

Dear

Thank you for your request, received on 14 July. You requested the following information, under the Local Government Official Information and Meetings Act 1987 (LGOIMA):

"Plans for the Dyers Pass Road Guardrails and copies of the rational and evidence supporting the case for the barriers".

Please find below a link the following documents. Please ensure you download and save the files as the link is only active for 14 days.

- Dyers Pass Road Guardrails Tender Site Plans
- Dyers Pass Road Guardrails Rational and Business Case

https://christchurchcitycouncil.sharefile.com/d-s220897b24d194f66bf852bc2d485d5b2

You will note a small redaction has been made, this is being withheld under the following section of the LGOIMA:

• 7(2)(a) – to protect the privacy of natural persons

For your reference, below is a link to the agenda and minutes from the Spreydon-Cashmere Community Board and Banks Peninsula Community Board meeting on 2 March 2018 in which the proposed safety improvements and speed limit change are addressed.

Agenda - https://christchurch.infocouncil.biz/Open/2018/03/JSBB 20180302 AGN 2618 AT.PDF Minutes - https://christchurch.infocouncil.biz/Open/2018/03/JSBB 20180302 MIN 2618 AT.PDF

The purpose of this project is to improve safety by installing guardrails in high-risk locations, which should reduce the severity of crashes where vehicles leave the road. In the area where new guardrails are being installed, the sealed road width will be increased by 1.25m providing more space for all road users. On the uphill side of the roadway where guardrails are being installed, a new 0.5m sealed shoulder will provide additional space as part of the 1.25m widening. Please be assured that these works are improving the safety of the road for users.

If you require any clarification, please let me know.

You have the right to ask the Ombudsman to investigate and review our decision. Complaints can be sent by email to info@ombudsman.parliament.nz.

Publication of responses to LGOIMA requests

Please note: our LGOIMA responses may be published on the Christchurch City Council website a month after they have been responded to, with requesters' personal details withheld. If you have any concerns about this please contact the Official Information team on officialinformation@ccc.govt.nz.

Yours sincerely,

Ana Macadie

Information AdvisorOffice of the Mayor and Chief Executive

DYERS PASS ROAD - SAFETY IMPROVEMENTS SITE 1 - CH3244 TO 3420



0 50 100 150 200 250m SCALE 1:5000 AT ORIGINAL SIZE

FOR TENDER
NOT FOR CONSTRUCTION

C FOR TENDER DM* 14/02/20
B FOR SAFETY AUDIT DM* 22/10/19
A PRELIMINARY
ISSUE AMENDMENTS SIGNED DATE

Christchurch City Council

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BENCH MK.		DESIGNED	A. MALDEN	AM*	14/02/20	FOR	R TENDER	
RL		DES. REVIEW	A. WATT	AW*	14/02/20	DATE	SIGNED	
SURVEY		DRAWN	G. ALDERSLEY	GA*	14/02/20	14/02/20	DM*	
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		AERIAL PHOTOGRAPHY © COPYRIGHT						

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3 378 0900 F 64 3 377 8575 E chcmail@ghd.co.nz W www.ghd.co.nz

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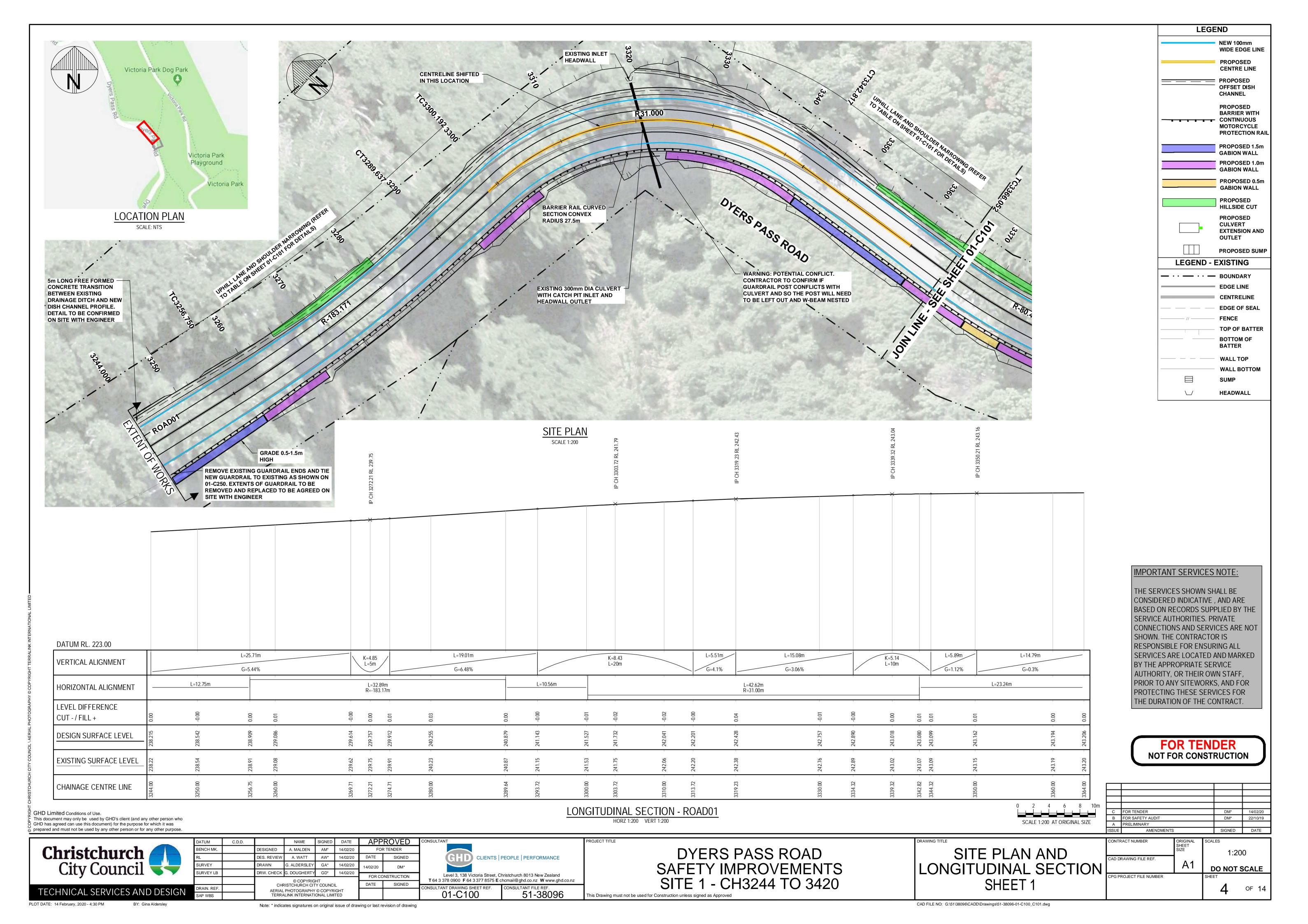
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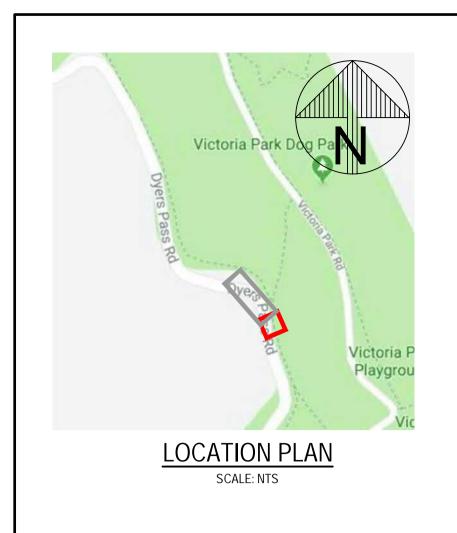
DYERS PASS ROAD SAFETY IMPROVEMENTS SITE 1 - CH3244 TO 3420

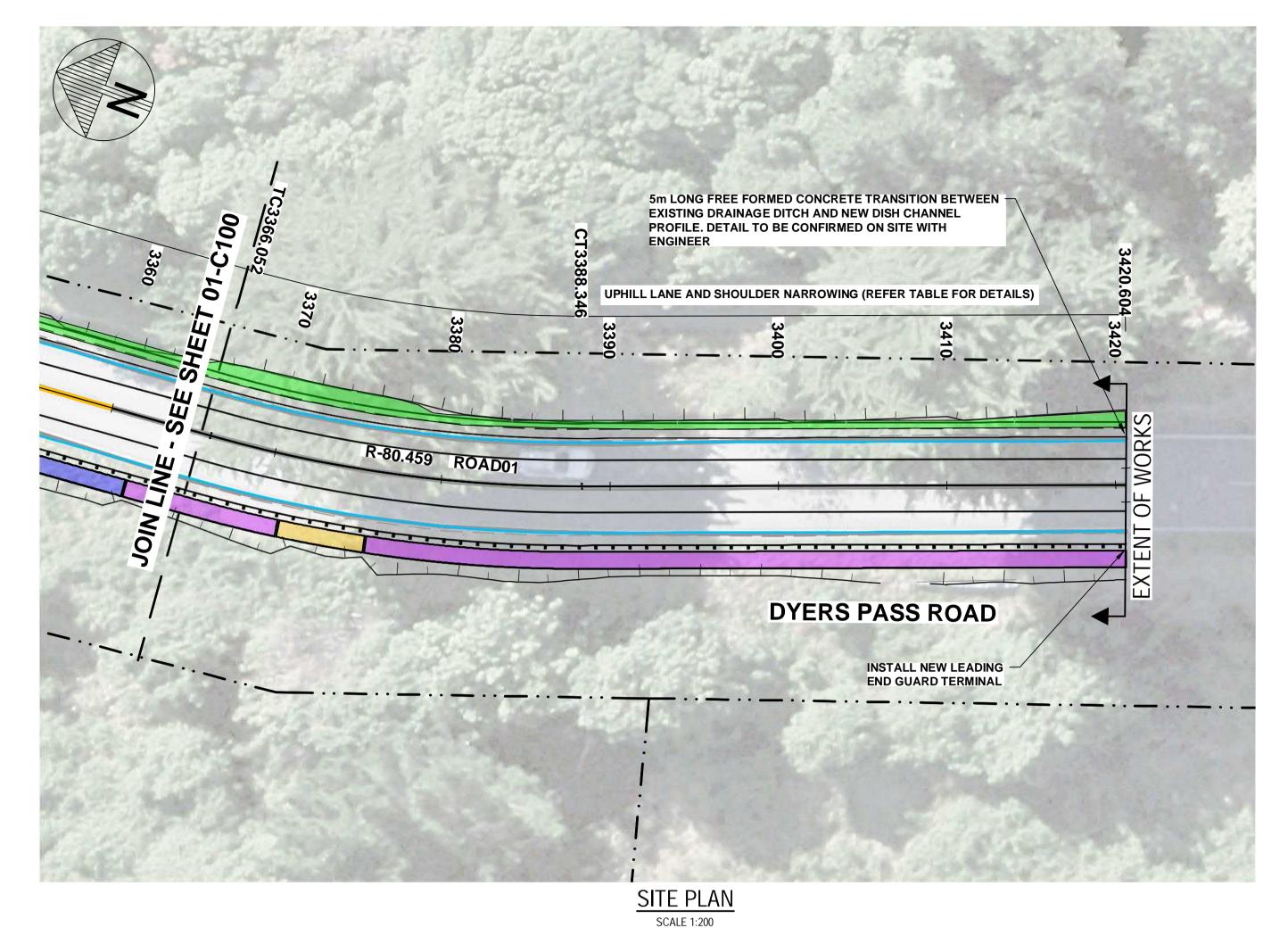
COVER SHEET AND LOCATION PLAN

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LONGITUDINAL SECTION - ROAD01

HORZ 1:200 VERT 1:200

LEGEND NEW 100mm **WIDE EDGE LINE PROPOSED CENTRE LINE** = PROPOSED OFFSET DISH CHANNEL **PROPOSED BARRIER WITH** CONTINUOUS MOTORCYCLE **PROTECTION RAIL GABION WALL** PROPOSED 1.0m GABION WALL PROPOSED 0.5m GABION WALL PROPOSED **HILLSIDE CUT** PROPOSED CULVERT **EXTENSION AND** OUTLET PROPOSED SUMP **LEGEND - EXISTING** — · · · — BOUNDARY EDGE LINE CENTRELINE **EDGE OF SEAL FENCE TOP OF BATTER BOTTOM OF BATTER** WALL TOP WALL BOTTOM **HEADWALL**

ROAD NARROWING TABLE					
LOCATION	DETAILS				
R3270-RP3380 (+20m TRANSITION EITHER SIDE)	UPHILL LANE 2.6m UPHILL SHOULDER 0.25m BACK OF CHANNEL 0m				
RP3351-RP3420 (+20m TRANSITION EITHER SIDE)	UPHILL LANE 2.6m UPHILL SHOULDER 0.25m BACK OF CHANNEL 0m				

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FOR TENDER
NOT FOR CONSTRUCTION

0 2 4 6 8 10m				
	С	FOR TENDER	DM*	14/02/20
	В	FOR SAFETY AUDIT	DM*	22/10/19
SCALE 1:200 AT ORIGINAL SIZE	Α	PRELIMINARY		
	ISSUE	AMENDMENTS	SIGNED	DATE

Christchurch City Council

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RL			DES. REVIEW	A. WATT	AW*	14/02/20	DATE	SIGNED
SU	JRVEY		DRAWN	G. ALDERSLEY	GA*	14/02/20	14/02/20	DM*
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_			© COPYRIGHT CHRISTCHURCH CITY COUNCIL				DATE	SIGNED
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	hristchurch 8013 New Zealand				
1 64 3 378 0900 F 64 3 377 8575 E C	hcmail@ghd.co.nz W www.ghd.co.nz				
CONSULTANT DRAWING SHEET REF.	CONSULTANT FILE REF.				
01-C101	51-38096				

DYERS PASS ROAD SAFETY IMPROVEMENTS SITE 1 - CH3244 TO 3420

DRAWING TITLE	CONT
SITE PLAN AND LONGITUDINAL SECTION	CAD [
SHEET 2	CPG I

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DYERS PASS ROAD - SAFETY IMPROVEMENTS SITE 2 - CH4247 TO 4524



SCALE 1:5000 AT ORIGINAL SIZE

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C FOR TENDER DM* 14/02/20
B FOR SAFETY AUDIT DM* 22/10/19
A PRELIMINARY
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RL DES. REVIEW A. WATT AW* 14/02/20 DATE SIGNED

SURVEY DRAWN G. ALDERSLEY GA* 14/02/20 DM*

SURVEY LB DRW. CHECK G. DOUGHERTY GD* 14/02/20 FOR CONSTRUCTION

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DYERS PASS ROAD SAFETY IMPROVEMENTS SITE 2 - CH4247 TO 4524

COVER SHEET AND LOCATION PLAN

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CONTRACT NUMBER

ORIGINAL SHEET SIZE

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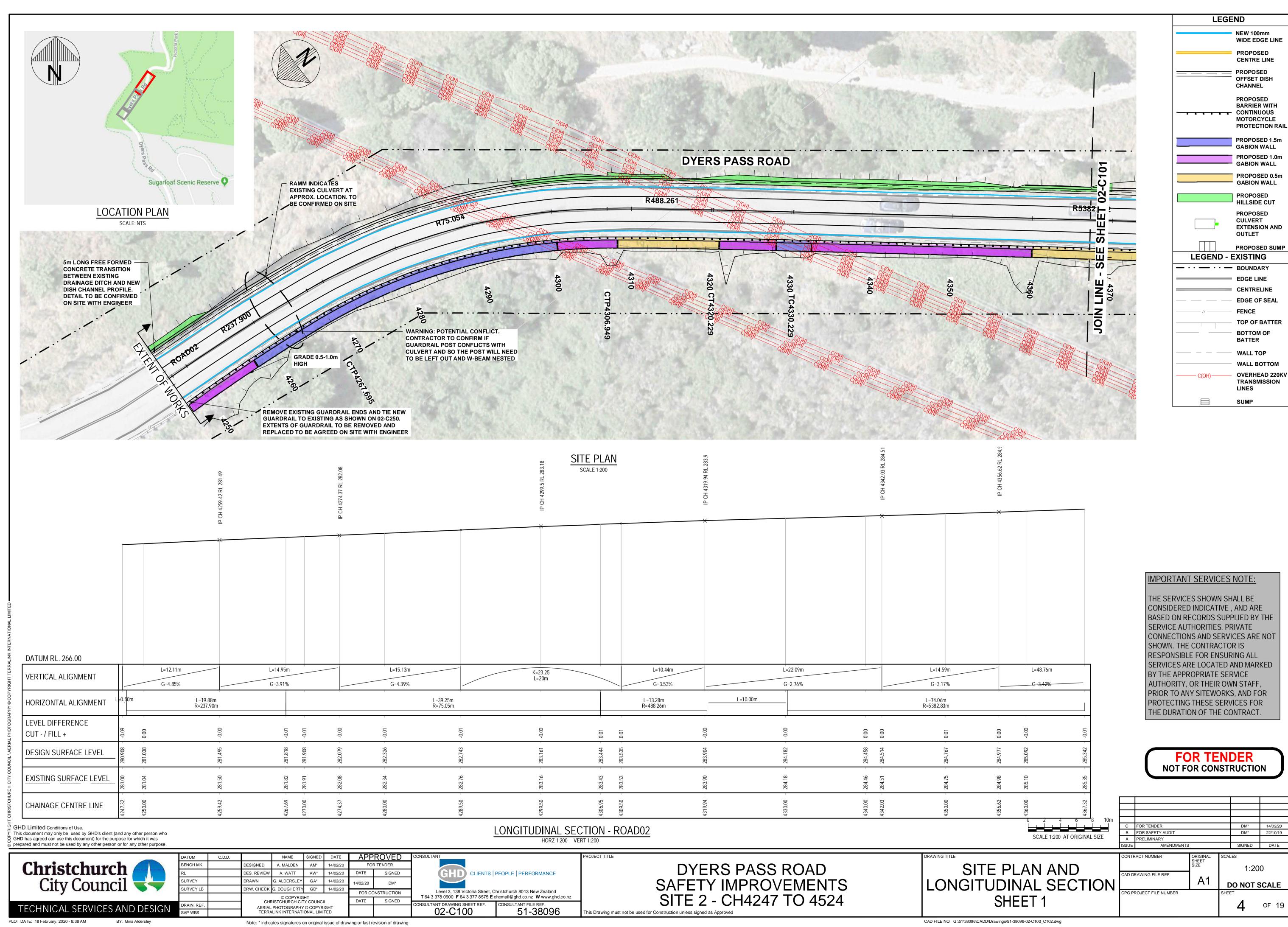
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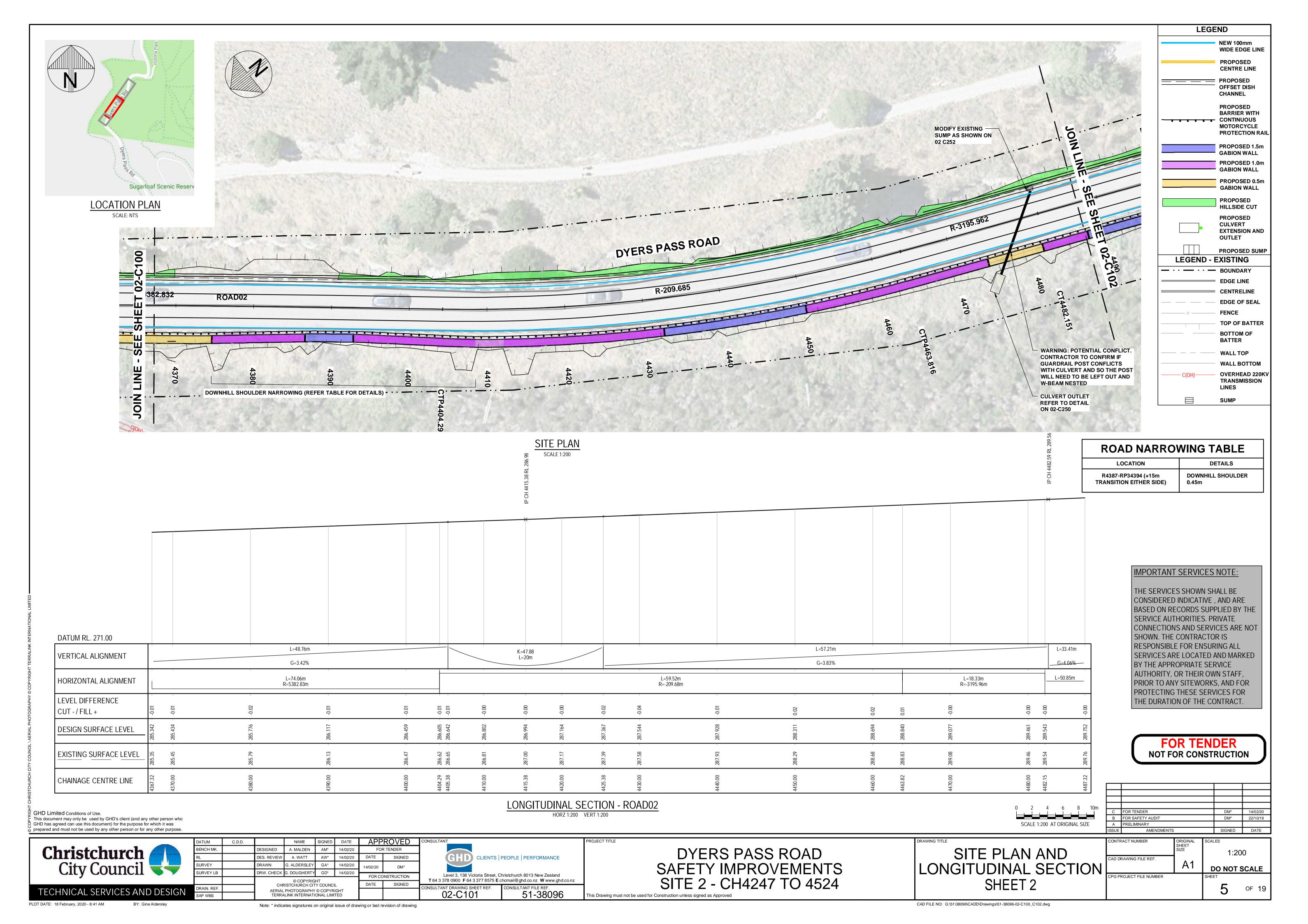
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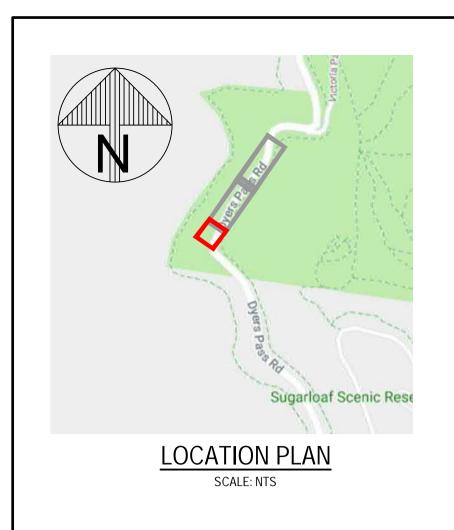
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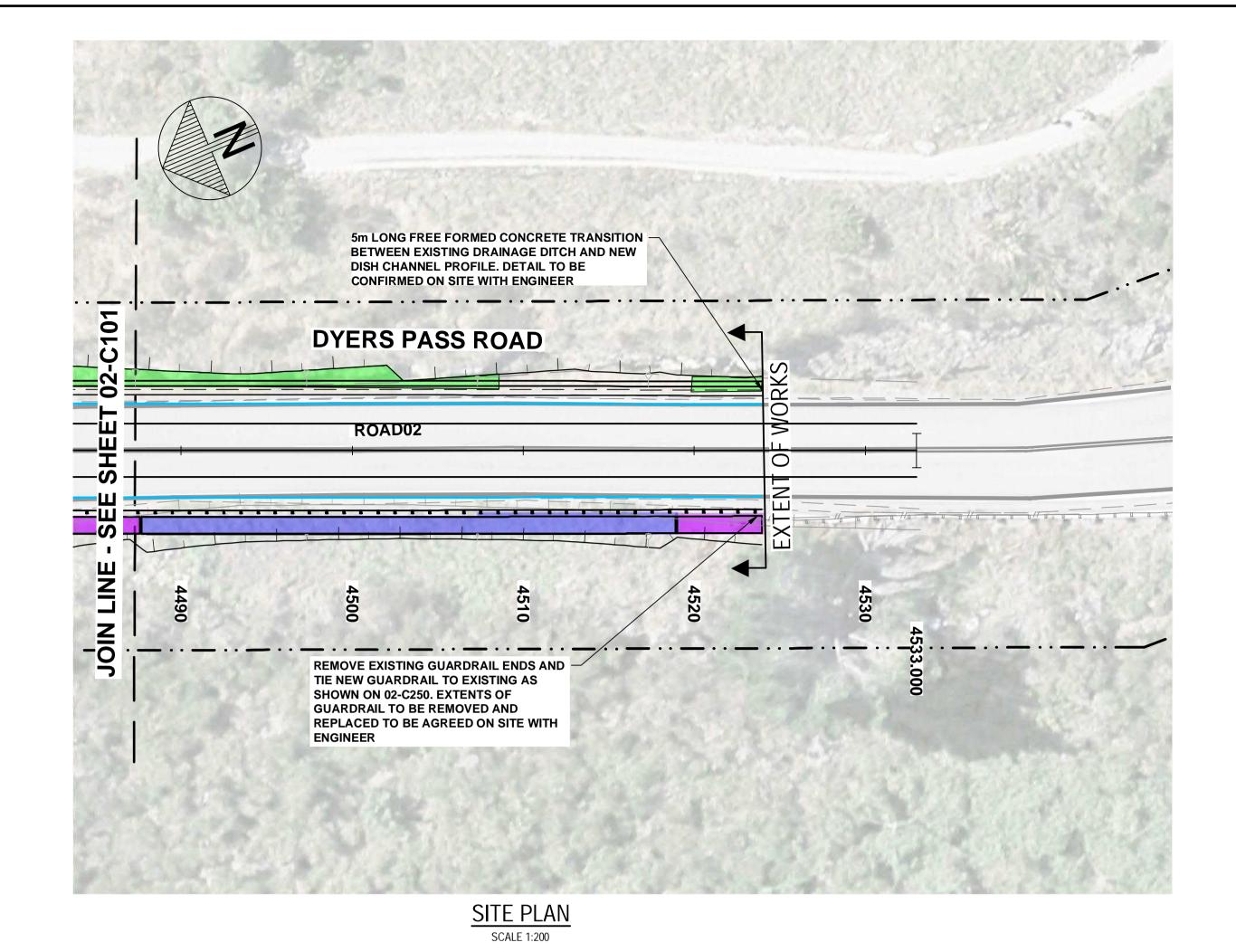
SHEET

OF 19









L=33.41m L=17m G=4.06% G=3.53% L=50.85m

LONGITUDINAL SECTION - ROAD02

HORZ 1:200 VERT 1:200

02-C102

51-38096

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DYERS PASS ROAD

SITE PLAN AND LONGITUDINAL SECTION SHEET 3

A PRELIMINARY AMENDMENTS SIGNED DATE 1:200 CAD DRAWING FILE REF. DO NOT SCALE CPG PROJECT FILE NUMBER 6 OF 19

B FOR SAFETY AUDIT

IMPORTANT SERVICES NOTE:

LEGEND

CONTINUOUS

NEW 100mm **WIDE EDGE LINE**

PROPOSED **CENTRE LINE**

PROPOSED **OFFSET DISH** CHANNEL

PROPOSED BARRIER WITH

MOTORCYCLE

GABION WALL PROPOSED 1.0m GABION WALL

PROPOSED 0.5m GABION WALL

HILLSIDE CUT

EXTENSION AND

PROPOSED SUMP

PROPOSED

CULVERT

OUTLET

EDGE LINE

FENCE

EDGE OF SEAL

TOP OF BATTER

BOTTOM OF

WALL TOP

WALL BOTTOM **OVERHEAD 220KV** TRANSMISSION

BATTER

LINES

SUMP

LEGEND - EXISTING

— · · · — BOUNDARY

PROTECTION RAIL

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> FOR TENDER NOT FOR CONSTRUCTION

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ATUM ENCH MK. DATE SIGNED CHRISTCHURCH CITY COUNCIL AERIAL PHOTOGRAPHY © COPYRIGHT

DATUM RL. 275.00

VERTICAL ALIGNMENT

LEVEL DIFFERENCE

CUT - / FILL +

HORIZONTAL ALIGNMENT

DESIGN SURFACE LEVEL

EXISTING SURFACE LEVEL

CHAINAGE CENTRE LINE

SAFETY IMPROVEMENTS SITE 2 - CH4247 TO 4524

DYERS PASS ROAD - SAFETY IMPROVEMENTS SITE 3 - CH4596 TO 4840



NOT FOR CONSTRUCTION

	ISSUE	AMENDMENTS		SIGNED	DATE
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	В	FOR SAFETY AUDIT		DM*	22/10/19
	С	FOR TENDER		DM*	14/02/20
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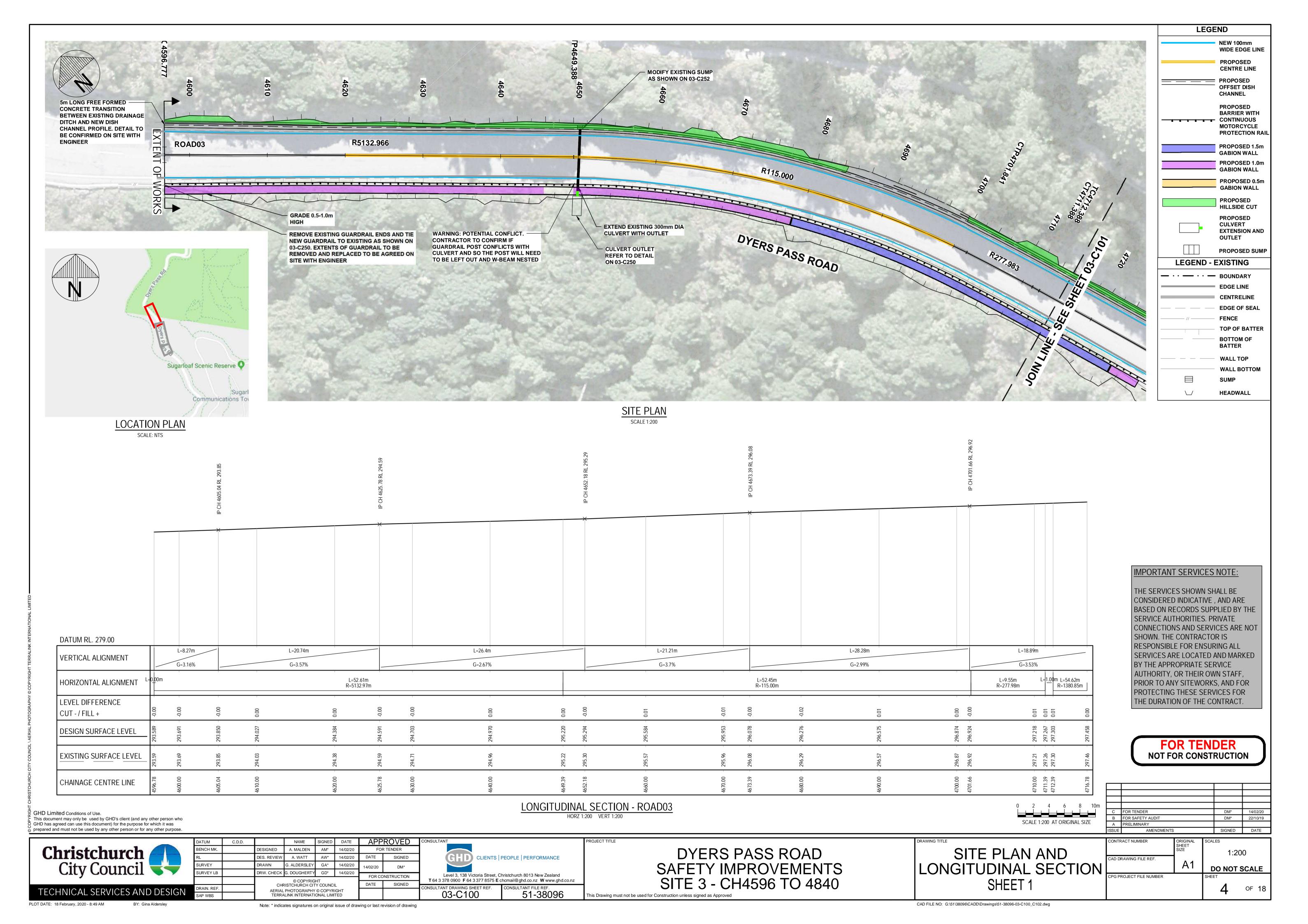
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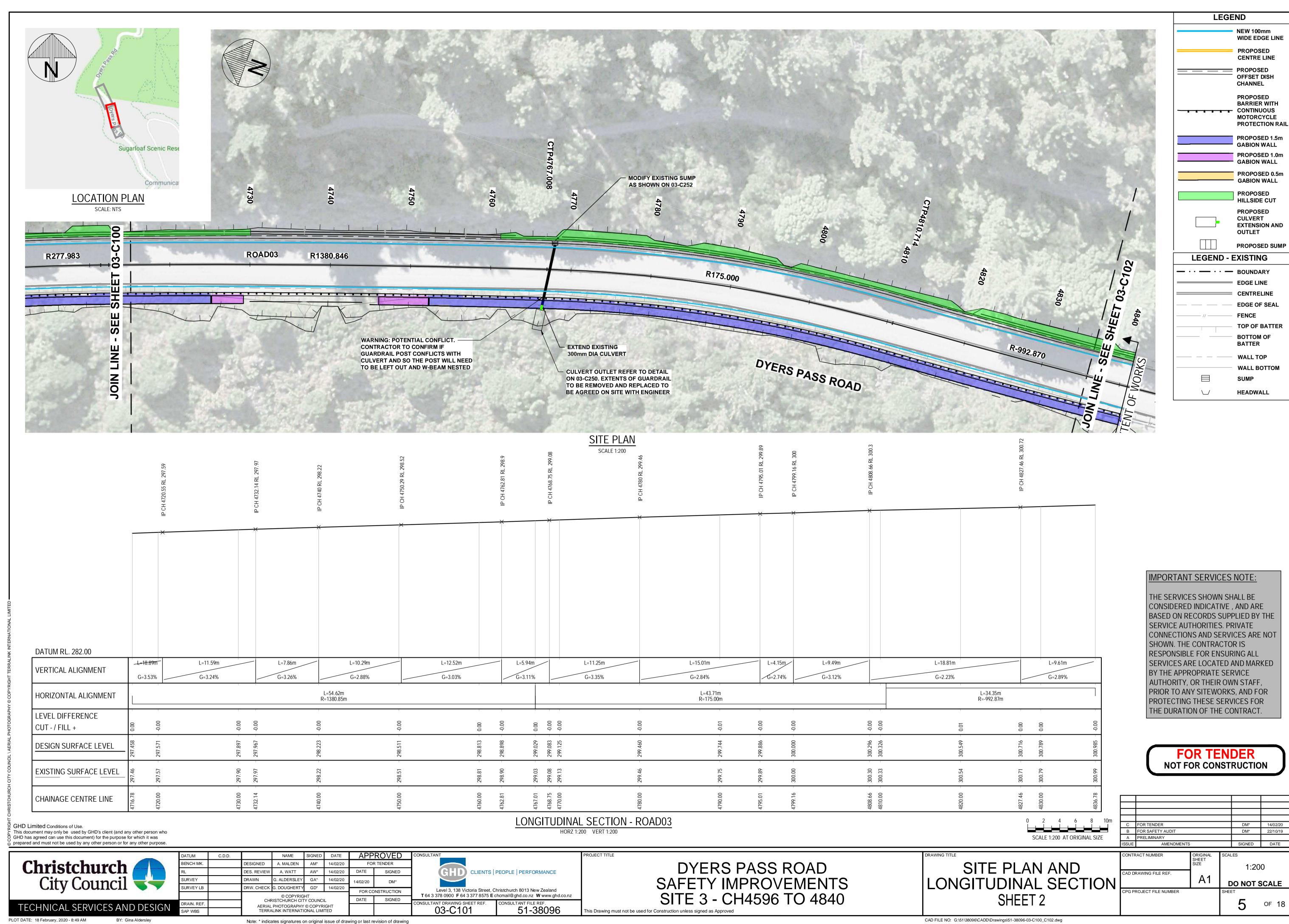
DYERS PASS ROAD SAFETY IMPROVEMENTS SITE 3 - CH4596 TO 4840

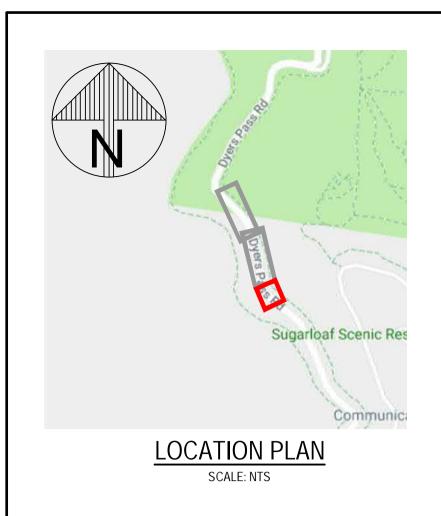
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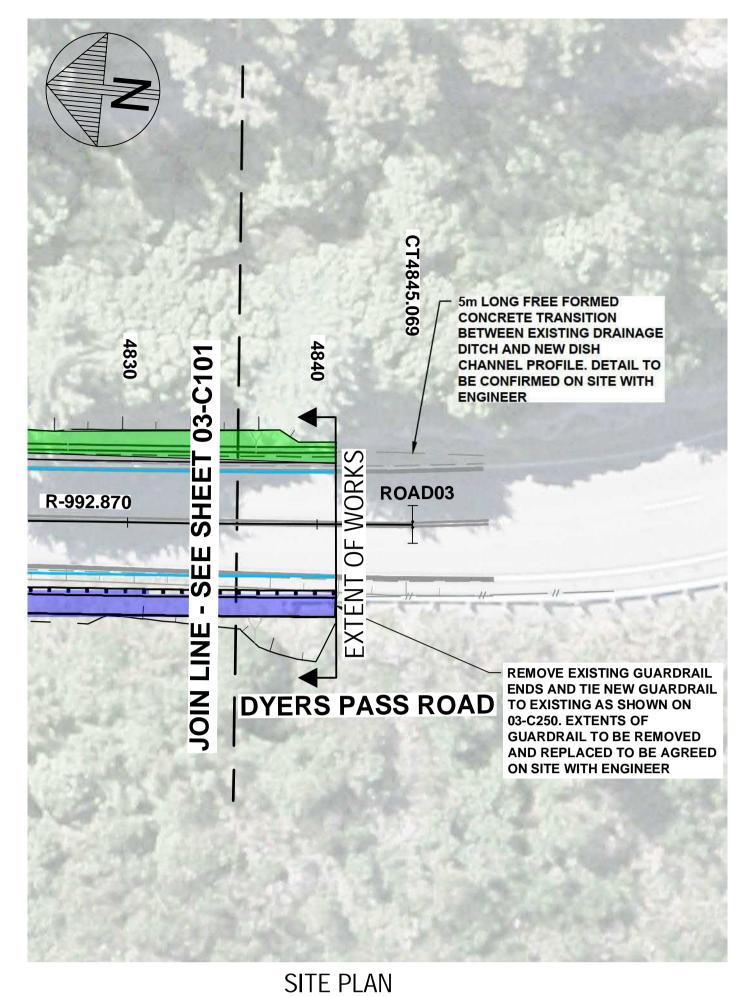
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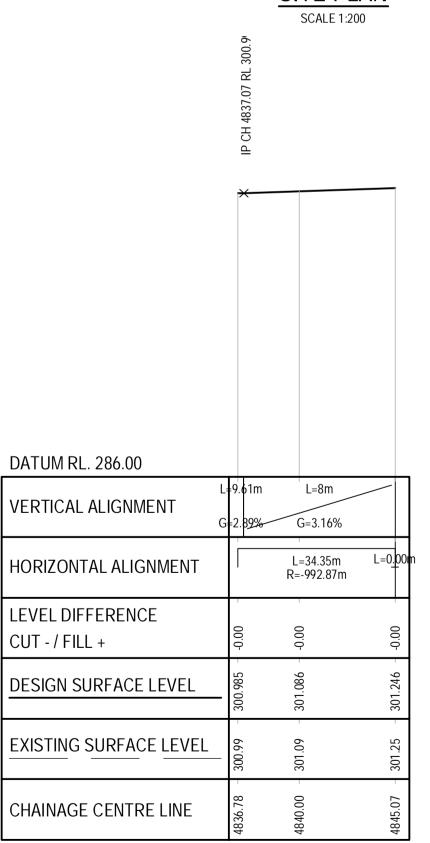
1:5000 DO NOT SCALE CPG PROJECT FILE NUMBER OF 18











LONGITUDINAL SECTION - ROAD03 HORZ 1:200 VERT 1:200

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DM*					
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DYERS PASS ROAD SAFETY IMPROVEMENTS SITE 3 - CH4596 TO 4840

SITE PLAN AND LONGITUDINAL SECTION SHEET 3

B FOR SAFETY AUDIT DM* A PRELIMINARY AMENDMENTS SIGNED DATE 1:200 CAD DRAWING FILE REF. DO NOT SCALE CPG PROJECT FILE NUMBER 6 OF 18

IMPORTANT SERVICES NOTE:

LEGEND

CONTINUOUS

NEW 100mm **WIDE EDGE LINE**

PROPOSED **CENTRE LINE**

= PROPOSED OFFSET DISH CHANNEL

> **PROPOSED BARRIER WITH**

MOTORCYCLE PROTECTION RAIL

PROPOSED 1.5m **GABION WALL**

PROPOSED 1.0m

PROPOSED 0.5m

GABION WALL

HILLSIDE CUT

EXTENSION AND

PROPOSED SUMP

PROPOSED CULVERT

OUTLET

EDGE LINE CENTRELINE

FENCE

EDGE OF SEAL

TOP OF BATTER

BOTTOM OF

BATTER

WALL TOP

HEADWALL

WALL BOTTOM

LEGEND - EXISTING

— · · · — BOUNDARY

GABION WALL

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TECHNICAL SERVICES AND DESIGN

DYERS PASS ROAD - SAFETY IMPROVEMENTS SITE 4 - CH4887 TO 5395



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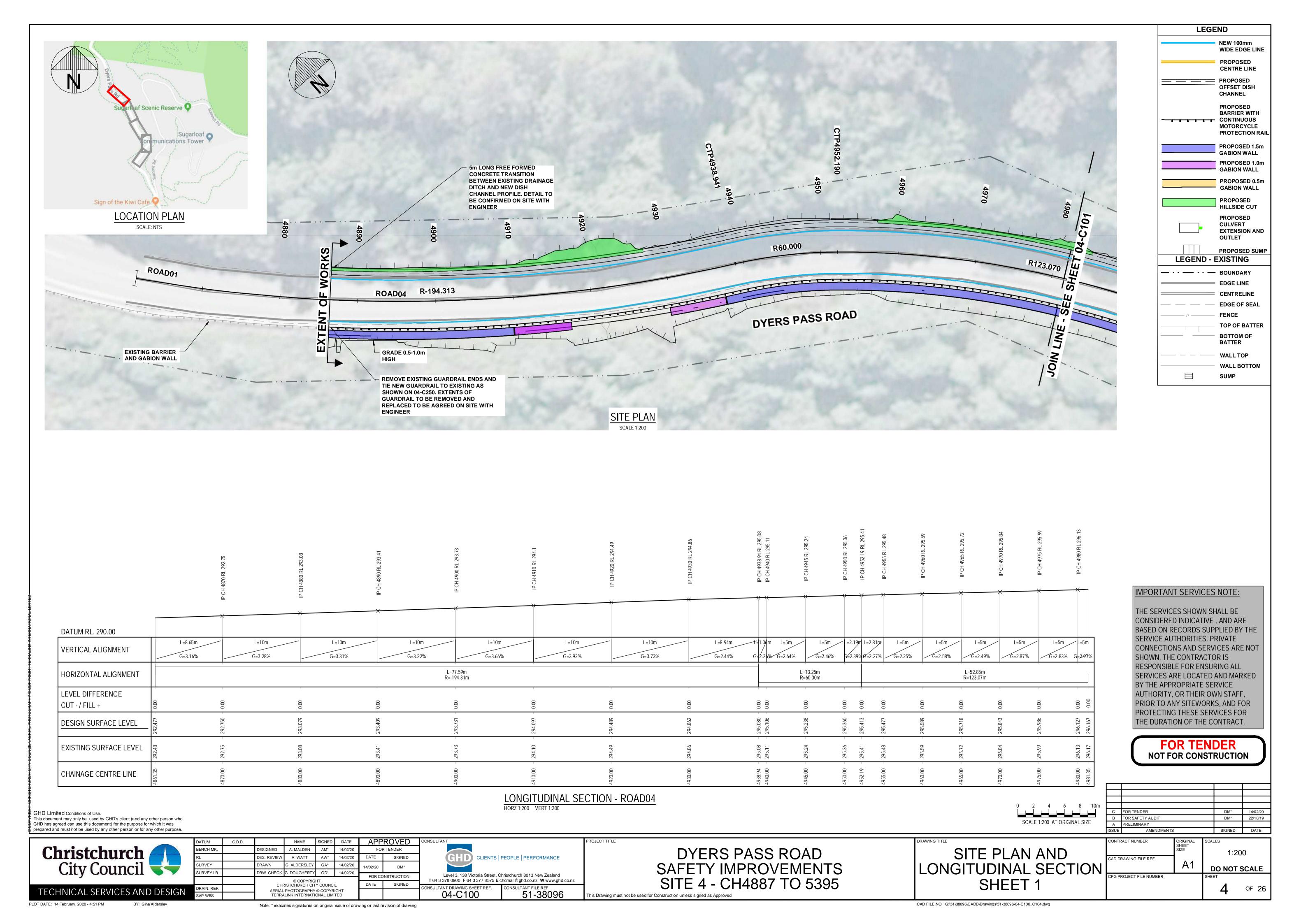
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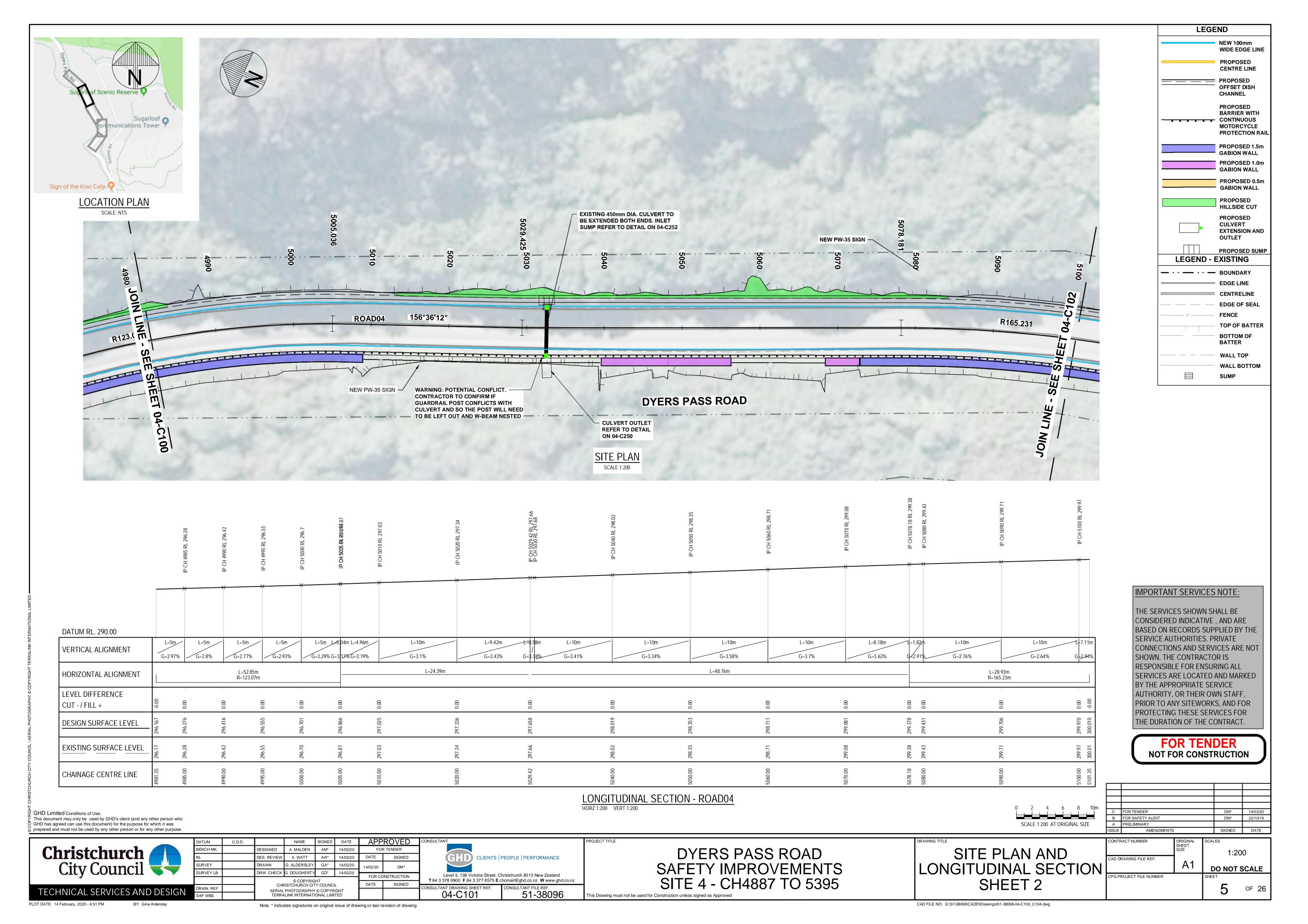
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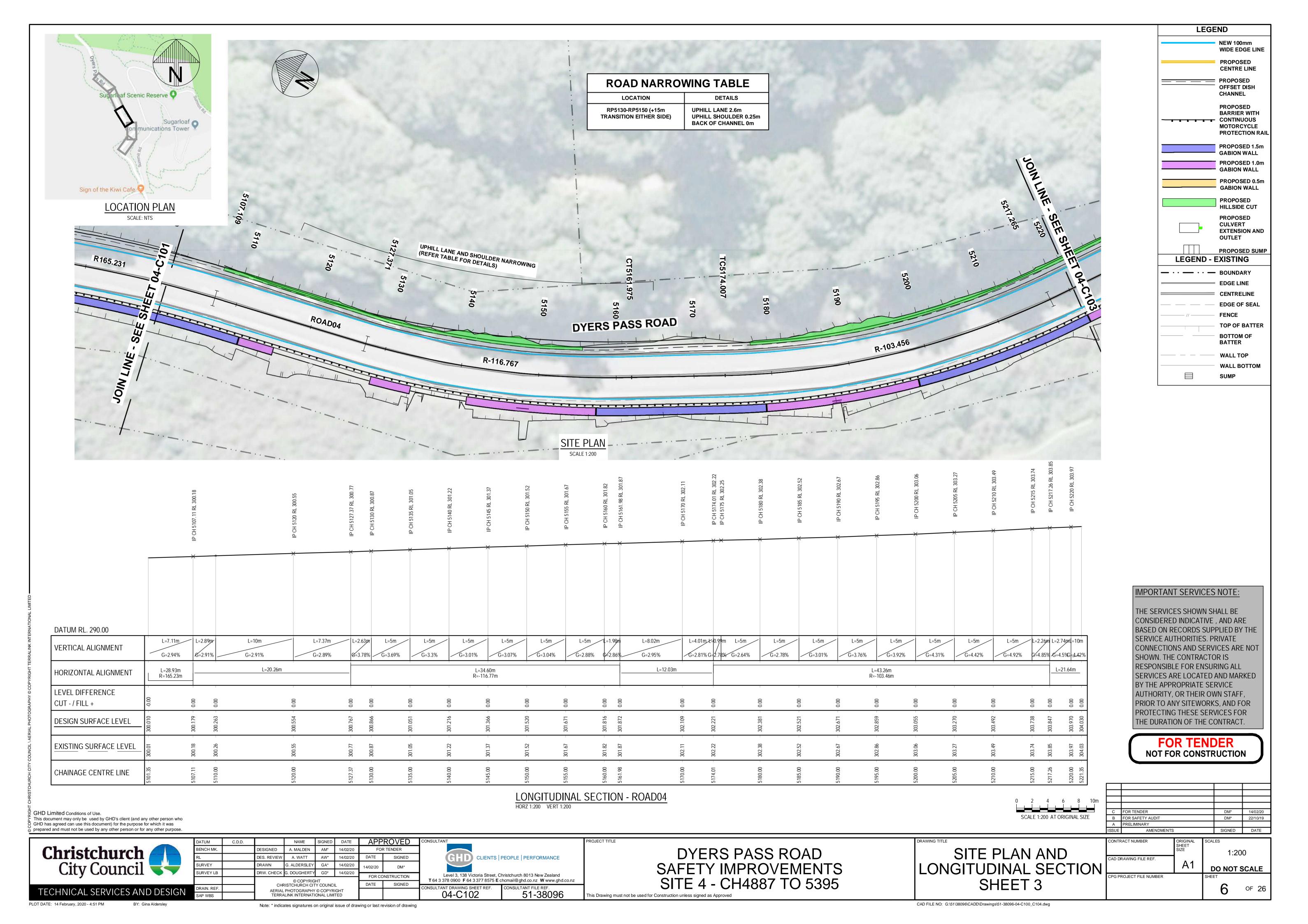
COVER SHEET AND LOCATION PLAN

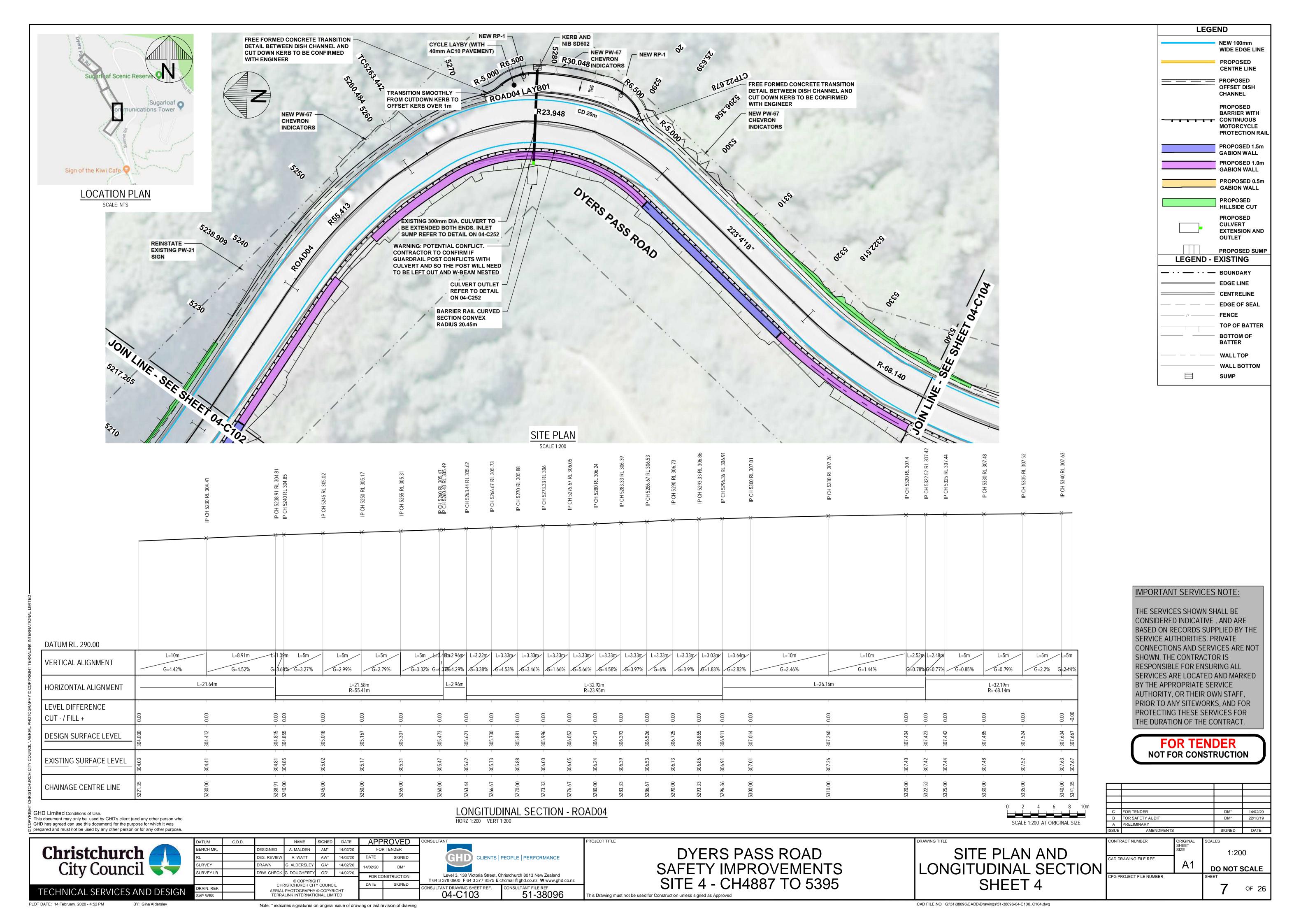
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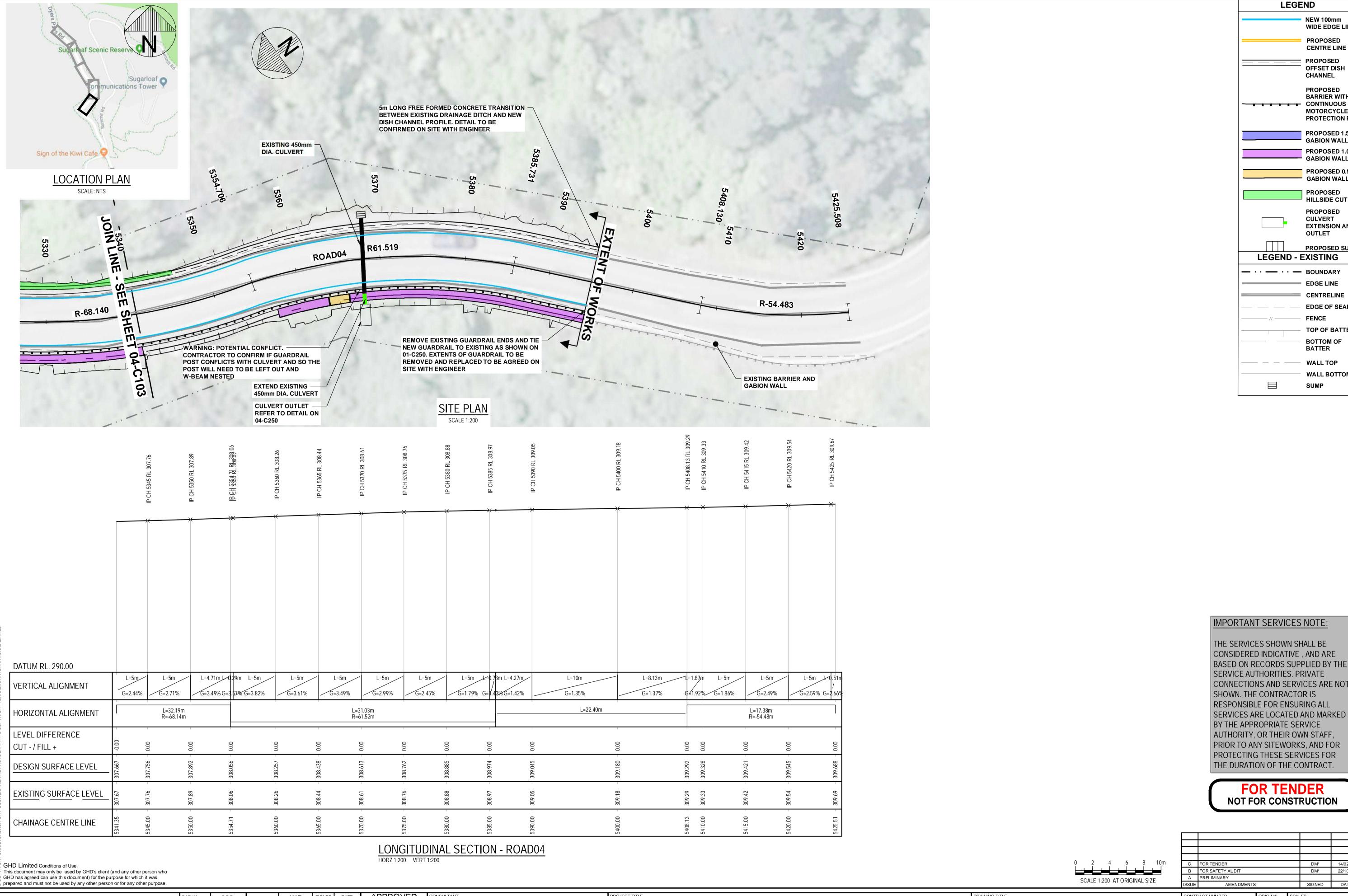
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APPROVED C.D.D. Christchurch City Council BENCH MK. A. MALDEN AM* 14/02/20 FOR TENDER DYERS PASS ROAD SITE PLAN AND 1:200 A. WATT AW* 14/02/20 DATE SIGNED CLIENTS | PEOPLE | PERFORMANCE CAD DRAWING FILE REF. SURVEY SAFETY IMPROVEMENTS LONGITUDINAL SECTION G. ALDERSLEY GA* 14/02/20 14/02/20 DM* DO NOT SCALE RW. CHECK G. DOUGHERTY Level 3, 138 Victoria Street, Christchurch 8013 New Zealand CPG PROJECT FILE NUMBER FOR CONSTRUCTION SITE 4 - CH4887 TO 5395 SHEET 5 **T** 64 3 378 0900 **F** 64 3 377 8575 **E** chcmail@ghd.co.nz **W** www.ghd.co.nz DATE SIGNED CHRISTCHURCH CITY COUNCIL 8 OF 26 TECHNICAL SERVICES AND DESIGN AERIAL PHOTOGRAPHY © COPYRIGHT 04-C104 51-38096 TERRALINK INTERNATIONAL LIMITED

PLOT DATE: 14 February, 2020 - 4:52 PM

LEGEND

NEW 100mm **WIDE EDGE LINE**

PROPOSED **CENTRE LINE**

PROPOSED **OFFSET DISH** CHANNEL

PROPOSED BARRIER WITH

MOTORCYCLE

GABION WALL

PROPOSED 1.0m

PROPOSED 0.5m

GABION WALL

GABION WALL

HILLSIDE CUT

EXTENSION AND

PROPOSED SUMP

PROPOSED CULVERT

OUTLET

EDGE LINE CENTRELINE

FENCE

EDGE OF SEAL

TOP OF BATTER

BOTTOM OF

BATTER

DM*

SIGNED DATE

WALL TOP

WALL BOTTOM

LEGEND - EXISTING

PROTECTION RAIL

DYERS PASS ROAD - SAFETY IMPROVEMENTS SITE 5 - CH5503 TO 5717



SCALE 1:5000 AT ORIGINAL SIZE

FOR TENDER
NOT FOR CONSTRUCTION

C FOR TENDER DM* 14/02/20
B FOR SAFETY AUDIT DM* 22/10/19
A PRELIMINARY
ISSUE AMENDMENTS SIGNED DATE

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DATUM C.D.D. NAME SIGNED DATE APPROVED

BENCH MK. DESIGNED A. MALDEN AM* 14/02/20 FOR TENDER

RL DES. REVIEW A. WATT AW* 14/02/20 DATE SIGNED

SURVEY DRAWN G. ALDERSLEY GA* 14/02/20 DM*

SURVEY LB DRW. CHECK G. DOUGHERTY GD* 14/02/20 FOR CONSTRUCTION

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DYERS PASS ROAD SAFETY IMPROVEMENTS SITE 5 - CH5503 TO 5717

COVER SHEET AND LOCATION PLAN

CAD FILE NO: G:\51\38096\CADD\Drawings\51-38096-05-C001.dwg

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CAD DRAWING FILE REF.

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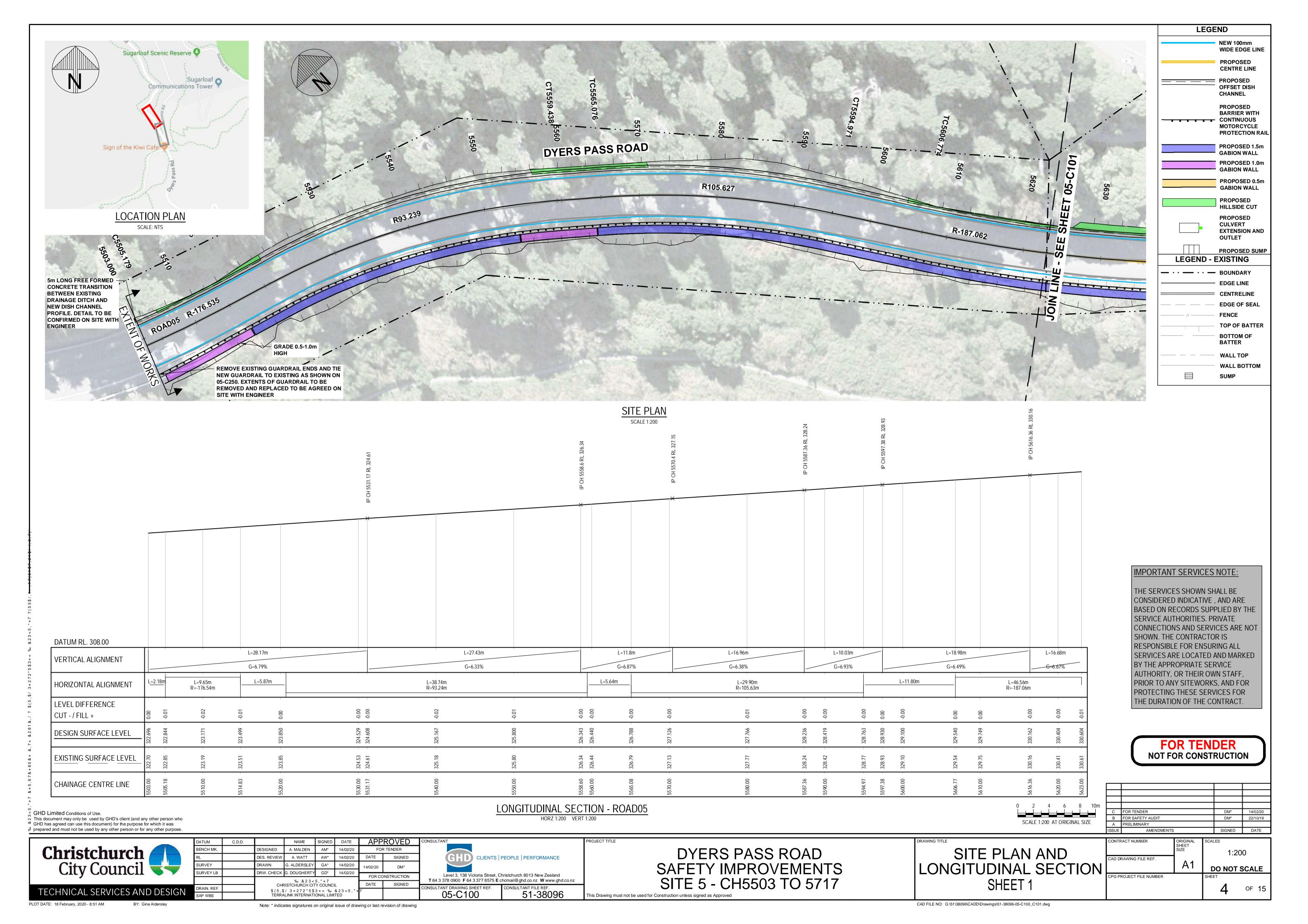
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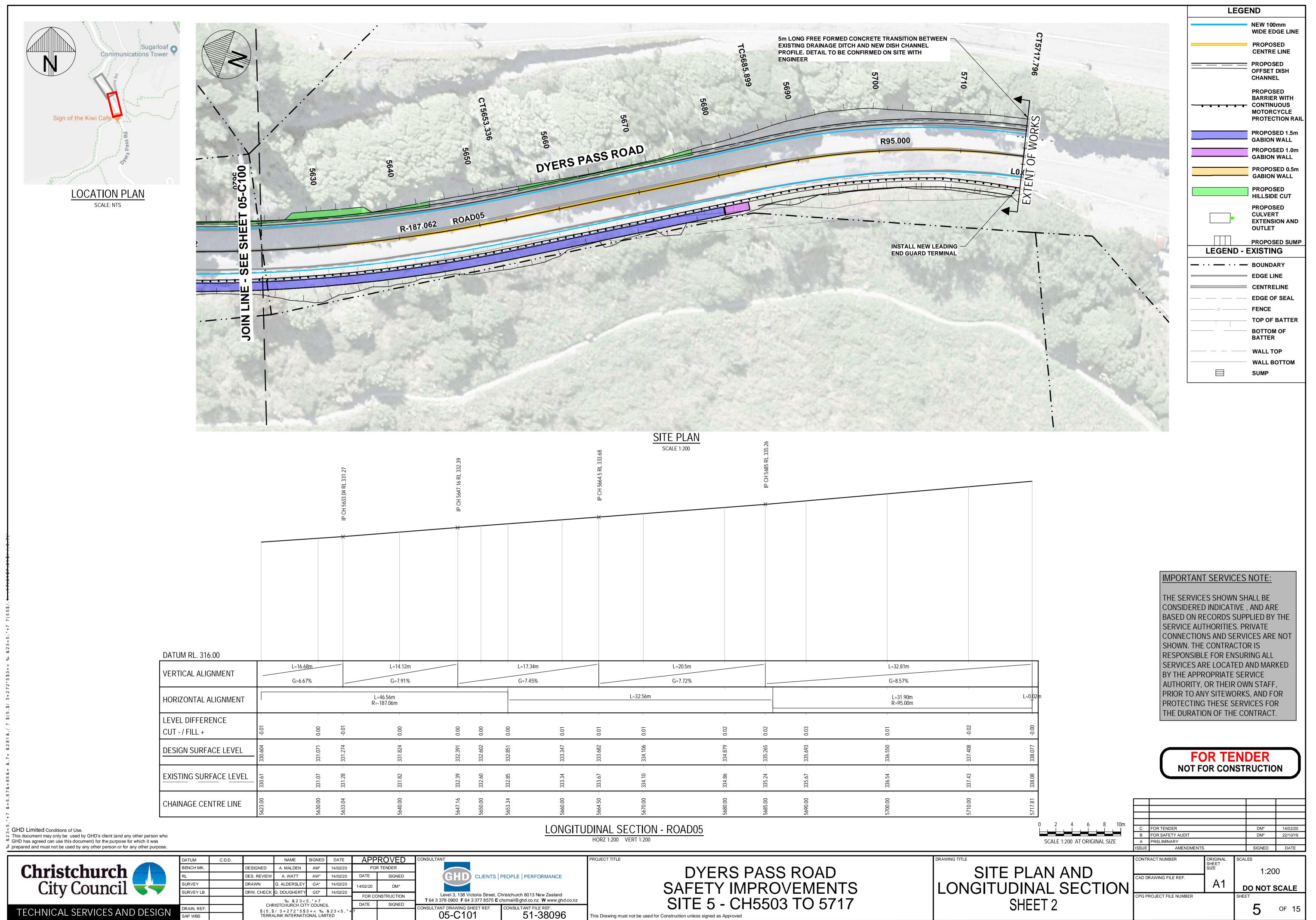
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DO NOT SCALE

SHEET

1 OF 15





PLOT DATE: 18 February, 2020 - 8:51 AM

DYERS PASS ROAD - SAFETY IMPROVEMENTS SITE 6 - CH2407 TO 2685



LOCATION PLAN

NOT FOR CONSTRUCTION

1				
1				
	С	FOR TENDER	DM*	14/02/20
	В	FOR SAFETY AUDIT	DM*	22/10/19
	Α	PRELIMINARY		
	ISSUE	AMENDMENTS	SIGNED	DATE

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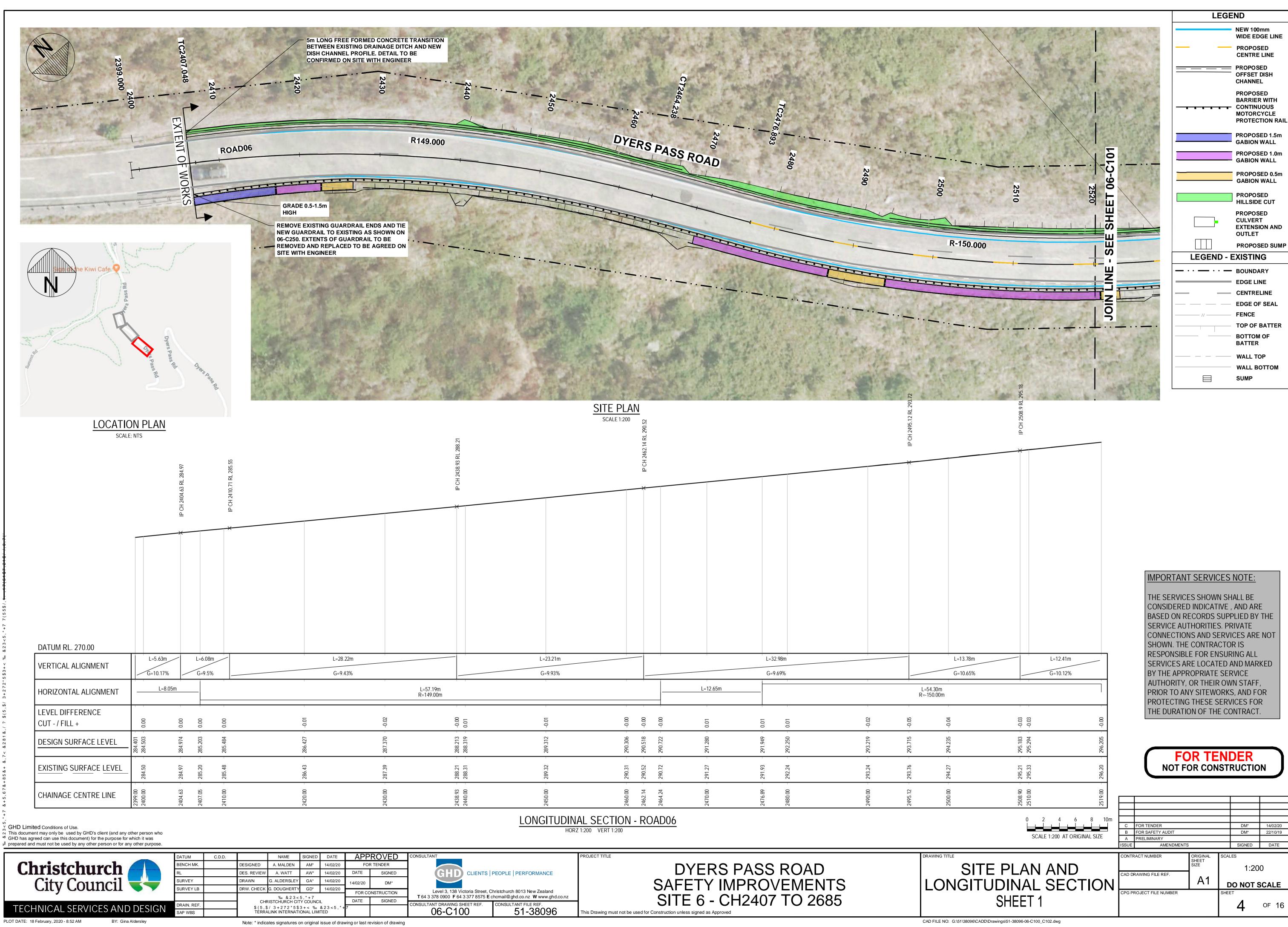
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ENCH MK.		DESIGNED	A. MALDEN	AM*	14/02/20	FOF	R TENDER	CLIENTS PEOPLE PERFORMANCE			
L		DES. REVIEW	A. WATT	AW*	14/02/20	DATE	SIGNED				
URVEY		DRAWN	G. ALDERSLEY	GA*	14/02/20	14/02/20	DM*				
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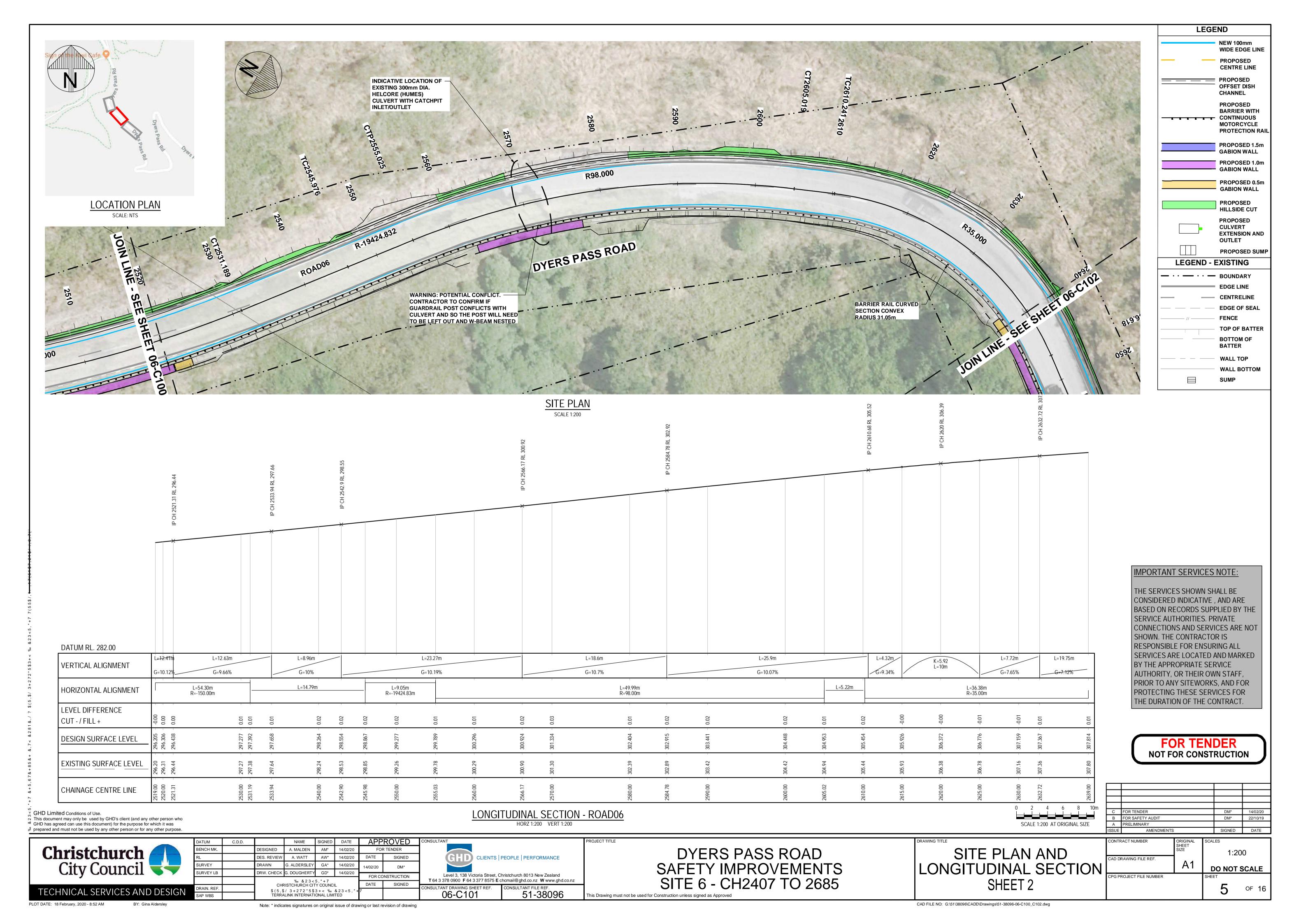
DYERS PASS ROAD SAFETY IMPROVEMENTS SITE 6 - CH2407 TO 2685

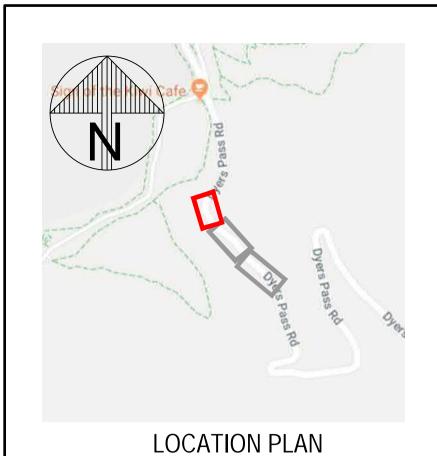
COVER SHEET AND LOCATION PLAN

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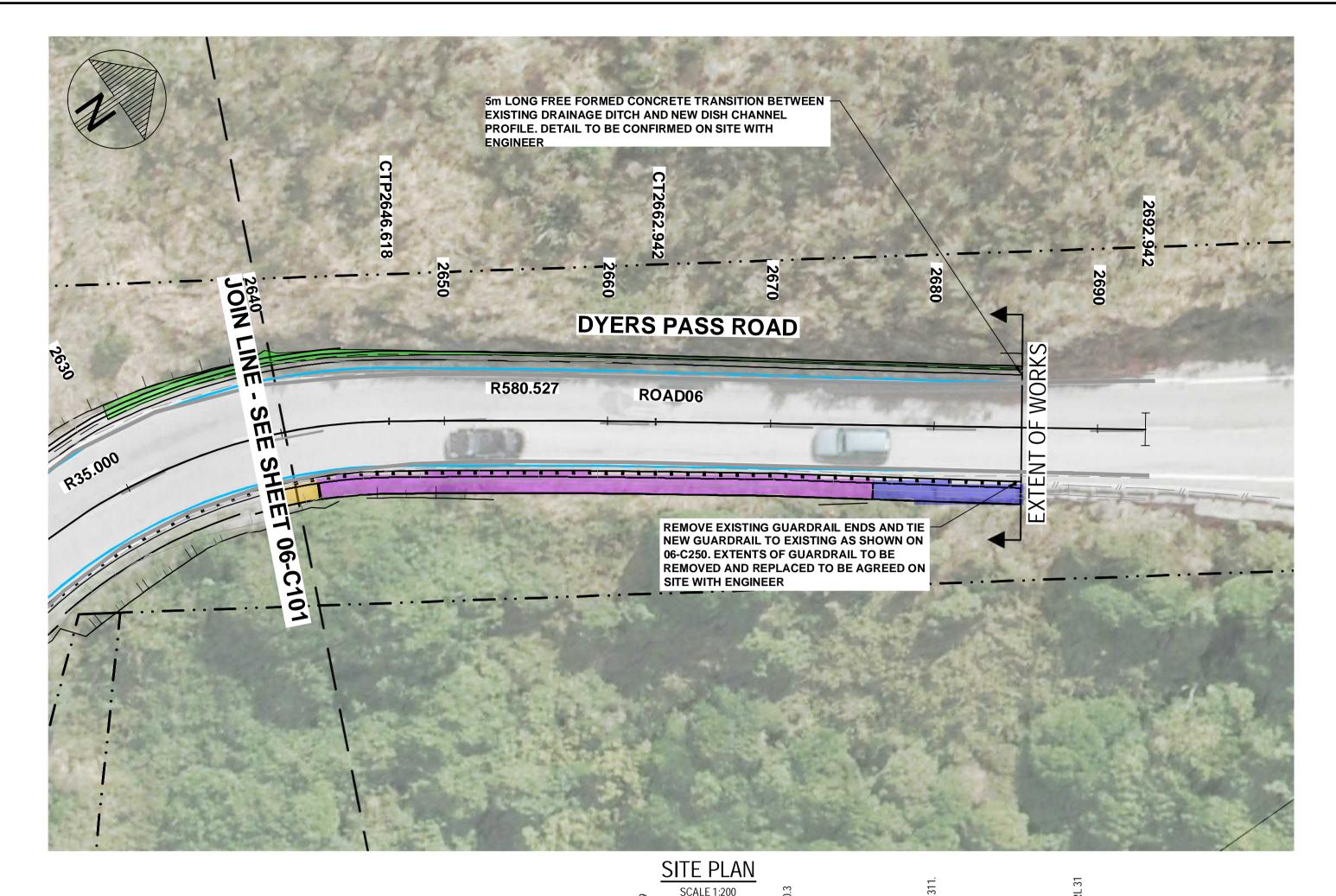
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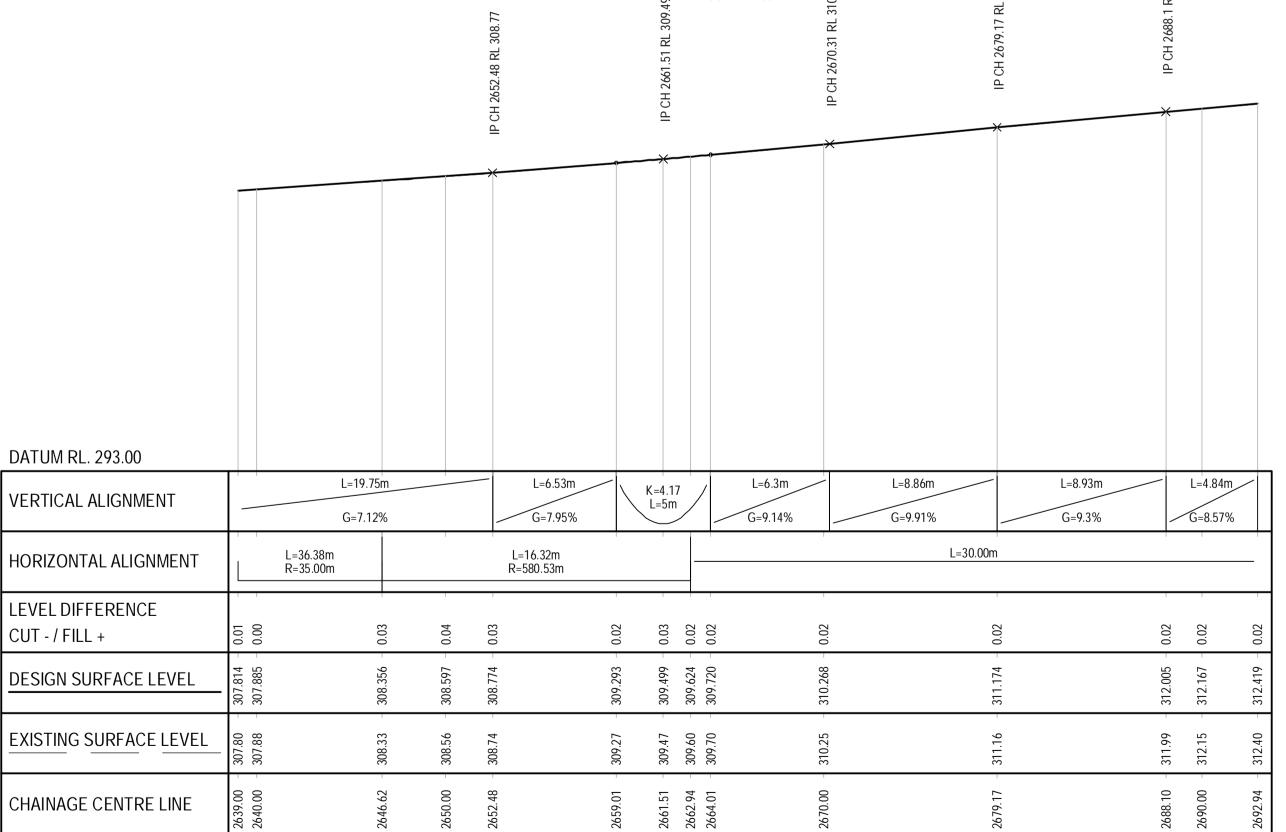






SCALE: NTS





LONGITUDINAL SECTION - ROAD06

HORZ 1:200 VERT 1:200

PROPOSED **OFFSET DISH** CHANNEL PROPOSED **BARRIER WITH** CONTINUOUS **MOTORCYCLE PROTECTION RAIL** PROPOSED 1.5m **GABION WALL** PROPOSED 1.0m GABION WALL PROPOSED 0.5m GABION WALL PROPOSED **HILLSIDE CUT PROPOSED** CULVERT **EXTENSION AND** OUTLET PROPOSED SUMP **LEGEND - EXISTING** — · · · — BOUNDARY EDGE LINE --- CENTRELINE **EDGE OF SEAL FENCE TOP OF BATTER BOTTOM OF BATTER WALL TOP** WALL BOTTOM

LEGEND

NEW 100mm **WIDE EDGE LINE**

PROPOSED **CENTRE LINE**

IMPORTANT SERVICES NOTE:

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RL		DES. REVIEW	A. WATT	AW*	14/02/20	DATE	SIGNE
SURVEY		DRAWN	G. ALDERSLEY	GA*	14/02/20	14/02/20	DM*
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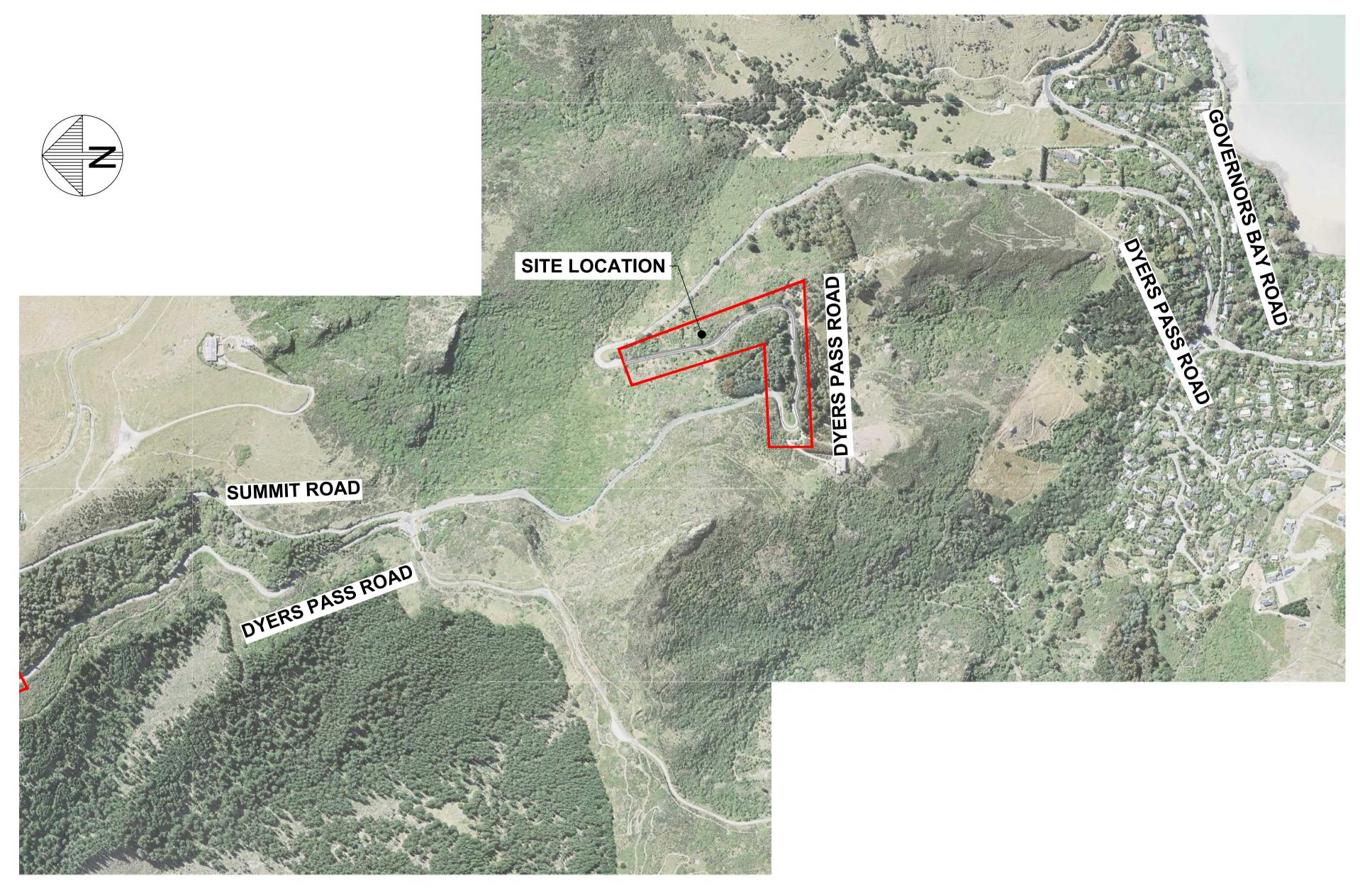
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GHD CLIENTS	PEOPLE PERFORMANCE
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T 64 3 378 0900 F 64 3 377 8575 E c	hcmail@ghd.co.nz W www.ghd.co.nz
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06-C102	51-38096

DYERS PASS ROAD SAFETY IMPROVEMENTS SITE 6 - CH2407 TO 2685

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SITE PLAN AND	CAD
LONGITUDINAL SECTION	CPG
SHEET 3	CPG

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DYERS PASS ROAD - SAFETY IMPROVEMENTS SITE 7 - CH1517 TO 2065



LOCATION PLAN

0 50 100 150 200 250m SCALE 1:5000 AT ORIGINAL SIZE

FOR TENDER
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C FOR TENDER DM* 14/02/20
B FOR SAFETY AUDIT DM* 22/10/19
A PRELIMINARY
ISSUE AMENDMENTS SIGNED DATE

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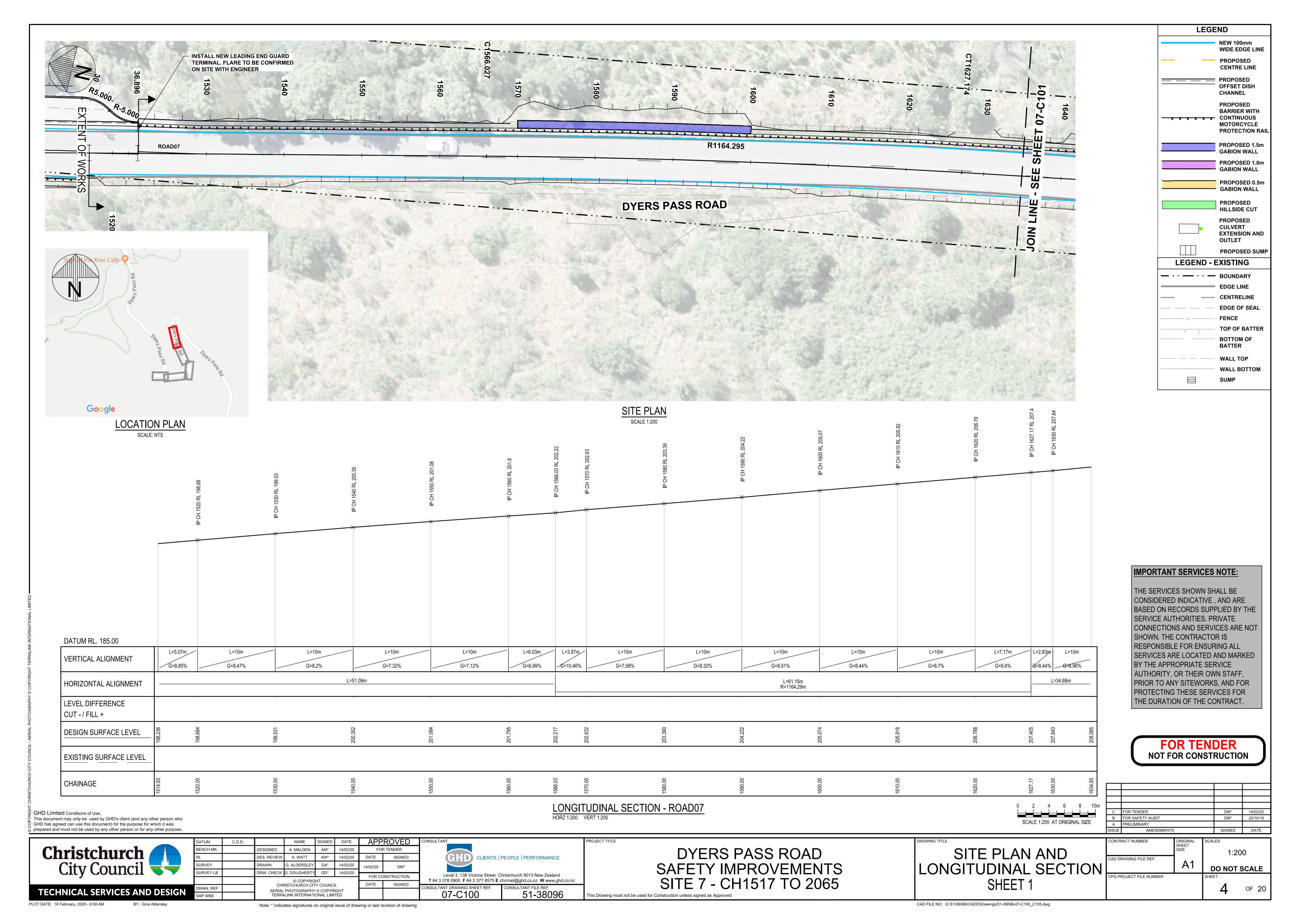
DATUM	C.D.D		NAME	SIGNED	DATE	I APP	ROVED	CONSULTANT	
BENCH M	IK.	DESIGNED	A. MALDEN	AM*	14/02/20		R TENDER		
RL		DES. REVIEW	A. WATT	AW*	14/02/20	DATE	SIGNED		Γ
SURVEY		DRAWN	G. ALDERSLEY	GA*	14/02/20	14/02/20	DM*		
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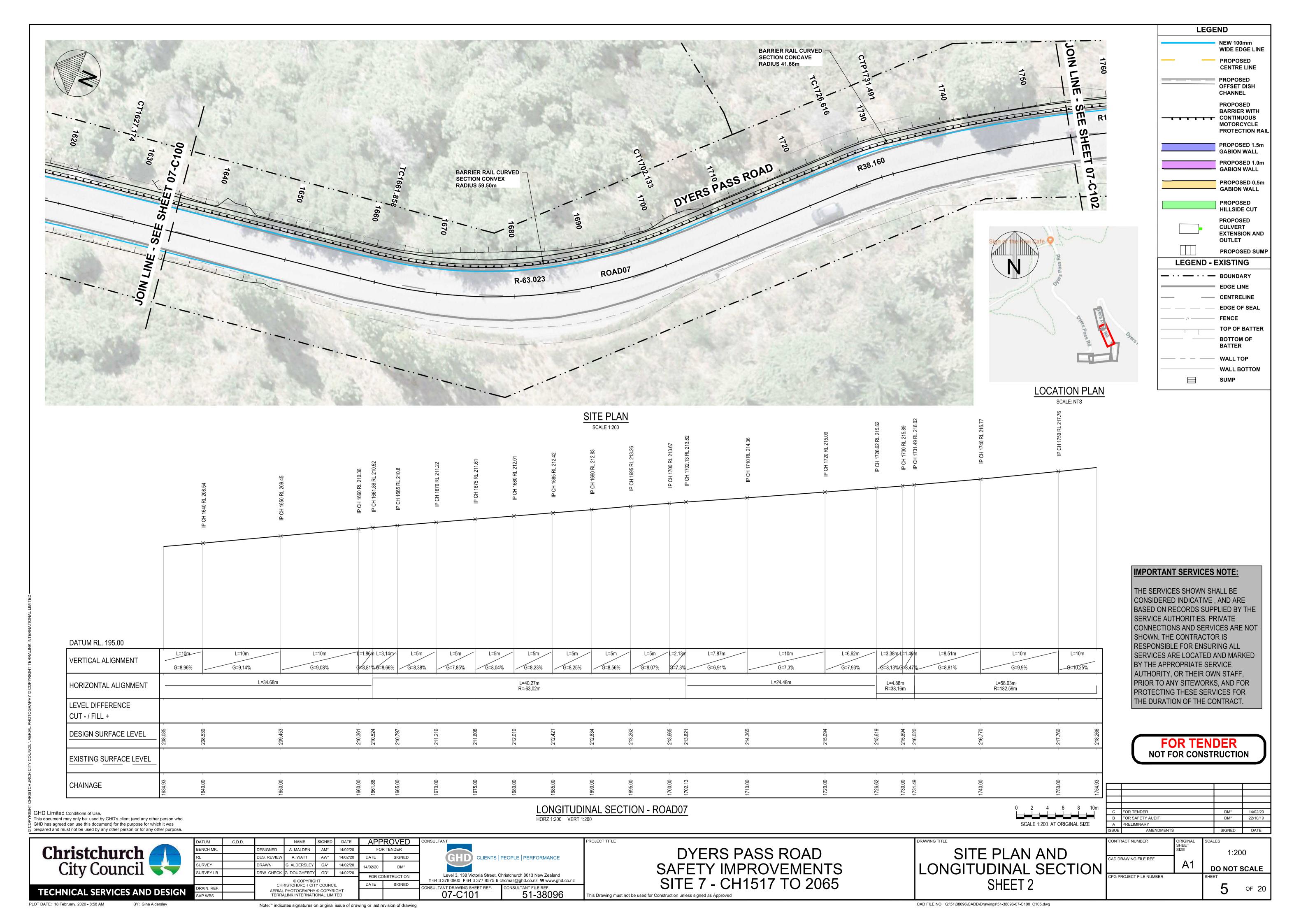
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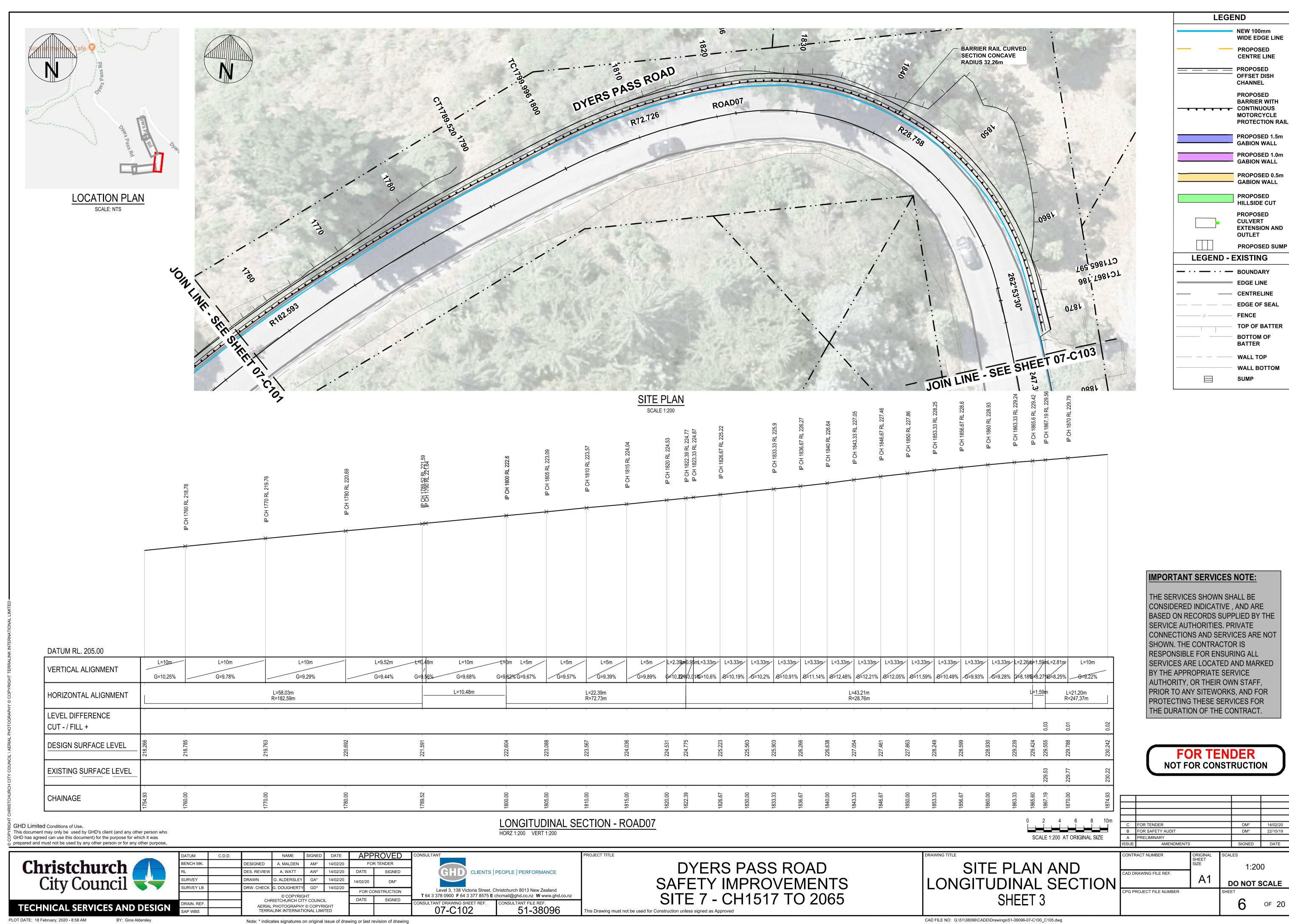
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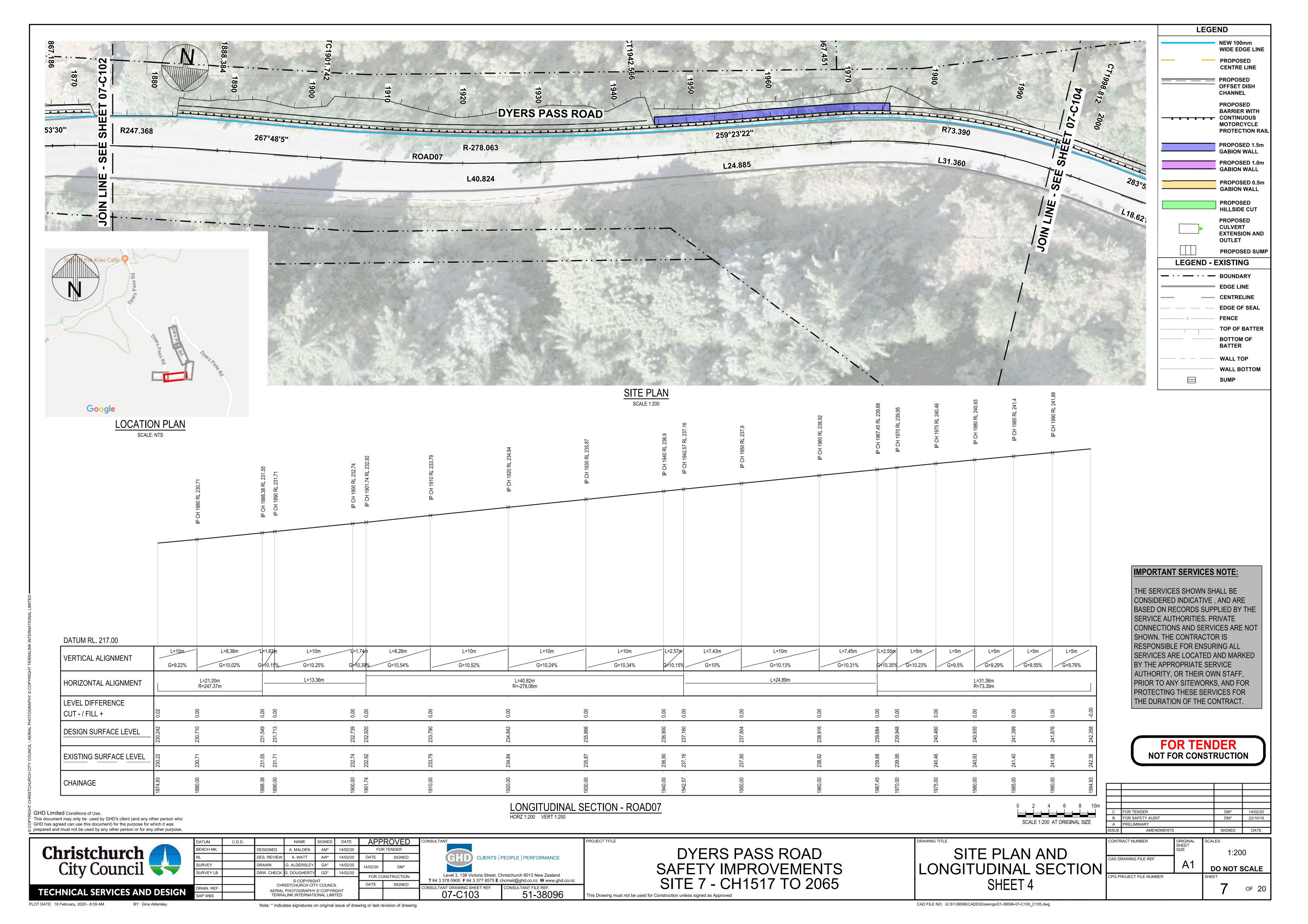
COVER SHEET
AND LOCATION PLAN

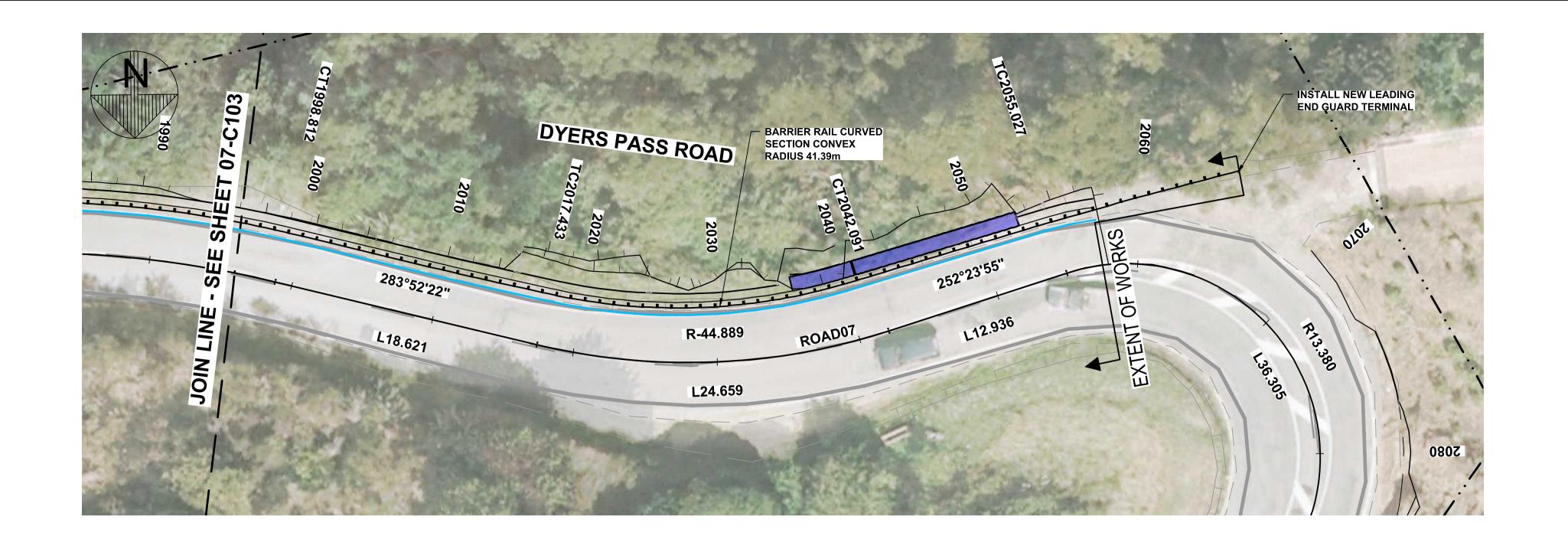
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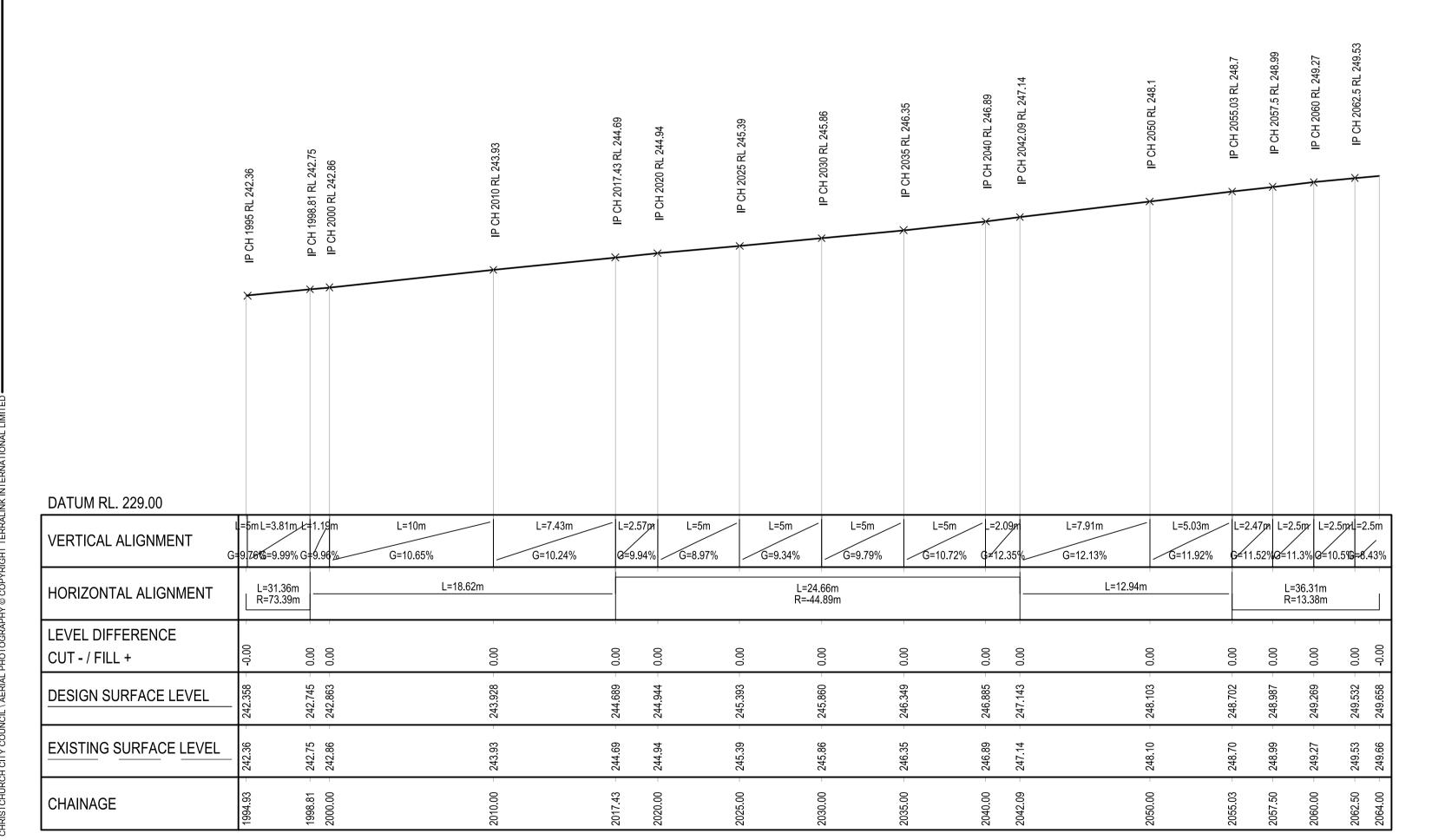








SITE PLAN



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LONGITUDINAL SECTION - ROAD07

HORZ 1:200 VERT 1:200

DYERS PASS ROAD
SAFETY IMPROVEMENTS
SITE 7 - CH1517 TO 2065

SITE PLAN AND LONGITUDINAL SECTION SHEET 5

SCALE 1:200 AT ORIGINAL SIZE

A PRELIMINARY
ISSUE AMENDMENTS SIGNED DATE

CONTRACT NUMBER

ORIGINAL SHEET SIZE

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OF 20

B FOR SAFETY AUDIT

PROPOSED **CENTRE LINE** — PROPOSED **OFFSET DISH** CHANNEL **PROPOSED BARRIER WITH** CONTINUOUS MOTORCYCLE **PROTECTION RAIL** PROPOSED 1.5m **GABION WALL** PROPOSED 1.0m GABION WALL PROPOSED 0.5m GABION WALL LOCATION PLAN PROPOSED SCALE: NTS HILLSIDE CUT PROPOSED CULVERT **EXTENSION AND** OUTLET PROPOSED SUMP **LEGEND - EXISTING** — · · · — BOUNDARY EDGE LINE --- CENTRELINE **EDGE OF SEAL FENCE TOP OF BATTER BOTTOM OF**

LEGEND

NEW 100mm WIDE EDGE LINE

BATTER

WALL TOP

WALL BOTTOM

IMPORTANT SERVICES NOTE:

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Christchurch	BENCH MK.	
	RL	
City Council	SURVEY	
City Council	SURVEY LB	
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	DATUM	C.D.D.		NAME	SIGNED	DATE	APPROVED		G
	BENCH MK.		DESIGNED	A. MALDEN	AM*	14/02/20	FO	R TENDER	
	RL		DES. REVIEW	A. WATT	AW*	14/02/20	DATE	SIGNED	
	SURVEY		DRAWN	G. ALDERSLEY	GA*	14/02/20	14/02/20	DM*	ı
	SURVEY LB		DRW. CHECK	G. DOUGHERTY	GD*	14/02/20	FOR CONSTRUCTION		
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T 64 3 378 0900 F 64 3 377 8575 E chcmail@ghd.co.nz W www.ghd.co.nz

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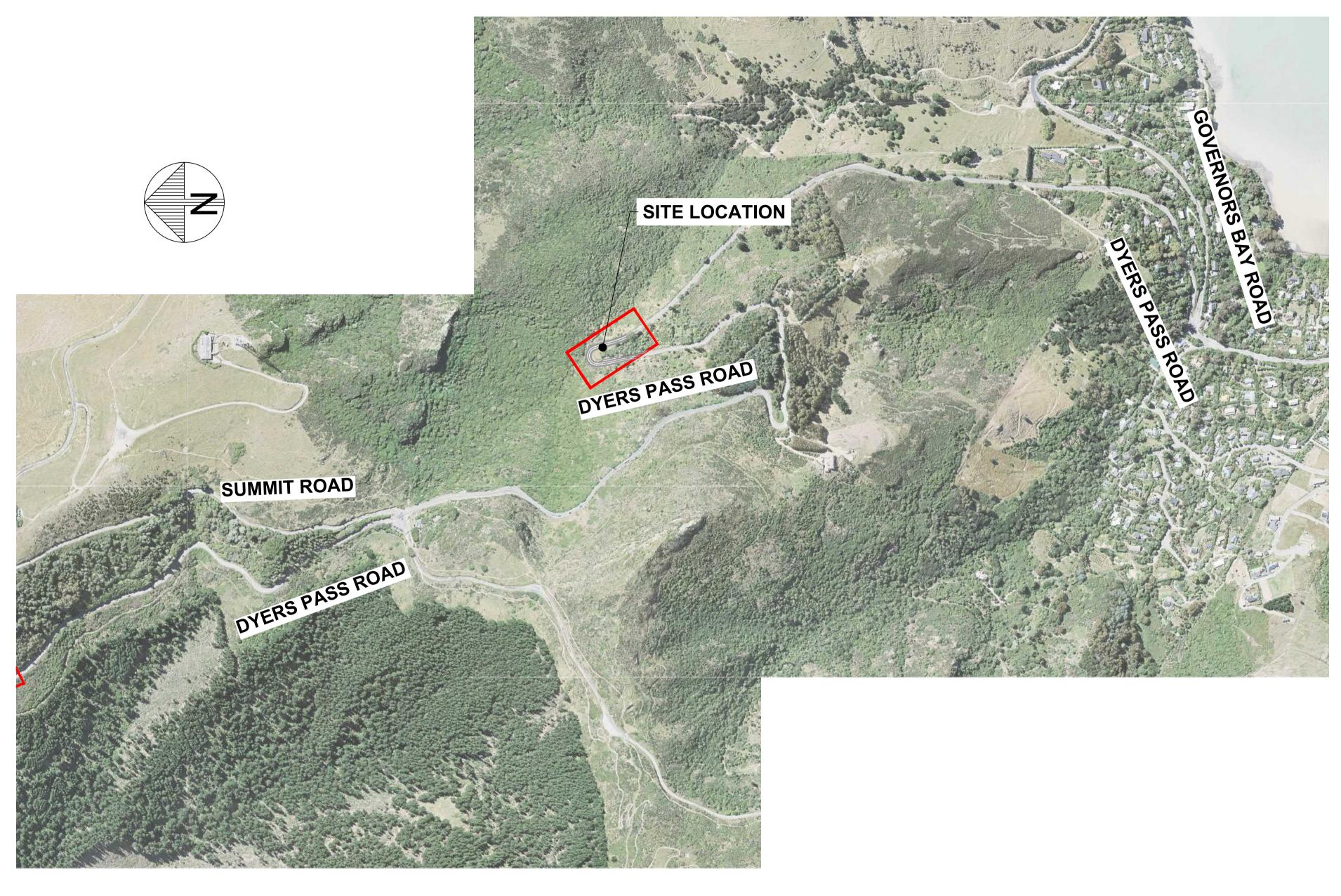
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51-38096

TECHNICAL SERVICES AND DESIG

DYERS PASS ROAD - SAFETY IMPROVEMENTS SITE 8 - CH1370 TO 1517



LOCATION PLAN
SCALE 1:5000

0 50 100 150 200 250m SCALE 1:5000 AT ORIGINAL SIZE

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NOT FOR CONSTRUCTION

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В	FOR SAFETY AUDIT	DM*	22/10/19
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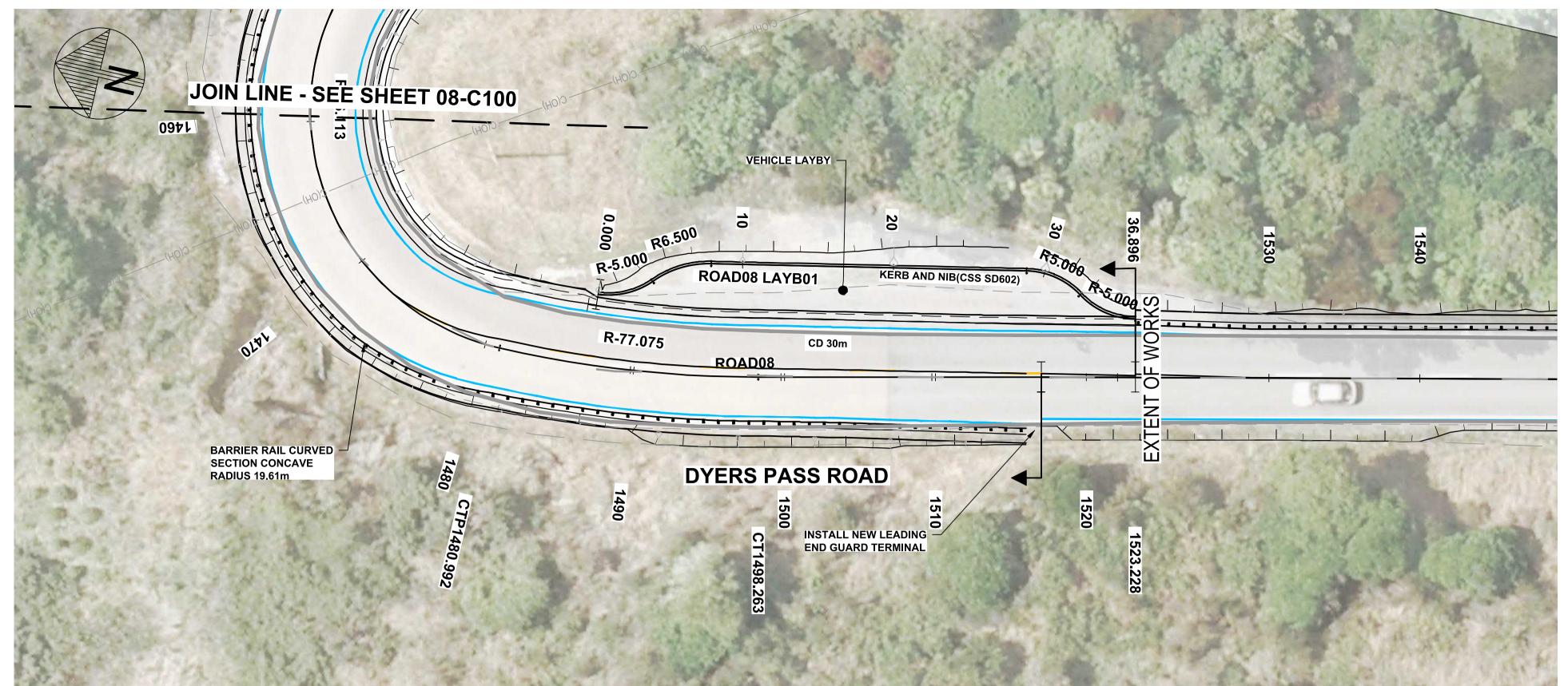
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	C.D.D.		NAME	SIGNED	DATE	<u> APP</u>	ROVED	CONSULTANT			
MK.		DESIGNED	A. MALDEN	AM*	14/02/20	FOF	RTENDER				
		DES. REVIEW	A. WATT	AW*	14/02/20	DATE	SIGNED	GHD CLIENTS	PEOPLE PERFORMANCE		
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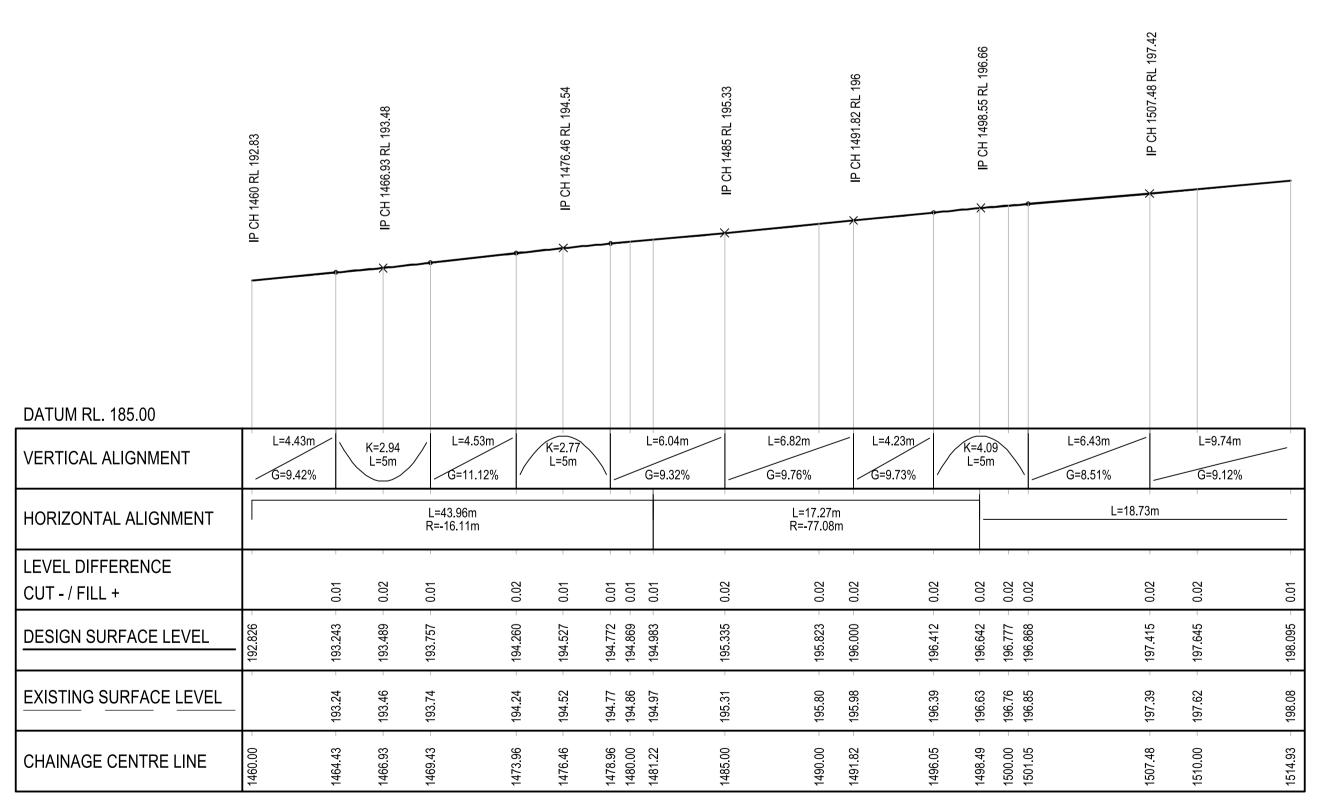
DYERS PASS ROAD SAFETY IMPROVEMENTS SITE 8 - CH1370 TO 1517 COVER SHEET AND LOCATION PLAN

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SITE PLAN
SCALE 1:200



LONGITUDINAL SECTION - ROAD08

IMPORTANT SERVICES NOTE:

LEGEND

CONTINUOUS

NEW 100mm WIDE EDGE LINE

PROPOSED CENTRE LINE

OFFSET DISH CHANNEL

PROPOSED BARRIER WITH

MOTORCYCLE PROTECTION RAIL

PROPOSED 1.5m GABION WALL

PROPOSED 1.0m
GABION WALL

PROPOSED 0.5m GABION WALL

PROPOSED

PROPOSED CULVERT EXTENSION AND

OUTLET

EDGE LINE
CENTRELINE

FENCE

EDGE OF SEAL

TOP OF BATTER

BOTTOM OF BATTER

WALL TOP

WALL BOTTOM

LEGEND - EXISTING

— · · · — BOUNDARY

HILLSIDE CUT

PROPOSED SUMP

— PROPOSED

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FOR TENDER
NOT FOR CONSTRUCTION

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	В	FOR SAFETY AUDIT	DM*	22/10/19
ORIGINAL SIZE	Α	PRELIMINARY		
	ISSUE	AMENDMENTS	SIGNED	DATE

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	BENCH MK.		DESIGNED	A. MALDEN	AM*	14/02/20	FO	R TENDER	1
	RL		DES. REVIEW	A. WATT	AW*	14/02/20	DATE	SIGNED	
	SURVEY		DRAWN	G. ALDERSLEY	GA*	14/02/20	14/02/20	DM*	
	SURVEY LB		DRW. CHECK	G. DOUGHERTY	GD*	14/02/20	EOD CC	NSTRUCTION	1
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GHD CLIENTS	PEOPLE PERFORMANCE
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08-C101	51-38096

DYERS PASS ROAD SAFETY IMPROVEMENTS SITE 8 - CH1370 TO 1517

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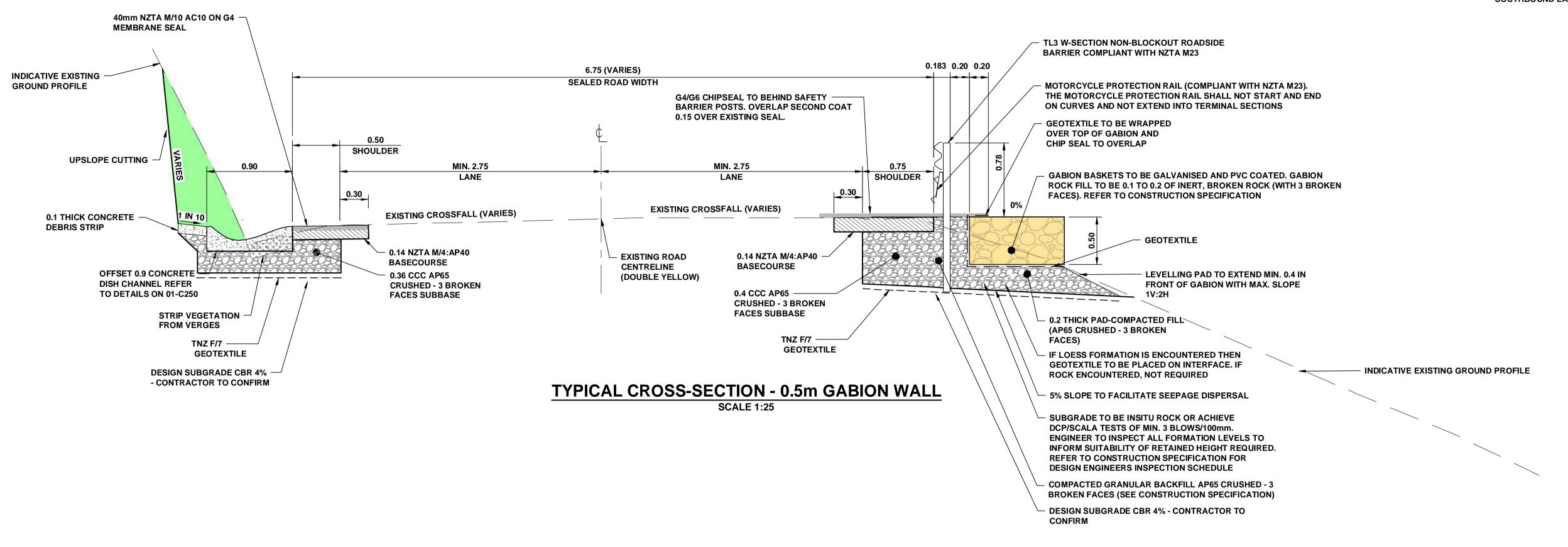
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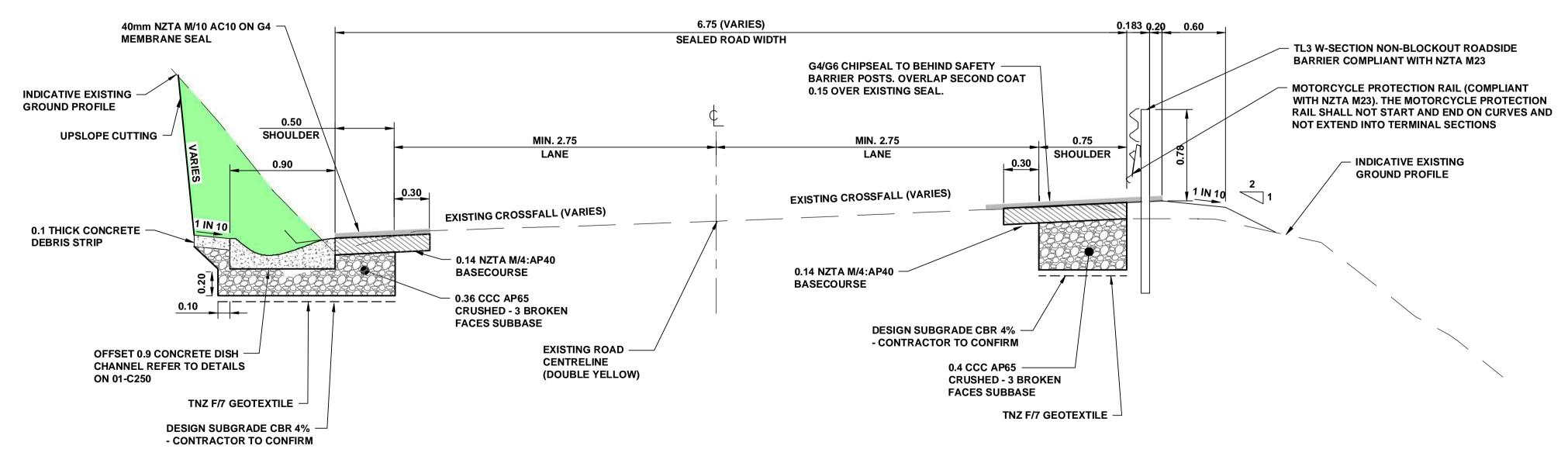
PLOT DATE: 18 February, 2020 - 9:01 AM BY: Gina Aldersley

TECHNICAL SERVICES AND DESIGN

NOTES:

- REFER TO GABION RETAINING WALL NOTES ON DRG 01-C002.
- DIMENSIONS IN METRES UNLESS STATED OTHERWISE.
 WHERE EXISTING ROAD PAVEMENT SURFACE IS ASPHALT. THE
- 3. WHERE EXISTING ROAD PAVEMENT SURFACE IS ASPHALT, THE NEW PAVEMENT ON THE NORTHBOUND LANE AND SHOULDER (GABION WALL SIDE) SHALL BE ASPHALT, WITH THE SAME DETAIL AS SHOWN ON SOUTHBOUND LANE.





0 0.25 0.5 0.75 1.0 1.25m SCALE 1:25 AT ORIGINAL SIZE

FOR TENDER
NOT FOR CONSTRUCTION

TYPICAL CROSS-SECTION - NO GABION WALL
SCALE 1:25

;	FOR TENDER	DM*	14/02/20
3	FOR SAFETY AUDIT	DM*	22/10/19
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UE	AMENDMENTS	SIGNED	DATE

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BENCH MK.		DESIGNED	A. MALDEN	AM*	14/02/20	FO	R TENDER		
RL		DES. REVIEW	A. WATT	AW*	14/02/20	DATE	SIGNED	GHD CLIENT	S PEOPLE PERFORMANCE
SURVEY		DRAWN	G. ALDERSLEY	GA*	14/02/20	14/02/20	DM*		
SURVEY LB		DRW. CHECK	G. DOUGHERTY	GD*	14/02/20	EOR CO	NSTRUCTION	Level 3, 138 Victoria Stree	et, Christchurch 8013 New Zealand
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DYERS PASS ROAD SAFETY IMPROVEMENTS SITE 1 - CH3244 TO 3420 TYPICAL SECTIONS
SHEET 1

ISSUE AMENDMENTS SIGNED DATE

CONTRACT NUMBER

ORIGINAL SHEET SIZE

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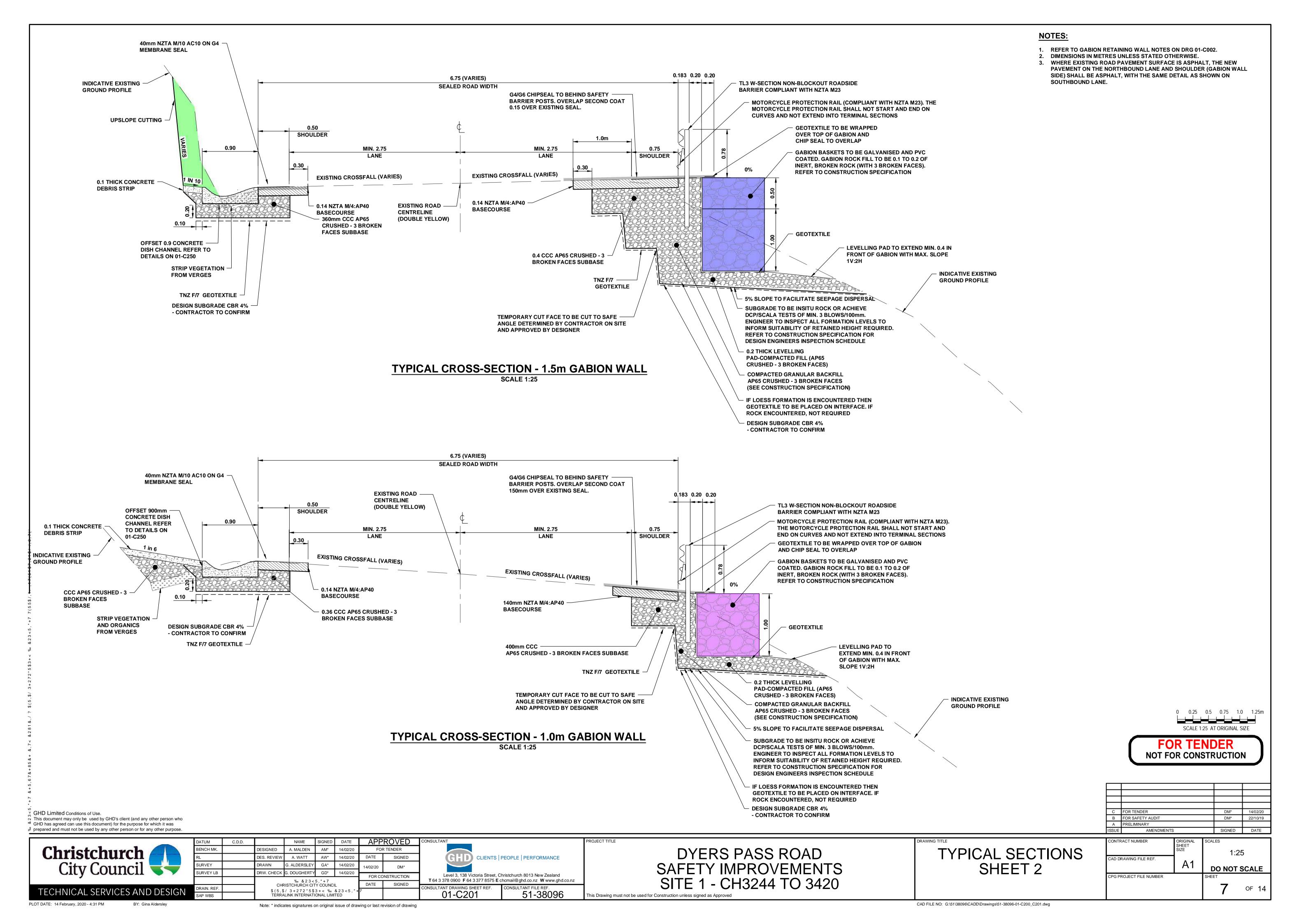
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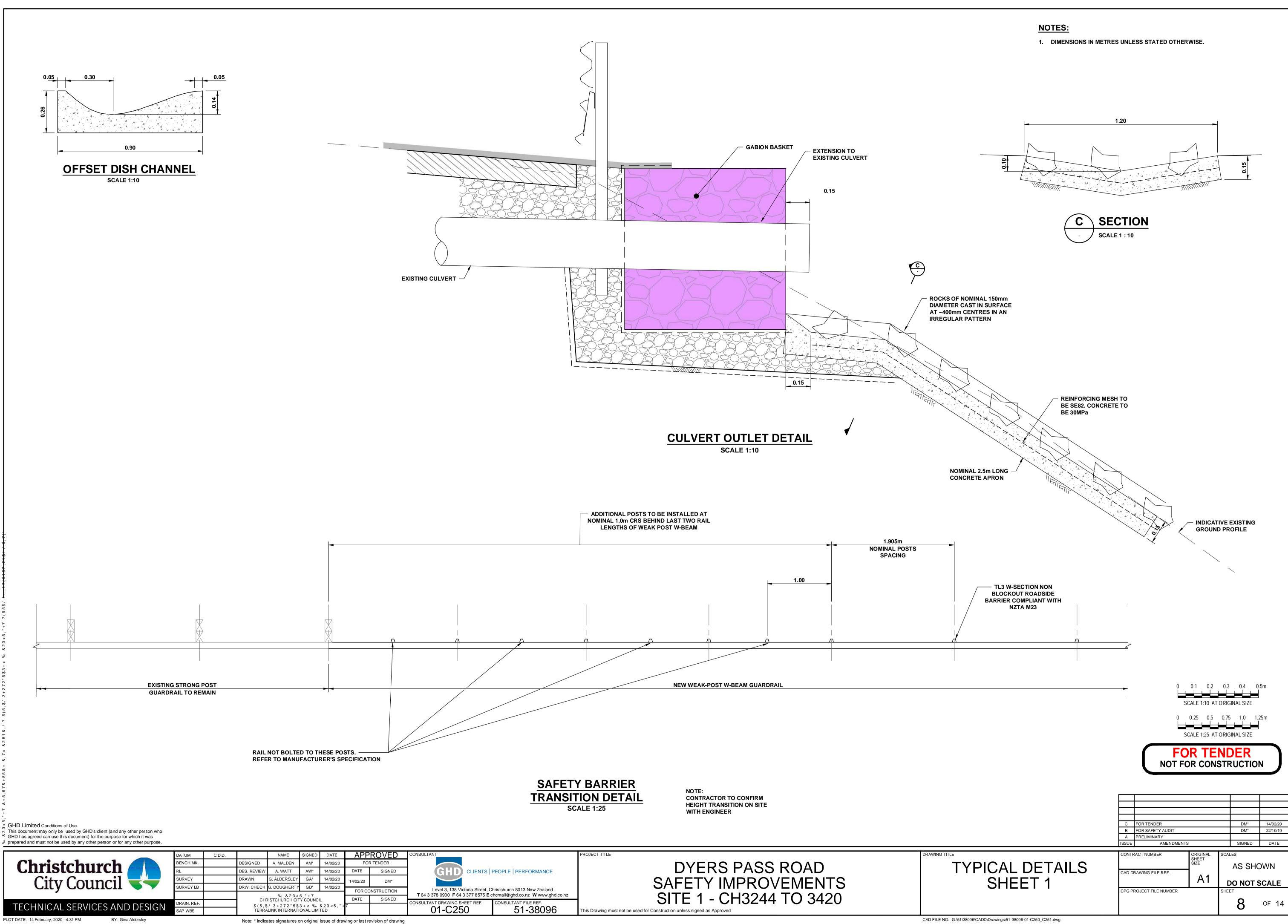
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OF 14

TECHNICAL SERVICES AND DESIGN





Dyers Pass Rd Guardrails – rational and business case.

Scope of work within this funding application e.g. Includes pre-implementation and implementation. If additional funding phases are to be sought, provide a brief overview of these.	This application is for Pre- following Standard Safety ~3 km of: • Roadside safety be • Shoulder widening	Interventions (SSI arrier at high-risk): locations	anding of the	
Total expected project cost	\$7.25 M (Pre-Imp, Imp 18/19 – 20/21)	Funding sou	Activity class improvement work categor Road improv	Safe Network Programme Activity class: Local road improvements work category: WC 324: Road improvements local road component	
		FAR %	75.5%		
Primary outcome	Reduction in the frequency	and severity of c	rashes		
Other benefits from this activity Previous approvals / applications; conditions and status	Safety improvements through installation of roadside safety barriers and associated supporting retaining walls, 0.5 m & 0.75 m shoulders, cycle friend drainage dish channels and a minimum of 2 x 2.75 m minimum width lanes. What previous phases have been done and/or funded, if any? LCLR was approved for \$750k for the highest priority sites. This application effectively increases the size of the project and cancels that agreement. Have conditions previously imposed that affect this funding application been satisfactorily met, and are all teams in agreement? No formal conditions.			s, cycle friendly width lanes. application eement.	
Actions completed (All required prior to application)	☑ TIO Updated (submission be accepted unless actions	ed) No Fin Ma by	☑ Funding Available Note: Subject to approval at the Finance & Performance commit March 5 th and variation of the R by ECan all of which are in prog at the time of this application.		
	☐ Docs uploaded to TIO	0.5	SAP Updated		

and options	
What are the transport safety problems and other problems that require attention?	Winding steep road alignment with narrow roadway (minimal shoulders) with high crash rate and high severity outcomes. The road is also a very popular motorcycling and cycling route. Motorcycle underrun rails on guardrails and cycle safety improvements such cycle friendly road shoulders and drainage channel are required.
ls this SSI included in a RLTP and in 2018-21 NLTP?	Yes
Alignment with Safe Networks Programme For the 2018-21 NLTP, it is expected that most, if not all, SSI activities will be part of the SNP.	Is the location (corridor / intersection) for this activity identified in the Agency's 2018-21 Safe Networks Programme (SNP)? Yes
Programme/project linkages – related activities	How does the activity fit within the context of the Transport Agency policies or national business case and key regional transport documents?
	Safety is on top of the list of the four key strategic priorities of the GPS for land transport. It aims to make state highways and local roads are safer for everyone by treating the highest-risk parts of the network. The policy specifically emphasises on investment in primary safe system treatments, that reduce the risk of head-on and run-off road crashes (such as through the installation of median and side barriers). Safety is one of the main four categories in the NLTP 18-21. Under the section SUPPORTING COUNCILS TO CO-INVEST it states "GPS 2018 provides new opportunities for local councils, particularly in the areas of regional improvements, local road improvements, public transport and active modes. This new opportunity presents some challenges in relation to local share affordability. The Transport Agency has worked with local government to develop a range of support options to enable councils to take up new co-investment opportunities in the GPS." It re-emphasises on targeting to the most significant risks through making roads and roadsides more forgiving in the event of human error or mechanical fault, and protecting vulnerable users such as pedestrians, cyclists and motorcyclists. The above shows the alignment of the Dyers Rd Safety Improvement project with the high level national policies and NZTA investment framework. Dyers Pass Rd is an extremely dangerous section of road in Christchurch. Over the 5-year period of 2015-19 there has been 8 DSI crashes on the road causing 6 fatalities and 7 serious injuries. Five of those crashes were likely to be preventable by guardrails, motorcycle under-runs and wider shoulders. The 6-kilometre road section has a 8.3 estimated DSI saving and 5 actual DSI saving over the analysis period offering 43 to 72 DSI savings per \$100m spent which highlights the significant value for money for this project. What other projects are in the area that are interdependent or may have effect on this business case that decision makers need to be aware of? Not applicable
Is the status quo (do nothing)	No No

What is Safe System treatment philosophy that applies to this site?	Safer Corridors
Option exploration	List the range of options considered, including their implementation costs and DSI reduction Study of the route over the past few years suggested several options to address the safety issues on Dyers Pass Rd are: - Speed limit reduction; - Painting double yellow no overtaking centrelines; and - Shoulder widening and safety barriers (guardrails). Over the course of the past 5 years the first two options have been implemented on the road by reducing speed to 60kph and installation of painted double yellow no overtaking centrelines, but DSI crashes are still occurring on the road. This is mainly due to the fact that operational speeds were nearly 63kph even with the former 70kph posted speed limits due to the road environment. Also the road width is so narrow that the double yellow no-overtaking lanes can not effectively address the issues with contra-flow proximity safety issues on the road. At this stage installation of road side safety barriers and road widening at high risk locations is the only viable option to address the numerous run offroad type of crashes on this winding road. The estimated and actual crash saving by the proposed intervention (tackling "C" and "D" crash movements) are 8.3 and 5, respectively. How were the options assessed and the recommended chosen (MCA, workshop, stakeholder input etc) A comprehensive assessment of the road safety issues has been undertaken. The reports and the associated prioritisation processes has already been submitted to the Agency. Confirm that improvements with BCR less than 1.0 are part of an existing safety programme. If there are any doubts refer to requirements set out in the IAF. BCR has not been calculated for this project. Indicative BCR based on the SSI toolkit. 1.9 to 7.6 for 4.3 ROADSIDE SAFETY BARRIER AT HIGH-RISK LOCATIONS 1.4 to 3.1 for 4.5 SHOULDER WIDENING AT HIGH-RISK LOCATIONS
Choice of preferred option - briefly explain the clear rationale for the selection of the preferred option Note: not required if funding application is for design and engage only.	Also include the investment criteria for each SSI from the toolkit with yes/no Roadside barrier at high risk locations AADT is greater than 1000 vehicles per day – yes – 3,500 weekday & 4,700 weekends Collective risk is medium risk or higher or predictive collective risk medium or greater – yes Posted speed limit is 60km/h

Detailed information		
Length of route (km) to be treated	Total route length requiring treatment is ~6 km. The length of route covered by this application is ~4.6km within which ~3km of new roadside barrier installation and shoulder extension treatments at the high risk locations.	

Annual Average Daily Traffic (AADT) at time zero For intersections, provide AADT for major and minor approaches	3,852 (2019)		
Pedestrians - Annual Average Daily Count at time zero	Nil		
Cyclists - Annual Average Daily Count at time zero	The road is highly popular for recreational cycling. No proper full day counts has been undertaken for cyclists on this road. The most recent survey at the Summit Rd intersection shows 160 cyclist over 5 hours of the survey indicating a rough estimate of 300 to 600 cyclists per day (higher volumes on weekends). Similar to the rest of the city, a relatively fast growth is likely for the number of cyclist on this road.		
Heavy Vehicles Volume (%) at time zero	3.6%		
ONRC Road classification	Primary Collector		
Seal width	Varies 5.3 m to 6.0 m		
Shoulder width / sealed or unsealed?	Nil to minimal		
Current Posted speed limit	60 km/hr		
Current mean operating speed (measured or estimated)	City side 49 km/hr (2019). Harbour side 56 km/hr (2018)		
What is the Safe and Appropriate Speed (SAAS) for this location? (Source: MegaMaps)	60 kph		
ls the corridor or site included within the Top 10% Speed Management Programme	NO		
ls a speed limit review required?	Speed review completed in 2019 and posted speeds reduced to 60kph. If yes, how does this activity fit with the speed limit review? Crash rate of the road are still high. Operation speeds haven't considerably changed by the reduction in posted speed limits. Provide name and email for project manager for speed limit review or upload Speed Limit Review report to TIO		
Proposed speed limit (for preferred option)	60 kph		
Fatal + serious injuries per 5- or 10-year period for current speed environment – advise which period	8 DSI crashes over the 5-year period (2015-19) 14 DSI crashes over the 10-year period (2010-19)		
Types of injury crashes, movement type, severities for	5-year period incl. 5 Fatal and 3 SI		

each movement type, and movement codes	The crash movements for the 8 DSI crashes are: LB DF 4 x DJ AB BO
Collective safety risk rating before intervention	High / Actual High (10.3)
Personal safety risk rating before intervention	High (24.4)
Deaths and Serious Injuries (DSI) per annum	10.3 / 5 = 2.1