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19 March 2021

Fife Kemps Creek Pty Ltd
Level 25
133 Castlereagh Street
Sydney, NSW 2000

Your Ref:

Our Ref: LTR001-01-19-609 Submission Comments North Rd and Water Q

Attention: Michael Wiseman & Rob Mackay

Email: michael.wiseman@fifecapital.com.au

Dear Michael and Rob,

RE: **SSD-10479 COMMENTS FROM SUBMISSIONS – ALTERNATIVE PROPOSALS**

Several submissions have been made from reviewers of the SSD-10479 application. There are two comments from DPIE that this letter seeks to address:

1) The proposed development layout is not consistent with the Mamre Road Precinct road network map in the draft MRP DCP.

2) Ensure stormwater management proposed for the development complies with Section 2.6 of the draft MRP DCP. (Specifically, the water runoff quantity target of 1.9ML/ha/yr)

1) Northern Road Layout

The Mamre Road Precinct Draft DCP shows a road on the common boundary of this site and the adjacent land to the north. Using information obtained from concept work AT&L has undertaken for precinct wide servicing and earthworks strategies, and as the civil consultant for this project, a few sections of the northern boundary have been produced. Refer drawings enclosed at the back of this letter.

The sections show the proposed development along this boundary is expected to differ significantly between the two landowners. The resultant road centred on the boundary would be unfeasible for several reasons:

a) The road would need to be built on or between retaining walls, requiring rigid performance barriers to mitigate safety risks.

b) Does not allow for total construction of a complete road by either landowner thereby prevents orderly development.

c) Does not provide efficient access to development building site on both sides of the road, which increases the costs and challenges of designing and constructing a road, as well as compromising the road frontage amenity.

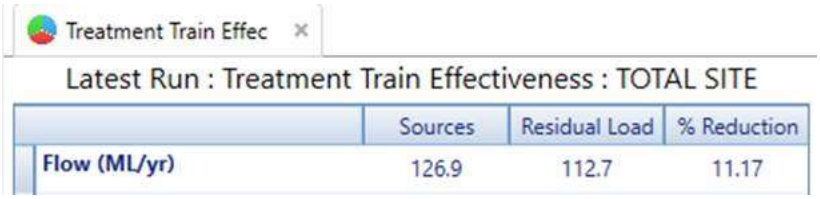
d) In this location, the intersection is too close to another proposed intersection in the draft DCP, which is only 150m north of this position on Aldington Road.

e) The lot directly north of 200 Aldington Estate is already serviced by the local industrial elbow shaped road 150m to the north. It does not require a second access point, and should not be burdened with a second road given its relatively small size.

The design and construction of a high order road along the northern boundary of 200 Aldington is challenging and uneconomical. It is recommended to relocate the road to achieve the required traffic outcomes and allow orderly development an efficient manner to maximise use of the s7.11 funds and WSEA outcomes. The road should be reconsidered for a position where it can be incorporated into known landholdings where it makes the most of existing precinct constraints, efficient use of s7.11 contributions and especially the proximity to other intersections.

2) Water Runoff Quantity

The proposed development seeks to complete roads and earthworks across the site and construct a building on Lot F. The modelling has been undertaken in MUSIC X to confirm that the SSD Application will not exceed the 1.9ML/ha/yr requirement. The output from MUSIC X is below:


Treatment Train Effec

Latest Run : Treatment Train Effectiveness : TOTAL SITE

	Sources	Residual Load	% Reduction
Flow (ML/yr)	126.9	112.7	11.17

To calculate the overall site rate of runoff = 112.7ML/yr divided by 72.08ha = 1.56 ML/ha/yr < 1.9ML/ha/yr. Therefore, the SSD proposal does not exceed the draft DCP quantity target.

Through a separate investigation into the impacts of achieving the Draft DCP water runoff quantity target, AT&L has determined the 1.9ML/ha/yr target is not viable due to the significant loss of developable land required reducing the ability to deliver jobs in the Western Sydney Employment Area. The Draft DCP only considers 1 element of waterway health, however according to the Urban Streamflow Impact Assessment[1] funded by Sydney Water, there are nine:

[1] Stephanie Kermode , Geoff Vietz , Carl Tippler , Kathryn Russell , Tim Fletcher , Marlène van der Sterran , Phillip Birtles & Michael Dean (2020): Urban Streamflow Impact Assessment (USIA): a novel approach for protecting urbanising waterways and providing the justification for integrated water management, Australasian Journal of Water Resources, DOI:10.1080/13241583.2020.1824330

(1) Annual flow volume;

(2) Mean duration of zero flow periods;

(3) Total duration of zero flow periods;

(4) Baseflow index (ratio of baseflow to total flow volume);

(5) Frequency of freshes (flows > 3 times median flow);

(6) Total duration of freshes (flows > 3 times median flow);

(7) Total duration of flows above channel erosion threshold;

(8) Frequency of floodplain engagement flows; and

(9) Total duration of floodplain engagement flows.

It is questioned why the other streamflow metrics have not been considered to provide a reasonable, practical and cost-effective outcomes in the Draft DCP. It may be possible to maintain or improve waterway health post development if other factors are considered for the basis of assessment. No data publicly available can be found that validates the selection of 1.9ML/ha/yr limit.

In addition, each stream or creek behaves differently. Ropes Creek, which the majority of this site falls to, is channelised in sections and traverses through predominately urban areas for most of its length. A policy for the development of the last few major pieces of undeveloped land leading to Ropes Creek should take this into consideration.

It is proposed that Fife Kemps Creek Pty Ltd meet with DPIE and Sydney Water to determine suitable alternative and viable metrics to preserve waterway health and resolve them for inclusion in the Final Mamre Road DCP. The masterplan and all buildings can then be modelled, reviewed and approved to allow the total estate to be constructed inline with the final DCP.

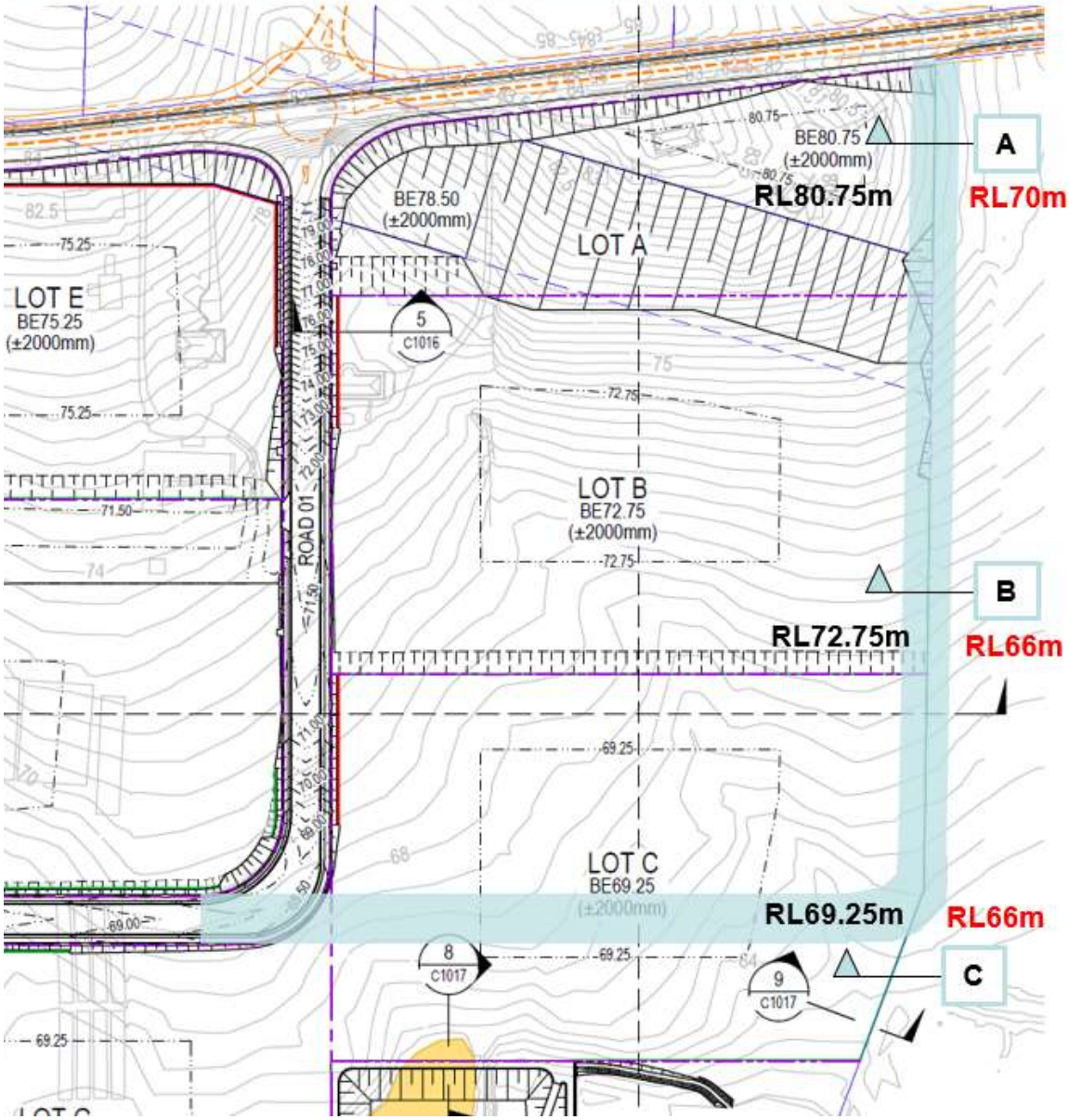
On this basis, SSD consent for Stage 1 of 200 Aldington Estate can be granted while not precluding future compliance with Sydney Water DCP requirements once suitable targets are identified.

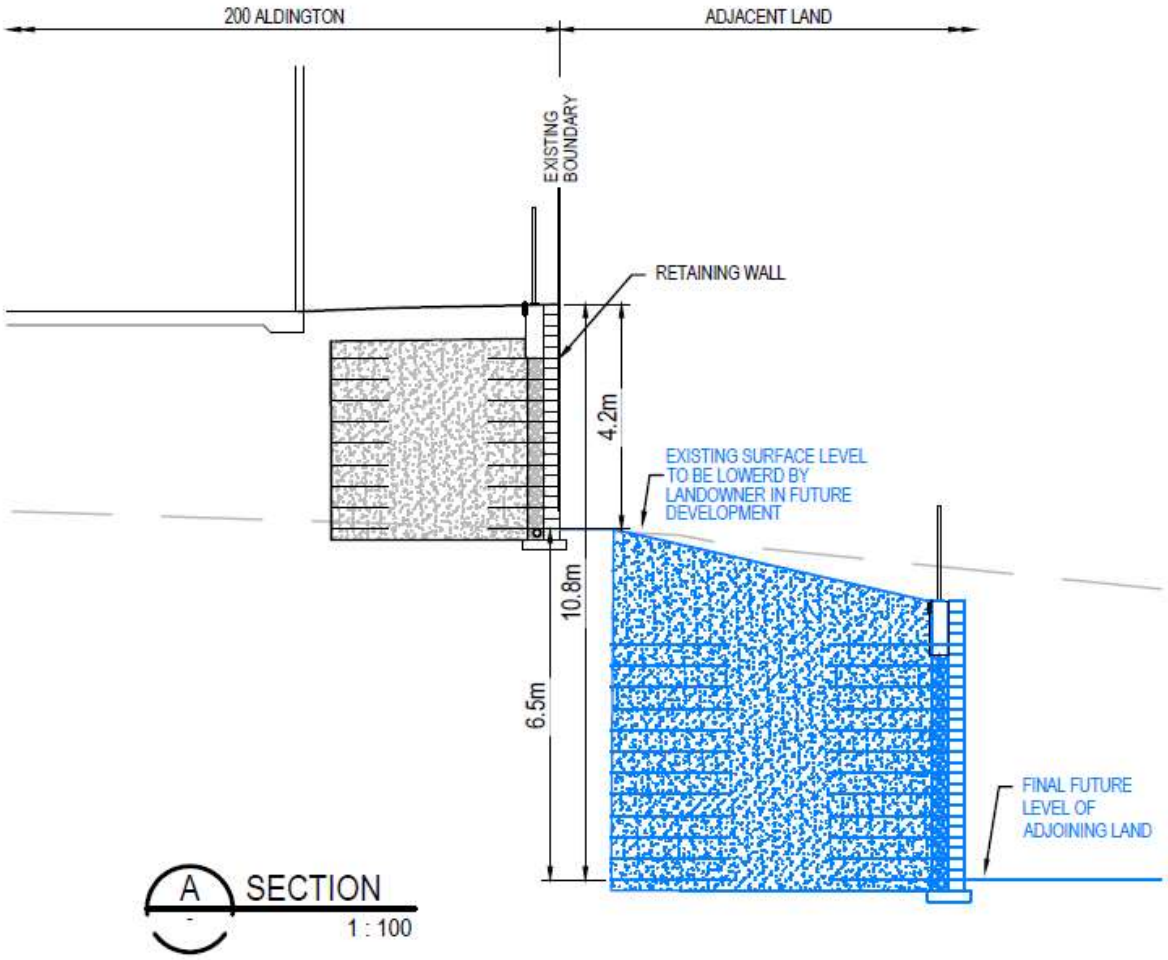
Should you have any questions, please don't hesitate to contact the undersigned.

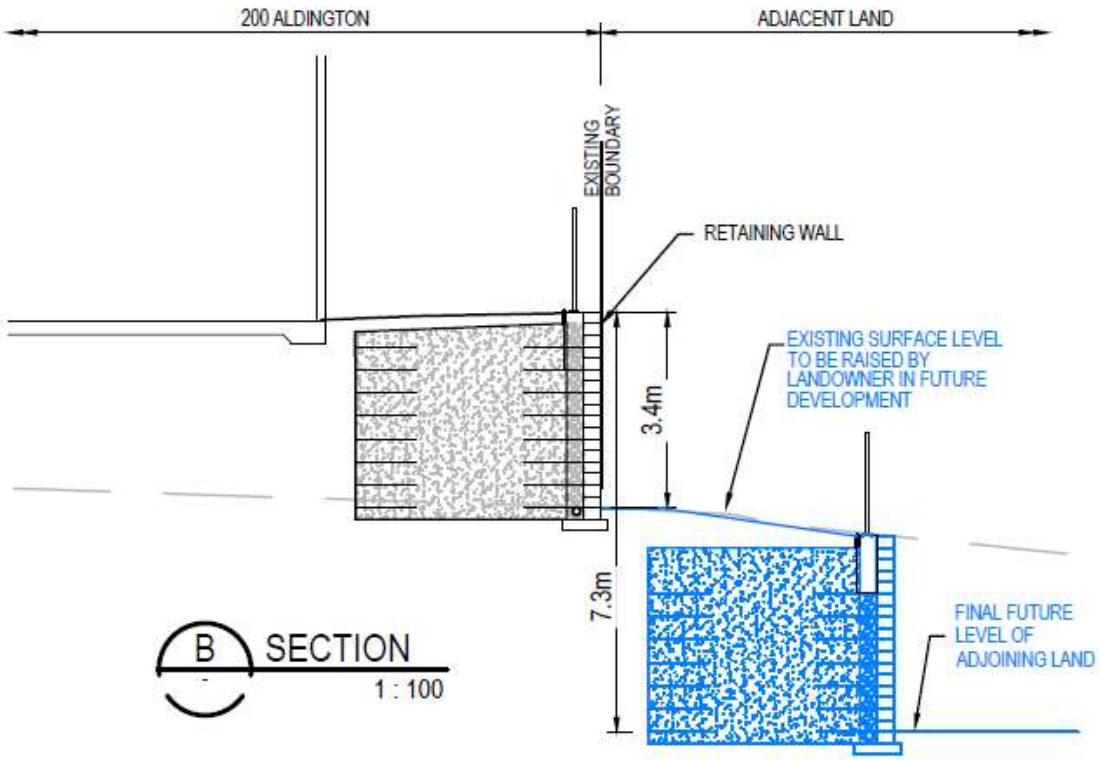
Yours sincerely,

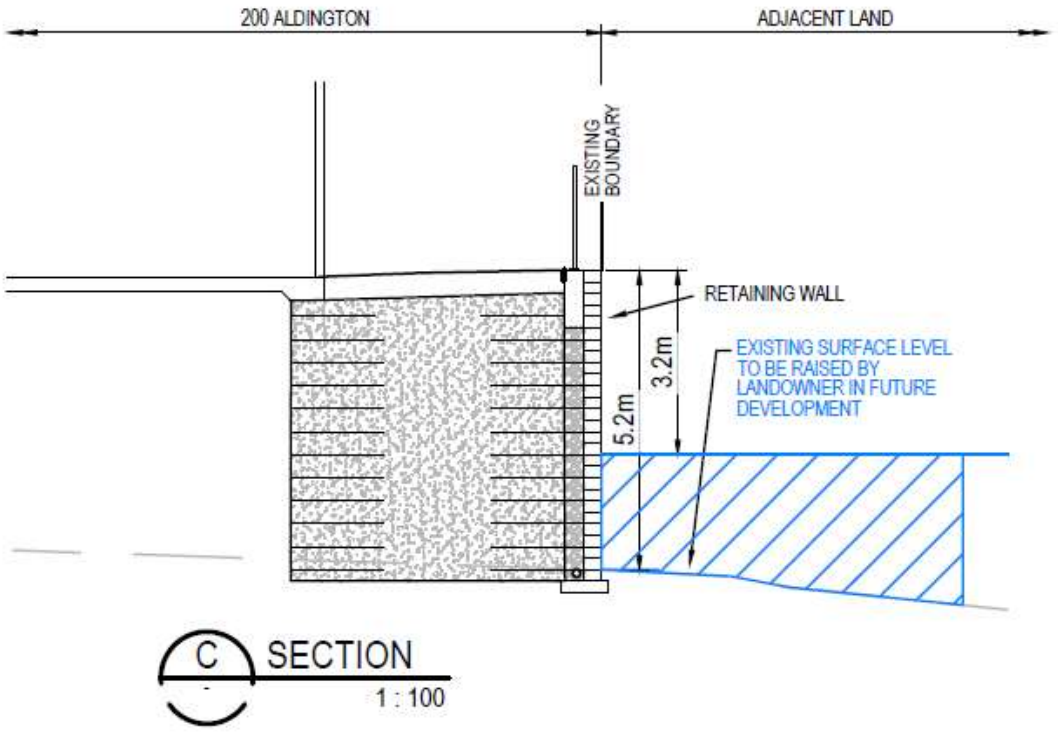
Alex Lohrisch
Senior Civil Engineer / Project Manager

Future Level on Adjacent land:




200 ALDINGTON
ADJACENT LAND
EXISTING BOUNDARY
RETAINING WALL
4.2m
EXISTING SURFACE LEVEL TO BE LOWERD BY LANDOWNER IN FUTURE DEVELOPMENT
10.8m
6.5m
FINAL FUTURE LEVEL OF ADJOINING LAND
A
SECTION
1 : 100


200 ALDINGTON
ADJACENT LAND
EXISTING BOUNDARY
RETAINING WALL
EXISTING SURFACE LEVEL TO BE RAISED BY LANDOWNER IN FUTURE DEVELOPMENT
3.4m
7.3m
FINAL FUTURE LEVEL OF ADJOINING LAND
B SECTION
1 : 100


200 ALDINGTON
ADJACENT LAND
EXISTING BOUNDARY
RETAINING WALL
EXISTING SURFACE LEVEL TO BE RAISED BY LANDOWNER IN FUTURE DEVELOPMENT
3.2m
5.2m
C SECTION
1 : 100