



Greater Western Water
ABN 70 066 902 467

36 Macedon Street, Sunbury Vic 3429
Locked Bag 350, Sunshine Vic 3020

RE: SERVICING ADVICE FOR THE MERRIMU PRECINCT

1. Water Supply

1.1. Current supply to the area

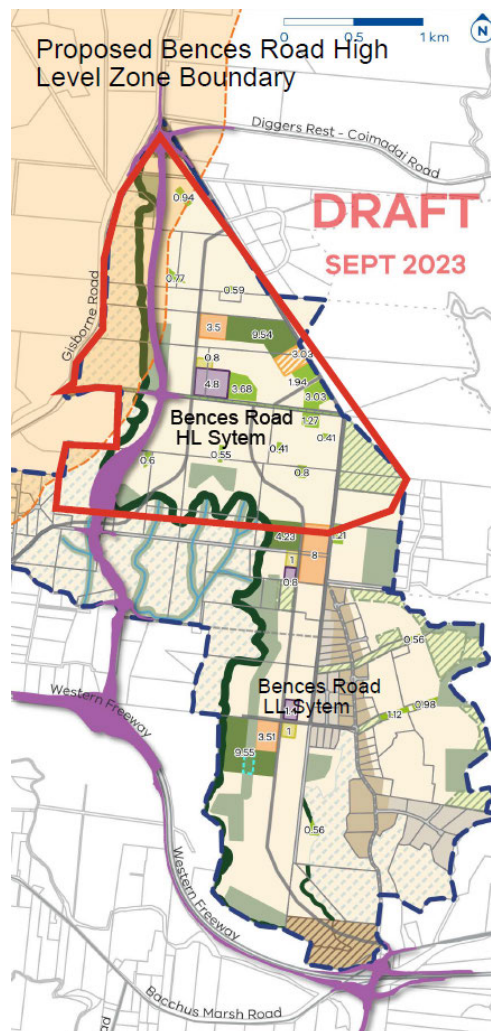
1.2. Previous advice

Greater Western Water respectfully acknowledges the Traditional Owners of the lands and waters upon which we work and operate, the peoples of the Kulin Nation. We pay our deepest respects to their Elders past and present who continue to forge the way ahead for their emerging leaders.

1.3. Proposed servicing strategy

The ultimate development of the proposed PSP will necessitate the establishment of the Bences Road water supply zone, which comprises two distinct pressure zones:

1. Bences Road Low-Level (LL) System
 - Top Water Level (TWL): 220m AHD
 - Services areas below the 190m contour level.
2. Bences Road High-Level (HL) System
 - Top Water Level (TWL): 250m AHD (TBC)
 - Supplies areas above the 190m contour level, covering approximately 200 hectares in the northern part of the PSP as indicated in the plan below.



1.3.1. Bences Road Low Level (LL) system

Bences Road LL system will be supplied via the proposed Bences Road tank (10ML – TWL 220m AHD), which will be constructed to the north of the PSP and supplied from GWW's supply to the east.

External works will be required to service the PSP including:

1. Various augmentations to the supply from the east
2. New Storage Tank: A 10 ML storage tank at the Bences Road tank site.
3. DN600 Bences Road tank outlet main along Bences Road head south along the future roads within the PSP to supply the southern area of the proposed PSP.

1.3.2. Bences Road High Level (HL) system

The Bences Road HL system will be supplied via an elevated tank (TWL approximately 250m AHD, to be confirmed) supported by a pump station connected to a ground-level tank. Development within the PSP will necessitate the construction of the following assets:

1. An elevated tank with a capacity of approximately 0.3-0.4 ML.
2. A pump station equipped with variable-speed drives to fill the elevated tank and directly supply customers.
3. Internal distribution and reticulation mains within the northern section of the PSP.

1.3.3. Additional Infrastructure

In addition to the assets that supply the PSP, assets are required to traverse the PSP to supply the surrounding areas. These assets include:

1. A 10ML ground level tank to supply the Bacchus Marsh system
2. A DN600 main to connect this tank to the Bacchus Marsh system

The DN600 main and impact on the existing DN600 main that traverses the site is discussed in Section 1.3.5

1.3.4. Interim supply to the area

The existing DN225 main along Bences Road may have limited spare capacity to service the initial stages of development within the proposed PSP. However, any initial development must be located below the 190m contour level or supplied via a temporary booster pump station and associated infrastructure as a temporary high level zone.

1.3.5. Asset relocation work

The existing Dodemaide-to-Darley DN600 RC main currently traverses the PSP for approximately 2300 meters. This main is a critical distribution asset, serving as the sole supply to Bacchus Marsh and surrounding suburbs.

The ultimate servicing solution will not utilize this pipeline as it will be replaced by the new assets discussed in Section 1.3.3. The pipeline is required to be maintained until the new assets are constructed and commissioned.

Once the new infrastructure is operational, the existing DN600 RC main and associated easement will no longer be required.

1.3.6. Land requirements for future water assets

GWW will need to secure sufficient land at the southwest corner of Bences Road and Diggers Rest-Coimadai Road to accommodate the construction of essential water infrastructure. The preferred site is located outside the PSP boundary.

1. A 10 ML ground-level tank to supply the Bacchus Marsh system, with the new relocated Dodemaide-to-Darley DN600 main connecting to this tank.
2. A 10 ML ground-level tank to supply the Bences Road LL system.
3. A 0.3–0.4 ML elevated tank to supply the Bences Road HL system.
4. A pump station to supply the elevated tank.
5. Storage facilities and site office amenities for operational staff.
6. Internal accessways within the site and external access to the site.

These assets will be located on the same parcel of land

The following plan shows the indicative alignment of the proposed water assets within the Merrimu PSP.

Notes:

1. This working draft place-based plan is for internal use only and not to be distributed by Council without VPA consent.
2. The plan shows RRV's preferred alignment Option B for the Bacchus Marsh Eastern Link Road (Aug 2023). The spatial impact of this alignment on the proposed urban structure has not been assessed and will be undertaken in next phase of project by VPA and is likely to require adjustment to the current layout.
3. Further refinement of the draft place-based plan is required including input from outstanding technical work (such as transport modelling), further consultation with landowners, Melbourne Water and other relevant government agencies.
4. Grassland Earless Dragon surveys have not been undertaken for precinct and future conservation areas may need to be amended/added.
5. Indicative buffers to Darley Sands extractive industry is shown and will be addressed by VPA in the next stage. This may require changes to the urban structure layout and/or changes to the extent as it applies to the precinct.
6. School, community facility and open space locations are indicative and subject to further review by VPA and consultation with agencies and landowners.
7. Future use/management of conservation/open space areas, extent of developable land and offsets (particularly in the Long Forest Estate property) are still subject to confirmation through later PSP stages, including preparation of a Native Vegetation Precinct Plan (NVPP) etc.

INDICATIVE ALIGNMENT OF PROPOSED WATER MAINS

1 km



Future Bences Rd
Tank Site

Dodamaid-to-Darley DN600
relocated main

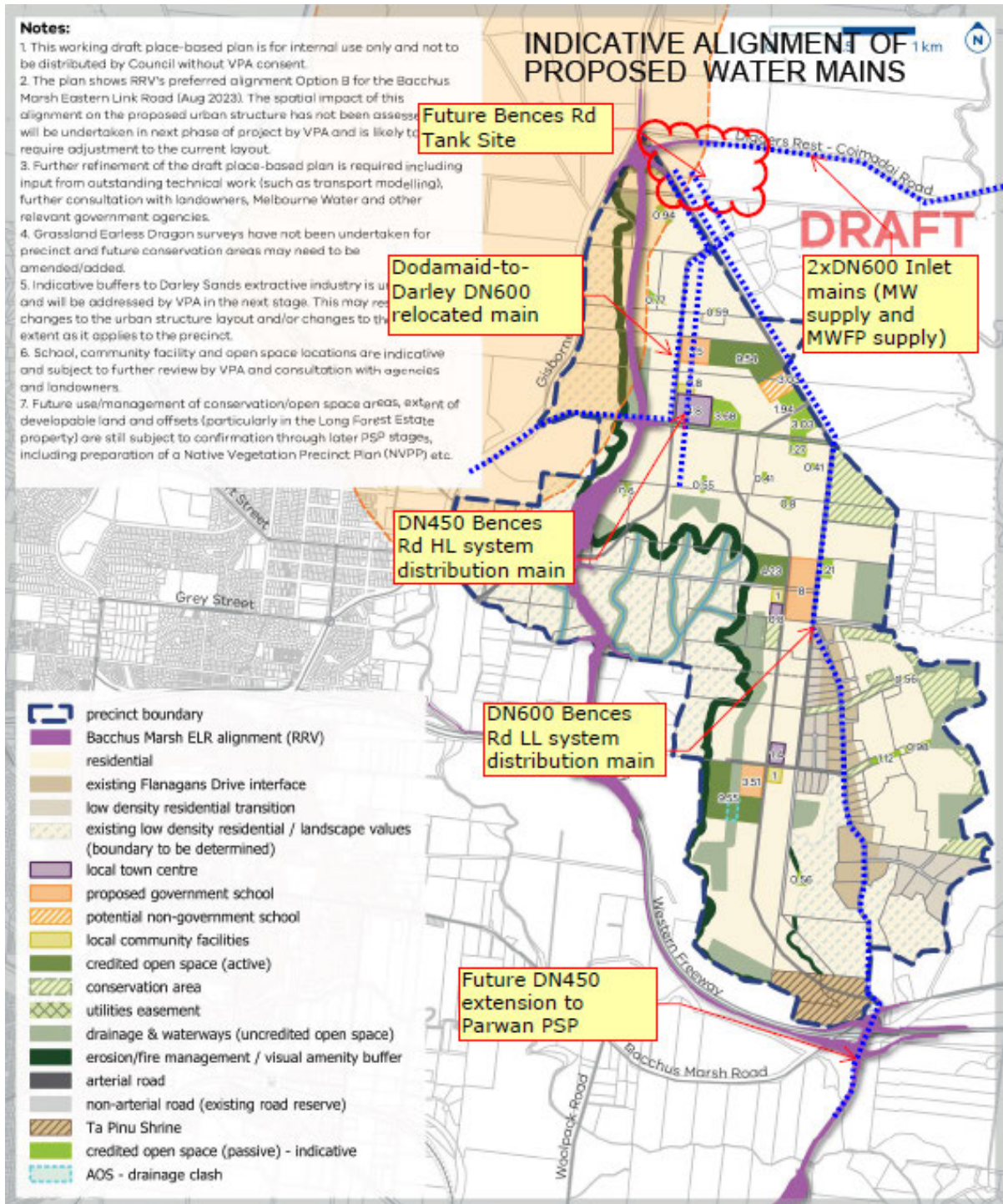
DRAFT
2xDN600 Inlet
mains (MW
supply and
MWFP supply)

DN450 Bences
Rd HL system
distribution main

DN600 Bences
Rd LL system
distribution main

Future DN450
extension to
Parwan PSP

-  precinct boundary
-  Bacchus Marsh ELR alignment (RRV)
-  residential
-  existing Flanagan's Drive interface
-  low density residential transition
-  existing low density residential / landscape values (boundary to be determined)
-  local town centre
-  proposed government school
-  potential non-government school
-  local community facilities
-  credited open space (active)
-  conservation area
-  utilities easement
-  drainage & waterways (uncredited open space)
-  erosion/fire management / visual amenity buffer
-  arterial road
-  non-arterial road (existing road reserve)
-  Ta Pinu Shrine
-  credited open space (passive) - indicative
-  AOS - drainage clash



2. Sewer

2.1. Previous advice

From the 2023 report the following has been suggested that the existing network can handle:

A small sewer pump station is located at the corner of Tipperary Flats Road and Bacchus Marsh Road that services fewer than 100 lots. This pump station has a 150mm diameter rising main that pumps sewerage flows to the Avenue of Honour sewer pump station and ultimately to the Bacchus Marsh recycled water plant.

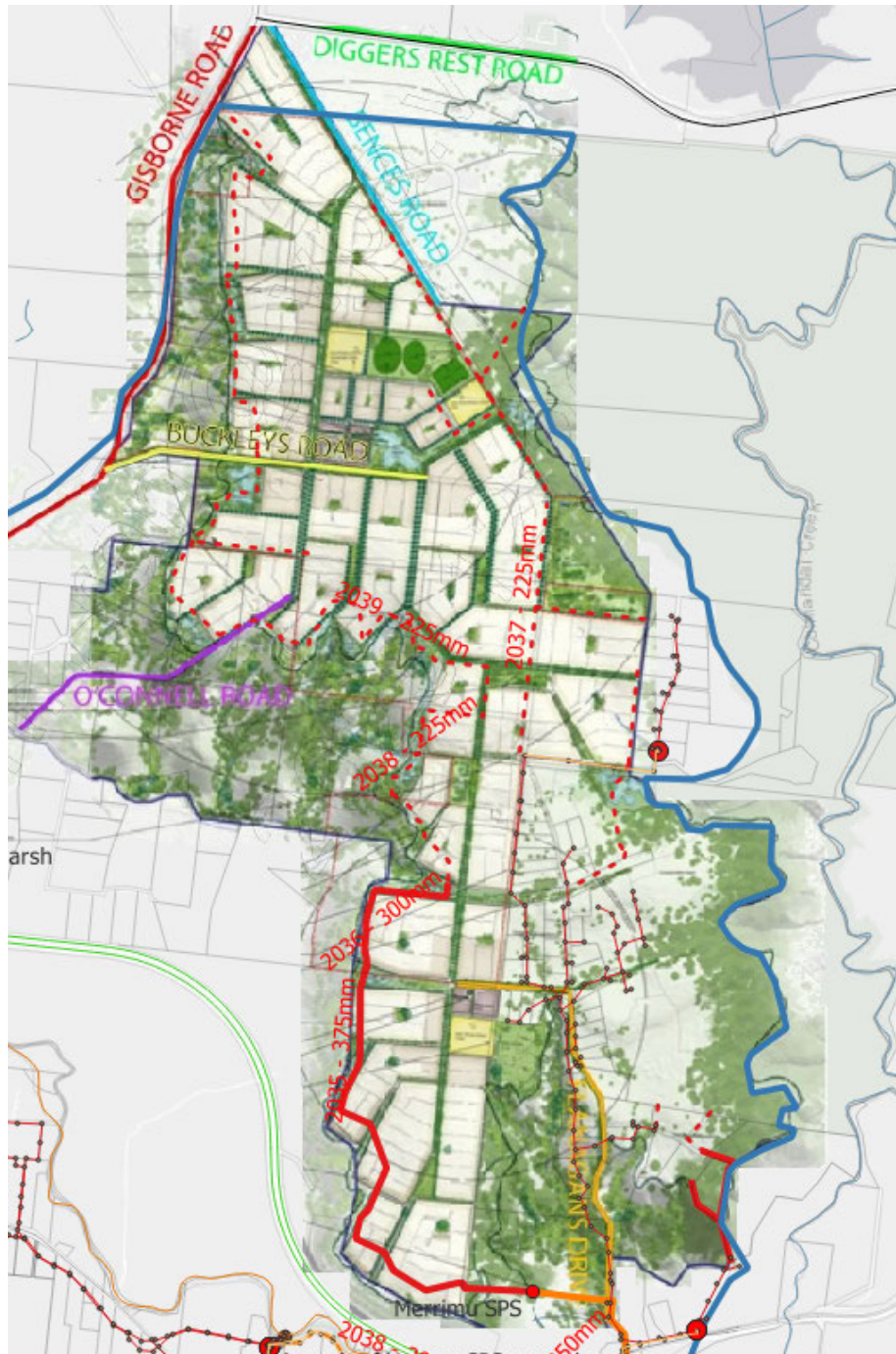
GWW have advised that the said existing pump station could be upgraded to service the initial stages of the Merrimu Precinct. The number of lots that this pump station could service, would be limited to the capacity of the existing 150mm diameter rising main. GWW have determined that the existing rising main can service a total of 500 lots. The location of these 500 lots is not constrained to the southern end of the PSP.

This advice is still acceptable following the review of the servicing solution.

2.2. Future servicing

GWW has had an opportunity to review the servicing for the bulk of the precinct. Once the initial 500 lots are developed, a future pump station is required. The indicative location of this pump station is shown on the plan below. The pump station would pump directly to the Bacchus Marsh recycled water plant. The pump station would be required to be approximately 170 L/s in size.

Along with the future pump station, an indicative sewer layout has been developed for servicing the precinct. This proposes a DN300/375 sewer to be the main trunk sewer. Branches off the trunk sewer are proposed but are not expected to be larger than a 225mm main. The dashed lines in the figure below identify the developer funded assets, whilst the solid lines signify the GWW funded assets.



As per the previous advice, the Bacchus Marsh recycled water plant has a capacity of 3.9 ML/day. This is sufficient to only treat the forecast sewerage generated by the Bacchus Marsh area in the short to medium term. GWW is currently investigating options for the Bacchus Marsh recycled water plant and how to manage and treat the future flows to the plant.

3. Conclusion

The servicing plan for the Merrimu precinct has been updated. Both the network servicing plans, and this letter identify the future servicing requirements for the precinct. It is proposed that this servicing plan is adopted and provided to the landowner for their consideration.

If you would like to discuss the servicing advice or have some follow up questions, please don't hesitate to contact [REDACTED] [@gww.com.au](mailto:[REDACTED]@gww.com.au).

Yours sincerely,



Head of Infrastructure and Resource Planning