



**Note that minutes are paraphrased to an extent and may not match actual statements exactly.**





Project	Hydro Kurri Kurri site redevelopment project	From	Alysia Norris
Subject	Community Reference Group Meeting	Tel	1800 066 243
Venue/Date/Time	Thursday 16 August 2018 Hydro Aluminium 6.03pm – 7.40pm	Job No	2218982
Copies to	All committee members		
Attendees	Mr Andrew Walker – Hydro Kurri Kurri Project Manager (AW) Mr Richard Brown – Managing Director, Hydro Kurri Kurri (RB) Mrs Kerry Hallett – Hunter BEC (KH) Mr Kerry McNaughton – Environmental Officer, Hydro Kurri Kurri (KM) Cr Robert Aitchison – Maitland City Council (RA) Mr Allan Gray – Community representative - Retired Mineworkers (AG) Mr Brad Wood – Community representative (BW) Cr Darrin Gray – Cessnock City Council (DG) Mr Toby Thomas – Community representative, Towns with Heart (TT) Mr Ian Shillington – Cessnock City Council (attending for Martin Johnson) (IS) Mr Michael Ulph – CRG Chair, GHD (MU) Ms Alysia Norris – GHD (Minutes)		
Guests/observers	Mr Jamin Tappouras – Flow Systems (JT)		
Apologies	Mr Mark Roser – Strategic Planner, Maitland City Council – (MR)		
Not present	Mr Bill Metcalfe – Community representative (BM) Mr Gareth Curtis – Cessnock City Council (alternating with Martin Johnston) Ms Tara Dever – CEO Mindaribba Local Aboriginal Land Council (TD) Ms Debra Ford - Community representative (DF) Mr Rod Doherty – Kurri Kurri Business Chamber (RD) Mr Martin Johnston - Cessnock City Council (MJ)		



## Table of Contents

1	Welcome and Acknowledgement of Country .....	3
2	Meeting agenda .....	3
3	Welcome and meeting opening .....	3
4	Last meeting minutes .....	3
5	Site divestment update .....	4
6	Project update .....	33
7	CRG questions and answers .....	42
8	Any other business .....	43
9	Meeting close .....	43

Notes	Action
<p><b>1 Welcome and Acknowledgement of Country</b></p> <p>Meeting commenced at 6.03pm</p> <p><b>Michael Ulph (Chair) (MU)</b></p> <p>Acknowledgement of country.</p> <p>Intro of people at the table.</p> <p>Alysia Norris from GHD taking minutes.</p>	
<p><b>2 Meeting agenda</b></p> <ul style="list-style-type: none"> <li>• Welcome and meeting opening</li> <li>• Apologies</li> <li>• Declaration of pecuniary interests</li> <li>• Acceptance of minutes from the last meeting</li> <li>• Site divestment update</li> <li>• Project update</li> <li>• CRG questions and answers</li> <li>• General business</li> <li>• Next meeting and meeting close</li> </ul>	
<p><b>3 Welcome and meeting opening</b></p> <p><b>MU</b> welcomed attendees and noted apologies.</p> <p><b>MU</b> asked those present to declare any pecuniary interests.</p> <p>None besides paid staff from GHD, Hydro and Flow Systems.</p>	
<p><b>4 Last meeting minutes</b></p> <p><b>MU:</b> Can I have someone move that the minutes were a true and correct record of the last meeting?</p> <p><b>AG moved the minutes.</b></p> <p><b>KM seconded the minutes.</b></p>	



## 5 Site divestment update

**MU:** I'll pass to Richard to introduce our guest today and Richard, if you wouldn't mind, we'll go from there.

**RB:** So, everyone will no doubt recall at previous meetings we've got to the divestment slide and I've gone "next time" and then the next meeting I've gone, "next time". Well this time it's this time.

We have, after a number of years of negotiating what's turned out to be quite an extensive and complex arrangement, we've now formally signed a deal to sell the site. The party that's going to acquire the site over the coming years is represented here today by Jamin Tappouras. I'll let Jamin introduce the company but needless to say that we are very excited that we've reached this milestone. It's taken a long time to get here – but like everything we've been doing with demolition and with remediation, this is another significant step forward in the whole, our regrowth of the site, which is really what we're here to do. So it's great to get an organisation such as Jamin's involved and you'll understand why when he starts talking through. And I think in terms of process, this is the, I guess this is the formal announcement of this acquisition. We will be making a media release in the morning which will go to not just the local media, it's broader than that, and we'll deal with any sort of follow up enquiries during the day but we'll also probably circulate the media release to you all, either ... I don't know whether you [to MU] were planning to do it tonight or first thing in the morning?

**MU:** [In the morning].

**RB:** You'll all see it as well. We'll offer briefings to local politicians, they'll get the same media release tomorrow, so trying to inform as many people as we can about what's going on. But no doubt this is really just the start of the process. So what you see is likely to generate more questions than it will answer but over a period of time we'll get a chance to answer a lot of questions that arise.

**MU:** I'll just jump in to say that Richard was keen to pay due respect to the CRG and inform you guys first because of the investment that you've put in. And so there's only a couple of people outside of this group that got prior notice of this announcement. So we thought, we've been here since 2014, meeting number 28, for many of you, so we thought we'd take this step together.

**RB:** Jamin, over to you.

**JT:** Over to me, OK.



**JT:** Jamin is my name, Jamin Tappouras, and the company that I'm part of, that is, the entity that has acquired the site off Hydro is Flow, or Flow Systems as we're formally known, but Flow.

What I'm going to talk about is who is Flow, what our vision is generally as a business, and show you how we demonstrate that in our business and how we do so around the country. Then we'll look at some case studies that demonstrate that. Then we'll focus on the Kurri site and talk about what our plans and aspirations and so on are for the site here. If we've questions going through please jump in.

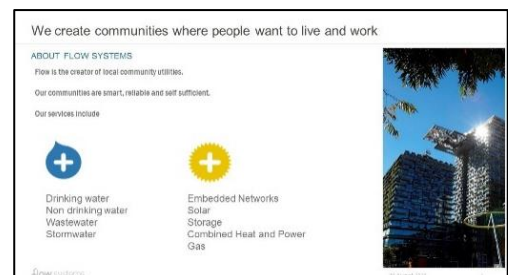
Flow is a utility that creates local community utilities around the water and energy space, and across all utilities and telecommunications, also in gas and other areas. But water and energy is a nexus and a focus that we have within the sector.

So what that does is puts us into a space that allows us, in that industry, we service major properties and major property developers, and we act as a sophisticated landowner, and we control a bunch of items that happen on a site as that landowner. So we'll talk to some of that, how that happens.

You know, a traditional Lendlease or a Stockland's - we work with all those kind of entities but we sit on top of those sort of entities from a utility space looking at how land is value-added to and how communities are created in a space.

As a utility we are different to a property developer in that we are embedded into a project or into land forever, so in perpetuity. We operate under a bunch of legislation which we can talk to, to some extent, or the case studies will talk to that, where we are there licensed by various governments in various jurisdictions around Australia, where we are there in perpetuity and we have licenses from governments to operate in certain spaces and are regulated in a range of spaces and we are there for the long term. So we're not about jumping in and developing land and flicking it on, like a traditional property developer, we are there for the long term, and growing a community and invested in that community that's there.

We also have a particular focus on sustainability, environmental sustainability, so again the energy and water, particularly the utilities that we invest in, are about sustainability - saving natural resources and harnessing natural resources to have a low carbon footprint, zero or carbon positive projects in some cases, resource positive, so water resource positive projects, and energy positive projects. So there's certain elements to the Kurri site an opportunity for us that are very attractive in creating a positive outcome for the community ultimately.



We already have about 16,000 customers across a bunch of communities in Australia and we'll have about 100,000 customers in the next five years.

Flow Systems has leading capability in owning, operating and optimising microgrids and embedded networks

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**OVERVIEW**

- Flow Systems leads the industry in the provision of local sustainable multi-utility services.
- Flow Systems currently provides services to 16,000 customers across multiple communities
- Customers numbers are projected to grow to 100,000 in 5 years
- Flow systems is 51% owned by Brookfield


Brookfield has more than \$250B in assets worldwide. It has a diversified portfolio across 20 countries, a 60,000 strong workforce and above average returns year on year. Brookfield is the largest utility operating in Australia.

\$250B +

assets worldwide

60,000

strong workforce



flow systems

20 August 2018

Flow is an Australian privately started company. I am a shareholder, and was part of the founding group about 10 years ago. We are also financially backed with an ownership structure that includes Brookfield. Brookfield is a large utility business, 250-plus billion [dollars] of assets under management in the renewable energy space, transport sectors, infrastructure.

So Brookfield is really an infrastructure organisation. Many of us probably have heard of different Brookfield businesses in Australia. Multiplex, one of Australia's largest builders, is a fully owned subsidiary of Brookfield but it's about five per cent of the Brookfield business. Brookfield is about infrastructure and providing that infrastructure into areas all around the world and taking a long-term viewpoint and a revenue return from that infrastructure.

For clarity, Brookfield for us don't manage our business. Brookfield is essentially a financial investor, but we deploy their capital, or deploy others' capital, but essentially a funding agent for us to be able to enact transactions like the Hydro acquisition and the more substantial investment into the communities in the long term for water, energy, telco, land supply and other infrastructure requirements that go along with those.

Getting to the vision so as far as what Flow's business is about, it always has been and why it was created, is to be a utility that innovates and that inspires to create communities in the future. So, we will only invest and roll out infrastructure that is better. Unless it's better, unless it's doing something positive, then we don't need to provide that. There's others than can provide that. So we're really focused on trying to do world's best practice and we'll go through some case studies where we are doing that and

Contents	
Who is Flow	
Flow Vision	
Case Studies	
The Kurri Kurri Site	
Questions	

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20 August 2018

are world leaders in this space. Again our mission is about creating the next generation of utilities that are enabling communities to be self-sufficient and also sustainable, with sustainable innovation. We as an organisation drive ourselves to be the leaders, we think, in thought and smart thinking in this space and actively show that and demonstrate that to governments and to other organisations around the world and here in Australia, and leading in those spaces.

I'll jump through, this is probably more for understanding our DNA, but how we approach a site is about the inside out not the outside in. A lot of the constraints to major sites like this one here is about what are all the constraints externally that stop you from doing things. We turn that on its head if you like and go "what are the opportunities within the site and how can we utilise that to create a sustainable utility or a sustainable outcome for the community that is within that precinct". Whether it's residential, industrial or commercial ... tourism, whatever activity or any activity is born into that same philosophy and then all of those embedded networks that are in there are utilised through that process.

That then results in, what we talk about constantly, is true sustainability. And while sustainability is definitely about creating healthy communities and protecting the natural environment, a real key pillar is the economic viability. And you can't have real sustainability unless it economically works, and we challenge ourselves and the investments we make are about creating real sustainable outcomes, based on existing price structures and business cases so that we're creating a positive experience for our users and a lower cost base, for example for energy costs, lower cost base for water while saving natural resources in doing those activities.

We've been around for a fair while, and we've actually been very active in the Hunter for a fair while too. Some of the projects that we're involved in - projects that I can safely say would not exist and not be on the map here and not be developed in the Hunter region unless Flow was involved in that utility investment space, they're projects that would still be sitting dormant. So Huntlee, you probably, you guys are hopefully locals and would know Huntlee. Huntlee has a Flow overlay in water. It has a wastewater and recycled water system that allows that to exist otherwise it would not exist. It also has an overlay that has not yet been rolled out, but will do so in the near future, on energy. So an alternative energy space as the energy market deregulates more and rules change on how that energy market is able to be utilised for saving resources and removing unnecessary gold-plating and capital

Flow's Vision

Be the utility that innovates, inspires and creates the communities of the future

Flow systems 17/04/2022 8

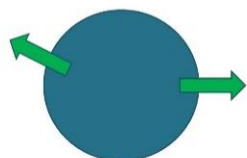
Flow's Mission

Creating next generation utilities that enable self sufficient communities, exceeding customer expectations through sustainable innovation, leadership and smart thinking

Flow systems 17/04/2022 9

Self Sufficient Communities

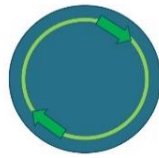
Flow's approach is 'inside out' NOT 'outside in'



Flow systems 17/04/2022 10

Self Sufficient Communities

Embedded local networks allow the capture and sharing of resources



**Embedded networks**

- Drinking water
- Recycled Water
- Wastewater
- Stormwater
- Electricity
- Gas
- Optical Fibre
- LoRa WAN

Flow systems 17/04/2022 11

Sustainable Innovation



Flow systems 17/04/2022 12



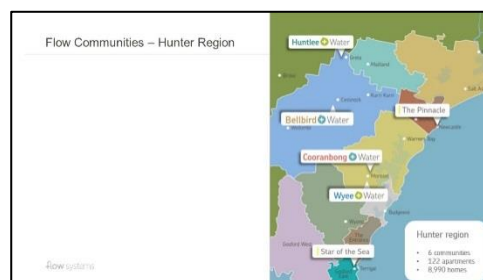
expenditure that goes back to the costs of bills. I'm sure you're aware that gold plating by the network operators adds to your bill, so we are part of the driving force of creating new business models that bring those costs down while still providing the same level of service from renewable energy sources and alternative energy sources.

Cooranbong's another one. I'm not sure if you guys would get that far south in the Hunter region, but Cooranbong is 2,500 lots. It's certainly not as big as Huntlee. Huntlee will grow to 7,000-7,500 homes, eventually, and a few town centres. Cooranbong is 2,500 lots and there's probably 500 or 600-odd lots on the ground already in the last few years and again it's another project that would not be there unless Flow, as a utility provider, invested in that project.

Wyee is another one, which is down in that further area. There's a few other high rise projects. And Bellbird, which again Flow is providing services to. Not that Bellbird has hit the market and is not yet being marketed, but it will probably be out on the market, in the marketplace, very soon.

So we can add Kurri. There's a few other ones, major ones in the Hunter. It's fair to say that the way investment works by major property developers in infrastructure and how they need to invest, it'd be fair to say in the Hunter that there's not too many major projects that would have started without the involvement of Flow investing in those. There are some major projects in the Hunter to note, in Anambah and Lochinvar area, and other ones around the Hunter that major players have exited. They're not viable for major players like Stockland and Lendlease and others because the business-as-usual utility play for those providers, it's not sustainable and it's not economically viable for those projects to proceed. That's a constraint for those projects which is the exact opposite for this opportunity here at Kurri that has that availability of our overlay to make this project really work.

Again, a few cases studies. Huntlee which I mentioned already; Flow provides recycled water, wastewater and drinking water, so we are the drinking water provider there. While we essentially wholesale or take that drinking water from Hunter Water, under an arrangement that is in the Act that we operate under. So we operate under – there's a bunch of different acts that we all operate under – and in return that Act allows us to provide services to Hunter Water which we do in the Wyee project.




### Case study

#### HUNTLEE – HUNTER VALLEY

Overview

- Flow provides Recycled Water, Wastewater and Drinking Water
- 7,500 homes including a significant town centre 800,000m<sup>2</sup>
- Development benefits:
  - Released land earlier
  - Reduced cost to achieve BASIX ratings for new homes.
  - Lower utility costs for residents



### Contents

- Who is Flow
- Flow Vision
- Case Studies
- The Kurri Kurri Site
- Questions

We provide wastewater services to them, and that process in Sydney, especially in western Sydney as things grow, that is becoming more and more common where private utilities licensed by state government are providing services through the incumbent or, and instead of, the incumbent.

The benefits for the development obviously is that it actually exists. The peak debt issues for property development are major, and if that opportunity of wastewater and recycled water wasn't made available to LWP [Property Group], as the developer and landowner there then that project would not exist. You know obviously it's a great contributor to the economies of that part of the Hunter.

Again, reducing costs for homeowners and their BASIX compliance, so reducing the capital costs on spend for project homes, and passing on savings to mums and dads as they buy dwellings, and then also recycled water that we produce from wastewater is sold back into those same communities at discounted prices, saving water and allowing those communities to be resilient. And it's going to be a big factor as we move on into another drought period, as we're already in another drought.

Most of the technology and the innovation that we have been operating with for a decade or so was enabled by the previous millennium drought. Now in the last few years, everyone's forgotten about that. Right now everyone's remembering it again and so all these communities that we're servicing will be able to continue to water because, you know, it's a closed water loop and will continue to be green. And that goes back into our nexus with our energy space where we promote a green canopy that reduces heat island effect which again, in turn, brings down the need for energy to cool places down.

Again, we're world leaders in this stuff and it's really amazing that the Hunter is, we're able to test these, and employ these world-

leading things here in the Hunter, as well as plenty of other places in NSW. But we're certainly well-advanced up here. And, ultimately, lower utility costs for residents there against the incumbents.



There's just a bit of a snapshot again of Huntlee. That's a wastewater treatment plant that we have at Huntlee – what we call a local water centre - using totally different technologies than what you would have in a traditional sense. Traditionally, you'd have some kind of treatment plant on the edge of a river that discharges wastewater in flood events, and with buffer zones around it because it smells and all these things. The technologies that we employ don't do that. So these are homes directly across from the facility – it's not even a great view from the air – but, you know, they're facilities that we sit in the community. They're facilities that are not noisy, and not smelly and all these things but sit comfortably in the confines of the community and saving massive energy costs instead of, you know, I'm not sure if you're aware but most wastewater in this part of the world gets pumped out at Merewether Beach. So it's got a long way to go, the energy costs to get it there, and it's not treated and it's put out into our environment.

These process are different to that and will allow that resource to be reused back in that community again and again, going back into homes for clothes washing, toilet flushing, irrigation, so that resource is saved. And the amount of saving that it has to the requirements on dams and the loads and those things are well recognised by governments and promoted for those very reasons.

**DG:** So you're running two lines everywhere?

**JT:** Yep.

**DG:** So you get fresh water and grey water?

**JT:** Yeah well the grey water's not the right term but yeah, it's fully recycled water. Again the technologies we employ, you would be drinking this if you were in other parts of the world. We don't drink recycled water in our systems here in Australia because it's from a wastewater source but it's pure water that goes back into irrigation, toilet flushing and clothes washing, all regulated obviously by the Department of Health and we're licensed to use that process through, again, regulated by IPART the pricing regulator, and then in a similar way to any water utility or energy utility here in Australia.

**RB:** I have to say Jamin that was one of the qualification tests. We made Thomas drink the recycled water at one of the facilities.


**DG:** And he's still here.

Case study

CENTRAL PARK - SYDNEY

Overview

- Flow provides recycled water, wastewater, drinking water and embedded electricity services.
- 2,200 apartments and 250,000m<sup>2</sup> of commercial and retail space.
- Recycled water connection with University of Technology Sydney.
- Supported by Flow's innovative servicing, Central Park has won numerous local and international awards:
  - Sustainability award, 2014 LEAF Awards (global)
  - International Green Infrastructure Award, World Green (global)
  - Best Innovative Green Building, MIPIM Awards 2016 (global)
  - Best Tall Building Worldwide, Council for Tall Buildings and Urban Habitat (global)



**JT:** So again, we don't just do this stuff in greenfield, you know, horizontal communities. We do it in vertical communities. So one of the most recognised buildings in Sydney – I'm not sure if you're aware of the Central Park precinct – it's the old Carlton Breweries United site, where's there's over 2,000 apartments, a couple of hundred thousand square metres of commercial space, and it's won accolades all over the world as the most sustainable development in the world, over various years. And that's because we harness; we take water from all the sources on that site. We have the largest wastewater treatment plant [of its kind] anywhere in the world in the basement of that building and we recycle all of that water and we also export. We're an exporter of, positively of water into other parts of the grid. And from that project, piloting that project, and leading that way are embedded now in what's known as the Green Square precinct, which is the City of Sydney. And we have our first facility within Green Square in the town centre servicing 4,500 apartments and have just finished our deal with the City of Sydney to service the next 22,000 apartments that go in there. So this process allows that development. So Green



Square is the most densely developed area in Australia and those developments cannot happen without this kind of infrastructure being embedded. Otherwise you're just putting in, I mean, you need to rebuild systems to discharge through Bondi, ocean outfalls and things like that, which is just not sustainable. You lose so much water from Sydney out into the harbour, it's crazy, I don't know the stats off the top of my head but they are ... it's really scary, you know, if you know how valuable water is and how much we just put out to the ocean. So again, yeah, that's a pretty monumental project.

Case study

SHEPHERDS BAY - SYDNEY

Overview

- Recycled water, wastewater, drinking water, hot water, gas and embedded electricity networks
- 1,700 apartments
- Lower utility bills

flow

Another interesting case study ... where another precinct in the Meadowbank area, Shepherds Bay. There's a lot of development happening along Parramatta River where there's a nexus again. This one includes energy, gas, recycled water, wastewater – it's a good example of multi-utility – where lower bills are being provided to customers in that precinct. And there's many sites – there's literally 900 sites – that we provide services to, ranging from hundreds to tens of thousands of customers.

**RA:** Do these properties have two water meters then?

**JT:** Sometimes four water meters. Yep.

**RA:** Oh OK.

**JT:** Yeah. And they're all tech, they're not read by meter readers so we embrace technology. We have again, connected to telecommunication systems and we're reading ... and that's a really good point, in that we're reading meters in real time constantly. That enables us to have a relationship with our customers and tell them and understand when they are using, if they are using too much water. So again, our billing processes are slightly different. I'm sure all of us know traditionally around here you get a quarterly bill, on a bit of paper and your interaction with how much water you're using is when you flick to the back and it's got a little bit of a bar chart that tells you how you went with last

year. Well, we do it a bit more sophisticated than that and we understand from an EP to ET basis, which is an equivalent person to an equivalent tenant basis how much water really you should be paying and what you really want to be paying for. So, if you spike that, we're able to contact you and understand why you are using more water than you should be. Because we don't want you to use that water. That's just going to cost us money to treat it, and it's going to cost you money because you are charged by how much water you are using.

And in those examples, real examples, we have people that have you know gone "great, we've got a bobcat digging something in the backyard" and it's like "well, you've hit something and you're leaking, you're bleeding water, go and check that out" and EWON, the regulator, loves that because bill shock is massive with the traditional utilities where no one knows anything for months and months and months and things could be leaking and that's a resource down the drain, literally. The others ones are "yeah, well I've got family just moved in from Canada and there's 12 showers going a day" and we go well, "understand you gotta do that, but just to let you know that your utility is interested in that, and wants to let you know it's going to cost you money and is costing you money". So that's the kind of relationship in that, that's a simple sort of example, they're real examples, but that's the kind of stuff that –

**RA:** You've got to set the buzzer off in my daughter's shower? Tell her to get out of the shower.

**JT:** My daughters, I just go and turn the heater off, they haven't figured that out yet. "The hot water's run out again dad".

**AG:** I guess what you're saying there now, that you're taking over the site, is that like Wangara, the housing and ...

**JT:** We'll get to that, I'll talk you through, and I'll just start to talk about the context of the site. We'll take you through a master plan and what we're doing on the site and proposing to do.

Obviously, I don't need to dwell on these too much because you guys are locals and you know the area here no doubt. Really, Kurri in this region is pretty well located now. It's front and centre in the cross roads of every decent road around the place. It's obviously a key area.

This is state government documentation; that it's a key area that is very important to the growth of the Hunter region and the opportunities that are here for population growth, for jobs, for communities to thrive.

## Site Context

### NSW Government Strategic Planning Policy

- The site forms part of a regional tourism cluster which links
  - Maitland, Cessnock and Kurri Kurri and wineries in the west
  - national parks and Lake Macquarie in the south
  - Newcastle City Centre and new cruise ship terminal for Newcastle Harbour (and links to global destinations) in the east
  - Newcastle Airport (and links to global destinations) to the north



## Contents

- Who is Flow
- Flow Vision
- Case Studies
- The Kurri Kurri Site**
- Questions

Flow systems

19 April 2018

17

So, again, that's an attractant for us to go "well that's a site we want to invest in". While Richard and his crew look at, you know, they're going to exit the site, they've got a bunch of demo to deal with and Andrew will tell us about all that sort of stuff, we look at it from the other perspective, well what's the opportunity here. What's the future? And we see state government and other governments looking at the region and going yes, there is potential here, there's the opportunity, how do we get that going. So that's a lot of stuff that takes up our time.

## Our Unique Attributes

- Industrial Infrastructure**
  - Grand scale of site and infrastructure
  - Energy infrastructure as part of industrial legacy of site
  - Agriculture, pasture, or remediation/educational uses
  - Industrial infrastructure as an attractor / point of difference
- Railway Corridor**
  - Link to South Maitland Railway may provide future access to industrial areas



The unique attributes to this site are – were – a great driver for us to stay focused on this site. As Richard alluded to earlier, this was a two year-plus exercise for us to finalise this acquisition, it's actually closer to three but seriously in the last two years. So it takes time. A very complex site. An attractive site for us for a range of reasons but high on that list is its energy capability.

So the smelter has been a major energy user but with that is a major switchyard, with three 132kV lines coming in to the site which places it high on the desirability list for any major site in the



eastern seaboard NEM, so across the national energy market network.

So it's well placed with infrastructure already in place to do a range of things. That scale is acknowledged. It's also the industrial capabilities on site that lend itself to reinvesting in those capabilities, in those energy capabilities, and providing opportunities for energy production from renewable sources and from other sources that are sustainable to create jobs, to increase the activity and the value of the property.

Again, another attribute is the rail corridor, a pretty unique opportunity. While some people see it and have seen it as a constraint to have a piece of rail infrastructure running through the land, we see that as an opportunity as it gives us the capabilities to bring some of our business plan or business case opportunities of intermodal and other activities linking that industrial space to the Port of Newcastle or to other distribution locations.

**Our Unique Attributes**

**Landscape**

Constantly changing landscape - wetland peninsulas, meandering creeks


Older patches of bushland, combined with rural land use, animal and bird life

Variations in topography - opportunities for creating distinct identities, long views of bushland and wetlands

**Environmental management**

A number of threatened ecological communities exist on site including Lowland Redgum Forest, Kurri Sand Swamp Woodland and Spotted Gum - Red Ironbark Forest.

One of key conservation areas is the Kurri Sand Swamp Woodland - a rare low woodland, that is listed as an Endangered Ecological Community (ECC) and a habitat with unique plants, wild-flowers and trees attractive to wildlife, and a destination for bush-walkers and birdwatchers.



Again, the landscape and the environmental attributes on the site, I won't dwell on those massively. I'm sure you guys know how unique it is, but again, things that we are passionate about in preserving the uniqueness and are actively doing so and creating what is the largest biodiversity offset site in NSW at the moment.

We're navigating our way through that process. So, really, the vision of the site is for Flow to create a vibrant, sustainable, mixed use precinct, so there's a bunch of uses but all hanging off that innovation of energy, telco, water cycle management, back to its diversity of housing and employment

## The Vision

Flow will deliver a vibrant and sustainable mixed use precinct that delivers housing diversity, employment, innovation in energy, telecommunications and water cycle management to the Hunter Region.

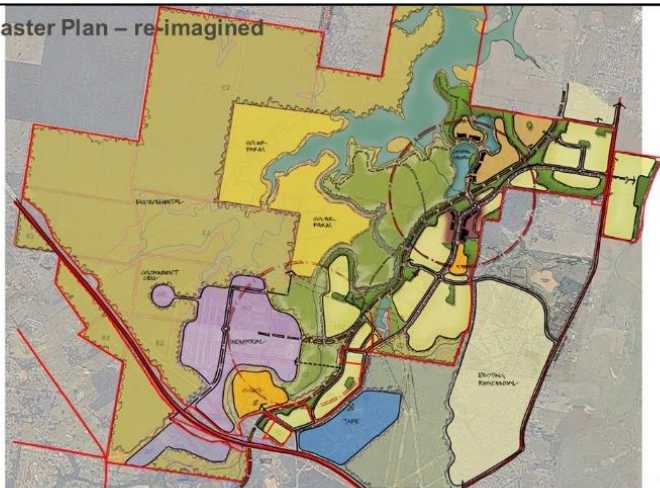
The project will become a smart community through the promotion of integrated communications, transport and infrastructure to underpin social capital, economic vitality and positive environmental outcomes for the wider community.

It will be a place that leverages its unique environmental attributes including wetland and natural areas, a place which will attract additional visitors to the region.



Employment's a key for us, a focus, as well as the housing. It's an amazing site in that, you know, traditionally I've dealt with a lot of sites over time and it just had one or one other of those affects but to have a site that has both employment and housing diversity capabilities is really exciting, mixed with its capabilities for tourism and environmental features and utilisation of the environment.

## The Master Plan – re-imagined



OK, here's the master plan reimagined. I'll leave this up for a little while and let people absorb it and I'll just talk to some of the elements so that people can absorb it, because there's lots of sort of drawings around and there's been, you as this group would be I suspect looking at some of those and trying to understand well what are those, what are those key features and will developers want to do and so on.

We've recut what has been around for a little while and it's taken us around ... this has been, you know, 18 months' worth of readdressing, probably closer to two years, of readdressing



previous work that has gone on. There's a lot of work involved with understanding flood boundaries and constraints and the natural environment and the non-natural environment, the other, you know, contamination type constraints and all these aspects that go into it and looking at then what are the best opportunities.

The connectivity, so it's a really well connected site with freeways and roads but it needs a lot more work in connectivity and they're the elements that we're putting into it now as we develop and put the meat on the bone of this master plan.

We are wanting to enhance this whole precinct as it joins into the wetlands, as well as the 1250-odd hectares of EECs or environmental lands. On top of that we have another 350-400 hectares of wetlands that we want to enhance. Again, as a utility operator we have options with new legislation looking at how we manage those assets and how we allow community to work, play, you know, enjoy those assets. We see them as assets to enhance liveability in the area. There has been a trend in the last few decades in the environmental movement to try and sort of lock this stuff away so that it's not tangible. We see it differently to that and we're happy to put our money where our mouth is because basically the more we do in that space the less development right we have as the offset regime, as we pull those levers in and out. It's getting that balance right.

We have retracted some of the previous proposals to remove trees and are removing less trees in some of these areas than were previously proposed and just focusing on that natural environment, how the residents – and there are, you know, it's a large residential precinct running from north to south – how those residents and visitors to the area, because we are looking at tourism activities and trying to create a destination, and trying to understand and deliver the best way to have these natural features as part of the site experience and creating a new destination.

So I'm going to stop. I feel like I've been talking too much so I'm going to have a drink and happy to take some questions or talk to that some more.

**DG:** So the green area on the right is residential, is it?

**JT:** This is the existing residential, Cessnock Road?

**MU:** Yes.

**JT:** Cessnock Road. That's Testers Hollow through there. So that's the existing road sort of near ...

**RB:** Near William Tester Drive.

**JT:** William Tester Drive.

**JT:** As it comes in, or it doesn't quite come in, it stops about here at these playing fields down on the water gully. So that will be a link into the site at some stage and then a new intersection link into the north, with crossings over the rail line to these elements out here above the flood plain. And then a link through to the south, feeding the south precinct.

So this is residential, through the residential and tourism, the town centre. More residential into these elements, with an institutional educational precinct down here near the TAFE – so that's the TAFE, that's not us – but that is a key strategic spot in the site, with a school precinct here. That's another school up here. Then the employment zone through here that is part of the existing demolition precinct that is part of the smelter site.

**DG:** So is there a town centre?

**JT:** Yeah, we're exploring that opportunity bearing in mind that we're sort of looking at north of 2,500 dwellings increasing the population in that area substantially and looking at how we activate that area. We're also proposing a lagoon, a swimming lagoon. It's called a crystal lagoon. It's a business based in South America in Chile, which Flow are a partner and a provider of their utility services for these lagoons. They're all around the world. There's not too many in Australia yet. They're mostly in resort-style settings. In South America they do use them fairly extensively in community housing projects. Basically they take a bit of a model where they go into very remote areas, build a bunch of high rises around a crystal lagoon and then move people to them and that creates a community.

Key Benefits	
Biodiversity	• Vegetation and wetland protection, promotion and tourism
Employment	• Diverse – industrial, education, retail, tourism, energy, business and construction
Environment	• Energy innovation, water management, solar farm
Community	• Connected, work and live, play, education, healthy
Residential	• Housing choice, small to larger lot, ageing in place
Education	• Two schools, connections to TAFE
Tourism	• Day visitors, stay visitors, environment, crystal lagoons, wetlands, heritage, biodiversity

### The Landscape – re-imagined

Enjoyable, engaging and sustainable public realm environments that are a long-term asset for the land owner, humans and flora and fauna who inhabit these environments and places.

Respect the existing and past owners / stewards of the land and celebrate their achievements in the public realm.

Preservation and restoration of existing vegetation is a key priority for the project.

Create excellent growing environments for street and all vegetation (adequate street widths and verge dimensions and buffer planting zones).

Clear hierarchy and pedestrian / cycle network of public open spaces that use sequential experiences using gateways, thresholds and views.

Leverage off the expansive existing wetland and water expanses through active pathways that link pedestrians to the water's edge and through the management of vegetation to





We don't think we'll be doing that, quite that type of thing, but we're certainly are looking at the opportunity as being a non-luxury item. It doesn't need to be a luxury item as they do in Dubai and all kinds of resort areas. We're seeing it more as a community space in a form that a utility like Flow can own and manage for that precinct.

**DG:** Environmental lands, you'll be managing those?

**JT:** That was the aspiration actually. That's been the work we've been doing for the last two years. Under the new Biodiversity Act there's a stewardship regime. I really can't answer that question right at the moment but I think state government and OEH [Office of Environment and Heritage] know that they've got some real issues with that Act and how it interfaces with reality. So, I don't know. We may just package it up and hand it off to OEH or the traditional mechanisms. That will probably be not the best outcome. I'd prefer to manage it but that will come down to a whole bunch of things that are out of our control, right now.

**MU:** But whoever manages it, the intent at this point through the legislation is that it's kept and maintained in perpetuity?

**JT:** Absolutely, so it will be maintained in perpetuity in those environmental features, by someone, forever, because that's our land that we are dedicating for that. To answer your question directly, is it us that's going to be maintaining it or is it going to be handed to a government department to maintain? We're still working through those finer details. We know we have our preferences but it comes down to economics and the process of that legislation. And it could be a mix of both to be honest. It could be a mix of both.

**TT:** The industrial area – have you got any visions for that, have you got any industries that you think would be appropriate to go into the industrial area?

**JT:** Yes we do, and it's fair to say we're going to be reasonably tight-lipped about that process until the right time for us to talk about that. We're focusing in that area on high technology energy users who need resilience. So energy users who need lower costs on energy, because we're going to be able to provide that, that need security of energy, so energy businesses are not just about having the energy but having redundancy and back up. So what I can tell you that it's not going to be; it's not going to be an industrial estate like you might see already around your region with little boxes and little businesses. It's going to be an opportunity to attract national and international players, not just in energy, sorry energy and also logistics, that's with the rail, the rail



network there, the freeway close by, the intermodal capabilities on the site. We're well aware of those and they'll be probably talked about in the next year or so.

Business case wise it's not there yet, but strategically on the national scene it's certainly a place you would earmark for that and try to get that outcome, but those business cases aren't there yet. There's lots of levers on costs to do with those freeway exits. You know we're talking ten, many tens of millions of dollars of issues that are not yet addressed that need to be to have those things concrete so we can go out to the marketplace or to the community and say yes, that's what we're doing. But we're definitely working on all those things.

**AG:** So it sounds like, I mentioned earlier on, a pecuniary interest with the Scouts, so we talk to you for a possibility on what you're talking about on that land you want for tourism and that sort of thing? The Scouts had a campsite, I don't know if you're aware or not, out on the edge there. It's mainly on a flood plain, and they were looking to keep it natural. They wanted it so kids could camp in the bush.

**JT:** That's down here isn't it?

**AG:** Yes, there. Yeah.

**JT:** Yes definitely, yes I am ... that's where Richard hasn't ... if Richard hasn't said it loud enough, he's passing all that to me.

**AG:** Right.

**RB:** That's why I'm sitting at the back of the bus.

**AG:** That's why I'm getting in a little bit early.

**JT:** That's OK.

**AG:** You know, we looked at the site and they didn't want to develop the site. They wanted to so the kids would have a bush camp and so it sounds like if we can do a deal there, it might meet several of your visions.

**JT:** Yeah that's right. Yeah, bringing all those aspirations in together. Let me talk industrial a little bit more then so, and Andrew's probably going to get up and tell us about the good job he's doing in demo-ing stuff. And then, next meeting, he'll have to tell you about what he's not demo-ing. Because we are not, well Flow is not, is stopping Hydro from demolishing everything. So, we are acquiring the switchyard obviously, be maintained and left there for us. And we're also preserving 250 lineal metres of pot lines 2 and 3 for adaptive reuse and repurposing for other uses as part of our business vision for the site. Andrew doesn't know that



officially yet, I don't think. I'm not sure if you've seen the memo yet.

**AW:** Yeah I know.

**JT:** Yeah you know. And that's for something for us to be talking about as a Reference Group. Previously you would have been talking about a demolition process that was going to leave, you know, everything here totally gone. Well we don't want everything totally gone. We've been through, looking at a whole range of assets that can be repurposed and reutilised for getting jobs back here sooner, getting industry happening here sooner. So that's part of what we're doing.

**BW:** So the waste pile is that still your problem [to RB], or is that yours [to JT] now?

**JT:** Ah so, do you want to start answering that ...

**RB:** Yeah sure. I guess that's been also one of the attractions of talking to Flow about the future of the site, is that as an owner of assets in perpetuity, which they talked about, then they have the capability of owning things like the containment cell in perpetuity and maintaining the containment cell in perpetuity. So, at the moment, that's the proposal we're taking forward, in that once the containment cell is constructed and it's approved, in terms of over a long period of time – there's a period of proof of performance – then that will be handed over to Flow with an appropriate funding strategy to ensure that they're able to maintain that cell in perpetuity, along with all the other assets that they're maintaining

–

**JT:** And the funding and the revenue streams for doing those things are really the key and important for that stuff to be working. That's what we see as economic viability, is creating that funding mechanism, and we have arrangements in the development of other parts of the site to create those funds and revenue streams to be able to manage that asset in perpetuity. Protect that community that we're creating and being part of forever.

That's been a really interesting, challenging, enjoyable part of this process, to look at the perceived negatives of what that cell means and how to create a viable and doable outcome for the long term. So it's been challenging and we've got there. We're going through a process to demonstrate that to the regulators, the EPA and so on.

**RB:** It's an ideal solution, in terms of an asset, an infrastructure owner owning those sorts of things where your standard property developer, they're not interested in owning a containment cell.



They're interested in flipping [the land]. But as an infrastructure owner, that's a different matter.

**DG:** OK so the models that we were talking about earlier, you've effectively ... one into the other?

**RB:** Ah, yes and no. Yes and no. There's a bit of both. So that's part of the negotiation that we've been doing; is what Hydro kicks in and what then can be utilised as part of the developments. But fundamentally the concept is that match of –

**DG:** Trust fund type system?

**RB:** Well no, that's all there.

**JT:** That's all there.

**RB:** That's all there.

**JT:** But it's how you build that trust fund.

**RB:** And that's still all independent. So that will still exist independently. So regardless of whether that's Flow or that's Hydro or that's, you know, any other entity, the funding that's required for the long term management is independent of all of that. So it sits in a box but who's responsible for maintaining that is –

**DG:** Is Flow?

**RB:** Is Flow.

**DG:** Right.

**RB:** So they take the money out of the box. If Flow disappears – which is unlikely because they're here forever – but if they disappear, the box is still there. And the EPA could come along and say "righto Darrin, we want you to look after the cell now. There's the money that's in the box". So it's all kind of modelled that way. This is something that we haven't formally tested with the authorities yet and that's something that we'll be doing in the coming weeks. We'll be having a similar discussion with Planning, and EPA, you know specifically around that matter and the acquisition with Flow and we'll test to see ...

**DG:** And council will, obviously, will have briefings?

**RB:** Yep. I guess there's a whole process to go on from here about our –

**JT:** Our rezoning journey that's already started and how we are now leading that process and the things that need to be, the boxes that need to be ticked if you like, along the way for that. While council has a role there, when it comes to the containment

cell, it's really, they're a post box for referral back to the regulators and authorities that we are dealing with and have been dealing with and satisfy them at that highest level of that integrity and scrutiny that they'll want to see and rightly so. We understand that well as a utility vehicle. That's a world, that regulatory world that is there, that's what we know well. We live and breathe that. That's why I'm trying to stress: we're not a traditional property developer. We call ourselves a sophisticated landowner and a utility.

**TT:** Is there any significant advantage to the overall project of having the northbound ramps constructed on the Expressway or is that neither here nor there?

**JT:** No, it would be an advantage ... just the viability is the challenge. There is likely to be a discussion at a state level, whether that gets included in the state infrastructure contribution levies at some future stage or not and depends on a range of factors. But at the moment, it's not proposed, we're not proposing that. What we're proposing is sustainable without them there, and if they were to be there we'd need to see a benefit if we were to fund them or they might be funded by others. And there are funding mechanisms around that can see that change and we'll be open for those discussions, obviously, with any layer of government on how to solve some of those issues. And again, being a sophisticated funder of utilities and infrastructure, we understand those issues and having that dialogue with governments is a lot simpler than the traditional property developer. I've been there, you know, 15-20 years ago with the traditional property developer who just goes "no, I don't want to spend anything" or "no, I don't see the benefit", "I won't, I just want something else". We have a different approach to that and, if there's benefit, happy to invest and take a longer term view, you know, rather getting into a project and out after five years. The property development side of this is a 15-year exercise, could be less if we do a really good job of it. But in reality, it's a 15-year exercise. But the utility space goes on forever.

**AG:** It might not help you to fund it but to say it would be an advantage because we've been trying for these [ramps] since the Expressway went in, and we've got people turning short or having to go to Kurri to turn around now to go north.

I'm going to ask, did anybody hear where the accident was this morning? On the Expressway at Sawyers Gully? I was wondering if it was somebody turning short through that strip. It was supposed to have happened at 3 o'clock this morning. I wondered if it was somebody doing a short cut.



**RB:** Yeah I know what you're talking about.

**KH:** I didn't hear about it.

**AG:** I only heard it on the 5 o'clock news.

**RB:** So while Jamin's taking a breath. I would add to the discussion, that although we've been negotiating seriously for a couple of years, and Jamin's team have been working on this a lot – they've spent a lot of money even getting it to this point because they've been testing business models and viability of the potential for the development and Flow's involvement – we're still really at an early stage. There's been some dialogue with council staff just testing some of the viability and some of the assumptions that are being made. But essentially what's happening now, is that once the announcement is formal (which it is) Flow will take full carriage of all those responsibilities for the rezoning and the master planning work and all the interfaces with council and various government agencies to bring that to fruition.

So, Hydro's role in this is, in the short term, is as landowner. I guess that's something we didn't really touch on. We've still got lots of work to do here, we're still here for, you know, three, four, five years completing the demolition and completing the remediation and there will be a staged transfer of land over that period. So essentially, the agreement we've got is a bunch of individual land sale agreements that have certain conditions that we have to meet to make sure that that land can transfer, but that will happen progressively over that three to five-year timeframe. So, as we're landowners, we'll continue to operate as landowners, but we'll grant Flow all the landowner consents required for progressing the rezoning and planning work that they're doing.

**JT:** And just to reiterate that while Hydro have got an active role for three to five years or whatever that time is, that doesn't preclude us from continuing and developing and starting the works well within that timeframe. So there's a control mechanism where Flow are now in control of that future. Hydro are exiting and doing their thing and then there's a gradual transition of what's physically happening on the site.

**DG:** Will you be doing, like a roadshow to the community? You know, one would be good because as a councillor, so Cessnock Council, and bringing the other 13 councillors on board in a briefing, like this, would be –

**JT:** Absolutely.

**DG:** The quicker the better.



**JT:** Absolutely. And we proposed that last Thursday when we met with senior officers and there's a joint briefing being coordinated by that team for both Maitland and Cessnock councils, because it's in both of their areas. I haven't checked with my team today on that but I suspect it's already ready to be dialled out in the next week or two.

**KH:** I suggested he might also like to come along and talk to the chamber. You know, I'm already, I've been there.

**RB:** And we'll start also with the local state and federal members, to make sure they're across it. You know, they obviously get questions. We obviously can't insist but we'll offer our presence and an opportunity to have that discussion.

**KH:** I think they'd be there.

**RB:** Yeah I think they'd be interested.

**KH:** Knowing them, they'll be there.

**RB:** And there's obviously the statutory processes that we still need to go through. This is a, I guess they'd call it a draft master plan. That will get firmed up into a revised rezoning plan. It then needs to get updated gateway (approval). Once that goes through, there will be obviously a formal exhibition process. I'm not sure of Flow's intentions around that exhibition process, whether there's intention to do something more broadly in the community, I'm not sure –

**JT:** Absolutely. And that's part of the discussions that we've been having with Ian. I point to Ian because he was there at that last meeting. And our team and – not that I was there for all of those meetings – but our team, and quite a large team that are actively working on this project and have been for a long time, are engaged with both councils at the officer level and senior officer level going through that process. [They're] experienced rezoning teams that are doing this actively, and understand where we need to get into the community and help them with our vision so that they can see where we're going and how we're doing it.

We're really excited about it. We're really looking forward to being able to get that announcement out there formally tomorrow. I think the embargo on the media is lifted tomorrow, Michael's sort of pushing the button on some of that locally here. But Flow as a business has been very excited to be part of this project. Really, it's a project that just enables us to supercharge all of the visionary items that we've had and we're doing in, not piecemeal – we're doing versions of them around the country – we're able to put all of those into this unique experience. We aspire and know



that if we can get there that this will be a world recognised project in sustainability and urban development. The benchmark's reasonably low around the world and there's some projects that are put up there –

**RB:** That's not a good way of selling it Jamin.

**JT:** I know. We intend to surpass that.

**DG:** I was going to say, did I just hear that right?

**JT:** Projects, you know, projects around the world that were put up as wonderful are, when you get into the detail, are not that ... they're OK, but we have the opportunity here to –

**RB:** The benchmark's about to be set very high.

**JT:** Absolutely. That's right. That's what we like to do in our innovative world. We've gone very well economically in the marketplace of doing it in a sustainable way and we'll continue to strive for that. It's really amazing because we built a business that is driven by passionate people in this space. There's a lot of people who want to care for our environment and to see sustainable outcomes but there is not a lot of action for it in the traditional businesses that are already in this space. And so we are a leader in that space and we want to continue to be a leader.

**DG:** This is the, you know, the two second synopsis, is that the effect of it's going to be operated in isolation or is it the rest of the town? You know with the town centres ... you don't want to be sucking away from your existing town centres and that type of thing. So have you guys worked in isolation or is there a bigger picture of the plan, sort of the whole of Kurri and ...

**JT:** Yeah, that's a good question and one that we've been struggling with to go well, what is it? Is it an arm, north arm of Kurri? I think we started off thinking it could be. Right now, I don't think it is. I think it's going to have its own identity and be something different; an attractant; something that people in Kurri are going to be proud to have up the road but it's not just another version of what they are. Again, I only reflect on those things from what the experts, the urban designers and the urban architects who do this stuff worldwide tell me when you look at the constraints and the connectivity and all these aspects that go into a site. So that's a journey we're still on, that we go through in the rezoning process, and understand what does the community want, what does the local government want and need. What are the resistances in economic terms, what are the benefits in economic terms. There's a real push to try and connect the technology industrial precinct to the residential. That's a new thing

that we haven't really explored ... I won't say properly, we have explored it but the economics around that are tough. The planning laws around that are not that easy to deal with because it creates a whole bunch of traffic issues. We're sort of in that space where we're willing to try and figure that out and make the best outcome for the community.

**DG:** So there will be plenty of opportunities and discussions with the chamber, with the council and people, the existing residents?

**JT:** I'm not sure if I'm going to agree to ... you know. There's experts in that space, so your Council employs a bunch of experts who we have already engaged and are continuing to engage with those. Are residents experts? I don't think they are. Everyone has an opinion. I've got to be honest on that. I've been around rezoning sites and developing sites for 25 years. While residents per se may have an opinion, and they may have a focused opinion on their little problem, we need to think as creators of communities bigger than that. We employ professionals in all of our organisations who know that stuff. That's where I go, I always go to the professional areas. If you as a councillor need to harness your input from your community on your residents, you've got a whole machine, and ratepayers are paying for that to happen so you can give me that feedback. So that's just a bit of insight into how I think that relationship of communication can go and love to go on. But do I need to go and talk to every resident to know what their opinion is on what I am doing as world's best practice?

**DG:** I'm more to the point of saying that it doesn't ...

**KH:** Getting them on board.

**DG:** Getting them on board number one. But the other one is too, is that it doesn't put a class structure in. You know, over the creek you've got the super environmental new city, and you know, it basically draws a delineation ... we've got to lift the whole community you know. The integration is what I'm sort of taking about, is that the lifting the whole community.

**JT:** We're certainly we're not proposing community title or gated communities or anything like that.

**DG:** I understand.

**JT:** We're actually trying to create a destination so that tourism can be there. And that's not just tourism from outside the region; that's tourism in your region. So someone who wants to enjoy the benefits of those wetlands ... probably people in Kurri don't even



know those wetlands are there because they're not accessible to anyone. But in a couple of years' time they might be.

**DG:** I think they do. They trespass all the time.

**JT:** They trespass all the time.

**RB:** They're the ones you don't want to know about.

**JT:** But that's a very small percentage of that community.

**DG:** I think everybody does who knows Kurri.

**TT:** Where's the Kurri speedway sit in this vision?

**JT:** Yeah so Kurri speedway is ... you can just faintly see it there because this is an overlay of an aerial photograph. It's in that industrial zoned land there.

**KH:** Yep, you mean for the future?

**TT:** Yeah, will ... what its future likely to be? Will it cease to exist or ...?

**JT:** Possibly. I have met with the speedway operators a couple of times.

**RA:** Oh, you have met with them. OK.

**JT:** Yep and I've given them an opportunity to create a business case of why I can leave them there. I've encouraged them to look at some funding and if it's a viable, sustainable operation we're certainly open to leaving them there and they know that. And they're off doing work in that respect.

**TT:** That's fine. I didn't realise you'd met with them.

**MU:** I just want to take a step back to when you were talking about bringing the rest of the community along. If you could maybe talk around this, so with that number of additional residences and additional people in proximity to Kurri, we would expect that some of them would come into Kurri or into Weston to shop and to live and to buy and that sort of thing. So there'd be more people with more choices on where they, you know, where they go to Coles, or where they go to the pool or all those sorts of things. Is that a fair statement?

**JT:** Yep ...

**MU:** I mean I don't want to overplay it. I don't want to put words in your mouth.

**JT:** Well, yeah, we are part of the region and so there's interconnections between regions and town centres and services. There's no way that that could replace a regional town centre, you



know a regional destination that has services that people need to go and connect to health professionals and so on. The viewpoint that we're going to create some destination for coffee shops and taverns and distilleries and micro-brewers is going to stop everyone from going to that town centre, I don't subscribe to that.

**MU:** Yeah that's what I was getting at.

**DG:** That's what I was getting at as well.

**JT:** Yeah I know.

**DG:** Is it going to be at the expense of Kurri main street? You know, when everyone migrates ...

**JT:** I wouldn't have thought so. It's not going to have that capacity to do that –

**MU:** It's greater than the sum of its parts.

**DG:** I can't even get the wording.

**JT:** I know and that's because it's so massive. This, this is a massive space to get down. Now we've broken it up into two precincts right now and it could be many more. This is, probably, I think right now the most substantial precinct in the Hunter, in the Lower Hunter region now.

**MU:** We overlaid this entire 2,000 hectare site over Newcastle CBD back in the day and there wasn't much change, you know when you put it over Newcastle.

**DG:** But it's got implications in that we've just finished the Kurri Kurri strategic plan, so all of that from a strategic planning point of view is, especially for Councillors, we've just gone through this. And then all of a sudden here's a master plan, so really it puts all of that –

**JT:** Absolutely.

**DG:** ... Back into flux.

**JT:** Well, it doesn't put it into flux. I think this response reacts to that. It also the Department of Planning, metropolitan housing plan that's just been released, identifies this location as key to a whole bunch of connectivity, housing and so on. And I think as people start to look at the region from a bigger picture point of view, they are now seeing that this location is actually very strategic and it has the jobs and the capabilities for tourism and for residential. We see that as well and we go, well, that's why investment comes, because it has those factors. You have the other sites in other parts of Lochinvar and Anambah and some big players have been throwing some money at it but it doesn't work. We've been



out there helping them, trying to fund with them on those projects and other projects around the Hunter. We're involved in every bit of land from 500 lots up and we know what's viable and what's going to work.

**TT:** The Hart Road area, I think it was proposed to be B7. Is that still what you're looking at?

**JT:** Yeah, it's still a B. I need my planning consultant to tell me if it's still a 7. A B something.

**RB:** There's a strategic planner in the room.

**IS:** I think it was proposed as B7 in the original.

**JT:** That's right and there was requirement for us look at the viability.

**TT:** The viability, yes. The state government came back with that.

**JT:** That's right. That's right.

**KH:** Because there was a B4 thrown around for a little while too.

**IS:** B4, B5.

**JT:** Yep B4. B5 is still there or still being considered and will be part of the process moving forward, with Cessnock particularly, but with both councils as we work through that process. Again, it's about viability. We want it to be viable but the overall project and where we start, is about ... we need to get those things right. So it's fair to say the investments in those areas are not as straight forward today as some of the other parts of the site and we need to work through those. We have a bunch, as Richard and I have alluded to, a bunch of business cases for a whole range of things and we're getting closer every day on resolving those and will continue to resolve those.

Notwithstanding that, we're not in a position where we can just go oh well let's down tools and not do anything on the rezoning. We still need to create value in the overall project and finalise the rezone that's there so that we can activate parts of the site.

**TT:** So is the rezoning still held up in flood study?

**IS:** The flood study's completed.

**JT:** The flood study's completed. I think to be honest –

**IS:** It has to go to council to be finalised.

**JT:** I think, to be honest, the rezoning's been held up with us, probably.

**RB:** Probably now it is.



**JT:** It's been in our court for the last four months. And then we've had some recent dialogue and ramp up of a series of meetings with council and we have a program in place, to have that, our rezoning plan back on exhibition in October?

**IS:** You're planning to submit it to council in October, I think it is.

**JT:** Right. Sorry, not on exhibition but back to council. Sorry, back to council for endorsement back through the gateway.

**IS:** Yeah so we have to get another, a new gateway probably. That was our understanding. It won't be exhibited this year.

**TT:** What's your projected timeframe to get the final rezoning over the line?

**JT:** Well, Ian's just blew me away by saying he wants a new gateway [process].

**IS:** Well that's what the department's told us.

**JT:** Well they've told us different advice. But anyway, we've just got to work through all of those issues, with different governments. And it depends who you speak to in governments and what answer you get. We expect, our trajectory is to have a rezoning Q3 next year.

**TT:** So you're talking about 12 months or so really?

**JT:** It's been around for 4 or 5 years, it's not processes and changes and enhancements. Three years in the process but somewhere in three years.

**AG:** Somewhere in there you might be able to put in a small area there for a GP or medical centre, because I think, from memory it would put us under RRMA three. We have trouble holding doctors in Kurri because we come under RRMA 1, and I believe that Northcott Street, once you stepped over Northcott Street, it puts us into RRMA 3 and that makes it more viable for doctors.

**JT:** That's why the work in what we're doing in this B zoning area is important for that because that could be a real key and we want as much flexibility as we can in those precincts. B7 ... we understand the arguments from state government that B7 may not be the right zoning. Is it B5? Is it B4? Is it something with permissible uses in that process?

**AG:** I know you boys are up with that but just there, that medical zoning for doctors, not hospital, but doctors –

**JT:** Yeah, we went through all that hospital drama 18 months ago. Anyway, I've just seen Richard looking at his watch so he's obviously got to get home.



**MU:** OK, any further questions of Jamin at this time? If you can hold off we've got a period at the end there for any other. OK, and that's your last slide Jamin?

**JT:** Oh no, I don't think it is. I did have one other one.

**MU:** Well go on. OK, one last slide.

**JT:** Nah, nah it was just again I was just reiterating some of the interaction with the natural landscape. There's a picture of one of the lagoons, you know, that kind of environmental connectivity and destination capabilities, is what we're trying to focus on to get it to be an attractive place.

**MU:** Billy Metcalfe's not here but the mention of the cycle network will excite him I'm sure.

**JT:** Well that master plan has a 9km cycleway around the wetlands there that we see as a real benefit. OK, I think over to you. I think that might be it.

**MU:** Thanks Jamin.

**RB:** Thanks Jamin.

**JT:** Oh there you are. I think we've been over those.

## Stage 1 Demolition Progress – CMA Contracting



White boxes indicate areas which have been demolished.

- Contract awarded 13/4/2017.
- Site meeting to discuss the demolition methodology and Demolition Risk Assessment Workshop (DRAW) process with SafeWork NSW on 1/5/2017.
- DRAW # 1 – site establishment held on 8/5/2017.
- Handover of western part of the site to CMA as PC occurred on 16/5/2017.
- Meeting held with Cessnock City Council staff on 17/5/2017.
- Management plans submitted to CCC for approval on 26/5/2017.
- DRAW # 2 – planning for the demolition of first structures held on 7/6/2017.
- Management plans approved on 26/6/2017 and demolition commenced thereafter.
- DRAW # 3 Structures between Line 1 and 2 held on 7/8/17
- DRAW # 4 Potline 3 Demolition held on 14/11/2017
- DRAW # 5 Casting Demolition held 22/2/18

### 6 Project update

**MU:** Now on to the very exciting demolition. It's been the most exciting thing, until today.

**AW:** An anti-climax!

As Richard said we've still got a lot of work to do. We're still continuing with stage one demolition. Still got to do stage two demolition, which is the below ground demolition of foundations and services and then we've got to get on with the remediation which includes construction of the containment cell, so that's all part of Hydro's scope, continuing scope of this project, the ReGrowth project.

These are just a few photos, it's mainly photos, so this is our line 2 and 3 south area, so Jamin you'll see we haven't demolished 250 metres of the pot lines. So we've been cleaning the area up, removing scrap and digging out the substations. Some of them have PCB contaminated soils, backfilling voids. A lot of the cathode busbar has been now moved and it's out on the pad.

This was a dip in the road that was underneath the line 2 south bridge. It's an underpass that's been backfilled.

We've demolished the north bath station, between lines 2 and 3. That's the honeycomb bins there on the ground.

**MU:** Sorry, honeycomb?

### Stage 1 Demolition Progress



Line 2 & 3 South Area – July 2018 following a clean up of the area



Line 2 & 3 Southern Roadway – July 2018 after backfilling of the dip at L25 underpass

**AW:** Honeycomb bins. That's the shape of them. They were bins that were used to contain the alumina and cryolite bath that was blended together in that bath station.

We've started demolishing the casthouse, this is photos taken on the 10th July. And just a few photos taken from our drone, looking from the awning nearly gone. We had to close the road for a couple days when we did the awnings. It wasn't safe for traffic to go past.

That's another view a few days later.

**BW:** Gees, you aren't mucking about.

**KM:** Nah it's coming down now.

**AW:** That's one of the homogenising furnaces being demolished and that's on the 16<sup>th</sup> July. Here, this is just before we removed the two twenty-tonne cranes, DC2 crane and DC3 crane. They were pulled out with one of the big excavators.

We've been pulverising the concrete and this is one of our consultants from Ramboll taking representative samples of the crushed concrete and getting it tested to make sure it's clean and OK to reuse as backfill.

This is one of the voids. We had to remove the hydraulic cylinder that was in here. This was the spacer storage pit and that's one of the voids that's going to get backfilled with that concrete. It's been tested and shown to be OK.

Some more photographs, so yeah, that's just a week ago, so there's not much left now in casting. Probably about another two weeks it will all be gone.

That was holding furnace 5 getting demolished. They actually pulled it off the trunions and demolished it.

They have all the refractory out. The refractory's going into the baking furnace which will go into the cell. This is the IT building getting demolished, late July, and the lab.

**KM:** Oh yeah.

**AW:** Which Kerry would recognise no doubt. That's also being demolished.

### Stage 1 Demolition Progress



Demolition of 49B/C North Bath Station

### Stage 1 Demolition Progress



Demolition of Homogenising Furnace 3 (photo taken 16/7/18)

### Stage 1 Demolition Progress



Validation sampling of concrete from the Casthouse (20/7/18). Results show that the concrete is suitable for backfilling.



### Stage 1 Demolition Progress



Demolition of Holding Furnace 5 in Casting (photo taken 8/8/18)

## Stage 1 Demolition Progress



Asbestos conduit in Line 1 following machine and hand digging

We've been continuing with removing the asbestos out of line 1 basement area. So last meeting I talked about these conduits that we used for the voltage measurement on each pot. So it requires saw cutting the concrete and a combination of machine digging and then hand digging when we get close to the conduit and then carefully removing it and then digging out another ... we were digging about 200mm below the conduits, but we were finding – this is a guy jack hammering around the conduit, being very careful not to actually hit the conduit. And this is the asbestos that's being wrapped up in plastic. It's being stored in the carbon plant and later on it will go into the cell.

## Stage 1 Demolition Progress



Asbestos conduits and soils wrapped in plastic and stored in Carbon Plant

We've been having a lot of problems with getting failures. So when we remove 200mm of soil under the conduit we're still getting positive results. Contractors are marking them with pink paint, fluoro pink paint, if they fail. Also the soil that we removed was failing. And we've been doing a lot of investigation. We've

## Stage 1 Demolition Progress



Demolition of Casting (photo taken 10/7/18)

## Stage 1 Demolition Progress



Demolition of Casting (photo taken 10/7/18)

## Stage 1 Demolition Progress



Demolition of Casting (photo taken 13/7/18)

## Stage 1 Demolition Progress



Demolition of Casting (photo taken 16/7/18)

actually gone back to the original construction photos to try and get some clues into what was going on.

## Stage 1 Demolition Progress



KK-107 26 June 1968  
Looking south from Potroom Building 3A crane rail level. Predominant columns are for potshell support. Note pot exhaust trench on centreline of building.  
Historical photographs from Line 1 construction being used to provide clues on presence of asbestos

So here you can see this is one of the expansion joints in the concrete. You can see lots of little bits of asbestos tape lying around and, you know, areas here. This is the fume duct trench. This is in the southern half of the pot line. We suspect that, during construction, they might have just thrown scraps of asbestos in against wherever they were backfilling. It's been a real headache but anyway.

## Stage 1 Demolition Progress



KOT-05 4.8.69  
Construction of raised central floor in potroom extension. Exhaust trench in centre foreground.  
Historical photograph of Line 1 south construction down to Pot 64

The south end's been a problem, but the north end we're just going to dig down with a machine to natural soil, and then, it means there will be a few more cubes [M<sup>3</sup>] of asbestos

## Stage 1 Demolition Progress



Demolition of Casting (photo taken 20/7/18)

## Stage 1 Demolition Progress



Demolition of Casting (photo taken 1/8/18)

## Stage 1 Demolition Progress



Spacer storage pit following removal of hydraulic cylinder and prior to backfilling with clean concrete.

## Stage 1 Demolition Progress



Demolition of 78A IT Building (photo taken 23/7/18)

contaminated soil coming out, but at least that way we can get a better chance of getting clearance from Ramboll, our consultant.

## Stage 1 Demolition Progress



Test pits dug down to natural clays and soil samples taken at progressive intervals

We also did a test, we cut six test pits underneath the pots, where you wouldn't expect there to be any asbestos, because it wasn't on drawings. Fortunately, they all came back clear. So we dug down to the natural clays, that's the clean soil - It looks pretty - clean and took samples, like every 100mm and all came back clean. So, that was reassuring, that it looks like most of the soil's clean but we're going to have to detail and do a lot more careful digging where we know there's been asbestos, so the conduits, the expansion joints, which are every five or six bays along the building and few in a trench that run up the centre. So it's like Michael said last meeting, it's like unscrambling an egg.

We've also been loading out the cathode busbar from lines 2 and 3, so that's the first load leaving the site on the 8<sup>th</sup>. As we start line 1 demolition, that busbar will also be going out but we're keeping 400m for you Jamin so we won't forget that.

**JT:** That's alright.

**AW:** In the switchyard, Flow has asked that we remove the 14 old Fuji rectifiers, so they're old rectifiers between 40 and 50 years old and they're not really useful. They're very old and it's only the three newer ones – that's one of the newer ones there – that are staying. They were installed back in 2009. So we've awarded the contract now to a company from Sydney that specialises in transformer removal and oil removal and recycling of the scrap metals and we've got a kick off meeting with them next week.

## Stage 1 Demolition Progress



Demolition of the Laboratory / HSE Building (photo taken 8/8/18)

## Stage 1 Demolition Progress



Jack hammering of concrete either side of asbestos conduit by ACM removal crew

## Stage 1 Demolition Progress



Line 1 conduit trench that has failed validation testing

## Stage 1 Demolition Progress



Line 1 soil removed from a conduit trench that has failed validation testing

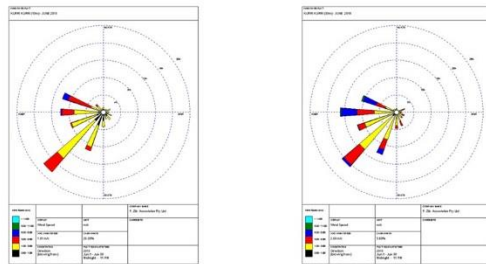
## Stage 1 Demolition Progress



Six locations directly underneath the pots checked for presence of asbestos

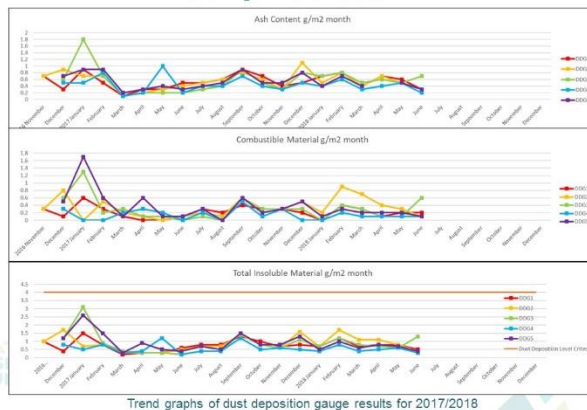
We're also continuing with our dust monitoring. This is the wind rose charts for June.

### Wind Rose Charts – Jun'18



Predominantly winds are coming from the south west. That's the 10m and that's the 30m altitude from our met station out there, and that's the trend graph, so that's ash, combustibles and total insoluble. So we're trending OK and they're the locations of the monitoring.

### Dust Deposition Results



Trend graphs of dust deposition gauge results for 2017/2018

**DG:** Are they testing for PFAS?

**RB:** We don't have a history of using it on site.

**AW:** We haven't used it on site.

**MU:** It's not a real airborne thing.

**DG:** Seems to be a history of it everywhere.

**IS:** What happens to the excavated soil?

**AW:** So that's being ... the soil that we're taking out of pot line 1, we're just stockpiling it here in the south west corner of the site and we're going to cover it with geotextile or black plastic and eventually it will go into the new cell, which is being built out here once we get the approval.

### Stage 1 Demolition Progress



Soil tested and found to be free of asbestos

### Stage 1 Demolition Progress



First load of cathode busbar being shipped off-site on 8/8/18

### Stage 1 Demolition Progress



Contract awarded to a Sydney company to drain oil and remove all 14 Fuji rectifiers from the Switchyard. Contract kick-off meeting to be held 22/8/18

### Site Locations



We've continued with moving the ledge bath off site, so that's getting recycled in China at another aluminium smelter. We've now moved 2,000, nearly 2,500 tonnes and we've got about 940 tonnes left to go. Unfortunately we have 2,700 tonnes of anode cover material that we weren't able to find a viable recycling outlet for, so it doesn't look like it's going to get recycled.

We have awarded a contract to a local company to send about 100 tonnes of this PCB contaminated soil that we dug out from under the substations. So it's going down to Victoria to a thermal desorption plant where they heat treat it and it destroys the PCB's and the soil can be, I think it just goes to a general solid waste landfill or it can even be reused. There's no facilities in NSW, no thermal desorption facilities in NSW so it's either got to go to Queensland or Victoria.

### Approval of Stage 2 Demolition

- Stage 2 demolition approved by Cessnock City Council on 9<sup>th</sup> May 2018.
- CMA have updated their management plans to reflect the conditions of consent for submission to Council.
- Management plans submitted to CCC on 1/8/18.
- Planning to commence Stage 2 works in Q3'2018.

We've also submitted the updated management plans from CMA Contracting to council. So stage two demo, the DA was approved on 9 May and we submitted the plans on 1 August. And as soon as they're approved, hopefully in the next few weeks, we can then start stage two works. And we'll get the big excavator, which is the big 160 tonne excavator that's demolishing casting at the moment, it will go over and start pulling out the big foundations from lines 2 and 3.

**DG:** Stage 2 includes the stack?

**AW:** That's right. So it's pulling out the foundations and services and explosive demolition of the stacks.

We're working through our procurement processes now for the remediation contract, so this is going to be the biggest contract in the whole project. And we've just finished doing supplier qualification audits on seven different companies, a mixture of civil companies that have experience in remediation projects and specialist remediation companies that would engage their own civil contractors.

### Ledge Bath Shipments



5,080T of ledge bath & anode cover material was on site – 2,460T of ledge bath has now left site for recycling in China. About 940T still remains. A trial to recycle the remaining 2,700T of anode cover material was not successful.

### Stage 1 Demolition Progress



A contract has been awarded to send approximately 100 tonnes of PCB-contaminated soils from substations off-site. The soils will be sent to a thermal desorption plant in Victoria.

#### Procurement Plan – Remediation Contract

- Procurement analysis currently being finalised.
- EOI issued on 22/1/2018 and closed on 28/2/18.
- Currently evaluating EOI submissions and meeting with shortlisted candidates.
- **Supplier qualification audits for the shortlisted companies completed (Jul'18).**
- Expecting to have a civil / earthworks / remediation company as the Principal Contractor with a specialist lining installer as a subcontractor to the PC.
- Target date to go out to tender is in Q4'18 (pending EIS approval date and approval by EPA's technical review of the cell design).
- Tender documents will include – detailed design docs (including drawings, tech spec, CQA plan & others), draft AS2124 construction contract with amendments plus various project-related documents (eg. EIS, conditions of consent from DoPE/EPA and various Hydro management plans – WHS, EMP, asbestos management plan, etc).
- Lining materials – HDPE liner is a long lead item and only the pre-qualified suppliers from the liner testing can be used. Decision to be made on Principal-supplied or Contractor-supplied item (leaning towards Contractor-supplied based on advice from the cell designer).
- CQA contract to be awarded.
- Expected award date is Q1'19 pending authority approvals and Hydro decision gate approval process.
- **Planning to start some of the smaller off-site remediation packages as early works in Q4'18 and stockpile the waste at a suitable location on site.**

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PROSPERITY

And we're now at a stage where we can shortlist for a tender but we're waiting for approval before we can go out to tender. We may issue some early documents just for their information but we won't actually start the formal tender process until we have approval.

We are planning to start some small offsite remediation in the buffer zone, which we are allowed to do because we have RAPS, Remedial Action Plans, and we're going to be sending those through to council and give council notice that we'll start those works in the next few weeks. And that's planned, that will be most of quarter four, we'll be doing that work. Fiona spoke about it last meeting, it will be just those sites that she explained. Is there any questions from me before I hand over to Richard?

**RB:** Very quickly then. So on the approval process for the remediation, so we've been given advice from the EPA that the treatment process, the treatment methodology, for the capped waste stockpiles, is acceptable so that we can proceed with the Response to Submissions, which we are finalising the draft as we speak. In fact, we've got it sent to Flow, they're having a read through it, they'll provide any comments and we'll hopefully get our draft submission to them next week. That's a draft for them to review and come back to us with any additional comments or concerns that they've got and hopefully then a formal submission within the next month.

Beyond that I'm not sure what the process exactly looks like. We'll have a meeting with the department I'd say a few weeks after we formally submit it so they can give us a rundown on timing and process from there. There could be an exhibition of the RTS. We're still not certain exactly of the process if it will go through a PAC – we think it will – but we're yet to see that.

#### Environmental Impact Assessment for Stage 2 Demolition / Remediation DA (SSD6666)

- Response to Submissions (RtS) Report
  - EPA has provided support for gypsum treatment of CWS
  - Draft RtS report submission next week
  - Aiming for 'formal' submission within the next months

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[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=6666](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6666)

## Spent Pot Lining Recycling

### • Commenced 1 Recycling Contract

– Material dispatched from site. (1<sup>st</sup> month - ~250t)

### • Phase 2 investigations are ongoing with a number of additional options. This includes:

- Site visits for the purpose for HSE / CSR audits
- Intermediate and final product testing (to validate claims of non-hazardous material, or otherwise)
- Validation of capacity claims
- Commercial negotiations
- Confirmation of approval from NSW and Commonwealth authorities for proposed solution

SPL ... there's another momentous, another milestone for us in the project. That's the first truckload of SPL leaving the site. I think I repeat myself on the next slide, Andrew, but the first month of the recycling contract there was about 250 tonnes of material moved off site. If you do the maths, that's a long way short of where it needs to be for our timing, but that's not in our control. That's the recyclers removing that.

**TT:** Where's that going to?

**RB:** That's going locally.

**TT:** Where's it going here?

**RB:** I'm not ... it's going locally. And our expectations are that that will increase, but let's ... we're obviously going to be having lots of discussions in that process to make sure they're capable of delivering on the contract.

We're still having discussions with another, a number of other possibilities to make sure that we do deliver on that timeframe ambition that we've got.

I think that's it Andrew, isn't it?

**AW:** Yep.

**RB:** That's it.

**MU:** Alright, thanks Andrew and Richard.

## Spent Pot Lining Recycling



1<sup>st</sup> truckload of 2<sup>nd</sup> Cut SPL leaving site on 6/7/18 (255T of 2<sup>nd</sup> cut SPL were recycled in July)

## 7 CRG questions and answers

**MU:** Alright. Big meeting today. So we'll start with any questions that have come to you from the community. Anything that's sort of jumped out? This is usually where we hear the crickets. No one's been talking to anybody and nobody wants to know anything. Anything else that's jumped out?

And so Jamin, the CRG is not just here for the lollies. They are a conduit to the community and the community ask them questions and they provide information back to the community.

Alright, so there's being nothing there, I'll just call for all other business and general business. I've got one item but I'll hold off. Anything else?

**TT:** I put the solar panels up today and the battery and the floodlights.

**MU:** I had a look on the way here mate. Yes.

**TT:** I've just got to put the dusk to dawn sensor in the circuit and they'll be going.

**MU:** OK.

**KH:** So you have the cake ordered do you?

**MU:** That was my item, was to talk about the mural. I haven't quite ordered the cake yet. I could order it but it might go stale so we won't do that yet.

**KH:** Well you can order it now so it's ready.

**MU:** We can put a tentative order in then. Date to be confirmed on it. We've got the plaque under way. We've got the wording for the plaque confirmed and the plaque's been ordered to go on to the mural. We've got a few little administrative items to sort out around the event. And once that's done we'll be issuing or, be planning that, finalising the plans for that and then being able to do that.

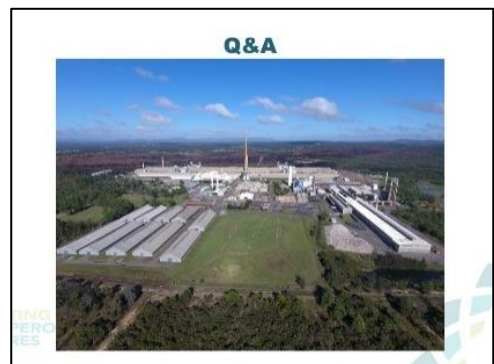
**RB:** Council will be very happy to close Hart Rd for us.

**MU:** Council's going to close Hart Rd for us. You heard it here first. We'll leave that one with you OK Darrin? Is that alright?

**DG:** I'm turning my phone off and I'm going.

**ALL:** Laughter.

**RB:** This is a Towns with Heart event, we just say that.





## 8 Any other business

**MU:** OK. Is there any other general business or any other comments?

**AG:** You've answered most of the way through.

**MU:** OK. Great. So the planned meeting date for the next meeting is 18 October, same place. We'll be looking to get a formalised name plate I think for Ian because we've upgraded our name badges since you were last here mate. It sounds like you are going to be part of the furniture. You're standing in a bit. It's only fair. And one for Jamin, I expect. Are you here next time?

**JT:** Absolutely.

**MU:** OK. Well with that we'll close the meeting.

**MU closed the meeting at 7.40pm.**

*Video played.*

## 9 Meeting close

Meeting closed: 7.40pm

Proposed date of following meetings:

Thursday 18 October

Thursday 20 December 2018 (TBC)