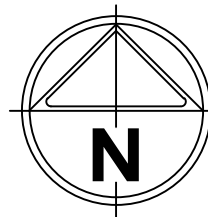
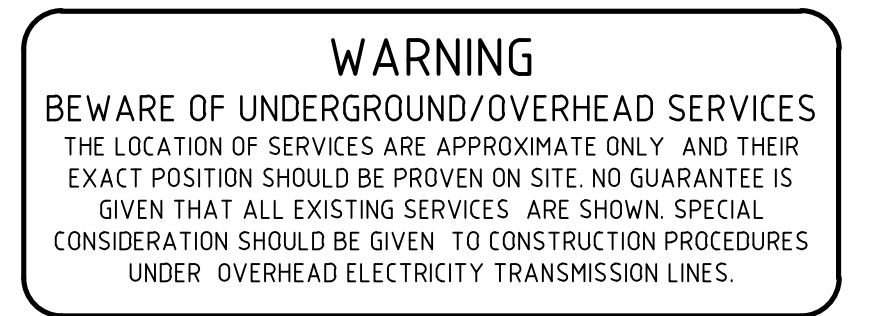


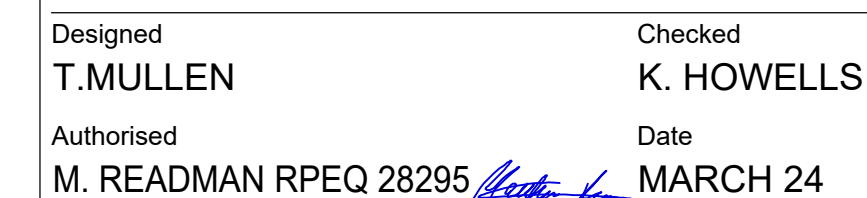
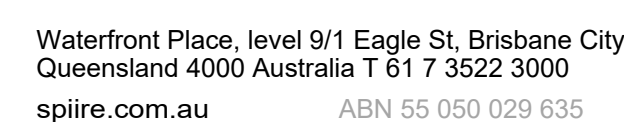
File location C:\12dS\data\SpiireSYN\02B_51\Civil\ACAD plot date 19/02/2025 8:44 AM Sheet ### of ### Sheets



DRAWING SCHEDULE	
DRAWING	DESCRIPTION
GENERAL	
320678-02B-C0100	DRAWING SCHEDULE & LOCALITY PLAN
320678-02B-C0101	GENERAL NOTES & LEGEND
320678-02B-C0102	OVERALL KEY PLAN
320678-02B-C0103	CONTROL LINE LAYOUT PLAN & TYPICAL ROAD SECTIONS
EARTHWORKS	
320678-02B-C0200	EARTHWORKS LAYOUT PLAN - SHEET 1 OF 2
320678-02B-C0201	EARTHWORKS LAYOUT PLAN - SHEET 2 OF 2
320678-02B-C0202	EARTHWORKS SITE SECTIONS
ROADWORKS	
320678-02B-C0300	ROADWORKS STANDARD NOTES & DETAILS
320678-02B-C0301	ROADWORKS LAYOUT PLAN - SHEET 1 OF 2
320678-02B-C0302	ROADWORKS LAYOUT PLAN - SHEET 2 OF 2
320678-02B-C0303	ROAD 4 LONGITUDINAL SECTION - SHEET 1 OF 2
320678-02B-C0304	ROAD 4 LONGITUDINAL SECTION - SHEET 2 OF 2
320678-02B-C0305	ROAD 4 CROSS SECTIONS
320678-02B-C0306	ROAD 6 LONGITUDINAL SECTION - SHEET 1 OF 2
320678-02B-C0307	ROAD 6 LONGITUDINAL SECTION - SHEET 2 OF 2
320678-02B-C0308	ROAD 6 CROSS SECTIONS - SHEET 1 OF 2
320678-02B-C0309	ROAD 6 CROSS SECTIONS - SHEET 2 OF 2
320678-02B-C0310	ACCESS LANEWAY LAYOUT PLAN & TYPICAL SECTION
SIGNAGE & LINEMARKING	
320678-02B-C0400	SIGNAGE & LINEMARKING LAYOUT PLAN
STORMWATER DRAINAGE	
320678-02B-C0500	STORMWATER DRAINAGE STANDARD NOTES & DETAILS
320678-02B-C0501	STORMWATER DRAINAGE CATCHMENT PLAN
320678-02B-C0502	STORMWATER DRAINAGE LONGITUDINAL SECTIONS - SHEET 1 OF 2
320678-02B-C0503	STORMWATER DRAINAGE LONGITUDINAL SECTIONS - SHEET 2 OF 2
320678-02B-C0504	STORMWATER STRUCTURE DETAILS
SAFETY IN DESIGN REPORT	
320678-02B-C0900	SAFETY IN DESIGN REPORT



2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	30-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24
Rev	Amendments	Approved	Date



IPSWICH CITY COUNCIL
RIPLEY ESTATE DEVELOPMENT PTY LTD

CONSTRUCTION	Drg No 320678-02B-C0100	Rev 2
---------------------	-----------------------------------	-----------------

NOTES:

GENERAL

- ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM
- ALL EXISTING SURFACE LEVELS SHOWN ON THE ENGINEERING DRAWINGS HAVE BEEN INTERPOLATED FROM A DIGITAL TERRAIN MODEL. THESE LEVELS HAVE BEEN USED AS THE BASIS FOR ALL ENGINEERING DESIGN AND DETERMINATION OF QUANTITIES AND ARE ACCURATE TO WITHIN ±0.05m.
- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS2124-1992 GENERAL CONDITIONS OF CONTRACT, SPECIFICATIONS, APPROVED AUTHORITY SPECIFICATIONS AND STANDARD DRAWINGS, AUSTRALIAN STANDARDS AND TO THE SATISFACTION OF THE SUPERINTENDENT AND THE COUNCIL ENGINEER OR THEIR REPRESENTATIVE.
- ROAD CHAINAGES REFER TO ROAD CENTRELINES. CHAINAGES FOR INTERSECTIONS AND CUL-DE-SACS REFER TO THE LIP OF KERB.
- CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING SURFACES AND CONNECTION POINTS INCLUDING CONNECTION LEVELS AND ADVISE THE SUPERINTENDENT OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT ON SITE.
- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE IMPLEMENTED IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLANS, BEST PRACTICE AND IN ACCORDANCE WITH INTERNATIONAL EROSION CONTROL ASSOCIATION PRACTICES AND GUIDELINES. PROJECT SURVEYOR SHALL PEG COMMON BOUNDARY WITH ADJOINING PROPERTIES.
- CONTRACTOR SHALL ASSESS LOCATION AND LEVEL OF ANY EXISTING FENCING AND RETAINING WALLS RELATIVE TO PROPOSED RETAINING WALL CONSTRUCTION.
- CONTRACTOR MUST PROVIDE TEMPORARY PROPPING AS NECESSARY TO ENSURE THAT PROPOSED CONSTRUCTION WORKS DO NOT CAUSE ANY DAMAGE OR DRAINAGE ISSUES TO EXISTING NEIGHBORING PROPERTIES.
- CONTRATOR TO PROVIDE DILAPIDATION REPORT OF ALL ASSETS IN THE VICINITY OF WORKS

EARTHWORKS

- ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM
- ALL EXISTING SURFACE LEVELS SHOWN ON THE ENGINEERING DRAWINGS HAVE BEEN INTERPOLATED FROM A DIGITAL TERRAIN MODEL. THESE LEVELS HAVE BEEN USED AS THE BASIS FOR ALL ENGINEERING DESIGN AND DETERMINATION OF QUANTITIES.
- THE CONTRACTOR SHALL ADVISE THE COUNCIL INSPECTOR OF THE PROPOSED SOURCE OF IMPORTED FILL TO BE BROUGHT ONTO THE DEVELOPMENT SITE AND PROVIDE CERTIFICATION (IF REQUESTED BY COUNCIL) FROM THE SUPPLIER / GEOTECHNICAL CONSULTANT.
- THE CONTRACTOR SHALL ALSO ADVISE THE COUNCIL INSPECTOR OF THE PROPOSED HAUL ROUTE TO BE TAKEN BY ANY TRUCKS DELIVERING FILL TO THE PROPOSED DEVELOPMENT SITE.
- IT IS THE PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT NO FILL MATERIAL IS DEPOSITED ONTO THE ROADS USED BY DELIVERY TRUCKS. ANY MATERIAL DEPOSITED ONTO ROADWAYS SHALL BE CLEANED AS NECESSARY TO AVOID CAUSING NUISANCE TO VEHICLE TRAFFIC.
- ALL WORK SHALL BE IN ACCORDANCE WITH IPSWICH CITY COUNCIL DESIGN STANDARDS.
- ALL EARTHWORKS & WORKS ASSOCIATED WITH PROPOSED DEVELOPMENT SHALL BE UNDERTAKEN IN STRICT ACCORDANCE WITH THE PROJECT SPECIFIC GEOTECHNICAL REPORT AND AS3978.
- WORKS MUST BE UNDERTAKEN IN ACCORDANCE WITH BUTLER PARTNERS REPORTS 010-218K - '633 RIPLEY ROAD' & '695 AND 787-815 RIPLEY ROAD' 31/01/2021
- WHERE NEW WORK ABUTS EXISTING WORK THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED.
- THE PLACEMENT OF ALL FILL TO BE INSPECTED, TESTED AND CERTIFIED BY A GEOTECHNICAL ENGINEER TO A LEVEL 1 REQUIREMENT DURING THE EARTHWORKS OPERATIONS TO ENDURE THAT ALL FILL IS PLACED IN A "CONTROLLED MANNER", IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS".
- THE CONTRACTOR IS RESPONSIBLE FOR ENGAGING A NATA ACCREDITED GEOTECHNICAL CONSULTANT TO SUPERVISE ALL EARTHWORKS PROCEDURES AND PROVIDE LEVEL 1 TESTING AND CERTIFICATION IN ACCORDANCE WITH THE REQUIREMENTS OF AS3798.
- STRIPPED TOPSOIL SHALL BE STOCKPILED WITHIN THE DEVELOPMENT SITE IN A POSITION APPROVED BY THE SUPERINTENDENT.
- ANY IMPORTED FILL SHALL BE APPROVED AND FREE OF ORGANIC MATTER WITH CERTIFICATES PROVIDED
- FILL SHALL BE PLACED IN MAXIMUM150mm LAYERS

LOCATION	MINIMUM DRY DENSITY RATIO (%)
BUILDING PADS	REFER SITE SPECIFIC GEOTECHNICAL REPORT RECOMMENDATIONS
ROADWAYS	
a) >0.5m BELOW PAVEMENT SUBGRADE	95 (Std.)
b) <0.5m BELOW PAVEMENT SUBGRADE	100 (Std.)
NOTE: THE RECOMMENDED COMPACTIONS ARE PERCENTAGES OF THE MAXIMUM DRY DENSITY DETERMINED BY AUSTRALIAN STANDARD 1289	

ROAD CONSTRUCTION

- CONCRETE WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH AS3600 AND RELEVANT AUTHORITY STANDARDS.
- ONCE EXCAVATION TO SUBGRADE LEVEL HAS OCCURRED, CONTRACTOR TO PROVIDE CBR TEST RESULTS TO SUPERINTENDENT FOR FINAL PAVEMENT DESIGN CONFIRMATION.
- PRIOR TO PLACING EACH LAYER OF PAVEMENT, COMPACTION TEST RESULTS ARE TO BE PROVIDED TO SUPERINTENDENT FOR ACCEPTANCE.
- CONSTRUCTION OF KERB TO BE IN ACCORDANCE WITH RELEVANT COUNCIL STANDARDS.
- ALL SERVICE CONDUIT TRENCHES UNDER ROAD PAVEMENTS TO BE BACKFILLED IN ACCORDANCE WITH RELEVANT MUNICIPALITY OR ROAD AUTHORITY SPECIFICATION. TESTING TO OCCUR AT MINIMUM 40m INTERVALS- 1 TEST FOR EVERY 2 LAYERS.

LOCATION	DENSITY RATIO (%)	TYPE
PAVEMENT	95	MODIFIED MAXIMUM DRY DENSITY
ROADWAYS		
a) >0.5m BELOW PAVEMENT SUBGRADE	95	STANDARD MAXIMUM DRY DENSITY
b) <0.5m BELOW PAVEMENT SUBGRADE	100	

GENERAL STORMWATER DRAINAGE

- AG/SUBSOIL DRAIN TO BE LAID BEHIND KERB WHERE REQUIRED IN ACCORDANCE WITH THE COUNCIL STANDARD DRAWINGS AND CONNECTED TO UNDERGROUND DRAINAGE WITH CLEANOUTS AS REQUIRED.
- ALL STORMWATER DRAINS ARE TO BE CLASS '2' R.C. PIPES UNLESS OTHERWISE SHOWN.
- ALL PIPES ≤600 DIAMETER TO BE RUBBER RING JOINTED (R.R.J.) UNLESS STATED OTHERWISE. ALL OTHER PIPES TO BE FLUSH JOINTED (F.J) UNLESS STATED OTHERWISE.
- ALL DRAINAGE AND DRAINAGE STRUCTURES TO BE IN ACCORDANCE WITH COUNCIL STANDARDS WITH THE INSTALLATION OF HEAVY DUTY LIDS.
- CONCRETE WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH AS3600 AND RELEVANT AUTHORITY STANDARDS.

PAVEMENT

- PAVEMENT DEPTHS MAY BE MODIFIED AS DIRECTED BY THE SUPERINTENDENT. PAVEMENT TO BE BOXED OUT TO MINIMUM DEPTH DENOTED, INSPECTED AND IF SUBGRADE IS IN QUESTION, FURTHER TESTING CARRIED OUT TO DETERMINE FINAL PAVEMENT DEPTH.
- WHERE PAVEMENT IS CONSTRUCTED ON FILLING, FILL MATERIAL IS TO BE APPROVED BY THE SUPERINTENDENT AND COUNCIL. FILLING TO BE CONSTRUCTED IN LAYERS 150mm THICK WITH COMPACTION ACHIEVING 95% AUSTRALIAN STANDARD DENSITY.
- WHEN PAVEMENT EXCAVATION IS IN ROCK ALL LOOSE MATERIAL (INCLUDING ROCKS AND CLAY) MUST BE REMOVED. THE SUB-GRADE MUST THEN BE REGULATED WITH COUNCIL APPROVED MATERIAL.

SIGNAGE AND LINEMARKING

- LINEMARKING AND SIGNAGE TO BE INSTALLED IN ACCORDANCE WITH AS 1742 SERIES UNLESS NOTED OTHERWISE. STREET SIGNS ARE TO BE INSTALLED IN ACCORDANCE WITH COUNCIL/AUTHROITY STANDARDS.
- ALL TEMPORARY WARNING SIGNS USED DURING CONSTRUCTION SHALL BE SUPPLIED AND MAINTAINED IN ACCORDANCE WITH AS 1742
- TACTILE GROUND SURFACE INDICATORS ARE TO BE INSTALLED IN ACCORDANCE WITH THE DISABILITY DISCRIMINATION ACT AND RELEVANT COUNCIL STANDARD DRAWINGS.

CONCRETE

- CONCRETE WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH AS3600 AND RELEVANT AUTHORITY STANDARDS.

RETAINING WALLS

- RETAINING WALLS SHOWN ON THESE CIVIL DRAWINGS INDICATE ONLY THE RETAINING WALL TYPE, LOCATION, HEIGHT AND RELATIVITY TO BOUNDARIES OR OTHER KNOWN ELEMENTS. ALL RETAINING WALL STRUCTURAL AND OTHER SPECIFICATION SHALL BE DETAILED BY OTHERS. THE APPOINTED CONTRACTOR SHALL REVIEW ALL DEVELOPMENT APPROVAL CONDITIONS, PLANS AND SPECIFICATIONS TO ENSURE THAT ALL RETAINING WALL LOADS, ANCILLARY DRAINAGE (SUBSOIL & SURFACE DRAINAGE) AND CONSTRAINTS ARE ACCOMMODATED (INCLUDING ANY FUTURE FENCES WHICH MAY BE ATTACHED), AND SHALL SUPPLY THE SUPERVISING ENGINEER ALL POST-CONSTRUCTION CERTIFICATIONS NECESSARY FOR RELEVANT LOCAL AUTHORITY ACCEPTANCE. FOR WORKS WITHIN QUEENSLAND THIS SHALL INCLUDE (BUT NOT LIMITED TO) QUEENSLAND GOVERNMENT - "FORM 15" AND "FORM 12" CERTIFIED BY AN R.P.E.Q. ENGINEER.

LEGEND

DESCRIPTION	EXISTING	PROPOSED
WATER MAIN	DW	DW
SEWER & MAINTENANCE STRUCTURE	S	S
SWALE	SWD	SWD
STORMWATER DRAIN & PIT		
STORMWATER PITS		
KERB ADAPTOR		
ROOFWATER HOUSE CONNECTION DIRECT TO GULLY		
AG DRAIN AND FLUSHER	AG	AG
STORM WATER DRAINAGE PIT NUMBER		
KERB AND CHANNEL TYPE M1		M1
SURFACE CONTOUR MAJOR	~ 169.00 ~	169.00
SURFACE CONTOUR MINOR	~ 168.90 ~	168.90
SIGN AND POST		
LIGHT & POLE (BY OTHERS)		
STREET SIGN		
ROAD CENTERLINE		
ROAD CHAINAGES	CH200.000	CH200.000
BATTER		
CUT EXTENTS		
FILL EXTENTS		
ROCK PITCHING		
FENCES		
GUARD RAIL		
TREE		
ROAD PAVEMENT - TYPE A		
ROAD PAVEMENT - TYPE B		
FOOTPATH		
RETAINING WALL		
RETAINING WALL HEIGHT		(2.0)

file location C:\2d5\data\Spire\SYN\02B_51\N\Civil\AC40_plot date 19/02/2025 8:44 AM Sheet ### of ### Sheets

2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	30-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24
Rev	Amendments	Approved	Date

© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

Waterfront Place, level 9/1 Eagle St, Brisbane City
Queensland 4000 Australia T 61 7 3522 3000
spiire.com.au ABN 55 050 029 635

AT RIPLEY

Designed
T.MULLEN

Checked
K. HOWELLS

Authorised
M. READMAN RPEQ 28295

Date
MARCH 24

AMORY AT RIPLEY
STAGE 02B
GENERAL NOTES & LEGEND

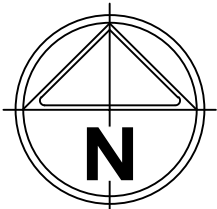
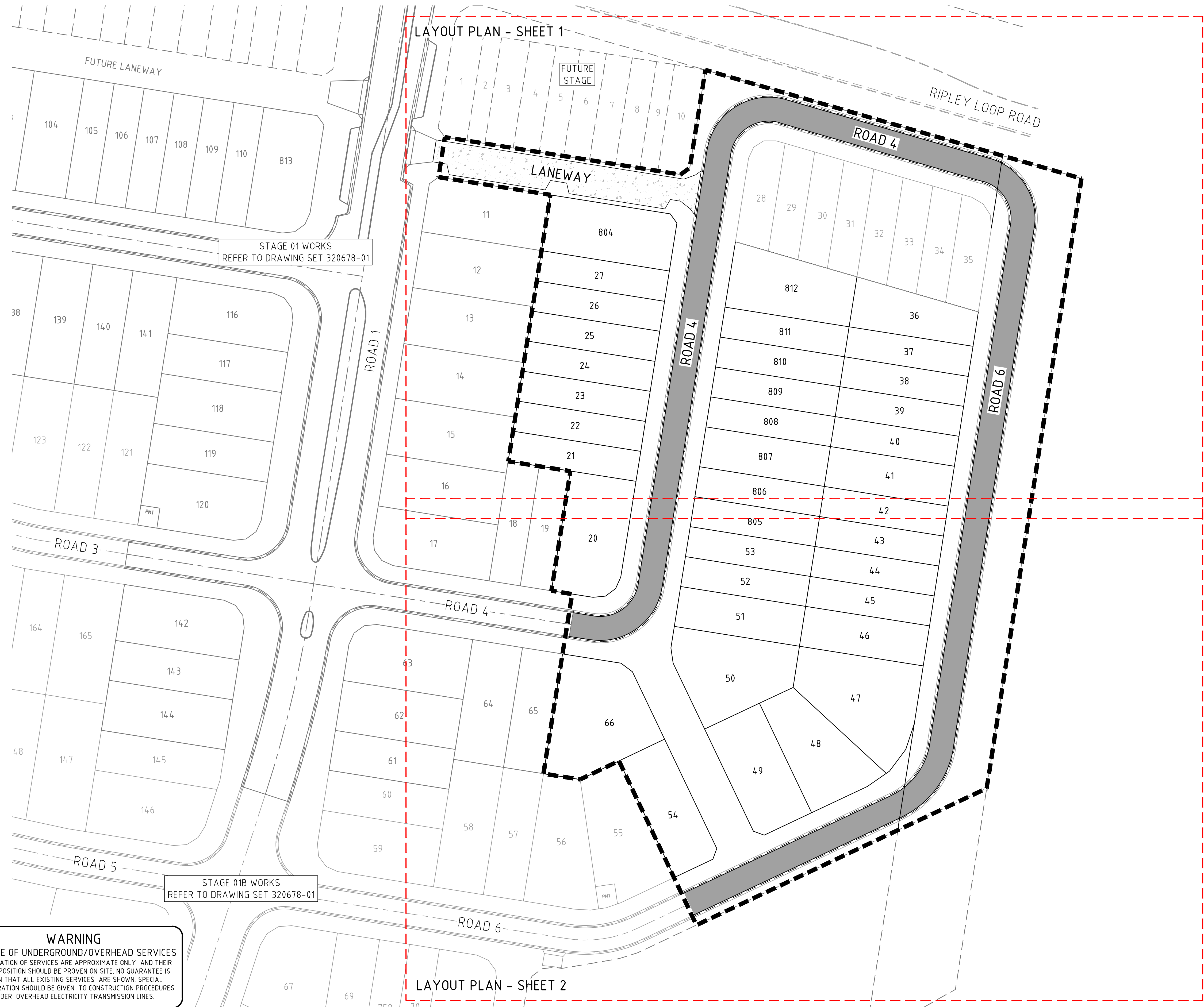
IPSWICH CITY COUNCIL
RIPLEY ESTATE DEVELOPMENT PTY LTD

CONSTRUCTION

Drg No
320678-02B-C0101

Rev
2

file location C:\2d5\data\Spire\SYN\02B_51\Civil\AC40_plot date 19/02/2025 8:44 AM Sheet ##### of ##### Sheets



Rev	Amendments	Approved	Date
2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	30-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24

H 1500
SCALE @ A1



© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

spiire

Waterfront Place, level 9/1 Eagle St, Brisbane City
Queensland 4000 Australia T 61 7 3522 3000
spiire.com.au ABN 55 050 029 635

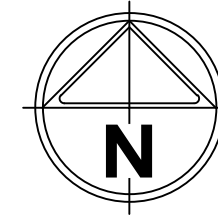
AMORY
AT RIPLEY

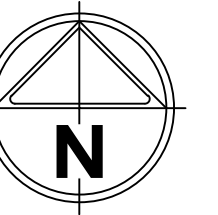
Designed T.MULLEN	Checked K. HOWELLS
Authorised M. READMAN RPEQ 28295	Date MARCH 24

**AMORY AT RIPLEY
STAGE 02B
OVERALL KEY PLAN**

IPSWICH CITY COUNCIL
RIPLEY ESTATE DEVELOPMENT PTY LTD

CONSTRUCTION Drg No 320678-02B-C0102 Rev 2





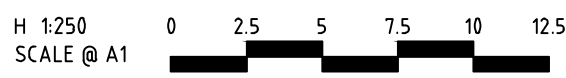
STAGE 01 WORKS
REFER TO DRAWING SET 320678-01

WARNING
BEWARE OF UNDERGROUND/OVERHEAD SERVICES
THE LOCATION OF SERVICES ARE APPROXIMATE ONLY. AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. SPECIAL CONSIDERATION SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES.

RETAINING WALLS TYPICAL NOTE:
RETAINING WALLS SHOWN ON THESE CIVIL DRAWINGS INDICATE ONLY THE RETAINING WALL TYPE, LOCATION, HEIGHT AND RELATIVITY TO BOUNDARIES OR OTHER KNOWN ELEMENTS. ALL RETAINING WALL STRUCTURAL AND OTHER SPECIFICATION SHALL BE DETAILED BY OTHERS. THE APPOINTED CONTRACTOR SHALL REVIEW ALL DEVELOPMENT APPROVAL CONDITIONS, PLANS AND SPECIFICATIONS TO ENSURE THAT ALL RETAINING WALL LOADS, ANCILLARY DRAINAGE (SUBSOIL & SURFACE DRAINAGE) AND CONSTRAINTS ARE ACCOMMODATED (INCLUDING ANY FUTURE FENCES WHICH MAY BE ATTACHED), AND SHALL SUPPLY THE SUPERVISING ENGINEER ALL POST-CONSTRUCTION CERTIFICATIONS NECESSARY FOR RELEVANT LOCAL AUTHORITY ACCEPTANCE. FOR WORKS WITHIN QUEENSLAND THIS SHALL INCLUDE (BUT NOT LIMITED TO) QUEENSLAND GOVERNMENT - DEPARTMENT OF LOCAL GOVERNMENT AND PLANNING IDAS "FORM 15" AND "FORM 16" CERTIFIED BY AN R.P.E.Q. ENGINEER.

FOR CONTINUATION REFER TO DRG 320678-02B-C0201

2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	30-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24
Rev	Amendments	Approved	Date



© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

spiire

Waterfront Place, level 9/1 Eagle St, Brisbane City
Queensland 4000 Australia T 61 7 3522 3000
spiire.com.au ABN 55 050 029 635

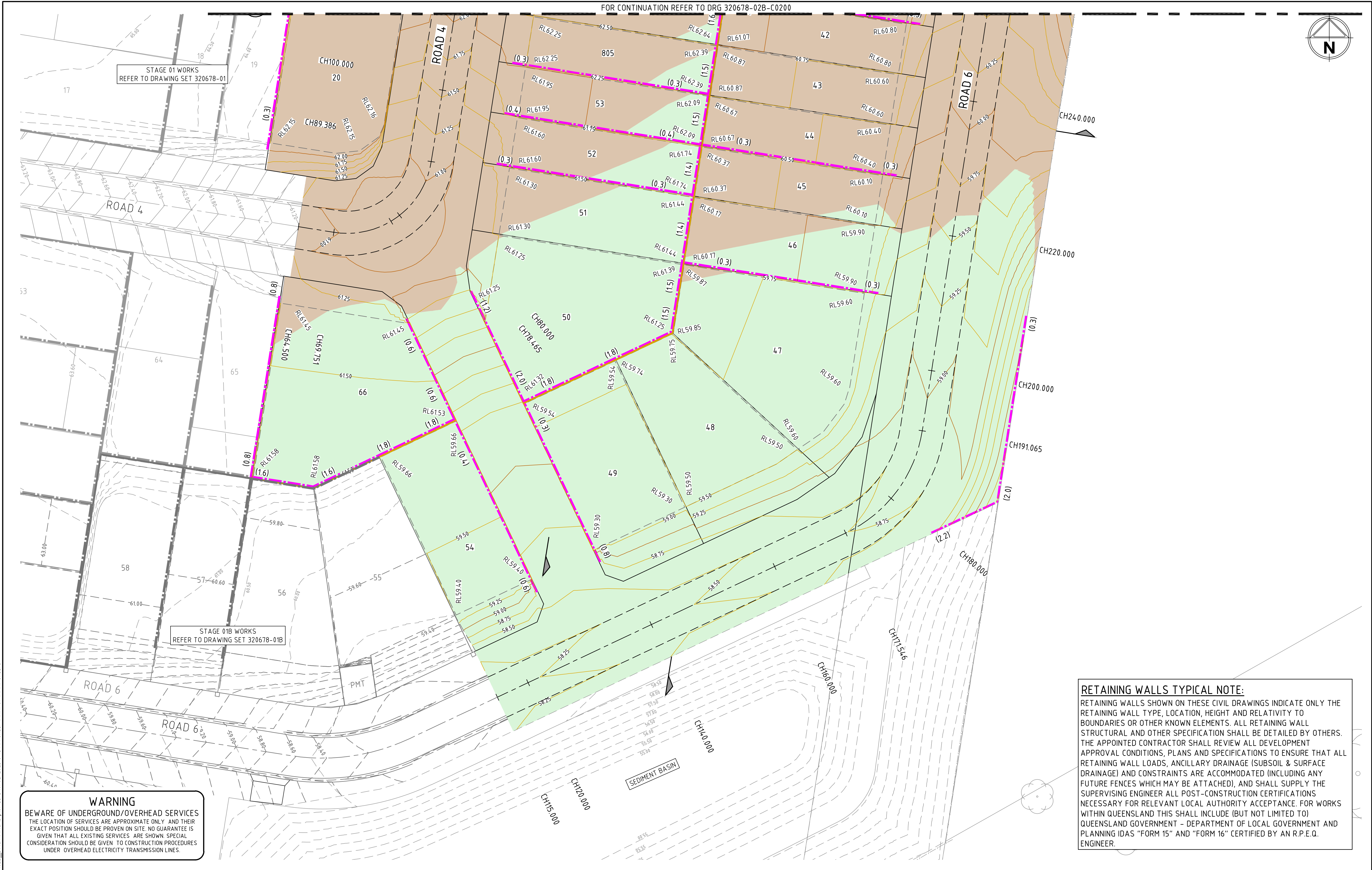
AMORY
AT RIPLEY

Designed
T.MULLEN
Authorised
M. READMAN RPEQ 28295
Checked
K. HOWELLS
Date
MARCH 24

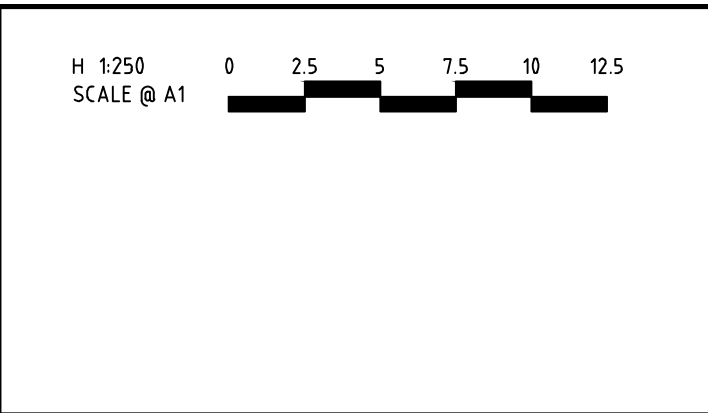
**AMORY AT RIPLEY
STAGE 02B
EARTHWORKS LAYOUT PLAN
SHEET 1 OF 2**
IPSWICH CITY COUNCIL
RIPLEY ESTATE DEVELOPMENT PTY LTD

CONSTRUCTION Drg No **320678-02B-C0200** Rev **2**

file location C:\2025\Draws\Spire\SYN\02B_51\Civil\AC40_plot date 19/02/2025 8:45 AM Sheet ##### of ##### Sheets



2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	30-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24
Rev	Amendments	Approved	Date



© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

spiire

Waterfront Place, level 9/1 Eagle St, Brisbane City
Queensland 4000 Australia T 61 7 3522 3000
spiire.com.au ABN 55 050 029 635

AMORY
AT RIPLEY

Designed
T.MULLEN

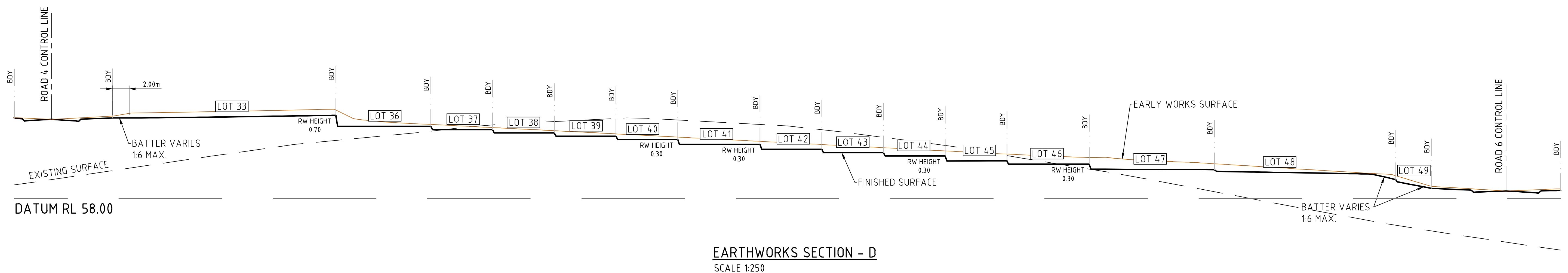
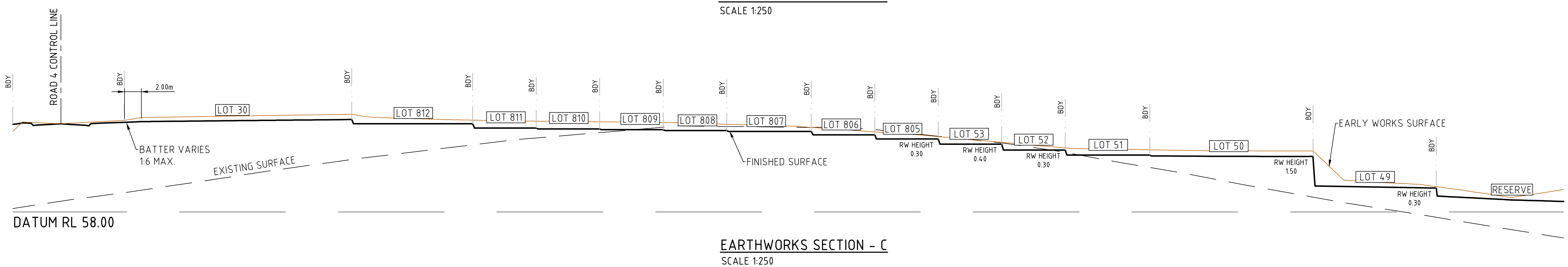
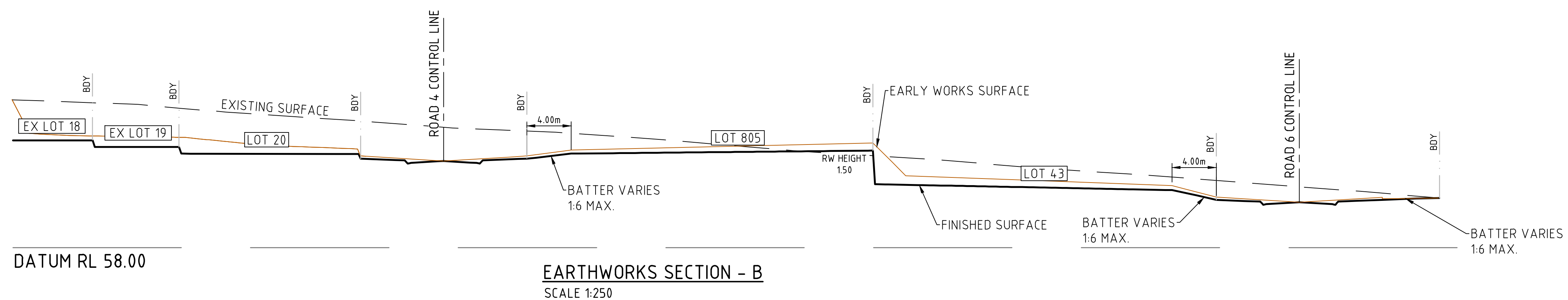
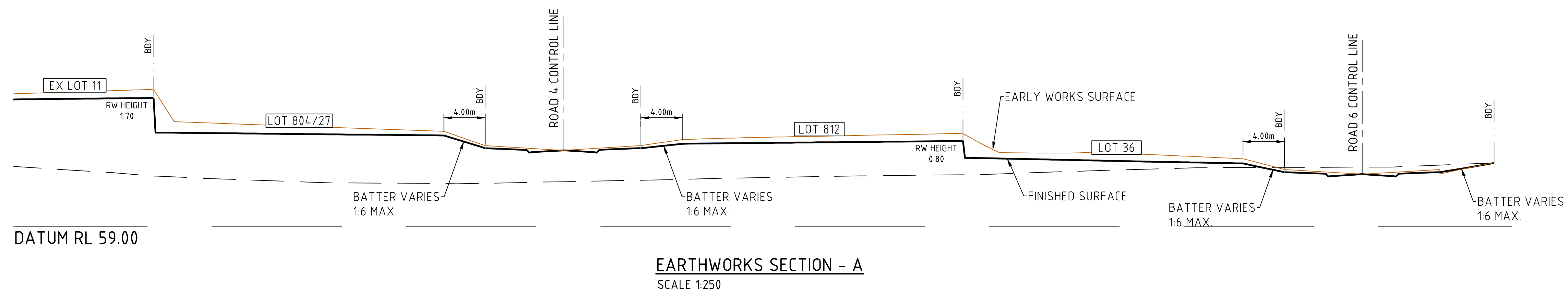
Checked
K. HOWELLS

Authorised
M. READMAN RPEQ 28295

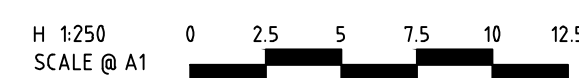
Date
MARCH 24

AMORY AT RIPLEY
STAGE 02B
EARTHWORKS LAYOUT PLAN
SHEET 2 OF 2
IPSWICH CITY COUNCIL
RIPLEY ESTATE DEVELOPMENT PTY LTD

CONSTRUCTION Drg No 320678-02B-C0201 Rev 2



2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	30-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24
Rev	Amendments	Approved	Date



© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.



Waterfront Place, level 9/1 Eagle St, Brisbane City
Queensland 4000 Australia T 61 7 3522 3000
spiire.com.au ABN 55 050 029 635



Designed	Checked
T.MULLEN	K. HOWELLS
Authorised	Date
M. READMAN RPEQ 28295 <i>[Signature]</i>	MARCH 24

**AMORY AT RIPLEY
STAGE 02B
EARTHWORKS SITE SECTIONS**

IPSWICH CITY COUNCIL
RIPLEY ESTATE DEVELOPMENT PTY LTD

CONSTRUCTION Drg No **320678-02B-C0202**

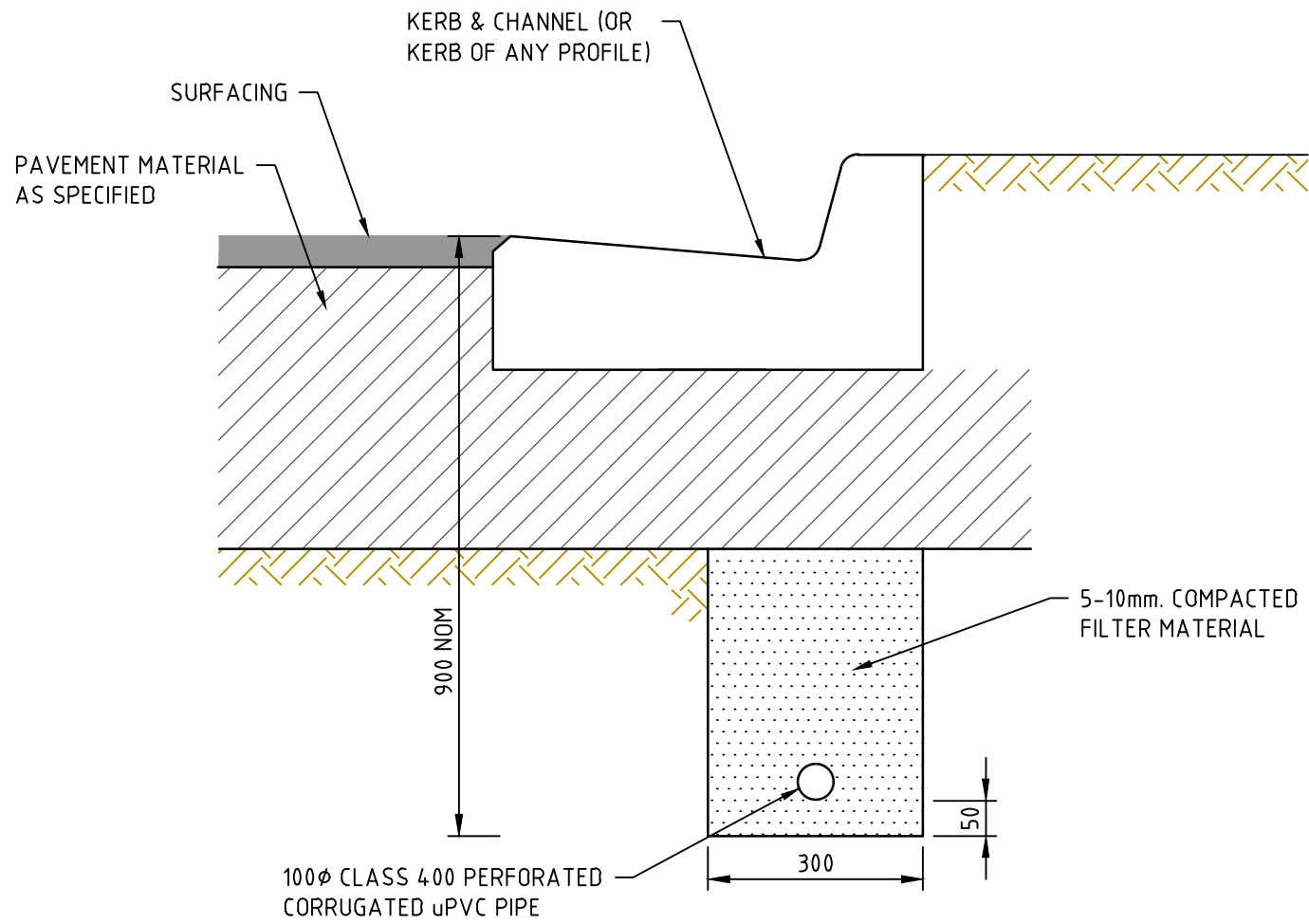
DESIGN PAVEMENT PROFILE- TYPE B

PAVEMENT LAYER	DESCRIPTION	DEPTH (mm)
		TYPE B*
WEARING SURFACE	ASPHALT CONCRETE AC14M	35
PRIMER SEAL	AMC0 OR AMC00 PRIME	YES
BASE COURSE	TYPE 2.1 (MIN CBR 80)	125
UPPER PAVEMENT TOTAL		
UPPER SUBBASE	TYPE 2.3 (MIN CBR 45)	100
LOWER SUBBASE	TYPE 2.5 (MIN CBR 15)	195
TOTAL PAVEMENT DEPTH		455

ROAD NAME	TYPE
ROAD 4	TYPE B
ROAD 6	TYPE B

NOTE:

THE PAVEMENT DEPTHS ARE INDICATIVE ONLY. PAVEMENT DESIGN IS SUBJECT TO CONFIRMATION WITH GEOTECHNICAL TESTING AND RPEQ CERTIFIED PAVEMENT DESIGN REPORT.



SUBSURFACE PAVEMENT DRAIN

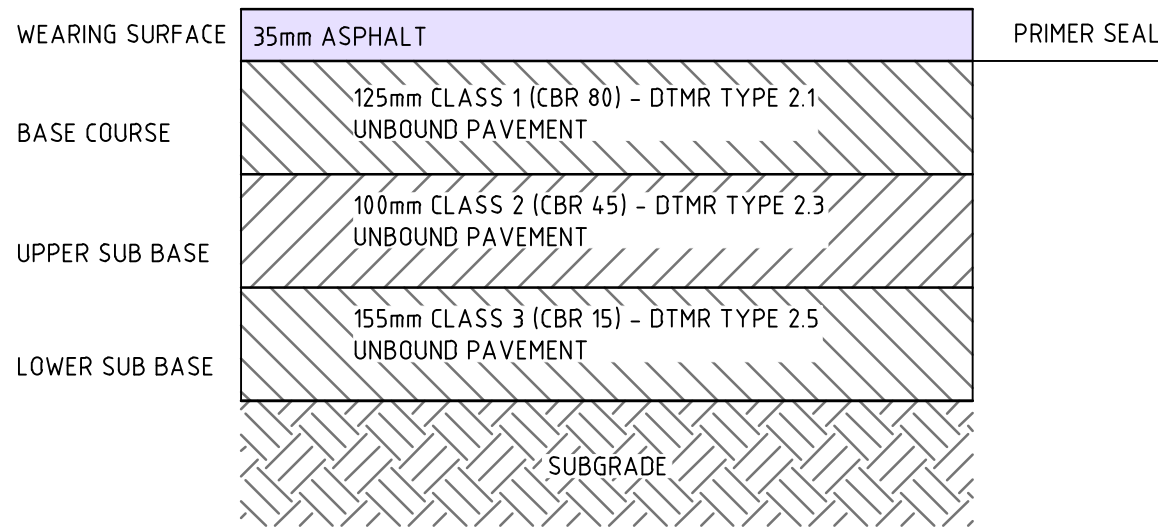
REFER TO ICC STANDARD DWG NO. SR.20
NOT TO SCALE

MEDIAN INFILL

100mm N32 CONCRETE WITH 50mm SAND- REFER IPWEA RS-065

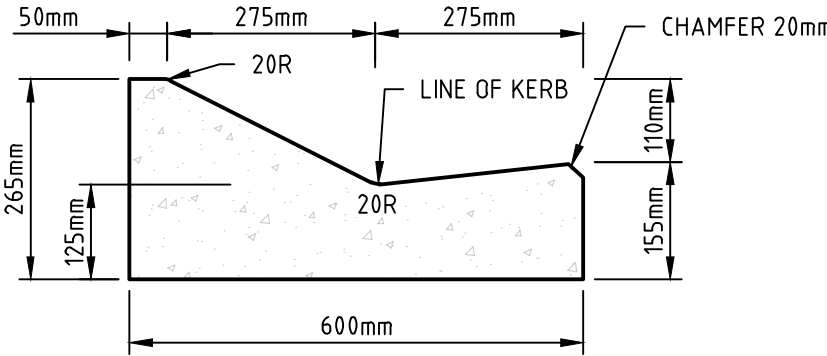
FOOTPATHS

100mm N25 CONCRETE- SL72 50 TOP COVER- REFER ICC SR.19



PAVEMENT TYPE B

ROAD 4 & ROAD 6

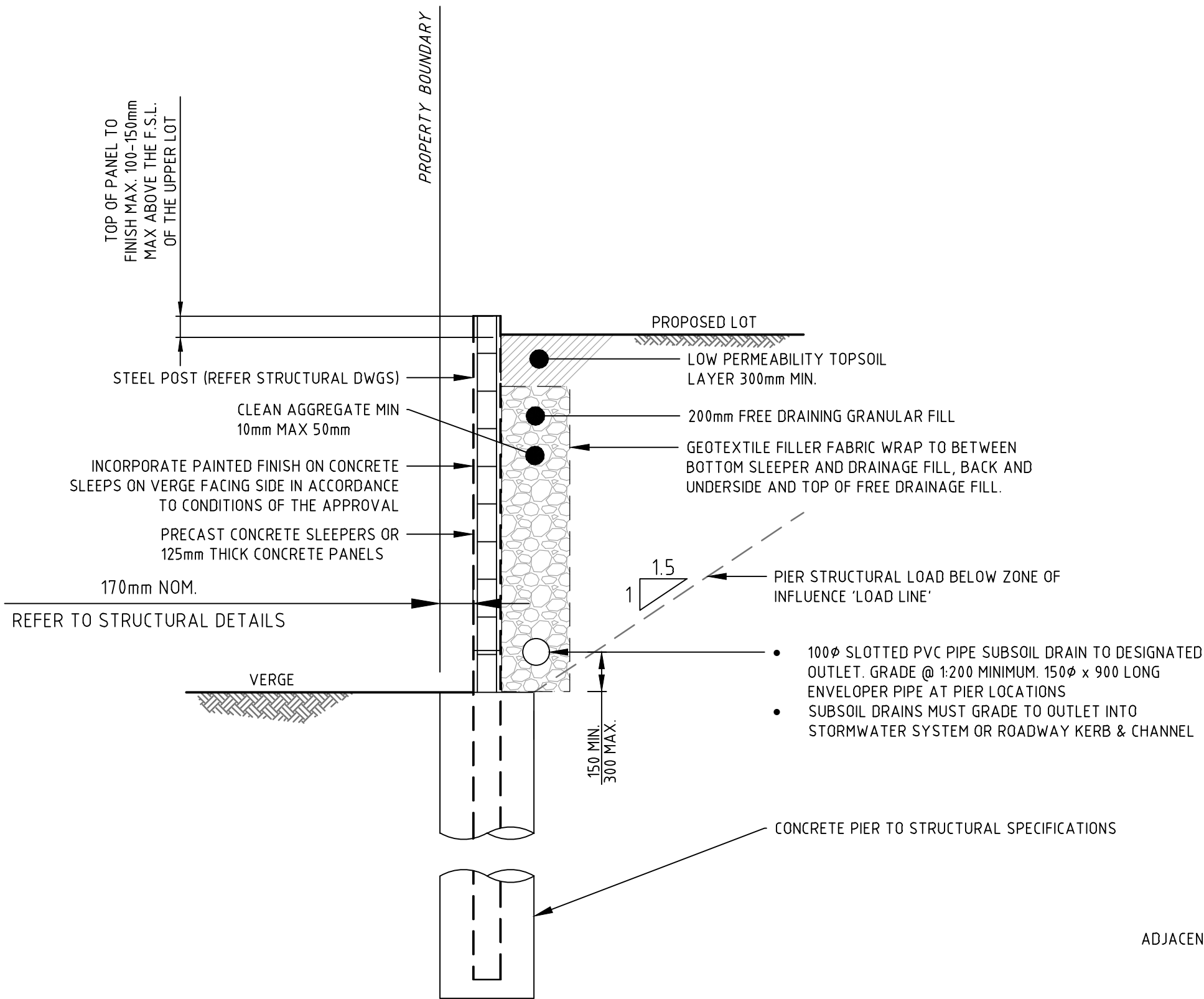


TYPE M1
MOUNTABLE KERB

N.T.S

STANDARD KERB PROFILES

NOTE: ALL KERB & CHANNEL AS PER IPWEA STD
DRAWING RS.080 UNLESS STATED OTHERWISE

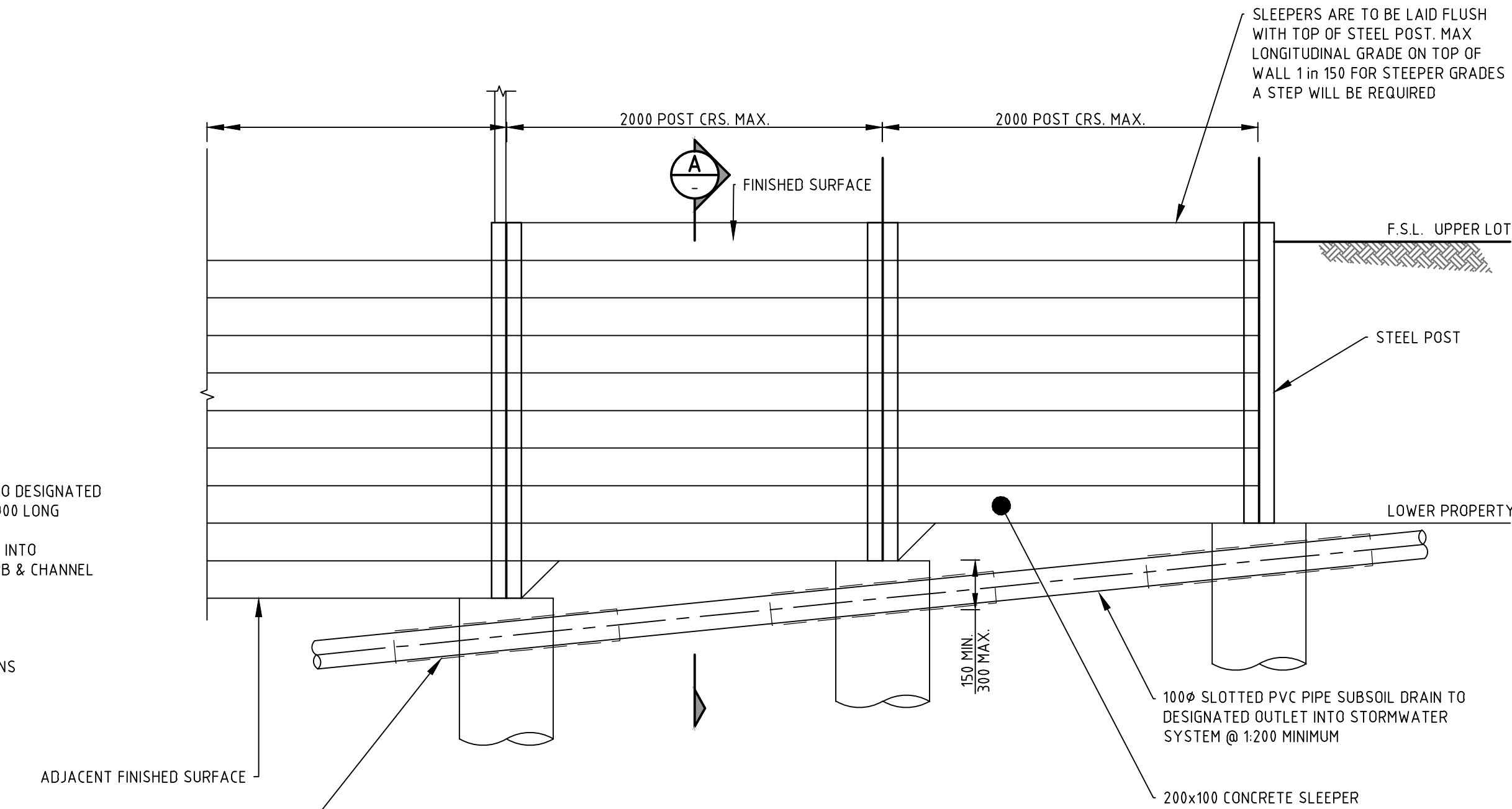


RETAINING WALL FRONTING ROAD RESERVE

Scale 1: 25

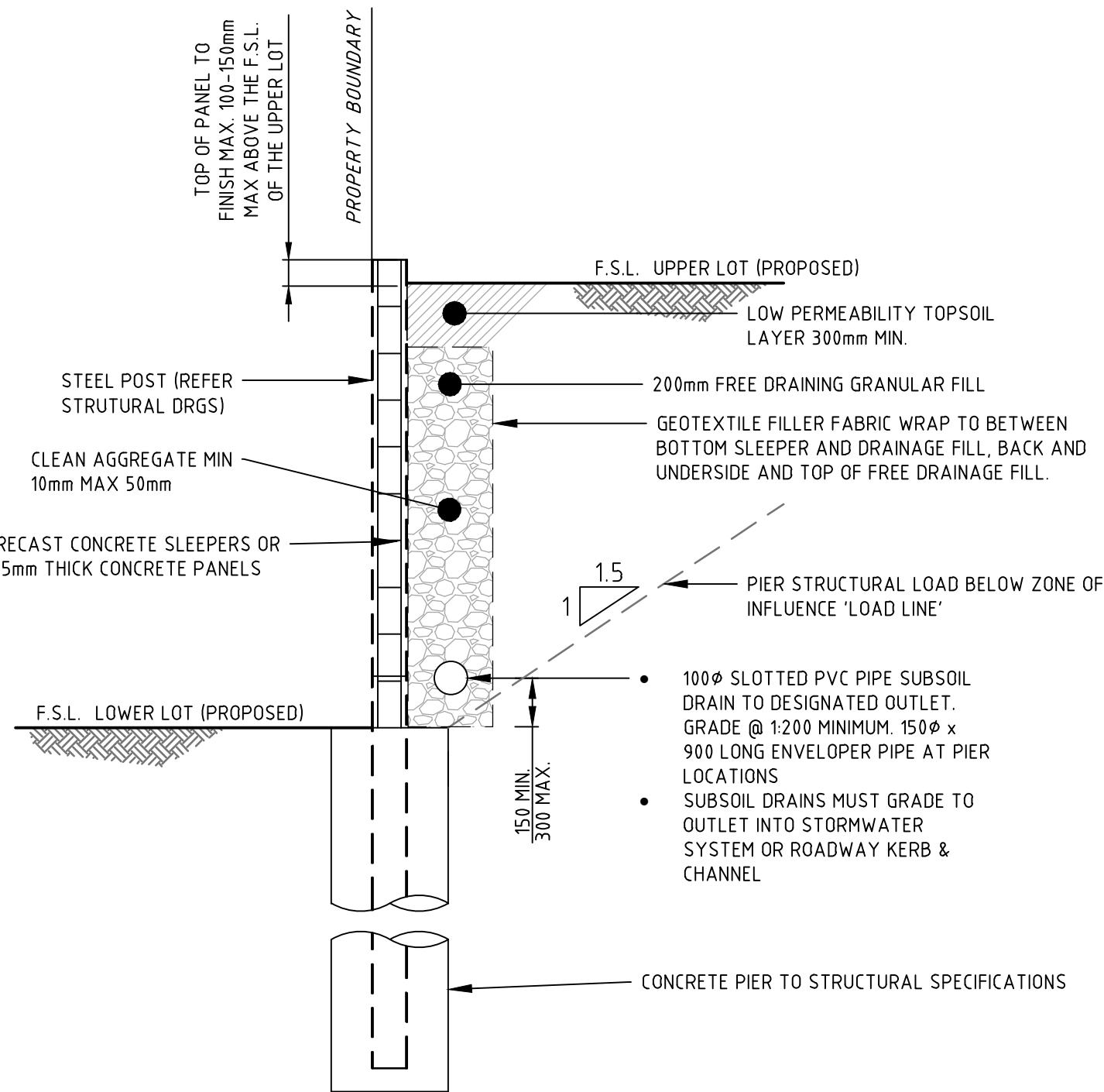
RETAINING WALL FRONTING ROAD RESERVE NOTE:-

CONTRACTOR TO CONFIRM STRUCTURAL DETAILS TO ENSURE ALL RETAINING WALL FOOTINGS ARE WITHIN PRIVATE PROPERTY.



TYPICAL RETAINING WALL PART ELEVATION

Scale 1: 25



SECTION - A

Scale 1: 25

IMPORTANT NOTES:-

RETAINING WALLS/PROPERTY BOUNDARY

- RETAINING WALL STRUCTURE (INCLUDING FOOTING) MUST NOT ENCR OACH BEYOND PROPERTY BOUNDARY ONTO EXTERNAL PROPERTY OWNED BY OTHERS, OR COUNCIL PROPERTY.
- FOOTING OF RETAINING WALL IS ONLY PROPOSED TO ENCR OACH OVER BOUNDARY ONTO OTHER LOTS WITHIN PROPOSED DEVELOPMENT - WHICH ARE PROPOSED TO HAVE COVENANT (OR EASEMENT) WHICH PERMITS SUCH ENCR OACHMENT
- THE CONTRACTOR SHALL ENSURE THAT PROPERTY BOUNDARIES ARE PEGGED ON-SITE AND RETAINING WALL LOCATIONS VERIFIED WITH THE SUPERINTENDENT PRIOR TO CONSTRUCTION.
- THE BOUNDARY / RETAINING WALL CONFIGURATIONS DETAILS SHOWN ARE TYPICAL DETAILS ONLY. THE CONTRACTOR MUST ASCERTAIN WHICH CONFIGURATION APPLIES AT ALL LOCATIONS.
- SHOULD ANY DOUBT EXIST TO THE REQUIRED LOCATION OF RETAINING WALL - THE CONTRACTOR SHALL SEEK DIRECTION FROM THE SUPERINTENDENT.

file location C:\2d5\data\Spire\SYN\02B_51\VCivil\AC40_plot.dwg, plot date: 19/02/2025, 8:45 AM Sheet ##### of ##### Sheets

2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	30-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24
Rev	Amendments	Approved	Date



© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.



Waterfront Place, level 9/1 Eagle St, Brisbane City
Queensland 4000 Australia T 61 7 3522 3000
spiire.com.au ABN 55 050 029 635



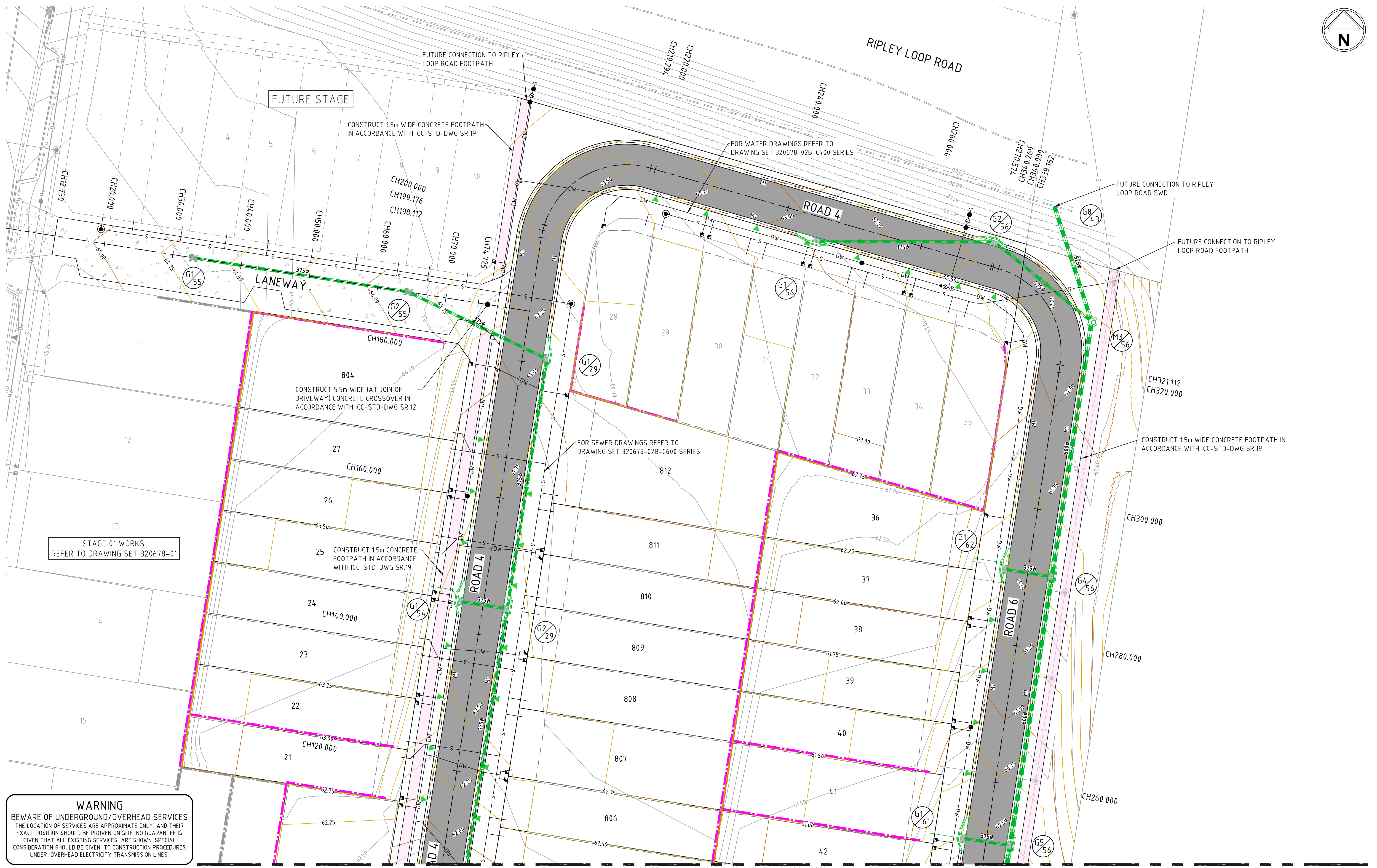
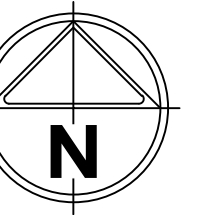
Designed
T.MULLEN
Authorised
M. READMAN RPEQ 28295
Checked
K. HOWELLS
Date
MARCH 24

AMORY AT RIPLEY
STAGE 02B
ROADWORKS STANDARD NOTES & DETAILS

IPSWICH CITY COUNCIL
RIPLEY ESTATE DEVELOPMENT PTY LTD

CONSTRUCTION
320678-02B-C0300

Rev
2



STAGE 01 WORKS.
REFER TO DRAWING SET 320678-01

WARNING
BEWARE OF UNDERGROUND/OVERHEAD SERVICES
THE LOCATION OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. SPECIAL CONSIDERATION SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES.

FOR CONTINUATION REFER TO DRG 320678-02B-C0302

2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	30-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24
Rev	Amendments	Approved	Date



© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

spiire

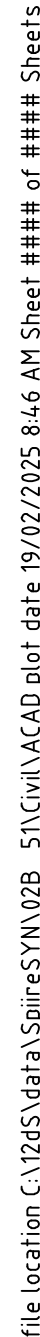
Waterfront Place, level 9/1 Eagle St, Brisbane City
Queensland 4000 Australia T 61 7 3522 3000
spiire.com.au ABN 55 050 029 635

AMORY
AT RIPLEY

Designed T.MULLEN	Checked K. HOWELLS
Authorised M. READMAN RPEQ 28295	Date MARCH 24

**AMORY AT RIPLEY
STAGE 02B
ROADWORKS LAYOUT PLAN
SHEET 1 OF 2**
IPSWICH CITY COUNCIL
RIPLEY ESTATE DEVELOPMENT PTY LTD

CONSTRUCTION Drg No **320678-02B-C0301** Rev **2**



H 1:250
SCALE @ A1

0 2.5 5 7.5 10 12.5

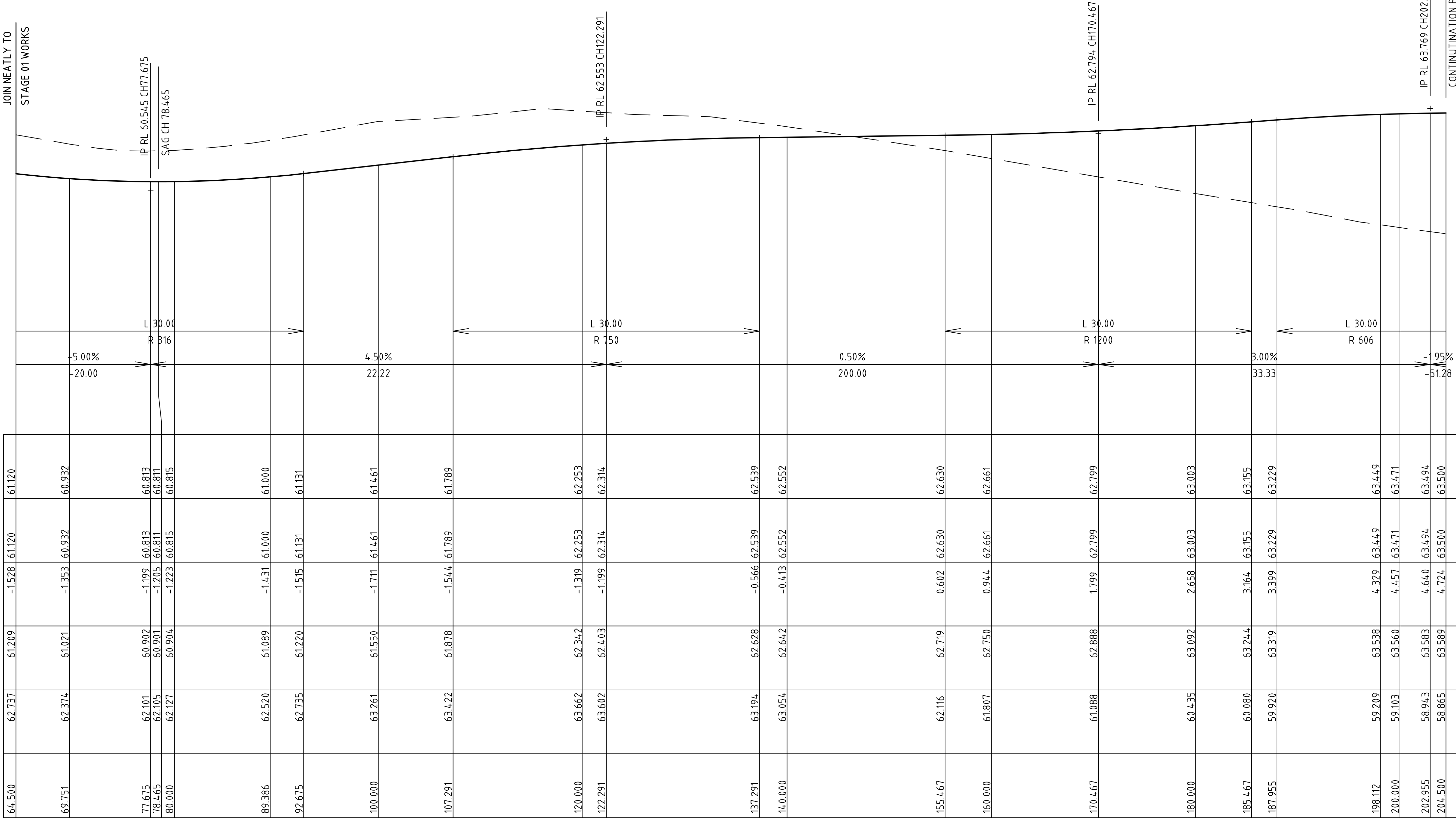


AMORY AT RIPLEY		
STAGE 02B		
ROADWORKS LAYOUT PLAN		
SHEET 2 OF 2		
IPSWICH CITY COUNCIL		
RIPLEY ESTATE DEVELOPMENT PTY LTD		
CONSTRUCTION	Orig No 320678-02B-C0302	Rev 2

file location C:\2d5\data\Spire\SYN\02B_51\Civil\AC40_plot date 19/02/2025 8:46 AM Sheet ### of ### Sheets

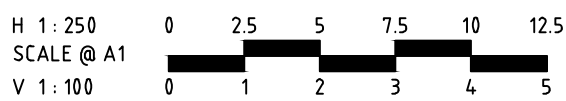
Vertical Curve Length (m)
Vertical Curve Radius (m)
Vertical Grade (%)
Vertical Grade (1 in ...)

DATUM RL51.000	
DESIGN LEVELS LEFT LIP OF KERB	
DESIGN LEVELS RIGHT LIP OF KERB	
CUT / FILL DEPTH	
DESIGN LEVELS ON ROAD CL	
EXISTING SURFACE ON ROAD CL	
CHAINAGE	



LONGITUDINAL SECTION - ROAD 4
SCALE HORIZONTAL 1 : 250
VERTICAL 1 : 100

2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	30-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24
Rev	Amendments	Approved	Date



© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

spiire

Waterfront Place, level 9/1 Eagle St, Brisbane City
Queensland 4000 Australia T 61 7 3522 3000
spiire.com.au ABN 55 050 029 635

AMORY
AT RIPLEY

Designed T.MULLEN	Checked K. HOWELLS
Authorised M. READMAN RPEQ 28295	Date MARCH 24

**AMORY AT RIPLEY
STAGE 02B
ROAD 4 LONGITUDINAL SECTION
SHEET 1 OF 2**
IPSWICH CITY COUNCIL
RIPLEY ESTATE DEVELOPMENT PTY LTD

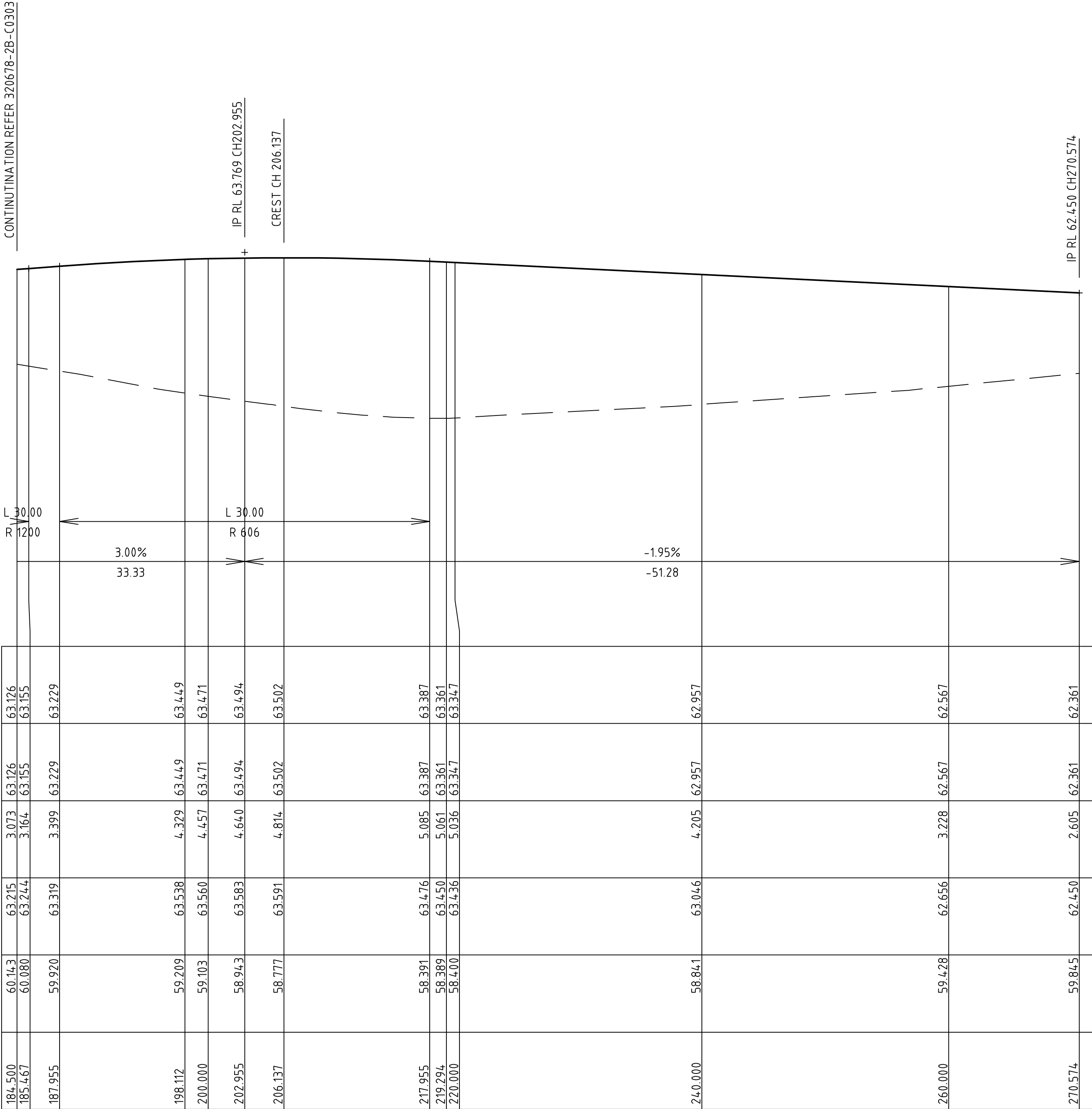
CONSTRUCTION Drg No **320678-02B-C0303** Rev **2**

file location C:\2d5\data\Spire\SYN\02B_51\Civil\AC40_plot date 19/02/2025 8:46 AM Sheet ### of ### Sheets

Vertical Curve Length (m)
Vertical Curve Radius (m)
Vertical Grade (%)
Vertical Grade (1 in ...)

DATUM RL51.000

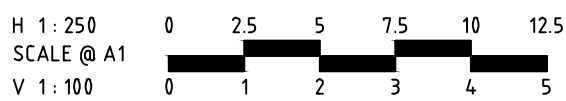
DESIGN LEVELS LEFT LIP OF KERB
DESIGN LEVELS RIGHT LIP OF KERB
CUT / FILL DEPTH
DESIGN LEVELS ON ROAD CL
EXISTING SURFACE ON ROAD CL
CHAINAGE



LONGITUDINAL SECTION - ROAD 4
SCALE HORIZONTAL 1: 250
VERTICAL 1: 100

CONTROL LINE - ROAD 4 - HORIZONTAL POINTS								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
TC	69.751	10022.302	37106.859	61.021	99°00'49.87"			
	70.000	10022.549	37106.823	61.014	97°52'18.85"			
IP 2	79.568	10034.648	37104.901	60.903		R = -12.500	19.635	89°59'59.90"
	80.000	10031.950	37109.350	60.904	52°02'07.00"			
CT	89.386	10036.606	37117.247	61.089	9°00'49.97"			
	90.000	10036.703	37117.853	61.111	9°00'49.97"			
	100.000	10038.269	37127.730	61.550	9°00'49.97"			
	110.000	10039.836	37137.606	61.995	9°00'49.97"			
	120.000	10041.403	37147.483	62.342	9°00'49.97"			
	130.000	10042.969	37157.359	62.556	9°00'49.97"			
	140.000	10044.536	37167.236	62.642	9°00'49.97"			
	150.000	10046.103	37177.112	62.692	9°00'49.97"			
	160.000	10047.670	37186.989	62.750	9°00'49.97"			
	170.000	10049.236	37196.865	62.880	9°00'49.97"			
	180.000	10050.803	37206.742	63.092	9°00'49.97"			
	190.000	10052.370	37216.618	63.376	9°00'49.97"			
TC	198.112	10053.641	37224.630	63.538	9°00'49.97"			
	200.000	10054.076	37226.465	63.560	17°40'04.23"			
IP 3	208.703	10055.858	37238.607	63.586		R = 12.500	21.182	97°05'35.02"
	210.000	10060.410	37233.859	63.579	63°30'16.08"			
CT	219.294	10069.454	37234.681	63.450	106°06'24.99"			
	220.000	10070.132	37234.485	63.436	106°06'24.99"			
	230.000	10079.740	37231.711	63.241	106°06'24.99"			
	240.000	10089.347	37228.937	63.046	106°06'24.99"			
	250.000	10098.955	37226.162	62.851	106°06'24.99"			
	260.000	10108.562	37223.388	62.656	106°06'24.99"			
	270.000	10118.170	37220.614	62.461	106°06'24.99"			
IP 4	270.574	10118.721	37220.454	62.450	106°06'24.99"			

2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	30-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24
Rev	Amendments	Approved	Date



© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

spiire

Waterfront Place, level 9/1 Eagle St, Brisbane City
Queensland 4000 Australia T 61 7 3522 3000
spiire.com.au ABN 55 050 029 635

AMORY
AT RIPLEY

Designed
T.MULLEN

Authorised
M. READMAN RPEQ 28295

Checked
K. HOWELLS

Date
MARCH 24

**AMORY AT RIPLEY
STAGE 02B
ROAD 4 LONGITUDINAL SECTION
SHEET 2 OF 2**

IPSWICH CITY COUNCIL
RIPLEY ESTATE DEVELOPMENT PTY LTD

CONSTRUCTION

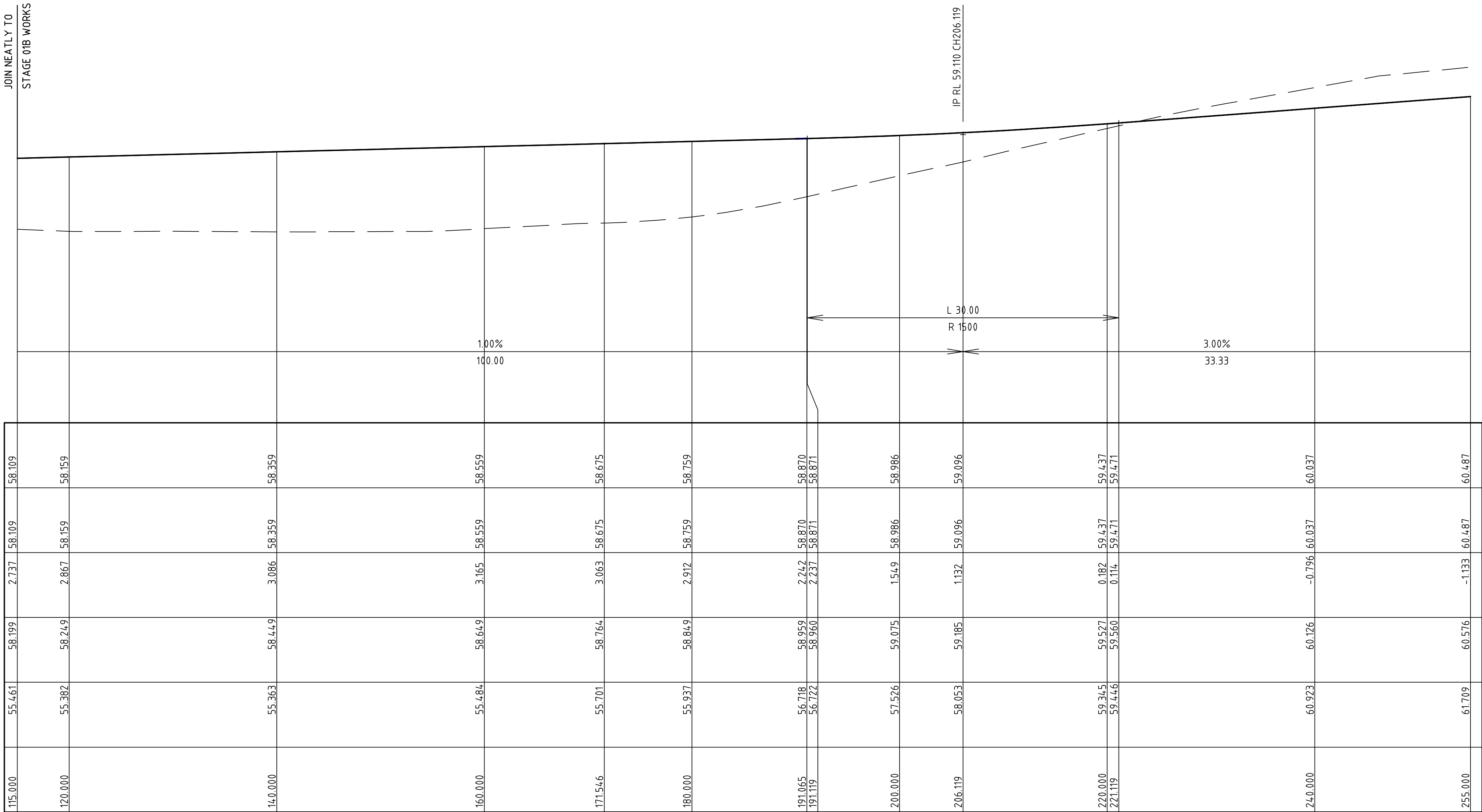
Drg No
320678-02B-C0304

Rev
2

file location C:\2d5\data\Spire\SYN\02B_51\Civil\AC40_plot date 19/02/2025 8:46 AM Sheet ##### of ##### Sheets

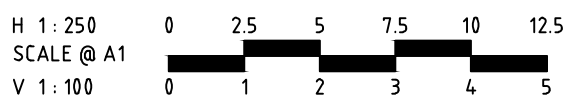
Vertical Curve Length (m)
Vertical Curve Radius (m)
Vertical Grade (%)
Vertical Grade (1 in ...)

DATUM RL48.000	
DESIGN LEVELS LEFT LIP OF KERB	
DESIGN LEVELS RIGHT LIP OF KERB	
CUT / FILL DEPTH	
DESIGN LEVELS ON ROAD CL	
EXISTING SURFACE ON ROAD CL	
CHAINAGE	



LONGITUDINAL SECTION - ROAD 6
SCALE HORIZONTAL 1 : 250
VERTICAL 1 : 100

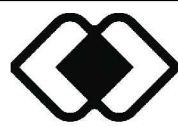
2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	30-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24
Rev	Amendments	Approved	Date



© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.



Waterfront Place, level 9/1 Eagle St, Brisbane City
Queensland 4000 Australia T 61 7 3522 3000
spiire.com.au ABN 55 050 029 635



AMORY
AT RIPLEY

Designed
T.MULLEN

Authorised
M. READMAN RPEQ 28295

Checked
K. HOWELLS

Date
MARCH 24

AMORY AT RIPLEY
STAGE 02B
ROAD 6 LONGITUDINAL SECTION
SHEET 1 OF 2
IPSWICH CITY COUNCIL
RIPLEY ESTATE DEVELOPMENT PTY LTD

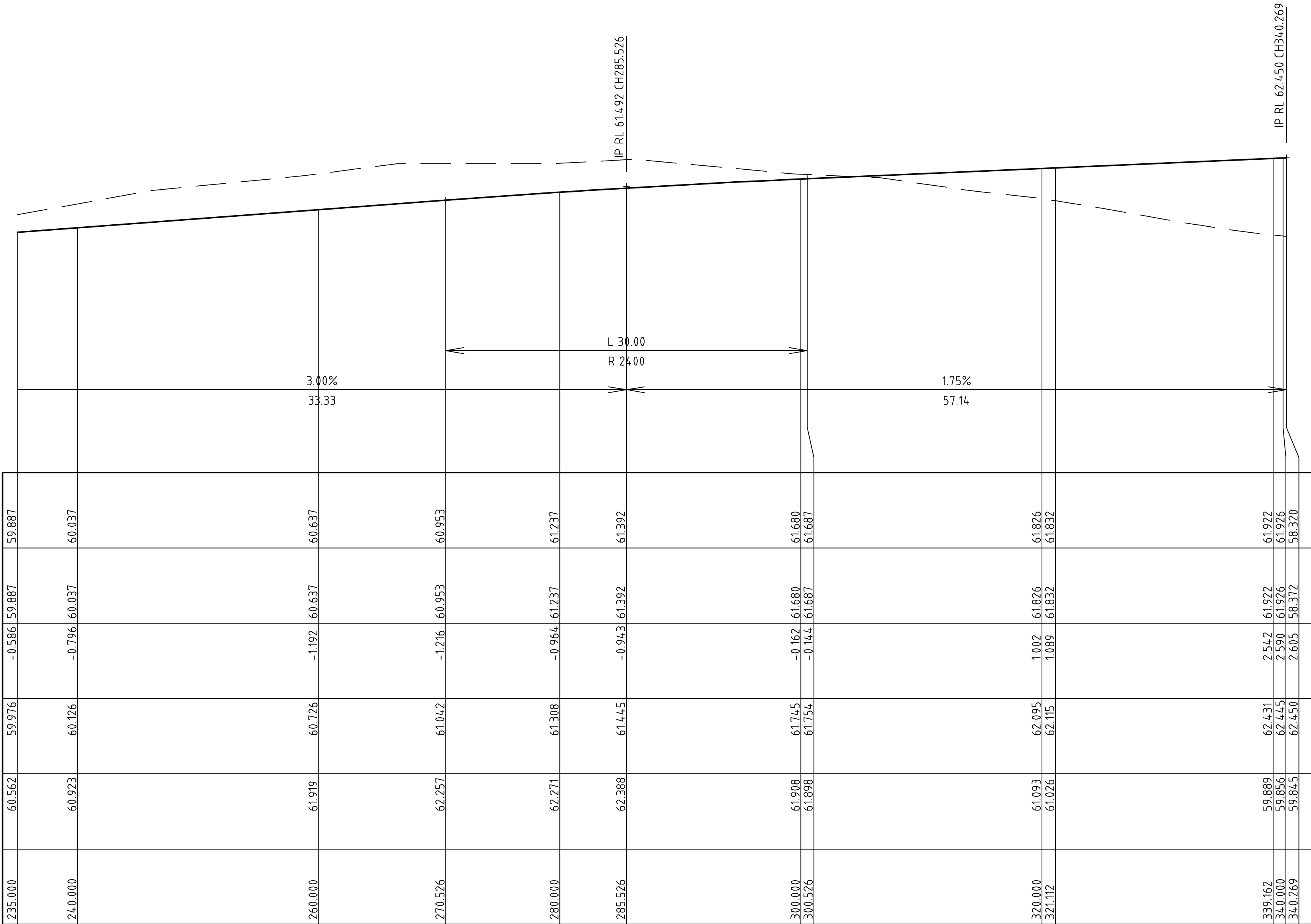
CONSTRUCTION Drg No 320678-02B-C0306 Rev 2

file location C:\2d5\data\Spire\SYN\02B_51\Civil\AC40_pilot date 19/02/2025 8:46 AM Sheet ### of ### Sheets

Vertical Curve Length (m)
Vertical Curve Radius (m)
Vertical Grade (%)
Vertical Grade (1 in ...)

DATUM RL52.000

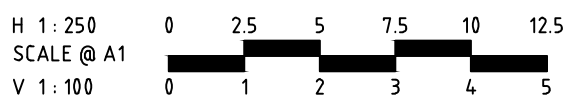
DESIGN LEVELS LEFT LIP OF KERB
DESIGN LEVELS RIGHT LIP OF KERB
CUT / FILL DEPTH
DESIGN LEVELS ON ROAD CL
EXISTING SURFACE ON ROAD CL
CHAINAGE



LONGITUDINAL SECTION - ROAD 6
SCALE HORIZONTAL 1 : 250
VERTICAL 1 : 100

ALIGNMENT 2B->ROAD 6 HORIZONTAL POINTS								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
	120.000	10050.830	37040.715	58.249	64°45'25.65"			
	130.000	10059.875	37044.980	58.349	64°45'25.65"			
	140.000	10068.920	37049.244	58.449	64°45'25.65"			
	150.000	10077.965	37053.509	58.549	64°45'25.65"			
	160.000	10087.010	37057.773	58.649	64°45'25.65"			
	170.000	10096.055	37062.038	58.749	64°45'25.65"			
TC	171.546	10097.453	37062.697	58.764	64°45'25.65"			
	180.000	10104.124	37067.788	58.849	40°32'15.76"			
IP 3	181.305	10107.055	37067.224	58.862		R = -20.000	19.519	55°55'06.28"
	190.000	10108.495	37076.667	58.949	11°53'23.35"			
CT	191.065	10108.687	37077.714	58.959	8°50'19.37"			
	200.000	10110.060	37086.543	59.075	8°50'19.37"			
	210.000	10111.596	37096.424	59.267	8°50'19.37"			
	220.000	10113.133	37106.306	59.527	8°50'19.37"			
	230.000	10114.669	37116.187	59.826	8°50'19.37"			
	240.000	10116.206	37126.068	60.126	8°50'19.37"			
	250.000	10117.742	37135.949	60.426	8°50'19.37"			
	260.000	10119.279	37145.831	60.726	8°50'19.37"			
	270.000	10120.815	37155.712	61.026	8°50'19.37"			
	280.000	10122.352	37165.593	61.308	8°50'19.37"			
	290.000	10123.888	37175.474	61.547	8°50'19.37"			
	300.000	10125.425	37185.355	61.745	8°50'19.37"			
	310.000	10126.961	37195.237	61.920	8°50'19.37"			
	320.000	10128.498	37205.118	62.095	8°50'19.37"			
TC	321.112	10128.669	37206.217	62.115	8°50'19.37"			
	330.000	10126.930	37214.743	62.270	328°06'02.89"			
IP 4	330.137	10130.360	37217.094	62.273		R = -12.500	18.049	82°43'57.53"
CT	339.162	10119.785	37220.147	62.431	286°06'21.84"			
	340.000	10118.980	37220.380	62.445	286°06'21.84"			
IP 5	340.269	10118.721	37220.454	62.450	286°06'21.84"			

2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	30-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24
Rev	Amendments	Approved	Date



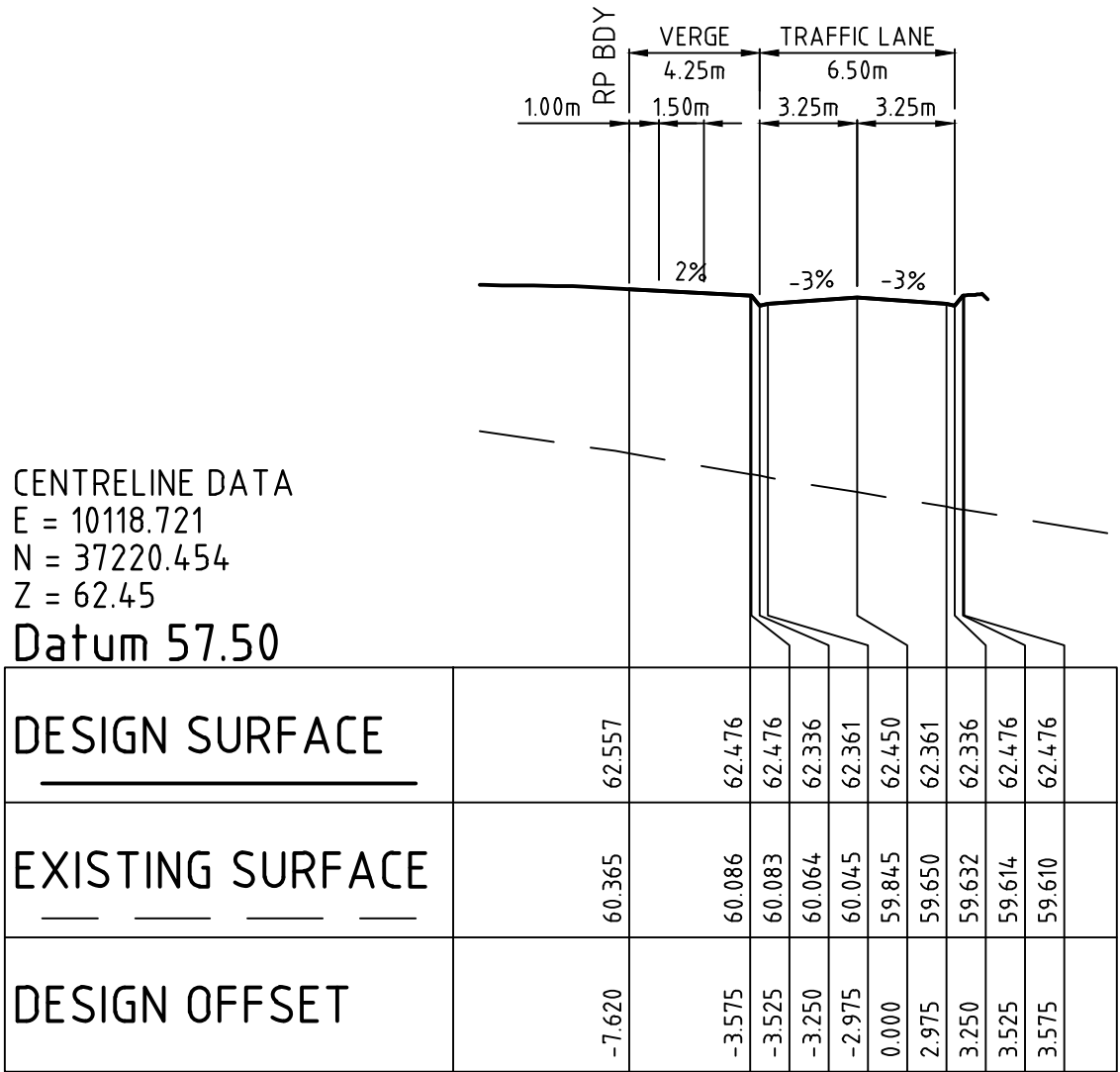
© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

spiire
Waterfront Place, level 9/1 Eagle St, Brisbane City
Queensland 4000 Australia T 61 7 3522 3000
spiire.com.au ABN 55 050 029 635

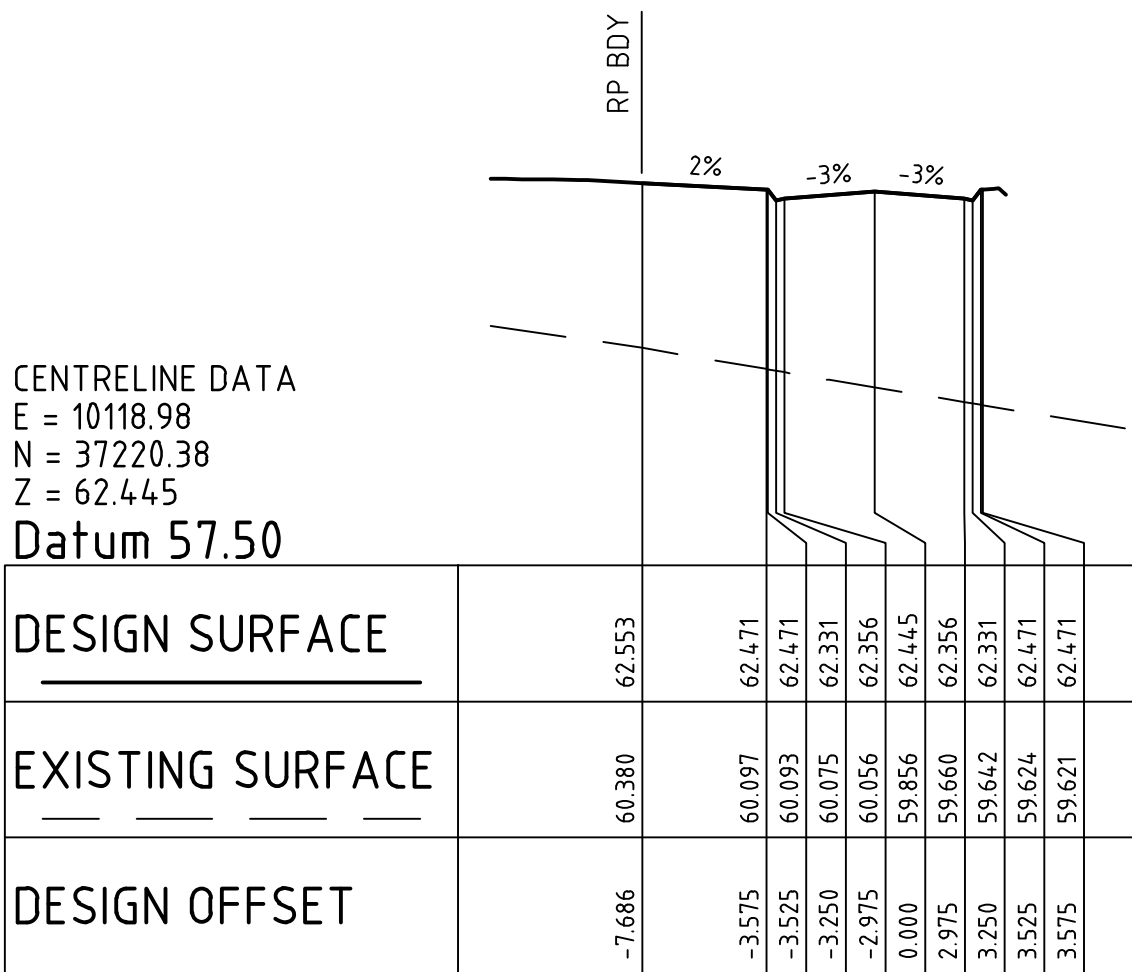
AMORY
AT RIPLEY
Designed T.MULLEN
Checked K. HOWELLS
Authorised M. READMAN RPEQ 28295
Date MARCH 24

AMORY AT RIPLEY
STAGE 02B
ROAD 6 LONGITUDINAL SECTION
SHEET 2 OF 2
IPSWICH CITY COUNCIL
RIPLEY ESTATE DEVELOPMENT PTY LTD
CONSTRUCTION Drg No **320678-02B-C0307** Rev **2**

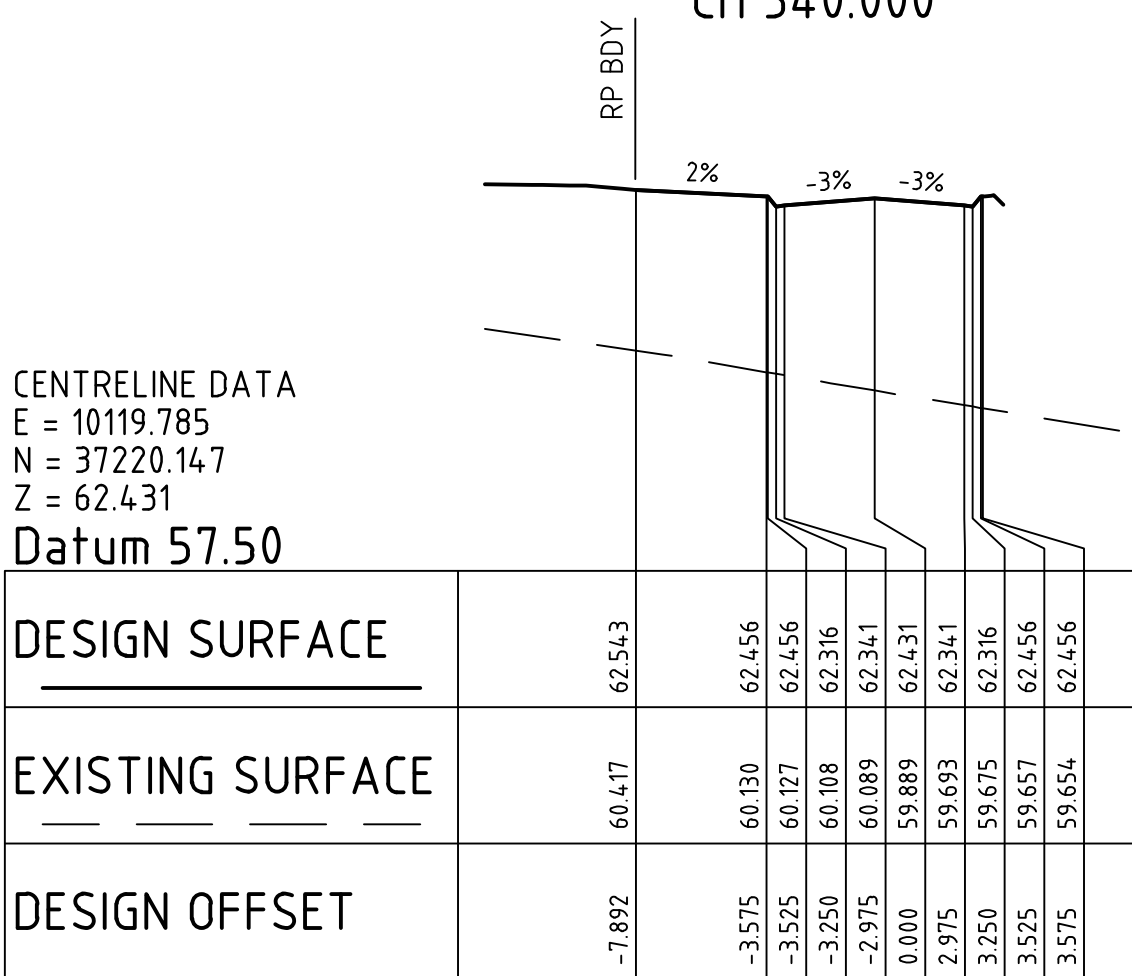
file location C:\2d5\data\Spire\SYN\02B_51\Civil\AC40_pilot date 19/02/2025 8:47 AM Sheet ##### of ##### Sheets



CH 340.269



CH 340.000

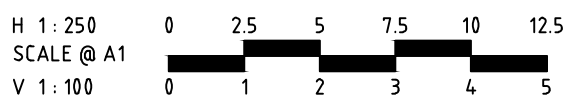


CH 339.162

CROSS SECTIONS - ROAD 6 - CH339.162 TO CH340.269

SCALE HORIZONTAL 1 : 250
VERTICAL 1 : 100

Rev	Amendments	Approved	Date
2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	30-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24



© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.



Waterfront Place, level 9/1 Eagle St, Brisbane City
Queensland 4000 Australia T 61 7 3522 3000
spiire.com.au ABN 55 050 029 635

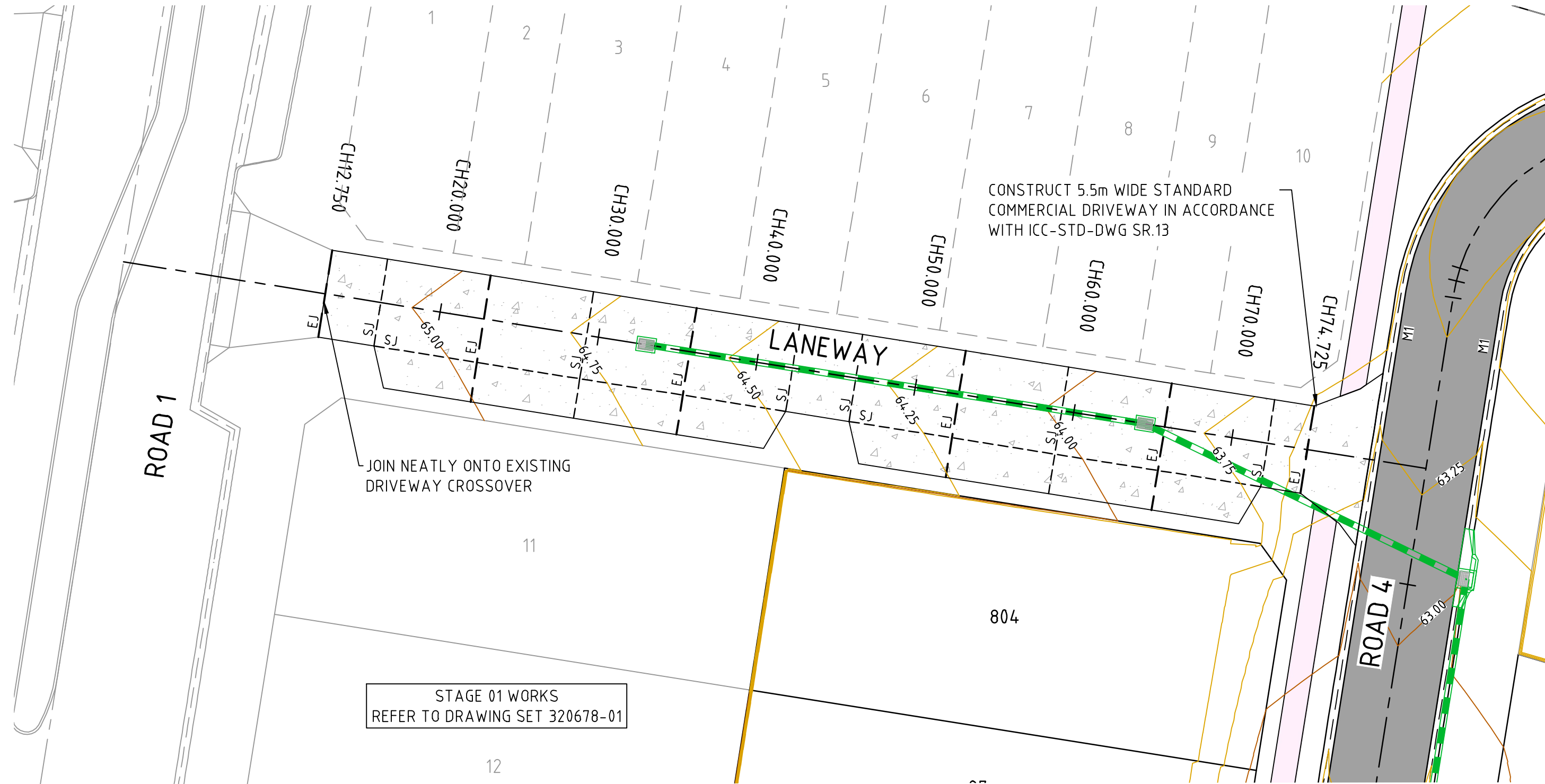


Designed T.MULLEN	Checked K. HOWELLS
Authorised M. READMAN RPEQ 28295	Date MARCH 24

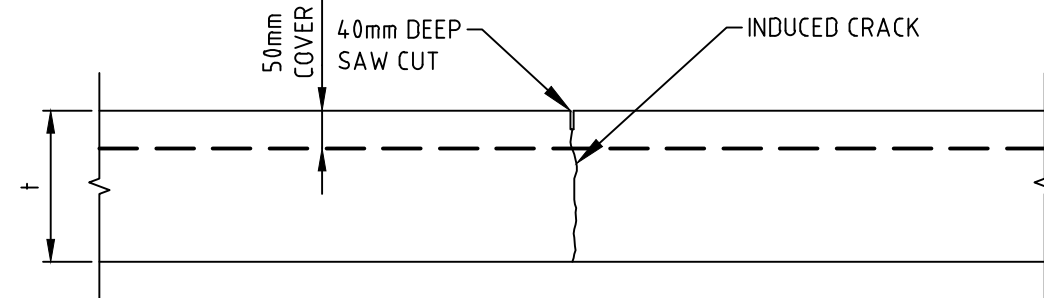
AMORY AT RIPLEY
STAGE 02B
ROAD 6 CROSS SECTIONS
SHEET 2 OF 2
IPSWICH CITY COUNCIL
RIPLEY ESTATE DEVELOPMENT PTY LTD

CONSTRUCTION	Drg No 320678-02B-C0309	Rev 2
--------------	----------------------------	----------

file location C:\2025\data\Spire\SYN\02B_51\Civil\AC40_plot date 19/02/2025 8:47 AM Sheet ##### of ##### Sheets

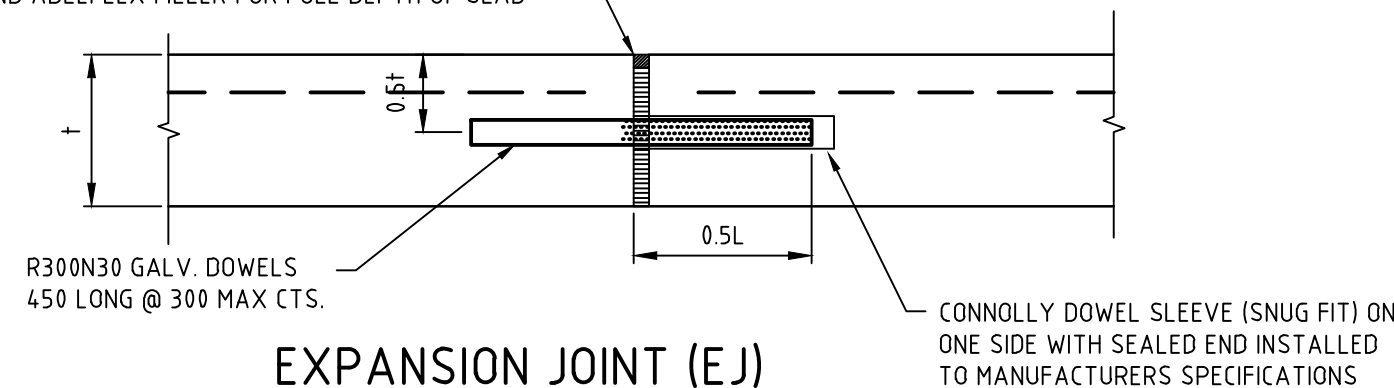


ACCESS LANEWAY LAYOUT PLAN
SCALE 1:250



SAW CUT JOINT (SJ)

20w x 10d EMER-SEAL PU4.0 PRIMED & INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATION
INSTALLED ON POLYETHYLENE TAPE OVER BACKING
ROD AND ABLEFLEX FILLER FOR FULL DEPTH OF SLAB



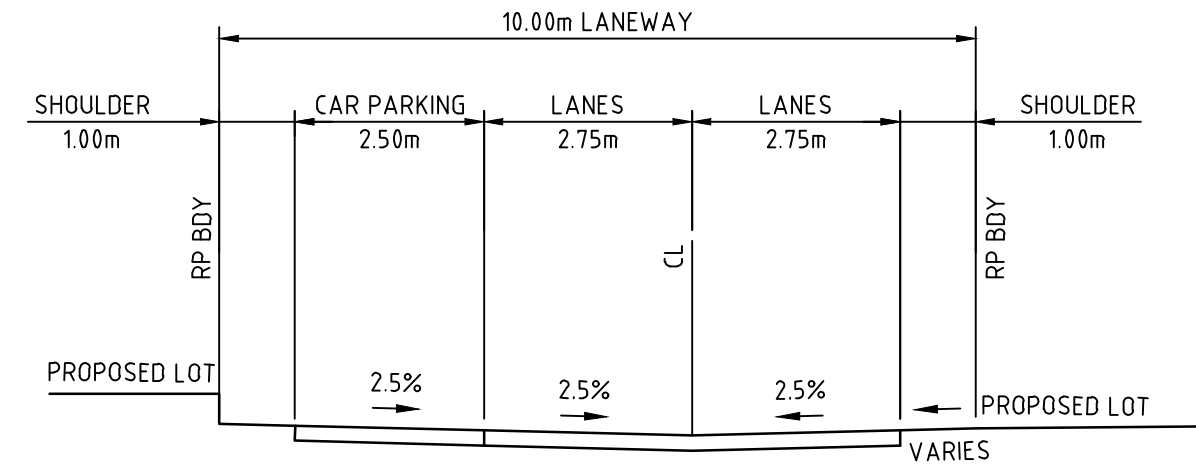
EXPANSION JOINT (EJ)

Vertical Curve Length (m)
Vertical Curve Radius (m)
Vertical Grade (%)
Vertical Grade (1 in ...)

DATUM RL52.000

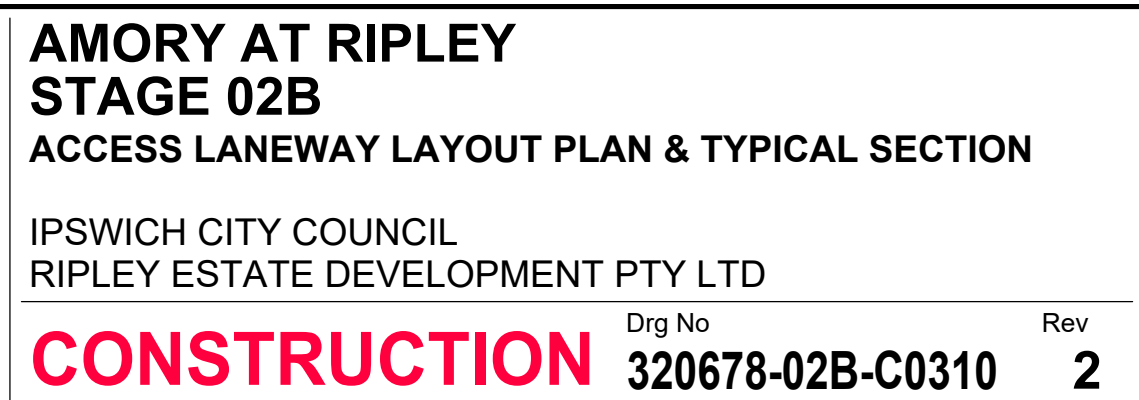
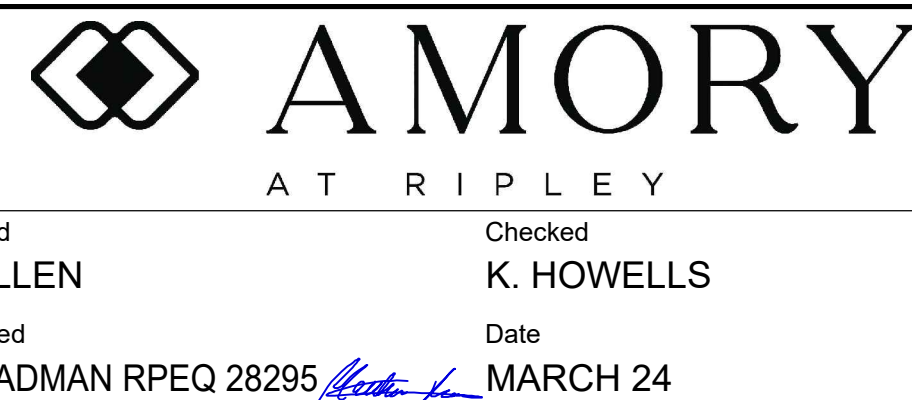
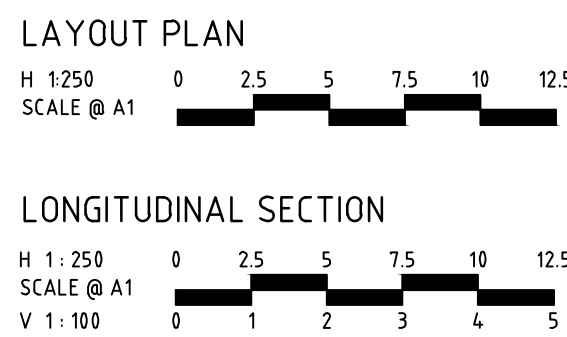
	DESIGN LEVELS LEFT LIP OF KERB	DESIGN LEVELS RIGHT LIP OF KERB	CUT / FILL DEPTH	DESIGN LEVELS ON ROAD CL	EXISTING SURFACE ON ROAD CL	CHAINAGE
0.000	63.137	65.172	2.035	65.172	63.137	0.000
5.550	62.770	65.006	2.236	65.006	62.770	5.550
9.000	62.740	64.968	2.228	64.968	62.740	9.000
12.750	62.658	65.140	2.482	65.140	62.658	12.750
14.907	62.151	65.083	2.932	65.083	62.151	14.907
20.000	61.812	64.956	3.143	64.956	61.812	20.000
40.000	60.701	64.456	3.755	64.456	60.701	40.000
60.000	60.054	63.956	3.902	63.956	60.054	60.000
73.218	59.879	63.625	3.746	63.625	59.879	73.218
74.725	59.887	63.500	3.613	63.500	59.887	74.725
75.750	59.897	63.414	3.518	63.414	59.897	75.750
76.041	59.900	63.390	3.490	63.390	59.900	76.041
77.741	59.916	63.356	3.440	63.356	59.916	77.741
79.000	59.928	63.306	3.378	63.306	59.928	79.000
79.215	59.931	63.271	3.340	63.271	59.931	79.215
80.000	59.938	63.233	3.295	63.233	59.938	80.000
82.250	59.960	63.300	3.340	63.300	59.960	82.250

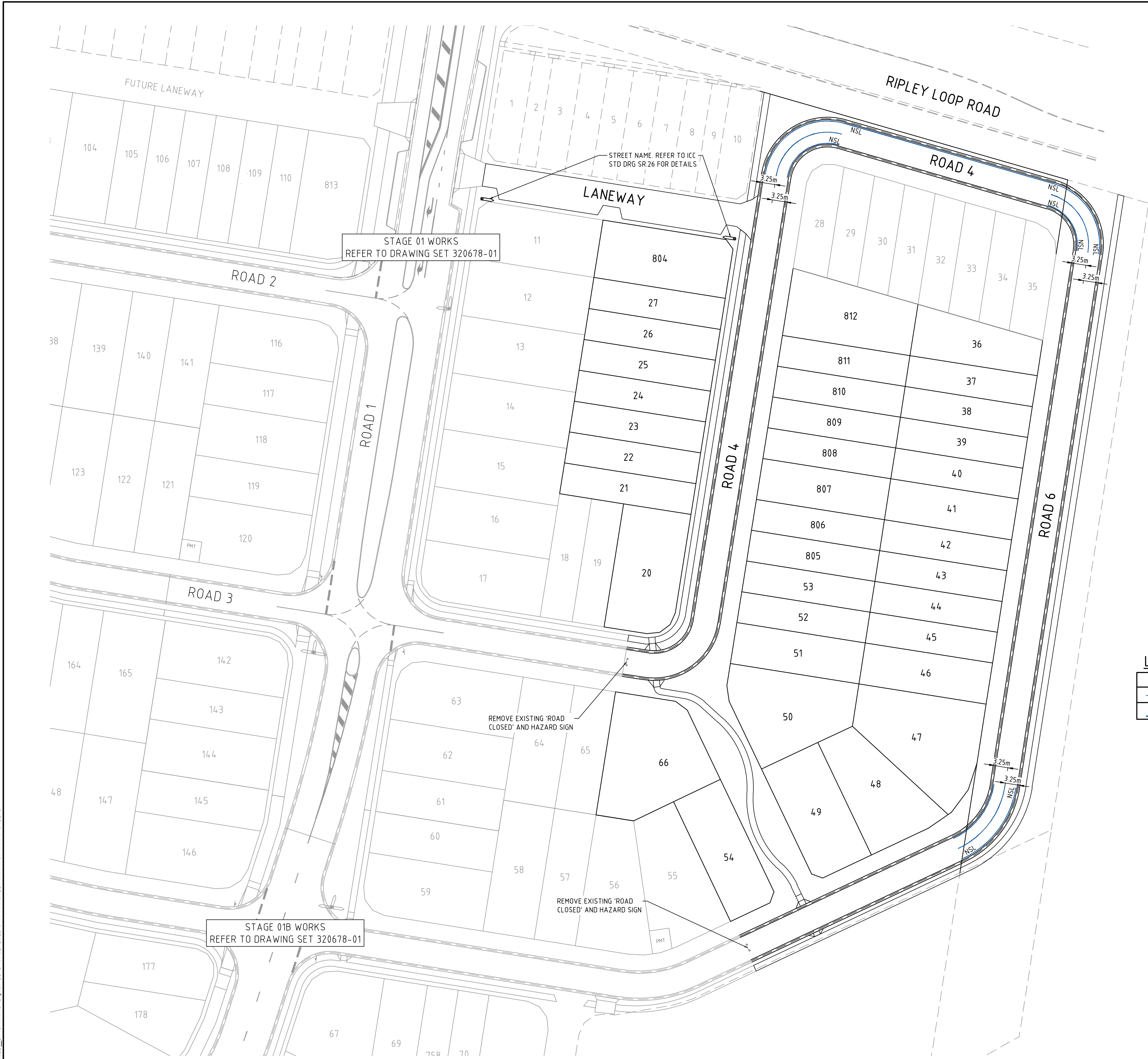
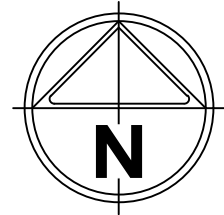
LONGITUDINAL SECTION - LANEWAY
SCALE HORIZONTAL 1: 250
VERTICAL 1: 100



TYPICAL SECTION - 10.00m ACCESS LANEWAY
NTS

Rev	Amendments	Approved	Date
2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	30-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24

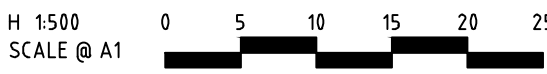




- NOTES**
1. T.G.S.I's TO BE PROVIDED FOR ALL KERB RAMPS AT SIGNALISED INTERSECTION, REFER TO ICC STD DWG SR.18 FOR DETAILS.
 2. ALL PAVEMENT MARKINGS AND SIGNAGE TO BE IN ACCORDANCE WITH TMR AND AS1742 MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES.
 3. FOR SIGNAGE AND ASSEMBLY DETAILS REFER TMR MANUAL OF UNIFORM CONTROL DEVICES.
 4. EXISTING PAVEMENT MARKING ARE TO BE REMOVED BY GRINDING.
 5. LINEMARKING SHALL BE DULUX ROADMASTER WATER BASED PAVEMENT MARKING OR APPROVED EQUIVALENT.

LINEMARKING LEGEND:		
SYMBOL:	DESCRIPTION:	REMARK:
	SINGLE CONTINUOUS LANE LINE	CONTINUOUS LINE, 100mm WIDE. AS1742.2 CLAUSE 5.3
	NO STOPPING LINE	CONTINUOUS LINE, 100mm WIDE. AS1742.2 CLAUSE 5.3

Rev	Amendments	Approved	Date
2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	30-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24



© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.



Waterfront Place, level 9/1 Eagle St, Brisbane City
Queensland 4000 Australia T 61 7 3522 3000
spiire.com.au ABN 55 050 029 635



AMORY
AT RIPLEY

Designed T.MULLEN	Checked K. HOWELLS
Authorised M. READMAN RPEQ 28295	Date MARCH 24

**AMORY AT RIPLEY
STAGE 02B
SIGNAGE & LINEMARKING LAYOUT PLAN**

IPSWICH CITY COUNCIL
RIPLEY ESTATE DEVELOPMENT PTY LTD

CONSTRUCTION Drg No **320678-02B-C0400** Rev **2**

STORMWATER DRAINAGE NOTES:

1. ALL DRAINAGE MATERIALS, EXCAVATION AND CONSTRUCTION SHALL COMPLY WITH THE APPLICABLE LOCAL AUTHORITY SPECIFICATIONS AND DETAILS AND THE FOLLOWING PUBLICATIONS (AS APPLIES TO THE TYPE OF PIPELINE):-
- CONCRETE PIPE ASSOCIATION OF AUSTRALIA TECHNICAL ADVISORY PUBLICATIONS

• AS 3725 "DESIGN FOR THE INSTALLATION OF BURIED CONCRETE PIPES"

• AS 4058 "PRE-CAST CONCRETE PIPES (PRESSURE AND NON-PRESSURE)"

• AS 4139 "FIBRE REINFORCED CONCRETE PIPES AND FITTINGS"

• AS 2566 "BURIED FLEXIBLE PIPELINES"

• AS 3500 "NATIONAL PLUMBING CODE"

• AS 1254 "PVC PIPES AND FITTINGS FOR STORM & SURFACE WATER APPLICATIONS"

• AS 1273 "UNPLASTICIZED PVC (uPVC) DOWNPIPE AND FITTINGS FOR RAINWATER"
2. WHERE THE DEPTH OF FILL OVER THE PIPE IS BETWEEN Min. 600mm AND Max. 1.5m HIGH:-
- ALL uPVC PIPES SHALL BE CLASS "SN8" FOR 150ϕ - 225ϕ AND "SN6" FOR 100ϕ

• ALL CONCRETE PIPES SHALL BE MINIMUM CLASS "2".
- SHOULD THE DEPTH OF COVER OVER THE PIPE BE OUTSIDE THE ABOVE MAXIMUM AND MINIMUM LIMITS, OR ANY LOADING OTHER THAN NORMAL EARTH LOADS BE APPLICABLE (INCLUDING CONSTRUCTION TRAFFIC LOADS) THE DESIGN ENGINEER MUST BE CONTACTED FOR SPECIFIC DESIGN OF PIPE CLASS.
3. UNLESS DETAILED OTHERWISE PIPE CLASSES SPECIFIED ON PROJECT DRAWINGS ARE BASED ON SINGLE PIPE BARREL ONLY - WHERE MULTIPLE PIPE BARRELS ARE PROPOSED THE PIPE CLASS MUST BE REFERRED TO THE DESIGN ENGINEER FOR CONFIRMATION.
4. UNLESS SPECIFIED OTHERWISE DESIGN LOADING ON ALL PIPELINES REQUIRE "TRENCH" TYPE BEDDING AND BACKFILL INSTALLATION IN ACCORDANCE WITH AS 3725. "EMBANKMENT" TYPE INSTALLATION WILL NOT BE ACCEPTED WITHOUT WRITTEN APPROVAL. STABILITY OF TRENCH BASE AND SIDES MUST BE ADEQUATE TO PROVIDE REQUIRED SUPPORT TO THE BEDDING, HAUNCH AND SIDES OF THE TRENCH - IF ANY DOUBT EXISTS THE CONTRACTOR MUST OBTAIN GEOTECHNICAL CONSULTANT CONFIRMATION.
5. THE WIDTH OF TRENCH OUTSIDE THE PIPE SHALL BE IN ACCORDANCE WITH AS 3725 (NOMINAL 300mm Max.). ANY FURTHER WIDENING OF THE TRENCH WILL INCREASE LOAD ONTO PIPE, AND WILL REQUIRE REVIEW OF PIPE CLASS AND INSTALLATION SPECIFICATIONS. ANY ADDITIONAL ASSOCIATED PIPE OR SUPPORT COSTS WILL BE AT CONTRACTOR'S EXPENSE.
6. UNLESS SPECIFIED OTHERWISE PIPE BEDDING AND SUPPORT SHALL BE INSTALLED IN ACCORDANCE WITH AS 3725 AND SHALL BE GENERALLY AS FOLLOWS:-
- "HS2" UNDER ROADWAYS

• "H2" UNDER NON-TRAFFIC / NON-LOADED AREAS
- ANY CIRCUMSTANCES OUTSIDE THESE MUST BE REFERRED TO THE DESIGN ENGINEER FOR PIPE SUPPORT SPECIFICATIONS.
7. THE CONTRACTOR SHALL ENSURE THAT ALL CONSTRUCTION TRAFFIC LOADING ONTO PIPELINES IS LIMITED TO MAXIMUM VEHICLE LOADINGS AND ACHIEVES BACKFILL COVER IN ACCORDANCE WITH AS 3725 (OR ALTERNATIVELY PROVIDE ADEQUATE TEMPORARY AND PERMANENT BRIDGING). REFER C.P.A.A. PIPE CLASS SELECTION CRITERIA / SOFTWARE FOR ACCEPTABLE LOADING APPLICATIONS.
8. ANY DRAINLINE BEING INSTALLED WITH ANY PORTION OF THE DRAINLINE BELOW THE MAXIMUM TIDAL LEVEL SHALL HAVE SALTWATER EXPOSURE COVER CLASS PIPES OR CULVERTS INSTALLED. FOR ANY DEVELOPMENT WITHIN 1 KILOMETRE OF THE COASTLINE, OR WITH PIPEWORK THE HIGHEST ASTRONOMICAL TIDE (H.A.T.) THE CONTRACTOR MUST VERIFY THIS REQUIREMENT WITH THE SUPERVISING ENGINEER.
9. WHERE DRAINLINES ARE TO BE INSTALLED IN "AGGRESSIVE" PERMEABLE SOILS AS DEFINED IN AS 3600, OR ACID SULPHATE SOILS (pH <4.0) THEY MUST BE REFERRED TO THE SUPERVISING ENGINEER FOR REVIEW OF PIPE / EXPOSURE COVER CLASS. THE CONTRACTOR SHALL VERIFY SOIL CONDITION (BY TESTING) AND UNDERTAKE SOIL REMEDIATION TREATMENT (WHERE REQUIRED) PRIOR TO DRAINLINE CONSTRUCTION.
10. MINIMUM AND MAXIMUM PIPE GRADES SHALL BE IN ACCORDANCE WITH Q.U.D.M. SPECIFICATIONS. (N.B. 150ϕ=1% Min. And 375ϕ=0.4% Min.)
11. ANY PIPE DOWNSTREAM OF INLETS CAPTURING GROUND RUNOFF SHALL BE Min. 150ϕ.
12. WHERE PIPES AND STRUCTURES ARE TO BE LAID WITHIN THE ZONE OF INFLUENCE OF STRUCTURAL ELEMENTS (e.g. BUILDING FOOTINGS, RETAINING WALLS . . . etc.) THE BUILDER SHALL PROVIDE ADEQUATE BRIDGING / PROTECTION TO ENSURE NO UNDUE LOADING ONTO STORMWATER PIPES AND STRUCTURES. WHERE ANY DOUBT MAY EXIST REFERENCE SHALL BE MADE TO THE DESIGNER OF THE STRUCTURE AND THE STORMWATER DESIGN ENGINEER.
13. CONTRACTOR MUST VERIFY THAT ALL PIPE LEVELS AND GRADES CAN BE ACHIEVED PRIOR TO CONSTRUCTING DRAINLINES. ANY CONFLICT SHALL BE REFERRED TO THE SUPERINTENDENT FOR RE-DESIGN PRIOR TO ANY PIPELINE CONSTRUCTION.
14. BENCHING OF PIT STRUCTURES SHALL HAVE A SMOOTH FINISHED SURFACE, AND PIPES SHALL NOT PROJECT INSIDE THE SHAFT OF THE PIT.
15. WHERE RECTANGULAR PITS OR STRUCTURES ARE CONSTRUCTED, PIPES MUST NOT CONNECT INTO THE STRUCTURE AT CORNERS.

16. ALL CONSTRUCTION AND EXCAVATIONS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT WORKPLACE HEALTH AND SAFETY ACT INCLUDING AMENDMENTS SUBSEQUENT TO THE ORIGINAL PUBLICATION.
17. BASE AND SHAFT OF ALL STORMWATER STRUCTURES SHALL BE "CAST IN-SITU" CONCRETE UNLESS OTHERWISE APPROVED IN WRITING BY THE SUPERVISING ENGINEER.
18. ALL GRATED INLETS SHALL BE MINIMUM "CLASS D" TRAFFICABLE, AND SHALL BE BOLTED DOWN UNLESS OTHERWISE APPROVED BY THE SUPERVISING ENGINEER.
19. WHERE A BRANCH CONNECTION IS INDICATED DIRECTLY ONTO THE RECEIVING PIPELINE (I.E. WITHOUT JUNCTION PIT) - A PROPRIETORY OBLIQUE BRANCH FITTING SHALL BE INSTALLED ONTO RECEIVING PIPELINE SIZE UP TO 300MM, OR APPROVED SADDLE BRANCH INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER SPECIFICATIONS FOR PIPES FOR RECEIVING PIPELINE SIZE 375MM OR GREATER. THE MAXIMUM SIZE OF THE CONNECTING BRANCH LINE (WITHOUT JUNCTION PIT) SHALL BE 150MM U.N.O.
20. ALL PIPED OUTLETS AND INLETS MUST BE PROVIDED WITH CEMENT GROUTED STONE PITCHING SCOUR PROTECTION IN ACCORDANCE WITH IPWEA STANDARD DRAWING NUMBER D-0081. ALL VOIDS BETWEEN STONES MUST BE CEMENT GROUTED - NO SHALL NOT BE LOOSE STACKED. ALL STONE PITCHING SHALL BE PLACED OVER GEOFABRIC - BIDIM A24 OR EQUIVALENT.

STORMWATER DESIGN CRITERIA:

1. STORMWATER HAS BEEN DESIGNED IN ACCORDANCE WITH QUEENSLAND URBAN DRAINAGE MANUAL (Q.U.D.M.) AND IPSWICH COUNCIL PLANNING SCHEME, POLICIES & DEVELOPMENT STANDARDS.
2. STORMWATER DESIGN EVENTS ADOPTED ARE AS FOLLOWS:-
- "MINOR STORM" PIPED SYSTEM

- 10 YEAR A.R.I.

"MAJOR STORM" OVERLAND FLOW

- 100 YEAR A.R.I.
3. CATCHMENT LABELS CORRELATE TO INLET STRUCTURE LABELS U.N.O.

NOTES:

1. ALL STORMWATER PIPELINES SHALL BE INSTALLED WITH TYPE "HS2" EMBEDMENT IN ACCORDANCE WITH AS 3725.
2. ALL STORMWATER STRUCTURE COVERS SHALL BE CLASS 'D' TRAFFICABLE U.N.O.
3. PIPE CLASS NOMINATED ON LONGITUDINAL SECTIONS ARE AS FOLLOWS;
- U = uPVC CLASS "SN8"

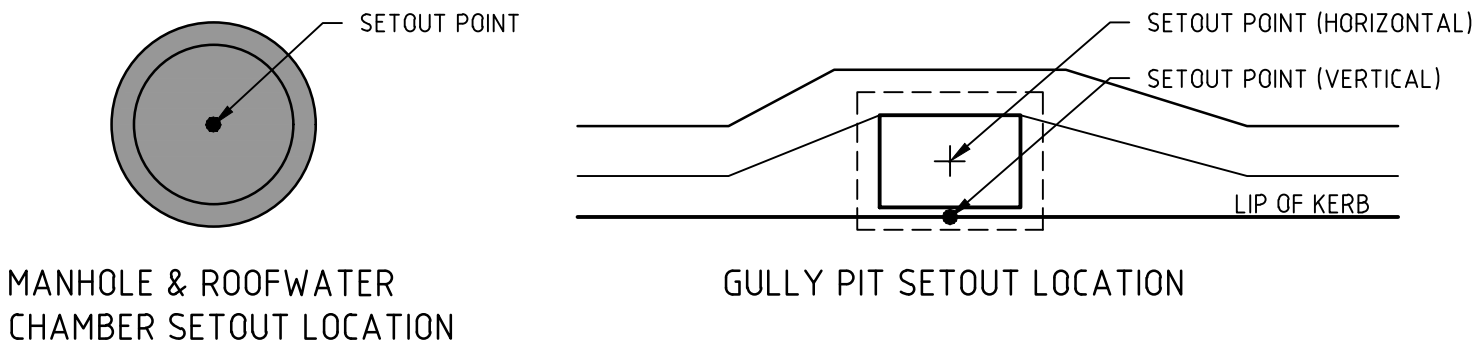
- 2 = RCP CLASS '2'

- 3 = RCP CLASS '3'

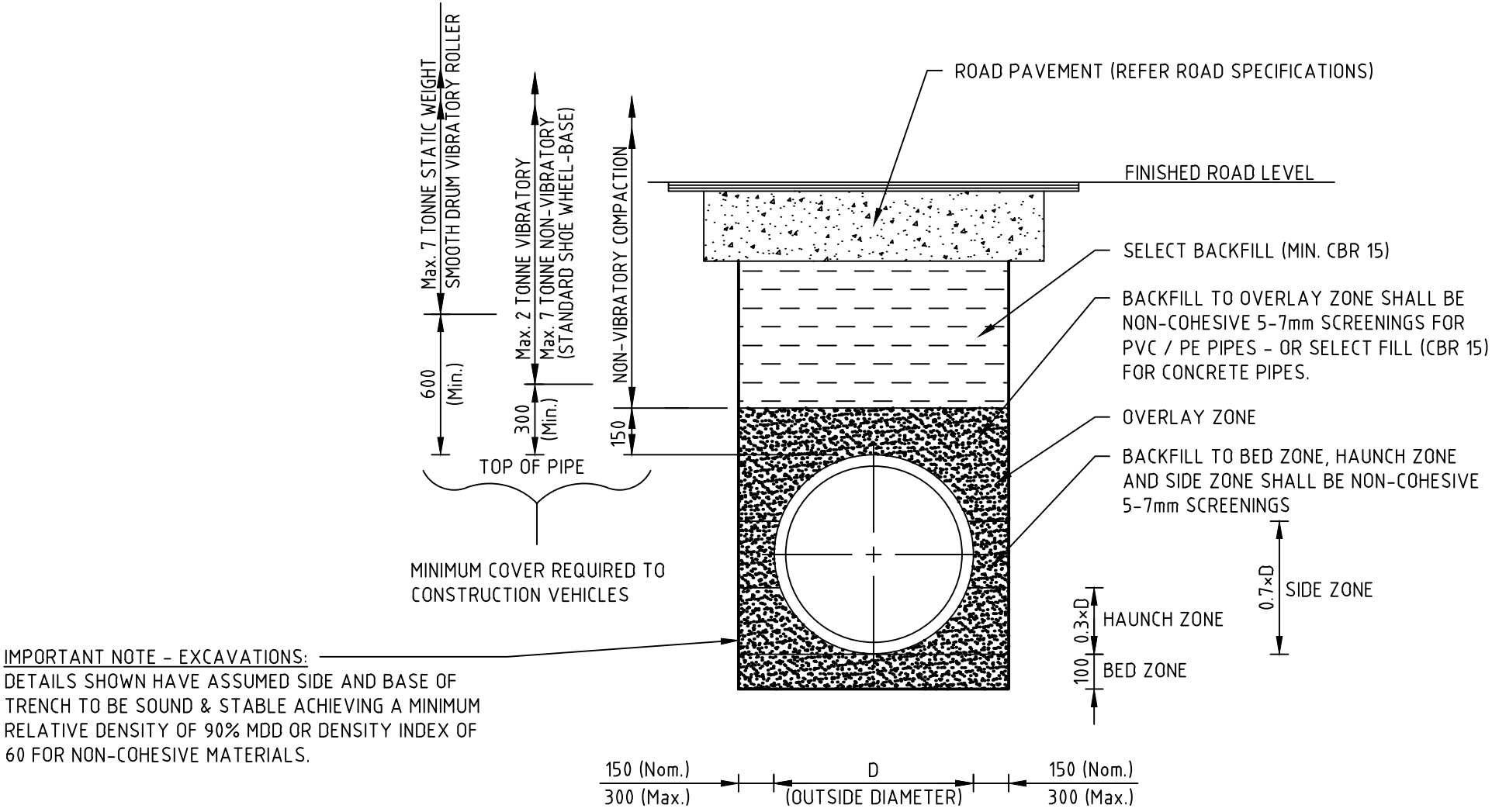
- 4 = RCP CLASS '4'

ROOFWATER CONNCTION NOTE:

1. LOTS SHALL BE PROVIDED WITH KERB ADAPTER INSTALLED INTO KERB & CHANNEL IN ACCORDANCE WITH IPWEA STANDARD DRAWING RS-081.



SETOUT POINTS LOCATION DETAIL
N.T.S



TYPICAL STORMWATER TRENCH DETAIL
TYPE "HS2" SUPPORT - SINGLE BARREL
N.T.S

WARNING
BEWARE OF UNDERGROUND/OVERHEAD SERVICES
THE LOCATION OF SERVICES ARE APPROXIMATE ONLY. AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. SPECIAL CONSIDERATION SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES.

file location C:\2d5\data\Spire\SYN\02B_51\VCivil\AC40_plot.dwg, plot date: 19/02/2025 8:47 AM Sheet ### of ### Sheets

2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	30-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24
Rev	Amendments	Approved	Date

ISO 9001

certified

ISO 45001

certified

ISO 14001

certified

© Spiire Australia Pty Ltd All Rights Reserved

This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

spiire

Waterfront Place, level 9/1 Eagle St, Brisbane City
Queensland 4000 Australia T 61 7 3522 3000
spiire.com.au

ABN 55 050 029 635

AMORY

AT RIPLEY

Designed

T.MULLEN

Authorised

M. READMAN RPEQ 28295

Checked

K. HOWELLS

Date

MARCH 24

AMORY AT RIPLEY

STAGE 02B

STORMWATER DRAINAGE STANDARD NOTES & DETAILS

IPSWICH CITY COUNCIL

RIPLEY ESTATE DEVELOPMENT PTY LTD

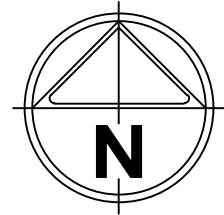
CONSTRUCTION

Drg No

320678-02B-C0500

Rev

2



2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	30-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24
Rev	Amendments	Approved	Date

H 1500
SCALE @ A1



© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.



Waterfront Place, level 9/1 Eagle St, Brisbane City
Queensland 4000 Australia T 61 7 3522 3000
spiire.com.au ABN 55 050 029 635



Designed
T.MULLEN
Authorised
M. READMAN RPEQ 28295
Checked
K. HOWELLS
Date
MARCH 24

AMORY AT RIPLEY
STAGE 02B
STORMWATER DRAINAGE CATCHMENT PLAN

IPSWICH CITY COUNCIL
RIPLEY ESTATE DEVELOPMENT PTY LTD

CONSTRUCTION Drg No 320678-02B-C0501 Rev 2

file location C:\2d5\data\Spire\SYN\02B_51\Civil\AC40_plot date 19/02/2025 8:48 AM Sheet ##### of ##### Sheets

STRUCTURE NAME	G1/55
STRUCTURE DESCRIPTION	900x600 FIELD INLET TYPE '2' REFER ICC STD. DRG. SD-09

NOTES:

- ALL STORMWATER PIPELINES SHALL BE INSTALLED WITH TYPE "HS2" EMBEDMENT IN ACCORDANCE WITH AS 3725.
- ALL STORMWATER STRUCTURE COVERS SHALL BE CLASS 'D' TRAFFICABLE U.N.O.
- PIPE CLASS NOMINATED ON LONGITUDINAL SECTIONS ARE AS FOLLOWS:
 - U = uPVC CLASS "SN8"
 - 2 = RCP CLASS '2'
 - 3 = RCP CLASS '3'
 - 4 = RCP CLASS '4'

PIPE SIZE (mm)	375	375
PIPE CLASS	RCP (CLASS 2)	RCP (CLASS 2)
PIPE GRADE (%)	2.50%	2.50%
PIPE SLOPE (1 in X)	40.00	40.00
FULL PIPE VELOCITY (m/s)	0.24	0.79
PART FULL VELOCITY (m/s)	1.59	2.22
DATUM RL	49.0	

H.G.L IN PIPE & W.S.E IN STRUCTURE	63.338 63.317	62.491 62.490 62.323	61.890 61.901	61.804
PIPE FLOW (Cumecs)	0.027	0.087		
PIPE CAPACITY AT GRADE (Cumecs)	0.277	0.277		
DEPTH TO INVERT	1.431	1.431 1.736	1.591	1.611
INVERT LEVEL OF DRAINAGE	63.200	62.413 62.107	61.550	61.530
DESIGN SURFACE LEVEL	64.631	63.843	63.141	
SETOUT COORDINATES	0.000 E 10003.314 N 37221.702	31.500 E 10034.425 N 37216.767	22.280 E 10054.442 N 37207.071	
CHAINAGE		31.500	22.280	

LINE

55

STRUCTURE NAME	G1/31
STRUCTURE DESCRIPTION	LIP IN LINE - GRATED KERB INLET PIT TYPE 'S' UNTEL REFER ICC STD. DRG. SD-04

PIPE SIZE (mm)	375
PIPE CLASS	RCP (CLASS 2)
PIPE GRADE (%)	0.50%
PIPE SLOPE (1 in X)	200.01
FULL PIPE VELOCITY (m/s)	0.54
PART FULL VELOCITY (m/s)	1.11
DATUM RL	48.0

H.G.L IN PIPE & W.S.E IN STRUCTURE	60.711 60.594	60.586 60.660	60.217
PIPE FLOW (Cumecs)	0.059		
PIPE CAPACITY AT GRADE (Cumecs)	0.124		
DEPTH TO INVERT	1.464	1.473	1.800
INVERT LEVEL OF DRAINAGE	60.030	59.994	59.667
DESIGN SURFACE LEVEL	61.494	61.467	
SETOUT COORDINATES	0.000 E 10034.486 N 37126.491	7.113 E 10041.390 N 37124.794	
CHAINAGE		7.113	

31

STRUCTURE NAME	G1/54
STRUCTURE DESCRIPTION	LIP IN LINE - GRATED KERB INLET PIT TYPE 'S' UNTEL REFER ICC STD. DRG. SD-04

PIPE SIZE (mm)	375
PIPE CLASS	RCP (CLASS 2)
PIPE GRADE (%)	0.50%
PIPE SLOPE (1 in X)	200.00
FULL PIPE VELOCITY (m/s)	0.54
PART FULL VELOCITY (m/s)	1.11
DATUM RL	48.0

H.G.L IN PIPE & W.S.E IN STRUCTURE	61.864 61.736	61.728 61.773	61.465
PIPE FLOW (Cumecs)	0.060		
PIPE CAPACITY AT GRADE (Cumecs)	0.124		
DEPTH TO INVERT	1.464	1.499	1.539
INVERT LEVEL OF DRAINAGE	61.225	61.190	61.150
DESIGN SURFACE LEVEL	62.689	62.689	
SETOUT COORDINATES	0.000 E 10041.710 N 37112.033	7.085 E 10048.710 N 37170.937	
CHAINAGE		7.085	

54

STRUCTURE NAME	G1/57
STRUCTURE DESCRIPTION	LIP IN LINE - GRATED KERB INLET PIT TYPE 'S' UNTEL REFER ICC STD. DRG. SD-04

PIPE SIZE (mm)	375
PIPE CLASS	RCP (CLASS 2)
PIPE GRADE (%)	1.00%
PIPE SLOPE (1 in X)	100.02
FULL PIPE VELOCITY (m/s)	0.06
PART FULL VELOCITY (m/s)	0.75
DATUM RL	43.0

H.G.L IN PIPE & W.S.E IN STRUCTURE	57.915 57.914	57.914 57.922	57.861
PIPE FLOW (Cumecs)	0.006		
PIPE CAPACITY AT GRADE (Cumecs)	0.175		
DEPTH TO INVERT	1.561	1.513	1.984
INVERT LEVEL OF DRAINAGE	56.900	56.872	56.401
DESIGN SURFACE LEVEL	58.461	58.385	
SETOUT COORDINATES	0.000 E 10070.870 N 37046.247	2.762 E 10068.643 N 37047.759	
CHAINAGE		2.762	

57

STRUCTURE NAME	G1/58
STRUCTURE DESCRIPTION	LIP IN LINE - GRATED KERB INLET PIT TYPE 'S' UNTEL REFER ICC STD. DRG. SD-04

PIPE SIZE (mm)	375
PIPE CLASS	RCP (CLASS 2)
PIPE GRADE (%)	0.50%
PIPE SLOPE (1 in X)	200.01
FULL PIPE VELOCITY (m/s)	0.41
PART FULL VELOCITY (m/s)	1.04
DATUM RL	43.0

H.G.L IN PIPE & W.S.E IN STRUCTURE	57.959 57.911	57.914 57.922	57.861
PIPE FLOW (Cumecs)	0.046		
PIPE CAPACITY AT GRADE (Cumecs)	0.124		
DEPTH TO INVERT	1.461	1.410	1.984
INVERT LEVEL OF DRAINAGE	57.000	56.975	56.401
DESIGN SURFACE LEVEL	58.461	58.385	
SETOUT COORDINATES	0.000 E 10067.849 N 37052.656	4.978 E 10068.643 N 37047.759	
CHAINAGE		4.978	

58

STRUCTURE NAME	G1/59
STRUCTURE DESCRIPTION	LIP IN LINE - GRATED KERB INLET PIT TYPE 'S' UNTEL REFER ICC STD. DRG. SD-04

PIPE SIZE (mm)	375
PIPE CLASS	RCP (CLASS 2)
PIPE GRADE (%)	1.00%
PIPE SLOPE (1 in X)	100.00
FULL PIPE VELOCITY (m/s)	0.31
PART FULL VELOCITY (m/s)	1.23
DATUM RL	44.0

H.G.L IN PIPE & W.S.E IN STRUCTURE	58.274 58.253	58.250 58.274	58.026
PIPE FLOW (Cumecs)	0.034		
PIPE CAPACITY AT GRADE (Cumecs)	0.175		
DEPTH TO INVERT	1.526	1.592	1.896
INVERT LEVEL OF DRAINAGE	57.220	57.149	56.845
DESIGN SURFACE LEVEL	58.746	58.741	
SETOUT COORDINATES	0.000 E 10093.629 N 37064.846	7.141 E 10096.155 N 37058.169	
CHAINAGE		7.141	

59

STRUCTURE NAME	G1/60
STRUCTURE DESCRIPTION	LIP IN LINE - GRATED KERB INLET PIT TYPE 'S' UNTEL REFER ICC STD. DRG. SD-04

PIPE SIZE (mm)	375
PIPE CLASS	RCP (CLASS 2)
PIPE GRADE (%)	1.00%
PIPE SLOPE (1 in X)	100.00
FULL PIPE VELOCITY (m/s)	0.63
PART FULL VELOCITY (m/s)	1.49
DATUM RL	45.0

H.G.L IN PIPE & W.S.E IN STRUCTURE	58.651 58.566	58.554 58.573	58.352
PIPE FLOW (Cumecs)	0.069		
PIPE CAPACITY AT GRADE (Cumecs)	0.175		
DEPTH TO INVERT	1.478	1.507	1.871
INVERT LEVEL OF DRAINAGE	57.600	57.521	57.158
DESIGN SURFACE LEVEL	59.078	59.029	
SETOUT COORDINATES	0.000 E 10106.166 N 37086.490	7.864 E 10112.958 N 37082.125	
CHAINAGE		7.864	

60

STRUCTURE NAME	G1/61
STRUCTURE DESCRIPTION	LIP IN LINE - GRATED KERB INLET PIT TYPE 'S' UNTEL REFER ICC STD. DRG. SD-04

PIPE SIZE (mm)	375
PIPE CLASS	RCP (CLASS 2)
PIPE GRADE (%)	1.00%
PIPE SLOPE (1 in X)	100.00
FULL PIPE VELOCITY (m/s)	0.54
PART FULL VELOCITY (m/s)	1.43
DATUM RL	47.0

H.G.L IN PIPE & W.S.E IN STRUCTURE	59.651 59.537	59.529 59.564	59.325
PIPE FLOW (Cumecs)	0.059		
PIPE CAPACITY AT GRADE (Cumecs)	0.175		
DEPTH TO INVERT	1.541	1.612	1.665
INVERT LEVEL OF DRAINAGE	58.950	58.879	58.826
DESIGN SURFACE LEVEL	60.491	60.491	
SETOUT COORDINATES	0.000 E 10114.441 N 37137.773	7.085 E 10121.442 N 37136.685	
CHAINAGE		7.085	

61

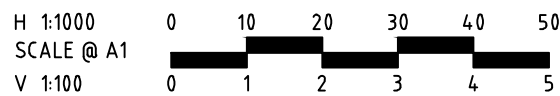
STRUCTURE NAME	G1/62
STRUCTURE DESCRIPTION	LIP IN LINE - GRATED KERB INLET PIT TYPE 'S' UNTEL REFER ICC STD. DRG. SD-04

PIPE SIZE (mm)	375
PIPE CLASS	RCP (CLASS 2)
PIPE GRADE (%)	1.00%
PIPE SLOPE (1 in X)	100.00
FULL PIPE VELOCITY (m/s)	0.62
PART FULL VELOCITY (m/s)	1.49
DATUM RL	48.0

H.G.L IN PIPE & W.S.E IN STRUCTURE	60.755 60.605	60.594 60.630	60.402
PIPE FLOW (Cumecs)	0.068		
PIPE CAPACITY AT GRADE (Cumecs)	0.175		
DEPTH TO INVERT	1.537	1.608	1.659
INVERT LEVEL OF DRAINAGE	60.050	59.979	59.929
DESIGN SURFACE LEVEL	61.587	61.587	
SETOUT COORDINATES	0.000 E 10120.490 N 37116.673	7.085 E 10127.491 N 37115.585	
CHAINAGE		7.085	

62

2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	30-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24
Rev	Amendments	Approved	Date



© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.



Waterfront Place, level 9/1 Eagle St, Brisbane City
Queensland 4000 Australia T 61 7 3522 3000
spiire.com.au ABN 55 050 029 635



Designed T.MULLEN	Checked K. HOWELLS
Authorised M. READMAN RPEQ 28295	Date MARCH 24

AMORY AT RIPLEY
STAGE 02B
STORMWATER DRAINAGE LONGITUDINAL SECTIONS
SHEET 1 OF 2
IPSWICH CITY COUNCIL
RIPLEY ESTATE DEVELOPMENT PTY LTD

CONSTRUCTION	Drg No 320678-02B-C0502	Rev 2
---------------------	-----------------------------------	-----------------

file location C:\2d5\data\Spire\SYN\02B_51\Civil\AC40_plot date 19/02/2025 8:48 AM Sheet ##### of ##### Sheets

STRUCTURE NAME	STRUCTURE DESCRIPTION
G1/23	LIP IN LINE - GRATED KERB INLET PIT (SAGI) TYPE 'M' UNTEL REFER ICC STD. DRG. SD-04
G2/23	LIP IN LINE - GRATED KERB INLET PIT (SAGI) TYPE 'M' UNTEL REFER ICC STD. DRG. SD-04
M3/23	150mm DIA. ACCESS CHAMBER REFER ICC STD. DRG. SD-02
M4/23	1050mm DIA. ACCESS CHAMBER REFER ICC STD. DRG. SD-02
M5/23	1500mm DIA. ACCESS CHAMBER REFER ICC STD. DRG. SD-02
M13/1	2100mm DIA. ACCESS CHAMBER REFER ICC STD. DRG. SD-02

NOTES:

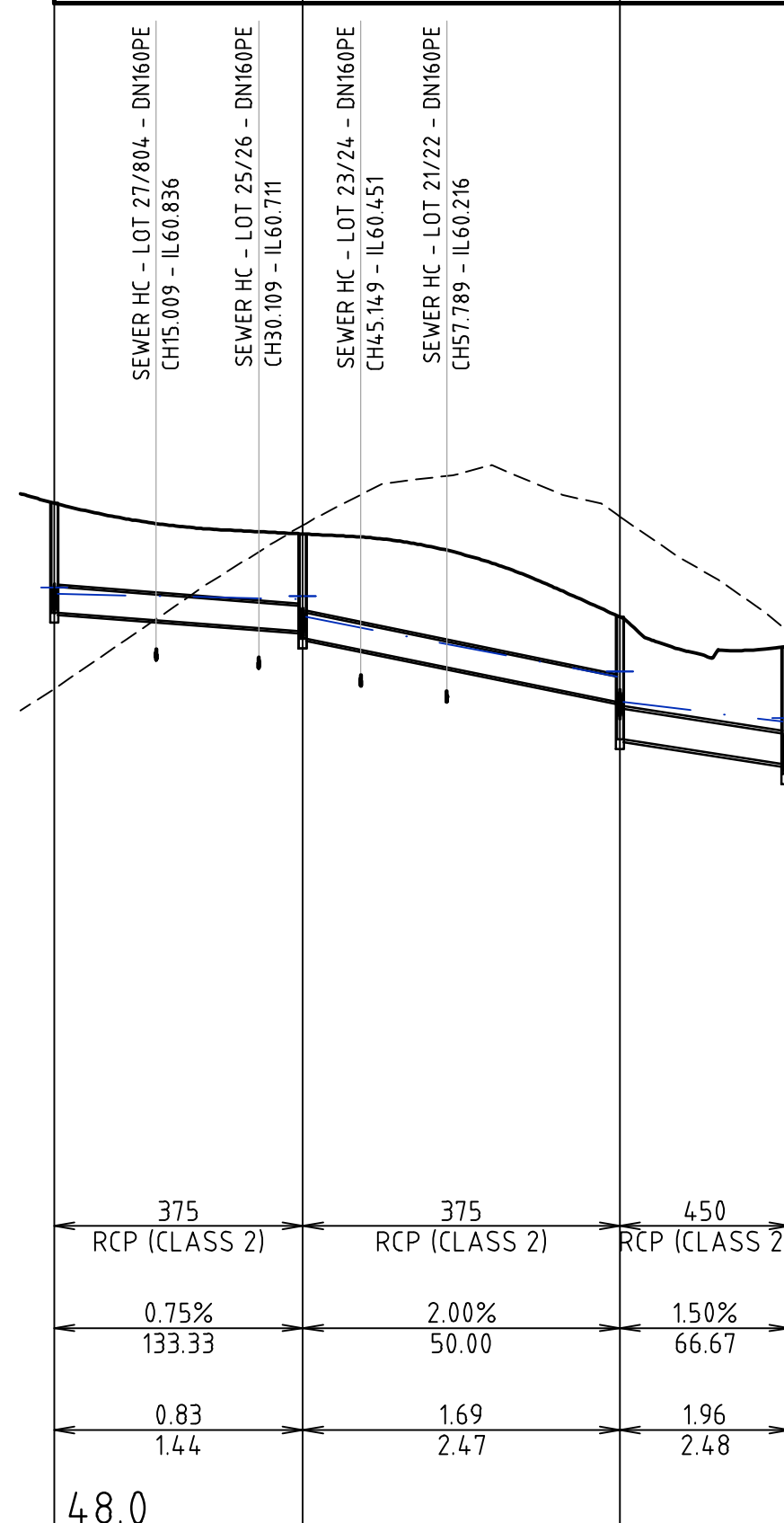
- ALL STORMWATER PIPELINES SHALL BE INSTALLED WITH TYPE "HS2" EMBEDMENT IN ACCORDANCE WITH AS 3725.
- ALL STORMWATER STRUCTURE COVERS SHALL BE CLASS 'D' TRAFFICABLE U.N.O.
- PIPE CLASS NOMINATED ON LONGITUDINAL SECTIONS ARE AS FOLLOWS:
 - U = uPVC CLASS "SN8"
 - 2 = RCP CLASS '2'
 - 3 = RCP CLASS '3'
 - 4 = RCP CLASS '4'

PIPE SIZE (mm)	450	600	600	600	900
PIPE CLASS	RCP (CLASS 2)	RCP (CLASS 2)	RCP (CLASS 2)	RCP (CLASS 2)	RCP (CLASS 2)
PIPE GRADE (%)	0.50%	0.50%	6.25%	2.50%	1.25%
PIPE SLOPE (1 in X)	200.00	199.99	16.00	40.00	80.00
FULL PIPE VELOCITY (m/s)	0.38	0.75	1.82	1.81	1.87
PART FULL VELOCITY (m/s)	1.11	1.53	4.89	3.48	3.31
DATUM RL	45.0				
H.G.L IN PIPE & W.S.E IN STRUCTURE	60.103 60.034	60.031 60.042 59.931	59.925 59.980 59.623	58.150 58.150 58.117	57.850 57.876 57.555
PIPE FLOW (Cumecs)	0.061	0.212	0.514	0.510	1.187
PIPE CAPACITY AT GRADE (Cumecs)	0.202	0.434	1.536	0.971	2.025
DEPTH TO INVERT	1.541	1.577	1.857	1.779	2.558
INVERT LEVEL OF DRAINAGE	59.385	59.349	59.173	57.418	56.450
DESIGN SURFACE LEVEL	60.926	60.926	61.031	59.197	58.314
SETOUT COORDINATES	0.000 E 10028.911 N 37111.587	7.120 E 10032.369 N 37105.364	12.367 E 10035.378 N 37101.068	36.046 E 10045.573 N 37079.695	74.771 E 10062.239 N 37044.740
CHAINAGE	0.000	7.120	5.247	23.679	38.725

LINE

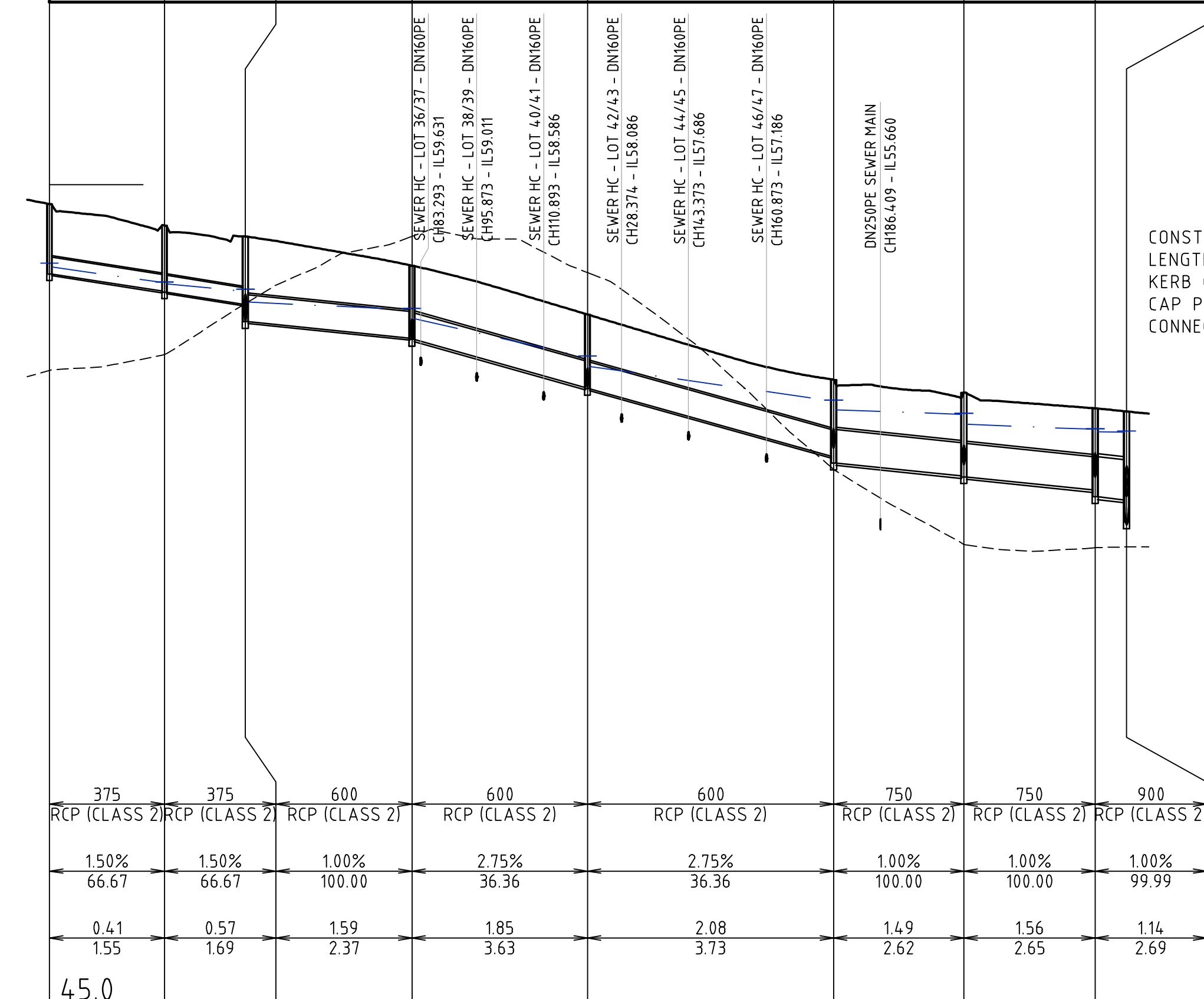
23

G1/29	LIP IN LINE - GRATED KERB INLET PIT TYPE 'S' UNTEL REFER ICC STD. DRG. SD-04
G2/29	LIP IN LINE - GRATED KERB INLET PIT TYPE 'S' UNTEL REFER ICC STD. DRG. SD-04
G3/29	LIP IN LINE - GRATED KERB INLET PIT TYPE 'S' UNTEL REFER ICC STD. DRG. SD-04
M3/23	



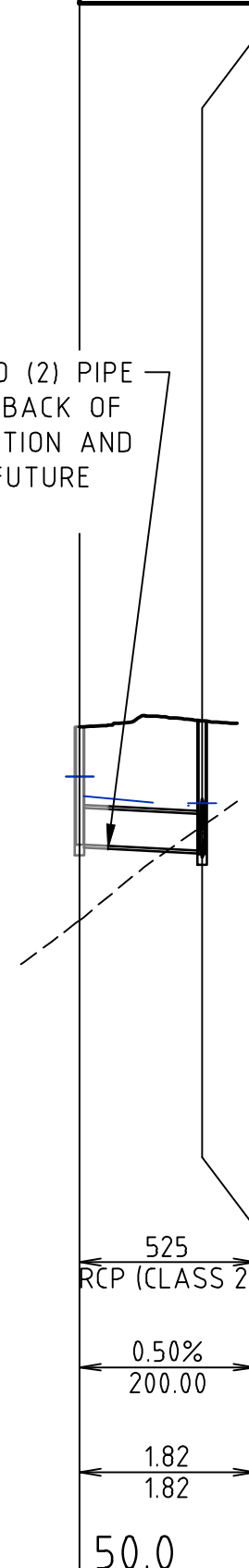
29

G1/56	LIP IN LINE - GRATED KERB INLET PIT TYPE 'S' UNTEL REFER ICC STD. DRG. SD-04
G2/56	LIP IN LINE - GRATED KERB INLET PIT TYPE 'S' UNTEL REFER ICC STD. DRG. SD-04
M3/56	1200mm DIA. ACCESS CHAMBER REFER ICC STD. DRG. SD-02
G4/56	LIP IN LINE - GRATED KERB INLET PIT TYPE 'S' UNTEL REFER ICC STD. DRG. SD-04
G5/56	LIP IN LINE - GRATED KERB INLET PIT TYPE 'S' UNTEL REFER ICC STD. DRG. SD-04
G6/56	LIP IN LINE - GRATED KERB INLET PIT UPON 1050 ACCESS CHAMBER EXT 300
G7/56	LIP IN LINE - GRATED KERB INLET PIT UPON 1050 ACCESS CHAMBER EXT 300
M8/56	1500mm DIA. ACCESS CHAMBER REFER ICC STD. DRG. SD-02
M5/23	



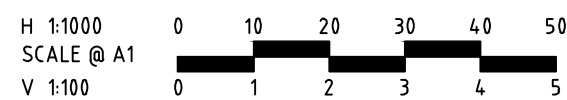
56

G8/43	ON-GRADE LIP IN LINE GULLY 2.4m UNTEL MOUNTABLE K&C
M3/56	



43

Rev	Amendments	Approved	Date
2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	30-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24

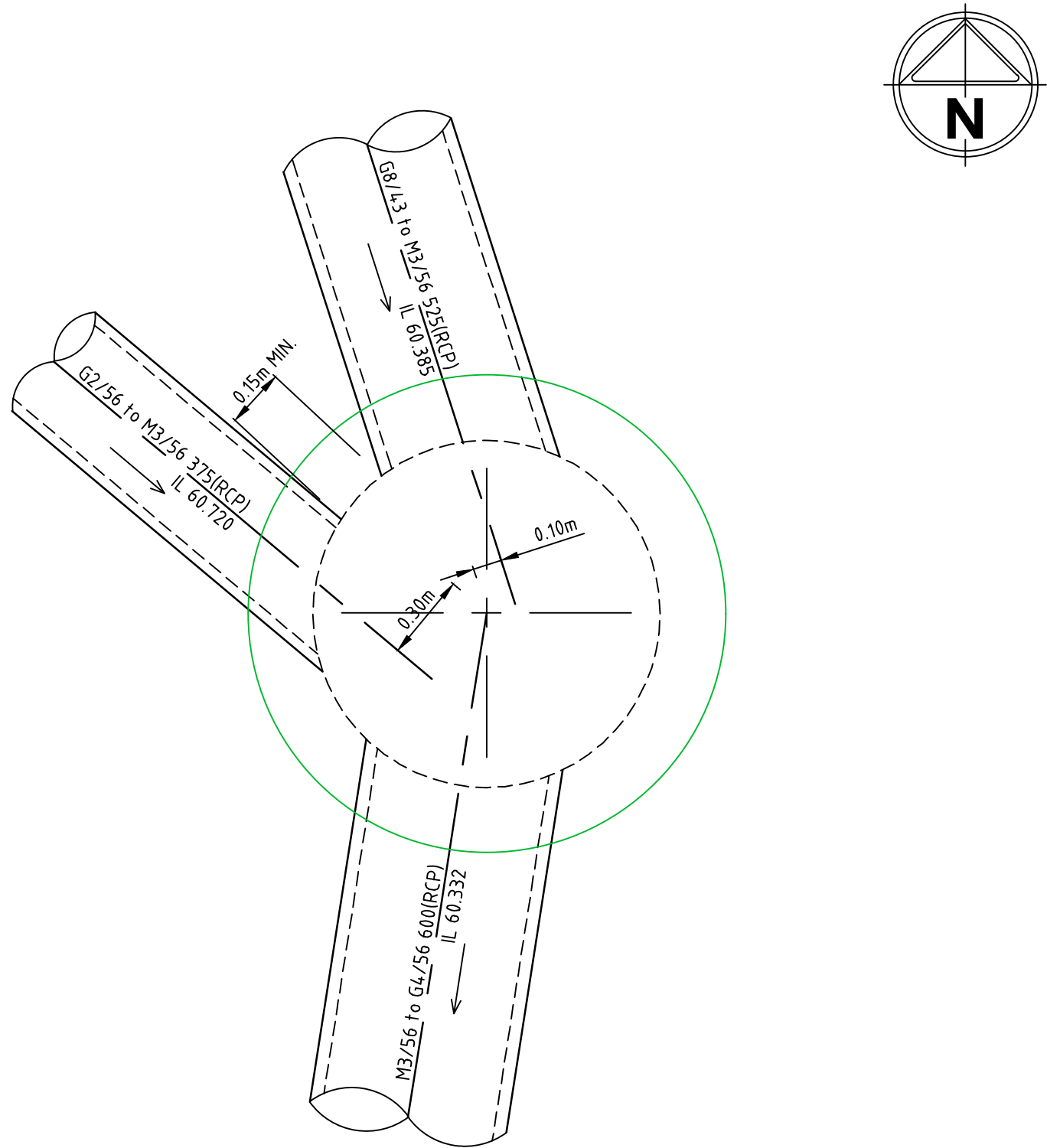


© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

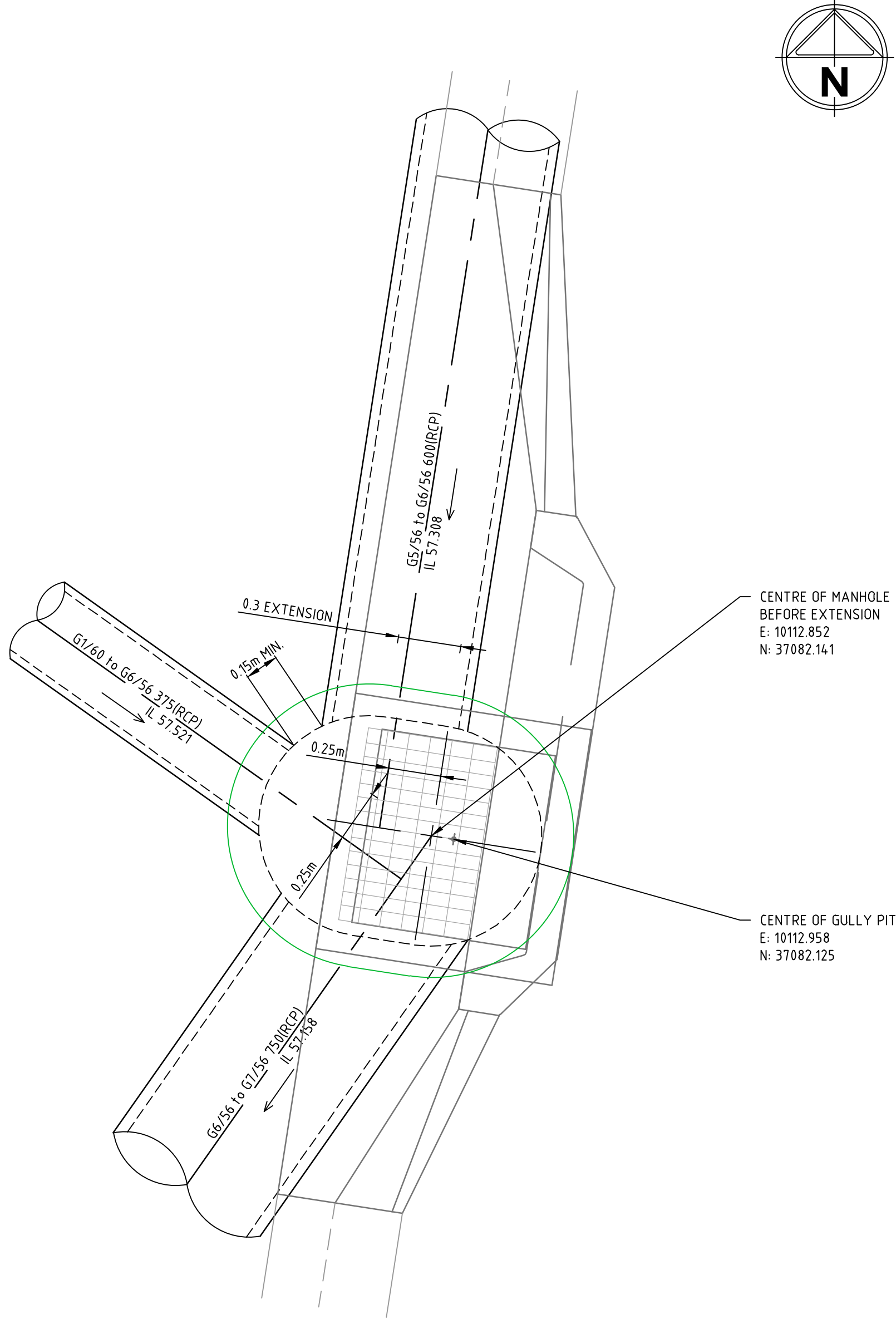
spiire
Waterfront Place, level 9/1 Eagle St, Brisbane City
Queensland 4000 Australia T 61 7 3522 3000
spiire.com.au ABN 55 050 029 635

AMORY
AT RIPLEY
Designed T.MULLEN
Checked K. HOWELLS
Authorised M. READMAN RPEQ 28295
Date MARCH 24

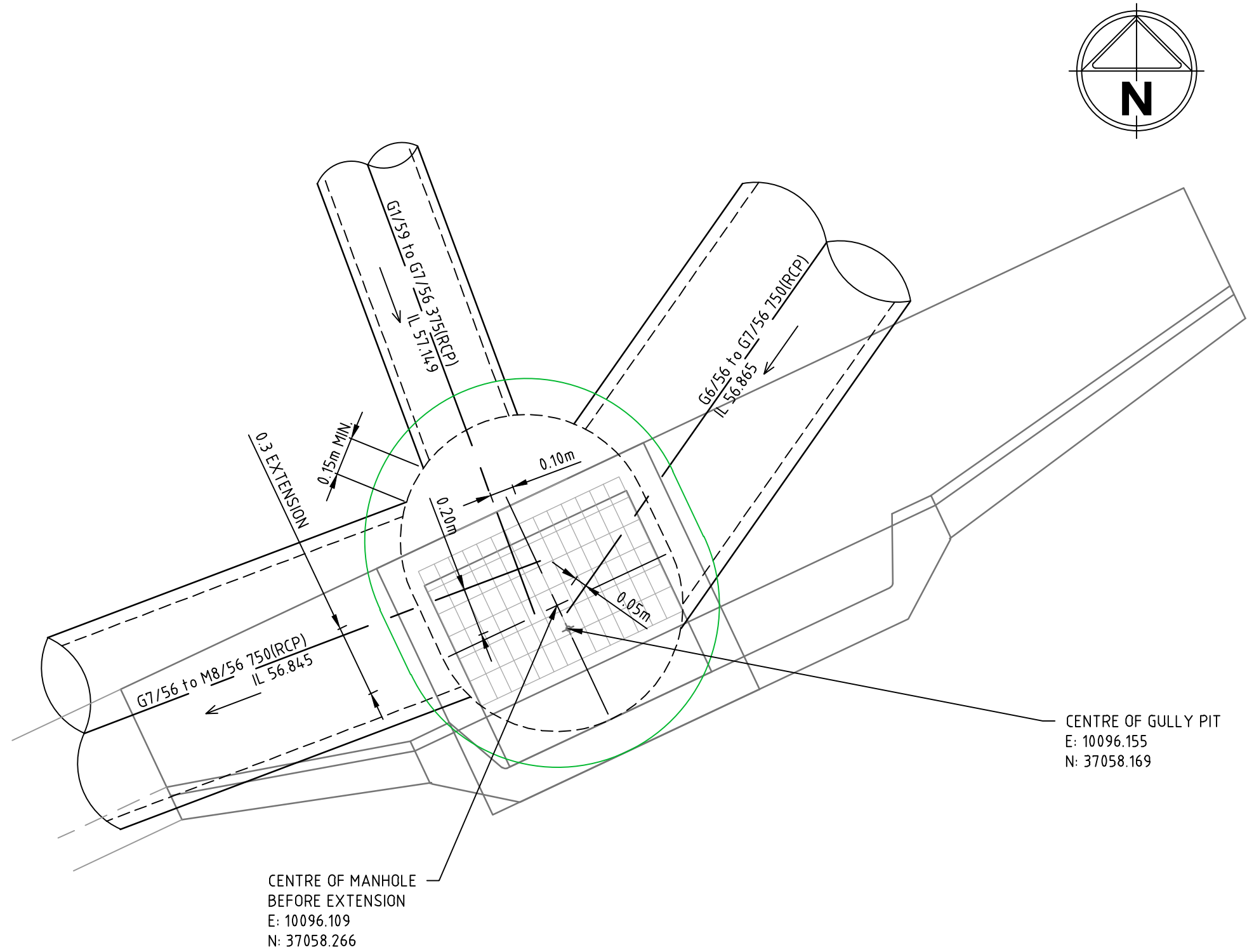
AMORY AT RIPLEY
STAGE 02B
STORMWATER DRAINAGE LONGITUDINAL SECTIONS
SHEET 2 OF 2
IPSWICH CITY COUNCIL
RIPLEY ESTATE DEVELOPMENT PTY LTD
CONSTRUCTION
Drg No 320678-02B-C0503
Rev 2



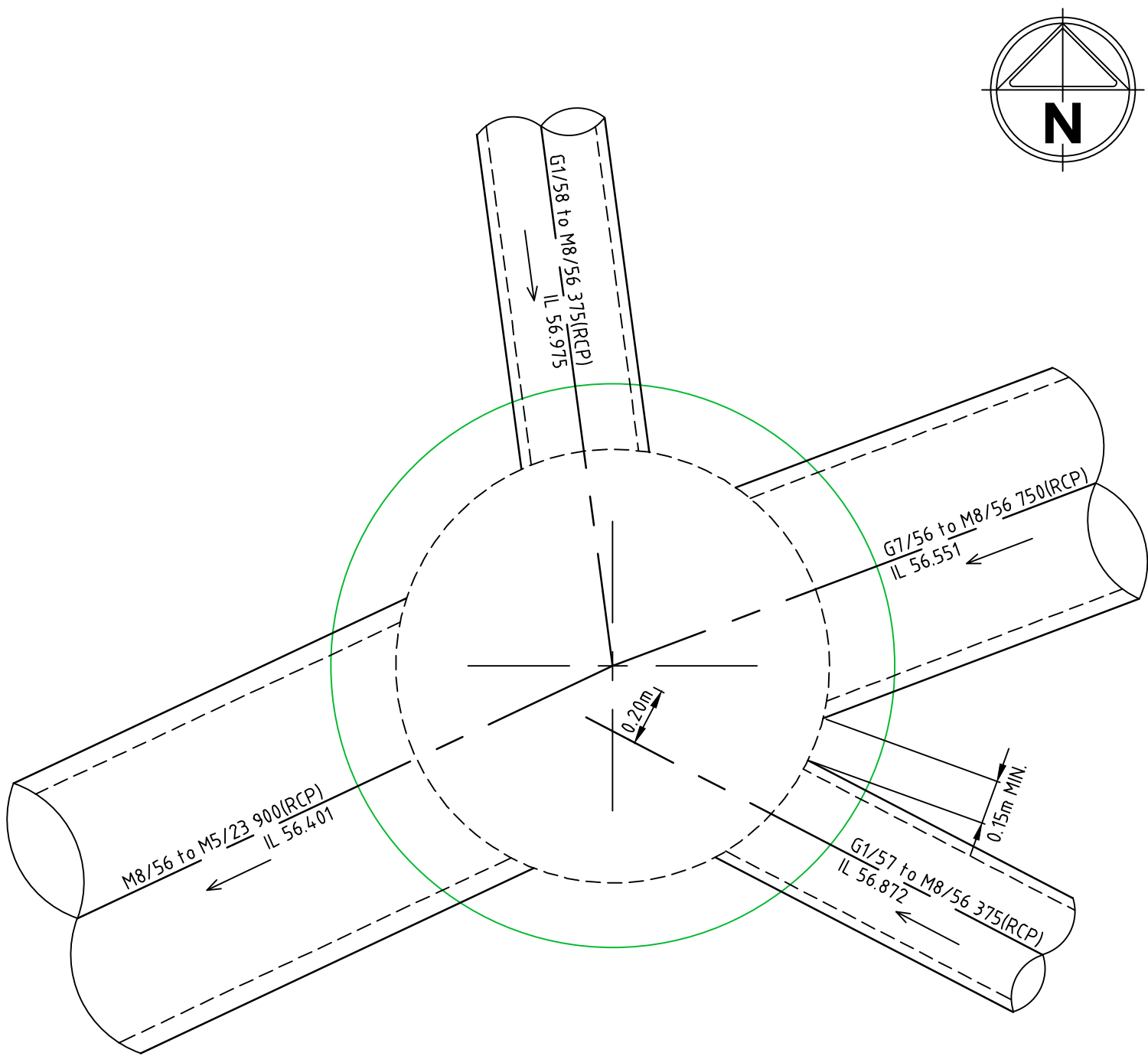
STORMWATER STRUCTURE M3/56 - 1200Ø MANHOLE
SCALE : 1 : 20



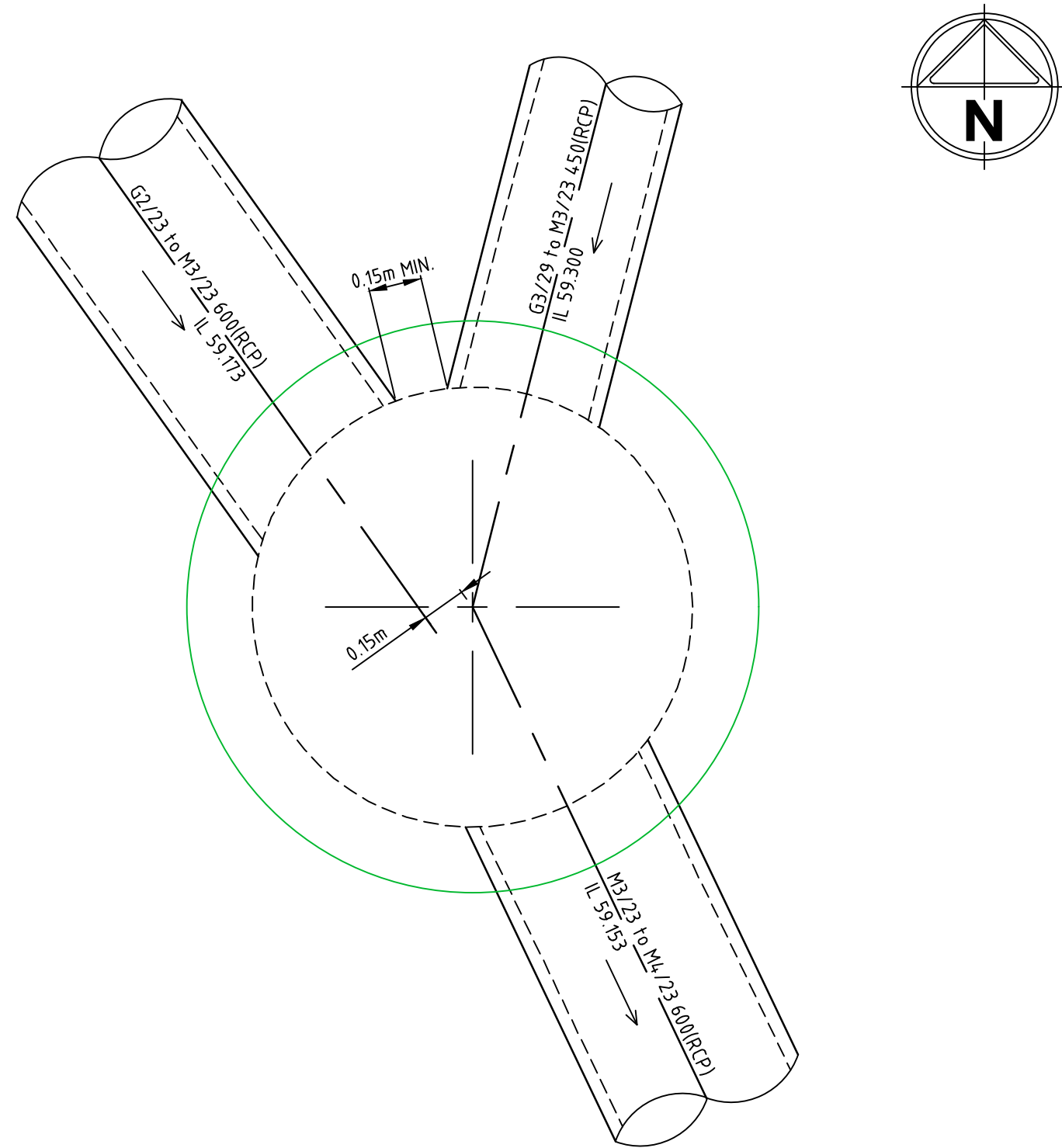
STORMWATER STRUCTURE G6/56 - 1050Ø MANHOLE EXT 300
SCALE : 1 : 20



STRUCTURE G7/56 - 1050Ø MANHOLE EXT 300
SCALE : 1 : 20



STORMWATER STRUCTURE M8/56 - 1500Ø MANHOLE
SCALE : 1 : 20



STORMWATER STRUCTURE M3/23 - 1500Ø MANHOLE
SCALE : 1 : 20

STORMWATER STRUCTURE NOTES

1. DETAILS SHOWN ON THIS DRAWING ARE GENERAL ARRANGEMENT DETAILS ONLY. THESE DETAILS MUST BE READ IN CONJUNCTION WITH STRUCTURAL DETAILS FOR FULL CONSTRUCTION DETAILS OF CUSTOM MANHOLE CHAMBERS.
2. REFER TO ICC SPECIFICATIONS AND STANDARD DRAWING NO. SD-02 & SD-03 FOR MANHOLE GENERAL CONSTRUCTION DETAILS.
3. ALL MANHOLES SHALL BE FITTED WITH A CLASS D HEAVY DUTY ROADWAY TRAFFICABLE ACCESS COVER AND FRAME IN ACCORDANCE WITH ICC STANDARD DRAWING SD-02.
4. STEP RUNGS TO ICC REQUIREMENTS. REFER TO ICC STANDARD DRAWINGS SD-02 & SD-10 AND IN ACCORDANCE WITH AS1657.

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24

H 1:1000
SCALE @ A1



© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

spiire

Waterfront Place, level 9/1 Eagle St, Brisbane City
Queensland 4000 Australia T 61 7 3522 3000
spiire.com.au ABN 55 050 029 635

AMORY
AT RIPLEY

Designed
T.MULLEN
Authorised
M. READMAN RPEQ 28295
Checked
K. HOWELLS
Date
MARCH 24

**AMORY AT RIPLEY
STAGE 02B
STORMWATER STRUCTURE DETAILS**

IPSWICH CITY COUNCIL
RIPLEY ESTATE DEVELOPMENT PTY LTD

CONSTRUCTION Drg No
320678-02B-C0504
Rev
0

SAFETY IN DESIGN REPORT

DURING THE DESIGN SPIIRE AUSTRALIA PTY LTD HAS REGULARLY REVIEWED THE DESIGN IN PROGRESS TO ELIMINATE OR REDUCE SAFETY HAZARDS SO FAR AS IS REASONABLY PRACTICABLE FOR THE CONSTRUCTION, MAINTENANCE, OPERATION AND DEMOLITION OF THE PROPOSED CIVIL WORKS. IN ACCORDANCE WITH WORK HEALTH AND SAFETY ACT AND REGULATIONS, POTENTIAL RESIDUAL HAZARDS ASSOCIATED WITH THE CIVIL DESIGN AS DOCUMENTED WILL INCLUDE BUT MAY NOT BE LIMITED TO THE FOLLOWING:

RESIDUAL RISK	LIKELIHOOD (L)	IMPACT (I)	RISK RATING (L+I)
DEMOLITION	4	4	8
GROUND VIBRATIONS	4	2	6
SURROUNDING PROPERTY AND INFRASTRUCTURE INCLUDING TREES	4	4	8
EXCAVATIONS	4	4	8
TRIP/FALL HAZARDS	4	3	7
FIRE AND OTHER EMERGENCY HAZARDS, INCLUDING EMERGENCY ROUTES AND EXITS	3	4	7
UNDERGROUND AND ABOVE GROUND SERVICES AND OBSTRUCTIONS	4	4	8
LIFTING AND POSITIONING OF STRUCTURAL COMPONENTS	3	4	7
HAZARDOUS MATERIALS	3	4	7
NOISE EXPOSURE FROM CONSTRUCTION AND SURROUNDING ACTIVITIES	3	4	7
OVER LOADING DUE TO CONSTRUCTION LOADS	3	4	7
OPEN TRENCHING	4	4	8
UNDER-BORE & AND OTHER TRENCHLESS METHODOLOGY FOR PIPELINE CONSTRUCTION	3	4	7
WORKING AT HEIGHTS	3	5	8
GENERAL SITE WORKS AND USE OF CONSTRUCTION VEHICLES & EQUIPMENT	3	5	8
SITE ACCESS INCLUDING RESTRICTED WORK SPACES	4	4	8
INTERACTION OF VEHICLES AND PERSONNEL ON THE ROAD/TRANSPORT NETWORK	4	4	8

THE ABOVE LISTED HAZARDS ARE TO BE ADDRESSED BY IMPLEMENTING AND COMPLYING WITH THE FOLLOWING NOTES, AUSTRALIAN STANDARDS, REGULATORY REQUIREMENTS AND OTHER RELEVANT DOCUMENTATION RELATING TO THE PROPOSED WORKS:

1. IT IS THE CLIENT'S RESPONSIBILITY TO PROVIDE ALL "SAFETY IN DESIGN" REPORTS TO THE BUILDER, PROJECT MANAGER AND/ OR PRINCIPAL CONTRACTOR.
2. IT IS THE BULDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO BUILD THE WORKS STRICTLY IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND NOT TO MAKE ANY VARIATIONS TO THE CONSTRUCTION WITHOUT THE SPECIFIC WRITTEN APPROVAL OF THE DESIGNERS.
3. IT IS THE CLIENT'S RESPONSIBILITY, THROUGH CONSULTATION AND ENGAGEMENT OF SUITABLY QUALIFIED PROFESSIONALS, TO MAKE THE DESIGNERS AWARE OF ANY INFORMATION RELATING TO HAZARDS AND RISKS WHERE CONSTRUCTION WORK IS TO BE CARRIED OUT, INCLUDING BUT NOT LIMITED TO: THE LOCATION OF UNDER GROUND AND ABOVE GROUND SERVICES, IDENTIFICATION OF CONTAMINATED SOILS AND OTHER MATERIALS OR THE PRESENCE OF DANGEROUS MATERIALS INCLUDING ASBESTOS.
4. THIS DESIGN HAS BEEN DOCUMENTED IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS, LOCAL AUTHORITY REGULATIONS AND STANDARD BUILDING CODES OF PRACTICE UNLESS NOTED OTHERWISE. EACH LEVEL OF CONSTRUCTION IS TO BE COMPLETED AND INSPECTED TO ENSURE DESIGN COMPLIANCE BY THE CERTIFYING AUTHORITY PRIOR TO ADVANCING TO THE NEXT STAGE OF WORK. IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO PROGRAM THE WORKS IN A SAFE MANNER AND TO HIGHLIGHT TO THE DESIGNERS ANY ASPECTS OF THE WORK THAT MAY REQUIRE FURTHER CLARIFICATION OR ADVICE WITH REGARD TO THE HEALTH AND SAFETY OF THE PROJECT.
5. ALL ASPECTS DETAILED OR NOTED IN THE DOCUMENTS ARE THOSE REQUIRED FOR THE COMPLETED WORKS ONLY. THE BUILDER, PROJECT MANAGER OR THE PRINCIPAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY NECESSARY TEMPORARY WORKS TO MAINTAIN THE STABILITY AND SAFETY OF THE WORKS THROUGHOUT THE CONSTRUCTION PERIOD. THE DESIGNER IS TO BE CONTACTED FOR FUTHER ADVICE IF REQUIRED.
6. WHERE THESE DESIGN DRAWINGS ONLY DOCUMENT PART OF THE WORKS, IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO ENSURE ALL DESIGN DRAWINGS ARE CO-ORDINATED BETWEEN CONSULTANTS. FOR EXAMPLE, CO-ORDINATION TO ENSURE APPROPRIATE SLAB THICKENINGS AND DETAILING FOR LOAD-BEARING AND BRACING WALL ELEMENTS, ETC.
7. DURING CONTRUCTION, THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR SHALL PRTOECT NEIGHBOURING PROPERTIES FROM NOISE IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS, RADIATION, GROUND VIBRATIONS AND OTHER CONSTRUCTION HAZARDS. CONDITION (DILAPIDATION) REPORTS ON NEIGHBOURING PROPERTIES AND STRUCTURES ARE RECOMMENDED PRIOR TO CONSTRUCTION.
8. THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR IS REQUIRED TO VERIFY AND IF NECESSARY CONDUCT FURTHER SEARCHES TO ACCURATELY LOCATE EASEMENTS, UNDER GROUND AND ABOVE GROUND SERVICES, PROPERTY BOUNDARIES, TREES, EXISTING STRUCTURES, AND OTHER OBSTRUCTIONS PRIOR TO CONSTRUCTION. THE DESIGNER IS TO BE IMMEDIATELY NOTIFIED OF ANY ELEMENTS NOT SHOWN ON THE APPROVED DRAWINGS AS THE DESIGN AND SAFETY DESIGN REPORT MAY REQUIRE AMENDING.
9. THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR MUST OBTAIN DESIGN AND INSPECTION CERTIFICATES ON ALL ELEMENTS OF THE WORKS WHICH PRESENT ANY SAFETY RISKS.
10. THE CONSTRUCTION IS TO BE FULLY CARRIED OUT IN ACCORDANCE WITH ALL DESIGN DRAWINGS AND NOTES AS DOCUMENTED. IF CONSTRUCTION CEASES AT ANY STAGE, THE DESIGNERS ARE TO BE NOTIFIED TO PROVIDE ADVICE ON THE SAFETY OF COMPLETED CONSTRUCTION WORK AT THAT TIME.
11. IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO INFORM THE DESIGNERS OF ANY CHANGE TO CONTRACTUAL ARRANGEMENTS BETWEEN THE CLIENT AND THEMSELVES WHICH MAY IMPACT ON THE DESIGN AND SAFETY OF THE DESIGN.
12. THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR SHALL PROVIDE SUITABLE FENCING AROUND ALL EXCAVATIONS AND AT NO STAGE SHOULD AN EXCAVATION BE APPROACHED OR ENTERED INTO UNLESS AN APPROVED AND CERTIFIED SHORING SYSTEM HAS BEEN INSTALLED OR THE BANKS HAVE BEEN BATTERED AND/ OR BENCHED IN ACCORDANCE WITH THE PROJECTS GEOTECHNICAL ENGINEERING SPECIFICATION AND/ OR WRITTEN INSTRUCTIONS BY THE INSPECTING GEOTECHNICAL ENGINEER.
13. AT NO STAGE SHALL SITE PERSONNEL PASS UNDER MATERIALS BEING LIFTED AND MOVED AROUND ON SITE. IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITYTO ENSURE THAT SITE MATERIALS ARE DELIVERED, TRANSPORTED, STORED AND POSITIONED IN A SAFE MANNER AND IN ACCORDANCE WITH THE PRODUCT SPECIFICATION, THE SITE SPECIFIC SAFETY PLAN AND GENERAL SAFETY INDUCTION REGULATIONS.

14. CONTRACTORS ARE REQUIRED TO OBTAIN AND COMPLY WITH MATERIAL PRODUCT SPECIFICATIONS AND RECOMMENDATIONS WHEN USING MATERIALS SPECIFIED IN THE DESIGN DOCUMENTS.
15. THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR MUST ELIMINATE OR LIMIT (AS FAR AS REASONABLY PRACTICABLE) SLIP AND TRIP HAZARDS AND PROTRUDING, SHARP OR ABRASIVE ELEMENTS ON SITE. HAZARDOUS ELEMENTS MUST BE CAPPED, ADEQUATELY SCREENED OR CLEARLY MARKED TO ENSURE SITE SAFETY.
16. IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT SITE WORKERS ARE SUITABLY QUALIFIED, TRAINED AND INSURED FOR THE TASKS BEING UNERTAKEN ON SITE.
17. IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL SITE PERSONNEL ARE PROVIDED WITH ADEQUATE SPACE, VENTILATION AND APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT TO UNDERTAKE THE WORKS REQUIRED. ALL CONSTRUCTION EQUIPMENT IS TO BE USED IN ACCORDANCE WITH BEST INDUSTRY SAFETY PRACTICES AND REGULATIONS.
18. DEMOLITION WORKS ARE REQUIRED TO BE CARRIED OUT IN A SAFE, SYSTEMATIC AND ORDERLY MANNER IN ACCORDANCE WITH THE SITE SPECIFIC SAFETY PLAN AND ALL GENERAL SAFETY INDUCTION REGULATIONS. TEMPORARY PROPPING OF MEMBERS MAY BE REQUIRED IN ACCORDANCE WITH THE DIRECTION OF A SUITABLY QUALIFIED PROFESSIONAL IN ACCORDANCE WITH INDUSTRY SAFETY PRACTICES AND REGULATIONS.
19. AT ALL TIMES THE BUILDER, THE PROJECT MANAGER OR PRINCIPAL CONTRACTOR IS TO PROVIDE SAFE ACCESS ONTO AND AROUND THE SITE INCLUDING ADEQUATE STAIRS, SCAFFOLDING, SECURE LADDER ACCESS, SAFE WORKING PLATFORMS, ACCESS PATHS FREE FROM FALLING OBJECTS, ADEQUATE RAILINGS, FALL ARREST SYSTEMS, ETC.
20. ALL FORMWORK AND SCAFFOLDING SYSTEMS ARE TO BE DESIGNED AND CERTIFIED BY A LICENSED CONTRACTOR TO COMPLY WITH RELEVANT AUSTRALIAN STANDARDS AND KEPT AND MAINTAINED IN A GOOD WORKING ORDER. REGULAR CHECKS ON ERECTED MEMBERS AND FIXINGS MUST BE CARRIED OUT BY A QUALIFIED PROFESSIONAL TO ENSURE COMPLIANCE WITH THE DESIGN.
21. CLIMBING ON SCAFFOLDING OR FORMWORK AND WORKING AT HEIGHTS WITHOUT SUITABLY APPROVED RAILINGS, BARRIERS AND RESTRAINTS FIXED OFF TO CERTIFIED ANCHOR POINTS IS STRICTLY PROHIBITED.
22. ALL SITE MACHINERY AND ELECTRICAL EQUIPMENT IS TO BE KEPT IN GOOD WORKING ORDER WITH CURRENT SAFETY TAGGING AND SERVICING WHERE APPLICABLE.
23. THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR IS TO ADEQUATELY TREAT AND DISPOSE OF DANGEROUS SITE MATERIALS INCLUDING CONTAMINATED SOILS AND ASBESTOS IN ACCORDANCE WITH AUTHORITY REGULATIONS, INDUSTRY STANDARDS AND PRACTICES.
24. THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR IS TO ENSURE THAT THE SITE IS MAINTAINED IN A SAFE WORKING MANNER AND THAT ALL SITE PRACTICES ARE IN ACCORDANCE WITH CURRENT WORK PLACE HEALTH AND SAFETY LAWS AND REGULATIONS.

(L) LIKELIHOOD OF THE CONSEQUENCES OCCURRING	
RATING	DESCRIPTION
ALMOST CERTAIN 5	HAS HAPPENED SEVERAL TIMES IN THE PAST YEAR AND IN EACH OF THE PREVIOUS 5 YEARS <u>OR</u> HAS A >90% CHANCE OF OCCURRING IN THE NEXT 24 MONTHS IF THE RISK IS NOT MITIGATED.
LIKELY 4	HAS HAPPENED AT LEAST ONCE IN THE PAST YEAR AND IN EACH OF THE PREVIOUS 5 YEARS <u>OR</u> HAS A 60-90% CHANCE OF OCCURRING IN THE NEXT 24 MONTHS IF THE RISK IS NOT MITIGATED.
POSSIBLE 3	HAS HAPPENED DURING THE PAST 5 YEARS BUT NOT EVERY YEAR <u>OR</u> HAS A 40-60% CHANCE OF OCCURRING IN THE NEXT 24 MONTHS IF THE RISK IS NOT MITIGATED.
UNLIKELY 2	MAY HAVE OCCURRED ONCE IN THE LAST 5 YEARS <u>OR</u> HAS A 10-30% CHANCE OF OCCURRING IN THE FUTURE IF THE RISK IS NOT MITIGATED.
RARE 1	HAS NOT OCCURRED IN THE PAST 5 YEARS <u>OR</u> MAY OCCUR IN EXCEPTIONAL CIRCUMSTANCES AND LESS THAN 10% CHANCE OF OCCURRING IN THE NEXT 24 MONTHS IF THE RISK IS NOT MITIGATED.

(I) IMPACT OR CONSEQUENCE RATING TABLE	
RATING	DESCRIPTION
SEVERE 5	ONE OR MORE FATALITIES OR LIFE THREATENING INJURIES OR ILLNESS, <u>OR</u> PUBLIC OR STAFF EXPOSED TO A SEVERE, ADVERSE LONG TERM HEALTH IMPACT OR LIFE THREATENING HAZARD.
MAJOR 4	ONE OR MORE MAJOR INJURIES OR ILLNESS REQUIRING MAJOR SURGERY OR RESULTING IN PERMANENT DISABLEMENT <u>OR</u> PUBLIC OR STAFF EXPOSED TO A HAZARD THAT RESULTS IN MAJOR SURGERY, PERMANENT DISABLEMENT OR ADVERSE PERMANENT HEALTH EFFECTS.
MODERATE 3	ONE OR MORE INJURIES OR ILLNESS REQUIRING TREATMENT BY A PHYSICIAN OR HOSPITALISATION <u>OR</u> PUBLIC OR STAFF EXPOSED TO A HAZARD THAT COULD CAUSE INJURIES OR MODERATE ADVERSE HEALTH EFFECTS.
MINOR 2	ONE OR MORE INJURIES OR ILLNESS REQUIRING TREATMENT BY A QUALIFIED FIRST AID PERSON <u>OR</u> EXPOSURE OF PUBLIC OR STAFF TO A HAZARD THAT COULD CAUSE MINOR INJURIES OR MINOR ADVERSE HEALTH EFFECTS.
NEGLIGIBLE 1	MINOR INJURY OR AILMENT THAT DOES <u>NOT</u> REQUIRE MEDICAL TREATMENT BY A PHYSICIAN OR A QUALIFIED FIRST AID PERSON.

LIKELIHOOD RATING	CONSEQUENCE RATING				
	SEVERE 5	MAJOR 4	MODERATE 3	MINOR 2	NEGLIGIBLE 1
ALMOST CERTAIN 5	VERY HIGH 10	VERY HIGH 9	HIGH 8	HIGH 7	MEDIUM 6
LIKELY 4	VERY HIGH 9	HIGH 8	HIGH 7	MEDIUM 6	MEDIUM 5
POSSIBLE 3	HIGH 8	HIGH 7	MEDIUM 6	MEDIUM 5	LOW 4
UNLIKELY 2	HIGH 7	MEDIUM 6	MEDIUM 5	LOW 4	LOW 3
RARE 1	MEDIUM 6	MEDIUM 5	LOW 4	LOW 3	VERY LOW 2

RISK LEVEL	REQUIRED ACTION
VERY HIGH	<u>ACT IMMEDIATELY:</u> THE PROPOSED TASK OR PROCESS ACTIVITY MUST NOT PROCEED. STEPS MUST BE TAKEN TO LOWER THE RISK LEVEL TO AS LOW AS REASONABLY PRACTICABLE USING THE HIERARCHY OF RISK CONTROLS.
HIGH	<u>ACT TODAY:</u> THE PROPOSED ACTIVITY CAN ONLY PROCEED, PROVIDED THAT: (i) THE RISK LEVEL HAS BEEN REDUCED TO AS LOW AS REASONABLY PRACTICABLE USING THE HIERARCHY OF RISK CONTROLS; (ii) THE RISK CONTROLS MUST INCLUDE THOSE IDENTIFIED IN LEGISLATION, STANDARDS, CODES OF PRACTICE ECT. (iii) THE RISK ASSESSMENT HAS BEEN REVIEWED AND APPROVED BY THE SUPERVISOR AND (iv) THE SUPERVISOR MUST REVIEW AND DOCUMENT THE EFFECTIVENESS OF THE IMPLEMENTED RISK CONTROLS.
MEDIUM	<u>ACT THIS WEEK:</u> THE PROPOSED TASK OR PROCESS CAN PROCEED, PROVIDED THAT: (i) THE RISK LEVEL HAS BEEN REDUCED TO AS LOW AS REASONABLY PRACTICABLE USING THE HIERARCHY OF RISK CONTROLS; (ii) THE RISK ASSESSMENT HAS BEEN REVIEWED AND APPROVED BY THE SUPERVISOR.
LOW	<u>ACT THIS MONTH:</u> MANAGED BY LOCAL DOCUMENTED ROUTINE PROCEDURES WHICH MUST INCLUDE APPLICATION OF THE HIERARCHY OF CONTROLS.
VERY LOW	<u>KEEP A WATCHING BRIEF:</u> ALTHOUGH THE RISK LEVEL IS LOW THE SITUATION SHOULD BE MONITORED PERIODICALLY TO DETERMINE IF THE SITUATION CHANGES.

HIERARCHY OF CONTROLS	
1	ELIMINATE THE HAZARD - REMOVE IT COMPLETELY FROM YOUR WORKPLACE.
2	SUBSTITUTE THE HAZARD - WITH A SAFER ALTERNATIVE.
3	ISOLATE THE HAZARD - AS MUCH AS POSSIBLE AWAY FROM WORKERS.
4	USE ENGINEERING CONTROLS - ADAPT TOOLS OR EQUIPMENT TO REDUCE THE RISK.
5	USE ADMINISTRATIVE CONTROLS - CHANGE WORK PRACTICES AND ORGANISATION.
6	USE PERSONAL PROTECTIVE EQUIPMENT (PPE) - THIS SHOULD BE THE LAST OPTION AFTER YOU HAVE CONSIDERED ALL OTHER OPTIONS FOR YOUR WORKPLACE.

file location C:\2d5\data\Spire\SYN\02B_51\VCivil\AC40_plot date 19/02/2025 8:48 AM Sheet ##### of ##### Sheets

2	ISSUED FOR CONSTRUCTION	K.H.	18-02-25
1	ISSUED FOR CONSTRUCTION	K.H.	29-01-25
0	ISSUED FOR CONSTRUCTION	K.H.	18-11-24
C	ISSUED FOR APPROVAL	M.R.	04-09-24
B	RE-ISSUE FOR TENDER	K.H.	02-04-24
A	ISSUE FOR TENDER	K.H.	15-03-24
Rev	Amendments	Approved	Date



© Spiire Australia Pty Ltd All Rights Reserved
This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.



Waterfront Place, level 9/1 Eagle St, Brisbane City
Queensland 4000 Australia T 61 7 3522 3000
spiire.com.au ABN 55 050 029 635



Designed
T.MULLEN

Checked
K. HOWELLS

Authorised
M. READMAN RPEQ 28295

Date
MARCH 24

AMORY AT RIPLEY
STAGE 02B
SAFETY IN DESIGN REPORT

IPSWICH CITY COUNCIL
RIPLEY ESTATE DEVELOPMENT PTY LTD

CONSTRUCTION

Drg No
320678-02B-C0900

Rev
2