

River Street Ballina - Lane Duplication Project

Explanatory Notes

Concept Design

The concept design plans provide:

- An overview of all the project,
- Scope, plan location and typical cross sections of the roadworks, associated footpaths, retaining walls and other structures
- Intersection and major access details
- Location of services (stormwater, water supply, sewer, electricity, telecommunications) and required service adjustments, at a desktop accuracy level.

A detailed design phase for each construction stage will follow completion of the concept plans. This will also provide an opportunity for improvements or amendments to the plans arising from public consultation and Council's consideration of submissions.

The principal objective of the concept design has been to increase and optimise through traffic carrying capacity of River Street to accommodate present and future traffic volumes, whilst providing acceptable levels of access to adjacent properties and intersecting streets.

In this regard there are a number of intersections to be modified to facilitate through traffic free flow that limit access options from adjoining streets.

To assist interpretation of the concept design, the following commentary summarises the proposed works by sections heading east from Smith Drive. Concept Design Plan Drawing references are given for each section.

Pacific Highway Roundabout to Burns Point Ferry Drive **Plan Drawings C105, C106, C107. Typical Cross Sections C100** **(Sections 1, 2 and 3)**

- Four lane configuration to be continued east from Smith Drive.
- A central crowned cross section with raised median will be provided, accesses will be left in/left out only.
- A roundabout is provided in the design for the approved Highway Services Centre (DA 2016/92) and associated floodway culverts under River Street. If the services centre and roundabout proceed, construction would be financed by the developer. If the services centre does not proceed, the roundabout and culverts will **not** be constructed by Council as part of the lane duplication project.
- A leg of the roundabout is provided for Emigrant Creek Lane.
- Existing flood overflow levels along the River Street formation are maintained.
- Provision is made for an auxilliary left turn lane into the Caravan Park and an adjusted Caravan Park entrance.
- Stormwater is to be piped, removing existing open drain along the Caravan Park frontage.
- Provision is made for left in/left out entrances north and south sides of River Street between the Caravan Park and Burns Point Ferry Road to allow for future development.
- No change is proposed to the existing River Street/Burns Point Ferry Drive/Riverbend Drive roundabout.

Burns Point Ferry Drive to Quays Drive **Plan Drawings C107, C108. Typical Cross Sections C100 (Section 4)**

- Eastbound lanes are already duplicated, no further change proposed.
- Westbound lane to be duplicated (involves deep pavement dig out and replacement). Mill

out and new asphalt surface for parking lane.

- No change to existing central raised median.
- No change to existing River Street/Quays Drive/Bunnings roundabout.

Quays Drive to Barlows Road

Plan Drawings C108, C109, C110. Typical Cross Sections C101 (Section 5)

- Eastbound and westbound lanes to be duplicated (involves deep pavement dig out and replacement). Mill out and new asphalt surface for parking lane.
- Central raised islands/median to be provided full length, eliminating right turns at Ronan Place.
- Ronan Place entrance to be reconfigured to facilitate heavy vehicle left in/left out turns.
- No change proposed to existing River Street/Barlows Road/Keppel Street roundabout.

Barlows Road to East of Brampton Avenue

Plan Drawings C110, C111. Typical Cross Sections C101 (Section 6)

- The configuration of the existing four lane concrete pavement, with raised centre median in River Street will be unchanged from Barlows Road to east of Brampton Ave.
- The existing Brampton Avenue seagull intersection will be unchanged, as will be the connection to Johnson Drive.

Brampton Avenue to Fishery Creek Bridge

Plan Drawings C111, C112. Typical Cross Sections C102 (Section 7)

- Eastbound and westbound lanes to be duplicated and raised centre median provided.
- Westbound lanes diverge to south of existing road to align with approaches to new duplicate Fishery Creek Bridge.
- New pathway to be provided on south side of River Street, east from Brampton Avenue to Boatharbour Road. There may be a small reduction in Johnson Drive width to accommodate the River Street pathway.
- A pathway will extend from Boatharbour Road onto a new pathway alignment on the south side of duplicate Fishery Creek Bridge and approaches.
- Retaining walls to be used on the north side of the road formation to avoid/minimise encroachment into adjacent mangrove areas.
- Left in/left out access only provided for Fishery Creek Road.
- Left in/left out access retained for Boatharbour Road.
- Westbound lanes west of duplicate bridge are elevated and retained by a retaining wall from Boatharbour Road to the bridge.
- The new, elevated westbound lane formation will partly encroach on the existing vehicle and boat/trailer parking area. The boat/trailer parking area will be reconfigured as part of the future detailed design.

Duplicate Fishery Creek Bridge

Plan Drawings C112, C211. Typical Cross and Long Section C104

- A duplicate Fishery Creek Bridge carrying two westbound lanes and a pathway is to be provided on the south of the existing bridge. The existing bridge will carry two eastbound lanes, the pathway on the south side of the existing bridge will be removed.
- The duplicate bridge will have the same deck level and pier/span spacing as the existing bridge.
- The duplicate bridge pathway is on the south side which will connect to existing and new connecting pathways on the south side of River Street.

Fishery Creek Bridge to Tweed Street

Plan Drawings C113, C114. Typical Cross Sections C102 (Sections 8, 9), C103 (Sections

10, 11)

- Duplicate eastbound and westbound lanes will be extended eastward from the duplicated bridges to merge with the existing duplicated lanes west of Tweed Street. There will be a continuous raised centre median with a breaks for Brunswick Street intersection only.
- Norlyn Avenue will no longer have left in/left out access to River Street due to the height and proximity of the duplicate (westbound) bridge approaches and associated retaining wall. Norlyn Avenue will terminate with a turning head adjacent to River Street with provision for all existing property accesses. Norlyn Avenue will be accessed via Latta Avenue and Henry Philp Avenue.
- Bagot Street access functionality will be unchanged with left out access only.
- Henry Philp Avenue will be left in/left out only.
- Brunswick Street intersection will be unchanged regarding access to River Street. It will be configured to enable future signalisation which can be pursued if future traffic volumes reach RMS warrants (RMS designated traffic volume thresholds).
- The cross fall, beyond the centre concrete pavement, of a portion of River Street between Henry Philp Avenue to midway between Brunswick and Tweed Street, has excessive side slope for through traffic. Correction (reduction) of this cross fall will be required for parts of the outer duplicate lanes. This will require elevation of some sections of kerb and gutter which in turn will create lowered sections of verge/footpath. These lowered areas will be provided with a separate stormwater drainage system. Pedestrian access to properties will be maintained and no vehicular accesses will be adversely impacted by the elevated kerbs.