAN
300001(2)-ENG-499	CUSTOM STORMWATER PIT - PIT No.1/10
300001(2)-ENG-501	SITE REGRADE PLAN
300001(2)-ENG-551	RETAINING WALL DETAIL PLAN
300001(2)-ENG-561	RETAINING WALL LONGITUDINAL SECTION - RW100
300001(2)-ENG-562	RETAINING WALL LONGITUDINAL SECTION - BRIDGE WALL No.1
300001(2)-ENG-563	RETAINING WALL LONGITUDINAL SECTION - EXISTING RETAINING WALL
300001(2)-ENG-564	RETAINING WALL LONGITUDINAL SECTION - RW101
300001(2)-ENG-571	TYPICAL RETAINING WALL DETAILS & NOTES
300001(2)-ENG-572	TYPICAL GABION WALL DETAILS & NOTES
300001(2)-ENG-573	TYPICAL GABION WALL BRIDGING STRUCTURE DETAILS
300001(2)-ENG-574	TYPICAL GABION WALL NOTES
300001(2)-ENG-601	EROSION & SEDIMENT CONTROL PLAN
300001(2)-ENG-611	EROSION & SEDIMENT CONTROL DETAILS & NOTES
300001(2)-ENG-701	BRIDGE DETAIL PLAN
300001(2)-ENG-711	FOOTPATH No.2 PLAN & LONGITUDINAL SECTION
300001(2)-ENG-721	BRIDGE ABUTMENT LONGITUDINAL SECTION & HEADWALL OUTLET DETAILS
300001(2)-ENG-722	HEADWALL OUTLET DETAILS
300001(2)-ENG-751	LINEMARKING & SIGNAGE PLAN
300001(2)-ENG-801	TREE RETENTION PLAN
300001(2)-ENG-901	COMBINED SERVICES PLAN
300001(2)-ENG-902	TYPICAL ROAD PROFILES - SERVICE LOCATIONS
300001(2)-ENG-903	SERVICES RELOCATION PLAN
300001(2)-ENG-904	SERVICES RELOCATION SECTIONS

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
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Certifier – Strata
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES
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www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT
FRASERS PROPERTY

PROPERTY DESCRIPTION
LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: COVER SHEET, INDEX OF DRAWINGS & LOCALITY SKETCH

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	001	2

100mm AT FULL SIZE
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Plotted By: Mark Hoyland Plot Date: 16/05/22 2:05:14PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-001.DWG

300001(2)-ENG-002

100mm AT FULL SIZE

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RYDE CITY COUNCIL

GENERAL:

1. ALL MATERIALS AND PRODUCTS FOR INSTALLATION AND CONSTRUCTION SHALL COMPLY WITH AUSTRALIAN STANDARDS. MONITORING TESTING ("STRING LINE" AND "ROLL") WHERE SPECIFIED BY COUNCIL'S MANUAL OF ENGINEERING STANDARDS, TO BE PERFORMED BY COUNCIL, SHALL BE ARRANGED **24 HOURS** IN ADVANCE. WHERE A COUNCIL OFFICER IS NOT AVAILABLE, A GEOTECHNICAL ENGINEER MAY PERFORM SUCH TESTS.
2. ALL TREES WITHIN THE ALLOTMENT AND RESERVES (OTHER THAN ROAD RESERVES) SHALL BE RETAINED, UNLESS OTHERWISE NOMINATED BY THE APPROVED LANDSCAPE PLAN. REMOVAL OF TREES FOR THE ESTABLISHED OF FIRE-BREAKS SHALL BE CARRIED OUT IN CONSULTATION WITH THE FIRE CONTROL OFFICER AND/OR COUNCIL'S ENVIRONMENTAL OFFICER.

TRAFFIC CONTROL:

1. TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE RMS DOCUMENT "TRAFFIC CONTROL AT WORKSITES".

REGRADING:

1. TOPSOIL **150mm** THICK SHALL BE APPLIED TO ALL FOOTPATHS AND FILLED AREAS. WHERE TURF IS NOT REQUESTED, ALL EXPOSED TOPSOIL SHALL BE SEEDED IMMEDIATELY UPON COMPLETION OF THE SOIL SPREADING OPERATION. TURF TO BE PLACED FULL WIDTH BETWEEN KERB AND FOOTPATH.
2. ALL FILL WITHIN LOTS INCLUDING BATTERS SHALL BE PLACED IN ACCORDANCE WITH **AS 3798** TO **LEVEL 1** INSPECTION AND TESTING.

PAVEMENT:

1. PROVISION SHOULD BE MADE FOR SUITABLE PROTECTION OF THE EXISTING ROAD PAVEMENTS, KERB AND GUTTER AND FOOTPATH FORMATION. VEHICULAR ACCESS TO ALL SERVICES TO ADJOINING PROPERTIES AFFECTED BY CONSTRUCTION WORKS, SHALL BE MAINTAINED AT ALL TIMES.

STORMWATER:

1. SUBSOIL DRAINS SHALL BE PROVIDED IN ACCORDANCE WITH COUNCILS STANDARDS, ADDITIONAL DRAINS SHALL BE PROVIDED WHERE CONSIDERED NECESSARY, BY COUNCIL OR A GEOTECHNICAL ENGINEER.

SEDIMENT & EROSION CONTROL:

2. ALL SILT CONTROL MEASURES SHALL BE PLACED PRIOR TO THE COMMENCEMENT OF EARTHWORKS. SUCH MEASURES SHALL BE SUBJECT TO FURTHER ADDITIONS, WHERE CONSIDERED NECESSARY, AS DIRECTED BY THE PROJECT MANAGER OR COUNCIL, DURING THE PROGRESSIONS OF WORKS. ALL FINAL EROSION PREVENTION MEASURES INCLUDING ESTABLISHMENT OF GRASS SHALL BE COMPLETED PRIOR TO THE "FINAL" INSPECTION.

GENERAL

1. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE APPROVED PLANS, SUBJECT TO RYDE COUNCIL DCP 2014 SECTIONS 8.1, 8.2 + 8.5, MACQUARIE PARK CORRIDOR TECHNICAL MANUAL, COUNCIL STANDARD DRAWINGS AND RELEVANT AUSTRALIAN STANDARDS.
2. SETOUT INFORMATION IS TO BE VERIFIED BY THE CONTRACTOR AGAINST THE PLAN VIEW, LONGITUDINAL SECTIONS, AND ELECTRONIC 12d DATA BEFORE BEING USED. IF THERE IS A DISCREPANCY, THE SUPERINTENDENT IS TO BE NOTIFIED AND DIRECTION WILL BE PROVIDED IN WRITING BEFORE PROCEEDING.
3. THE DRAWINGS ARE A DIAGRAMMATIC REPRESENTATION OF THE WORK TO BE CARRIED OUT ONLY, AND DIMENSIONS SHALL NOT BE OBTAINED BY SCALING.
4. ALL LEVELS SHALL BE OBTAINED FROM ESTABLISHED BENCHMARKS TO THE **AUSTRALIAN HEIGHT DATUM (A.H.D.)**.
5. POINTS OF CONFLICT BETWEEN NEW CONSTRUCTION AND EXISTING UTILITY SERVICE MAINS SHALL BE IDENTIFIED, EXPOSED AND REPORTED TO THE PROJECT MANAGER PRIOR TO CONSTRUCTION. SERVICE CONDUITS SHALL BE LAID IN POSITIONS AS APPROVED BY THE RELEVANT AUTHORITY.
6. ALL MATERIALS AND PRODUCTS FOR INSTALLATION AND CONSTRUCTION SHALL COMPLY WITH AUSTRALIAN STANDARDS.
7. THE INSPECTION, SUPERVISION AND REPORTING REQUIREMENTS OF A SUITABLY QUALIFIED ECOLOGIST REGARDING THE REMOVAL AND RELOCATION OF ANY THREATENED FAUNA SPECIES SHALL BE UNDERTAKEN AS PER RELEVANT CONDITIONS OF CONSENT.
8. STORMWATER AND SEWER CONNECTIONS TO LOT 11 DP1247523 TO BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.

SURVEYING

1. SURVEY BY: ADW JOHNSON PTY LTD
2. ORIGIN OF COORDINATES: GDA94 MGA56 BENCH MARK P.M.50023 E:325216.337 N:6260317.86 RL.80.785 AHD
3. ALL WORK TO BE SET OUT BY A REGISTERED SURVEYOR
4. ALL LEVELS SHOWN ARE A.H.D. GDA94

GEOTECHNICAL

1. GEOTECHNICAL INVESTIGATION PERFORMED BY:

   DOUGLAS PARTNERS - REFERENCE 86043.01
   DATED: DECEMBER 2019

   REFER TO THE AFOREMENTIONED REPORT DURING CONSTRUCTION.

EARTHWORKS & REGRADING

1. SITE REGRADE AREA IS TO BE DRAINED IF REQUIRED AND ALL EXISTING VEGETATION REMOVED.
2. ALL TOPSOIL AND UNSUITABLE MATERIAL WILL BE REMOVED PRIOR TO PLACEMENT OF EXCESS MATERIAL FROM ROAD EXCAVATION IN ACCORDANCE WITH DIRECTIONS FROM GEOTECHNICAL ENGINEER.
3. MAXIMUM NOMINATED THICKNESS OF FILL LAYER
   - **150mm** IN ROAD RESERVE AREAS
   - **300mm** IN OTHER AREAS
4. MINIMUM NOMINATED COMPACTION OF FILL
   - **98%** STANDARD IN ROAD RESERVE AREAS
   - **95%** STANDARD IN OTHER AREAS
5. COMPACTION OF EARTHWORKS ASSOCIATED WITHIN LOTS TO BE CARRIED OUT UNDER **LEVEL 1** SUPERVISION IN ACCORDANCE WITH **AS 3798-1996** AND A REPORT SUBMITTED TO THE PRINCIPAL CERTIFYING AUTHORITY WITH DOCUMENTATION ACCOMPANYING THE RESPECTIVE COMPLIANCE CERTIFICATE APPLICATION.
6. ALL AREAS DISTURBED DURING EARTHWORKS ARE TO BE REINSTATED AND SEEDED IMMEDIATELY.
7. ALL SITE REGRADE TO BE CONTROL FILL IN ACCORDANCE WITH GEOTECHNICAL ENGINEERS DIRECTION.
8. WHERE PRACTICAL CATCHDRAINS ARE TO BE CONSTRUCTED UPSLOPE OF THE SITE REGRADE TO DIVERT CLEAN SURFACE WATER.
9. SITE REGRADE AREAS ARE TO BE TURFED OR SEEDED AS DIRECTED BY LANDSCAPE ARCHITECT OR SUPERINTENDENT.
10. ALL TREES TO BE REMOVED ARE TO BE MULCHED/ CHIPPED ON SITE AND REUSED AS MULCH WITHIN THE DEVELOPMENT.

STORMWATER

1. ALL STORMWATER PITS DEEPER THAN **1.0m** TO HAVE STEP IRONS.
2. PRECAST PITS TO BE INSTALLED AS PER MANUFACTURERS SPECIFICATION.
3. ALL INTERALLOTMENT DRAINAGE PITS TO BE PROVIDED WITH HINGED, LOCKABLE GRATES.
4. ALL INTERALLOTMENT DRAINAGE PITS DEEPER THAN **2.5m** TO BE DESIGNED BY A SUITABLY QUALIFIED STRUCTURAL ENGINEER.
5. ALL RCP STORMWATER PIPES TO BE RUBBER RING JOINTED (RRJ) UNLESS INDICATED OTHERWISE.
6. ALL FINAL GRATE LEVELS FOR IAD PITS TO BE **100mm** BELOW DESIGN SURFACE LEVELS.
7. ALL STORMWATER PITS AND PIPES TO BE INSTALLED IN ACCORDANCE WITH RYDE COUNCIL STANDARD DRAWINGS.
8. ALL STORMWATER PITS TO HAVE MINIMUM 35mm MASS CONCRETE BENCH AS PER COUNCIL STANDARD DRAWING.

RIPRAP

1. ALL PERMANENT ROCK SCOUR PROTECTION MUST CONSIST OF HARD DURABLE RUN-OF-QUARRY ROCK, SIZED TO RESIST PREDICTED SCOUR VELOCITIES. ROCK MUST BE ANGULAR AND BULKY RATHER THAN FLAT, TO ENSURE A GOOD "BIND" AND TO RESIST NEGATIVE HYDRAULIC PRESSURE. ROCK IS TO BE PLACED OVER GEOFABRIC TO PREVENT EROSION OF UNDERLYING FINE BED SEDIMENTS.
2. COMPACT THE SUBGRADE FILL TO THE DENSITY OF THE SURROUNDING UNDISTURBED MATERIAL.
3. PREPARE A SMOOTH, EVEN FOUNDATION FOR THE STRUCTURE THAT WILL ENSURE THAT THE NEEDLE-PUNCHED GEOTEXTILE DOES NOT SUSTAIN DAMAGE WHEN COVERED WITH ROCK.
4. SHOULD ANY MINOR DAMAGE TO THE GEOTEXTILE OCCUR, REPAIR BEFORE SPREADING ANY AGGREGATE. FOR REPAIRS, PATCH BY PLACING ONE PIECE OF FABRIC OVER THE DAMAGE, MAKING SURE THAT ALL JOINTS AND PATCHES OVERLAP MORE THAN **300mm**.
5. LAY ROCK FOLLOWING THE DRAWING, AND WITH A MINIMUM DIAMETER OF **300mm**.

LINEMARKING & SIGNAGE

1. LINEMARKING & SIGNAGE TO BE PROVIDED IN ACCORDANCE WITH APPROVED DRAWINGS PREPARED BY ADW JOHNSON REFERENCE 300001-ESK-190-192.

EROSION & SEDIMENT CONTROL

1. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSISTENT WITH THE NSW GOVERNMENT'S "MANAGING URBAN STORMWATER: SOILS AND CONSTRUCTION".
2. THE ARRANGEMENT SHOWN ON THE PLANS IS DIAGRAMMATIC ONLY. AMENDMENTS MAY NEED TO BE MADE DURING CONSTRUCTION.
3. ALL SEDIMENT AND EROSION CONTROL MEASURES, INCLUDING BASINS AND DIVERSION DRAINS, ARE TO BE IN PLACE PRIOR TO STRIPPING OF SITE.
4. MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL COMPLETE REHABILITATION IS ACHIEVED.
5. DISTURBED AREAS ARE TO BE KEPT TO A MINIMUM. NO MORE THAN **2.5ha** OF THE SITE SHALL BE EXPOSED TO EROSION AT ANY ONE TIME.
6. ALL TOPSOIL IN SITE REGRADING AREAS AND ROAD RESERVES TO BE STOCKPILED ON SITE AS SHOWN.
7. STOCKPILE LOCATIONS INDICATIVE ONLY. CONTRACTOR TO IDENTIFY LOCATIONS AND SEEK APPROVAL FROM SUPERINTENDENT.
8. STOCKPILE AREA TO BE FULLY FENCED WITH SILT PROOF FABRIC AT ALL TIMES.
9. IMPORTED MATERIAL TO BE PLACED DIRECTLY INTO SITE REGRADING AREAS. IMPORTED MATERIAL IS NOT TO BE STOCKPILED.
10. STOCKPILES ARE TO BE REMOVED AS SOON AS PRACTICABLE AND SITES REINSTATED AS SOON AS POSSIBLE.
11. CONSERVE ALL TOPSOIL, STOCKPILE AND PROTECT FOR RE-USE ON SITE.
12. STOCKPILES OF MATERIAL ARE TO BE PLACED AWAY FROM DRAINAGE FLOW PATHS AND HEAVILY TRAFFICABLE AREAS AND ARE TO BE SURROUNDED BY SILT FENCING AT ALL TIMES.
13. PROTECT ALL DISTURBED AREAS FROM EROSION.
14. MINIMISE SEDIMENTATION.
15. CONSTRUCT STABILISED EARTH BERMS TO DIRECT CLEAN RUNOFF FROM ENTERING THE DISTURBED SITE
16. CONSTRUCT STABILISED DIVERSION BANKS TO COLLECT RUNOFF FROM DISTURBED AREAS AND DIRECT IT TO A SEDIMENT CONTROL PIT.
17. ERECT AND MAINTAIN SILT FENCES AT THE DOWNSLOPE SIDE OF DISTURBED AREA/S DURING CONSTRUCTION.
18. PLACE SEDIMENT INLET TRAPS AROUND ALL PITS WITHIN, AND DOWNSTREAM OF, THE DEVELOPMENT.
19. PROVIDE GRAVEL BAGS AS REQUIRED.
20. SILT FENCES AND HAY BALING TO BE PLACED WHERE DIRECTED BY COUNCIL'S ENGINEER AND MAINTAINED AT ALL TIMES.
21. ALL DISTURBED AREAS ARE TO BE STABILISED IMMEDIATELY UPON FINISHING CONSTRUCTION ON THAT AREA WITH BITUMEN STABILIZED STRAW MULCH.
22. WHERE EVIDENCE OF SILT LEAVING THE SITE IS FOUND, CONTRACTOR IS TO CLEAR ALL SEDIMENT (INCLUDING THAT IN STORMWATER INFRASTRUCTURE) AT THEIR OWN COST.
23. FOLLOWING RAIN EVENTS, ALL SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE AUDITED AND REINSTATED IF NECESSARY.
24. CONTROL CLEAN WATER FROM ABOVE THE SITE, THROUGH THE SITE.
25. KEEP CLEAN WATER SEPARATE FROM DIRTY WATER.
26. KEEP RUNOFF FROM DISTURBED AREAS, WHERE POSSIBLE, SEPARATE FROM DIRTY WATER.
27. ALL DISTURBED AREAS ARE TO BE RE-VEGETATED OR OTHERWISE PROTECTED AS SOON AS PRACTICAL.
28. ALL NATURAL VEGETATION AREAS OUTSIDE THE BOUNDARIES OF THE PROPOSED DEVELOPMENT WILL BE FENCED WITH NO GO FENCING TO KEEP THE AREAS FREE FROM DISTURBANCE OF MACHINERY, PARKED VEHICLES AND WASTE MATERIAL.
29. AREAS OUTSIDE THE BOUNDARIES OF THE PROPOSED DEVELOPMENT WILL BE FENCED WITH NO GO FENCING TO KEEP THE AREAS FREE FROM DISTURBANCE OF MACHINERY, PARKED VEHICLES AND WASTE MATERIAL.
30. TREES TO BE RETAINED WITHIN THE CONSTRUCTION AREAS ARE TO BE PROTECTED IN ACCORDANCE WITH AS 4970:2009 BY TREE PROTECTION FENCING IN ACCORDANCE WITH THE APPROVED LANDSCAPE MANAGEMENT PLANS
31. ESTABLISH A RESTRICTION BOUNDARY AROUND PROTECTED PLANT WITH PARAWEB FENCING. TEMPORARILY RELOCATE FENCE TO ALLOW CONSTRUCTION OF REQUIRED WORKS AND RE-ESTABLISH PROTECTION ZONE AFTER WORKS COMPLETES.

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision, Certifier – Strata, Certifier – Stormwater, Certifier – Road & Drainage, Certifier – Hydraulic (stormwater)
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES

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ABN 62 129 445 398

CLIENT

FRASERS PROPERTY

PROPERTY DESCRIPTION

LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

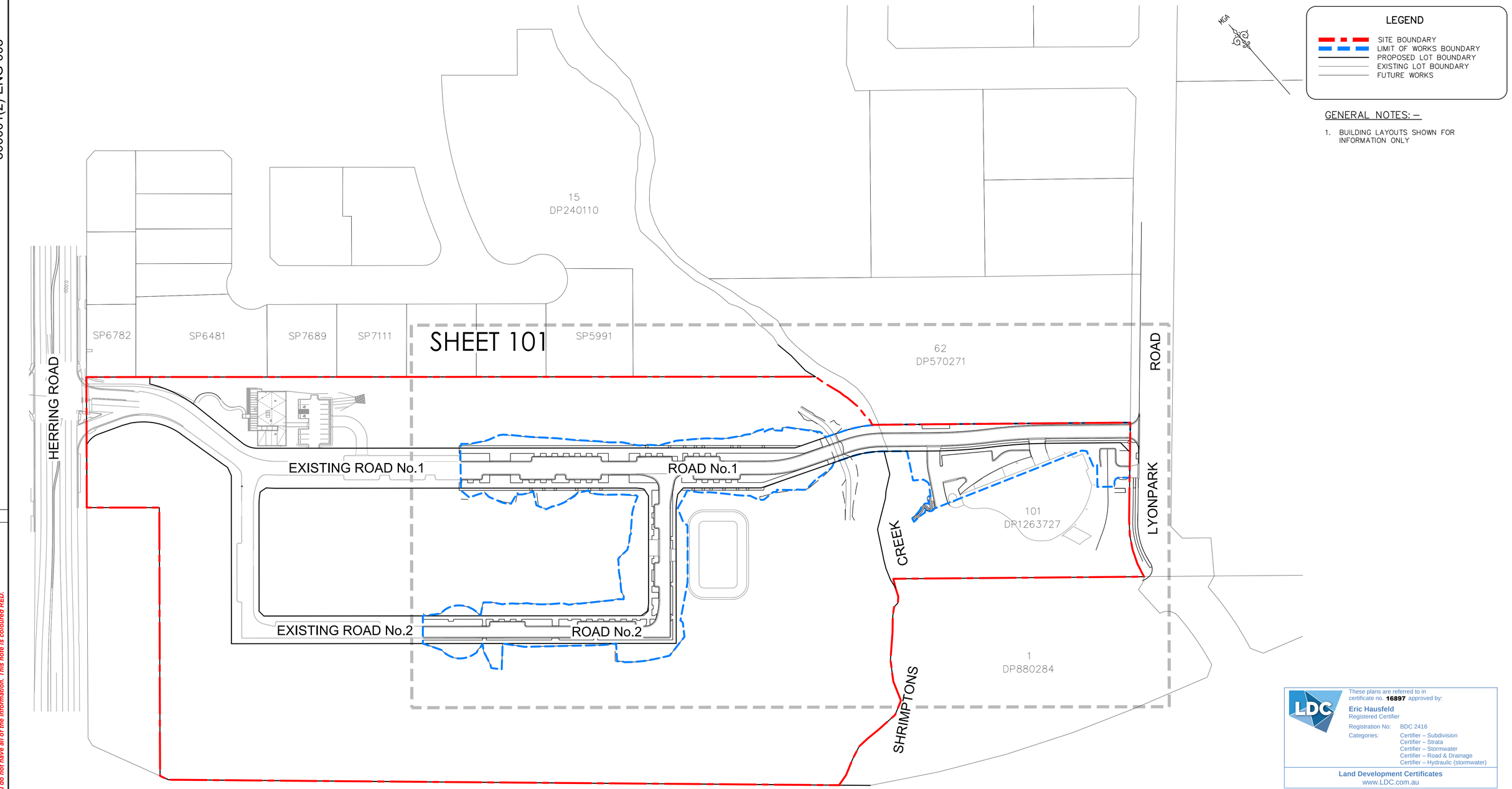
PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: GENERAL NOTES

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	002	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:05:19PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-002.DWG

300001(2)-ENG-003



OVERALL SITE PLAN
SCALE 1:1000

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2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:1000; 0 25 50m; A3 1:2000

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CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION
LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: OVERALL SITE PLAN

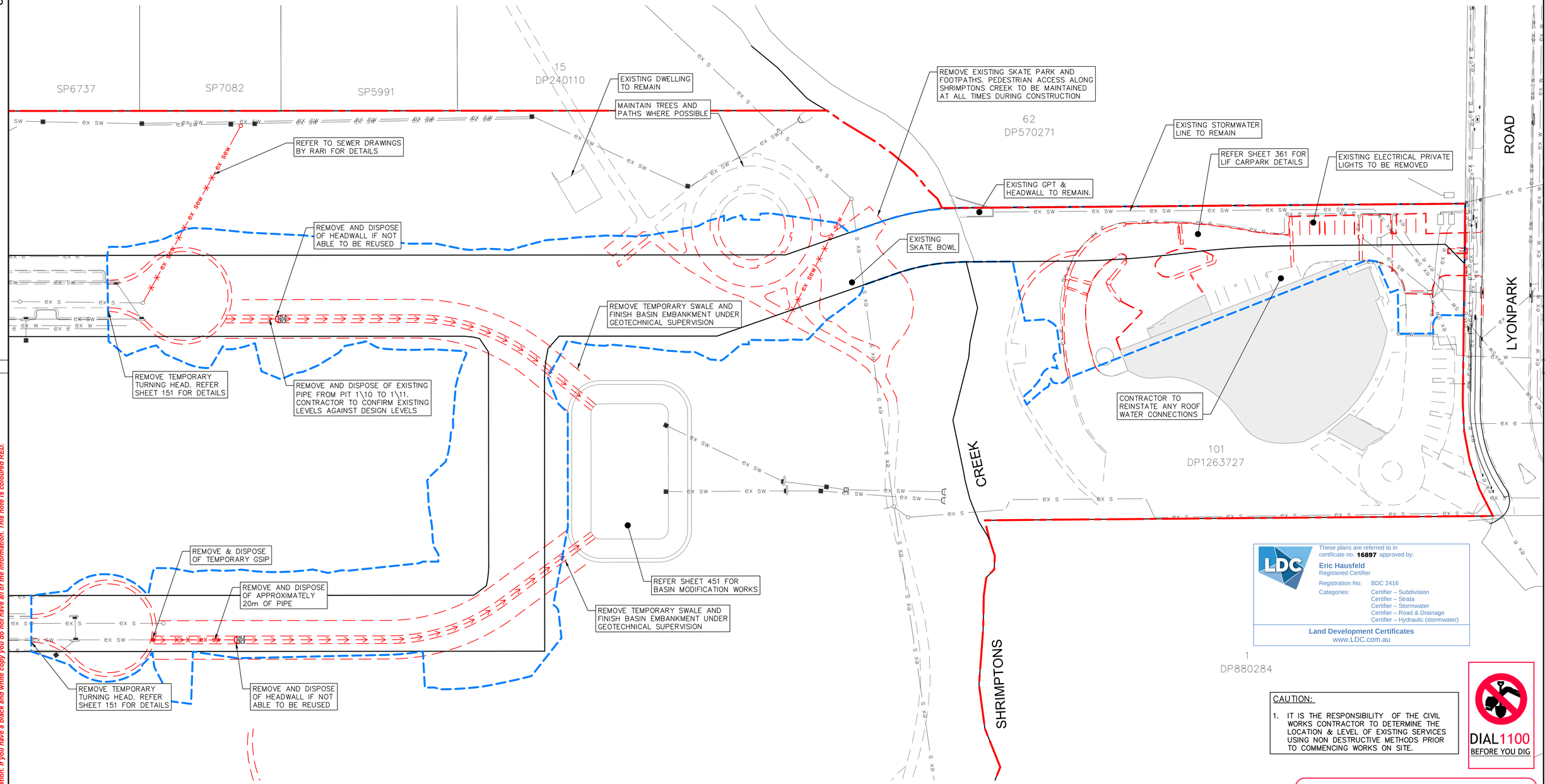
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	003	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:05:26PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-003.DWG

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300001(2)-ENG-004



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CAUTION:

1. IT IS THE RESPONSIBILITY OF THE CIVIL WORKS CONTRACTOR TO DETERMINE THE LOCATION & LEVEL OF EXISTING SERVICES USING NON DESTRUCTIVE METHODS PRIOR TO COMMENCING WORKS ON SITE.

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DEMOLITION PLAN

SCALE 1:500

CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:500 — 0, 12.5, 25.0m — A3 1:1000

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ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: DEMOLITION PLAN

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	004	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:05:33PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-004.DWG

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300001(2)-ENG-005

PEACH TREE ROAD

SP6782 SP6481 SP7689 SP7111 SP6737 SP7082 SP5991

MGA

EXISTING SUBDIVISION

HERRING ROAD

EPPING ROAD

CREEK

SHRIMPTONS CREEK

LYONPARK ROAD

101 DP1263727

1 DP880284

DP570271

1 311°11'40" 382.34 8

2 221°04' 68.45

2 38.035 131°12'20" 3

3 221°03'50" 140.78 4

4 4.82 155°44'10" 5

5 131°42' 140.44 6

6 131°41' 211.665 7

7

NOTE:

THIS PLAN IS ON A LOCAL COORDINATE SYSTEM

LEGEND

- EXISTING LOT BOUNDARY
- EXISTING LOT BOUNDARY (EXTERNAL)
- CREEK BOUNDARY – REFER BEVERIDGE WILLIAMS PLANS FOR DETAILS

NOTE:

1. THIS DRAWING IS PROVIDED FOR INFORMATION PURPOSES ONLY.
2. REFER TO CONSOLIDATION PLAN PREPARED BY BEVERIDGE WILLIAMS REFERENCE D.P.1262209 FOR MGA COORDINATES.
3. IF THERE ARE ANY DISCREPANCIES BETWEEN THIS PLAN & ANY OTHER SURVEY INFORMATION CONTACT ADW JOHNSON OR BEVERIDGE WILLIAMS IMMEDIATELY.

EXISTING SUBDIVISION

EXISTING SUBDIVISION

ORIGIN OF LEVELS
GDA94 MGA56
BENCH MARK
P.M.50023
E: 325 216.337
N: 6 260 317.86
R.L. 80.785 A.H.D.

SCHEDULE OF CO-ORDINATES

PT	EASTING	NORTHING
1	325500.601	6260621.247
2	325455.634	6260569.639
3	325484.250	6260544.583
4	325391.772	6260438.438
5	325393.752	6260434.044
6	325498.610	6260340.620
7	325656.689	6260199.860
8	325788.306	6260369.432

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CONSTRUCTION ISSUE

SURVEY SETOUT PLAN

SCALE 1:1000

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
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SCALES: A1 1:1000 — 0 25 50m — A3 1:2000

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: SURVEY SETOUT PLAN

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	005	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:05:38PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-005.DWG

100mm AT FULL SIZE

This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

300001(2)-ENG-006

GENERAL - STRUCTURAL

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE CIVIL ENGINEERING PLANS, AND OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK. CONSTRUCTION FROM THESE DRAWINGS, AND THEIR ASSOCIATED CONSULTANTS' DRAWINGS IS NOT TO COMMENCE UNTIL APPROVED BY THE LOCAL AUTHORITIES.

2. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AND CURRENT AUSTRALIAN STANDARDS.

3. ALL DIMENSIONS SHOWN SHALL BE VERIFIED BY THE BUILDER ON SITE. ENGINEERS' DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS.

4. DURING CONSTRUCTION STRUCTURES SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED. TEMPORARY BRACING SHALL BE PROVIDED BY THE CONTRACTOR TO KEEP THE WORKS AND EXCAVATIONS STABLE AT ALL TIMES.

5. UNLESS NOTED OTHERWISE ALL LEVELS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES.

6. THE DRAWINGS SHALL NOT BE USED FOR SETOUT PURPOSES. CONTRACTOR IS TO REFER TO CURRENT CIVIL ENGINEERING PLANS FOR SETOUT INFORMATION.

7. POINTS OF CONFLICT BETWEEN NEW CONSTRUCTION AND EXISTING UTILITY SERVICE MAINS SHALL BE IDENTIFIED, EXPOSED AND REPORTED TO THE PROJECT ENGINEER PRIOR TO CONSTRUCTION.

FOUNDATIONS

1. STORMWATER PIT BASES AND RETAINING WALL FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING CAPACITY OF 150kPa ON STIFF CLAY (U.N.O.) THE FOUNDATION MATERIAL SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER FOR THIS BEARING CAPACITY BEFORE PLACING MEMBRANE, REINFORCEMENT OR CONCRETE.

2. REFER TO GEOTECHNICAL INVESTIGATION REPORT No. 86043.02.R.001.Rev0 PREPARED BY DOUGLAS PARTNERS DATED 23 APRIL 2018 AND 86043.01.R.003.Rev0 PREPARED BY DOUGLAS PARTNERS DATED 22 DEC 2017.

3. FOOTINGS SHALL BE LOCATED CENTRALLY UNDER WALLS AND COLUMNS UNLESS NOTED OTHERWISE.

4. DO NOT EXCEED A RISE OF 1 IN A RUN OF 2 FOR THE LINE OF SLOPE BETWEEN ADJACENT FOOTINGS OR EXCAVATIONS.

5. FOOTINGS TO BE CONSTRUCTED AND BACKFILLED AS SOON AS POSSIBLE FOLLOWING EXCAVATION TO AVOID SOFTENING OR DRYING OUT BY EXPOSURE.

6. ALL FOUNDATION MATERIAL TO BE COMPACTED TO THE EQUIVALENT OF 98% STANDARD OR 70% RELATIVE DENSITY TO AS1289 AND TESTED PRIOR TO INSTALLATION OF FOUNDATION.

LOADING

1. THE STRUCTURAL COMPONENTS DETAILED ON THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS FOR THE FOLLOWING LOADINGS:

   RETAINING WALLS
   SURCHARGE LOAD = 5 kPa GENERALLY (20kPa WHERE TRAFFICABLE ROAD BEHIND WALL)

   STORMWATER PITS
   SURCHARGE LOAD = 20 kPa

2. WIND LOADS ARE IN ACCORDANCE WITH AS 1170.2 AS FOLLOWS:
   IMPORTANCE LEVEL: 2
   BASIC WIND VELOCITY, Vp = 45m/s
   REGION: 2
   TERRAIN CATEGORY: TC3

FORMWORK

1. THE DESIGN CERTIFICATE CONSTRUCTION AND PERFORMANCE OF THE FORMWORK AND FALSE WORK SHALL BE THE RESPONSIBILITY OF THE BUILDER, EXCEPT TO THE EXTENT THAT FORMWORK DESIGN IS SHOWN ON THE DRAWINGS.

2. FORMWORK DESIGN, CONSTRUCTION TOLERANCES AND STRIPPING TIMES SHALL COMPLY WITH AS 3610 AND AS 3600 UNLESS OTHERWISE APPROVED BY THE ENGINEER.

3. DURING CONSTRUCTION, SUPPORT PROPPING WILL BE REQUIRED WHERE LOADS FROM STACKED MATERIALS, FORMWORK AND OTHER SUPPORTED SLABS INDUCE LOADS IN A SLAB OR BEAM WHICH EXCEED THE DESIGN LOAD FOR STRENGTH OR SERVICEABILITY AT THAT AGE. ONCE THE NOMINATED 28 DAY STRENGTH HAS BEEN ATTAINED, THESE LOADS SHALL NOT EXCEED THE DESIGN SUPERIMPOSED LOADS SET OUT IN THE LOADING NOTES.

4. THE FORMWORK SHALL NOT BE DESIGNED TO ACCOMMODATE MOVEMENTS ON RESTRAINT OR SUPPORT FROM THE PERMANENT STRUCTURE WITHOUT PRIOR APPROVAL FROM THE PROJECT DESIGN ENGINEER.

FORMWORK (CONTINUED)

5. CONCRETE FORMED SURFACES TO HAVE FINISHES IN ACCORDANCE WITH AS 3610.

6. DO NOT PLACE PERMANENT LOADS, INCLUDING MASONRY WALL AND THE LIKE, ON THE CONCRETE STRUCTURE UNTIL AFTER FORMWORK AND PROPPING IS REMOVED.

7. SPECIAL REQUIREMENTS FOR SEQUENCE OF CONCRETE PLACEMENT AND STRIPPING ARE AS FOLLOWS:
   DESIGN INFORMATION CONCERNING THE FOUNDATION FORMWORK SHALL BE DETERMINED FROM THE CONDITIONS EXISTING ON THE SITE AT THE TIME OF CONSTRUCTION. REFER ALSO TO THE GEOTECHNICAL REPORT WHERE AVAILABLE.

MASONRY

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3700.

2. STRENGTHS OF BRICKS, CLASS OF BLOCKS AND TYPE OF MORTAR SHALL BE AS FOLLOWS:–

ELEMENT	MATERIAL	CHARACTERISTIC UNCONFINED COMMPRESSIVE STRENGTH, fuc	MORTAR CLASSIFICATION
SANDSTONE LOGS	NATURAL STONE	–	N/A
CORE FILLED BLOCKS	CONCRETE	15 MPa	M4
MASS ROCK	NATURAL STONE	–	N/A

3. MORTAR ADMIXTURES SHALL NOT BE USED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.

4. ALL MASONRY WALLS SHALL HAVE A PRE–GREASED GALVANISED STEEL SLIP JOINT BETWEEN CONCRETE SOFFIT AND THE TOP OF THE MASONRY ELEMENT U.N.O. OR TWO LAYERS OF SUPER ALCOR.

5. NO CHASES OR RECESSES ARE PERMITTED IN LOAD BEARING MASONRY WITHOUT THE APPROVAL OF THE ENGINEER.

6. REINFORCED CONCRETE BLOCKWORK SHALL COMPLY WITH THE FOLLOWING U.N.O.:
   - BLOCKS SHALL BE STRENGTH GRADE 15 CONFORMING TO AS 4455.
   - MORTAR SHALL COMPRISE 1 CEMENT : 0.25 LIME : 3 SAND.
   - PROVIDE CLEANOUT HOLES AT BASE OF ALL WALLS AND ROD CORE HOLES TO REMOVE PROTRUDING MORTAR FINS.
   - CORE FILLING GROUT TO HAVE A CHARACTERISTIC STRENGTH OF 20MPa, 10mm AGGREGATE, 230mm SLUMP ±30mm.
   - PROVIDE 65mm COVER TO REINFORCING BARS FROM THE OUTSIDE FACE OF THE BRICKWORK TO ALLOW ADEQUATE GROUT COVER.

7. PROVIDE VERTICAL CONTROL JOINTS AT 10m MAX CENTRES, AND 5m MAXIMUM FROM CORNERS IN ALL MASONRY WALLS.

8. BACKFILL TO RETAINING WALLS TO BE FREE DRAINING GRANULAR MATERIAL U.N.O. PROVIDE SUBSOIL DRAIN TO WEEP HOLES.

9. ALL CAVITY CONSTRUCTION TO HAVE STAINLESS STEEL WALL TIES INSTALLED AS PER CLAUSE 4.10 AS 3700.

10. MAXIMUM HEIGHT OF BLOCK WORK TO BE POURED IN ONE LIFT TO BE 1200mm.

11. BACKFILL SHOULD NOT BE PLACED BEHIND THE WALL UNTIL ATLEAST TEN DAYS AFTER GROUTING.

CONCRETE

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 CURRENT EDITION WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

2. READYMIX CONCRETE SUPPLY SHALL COMPLY WITH AS 1379.

3. CONCRETE QUALITY ALL THE REQUIREMENTS OF THE ACSE CONCRETE SPECIFICATION DOCUMENT 1 (EDITION 6) SHALL APPLY TO THE FORMWORK, REINFORCEMENT AND CONCRETE UNLESS NOTED OTHERWISE.

4. PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1012

5. NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING.

CONCRETE (CONTINUED)

6. CLEAR CONCRETE COVER TO ALL REINFORCEMENT FOR DURABILITY SHALL BE AS FOLLOWS UNLESS SHOWN OTHERWISE.

STRUCTURAL ITEM	CONCRETE GRADE (MPa)	CAST AGAINST GROUND (mm)	EXPOSURE TO FLOWING WATER / ATMOSPHERE (mm)
STORMWATER PIT BASE/LID	32	50	50
STORMWATER PIT WALLS	32	50	50
FOOTINGS	25	50	–
PIERS	25	75	–
BRIDGING SLAB	32	50	40
CONCRETE RETAINING WALL	32	50	40

7. ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS, PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1 METRE CENTRES BOTH WAYS. BARS SHALL BE TIED AT ALTERNATE INTERSECTIONS. IN EXPOSURE CONDITIONS GREATER THAN B1 USE ONLY PLASTIC CHAIRS.

8. CONCRETE SIZES SHOWN DO NOT INCLUDE THICKNESSES OF APPLIED FINISHES.

9. NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE ENGINEER.

10. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER.

11. THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTINGS SHALL BE COMPACTED WITH MECHANICAL VIBRATORS.

12. CURING OF ALL CONCRETE IS TO BE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF 3 DAYS, AND PREVENTION OF LOSS OF MOISTURE FOR A TOTAL OF 7 DAYS FOLLOWED BY A GRADUAL DRYING OUT. APPROVED SPRAYED ON CURING COMPOUNDS THAT COMPLY WITH AS 3799 MAY BE USED WHERE FLOOR FINISHES WILL NOT BE AFFECTED (REFER MANUFACTURER'S SPECIFICATION). POLYTHENE SHEETING OR WET HESSIAN MAY BE USED TO RETAIN CONCRETE MOISTURE WHERE NOT PROTECTED FROM WIND AND TRAFFIC.

13. CONSTRUCTION SUPPORT PROPPING IS TO BE LEFT IN PLACE WHERE NEEDED TO AVOID OVERSTRESSING THE STRUCTURE DUE TO CONSTRUCTION LOADING.

14. THE ENGINEER SHALL BE GIVEN 48 HOURS NOTICE FOR REINFORCEMENT INSPECTION AND CONCRETE SHALL NOT BE DELIVERED UNTIL FINAL APPROVAL OBTAINED.

15. REINFORCEMENT SYMBOLS:
   N DENOTES DEFORMED RIBBED BARS, GRADE 500MPa, NORMAL DUCTILITY, NOMINATED BAR SIZE TO AS 4671 U.N.O. eg. N16
   R DENOTES ROUND BARS, GRADE 250MPa, NORMAL DUCTILITY, NOMINATED BAR SIZE TO AS 4671 eg. R10
   SL DENOTES SQUARE MESH, DEFORMED RIBBED BARS, GRADE 500MPa, LOW DUCTILITY, NOMINATED BAR SIZE AND SPACING TO AS 4671, U.N.O. eg. SL92 – 9mm BARS @ 200mm CENTRES
   RL DENOTES RECTANGULAR MESH, DEFORMED RIBBED BARS, GRADE 500MPa, LOW DUCTILITY, NOMINATED BAR SIZE AND SPACING TO AS 4671 U.N.O. eg. RL1018 – 10mm BARS @ 100mm CENTRES, 8mm BARS @ 200mm CENTRES
   TM DENOTES TRENCH MESH, DEFORMED RIBBED BARS, GRADE 500MPa, LOW DUCTILITY, NOMINATED BAR SIZE TO AS 4671 U.N.O. eg. 3–L11TM – 3 11mm BARS @100mm CENTRES LONGITUDINALLY AND CROSS BARS @ 300mm CENTRES

   NUMBER OF BARS IN GROUP — 17 N 20 – 250 — BAR GRADE AND TYPE; NOMINAL BAR SIZE IN mm; SPACING IN mm

16. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.

17. SLAB REINFORCEMENT SHALL EXTEND AT LEAST 65mm ONTO MASONRY SUPPORT WALLS AND 50 PERCENT OF BOTTOM REINFORCEMENT SHALL BE COGGED TO ACHIEVE ANCHORAGE AT SIMPLY SUPPORTED ENDS.

18. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN OR OTHERWISE APPROVED IN WRITING BY THE ENGINEER. LAPS SHALL BE IN ACCORDANCE WITH AS 3600 AND NOT LESS THAN THE DEVELOPMENT LENGTH FOR EACH BAR.

19. SITE BENDING OF DEFORMED REINFORCING BARS SHALL BE DONE WITHOUT HEATING USING MECHANICAL BENDING TOOLS.

20. WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE ENGINEER.

21. JOGGLES TO BAR SHALL BE 1 BAR DIAMETER OVER A LENGTH OF 12 BAR DIAMETERS.

22. FABRIC SHALL BE LAPPED 2 TRANSVERSE WIRES PLUS 50mm. BUNDLED BARS SHALL BE TIED TOGETHER AT 30 BAR DIAMETER CENTRES WITH 3 WRAPS OF THE WIRE.

CONCRETE (CONTINUED)

23. WHERE TRANSVERSE TIE BARS ARE NOT SHOWN PROVIDE N12–400 SPLICED WHERE NECESSARY AND LAP WITH MAIN BARS 400mm U.N.O.

24. REINFORCING LAP/COG LENGTHS

BARØ	LAP(mm)	COG
N12	500	IN ACCORDANCE WITH AS 3600
N16	600	
N20	900	
N24	1200	
N28	1500	

UNLESS NOTED OTHERWISE

25. GROUT TO BE 30MPa NON–SHRINK POURABLE GROUT. ALL BLOCKOUTS TO BE REMOVED PRIOR TO INSTALLING GROUT. GROUT AS PART OF BASE PLATE GROUTING.

26. ALL SLABS TO BE POURED ON WATERPROOF MEMBRANE UNO. WATERPROOF MEMBRANE TO BE 0.2mm THK PLASTIC MEMBRANE UNO.

27. CONCRETE QUALITY:
   ALL CEMENT TO BE TYPE SL, SHRINKAGE LIMITED CEMENT IN ACCORDANCE WITH AS 3972, EXCEPT THAT THE MAXIMUM SHRINKAGE OF THE CEMENT IN THE MORTAR TEST SAMPLE IN ACCORDANCE WITH AS 2350 SHALL BE LESS THAN 600 MICROSTAIN.

STRUCTURAL ELEMENT	SLUMP (mm)	MAX. AGG. SIZE (mm)	GRADE (MPa)
FOOTING	80	20	25
PIERS	80	20	25
BRIDGING SLAB	80	20	32
STORMWATER PIT	80	20	32
CONCRETE RETAINING WALL	80	20	32
CONCRETE RETAINING WALL FOOTING	80	20	32

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
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DIAL1100 BEFORE YOU DIG

CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

ALL DIMENSIONS ARE IN METRES. DO NOT SCALE

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ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION
LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

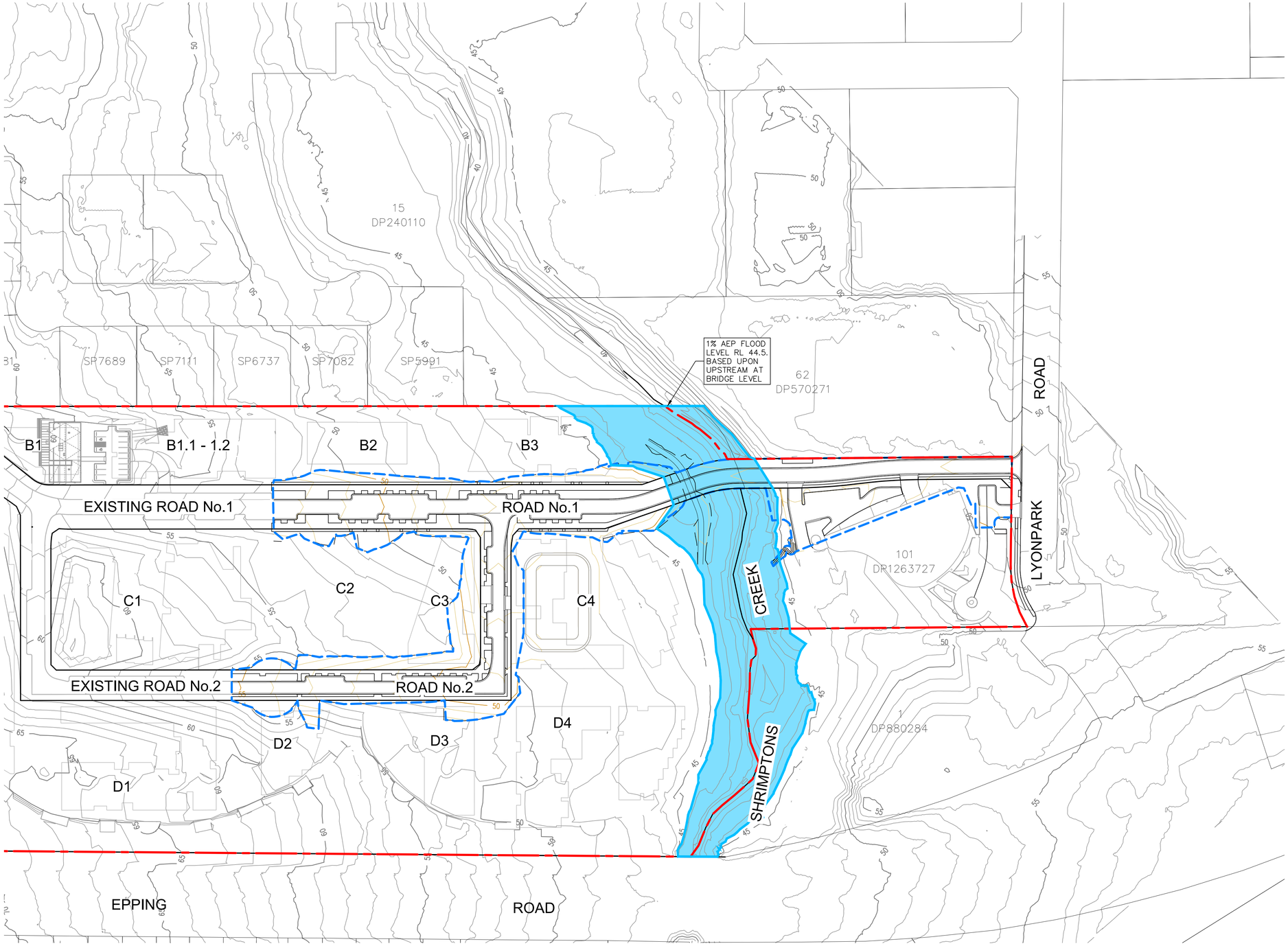
PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: STRUCTURAL NOTES

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	006	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:05:43PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)–ENG–006.DWG

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

300001(2)-ENG-007



GENERAL NOTES: –

1. BUILDING LAYOUTS SHOWN FOR INFORMATION ONLY.
2. REFER TO FLOOD REPORT BY BMT FOR FLOOD DETAILS.

FLOOD EXTENTS PLAN
SCALE 1:1000

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:1000 (0, 25, 50m) A3 1:2000

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: FLOOD EXTENTS PLAN

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	007	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:05:50PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-007.DWG

100mm AT FULL SIZE

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300001(2)-ENG-101

GENERAL NOTES: –

1. FOR TYPICAL ROAD CROSS SECTIONS, KERB PROFILES REFER SHEET 201 AND PAVEMENT DETAILS REFER TO SHEET 151.
2. SETOUT INFORMATION IS TO BE VERIFIED BY THE CONTRACTOR AGAINST THE PLAN VIEW, LONGITUDINAL SECTIONS AND ELECTRONIC 12D DATA BEFORE BEING USED. IF THERE IS A DISCREPANCY THE SUPERINTENDENT IS TO BE NOTIFIED AND DIRECTION TO BE PROVIDED IN WRITING BEFORE PROCEEDING.
3. REFER TO SHEET 901 FOR COMBINED SERVICES PLAN.
4. REFER DRAWINGS PREPARED BY R.A.R.I. FOR SEWER AND WATER DETAILS.

These plans are referred to in certificate no. **16897** approved by:
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MGA

LEGEND

- WORKS SUBJECT TO ROADS ACT APPROVAL
- SITE BOUNDARY
- LIMIT OF WORKS BOUNDARY
- PROPOSED LOT BOUNDARY
- EXISTING LOT BOUNDARY
- MAJOR CONTOURS
- MINOR CONTOURS
- PROPOSED KERB
- EXISTING KERB
- PROPOSED SAWCUT
- EXTENTS OF BATTER
- PROPOSED PAVED FOOTPATH
- PROPOSED CONCRETE FOOTPATH
- PROPOSED RETAINING WALL
- PROPOSED STORMWATER
- PROPOSED SEWER
- EXISTING STORMWATER
- EXISTING SEWER
- EXISTING WATER
- EXISTING TELSTRA
- EXISTING ELECTRICITY
- EXISTING GAS
- FUTURE STORMWATER
- TEMPORARY BERM
- PROPOSED SW PIT
- PROPOSED LINTEL
- PROPOSED HEADWALL
- PIT LABEL

CONTOUR INTERVAL = 0.5m

FUTURE STORMWATER SUBJECT TO DETAILED DESIGN

CONTRACTOR TO SUBMIT TEMPORARY WORKS FORM AND PAY RELEVANT FEES TO COUNCIL PRIOR TO COMMENCING PATH WORKS WITHIN LOT 15 DP240110

EXISTING STORMWATER TO REMAIN IN PLACE

LOCALLY STEEPEN BETTER TO 1 IN 3 IN FRONT OF DISPLAY CENTRE

PROPOSED BRIDGE. REFER SHEET 701 FOR DETAILS

EXCAVATE DOWN TO TOP OF PIT LEVEL AND PROVIDE RISER AND LINTEL TO SUIT FINISHED LEVELS

SAWCUT ALONG PROPOSED LIP LINE. EXISTING PAVEMENT TO REMAIN SUBJECT TO CONDITION ASSESSMENT

REFER SHEET 301 FOR INTERSECTION DETAILS

REFER SHEET 353 FOR CARPARK DETAILS

REFER SHEET 303 FOR INTERSECTION DETAILS

ROAD No.1

ROAD No.2

LYONPARK ROAD

LIMIT OF WORKS CH 220.276

LIMIT OF WORKS CH 177.685

REMOVE AND RECONSTRUCT PITS 1\10 + C2\1

REMOVE AND RECONSTRUCT PIPE FROM PIT 1\10 TO 1\12

DIRECT FLOWS FROM BERM TO INLET PITS

REFER SHEET 451 FOR BASIN DETAILS

PROVIDE STUB FROM PIT 1\16 AT 1% TO BOUNDARY AND CAP FOR FUTURE CONNECTION

FOR LIF CARPARK 2 DETAILS REFER SHEET 367

FOR LIF CARPARK 1 DETAILS REFER SHEET 362

CONNECT TO EXISTING PATH

ALL WORKS ON WATERFRONT LAND (40m FROM TOP OF CREEK BANK) TO BE UNDERTAKEN IN ACCORDANCE WITH THE GUIDELINES FOR CONTROLLED ACTIVITIES (2019)

CREEK

SHRIMPTONS

ANY WORKS ON LYONPARK ROAD SUBJECT TO ROADS ACT APPROVAL

EXCAVATE DOWN TO TOP OF PIT LEVEL AND PROVIDE RISER AND LINTEL TO SUIT FINISHED LEVELS

TEMPORARY BERMS. REFER SHEET 202 FOR DETAILS.

REFER SHEET 351 FOR CARPARK DETAILS

REFER SHEET 302 FOR INTERSECTION DETAILS

SAWCUT ALONG PROPOSED LIP LINE. EXISTING PAVEMENT TO REMAIN SUBJECT TO CONDITION ASSESSMENT

SP6737 SP7082 SP5991 DP240110 DP570271 DP880284

CAUTION:

1. IT IS THE RESPONSIBILITY OF THE CIVIL WORKS CONTRACTOR TO DETERMINE THE LOCATION & LEVEL OF EXISTING SERVICES USING NON DESTRUCTIVE METHODS PRIOR TO COMMENCING WORKS ON SITE.

DIAL 1100 BEFORE YOU DIG

DETAIL PLAN

SCALE 1:500

CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:500 — 0 12.5 25.0m — A3 1:1000

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SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: DETAIL PLAN

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG	– 101	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:05:59PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-101.DWG

100mm AT FULL SIZE
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300001(2)-ENG-151

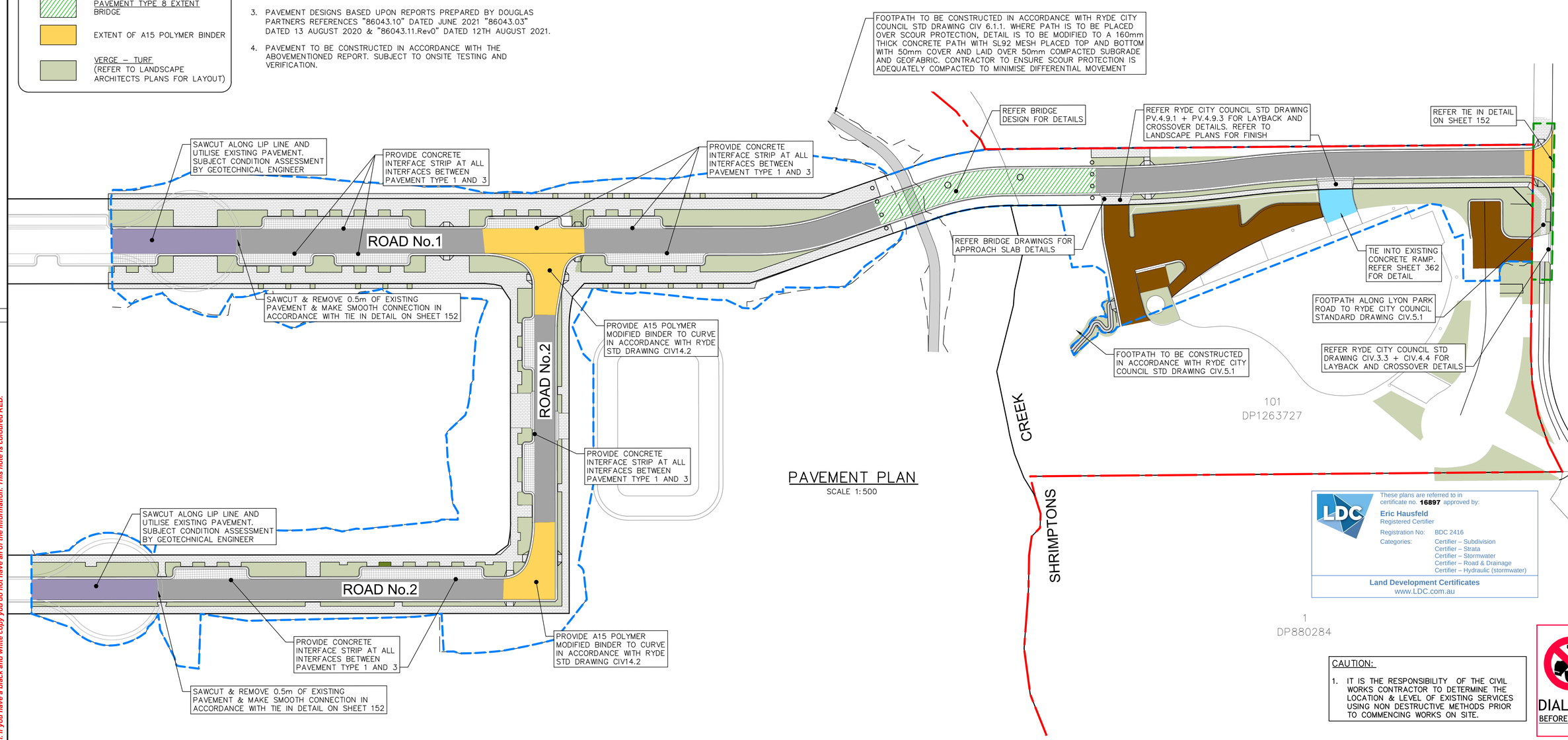
LEGEND

- WORKS SUBJECT TO ROADS ACT APPROVAL
- LIMIT OF WORKS BOUNDARY
- PROPOSED LOT BOUNDARY
- EXISTING LOT BOUNDARY
- PAVEMENT TYPE 1 EXTENT — STANDARD ROAD PAVEMENT
- PAVEMENT TYPE 3 EXTENT — GRANITE PAVING – ROAD
- PAVEMENT TYPE 4 EXTENT — GRANITE PAVING – VERGE
- PAVEMENT TYPE 5 EXTENT — CARPARK PAVEMENT
- PAVEMENT TYPE 6 EXTENT — EXISTING PAVEMENT
- PAVEMENT TYPE 7 EXTENT — CONCRETE PAVEMENT
- PAVEMENT TYPE 8 EXTENT — BRIDGE
- EXTENT OF A15 POLYMER BINDER
- VERGE – TURF (REFER TO LANDSCAPE ARCHITECTS PLANS FOR LAYOUT)

MGA

GENERAL NOTES: –

1. FOR TYPICAL ROAD CROSS SECTIONS & KERB PROFILES REFER SHEET 201.
2. SETOUT INFORMATION IS TO BE VERIFIED BY THE CONTRACTOR AGAINST THE PLAN VIEW, LONGITUDINAL SECTIONS AND ELECTRONIC 12D DATA BEFORE BEING USED. IF THERE IS A DISCREPANCY THE SUPERINTENDENT IS TO BE NOTIFIED AND DIRECTION TO BE PROVIDED IN WRITING BEFORE PROCEEDING.
3. PAVEMENT DESIGNS BASED UPON REPORTS PREPARED BY DOUGLAS PARTNERS REFERENCES "86043.10" DATED JUNE 2021 "86043.03" DATED 13 AUGUST 2020 & "86043.11.Rev0" DATED 12TH AUGUST 2021.
4. PAVEMENT TO BE CONSTRUCTED IN ACCORDANCE WITH THE ABOVEMENTIONED REPORT. SUBJECT TO ONSITE TESTING AND VERIFICATION.



PAVEMENT PLAN

SCALE 1:500

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
www.LDC.com.au

CAUTION:

1. IT IS THE RESPONSIBILITY OF THE CIVIL WORKS CONTRACTOR TO DETERMINE THE LOCATION & LEVEL OF EXISTING SERVICES USING NON DESTRUCTIVE METHODS PRIOR TO COMMENCING WORKS ON SITE.

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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:500 — 0, 12.5, 25.0m — A3 1:1000

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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Fax: (02) 4305 4399
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www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: PAVEMENT PLAN

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	151	2

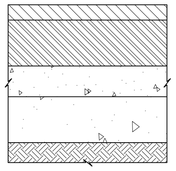
Plotted By: Mark Hoyland Plot Date: 16/05/22 2:06:05PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-151.DWG

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

300001(2)-ENG-152

GENERAL NOTES: –

1. FOR TYPICAL ROAD CROSS SECTIONS & KERB PROFILES REFER SHEET 201.
2. SETOUT INFORMATION IS TO BE VERIFIED BY THE CONTRACTOR AGAINST THE PLAN VIEW, LONGITUDINAL SECTIONS AND ELECTRONIC 12D DATA BEFORE BEING USED. IF THERE IS A DISCREPANCY THE SUPERINTENDENT IS TO BE NOTIFIED AND DIRECTION TO BE PROVIDED IN WRITING BEFORE PROCEEDING.
3. PAVEMENT DESIGNS BASED UPON REPORTS PREPARED BY DOUGLAS PARTNERS REFERENCES "86043.10" DATED JUNE 2021 "86043.03" DATED 13 AUGUST 2020 & "86043.11.Rev0" DATED 12TH AUGUST 2021.
4. PAVEMENT TO BE CONSTRUCTED IN ACCORDANCE WITH THE ABOVEMENTIONED REPORT. SUBJECT TO ONSITE TESTING AND VERIFICATION.

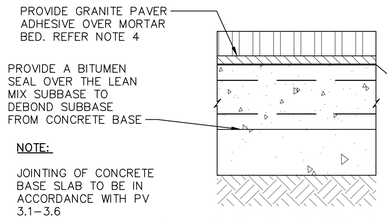


– WEARING COURSE – AC14
– INTERMEDIATE COURSE – AC20 (IN TWO LAYERS)
– PRIME AMC00 OR APPROVED EQUIVALENT
– BASE COURSE – DGB20
– SUB BASE COURSE – DGS40
– EXISTING SUBGRADE

NOTE*:
TYPE 1A = TYPE 1 WITH CBR 6%.

PAVEMENT TYPE 1 – STANDARD ROAD PAVEMENT*

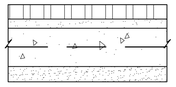
N.T.S.



– 80mm GRANITE PAVING – AS PER LANDSCAPE SPECIFICATION
– MORTAR BED – REFER TO NOTE 3
– SLURRY BOND COAT – REFER TO NOTE 2
– SL82 TOP & BTM MIN. 50mm COVER 210mm THICK 32MPa REINFORCED CONCRETE BASE. REFER TO NOTE 1
– LEAN MIX CONCRETE SUBBASE (f'c = 5MPa, LOW SHRINKAGE)
– COMPACTED SUBGRADE 100% STANDARD (CBR 6–10%) – IN ACCORDANCE WITH GEOTECHNICAL SPECIFICATIONS PROVIDED BY DOUGLAS PARTNERS

PAVEMENT TYPE 3 – GRANITE PAVERS – ROAD

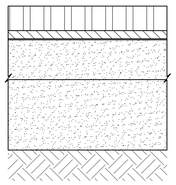
N.T.S.



– GRANITE PAVING – AS PER LANDSCAPE SPECIFICATION
– WET SAND/CEMENT – AS PER PV 1.2 SPECIFICATION
– BLINDING SLAB – AS PER PV 1.1 SPECIFICATION
– DGB20 TO 98% STANDARD DRY COMPACTION

PAVEMENT TYPE 4 – GRANITE PAVERS VERGE

N.T.S.



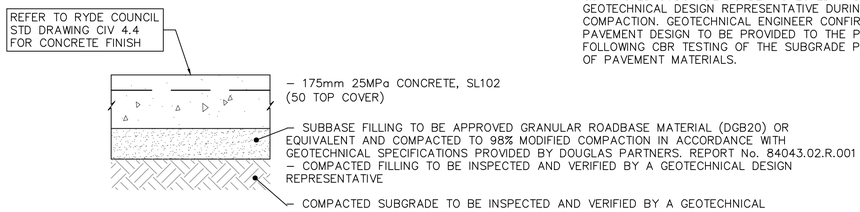
– 80mm CONCRETE PAVING – AS PER LANDSCAPE SPECIFICATION
– SAND BED – TO GEOTECHNICAL SPECIFICATION
– UNBOUND DGB20
– UNBOUND DGS20
– COMPACTED SUBGRADE 100% STANDARD (CBR 4–6%) – IN ACCORDANCE WITH GEOTECHNICAL SPECIFICATIONS PROVIDED BY DOUGLAS PARTNERS

PAVEMENT TYPE 5 – PAVERS – LIF CARPARK

N.T.S.

SUBGRADE NOTES: –

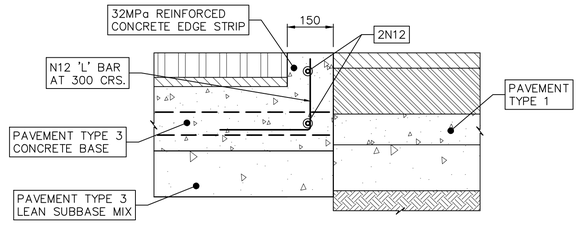
- THE EXISTING SUBGRADE WHERE CONSIDERED TO BE 'UNCONTROLLED' IS TO BE STRIPPED BACK TO NATURAL MATERIAL. RETAIN THE EXCAVATED MATERIAL IN SEPARATE STOCKPILES FOR ASSESSMENT FOR POSSIBLE RE–USE.
- COMPACT STIFF CLAY SUBGRADE TO 100% STANDARD COMPACTION (CBR 6–10%) IN ACCORDANCE WITH REQUIREMENTS IN GEOTECH REPORT No.86043.02.R.001 (Rev0).
- PLACE APPROVED COMPACTABLE FILL MATERIAL (TO BE APPROVED BY QUALIFIED GEOTECHNICAL ENGINEER) IN 250mm LOOSE LAYERS AND COMPACTED TO 100% STANDARD COMPACTION (CBR 6–10%) IN ACCORDANCE WITH REQUIREMENTS IN GEOTECH REPORT No.86043.02.R.001 (Rev0).
- COMPACTED SUBGRADE TO BE INSPECTED AND VERIFIED BY A GEOTECHNICAL DESIGN REPRESENTATIVE DURING THE TIME OF COMPACTION. GEOTECHNICAL ENGINEER CONFIRMATION OF THE PAVEMENT DESIGN TO BE PROVIDED TO THE PRINCIPAL CERTIFIER FOLLOWING CBR TESTING OF THE SUBGRADE PRIOR TO PLACEMENT OF PAVEMENT MATERIALS.



– 175mm 25MPa CONCRETE, SL102 (50 TOP COVER)
– SUBBASE FILLING TO BE APPROVED GRANULAR ROADBASE MATERIAL (DGB20) OR EQUIVALENT AND COMPACTED TO 98% MODIFIED COMPACTION IN ACCORDANCE WITH GEOTECHNICAL SPECIFICATIONS PROVIDED BY DOUGLAS PARTNERS. REPORT No. 84043.02.R.001
– COMPACTED FILLING TO BE INSPECTED AND VERIFIED BY A GEOTECHNICAL DESIGN REPRESENTATIVE
– COMPACTED SUBGRADE TO BE INSPECTED AND VERIFIED BY A GEOTECHNICAL DESIGN REPRESENTATIVE (REFER TO SUBGRADE NOTES ON THIS SHEET)

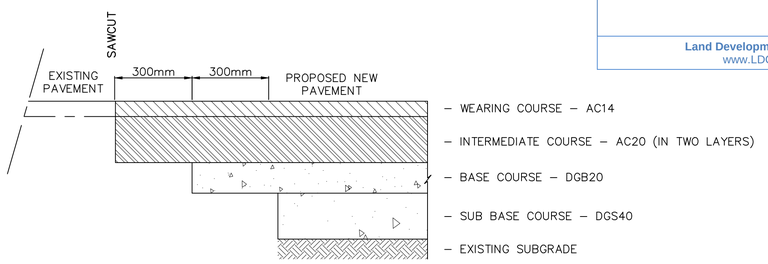
PAVEMENT TYPE 7 – CONCRETE PAVEMENT

N.T.S.



INTERFACE STRIP DETAIL

N.T.S.



– WEARING COURSE – AC14
– INTERMEDIATE COURSE – AC20 (IN TWO LAYERS)
– BASE COURSE – DGB20
– SUB BASE COURSE – DGS40
– EXISTING SUBGRADE

TYPICAL TIE IN DETAIL

N.T.S

TABLE OF PAVEMENT

ROAD	TREATMENT LAYER	SUBBASE	BASECOURSE	INTERMEDIATE LAYER	WEARING COURSE	TOTAL
PAVEMENT TYPE 1 (CBR 10%)	–	150mm	100mm	150mm	50mm	450mm
PAVEMENT TYPE 1A (CBR 6%)	200mm	150mm	100mm	170mm	50mm	670mm
PAVEMENT TYPE 3 (CBR 6–10%)	–	150mm	210mm	30mm	80mm	470mm
PAVEMENT TYPE 4 (CBR 6–10%)	–	50mm	125mm	30mm	60mm	265mm
PAVEMENT TYPE 5 (CBR 4%)	–	320mm	120mm	20mm	80mm	530mm
PAVEMENT TYPE 5 (CBR 6%)	–	230mm	120mm	20mm	80mm	450mm
PAVEMENT TYPE 7 (CBR 6%)		100mm	175mm	–	–	275mm

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: NOT TO SCALE

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: PAVEMENT DETAILS

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	152	2

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:06:10PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)–ENG–152.DWG

300001(2)-ENG-181

GENERAL NOTES: –

1. THIS PLAN SHOWS LANDSCAPE AND RETAINING WALL SUBSOIL LOCATIONS ONLY. CONTRACTOR TO PROVIDE SUBSOIL DRAINAGE UNDER KERBS IN ACCORDANCE WITH RYDE COUNCIL STANDARD DRAWINGS SWD.2.
2. FLUSHING POINTS THROUGH CENTRE OF ALL PLANTING AREAS TO BE PROVIDED IN ACCORDANCE WITH SWD.2.

MGA

LEGEND

- SITE BOUNDARY
- PROPOSED LOT BOUNDARY
- EXISTING LOT BOUNDARY
- MAJOR CONTOURS
- MINOR CONTOURS
- PROPOSED KERB
- EXISTING KERB
- PROPOSED STORMWATER
- RETAINING WALL
- SW — PROPOSED STORMWATER
- ex sw — EXISTING STORMWATER
- PROPOSED SW PIT
- PROPOSED LINTEL
- PROPOSED HEADWALL
- SS — PROPOSED SUBSOIL DRAINAGE
- SUBSOIL FLOW DIRECTION
- FLUSHING POINT

CONTOUR INTERVAL = 0.5m

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

Land Development Certificates
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NOTE: –

LANDSCAPE AREAS SHOWN INDICATIVELY ONLY. SUBSOIL TO BE PROVIDED UNDER CENTRE OF ALL LANDSCAPE AREAS IN ACCORDANCE WITH LANDSCAPE DRAWINGS.

PROVIDE SUBSOIL WITHIN LIF CARPARK IN ACCORDANCE WITH DOUGLAS PARTNERS REPORT 86043.10 DATED JUNE 2021

SP6737 SP7082 SP5991 15 DP240110 62 DP570271 ROAD LYONPARK ROAD No.1 ROAD No.2 CREEK SHRIMPTONS 101 DP1263727 1 DP880284

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SUBSOIL DRAINAGE PLAN

SCALE 1:500

CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:500 — 0 12.5 25.0m — A3 1:1000

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: SUBSOIL DRAINAGE PLAN

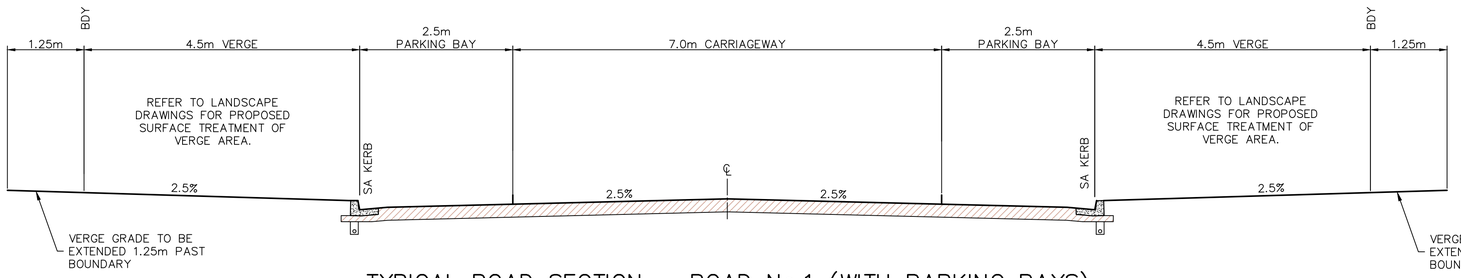
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	181	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:06:19PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-181.DWG

100mm AT FULL SIZE

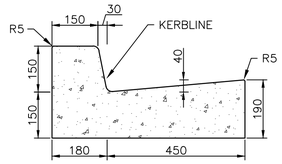
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300001(2)-ENG-201



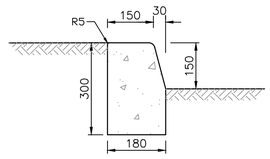
TYPICAL ROAD SECTION – ROAD No.1 (WITH PARKING BAYS)

SCALE 1 : 50



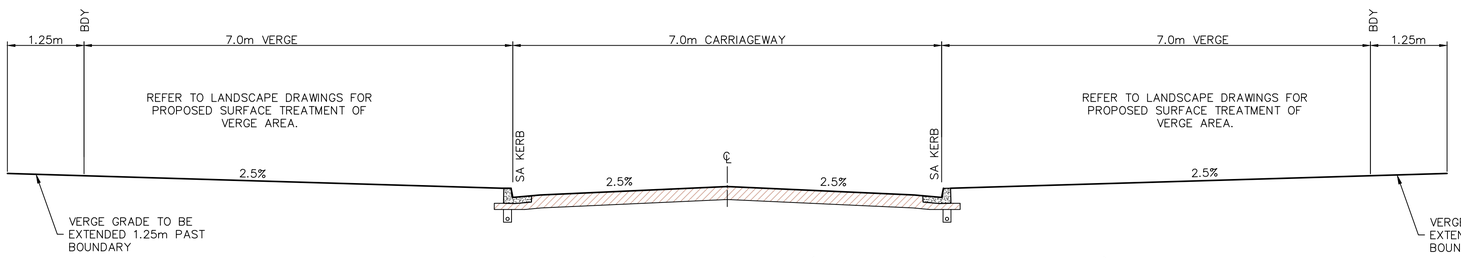
KERB AND GUTTER (SA)

NOT TO SCALE



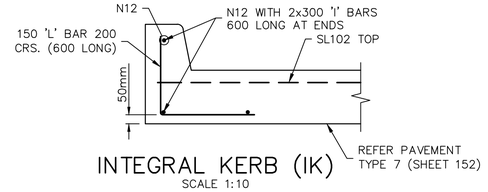
KERB ONLY (KO)

NOT TO SCALE



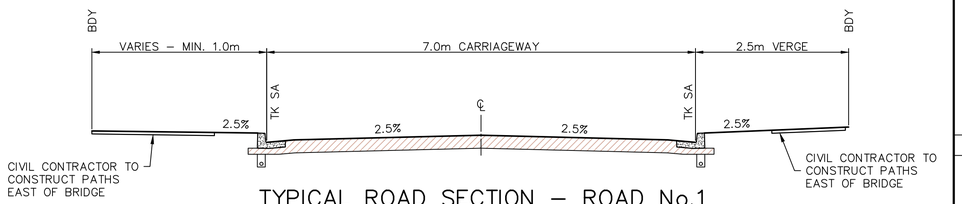
TYPICAL ROAD SECTION – ROAD No.1 (WITHOUT PARKING BAYS)

SCALE 1 : 50



INTEGRAL KERB (IK)

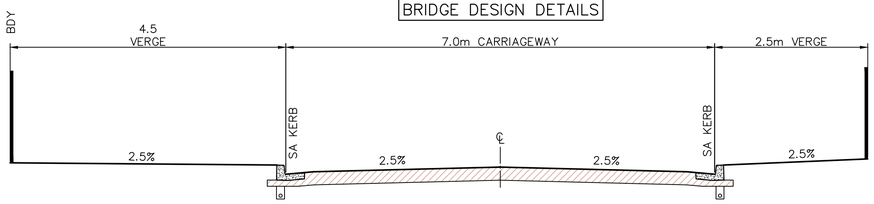
SCALE 1:10



TYPICAL ROAD SECTION – ROAD No.1 (BRIDGE TO LYON PARK ROAD)

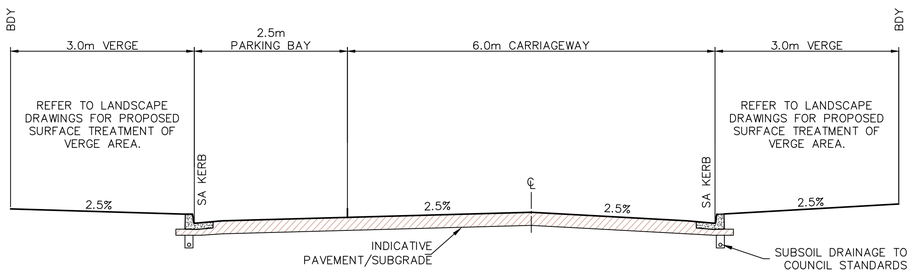
SCALE 1 : 50

REFER SHEET 701 FOR BRIDGE DESIGN DETAILS



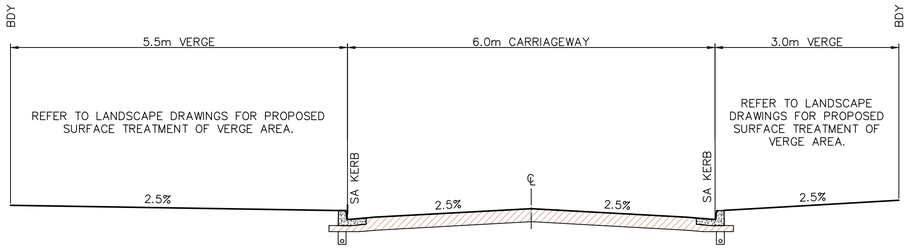
TYPICAL ROAD SECTION – ROAD No.1 (BRIDGE)

SCALE 1 : 50



TYPICAL ROAD SECTION – ROAD No.2 (WITH PARKING BAYS)

SCALE 1 : 50



TYPICAL ROAD SECTION – ROAD No.2 (WITHOUT PARKING BAYS)

SCALE 1 : 50

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:50 — 0 — 1.25 — 2.5 m — A3 1:100

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537, EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK, SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

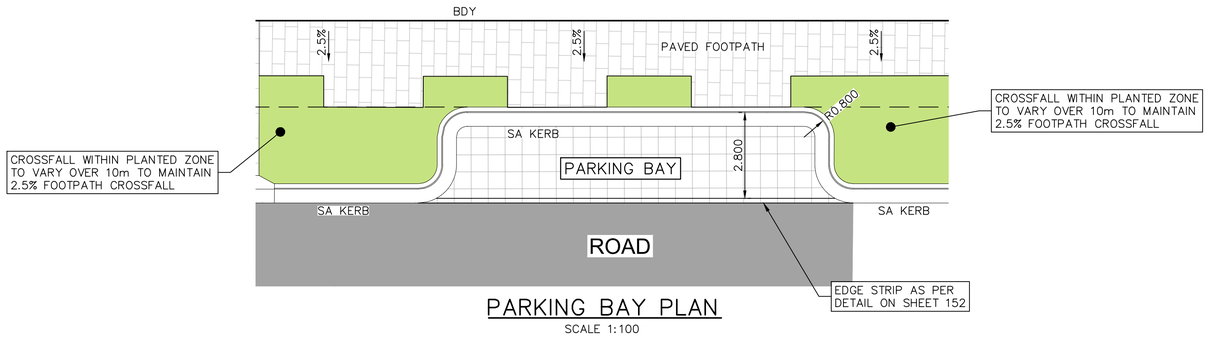
PLAN TITLE: TYPICAL ROAD PROFILES, KERB DETAILS & ROAD SETOUT TABLES

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	201	2

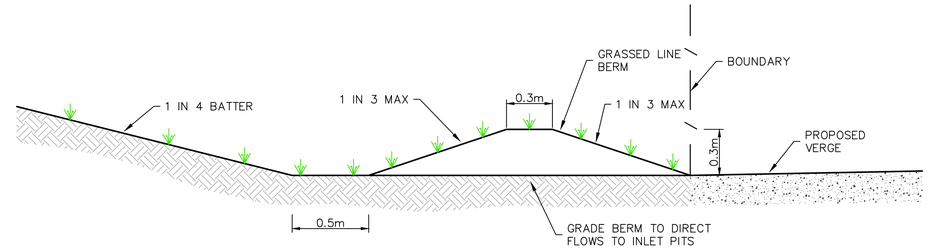
Plotted By: Mark Hoyland Plot Date: 16/05/22 2:06:24PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-201.DWG

100mm AT FULL SIZE
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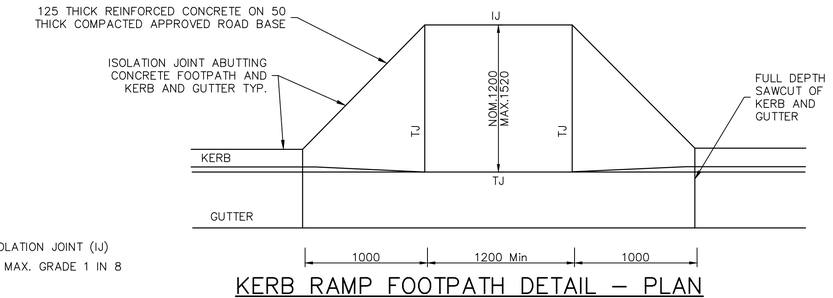
300001(2)-ENG-202



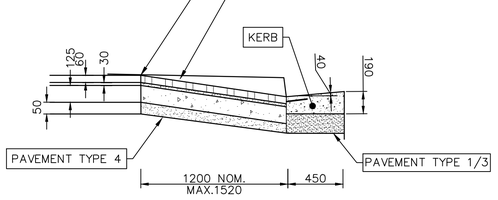
PARKING BAY PLAN
SCALE 1:100



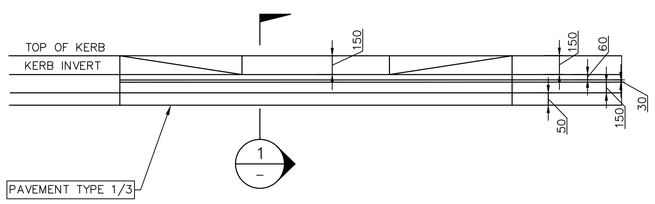
TYPICAL BERM SECTION
NOT TO SCALE



KERB RAMP FOOTPATH DETAIL – PLAN
NOT TO SCALE



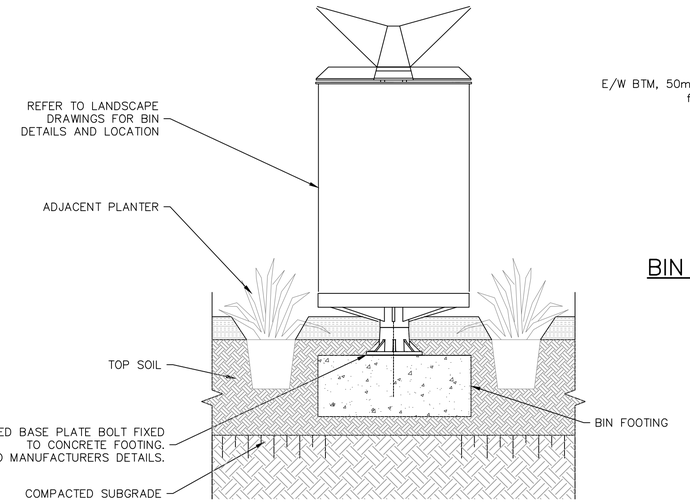
SECTION 1
NOT TO SCALE



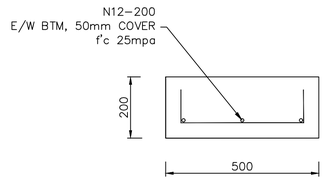
KERB RAMP FOOTPATH DETAIL – ELEVATION
NOT TO SCALE

NOTE:

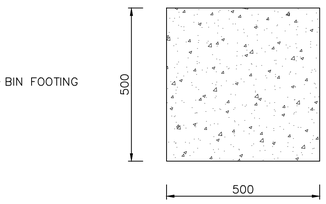
PRAM RAMPS TO CIV 2.1.2 EXCEPT WHERE MODIFIED BY LANDSCAPE DRAWINGS.



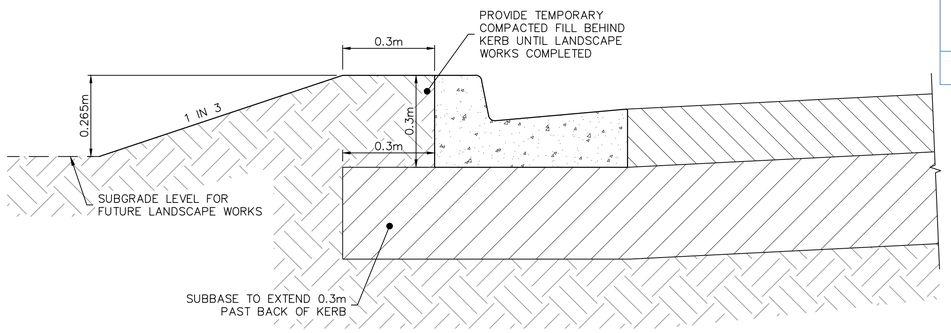
BIN IN PLANTING TYPICAL DETAIL
SCALE 1:10



BIN FOOTING DETAIL – SECTION
SCALE 1:10



BIN FOOTING DETAIL – PLAN
SCALE 1:10



TEMPORARY KERB DETAIL
NOT TO SCALE

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision, Certifier – Strata, Certifier – Stormwater, Certifier – Road & Drainage, Certifier – Hydraulic (stormwater)
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:10 — 0 0.25 0.5m — A3 1:20

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

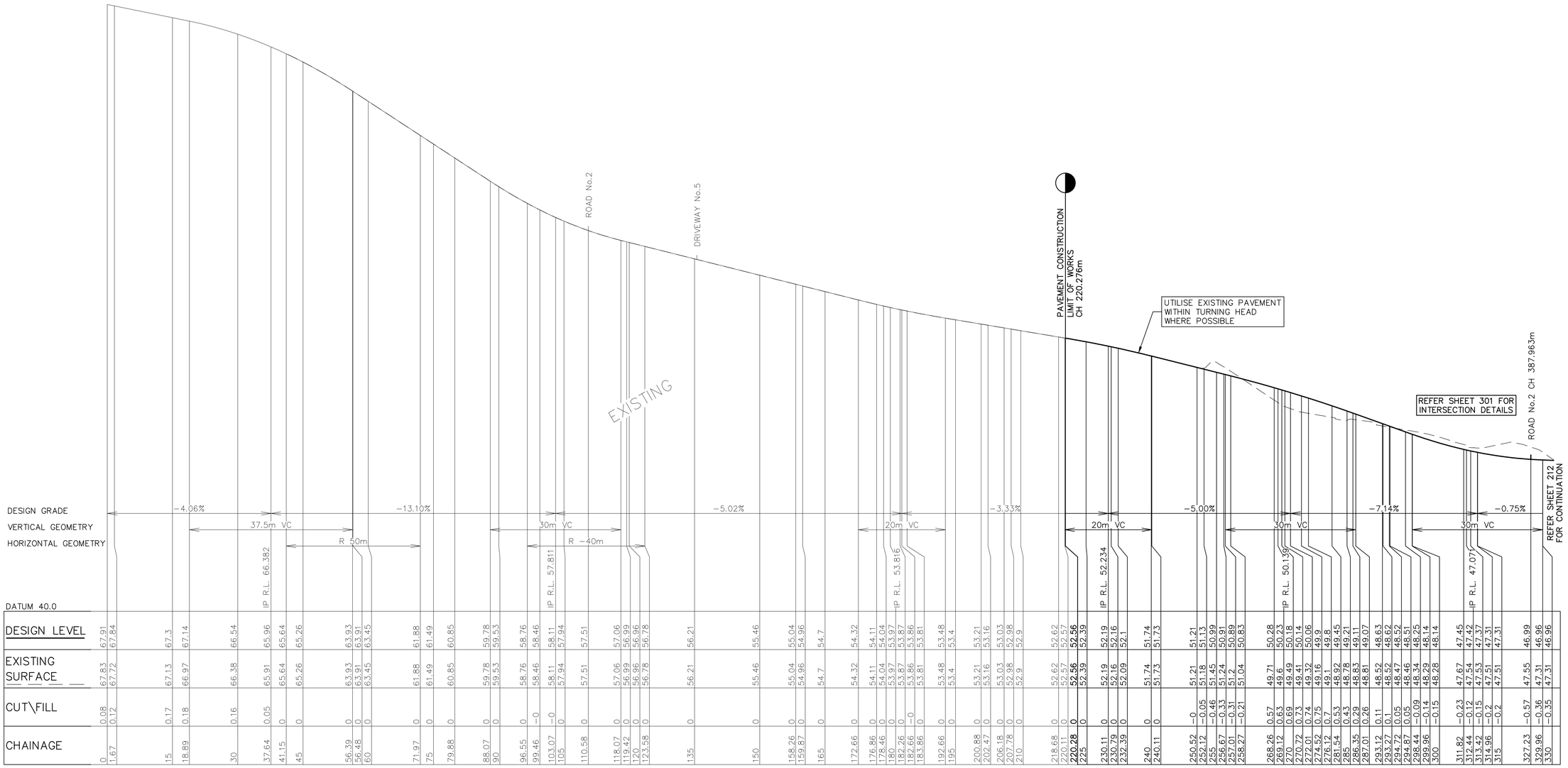
PLAN TITLE: KERB RAMP, TEMPORARY BERM & BIN FOOTING DETAILS

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	202	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:06:29PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-202.DWG

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

300001(2)-ENG-211



DATUM 40.0

CHAINAGE	DESIGN LEVEL	EXISTING SURFACE	CUT\FILL
0	67.91	67.83	0.08
1.67	67.84	67.72	0.12
15	67.3	67.13	0.17
18.89	67.14	66.97	0.18
30	66.54	66.38	0.16
37.64	65.96	65.91	0.05
41.15	65.64	65.64	0
45	65.26	65.26	0
56.39	63.93	63.93	0
56.48	63.91	63.91	0
60	63.45	63.45	0
71.97	61.88	61.88	0
75	61.49	61.49	0
79.88	60.85	60.85	0
88.07	59.78	59.78	0
90	59.53	59.53	0
96.55	58.76	58.76	0
99.46	58.46	58.46	−0
103.07	58.11	58.11	−0
105	57.94	57.94	0
110.58	57.51	57.51	0
118.07	57.06	57.06	0
119.42	56.99	56.99	0
120	56.96	56.96	0
123.58	56.78	56.78	0
135	56.21	56.21	0
150	55.46	55.46	0
158.26	55.04	55.04	0
159.87	54.96	54.96	0
165	54.7	54.7	0
172.66	54.32	54.32	0
176.86	54.11	54.11	0
178.46	54.04	54.04	0
180	53.97	53.97	0
182.26	53.87	53.87	0
182.66	53.86	53.86	−0
183.86	53.81	53.81	0
192.66	53.48	53.48	0
195	53.4	53.4	0
200.88	53.21	53.21	0
202.47	53.16	53.16	0
206.18	53.03	53.03	0
207.78	52.98	52.98	0
210	52.9	52.9	0
218.68	52.62	52.62	0
220.11	52.57	52.57	0
220.28	**52.56**	**52.56**	**0**
225	52.39	52.39	0
230.11	52.19	52.19	0
230.79	52.16	52.16	0
232.39	52.09	52.09	0
240	51.74	51.74	0
240.11	51.73	51.73	0
250.52	51.21	51.21	−0
252.12	51.18	51.13	−0.05
255	51.45	50.99	−0.46
256.67	51.24	50.91	−0.33
257.01	51.2	50.89	−0.31
258.27	51.04	50.83	−0.21
268.26	49.71	50.28	0.57
269.12	49.6	50.23	0.63
270	49.49	50.18	0.69
270.72	49.41	50.14	0.73
272.01	49.32	50.06	0.74
274.52	49.16	49.9	0.75
276.12	49.1	49.8	0.7
281.54	48.92	49.45	0.53
285	48.78	49.21	0.43
286.35	48.83	49.11	0.28
287.01	48.81	49.07	0.26
293.12	48.52	48.63	0.11
293.27	48.52	48.62	0.1
294.72	48.47	48.52	0.05
294.87	48.46	48.51	0.05
298.44	48.34	48.25	−0.09
299.96	48.29	48.14	−0.14
300	48.28	48.14	−0.15
311.82	47.67	47.45	−0.23
312.44	47.54	47.42	−0.12
313.42	47.53	47.37	−0.15
314.96	47.51	47.31	−0.2
315	47.51	47.31	−0.2
327.23	47.55	46.99	−0.57
329.96	47.31	46.96	−0.36
330	47.31	46.96	−0.35

LONGITUDINAL SECTION ROAD No.1

HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES
A1 1:500 — 0 12.5 25.0m — A3 1:1000
A1 1:100 — 0 2.5 5.0m — A3 1:200

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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ABN 62 129 445 398

CLIENT
FRASERS PROPERTY

PROPERTY DESCRIPTION
LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

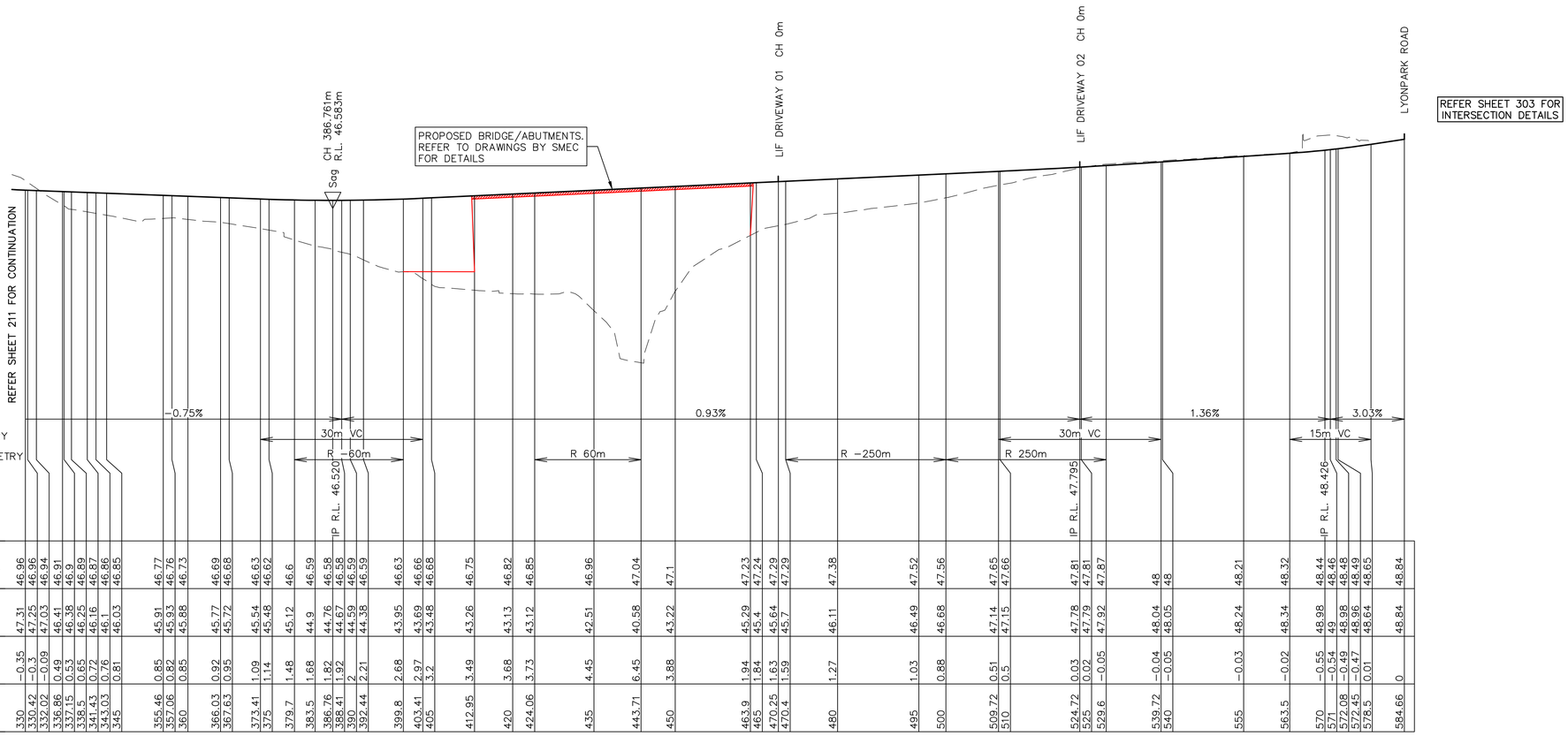
PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: ROAD LONGITUDINAL SECTIONS ROAD No.01 SHEET 1

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	211	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:06:38PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-211.DWG

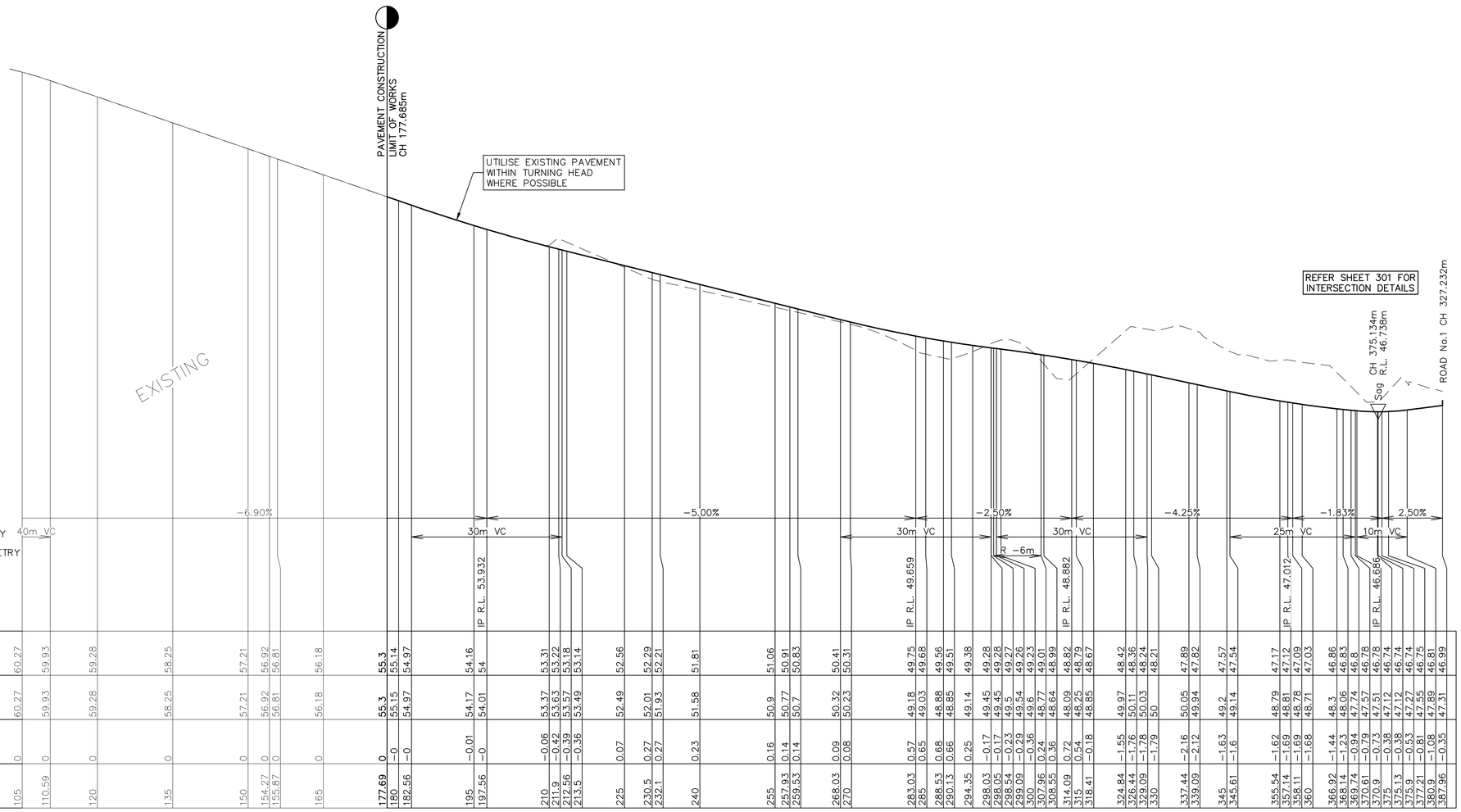
100mm AT FULL SIZE
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300001(2)-ENG-212



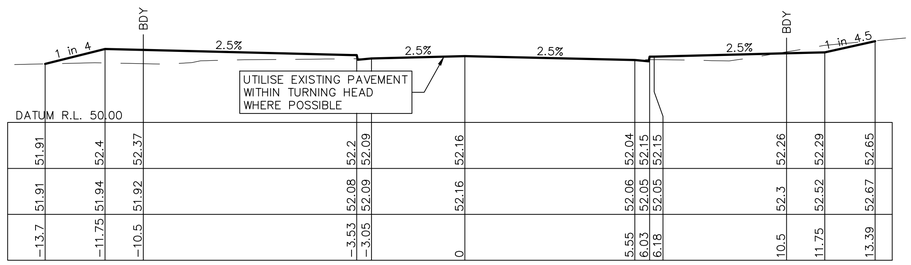
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300001(2)-ENG-213

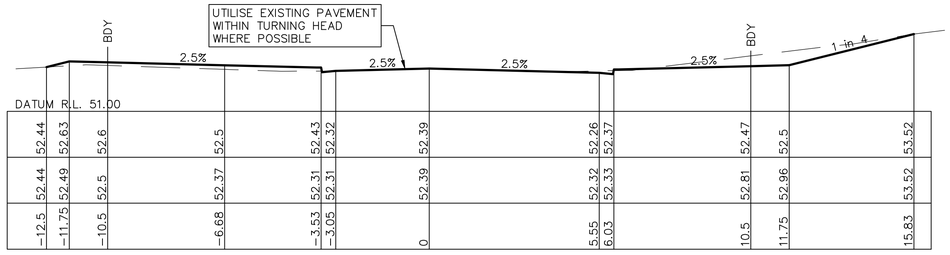


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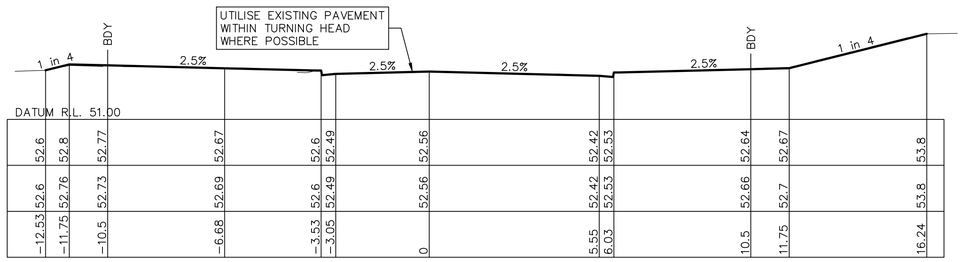
300001(2)-ENG-231



CH 230.79



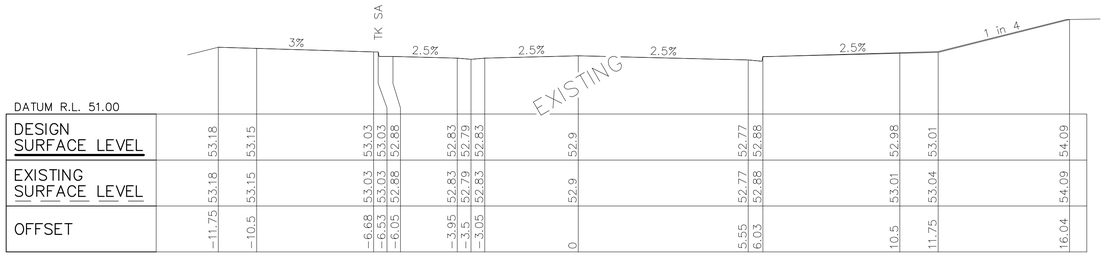
CH 225



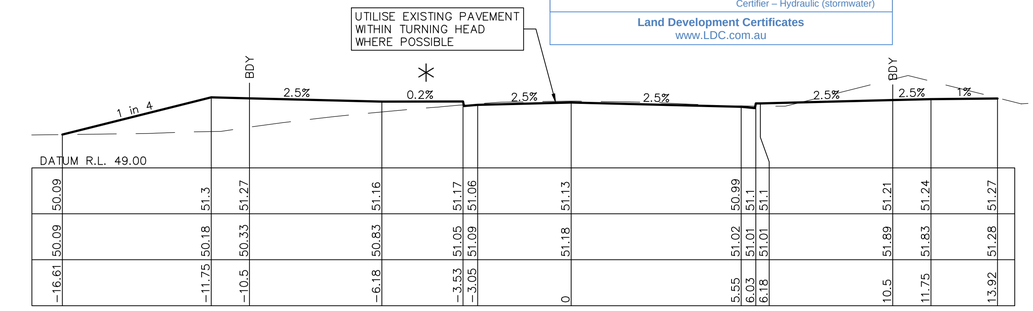
CH 220.28 – LIMIT OF WORKS



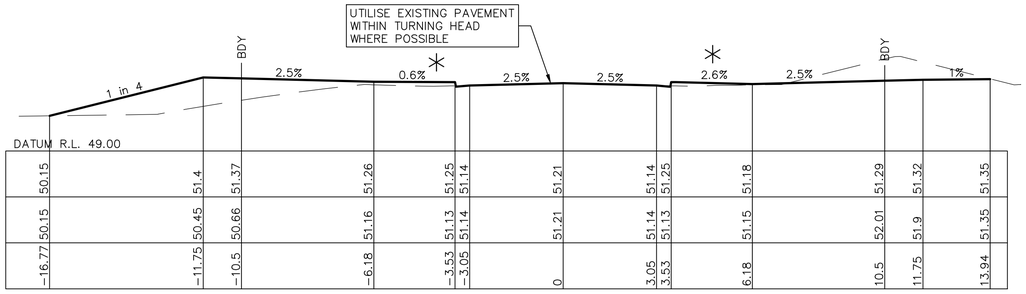
CH 218.68



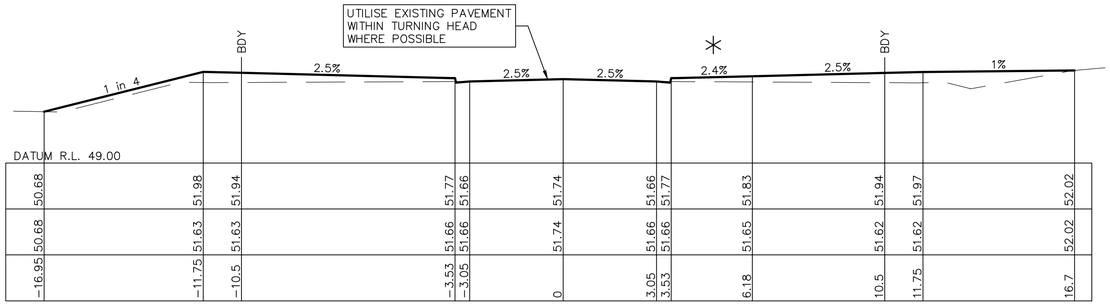
CH 210



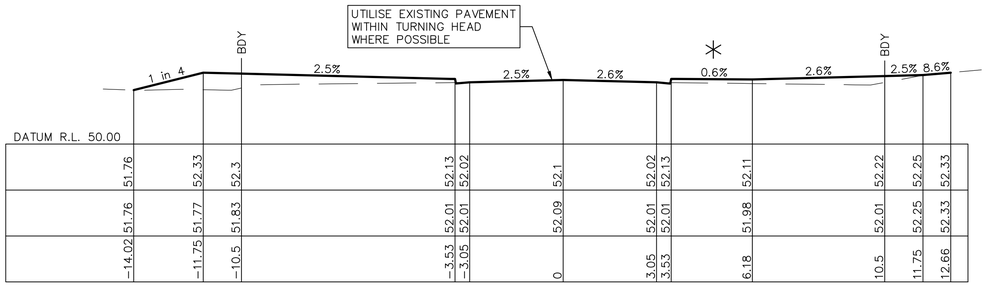
CH 252.12



CH 250.52



CH 240



CH 232.39

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
Land Development Certificates
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✳ MODIFY CROSS FALL OF PLANTED ZONES TO MAINTAIN 2.5% FOOTPATH

DIAL1100 BEFORE YOU DIG

CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:100 — 0 2.5 5.0m — A3 1:200

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: ROAD CROSS SECTIONS
ROAD No.01
SHEET 1

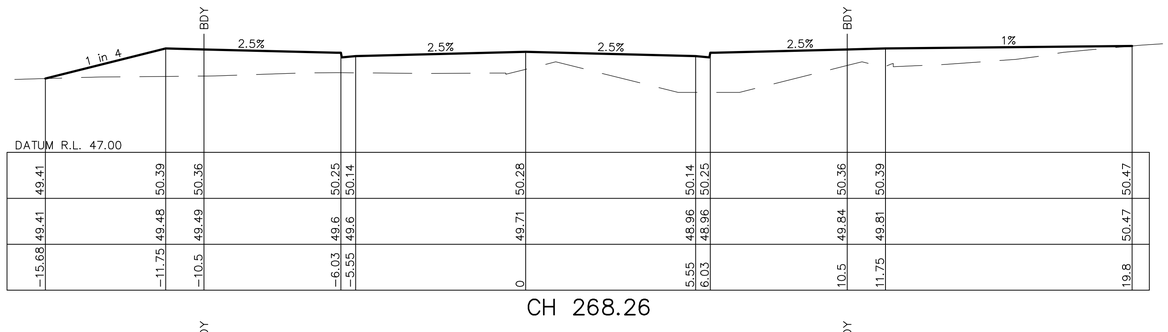
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG	– 231	2

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Plotted By: Mark Hoyland Plot Date: 16/05/22 2:07:05PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-231.DWG

300001(2)-ENG-232

✳ MODIFY CROSS FALL OF PLANTED ZONES TO MAINTAIN 2.5% FOOTPATH

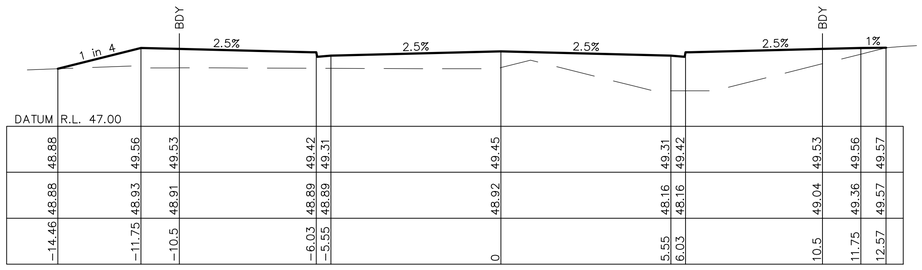


DATUM R.L. 47.00

| | | |

300001(2)-ENG-233

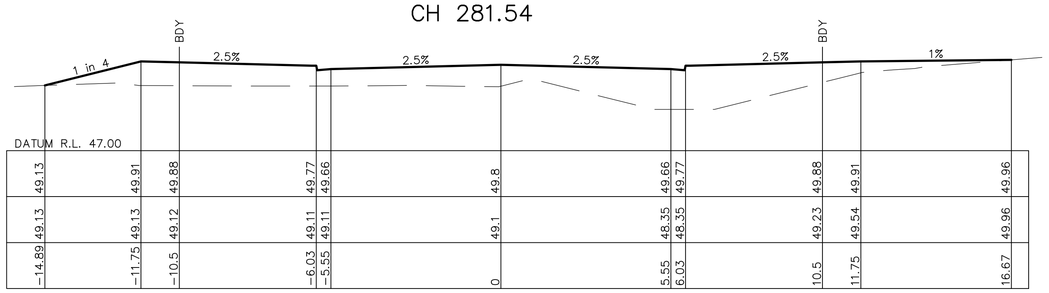
MODIFY CROSS FALL OF PLANTED ZONES TO MAINTAIN 2.5% FOOTPATH



DATUM R.L. 47.00

48.88	49.56	49.53	49.42	49.31	49.45	49.31	49.42	49.53	49.56	49.57		
48.88	48.93	48.91	48.89	48.89	48.92	48.16	48.16	49.04	49.36	49.57		
-14.46	-11.75	-10.5	-6.03	-5.55	0	5.55	6.03	10.5	11.75	12.57		

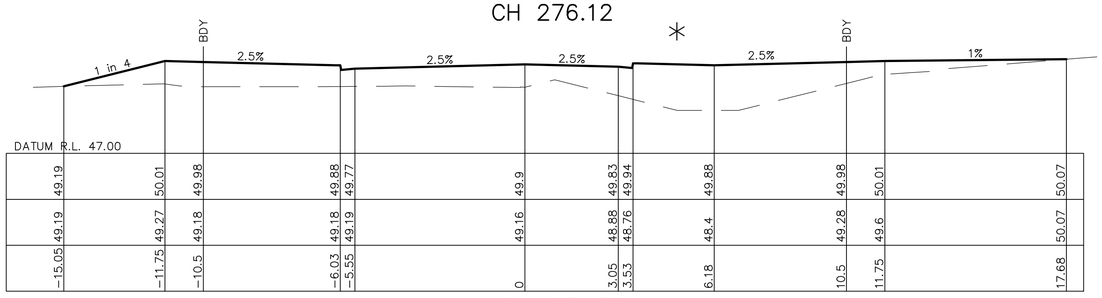
CH 281.54



DATUM R.L. 47.00

49.13	49.91	49.88	49.77	49.66	49.8	49.66	49.77	49.88	49.91	49.96		
49.13	49.13	49.12	49.11	49.11	49.1	48.35	48.35	49.23	49.54	49.96		
-14.89	-11.75	-10.5	-6.03	-5.55	0	5.55	6.03	10.5	11.75	16.67		

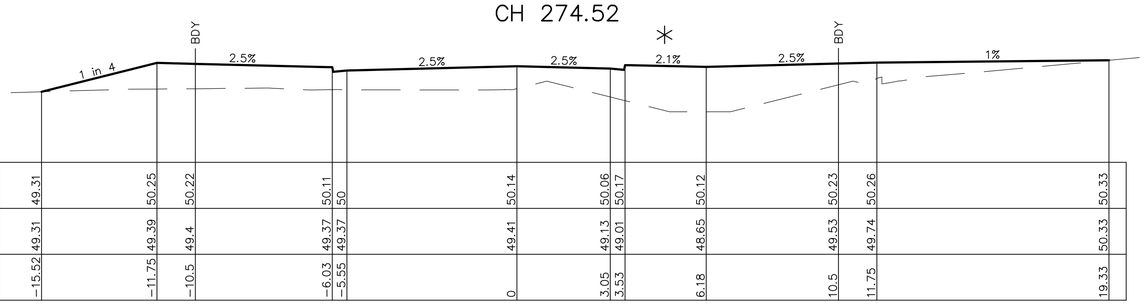
CH 276.12



DATUM R.L. 47.00

49.19	50.01	49.98	49.88	49.77	49.9	49.83	49.94	49.88	49.98	50.01	50.07	
49.19	49.27	49.18	49.18	49.19	49.16	48.88	48.76	48.4	49.28	49.6	50.07	
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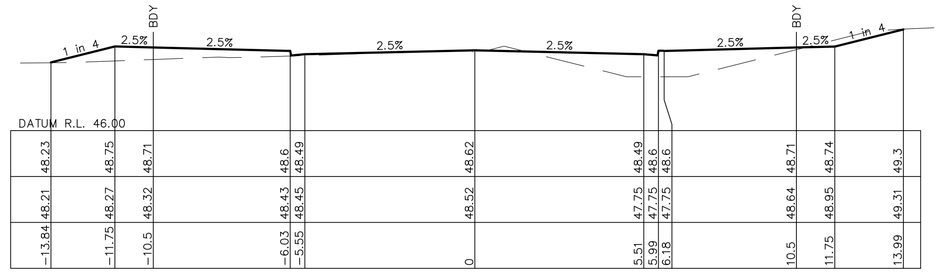
CH 274.52



DATUM R.L. 47.00

DESIGN SURFACE LEVEL	49.31	50.25	50.22	50.11	50	50.14	50.06	50.17	50.12	50.23	50.26	50.33
EXISTING SURFACE LEVEL	49.31	49.39	49.4	49.37	49.37	49.41	49.13	49.01	48.65	49.53	49.74	50.33
OFFSET	-15.52	-11.75	-10.5	-6.03	-5.55	0	3.05	3.53	6.18	10.5	11.75	19.33

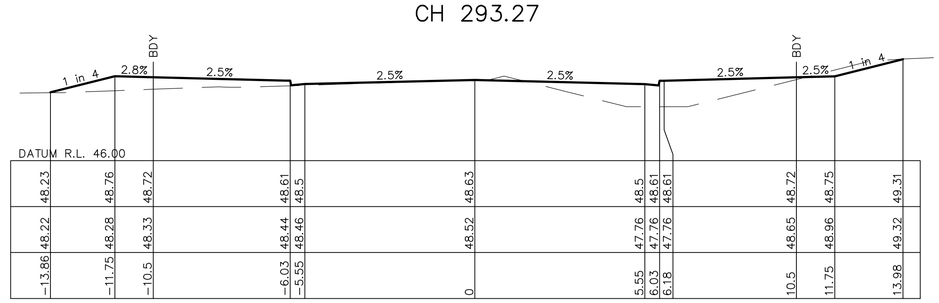
CH 270.72



DATUM R.L. 46.00

48.23	48.75	48.71	48.6	48.49	48.62	48.49	48.6	48.71	48.74	49.3		
48.21	48.27	48.32	48.43	48.45	48.52	47.75	47.75	48.64	48.95	49.31		
-13.84	-11.75	-10.5	-6.03	-5.55	0	5.51	5.99	6.18	10.5	11.75	13.99	

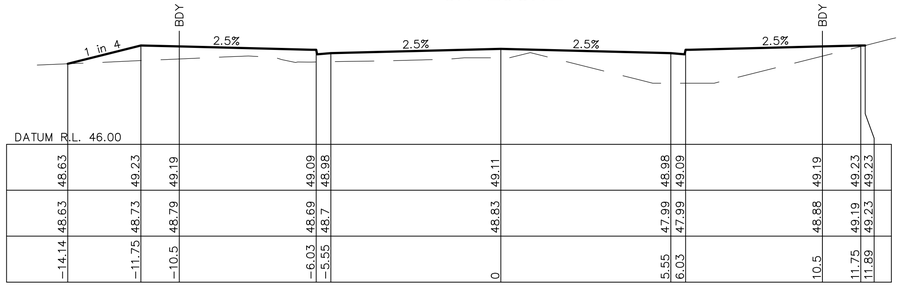
CH 293.27



DATUM R.L. 46.00

48.23	48.76	48.72	48.61	48.5	48.63	48.5	48.61	48.61	48.75	49.31		
48.22	48.28	48.33	48.44	48.46	48.52	47.76	47.76	48.65	48.96	49.32		
-13.86	-11.75	-10.5	-6.03	-5.55	0	5.55	6.03	6.18	10.5	11.75	13.98	

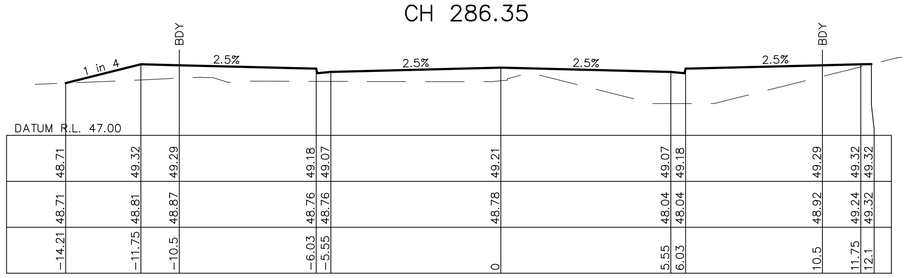
CH 293.12



DATUM R.L. 46.00

48.63	49.23	49.19	49.09	48.98	49.11	48.98	49.09	49.19	49.23	49.23		
48.63	48.73	48.79	48.69	48.7	48.83	47.99	47.99	48.88	49.19	49.23		
-14.14	-11.75	-10.5	-6.03	-5.55	0	5.55	6.03	10.5	11.75	11.89		

CH 286.35



DATUM R.L. 47.00

48.71	49.32	49.29	49.18	49.07	49.21	49.07	49.18	49.29	49.32	49.32		
48.71	48.81	48.87	48.76	48.76	48.78	48.04	48.04	48.92	49.24	49.32		
-14.21	-11.75	-10.5	-6.03	-5.55	0	5.55	6.03	10.5	11.75	12.1		

CH 285

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:100; 0 2.5 5.0m; A3 1:200

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537, EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK, SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: ROAD CROSS SECTIONS ROAD No.01 SHEET 3

PROJECT No. 300001(2) – DISCIPLINE ENG – NUMBER 233 REV. 2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:07:23PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-233.DWG

100mm AT FULL SIZE

This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

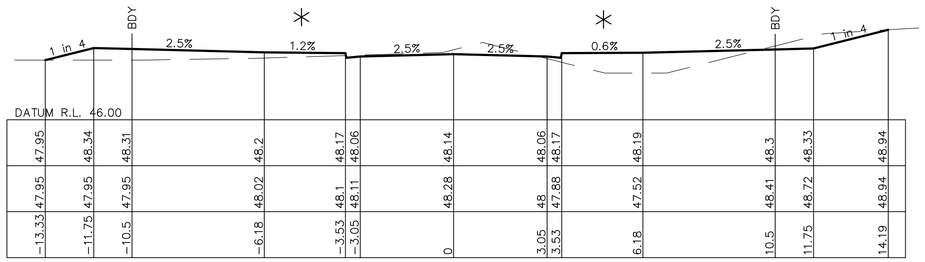
300001(2)-ENG-234

100mm AT FULL SIZE

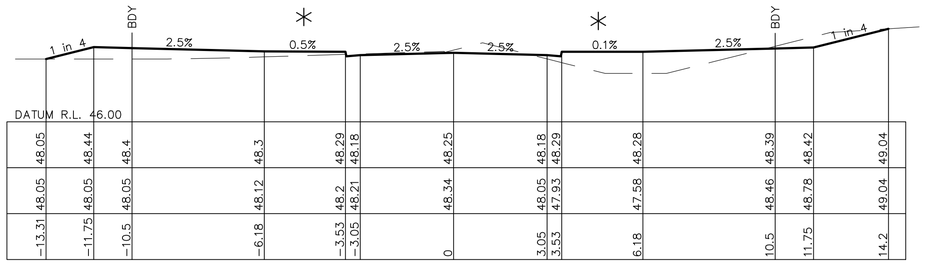
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

REFER SHEET 501 FOR SITE REGRADE DETAILS

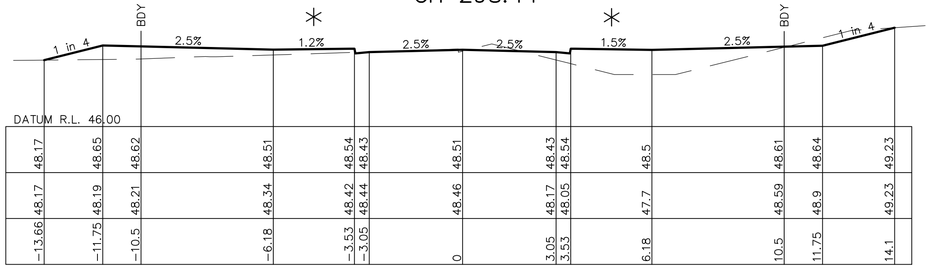
✳ MODIFY CROSS FALL OF PLANTED ZONES TO MAINTAIN 2.5% FOOTPATH



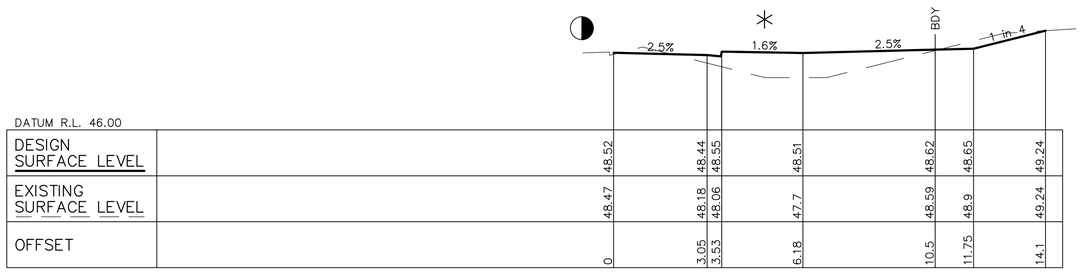
CH 300



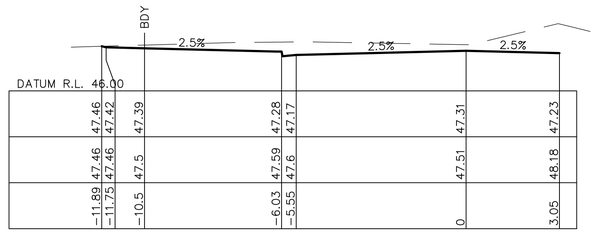
CH 298.44



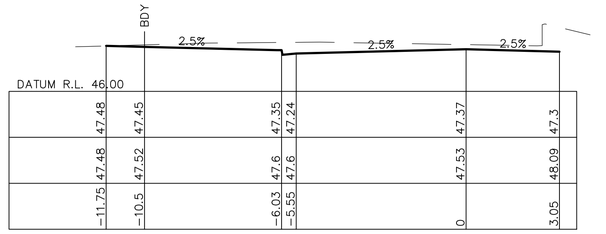
CH 294.87



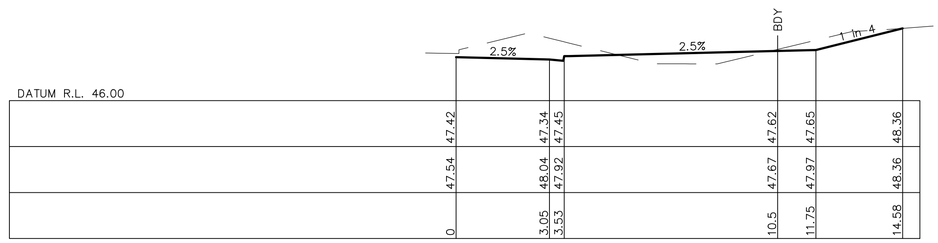
CH 294.72



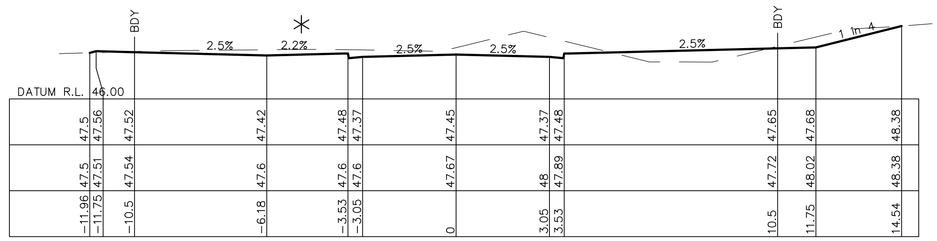
CH 315



CH 313.42



CH 312.44



CH 311.82

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
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2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:100 — 0 2.5 5.0m — A3 1:200

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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adw johnson
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Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: ROAD CROSS SECTIONS
ROAD No.01
SHEET 4

PROJECT No. 300001(2) – DISCIPLINE ENG – NUMBER 234 REV. 2

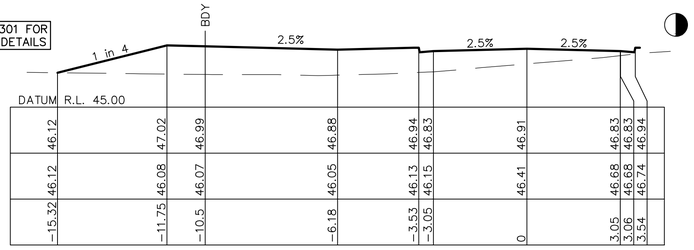
Plotted By: Mark Hoyland Plot Date: 16/05/22 2:07:33PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-234.DWG

300001(2)-ENG-235

REFER SHEET 501 FOR SITE REGRADE DETAILS

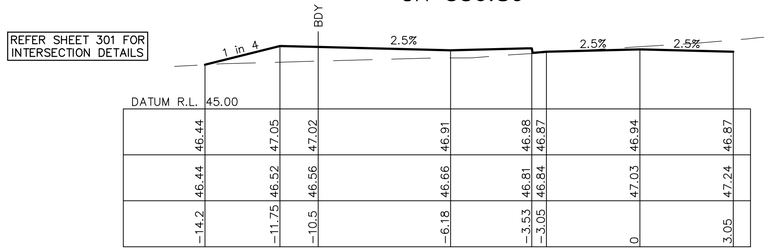
✳ MODIFY CROSS FALL OF PLANTED ZONES TO MAINTAIN 2.5% FOOTPATH

REFER SHEET 301 FOR INTERSECTION DETAILS



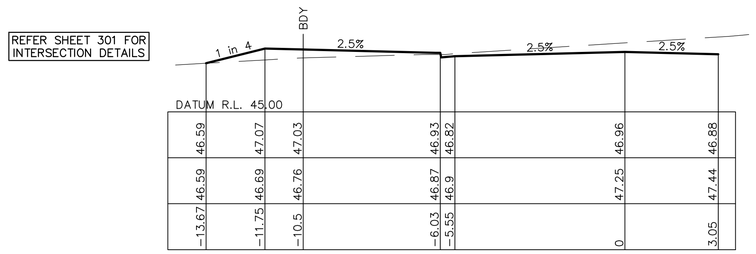
CH 336.86

REFER SHEET 301 FOR INTERSECTION DETAILS



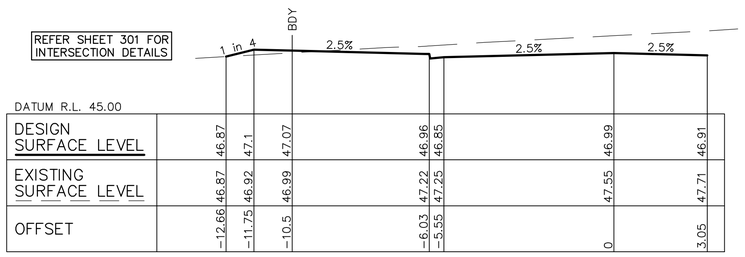
CH 332.02

REFER SHEET 301 FOR INTERSECTION DETAILS

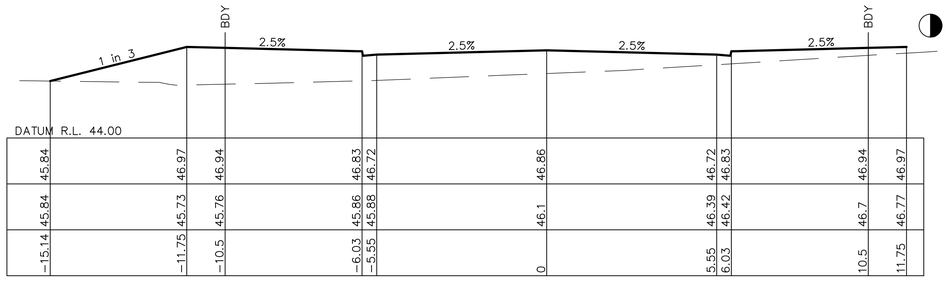


CH 330.42

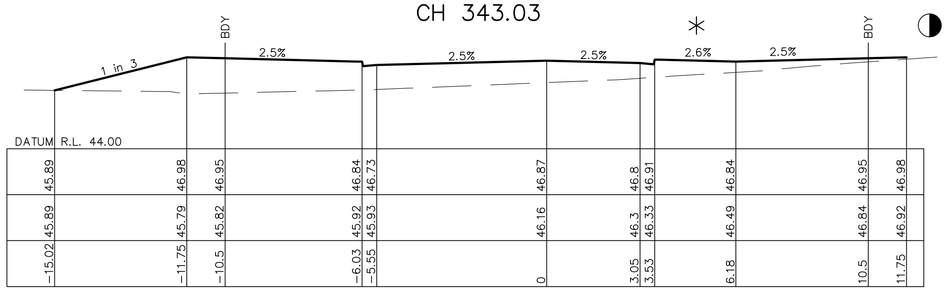
REFER SHEET 301 FOR INTERSECTION DETAILS



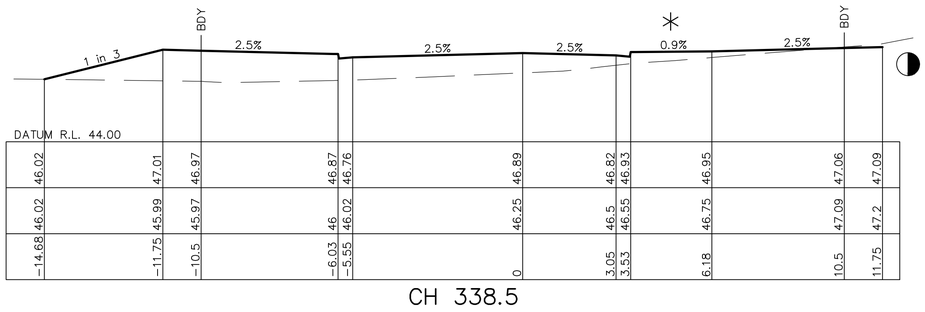
CH 327.23



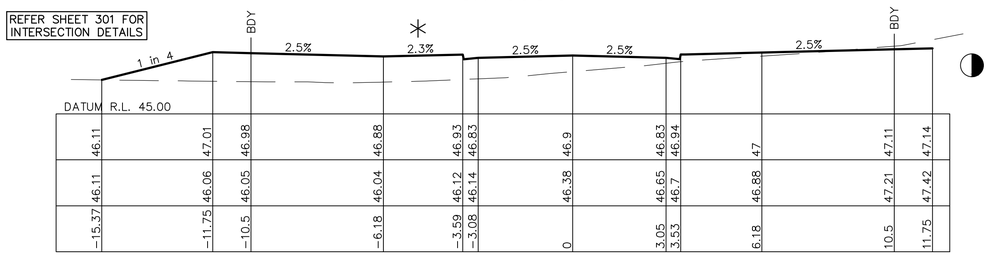
CH 343.03



CH 341.43



CH 338.5



CH 337.15

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision, Certifier – Strata, Certifier – Stormwater, Certifier – Road & Drainage, Certifier – Hydraulic (stormwater)
Land Development Certificates
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:100 — 0 2.5 5.0m — A3 1:200

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Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: ROAD CROSS SECTIONS ROAD No.01 SHEET 5

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	235	2

100mm AT FULL SIZE

This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:07:42PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-235.DWG

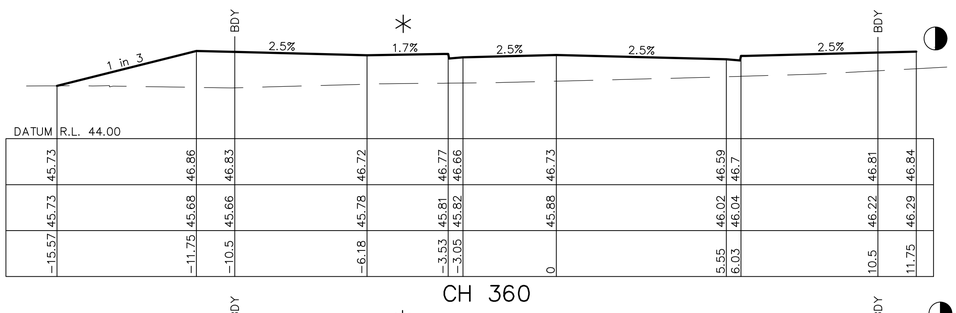
300001(2)-ENG-236

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

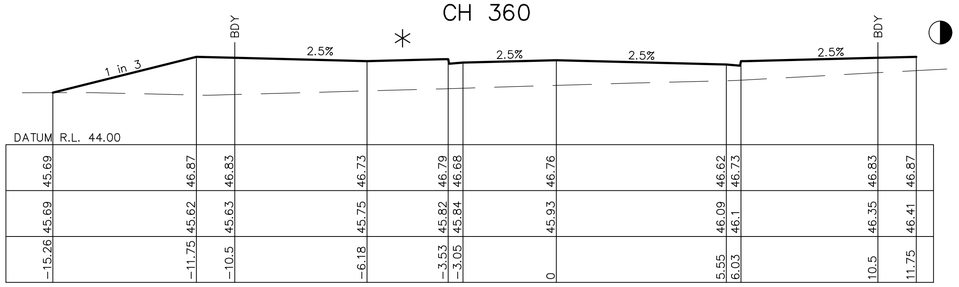
These plans are referred to in certificate no. **16897** approved by:
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Categories: Certifier – Subdivision
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Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
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◑ REFER SHEET 501 FOR SITE REGRADE DETAILS

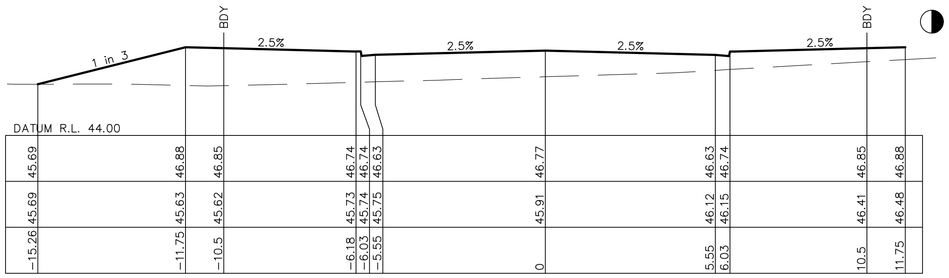
✳ MODIFY CROSS FALL OF PLANTED ZONES TO MAINTAIN 2.5% FOOTPATH



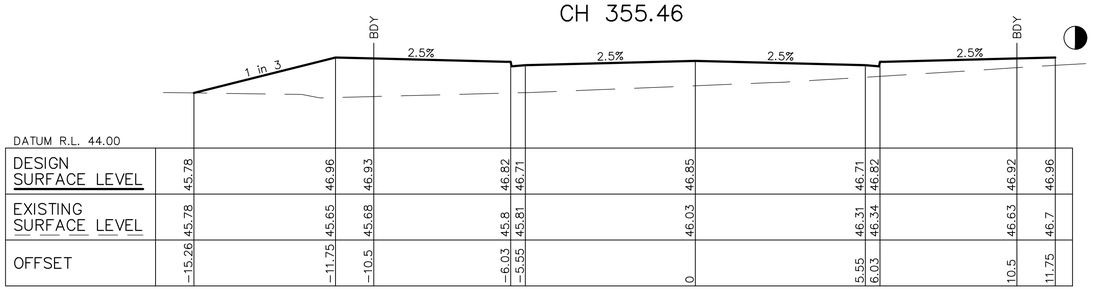
CH 360



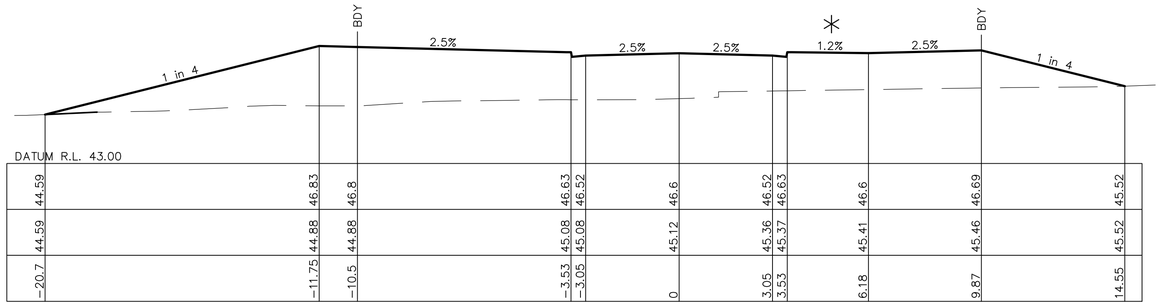
CH 357.06



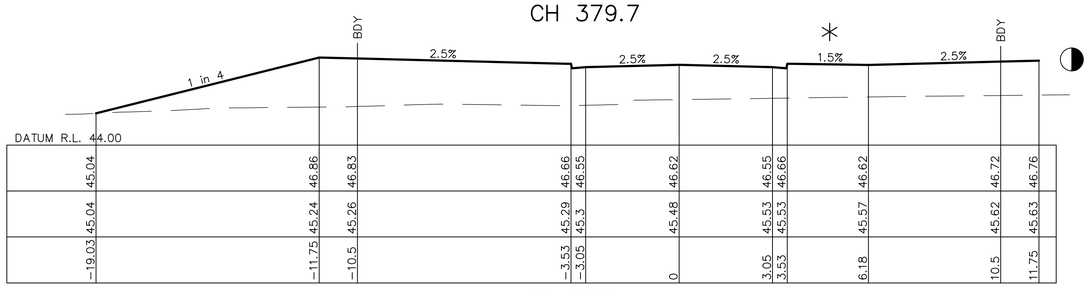
CH 355.46



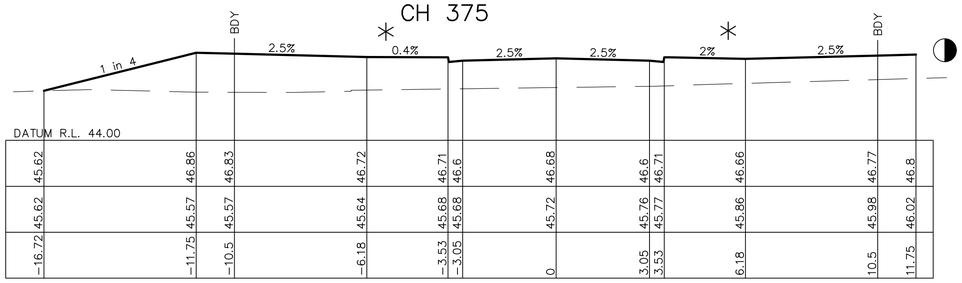
CH 345



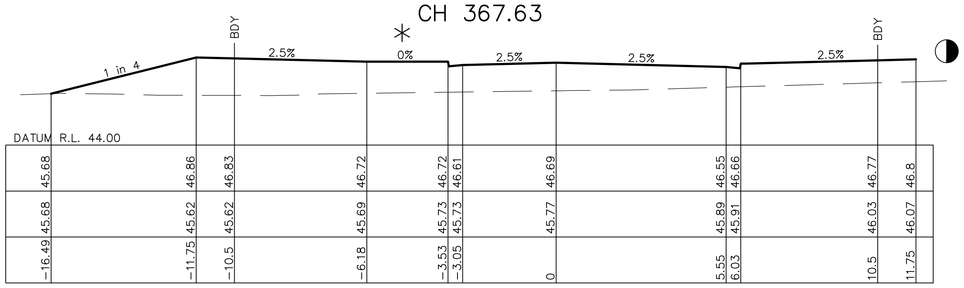
CH 379.7



CH 375



CH 367.63



CH 366.03

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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:100 — 0 2.5 5.0m — A3 1:200

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: ROAD CROSS SECTIONS
ROAD No.01
SHEET 6

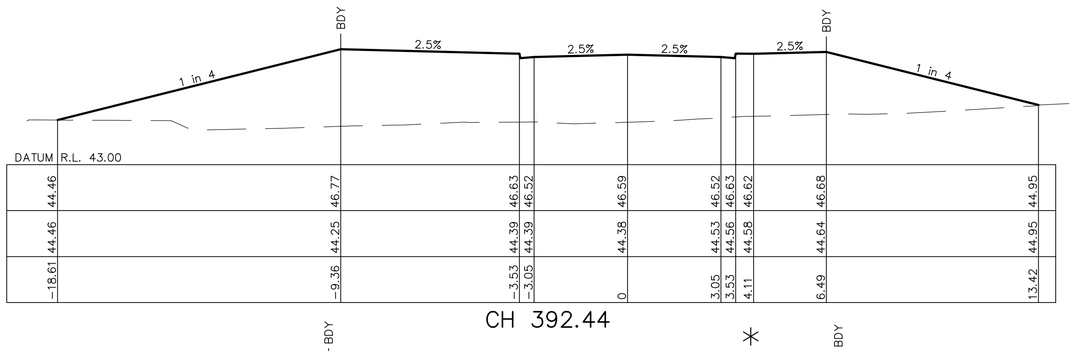
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) -	ENG -	236	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:07:51PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-236.DWG

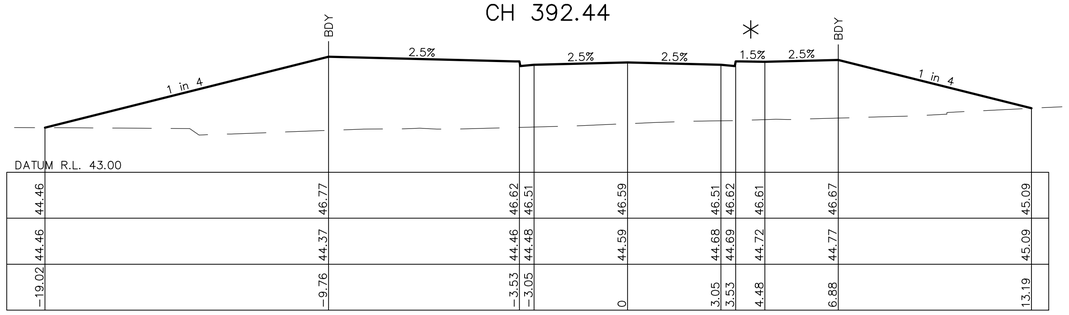
300001(2)-ENG-237

REFER SHEET 501 FOR SITE REGRADE DETAILS

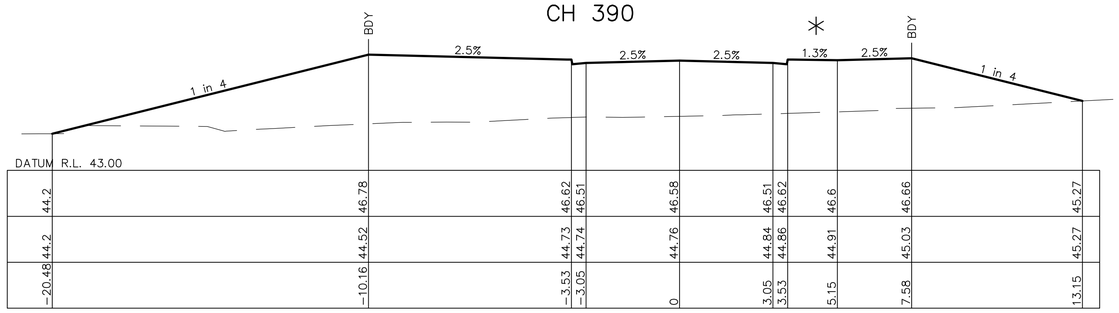
MODIFY CROSS FALL OF PLANTED ZONES TO MAINTAIN 2.5% FOOTPATH



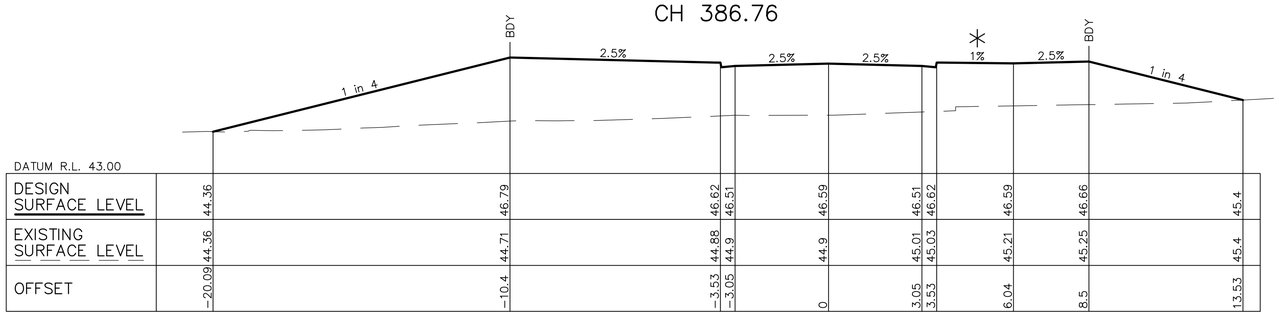
CH 392.44



CH 390

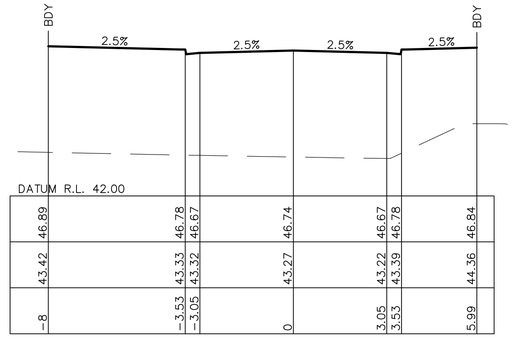


CH 386.76

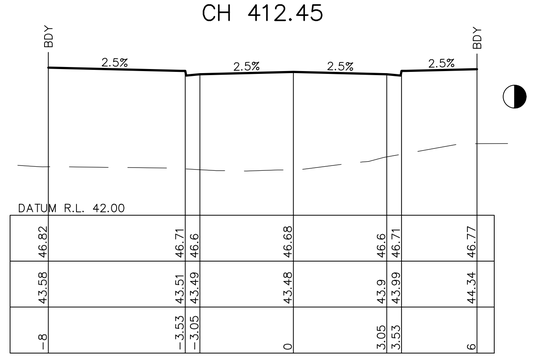


CH 383.5

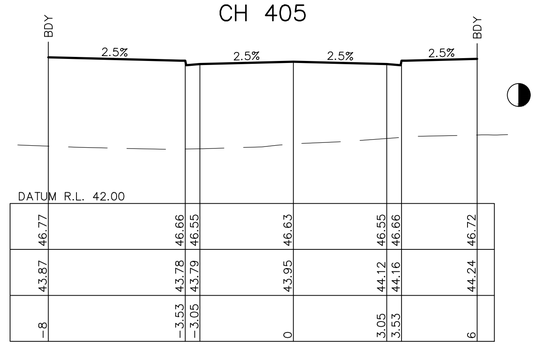
REFER SHEET 701 FOR BRIDGE DETAILS



CH 412.45



CH 405



CH 399.8

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
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CONSTRUCTION ISSUE

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2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:100 — 0 2.5 5.0m — A3 1:200

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P.O. Box 3717,
Tuggerah N.S.W. 2259
Phone: (02) 4305 4300
Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: ROAD CROSS SECTIONS ROAD No.01 SHEET 7

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) -	ENG	- 237	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:08:00PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-237.DWG

100mm AT FULL SIZE

This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

300001(2)-ENG-238

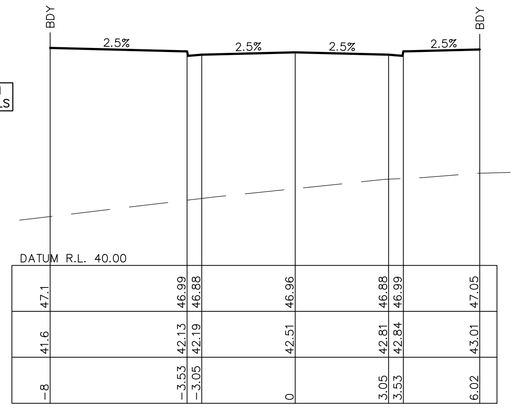
100mm AT FULL SIZE

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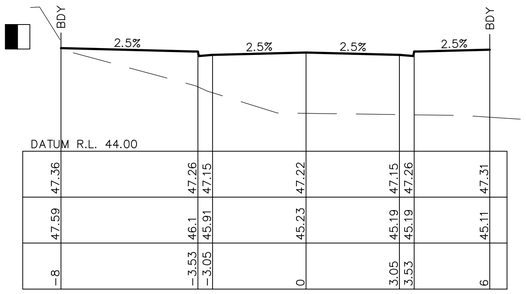
REFER SHEET 501 FOR SITE REGRADE DETAILS

EXISTING RETAINING WALL. EXCAVATION TO BE UNDERTAKEN UNDER GEOTECHNICAL SUPERVISION. CONTRACTOR TO PREPARE DILAPIDATION REPORT PRIOR TO COMMENCING WORKS

REFER SHEET 701 FOR BRIDGE DETAILS

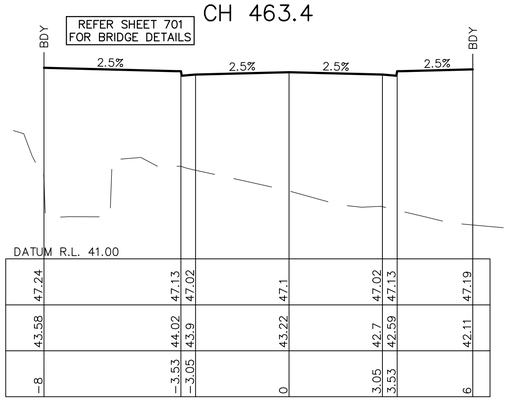


CH 435

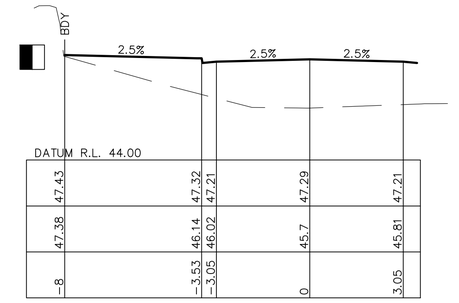


CH 463.4

REFER SHEET 701 FOR BRIDGE DETAILS

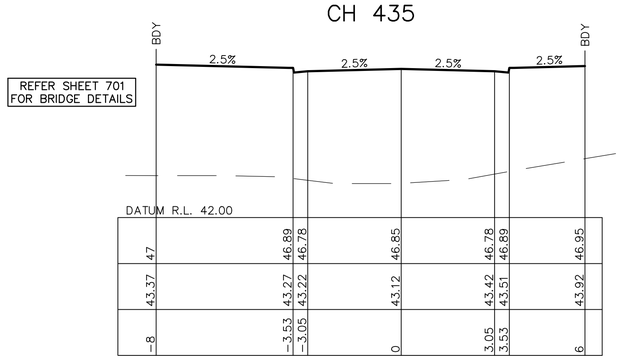


CH 450

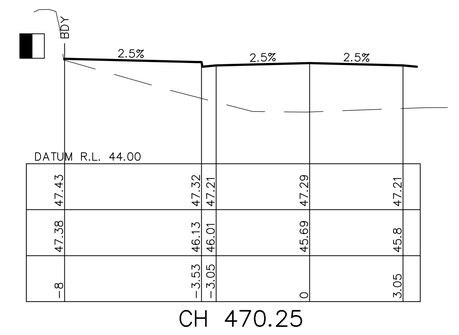


CH 470.4

REFER SHEET 701 FOR BRIDGE DETAILS

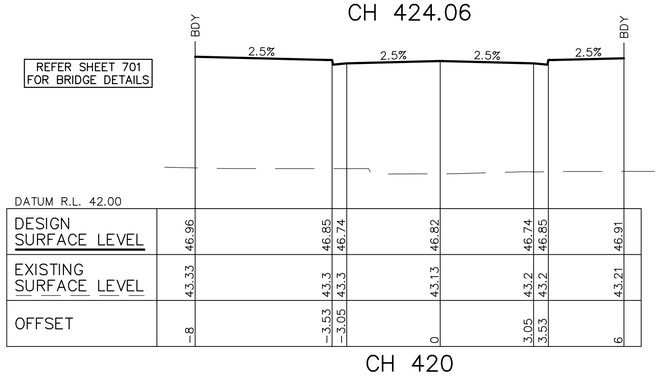


CH 424.06



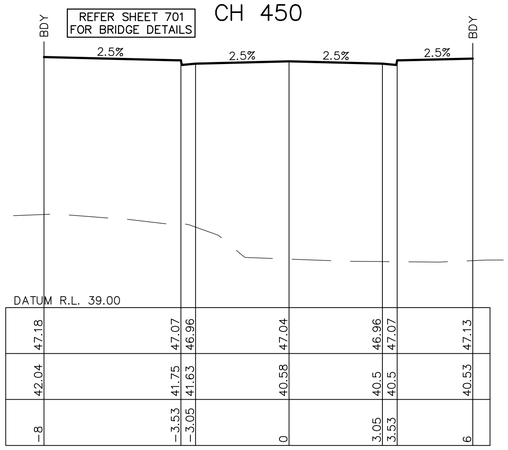
CH 470.25

REFER SHEET 701 FOR BRIDGE DETAILS

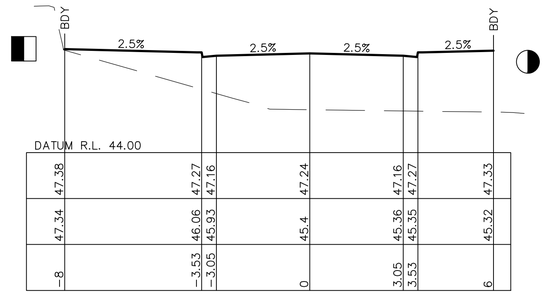


CH 420

REFER SHEET 701 FOR BRIDGE DETAILS



CH 443.71



CH 465

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

Land Development Certificates
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:100 — 0 2.5 5.0m — A3 1:200

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

ALL DIMENSIONS ARE IN METRES. DO NOT SCALE

adw johnson
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ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: ROAD CROSS SECTIONS
ROAD No.01
SHEET 8

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	238	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:08:09PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-238.DWG

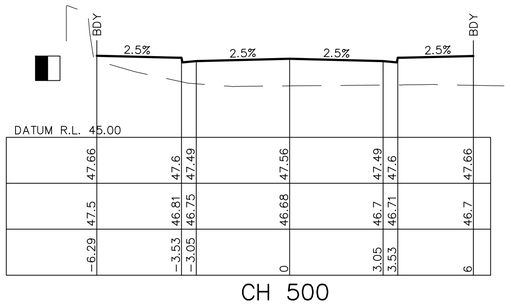
300001(2)-ENG-239

100mm AT FULL SIZE

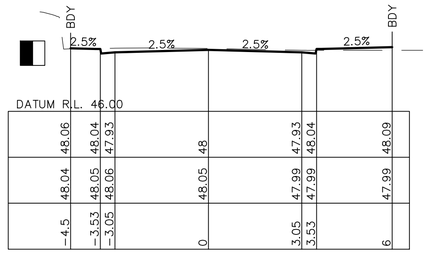
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REFER SHEET 501 FOR SITE REGRADE DETAILS

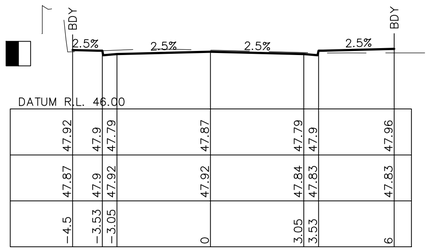
EXISTING RETAINING WALL. EXCAVATION TO BE UNDERTAKEN UNDER GEOTECHNICAL SUPERVISION. CONTRACTOR TO PREPARE DILAPIDATION REPORT PRIOR TO COMMENCING WORKS



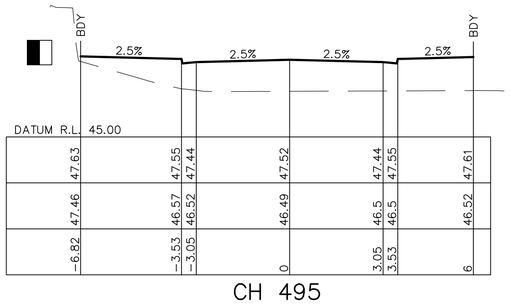
CH 500



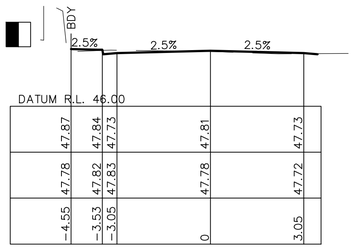
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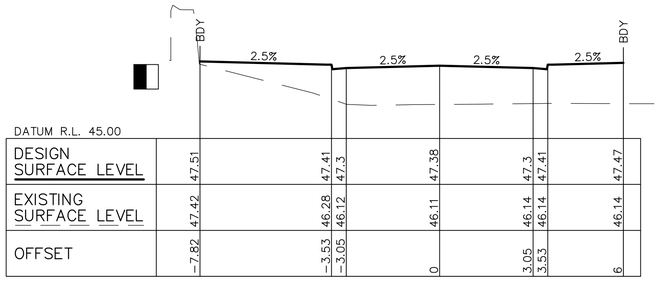
CH 529.6



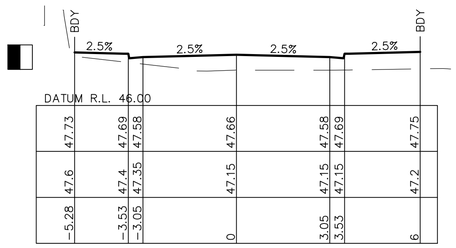
CH 495



CH 524.72



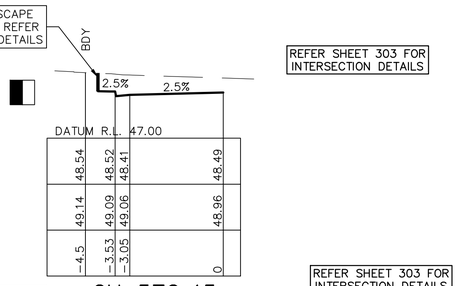
CH 480



CH 510

PROPOSED LANDSCAPE RETAINING WALL. REFER SHEET 551 FOR DETAILS

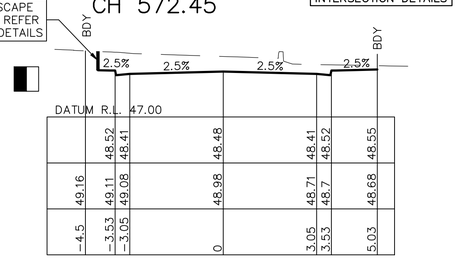
REFER SHEET 303 FOR INTERSECTION DETAILS



CH 572.45

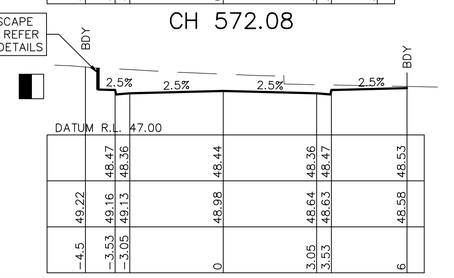
PROPOSED LANDSCAPE RETAINING WALL. REFER SHEET 551 FOR DETAILS

REFER SHEET 303 FOR INTERSECTION DETAILS



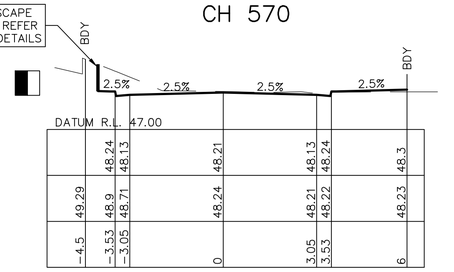
CH 572.08

PROPOSED LANDSCAPE RETAINING WALL. REFER SHEET 551 FOR DETAILS



CH 570

PROPOSED LANDSCAPE RETAINING WALL. REFER SHEET 551 FOR DETAILS



CH 555

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision, Certifier – Strata, Certifier – Stormwater, Certifier – Road & Drainage, Certifier – Hydraulic (stormwater)
Land Development Certificates
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:100, A3 1:200 (0, 2.5, 5.0m)

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: ROAD CROSS SECTIONS ROAD No.01 SHEET 9

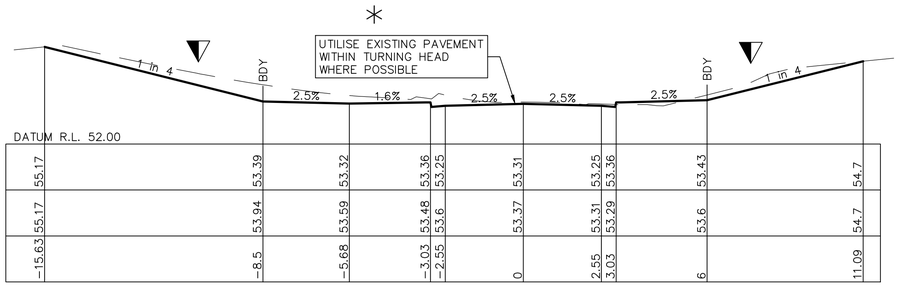
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG	– 239	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:08:19PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-239.DWG

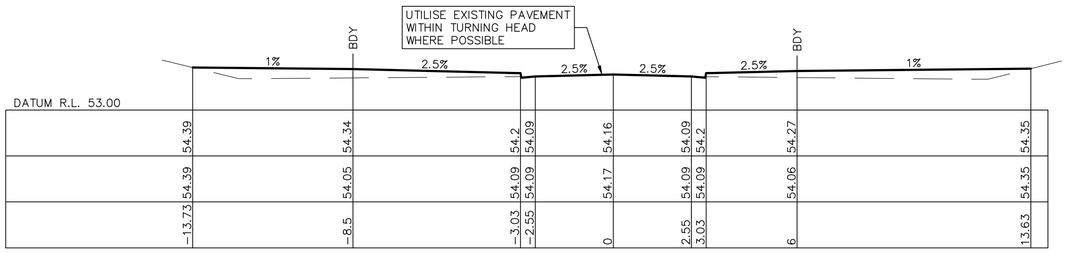
300001(2)-ENG-240

BERM TO BE PROVIDED AT BASE OF ALL BATTERS. REFER SHEET 202 FOR DETAILS.

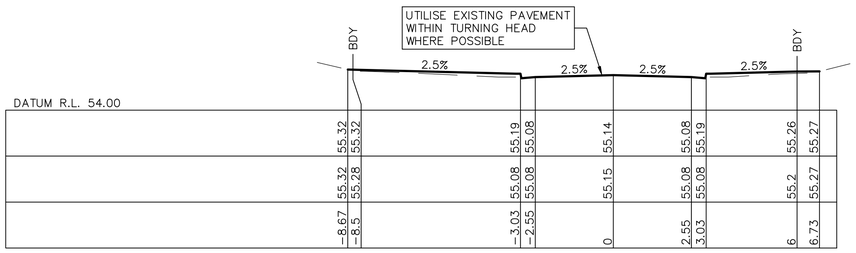
✳ MODIFY CROSS FALL OF PLANTED ZONES TO MAINTAIN 2.5% FOOTPATH



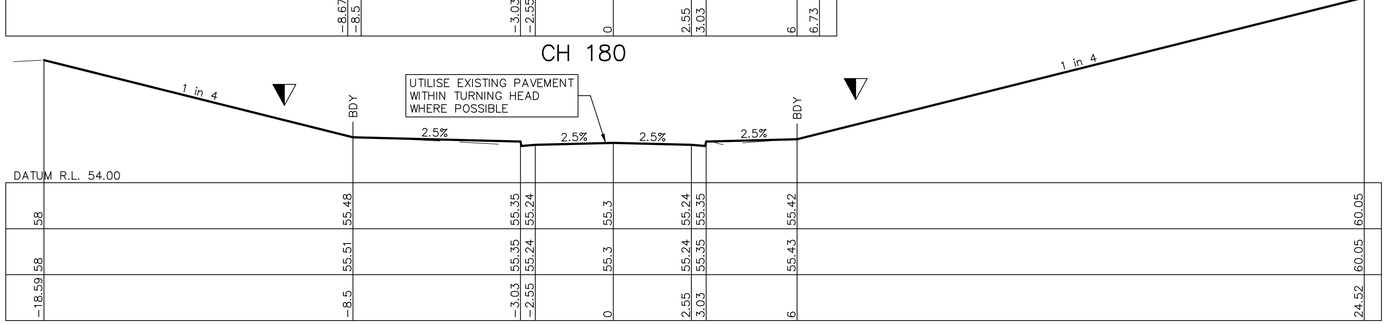
CH 210



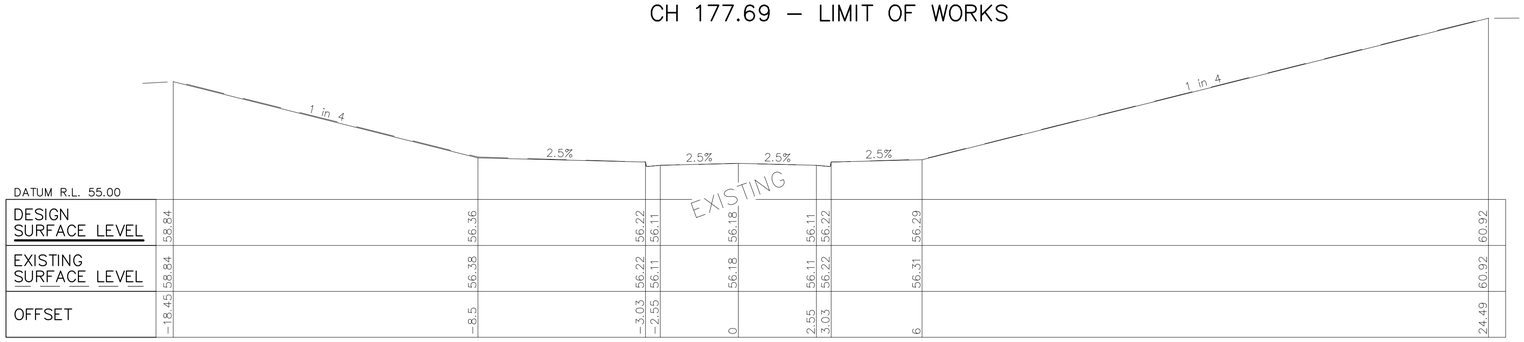
CH 195



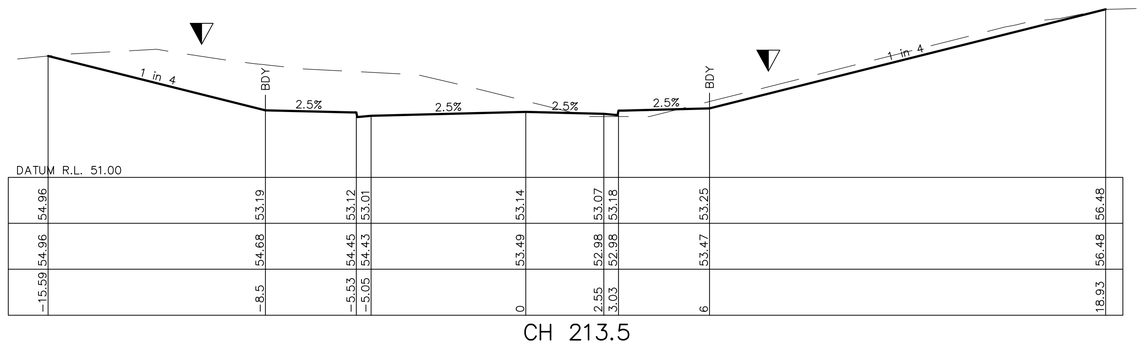
CH 180



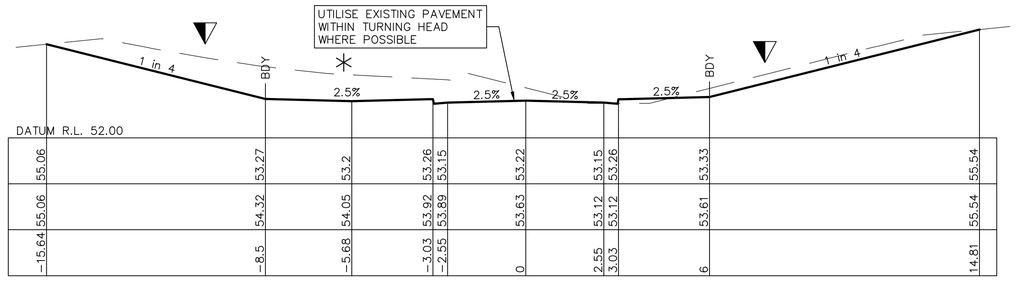
CH 177.69 – LIMIT OF WORKS



CH 165



CH 213.5



CH 211.9

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:100 — 0 2.5 5.0m — A3 1:200

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: ROAD CROSS SECTIONS
ROAD No.02
SHEET 1

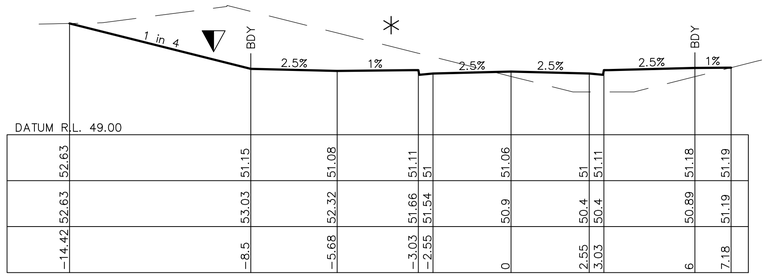
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	240	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:08:28PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-240.DWG

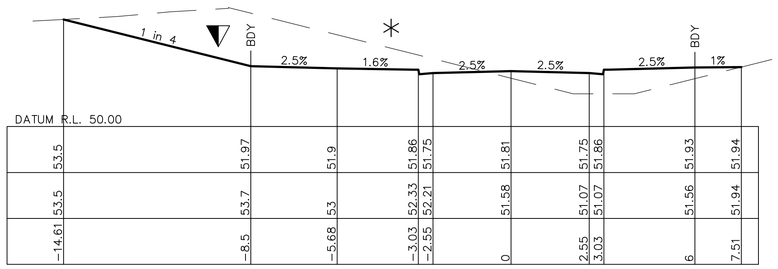
100mm AT FULL SIZE

This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

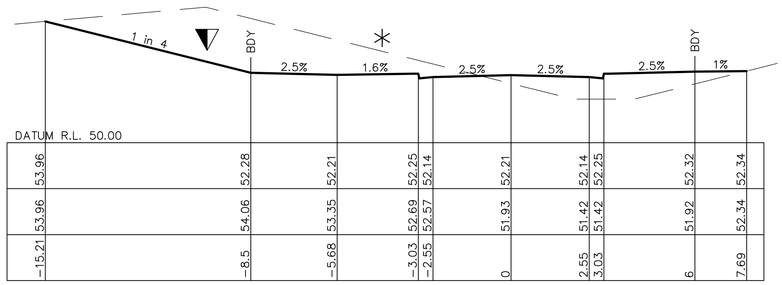
300001(2)-ENG-241



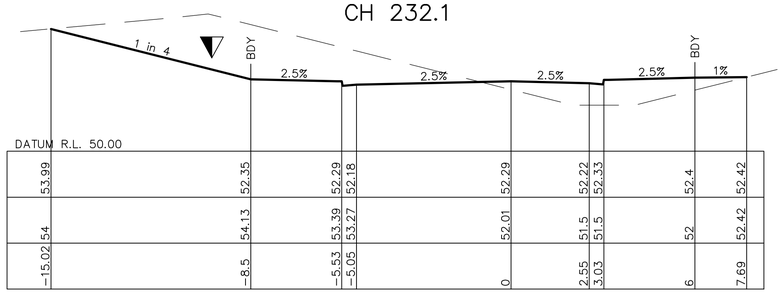
CH 255



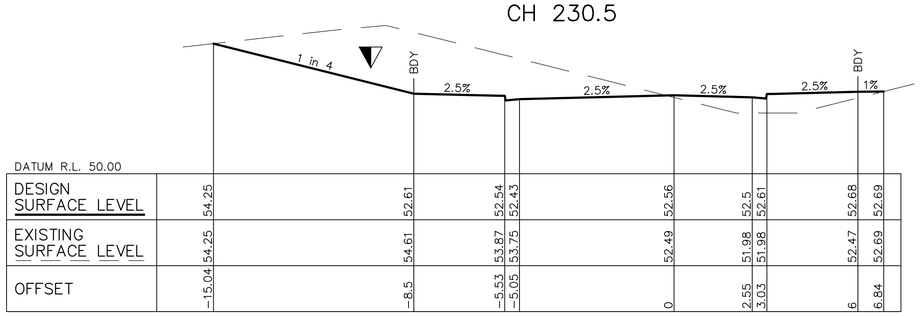
CH 240



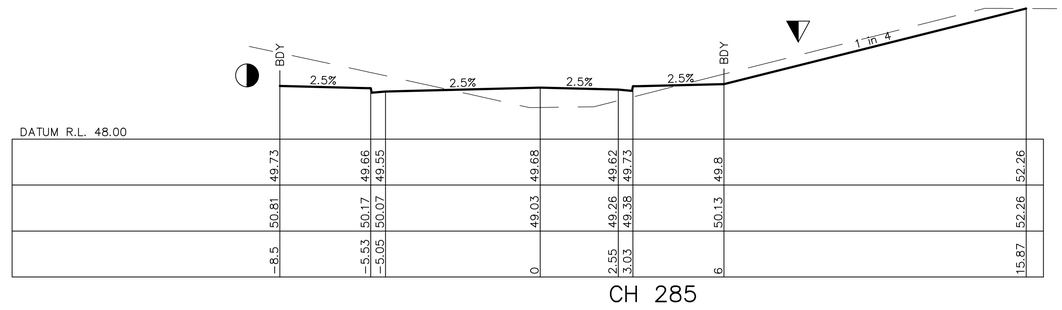
CH 232.1



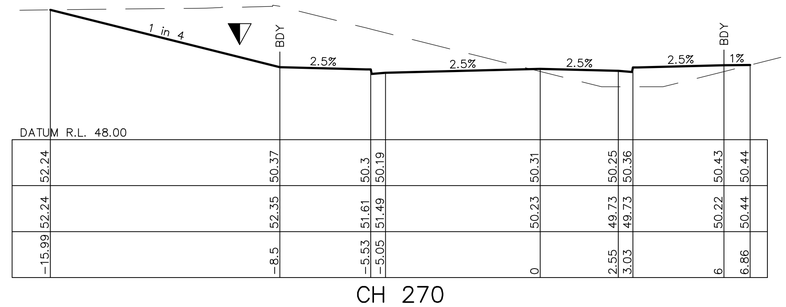
CH 230.5



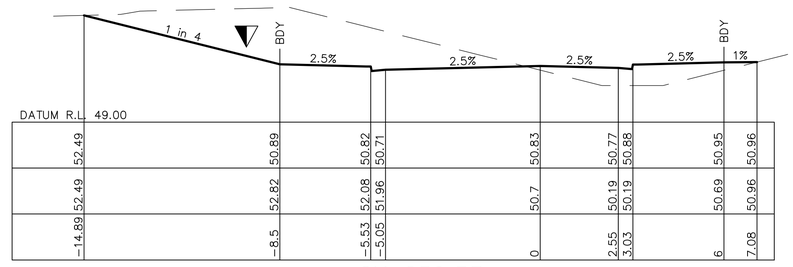
CH 225



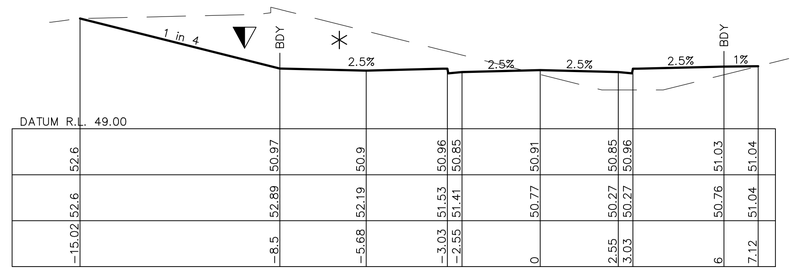
CH 285



CH 270



CH 259.53



CH 257.93

REFER SHEET 501 FOR SITE REGRADE DETAILS

BERM TO BE PROVIDED AT BASE OF ALL BATTERS. REFER SHEET 202 FOR DETAILS.

MODIFY CROSS FALL OF PLANTED ZONES TO MAINTAIN 2.5% FOOTPATH

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision
Certifier – Strata
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2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:100 — 0 2.5 5.0m — A3 1:200

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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adw johnson
Central Coast
5 Pioneer Avenue,
P.O. Box 3717,
Tuggerah N.S.W. 2259
Phone: (02) 4305 4300
Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: ROAD CROSS SECTIONS
ROAD No.02
SHEET 2

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	241	2

100mm AT FULL SIZE

This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:08:37PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-241.DWG

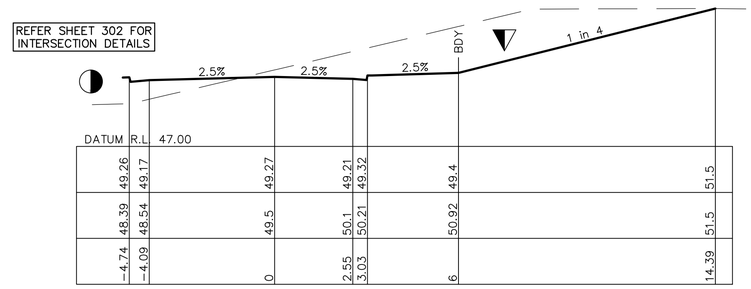
300001(2)-ENG-242

REFER SHEET 501 FOR SITE REGRADE DETAILS

BERM TO BE PROVIDED AT BASE OF ALL BATTERS. REFER SHEET 202 FOR DETAILS.

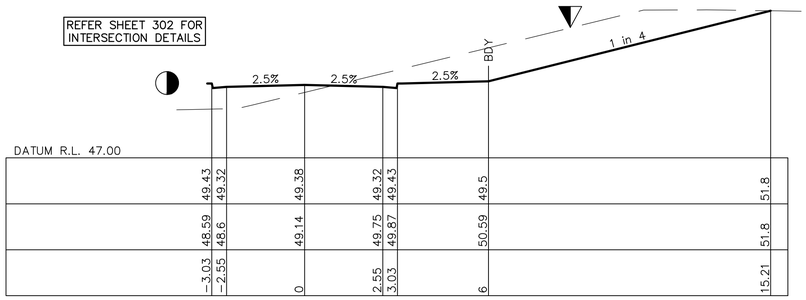
MODIFY CROSS FALL OF PLANTED ZONES TO MAINTAIN 2.5% FOOTPATH

REFER SHEET 302 FOR INTERSECTION DETAILS



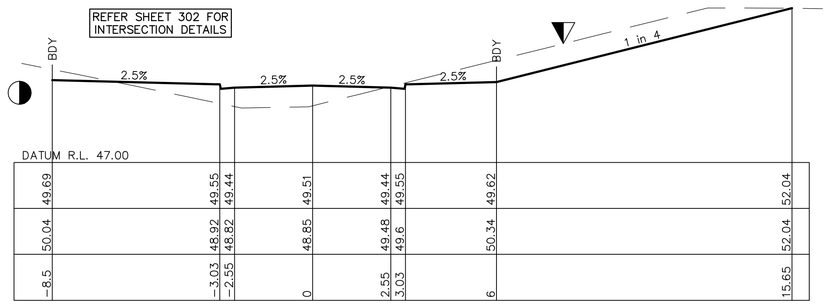
CH 298.54

REFER SHEET 302 FOR INTERSECTION DETAILS



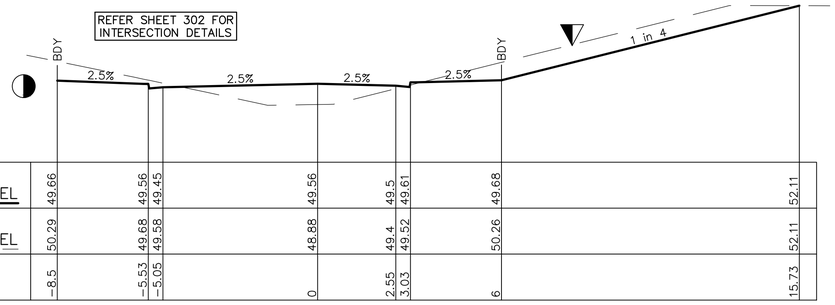
CH 294.35

REFER SHEET 302 FOR INTERSECTION DETAILS



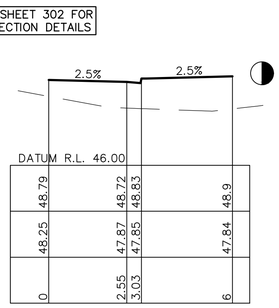
CH 290.13

REFER SHEET 302 FOR INTERSECTION DETAILS



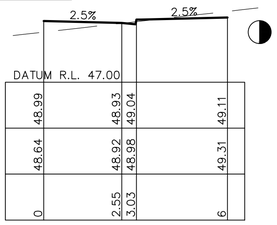
CH 288.53

REFER SHEET 302 FOR INTERSECTION DETAILS

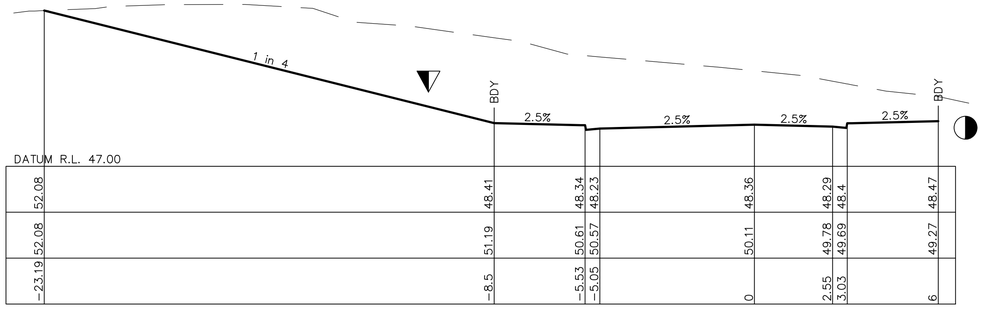


CH 315

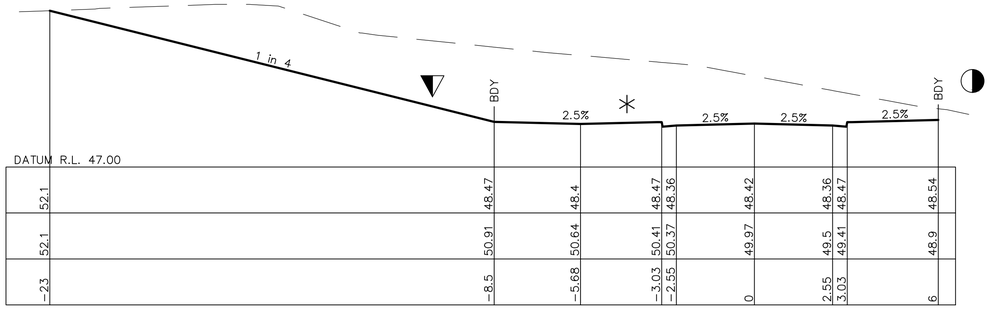
REFER SHEET 302 FOR INTERSECTION DETAILS



CH 308.55

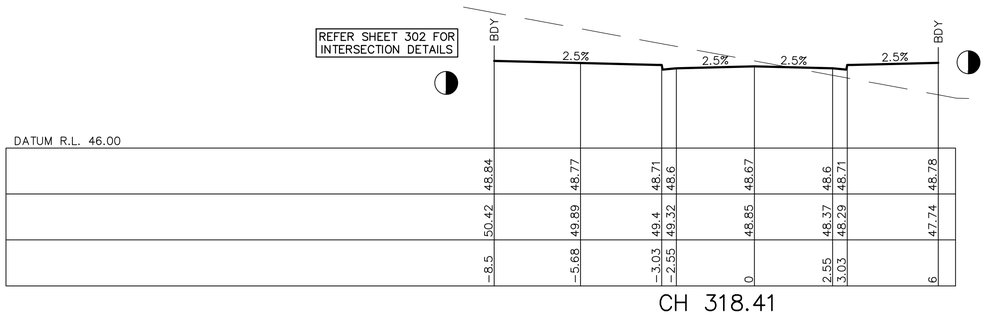


CH 326.44



CH 324.84

REFER SHEET 302 FOR INTERSECTION DETAILS



CH 318.41

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
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2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:100 — 0 2.5 5.0m — A3 1:200

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MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: ROAD CROSS SECTIONS
ROAD No.02
SHEET 3

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	242	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:08:46PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-242.DWG

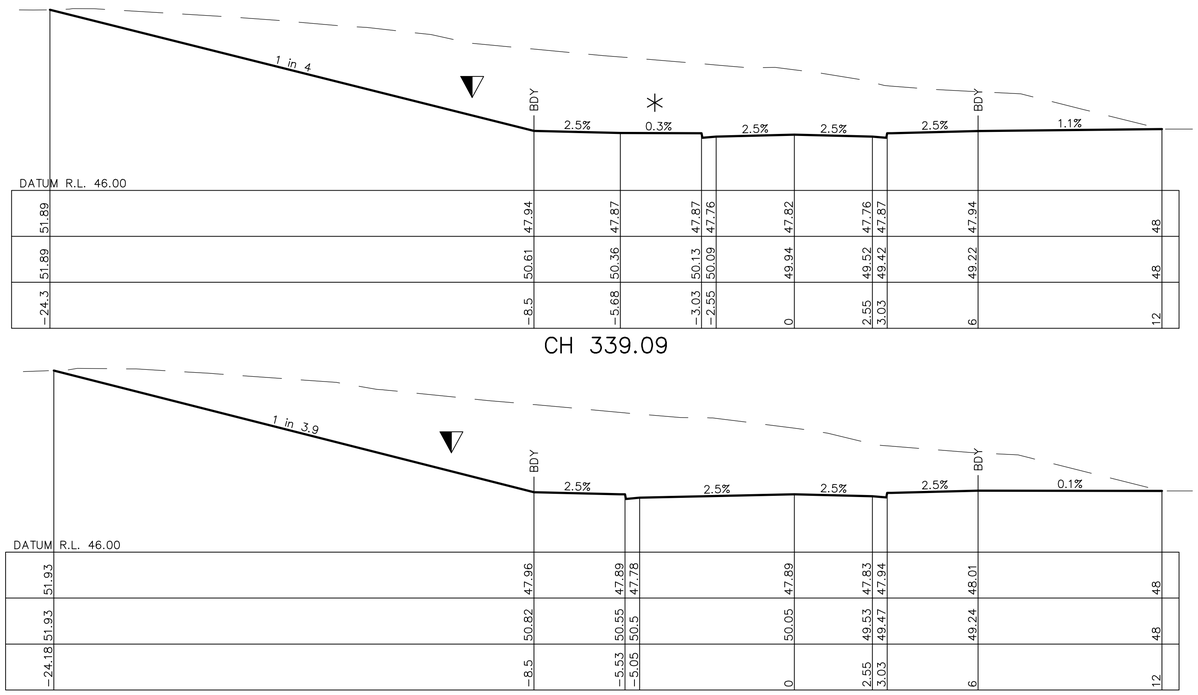
100mm AT FULL SIZE

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300001(2)-ENG-243

▼ BERM TO BE PROVIDED AT BASE OF ALL BATTERS. REFER SHEET 202 FOR DETAILS.

✳ MODIFY CROSS FALL OF PLANTED ZONES TO MAINTAIN 2.5% FOOTPATH



DATUM R.L. 46.00

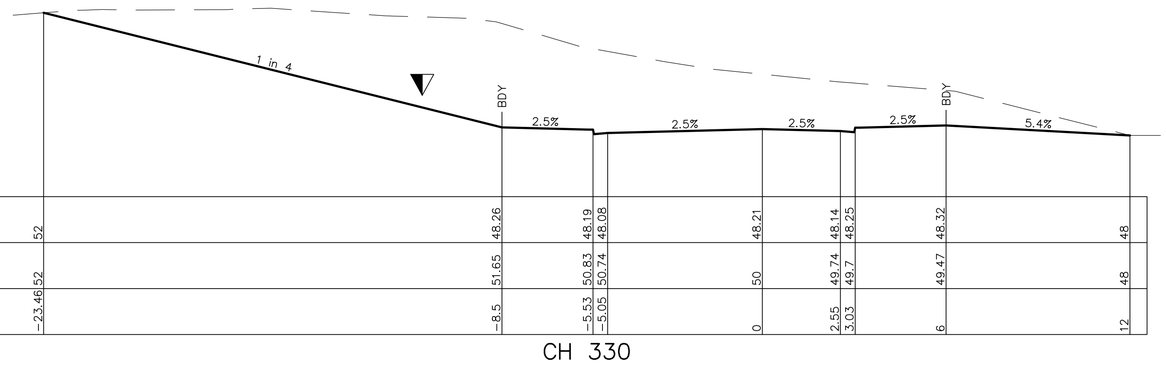
51.89	47.94	47.87	47.87	47.76	47.82	47.76	47.87	47.94	48				
51.89	50.61	50.36	50.13	50.09	49.94	49.52	49.42	49.22	48				
-24.3	51.89	-8.5	-5.68	-3.03	-2.55	0	2.55	3.03	6	12			

CH 339.09

DATUM R.L. 46.00

51.93	47.96	47.89	47.89	47.83	47.94	48.01	48						
51.93	50.82	50.55	50.5	50.05	49.53	49.47	49.24	48					
-24.18	-8.5	-5.53	-5.05	0	2.55	3.03	6	12					

CH 337.44



DATUM R.L. 46.00

DESIGN SURFACE LEVEL	52	48.26	48.19	48.08	48.21	48.14	48.25	48.32	48				
EXISTING SURFACE LEVEL	52	51.65	50.83	50.74	50	49.74	49.7	49.47	48				
OFFSET	-23.46	-8.5	-5.53	-5.05	0	2.55	3.03	6	12				

CH 330

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)

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2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:100 — 0 2.5 5.0m — A3 1:200

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CLIENT: FRASERS PROPERTY

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MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: ROAD CROSS SECTIONS
ROAD No.02
SHEET 4

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	243	2

100mm AT FULL SIZE
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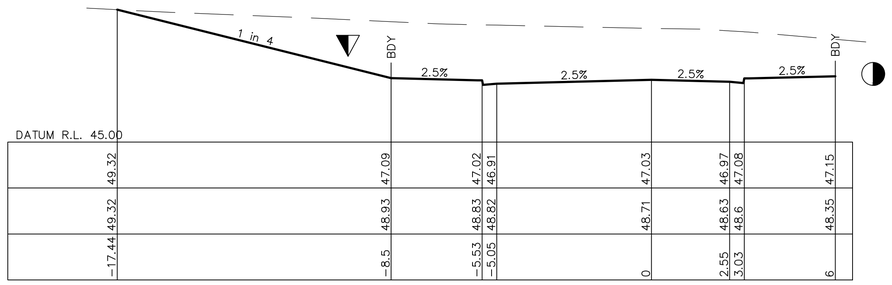
Plotted By: Mark Hoyland Plot Date: 16/05/22 2:08:55PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-243.DWG

300001(2)-ENG-244

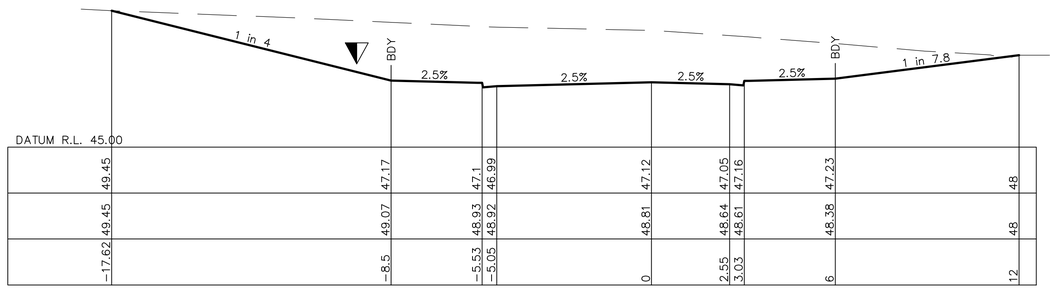
REFER SHEET 501 FOR SITE REGRADE DETAILS

BERM TO BE PROVIDED AT BASE OF ALL BATTERS. REFER SHEET 202 FOR DETAILS.

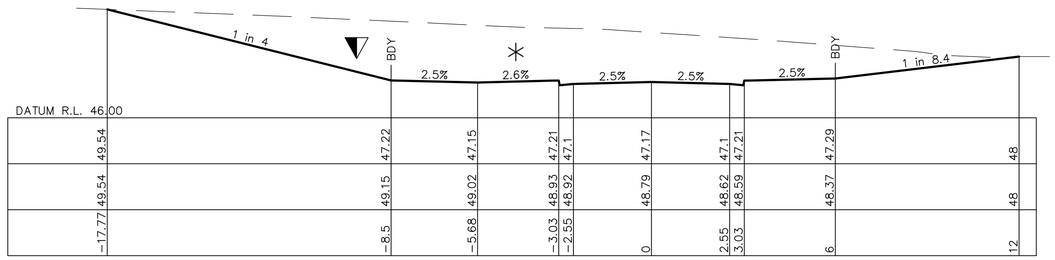
MODIFY CROSS FALL OF PLANTED ZONES TO MAINTAIN 2.5% FOOTPATH



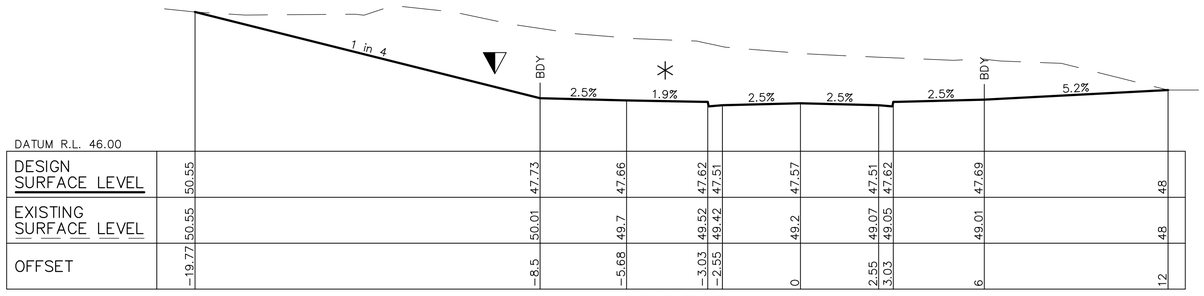
CH 360



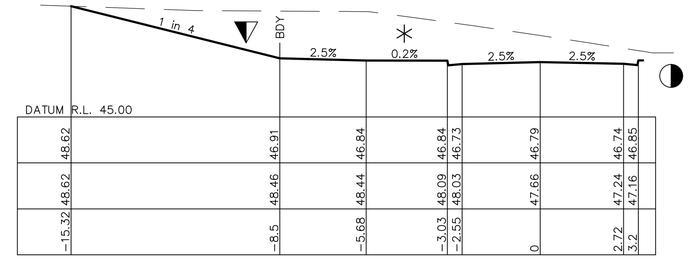
CH 357.14



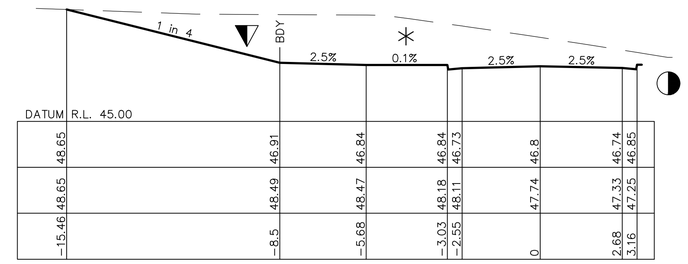
CH 355.54



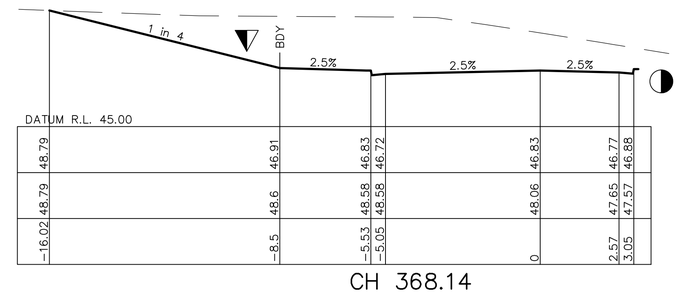
CH 345



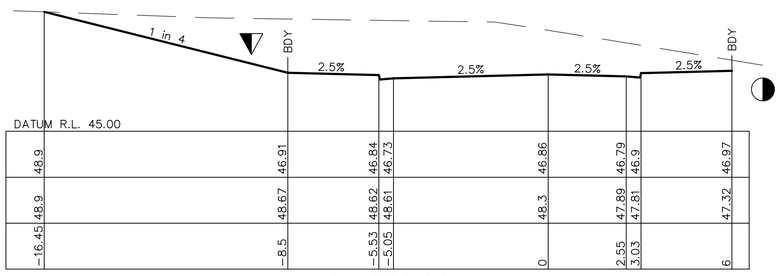
CH 370.15



CH 369.74

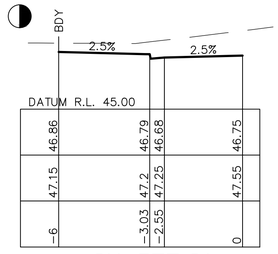


CH 368.14



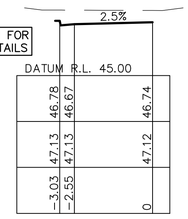
CH 366.92

REFER SHEET 301 FOR INTERSECTION DETAILS



CH 377.21

REFER SHEET 301 FOR INTERSECTION DETAILS



CH 375

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
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Categories: Certifier – Subdivision
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Certifier – Stormwater
Certifier – Road & Drainage
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SCALES: A1 1:100 — 0 2.5 5.0m — A3 1:200

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CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

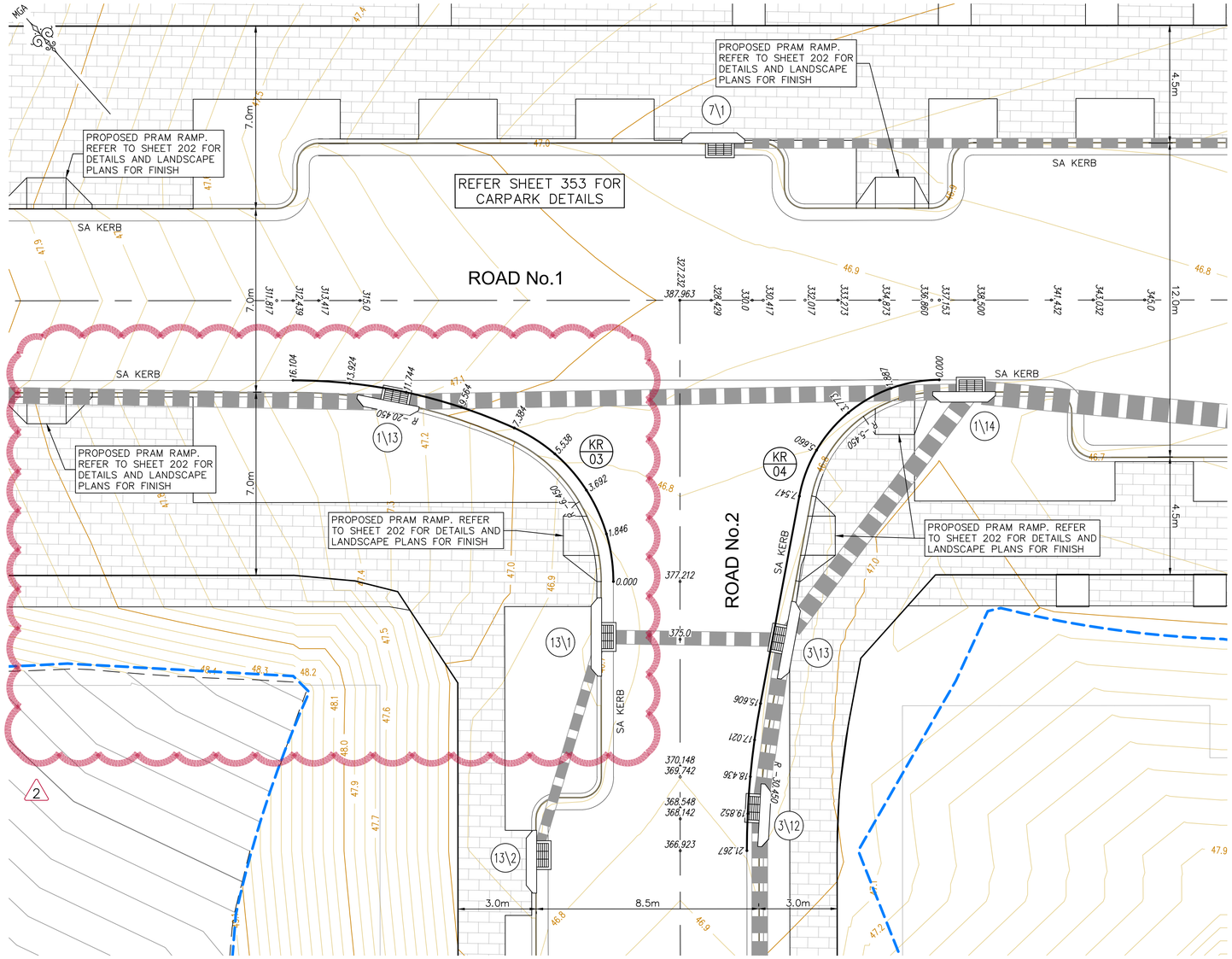
PLAN TITLE: ROAD CROSS SECTIONS ROAD No.02 SHEET 5

PROJECT No. 300001(2) – DISCIPLINE ENG – NUMBER 244 REV. 2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:09:04PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-244.DWG

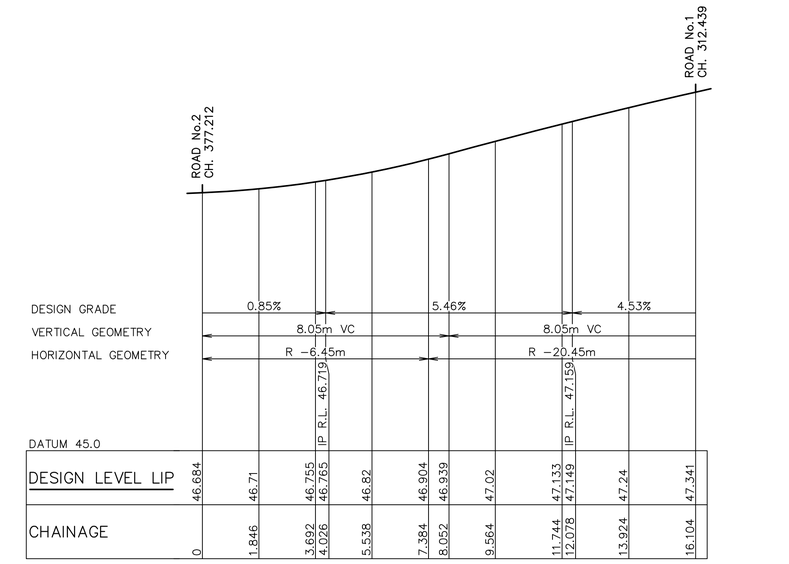
100mm AT FULL SIZE
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300001(2)-ENG-301



INTERSECTION PLAN

SCALE 1:100

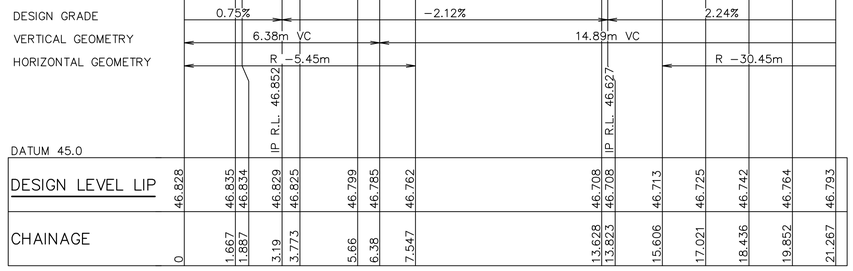


LONGITUDINAL SECTION KR03

HORIZONTAL SCALE 1:100
VERTICAL SCALE 1:20

KR03 – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	325688.263	6260379.127	41°10'57.30"			
IP 2	3.692	325691.000	6260382.255		R = −6.450	7.384	65°35'42.44"
CC	7.384	325689.282	6260386.040	335°35'14.85"			
IP 3	11.744	325687.452	6260390.071		R = −20.450	8.720	24°25'47.55"
IP 4	16.104	325684.119	6260392.985	311°09'27.31"			



LONGITUDINAL SECTION KR04

HORIZONTAL SCALE 1:100
VERTICAL SCALE 1:20

KR04 – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	325702.719	6260376.712	311°10'55.80"			
IP 2	3.774	325699.317	6260379.688		R = −5.450	7.547	79°20'48.12"
CT	7.547	325695.763	6260376.895	231°50'07.69"			
TC	15.606	325689.427	6260371.915	231°50'07.69"			
IP 3	18.437	325687.195	6260370.161		R = −30.450	5.660	10°39'01.94"
IP 4	21.267	325685.326	6260368.025	221°11'05.75"			

LEGEND

- LIMIT OF WORKS BOUNDARY
- PROPOSED LOT BOUNDARY
- EXISTING LOT BOUNDARY
- MAJOR CONTOURS
- MINOR CONTOURS
- PROPOSED KERB
- EXISTING KERB
- EXTENTS OF BATTER
- PROPOSED FOOTPATH
- PROPOSED STORMWATER
- ex sw EXISTING STORMWATER
- PROPOSED SW PIT
- PROPOSED LINTEL
- PROPOSED HEADWALL
- 1\1 PIT LABEL

CONTOUR INTERVAL = 0.1m

GENERAL NOTES:–

1. FOR TYPICAL ROAD CROSS SECTIONS, KERB PROFILES REFER SHEET 201 AND PAVEMENT DETAILS REFER TO SHEET 151.
2. SETOUT INFORMATION IS TO BE VERIFIED BY THE CONTRACTOR AGAINST THE PLAN VIEW, LONGITUDINAL SECTIONS AND ELECTRONIC 12D DATA BEFORE BEING USED. IF THERE IS A DISCREPANCY THE SUPERINTENDENT IS TO BE NOTIFIED AND DIRECTION TO BE PROVIDED IN WRITING BEFORE PROCEEDING.
3. REFER TO SHEET 901 FOR COMBINED SERVICES PLAN.
4. REFER DRAWINGS PREPARED BY R.A.R.I. FOR SEWER AND WATER DETAILS.

CAUTION:

1. IT IS THE RESPONSIBILITY OF THE CIVIL WORKS CONTRACTOR TO DETERMINE THE LOCATION & LEVEL OF EXISTING SERVICES USING NON DESTRUCTIVE METHODS PRIOR TO COMMENCING WORKS ON SITE.

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SCALES
A1 1:100 0 2.5 5.0m A3 1:200
A1 1:20 0 0.5 1.0m A3 1:40

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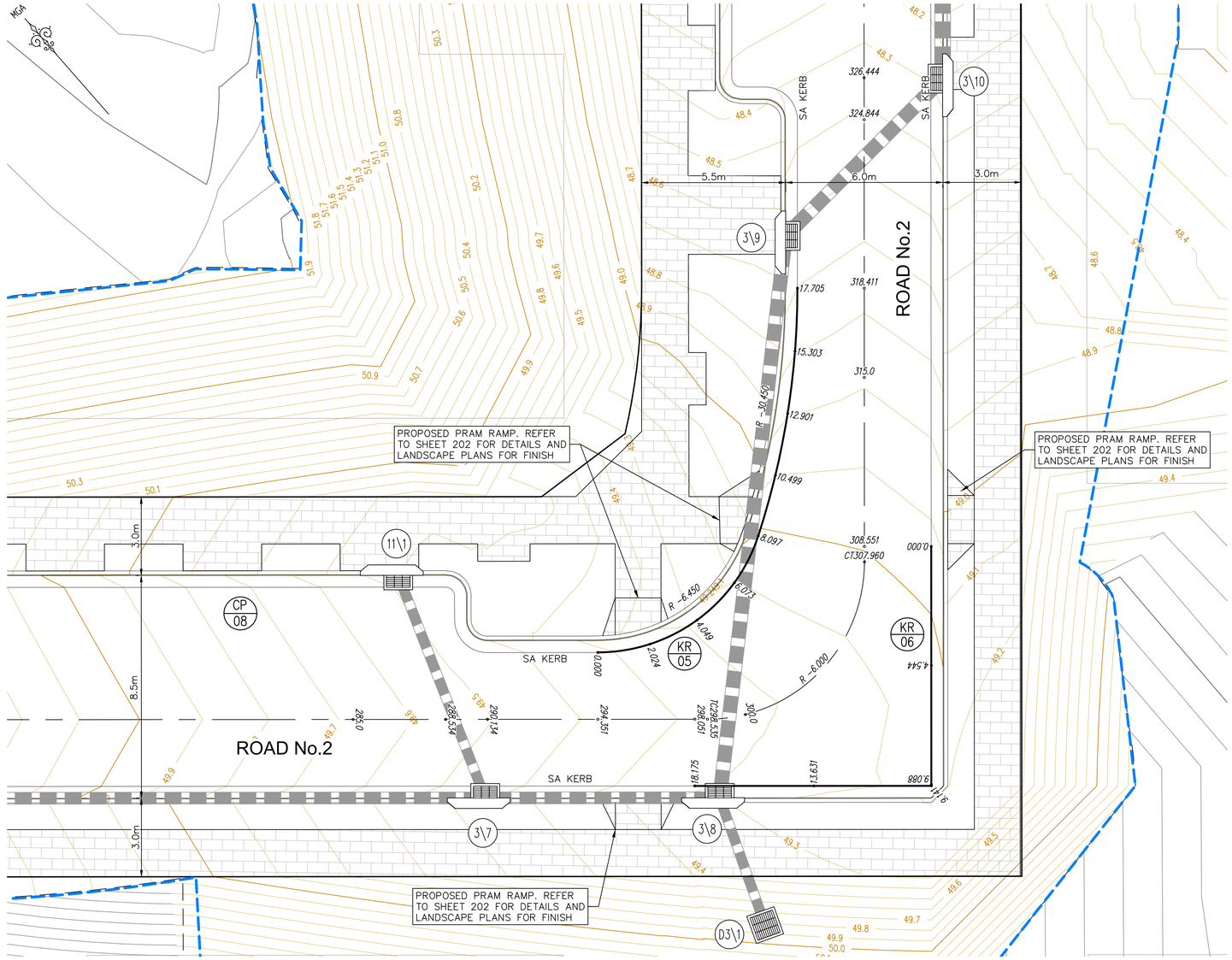
PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: INTERSECTION DETAILS KERB RETURNS KR03 & KR04

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG	– 301	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:09:18PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-301.DWG

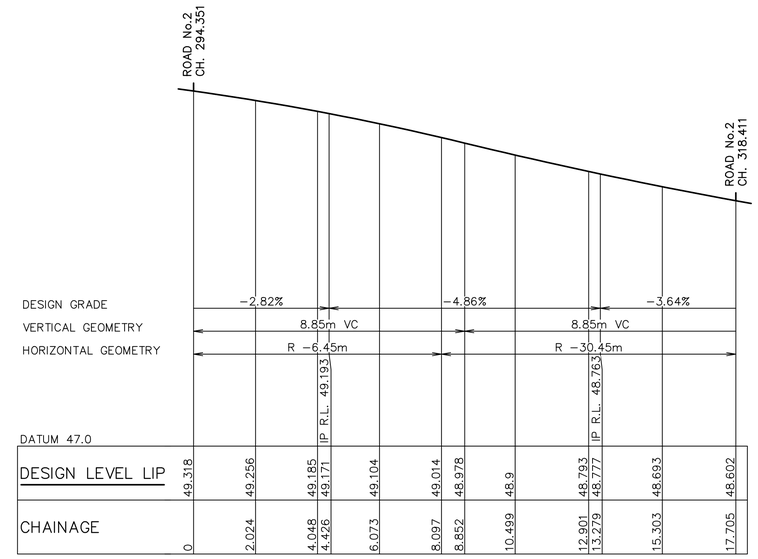
100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

300001(2)-ENG-302



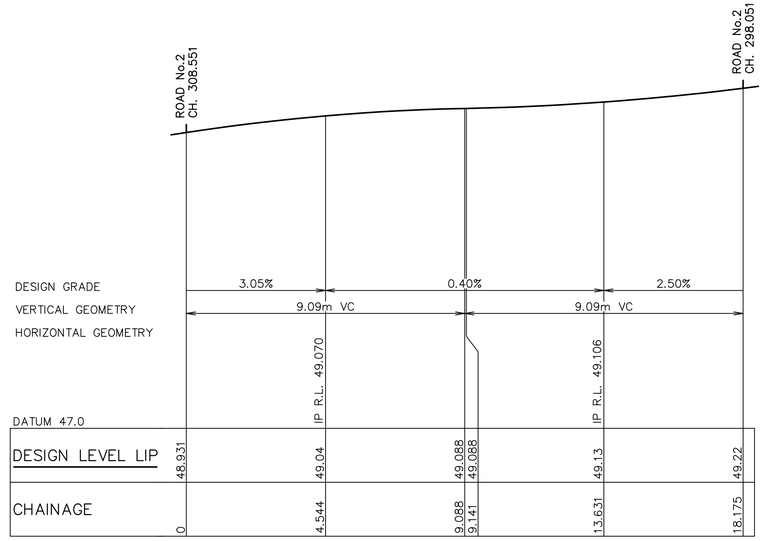
INTERSECTION PLAN

SCALE 1:100



LONGITUDINAL SECTION KR05

HORIZONTAL SCALE 1:100
VERTICAL SCALE 1:20



LONGITUDINAL SECTION KR06

HORIZONTAL SCALE 1:100
VERTICAL SCALE 1:20

KR05 – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	325634.648	6260329.440	131°10'58.81"			
IP 2	4.048	325638.170	6260326.358		R = -6.450	8.097	71°55'31.14"
CC	8.097	325642.192	6260328.751	59°15'27.66"			
IP 3	12.901	325646.355	6260331.227		R = -30.450	9.608	18°04'44.13"
IP 4	17.705	325649.545	6260334.873	41°10'43.54"			

KR06 – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	BEARING
IP 1	0.000	325646.890	6260324.094	221°10'59.00"
IP 2	9.141	325640.872	6260317.214	
IP 3	18.175	325634.072	6260323.163	311°10'57.73"

LEGEND

- LIMIT OF WORKS BOUNDARY
- PROPOSED LOT BOUNDARY
- EXISTING LOT BOUNDARY
- MAJOR CONTOURS
- MINOR CONTOURS
- PROPOSED KERB
- EXISTING KERB
- EXTENTS OF BATTER
- PROPOSED FOOTPATH
- PROPOSED STORMWATER
- EXISTING STORMWATER (ex. SW)
- PROPOSED SW PIT
- PROPOSED LINTEL
- PROPOSED HEADWALL
- PIT LABEL (1\1)

CONTOUR INTERVAL = 0.1m

GENERAL NOTES: –

1. FOR TYPICAL ROAD CROSS SECTIONS, KERB PROFILES REFER SHEET 201 AND PAVEMENT DETAILS REFER TO SHEET 151.
2. SETOUT INFORMATION IS TO BE VERIFIED BY THE CONTRACTOR AGAINST THE PLAN VIEW, LONGITUDINAL SECTIONS AND ELECTRONIC 12D DATA BEFORE BEING USED. IF THERE IS A DISCREPANCY THE SUPERINTENDENT IS TO BE NOTIFIED AND DIRECTION TO BE PROVIDED IN WRITING BEFORE PROCEEDING.
3. REFER TO SHEET 901 FOR COMBINED SERVICES PLAN.
4. REFER DRAWINGS PREPARED BY R.A.R.I. FOR SEWER AND WATER DETAILS.

CAUTION:

1. IT IS THE RESPONSIBILITY OF THE CIVIL WORKS CONTRACTOR TO DETERMINE THE LOCATION & LEVEL OF EXISTING SERVICES USING NON DESTRUCTIVE METHODS PRIOR TO COMMENCING WORKS ON SITE.

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:100 / A3 1:200 (0, 2.5, 5.0m); A1 1:20 / A3 1:40 (0, 0.5, 1.0m)

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

ALL DIMENSIONS ARE IN METRES. DO NOT SCALE

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Central Coast
5 Pioneer Avenue,
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email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: INTERSECTION DETAILS KERB RETURNS KR05 & KR06

PROJECT No. 300001(2) – DISCIPLINE ENG – NUMBER 302 – REV. 2

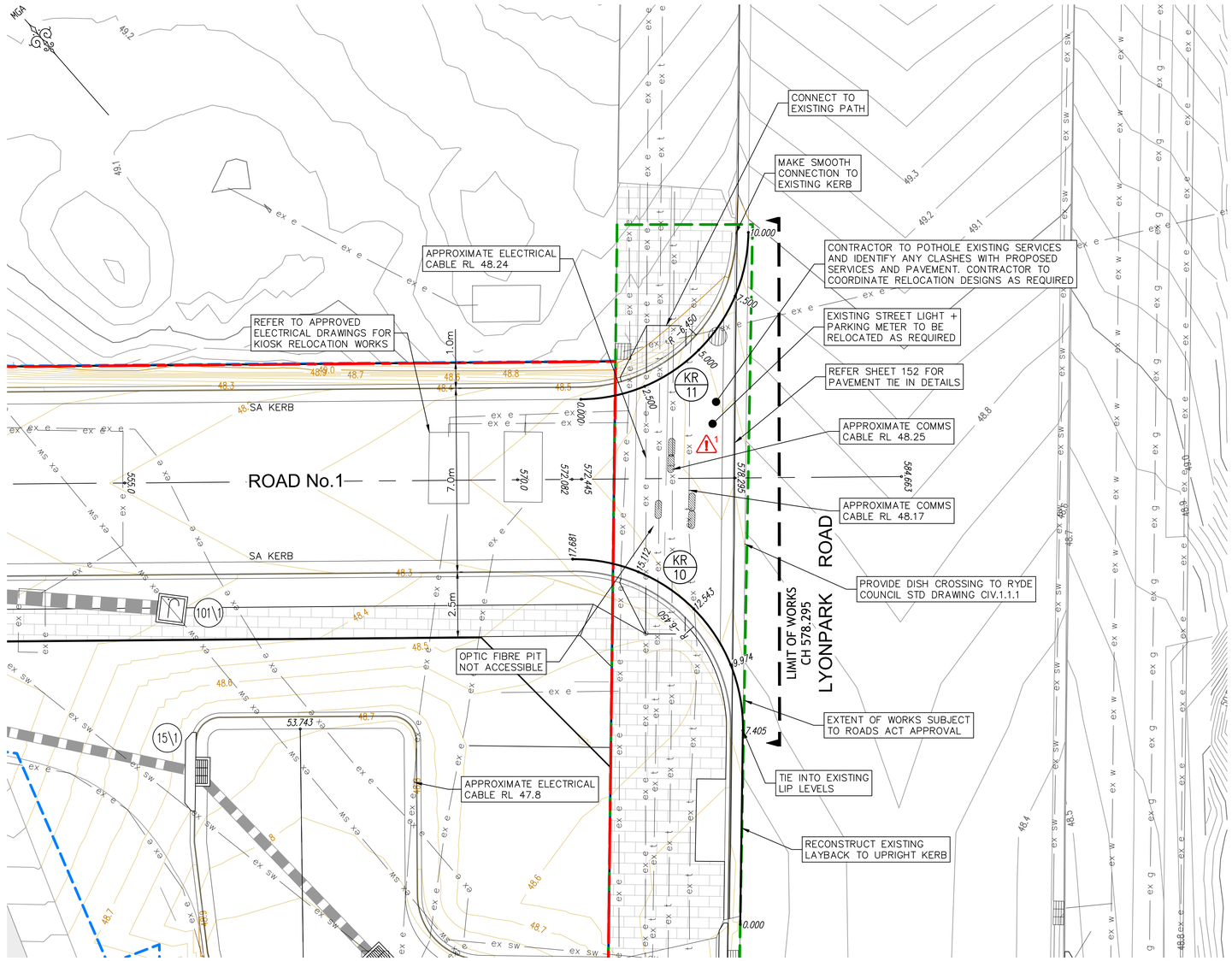
100mm AT FULL SIZE

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Plotted By: Mark Hoyland Plot Date: 16/05/22 2:09:33PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-302.DWG

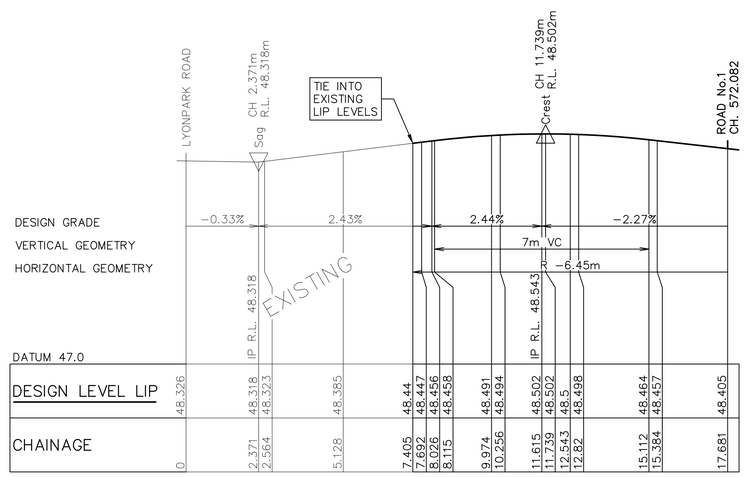
300001(2)-ENG-303

THIS DRAWING IS PROVIDED FOR INFORMATION ONLY. REFER TO S138 DRAWING SET REFERENCE 300001(S138) FOR FINAL DETAILS



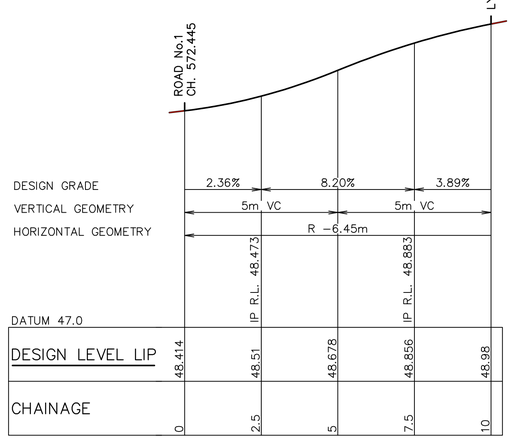
INTERSECTION PLAN

SCALE 1:100



LONGITUDINAL SECTION KR10

HORIZONTAL SCALE 1:100
VERTICAL SCALE 1:20



LONGITUDINAL SECTION KR11

HORIZONTAL SCALE 1:100
VERTICAL SCALE 1:20

KR10 – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	325886.055	6260223.181	42°01'48.63"			
TC	7.405	325891.013	6260228.681	42°01'48.63"			
IP 2	12.543	325895.429	6260233.580		R = −6.450	10.276	91°16'52.57"
IP 3	17.681	325890.432	6260237.886	310°44'56.06"			

KR11 – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	325894.689	6260242.270	130°44'56.06"			
IP 2	5.000	325899.477	6260238.145		R = −6.450	10.000	88°49'47.99"
IP 3	10.000	325903.699	6260242.847	41°55'08.07"			

LEGEND

- WORKS SUBJECT TO ROADS ACT APPROVAL
- LIMIT OF WORKS BOUNDARY
- PROPOSED LOT BOUNDARY
- EXISTING LOT BOUNDARY
- MAJOR CONTOURS
- MINOR CONTOURS
- PROPOSED KERB
- EXISTING KERB
- EXTENTS OF BATTER
- PROPOSED FOOTPATH
- PROPOSED STORMWATER
- ex sw EXISTING STORMWATER
- ex w EXISTING WATER
- ex t EXISTING TELSTRA
- ex e EXISTING ELECTRICITY
- ex g EXISTING GAS
- PROPOSED SW PIT
- PROPOSED LINTEL
- PROPOSED HEADWALL
- 1\1 PIT LABEL

CONTOUR INTERVAL = 0.1m

GENERAL NOTES: –

1. FOR TYPICAL ROAD CROSS SECTIONS, KERB PROFILES REFER SHEET 201 AND PAVEMENT DETAILS REFER TO SHEET 151.
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3. REFER TO SHEET 901 FOR COMBINED SERVICES PLAN.
4. REFER DRAWINGS PREPARED BY R.A.R.I. FOR SEWER AND WATER DETAILS.

CAUTION:

1. IT IS THE RESPONSIBILITY OF THE CIVIL WORKS CONTRACTOR TO DETERMINE THE LOCATION & LEVEL OF EXISTING SERVICES USING NON DESTRUCTIVE METHODS PRIOR TO COMMENCING WORKS ON SITE.

1 IDENTIFIED RISK/HAZARD

1. CONTRACTOR IS TO CONFIRM LEVELS AND LOCATION OF EXISTING SERVICES PRIOR TO CONSTRUCTION

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision, Certifier – Strata, Certifier – Stormwater, Certifier – Road & Drainage, Certifier – Hydraulic (stormwater)
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES
A1 1:100 — 0 2.5 5.0m — A3 1:200
A1 1:20 — 0 0.5 1.0m — A3 1:40

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project
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Central Coast
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Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION
LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

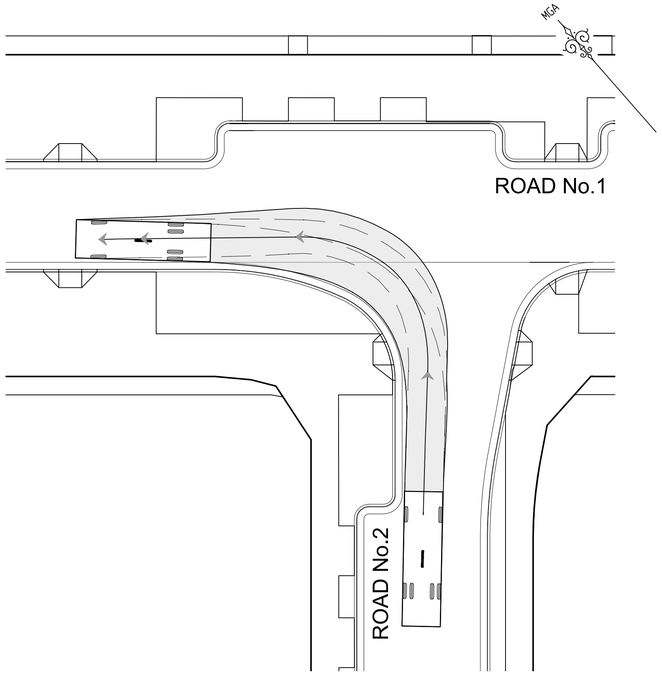
PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: INTERSECTION DETAILS KERB RETURNS KR10 & KR11

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	303	2

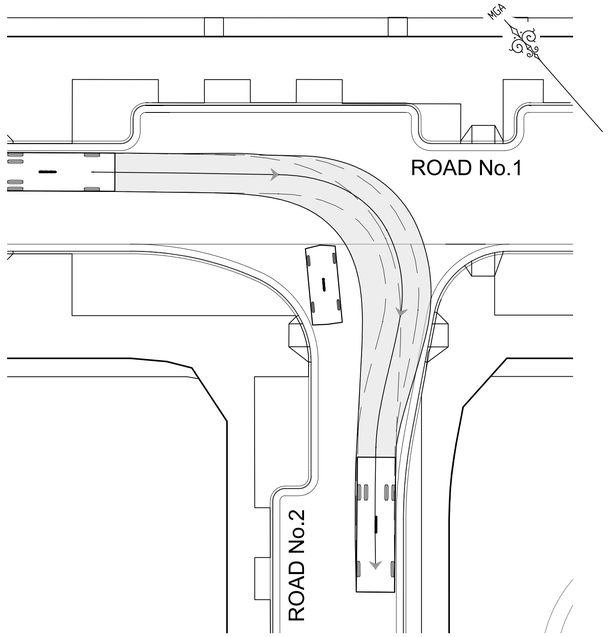
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.
100mm AT FULL SIZE

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:09:49PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-303.DWG

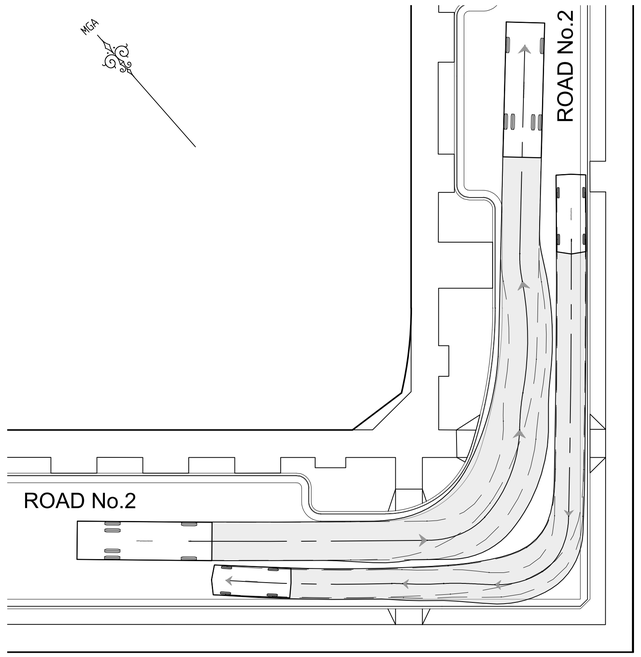
300001(2)-ENG-310



ROAD No.1 & 2 INTERSECTION
LEFT OUT
SCALE 1:200



ROAD No.1 & 2 INTERSECTION
RIGHT IN
SCALE 1:200



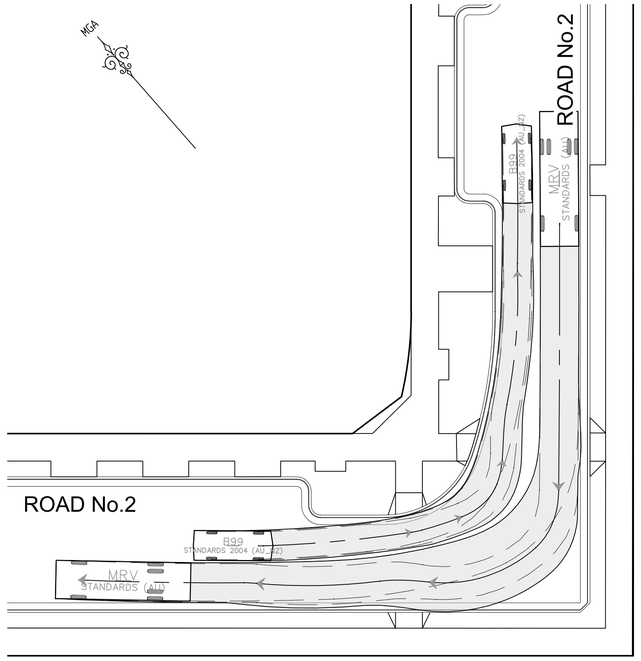
ROAD No.2 BEND – RIGHT & LEFT TURN
SCALE 1:200

MRV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 34.0

ADWJ B99

	meters
Width	: 1.94
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 37.2



ROAD No.2 BEND – RIGHT & LEFT TURN
SCALE 1:200

LDC
These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:200 — 0 5.0 10.0m — A3 1:400

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Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION
LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: MRV TURNING PATHS DETAIL PLANS

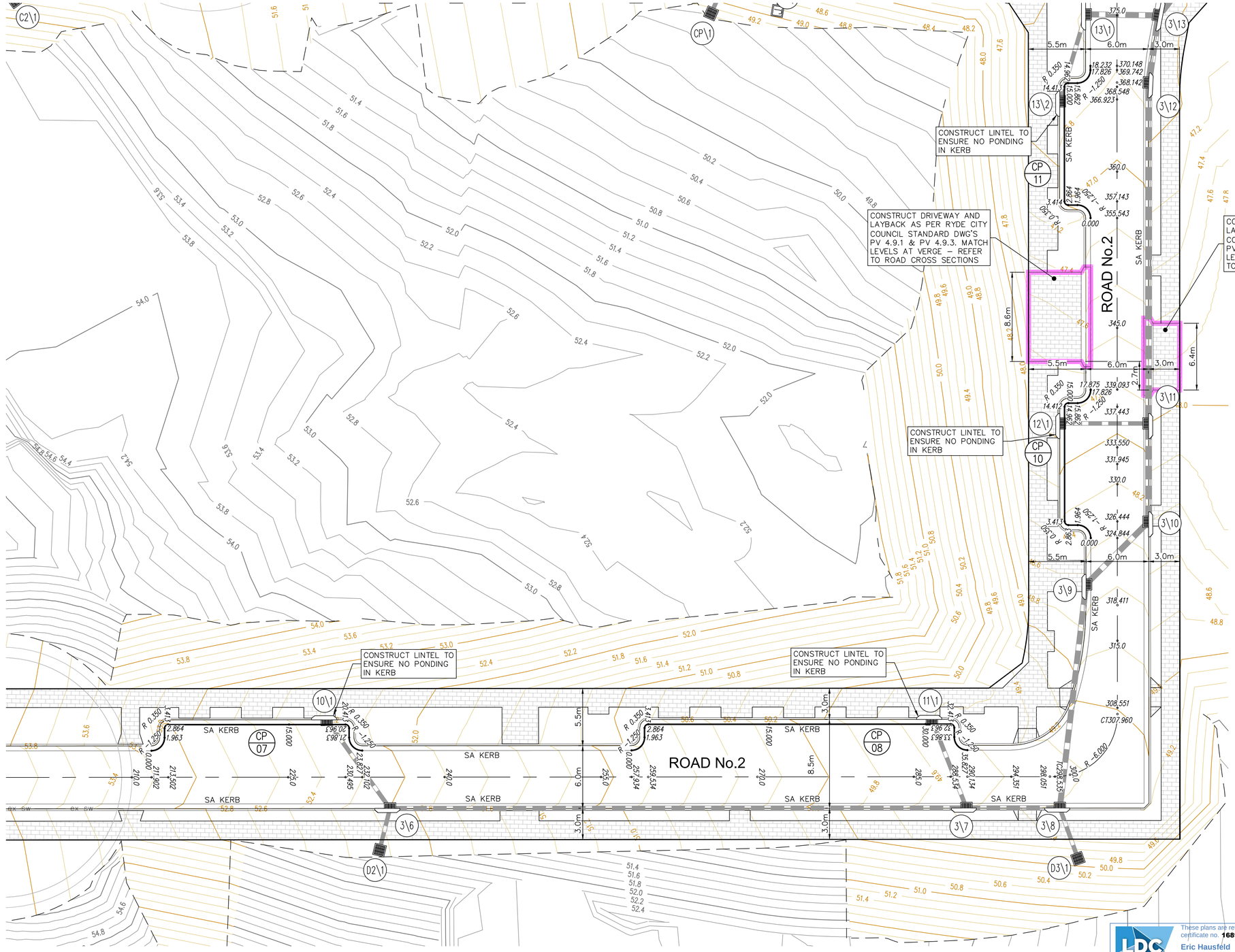
PROJECT No. 300001(2) – DISCIPLINE ENG – NUMBER 310 REV. 2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:09:56PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-310.DWG

100mm AT FULL SIZE

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300001(2)-ENG-351



LEGEND

- PROPOSED LOT BOUNDARY
- EXISTING LOT BOUNDARY
- MAJOR CONTOURS
- MINOR CONTOURS
- PROPOSED KERB
- EXISTING KERB
- PROPOSED DRIVEWAY
- EXTENTS OF BATTER
- PROPOSED FOOTPATH
- PROPOSED STORMWATER
- EXISTING STORMWATER (ex sw)
- PROPOSED SW PIT
- PROPOSED LINTEL
- PROPOSED HEADWALL
- PIT LABEL (1\1)

CONTOUR INTERVAL = 0.2m

CARPARK CP07 – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	325572.594	6260383.727	131°10'57.97"			
IP 2	0.982	325573.535	6260382.904		R = –1.250	1.963	89°59'55.10"
CT	1.963	325574.358	6260383.845	41°11'02.86"			
TC	2.864	325574.950	6260384.522	41°11'02.86"			
IP 3	3.138	325575.181	6260384.786		R = 0.350	0.550	89°59'55.10"
CT	3.413	325575.444	6260384.555	131°10'57.97"			
TC	20.413	325588.239	6260373.361	131°10'57.97"			
IP 4	20.688	325588.502	6260373.131		R = 0.350	0.550	90°00'07.05"
CT	20.963	325588.272	6260372.867	221°11'05.02"			
TC	21.863	325587.679	6260372.190	221°11'05.02"			
IP 5	22.845	325586.856	6260371.249		R = –1.250	1.964	90°00'07.05"
IP 6	23.827	325587.797	6260370.426	131°10'57.97"			

CARPARK CP08 – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	325607.238	6260353.417	131°10'57.97"			
IP 2	0.982	325608.179	6260352.594		R = –1.250	1.963	89°59'55.10"
CT	1.963	325609.002	6260353.535	41°11'02.86"			
TC	2.864	325609.594	6260354.212	41°11'02.86"			
IP 3	3.138	325609.825	6260354.476		R = 0.350	0.550	89°59'55.10"
CT	3.413	325610.088	6260354.245	131°10'57.97"			
TC	32.413	325631.914	6260335.150	131°10'57.97"			
IP 4	32.688	325632.177	6260334.919		R = 0.350	0.550	89°59'49.81"
CT	32.963	325631.947	6260334.656	221°10'47.77"			
TC	33.863	325631.354	6260333.978	221°10'47.77"			
IP 5	34.845	325630.531	6260333.038		R = –1.250	1.963	89°59'49.81"
IP 6	35.827	325631.472	6260332.215	131°10'57.97"			

CARPARK CP10 – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	325653.781	6260339.715	41°10'58.51"			
IP 2	0.982	325654.604	6260340.655		R = –1.250	1.964	90°00'10.74"
CT	1.964	325653.663	6260341.478	311°10'47.77"			
TC	2.863	325652.986	6260342.071	311°10'47.77"			
IP 3	3.138	325652.722	6260342.301		R = 0.350	0.550	90°00'10.73"
CT	3.413	325652.953	6260342.565	41°10'58.50"			
TC	14.412	325660.195	6260350.843	41°10'58.50"			
IP 4	14.687	325660.426	6260351.106		R = 0.350	0.550	90°00'21.61"
CT	14.962	325660.689	6260350.876	131°11'20.11"			
TC	15.862	325661.366	6260350.283	131°11'20.11"			
IP 5	16.844	325662.307	6260349.460		R = –1.250	1.964	90°00'21.60"
CT	17.826	325663.130	6260350.401	41°10'58.51"			
IP 6	17.875	325663.163	6260350.438	41°10'58.51"			

CARPARK CP11 – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	325673.995	6260362.819	41°10'56.86"			
IP 2	0.000	325673.995	6260362.819				
IP 3	0.982	325674.818	6260363.760		R = –1.250	1.964	90°00'09.07"
CT	1.964	325673.877	6260364.583	311°10'47.77"			
TC	2.864	325673.200	6260365.176	311°10'47.77"			
IP 4	3.139	325672.937	6260365.406		R = 0.350	0.550	90°00'10.74"
CT	3.414	325673.167	6260365.669	41°10'58.51"			
TC	14.413	325680.410	6260373.947	41°10'58.51"			
IP 5	14.688	325680.640	6260374.211		R = 0.350	0.550	90°00'21.60"
CT	14.962	325680.903	6260373.980	131°11'20.11"			
TC	15.862	325681.581	6260373.388	131°11'20.11"			
IP 6	16.844	325682.521	6260372.564		R = –1.250	1.964	90°00'21.60"
CT	17.826	325683.345	6260373.505	41°10'58.51"			
IP 7	18.232	325683.612	6260373.811	41°10'58.51"			

CARPARK PLAN – CP07, CP08, CP10 & CP11

SCALE 1:200

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
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CAUTION:

1. IT IS THE RESPONSIBILITY OF THE CIVIL WORKS CONTRACTOR TO DETERMINE THE LOCATION & LEVEL OF EXISTING SERVICES USING NON DESTRUCTIVE METHODS PRIOR TO COMMENCING WORKS ON SITE.

DIAL1100 BEFORE YOU DIG

CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:200; A3 1:400 (0, 5.0, 10.0m)

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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CLIENT: FRASERS PROPERTY

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MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: CARPARK DETAIL PLAN
CP07, CP08, CP10 & CP11

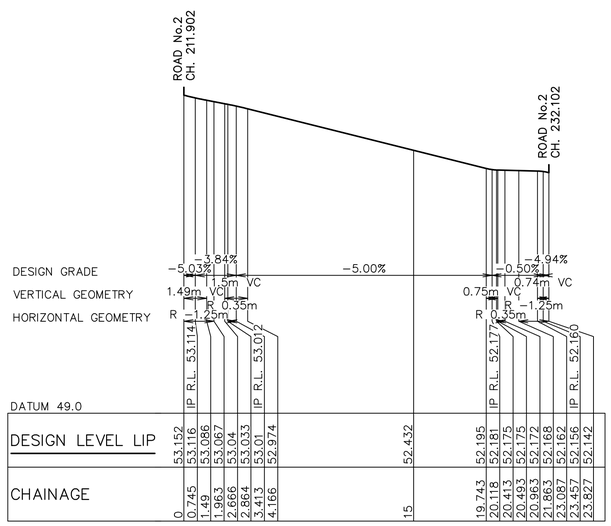
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	351	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:10:07PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)–ENG–351.DWG

100mm AT FULL SIZE

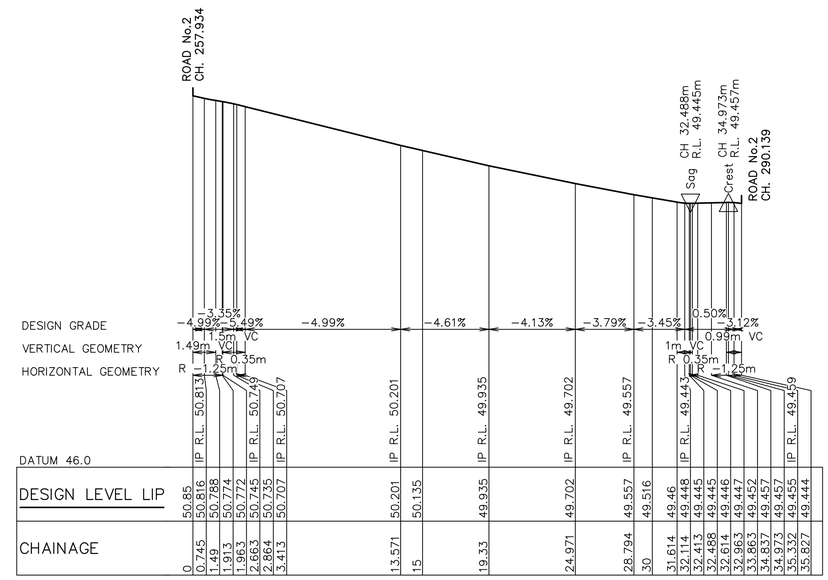
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

300001(2)-ENG-352



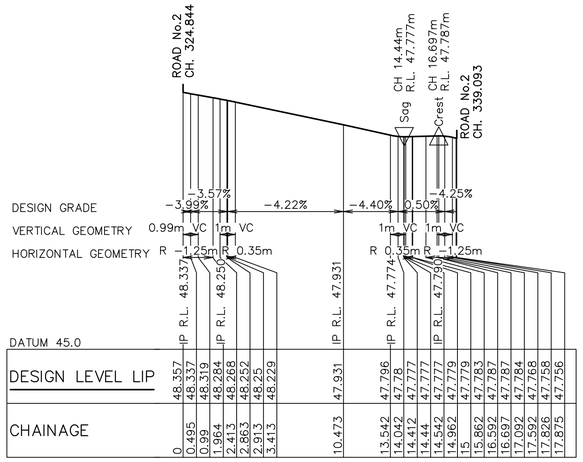
LONGITUDINAL SECTION ENG CP07

HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:40



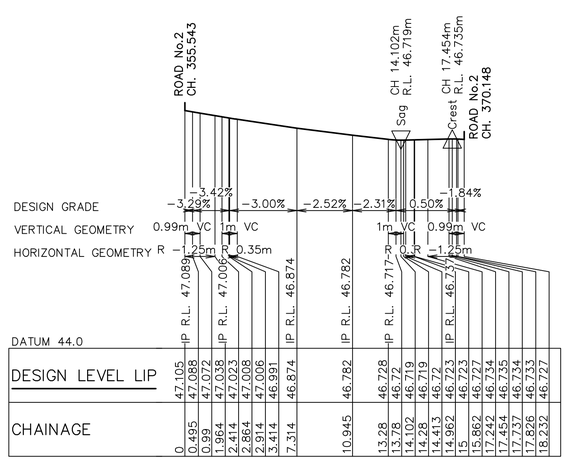
LONGITUDINAL SECTION ENG CP08

HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:40



LONGITUDINAL SECTION ENG CP10

HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:40



LONGITUDINAL SECTION ENG CP11

HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:40

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

SCALES
A1 1:200 — 0 5.0 10.0m — A3 1:400
A1 1:40 — 0 1.0 2.0m — A3 1:80
ALL DIMENSIONS ARE IN METRES. DO NOT SCALE

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Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT
FRASERS PROPERTY

PROPERTY DESCRIPTION
LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: CARPARK LONGITUDINAL SECTIONS CP07, CP08, CP10 & CP11

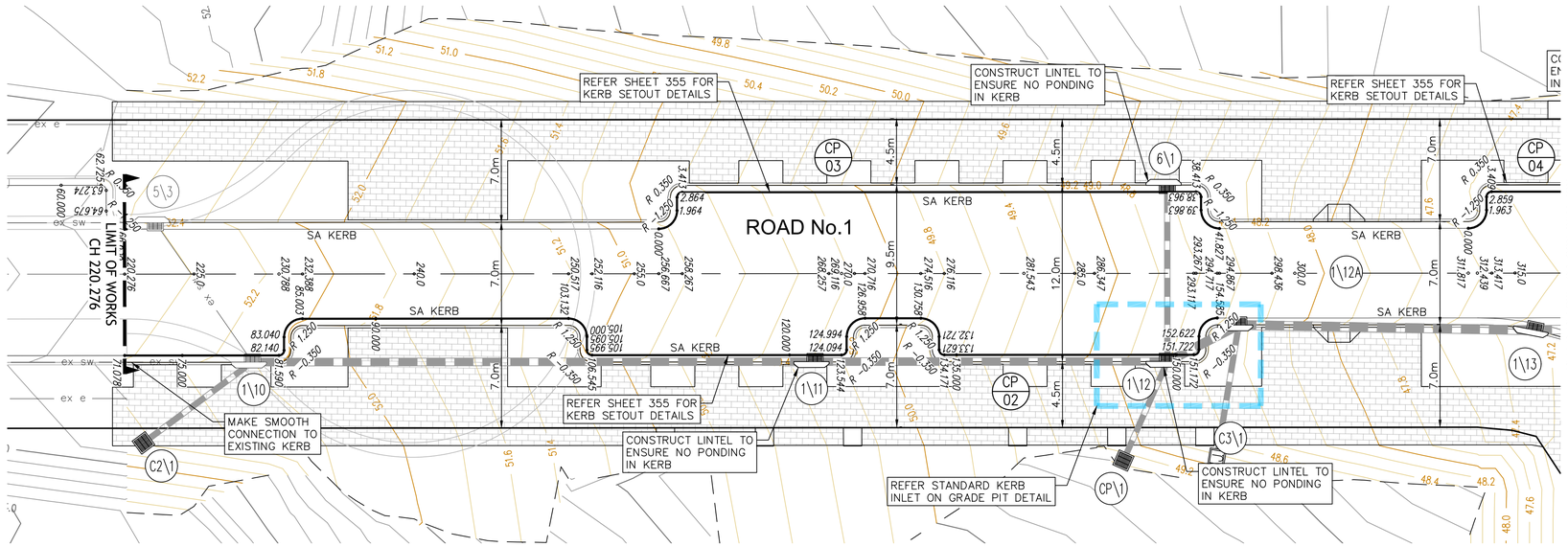
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	352	2

100mm AT FULL SIZE

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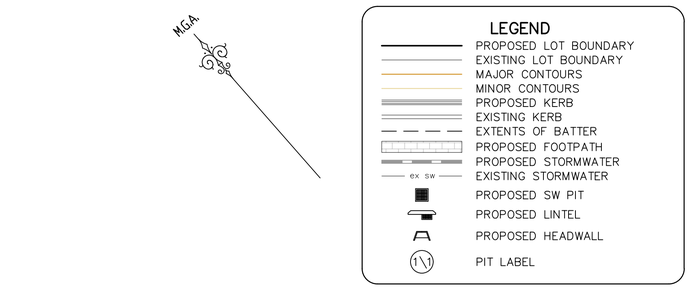
Plotted By: Mark Hoyland Plot Date: 16/05/22 2:10:12PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-352.DWG

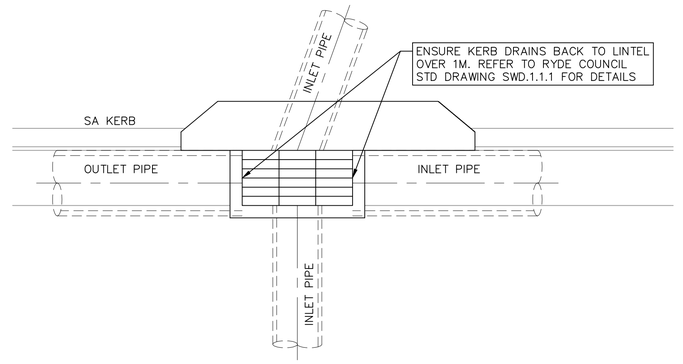
300001(2)-ENG-353



CARPARK PLAN – CP02, CP03 & CP04

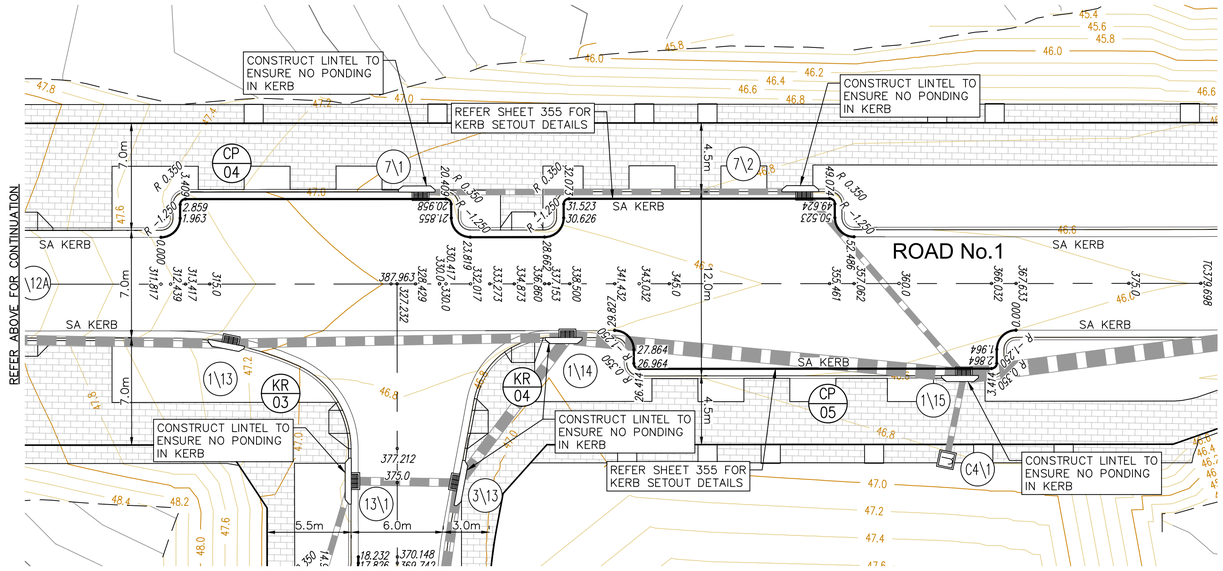
SCALE 1:200





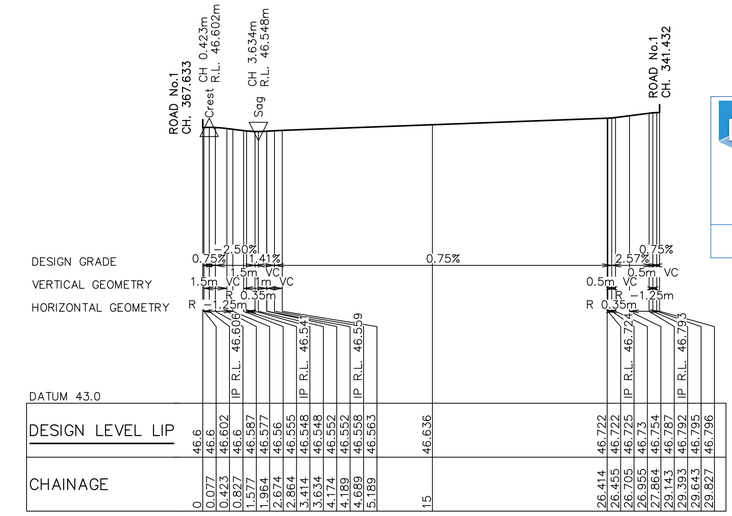
STANDARD KERB INLET ON GRADE PIT DETAIL

SCALE 1:25



CARPARK PLAN – CP04 & CP05

SCALE 1:200



LONGITUDINAL SECTION ENG CP05

HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:40

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
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CAUTION:

1. IT IS THE RESPONSIBILITY OF THE CIVIL WORKS CONTRACTOR TO DETERMINE THE LOCATION & LEVEL OF EXISTING SERVICES USING NON DESTRUCTIVE METHODS PRIOR TO COMMENCING WORKS ON SITE.

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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

SCALES: A1 1:200 / A3 1:400; A1 1:40 / A3 1:80; A1 1:25 / A3 1:50

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email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

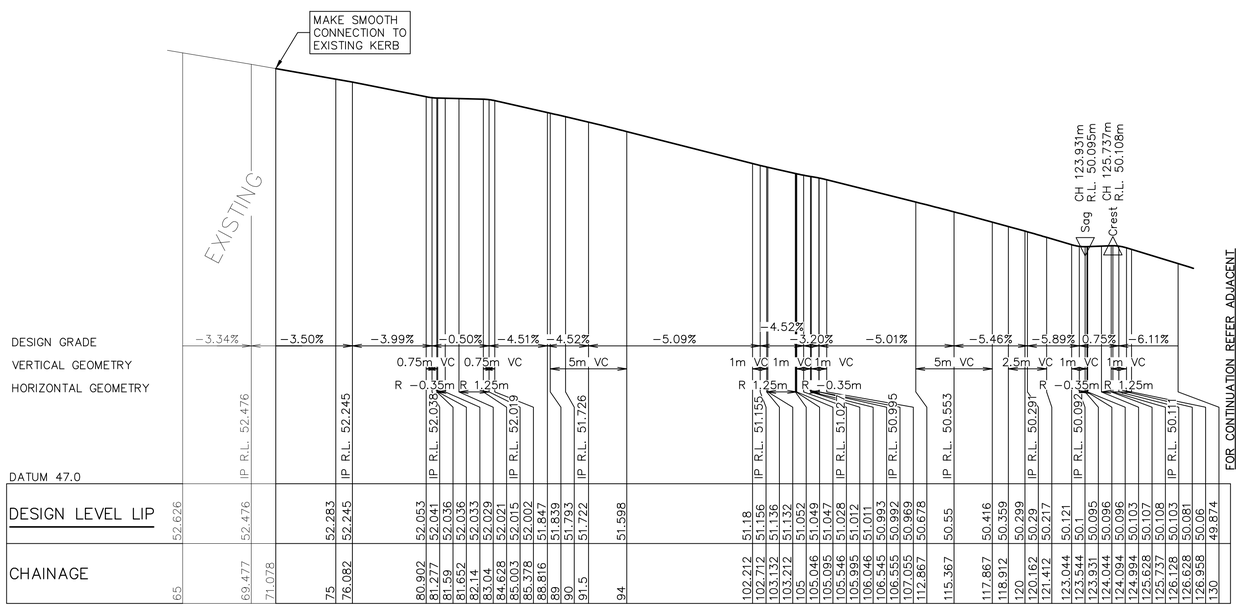
PLAN TITLE: CARPARK DETAIL PLAN CP02, CP03, CP04 & CP05

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG	– 353	2

100mm AT FULL SIZE
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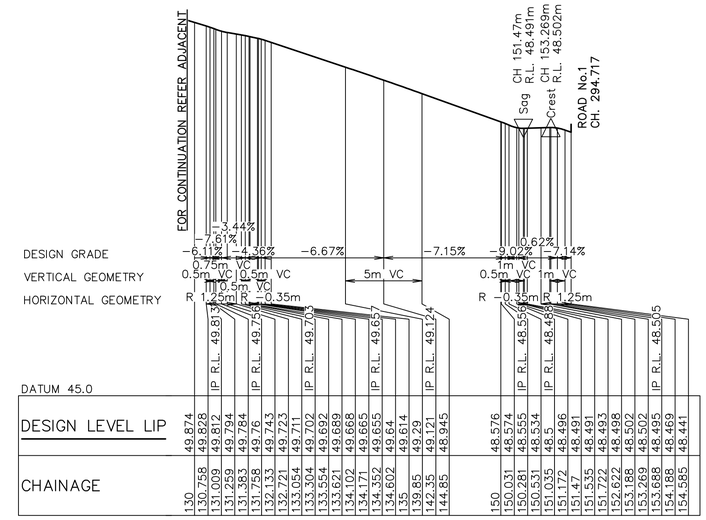
Plotted By: Mark Hoyland Plot Date: 16/05/22 2:10:28PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-353.DWG

300001(2)-ENG-354



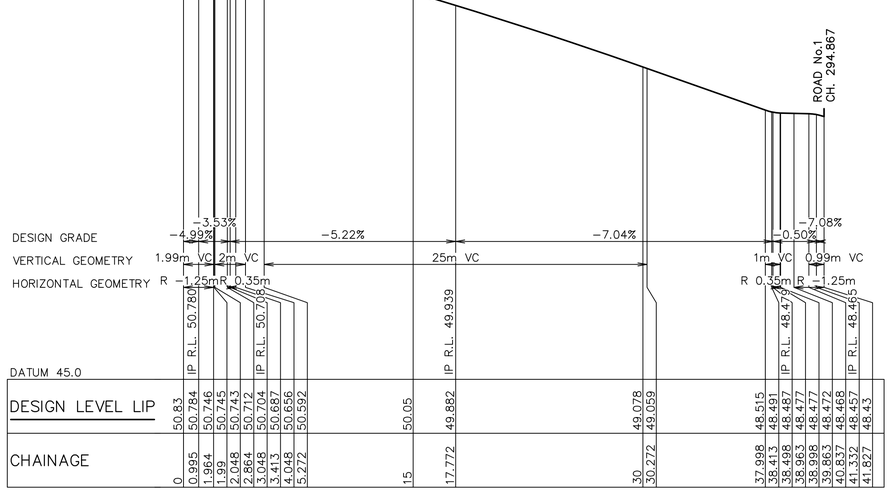
LONGITUDINAL SECTION ENG CP02

HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:40



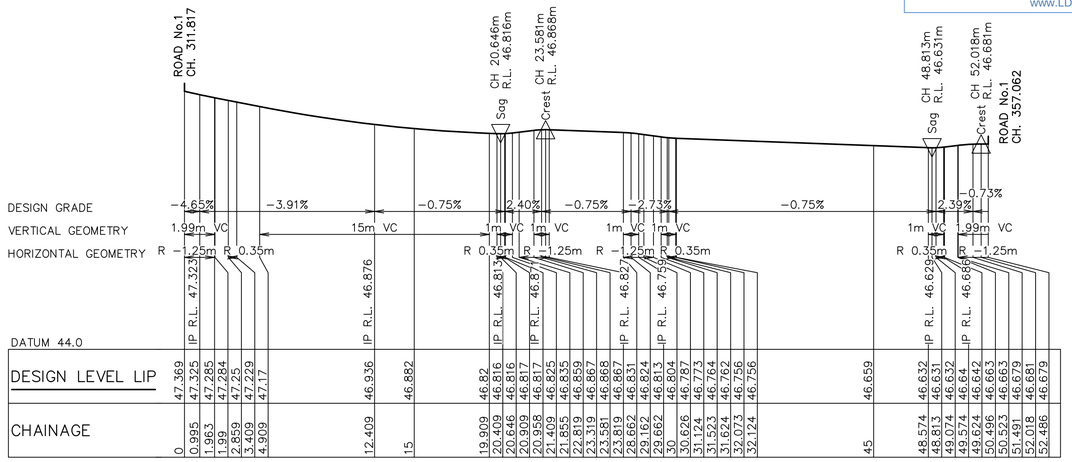
LONGITUDINAL SECTION ENG CP02 (CONTINUED)

HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:40



LONGITUDINAL SECTION ENG CP03

HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:40



LONGITUDINAL SECTION ENG CP04

HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:40

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SCALES: A1 1:200 / A3 1:400; A1 1:40 / A3 1:80

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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SURVEYED: ADW Johnson
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PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: CARPARK LONGITUDINAL SECTIONS CP02, CP03 & CP04

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	354	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:10:34PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-354.DWG

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300001(2)-ENG-355

CARPARK CP02 – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	325568.083	6260494.502	131°10'56.81"			
IP 2	0.000	325568.084	6260494.502				
IP 3	0.981	325569.023	6260493.680		R = 1.250	1.962	89°55'34.71"
CT	1.962	325568.202	6260492.739	221°06'31.58"			
TC	2.864	325567.609	6260492.060	221°06'31.58"			
IP 4	3.139	325567.379	6260491.796		R = −0.350	0.549	89°55'36.38"
CT	3.414	325567.643	6260491.566	131°10'55.20"			
TC	20.411	325580.435	6260480.374	131°10'55.20"			
IP 5	20.685	325580.698	6260480.144		R = −0.350	0.550	89°59'43.67"
CT	20.960	325580.929	6260480.407	41°11'11.52"			
TC	21.860	325581.521	6260481.085	41°11'11.52"			
IP 6	22.842	325582.344	6260482.025		R = 1.250	1.963	89°59'43.78"
CT	23.824	325583.285	6260481.202	131°10'55.31"			
TC	27.624	325586.145	6260478.700	131°10'55.31"			
IP 7	28.606	325587.086	6260477.877		R = 1.250	1.964	90°00'16.22"
CT	29.588	325586.263	6260476.936	221°11'11.52"			
TC	30.488	325585.670	6260476.259	221°11'11.52"			
IP 8	30.762	325585.440	6260475.995		R = −0.350	0.550	90°00'16.22"
CT	31.037	325585.703	6260475.765	131°10'55.31"			
TC	48.050	325598.508	6260464.563	131°10'55.31"			
IP 9	48.325	325598.771	6260464.332		R = −0.350	0.550	89°59'43.78"
CT	48.600	325599.001	6260464.596	41°11'11.52"			
TC	49.500	325599.594	6260465.273	41°11'11.52"			
IP 10	50.482	325600.417	6260466.214		R = 1.250	1.963	89°59'43.78"
CT	51.464	325601.358	6260465.391	131°10'55.31"			
TC	55.164	325604.143	6260462.955	131°10'55.31"			
IP 11	56.145	325605.084	6260462.131		R = 1.250	1.964	90°00'16.22"
CT	57.127	325604.260	6260461.191	221°11'11.52"			
TC	58.027	325603.668	6260460.513	221°11'11.52"			
IP 12	58.302	325603.437	6260460.250		R = −0.350	0.550	90°00'16.27"
CT	58.577	325603.701	6260460.019	131°10'55.25"			
TC	81.590	325621.021	6260444.867	131°10'55.25"			
IP 13	81.865	325621.284	6260444.636		R = −0.350	0.550	89°59'59.94"
CT	82.140	325621.515	6260444.899	41°10'55.31"			
TC	83.040	325622.107	6260445.577	41°10'55.31"			
IP 14	84.021	325622.930	6260446.518		R = 1.250	1.963	90°00'00.00"
CT	85.003	325623.871	6260445.695	131°10'55.31"			
TC	103.132	325637.515	6260433.758	131°10'55.31"			
IP 15	104.114	325638.456	6260432.935		R = 1.250	1.964	90°00'16.22"
CT	105.095	325637.633	6260431.994	221°11'11.52"			
TC	105.995	325637.040	6260431.316	221°11'11.52"			
IP 16	106.270	325636.810	6260431.053		R = −0.350	0.550	90°00'16.22"
CT	106.545	325637.073	6260430.823	131°10'55.31"			
TC	123.544	325649.867	6260419.629	131°10'55.31"			
IP 17	123.819	325650.131	6260419.399		R = −0.350	0.550	89°59'43.79"
CT	124.094	325650.361	6260419.662	41°11'11.52"			
TC	124.994	325650.954	6260420.340	41°11'11.52"			
IP 18	125.976	325651.777	6260421.280		R = 1.250	1.963	89°59'43.78"
CT	126.958	325652.718	6260420.457	131°10'55.31"			
TC	130.758	325655.578	6260417.955	131°10'55.31"			
IP 19	131.740	325656.518	6260417.132		R = 1.250	1.964	90°00'16.22"
CT	132.721	325655.695	6260416.191	221°11'11.52"			
TC	133.621	325655.103	6260415.514	221°11'11.52"			
IP 20	133.896	325654.872	6260415.251		R = −0.350	0.550	90°00'16.22"
CT	134.171	325655.136	6260415.020	131°10'55.31"			
TC	151.172	325667.931	6260403.826	131°10'55.31"			
IP 21	151.447	325668.194	6260403.595		R = −0.350	0.550	89°59'43.78"
CT	151.722	325668.425	6260403.859	41°11'11.52"			
TC	152.622	325669.017	6260404.536	41°11'11.52"			
IP 22	153.603	325669.840	6260405.477		R = 1.250	1.963	89°59'43.78"
IP 23	154.585	325670.781	6260404.654				
IP 24	154.585	325670.781	6260404.654	131°10'55.03"			

CARPARK CP03 – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	325646.160	6260434.299	131°10'55.36"			
IP 2	0.982	325647.101	6260433.476		R = −1.250	1.964	90°00'10.46"
CT	1.964	325647.924	6260434.417	41°10'44.90"			
TC	2.864	325648.517	6260435.094	41°10'44.90"			
IP 3	3.138	325648.747	6260435.357		R = 0.350	0.550	90°00'10.35"
CT	3.413	325649.011	6260435.127	131°10'55.25"			
TC	38.413	325675.353	6260412.081	131°10'55.25"			
IP 4	38.688	325675.616	6260411.851		R = 0.350	0.550	89°59'55.40"
CT	38.963	325675.386	6260411.587	221°10'50.65"			
TC	39.863	325674.793	6260410.910	221°10'50.64"			
IP 5	40.845	325673.970	6260409.969		R = −1.250	1.963	89°59'42.87"
IP 6	41.827	325674.911	6260409.146	131°11'07.78"			

CARPARK CP04 – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	325684.968	6260400.347	131°10'58.44"			
IP 2	0.000	325684.968	6260400.347				
IP 3	0.982	325685.908	6260399.524		R = −1.250	1.963	89°59'58.31"
CT	1.963	325686.731	6260400.465	41°10'57.00"			
TC	2.859	325687.321	6260401.139	41°10'57.00"			
IP 4	3.134	325687.552	6260401.402		R = 0.350	0.550	89°59'44.72"
CT	3.409	325687.815	6260401.172	131°10'41.72"			
TC	20.409	325700.610	6260389.979	131°10'41.72"			
IP 5	20.684	325700.874	6260389.749		R = 0.350	0.550	90°00'12.90"
CT	20.958	325700.643	6260389.485	221°10'54.62"			
TC	21.855	325700.053	6260388.810	221°10'54.62"			
IP 6	22.837	325699.230	6260387.870		R = −1.250	1.963	89°59'59.32"
CT	23.818	325700.171	6260387.047	131°10'55.31"			
TC	28.662	325703.816	6260383.857	131°10'55.31"			
IP 7	29.644	325704.757	6260383.034		R = −1.250	1.964	90°01'13.45"
CT	30.626	325705.580	6260383.975	41°09'41.85"			
TC	31.523	325706.170	6260384.650	41°09'41.85"			
IP 8	31.798	325706.401	6260384.914		R = 0.350	0.550	90°00'59.87"
CT	32.072	325706.664	6260384.683	131°10'41.72"			
TC	49.074	325719.461	6260373.489	131°10'41.72"			
IP 9	49.349	325719.724	6260373.259		R = 0.350	0.550	90°00'12.90"
CT	49.624	325719.494	6260372.996	221°10'54.62"			
TC	50.522	325718.902	6260372.320	221°10'54.62"			
IP 10	51.504	325718.079	6260371.379		R = −1.250	1.963	89°59'59.31"
IP 11	52.485	325719.020	6260370.556				
IP 12	52.485	325719.020	6260370.556	131°10'47.07"			

CARPARK CP05 – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	325725.659	6260356.642	311°10'55.25"			
IP 2	0.000	325725.659	6260356.642				
IP 3	0.982	325724.718	6260357.465		R = −1.250	1.964	90°00'04.33"
CT	1.964	325723.895	6260356.525	221°10'50.97"			
TC	2.864	325723.302	6260355.847	221°10'50.97"			
IP 4	3.139	325723.072	6260355.584		R = 0.350	0.550	90°00'04.33"
CT	3.414	325722.809	6260355.814	311°10'55.31"			
TC	26.414	325705.498	6260370.959	311°10'55.31"			
IP 5	26.689	325705.235	6260371.189		R = 0.350	0.550	90°00'00.00"
CT	26.964	325705.465	6260371.453	41°10'55.31"			
TC	27.864	325706.058	6260372.130	41°10'55.31"			
IP 6	28.845	325706.881	6260373.071		R = −1.250	1.963	90°00'00.00"
IP 7	29.827	325705.940	6260373.894	311°10'55.31"			

100mm AT FULL SIZE

This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
Land Development Certificates
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

SCALES: NOT TO SCALE

ALL DIMENSIONS ARE IN METRES. DO NOT SCALE

adw johnson
Central Coast
5 Pioneer Avenue,
P.O. Box 3717,
Tuggerah N.S.W. 2259
Phone: (02) 4305 4300
Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

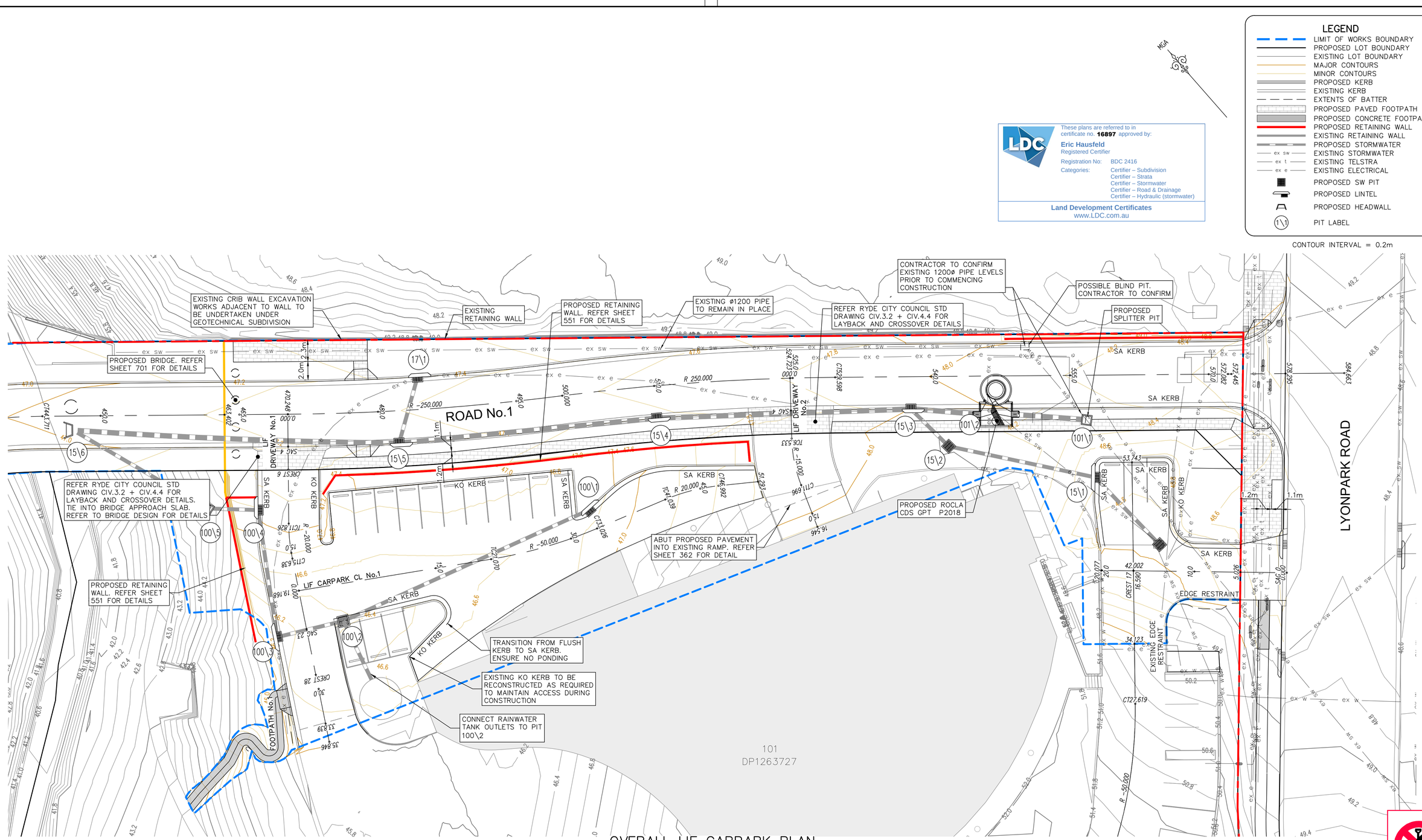
PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: CARPARK SETOUT TABLES
CP02, CP03, CP04 & CP05

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	355	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:10:38PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-355.DWG

300001(2)-ENG-361



OVERALL LIF CARPARK PLAN

SCALE 1:200

CAUTION:

1. IT IS THE RESPONSIBILITY OF THE CIVIL WORKS CONTRACTOR TO DETERMINE THE LOCATION & LEVEL OF EXISTING SERVICES USING NON DESTRUCTIVE METHODS PRIOR TO COMMENCING WORKS ON SITE.

DIAL1100 BEFORE YOU DIG

CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:200 / A3 1:400 (0, 5.0, 10.0m)

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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adw johnson
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email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: OVERALL LIF CARPARK PLAN

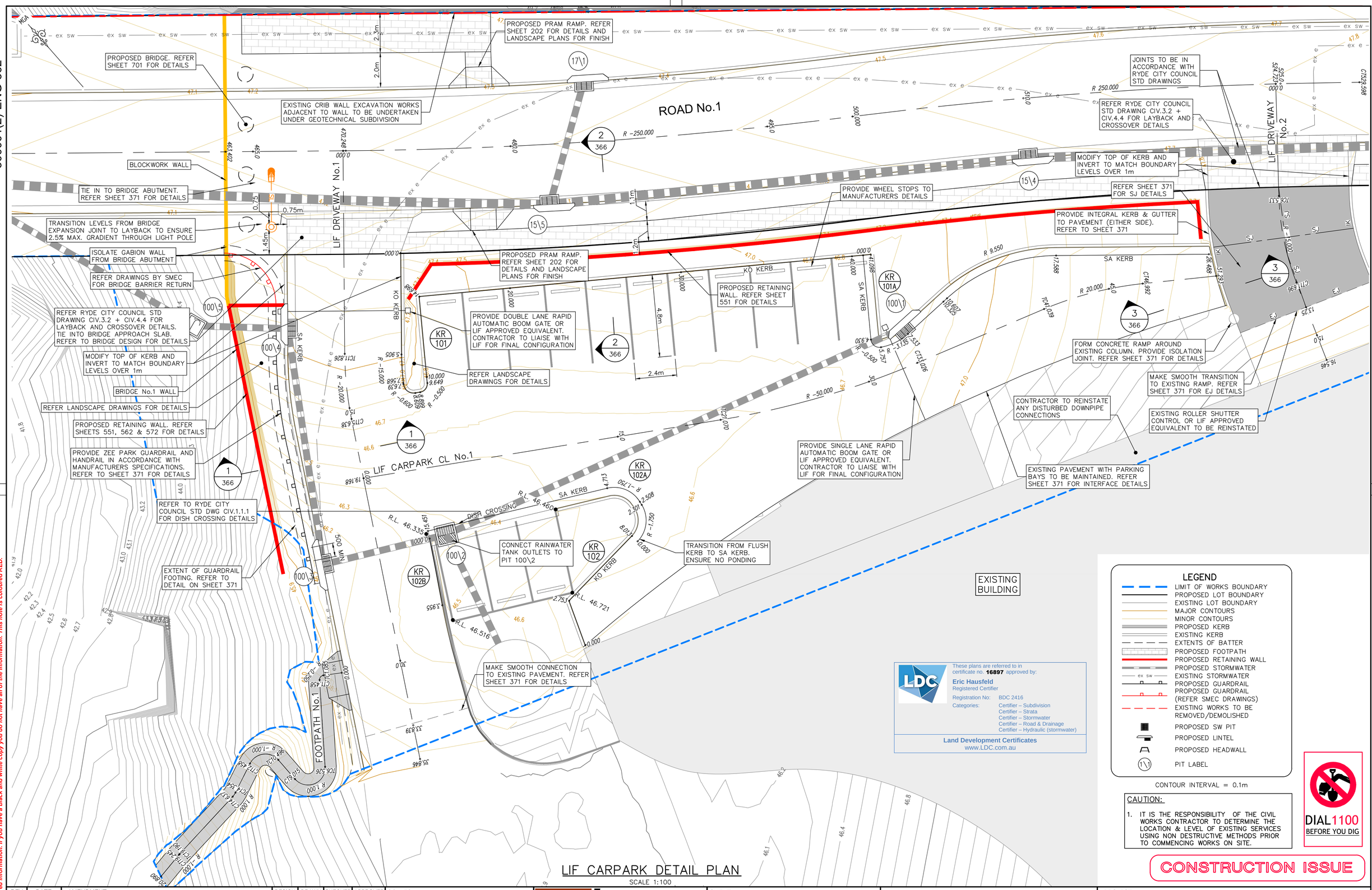
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG	– 361	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:10:50PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-361.DWG

100mm AT FULL SIZE

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300001(2)-ENG-362



LIF CARPARK DETAIL PLAN

SCALE 1:100

CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:100, A3 1:200 (0, 2.5, 5.0m)

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adw johnson
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5 Pioneer Avenue,
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Phone: (02) 4305 4300
Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: LIF CARPARK DETAIL PLAN
CARPARK No.1

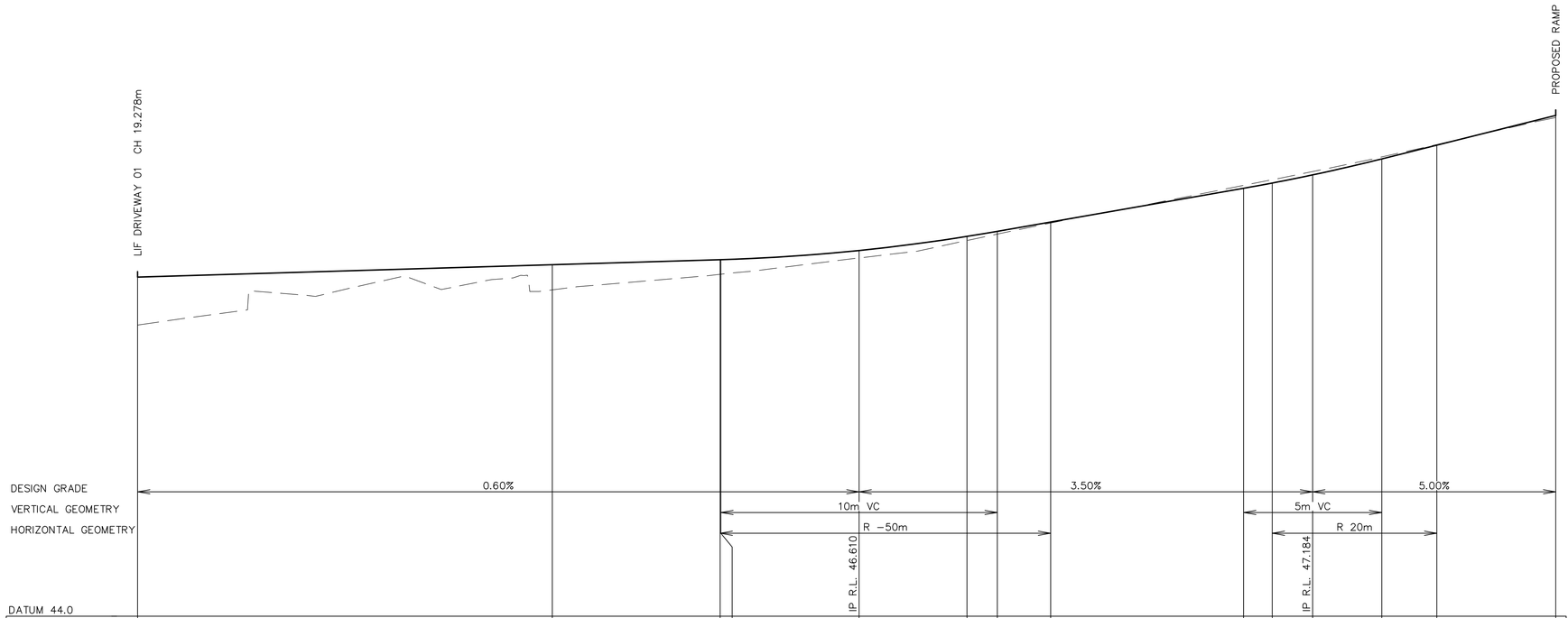
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	362	2

100mm AT FULL SIZE

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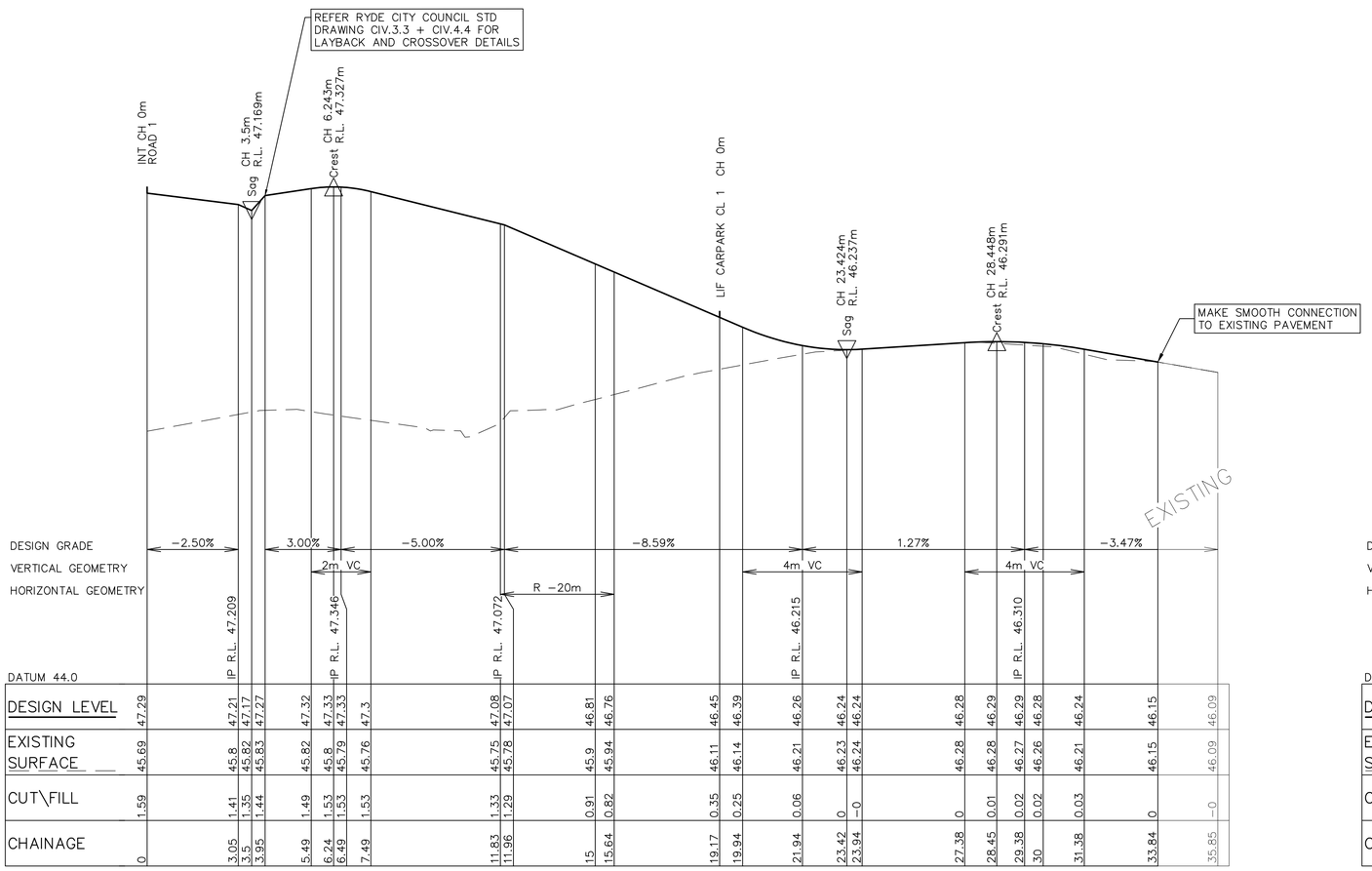
Plotted By: Mark Hoyland Plot Date: 16/05/22 2:11:05PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-362.DWG

300001(2)-ENG-363



| | | |

300001(2)-ENG-364



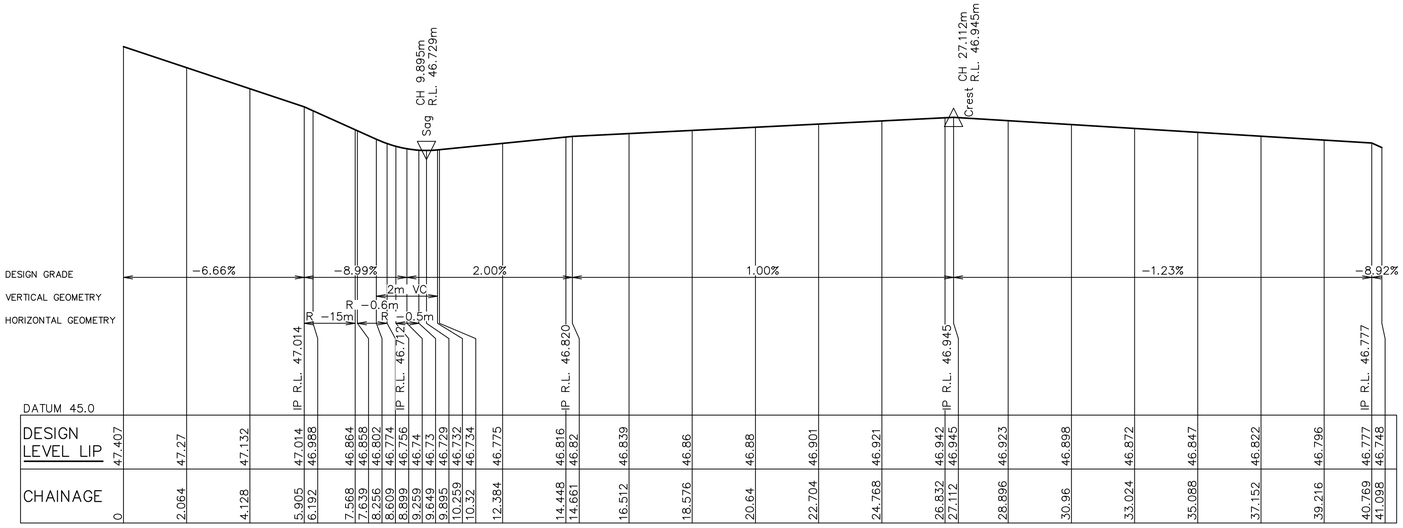
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300001(2)-ENG-365

100mm AT FULL SIZE

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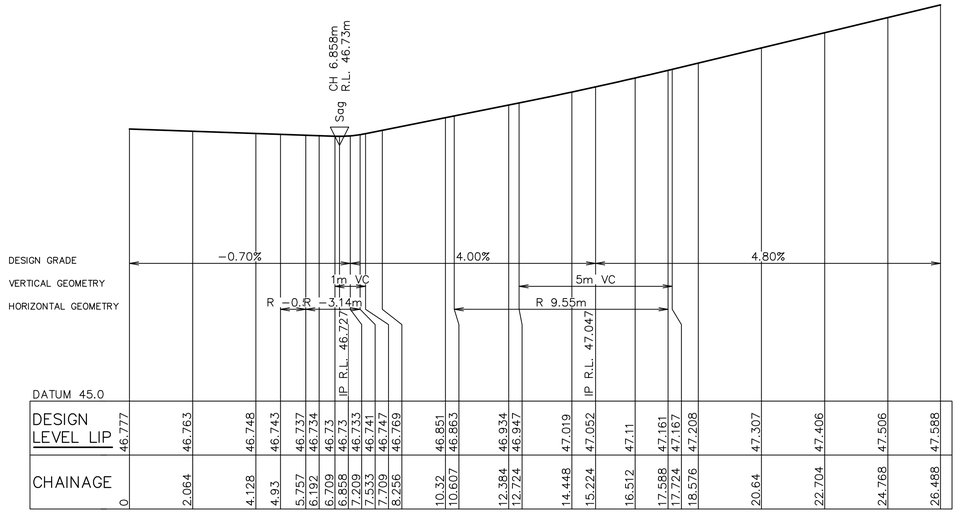
KR101 – SETOUT TABLE							
PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	325811.689	6260297.238	220°44'56.00"			
TC	5.905	325807.835	6260292.765	220°44'56.00"			
IP 2	6.736	325807.292	6260292.134		R = −15.000	1.663	6°21'08.21"
CT	7.568	325806.821	6260291.448	214°23'47.79"			
TC	7.639	325806.781	6260291.389	214°23'47.79"			
IP 3	8.124	325806.427	6260290.871		R = −0.600	0.969	92°33'37.65"
CT	8.609	325806.960	6260290.540	121°50'10.14"			
TC	8.899	325807.206	6260290.387	121°50'10.14"			
IP 4	9.274	325807.602	6260290.141		R = −0.500	0.750	85°56'28.04"
CT	9.649	325807.875	6260290.518	35°53'42.10"			
IP 5	14.698	325810.835	6260294.609				
IP 6	41.098	325832.222	6260279.130	125°53'42.10"			



LONGITUDINAL SECTION KR101

HORIZONTAL SCALE 1:100
VERTICAL SCALE 1:20

KR101A – SETOUT TABLE							
PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	325831.857	6260279.394	215°53'42.10"			
TC	4.930	325828.967	6260275.401	215°53'42.10"			
IP 2	5.343	325828.649	6260274.960		R = −0.500	0.827	94°45'19.41"
CC	5.757	325829.114	6260274.679	121°08'22.69"			
IP 3	6.645	325829.895	6260274.207		R = −3.135	1.776	32°27'45.28"
IP 4	7.533	325830.807	6260274.229				
IP 5	10.325	325833.599	6260274.284				
TC	10.607	325833.881	6260274.289	88°51'10.68"			
IP 6	14.098	325837.535	6260274.363		R = 9.550	6.981	41°53'03.19"
CT	17.588	325840.304	6260271.977	130°44'13.87"			
IP 7	26.488	325847.048	6260266.170	130°44'13.87"			



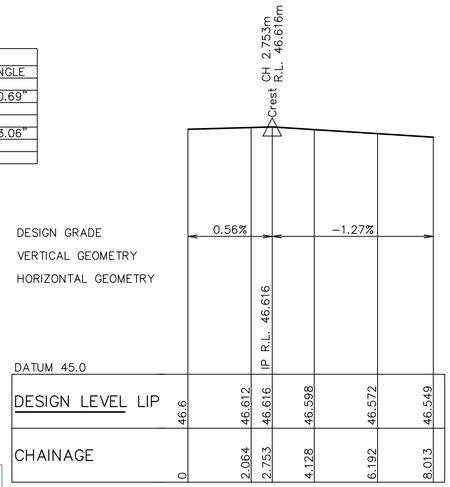
LONGITUDINAL SECTION KR101A

HORIZONTAL SCALE 1:100
VERTICAL SCALE 1:20

KR102 – SETOUT TABLE				
PT	CHAINAGE	EASTING	NORTHING	BEARING
IP 1	0.000	325804.733	6260272.969	21°09'13.79"
IP 2	2.753	325805.726	6260275.537	
IP 3	8.013	325810.969	6260275.964	85°20'45.46"

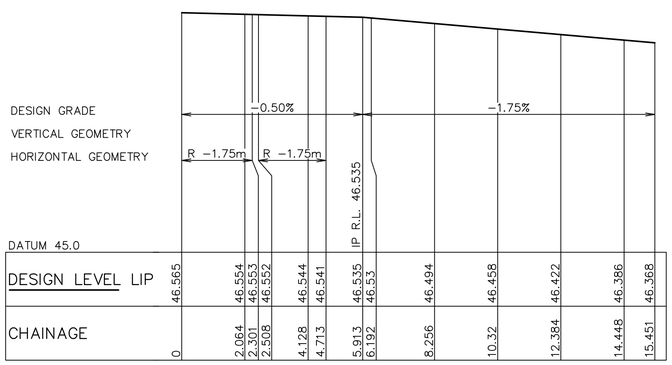
KR102A – SETOUT TABLE							
PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	325811.005	6260275.515	85°20'45.46"			
IP 2	1.151	325812.352	6260275.625		R = −1.750	2.301	75°21'00.69"
CT	2.301	325812.587	6260276.956	9°59'44.77"			
TC	2.508	325812.623	6260277.159	9°59'44.77"			
IP 3	3.610	325812.844	6260278.416		R = −1.750	2.205	72°12'23.06"
CT	4.713	325811.715	6260279.011	297°47'21.71"			
IP 4	15.451	325802.215	6260284.017	297°47'21.71"			

KR102B – SETOUT TABLE				
PT	CHAINAGE	EASTING	NORTHING	BEARING
IP 1	0.000	325801.777	6260283.231	210°33'50.53"
IP 2	3.505	325799.994	6260280.213	210°33'50.53"



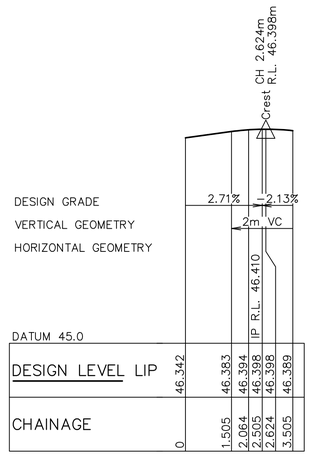
LONGITUDINAL SECTION KR102

HORIZONTAL SCALE 1:100
VERTICAL SCALE 1:20



LONGITUDINAL SECTION KR102A

HORIZONTAL SCALE 1:100
VERTICAL SCALE 1:20



LONGITUDINAL SECTION KR102B

HORIZONTAL SCALE 1:100
VERTICAL SCALE 1:20

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

Land Development Certificates
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES
A1 1:100 — 0 2.5 5.0m — A3 1:200
A1 1:20 — 0 0.5 1.0m — A3 1:40

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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adw johnson
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5 Pioneer Avenue,
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email: coast@adwjohnson.com.au
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ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION
LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

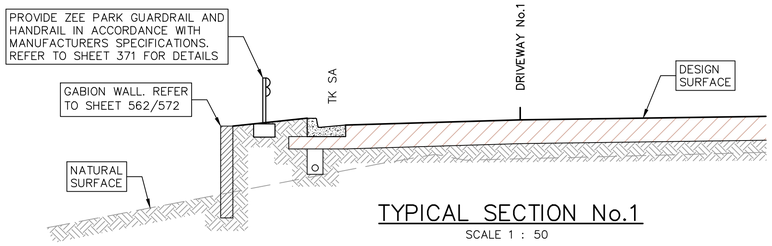
PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: KERB RETURN LONGITUDINAL SECTIONS
KR101, KR101A,
KR102, KR102A & KR102B

PROJECT No. 300001(2) – DISCIPLINE ENG – NUMBER 365 REV. 2

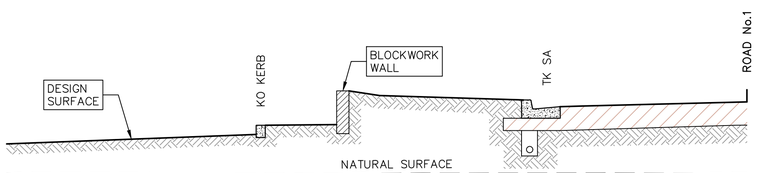
Plotted By: Mark Hoyland Plot Date: 16/05/22 2:11:33PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-365.DWG

300001(2)-ENG-366



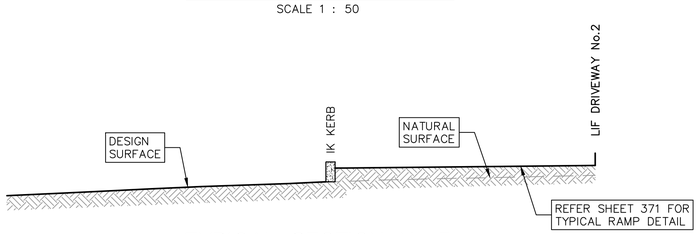
TYPICAL SECTION No.1

SCALE 1 : 50



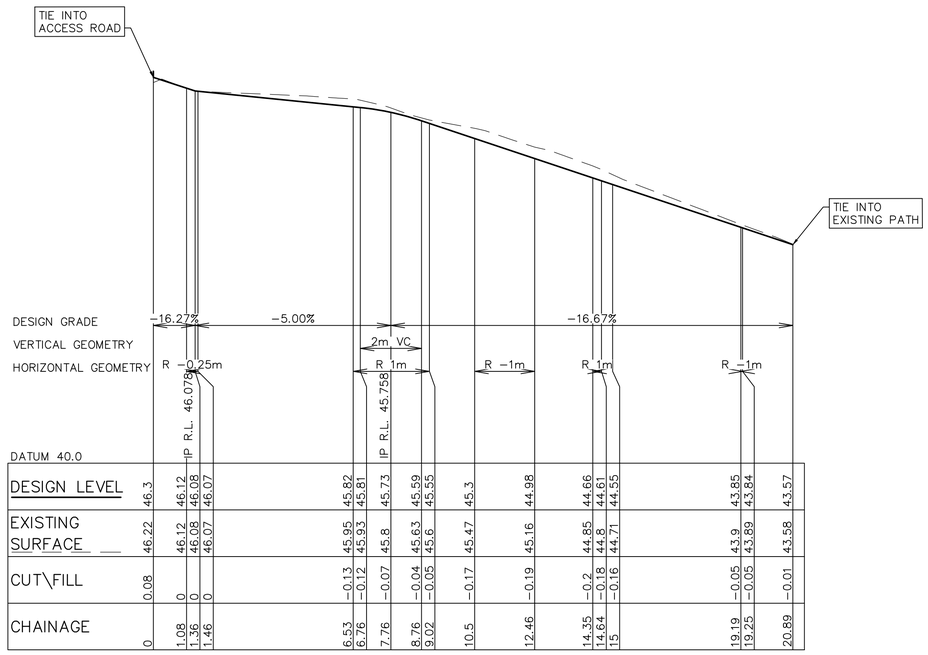
TYPICAL SECTION No.2

SCALE 1 : 50



TYPICAL SECTION No.3

SCALE 1 : 50



| | | |

300001(2)-ENG-367

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

Land Development Certificates
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MAINTAIN EXISTING PATH

REMOVE EXISTING PIPE TO EXISTING GRATE DRAIN AND RECONSTRUCT INTO PIT 15\1

TIE INTO EXISTING LEVELS

EXISTING WATER OBVERT RL 49.33

REMOVED EXISTING GRATE DRAIN AND CONSTRUCT NEW GSIP

EXISTING DRAIN GRATE

CONTRACTOR TO CONFIRM ELECTRICAL SOURCE PRIOR TO REMOVAL

EXISTING EDGE RESTRAINT

CONNECT EXISTING DRAINAGE TO NEW GSIP

CONTRACTOR TO ALLOW TO CONNECT FROM RELOCATED KIOSKS TO BUILDING SWITCHBOARD

PROVIDE 300mm WIDE 150mm DEEP GRASS LINED SWALE TO CATER FOR LOCAL FLOWS. OVERFLOWS FROM LYONPARK ROAD TO BE CONVEYED DOWN ROAD No.1

EXISTING SERVICES BAY. CONTRACTOR TO LOCATE ALL SERVICES PRIOR TO WORKS

RELOCATED PYLON SIGN

EXISTING PYLON SIGN TO BE RELOCATED

MODIFY TOP OF KERB AND INVERT TO MATCH BOUNDARY LEVELS OVER 1m

ELECTRICAL KIOSK. REFER TO ELECTRICAL PLANS FOR FURTHER DETAILS

RECONSTRUCT 2 BAYS OF EXISTING FOOTPATH

DRIVEWAY TO EXTEND PAST PROPOSED V-GRATE

CONVERT EXISTING LINTEL TO A 900x900 V-GRATE

CONSTRUCT CONCRETE PATH TO RYDE CITY COUNCIL STANDARD DRAWING CIV.5.1

EXTENT OF WORKS SUBJECT TO ROADS ACT APPROVAL

TOTAL FLOW TO V-GRATE = 111 L/s IN 100 YEAR EVENT ADOPTING A 50% BLOCKAGE PONDING DEPTH REQUIRED TO CAPTURE FLOW = 120mm.

REFER S138 DRAWING SET REFERENCE 300001(S138) FOR WORKS IN ROAD RESERVE

LIF CARPARK CL No.2

LYONPARK ROAD

LIF DRIVEWAY No.3

ROAD No.1

SA KERB

EDGE RESTRAINT

KR 103

KR 103A

CAUTION:

1. IT IS THE RESPONSIBILITY OF THE CIVIL WORKS CONTRACTOR TO DETERMINE THE LOCATION & LEVEL OF EXISTING SERVICES USING NON DESTRUCTIVE METHODS PRIOR TO COMMENCING WORKS ON SITE.

LEGEND

- WORKS SUBJECT TO ROADS ACT APPROVAL
- LIMIT OF WORKS BOUNDARY
- PROPOSED LOT BOUNDARY
- EXISTING LOT BOUNDARY
- MAJOR CONTOURS
- MINOR CONTOURS
- PROPOSED KERB
- EXISTING KERB
- EXTENTS OF BATTER
- PROPOSED PAVED FOOTPATH
- PROPOSED CONCRETE FOOTPATH
- PROPOSED RETAINING WALL
- PROPOSED STORMWATER
- EXISTING STORMWATER
- PROPOSED SW PIT
- PROPOSED LINTEL
- PROPOSED HEADWALL
- PIT LABEL

CONTOUR INTERVAL = 0.1m

IDENTIFIED RISK/HAZARD

1. CONTRACTOR IS TO IDENTIFY AND RELOCATE ANY SERVICES WITHIN CARPARK AREA.

LIF CARPARK DETAIL PLAN

SCALE 1:100

DIAL1100 BEFORE YOU DIG

CONSTRUCTION ISSUE

100mm AT FULL SIZE

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2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:100 (0, 2.5, 5.0m) A3 1:200

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ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

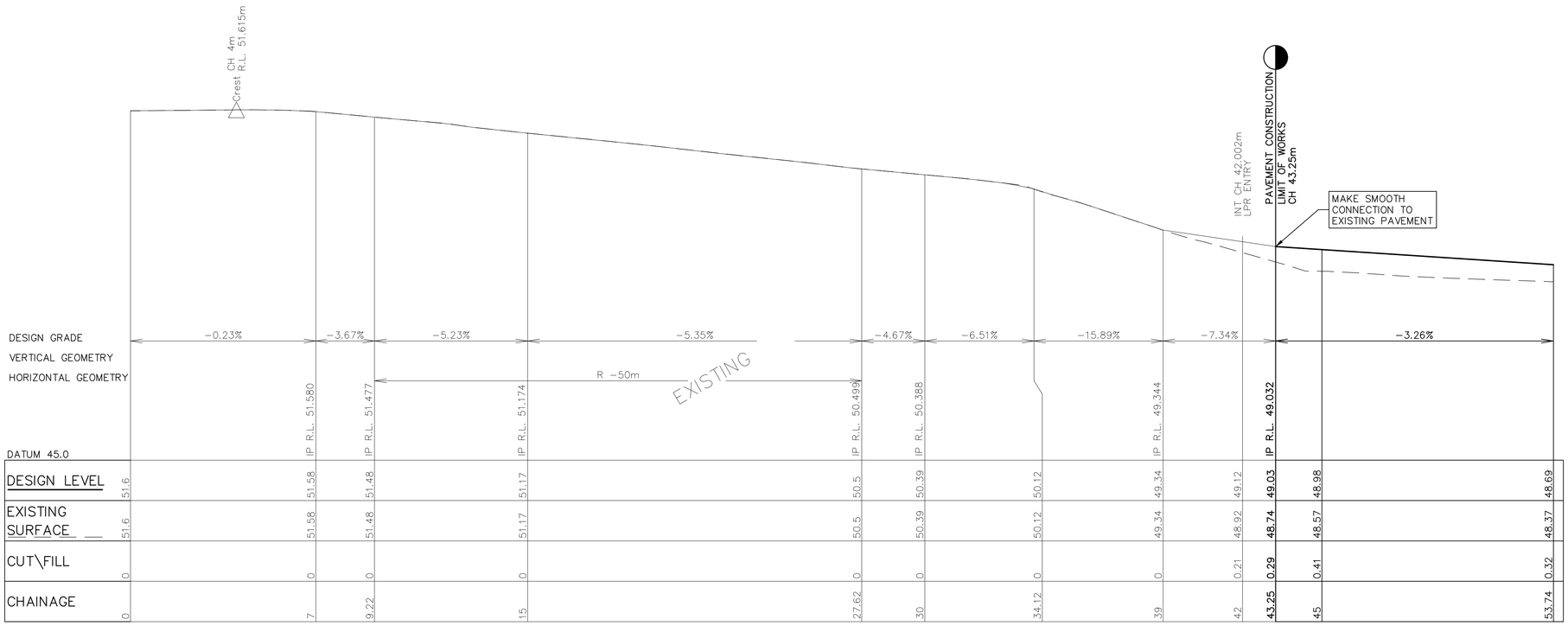
PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: LIF CARPARK DETAIL PLAN CARPARK No.2

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	367	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:11:58PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-367.DWG

300001(2)-ENG-368



LONGITUDINAL SECTION LIF CARPARK CL No.2

HORIZONTAL SCALE 1:100
VERTICAL SCALE 1:50

LIF CARPARK CL No.2 – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	325839.061	6260204.085	61°32'48.53"			
TC	9.216	325847.164	6260208.476	61°32'48.53"			
IP 2	18.418	325855.346	6260212.911		R = −50.000	18.403	21°05'16.04"
CT	27.619	325861.385	6260219.992	40°27'32.49"			
IP 3	53.743	325878.337	6260239.869	40°27'32.49"			

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Registered Certifier
Registration No: BDC 2416
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Certifier – Strata
Certifier – Stormwater
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Land Development Certificates
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES
A1 1:100 — 0 2.5 5.0m — A3 1:200
A1 1:50 — 0 1.25 2.5 m — A3 1:100

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project
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adw johnson
Central Coast
5 Pioneer Avenue,
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Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT
FRASERS PROPERTY

PROPERTY DESCRIPTION
LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: LIF CARPARK SECTION CARPARK CL No.2

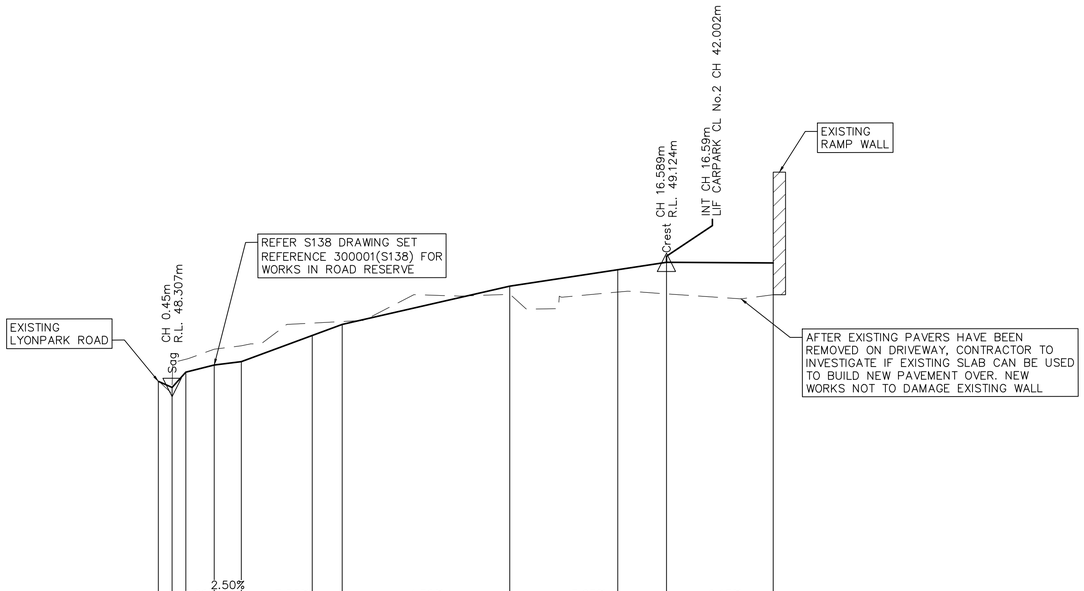
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG	– 368	2

100mm AT FULL SIZE

This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

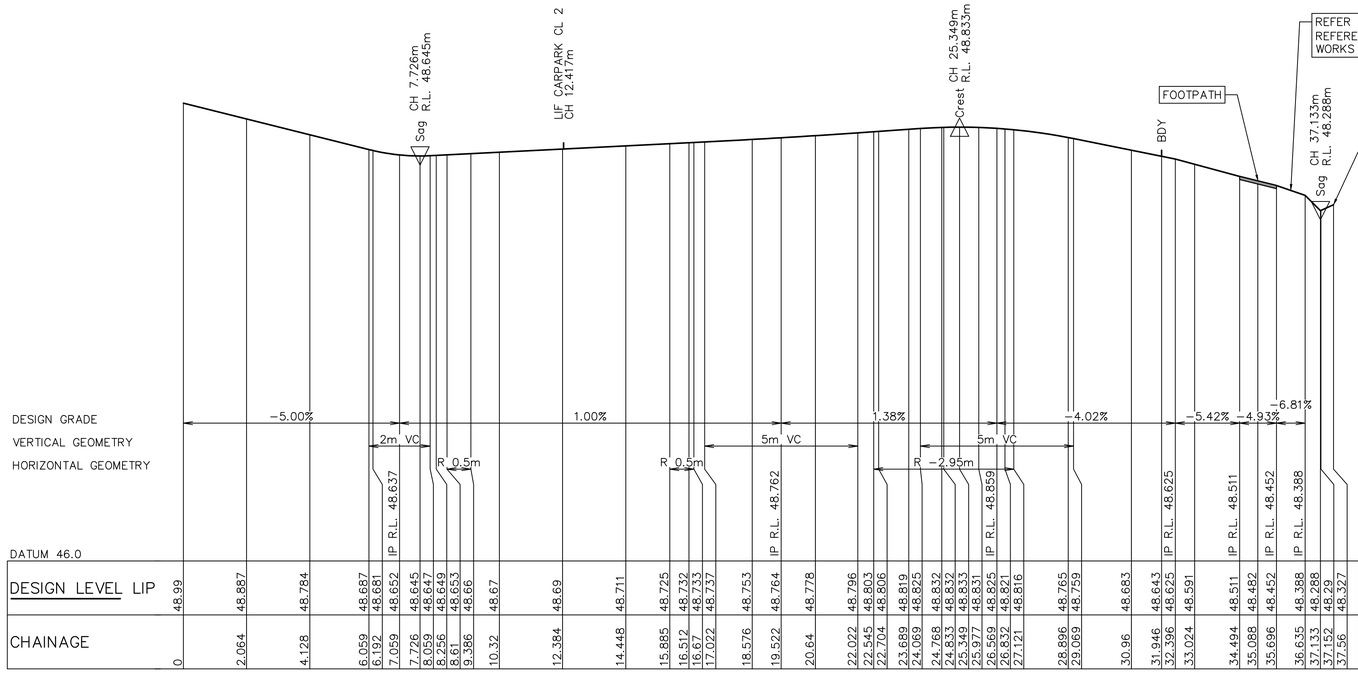
Plotted By: Mark Hoyland Plot Date: 16/05/22 2:12:08PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-368.DWG

300001(2)-ENG-369



| | | |

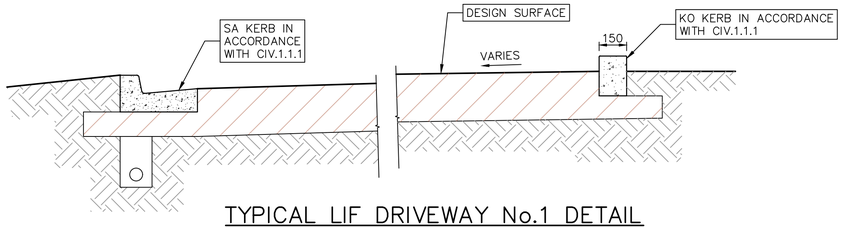
300001(2)-ENG-370



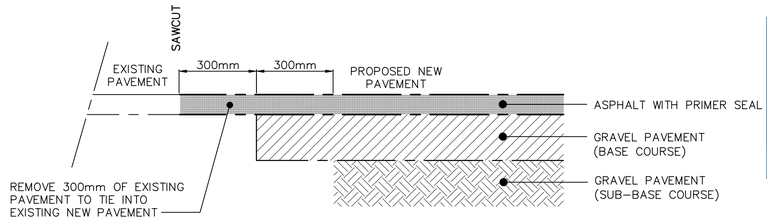
DATUM 46.0

| | | |

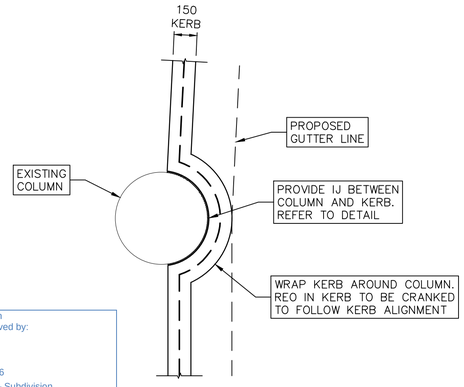
300001(2)-ENG-371



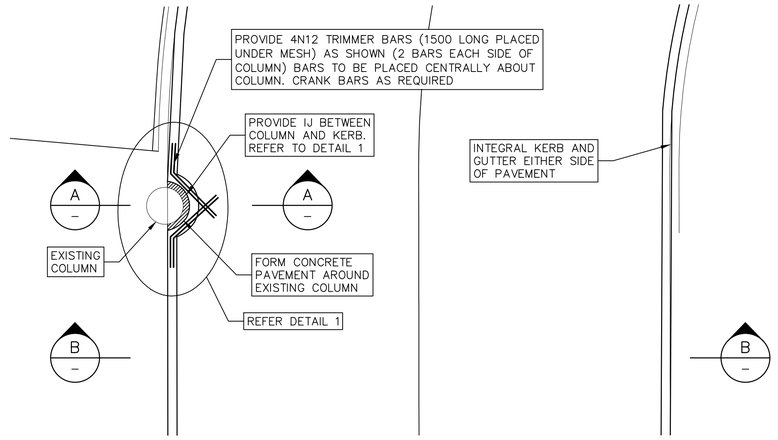
TYPICAL LIF DRIVEWAY No.1 DETAIL
NOT TO SCALE



TYPICAL SAWCUT DETAIL
SCALE 1:10

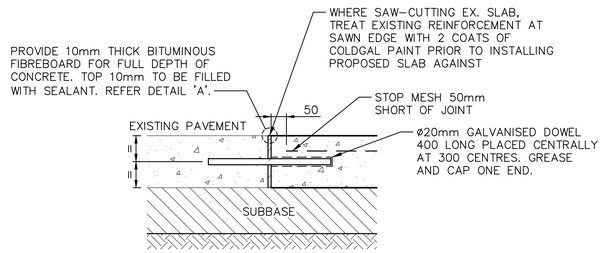


DETAIL 1
SCALE 1:20

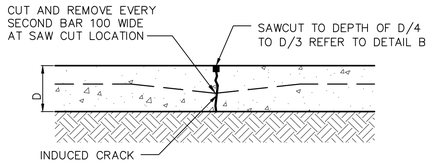


EXISTING COLUMN/DRIVEWAY DETAIL
SCALE 1:50

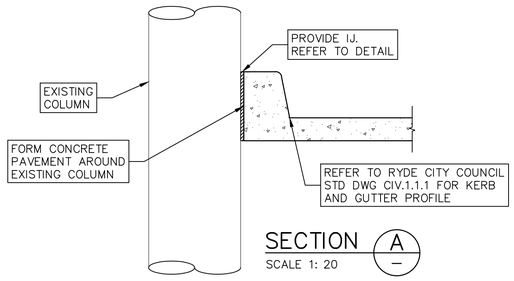
These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
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Land Development Certificates
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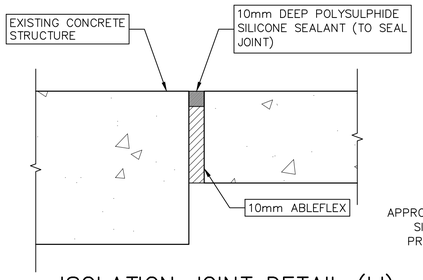
EXPANSION JOINT DETAIL (EJ)
SCALE 1:10



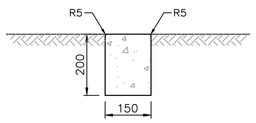
SAWN JOINT (SJ)
SCALE 1:10



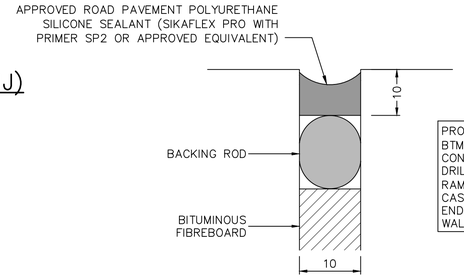
SECTION A
SCALE 1: 20



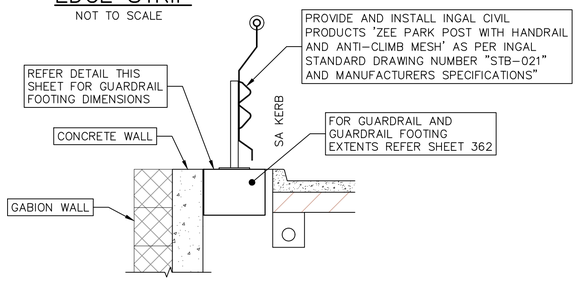
ISOLATION JOINT DETAIL (IJ)
NOT TO SCALE



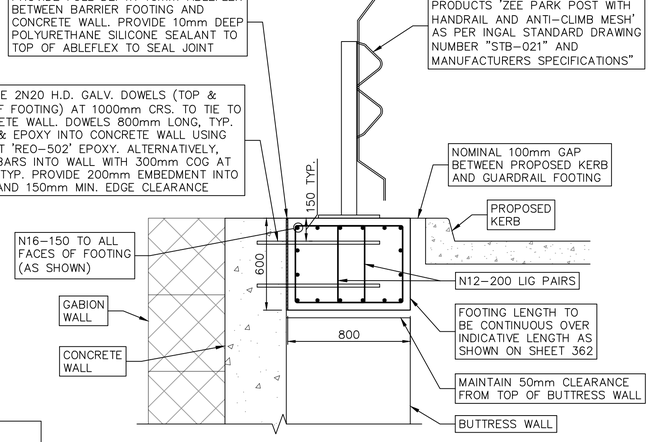
EDGE STRIP
NOT TO SCALE



DETAIL 'A'
NOT TO SCALE



TYPICAL GUARDRAIL DETAIL
NOT TO SCALE



TYPICAL GUARDRAIL FOOTING DETAIL
SCALE 1:20

NOTE:

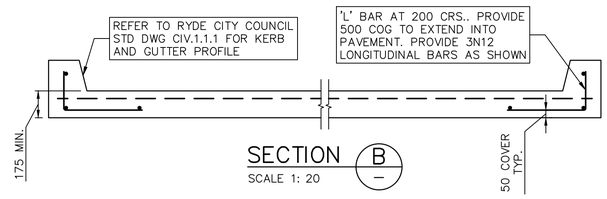
FOOTING TO EXTEND 500mm MIN. PAST OUTER GUARDRAIL POSTS. REFER SHEET 362 FOR EXTENTS, TYP.

TYPICAL GUARDRAIL FOOTING DETAILS:

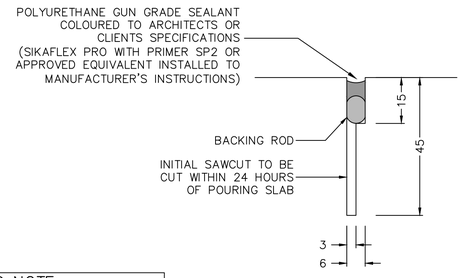
- CONCRETE GRADE – 32MPa (80mm SLUMP, 20mm AGGREGATE GP CEMENT)
- CONCRETE COVER (CAST AGAINST GROUND) – 50mm
- CONCRETE COVER (EXPOSED TO ATMOSPHERE) – 40mm

SAFETY BARRIER DESIGN LOADS NOTE:

THE 'ZEE-PARK' SAFETY BARRIER TO BE INSTALLED NEEDS TO BE DESIGNED AS A CARPARK BARRIER FOR MEDIUM VEHICLE TRAFFICABLE AREAS (MAX. 10 TONNE VEHICLES – HORIZ. IMPOSED ACTION = 40kN IN ACCORDANCE WITH SECTION 3.8 OF AS1170.1). THE MANUFACTURER SUPPLYING THE PRODUCT IS TO CONFIRM THAT THE PRODUCT SPECIFIED MEETS THIS DESIGN REQUIREMENT.



SECTION B
SCALE 1: 20



DETAIL 'B'
NOT TO SCALE

DIAL1100 BEFORE YOU DIG

CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES
A1 1:50 — 0 1.25 2.5 m — A3 1:100
A1 1:20 — 0 0.5 1.0m — A3 1:40
A1 1:10 — 0 0.25 0.5m — A3 1:20

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project
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Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION
LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: TYPICAL DETAILS & SECTIONS

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG	– 371	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:12:33PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-371.DWG

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

300001(2)-ENG-401

GENERAL NOTES: –

1. FOR TYPICAL ROAD CROSS SECTIONS, KERB PROFILES REFER SHEET 201 & PAVEMENT DETAILS REFER TO SHEET 151.
2. SETOUT INFORMATION IS TO BE VERIFIED BY THE CONTRACTOR AGAINST THE PLAN VIEW, LONGITUDINAL SECTIONS AND ELECTRONIC 12D DATA BEFORE BEING USED. IF THERE IS A DISCREPANCY THE SUPERINTENDENT IS TO BE NOTIFIED AND DIRECTION TO BE PROVIDED IN WRITING BEFORE PROCEEDING.
3. FUTURE BUILDINGS FLOWS DIRECTLY INPUT TO PITS C2\1, C3\1, C4\1, D2\1 AND D3\1 FROM RAFTS MODEL. REFER TO DA SWMP PREPARED BY ADW JOHNSON AND CALC. CHARTS FOR DETAILS.

LDC
These plans are referred to in certificate no: **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
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MGA

LEGEND
- LIMIT OF WORKS BOUNDARY
- PROPOSED LOT BOUNDARY
- EXISTING LOT BOUNDARY
- MAJOR CONTOURS
- MINOR CONTOURS
- PROPOSED KERB
- EXISTING KERB
- EXTENTS OF BATTER
- CATCHMENT BOUNDARY
- SW PROPOSED STORMWATER
- ex sw EXISTING STORMWATER
- FSW FUTURE STORMWATER
- TEMPORARY BERM
- PROPOSED SW PIT
- PROPOSED LINTEL
- PROPOSED HEADWALL
- 1\1 PIT LABEL
- 1\1 EXISTING PIT LABEL

CONTOUR INTERVAL = 0.5m

SP6737 SP7082 SP5991 DP240110 15 62 DP570271 B3

EXISTING STORMWATER TO REMAIN IN PLACE

EXCAVATE DOWN TO TOP OF PIT LEVEL AND PROVIDE RISER AND LINTEL TO SUIT FINISHED LEVELS

EXCAVATE DOWN TO TOP OF PIT LEVEL AND PROVIDE RISER AND LINTEL TO SUIT FINISHED LEVELS

TOTAL FLOW IN 100 YEAR EVENT = 111 L/s

ROAD No.1

ROAD No.2

5\3 0.0412ha
6\1 0.0723ha
7\1 0.0422ha
7\2 0.0263ha
20\1 0.1155ha
1\10 0.0315ha
1\11 0.0408ha
1\12 0.0247
1\13 0.0238ha
1\14 0.0022ha
1\15 0.0260ha
1\16 s0.0324ha
1\17 0.0498ha
17\1 0.0473ha
15\5 0.0176ha
15\4 0.0275ha
15\3 0.0271ha
15\2 0.0120ha
15\1 0.0092ha
EX 1 0.016ha
100\4 0.0007ha
100\3 0.0204ha
100\2 0.0538ha
100\1 0.0079ha
3\13 0.0157ha
13\1 0.0273ha
3\12 0.0205ha
13\1 0.0272ha
3\11 0.0056ha
3\10 0.0212ha
3\9 0.0242ha
3\8 0.0071ha
3\6 0.0273ha
3\7 0.0327ha
10\1 0.0315ha
11\1 0.0489ha
CP\1 0.3340ha
15\1 EX 0.0428ha
LIF ROOF 0.2722ha

PROVIDE STUB FROM PIT 1\16 AT 1% TO BOUNDARY AND CAP FOR FUTURE CONNECTION

FUTURE BUILDING FLOW DIRECTLY INPUT INTO PIT C4\1:
Q_{20} = 94 L/S
Q_{100} = 169 L/S

EXISTING BUILDING FLOW DIRECTLY INPUT INTO PIT 100\2:
Q_{20} = 120 L/S
Q_{100} = 180 L/S

FUTURE BUILDING FLOW DIRECTLY INPUT INTO PIT C3\1:
Q_{20} = 72 L/S
Q_{100} = 122 L/S

EXCAVATE DOWN TO TOP OF PIT LEVEL AND PROVIDE RISER AND LINTEL TO SUIT FINISHED LEVELS

TEMPORARY BERMS. REFER SHEET 202 FOR DETAILS

FUTURE BUILDING FLOW DIRECTLY INPUT INTO PIT D3\1:
Q_{20} = 70.5 L/S
Q_{100} = 113.5 L/S

FUTURE BUILDING FLOW DIRECTLY INPUT INTO PIT D2\1:
Q_{20} = 70.5 L/S
Q_{100} = 113.5 L/S

C1 C2 C3 C4 D1 D2 D3 D4

ROAD
LYONPARK
CREEK
SHRIMPTONS
101 DP1263727
1 DP880284

CAUTION:
1. IT IS THE RESPONSIBILITY OF THE CIVIL WORKS CONTRACTOR TO DETERMINE THE LOCATION & LEVEL OF EXISTING SERVICES USING NON DESTRUCTIVE METHODS PRIOR TO COMMENCING WORKS ON SITE.

DIAL1100 BEFORE YOU DIG

STORMWATER CATCHMENT PLAN

SCALE 1:500

CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:500; A3 1:1000 (0, 12.5, 25.0m)

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email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: STORMWATER CATCHMENT PLAN

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG	– 401	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:12:42PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)–ENG–401.DWG

100mm AT FULL SIZE

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300001(2)-ENG-411

STORMWATER SETOUT			
PIT NAME	PIT TYPE	EASTING m	NORTHING m
1\1	1.8m LINTEL	325526.5	6260581.128
1\2	1.8m LINTEL	325519.789	6260572.772
1\3	1.8m LINTEL	325524.011	6260556.871
1\4	1.8m LINTEL	325527.843	6260540.363
1\5	1.8m LINTEL	325542.088	6260526.612
1\6	1.8m LINTEL	325539.014	6260519.544
1\7	1.8m LINTEL	325566.432	6260495.349
1\8	1.8m LINTEL	325578.784	6260481.221
1\9	1.8m LINTEL	325596.857	6260465.409
1\10	1.8m LINTEL (CUSTOM PIT)	325619.37	6260445.713
1\11	1.8m LINTEL	325648.216	6260420.476
1\12	1.8m LINTEL	325666.28	6260404.672
1\12A	1.8m LINTEL	325671.584	6260403.354
1\13	1.8m LINTEL	325686.503	6260389.795
1\14	1.8m LINTEL (CUSTOM PIT)	325703.326	6260375.583
1\15	1.8m LINTEL (CUSTOM PIT)	325721.158	6260356.661
1\16	2.4m LINTEL SAG (CUSTOM PIT)	325740.346	6260343.779
1\17	1.8m LINTEL (CUSTOM PIT)	325752.48	6260337.269
1\18	HEADWALL OUTLET	325783.977	6260336.887
3\1	900 x 900 GSIP	325471.604	6260457.855
3\2	1.8m LINTEL	325480.351	6260457.062
3\3	1.8m LINTEL	325499.773	6260440.064
3\4	1.8m LINTEL	325527.657	6260415.668
3\5	1.8m LINTEL	325551.836	6260394.514
3\6	1.8m LINTEL	325586.146	6260364.496
3\7	1.8m LINTEL	325627.755	6260328.092
3\8	1.2m LINTEL	325634.491	6260322.198
3\9	1.8m LINTEL (CUSTOM PIT)	325650.523	6260336.675
3\10	1.8m LINTEL (CUSTOM PIT)	325658.99	6260337.24
3\11	1.8m LINTEL (CUSTOM PIT)	325665.2	6260344.338
3\12	1.8m LINTEL (CUSTOM PIT)	325686.757	6260368.912
3\13	2.4m LINTEL SAG (CUSTOM PIT)	325691.718	6260373.144
6\1	1.8m LINTEL	325674.181	6260413.704
1\12	1.8m LINTEL	325666.28	6260404.672
7\1	1.8m LINTEL	325702.365	6260389.042
7\2	1.8m LINTEL	325721.215	6260372.553
10\1	1.8m LINTEL	325587.18	6260374.885
11\1	1.8m LINTEL	325630.856	6260336.674
12\1	1.8m LINTEL	325658.803	6260349.935
13\1	1.8m LINTEL	325679.167	6260373.195
13\2	2.4m LINTEL SAG	325686.532	6260377.832
15\1 EX	900 x 900 GSIP	325874.713	6260231.199
15\1	2.4m LINTEL SAG	325874.259	6260241.271
15\2	900 x 900 GSIP	325864.563	6260254.225
15\3	1.8m LINTEL	325864.144	6260259.942
15\4	1.8m LINTEL	325842.835	6260277.303
15\5	1.8m LINTEL	325820.092	6260293.644
15\6	HW OUT	325794.535	6260317.883
17\1	1.8m LINTEL	325826.278	6260297.705
19\1	1.8m LINTEL	325853.386	6260278.087
20\1	2.4m LINTEL SAG	325744.304	6260349.553
100\1	1.8m LINTEL	325830.769	6260274.678
100\2	900 x 900 VGRATE	325802.891	6260283.152
100\3	2.4m LINTEL SAG	325796.339	6260286.568
100\4	1.8m LINTEL	325803.852	6260298.254
100\5	900 x 900 JUNCTION	325799.864	6260301.971
15\6	HW OUT	325794.521	6260317.849
101\1	900 x 900 JUNCTION	325877.656	6260246.531
101\2	900 x 900 JUNCTION	325870.985	6260254.047
C2\1	900 x 900 GSIP	325610.153	6260446.469
C3\1	900 x 900 GSIP	325664.535	6260397.56
C4-2\1	2.4m LINTEL SAG	325740.346	6260343.768
CP\1	900 x 900 GSIP	325659.577	6260401.568
D2\1	900 x 900 GSIP	325582.76	6260362.144

2

2

100mm AT FULL SIZE

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Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
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2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES

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CLIENT

FRASERS PROPERTY

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EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: STORMWATER SETOUT TABLE & DETAILS

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	411	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:12:46PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-411.DWG

300001(2)-ENG-421

20 YEAR HYDROLOGICAL DESIGN

PIT NAME	PIT DETAILS	AREA	IMPER.	PER.	tc IMPER.	tc PER.	INTENSITY	RUNOFF C IMPER.	RUNOFF C PER.	CRITICAL SUM CA	CATCHMENT FLOW	BYPASS ARRIVING	TOTAL FLOW @ PIT	PIT INLET FLOW	PIT BYPASS FLOW	BYPASS PIT	Ku	GUTTER SLOPE	FLOODED DEPTH	FLOW WIDTH	VELOCITYx DEPTH	MAX POND DEPTH	CHOKE FACTOR	NOTES
		ha	%	%	min	min	mm/hr				L/s	L/s	L/s	L/s	L/s			%	m	m		m	1=NONE	
1\1	1.8m LINTEL	0.052	90	10	5	5	195	0.945	0.5362	0.047	25		25	25	0	18\2	3.6	11.9	0.05	0.79	0.08		1	
1\2	1.8m LINTEL	0.0686	90	10	5	5	195	0.945	0.5362	0.062	34		34	33	1	1\3	2.8	14.5	0.05	0.85	0.1		1	
1\3	1.8m LINTEL	0.0173	90	10	5	5	195	0.945	0.5362	0.016	8		9	9	0	1\4	0.8	13	0.03	0.38	0.05		1	
1\4	1.8m LINTEL	0.0118	90	10	5	5	195	0.945	0.5362	0.011	6		6	6	0	2\5	0.8	10.1	0.03	0.33	0.03		1	
1\5	1.8m LINTEL	0.0299	90	10	5	5	195	0.945	0.5362	0.027	15		15	15	0	4\1	1.7	6.2	0.05	0.75	0.05		1	
1\6	1.8m LINTEL	0.0249	90	10	5	5	195	0.945	0.5362	0.023	12		12	12	0	1\7	0.6	5	0.05	0.72	0.04		1	
1\7	1.8m LINTEL	0.0368	90	10	5	5	195	0.945	0.5362	0.033	18		18	18	0	1\8	0.4	5	0.05	0.94	0.05		1	
1\8	1.8m LINTEL	0.0205	90	10	5	5	195	0.945	0.5362	0.019	10		10	10	0	1\9	0.4	4.9	0.04	0.59	0.04		1	
1\9	1.8m LINTEL	0.025	90	10	5	5	195	0.945	0.5362	0.023	12		12	12	0	1\10	0.4	3.3	0.05	0.85	0.04		1	
1\10	1.8m LINTEL	0.0315	90	10	5	5	195	0.945	0.5362	0.028	15		15	15	0	1\11	1.7	3.9	0.05	0.91	0.05		1	
1\11	1.8m LINTEL	0.0408	90	10	5	5	195	0.945	0.5362	0.037	20		20	20	0	1\12	0.3	5.7	0.05	0.98	0.06		1	
1\12	1.8m LINTEL	0.0247	90	10	5	5	195	0.945	0.5362	0.022	12		12	12	0	1\12A	0.7	7.1	0.04	0.54	0.05		1	
1\12A	1.8m LINTEL		90	10	5	5	0			0	0		0	0	0	1\13	1	7.1					1	
1\13	1.8m LINTEL	0.0268	90	10	5	5	195	0.945	0.5362	0.024	13		13	13	0	13\2	0.3	5	0.05	0.49	0.05		1	
1\14	1.8m LINTEL	0.0022	50	50	5	5	195	0.945	0.5362	0.002	1		1	1	0	1\15	0.3	0.8	0.02	0.27	0.01		1	
1\15	1.8m LINTEL	0.026	90	10	5	5	195	0.945	0.5362	0.024	13		13	13	0	1\16	0.4	0.8	0.06	1.35	0.03		1	
1\16	2.4m LINTEL SAG	0.0324	90	10	5	5	195	0.945	0.5362	0.029	16		16	16	0	20\1	0.2	0.1	0.03			0.12	1	
1\17	1.8m LINTEL	0.0498	90	10	5	5	195	0.945	0.5362	0.045	24		24	24	0	C4-2\1	0.6	0.8	0.07	1.85	0.04		1	
1\18	HEADWALL OUTLET		90		5	5																		
3\2	1.8m LINTEL	0.0067	90	10	5	5	195	0.945	0.5362	0.006	3	0	3	3	0	3\3	0.7	11.8	0.03	0.36	0.02		1	
3\3	1.8m LINTEL	0.0152	90	10	5	5	195	0.945	0.5362	0.014	7	0	7	7	0	3\4	0.6	6.9	0.03	0.39	0.04		1	
3\4	1.8m LINTEL	0.0219	90	10	5	5	195	0.945	0.5362	0.02	11	0	11	11	0	3\5	0.7	6.9	0.04	0.45	0.05		1	
3\5	1.8m LINTEL	0.0193	90	10	5	5	195	0.945	0.5362	0.017	9	0	9	9	0	3\6	0.6	6.5	0.04	0.43	0.04		1	
3\6	1.8m LINTEL	0.0273	90	10	5	5	195	0.945	0.5362	0.025	13	0	13	13	0	3\7	0.4	5	0.05	0.75	0.05		1	
3\7	1.8m LINTEL	0.0327	90	10	5	5	195	0.945	0.5362	0.03	16	0	16	16	0	3\8	0.4	3.3	0.05	1.02	0.04		1	
3\8	1.2m LINTEL	0.0071	90	10	5	5	195	0.945	0.5362	0.006	3	0	3	3	0	3\10	1.6	2.1	0.03	0.36	0.02		1	
3\9	1.8m LINTEL	0.0242	90	10	5	5	195	0.945	0.5362	0.022	12	0	12	12	0	12\1	0.6	3.7	0.05	0.79	0.04		1	
3\10	1.8m LINTEL	0.0212	90	10	5	5	195	0.945	0.5362	0.019	10	0	10	10	0	3\11	0.6	4	0.04	0.64	0.04		1	
3\11	1.8m LINTEL	0.0056	90	10	5	5	195	0.945	0.5362	0.005	3	0	3	3	0	3\12	0.6	4.3	0.03	0.3	0.02		1	
3\12	1.8m LINTEL	0.0205	90	10	5	5	195	0.945	0.5362	0.019	10	0	10	10	0	3\13	0.3	2	0.05	0.97	0.03		1	
3\13	2.4m LINTEL SAG	0.0157	90	10	5	5	195	0.945	0.5362	0.014	8	0	8	8	0	1\14	0.5	0.5	0.02			0.05	1	
6\1	1.8m LINTEL	0.0723	90	10	5	5	195	0.945	0.5362	0.065	35	1	36	35	1	7\1	3.6	7.1	0.06	1.35	0.08		1	
7\1	1.8m LINTEL	0.0422	90	10	5	5	195	0.945	0.5362	0.038	21	0	21	21	0	7\2	3.6	1.3	0.07	1.62	0.04		1	
7\2	1.8m LINTEL	0.0263	90	10	5	5	195	0.945	0.5362	0.024	13	0	13	13	0	20\1	1.9	0.8	0.06	1.32	0.03		1	
10\1	1.8m LINTEL	0.0315	90	10	5	5	195	0.945	0.5362	0.029	15	0	15	15	0	11\1	3.6	5	0.05	0.88	0.05		1	
11\1	1.8m LINTEL	0.0489	90	10	5	5	195	0.945	0.5362	0.044	24	0	24	24	0	3\9	3.6	3.5	0.06	1.27	0.05		1	
12\1	1.8m LINTEL	0.0128	90	10	5	5	195	0.945	0.5362	0.012	6	0	6	6	0	13\1	3.6	4.4	0.03	0.4	0.03		1	
13\1	1.8m LINTEL	0.0272	90	10	5	5	195	0.945	0.5362	0.025	13	0	13	13	0	13\2	3.6	2.3	0.05	1.08	0.04		1	
13\2	2.4m LINTEL SAG	0.0273	90	10	5	5	195	0.945	0.5362	0.025	13	0	13	13	0	3\13	0.9	0.5	0.02			0.06	1	
15\1 EX	900 x 900 GSIP	0.0428	90	10	5	5	195	0.945	0.5362	0.039	21	0	21	21	0		3.6						1	
15\1	2.4m LINTEL SAG	0.0092	90	10	5	5	195	0.945	0.5362	0.008	4	0	4	4	0		1.2	3.6	0.01			0.15	1	
15\2	900 x 900 GSIP	0.012	50	50	5	5	195	0.945	0.5362	0.009	5	0	5	5	0		0.6	1					1	
15\3	1.8m LINTEL	0.0271	90	10	5	5	195	0.945	0.5362	0.024	13	0	13	13	0	15\4	0.6	1.4	0.06	1.18	0.03		1	
15\4	1.8m LINTEL	0.0275	90	10	5	5	195	0.945	0.5362	0.025	13	0	13	13	0	15\5	0.3	1					1	
15\5	1.8m LINTEL	0.0176	90	10	5	5	195	0.945	0.5362	0.016	9	0	9	9	0	1\17	1.5	0.9	0.05	1.02	0.02		1	
15\6	HW OUT		90		5	5						0												
17\1	1.8m LINTEL	0.0473	90	10	5	5	195	0.945	0.5362	0.043	23	0	23	23	0	20\1	3.6	0.9	0.07	1.7	0.04		1	
20\1	2.4m LINTEL SAG	0.1155	90	10	5	5	195	0.945	0.5362	0.104	57	0	57	57	0		3.6	0.1	0.06			0.12	1	
100\1	1.8m LINTEL	0.0079	100	0	5	5	195	0.945	0	0.007	4	0	4	4	0	100\2	3.6	4	0.03	0.37	0.02	0	1	0
100\2	900 x 900 VGRATE	0.0538	80	20	5	5	195	0.945	0.5362	0.046	25	0	25	24	1	100\3	2	1.8	0.05	1.95	0.03	0	1	0
100\3	2.4m LINTEL SAG	0.0204	95	5	5	5	195	0.945	0.5362	0.019	10	1	11	11	0	0	2.1	2.3	0.02	0	0	0.15	1	0
100\4	1.8m LINTEL	0.0007	90	10	5	5	195	0.945	0.5362	0.001	0	0	0	0	0	0	2.1	5.8	0	0	0	0	1	0
100\5	900 x 900 JUNCTION	0	90	10	5	5	0	0	0	0	0	0	0	0	0	0	2.1	0	0	0	0	0	1	0
15\6	HW OUT		90		5	5						0												
101\1	900 x 900 JUNCTION		90	10	5	5	0			0	0	0	0	0	0		0						1	
101\2	900 x 900 JUNCTION		90	10	5	5	0			0	0	0	0	0	0		0.2	1.4					1	
C2\1	900 x 900 GSIP		90	10	5	5	0			0	0	0	0	0	0		0						1	
C3\1	900 x 900 GSIP		90	10	5	5	0			0	0	0	0	0	0		0						1	
C4\1	900 x 900 JUNCTION		90	10	5	5	0			0	0	0	0	0	0		0						1	
CP\1	900 x 900 GSIP	0.334	10	90	5	8	165	0.945	0.5362	0.193	88	0	88	88	0		4.1						1	
D2\1	900 x 900 GSIP		90	10	5	5	0			0	0	0	0	0	0		0						1	
D3\1	900 x 900 GSIP		90	10	5	5	0			0	0	0	0	0	0		0						1	

20 YEAR HYDRAULIC DESIGN

REACH	TYPE	LENGTH	DIA.	U/S IL	D/S IL	PIPE GRADE	PIPE FLOW	PIPE VELOCITY	U/S HGL	D/S HGL	GRADE HGL	U/S PIT Ku
		m	mm	m	m	%	L/s	m/s	m	m	%	
1\1 to 1\2	RCP CLASS 4	10.7	375	62.09	61.13	9	25	2.9	62.2	61.31	8.35	3.6
1\2 to 1\3	RCP CLASS 4	16.5	375	61.1	59.29	11	58	4	61.27	59.36	11.63	2.8
1\3 to 1\4	RCP CLASS 4	16.9	375	59.1	56.9	13	88	4.8	59.32	57.11	13.01	0.8
1\4 to 1\5	RCP CLASS 4	19.8	375	56.86	55.67	6	93	3.7	57.09	55.96	5.68	0.8
1\5 to 1\6	RCP CLASS 4	7.7	375	55.64	55.36	3.62	106	3.2	55.88	55.87	0.08	1.7
1\6 to 1\7	RCP CLASS 4	36.6	450	55.28	53.46	5	378	4.9	55.7	53.99	4.66	0.6
1\7 to 1\8	RCP CLASS 4	18.8	450	53.42	52.48	5	409	5	53.84	52.71	6.02	0.4
1\8 to 1\9	RCP CLASS 4	24	450	52.13	51.23	3.75	417	4.5	52.56	51.79	3.2	0.4
1\9 to 1\10	RCP CLASS 4	29.9	525	51.16	50.34	2.75	574	4.3	51.64	50.65	3.33	0.4
1\10 to 1\11	RCP CLASS 4	38.3	525	48.17	47.79	1	703	3.2	48.89	48.45	1.14	1.7
1\11 to 1\12	RCP CLASS 4	24	525	47.75	47.27	2	716	3.9	48.26	47.69	2.37	0.3
1\12 to 1\12A	RCP CLASS 4	5.5	600	46.76	46.48	5	837	5.9	47.32	46.78	9.79	0.7
1\12A to 1\13	RCP CLASS 4	20.2	600	45.34	45.14	1.01	909	3.2	46.16	45.86	1.49	1
1\13 to 1\14	RCP CLASS 4	22	600	45.14	44.8	1.53	917	3.7	45.71	45.31	1.85	0.3
1\14 to 1\15	RCP CLASS 4	26	900	44.5	44.24	1	1451	3.6	45.22	44.88	1.3	0.3
1\15 to 1\16	RCP CLASS 4	23.1	1050	44.09	43.86	1	1579	3.7	44.81	44.72	0.39	0.4
1\16 to 1\17	RCP CLASS 4	13.8	1200	43.71	43.57	1	1637	3.7	44.7	44.71	-0.07	0.2
1\17 to 1\18	RCP CLASS 4	31.5	1200	41.77	41.46	1	1653	3.7	44.64	44.6	0.14	0.6
3\1 to 3\2	RCP CLASS 4	8.8	375	59.96	59.24	4	70	2.9	59.79	59.42	4.15	0
3\2 to 3\3	RCP CLASS 4	25.8	375	59.21	57.85	5.25	73	3.3	59.4	58.04	5.28	0.7
3\3 to 3\4	RCP CLASS 4	37.1	375	57.82	55.31	6.77	81	3.7	58.02	55.56	6.65	0.6
3\4 to 3\5	RCP CLASS 4	32.1	375	55.27	53.19	6.5	114	4	55.52	53.42	6.56	0.7
3\5 to 3\6	RCP CLASS 4	45.6	375	52.89	50.61	5	274	4.5	53.24	50.95	5.02	0.6
3\6 to 3\7	RCP CLASS 4	55.3	450	50.42	47.66	5	370	4.9	50.84	48.39	4.43	0.4
3\7 to 3\8	RCP CLASS 4	9	450	47.62	47.36	3	404	4.1	48.26	48.14	1.34	0.4
3\8 to 3\9	RCP CLASS 4	21.6	525	47.28	46.74	2.5	478	4	47.74	47.32	1.93	1.6
3\9 to 3\10	RCP CLASS 4	8.5	525	46.71	46.49	2.5	488	4	47.17	46.98	2.28	0.6
3\10 to 3\11	RCP CLASS 4	9.4	600	46.42	46.18	2.5	496	4	46.88	46.71	1.8	0.6
3\11 to 3\12	RCP CLASS 4	32.7	600	46.15	45.33	2.5	504	4	46.61	45.82	2.43	0.6
3\12 to 3\13	RCP CLASS 4	6.5	600	45.3	45.13	2.5	511	4	45.76	45.43	5.16	0.3
3\13 to 1\14	RCP CLASS 4	11.9	675	44.85	44.73	1	614	3	45.35	45.32	0.21	0.5
												1.7
6\1 to 1\12	RCP CLASS 4	12	375	47.34	47.22	1	35	1.5	47.95	47.95	0.03	3.6
												0.9
7\1 to 7\2	RCP CLASS 4	25	375	44.93	44.68	1	21	1.3	45.04	44.88	0.61	3.6
7\2 to 1\15	RCP CLASS 4	15.9	375	44.65	44.49	1	34	1.4	44.88	44.88	-0.02	1.9
												0.6
10\1 to 3\6	RCP CLASS 4	10.4	375	50.8	50.61	1.85	15	1.4	50.95	50.95	-0.04	3.6
												0.4
11\1 to 3\7	RCP CLASS 4	9.1	375	48.06	47.97	1	24	1.3	48.39	48.39	0	3.6
												0.4
12\1 to 3\11	RCP CLASS 4	8.5	375	46.57	46.49	1	6	0.9	46.71	46.71	-0.01	3.6
												0.6
13\1 to 13\2	RCP CLASS 4	8.7	375	45.59	45.5	1	13	1.1	45.67	45.56	1.22	3.6
13\2 to 3\13	RCP CLASS 4	7	375	44.95	44.88	1	99	1.9	45.44	45.43	0.21	0.9
												1.6
15\1 EX to 15\1	RCP CLASS 4	10.1	375	47.2	46.92	2.72	21	1.8	47.3	47.01	2.93	3.6
15\1 to 15\2	RCP CLASS 4	16.2	375	46.89	46.73	1	25	1.3	47	46.82	1.14	1.2
15\2 to 15\3	RCP CLASS 4	5.7	375	46.69	46.64	1	30	1.4	46.82	46.73	1.53	0.6
15\3 to 15\4	RCP CLASS 4	27.5	525	44.02	43.75	1	573	2.6	45.99	45.66	1.2	0.6
15\4 to 15\5	RCP CLASS 4	28	525	43.72	43.44	1	585	2.7	45.56	45.21	1.25	0.3
15\5 to 15\6	RCP CLASS 4	35.2	525	42.59	41.47	3.18	614	4.6	44.58	44.1	1.37	1.5
17\1 to 15\5	RCP CLASS 4	7.4	375	46.08	46	1	23	1.3	46.19	46.09	1.36	3.6
												0.8
19\1 to 15\4	RCP CLASS 4	10.6	375	46.41	46.3	1	12	1.1	46.65	46.65	0	3.6
												0.3
20\1 to 1\16	RCP CLASS 4	7	375	45.28	45.21	1	56	1.7	45.45	45.34	1.6	3.6
100\1 to 100\2	RCP CLASS 4	29.1	375	45.17	44.87	1	4	0.8	45.46	45.46	0	3.6
100\2 to 100\3	RCP CLASS 4	7.4	375	44.84	44.77	1	148	2.1	45.28	45.24	0.47	2
100\3 to 100\4	RCP CLASS 4	13.9	375	44.73	44.31	3	159	3.3	45.02	44.48	3.89	2.1
100\4 to 100\5	RCP CLASS 4	5.5	375	42.69	42.63	1	159	2.1	42.98	42.87	1.98	2.1
100\5 to 15\6	RCP CLASS 4	16.8	375	42.14	41.47	4	159	3.6	42.43	41.63	4.82	2.1
101\1 to 101\2	RCP CLASS 4	10	525	44.27	44.17	1	530	2.7	46.47	46.36	1.03	0
101\2 to 15\3	RCP CLASS 4	9	525	44.14	44.05	1	530	2.7	46.3	46.2	1.03	0.2
												0.6
C2\1 to 1\10	RCP CLASS 4	9.2	375	48.3	48.21	1	72	1.8	49.47	49.46	0.12	0
												1.7
C3\1 to 1\12A	RCP CLASS 4	9.1	375	45.47	45.38	1	72	1.8	46.7	46.69	0.12	0
												1
C4\1 to 1\15	RCP CLASS 4	5.6	375	44.8	44.74	1	94	1.9	45.03	44.92	1.93	0
												0.4
CP\1 to 1\12	RCP CLASS 4	7.4	375	47.22	47.14	1	88	1.9	47.96	47.95	0.17	4.1
												0.9
												0.6
D2\1 to 3\6	RCP CLASS 4	4.1	375	50.5	50.46	1	71	1.8	50.96	50.95	0.11	0
												0.4
D3\1 to 3\8	RCP CLASS 4	5.2	375	47.41	47.36	1	71	1.8	48.15	48.14	0.11	0

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
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DIAL1100
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

SCALES

ALL DIMENSIONS ARE IN METRES. DO NOT SCALE

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Central Coast
5 Pioneer Avenue,
P.O. Box 3717,
Tuggerah N.S.W. 2259
Phone: (02) 4305 4300
Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
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ABN 62 129 445 398

CLIENT

FRASERS PROPERTY

PROPERTY DESCRIPTION

LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED ADW Johnson

DATUM GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT PROPOSED SUBDIVISION

PLAN TITLE STORMWATER CALCULATION CHARTS
20 YEAR A.R.I.

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	421	2

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:12:51PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-421.DWG

300001(2)-ENG-422

100 YEAR HYDROLOGICAL DESIGN

PIT NAME	PIT DETAILS	AREA	IMPER.	PER.	tc IMPER.	tc PER.	INTENSITY	RUNOFF C IMPER.	RUNOFF C PER.	CRITICAL SUM CA	CATCHMENT FLOW	BYPASS ARRIVING	TOTAL FLOW @ PIT	PIT INLET FLOW	PIT BYPASS FLOW	BYPASS PIT	Ku	GUTTER SLOPE	FLOODED DEPTH	FLOW WIDTH	VELOCITYx DEPTH	MAX POND DEPTH	CHOKE FACTOR 1=NONE	NOTES
		ha	%	%	min	min	mm/hr				L/s	L/s	L/s	L/s	L/s			%	m	m		m		
1\1	1.8m LINTEL	0.052	90	10	5	5	195	0.945	0.5362	0.047	25		25	25	0	18\2	3.6	11.9	0.05	0.79	0.08			1	
1\2	1.8m LINTEL	0.0686	90	10	5	5	195	0.945	0.5362	0.062	34		34	33	1	1\3	2.8	14.5	0.05	0.85	0.1			1	
1\3	1.8m LINTEL	0.0173	90	10	5	5	195	0.945	0.5362	0.016	8		9	9	0	1\4	0.8	13	0.03	0.38	0.05			1	
1\4	1.8m LINTEL	0.0118	90	10	5	5	195	0.945	0.5362	0.011	6		6	6	0	2\5	0.8	10.1	0.03	0.33	0.03			1	
1\5	1.8m LINTEL	0.0299	90	10	5	5	195	0.945	0.5362	0.027	15		15	15	0	4\1	1.7	6.2	0.05	0.75	0.05			1	
1\6	1.8m LINTEL	0.0249	90	10	5	5	195	0.945	0.5362	0.023	12		12	12	0	1\7	0.6	5	0.05	0.72	0.04			1	
1\7	1.8m LINTEL	0.0368	90	10	5	5	195	0.945	0.5362	0.033	18		18	18	0	1\8	0.4	5	0.05	0.94	0.05			1	
1\8	1.8m LINTEL	0.0205	90	10	5	5	195	0.945	0.5362	0.019	10		10	10	0	1\9	0.4	4.9	0.04	0.59	0.04			1	
1\9	1.8m LINTEL	0.025	90	10	5	5	195	0.945	0.5362	0.023	12		12	12	0	1\10	0.4	3.3	0.05	0.85	0.04			1	
1\10	1.8m LINTEL	0.0315	90	10	5	5	195	0.945	0.5362	0.028	15		15	15	0	1\11	1.7	3.9	0.05	0.91	0.05			1	
1\11	1.8m LINTEL	0.0408	90	10	5	5	195	0.945	0.5362	0.037	20		20	20	0	1\12	0.3	5.7	0.05	0.98	0.06			1	
1\12	1.8m LINTEL	0.0247	90	10	5	5	195	0.945	0.5362	0.022	12		12	12	0	1\12A	0.7	7.1	0.04	0.54	0.05			1	
1\12A	1.8m LINTEL		90	10	5	5	0			0	0		0	0	0	1\13	1	7.1						1	
1\13	1.8m LINTEL	0.0268	90	10	5	5	195	0.945	0.5362	0.024	13		13	13	0	13\2	0.3	5	0.05	0.49	0.05			1	
1\14	1.8m LINTEL	0.0022	50	50	5	5	195	0.945	0.5362	0.002	1		1	1	0	1\15	0.3	0.8	0.02	0.27	0.01			1	
1\15	1.8m LINTEL	0.026	90	10	5	5	195	0.945	0.5362	0.024	13		13	13	0	1\16	0.4	0.8	0.06	1.35	0.03			1	
1\16	2.4m LINTEL SAG	0.0324	90	10	5	5	195	0.945	0.5362	0.029	16		16	16	0	20\1	0.2	0.1	0.03			0.12		1	
1\17	1.8m LINTEL	0.0498	90	10	5	5	195	0.945	0.5362	0.045	24		24	24	0	C4-2\1	0.6	0.8	0.07	1.85	0.04			1	
1\18	HEADWALL OUTLET		90		5	5																			
3\1	1.8m LINTEL	0.0067	90	10	5	5	247	1	0.6128	0.005	4	0	4	4	1	3\2	0.7	11.8	0.04	0.41	0.02			0.8	
3\2	1.8m LINTEL	0.0152	90	10	5	5	247	1	0.6128	0.015	10	1	11	9	2	3\4	0.5	6.9	0.04	0.45	0.05			0.8	
3\3	1.8m LINTEL	0.0219	90	10	5	5	247	1	0.6128	0.021	14	3	17	13	3	3\5	0.6	6.9	0.05	0.79	0.06			0.8	
3\4	1.8m LINTEL	0.0193	90	10	5	5	247	1	0.6128	0.019	13	3	16	13	3	3\6	0.5	6.5	0.05	0.79	0.05			0.8	
3\5	1.8m LINTEL	0.0273	90	10	5	5	247	1	0.6128	0.026	18	3	21	17	4	3\7	0.4	5	0.05	1.05	0.06			0.8	
3\6	1.8m LINTEL	0.0327	90	10	5	5	247	1	0.6128	0.031	22	4	26	0	26	3\8	0.2	3.3	0.06	1.34	0.06			0.8	
3\7	1.2m LINTEL	0.0071	90	10	5	5	247	1	0.6128	0.007	5	25	30	23	8	3\10	1.3	2.1	0.07	1.58	0.06			0.8	
3\8	1.8m LINTEL	0.0242	90	10	5	5	247	1	0.6128	0.023	16	9	25	20	5	12\1	0.6	3.7	0.06	1.26	0.06			0.8	
3\9	1.8m LINTEL	0.0212	90	10	5	5	247	1	0.6128	0.02	14	8	22	17	4	3\11	0.6	4	0.06	1.14	0.05			0.8	
3\10	1.8m LINTEL	0.0056	90	10	5	5	247	1	0.6128	0.005	4	4	8	6	2	3\12	0.6	4.3	0.04	0.44	0.04			0.8	
3\11	1.8m LINTEL	0.0205	90	10	5	5	247	1	0.6128	0.02	14	1	15	12	3	3\13	0.3	2	0.06	1.26	0.04			0.8	
3\12	2.4m LINTEL SAG	0.0157	90	10	5	5	247	1	0.6128	0.015	10	3	13	13	0	1\14	0.5	0.5	0.04			0.05		0.5	
3\13	1.8m LINTEL	0.0723	90	10	5	5	247	1	0.6128	0.07	48	11	59	2	58	7\1	3.6	7.1	0.07	1.7	0.1			0.8	
6\1	1.8m LINTEL	0.0422	90	10	5	5	247	1	0.6128	0.041	28	58	86	54	32	7\2	3.6	1.3	0.1	2.92	0.08			0.8	
7\1	1.8m LINTEL	0.0263	90	10	5	5	247	1	0.6128	0.025	17	32	49	35	14	20\1	1.7	0.8	0.09	2.47	0.05			0.8	
7\2	1.8m LINTEL	0.0315	90	10	5	5	247	1	0.6128	0.03	21	6	27	21	5	11\1	3.6	5	0.06	1.23	0.06			0.8	
10\1	1.8m LINTEL	0.0489	90	10	5	5	247	1	0.6128	0.047	32	6	38	29	9	3\9	3.6	3.5	0.07	1.59	0.07			0.8	
11\1	1.8m LINTEL	0.0128	90	10	5	5	247	1	0.6128	0.012	8	6	14	11	3	13\1	3.6	4.4	0.05	0.77	0.05			0.8	
12\1	1.8m LINTEL	0.0272	90	10	5	5	247	1	0.6128	0.026	18	3	21	17	4	13\2	3.6	2.3	0.06	1.36	0.04			0.8	
13\1	2.4m LINTEL SAG	0.0273	90	10	5	5	247	1	0.6128	0.026	18	4	22	22	0	3\13	0.7	0.5	0.05			0.06		0.5	
13\2	2.4m LINTEL SAG	0.0605	90	10	5	5	247	1	0.6128	0.058	40	0	40	40	0		3.6	2.6	0.07			0.15		0.5	
15\1																									
15\2	900 x 900 GSIP	0.0123	50	50	5	5	247	1	0.6128	0.01	7	0	7	7	0		0.6	1						0.8	
15\3	1.8m LINTEL	0.0245	90	10	5	5	247	1	0.6128	0.024	16	0	16	13	3	15\4	0.6	1.4	0.06	1.31	0.04			0.8	
15\4	1.8m LINTEL	0.0275	90	10	5	5	247	1	0.6128	0.026	18	3	21	17	4	15\5	0.3	1						0.8	
15\5	1.8m LINTEL	0.0227	90	10	5	5	247	1	0.6128	0.022	15	4	19	16	4		1.5	0.9	0.07	1.58	0.04			0.8	
15\6	HW OUT		90		5	5						0													
17\1	1.8m LINTEL	0.0226	90	10	5	5	247	1	0.6128	0.022	15	3	18	15	4	20\1	3.6	0.9	0.07	1.52	0.03			0.8	
19\1	1.8m LINTEL	0.0251	90	10	5	5	247	1	0.6128	0.024	17	0	17	13	3	17\1	3.6	1.1	0.06	1.42	0.03			0.8	
20\1	2.4m LINTEL SAG	0.1132	90	10	5	5	247	1	0.6128	0.109	75	24	99	92	7		3.6	0.1	0.12			0.12		0.5	
100\1	1.8m LINTEL	0.0079	100	0	5	5	247	1		0.008	5	0	5	4	1	100\2	3.6	4	0.03	0.41	0.03			0.8	
100\2	900 x 900 VGRATE	0.0538	80	20	5	5	247	1	0.6128	0.05	34	1	35	27	8	100\3	2	1.8	0.06	2.3	0.04			0.8	
100\3	2.4m LINTEL SAG	0.0204	95	5	5	5	247	1	0.6128	0.02	14	8	22	22	0		1.9	2.3	0.05			0.15		0.5	
100\4	1.8m LINTEL	0.0007	90	10	5	5	247	1	0.6128	0.001	0	0	0	0	0		1.9	5.8						0.8	
100\5	900 x 900 JUNCTION		90	10	5	5	0			0	0	0	0	0	0		1.9							0.8	
15\6	HW OUT		90		5	5						0													
101\1	900 x 900 JUNCTION		90	10	5	5	0			0	0	0	0	0	0		0							0.8	
101\2	900 x 900 JUNCTION		90	10	5	5	0			0	0	0	0	0	0		0.2	1.4						0.8	
C2\1	900 x 900 GSIP		90	10	5	5	0			0	0	0	0	0	0		0							0.8	
C3\1	900 x 900 GSIP		90	10	5	5	0			0	0	0	0	0	0		0							0.8	
C4\1	900 x 900 JUNCTION		90	10	5	5	0			0	0	0	0	0	0		0							0.8	
CP\1	900 x 900 GSIP	0.334	10	90	5	8	232	1	0.6128	0.218	140	0	140	140	0		2.4							0.8	
D2\1	900 x 900 GSIP		90	10	5	5	0			0	0	0	0	0	0		0							0.8	
D3\1	900 x 900 GSIP		90	10	5	5	0			0	0	0	0	0	0		0							0.8	

100 YEAR HYDRAULIC DESIGN

REACH	TYPE	LENGTH	DIA.	U/S IL	D/S IL	PIPE GRADE	PIPE FLOW	PIPE VELOCITY	U/S HGL	D/S HGL	GRADE HGL	U/S PIT Ku
		m	mm	m	m	%	L/s	m/s	m	m	%	
1\1 to 1\2	RCP CLASS 4	10.7	375	62.09	61.13	9	27	3	62.21	61.32	8.33	3.6
1\2 to 1\3	RCP CLASS 4	16.5	375	61.1	59.29	11	60	4.1	61.27	59.4	11.39	2.7
1\3 to 1\4	RCP CLASS 4	16.9	375	59.1	56.9	13	111	5.1	59.34	57.17	12.85	1.1
1\4 to 1\5	RCP CLASS 4	19.8	375	56.86	55.67	6	120	3.9	57.12	56.19	4.67	0.8
1\5 to 1\6	RCP CLASS 4	7.7	375	55.64	55.36	3.62	136	3.4	56.06	56.02	0.4	1.7
1\6 to 1\7	RCP CLASS 4	36.6	450	55.28	53.46	5	527	5.3	55.72	54.13	4.36	0.5
1\7 to 1\8	RCP CLASS 4	18.8	450	53.42	52.48	5	566	5.4	53.86	52.82	5.55	0.4
1\8 to 1\9	RCP CLASS 4	24	450	52.13	51.23	3.75	578	4.8	52.58	51.91	2.77	0.4
1\9 to 1\10	RCP CLASS 4	29.9	525	51.16	50.34	2.75	770	4.5	51.67	50.72	3.17	0.4
1\10 to 1\11	RCP CLASS 4	38.3	525	48.17	47.79	1	963	4.4	49.5	49.5	0	1.6
1\11 to 1\12	RCP CLASS 4	24	525	47.75	47.27	2	979	4.5	49.26	48.58	2.85	0.3
1\12 to 1\12A	RCP CLASS 4	5.5	600	46.76	46.48	5	980	6.1	48.19	48.1	1.73	0.6
1\12A to 1\13	RCP CLASS 4	20.2	600	45.34	45.14	1.01	1178	4.2	47.21	46.71	2.5	1
1\13 to 1\14	RCP CLASS 4	22	600	45.14	44.8	1.53	1227	4.3	46.37	45.77	2.71	0.4
1\14 to 1\15	RCP CLASS 4	26	900	44.5	44.24	1	2083	3.8	45.54	45.3	0.94	0.4
1\15 to 1\16	RCP CLASS 4	23.1	1050	44.09	43.86	1	2341	4	45.15	45.02	0.54	0.4
1\16 to 1\17	RCP CLASS 4	13.8	1200	43.71	43.57	1	2438	4.1	44.98	44.94	0.29	0.2
1\17 to 1\18	RCP CLASS 4	31.5	1200	41.77	41.46	1	2455	4.1	44.79	44.7	0.3	0.6
3\1 to 3\2	RCP CLASS 4	8.8	375	59.59	59.24	4	132	3.5	59.67	59.54	3.73	0
3\2 to 3\3	RCP CLASS 4	25.8	375	59.01	57.86	4.45	141	3.9	59.48	58.15	5.18	0.7
3\3 to 3\4	RCP CLASS 4	37.1	375	57.82	55.31	6.77	149	4.4	58.1	55.67	6.56	0.5
3\4 to 3\5	RCP CLASS 4	32.1	375	55.27	53.19	6.5	187	4.6	55.59	53.63	6.09	0.6
3\5 to 3\6	RCP CLASS 4	45.6	375	52.89	50.61	5	427	4.9	53.26	51.15	4.63	0.5
3\6 to 3\7	RCP CLASS 4	55.3	450	50.42	47.66	5	575	5.4	50.88	49.4	2.68	0.4
3\7 to 3\8	RCP CLASS 4	9	450	47.62	47.36	3	597	4.3	49.25	48.99	2.89	0.2
3\8 to 3\9	RCP CLASS 4	21.6	525	47.28	46.74	2.5	732	4.3	48.21	47.79	1.94	1.3
3\9 to 3\10	RCP CLASS 4	8.5	525	46.71	46.49	2.5	748	4.3	47.43	47.26	2.03	0.6
3\10 to 3\11	RCP CLASS 4	9.4	600	46.42	46.18	2.5	764	4.4	47.03	46.93	1.06	0.6
3\11 to 3\12	RCP CLASS 4	32.7	600	46.15	45.33	2.5	779	4.4	46.7	46.28	1.29	0.6
3\12 to 3\13	RCP CLASS 4	6.5	600	45.3	45.13	2.5	787	4.4	46.16	46.09	1.12	0.3
3\13 to 1\14	RCP CLASS 4	11.9	675	44.85	44.73	1	956	3.2	45.89	45.78	0.9	0.5
												1.6
6\1 to 1\12	RCP CLASS 4	12	375	47.34	47.22	1	2	0.6	48.58	48.58	0	3.6
												0.8
7\1 to 7\2	RCP CLASS 4	25	375	44.93	44.68	1	54	1.6	45.4	45.38	0.07	3.6
7\2 to 1\15	RCP CLASS 4	15.9	375	44.65	44.49	1	88	1.9	45.32	45.3	0.17	1.7
												0.5
10\1 to 3\6	RCP CLASS 4	10.4	375	50.8	50.61	1.85	21	1.6	51.15	51.15	0.01	3.6
												0.4
11\1 to 3\7	RCP CLASS 4	9.1	375	48.06	47.97	1	29	1.4	49.4	49.4	0.02	3.6
												0.2
12\1 to 3\11	RCP CLASS 4	8.5	375	46.57	46.49	1	11	1	46.93	46.93	0	3.6
												0.6
13\1 to 13\2	RCP CLASS 4	8.7	375	45.59	45.5	1	17	1.2	46.2	46.2	0.01	3.6
13\2 to 3\13	RCP CLASS 4	7	375	44.95	44.88	1	161	2.1	46.13	46.09	0.56	0.7
												1.3
15\1 EX to 15\1	RCP CLASS 4	10.1	375	47.2	46.92	2.72	28	2	47.32	47.03	2.88	3.6
15\1 to 15\2	RCP CLASS 4	16.2	375	46.89	46.73	1	34	1.4	47.02	46.84	1.12	1.2
15\2 to 15\3	RCP CLASS 4	5.7	375	46.69	46.64	1	40	1.5	46.84	46.74	1.62	0.6
15\3 to 15\4	RCP CLASS 4	27.5	525	44.02	43.75	1	584	2.7	46.5	46.16	1.24	0.6
15\4 to 15\5	RCP CLASS 4	28	525	43.72	43.44	1	600	2.8	46.05	45.68	1.31	0.3
15\5 to 15\6	RCP CLASS 4	35.2	525	42.59	41.47	3.18	634	4.6	45.02	44.5	1.46	1.5
17\1 to 15\5	RCP CLASS 4	7.4	375	46.08	46	1	24	1.3	46.19	46.09	1.37	3.6
												1.1
19\1 to 15\4	RCP CLASS 4	10.6	375	46.41	46.3	1	13	1.1	46.94	46.94	0	3.6
												0.3
20\1 to 1\16	RCP CLASS 4	7	375	45.28	45.21	1	92	1.9	45.5	45.38	1.74	3.6
100\1 to 100\2	RCP CLASS 4	29.1	375	45.17	44.87	1	4	0.8	45.94	45.94	0	3.6
100\2 to 100\3	RCP CLASS 4	7.4	375	44.84	44.77	1	211	2.2	45.57	45.5	0.95	2
100\3 to 100\4	RCP CLASS 4	13.9	375	44.73	44.31	3	233	3.6	45.07	44.53	3.92	1.9
100\4 to 100\5	RCP CLASS 4	5.5	375	42.69	42.63	1	233	2.1	43.04	42.98	1.18	1.9
100\5 to 15\6	RCP CLASS 4	16.8	375	42.14	41.47	4	233	4	42.48	41.67	4.88	1.9
101\1 to 101\2	RCP CLASS 4	10	525	44.27	44.17	1	530	2.7	46.99	46.89	1.03	0
101\2 to 15\3	RCP CLASS 4	9	525	44.14	44.05	1	530	2.7	46.82	46.72	1.03	0.2
												0.6
C2\1 to 1\10	RCP CLASS 4	9.2	375	48.3	48.21	1	122	2	49.5	49.5	0	0
												1.6
C3\1 to 1\12A	RCP CLASS 4	9.1	375	45.47	45.38	1	122	2	48.13	48.1	0.32	0
												1
C4\1 to 1\15	RCP CLASS 4	5.6	375	44.8	44.74	1	169	2.2	45.33	45.3	0.61	0
												0.4
CP\1 to 1\12	RCP CLASS 4	7.4	375	47.22	47.14	1	140	2.1	48.61	48.58	0.43	2.4
												0.8
												0.5
D2\1 to 3\6	RCP CLASS 4	4.1	375	50.5	50.46	1	114	2	51.16	51.15	0.28	0
												0.4
D3\1 to 3\8	RCP CLASS 4	5.2	375	47.41	47.36	1	114	2	49	48.99	0.28	0

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)

Land Development Certificates
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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adw johnson
Central Coast
5 Pioneer Avenue,
P.O. Box 3717,
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Phone: (02) 4305 4300
Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: STORMWATER CALCULATION CHARTS
100 YEAR A.R.I.

PROJECT No. 300001(2) – DISCIPLINE ENG – NUMBER 422 REV. 2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:12:59PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-422.DWG

100mm AT FULL SIZE

This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

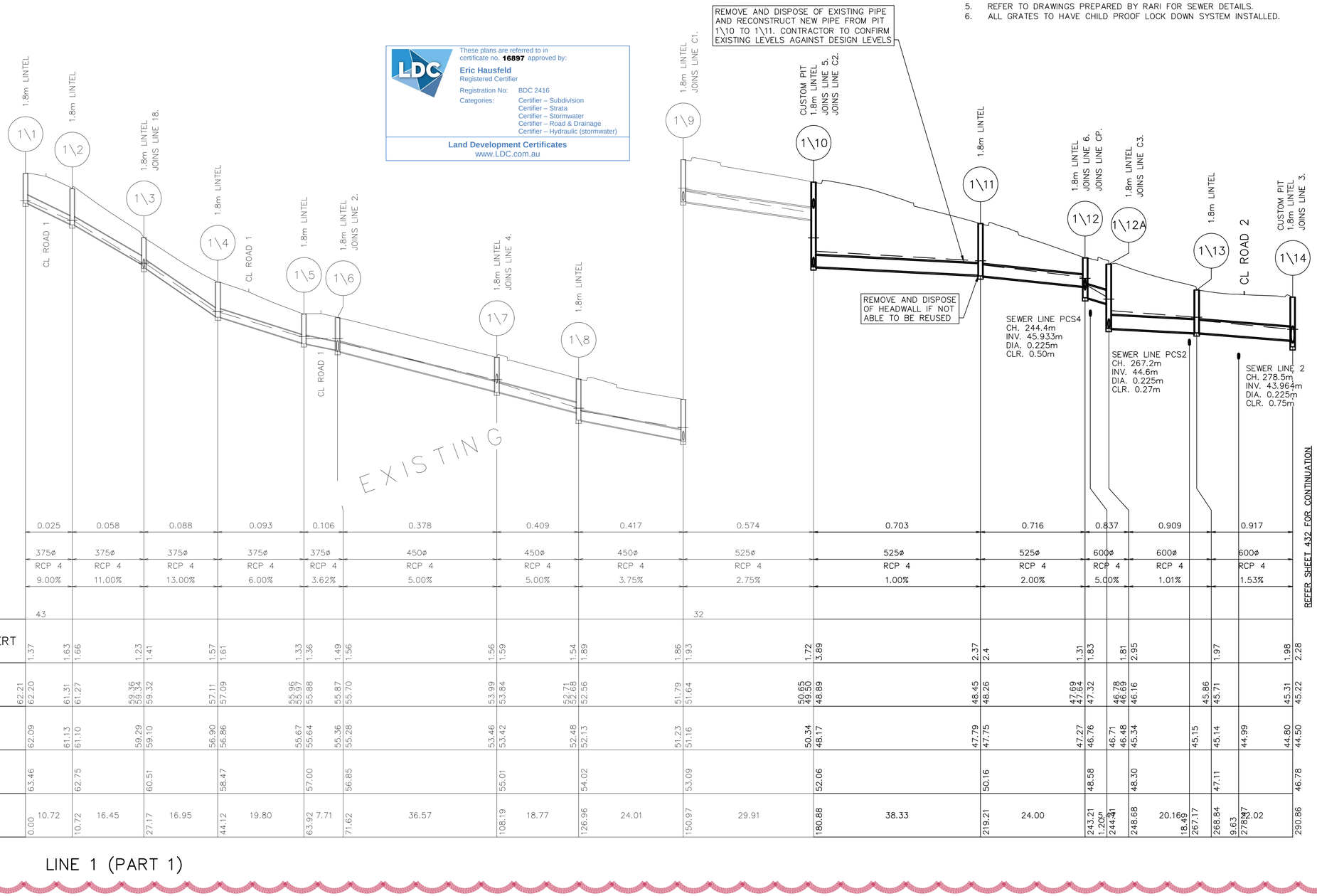
300001(2)-ENG-431

2

NOTES: –

1. ALL STORMWATER PITS TO BE CONSTRUCTED IN ACCORDANCE WITH RYDE COUNCILS ENGINEERING CONSTRUCTION SPECIFICATION.
2. ALL PITS DEEPER THAN 1.0m TO HAVE STEP IRONS.
3. ALL STORMWATER PIPE CLASSES ARE TO COMPLY WITH COUNCILS DESIGN AND CONSTRUCTION SPECIFICATIONS. IF THERE ARE DISCREPANCIES BETWEEN COUNCILS SPECIFICATIONS AND THE APPROVED CONSTRUCTION CERTIFICATE PLANS PLEASE NOTIFY THE SUPERINTENDENT IMMEDIATELY. IT IS THE CONTRACTORS RESPONSIBILITY TO USE THE APPROPRIATE CONSTRUCTION METHODOLOGY TO COMPACT AROUND/OVER STORMWATER PIPES AND ENSURE NO CRACKING OF THE STORMWATER PIPES OCCURS.
4. PITS DEEPER THAN 2.5m TO BE CONSTRUCTED IN ACCORDANCE WITH STRUCTURAL ENGINEERS DESIGN.
5. REFER TO DRAWINGS PREPARED BY RARI FOR SEWER DETAILS.
6. ALL GRATES TO HAVE CHILD PROOF LOCK DOWN SYSTEM INSTALLED.

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
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| | | |

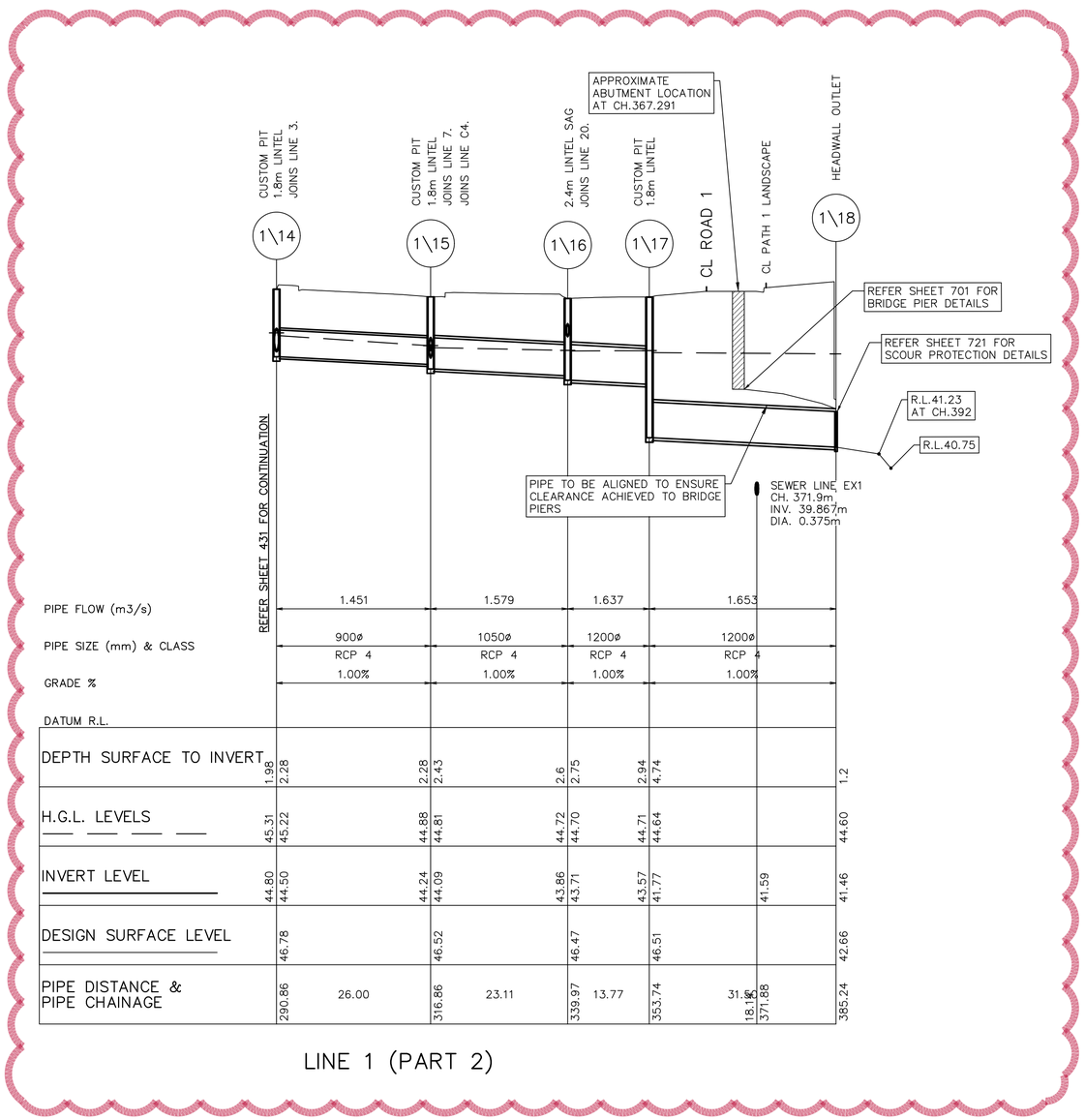
300001(2)-ENG-432

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Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
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NOTES: –

1. ALL STORMWATER PITS TO BE CONSTRUCTED IN ACCORDANCE WITH RYDE COUNCILS ENGINEERING CONSTRUCTION SPECIFICATION.
2. ALL PITS DEEPER THAN 1.0m TO HAVE STEP IRONS.
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4. PITS DEEPER THAN 2.5m TO BE CONSTRUCTED IN ACCORDANCE WITH STRUCTURAL ENGINEERS DESIGN.
5. REFER TO DRAWINGS PREPARED BY RARI FOR SEWER DETAILS.
6. ALL GRATES TO HAVE CHILD PROOF LOCK DOWN SYSTEM INSTALLED.

2



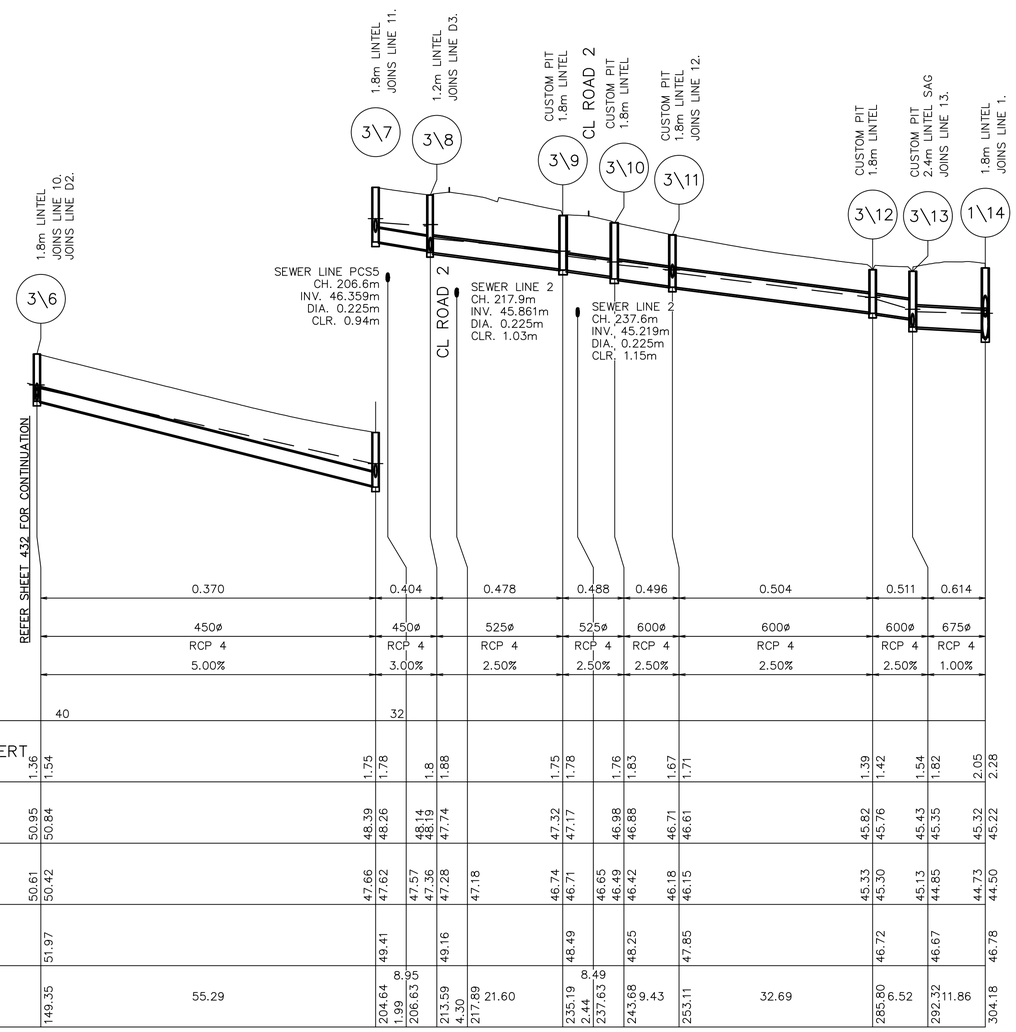
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300001(2)-ENG-433

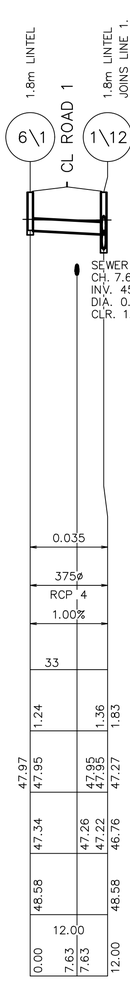
NOTES: –

1. ALL STORMWATER PITS TO BE CONSTRUCTED IN ACCORDANCE WITH RYDE COUNCILS ENGINEERING CONSTRUCTION SPECIFICATION.
2. ALL PITS DEEPER THAN 1.0m TO HAVE STEP IRONS.
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5. REFER TO DRAWINGS PREPARED BY RARI FOR SEWER DETAILS.
6. ALL GRATES TO HAVE CHILD PROOF LOCK DOWN SYSTEM INSTALLED.

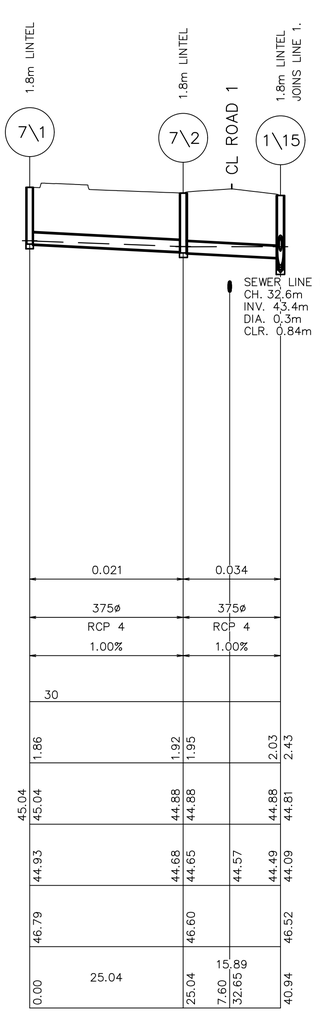
These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
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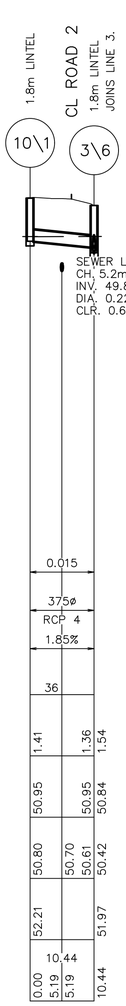
LINE 3 (CONTINUED)



LINE 6



LINE 7



LINE 10

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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES
A1 1:500 — 0 12.5 25.0m — A3 1:1000
A1 1:100 — 0 2.5 5.0m — A3 1:200

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project
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adw johnson
Central Coast
5 Pioneer Avenue,
P.O. Box 3717,
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Phone: (02) 4305 4300
Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: STORMWATER LONGITUDINAL SECTIONS SHEET 3

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	433	2

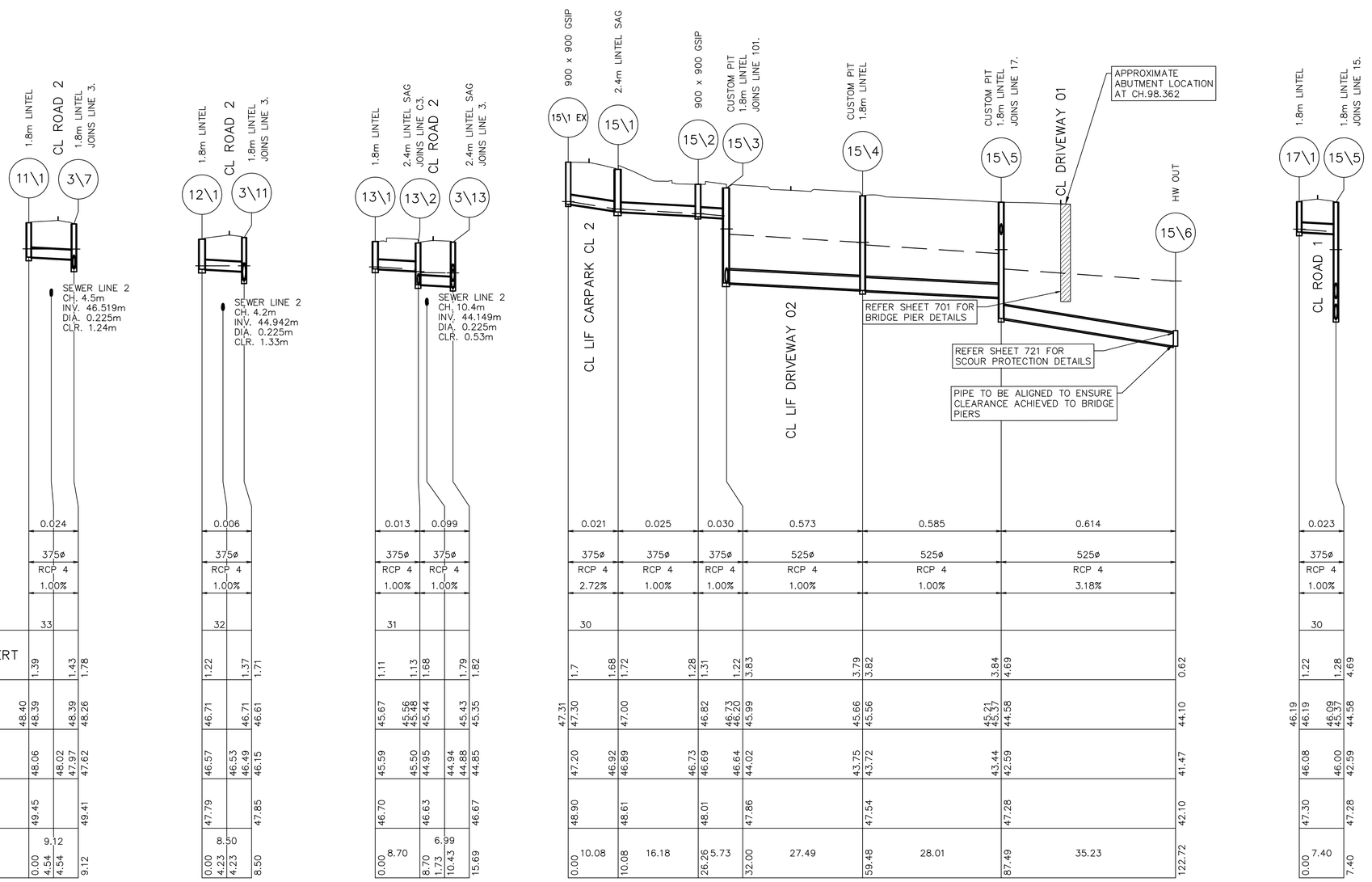
Plotted By: Mark Hoyland Plot Date: 16/05/22 2:13:21PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-433.DWG

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

300001(2)-ENG-434

NOTES: –

1. ALL STORMWATER PITS TO BE CONSTRUCTED IN ACCORDANCE WITH RYDE COUNCILS ENGINEERING CONSTRUCTION SPECIFICATION.
2. ALL PITS DEEPER THAN 1.0m TO HAVE STEP IRONS.
3. ALL STORMWATER PIPE CLASSES ARE TO COMPLY WITH COUNCILS DESIGN AND CONSTRUCTION SPECIFICATIONS. IF THERE ARE DISCREPANCIES BETWEEN COUNCILS SPECIFICATIONS AND THE APPROVED CONSTRUCTION CERTIFICATE PLANS PLEASE NOTIFY THE SUPERINTENDENT IMMEDIATELY. IT IS THE CONTRACTORS RESPONSIBILITY TO USE THE APPROPRIATE CONSTRUCTION METHODOLOGY TO COMPACT AROUND/OVER STORMWATER PIPES AND ENSURE NO CRACKING OF THE STORMWATER PIPES OCCURS.
4. PITS DEEPER THAN 2.5m TO BE CONSTRUCTED IN ACCORDANCE WITH STRUCTURAL ENGINEERS DESIGN.
5. REFER TO DRAWINGS PREPARED BY RARI FOR SEWER DETAILS.
6. ALL GRATES TO HAVE CHILD PROOF LOCK DOWN SYSTEM INSTALLED.



	LINE 11			LINE 12			LINE 13			LINE 15						LINE 17		
PIPE FLOW (m3/s)		0.024			0.006			0.013	0.099	0.021	0.025	0.030	0.573	0.585	0.614		0.023	
PIPE SIZE (mm) & CLASS		375ø RCP 4			375ø RCP 4			375ø RCP 4	375ø RCP 4	375ø RCP 4	375ø RCP 4	375ø RCP 4	525ø RCP 4	525ø RCP 4	525ø RCP 4		375ø RCP 4	
GRADE %		1.00%			1.00%			1.00%	1.00%	2.72%	1.00%	1.00%	1.00%	1.00%	3.18%		1.00%	
DATUM R.L.		33			32			31		30							30	
DEPTH SURFACE TO INVERT		1.39	1.43	1.78	1.22	1.37	1.71	1.11	1.13	1.68	1.7	1.72	1.28	1.31	1.22	3.83	3.79	3.82	3.84	4.69	0.62		1.22	1.28	4.69
H.G.L. LEVELS	48.40	48.39	48.39	48.26	46.71	46.71	46.61	45.67	45.58 45.48	45.44	47.31	47.30	47.00	46.82	46.73 46.20	45.99	45.66	45.56	45.21 45.37	44.58	44.10	46.19	46.19	46.09 45.37	44.58
INVERT LEVEL		48.06	48.02 47.97	47.62	46.57	46.53 46.49	46.15	45.59	45.50	44.95		47.20	46.92	46.89	46.73	46.69	46.64	44.02	43.75	43.72	43.44	42.59	41.47		46.08	46.00	42.59
DESIGN SURFACE LEVEL		49.45		49.41	47.79		47.85	46.70	46.63			48.90	48.61		48.01		47.86		47.54		47.28		42.10		47.30		47.28
PIPE DISTANCE & PIPE CHAINAGE	0.00	4.54	4.54	9.12	0.00	4.23	4.23	8.50	0.00	8.70	1.73	6.99	10.43	15.69	0.00	10.08	10.08	16.18	26.26	5.73	32.00	27.49	59.48	28.01	87.49	35.23	122.72	0.00	7.40	7.40

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
Land Development Certificates
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES
A1 1:500 — 0 12.5 25.0m — A3 1:1000
A1 1:100 — 0 2.5 5.0m — A3 1:200

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project
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adw Johnson
Central Coast
5 Pioneer Avenue,
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Phone: (02) 4305 4300
Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: STORMWATER LONGITUDINAL SECTIONS SHEET 4

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	434	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:13:27PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-434.DWG

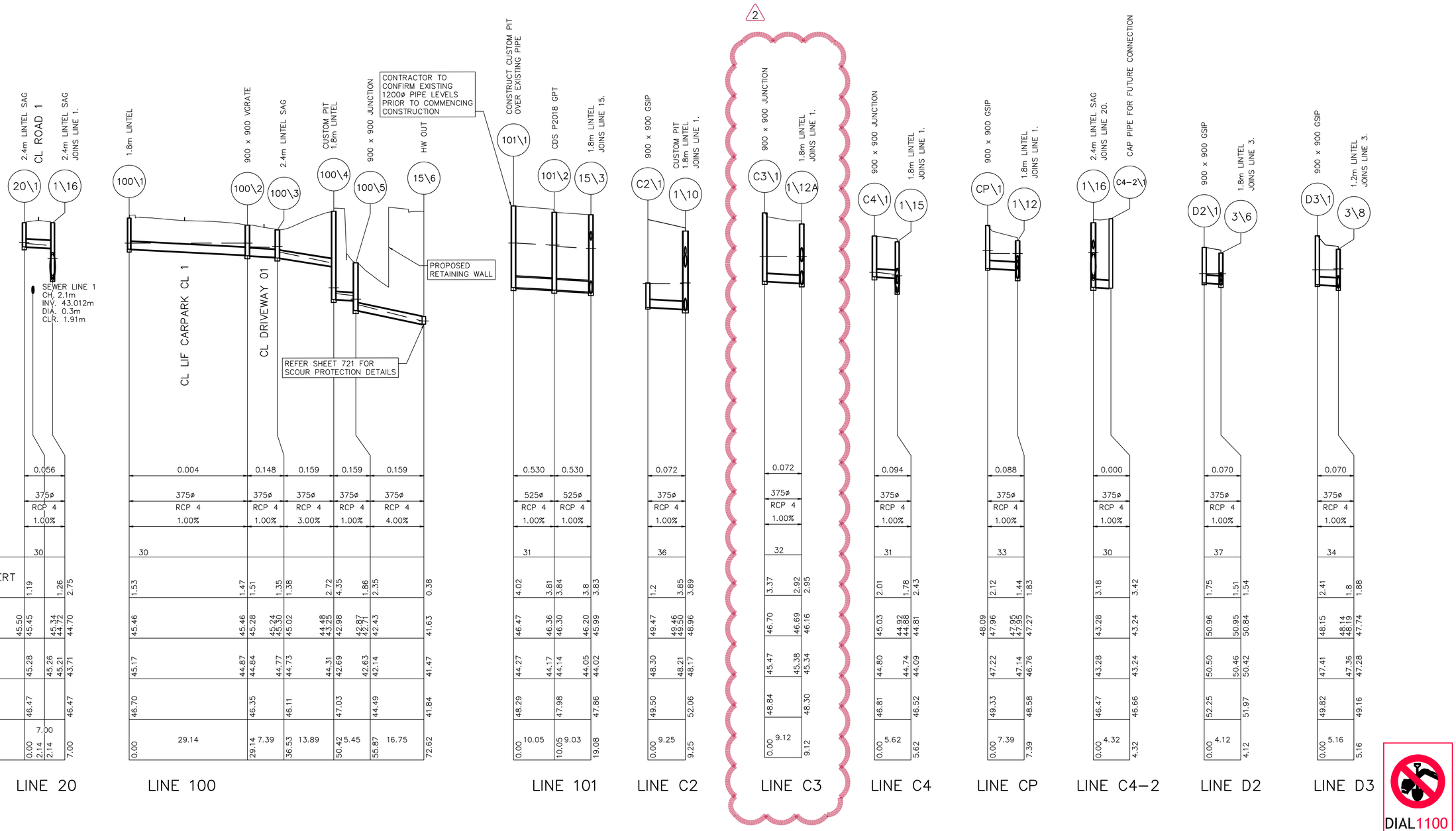
100mm AT FULL SIZE
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300001(2)-ENG-435

These plans are referred to in certificate no. **16897** approved by:
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Registered Certifier
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Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
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NOTES: –

1. ALL STORMWATER PITS TO BE CONSTRUCTED IN ACCORDANCE WITH RYDE COUNCILS ENGINEERING CONSTRUCTION SPECIFICATION.
2. ALL PITS DEEPER THAN 1.0m TO HAVE STEP IRONS.
3. ALL STORMWATER PIPE CLASSES ARE TO COMPLY WITH COUNCILS DESIGN AND CONSTRUCTION SPECIFICATIONS. IF THERE ARE DISCREPANCIES BETWEEN COUNCILS SPECIFICATIONS AND THE APPROVED CONSTRUCTION CERTIFICATE PLANS PLEASE NOTIFY THE SUPERINTENDENT IMMEDIATELY. IT IS THE CONTRACTORS RESPONSIBILITY TO USE THE APPROPRIATE CONSTRUCTION METHODOLOGY TO COMPACT AROUND/OVER STORMWATER PIPES AND ENSURE NO CRACKING OF THE STORMWATER PIPES OCCURS.
4. PITS DEEPER THAN 2.5m TO BE CONSTRUCTED IN ACCORDANCE WITH STRUCTURAL ENGINEERS DESIGN.
5. REFER TO DRAWINGS PREPARED BY RARI FOR SEWER DETAILS.
6. ALL GRATES TO HAVE CHILD PROOF LOCK DOWN SYSTEM INSTALLED.



	LINE 20			LINE 100						LINE 101		LINE C2		LINE C3		LINE C4		LINE CP		LINE C4–2		LINE D2		LINE D3	
PIPE FLOW (m3/s)	0.056			0.004	0.148	0.159	0.159	0.159		0.530	0.530	0.072		0.072		0.094		0.088		0.000		0.070		0.070	
PIPE SIZE (mm) & CLASS	375ø RCP 4			375ø RCP 4	375ø RCP 4	375ø RCP 4	375ø RCP 4	375ø RCP 4		525ø RCP 4	525ø RCP 4	375ø RCP 4		375ø RCP 4		375ø RCP 4		375ø RCP 4		375ø RCP 4		375ø RCP 4		375ø RCP 4	
GRADE %	1.00%			1.00%	1.00%	3.00%	1.00%	4.00%		1.00%	1.00%	1.00%		1.00%		1.00%		1.00%		1.00%		1.00%		1.00%	
DATUM R.L.	30			30						31		36		32		31		33		30		37		34	
DEPTH SURFACE TO INVERT	1.19		1.26	1.53	1.47	1.51	1.35	1.38	2.72	4.35	1.86	2.35	0.38	4.02	3.81	3.84	3.8	3.83	3.37	2.92	2.95	2.01	1.78	2.43	2.12	1.44	1.83	3.18	3.42	1.75	1.51	1.54	2.41	1.8	1.88
H.G.L. LEVELS	45.50	45.45	45.34 44.72	45.46	45.46	45.28	45.34 45.34	45.02	44.48 44.25	42.98	42.87 42.71	42.43	41.63	46.47	46.36	46.30	46.20	45.99	46.70	46.69	46.16	45.03	44.92 44.88	44.81	48.09	47.96	47.95 47.95	47.27	43.28	43.24	50.96	50.95	50.84	48.15	48.14 48.19	47.74
INVERT LEVEL	45.28	45.26	45.21 43.71	45.17	44.87	44.84	44.77	44.73	44.31	42.69	42.63	42.14	41.47	44.27	44.17	44.14	44.05	44.02	48.30	48.21	48.17	44.80	44.74	44.09	47.22	47.14	46.76	43.28	43.24	50.50	50.46	50.42	47.41	47.36	47.28
DESIGN SURFACE LEVEL	46.47	45.45	46.47	46.70	46.35	46.11	47.03	44.49	41.84	48.29	47.98	47.86	49.50	48.06	52.06	46.81	46.52	49.33	48.58	48.84	48.30	46.52	5.62	4.32	4.12	5.16										
PIPE DISTANCE & PIPE CHAINAGE	0.00	7.00 2.14	2.14 7.00	0.00	29.14	29.14 7.39	36.53 13.89	50.42 5.45	55.87 16.75	72.62	0.00	10.05	10.05 9.03	19.08	0.00	9.25	9.25	0.00	9.12	9.12	0.00	5.62	5.62	0.00	7.39	7.39	0.00	4.32	4.32	0.00	4.12	4.12	0.00	5.16	5.16

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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES
A1 1:500 — 0 12.5 25.0m — A3 1:1000
A1 1:100 — 0 2.5 5.0m — A3 1:200

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project
ALL DIMENSIONS ARE IN METRES. DO NOT SCALE

adw Johnson
Central Coast
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www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT
FRASERS PROPERTY

PROPERTY DESCRIPTION
LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

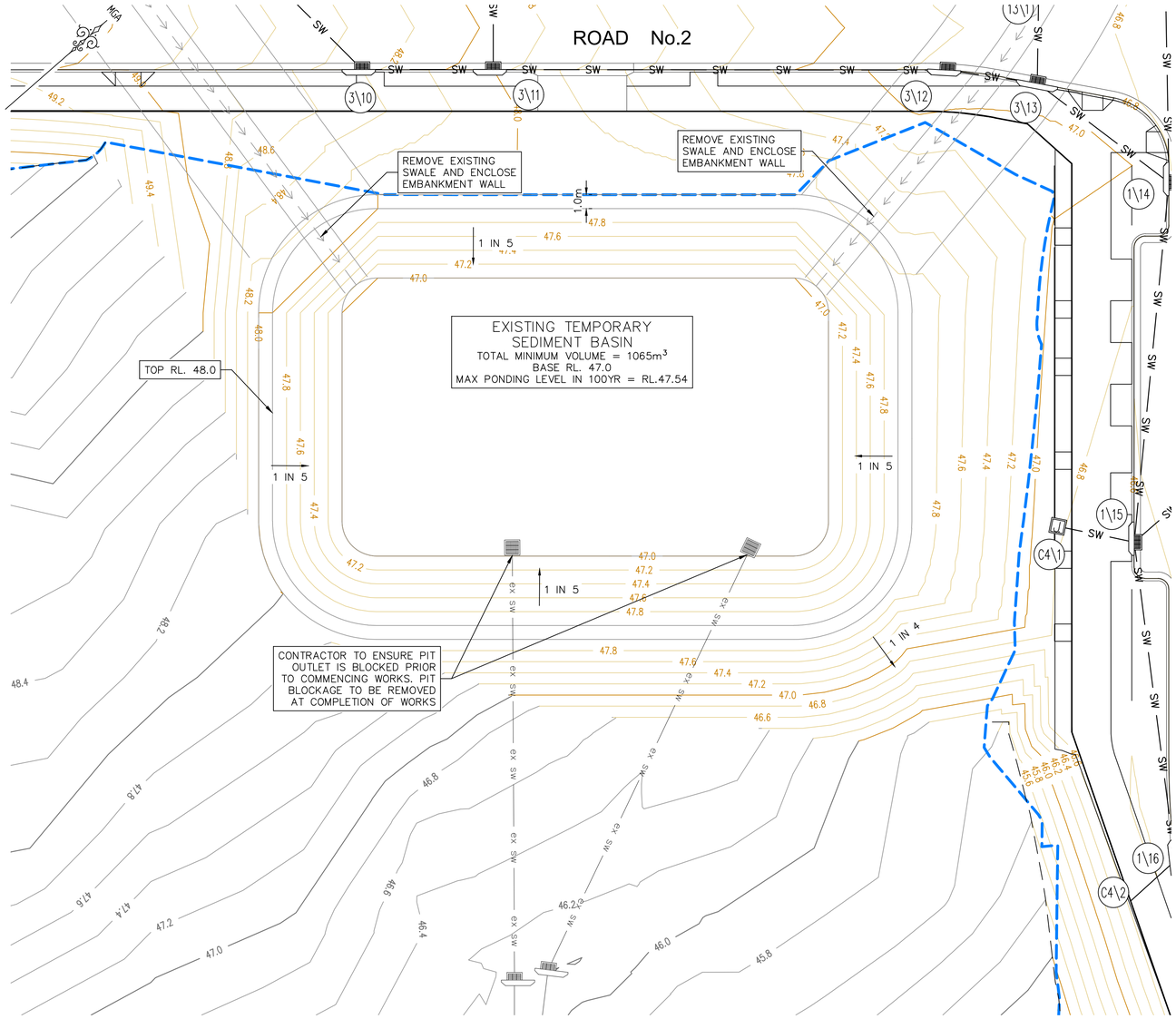
PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: STORMWATER LONGITUDINAL SECTIONS SHEET 5

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	435	2

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:13:32PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-435.DWG

300001(2)-ENG-451



BASIN DETAIL PLAN

SCALE 1:200

LEGEND

- SITE BOUNDARY
- LIMIT OF WORKS BOUNDARY
- PROPOSED LOT BOUNDARY
- EXISTING LOT BOUNDARY
- MAJOR CONTOURS
- MINOR CONTOURS
- EXTENTS OF BATTER
- SW PROPOSED STORMWATER
- ex sw EXISTING STORMWATER
- PROPOSED SWALE
- PROPOSED SW PIT
- PROPOSED HEADWALL
- 1\ PIT LABEL

CONTOUR INTERVAL = 0.2m

Revised Universal Soil Loss Equation (RUSLE)		
Catchment Area (A)	1.46	ha
Settling Zone		
Runoff Coefficient (Cv)	0.5	
85th %, 5 day Rainfall Event (R)	38.8	
Settling Zone Volume	284	m^3
Sediment Zone		
Disturbed Site Area (hectares)	1.46	ha
Rainfall Erosivity Factor, R	3482	
Soil Erodibility Factor, K	0.1	
Slope Length Gradient Factor, LS	1.7	
Erosion Control Practice Factor, P	1.3	
Cover Factor, C	1	
Sediment Zone Volume	147	m^3
Total Storage Required (Settling + Sediment)	431	m^3

NOTE:

REFER SHEET 601 FOR BASIN CATCHMENT DETAILS.

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)

Land Development Certificates
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BASIN TO BE UTILISED AS SEDIMENT BASIN DURING STAGE 2 CIVIL WORKS. BASIN TO BE MAINTAINED IN ACCORDANCE WITH THE BLUE BOOK.

ONCE THE UPSTREAM CATCHMENT HAS BEEN STABILISED THE BASIN IS TO BE FLOCCULATED, ALL WATER PUMPED OUT AND PIT BLOCKAGE REMOVED.

CONTRACTOR TO PROVIDE TEMPORARY HOARDING AROUND BASIN TO RESTRICT PUBLIC ACCESS TO BASIN ONCE WORKS COMPLETED

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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:200; 0 5.0 10.0m; A3 1:400

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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adw johnson
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email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: BASIN DETAIL PLAN

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	451	2

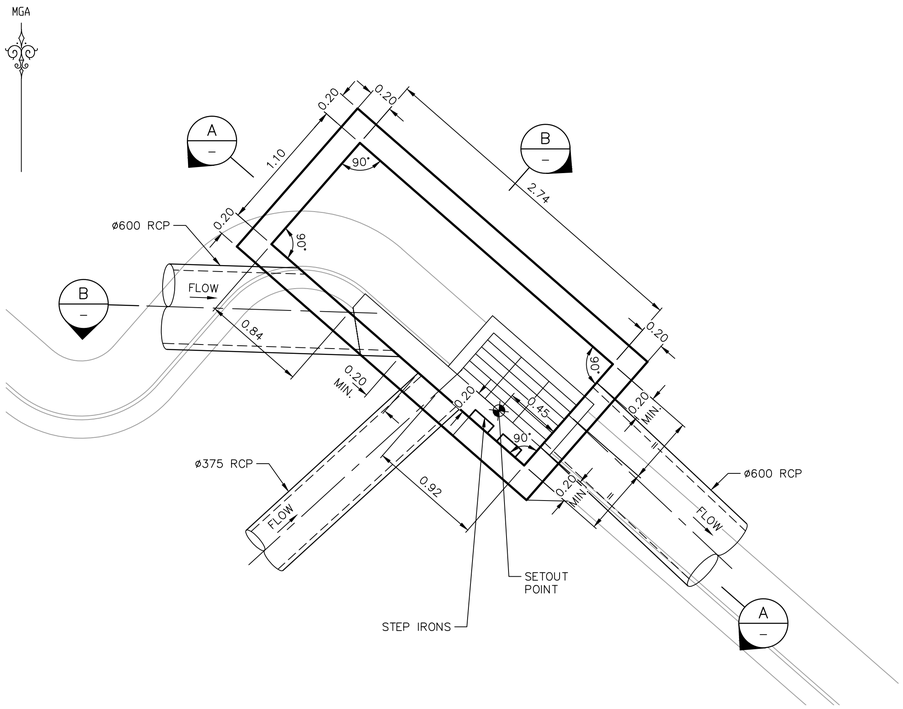
Plotted By: Mark Hoyland Plot Date: 16/05/22 2:13:44PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-451.DWG

100mm AT FULL SIZE

This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

300001(2)-ENG-480

2



NOTE:

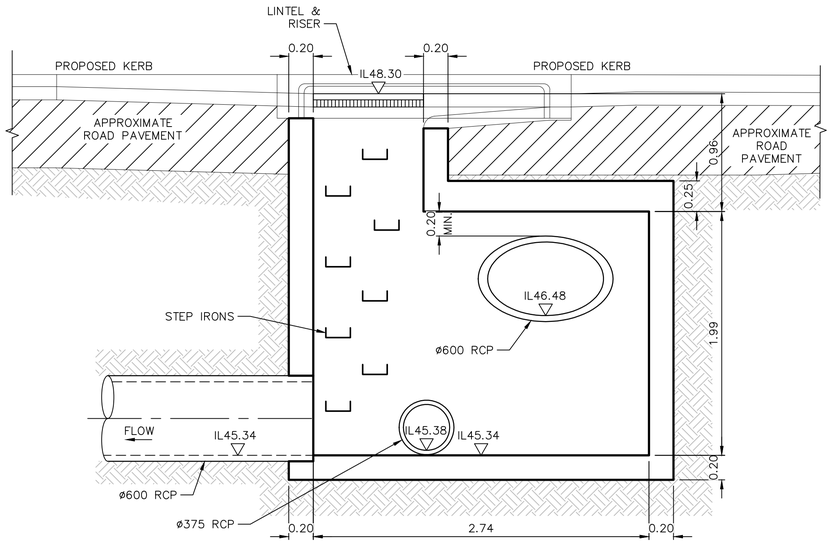
LOCKABLE GRATES ARE TO BE INSTALLED TO PITS IN ACCORDANCE WITH RYDE CITY COUNCIL STANDARD DRAWINGS AND SPECIFICATIONS.

NOTE:

REFER SHEET 495 FOR REINFORCEMENT DETAILS.

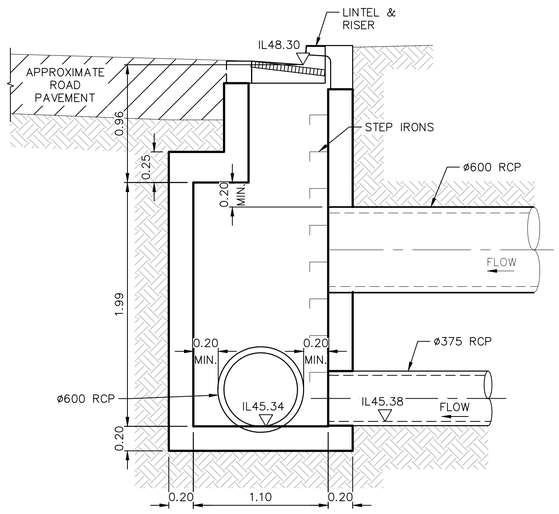
DETAIL PLAN – PIT 1\12A

SCALE 1:25



SECTION A

SCALE 1: 25



SECTION B

SCALE 1: 25

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416
Categories: Certifier – Subdivision
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Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

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REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
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2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:25 — 0 0.25 0.50 0.75 1.00 1.25m — A3 1:50

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

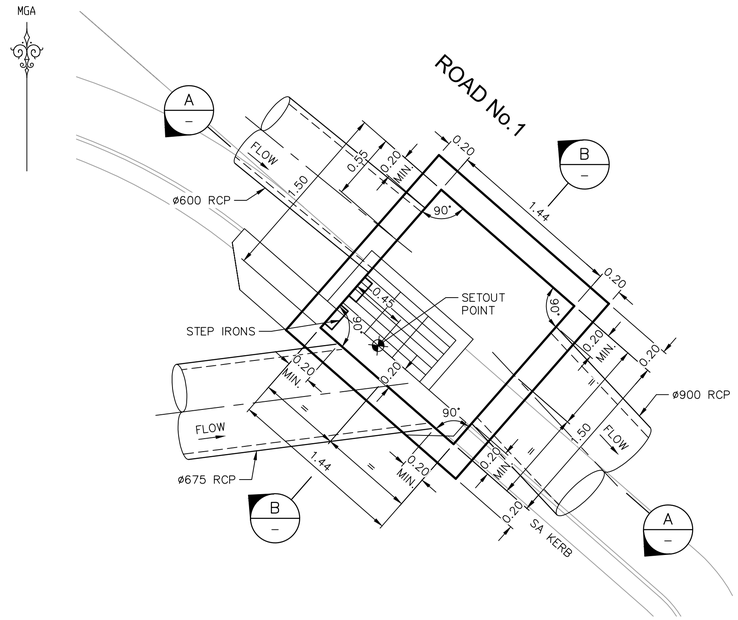
PLAN TITLE: CUSTOM STORMWATER PIT PIT No. 1\12A

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	480	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:13:55PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-480.DWG

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300001(2)-ENG-481



DETAIL PLAN – PIT 1\14

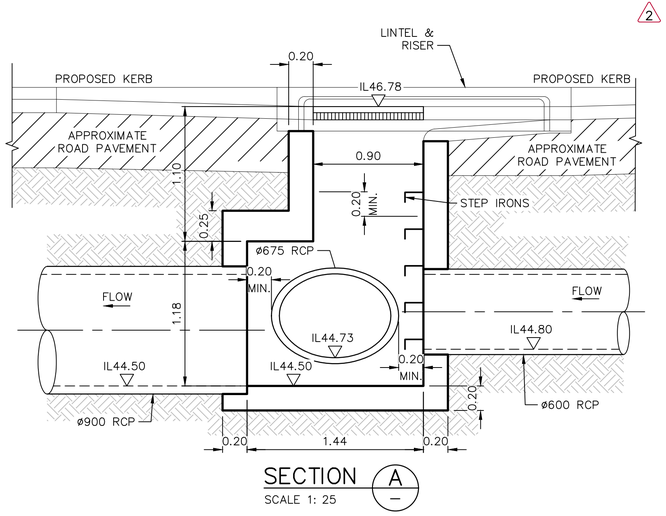
SCALE 1:25

NOTE:

REFER SHEET 495 FOR REINFORCEMENT DETAILS.

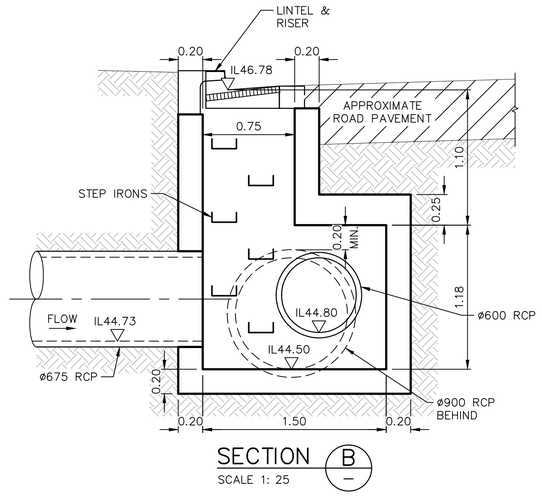
NOTE:

LOCKABLE GRATES ARE TO BE INSTALLED TO PITS IN ACCORDANCE WITH RYDE CITY COUNCIL STANDARD DRAWINGS AND SPECIFICATIONS.



SECTION A

SCALE 1: 25



SECTION B

SCALE 1: 25

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SCALES: A1 1:25 | 0 0.25 0.50 0.75 1.00 1.25m | A3 1:50

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SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

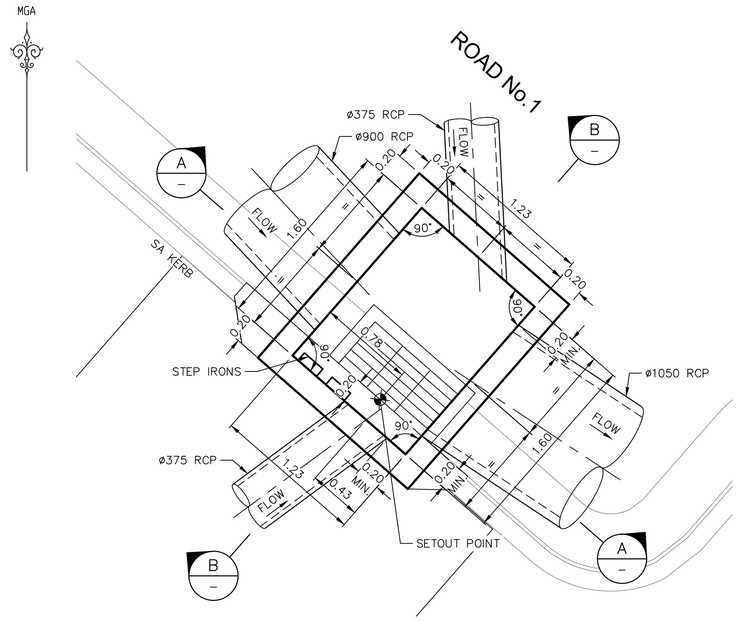
PLAN TITLE: CUSTOM STORMWATER PIT
PIT No. 1\14

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	481	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:14:04PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-481.DWG

100mm AT FULL SIZE
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300001(2)-ENG-482



DETAIL PLAN – PIT 1\15

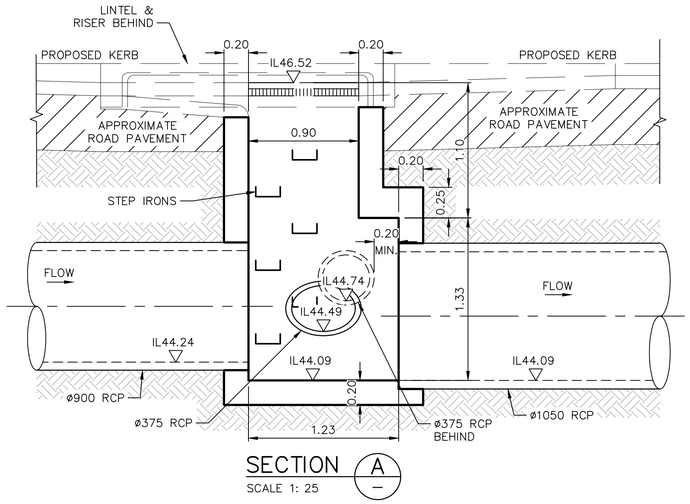
SCALE 1:25

NOTE:

REFER SHEET 495 FOR REINFORCEMENT DETAILS.

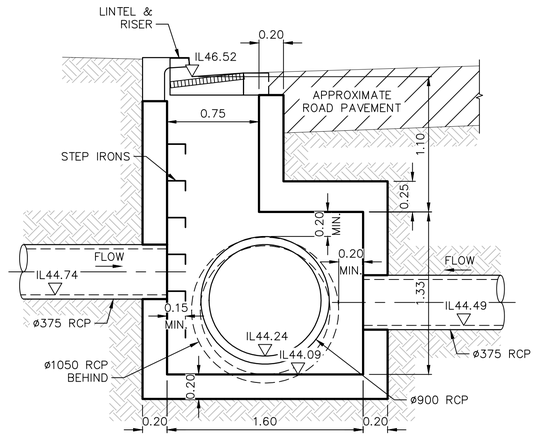
NOTE:

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SECTION A

SCALE 1: 25



SECTION B

SCALE 1: 25

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Registered Certifier

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SCALES: A1 1:25 — 0 0.25 0.50 0.75 1.00 1.25m — A3 1:50

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MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: CUSTOM STORMWATER PIT
PIT No. 1\15

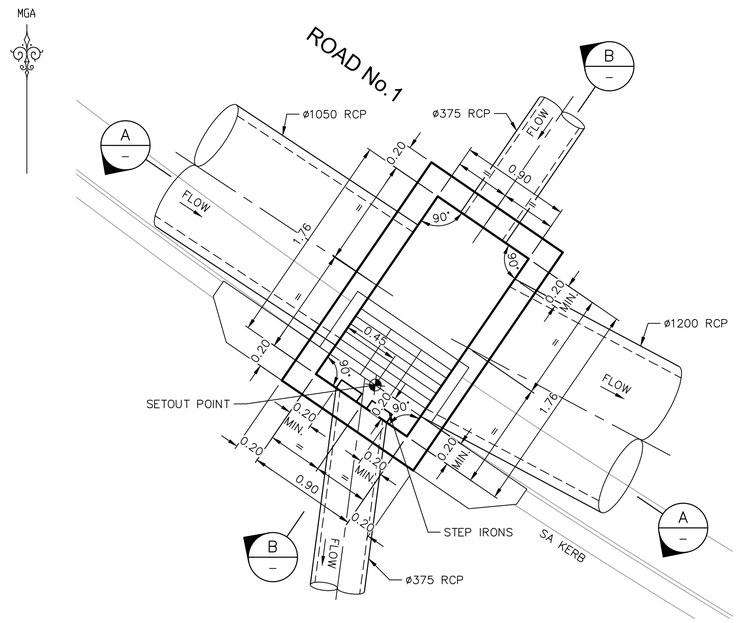
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	482	2

100mm AT FULL SIZE

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Plotted By: Mark Hoyland Plot Date: 16/05/22 2:14:14PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-482.DWG

300001(2)-ENG-483



DETAIL PLAN – PIT 1\16

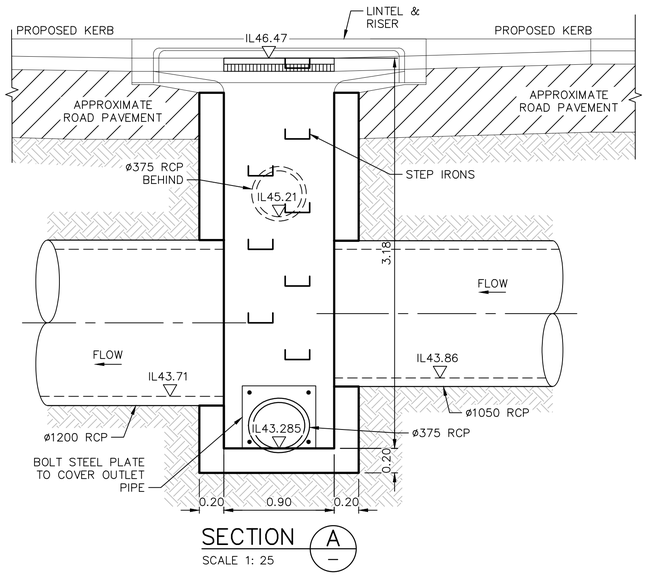
SCALE 1:25

NOTE:

REFER SHEET 495 FOR REINFORCEMENT DETAILS.

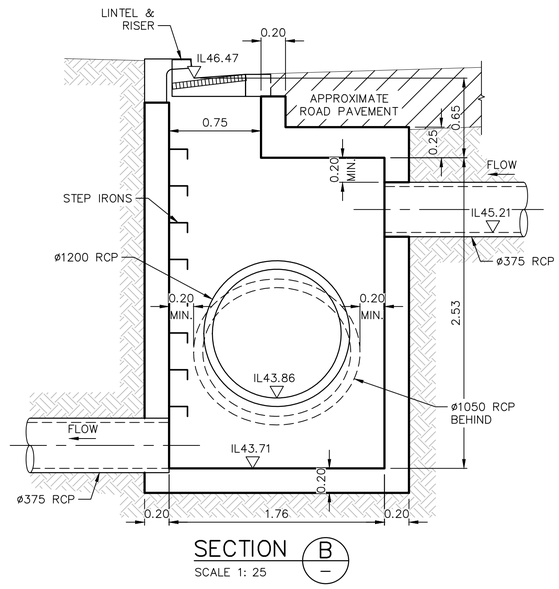
NOTE:

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SECTION A

SCALE 1:25



SECTION B

SCALE 1:25

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Registered Certifier

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Categories:
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
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SCALES: A1 1:25 — 0 0.25 0.50 0.75 1.00 1.25m — A3 1:50

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SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: CUSTOM STORMWATER PIT PIT No. 1\16

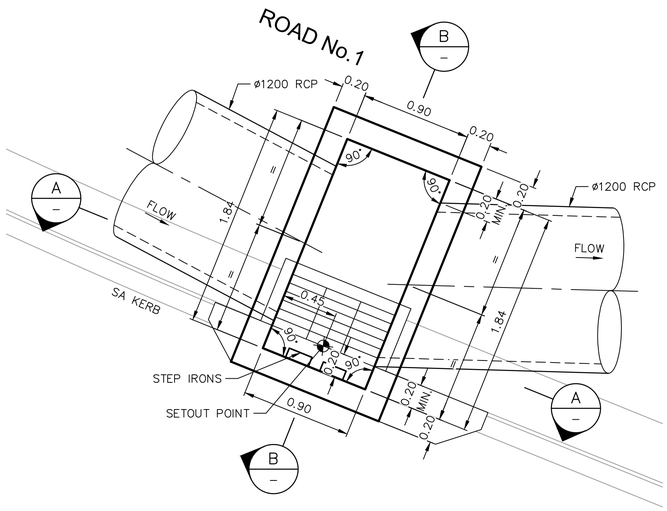
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	483	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:14:24PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-483.DWG

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300001(2)-ENG-484

MGA



NOTE:

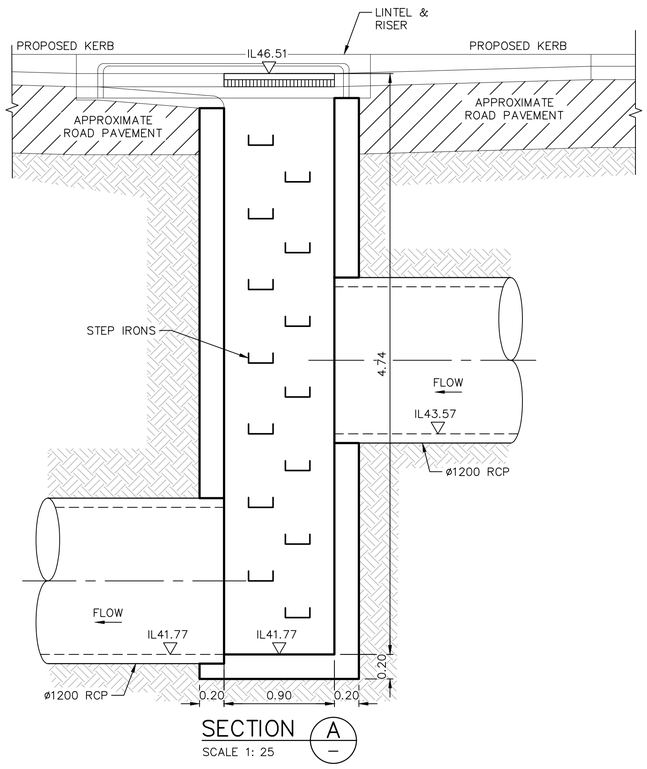
REFER SHEET 495 FOR REINFORCEMENT DETAILS.

DETAIL PLAN – PIT 1\17

SCALE 1:25

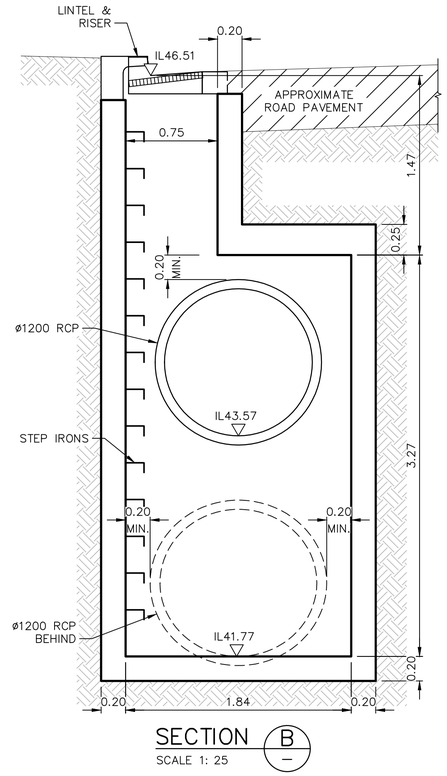
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SECTION A

SCALE 1:25



SECTION B

SCALE 1:25

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SCALES: A1 1:25 — 0 0.25 0.50 0.75 1.00 1.25m — A3 1:50

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SSDA 8903

SURVEYED: ADW Johnson

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PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: CUSTOM STORMWATER PIT
PIT No. 1\17

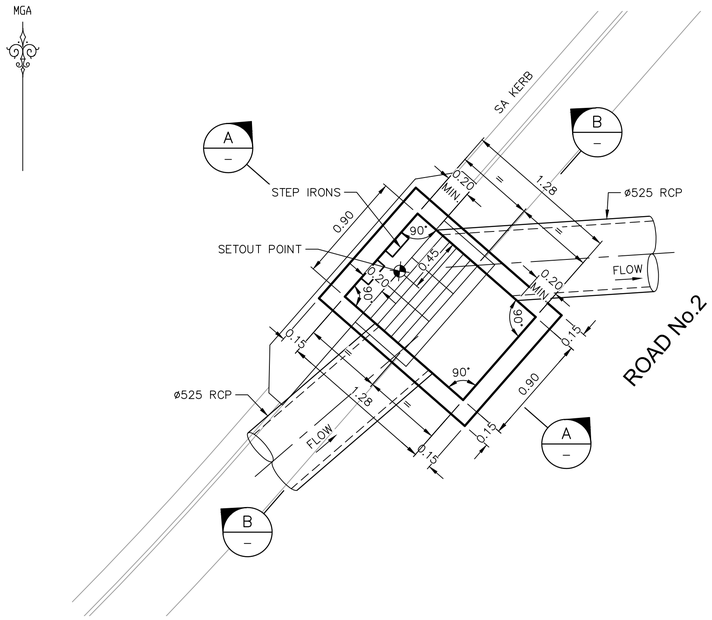
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	484	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:14:35PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-484.DWG

100mm AT FULL SIZE

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300001(2)-ENG-485



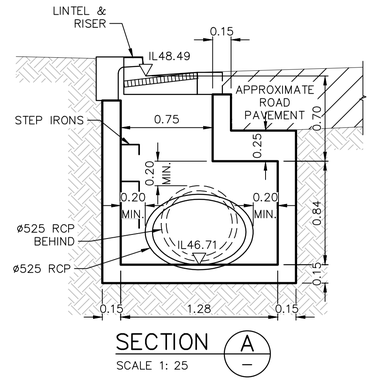
DETAIL PLAN – PIT 3\9
SCALE 1:25

NOTE:

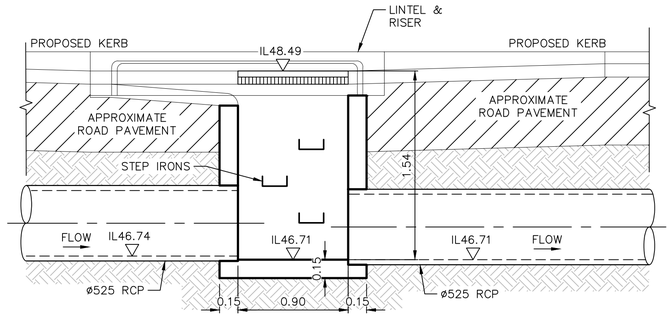
REFER SHEET 495 FOR REINFORCEMENT DETAILS.

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SECTION A
SCALE 1: 25



SECTION B
SCALE 1: 25

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SCALES: A1 1:25; 0 0.25 0.50 0.75 1.00 1.25m; A3 1:50

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SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: CUSTOM STORMWATER PIT
PIT No. 3\9

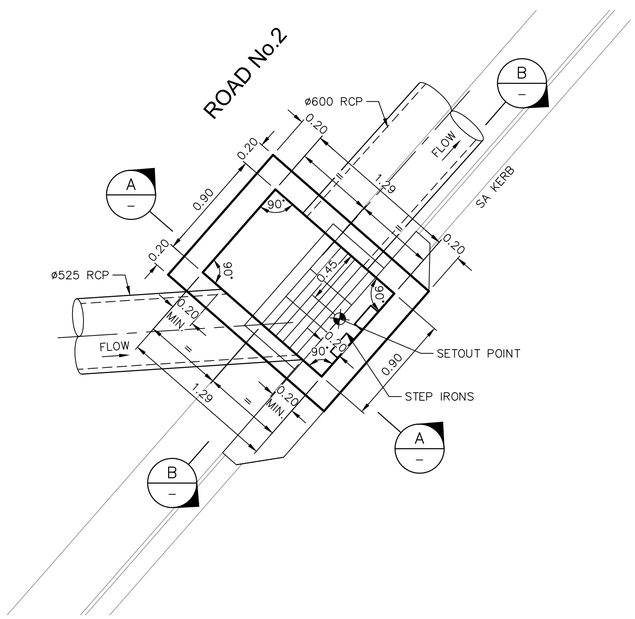
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	485	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:14:45PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-485.DWG

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

300001(2)-ENG-486

MGA



DETAIL PLAN – PIT 3\10

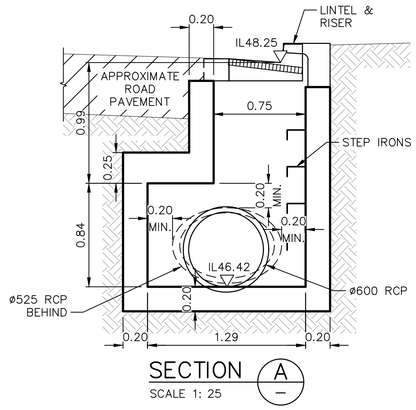
SCALE 1: 25

NOTE:

REFER SHEET 495 FOR REINFORCEMENT DETAILS.

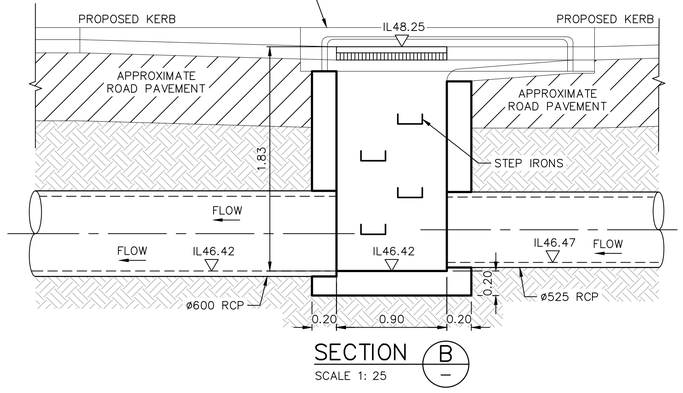
NOTE:

LOCKABLE GRATES ARE TO BE INSTALLED TO PITS IN ACCORDANCE WITH RYDE CITY COUNCIL STANDARD DRAWINGS AND SPECIFICATIONS.



SECTION A

SCALE 1: 25



SECTION B

SCALE 1: 25

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories:
- Certifier – Subdivision
- Certifier – Strata
- Certifier – Stormwater
- Certifier – Road & Drainage
- Certifier – Hydraulic (stormwater)

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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:25 — 0 0.25 0.50 0.75 1.00 1.25m — A3 1:50

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

ALL DIMENSIONS ARE IN METRES. DO NOT SCALE

adw Johnson
Central Coast
5 Pioneer Avenue,
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Phone: (02) 4305 4300
Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: CUSTOM STORMWATER PIT
PIT No. 3\10

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	486	2

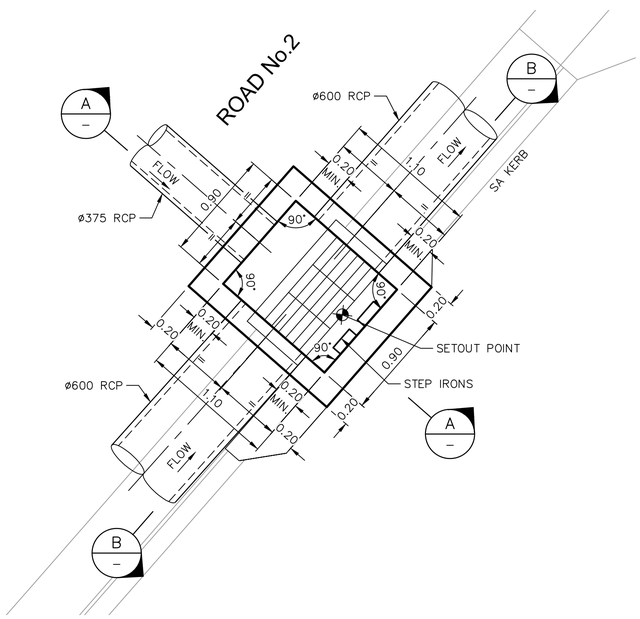
Plotted By: Mark Hoyland Plot Date: 16/05/22 2:14:54PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-486.DWG

100mm AT FULL SIZE

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300001(2)-ENG-487

MGA



DETAIL PLAN – PIT 3\11

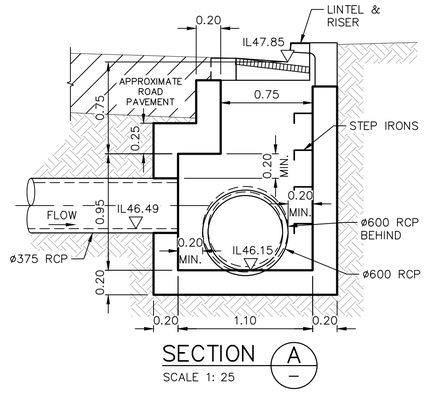
SCALE 1:25

NOTE:

REFER SHEET 495 FOR REINFORCEMENT DETAILS.

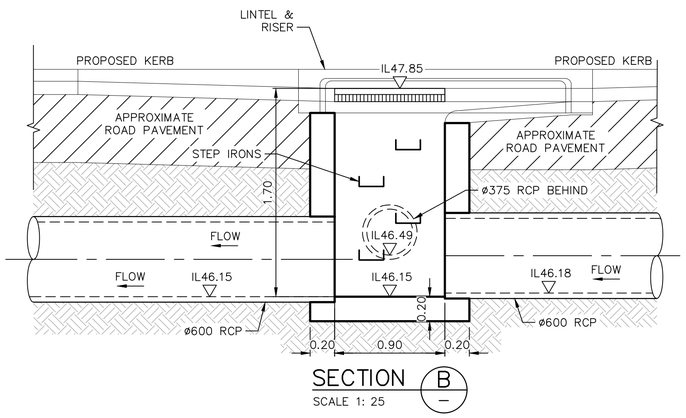
NOTE:

LOCKABLE GRATES ARE TO BE INSTALLED TO PITS IN ACCORDANCE WITH RYDE CITY COUNCIL STANDARD DRAWINGS AND SPECIFICATIONS.



SECTION A

SCALE 1: 25



SECTION B

SCALE 1: 25

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:25 — 0 0.25 0.50 0.75 1.00 1.25m — A3 1:50

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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adw Johnson
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SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: CUSTOM STORMWATER PIT
PIT No. 3\11

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG	– 487	2

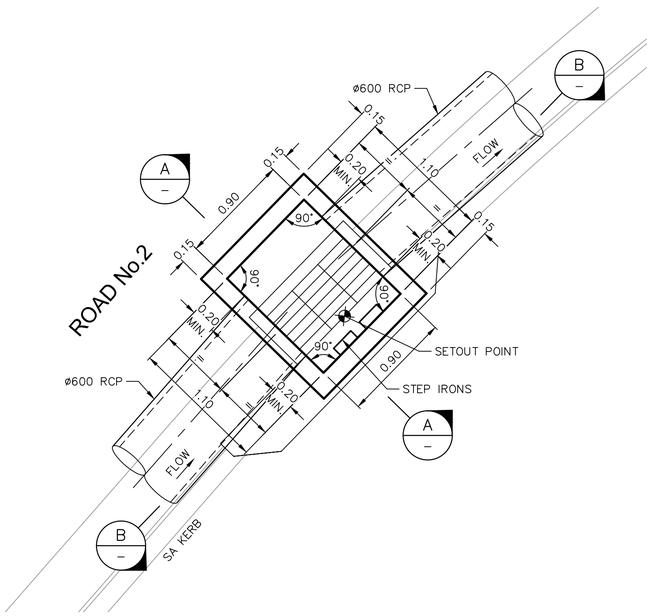
Plotted By: Mark Hoyland Plot Date: 16/05/22 2:15:04PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-487.DWG

100mm AT FULL SIZE

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300001(2)-ENG-488

MGA



DETAIL PLAN – PIT 3\12

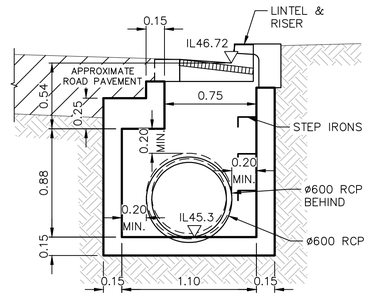
SCALE 1:25

NOTE:

REFER SHEET 495 FOR REINFORCEMENT DETAILS.

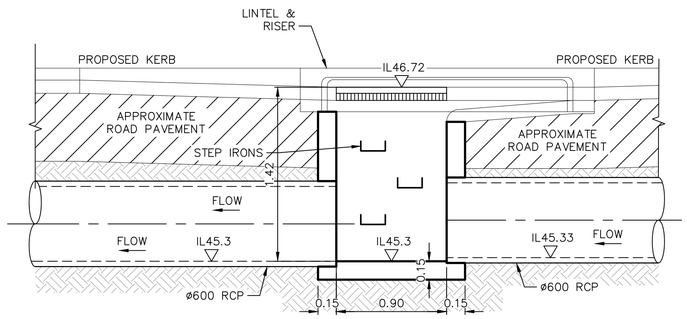
NOTE:

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SECTION A

SCALE 1: 25



SECTION B

SCALE 1: 25

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:25 — 0 0.25 0.50 0.75 1.00 1.25m — A3 1:50

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www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: CUSTOM STORMWATER PIT
PIT No. 3\12

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	488	2

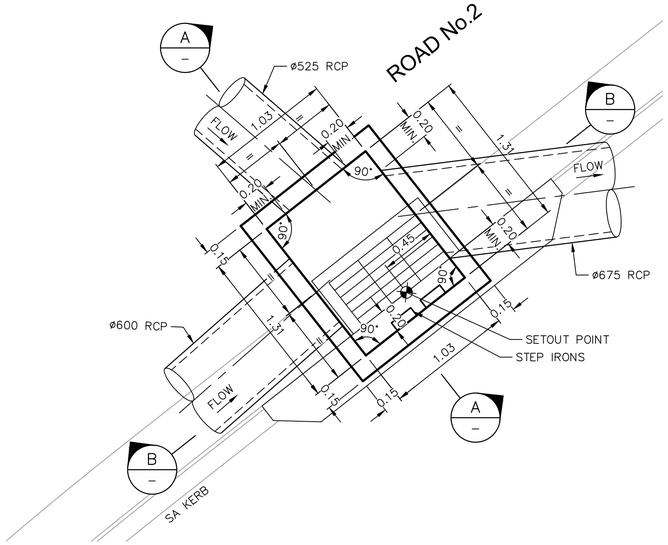
Plotted By: Mark Hoyland Plot Date: 16/05/22 2:15:13PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-488.DWG

100mm AT FULL SIZE

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300001(2)-ENG-489

MGA



DETAIL PLAN – PIT 3\13

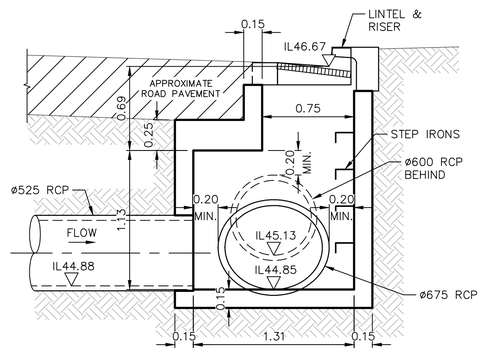
SCALE 1:25

NOTE:

REFER SHEET 495 FOR REINFORCEMENT DETAILS.

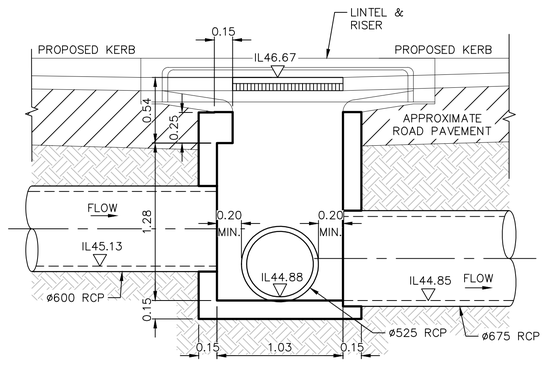
NOTE:

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SECTION A

SCALE 1:25



SECTION B

SCALE 1:25

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:25 — 0 0.25 0.50 0.75 1.00 1.25m — A3 1:50

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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adw johnson
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ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

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MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: CUSTOM STORMWATER PIT
PIT No. 3\13

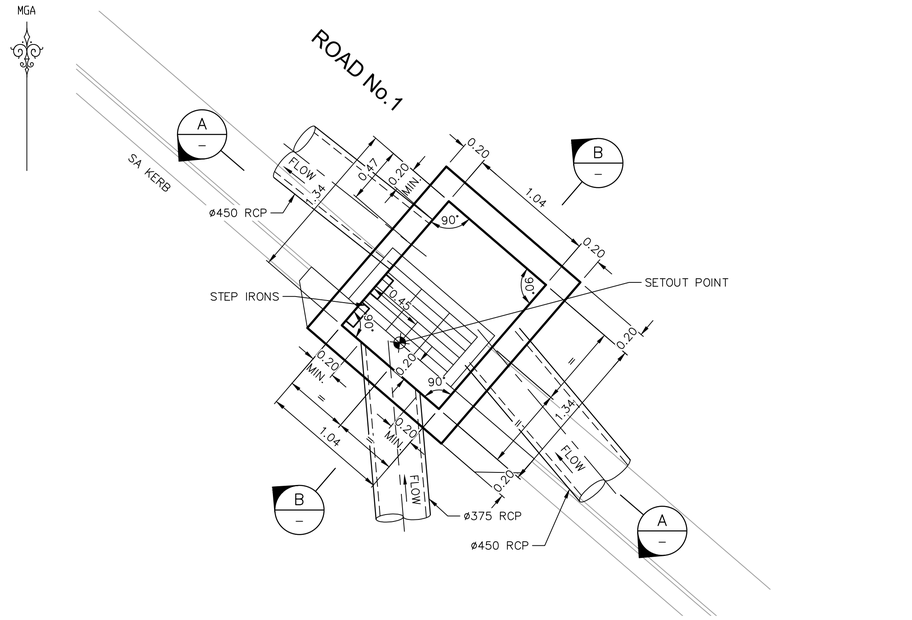
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	489	2

100mm AT FULL SIZE

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Plotted By: Mark Hoyland Plot Date: 16/05/22 2:15:23PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-489.DWG

300001(2)-ENG-490



DETAIL PLAN – PIT 15\3

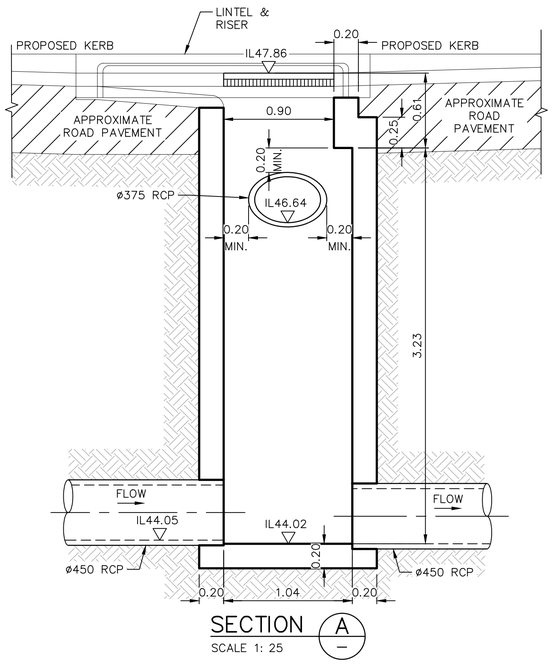
SCALE 1:25

NOTE:

REFER SHEET 495 FOR REINFORCEMENT DETAILS.

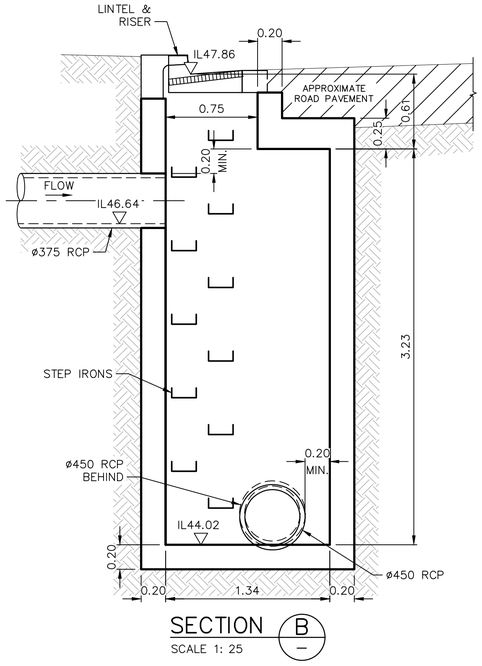
NOTE:

LOCKABLE GRATES ARE TO BE INSTALLED TO PITS IN ACCORDANCE WITH RYDE CITY COUNCIL STANDARD DRAWINGS AND SPECIFICATIONS.



SECTION A

SCALE 1: 25



SECTION B

SCALE 1: 25

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:25 — 0 0.25 0.50 0.75 1.00 1.25m — A3 1:50

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Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

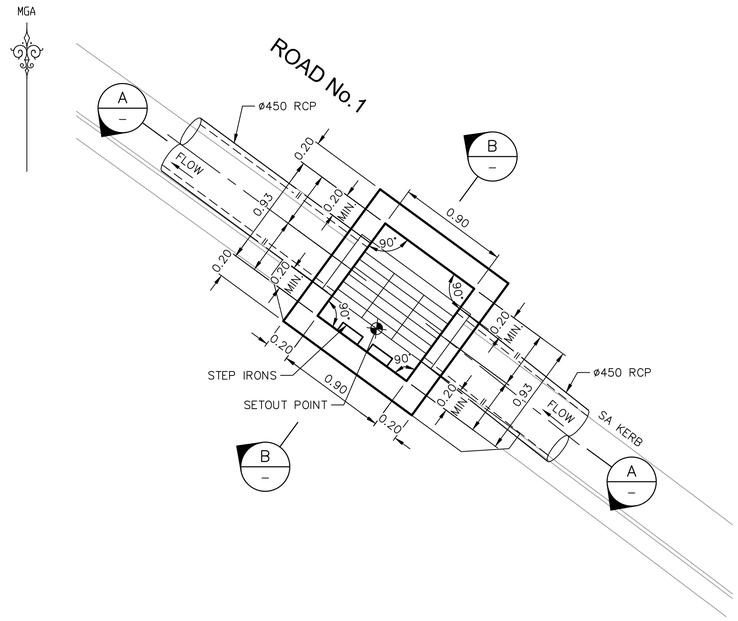
PLAN TITLE: CUSTOM STORMWATER PIT
PIT No. 15\3

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	490	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:15:32PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-490.DWG

100mm AT FULL SIZE
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300001(2)-ENG-491



DETAIL PLAN – PIT 15\4

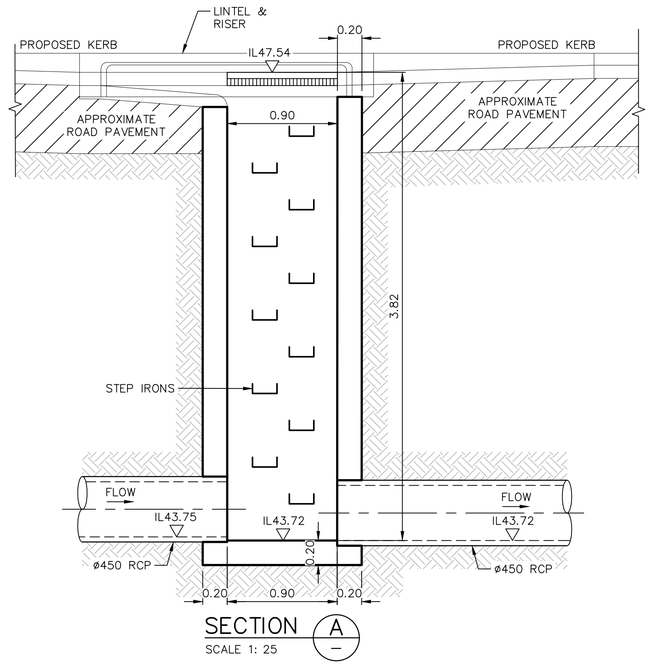
SCALE 1:25

NOTE:

REFER SHEET 495 FOR REINFORCEMENT DETAILS.

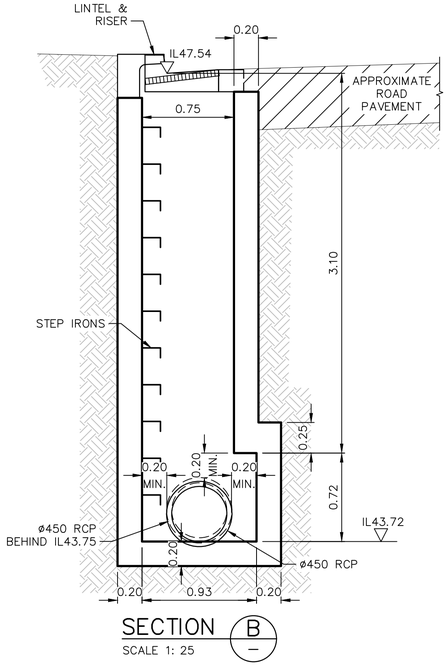
NOTE:

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SECTION A

SCALE 1: 25



SECTION B

SCALE 1: 25

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories:
Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:25 — 0 0.25 0.50 0.75 1.00 1.25m — A3 1:50

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: CUSTOM STORMWATER PIT PIT No. 15\4

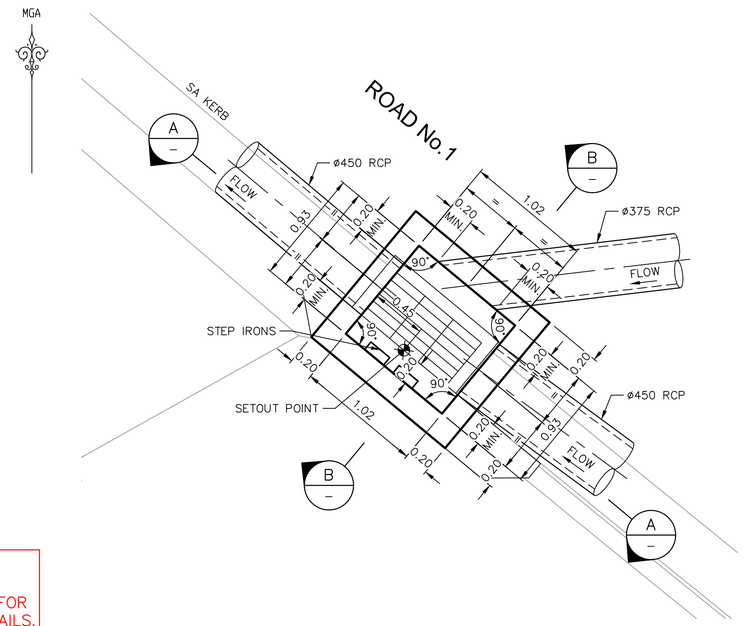
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	491	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:15:42PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-491.DWG

100mm AT FULL SIZE

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300001(2)-ENG-492



NOTE:

REFER SHEET 495 FOR REINFORCEMENT DETAILS.

NOTE:

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DETAIL PLAN – PIT 15\5

SCALE 1:25

SECTION A

SCALE 1:25

SECTION B

SCALE 1:25

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Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)

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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:25 — 0 0.25 0.50 0.75 1.00 1.25m — A3 1:50

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

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MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: CUSTOM STORMWATER PIT
PIT No. 15\5

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	492	2

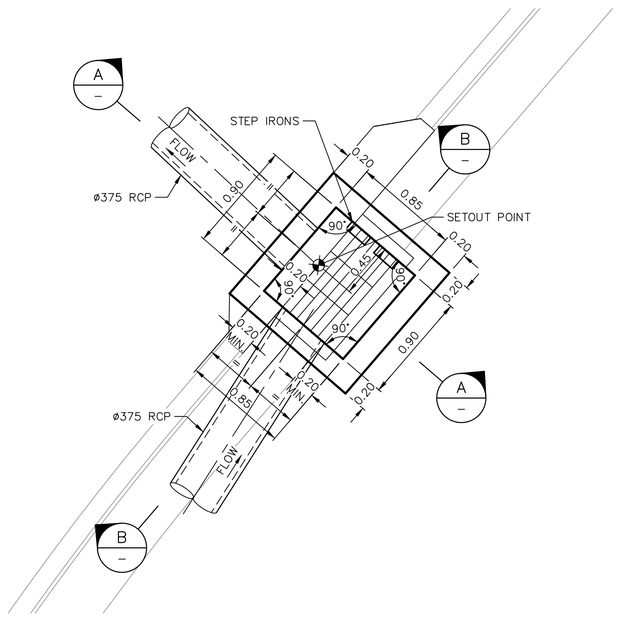
100mm AT FULL SIZE

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Plotted By: Mark Hoyland Plot Date: 16/05/22 2:15:53PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-492.DWG

300001(2)-ENG-493

MGA



DETAIL PLAN – PIT 100\4

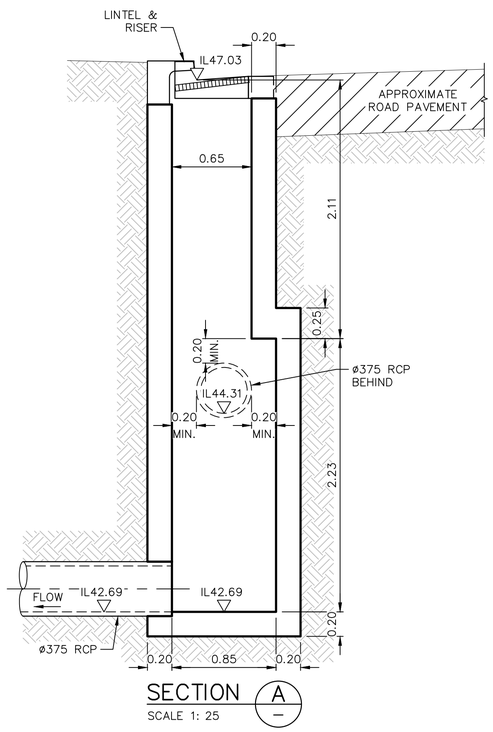
SCALE 1:25

NOTE:

REFER SHEET 495 FOR REINFORCEMENT DETAILS.

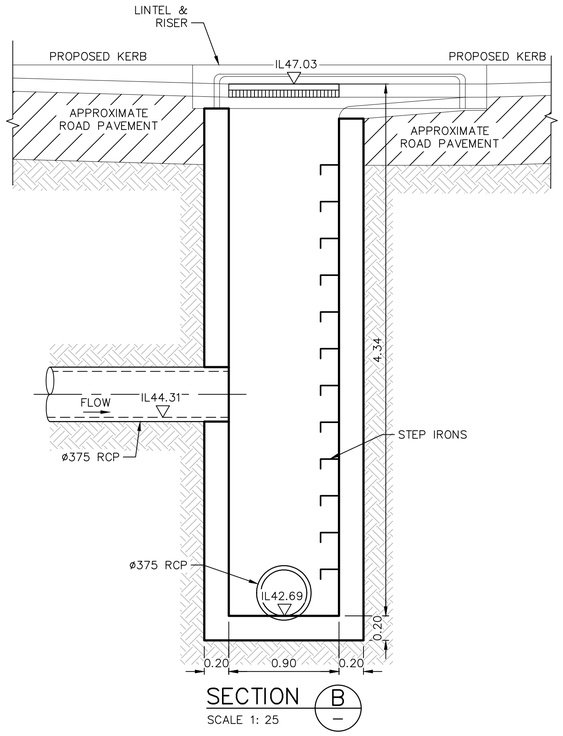
NOTE:

LOCKABLE GRATES ARE TO BE INSTALLED TO PITS IN ACCORDANCE WITH RYDE CITY COUNCIL STANDARD DRAWINGS AND SPECIFICATIONS.



SECTION A

SCALE 1: 25



SECTION B

SCALE 1: 25

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416
Categories: Certifier – Subdivision, Certifier – Strata, Certifier – Stormwater, Certifier – Road & Drainage, Certifier – Hydraulic (stormwater)

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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:25 — 0 0.25 0.50 0.75 1.00 1.25m — A3 1:50

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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adw Johnson
Central Coast
5 Pioneer Avenue,
P.O. Box 3717,
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Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537, EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK, SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: CUSTOM STORMWATER PIT, PIT No. 100\4

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	493	2

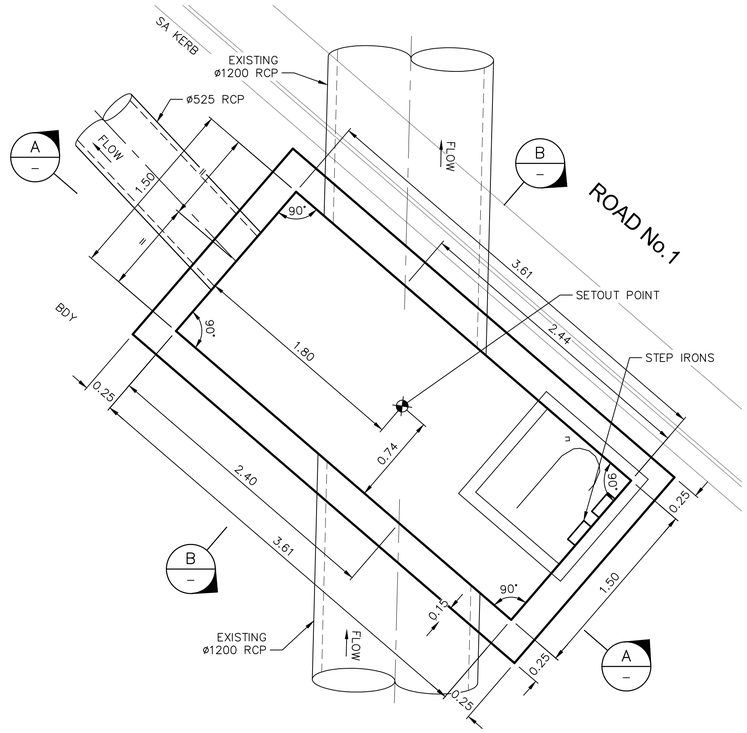
Plotted By: Mark Hoyland Plot Date: 16/05/22 2:16:03PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-493.DWG

100mm AT FULL SIZE

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300001(2)-ENG-494

MGA



DETAIL PLAN – PIT 101\1

SCALE 1:25

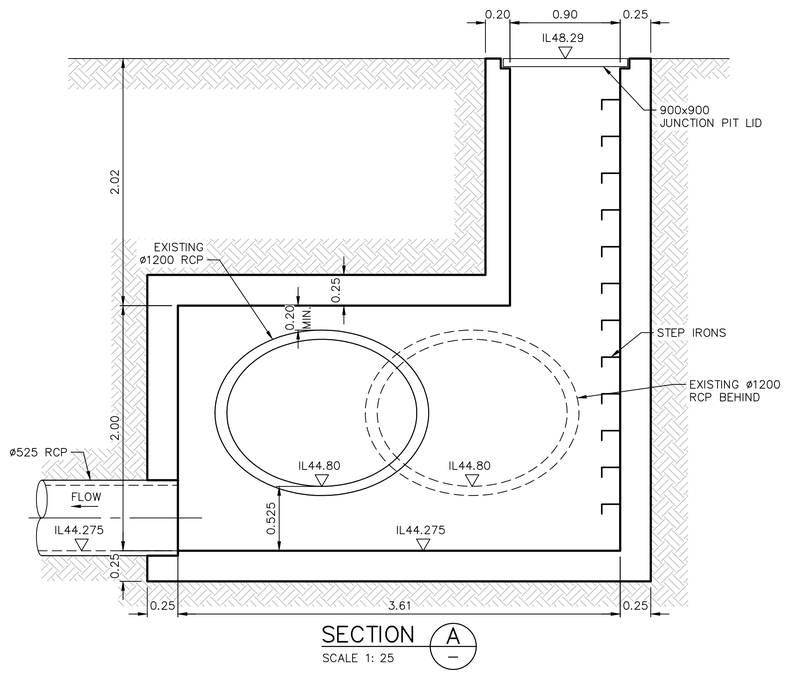
NOTE:

REFER SHEET 496 FOR REINFORCEMENT DETAILS.

CONTRACTOR TO CONFIRM SETOUT OF PIT 101\1 AGAINST SA KERB FOR CONSTRUCTION CLEARANCES

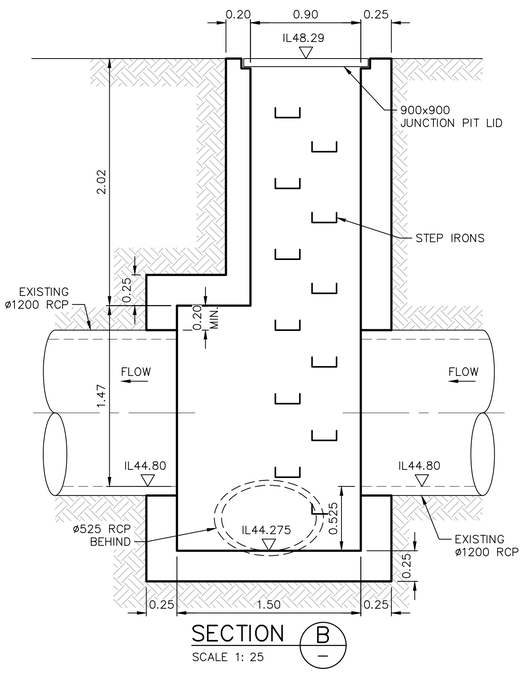
NOTE:

LOCKABLE GRATES ARE TO BE INSTALLED TO PITS IN ACCORDANCE WITH RYDE CITY COUNCIL STANDARD DRAWINGS AND SPECIFICATIONS.



SECTION A

SCALE 1: 25



SECTION B

SCALE 1: 25

NOTE:

CONTRACTOR TO CONFIRM EXISTING 1200ø PIPE LEVELS PRIOR TO COMMENCING CONSTRUCTION.

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

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2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:25 / A3 1:50 — 0 0.25 0.50 0.75 1.00 1.25m

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: CUSTOM STORMWATER PIT PIT No. 101\1

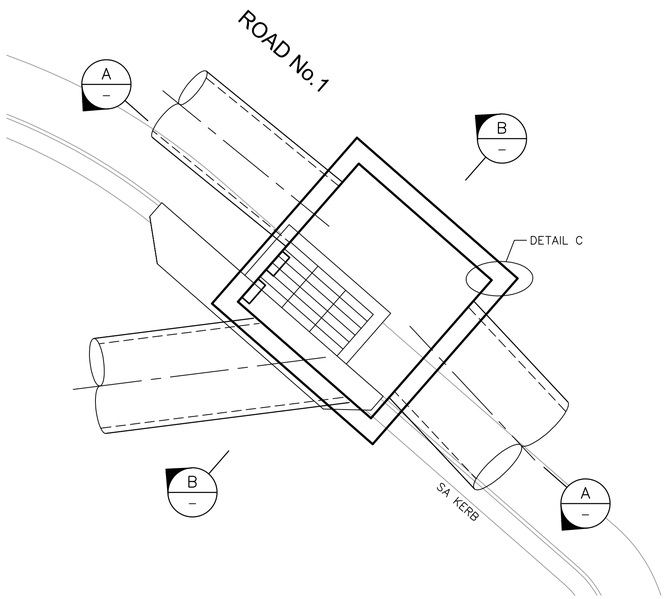
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	494	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:16:14PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-494.DWG

100mm AT FULL SIZE

This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

300001(2)-ENG-495



DETAIL PLAN – TYPICAL PIT
SCALE 1:25

TYPICAL CUSTOM PIT DETAILS:

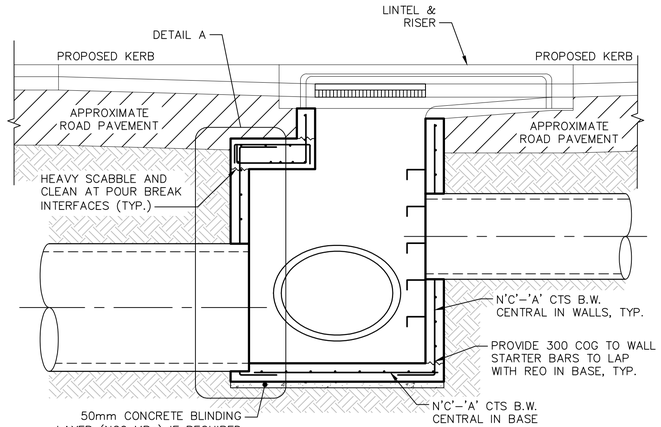
- CONCRETE GRADE – 32MPa (80mm SLUMP, 20mm AGGREGATE GP CEMENT)
- CONCRETE COVER (CAST AGAINST GROUND) – 50mm
- CONCRETE COVER (EXPOSED TO ATMOSPHERE) – 50mm

NOTE:

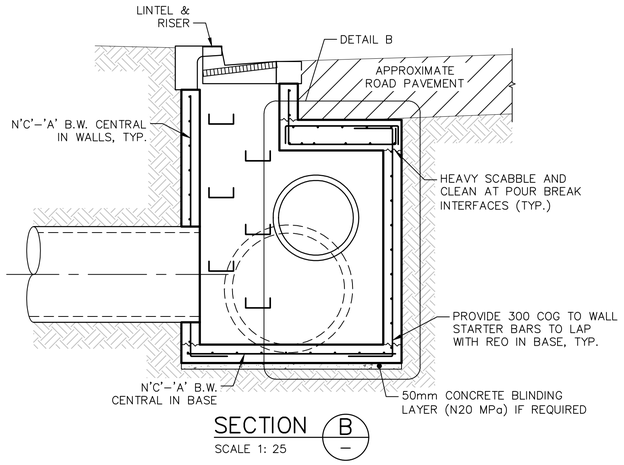
REFER TO SHEETS 480 TO 494 & 499 FOR PIT DIMENSIONS & WALL/LID SLAB/BASE THICKNESSES.

NOTE:

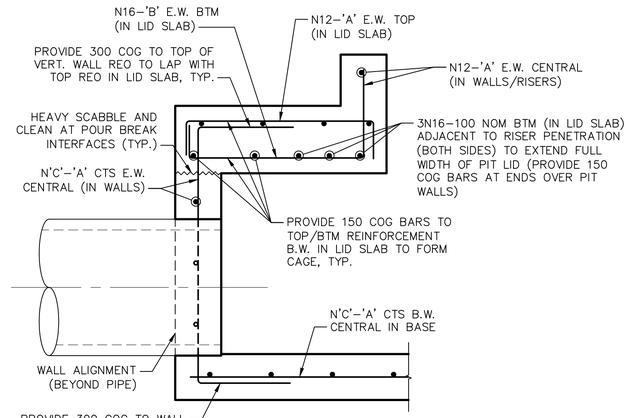
REFER TO SHEET 497 FOR TYPICAL TRIMMER BAR AROUND PIPE PENETRATIONS.



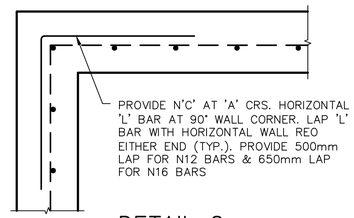
SECTION A
SCALE 1: 25



SECTION B
SCALE 1: 25



DETAIL A/B
SCALE 1:10



DETAIL C
90° CORNER REINFORCEMENT DETAILS
(SINGLE LAYER REINFORCEMENT)
SCALE 1:10

2

REINFORCEMENT TABLE			
PIT	'A'	'B'	'C'
1\10	200	200	16
1\12A	200	200	16
1\14	200	200	12
1\15	200	200	12
1\16	200	200	12
1\17	200	200	16
3\9	200	200	12
3\10	200	200	12
3\11	200	200	12
3\12	200	200	12
3\13	200	200	12
15\3	200	200	16
15\4	200	200	16
15\5	200	200	16
100\4	200	200	16

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Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
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CONSTRUCTION ISSUE

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1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES
A1 1:25 — 0 0.25 0.50 0.75 1.00 1.25m — A3 1:50
A1 1:10 — 0 0.25 0.5m — A3 1:20

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project
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adw Johnson
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email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION
LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

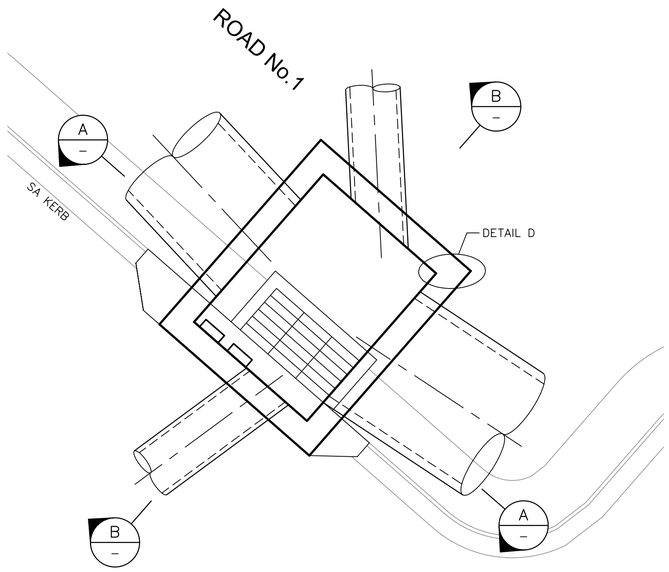
PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: TYPICAL CUSTOM STORMWATER PIT DETAILS SHEET 1

PROJECT No. 300001(2) – DISCIPLINE ENG – NUMBER 495 REV. 2

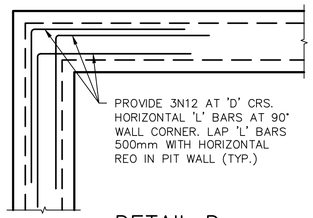
Plotted By: Mark Hoyland Plot Date: 16/05/22 2:16:26PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-495.DWG

100mm AT FULL SIZE
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300001(2)-ENG-496



DETAIL PLAN – TYPICAL PIT
SCALE 1:25



DETAIL D
90° CORNER REINFORCEMENT DETAILS
(DOUBLE LAYER REINFORCEMENT)
SCALE 1:10

REINFORCEMENT TABLE			
PIT	'C'	'D'	'E'
101\1	16	200	200

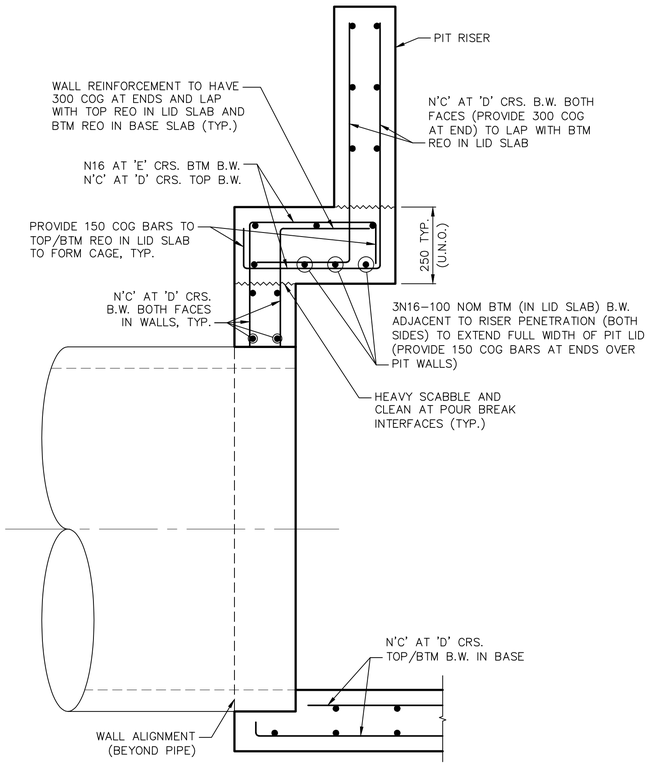
TYPICAL CUSTOM PIT DETAILS:

- CONCRETE GRADE – 32MPa (80mm SLUMP, 20mm AGGREGATE GP CEMENT)
- CONCRETE COVER (CAST AGAINST GROUND) – 50mm
- CONCRETE COVER (EXPOSED TO ATMOSPHERE) – 50mm

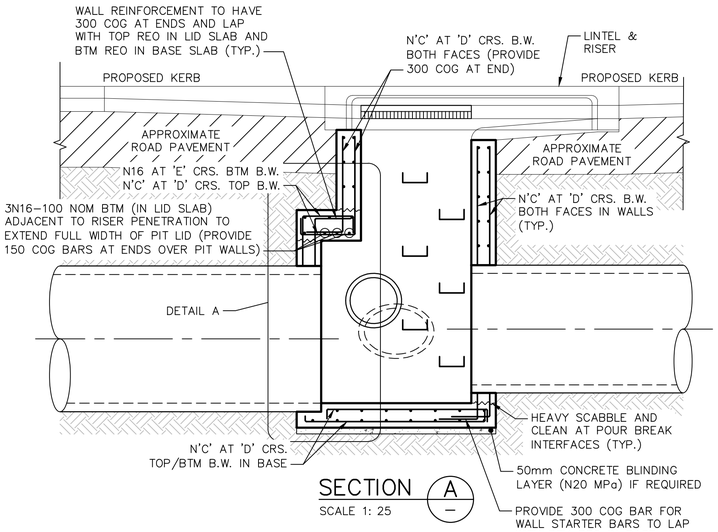
NOTE:

REFER TO SHEETS 481 TO 494 & 499 FOR PIT DIMENSIONS & WALL/LID SLAB/BASE THICKNESSES.

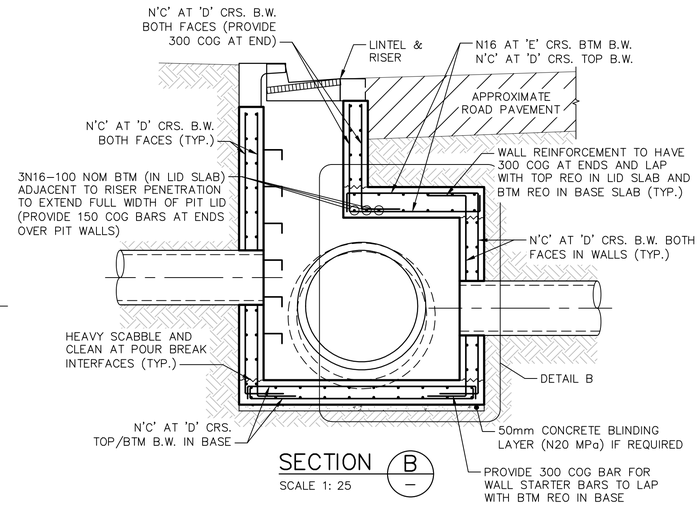
These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
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DETAIL A/B
SCALE 1:10



SECTION A
SCALE 1: 25



SECTION B
SCALE 1: 25

NOTE:

REFER TO SHEET 497 FOR TYPICAL TRIMMER BAR AROUND PIPE PENETRATIONS.

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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES
A1 1:25 — 0 0.25 0.50 0.75 1.00 1.25m — A3 1:50
A1 1:10 — 0 0.25 0.5m — A3 1:20

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www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION
LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

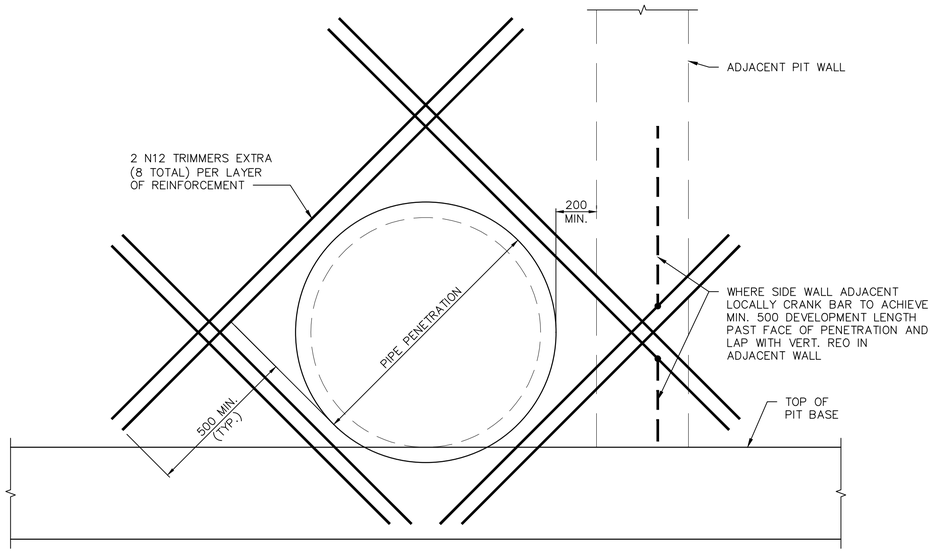
PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: TYPICAL CUSTOM STORMWATER PIT DETAILS SHEET 2

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	496	2

100mm AT FULL SIZE
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Plotted By: Mark Hoyland Plot Date: 16/05/22 2:16:39PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-496.DWG

300001(2)-ENG-497



TYPICAL TRIMMER BAR DETAIL AROUND SINGLE PIPE PENETRATION

SCALE 1:10

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SCALES: A1 1:10 — 0 — 0.25 — 0.5m — A3 1:20

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SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: TYPICAL CUSTOM STORMWATER PIT DETAILS SHEET 3

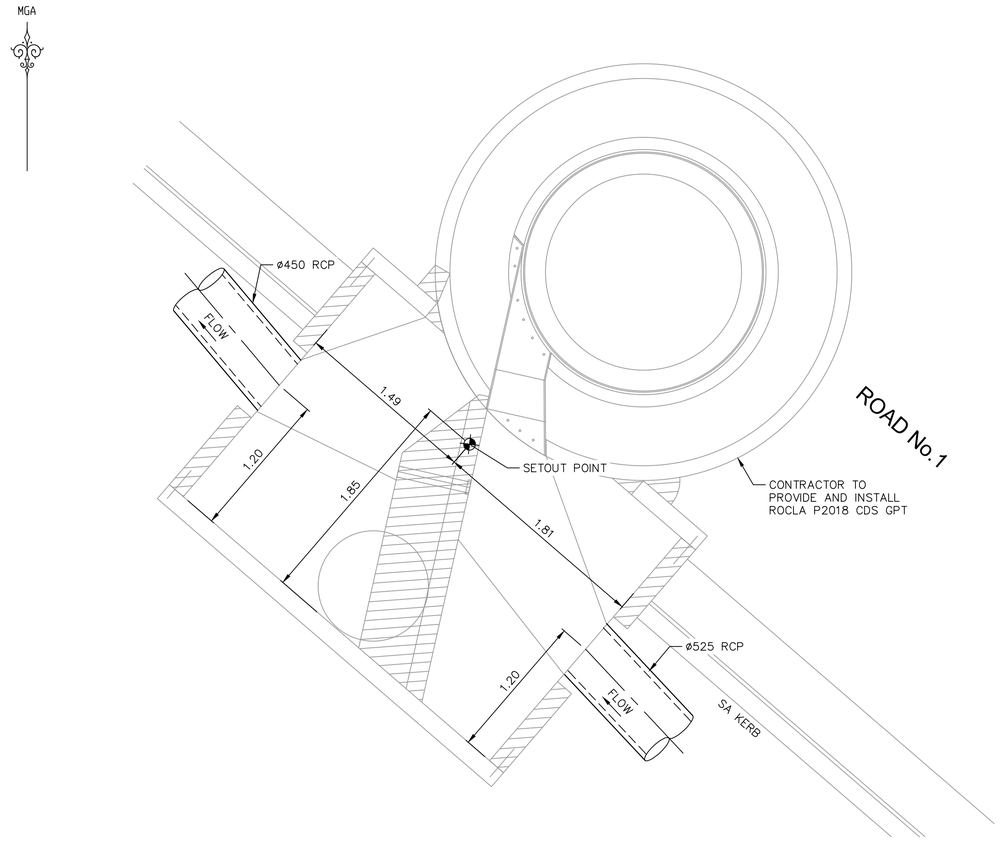
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	497	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:16:46PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-497.DWG

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300001(2)-ENG-498



SETOUT PLAN – PIT 101\2

SCALE 1:25

NOTE:

REFER SHEET 411 FOR SETOUT DETAILS

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SCALES: A1 1:25 — 0 0.25 0.50 0.75 1.00 1.25m — A3 1:50

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MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: STORMWATER PIT 101\2
SETOUT PLAN

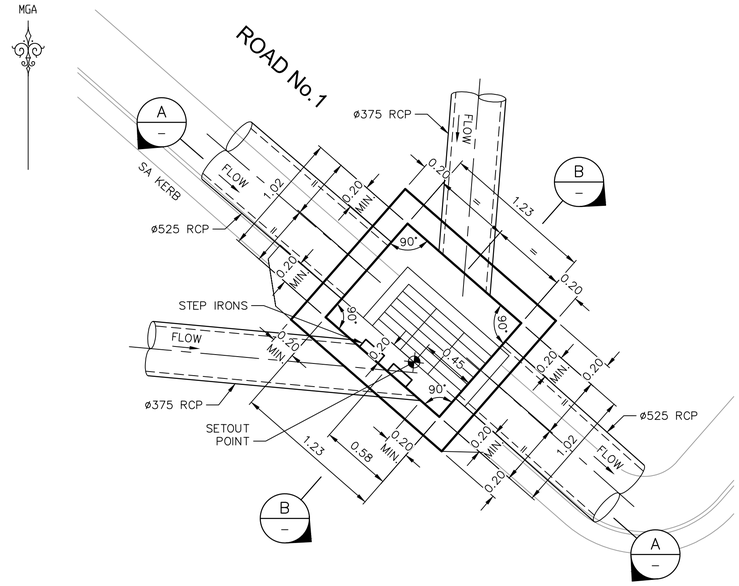
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	498	2

100mm AT FULL SIZE

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Plotted By: Mark Hoyland Plot Date: 16/05/22 2:16:53PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-498.DWG

300001(2)-ENG-499



DETAIL PLAN – PIT 1\10

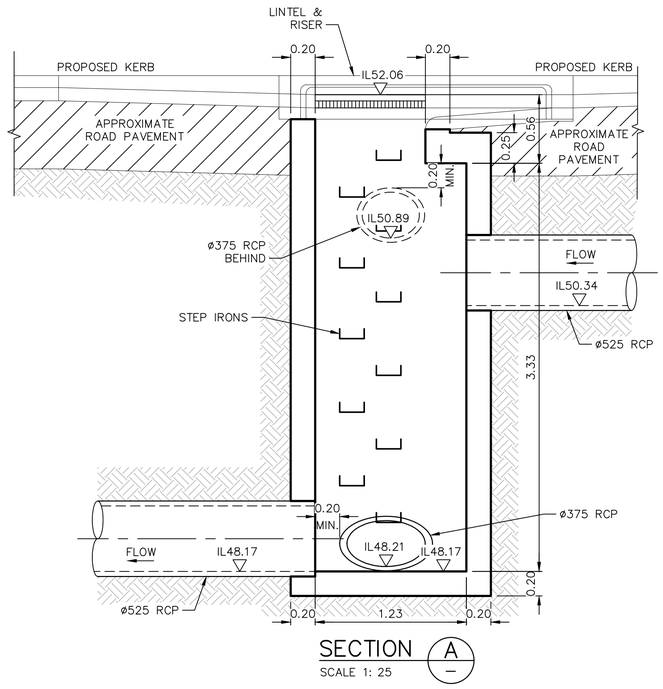
SCALE 1:25

NOTE:

REFER SHEET 495 FOR REINFORCEMENT DETAILS.

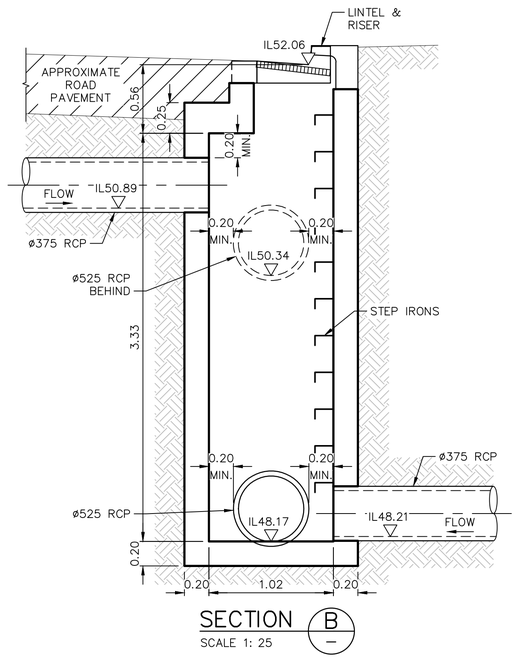
NOTE:

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SECTION A

SCALE 1: 25



SECTION B

SCALE 1: 25

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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:25; 0 0.25 0.50 0.75 1.00 1.25m; A3 1:50

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

ALL DIMENSIONS ARE IN METRES. DO NOT SCALE

adw Johnson
Central Coast
5 Pioneer Avenue,
P.O. Box 3717,
Tuggerah N.S.W. 2259
Phone: (02) 4305 4300
Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: CUSTOM STORMWATER PIT PIT No. 1\10

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	499	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:17:02PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-499.DWG

100mm AT FULL SIZE

This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

300001(2)-ENG-501

LEGEND (+ FILL – CUT) Lower		Upper	Colour
−4.00	to	−3.50 m	
−3.50	to	−3.00 m	
−3.00	to	−2.50 m	
−2.50	to	−2.00 m	
−2.00	to	−1.50 m	
−1.50	to	−1.00 m	
−1.00	to	−0.50 m	
−0.50	to	−0.00 m	
0.00001	to	0.50 m	
0.50	to	1.00 m	
1.00	to	1.50 m	
1.50	to	2.00 m	
2.00	to	2.50 m	
2.50	to	3.00 m	

VOLUMES:

CUT =	- 6,600m³
FILL =	3,350m³
EXCESS =	3,250m³

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

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MGA

LEGEND

- SITE BOUNDARY
- LIMIT OF WORKS BOUNDARY
- PROPOSED LOT BOUNDARY
- EXISTING LOT BOUNDARY
- MAJOR CONTOURS
- MINOR CONTOURS
- PROPOSED KERB
- EXISTING KERB
- EXTENTS OF BATTER

CONTOUR INTERVAL = 0.5m

CONTRACTOR TO SUBMIT TEMPORARY WORKS FORM AND PAY RELEVANT FEES TO COUNCIL PRIOR TO COMMENCING PATH WORKS WITHIN LOT 15 DP240110

SP7082
SP5991
15
DP240110
62
DP570271
101
DP1263727
1
DP880284
ROAD No.1
ROAD No.2
ROAD No.2
ROAD
LYONPARK
CREEK
SHRIMPTONS

GENERAL NOTES: –

1. VOLUMES ARE BASED UPON LEVEL DIFFERENCE BETWEEN EXISTING SURFACE (NO STRIPPING OF TOPSOIL IS ASSUMED) AND PROPOSED SUBGRADE LEVELS. SUBGRADE LEVEL CONSISTS OF PAVEMENT THICKNESSES OUTLINED ON SHEET 152 AND 100mm ALLOWANCE FOR TOPSOIL REPLACEMENT IN LANDSCAPED AREA.
2. NO ALLOWANCE HAS BEEN MADE FOR LANDSCAPE OR TO TRENCHSPOIL VOLUMES.

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SITE REGRADE PLAN

SCALE 1:500

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2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:500 — 0 12.5 25.0m — A3 1:1000

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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email: coast@adwjohnson.com.au
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ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: SITE REGRADE PLAN

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	501	2

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100mm AT FULL SIZE

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:17:40PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-501.DWG

300001(2)-ENG-551

100mm AT FULL SIZE

This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

CORNER OF EXISTING CRIB WALL

EXISTING RETAINING WALL

BRIDGE WALL No.1

REFER TO DRAWING BY SMEC FOR BRIDGE ABUTMENT DETAILS.

GABION WALL INFILL

BRIDGE WING WALL. REFER TO SMEC DRAWINGS FOR DETAILS.

RETURN WALL AT CH 17 TO TIE IN WITH BRIDGE WING WALL. REFER TO DRAWING BY SMEC FOR DETAILS. PROVE 30mm ISOLATION JOINT

ROAD No.1

RETAINING WALL RW100. REFER TO DETAILS ON SHEET 561/571

R 243.300

R 256.700

RW 100

LIF DRIVEWAY No.1

LIF DRIVEWAY No.2

CARPARK GUARDRAIL AND FOOTING. REFER SHEET 371 FOR DETAILS.

BRIDGE WALL No.1 (BW1). REFER TO DETAILS ON SHEET 562/572

WHERE STORMWATER PIPE INTERSECTS RETAINING WALL, REFER TO PIERING DETAIL ON SHEET 573

REFER BELOW FOR CONTINUATION

RETAINING WALL DETAIL PLAN

SCALE 1:100

REFER ABOVE FOR CONTINUATION

EXISTING RETAINING WALL

RW101

SA KERB

SA KERB

LYONPARK ROAD

RETAINING WALL DETAIL PLAN

SCALE 1:100

MGA

LEGEND

- SITE BOUNDARY
- LIMIT OF WORKS BOUNDARY
- PROPOSED LOT BOUNDARY
- EXISTING LOT BOUNDARY
- MAJOR CONTOURS
- MINOR CONTOURS
- PROPOSED KERB
- EXISTING KERB
- EXTENTS OF BATTER
- PROPOSED RETAINING WALL
- BRIDGE WALL
- SW PROPOSED STORMWATER

CONTOUR INTERVAL = 0.1m

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)

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GENERAL NOTES: –

1. FOR TYPICAL ROAD CROSS SECTIONS AND KERB PROFILES REFER SHEET 201, PAVEMENT DETAILS REFER TO SHEET 151
2. SETOUT INFORMATION IS TO BE VERIFIED BY THE CONTRACTOR AGAINST THE PLAN VIEW, LONGITUDINAL SECTIONS AND ELECTRONIC 12D DATA BEFORE BEING USED. IF THERE IS A DISCREPANCY THE SUPERINTENDENT IS TO BE NOTIFIED AND DIRECTION TO BE PROVIDED IN WRITING BEFORE PROCEEDING.

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CONSTRUCTION ISSUE

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SCALES: A1 1:100 — 0 2.5 5.0m — A3 1:200

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: RETAINING WALL DETAIL PLAN

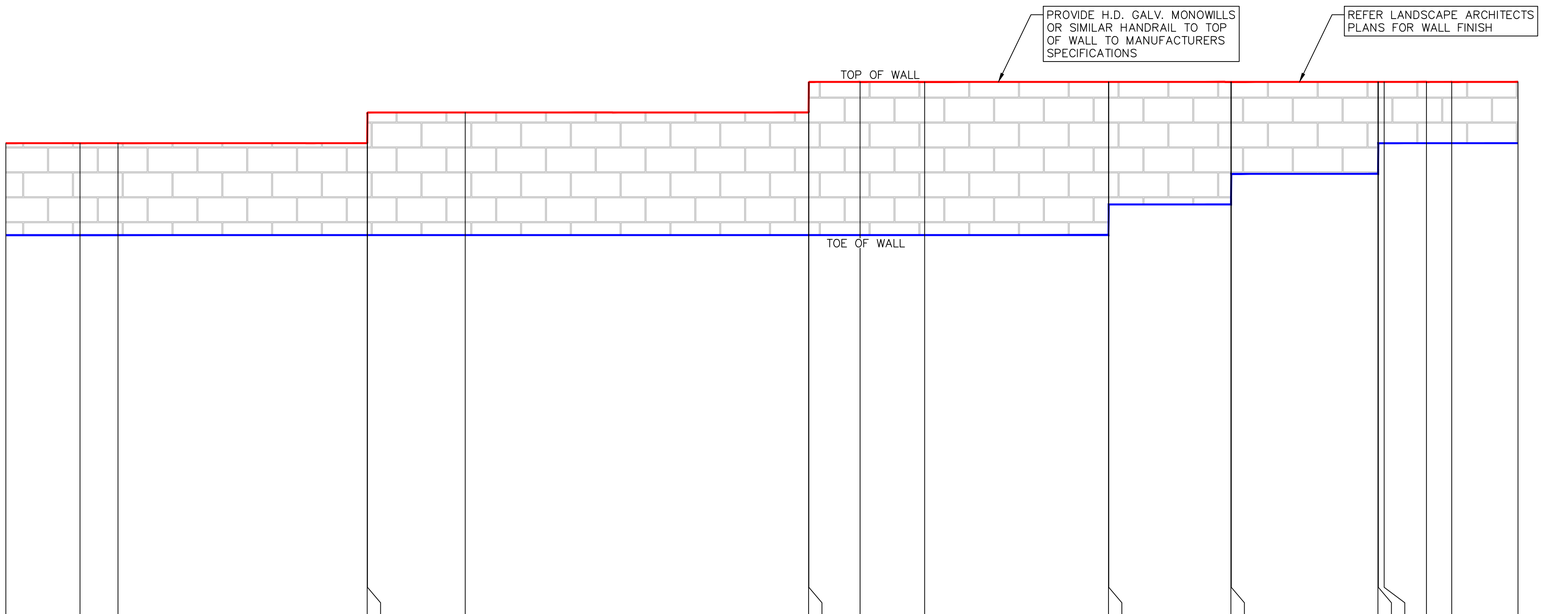
PROJECT No. 300001(2) – DISCIPLINE ENG – NUMBER 551 REV. 2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:18:04PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-551.DWG

300001(2)-ENG-561

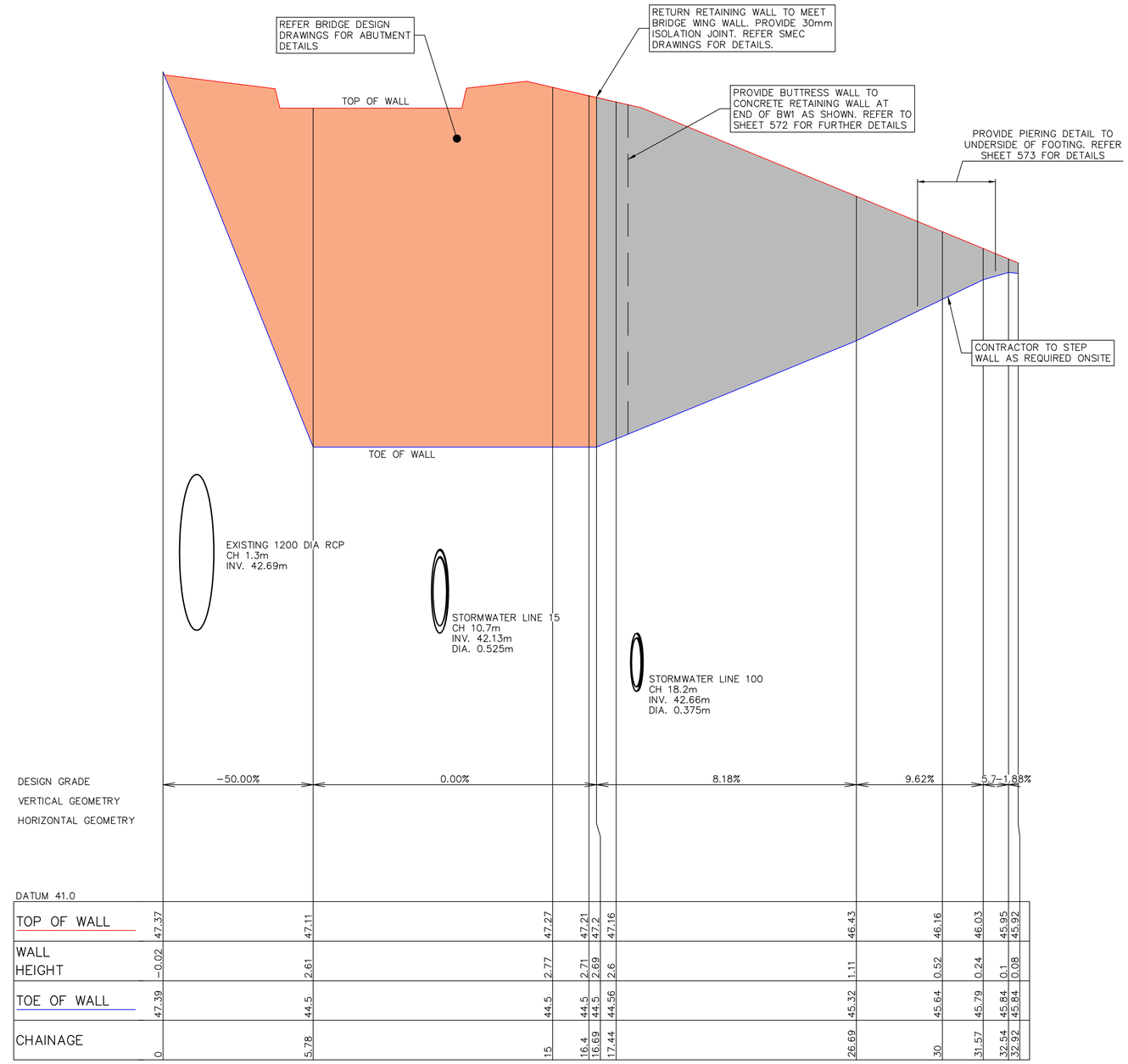
NOTE:

REFER SHEET 571 FOR STRUCTURAL DETAILS.



| | | |

300001(2)-ENG-562

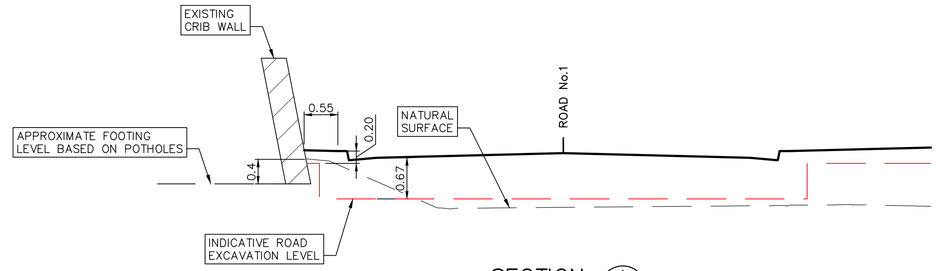


| | | |

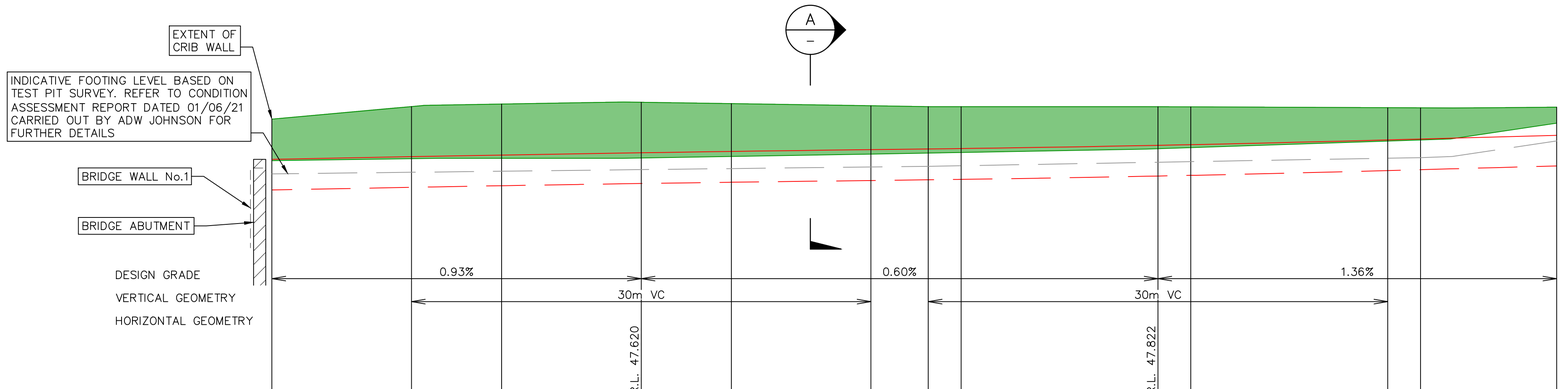
300001(2)-ENG-563

NOTE:

1. REFER CONDITION ASSESSMENT REPORT BY ADWJOHNSON REFERENCE '210601_STRUCTURAL REPORT_EXISTING RETAINING WALL_IVANHOE ESTATE_300001.FINAL' FOR EXISTING WALL CONDITION AND EXCAVATION CONDITIONS
2. REFER TO GEOTECHNICAL REPORT PREPARED BY DOUGLAS PARTNERS REFERENCE 86043.02 FOR CONSTRUCTION METHODOLOGY. WORKS TO BE UNDERTAKEN UNDER GEOTECHNICAL SUPERVISION.
3. CONTRACTOR TO UNDERTAKE DILAPIDATION SURVEY PRIOR TO COMMENCING WORKS.

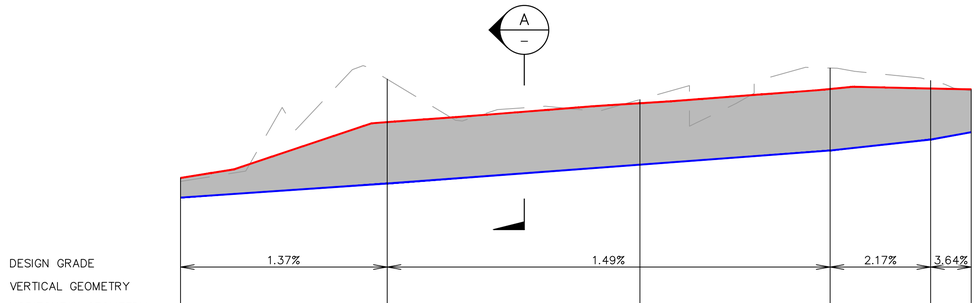


SECTION A–A
SCALE 1: 50



| | | |

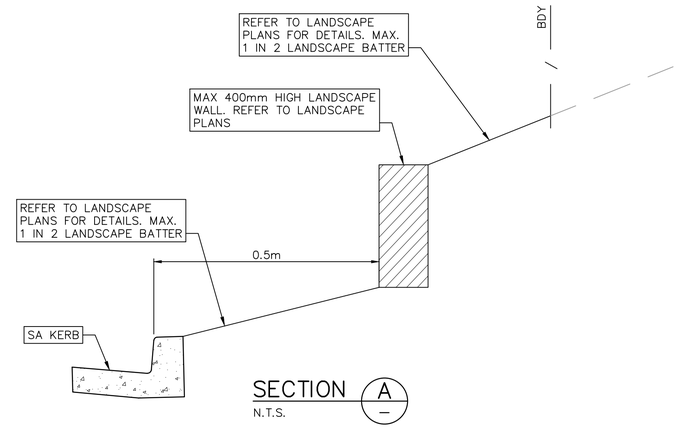
300001(2)-ENG-564



DESIGN GRADE		1.37%	1.49%		2.17%	3.64%
VERTICAL GEOMETRY						
HORIZONTAL GEOMETRY						
DATUM 47.0						
TOP OF WALL	48.48	48.85	48.97	49.06	49.07	49.06
WALL HEIGHT	0.13	0.4	0.4	0.4	0.33	0.28
EXISTING	48.46	49.13	48.99	49.2	49.12	49.05
TOE OF WALL	48.35	48.45	48.57	48.66	48.73	48.78
CHAINAGE	0	6.75	15	21.21	24.49	25.82

LONGITUDINAL SECTION RW101

HORIZONTAL SCALE 1:100
VERTICAL SCALE 1:20



SECTION A – N.T.S.

100mm AT FULL SIZE

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SCALES
A1 1:100 — 0 2.5 5.0m — A3 1:200
A1 1:20 — 0 0.5 1.0m — A3 1:40

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SSDA 8903

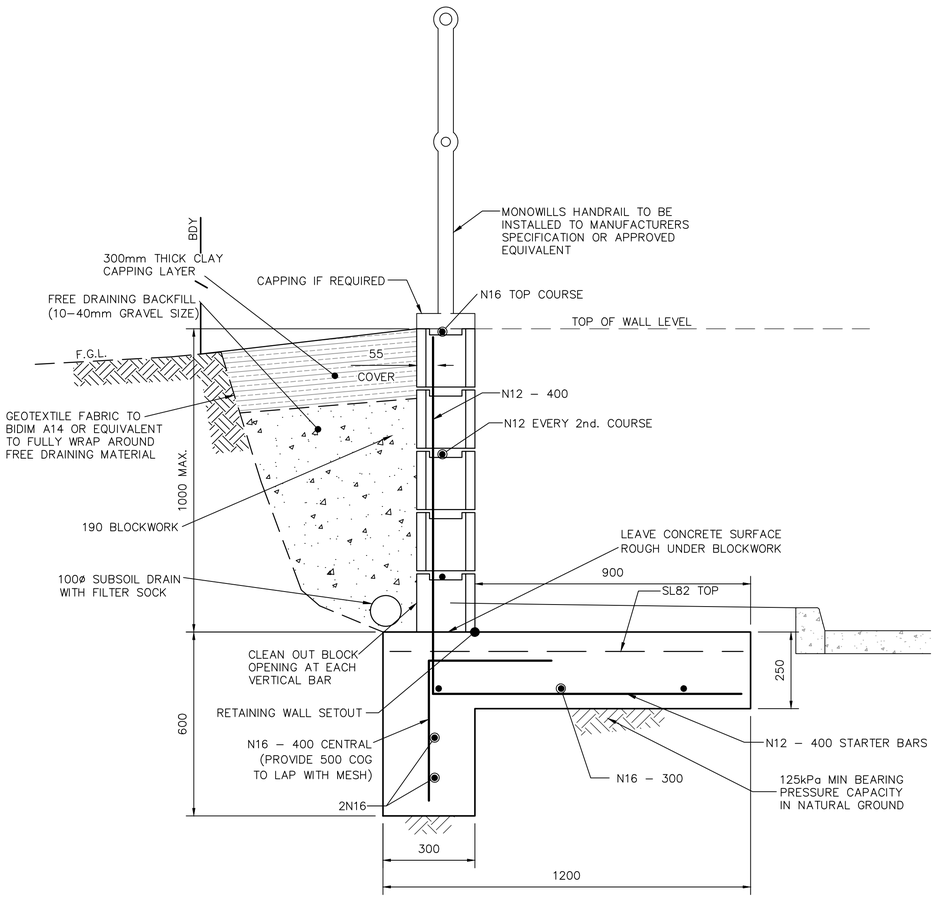
SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: RETAINING WALL LONGITUDINAL SECTION RW101

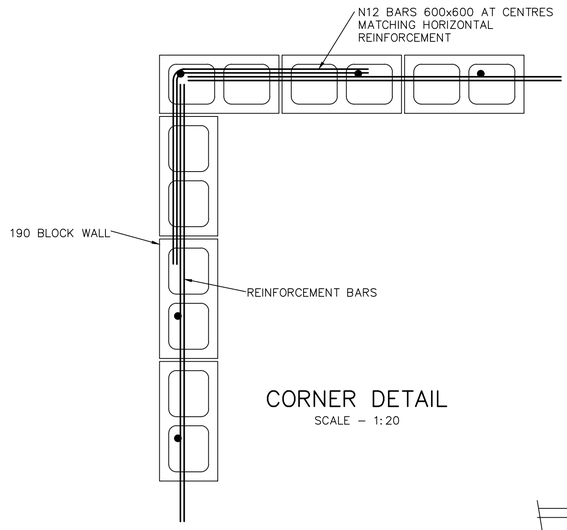
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	564	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:18:26PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-564.DWG

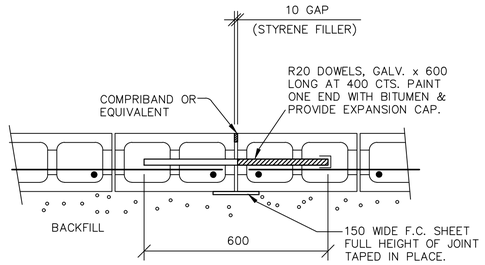
300001(2)-ENG-571



RW100 TYPICAL DETAILS
N.T.S.

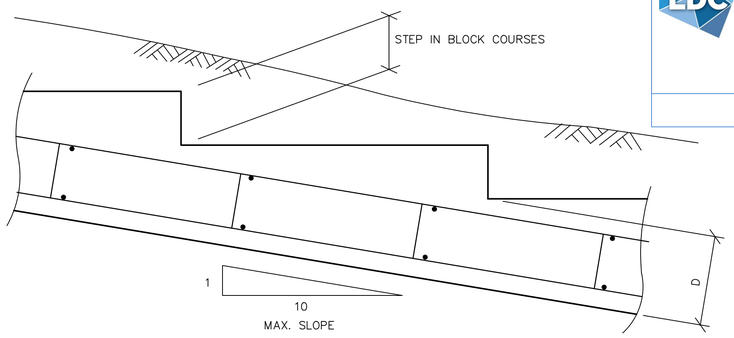


CORNER DETAIL
SCALE – 1:20



BLOCKWORK DOWEL JOINT
N.T.S.

PROVIDE JOINTS AT 8m MAX CTS.
LAYOUT TO ARCHITECTS SPECIFICATIONS



SLOPED STRIP FOOTING
N.T.S.

These plans are referred to in certificate no. **16897** approved by:
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Registered Certifier
Registration No: BDC 2416
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SCALES: A1 1:20 — 0 — 0.5 — 1.0m — A3 1:40

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SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: TYPICAL RETAINING WALL DETAILS & NOTES

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	571	2

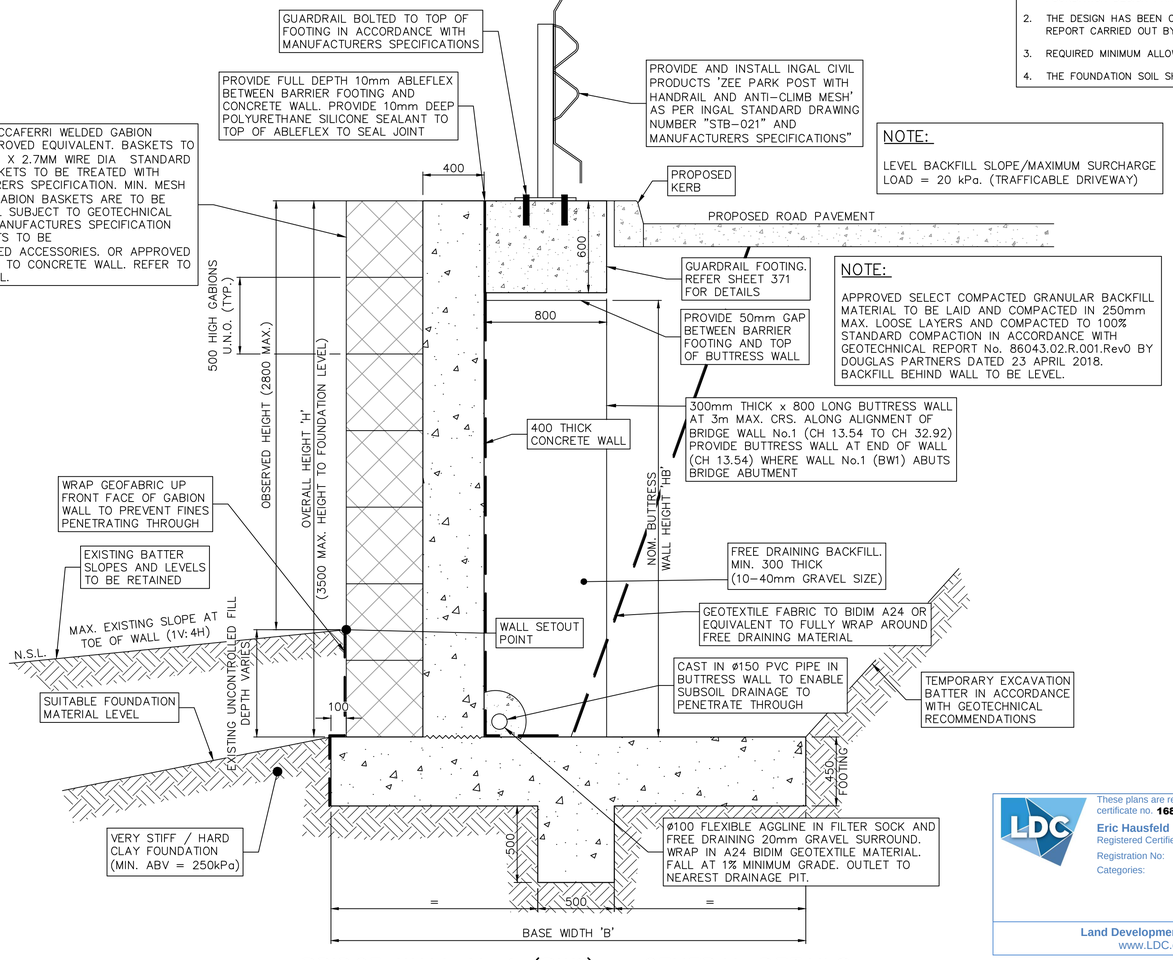
Plotted By: Mark Hoyland Plot Date: 16/05/22 2:18:32PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)–ENG–571.DWG

100mm AT FULL SIZE
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300001(2)-ENG-572

FOUNDATIONS

1. FOUNDATION TO HAVE AN ALLOWABLE BEARING CAPACITY OF 250kPa MIN. ON A VERY STIFF/HARD CLAY. THE FOUNDATION MATERIAL IS TO BE ASSESSED BY A GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION OF THE RETAINING WALL TO CONFIRM THE ASSUMED FOUNDATION DESIGN PARAMETERS.
2. THE DESIGN HAS BEEN CARRIED OUT WITH REFERENCE TO THE GEOTECHNICAL INVESTIGATION REPORT CARRIED OUT BY DOUGLAS PARTNERS 86043.01.R.003.REV0 DATED 22/12/17.
3. REQUIRED MINIMUM ALLOWABLE BEARING PRESSURE 250kPa.
4. THE FOUNDATION SOIL SHALL BE PROOF-ROLLED PRIOR TO PLACEMENT OF CONCRETE FOOTING.



NOTE:

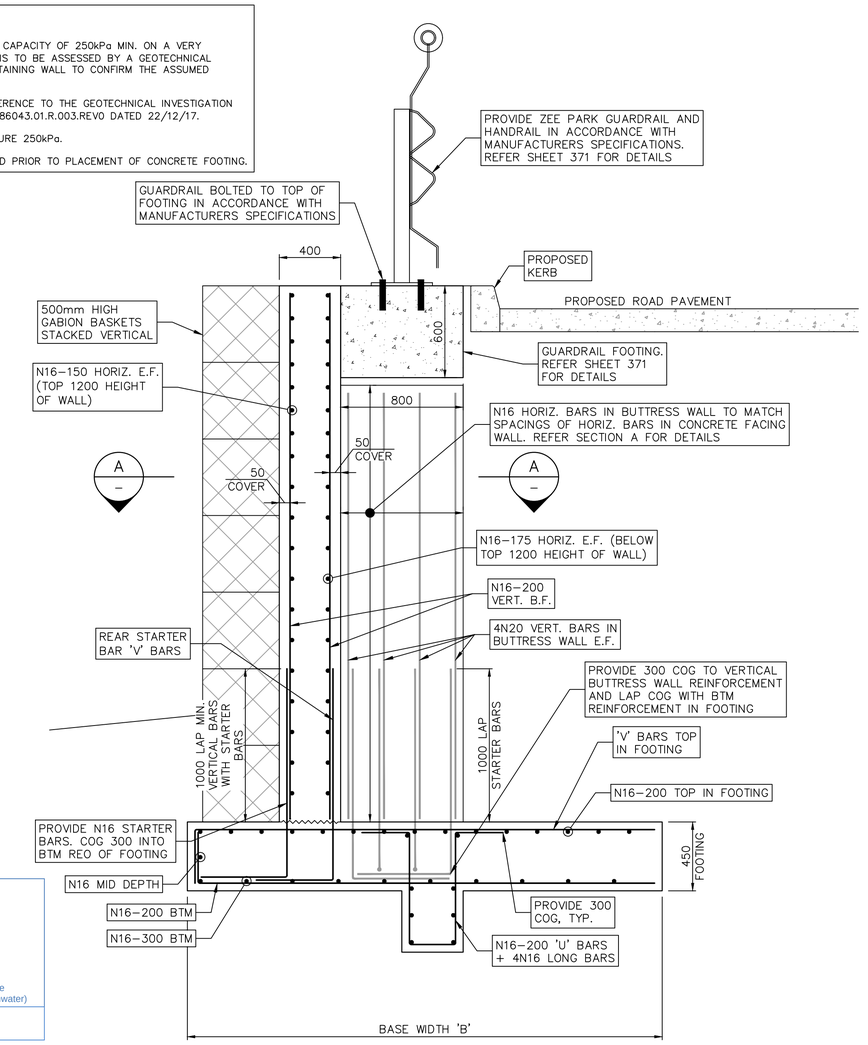
LEVEL BACKFILL SLOPE/MAXIMUM SURCHARGE LOAD = 20 kPa. (TRAFFICABLE DRIVEWAY)

NOTE:

APPROVED SELECT COMPACTED GRANULAR BACKFILL MATERIAL TO BE LAID AND COMPACTED IN 250mm MAX. LOOSE LAYERS AND COMPACTED TO 100% STANDARD COMPACTION IN ACCORDANCE WITH GEOTECHNICAL REPORT No. 86043.02.R.001.Rev0 BY DOUGLAS PARTNERS DATED 23 APRIL 2018. BACKFILL BEHIND WALL TO BE LEVEL.

BRIDGE WALL No.1 (BW1) - GENERAL DETAILS

SCALE 1:20



REINFORCEMENT DETAIL FACING WALL/FOOTING/BUTTRESS WALL

SCALE 1:20

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Registered Certifier
Registration No: BDC 2416
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H. RETAINING WALL DESIGN PARAMETERS

H1: DESIGN OF THE MACCAFERI GABION GRAVITY STRUCTURES ARE BASED UPON THE FOLLOWING PARAMETERS :

GABION WALL REQUIREMENTS

GABION WALL FACE SLOPE	=	1H : 5V
MIN. ROCK DENSITY	=	24kN/m³
MAX. POROSITY OF CONSTRUCTED GABIONS	=	30%
MIN. WET STRENGTH OF AGGREGATE IN ACCORDANCE WITH AS1141.22	=	100kN
MIN. ROCK SIZE	=	100mm
MAX. ROCK SIZE	=	250mm

RETAINED FILL

BACKFILL MATERIAL DESCRIPTION	=	GRANULAR ENGINEERED FILL
EFFECTIVE INTERNAL FRICTION ANGLE	=	30°
EFFECTIVE COHESION	=	0kPa
BACKFILL UNIT WEIGHT	=	20kN/m³

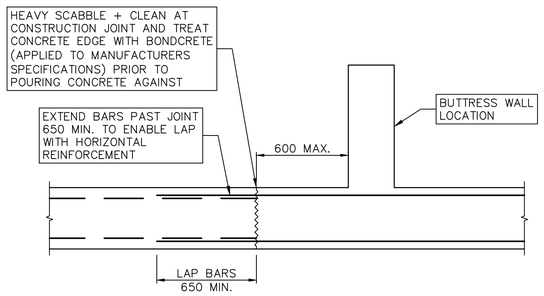
FOUNDATION MATERIAL

FOUNDATION MATERIAL DESCRIPTION	=	VERY STIFF/HARD CLAY
MIN. ALLOWABLE BEARING CAPACITY	=	250kPa
EFFECTIVE INTERNAL FRICTION ANGLE	=	28°
EFFECTIVE COHESION	=	7kPa
FOUNDATION UNIT WEIGHT	=	19kN/m³
UNDRAINED SHEAR STRENGTH	=	120kPa

H2: LIVE LOADS APPLIED TO STRUCTURES :

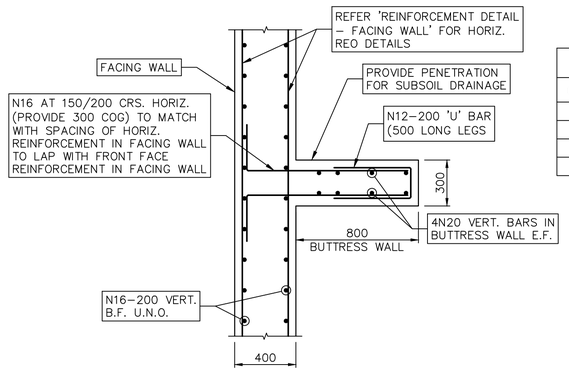
2. LIVE LOAD CONSTRUCTION SURCHARGE - 10kPa
3. LIVE LOAD TRAFFIC SURCHARGE - 20kPa

H3: HYDROSTATIC FORCES= N/A



WALL CONSTRUCTION JOINT DETAIL (POUR BREAK)

SCALE 1:20



SECTION A-A

SCALE 1: 20

BRIDGE WALL No.1 (BW1) - DIMENSIONS

OVERALL HEIGHT 'H'	BASE WIDTH	NOMINAL BUTTRESS WALL HEIGHT	'V' BAR REQUIRED	'V' BAR STARTER BAR HEIGHT
3500-2500	3100	UP TO 2900 HIGH	N20-200	1000
2500-1500	2600	UP TO 1900 HIGH	N20-200	1000
1500-1000	1800	UP TO 900 HIGH	N20-200	1000
1000	1800	NOT REQUIRED	N20-200	1000

NOTE:

A GEOTECHNICAL ENGINEER IS TO ASSESS THE SITE UPON INITIAL CLEARING AND EXCAVATION FOR CONSTRUCTION OF THE RETAINING WALL FOOTING TO VERIFY THAT THE SITE CONDITIONS ARE CONSISTENT WITH THE GEOTECHNICAL PARAMETERS PROVIDED ON THE DESIGN DRAWINGS. THE GEOTECHNICAL ENGINEER MAY NEED TO TO PROVIDE ADDITIONAL GEOTECHNICAL POTHOLING/TESTING TO VERIFY THE GEOLOGICAL LAYERS BEYOND THE OBSERVED EXCAVATION LAYER, AS REQUIRED.

NOTE:

A GLOBAL STABILITY ASSESSMENT FOR THE BRIDGE RETAINING WALL NO. 1 (BW1) HAS BEEN DETAILED IN REPORT NO. 86043.06.R.007.REV0 DATED 2/8/21 BY DOUGLAS PARTNERS. REFERENCE IS TO BE MADE TO THIS REPORT FOR GEOTECHNICAL PARAMETERS USED IN THE ASSESSMENT AND PROPOSED RECOMMENDATION FOR CONSTRUCTION BASED ON THE OUTCOME OF THE SLOPE STABILITY ASSESSMENT.

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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:20, 0, 0.5, 1.0m, A3 1:40

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

ALL DIMENSIONS ARE IN METRES. DO NOT SCALE

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www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537, EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK, SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: TYPICAL GABION WALL DETAILS & NOTES

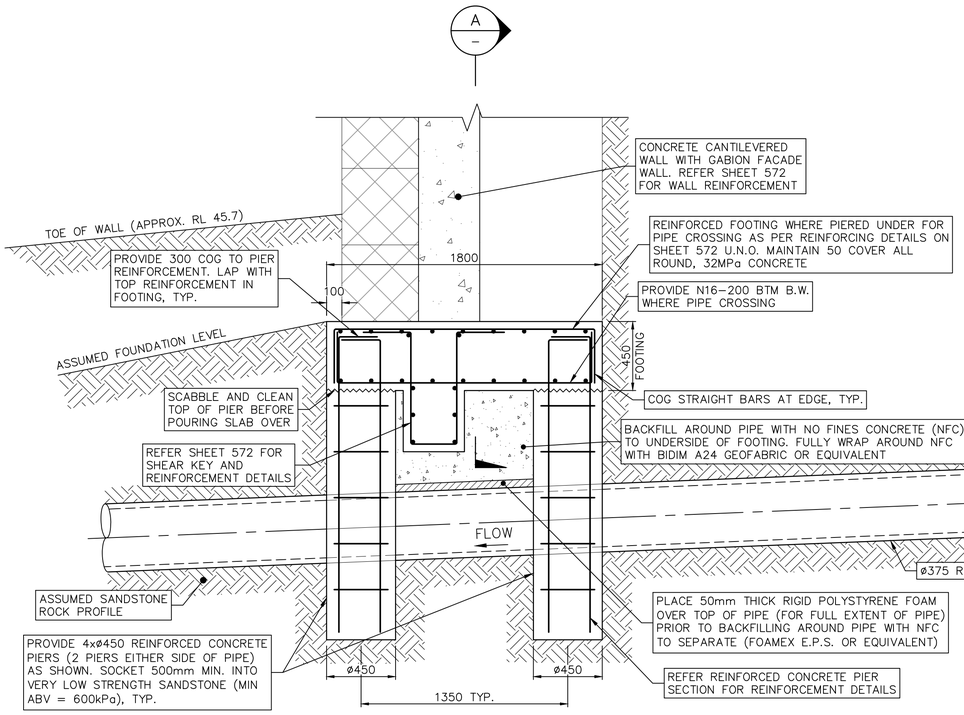
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) -	ENG -	572	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:18:40PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-572.DWG

100mm AT FULL SIZE

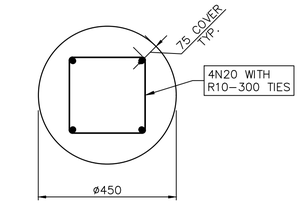
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300001(2)-ENG-573



GABION WALL BRIDGING STRUCTURE DETAIL

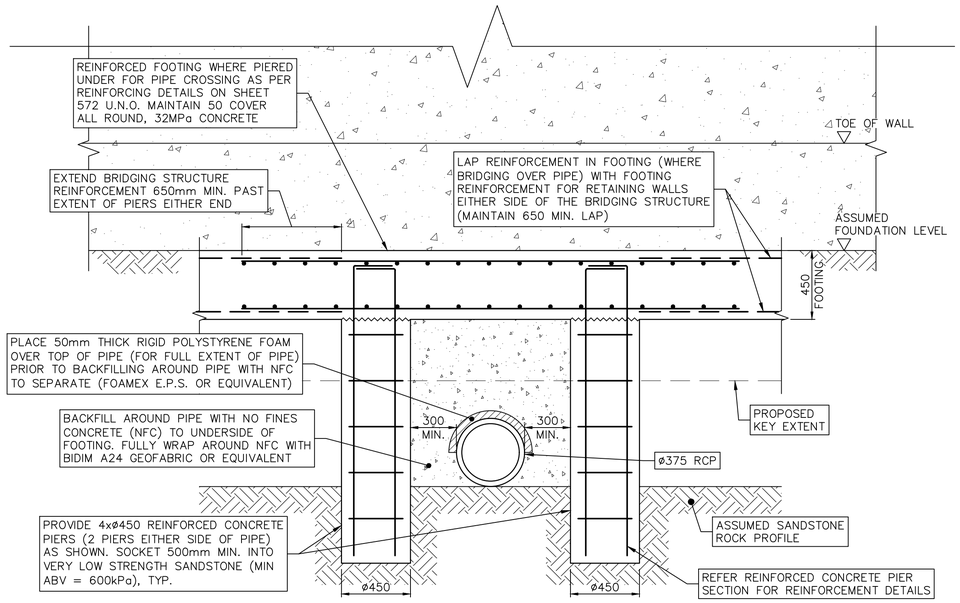
SCALE 1:20



REINFORCED CONCRETE PIER SECTION

(CONCRETE GRADE = 32MPa)

SCALE 1:10



SECTION A –

SCALE 1: 20

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

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2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES

A1 1:10 — 0 — 0.25 — 0.5m — A3 1:20

A1 1:20 — 0 — 0.5 — 1.0m — A3 1:40

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ABN 62 129 445 398

CLIENT

FRASERS PROPERTY

PROPERTY DESCRIPTION

LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: TYPICAL GABION WALL BRIDGING STRUCTURE DETAILS

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG –	573	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:18:47PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-573.DWG

100mm AT FULL SIZE
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300001(2)-ENG-574

100mm AT FULL SIZE

This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

GABION WALL – GENERAL NOTES:

A: GENERAL

A1: ALL DIMENSIONS SHOWN ARE IN MILLIMETRES U.N.O ALL REDUCED LEVELS ARE IN METRES.

A2: THE OWNER OR CONTRACTOR IS RESPONSIBLE FOR REVIEWING AND VERIFYING THAT THE ACTUAL SITE CONDITIONS ARE AS DESCRIBED PRIOR TO AND DURING CONSTRUCTION.

A3: ALL PLAN DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. THE PROJECT ENGINEER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE THE CONTRACTOR BEGINS WITH WORK.

A4: STRUCTURES SUCH AS BUILDING FOOTINGS, SWIMMING POOLS, RETAINING WALLS, STORAGE OR SOLID PANEL FENCING MUST BE KEPT CLEAR SUCH THAT THE LOAD IS NOT PLACED BETWEEN A LINE PROJECTED BEHIND THE WALL FROM THE FOUNDING LEVEL AT 1V : 1.5H AND THE WALL.

A5: PRECAUTIONS MUST BE TAKEN WHERE OTHER BUILDING WORK, SERVICE TRENCHES, GARDEN BEDS ETC. MAY BE EXCAVATED IN FRONT OF THE WALL.

A6: WHERE A SAFETY FENCE IS REQUIRED BY COUNCIL IT SHALL BE SET BACK A MINIMUM OF 500 mm FROM THE TOP OF THE WALL.

A7: MACCAFERRI GABION WALLS MAY BE DESIGNED AS EITHER MASS GRAVITY OR SEMI-GRAVITY STRUCTURES. DETAILED DESIGN ADVICE MAY BE SOUGHT FROM MACCAFERRI PTY LTD.

A8: A NON-WOVEN GEOTEXTILE IS TO BE USED IN BACKFILL BETWEEN THE SOIL AND THE RETAINING WALL.

A9: GABION BASKETS MUST BE GALVANIZED AND FULLY LACED TO BOTH UPPER AND LOWER NEIGHBOURING BASKETS.

A10: GABION MUST BE DIVIDED INTO CELL OF LENGTH OF NOT GREATER THAN 2m.

A11: THE FRONT FACE AND OTHER EXPOSED FACES OF THE GABION WALL SHALL BE HAND PACKED WITH ROCKS TO PROVIDE A SMOOTH CONSISTENT FINISH.

A12: BACKFILL IS TO BE GRANULAR, FREE DRAINING AND COMPACTED TO THE REQUIREMENTS MADE IN DOUGLAS PARTNERS GEOTECHNICAL REPORT 2018-04-26.86043.R.001.REVO DATED 23/4/18.

A13: ALL SURFACE RUN-OFF SHOULD BE DIRECTED AWAY FROM THE BACK OF THE WALL SO AS TO PREVENT INFILTRATION OF SUCH SURFACE RUN-OFF INTO THE GRANULAR BACKFILL.

A14: PROVIDE AN UPSTREAM FLUSHING POINT TO THE SUB-SOIL DRAINAGE LINE LOCATED BEHIND THE RETAINING WALL.

A15: WHERE THE WALL IS FOUNDED ON BEDROCK THE PREPARATION OF THE FOUNDATION SHOULD INCLUDED THE REMOVAL OF ALL LOOSE ROCK AND SOIL. ANY IRREGULARITIES IN THE BEDROCK SHOULD BE FILLED WITH MASS CONCRETE (F'C = 25MPa).

B: GABION ROCK INFILL

B1: SUPPLY GABION ROCK OF IGNEOUS ORIGIN WHICH IS DENSE, CLEAN, HARD AND FREE FROM DEFECTS, CRACKS, SEAMS, CLEAVAGE PLANES, WEATHERING, DEGRADATION AND PERVASIVE CHEMICAL ALTERATION THAT WILL AFFECT ROCK DURABILITY. ROCK MAY BE EITHER QUARRIED ROCK OR SELECTED RIVER COBBLE.

B2: SUPPLY ROCKFILL MEETING THE QUALITY CRITERIA AS SPECIFIED BELOW:

B2.1 DIMENSIONS

SUPPLY ROCK GENERALLY UNIFORM IN SHAPE, FREE FROM ELONGATED FLAT OR FLAKY PIECES. THE ROCKFILL SHALL HAVE NO MORE THAN 10% MIS-SHAPEN PARTICLES. THE DEFINITION OF MIS-SHAPEN PARTICLES SHALL BE AS DETERMINED BY TEST METHOD AS1141.14 (CALIPER RATIO 3:1).

B2.2 DURABILITY

THE ROCK SUPPLIED SHALL BE TESTED IN ACCORDANCE WITH AS1141.22 FOR WET/DRY STRENGTH VARIATION. THE ROCK TESTED SHALL BE REPRESENTATIVE OF THE ROCK TO BE SUPPLIED AS SHALL HAVE A MINIMUM DRY STRENGTH OF 200kN AND A MINIMUM WET STRENGTH OF 100kN. THE MAXIMUM WET/ DRY STRENGTH VARIATION SHALL BE NO MORE THAN 50%.

B2.3 GRADING

SUPPLY ROCKFILL WHICH IS UNIFORMLY GRADED BETWEEN A MAXIMUM OF GENERALLY 200mm (BUT NO MORE THAN 250mm) AND A MINIMUM OF NOT GREATER THAN 10% FINER THAN 75mm.

B2.4 FREQUENCY OF TESTING

THE SUPERINTENDANT SHALL WITH DUE REGARD TO THE CONTRACT NOMINATE THE FREQUENCY AND COMPLIANCE REQUIREMENTS FOR THE ROCKFILL. ALL ROCKFILL NOT MEETING THE REQUIREMENTS OF THE SPECIFICATION WILL BE REJECTED. ALL REJECTED ROCKFILL SHALL BE DISPOSED OF IN AN APPROVED MANNER AT THE EXPENSE OF AND BY THE CONTRACTOR.

C: MACCAFERRI GABION CONSTRUCTION

C1: REFER TO MACCAFERRI ASSEMBLY & ERECTION LEAFLETS AND INSTALLATION SEQUENCE DRAWING.

D: MACCAFERRI GABION UNITS

D1: MACCAFERRI GABION UNITS ARE TO BE STORED, TRANSPORTED, HANDLED AND PLACED TO THE MANUFACTURERS SPECIFICATION. THEY SHALL NOT BE DAMAGED OR DISPLACED DURING PLACEMENT AND COMPACTION OF THE BACKFILL.

D2: THE GABION UNITS SHALL BE MANUFACTURED IN ACCORDANCE WITH THE MACCAFERRI SPECIFICATION (AVAILABLE UPON REQUEST). GABION UNITS MAY BE SUPPLIED AS A HEAVILY GALVANISED DOUBLE TWISTED WOVEN HEXAGONAL WIRE MESH COMPLYING WITH INTERNATIONAL STANDARDS BS1052-1980 & BS443-1982. FOR SPECIFIC APPLICATIONS THE WIRE MAY BE ADDITIONALLY COATED WITH PVC.

D3: IMPROVED LONGETIVITY AND DURABILITY CAN BE ACHIEVED USING IMPROVED TECHNOLOGY GALMAC GABION UNITS CONFORMING TO A.S.T.M 856 & EN/EURONORM 10244/2.

D4: THE SPECIFIER SHALL NOMINATE THE COATING REQUIRED DEPENDANT UPON THE GABION EXPOSURE CONDITIONS.

E: GEOTEXTILE / DRAINAGE

E1: A NON-WOVEN MACCAFERRI GEOTEXTILE SHALL BE INCORPORATED AT THE REAR FACE OF THE MACCAFERRI GABION UNITS.

E2: IF THE BACKFILL IS NOT FREE-DRAINING, DRAINAGE PROVISIONS SHALL BE SPECIFIED BY THE PROJECT ENGINEER.

E3: ALL SUBSURFACE DRAINS TO HAVE OUTLETS AT LOW POINTS AND A POSITIVE DRAINAGE PATH. PROVIDE SUBSOIL DRAINAGE PIPES WITH FLUSHING POINTS AT HIGH POINTS AND INTERMEDIATE RODDING POINTS.

E4: ALL SUBSURFACE DRAINAGE SHALL BE PROPERLY DISCHARGED TO NEARBY PIT/DRAINAGE SYSTEM.

F. DESIGN ASSUMPTIONS

F1: THE DESIGN PRESENTED HEREIN IS BASED ON SOIL PARAMETERS, FOUNDATION CONDITIONS, GROUNDWATER CONDITIONS, STATED IN THE RELEVANT GEOTECH REPORT. SHOULD ACTUAL CONDITIONS VARY FORM THOSE ASSUMED, THE PROJECT ENGINEER SHOULD BE NOTIFIED PRIOR TO CONSTRUCTION TO DETERMINE IF REDESIGN OF THE PROPOSED STRUCTURE IS REQUIRED.

GENERAL INSTALLATION NOTES

1. THE GABION WALL IS TO BE PREPARED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION. REFER TO THE MANUFACTURE'S INSTALLATION GUIDELINES FOR FURTHER DETAILS.
2. ALL UTILITIES WITHIN THE VICINITY OF THE WALL MUST BE IDENTIFIED/RELOCATED PRIOR TO EXCAVATION.
3. EXCAVATE DOWN TO THE GABION WALL FOUNDATION LEVEL. ANY TEMPORARY EXCAVATION STABILITY MEASURES ARE TO BE ASSESSED BY A QUALIFIED GEOTECHNICAL ENGINEER UPON EXCAVATION. PREPARE FOUNDATION IN ACCORDANCE WITH THE REQUIREMENTS ON THE DESIGN DRAWINGS. FOUNDATION IS TO BE LEVEL PRIOR TO PLACING THE FIRST LAYER OF THE GABION WALL. THE FOUNDATION IS TO BE ASSESSED BY A QUALIFIED GEOTECHNICAL ENGINEER TO VERIFY THE PARAMETERS ARE IN ACCORDANCE WITH THE REQUIREMENTS OF THESE DRAWINGS.
4. INSTALL THE FIRST LAYER OF GABION CAGE ON THE FOUNDATION.
5. INFILL THE GABION CAGE WITH ROCKS TO THE SPECIFICATIONS AS INDICATED ON THE GENERAL NOTES AND MACCAFERRI INSTALLATION GUIDELINES. MECHANICALLY INTERLOCKING ROCKS ARE PREFERRED. THE ROCKS SHALL HAVE A DEGREE IN ANGULARITY AND A RANGE IN SIZE. USING SMALL ROCKS, 100 TO 150MM IN SIZE, ALLOWS THE CAGE TO BE ECONOMICALLY FILLED. IT WILL ALSO PROVIDE BETTER LOAD DISTRIBUTION AND ADAPTABILITY OF THE STRUCTURE TO DEFORMATION.
6. INSTALL THE NON-WOVEN GEOTEXTILE AND SUBSOIL DRAINAGE LAYER (IF APPLICABLE).
7. PLACE THE APPROVED SELECT GRANULAR FILL IN 250mm MAX LOOSE LAYERS BEHIND THE RETAINING WALL AND COMPACT TO THE COMPACTION REQUIREMENTS AS NOTED ON THIS SHEET PROGRESSIVELY TO A MAXIMUM COMPACTED HEIGHT OF 1m. NOTE: MAXIMUM COMPACTED HEIGHTS TO BE 1m PRIOR TO INSTALLATION OF THE SUCCESSIVE 1m HIGH GABION WALL UNITS.
8. EXISTING UNCONTROLLED FILL IN FRONT OF GABION WALL THAT WAS REMOVED TO ENABLE CONSTRUCTION OF THE WALL IS TO BE RE-PLACED IN 250mm LOOSE LAYERS AND HAND COMPACTED TO THE EXISTING NSL AS INDICATED ON THE RETAINING WALL LONG-SECTION ON SHEET 562. PROVIDE GEOTEXTILE BETWEEN THE GABION WALL UNITS AND THE FILL MATERIAL.
9. REPEAT FOR THE NEXT SUCCESSIVE 1m MAX GABION WALL HEIGHTS UNTIL COMPLETION OF WALL HEIGHT.

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES
A1 1:10 — 0 — 0.25 — 0.5m — A3 1:20
A1 1:20 — 0 — 0.5 — 1.0m — A3 1:40

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: TYPICAL GABION WALL NOTES

PROJECT No. 300001(2) – DISCIPLINE ENG – NUMBER 574 REV. 2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:18:51PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-574.DWG

300001(2)-ENG-601

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision, Certifier – Strata, Certifier – Stormwater, Certifier – Road & Drainage, Certifier – Hydraulic (stormwater)
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MGA

LEGEND

- SITE BOUNDARY
- LIMIT OF WORKS BOUNDARY
- PROPOSED LOT BOUNDARY
- EXISTING LOT BOUNDARY
- MAJOR CONTOURS
- MINOR CONTOURS
- PROPOSED KERB
- EXISTING KERB
- EXTENTS OF BATTER
- SW — PROPOSED STORMWATER
- ex sw — EXISTING STORMWATER
- FSW — FUTURE STORMWATER
- PROPOSED PIT + INLET FILTER
- PROPOSED LINTEL + INLET FILTER
- PROPOSED HEADWALL
- STRAWBALES
- SEDIMENT/SILT FENCING
- NO–GO FENCING
- CLEAN WATER DIVERSION DRAIN
- DIRTY WATER DIVERSION DRAIN
- GRAVEL/SAND BAGS
- SITE ACCESS/SHAKER RAMP

CONTOUR INTERVAL = 0.5m

SP6737 SP7082 SP5991 DP240510 15 62 DP570271 101 DP1263727

ROAD No.1 ROAD No.2 LYONPARK ROAD CREEK SHRIMPTONS

CONTRACTOR TO MANAGE CLEAN WATER FROM STAGE 1A

CONTRACTOR TO PROVIDE DETAILED EROSION AND SEDIMENT CONTROL PLAN FOR CREEK

DIRTY WATER DRAIN

DIVERT CLEAN WATER TO EXISTING PITS

DIRTY WATER DRAIN

CONTRACTOR TO MANAGE CLEAN WATER FROM STAGE 1A

CLEAN WATER DIVERSION DRAIN

NOTE: –

CONTRACTOR TO PREPARE DETAILED CONSTRUCTION SOIL AND WATER MANAGEMENT PLAN, INCLUDING SITE INSPECTION CHECKLIST PRIOR TO COMMENCEMENT OF WORKS. CONTRACTOR IS TO ENSURE THAT ALL REQUIREMENTS OF CONDITION B45 ARE MET AND SPECIFIC DETAILS SURROUNDING THE PROTECTION OF THE CREEK ARE PROVIDED.

DIAL 1100 BEFORE YOU DIG

EROSION & SEDIMENT CONTROL PLAN

SCALE 1:500

CONSTRUCTION ISSUE

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SCALES: A1 1:500 — 0 12.5 25.0m — A3 1:1000

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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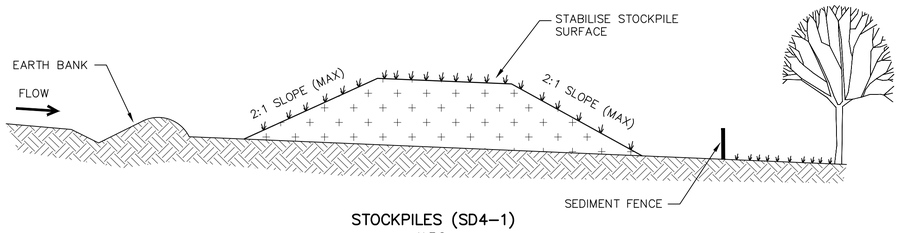
PLAN TITLE: EROSION & SEDIMENT CONTROL PLAN

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG	– 601	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:19:00PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)–ENG–601.DWG

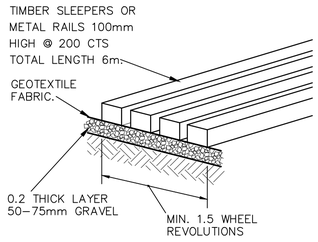
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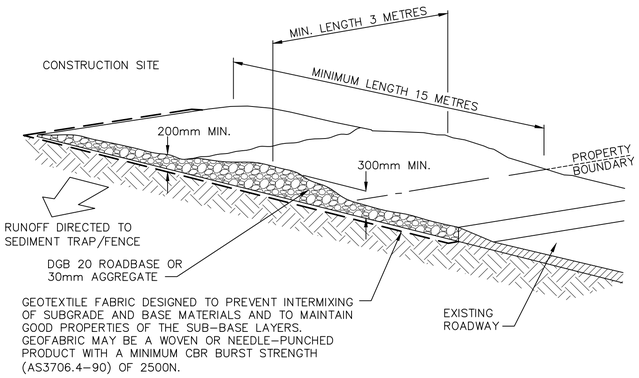


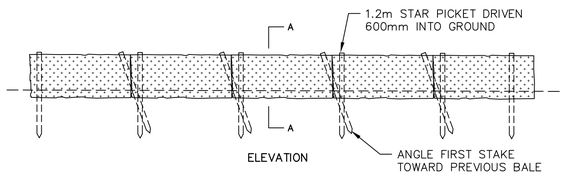
STOCKPILES (SD4–1)
N.T.S.

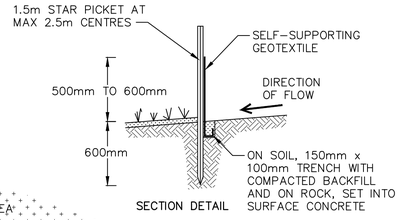
CONSTRUCTION NOTES:
1. PLACE STOCKPILES MORE THAN 2 (PREFERABLY 5) METRES FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2 METRES IN HEIGHT.
4. WHERE THEY ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, STABILISE FOLLOWING THE APPROVED ESCP OR SWMP TO REDUCE THE C–FACTOR TO LESS THAN 0.10.
5. CONSTRUCT EARTH BANKS (STANDARD DRAWING 5–5) ON THE UPSLOP SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES (STANDARD DRAWING 6–8) 1 TO 2 METRES DOWNSLOPE.

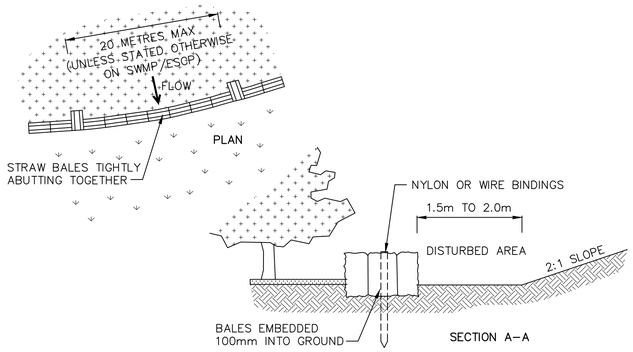


SHAKER RAMP



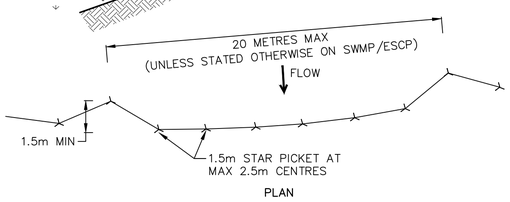






STRAW BALE FILTER (SD6–7)
N.T.S.

CONSTRUCTION NOTES:
1. CONSTRUCT THE STRAW BALE FILTER AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE.
2. PLACE BALES LENGTHWISE IN A ROW WITH ENDS TIGHTLY ABUTTING. USE STRAW TO FILL ANY GAPS BETWEEN BALES. STRAWS ARE TO BE PLACED PARALLEL TO GROUND.
3. ENSURE THAT THE MAXIMUM HEIGHT OF THE FILTER IS ONE BALE.
4. EMBED EACH BALE IN THE GROUND 75mm TO 100mm AND ANCHOR WITH TWO 1.2m STAR PICKETS OR STAKES. ANGLE THE FIRST STAR PICKET OR STAKE IN EACH BALE TOWARDS THE PREVIOUSLY LAID BALE. DRIVE THEM 600mm IN THE GROUND AND, IF POSSIBLE, FLUSH WITH THE TOP OF THE BALES. WHERE STAR PICKETS ARE USED AND THEY PROTRUDE ABOVE THE BALES, ENSURE THEY ARE FITTED WITH SAFETY CAPS.
5. WHERE A STRAW BALE FILTER IS CONSTRUCTED DOWNSLOPE FROM A DISTURBED BATTER, ENSURE THE BALES ARE PLACES 1 TO 2 METRES DOWNSLOPE FROM THE TOE.
6. ESTABLISH A MAINTENANCE PROGRAM THAT ENSURES THE INTEGRITY OF THE BALES IS RETAINED – THEY COULD REQUIRE REPLACEMENT EACH TWO TO FOUR MONTHS.



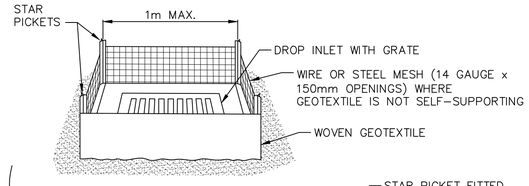
SEDIMENT FENCE (SD6–8)
N.T.S.

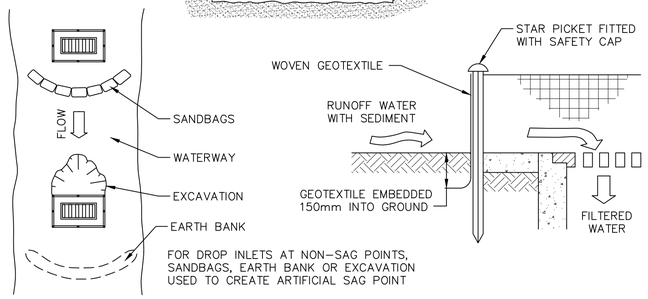
CONSTRUCTION NOTES:
1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10–YEAR EVENT.
2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
3. DRIVE 1.5m LONG STAR PICKETS INTO GROUND AT 2.5 METRE INTERVALS (MAX) AT DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
4. FIX SELF–SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
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STABILISED SITE ACCESS (SD6–14)
N.T.S.

CONSTRUCTION NOTES:
1. STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE.
2. COVER THE AREA WITH NEEDLE–PUNCHED GEOTEXTILE.
3. CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30mm AGGREGATE.
4. ENSURE THE STRUCTURE IS AT LEAST 15 METRES LONG OR TO BUILDING ALIGNMENT AND AT LEAST 3 METRES WIDE.
5. WHERE A SEDIMENT FENCE JOINS ONTO THE STABILISED ACCESS, CONSTRUCT A HUMP IN THE STABILISED ACCESS TO DIVERT WATER TO THE SEDIMENT FENCE.





GEOTEXTILE INLET FILTER (SD6–12)
N.T.S.

CONSTRUCTION NOTES:
1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES.
2. REFER STANDARD DRAWINGS 6–7 & 6–8 FOR INSTALLATION PROCEDURES FOR THE STRAW BALES OR GEOFABRIC. REDUCE THE PICKET SPACING TO 1 METRE CENTRES.
3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
4. DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: NOT TO SCALE

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: EROSION & SEDIMENT CONTROL DETAILS & NOTES

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG	– 611	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:19:05PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)–ENG–611.DWG

100mm AT FULL SIZE

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300001(2)-ENG-701

100mm AT FULL SIZE

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Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

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1 IDENTIFIED RISK/HAZARD

1. CONTRACTOR IS TO CONFIRM LEVELS AND LOCATION OF EXISTING TRUNK SEWER PRIOR TO CONSTRUCTION

2 IDENTIFIED RISK/HAZARD

1. CONTRACTOR IS TO CONSIDER STABILITY OF EXISTING RETAINING WALL DURING CONSTRUCTION.

MGA

LEGEND

- PROPOSED LOT BOUNDARY
- EXISTING LOT BOUNDARY
- MAJOR CONTOURS
- MINOR CONTOURS
- MAJOR CONTOURS NATURAL
- MINOR CONTOURS NATURAL
- PROPOSED KERB
- EXISTING KERB
- EXTENTS OF BATTER
- PROPOSED FOOTPATH
- PROPOSED RETAINING WALL
- PROPOSED STORMWATER
- S — PROPOSED SEWER
- ex sw — EXISTING STORMWATER
- ex s — EXISTING SEWER
- PROPOSED SW PIT
- PROPOSED LINTEL
- PROPOSED HEADWALL
- 1\1 PIT LABEL

CONTOUR INTERVAL = 0.2m

GENERAL NOTES: –

1. SETOUT INFORMATION IS TO BE VERIFIED BY THE CONTRACTOR AGAINST THE PLAN VIEW, LONGITUDINAL SECTIONS AND ELECTRONIC 12D DATA BEFORE BEING USED. IF THERE IS A DISCREPANCY THE SUPERINTENDENT IS TO BE NOTIFIED AND DIRECTION TO BE PROVIDED IN WRITING BEFORE PROCEEDING.

CONTRACTOR TO SUBMIT TEMPORARY WORKS FORM AND PAY RELEVANT FEES TO COUNCIL PRIOR TO COMMENCING PATH WORKS WITHIN LOT 15 DP240110

EXISTING TRUNK SEWER

REFER SHEET 721 SCOUR PROTECTION DETAILS

REFER TO DRAWINGS BY SMEC FOR SCOUR DETAILS

FOOTPATH No.2

PROPOSED BALUSTRADE. REFER SMEC DRAWINGS FOR DETAILS

BRIDGE ABUTMENT A. REFER SHEET 721 FOR LONGSECTION

NOTE:

TREES WITHIN CLOSE PROXIMITY TO WORKS TO BE PROTECTED AND WORKS SUPERVISED BY PROJECT ARBORIST.

EXISTING TRASH SCREEN AND HEADWALL TO REMAIN IN PLACE

PROPOSED BRIDGE COLUMN. REFER SMEC DRAWINGS FOR DETAILS

CONTRACTOR TO ENSURE NO WORKS UNDERTAKEN ON ADJOINING PROPERTY WITHOUT ADJOINING LAND OWNERS CONSENT

EXISTING WALL STABILITY TO BE MONITORED DURING CONSTRUCTION WORKS. CONTRACTOR TO LIAISE WITH ADJOINING OWNER AS REQUIRED

REFER SHEET 562 FOR ABUTMENT B + WALL DETAILS

EXTENT OF APPROACH SLAB. REFER SMEC DRAWINGS FOR DETAILS.

ROAD No.1

SA KERB

COMBINED HEADWALL

REFER SHEET 721 SCOUR PROTECTION DETAILS

EXISTING CREEK

PROPOSED BALUSTRADE. REFER SMEC DRAWINGS FOR DETAILS

CONTRACTOR TO ENSURE MINIMUM 2.4m HEADROOM UNDER BRIDGE

ENSURE CLEARANCE BETWEEN STORMWATER PIPE AND BRIDGE PIERS

PROVIDE 50mm GAP BETWEEN BRIDGE BARRIER AND GUARDRAIL

ENSURE BRIDGE SCOUR PROTECTION IS EXTENDED IN FRONT OF RETAINING WALL

ALL WORKS ON WATERFRONT LAND (40m FROM TOP OF CREEK BANK) TO BE UNDERTAKEN IN ACCORDANCE WITH THE GUIDELINES FOR CONTROLLED ACTIVITIES (2019)

CAUTION:

1. IT IS THE RESPONSIBILITY OF THE CIVIL WORKS CONTRACTOR TO DETERMINE THE LOCATION & LEVEL OF EXISTING SERVICES USING NON DESTRUCTIVE METHODS PRIOR TO COMMENCING WORKS ON SITE.

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BRIDGE DETAIL PLAN

SCALE 1:200

CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:200 — 0 5.0 10.0m — A3 1:400

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ABN 62 129 445 398

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SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

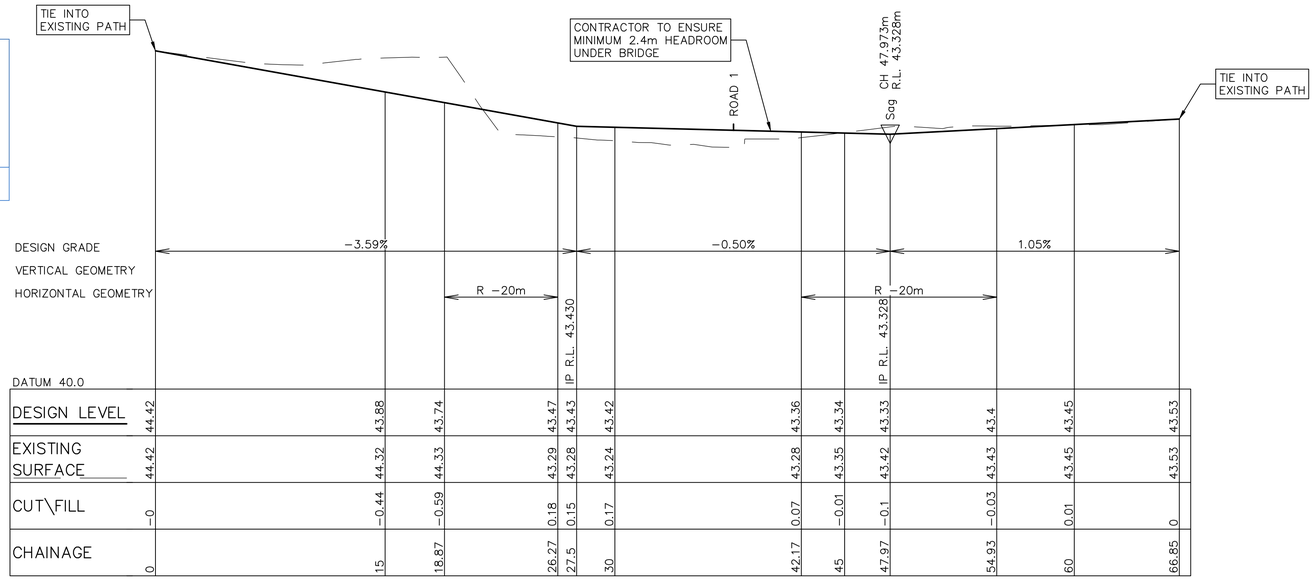
PLAN TITLE: BRIDGE DETAIL PLAN

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG	– 701	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:19:17PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-701.DWG

300001(2)-ENG-711

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Registered Certifier
Registration No: BDC 2416
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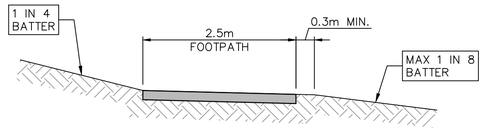


LONGITUDINAL SECTION FOOTPATH No.2

HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:40

FOOTPATH No.2 – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	325750.545	6260302.534	42°52'53.79"			
IP 2	13.137	325759.484	6260312.160				
TC	18.871	325763.260	6260316.477	41°10'55.30"			
IP 3	22.572	325765.725	6260319.294		R = −20.000	7.401	21°12'05.83"
CT	26.272	325767.004	6260322.812	19°58'49.48"			
TC	42.172	325772.437	6260337.755	19°58'49.48"			
IP 4	48.553	325774.694	6260343.963		R = −20.000	12.761	36°33'31.99"
CT	54.934	325772.809	6260350.295	343°25'17.49"			
IP 5	66.851	325769.409	6260361.717	343°25'17.49"			

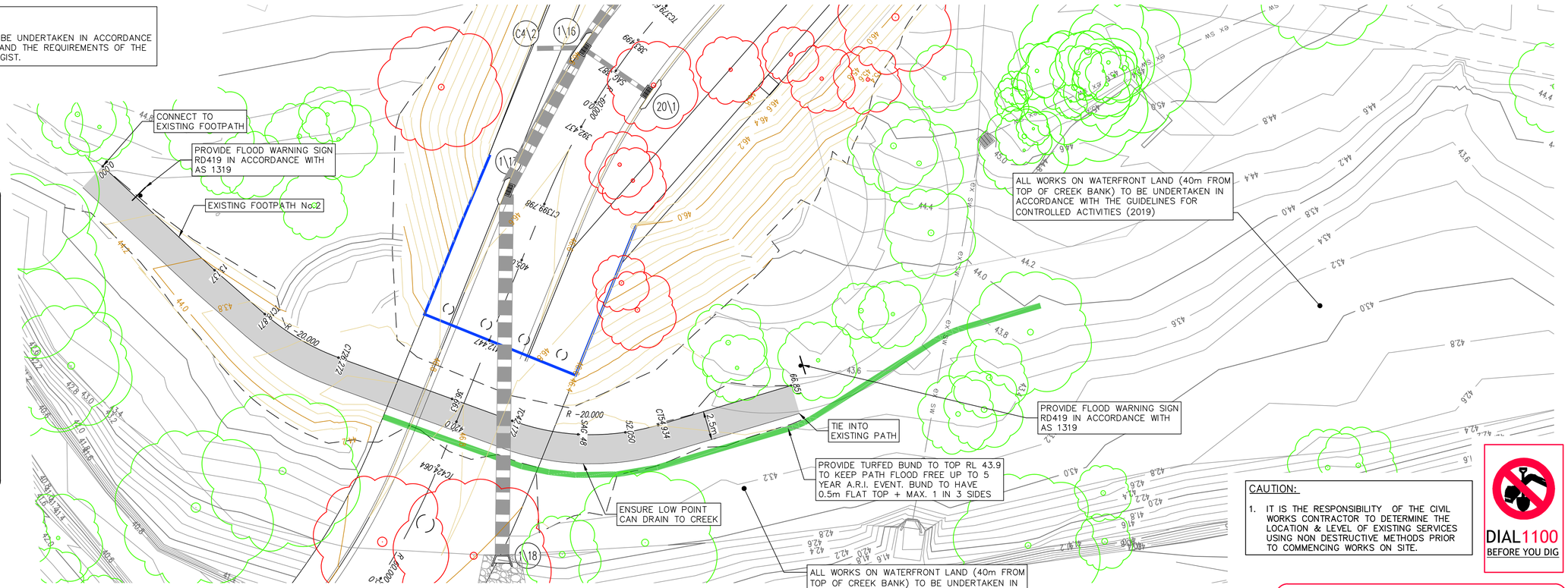


TYPICAL FOOTPATH No.2 SECTION

CH 0.00 TO END
SCALE 1:50

NOTE:

ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH THE BMP AND THE REQUIREMENTS OF THE PROJECT ECOLOGIST.



MGA

LEGEND

- PROPOSED LOT BOUNDARY
- EXISTING LOT BOUNDARY
- MAJOR CONTOURS
- MINOR CONTOURS
- MAJOR CONTOURS NATURAL
- MINOR CONTOURS NATURAL
- PROPOSED KERB
- EXISTING KERB
- EXTENTS OF BATTER
- EXISTING FOOTPATH
- PROPOSED RETAINING WALL
- PROPOSED STORMWATER
- EXISTING STORMWATER (ex sw)
- PROPOSED SW PIT
- PROPOSED LINTEL
- PROPOSED HEADWALL
- PIT LABEL (1\1)
- TREES TO BE RETAINED
- TREES TO BE REMOVED

CONTOUR INTERVAL = 0.2m

GENERAL NOTES: –

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CAUTION:

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FOOTPATH No.2 DETAIL PLAN

SCALE 1:200

CONSTRUCTION ISSUE

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1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:200; 0 5.0 10.0m; A3 1:400

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www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

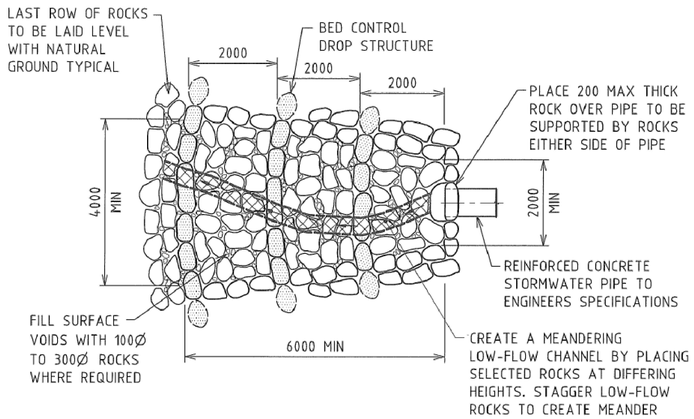
PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: FOOTPATH No.2 PLAN & LONGITUDINAL SECTION

PROJECT No. 300001(2) – DISCIPLINE ENG – NUMBER 711 REV. 2

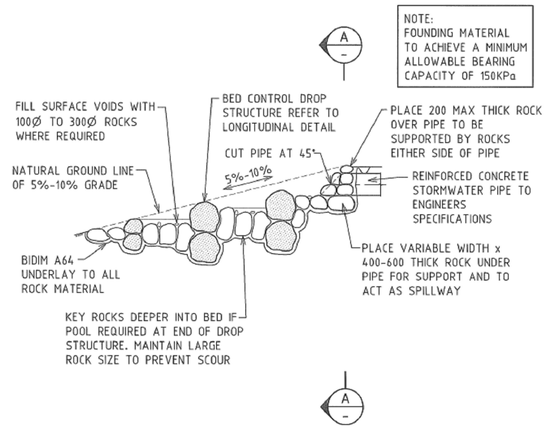
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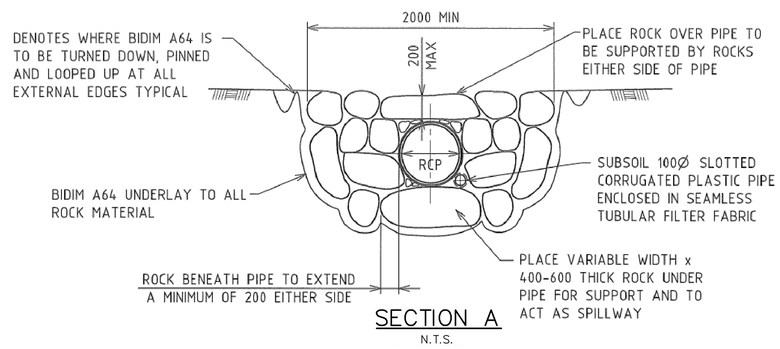
ROCK PITCHED HEADWALL AND ENERGY DISSIPATOR PLAN

N.T.S.



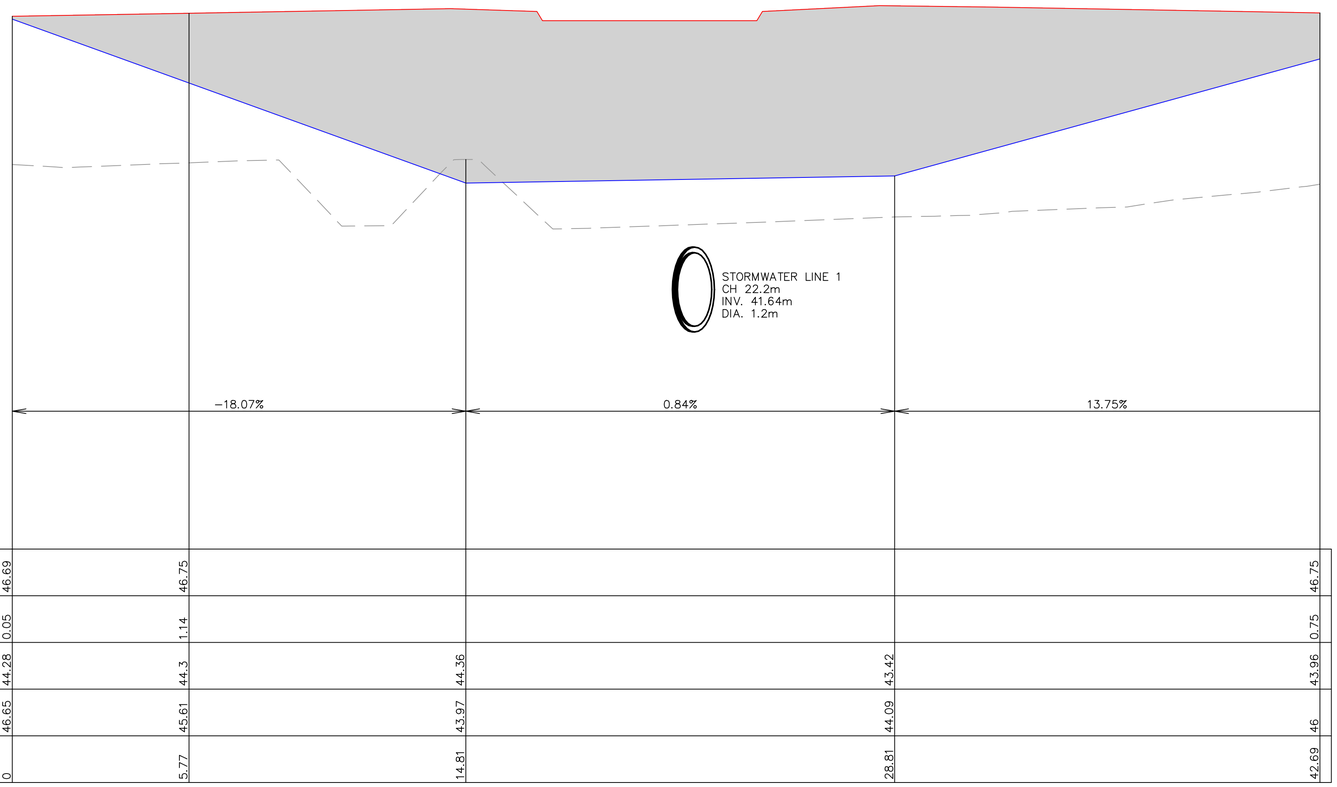
LONGITUDINAL SECTION – ROCK PITCHED HEADWALL AND ENERGY DISSIPATOR

N.T.S.



SECTION A

N.T.S.



LONGITUDINAL SECTION – BRIDGE ABUTMENT A

HORIZONTAL SCALE 1:100
VERTICAL SCALE 1:50

NOTE:

REFER TO SMEC DESIGN FOR DETAILS.

NOTE:

LENGTH OF OUTLET STRUCTURES TO BE TERMINATED AT TOP OF BANK WHERE REQUIRED. FINAL LOCATIONS TO BE COORDINATED ON SITE.

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CONSTRUCTION ISSUE

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SCALES

A1 1:100 — 0 2.5 5.0m — A3 1:200

A1 1:50 — 0 1.25 2.5 m — A3 1:100

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CLIENT

FRASERS PROPERTY

PROPERTY DESCRIPTION

LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: BRIDGE ABUTMENT LONGITUDINAL SECTION & HEADWALL OUTLET DETAILS

PROJECT No. 300001(2) – DISCIPLINE ENG – NUMBER 721 REV. 2

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
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300001(2)-ENG-722

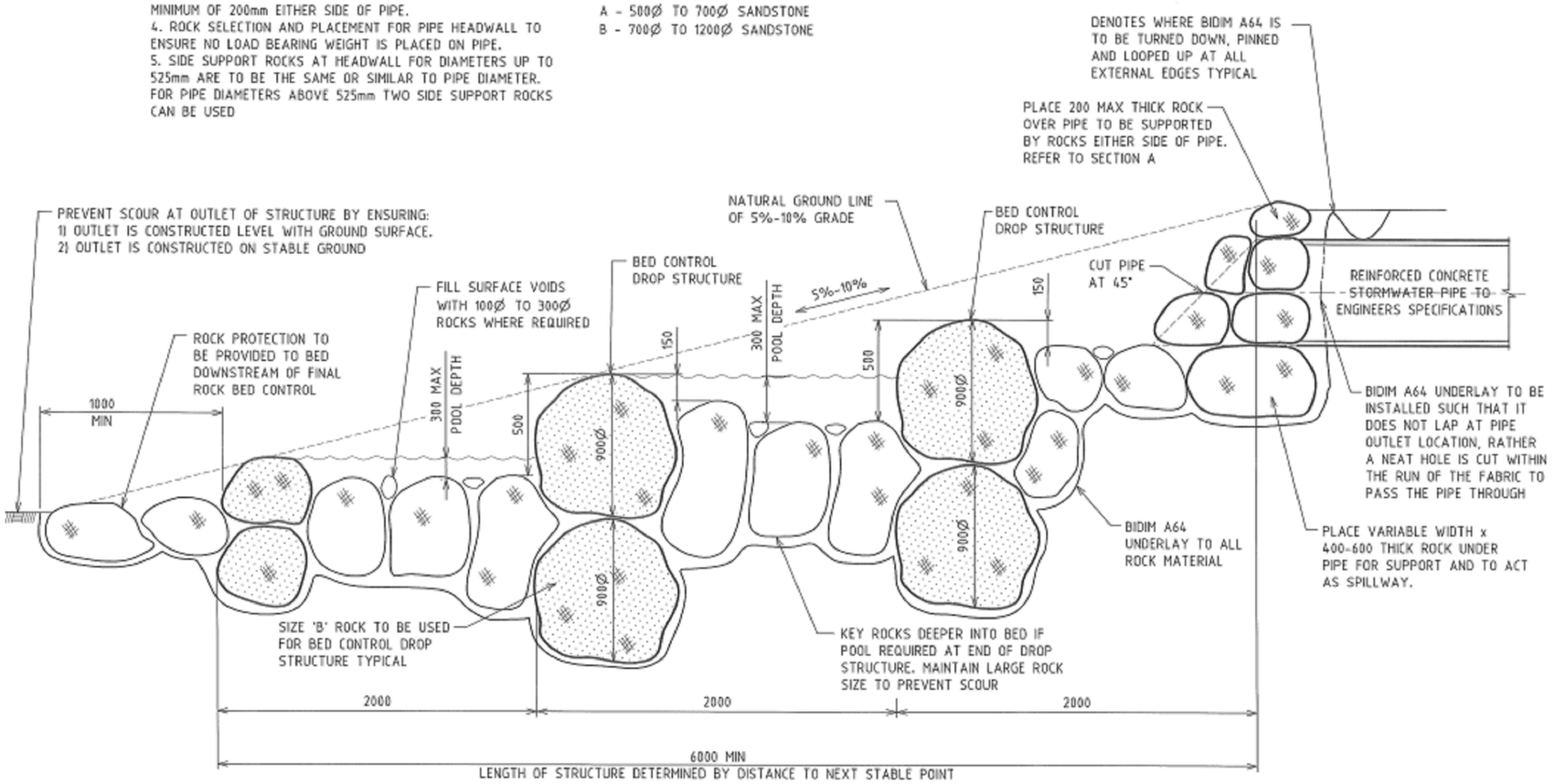
ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE

ROCK CONSTRUCTION NOTES

1. SIZE B ROCKS ARE TO BE USED FOR ALL CRITICAL POINTS IN STRUCTURE ie. BED CONTROLS AND STRUCTURE OUTLETS.
2. 100 TO 300mm ROCKS ARE TO BE HAND PACKED INTO VOIDS WITHIN ROCK STRUCTURE BETWEEN SIZE A AND B ROCKS.
3. ROCK PLACED BETWEEN OUTLET OF PIPE IS TO EXTEND A MINIMUM OF 200mm EITHER SIDE OF PIPE.
4. ROCK SELECTION AND PLACEMENT FOR PIPE HEADWALL TO ENSURE NO LOAD BEARING WEIGHT IS PLACED ON PIPE.
5. SIDE SUPPORT ROCKS AT HEADWALL FOR DIAMETERS UP TO 525mm ARE TO BE THE SAME OR SIMILAR TO PIPE DIAMETER. FOR PIPE DIAMETERS ABOVE 525mm TWO SIDE SUPPORT ROCKS CAN BE USED

ROCK SIZING		
PIPE Ø (mm)	0-5%	>5%
375 to 600	A	B
> 600	B	B

A - 500Ø TO 700Ø SANDSTONE
B - 700Ø TO 1200Ø SANDSTONE



LONGITUDINAL SECTION – ROCK PITCHED HEADWALL AND ENERGY DISSIPATOR

N.T.S.

NOTE:

LENGTH OF OUTLET STRUCTURES TO BE TERMINATED AT TOP OF BANK WHERE REQUIRED. FINAL LOCATIONS TO BE COORDINATED ON SITE.

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SCALES: NOT TO SCALE
DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project
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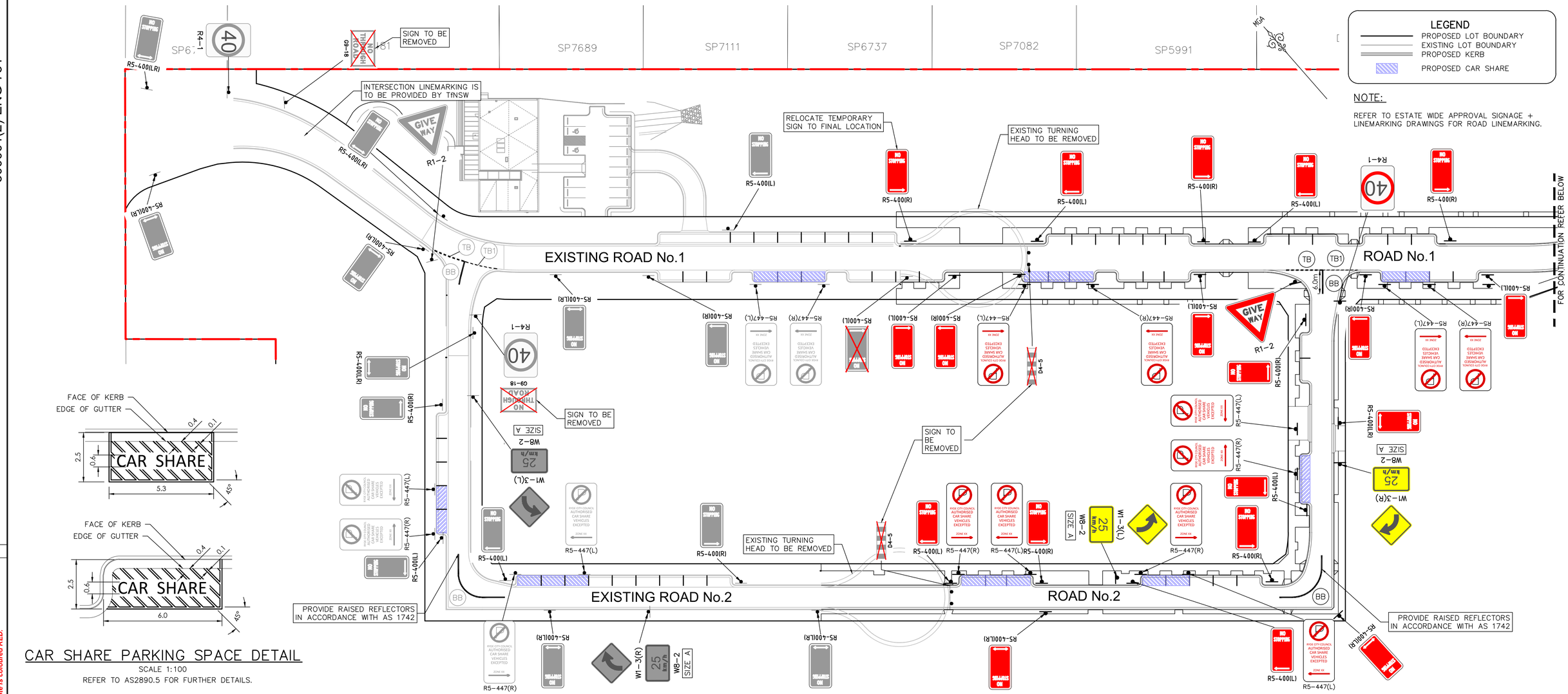
PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: HEADWALL OUTLET DETAILS

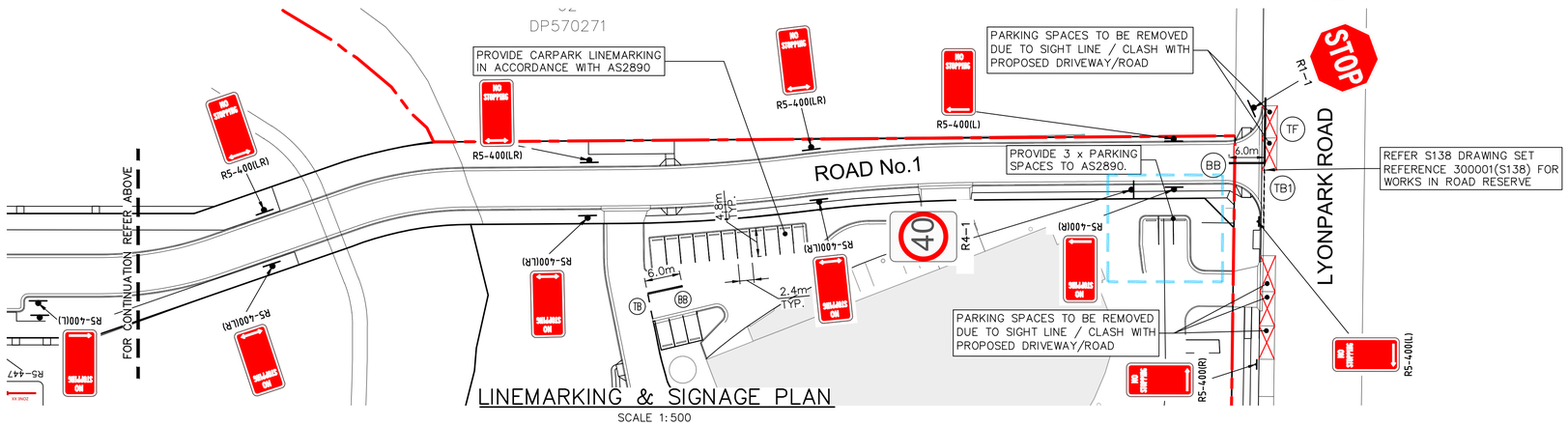
PROJECT No. 300001(2) – DISCIPLINE ENG – NUMBER 722 REV. 2

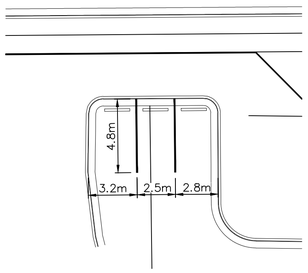
Plotted By: Mark Hoyland Plot Date: 16/05/22 2:19:38PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-722.DWG

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

300001(2)-ENG-751







NOTES: –

1. CAR SHARE ZONE TO BE CONFIRMED BY LTC.
2. INSTALL LINEMARKING AND SIGNAGE IN ACCORDANCE WITH AS1742 AND RMS DELINEATION GUIDELINES.

DIAL1100 BEFORE YOU DIG

CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:200, A3 1:400 (0, 5.0, 10.0m)

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

ALL DIMENSIONS ARE IN METRES. DO NOT SCALE

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Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: LINEMARKING & SIGNAGE PLAN

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	751	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:19:47PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-751.DWG

100mm AT FULL SIZE

This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

300001(2)-ENG-801

GENERAL NOTES: –

1. ALL TRESS WITHIN WORKS FOOTPRINT TO BE REMOVED IN ACCORDANCE WITH APPROVED ARBORIST REPORT.
2. ALL TREES OUTSIDE OF WORKS ZONE TO BE PROTECTED.
3. NO TREES TO BE REMOVED UNTIL AUTHORISED BY THE PROJECT ECOLOGIST.
4. TREE REMOVAL AND RETENTION/PROTECTION WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH THE ARBORICULTURAL IMPACT ASSESSMENT 19NEW–13891 DATED FEBRUARY 2020 AND UNDER SUPERVISION OF THE PROJECT ECOLOGIST.

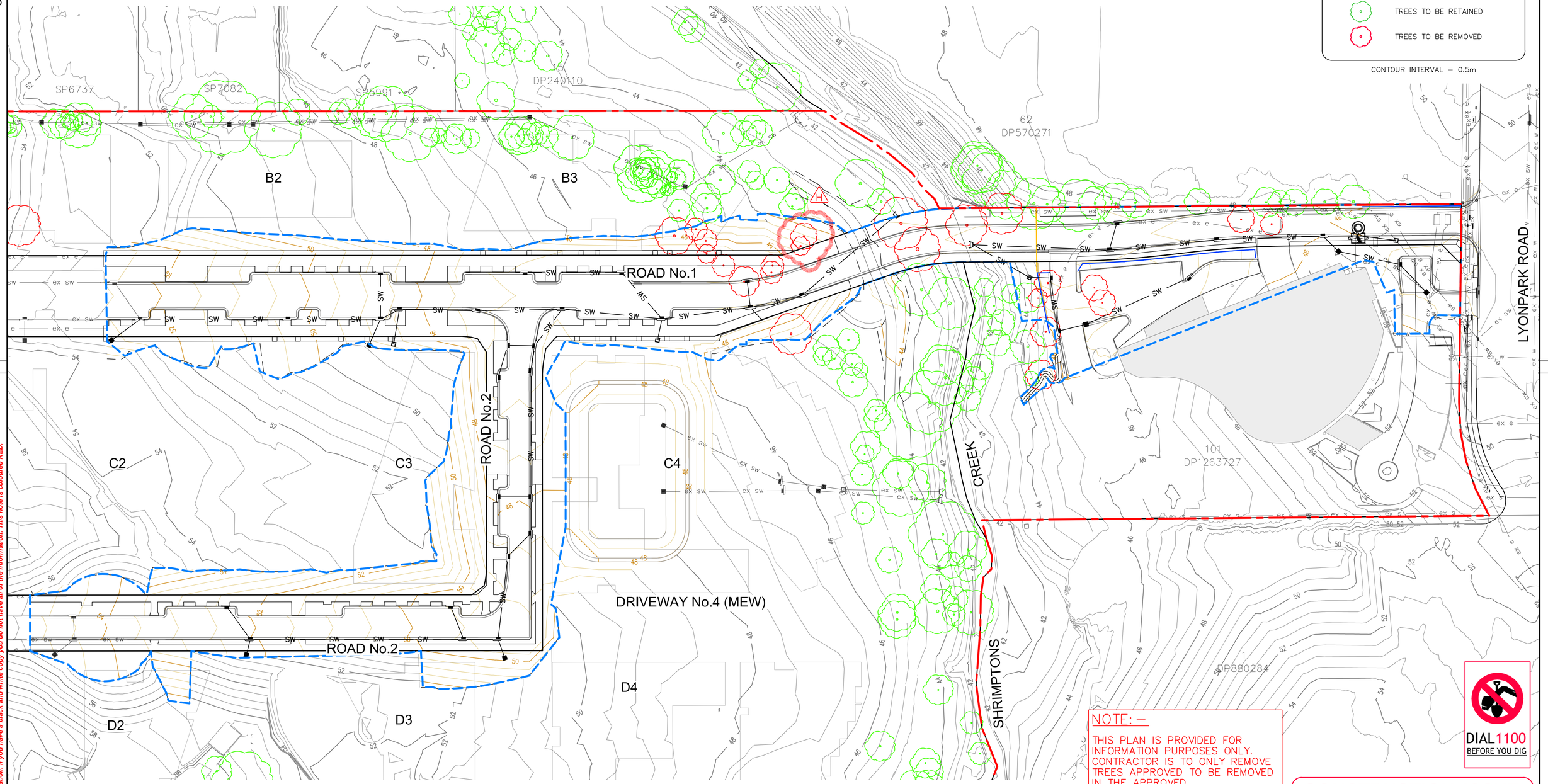
These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision, Certifier – Strata, Certifier – Stormwater, Certifier – Road & Drainage, Certifier – Hydraulic (stormwater)
Land Development Certificates
www.LDC.com.au

MGA

NOTE:
ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH THE BMP AND THE REQUIREMENTS OF THE PROJECT ECOLOGIST.

LEGEND
- SITE BOUNDARY
- LIMIT OF WORKS BOUNDARY
- PROPOSED LOT BOUNDARY
- EXISTING LOT BOUNDARY
- MAJOR CONTOURS
- MINOR CONTOURS
- PROPOSED KERB
- EXISTING KERB
- EXTENTS OF BATTER
- SW — PROPOSED STORMWATER
- ex sw — EXISTING STORMWATER
- PROPOSED SW PIT
- PROPOSED LINTEL
- PROPOSED HEADWALL
- TREES TO BE RETAINED
- TREES TO BE REMOVED

CONTOUR INTERVAL = 0.5m



NOTE: –
THIS PLAN IS PROVIDED FOR INFORMATION PURPOSES ONLY. CONTRACTOR IS TO ONLY REMOVE TREES APPROVED TO BE REMOVED IN THE APPROVED ARBORICULTURAL IMPACT ASSESSMENT.

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CONSTRUCTION ISSUE

TREE RETENTION PLAN
SCALE 1:500

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:500 — 0, 12.5, 25.0m — A3 1:1000

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION
LOT 100 D.P.1262209 & LOT 1 D.P.859537
EPPING ROAD & LYONPARK ROAD,
MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson
DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION
PLAN TITLE: TREE RETENTION PLAN

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG	– 801	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:19:56PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)–ENG–801.DWG

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

300001(2)-ENG-901

NOTE: –

WATERMAIN REQUIRED TO BE LOCALLY DIVERTED AROUND STORMWATER PITS AND STREET LIGHT FOOTINGS. ENSURE ADEQUATE CLEARANCE BETWEEN WATERMAIN AND STRUCTURES. CLEARANCES TO ALLOW FOR WORKING SPACE FOR BORING OF STREET LIGHT FOOTINGS.

NOTE: –

CONTRACTOR TO UNDERTAKE CLASH CHECK OF ALL SERVICES PRIOR TO COMMENCEMENT.

NOTE: –

TEMPORARY WORKS NOT SHOWN. REFER TENDER SET OF DRAWINGS PREPARED BY ADWJ FOR FURTHER DETAILS.

NOTE: –

CONTRACTOR TO CONFIRM SERVICES AGAINST LANDSCAPE DRAWINGS PRIOR TO COMMENCEMENT

NOTE: –

ALL SERVICES SHOWN INDICATIVELY ONLY. REFER TO RELEVANT DESIGNS FOR SETOUT INFORMATION.

GENERAL NOTES: –

1. SERVICES SHOWN FOR INFORMATION ONLY. ALL SERVICES TO BE CONSTRUCTED IN ACCORDANCE WITH APPROVED CONSTRUCTION DOCUMENTATION, RYDE CITY COUNCIL STANDARDS AND THE RELEVANT SERVICE AUTHORITY STANDARDS.
2. CONTRACTOR TO LOCALLY FILL AROUND ALL SERVICE FITTINGS IF LANDSCAPE WORKS NOT CONSTRUCTED.

MGA

LEGEND

- SITE BOUNDARY
- LIMIT OF WORKS BOUNDARY
- PROPOSED LOT BOUNDARY
- EXISTING LOT BOUNDARY
- PROPOSED KERB
- SW — PROPOSED STORMWATER
- S — PROPOSED SEWER
- W — PROPOSED WATER
- PROPOSED PVC CONDUIT
- NBN — PROPOSED NBN
- E — PROPOSED ELECTRICITY
- HV — PROPOSED HIGH VOLTAGE
- SL — PROPOSED STREET LIGHT CABLING
- PROPOSED STREET LIGHT
- PROPOSED SW PIT
- PROPOSED LINTEL
- PROPOSED HEADWALL

SP6737
SP7082
SP5991
15
DP240110
62
DP570271
101
DP1263727
1
DP880284

ROAD No.1
ROAD No.2
LYONPARK ROAD
CREEK
SHRIMPTONS

REFER BRIDGE DRAWINGS FOR ELECTRICAL CONDUITS OVER BRIDGE

ENSURE GPT LOCATED TO ALLOW FOR STREET LIGHT CONDUITS.

STREET LIGHT CONDUITS TO BE PROVIDED ACROSS BRIDGE. REFER TO BRIDGE DESIGN DRAWINGS FOR DETAILS

REFER TO DRAWINGS BY SMEC FOR LIGHT DETAILS ON BRIDGE

PROVIDE 3 x DN300 PVC CONDUITS AT 1m SPACING FOR FUTURE WATER SERVICES. CONDUITS TO HAVE MINIMUM 600mm COVER & BEDDED IN 8:1 STABILISED SAND. CONTRACTOR TO ENSURE CONDUITS CLEAR OF PROPOSED TREES

PROVIDE 3 x DN300 PVC CONDUITS AT 1m SPACING FOR FUTURE WATER SERVICES. CONDUITS TO HAVE MINIMUM 600mm COVER & BEDDED IN 8:1 STABILISED SAND. CONTRACTOR TO ENSURE CONDUITS CLEAR OF PROPOSED TREES

A 902 · B 902 · C 902 · D 902

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CONSTRUCTION ISSUE

COMBINED SERVICES PLAN

SCALE 1:500

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:500 · 0 · 12.5 · 25.0m · A3 1:1000

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: COMBINED SERVICES PLAN

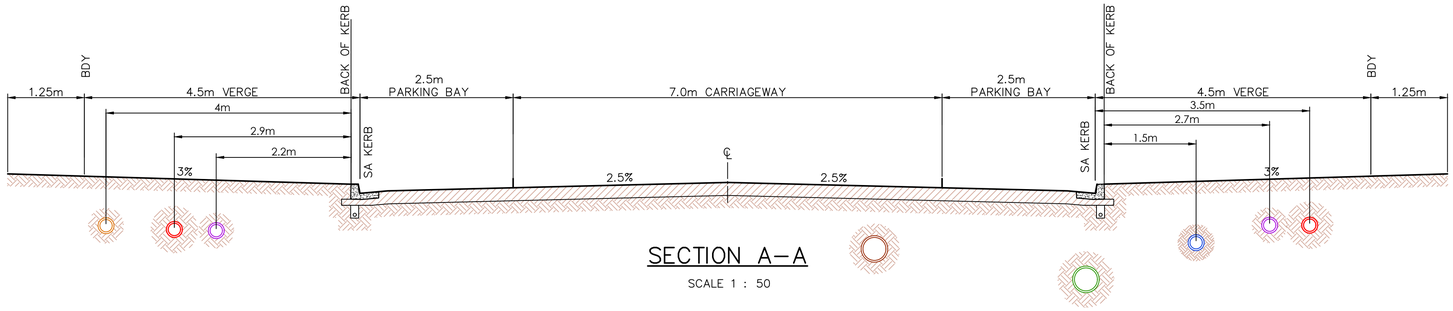
PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG	– 901	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:20:03PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-901.DWG

100mm AT FULL SIZE

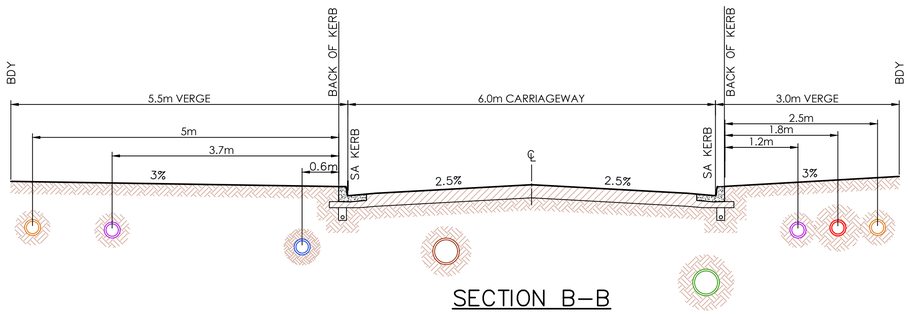
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

300001(2)-ENG-902



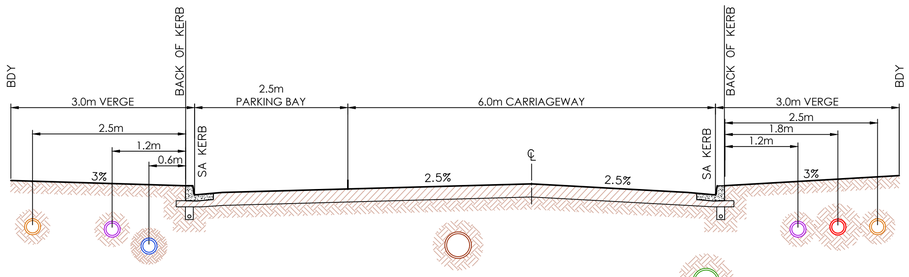
SECTION A–A

SCALE 1 : 50



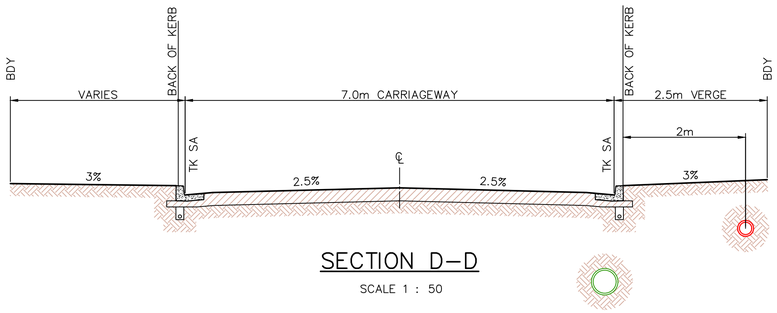
SECTION B–B

SCALE 1 : 50



SECTION C–C

SCALE 1 : 50



SECTION D–D

SCALE 1 : 50

LEGEND

- PROPOSED STORMWATER
- PROPOSED WATER
- PROPOSED SEWER
- PROPOSED NBN
- PROPOSED ELECTRICAL
- EXISTING HIGH VOLTAGE
- PROPOSED STREET LIGHTING

GENERAL NOTES: –

1. SERVICES SHOWN FOR INFORMATION ONLY. ALL SERVICES TO BE CONSTRUCTED IN ACCORDANCE WITH APPROVED CONSTRUCTION DOCUMENTATION, RYDE CITY COUNCIL STANDARDS AND THE RELEVANT SERVICE AUTHORITY STANDARDS.

NOTE: –

WATERMAIN REQUIRED TO BE LOCALLY DIVERTED AROUND STORMWATER PITS AND STREET LIGHT FOOTINGS. ENSURE ADEQUATE CLEARANCE BETWEEN WATERMAIN AND STRUCTURES. CLEARANCES TO ALLOW FOR WORKING SPACE FOR BORING OF STREET LIGHT FOOTINGS.

NOTE: –

CONTRACTOR TO UNDERTAKE CLASH CHECK OF ALL SERVICES PRIOR TO COMMENCEMENT.

SERVICE LEVELS INDICATIVE ONLY

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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:50 / A3 1:100 (0, 1.25, 2.5 m)

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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5 Pioneer Avenue,
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Fax: (02) 4305 4399
email: coast@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT: FRASERS PROPERTY

PROPERTY DESCRIPTION: LOT 100 D.P.1262209 & LOT 1 D.P.859537 EPPING ROAD & LYONPARK ROAD, MACQUARIE PARK SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: TYPICAL ROAD PROFILES, SERVICE LOCATIONS

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2) –	ENG	– 902	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:20:07PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-902.DWG

100mm AT FULL SIZE
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300001(2)-ENG-903

MGA

APPROXIMATE LOCATION OF EXISTING MAIN SWITCHBOARD

EXTENT OF MSB ROOM + SUSPENDED SLAB

MSB ROOM

MFD ROOM

CONSUMER MAINS TO ENTER SIDE OF MSB ROOM TO AVOID WORKS WITHIN SUSPENDED SLAB

PROPOSED CONSUMER MAINS. REFER TO ELECTRICAL DRAWINGS BY SHELMERDINES REFERENCE 6820-ES-502 FOR DETAILS

EXISTING SERVICES BAY. CONTRACTOR TO LOCATE ALL SERVICES PRIOR TO WORKS

SERVICE PITS TO BE RELOCATED OUT OF PROPOSED DRIVEWAY. FINAL LOCATION SUBJECT TO AUTHORITY DESIGN

ELECTRICAL KIOSK. REFER TO ELECTRICAL PLANS FOR FURTHER DETAILS

ALL SERVICE PITS TO BE RELOCATED TO WITHIN VERGE. FINAL LOCATION SUBJECT TO AUTHORITY DESIGN

EXISTING LV PILLAR TO BE RELOCATED. REFER CERTIFIED AUSGRID DESIGN PREPARED BY SHELMERDINES

EXISTING STREET LIGHT TO BE RELOCATED. REFER CERTIFIED AUSGRID DESIGN PREPARED BY SHELMERDINES

EXISTING PARKING METER TO BE RELOCATED TO COUNCIL SATISFACTION

ROAD No.1

LYONPARK ROAD

15\2 101\2 15\1 101\1

CAUTION:

1. IT IS THE RESPONSIBILITY OF THE CIVIL WORKS CONTRACTOR TO DETERMINE THE LOCATION & LEVEL OF EXISTING SERVICES USING NON DESTRUCTIVE METHODS PRIOR TO COMMENCING WORKS ON SITE.

LEGEND

- LIMIT OF WORKS BOUNDARY
- PROPOSED LOT BOUNDARY
- EXISTING LOT BOUNDARY
- MAJOR CONTOURS
- MINOR CONTOURS
- PROPOSED KERB
- EXISTING KERB
- EXTENTS OF BATTER
- PROPOSED PAVED FOOTPATH
- PROPOSED CONCRETE FOOTPATH
- PROPOSED RETAINING WALL
- PROPOSED STORMWATER
- PROPOSED CONSUMER MAIN
- EXISTING STORMWATER
- EXISTING ELECTRICAL
- EXISTING WATER
- EXISTING TELSTRA
- PROPOSED SW PIT
- PROPOSED LINTEL
- PROPOSED HEADWALL
- PIT LABEL

CONTOUR INTERVAL = 0.1m

1 IDENTIFIED RISK/HAZARD

1. CONTRACTOR IS TO IDENTIFY AND RELOCATE ANY SERVICES WITHIN CARPARK AREA.
2. CONTRACTOR TO LIAISE WITH RELEVANT AUTHORITIES TO RELOCATE SERVICES AS REQUIRED.

4 904 3 904 2 904 1 904

SERVICES RELOCATION PLAN

SCALE 1:100

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CONSTRUCTION ISSUE

100mm AT FULL SIZE

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1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
2	16.05.22	C3 STORMWATER CHANGE	B.M.	M.H.	B.M.	B.M.

SCALES: A1 1:100, 0, 2.5, 5.0m, A3 1:200

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SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: SERVICES RELOCATION PLAN

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	903	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:20:13PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-903.DWG

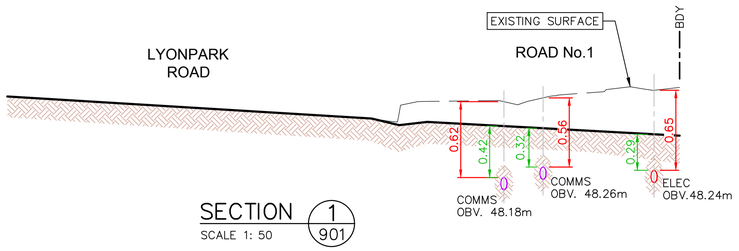
300001(2)-ENG-904

LEGEND

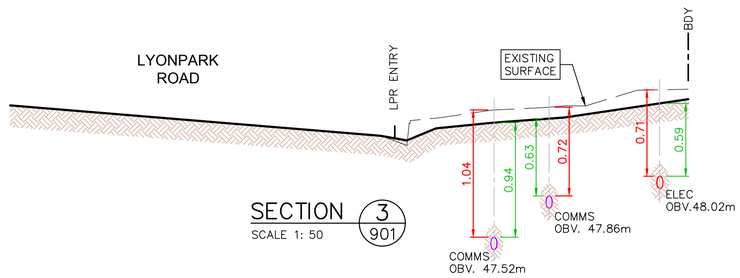
0.54 — COVER TO EXISTING SERVICES BASED UPON PROPOSED DESIGN LEVELS

0.56 — EXISTING COVER

NOTE:
ALL SERVICES TO BE LOWERED TO STANDARD COVER WHERE REQUIRED. FINAL LOCATIONS SUBJECT TO AUTHORITY DESIGN

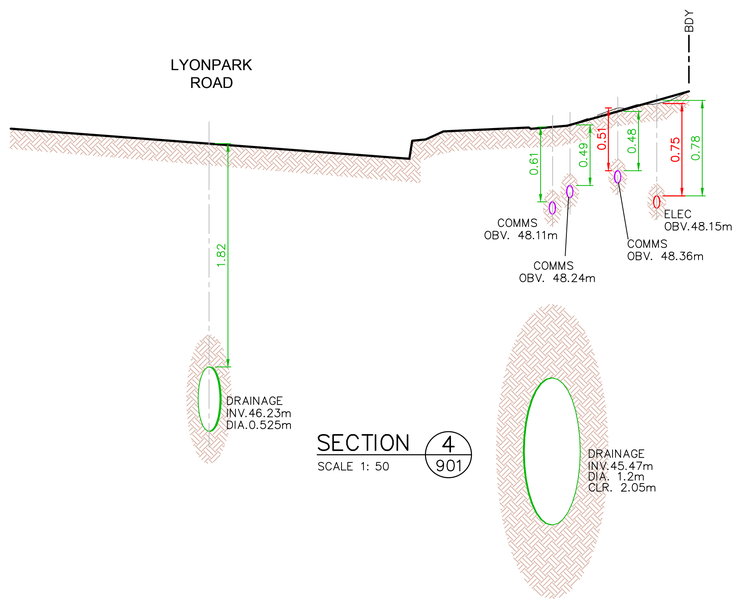


SECTION 1 / 901
SCALE 1: 50



SECTION 3 / 901
SCALE 1: 50

SECTION 2 / 901
SCALE 1: 50



SECTION 4 / 901
SCALE 1: 50

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CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DESIGN	DRAWN	CHECKED	APPROVED
1	21.01.22	ISSUED FOR CONSTRUCTION	B.M.	J.J.	B.M.	B.M.
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SCALES: A1 1:50 — 0 1.25 2.5 m — A3 1:100

DESIGN FILE S:\300001\DESIGN\12D\STAGE 2 CC\DESIGN FILE.project

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MACQUARIE PARK
SSDA 8903

SURVEYED: ADW Johnson

DATUM: GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT: PROPOSED SUBDIVISION

PLAN TITLE: SERVICES RELOCATION SECTIONS

PROJECT No.	DISCIPLINE	NUMBER	REV.
300001(2)	ENG	904	2

Plotted By: Mark Hoyland Plot Date: 16/05/22 2:20:18PM Cad File: S:\300001\DRAWINGS\ENGINEERING\CIVIL\STAGE 2 CC ENG\300001(2)-ENG-904.DWG

100mm AT FULL SIZE

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SHRIMPTON CREEK BRIDGE

NEW BRIDGE - 2021

DESIGN STANDARD: AS 5100: 2017 SERIES BRIDGE DESIGN

ROAD TRAFFIC LOADING: SM1600
NUMBER OF DESIGN LANES: 2
DESIGN TRAFFIC SPEED: 60km/h

TRAFFIC BARRIER PERFORMANCE LEVEL: MEDIUM

WIND LOADING
WIND TERRAIN CATEGORY: 2
WIND REGION: A2
WIND VELOCITY ULS: 48m/s
WIND VELOCITY SLS: 37m/s
AVERAGE RECURRENCE INTERVAL (ARI) ULS = 2000 YEARS
AVERAGE RECURRENCE INTERVAL (ARI) SLS = 20 YEARS

EARTHQUAKE LOADING: AS 5100.2
DESIGN CATEGORY: BEDC-2
DESIGN PERFORMANCE LEVEL: DAMAGE CONTROL
ANNUAL PROBABILITY OF EXCEEDANCE: P = 1:500
PROBABILITY FACTOR: K_p = 1.0
SEISMIC HAZARD FACTOR: Z = 0.08
SITE SUBSOIL CLASS: B_e/C_e - ROCK OR SHALLOW SOIL
DESIGN DUCTILITY FACTOR - HORIZONTAL (LONGITUDINAL): μ = 4.0
DESIGN DUCTILITY FACTOR - HORIZONTAL (TRANSVERSE): μ = 4.0

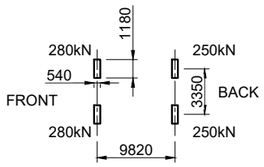
FLOOD DATA

ARI	100 years	2000 years
DESIGN FLOWRATE (m^3/s)	93	123
FLOOD VELOCITY (m/s)	2.3	2.5
FLOOD LEVEL (mAHD)	44.7	45.2

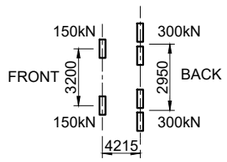
SCOUR DEPTH	100 years ARI	2000 years ARI
ABUTMENT A	3.3	5.0
PIER 1	3.2	3.5
PIER 2	3.2	3.5
ABUTMENT B	N.A	N.A

DIFFERENTIAL SETTLEMENT
15mm TOTAL BETWEEN BRIDGE SUPPORTS

CONSTRUCTION LOADING



651 SCRAPER



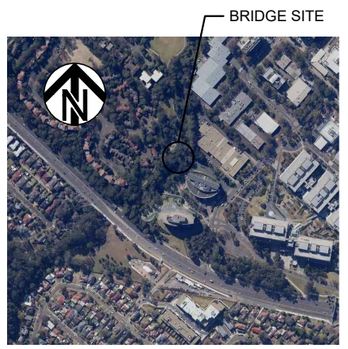
773 ROCK TRUCK (CATERPILLAR)

LOADS REPRESENT MAX WORKING WHEEL LOADS.
DESIGN DYNAMIC LOAD ALLOWANCE NOT INCLUDED IN THESE LOADS.
THE DESIGN ADOPTS A DYNAMIC LOAD ALLOWANCE OF 0.1 AND AN ULTIMATE LIMIT STATE LOAD FACTOR OF 1.5.
VEHICLE SPEED IS RESTRICTED TO 10km/h ON THE BRIDGE.
LOAD IS TO BE RESTRICTED TO ONE VEHICLE AT ANY TIME RUNNING WITHIN THE CENTRAL 5m OF DECK WITH NO CO-EXISTING LOADING.
FOR THE 773 VEHICLE, THE WHEEL CONTACT AREA IS ASSUMED TO BE 750mm (TRANSVERSE) x 250mm (LONGITUDINAL).

JACKING OF BRIDGE DECK FOR BEARING REPLACEMENT
FOR INFORMATION ONLY
THE DESIGN INCLUDES THE FOLLOWING REQUIREMENTS:
- COVER PLATE AND RAILING ON APPROACH ARE TO BE REMOVED PRIOR TO JACKING.
- NO TRAFFIC SHALL BE OVER THE BRIDGE DURING JACKING.
- DYNAMIC LOAD ALLOWANCE OF α = 0.1 HAS BEEN INCLUDED IN THE DESIGN.
- REFER DRAWING No 115 AND 116 FOR JACKING LOCATIONS AND JACKING LOADS.
- ALL JACKS AT EACH LIFT POINT SHALL BE HYDRAULICALLY LINKED AND HAVE A CONTROL MECHANISM TO ENSURE THAT THE SAME VERTICAL DISPLACEMENTS OCCUR AT EACH LIFT POINT AT ALL TIMES DURING THE JACKING OPERATION.
- BRIDGE BEARINGS ARE DESIGNED TO BE REPLACED USING LIFTS OF NOT GREATER THAN 5mm.
- STEEL PLATES SHALL BE PLACED BETWEEN CONCRETE BEARING SURFACE AND HYDRAULIC JACK.
- MAXIMUM ALLOWABLE CONTACT PRESSURE BETWEEN CONCRETE SURFACE AND STEEL PLATES SHALL BE 25MPa.
- HORIZONTAL RESTRAINTS TO BE MAINTAINED TO RESIST A FORCE OF 500kN AT EACH ABUTMENT AND PIER.

LIST OF SPECIFICATIONS (BUT NOT LIMITED TO)

No.	SPECIFICATIONS FOR BRIDGE WORKS
TfNSW QA R53	CONCRETE (FOR GENRAL USE), MORTAR AND GROUT
TfNSW QA R63	GEOTEXTILES (SEPARATION AND FILTRATION)
TfNSW QA R132	SAFETY BARRIER SYSTEMS
TfNSW QA B30	EXCAVATION AND BACKFILL FOR BRIDGE WORKS
TfNSW QA B58	BORED CAST-IN-PLACE REINFORCED CONCRETE PILES (WITH PERMANENT CASING)
TfNSW QA B59	BORED CAST-IN-PLACE REINFORCED CONCRETE PILES (WITHOUT PERMANENT CASING)
TfNSW QA B80	CONCRETE WORK FOR BRIDGES
TfNSW QA B170	SUPPLY AND INSTALLATION OF VOID FORMERS
TfNSW QA B201	STEEL WORK FOR BRIDGES
TfNSW QA 220	PROTECTIVE TREATMENT OF BRIDGE STEEL WORK
TfNSW QA 240	STEEL FASTERNERS
TfNSW QA 261	ERECTION OF STRUCTURAL ALUMINIUM
TfNSW QA 280	PLAN ELSTOMERIC BEARING PADS AND STRIPS
TfNSW QA 284	INSTALLATION OF BRIDGE BEARINGS
TfNSW QA 312	COLD APPLIED SEALED JOINTS
TfNSW QA 315	ELASTOMERIC STRIP SEAL EXPANSION JOINTS
TfNSW QA 344	SPRAYED BITUMINOUS WATERPROOFING MEMBRANES
TfNSW QA 345	SUPPLY OF BRIDGE NAME PLATES



LOCALITY PLAN

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
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150 mm ON ORIGINAL
A1
X_30013046_SMEC_A1

DRAWING FILE LOCATION / NAME: V:__Vault\Projects\3001\30013046\110__CADD\CAD\DWG\30013046-100.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:20:48

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING

DESIGNER: SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE
COVER SHEET

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-100	A

SCHEDULE OF DRAWINGS

100 COVER SHEET
101 DRAWING SCHEDULE

105 GENERAL ARRANGEMENT SHEET A
106 GENERAL ARRANGEMENT SHEET B
107 GENERAL ARRANGEMENT SHEET C

111 PILING LAYOUT
112 PILE DETAILS SHEET A
113 PILE DETAILS SHEET B

115 ABUTMENT CONCRETE SHEET A
116 ABUTMENT CONCRETE SHEET B
117 ABUTMENT CONCRETE SHEET C

121 ABUTMENT REINFORCEMENT SHEET A
122 ABUTMENT REINFORCEMENT SHEET B
123 ABUTMENT REINFORCEMENT SHEET C
124 ABUTMENT REINFORCEMENT SHEET D

131 PIER DETAILS SHEET A
132 PIER DETAILS SHEET B
133 PIER DETAILS SHEET C

135 PIER REINFORCEMENT DETAILS SHEET A
136 PIER REINFORCEMENT DETAILS SHEET B

141 BEARINGS

151 DECK SETTING OUT
152 DECK CONCRETE SHEET A
153 DECK CONCRETE SHEET B

161 DECK POST TENSIONING SHEET A
162 DECK POST TENSIONING SHEET B
163 DECK POST TENSIONING SHEET C

171 DECK REINFORCEMENT SHEET A
172 DECK REINFORCEMENT SHEET B
173 DECK REINFORCEMENT SHEET C
174 DECK REINFORCEMENT SHEET D

181 ON STRUCTURE BARRIER DETAILS SHEET A
182 ON STRUCTURE BARRIER DETAILS SHEET B
183 ON STRUCTURE BARRIER DETAILS SHEET C
184 ON STRUCTURE BARRIER DETAILS SHEET D
185 ON STRUCTURE BARRIER DETAILS SHEET E

186 RETAINING WALL CONCRETE DETAILS
187 RETAINING WALL REINFORCEMENT DETAILS

188 OFF STRUCTURE BARRIER DETAILS SHEET A
189 OFF STRUCTURE BARRIER DETAILS SHEET B

190 OFF STRUCTURE BARRIER CYCLE RAIL AND HAND RAIL TERMINATION DETAIL

191 APPROACH SLAB CONCRETE SHEET A
192 APPROACH SLAB CONCRETE SHEET B

195 APPROACH SLAB REINFORCEMENT SHEET A
196 APPROACH SLAB REINFORCEMENT SHEET B

201 EXPANSION JOINT DETAILS SHEET A
202 EXPANSION JOINT DETAILS SHEET B

205 COVER PLATE DETAILS SHEET A
206 COVER PLATE DETAILS SHEET B

211 SCOUR PROTECTION DETAILS SHEET A
212 SCOUR PROTECTION DETAILS SHEET B
213 MAINTENANCE ACCESS

215 BAR SHAPES DIAGRAMS

221 CLADDING DETAILS SHEET A
222 CLADDING DETAILS SHEET B
223 CLADDING DETAILS SHEET C

230 BRIDGE AND APPROACH SLAB PAVEMENT DETAILS

235 RAIL SPLICE DETAILS AT CURVE LOCATION

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Registered Certifier

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150 mm ON ORIGINAL
A1
X_30013046_SMEC_A1

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PLOT DATE: 14 Jun 2022 TIME: 17:21:26

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

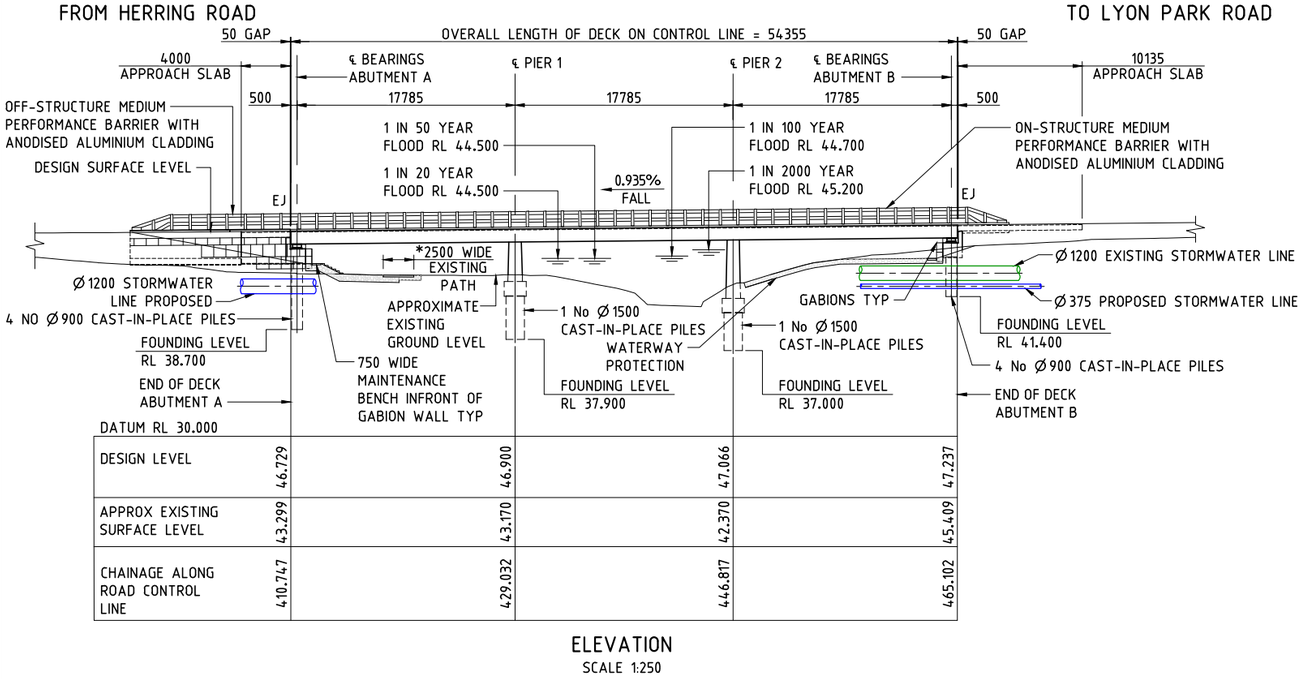
SCALES AT A1 SIZE DRAWING

DESIGNER: SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

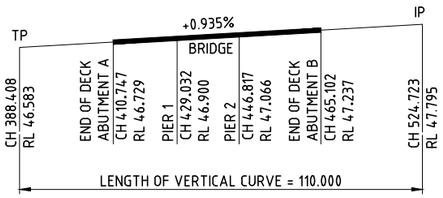
CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE
DRAWING SCHEDULE

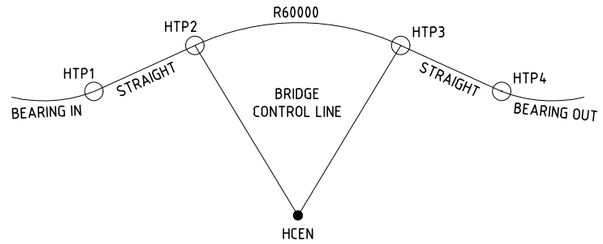
SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-101	A



ELEVATION
SCALE 1:250



VERTICAL ALIGNMENT DIAGRAM
NOT TO SCALE

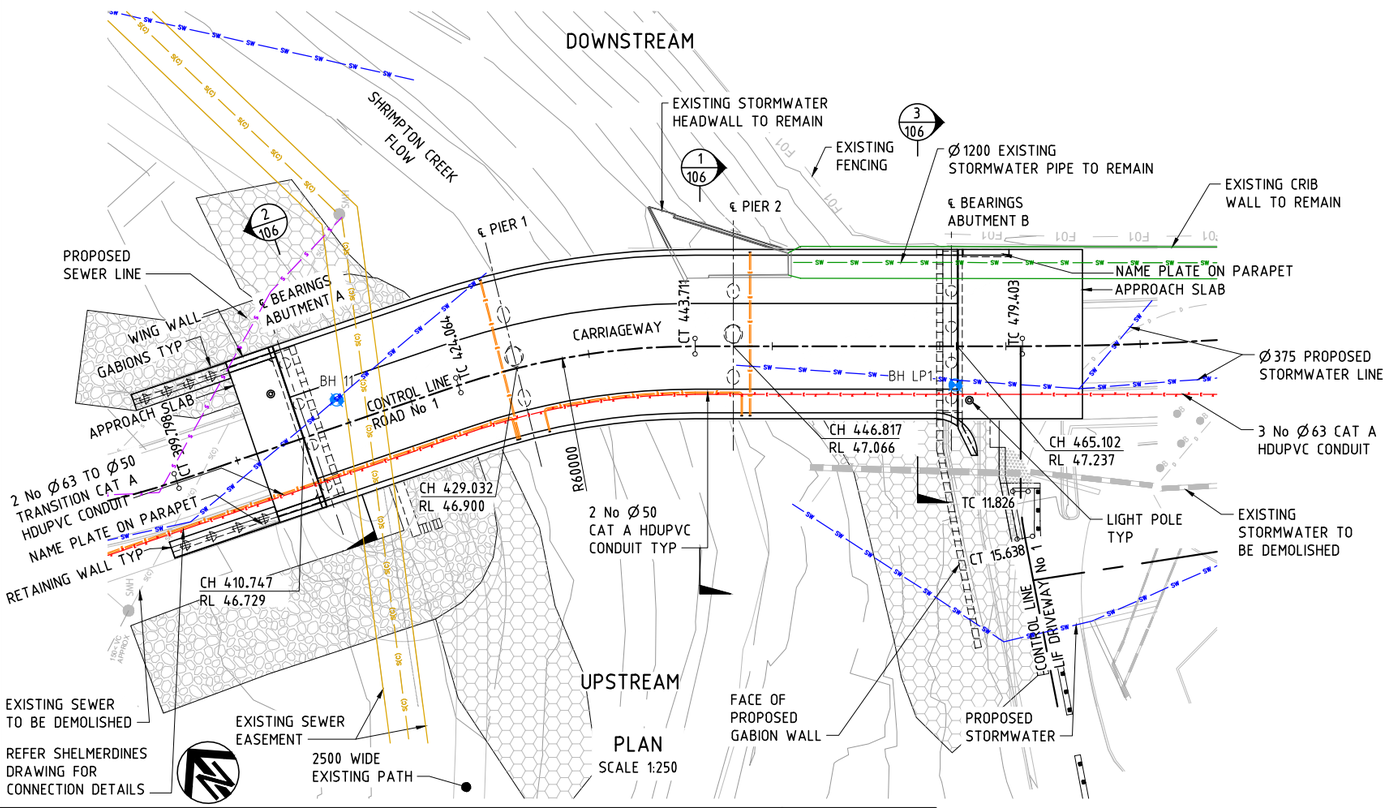


HORIZONTAL ALIGNMENT DIAGRAM
NOT TO SCALE

TABLE 1 - HORIZONTAL ALIGNMENT DATA - M010

POINT	LOCATION	EASTING	NORTHING	BEARING IN	BEARING OUT
HCEN	CENTRE OF CIRCLE	325753.827	6260275.793	-	-
HTP1	CH 399.798	325753.791	6260340.515	111°59'16"	-
HTP2	CH 424.064	325776.292	6260331.429	-	-
HTP3	CH 443.711	325792.992	6260321.248	-	-
HTP4	CH 470.403	325813.213	6260303.825	-	130°44'56"

FROM HERRING ROAD
TO LYON PARK ROAD



LEGEND

- BOLLARD
- SEWER MAN HOLE (SMH)
- F01 — FENCE 01
- BOREHOLE
- LIGHT POLE

PROPOSED UTILITIES

- SW SW — PROPOSED STORMWATER
- S S — PROPOSED SEWER LINE
- E E — PROPOSED Ø50 ELECTRICAL LINE
- E E — PROPOSED Ø63 ELECTRICAL LINE

EXISTING SERVICES TO BE DECOMMISSIONED

- UNDERGROUND STORMWATER PIPE (QL A)
- S(C) — UNDERGROUND SEWER (QL C)

EXISTING SERVICES TO REMAIN

- SW SW — UNDERGROUND STORMWATER PIPE (QL D)
- S(C) — UNDERGROUND SEWER (QL C)

GENERAL NOTES

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
CHAINAGES AND REDUCED LEVELS ARE IN METRES.
REDUCED LEVELS ARE TO AUSTRALIAN HEIGHT DATUM.
CO-ORDINATES ARE ON A LOCAL SYSTEM. REFER TO CIVIL DRAWINGS PREPARED BY ADW JOHNSON 300001(2)-ENG-005 FOR DETAILS.
ALL CONCRETE SURFACES THAT ARE VISIBLE TO ROAD USERS OR PEDESTRIANS AND WITHIN 3m ABOVE FINISHED SURFACE LEVEL OR ACCESSIBLE FOOTHOLDS SHALL BE TREATED WITH ANTI-GRAFFITI COATING.
REFER DRAWINGS PREPARED BY SHELMERDINES FOR LIGHTING DETAILS.
EJ DENOTES EXPANSION JOINT.
SP DENOTES SHARED PATH.
FP DENOTES FOOT PATH.
TL DENOTES TRAFFIC LANE.
* EXISTING PATH TO BE REINSTATED POST INSTALLATION OF SCOUR PROTECTION. FOR DETAILS REFER CIVILS DRAWING PREPARED BY ADW JOHNSON.

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision, Certifier – Strata, Certifier – Stormwater, Certifier – Road & Drainage, Certifier – Hydraulic (stormwater)
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DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-105.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:21:58

EXTERNAL REFERENCE FILES: X_30013046_SMEC_A1, X_DES_MAIN, X_SURV, X_SHP_PLAN, X_SHP_PILES, X_PROP_SERVICES, X_PROP_BORE LOG, X_BRG_SCOUR PROTECTION

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 5000 10000mm; 2500 1250 1:250

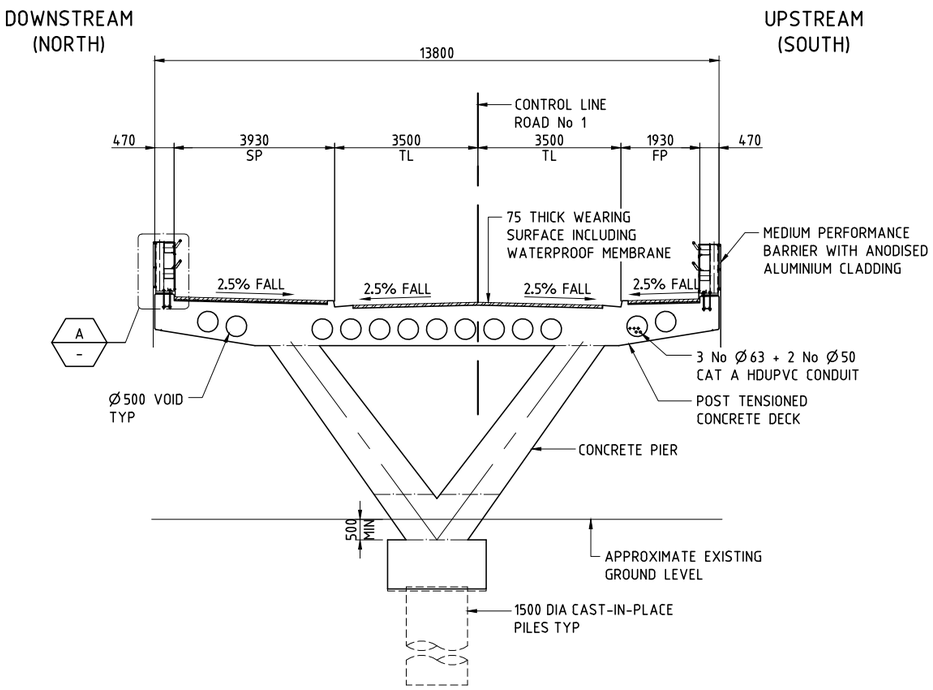
DESIGNER: SMEC
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LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

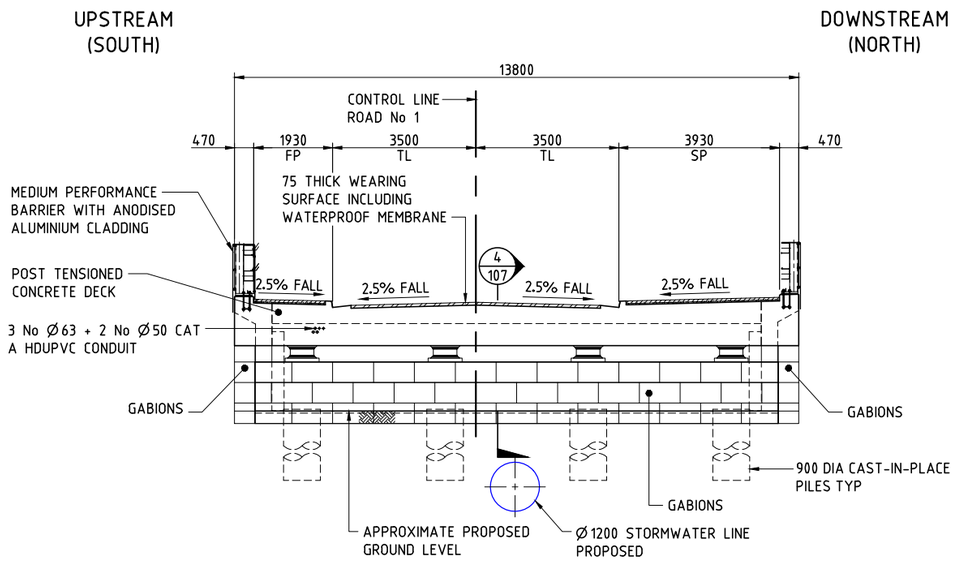
PROJECT TITLE: SHRIMPTON CREEK BRIDGE
GENERAL ARRANGEMENT SHEET A

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-105	A

150 mm ON ORIGINAL
A1

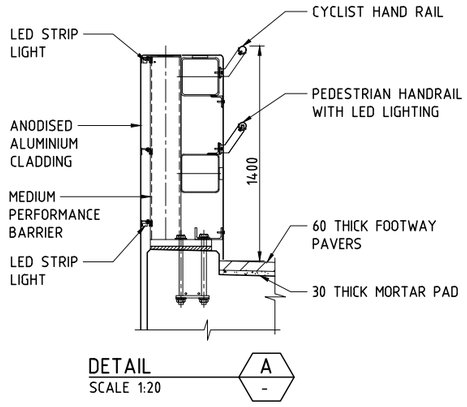


SECTION 1 / 105
SCALE 1:75

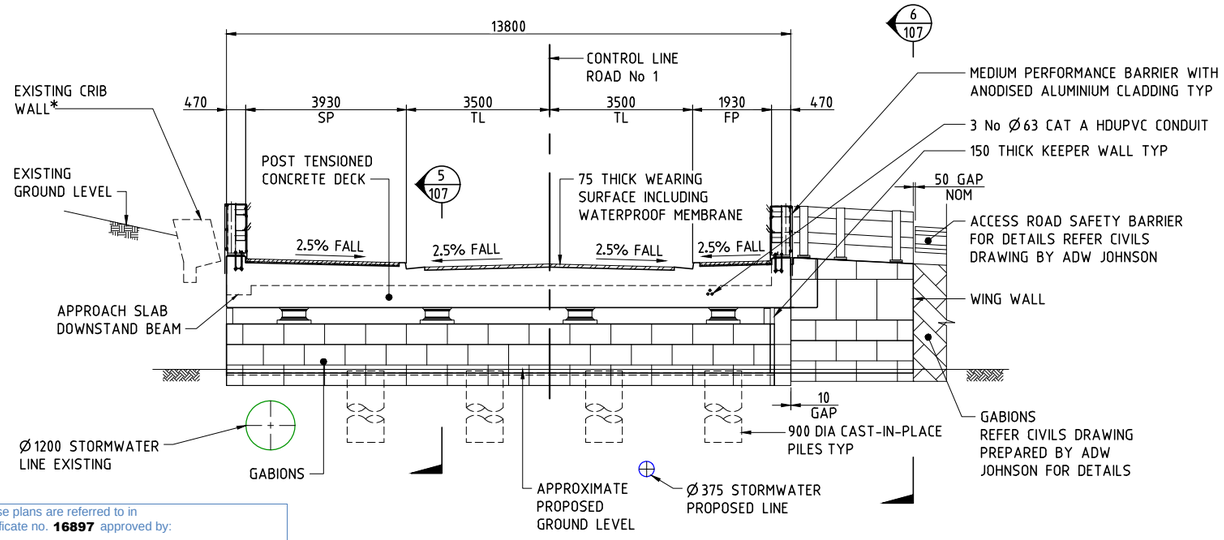


SECTION 2 / 105
SCALE 1:75

STAINLESS STEEL ANCHORS FOR CONNECTING
GABIONS NOT SHOWN FOR CLARITY



DETAIL A / -
SCALE 1:20



SECTION 3 / 105
SCALE 1:75

STAINLESS STEEL ANCHORS FOR HOLDING GABIONS IN POSITION
NOT SHOWN FOR CLARITY

* STABILITY OF EXISTING CRIB WALL TO BE MAINTAINED
BY CONTRACTOR DURING CONSTRUCTION

GENERAL NOTES

FOR GENERAL NOTES RELATED TO THIS DRAWING,
REFER DRG No 105.

LDC

These plans are referred to in
certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories:
Certifier – Subdivision
Certifier – Strata
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Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

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DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-106.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:22:31

EXTERNAL REFERENCE FILES: X_30013046_SMEC_A1, X_BRG_SEC

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 1000 2000 3000mm; 750 375 1:75

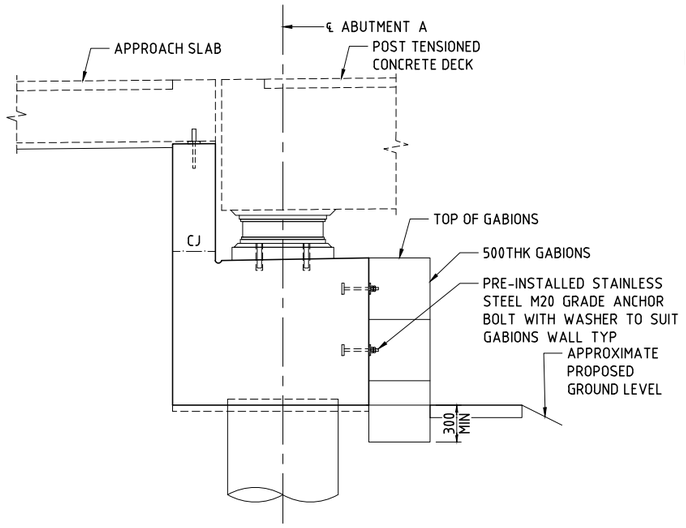
DESIGNER
SMEC
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© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT
FRASERS PROPERTY

PROJECT TITLE
SHRIMPTON CREEK BRIDGE
GENERAL ARRANGEMENT
SHEET B

SCALE	PHASE	PROJECT / DRAWING No	REVISION
AS NOTED	CONSTRUCTION	30013046-106	A

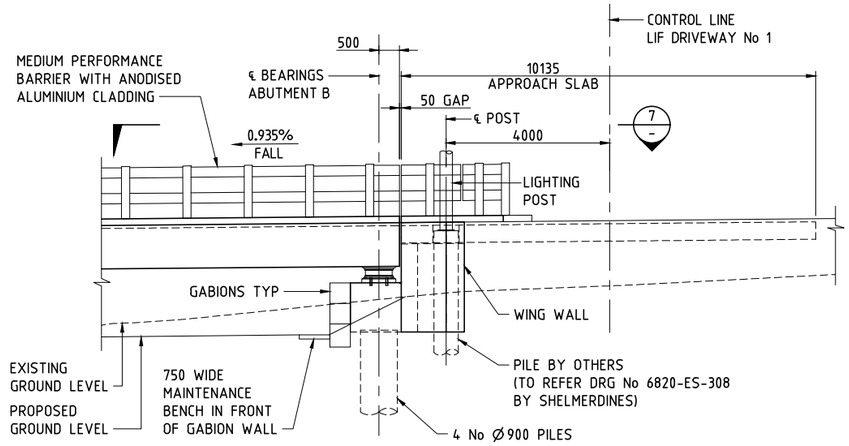
A1
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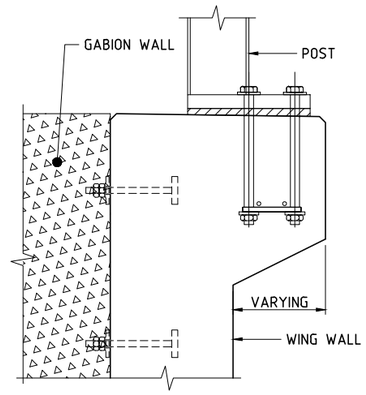
SECTION 4 / 106
SCALE 1:25

FROM HERRING ROAD

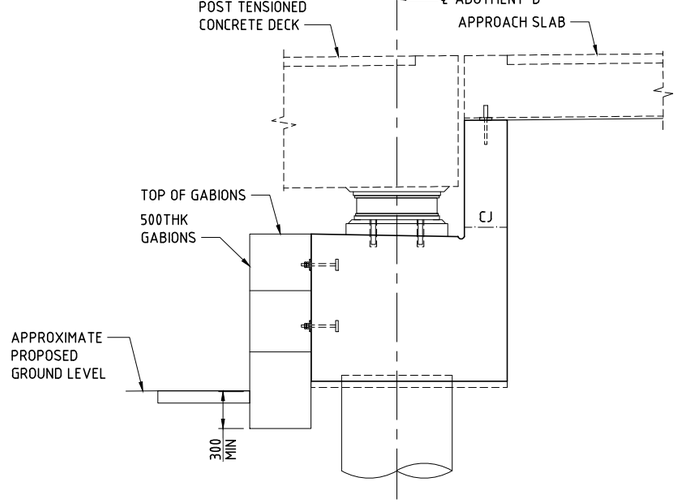
TO LYON PARK ROAD



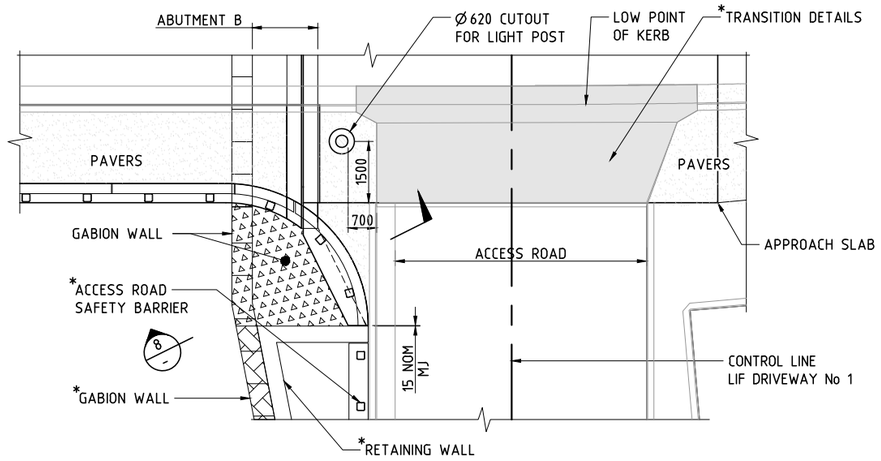
SECTION 6 / 106
SCALE 1:75



SECTION 8 / -
SCALE 1:10



SECTION 5 / 106
SCALE 1:25



VIEW 7 / 107
SCALE 1:75

*FOR DETAILS REFER CIVILS DRAWINGS PREPARED BY ADW JOHNSON

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Registered Certifier
Registration No: BDC 2416
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GENERAL NOTES

FOR GENERAL NOTES RELATED TO THIS DRAWING, REFER DRG No 105.

150 mm ON ORIGINAL
A1

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-107.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:23:04

EXTERNAL REFERENCE FILES: X_30013046_SMEC_A1, X_BRG_SEC, X_BRG_PLAN, X_SURV

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
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PROJECT MANAGER	J.DICKERSON
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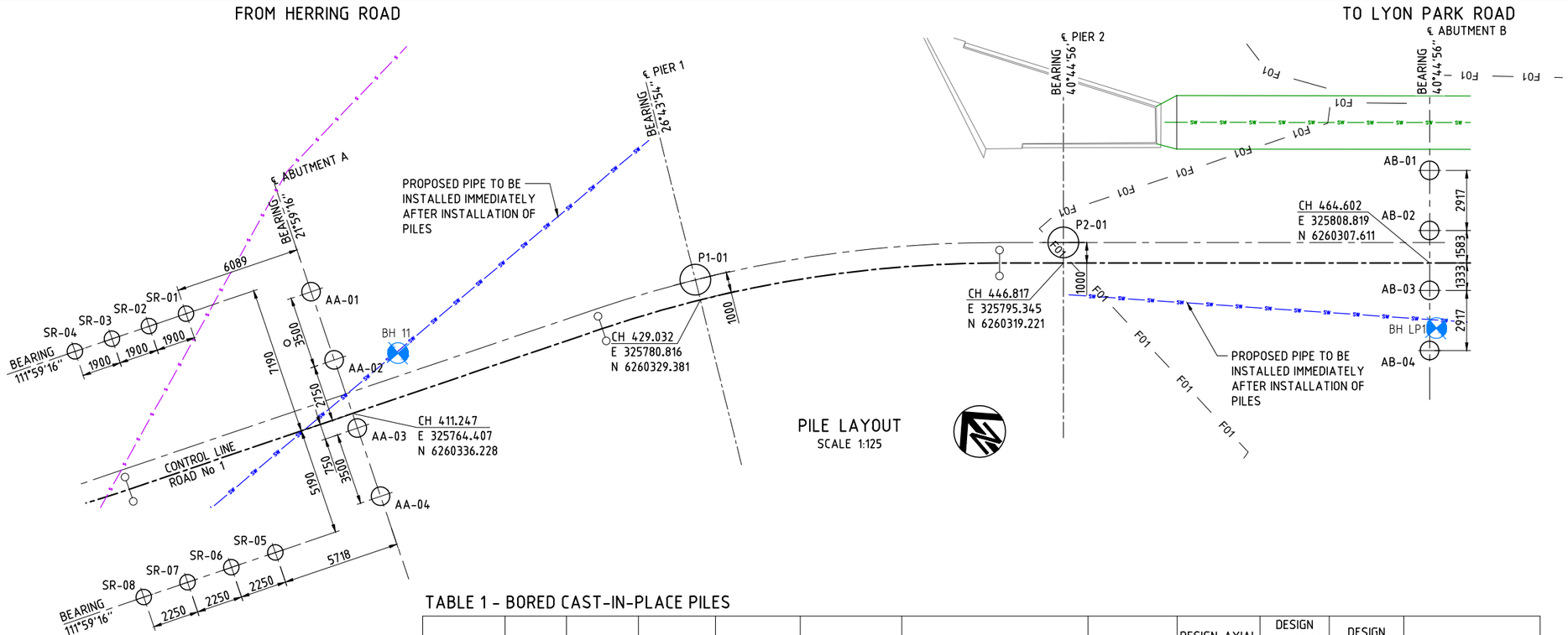
SCALES AT A1 SIZE DRAWING: 0 1000 2000 3000mm; 750 375; 1:75

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CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE
GENERAL ARRANGEMENT SHEET C

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-107	A



PILE LAYOUT
SCALE 1:125

TABLE 1 - BORED CAST-IN-PLACE PILES

LOCATION	PILE No	TOE OF PILE RL 'A'	TOP OF PILE RL 'B'	LENGTH OF PILE 'L' (m)	MINIMUM TOTAL SOCKET LENGTH 'Ls'(m)	SOCKET MATERIAL 'S'/ LAYER THICKNESS (m)	FOUNDING MATERIAL 'R'	DESIGN AXIAL COMPRESSION SLS (kN)	DESIGN AXIAL COMPRESSION ULS (kN)	DESIGN MAXIMUM BENDING MOMENT (ULS) (kNm)	DESIGN MAXIMUM SHEAR (ULS) (kN)	REINFORCEMENT 'x'	REINFORCEMENT 'y'
ABUTMENT A	AA-01	36.929	44.129	7.200	2.200	CLASS IV SANDSTONE (1.3m) CLASS III SANDSTONE (0.9m)	CLASS III SANDSTONE	1600	2350	700	350	3	23
	AA-02*											4	24
	AA-03											5	25
	AA-04*											6	26
PIER 1	P1-01*	35.866	41.466	5.600	3.300	CLASS IV SANDSTONE (2.0m) CLASS III SANDSTONE (1.3m)		9100	12600	3450	1400	7	27
PIER 2	P2-01*	34.802	40.102	5.300	3.300	CLASS IV SANDSTONE (2.0m) CLASS III SANDSTONE (1.3m)						8	28
ABUTMENT B	AB-01	39.128	44.628	5.500	1.700	CLASS III SANDSTONE (1.7m)		1750	2200	425	225	9	29
	AB-02*											10	30
	AB-03											11	31
	AB-04											12	32
SRW	SR-01	37.157	43.957	6.800	1.800	CLASS IV SANDSTONE (1.3m) CLASS III SANDSTONE (0.5m)		150	250	525	150	13	33
	SR-02											14	34
	SR-03											15	35
	SR-04											16	36
	SR-05	37.107	43.907	6.800	1.800			150	250	525	150	17	37
	SR-06											18	38
	SR-07											19	39
	SR-08											20	40

TABULATED DESIGN LOADS ARE MAXIMUM OF EACH ABUTMENT AND PIER AND ARE NOT CONCURRENT.
* INDICATES PILES NOMINATED FOR INTEGRITY TESTING.

GEOTECHNICAL NOTES FOR CAST-IN-PLACE PILES

THE PILING CONTRACTOR SHALL REVIEW AVAILABLE GEOTECHNICAL INVESTIGATIONS AND DETERMINE WHETHER A TEMPORARY CASING IS REQUIRED FOR THE CONSTRUCTION OF THE CAST-IN-PLACE PILES.
IF BENTONITE OR OTHER AGENCY IS USED TO SUPPORT PILE OR SOCKET FACES, THE DESIGNER SHALL BE INFORMED AND CONSIDER THE EFFECTS ON SOCKET LENGTH REQUIREMENTS.
ROCK SOCKET DESIGNS ARE BASED ON THE GEOTECHNICAL DESIGN PARAMETERS IN TABLE 2.
GEOTECHNICAL STRENGTH REDUCTION FACTOR ϕg OF 0.48 HAS BEEN ADOPTED FOR BORED PILES AND SHALL BE APPLIED TO THE ULTIMATE GEOTECHNICAL DESIGN PARAMETERS IN TABLE 2 TO DERIVE THE DESIGN ULTIMATE GEOTECHNICAL CAPACITY.
PILE DESIGN LOADS ARE PRESENTED IN TABLE 1. THE AXIAL LOADS AND MOMENTS TABULATED ARE NOT CONCURRENT BUT ARE MAXIMUM VALUES.
THE PILE EXCAVATION SHALL BE INSPECTED BY THE GEOTECHNICAL DESIGN REPRESENTATIVE (GDR) IN ORDER TO VALIDATE THE ASSUMED GROUND CONDITIONS, EFFECTIVENESS OF THE PILE TOE AND SOCKET CLEANING METHODS AND CONFIRM THAT THE MINIMUM ROCK SOCKET LENGTH HAS BEEN ACHIEVED, PRIOR TO CASTING OF CONCRETE.
PILE SOCKET LENGTH, SOCKET AND BASE MATERIAL CLASSES IN TABLE 1 ARE MINIMUM REQUIREMENTS. PILE TOE LEVELS SHOWN ARE BASED ON INTERPRETATION OF AVAILABLE SITE INVESTIGATION. THE ACTUAL PILE TOE LEVELS MAY VARY DEPENDING ON ACTUAL CONDITION. THE GDR SHALL REVIEW THE ACTUAL PROFILE OF THE ROCK SOCKET AND ADJUST THE FOUNDING LEVEL REQUIRED TO ACHIEVE THE DESIGN GEOTECHNICAL STRENGTH TO RESIST THE APPLIED STRUCTURAL LOADING.
PILE TOE LEVELS RL 'A' CAN BE VARIED FROM THE GIVEN VALUES IN TABLE 1 BY UP TO 1.0m AT THE DIRECTION OF THE GDR, PROVIDED THAT THE PILE SOCKET REQUIREMENTS IN TABLE 1 ARE ACHIEVED.
INTEGRITY TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS2159 AND TfNSW BRIDGE TECHNICAL DIRECTION BTD 2011/08 USING LOW STRAIN HEAD IMPACT METHODS, IE. IMPULSE RESPONSE (IR) OR PULSE ECHO (PE).
THE MINIMUM NUMBER OF PILES TO BE TESTED IS 5.
PILE DESIGN ASSUMES THAT CLASS III SANDSTONE (HIGH STRENGTH SANDSTONE) WILL NOT BE SCOURED DURING FLOODING EVENTS.

LEGEND

- BOREHOLE (REFER DOUGLAS PARTNERS REPORT No 86043.01 DEC 2017)
- F01 — FENCE 01

PROPOSED UTILITIES

- SW — PROPOSED STORMWATER
- S — PROPOSED SEWER LINE

EXISTING SERVICES TO REMAIN

- SW — UNDERGROUND STORMWATER PIPE (QL D)

GENERAL NOTES

CONCRETE EXPOSURE CLASSIFICATION: B1
MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 40MPa.
THE PLACING OF CONCRETE IN THE PILES SHALL BE CARRIED OUT IN ONE CONTINUOUS OPERATION UNLESS OTHERWISE SPECIFIED.
ALL SETTING OUT INFORMATION SHALL BE CHECKED BY THE CONTRACTOR ON SITE PRIOR TO CONSTRUCTION.

REINFORCEMENT NOTES

NOMINAL COVER TO REINFORCEMENT NEAREST TO THE CONCRETE SURFACE OF BORED PILE SHALL BE 75mm UNLESS NOTED OTHERWISE.
UNLESS NOTED OTHERWISE THE MINIMUM LAP LENGTHS OF BARS SHALL BE AS FOLLOWS:

BAR SIZE:	N12	N16	N20	N24	N28	N32	N36
a) HORIZONTAL BARS WITH >300mm OF CONCRETE CAST BELOW THE BAR	650	900	1150	1430	1730	2060	2410
b) OTHER BARS	500	690	890	1100	1330	1590	1860

CLEAR DISTANCE BETWEEN LAPPED BARS SHALL NOT EXCEED 3 x THE SMALLEST BAR DIAMETER.
REINFORCEMENT MAY BE DISPLACED SLIGHTLY WHERE NECESSARY TO CLEAR DOWELS, ANCHORS, LIFTING ANCHORS, DUCTS, DRAINAGE LINES AND GENERAL FITMENTS.
REINFORCING BARS IN PILES SHALL BE ELECTRICALLY CONNECTED.
ELECTRICAL CONNECTIVITY OF REINFORCEMENT AND FITMENTS SHALL BE DEMONSTRATED IN ACCORDANCE WITH AS2832.5.
REINFORCING BARS AND STARTER BARS IN PILES MAY BE LAPPED ON THE INSIDE USING CRANKED BARS.
FOR REINFORCEMENT NOTES REFER DRG No 112.
FOR TABLE 2 REFER DRG No 113.

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
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DRAWING FILE LOCATION / NAME: V:_Vault\Projects\30013\30013046\110_CADD\CAD\DWG\30013046-111.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:23:35

EXTERNAL REFERENCE FILES: X_30013046_SMEC_A1; X_DES_MAIN; X_BRG_PLAN; X_PROP_SERVICES; X_PRV_SERVICES; X_PROP_BORE LOG

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 2500 5000mm; 1250 625; 1:125

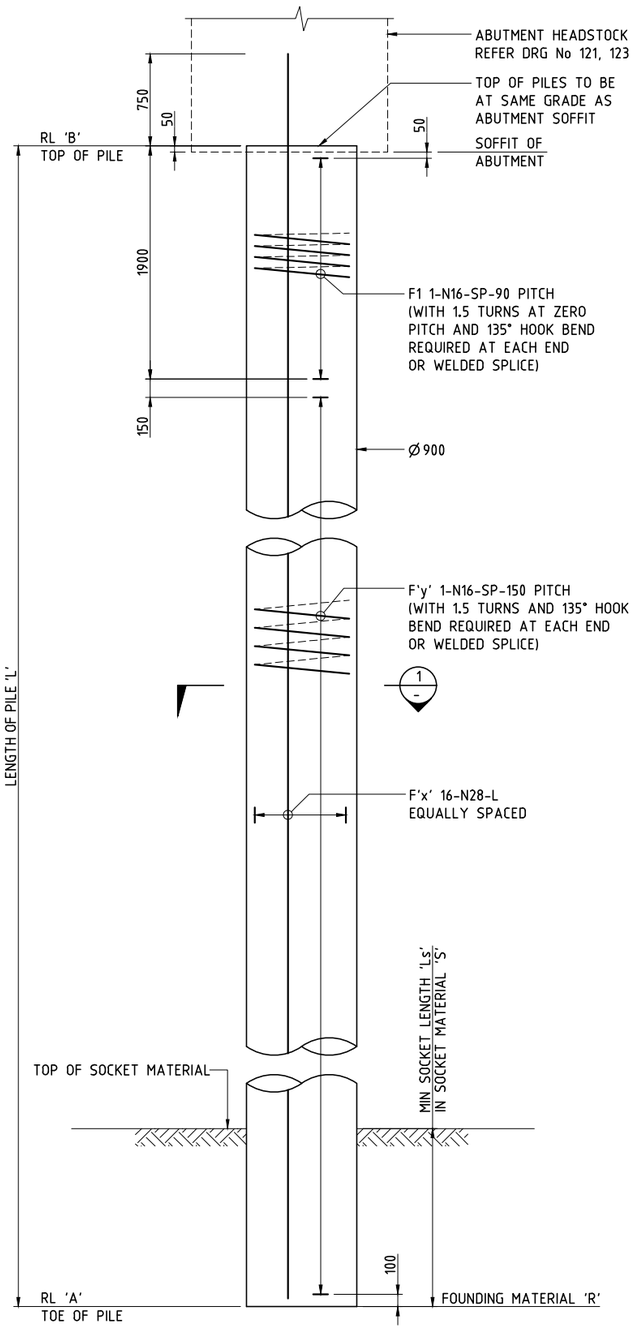
DESIGNER: SMEC
Member of the Surbana Jurong Group
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LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE
PILING LAYOUT

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-111	A

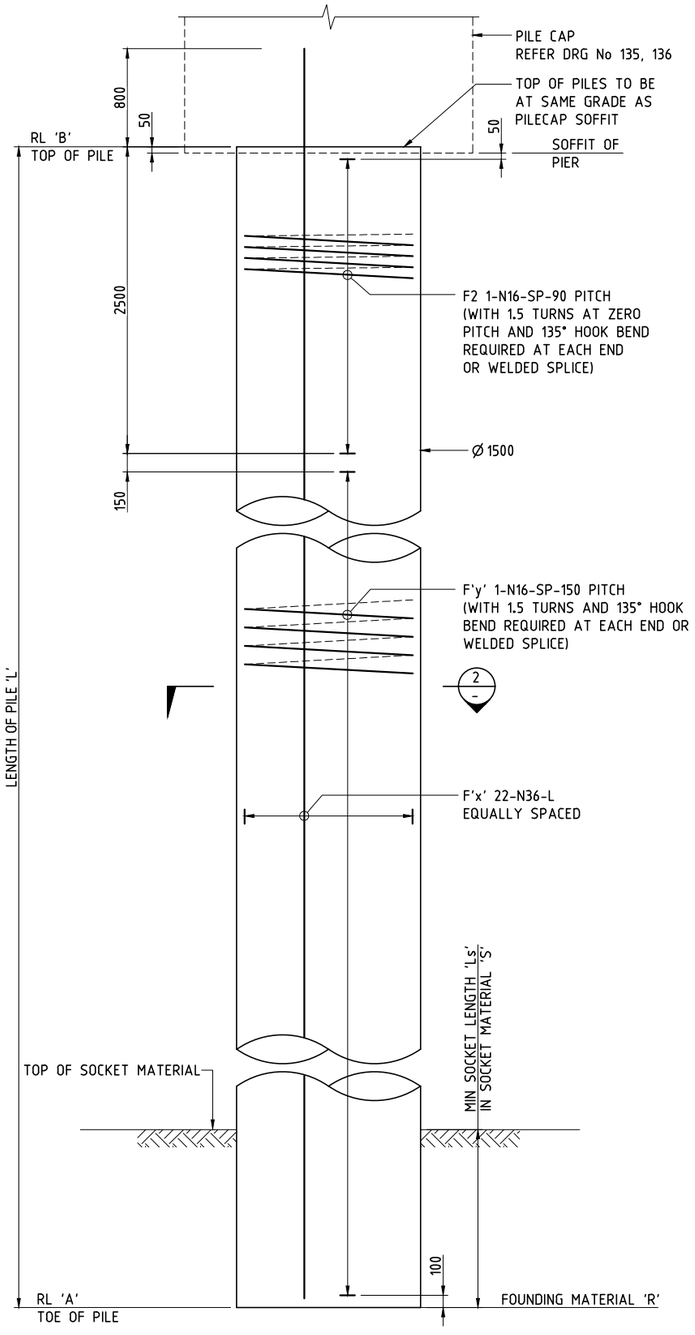
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A1



ELEVATION
SCALE 1:25

FOR VALUES OF RL 'A', RL 'B', 'L', 'Ls', 'R', 'S', 'x' AND 'y', REFER TABLE 1 ON DRG No 111

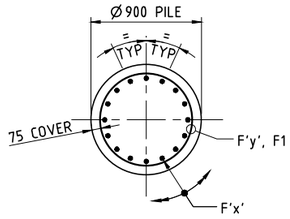
PILE AT ABUTMENTS



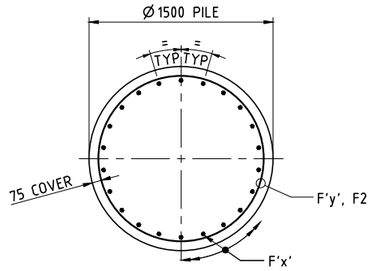
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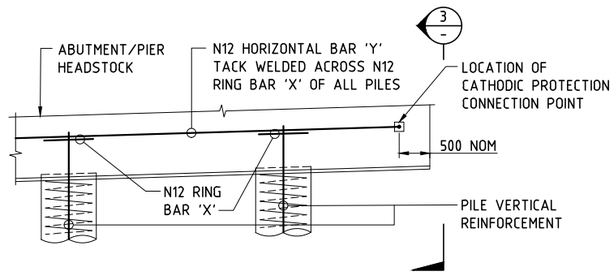
PILE AT PIERS



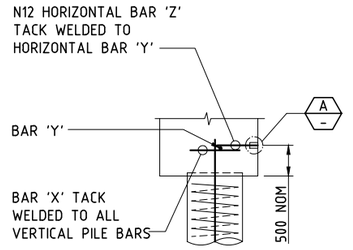
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SECTION 2 — SCALE 1:25

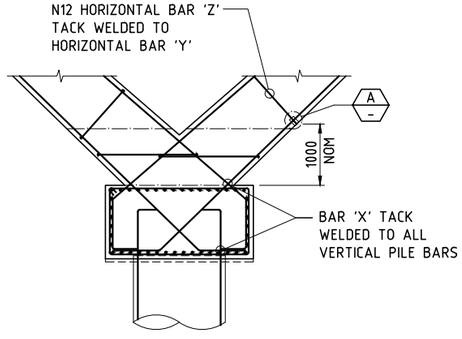


ELEVATION

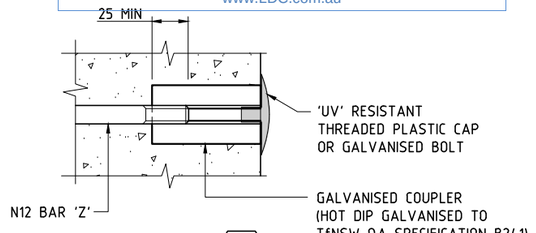


VIEW 3 — SCALE 1:50

DETAILS OF CATHODIC PROTECTION AT ABUTMENT PILES
NOT TO SCALE



DETAILS OF CATHODIC PROTECTION AT PIER PILES
NOT TO SCALE



DETAIL A — SCALE 1:2

GENERAL NOTES
FOR GENERAL NOTES RELATING TO THIS DRAWING, REFER DRG No 111.

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Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
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150 mm ON ORIGINAL

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-112.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:24:05

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SMEC_A1	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 500 1000mm; 250 125 1:25

DESIGNER: SMEC — Member of the Surbana Jurong Group — © ABN 47 065 475 149 — LEVEL 5, 20 BERRY STREET NORTH SYDNEY NSW 2060 — SMEC PROJECT No 30013046

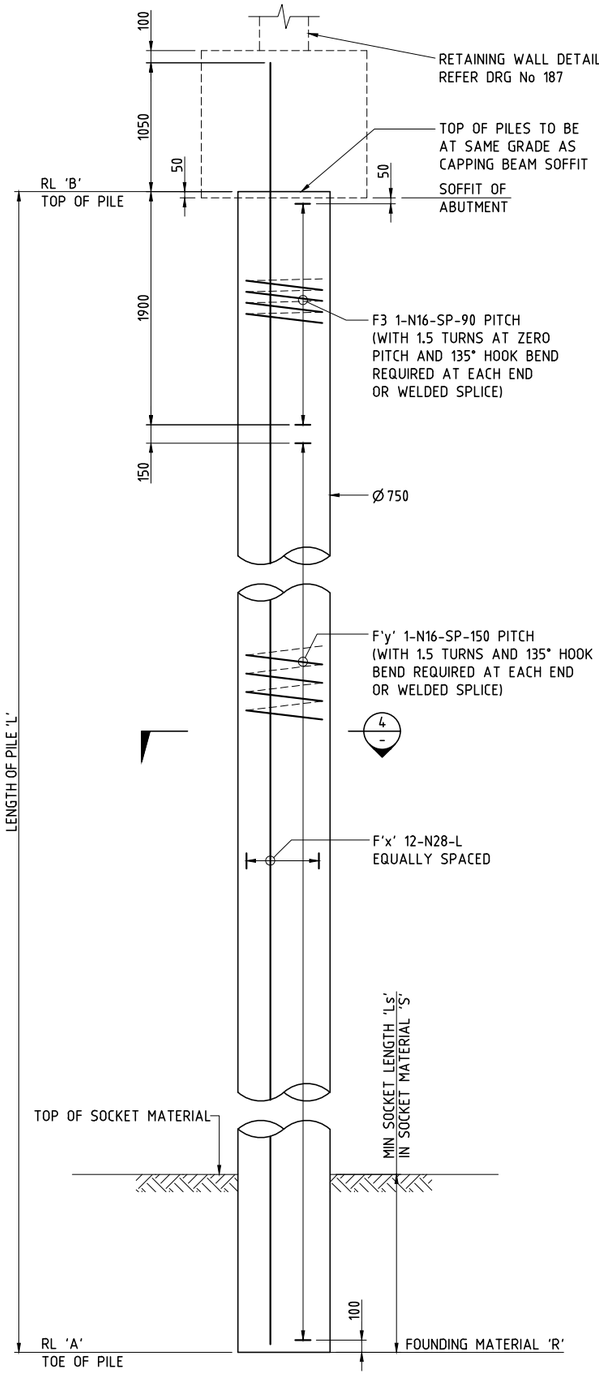
CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE

PILE DETAILS SHEET A

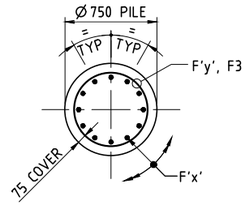
SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-112	A

A1



ELEVATION
SCALE 1:25
FOR VALUES OF RL 'A', RL 'B', 'L', 'Ls', 'R', 'S', 'x' AND 'y',
REFER TABLE 1 ON DRG No 111

PILE AT RETAINING WALL



SECTION 4/-
SCALE 1:25

TABLE 2 - SANDSTONE CLASSIFICATION AND DESIGN PARAMETERS

CLASS	SANDSTONE CLASSIFICATION			DESIGN PARAMETERS		
	UCS (MPa)	DEFECT SPACING	ALLOWABLE SEAMS	ULTIMATE END BEARING (MPa)	SERVICEABILITY END BEARING (MPa)	ULTIMATE SHAFT ADHESION (kPa)
CLASS IV SANDSTONE	>2	>60	<10%	7	1.5	400
CLASS III SANDSTONE	>7	>200	<5%	20	3.5	800
CLASS II SANDSTONE	>12	>200	<3%	60	6.0	1500

UCS DENOTES UNCONFINED COMPRESSIVE STRENGTH.
UCS CAN BE CORRELATED TO POINT LOAD STRENGTH INDEX $I_{S(50)}$. USING A CORRELATION OF UCS = 20 Is(50).
DESIGN PARAMETERS HAVE BEEN REVIEWED AND AMENDED TO REFLECT SITE SPECIFIC CONDITIONS.

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GENERAL NOTES

FOR GENERAL NOTES RELATING TO THIS DRAWING,
REFER DRG No 111.

DRAWING FILE LOCATION / NAME	PLOT DATE	TIME
V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-113.dwg	14 Jun 2022	17:24:36

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SMEC_A1	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING
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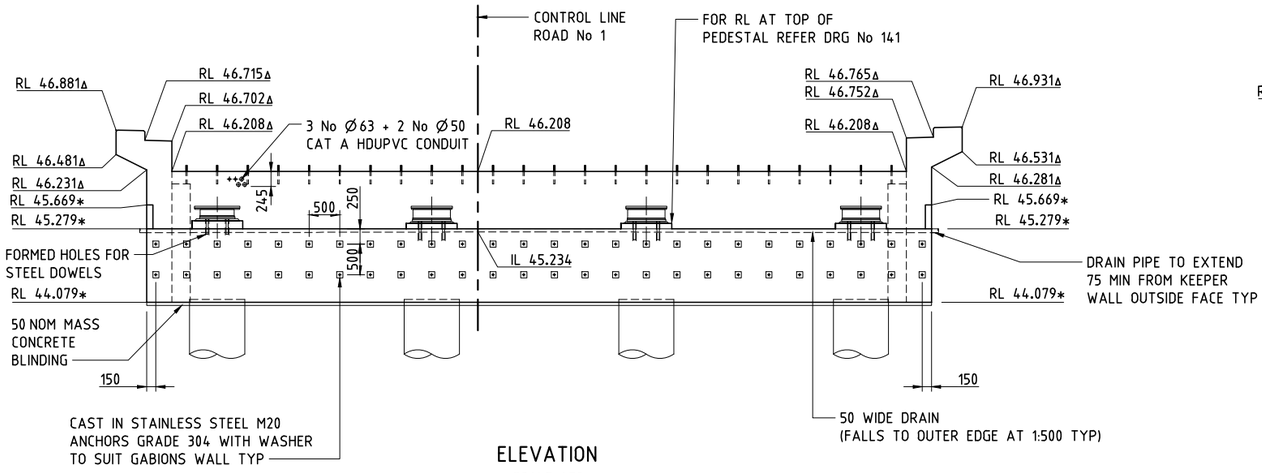
DESIGNER
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NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

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PROJECT TITLE
SHRIMPTON CREEK BRIDGE
PILE DETAILS
SHEET B

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-113	A

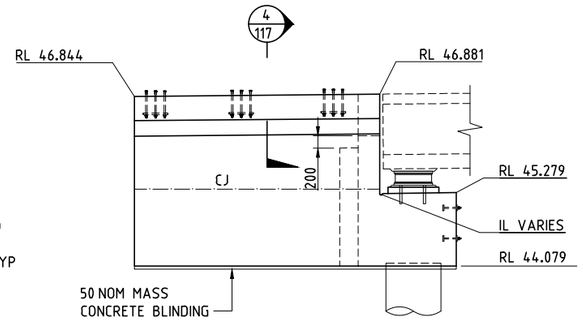
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ELEVATION

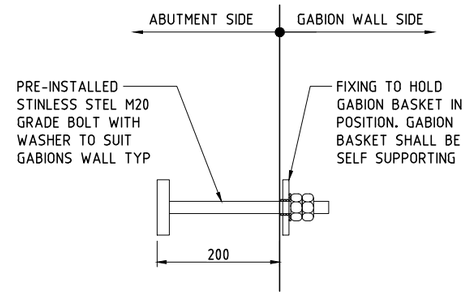
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BARRIER NOT SHOWN FOR CLARITY.
* DENOTES RL OF FRONT FACE OF HEADSTOCK.
▵ DENOTES RL OF FRONT FACE OF CURTAIN WALL.



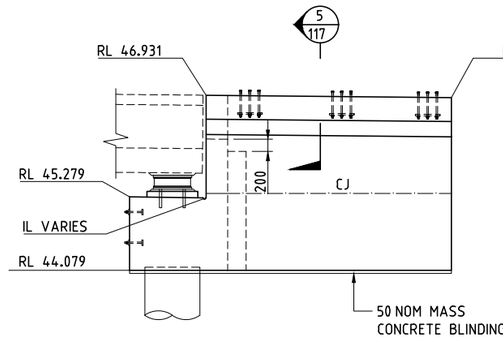
VIEW
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(KEEPER WALL NOT SHOWN FOR CLARITY)



TYPICAL PRE-INSTALLED ANCHOR BOLT DETAILS

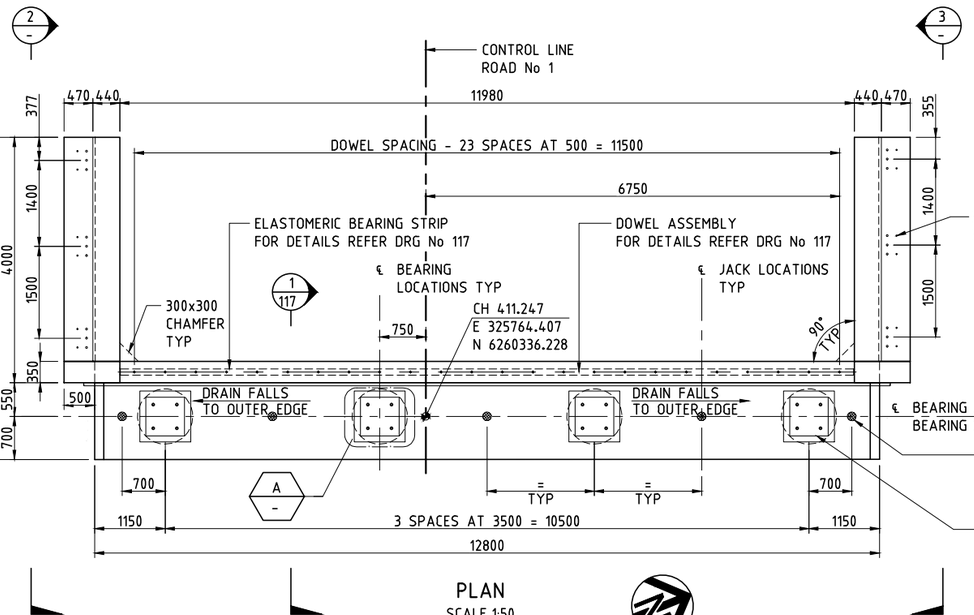
SCALE 1:5



VIEW
SCALE 1:50 — 3 / -

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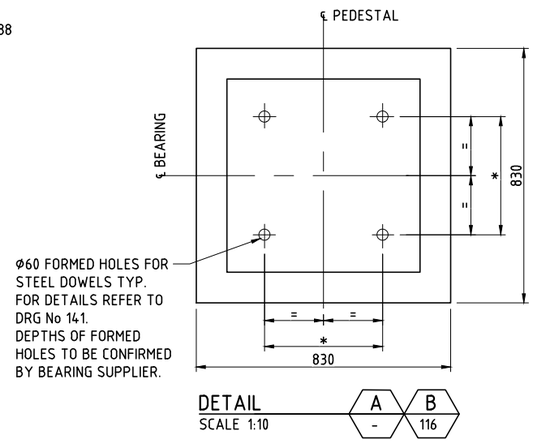


PLAN

SCALE 1:50

ABUTMENT A

PRE-INSTALLED ANCHOR BOLT NOT SHOWN FOR CLARITY



DETAIL
SCALE 1:10 — A / - , B / 116

* DENOTES DISTANCE BETWEEN THE DOWELS REFER DRG No 141 FOR DETAILS

GENERAL NOTES

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
CONCRETE EXPOSURE CLASSIFICATION: B1.
MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 40 MPa.
MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF MASS CONCRETE SHALL BE 20 MPa.
EDGES SHALL BE CHAMFERED 20 x 20 AND RE-ENTRANT ANGLES FILLETED 20 x 20 UNO.
CJ DENOTES CONSTRUCTION JOINT.
DENOTES JACKING POINT FOR BEARING REPLACEMENT.
MAXIMUM JACKING LOADS PER JACK SHALL BE:
SLS = 1250 kN
ULS = 1850 kN
EXPOSED CONCRETE SURFACE TO HAVE SMOOTH FINISH.
FOR STAINLESS STEEL ANCHOR NOTES REFER DRAWING No 223.
DOWELS IN THE ABUTMENT CONCRETE MAY BE DISPLACED SLIGHTLY WHERE NECESSARY TO CLEAR ELECTRICAL DUCTS.

DURABILITY NOTES

MAXIMUM TOTAL BINDER CONTENT SHALL BE KEPT AT 430kg/m^3 WITH TYPE GB CEMENT WITH 65.5% GROUND GRANULAR BLAST-FURNACE SLAG.
USE 36mm THICK PLYWOOD FORMWORK OR PROVIDE INSULATION TO FORMWORK CONSTRUCTED WITH OTHER MATERIALS TO ACHIEVE AN OVERALL SURFACE CONDUCTANCE LESS THAN 3.0W/m^2 °C.
MAXIMUM CONCRETE PLACEMENT TEMPERATURE SHALL NOT EXCEED 27°C.
TOP SURFACE OF THE ABUTMENT HEADSTOCKS SHALL BE COVERED WITH 20mm THICK POLYSTYRENE FOAM OR EQUIVALENT AFTER CASTING. THE INSULATION SHALL BE REMOVED AT THE SAME TIME AS THE FORMWORK.
FORMWORK SHALL BE REMOVED NOT EARLIER THAN 216 HOURS.
THERMOCOUPLES SHOULD BE LOCATED WITHIN THE CONCRETE MEMBER BEING CONSTRUCTED. (ONE AT CENTRE AND ONE BELOW SURFACE WITH THE LAST DIMENSION).

150 mm ON ORIGINAL
A1
X_30013046_SMEC_A1
X_BRG_PLAN

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-115.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:25:11

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
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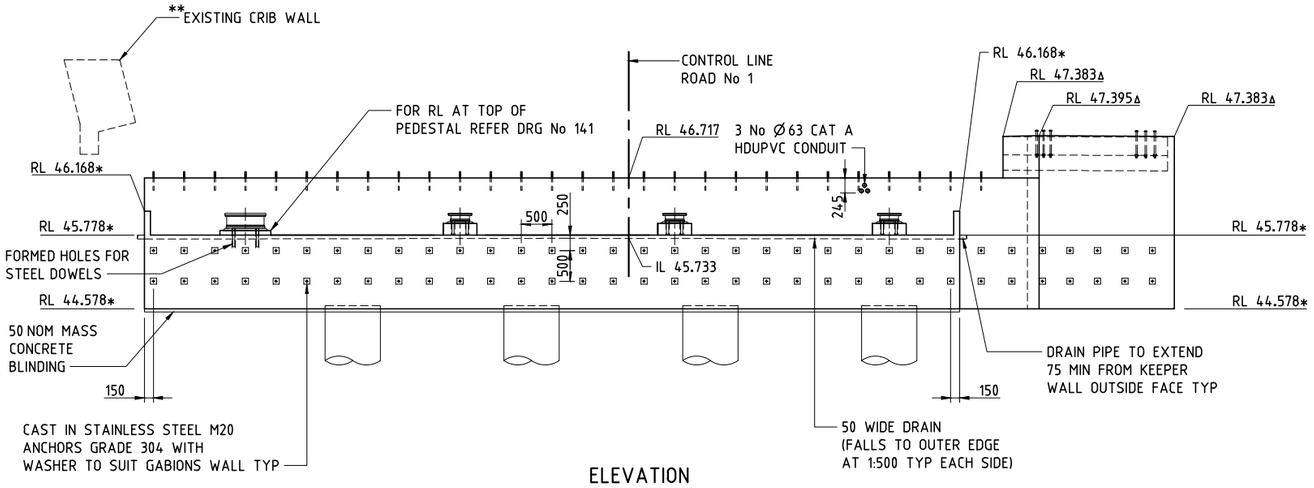
SCALES AT A1 SIZE DRAWING: 0 1000 2000mm; 500 250 1:50

DESIGNER: SMEC — Member of the Surbana Jurong Group
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LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE
ABUTMENT CONCRETE
SHEET A

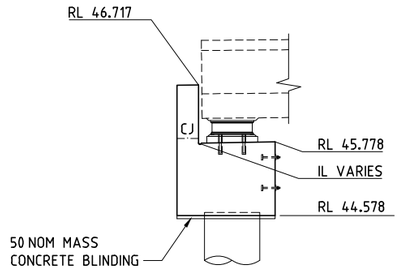
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AS NOTED	CONSTRUCTION	30013046-115	A



ELEVATION

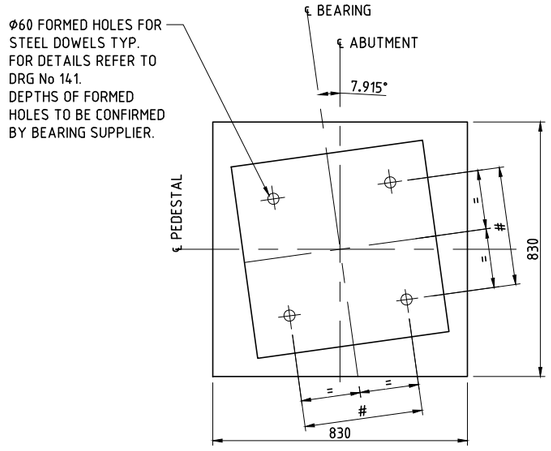
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BARRIER NOT SHOWN FOR CLARITY.
* DENOTES RL OF FRONT FACE OF HEADSTOCK.
** STABILITY OF EXISTING CRIB WALL TO BE MAINTAINED BY CONTRACTOR DURING CONSTRUCTION.
Δ DENOTES RL OF FRONT FACE OF CURTAIN WALL.



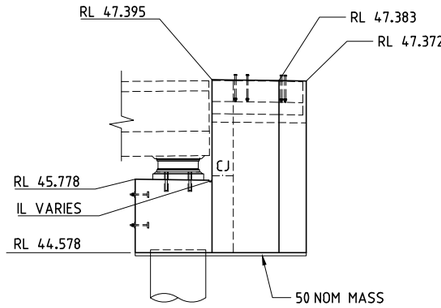
VIEW 7 / - SCALE 1:50

(KEEPER WALL NOT SHOWN FOR CLARITY)



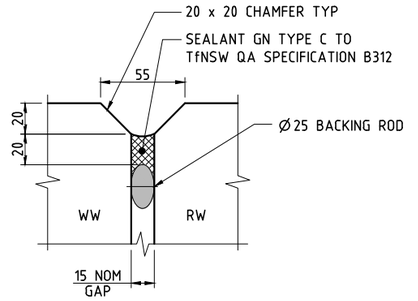
DETAIL C / - SCALE 1:10

\# DENOTES DISTANCE BETWEEN THE DOWELS
REFER DRG NO 141 FOR DETAILS



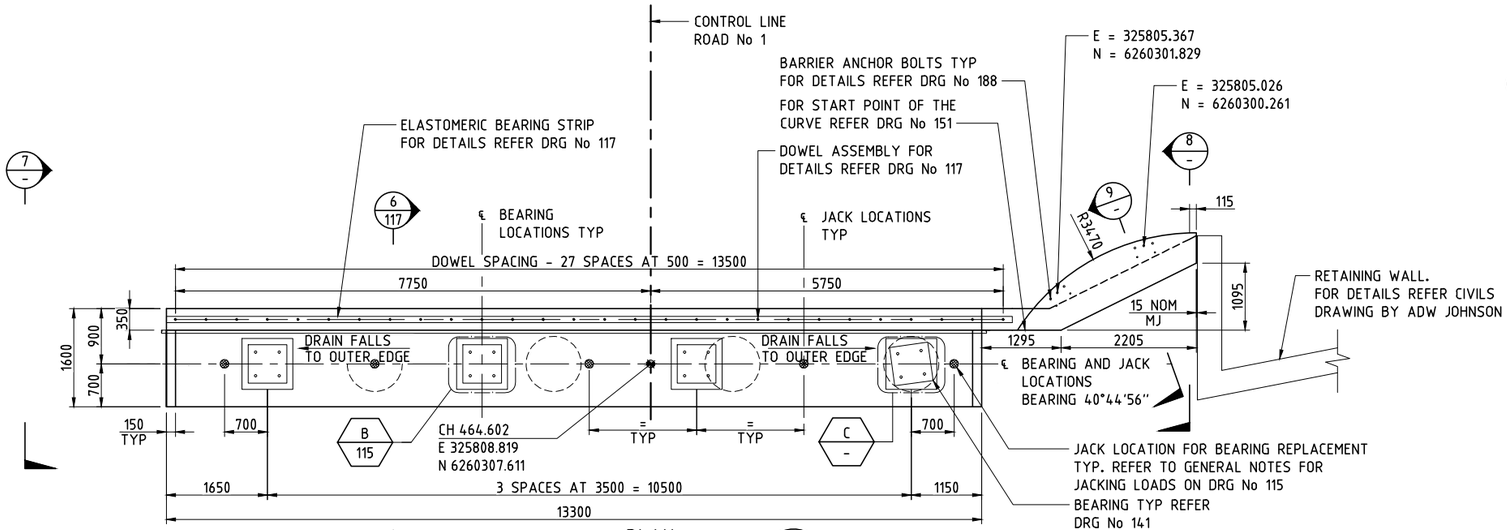
VIEW 8 / - SCALE 1:50

(KEEPER WALL NOT SHOWN FOR CLARITY)



TYPICAL INTERFACE DETAILS FOR MOVEMENT JOINT

SCALE 1:2

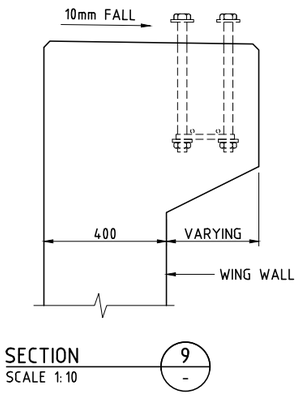


PLAN

SCALE 1:50

ABUTMENT B

PRE-INSTALLED ANCHOR BOLT NOT SHOWN FOR CLARITY



SECTION 9 / - SCALE 1:10

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
www.LDC.com.au

GENERAL NOTES

FOR GENERAL NOTES RELATED TO THIS DRAWING, REFER DRG No 115.
MJ DENOTES MOVEMENT JOINT.
WW DENOTES WING WALL.
RW DENOTES RETAINING WALL.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-116.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:25:42

EXTERNAL REFERENCE FILES: X_30013046_SMEC_A1, X_BRG_PLAN

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 1000 2000mm; 500 250 1:50

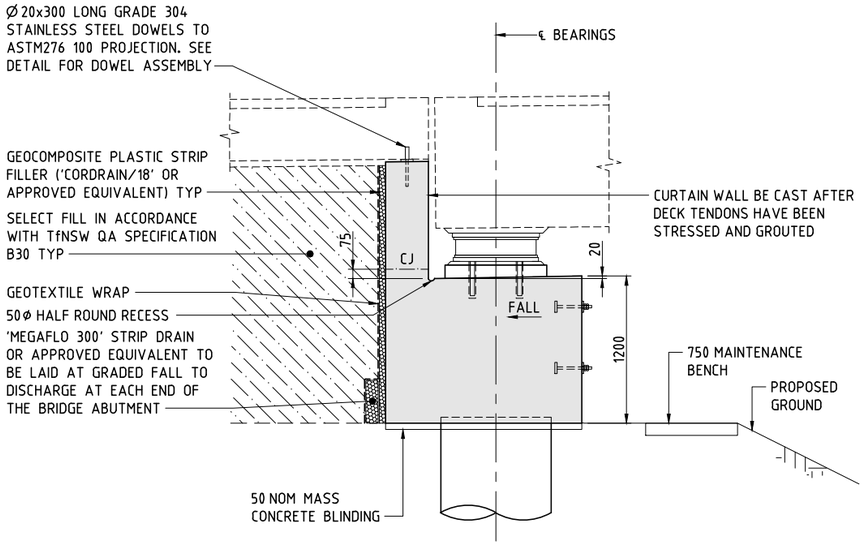
DESIGNER
SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

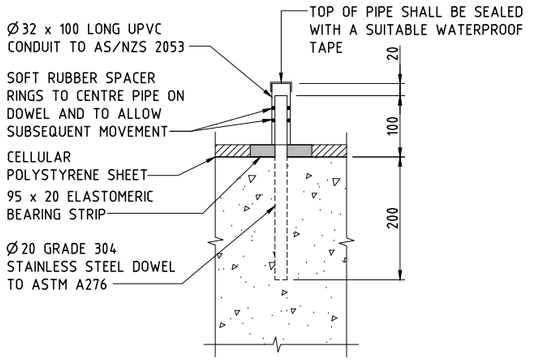
PROJECT TITLE: SHRIMPTON CREEK BRIDGE
ABUTMENT CONCRETE SHEET B

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-116	A

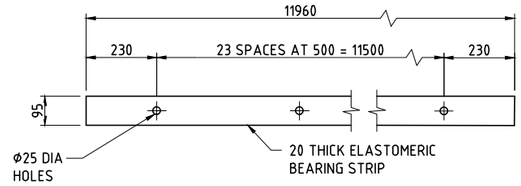
150 mm ON ORIGINAL
A1



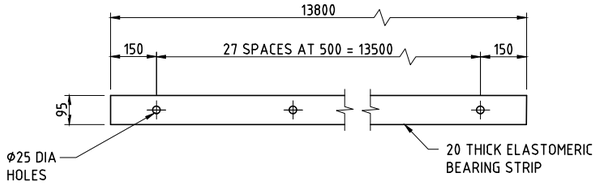
SECTION 1 / 115
SCALE 1:25



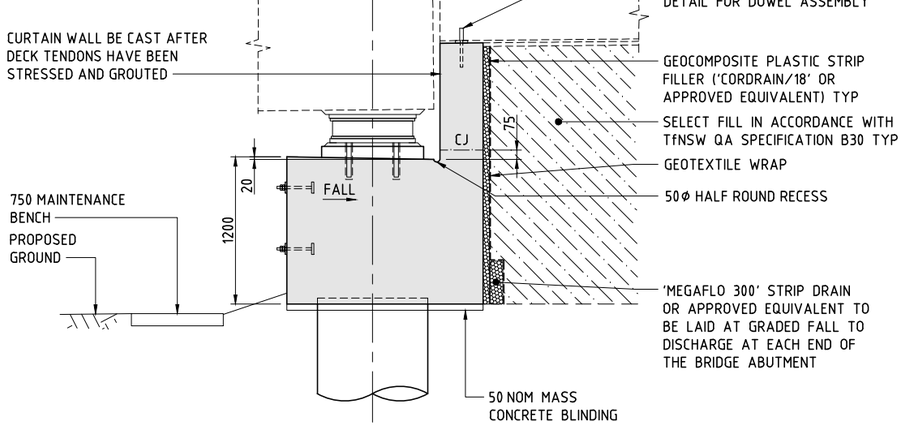
DOWEL ASSEMBLY
SCALE 1:5
A SUITABLE ALTERNATIVE TYPE OF DOWEL CAP MAY BE USED
51 No REQUIRED



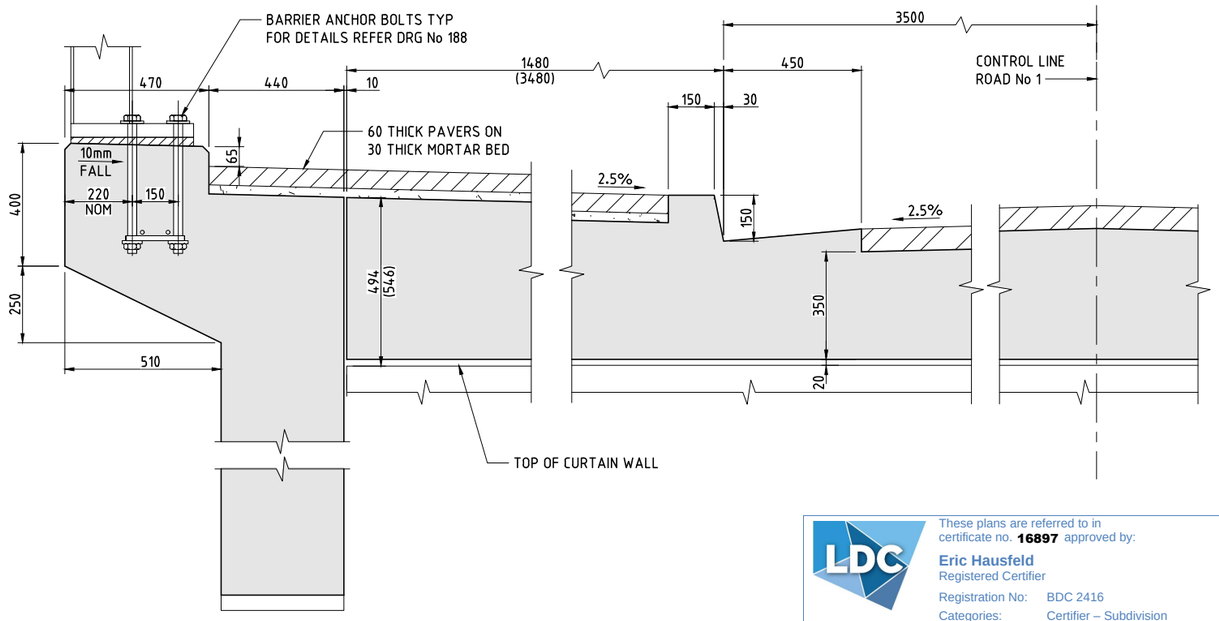
ELASTOMERIC BEARING STRIP - ABUTMENT A
SCALE 1:10
1 No REQUIRED



ELASTOMERIC BEARING STRIP - ABUTMENT B
SCALE 1:10
1 No REQUIRED



SECTION 6 / 116
SCALE 1:25



SECTION 4 / 115 — 5 / 115 SIMILAR BUT TO OPPOSITE HAND
SCALE 1:10

DRAWN FOR SECTION 4 FIGURES IN BRACKETS REFER TO SECTION 5

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
www.LDC.com.au

GENERAL NOTES
FOR GENERAL NOTES RELATED TO THIS DRAWING, REFER DRG No 115.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-117.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:26:15
EXTERNAL REFERENCE FILES:

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 500 1000mm; 250 125 1:25

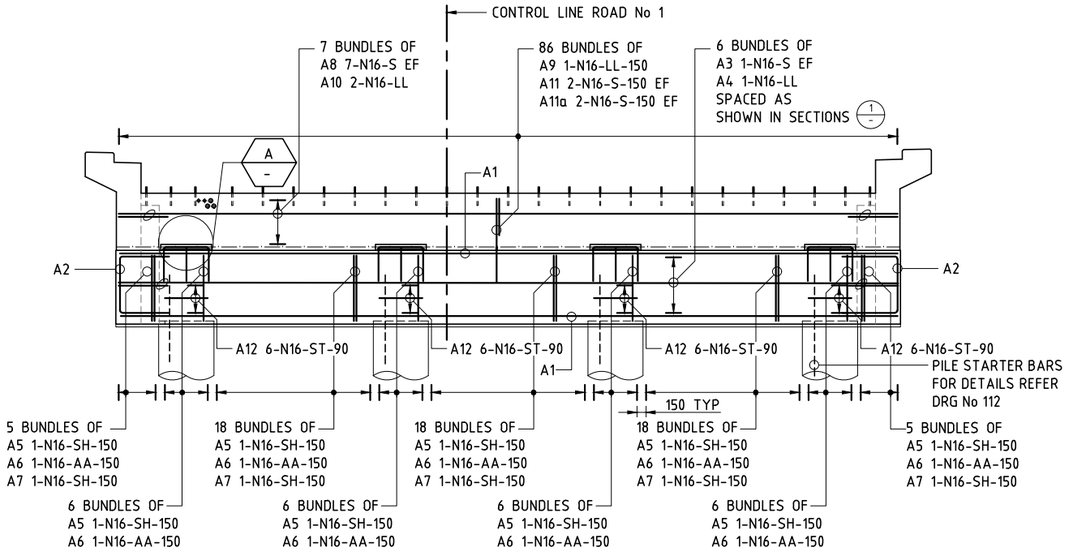
DESIGNER: SMEC — Member of the Surbana Jurong Group — © ABN 47 065 475 149 — LEVEL 5, 20 BERRY STREET NORTH SYDNEY NSW 2060 — SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

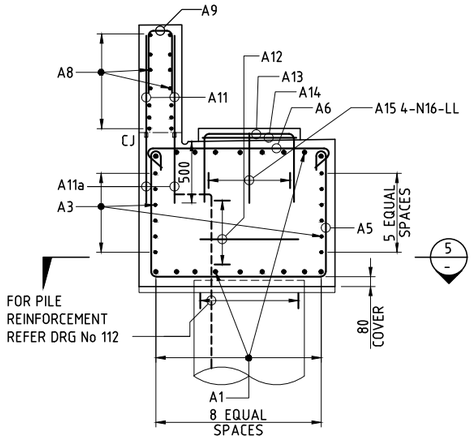
PROJECT TITLE: SHRIMPTON CREEK BRIDGE
ABUTMENT CONCRETE SHEET C

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-117	A

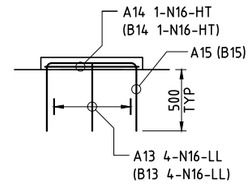
150 mm ON ORIGINAL
A1
X_30013046_SMEC_A1



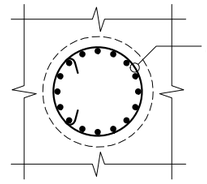
ELEVATION
SCALE 1:50



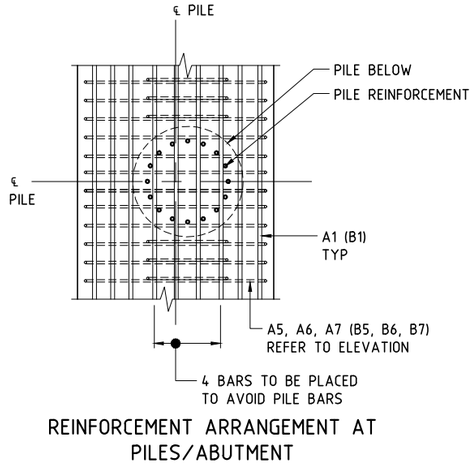
SECTION 1
SCALE 1:25



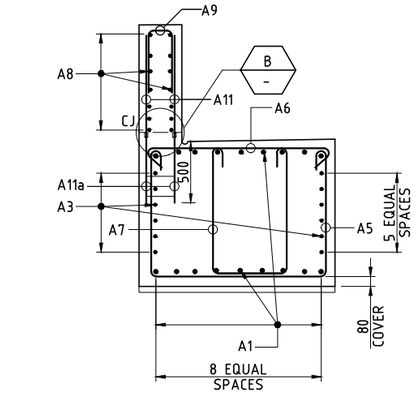
DETAIL A
SCALE 1:25



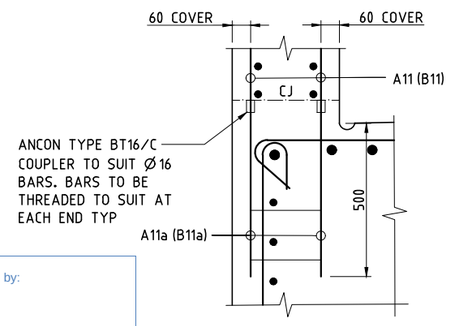
SECTION 5
SCALE 1:25



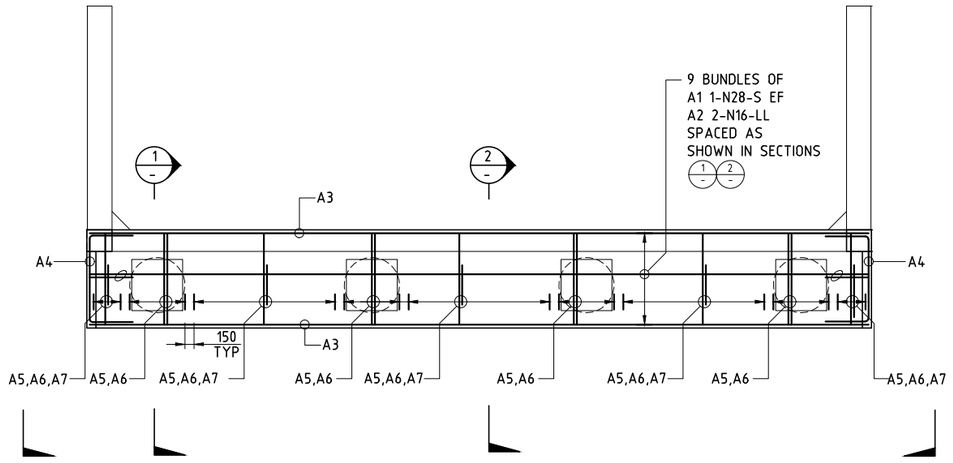
REINFORCEMENT ARRANGEMENT AT PILES/ABUTMENT
SCALE 1:25
ABUTMENT A SHOWN, ABUTMENT B SIMILAR
VALUES IN BRACKETS REFER TO ABUTMENT B



SECTION 2
SCALE 1:25



DETAIL B
SCALE 1:10



PLAN
SCALE 1:50
RETURN WALL REINFORCEMENT NOT SHOWN FOR CLARITY

ABUTMENT A

GENERAL NOTES

NOMINAL COVER TO REINFORCEMENT NEAREST TO THE CONCRETE SURFACE SHALL BE 45mm UNLESS NOTED OTHERWISE.
UNLESS NOTED OTHERWISE THE MINIMUM LAP LENGTHS OF BARS SHALL BE AS FOLLOWS:

BAR SIZE:	N12	N16	N20	N24	N28	N32	N36
a) HORIZONTAL BARS WITH >300mm OF CONCRETE CAST BELOW THE BAR	650	900	1150	1430	1730	2060	2410
b) OTHER BARS	500	690	890	1100	1330	1590	1860

CLEAR DISTANCE BETWEEN LAPPED BARS SHALL NOT EXCEED 3 x THE BAR DIAMETER.
REINFORCEMENT MAY BE DISPLACED SLIGHTLY WHERE NECESSARY TO CLEAR DOWELS, ANCHORS, LIFTING DEVICES, DUCTS, DRAINAGE LINES AND GENERAL FITMENTS.
THE HEADSTOCK LONGITUDINAL REINFORCEMENT BARS SHALL NOT BE LAPPED AT THE PILE LOCATIONS.
FOR REINFORCEMENT NOTES REFER DRG No 215.

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
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3/122
4/122

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\30013\30013046\110_CADD\CAD\DWG\30013046-121.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:26:45

EXTERNAL REFERENCE FILES: X_30013046_SMEC_A1, X_BRG_PLAN

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 1000 2000mm; 500 250 1:50

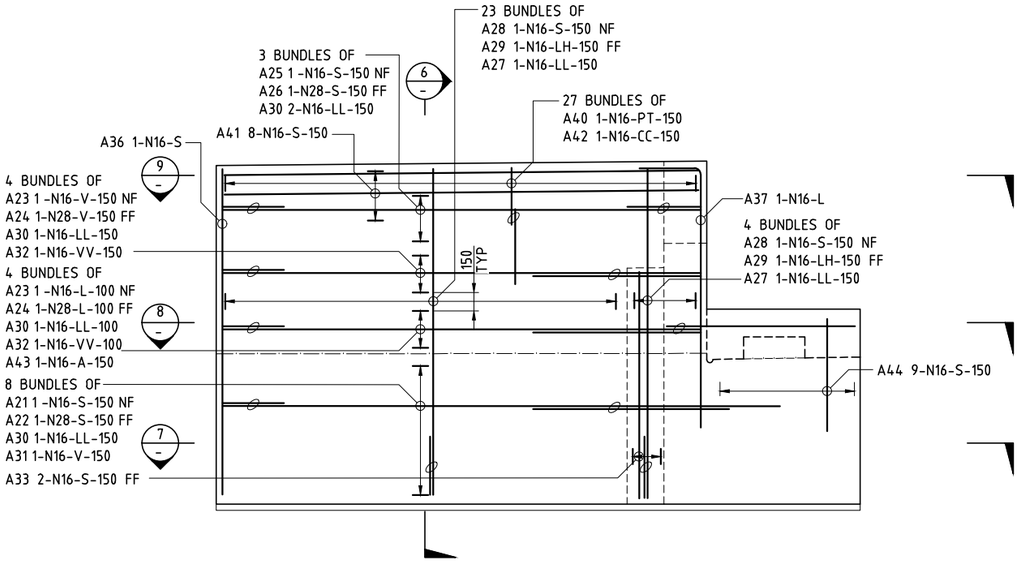
DESIGNER
SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE
ABUTMENT REINFORCEMENT SHEET A

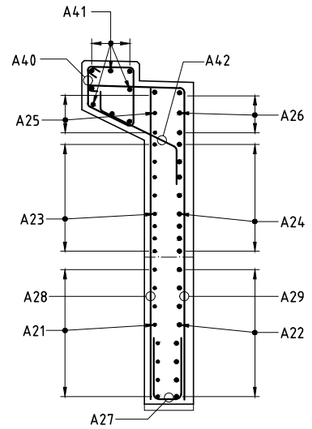
SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-121	A

150 mm ON ORIGINAL
A1



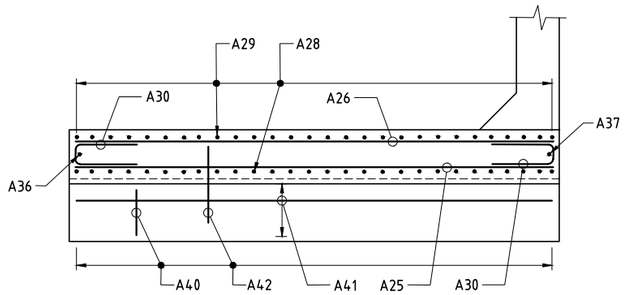
VIEW
SCALE 1:25

3 121 / 4 121 SIMILAR BUT OPPOSITE HAND



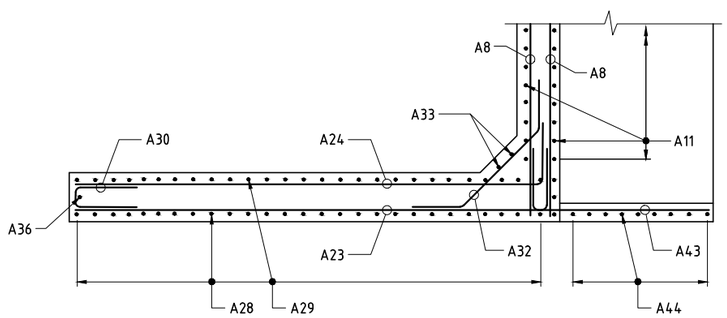
SECTION
SCALE 1:25

6



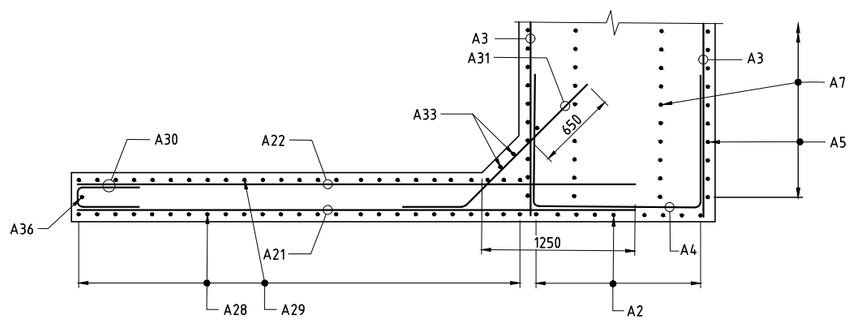
SECTION
SCALE 1:25

9



SECTION
SCALE 1:25

8



SECTION
SCALE 1:25

7

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Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

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GENERAL NOTES

FOR GENERAL NOTES RELATING TO THIS DRAWING, REFER DRG No 121.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-122.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:27:15

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SMEC_A1	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 500 1000mm; 250 125 1:25

DESIGNER
SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

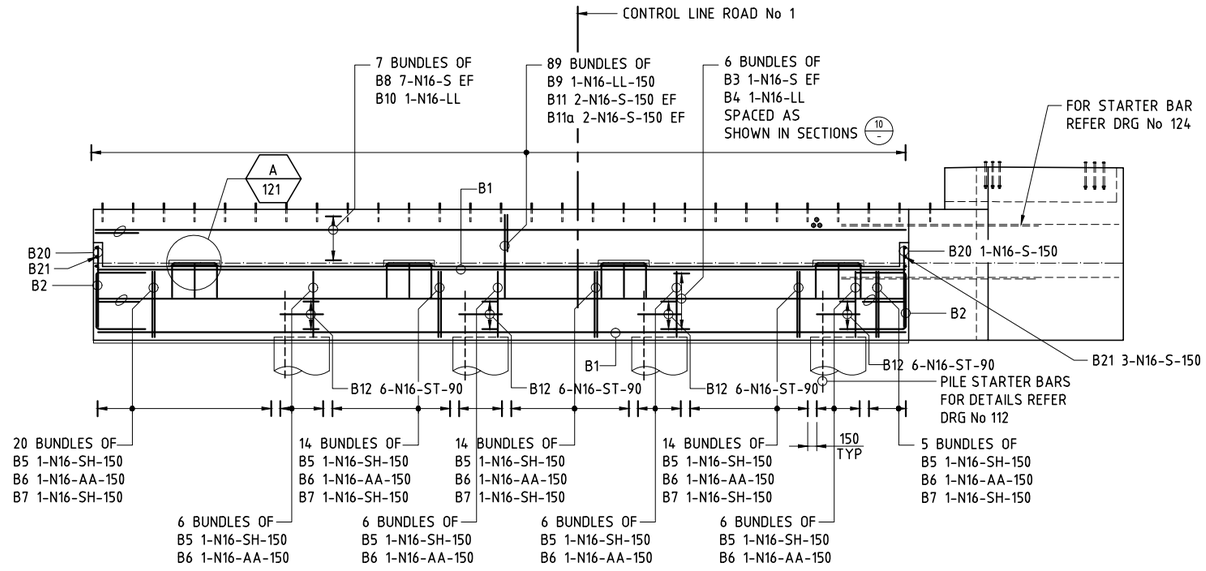
CLIENT
FRASERS PROPERTY

PROJECT TITLE
SHRIMPTON CREEK BRIDGE

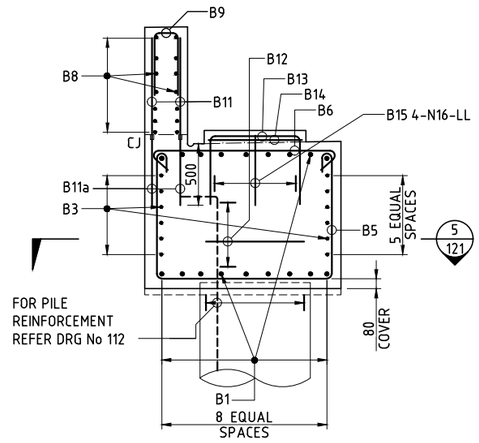
ABUTMENT REINFORCEMENT SHEET B

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-122	A

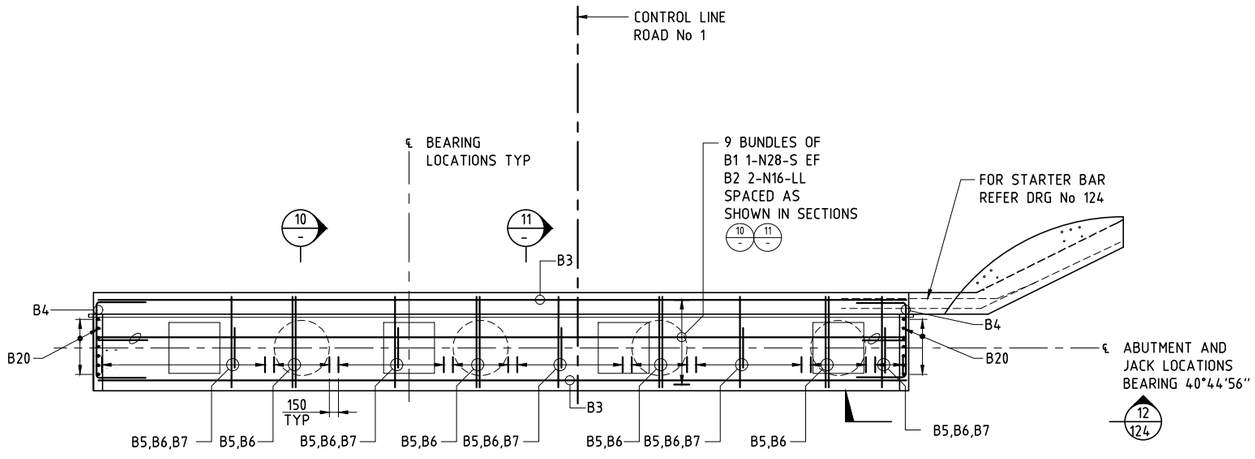
150 mm ON ORIGINAL
A1
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ELEVATION
SCALE 1:50



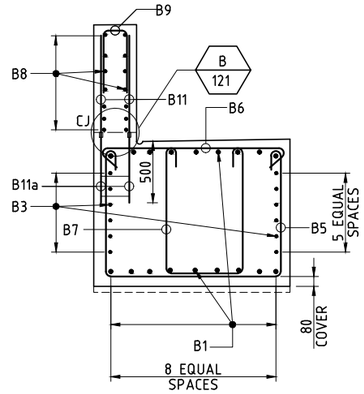
SECTION
SCALE 1:25
10
-



PLAN
SCALE 1:50

ABUTMENT B

PRE-INSTALLED ANCHOR BOLT NOT SHOWN FOR CLARITY



SECTION
SCALE 1:25
11
-

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Registered Certifier

Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

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GENERAL NOTES

FOR GENERAL NOTES RELATED TO THIS DRAWING, REFER DRG No 121.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-123.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:27:44

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SMEC_A1 X_BRG_PLAN	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 1000 2000mm; 500 250 1:50

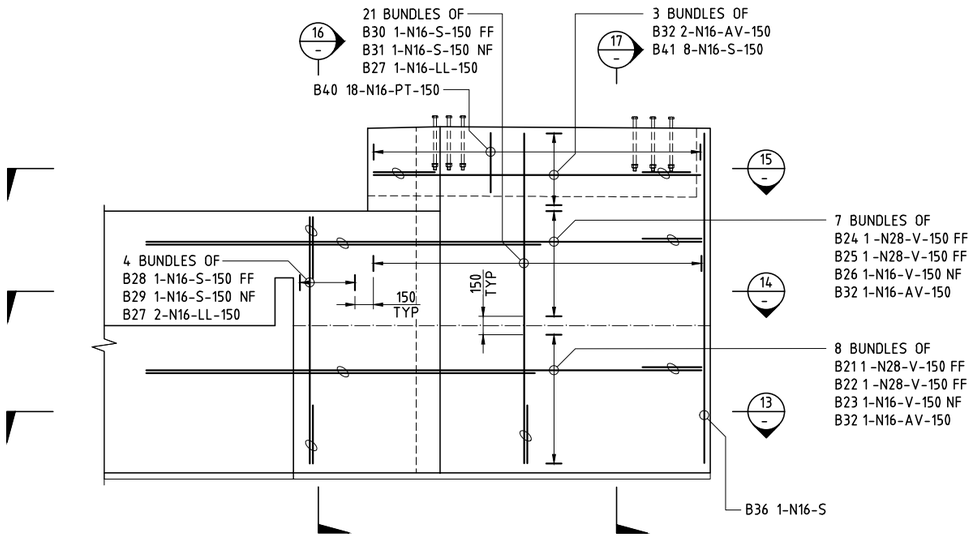
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LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

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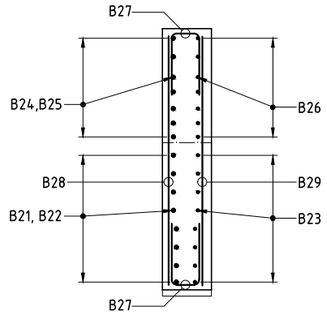
PROJECT TITLE
SHRIMPTON CREEK BRIDGE
ABUTMENT REINFORCEMENT
SHEET C

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-123	A

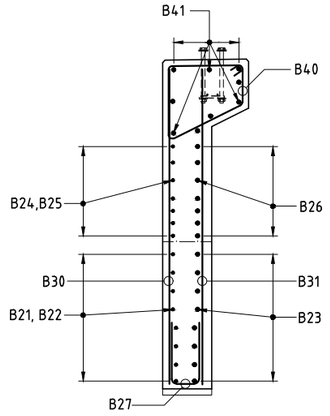
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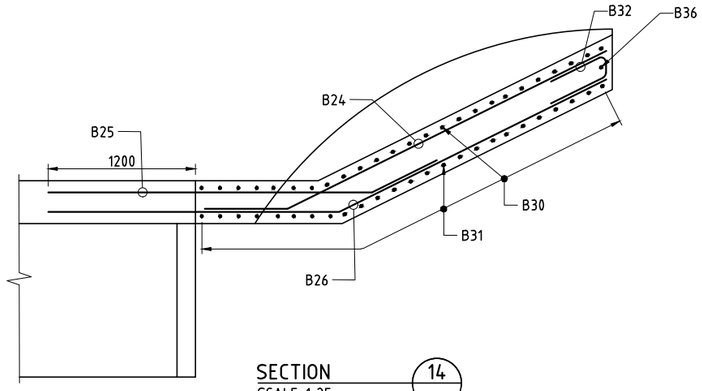
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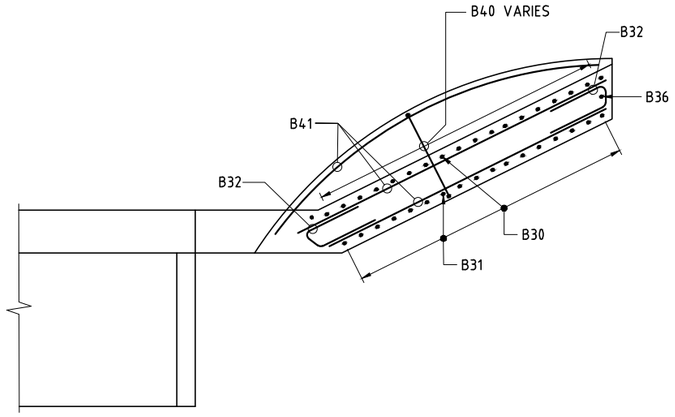
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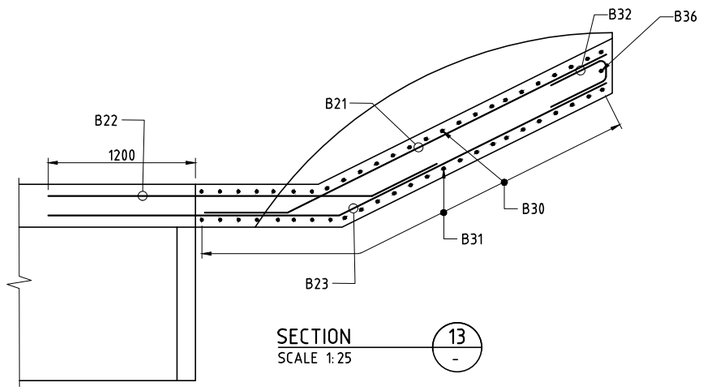
SECTION 17
SCALE 1:25



SECTION 14
SCALE 1:25



SECTION 15
SCALE 1:25



SECTION 13
SCALE 1:25

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

Land Development Certificates
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GENERAL NOTES

FOR GENERAL NOTES RELATING TO THIS DRAWING, REFER DRG No 121.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-124.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:28:13

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SMEC_A1	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 250 125 500 1000mm 1:25

DESIGNER: SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

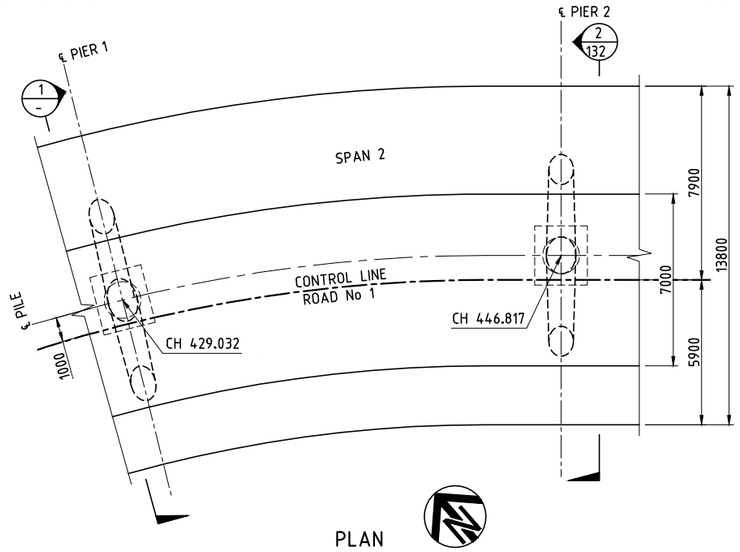
PROJECT TITLE: SHRIMPTON CREEK BRIDGE
ABUTMENT REINFORCEMENT
SHEET D

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-124	A

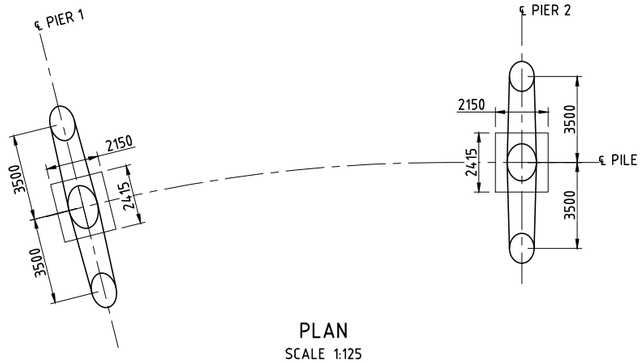
150 mm ON ORIGINAL
A1
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FROM HERRING ROAD

TO LYON PARK ROAD



PLAN
SCALE 1:125

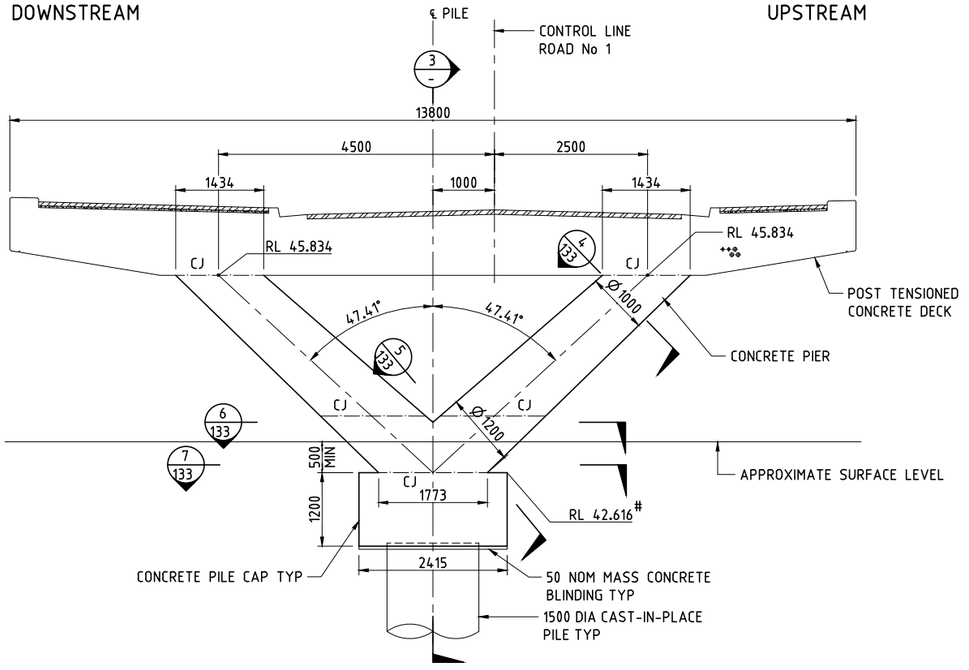


PLAN
SCALE 1:125

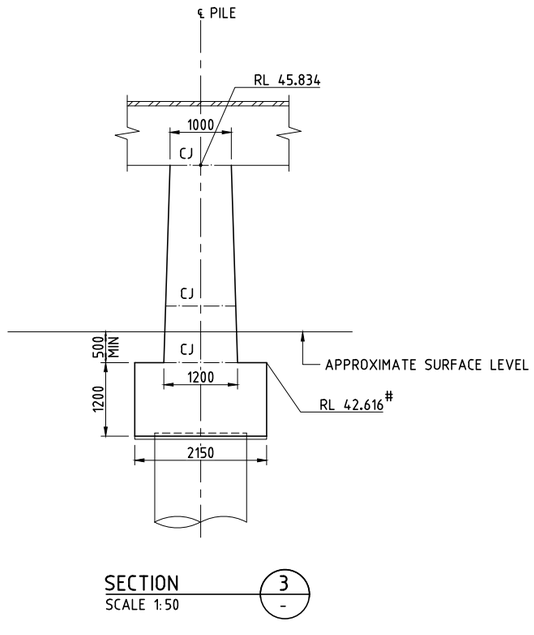
PIER LAYOUT

DOWNSTREAM

UPSTREAM



SECTION 1 / SCALE 1:50



SECTION 3 / SCALE 1:50

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

Land Development Certificates
www.LDC.com.au

GENERAL NOTES

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
CONCRETE EXPOSURE CLASSIFICATION: B1.
MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 40 MPa.
MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF MASS CONCRETE SHALL BE 20 MPa.
CONSTRUCTION JOINT ONLY AT THE LOCATIONS NOMINATED ON THE DRAWINGS.
EXPOSED CONCRETE SURFACE TO HAVE SMOOTH FINISH.
# DENOTES PROVIDED RL NEED TO BE CONFIRMED ON SITE.

DURABILITY NOTES

MAXIMUM TOTAL BINDER CONTENT SHALL BE KEPT AT 430kg/m^3 WITH TYPE GB CEMENT WITH 65.5% GROUND GRANULAR BLAST-FURNACE SLAG.
USE 36mm THICK PLYWOOD FORMWORK OR PROVIDE INSULATION TO FORMWORK CONSTRUCTED WITH OTHER MATERIALS TO ACHIEVE AN OVERALL SURFACE CONDUCTANCE LESS THAN 3.0W/m^2 °C.
MAXIMUM CONCRETE PLACEMENT TEMPERATURE SHALL NOT EXCEED 27°C.
TOP SURFACE OF THE PIER SHALL BE COVERED WITH 20mm THICK POLYSTYRENE FOAM OR EQUIVALENT AFTER CASTING. THE INSULATION SHALL BE REMOVED AT THE SAME TIME AS THE FORMWORK.
FORMWORK SHALL BE REMOVED NOT EARLIER THAN 216 HOURS.
THERMOCOUPLES SHOULD BE LOCATED WITHIN THE CONCRETE MEMBER BEING CONSTRUCTED. (ONE AT CENTRE AND ONE BELOW SURFACE WITH THE LAST DIMENSION).

150 mm ON ORIGINAL
A1

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-131.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:28:43

EXTERNAL REFERENCE FILES: X_30013046_SMEC_A1, X_BRG_PLAN, X_DES_MAIN, X_BRG_SEC

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 2500 5000mm / 1250 625 1:125

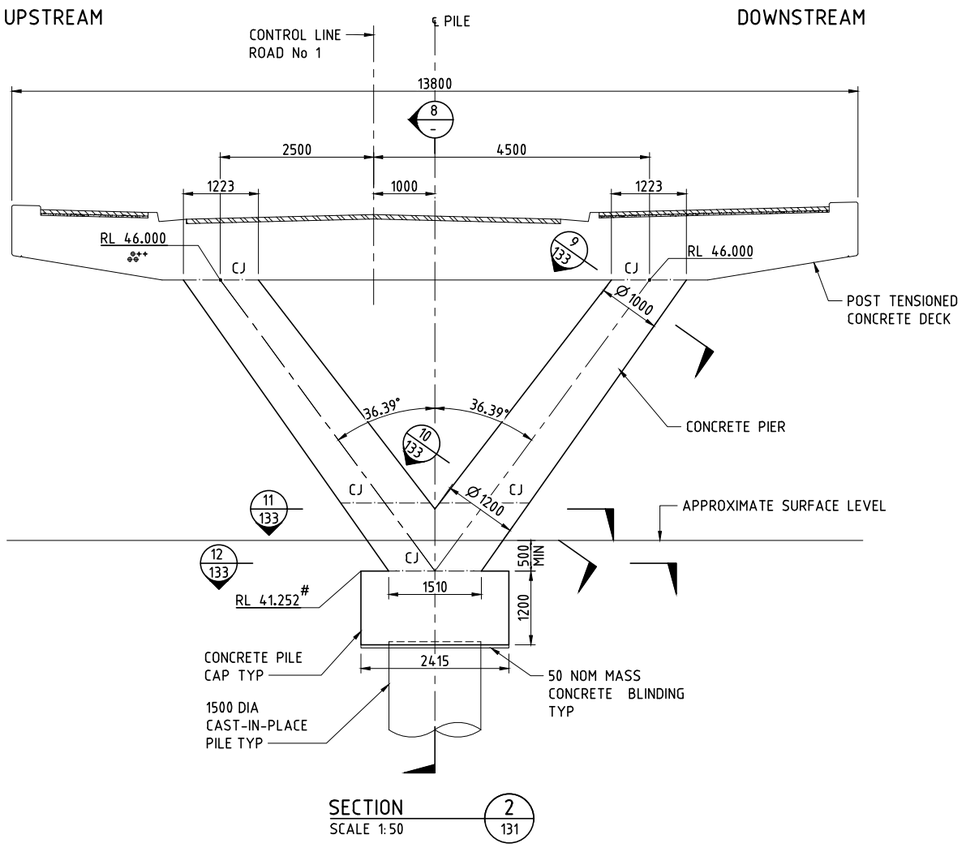
DESIGNER: SMEC — Member of the Surbana Jurong Group © ABN 47 065 475 149 — LEVEL 5, 20 BERRY STREET NORTH SYDNEY NSW 2060 — SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

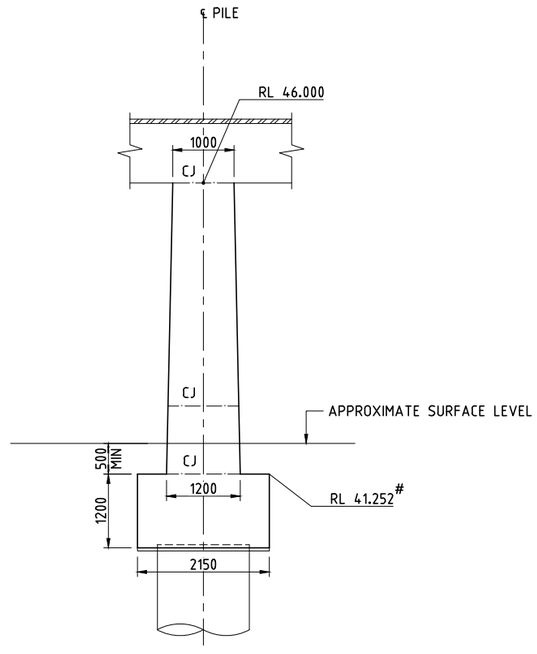
PROJECT TITLE: SHRIMPTON CREEK BRIDGE

PIER DETAILS
SHEET A

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-131	A



SECTION 2 / 131
SCALE 1:50



SECTION 8 / -
SCALE 1:50

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

Land Development Certificates
www.LDC.com.au

GENERAL NOTES

FOR GENERAL NOTES RELATING TO THIS DRAWING, REFER DRG No 131.

150 mm ON ORIGINAL
A1

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-132.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:29:13

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SMEC_A1 X_BRG_SEC	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

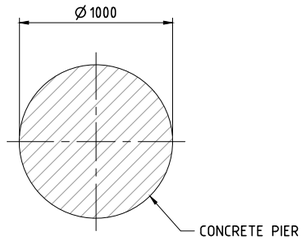
SCALES AT A1 SIZE DRAWING: 0 1000 2000mm; 500 250 1:50

DESIGNER
SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

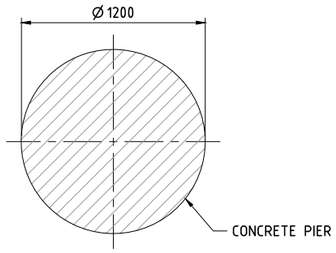
CLIENT
FRASERS PROPERTY

PROJECT TITLE
SHRIMPTON CREEK BRIDGE
PIER DETAILS
SHEET B

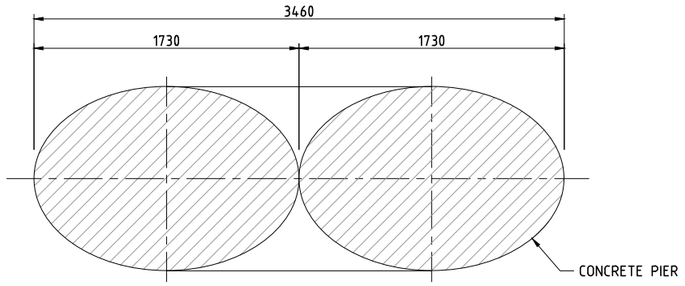
SCALE	PHASE	PROJECT / DRAWING No	REVISION
AS NOTED	CONSTRUCTION	30013046-132	A



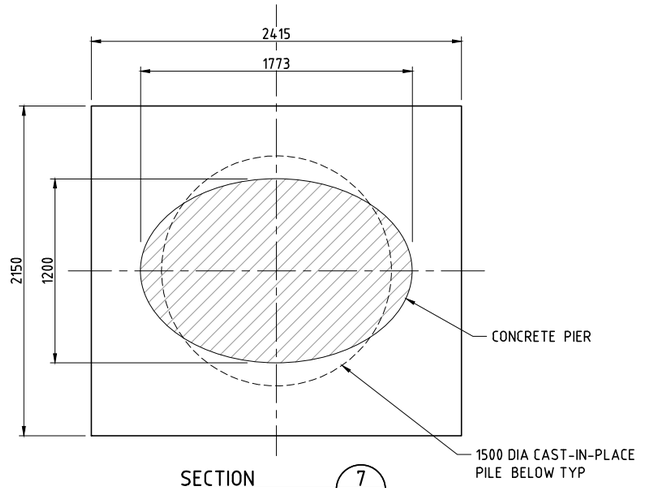
SECTION 4/131 9/132
SCALE 1:20



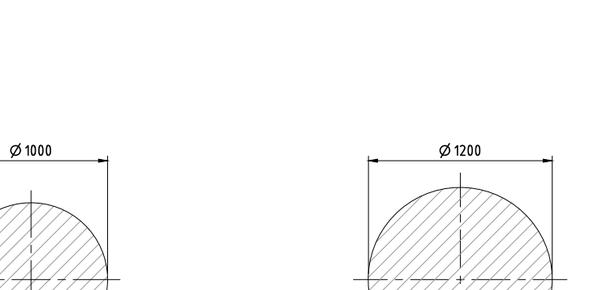
SECTION 5/131 10/132
SCALE 1:20



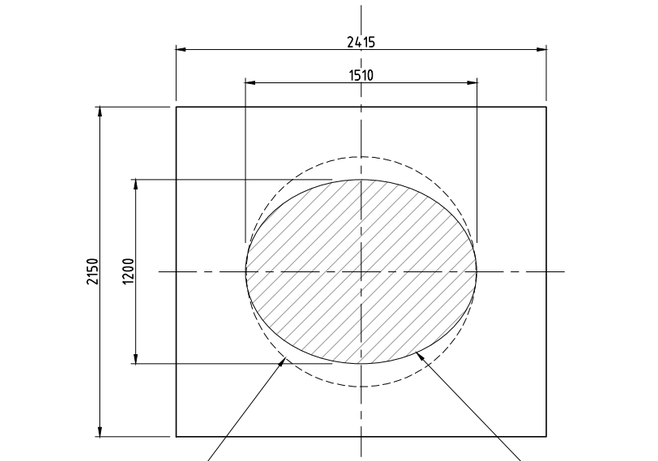
SECTION 6/131
SCALE 1:20



SECTION 7/131
SCALE 1:20



SECTION 11/132
SCALE 1:20



SECTION 12/132
SCALE 1:20

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
Land Development Certificates
www.LDC.com.au

GENERAL NOTES

FOR GENERAL NOTES RELATING TO THIS DRAWING, REFER DRG No 131.

150 mm ON ORIGINAL
A1
X_30013046_SMEC_A1

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-133.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:29:42

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 200 400 600 800 1000mm; 200 100 1:20

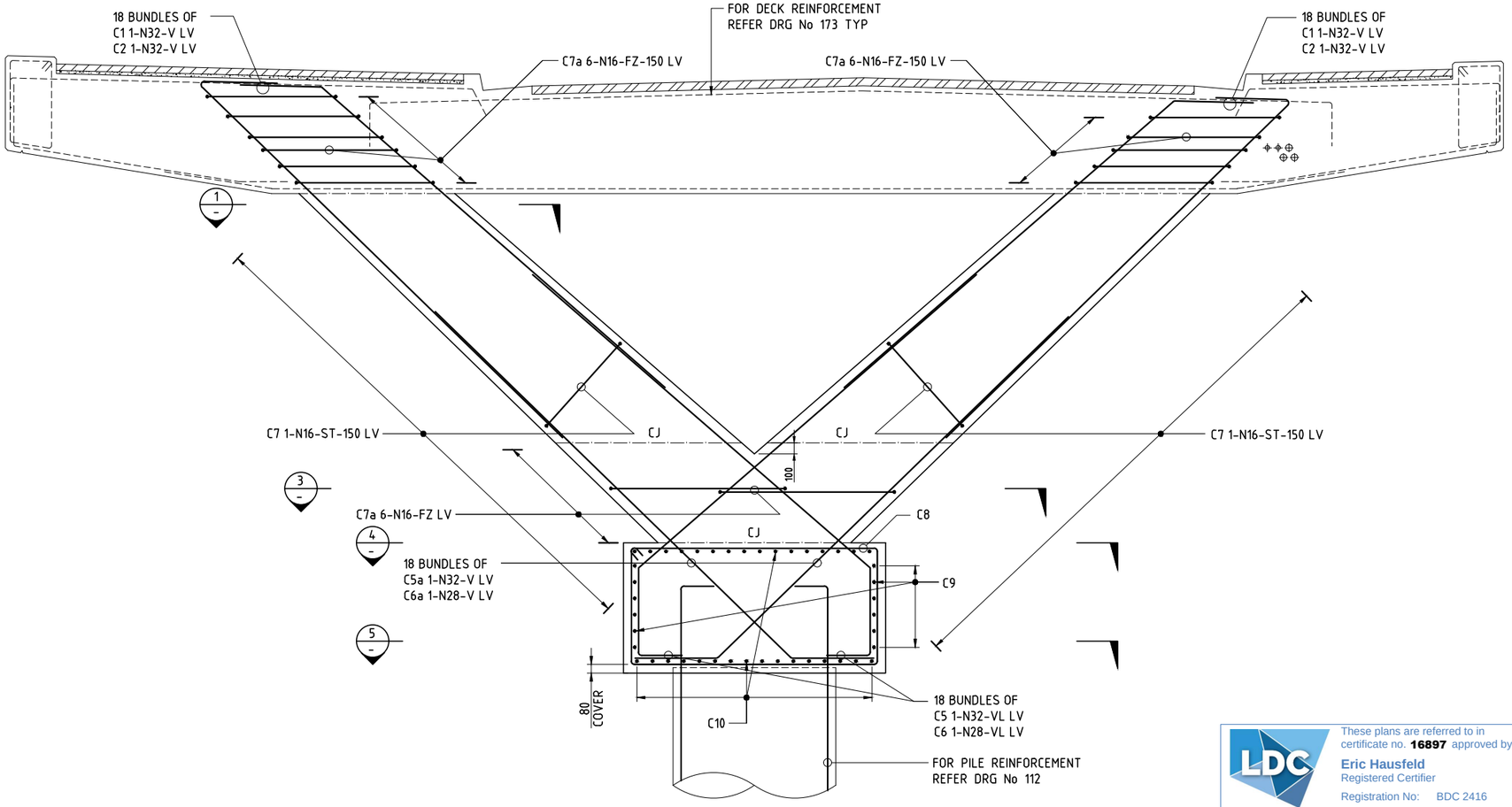
DESIGNER
SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT
FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE

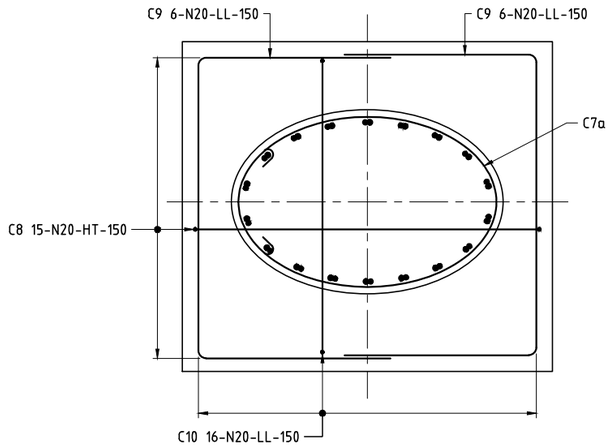
PIER DETAILS SHEET C

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-133	A

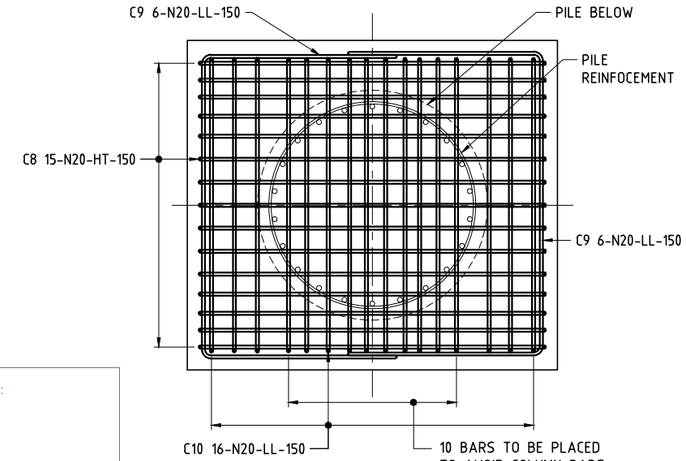


ELEVATION
SCALE 1:25

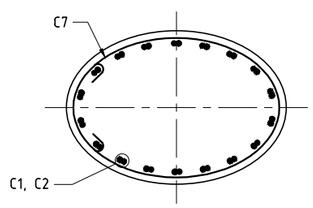
PIER 1



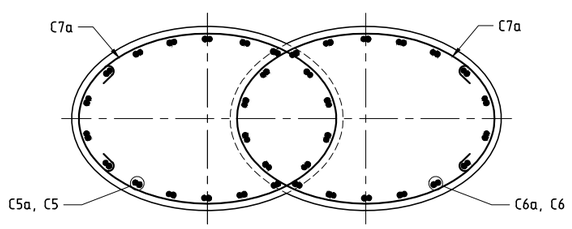
SECTION 4
SCALE 1:20



SECTION 5
SCALE 1:20



SECTION 1
SCALE 1:20



SECTION 3
SCALE 1:20

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
Land Development Certificates
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GENERAL NOTES

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
REINFORCEMENT GRADE SHALL BE D500N TO AS/NZS UNLESS NOTED OTHERWISE.
NOMINAL COVER TO REINFORCEMENT NEAREST TO THE CONCRETE SURFACE SHALL BE 45mm UNLESS NOTED OTHERWISE.
UNLESS NOTED OTHERWISE THE MINIMUM LAP LENGTHS OF BARS SHALL BE AS FOLLOWS:

BAR SIZE:	N12	N16	N20	N24	N28	N32	N36
a) HORIZONTAL BARS WITH >300mm OF CONCRETE CAST BELOW THE BAR	650	900	1150	1430	1730	2060	2410
b) OTHER BARS	500	690	890	1100	1330	1590	1860

ON CURVE REGION TRANSVERSE BARS TO BE PLACED RADIALLY AND THE BAR SPACING TO BE MAINTAINED ON THE OUTER CURVE CLEAR DISTANCE BETWEEN LAPPED BARS SHALL NOT EXCEED 3 x THE BAR DIAMETER.
REINFORCEMENT MAY BE DISPLACED SLIGHTLY WHERE NECESSARY TO CLEAR DOWELS, ANCHORS, DUCTS, DRAINAGE LINES AND GENERAL FITMENTS.
CURING OF THE CONCRETE SHALL NOT INCLUDE CURING COMPOUNDS AND SHALL COMMENCE IMMEDIATELY AFTER FINISHING OPERATIONS HAVE BEEN COMPLETED ON THE CONCRETE BEING PLACED.
FOR BAR SHAPES DIAGRAM REFER DRG No 216.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-135.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:30:11

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SMEC_A1 X_BRG_SEC	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 500 1000mm; 250 125 1:25

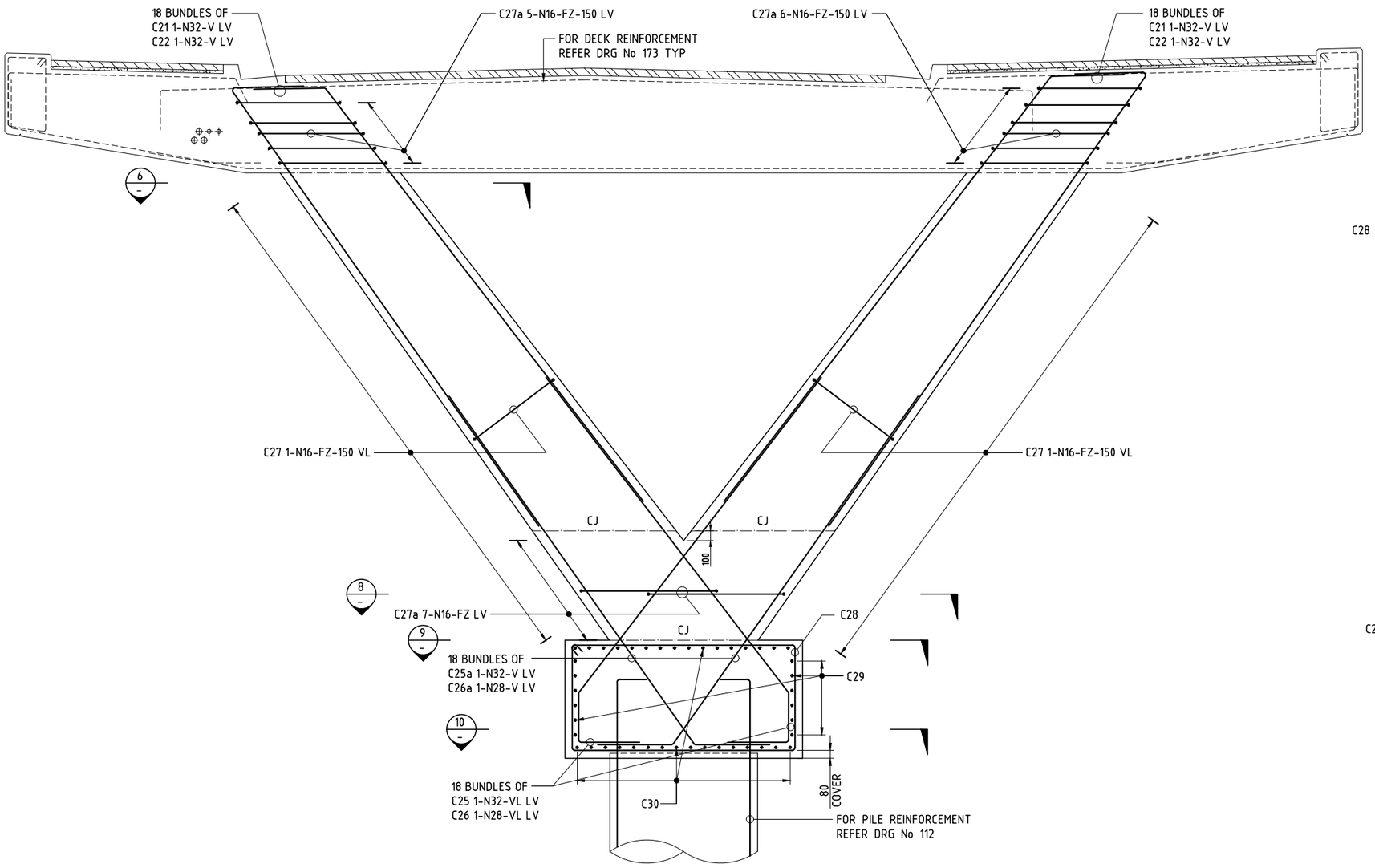
DESIGNER: SMEC — Member of the Surbana Jurong Group — © ABN 47 065 475 149 — LEVEL 5, 20 BERRY STREET NORTH SYDNEY NSW 2060 — SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE
PIER REINFORCEMENT DETAILS SHEET A

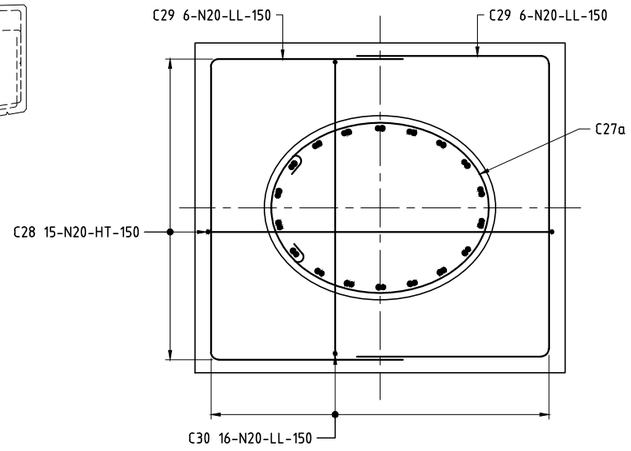
SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-135	A

150 mm ON ORIGINAL
A1

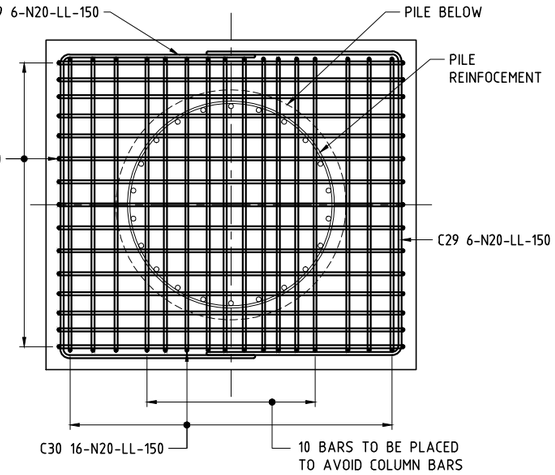


ELEVATION
SCALE 1:25

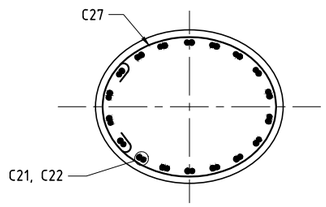
PIER 2



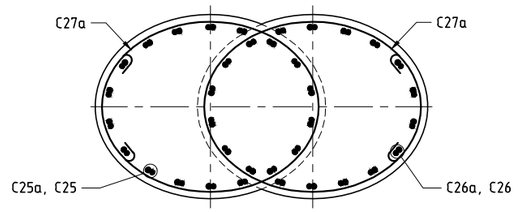
SECTION 9
SCALE 1:20



SECTION 10
SCALE 1:20



SECTION 6
SCALE 1:20



SECTION 8
SCALE 1:20

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories:
Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

Land Development Certificates
www.LDC.com.au

GENERAL NOTES

FOR OTHER GENERAL NOTES RELATED TO THIS DRAWING, REFER TO DRG No 135.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-136.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:30:46

EXTERNAL REFERENCE FILES: X_30013046_SMEC_A1, X_BRG_SEC

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 500 1000mm; 250 125 1:25

DESIGNER: SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

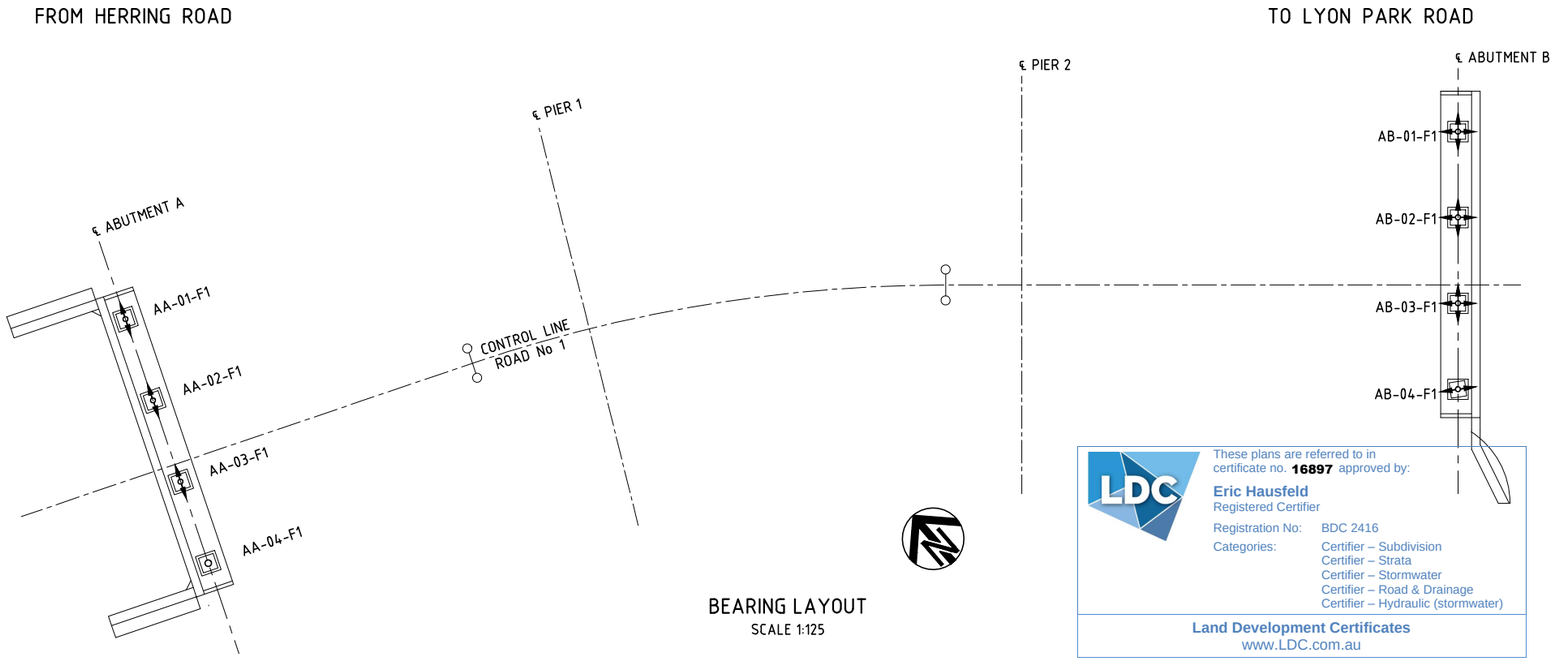
CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE

PIER REINFORCEMENT DETAILS
SHEET B

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-136	A

150 mm ON ORIGINAL
A1



BEARING LAYOUT
SCALE 1:125

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
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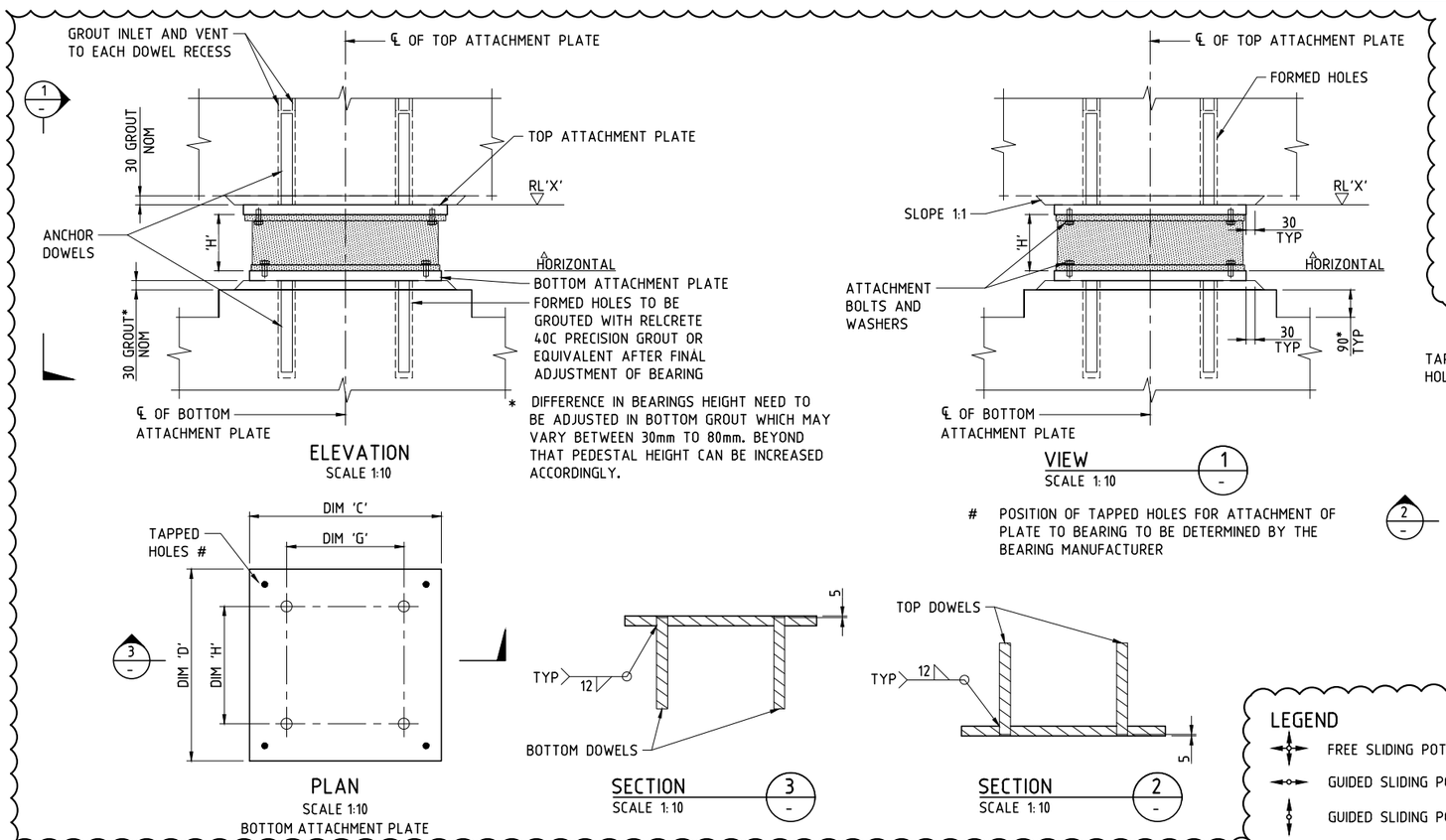


TABLE 1 - BEARING SCHEDULE

BEARING LOCATION AND REFERENCE				AA-01/02/03	AA-04	AB-01/02/03	AB-04
BEARING TYPE				TRANSVERSLY GUIDED	FIXED	FREE	LONGITUDINALLY GUIDED
TYPE (REFER TO GRANOR POT-TYPE BEARING CATALOGUE)				GPGS6000	GPGS5000	GPFF1500	GPGS6000
DESIGN LOAD	SLS	VERTICAL	MAX	1494	1029	1389	1048
			PERMANENT	708	600	850	619
			MIN	446	419	374	444
		HORIZONTAL	LONGITUDINAL	603	510	–	–
			TRANSVERSE	–	515	–	543
	ULS	VERTICAL	MAX	2248	1480	2108	1497
			PERMANENT	835	713	1011	730
			MIN	488	430	424	473
		HORIZONTAL	LONGITUDINAL	818	664	–	–
			TRANSVERSE	–	803	–	786
TRANSLATION (mm)	ULS	PRESET P	LONGITUDINAL	–	–	–	–
			TRANSVERSE	–	–	–	–
		MOVEMENT	LONGITUDINAL	0	0	±50	±50
			TRANSVERSE	±15	0	±15	0
ROTATION (rad)	SLS		LONGITUDINAL	0.01	0.01	0.01	0.01
			TRANSVERSE				
NOMINAL BEARING HEIGHT 'H' (mm)				185	142	98	185
TOP ATTACHMENT PLATE			THICKNESS (mm)	32	32	20	32
			DIM 'A' (mm)	670	740	390	670
			DIM 'B' (mm)	630	575	320	630
DOWELS			DIM 'E' (mm)	385	620	230	385
			DIM 'F' (mm)	385	455	230	385
			DOWEL SIZE (mm)	36	36	20	36
			DOWEL LENGTH (mm)	300	250	200	300
BOTTOM ATTACHMENT PLATE			THICKNESS (mm)	32	32	20	32
			DIM 'C' (mm)	630	575	320	630
			DIM 'D' (mm)	630	575	320	630
DOWELS			DIM 'G' (mm)	385	325	180	385
			DIM 'H' (mm)	385	325	180	385
			DOWEL SIZE (mm)	36	36	20	36
			DOWEL LENGTH (mm)	300	250	200	300
RL 'X'			AT ABUTMENT A	45.638	45.638	–	–
			AT ABUTMENT B	–	–	46.137	46.137

GENERAL NOTES

MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF MORTAR AND GROUT SHALL BE 50MPa.
MORTAR SHALL BE DRY PACKED.
EXPOSED CONCRETE SURFACE TO HAVE SMOOTH FINISH.

CONSTRUCTION SEQUENCE

DOWELS IN ATTACHMENT PLATES OF BEARINGS SHALL BE GROUTED BEFORE ALL TENDONS ARE STRESSED AND GROUTED.
CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORTS AND RESTRAINTS BEFORE THE BEARINGS ARE GROUTED.

BEARING NOTES

TYPICAL POT-TYPE BEARING AND ASSOCIATED ATTACHMENT PLATES ARE DETAILED ON THE BEARING DRAWINGS.
POT-TYPE BEARINGS OF ANY MANUFACTURER WILL BE CONSIDERED PROVIDED:
a) THE PERFORMANCE REQUIREMENTS IN TABLE 1 ARE SATISFIED.
b) ANY VARIATIONS OF THE PHYSICAL DIMENSIONS OF THE BEARINGS AND ATTACHMENT PLATES FROM THOSE SHOWN ON THE DRAWINGS CAN BE ACCOMMODATED WITHIN THE STRUCTURE.
THE ACTUAL HEIGHT OF THE BEARINGS SHALL BE ASCERTAINED FROM THE BEARING MANUFACTURER BEFORE CONSTRUCTION OF THE ABUTMENTS.
THE REDUCED LEVEL AT THE TOP OF THE ABUTMENTS SHALL BE ADJUSTED TO SUIT THE ACTUAL BEARING HEIGHTS WHERE REQUIRED.
ALL SURFACES (EXCEPT STAINLESS STEEL SLIDING SURFACES) OF THE BEARINGS SHALL BE GIVEN A PROTECTIVE TREATMENT OF AN INORGANIC ZINC SILICATE PRIMER AND TWO COATS OF CHLORINATED RUBBER FINISHING PAINT.
BEARING ASSEMBLIES SHALL BE HELD TOGETHER WITH TRANSIT BOLTS TO PREVENT MISALIGNMENT AND DAMAGE TO THE COMPONENT DURING TRANSIT AND ERECTION. THE TRANSIT BOLTS SHOULD BE REMOVED UNTIL AFTER INSTALLATION.
THE PTFE/STAINLESS STEEL INTERFACE OF ALL BEARINGS SHALL BE PERMANENTLY LUBRICATED AFTER TESTING.
STEEL PLATE GRADE 350 TO AS3678
DOWELS GRADE 350 TO AS367
WELDING CATEGORY SHALL BE SP TO AS1554 PT1.
WELDING SYMBOLS TO AS 1101 PT3.

LEGEND

- FREE SLIDING POT BEARING - FREE TO MOVE IN ALL DIRECTIONS
- GUIDED SLIDING POT BEARING - FREE TO MOVE LONGITUDINALLY
- GUIDED SLIDING POT BEARING - FREE TO MOVE TRANSVERSELY
- FIXED POT BEARING

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-141.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:55:21

EXTERNAL REFERENCE FILES: X_30013046_SMEC_A1, X_DES_MAIN, X_BRG_PLAN

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 2500 5000mm; 1250 625 1:125

DESIGNER: SMEC — Member of the Surbana Jurong Group — © ABN 47 065 475 149 — LEVEL 5, 20 BERRY STREET NORTH SYDNEY NSW 2060 — SMEC PROJECT No 30013046

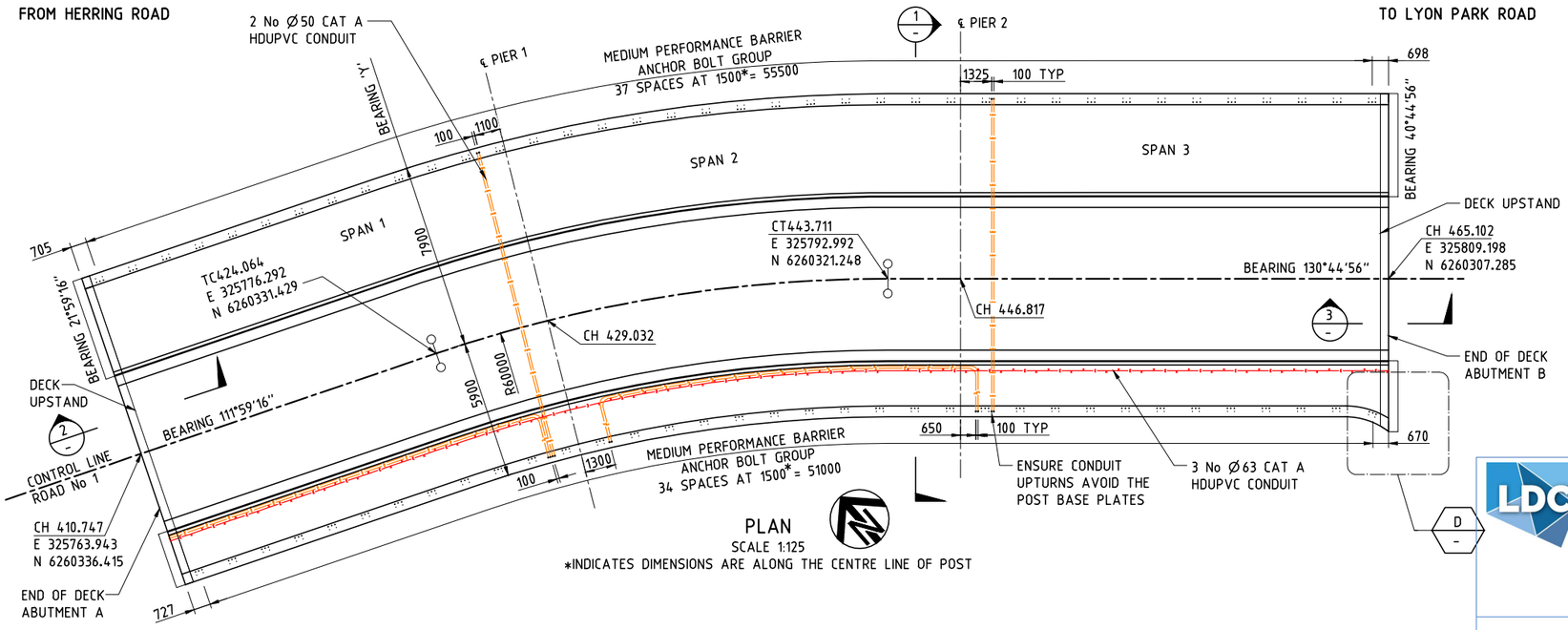
CLIENT: FRASERS PROPERTY

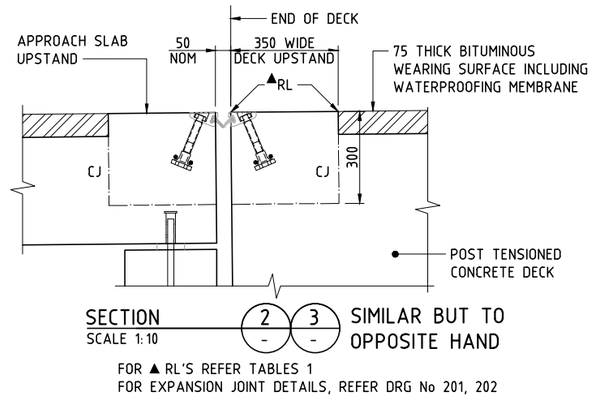
PROJECT TITLE: SHRIMPTON CREEK BRIDGE

BEARINGS

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-141	A

150 mm ON ORIGINAL
A1





These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
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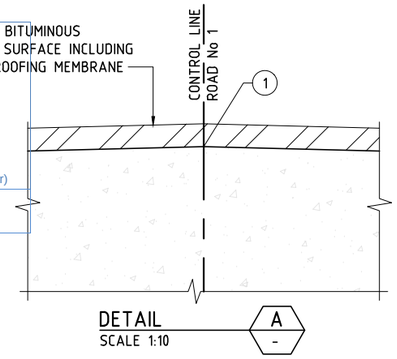
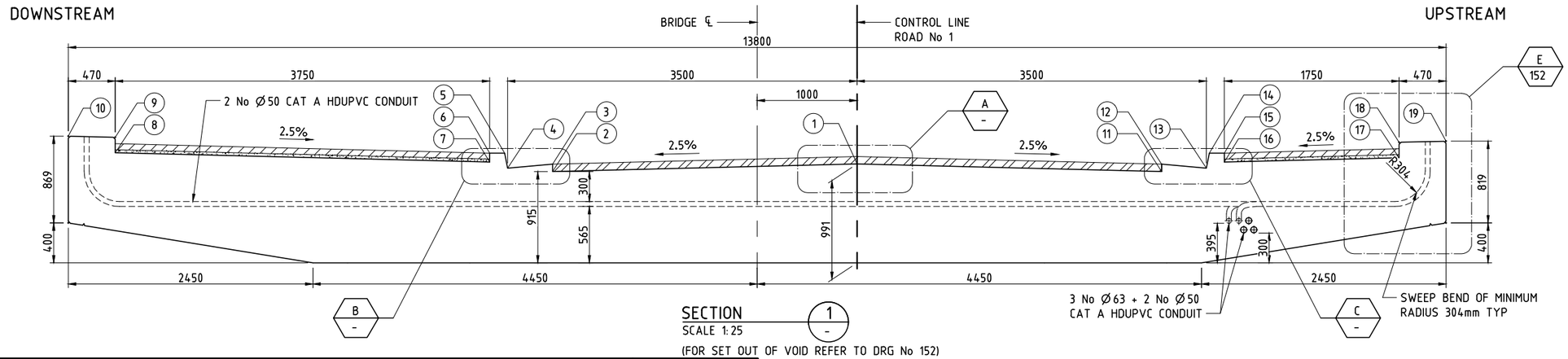
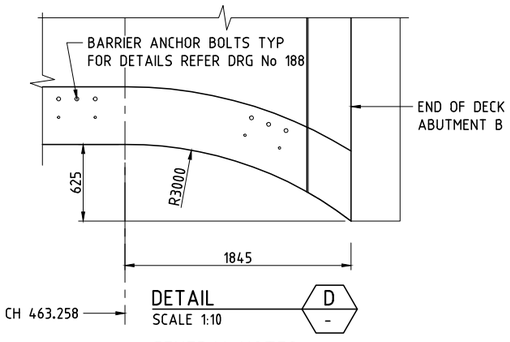


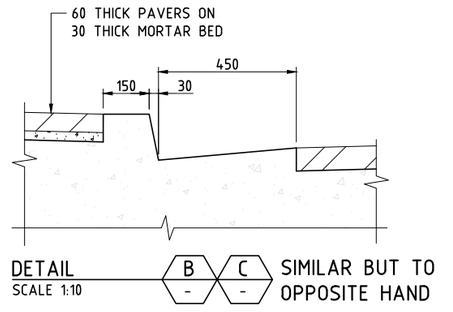
TABLE 1 - DECK SETTING OUT

LOCATION	STATION	BEARING 'Y'	POINT 1	POINT 2	POINT 3	POINT 4	POINT 5	POINT 6	POINT 7	POINT 8	POINT 9	POINT 10	POINT 11	POINT 12	POINT 13	POINT 14	POINT 15	POINT 16	POINT 17	POINT 18	POINT 19
END OF DECK AT ABUTMENT A	410.747	21°59'16"	▲46.729	▲46.653	▲46.653	▲46.613	▲46.763	▲46.762	▲46.762	▲46.855	▲46.920	▲46.930	▲46.653	▲46.653	▲46.613	▲46.763	▲46.762	▲46.762	▲46.805	▲46.870	▲46.880
UPSTAND	411.097	21°59'16"	▲46.732	▲46.656	▲46.656	▲46.616	▲46.766	▲46.766	▲46.766	▲46.859	▲46.924	▲46.934	▲46.656	▲46.656	▲46.616	▲46.766	▲46.766	▲46.766	▲46.809	▲46.874	▲46.884
SPAN 1	420.000	21°59'16"	46.741	46.664	46.739	46.699	46.849	46.849	46.759	46.852	47.007	47.017	46.664	46.739	46.699	46.849	46.849	46.759	46.802	46.957	46.967
	424.064	21°59'16"	46.779	46.702	46.777	46.737	46.887	46.887	46.797	46.890	47.045	47.055	46.702	46.777	46.737	46.887	46.887	46.797	46.839	46.995	47.005
℄ PIER 1	429.032	26°43'54"	46.825	46.749	46.824	46.784	46.934	46.933	46.843	46.936	47.091	47.101	46.749	46.824	46.784	46.934	46.933	46.843	46.886	47.041	47.051
SPAN 2	440.000	37°12'19"	46.928	46.851	46.926	46.886	47.036	47.036	46.946	47.039	47.194	47.204	46.851	46.926	46.886	47.036	47.036	46.946	46.989	47.144	47.154
	443.711	40°44'56"	46.962	46.886	46.961	46.921	47.071	47.070	46.980	47.073	47.228	47.238	46.886	46.961	46.921	47.071	47.070	46.980	47.023	47.178	47.188
℄ PIER 2	446.817	40°44'56"	46.991	46.915	46.990	46.950	47.100	47.100	47.010	47.103	47.258	47.268	46.915	46.990	46.950	47.100	47.100	47.010	47.053	47.208	47.218
SPAN 3	450.000	40°44'56"	47.021	46.945	47.020	46.980	47.130	47.129	47.039	47.132	47.287	47.297	46.945	47.020	46.980	47.130	47.129	47.039	47.082	47.237	47.247
	460.000	40°44'56"	47.115	47.038	47.113	47.073	47.223	47.223	47.133	47.226	47.381	47.391	47.038	47.113	47.073	47.223	47.223	47.133	47.176	47.331	47.341
	463.258	40°44'56"	47.145	47.068	47.143	47.103	47.253	47.253	47.163	47.252	47.407	47.417	47.068	47.143	47.103	47.253	47.253	47.163	47.202	47.357	47.367
UPSTAND	464.752	40°44'56"	▲47.234	▲47.158	▲47.158	▲47.118	▲47.268	▲47.267	▲47.267	▲47.360	▲47.425	▲47.435	▲47.158	▲47.158	▲47.118	▲47.268	▲47.267	▲47.267	▲47.318	▲47.383	▲47.395
END OF DECK AT ABUTMENT B	465.102	40°44'56"	▲47.237	▲47.161	▲47.161	▲47.121	▲47.271	▲47.270	▲47.270	▲47.363	▲47.428	▲47.438	▲47.161	▲47.161	▲47.121	▲47.271	▲47.270	▲47.270	▲47.326	▲47.391	▲47.404

▲ DENOTES RL's AT END OF DECK AND UPSTAND AS SHOWN IN SECTION 2 AND 3.
END OF DECK AND UPSTAND RL's SHOWN MAKE NO ALLOWANCE FOR COVER PLATE RECESSES WHERE APPLICABLE.







GENERAL NOTES

FOR GENERAL NOTES RELATING TO THIS DRAWING, REFER DRG No 152.

DRAWING FILE LOCATION / NAME	V:__Vault\Projects\3001\30013046\110__CADD\CAD\DWG\30013046-151.dwg	PLOT DATE	14 Jun 2022
		TIME	17:31:47

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046-SMEC_A1 X_BRG_PLAN X_DES_MAIN X_BRG_SEC	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING
0 2500 5000mm
1250 625 1:125

DESIGNER
SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

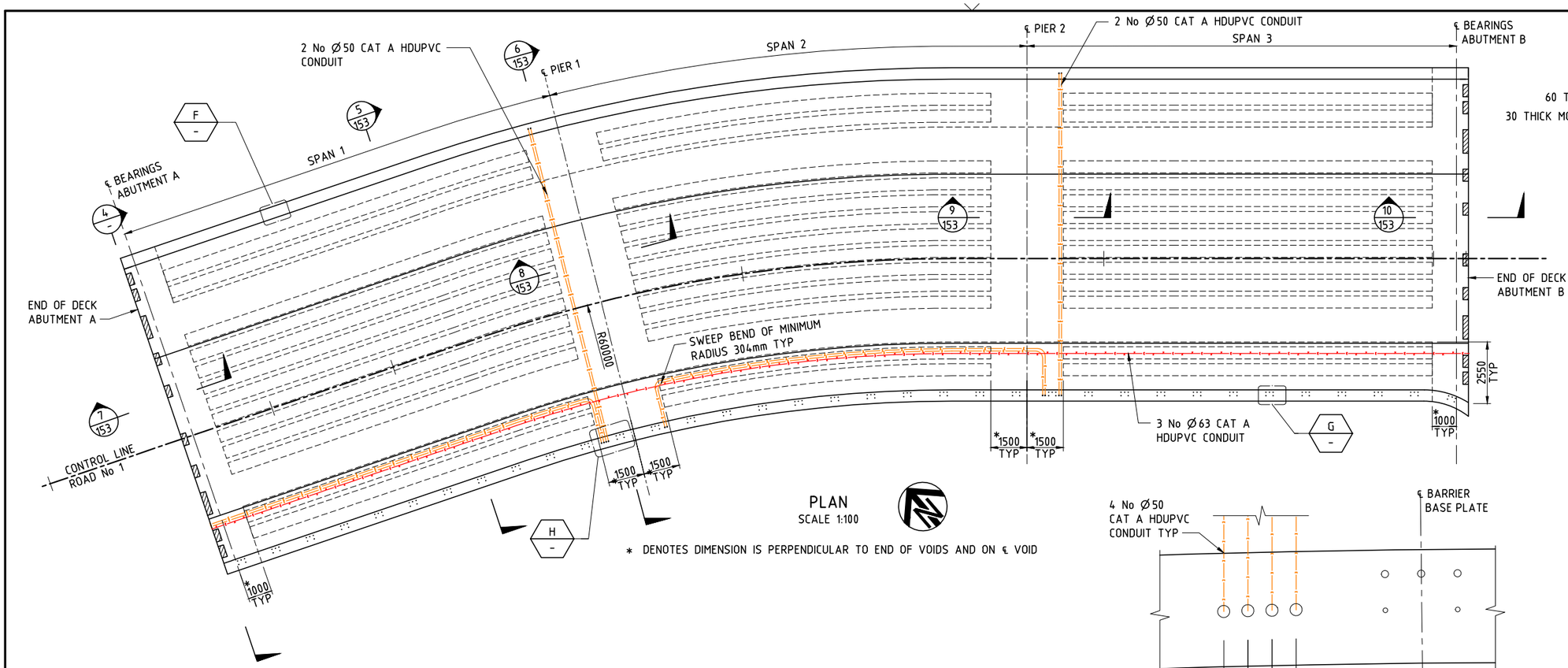
CLIENT
FRASERS PROPERTY

PROJECT TITLE
SHRIMPTON CREEK BRIDGE

DECK SETTING OUT

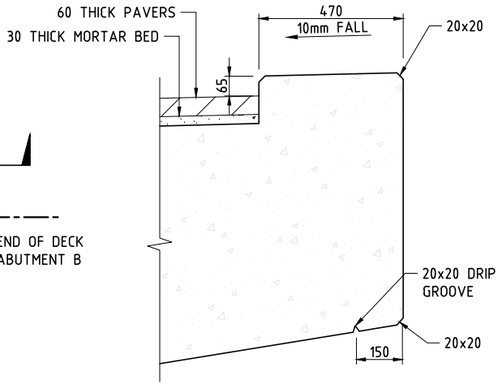
SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-151	A

150 mm ON ORIGINAL
A1



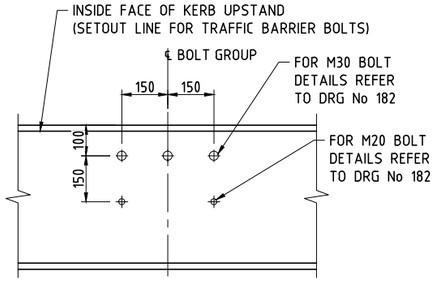
PLAN
SCALE 1:100

* DENOTES DIMENSION IS PERPENDICULAR TO END OF VOIDS AND ON ℄ VOID



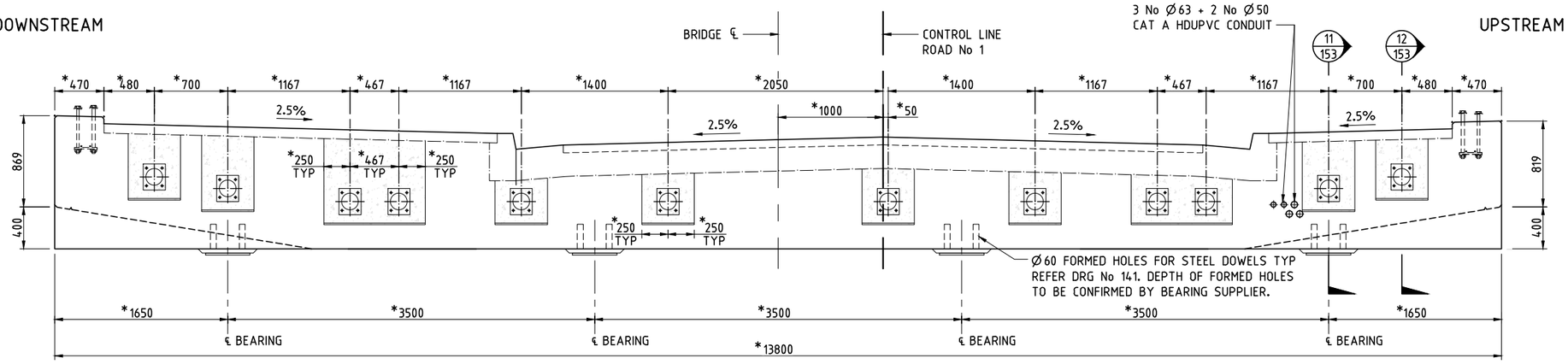
DETAIL E
SCALE 1:10

DETAIL (Ø50 ELECTRICAL DUCT) H
SCALE 1:10



DETAIL G F SIMILAR BUT TO OPPOSITE HAND
SCALE 1:10

DOWNSTREAM



UPSTREAM

SECTION 4
SCALE 1:25

FOR POST TENSION LAYOUT REFER TO DRG No 161.
* DENOTES DIMENSION ARE OFFSETS ALONG BEARING CENTERLINES.

'-' DENOTES STRAIGHT LINE

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
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GENERAL NOTES

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
CONCRETE EXPOSURE CLASSIFICATION: B1
MINIMUM 28 DAY COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 40 MPa
EDGES SHALL BE CHAMFERED 20 x 20 AND RE-ENTRANT ANGLES FILLETED 20 x 20 UNLESS NOTED OTHERWISE.
CONSTRUCTION JOINT ONLY AT THE LOCATIONS NOMINATED ON THE DRAWINGS.
REFER TO TABLE 1 FOR SETTING OUT DETAILS.
ALL REDUCE LEVELS SHOWN ARE TO DESIGN FINISHED CONCRETE LEVELS.
THE CONTRACTOR SHALL ALLOW FOR SETTLEMENT OF FALSEWORK DURING CONSTRUCTION.
EXPOSED CONCRETE SURFACE TO HAVE SMOOTH FINISH.

150 mm ON ORIGINAL
A1

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-152.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:32:24

EXTERNAL REFERENCE FILES: X_30013046_SMEC_A1, X_BRG_PLAN, X_BRG_SEC, X_DES_MAIN

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

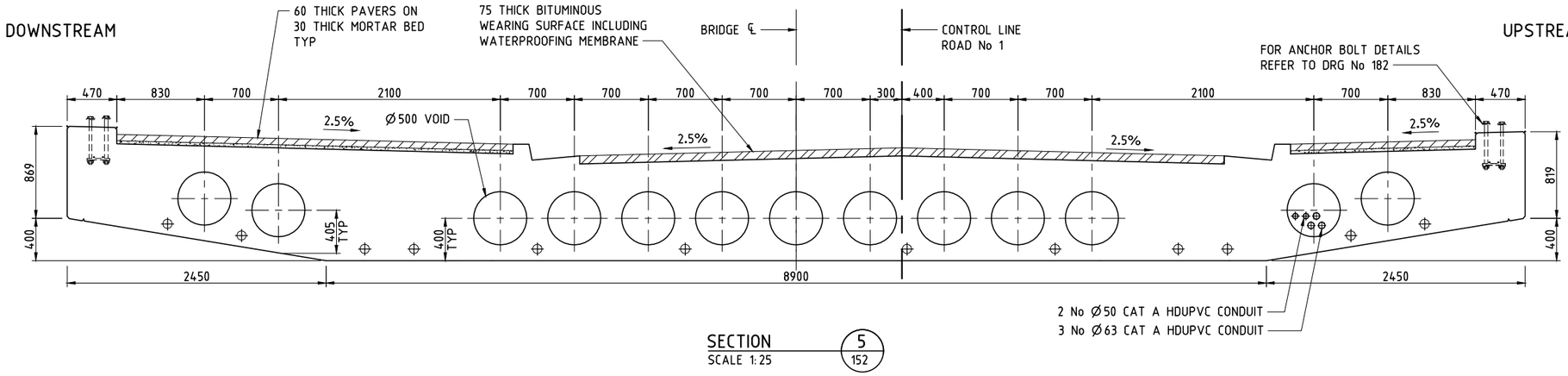
SCALES AT A1 SIZE DRAWING: 0 1000 2000 3000 4000 5000mm; 1000 500; 1:100

DESIGNER: SMEC
Member of the Surbana Jurong Group
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LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

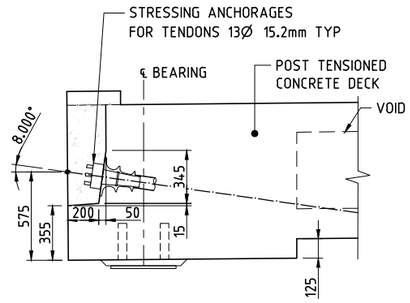
CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE
DECK CONCRETE
SHEET A

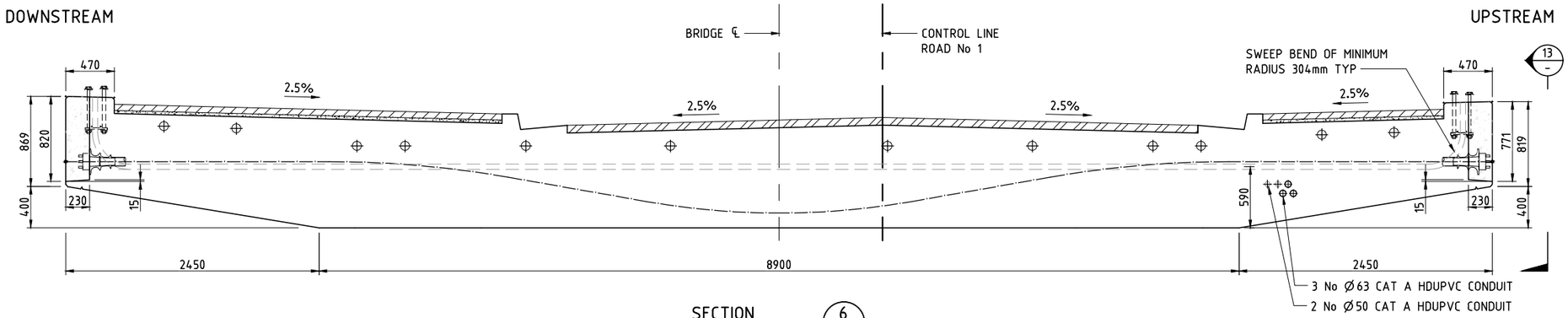
SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-152	A



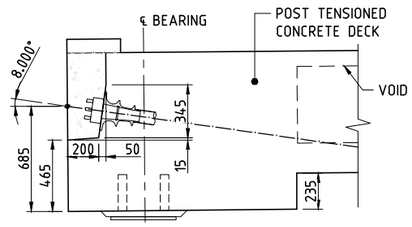
SECTION 5 / 152
SCALE 1:25



SECTION 11 / 152
SCALE 1:20

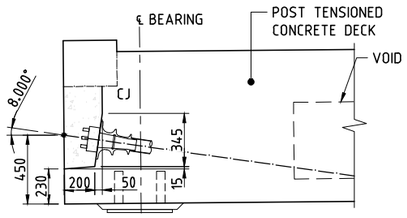


SECTION 6 / 152
SCALE 1:25

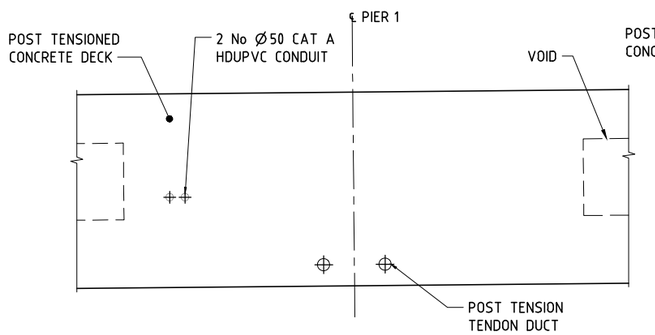


SECTION 12 / 152
SCALE 1:20

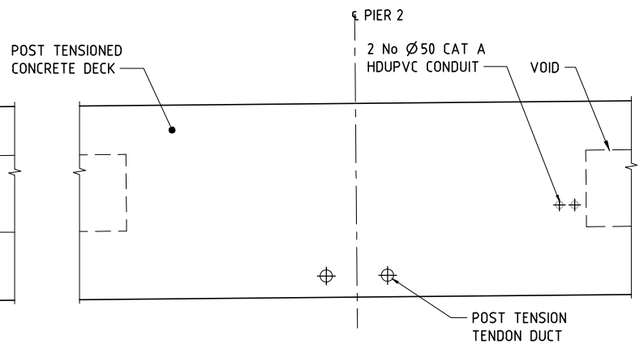
FOR POST TENSION LAYOUT REFER TO DRG No 161.



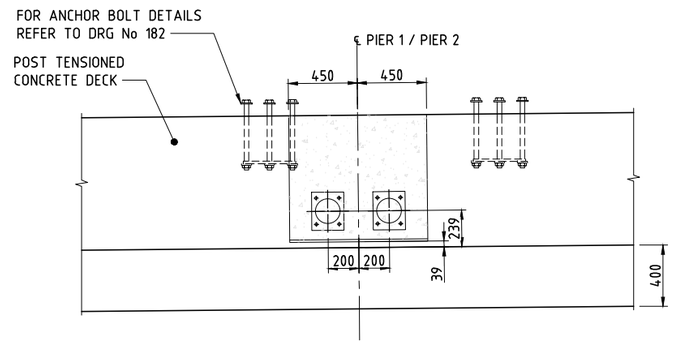
SECTION 7 / 152 10 / 152 SIMILAR BUT TO OPPOSITE HAND
SCALE 1:20



VIEW 8 / 152
SCALE 1:20



VIEW 9 / 152
SCALE 1:20



VIEW 13 / 153
SCALE 1:20

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
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GENERAL NOTES
FOR GENERAL NOTES RELATING TO THIS DRAWING, REFER DRG No 152.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-153.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:32:54

EXTERNAL REFERENCE FILES: X_30013046_SMEC_A1, X_BRG_SEC, X_BRG_PLAN

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
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DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 500 1000mm; 250 125 1:25

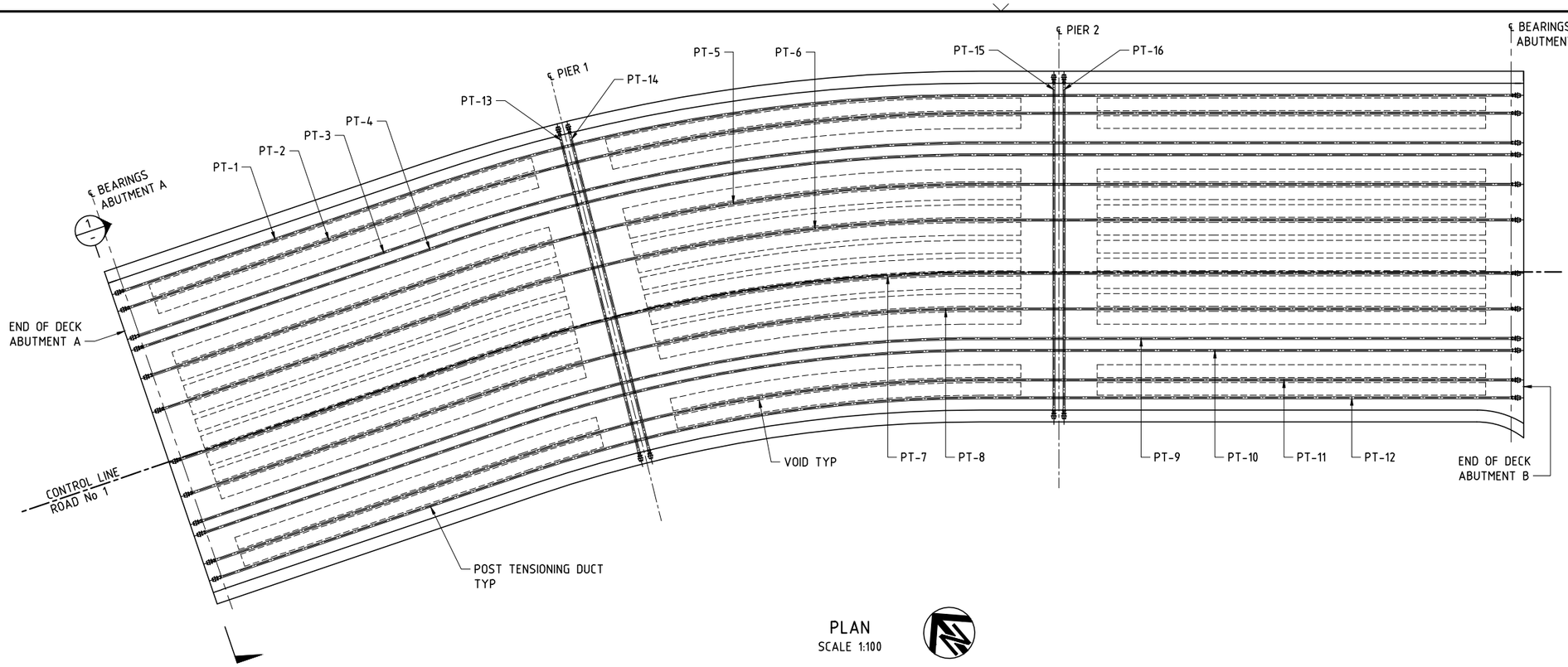
DESIGNER: SMEC — Member of the Surbana Jurong Group — © ABN 47 065 475 149 — LEVEL 5, 20 BERRY STREET NORTH SYDNEY NSW 2060 — SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE
DECK CONCRETE SHEET B

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-153	A

A1 150 mm ON ORIGINAL



PLAN
SCALE 1:100

GENERAL NOTES

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

CONCRETE NOTES

MINIMUM COMPRESSIVE STRENGTH CONCRETE AT TRANSFER SHALL BE 40Mpa. FORMWORK/FALSEWORK SUPPORTING THE DECK SHALL NOT BE RELEASED UNTIL STRESSING OF ALL TENDONS IS COMPLETED.
EXPOSED CONCRETE SURFACE TO HAVE SMOOTH FINISH.

POST-TENSIONING

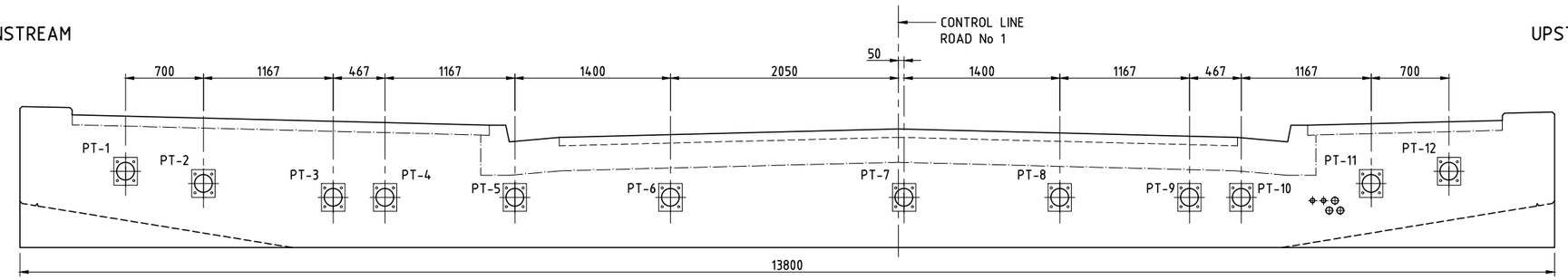
THE DESIGN HAS BEEN BASED ON THE FREYSSINET C RANGE SYSTEM OF STRESSING ANCHORAGE. AN EQUIVALENT SYSTEM SHALL BE A PROPRIETARY POST-TENSIONING SYSTEM IN ACCORDANCE WITH TfNSW BRIDGE TECHNICAL DIRECTION 2008/11.
TENDON SHALL CONSIST OF 13 No. 15.2mm DIAMETER LOW RELAXATION, STRESS RELIEVED, SUPERGRADE 7 WIRE STRANDS TO AS/NZS 4672.1 (MINIMUM BREAKING LOAD OF 262kN).
DUCTS FOR TENDONS SHALL BE FORMED WITH GALVANISED SEMI-RIGID STEEL SHEATHING.
DUCT INSIDE DIAMETER IS 80mm.
DUCTS SHALL BE RIGIDLY SUPPORTED DURING CONCRETING AND FIXED TO A SMOOTH PROFILE OF THE SPECIFIED POINTS SHOWN ON THE VERTICAL DUCT PROFILE USING A METHOD APPROVED BY THE DESIGN ENGINEER.
OVERALL LENGTHS OF EACH TENDON VARIES.
GROUT VENTS SHALL BE PROVIDED AT ALL ANCHORAGES AND AT CROWN AND SAG POINTS OF ALL DUCT.
FIXING OF DUCTS, GROUTING AND PROTECTION OF ANCHORAGES SHALL COMPLY WITH TfNSW SPECIFICATION B113.
ALL TENDON LOCATIONS ARE MEASURED FROM THE CENTERLINE OF THE DUCT TO THE SOFFIT VERTICALLY.
THE TENDONS SHALL BE STRESSED FROM BOTH ENDS. THE ORDER OF STRESSING SHALL BE PT6, PT7, PT5, PT8, PT4, PT9, PT3, PT10, PT2, PT11, PT1, PT12, PT13, PT14, PT15 AND PT16.
ALL STRANDS IN EACH TENDON SHALL BE STRESSED SIMULTANEOUSLY.
CALCULATION OF FRICTION AND DRAW IN LOSSES HAS BEEN BASED ON THE FOLLOWING ASSUMPTIONS:

- FRICTION CURVATURE COEFFICIENT μ = 0.17
- WOBBLE COEFFICIENT β = 0.007 rad/m
- ELASTIC MODULUS OF TENDONS Es = 195000 Mpa
- DRAW IN AT LOCK OFF = 6mm

TENDON DUCTS SHALL BE GROUTED AS SOON AS POSSIBLE AFTER STRESSING.
CALCULATED HOG/DEFLECTIONS OF DECKS ARE:

HOG OF DECK	HOG/DEFLECTION (mm)	ELASTIC MODULUS (Mpa)
AT TRANSFER	3	32800
AT 60 DAYS	4	34800

DOWNSTREAM



UPSTREAM

SECTION 1/-
SCALE 1:25

LOCAL BLOCKOUT DETAILS NOT SHOWN FOR CLARITY.
FOR DETAILS REFER DRG No 152

THEORETICAL TOTAL ELONGATION OF TENDONS (mm)		
TENDON	JACKING FROM ABUTMENT A / PIER 1 END	JACKING FROM ABUTMENT B / PIER 2 END
1	177	177
2	172	172
3	167	167
4	167	167
5	170	170
6	167	167
7	166	166
8	163	163
9	162	162
10	160	160
11	163	163
12	167	167
13	48	48
14	48	48
15	48	48
16	48	48

JACKING FORCE = 75% UTS

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
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DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-161.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:59:13

EXTERNAL REFERENCE FILES: X_30013046_SMEC_A1, X_BRG_PLAN, X_DES_MAIN, X_BRG_SEC

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 1000 2000 3000 4000 5000mm; 1000 500; 1:100

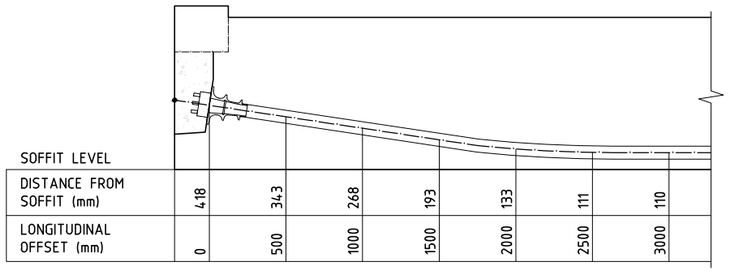
DESIGNER: SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE
DECK POST TENSIONING SHEET A

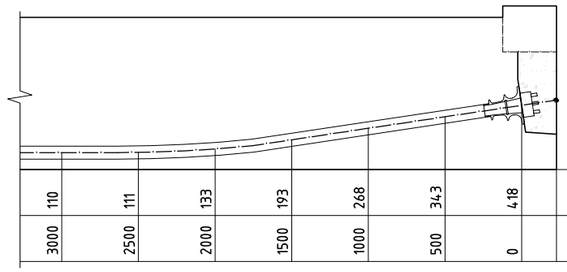
SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-161	A

A1 150 mm ON ORIGINAL



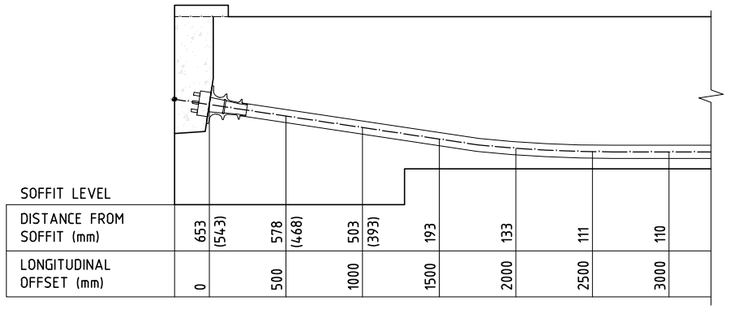
SOFFIT LEVEL							
DISTANCE FROM SOFFIT (mm)	418	343	268	193	133	111	110
LONGITUDINAL OFFSET (mm)	0	500	1000	1500	2000	2500	3000

ABUTMENT A END POST-TENSIONING TENDON DUCT
ELEVATION FOR PT3 TO PT10
SCALE 1:20



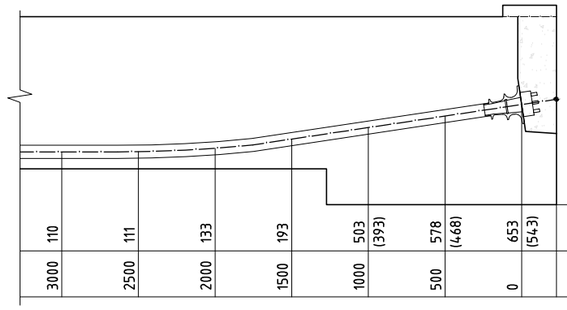
							SOFFIT LEVEL
110	111	133	193	268	343	418	DISTANCE FROM SOFFIT (mm)
3000	2500	2000	1500	1000	500	0	LONGITUDINAL OFFSET (mm)

ABUTMENT B END POST-TENSIONING TENDON DUCT
ELEVATION FOR PT3 TO PT10
SCALE 1:20



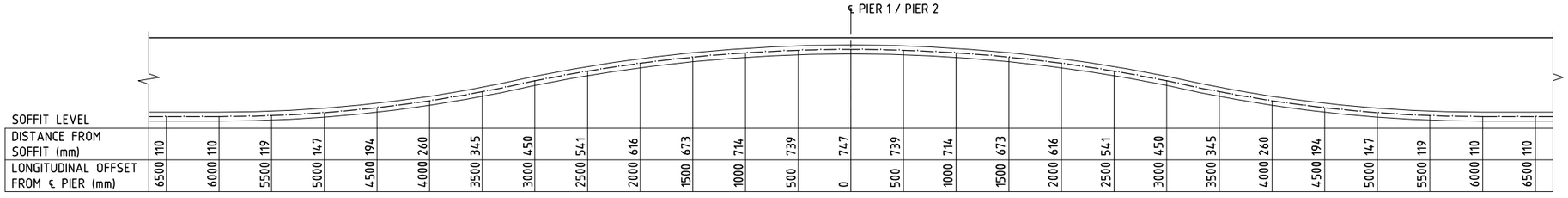
SOFFIT LEVEL									
DISTANCE FROM SOFFIT (mm)	653	(543)	578	(468)	503	(393)	193	133	111	110
LONGITUDINAL OFFSET (mm)	0		500		1000		1500	2000	2500	3000

ABUTMENT A END POST-TENSIONING TENDON DUCT
ELEVATION FOR PT1 AND PT12 (PT2 AND PT11)
SCALE 1:20
VALUES IN BRACKET ARE FOR PT2 AND PT11



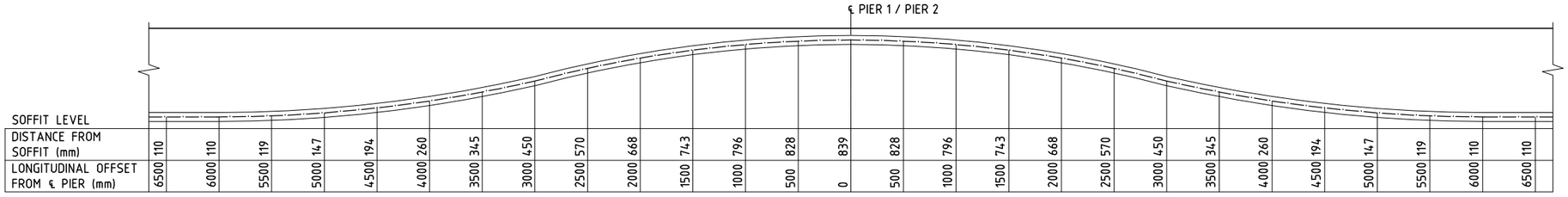
									SOFFIT LEVEL
110	111	133	193	503	(393)	578	(468)	653	(543)	DISTANCE FROM SOFFIT (mm)
3000	2500	2000	1500	1000		500		0		LONGITUDINAL OFFSET (mm)

ABUTMENT B END POST-TENSIONING TENDON DUCT
ELEVATION FOR PT1 AND PT12 (PT2 AND PT11)
SCALE 1:20
VALUES IN BRACKET ARE FOR PT2 AND PT11



SOFFIT LEVEL																									
DISTANCE FROM SOFFIT (mm)	110	110	119	14.7	194	260	345	450	541	616	673	714	739	74.7	739	714	673	616	541	450	345	260	194	14.7	119	110	110
LONGITUDINAL OFFSET FROM ℄ PIER (mm)	6500	6000	5500	5000	4500	4000	3500	3000	2500	2000	1500	1000	500	0	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500

POST-TENSIONING TENDON DUCT LAYOUT AT PIER-TYPICAL
ELEVATION FOR PT1
SCALE 1:25



SOFFIT LEVEL																									
DISTANCE FROM SOFFIT (mm)	110	110	119	14.7	194	260	345	450	570	668	743	796	828	839	828	796	743	668	570	450	345	260	194	14.7	119	110	110
LONGITUDINAL OFFSET FROM ℄ PIER (mm)	6500	6000	5500	5000	4500	4000	3500	3000	2500	2000	1500	1000	500	0	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500

POST-TENSIONING TENDON DUCT LAYOUT AT PIER-TYPICAL
ELEVATION FOR PT2
SCALE 1:25

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
Land Development Certificates
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GENERAL NOTES

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRG No 161.
ALL TENDON LOCATIONS ARE NOTED TO CENTERLINE OF DUCT FROM THE SOFFIT OF THE BEAM.
FOR OTHER GENERAL NOTES REFER TO DRG No 161.

150 mm ON ORIGINAL
A1

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-162.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:33:54

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SMEC_A1 X_BRG_SEC	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

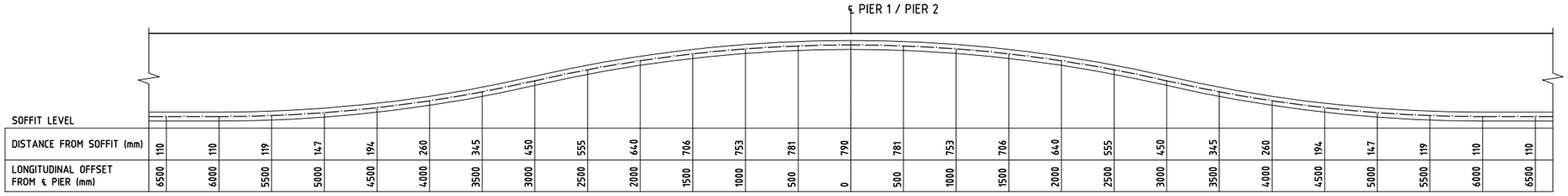
SCALES AT A1 SIZE DRAWING: 0 500 1000mm; 250 125 1:25

DESIGNER: SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

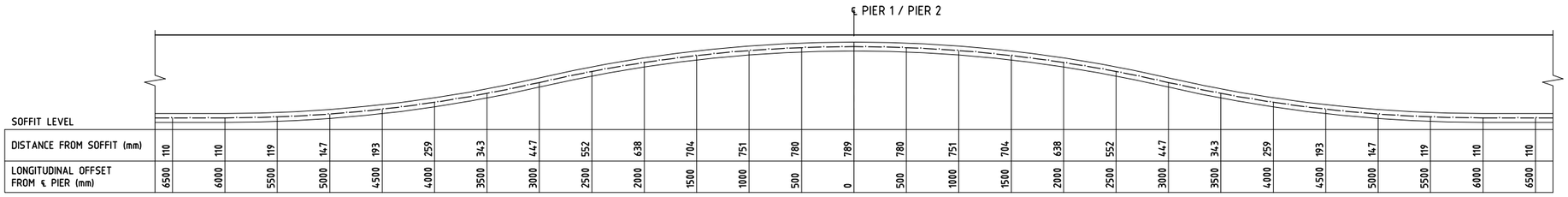
PROJECT TITLE: SHRIMPTON CREEK BRIDGE
DECK POST TENSIONING
SHEET B

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-162	A



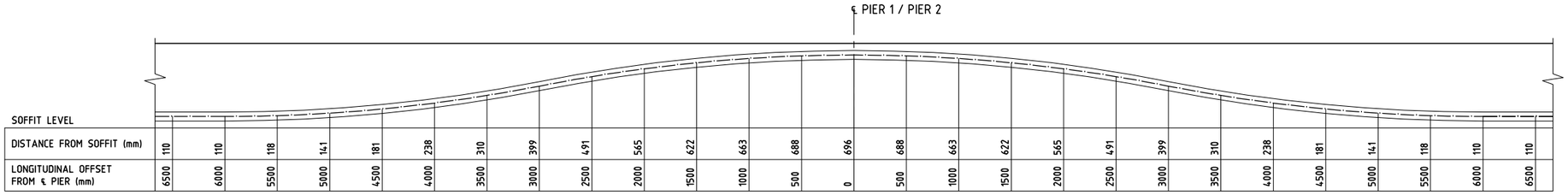
SOFFIT LEVEL																														
DISTANCE FROM SOFFIT (mm)	110	110	119	147	194	260	345	450	555	640	706	753	781	790	781	753	706	640	555	450	345	260	194	147	119	110	110			
LONGITUDINAL OFFSET FROM ℄ PIER (mm)	6500	6000	5500	5000	4500	4000	3500	3000	2500	2000	1500	1000	500	0	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500			

POST-TENSIONING TENDON DUCT LAYOUT AT PIER-TYPICAL
ELEVATION FOR PT3 TO PT10



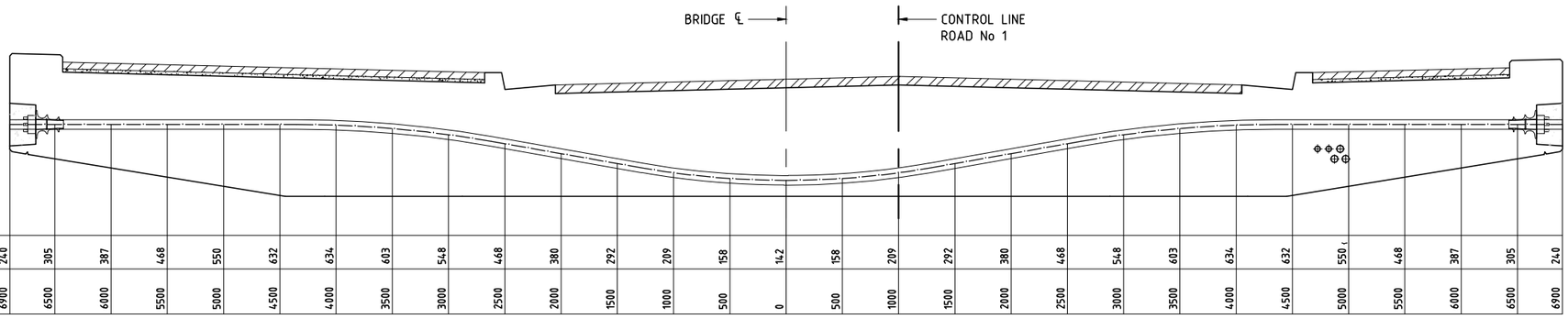
SOFFIT LEVEL																														
DISTANCE FROM SOFFIT (mm)	110	110	119	147	193	259	343	447	552	638	704	751	780	789	780	751	704	638	552	447	343	259	193	147	119	110	110			
LONGITUDINAL OFFSET FROM ℄ PIER (mm)	6500	6000	5500	5000	4500	4000	3500	3000	2500	2000	1500	1000	500	0	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500			

POST-TENSIONING TENDON DUCT LAYOUT AT PIER-TYPICAL
ELEVATION FOR PT11



SOFFIT LEVEL																														
DISTANCE FROM SOFFIT (mm)	110	110	118	141	181	238	310	399	491	565	622	663	688	696	688	663	622	565	491	399	310	238	181	141	118	110	110			
LONGITUDINAL OFFSET FROM ℄ PIER (mm)	6500	6000	5500	5000	4500	4000	3500	3000	2500	2000	1500	1000	500	0	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500			

POST-TENSIONING TENDON DUCT LAYOUT AT PIER-TYPICAL
ELEVATION FOR PT12



SOFFIT LEVEL																														
DISTANCE FROM SOFFIT (mm)	240	305	387	468	550	632	634	603	548	468	380	292	209	158	142	158	209	292	380	468	548	603	634	632	550	468	387	305	240	
TRANSVERSE OFFSET FROM ℄ BRIDGE CONTROL LINE (mm)	6900	6500	6000	5500	5000	4500	4000	3500	3000	2500	2000	1500	1000	500	0	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	6900	

TRANSVERSE POST-TENSIONING TENDON DUCT LAYOUT AT PIER-TYPICAL
ELEVATION FOR PT13 TO PT16

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
Land Development Certificates
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GENERAL NOTES

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRG No 161.
ALL TENDON LOCATIONS ARE NOTED TO CENTERLINE OF DUCT FROM THE SOFFIT OF THE BEAM.
FOR OTHER GENERAL NOTES REFER TO DRG No 161.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-163.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:34:27

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SMEC_A1 X_BRG_SEC	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 500 1000mm; 250 125 1:25

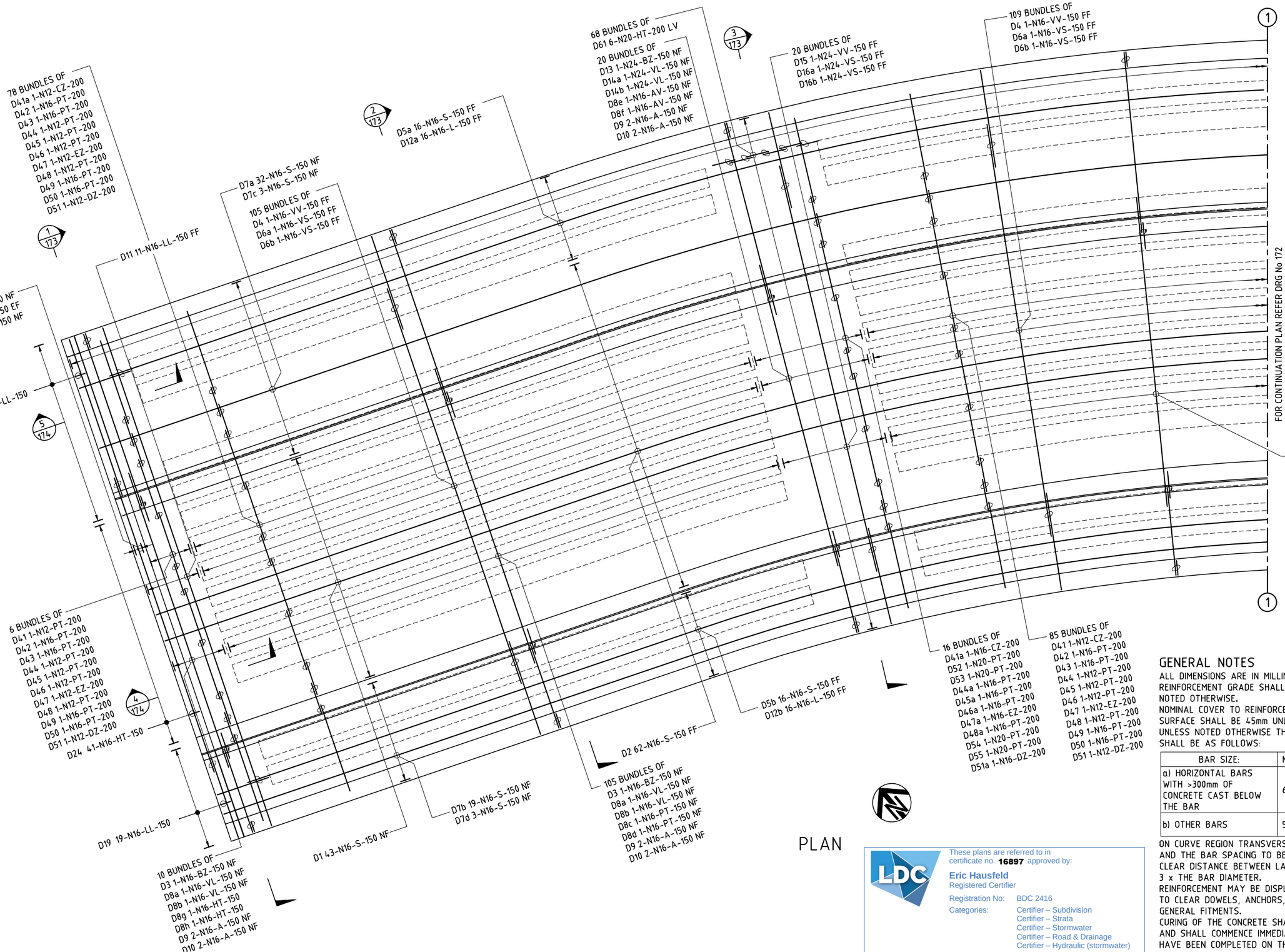
DESIGNER: SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE
DECK POST TENSIONING
SHEET C

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-163	A

150 mm ON ORIGINAL
A1



PLAN

GENERAL NOTES

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
REINFORCEMENT GRADE SHALL BE D500N TO AS/NZS UNLESS NOTED OTHERWISE.
NOMINAL COVER TO REINFORCEMENT NEAREST TO THE CONCRETE SURFACE SHALL BE 45mm UNLESS NOTED OTHERWISE.
UNLESS NOTED OTHERWISE THE MINIMUM LAP LENGTHS OF BARS SHALL BE AS FOLLOWS:

BAR SIZE:	N12	N16	N20	N24	N28	N32	N36
a) HORIZONTAL BARS WITH >300mm OF CONCRETE CAST BELOW THE BAR	650	900	1150	1430	1730	2060	2410
b) OTHER BARS	500	690	890	1100	1330	1590	1860

ON CURVE REGION TRANSVERSE BARS TO BE PLACED RADIALLY AND THE BAR SPACING TO BE MAINTAINED ON THE OUTER CURVE CLEAR DISTANCE BETWEEN LAPPED BARS SHALL NOT EXCEED 3 x THE BAR DIAMETER.
REINFORCEMENT MAY BE DISPLACED SLIGHTLY WHERE NECESSARY TO CLEAR DOWELS, ANCHORS, DUCTS, DRAINAGE LINES AND GENERAL FITMENTS.
CURING OF THE CONCRETE SHALL NOT INCLUDE CURING COMPOUNDS AND SHALL COMMENCE IMMEDIATELY AFTER FINISHING OPERATIONS HAVE BEEN COMPLETED ON THE CONCRETE BEING PLACED.
FOR BAR SHAPES DIAGRAM REFER DRG No 215.

LDC
These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
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150 mm ON ORIGINAL
A1
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\30013\30013046\110_CADD\CAD\DWG\30013046-171.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:34:57

EXTERNAL REFERENCE FILES:
X_30013046_SMEC_A1
X_BRG_PLAN
X_DES_MAIN

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

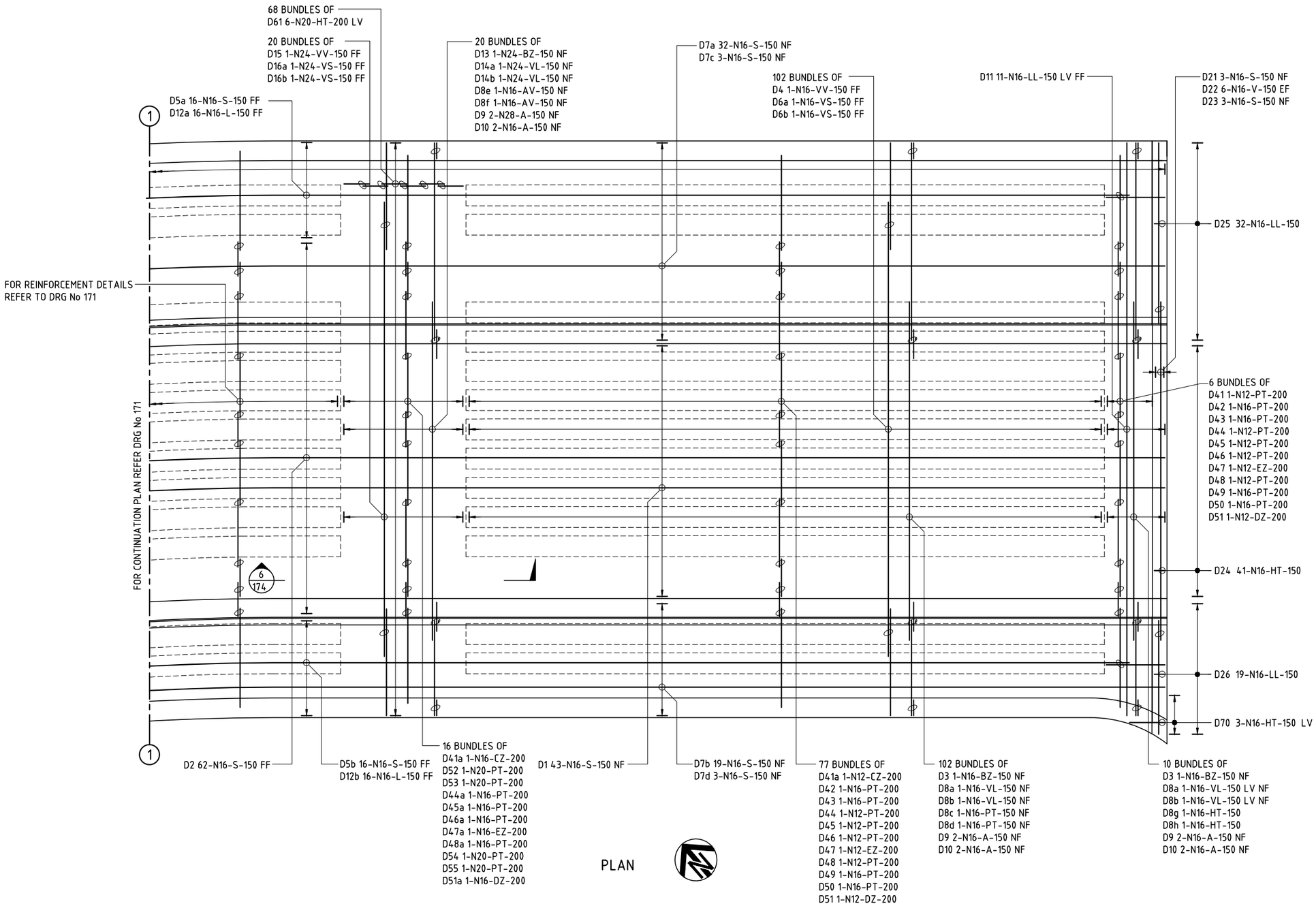
SCALES AT A1 SIZE DRAWING: 0 1000 2000mm; 500 250; 1:50

DESIGNER
SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT
FRASERS PROPERTY

PROJECT TITLE
SHRIMPTON CREEK BRIDGE
DECK REINFORCEMENT
SHEET A

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-171	A



PLAN

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories:
Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

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GENERAL NOTES

FOR OTHER GENERAL NOTES RELATED TO THIS DRAWING, REFER TO DRG No 171.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-172.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:35:26

EXTERNAL REFERENCE FILES:
X_30013046_SMEC_A1
X_BRG_PLAN
X_DES_MAIN

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 1000 2000mm; 500 250; 1:50

DESIGNER
SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

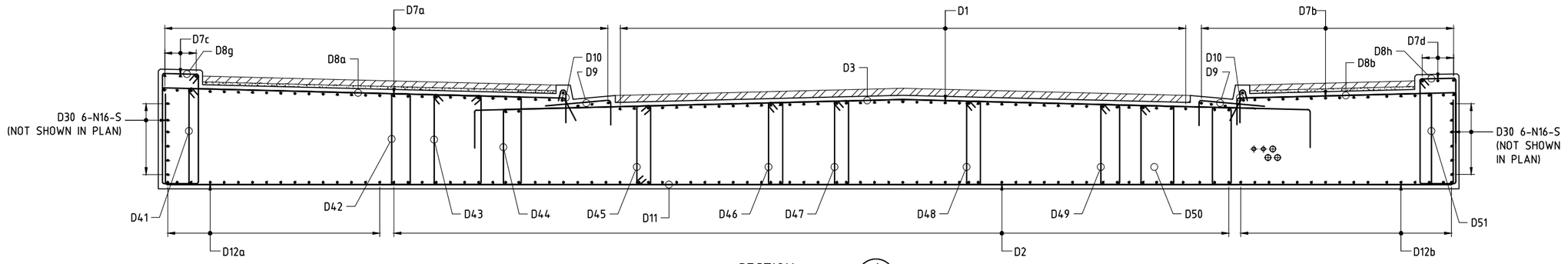
CLIENT
FRASERS PROPERTY

PROJECT TITLE
SHRIMPTON CREEK BRIDGE

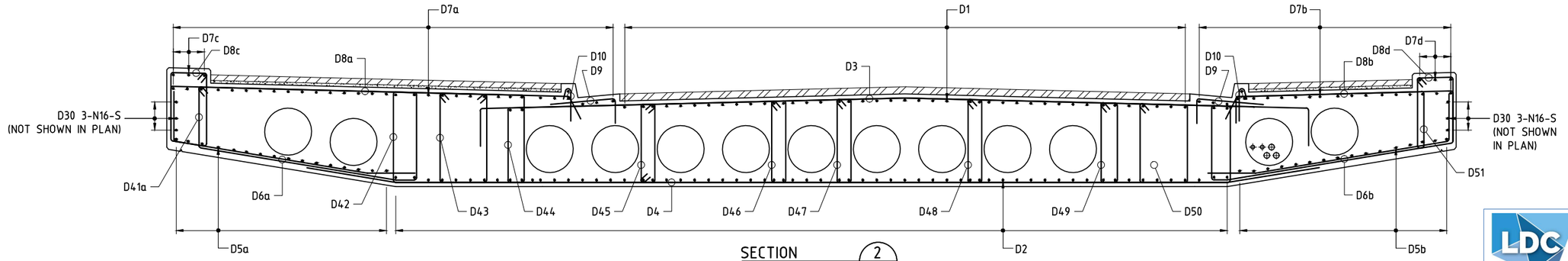
DECK REINFORCEMENT
SHEET B

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-172	A

A1
150 mm ON ORIGINAL
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



SECTION 1
SCALE 1:25
171



SECTION 2
SCALE 1:25
171

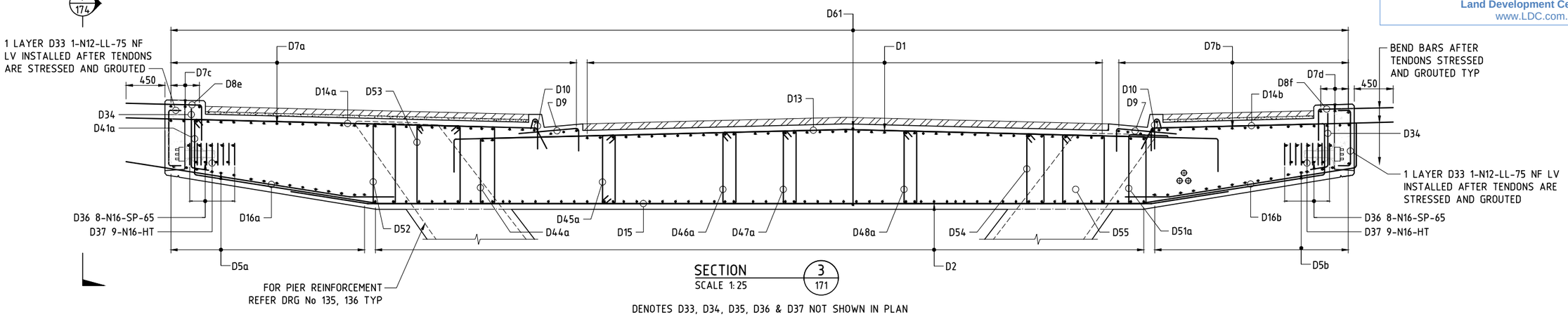
These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

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7
174



SECTION 3
SCALE 1:25
171

DENOTES D33, D34, D35, D36 & D37 NOT SHOWN IN PLAN

GENERAL NOTES

FOR OTHER GENERAL NOTES RELATED TO THIS DRAWING, REFER TO DRG No 171.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-173.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:35:55

EXTERNAL REFERENCE FILES: X_30013046_SMEC_A1, X_BRG_SEC

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 500 1000mm; 250 125 1:25

DESIGNER: SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

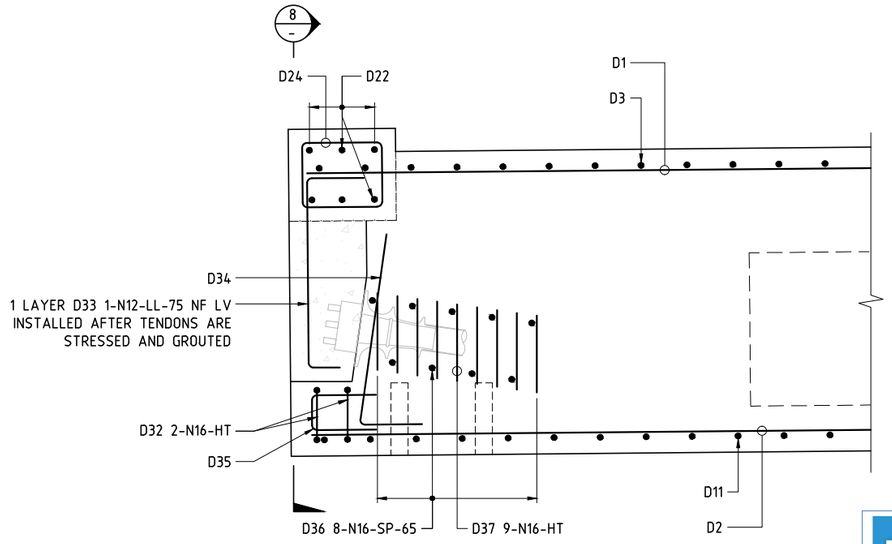
CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE

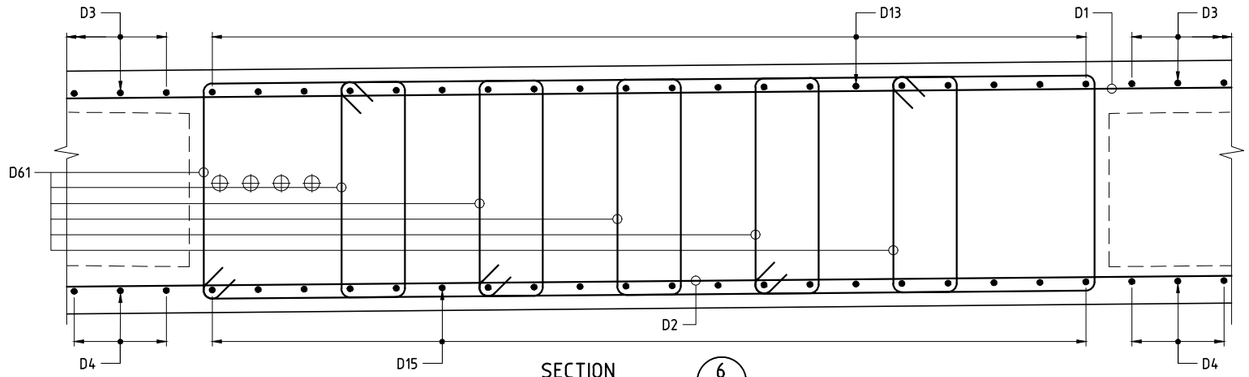
DECK REINFORCEMENT
SHEET C

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-173	A

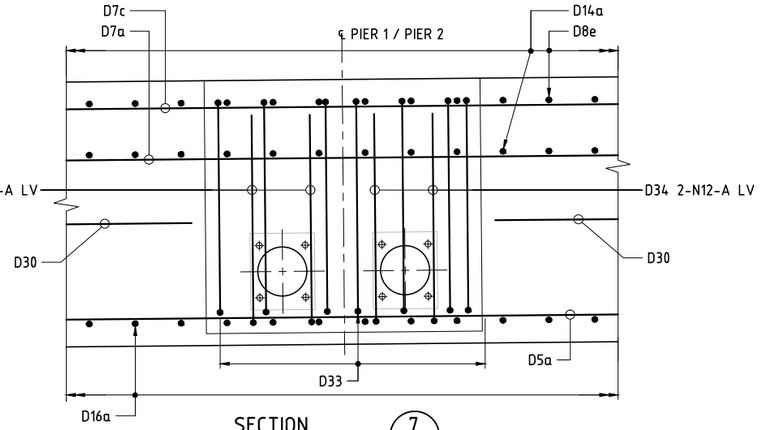
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A1
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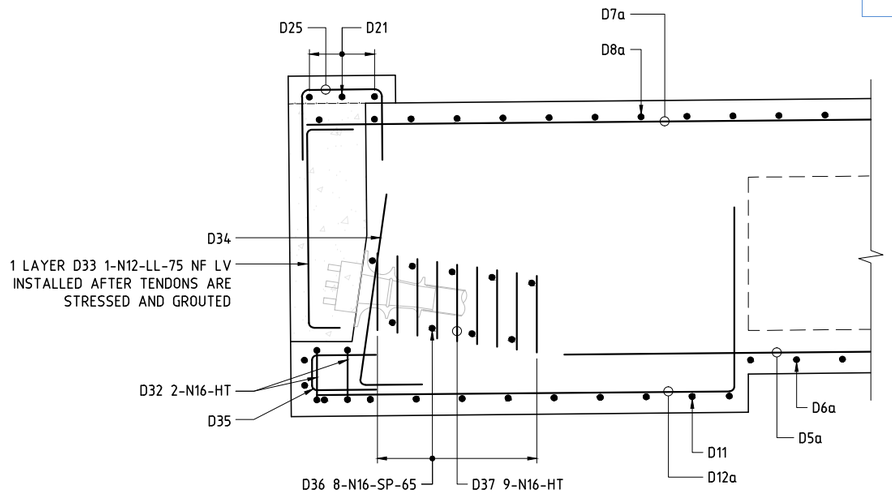
SECTION 4 / 171
SCALE 1:10
SHEAR STIRRUPS NOT SHOWN FOR CLARITY



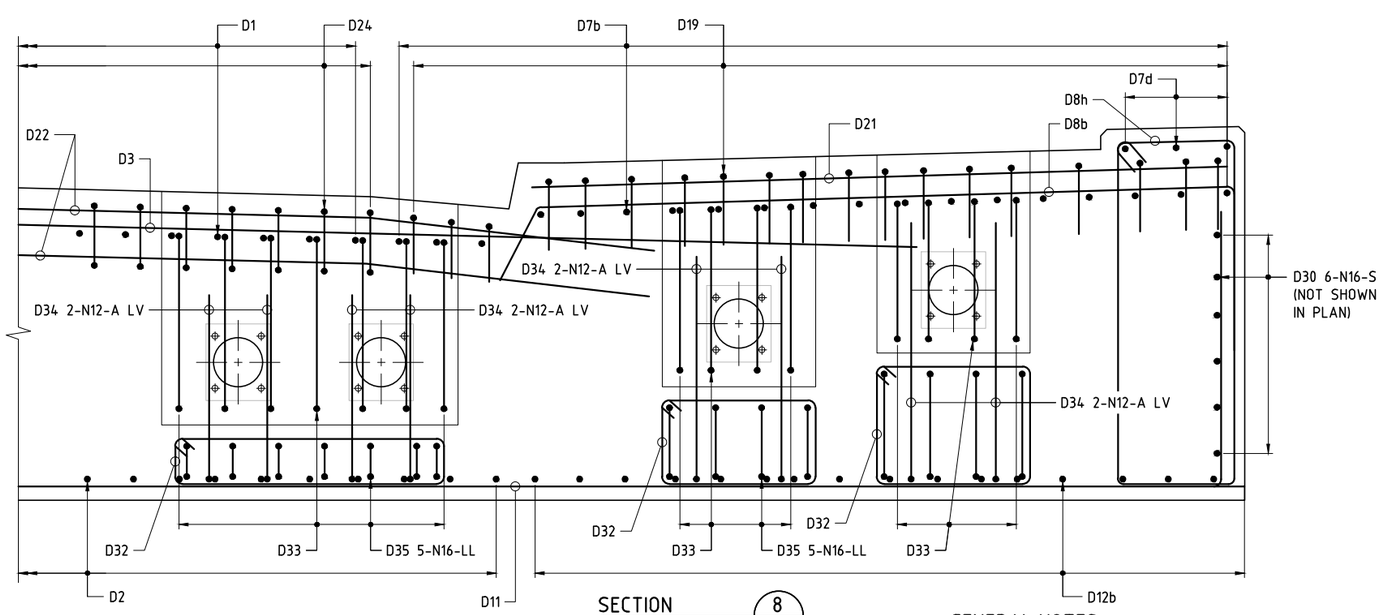
SECTION 6 / 172
SCALE 1:10



SECTION 7 / 173
SCALE 1:10



SECTION 5 / 171
SCALE 1:10
SHEAR STIRRUPS NOT SHOWN FOR CLARITY



SECTION 8 / -
SCALE 1:10

GENERAL NOTES

FOR OTHER GENERAL NOTES RELATED TO THIS DRAWING, REFER TO DRG No 171.

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
www.LDC.com.au

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-174.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:36:24

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 100 200 300 400 500mm; 100 50 1:10

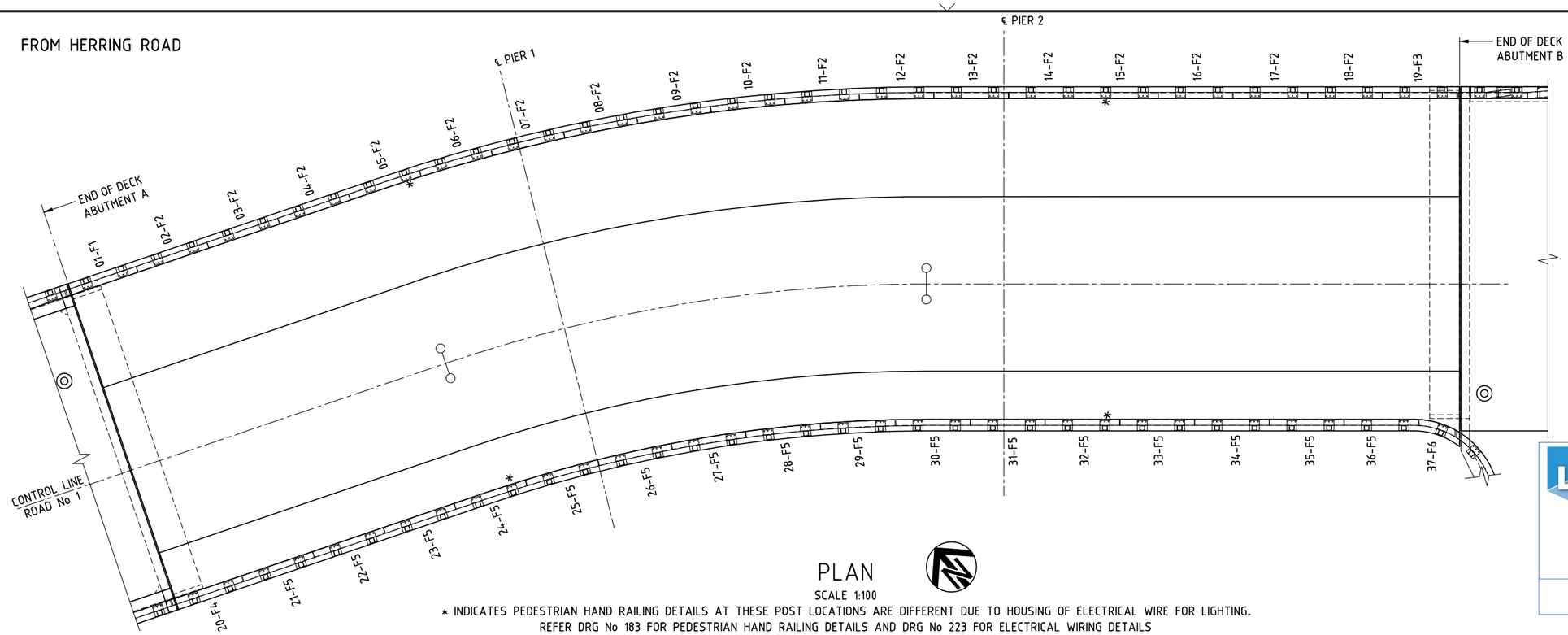
DESIGNER
SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE
DECK REINFORCEMENT
SHEET D

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-174	A

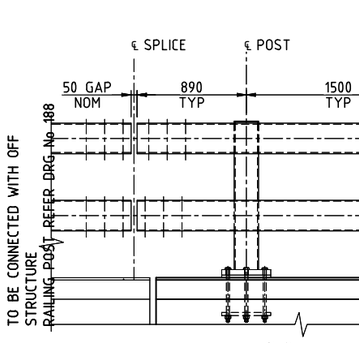
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A1
X_30013046_SMEC_A1



PLAN

SCALE 1:100

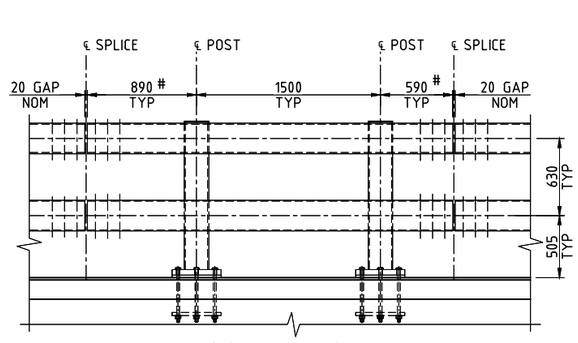
∗ INDICATES PEDESTRIAN HAND RAILING DETAILS AT THESE POST LOCATIONS ARE DIFFERENT DUE TO HOUSING OF ELECTRICAL WIRE FOR LIGHTING.
REFER DRG No 183 FOR PEDESTRIAN HAND RAILING DETAILS AND DRG No 223 FOR ELECTRICAL WIRING DETAILS



INSIDE ELEVATION PANEL F1 (F4)

SCALE 1:25

(CYCLIST/PEDESTRIAN RAILS NOT SHOWN)

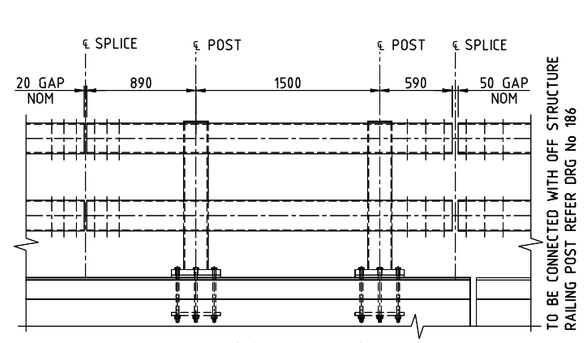


INSIDE ELEVATION PANEL F2 (F5 SIMILAR)

SCALE 1:25

(CYCLIST/PEDESTRIAN RAILS NOT SHOWN)

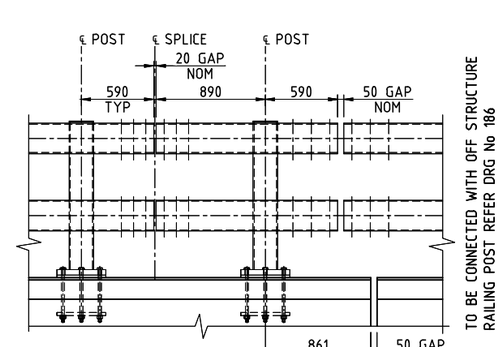
# INDICATES THE HANDRAIL DIMENSION ALONG THE CURVE MEASURED INNER FACE OF THE RAIL)



INSIDE ELEVATION PANEL F3

SCALE 1:25

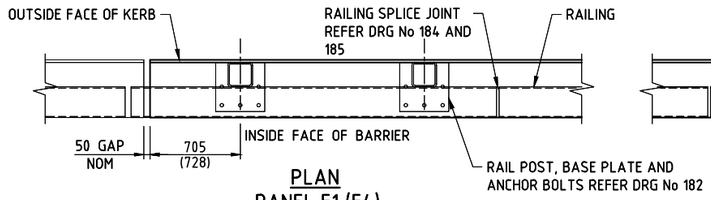
(CYCLIST/PEDESTRIAN RAILS NOT SHOWN)



INSIDE ELEVATION PANEL F6

SCALE 1:25

(CYCLIST/PEDESTRIAN RAILS NOT SHOWN)

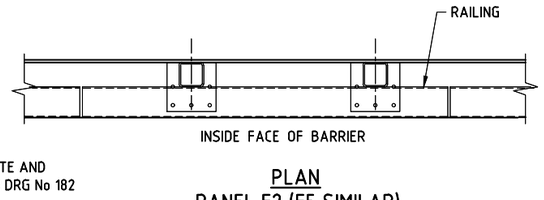


PLAN PANEL F1 (F4)

SCALE 1:25

(F1-1 No REQUIRED)

(F4-1 No REQUIRED)

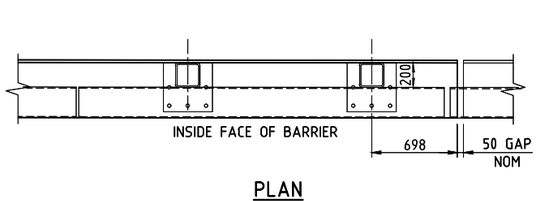


PLAN PANEL F2 (F5 SIMILAR)

SCALE 1:25

(F2-17 No REQUIRED)

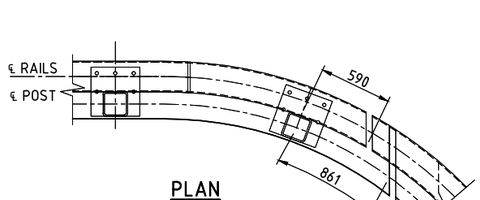
(F5-16 No REQUIRED)



PLAN PANEL F3

SCALE 1:25

(F3-1 No REQUIRED)



PLAN PANEL F6

SCALE 1:25

(F6-1 No REQUIRED)

GENERAL NOTES

FOR GENERAL NOTES RELATED TO THIS SHEET, REFER DRG No 182.
ELEVATIONS DRAWN ARE ALONG THE LENGTH.

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
www.LDC.com.au

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-181.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:36:54

EXTERNAL REFERENCE FILES: X_30013046_SMEC_A1, X_DES_MAIN, X_BRG_PLAN

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 1000 2000 3000 4000 5000mm; 1000 500; 1:100

DESIGNER
SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

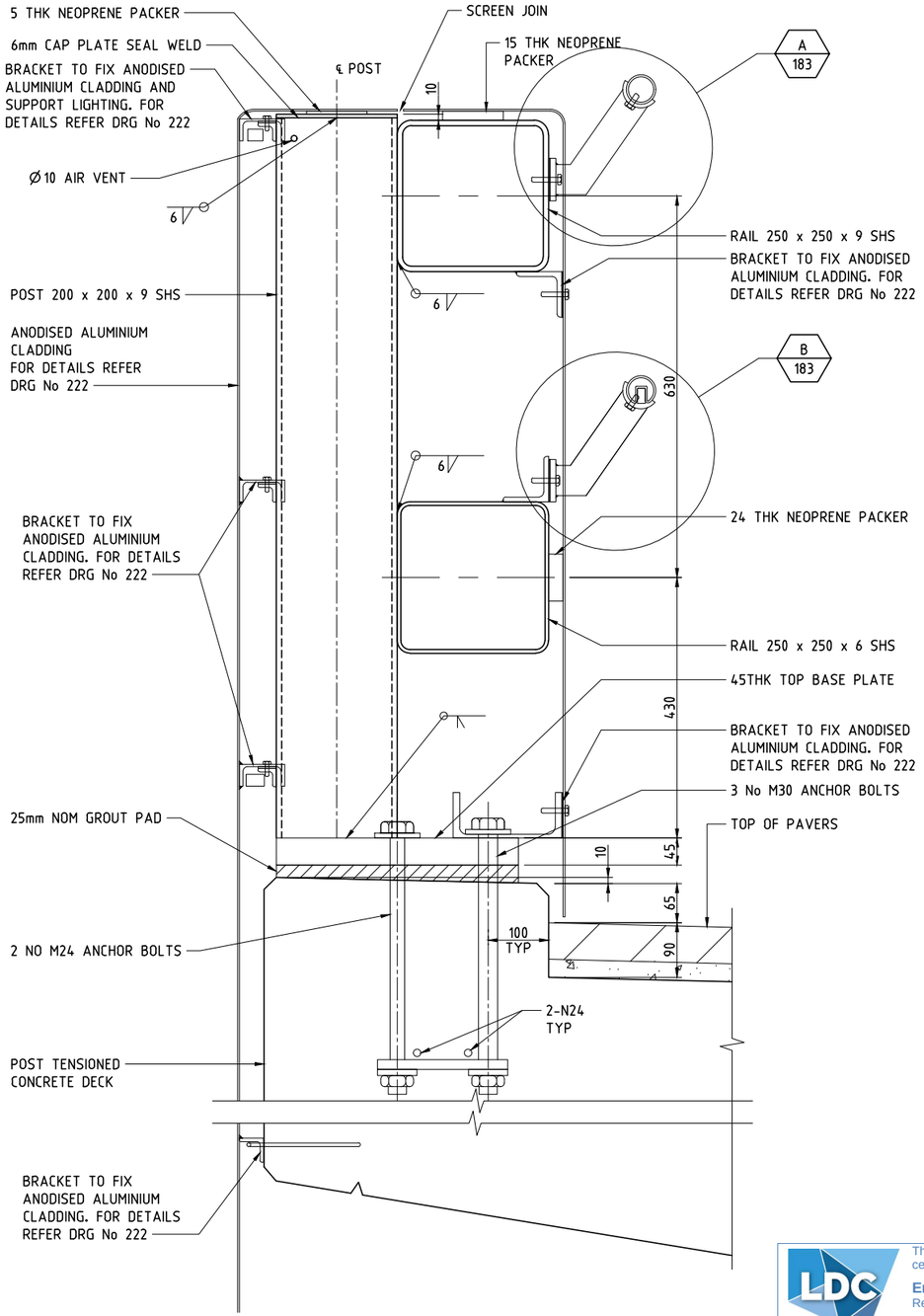
CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE

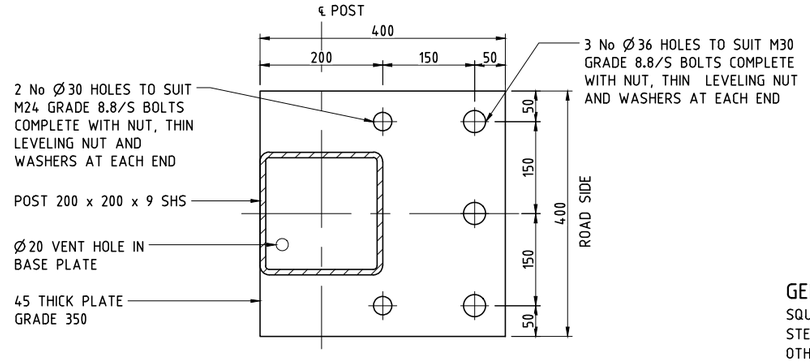
ON STRUCTURE BARRIER DETAILS SHEET A

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-181	A

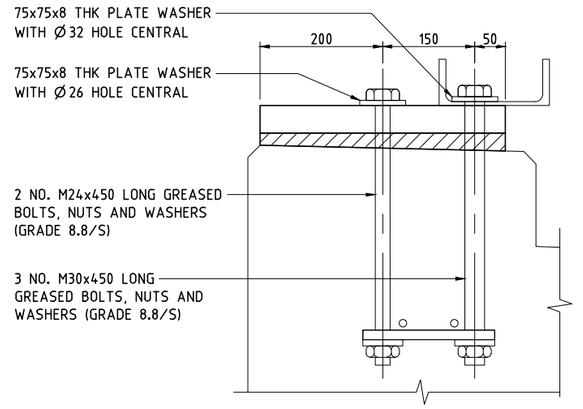
150 mm ON ORIGINAL
A1



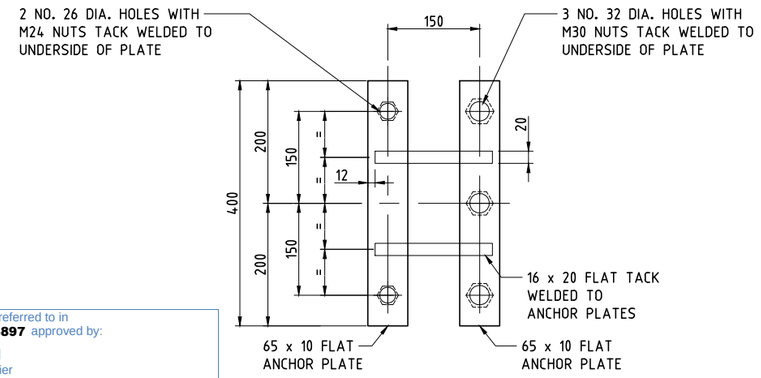
TYPICAL BARRIER SECTION
SCALE 1:5



TOP OF BASE PLATE
SCALE 1:5
(PFC NOT SHOWN FOR CLARITY)



RAIL POST ANCHOR BOLTS DETAIL
SCALE 1:5



RAIL POST ANCHOR PLATE ASSEMBLY
SCALE 1:5

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
Land Development Certificates
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GENERAL NOTES

SQUARE HOLLOW SECTIONS SHALL BE GRADE C350LO TO AS 1163.
STEEL PLATE SHALL BE GRADE 350 TO AS/NZS3678 UNLESS NOTED OTHERWISE.
BOLTING CATEGORY SHALL BE 8.8/S IN ACCORDANCE WITH AS 5100.6.
WELDING SYMBOLS COMPLY WITH AS 1101.3.
ALL WELDING SHALL CONFORM TO THE REQUIREMENTS OF AS/NZS 1554.1.
THE WELD CATEGORY SHALL BE SP IN ACCORDANCE WITH AS/NZS 1554.1.
ALL EXPOSED BUTT WELDS SHALL BE GROUND FLUSH.
EDGES TO BE PROTECTIVE TREATED SHALL BE ROUNDED TO A RADIUS OF 1.5mm UNLESS SPECIFIED OTHERWISE.
ALL STEEL COMPONENTS SHALL BE HOT DIP GALVANISED AFTER FABRICATION.
BOLTS, NUTS AND WASHERS SHALL BE HOT DIP GALVANISED IN ACCORDANCE WITH AS 1214.
NUTS SHALL BE TAPPED TO SUIT GALVANISED THREADS AND OILED FOR PROTECTION.
THE LONGITUDINAL SEAM IN SHS MEMBERS SHALL BE ON THE UNDERSIDE OF THE RAILS.
RAILING POSTS SHALL BE ALIGNED PERPENDICULAR TO THE DECK.
RAILS SHALL FOLLOW LONGITUDINAL SLOPE OF BRIDGE.
HIGH-STRENGTH STEEL CUP HEAD BOLTS SHALL BE PROPERTY CLASS 8.8 WITH MATERIAL AND MECHANICAL PROPERTIES IN ACCORDANCE WITH AS/NZS 1252.
DIMENSION AND SHAPE FOR CUP HEAD BOLTS SHALL BE IN ACCORDANCE WITH AS/NZS 1390.
PRIOR TO INSTALLATION THE SOFFIT OF THE POST BASE PLATES AND THE SURFACE OF THE SLOTTED HOLES SHALL BE COATED WITH A TWO PACK EPOXY PAINT WITH A MINIMUM DRY FILM THICKNESS OFF 100mm.
PTFE SPACER SHALL BE 100% VIRGIN POLYTETRAFLUOROETHYLENE CONFORMING TO ISO 1300-1 GRADE 1 AND SHALL BE UNFILLED, NOT LUBRICATED AND NOT DIMPLED.
CONNECTORS TO BE TRIAL FITTED BEFORE GALVANISING TO ENSURE LOOSE FIT.
SEAM WELD INSIDE SHS TO BE GROUND OFF FOR 250mm MINIMUM FROM END OF RAIL.
PREPARE SHOP DRAWINGS AND SUBMIT COPIES OF EACH FOR ENGINEER'S REVIEW OF GENERAL COMPLIANCE WITH DESIGN CONCEPT. SHOP DRAWINGS TO SHOW RELEVANT DETAILS OF EACH ASSEMBLY, COMPONENT AND CONNECTION, TOGETHER WITH INFORMATION RELATIVE TO FABRICATION AND ERECTION, INCLUDING IDENTIFICATION, STEEL TYPE AND GRADE, DIMENSIONS OF ITEMS, LOCATION, TYPE AND SIZE OF WELDS OR BOLTS, WELD CATEGORIES AND BOLTING CATEGORIES, SURFACE PREPARATION METHODS AND COATING SYSTEM, VENT/DRAIN HOLES FOR HOP DIP GALVANISING, PROPOSED JOINTS IN STEEL MEMBERS, ETC.
THE GROUT USED TO CONSTRUCT MORTAR PADS AND FILL FORMED RECESSES SHALL BE SHRINKAGE COMPENSATED HIGH FLOW CEMENTITIOUS GROUT. MINIMUM COMPRESSIVE STRENGTH OF GROUT SHALL BE 40MPa.

* DENOTES NOMINAL DIMENSION ONLY. AFTER GALVANISING, HOLES SHALL PROVIDE TAP-IN FIT FOR M24 GALVANISED BOLTS.
† DENOTES APPROXIMATE DIMENSION. RAIL CONNECTOR SHALL BE SLIDING FIT INSIDE THE RAILS AFTER GALVANISING AND FITTING OF PINS.

FOR NOTES RELATED TO STAINLESS STEEL & ALUMINIUM REFER DRG No 223.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-182.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:37:24

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SMEC_A1 X_BRG_SEC	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 100 200mm; 50 25 1:5

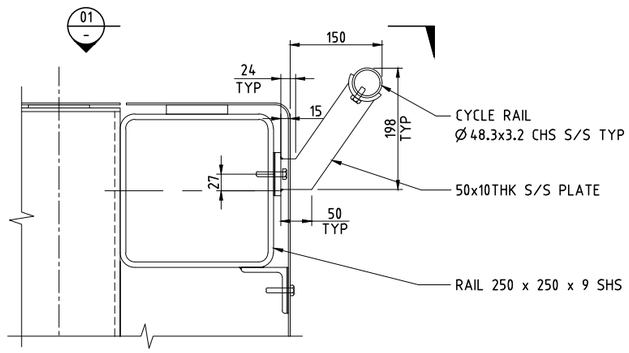
DESIGNER: SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

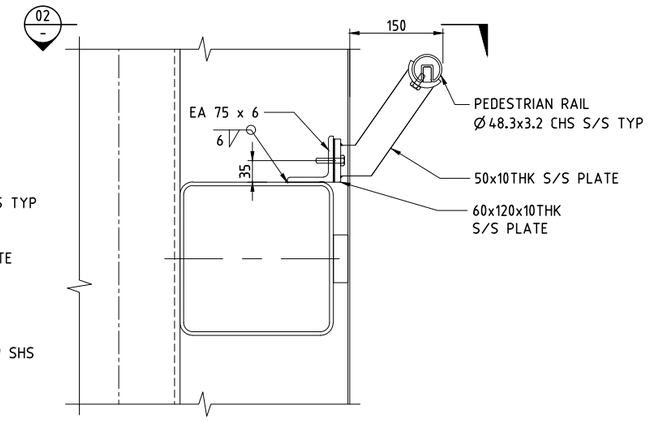
PROJECT TITLE: SHRIMPTON CREEK BRIDGE
ON STRUCTURE BARRIER DETAILS
SHEET B

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-182	B

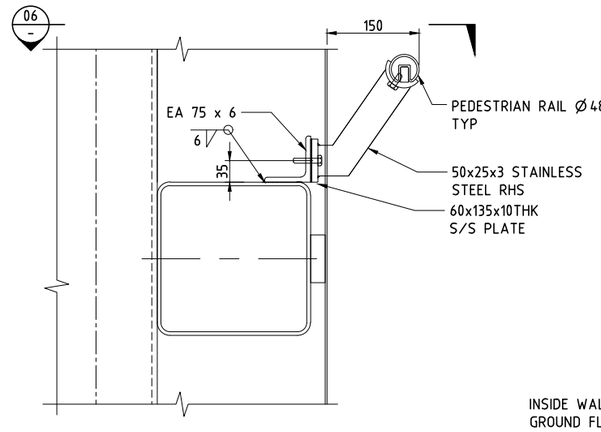
150 mm ON ORIGINAL
A1



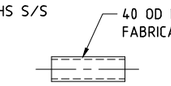
DETAIL A
SCALE 1:5
182



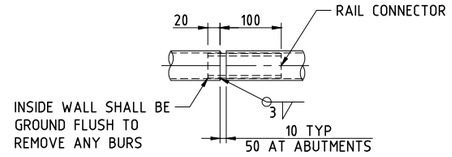
DETAIL B
SCALE 1:5
182



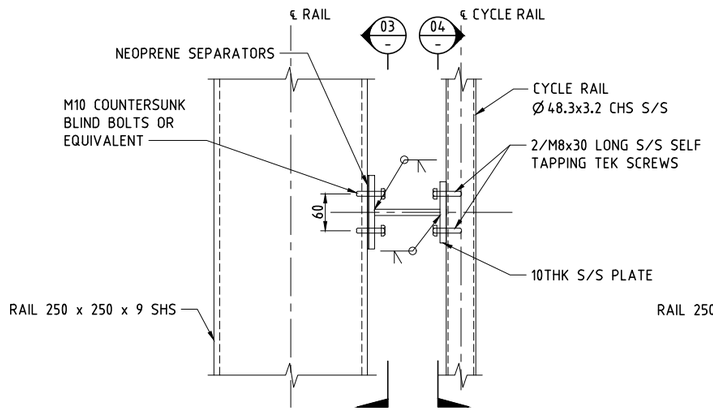
PEDESTRIAN HAND RAIL DETAILS FOR
POST INDICATED WITH * IN DRG NO 181
SCALE 1:5



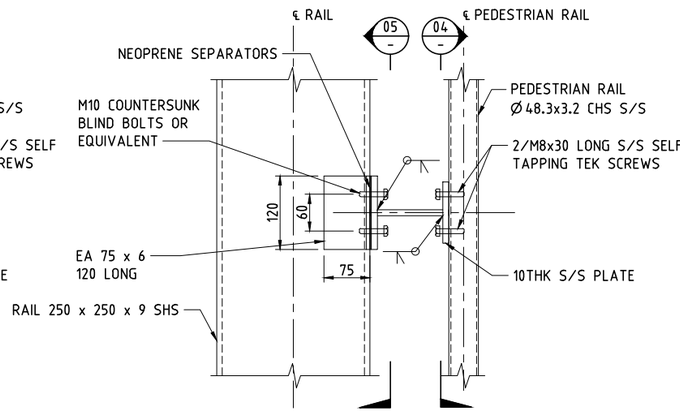
RAIL CONNECTOR
SCALE 1:5



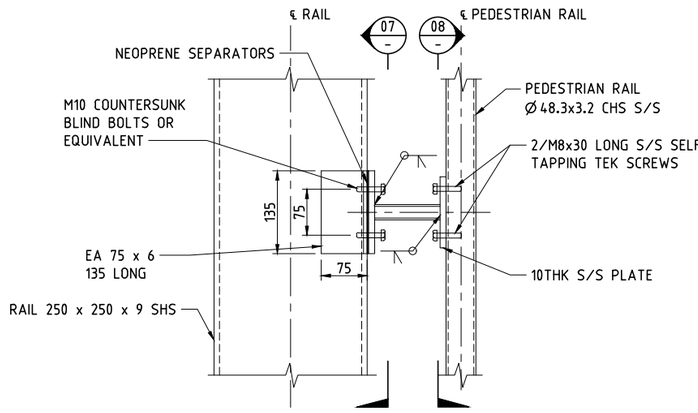
RAIL CONNECTOR ASSEMBLY
SCALE 1:5



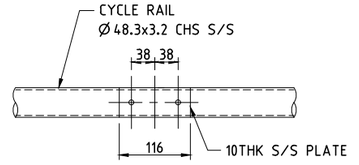
VIEW 1
SCALE 1:5
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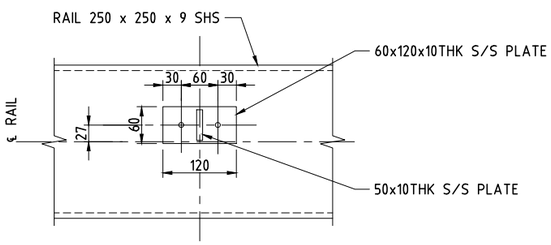
VIEW 2
SCALE 1:5
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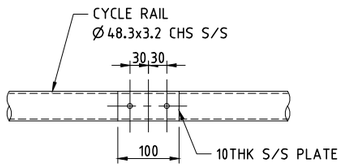
VIEW 6
SCALE 1:5
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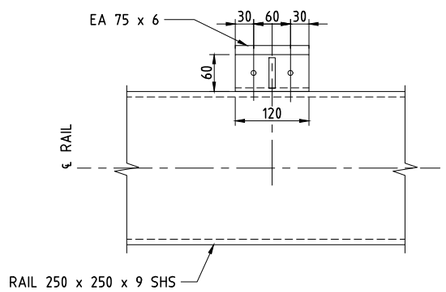
SECTION 8
SCALE 1:5
-



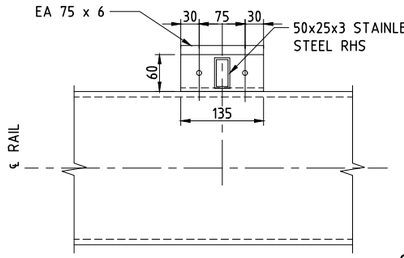
SECTION 3
SCALE 1:5
-



SECTION 4
SCALE 1:5
-



SECTION 5
SCALE 1:5
-



SECTION 7
SCALE 1:5
-

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
Land Development Certificates
www.LDC.com.au

GENERAL NOTES

FOR GENERAL NOTES RELATED TO THIS DRAWING, REFER DRG No 182.
S/S INDICATES STAINLESS STEEL.
CONTRACTOR TO PROPOSE THE PEDESTRIAN RAIL SPLICING DETAILS.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-183.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:37:53

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SHEC_A1 X_BRG_SEC	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 100 200mm; 50 25; 1:5

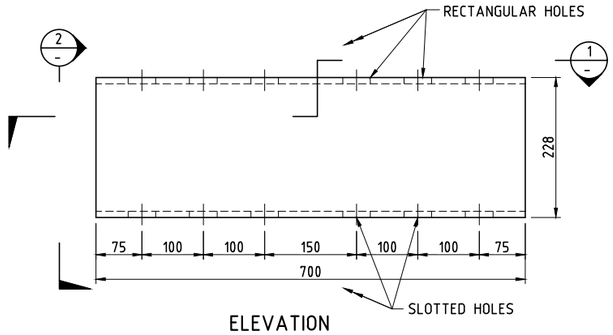
DESIGNER: SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

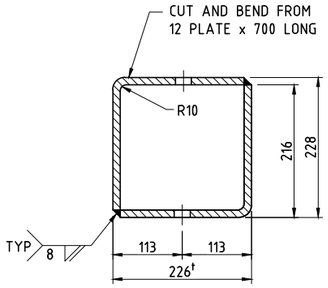
PROJECT TITLE: SHRIMPTON CREEK BRIDGE
ON STRUCTURE BARRIER DETAILS
SHEET C

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-183	B

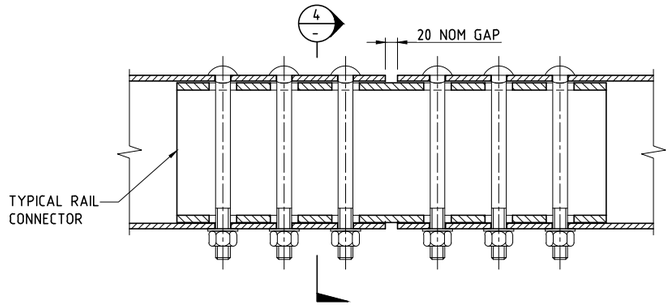
150 mm ON ORIGINAL
A1



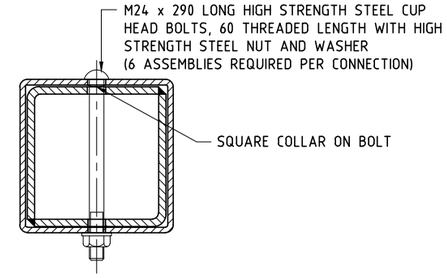
ELEVATION
SCALE 1:5



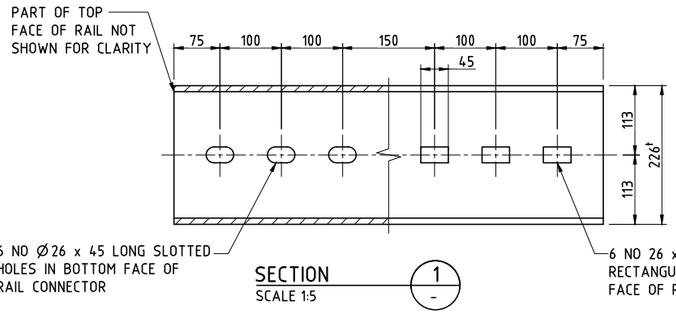
VIEW 2
SCALE 1:5



SECTION 3
SCALE 1:5



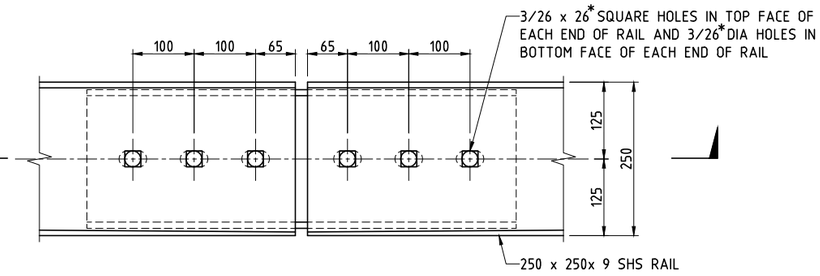
SECTION 4
SCALE 1:5



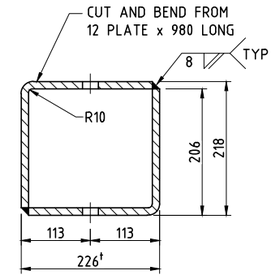
SECTION 1
SCALE 1:5

TYPICAL RAIL CONNECTOR

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
Land Development Certificates
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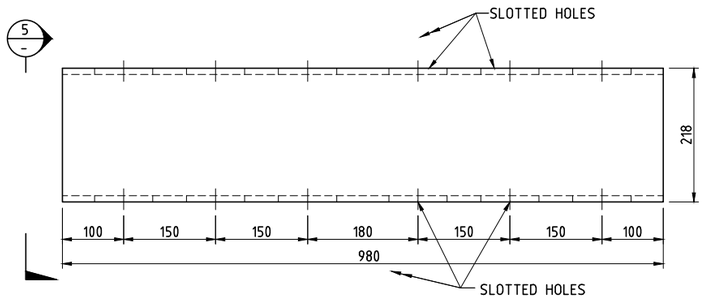
PLAN
ASSEMBLY OF TYPICAL RAIL CONNECTION
SCALE 1:5



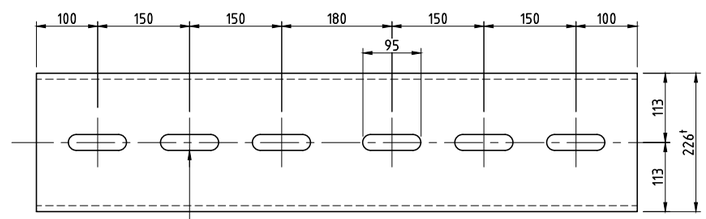
VIEW 5
SCALE 1:5

DETAIL AT TYPICAL CONNECTION

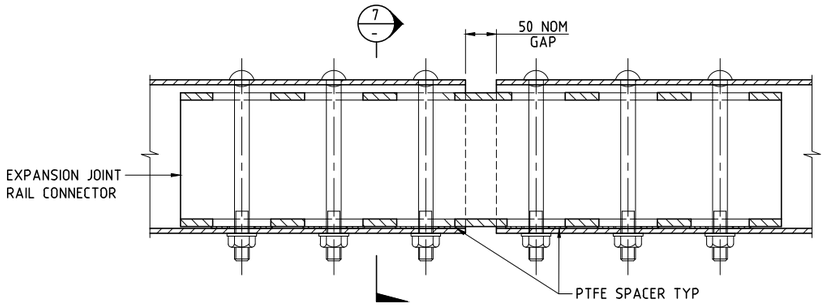
(FOR 250 x 250 x 9 SHS RAIL)



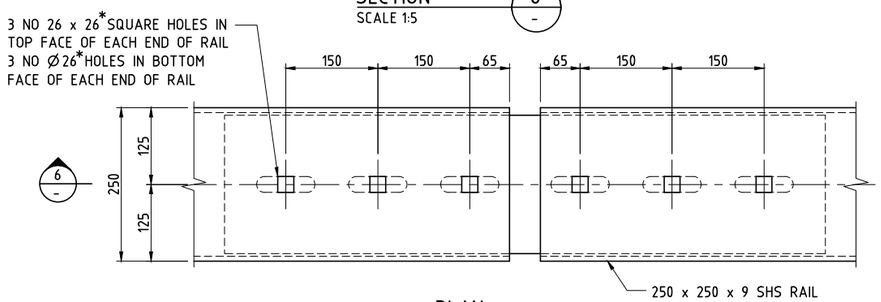
ELEVATION
SCALE 1:5



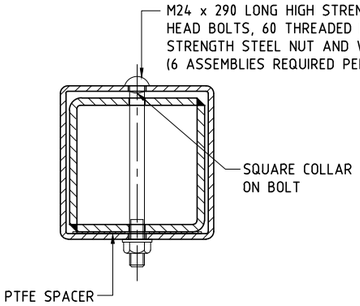
PLAN
EXPANSION JOINT RAIL CONNECTOR
SCALE 1:5



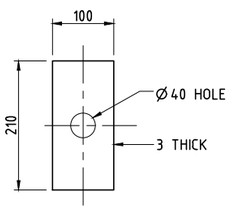
SECTION 6
SCALE 1:5



PLAN
ASSEMBLY AT EXPANSION JOINT RAIL CONNECTION
SCALE 1:5



SECTION 7
SCALE 1:5



PTFE SPACER
SCALE 1:5

DETAIL AT EXPANSION JOINT CONNECTION

(FOR 250 x 250 x 9 SHS RAIL)

GENERAL NOTES

FOR GENERAL NOTES RELATED TO THIS DRAWING, REFER DRG No 182.

DRAWING FILE LOCATION / NAME	PLOT DATE	TIME
V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-184.dwg	14 Jun 2022	17:38:22

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SMEC_A1	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 100 200mm; 50 25 1:5

DESIGNER: SMEC — Member of the Surbana Jurong Group © ABN 47 065 475 149 — LEVEL 5, 20 BERRY STREET NORTH SYDNEY NSW 2060 — SMEC PROJECT No 30013046

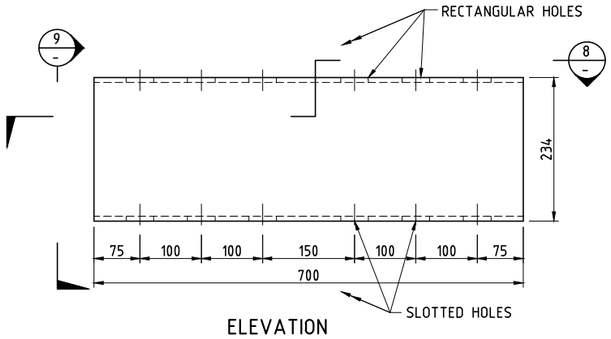
CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE

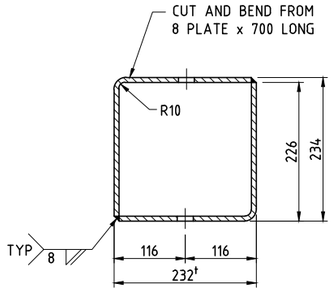
ON STRUCTURE BARRIER DETAILS
SHEET D

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-184	A

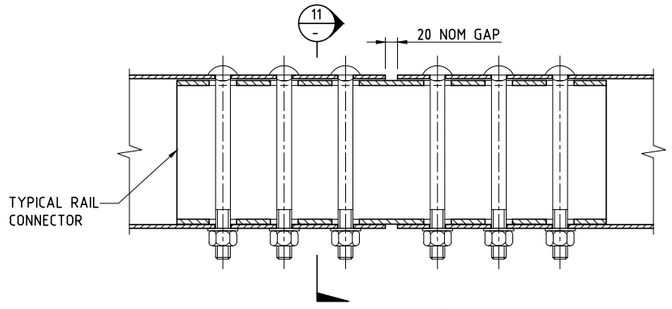
150 mm ON ORIGINAL
A1



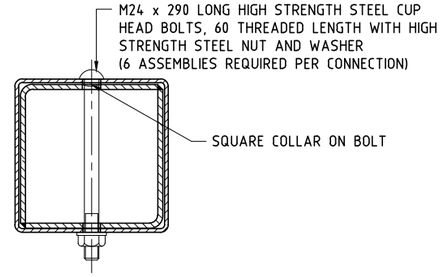
ELEVATION
SCALE 1:5



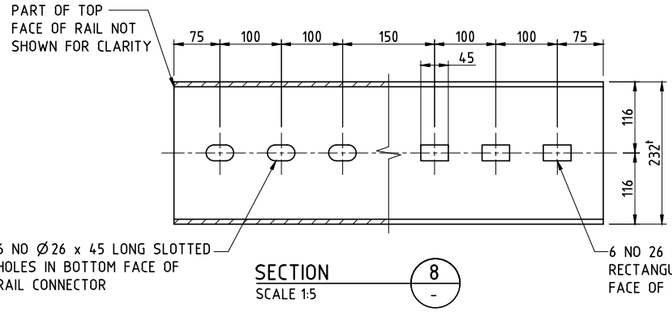
VIEW 9
SCALE 1:5



SECTION 10
SCALE 1:5



SECTION 11
SCALE 1:5



SECTION 8
SCALE 1:5

TYPICAL RAIL CONNECTOR

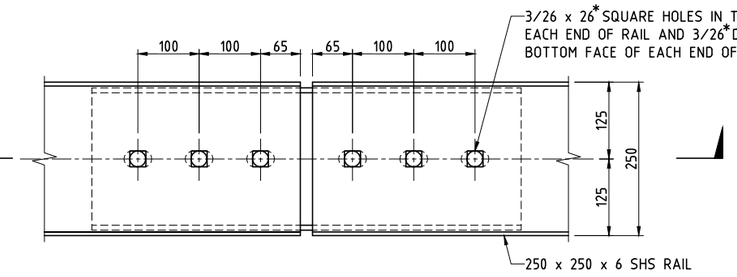
These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

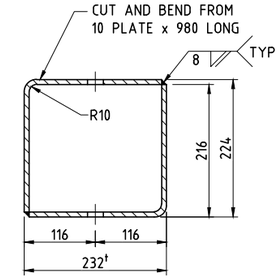
Registration No: BDC 2416

Categories:
Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

Land Development Certificates
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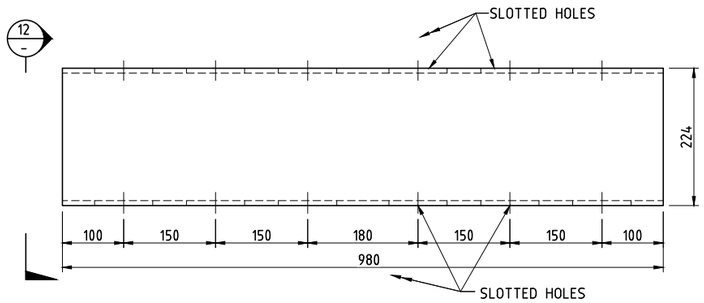
PLAN
ASSEMBLY OF TYPICAL RAIL CONNECTION
SCALE 1:5



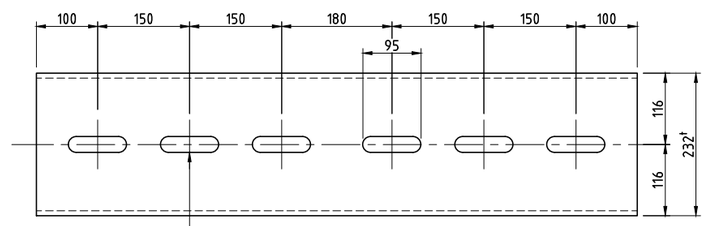
VIEW 12
SCALE 1:5

DETAIL AT TYPICAL CONNECTION

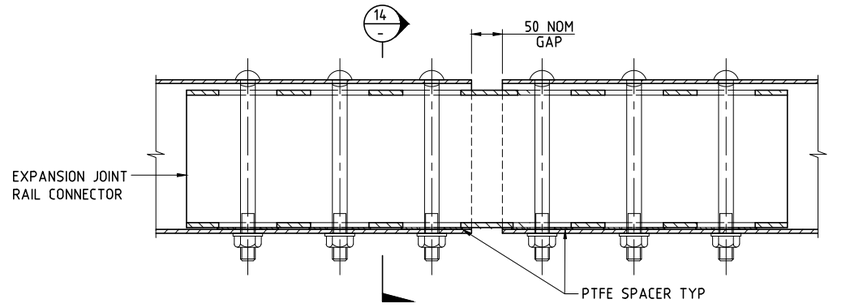
(FOR 250 x 250 x 6 SHS RAIL)



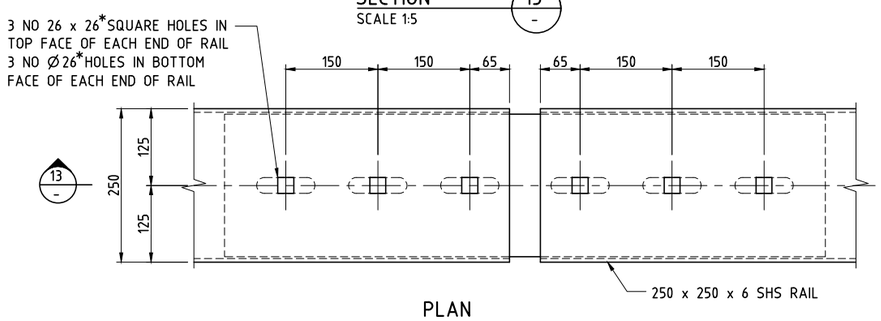
ELEVATION
SCALE 1:5



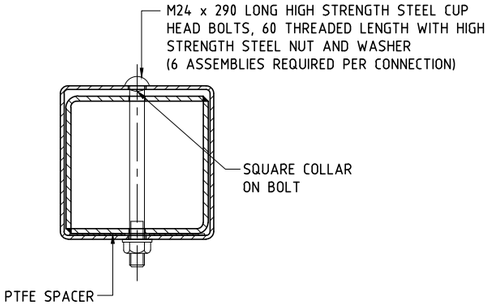
PLAN
EXPANSION JOINT RAIL CONNECTOR
SCALE 1:5



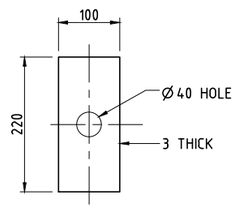
SECTION 13
SCALE 1:5



PLAN
ASSEMBLY AT EXPANSION JOINT RAIL CONNECTION
SCALE 1:5



SECTION 14
SCALE 1:5



PTFE SPACER
SCALE 1:5

DETAIL AT EXPANSION JOINT CONNECTION

(FOR 250 x 250 x 6 SHS RAIL)

GENERAL NOTES

FOR GENERAL NOTES RELATED TO THIS DRAWING, REFER DRG No 182.

DRAWING FILE LOCATION / NAME	PLOT DATE	TIME
V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-185.dwg	14 Jun 2022	17:38:51

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SMEC_A1	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING
0 100 200mm
50 25 1:5

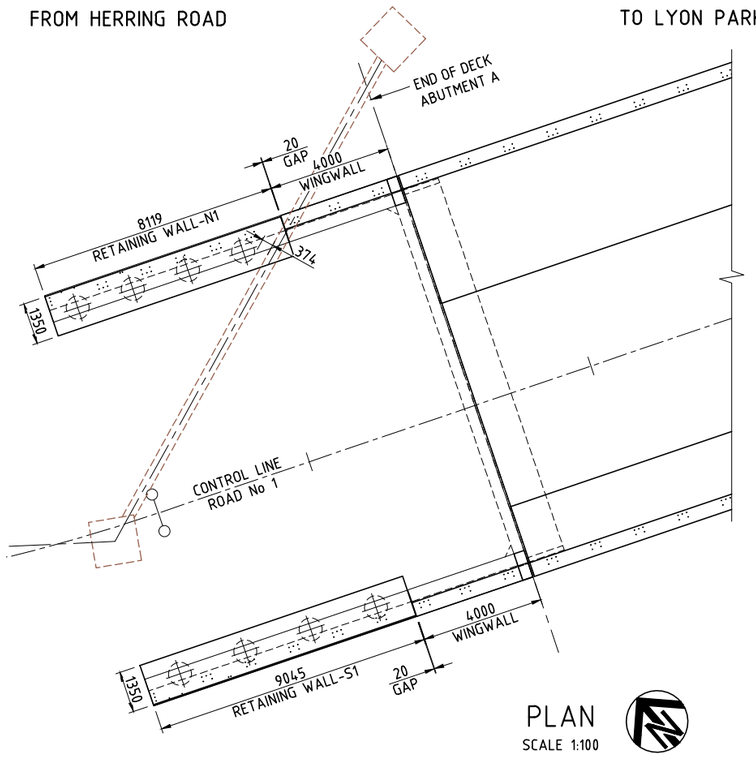
DESIGNER
SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT
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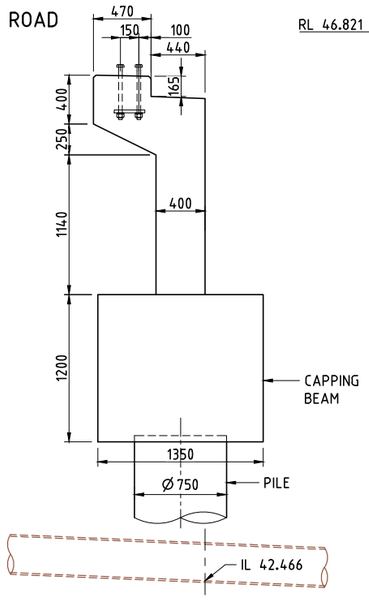
PROJECT TITLE
SHRIMPTON CREEK BRIDGE
ON STRUCTURE BARRIER DETAILS
SHEET E

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-185	A

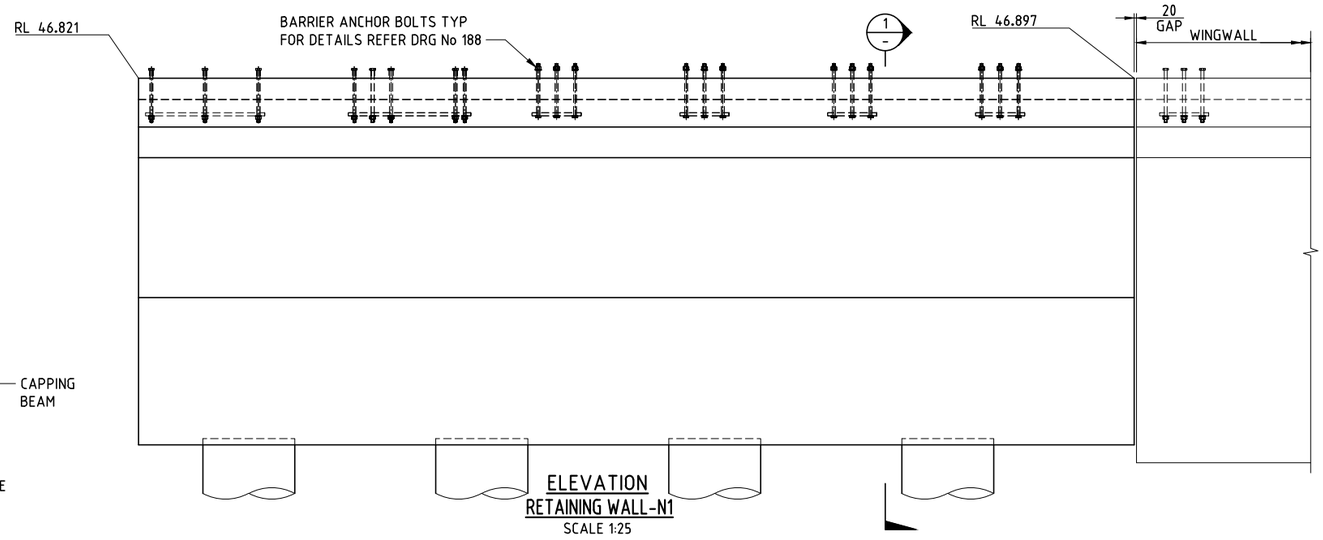
A1
150 mm ON ORIGINAL



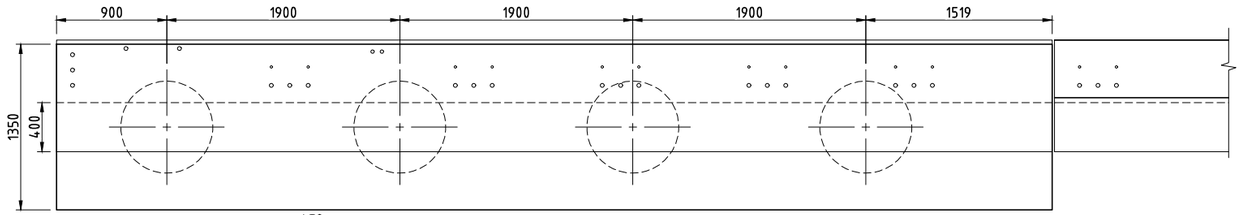
PLAN
SCALE 1:100



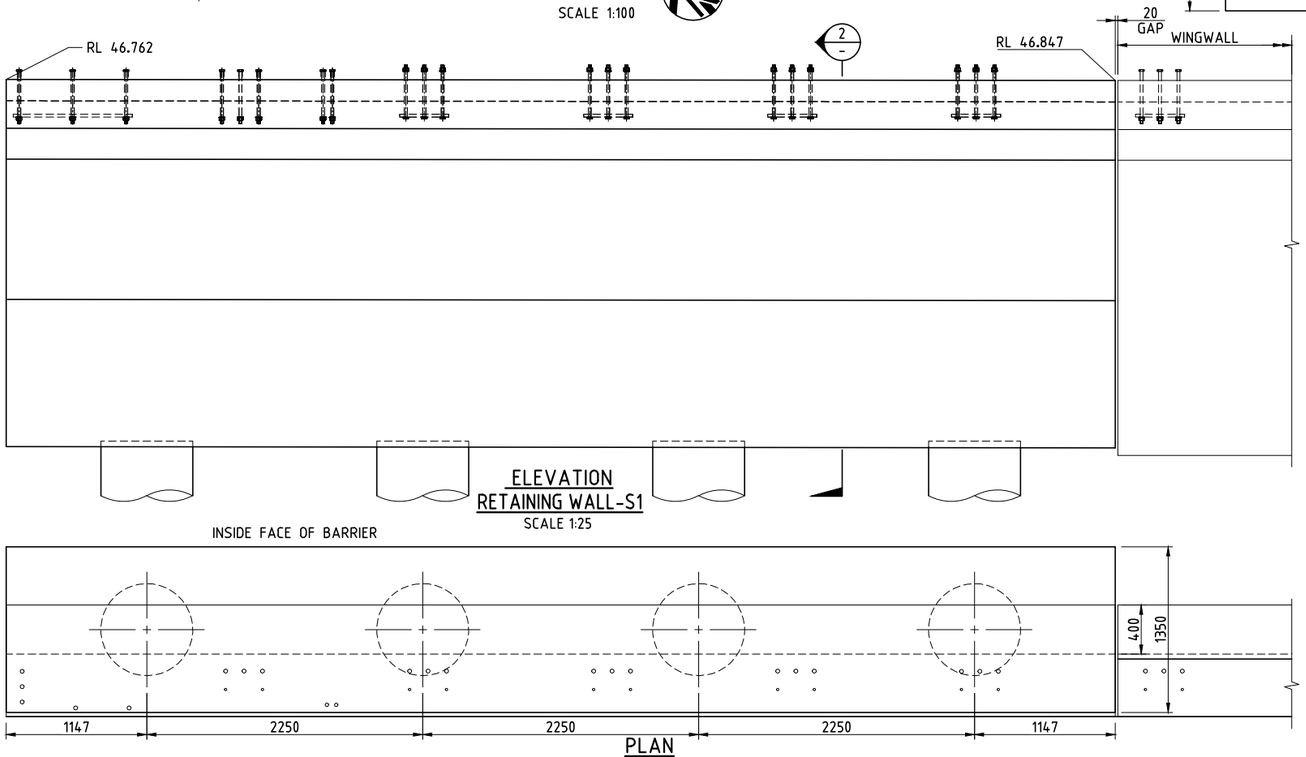
SECTION 2
SCALE 1:25



ELEVATION
RETAINING WALL-N1
SCALE 1:25



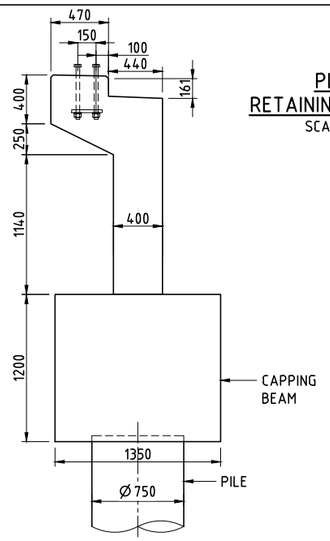
INSIDE FACE OF BARRIER



ELEVATION
RETAINING WALL-S1
SCALE 1:25

INSIDE FACE OF BARRIER

PLAN
RETAINING WALL-S1
SCALE 1:25



SECTION 2
SCALE 1:25

PLAN
RETAINING WALL-N1
SCALE 1:25

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
Land Development Certificates
www.LDC.com.au

GENERAL NOTES

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
CONCRETE EXPOSURE CLASSIFICATION: B1.
MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 40 MPa.
MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF MASS CONCRETE SHALL BE 20 MPa.
CONSTRUCTION JOINT ONLY AT THE LOCATIONS NOMINATED ON THE DRAWINGS.
EXPOSED CONCRETE SURFACE TO HAVE SMOOTH FINISH.

DURABILITY NOTES

MAXIMUM TOTAL BINDER CONTENT SHALL BE KEPT AT 430kg/m^3 WITH TYPE GB CEMENT WITH 65.5% GROUND GRANULAR BLAST-FURNACE SLAG.
USE 36mm THICK PLYWOOD FORMWORK OR PROVIDE INSULATION TO FORMWORK CONSTRUCTED WITH OTHER MATERIALS TO ACHIEVE AN OVERALL SURFACE CONDUCTANCE LESS THAN 3.0W/m^2 °C.
MAXIMUM CONCRETE PLACEMENT TEMPERATURE SHALL NOT EXCEED 27°C.
TOP SURFACE OF THE RETAINNG WALL SHALL BE COVERED WITH 20mm THICK POLYSTYRENE FOAM OR EQUIVALENT AFTER CASTING. THE INSULATION SHALL BE REMOVED AT THE SAME TIME AS THE FORMWORK.
FORMWORK SHALL BE REMOVED NOT EARLIER THAN 216 HOURS.
THERMOCOUPLES SHOULD BE LOCATED WITHIN THE CONCRETE MEMBER BEING CONSTRUCTED. (ONE AT CENTRE AND ONE BELOW SURFACE WITH THE LAST DIMENSION).

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-186.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:39:24

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SMEC_A1 X_DES_MAIN X_BRG_PLAN	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 1000 2000 3000 4000 5000mm; 1000 500; 1:100

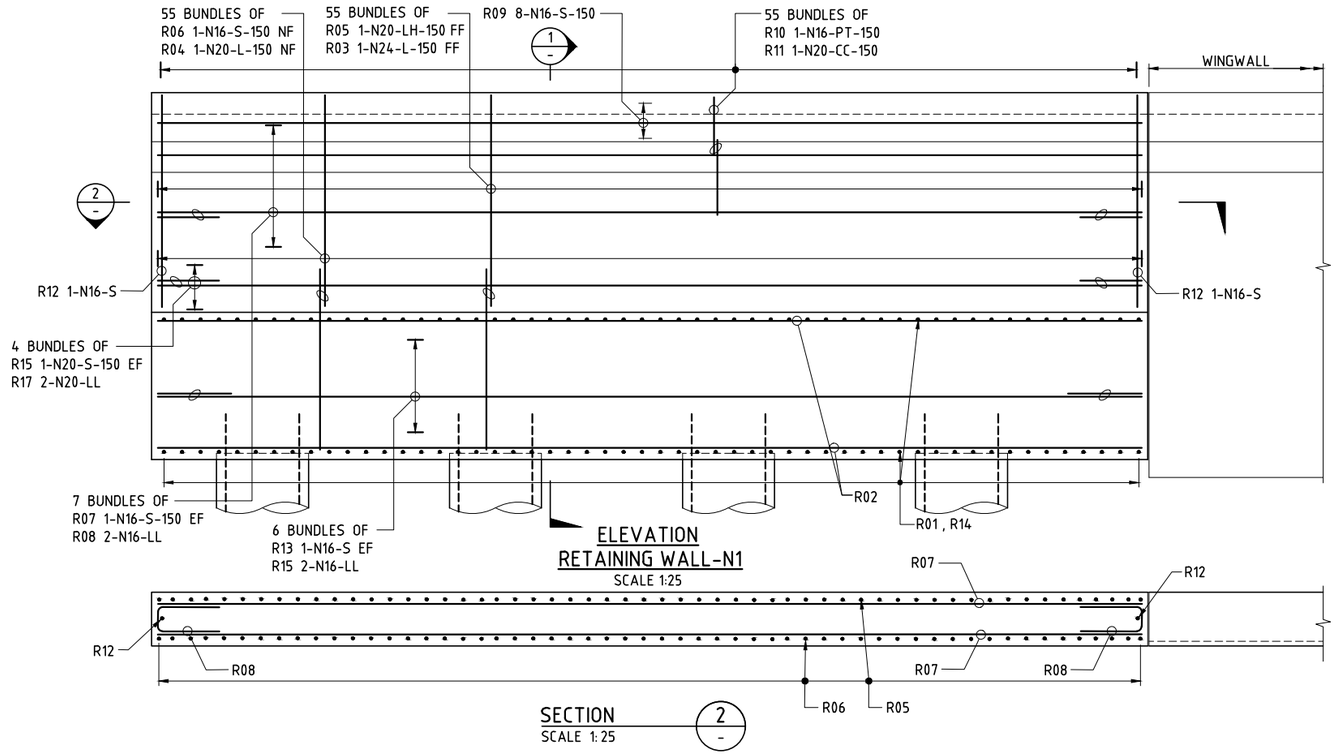
DESIGNER: SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

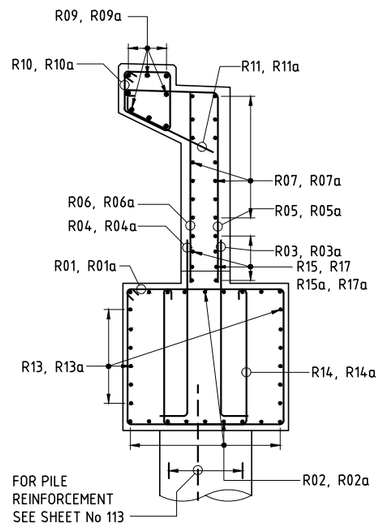
CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE
RETAINING WALL
CONCRETE DETAILS

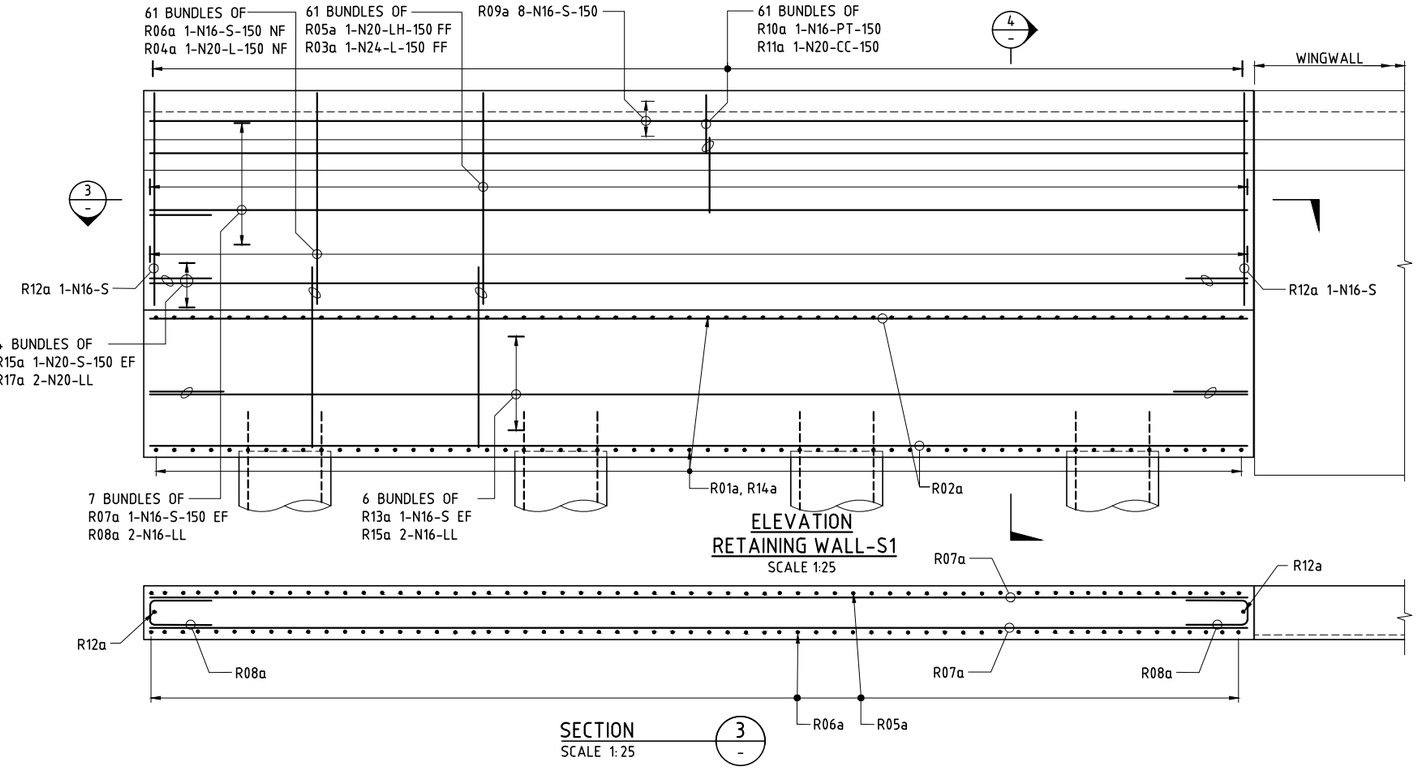
SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-186	A

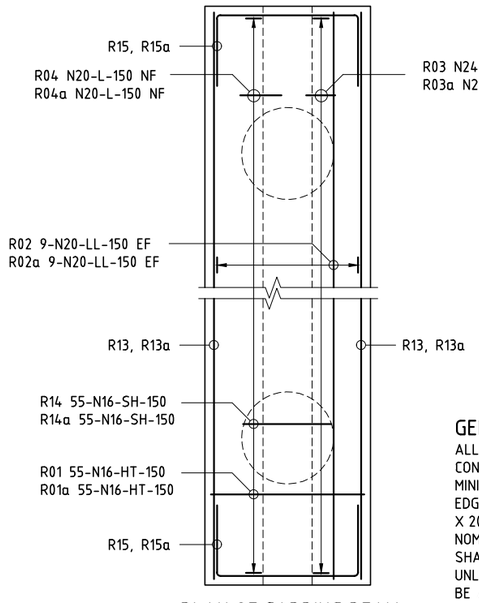
150 mm ON ORIGINAL
A1





SECTION
SCALE 1:25
1 4
SIMILAR BUT
OPPOSITE HAND





PLAN OF CAPPING BEAM
RETAINING WALL
SCALE 1:25

GENERAL NOTES

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
CONCRETE EXPOSURE CLASSIFICATION: B1.
MINIMUM 28 DAY COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 40MPA.
EDGES SHALL BE CHAMFERED 20 X 20 AND RE-ENTRANT ANGLES FILLETED 20 X 20 UNLESS SPECIFIED OTHERWISE.
NOMINAL COVER TO REINFORCEMENT NEAREST TO THE CONCRETE SURFACE SHALL BE 45mm UNLESS NOTED OTHERWISE.
UNLESS NOTED OTHERWISE, THE MINIMUM LAP LENGTHS OF BARS SHALL BE AS FOLLOWS:

BAR SIZE	N12	N16	N20	N24	N28	N32
A) HORIZONTAL BARS WITH >300mm OF CONCRETE CAST BELOW THE BAR	650	900	1150	1430	1730	2060
B) OTHER BARS	500	690	890	1100	1330	1590

CLEAR DISTANCE BETWEEN LAPPED BARS SHALL NOT EXCEED 3 x THE BAR DIAMETER.
REINFORCEMENT MAY BE DISPLACED SLIGHTLY WHERE NECESSARY TO CLEAR DOWELS, ANCHORS, LIFTING DEVICES, DUCTS, DRAINAGE LINES AND GENERAL FITMENTS.
FOR REINFORCEMENT NOTES REFER DRG No 215.

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
www.LDC.com.au

DRAWING FILE LOCATION / NAME: V:__Vault\Projects\3001\30013046\110__CADD\CAD\DWG\30013046-187.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:39:54
EXTERNAL REFERENCE FILES: X_30013046_SMEC_A1

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 1000 2000 3000 4000 5000mm; 1000 500; 1:100

DESIGNER: SMEC — Member of the Surbana Jurong Group — © ABN 47 065 475 149 — LEVEL 5, 20 BERRY STREET NORTH SYDNEY NSW 2060 — SMEC PROJECT No 30013046

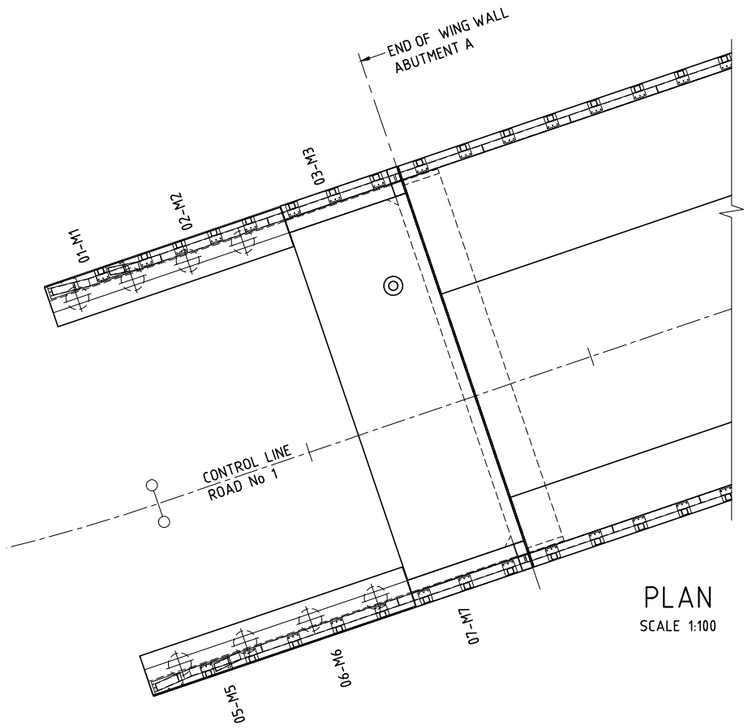
CLIENT: FRASERS PROPERTY

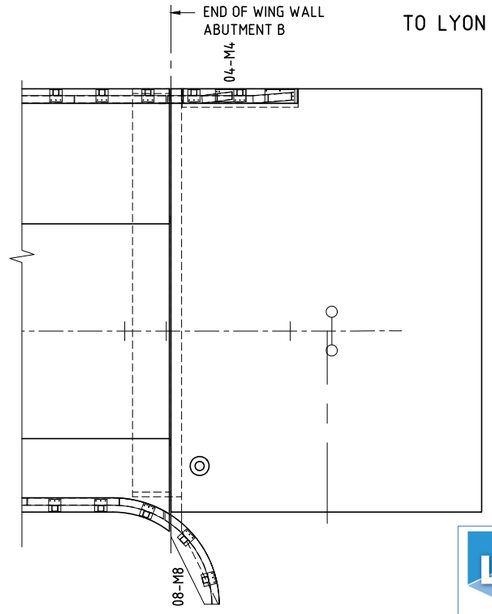
PROJECT TITLE: SHRIMPTON CREEK BRIDGE
RETAINING WALL REINFORCEMENT DETAILS

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-187	A

150 mm ON ORIGINAL
A1

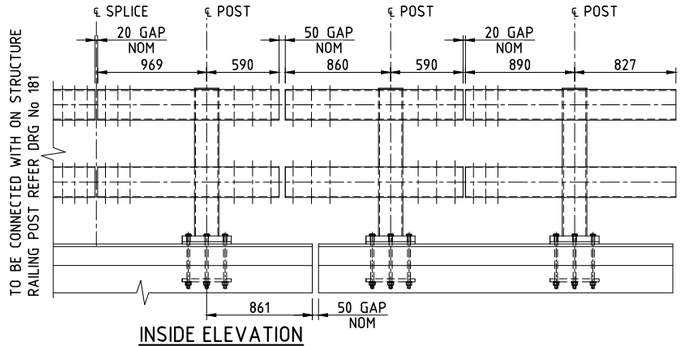
FROM HERRING ROAD



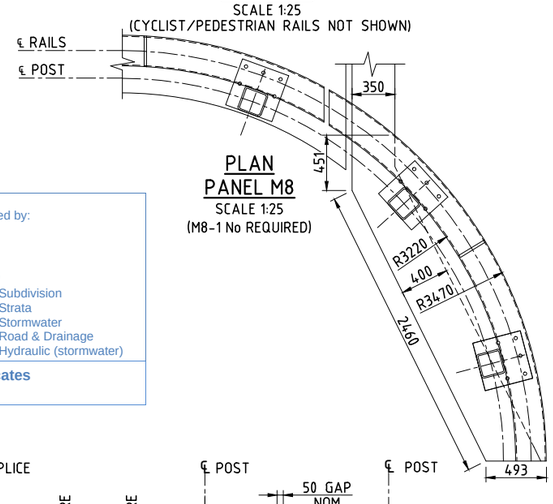


TO LYON PARK ROAD

PLAN
SCALE 1:100

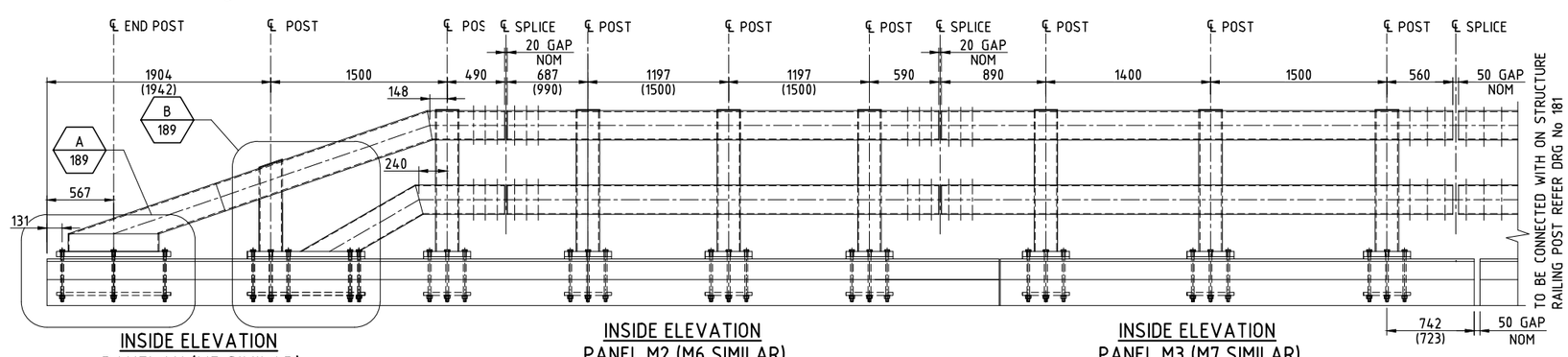


INSIDE ELEVATION
PANEL M8
SCALE 1:25
(CYCLIST/PEDESTRIAN RAILS NOT SHOWN)



PLAN
PANEL M8
SCALE 1:25
(M8-1 No REQUIRED)

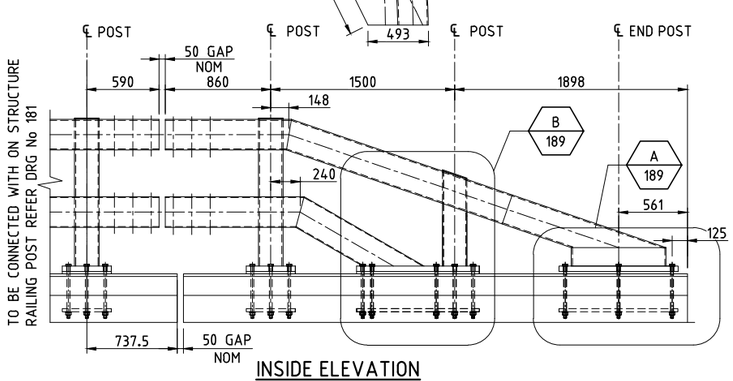
These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
Land Development Certificates
www.LDC.com.au



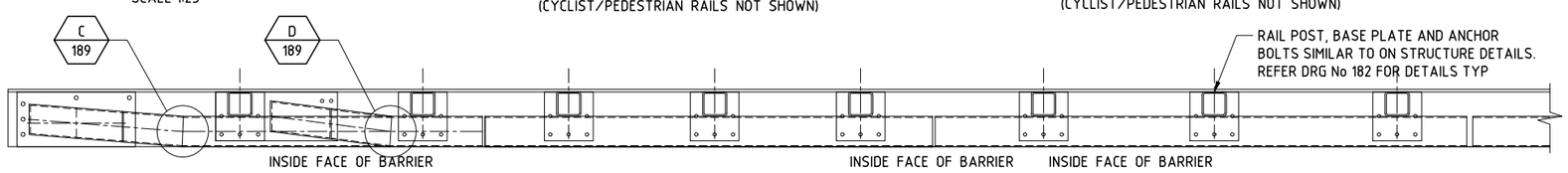
INSIDE ELEVATION
PANEL M1 (M5 SIMILAR)
SCALE 1:25

INSIDE ELEVATION
PANEL M2 (M6 SIMILAR)
SCALE 1:25
(CYCLIST/PEDESTRIAN RAILS NOT SHOWN)

INSIDE ELEVATION
PANEL M3 (M7 SIMILAR)
SCALE 1:25
(CYCLIST/PEDESTRIAN RAILS NOT SHOWN)



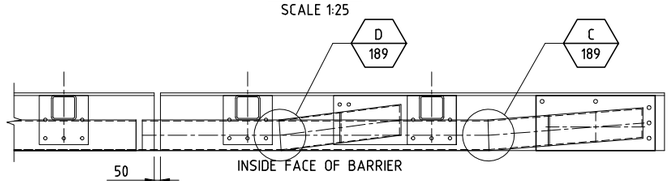
INSIDE ELEVATION
PANEL M4
SCALE 1:25



PLAN
PANEL M1 (M5)
SCALE 1:25
(M1-1 No REQUIRED)
(M5-5 No REQUIRED)

PLAN
PANEL M2 (M6 SIMILAR)
SCALE 1:25
(M2-1 No REQUIRED)
(M6-1 No REQUIRED)

PLAN
PANEL M3 (M7 SIMILAR)
SCALE 1:25
(M3-1 No REQUIRED)
(M7-1 No REQUIRED)



PLAN
PANEL M4
SCALE 1:25
(M4-1 No REQUIRED)

GENERAL NOTES

FOR GENERAL NOTES RELATED TO THIS DRAWING, REFER DRG No 182.
ELEVATIONS DRAWN ARE ALONG THE LENGTH.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-188.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:40:28

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SMEC_A1 X_DES_MAIN X_BRG_PLAN	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING
0 1000 2000 3000 4000 5000mm
1000 500 1:100
0 500 1000mm
250 125 1:25

DESIGNER
SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

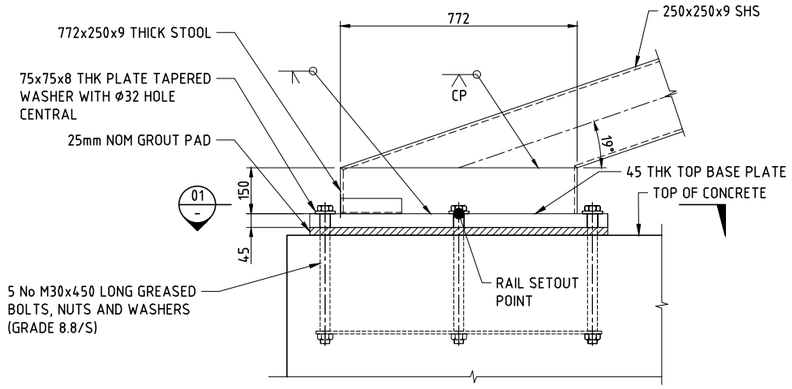
CLIENT
FRASERS PROPERTY

PROJECT TITLE
SHRIMPTON CREEK BRIDGE

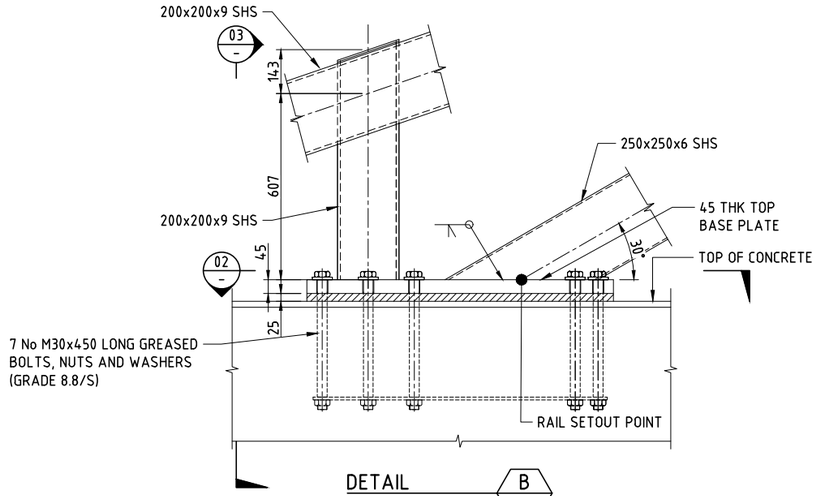
OFF STRUCTURE BARRIER DETAILS
SHEET A

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-188	A

150 mm ON ORIGINAL
A1

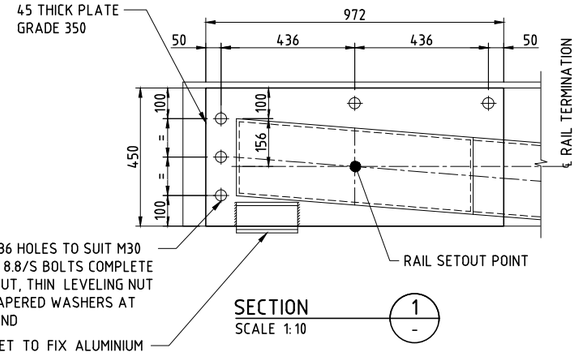


DETAIL A
SCALE 1:10
188

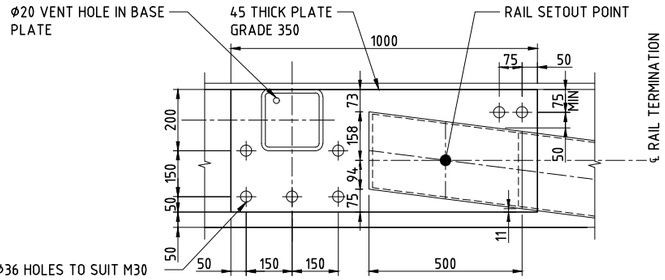


DETAIL B
SCALE 1:10
188

(PFC NOT SHOWN FOR CLARITY)

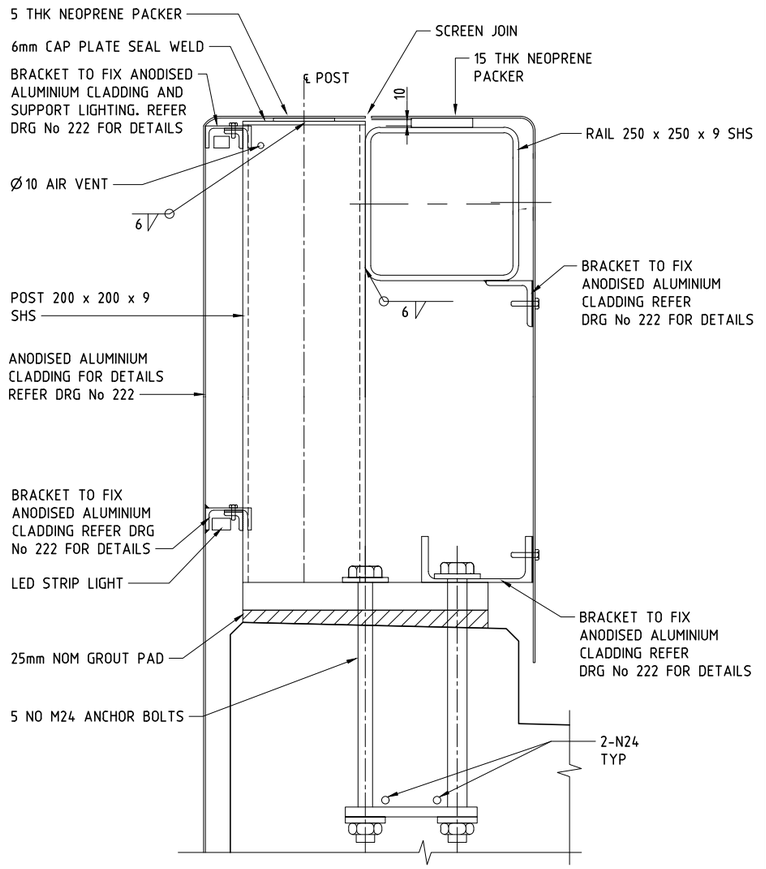


SECTION 1
SCALE 1:10
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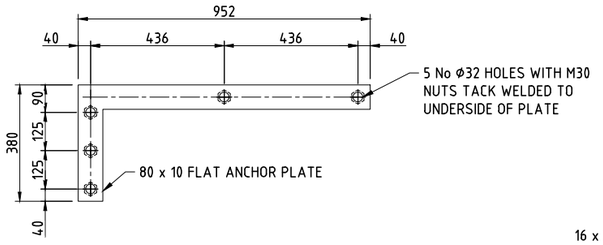


SECTION 2
SCALE 1:10
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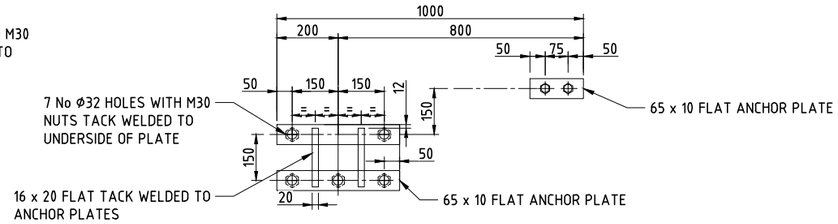
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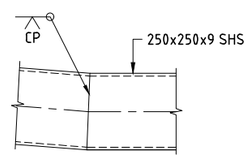
SECTION 3
SCALE 1:5
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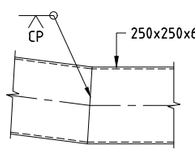
RAIL POST ANCHOR PLATE ASSEMBLY
SCALE 1:10



RAIL POST ANCHOR PLATE ASSEMBLY
SCALE 1:10



DETAIL C
SCALE 1:10
188



DETAIL D
SCALE 1:10
-

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

Land Development Certificates
www.LDC.com.au

GENERAL NOTES

FOR GENERAL NOTES RELATED TO THIS DRAWING, REFER DRG No 182.

150 mm ON ORIGINAL
A1

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-189.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:41:02

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046-SMEC_A1 X_BRG_SEC	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

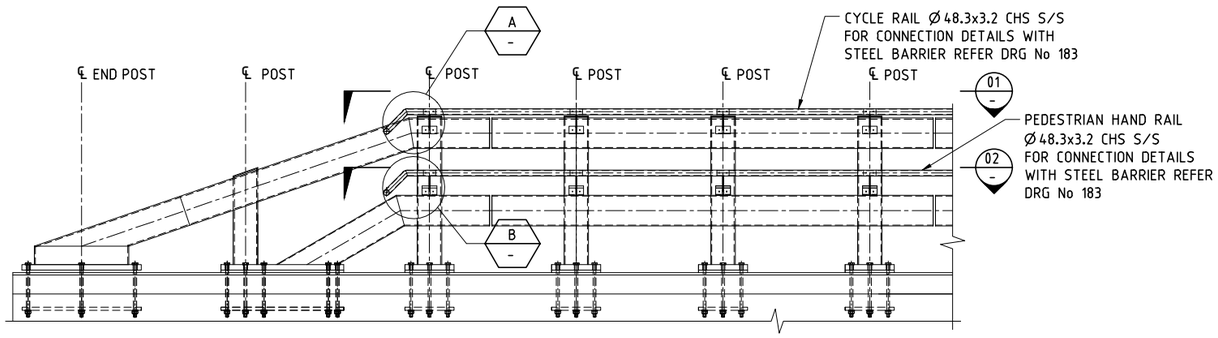
SCALES AT A1 SIZE DRAWING: 0 100 200 300 400 500mm; 100 50 1:10; 0 100 200mm; 50 25 1:5

DESIGNER: SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

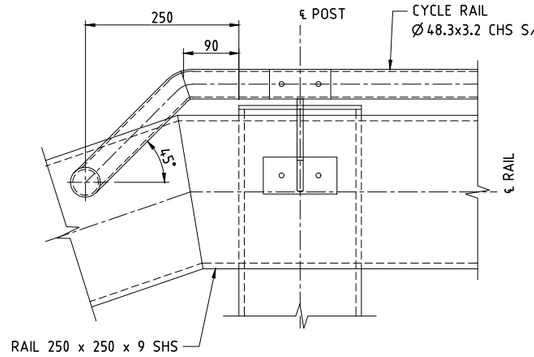
CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE
OFF STRUCTURE BARRIER DETAILS SHEET B

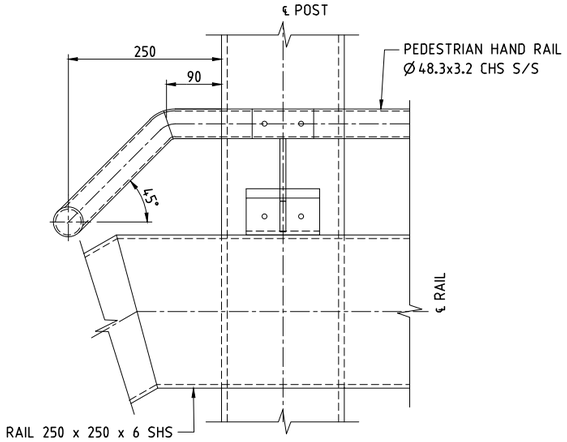
SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-189	A



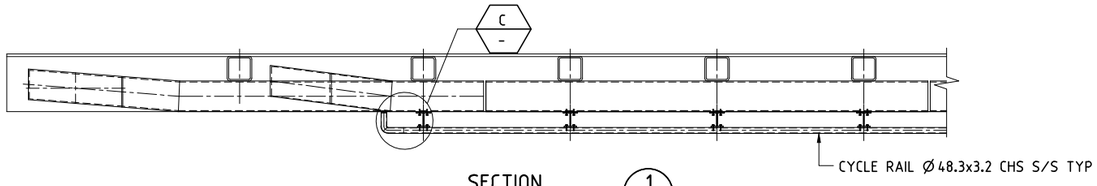
CYCLIST/PEDESTRIAN RAILS INSIDE ELEVATION
SCALE 1:25



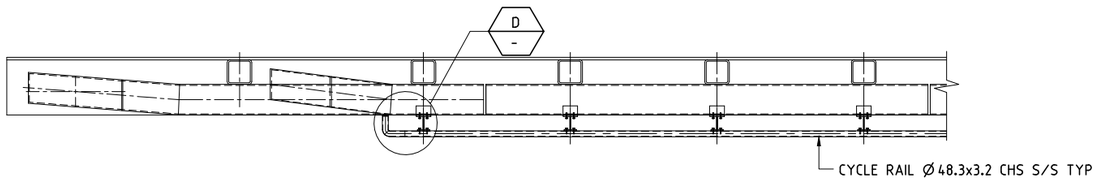
DETAIL A
SCALE 1:5



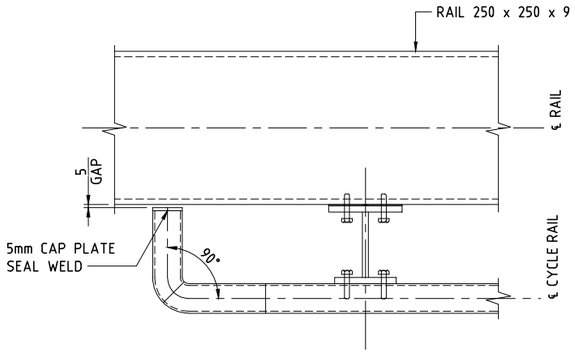
DETAIL B
SCALE 1:5



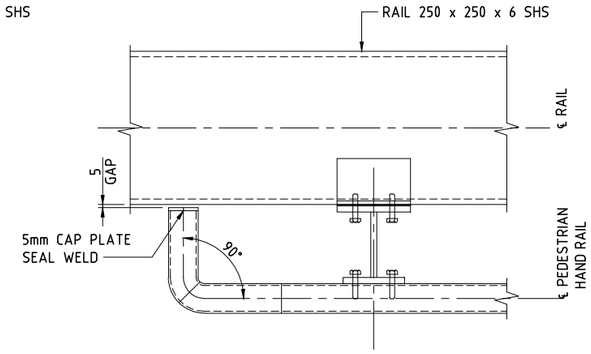
SECTION 1
SCALE 1:25



SECTION 2
SCALE 1:25



DETAIL C
SCALE 1:5



DETAIL D
SCALE 1:5

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

Land Development Certificates
www.LDC.com.au

GENERAL NOTES

FOR GENERAL NOTES RELATED TO THIS DRAWING, REFER DRG No 182.

150 mm ON ORIGINAL
A1
X_30013046_SHEC_A1
X_BRG_SEC

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-190.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:41:31

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 500 1000mm; 250 125 1:25

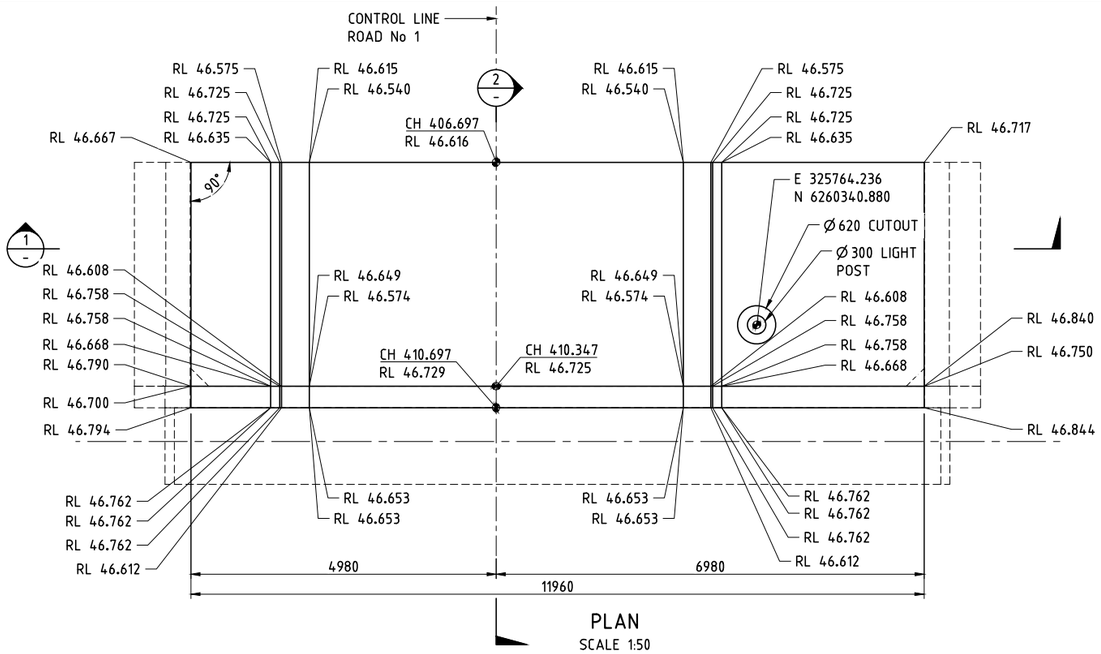
DESIGNER: SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE

OFF STRUCTURE BARRIER CYCLE RAIL AND HAND RAIL TERMINATION DETAILS

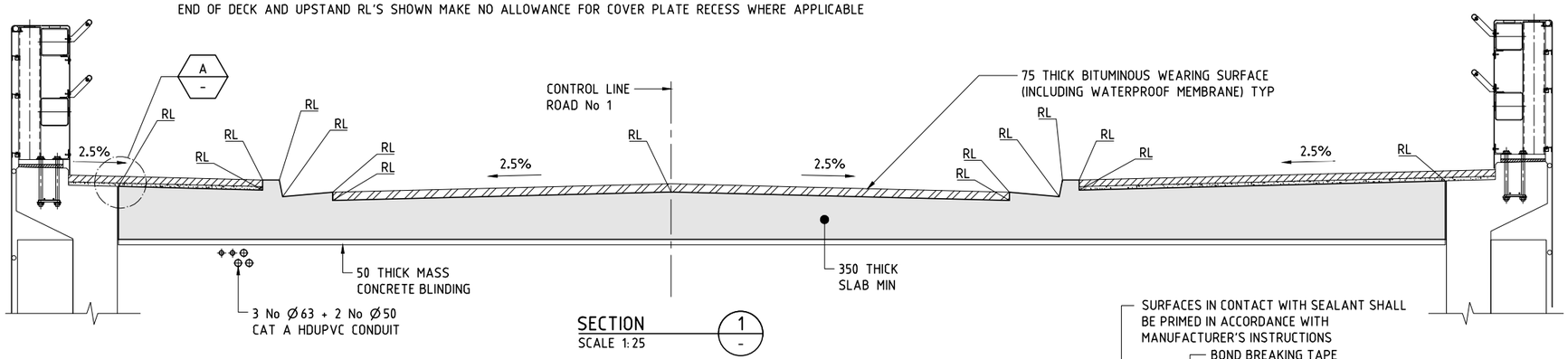
SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-190	A



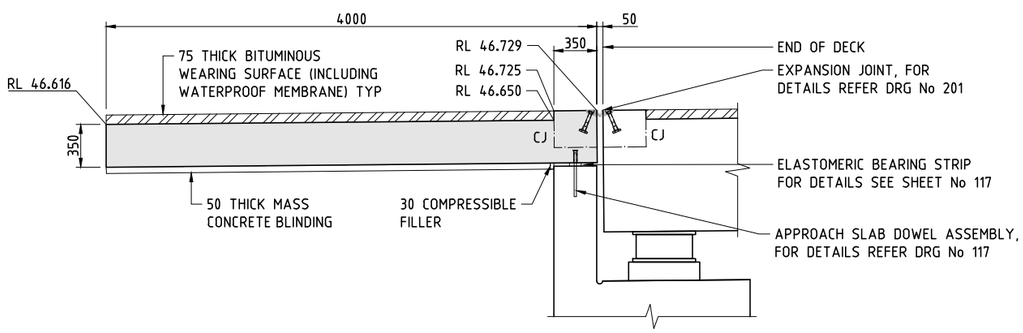
PLAN
SCALE 1:50

ABUTMENT A

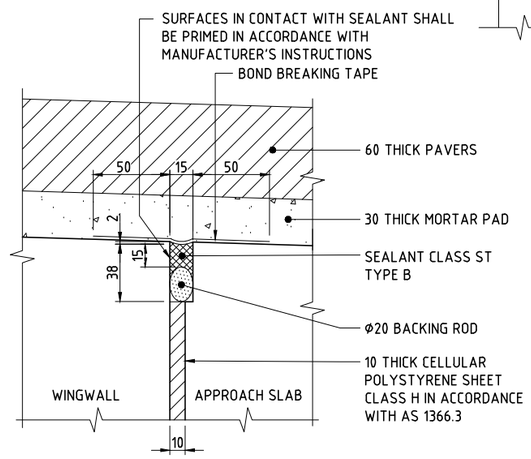
BARRIER NOT SHOWN FOR CLARITY
END OF DECK AND UPSTAND RL'S SHOWN MAKE NO ALLOWANCE FOR COVER PLATE RECESS WHERE APPLICABLE



SECTION 1
SCALE 1:25



SECTION 2
SCALE 1:25



DETAIL A
SCALE 1:10

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
Land Development Certificates
www.LDC.com.au

GENERAL NOTES

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
CONCRETE EXPOSURE CLASSIFICATION: B1.
MINIMUM 28 DAY COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 40MPa.
EDGES SHALL BE CHAMFERED 20 x 20 AND RE-ENTRANT ANGLES FILLETED 20 x 20 UNLESS SPECIFIED OTHERWISE.

150 mm ON ORIGINAL
A1
X_30013046_SMEC_A1
X_DES_MAIN
X_BRG_PLAN

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-191.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:42:02

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

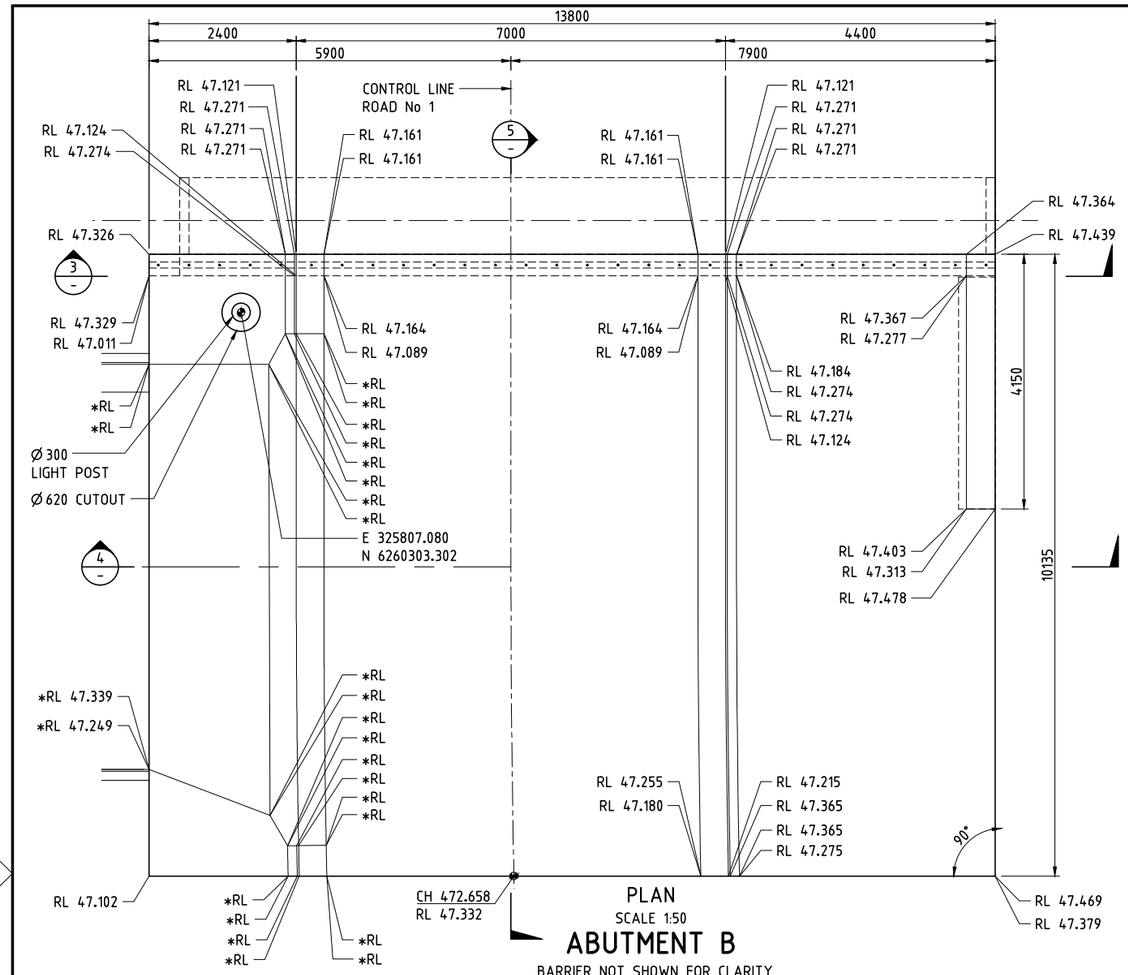
SCALES AT A1 SIZE DRAWING: 0 1000 2000mm; 500 250 1:50

DESIGNER: SMEC — Member of the Surbana Jurong Group — © ABN 47 065 475 149 — LEVEL 5, 20 BERRY STREET NORTH SYDNEY NSW 2060 — SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE
APPROACH SLAB CONCRETE SHEET A

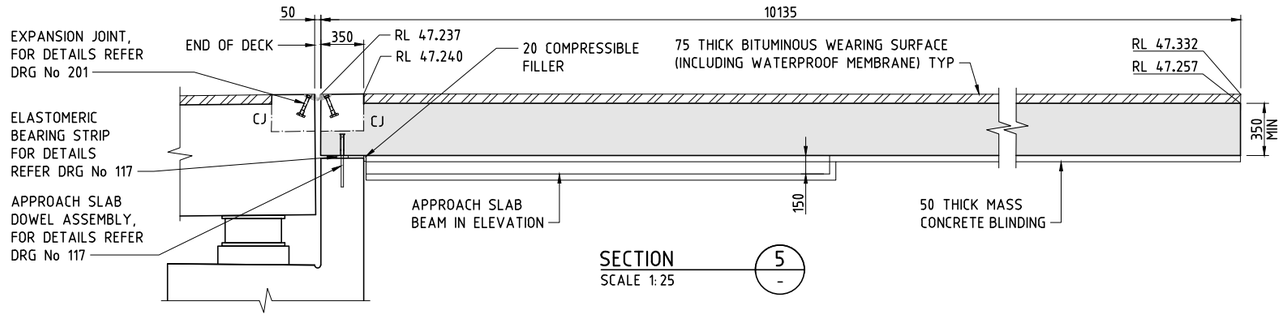
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AS NOTED	CONSTRUCTION	30013046-191	A



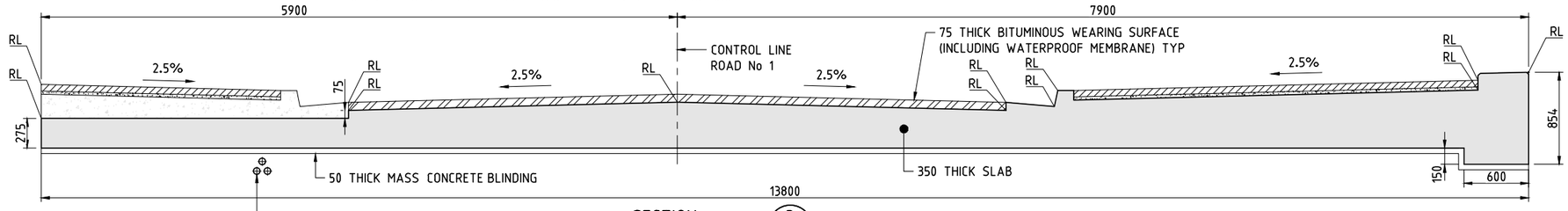
PLAN
SCALE 1:50

ABUTMENT B

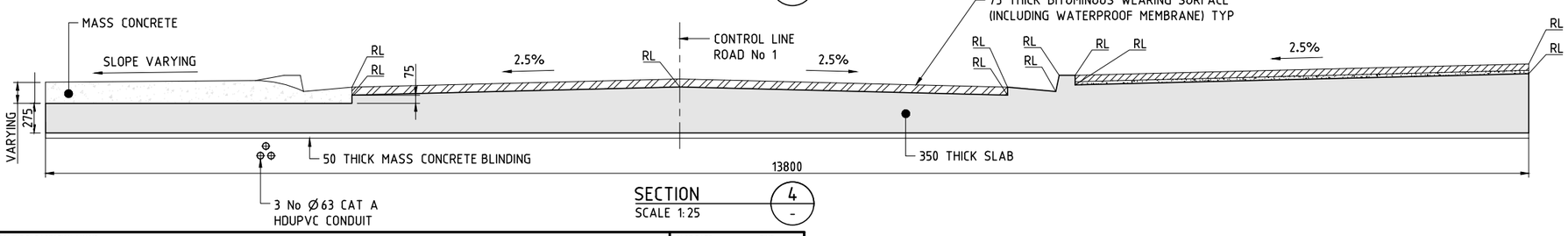
BARRIER NOT SHOWN FOR CLARITY
END OF DECK AND UPSTAND RL'S SHOWN MAKE NO ALLOWANCE FOR COVER PLATE RECESS WHERE APPLICABLE
* FOR DETAILS REFER CIVIL DRAWINGS PREPARED BY ADW JOHNSON



SECTION 5
SCALE 1:25



SECTION 3
SCALE 1:25



SECTION 4
SCALE 1:25

GENERAL NOTES

FOR GENERAL NOTES RELATING TO THIS DRAWING, REFER DRG No 191.

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
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DRAWING FILE LOCATION / NAME: V:_\Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-192.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:42:39

EXTERNAL REFERENCE FILES: X_30013046_SMEC_A1; X_DES_MAIN; X_BRG_PLAN; X_BRG_SEC; X_SURV

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 1000 2000mm; 500 250 1:50

DESIGNER: SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

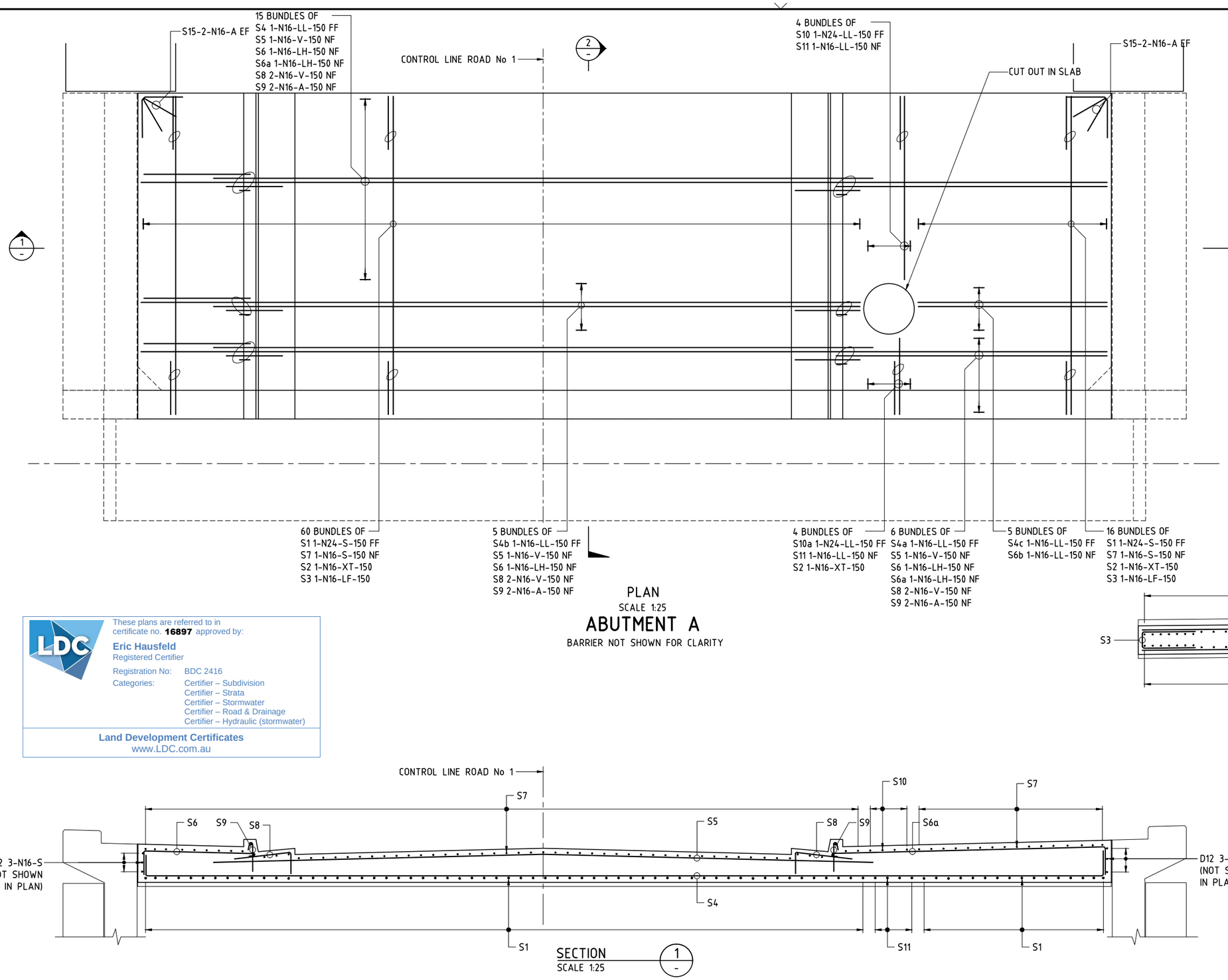
CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE

APPROACH SLAB CONCRETE SHEET B

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-192	A

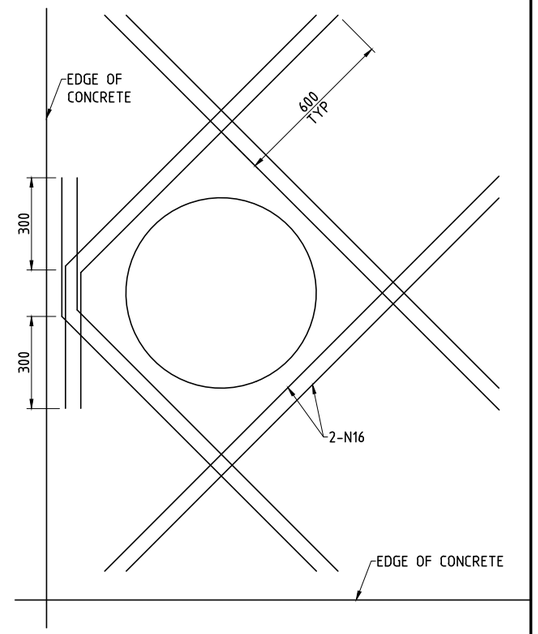
150 mm ON ORIGINAL
A1



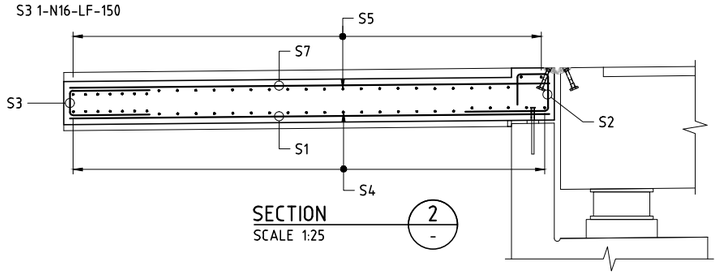
PLAN
SCALE 1:25

ABUTMENT A

BARRIER NOT SHOWN FOR CLARITY



ADDITIONAL REBAR AT CUTOUT LOCATION
SCALE 1:10



SECTION 2
SCALE 1:25

SECTION 1
SCALE 1:25

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

Land Development Certificates
www.LDC.com.au

GENERAL NOTES

NOMINAL COVER TO REINFORCEMENT NEAREST TO THE CONCRETE SURFACE SHALL BE 45mm UNLESS NOTED OTHERWISE.
UNLESS NOTED OTHERWISE, THE MINIMUM LAP LENGTHS OF BARS SHALL BE AS FOLLOWS:

BAR SIZE:	N12	N16	N20	N24	N28	N32	N36
a) HORIZONTAL BARS WITH >300mm OF CONCRETE CAST BELOW THE BAR	650	900	1150	1430	1730	2060	2410
b) OTHER BARS	500	690	890	1100	1330	1590	1860

CLEAR DISTANCE BETWEEN LAPPED BARS SHALL NOT EXCEED 3 x THE BAR DIAMETER.
REINFORCEMENT MAY BE DISPLACED SLIGHTLY WHERE NECESSARY TO CLEAR DOWELS, ANCHORS, LIFTING DEVICES, DUCTS, DRAINAGE LINES AND GENERAL FITMENTS.
FOR REINFORCEMENT NOTES REFER DRG No 215.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-195.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:43:15

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30130046_SMEC_A1 X_DES_MAIN X_BRG_PLAN	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 1000 2000mm; 500 250; 1:50

DESIGNER: SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

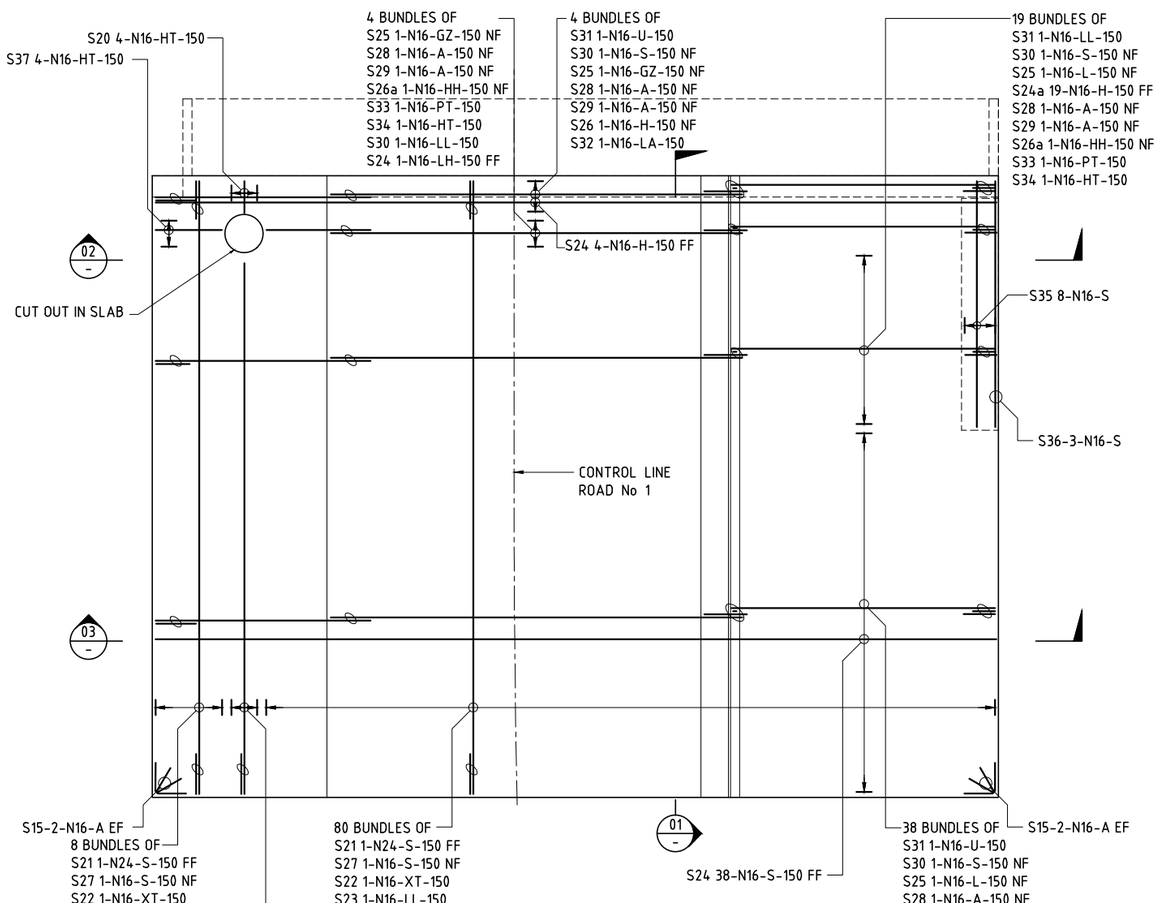
CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE

APPROACH SLAB REINFORCEMENT SHEET A

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-195	A

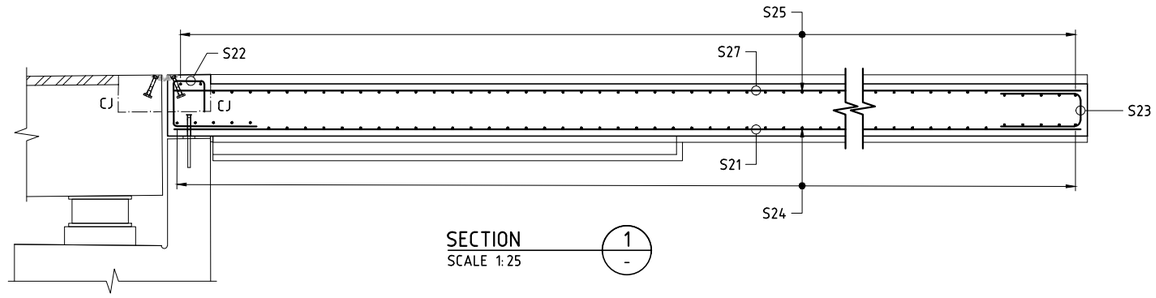
150 mm ON ORIGINAL
A1



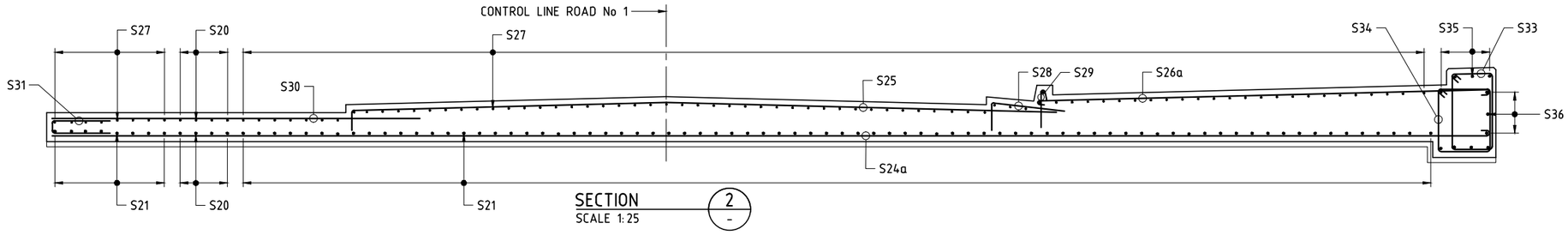
PLAN

ABUTMENT B

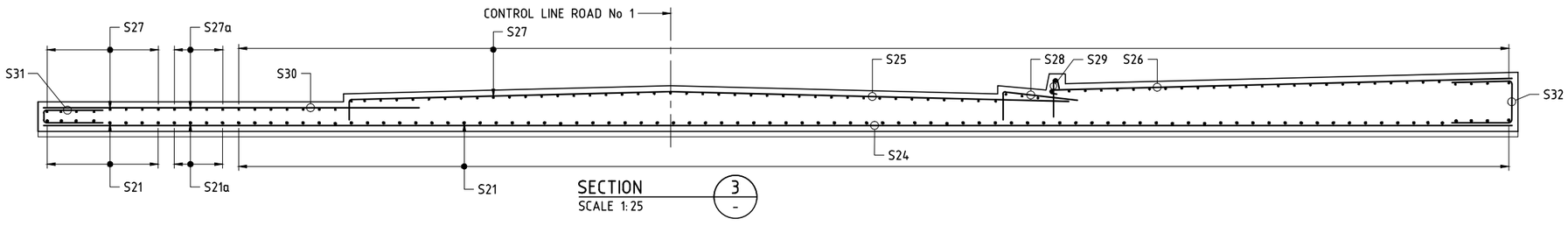
BARRIER NOT SHOWN FOR CLARITY



SECTION 1
SCALE 1:25



SECTION 2
SCALE 1:25



SECTION 3
SCALE 1:25

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories:
Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

Land Development Certificates
www.LDC.com.au

GENERAL NOTES

FOR GENERAL NOTES RELATING TO THIS DRAWING, REFER DRG No 195.

150 mm ON ORIGINAL

A1

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-196.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:43:44

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SMEC_A1 X_DES_MAIN X_BRG_PLAN	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING
0 1000 2000mm
500 250 1:50
0 500 1000mm
250 125 1:25

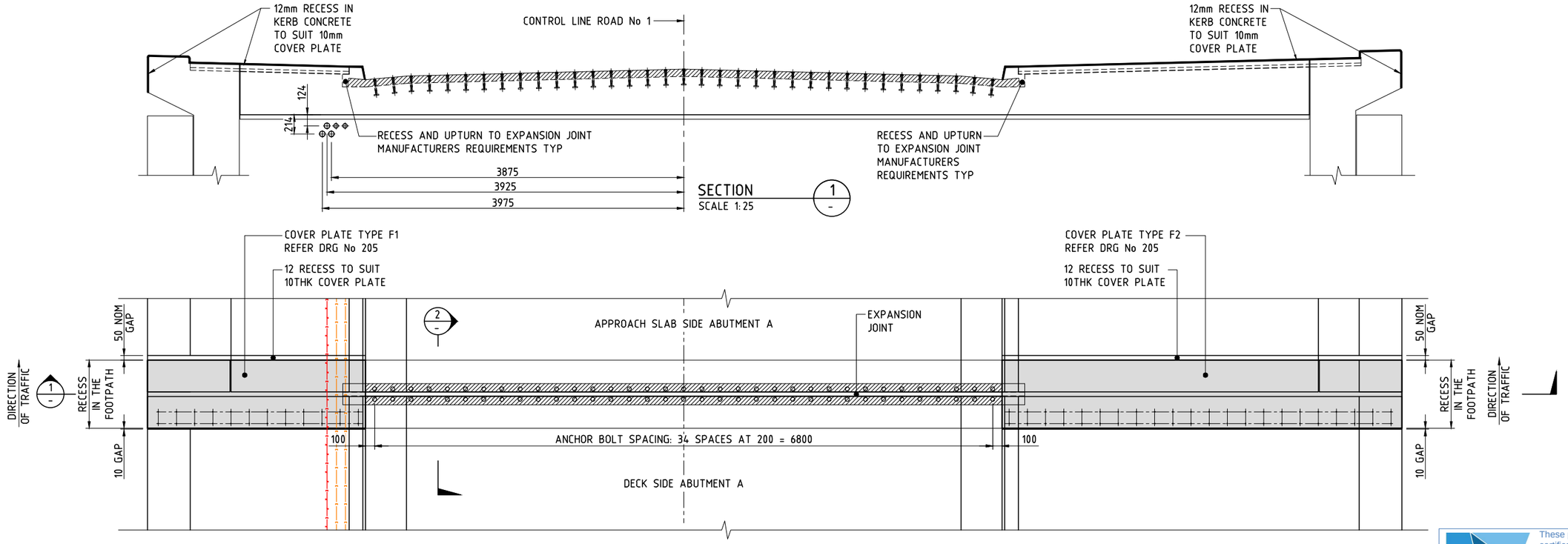
DESIGNER
SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT
FRASERS PROPERTY

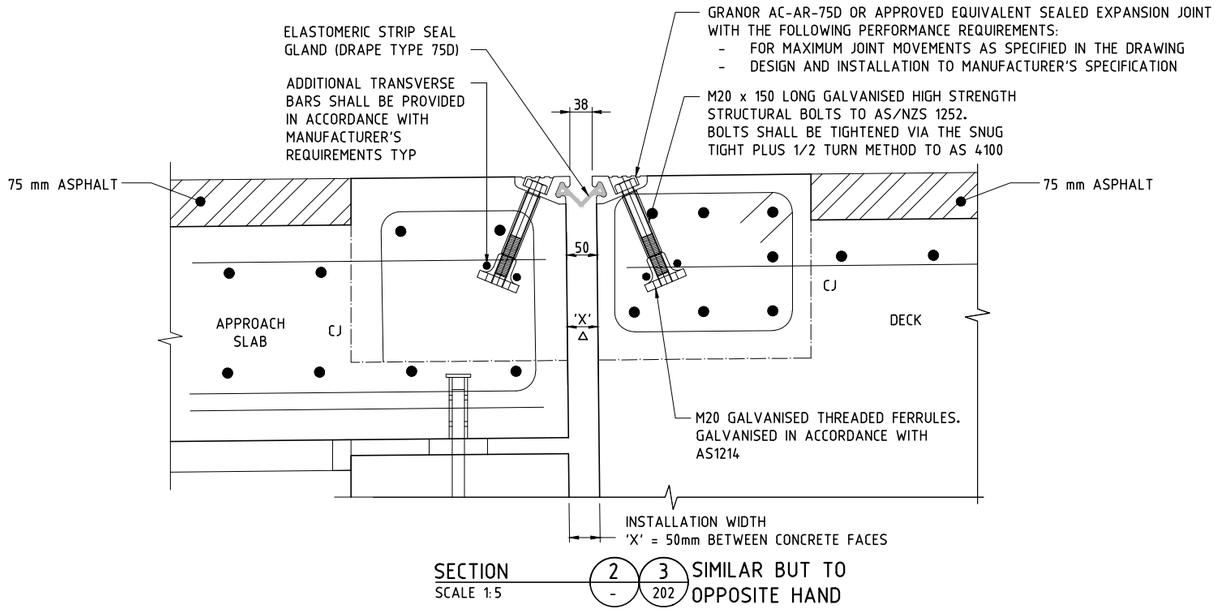
PROJECT TITLE
SHRIMPTON CREEK BRIDGE

APPROACH SLAB REINFORCEMENT
SHEET B

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-196	A



EXPANSION JOINT AT ABUTMENT A
SCALE 1:50



SECTION 2/- SCALE 1:5 — 3/202 SIMILAR BUT TO OPPOSITE HAND

△ DENOTES DIMENSIONS AT SHADE AIR TEMPERATURE OF 20-22°C MEASURED NORMAL TO EDGE OF DECK. THE CALCULATED TEMPERATURE MOVEMENT IS APPROXIMATELY 1.05mm PER 1.0°C AT EXPANSION JOINT. JOINT MOVEMENT INCLUDES ALLOWANCE FOR POSSIBLE VARIATION IN COEFFICIENT OF THERMAL EXPANSION

STRIP SEAL EXPANSION JOINT ULTIMATE PERFORMANCE REQUIREMENTS	
INSTALLATION GAP WIDTH SHADE AIR TEMPERATURE 20°C - 22°C	38mm
MAXIMUM ULS CLOSING MOVEMENT	20mm
MAXIMUM ULS OPENING MOVEMENT	25mm

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Registered Certifier
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PROPOSED UTILITIES
PROPOSED ⌀50 ELECTRICAL LINE
PROPOSED ⌀63 ELECTRICAL LINE

GENERAL NOTES
PERMANENT SEAL ELEMENT TO BE INSTALLED IN ONE LENGTH.
STEEL PLATES SHALL BE GRADE 250 TO AS/NZS 3678.3.
SLOTTED COUNTERSUNK HEAD SCREWS SHALL CONFORM TO AS/NZS 1427.4.
ALL EXPOSED STEEL COMPONENTS EXCEPT STAINLESS STEEL SHALL BE HOT-DIP GALVANISED AFTER FABRICATION IN ACCORDANCE WITH TfNSW SPECIFICAITON B241.
EDGES TO BE PROTECTIVE TREATED SHALL BE ROUNDED TO A RADIUS 1.5mm UNLESS OTHERWISE SPECIFIED.
ANCHORS FOR COVER PLATE TO BE SETOUT USING A SUITABLE TEMPLATE OR ACTUAL COVER PLATE.
DECK JOINTS TO BE INSTALLED STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-201.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:44:14

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_3001046_SMEC_A1 X_DES_MAIN X_BRG_PLAN	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 500 1000mm; 250 125; 1:25

DESIGNER: SMEC — Member of the Surbana Jurong Group — © ABN 47 065 475 149 — LEVEL 5, 20 BERRY STREET NORTH SYDNEY NSW 2060 — SMEC PROJECT No 30013046

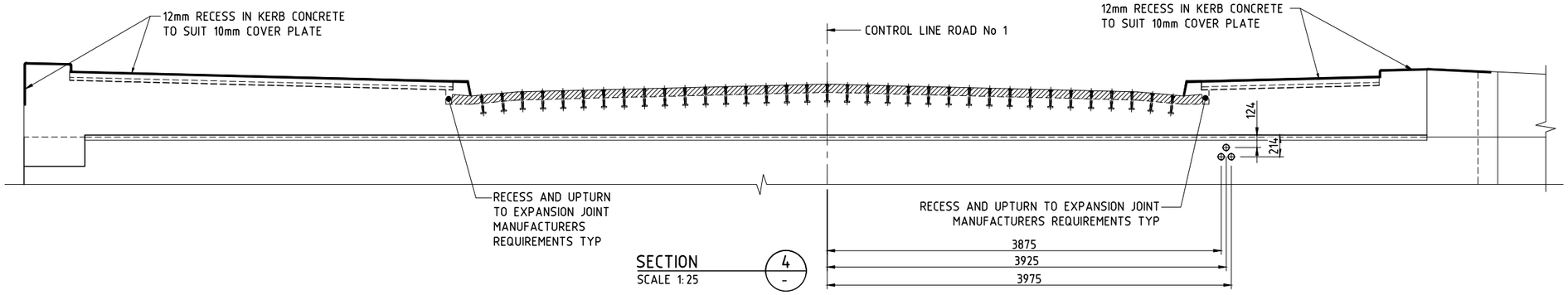
CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE

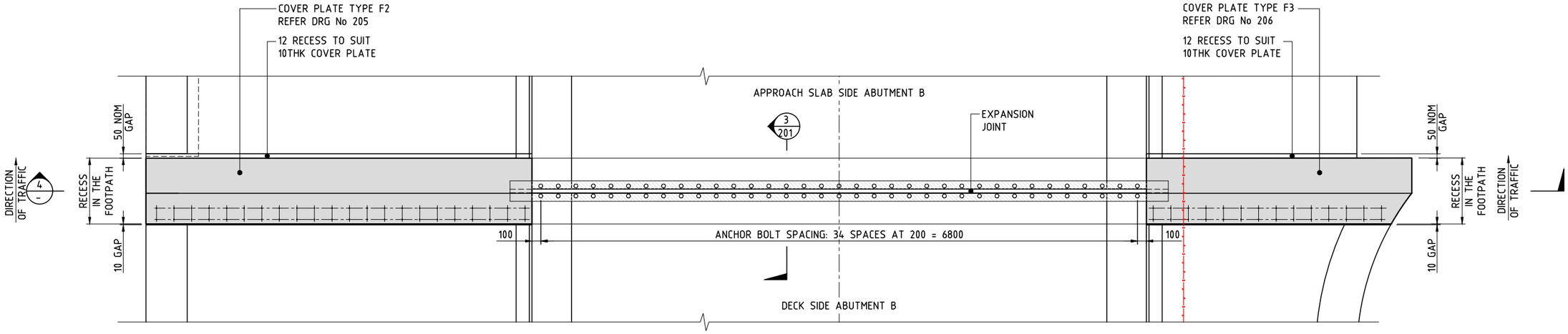
EXPANSION JOINT DETAILS SHEET A

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-201	A

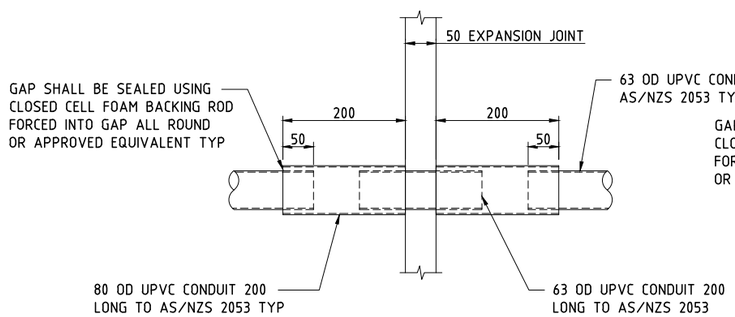
A1 — 150 mm ON ORIGINAL



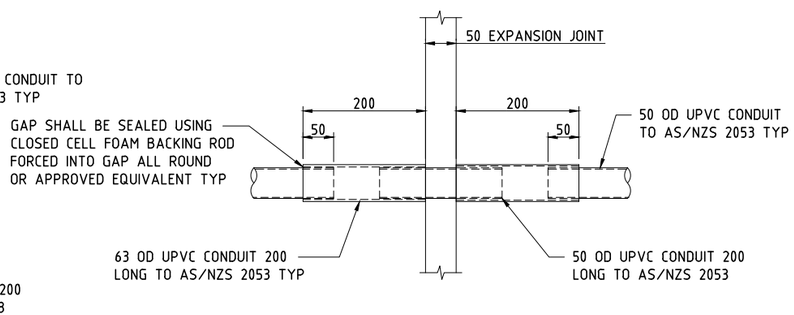
SECTION 4/- SCALE 1:25



EXPANSION JOINT AT ABUTMENT B
SCALE 1:25



EXPANSION JOINT FOR Ø63 CONDUIT
SCALE 1:5



EXPANSION JOINT FOR Ø50 CONDUIT
SCALE 1:5

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates
www.LDC.com.au

PROPOSED UTILITIES

PROPOSED Ø63 ELECTRICAL LINE

GENERAL NOTES

FOR GENERAL NOTES RELATING TO THIS DRAWING, REFER DRG No 201.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-202.dwg
PLOT DATE: 14 Jun 2022 TIME: 18:01:23

EXTERNAL REFERENCE FILES: X_30013046_SMEC_A1, X_DES_MAIN, X_BRG_PLAN

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 500 1000mm; 250 125 1:25

DESIGNER: SMEC — Member of the Surbana Jurong Group — © ABN 47 065 475 149 — LEVEL 5, 20 BERRY STREET NORTH SYDNEY NSW 2060 — SMEC PROJECT No 30013046

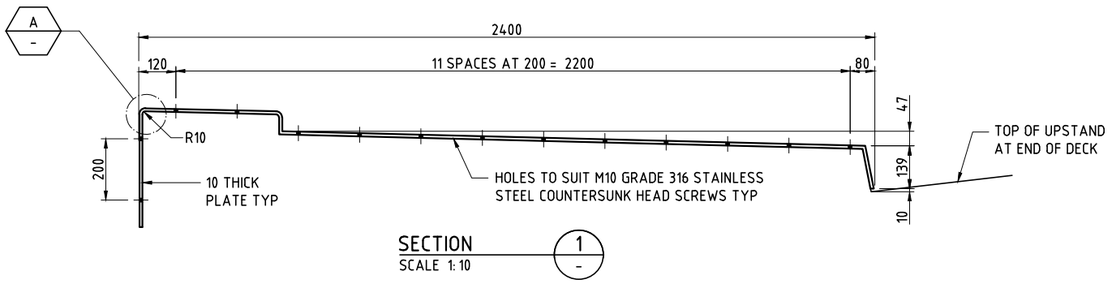
CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE

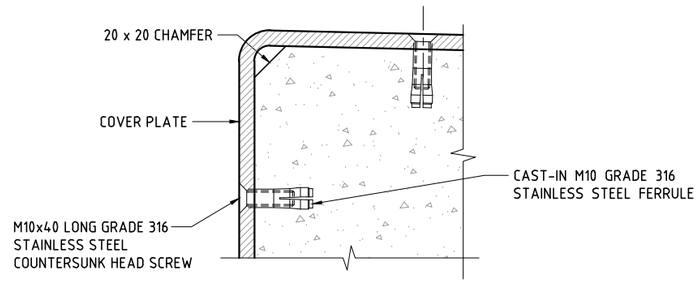
EXPANSION JOINT DETAILS SHEET B

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-202	A

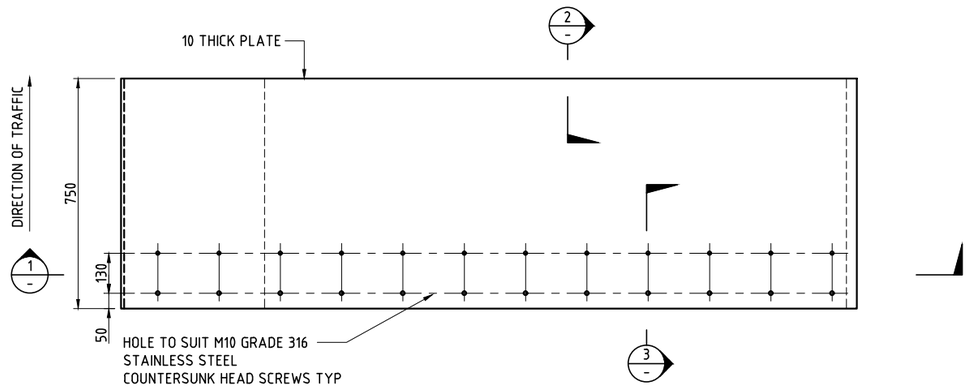
150 mm ON ORIGINAL
A1



SECTION 1 / - — SCALE 1:10



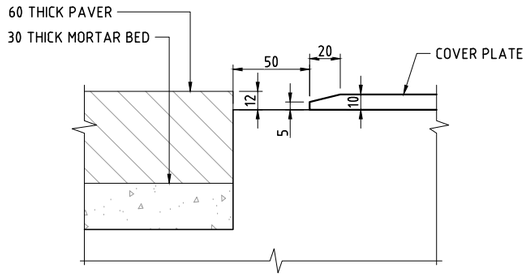
DETAIL A / - B / 206 — SCALE 1:2 — SIMILAR BUT TO OPPOSITE HAND



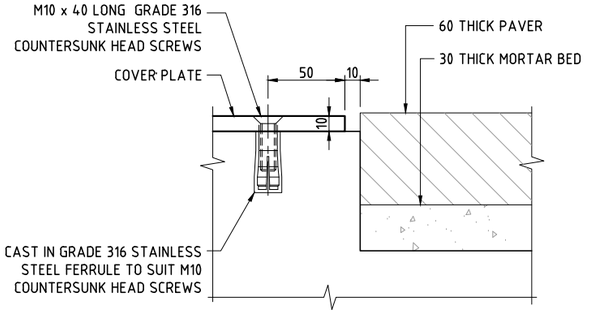
PLAN

COVER PLATE TYPE F1

2 No REQUIRED



SECTION 2 / - 5 / 206 — SCALE 1:10



SECTION 3 / - 6 / 206 — SCALE 1:10

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

Land Development Certificates
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GENERAL NOTES

FOR GENERAL NOTES RELATED TO THIS DRAWING, REFER DRG No 201.

150 mm ON ORIGINAL — A1

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-205.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:45:14

EXTERNAL REFERENCE FILES: X_30013046-SMEC_A1, X_BRG_SEC

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 100 200 300 400 500mm — 100 50 — 1:10

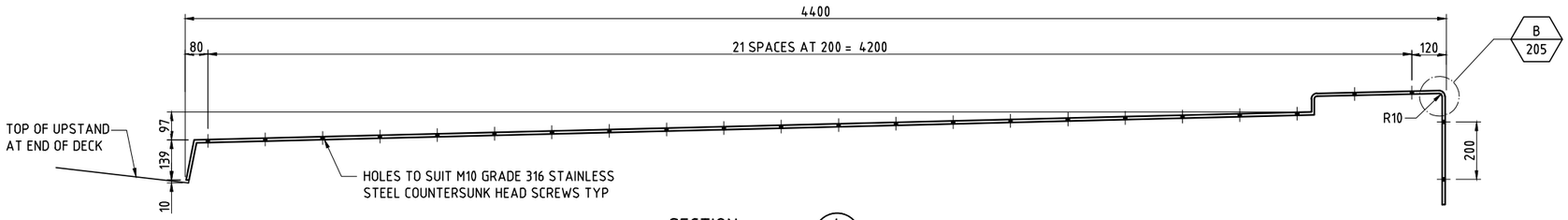
DESIGNER: SMEC — Member of the Surbana Jurong Group — © ABN 47 065 475 149 — LEVEL 5, 20 BERRY STREET NORTH SYDNEY NSW 2060 — SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE

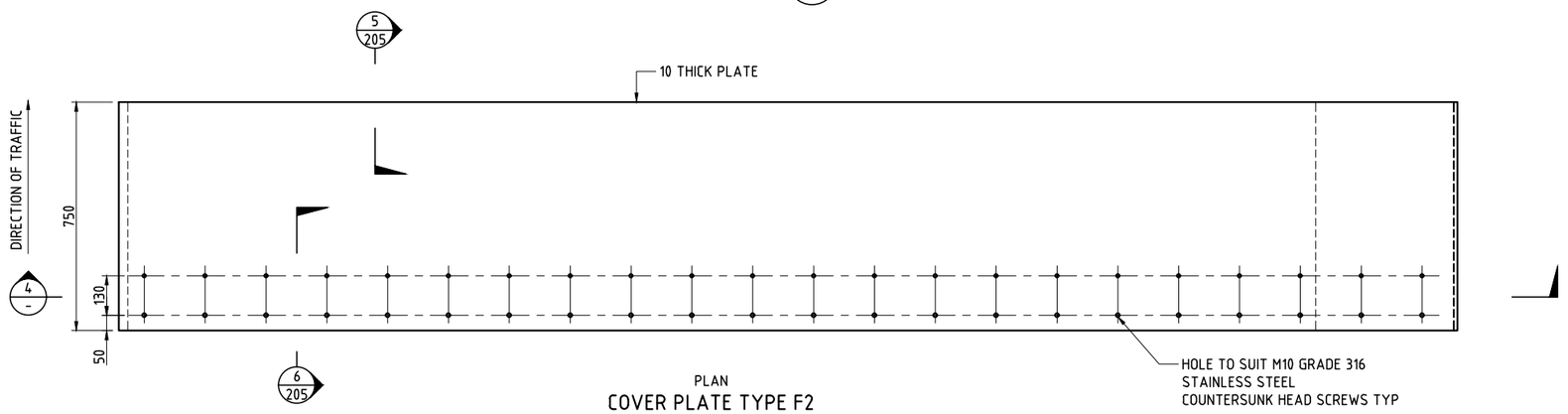
COVER PLATE DETAILS
SHEET A

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-205	A

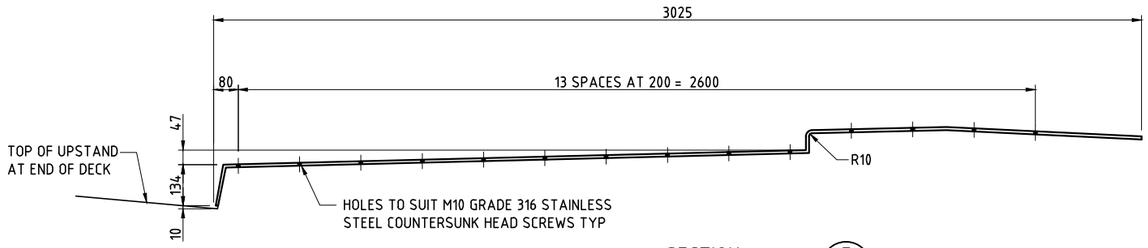


SECTION
SCALE 1:20

4
-

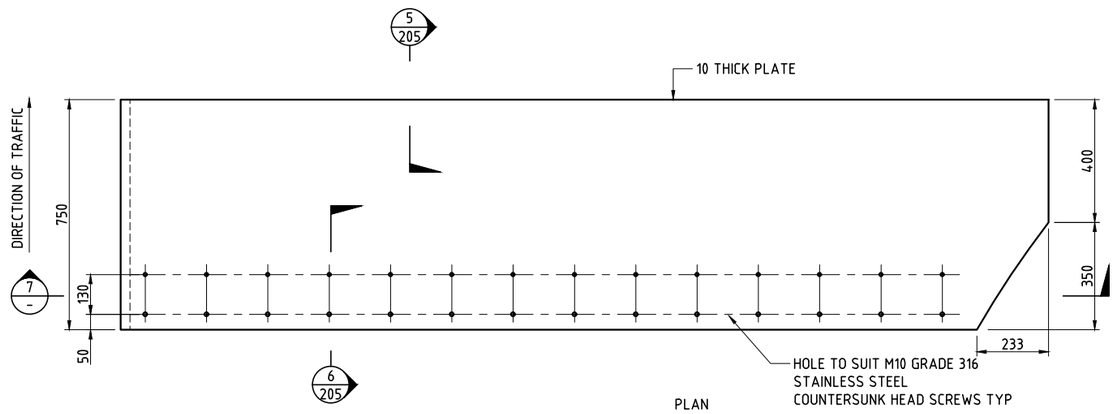


PLAN
COVER PLATE TYPE F2
2 No REQUIRED



SECTION
SCALE 1:20

7
-



PLAN
COVER PLATE TYPE F3
2 No REQUIRED

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories:
Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

Land Development Certificates
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GENERAL NOTES
FOR GENERAL NOTES RELATED TO THIS DRAWING, REFER DRG No 201.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-206.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:45:43

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SMEC_A1	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 100 200 300 400 500mm; 100 50; 1:10

DESIGNER
SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT
FRASERS PROPERTY

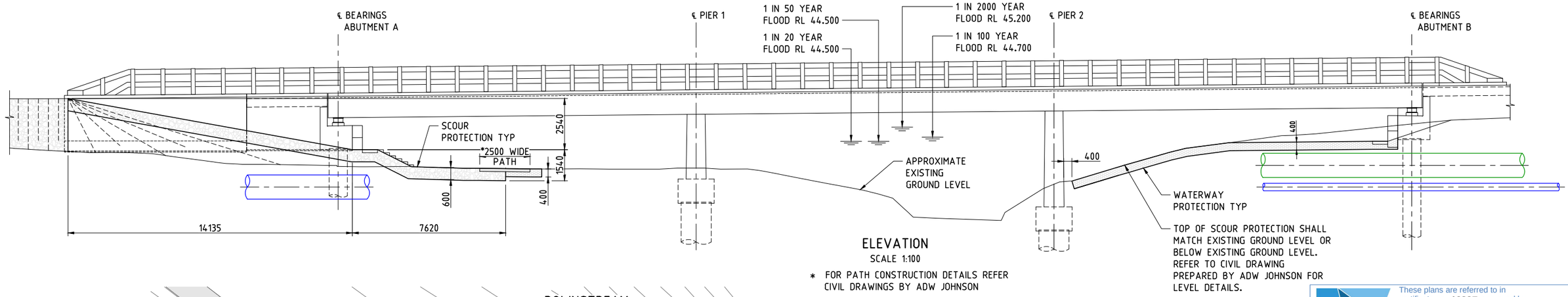
PROJECT TITLE
SHRIMPTON CREEK BRIDGE
COVER PLATE DETAILS
SHEET B

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-206	A

150 mm ON ORIGINAL
A1

FROM HERRING ROAD

TO LYON PARK ROAD



ELEVATION

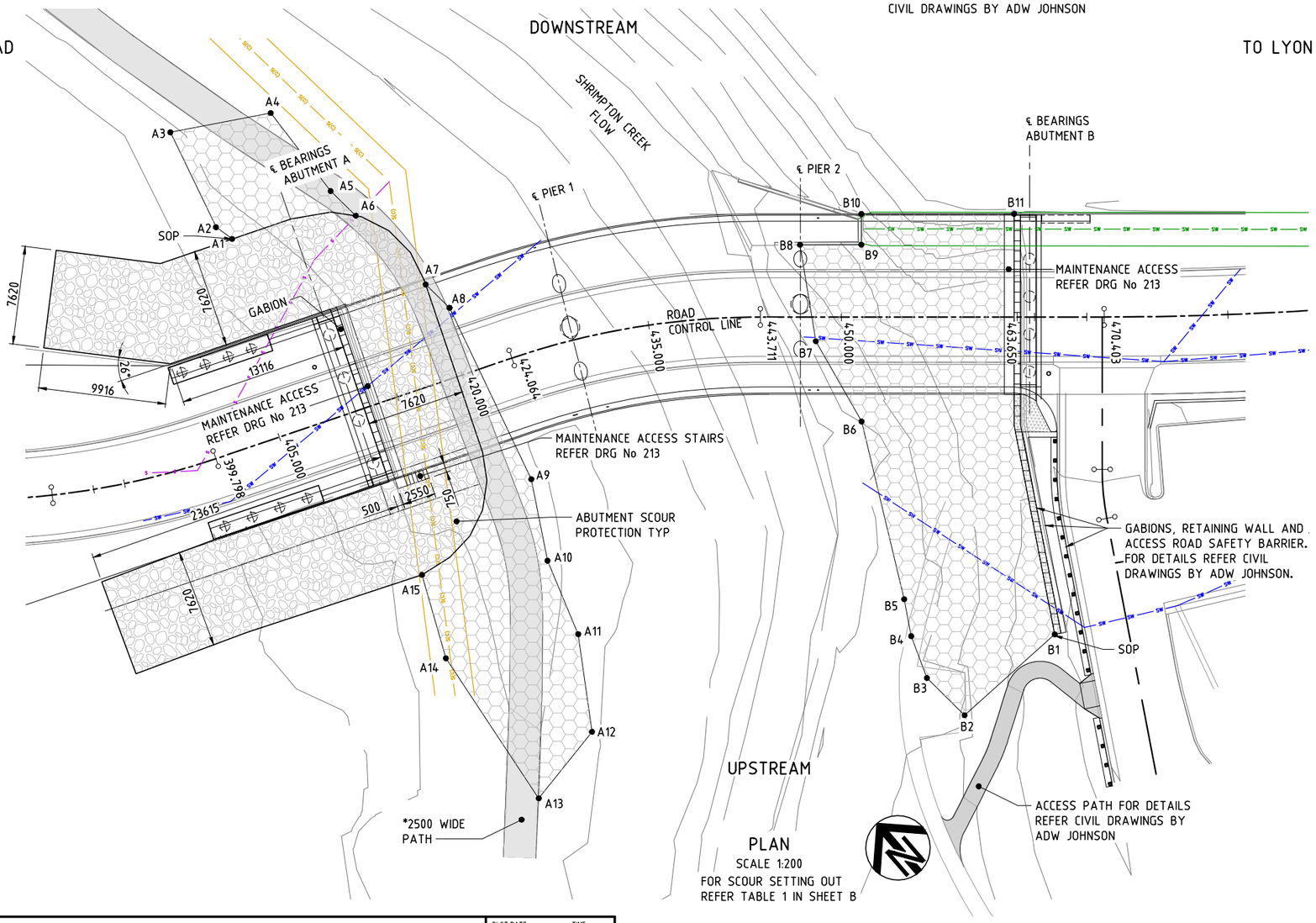
SCALE 1:100

* FOR PATH CONSTRUCTION DETAILS REFER CIVIL DRAWINGS BY ADW JOHNSON

FROM HERRING ROAD

DOWNSTREAM

TO LYON PARK ROAD



PLAN

SCALE 1:200

FOR SCOUR SETTING OUT REFER TABLE 1 IN SHEET B

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

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LEGEND

SLOPE PROTECTION

WATERWAY PROTECTION

PROPOSED UTILITIES

SW SW — PROPOSED STORMWATER

S S — PROPOSED SEWER LINE

EXISTING SERVICES TO REMAIN

SW SW — UNDERGROUND STORMWATER PIPE (QL D)

S(C) — UNDERGROUND SEWER (QL C)

SCOUR PROTECTION NOTES

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
THE THICKNESS OF THE ROCKFILL PROTECTION SHALL BE 600 FOR ABUTMENT SCOUR PROTECTION AND THE THICKNESS OF THE ROCKFILL PROTECTION FOR WATERWAY SHALL BE 400.
THE STONE SHALL BE REASONABLY WELL GRADED THROUGHOUT THE ROCKFILL LAYER. STONE SIZES SHALL BE DEPENDANT ON THE D50 VALUE SPECIFIED.
ROCK IS TO BE HARD, DENSE, DURABLE, RESISTANT TO WEATHERING AND ANGULAR IN SHAPE. IT SHALL BE FREE FROM OVERBURDEN, SPOIL, SHALE AND ORGANIC MATTER. ROCK THAT IS LAMINATED, FRACTURED, POROUS OR OTHERWISE PHYSICALLY WEAK WILL BE UNACCEPTABLE.
AN APPROXIMATE GUIDE TO STONE SHAPE IS THAT THE BREADTH OR THICKNESS OF A SINGLE STONE SHOULD BE NOT LESS THAN ONE-THIRD ITS LENGTH.
GEOFABRIC UNDER PLACED ROCKFILL TO BE BIDIM A49 BY GEOFABRICS OR EQUIVALENT UNLESS NOTED OTHERWISE.
GEOTEXTILE UNDERLAYER SHALL BE IN ACCORDANCE WITH TfNSW D&C QA SPECIFICATION R63.
PLACEMENT OF ROCK SHALL NOT DAMAGE THE GEOTEXTILE UNDERLAYER
SCOUR PROTECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS AS INDICATED ON THESE DRAWINGS.
TOP OF ALL ROCKFILL PROTECTION MUST BE FLUSH WITH EXISTING GROUND SURFACE.
FOR DETAILS OF SCOUR AND WATERWAY INTERFACE WITH EXISTING AND NEW SERVICES REFER CIVIL DRAWING BY ADW JOHNSON.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-211.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:46:14

EXTERNAL REFERENCE FILES:
X_30013046_SMEC_A1
X_RES_MAIN
X_SURV
X_SMEC_PLAN
X_BRG_SCOUR PROTECTION
X_PROP_SERVICES

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: SCALE 1:100 (1 0 1 2 3 4 5)

DESIGNER: SMEC — Member of the Surbana Jurong Group — © ABN 47 065 475 149 — LEVEL 5, 20 BERRY STREET NORTH SYDNEY NSW 2060 — SMEC PROJECT No 30013046

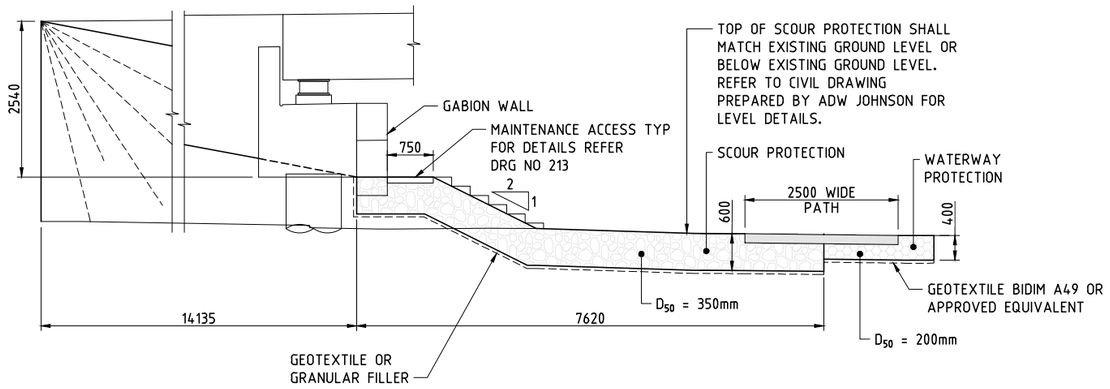
CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE

SCOUR PROTECTION DETAILS SHEET A

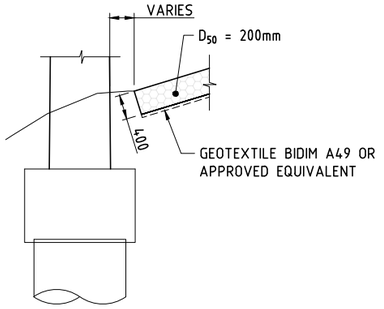
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AS NOTED	CONSTRUCTION	30013046-211	A

A1 — 150 mm ON ORIGINAL

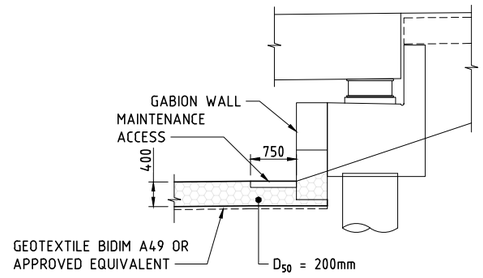


ABUTMENT A SCOUR PROTECTION
SCALE 1:50

TABLE 1 - SCOUR SETTING OUT		
LOCATION	**NORTHING**	**EASTING**
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A2	325765.533	6260354.104
A3	325767.644	6260362.002
A4	325774.521	6260358.053
A5	325774.092	6260350.435
A6	325774.321	6260347.700
A7	325774.955	6260340.130
A8	325775.172	6260337.537
A9	325771.305	6260323.330
A10	325768.130	6260317.712
A11	325766.217	6260311.843
A12	325762.086	6260305.404
A13	325755.580	6260304.194
A14	325757.213	6260317.132
A15	325760.033	6260323.247
B1	325794.236	6260287.686
B2	325784.836	6260287.498
B3	325784.506	6260291.597
B4	325785.702	6260294.856
B5	325787.153	6260297.376
B6	325793.651	6260309.983
B7	325795.020	6260317.012
B8	325798.980	6260323.488
B9	325802.593	6260320.383
B10	325804.152	6260322.192
B11	325813.131	6260314.454



WATERWAY PROTECTION AT PIER 2
SCALE 1:50



WATERWAY PROTECTION AT ABUTMENT B
SCALE 1:50

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
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GENERAL NOTES
FOR GENERAL NOTES RELATED TO THIS DRAWING, REFER DRG No 211.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-212.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:46:43

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
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TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 1000 2000mm; 500 250 1:50

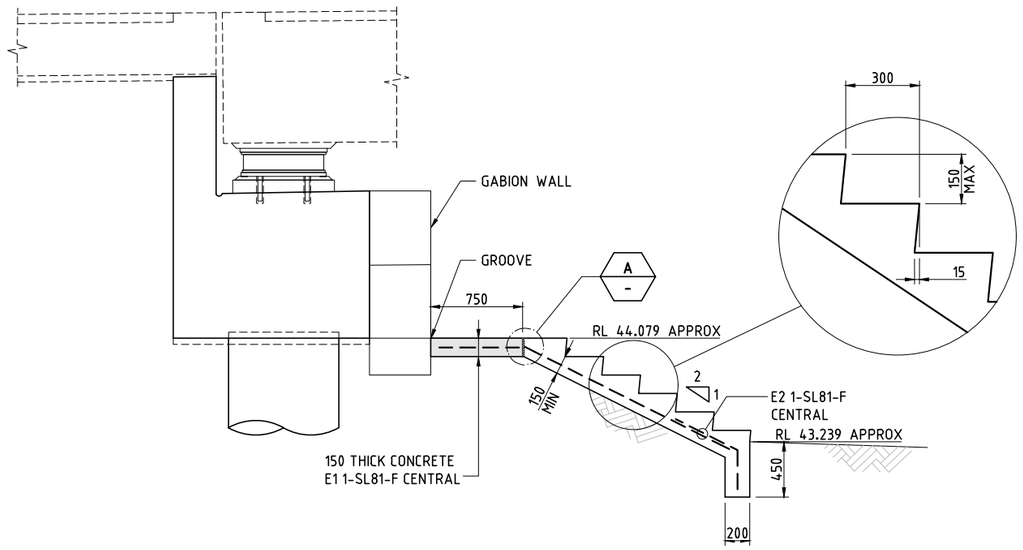
DESIGNER: SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

CLIENT: FRASERS PROPERTY

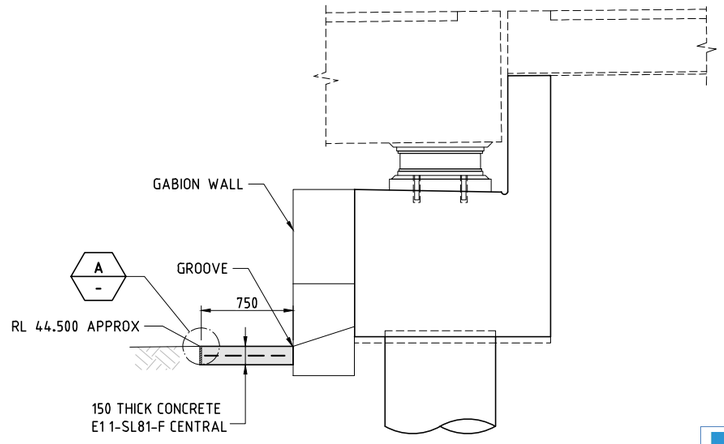
PROJECT TITLE: SHRIMPTON CREEK BRIDGE
SCOUR PROTECTION DETAILS
SHEET B

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-212	A

A1 150 mm ON ORIGINAL

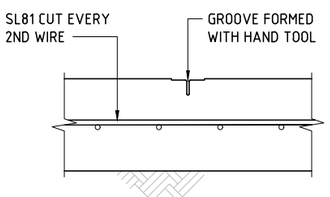


MAINTENANCE STAIRS AND ACCESS PATH DETAIL AT ABUTMENT A
SCALE 1:25

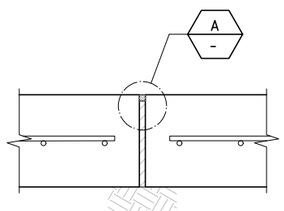


MAINTENANCE ACCESS PATH DETAIL AT ABUTMENT B
SCALE 1:25

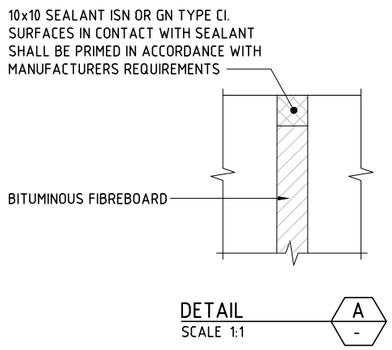
These plans are referred to in certificate no. **16897** approved by:
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Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
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TOOLED JOINT(TJ)
AT MAX 2500 CENTRES IN MAINTENANCE ACCESS WALKWAYS
SCALE 1:5



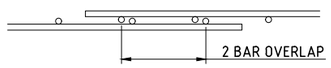
EXPANSION JOINT (EJ)
AT MAX 7500 CENTRES IN MAINTENANCE ACCESS WALKWAYS
SCALE 1:5



DETAIL A
SCALE 1:1

GENERAL NOTES

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
CONCRETE EXPOSURE CLASSIFICATION B1.
MINIMUM 28 DAY COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 32MPa.
MINIMUM 28 DAY COMPRESSIVE STRENGTH OF MASS CONCRETE SHALL BE 20MPa UNO.
NOMINAL COVER TO REINFORCEMENT NEAREST TO THE CONCRETE SURFACE SHALL BE 50mm OR 80mm IF CAST AGAINST GROUND UNLESS SPECIFIED OTHERWISE.
REINFORCEMENT FABRIC LAPPED SPLICE SHALL BE AS FOLLOWS :



MAINTENANCE ACCESS STEPS AND BENCH SHALL HAVE A ROUGHENED SURFACE AS PER SPECIFICATION .
ALL SEALANTS SHALL CONFORM TO TfNSW QA SPECIFICATION B312.
BACKING RODS SHALL BE NON-ABSORBENT, CLOSED CELL POLYSTYRENE OR NEOPRENE (PARBURY'S EXPANDFORM BACKER ROD OR APPROVED EQUIVALENT) INSTALLED WITH 25% COMPRESSION.
SEALANTS SHALL BE APPLIED AS PER MATERIAL SPECIFICATION REQUIREMENTS.
BLINDING CONCRETE CAN BE POURED TOGETHER WITH THE MAINTENANCE ACCESS BENCH AS LONG AS THE CONCRETE STRENGTH IS THE SAME AS THE MAINTENANCE ACCESS BENCH.

150 mm ON ORIGINAL
A1
X_30013046_SMEC_A1

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PLOT DATE: 14 Jun 2022 TIME: 17:47:13

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

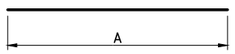
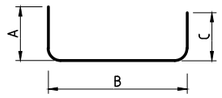
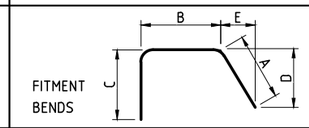
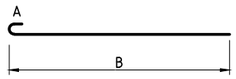
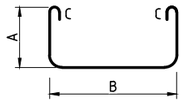
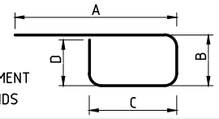
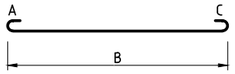
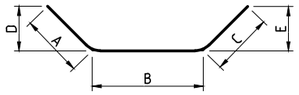
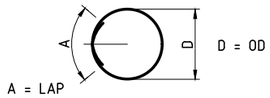
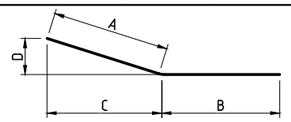
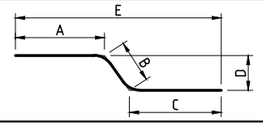
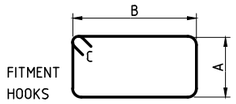
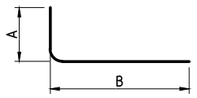
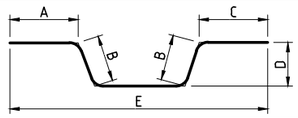
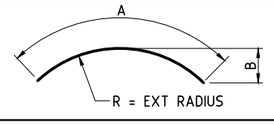
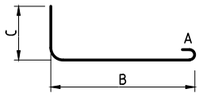
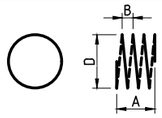
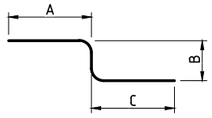
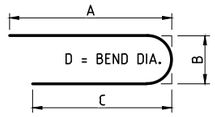
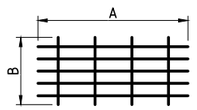
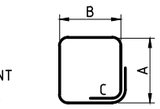
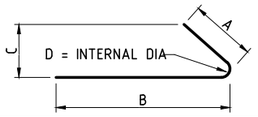
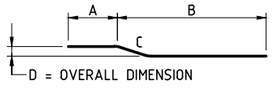
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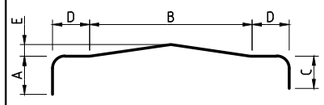
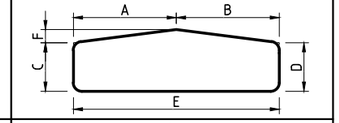
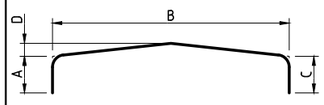
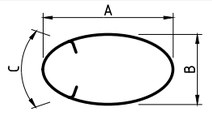
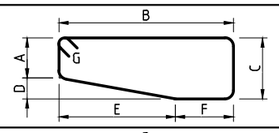
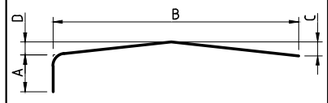
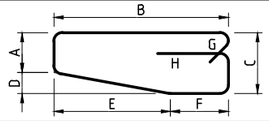
DESIGNER: SMEC — Member of the Surbana Jurong Group — © ABN 47 065 475 149 — LEVEL 5, 20 BERRY STREET NORTH SYDNEY NSW 2060 — SMEC PROJECT No 30013046

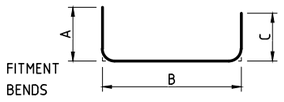
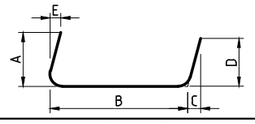
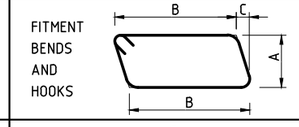
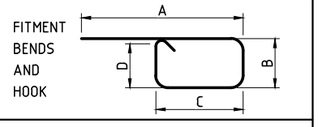
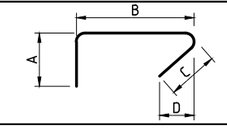
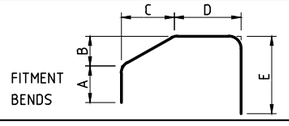
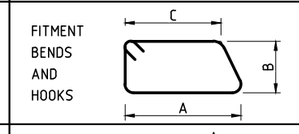
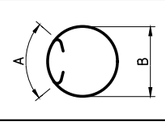
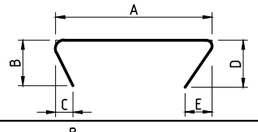
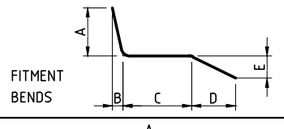
CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE
MAINTENANCE ACCESS

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-213	A

SHAPE CODE	AUSTRALIAN STANDARD SHAPE	SHAPE CODE	AUSTRALIAN STANDARD SHAPE	SHAPE CODE	AUSTRALIAN STANDARD SHAPE	SHAPE CODE	AUSTRALIAN STANDARD SHAPE
S		LL		VL		H	
SH		XT		HH		VV	
CT		V		J		HT	
L		JJ		R		LH	
SP		RC		U		F	
T		A		CC			

SHAPE CODE	NON STANDARD SHAPE	SHAPE CODE	NON STANDARD SHAPE
AZ		EZ	
BZ		FZ	
CZ		GZ	
DZ		LZ	

SHAPE CODE	ROADS AND MARITIME SERVICES STANDARD SHAPE	SHAPE CODE	ROADS AND MARITIME SERVICES STANDARD SHAPE	SHAPE CODE	ROADS AND MARITIME SERVICES STANDARD SHAPE	SHAPE CODE	ROADS AND MARITIME SERVICES STANDARD SHAPE
LF		AV		TT		XH	
LA		LG		PT		ST	
AA		KH		QT		VS	
KL		GT		KF		AF	

BAR MARKING LEGEND

THE METHOD USED TO DESCRIBE REINFORCEMENT ON THE DRAWINGS IS AS FOLLOWS:

A1 10-N16-S-300EF

- A1 — STRUCTURE ELEMENT DENOTATION
- 10 — NUMBER OF BARS IN THE SET
- N — BAR STRUCTURAL PROPERTIES
- 16 — BAR SIZE IN MILLIMETRES
- S — BAR SHAPE CODE
- 300 — SPACE ALONG LIMIT LINE
- EF — INFORMATION FOR PLACING

WHERE THE BAR SPACING IS APPROXIMATE ONLY, THE FOLLOWING FORMAT SHALL BE USED:

A1 10-N16-S-300EF APPROX

GENERAL NOTES

STRUCTURE ELEMENT DENOTATION:

A - FOR ABUTMENT A
B - FOR ABUTMENT B
C - FOR PIER COLUMNS
D - FOR DECK
E - FOR MAINTENANCE ACCESS
F - FOR FOUNDATION
G - FOR PRECAST GIRDERS
R - FOR RETAINING WALL
S - FOR APPROACH SLABS
W - FOR DEFECTION WALL

INFORMATION FOR PLACING:

NF - NEAR FACE
FF - FAR FACE
LV - LENGTH VARIES
EF - EACH FACE

REINFORCEMENT NOTES

AUSTRALIAN STANDARD BAR SHAPES ARE IN ACCORDANCE WITH AS 1100.501.
BAR SIZE IS THE NOMINAL DIAMETER IN MILLIMETRES, OR THE AS/NZS 4671 FABRIC NUMBER.
THE GRADE OF REINFORCEMENT, IF NOT STATED ON THE DRAWINGS, SHALL BE D500N TO AS/NZS 4671.
WHERE SHOWN ON THE DRAWINGS, "W" SHALL DENOTE PLAIN ROUND REINFORCING BARS EQUIVALENT TO GRADE R500L TO AS/NZS 4671.
WHERE SHOWN ON THE DRAWINGS, RL AND SL SHALL DENOTE WELDED REINFORCING FABRIC (RECTANGULAR AND SQUARE), RESPECTIVELY.
DIMENSIONS SHOWN ON BAR SHAPES DIAGRAMS ARE MEASURED FROM THE OUTSIDE FACES OF THE BARS AND ARE IN MILLIMETRES.
THE INCLUDED ANGLE OF ANY BEND SHALL BE A RIGHT ANGLE IF NO DIMENSION SHOWN.
BARS OF DIAMETER GREATER THAN 24mm SHALL NOT BE REBENT.
BAR BENDING AND HOOK DETAILS SHALL BE IN ACCORDANCE WITH SECTION 13 OF AS 5100.5.

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

Land Development Certificates
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DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-215.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:47:43

EXTERNAL REFERENCE FILES: X_30013046_SMEC_A1

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING

DESIGNER: SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

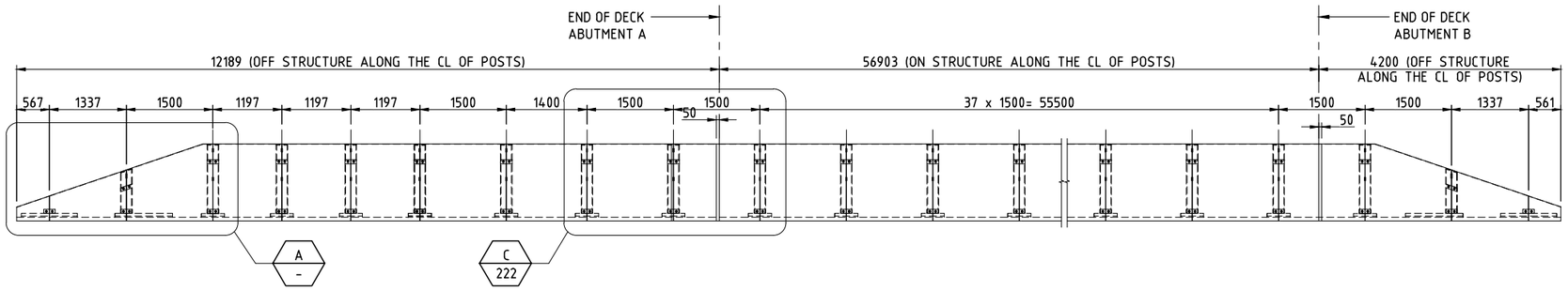
CLIENT: FRASERS PROPERTY

PROJECT TITLE: SHRIMPTON CREEK BRIDGE

BAR SHAPES DIAGRAMS

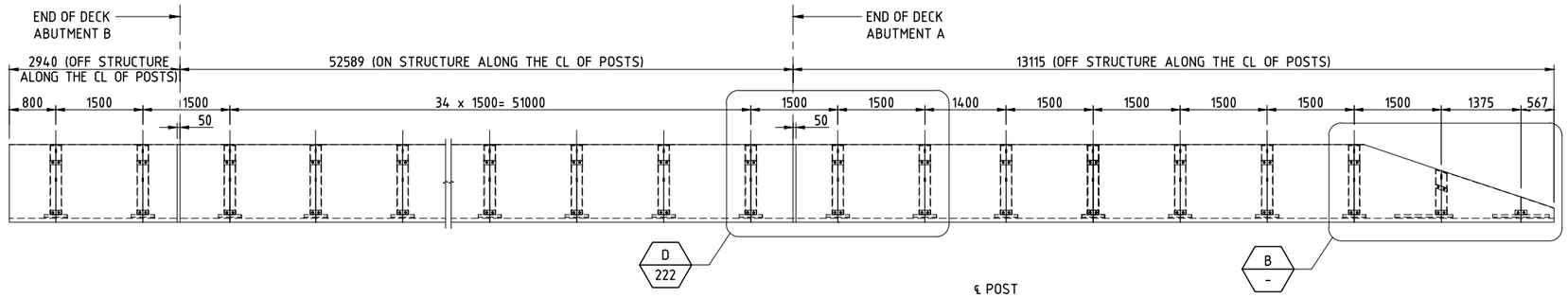
SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-215	A

150 mm ON ORIGINAL
A1



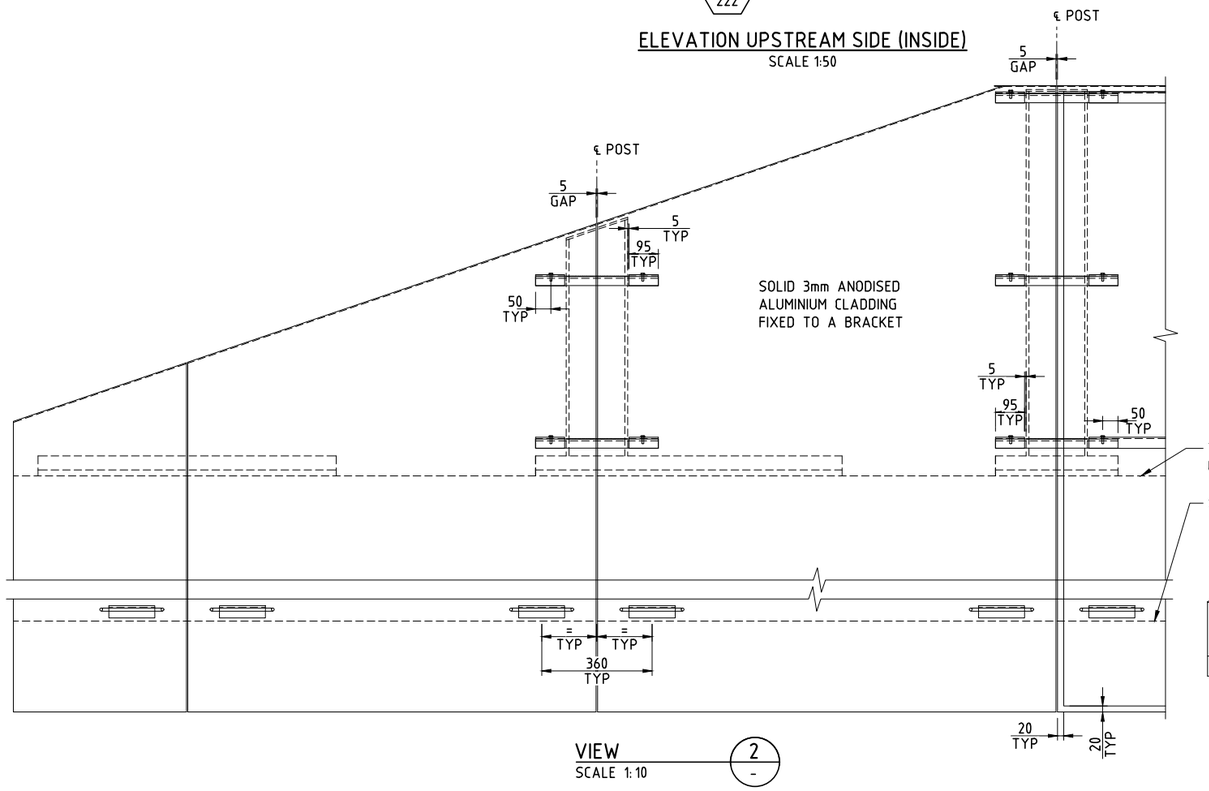
ELEVATION DOWNSTREAM SIDE (INSIDE)

SCALE 1:50



ELEVATION UPSTREAM SIDE (INSIDE)

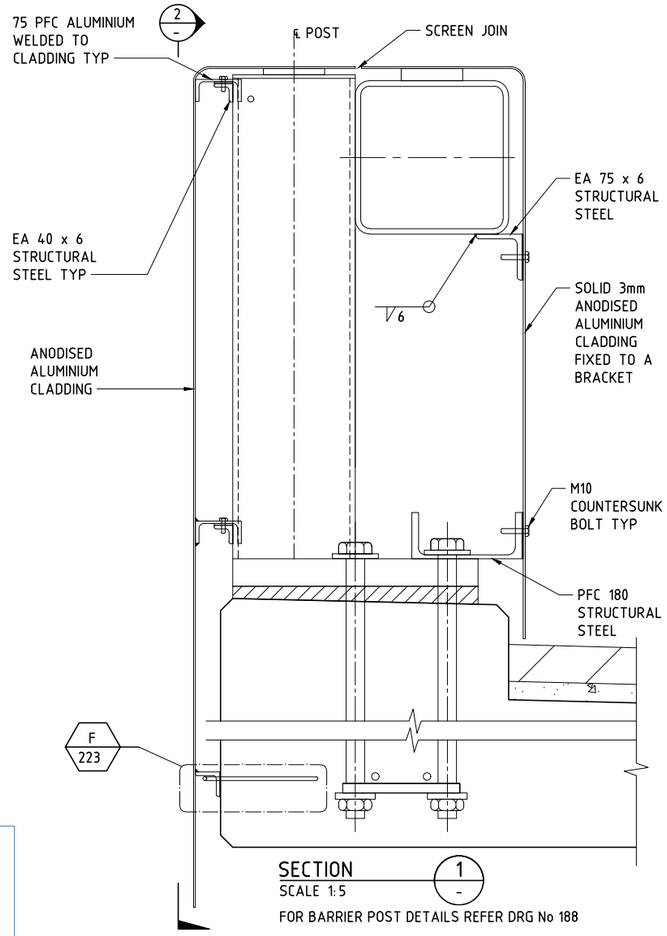
SCALE 1:50



VIEW

SCALE 1:10

2
-

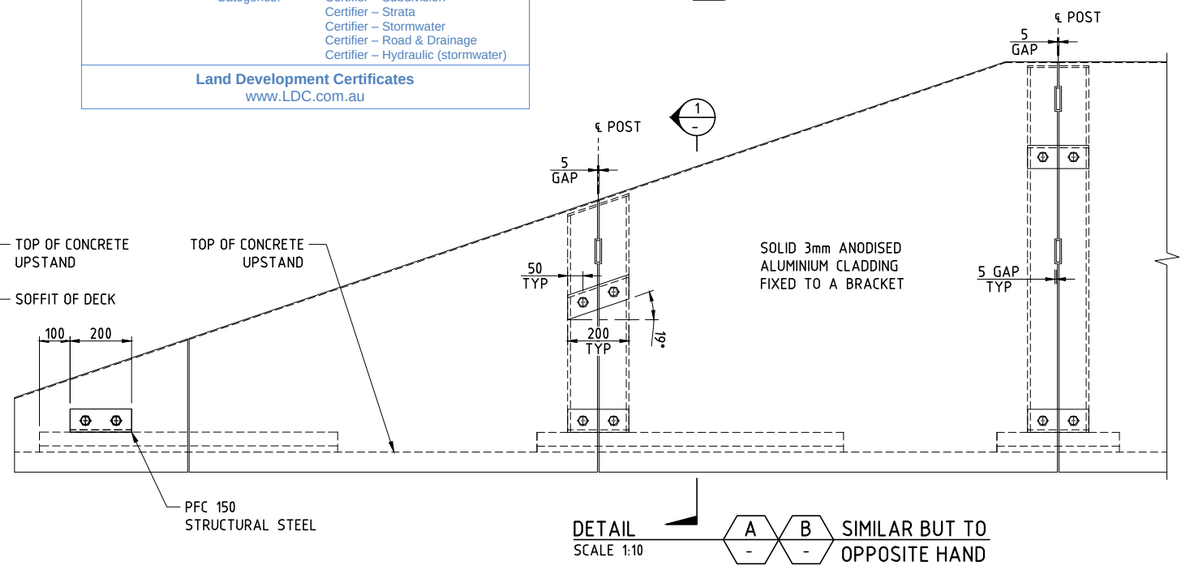


SECTION

SCALE 1:5

1
-

FOR BARRIER POST DETAILS REFER DRG No 188



DETAIL

SCALE 1:10

A
-
B
-

SIMILAR BUT TO OPPOSITE HAND

GENERAL NOTES

FOR ALL NOTES RELATED TO THIS DRAWING, REFER DRG No 223.

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

Land Development Certificates
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DRAWING FILE LOCATION / NAME	PLOT DATE	TIME
V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-221.dwg	14 Jun 2022	17:48:17

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SMEC_A1 X_BRG_SEC	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING

DESIGNER
SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

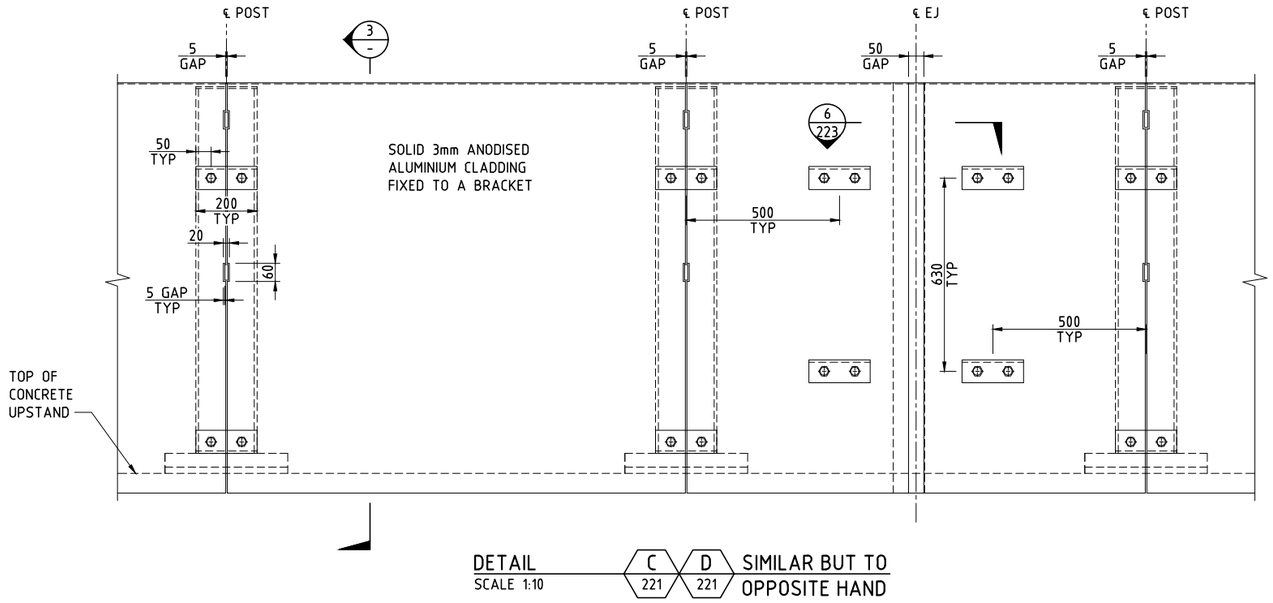
CLIENT
FRASERS PROPERTY

PROJECT TITLE
SHRIMPTON CREEK BRIDGE

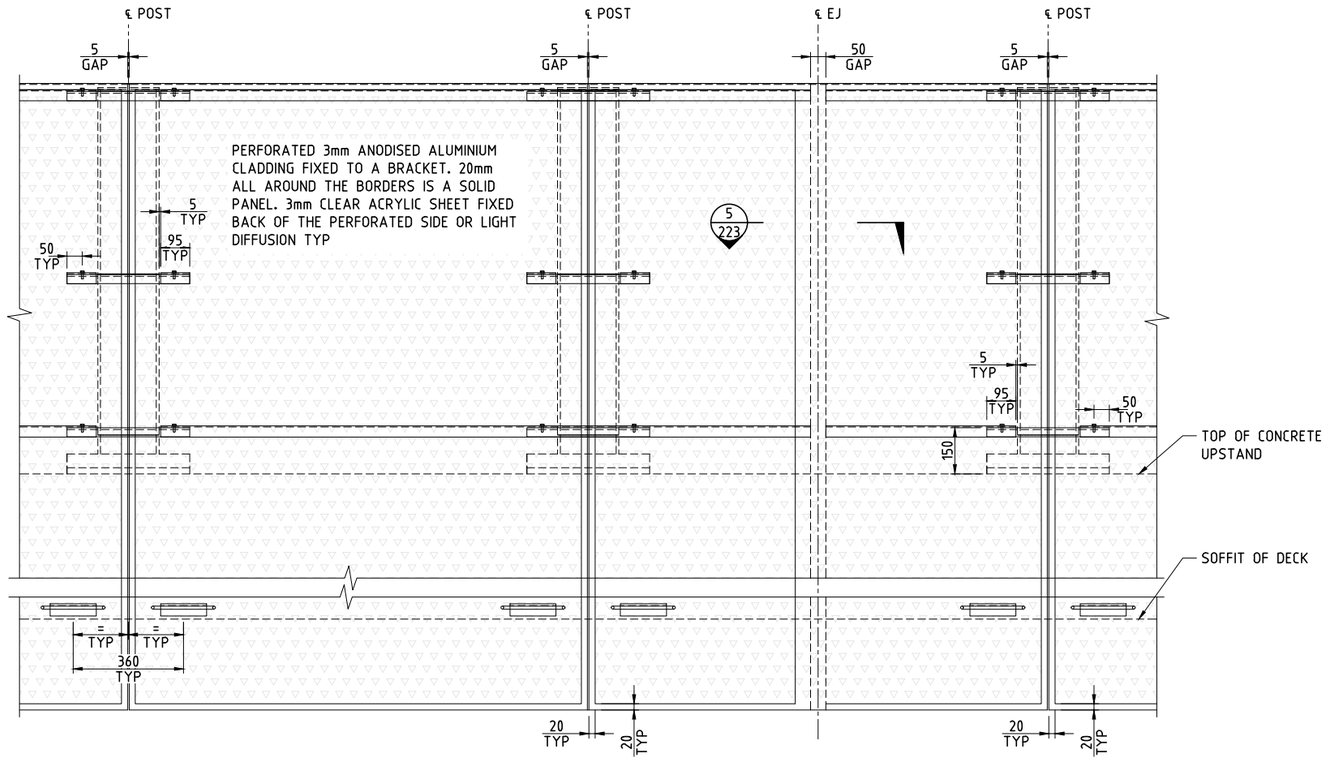
CLADDING DETAILS
SHEET A

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-221	A

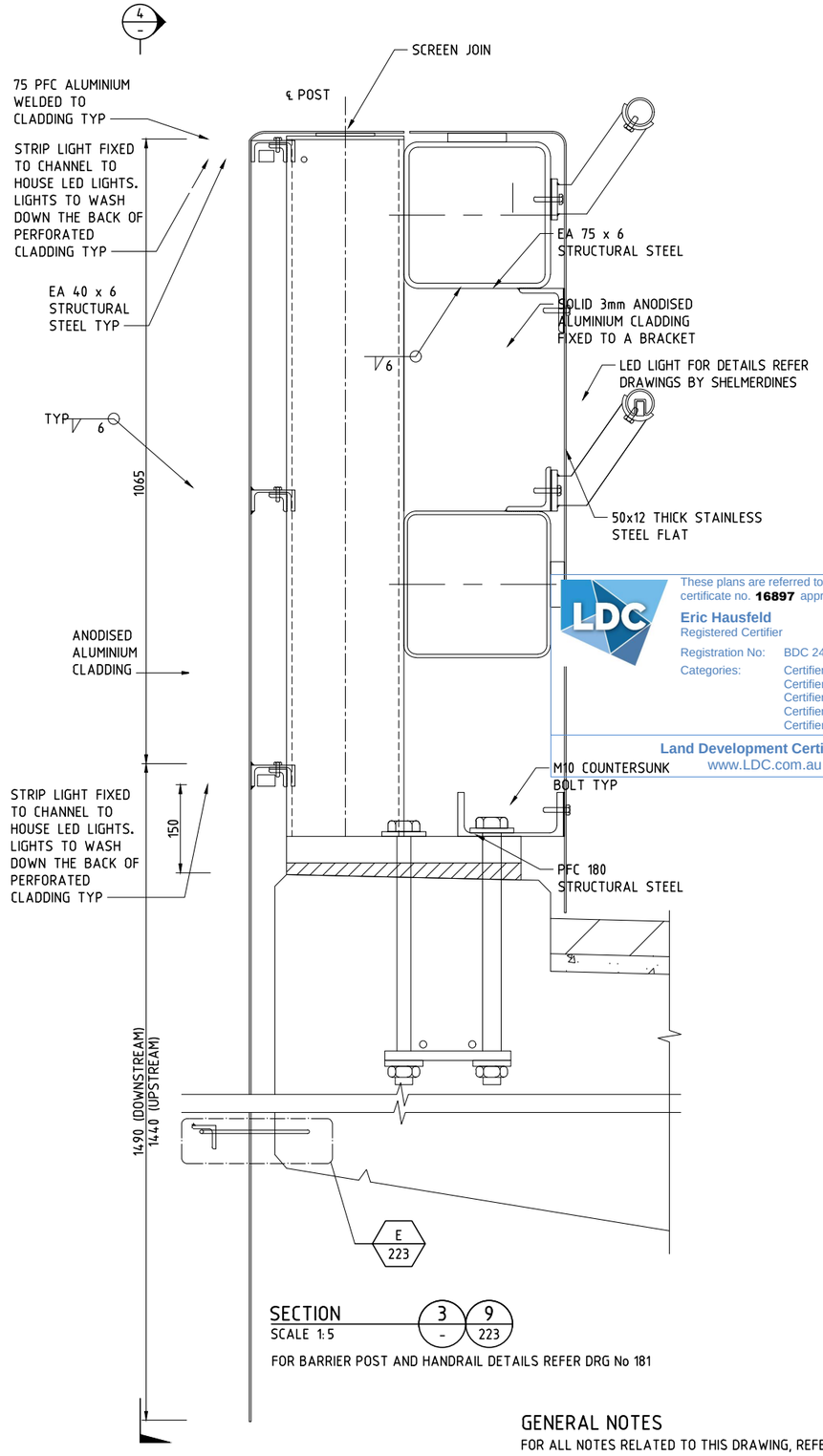
A1
150 mm ON ORIGINAL



DETAIL C 221 / D 221 SCALE 1:10 — SIMILAR BUT TO OPPOSITE HAND



VIEW 4 SCALE 1:10



SECTION 3 - / 9 223 SCALE 1:5

FOR BARRIER POST AND HANDRAIL DETAILS REFER DRG No 181

GENERAL NOTES

FOR ALL NOTES RELATED TO THIS DRAWING, REFER DRG No 223.

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
Land Development Certificates www.LDC.com.au

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-222.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:48:51

EXTERNAL REFERENCE FILES: X_30013046_SMEC_A1, X_BRG_SEC

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING

DESIGNER: SMEC — Member of the Surbana Jurong Group © ABN 47 065 475 149 — LEVEL 5, 20 BERRY STREET NORTH SYDNEY NSW 2060 — SMEC PROJECT No 30013046

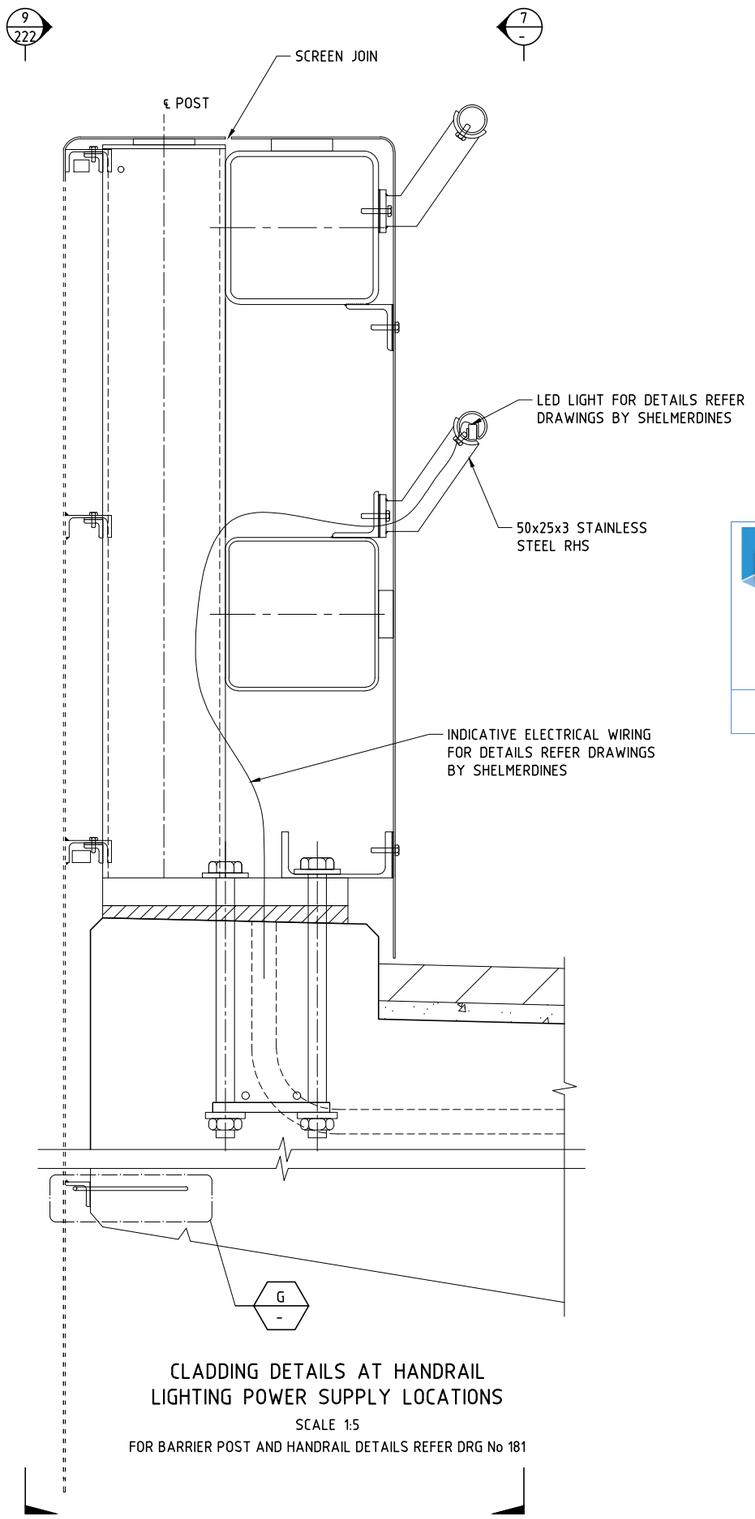
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PROJECT TITLE: SHRIMPTON CREEK BRIDGE

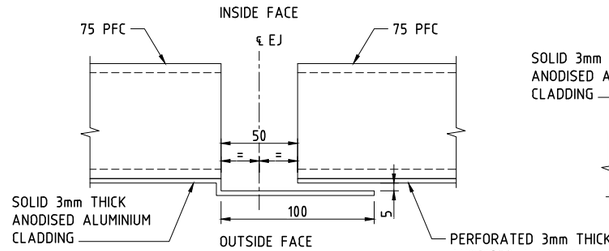
CLADDING DETAILS SHEET B

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-222	A

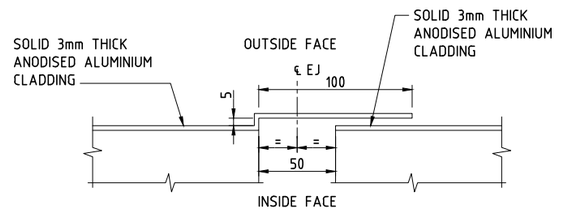
A1 — 150 mm ON ORIGINAL



CLADDING DETAILS AT HANDRAIL
LIGHTING POWER SUPPLY LOCATIONS
SCALE 1:5
FOR BARRIER POST AND HANDRAIL DETAILS REFER DRG No 181

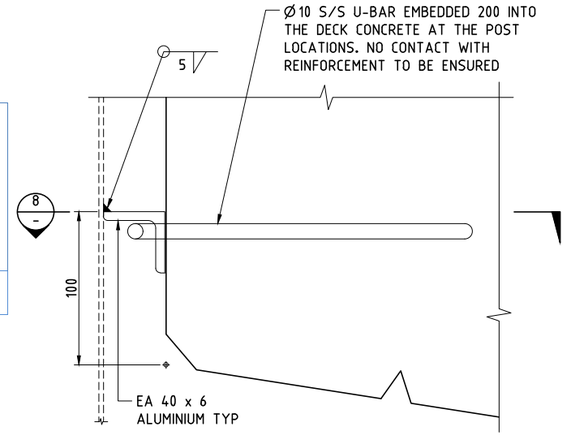


SECTION 5 / 222
SCALE 1:2

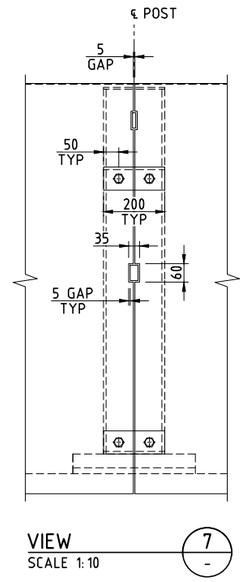


SECTION 6 / 222
SCALE 1:2

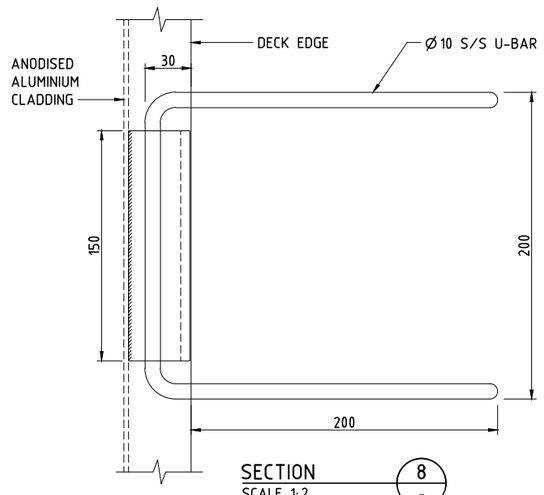
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Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision; Certifier – Strata; Certifier – Stormwater; Certifier – Road & Drainage; Certifier – Hydraulic (stormwater)
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DETAIL E / 222 F / 221 G / -
SCALE 1:2



VIEW 7 / -
SCALE 1:10



SECTION 8 / -
SCALE 1:2

GENERAL NOTES

CLADDING PANEL NEEDS TO BE BENT IN CURVE TO FOLLOW THE BARRIER PROFILE.
FOR COLOR AND PERFORATION DETAILS OF CLADDING REFER SPECIFICATIONS IN THE CONTRACT DOCUMENT.
PANEL AT ENDS TO TURN IN AND STOP WITH 10mm GAP
FOR STRUCTURAL STEEL NOTES REFER DRAWING No 182.

STAINLESS STEEL

ALL STAINLESS STEEL (S/S) SHALL BE GRADE 304 U.N.O. ALL WELDS SHALL BE 6 CFW U.N.O.
CONNECTIONS BETWEEN DISSIMILAR METALS SHALL BE MADE USING NEOPRENE OR NYLON SEPARATORS.
MINIMUM CONNECTIONS SHALL BE 10PL 2/M10(S/S) BOLTS U.N.O.
SHOP DRAWINGS SHALL BE SUBMITTED BEFORE COMMENCEMENT OF FABRICATION.
ALL STAINLESS STEEL MATERIALS SHALL NOT BE STORED OR BROUGHT INTO CONTACT WITH ANY CARBON STEEL OR OTHER FERROUS METALS INCLUDING TOOLS;
STAINLESS STEEL PLATE TO ASTM A240.
STAINLESS STEEL FLAT BAR AND ROUND BAR TO ASTM A276.
ALL STAINLESS STEEL BOLTS TO CLASS 2 B8M TO ASTM A193.
STAINLESS STEEL SET SCREWS TO AS/NZS ISO 3506.3.
GRADE 304 ELECTRODES SHALL BE USED FOR WELDING GRADE 304 GRADE STAINLESS STEEL;
WELDS SHALL BE CATEGORY 2B IN ACCORDANCE WITH AS1554.6 TABLE 6.1 THE EXTENT OF NON-DESTRUCTIVE EXAMINATION OF WELDS WILL BE IN ACCORDANCE WITH AS1554.6 TABLE 7.4. ;
AFTER FABRICATION, PICKLING AND PASSIVATION WILL BE IN ACCORDANCE WITH ASTM A380 IN LINE WITH THE REQUIREMENTS OF PPR PART C1 CLAUSE 20.5.3.
WELDER SHALL BE QUALIFIED AND PERFORMED IN ACCORDANCE WITH AS/NZS 1554.6;
EDGES TO BE PROTECTIVE TREATED SHALL BE ROUNDED TO A RADIUS OF 1.5mm UNLESS NOTED OTHERWISE.
TO PROVIDE RESISTANCE TO PITTING CORROSION AND TEA STAINING, THE SURFACE ROUGHNESS (RA) SHALL BE <0.5 MICRONS. DEPENDING ON THE PRODUCT, THE FOLLOWING SURFACE FINISHES ARE ACCEPTABLE.

ALUMINIUM

ALUMINIMUM MATERIALS SHALL COMPLY WITH AUSTRALIAN STANDARDS 1664, 1734 AND 1866 AS APPROPRIATE.
THE ALLOY SHALL BE AS SHOWN ON THE DRAWINGS.
ALL WORKMANSHIP AND MATERIAL SHALL BE ACCORDANCE WITH AS1664 ALUMINIUM STRUCTURES AND AS1665 WELDING OF ALUMINIUM STRUCTURES.
ALL WELDING OF ALUMINIUM SHALL BE CARRIED OUT IN ACCORDANCE WITH AS1665 AND THE FOLLOWING:
- WELD CATEGORY B.
- ALL WELDS SHALL BE INERT GAS WELD USING PULSED-ARC WELDING (GTAW OR GMAW) TO AS1665(2004).
- ALL ALUMINIUM WELDING AND FABRICATION SHALL BE CARRIED OUT BY AN ACCREDITED FABRICATOR TO AS1664 & AS1665.

ALL WELDS SHALL BE 3 CFW U.N.O.
CONNECTIONS BETWEEN DISSIMILAR METALS SHALL BE MADE USING NEOPRENE OR NYLON SEPARATORS.
ALUMINIUM SURFACES IN CONTACT WITH CONCRETE SHALL BE COATED WITH ALKALI RESISTANT BITUMEN PAINT.
SHOP DRAWINGS SHALL BE SUBMITTED BEFORE COMMENCEMENT OF FABRICATION.
MINIMUM CONNECTIONS SHALL BE 10PL 2/M10(S/S) BOLTS U.N.O.
ALL WORK SHALL BE NEATLY FINISHED WITH ALL SHARP EDGES TO HAVE GROUND SMOOTH FINISH.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-223.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:49:27

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SMEC_A1 X_BRG_SEC	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING

DESIGNER
SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

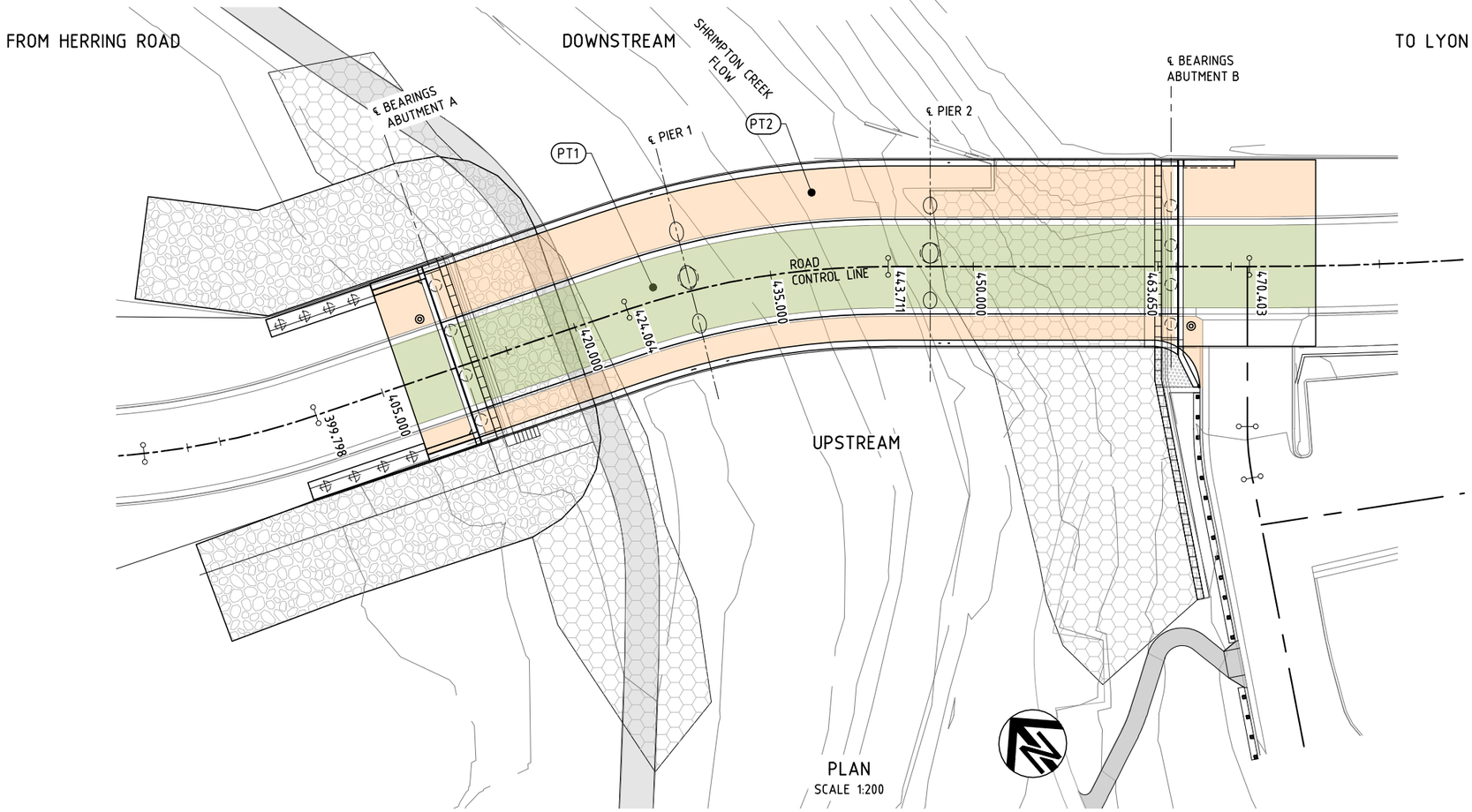
CLIENT
FRASERS PROPERTY

PROJECT TITLE
SHRIMPTON CREEK BRIDGE

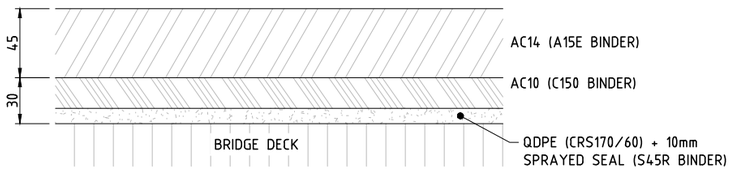
CLADDING DETAILS
SHEET C

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-223	A

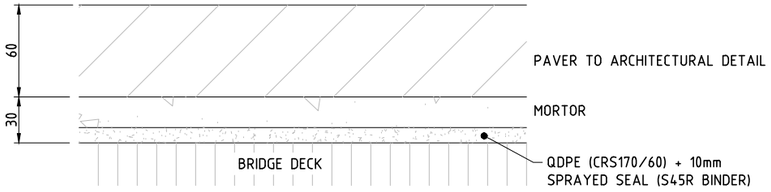
A1
150 mm ON ORIGINAL



PLAN
SCALE 1:200



PAVEMENT TYPE - PT1
NOT TO SCLAE



PAVEMENT TYPE - PT2
NOT TO SCLAE

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
Land Development Certificates
www.LDC.com.au

GENERAL NOTES

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
TREATMENT OF CONCRETE SURFACE FOR APPROACH SLABS AND BRIDGE DECK TO BE IN ACCORDANCE WITH TfNSW QA SPECIFICATION B312.

150 mm ON ORIGINAL
A1

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-230.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:59:53

EXTERNAL REFERENCE FILES:
X_30013046_SMEC_A1
X_DES_MAIN
X_SURV
X_BRG_PLAN
X_BRG_SCOUR PROTECTION
X_PROP_SERVICES

REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
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DRAFTING CHECK	V.S.KODURU
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PROJECT DIRECTOR	K.LUU

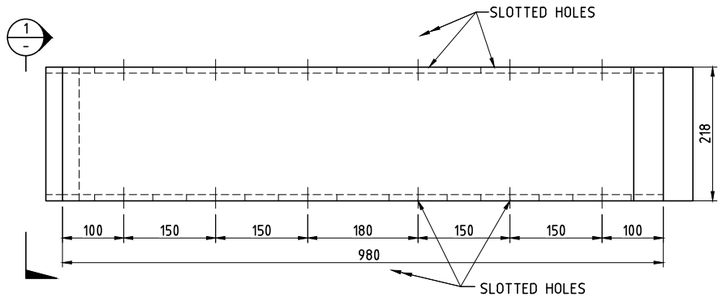
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DESIGNER
SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

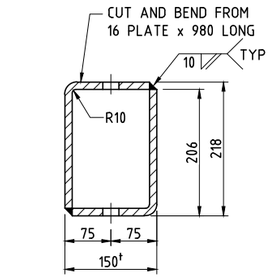
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PROJECT TITLE
SHRIMPTON CREEK BRIDGE
BRIDGE AND APPROACH SLAB PAVEMENT DETAILS

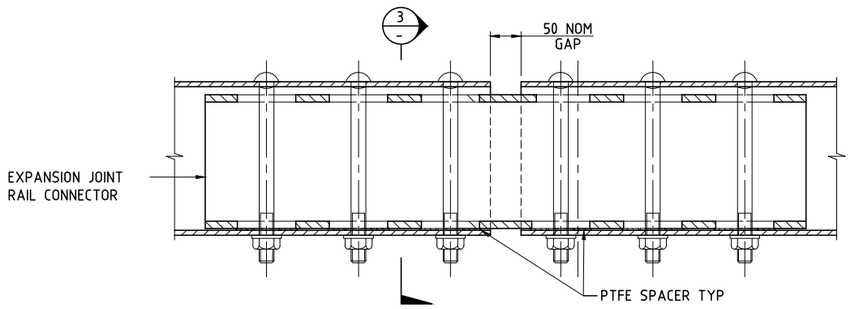
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AS NOTED	CONSTRUCTION	30013046-230	A



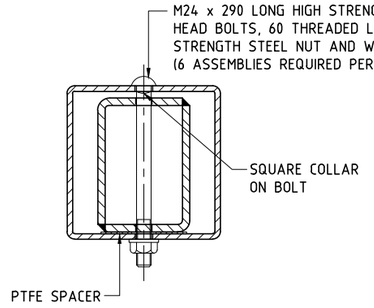
ELEVATION
SCALE 1:5



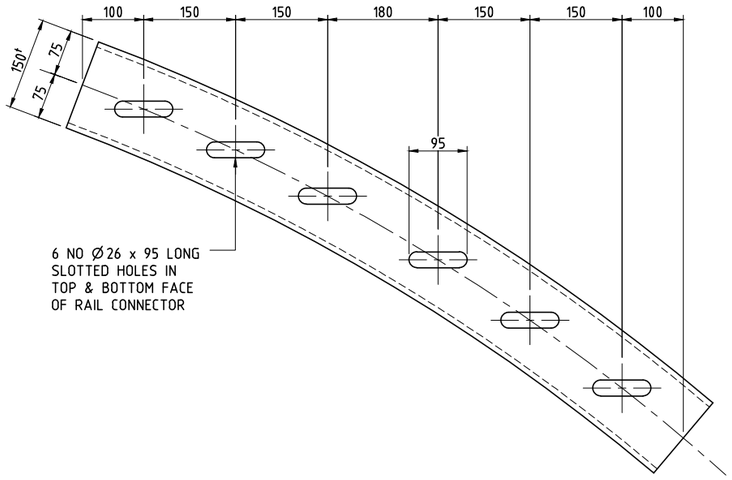
VIEW 1
SCALE 1:5



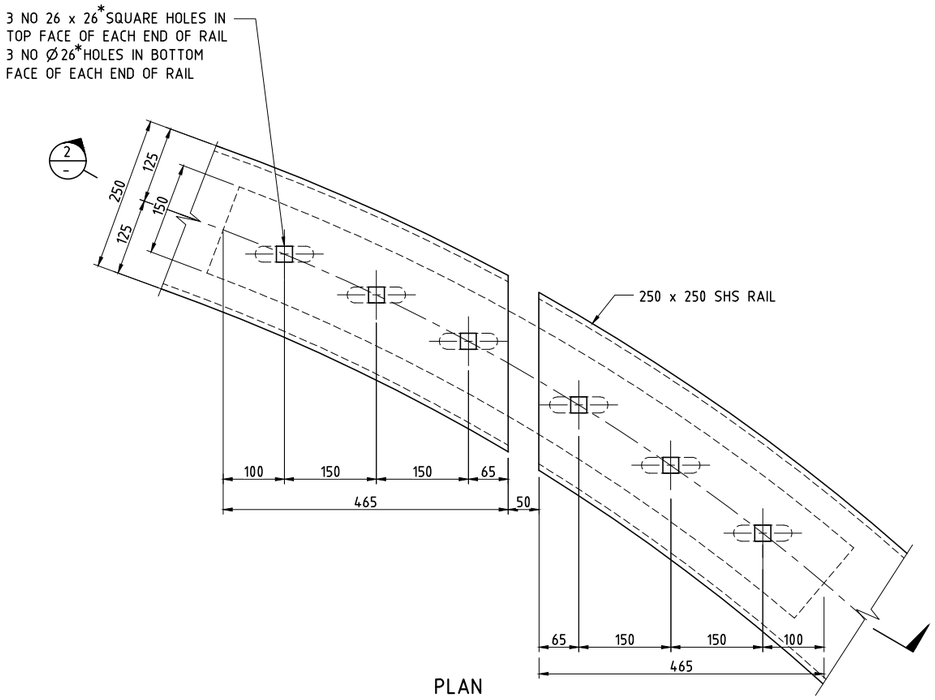
SECTION 2
SCALE 1:5



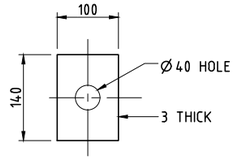
SECTION 3
SCALE 1:5



PLAN
ASSEMBLY AT EXPANSION JOINT RAIL CONNECTION
SCALE 1:5



PLAN
ASSEMBLY AT EXPANSION JOINT RAIL CONNECTION
SCALE 1:5



PTFE SPACER
SCALE 1:5

DETAIL AT EXPANSION JOINT CONNECTION

(FOR 250 x 250 SHS RAIL)

These plans are referred to in certificate no. **16897** approved by:
Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)
Land Development Certificates
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GENERAL NOTES

FOR GENERAL NOTES RELATED TO THIS DRAWING, REFER DRG No 182.

DRAWING FILE LOCATION / NAME: V:_Vault\Projects\3001\30013046\110_CADD\CAD\DWG\30013046-235.dwg
PLOT DATE: 14 Jun 2022 TIME: 17:50:38

EXTERNAL REFERENCE FILES	REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
X_30013046_SMEC_A1	A	14.06.2022	APPROVED FOR CONSTRUCTION	001	JD

TITLE	NAME
DRAFTER	T.SABAPATHI
DRAFTING CHECK	V.S.KODURU
DESIGNER	V.S.KODURU
DESIGN CHECK	V.BALAKRISHNAN
PROJECT MANAGER	J.DICKERSON
PROJECT DIRECTOR	K.LUU

SCALES AT A1 SIZE DRAWING: 0 100 200mm; 50 25 1:5

DESIGNER
SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
LEVEL 5, 20 BERRY STREET
NORTH SYDNEY NSW 2060
SMEC PROJECT No 30013046

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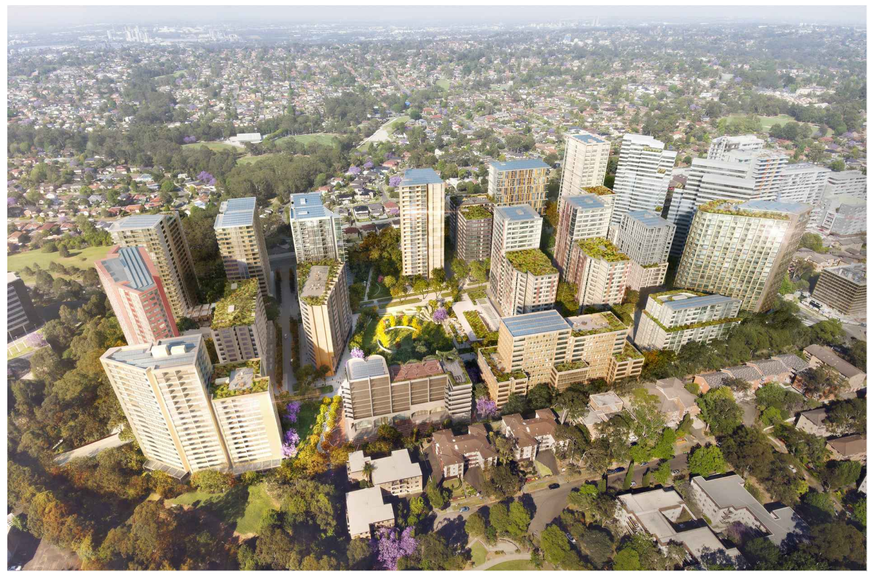
PROJECT TITLE
SHRIMPTON CREEK BRIDGE
RAIL SPLICE DETAILS
AT CURVE LOCATION

SCALE	PHASE	PROJECT / DRAWING No.	REVISION
AS NOTED	CONSTRUCTION	30013046-235	A

150 mm ON ORIGINAL
A1

MIDTOWN AT MACQUARIE PARK, IVANHOE

STAGE 1B LANDSCAPE WORKS
TENDER DOCUMENTATION





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Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories:
Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

Land Development Certificates
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CONSULTANT

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sydney@hassellstudio.com
Nominated Architects NSW:
Tony Grist 5350
Glenn Scott 6842
Ross de la Motte 7398

REFERENCE

NORTH

NOTES

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REV	DESCRIPTION	DATE
A	FOR TENDER	16 08 2021

CLIENT
FRASERS PROPERTY AUSTRALIA

PROJECT
STAGE 1B STREETSCAPES
MIDTOWN IVANHOE, MACQUARIE PARK
SYDNEY, NSW 2113

STATUS
TENDER DOCUMENTATION

DRAWING TITLE
COVER SHEET

REVIEWED
GD

SCALE @ A1

APPROVED

PROJECT NO.
012092

DRAWING NO.
HSL_S1B_0001

REV NO.
A

PRINT INFORMATION_ PRINTED BY: Georgia Darling _ ON: 2021/08/16 _ USING PAGESETUP: ---- _ USING PLOTSTYLE TABLE: halfweight.ctb _ PC3: DWG To PDF.pc3 _ PSLTSCALE: 1 _ LTSCALE: 1.000000

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DRAWING INDEX

DRAWING No.	DRAWING TITLE
GENERAL	
HSL_S1B_0001	COVER SHEET
HSL_S1B_0002	DRAWING INDEX
HSL_S1B_0003	DRAWING LEGEND
HSL_S1B_0004	PLANTING SCHEUDLE
SITE PLAN	
HSL_S1B_0100	SITE PLAN
GENERAL ARRANGEMENT PLANS	
HSL_S1B_1001	GENERAL ARRANGEMENT PLAN SHEET 1 OF 10
HSL_S1B_1002	GENERAL ARRANGEMENT PLAN SHEET 2 OF 10
HSL_S1B_1003	GENERAL ARRANGEMENT PLAN SHEET 3 OF 10
HSL_S1B_1004	GENERAL ARRANGEMENT PLAN SHEET 4 OF 10
HSL_S1B_1005	GENERAL ARRANGEMENT PLAN SHEET 5 OF 10
~~HSL_S1B_1006~~	~~GENERAL ARRANGEMENT PLAN SHEET 6 OF 10~~
HSL_S1B_1007	GENERAL ARRANGEMENT PLAN SHEET 7 OF 10
HSL_S1B_1008	GENERAL ARRANGEMENT PLAN SHEET 8 OF 10
HSL_S1B_1009	GENERAL ARRANGEMENT PLAN SHEET 9 OF 10
HSL_S1B_1010	GENERAL ARRANGEMENT PLAN SHEET 10 OF 10
HSL_S1B_5001	DETAIL PLAN SHEET - BRIDGE
DETAILS	
HSL_S1B-5201	DETAILS - FURNITURE & FIXTURE
HSL_S1B-5202	DETAILS - FURNITURE & FIXTURE
HSL_S1B-5203	DETAILS - FURNITURE & FIXTURE
HSL_S1B-5301	DETAILS - PAVING
HSL_S1B-5302	DETAILS - PAVING
HSL_S1B-5401	DETAILS - PLANTING
SPECIFICATIONS	
HSL_S1B-6001	MATERIALS & FINISHES SCHEDULE
HSL_S1B-6003	LANDSCAPE SPECIFICATION
APPENDIX	
APPENDIX 1	PORPHYRY SETTS VEHICULAR PAVEMENT - 'STANDARD DRAWINGS CITY OF RYDE'
APPENDIX 2	GRANITE EXPANSION JOINT - 'STANDARD DRAWINGS CITY OF RYDE'
APPENDIX 3	GRANITE ISOLATION JOINT - 'STANDARD DRAWINGS CITY OF RYDE'
APPENDIX 4	TREE PIT WITH GRATE AND GRANITE BANDING TYPICAL - 'STANDARD DRAWINGS CITY OF RYDE'
APPENDIX 5	STEEL EDGE TYPES GRANITE PAVING TO GARDEN BED 'STANDARD DRAWINGS CITY OF RYDE'

C DRAWING ADDED

C UPDATED

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision
Certifier – Strata
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Certifier – Road & Drainage
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Land Development Certificates
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CONSULTANT

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sydney@hassellstudio.com
Nominated Architects NSW:
Tony Grist 5350
Glenn Scott 6842
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REFERENCE

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REV	DESCRIPTION	DATE
C	TENDER ADDENDUM	18 10 2021
B	FOR TENDER	04 08 2021
A	FOR TENDER	16 08 2021

CLIENT
FRASERS PROPERTY AUSTRALIA

PROJECT
STAGE 1B STREETSCAPES
MIDTOWN IVANHOE, MACQUARIE PARK
SYDNEY, NSW 2113

STATUS
TENDER DOCUMENTATION

DRAWING TITLE
DRAWING INDEX

REVIEWED

APPROVED

DRAWING NO.
HSL_S1B_0002

SCALE @ A1

PROJECT NO.
012092

REV NO.
C

PRINT INFORMATION_ PRINTED BY: Georgia Darling _ ON: 2021/10/18 _ USING PAGESETUP: ---- _ USING PLOTSTYLE TABLE: halfweight.ctb _ PC3: DWG To PDF.pc3 _ PSLTSCALE: 1 _ LTSCALE: 1.000000

FILENAME \\Syd-p-fs-06\fs04$\012092-61A-P\Working\AutoCAD\10_TD_Stage01B\Sheet\HSL_S1B_0002 DRAWING INDEX.dwg

LEGEND

REFER TO 'SH_L-S1B-6001 MATERIALS & FINISHES SCHEDULE' FOR SPECIFICATIONS

SITE

DRAWING	DETAIL REF	CODE	SYMBOL	
-	-	-		IVANHOE ESTATE SITE BOUNDARY
-	-	-		STAGE 1 & 1A LOT BOUNDARY
-	-	-		IVANHOE ESTATE LOT BOUNDARIES
-	-	-		STAGE 1B EXTENT OF WORKS
-	-	-	RL 0.00	INDICATIVE RELATIVE LEVEL REFER TO CIVIL ENGINEERS DRAWINGS
-	-	-	TW 0.00 BW 0.00	INDICATIVE TOP OF WALL BOTTOM OF WALL LEVEL. REFER TO CIVIL ENGINEERS DRAWINGS
-	-	-	0.00	PROPOSED CONTOURS. REFER TO CIVIL ENGINEERS DRAWINGS

PL - SOFTWORKS

DRAWING	DETAIL REF	CODE	SYMBOL	
L-S1B_5402	03 04	PL02		PLANTING MIX 02 MAIN STREET
L-S1B_5402	03 04	PL03		PLANTING MIX 03 NEIGHBOURHOOD STREET
L-S1B_5402	02 03	PL09		PLANTING MIX 09 LYON PARK ROAD CAR PARK
L-S1B_5402	01 05	PL10		PLANTING MIX 10 SHRIMPTONS CREEK

TREES

DRAWING	DETAIL REF	CODE	SYMBOL	DESCRIPTION
L-S1B_5401	01 02	-		PROPOSED TREE 750LTR
L-S1B_5401	01 03	-		PROPOSED TREE 400LTR
L-S1B_5401	01	-		PROPOSED PALM TREE

WA - WALLS

DRAWING	DETAIL REF	CODE	SYMBOL	DESCRIPTION
-	-	WA01		GABION RETAINING WALL LOCATION: SHRIMPTONS CREEK REFER ENGINEERS DETAILS
L-S1B_5102	04	WA02		CONCRETE RETAINING WALL LOCATION: LGS CAR PARK REFER ENGINEER DETAILS

FN - FURNITURE

DRAWING	DETAIL REF	CODE	SYMBOL	
L-S1B_5201	01 02 04	FN01		SINGLE SEAT 'PRECINCT SEAT' LOCATION: PUBLIC DOMAIN
L-S1B_5201	01 03	FN02		BENCH WITH BACKREST 'PRECINCT SEAT' LOCATION: PUBLIC DOMAIN
L-S1B_5201	01 03	FN04		BENCH WITH BACKREST 'PRECINCT SEAT' LOCATION: PUBLIC DOMAIN
L-S1B_5201	05	FN05		LINEAR STONE EDGING LOCATION: MAIN & NEIGHBOURHOOD STREETS
L-S1B_5203	01	FE02		VERTICAL PALISADE FENCE/ SCREEN LOCATION: LGS CARPARK

FI - FIXTURES

DRAWING	DETAIL REF	CODE	SYMBOL	
L-S1B_5202	01 02	FI01		CAST ALUMINIUM TREE SURROUNDS LOCATION: PUBLIC DOMAIN
L-S1B_5201	05	FI02 A		80L BIN - GENERAL WASTE LOCATION: PUBLIC DOMAIN
L-S1B_5201	05	FI02 B		80L BIN - RECYCLING' LOCATION: PUBLIC DOMAIN
L-S1B_5202	03	FI04		ETCHED GAME
L-S1B_5202	05	FI05		ETCHED GAME
L-S1B_5202	05	FI06		ETCHED GAME
-	-	FI07		NATIVE BIRD NESTING BOX LOCATION: STREETSCAPES

PV - HARDWORKS

DRAWING	DETAIL REF	CODE	SYMBOL	
L-S1B_5301	01	PV01		GRANITE PAVING LOCATION: FOOTPATH - MAIN STREET
L-S1B_5301 L-S1B_5302	02 01	PV02		GRANITE PAVING LOCATION: NEIGHBOURHOOD STREETS
L-S1B_5301	01 02	PV03		GRANITE PAVER - HEADER LOCATION: MAIN & NEIGHBOURHOOD STREETS
L-S1B_5301	03	PV04		GRANITE PAVING - SQUARE LOCATION: MAIN & NEIGHBOURHOOD STREETS
L-S1B_5301	06	PV05		GRANITE PAVING - PARKING BAYS LOCATION: MAIN & NEIGHBOURHOOD STREETS (TRAFFICABLE)
L-S1B_5302	06	PV07		CONCRETE FOOTPATH LOCATION: SHRIMPTONS CREEK

LI - LIGHTING

DRAWING	DETAIL REF	CODE	SYMBOL	
-	-			POLE TOP STREET LIGHTING COLOUR: BLACK RAL 9004 REFER ELECTRICAL ENGINEER DOCUMENTATION FOR SPECIFICATION

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Registered Certifier

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Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

Land Development Certificates
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DRAWING NOTES

1. INFORMATION, OTHER THAN LANDSCAPE ARCHITECTURAL WORKS, HAS BEEN PROVIDED BY VARIOUS CONSULTANTS AND IS INCLUDED FOR INFORMATION ONLY.
2. FINAL COORDINATION OF ALL TREES, LIGHT POLES AND STREET FURNITURE LOCATIONS TO BE CONFIRMED POST TENDER FOLLOWING TRAFFIC SAFETY AUDIT
3. FINAL COORDINATION OF ALL TREES AND LOCATION OF PITS AND SERVICES TO BE CONFIRMED POST TENDER
4. PLANTING SCHEDULES ARE INDICATIVE ONLY AND SUBJECT TO REFINEMENT POST AWARD OF TENDER
5. ALL SITE LEVELS TO ADWJ DOCUMENTATION

CONSULTANT
Hassell LTD ABN 24 007 711 435
Level2, Pier 8/9,23 Hickson Rd
Sydney NSW 2000 Australia
T +61 2 9101 2000
F +61 2 9101 2100
sydney@hassellstudio.com
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REFERENCE

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REV	DESCRIPTION	DATE
A	FOR TENDER	16 08 2021

CLIENT
FRASERS PROPERTY AUSTRALIA

PROJECT
STAGE 1B STREETSCAPES
MIDTOWN IVANHOE, MACQUARIE PARK
SYDNEY, NSW 2113

STATUS
TENDER DOCUMENTATION

DRAWING TITLE
DRAWING LEGEND

REVIEWED

APPROVED

DRAWING NO.
HSL_S1B_0003

SCALE @ A1

PROJECT NO.
012092

REV NO.
A

PRINT INFORMATION_ PRINTED BY: Georgia Darling _ ON: 2021/08/17 _ USING PAGESETUP: ---- _ USING PLOTSTYLE TABLE: halfweight.ctb _ PC3: DWG To PDF.pc3 _ PSLTSCALE: 1 _ LTSCALE: 1.000000

FILENAME \\sydproj\fs03\012092-61A-P\Working\AutoCAD\10_TD_Stage01B\Sheet\HSL_S1B_0003 DRAWING LEGEND.dwg

PLANTING SCHEDULE - STAGE 1B PUBLIC DOMAIN

CODE	BOTANIC NAME	COMMON NAME	POT SIZE	MIX %	QUANTITY
TREES					
Er	Elaeocarpus reticulatus 'Prima Donna'	Blueberry Ash	400ltr	-	37
Fm	Ficus microcarpa var. hilli 'Flash'	Hills Fig	750ltr	-	48
Hf	Howea forsteriana	Kentia Palm	Ex ground/ 12m(h)	-	4
			Ex ground/ 11m(h)		4
			Ex ground/ 9m(h)		4
Cf	Cercis canadensis 'Forest Pansy'	Eastern Redbud	400ltr	-	6
Wf	Waterhousia floribunda 'Amaroo'	Weeping Lily Pilly	400ltr	-	43
GROUNDCOVER MIXES					
PL 02	MAIN STREET (1221m²)				
	Lomandra hystrix 'Katie Belles'	Spiny Head Mat Rush	200mm	25	952
	Pennisetum alopecuroidea 'Nafray'	Swamp Foxtail Grass	200mm	25	952
	Liriope spicata	Lilyturf	150mm	20	1714
	Myoporum parvifolium	Creeping Boobialla	150mm	10	857
	Ophiopogon japonicus	Dwarf Turf Lily	150mm	20	2285
PL 03	NEIGHBOURHOOD STREET (594m²)				
	Lomandra longifolia 'Verday'	Spiny Head Mat Rush	200mm	25	585
	Tulbaghia violacea	Pink Agapanthis	200mm	25	585
	Liriope muscari 'Amethyst'	Lilyturf	150mm	20	1053
	Pratia pedunculata	Pratia	150mm	20	1872
	Trachelospermum asiaticum 'Flat Mat'	Chinese Star Jasmine	150mm	10	527
PL 09	LYON PARK ROAD CAR PARK (564m2)				
	Billardiera scandens	Apple Berry	200mm	15	338
	Centella asiatica	Swamp Pennywort	150mm	10	226
	Dianella caerulea 'Cassa Blue'	Native Flax Plant	200mm	15	338
	Goodenia hederacea	Violet-leaved Goodenia	150mm	10	226
	Hardenbergia violacea	False Saraparilla	200mm	15	338
	Helmholtzia glaberrima	Stream Lily	200mm	15	338
	Liriope muscari	Lily Turf	150mm	10	226
	Wahlenbergia gracilis	Australian Bluebell	150mm	10	226
PL 10	SHRIMPTONS CREEK (1039m2)				
	Callistemon hybrid 'Calkwr'	Bottlebrush	200mm	2	57
	Crowea exalta	Waxflower	200mm	8	228
	Dianella caerulea 'Casssa Blue'	Native Flax Lily	200mm	8	228
	Lamberta formosa	Mountain Devil	200mm	2	57
	Leptospermum 'Vertical Drop'	Tea tree	200mm	8	228
	Liriope muscari 'Amethyst'	Lily Turf	200mm	8	228
	Lomandra confertifolia 'Wingarra'	Mat Rush	200mm	8	228
	Lomandra confertifolia 'Katrinus'	Mat Rush	200mm	8	228
	Melaleuca 'Little Red'	Honey Myrtle	200mm	8	228
	Ozmanthus diosmifolius	Rice Flower	200mm	2	57
	Platysace lanceolata	Edna Walling Flower Girl	200mm	8	228
	Pennisetum alopecuroides 'Nafray'	Swamp Grass	200mm	8	228
	Poa labillardierei	Tussock Grass	200mm	8	228
	Russelia equisetiformis	Firecracker Plant	200mm	2	57
	Sarcococca confusa	Sweet Box	200mm	2	57
	Scaevola humilis 'Purple Fusion'	Fan Flower	200mm	8	57

C PLANT QUANTITIES REDUCED

C PLANT QUANTITIES REDUCED

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories:
Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

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Ross de la Motte 7398

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C	TENDER ADDENDUM	18 10 2021
B	FOR TENDER	24 08 2021
A	FOR TENDER	16 08 2021

CLIENT
FRASERS PROPERTY AUSTRALIA

PROJECT
STAGE 1B STREETSCAPES
MIDTOWN IVANHOE, MACQUARIE PARK
SYDNEY, NSW 2113

STATUS
TENDER DOCUMENTATION

DRAWING TITLE
PLANTING SCHEDULE

REVIEWED

APPROVED

DRAWING NO.
HSL_S1B_0004

SCALE @ A1

PROJECT NO.
012092

REV NO.
C

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STAGE A
FUTURE DEVELOPMENT

STAGE B
FUTURE DEVELOPMENT

STAGE 4
FUTURE DEVELOPMENT

JOHNSTONS CREEK PATHWAY AREA REVISED
BASED ON ADWJ DRAWINGS

FURNITURE & PLANTING RELOCATED

FURNITURE, PAVING & PLANTING RELOCATED

LYON PARK ROAD

SHRIMPTONS CREEK

LOT DEVELOPMENT
859537

STAGE 2
FUTURE DEVELOPMENT

STAGE 2
FUTURE DEVELOPMENT

STAGE 2
FUTURE DEVELOPMENT

FUTURE RAISED PEDESTRIAN CROSSING SUBJECT TO SEPARATE APPROVAL.
FOR STAGE 1B CROSSING DESIGN REFER CIVIL ENGINEERING LAYOUT.
ADW JOHNSON 300001(2)-ENG-001

STAGE 3
FUTURE DEVELOPMENT

STAGE 5
FUTURE DEVELOPMENT

STAGE 6
FUTURE DEVELOPMENT

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REV	DESCRIPTION	DATE
D	TENDER ADDENDUM	24 02 2022
C	TENDER ADDENDUM	18 10 2021
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A	FOR TENDER	16 08 2021

CLIENT
FRASERS PROPERTY AUSTRALIA

PROJECT
STAGE 1B STREETSCAPES
MIDTOWN IVANHOE, MACQUARIE PARK
SYDNEY, NSW 2113

STATUS
TENDER DOCUMENTATION

DRAWING TITLE
SITE PLAN

REVIEWED

APPROVED

SCALE @ A1

PROJECT NO.
012092

DRAWING NO.
HSL_S1B_0100

REV NO.
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STAGE A
FUTURE DEVELOPMENT

STAGE B
FUTURE DEVELOPMENT

JOINS SHEET HSL_S1B_1001

PV 01

FI 04

PL 02
64.0m²

PL 02
46.2m²

4.6m²
PL 02

4.6m²
PL 02

PV 05

PV 03

2 x Fm

3 x Fm

PV 04

MAIN STREET / ROAD NO. 1

This approval does not include landscape works beyond the future road reserve boundary. These works are subject to separate approval.

FUTURE RAISED PEDESTRIAN CROSSING SUBJECT TO SEPARATE APPROVAL.
FOR STAGE 1B CROSSING DESIGN REFER CIVIL ENGINEERING LAYOUT.
ADW JOHNSON 30000(2)-ENG-001

2 x Fm

4 x Fm

PV 05

PV 03

PL 02
17.4m²

PL 02
21.7m²

PV 05

PV 03

FI07

PL 02
2.1m²

PL 02
4.6m²

PV 01

PL 02
4.6m²

PL 02
4.6m²

PL 02
26.5m²

PAVING, FURNTIURE & LANDSCAPE RELOCATED

STAGE 2 - C2
FUTURE DEVELOPMENT

STAGE 2
FUTURE DEVELOPMENT

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Registered Certifier

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A	FOR TENDER	16 08 2021

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FRASERS PROPERTY AUSTRALIA

PROJECT
STAGE 1B STREETSCAPES
MIDTOWN IVANHOE, MACQUARIE PARK
SYDNEY, NSW 2113

STATUS
TENDER DOCUMENTATION

DRAWING TITLE
GENERAL ARRANGEMENT

REVIEWED

APPROVED

SCALE @ A1

PROJECT NO.
012092

DRAWING NO.
HSL_S1B_1001

REV NO.
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JOINS SHEET HSL_S1B_1001

JOINS SHEET HSL_S1B_1003

STAGE B
FUTURE DEVELOPMENT

STAGE 4
FUTURE DEVELOPMENT

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Certifier – Strata
Certifier – Stormwater
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FURNTIURE, TREES RELOCATED

3 x Cf

1 x Er

3 x Hf

FI01

FN04

PV 01

4.6m²
PL 02

PL 02
17.4m²

PL 02
18.3m²

PL 02
3.9m²

PL 02
16.5m²

PV 03

PV 05

4 x Fm

1 x Wf

1 x Fm

MAIN STREET / ROAD NO. 1

PV 04

FUTURE RAISED PEDESTRIAN CROSSING SUBJECT TO SEPARATE APPROVAL.
FOR STAGE 1B CROSSING DESIGN REFER CIVIL ENGINEERING LAYOUT.
ADW JOHNSON 300001(2)-ENG-001

3 x Fm

PL 02
17.2m²

PL 02
47.3m²

FN 05

PL 02
4.6m²

PV 02

PL 03
26m²

FI07

PAVING, FURNTIURE & LANDSCAPE RELOCATED

This approval does not include landscape works beyond the future road reserve boundary. These works are subject to separate approval.

PL 02
25m²

FN 02

STAGE 2 - C3
FUTURE DEVELOPMENT

STAGE 2 - C4
FUTURE DEVELOPMENT

JOINS SHEET HSL_S1B_1007

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C	TENDER ADDENDUM	24 02 2022
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CLIENT
FRASERS PROPERTY AUSTRALIA

PROJECT
STAGE 1B STREETSCAPES
MIDTOWN IVANHOE, MACQUARIE PARK
SYDNEY, NSW 2113

STATUS
TENDER DOCUMENTATION

DRAWING TITLE
GENERAL ARRANGEMENT

REVIEWED

APPROVED

SCALE @ A1

PROJECT NO.
012092

DRAWING NO.
HSL_S1B_1002

REV NO.
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JOINS SHEET HSL_S1B_1002

JOINS SHEET HSL_S1B_1010

JOINS SHEET HSL_S1B_1004

SHRIMPTONS CREEK

STAGE 4
FUTURE DEVELOPMENT

BRIDGE DETAILS REFER TO SMEC PACKAGE

FOR BRIDGE DESIGN REFER SMEC DOCUMENTATION 30013046-100

REFER HSL_S1B_5001 DETAIL PLAN FOR BRIDGE GENERAL ARRANGEMENT

BRIDGE ABUTMENT
REFER SMEC
DOCUMENTATION
30013046-100

FURNTIURE, TREES RELOCATED

1 x Er
1 x Hf
3 x Cf
1 x Er
FN 02
FN 02
FN 02
FN 02
FI01
FI01
FI01
FI01
FI01
FN04
FN04
FN04
FN04
PV 01
PL 02 2.5m²
1 x Hf
PL 02
151m²
FI07
1 x Er
1 x Er
1 x Fm
3 x Hf
2 x Fm

This approval does not include landscape works beyond the future road reserve boundary. These works are subject to separate approval.

MAIN STREET / ROAD NO. 1

1 x Fm
1 x Fm
2 x wF
1 x Hf
1 x Fm
1 x Hf
PV 05
PL 02
78.2m²
PL 02
4.6m²
FI01
FI01
FI01
FI01
PV 01
4 x Er
TREE RELOCATED

PL 10
PV 07
PL 10
PL 10
PL 10
332.2m²
PV 07
PL 10
480m²

BRIDGE ABUTMENT
REFER SMEC
DOCUMENTATION
30013046-100

NEW FOOTPATH
TIE INTO EXISTING

REFER ADJACENT PLAN INSERT

PLAN INSERT

STAGE 2 - C4
FUTURE DEVELOPMENT

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories:
Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

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A	FOR TENDER	16 08 2021

CLIENT
FRASERS PROPERTY AUSTRALIA

PROJECT
STAGE 1B STREETSCAPES
MIDTOWN IVANHOE, MACQUARIE PARK
SYDNEY, NSW 2113

STATUS
TENDER DOCUMENTATION

DRAWING TITLE
GENERAL ARRANGEMENT

REVIEWED

APPROVED

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DRAWING NO.
HSL_S1B_1003

REV NO.
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JOINS SHEET HSL_S1B_1003

JOINS SHEET HSL_S1B_1005

EXISTING RETAINING WALL

PL 02
23m²

PL 02
148.6m²

PL 10
220m²

FOR BRIDGE DESIGN REFER SMEC DOCUMENTATION 30013046-100

REFER HSL_S1B_5001 DETAIL PLAN FOR BRIDGE GENERAL ARRANGEMENT

MAIN STREET / ROAD NO. 1

5 x Fm

6 x Fm

B PV04 ADDED TO THRESHOLDS
STREET LIGHT COORDINATED
1xFM RELOCATED

PV 04

PL 02
3.3m²

PL 02
46.5m²

PV 01

PL 09
133.7m²

WA 02

3 x Er

SHRIMPTONS CREEK

BRIDGE ABUTMENT
REFER SMEC
DOCUMENTATION
30013046-100

PL 09
36m²

1 x Er

PL 09
13.4m²

LOT DEVELOPMENT 859537

PL 10
20.0m²

PV 07

PL 10
24.5m²

PL 10
20.0m

PV 07

REFER ADJACENT PLAN INSERT

PL 10
24.5m²

PL 09
43.7m²

NEW FOOTPATH
TIE INTO EXISTING

PLAN INSERT

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Categories:
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B	FOR TENDER	24 08 2024
A	FOR TENDER	16 08 2021

CLIENT
FRASERS PROPERTY AUSTRALIA

PROJECT
STAGE 1B STREETSCAPES
MIDTOWN IVANHOE, MACQUARIE PARK
SYDNEY, NSW 2113

STATUS
TENDER DOCUMENTATION

DRAWING TITLE
GENERAL ARRANGEMENT

REVIEWED

APPROVED

DRAWING NO.
HSL_S1B_1004

SCALE @ A1

PROJECT NO.
012092

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JOINS SHEET HSL_S1B_1004

EXISTING RETAINING WALL

WA 02

PV 07

MAIN STREET / ROAD NO. 1

7 x Fm

C PV04 ADDED TO THRESHOLDS

PV 04

PL 02
90.5m²

PV 01

PL 09
263m²

PV 07

PL 02
12.8m²

5 x Er

FE 02

C PV04 ADDED TO THRESHOLDS

PV 04

LYON PARK ROAD

LOT DEVELOPMENT 859537

3 x Er

GA

PL 09
74m²

PV 07

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FRASERS PROPERTY AUSTRALIA

PROJECT
STAGE 1B STREETSCAPES
MIDTOWN IVANHOE, MACQUARIE PARK
SYDNEY, NSW 2113

STATUS
TENDER DOCUMENTATION

DRAWING TITLE
GENERAL ARRANGEMENT

REVIEWED

APPROVED

SCALE @ A1

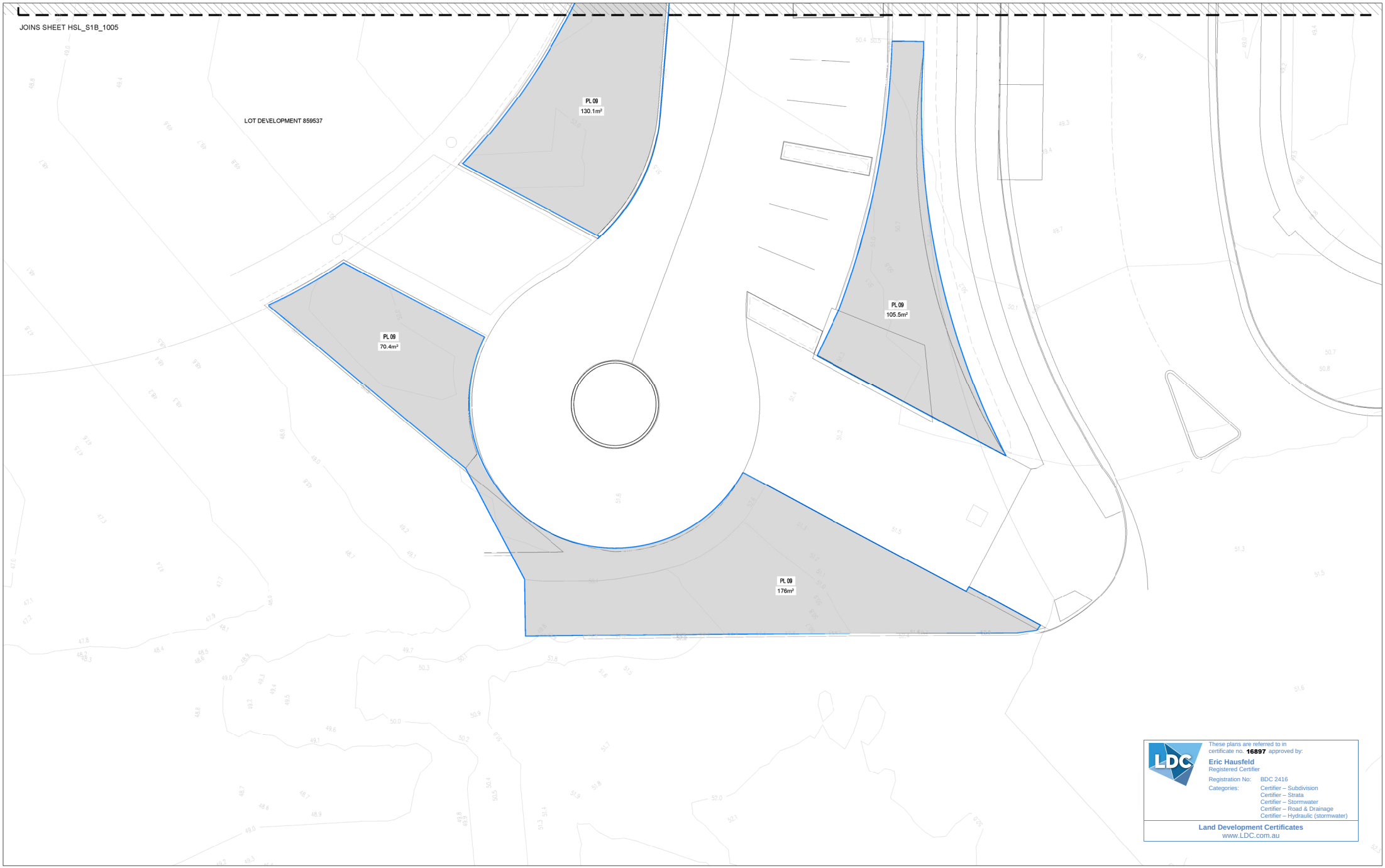
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HSL_S1B_1005

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MIDTOWN IVANHOE, MACQUARIE PARK
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STATUS
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DRAWING TITLE
GENERAL ARRANGEMENT

REVIEWED

APPROVED

DRAWING NO.
HSL_S1B_1006

SCALE @ A1

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JOINS SHEET HSL_S1B_1002

STAGE 2 - C3
FUTURE DEVELOPMENT

1 x Er
PL 03
2.8m²
PV 03
PV 05
1 x Wf
FN01
PL 03
20.0m²
FN01
1 x Er
FUTURE
DRIVEWAY
PL 03
13.4m²
1 x Er
PV 02
PV 03
PV 05
PL 03
3.1m²
3 x Wf
PV 03
PL 03
73.5m²
1 x Wf

NEIGHBOURHOOD STREET / ROAD NO. 2

1 x Wf
PL 03
20.5m²
1 x Er
PV 03
FN02
1 x Wf
PL 03
4.5m²
FUTURE
DRIVEWAY
PV 02
1 x Wf
PL 03
11.2m²
FI 06
1 x Er
PV 03
FN02
2 x Wf
FI07
PL 03
15.6m²

STAGE 2 - C4
FUTURE DEVELOPMENT

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416
Categories:
Certifier – Subdivision
Certifier – Strata
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JOINS SHEET HSL_S1B_1009

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sydney@hassellstudio.com
Nominated Architects NSW:
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Glenn Scott 6842
Ross de la Motte 7398

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REV	DESCRIPTION	DATE
A	FOR TENDER	16 08 2021

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PROJECT
STAGE 1B STREETSCAPES
MIDTOWN IVANHOE, MACQUARIE PARK
SYDNEY, NSW 2113

STATUS
TENDER DOCUMENTATION

DRAWING TITLE
GENERAL ARRANGEMENT

REVIEWED

APPROVED

DRAWING NO.
HSL_S1B_1007

SCALE @ A1

PROJECT NO.
012092

REV NO.
A

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STAGE 2
FUTURE DEVELOPMENT

STAGE 2
FUTURE DEVELOPMENT

JOINS SHEET HSL_S1B_1009

FN 01 FN 01 FI 02A FI 02B PV 02 FI07 PV 03 PV 03 PV 03 PV 02 FI07

PL 03
107.5m²

PL 03
8.2m²

3.1m²
PL 03

3.1m²
PL 03

PV 05

PL 03
51.5m²

FN 05

PL 03
34.4m²

PV 03

4 x Wf 1 x Er 1 x Wf 1 x Er 1 x Wf 1 x Er 1 x Wf

NEIGHBOURHOOD STREET / ROAD NO. 2

PV 04

FUTURE RAISED PEDESTRIAN CROSSING SUBJECT TO SEPARATE APPROVAL.
FOR STAGE 1B CROSSING DESIGN REFER CIVIL ENGINEERING LAYOUT.
ADW JOHNSON 30001(1)-ENG-001

PL 03
32m²

PV 02

PL 03
35m²

PV 03
PV 02

FI 05

STAGE 1 INTERFACE EXTENT OF WORKS

4 x Wf 1 x Er 1 x Wf 1 x Er 1 x Wf 1 x Er 1 x Wf

STAGE 3
FUTURE DEVELOPMENT

STAGE 3
FUTURE DEVELOPMENT

STAGE 5
FUTURE DEVELOPMENT

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Eric Hausfeld
Registered Certifier
Registration No: BDC 2416
Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
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MIDTOWN IVANHOE, MACQUARIE PARK
SYDNEY, NSW 2113

STATUS
TENDER DOCUMENTATION

DRAWING TITLE
GENERAL ARRANGEMENT

REVIEWED

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DRAWING NO.
HSL_S1B_1008

SCALE @ A1

PROJECT NO.
012092

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A

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JOINS SHEET HSL_S1B_1007

JOINS SHEET HSL_S1B_1008

STAGE 2
FUTURE DEVELOPMENT

STAGE 2 - C4
FUTURE DEVELOPMENT

FN 02
PL 03
50.5m²
1 x Wf
1 x Er
PV 02
PV 03
3.1m²
PL 03
PV 05
PL 03
5.3m²
PL 03
23.4m²
1 x Er
1 x Wf
1 x Er
1 x Wf
1 x Er
3 x Wf
FUTURE
DRIVEWAY

NEIGHBOURHOOD STREET / ROAD NO. 2

PV 03
FN 02
PL 03
18.7m²
PV 02
PL 03
27m²
PL 03
20.6m²
1 x Wf
1 x Er
1 x Wf
1 x Er
3 x Wf
FUTURE
DRIVEWAY

STAGE 5
FUTURE DEVELOPMENT

STAGE 6
FUTURE DEVELOPMENT

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JOINS PLAN INSERT ADJACENT

JOHNSTONS CREEK PATHWAY AREA REVISED
BASED ON ADWJ DRAWINGS

PL 10

PV 07

PL 10

JOINS SHEET HSL_S1B_1003

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A	FOR TENDER	16 08 2021

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SYDNEY, NSW 2113

STATUS
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DRAWING TITLE
GENERAL ARRANGEMENT

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APPROVED

DRAWING NO.
HSL_S1B_1010

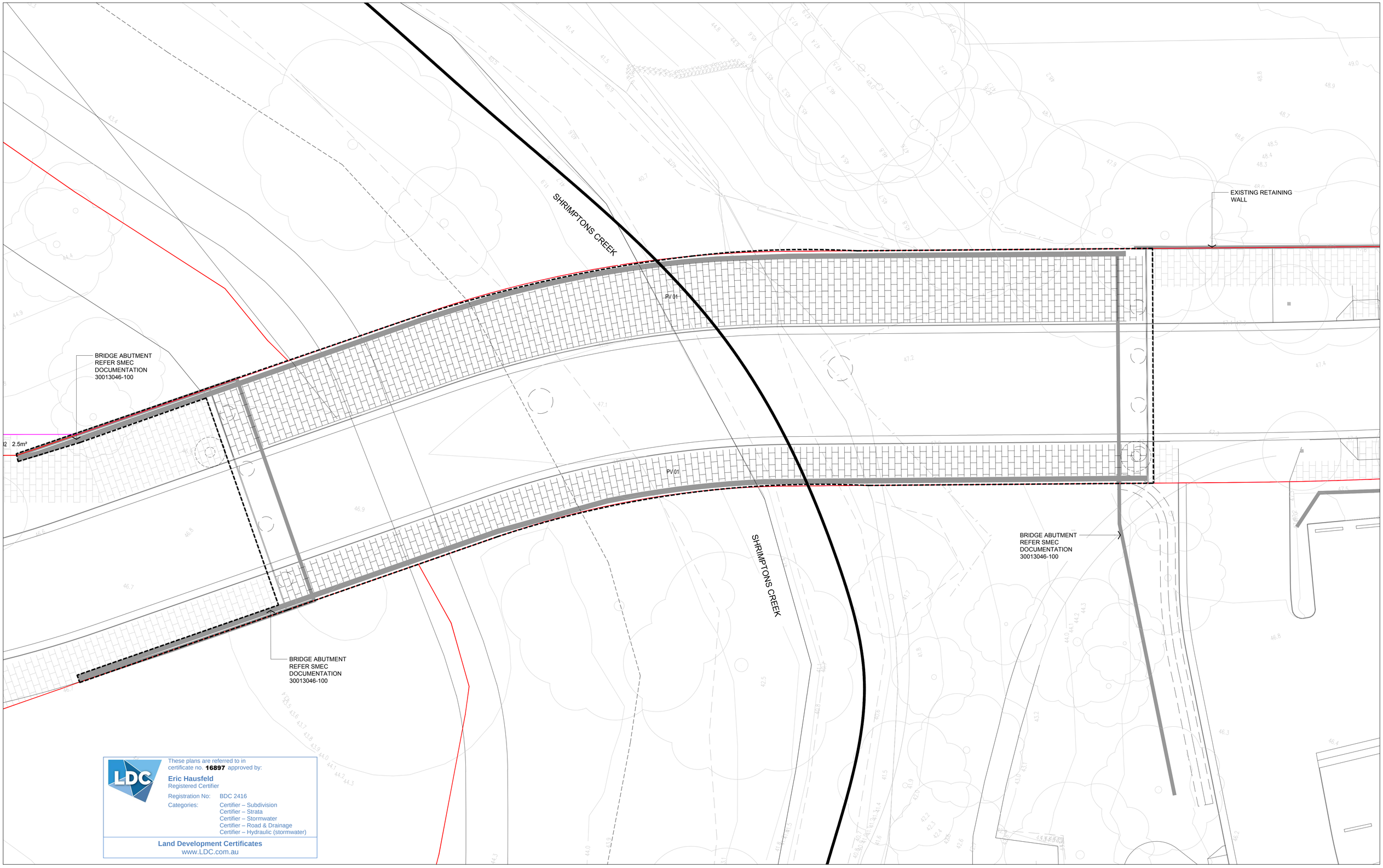
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PROJECT NO.
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STATUS
TENDER DOCUMENTATION

DRAWING TITLE
DETAIL PLAN - SHRIMPTONS CREEK BRIDGE

REVIEWED

APPROVED

SCALE @ A1

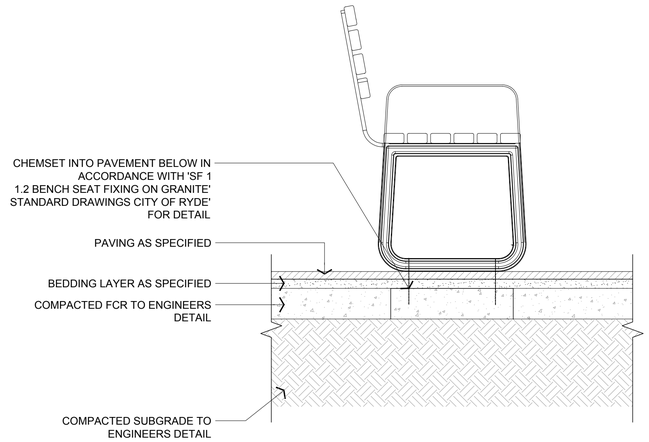
PROJECT NO.
012092

DRAWING NO.
HSL_S1B_5001

REV NO.
A

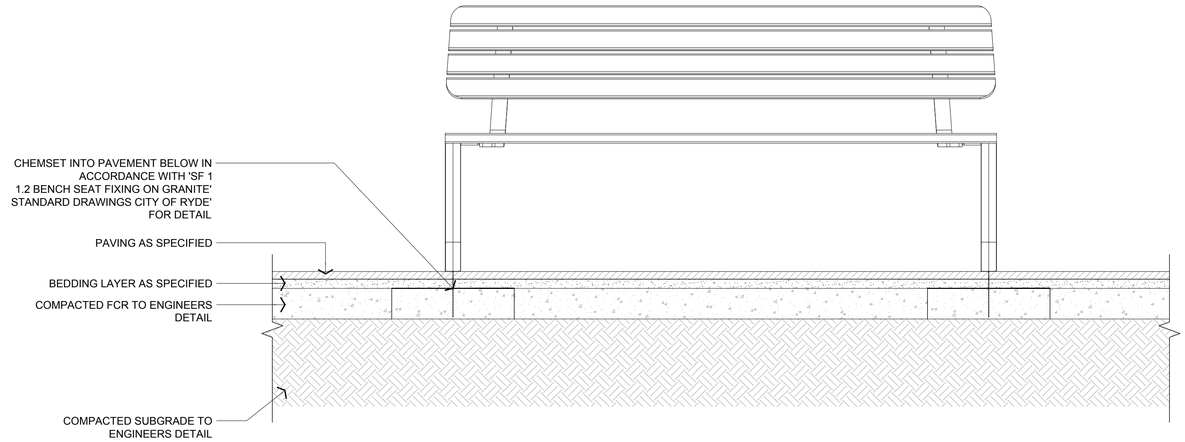
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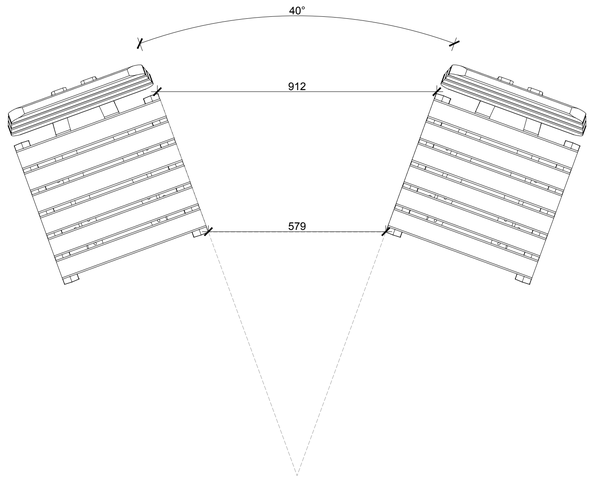
01 FN01/02 - SEAT ON STONE PAVING

ELEVATION - Scale: 1:10@A1



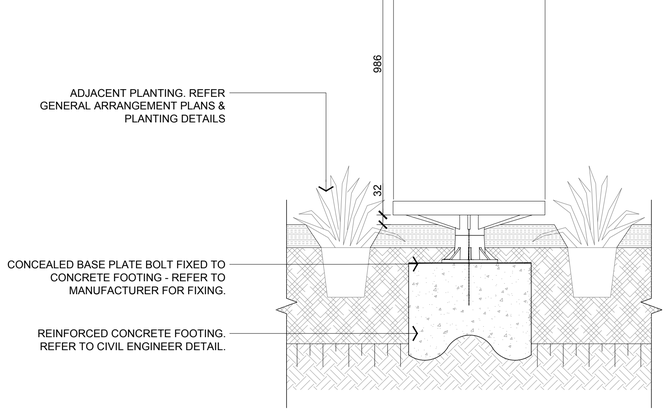
03 FN02 - BENCH ON STONE PAVING

SECTION - Scale: 1:10@A1



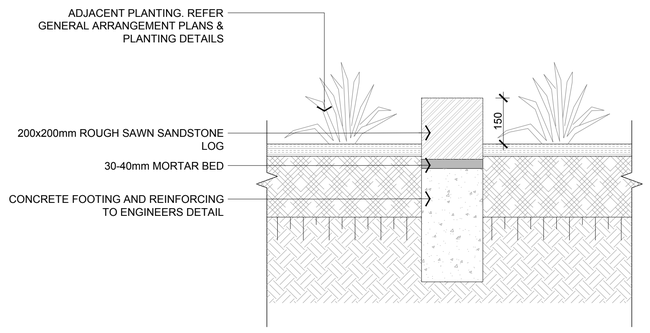
02 FN01 - SEAT SETOUT

PLAN - Scale: 1:10@A1



04 FI02 A/B - BIN IN PLANTING

PLAN - Scale: 1:10@A1



05 FN05 - LINEAR STONE EDGING

PLAN - Scale: 1:10@A1

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STAGE 1B STREETSCAPES
MIDTOWN IVANHOE, MACQUARIE PARK
SYDNEY, NSW 2113

STATUS
TENDER DOCUMENTATION

DRAWING TITLE
DETAILS - FURNITURE & FIXTURES

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APPROVED

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HSL_S1B_5201

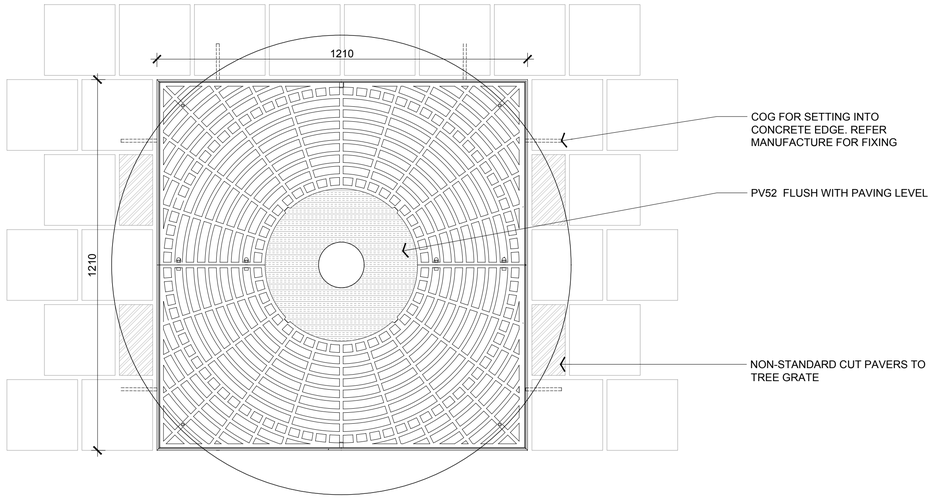
SCALE @ A1
1:10

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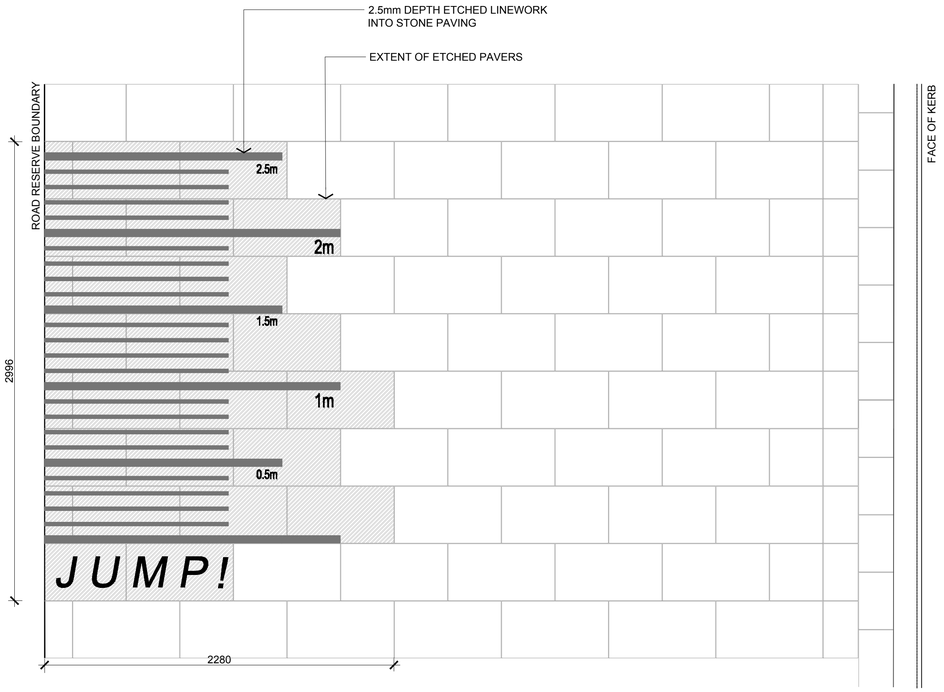




INDICATIVE ETCHING IMAGE

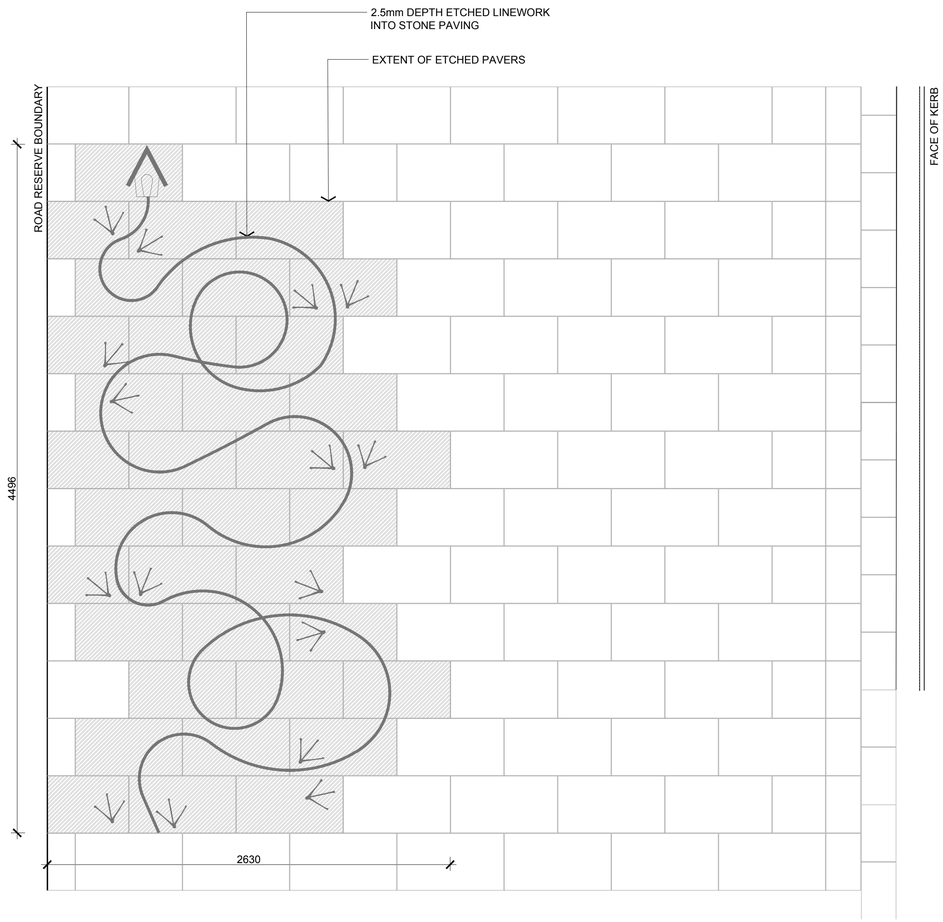
01 FI01 - TREE SURROUNDS IN PV01

ELEVATION - Scale: 1:10@A1



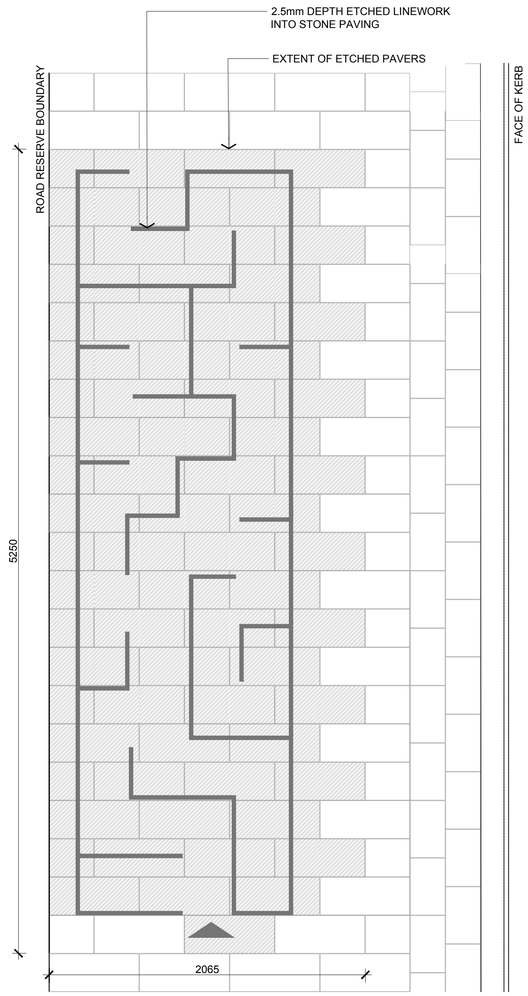
02 FI04 - ETCHED GAME

PLAN - Scale: 1:20@A1



03 FI05 - ETCHED GAME

PLAN - Scale: 1:20@A1



04 FI06 - ETCHED GAME

PLAN - Scale: 1:20@A1

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PROJECT
STAGE 1B STREETSCAPES
MIDTOWN IVANHOE, MACQUARIE PARK
SYDNEY, NSW 2113

STATUS
TENDER DOCUMENTATION

DRAWING TITLE
DETAILS - FURNITURE & FIXTURES

REVIEWED

APPROVED

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HSL_S1B_5202

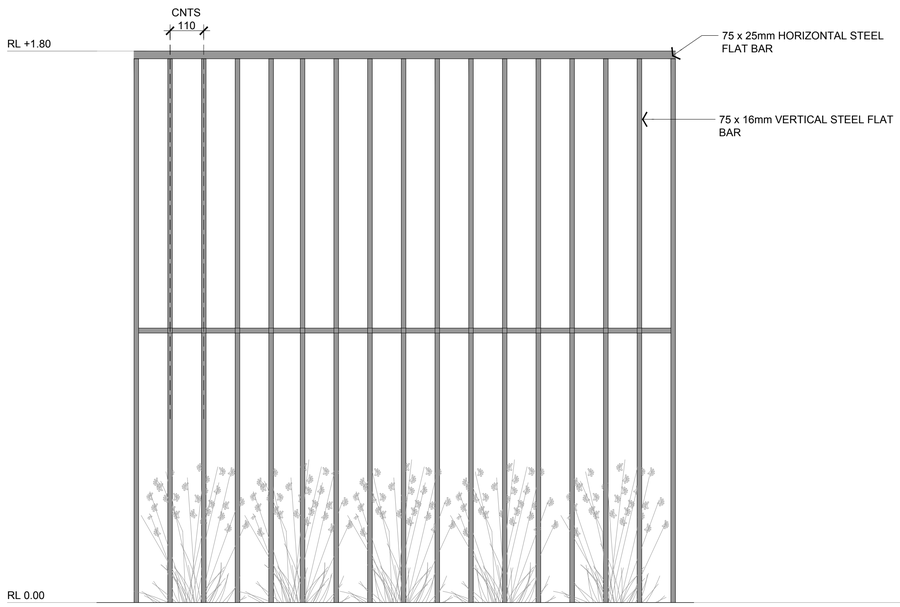
SCALE @ A1
VARIES

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012092

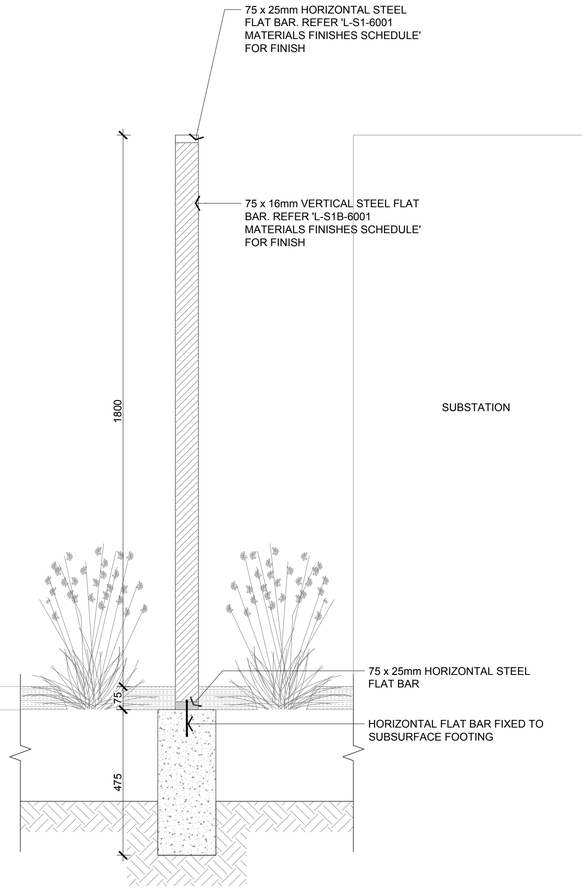
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ELEVATION



SECTION - AA

01 FE02 - VERTICAL PALISADE FENCE

SECTION - Scale: 1:10@A1

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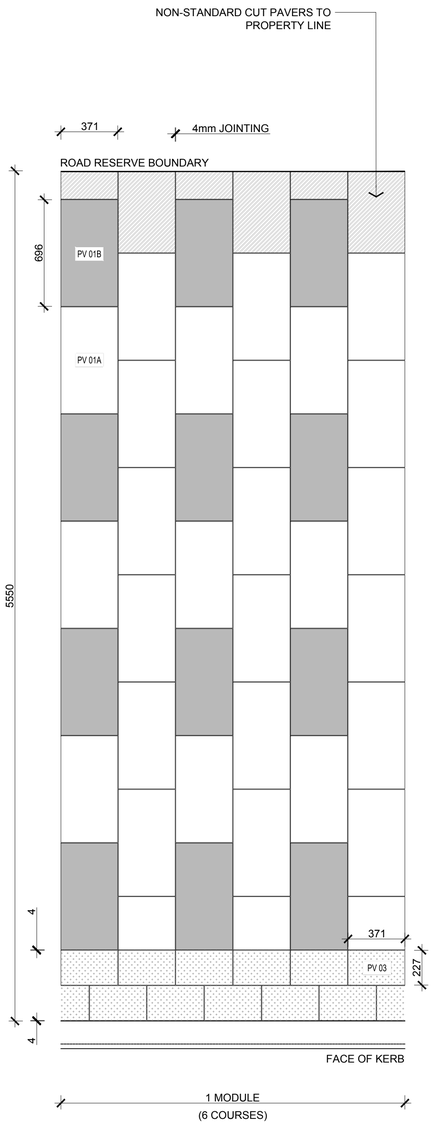
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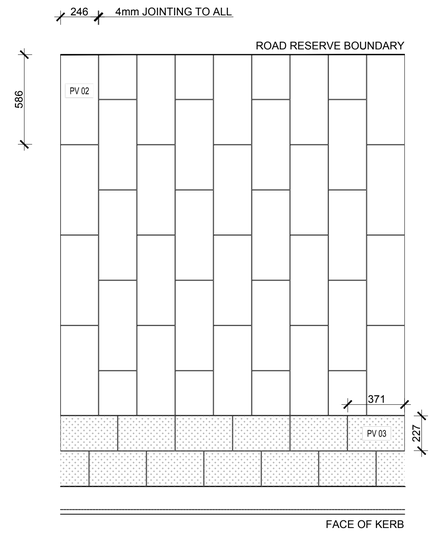
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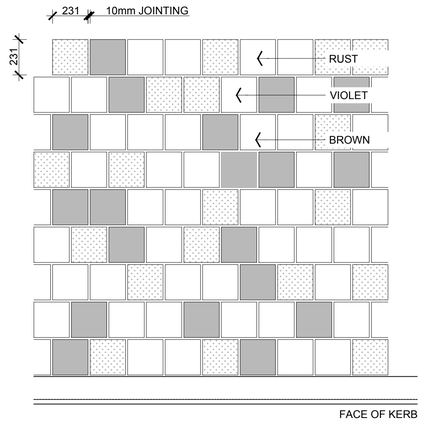
01 PV01 / PV03 - MAIN STREET PAVING

PLAN - Scale: 1:20@A1



02 PV02 / PV03 - NEIGHBOURHOOD STREET PAVING

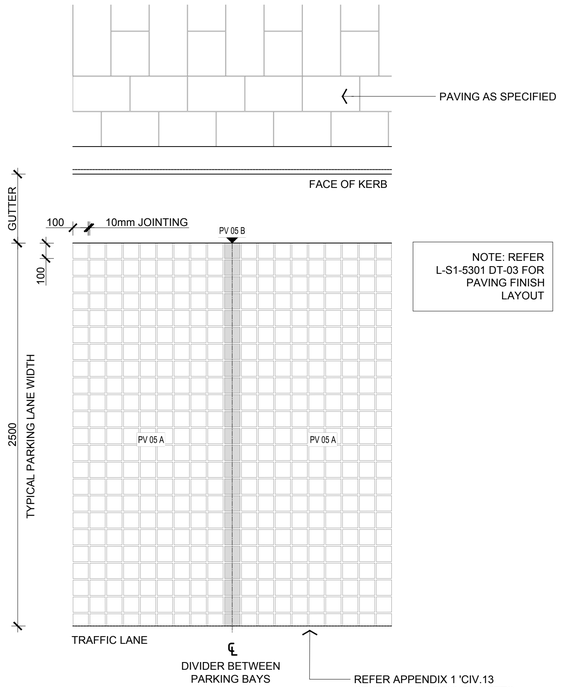
PLAN - Scale: 1:20@A1



NOTE: PAVING COLOURS TO BE SET OUT IN AN IRREGULAR MIX ACROSS THE GRID. NO SAME COLOURS TO OCCUR IN A ROW OF THREE OR MORE

03 PV04 - MAIN STREET ARRIVAL

PLAN - Scale: 1:20@A1



NOTE: REFER L-S1-5301 DT-03 FOR PAVING FINISH LAYOUT

04 PV05 - PARKING BAYS

PLAN - Scale: 1:20@A1

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Registered Certifier

Registration No: BDC 2416

Categories: Certifier – Subdivision
Certifier – Strata
Certifier – Stormwater
Certifier – Road & Drainage
Certifier – Hydraulic (stormwater)

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Nominated Architects NSW:
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Glenn Scott 6842
Ross de la Motte 7398

REFERENCE

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NOTES

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REV	DESCRIPTION	DATE
A	FOR TENDER	16 08 2021

CLIENT
FRASERS PROPERTY AUSTRALIA

PROJECT
STAGE 1B STREETSCAPES
MIDTOWN IVANHOE, MACQUARIE PARK
SYDNEY, NSW 2113

STATUS
TENDER DOCUMENTATION

DRAWING TITLE
DETAILS - PAVING

REVIEWED

APPROVED

DRAWING NO.
HSL_S1B_5301

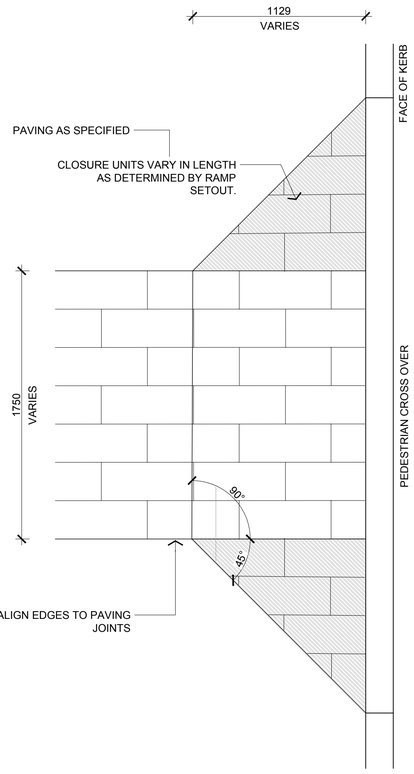
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PROJECT NO.
012092

REV NO.
A

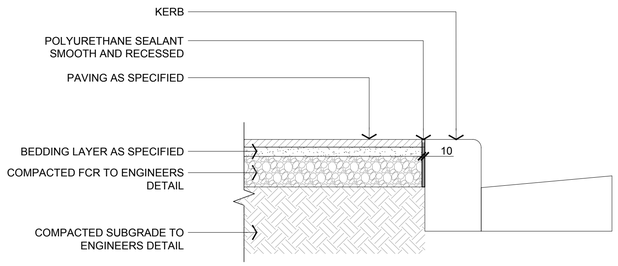
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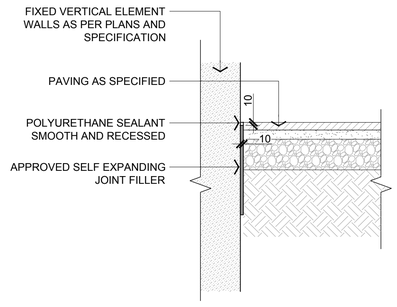
01 STONE PAVING - PEDESTRIAN RAMP

PLAN - Scale: 1:20@A1



03 JUNCTION - STONE PAVING & KERB

PLAN - Scale: 1:10@A1



04 JUNCTION - STONE PAVING & WALL

PLAN - Scale: 1:10@A1

These plans are referred to in certificate no. **16897** approved by:

Eric Hausfeld
Registered Certifier

Registration No: BDC 2416

Categories:
Certifier – Subdivision
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REV	DESCRIPTION	DATE
A	FOR TENDER	16 08 2021

CLIENT
FRASERS PROPERTY AUSTRALIA

PROJECT
STAGE 1B STREETSCAPES
MIDTOWN IVANHOE, MACQUARIE PARK
SYDNEY, NSW 2113

STATUS
TENDER DOCUMENTATION

DRAWING TITLE
DETAILS - PAVING

REVIEWED

APPROVED

DRAWING NO.
HSL_S1B_5302

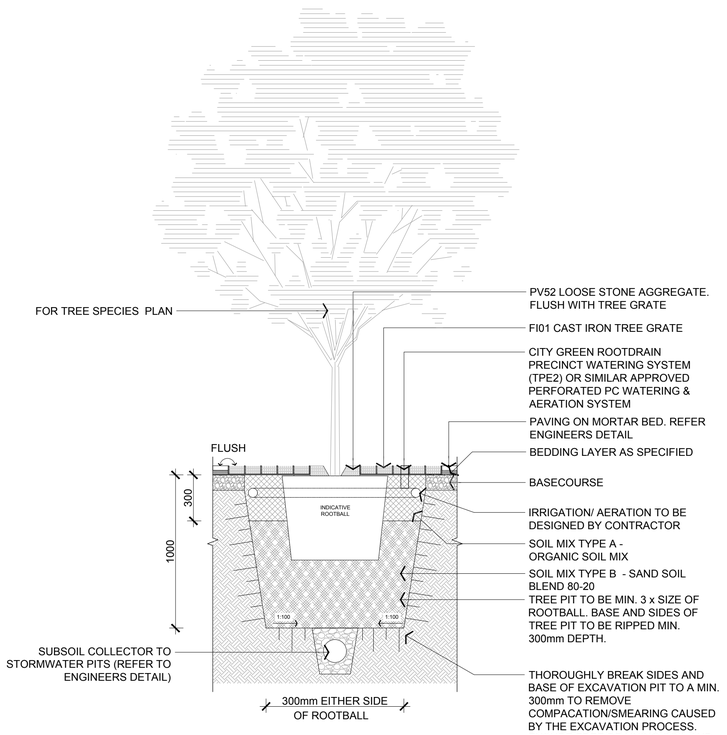
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PROJECT NO.
012092

REV NO.
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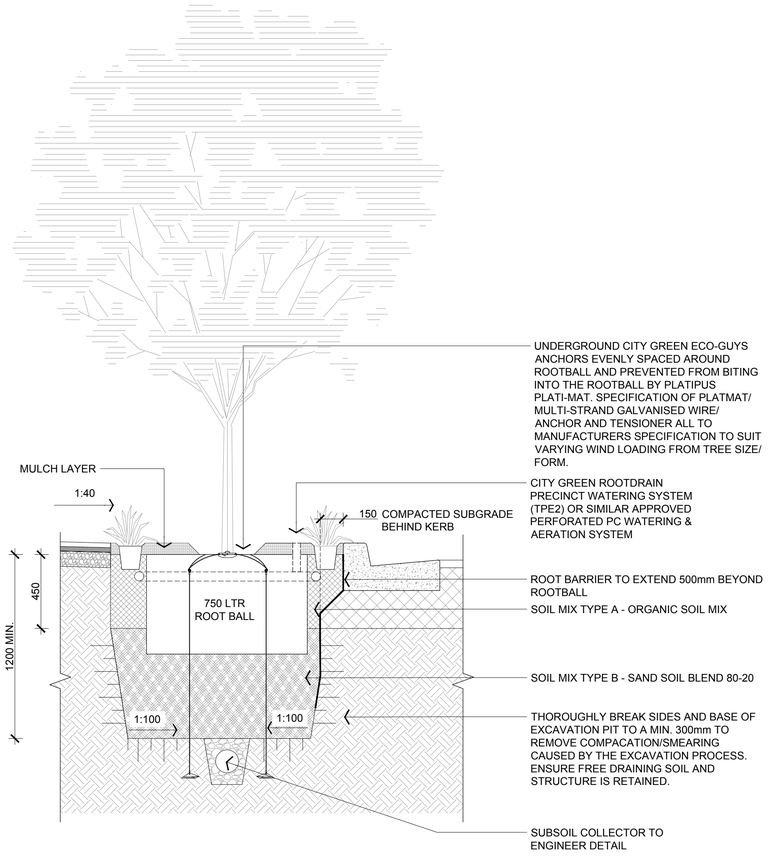
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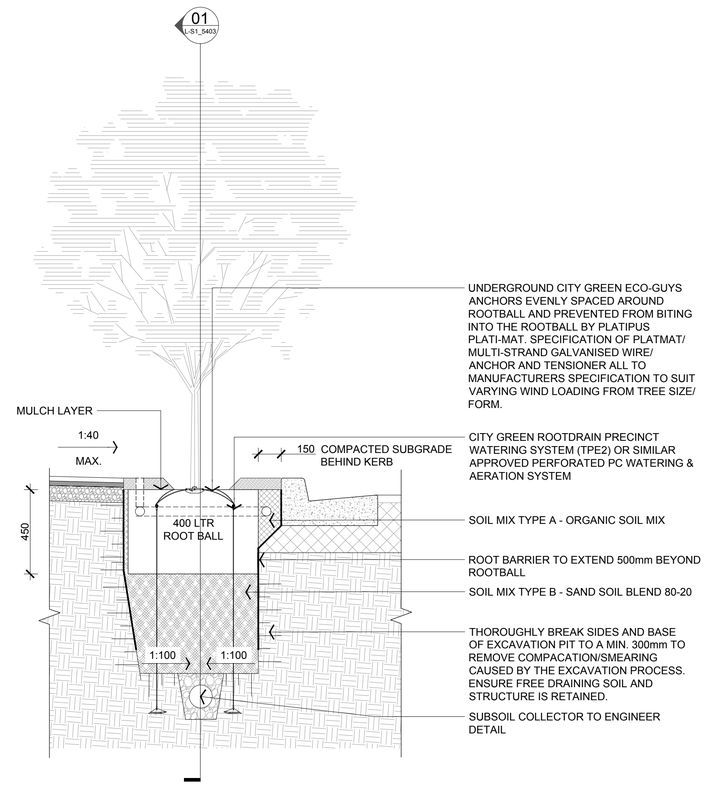


NOTE: FOR FI01 'TREE IN GRATE' JUNCTION WITH KERB REFER APPENDIX 4 'PV2.3.5 TREE PLANTING WITH TREE GRATE TYPICAL' STANDARD DRAWINGS CITY OF RYDE' FOR PUBLIC DOMAIN DETAIL

01 TREE/ FI01 - TREE IN GRATE
SECTION - Scale: 1:20@A1

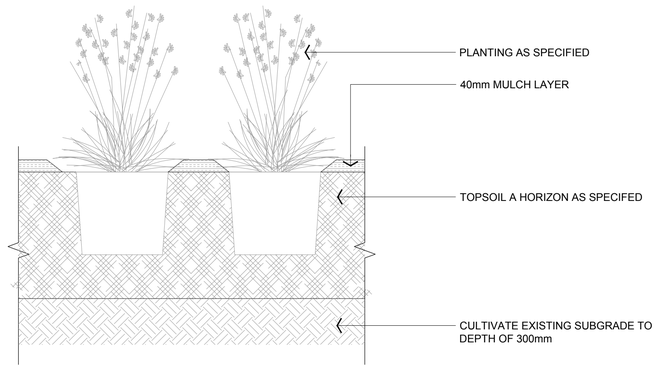


02 TREE - 750LTR STREET TREE
SECTION - Scale: 1:20@A1



03 TREE - 400LTR STREET TREE
SECTION - Scale: 1:20@A1

DETAIL DISCONTINUED
REFER TO MATERIAL AND FINISHES SCHEDULE



04 PL02/03/09/10 - GROUNDCOVER PLANTING
SECTION - Scale: 1:10@A1

UPDATED TO REFLECT RELEVANT PLANTING MIXES

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Registered Certifier
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REV	DESCRIPTION	DATE
B	TENDER FOR ADDENDUM	18 10 2021
A	FOR TENDER	16 08 2021

CLIENT
FRASERS PROPERTY AUSTRALIA

PROJECT
STAGE 1B STREETSCAPES
MIDTOWN IVANHOE, MACQUARIE PARK
SYDNEY, NSW 2113

STATUS
TENDER DOCUMENTATION

DRAWING TITLE
DETAILS - PLANTING

REVIEWED

SCALE @ A1
1:20

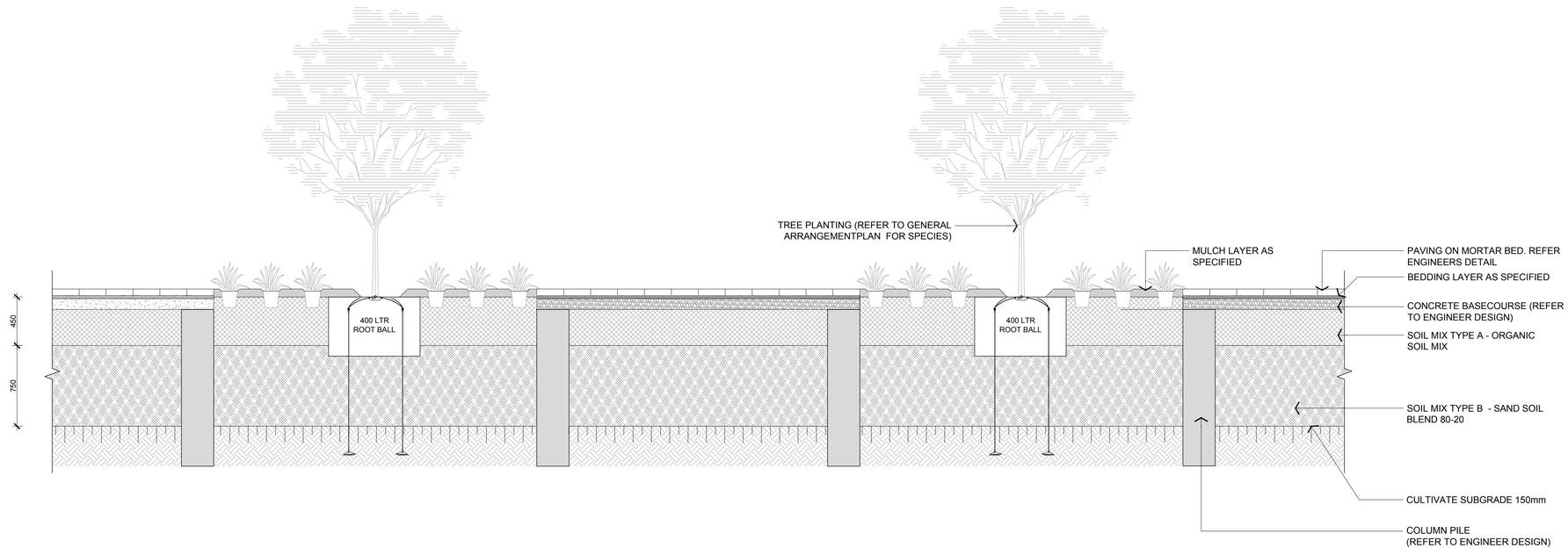
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PROJECT NO.
012092

DRAWING NO.
HSL_S1B_5401

REV NO.
B

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01 TREE - 400LTR STREET TREE

SECTION - Scale: 1:25@A1

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SCALE @ A1
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APPROVED

PROJECT NO.
012092

DRAWING NO.
HSL_S1B_5403

REV NO.
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