



GREATER GEELONG PLANNING SCHEME AMENDMENT C369

DRYSDALE BYPASS

City of Greater Geelong Submission

7 June 2017



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1 Introduction

This submission is made by the City of Greater Geelong in support of Amendment C369. The amendment proposes to apply the Public Acquisition Overlay - Schedule 3 (PAO3) to additional land required for the Drysdale Bypass construction, as well as add an incorporated document 'Drysdale Bypass April 2017' to the planning scheme.

Council reserves the right to expand on this submission at the Panel Hearing

1.1 Background

Amendment C369 has been prepared by the Roads Corporation (trading as VicRoads) who is the planning authority for this amendment.

The amendment applies to all the land identified within the Drysdale Bypass Project Area Boundary as shown in **Figure 1**.

Figure 1 – Drysdale Bypass Project Area Boundary



Legend
Project Area Boundary
Proposed Alignment

Specifically the amendment will:

- Apply additional land under the PAO3;
- Amend Clause 21.14 to include an additional strategy under 'Drysdale /Clifton Springs';
- Amend the Schedule to Clause 52.03 to include a new incorporated document titled *Drysdale Bypass April 2017*;
- Amend the Schedule to Clause 52.17 to include reference to the Drysdale Bypass project; and
- Amend the Schedule to Clause 81.01 to introduce the incorporated document titled *Drysdale Bypass April 2017* into the Greater Geelong Planning Scheme.

The Greater Geelong Planning Scheme and its predecessor planning schemes have contained an alignment for the Drysdale Bypass as a PAO3 since 1983. Amendment C369 reserves additional land to accommodate reconfigured Bypass intersections and meet current road design requirements.

The effect of the incorporated document will be that no planning permit is required for the use, development and carrying out of works for the purposes of the Drysdale Bypass within the Project Area Boundary. This includes the removal of native vegetation. Such activities must be undertaken by or on behalf of VicRoads for the incorporated document to apply.

As stated in the VicRoads *Drysdale Bypass Report to Accompany Planning Scheme Amendment C369 April 2017*, Council officers have attended several information sharing workshops coordinated by VicRoads over the past 12-18 months.

Council also provided letters of support for VicRoads to be the Planning Authority for this planning scheme amendment.

2 Strategic and Land Use Planning Issues

2.1 Assessment against Planning Policy, Zones and Overlays

The Explanatory Report and *Land Use Planning Assessment* (Jacobs, 10 April 2017) provides a good analysis of the relevant state and local planning policies.

The amendment land is located on the Bellarine Peninsula which is recognised in the State Planning Policy Framework as one of four distinctive areas of state significance. Under Clause 11.05-2 planning must consider the *Bellarine Peninsula Localised Planning Statement* (BPLPS) Victorian Government, 2015. The Drysdale Bypass will influence the 'tourist route' designated in the BPLPS map, however will reinforce the Drysdale Settlement Boundary, support tourism growth and have minimal impact on the open farmed landscape and associated agricultural uses.

Ministerial Direction no. 17 requires planning authorities to have regard to the adopted *Bellarine Peninsula Localised Planning Statement* when preparing a planning scheme amendment affecting land on the Bellarine. Amendment C369 documents must be revised to address Direction no. 17.

The *G21 Regional Growth Plan 2013* is referenced in the State Planning Policy Framework at Clauses 11.07 and 11.09. The Plan establishes a framework for strategic land use and settlement planning. The purpose of the Plan is to ensure growth is managed in a way which protects, and builds on, the region's strengths, unique character and significant natural assets. The Plan identifies the Drysdale Bypass as a key transport project on the Bellarine Peninsula (page 50).

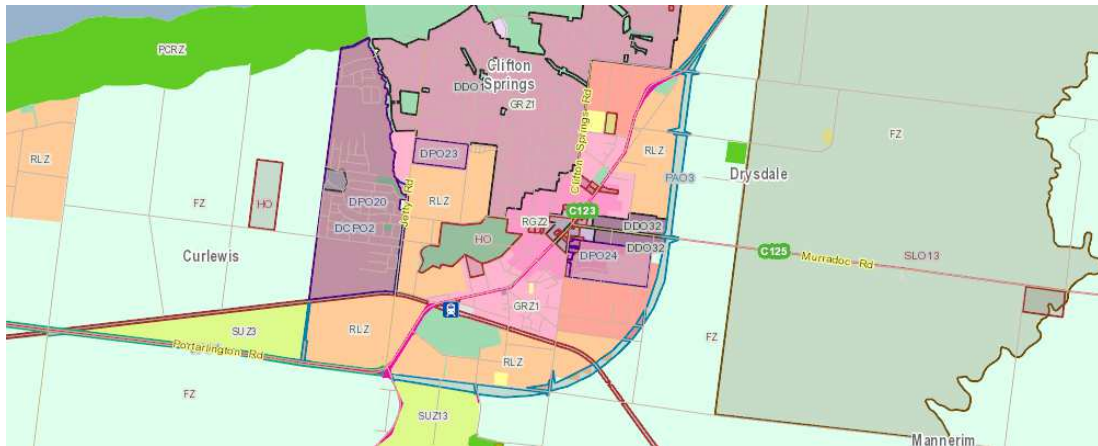
Other applicable state policies include: Clause 17.03-1 Facilitating tourism; Clause 18.01-1 Land use and transport planning; Clause 18.02-1 Sustainable personal transport; and Clause 18.02-4 Management of the road system.

It is noted that as a result of Ministerial Amendment VC134 introduced to all planning schemes in Victoria on 31 March 2017 relevant state clause references and locations have changed. These changes have not materially affected Amendment C369.

The Municipal Strategic Statement includes Clause 21.14 The Bellarine Peninsula. Strategies under 'Drysdale/Clifton Springs' recognise the proposed Drysdale Bypass and to contain urban growth, support the development of the Jetty Road Urban Growth Area and the Murradoc Road commercial precinct, and provide additional bicycle and pedestrian links. The amendment accords with these strategies.

Figure 2 shows a zone and overlay map of the area.

Figure 2 – Applicable Zones and Overlays



The Jacobs report lists the relevant zones and overlays applicable to the Drysdale Bypass as follows:

Zones	Overlays
Low Density Residential Zone Schedule 1 (LDRZ1)	Vegetation Protection Overlay Schedule 1 – Significant Roadsides and Linear Reserves (VPO1)
Low Density Residential Zone Schedule 2 (LDRZ2)	Heritage Overlay Schedule 1561 – Geelong-Queenscliff Railway Line (HO1561)
Commercial 2 Zone (C2Z)	Design and Development Overlay Schedule 32 – Town Entry Murradoc Road, Drysdale (DDO32)
Rural Living Zone (RLZ)	Public Acquisition Overlay Schedule 3 – VicRoads Proposed Category 1 Road (PAO3)
Farming Zone (FZ)	
Public Use Zone Schedule 4 – Transport (PUZ4)	
Road Zone Category 1 (RDZ1)	
Special Use Zone Schedule 13 – Drysdale Regional Community and Cultural Hub (SUZ13)	

The amendment will not impact on the existing zone structure of the area.

A primary function of Amendment C369 is to apply the PAO3 to additional properties required for the proposed Bypass alignment. The purpose of the Public Acquisition Overlay includes:

To identify land which is proposed to be acquired by a Minister, public authority or municipal council.

To reserve land for a public purpose and to ensure that changes to the use or development of the land do not prejudice the purpose for which the land is to be acquired.

To designate a Minister, public authority or municipal council as an acquiring authority for land reserved for a public purpose.

The application of the PAO3 supports and enables the construction of the Drysdale Bypass.

2.2 Drysdale Clifton Springs Structure Plan 2010

The Drysdale Bypass creates the eastern settlement boundary of the Drysdale/Clifton Springs Township. Land to the east of the Bypass is located in the Farming Zone, whilst land within the Bypass (to the west) is a mix of residential, commercial, rural living and farming zone land. A number of urban consolidation opportunities have been identified for land within the settlement boundary, however the structure seeks to maintain land within the farming zone outside the settlement boundary.

A future review of the Structure Plan will consider the impacts from the development of the Bypass (among other things) and whether there is a need to rezone land adjacent to the bypass. Given the extensive amount of residential and commercial zoned land within Drysdale, the review is **not** expected to recommend significant change, particularly to Farming zoned land.

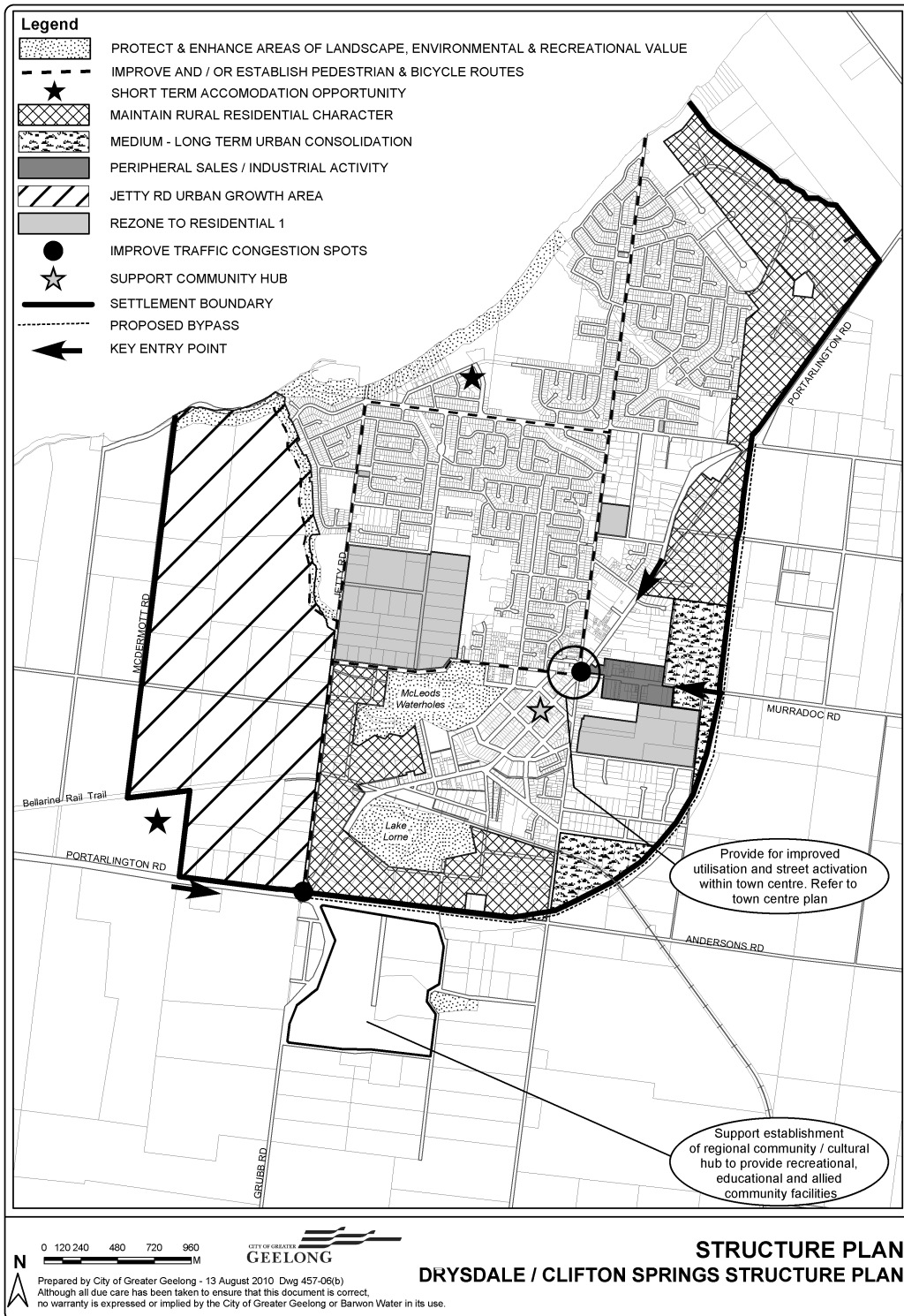
Given the established settlement boundary in Drysdale/Clifton Springs and recent land monitoring identifying in excess of 10 years supply there is no urgent need to review the Structure Plan. It is likely the Structure Plan will be review in 2019-2020.

The current Structure Plan identifies a number of issues within the Townships that could be improved by the construction of the Drysdale bypass, these include

- Improved pedestrian links across Anderson and Portarlington Roads to access school and sporting/community precinct.
- Remove the need to modify the road network (in the absence of the Bypass) as recommended in the Structure Plan (page 29), particularly at the Portarlington/Andersons/Jetty Road Intersection.
- Opportunity to provide safe off road cycle routes for children to access schools
- Make improvements to High Street including removing congestion and safety concerns.
- Improved connections to the Town Centre by making the Murradoc Road entry from the Bypass more accessible.

The Structure Plan map is shown in **Figure 3**.

Figure 3 – Drysdale Clifton Springs Structure Plan map



2.3 Drysdale Urban Design Framework 2012

The Drysdale UDF identified a number of improvements to the Drysdale Town Centre (commercial area). It identified redevelopment opportunities, improvements to pedestrian movements and the upgrading of Murradoc Road.

The timing and construction of the Drysdale Bypass was a key issue raised by the community when identifying current issues with the Town Centre. In particular the issues associated with the roundabouts along High Street, proposed changes to Murradoc Road and the traffic congestions that town currently experiences.

The UDF recommended a number of changes be considered to improve the functionality of the Town Centre:

- Consider replacing the High Street/Murradoc Road roundabout with traffic lights to improve traffic flow and make pedestrian movement through the town safer.
- Provide additional Commercial 1 zoned land along Murradoc Road to facilitate the development of a supermarket and provide additional car parking opportunities.
- Upgrade Murradoc Road to provide a median strip, formal kerb and channel, street tree planting and a service lane (where possible,) to create an attractive entry to the Town Centre from the Northern Bellarine once the bypass is in place.

Council understands that VicRoads is of the view that traffic signals are not warranted at the High Street/ Murradoc Road intersection and that other upgrades along High Street are proposed to improve pedestrian movement. It is submitted that signals provide superior pedestrian connectivity as the traditional Town Centre expands east to capture the ALDI and Coles supermarkets.

More detailed design work for Murradoc Road is yet to be undertaken. This may become a priority for both Council and VicRoads once the Bypass is operational, given the poor condition of the road and improved access to Murradoc Road from the Bypass. VicRoads should consider developing detailed design plans for Murradoc Road in consultation with Council to improve the appearance, safety and accessibility of Murradoc Road.

There is no review identified for the Drysdale Urban Design Framework.

2.4 Jetty Road Urban Growth Area

As VicRoads is aware, a new north-south collector road and intersection is proposed off Portarlington Road just to the west of the Drysdale Bypass Study Area.

The road is part of the Jetty Road Urban Growth Plan (refer to **Figure 4**).

The north south road will provide access into the Jetty Road / Curlewis Growth Area. The road will have a fully signalised, three legged intersection with Portarlington Road just east of the Curlewis Golf Course.

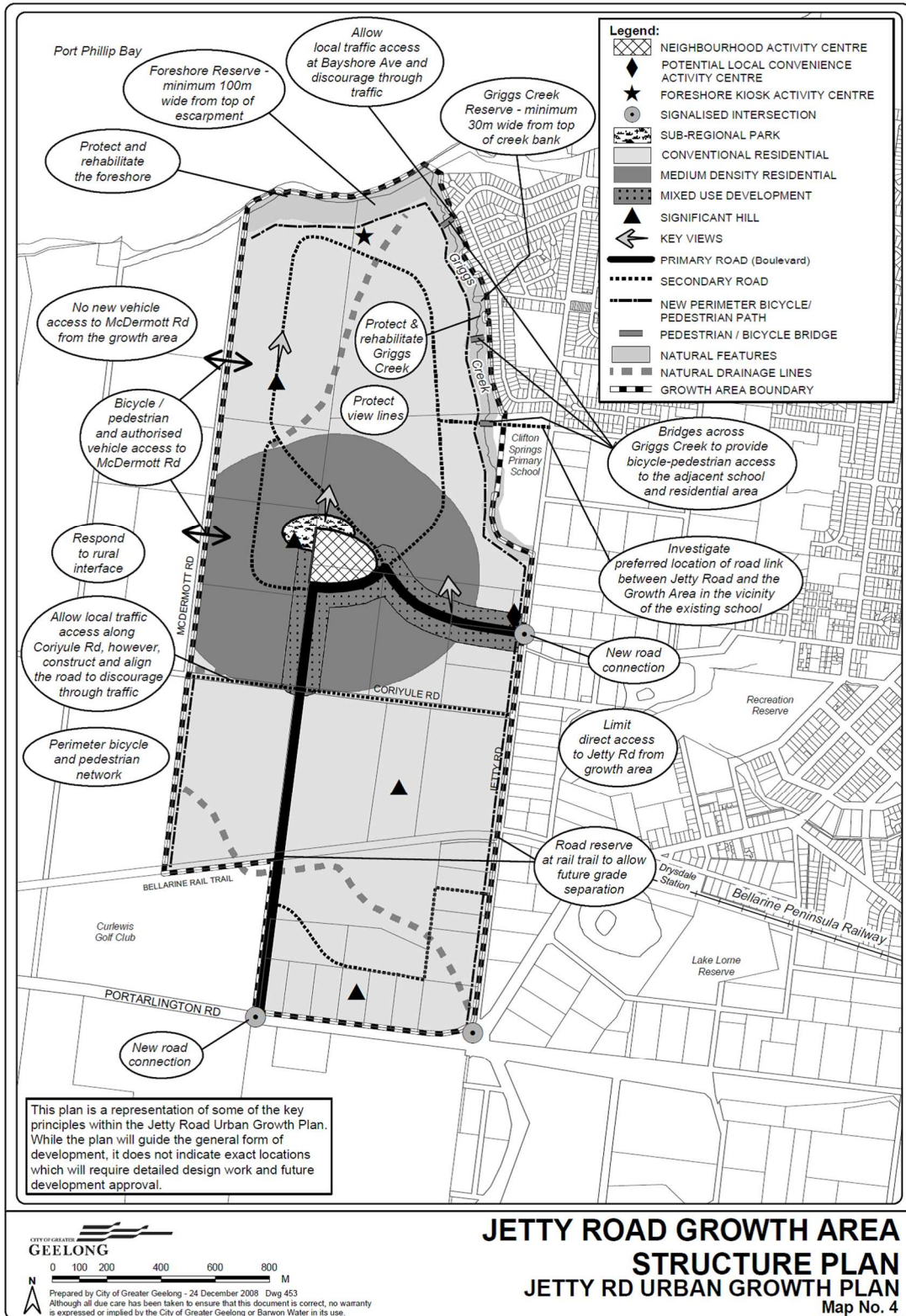
A Public Acquisition Overlay 4 – Proposed Road (no category) is in place and land has recently been acquired to construct the first leg of the road.

Council is responsible for delivery of the first leg of the road and intersection which are funded through the Jetty Road Urban Growth Area Development Contributions Plan (2011). The DCP budget for the road is \$1.7M and the intersection budget is \$1.3M.

Council expects to complete final design of the road and intersection by August 2018. VicRoads has agreed to construct the road on Council's behalf with construction expected to commence by February 2018 and completion by June 2018.

The section of road north of the Bellarine Rail Trail up to the Curlewis Activity Centre will be constructed by the adjoining developers along similar timelines to VicRoads.

Figure 4 – Jetty Road Urban Growth Area map



2.5 Land Use Impacts and Property Severance

The proposed Drysdale Bypass project will result in 22 private properties being subject to partial or full acquisition for the Bypass alignment including one dwelling not previously required. Over 50 properties close by may be affected by changed access arrangements, noise and light spill.

The Jacobs Planning Assessment includes a summary of the properties affected by Amendment C369 in Tables 5.1 and 6.1.

It is acknowledged that directly affected property owners will be compensated by the Roads Corporation for the loss of land in accordance with the *Land Acquisition and Compensation Act 1986*. Private land identified for public acquisition, balance land uses and proposed alternative access arrangements will be further addressed at the Panel Hearing as necessary.

As indicated earlier in the submission it is unlikely that a future review of the Drysdale/Clifton Springs Structure Plan will seek to rezone Farming zoned land on the outside of the Bypass. VicRoads are encouraged to advise existing land owners impacted upon by land acquisitions that current planning policy will be applied to properties in the Farming Zone. This may limit the opportunity to further subdivide or construct a dwelling on any given property.

Council supports the preparation of the *Drysdale Bypass Access Management Strategy* to ensure the interface between the Bypass and adjacent land is managed in a way that maximises the safety and efficiency of the road for all road users.

3 Technical Issues

3.1 Drainage

The City of Greater Geelong is the drainage authority for the municipality. Council engineers are currently reviewing the relevant technical reports and further submissions will be made at the Panel Hearing.

3.2 Road Network

The Drysdale Bypass will improve the operational performance of Geelong – Portarlington Road; a strategic link that connects Drysdale, Clifton Springs, Portarlington, Indented Head and St Leonards to Geelong. Simultaneously, the Bypass will divert approximately 50 per cent of traffic away from High Street (within the Drysdale Township). The intended removal of freight and heavy vehicles in particular will have significant amenity benefits for the Drysdale Town Centre.

The Bypass alignment was established in 1983 with the application of the PAO stretching from the Geelong – Portarlington/ Grubb Road intersection, around the eastern edge of the Township, and ending at Portarlington/ Whitcombes Road intersection. Amendment C369 will expand the land applied with a PAO to enable construction of the Bypass.

The amendment is supported by the Drysdale Bypass Access Management Strategy. The Access Management Strategy establishes accepted access points of direct access to the Bypass and seeks to protect the Bypass from further direct points of access in the future. It is submitted that the Access Management Strategy is an important tool to protect the integrity of the Bypass as a through route for traffic.

An engineering assessment of the road network changes and requirements is provided in [Appendix 1](#).

3.3 Flora and Fauna

The amendment is supported by environmental assessments from GHD and Ecology & Heritage Partners.

A large project area formed the survey area for GHD when they assessed the site and prepared their Habitat Hectare Assessment Report and Tree, Shrub and Significant Flora Assessment Report. The overall habit hectare scores were very high in these reports due to the large survey area. However it is understood there is no intention by

VicRoads to remove all of this vegetation. Council notes that a high percentage of the vegetation is planted and non-indigenous.

It is understood that VicRoads will use the GHD reports to inform the actual Bypass road alignment and the extent of the road works footprint. This approach is supported to ensure compliance with the State Government requirement for a Moderate Risk-based pathway to avoid and minimise native vegetation removal.

Once the final alignment is confirmed, it is submitted that the extent of native vegetation removal be reviewed by GHD. The review should inform the actual offset requirements that will be contained within the Native Vegetation Offset Management Plan to be prepared.

It is also submitted that VicRoads engage a zoologist to inspect all vegetation to be removed to confirm the presence or otherwise of fauna, nesting birds etc.

Section 5.0 of the Incorporated Document *Drysdale Bypass April 2017* requires the preparation of a Construction Environmental Management Plan(s) and a Native Vegetation Offset Management Plan. In both cases the Incorporated Document does not require approval by an external party (i.e. DELWP, CoGG). This is considered unusual in respect to VicRoads preparing and approving documents without any independent assessment and approval. These processes require transparency and an ability for another party to review and approve such key documents.

Council officers have been in discussion with the owners of 22-30 Drakes Road Drysdale, and their desire to apply an Environmental Significance Overlay to the property. The property contains a significant stand of River Red Gum vegetation and natural waterway (refer to Figure 2g *Ecological features within the study area*, Ecology & Partners Final Report, April 2017 for a map of the immediate area). It is submitted that VicRoads assess any hydrological changes resulting from the Bypass project and implement measures to protect the long term health of this vegetation.

3.4 Recreation and Open Space

The Drysdale Bypass project will impact on the Drysdale Clifton Springs Cultural and Community Hub Sub-Regional Sports Precinct, located in the SUZ13 directly south of Andersons Road and east of Grubb Road.

The executive summary of the April 2011 Masterplan states:

The City of Greater Geelong is committed to the development of a sub-regional sports precinct in Drysdale at the 45ha site bounded by Peninsula Drive, Andersons Road, Grubb Road and Belchers Road. This Master Plan provides for a range of current and future sporting needs of the Bellarine Peninsula, reinforcing the directions set by the Recreation and Leisure Needs Study (2005) and the Drysdale Clifton Springs Structure Plan (2009).

This Plan is designed to be implemented over many years and involves significant development of a range of sporting facilities, supporting infrastructure and informal recreation facilities. With three schools located in the adjacent precinct and within walking distance of the proposed sporting facilities, the potential for an affective partnership between the schools, the community and the City of Greater Geelong is very strong. Such a partnership would see schools using the sports precinct during school hours for various programs and events and the community accessing some school recreation facilities outside of school hours to complement the sports precinct facilities.

It is submitted that the location of the Grubb Road roundabout and road linking to Peninsula Drive is acceptable as VicRoads has previously demonstrated how the proposed sporting facilities at the Drysdale Sporting Precinct can be accommodated with necessary buffers around this road alignment.

This alignment will require a significant land acquisition by VicRoads and it is anticipated that a works-in-kind agreement can be negotiated to enable VicRoads to undertake upgrades to Belchers Road and an extension of Peninsula Drive. Delivery of these works in the short term is encouraged.

Sheet 3 Alignment Plan of the Roadwork Drawings shows a shared path connection into the retarding basin parcel of land which is wedged between the Bypass and the Peninsula Road link. This section of shared path should be deleted as it is not an appropriate area to facilitate pedestrian or cycle connections to.

The Drysdale Bypass will bridge over the Bellarine Rail Trail which is addressed in Appendix 1.

3.5 Social Impacts

It is submitted that the overall social impact will be positive by relieving congestion on High Street, reducing travel times and improving safety for road users, including pedestrians and cyclists. There are however a number of Bypass design considerations to lessen potential social impacts.

Requiring particular attention will be the design of the pedestrian underpass and CPTED elements that need to be incorporated into its design from the outset.

Key users of the underpass will be children attending primary school and young students attending secondary school. Consequently the design needs to be appealing for these target groups in order for students to feel comfortable to use the underpass. Also the design needs to address the asset's vulnerability to graffiti, vandalism and anti-social behaviour. Without this thoughtful approach in the design process there is a risk that students will not use the tunnel as anticipated or that the tunnel will be repeatedly targeted by graffiti artists and other forms of anti-social behaviour.

Consideration should be given to the inclusion of public art elements (see **Figure 5**) in order to make the tunnel more appealing for students and therefore students and children will feel more comfortable in this space. Public art has been included in a number of interventions for pedestrian underpasses in different parts of Melbourne. Design elements need to include lighting. Lighting should be designed for the purpose for which it is intended.

Overhead lighting in this instance may not be the best design solution. It is submitted consideration be given to illuminating the walls rather than lighting placed overhead. The advantage of this lighting is that it shows up isolated figures and movement very readily, whereas overhead lighting creates shadows.

The design of the underpass should also address the following:

- Installed lighting should be vandal resistant.
- Long sightlines into the tunnel are an important element of safer design.
- Avoid creating 'natural ladders' with lighting fixtures etc.
- Avoid unshielded lighting at eye level.
- Consider public notices regarding maintenance contact details.
- Must include way finding signage and where assistance and key areas can be located (e.g. toilets, public transport, key destinations).

Council strongly recommends that VicRoads engage with the school communities and the Potato Shed (a local arts facility) to develop site responsive designs for the tunnel and entry apron area. The Potato Shed would be an ideal venue to host workshops with students.

Clarification is required as to who will be the asset owner and how will the underpass be managed and maintained. As well as who will respond to issues raised by the community such as graffiti, rubbish removal, sweeping, etc.

Figure 5 – Pedestrian underpasses with public art examples



Council at its meeting on the 23 May 2017 resolved to sell a portion of 29-39 Peninsula Drive, Drysdale to the Roman Catholic Trust (St Ignatius College) to facilitate an expansion of the school. It is submitted VicRoads continue Bypass access arrangement discussions with the school and Council to determine what changes/impacts there may be on any design work undertaken by VicRoads for Peninsula Drive, Grubb Road and Gilles Road.

The draft Aboriginal Cultural Heritage Management Plan, 13 April 2017 (Ecology & Heritage Partners) is to be updated after further field work is completed by the end of April 2017.

3.6 Landscape and visual impact

Clause 21.14 and the *Bellarine Peninsula Localised Planning Statement* specifically attempt to appropriately manage urban growth on the Bellarine Peninsula in order to retain the areas identity and key attributes.

The design response of all aspects of the proposed road infrastructure needs to take into consideration the highly valued rural Bellarine Peninsula context for this road. It is submitted this means softening some elements to place the infrastructure in the landscape rather than impose the Bypass in a hard uncompromising fashion (e.g. noise attenuation, visual impacts, lighting etc). This is especially the case in areas abutting Rural Living Zone and Farming Zone land (e.g. the lighting of intersections and general light spill, etc).

4 Draft planning controls

Amendment C369 proposes to make the following changes to the Greater Geelong Planning Scheme:

- Apply additional land under the PAO3;
- Amend Clause 21.14 to include an additional strategy under 'Drysdale /Clifton Springs';
- Amend the Schedule to Clause 52.03 to include a new incorporated document titled *Drysdale Bypass April 2017*;
- Amend the Schedule to Clause 52.17 to include reference to the Drysdale Bypass project; and
- Amend the Schedule to Clause 81.01 to introduce the incorporated document titled *Drysdale Bypass April 2017* into the Greater Geelong Planning Scheme.

As outlined earlier in the submission, the application of the PAO3 maps are supported.

The minor changes to Clause 21.14 are supported however Council officers will likely suggest improvements to the drafting at the Panel Hearing.

The introduction of the *Drysdale Bypass April 2017* Incorporated Document is supported. The incorporated document will mean that no planning permit is required for the use, development and carrying out of works for the purposes of the Drysdale Bypass within the Project Area Boundary.

It is submitted that the draft Incorporated Document can be improved as follows:

1. Enlarge Figure 1 to a more legible scale over multiple map sheets to accurately identify the project area boundary and property boundaries.
2. Remove private land within the project area boundary that does not form part of the Bypass road alignment.
3. Under section 4.0 Controls dot point 4, it says the Native Vegetation Offset Management Plan must be 'approved' in accordance with Clause 5.3. However Clause 5.3 only requires the plan to be 'prepared'. Technically the Native Vegetation Offset Management Plan could therefore be prepared but never approved.
4. Sections 5.2 and 5.3 to require plans to be prepared in consultation with the City of Greater Geelong and approved by the Department of Environment, Land, Water and Planning or its equivalent.

The Schedule to Clause 52.17 will allow the removal, destruction and lopping of native vegetation within the area specified in the Incorporated Document without a planning permit. This approach is also supported subject to the changes recommended above.

5 Conclusion

In summary, the proposed amendment is considered to be broadly consistent with the State and Local Planning Policy Frameworks, the G21 Regional Growth Plan and with Council's adopted Drysdale Clifton Springs Structure Plan.

The City of Greater Geelong supports the reservation of additional PAO3 land to enable VicRoads to acquire land for the construction of the Drysdale Bypass project and associated works. The approvals process will be streamlined by incorporating a Drysdale Bypass document into the Greater Geelong Planning Scheme, which is also supported.

The Drysdale Bypass will deliver a number of benefits to the region including transport network efficiencies, reduced travel times and road safety improvements. There will be flow-on benefits for the Drysdale Town Centre as heavy vehicles are re-routed and through-traffic reduced. The tourism and business sectors will also benefit, particularly those located on the Northern Bellarine.

Council officers welcome the opportunity for further input and discussion with VicRoads in relation to the issues raised in the submission.

Council officers will continue to review the substantial technical reports on exhibition with Amendment C369 and may add to this submission when it is presented to the Independent Panel in July 2017.

APPENDIX 1: ROAD & TRAFFIC ENGINEERING ASSESSEMNT

Traffic Unit Comments

The Drysdale Bypass alignment and the new proposed works are divided into two sections, A & B

[A = Improvements required]

[B= VicRoads to construct]

A Key Infrastructure proposed by VicRoads

1. Traffic Signals at Jetty Road / Reserve Road and Portarlinton Road and Jetty Road re-alignment to High Street and new intersection connection with Reserve Road (4 way intersection)
 - The new connection and the traffic signals will be constructed by VicRoads.
 - a. At the signals, VicRoads need to provide for bicycle facilities for cyclist to turn right safely.
 - b. Pedestrian facilities with DDA compliance is required at the signals.
2. Traffic Signals at Grubb Road and (new Bypass) / Portarlinton Road
 - The new connection and the traffic signals will be constructed by VicRoads.
 - a. At the signals, VicRoads need to provide for bicycle facilities to turn right.
 - b. Pedestrian facilities with DDA compliance is required at the signals.
 - c. Pedestrian connection into the Sports Precinct.
3. Pedestrian Underpass at Peninsula Drive
 - The pedestrian underpass will be constructed by VicRoads.
 - a. Safety Lighting within the underpass is required 24/7
 - b. Pedestrian facilities with DDA compliance is required.
 - c. Safe pedestrian connection into the Sports Precinct and the footpath in Peninsula Drive is required.
4. Peninsula Drive connection via roundabout at Grubb Road
 - The new roundabout will be constructed by VicRoads.
 - a. Pedestrian crossing facilities at the roundabout to the sports precinct is required.
 - b. Pedestrian facilities with DDA compliance is required.
 - c. Safe pedestrian connection into the Sports Precinct and the footpath in Peninsula Drive is required.
5. New 'Parent Drop Off' zone in Peninsula Drive
 - The new connection to Peninsula Drive will be constructed by VicRoads.
 - a. 'Parent Drop Off', needs to be properly designed to provide safe access to drop off area.
 - b. Safe merging connection is required to Peninsula Drive.
 - c. Safe children crossing facilities are required.
 - d. Pedestrian facilities with DDA compliance is required.
 - e. Safe pedestrian connection into the footpath in Peninsula Drive is required.
6. Peninsula Drive connection to Belchers Road and new intersection treatment at Belchers Road and Peninsula Drive.
 - This new connection will be designed by CoGG.
 - This is proposed to be a modified T-intersection, giving priority to vehicles in peninsula drive to access Belchers Road.
 - a. Depending on the traffic access, this intersection will have a modified T or a roundabout.
 - b. Pedestrian crossing facilities at the roundabout to the sports precinct is required.
 - c. Pedestrian facilities with DDA compliance is required.
 - d. Safe pedestrian connection into the Sports Precinct and the footpath in Peninsula Drive is required.

7. New roundabout at Grubb Road and Belchers Road
 - This will be designed by CoGG.
 - a. Need to provide to buses to turn into Belchers Road
 - b. Need to be designed for cyclists to access belchers Road safely.
8. New road alignment in Peninsula Drive
 - This designed by CoGG.
 - a. Need to provide footpath connectivity into the sports precinct.
 - b. Need to provide safe connection into the car parks within the sports precinct.
 - c. Identify possible safe 'school crossing' locations and facilities along Peninsula Drive.
 - d. Integrate the existing access points in Peninsula Drive with the new proposed access locations from the sports precinct.
9. New roundabout at Princess Street and the Bypass
 - This will be designed and constructed by VicRoads.
10. New roundabout at Murradoc Road and the Bypass
 - This will be designed and constructed by VicRoads.
11. New roundabout at Whitcombes Road and the Bypass
 - This will be designed and constructed by VicRoads.
12. Bridge over Rail Trail
 - This will be designed and constructed by VicRoads.
 - a. Need to provide safety fencing.
13. Left in / left out at Drakes Road intersection with the Bypass
 - This will be designed and constructed by VicRoads.
14. Modified T-intersection treatment at Whitcombes Road and Portarlington Road
 - This will be designed and constructed by VicRoads.
15. High Street improvements
 - This will be designed and constructed by VicRoads.

B CoGG Requirements for local roads from VicRoads

B - Road Segment Upgrades

- B 1 - Reserve Road [CAT 2 LOCAL ROAD – RURAL]
(Reserve Road, between High Street and Bridge Road)
- This is a gravel road.
 - Traffic volumes – 87 vpd (2009)
 - This road will be used to access school drop off area.
 - This will be one of the main access routes to the pedestrian underpass.
- a. Reseal Reserve Road from High Street to Bridge Road (approximate length is 875 m)
 - b. Needs to be constructed to a level of 'rural road' standard or as required by CoGG.
 - c. K & C as discussed with CoGG.
 - d. Importance of sealing this road segment as part of the bypass construction is – HIGH

B 2 - Bridge Road [CAT 2 LOCAL ROAD – URBAN]

(Between Reserve Road and Rail Trail)

- This is a gravel road.
- Traffic volumes – 80 vpd (2009)
- This road will be used to access school drop off area.
- This will be one of the main access routes to the pedestrian underpass.
- a. Reseal Bridge Road from Reserve Road to Rail Trail (approximate length is 305 m)
- b. Needs to be constructed to a level of 'rural road' standard or as required by CoGG.
- c. K & C as discussed with CoGG.
- d. Importance of sealing this road segment as part of the bypass construction is – HIGH

B 3 - Gillies Road, [CAT 2 LOCAL ROAD – URBAN]

(Between Reserve Road and Anderson Road)

- This is a gravel road.
- Traffic volumes – 140 vpd (2009)
- This road will be used to access school drop off area.
- This will be one of the main access routes to the pedestrian underpass.
- a. Reseal Gillies Road from Reserve Road to Anderson Road (approximate length is 230 m)
- b. Needs to be constructed to a level of 'rural road' standard or as required by CoGG.
- c. K & C as discussed with CoGG.
- d. Importance of sealing this road segment as part of the bypass construction is – HIGH

B 4 - Jones Road [CAT 2 LOCAL ROAD – URBAN]

(Between Bridge Road and Princess Street)

- This is a gravel road.
- Traffic volumes – 50 vpd (2009)
- This road will be used to access school drop off area.
- This will be one of the main access routes to the schools.
- a. Reseal Jones Road from Bridge Road to Princess Street (approximate length is 466 m)
- b. Needs to be constructed to a level of 'rural road' standard or as required by CoGG.
- c. K & C as discussed with CoGG.
- d. Importance of sealing this road segment as part of the bypass construction is – HIGH

B 5 - Gillies Road, [CAT 2 LOCAL ROAD – URBAN]

(Between Basin Road and Anderson Road)

- This is a gravel road.
- Traffic volumes – 140 vpd (2009)
- This road will be used to access school drop off area.
- This will be one of the access routes to the schools.
- a. Reseal Gillies Road from Anderson Road to Basin Road (approximate length is 300 m)
- b. Needs to be constructed to a level of 'rural road' standard or as required by CoGG.
- c. K & C as discussed with CoGG.
- d. Importance of sealing this road segment as part of the bypass construction is – MEDIUM

B 6 - Basin Road [CAT 2 LOCAL ROAD – RURAL]

(Between Gillies Road and Princess Street)

- This is a gravel road.
- Traffic volumes – 50 vpd (2009)
- This road will be used to access school drop off area.
- This will be one of the access routes to the schools.
- a. Reseal Gillies Road from Gillies Road to Princess Street (approximate length is 600 m)
- b. Needs to be constructed to a level of 'rural road' standard or as required by CoGG.
- c. K & C as discussed with CoGG.
- d. Importance of sealing this road segment as part of the bypass construction is – MEDIUM

B 7 - Whitcombes Road [CAT 2 LOCAL ROAD – RURAL]
(Between Bypass and Martins Road)

- This is a gravel road.
- Traffic volumes – 162 vpd (2009)
- This road will be used by local traffic.
- a. Reseal Whitcombes Road from Bypass to Martins Road (approximate length is 636 m)
- b. Needs to be constructed to a level of 'rural road' standard or as required by CoGG.
- c. K & C as discussed with CoGG.
- d. Importance of sealing this road segment as part of the bypass construction is – MEDIUM to LOW

B 8 - Martins Road [CAT 2 LOCAL ROAD – RURAL]
(Between Whitcombes Road and Murradoc Road)

- This is a gravel road.
- Traffic volumes – 154 vpd (2009)
- This road will be used 'sometimes' as a rat run.
- a. Reseal Martins Road from Whitcombes Road and Murradoc Road (approximate length is 636 m)
- b. Needs to be constructed to a level of 'rural road' standard or as required by CoGG.
- c. K & C as discussed with CoGG.
- d. Importance of sealing this road segment as part of the bypass construction is – MEDIUM to LOW

B 9 - Sproat Street, [CAT 2 LOCAL ROAD – URBAN]
(Between End and Murradoc Road)

- This is a gravel road.
- Traffic volumes – 216 vpd (2009)
- This road will be used to access school drop off area.
- This will be one of the possible access routes to the school.
- a. Reseal Sproat Street from end of Sproat Street to Murradoc Road (approximate length is 450 m)
- b. Needs to be constructed to a level of 'rural road' standard or as required by CoGG.
- c. K & C as discussed with CoGG.
- d. Importance of sealing this road segment as part of the bypass construction is – LOW

C - Intersection Upgrades

C 1 - Intersection - Reserve Road and Gillies Rd (4 way)

- Two gravel road intersects.
- This intersection will be used to access school drop off area.
- As is it is, this intersection is not safe more traffic movements.
- a. Reseal this intersection.
- b. Improve intersection by sealing it with Drainage, K&C, Footpath and Lighting to CoGG standards.
- c. Importance of sealing this road segment as part of the bypass construction is – HIGH

C 2 - Intersection - Bridge Road and Jones Road (3 way)

- Two gravel road intersects.
- This intersection will be used to access school drop off area.
- As is it is, this intersection is not safe more traffic movements.
- a. Reseal this intersection.
- b. Improve intersection by sealing it with Drainage, K&C, Footpath and Lighting to CoGG standards.
- c. Importance of sealing this road segment as part of the bypass construction is – HIGH

C 3 - Intersection - Whitcombes Road and Martins Road (3 way)

- Two gravel road intersects.
- This intersection will be used by local traffic.
- As is it is, this intersection is not safe more traffic movements.
- a. Reseal this intersection.
- b. Improve intersection by sealing it with Drainage, K&C, Footpath and Lighting to CoGG standards.
- c. Importance of improving this intersection as part of the bypass construction is – Medium to LOW

C 4 - Intersection - Drakes Road and Martins Road (4 way)

- Two gravel road intersects.
- This intersection will be used by local traffic.
- As is it is, this intersection is not safe more traffic movements.
- a. Reseal this intersection.
- b. Improve intersection by sealing it with Drainage, K&C, Footpath and Lighting to CoGG standards.
- c. Importance of improving this intersection as part of the bypass construction is – Medium to LOW

C 5 - Intersection - Martins Road and Murradoc Road (3 way)

- This intersection will be used by local traffic.
- Improve sight lines.
- a. Improve sight lines and intersection treatments in Martins Road.
- b. Importance of improving this intersection as part of the bypass construction is – Medium to LOW

C 6 - Intersection - Clarendon Road and Murradoc Road (3 way)

- This intersection will be used by local traffic.
- Improve accessibility into Murradoc Road.
- a. Improve access into Murradoc Road and intersection treatments in Martins Road.
- b. Importance of improving this intersection as part of the bypass construction is – Medium

C 7 - Intersection - Gillies Road and Basin Road (90 degree bend)

- This intersection will be used by local and school traffic.
- Improve sight lines.
- Unsafe intersection.
- a. Improve sight lines at this intersection.
- b. Improve width of the road to accommodate two passing vehicles according to CoGG standards.
- c. Importance of improving this intersection as part of the bypass construction is – Medium

C 8 - Intersection - Basin Road and Princess Street (3 way)

- This intersection will be used by local and school traffic.
- Improve sight lines.
- Unsafe intersection.
- a. Improve sight lines at this intersection.
- b. Improve width of the road to accommodate two passing vehicles according to CoGG standards.
- c. Importance of improving this intersection as part of the bypass construction is – Medium

Pedestrian Upgrades

P-1 Pedestrian connections – From traffic signals at Grubb Road and Bypass into the Sports Precinct.

- a. Shared Path or Board Walk or Suitable Path needs to be constructed with DDA compliance with TGSIs.
- b. This path should be suited to all weather types.
- c. Need to check the requirement of this infrastructure.
- d. Will this work be incorporated into the Bypass project?
- e. Importance of improving this intersection as part of the bypass construction is – HIGH

- P-2 Pedestrian connections – From Shared Path from traffic signals at Grubb Road into the Sports Precinct.
- Shared Path / Board Walk / Suitable Path needs to be constructed with DDA compliance with TGSI's.
 - Need to check the requirement of this infrastructure.
 - Will this work be incorporated into the Bypass project?
 - Who will own it for future changes
 - Possible school crossing opportunity - Connection to 'Shared Path', within the sports reserve.
 - Importance of improving this intersection as part of the bypass construction is – HIGH
- P-3 Pedestrian connections – Across Jetty Road.
(‘New’ 3-way modified T-intersection)
- Improve pedestrian storage with DDA compliance with TGSI's.
 - Need to check the requirement.
 - Will this work be incorporated into the Bypass project?
 - Who will own it for future changes?
 - Importance of improving this intersection as part of the bypass construction is – MEDIUM
- P-4 Shared Path and Pedestrian connections – Roundabout at the intersection of the Bypass & Princess Street
(4-leg roundabout)
- Improve ‘Shared path’ and pedestrian connectivity by providing storage with DDA compliance (with TGSI's) at the roundabout islands.
 - Need to check the location and the requirement.
 - Will this work be incorporated into the Bypass project?
 - Who will own it for future changes
 - Importance of improving this intersection as part of the bypass construction is – HIGH
- P-5 School Drop Off and pedestrian connections in Peninsula Drive
- The dedicated drop off zone needs to be made safe.
 - Especially merging traffic and pedestrian mix.
 - Improve pedestrian connection to the footpath in Peninsula Drive with DDA compliance with TGSI's.
 - Need to check the requirement.
 - Will this work be incorporated into the Bypass project?
 - Who will own it for future changes
 - Importance of improving this intersection as part of the bypass construction is – MEDIUM
- P-6 Shared Path and Pedestrian connection from the Rail Trail into the shared path, which runs along the Bypass.
- The proposed connection from the Rail Trail is long and there's a possibility that 'some users' will try to cut the corner and dismount at the end of the bridge. This is not safe.
 - Need to improve safety by installing safety fencing or providing a proper steps for pedestrians with cycle accessibility
 - Will this work be incorporated into the Bypass project?
 - Who will own it for future changes
 - Importance of improving this intersection as part of the bypass construction is – HIGH to MEDIUM

Bus Stop / Shelter Review

Review the Bus Shelters and Stops in:
 PTV-1 Portarlington Road near the new Traffic Signals
 PTV-2 High Street near the service station

PTV-3 High Street after the traffic signals

- a. Need to check the requirement.
- b. Will this work be incorporated into the Bypass project?
- c. Who will own it for future changes?
- d. Importance of improving this intersection as part of the bypass construction is – MEDIUM

U Turn Facilities

Improve U-Turn facilities for longer vehicles and vehicles with trailers

- a. U TURN – 1 Improve U-turn facility at the traffic signals at the intersection of the Bypass and Grubb Road.
- b. U TURN – 2 Improve U-turn facility in High Street past the service station.
- c. U TURN – 3 Improve U-turn facility in High Street near the service station.
- b. Need to check the requirement.
- c. Will this work be incorporated into the Bypass project?
- d. Importance of improving this intersection as part of the bypass construction is – MEDIUM

Redundant Land Use

Dispose or improve redundant land due to the Bypass alignment

R-1 Jetty Road and Bypass intersection (near the service Station side)

- Use part of the existing roadway to provide a bicycle connection to Jetty's Road.
- Remove the other redundant road surface.
- Need to check the requirement.
- Will this work be incorporated into the Bypass project?
- Who will own it for future changes
- Importance of improving this section as part of the bypass construction is – MEDIUM

R-2 Peninsula Drive and the Bypass

- The redundant land near the bypass
- Can be designed to be used for long term parking for the school staff.
- Need to check the requirement.
- Will this work be incorporated into the Bypass project?
- Who will own it for future changes
- Importance of improving this intersection as part of the bypass construction is – HIGH to MEDIUM

If you require any additional information please feel free to contact me.

Yours sincerely

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