PUBLIC

THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS MET IN COMMITTEE ROOM 1, PARLIAMENT HOUSE, HOBART ON TUESDAY, 16 FEBRUARY 2021

TasTAFE ENERGY, TRADES AND WATER CENTRE FOR EXCELLENCE PROJECT

Mr SCOTT ADAMS, CHIEF OPERATING OFFICER, **Mr JAMES EAVES**, SENIOR PROJECT MANAGER, TasTAFE, **Mr JAMES KAZALAC**, ARCHITECT, FMS ARCHITECTURE, (WEBEX). AND **Ms FEBIANCA SAMPSON**, PROJECT ARCHITECT, ARTAS, WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

CHAIR - Welcome. Before we start I will read a statement to you in relation to the committee hearing today.

A committee hearing is a proceeding in parliament. This means it receives the protection of parliamentary privilege, an important legal protection that allows individuals giving evidence to a parliamentary committee to speak with complete freedom without the fear of being sued or questioned in any court or any place out of parliament. It applies to ensure that parliament receives the very best information when conducting its inquiries. It is important to be aware that this protection is not accorded to you if statements are made outside the confines of the parliament because they may be defamatory. This is a public hearing. Members of the public and journalists may be present and this means your evidence may be reported.

I will, for the purposes of Hansard, introduce honourable members. On this side of the table, we have Ms Jacquie Petrusma, MP; Jen Butler, MP; Felix Ellis, MP; Tania Rattray, MLC; and myself, Rob Valentine, MLC, as Chair. We have secretary Mr Scott Hennessy, who is doing all the hard work at the moment, and Rosemary Johnston from Hansard.

Mr ADAMS - Before I begin I wish to present an additional document, a copy of the master plan for the Clarence campus site.

Thank you for the opportunity to present this exciting project to the committee. This project represents a $21 million investment by both the state Government and the federal government in the establishment of a centre of excellence for water, electrotechnology and related trades training in Tasmania. The centre will replace ageing training facilities for plumbing, heating, ventilation, and air conditioning - HVAC - and refrigeration at the Claremont College and electrotechnology training currently delivered from the TasTAFE Campbell Street campus.

In addition to replacing these existing training facilities, the new centre will cater for emerging training needs in new industries such as poly welding, wastewater management, hydrogen and renewable energies. The centre is the culmination of three years of work and will place Tasmania at the forefront of trades training in these areas. The chosen site for the centre is on vacant land at TasTAFE's existing Clarence campus, which is already the home of construction and allied trades training, as well as many other disciplines. The co-location of

these new trades with the existing trades will result in a much-improved learning experience for students.

The Clarence site will also provide much-needed ancillary services for students, including a learning hub featuring a library and computer labs; cafeteria; student counselling and support services; and, most importantly, onsite student accommodation. The centre will cater for the trades training needs, both now and well into the future, training from short course through certificate II to certificate IV and advanced diploma level. It will be underpinned by TasTAFE's agreed set of principles for centres of excellence, which include being co-designed with industry; a strong partnership with industry and university, including shared use of facilities and integrated learning models; applied research; catering for strong existing student demand and predicted future growth; and emphasis on the use of emerging technologies.

The centre of excellence project is being overseen by a steering committee made up of representatives from industry, including the Master Plumbers Association, the National Electrical and Communications Association, the Air Conditioning and Mechanical Contractors' Association, TasWater and Keystone. All these industry partners have committed not only to a successful development of the physical centre but also to the ongoing success of the centre of excellence.

With me today I have James Kazalac and Febianca Sampson, representing our architects, and James Eaves, our project manager. We will be happy to answer any questions. Thank you.

CHAIR - Thank you very much; indeed, committee members will have many questions, I am sure, with regard to this project. Thank you for conducting the site visits this morning; we really appreciated that. It is always good to go on site to look at exactly where the construction is going to happen, and to get a bit of a feel for that site. I will hand over to any member who has a burning question in terms of overview. Other than that, we will work our way through the submission. Does anyone have any overview questions?

Ms BUTLER - I have a question in relation to the education plan, which is not part of the overview. When would be the appropriate time?

CHAIR - My intention is to work through this first, and then go to that particular document at the end as it involves the nitty-gritty in terms of what is exactly going to be taught at the site as opposed to its construction. Is everybody happy if we do that? Okay, thanks for that. Let us make our way through the document submission. I prefer to go to page 4 rather than do the executive summary because that will cover things we are going to cover anyway. Can we start on the introduction, 2.1, the purpose of the submission? Do we have any questions?

Mrs PETRUSMA - Chair, I have a question on the paragraph above, but I do not think that is talked about much as regards that document.

CHAIR - Okay, go for that.

Mrs PETRUSMA - The paragraph above the introduction talks about how it will replace TasTAFE's ageing plumbing training centre located at the Claremont College school campus and the electrotechnology training facility at TasTAFE's Campbell Street campus. For the record, how old are those existing centres? What are the benefits of those centres being moved

to Warrane? What is the benefit not only to the students, but also to industry in the sectors involved?

Mr ADAMS - The plumbing facility at Claremont is in excess of 30 years old. The electrotechnology facilities at the Campbell Street site would be the same sort of vintage.

In addition to its age, the Claremont plumbing facility was not a purpose-built training facility and is quite dispersed - it has a range of small rooms and small workshops, which limit flexibility around training. So space is a significant issue around there. With the electrotechnology facilities at Campbell Street, it is not so much a space issue there. The equipment is very aged and needs to be brought up to speed. In addition, a real driver behind moving that facility to Clarence is there is a lot more overlap in trades training now between disciplines. For example, virtually all plumbers need to do a restricted electrical licence for installation and what have you. At the moment, we deliver that in different locations. By combining all that at Clarence, everything will be on one site, which will allow us much more flexibility in the delivery model.

CHAIR - Section 2.1 talks about the Commonwealth and Tasmanian governments having committed $7 million and $14 million respectively to build contemporary fit-for-purpose ETW CoE and it goes through what it will contain. Do we know how many others of a similar nature are actually being funded by the Commonwealth, going to deal with the courses this site will provide?

Mr ADAMS - In terms of what will be delivered - the $7 million contribution from the federal government came under the Revitalising TAFE Campus Across Australia program, which I think was $50 million nationally, of which $7 million has come to us for the electrotechnology component. I am not sure what the breakdown is nationally.

In terms of building similar facilities, I am not aware of anyone at the moment investing in these facilities. There was some prior investment, which FMSA was involved in, particularly plumbing facilities in a couple of other states.

CHAIR - Is it going to be in competition with other sites in the context of what we are providing here and being able to basically fill it with students? I thought that was a relevant question to ask, including whether there has been any discussion with other states or the Commonwealth in terms of what they are funding and whether they are funding it viably.

Mr ADAMS - Perhaps the best way to answer that is to talk a little bit about the types of training that will be delivered. A lot of the training, particularly in the certificate II through to certificate IV level is training for tradesmen and apprentices, which each state does directly because they will do components of learning on campus and then with their employer, so moving to other states is not practical for that type of training.

Perhaps the best way we move up the Australian Qualification Framework level into diplomas and advanced diplomas is where there can be more specialist delivery. In this particular centre, we will be focusing on where we see a need, particularly in the wastewater management components. At the moment, that training is delivered in only one other state, Queensland. We do not believe we will necessarily be competing because there is growing demand for that in Australia and there is only one site at the moment in Queensland that delivers this. In terms of wastewater management - whilst I am not an expert - our advice is that

temperature and climate have a significant impact on how you design wastewater management. Obviously, Queensland has a fairly significant different climate to south-east Australia.

CHAIR - Thank you. Any other questions on page 4? Under section 3.1, you talk about the existing facility at Claremont College campus having been built in 1980 and that it has not been updated. Why Clarence campus in particular? Is it possible there is space in Claremont to do this? There must be reasons why this is seen as a good site for this.

Mr ADAMS - Absolutely, space is one. We have vacant land at the Clarence campus but there are a number of other factors as to why the Clarence campus. The principal ones are that Clarence is already our southern trade training base and we do all our other trades there - construction, allied trades. As I mentioned earlier, there is a lot of crossover in trades training now, so one site will be able to deliver core components for all trades, including working at heights, first aid and components such as that. Cross-fertilisation across trades is very important.

Second, moving to an existing substantial campus like Clarence means we do not have to replicate all those other services for students. So, we have the library, computer labs and student counsellors on site, all of which will need to be replicated elsewhere; at the moment they are not replicated at Claremont and that is to the detriment of students. The other very important component is onsite student accommodation. This is available at Clarence and is becoming more and more important because we have apprentices come from around the state for their block release components.

CHAIR - It is catering for the whole state?

Mr ADAMS - Yes.

CHAIR - It is good to get on the record that it is not just southern Tasmania. I know some of that is actually in the submission, to actually put it out there and members of the public may be watching. We welcome them today.

Ms RATTRAY - In regard to stakeholder communication, can you give us some idea of what sort of communication there has been with stakeholders? You talk a little bit about it, the Master Plumbers Association and other relevant industry stakeholders have been identified through an independent audit, but what sort of engagement has there been?

Mr ADAMS - I will talk briefly about industry engagement and then I might invite James to comment about the border stakeholder management plan that is part of the project.

From the beginning of this project, it has been a joint effort with industry and, as I mentioned, all those industry bodies sit on our steering committee that oversees the entire project. Underneath that we have established a series of working parties in particular disciplines, where we draw on other experts of industry in terms particularly of where the emerging leads are coming. Where I have talked about emerging industries such as poly welding and wastewater management, we bring experts from industry in to be on the working parties, initially to help ensure the physical design of the centre will cater for their needs. Also, for what goes into our education plan as to what qualifications and courses we will be delivering.

Ms RATTRAY - Are they industry experts from within or from outside the state?

Mr ADAMS - No. They are within the state. Our direct involvement with industry representatives is with those from within the state who are sitting on our working parties. We have done various site tours and discussions nationally. That is now restricted to virtual site tours because of COVID, but that is more focused on the physical build whereas the work with industry is much more focused on the ongoing education.

Ms BUTLER - During the consultation with those stakeholders, did you consult with the Communications, Electrical and Plumbing Union at all? They represent 2000 workers, including plumbers and TasWater employees. Have they been consulted at all? I note they are not noted in the stakeholder list in the education plan.

Mr ADAMS - There has been no formal contact with that union.

Ms BUTLER - Is there any reason why not? It is 2000 workers and their expertise would be very important, I imagine.

Mr EAVES - We have TasWater as part of the steering committee so they are represented through that. We have consultation from time to time with other agencies such as TasWater, TasNetworks, Tas Fire Service, Hydro and the others. We are trying simply to be part of those agencies and talk to those agencies but we haven't spoken directly to those unions.

Ms BUTLER - The CEPU represents Tasmanian plumbers and actually has a very good reputation. Is there any reason why they wouldn't be included in this consultation? They represent the workers and the people with the expertise.

Mr ADAMS - No particular reason. I suppose our focus to date has been what needs to go into the physical build to cater for the training and education delivery. We hadn't considered involving them but there's no particular reason why we wouldn't.

Ms BUTLER - It might be important to note that that is a skill set and industry knowledge when establishing a centre for excellence, especially in plumbing and wastewater and water management through TasWater, so it may have been prudent to extend the consultation to include that knowledge and expertise. It is quite a big investment.

CHAIR - Do they deal with the actual technical aspects or is it more an industrial organisation?

Ms BUTLER - It would be a mixture of both, I imagine.

Mr ADAMS - I don't think so but that's only my experience.

Ms BUTLER - It's not just industrial; they also provide expertise and they represent our workers with that expertise. You will find that in the Victorian trades centre, which some of these documents relate to, there is ownership from that union in Victoria and that is one of the reasons they have been able to develop a fantastic reputation of excellence in Victoria. I think that may be something which could have been overlooked in this. That's just my own opinion, though.

Ms RATTRAY - Following on from the question from Ms Butler, you have listed the National Electrical and Communications Association - NECA. What input did it provide, given what Ms Butler has just said about the local electrical trades and plumbers association representatives?

Mr ADAMS - NECA is a member of our steering committee and has membership on various working parties so it has regular input that way. NECA represents the business owners but also delivers electrical training in a number of states nationally, so we get a lot of very good input from it in terms of the training delivery.

Mr ELLIS - I note that the Master Plumbers Association is obviously the custodian of the quality of the trade and the work done around the state and nationally. In other states they're employers of apprentices and are an RTO themselves. I personally was employed and trained with the Master Plumbers in Western Australia. What sort of input did they have in this? What was the need they identified and why do they think consolidating it in one site to then train across the state was a good idea?

Mr ADAMS - The Master Plumbers has been a partner in this from the very start and they were instrumental in identifying that Claremont didn't meet training needs and simply would not meet those needs going forward. It has been very active in terms of what needs to be in the new centre to basically bring it up to speed but also meet those particular emerging needs. The plumbing training package is going through a revamp at the moment. A new training package will be implemented this year. The requirements within that are changing fairly significantly in terms of what needs to be delivered, so Master Plumbers is, I guess, our key conduit for that information.

CHAIR - Because you are a provider in this space, as opposed to the provider, are there other private enterprise providers in this space?

Mr ADAMS - For apprenticeship training in plumbing and electrical, we are certainly the dominant provider in Tasmania.

CHAIR - Sixty per cent or something - is that what was mentioned in here?

Mr ADAMS - Yes, that is probably in terms of training overall. In terms of apprenticeship training, the percentage would be a bit higher. One of the reasons is that these disciplines are very equipment intensive. In a state like Tasmania there is not really a big enough market for a number of people to replicate the types of facilities required. We also deliver a range of short courses and other training, and that is where there are other providers in the market, but for the longer term certificate-level apprenticeships, there are significant hurdles.

CHAIR - So this is a more holistic approach. Private providers would be more niche providers in certain areas?

Mr ADAMS - Yes, niche specialisations.

CHAIR - Okay, thank you.

Mrs PETRUSMA - In regard to the project cost, it says it is $22.5 million and $21 million in government funding, but then there is a $1.5 million contribution from industry through cash and in-kind. I note that in the project agreement it was only $500 000, $250 000 for TBCITB and $250 000 for Master Plumbers et cetera so is their in-kind contribution now increased by another $1 million from when the initial agreement was made with the federal government?

Mr ADAMS - It is not confirmed yet. We certainly have pledges from industry of those sorts of quantities. Under the arrangement with industry we asked for initial pledges of support. The next component is exactly what that looks like. As we go through the detailed design process, it will be determining exactly which equipment can be provided by industry to meet that initial pledge.

Mrs PETRUSMA - Can you explain to us what the cash and in-kind contribution from industry is? What do you think that $1.5 million is made of at this stage?

Mr ADAMS - There is a cash component from Keystone, formerly TBCITB, into the project, and that is really targeted towards ensuring we have the ability to deliver from the centre statewide in terms of remote learning, so online learning, AV delivery et cetera will be the focus of that money. The rest of it is largely equipment. We have a fairly significant spreadsheet that James might be able to talk to that basically outlines all the various types of equipment we require in the delivery of the training and what industry players can meet that. That includes things like hot water cylinders, gas units, TMV valves, a whole range of equipment.

Mrs PETRUSMA - Is there scope for that $1.5 million to increase, that industry might want to contribute more if need be?

Mr ADAMS - Absolutely. We considered $1.5 million was really the minimum threshold to make the project work and ensure a commitment from industry. We would like to see that contribution grow as we go through the design process with industry and identify particular fit-out.

Mrs PETRUSMA - Thank you.

CHAIR - Further down the page under plumbing, refrigeration and air-conditioning, you mention that the development of the centre of excellence will allow TAFE to deliver a whole heap of things but various qualifications in hydrogen to be developed in consultation with industry. Is that purely to satisfy what we believe to be the major government project that's likely to happen in the north of the state - the generation of hydrogen through using electricity, or is it for other aspects as well?

Mr ADAMS - It's broader than that and certainly it will cater for that. The reason it says 'various qualifications … to be developed' is currently there aren't any accredited qualifications around hydrogen. It's an emerging technology Australia-wide. Work is underway now to determine what training is required within that industry.

CHAIR - So we're getting ahead of the game in a sense? Would that be fair to say?

Mr ADAMS - Yes, and our intention is to design those qualifications and courses now and get them accredited through the National Accreditation Framework.

CHAIR - Do you know whether that's happening in any other government locations around Australia, or are we it?

Mr ADAMS - Most states are looking at this now. We're certainly not behind the eight-ball, but everybody is probably at the starting point in terms of hydrogen.

CHAIR - In terms of the staffing of that area, obviously they're going to need some pretty good skills and there will be a fair bit of competition maybe. How do you intend to staff that? Is it just taking current staff and sending them off to get trained, or is it buying in that sort of expertise?

Mr ADAMS - It's a combination. You referred to the potential for a hydrogen production hub in the north of the state. If that gets the go ahead, then that feeds in. It will attract people here. It will create jobs here and therefore that will feed in to what we can do in terms of training and accessing people.

CHAIR - So you'd make arrangements with government or private enterprise, depending on what it is, to deliver this course?

Mr ADAMS - Yes, absolutely.

Mrs PETRUSMA - The second last paragraph talks about how 'the design of the centre will cater for changes in technology and training requirements over time.'. Can you explain how the design will do that, please?

Mr ADAMS - Yes, we can, and then I might defer to our architect experts.

Essentially the model we're adopting here for this centre of excellence is what I term a roll-in, roll-out model. With our existing training at Claremont, for example, everything is fixed and there are small rooms to cater for particular training. The model under this scenario has a workshop facility where basically we can roll-in and roll-out equipment, depending on the discipline that's being delivered, which has been a successful model.

Perhaps, James, you might want to expand on that?

Mr KAZALAC - Yes, absolutely. One of the main design methodologies out of this is that we want to try to maximise multipurpose use throughout this facility as best we can and some of this sort of 'park and play' and flexible training aids and modules is a key component of that.

Part of our role is to design that sort of process and integrate that fit-out into the different disciplines that we have. For example, there are options with our backflow team training in plumbing. We can have a mobile trolley which can be utilised when the course is running, and then from a management sort of system and timetabling, we can then shift that to a storage area and utilise that open space for another key component of the course. That's kind of the ideology behind the design process at the moment.

Mrs PETRUSMA - And that design is being used successfully elsewhere?

Mr KAZALAC - Yes. I've had previous experience personally working for PICAC throughout Victoria and their facilities in Queensland too. They have a similar sort of typology that they've developed as well. It seems to give them a good balance of what certain items will need to have fixed infrastructure in place but also where we can utilise any of these multipurpose or flexible modules and trolleys. It gives them an opportunity to use the space to give more benefit than from just a single purpose-use design, which is a little bit more old style.

Mrs PETRUSMA - Thank you.

CHAIR - With respect to the last paragraph on page 6, you talk about expecting to see a doubling of student numbers per annum from 2019 within five years. Was that just finger in the wind? Or how have you decided that that is exactly what is going to happen?

Mr ADAMS - That's a very good question. It is a little more than a finger in the wind. What we have done is look at demand for training over the last few years. There has certainly been a very clear growth in the certificate and apprenticeship space. What we have identified is also a growing need for particular specialisations or what we refer to as skill sets, where you have got your qualifications but are coming back to do particular areas. We have taken that experience and basically projected what we see happening. We are expecting a doubling in student numbers but that does not mean a doubling in apprentice numbers, for example. There is a steady growth there but there is a lot more short course delivery.

Ms BUTLER - As a follow up to that - for the record, can you run through the strategies TasTAFE would be implementing prior to the potential doubling of the numbers to deal with the recruitment and the retention of staff at TasTAFE to make sure those courses can actually be delivered?

Mr ADAMS - There are three key strategies I will mention to start with. The first is the development of a workforce plan. We are taking the education plan being delivered here that looks at the numbers, turning that into what that means in terms of the number of teachers and that is going into our workforce plan so we can see where the areas are that we might be short in and need to recruit for. Once we have identified that, there are a couple of strategies in place.

We have a thing called 'a teacher under supervision' at TasTAFE which enables us to hire a teacher who is not qualified to teach but might be industry competent and then over a 12-month period with TasTAFE, they get up to speed in terms of their teaching qualifications and their training and assessment requirements. We have an arrangement where we employ them fixed term for 12 months and subject to them achieving those qualifications, they are made permanent.

That opens up a new market for us for those who are not qualified teachers, but are interested in getting into program. That is the existing strategy, and in the workforce plan we have identified some further strategies to develop ways to get industry people to be able to come and teach with TasTAFE but not necessarily in a permanent capacity. A lot of our trade-competent people do not necessarily want to teach full time but they do not want to work in industry full time. We are working with industry on a model that might see them able to do both.

Ms BUTLER - Would the university be involved within that training at this stage? Is there any discussion around the university teaming up with some of the areas in this new centre of excellence?

Mr ADAMS - Not in terms of the staffing and workforce; there are certainly discussions with the university around applied research, but not so much in terms of the workforce required to deliver the training.

Mr ELLIS - I noted that Tas Gas signed its offtake agreement to put hydrogen into the Tasmanian Gas Network - TGN - about a month ago. We have some stuff in here about hydrogen training. How important is it to make sure that this centre caters for existing traders like gasfitters to be able to adapt to new technologies such as hydrogen through this centre?

Mr ADAMS - It is extremely important. One of the items underpinning the principles for a centre of excellence is emerging technologies that comes back to the design methodology James mentioned previously. Also, while we have to invest and build a facility here, we need to be conscious that training will change over a number of years so that feeds into the methodology about having flexible space that needs certain services, but a lot of the equipment needs to be changed regularly.

Again, one of the principles underpinning a centre of excellence is once we have built the physical facility, the centre will continue with industry representation so that it is continually adapting.

Mr ELLIS - When I was thinking about doing a diploma of hydraulic services that was similar in that it could only be done in Queensland, so bringing that sort of training here as well in terms of increasing the capacity for south-eastern Australia to have qualified people in that area.

Mr ADAMS - Yes. You will see in our education plan a strategy to grow diploma-level training delivery quite significantly.

CHAIR - With respect to the training side of it and who you are targeting, will it impact in any way on the Government's year 11 and year 12 initiative, keeping students in high school and colleges? Are you expecting to target students who might be going into a VET course into this sort of area?

Mr ADAMS - No. TasTAFE already delivers significant training into years 11 and 12 in partnership with Department of Education. Certainly our philosophy is that students should stay and complete years 11 and 12, but they can do various what we term pre-vocational VET courses as part of that, which will help them inform decisions as they leave as to whether a VET pathway is what they want.

CHAIR - So you don't see it as particularly interrupting that initiative of years 11 and 12 and getting that training happening?

Mr ADAMS - No.

CHAIR - Okay, that's fine. Under electrotechnology you talk about TasTAFE not keeping pace with changes in technology in this sector. What steps have been taken to verify

what the nature of courses should be that are offered to make sure you are delivering up-to-the-minute focused courses for the industry? Is it just through general industry contact and communication or somebody seeing what is happening in other parts of the world to know what focus should be provided in this area?

Mr ADAMS - I suppose the best way to sum it up is that there are three components to that. Under the national skills model there is already a well-established system federally for industry to design training packages. Our training packages get replaced regularly. I mentioned earlier that the plumbing one is being replaced this year and electrotechnology will be the same. There is a process nationally for industry to have input as to what should be in that core training package if you're going to do a certificate III in electrotechnology, for example. So there is that component.

The other component is probably more where we are talking about specific skill sets and short courses, and at that level that is much more local discussion between TasTAFE and industry as to what you are seeing in terms of needs for the workforce and what components of a larger qualification you might want delivered in short, sharp training. We have a well-established process within TasTAFE for ongoing discussion with industry around those components.

As to the third component, if we take electrotechnology, while some of the core training has not changed for a number of years in terms of what needs to be delivered, how it is delivered and the equipment it is delivered on have most definitely changed. There is a move to things such as extra low voltage for training purposes and what have you.

CHAIR - That is in this other document?

Mr ADAMS - Yes, and that's one of the areas we have fallen behind on in terms of the equipment that is used.

CHAIR - Okay. In that space, electric vehicles are obviously something that is being promoted. We talked about this during the site visit. Can you tell me whether training is being delivered for electric vehicle maintenance, or is that in another aspect of TAFE operations that is not being handled on this site?

Mr ADAMS - Absolutely. There are two components to that. There are the electric vehicles themselves, and that is a component we are just in the process of factoring into our automotive delivery so the mechanics work on electric vehicles -

CHAIR - Whereabouts is that delivered?

Mr ADAMS - At the moment that is delivered from our Campbell Street site in Hobart for the south of the state. The other component around electric vehicles is the infrastructure and charging stations. At the moment we don't do anything in that space, but that's one of the identified needs in terms of electrotechnology - how the electricians will look after charging stations, for example.

Mrs PETRUSMA - Going to the trades and water student numbers on page 7, fantastic growth is shown there. If you add up all the individual ones, it comes to around 9000. Can you explain what that increase would look like in day-to-day operations between now and

2027? How will this new facility cater for this increased demand to be able to flex up or flex down to cater for that huge increase we're going to see, which is great?

Mr ADAMS - Absolutely. Perhaps I will refer to the graph to start with. The single biggest increase you will see there is something labelled CPD courses. That's continuing professional development for industry. That's where I was talking earlier about people who've been through, they've got their qualification, they're working in industry, but they need to come back and refresh or upskill in particular areas.

In answer to your question as to how we're going to cater for it, whilst the facility will cater for significantly more students at any point in time than the current ones, CPD courses, for example, will mostly be done out of hours because they want to do it and obviously they're working during the day, so weekends, evenings et cetera. The facility will be working more than existing facilities.

Mrs PETRUSMA - So the facility will be open evenings and weekends?

Mr ADAMS - Yes, and that's something we've seen over the last couple of years - a requirement for more and more out-of-hours training, if you like, because that's when industry wants to do their training because they're obviously very busy at other times.

Mrs PETRUSMA - Will the facility also be suitable for online training as well?

Mr ADAMS - Yes, absolutely. I think I mentioned that earlier. Part of the commitment from Keystone in terms of its contribution was to ensure we can deliver online and statewide - those components that can be taught online, obviously.

CHAIR - Further to that, you say the new facility will provide a doubling of capacity for training in the south of the state - this is under electrotechnology. Are there other facilities delivering electrotechnology courses in the state? Presumably there are, but you are talking about online now as well, so how's that working out within TAFE itself? Is there a rationalisation of how you're going to deliver that?

Mr ADAMS - For electrotechnology, we deliver those disciplines at Alanvale in the north as well. We deliver some pre-vocational courses in the north-west as well, but full qualifications are out of Alanvale around electrotechnology. We have some capacity in the north to manage future growth. We have demand exceeding supply, if you like, more in the south of the state. We also have a slightly bigger facility in Alanvale.

CHAIR - So you have a few options there to work with.

Mr ADAMS - In regard to your other question in terms of online, one of the things we are looking at at TasTAFE is our delivery models and being more flexible, so we can deliver those components suitable online to a larger audience at one point in time and then break them up into their practical components, and that again factors into the sort of philosophy around the build.

Ms RATTRAY - A question on the graph. I am interested in - and I may have missed it and forgive me if I have - the reference to 2D CAD.

CHAIR - Computer-aided design.

Ms RATTRAY - That's all very foreign to me.

Ms SAMPSON - It's software.

Mr ADAMS - It's software used in industry for architecture - for designing the plumbing in a building and that sort of stuff.

Ms RATTRAY - Did I miss that in there?

Mr ADAMS - It probably wasn't spoken about in much detail.

Ms RATTRAY - If it wasn't, that's good.

CHAIR - It stands for two-dimensional computer-aided design.

Ms RATTRAY - Thank you.

Mr ADAMS - It's just the evolution that when people are designing buildings now they're doing it on a computer rather than the old hand-drawn stuff. As it indicates there, there's certainly increasing demand for tradesmen to come in and learn how to do that.

CHAIR - On electrotechnology, is there any training being considered or delivered for the operation of robots? Obviously, in some industry there is a lot of robotics. Is this something delivered at this site?

Mr ADAMS - No; in short, we do not do any.

CHAIR - You do not see this as a possible expansion area, or would industry be delivering a specialist robotics they are employing?

Mr ADAMS -. I would probably need to refer to our educational team. At the moment, robotics is probably more a domain in universities, in how you program the robot to do things, but it is certainly not something we are currently training.

CHAIR - I thought in the electrotechnology area robots might have risen as an issue.

Mr ADAMS - It has not been raised with us

CHAIR - On page 7, it says the water sector was expected to generate $24.2 billion-worth of revenue in 2017-18: did this occur? You may not have the answer.

Mr ADAMS - No, I do not have the answer to that one.

CHAIR - It seems a bit odd and just a figure someone has put in there. I reckon it has been taken out of another report at some stage and been missed.

Mrs PETRUSMA - Mitchell Plastics is a fantastic business in my electorate of Franklin, and it has had a fantastic growth over the last decade. As they are mentioned in the submission,

what conversations have been held with Mitchell Plastics and how will this assist them in the future?

Mr ADAMS - Yes, the main focus in assisting them is on the poly welding components. We have had a number of discussions with Mitchells and they will be or have already been invited to the industry subcommittee working in the party on poly welding. This is clearly an area experiencing rapid growth in Tasmania. Currently, there is no formal training on poly welding and Mitchell Plastics do a lot of on-the-job training. The discussion is really on how we can turn that into accredited training both to the system and also how to ensure it is a transferable skill for students.

Mrs PETRUSMA - They are a great employer for the Huon Valley. That is a great initiative; well done.

Ms BUTLER - In relation to the paragraph on Tasmanian irrigation plans, my good friend and former water minister David Lewellyn was the mastermind behind the Tasmanian irrigation system; fabulous by the way -

CHAIR - No political ads.

Ms RATTRAY - I would have to say when he was the leader, Jack Smith was the founding father.

CHAIR - We won't argue about that.

Ms BUTLER - The Tasmanian Irrigation 2016 report says a further a $149.5 million of potential projects is under investigation. Can you outline how the courses in this centre of excellence would complement the irrigation scheme at the moment?

Mr ADAMS - Absolutely. A couple of components: the first one would be around design. The first component in the education plan talks about courses to assist students in how to design irrigation schemes. The second component is the delivery of the irrigation scheme. Our core qualification is deal with issues around pipeline and what have you.

Ms BUTLER - They would be transferable skills they could use in other states that would be copying our very clever irrigation system?

Mr ADAMS - Yes, our focus is wherever possible to always give accredited training, which gives them transferable skills recognised Australia-wide.

Ms RATTRAY - With the envy of the rest of the country in that regard.

CHAIR - With regard to the building of waterlines, fish pens, bird net stands and so on, do we have any understanding of how many employees in the industry are doing this and how many are you hoping to train?

Mr ADAMS - I do not have those statistics in front of me. We certainly discussed, particularly with Mitchell Plastics, the size of their workforce, but I do not have the numbers.

CHAIR - Are there any other niche providers, private enterprise providers or is it Mitchell's doing its own training?

Mr ADAMS - There isn't anyone really training in this area at all.

CHAIR - For them it is all on-the-job training and they will presumably partner with you in setting these courses up?

Mr ADAMS - Yes, that is right. At the moment there are no training providers we are aware of.

Mrs PETRUSMA - You touched briefly on specialist cool climate training. Can explain more about specialist cool climate training? Why is it not currently available anywhere else in Australia? What would be advantage for this site in Warrane?

Mr ADAMS - The cool climate training we referred to specifically refers to wastewater training. At the moment, Queensland is the only place that specialisation is delivered, where they have a training facility to deliver on those specific components of wastewater training. I cannot give you too much detail. Some wastewater training is included in the core qualifications, but there is specialisation around wastewater training and design of wastewater treatment facilities. That is only delivered out in Queensland and all states send people to Queensland for training. Part of the problem with waste water is that it is very climate dependant and the Queensland climate is very different. We have identified a gap, particularly for south-east Australia with specific climate associated training on waste water which we can fill, because there is no facility doing that at the moment.

Mrs PETRUSMA - Other states are sending students to Queensland at the moment?

Mr ADAMS - Correct.

Mrs PETRUSMA - Is that all southern states

Mr ADAMS - Yes, everyone sends students to Queensland. We believe there is an opportunity for certainly south-eastern states to send to Tasmania because it would be more relevant for training

CHAIR - Are you aware other states are looking at this area?

Mr ADAMS - Not that we are aware of.

Ms RATTRAY - Does 'south-eastern' include South Australia?

Mr ADAMS - Yes, it could do; obviously South Australia will need to determine which one is most relevant to their climate as they are probably at the hotter end.

CHAIR - It is simply the physical design of plants and how the various stages sewage treatment needs to go through and that sort of thing.

Mr ADAMS - Yes and climate apparently -

CHAIR - Has a significant impact on that. That is fascinating.

Mr ADAMS - I do not know whether James or Febianca -

Ms SAMPSON - It is more like an engineering equation for that one. The specification they put into the wastewater design is beyond architecture. James, do you know anything about the specification for waste water in a cool…

Mr KAZALAC - No. I have not come across it in previous training centres I have worked on; it might just be a specialised one in Queensland at the moment.

Ms BUTLER - I have a question around 3.1, Project site. To clarify, can you advise what the current gross floor area is of the Claremont Campus? The existing one at the moment. Can you advise what the proposed Clarence campus area will be?

Ms SAMPSON - Correct me if I am wrong, James, is it 4000 square metres currently?

Mr KAZALAC - Yes, 4000 at the moment.

Ms BUTLER - Thank you.

CHAIR - What will be the impact overall on the Claremont campus? Is it intended to be updated in any way to satisfy other industry training initiatives, or are you pulling out of there altogether?

Mr ADAMS - The Claremont campus is a Department of Education site; we are only a tenant there at the moment for plumbing. We don't yet have a plan for what will happen once plumbing moves out of there, but we will start those discussions with the Department of Education. TasTAFE will maintain a presence at the Claremont College site. We are investing at the moment in building a new hospitality training centre at that site and will continue to deliver that training from Claremont, but that is not within the plumbing buildings.

CHAIR - Regarding the nursing and aged care teaching facilities under the existing building and facilities at Clarence campus, how is that going to work in with nursing provided on the Domain campus for UTAS? How are you interacting with them in regard to that nursing curriculum?

Mr ADAMS - There are two answers to that. The way nursing training is delivered - we are responsible for enrolled nursing training through TAFE and the university delivers registered nurse training. We do the ENs; they do the RNs. We also, in our health hub, do a lot of aged care and individual support training for the aged care sector. So that is the split of training, if you like. However, we work in partnership with the university and, particularly with the investment they are making up north in Inveresk, we are looking at certain specialisations we might deliver through the university facilities. By the nature of their training the university has more advanced simulation labs, which allows you to have a dummy in a lab, if you like, and program in certain medical episodes. Out of our nursing training we are looking at various specialisation components that are best delivered through their facilities.

Ms BUTLER - On that, would you be able to provide some insight into what the changes will be to the construction aspect of those existing buildings? I know Master Builders and the

HIA are taking on accredited training. Will that reduce the amount of builder training that occurs at this particular campus? Do you know what that is going to look like if that rolls out?

Mr ADAMS - With the delivery of this centre of excellence?

Ms BUTLER - Existing construction facilities at the moment - will you still need that same amount of space there for the building and construction aspect with that change with the MBA taking on the accredited training aspect?

Mr ADAMS - Yes, absolutely. We don't see any reduction in the need for capacity in our construction and trade training at Clarence. There is very strong demand in that space and we work closely with the Master Builders Association around the delivery of training. Again, it is a model whereby we are best placed to deliver certain components of the training. For some of the other components when we move up to the certificate IV level and diploma, we work in partnership with Master Builders to deliver that.

Ms BUTLER - But basically that will still be on site at Clarence anyway?

Mr ADAMS - Absolutely.

Ms BUTLER - Thank you.

Mrs PETRUSMA - In regard to student accommodation, it talks about its onsite accommodation for 60 students and how that the site also has room for further expansion. I have two questions on this: Is the accommodation full at the moment? What do you expect will be the accommodation needs for the future?

Mr ADAMS - In answer to the first question, the accommodation is not full at the moment. Part of the reason for that is because the accommodation has not been promoted to our students as much as it could have because the accommodation was used for other parties as well. We changed our approach around accommodation with a TasTAFE student-first focus so I imagine the accommodation utilisation will increase over the next year. In answer to your question, it is not full at the moment so it has some capacity for growth, but based on the numbers you have seen in the education plan, we predict we will need to add additional accommodation in the future. We can certainly accommodate that on the site, we have the space, but that will be subject to separate funding.

CHAIR - Do you envisage a number there as to how high you could go in that regard?

Mr ADAMS - We have the physical capacity to double the accommodation on the site.

CHAIR - Under the existing electrotechnology analysis you provided in the report on page 10, the last dot point says no onsite or nearby TasTAFE accommodation for out-of-area students. Have you thought of working with the University of Tasmania? They certainly have a lot of accommodation that is built and because of COVID, I imagine is not being utilised as heavily as it might.

Mr ADAMS - Absolutely, and we do work with the university and we did throughout COVID in terms of utilising student accommodation. In terms of our accommodation strategy,

when our onsite accommodation is full, we go to the university as first provider, but again it is not onsite so you have a transport issue between where it is.

CHAIR - And you could hardly develop it at Campbell Street because of the space needed, presumably. Is that right?

Mr ADAMS - Yes, correct.

Ms BUTLER - On that, is there a reduction in the price of accommodation for student apprentices who as a general rule do not earn much? If they are having to travel from, say, Burnie for a practical module, are there discounts offered? Could you run through that?

Mr ADAMS - With the student accommodation, TasTAFE students who want accommodation are eligible to apply for an accommodation allowance through Skills Tasmania and that is given directly to the student, which helps them to pay for accommodation at TasTAFE. Our accommodation is already significantly cheaper than other available accommodation but with those subsidies it is effectively cost free for students already.

Ms BUTLER - Good, thank you.

CHAIR - With accommodation, do you envisage it being used part-time for students or do you see them living on site for significant periods of time, as in months, or is it overnight, or two or three days at a time? What does that look like?

Mr ADAMS - Most of our training, particularly when we talk about apprentices, is what we refer to as bloc release, so students will come for a block of training and that can vary. It is typically around four weeks, so they do a four-week intensive block of training and then they will be back with their employer for a number of months, so generally it would be no more than four weeks at a time.

CHAIR - Is the accommodation catered? Is there some form of catering or are they left to their own devices?

Mr ADAMS - They're left to their own devices. They have their own kitchen facilities within the units but we don't provide catered accommodation.

CHAIR - I am interested because where it is located, I suppose, it has access to restaurants and cafes but a fair way away. If it is self-catering, they all have their stoves and fridges.

Mr ADAMS - Yes, all self-catering.

Mr ELLIS - Two-minute noodles.

Ms RATTRAY - That's university students, isn't it?

CHAIR - We've heard about how non-nutritious that sort of meal is, but I'm sure we've all gone there at some stage.

Mrs PETRUSMA - In regard to the building envelope, it takes up a reasonable part of the land but there is still plenty of land left. Can you explain how that may allow for expansion in the future, please?

Mr ADAMS - Absolutely. I will refer to the master plan report we tabled earlier today.

The master plan for the Clarence site sees future stages of development really with a focus to ensure any equipment-intensive training is located at our Clarence site. Obviously, the first components are plumbing and electro moving there. Future development would see automotive move out there as well, because that's a capital intensive training component currently delivered from Campbell Street, which is not ideal and is certainly space-constrained. And then future development would potentially include hair and beauty, which is also delivered out of Campbell Street, to the Clarence site.

We see Clarence as the ideal site for any equipment-intensive training, which would leave Campbell Street more focused on what we term general learning areas, so classrooms and computer labs.

Mrs PETRUSMA - How much of the remaining site would be available then for these future initiatives?

Mr ADAMS - What's the total area of the site?

Mr EAVES - The total site is about 15.27 hectares, but we're probably only using less than one-third of that for this. Would that be correct?

Mr KAZALAC - Yes. We've got a small portion of that.

Mr ADAMS - That's for where this site goes. You'll also see from the master plan that we have vacant space up the top of the site and on the right-hand side as you enter the site and behind the childcare centre. We have no shortage of available land.

CHAIR - At this particular time there's no thought of Campbell Street being vacated?

Mr ADAMS - No.

CHAIR - I have one a question on project objectives, and I asked this during the site visit. Is there any research component or collaboration with relevant industries to foster innovation? Quite clearly, a centre of excellence is only a centre of excellence if it is indeed at the top end of what it's offering. How are you intending to deliver that?

Mr ADAMS - Absolutely. Applied research is a key component of our centre of excellence. We have started discussions and we have letters of commitment from the university to work with us on the research components at the site. We haven't progressed much further yet in terms of what those components are. I guess it's a tripartite arrangement with ourselves, the university and industry as to what the focus of that applied research should be.

CHAIR - Quite clearly, in some areas Tasmania offers an opportunity to really push the envelope. When first looking at this I thought we do have some competitive edges to be a

centre of excellence. Obviously, I'm interested in that side of it - how we intend to move forward and gain that ground.

Mr ADAMS - TasTAFE signed a memorandum of understanding with the university in 2019 to work more collaboratively. Tasmania has many advantages, one of which is that it has a single TAFE and a single university, which makes working together a lot easier than in other jurisdictions where you have multiple providers.

CHAIR - And multiple interests?

Mr ADAMS - Yes. Those discussions took a bit of a backseat last year due to COVID and various other activities, but that will be ramping back up.

Ms RATTRAY - The value for money statement, before we leave page 12, is something that we normally ask at the end of this process. Is the Tasmanian community receiving value for money? Is there something specific you can point me to that reassures me we will be getting value for money, even though we haven't got to the fact that building anything in Tasmania at the moment is quite a challenge given the constraints on availability of tradespeople?

Mr ADAMS - Perhaps I could best answer that question by saying that the investment in these facilities is needed based on the age and the lack of suitability of the existing ones. Doing it at the Clarence site will ensure we maximise value for money. There is a range of advantages building within an existing campus. All the support infrastructure I've mentioned is at the one site, a lot of which would need to be replicated if we went anywhere else. In the business case, which we have taken through to the TasTAFE board, we detailed the ongoing running costs of this facility, showing that both in terms of delivering teaching and student support services, it is significantly cheaper than even the existing facilities because we have them co-located.

Ms RATTRAY - And for some of those areas you already mentioned in previous answers as well?

Mr ADAMS - Yes, and in a much better environment for students because they have access to all that infrastructure that they don't elsewhere.

Mr ELLIS - Would you mind reiterating that? Constructing at this site would actually increase the value for money, not just because of the new build but the rest of the campus around it because there will be greater utilisation of some of those shared services?

Mr ADAMS - Absolutely. The shared services and student support services I have mentioned will offer far more value for money by activating this site more. The more students we have on the site using those facilities, the delivery cost per student comes down dramatically.

Mr ELLIS - It's a win-win for the existing facilities at two separate locations coming together?

Mr ADAMS - Yes, it is a win from a value for money perspective but it is also a win from the student experience. The learning opportunity, particularly with the trades co-located

in one site, which we have seen at our other facility in Alanvale in Launceston, where we have more of the trades co-located across learning opportunities, is significant.

CHAIR - The consultation of the design brief on page 13 -

> In line with the State Government's procurement guidelines, following a procurement process for architectural services, in July 2020 ARTAS Architects … was awarded the contract to design…

The state Government's procurement guidelines. Yet in the federal agreement paper, it says that you have to ensure compliance with the code for the tendering and performance of building work, Building Code 2016. Do the state Government guidelines follow that or is that a separate thing to the procurement guidelines the state Government has?

Mr ADAMS - The reference here is around the Treasurer's Instructions for contract procurement, which related to the appointing of our architects. The federal one relates to when we go out to tender for the actual build component.

CHAIR - The Building Code of Australia.

Mr ADAMS - We need to meet both federal and state requirements at that time.

CHAIR - I wanted to clarify to show you we read the paperwork.

Mr ADAMS - This one really just talks about the Treasurer's Instructions in terms of contracting.

Mr ELLIS - Page 13 notes excellent public transport links. Can you give us a sense of that and why that would be important for apprentices?

Mr ADAMS - It is all about being able to access the site for delivery of training. This site has two advantages - it has ample student car parking for students but it also has good public transport links. For this site in particular, public transport basically goes to the front door. The regular bus service drops students off in the middle of the campus, which means it is good access for all students.

CHAIR - Even though most apprentices probably have their own vehicle, a lot do come by bus.

Mr ADAMS - At this site we cater for a lot of other training too so transport links are very important for us.

Mrs PETRUSMA - There is also a big school in the same location, and a big organisation is located there for people with disabilities as well as another workplace for people working in forestry with wood. It is a big site which buses and local transport use quite a lot.

CHAIR - I was thinking that as we went through. With the school being there and other facilities and aged care training, quite a dense set of activities happens on that site, or in that area.

Regarding page 14, I think we could have done with a slightly more defined plan; it is very difficult to read. It might be in your master plan - is it?

Mr ADAMS - That site schematic will not be in the master plan. That is subsequent to the master plan. We can certainly look to provide you a more readable copy.

Ms SAMPSON - I have one copy, if you want to borrow it.

CHAIR - I just saw 'Antarctic Division' there and I thought, 'This is not Macquarie Point, what's going on?'.

Mr ADAMS - TasTAFE delivers training for the Antarctic Division for expeditioners going to the Antarctic.

CHAIR - And they deliver it on that site?

Mr ADAMS - Yes, at the moment that is delivered out of Claremont and that will go to this site.

CHAIR - I would have thought with Macquarie Point becoming what it is to become with regard to the Antarctic industries those things might happen on that site, but not so?

Mr ADAMS - No, because we train them in things like basic emergency plumbing repairs and electrical et cetera so it would best be suited at this facility.

CHAIR - They have to be where you are.

Mr ADAMS - And that is where the teachers are.

CHAIR - That is fair enough.

Mr EAVES - It probably should be pointed out this is not the final design, this is just an indicative layout.

Mrs PETRUSMA - When will the final design be prepared?

Mr EAVES - We have to go through that detailed design framework, which is getting all the technical specifications together, building up intelligence around the equipment currently in place, understanding the demographics we have been talking about with student numbers and the mix and everything else. Then the architects will be able to put that through their business models or building models and that should reshape that layout and utilisation.

Mrs PETRUSMA - Is there a time frame for that?

Mr ADAMS - On our current time frame, first week of June for completion of the design.

Mrs PETRUSMA - I see where you have to put in a DA to Clarence City Council.

Mr ADAMS - The DA will go in before that. The DA doesn't require the full final design.

CHAIR - It is supposed to be this month, isn't it - February?

Mr ADAMS - I have 15 March down for the DA.

Ms SAMPSON - We are thinking 15 March, depending on program management.

Ms BUTLER - Referring to page 14, when I asked the question previously about the floor space area, I think the answer was 4000 square metres. What section were you referring to? Were you referring to the entire floor area or the actual dedicated floor area?

Ms SAMPSON - James, please correct me if I am wrong, is it the first floor, the first floor plus ground floor plan, or is it just the building footprint, 4000 square metres?

Mr KAZALAC - No, that is the total ground and level 1 area.

Ms BUTLER - That is total - all right. Do you know what the actual area is itself? I am not talking the total including hubs or the different breakout areas, but the actual dedicated floor area. Do you know what that is?

Mr ADAMS - For what?

Ms SAMPSON - Do you mean the building footprint?

Ms BUTLER - I'm not talking about the electro section; I'm talking about the actual layout area, the workshop area.

Mr ELLIS - Chair, I am not following the relevance.

Ms BUTLER - I just want to see if it is as big here as it is at the moment in Claremont. Has there been a reduction in the actual area space?

Ms SAMPSON - You just want to compare within the access thing and what we currently propose? I think it's bit on par, if I'm not mistaken, James Kazalac, in that we're just providing more multi-use sort of purpose spaces instead of dedicated spaces? Is that correct, James?

Mr KAZALAC - Yes, that's right. I think there's around 2800 square metres at Claremont. With the 4000 we've got here it's sort of about a two-third split, so we're not far off but we do have a change from that sort of single use enclosed space at Claremont to more open plan in here. So it's similar. There might be a fraction below, but it's just got a slightly different design typology of the spaces.

CHAIR - You have moveable walls and things like that to be able to configure the spaces?

Ms SAMPSON - Yes.

Mr KAZALAC - Yes, correct, where possible.

Ms BUTLER - So the floor area at the moment is larger at Claremont than this will be?

Mr ADAMS - No. The floor area at Claremont is approximately 2800.

Ms SAMPSON - It is 2700-something.

Mrs PETRUSMA - It's on page 9 of the submission.

Mr ADAMS - The submission one is 4000 including electrotechnology so it's substantially larger and more flexible. It's larger than Claremont but it also includes electrotechnology. In total floor space we're not delivering more for plumbing than we currently have. It's pretty close to about the same, but we'll get a lot more productive use out of this space.

Mrs PETRUSMA - It's also because this is a much taller building too. In this building you can have up to four different levels and you've got the sandpit and everything else, so you're using the space in more innovative or productive way.

Mr ADAMS - Yes, far more innovative. What you also have at Claremont, as I indicated earlier, is a lot of small dedicated rooms, which is not a good use of space, whereas here with the roll-in, roll-out philosophy we have a bigger open workshop, but it will be reconfigured depending on what they want.

CHAIR - It's more flexible?

Mr ADAMS - Far more flexible

Ms BUTLER - It's more flexible but is there as much dedicated space for plumbing in this new facility as there has been at Claremont because this new facility is also shared with other areas?

Mr ADAMS - As James indicated, it's a bit hard to separate them, but it's roughly the same. At Claremont we've got about 2700 square metres and this facility's going to be 4000 square metres with about two-thirds allocated sensibly to plumbing, so it's close to about the same.

Ms BUTLER - So we're going for something that's the same, but you believe the number of apprentices going through and using that space will be vastly increased, maybe doubled?

Mr ADAMS - Yes.

Ms BUTLER - But they're going to have the same space as they have now. That's what my point is. I know it's a dedicated shared area, but seems to me like they're getting less than they have already.

Mr ADAMS - They're not getting less; they're getting space that can be reconfigured for different purposes. For example, at Claremont they have a particular training area that's dedicated to training that happens four weeks out of the year but that takes up a whole section that's not used for anything else. Under this model there won't be dedicated space, there will be a roll-in component so they can deliver that training, move it out and use it for something else.

Ms BUTLER - Has there been any feedback from staff or people who will be working within that space that that area of floor space could be of concern? If it's meant to be a centre of excellence, it will have more students using that space and more teaching staff. Has that been raised as a potential issue?

Mr ADAMS - We're going through a series of workshops now with the teachers through this plan and the detail of equipment and how each space is being used. That process is happening over the next few weeks. Up until now we've taken the input we've been provided and developed a schematic design. The next phase - and Febianca might want to expand on that - is to go through with each of the teams around their particular requirements and make sure that that functions properly for them.

Ms BUTLER - I have another question on teaching officers within the facilities. Is there any dedicated teaching office facility?

Mr ADAMS - That is one of the things we are working through now. You will see there is an office admin at the front, some dedicated space. We are also looking to maximise the use of the existent capacity. All our teachers will have a dedicated office space, whether it is in this facility or within the existing campus.

Ms BUTLER - So they potentially will have to walk from other areas in the campus to this area?

Mr ADAMS - Potentially.

Ms BUTLER - Is that a cost cut, design fault or a normal part of the design system?

Mr ADAMS - No, it is not unusual within TasTAFE to have teacher offices and then administration facilities separated to the workshops. It is a fairly common approach.

CHAIR - What about occupation, health and safety issues?

Mr ADAMS - Yes, we will have the lecture facilities here and have the classroom teaching facilities. All our classrooms are structured to allow teachers to come in, plug in their laptops and deliver the teaching component. They have the space within the classroom for that component. Is when they are doing the non-teaching time they are at their office accommodation.

Ms BUTLER - And I suppose, if there is an issue with the teaching staff, that would be raised in that next sort of consultation?

Mr ADAMS - Yes, it will be raised through there or after that it will go to a phase with each of the working parties I mentioned earlier, to tick off we met all their requirements. The teachers are represented in that process.

Ms BUTLER - OK, thank you.

Mr ELLIS - Would it be fair to say that having quite administrative workspaces separate from noisy workshops would be common sense in terms of design?

Mr ADAMS - Yes, very much so.

Ms BUTLER - Best to leave it to the teachers to decide what they would like to work with.

CHAIR - I am sure they will if there is an issue, and it sounds like they are going to get the opportunity, which is important.

Recruiting of staff is on page 16. Obviously, the expertise might not exist here. What process will you be going through to recruit staff? We touched on this a bit, but is there an intention to scan for expertise outside Tasmania, or indeed Australia? Or is it all going to be in conjunction with industry and training up the experts in the industry as teachers?

Mr ADAMS - Oh no, it will definitely be both. There is training from within and the models I talked about to have people from industry upskill to teaching, but we also recruit nationally, and had quite a bit of success in recent months. A lot of people want to move to Tasmania now.

CHAIR - That's funny, isn't it?

Mr ADAMS - Getting them here has proved difficult.

Mr KAZALAC - I think I am the next one to come over.

CHAIR - Well, you know, you need to get your Tassie passport.

Mr KAZALAC - Absolutely.

Ms RATTRAY - Probably you need to check with your wife and family first.

Mr ADAMS - Certainly, we have one or two plumbing teachers who commenced with us this year from the mainland.

Mr ELLIS - You noted TasTAFE is looking to be more responsive to student needs of out of hours, weekends and that sort of stuff. A bit more flexibility in terms of getting people who are working part-time on the tools and may be being able to teach at night or on weekends. Would that sort of help improve the delivery and also getting more skilled knowledge into the Tasmanian sector?

Mr ADAMS - Absolutely, it will do exactly those two things. It will help flexibility, so we can deliver the training required when it suits both, students and industry. But it also is very important getting that refresh of what is going on in industry. We can get so much from the design of training packages and our contacts through ASTRA to ask them where that is going, but there is a whole component of what are the things industry is using now such as different crimping tools et cetera. That is very important too, to make sure the training is current, which takes some time to flow through to a training package we designed.

Ms RATTRAY - Chair, I note there have been some preliminary discussions around the arts scheme. Can we have some indication of where those discussions are at?

Mr EAVES - Certainly, we have been talking to Arts Tasmania with the idea of also being inclusive of Aboriginal artwork on the site. We also want to be able to incorporate some of the available land you saw when you were out on the site. You would have seen there was a rotunda. Bringing that down and using that area there for quiet areas, where students would like to sit down and have a quiet shady area, but also incorporating Aboriginal art. There is around about $160 000 in initial scoping exercise toward that.

We have some preliminary designs about what they could do and having a name board coming into the entrance of the campus. We will have some name board that will give industry partners their name in lights, if you like, so we can share the experience of the centre of excellence with the industry. We are working on a combination still in the infant stage at the moment. Arts Tasmania and ourselves are working very well together getting that design through.

CHAIR - That would be David Patman?

Mr EAVES - David Patman; that is correct, yes.

Mrs PETRUSMA - The first paragraph of page 17 talks about future polymer plastics and hydrogen gas; when do you expect that to come online and be taught at Warrane?

Mr ADAMS - Polymer plastics, I expect, would be delivering certainly when the centre opens in 2023. There is quite a bit of work to do to determine just what the training requirements are for hydrogen gas. That could well be online by 2023; it might take longer depending on that process.

Mrs PETRUSMA - On this page it also talks about the building as a tool for learning. Can you explain that concept for the record, please?

Mr ADAMS - Yes, I might defer to James or Febianca to talk about the building as a learning tool.

Ms SAMPSON - I am happy to explain or James, would you like to explain?

Mr EAVES - You can start off.

Ms SAMPSON - As shown on the report, we would like to introduce a passive sort of learning tool. We are trying to expose the services so the apprentice or student can see what is going on when they lay pipes and what happens if the toilet flushes and the like, wherever we can, in the foyer, in the amenities area. Is there any other addition to that?

Mr KAZALAC - Not really. The more we expose the physical services throughout the building, the more, the knowledge is observed by the student. That has been a key thing to all this. You get, obviously, a higher workmanship quality than is usual from the mechanical point of view concealed by ceiling tiles and what not. The more we can show and the more on display, gives this passive learning happening throughout the building, not just in the actual class itself. It is quite a powerful tool.

Ms RATTRAY - The front entry will not include those three toilets, though, will it, James? If so, my answer is no, now.

Mrs PETRUSMA - James, can you for the record, let us know where else in Australia is this concept being used, please? We have seen in the submission that it is based on the Centre Pompidou in France, but also it is being used elsewhere in Australia.

Mr KAZALAC - Yes, a couple of projects I have worked onwith PICAC, which is a joint venture between the Plumbers Union, the Master Plumbers and a few RTOs altogether. They have done some work obviously in Victoria, also some training centres in Queensland as well, so those buildings there that use this typology trying to show the knowledge of what's hidden behind things. You've got the example of the toilets with cisterns. With the one we just completed not long ago in Narre Warren, we had a geothermal heat pump system so we had the conduits in the ground exposed; we had hydronic heating in the slab too, so that's shown as a portion of exposed services as well. Those are examples of how the building works and operates. It's all part of that learning experience as well. We try to take that across the border to as many facilities as we can.

Mrs PETRUSMA - Which centres did the photos in the submission come from?

Mr KAZALAC - I don't have them in front of me.

Ms SAMPSON - I think that is PICAC at Narre Warren.

CHAIR - Page 18.

Mr KAZALAC - Yes, they're the most recent ones we've worked on and that had geothermal, hydronic heating, services and fire sprinklers included as all part of that process, and the toilets as well. There were a few different toilet systems in there too. That's always an easy one, the toilets.

CHAIR - I think CH2 as it's called in Melbourne, the Melbourne City Council building, has an element of that, doesn't it?

Mr ELLIS - Yes, and it would be a fantastic learning tool for a lot of plumbers because, like doctors, we bury our mistakes, so we can see what really goes on when you're in the early stages.

CHAIR - I suppose as technology changes you might retrofit some to be able to demonstrate new technology.

Mr KAZALAC - That's the general idea.

CHAIR - Is aluminium welding a part of the training over there or does Incat do all of that?

Mr ADAMS - No, we do the aluminium welding training but that's at our Bender Drive centre which is located adjacent to Incat. There will be a small welding component here which is the oxyacetylene copper welding that they need to do for plumbing, but the majority of welding is done at Bender Drive.

CHAIR - Do you do any casting training at all for cast iron bars, those sorts of things?

Mr ADAMS - Not that I'm aware of.

CHAIR - There aren't too many providers in that space, I suppose, so it's probably all on-the-job training but I was just interested to know if that's something that might be delivered.

On page 18 in the second paragraph you say -

> In exposing the structure, technologies and moving parts the building becomes an expression of the trades themselves and provides opportunity for the industry to market their products.

Are we becoming commercial?

Mr ADAMS - That relates back to our comments earlier about industry contribution, both in terms of the development of the centre and ongoing sport and equipment replacement. We already receive donated equipment from industry at various places at TasTAFE and we would like to see that certainly continue and hopefully ramp up at this centre of excellence.

CHAIR - A bit of in-kind support, is that the opportunity you're talking about there?

Ms SAMPSON - Yes.

CHAIR - Okay. The third dot point on page 19 says -

> Creates space that can accommodate multiple training and demonstrations by eliminating wasted space occupied by equipment not required for the current training module.

Where does that go? Does it just get rolled out of the way?

Mr ADAMS - In the plans you will see a fairly significant central store, so the intention is the equipment gets rolled into there and rolled out when it's required for training.

CHAIR - I suppose it's part of that flexibility, getting back to the efficient use of space - that while a large portion of that space is flexible, there are components that really can't be used for anything other than storage in that regard.

Mr ADAMS - Yes, storage is definitely required to make that model work.

CHAIR - But it's still more flexible to do it that way than providing dedicated space for each individual course.

Mr ADAMS - Yes

Mr ELLIS - It might assist the committee to have a bit more explanation about what these trollies might look like. Are we talking things like backflow valves and thermostatic mixing valves that are small and can sit on top of a trolley, which is very rarely taught in plumbing except for a week or two as part of your full four-year training program? Some places have to do a full room; this way you can shuffle it off into a cupboard.

Mr ADAMS - Perhaps as an example we could table the document Febianca's got there. That is the T and V training unit we were mentioning that we needed four weeks out of the year for training. It's only a small component delivered to apprentices and that is the model. It is a self-contained unit that can be wheeled out, deliver the training and then it slides away. Previously that was an empty room for 48 weeks of the year. At our current facility it's all fixed infrastructure at the moment so it's a dedicated space that gets used four weeks out of 48.

Mr EAVES - The other advantage with that is we can always take it back to industry and say, 'Update it and bring it back.'.

Mr ADAMS - That is an important point. Obviously, there is a fair component of fixed infrastructure but the less fixed the infrastructure, the easier it is to replenish and replace it.

CHAIR - Sounds good. On page 20 we have the sandpit.

Mrs PETRUSMA - My question was in regard to the sandpit. Can you explain the advantages of the sandpit, but also what is in current use at the moment and how this is more advantageous, and the issues around the height? How are you overcoming those?

Mr ADAMS - At our current facility at Claremont there are two sandpits that are both quite small and difficult to use. At this site there will be one sandpit. What we call the stack or the four-storey tower will sit and overhang part of the sandpit and that allows them to do a full building plumbing right through to what happens in the ground and the termination of facilities. The sandpit here will also be significantly larger to allow for all the other training in terms of laying stormwater and sewerage, installing septic tanks and the model is they can do the training and then there will be a gantry system over the sandpit which allows them to then pull that stuff out, reset the sandpit and start again.

CHAIR - It sounds very interesting. It is more than a bucket and spade, isn't it?

Mr ADAMS - One of the big advantages with the new build is that the stack is very important; a lot of training takes place in that where they set up the plumbing et cetera room by room, and to be able to have that right through down to the sandpit is very important.

Mrs PETRUSMA - Is this sandpit seen as industry best practice? Is this going to be industry-leading or is it equivalent to what other states have?

Mr KAZALAC - It's going to be similar so it will be on par with what the other states are doing at the moment. There are variations to this. Some like to have it fully integrated under the sandpit, some like to have it adjacent as well. I think this is right up there with getting that real-life simulation of construction into the training area, which is a key component to the course delivery.

Mr ADAMS - The sandpit is also used for fairly extensive training by other components of industry and Tasmania Fire Service uses the sandpit facility for some of its training as well.

Mrs PETRUSMA - A popular addition, by the sound of it.

Ms BUTLER - Will this be able to assist with training for multistorey plumbing as well as just your normal plumbing? Was that part of the function?

Mr ADAMS - Yes, that is one of the reasons it's a four-storey stack - so they can demonstrate basically all the components required for multistorey.

Ms BUTLER - Can you run through the current situation with the area where the site will be potentially built, with it being reclaimed land and some of the potential issues there and how you will eliminate any risk around that?

Ms SAMPSON - I don't think it's reclaimed land. It's more like it's filled. The geotech report and the advice from the engineer - we just have to put in piling. The deepest pile to the bedrock is 3 metres, but that's only happening in the centre of the site and the rest of the site will be around 0.3 or 1.2 metres.

CHAIR - What, the sandstone base?

Ms SAMPSON - Yes.

Ms BUTLER - I was a bit confused. I thought when we had the walkthrough this morning it was reclaimed?

Mr ADAMS - No, it's certainly not reclaimed.

Ms SAMPSON - It's filled.

Ms BUTLER - Re-filled?

Mr ADAMS - It's not reclaimed land.

CHAIR - It's built up. A bit of slope has been taken out of it by putting in some fill.

Ms BUTLER - Okay, all right.

Mr ADAMS - Yes, it's certainly not reclaimed.

CHAIR - I think further towards the western road, or creek, whatever it is.

Ms BUTLER - Okay. So we don't have to worry about finding deposits underneath that soil in time, or anything like that?

Ms SAMPSON - Hopefully not, unless it's in poor condition.

MR EAVES - It's all been tested; it's all clean.

Ms BUTLER - Thank you.

CHAIR - What about Aboriginal artefacts? Has anything been done in regard to that?

Mr EAVES - Nothing has been found. There was testing.

CHAIR - There was an examination of the site?

Mr EAVES - Correct, yes.

CHAIR - I'm trying to understand the stormwater on page 23.

> The proposed development will require stormwater detention so that there is not an increase in the discharge between pre and post development flows.

I would have thought post-development, it's going to increase because there's a bigger roofed area and therefore it's going to have an increase. I couldn't understand it.

Ms SAMPSON - The current capacity for stormwater infrastructure wouldn't have the capacity.

CHAIR - It doesn't have the capacity?

Ms SAMPSON - It doesn't have the capacity, yes. We either have to upgrade the stormwater infrastructure, or we have to have an onsite stormwater management system, which is what we prefer.

CHAIR - It collects it and then lets it go at a certain rate?

Ms SAMPSON - We treat it and then let it go.

Mr ADAMS - Which again will factor in to what we were talking about the learning opportunities in the building.

CHAIR - I noticed that it talks about a 45 per cent reduction of total phosphorus and total nitrogen et cetera. How are those elements likely to increase with storm water? It seems a bit odd.

Ms SAMPSON - Just the roof area, and also the water runoff from the driveway and the hard stand area. That will run off and will need to go somewhere.

CHAIR - And that will bring through the phosphorus and nitrogen? Yes, okay, it's interesting. As you say, because you are dealing with sewage and grey water, it's a good learning opportunity. You're utilising some of the collected water; you're treating it. You're utilising some of the collected water for toilet flushing, and those sorts of things?

Ms SAMPSON - That's the plan, yes.

Mr ADAMS - There's potential, depending on where we go with the plans, for using it elsewhere on the site, on the campus, to maintain the grounds. We do deliver our horticulture training from that site as well.

CHAIR - Given the Government's push for electric vehicles, they were talking about training in electric vehicles before. What about charging of electric vehicles on this site for students or staff who bring electric vehicles to work? Is there any consideration of charging facilities being incorporated with this development?

Mr ADAMS - Not at this time, but we'd certainly be happy to consider it.

CHAIR - I can't direct you to do that. That's not my position, but it's just something to think about.

Mrs PETRUSMA - Just in regards to parking, I know that it appears that there's going to be plenty of parking on site, but if we get the great numbers in 2027, which is in this report, as you were saying before, some of the spare land could be utilised for parking if need be in the future.

Mr ADAMS - Yes, at the top end of the side where our main student car park is, we have more land up there. Some of students already choose to park up on the grass, but there is certainly the opportunity to extend that carpark, should the need arise.

Mrs PETRUSMA - Thank you.

Ms BUTLER - Can we explore the dot point on page 24 about the landslide hazard area -

> The proposed work is outside of this overlay so the landslide code should not apply.

So there is no risk at all of landslide and also potential flooding with the creek going along the back of the site? Is there?

Ms SAMPSON - If I'm not mistaken, based on the geotech report, there's no landslide hazard, just like overlays are missing that part of the site as well.

CHAIR - So it's outside that?

Ms SAMPSON - Yes.

CHAIR - Will silt traps and those sorts of things be installed during construction to stop sediment runoff and the like?

Ms SAMPSON - Yes.

CHAIR - OK, moving over to page 26.

Ms BUTLER - In regard to bushfire risk at that area, has mitigation been put in place or a bushfire plan or does the actual building itself need to be built to certain standards? Could you run through that?

Ms SAMPSON - I spoke with a bushfire consultant this morning to clarify that issue. Basically the council is remapping the bushfire-prone area overlay and we are outside that. In the old days, even though the site is on the overlay of a bushfire-prone area, as it is within 100 metres it is still considered as a bushfire-prone area. But now, they're remapping and delineating which area is considered as a bushfire-prone area and which is not under the overlay. We are not in the overlay, so we should not be considered as being in a bushfire-prone area.

Ms BUTLER - I suppose that would be further explored if there are any potential problems when we go through the application process with the council.

Ms SAMPSON - Yes, for sure. The council will determine that.

Ms BUTLER - Thank you

CHAIR - I have one question about the table on page 26 . I note in the middle of the page under the green shaded area that electrotechnology, plumbing, gas/refrigeration add up to 99.85 per cent. You've got 48.15 per cent below that as a subtotal, but it seems to be in a value of 41.269 per cent. I just couldn't quite figure that. It's only 7 per cent but it's -

Ms SAMPSON - It doesn't add up, you mean?

CHAIR - The percentages don't seem to work out. I think the figures add up, because I went through them and checked them all. The percentages to the side seem to be a bit strange.

Ms SAMPSON - The percentages on the side represent what's left compared to the previous scope. It's not really easy to read. Previously we had more area in electrotechnology and then what's left is 60 per cent because of the value managing process and to cut the cost.

CHAIR - Yes.

Ms SAMPSON - And then, in the plumbing we previously had 100 per cent, but now we have 45 per cent.

CHAIR - Okay.

Ms SAMPSON - So, that's the quantity, 1000 square metres is only 60 per cent of what previously may be - I don't know, off the top of my head maybe 1500. Maybe I can do the maths right at the moment - what is 100 per cent out of $1000 - yes.

CHAIR - Okay, I'll believe you.

Ms SAMPSON - Do you get that now?

CHAIR - I think I do. I don't think the project's going to rest on that figure being right or wrong. It just didn't seem to quite calculate. That's okay, it's not a big issue.

Mrs PETRUSMA - Further in regard to page 26, some things are pro rata. Is that because industry will be paying or offering up some of those items?

Mr ADAMS - No, this relates just to the $21 million of government funding. Where it says pro rata, that's just the cost estimate that's been allowed for those services at the moment based on area. This is just the initial project budget to help through the design process.

Ms SAMPSON - It's the value management process that we've gone through.

Mr ADAMS - For example, electrical services pro rata, that figure is derived from whatever we've got in terms of the total building area and it's just an allowance. That's correct, isn't it?

Ms SAMPSON - Yes.

CHAIR - With respect to this whole project that we're dealing with, we're looking at a $21 million project. Is there absolute surety that that will be built? Or is this a project that you're looking to get us to approve that will eventuate in the future rather than in the time line that's put in here? Is it guaranteed that this will be built? Can you explain that to me exactly so we can understand what we're approving today?

Mr ADAMS - Absolutely. The first thing I'd say is we're actually talking about a $22.5 million, so it's $21 million of government funding plus industry contributions. As we go through the design process we were certainly confident that the $22.5 million was adequate to deliver everything we needed when we started this process, but obviously things move on and building costs have increased significantly. It's a little hard to answer the question until we've completed our design process and gone to market as to whether there's an issue there.

CHAIR - But you can appreciate the question?

Mr ADAMS - Absolutely. I have to be upfront with the committee that all the indications are that building costs have risen significantly since we started this process. We feel, in terms of the project, that we need to complete our design process and then assess what that looks like and see whether we can deliver what we need to with the available funding. If not, there are various levers to look at, whether that's further contributions from industry or whatever that might be.

CHAIR - So we're really approving the concept and the integrity of the project, if I can put it that way. Whether it gets fully delivered will depend on future costs that may arise, or may rise more particularly?

Mr ADAMS - Yes. We were certainly confident that we could deliver everything we wanted within the budget when we secured the funding, but things are moving fairly rapidly in the building space.

CHAIR - The question then is, are we going to end up with a two-thirds built set of structures that can't be utilised?

Mr ADAMS - No.

CHAIR - That would be the issue that the committee may turn its mind to.

Mr ADAMS - No. Our intention would not be to go forward with the build until we had a workable facility that will deliver the centre of excellence.

CHAIR - Or at least build full components that can be utilised and other parts that might be added at a later point - is that fair to say?

Mr ADAMS - Absolutely, and we'd need to look at that in terms of all the things we've talked about in terms of the advantages of having students on the one site and what have you.

CHAIR - Okay.

Mr ADAMS - But we would not proceed with something that was only going to deliver half of what we needed.

CHAIR - No, there wouldn't be much sense.

Mrs PETRUSMA - Further to that, under the project agreement you have with the federal government to get the $7 million contribution, are you confident you will be able to deliver, what will ensure that we do get that $7 million to make the $21 million for this project?

Mr ADAMS - There are various milestones as to when the federal government money would be paid, but it will need to be looked at in terms of the overall project and what the final picture looks like.

Ms RATTRAY - The federal government has been fairly flexible in other projects. For the north-east rail line they have had the funding sitting there for about five years, so they are flexible. Page 29 of the master plan talks about stage 1 option A, stage 2 and there is a significant component for the electrotechnology in stage 2. Is that being short-changed in stage 1?

Mr ADAMS - No. In regard to the master plan particularly on page 29, the master plan was prepared for the site independently of this project. When it refers to stage 1 and stage 2, under that plan electrotechnology would be delivered in stage 2. What we have done with this project is combine components out of stage 1 and stage 2, which makes more sense.

Ms RATTRAY - So this is not actually an up-to-date document as such.

CHAIR - Well, it is. Sorry, I shouldn't be answering for him but I think I just heard what you said.

Mr ADAMS - The document itself is valid, but what we have done is take some components of stage 1 and stage 2 to deliver. For example, in the master plan it had new accommodation in stage 1 -

Ms RATTRAY - You have taken the $4.5 million out of that.

Mr ADAMS - We've said the accommodation is less urgent and it is a far better outcome if we move plumbing, gas, refrigeration and electrotechnology together.

Ms RATTRAY - That is the clarification I was looking for, Chair.

CHAIR - So the honourable member's observation is actually correct in the sense that the master plan might need updating as a result of the decisions being made.

Mr ELLIS - Would it be fair to say that the growing demand we're seeing for construction services across Tasmania will be proof of just how important this centre is?

Mr ADAMS - Absolutely, it would be very fair to say that. We've had very strong growth in all our traditional trades over the last three years and there is certainly no indication that that is going to be abating. There will be continual demand from industry for more skilled labour in that space.

Mr ELLIS - So some of those challenges in terms of looking to the next steps are part of demonstrating the need that we have for building this kind of facility?

Mr ADAMS - Yes, absolutely.

CHAIR - Moving on to page 27, how much of the budget is associated with the hydrogen gas component? I know you are saying it is in its infancy but the hydrogen gas component, the Battery of the Nation initiative, do you have a ballpark or gut feel of how much of the budget will be associated with that?

Mr ADAMS - No, we don't. That is part of the process we're going through at the moment so we can't give you the budget broken down into the particular disciplines. That is part of this process about the equipment. It's also a very difficult question to answer because the whole model is to move away from dedicated training facilities. It's a matter of what do you need for hydrogen and how does that fit with all the other components. It's early days in the hydrogen space.

CHAIR - When you are looking at risk mitigation strategy and the impact COVID-19 will have on the construction industry, particularly with respect to the project time lines, have there been any aspects of the COVID experience that have actually influenced the design in any way, shape or form? It might be a question for the architects.

Mr ADAMS - I will give Febianca a chance to talk about that, probably more from the workshop space, but in the other training components, I guess the influence of COVID-19 is really about the ability to be able to deliver more online so those components that can be delivered online or remotely into student homes, we are certainly doing that. You have seen the design and the learning hubs that sit at the top. The principle there is they have all the ability to have students in class or to be able to deliver online to them, which is a bit different to the practical components they have come in for.

Ms SAMPSON - I will let James Kazalac answer that.

Mr KAZALAC - With the practical components part of our flexibility, obviously you are needing more space now with COVID-19. For any practical training requirements, you almost have to double the amount of space you need for certain times or reduce the number of students in that learning activity. This is part of that roll-in roll-out idea, that the more flexibility we can have with open space or multi-purpose gives the curriculum more opportunities to have those practical areas taught during COVID-19 impacted curriculum or year. This is one of the benefits of that process.

CHAIR - That would impact on the overall amount of space required for each of the course components Jen was talking about.

Mr ADAMS - In part, it also influences fairly significantly how we design the program scheduling. Having students come through in smaller groups, but more frequently.

CHAIR - Page 28?

Mrs PETRUSMA - Checking the second point down, 'the planning application is commenced and scheduled to be submitted in February 2020', was that supposed to be February 2021?

Mr ADAMS - I reckon, yes.

CHAIR - It is actually March. That is where I got the February from, we read the paperwork.

Ms SAMPSON - There was a change in programs.

CHAIR - The conclusion -

> The provision of ETW CoE located at the TasTAFE Clarence Campus, will have significant benefits for the local Tasmanian and interstate regions -

I have asked the question about what sort of interaction has there been to be able to state this outside of the general revitalisation agreement of TAFE campuses across Australia? We can build this whiz-bang, all-singing, all-dancing facility, but if we do not have the students to fill it, the money is not necessarily well spent. You are confident you will get the student numbers you are expecting and other states are not going to gazump you?

Mr ADAMS - No, I am confident we will get the numbers for a couple of reasons. As you have seen, our traditional training delivery is showing no signs of slowing up in terms of apprenticeship demand and associated services, but also the list of emerging needs in this area when we talk about not only hydrogen but renewable energy training and the move to waste water. There are significant components to the market that simply are not being serviced at the moment - polymer welding, for example. I am very confident our traditional student numbers will continue to increase and they will also be complemented by those emerging technologies not catered for at the moment.

CHAIR - Any other questions there? We will move to the education?

Mrs PETRUSMA - One last question on page 29. It talks about the flow-on benefits to the broader Tasmania community. How are you going to ensure local builders are involved? It will go out for tender, but how are we going to make sure local builders, plumbers, et cetera, are involved in this build?

Mr ADAMS - As part of the normal tendering process we are required to go through and determine how we can break the tender down to the lowest variable, the lowest specific components to invite local builders as part of that process. We will certainly be doing that subject to the advice from our architects about how we package up the various components. That is essentially the process. Did you want to say anything else in regard to this, Febianca?

Ms SAMPSON - No.

Ms BUTLER - Even before COVID-19 was with us, TasTAFE have experienced strain to deliver and meet industry demand, especially in building construction. What will change between now and the construction of this to make that backlog stop? What will improve? That is my main concern. We know there are apprentices waiting to be ticked off. We know there are problems with rolling out the actual delivery of programs. What will change between now and then?

Mr ADAMS - Are there any specific areas you are referring to?

Ms BUTLER - I know in electrical there are problems. In building construction there have been a lot of problems. In plumbing there have been problems. Quite a few different areas actually. What will change between now -

CHAIR - Is that coming from unions or where is that coming from? Just general?

Ms BUTLER - It is general knowledge the problems with our current TAFE system in Tasmania. I am not being political and using evidence. I know it certainly would not come as a surprise to you to hear that. It should not, because it has been pretty open in the media.

My main wish is to know what will change between now and then because I really want to see this happen. We need this and certainly want the investment. What will culturally change between now and then?

Mr ADAMS - Certainly, at the moment we are meeting the demand of apprenticeship training where we have not turned any apprenticeships away at all.

Ms BUTLER - There is a backlog of assessments that need to be done. There is quite a problem from our - anyway, sorry?

Mr ADAMS - In terms of what we have discussed previously, this centre will allow for a much more flexible delivery model which will therefore increase our capacity and allow us for delivering at different times. The roll-in, roll-out model will help. As I mentioned, the work going on in of the workforce planning and how we are going to get the workforce in to deliver the training. We are planning now, bearing in mind the new centre will not come online until 2023. Obviously, that process is starting now.

Ms BUTLER - Okay, thank you.

CHAIR - Moving to the education plan. Do we have any questions there? I will not go through it page by page. Perhaps, we can pick up on areas that members may have questions on?

Mr ADAMS - If I may mention, Chair, the education plan, whilst you have this version, it is a living and evolving document. Obviously, we are continually working with industry through this process and the education plan will be updated as part of that.

CHAIR - On page 9, the co-location of industry peak bodies. What is expected to happen there?

Mr ADAMS - In regard to this project, nothing specifically, but we are in regular discussions with the industry peak bodies. A number of them, including Master Plumbers Association have a plan to be closer to where the training is delivered. That is something we ae discussing as to whether they want a physical presence at the Clarence campus.

CHAIR - Presumably they would pay for the privilege?

Mr ADAMS - They would certainly make a contribution. You could probably comment, James, I think that some of them have a presence at Plumbing Industry Climate Action Centre?

Mr KAZALAC - Yes, absolutely. I think Master Plumbers are an influence up here. Obviously, the union. Especially with PICAC, five RTOs are put together under one umbrella. There is Master Plumbers Association delivering curriculum and a plumbing perspective. There is also fire training involved. It is a bit of a big co-op of opportunity for industry to get involved.

CHAIR - You might explain what PICAC is, for the *Hansard*.

Mr KAZALAC - It's the Plumbing Industry and Climate Action Centre.

CHAIR - Where is that, in Victoria?

Mr KAZALAC - Yes, in Victoria, based here. There is training in Queensland and New South Wales as well.

CHAIR - Regarding polymer processing, the last sentence says 'this will provide opportunities to work with the agricultural team to develop targeted training'. Isn't that in the north-west?

Mr ADAMS - We deliver agriculture training statewide. We do have the Freer farm centre in the north-west but agriculture training is delivered statewide.

CHAIR - On page 12 you mention high level vocational educational qualifications and renewable energy engineering. I am assuming you are talking about wind and solar and possibly tidal as well? There is some work being done in that space, I think, on King Island. There is some wave power, isn't there? Isn't that being done in conjunction with the Maritime College?

Mr ELLIS - Wave Swell is the company doing it.

CHAIR - So it's a private enterprise?

Mr ELLIS - It is part of a research project that's very small at the moment.

CHAIR - I presume if anything comes of that, you might get approached to work in that space.

Mr ADAMS - Absolutely. In terms of training we would certainly welcome a discussion with them but we are certainly far more advanced in the training needs around wind and solar.

Ms BUTLER - For the record, on page 12 you talk about work readiness with 48 per cent of Tasmanians - I think there is a typo there - around literacy and numeracy skills. When I did a bit of consulting on this submission, that recognition was really praised up. I think it is important to note for the record that for some of the best apprentices, their literacy and numeracy may not be that flash but they may be absolutely brilliant practically. I think it's really positive that this is part of the education strategy and TasTAFE has recognised that. I think that needs to be noted.

Mr ADAMS - That again is one of the advantages of moving to the Clarence site, where we deliver our foundations training to support literacy and numeracy. Apprentices identified

who might struggle in that space will have access to training at the Clarence site, whereas at the moment it is not offered at Claremont so they have to travel.

Ms BUTLER - That is really positive.

CHAIR - That is a high percentage, so we all need to work to pull that down.

Mr ADAMS - Digital literacy is also a growing area of need.

CHAIR - At the moment how many undertake online and distance learning?

Mr ADAMS - Quite a number of our students would have a component of online or distance learning, but in these disciplines there aren't any that are doing full distance or online learning; there is always a hands-on component.

CHAIR - Just occasional or certain classes or whatever.

Mr ADAMS - Yes, certain units of study can be delivered online.

CHAIR - LLN?

Mr ADAMS - Language, literacy and numeracy.

CHAIR - Thank you. I think I've concluded everything I want to ask. Does anyone else have any further questions?

Mr ELLIS - I might just add to the record that Robin Gray completed the south-east irrigation project in 1986, just prior to David Llewellyn entering parliament.

CHAIR - Another little political statement. We will put that down as noted.

Ms RATTRAY - My founding father, Jack Smith, was way ahead of them in the irrigation schemes.

CHAIR - We have some standard questions that we like to ask. Do the proposed works meet an identified need or needs, or solve a recognised problem?

Mr ADAMS - They most definitely address both a recognised immediate need and emerging needs.

CHAIR - Are the proposed works the best solution to meet identified needs or solve a recognised problem within the allocated budget?

Mr ADAMS - Most definitely. As I've talked about, the location at the existing campus offers a range of advantages and would definitely be the best use of the money.

CHAIR - It does say 'within the allocated budget' but we've had discussion on that, so we're clear about what your intention is. Are the proposed works fit for purpose?

Mr ADAMS - Yes, they most definitely are. We've got the experts with us in terms of the architects who have done this exercise before and we are involving all our existing trainers in the detailed design.

CHAIR - Just to reiterate, do the proposed works provide value for money?

Mr ADAMS - Yes, they most definitely do.

CHAIR - Are the proposed works a good use of public funds?

Mr ADAMS - I believe they are an excellent use of public funds, meeting those existing demands for the Tasmanian workforce.

CHAIR - Excellent. That concludes the hearing, but I remind you again that any statements made when leaving this building will not be covered by parliamentary privilege should you be requested to comment and all those sorts of things, but everything that has been said today here is. Thank you for coming and presenting your submission to us. It was very informative and I think we've gone through it as closely as we can, so we will ask you to leave and we will retire to consider the project.

Mr ADAMS - Thank you.

THE WITNESSESS WITHDREW.