

12 July 2023

File Ref: OIAPR-1274023063-3111

[REDACTED]

Tēnā koe [REDACTED]

Request for information 2023-146

I refer to your request for information dated 8 June 2023, which was received by Greater Wellington Regional Council (Greater Wellington) on 8 June 2023. You have requested the following:

“Can I get, under the LGOIMA, all correspondence between GRWC/Metlink and NZ Bus about any issues related to the CRRC-made buses for the past two years?”

Greater Wellington’s response follows:

Please refer to **attachment 1** which contains a copy of all correspondence on issues related to CRRC-made buses over the last 2 years.

We are withholding Greater Wellington staff phone numbers (both personal numbers and work numbers) and the email addresses of individuals in the correspondence who are not employees of Greater Wellington under section 7(2)(a) of the Local Government Official Information and Meetings Act 1987 (the Act) to protect the privacy of natural persons, including that of deceased natural persons.

We have considered whether the public interest in this information would outweigh our decision, however, we believe in this instance that the public interest does not outweigh our decision to redact the phone numbers or email addresses.

If you have any concerns with the decision(s) referred to in this letter, you have the right to request an investigation and review by the Ombudsman under section 27(3) of the Local Government Official Information and Meetings Act 1987.

Please note that it is our policy to proactively release our responses to official information requests where possible. Our response to your request will be published shortly on Greater Wellington's website with your personal information removed.

Nāku iti noa, nā



Samantha Gain

Kaiwhakahaere Matua Waka-ā-atea | Group Manager Metlink

PROACTIVE RELEASE

From: Ken Pearson [REDACTED]
Sent: Wednesday, 24 May 2023 4:04 pm
To: Matthew Lear; Rusco Niemand; Tom Logan
Cc: Paul Blane; Rob Braddock; Tristan Elder; Melissa Anderson
Subject: RE: CRRC wheelchair ramp failure

Thanks Mathew

Agree , so if any passengers get caught out the driver can call OCC and order a taxi which will resolve the issue.

Buses can kneel for those with walkers.

I will let OCC know the process and they can advise me so we can track number of those effected.

Regards
Ken Pearson



Ken Pearson | General Manager - Service Delivery

Email [REDACTED]

Website www.nzbus.co.nz

Mobile + [REDACTED]

45 Onepu Rd | Kilbirnie | Wellington | New Zealand



Please consider the environment before printing this e-mail

ATTENTION RECIPIENT: This email and any attachments are confidential and may be legally privileged. Confidentiality and/or privilege is not waived or lost by mistaken delivery. If you are not the intended recipient of this email, please notify us immediately and delete it from your system. Unauthorized use of this email is prohibited. Any personal information in this email must be treated in accordance with applicable privacy laws.

From: Matthew Lear <Matthew.Lear@gw.govt.nz>

Sent: Wednesday, May 24, 2023 3:47 PM

To: Ken Pearson [REDACTED]; Rusco Niemand [REDACTED]; Tom Logan <tom.logan@gw.govt.nz>

Cc: Paul Blane <Paul.Blane@gw.govt.nz>; Rob Braddock <Rob.Braddock@gw.govt.nz>; Tristan Elder <Tristan.Elder@gw.govt.nz>; Melissa Anderson <Melissa.Anderson@gw.govt.nz>

Subject: Re: CRRC wheelchair ramp failure

Ok- can we ask you put some thought into a contingency as a matter of urgency- it feels to me there is potential that people maybe stranded? One thought could be you call some taxi firms and assess options they have to transport customers should the need arise on the last trip.

Ngā mihi,
Matthew

Matthew Lear *he/him*

Kaiwhakahaere Matua | Manager Network Operations

Metlink

M [REDACTED]

100 Cuba St, Te Aro, Wellington 6011 | PO Box 11646, Manners St, Wellington 6142

Follow us online: [Facebook](#) | [Twitter](#)

To find out how to plan your journey, go to metlink.org.nz



From: Ken Pearson [REDACTED]
Sent: Wednesday, May 24, 2023 3:42:36 PM
To: Matthew Lear <Matthew.Lear@gw.govt.nz>; Rusco Niemand [REDACTED]; Tom Logan <tom.logan@gw.govt.nz>
Cc: Paul Blane <Paul.Blane@gw.govt.nz>; Rob Braddock <Rob.Braddock@gw.govt.nz>; Tristan Elder <Tristan.Elder@gw.govt.nz>; Melissa Anderson <Melissa.Anderson@gw.govt.nz>
Subject: RE: CRRC wheelchair ramp failure

Hi Mathew

Unfortunately, that is not possible tonight.

At present no EV ramps are being used (today) however tomorrow we will be removing signs from those that have been upgraded so those ramps will be able to be used throughout the day.

This will then allow a more flexible allocation process.

Regards
Ken Pearson



Ken Pearson | General Manager - Service Delivery

Email [REDACTED]

Website www.nzbus.co.nz

Mobile [REDACTED]

45 Onepu Rd | Kilbirnie | Wellington | New Zealand



Please consider the environment before printing this e-mail

ATTENTION RECIPIENT: This email and any attachments are confidential and may be legally privileged. Confidentiality and/or privilege is not waived or lost by mistaken delivery. If you are not the intended recipient of this email, please notify us immediately and delete it from your system. Unauthorized use of this email is prohibited. Any personal information in this email must be treated in accordance with applicable privacy laws.

From: Matthew Lear <Matthew.Lear@gw.govt.nz>
Sent: Wednesday, May 24, 2023 3:28 PM
To: Rusco Niemand [REDACTED]; Tom Logan <tom.logan@gw.govt.nz>; Ken Pearson [REDACTED]
Cc: Paul Blane <Paul.Blane@gw.govt.nz>; Rob Braddock <Rob.Braddock@gw.govt.nz>; Tristan Elder <Tristan.Elder@gw.govt.nz>
Subject: RE: CRRC wheelchair ramp failure

Thanks Rusco- appreciate the work you are putting into this.

Ken- can you ensure that none of the last trips on timetables are operated by a bus with a ramp which is impacted by this- it's important that we don't leave anyone stranded.

Ngā mihi,
Matthew

Matthew Lear *he/him*
Kaiwhakahaere Matua | Manager Network Operations
Metlink
M [REDACTED]
100 Cuba St, Te Aro, Wellington 6011 | PO Box 11646, Manners St, Wellington 6142
Follow us online: [Facebook](#) | [Twitter](#)
To find out how to plan your journey, go to metlink.org.nz



From: Rusco Niemand [REDACTED]
Sent: Wednesday, 24 May 2023 3:17 pm
To: Tom Logan <tom.logan@gw.govt.nz>
Cc: Paul Blane <Paul.Blane@gw.govt.nz>; Rob Braddock <Rob.Braddock@gw.govt.nz>; Matthew Lear <Matthew.Lear@gw.govt.nz>; Tristan Elder <Tristan.Elder@gw.govt.nz>
Subject: RE: CRRC wheelchair ramp failure

Hi Tom

Thank you for coming out and looking at the ramps. We have fitted three additional rivets to the remaining 35 busses that still have the original ramps, but the ramps of these busses are NOT being used. The drivers are instructed not to use the ramps if not replaced with a new version.

There is a sign that states the ramp is not in service on the busses with the original ramps.

The busses that have had the new version ramp fitted don't have the sign in the door and the new ramp is being used.

Regards

Rusco Niemand | Fleet Manager, Wellington
Email [REDACTED]
Website www.nzbus.co.nz
Mobile + [REDACTED]
Wellington | New Zealand



RELIABILITY | RESPECT | FIT FOR PURPOSE

Please consider the environment before printing this e-mail

ATTENTION RECIPIENT: This email and any attachments are confidential and may be legally privileged. Confidentiality and/or privilege is not waived or lost by mistaken delivery. If you are not the intended recipient of this email, please notify us immediately and delete it from your system. Unauthorized use of this email is prohibited. Any personal information in this email must be treated in accordance with applicable privacy laws.

From: Tom Logan <tom.logan@gw.govt.nz>

Sent: Wednesday, May 24, 2023 3:00 PM

To: Rusco Niemand [REDACTED]

Cc: Paul Blane <Paul.Blane@gw.govt.nz>; Rob Braddock <Rob.Braddock@gw.govt.nz>; Matthew Lear <Matthew.Lear@gw.govt.nz>; Tristan Elder <Tristan.Elder@gw.govt.nz>

Subject: CRRC wheelchair ramp failure

Kia ora Rusco,

Thanks for your time this morning explaining the issue with the wheelchair ramps on the CRRC buses. I understand that the 35 buses that have not yet had the new design ramp installed are being used in service, but the drivers have been instructed not to deploy the ramps. Can you please confirm that is the case.

You showed me a temporary fix with three additional rivets, however I am not clear what evidence there is that this is sufficient, do you have any calculations or test results? Without some evidence of the robustness of this temporary fix they should not be deployed.

Ngā mihi

Tom Logan (he/him) | Bus Projects Delivery Consultant

GREATER WELLINGTON REGIONAL COUNCIL

M [REDACTED]
100 Cuba St, Te Aro, Wellington 6011 | PO Box 11646, Manners St, Wellington 6142 | metlink.org.nz

Follow us online: [Facebook](#) | [Twitter](#)



ATTENTION: This correspondence is confidential and intended for the named recipient(s) only. If you are not the named recipient and receive this correspondence in error, you must not copy, distribute or take any action in reliance on it and you should delete it from your system and notify the sender immediately. Unless otherwise stated, any views or opinions expressed are solely those of the author, and do not represent those of the organisation.

ATTENTION: This correspondence is confidential and intended for the named recipient(s) only. If you are not the named recipient and receive this correspondence in error, you must not copy, distribute or take any action in reliance on it and you should delete it from your system and notify the sender immediately. Unless otherwise stated, any views or opinions expressed are solely those of the author, and do not represent those of the organisation.

ATTENTION: This correspondence is confidential and intended for the named recipient(s) only. If you are not the named recipient and receive this correspondence in error, you must not copy, distribute or take any action in reliance on it and you should delete it from your system and notify the sender immediately. Unless otherwise

From: Ken Pearson [REDACTED]
Sent: Wednesday, 24 May 2023 4:28 pm
To: Matthew Lear; Rusco Niemand; Tom Logan
Cc: Paul Blane; Rob Braddock; Tristan Elder; Melissa Anderson
Subject: RE: CRRC wheelchair ramp failure

Agree Mathew

I have advised OCC that they can call me anytime if something else pops up for disabled passengers due to the ramp issues.

Regards
Ken Pearson



Ken Pearson | General Manager - Service Delivery

Email [REDACTED]

Website www.nzbus.co.nz

Mobile [REDACTED]

45 Onepu Rd | Kilbirnie | Wellington | New Zealand



Please consider the environment before printing this e-mail
ATTENTION RECIPIENT: This email and any attachments are confidential and may be legally privileged. Confidentiality and/or privilege is not waived or lost by mistaken delivery. If you are not the intended recipient of this email, please notify us immediately and delete it from your system. Unauthorized use of this email is prohibited. Any personal information in this email must be treated in accordance with applicable privacy laws.

From: Matthew Lear <Matthew.Lear@gw.govt.nz>
Sent: Wednesday, May 24, 2023 4:07 PM
To: Ken Pearson [REDACTED]; Rusco Niemand [REDACTED]; Tom Logan <tom.logan@gw.govt.nz>
Cc: Paul Blane <Paul.Blane@gw.govt.nz>; Rob Braddock <Rob.Braddock@gw.govt.nz>; Tristan Elder <Tristan.Elder@gw.govt.nz>; Melissa Anderson <Melissa.Anderson@gw.govt.nz>
Subject: Re: CRRC wheelchair ramp failure

Thanks Ken- appreciate that, it's really important we don't risk leaving anyone and have a plan B.

Ngā mihi,
Matthew

Matthew Lear *he/him*

Kaiwhakahaere Matua | Manager Network Operations

Metlink

M [REDACTED]

100 Cuba St, Te Aro, Wellington 6011 | PO Box 11646, Manners St, Wellington 6142

Follow us online: [Facebook](#) | [Twitter](#)

To find out how to plan your journey, go to metlink.org.nz



From: Ken Pearson [REDACTED]
Sent: Wednesday, May 24, 2023 4:03:30 PM
To: Matthew Lear <Matthew.Lear@gw.govt.nz>; Rusco Niemand [REDACTED]; Tom Logan <tom.logan@gw.govt.nz>
Cc: Paul Blane <Paul.Blane@gw.govt.nz>; Rob Braddock <Rob.Braddock@gw.govt.nz>; Tristan Elder <Tristan.Elder@gw.govt.nz>; Melissa Anderson <Melissa.Anderson@gw.govt.nz>
Subject: RE: CRRC wheelchair ramp failure

Thanks Mathew

Agree , so if any passengers get caught out the driver can call OCC and order a taxi which will resolve the issue.

Buses can kneel for those with walkers.

I will let OCC know the process and they can advise me so we can track number of those effected.

Regards
Ken Pearson



Ken Pearson | General Manager - Service Delivery
Email [REDACTED]
Website www.nzbus.co.nz
Mobile [REDACTED]
45 Onepu Rd | Kilbirnie | Wellington | New Zealand



Please consider the environment before printing this e-mail

ATTENTION RECIPIENT: This email and any attachments are confidential and may be legally privileged. Confidentiality and/or privilege is not waived or lost by mistaken delivery. If you are not the intended recipient of this email, please notify us immediately and delete it from your system. Unauthorized use of this email is prohibited. Any personal information in this email must be treated in accordance with applicable privacy laws.

From: Matthew Lear <Matthew.Lear@gw.govt.nz>
Sent: Wednesday, May 24, 2023 3:47 PM
To: Ken Pearson [REDACTED]; Rusco Niemand [REDACTED]; Tom Logan <tom.logan@gw.govt.nz>
Cc: Paul Blane <Paul.Blane@gw.govt.nz>; Rob Braddock <Rob.Braddock@gw.govt.nz>; Tristan Elder

<Tristan.Elder@gw.govt.nz>; Melissa Anderson <Melissa.Anderson@gw.govt.nz>

Subject: Re: CRRC wheelchair ramp failure

Ok- can we ask you put some thought into a contingency as a matter of urgency- it feels to me there is potential that people maybe stranded? One thought could be you call some taxi firms and assess options they have to transport customers should the need arise on the last trip.

Ngā mihi,
Matthew

Matthew Lear *he/him*

Kaiwhakahaere Matua | Manager Network Operations

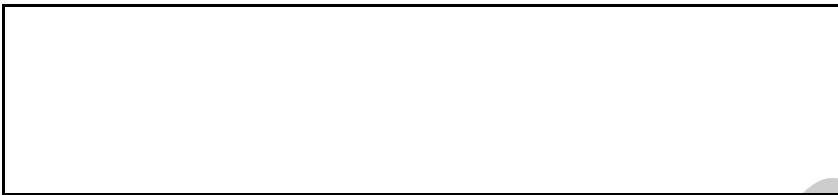
Metlink

M [REDACTED]

100 Cuba St, Te Aro, Wellington 6011 | PO Box 11646, Manners St, Wellington 6142

Follow us online: [Facebook](#) | [Twitter](#)

To find out how to plan your journey, go to metlink.org.nz



From: Ken Pearson [REDACTED]

Sent: Wednesday, May 24, 2023 3:42:36 PM

To: Matthew Lear <Matthew.Lear@gw.govt.nz>; Rusco Niemand [REDACTED]; Tom Logan <tom.logan@gw.govt.nz>

Cc: Paul Blane <Paul.Blane@gw.govt.nz>; Rob Braddock <Rob.Braddock@gw.govt.nz>; Tristan Elder <Tristan.Elder@gw.govt.nz>; Melissa Anderson <Melissa.Anderson@gw.govt.nz>

Subject: RE: CRRC wheelchair ramp failure

Hi Mathew

Unfortunately, that is not possible tonight.

At present no EV ramps are being used (today) however tomorrow we will be removing signs from those that have been upgraded so those ramps will be able to be used throughout the day.

This will then allow a more flexible allocation process.

Regards
Ken Pearson



Ken Pearson | General Manager - Service Delivery

Email [REDACTED]

Website www.nzbus.co.nz

Mobile + [REDACTED]

45 Onepu Rd | Kilbirnie | Wellington | New Zealand



Please consider the environment before printing this e-mail

ATTENTION RECIPIENT: This email and any attachments are confidential and may be legally privileged. Confidentiality and/or privilege is not waived or lost by mistaken delivery. If you are not the intended recipient of this email, please notify us immediately and delete it from your system. Unauthorized use of this email is prohibited. Any personal information in this email must be treated in accordance with applicable privacy laws.

From: Matthew Lear <Matthew.Lear@gw.govt.nz>

Sent: Wednesday, May 24, 2023 3:28 PM

To: Rusco Niemand [REDACTED] Tom Logan <tom.logan@gw.govt.nz>; Ken Pearson [REDACTED]

Cc: Paul Blane <Paul.Blane@gw.govt.nz>; Rob Braddock <Rob.Braddock@gw.govt.nz>; Tristan Elder <Tristan.Elder@gw.govt.nz>

Subject: RE: CRRC wheelchair ramp failure

Thanks Rusco- appreciate the work you are putting into this.

Ken- can you ensure that none of the last trips on timetables are operated by a bus with a ramp which is impacted by this- it's important that we don't leave anyone stranded.

Ngā mihi,
Matthew

Matthew Lear *he/him*

Kaiwhakahaere Matua | Manager Network Operations

Metlink

M [REDACTED]

100 Cuba St, Te Aro, Wellington 6011 | PO Box 11646, Manners St, Wellington 6142

Follow us online: [Facebook](#) | [Twitter](#)

To find out how to plan your journey, go to metlink.org.nz



From: Rusco Niemand [REDACTED]

Sent: Wednesday, 24 May 2023 3:17 pm

To: Tom Logan <tom.logan@gw.govt.nz>

Cc: Paul Blane <Paul.Blane@gw.govt.nz>; Rob Braddock <Rob.Braddock@gw.govt.nz>; Matthew Lear <Matthew.Lear@gw.govt.nz>; Tristan Elder <Tristan.Elder@gw.govt.nz>

Subject: RE: CRRC wheelchair ramp failure

Hi Tom

Thank you for coming out and looking at the ramps. We have fitted three additional rivets to the remaining 35 busses that still have the original ramps, but the ramps of these busses are NOT being used. The drivers are instructed not to use the ramps if not replaced with a new version.

There is a sign that states the ramp is not in service on the busses with the original ramps.

The busses that have had the new version ramp fitted don't have the sign in the door and the new ramp is being used.

Regards

Rusco Niemand | Fleet Manager, Wellington

Email [REDACTED]

Website www.nzbus.co.nz

Mobile + [REDACTED]

Wellington | New Zealand



RELIABILITY | RESPECT | FIT FOR PURPOSE

Please consider the environment before printing this e-mail

ATTENTION RECIPIENT: This email and any attachments are confidential and may be legally privileged. Confidentiality and/or privilege is not waived or lost by mistaken delivery. If you are not the intended recipient of this email, please notify us immediately and delete it from your system. Unauthorized use of this email is prohibited. Any personal information in this email must be treated in accordance with applicable privacy laws.

From: Tom Logan <tom.logan@gw.govt.nz>

Sent: Wednesday, May 24, 2023 3:00 PM

To: Rusco Niemand [REDACTED]

Cc: Paul Blane <Paul.Blane@gw.govt.nz>; Rob Braddock <Rob.Braddock@gw.govt.nz>; Matthew Lear <Matthew.Lear@gw.govt.nz>; Tristan Elder <Tristan.Elder@gw.govt.nz>

Subject: CRRC wheelchair ramp failure

Kia ora Rusco,

Thanks for your time this morning explaining the issue with the wheelchair ramps on the CRRC buses. I understand that the 35 buses that have not yet had the new design ramp installed are being used in service, but the drivers have been instructed not to deploy the ramps. Can you please confirm that is the case.

You showed me a temporary fix with three additional rivets, however I am not clear what evidence there is that this is sufficient, do you have any calculations or test results? Without some evidence of the robustness of this temporary fix they should not be deployed.

Ngā mihi

Tom Logan (he/him) | Bus Projects Delivery Consultant

GREATER WELLINGTON REGIONAL COUNCIL

M [REDACTED]

100 Cuba St, Te Aro, Wellington 6011 | PO Box 11646, Manners St, Wellington 6142 | metlink.org.nz

Follow us online: [Facebook](#) | [Twitter](#)



ATTENTION: This correspondence is confidential and intended for the named recipient(s) only. If you are not the named recipient and receive this correspondence in error, you must not copy, distribute or take any action in reliance on it and you should delete it from your system and notify the sender immediately. Unless otherwise

Subject: CRRCLV - compliance discussion.
Location: Kaiwharawhara

Start: Fri 9/07/2021 11:00 am
End: Fri 9/07/2021 12:00 pm
Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: Tristan Elder

Good afternoon,

This meeting is to discuss the outstanding CRRCLV compliance items.

Regards

Tristan

PROACTIVE RELEASE

From: Ian Gordon [REDACTED]
Sent: Tuesday, 13 July 2021 12:17 pm
To: Paul Blane
Cc: Tristan Elder; Erich Livengood
Subject: FW: NZ Bus - CRRC ELV Vehicle Design Compliance.
Attachments: CRRV EV WLGT COMPLIANCE_v1.1_13JUL21.xlsx

Hi Paul,

Attached summary from Friday's conversation has been forwarded by Tristan. Our goal is to have the 1st 5 vehicles into service on Monday 19th July and based on the summary this should be achievable. The majority of outstanding issues require either CRRC certification or some minor adjustments / changes which can be completed this week. Are you able to advise which items require rectification prior to go live on Monday plus a timeframe for the others. Note this refers to the 1st 5, we should be able to fix all issues less seat adjustments on the remaining vehicles.

Regards

From: Tristan Elder <Tristan.Elder@nzbus.co.nz>
Sent: Tuesday, 13 July 2021 09:32
To: Paul Blane <Paul.Blane@gw.govt.nz>; Erich Livengood [REDACTED]
Cc: Ian Gordon [REDACTED]
Subject: NZ Bus - CRRC ELV Vehicle Design Compliance.

Good morning,

Please find attached the compliance action sheet from our meeting on Friday 9th July 2021. Please review and raise with me any queries you may have.

Many thanks

Tristan



Tristan Elder | Fleet Capital Projects Manager

Email [REDACTED]

Website www.nzbus.co.nz

Mobile + [REDACTED]

110 Hutt Road | Kaiwharawhara | New Zealand
Private Bag 14070 | Wellington | New Zealand

Please consider the environment before printing this e-mail

ATTENTION RECIPIENT: This email and any attachments are confidential and may be legally privileged. Confidentiality and/or privilege is not waived or lost by mistaken delivery. If you are not the intended recipient of this email, please notify us immediately and delete it from your system. Unauthorized use of this email is prohibited. Any personal information in this email must be treated in accordance with applicable privacy laws.

CDR review dates

10/7/20 – based on CRRC documents provided by NZ Bus 6/7/20.

22/3/21 & 29/3/21 – Inspection of #1 bus.

21/6/21 and 28/3/21 - 5701 - 5725

SORT No.	REF	Requirement	YES if complied.	Comment if not complied	Action Owner	Agree Action.
1		2.2 Design and performance				
2	1	Vehicle age ≤ 20 years	Yes			
3	2	Maximum rear overhang for all Vehicles which have a rearmost steering axle must be the lesser of 4.5 metres or 72 percent of the wheelbase.	N/A	No Steering tag fitted.		
4		2.3 Engine				
5	3	Acceleration 0-50km/h ≤ 30 seconds			CRRC	Test to be preformed.
6	4	Fuelling range = ≥ 350 km or 15 hours	Accepted	NZ Bus requested for acceptance from GWRC. On the basis the range of 300km was included in the specification document supplied and accepted by GWRC prior to placing the order with CRRC. GWRC emailed 9/7/21 - Accepted		
7	5	Emissions (Euro 5)	N/A	Electric vehicle.		
8	6	Noise (ECE 51 R2 for external & GWRC contract for internal)		22/3/21 – No internal noise test required. ECE 51 external noise test is required. To be tested as outlined in the 2021 RUB.	CRRC	CRRC have provided partial information. Measurement to be taken when the air brake valve activates.
9	7	Compartment insulation – Non-flammable material used. Fire to ISO 3795 or FMVSS 302 (US) or equivalent ECE standard (ECE R118)	Yes	10/7/20 – PB - Whole vehicle complies with ECE118		
10	8	T2.1 - Engine fire protection system – required if travelling through a road tunnel. Certificate of compliance required with AS 5062 2006 or ECE R107, addendum 106, revision3, amendment 3		22/3/21 – Commissioning document to be sent to PB for signoff. 26/3/21 – CRRC - To provide commissioning certificate.	CRRC	Complies with AS 5062 2006. CRRC - To provide commissioning certificate for each vehicle.
11	9	T2.3 – Engine compartment safety lockout	Yes			
12	10	T2.9 – Exhaust pipe exits the Vehicle at the rear & facing rearward	N/A	Electric vehicle.		
13		2.4 Transmission				
14	11	SV/MV fully automatic or electronic shift	N/A	LV vehicle.		
15	12	LV/DD fully automatic or electronic shift plus retarder	Yes	22/3/21 – one speed forward and one speed reverse, electronic gear selector - Electric vehicle. Regen braking.		
16		2.5 Suspension				
17	13	SV/MV shall have air suspension	N/A	LV vehicle.		
18	14	LV/DD shall have air suspension ECAS, including self-levelling	Compliance pending	10/7/20 – CRRC statement 22/3/21 – CRRC to confirm - Confirmed, functionality demonstrated.	GWRC	GWRC emailed 6/7/21 Document file supplied to be shared with GWRC.
19	15	MV/LV/DD kneeling at front ≥ 60 mm drop/lift	Yes	10/7/20 – PB - CRRC state that will kneel at the front only. Front door must be open for kneeling to work. 1/7/21 - bus 5703 - Kneels 335mm to 270mm. =65mm		
20	16	Kneel or rise time < 8 seconds	Yes	22/3/21 – 5 seconds.		
21	17	MV/LV/DD driver controlled in-use indicator/drive off protection	Yes	22/3/21 – Simulating picking up passenger. Bus in D as if you were driving. Foot brake applied, Open door. The bus will not drive whilst the door is open. Even if footbrake or acceleration was pressed. Electric parking brake is activated when door is opened. If the door is closed the bus will not drive until the accelerator is press which deactivates the electric park brake.		[Erich is going to advised what parts of the braking system is used and what the slope capability.]
22		2.6 Stability and steering				

SORT No.	REF	Requirement	YES if complied.	Comment if not complied	Action Owner	Agree Action.
23	18	LV/DD fitted with ESC-(electronic stability control)	Accepted	22/3/21 – Currently not installed but not required for single deck buses in 2021 version of the RUB. Accept		
24		2.7 Braking				
25	19	Shall have EBS and ABS	Yes	20/07/2020 - PB 23/3/21 - Pass		
26	20	Vehicle movement above 5km/h is inhibited while the kneeling system is activated	Yes	20/7/20 – vehicle can't drive when kneeled. Can't kneel until the door is opened. 22/3/21 - Note – GWRC suggest programming so no movement is allowed whilst kneeling		
27	21	T2.4 - Vehicle must be capable of being held on the park brake, and restarting without rolling back on sealed grades of not less than 20%, both uphill and downhill when fully laden	Accepted	Ref response to electric brake. (Brake tested and certified at 18%) How many axles do the spring brakes supply too? Vehicle has single spring brake		
28	22	T2.6 - Vehicle movement is inhibited and engine throttle returned to idle while doors are open & until the door is fully closed	Yes	20/7/20 - PB - brakes activated when any door is opened. 22/3/21 – verified the electric park brake operated when either door is opened.		
29	23	T2.6 - A system is required to ensure that the brakes will not release unless intended to do so by the driver seated in the driver's position.	Yes	20/7/20 – PB - Once door is closed the brake pedal must be operated to release the brakes. 22/3/21 – Verified that the throttle pedal must be operated to release the electric brake.		
30		3.1 Access				
31	24	Priority seats – minimum 4 seats preferably off side Must be available when wheelchair space is occupied by wheelchair passenger or pram	Yes	2 inward facing seats on both near-side and off-side, directly behind the front wheel arch. 2 nd row 2 forward facing priority seats on near side and off side.		
32	25	Minimum of 50% of all priority seats forward facing (count includes fold up seats)	Yes			
33		3.2 Doors				
34	26	SV front door ≥ 850mm single leaf	N/A	LV vehicle.		
35	27	MV/LV/DD front door ≥ 1000mm double leaf	Yes	10/7/20 - PB – CRRC state that is 1000mm net width when door open. Ventura doors 22/3/21 – measured 1080mm		
36	28	MV (SV if fitted) rear door ≥ 700mm single leaf	N/A	LV vehicle.		
37	29	LV/DD rear door ≥ 1000mm double leaf	Remedial work - CRRC	10/7/20 - PB – CRRC state that is 1000mm net width when door open. Ventura doors 22/3/21 – Bus 5701 - measured 1005mm 21/6/21 - Bus 5703 measured 1005mm 21/6/21 - Bus 5702 [TBC] measured 989mm - requires adjustment	CRRC	CRRC to adjust door width prior to going into service.
38	30	Door width measured as per T2.27	Yes	10/7/20 – to be confirmed at time of inspection. 22/3/21 - Confirmed.		
39	31	T2.26 – Rear doors must be outward opening.	Yes	10/7/20 – PB - CRRC state that the rear door opens outward by 200mm. 22/3/21 – verified.		

SORT No.	REF	Requirement	YES if complied.	Comment if not complied	Action Owner	Agree Action.
40	32	T2.20 - Safety sensor fitted to both front and rear doors that operates from 40mm above the floor to 1500mm above the floor (minimum)	NZ Bus - Decision.	10/7/20 - CRRC state that a door sensitive edge system is fitted, but need to confirm the vertical height and that it will work when tested to the requirements of the current VQS. 22/3/21 - Front door test - Verified Sensitive edge works. Software setup needs to be reviewed as the vehicle is able to move forward slightly. Rear door test - Verified sensitive edge works. Bus does not move off. 9/7/21 - CRRC has issued a software update which has been tested on bus 5701. This will be rolled out to the fleet. 9/7/21 - Sensitive edge does not work when the manual emergency door close buttons is used. The rear door close button to be deactivated. CRRC - To program the vehicle with a longer delay to the door close mechanism to allow additional time for the sensitive edge to react - Programme updated and tested on 5701	NZ Bus	CRRC - Bypass of rear door close button in planning stage. Requires a formal request from NZ Bus to action.
41	33	T2.20 - The door safety system shall cause the door to open when tested with the 30mm test bar.	Pass	22/3/21 - Test block used. 30 / 60mm. 5mm edge radius.		
42	34	T2.20 - Warning signage required for inward opening doors	N/A	22/3/21 - Only the front door is inward opening. No seats are situated directly behind and it is a no standing area.		
43	35	T2.22 - Front door opposite the driver	Yes	10/7/20 - PB - ref drawing DOC-GWRC25-D-VL-001D 22/3/21 - Pass		
44	36	T2.22 - Front door glazing to be clear	Yes			
45	37	T2.21 - MV/LV (SV if fitted) rear door immediately in front of rear wheel	Yes	10/7/20 - PB - ref drawing DOC-GWRC25-D-VL-001D		
46	38	T2.21 - DD rear door opposite stairs	N/A			
47	39	T2.22 - Rear door glazing can be tinted the same as the windows	Yes	22/3/21 - Rear tinted - VLT readings to provide/ statement from manufacture / supplier.		
48	40	T2.28 - Draught screens fitted at front door and both sides of rear door	Remedial work - CRRC	10/7/21 - CRRC state that screens are fitted at rear of front door and at the rear door. But don't state if they are fitted both sides of the rear door. 22/3/21 - Front door not required. Rear door - no front rear draught screen fitted. Rear side of the rear door fitted	CRRC	Bus 5701 to have screens retrofitted, remaining tranche to come with draft screens forward and rearward of rear door. Stock on order.
49	41	T2.28 - 45mm clearance between handrails & draught screen	Remedial work - CRRC	22/3/21 - Wheelchair handhold presents a pinch point when transitioning across window pillar. Off side rear row main saloon pinch points deemed ok.	CRRC	Bus 5701 to have screens retrofitted, remaining tranche to come with draft screens forward and rearward of rear door. Stock on order.
50	42	T2.28 - Draught screens do not create blind spots	Yes			
51		3.3 Step height/depths				
52	43	First step measured from the ground to top of step (not kneeled)	Yes			
53	44	SV/MV front \leq 300mm, may be \leq 370mm if kneeling to $<$ 300mm fitted	N/A			
54	45	MV rear \leq 370mm	N/A			
55	46	LV/DD Front \leq 370mm	Yes	10/7/20 - PB - CRRC state 360mm or less. 22/3/21 - 335mm		
56	47	Rear \leq 370mm	Yes	10/7/20 - CRRC state 380mm or less. Needs to be no more than 370mm. 22/3/21 - 340mm		
57	48	Kneeled: Front 22.5 inch rims \leq 300mm	Yes	20/7/20 - CRRC state will be $<$ 300mm 22/3/21 - 270mm		
58	49	For DD internal step heights should be of equal height (Maximum of two different heights is permitted)	N/A			

SORT No.	REF	Requirement	YES if complied.	Comment if not complied	Action Owner	Agree Action.
59	50	Minimum depth of any steps \leq 230mm	Yes	10/7/20 - PB - CRRC state that there are 2 steps excluding the platform for the last row of seats. The depth will be 300mm. 22/3/21 - PB - 345mm rear step		
60	51	No seat plinths forward of the rear edge of the rear door	Yes			
61	52	T2.73 - Vehicles must have sufficient ground clearance to permit the body (including skid plates) of the Vehicle to pass over a Kassel kerb without making contact with the kerb. These kerbs are 180mm high above the road surface immediately adjacent to the Kassel kerb	Yes	22/3/21 - Front 230mm and rear 360mm between ground and skid plates.		
62		3.4 Floors				
63	53	Floor coverings have been approved by GWRC	Yes	10/7/20 - CRRC state that Gerflor being used. This has not been approved by GW. 22/3/21 - Pass on colour. Proof the product used is the correct product. GWRC to confirm Gerflor is an approved supplier - Confirm Gerflor is not as of 9July21. Gerflor is the substrate under the vinyl flooring material. CRRC have confirmed Altro 'New Zealand', 'Silver', and 'Yellow' has been used. GWRC emailed 6/7/21 - Approved 12/7/21		
64	54	T2.30 - Floor junction with walls provides for ease of cleaning & ensures seal between wall and floor	Remedial work - CRRC	22/3/21 - Design is acceptable in principle, want CRRC to confirm there is no opportunity for water ingress. CRRC have confirmed the wall floor transitions throughout the vehicles are sealed.	CRRC	The cabinet under the till stand will be sealed.
65	55	T2.30 - There shall be no cables or services ducting which protrude into the saloon area.	Yes			
66	56	T2.32 - Floor joins to be impervious to and chemically unaffected by water, paint, human waste, graffiti removers, wash-plant solutions, cleaning solutions, food and drink spills	Remedial work - CRRC	22/3/21 - Generally good. Wheelchair and Pram inlays need to be chemically welded. CRRC to confirm transition between floor and wall is water tight - CRRC confirmed. Rear saloon transition between floor and wall needs to be sealed - CRRC confirmed sealed.	CRRC	CRRC awaiting delivery of cold weld to seal pram and wheelchair inserts. Area under front electrical cabinet should be sealed to prevent any liquid / dirt being captured under the cabinet, as mentioned re. 54.
67	57	Priority floor area - contrasting colour as per brand manual	Yes	22/3/21 - Note rear of the priority seating area could finish under the last priority seat.		
68	58	Wheelchair & pram flooring insert signage as per brand manual	Yes			
69	59	No standing floor labels applied in both doorways (including plug type doors) as per brand manual	Yes	Note that the rear label could be placed at 300mm from the inside of the rear door.		
70	60	SV/MV flat floor at least to rear of priority area	N/A			
71	61	LV/DD flat floor to rear edge of rear door	Yes	20/7/20 - PB - CRRC state that it is flat. 22/3/21 - Pass		
72	62	LV/DD stepped access from saloon to the rear seating area - behind the rear door - maximum of 2 steps	Yes	22/3/21 - 2 steps from main saloon to rear saloon.		
73	63	LV/DD - Is transverse ramp slope required to meet \leq 370mm rear step height	Yes	22/3/21 - No its not.		
74		3.5 Aisle width				
75	64	There must be unimpeded access for a wheelchair and pram through the front wheel arches to the respective positions in the bus	Yes	22/3/21 - To be tested with a piece of 700 / 1200mm. 28/6/21 - Height has been taken at 900mm from the 2021 RUB. Tested with a piece of 700 / 1200mm - pass		
76	65	T2.34 - SV \geq 780mm through wheel arches, to rear of multi-use/wheelchair space. Measured from floor to a height of 1600mm.	N/A			

SORT No.	REF	Requirement	YES if complied.	Comment if not complied	Action Owner	Agree Action.
77	66	T2.35 & T2.36 - MV/LV/DD ≥ 800mm through wheel arches to the rear of multi-use/wheelchair space. Measured from floor to a height of 1600mm.	Yes	PB - CRRC state 800mm min. Need to confirm height to 1600mm. 22/3/21 - PB - At narrowness point 800mm. Range 800-815mm		
78	67	LV ≥ 440mm from the rear of multi-use/wheelchair space through the rest of the bus. Measured from floor to a height of 1600mm.	Yes	10/7/20 - PB - CRRC statement. 22/3/21 - PB - Main saloon - 520-545mm		
79	68	DD ≥ 440mm from the rear of multi-use/wheelchair space in both the lower and upper saloon	N/A			
80	69	DD ≥ 550mm (≥600mm preferred) between handrails throughout the stairs	N/A			
81	70	T2.38 - The shape of the aisle from the front door to the aisle through the wheel arches shall accommodate the swept path of a wheelchair/mobility device/pram of ≤700mm width x ≤1200mm length to a height of 1600mm from the floor.	Yes	22/3/21 - To be tested with a piece of 700 / 1200mm sheet. Note the height is taken from the 2021 RUB at 900mm. 28/6/21 - Pass		
82	71	T2.37 - Positioning of the driver Ticketing Equipment does not impede on minimum aisle width clearances.	Yes	To be checked once the position has been optimised for the driver.		Note - Cash box may slide around, suggest location device, bolts to be countersunk and rubber matt.
83		3.6 Seating configuration				
84	72	SV minimum of 24 seats	N/A			
85	73	MV minimum of 24 seats	N/A			
86	74	LV minimum of 36 seats	Yes	10/7/20 - PB - 37 22/3/21 - PB - 37 + driver		
87	75	DD minimum of 80 seats	N/A			
88	76	≥ 60 percent forward facing	Yes			
89	77	≥ 50 percent forward facing in priority area	Yes			
90	78	Seat spacing between seats that face each other must be ≥1300mm	N/A			
91	79	Seat spacing between forward-facing seats shall be ≥690mm	No	Refer to table, 'Seat Measurement' TAB. Bus 5701 - fails on 690mm distance. Bus 5702 - Nearside row 5 @ 686mm, Rear row averages 662mm	CRRC	Rear seat spacing to be confirmed on bus 5701 - Done. Adjustments to be made on bus 5701 using slotted bolt holes in seat pedestal and wall mount to improve seat spacing results. Results to be presented to GWRC for further consideration.
92	80	T2.41 - The height from the floor to the top of the front of the seat cushion to be ≥450mm and ≤500mm	Yes	10/7/20 - CRRC to advise the height for the 2 rows of seats over the rear axles that will not be compliant. Otherwise all other seats comply according to CRRC. 22/3/21 - Design changed. All seats now comply.		
93	81	T2.44 - The height to the top of the seat back from floor (including wall mounted fold up seats), excluding any grab handle, to be ≥900mm.	Yes			
94	82	Leg room ≥ 300mm measured from front edge of seat squab horizontally to seat back or modesty panel in front	No	22/3/21 - Refer to table, 'Seat Measurement' TAB. Bus 5701 - fails on 300mm distance. Bus 5702 - Pass.	CRRC	Adjustments to be made on bus 5701 using slotted body holes in seat pedestal and wall mount to improve leg room measurement results. Results to be presented to GWRC for further consideration.
95		3.7 Seating design				
96	83	Seat width - single seat ≥ 425mm	Yes	10/7/20 - PB - CRRC state 425mm wide. 22/3/21 - PB - Inwards - 425mm, Ster - 440mm		
97	84	Seat width - double bench or paired seat ≥ 875mm	Yes	22/3/21 - 890mm		
98	85	Seat width - mother/child ≥ 760mm, location	N/A			
99	86	T2.40 - Seats shall use individual seat backs and squabs for both fold up and fixed seats. (The rear row of seats can be a bench style with a lower cushion that is moulded to define 5 seating positions)	Yes	10/7/20 - PB - CRRC state Ster 8MA. 22/3/21 - Pass		
100	87	T2.40 - Seats shall have swallow or no curve profile, i.e. no "bucket style" seats, to allow larger passengers to sit in comfort.	Yes			

SORT No.	REF	Requirement	YES if complied.	Comment if not complied	Action Owner	Agree Action.
101	88	T2.43 – Seats shall not have a headrest	Yes			
102	89	T2.40 - Seat fabric, to be green for all priority seats including fold up seats in the wheelchair and pram areas	Yes	22/3/21 – Confirm product is correct from manufacturer. Colour - pass Specification - TBC		
103	90	T2.40 - Seat fabric, to be blue for all other seats	Yes	22/3/21 – Confirm product is correct from manufacturer. Colour - pass Specification - TBC		
104	91	T2.40 – Seat materials shall be easily cleaned or exchanged during maintenance. The seating structure shall be vandal/graffiti resistant		22/3/21 – Confirm product is correct from manufacturer. Subject to the answer to the material been used.	CRRC	CRRC to gain GWRC approval for material supplier. Letter and table to be supplied outlining material specifications.
105	92	T2.43 - Seat fabrics have been approved by GWRC. (Operator to provide proof of purchase from fabric supplier).		22/3/21 - Manufacturer to supply	CRRC	CRRC to gain GWRC approval for material composition, fire retardant characteristics, and colour. Letter and table to be supplied outlining material specifications.
106	93	T2.44 - Fold up seats must automatically fold up once vacated.	Yes			
107	94	Fold up seats must not have a locking mechanism to hold in the up position.	Yes			
108	95	Fold up seat hinges do not protrude	Yes			
109	96	T2.19 - Any wall mounted fold up seats in the wheelchair bay are to be adjacent to handholds	Yes			
110	97	T2.42 - The rear row of seats must be constructed in a manner which enables easy replacement of cushions and seat shells and for cleaning behind the seats, or comprises a bench style seat that is fitted so that there are no gaps around the seat cushions where rubbish can be placed	Yes			
111		3.8 Luggage/stroller/prams/mobility devices				
112	98	Provide space for 2 folded prams/mobility frames and 2 pieces of luggage of ≤25kg with dimensions ≤ 800mm x ≤ 300mm	Yes			
113		4.2 Vehicle interior, entrance and exit step and plinth edges				
114	99	Door entry/exits - slip-resistant material	Remedial work - CRRC	28/6/21 - Rear door pass. Front door wheel chair ramp alloy surround is not slip resistant and wide enough (80mm wide) to be a concern. Proof to be provided that GWRC floor material has been used - GWRC emailed 6/7/21 - Approved	CRRC	Apply 3m black antislip material to alloy around wheelchair ramp.
115	100	Sharks tooth design edging has not been used in any area	Yes	Not present		
116	101	Step and plinth edges fitted with yellow high-visibility, slip-resistant/non-trip nosing in a solid band contrasting colour	Remedial work - CRRC	22/3/21 – Note wheelchair ramp underside – black tape removed and insert installed.	CRRC	Infill spec sheet to be provide to prove slip resistance performance. Apply 3m yellow antislip material to alloy around wheelchair ramp.
117	102	Step and plinth edges to be 45mm to 50mm wide	Yes	10/7/20 – PB - CRRC statement. 22/3/21 – PB - 50mm		
118		4.3 Stanchions/handrails				
119	103	High-visibility yellow contrasting colour as per brand manual	Yes			
120	104	Along length of bus saloon(s) and not impede movement on aisle, spacing at least on alternate seats	Yes	10/7/20 – CRRC state stanchions are fitted through the bus at alternating sides and at a distance that does not exceed 1050mm. Drawing to be provided to confirm as this is unlikely through the wheel chair area. 22/3/21 - pass		


SORT No.	REF	Requirement	YES if complied.	Comment if not complied	Action Owner	Agree Action.
121	105	Additional handrails in entry and exit locations	Yes	10/7/20 - PB - CRRC statement. 22/3/21 - Pass		
122	106	T2.49 - A horizontal handrail shall be fitted either side of the rear door exit aisle.		10/7/20 - PB - CRRC statement. 22/3/21 - The handrail has not been altered as promised by CRRC.	CRRC	Letter to be presented to GWRC from CRRC. CRRC note that a horizontal hand rail is fitted in this area on both sides. CRRC has also agreed to change the design of the hand rail for future orders to provide a different style of horizontal hand rail, but considers that current handrail meets specifications.
123	107	T2.49 - There shall be a horizontal handrail fitted along the wall and above the fold up seats in wheelchair bays.	Yes			
124	108	Handrails are fitted to all inward opening doors	Yes			
125	109	T2.49 - Grab handles are not to be fitted under the foldup seats	Yes			
126	110	DD stairwell - stanchions are required at the top and bottom of the stairwell both sides.	N/A			
127	111	T2.49 - There shall be handrails on either side of the DD stairway. The handrails are to be continuous from top to bottom, accessible both sides of the entrance to the stairway from the top deck floor and run continuously to the landing at the bottom of the stairway. The handrails on both sides are to be 1000mm high measured vertically above each step.	N/A			
128	112	Overhead handrails should be no higher than 1900mm from floor level, unless fitted with strap hangers to reach to or below this height	Yes	22/3/21 - 1895mm		
129	113	Maximum cross-section dimension 30-35mm	Yes	22/3//21 - 35mm		
130	114	Finger/hand clearance space of 45mm between any part of the Vehicle and all handrail	Yes			
131	115	Smooth surface to aid cleaning	Remedial work - CRRC	22/3/21 - A number of stanchions and handholds have a rough chalky feel - Bus 5701 5705 areas that present again chalky finish.	CRRC	Handrails to be cut and polished prior to going into service.
132	116	T2.51 - Handrails are fitted over wheel arches	Yes			
133	117	T2.48 - Stanchions to the rear and on the edge of dedicated wheelchair bays to have a curved or angular profile providing clearance from the floor of at least 300mm and from the aisle of at least 300mm in order to allow for the turning of a wheelchair within the confines of the wheelchair bay	Yes	22/3/21 - modesty's on the rear of both the wheelchair spaces to provide 300mm clearance height off the floor. Bus 5702 - Pass Bus 5703 - pass Bus 5701 requires new design modesty's to be installed - Done		
134		4.4 Grab handles & hanging Straps				
135	118	Circular or cross section of 30-35mm	Yes			
136	119	Usable length of both grab handle and hanging strap handles to be 100mm minimum	N/A			
137	120	T2.50 - Hanging straps are approved by GWRC for style and design before installation.	N/A	22/3/21 - Not fitted as not required.		
138	121	T2.50 - Hanging straps are to be fixed to the overhead bar so that they do not slide along the bar.	N/A			
139	122	T2.51 - All forward & rearward facing seats to have yellow grab handles	Yes	10/7/20 - CRRC state that fitted only to aisle seats. 22/3/21 - All seats fitted with yellow hand holds.		
140		4.5 Lighting				
141	123	T2.52 - Vehicles must be fitted with interior lighting using LED lamps	Yes	20/07/2020 - PB		
142	124	T2.47 - The system designed to ensure the interior lighting will automatically provide the required lighting levels at all times		[Night time interior lighting test will need to be completed. To ensure light levels are correct or need to be adjusted. The test also to check the function of the light sensor.]	CRRC	CRRC lighting mode / description of how this function works.


SORT No.	REF	Requirement	YES if complied.	Comment if not complied	Action Owner	Agree Action.
143	125	T2.53 - There must be no reflection on the windscreen from the internal lights operating at the specified light levels.	Yes	20/7/20 - CRRC state that there will be no reflection, but spec light levels are not provided. Reflection at setting 2 - pass.		
144	126	Internal entry and exit doorway \geq 100 lux, externally downwards and outwards for \geq 300mm	No		CRRC	Measurements to be taken on vehicle which lighting had been adjusted with light meter [add name]. Results to be presented to GWRC for further consideration.
145	127	Entry/exit light automatically extinguished on door closure prior to moving off	Yes			
146	128	Fare paying area \geq 65 lux extinguished on door closure prior to moving off	Yes	Set at setting number 2.		
147	129	DD Overhead lighting above the stairwell \geq 40 lux	N/A			
148	130	DD stairwell sidewall low intensity safety lighting at each step height	N/A			
149	131	General saloon behind driver's modesty panel \geq 40 lux	Yes	Set at setting number 2.		
150		4.6 Security and safety				
151	132	T2.54 - CCTV system fitted that complies with the requirements of VQS appendix 2. (CCTV system compliance check sheet to be completed by operator).	Quickstart to provide document	12/7/20 - Streamax system 29/3/21 - CCTV check sheet to be provided.		
152	133	T2.54 - The CCTV system must be configured to show the following images on the driver's screen: Rear &/or front door open <ul style="list-style-type: none"> · Stairs (if DD), Wheelchair bays (if single deck) · Top level (if DD), View from the rear of the Vehicle looking forward (if single deck) · Left side of bus exterior (rear door outside) · Rear door inside Doors closed & driving <ul style="list-style-type: none"> · Top deck view that also covers the entrance to the stairs · blind spot cameras (left flank, right flank cameras) 	Camera views to be adjusted new camera views to be provided to GWRC.	Camera mode as follows. Bus Number 5701 - 5725 Rear or/& front door open. <ul style="list-style-type: none"> -Wheelchair area. -Rear interior camera. -Near side blind spot. -Rear door. Doors closed & driving. <ul style="list-style-type: none"> -Near side blind spot. -Off side blind spot camera. Reversing. Reversing camera. GWRC Comments. Camera 1 - near side blind spot camera. Image is upside down and angle does not show side sufficient view down bus. Camera 2 - Off side blind spot camera. Image is upside down and angle does not provide sufficient view down bus. Camera 3 - Rear door camera. Angle acceptable. Camera 4 - Rear of bus looking forward. Camera angle does not cover the rear saloon forward of the second to last row. Camera 5 - Camera 6 - Camera 11 - Wheel chair / Priority seating space. This camera needs to pick up the area in the main saloon that is not captured - all forward facing lower seats need to be captured by camera. It does cover the wheelchair adequately. Camera 10 - Front door fare paying area. Camera	NZ Bus	NZ Bus to present document outlining camera modes and showing camera angles to GWRC for compliance sign off.
153	134	T2.56 - DD Vehicles must be fitted with an upper deck passenger counting system which includes screens in the lower passenger saloon and driving compartment so the driver and passengers can see how many seats are available in the upper deck	N/A			

SORT No.	REF	Requirement	YES if complied.	Comment if not complied	Action Owner	Agree Action.
154	135	T2.57 - DD Vehicles must be fitted with a tamper proof smoke detector in the upper deck rear seated area and provide audible warning to the driver	N/A			
155	136	For DD signage requiring that "passengers must not stand in the stair well whilst the bus is in motion"	N/A			
156	137	DD must have a tree guard fitted to the upper front corners	N/A			
157	138	For DD an upper deck electro/optical approaching hazard warning device is optional	N/A			
158		4.7 Heating, ventilation and air conditioning				
159	139	Air conditioning with climate control shall be fitted	Yes	10/7/20 - PB - CRRC stated that the system is fully automatic.		
160	140	T2.58 - Saloon heating, ventilation and air conditioning systems must be independent of the driver system control	Yes	10/7/20 - PB - CRRC statement. 29/3/21 - The controller is in the overhead compartment.		
161	141	T2.59 - The temperature within the saloon areas is to be maintained at a temperature of 22degreesC +/- 4degreesC. (operator to provide performance certification from aircon manufacturer)	Yes	10/7/20 - PB - CRRC stated that it will comply.		
162	142	T2.59 - Relative humidity must normally be around 50% but must not exceed 70% at any time in service. Optimum levels to be reached within 10 minutes of Vehicle start up. (operator to provide performance certification from aircon manufacturer).		10/7/20 - PB - CRRC stated that it will comply with the humidity levels, but not the time. 29/3/21 - PB - CRRC to advise what the demist time will be.	CRRC	CRRC to confirm systems operation.
163	143	T2.59 - DD Vehicles must have at least 2 temperature sensing zones, one for the lower saloon area and one for the upper saloon area.	N/A			
164	144	T2.59 - Distributed air from the a/c system must not blow directly onto passengers' heads.	Yes			
165	145	T2.59 - Additional, individual, vandal proof, adjustable vents must be fitted in the upper compartment of DD Vehicles.	N/A			
166		4.8 Demisting				
167	146	Must demist the windscreen, driver's side windows, front and rear door glass and all side windows within 10 minutes of Vehicle start up.		10/7/20 - PB - CRRC state that it will. Air ducting not airconditioned air. Erich needs to prove 10/7/20 - CRRC state that it will. 29/3/21 - It appears that the aircon is not ducted to the windscreen or front doors. Ducting is present but only uses ambient air. Proof is required that the demisting requirements can be met. 1/7/21 - there appears to be a vent in the outside of the overhead console facing the driver's window. But is closed. Confirm	CRRC	CRRC to confirm off side air vent behind blind is able to open. CRRC to submit letter to confirm modes and operation.
168		Communication				
169		5.2 Bus stopping signals				
170	147	Fitted with 2 dual-indicator bus stopping audible signalling and visual display devices (a mix of upper and lower case) that are easily seen and heard by the driver and the passengers (one rearward facing at the front of the bus and a 2nd forward and rearward facing repeater located near the rear door or rear axle if only one door fitted)	Yes	10/7/20 - PB - CRRC state that audible and visual is provided, with 1 visual in lower saloon near driver and the other (double sided) near rear door. 29/3/21 - Pass		29/3/21 - Drawing to be inserted. The bus stopping electronics signs are visible when not triggered. This is confusing. They should only be visible when triggered.
171	148	DD to have an additional signalling and display device in the upper saloon	N/A			
172	149	Easily reached by any person seated in a priority seating area or wheelchair area without having to stand up. e.g. on side walls or on stanchions	Yes			
173	150	Used by elderly and disabled people with poor hand and finger function or dexterity	Yes			

SORT No.	REF	Requirement	YES if complied.	Comment if not complied	Action Owner	Agree Action.
174	151	Signalling devices shall be adjacent to and not less than every second row of seats on both sides of the aisle	Yes			
175	152	T2.60 - Signalling devices shall be mounted to the walls or window ledges between every row of seats	Yes			
176	153	Fitted to the underside of any fold-up seat fitted in the multi-use/wheelchair space if the other bell push is obscured by the fold-up seat	N/A	No bell buttons are obscured by fold-up seats.		
177	154	The dashboard indicator shall have two components: a general signal and a second signal to indicate to the driver that the signal has been made by a passenger occupying the wheelchair or a priority seating position	Yes	Priority buttons bring up the wheel chair symbol.		
178	155	The device shall trigger both an audible and visual indication to the driver and passenger	Yes			
179	156	Finger/thumb/knuckle push buttons on the vertical stanchions at a height of 1300mm to 1600mm above floor level	Yes	Forward facing priority seats lower button 1140mm from floor is accepted.		
180	157	Finger/thumb/knuckle push buttons on the bus side panels at a height of 850mm to 1050mm (where possible) particularly in the priority seating area or on the undersides of folding seats	Yes	Installed on window edge – acceptable.		
181	158	Finger/thumb/knuckle push buttons fitted as near as possible to top edge of any fold up seat for use when seat in fold up position if the side wall button obscured	N/A	No bell buttons are obscured by fold-up seats.		
182	159	Cordage is not acceptable	N/A	15/6 – TE Not installed.		
183	160	All signalling devices shall be a red button on yellow background/mounting	Yes			
184	161	A button that has a wheelchair symbol and/or blue in colour is not to be fitted in the wheelchair position	Yes	Not fitted.		
185		5.3 External destination display				
186	162	T2.61 - Displays shall be LED amber displays, with emphasis on high visibility during all light levels that can be easily read	Yes	12/7/20 - PB - Amber		
187	163	T2.14 - Clear glass must be fitted over all external destination displays.		CRRC provide proof glass covering rear sign complies.	CRRC	CRRC to provide documentation of results from VLT test.
188	164	T2.61 - The destination display light sensor must be fitted towards the bottom of the display so that it has access to direct sunlight.	No	Light sensor locations; Front dest screen - Offside just up from the bottom and indirect sunlight. Near side dest screen - Top of the screen. But lower than the black border line and indirect sunlight. Rear dest screen - Top of screen just below black out area	CRRC	CRRC to provide statement / supporting documentation from Hanover for ensurance the sign ambient light sensor will functioning correctly.
189	165	T2.61 - The destination display controller must be capable of storing at least 2000 separate displays and be updated by means of a smartcard or USB connection	Yes	STD Hanover system		
190	166	T2.61 - Displays must have the capability to display multi-line information in a mix of upper and lower case characters and also frequently changing displays to facilitate additional route information e.g. via station.	Yes			
191	167	The first letter of each word is to be in upper case with all other letters in lower case	Yes			
192	168	T2.61 - Front, nearside and rear displays must be configured to display details in accordance with the VQS T2.55				
193	169	Front forward-facing three-digit/character route number and destination combination sign ≥1500mm wide located at or above the top of the windscreen	Yes			

SORT No.	REF	Requirement	YES if complied.	Comment if not complied	Action Owner	Agree Action.
194	170	Near side, as close as possible to the front entrance, a route number and destination repeater sign preferably fitted at the top of the first side window	Accepted			Accept position in the 2 nd window.
195	171	Rear ward-facing three digit/character route-number only sign at a height 1500mm to 2500mm (for DD 1500mm to 2900mm) above ground level and central or left of centre i.e. toward the nearside of the bus	Yes	2440mm to bottom of LED area.		
196	172	T2.61 - Front and rear route number characters shall be ≥150mm			NZ Bus	NZ Bus to provide programming sheet to GWRC.
197	173	T2.61 - Front destination characters shall be ≥125mm			NZ Bus	NZ Bus to provide programming sheet to GWRC.
198	174	T2.61 - Side destination characters shall be ≥60mm For LV/DD a wide destination sign is desirable			NZ Bus	NZ Bus to provide programming sheet to GWRC.
199	175	For LV/DD a wide destination sign is desirable	Noted.			
200		5.4 Internal information				
201	176	T2.62 - All Vehicles to be fitted with internal passenger information displays and audio speakers which comply with the minimum requirements as set out in GWRC's "On-Vehicle Passenger Information System Specification"	No	Off side screen not level on the horizontal plane. PIS screens fitted. Protection required for front of screen, buttons on the rear screen only. The rear of the screen is covered. Front screen is okay as without protection.	CRRC	Provide spec sheet for the screens to indicate that the wiring connections are as per the specification.
202	177	T2.62 - SV/MV/LV: To be fitted with one rearward facing display located at the front positioned so that it is visible to all passengers and one forward facing display so that it is visible to the rearward facing wheel chair and does not block the view of the front display or cause reflection on the windscreen impacting on the driver's vision	Yes	28/6/21 - Screen locations are. - Main saloon ceiling (centred) mounted rearward facing - Offside opposite rear door forward facing.		
203	178	T2.62 - DD: The lower deck is to be fitted with one rearward facing display at the front so that it is visible to all passengers to the rear of the display and one forward facing display so that it is visible to the rearward facing wheel chair, standing passengers and does not block the view of the front display or cause reflection on the windscreen impacting on the driver's vision. The upper deck is to be fitted with one rearward facing display fitted to the rear of the stairs so that it is visible to all passengers to the rear of the display	N/A			
204	179	T2.62 - LCD display size to be between 20"- 22" measured diagonally from bottom left to top right, or bottom right to top left.	Yes	22" fitted		
205	180	T2.62 - Up to 8 pairs of speakers shall be fitted to the Vehicle (surface mounted speakers shall be located in such a way that 5 pairs for the upper saloon of a DD and 3 pairs for the lower saloon of a DD and a single deck Vehicle allow convenient notification of the passenger with good coverage)	Yes (Consideration outstanding)	12/7/20 - 4 pairs of speakers provided. 29/3/21 - Too larger gap between the rear speakers.	NZ Bus	Note - GWRC ask NZ Bus to consider on future builds add an additional pair of speakers rear saloon. CRRC to investigate what's involved.
206	181	T2.63 - Operators are to install and supply poster holders for placing advertising posters and operational notices in the saloon, as specified in the branding manual		Poster holder provided on back of driver's modesty but is landscape. Needs to be portrait. Two brochure holders to be provided on rear of N/S back board - Only one provided	CRRC	CRRC to fit NZ Bus stock and replenished.
207		5.5 Driver operational communication				
208	182	T2.64 - A public address system capable of broadcasting driver announcements. This system has the capability to being overridden by an Operator's control centre		QUICKSTART to install. CRRC to advise Quickstart which inputs / outputs to use - DONE	NZ Bus	System to be demonstrated to GWRC.

SORT No.	REF	Requirement	YES if complied.	Comment if not complied	Action Owner	Agree Action.
209	183	T2.64 - The two-way radio communication system shall enable communication between the Vehicle and back to base depot and to any central information or control centre only. The radio communication system shall not enable communication between Vehicles.	Yes	NZ Bus to install. RT to be installed by VITAL - DONE.		
210	184	T2.64 - The system must be capable of broadcasting to all or to individual Vehicles from the base depot, central information or control centre.	Yes	NZ Bus to install. RT to be installed by VITAL - DONE.		
211		Facilities for passengers with impairments				
212		6.2 Priority seating area				
213	185	Priority seating area well to the forward end of the saloon with at least four preferably all forward facing seats identified for passengers with impairments or extra mobility needs (ref to picture below for layout). These seats may be of the folding type in order to facilitate wheelchair and pram access and stowage.	Yes	2 Inward facing seats on both the nearside and off side. The row directly behind the inward facing seats are forward facing, 2 on both the nearside and offside.		
214						
215	186	A separate space will be provided for a parent with a pram	Yes	The off side wheel chair space is allocated to the pram in the first instance and is fitted with the pram symbol.		
216	187	Vehicles to have a minimum of one rearward facing wheelchair position with backboard (preferably on the nearside)	Yes	Note that there are 2 wheelchair that meet the required size and fitted with a back board and horizontal hand rail.		
217	188	The wheelchair space to be not less than 800mm by 1300mm to cater for a wheelchair and user with a wheelchair footprint of ≤700mm width x ≤1200mm length	Yes	1525mm x 800mm		
218	189	Contrasting, easily seen signage and flooring to indicate the area and request to vacate seats for use by priority passengers shall be applied in accordance with the brand manual	CRRC - Decals to be installed.	Floor colours are as per the brand manual. Signage to be applied.	CRRC	CRRC - Decals to be installed and signed off by GWRC
219	190	Wheelchair and pram symbols must be provided in the flooring material of the wheelchair and pram spaces in accordance with the brand manual	Yes	15/6 - TE. To be sealed. Correct symbols present, but gaps around the symbols - Re. 56.		
220	191	Internal and external signage in accordance with the brand manual	CRRC - Decals to be installed.	Signage to be installed.	CRRC	CRRC - Decals to be installed and signed off by GWRC
221	192	Any passenger safety/modesty panel & vertical stanchion fitted behind wheelchair/multi-use space should not hinder wheelchair manoeuvrability in to/out of the space	Yes	Modesty's will be retrofitted on this vehicle, all other vehicle will come fitted with modesty's that do not hinder users of this space. Bus number 5701 - Modesty's too low. Modesty's will be retrofitted on this vehicle, all other vehicle will come fitted with compliant modesty. - Done Bus numbers 5705 - Pass		
222		6.4 Boarding and alighting				
223	193	Shall have a kneeling capability	Yes	20/7/20 - PB - front only		
224	194	The following shall be provided on the exterior of the bus adjacent to the front door: A sign stating 'This bus kneels on request'. Ref to the brand manual.	CRRC - Decals to be installed.	Signage to be installed.	CRRC	CRRC - Decals to be installed and signed off by GWRC
225		6.5 Ramp				
226	195	A manually-operated flip-over style ramp ≥800mm width shall be provided at the front door		10/7/20 - CRRC state will be 300kg capacity. Is 840mm wide. Load capacity to be confirmed.	CRRC	CRRC to confirm maximum weight of wheelchair.
227	196	Ramp hinges & lifting rings/handles countersunk/flush with floor, lifting handle full-hand width	Yes			
228	197	T2.65 - Yellow flat ramp non-slip edge marker strips (min 70% contrasting with the ramp surface material) 45mm to 50mm wide are required on all edges of the upper surface when the ramp is deployed.	No	Edges to be filled with yellow. There is a black tape applied to the alloy edge. This is to be replaced with non-slip tape.	CRRC	

SORT No.	REF	Requirement	YES if complied.	Comment if not complied	Action Owner	Agree Action.
229	198	T2.65 - Ramp surface material (when deployed) must be slip resistant and a min of 70% contrasting with the yellow edge marker.	Yes	Black surface. Sand paper type of surface		
230	199	T2.65 - Ramp surface material (when stowed) must be the same material as the remainder of the bus floor and as per the brand manual	Yes	Same floor material used.		
231	200	An external sign adjacent to the front door clearly indicating maximum permitted ramp weight and dimension for the wheel chair passenger in accordance with the brand manual	CRRC - Decals to be installed.	Signage to be installed.	CRRC	CRRC - Decals to be installed and signed off by GWRC
232		7. Driver compartment				
233	201	T2.66 - Have individual, driver controlled, adjustable heating/cooling outlets, including to the foot area		20/7/20 - PB - drivers area as required, but not foot area. Warm air only to foot position. The drivers area has ambient air and heated air function.	NZ Bus	NZ Bus to review system in the ADL E500.
234	202	A fully sprung driver's seat with adjustment for all three planes of driving position	Yes	10/7/20 - PB - CRRC statement.		
235	203	A readily adjustable (tilt and height) steering wheel column and soft style easily cleaned, and dried steering wheel		20/7/20 - PB - tilt only. 17/6/21 - TE - Steering column can be adjusted (tilt and height). Note that the instrument panel moves with the steering column. On some buses the system does not move freely. Lubricated and free now.	CRRC	CRRC to include testing and remedial work if required as part of vehicle commissioning.
236	204	A footrest for the left foot	Yes	10/7/20 - PB - CRRC statement.		
237	205	Coat/jacket storage, e.g. hook	Yes	10/7/20 - PB - CRRC statement		
238	206	Out-of-sight storage for personal belongings such as bag/lunchbox	Yes	10/7/20 - PB - CRRC statement Small cabinet behind driver.		
239	207	Ticketing equipment and till stand should be ergonomically located	Yes			
240	208	Barrier protection panel immediately behind the driver to prevent any form of assault from behind, either directly by a passenger or by a thrown object	Yes	10/7/20 - PB - CRRC statement		
241	209	A revenue collection and holding system so that the driver's cash can be readily and securely locked into a cash box that can be secured to the bus	Yes			
242	210	T2.67 - Driver feedback near real time system must advise drivers immediately of any harsh acceleration, braking, swerving or cornering (G forces) and enable the Operator to upload records.	Yes	NZ Bus to install RIBAS - DONE		
243	211	T2.68 - A covert duress panic button is to be installed in the event the driver feels a threat situation is developing (Duress Alarm). The Duress Alarm must open the radio channel to enable confidential conversation between the driver and the operator control centre in addition to 'tagging' the CCTV footage.	Yes	QUICKSTART to install - DONE.		
244	212	T2.68 - The Duress Alarm shall be positioned in an area which is able to be reached from all driver seat positions and not located where accidental activation will occur.	pass	PANIC BUTTON INSTALLED BY CRRC AT FACTORY.		
245		8. Length				
246	213	SV 10.13m max	N/A			
247	214	MV 11.8m max	N/A			
248	215	LV 12.8m max	Yes	10/7/20 - PB - 12.65m		
249	216	DD 12.8m max	N/A			
250	217	The Operator must provide evidence to GWRC of swept path performance analysis showing performance criteria and tail swing limitations for each Vehicle type before the Vehicle is used in providing Services. (ref VOS 3.9)		Drawing showing overhang of bike rack to driver.  Turn passability 转弯通过性-Model.p	CRRC	CRRC to confirm compliance to fact sheet NZTA 13f.

SORT No.	REF	Requirement	YES if complied.	Comment if not complied	Action Owner	Agree Action.
251	218	T2.71 - All Vehicles must be fitted with brackets and approved GWRC front mounted bike racks capable of carrying a minimum of two bikes.	Yes	22/3/21 - Bike rack bracket, pivot plates and rack to be installed - Done.		
252		9. Passenger Numbers (VQS table 1)				
253	219	SV 30 - 53 passengers(excluding driver)	N/A			
254	220	MV 54 - 74 passengers (excluding driver)	N/A			
255	221	LV 75 or more passengers (excluding driver)	CRRC - to gain 4x COF's 5702 - 5705 and Capacity recalculated on 5701	10/7/20 - 75. Needs to be confirmed by VTNZ. 17/6/21 - TE - Seated 38, Standee's 37 - TBC	CRRC	CRRC to provide loading cert photo.
256	223	DD 95 or more passengers (excluding driver)	N/A			
257		10. Fleet Management System				
258	224	T2.8 - The fleet management system parameters required are: <ul style="list-style-type: none"> · driver performance · Vehicle performance · speed and location monitoring · harsh braking and harsh acceleration · accident analysis capabilities · download and upload through wireless, cellular or cable link · reporting and analytics capability 	Yes	22/3/21 - Telematics and RIBAS to be installed. DONE		
259	225	T2.61 - This system must advise drivers immediately of any harsh acceleration, braking, swerving or cornering (G forces) and enable the Operator to upload records	Bus 5701 to be completed when other vehicles are available for driver training	NZ Bus to install. As 2/7/21 - Bus No's 5702 thru to 5705 - DONE.	NZ Bus	GWRC request road test to experience acceleration under normal driving conditions.
260		11. Glazing				
261	226	T2.12 - Anti-graffiti film shall be fitted to the inside of all side windows	Yes	10/07/2020 - PB 28/6/21 - Pass		
262	227	T2.14 - All side windows including any emergency exits must be made from toughened grey coloured glass with a minimum of 48% light transmission		10/7/20 - PB - CRRC state that grey glass with >48% light transmission. Get details from glass supplier - Cert provided by CRRC (In Chinese needs to be translated)	CRRC	CRRC to complete VLT test or supply information.NZ Bus to test
263	228	T2.15 - There must be no black-out area under the windscreen (excluding the anti-glare band) and no black out areas on the side windows of the passenger saloon area (excluding sections of glass not visible to passengers due to an internal wall covering that section of the glazing, and then only the covered glazed area can be blacked out)	Yes	15/6 - TE		
264		12. Electrical Systems				
265	229	T2.16 - 1 validator fitted to the right side of the front door	Yes	Bus number 5701 - pass		
266	230	T2.16 - MV (SV with rear door) ≥ 700mm single leaf door, 1 validator fitted on the opposite side of an inward opening door	N/A			
267	231	T2.16 - LV/DD ≥1000mm double leaf - 1 validator fitted either side.	Yes	Two validator positions present. Validators to be by GW fitted.		
268	232	Mounting height to the centre of the reader (Cable Slot) should be 900 - 1200mm above floor level with 1050 to 1100mm being optimal	Yes	950mm front door 1090mm rear door		
269	233	T2.16 - Electrical installation completed in accordance with VQS, appendix 3	Pass	20/7/20 - PB -noted that 24v power provided for GWRC specified equip. To be verified using the Bus Wiring Identification doc and GW Power Connectors drawing.		
270	234	T2.17 - RTI & Snapper cables supplied by GWRC installed in accordance with the Ticketing & RTI Installation Spec documents	Yes	RTI and Snapper has been installed.		

SORT No.	REF	Requirement	YES if complied.	Comment if not complied	Action Owner	Agree Action.
271	235	T2.18 – Switch board/s located with internal access only	Yes	Cabinet for additional GW and NZ Bus equipment to be identified including surfaces for mounting equipment.		
272	236	T2.18 - It is recommended that the electrical system be sized to provide adequate power supply to the specified technologies including additional power capacity to 10 additional spare electrical fuses (8 fuses at 10 amps each and 2 fuses at 15 amps each) in order to permit aftermarket accessories to be installed such as Wi-Fi		To be verified.	CRRC / NZ Bus	CRRC / NZ Bus to complete vehicle inspection.
273	237	Cashbox designed to suit ticketing BDC and printer mounting bracket	Yes	Top surface to be as per BDC mounting drawing. Cashbox is not mounted.		
274		13. Accident Prevention				
275	238	T2.70 - Vehicles must be installed with rear and side blind spot camera system to show pedestrians and cyclists down the sides of the bus. The camera system is to be active all the time while the bus is in operation and display all images at the same time to the driver		Cameras present but configured incorrectly as stated in the CCTV section. The configuration of the blind spot system to be checked.	NZ Bus	NZ Bus to provide GWRC mode and camera angle document.
276	239	T2.7 - Vehicles must be installed with: <ul style="list-style-type: none"> · Reversing cameras · reversing sensors with driver warning indicator · reversing buzzers · hazard light activation 		Hazard lights need to activate when reversing. CRRC have programmed bus 5701. Blink speed is too slow - this needs to be speed up.	CRRC	CRRC to review.
277		14. Branding				
278	240	External livery as approved by GWRC (use separate record sheet)	CRRC - Decals to be installed.	22/3/21 - To be installed	CRRC	CRRC - Decals to be installed and signed off by GWRC Bus 5701 - Blue front panel to be yellow.
279	241	Internal colours as approved by GWRC (use separate record sheet)	Yes	Internal colours comply with the CRRC Interior Colours Review doc (ref to this document).		

From: Rusco Niemand [REDACTED]
Sent: Tuesday, 5 July 2022 12:09 pm
To: Tristan Elder; Ian Gordon
Cc: Paul Blane
Subject: RE: CRRC ELV PIS rear screen

Hi Tristan

All the stanchions and sleeves on the 51 EV'S has been fitted and the missing monitor covers at the back was replaced.

Thank you

Regards

Rusco Niemand | Fleet Manager, Wellington

Email [REDACTED]

Website www.nzbus.co.nz

Mobile + [REDACTED]

Wellington | New Zealand



RELIABILITY | RESPECT | FIT FOR PURPOSE

Please consider the environment before printing this e-mail

ATTENTION RECIPIENT: This email and any attachments are confidential and may be legally privileged. Confidentiality and/or privilege is not waived or lost by mistaken delivery. If you are not the intended recipient of this email, please notify us immediately and delete it from your system. Unauthorized use of this email is prohibited. Any personal information in this email must be treated in accordance with applicable privacy laws.

From: Tristan Elder <Tristan.Elder@gw.govt.nz>

Sent: Tuesday, 5 July 2022 12:02

To: Rusco Niemand [REDACTED]; Ian Gordon [REDACTED]

Cc: Paul Blane <Paul.Blane@gw.govt.nz>

Subject: CRRC ELV PIS rear screen

Hi Rusco,

Thank you for the phone message you left. Just to confirm what was completed. All horizontal stanchion with rubber sleeve has been fitted to all 51 CRRC ELV's. Has the hi-vise decal been applied also?

Have the backing covers been manufactured and installed on the vehicles missing them?

Regards

Tristan Elder

Asset Engineer (Bus Fleet)

Metlink

Cell | [REDACTED]

100 Cuba St, Te Aro, Wellington 6011 | PO Box 11646, Manners St, Wellington 6142

Follow us online: [Facebook](#) | [Twitter](#)

To find out how to plan your journey, go to metlink.org.nz

From: Ian Gordon [REDACTED]
Sent: Tuesday, 6 September 2022 10:42 am
To: Tristan Elder; Rusco Niemand
Cc: Paul Blane
Subject: RE: NZ Bus CRRC ELV - Ride comfort.

Hi Tristan,

All planned maintenance is up to date on the vehicle. NZ Bus carries out an A service monthly and this includes a full inspection and the repair of any faults found. The bus does not return to service until the work is completed. One of the things we have noticed is that the lack of the engine noise does bring to the fore other noises. This could be the only explanation I can think of for a passenger considering this bus rattles and shakes any more than any other bus.

I will undertake some rides and let you know whether I can pick up anything.

Regards

From: Tristan Elder <Tristan.Elder@gw.govt.nz>
Sent: Tuesday, 6 September 2022 10:26
To: Rusco Niemand [REDACTED]
Cc: Ian Gordon [REDACTED]; Paul Blane <Paul.Blane@gw.govt.nz>
Subject: NZ Bus CRRC ELV - Ride comfort.

Good morning,

I have received a report from a customer who frequently uses the bus service and is concerned by the uncomfortable rattles and shakes experienced when riding on the NZ Bus CRRC ELV vehicle. The following fleet numbers were provided - 5721, 5723, 5738, 5725, 5717. I am interested in hearing your thoughts on this and have a few questions that I like you to answer for me please.

How is the CRRC vehicle performing are you aware of the shakes and rattles? What could be causing this to happen? Is the planned and corrective maintenance up to date on the vehicles mentioned?

Regards

Tristan Elder

Asset Engineer (Bus Fleet)

Metlink

Cell | [REDACTED]

100 Cuba St, Te Aro, Wellington 6011 | PO Box 11646, Manners St, Wellington 6142

Follow us online: [Facebook](#) | [Twitter](#)

To find out how to plan your journey, go to metlink.org.nz



From: Ian Gordon [REDACTED]
Sent: Wednesday, 14 July 2021 4:28 pm
To: Paul Blane
Cc: Tristan Elder; Erich Livengood
Subject: RE: NZ Bus - CRRC ELV Vehicle Design Compliance.

Hi Paul,

19 July go live is a target and we still have some hurdles to cross. However, we need a target in order to keep the pressure on all of us and not let this drift. Lets see where we are at on Friday morning and make a call, or set another target. It is important that we all have a common understanding of what is required for go live.

Paul – the go live decision sits with GWRC (yourself) and I am reliant on claurty from you on what is required with regard the bus.

Regards

From: Paul Blane <Paul.Blane@gw.govt.nz>
Sent: Wednesday, 14 July 2021 07:56
To: Ian Gordon [REDACTED]
Cc: Tristan Elder [REDACTED]; Erich Livengood [REDACTED]
Subject: RE: NZ Bus - CRRC ELV Vehicle Design Compliance.

Ian

I will review the list later this morning. I do not agree the Monday is a go live date. This will depend on where we get to with the first 5 buses regarding the compliance issues. So the go live date is dependent on other matters rather than a fixed date.

Regards.

Paul

From: Ian Gordon [REDACTED]
Sent: Tuesday, 13 July 2021 12:17 PM
To: Paul Blane <Paul.Blane@gw.govt.nz>
Cc: Tristan Elder [REDACTED]; Erich Livengood [REDACTED]
Subject: FW: NZ Bus - CRRC ELV Vehicle Design Compliance.

Hi Paul,

Attached summary from Friday's conversation has been forwarded by Tristan. Our goal is to have the 1st 5 vehicles into service on Monday 19th July and based on the summary this should be achievable. The majority of outstanding issues require either CRRC certification or some minor adjustments / changes which can be completed this week. Are you able to advise which items require rectification prior to go live on Monday plus a timeframe for the others. Note this refers to the 1st 5, we should be able to fix all issues less seat adjustments on the remaining vehicles.

Regards

From: Barry Hinkley [REDACTED]
Sent: Monday, 5 July 2021 4:03 pm
To: Scott Gallacher
Cc: Ian Grose; Jay Zmijewski; Ian Gordon
Subject: Procurement: Supply Chain Integrity - CRRC
Attachments: Declaration Letter GWRC.pdf

Scott

Further to my letter dated 25th May 2021 in relation to aspects of our supply chain associated with the purchase of Electric Vehicles (EV's) from CRRC for Metlink. Since writing to you I have been in contact with CRRC in order to give you some more reassurance that these electric buses are not being manufactured using forced or cheap labour. I attach a copy of a letter addressed to you from CRRC (which has also been sent to Auckland Transport) which I hope will allay any concerns you may still have about the integrity of our supply chain.

Please don't hesitate to make contact if you have any further queries on this subject.

Barry



Barry Hinkley | Chief Executive Officer

Email [REDACTED]

Website www.nzbus.co.nz

Phone + [REDACTED]

Mobile + [REDACTED]

110 Halsey Street | Viaduct Harbour | Auckland 1010 | New Zealand



Please consider the environment before printing this e-mail

ATTENTION RECIPIENT: This email and any attachments are confidential and may be legally privileged. Confidentiality and/or privilege is not waived or lost by mistaken delivery. If you are not the intended recipient of this email, please notify us immediately and delete it from your system. Unauthorized use of this email is prohibited. Any personal information in this email must be treated in accordance with applicable privacy laws.



Scott Gallacher
GM Metlink
Greater Wellington Regional council, PO Box
11646, Wellington 6011.
New Zealand

Zhejiang CRRC Electric Vehicle Co Ltd
5259, Huancheng South Road (Western)
Yinzhou, Ningbo
China
Date: July 1, 2021

Declaration on working conditions

Dear Scott,

Recently we provided some information to Auckland Transport regarding media questions about whether Uyghur labor is forced to manufacture electric buses. Our company solemnly declares as follows:

1. Our company strictly abides by relevant laws and regulations and internationally accepted business ethics. There is no forced labor in our company's operations.
2. As the business partner of NZ Bus, our company strictly complied with and accepts the regular on-site audits of NZ Bus auditors and fully complied with the audit principles of NZ Bus.
3. Our company has always actively cooperated with governments, industry institutions and other relevant stakeholders to ensure responsible supply chain management. This is done through the understanding of suppliers. Through these active measures, no phenomenon of "forced labor" has been identified.

This we hereby declare.

Zhejiang CRRC Electric Vehicle Co., Ltd

July 1, 2021

From: Ian Gordon [REDACTED]
Sent: Tuesday, 6 June 2023 9:03 am
To: Tom Logan; Rusco Niemand
Cc: Erich Livengood
Subject: RE: Wheelchair ramp replacements on CRRC buses

Hi Tom,

The flooring and yellow edge material on the CRRC wheel chair ramp replacements are compliant with the GWRC branding manual.

Regards

From: Tom Logan <tom.logan@gw.govt.nz>
Sent: Tuesday, June 6, 2023 8:55 AM
To: Ian Gordon [REDACTED]
Cc: Erich Livengood [REDACTED]
Subject: Wheelchair ramp replacements on CRRC buses

Kia ora Ian,

Can you please confirm that the flooring and yellow edge material on the replacement wheelchair ramps is the correct material required by GWRC, it looked correct to me but Paul would like confirmation.

Also I understand that there are 14 buses waiting for parts to be received, what is the status of those, are they in the depot?

Ngā mihi

Tom Logan (he/him) | Bus Projects Delivery Consultant

GREATER WELLINGTON REGIONAL COUNCIL

M [REDACTED]
100 Cuba St, Te Aro, Wellington 6011 | PO Box 11646, Manners St, Wellington 6142 | [metlink.org.nz](https://www.metlink.org.nz)
Follow us online: [Facebook](#) | [Twitter](#)



ATTENTION: This correspondence is confidential and intended for the named recipient(s) only. If you are not the named recipient and receive this correspondence in error, you must not copy, distribute or take any action in reliance on it and you should delete it from your system and notify the sender immediately. Unless otherwise stated, any views or opinions expressed are solely those of the author, and do not represent those of the organisation.

From: Ian Gordon [REDACTED]
Sent: Wednesday, 25 May 2022 11:35 am
To: Rusco Niemand; Tristan Elder; Erich Livengood
Subject: RE: CRRC ELV - PIS screen location.

Thanks Rusco

From: Rusco Niemand [REDACTED]
Sent: Wednesday, 25 May 2022 10:50
To: Ian Gordon [REDACTED]; Tristan Elder <Tristan.Elder@gw.govt.nz>; Erich Livengood [REDACTED]
Subject: RE: CRRC ELV - PIS screen location.

Hi Sir

I have met with Paul of the council and Tristan this morning and will report back to you once I have spoken to Janene as well.

Thank you

Regards

Rusco Niemand | Fleet Manager, Wellington

Email [REDACTED]

Website www.nzbus.co.nz

Mobile + [REDACTED]

Wellington | New Zealand



RELIABILITY | RESPECT | FIT FOR PURPOSE

Please consider the environment before printing this e-mail

ATTENTION RECIPIENT: This email and any attachments are confidential and may be legally privileged. Confidentiality and/or privilege is not waived or lost by mistaken delivery. If you are not the intended recipient of this email, please notify us immediately and delete it from your system. Unauthorized use of this email is prohibited. Any personal information in this email must be treated in accordance with applicable privacy laws.

From: Ian Gordon [REDACTED]
Sent: Wednesday, 25 May 2022 09:03
To: Tristan Elder <Tristan.Elder@gw.govt.nz>; Rusco Niemand [REDACTED]; Erich Livengood [REDACTED]
Subject: RE: CRRC ELV - PIS screen location.

Gents,

Please endeavour to accommodate Tristan's request. My view is that we take off the protective cover. The unit is moulded with round corners and plastic and becomes less of an obstacle. The risk of hitting a head is greater than the risk of someone smashing the screen.

Regards

From: Tristan Elder <Tristan.Elder@gw.govt.nz>

Sent: Wednesday, 25 May 2022 08:51

To: Rusco Niemand [REDACTED]; Erich Livengood [REDACTED]

Cc: Ian Gordon [REDACTED]

Subject: CRRC ELV - PIS screen location.

Good morning Rusco,

I have received incident report from a member of the public in relation to the position of the rear PIS monitor screen on the CRRC ELV's. This is the third incident report received in the past 6 months from a member of the public. I believe you and Erich Livengood, have been working on a solution. Is it possible to visit Kilbirnie, this morning, and view a vehicle to better understand the issue and have you run through your solution?

Resolve case number 237704 – 10/11/2021

Resolve case number 242649 – 4/2/2022

Resolve case number 247585 – 19/5/2022

Regards

Tristan Elder

Asset Engineer (Bus Fleet)

Metlink

Cell | [REDACTED]

100 Cuba St, Te Aro, Wellington 6011 | PO Box 11646, Manners St, Wellington 6142

Follow us online: [Facebook](#) | [Twitter](#)

To find out how to plan your journey, go to metlink.org.nz



ATTENTION: This correspondence is confidential and intended for the named recipient(s) only. If you are not the named recipient and receive this correspondence in error, you must not copy, distribute or take any action in reliance on it and you should delete it from your system and notify the sender immediately. Unless otherwise stated, any views or opinions expressed are solely those of the author, and do not represent those of the organisation.

Jose Cabrera

From: Ian Gordon [REDACTED]
Sent: Wednesday, 27 April 2022 3:57 pm
To: Erich Livengood
Cc: Rusco Niemand; Tristan Elder
Subject: RE: Update on Arrival of 10 CRRC electric buses - Tranche 2b - 28 April

Thanks Erich,

I am becoming resigned to shipping dates being so unreliable.

Regards

From: Erich Livengood [REDACTED]
Sent: Wednesday, 27 April 2022 15:32
To: [REDACTED]; Brad Walker [REDACTED]; ServiceDelivery@vital.co.nz; dgabriel@vital.co.nz; Lee Robinson [REDACTED]; Ian Gordon [REDACTED]; John Lian [REDACTED]; [REDACTED]; Mike House [REDACTED]; Omri Ash [REDACTED]; James Bennett [REDACTED]; Glen Shardlow [REDACTED]; Adam Robertson [REDACTED]; Don Wood [REDACTED]; Sam Redhill [REDACTED]; Rusco Niemand [REDACTED]; Monty Haenga [REDACTED]; James Bignell [REDACTED];
Cc: John Lian [REDACTED]
Subject: Update on Arrival of 10 CRRC electric buses - Tranche 2b - 28 April

Hello, this is an update on CRRC electric bus arrivals for NZ Bus Wellington

Tranche 2b, of 10 buses are estimated to arrive Centre Port pre dawn 30 April 2022. This is a further delay due to NZ Port congestion and domestic routing changes.

This new arrival date is low confidence. The date was pushed out two days after the last update while the ship is in the same position, at anchor off Lyttleton. The Buses are scheduled to remain on the *Clover Ace* until they arrive in Wellington, the next port.

Please contact John Lian with any questions at [REDACTED]

Cheers,

Erich

Erich Livengood
Electric Autobus
Kako, Ltd.

Mobile + [REDACTED]
Web www.electric-autobus.com Email [REDACTED]