BEFORE THE CHRISTCHURCH REPLACEMENT DISTRICT PLAN HEARINGS PANEL

IN THE MATTER of the Resource Management Act 1991 and the Canterbury Earthquake (Christchurch Replacement District Plan) Order 2014

AND the Proposed Christchurch Replacement Plan (Chapter 21: Specific Purpose Zones)

STATEMENT OF EVIDENCE OF EDWARD LEWIS JOLLY ON BEHALF OF THE UNIVERSITY OF CANTERBURY (SUBMITTER 2464)

Stage 2: Specific Purpose Tertiary Education Zone

Dated the 15th day of October 2015

TABLE OF CONTENTS

1. Introduction

2. Code of Conduct

3. Scope of Evidence

4. Executive Summary

5. Expert Conferencing

6. University Context

7. Built Form Provisions

8. Building Heights and Recession Planes

9. Road Setbacks

10. University Boundary Conditions

11. Façade Modulation

12. Conclusions

Introduction

1) My full name is Edward Lewis Jolly.

2) I am a Senior Associate Urban Designer for the company Jasmax Ltd based in Christchurch. I have a Bachelors Degree (Hons) in Landscape Architecture (BLA) and a Masters Degree in Urban Design (MAUD).

3) My experience includes:

   a) Over 15 years' working in landscape architecture and urban design in both the public and private sector, in both the UK and in New Zealand.
   b) My current role is that of head of Urban Design at Jasmax's office in Christchurch, although my role includes work across New Zealand. Jasmax Ltd specialises in architecture, interior design, landscape architecture, urban design and master planning. It has a history spanning 47 years across many notable local, national and international projects.
   c) Prior to my current role I was employed as a Principal Urban Designer for Auckland Council, where I was involved in both strategic design projects and as an expert in the assessment of resource consent applications.
   d) I am currently employed by the Canterbury of University (UC) within the design team appointed to write the Canterbury University Campus Masterplan. (an internal document which is currently in draft status)

4) My role involves providing expert evidence in relation to Urban Design matters considered in the Special Purpose (Tertiary Education) Zone (SPTE) and in specific reference to the Canterbury University campus. I attended expert conferencing on the 25th of September 2015 at the Hearings Venue, 348 Manchester Street, Christchurch, followed by a site visit of the Canterbury University Campus on the 28th of September and mediation on 12th October 2015 also at the Hearings Venue, 348 Manchester Street, Christchurch.

Code of Conduct

5) I confirm that I have read the code of conduct for expert witnesses contained in the Environment Court's Practice Note 2014. I have complied with the practice note when preparing my written statement of evidence.

6) I confirm that the issues addressed in this statement of evidence are within my area of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.

Scope of Evidence

7) My evidence will address the following urban design matters:

a) Built form standards (including building heights, setbacks, recession planes and bulk standards.)
b) To support my evidence I have undertaken a sectional study of the three campus zones identifying the stepped height rule 21.7.2.3.5 and recession plane rule 21.7.2.3.2 as proposed in the notified pRDP Specific Purpose (Tertiary Education) Zone (refer to Appendix A).
c) To support my evidence I have also provided an illustrated aerial photograph identifying the boundary conditions for the university campus. (refer to Appendix B).

Executive Summary

8) My evidence builds on the expert conferencing statement co-authored between Christchurch City Council Urban Design Principal Adviser and myself. I have provided sectional studies to support my evidence that compares the potential built form effects on surrounding residential zones in terms of recession planes and the stepped height rules.
9) My conclusions state that the combination of setbacks, recession planes, maximum height controls and façade modulation are sufficient to manage effects on surrounding residential zones and hence the stepped height rule 21.7.2.3.5 in the notified pRDP Specific Purpose (Tertiary Education) Zone is not required. However I recommend that the recession plane control is extended to road boundaries of Kirkwood Ave, Clyde Rd and

Creyke Rd on the main campus only to manage effects on neighbouring residential zones.

Expert Conferencing

10) Expert conferencing was held between Josie Schroder Christchurch City Council Principal Adviser Urban Design and myself (the participants) on Mon the 25th of September 2015 at the Hearings Venue, 348 Manchester Street, Christchurch, followed by a site visit of the Canterbury University Campus on the 28th of September. The conference statement was co-authored by the participants and is an accurate account of discussions.

11) My evidence builds on the Expert Conferencing Statement and in particular:

    a) The removal of the stepped height control from the SPTE zone as the recession plane rule will provide a similar built form outcome and management of effects.

    b) Building setbacks in combination with building height limits and residential suburban zone recession planes will appropriately address residential amenity effects to the west of Ilam Road.

    c) However concern was raised for this approach to the main campus to the east of Ilam Road (where height limits are greater (30m) and setbacks less (10m)). In particular the concern for potential adverse effects on adjacent residential properties at the campus interface with the road boundaries of Kirkwood Ave as well as Clyde Road and Creyke Road (as recession plane rules do not apply to road boundaries as proposed in the pRDP). Hence the participants proposed to introduce the suburban zone recession plane to these road boundaries to manage potential effects. When I refer to road boundaries at this location the recession plane calculations are made at the legal road boundary on the UC's side of the road. I accept that this is contrary to the plan's usual point of measurement but within the context of the SPTE zone it is a practical method of managing effects as agreed in the expert conferencing. The rule was not considered necessary for Ilam Rd due to the absence of the residential zone interface.

    d) The participants also agreed that the potential for continuous unmodulated built form is a design matter that requires resolution. No specific control was considered.

University Context

12) The University of Canterbury campus is located within a suburban context surrounded by low density residential neighbourhoods and schools. This context is not typical when considering other major universities in New Zealand which are generally located in inner city urban areas.
13) In addition the built form, scale, bulk, and height of university buildings in general are more consistent with inner city urban environments than they are with low density suburban or low rise industrial buildings.
14) Therefore it is my opinion that the suburban location by its nature raises potential conflicts with the surrounding residential zones and hence potential effects from development within the campus should be considered.
15) The University however is not a new development on the site, having operated from the site since 1964 and accordingly the effects of the site have been well-known to the surrounding residents.
16) In this context the university campus offers a number of benefits to the surrounding residential zone. From an urban design perspective, the quality of the park-like landscaping of the green spaces and unimpeded access and use of the campus by surrounding residents contributes positively to the general amenity of the surrounding environment.
17) The university has also been able to accommodate a range of building structures including historic buildings and grounds which contribute positively to the urban design fabric within the Zone.

Draft University Campus Masterplan

18) I am currently employed as a consultant within the design team appointed to write the Canterbury University Campus Masterplan. The Masterplan is a non-statutory internal document currently at a draft stage. However it sets out the university's intention with regard to the initial rebuild requirements of the university as well as the longer term aspirations for growth. Some of the key points of note that may help to address concerns by other submitters are:
    a) The Masterplan identifies most major development (those associated with the rebuild such as the Science, Engineering and Commerce buildings) will occur in the central areas of the main campus.

b) The Masterplan does not propose significant development on Ilam Fields within the Ilam Rd to Waimairi Rd area of the campus.
c) The Masterplan principles are consistent with the previous Dovedale masterplan.
d) The Masterplan contains specific design principles to maintain and enhance the landscape setting of the campus.

Built Form Provisions

19) It is my opinion that the combination of built form provisions in the proposed Replacement District Plan (pRDP) Specific Purpose (Tertiary Education) Zone subject to the recommended changes identified in the expert conferencing relating to the stepped height control, recession planes and façade modulation will manage effects on neighbouring residential zones appropriately.

Building Heights and Recession Planes (refer to Appendix A)

20) I support the University of Canterbury's submission to remove the proposed stepped height rule 21.7.2.3.5 in the notified pRDP Specific Purpose (Tertiary Education) Zone. I believe the removal of the rule is appropriate as it will firstly simplify the controls in the zone and secondly the combination of other rules including building setbacks, maximum height controls, recession planes and façade modulation as proposed in the expert conferencing will in principle manage effects in a similar manner.
21) To support my evidence I have undertaken a sectional study of the campus showing both the stepped height rule 21.7.2.3.5 and recession plane rule 21.7.2.3.2 as proposed in the notified pRDP Specific Purpose (Tertiary Education) Zone (refer to Appendix A). I have also for reference included the proposed road boundary recession plane rule in the sectional study. (refer to Appendix A – Figure 2,4,6) in addition I have provided an illustrated aerial photograph identifying the boundary conditions for the university campus (refer to Appendix B).
22) I believe that the stepped height rule should be removed but only if a recession plane is applied to both the internal boundary and to road boundaries of Kirkwood Ave, Clyde Rd and Creyke Rd adjacent to the main campus only. The need for the recession plane to road boundaries

with residential zones was discussed in the expert conferencing with the conclusion that the Residential Suburban Zone recession plane was appropriate (pRDP appendix 14.10.2 diagram A) If the recession plane was not applied to the road boundary on the main campus I believe there is potential that residential properties on Kirkwood Ave in particular would incur adverse effects from potential development within the campus.

23) The sectional study across the university campus (refer to Appendix A – Figure 1-13) shows that the recession planes in combination with setbacks and height controls are more restrictive on the southern boundary than the stepped height control and less restrictive on the northern boundary. In general the controls have similar outcomes on the east and west boundaries. I believe that this is appropriate as residential properties to the south of the campus generally are orientated to the north and have their outdoor living spaces on the north, east or west side of the dwelling and hence have greater sensitivity to shadowing and privacy effects from development on the university campus.

24) With respect to the main campus (refer to Appendix A – Figure 1-6) I note that there is only one instance where a northern internal boundary is applicable at the boundary at 83 Clyde Rd. It is my opinion that the effects on properties on northern road boundaries (across Creyke Rd) will be adequately managed due to the increased separation the road provides.

25) With respect to the campus between Ilam Rd and Waimairi Rd (refer to Appendix A – Figure 7-10) I note that properties to the north of the campus will benefit in part from further separation as a result of the Okeover Stream on the boundary and hence potential development would be set back further into the campus. I am comfortable that the combination of the 16m maximum height control, the location of the stream, building setback and recession planes will adequate manage effects. I am comfortable that there is no need for a street boundary recession plane for this location on the campus as the setbacks and height maximum will adequately manage effects.

26) With respect to Dovedale (refer to Appendix A – Figure 11-13) I note there are no residential properties with internal northern boundaries with the campus and hence all properties to the north of the campus benefit from the further 20m separation across Dovedale Ave. I note that the east west recession planes will be less restrictive than the stepped height rule at Dovedale however I am comfortable that the combination of recession planes, setbacks and maximum height will result in minimal effects on

surrounding residential zones. I am comfortable that there is no need for a road boundary recession plane for this location on the campus as the setbacks and height maximum will adequately manage effects on neighbouring residential zones.

Road Setbacks

27) In general the campus currently has generous landscaped areas adjacent to its road boundaries. These exist in various combinations of pedestrian and vehicle access ways, lawn, shrub planting, mature trees, mounding and other landscape features. These existing conditions contribute to the overall park-like character of the campus as well as providing separation from neighbouring residential zones.
28) I consider the setback provisions as identified in the pRDP Specific Purpose (Tertiary Education) Zone adequate to both restrict building development in the landscaped areas at the campus boundaries and manage effects on neighbouring residential zones when considered in combination with the other built form provisions.
29) With regard to Dovedale in particular I believe that some car parking may be appropriate within 15m of a road boundary to provide parking for visitors, temporary stay and drop-off facilities. I consider that parking will not be overly dominant in the 15m road setback. I also suggest a 5m planted landscaping strip will appropriately mitigate any adverse effects along the road boundary and provide appropriate boundary amenity.

University Boundary Conditions (refer to Appendix B)

30) The university campus consists of both road boundaries and internal boundaries with residential properties (and Ilam School). I have provided a recent aerial photograph of the university campus in Appendix B and overlain the specific boundary interfaces, internal or road.
31) I consider where the university campus interfaces with a road boundary there is an additional separation with surrounding residential zones of the width of the road carriageway (approximately 20m) in each case. I also note that a significant proportion of the campus boundaries are road boundaries.
32) Therefore the overall separation distance at a road interface in Dovedale would be 35m, and the rest of the campus would be 30m which will

provide more than sufficient separation distance to residential zones when considered in combination with the other built form provisions.

33) I consider the internal boundary setback of 6m across all zones in combination with the recession planes, and height controls will be sufficient to adequately manage effects on neighbouring residential zones.

Façade Modulation

34) I consider that in addition to the height maximum, setback and recession plane rules the potential of continuous building façades should be considered. This was discussed in the expert conferencing however no specific control was discussed.

35) Façade modulation in principle is a result of good design providing visual interest and built form outcomes that are a considered response to the immediate context and that mitigates the effects of bulky buildings as viewed from the street and neighbouring properties.

36) I believe that the nature of the larger university buildings in general lend themselves to providing a rhythm through the location and frequency of windows, the expression of the structural grid in the façade and the locations of egress stairs etc. Hence I am less concerned with these 'finer grain' issues but rather the overall bulk of the built form.

37) Hence I would be concerned if a building was to be constructed to 30m in height and 100m in length with no façade break as this would lend its self to an overly dominant and bulky built form.

38) I recognise that this was out of scope and was not raised in submissions however it remains an import consideration. Given that this is an issue of scope I have not made any further recommendations.

Conclusions

39) From the evidence I have provided I have reached the following conclusions:

a) The combination of setbacks, recession planes, maximum height controls and façade modulation are sufficient to manage effects on surrounding residential zones and hence the stepped height rule 21.7.2.3.5 in the notified pRDP Specific Purpose (Tertiary Education) Zone is not required.

b) The modelling I have undertaken identifies that effects on surrounding residential zones will be minimised.
c) Properties to the south of the university are more sensitive to effects of development on the campus and hence the recession plane is the appropriate rule to minimise these effects.
d) I consider the setback provisions as identified in the pRDP Specific Purpose (Tertiary Education) Zone adequate to both restrict building development in the landscaped areas at the campus boundaries and manage effects on neighbouring residential zones when considered in combination with the other built form provisions.
e) I consider the internal boundaries setback of 6m across all zones in combination with the recession planes, and height controls will be sufficient to adequately manage effects on neighbouring residential zones.
f) I consider that some parking will be appropriate in the 15m setback at Dovedale and that parking will not be overly dominant. I also suggest a 5m planted landscaping strip will appropriately mitigate any adverse effects along the road boundary and provide appropriate boundary amenity.

Appendix A

Figure 1 - South Boundary Main Campus

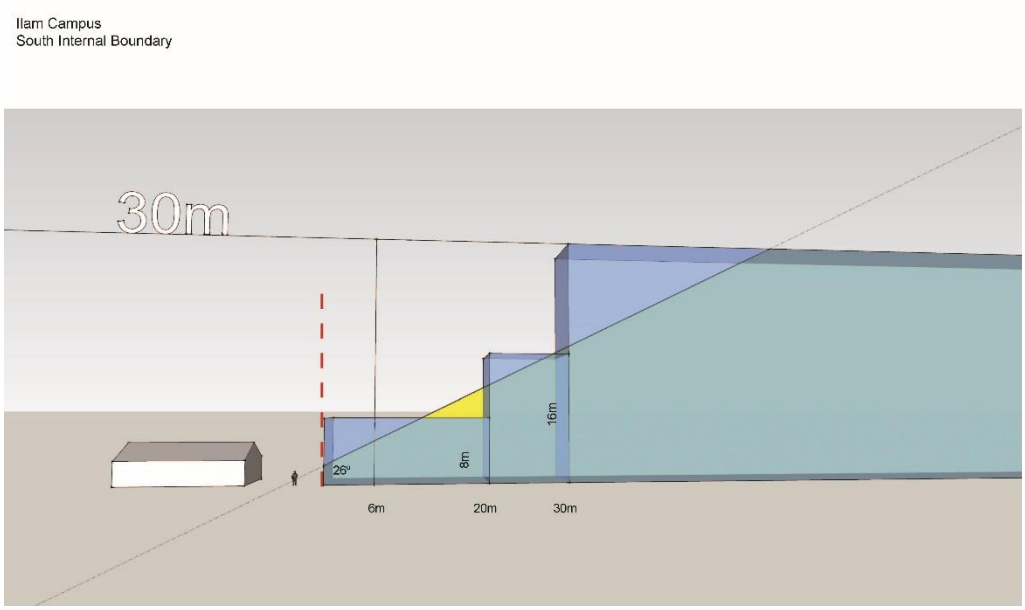


Figure 2 - South Boundary Main Campus (road interface)

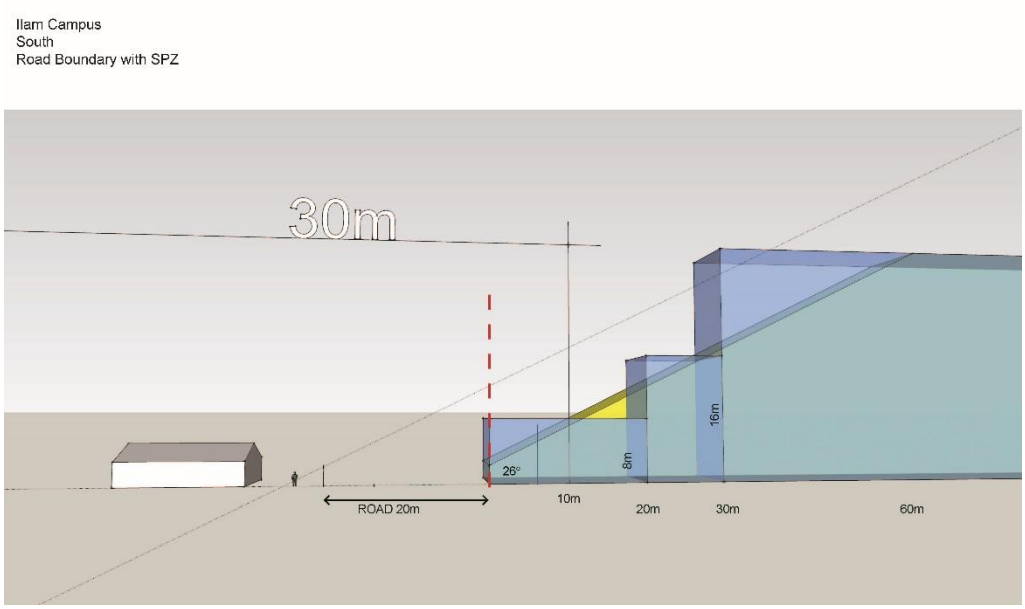


Figure 3 - East Boundary Main Campus

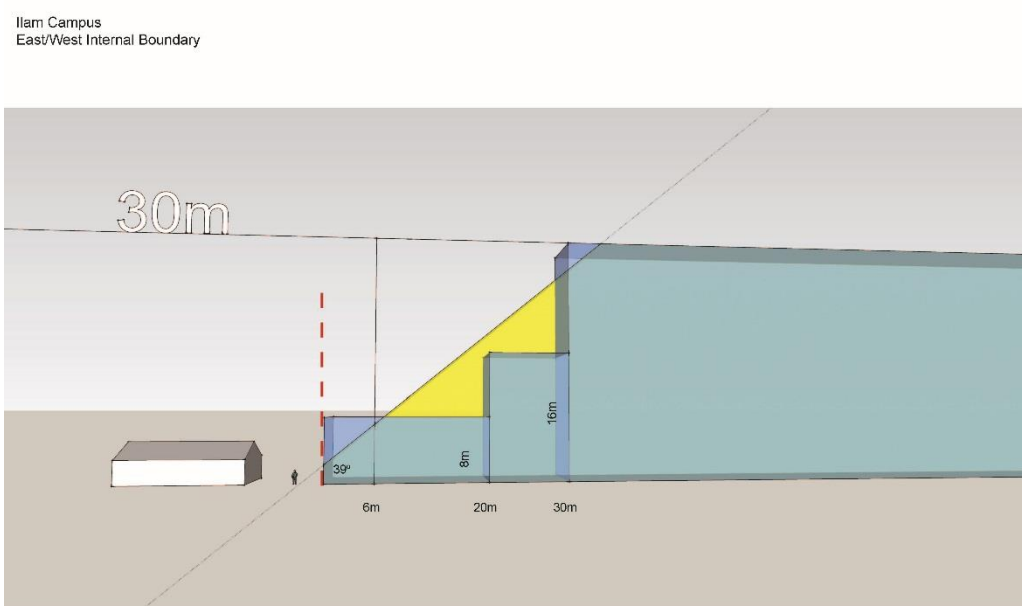


Figure 4 - East/West Boundary Main Campus (road interface)

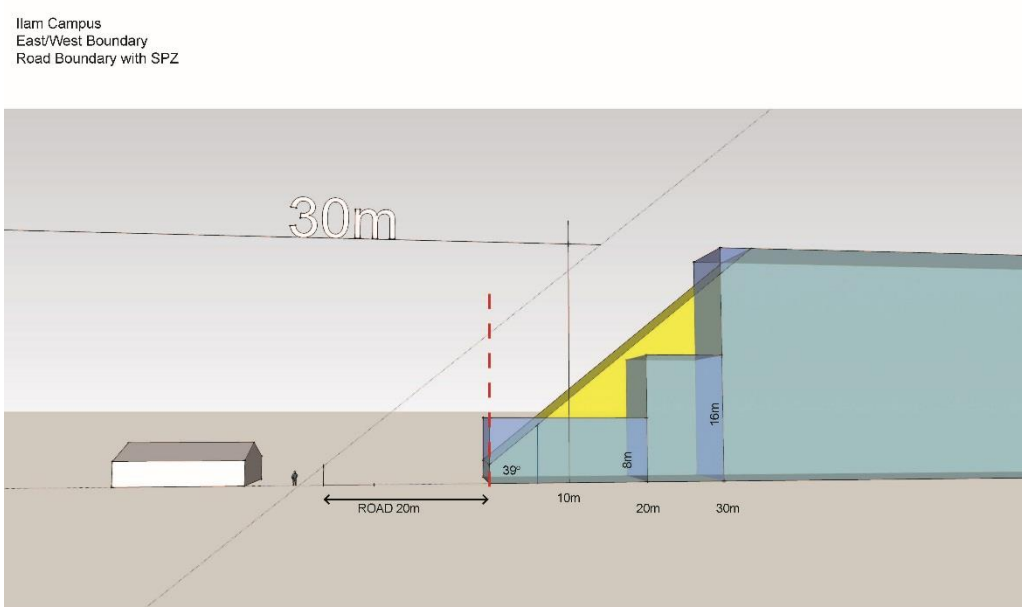


Figure 5 - North Boundary Main Campus

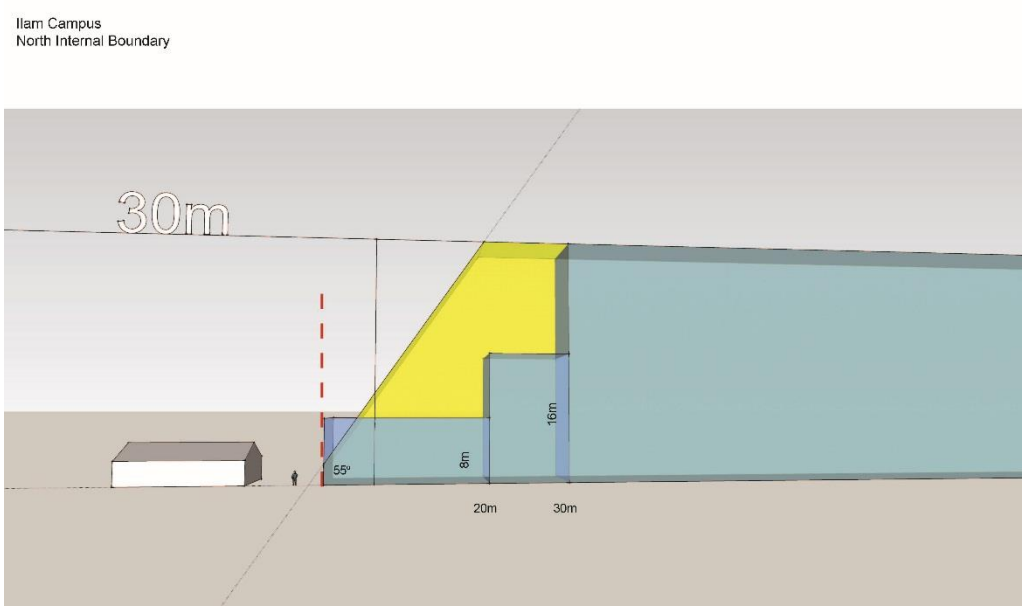


Figure 6 - North Boundary Main Campus (Road Interface)

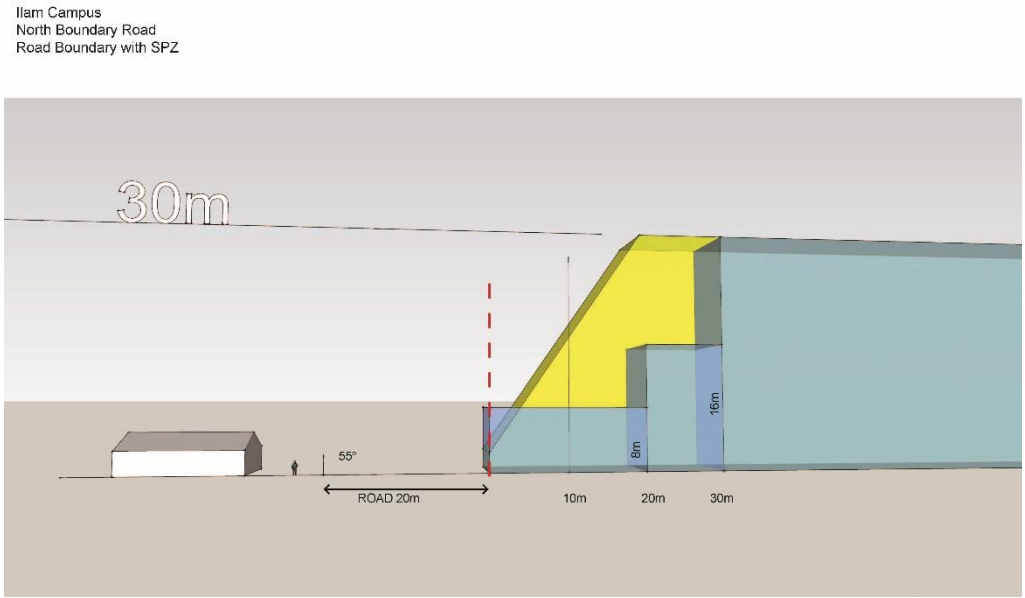


Figure 7 - South Boundary Ilam Rd to Waimairi Road

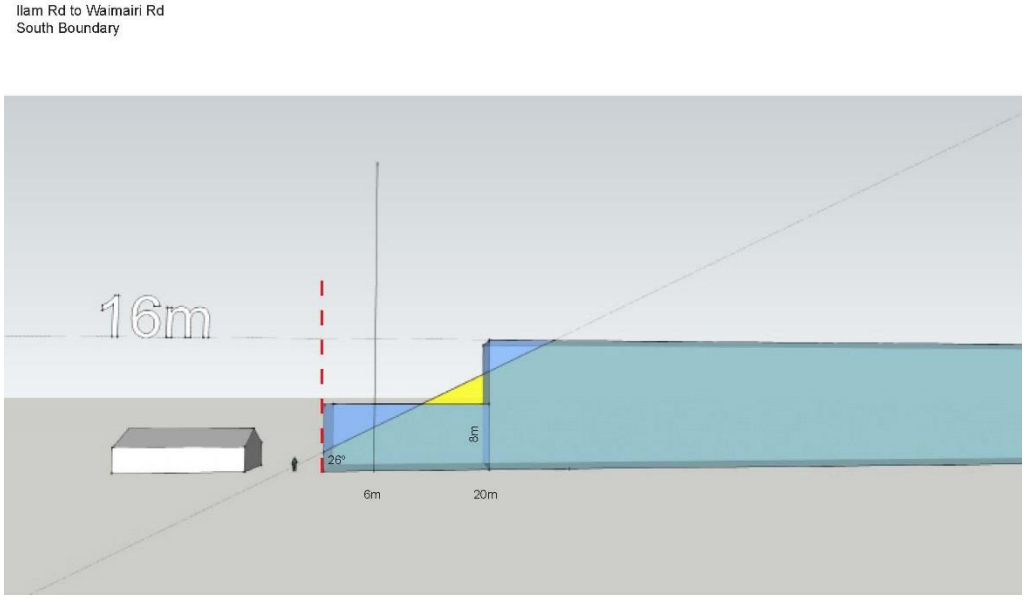


Figure 8 - North Boundary Ilam Rd to Waimairi Road

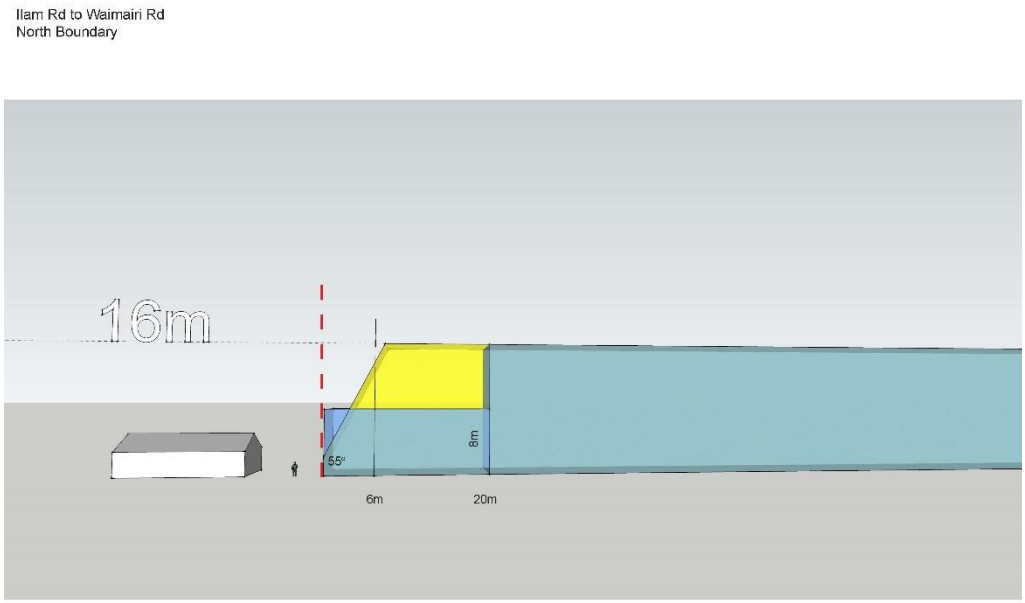


Figure 9 – East/West Boundaries Ilam Rd to Waimairi Road

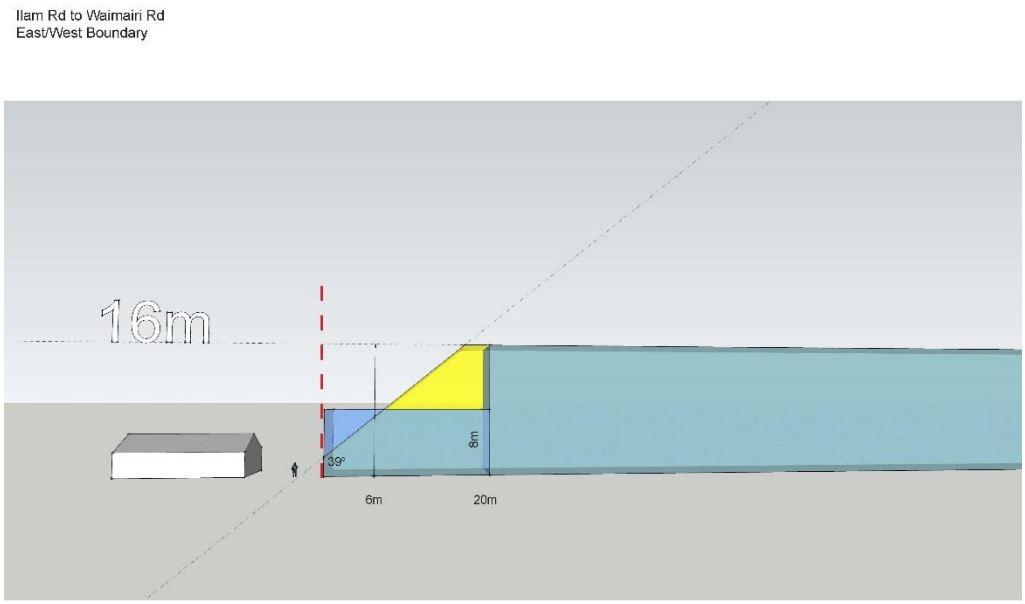


Figure 10 – All Boundaries Ilam Rd to Waimairi Rd (Road Interface)

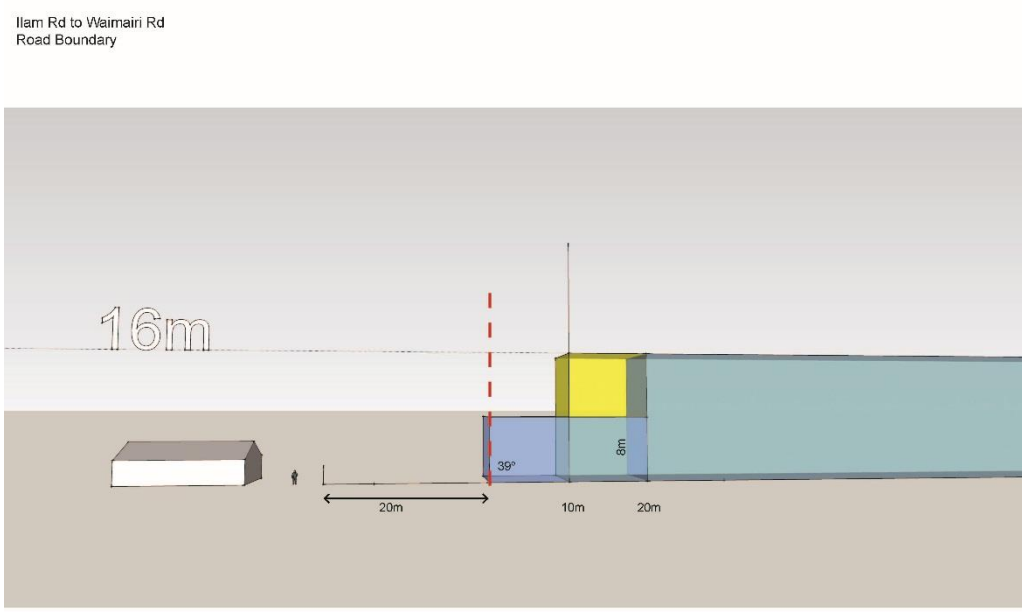


Figure 11 - South Boundary Dovedale

Dovedale
South Boundary

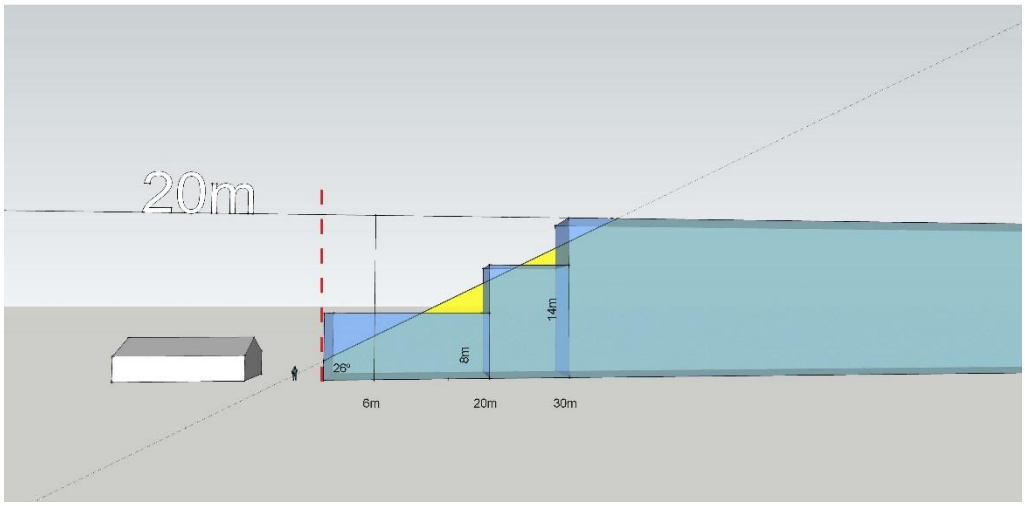


Figure 12 – East/West Boundaries Dovedale

Dovedale
East/West Boundary

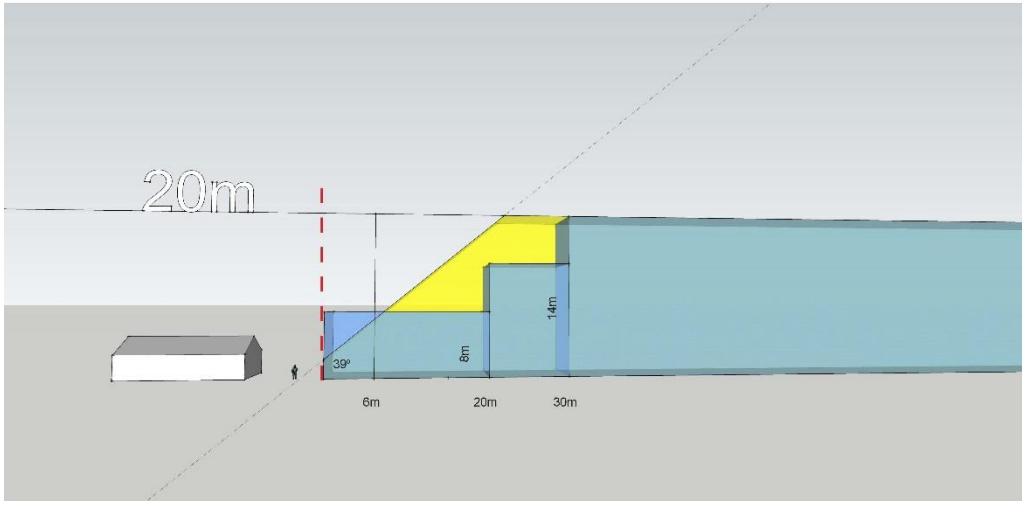
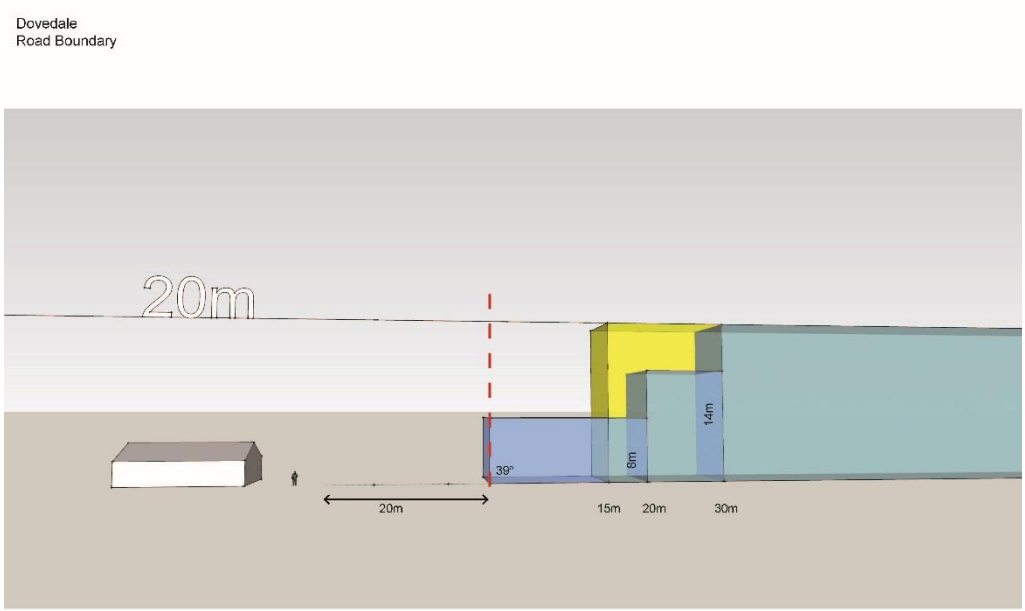
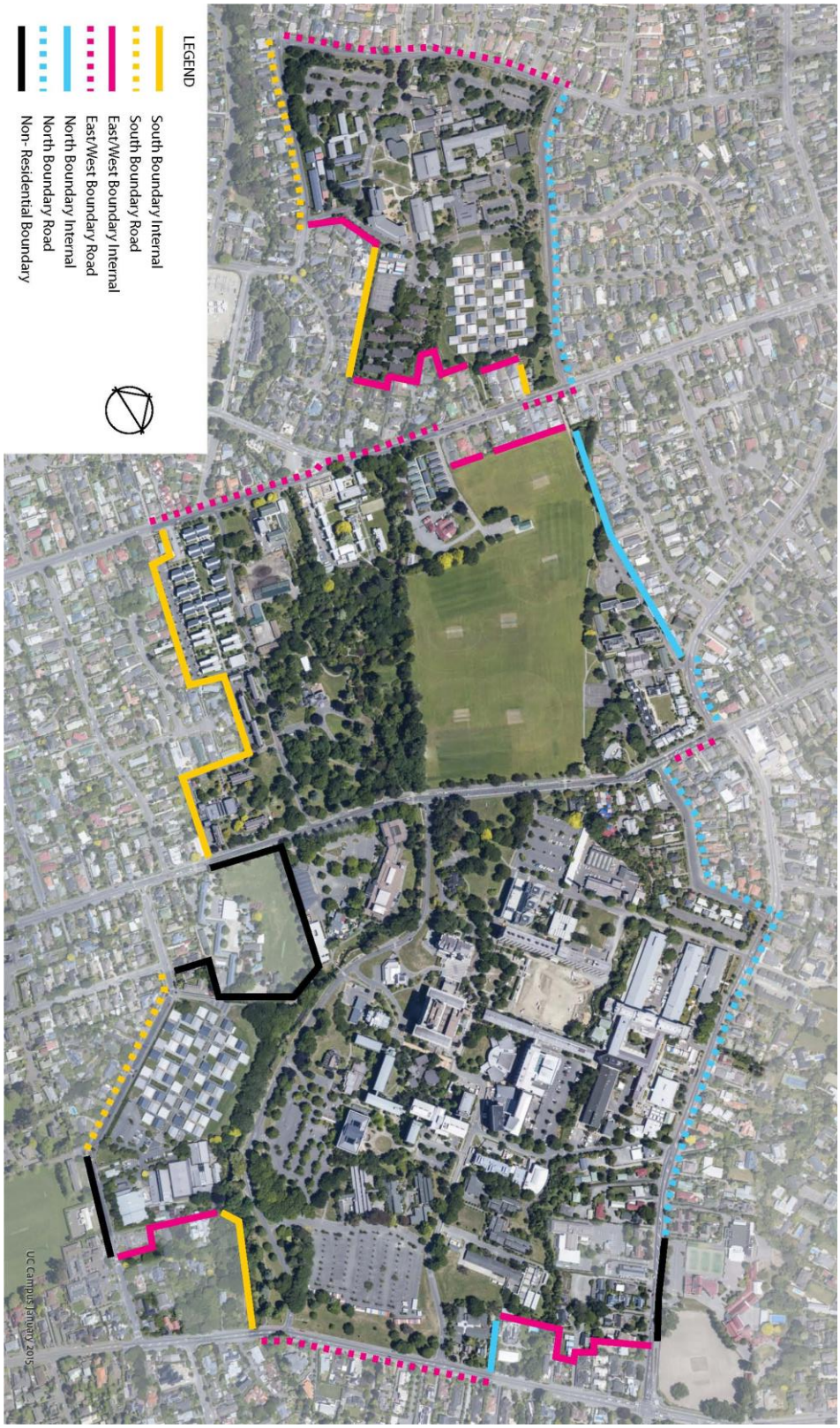


Figure 13 – All Boundaries Dovedale (Road Interface)



Appendix B


LEGEND
South Boundary Internal
South Boundary Road
East/West Boundary Internal
East/West Boundary Road
North Boundary Internal
North Boundary Road
Non-Residential Boundary
UC Campus Boundary 2015