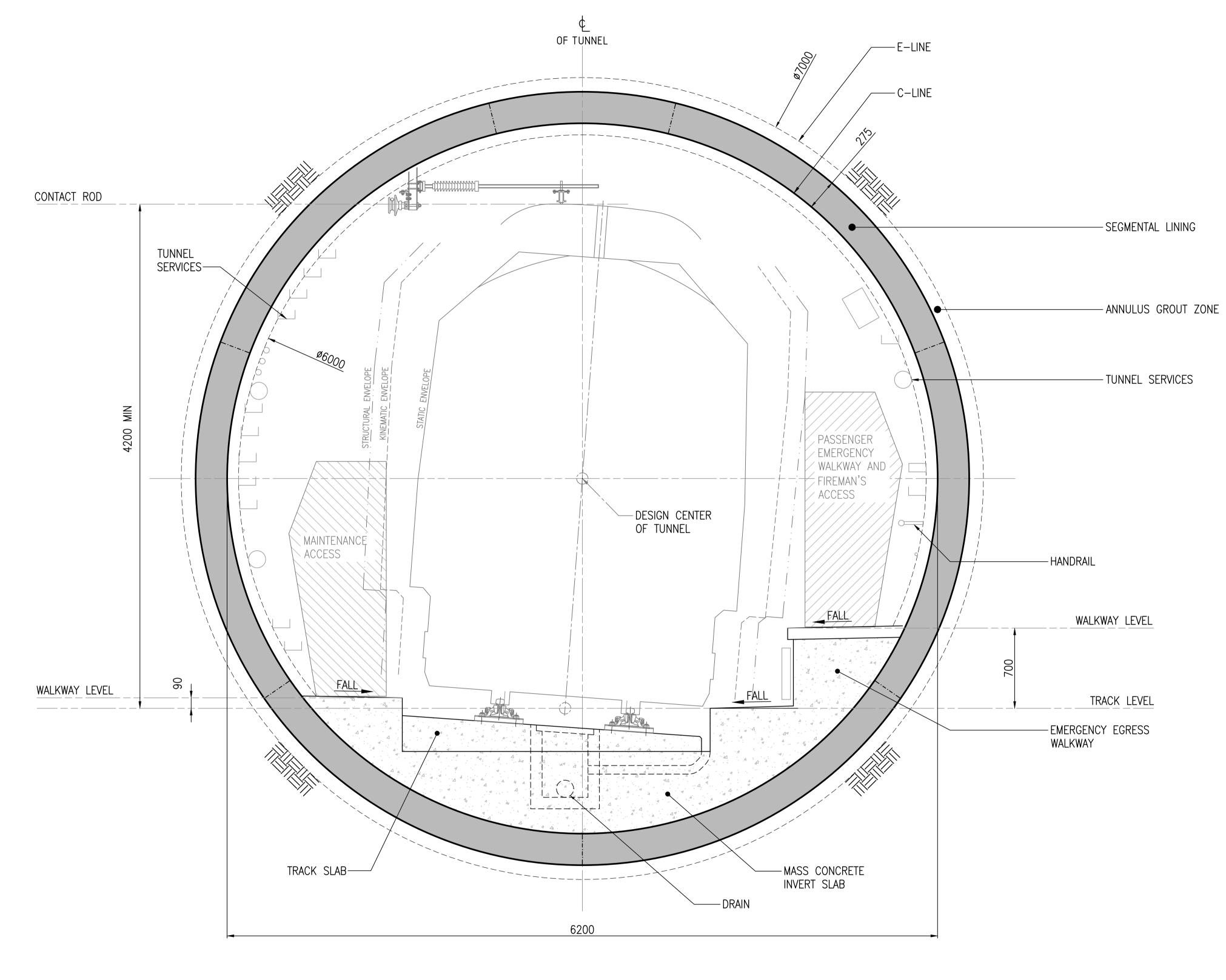
Level 4, 108 Wickham Street Fortitude Valley, QLD, Australia CRR-0002-TUN-GA-211

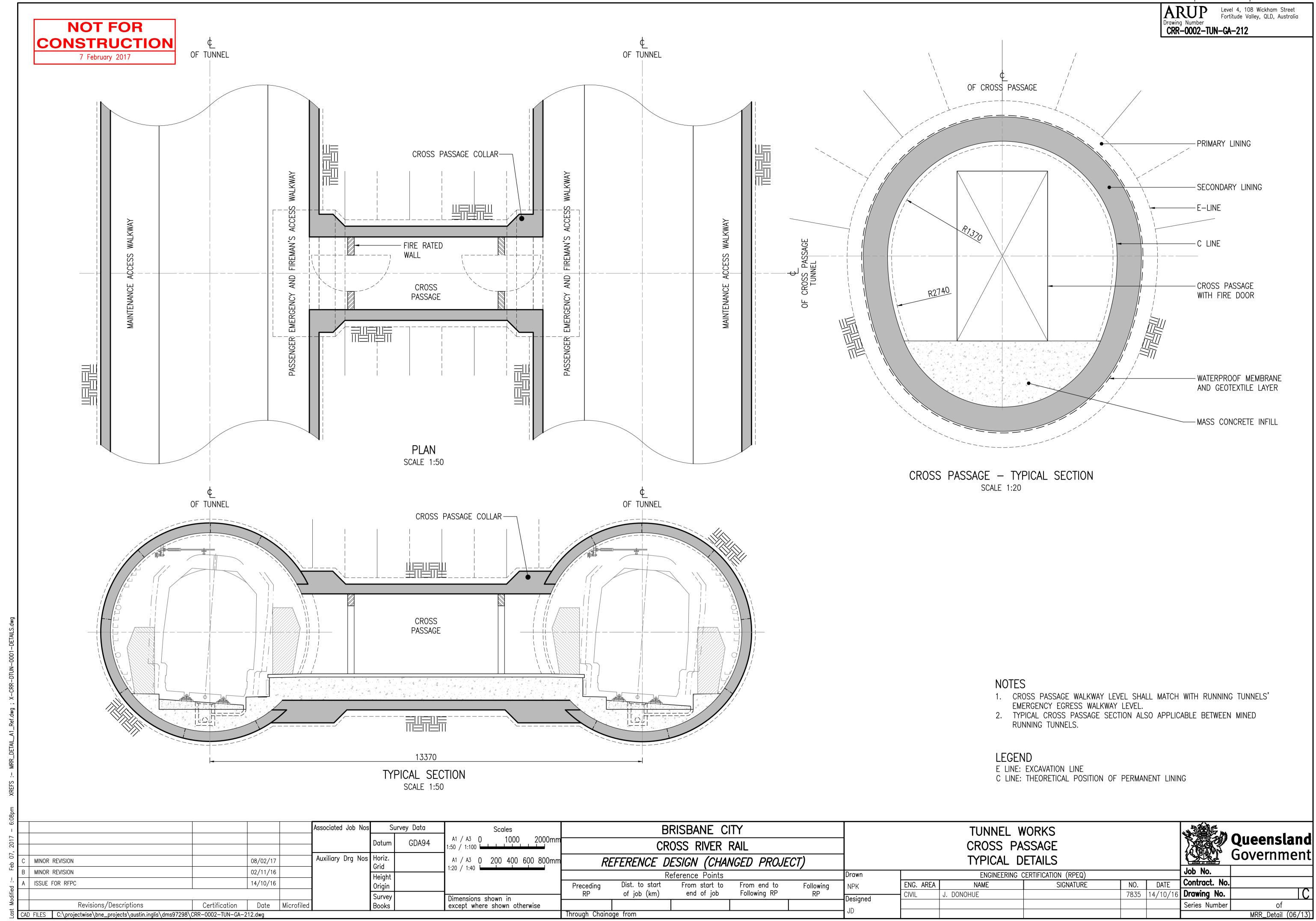




BORED TUNNEL - TYPICAL SECTION SCALE 1:20

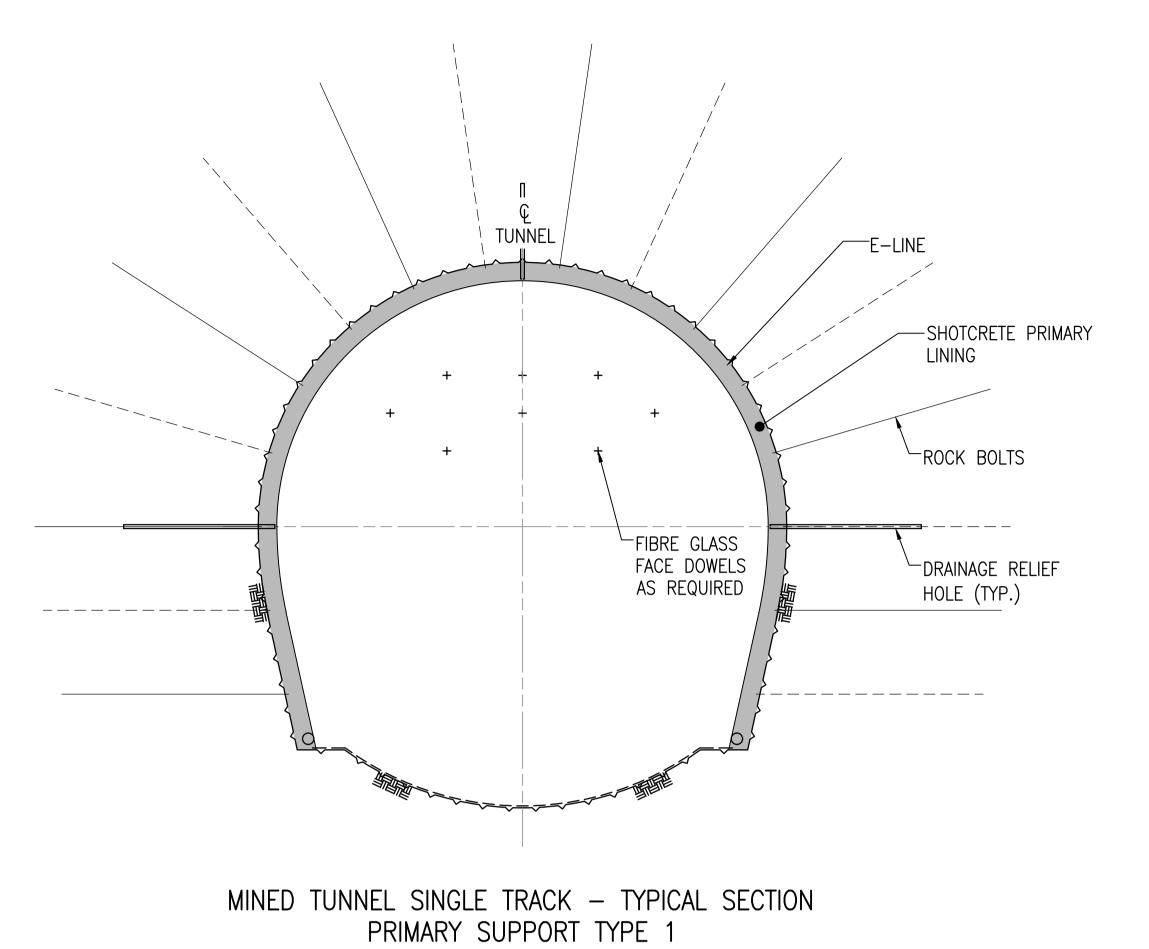
LEGEND E LINE: EXCAVATION LINE C LINE: THEORETICAL POSITION OF INSIDE OF PERMANENT LINING

	98\CRR-0002-TUN-GA-211.dwg				Through Chain	age from				שט						MRR_Detail (06/13)
Revisions/Descriptions	Certification Date Microfile	d	Books	except where shown otherwise											Series Number	of
ilipo Libraria de la companya della companya della companya de la companya della			Survey	Dimensions shown in	- RP	of job (km)	end of job	Following RP	RP	Designed	CIVIL J.	DONOHUE		7835	14/10/16 Drawing No.	
A ISSUE FOR RFPC	14/10/16	_	Origin		Preceding	Dist. to start	From start to	From end to	Following	NPK	ENG. AREA	NAME	SIGNATURE	NO.	DATE Contract. No.	
B MINOR REVISION	02/11/16	_	Height	1		R	eference Points			Drawn		ENGINEERING	CERTIFICATION (RPEQ)		Job No.	
C MINOR REVISION	08/02/17	-	Grid		L R	EFERENCE D	ESIGN (CHAI	VGED PROJE	<i>UI)</i>			TIFICAL 3	DECTION			
C MINOR PEVISION	08/02/17	Auxiliary Drg Nos	Horiz.	7			TCICNI (CLIA	NOCD DDO IC	CT)	1		TYPICAL S	FCTION			overnment
50			Datum GDA94	1:20 / 1:40		CR	OSS RIVER	RAIL				BORED TU	UNNEL			
17			D-1	A1 / A3 0 200 400 600 800mn	n					-						Queensland
		Associated Job Nos	s Survey Data	Scales		R	RISBANE C	ITY				TUNNEL V	NUBKS			

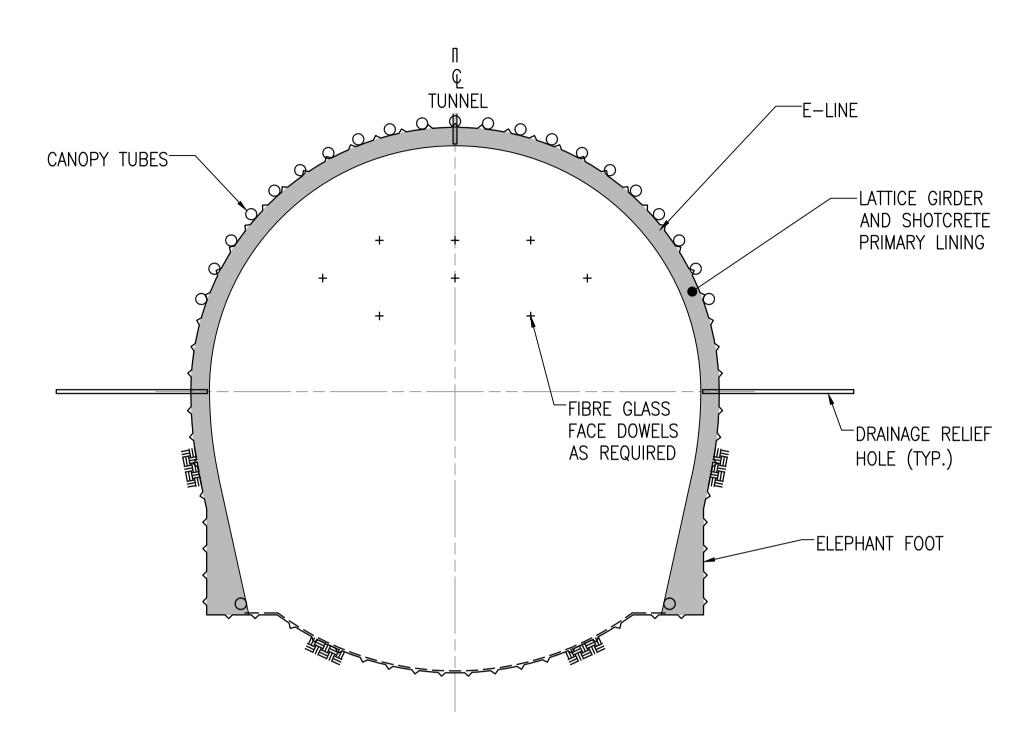


Level 4, 108 Wickham Street
Fortitude Valley, QLD, Australia
CRR-0002-TUN-GA-213

NOT FOR CONSTRUCTION
7 February 2017



SCALE 1:50



MINED TUNNEL SINGLE TRACK — TYPICAL SECTION PRIMARY SUPPORT TYPE 2

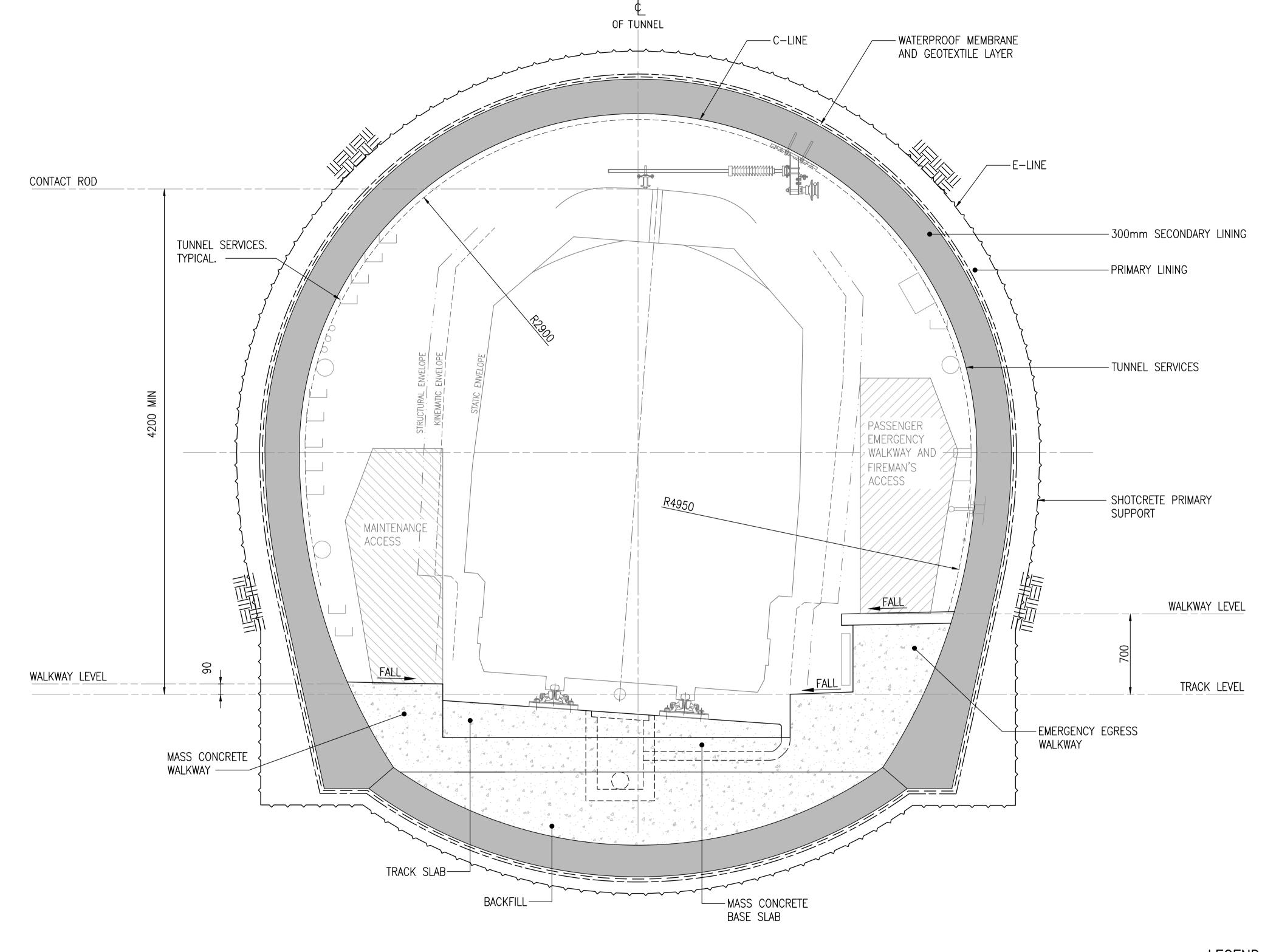
SCALE 1:50

LEGEND E LINE: EXCAVATION LINE

7 – 6:			Associated Job Nos Survey Data	Scales		В	RISBANE C	TY				TUNNEL	WORKS			A SECOND	0
, 2017			Datum GDA94	A1 / A3 0 1000 2000mm 1:50 / 1:100		CR	OSS RIVER	RAIL			SI	NGLE TRACK	MINED TUNNEL				Queensland
eb 07	C MINOR REVISION	08/02/17	Auxiliary Drg Nos Horiz.		R	EFERENCE D	ESIGN (CHAI	NGED PROJEC	CT)	1	PRIM	MARY SUPPOR	TS TYPE 1 & 2			AUDAX AV HIDBIAS	Government
- Fe	B MINOR REVISION	02/11/16	Height	-			eference Points			Drawn		ENGINEERING	G CERTIFICATION (RPEQ)			Job No.	
ed:-	A ISSUE FOR RFPC	14/10/16	Origin		Preceding	Dist. to start	From start to	From end to	Following	NPK	ENG. AREA	NAME	SIGNATURE	NO.	DATE	Contract. No.	
1 odifi			Survey	Dimensions shown in	RP RP	of job (km)	end of job	Following RP	RP RP	Designed	CIVIL	J. DONOHUE		7835	14/10/16	Drawing No.	
-ast ∧	Revisions/Descriptions Certification CAD FILES C:\projectwise\bne_projects\austin.inglis\dms97298\CRR-0002-TUN-GA-2	Date Microfiled	Books	except where shown otherwise	Through Chaine	age_from				JD						Series Number	of MRR_Detail (06/13)

Level 4, 108 Wickham Street Fortitude Valley, QLD, Australia CRR-0002-TUN-GA-214





MINED TUNNEL SINGLE TRACK — TYPICAL SECTION SECONDARY SUPPORT TYPE 1 & 2

SCALE 1:20

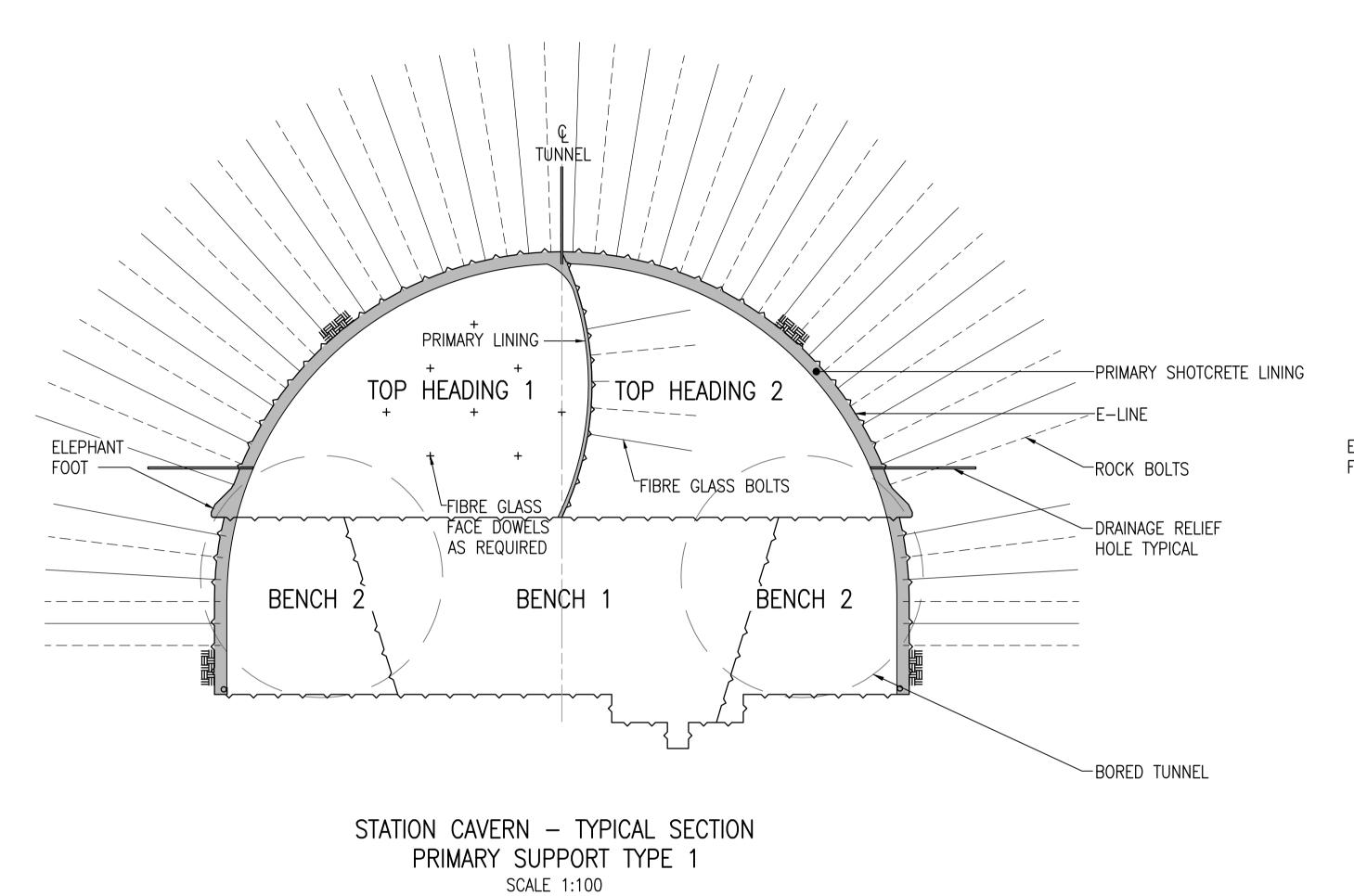
LEGEND
E LINE: EXCAVATION LINE
C LINE: THEORETICAL POSITION OF INSIDE OF PERMANENT LINING

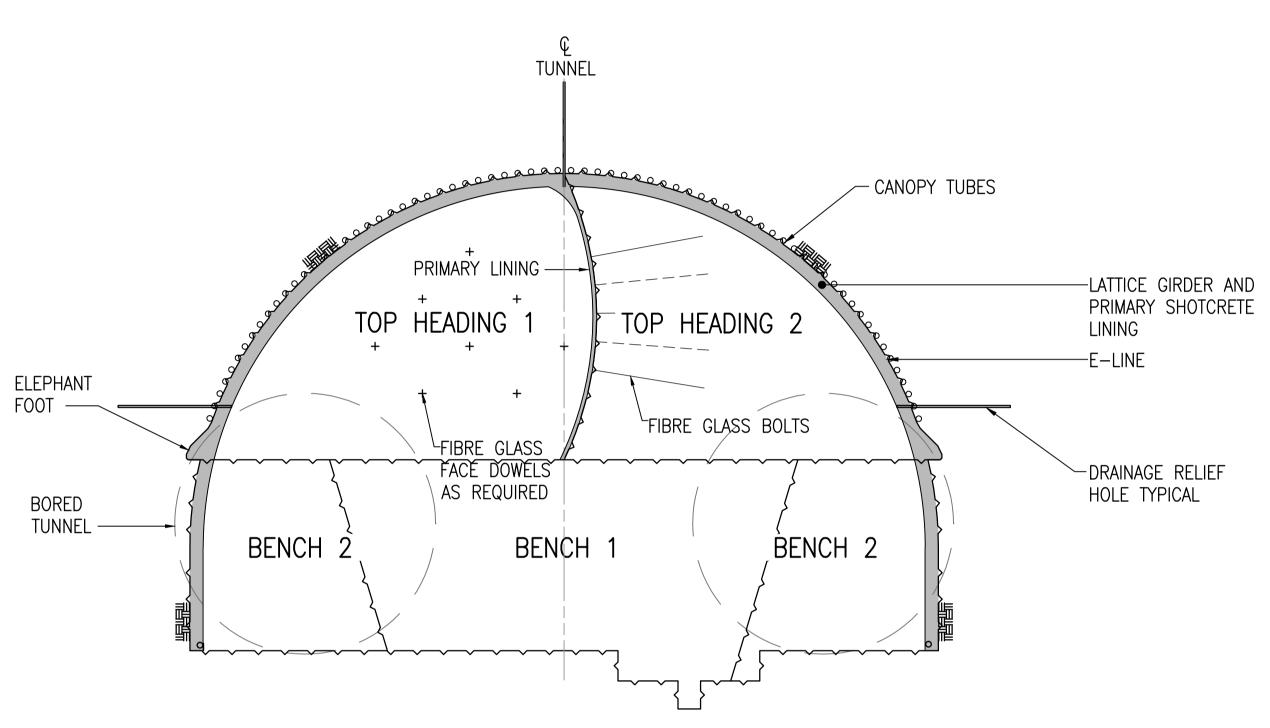
99	Associated Job N	os Survey Data	Scales		BF	RISBANE CI	TY			TUNNEL V	WORKS		WAR THE MAN	
501		Datum GDA94	A1 / A3 0 200 400 600 800mm		CRO	DSS RIVER F	RAIL			SINGLE TRACK M				Queensland
C MINOR REVISION 08/02/17	Auxiliary Drg No	s Horiz.		RE	FERENCE DE	ESIGN (CHAN	IGED PROJEC	CT)	SECOI	NDARY LINING PRIMARY	SUPPORT TYPE	1 & 2	2	Government
B MINOR REVISION 02/11/16		Height	1			ference Points			Drawn	ENGINEERING	CERTIFICATION (RPEQ)		Job No.	
A ISSUE FOR RFPC 14/10/16		Origin		Preceding	Dist. to start	From start to	From end to	Following	NPK	ENG. AREA NAME	SIGNATURE	NO.	DATE Contract. No.	
Revisions/Descriptions Certification Date I	icrofiled	Survey Books	Dimensions shown in except where shown otherwise	T KP	of job (km)	end of job	Following RP	KP	Designed	CIVIL J. DONOHUE		/835 12	1/10/16 Drawing No. Series Number	of I C
CAD FILES C:\projectwise\bne_projects\austin.inglis\dms97298\CRR-0002-TUN-GA-214.dwg	ior office i	DOOKS	CACOPE WHOLE SHOWIN COLICEWISE	Through Chainag	ge from				JD				COLIDO HAMBOI	MRR_Detail (06/13)

Level 4, 108 Wickham Street
Fortitude Valley, QLD, Australia
CRR-0002-TUN-GA-216

STRUCTION







STATION CAVERN - TYPICAL SECTION

PRIMARY SUPPORT TYPE 2

SCALE 1:100

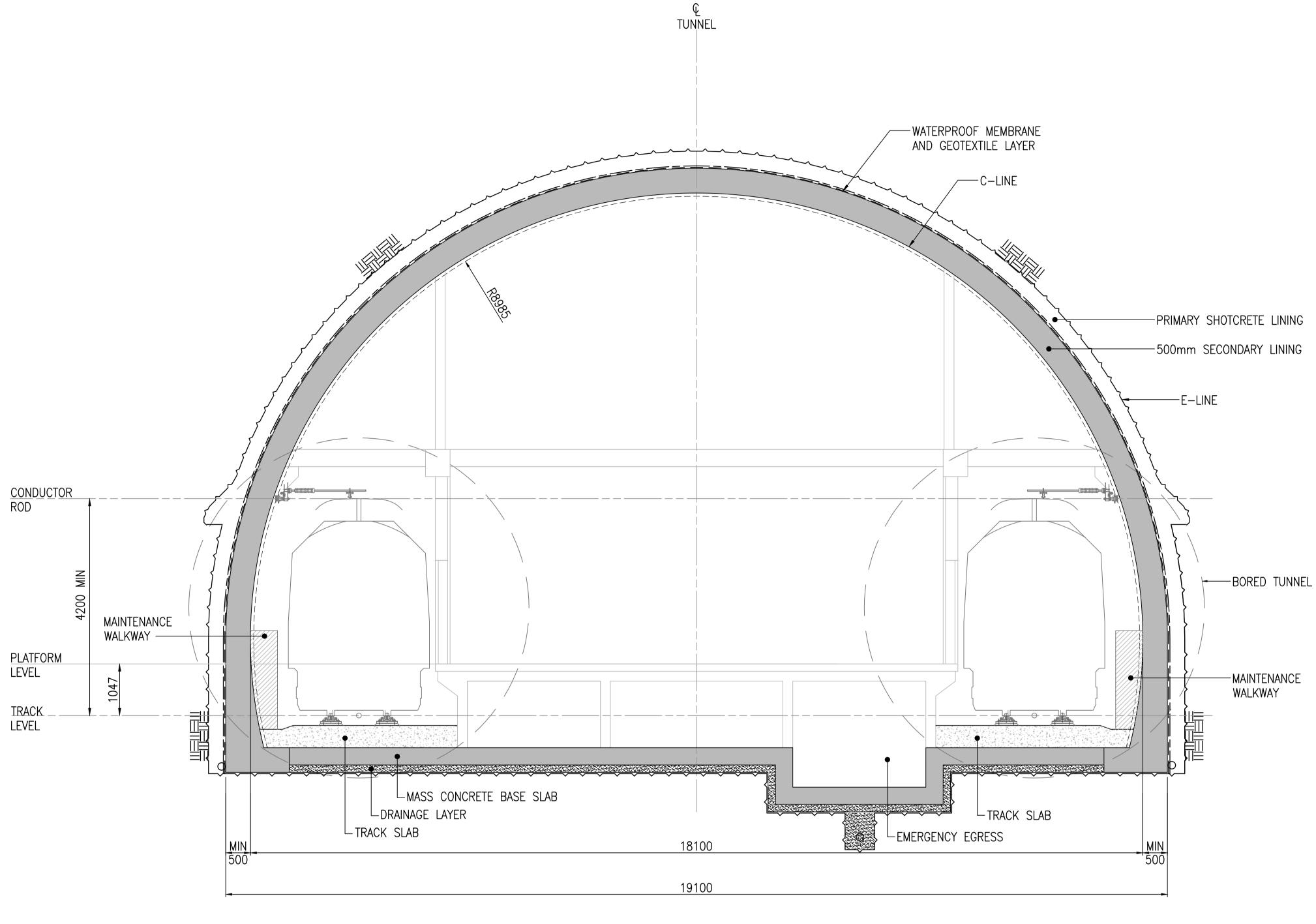
LEGEND E LINE: EXCAVATION LINE

- 6:09			Associated Job Nos Survey Data	Scales		Bf	RISBANE C	TY				TUNNEL \	WORKS				
7, 2017			Datum GDA94	A1 / A3 0 1 2 3 4m 1:100 / 1:200		CRO	OSS RIVER	RAIL				STATION (CAVERN				Queensland
eb 07	C MINOR REVISION	08/02/17	Auxiliary Drg Nos Horiz.		RE	FERENCE DI	ESIGN (CHAI	IGED PROJE	CT)		PRI	MARY SUPPOR	T TYPE 1 & 2				Government
-	B MINOR REVISION	02/11/16	Height	1		Re	ference Points			Drawn		ENGINEERING	CERTIFICATION (RPEQ)			Job No.	
: pei	A ISSUE FOR RFPC	14/10/16	Origin		Preceding	Dist. to start	From start to	From end to	Following RP	NPK	ENG. AREA	NAME	SIGNATURE	NO.	DATE	Contract. No.	
Modif	Revisions/Descriptions Certification	Date Microfiled	Survey	Dimensions shown in except where shown otherwise	KP KP	of job (km)	end of job	Following RP		Designed	CIVIL	J. DONOHUE		7835	14/10/16	Drawing No. Series Number	of IC
Last	CAD FILES C:\projectwise\bne_projects\austin.inglis\dms97298\CRR-0002-TUN-GA-2		BOOKS	except where shown otherwise	Through Chaina	ge from				JD						Scries Humber	MRR_Detail (06/13)

ARUP
Drawing Number
CRR-0002-TUN-GA-217

Level 4, 108 Wickham Street
Fortitude Valley, QLD, Australia





STATION CAVERN — TYPICAL SECTION SECONDARY SUPPORT TYPE 1

SCALE 1:50

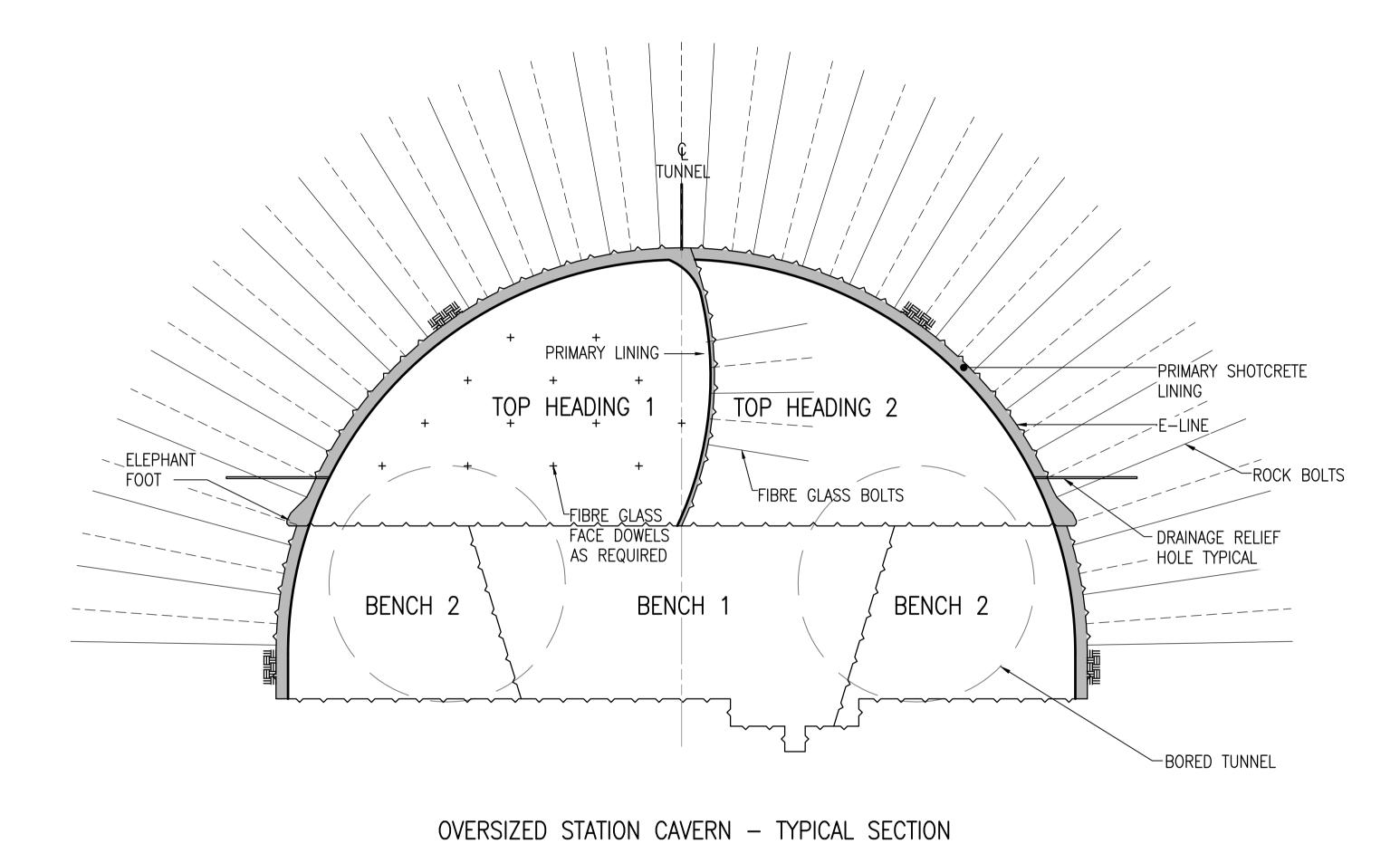
LEGEND
E LINE: EXCAVATION LINE
C LINE: THEORETICAL POSITION OF PERMANENT LINING

7 - 6:				Associated Job Nos	Survey Data	Scales		Bl	RISBANE C	TY				TUNNEL V	VORKS		,	WEED O	Augeneland
7, 201					Datum GDA94	A1 / A3 0 1000 2000mm 1:50 / 1:100		CR	OSS RIVER	RAIL				STATION C					ueensland
eb 0/	MINOR REVISION	08/02/17	7	Auxiliary Drg Nos	Horiz. Grid		R	EFERENCE DI	ESIGN (CHAI	VGED PROJE	CT)		SECO	NDARY SUP	PORT TYPE 1			AUDAX AT FIDELIS	overnment
<u></u> В	MINOR REVISION	02/11/16	6		Height	┪		Re	eference Points		•	Drawn		ENGINEERING	CERTIFICATION (RPEQ)			Job No.	
A	ISSUE FOR RFPC	14/10/16	6		Origin		Preceding	Dist. to start	From start to	From end to	Following	NPK	ENG. AREA	NAME	SIGNATURE	NO.	D/ \	Contract. No.	
difie					Survey	Dimensions shown in	RP	of job (km)	end of job	Following RP	RP	Designed	CIVIL J. DO	NOHUE		7835	14/10/16	Drawing No.	
ĭ ĭ	Revisions/Descriptions	Certification Date	Microfiled		Books	except where shown otherwise						Designed						Series Number	of
c/	D FILES C:\projectwise\bne_projects\austin.inglis\dms97298	CRR-0002-TUN-GA-217.dwg	•		•	•	Through Chain	age from	•			JD						•	MRR_Detail (06/13)

ARUP
Drawing Number
CRR-0002-TUN-GA-218

Level 4, 108 Wickham Street
Fortitude Valley, QLD, Australia

NOT FOR CONSTRUCTION
7 February 2017



PRIMARY SUPPORT TYPE 1

SCALE 1:100

TUNNEL - CANOPY TUBES PRIMARY LINING -LATTICE GIRDER AND PRIMARY SHOTCRETE TOP HEADING 1 TOP HEADING 2 LINING -E-LINE ELEPHANT FOOT FIBRE GLASS BOLTS FIBRE GLASS FACE DOWELS DRAINAGE RELIEF \ AS REQUIRED HOLE TYPICAL BORED TUNNEL-BENCH 2 BENCH 2 BENCH 1

OVERSIZED STATION CAVERN — TYPICAL SECTION PRIMARY SUPPORT TYPE 2

SCALE 1:100

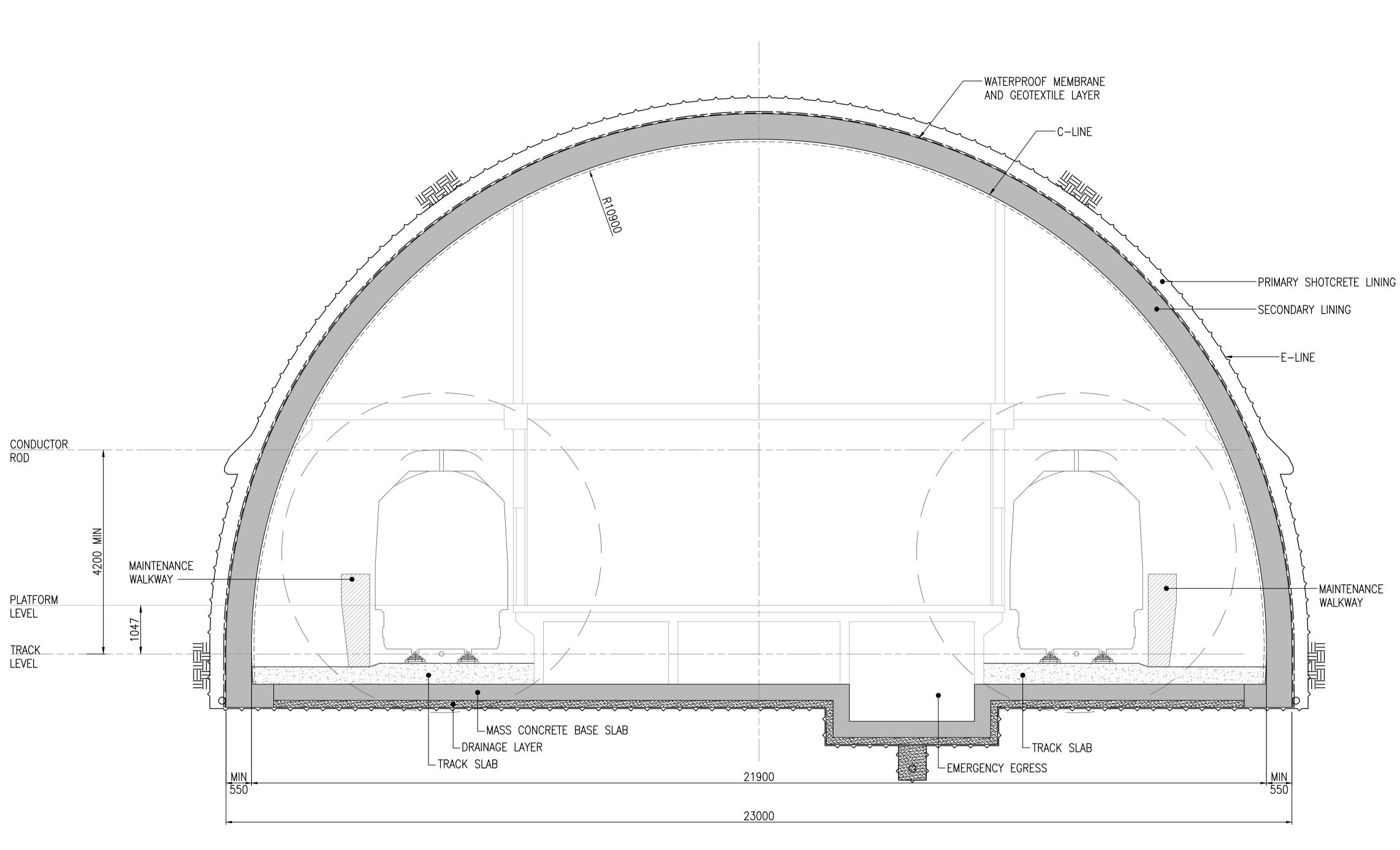
LEGEND E LINE: EXCAVATION LINE

	Associated Job Nos		Data Scales SDA94 A1 / A3 0 1 2 3 4m 1:100 / 1:200			RISBANE CI DSS RIVER I				OVE	TUNNEL ERSIZED STA	WORKS ATION CAVERN			Queensland
00/02/17	Auxiliary Drg Nos	Horiz. Grid		REI	FERENCE DE	ESIGN (CHAI	IGED PROJL	ECT)		PRIMA		RT TYPE 1 & 2		Job No.	Government
B MINOR REVISION 02/11/16 A ISSUE FOR RFPC 14/10/16		Height Origin		Preceding	Dist. to start	From start to	From end to	Following	Drawn NPK	ENG. AREA	ENGINEERING NAME	G CERTIFICATION (RPEQ) SIGNATURE	NO. DATE	Contract. No.	
Revisions/Descriptions Certification Date Microfiled		Survey Books	Dimensions shown in except where shown otherwise	RP	of job (km)	end of job	Following RP	RP RP	Designed	CIVIL J.	DONOHUE		7835 14/10/16	Series Number	of
CAD FILES C:\projectwise\bne_projects\austin.inglis\dms97298\CRR-0002-TUN-GA-218.dwg		•	,	Through Chainag	ge from			•	JD						MRR_Detail (06/13)

ARUP
Drawing Number
CRR-0002-TUN-GA-219

Level 4, 108 Wickham Street
Fortitude Valley, QLD, Australia





€ TUNNEL

OVERSIZED STATION CAVERN — TYPICAL SECTION SECONDARY SUPPORT TYPE 1 & 2

SCALE 1:50

LEGEND
E LINE: EXCAVATION LINE
C LINE: THEORETICAL POSITION OF INSIDE OF PERMANENT LINING

- 6:			Associated Job Nos	S Su	urvey Data	Scales		Bl	RISBANE CI	TY				TUNNEL V	WORKS			
, 2017				Datum	GDA94	A1 / A3 0 1000 2000mn		CR	OSS RIVER F	RAIL		1	OVE		ΓΙΟΝ CAVERN			Queensland
eb 07	MINOR REVISION	08/02/17	Auxiliary Drg Nos	Horiz. Grid			R	EFERENCE DI	ESIGN (CHAN	IGED PROJE	CT)	1	SECON	DARY SUPPO	RT TYPE 1 & 2		AUDAX AT FIDELIS	Government
" E	MINOR REVISION	02/11/16	_	Height		1		Re	eference Points			Drawn		ENGINEERING	CERTIFICATION (RPEQ)		Job No.	
-:- <u> </u>	ISSUE FOR RFPC	14/10/16	_	Origin			Preceding	Dist. to start	From start to	From end to	Following	NPK	ENG. AREA	NAME	SIGNATURE	NO. DATE	Contract. No.	
odifi.			_	Survey		Dimensions shown in	RP	of job (km)	end of job	Following RP	RP	Designed	CIVIL J. [DONOHUE		7835 14/10/16	Drawing No.	
ĕ	Revisions/Descriptions Certification	Date Microfiled	l l	Books		except where shown otherwise						Doorginod					Series Number	of
SD C	D FILES C:\projectwise\bne_projects\austin.inglis\dms97298\CRR-0002-TUN-GA-	219.dwg	;			•	Through Chain	age from				J JD						MRR_Detail (06/13)

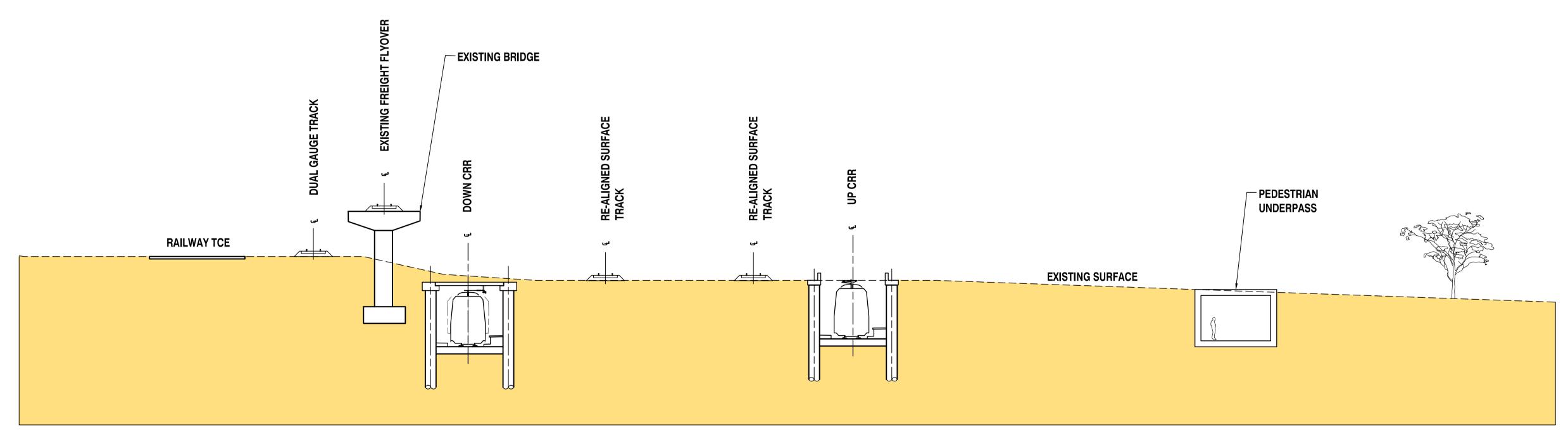
Level 4, 108 Wickham Street
Fortitude Valley, QLD, Australia
CRR-0002-PTL-GA-202

NOT FOR CONSTRUCTION

2 November 2016

EXECUTION OF SURFACE BUILDING SURFACE BU

SECTION A CH 1220 DOWN TRACK



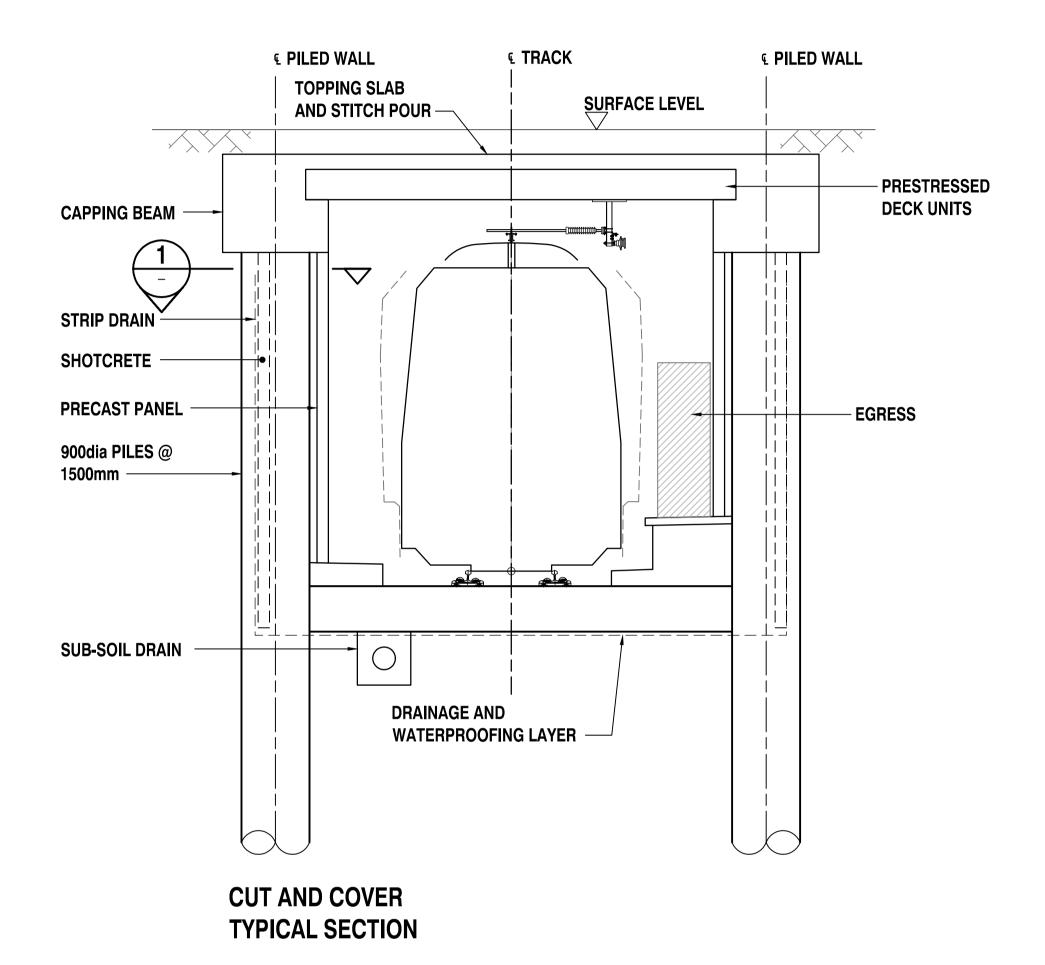
SECTION B CH 1345 DOWN TRACK

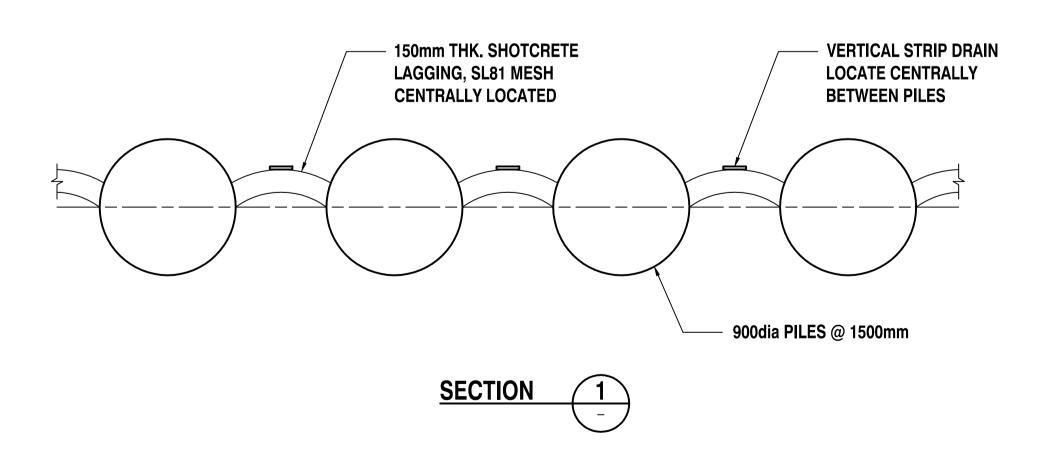
ov 02, 2016 – 2:		Associated Job Nos Auxiliary Drg Nos	Datum GDA94	Scales A1 / A3	R		RISBANE C OSS RIVER FSIGN (CHAI	RAIL	TCT)			TUNNEL \ SOUTHERN TYPICAL SI	PORTAL			Queensland Sovernment
B MINOR REVISION I SSUE FOR RFPC Revisions/Descriptions Certification CAD FILES C:\projectwise\bne_projects\luke.cruickshank\dms97298\CRR-0002-PTL-	02/11/16 14/10/16 Date Microfiled		Height Origin Survey Books	Dimensions shown in except where shown otherwise	Preceding RP Through Chain	Dist. to start of job (km)	eference Points From start to end of job	From end to Following RP	Following RP	Drawn NPK Designed	ENG. AREA J.		CERTIFICATION (RPEQ) SIGNATURE	NO. 7835	DATE 14/10/16 Drawing No. Series Number	of MRR_Detail (06/13)

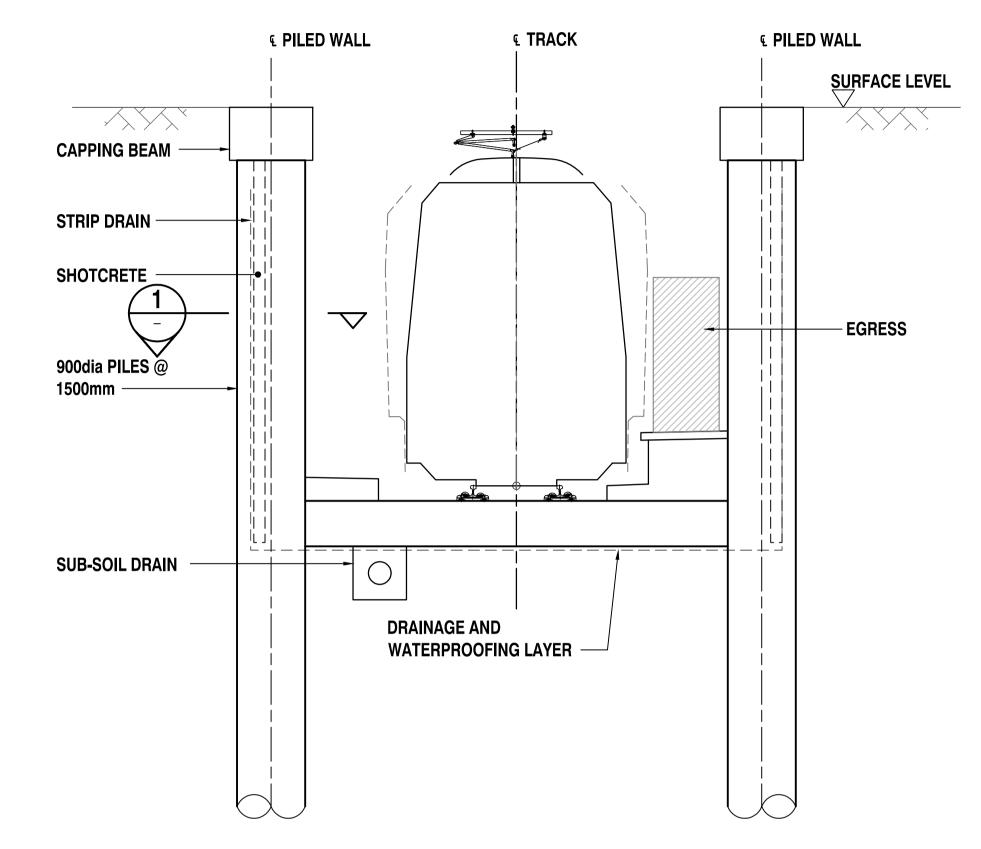
Level 4, 108 Wickham Street Fortitude Valley, QLD, Australia CRR-0002-PTL-GA-203

NOT FOR CONSTRUCTION

1 November 2016







TROUGH STRUCTURE - CANTILEVER PILE TYPICAL SECTION

:25p																	
4			Associated Job N	los Survey Data	Scales		В	RISBANE C	ITY				TUNNEL	WORKS		W TOPE W	
, 2016				Datum GDA94	A1 / A3 0 5 10 15 20m 1:500 / 1:1000		CR	OSS RIVER	RAIL		1		SOUTHERN				Queensland
lov 01			Auxiliary Drg N	os Horiz. Grid		R	EFERENCE D	ESIGN (CHAI	VGED PROJE	CT)	1	TY	PICAL DETAI	LED SECTIONS			Government
B M	MINOR REVISION	02/11/16		Height	 		R	Reference Points		•	Drawn	1	ENGINEERIN	NG CERTIFICATION (RPEQ)		Job No.	
i. A IS	SSUE FOR RFPC	14/10/16		Origin		Preceding	Dist. to start	From start to	From end to	Following	NPK	ENG. AREA	NAME	SIGNATURE	NO. DATE	Contract. No).
diffie				Survey	Dimensions shown in	- RP	of job (km)	end of job	Following RP	RP	- Designed	CIVIL J.	. DONOHUE		7835 14/10/16	Drawing No.	l IBI
№	Revisions/Descriptions	Certification Date Mic	ofiled	Books	Dimensions shown in except where shown otherwise						Designed					Series Numbe	of
CAD FII	ILES C:\Projectwise\Export\CRR\CRR-0002-PTL-GA-203.de	wg	•	•	•	Through Chair	age from	•		•	JU						MRR_Detail (06/13)

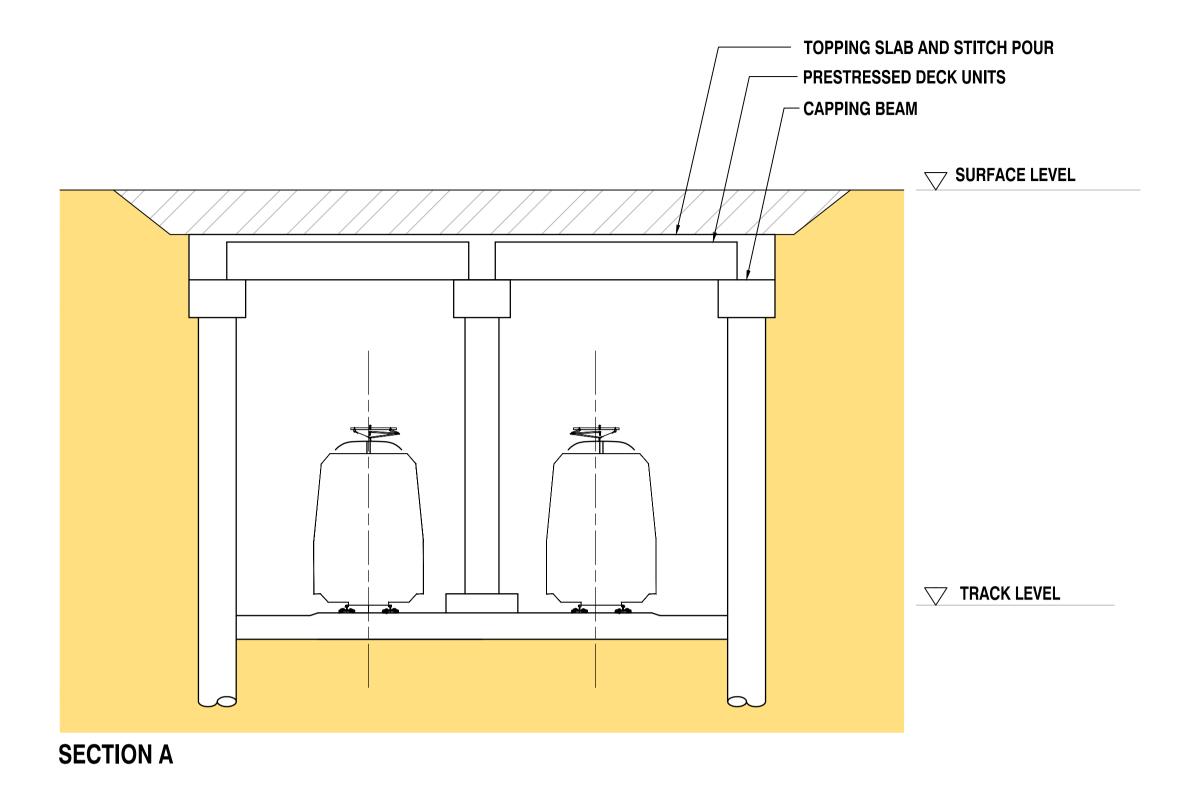
ARUP
Drawing Number

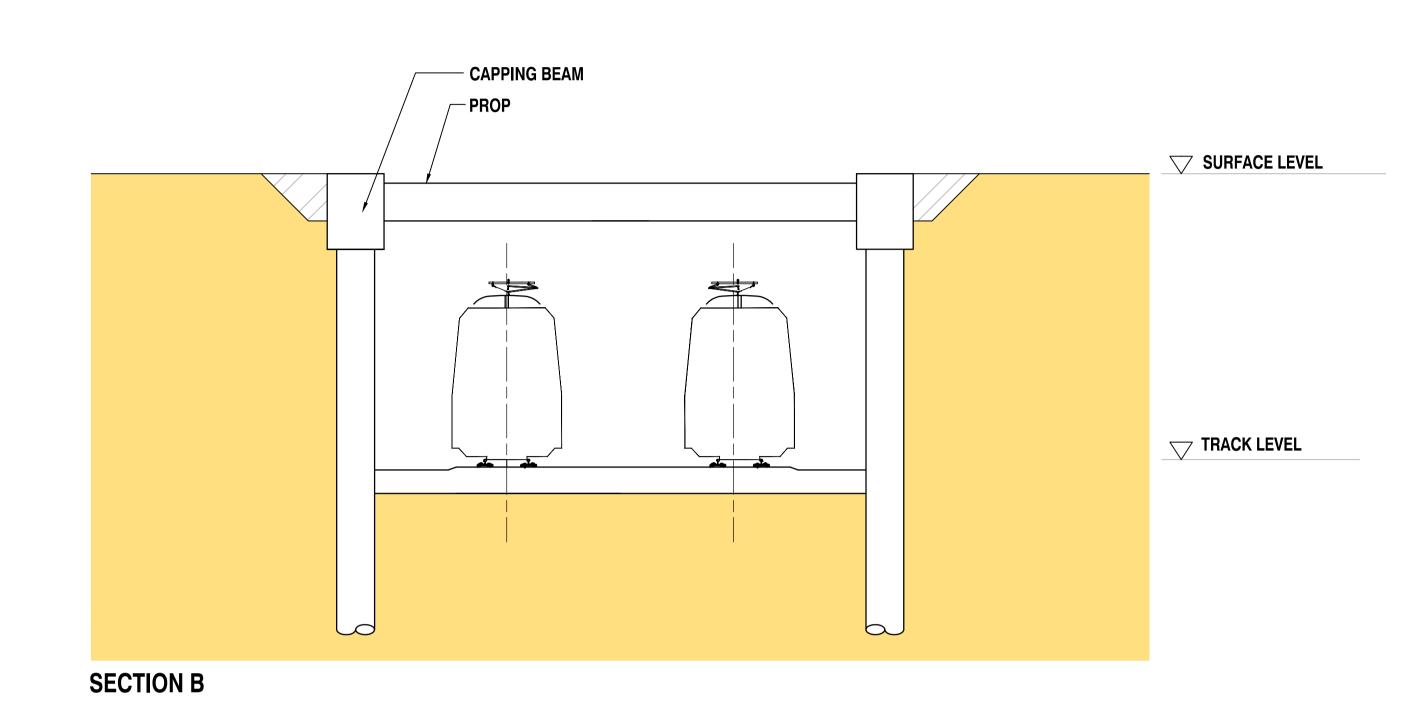
CRR-0002-PTL-GA-205

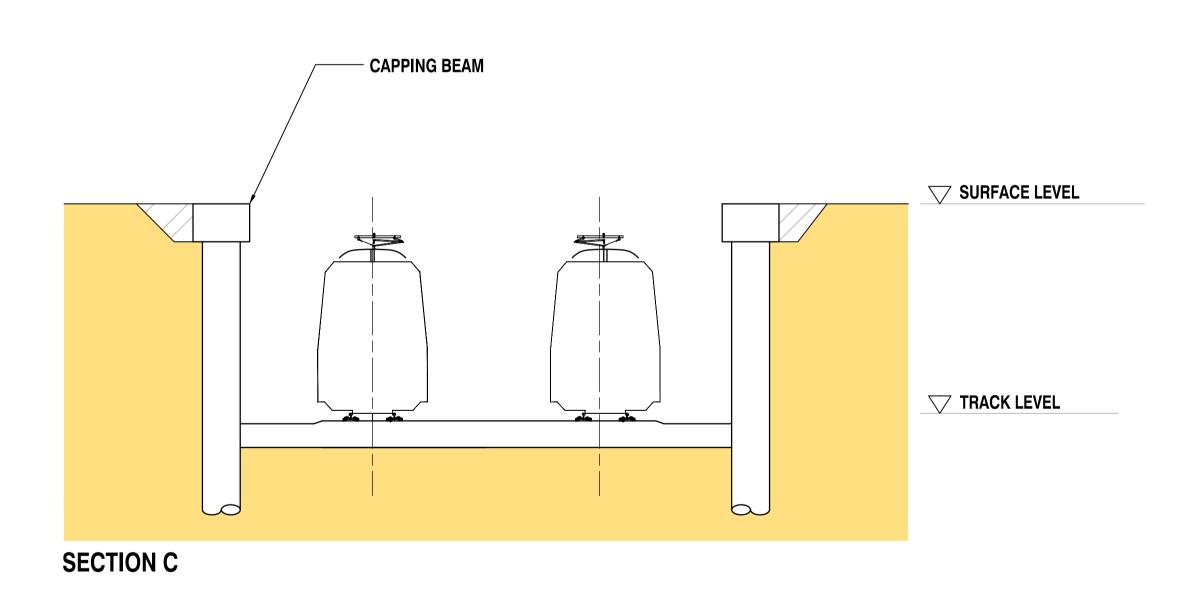
Level 4, 108 Wickham Street
Fortitude Valley, QLD, Australia

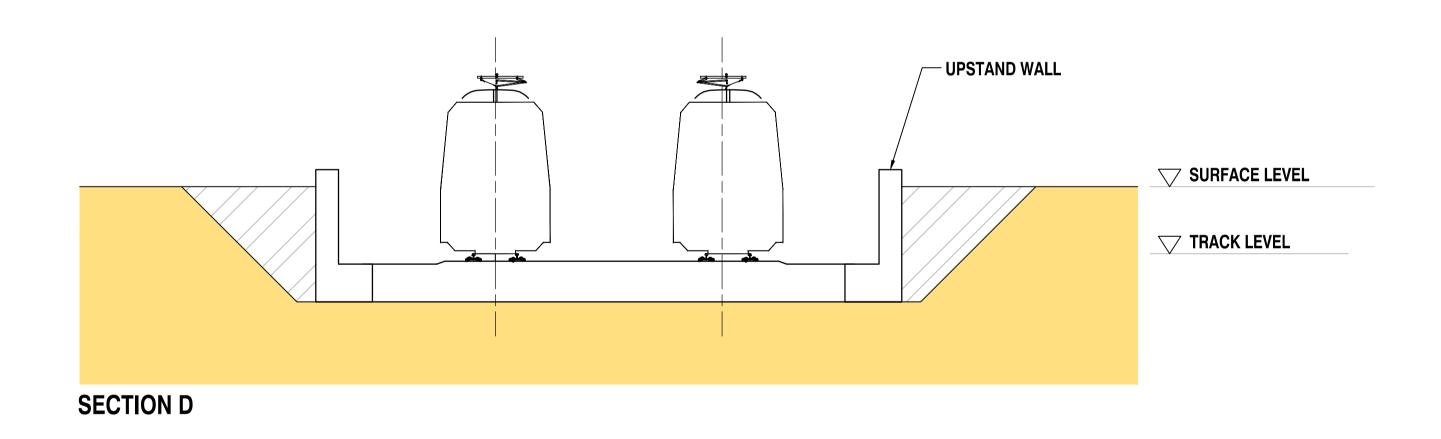
NOT FOR CONSTRUCTION

1 November 2016

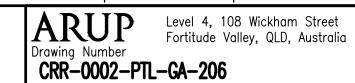


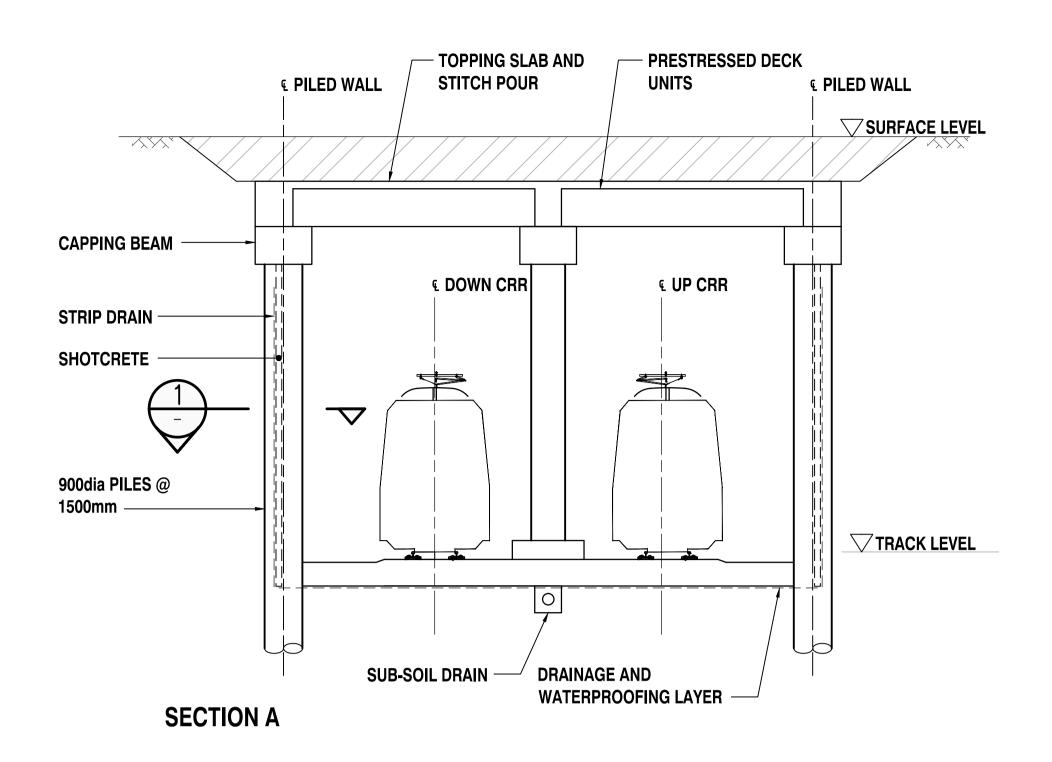


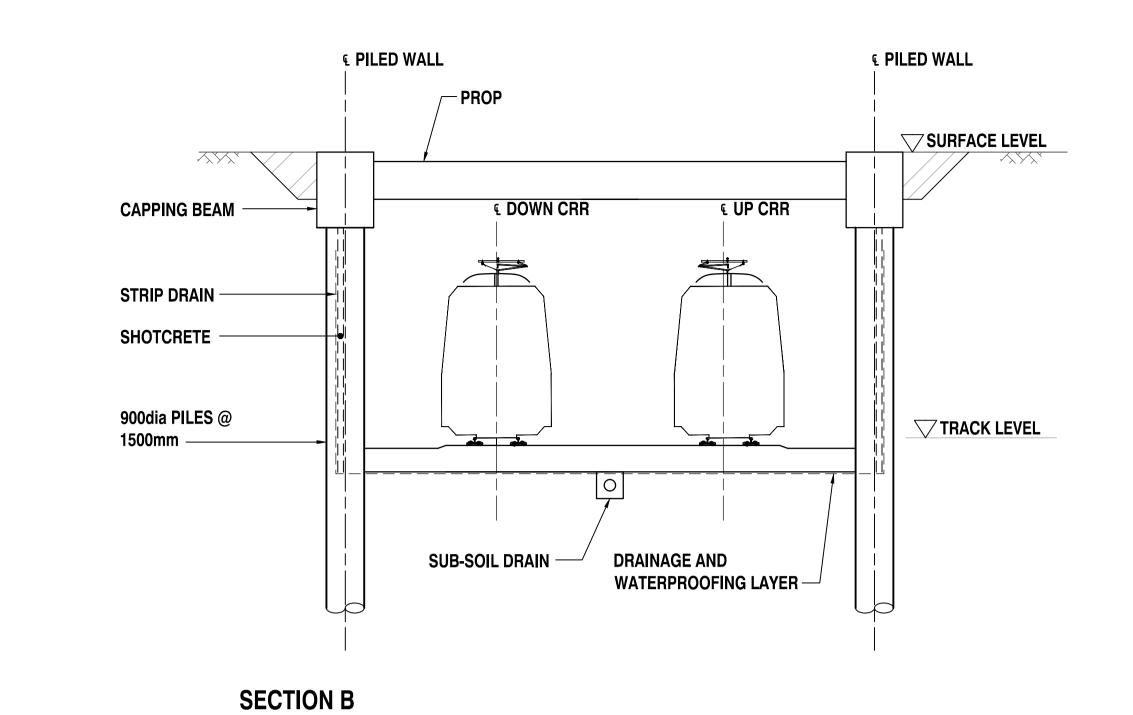


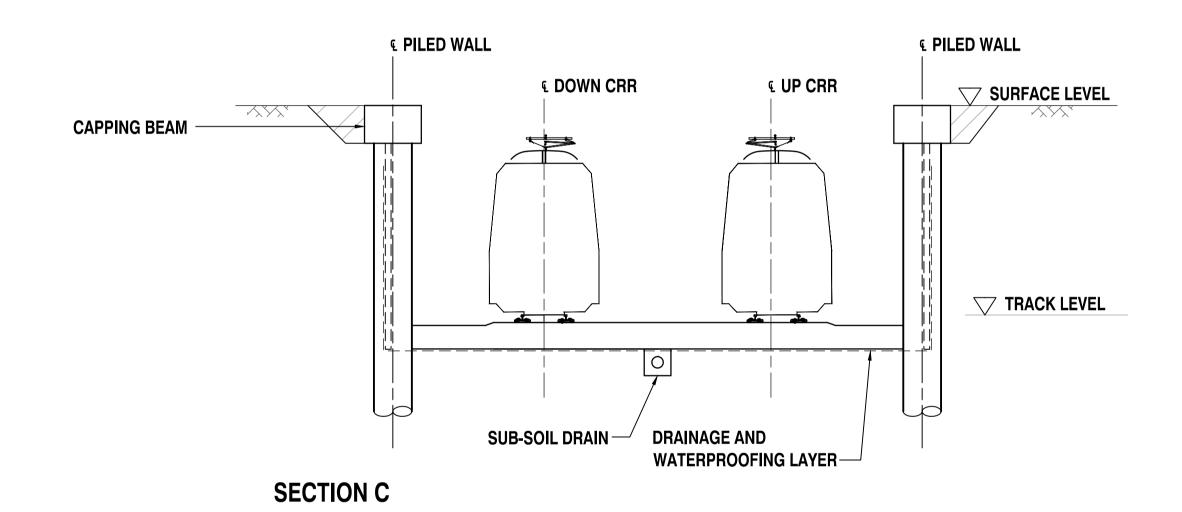


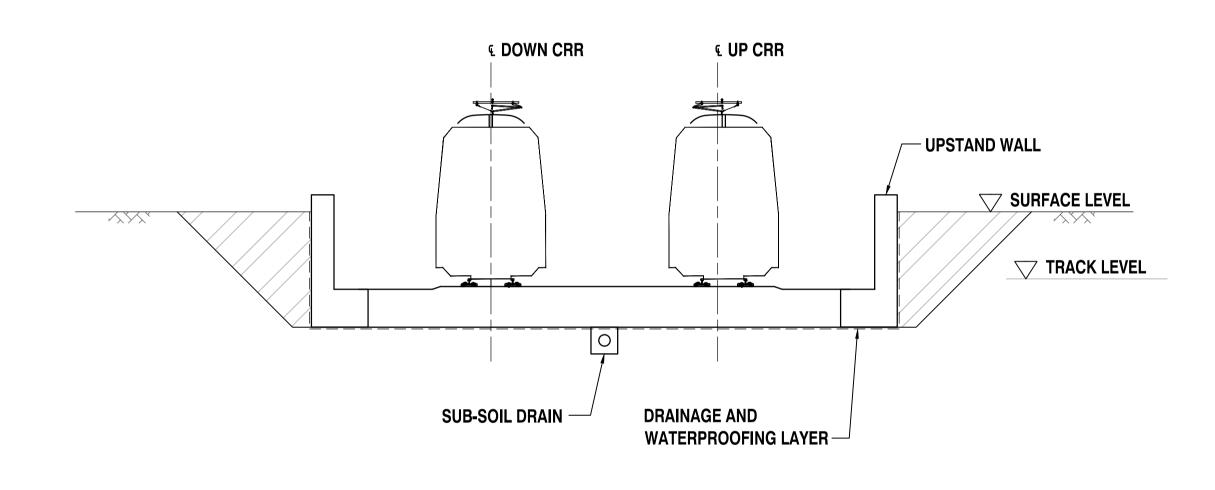
				Associated Job No	os S	urvey Data	Scales		В	BRISBANE C	ITY				TUNNEL	WORKS		DE M	0
					Datum	GDA94	A1 / A3 0 1000 2000mr 1:50 / 1:100	n	CR	ROSS RIVER	RAIL				NOTHERN	I PORTAL			Queenslan
				Auxiliary Drg No	s Horiz. Grid		A1 / A3 0 500 1000mr	n R	EFERENCE D	DESIGN (CHA	NGED PROJE	CT)			TYPICAL	SECTIONS			Governmer
MINOR REVISION		02/11/16			Height		1.25 / 1.50		F	Reference Points			Drawn		ENGINEERII	NG CERTIFICATION (RPEQ)	Job N		
ISSUE FOR RFPC		14/10/16			Origin			Preceding	Dist. to start	From start to	From end to	Following	NPK	ENG. AREA	NAME	SIGNATURE	NO. DATE Contro	uct. No.	
					Survey		Nimensions shown in	- RP	of job (km)	end of job	Following RP	RP	Designed	CIVIL	J. DONOHUE		7835 14/10/16 Drawi r	ng No.	1
Revisions/Descriptions	Certification	Date	Microfile	d	Books		Dimensions shown in except where shown otherwise						Designed				Series	Number	of
D FILES C:\Projectwise\Export\CRR\CRR-0002-PTL-	GA-205.dwg	•		-	•			Through Chain	age from		•	•	T JD						MRR_Detail (06/13

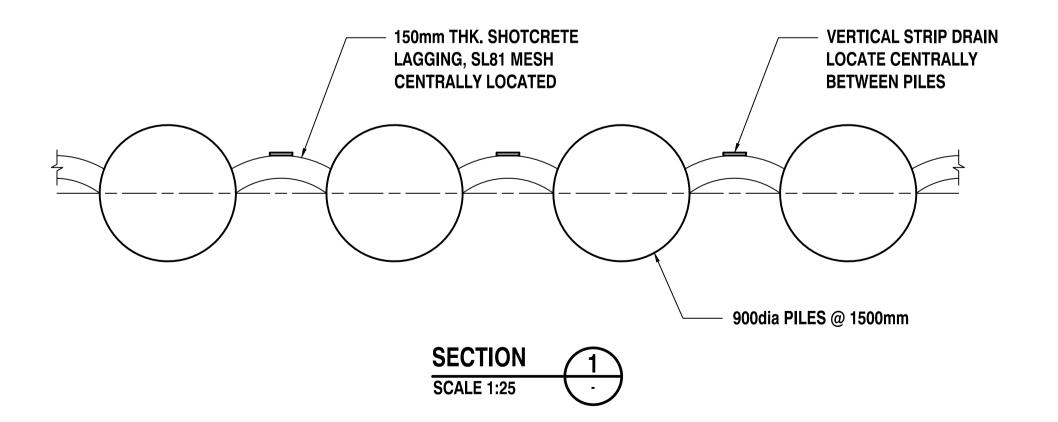












Associated Job Nos

Survey Data

SECTION D

BRISBANE CITY			TUNNEL W				WE THE THE PARTY OF THE PARTY O	Queensland
CROSS RIVER RAIL		_	NORTHERN					Governmen
PEFERENCE DESIGN (CHANGED PROJECT)		_	TYPICAL DETAILE	ED SECTIONS			1	Governmen
Reference Points	Drawn		ENGINEERING (CERTIFICATION (RPEQ)			Job No.	
Dist. to start From start to From end to Following	T NPK	ENG. AREA	NAME	SIGNATURE	NO.	DATE	Contract. No.	
of job (km) end of job Following RP RP		CIVIL	J. DONOHUE		7835	14/10/16	Drawing No.	
	— Designed						Series Number	of
nage from	ע ו ד							MRR_Detail (06/13

NOT FOR

CONSTRUCTION

1 November 2016

Datum Auxiliary Drg Nos Horiz. Grid MINOR REVISION 02/11/16 Height Origin Survey Books ISSUE FOR RFPC 14/10/16 Preceding RP Dimensions shown in Revisions/Descriptions Date Microfiled Certification except where shown otherwise CAD FILES | C:\Projectwise\Export\CRR\CRR-0002-PTL-GA-206.dwg Through Chainac

Dimensions shown in

except where shown otherwise

Through Chainage from

Revisions/Descriptions

CAD FILES C:\projectwise\bne_projects\stephen.grigg2\dms97298\CRR-0002-BR-GA-301.dwg

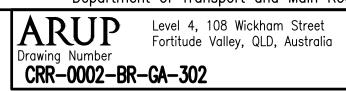
Date Microfiled

Certification

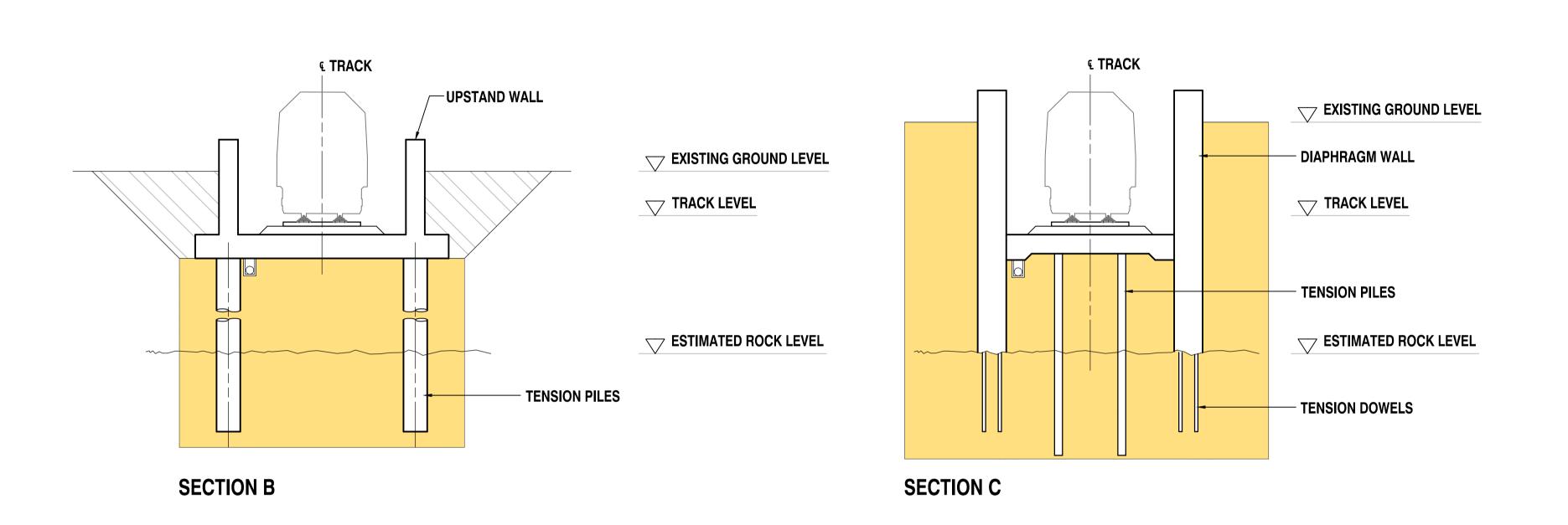
Designed

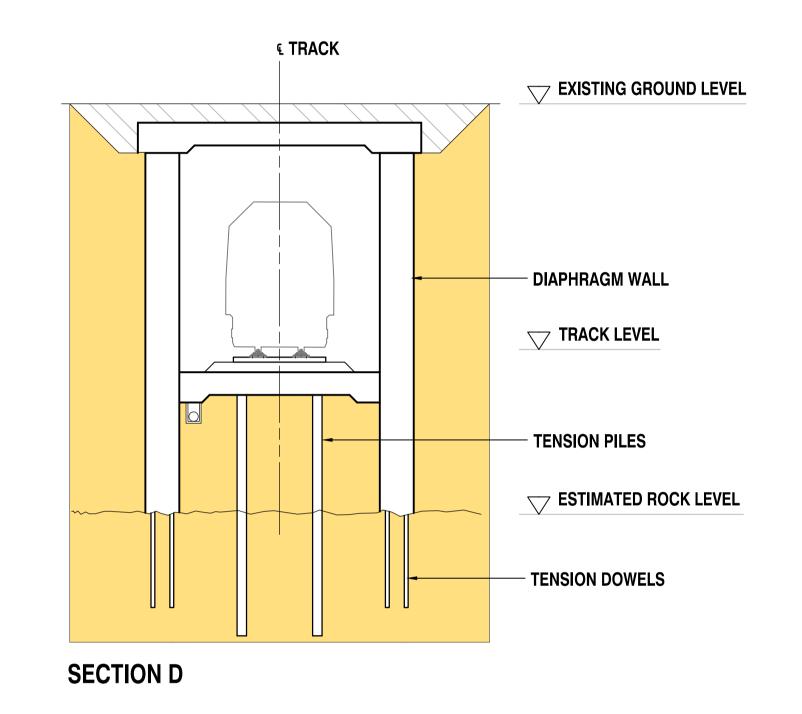
Series Number

MRR_Detail (06/13)









::24pm																
8 - 4			Associated Job Nos Survey Data	Scales		Bl	RISBANE CI	TY				MAYNE RA	IL YARD			Ousendand
, 2016			Datum GDA94	1:100 / 1:200		CR	OSS RIVER I	RAIL				UNDER	PASS			Queensland
ov 01			Auxiliary Drg Nos Horiz.		RE	FERENCE D	ESIGN (CHAI	IGED PROJE	CT)			TYPICAL S	ECTIONS		AUDAX AT FIDELIT	Government
Z E	B MINOR REVISION	02/11/16	Height	1			eference Points			Drawn		ENGINEERING	CERTIFICATION (RPEQ)		Job No.	
ied	A ISSUE FOR RFPC	14/10/16	Origin	_	Preceding	Dist. to start	From start to end of job	From end to Following RP	Following RP	NPK	ENG. AREA	NAME	SIGNATURE	NO. DATE		П
t Modif	Revisions/Descriptions Certification	Date Microfiled	Survey Books	Dimensions shown in except where shown otherwise	I RP	of job (km)	end of Job	Tollowing INF	<u> </u>	Designed	CIVIL	J. DONOHUE		7835 14/10/	/16 Drawing No. Series Number	of
SD C	AD FILES C:\Projectwise\Export\CRR\CRR-0002-BR-GA-302.dwg				Through Chainag	ge from				עע [MRR_Detail (06/13)

4:24pm XREFS :- MRR_DETAIL_A1_Ref.dwg ; X-CRR-DBRI-0001-MAYNE_UNDERPASS_DETAILS.dw