

A planning review for Sydney's suburb of [Epping](#) now underway contains an interim traffic report with a focus on cars and parking. No land or road space is set aside for a light rail terminus at Epping station which is needed to continue the proposed light rail Parramatta – Carlingford to Epping. Nor is provision made for a 4<sup>th</sup> above ground track through Epping station which is necessary for a full quadruplication from Strathfield to Hornsby.

[http://pandora.nla.gov.au/pan/38334/20040302-0000/www.transport.nsw.gov.au/pubs\\_legal/act2010syd.pdf](http://pandora.nla.gov.au/pan/38334/20040302-0000/www.transport.nsw.gov.au/pubs_legal/act2010syd.pdf)

Parra Rail Link EIS Summary.pdf - Adobe Reader

New train services in 2006

Legend:

- Proposed Parramatta Rail Link
- New stations
- Upgraded stations
- Main West Line
- Main North Line
- North Shore Line
- Airport Line
- Other Network Lines

Additional services using Parramatta Rail Link

+8/hr Additional trains in peak hour (am) towards Sydney CBD

+4 to 6/hr

+8 to 10/hr

Diversion of up to 4 trains/hour on Parramatta Rail Link

up to 2 trains/hour terminate at Chatswood

+8/hr

YEAR 2006—am peak

The original idea was to divert Western trains away from the Strathfield – CBD corridor which at the time of the EIS was estimated to reach capacity by 2016. Commuters west of Parramatta working in the corridor North Sydney – Chatswood have to go through the CBD.

PERL became a political football in the 2010 federal election and it was never built.

The result is that west bound trains in the evening peak are filling up before reaching the CBD to continue to Parramatta, just as predicted. Thank you Mr. Costa.



Fig 2: Standing only at Wynyard

When a new NSW government came to power in March 2011, the focus shifted to planning the Epping – Rouse Hill rail tunnel. But the original planning for the ubiquitous Sydney double deckers was changed to single deck automatic trains. The Parramatta stubs were moved 500 m north but the tunnel has a smaller diameter now so that double deckers cannot use it.

The original North West Rail Link has now been rebadged into a metro although the distance between stations was designed for heavy rail – while a genuine metro stops every 1,000 m or so and would usually run through a high density area. But what does not exist can be created – by building high rise residential towers around all stations like is happening in Castle Hill:



Fig 3: Australians do not want to stay in high rise flats and cannot afford them anyway

Automatic trains were introduced for ideological reasons (union bashing) and the signals in the Epping-Chatswood tunnel for conventional trains are proposed to be removed in 2018. The loss of operational flexibility is mind-boggling. The whole rail planning Parramatta – Chatswood has now been irreversibly botched.

4/1/2015

Sydney mismanages transition to driver-less single deck trains (part 2)

<http://crudeoilpeak.info/sydney-mismanages-transition-to-driver-less-single-deck-trains-part-2>

30/12/2014

Sydney plans to dismantle rail infrastructure built just 6 years ago (part 1)

<http://crudeoilpeak.info/sydney-plans-to-dismantle-rail-infrastructure-built-just-6-years-ago-part-1>

All this will be bitterly regretted in the coming oil crisis when trains will be full to bursting if only 10% of motorists try to catch trains.

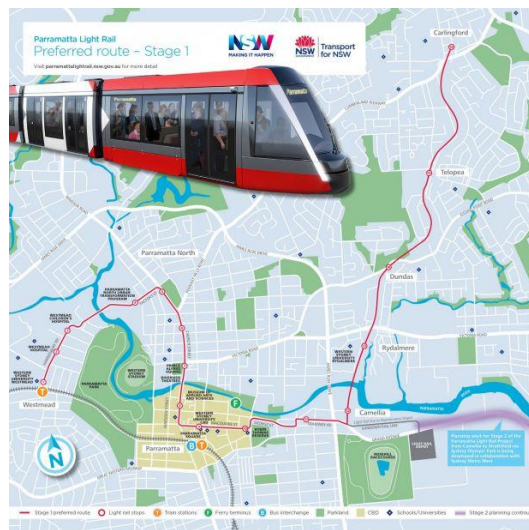


Fig 4: Parramatta light rail alignment

Current planning is for a light rail from Parramatta to Carlingford. That is easy as it involves converting and duplicating an existing heavy rail line.

But the hard part is Carlingford-Epping. At a public meeting in August 2016 we were told that the continuation is a State matter. As if it is not the State government which forces population targets onto Councils which then have to deal with the consequences.

The light rail proposal Parramatta – Carlingford is the final nail in the PERL coffin. It is basically a low floor tram. And since the North West “Metro” does not connect to the Richmond line at Schofields the bottleneck for western trains will continue. An unbelievable strategical blunder of the 1<sup>st</sup> order for the whole rail network of Sydney.

A proper mass transit light rail which could somehow be considered to replace a heavy rail link must be up to 100 m long trains in peak hr as they are used in Frankfurt.





Fig 5: Frankfurt (700K population) running light rail trains up to 100 m in peak hr.

Anyway, let's see how we could continue to Epping:

The location of the Carlingford station on the LR map seems to suggest that there is no intention to continue on Pennant Hills Rd (steep hill and sharp 90 degrees intersection with Carlingford Rd). That is promising because at least a short tunnel is needed up to Carlingford Court shopping centre (under the car park corner Carlingford Rd – Rembrandt St) which should be the next stop (that was forgotten in the original PERL EIS)

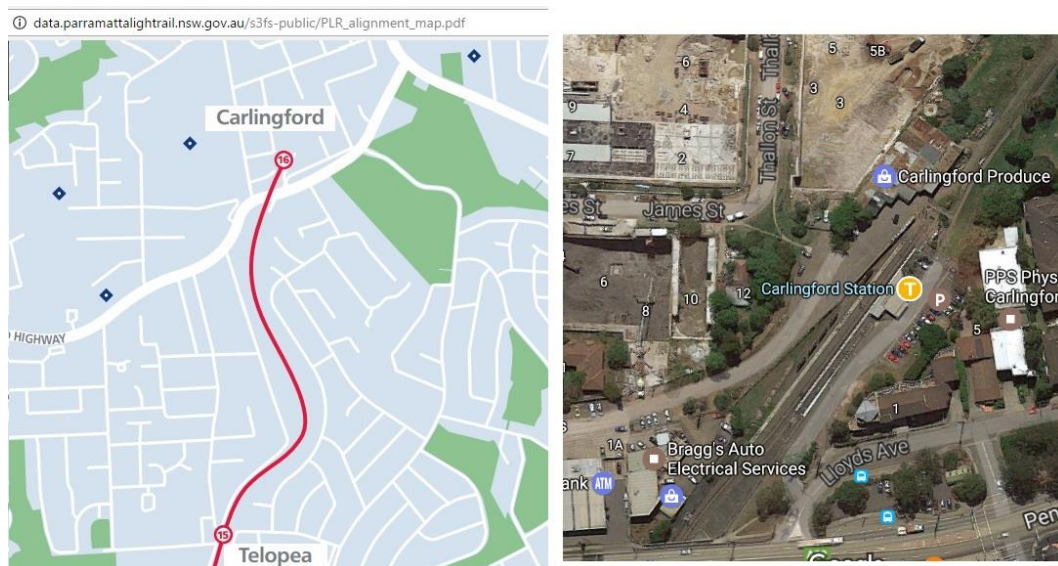


Fig 6: Carlingford station

However, flats with underground car parks have already been built near or over the alignment of such a tunnel, forcing it to be lower than preferable for the level of a station under Carlingford Court. This is another example of botched planning.

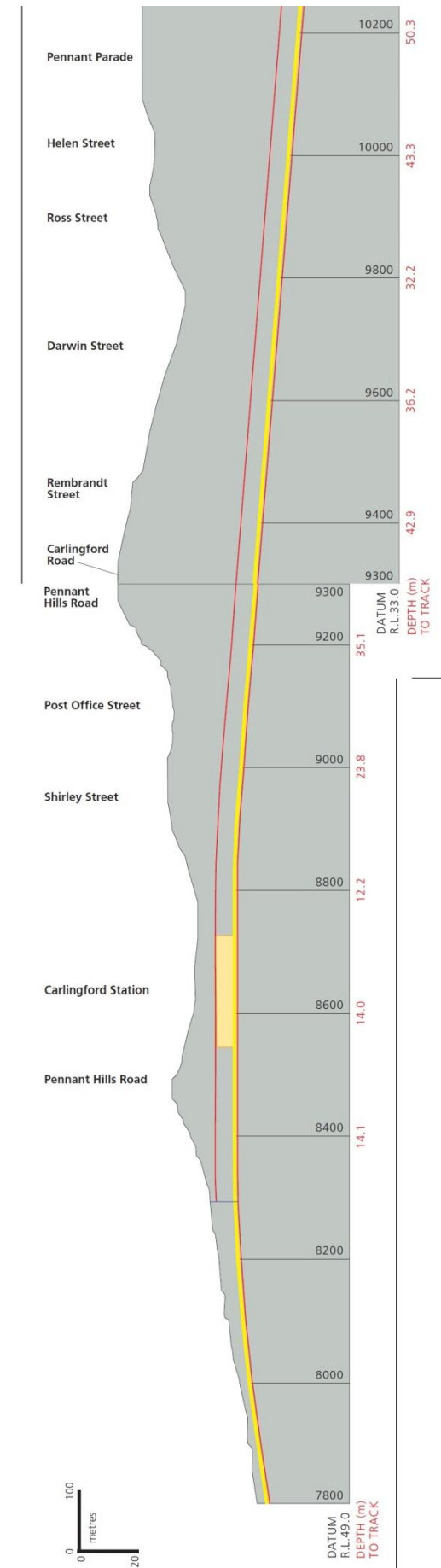


Fig 7: View north: end of the line at Carlingford

<< Fig 8: In the original PERL EIS, Carlingford station was underground, and no station under the shopping centre, also an inexcusable omission.





<< Fig 9: Plan of the original PERL EIS between Carlingford and the shopping centre.

The Baulkham Hills Council had a precinct plan.

See Part D Section 12

part\_d\_section\_12\_-\_carlingford\_precinct.pdf from:

<http://www.thehills.nsw.gov.au/Building/Planning-Guidelines/The-Hills-Development-Control-Plan>

They had a completely different alignment for a rail tunnel between Keeler St and Carlingford Rd.

This block is now full of flats with deep underground car parks

How can you build a rail tunnel under these foundations? The location is already in a valley.

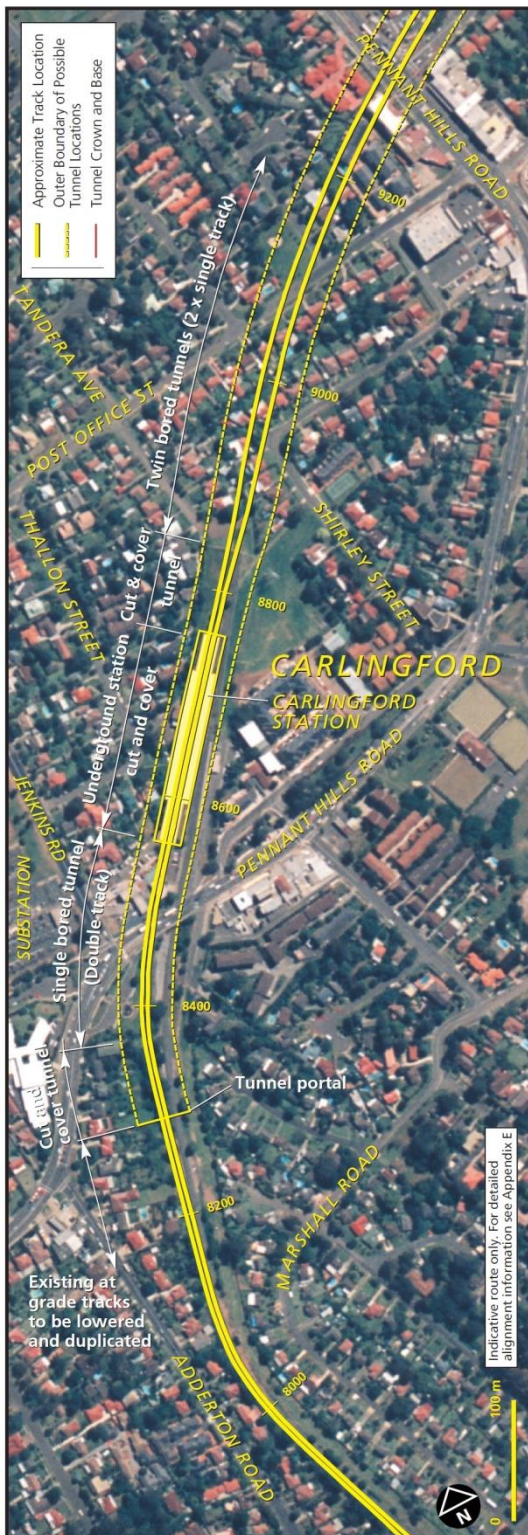


Fig 10: Embankment collapse due to cheap and hasty construction





**Figure 4. Structure Plan – Access and Circulation**

Fig 11: This is an excerpt from the Carlingford precinct plan on page 9. Who approved this tunnel alignment? It is definitely not that of the Original PERL EIS. It seems Councils do their own rail planning

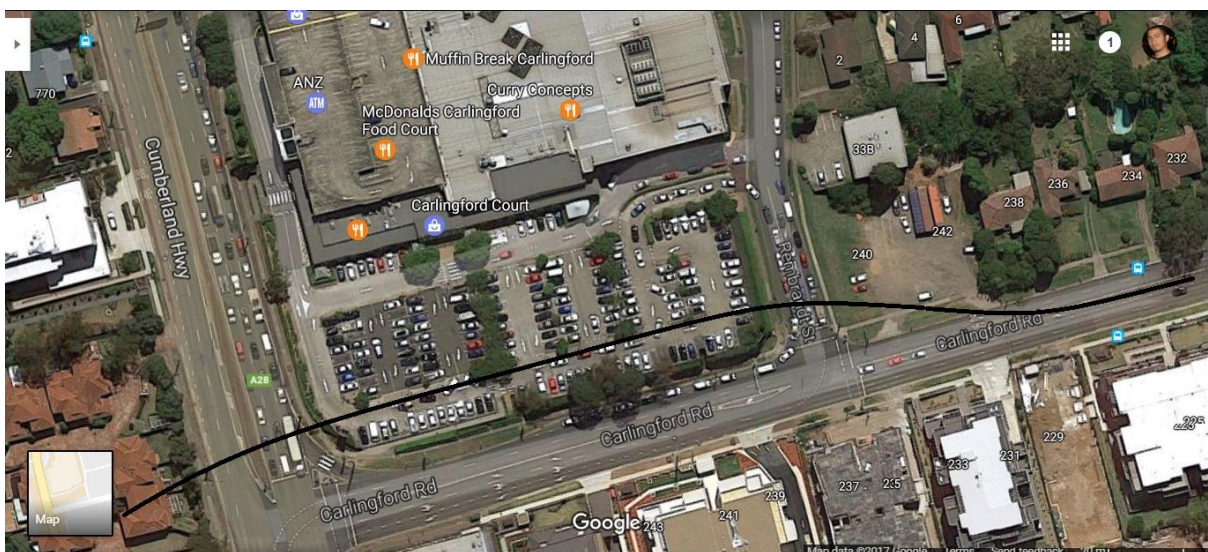


Fig 12: The black line shows a possible alignment under the Carlingford Court car park which is just 100 m long. The only problem is Rembrandt St. Traffic lights would have to guide the safe access of rail cars to and from the underground station.



Fig 13: How do we connect Carlingford Court station with Epping station? Ramps could come out from the shopping centre station but on one side the flats are too near with all their own ramps. That should never have been approved. When I presented the flawed traffic reports to the Hornsby Council I was told that Council only rubberstamps what the NSW government tells them

to do. The proper planning would have been an internal access road between the 2 rows of flats connecting to Carlingford Rd at the traffic lights with Rembrandt St.

No space for public transport was set aside, not even a bus-bay. Bad, car oriented planning everywhere.

There would be following solutions on Carlingford Rd:



Fig 13: Light rail vertical alignment options



The LRT solution on Carlingford Rd will definitely mean the end of car oriented planning. Traffic lights ahead of moving trains would clear the road.

A variant to the LRT layout would be to run the LR on the outer lanes. There should be at least one stop, at West Epping Public school.

There must be a proper LR terminus at Epping. Let's look at the options. The closest location to the station would be on the South bound part of Beecroft Rd. That's how it looks like:



Fig 14: Oops. A lift and staircases, just built in 2008, are in the way. At that time of course the Epping Parramatta rail tunnel was under planning, not light rail.

So we would require 1 southbound car lane on Beecroft Rd which will have an impact on the 3 east bound lanes on Epping bridge for which the traffic modelling is done now. All work for nothing.



Buses can turn into bus lane stop, but not light rail. One south bound lane on Beecroft Rd will have to be set aside for the light rail terminus

Fig 15 Approximate location of light rail terminus west of Epping station





Fig 16: As there is no space for a loop, trains would have to return on the same track until the Beecroft Rd / Carlingford Rd intersection which would have to be rebuilt, needing also new traffic modelling. For safety reasons, a concrete barrier would have to be built to protect the tracks along Beecroft Rd

The other alternative for an above ground light rail terminus can only be the Council carpark in Rawson St



Fig 17: Light Rail terminus on Council car park



It will be difficult to accommodate 100 m long tram trains as the car park is less than 100 m long. There is a possibility to do it diagonally.



Fig 18: But no, car oriented planners have already something else in mind: the extension of Victoria St north wards to connect to Carlingford Rd, cutting right through the recently upgraded Boronia Park, wasting Council rates.

That's how it looks like:

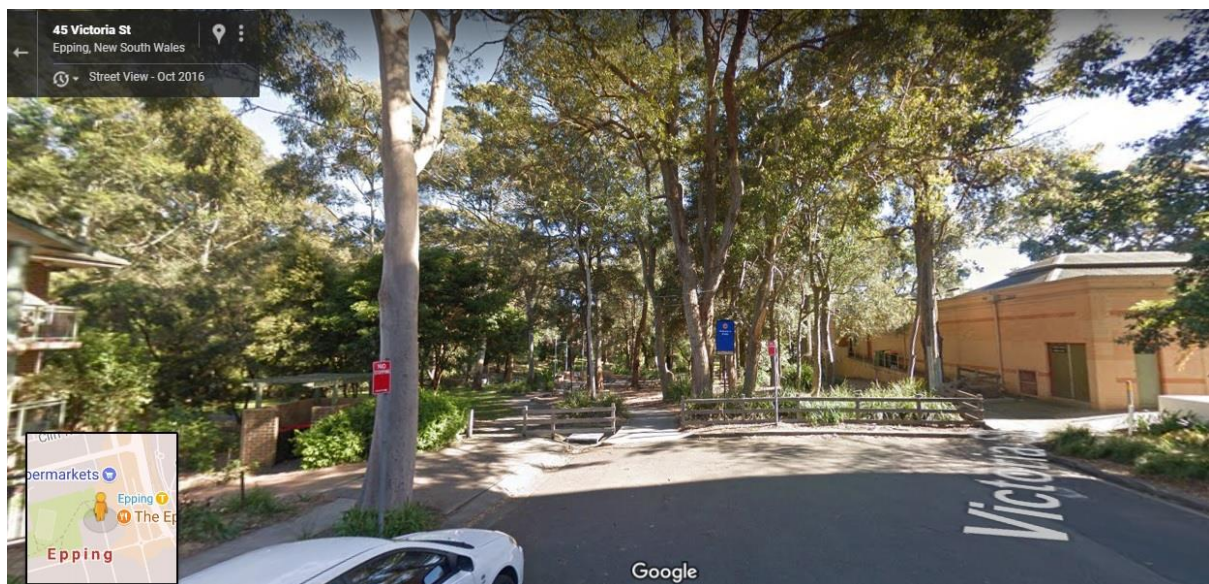


Fig 19: View from the end of Victoria St toward Boronia Park. Trees are proposed to be chopped off.

Sydney's car addiction will stop at nothing.

But the real problem is that Council changed the land use for the car park in Mar 2013. The following graphs show extracts from what was called "Epping Town Centre Urban Activation



Precinct” although it was not clear what was actually to be activated exactly. In 2011 it was SP2 “Infrastructure”, the proper use.

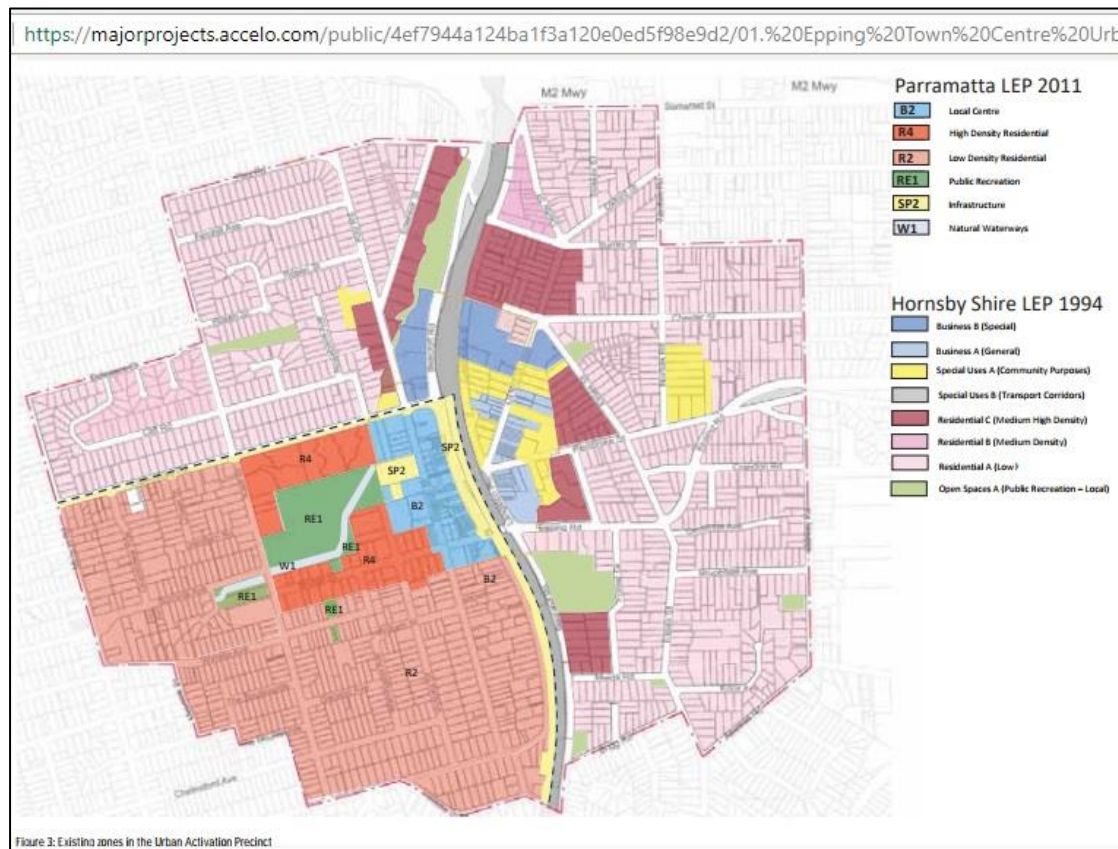


Fig 20: Land use planning before the changes

Then on page 17 we learn that the car park is a new public space to be “investigated”. In order to prepare the reader what that means, the area has already been colored for 15 storeys.

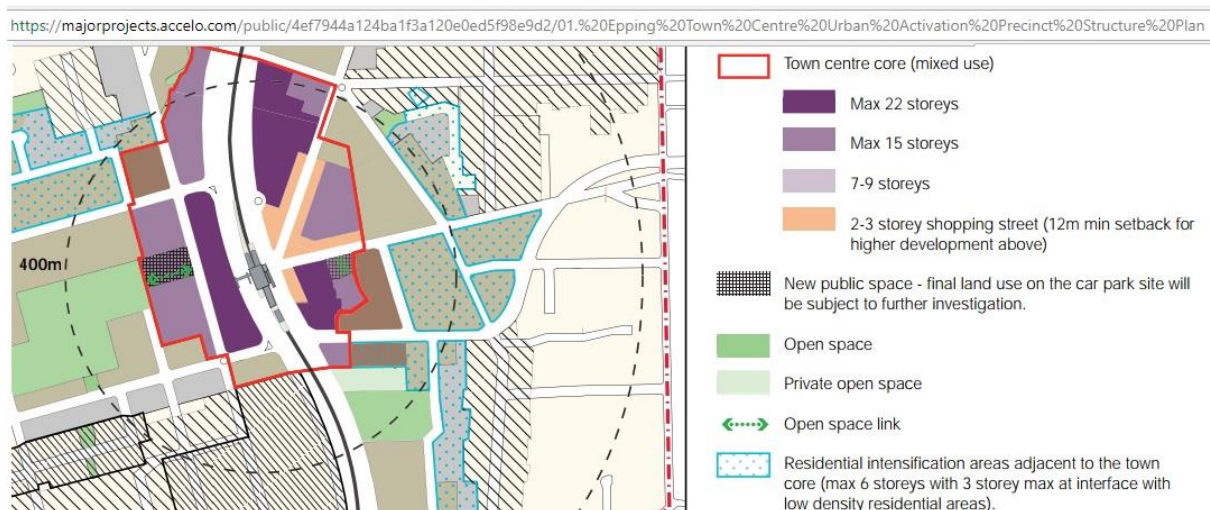


Fig 21: If under investigation the car park area should have been left white.

5 pages further down, the true land use is shown



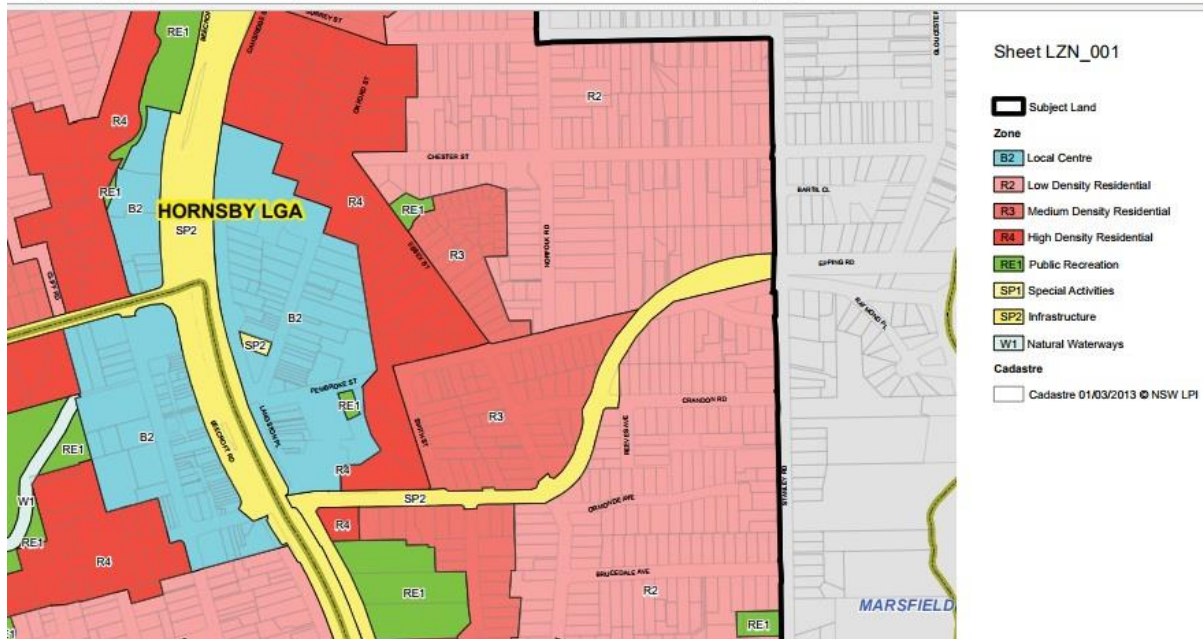


Fig 22: B2 is a chewing gum type of land use where anything is possible. Actually B stands for “Business” but that does not matter. The SP2 infrastructure is gone.

And while we are in this document, let’s have a look at the rail planning that goes with it.

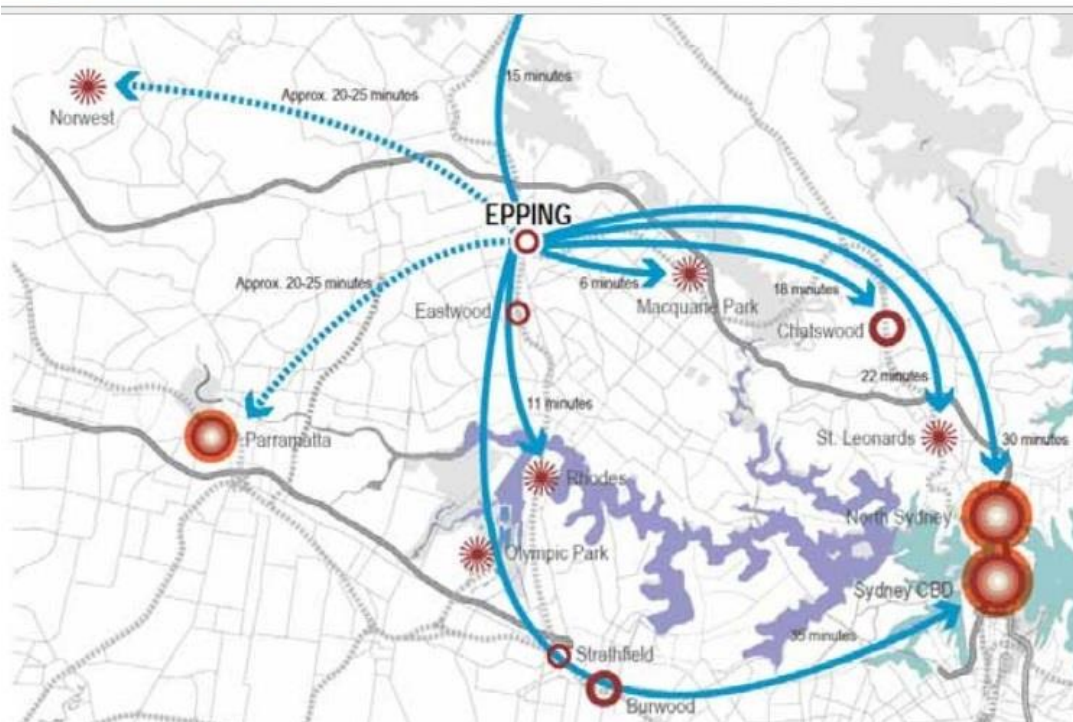


Fig 23: We see here rail planning instruments so typical for Sydney: Aspirational dotted and other arrows. Epping - Parramatta never materialized. And Epping - CBD will no longer be direct, change at Chatswood.

<https://majorprojects.accelo.com/public/4ef7944a124ba1f3a120e0ed5f98e9d2/01.%20Epping%20Town%20Centre%20Urban%20Activation%20Precinct%20Structure%20Plan.pdf> The

August 2011 rezoning was justified as follows:

*“To simplify the planning controls for the centre, a single B2 Local Centre zoning is recommended. This zone permits a wide range of uses, including retail, business, office, residential, community and entertainment purposes. There is no reason to continue to prohibit retail uses on those sites currently zoned Business B (Special) zone under the Hornsby LEP 1994. As such, it is not necessary to differentiate between zones”.*

<http://www.hornsby.nsw.gov.au/media/documents/planning-and-building/epping-town-centre/epping-town-centre-study-september-2011/Epping-Town-Centre-Study-Chapter-5-Structure-Plan-Part-A.pdf>

And here are the definitions for B2:

www.austlii.edu.au/au/legis/nsw/num\_epi/plep20112011540325.pdf

## Part 2 Permitted or prohibited development

### 2.1 Land use zones

The land use zones under this Plan

#### Residential Zones

- R1 General Residential
- R2 Low Density Residential
- R3 Medium Density Residential
- R4 High Density Residential

#### Business Zones

- B1 Neighbourhood Centre
- B2 Local Centre
- B4 Mixed Use
- B5 Business Development
- B6 Enterprise Corridor

#### Zone B2 Local Centre

##### 1 Objectives of zone

- To provide a range of retail, business, entertainment and community uses that serve the needs of people who live in, work in and visit the local area.
- To encourage employment opportunities in accessible locations.
- To maximise public transport patronage and encourage walking and cycling.
- To encourage the construction of mixed use buildings that integrate suitable commercial, residential and other developments and that provide active ground level uses.

Fig 24: Free-for all definitions

[http://www.austlii.edu.au/au/legis/nsw/num\\_epi/plep20112011540325.pdf](http://www.austlii.edu.au/au/legis/nsw/num_epi/plep20112011540325.pdf)

We see that item 4, mixed use, allows residential use to sneak in and overwhelm business use. The definitions are not based on principles but the wishes of developers. That is why the planning outcome in Epping will be a sleep city.





Fig 25: The media enjoy it with impressive illustrations

<http://www.dailytelegraph.com.au/newslocal/northern-district-times/northern-district-times-claims-community-newspapers-of-australia-award/news-story/c67e4e8ed958f331f1ee2add70ff9d0>

Council's car park will now be used as a bargaining chip with developers to test the meaning of B2: developers should build an underground car park with free parking at the current capacity and are then allowed to build as high as they like. Skyscraper #39 doesn't look as if it were just 15 storeys. Free for all. Monopoly pure.

No wonder therefore that the above mentioned Epping Planning Review has now increased the dwelling unit targets from 3,750 to 10,000 – through the backdoor without informing the public in the call for submissions.

If a location for a light rail terminus at Epping station cannot be found and if 10,000 dwelling units really materialize then the density would be so high that light rail would not be sufficient to serve as an adequate local rail link between Epping and Parramatta, not to mention as regional link. A tunnel would be needed, on a slightly shifted alignment of the original PERL proposal and definitely with a stop under the car park of the Carlingford Court shopping centre. In that case the light rail Parramatta – Carlingford should be stopped immediately.

Any trains from/to a Parramatta tunnel would have to share 500 m of automatic “metro” services running between Epping and Rouse Hill. If this is really provided at 5 min intervals as planned it would be extremely difficult to feed in trains from/to Parramatta. With every bad decision of the past, the government has lost options for the future.

In summary, the government wilfully creates incompatible rail systems. Even if the light rail Parramatta - Epping were completed anyone travelling from, say North Sydney to the West (trying to avoid the CBD) would have the wide choice of

- Double deckers to Chatswood

- Single deck automatic trains to Epping
- Low floor trams to Parramatta
- Double deckers to the West

Well done, NSW & Co.

This is exactly the opposite what is done in Europe.



Fig 26: To the right there is a tram train which can also use heavy rail track on the same platform of an Intercity train. Note the moveable steps to bridge the gap to the platforms.

And that brings us to the last chance to rescue the double decker functionality of the Epping – Chatswood tunnel.

- Operate trains in automatic mode only between Rouse Hill and Epping
- Drivers to operate trains in Epping – Chatswood tunnel in mixed mode with double deckers using the existing modern signalling system



Fig 27: <https://www.youtube.com/watch?v=xSwPYrkzUyc#t=4m51s>



As Metro trains are only 2.90 m wide (and double deckers 3.04 m) the gap can be closed with retractable treads as shown above.

### **Advantages and other critical considerations to rescue the project**

- Operational flexibility of double deckers is maintained (e.g. in case of accident between Epping – Strathfield Newcastle trains can alternatively use the ECRL). Future option of Epping – Parramatta rail link.
- No costly tunnel conversion and no risky 8 months closure which is actually unacceptable. In Europe absolutely impossible. Public is not aware of problem and sleeping.
- No platform congestion in Chatswood as all stations between Epping and Chatswood can be used to change to double decker trains going to the CBD
- To remove rail ramps to/from the tunnel at platforms 5 and 6 at Epping is dangerous negligence. How will management get rescue vehicles quickly into the tunnel?
- 2 metro trains possible between 1 double decker train every 15 min
- Metro trains every 5 min cannot be filled because of the low density area along the rail corridor and only 4,000 park and ride spaces. High rises around all stations to fill the trains is an untested assumption as they have become unaffordable and the long awaited housing crash will come one day, in all likelihood together with the next oil crisis around 2020 and a resulting credit crunch as already experienced in 2008.
- A global financial crash can happen any time. China sits on \$3 tr debt. That is why we have so many financial refugees from China here who think they can safely invest in the Australian housing market. They have made housing unaffordable in the process.
- After the next financial crisis which according to Prof. Garnaut will be worse than in 2008, there will be no money to continue the metro project into and under the CBD. Priority will be to bail out toll-way operator Transurban which has become too big to fail.

The decision to downgrade double deckers with a lot of seats to metro style trains with a lot of standing over long distance trips is not very popular and will politically backfire before election time. We can already imagine what headlines we get in newspapers. When the financial crash happens building around stations will stop – the whole metro project which depends on a continuation to the bitter end in Bankstown will fail.

### **Conclusion:**

There are similarities between botched rail and land use planning. Goal posts are constantly shifted by consecutive governments as original concepts are not adhered to and politically interfered with by ever changing ministers and their hire-and-fire departmental directors who don't have the technical, longstanding experience of civil servants. This is not the way to

manage a 5 million city The result of all this zig-zagging is what we see in Sydney: an unstructured settlement pie.

There is very little hope for Australia to make it through the next oil shock.

And while the last Epping workshop was held we get another warning:

Halliburton sees 2020 oil spike after industry cuts \$2 trillion [investments in oil fields]

<http://www.worldoil.com/news/2017/7/12/halliburton-sees-2020-oil-spike-after-industry-cuts-2-trillion>

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17/7/2017

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