

BALDIVIS SUBSTATION LANDSCAPING DESIGN COMMUNITY WORKSHOP #3

5.30 p.m. to 7.00 p.m.
Wednesday, 29 September 2010
Settlers Hills Community Centre, 1 Huxtable Terrace, Baldivis

WORKSHOP MINUTES

MEETING ADMINISTRATION

Meeting Purpose

The purpose of the meeting was to:

- Build on the workshop of 25 May 2010:
- Provide a project update.
- Respond to actions arising from the last meeting.
- Look at and discuss draft concepts and implications with the assistance of photo montages.
- Community feedback and discussion informing next steps in design.

The workshop was attended by 8 community participants.

Western Power officers in attendance were:

- Lisa Hamblin, Sustainability Assessment & Community Engagement.
- Nick Cullen, Project Coordinator.
- Ben Kraft, Environmental Officer.

FEEDBACK ON ACTIONS ARISING FROM WORKSHOP OF 25 MAY 2010

Western Power to provide additional information on noise and noise mitigation

Ben Kraft referenced information provided in the workshop papers. The substation is expected to generate noise in excess of that provided by regulation. Nick Cullen circulated a noise study of the site with projections of noise at set distances from the substation. In response to queries, Nick advised that the substation will be servicing immediate areas around the site, some existing communities and some future developments. Ben confirmed that at each property boundary, noise cannot exceed 35 dB(A). However, as the noise generated is “tonal”, and therefore with the potential to be more annoying, the approved noise level must not exceed 30 dB(A) at the boundaries of neighbouring properties. Western Power must comply with this. Key mitigation measures are:

- Enclosing the transformers within the site.
- Construction of the boundary wall. However, the boundary wall may be too far away from the source of noise to be an effective barrier to noise.

Ben confirmed that the site is in a very quiet area. Therefore the noise from the substation must be minimal. Ben confirmed that vegetation is not an

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effective barrier to noise. Nick circulated a site plan showing 3 transformers, all enclosed. Nick noted that use of a block wall cannot be taken off the table completely until all of the noise modelling is completed.

A chart showing examples of everyday activities and noise generated in dB(A) was circulated.

Western Power to provide additional information on EMF

Nick referred to the additional information provided in the workshop papers, including a graph showing the rapid decrease in EMF as you move away from the source and examples of the EMF generated by everyday items. The boundary will be 10 to 15 metres from the transformers. EMF mapping has been conducted at the Wanneroo and Clarkson substations. Clarkson is the most recently constructed, and shows EMF levels of .7 or .8 at the open gate to the site. These studies have only recently been completed and will be published on the Western Power website soon. In most cases, and taking into account the boundary and buffer zones, the public will be 30 metres from the transformers.

Western Power to liaise with David Krane on planting

This is ongoing and David was in attendance at the meeting.

Western Power to bring sample of transmission cables

Cable samples were circulated and explained:

- 22 kV underground cable
- 22 kV overhead cable
- 132 kV cable

Nick confirmed that the community will not directly be levied any additional charges for the substation. The construction of the substation was distinguished from the charges levied with the installation of underground power in communities in partnership with Local Government Authorities. It was confirmed that Western Power charges are regulated.

The painting of aluminium and galvanised surfaces

Nick advised of significant difficulties in working with painted or powder coated surfaces, being:

- There are earthing issues that would be expensive and complex to redress.
- Galvanised structures are ordered in bulk, making orders of powder coated structures a significant cost driver.
- There are issues associated with maintenance, with the potential for paint chipping, the need for regular re-painting.

Participants agreed that safety is paramount. It was acknowledged that as the metal surfaces to fade to a dull grey over time, the benefits of painted or powder coated surfaces are outweighed by the factors noted by Nick.

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Plantings on both sides of Eighty Road

Nick confirmed that planting has been undertaken on one side of the road. There are issues with footpath and verge widths on the western side of the road that do not make planting possible at this stage. Nick confirmed that residents overlooking the site have been provided with tube stock to allow for screening planting to start now.

Wall décor

Nick circulated examples of wall décor. He advised that “anti-graffiti paint” is available. Nick advised of the development of wall art through community groups. Western Power remains responsible for graffiti clean ups on its sites.

Participants agreed that the preference is for mesh fencing because of the lower visual impact. Nick confirmed that the only controlling/changing factors in wall choice is related to security and noise mitigation. Nick advised of some community calls for a solid wall, perhaps arising from beliefs about noise and hiding the site. Ben confirmed that enclosed transformers could deal with noise mitigation.

Participants confirmed their preference for enclosing the transformers, and dealing with noise, within the site, and then for a non-solid wall surrounding the site.

Nick confirmed that Western Power would continue to fully brief all parts of the community on expressed preferences to ensure all views are discussed and an assessment of most preferred options are clear.

Nick confirmed that mesh fencing cannot be climbed easily (it is a tight meshing designed so fingers and toes cannot fit in the sections to climb it).

Participants agreed that if block fencing is required, then their preference is for it to be fully screened by plantings, making wall art potentially unnecessary.

Site levels

By moving the switch rooms from the west to the east of the site, required earthworks have been reduced, and the site will not be much below the average ground level, but the profile of the site will be lowered. At the same time, taking into account earthworks by the developer, surrounding house lots are likely to be slightly lower than the substation.

DESIGN UPDATE

Nick circulated conceptual layouts of the substation, including sample plantings. Nick advised of advice from internal landscaping experts that there is no real benefit in mounds. Mounds were used at Waikiki to support the more mature plantings. He has been advised that selection of the right

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species will in fact give a better result. Mounds wear down over time. The workshop papers included more information about potential plantings. They are available on the project website www.westernpower.com.au

PARTICIPANTS' ISSUES, COMMENTS AND QUESTIONS

Nick confirmed that the overhead lines along Eighty Road will remain. There is no plan for an additional substation in the future in this area at this point in time. There will be some additional capacity in existing substations along side the new capacity provided by the new substation.

It was noted by a participant that a solid wall could have the effect of amplifying the noise of passing traffic.

Nick confirmed that mesh fencing is used in the majority of substations. It provides greater security, in enabling a view into the substation, and is easier to maintain.

It was noted that digging guards are also incorporated in boundary fencing to avoid people burrowing into the substation area.

The service date for the substation is still November 2013, but there is a chance that this may be pushed out. Western Power confirmed that if there are any future changes to the accepted design that such would be brought back to the community.

Participants confirmed that they are happy with the degree of consultation undertaken and proposed.

NEXT STEPS

Landscaping Design Plans finalised and circulated for comment including perimeter fencing and noise mitigation based on completed noise modelling
November 2010

Development application submitted to City of Rockingham January 2011

Required in service November 2013

Western Power invited participants to call for another community meeting if they felt that of value in the lead-up the submission of the development application.

Report prepared by Carol Whish-Wilson, Workshop Facilitator and Lisa Hamblin, Western Power

October 2010.