

16 December 2021

Selwyn District Council

Attention: Jocelyn Lewes

Novo Group Limited

Level 1, 279 Montreal Street PO Box 365, Christchurch 8140 O - 03 365 5570 info@novogroup.co.nz

Dear Jocelyn,

PLAN CHANGE 81 – SKELLERUP SOUTH: RFI RESPONSE TRANSPORT

 Further to Council's Request for Further Information dated 08 December 2021, this letter sets out our response to transport queries raised in the transport matters raised. This letter sets out and responds to the matters raised in turn.

Please confirm how the plan change will affect the timing of third party intersection upgrades identified in paragraph 42 of the ITA. Further, please confirm how the plan change can respond in the instance that the timing of these upgrades is not brought forward.

2. Table 1 sets out the proposed timing and funding of the upgrades set out in paragraph 42 of the ITA (plus other upgrades relied upon elsewhere in the ITA). This defers occupation of the Plan Change dwellings until such time as the intersection upgrades are completed. It also sets out the mechanism by which the Plan Change will be able to deliver these works, in conjunction with other Plan Changes, Council and Waka Kotahi.

Please confirm how the proposed upgrade for the Goulds Road/Dunns Crossing Road/Selwyn Road intersection will be funded and delivered, noting that it is not funded or programmed in Council's Long Term Plan. Further, please provide an indicative design for the upgrade.

- 3. The proposed funding mechanism and delivery is intended to be via a developer agreement that would include Plan Change 70, which is required to facilitate the realignment of Goulds Road and is anticipated to contribute toward delivery of the roundabout at Dunns Crossing Road / Selwyn Road.
- 4. A concept arrangement for the intersection upgrade is included in **Attachment 1** of this letter. This is based on an arterial roundabout design standard. The tie in of the proposed roundabout with the existing / upgraded roads will be determined through later design stages, although it is considered that the concept provides sufficient indication that a roundabout can be constructed in this area.
- 5. The plan in **Attachment 1** also illustrates an indicative arrangement for the realigned Goulds Road. This will need to be developed further in conjunction with Council and the developers of Plan Change 70. However, it is again considered to be sufficient to confirm that an acceptable layout can be detailed in the next design stages.

Table 1: Transport Network Upgrades

Upgrade Required	Timing	Anticipated Funding Mechanism
SH1 / Dunns Crossing Road / Walkers Road Intersection	Prior to occupation of any dwelling in the ODP area.	Works already funded by Waka Kotahi.
Dunns Crossing Road / Burnham School Road Traffic Signals	Prior to occupation of any dwelling in the ODP area.	Developer agreement (as in the LTP ¹ for 2032/2033 and also required for Plan Change 73).
Goulds Road / Dunns Crossing Road / Selwyn Road Upgrade	Prior to occupation of any dwelling in the ODP area.	Developer agreement as also required for Plan Change 70.
Dunns Crossing Road Frontage Upgrade	Prior to occupation of any dwelling in the ODP area.	Developer constructed.
Selwyn Road Frontage Upgrade	Prior to occupation of any dwelling in the ODP area.	Developer constructed.
Dunns Crossing Road / Newmans Road Intersection	Prior to occupation of any dwelling in the ODP area.	To be delivered by PC73 and / or as part of Waka Kotahi works to SH1 / Dunns Crossing Road.
Dunns Crossing Road / Lowes Road	Prior to occupation of any dwelling in the ODP area.	To be delivered by PC82 or brought forward by developer agreements noting it is in the LTP for 2035/36.

Please confirm how development within the plan change will be delayed until the third party intersection upgrades identified in the ITA are undertaken. Please consider if it appropriate that this be identified in the text accompanying the Outline Development Plan (ODP), or if it is more appropriate that a bespoke rule be incorporated into the Operative District Plan.

- 6. It is proposed that no occupation of dwellings will be permitted until such time as the road upgrades identified in **Table 1** are completed. This will be included within the ODP text.
 - Please confirm how development within the plan change area will be integrated with the upgrade of the Dunns Crossing Road / Newmans Road and Dunns Crossing Road / Lowes Road intersections, to ensure that effects of the plan change on these intersections will be adequately managed. It is noted that these upgrades are proposed by other parties, however the ITA does not address how the potential safety and efficiency effects will be managed should development precede these upgrades.
- 7. **Table 1** identifies that occupation of this Plan Change site will not occur until such time as those upgrades have been completed.
 - Please comment on whether Selwyn Road, along the site frontage, requires upgrading to support this request, referring to Council standards and guidelines where relevant.
- 8. In conjunction with other requests in this RFI, it is proposed to provide direct access to Selwyn Road for this portion of the site. The design of this road will be resolved in

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¹ Selwyn District Council Long Term Plan.

conjunction with the Council, although it is anticipated that a Local Major Road standard with a footpath on the northern side would be the most likely cross-section.

 A gateway feature is proposed at the western end of the site frontage along Selwyn Road to demarcate a change in speed environment to 60km/hr and the urbanising of this area. This will also assist in slowing speeds on the approach to the proposed roundabout at Dunns Crossing Road.

Please confirm if the PC80 is represented in the Rolleston Paramics model used to support this plan change request (PC81) ITA. If it is not, please provide an updated modelling assessment which includes PC80. Further, please provide the Paramics model files for review.

Plan Change 80 has been included in the Paramics traffic modelling of Plan Change 81.
The model files are being provided directly to Flow (Mat Collins) with the Council copied in (Andrew Mazey).

Please provide the SIDRA model files for the State Highway 1 / Dunns Crossing Road/Walkers Road intersection that have been used for the assessment included in the ITA. Further, please confirm that the SIDRA model includes traffic generated by PC80.

11. Plan Change 80 has been included in the SIDRA traffic modelling of Plan Change 81. The model files are being provided directly to Flow (Mat Collins) with the Council copied in (Andrew Mazey).

Please provide further information on the form and functioning of the southern access onto Dunns Crossing Road, as represented in the Rolleston Paramics model, and how this plan change request will support the construction of an appropriate intersection form.

- 12. The proposed intersection form of the access to Dunns Crossing Road has been assumed to be a priority controlled cross-roads (as illustrated in **Attachment 1**). This intersection form was chosen to reduce the potential for queuing back to Selwyn Road and because the through volumes on the minor arms are relatively low. The intention is that this aligns with the realigned Goulds Road and the location of the access will be flexible to facilitate this co-ordinated linkage with Plan Change 70.
- 13. The traffic modelling results of this intersection are included in **Attachment 2**, which indicate that the proposed arrangement is predicted to operate satisfactorily.
- 14. We trust this letter satisfactorily responds to the matters raised, but please feel free to contact the undersigned if you have any queries regarding this matter.

Yours sincerely,

Novo Group Limited



Nick Fuller

Senior Transport Engineer

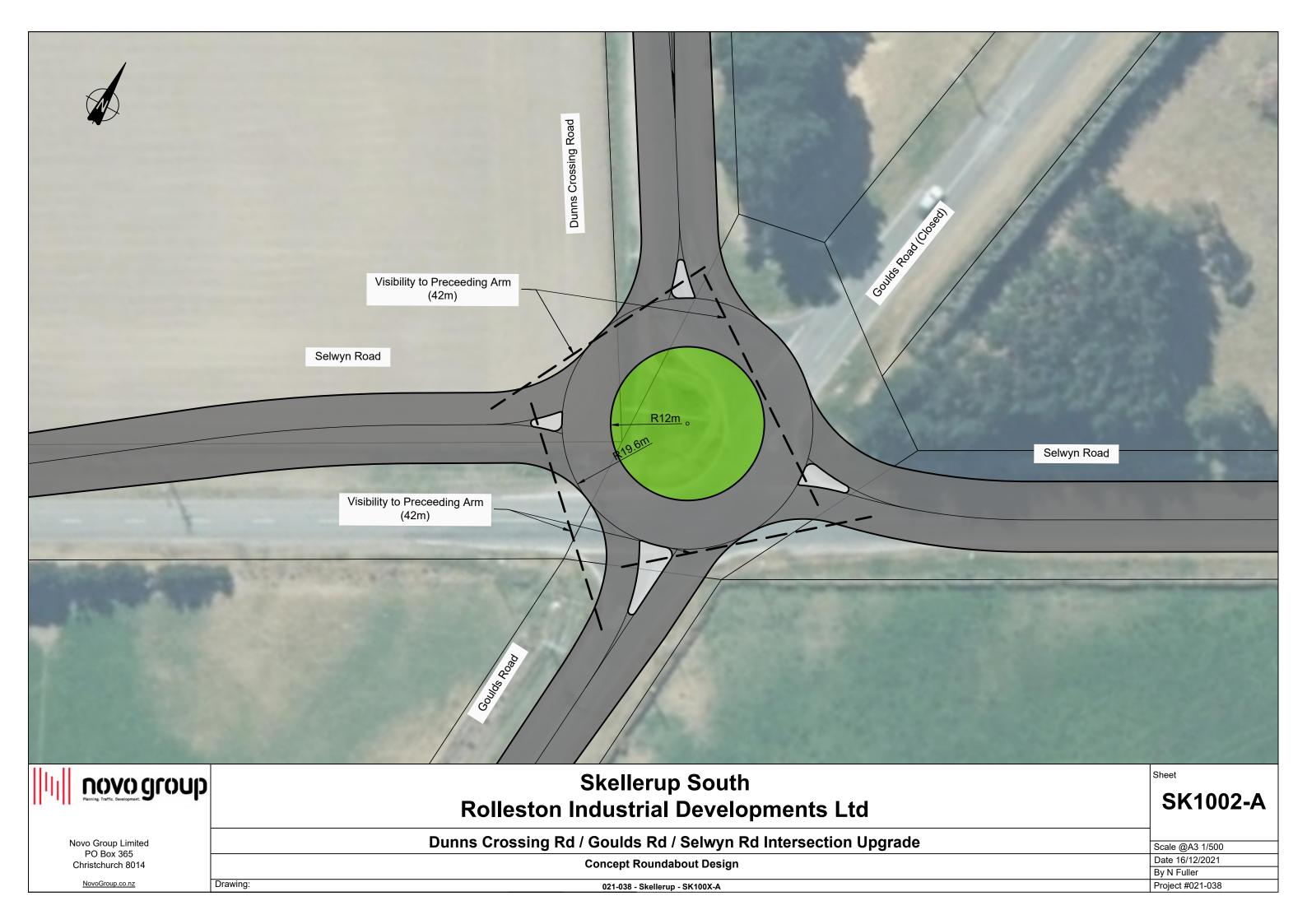
D: 03 972 5714 | **M**: 021 997 419 | **O**: 03 365 5570

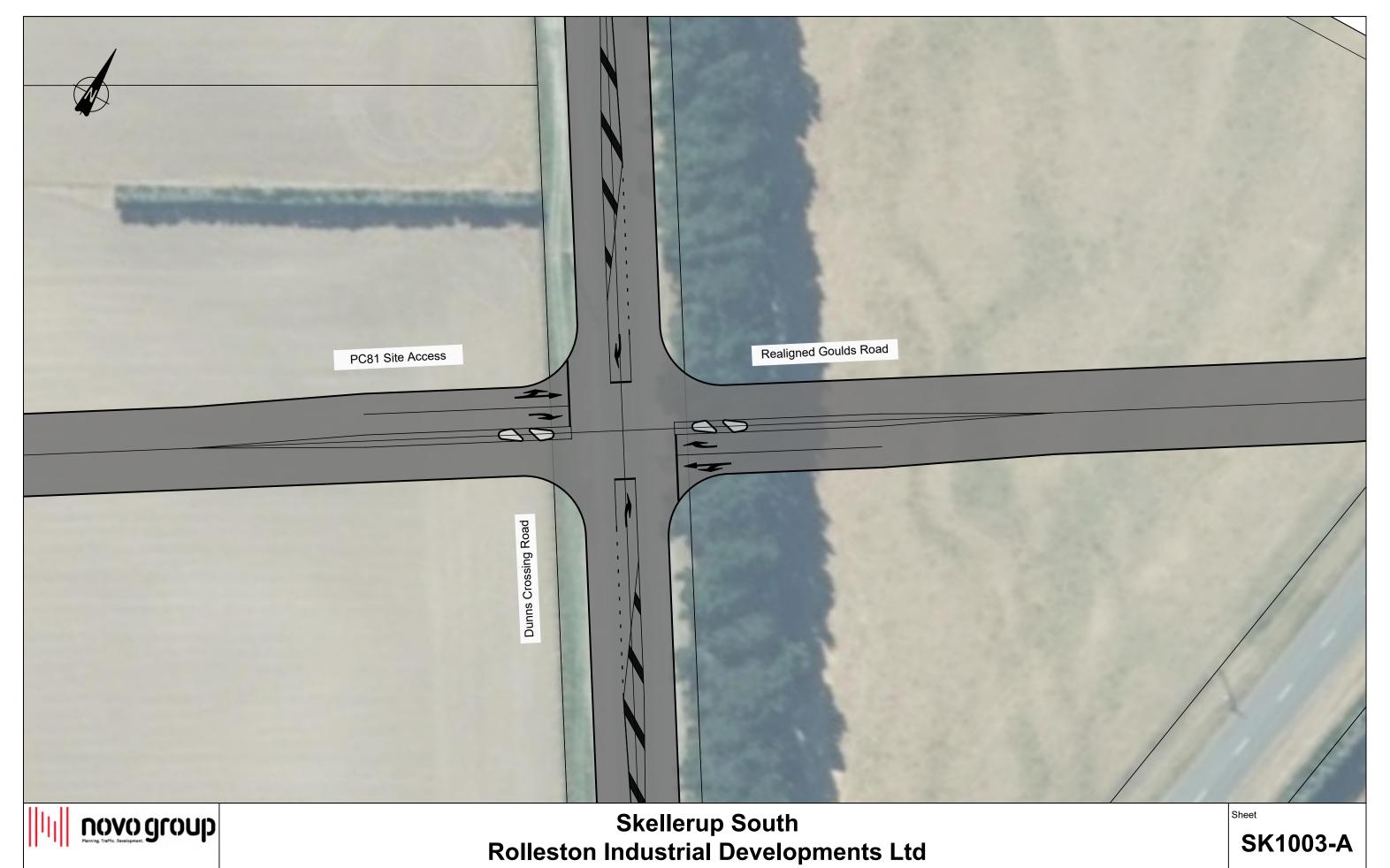
 $\textbf{E:} \underline{\mathsf{nick@novogroup.co.nz}} \ \textbf{I} \ \textbf{W:} \underline{\mathsf{www.novogroup.co.nz}}$

021-037 - Two Chain - TL001A

Attachment 1: Dunns Crossing Road / Goulds Road / Selwyn Road Intersection Arrangements







Novo Group Limited PO Box 365 Christchurch 8014

NovoGroup.co.nz

Dunns Crossing Rd / Goulds Rd / Selwyn Rd Intersection Upgrade

Concept Dunns Crossing Road / Goulds Road / Site Access Design

Drawing: 021-038 - Skellerup - SK100X-A

Scale @A3 1/500 Date 16/12/2021

Project #021-038

By N Fuller

Attachment 2: Dunns Crossing Road / Goulds Road / PC81 Intersection Operation

		07:00 to 08:00							08:00 to 09:00						
Approach I	Movement	Flow	Max Delay	Avg Delay	LOS	Approach delay	Approach LOS	Flow	Max Delay	Avg Delay	LOS	Approach delay	Approach LOS		
Dunns Crossing Rd North	Left	21	3	2	Α			14	3	2	Α				
	Through	279	5	1	Α	1	Α	326	5	1	Α	1	А		
	Right	3	2	1	Α			4	4	2	Α				
Goulds Rd East T	Left	119	32	7	Α			134	26	6	Α				
	Through	25	41	11	В	7	Α	22	23	8	Α	6	А		
	Right	12	15	6	Α			13	12	6	Α				
Dunns Crossing Rd South	Left	2	1	1	Α			1	1	0	Α				
	Through	124	2	0	Α	1	Α	144	2	0	Α	1	А		
	Right	61	18	3	Α			65	17	3	Α				
PC81 Access	Left	10	6	3	Α			9	6	3	Α				
	Through	36	24	8	Α	6	Α	25	18	7	Α	6	Α		
	Right	33	27	6	Α			24	21	6	Α				
Intersection Total		723		11	В	7	Α	779		8	Α	6	Α		



Approach Move		16:00 to 17:00							17:00 to 18:00						
	Movement	Flow	Max Delay	Avg Delay	LOS	Approach delay	Approach LOS	Flow	Max Delay	Avg Delay	LOS	Approach delay	Approach LOS		
Dunns Crossing Rd North	Left	11	3	1	Α			11	3	2	Α				
	Through	173	5	2	Α	2	А	200	5	2	Α	2	А		
	Right	2	3	2	Α			1	0	0	Α				
Goulds Rd East	Left	92	18	4	Α	5	А	113	21	4	Α		А		
	Through	36	21	6	Α			34	23	6	Α	5			
	Right	13	14	6	Α			23	15	5	Α				
Dunns Crossing Rd South	Left	4	1	0	Α	0	А	4	1	1	Α	1	А		
	Through	210	2	0	Α			260	2	0	Α				
	Right	82	12	2	Α			88	13	2	Α				
PC81 Access	Left	8	7	4	Α	4	А	8	8	4	Α	5	А		
	Through	24	15	5	Α			23	17	6	Α				
	Right	10	15	3	Α			10	15	4	Α				
Intersection Total		661		6	Α	5	Α	773		6	Α	5	А		