

Gen Hewett
Senior Advisor
Environmental Protection Agency (EPA)
By email

30 May 2022

Response to request for information No 1 from Auckland Council in relation to the Drury East Stage 1 Precinct resource consent application under COVID-19 Recovery (Fast-track Consenting) Act 2020

Thank you for the request for information (RFI) dated 16 May 2022. The Council has sought advice from its Healthy Waters Department (Paula Vincent and Danny Curtis) and its stormwater specialist (Trent Sunich) on relevant matters arising from the RFI, and responds below, following the numbering of the RFI:

RFI Paragraph 1

The Drury East Stage 1 Precinct Panel considering the Fast-track Consenting application by Fulton Hogan requests some further information from Auckland Council on matters arising since the decision on Private Plan Change 49 and the technical advice on flooding and stormwater received from Mr Nigel Mark-Brown. The Panel has yet to determine the weight that should be given to PC 49, if any, and would be assisted by receiving the information below.

Auckland Council response:

The Panel states in its Minute that it is “yet to determine the weight that should be given to PC 49, if any”, but would be assisted by information from Auckland Council as to how the “PC 49 transport triggers contained in Table 1X.6.1 should be applied to the Drury East Stage 1 Precinct site (the Fulton Hogan site) given that Table 1X.6.1 applies to the entirety of the plan change area as per Precinct Plan 2 in 1X.10.3 of the PC 49 decision”.

By way of preliminary comment, the Council’s view in relation to the status of PC 49 can be summarised as follows (reflecting legal advice received from Brookfields Lawyers):

1. As a private plan change that has been accepted by the Council but not adopted, PC 49 is not a “proposed plan” for the purposes of clause 31(1)(c) of Schedule 6 to the FTA (refer to section 2 of the Brookfields Lawyers memorandum dated 8 March 2022 for further discussion). This remains the position until any appeals are determined and the provisions are operative in clause 20 terms.
2. The discretion provided by clause 31(1)(d) to have regard to “other matters” must be exercised in a principled way, and the Council does not consider it would be appropriate to have regard to PC 49 under clause 31(1)(d) as doing so would circumnavigate the clear intent of the legislative regime (which, as noted above, does not give any status to a private plan change that has not been adopted).
3. The PC 49 decision and provisions remain subject to potential appeal (with 30 working days afforded for any appeals under clause 14(4) of Schedule 1 to the RMA).
4. The Panel should also be aware that, while the PC 49 decision has been notified, PC 49 is subject to the variation requirement in clause 34 of Part 5 of Schedule 12 to the RMA, which was introduced by the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021. PC 49 cannot be approved and made operative where there is a

requirement for Council to initiate a variation to incorporate medium density residential standards.

RFI Paragraph 2(a)

How the PC 49 transport triggers contained in Table 1X.6.1 should be applied to the Drury East Stage 1 Precinct site (the Fulton Hogan site) given that Table 1X.6.1 applies to the entirety of the plan change area as per Precinct Plan 2 in 1X.10.3 of the PC 49 decision.

Auckland Council response:

The Council refers the Panel to its comments on RFI paragraph 1 above concerning the status of PC 49.

The Council also refers the Panel to Auckland Transport's response to this query. The Council endorses Auckland Transport's comments.

RFI Paragraph 2(b)

An update to Auckland Council's comments on conditions proposed in the Drury East application in light of the PC 49 decision. We note the Council's initial comments on consent conditions at Section 11 of its comment on the application.

As stated above in response to RFI paragraph 1, given the status of the PC 49 decision and accompanying provisions, the Council's view is that the PC 49 Precinct Provisions should not be considered or given any weight in assessing and determining this resource consent application.

For these reasons, the Council is concerned as to the appropriateness of providing comment on conditions based on the PC 49 decision.

Having noted this concern, the Council provides a document with tracked changes to the updated Appendix 4 (provided to the EPA on 18 May 2022), and the following comments on amended conditions:

Comment from Auckland Council's Healthy Waters Department (Ms Vincent and Mr Curtis)

Healthy Waters considers that consent conditions need to require a development specific stormwater management plan as proposed as a revised Condition 14 and new Condition 14A in Auckland Council's initial comments. This is because the plan changes are not operative and there is no agreement with Healthy Waters, the network utility operator, on the Drury East Stormwater Management Plan referenced by the applicant. Healthy Waters do not support revisions to Condition 14 as proposed by the applicant. A stormwater management plan also enables stormwater effects and flood management to be managed at the appropriate scale.

Auckland Council's Stormwater Specialist response (Mr Sunich)

The applicant has proposed various edits to the stormwater discharge conditions, which are attached to the RFI No.2 document. In response the Council's stormwater specialist, Mr Sunich, makes the following comments:

- Mr Sunich retains the recommendations set out in section 7 of the Council's initial response to the EPA, particularly in relation to Condition 14 and 14a, including the requirement for a site-specific Stormwater Management Plan (**SMP**) to be developed. As indicated by Mr Mark-Brown, some optimisation of the stormwater management approach is required and the SMP is a pathway to achieve this both for the applicant and the future asset owners (e.g. Auckland Council and Auckland Transport). As drafted by the applicant in the stormwater discharge conditions there is limited scope to submit further design detail for certification prior to

construction which could lead to an undesirable set of public stormwater assets and burdensome operation and maintenance.

- At paragraph 38, Mr Mark-Brown discusses the operation and maintenance aspects of the private stormwater systems indicating there are limitations presented by legal mechanisms such as covenants outlining landowner responsibilities particularly in terms of long-term operation and maintenance guidance. To help with this, Mr Sunich recommends an edit to Condition 19 of the stormwater discharge conditions requiring the applicant to develop operation and maintenance guidance for the suite of potential devices that could be operated on the private lots. Recommended edit is as follows underlined:

19. The Operation and Maintenance Plan must set out how the stormwater management system is to be operated and maintained to ensure that adverse environmental effects are minimised. The plan must include (where relevant):

- details of who will hold responsibility for long-term maintenance of the stormwater management system and the organisational structure which will support this process;*
- a programme for regular maintenance and inspection of the stormwater management system;*
- a programme for the collection and disposal of debris and sediment collected by the stormwater management devices or practices;*
- a programme for post storm inspection and maintenance;*
- general inspection checklists for all aspects of the stormwater management system, including visual checks; and*
- a programme for inspection and maintenance of vegetation associated with the stormwater management devices.*
- a copy of any current maintenance contract.*
- Typical operation and maintenance practices for the suite of stormwater management devices to be constructed on the private lots.*

At paragraphs 10, 11, 12 and 13, Mr Mark-Brown discusses allowance for 3.8 degrees C of climate change (rather than 2.1 degrees C in the current stormwater code of practice). Noting the discharge consent application is a discretionary activity under the Auckland Unitary Plan, this could be accommodated in a revised Condition 14 and 14A as follows:

14. The management of stormwater must be in general accordance with the following design requirements:

Activity/ land use	Water quality treatment	Hydrological mitigation	Flooding and overland flows	Design Requirements
<i>Private land including residential super lots</i>	<i>Risk based treatment in accordance with the SMP certified under Condition 14a</i>	<i>SMAF 1 hydrological mitigation as per AUP(OP) Table E10.6.3.1.1</i>	<ul style="list-style-type: none"> <i>Maintain sub-catchment drainage paths where possible and/or provide area reduction or flow controls where required to limit flows to sensitive receiving tributaries.</i> <i>Maintenance of similar surface water catchments into the wetlands, ensuring the hydraulic neutrality of</i> 	<p><i>The design will be completed in accordance to but not limited by the following documents:</i></p> <ul style="list-style-type: none"> <i>Auckland Council Technical Publication GD-01, Stormwater Management Devices: Design Guidelines Manual</i> <i>Auckland Council Technical Publication GD-04, Water Sensitive Design for Stormwater</i>

Activity/ land use	Water quality treatment	Hydrological mitigation	Flooding and overland flows	Design Requirements
			<p>wetlands between pre and post development</p> <ul style="list-style-type: none"> Pass forward flood flows (no attenuation required or as certified under Condition 14a) 	<ul style="list-style-type: none"> Auckland Council Technical Publication TP108, Guidelines for stormwater runoff modelling in the Auckland Region
Private Land (Large Format Retail)	Treatment to GD01 for all contaminant producing impervious surfaces	SMAF 1 hydrological mitigation as per AUP(OP) Table E10.6.3.1.1	<ul style="list-style-type: none"> Maintain sub-catchment drainage paths where possible and/or provide area reduction or flow controls where required to limit flows to sensitive receiving tributaries. Maintenance of similar surface water catchments into the wetlands, ensuring the hydraulic neutrality of wetlands between pre and post development Pass forward flood flows (no attenuation required or as certified under Condition 14a) 	<p>The design will be completed in accordance to but not limited by the following documents:</p> <ul style="list-style-type: none"> Auckland Council Technical Publication GD-01, Stormwater Management Devices: Design Guidelines Manual Auckland Council Technical Publication GD-04, Water Sensitive Design for Stormwater Auckland Council Technical Publication TP108, Guidelines for stormwater runoff modelling in the Auckland Region
Road corridors (Public and Private Commercial)	Treatment to GD01 for all roads and carparks	SMAF 1 hydrological mitigation as per AUP(OP) Table E10.6.3.1.1	<ul style="list-style-type: none"> Maintain sub-catchment drainage paths where possible and/or provide area reduction or flow controls where required to limit flows to sensitive receiving tributaries. Maintenance of similar surface water catchments into the wetlands, ensuring the hydraulic neutrality of wetlands between pre and post development Pass forward flood flows (no attenuation required or as certified under Condition 14a) 	<p>The design will be completed in accordance to but not limited by the following documents:</p> <ul style="list-style-type: none"> Auckland Council Technical Publication GD-01, Stormwater Management Devices: Design Guidelines Manual Auckland Council Technical Publication GD-04, Water Sensitive Design for Stormwater Auckland Council Technical Publication TP108, Guidelines for stormwater runoff modelling in the Auckland Region Auckland Council Stormwater Code of Practice – Version 3

Activity/ land use	Water quality treatment	Hydrological mitigation	Flooding and overland flows	Design Requirements
				<i>including designing all public infrastructure to include allowance for 3.8 degrees C of climate change</i>
<i>Reserves</i>	<i>None</i>	<i>SMAF 1 hydrological mitigation as per AUP(OP) Table E10.6.3.1.1 for impervious surfaces connected the stormwater network</i>	<ul style="list-style-type: none"> • <i>Maintain sub-catchment drainage paths where possible and/or provide area reduction or flow controls where required to limit flows to sensitive receiving tributaries.</i> • <i>Maintenance of similar surface water catchments into the wetlands, ensuring the hydraulic neutrality of wetlands between pre and post development</i> • <i>Pass forward flood flows (no attenuation required or as certified under Condition 14a)</i> 	<i>Stormwater outfalls to be green outfalls the design consistent with Condition 17 "Stormwater Outfall Structures"</i>
<i>Public Stormwater Infrastructure</i>	<i>All</i>			<ul style="list-style-type: none"> • <i>Auckland Council Stormwater Code of Practice – Version 3 including designing all public infrastructure to include allowance for 3.8 degrees C of climate change</i>

14A. The Consent Holder must submit a site-specific Stormwater Management Plan to the Manager for certification at least 30 working days prior to the start of construction of any stormwater management devices. The Stormwater Management Plan shall be developed in accordance with the Auckland Design Manual Stormwater Management Plan Template and additionally shall outline the criteria for adopting a risk based approach to select stormwater treatment devices on private land.

RFI Paragraph 2(c)

The advice provided to the Panel by Mr Mark-Brown concerning flooding and stormwater issues including regarding the need to protect the capacity of the culverts on Fitzgerald Stream prior to later upgrades being done on Flanagan Road, Great South Road and at the railway line.

Comment from Auckland Council's Healthy Waters Department (Ms Vincent and Mr Curtis)

Line Item	Area of comment	Auckland Council Healthy Waters Department Response
1	Qualifications and Experience	No Comment
2	Qualifications and Experience	No Comment
3	Qualifications and Experience	No Comment
4	Code of Conduct	No Comment
5	Scope of Advice	No Comment
6	Scope of Advice	No Comment
7	Scope of Advice	No Comment
8	Scope of Advice	No Comment
8	Flooding	No Comment
9	Flooding	No Comment
10	Flooding	Agreed. Healthy Waters believes that applying a precautionary approach to floor levels of a development is appropriate.
11	Flooding (Climate Change)	<p>Version 2 of the Stormwater Code of Practice was published in 2015, including a 2.1-degree allowance for climate change. This allowance was based on IPCC's Fourth Assessment Report (2007). Since then there have been a number of changes with respect to climate change:</p> <ul style="list-style-type: none"> • Updated climate change projections have been released at a global, national and local level. The latest downscaled projections for Auckland were published in 2020 by NIWA, based on the IPCC's Fifth Assessment Report (2014). • In 2019 Auckland Council declared a climate emergency • In 2020 Auckland Council adopted Te-Tāruke-ā-Tāwhiri: Auckland's Climate Plan. <p>Te-Tāruke-ā-Tāwhiri states that we will prepare for the current emissions pathway, and plan and build resilience so that we are ready when a warmer world does occur. To implement Te-Tāruke-ā-Tāwhiri as well as to incorporate the updated climate change projections, Auckland Council has developed updated rainfall guidance based on designing for a 3.8-degree temperature rise. This includes an increase to design rainfall depth as well as an updated temporal pattern.</p> <p>These changes to the rainfall guidance were not made in Version 3 of the Stormwater Code of Practice, released in January 2022, due to the need</p>

Line Item	Area of comment	Auckland Council Healthy Waters Department Response
		<p>for organisational alignment and further engagement with industry on an appropriate transition pathway and framework.</p> <p>The implementation of Te-Tāruke-ā-Tāwhiri within the Auckland Design Manual is being assessed with the view to revising climate change provisions across all Codes of Practice to ensure consistency. This work will be carried out during 2022.</p> <p>Healthy Waters believes it is appropriate to use 3.8 degrees given it will likely be in updated Stormwater Code of Practice later this year.</p>
12	Flooding	Agreed
13	Flooding	Agreed. The potential impact of flooding of the roads and railway (including hazard to users) should be assessed as part of the application, including 3.8 degrees climate change.
14	Flooding	Agreed. Assessment of impacts in existing infrastructure (roads and rail) in response to the proposed fast-track developments should be completed to better understand the potential hazard to users. Healthy Waters would consider that this assessment should consider the 2-year, 5-year, 10-year, 20-year and 50-year events and include not only the depth of flooding, but also the duration to allow for a comprehensive assessment to occur.
15	Flooding	Healthy Waters agrees in part that the flood assessment presented in the memo by Woods in November 2021 provides an acceptable approach; however, this does not address the impact on flood hazard identified in Point 14 above.
16	Flooding	No comment
17	Flooding	No comment
18	Flooding	<p>Healthy Waters does not agree with the point that a holistic model is not required for this specific Drury East development. Where projects are to be undertaken that knowingly include earthworks within the floodplain and diversion of stormwater sub-catchments, it is important to provide a model that reflects the information known.</p> <p>Currently already granted through the Fast-Track process is the KiwiRail project associated with the Drury Centre Station (see location plan below). This site is within the wider Plan Change 48 (Drury Centre) area and is located directly upstream of the Flanagan Road / North Island Main Trunk Line culvert.</p> <p>As part of the development of the transport interchange associated with the station, the applicant is proposing to manipulate the floodplain to create a flat topography. This will involve cutting and filling within the existing floodplain so that there should be flood volume parity. The earthworks have the potential to impact the hydraulics into the Flanagan Road / NIMT culvert, which could result in the Drury Centre and Drury South development increasing local floodplains around this inlet.</p> <p>To date there has been no flood assessment undertaken on whether the Fast Track development would increase flooding accounting for the KiwiRail project, or what the potential flood effect from this application would be on the proposed KiwiRail project.</p>

Line Item	Area of comment	Auckland Council Healthy Waters Department Response
		<p>It should be noted that the model referenced in the Woods memo of 12 April 2022 that was passed to SGA for the design of the Drury Centre Transport Interchange included only proposed land uses within the plan change areas and used the Healthy Waters LiDAR data for the topography. It did not include the proposed topography that is currently being presented in the Fast-Track application.</p> <p>The Drury East Fast-Track development is not proposing any flood attenuation. There will be increased runoff from the Fast-Track area which may impact on the Transport Interchange, the floodplain and hazard associated with existing infrastructure.</p>  <p>Location Plan and relationship between Drury East and SGA Drury Centre Fast Track development areas</p>
19	Flooding	No comment
20	Flooding	<p>Agreed that Fast-Track design will need to manage interim flooding robustly.</p> <p>For clarification, guidance should be provided to the applicant on appropriate model scenarios that should be assessed. The modelling that was initially submitted with the Fast-Track application considered no climate change, no other development outside of the Fast Track areas and assumed that infrastructure is existing. The subsequent modelling supplied May 2022 considers Maximum Probable Development (as per the Auckland Unitary Plan), includes 3.8 degrees increase climate change and assumes that all infrastructure is opened to remove flow restrictions.</p> <p>The two models presented by Woods in their memos of November 2021 and May 2022 represent significantly different scenarios and it would be beneficial to provide the applicant with set scenarios to be managed to allow for assessment of the impacts of development on the floodplain, recognising that full build out of the Plan Change areas could be some time in the future.</p>
21	Flooding	No comment
22	Flooding	Agreed with the comments that have been made.
23	Stormwater Management	No comment

Line Item	Area of comment	Auckland Council Healthy Waters Department Response
24	Stormwater Management	No comment
25	Stormwater Management	No comment
26	Stormwater Management	Agreed with comments relating to number and location of devices.
27	Stormwater Management	(AT comment) Agreed with greater assessment on on-going Operation and Management, Health and Safety and justification that what is proposed is the Best Practicable Option for stormwater management to achieve all stormwater outcomes.
28	Stormwater Management	No comment.
29	Stormwater Management	Defer to AT for comment on this matter.
30	Stormwater Management	Defer to AT for comment on this matter.
31	Stormwater Management	Agreed. Clarification and justification of raingarden size and why larger communal devices were not considered.
32	Stormwater Management	Agreed on resilience of communal device flood protection.
33	Stormwater Management	Agreed.
34	Stormwater Management	No comment
35	Stormwater Management	Agreed, this is related to location of manhole assets.
36	Stormwater Management	Agreed clarification on the stormwater management for superlot areas and provision of SMAF and water quality management required.
37	Stormwater Management	No comment
38	Stormwater Management	Agreed with clarification on the stormwater management and Operation & Maintenance requirements for private devices.

RFI paragraph 2(d)

Mr Mark-Brown's advice regarding the management of communal and private stormwater between each of the sub-catchments on the Fulton Hogan site.

Auckland Council Healthy Waters Department response (Ms Vincent and Mr Curtis)

Ms Vincent and Mr Sunich agree with Nigel Mark-Brown's comments on the lack of rationale for why private stormwater devices are more appropriate than communal and urge that communal devices be considered to avoid unnecessary cost and maintenance to future council owners.

Auckland Council's Stormwater Specialist response (Mr Sunich)

At paragraph 33 of Mr Mark-Brown's technical advice, he concludes that the proposed stormwater management is not indicative on an integrated management approach. Further, he concludes there is limited evidence that demonstrates the proposed stormwater management is the best approach for the site. Based on advice from Mr Sunich, the Council agrees with this assessment, and it is consistent with the commentary provided in section 7 (Stormwater Discharge: Technical Assessment) of the Council's response to the EPA, which recommends further investigation into rationalising the number of bioretention raingardens and/or implementing alternative management

approaches. The latter may result in alterations to the proposed development scheme layout, consistent with the outcome of stormwater management and land use integration.

RFI paragraph 2(e)

The appropriate wording of additional conditions recommended by Mr Mark-Brown – including the adoption of the more recent and higher RCP8.5 climate change provision rather than the unmodified 2015 provision carried into the 2022 edition of the Auckland Council Code of Practice for Stormwater.

Auckland Council Healthy Waters Department response (Ms Vincent and Mr Curtis)

Auckland Council's Healthy Waters Department supports the additional conditions put forward by Nigel Mark-Brown, and notes that consultation on using the 3.8 degrees C is underway and this to ensure alignment across codes of practice used by Council.

Yours sincerely,

A handwritten signature in cursive script, appearing to read "Russell Butchers".

Russell Butchers
Principal Project Lead
Premium Resource Consents