



1 June 2023

Attn: Mr Craig Thompson
Toowoomba Regional Council
The Chief Executive Officer
PO Box 3021
TOOWOOMBA QLD 4350

Re. Further Advice Notice (OW/2022/5330)

Project No: 16552

Project Title: Gainsborough Lodge – Stage 1

Dear Craig,

This letter provides a response to the the Further Advice Notice dated 12/04/23.

1. RETAINING WALLS

1.1	Aspect of Development:
	The retaining wall design drawings are incomplete and structural details have not been provided. The retaining wall design details need to be included and certified within these operational works drawings.
	Further Advice
	Please amend the drawings to include design details for the retaining walls.

Response:

This is inconsistent with recent OW approvals which conditioned retaining walls; including OW/2023/390 approved 30/03/23 and OW/2022/4942 approved 23/01/23.

For reasons outlined in our RFI response letter dated 20/03/23 we again request retaining walls be conditioned in accordance with our previous response.

2. STORMWATER

2.1	Aspect of Development:
	Council does not accept that the bio-retention basin should be built within the detention basin floor and requires separation of the detention basin and bio-retention basin with a high flow bypass of the bio-retention basin.
	Further Advice
	Please design a bio-retention basin to accommodate the low flows with a high flow bypass. The bio-retention basin and detention basin must be separate facilities.

Response:

A comprehensive response to this outlining constraints and providing justification of current design (with reference to the PSP and relevant standards) was provided in our RFI response letter dated 20/03/23.

Council's one sentence statement response shows no background to their decision making or consideration to outlined constraints. In response, RMA attended a meeting with Council 29/05/23. We have received confirmation from Adam Gould on 1/06/23 that the Detention / Bio Basin will remain unchanged and will be approved in accordance with the current drawings.

2.2	Aspect of Development:
	The size of the bio-retention basin is confirmed as 1,380m ² for stage 1-4 but the size of the basin for stage 1 has not been provided. Until a mechanism is in place for the bio-retention basin to be constructed at stage 4, the development permit will need to condition construction of a bio-retention basin to service stage 1 with an advice note to the effect that Council would consider deferral of construction of the stage 1 basin until stage 4 of development.
	Further Advice
	Please confirm the size of the Stage 1 bio-retention basin and update the drawings to show the area and location of the stage 1 basin.

Response:

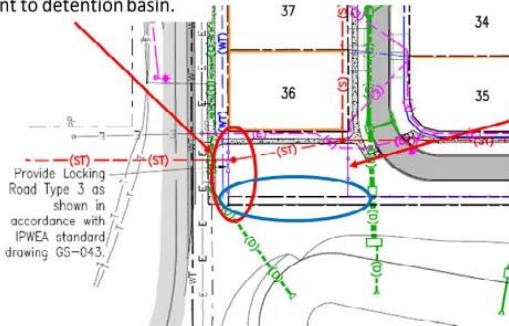
The bioretention area can be bonded within of Stage 1 Operational Works approval. It would be reasonable for the Stage 1 portion of the bioretention area to be bonded based on a percentage of total basin catchment area. The Stage 1 area (including Hursley Road and draining reserve) accounts for 48 percent of total Stage 1-4 area. Therefore, for the purposes of defining a bond amount, a bioretention filter area of 662.4m² can be adopted.

Conditioning early construction of the bioretention basin before the upstream building catchment is mature is not in line with Council's PSP, as outlined in our RFI response letter dated 20/03/23. Additionally, conditioning as proposed with an advice note can complicate off-maintenance as we understand under advice notes are not legally binding.

2.3	Aspect of Development:
	The stormwater easement shown along the balance lot future road alignment is not required based on the catchment plan provided. Condition 17 of RAL/2020/5054/A states “the easement must be by design and include the pipe or overflow path from Stage 1 to the lawful point of discharge at Devine Road” The design drawings show the easement is not required.
	Further Advice
	Please remove the stormwater easement shown along the future road alignment within the balance lot.

Response:

We request to condition as plan amendment. We will supply updated plans prior to the Council construction prestart meeting.

2.4	Aspect of Development:
	<p>An amendment is required to the positioning of bollards/post/rail fence, this being required on only one side of the section of road reserve between Lot 36 and the detention basin on the Road 3 road reserve extension as shown below.</p> <p>Remove section of bollards/fencing provision on Hursley Rd side. Continuation of bollards will be required adjacent to detention basin.</p>  <p>Lock rail gate will be required on section between Lot 36 and detention basin</p> <p>Provide Locking Road Type 3 as shown in accordance with IPWEA standard drawing GS-043</p>
	Further Advice
	Please remove the post and rail fence between Lot 36 and the detention basin through the road reserve on Hursley Road and provide a continuation of the post and rail fence on Road 3 to Hursley Road adjacent to the detention basin. A lock rail gate will be required for the section of bollard/fencing provided between Lot 36 and the detention basin.

Response:

We request to condition as plan amendment. We will supply updated plans prior to the Council construction prestart meeting.

3. ROAD DESIGN

3.1	Aspect of Development:
	There has been no amendment of the design to remove Road 12. RAL/2022/4965 which includes stage 2-8 of the Gainsborough development is still under assessment and there is no guarantee that Council will approve the tee intersection as currently designed.
	Council proposes that the design drawings retain the current design layout but the relevant plans not be listed as approved drawings. The applicant will need to submit to Council amended drawings that comply with the RAL conditions and the drawings be approved prior to pre-start.
	Further Advice
	No further action is currently required.

Response:

The design was not amended based on written confirmation from Adam Gould confirming Council's in principal agreement to the current Road 12/Road 1 intersection. It is sensible to undertake this work now to avoid future rework. It is noted that removal of this intersection is no longer an item on the Further Advice received for RAL/2022/4965 dated 9/05/23. We recommend the Assessing officer reaches out to Adam Gould for confirmation of our advice.

3.2	Aspect of Development:
	A residential vehicle crossing has been added to the design servicing Lot 27 within the Road 4 cul-de-sac. This will need to be constructed as a heavy duty vehicle crossing otherwise it could get damaged when building works occur.
	Further Advice
	Please amend drawing C-R0501 to include a heavy duty vehicle crossing in accordance with IPWEAQ Drawing RS-051.

Response:

The on-maintenance period controls this risk. Additionally, this is inconsistent with previous approvals where residential driveways are proposed with civil construction works: OW/2021/5275, OW/2020/4578, OW/2021/6830, OW/2021/3913 to name a few. On this basis, we request this advice is omitted.

4. WASTEWATER INFRASTRUCTURE

4.1	Aspect of Development:
	<p>There is no structural design detail provided for retaining walls and structural bridging over/near sewer. Clearances provided for retaining walls to sewer is very limited and doesn't apply to most scenarios. Issues include:</p> <ul style="list-style-type: none"> • Drawing C-S0101 shows very limited structural details for retaining walls as only 'Typical' and there is no detailed design provided: • Drawing C-S0101 detail for typical protection doesn't reflect retaining wall situations where one pier falls on a lot corner where walls also go in the direction 90 degrees away (walls in both directions, e.g. north-south, east-west). As such, one pier to sewer will generally be 1.5m away (sewer alignment) not the 1.2m shown on the drawing. • The cross section also indicates pier spacing is 2.4m. Depending on pier diameters, if a walls falls on the same side as a property boundary, then sleeper/whaler lengths may need to be up to 3m long to achieve a 1.2m sewer to edge of pier clearance. • The vertical clearance under the strip footing is only 300mm, where Council requires 600mm minimum. As such, C-S0101 drawing detail is unsuitable. • Pier diameters and sleeper/whaler lengths over sewers are not specified. If they vary at different sewer locations, different designs are required. • The Drawing C-S0101 note C.3 is generally satisfactory, except where a wall exists between the jump up and the boundary. (Sewer connection points must be located at a minimum distance of 1.0m clear of retaining wall structures). • The structural bridging detail of the sandstone wall over the sewer at MH48/A is not provided.
	Further Advice
	<p>Please amend the drawings to include structural design for retaining walls with detailed design details relating to sewer (both mains & service lines) clearances to retaining walls and structural bridging over detailed designs. All sleeper/whaler lengths and pier locations adjacent to sewers should be nominated on the drawings for each specific affected location.</p>

Response:

Refer item 1.1 response.

4.2	Aspect of Development:
	<p>Manholes 4/A, 4/B, 4/D, and 3/E are proposed to be only constructed as end of line DN100 property connections. These need to be constructed with DN1050 maintenance structures.</p>
	Further Advice
	<p>Please re-submit amended drawings to show full maintenance structure construction for MH4/A, 4/B, 4/D, and 3/E.</p>

Response:

This advice relates to Information Request Item 5.4. The response provided with RFI response letter dated 20/03/23 is as follows:

"End of lines 4/A, 4/B, 4/D and 3/E avoid future road crossings and reduces rework on Council's behalf. While manholes are ultimately required at end of lines 4/A, 4/B, 4/D and 3/E, finished surface levels of future stages may change. Plugged end on lines are provided as future levels are unknown.

We understand WIS now accept this approach as an outcome from a meeting held on the 23/11/22.

These road crossings remain be included for approval with Stage 1 OW. The Contractor will not construct Road 1 sewerage crossings unless they are approved by Council and installing these crossings without approval is an unreasonable risk to put on the development.

Construction of future manholes 3/A, 3/B, 3/D & 2/E with future stages can be done by the Contractor at Council's discretion."

Manholes at these locations were also discussed at an RFI meeting held with Council 23/11/22. Constructing manholes now creates more "live works" for Council with future stages. Manholes would be in effect constructed twice.

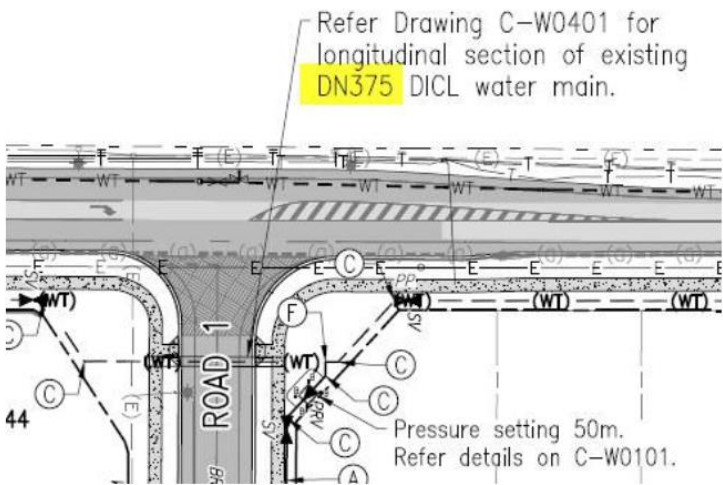
We request this advice is omitted.

5. WATER INFRASTRUCTURE

5.1	Aspect of Development:
	Two sluice valves and end caps are shown on drawings W0201, W0301, W0303 as terminating within the balance lot without easements. The sites include:
	<ol style="list-style-type: none"> 1. At the east side of Road 1, opposite the Lot 44 south east corner; and 2. Road 4 cul-de-sac, near lot 95.
	Information Required:
	Please amend drawing C-G0401 showing easements over watermains in private property.

Response:

We request to condition as plan amendment. We will supply updated plans prior to the Council construction prestart meeting.

5.2	<p>Aspect of Development:</p>
	<p>An incorrect pipe size label is shown on drawing C-W0303 as highlighted.</p> <p>Refer Drawing C-W0401 for longitudinal section of existing DN375 DICL water main.</p> 
	<p>Information Required:</p> <p>Please correct to the pipe size to DN200.</p>

Response:

We request to condition as plan amendment. We will supply updated plans prior to the Council construction prestart meeting.

The above provides a full response to the requests outlined in the Further Advice Notice dated 12/04/23.

If you have any queries or require further information, please contact the undersigned on 0458 194 260.

Yours faithfully

Ashleigh Tonkin
RMA ENGINEERS PTY LTD