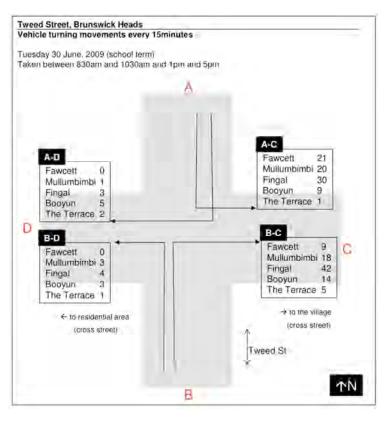
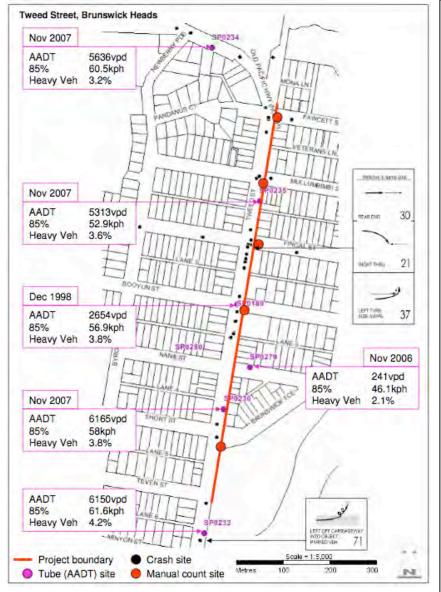
## **Analysis of Traffic Data**

- The volume of general traffic on Tweed Street is relatively
- Turning data indicates that there is 10 times more traffic turning East toward the CBD then West.
- Overall volume of traffic is greater from the South then the North but not significantly.
- Two times more vehicles turn at Fingal Street then Mullumbimbi Street. Both Booyun and Fawcett Streets have almost as many vehicles turning as Mullumbimbi Street.

This data and other feedback from the community suggests the following:

- Traffic volume alone does not suggest the need for turning lanes or other measures to promote traffic movement.
- There may be value in promoting turning of vehicles at Fingal and Mullumbimbi streets while discouraging vehicles turning at Fawcett and Booyun streets.





Year	Volume
1982	8818
1986	12182
1988	12182
1990	12944
1995	14551
1998	9064
2001	4526
2004	5344

**RTA Traffic** count taken adjacent to **Bayshore** Way

#### **MEETING WITH THE BYRON SHIRE COUNCIL TRAFFIC COMMITTEE 7.8.09.**

Present: Toni and Malcolm, Jason (Police), Mike (RTA), Tom Tabart, Mike King and Simon Bennet (BSC).

Tweed Street is a regional road which is managed by Byron Shire Council under delegated authority from the RTA. Some state funding is available for maintenance.

#### Layout options.

Median strip as a safety zone.

Median parking not supported – conflicts with pedestrians.

Nose to kerb angle is 45 degrees.

Roundabouts are pedestrian and cyclist unfriendly.

Removing turning bays is OK for this level of road.

U-turns are allowable if a median strip intervenes.

#### Means of slowing traffic.

Already a 50 km/hr zone, cannot be made slower.

Median strip as safety zone for pedestrians.

Texture changes on road surface – should not be confused as a pedestrian crossing.

Designated pedestrian crossings can be problematic – people are careless.

Speed humps – NO.

Special treatments at laneway entrances.

#### Bike path.

Use NSW bicycle guideline on the RTA website.

Shared with pedestrians not good.

Not on footpaths – driveways are problematic.

#### School bus stops.

Safety of pedestrians - use kerb blisters, median safety zones. Timed parking restrictions.

#### Funding.

Roundabouts are expensive and will not be in the first round of funding.

#### Installations.

Can be allowed for – business owners will be required to build them.



Brunswick Heads. Simple Pleasures. 18. Traffic Management



## **Initial Design Ideas**

#### **Precincts**

- **Environmental Entrances** Both North and South there will be little change although there will be some new planting on Western side of road between Teven and Short Street.
- **Village Street** Short to Booyun & Fawcett to Mullumbimbi Streets, these parts of the street will become more parklike and more like other streets in Brunswick Heads.
- **Marketplace** Booyun to Mullumbimbi Streets will be more commercial and plaza like, this would include a more formal treatment including decks or terraces for outside dining and some formal parking particularly around the supermarket.

## **Slow Traffic and Narrow Perception of Road**

- Narrow alignment of road to minimum 7-8m width with no turning lanes and no medium strip
- Cut holes in existing bitumen surface for new trees and plantings on existing road reserve rather then the nature strip where there are too many services.
- New Roundabouts at Fingal and Mullumbimbi Streets;
- Gently change alignment at several transition points including at The Terrace and roundabouts;
- Create raised sections of footpath/bicycle path across lane entrances to indicate precedence of pedestrian at these junctions.
- Create separate service road at places such as Pearces Motors

## Make Road More Legible

- Between precincts use transition elements such as: sections of raised road; changes of the alignment of the street; subtle change of road surface between Booyun and Mullumbimbi Streets; and subtle variation of tree plantings.
- Use Roundabouts to create indication where to turn toward commercial centre of town.
- Remove existing signage that doesn't work and create new uniform signage.
- Use Central street elements such as proposed roundabouts to mount signage (such as used in Lismore).

#### **New Bike/Pedestrian Path**

• Separate bike path from road and create new shared path suitable for pedestrians bicycles, "granny scooters" and skateboards that turns toward school and town at Booyun Street and comes out at Mullumbimbi Street.

## **Create Opportunities to Express Brunswick Heads Identity**

- Use street trees that are either indigenous to local area or are linked to history of Brunswick Heads;
- Use street furniture such as seats and shelters to express aspects of Brunswick Heads unique history, culture and environment;
- Between more uniform street trees encourage individuals along street to create and manage more individual gardens;

## BRUNSWICK HEADS PROGRESS ASSOCIATION MEETING 3.8.09

Paul and Toni presented the storyboard of the community consultation to date and the results of the mapping submissions.

The key points from the meeting were:

**Trees** – not to block winter morning sun for houses on the west of the street.

- Fruit trees should not attract fruit bats.
- Should not get too tall.
- Root systems should not damage surfaces.
- Use some advanced trees in initial plantings.

#### **The Road** – is a major asset

- Is much higher in the middle than at the gutters.
- Is not concrete.
- Bike lane is dangerous at present.
- Leave gutters and stormwater system in place.
- Recycle any material removed from the surface.

#### **The Place** – restore the place.

- Do not change the convenience of the current users of the street.
- Do not create a 'gun barrel' avenue.
- Safety for all users.
- Signage also provide for banners across the street.
- Footpath dining to be carefully thought out.





Brunswick Heads. Simple Pleasures.

19. Initial Design Ideas & Feedback





#### **Trees**

August 11th 2009 - Consultation with TerraArk about trees.

## **Preliminary Tree List** Large trees

- Toona ciliata Red cedar
- Euroschinus falcata Ribbonwood
- Podocarpus elatus Brown Pine
- Eleaocarpus obovatus Hard Quandong
- Ficus macrophylla (for roundabout) Moreton Bay fig
- Lophostemon confertus Brush box
- Melaleuca guinguenervia Broadleaved Paperbark
- Callitris columnellaris coastal Pine

#### **Medium sized trees**

- Cupaniopsis anacardioides Tuckeroo
- Mallotus discolor Yellow Kamala
- Sterculia quadrifida Peanut Tree
- Syzigium leuhmanii Riberry
- Syzigium oleosum Blue Lilly Pilly
- Cassia marksiana var brewsteri- Cigar cassia
- Flindersia bennettiana Bennett's Ash

## **Keys Considerations**

- Understanding that Tweed Street would naturally be at an interface between a coastal ecology and a swampy rainforest ecology.
- Use trees that you know grow well in the specific
- Try to provide a minimum of 3m ø clear space around large trees.
- Best to plant tube stock for long term healthy trees and then make sure that the tree is protected preferably with robust cage.
- Trees that grow near powerlines should generally be small leave varieties that can quickly recover from being hacked about.



Toona ciliata - Red cedar Large Street tree with historical link to town



Ficus macrophylla - Moreton Bay Fig Possible use as a feature roundabout tree

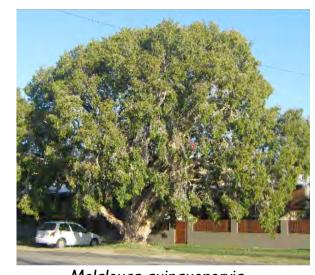




Podocarpus elatus - Brown Pine



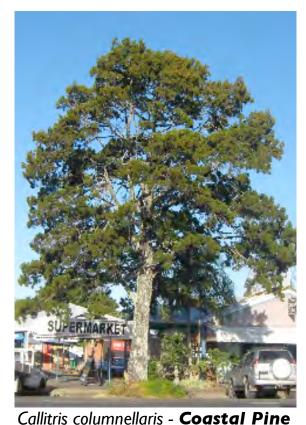
Lophostemon confertus - Brush Box



Melaleuca quinquenervia -**Broadleaved Paperbark** 



Euroschinus falcata – Ribbonwood

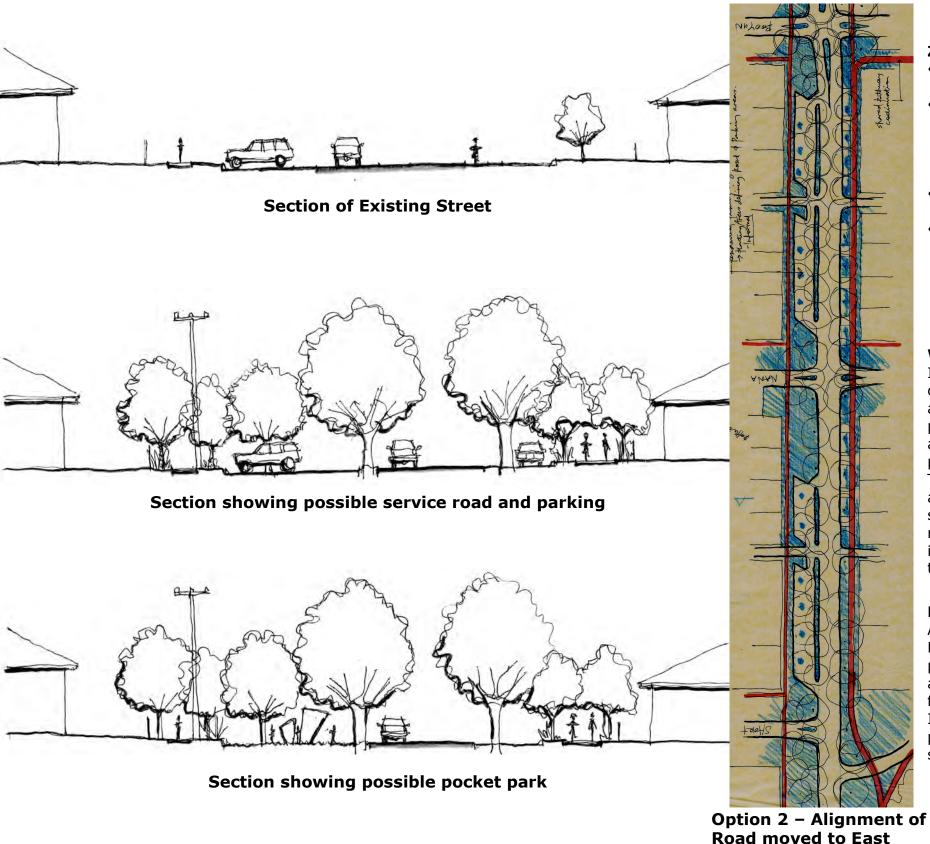




# Brunswick Heads. Simple Pleasures. 20. Preliminary Tree Ideas







#### **Zones**

- 3m natural strip and footpath
- 12m zone for either parking service road pocket park
- 7m zone for 2 wav road
- New 8m nature strip including shared and footpath/ bicycle path

#### **Western Side**

Includes areas of service road and angle parking as well as a series of pocket parks. This option allows for significant replanting including large trees.

#### **Eastern Side**

A straight shared Foot & Bicycle path that augments existing footpath. Includes space for planting of significant trees.



- 3m natural strip and footpath
- 5m zone for parallel parking and addition of large trees
- 7m zone for 2 way road
- 12m for landscaping including 3m bicycle path
- 3m nature strip and footpath

#### Western Side

Little change to of road except for addition of large structural trees

### **Eastern Side**

Historical **Interpretative Path** Bicycle path would curve through zone meeting up with footpath at safe places where there isn't a conflict with driveways. At these nodes there history seats and or shelters

## **Transition Point**

Change alignment of road at the Terrace and mark it with sculpture and entrance sign.

Option 1 – Alignment of **Road moved to West** 



Brunswick Heads. Simple Pleasures 21. Design Ideas Tweed Street from The Terrace to Booyun Street

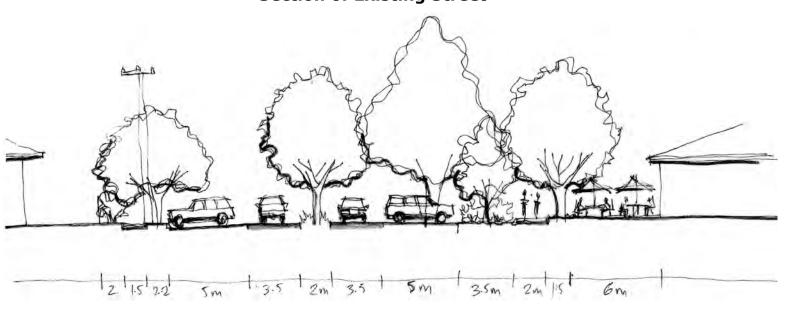
the processes, key events, development of ideas and decision making related to the development of the master plan for Tweed Street, Brunswick Heads. Its aim is to be an accurate reflection of the history of the project. (The document is recorded by Social Habitat)

This document is a page in a set of visual minutes of

## Section through street in front of KC's



**Section of Existing Street** 



**Section through street in front of supermarket** 



## **Marketplace Precinct** This whole

precinct may have a subtle change in road surface.

#### **Deck or Terrace** Potential for decks

and street side dining.

#### **Bus Stops**

Formalise 2 shelters on each side of street making sure shelters can have multiple uses. Buses can either stop in street lane or create bus lane.

#### **Median Strip**

New 2-3m wide median strip with planting of large trees.

#### **Roundabouts**

At Fingal and Mullumbimbi Streets with a sculptural elements, and clear signs indicating CBD and Beach etc and significant shade tree such as Moreton Bat Fig and or significant tree such pine that can be used as a Christmas or other commemorative function.

### **Angle Parking**

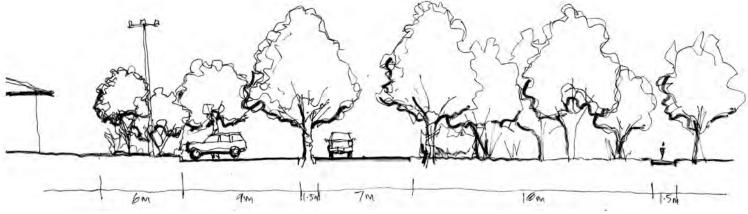
Establish new angle parking on either side of road.

#### **Pedestrian Crossing**

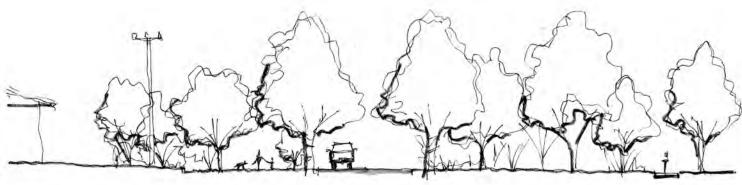
Points as natural extension of footpath network, These need not be formal zebra crossings, they may be raised sections of road though depending on safety implications.





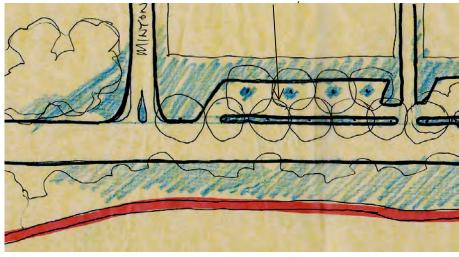


**Section through street at Pearces Garage** 



**Section at Pilgrim Park** 

Create service lane and planted parking in front of Pearces Garage that may continue to next block in front of vacant land.



road to stay the same possibly with some augmented planting. Current landcare work is quite successful.

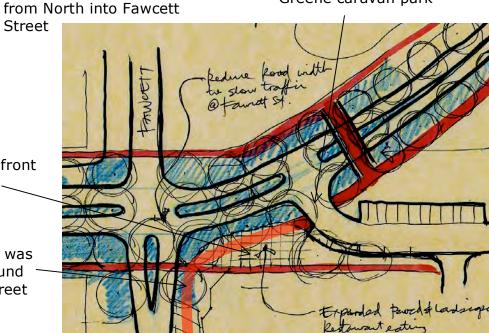
**Eastern Side of the** 

**Terrace Plaza** 

Create small plaza in front of shops on corner

Bicycle Path Link bicycle path that was diverted into and around town from Booyun Street back to Tweed Street

Change entrance to the end of Tweed Street and Massey Greene caravan park



## **North Entrance Precinct**

Possibly introduce planted medium strip.



**South Entrance Precinct** 

Narrow road to 7m wide 2way road



Discourage left turn

Street

from for cars travelling



#### **CHAMBER OF COMMERCE MEETING AT THE BOWLING CLUB 12.8.09**

Points of Discussions:

- USE NOSE TO KERB LIKE THE REST OF TOWN WITH BACK-OUT LANE WHERE NEEDED.
- PUT VEGETATION ALONG THE SIDES OF THE ROAD
- CENTRE MEDIAN STRIP IS A VISUAL PLUS BECAUSE TREES CAN SPREAD OUT
- ARE TURNING LANES NEEDED?
- ROUNDABOUTS WILL HAVE USE AS IDENTITY SIGNIFIER
- HISTORICAL WALK FROM INDIGENOUS TIMES TO PRESENT
- FLOWERING TREES BRACHICRYTON ARE AVAILABLE FROM ALSTONVILLE TREE FARM
- BETTER FOR EVERYBODY IF EAST/WEST IS CONNECTED
- O.K TO HAVE NO DEDICATED CROSSINGS IF THERE IS A MEDIAN STRIP OR ROAD IS NARROWED.
- SCHOOL BUSSES CURRENTLY CHAOS. COULD BE AT SAILS, BLUE HOUSE.
- TREE PLANTING TO BE CAREFULLY INFORMED BY ORIENTATION.

#### TWEED STREET TASKFORCE MEETING AT **INFORMATION CENTRE 27.8.09**

Presentation of draft plan for discussion, main points include:

- Location of bus stops, in particular the need to have at least an informal stop in front of KC's
- Need for ongoing management role within Brunswick Heads community possibly taskforce
- Need also for parallel parking in front of KC's
- Talked about street trees, Coolamon mentioned as a good option.
- Discussion about possible art installations:
  - o 10 seats related to themes that might be represented by a person from history such as Mohammed the fisherman.
  - o good opportunities for murals at entry points, faces of Brunswick Heads at Southern Entrance;
  - Large Trawler on new plaza at Fawcett Street
  - O Semi-trailer emerging from the road at Booyun Street
  - The Frank Mills History Talking Seat at shops
  - o Indigenous themed installation at The Terrace possibly relating to Durungbil - Place of the Water Rat, needs further consultation with Aboriginal Elders; and
  - Chicken man installation at Pilgrim Park;





## **Tree Planting and Management Ideas**

Quality of Nursery Stock - It is essential that trees supplied for street tree planting are grown to a standard which will allow them to establish rapidly and continue to grow as long term assets of the streetscape.

**Provide Good Protection** (see pictures)

**Adopt a Tree -** A number of other councils have 'Adopt a Tree' programs where residents take on either individual responsibility for a tree or community responsibility for a streetscape. The Brunswick Heads Primary School may have a significant potential role.

**Engage with Job Network Providers –** Use good connections with Job Network providers to create employment programs to plant and

UPTO LOOMM DEEP



PLANT LOMANDRA MATURE TREES AS EDGING TO SHOWN DOTTED PROTECT TREES TUBESTOCK / TWO TREES TO EACH 12M2 BED ROADSURFACE RAISED EDGING FLAT EDGING POAD SURFACE REMOVE COMPACTED GRAVEL AND ROAD SURFACE UPTO 1000 DEEP , BACKPILL WITH PREMIUM ORGANIC SOIL MIX. PERFORATED AG. PIPES IN GEO. TEXTILE SLEEVE COVER WITH CHIPPED MULCH

**Typical Street Planting Detail** 

3000



Brunswick Heads. Simple Pleasures.

# 24. Meetings & Trees Part 2

(CONG DIMENSION AT LEAST 4000)



Meeting August 12th Consultation with Chamber of Commerce at Brunswick Heads Bowling Club

Meeting August 27<sup>th</sup> Consultation with Tweed Street Taskforce at Brunswick Heads Visitor Information Centre







Syzygium Oleosum - Lilly Pilly



Syzygium Moorei - Coolamon



Lepiderema pulchella -**Fine Leaved Tuckeroo** 

## **How do you visualise Tweed Street?**

For the past three months consultants pedestrians and bike riders.' have been working with the Bruns- tion that the central part of Tweed wick Heads community to develop a Street, between Booyun and Mul-Pacific Highway.

including 15 from Brunswick Heads Public School students.

Malcom Price, from the consult- village street. ants Social Habitat, said, 'Overwhelmingly, responses have sup- on the project is on display at the planning process. ported slowing traffic, narrowing Brunswick Heads Visitor Centre in the road, reintroducing trees and making better, safer provision for

Story Byron Shire Echo 25th August 2009

The process has produced 40 maps, commercial centre of town. Most 7pm at the Memorial Hall. proposals wanted to see the remainder of the road revert to a slow, leafy

Park Street.

for people to comment on the draft appointed by Byron Shire Council He said there was a clear indica- plans. These currently include the Chamber of Commerce, Monday August 31, 6pm at the Brunswick Heads master plan for Tweed Street - the old lumbimbi Streets, should become a Bowling Club, and the Progress As-'marketplace' linking it back to the sociation on Monday, September 7,

> Council agreed in 2008 to fund a Tweed Street master plan to guide the makeover. In May 2009 Social A constantly updated storyboard Habitat was engaged to begin the

> The proposed new look for Tweed Street will be presented to Council There will be a series of meetings prior to going on public exhibition.

## **Plant Selection** Western Side of Road Under **Powerlines**

Small leaf trees that can recover quickly and handle radical pruning will be required on the western side of Tweed Street (suggested species above)

## Feature Flowering Tree for Median Strip

The Cassia Brewsteri is the one that has been nominated



Cassia Brewsteri - Cigar Cassia

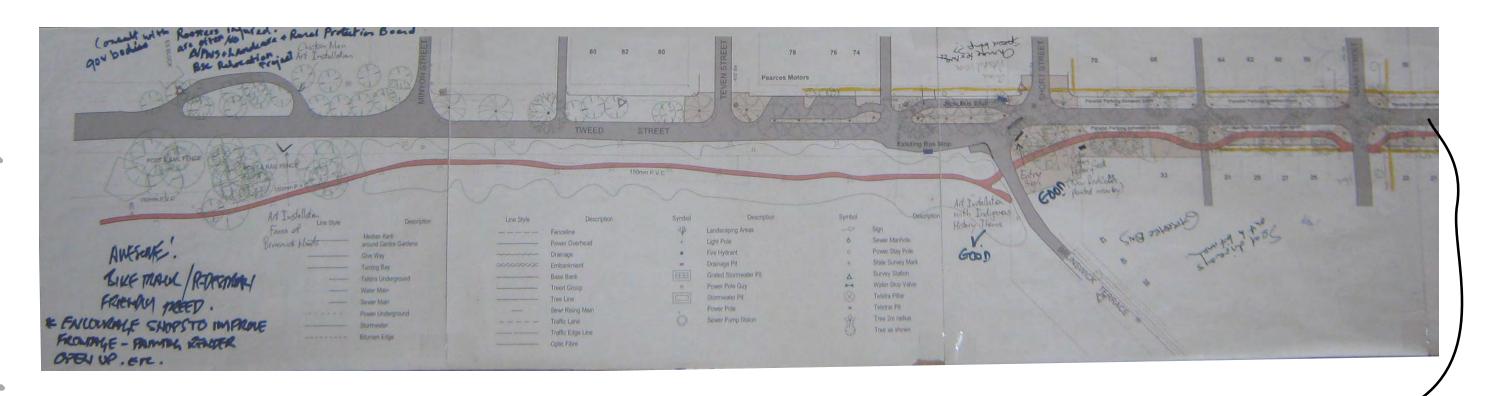


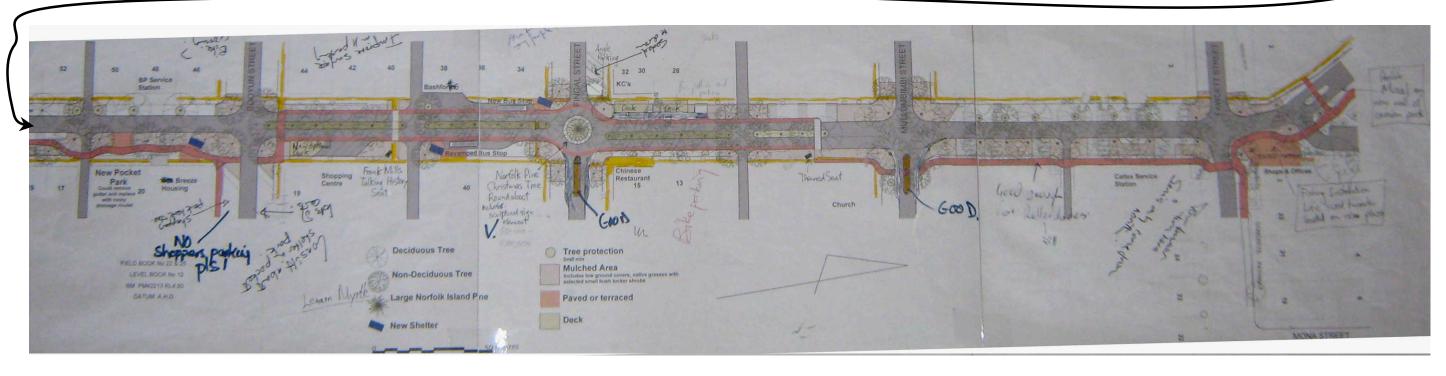
Brunswick Heads. Simple Pleasures 25. Trees Part 3 & Media Stories



Story published in Byron Shire News 28<sup>th</sup> of August 2009

Story published in Byron Shire Echo 25<sup>th</sup> of August 2009 (see above)





## **Draft Plan Used for Display at Consultation Meetings**



## Brunswick Heads. Simple Pleasures.

## 26. Plan Consultation Part 1



Meeting August 27<sup>th</sup> 2009 – Tweed Street Taskforce – Brunswick Heads Information Centre Meeting August 31st 2009 – Small Group of Brunswick Chamber of Commerce at Brunswick Heads Meeting September 7th 2009 7PM – Brunswick Heads Progress Association at Memorial Hall Meeting September 7<sup>th</sup> 2009 7PM – Brunswick Heads Progress Association at Memorial Hall Plan Display August 31st 2009 – Brunswick Chamber of Commerce Meeting at Brunswick Heads



## Meeting August 27th 2009 – Tweed Street Taskforce – Brunswick Heads **Information Centre**

There was good support for the plan; most of the discussion was about choice of trees, location of bus stops and provision of parking around KC's.

## Meeting August 31st 2009 - Small Group of **Brunswick Chamber of Commerce at Brunswick Heads Bowling Club**

There was generally good support for the plan. Comments at meeting included:

- There was some concern about road safety at the proposed new chicane at The Terrace.
- There was discussion about the best route of the bike path.
- Need for provision of parking on Fingal St and Tweed Street at KC's and parking at Shopping Centre particularly on Booyun Street.
- There was quite a deal of talk about trees and art/installations



## Meeting September 7th 2009 7PM -**Brunswick Heads Progress Association at Memorial Hall**

Malcolm presented the draft plan to the meeting of about 10 people. The plan was generally accepted well. The two exceptions were:

- Some within the meeting disagreed with the inclusion of a median strip between Booyun and Mullumbimbi Street;
- There was a minority that disagreed with the inclusion of street tree planting.

The roundabout was strongly support particularly with a Norfolk Pine in the centre.

## Meeting September 7th 2009 7PM - Brunswick Heads Progress **Association at Memorial Hall**

Present Andy Erskine, Simon Bennett, Michael King, Jeff Garratt, Lisa Wrightson from BSC, Toni Appleton and Malcolm Price from Social Habitat

Malcolm presented draft master plan and suggested that overall management and maintenance of the project was a major concern of the community. There was the suggestion that some form of Council - Community partnership like that in place for Federal Village Park might be workable.

Suggestions from meeting were:

• Opportunity for through traffic to pass turning traffic at major intersections (not laneways) - so increase pavement

- Also at intersections show trees as planted further away from intersections
- Often Brisbane bound traffic mistakenly head north to join highway best if they are signed to go south - maybe by better signage required. Tweed St is part of the tourist route known as "Brunswick Valley Way"
- Council has tree planting policy but often a site by site approach is taken. Andy suggested he could help further & potential that existing (tree) maintenance budget has some funds to contribute.
- Bike hoops, bins, seats, and the like need to be shown clearly on the plan, as does potential raised deck locations & preferred trees (including type & location).
- Clearly show on plan what is raised and what is 'at grade' example are any road crossing points (e.g. for bikes) raised at all? Raised can help slow traffic but unlikely to be supported on Tweed St given its function, traffic type & volumes. So best if road crossings are at grade. Potential to use different colour pavement however to mark and highlight them.
- It was recommended by someone you? Andy? that median needs to be at least 3m wide to give trees any chance & semi permeable surface was preferred. Please detail this clearly on plan or an attachment.
- It was suggested trees in median are spaced at 8-9m apart, which will allow for informal parallel parking. I would suggest this would only allow I car at most times given way people often park when no line marking & that IIm would better chance to allow 2 cars – but question is what is the aim here – more parking or more trees/shade? Or does IIm spacing provide for both?

## Plan Display August 31st 2009 - Brunswick Chamber of Commerce **Meeting at Brunswick Heads Bowling Club**

Plan was displayed at meeting so people could make comments about the plan. Comments were generally favourable.



Brunswick Heads. Simple Pleasures. 27. Plan Consultation Part 2



## Stage I

- New road line marking
- Create temporary 2way bike lane on Eastern side of existing road surface

## Stage 2

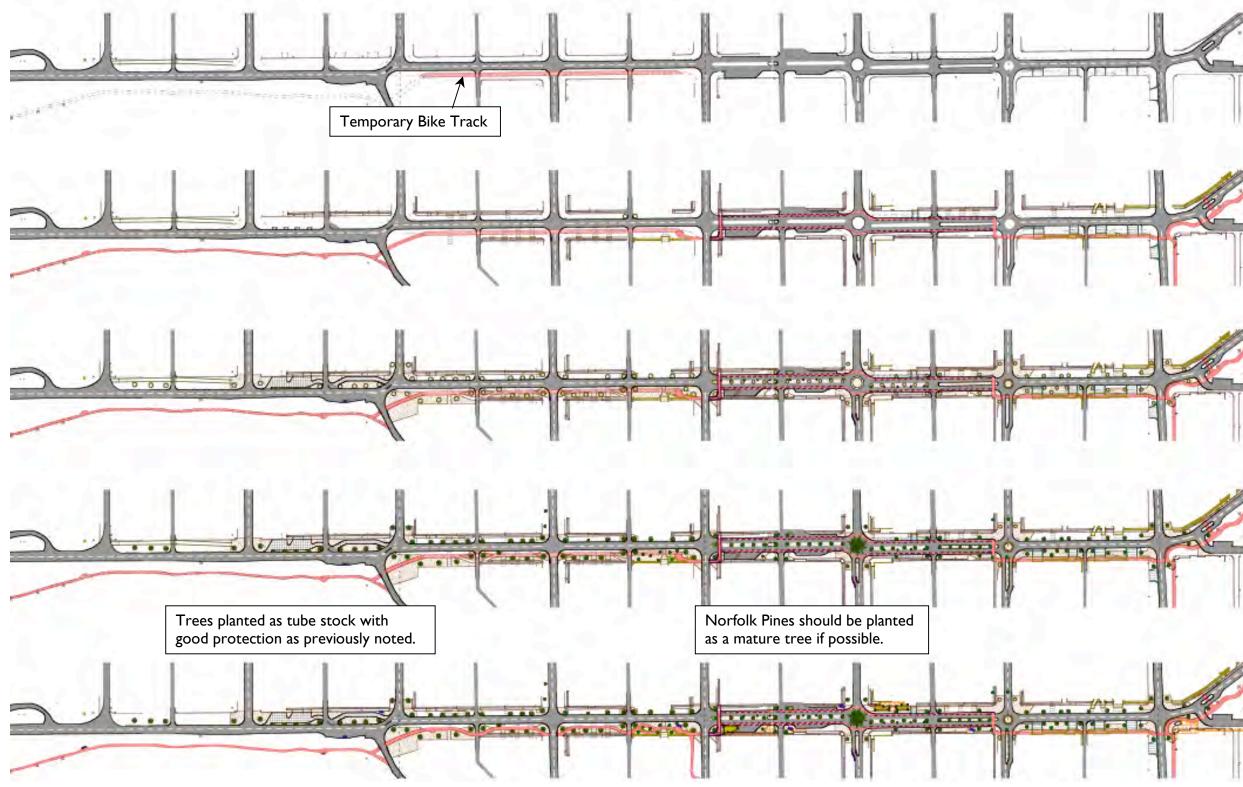
- Create new sections of bike track
- Cut away old road surface no longer required.
- New driveway extensions

## **Stage 3 & 4**

- Prepare ground for new street trees including median strip and roundabouts.
- Plant street trees.
  If it has to be in stages start in Booyun –
  Mullumbimbi section of street and work outward.
- Develop low gardens and mulch

## Stage 5

- Develop new bike track section South of Booyun Street and develop pocket park in front of "Breeze"
- Street Furniture, paved surfaces, decks and art installations developed as distinct projects over time.





Brunswick Heads. Simple Pleasures.

28. Suggested Staging of Plan

