BEFORE A COMMISSIONER APPOINTED BY THE CHRISTCHURCH CITY COUNCIL

IN THE MATTER OF	the Resource Management Act 1991
AND	
IN THE MATTER OF	RMA/2022/517 – Proposed Digital Screen Campus, 129 Waimairi Road, Ilam

---

STATEMENT OF EVIDENCE OF DR ANDREW PHELPS

(PROGRAM DIRECTOR, PROPOSED DIGITAL SCREEN CAMPUS)

Dated: 8 August 2022

GREENWOOD ROCHE
LAWYERS
CHRISTCHURCH
Solicitor: M A Thomas
(monique@greenwoodroche.com)

Applicant's Solicitor
Kettlewell House
Level 3, 680 Colombo Street
P O Box 139
Christchurch
Phone: 03 353 0577

1 INTRODUCTION

1.1 My name is Dr. Andrew (Andy) Phelps. I am the Programme Director for the proposed Digital Screen Campus and Professor of Human Interface Technology in the Faculty of Engineering at the University of Canterbury.

1.2 Additionally, I am appointed as a Professor of Film & Media Arts and as a Professor of Computer Science at American University in Washington, DC, USA. I also hold a visiting faculty appointment at the University of Uppsala Department of Game Design in Gotland, Sweden.

1.3 In my role as the Programme Director for the proposed Digital Screen Campus project, I am broadly responsible for the academic program and curriculum that will delivered in the Digital Screen Campus, the design, development, and delivery of the project vision as well as numerous aspects related to the planning and development of the project overall, including the high-level design of the proposed facilities and recruitment of project staff.

Qualifications and Experience

1.4 I hold a Bachelors of Fine Arts in both painting and computer arts from Bowling Green State University, a Masters of Science in Information Technology from the Rochester Institute of Technology (New York), and a Doctorate of Engineering from the University of Canterbury.

1.5 I have held faculty positions in areas related to digital media, arts, games, and computing for 23 years, first at the Rochester Institute of Technology (where I was awarded academic tenure), and now at both American University and the University of Canterbury. I have written over 50 peer-reviewed academic publications and given over 75 lectures at professional conferences and venues on these same subjects.

1.6 I was previously the founding Director of the School of Interactive Games & Media (IGM) at the Rochester Institute of Technology (RIT) from 2009-2013. During this period, and preceding the founding of the school, I was the academic lead for designing, developing and delivering the RIT Masters of Science in Game Design & Development

as well as the Bachelors of Science in Game Design & Development. These programs, since approval by the New York State Board of Education and beginning operations in 2006 and 2007 respectively, have been consistently ranked in the top 20 programs in the world by the Princeton Review (peaking during my tenure at #2), and helped prepare over a thousand undergraduate and graduate students to date for careers at major game studios including Microsoft, Electronic Arts, Activision, Bungie, Blizzard, Zynga, and more.

1.7 I was also previously the founding Director of the RIT Centre for Media, Arts, Games, Interaction & Creativity (RIT MAGIC Centre) and the associated MAGIC Spell Studios from 2013-2019. This work involved the creation of a public-private partnership between RIT and the State of New York, which leveraged university funds, funding from New York State, and funding from private industry to create a new $35M USD facility that served as:

(a) an educational space focused on the convergence of the digital screen industries (as discussed later in this evidence);

(b) a business incubator to help students and graduates create companies and commercial works; and

(c) as an industry production facility for digital media companies and contractors from the private sector where Work integrated learning could occur.

1.8 These elements were deliberately co-located on the campus of RIT for purposes of work-integrated-learning and digital media research and production support, with a broader mission of economic development and job creation across New York State.

1.9 As noted above, I am currently appointed as a Professor at the Human Interface Technology Laboratory NZ (HITLabNZ) in the Faculty of Engineering at the University of Canterbury. HITLabNZ is one of the premiere research labs in the world with respect to virtual, augmented, and cross-reality technologies, and is globally competitive for research and development funding, its doctoral programs, and collaborations with industry.

1.10 I am also currently serving as a co-principal investigator and co-founder of the Applied Immersive Gaming Initiative at the HITLabNZ which broadly explores the use of immersive games, virtual, augmented, and cross-reality for purposes of social good and net-positive applications of simulation, training, and entertainment. This work is funded by a multi-year "entrepreneurial universities" grant from the NZ Tertiary Education Commission.

1.11 In addition to my faculty appointments and my roles at HITLabNZ:

(a) I currently serve as the Director of the American University Game Centre, a nationally prominent academic research centre and set of graduate game programs located in Washington, DC, that are ranked in the top 20 in the world by the Princeton Review.

(b) I currently serve as president (and was a co-founder of) the Higher Education Video Game Alliance (HEVGA), a 501(c)(6) (non-profit) organization based in Washington, DC, representing over 395 colleges and universities with games-related curriculum and/or research programs world-wide, and with administrative bodies in the USA and the EU.

Preparations for the Presentation of Evidence

1.12 In preparing my evidence, I have reviewed the evidence prepared by Ms Nuthall, Ms Hutchison, Mr Brady, Ms Letcher, Mr Herriot, Mr Lester, Mr Farren and Mr Metherell on behalf of the University.

Funding Notes

1.13 My work in the past has received funding from Microsoft Research from 2002-2006, and again from 2008-2011, and I was part of a research project funded by Adobe, Inc. in 2014. My current work in NZ is funded in part by the NZ Tertiary Education Commission. In the past I have also received funding from the US National Science Foundation (NSF), the US Department of Education (DoE), the US National Endowment for the Humanities (NEH), the Library of Congress, the US National Digital Information Infrastructure and Preservation (NDIIP) program, the US Institute for Museum and Library Sciences (IMLS), and numerous internal start-up grants from my various universities of

employment. I have served on advisory boards for games and design education in roles *without* compensation for Adobe, Unity Technologies, and Darkwind Media. Via HEVGA, I have at times worked with the Entertainment Software Association when our interests were aligned on issues of public importance and debate. I have also testified before the United States Congress and to the Chief Technology Officer of America, a Cabinet-level position within the Obama Administration as a part of a delegation to the Office of Science and Technology Policy at the White House. At no time has this funding or collaboration history directly or indirectly influenced the form or substance of this evidence, and the statements and evidence provided here are solely my own and is not representative of these agencies or collaborators.

2 SCOPE OF EVIDENCE

2.1 My evidence:

(a) describes the background to development of the new discipline of Digital Screen Production at the University of Canterbury, and the importance of hands on and Work integrated learning to that discipline;

(b) describes the facilities proposed;

(c) describes the planning and design of the proposed Digital Screen Campus including the review and design of the facilities needed to deliver the new courses to be taught there; and

(d) describes, based on my international experience, the rationale of the proposed digital 'hub' approach for education and industry, and the benefits of this model.

3 BACKGROUND TO THE NEW DEGREE

3.1 As set out in Ms Nuthall's evidence, in May 2020, the UC Council began to consider the long term future of the Dovedale campus and how it could be best used to deliver the University's strategic vision. Investigations were undertaken as to whether there was a new education discipline and associated research function which would

benefit from the use of a dedicated campus and this important strategic asset.

3.2 Working with Dr. Kevin Watson (Professor and Executive Dean of Arts), Dr. Adrian Clark (Senior Lecturer in the School of Product Design), myself, and numerous other academic staff both at UC and abroad, UC undertook a review of its existing digital curriculum relative to global developments in the digital industry and education offerings both in New Zealand and around the world.

3.3 Having considered the results of that review, the decision was made to develop a new discipline of Digital Screen Production using the Dovedale campus.

3.4 A new highly flexible new 4-year degree in Digital Screen Production was then developed to produce work ready graduates in the newly converged world of media production. To do this, industry standard facilities for hands on learning and Work integrated learning are essential.

3.5 The degree contains numerous elements of hands on and work-integrated-learning, and relies heavily on co-location of educational and commercial screen industry production activity such that Work integrated learning activities can occur both formally and informally throughout the degree. Formal aspects will include internships, working alongside existing digital screen companies, and making content for industry.

3.6 As described in Ms Nuthall's evidence, the key trend driving the creation of the new degree and the proposed Digital Screen Campus is the strong global demand for digital content and the convergence that is occurring between game development, film production, and interactive media creation across sectors such as virtual and augmented reality, mobile applications, streaming, and more. This convergence can be thought about in 3 key ways:

(a) the content and stories in these spaces;

(b) the technology and practice of creating media in these sectors; and

(c) the consumer experience of how we consume this media.

3.7 As an example of content convergence, Netflix recently commissioned an *Exploding Kittens* series, based on the existing card game, with a new digital game in concurrent production. Another example is the Marvel® extended universe that creates a media franchise across feature film, animated series, live-action series, toys, games, comics, and more. The episode of *Black Mirror* entitled 'Bandersnatch' was a now famous first foray in using a streaming platform (Netflix) to engage viewers in an interactive narrative with multiple potential endings.

3.8 An example of technology convergence is the use of game-engine technology such as Unreal or Unity3D which is no longer used just for games but increasingly for virtual production and film and television work with examples ranging from Disney's *Mandalorian* or the Netflix series *1899*. The roles, processes, and skills needed to work in these environments are now starting to transcend film and games in 3D and interactive technology, as well as other long-standing overlaps such as animation and visual design, sound design, scriptwriting and characterization, etc.

3.9 An example of convergence as it relates to consumption is the modern streaming platform, be it Netflix, Hulu, HBO, XBOX Cloud Gaming, Playstation NOW, etc. All of these technologies aggregate consumer content across multiple screens and devices from large televisions to hand-held phones, with multiple networks and technologies playing a role in their delivery.

3.10 Given these elements of convergence, education in this sector is no longer as 'vertical' or 'discrete' per field as it once was: the bleed and blend between the preparation needed to enter the field of game development and film production is a key component of thinking about education in preparing the students of tomorrow.

3.11 Creating content for the screen and gaming industries is intrinsically multi-disciplinary, requiring experience and expertise from art to programming, animation to screen writing. Different skill sets are required for different stages of the content creation process; pre-

production, filming and post-production, with digital technologies increasingly crossing the traditional boundaries of media and genres.

3.12 As an example of the kinds of roles and careers that flow from this convergence, the area of virtual production (VP) is again a good touch point. VP is based in part on the use of game engines, and a complex linkage of game engine technology to camera tracking, shot placement, digital lighting, texture mapping, and digital compositing. Each of these areas is deeply technical, with longstanding roots in computing, graphics, and game development, but VP is currently the single fastest growing area of film production in the world today, with associated roles in engineering, on-set technical direction, technology management and administration, and more.

Work integrated learning

3.13 As early work in exploring VP, the University of Canterbury facilitated a pilot research project with Pixel, Resonate, and Cerebral Fix (three commercial partners) to create a small production using these techniques. Such activity will be a cauldron for Work integrated learning for students as they learn to engage in these new roles and production techniques.

3.14 The workforce that UC will develop at the Digital Screen Campus will not be merely crew for productions, but a highly skilled, technically affluent, and multi-faceted workforce that can significantly impact the capabilities and growth potential of this industry across both the Canterbury region and New Zealand. This will not happen without appropriate Work integrated learning.

4 FACILITIES PROPOSED

4.1 As described in Ms Nuthall's evidence, the proposed facilities which form part of the Digital Screen Campus are a mixture of:

(a) refurbishment and repurposing of existing facilities and structures on the existing Dovedale campus, as well as:

(b) new build construction of additional sound stages, green screen facilities, mill space, and pre- and post-production facilities (Dolby® grade sound studios, colour-correction and grading,

screening and non-linear editing facilities, and production offices).

4.2 The proposal will be carried out over three stages, as summarised below:

(a) Stage 1 – Refurbishment of eight existing buildings to support years one and two of the bachelor's degree, postgraduate incubator activity and game company co-location. The proposed changes to existing buildings will however be limited to internal works, with no physical alterations required to the existing built form or footprint;

(b) Stage 2 - Construction of new specialist technical space as part of the new film production facilities (mix, colour and Foley[1] facility). Construction of a purpose-built pre and postproduction facility to accommodate higher resolution production and industry standard mixing, colour correcting and sound effects; and

(c) Stage 3 – Construction of two sound stages, backlot, green screen/virtual production facilities, and mill space, for use by students in the fourth year of the degree.

4.3 Stages 2 and 3 will consist of six new buildings, to be built on the site of the former Dovedale Village where 47 temporary teaching and administrative buildings were previously located.

4.4 The new buildings proposed are numbered 9 – 13 on Plan SKA-080 (Rev B) included in Appendix 4 of the resource consent application. For ease of refence, that plan is reproduced in Appendix A to my evidence. The purpose of those buildings are as follows:

(a) Building 9 and 9a –Sound stages 1 and 2;

(b) Building 10 – Production offices;

[1] Foley is the reproduction of everyday sound effects that are added to films, videos, and other media in post-production to enhance audio quality. These reproduced sounds, named after sound-effects artist Jack Foley, can be anything from the swishing of clothing and footsteps to squeaky doors and breaking glass. Understandably, the stage has to be extremely sound-proof.

(c) Building 11 – Mill building (includes costume, wardrobe and make up);

(d) Building 12 – Green Screen and Virtual Production facilities; and

(e) Building 13 – Premix, Film mix, Foley, Prep room and large colour grading.

4.5 When completed, the facilities on the campus will be able to support the production of both independent and smaller 'AAA' games, high quality drama series, units of large feature films, or small and medium independent film productions as well as local films and media. It will be possible to produce an independent film or a television programme or series with the facilities, but not (for example) a global feature film. This is confirmed in the evidence by Mr Brady. This is intentional, and is in keeping with the educational focus of the facilities.

5 THE PROPOSED DIGITAL 'HUB' APPROACH

5.1 The following sections of my evidence set forth the rationale for the proposed Digital Screen Campus at the University of Canterbury, and addresses:

(a) The goals and objectives of co-locating education, research, screen industry, and entrepreneurial activities; and

(b) The history and success of this operational model of co-locations in the digital space in other regional and national contexts elsewhere in the world.

Co-Location of Industry, Educational, and Entrepreneurial Activities

5.2 The benefits of this operational model are wide and varied. They include:

(a) The ability of industry to influence the talent development pipeline;

(b) Access to the research and development functions of the university to facilitate the design of new media production techniques and technologies;

(c) Access to student talent and labour pools in such fashion that Work integrated learning provides educationally focused experiences for students and recent graduates, while also benefitting commercial industry productions at various stages of the production process; and

(d) Access to industry grade equipment (that is partially subsidized via industry use) by students and faculty for research and creative practice activities (i.e. their own media productions).

5.3 In my experience, New Zealand often seems to separate the worlds of academics and industry, even though functionally this is less separate than it is often described or perceived to be. The research activities undertaken at the University and their close relationships with industry and the public sector are described in the evidence of Ms Nuthall.

5.4 HITLabNZ is a good example of this close relationship. Most of the work at HITLabNZ is applied in nature, and deals with applying advances in virtual, augmented, and mixed reality (VR/AR/MR/XR) to specific use cases and verticals[2], for clients ranging from government services like Fire and Emergency, cultural institutions and public-facing info displays at libraries, museums, and science centres, to industry work for clients in sectors such as gaming, telecommunications, social services, education, media, etc. HITLabNZ has grown over the years to support 4 full time academic staff, 2 post-doctoral researchers, 4 professional staff, and numerous PhD and Masters students, and is predominantly 'soft funded' – i.e. funded by research dollars from both commercial/industry and government sources.

5.5 Numerous research labs and business incubators across campus have already helped nurture small companies, or provided a space to a large scale industry collaborator. Collaboration with industry in areas such as film, virtual production, television, game development, and VFX is no different, but requires larger scale infrastructure due to the nature of these activities.

[2] 'Verticals' in this context refers to specific market uses of virtual and augmented reality technologies. Entertainment games, for example, are a specific vertical, and emergency response training is another.

5.6 I am aware that there may be a perception by some that in developing this proposal, the university is seeking to engage with commercial activity on a 'for profit' basis, somehow de-prioritizing its academic mission. This is entirely untrue, and a misrepresentation of the proposed operating model for the campus. The university is investing heavily in the construction and development of the proposed campus, and obviously seeks to engage with industry partners such that some of these costs can be recovered over time. But the primary goal of co-locating industry activity is for hands on and Work integrated learning opportunities for students in the Digital Screen Campus academic programs, and related research and development opportunities. This is in keeping with the university's responsibility to produce work-ready graduates, and to provide relevant and timely educational opportunities to continue to grow the New Zealand workforce in critical sectors.

5.7 Thus, the presence of production activity at the Digital Screen Campus provides educational learning and connections that would otherwise not occur if they were operating elsewhere, such that we are able to educate a workforce for New Zealand in multiple media sectors as outlined in the Digital Screen Campus vision. It will also enable use of the facilities as a platform for research and creative practice for faculty, students, and staff across numerous fields and multidisciplinary collaborations. The long-term impact of this work is to produce a workforce of graduates in the sector that enable significant economic growth both regionally and nationally.

Prior Success of Proposed Operational Model

5.8 This model of combining facilities for educational and industry use is not new, internationally. This model was put into practice at the RIT campus through MAGIC Spell Studios and the associated $35M USD facility, which contained a virtually identical set of facilities to those proposed at the Digital Screen Campus (i.e. pre- and post-production facilities, sound stages, development laboratories, entrepreneurial start-up spaces, etc.). The RIT campus facilities were slightly smaller than those proposed because the academic programs in games, film, animation, and digital media were already established at RIT with associated facilities elsewhere, rather than the proposal here to more

directly co-locate them on the Dovedale campus. They were still 'co-located' with MAGIC at RIT overall though, as RIT is a single integrated campus, and the academic facilities in question were no more than a 5 minute walk to the studio facility. MAGIC also contained two academic research labs, and allowed for multiple courses to be taught on site at the studio facility)

5.9 MAGIC is not the only example, although it is obviously the one I am most familiar with as I designed it. Other efforts that have similar industry engagement are those at the Arizona State Mesa City Centre Innovation Hub, the Johnny Carson Centre for Emerging Media Arts at the University of Nebraska, industry use of the soundstage facilities at the University of Southern California, and the partnership between New York University, the Tish School of the Arts, and numerous studio locations across Manhattan and Long Island, to name a few.

5.10 During the 6 years I served as Director of the MAGIC Centre and MAGIC Spell Studios, we not only partnered with New York State to design and develop the facilities, we worked with numerous industry partners as follows:

(a) we provided space for operations for Forbes Media;

(b) we engaged in funded research and development with Adobe, Inc;

(c) we engaged in funded research and development with Xerox Corp;

(d) we engaged in funded research and development with Microsoft Research;

(e) we supported initial collaborations with Epic / Unreal that have since blossomed into commercial work;

(f) we engaged with the Wegmans Family Foundation on media production; and

(g) we engaged in numerous other private film productions that are considered confidential.

5.11 Each of these activities resulted in work-integrated-learning opportunities for our students including internships, advanced class projects, lectures from professionals, portfolio reviews, and in several cases full-time hires after graduation. Each of these clients and partners were selected based on a range of criteria including the ability of the partnership to contribute broadly to the educational mission and academic operations of the university.

5.12 In addition to these industry engagements, we also engaged with New York State to form a 'NYS Game Hub' (1 of three across the State, the others at RPI and NYU), and helped approximately a dozen small companies and products to market from our students and academic staff. One of these small studios, Darkwind Media, was founded by graduates from the Game Design & Development program: we worked to advise them, mentor them, provided real-estate in one of our incubators, and facilitated their move to downtown commercial facilities in a building that RIT owned. Today, Darkwind employs about 16 people full-time, as well as numerous interns and contractors, and is engaged in ~3-5M USD revenue annually. They also sold a portion of their business that was acquired by Unity Technologies. MAGIC also partnered with Vicarious Visions, a NY State video game development studio for on-campus projects and educational activities, and also placed numerous interns and graduates at the studio, which helped the studio grow to the point where it was acquired by Activision, Inc. and today generates over $65M USD a year in revenue in New York with 300+ employees contributing to the local economy.

5.13 During my tenure at MAGIC we produced three major video games, two of which were on the XBOX platform in collaboration with Microsoft. Over 90% of the students engaged in these efforts were immediately hired into the commercial sector based on having these kinds of experiences as a part of their educational background.

5.14 Also, via MAGIC, we partnered with regional museums, libraries, civic institutions, local K-12 primary and secondary schools, the Maker Faire, the NY State Faire, and other non-profits to encourage the use of games, movies, and interactive apps as a means to encourage the study of Science, Technology, Engineering, Arts, and Mathematics (STEAM) at all levels of education. This work culminated in recognition

by Congresswoman Louise Slaughter on the floor of the U.S. House of Representatives.

5.15 Following my tenure, the MAGIC Centre and MAGIC Spell Studios have continued to succeed: they have engaged in numerous additional commercial suites, have continued the partnerships with Dell, Cisco, and other technology vendors, have engaged in additional partnerships with Unity, Unreal, and others, and even shot a commercial for virtual production research with students that is now airing in front of all movies screened at Cinemark theatres in the USA in July 2022. In late 2021, MAGIC helped support the filming and sound-mix of 'The Story of Her' which was the #9 most streamed Netflix show in March of 2022. The power of these kinds of media and the prestige of their impact on the public sector is profound.

5.16 Whilst the concept of the Digital Screen Campus is founded on the operating model used at MAGIC Spell Studios, the Digital Screen Campus at UC will account for local, regional, cultural, and national differences between New Zealand and the United States. A key point of difference is UC's focus on Māori and indigenous storytelling as a key theme of the associated academic degree, and also in the selection of commercial and production partners. This is in keeping with the goals and objectives of the university as a Treaty organization, and with the general tenets of modern educational practice relative to media education in the field. Many of the major successes of film, media, and game production in New Zealand incorporate elements of Māori culture and context, and the Digital Screen Campus effort is committed to biculturalism in every aspect.

5.17 A second differentiating factor is being able to use the existing Dovedale campus. The construction of modern digital media facilities is expensive, and if we were not able to use the existing buildings, infrastructure and land within the campus, the project would simply be unaffordable as an undertaking for the university. This is a key advantage that UC enjoys compared to other NZ universities (there are no other NZ universities that have direct access to both the land and existing facilities that the Dovedale opportunity represents), and is almost unparalleled in the higher education sector.

6 DESIGN OF THE PROPOSED DIGITAL SCREEN CAMPUS AND ITS FACILITIES

Design

6.1 Identification and design of the facilities required at the Digital Screen Campus was informed by advice from a range of experts in the screen (film and gaming) industry, and in master planning, education and research both within New Zealand and internationally. The design team spent some months working on identifying the nature and scale of facilities required for each stage of production.

6.2 The primary guiding principle for the design of these facilities was that (in general):

(a) the renovation and refurbishment of existing facilities must provide academic-grade facilities for the academic programs in years 1 and 2; and

(b) the new-build facilities must provide industry quality end to end[3] facilities for use by students in years 3 and 4 of the academic program and for independent screen and game production by industry partners and collaborators at the minimal viable level: i.e. there must be one of each type of facility necessary for each stage of production. End to end facilities are essential, even for student produced work. In years 3 and 4 of the academic program, for example, students will be required to produce their own work for portfolios, festivals, and international competitions.

6.3 As of yet, there is no dedicated purpose-built end to end production film studio in the South Island, let alone in Christchurch. While Temple Studios has resource consent for the development of a film studio at Templeton, I believe (based on my experience at RIT) that to be successful, industry and educational activities need to operate on the same site. Co-location provides benefits that partnerships with external entities and satellites cannot.

[3] Digital screen production generally comes in four phases: pre-production, production, post-production and distribution. This is known as 'end to end'.

6.4 To make world class student and faculty output which will cement UC as an international research and educative leader in these fields, we need to provide industry quality facilities, none of which could be accommodated in existing buildings on the campus. The industry grade facilities provide a platform for hands on learning, and advanced research and development in digital media sectors for academic staff, masters students, doctoral students, and post-doctoral researchers from a variety of related disciplines.

6.5 Furthermore, the industry grade facilities provide a production platform for video, audio, and interactive applications in support of educational materials for other UC programs, including UC Online, which delivers teaching content virtually.

6.6 The industry grade facilities (both in film and in game and software development laboratories) will also support collaborations between the proposed Digital Screen Campus and other regional area education and training programs, including those at the Ara Institute of Canterbury and Yoobee.

6.7 There is, in essence, minimally one of each type of facility, except for the soundstages which will operate in tandem such that one will be in active use (i.e. shooting) while the other is being prepared for next use (i.e. is being dressed or prepped). Only having one sound stage would result in limited industry use, which would not provide the opportunities for Work integrated learning which students require.

6.8 All of these facilities are based on industry standard sizes and scales as discussed with the previous groups we consulted: colour correction suites, screening rooms, sound edit suites, etc. are built as they would be elsewhere. The stages are set at the square footage needed to attract industry to the site, at a scale where Work integrated learning and collaboration can occur. The grid[4] height proposed is an industry standard 17m, as discussed in Mr Brady's evidence. The mill space, production offices, and backlot were sized using modifications of industry standard formulae relating to the size of the stages, with modifications and some downsizing based on cost and placement.

[4] "Grid" refers to the support structure for theatrical rigging – typically comprising ropes and pulleys – that enables stage crew to quickly and safely move sets and lighting.

6.9 The facilities, in some cases, are of a higher quality and larger scale than would be the bare minimum for teaching, but they afford academics and students the opportunity to create world class outputs and to experiment in industrial scale facilities. This is in keeping with the practices of other colleges and universities offering world class programs in this space, as we reviewed capabilities and offerings from the top 20 international programs in these areas, as well as in New Zealand, (noting that none of the New Zealand programs and very few international programs are centred on the convergence model we have identified).

6.10 While the facilities are industry grade, industry use of those facilities is synergistic and supportive of the University's educational and research missions. If profit was the driver behind this proposal, the facilities would need to be significantly larger scale to support productions that could more rapidly realize a return on investment.

6.11 When it came to identifying how these buildings could be located within the site, several key design principles were applied at the outset as described in the evidence of Mr Herriot, the project architect.

6.12 The proposed plan presented in this hearing is the result of over two years of planning, logistics, and design work to date, and represents UC's best efforts to realize the vision of the Digital Screen Campus in a manner recognising the site's setting adjacent to a residential community.

6.13 During the planning process, one of the key considerations has been whether to simply build a more traditional program without industry co-located activity. This was roundly rejected. Doing so, and relying solely on refurbishing existing facilities and living within the scale that would then be imposed by this restriction, would mean that:

(a) our graduates would likely not be work-ready in the same way;

(b) they would not have the ability to produce professional grade work at the intersection of these media; and

(c) our offering would not be substantially different from other New Zealand universities.

6.14 Essentially, if this project were to proceed without the proposed new build construction and industry engagement and presence, it would not be nationally or internationally competitive, and would not be likely to succeed either as an educational program or as a differentiator for Christchurch and the South Island.

7 SUMMARY AND CONCLUSION

7.1 This proposal, which will see students, globally known academics, and industry working together on one site, will provide the foundation for UC becoming New Zealand's pre-eminent digital screen school.

7.2 The facilities proposed will afford students and academics the opportunity to create world class outputs and to experiment in industrial scale facilities. Production quality facilities are now the norm at the top ranked programs in this space worldwide, including in the US, the UK, and the EU. The facilities proposed will ensure that UC's educational offering in this space is globally competitive and will attract and retain the staff needed to teach this highly specialised, rapidly evolving discipline. Furthermore, the proposal provides a catalyst for continued research and development opportunities in the sector, and a strategic advantage for applying for additional funding and support for such.

7.3 The opportunity to co-locate with a university, to influence the talent development pipeline and to have easy access to R&D are significant attractors which differentiate the Digital Screen Campus facilities from any other facilities which may be developed.

7.4 I consider that this proposal represents an incredible opportunity for the university, but also for the Christchurch region specifically, and the digital screen industry in New Zealand generally. It has the potential to position Christchurch as a premiere destination for education in this sector world-wide.

Dr. Andrew Phelps

August 2022

Appendix A: Plan SKA-080 (Rev B)

KEY

1	EDUCATION MUSIC VOICE OVER STUDIOS (INC. RADIO), EDIT SUITES, SMALL COLOUR GRADING & CORRECTION
2	INNOVATION HUB: CO-WORKING SPACE INCUBATOR AND ACCELERATOR
3	SCHOOL OF DIGITAL SCREEN PRODUCTION, MOCAP AND SMALL VIRTUAL PRODUCTION
4	VFX/GRAPHIC SUITES
5	JACK MANN TEACHING SOUND STAGES
6	JACK MANN MULTIPURPOSE THEATER : RECORDING STUDIO, PLAYBACK & PERFORMANCE
7	EDUCATION TECH
8	PRODUCTION OFFICES
9	FUTURE SOUND STAGE 1
9a	FUTURE SOUND STAGE 2
10	FUTURE PRODUCTION OFFICES
11	MILL BUILDING - LOCATION TBC
12	GREEN SCREEN AND VIRTUAL PRODUCTION
13	PREMIX, FILM MIX, FOLEY, PREP ROOM, AND LARGE COLOUR GRADING
14	BACK LOT - SCOPE TBC
15	GATE HOUSE

CONCEPT

HERRIOT MELHUISH O'NEILL ARCHITECTS

WELLINGTON LEVEL 1
21 BLAIR STREET
PO BOX 6570 WGTN 6140
WWW.HMOA.NET.NZ

TEL (04) 385 0038

A	08 DEC 2021	Public Consultation
B	22 MAR 2022	Concept

N

1 : 2000 · A3

UOC - Digital Campus

Proposed Campus Site Plan
Option 1 A+

2130 | REV

SKA-080 | B

22/03/2022 5:37:04 pm