



BMT Eastern Australia Pty Ltd
Suite G2, 13-15 Smail Street
Ultimo, Sydney, NSW, 2007
Australia
PO Box 1181, Broadway NSW 2007

Our Ref: L.S20319.07.01.Letter in Support of Revised Master Plan

Tel: +61 2 8960 7755
Fax: +61 2 8960 7745

ABN 54 010 830 421

www.bmt.org

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Chris Koukoutaris
Frasers Property Australia
Level 2, 1C Homebush Bay Drive
Rhodes NSW 2138

Dear Mr Koukoutaris

RE: LETTER IN SUPPORT OF REVISED MASTER PLAN FOR IVANHOE ESTATE

Introduction

This letter supports the revised Master Plan of the Ivanhoe Estate redevelopment, a State Significant Development (SSD) submitted to the Department of Planning and Environment (DPE) pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). It has been prepared for Aspire Consortium on behalf of NSW Land and Housing Corporation.

Background

BMT was commissioned by Frasers Property Group to undertake a flood impact assessment to support the proposed Ivanhoe Estate Master Plan at Macquarie Park, Sydney (reference: *L.S20319.03.Flood Impact Assessment for Ivanhoe Estate Masterplan.pdf*). This assessment gave consideration to the following Master Plan developments:

- Buildings (residential flat buildings comprising private, social and affordable housing, seniors house comprising residential care facilities and self-contained dwellings, a new school, child care centres and minor retail development);
- public open space and roads; and
- community uses.

The above considerations were incorporated into a 2D hydraulic flood model and assessed against existing catchment conditions to establish the change in flood regime due to the Master Plan development.

Summary of Report Findings

In all modelled design events, the flood conditions outside of Shrimptons Creek were typified by shallow inundation (low depths), and low velocities (<0.2m/s). These areas are referred to as 'Local Drainage' under the NSW Government's Floodplain Development Manual (2005).

Outside of the local drainage areas the flood impact assessment found negligible differences in design flood conditions in the areas adjacent to Shrimptons Creek. Hence impacts on; emergency planning and evacuation, social and economic cost to the community and erosion, siltation, riparian vegetation and bank stability are not altered due to the proposed Ivanhoe Estate Master Plan development.

Letter of Support for the revised Master Plan for Ivanhoe Estate

Subsequent to the flood impact assessment reference above, the Master plan has undergone revision. BMT have reviewed the revised Master Plan for Ivanhoe estate (Figure 1) illustrating changes to building footprints and vehicle carriageway. Of note, are the changes in building footprint within the confines of the Shrimptons Creek corridor (Buildings B3, C4 and D4).

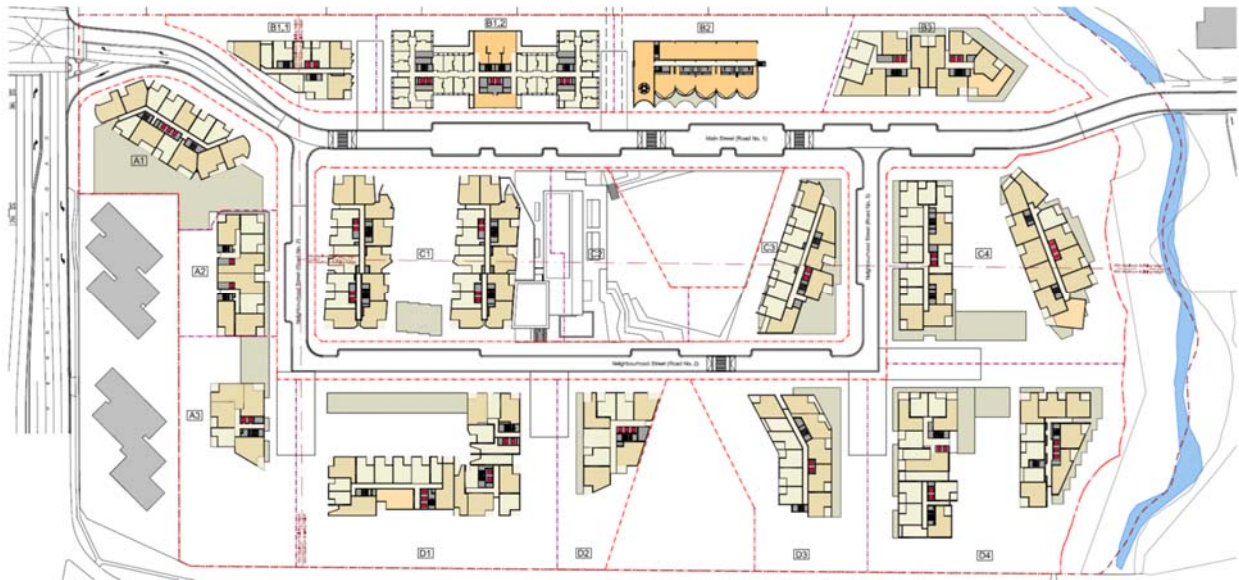


Figure 1 Ivanhoe Estate Masterplan (Bates Smart Architects 2019, drawing reference DA02.MP.002[11])

The revised building footprints have been overlaid on the modelling undertaken for the flood impact assessment (Attachment 1). It is BMT's view that the revised Master Plan does not pose any adverse change in flood regime (overland or otherwise) outside of those already documented in report *L.S20319.03.Flood Impact Assessment for Ivanhoe Estate Masterplan*, on account of the following:

- Buildings B3, C4 and D4 are located outside the 100 year ARI flood extent for the Shrimptons Creek corridor;
- The revised building extents retain the hydraulic characteristics of the floodplain;
- All other buildings are located outside of the Shrimptons Creek corridor, noting that these areas do not pose a risk due to flooding, as per the findings of the previous Master Plan flood impact assessment.

Conclusion

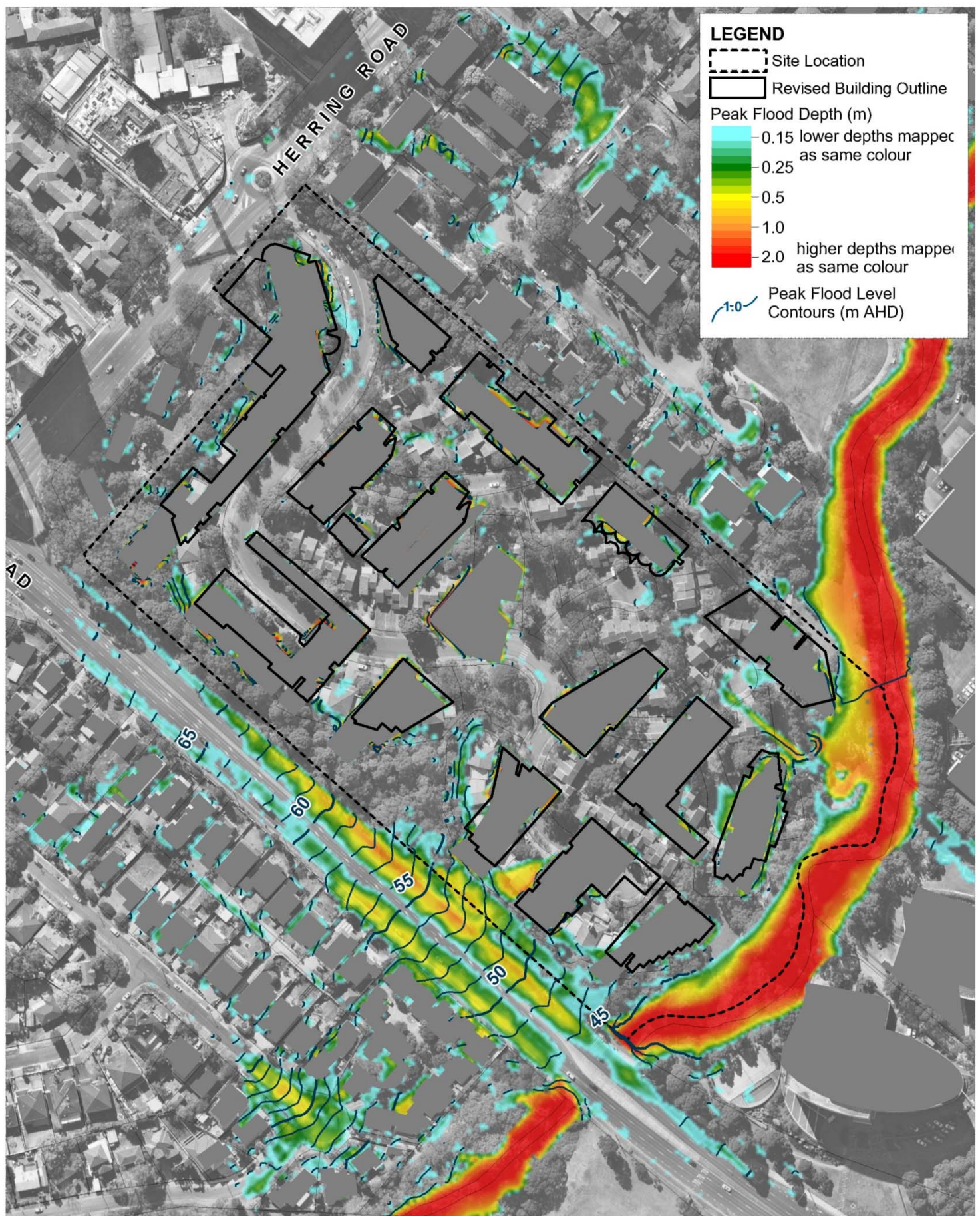
The findings of the Flood Impact Assessment for the Ivanhoe Estate Master Plan (reference: *L.S20319.03.Flood Impact Assessment for Ivanhoe Estate Masterplan.pdf*) found that there was no notable change to flood conditions due to the proposed Master Plan. Furthermore, the assessment found that the areas outside of Shrimptons Creek were not at risk of flooding, but rather would be considered 'Local Drainage' only. It is BMT's view that the revised Master Plan (drawing reference: DA02.MP.000[8].pdf), will not adversely alter the flood regime in Shrimptons Creek.

I trust that this letter meets the Secretary's environmental assessment requirements in relation to flooding for the Stage 1 development. Should you have any further questions regarding this assessment, please do not hesitate to contact the myself.

Yours Faithfully
BMT



Josh Atkinson
Senior Engineer



Title:
Peak Flood Depth - Developed Scenario
100 yr ARI

Figure:
A-1

Rev:
-

BMT WBM endeavours to ensure that the information provided in this map is correct at the time of publication. BMT WBM does not warrant, guarantee or make representations regarding the currency and accuracy of information contained in this map.



0 50 100m
 Approx. Scale

