18) Appendix Q

Infrastructure and Services Assessment
Prepared by
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Reference: 19059-L01-A4-Infrastructure

18 November 2021

Mr Steven Jacobs
Healing ONR Pty Ltd
679-685 Old Northern Road
DURAL NSW 2158

Dear Steven,

DURAL HEALTH HUB - 679-685 OLD NORTHERN ROAD, DURAL
DESKTOP INFRASTRUCTURE REPORT

Diversi Consulting have undertaken a desktop infrastructure assessment to identify available services for connection to the proposed development at 679-685 Old Northern Road (ONR), Dural.

1 THE SITE

The site location and characteristics are as follows:

- **Address:** 679-685 Old Northern Road, Dural
- **Lot:** 3 DP395437 & 1 DP120004
- **Local Government Area:** Hornsby Shire Council
- **Land Use Zone:** SP2 Infrastructure, RU2 Rural Landscape
- **Area:** 3,470m^2
- **Length:** 70m approx.
- **Width:** 49m approx.

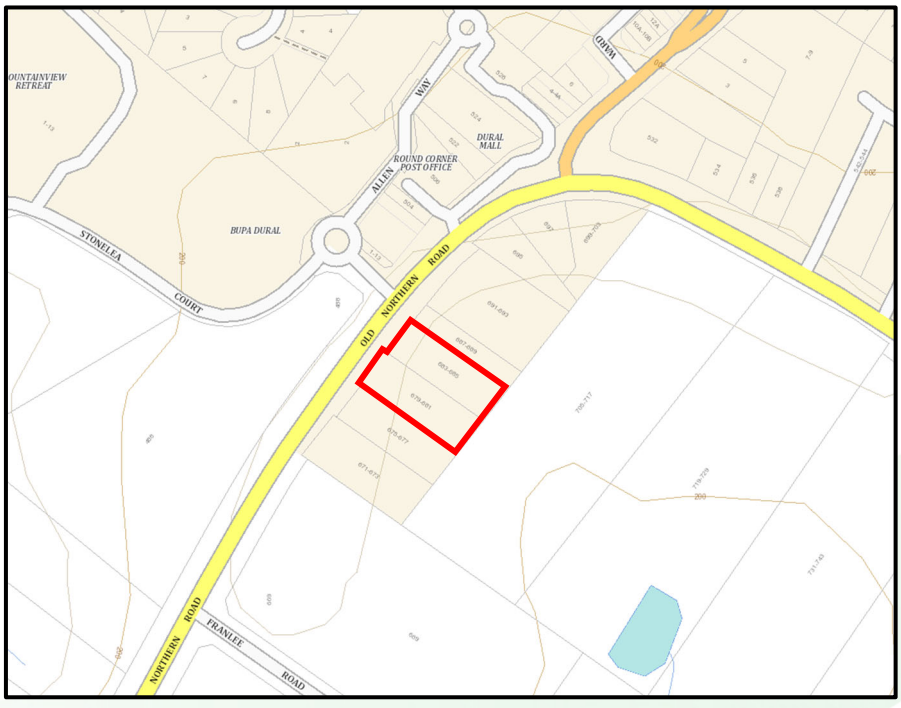

Plate 1.1 – Site Location

The proposed development comprises of a Health Services Facility, with health and medical associated retail units on the ground floor and basement carparking.

2 SERVICES

A Dial Before You Dig (DBYD) investigation was undertaken on 13 November 2020 to identify the presence of existing services that could be utilized for the connection to the proposed development. Results of the investigation were compared with detailed survey and site investigation and are summarised below along with recommendations.

2.1 Potable Water

An existing Ø300 Cast Iron Cement Lined potable water main is located on the south side of Old Northern Road (ONR) fronting the site. Refer **Plate 2.1**. DBYD also indicates that an existing hydrant is located the middle of the site frontage.

Plate 2.1 – Sydney Water DBYD at Site

Recommendation: The existing main, on face value, would appear to be sufficiently sized to service the proposed development. It is recommend that a Water Services Co-ordinator be engaged to provide advice on the design and constructability of the connection to this main – which can be completed as part of detailed design during the Construction Certificate stage.

If connection to the existing 300mm main is unavailable, an alternate approach could include a new crossing and connection to the existing 150mm main on the western side of ONR. It is noted that the proponent is already in discussions with Transport for NSW for road upgrade works along ONR as part of an adjoining development at 488 Old Northern Road (DA679/2016/HB). It is expected that any water main crossings required for the Dural Health Hub development would occur simultaneously with these road upgrades.

Notwithstanding, given the nature of the development, size and material of the existing main, we recommended that a feasibility application be undertaken with Sydney Water to confirm their requirements for connecting at the Construction Certificate stage.

2.2 Sewer

An existing Ø250 PVC Sydney Water sewer rising main is located on the north (opposite) side of ONR. Refer **Plate 2.2**. We also note that existing gravity mains are located to the north off Stonelea Court and near the intersection of ONR and Kenthurst Road.

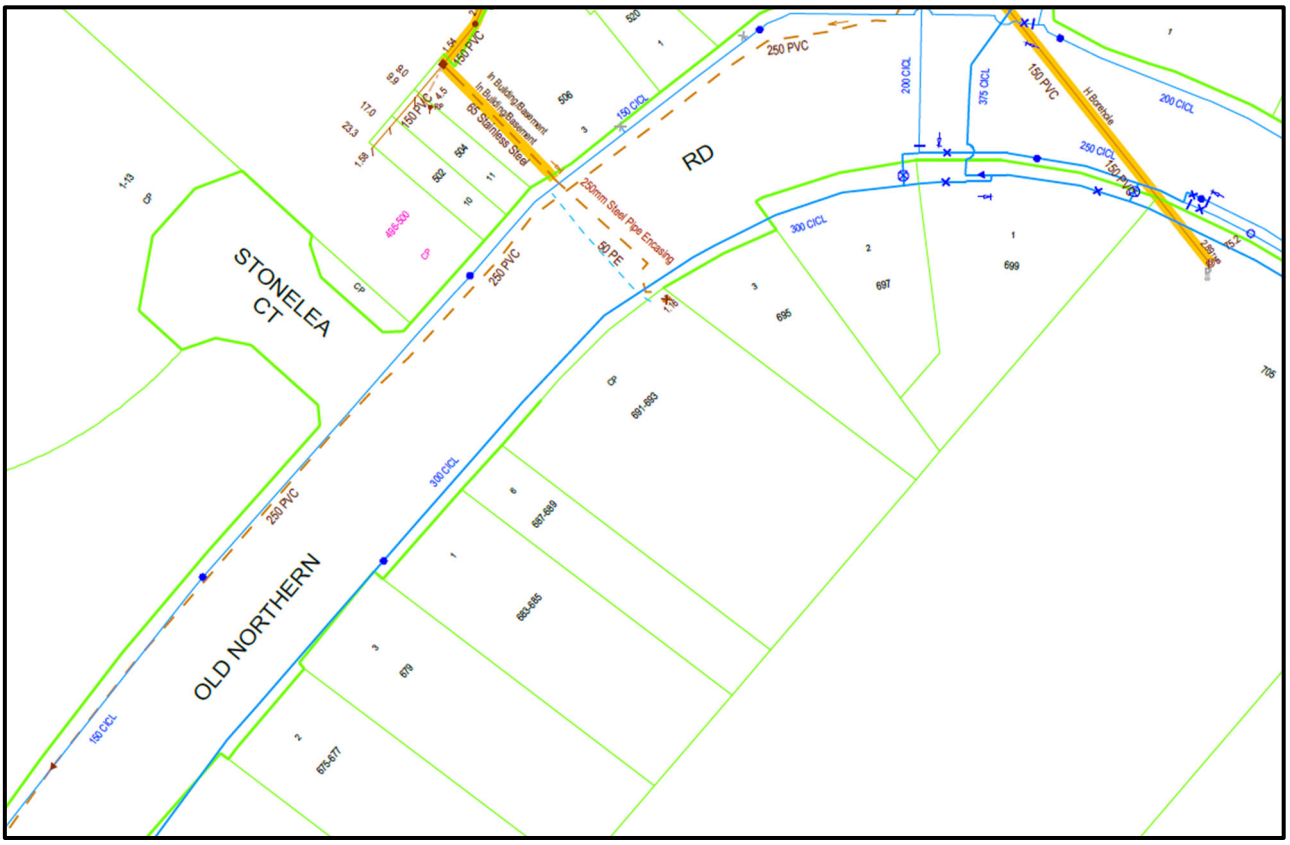

Plate 2.2 – Sydney Water DBYD at Site (Extended)

Recommendation: To service the development, a new crossing under ONR will be required to connect to the existing sewer gravity main in Stonelea Court or further to the north. This would require co-ordination with both Sydney Water as well as Transport for NSW. As stated above, the proponent is already in discussions to undertake road upgrade works along ONR as part of the adjoining development at 488 Old Northern Road (DA679/2016/HB). It is expected that any sewer crossings required for the Dural Health Hub development would occur simultaneously with these road upgrades.

An alternative could be to provide a sewer lead in up the southern side of ONR and connect to existing sewer crossings near the intersection with Kenthurst Road. These options should be considered under advice of a qualified sewer designer to determine the best outcome during the Construction Certificate stage.

The potential to connect to the existing sewer rising main on the opposing side of ONR would need to be confirmed with Sydney Water at the Construction Certificate stage.

Notwithstanding, there appears to be sufficient sewer to service the development. In conjunction with the potable water, it is recommended that a suitably qualified sewer designer and Water Services Co-ordinator be engaged to provide advice on the connection to the sewer works at the Construction Certificate stage..

2.3 Gas

An existing Jemena 110mm diameter 210kPa polyethylene gas main is located on the south side of ONR fronting the site. Refer **Plate 2.3** for the DBYD information.

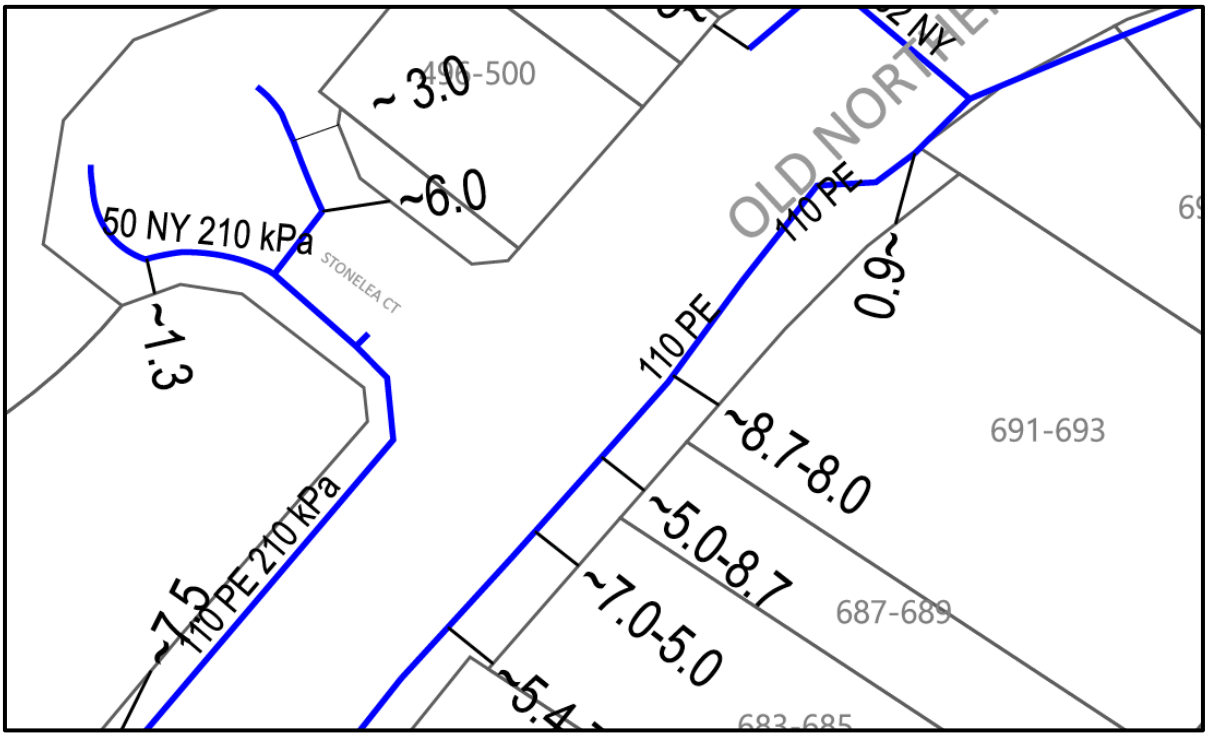

Plate 2.3 – Jemena DBYD

Recommendation: To service the development, a new gas connection to the gas main will be required. Details of the gas connection works can be prepared and co-ordinated with Jemena during the Construction Certificate stage.

2.4 Electrical

Above ground electrical services (Endeavour Energy) are located on ONR, with connections from existing power poles to the dwellings on the site. The overhead network appears to include HV, LV and streetlights. High level review of the surrounding area (200m from site) could not identify the presence of existing substations. No underground electrical services were identified on DBYD or detailed survey. Refer to **Plate 2.4** for a photo taken on ONR (site to the right of photo).

Plate 2.4 – Site Photo of Existing Overhead Electrical Services

Recommendation: It is expected that connection to the existing overhead power will be utilised for the proposed development, however assessment of the available network supply is to be undertaken and confirmed by Level 3 electrical designer at the Construction Certificate stage. On this basis, the proposed development may need to allow for a new substation in the site frontage.

Also, the existing overhead lines may need to be relocated underground in accordance with current industry standards. Given the relatively short length (i.e. site frontage) that would need to be adjusted, this may not be required but would need to be confirmed with Endeavour Energy at the Construction Certificate stage. As stated above, the proponent is already in discussions to undertake road upgrade works along ONR as part of the adjoining development at 488 Old Northern Road (DA679/2016/HB). These works propose to underground the existing electrical services, which has been accepted by TfNSW. It is expected that any electrical works required for the Dural Health Hub development would occur simultaneously with these road upgrades.

In addition, an appropriate electrical design consultant will be required to undertake the design of the electrical relocation, electrical services and street lighting to support the works during the Construction Certificate stage.

2.5 NBN

Existing underground telecommunication cables were identified on DBYD and detailed survey on the southern side of ONR fronting the site. Refer **Plate 2.5** for the DBYD. Importantly, DBYD information indicates that an existing NBN connection is already connected to the dwelling on 685 ONR and that two (2) NBN pits are located fronting the site. This indicates the existing connections could be replaced (if required) with a new connection to the proposed development.

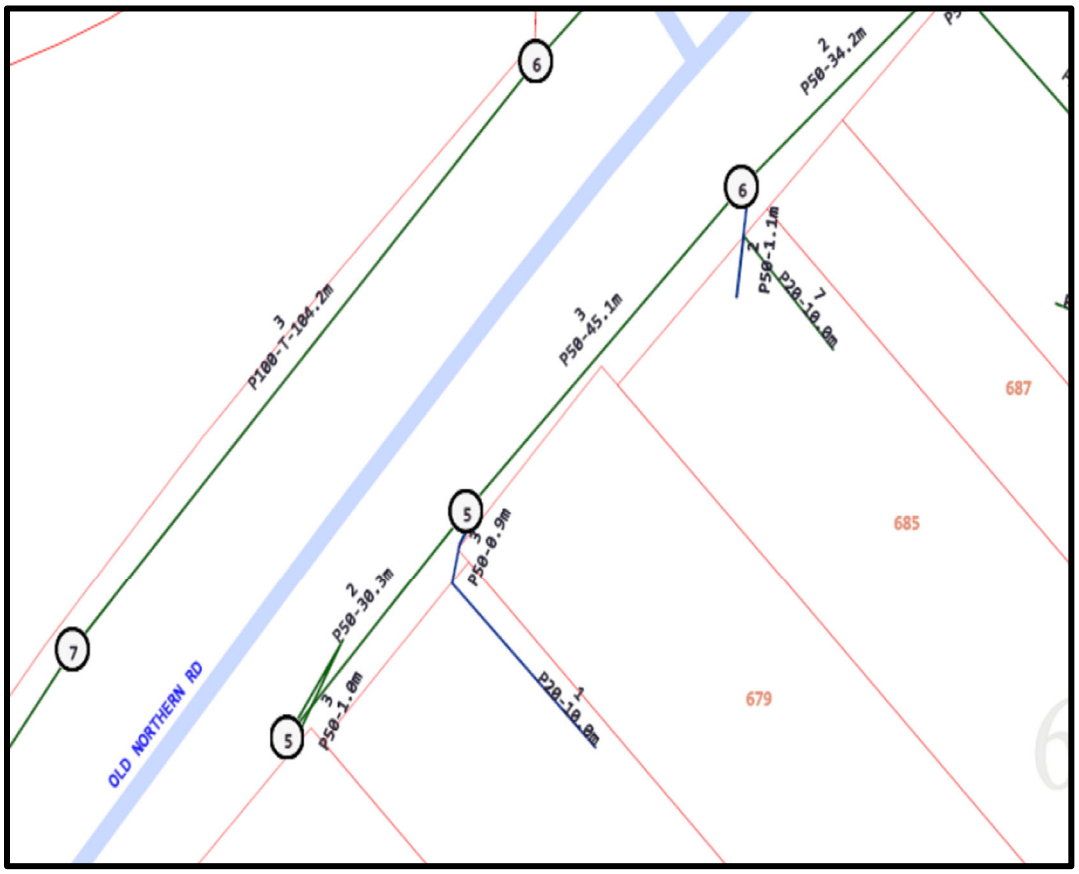

Plate 2.5 – NBN DBYD

Recommendation: Due to the presence of existing NBN pits fronting the site, it is likely that the development may be able to connect directly into this existing infrastructure. It is recommended that these pits be utilised where possible to reduce the construction costs or changes required to the existing utilities. A suitably qualified NBN designer will be required to undertake the design and co-ordinate the approvals of the NBN connections to the proposed development at the Construction Certificate stage.

Importantly, the location of the existing NBN conduits and pits will need to be considered in the layout of the site, particularly the proposed vehicle crossings to the proposed development.

3 CONCLUSION

A desktop infrastructure assessment has been undertaken to determine the location of existing services within the vicinity of the site and to identify opportunities for connections to service the proposed development. From review of available information, the majority of utility connections are available within Old Northern Road fronting the site or nearby, which should provide suitable connection points for the proposed development. The only exceptions being sewer and electrical that may require lead in works or a new crossing under Old Northern Road (in the case of sewer and possibly potable water), which could be undertaken in conjunction with the road upgrade works associated with DA/679/2016/HB by the same proponent. It is recommended that suitably qualified design consultants be engaged at the Construction Certificate stage, to provide advice and to co-ordinate any initial applications with the utility providers to inform the proposed development.

This report has been developed to provide high level advice to inform the planning proposal of the proposed development. If you have any questions or require any clarifications please call me on (02) 8883 1113.

Yours faithfully
Diversi Consulting

Phil Diversi

Director