BARR PROPERTY & PLANNING

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Off Site Assessment

1134 John Renshaw Drive, Black Hill

DA8/2018/539/1

Prepared by Barr Property and Planning

For Client

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Document Control

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Address: 1134 John Renshaw Drive, Black Hill 2322
Lot 1 DP 1260203
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Client: Broaden Management Pty Ltd

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1 Introduction

This Off-Site Assessment (Assessment) has been prepared by Barr Property and Planning on behalf of Broaden Management Pty Ltd. It accompanies Development Application 8/2018/539/1 to assess the off-site impacts in relation to the off-site works associated with the proposed development.

1.1 Purpose of this assessment

This assessment was requested by the Regional Planning Panel (RPP) in a meeting held on 5 August 2020. Typically, offsite works have been assessed by the authority requiring the works, under Part 5 of the Environmental Planning and Assessment Act (EPA Act) 1979 via a Review of Environmental Factors (REF). The court case on the adjoining site at Blackhill, (Stevens Holdings Pty Limited Trading as Stevens Group v Newcastle City Council (No. 2) [2020] NSWLEC 1287), the Stevens Case, found that no assessment was undertaken of offsite impacts, particularly of the road works proposed at the M1 and John Renshaw Drive. The Commissioner stated:

> *[246] Relatedly, I find that the Applicant's environmental impact assessment is substantially concentrated on the subject site, and does not include a survey or other environmental impact assessment of the likely environmental impacts arising from offsite road upgrades to John Renshaw Drive and at the southbound merge to the M1 Motorway from John Renshaw Drive in particular.*

Based on the above court case it is proposed to undertake an environmental assessment of the offsite works to consider the likely impacts.

Legal advice provided by McCullough Robertson found in summary that:

1. A development should consider the likely impacts of the development.
2. The likely impacts include offsite development.
3. The offsite works needed to be directly linked to the proposed development, as outlined in Hoxton Park Residents Action Group Inc v Liverpool City Council (2011) 184 LGERA 104, in this case it was identified that a bridge was required off site to provide access to a school.
4. Works that were not immediately necessary or were unclear as to their final location, it was appropriate for the consent authority to defer the assessment to a later stage - Australian Coal Alliance Inc v Wyong Coal Pty Ltd [2019] NSWLEC 31
5. The works needed to be inextricably involved with the overall development, as per Ballina Shire Council v Palm Lake Works Pty Ltd [2020] NSWLEC 41

The proposed offsite works proposed for the subject development include:

1. Upgrades to the intersection at John Renshaw Drive and Weakleys Drive; and
2. Construction of sewer rising main connecting to Chisholm.

In considering the above information, we make the following points in relation to this assessment:

- The offsite works will have an impact on the environment and the likely impacts should be considered to an appropriate level.
- The proposed works off site, are not exclusively for the benefit of the proposed development. The road network upgrades will provide for the increase in background traffic, the traffic from the adjoining development as well traffic from the proposed development. Similarly, the sewer upgrades will provide benefits to the subject lot, the adjoining lot and any other developments that may access the future rising main at a later date.
- It is also important to note that there is existing capacity in the road, sewer and water network for the proposed development, as a result the timing of the upgrades is unknown.
- The road network upgrades will depend on the growth in background traffic against the take up for land within the precinct. Further, the two industrial lots that make up the precinct are proposing very different products, one the subject land, is proposing large lots while the other adjoining lot was proposing 200 smaller industrial lots. Either development could trigger upgrade works, depending on take up of land. As a result, to consider the offsite works that are required for the subject site and the timing of the works, it is difficult to define the extent of works accurately that will be required. It is also difficult to build half an intersection or half a sewer pipe, as a result works may be delivered that are in excess of the demand generated by the subject development and are required to meet other developments.
- As stated above the, offsite works are linked to the subject development, however these are also driven by other sources other than just the subject development. It could also be argued that the subdivision itself does not drive the need for road works, rather the subsequent developments of the industrial buildings are the driver of traffic generation and therefore the development that will set the demand for road works. While this is similar with the sewer and water network, it is acknowledged that lots cannot be created without appropriate sewer and water connections, however the upgrades to these systems is open to influence from a range of other factors such as the take up of land, the users of water and sewer on the site and the speed of development on the adjoining site.
- None of the works are immediately necessary, there is existing capacity in the road system, sewer and water system. In addition, while the works associated with the road system can be accurately located, as they will be an extension of the existing infrastructure, the sewer and water final location is not clear. A sewer and water strategy has been developed which broadly identifies the location of the services, however the exact location will not be known until such time as the final design has been undertaken and submitted to Hunter Water. This location could be adjusted as result of environmental issue, cost related issues, preferences of the Authority, land ownership issues and as such the final location is not clear.
- It is clear that the works will be required to deliver the subdivision, and as a result they are directly linked to the development, however the extent of works may be more than what would be required to serve only the proposed development, providing infrastructure that will serve offsite growth in the immediate area, the adjoining development or the back ground traffic. This is highlighted through the apportionment discussions that are occurring around the cost of works. Hunter Water already have provisions for the reimbursement of works that are constructed as a result of a single development that then benefit later

development that utilise that infrastructure. Similarly, discussions have been ongoing with TFNSW regarding the apportionment of costs around the delivery of infrastructure, as it is recognised that the road upgrades will serve both developments in the precinct and also the background growth of traffic.

- It should also be recognised, that as this infrastructure serves the entire precinct, that depending on sales rates, either development could be required to provide this infrastructure before the other.

From the above assessment it can be argued that no offsite assessment is required. The sewer, both the timing and location are not known and the sewer will serve more than the subject development. With the offsite road works, particularly those at the intersection of the M1 and John Renshaw Drive, the works are not solely linked to the development. They will also serve the background traffic and adjoining development, however the extent of works will be confirmed upon detail design.

While it can be argued that the offsite assessment is not required, the likely impacts have been considered based on the information available currently. This assessment will provide a high level environmental assessment per the factors outlined in Environmental Planning and Assessment Regulation (EPA Reg) 2000, Part 5 Section 228 Clause (2). Whilst the development application is approved under Part 4 of the Environmental Planning and Assessment (EPA Act) 1979, the factors outlined provide a suitable framework for assessing the offsite impacts.

2 Project Details

2.1 Proposed development

The proposed development subject to DA8/2018/539/1 seeks consent for the subdivision of Lot 1 in Deposited Plan 1260203 to create 39- industrial lots, to be delivered in six stages and one Environmental Conservation lot. Additionally, the proposal includes the remediation of the site to ensure that the site is suitable for future occupation for industrial use.

The application includes:

- Creation of two signalised intersections to provide suitable access to the subdivision.
- The realignment of the existing watercourse that traverses the western portion of the site.
- Civil earthworks to provide a suitable foundation for future industrial development,
- Extension, augmentation and/ or adaptation of essential services (i.e. water, sewer & telecommunications) to cater for the future tenants of the industrial development,
- Construction of a 132/11kV substation and the relocation of the existing aboveground 132kV high voltage transmission line,
- Remediation of the site to ensure suitable occupation for industrial use, Subdivision of Part of Lot 1131 in Deposited Plan 1057179 to create 39- industrial lots, to be delivered in six stages and 1 environmental conservation lot,
- Construction of the ring-road network to provide suitable access to all proposed industrial lots, and
- Infrastructure to capture, detain and treat all stormwater collected on site.

As part of the assessment of this application, the RPP and Council determined it necessary to consider the need to provide a high level off-site assessment of the sewer and traffic works which have a link to the development proposal.

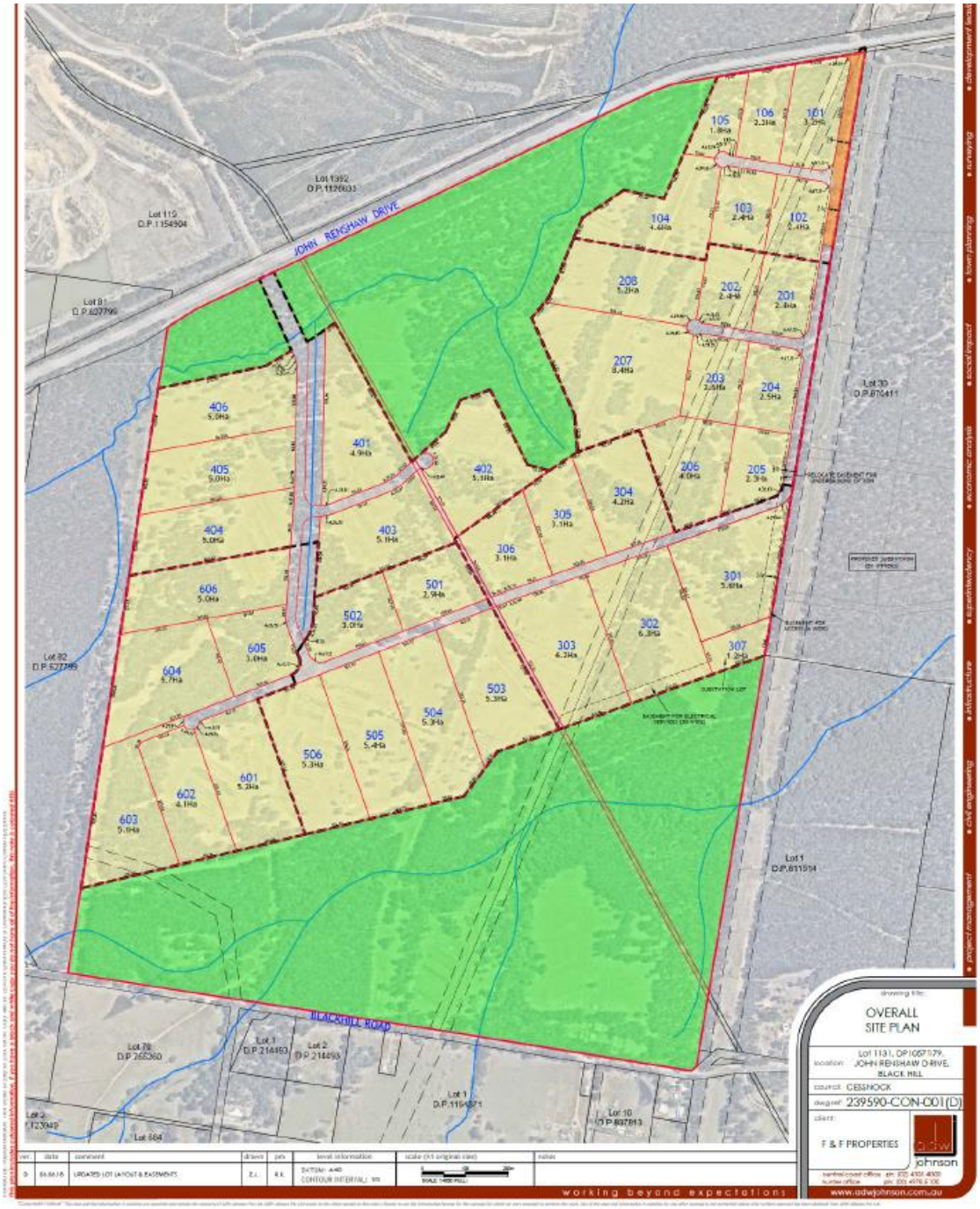

Figure 1: Proposed subdivision plan (ADW Johnson 2020).

2.2 Scope of offsite works proposed

The following works will be required to service the delivery of the Black Hill Precinct (which includes other landowners in addition to the subject site):

- Extension of sewer services from Black Hill to Chisholm.
- Upgrading the intersection of John Renshaw Drive and Weakleys Drive.

2.2.1 Sewer servicing

The sewer strategy is comprised of the following stages:

- Stage 1 – WWPS1 and associated rising main to Beresfield 1 WWPS with a capacity of 14.2L/s
- Stage 2 – Extension of the rising main to Chisholm 1 WWPS including upgrade to Chisholm 1 emergency storage and the WWPS1 pumps
- Connection of the F&F Properties site is by construction of WWPS2 and associated rising main pumping to WWPS1

Within Figure 2, the purple dashed line shows the location of the future sewer line connecting from Black Hill to Chisholm.

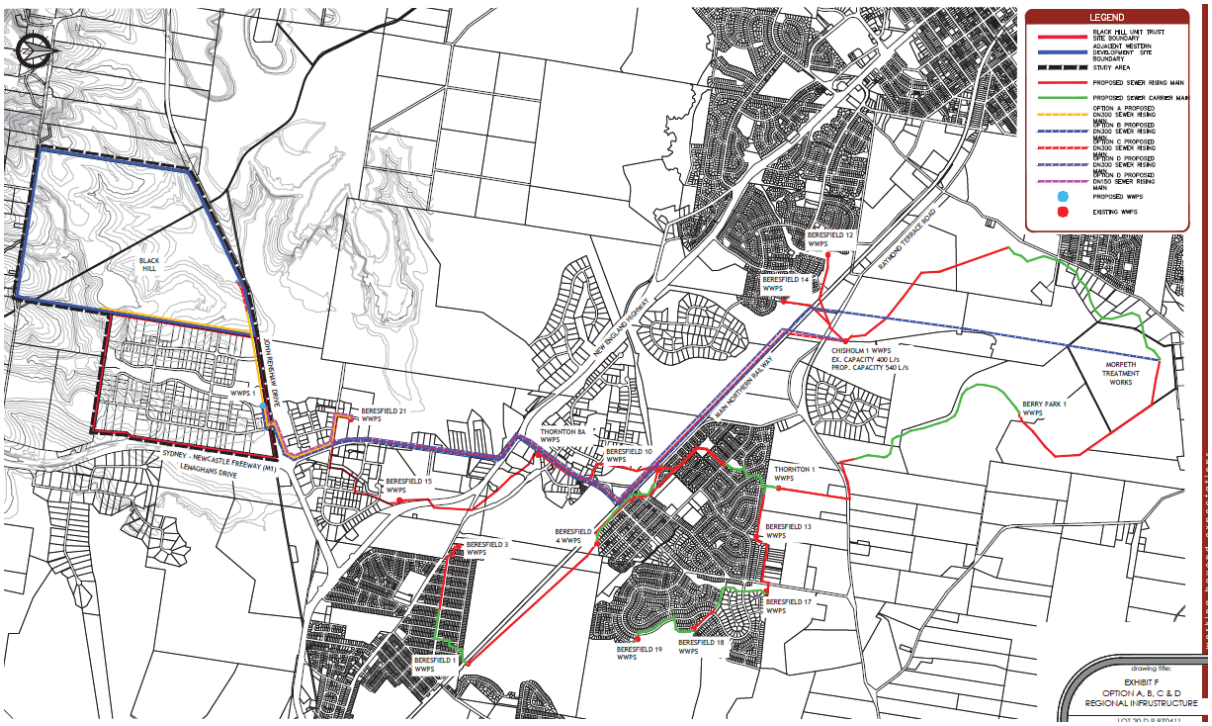

Figure 2: Sewer extension shown in purple (ADW Johnson 2020).

It is important to note that this information is from a sewer strategy, to show the connection point into the sewer network. A detailed design will need to be completed as part of further engagement with Hunter Water post consent.

2.2.2 Traffic upgrades

The traffic works at the M1 and John Renshaw Drive intersection are currently being assessed by TFNSW as to their suitability. The extent of works is unknown at this stage until the requirements to meet the State required roads infrastructure has been determined.

The following works are proposed at the John Renshaw Drive and Weakleys Drive intersection:

- Additional lane travelling west on John Renshaw Drive
- Additional turning lane to turn south off John Renshaw Drive
- Additional lane travelling east along John Renshaw Drive
- Altering the location of the cycle way
- Turning lane increased in length on Weakleys Drive turning west onto John Renshaw Drive

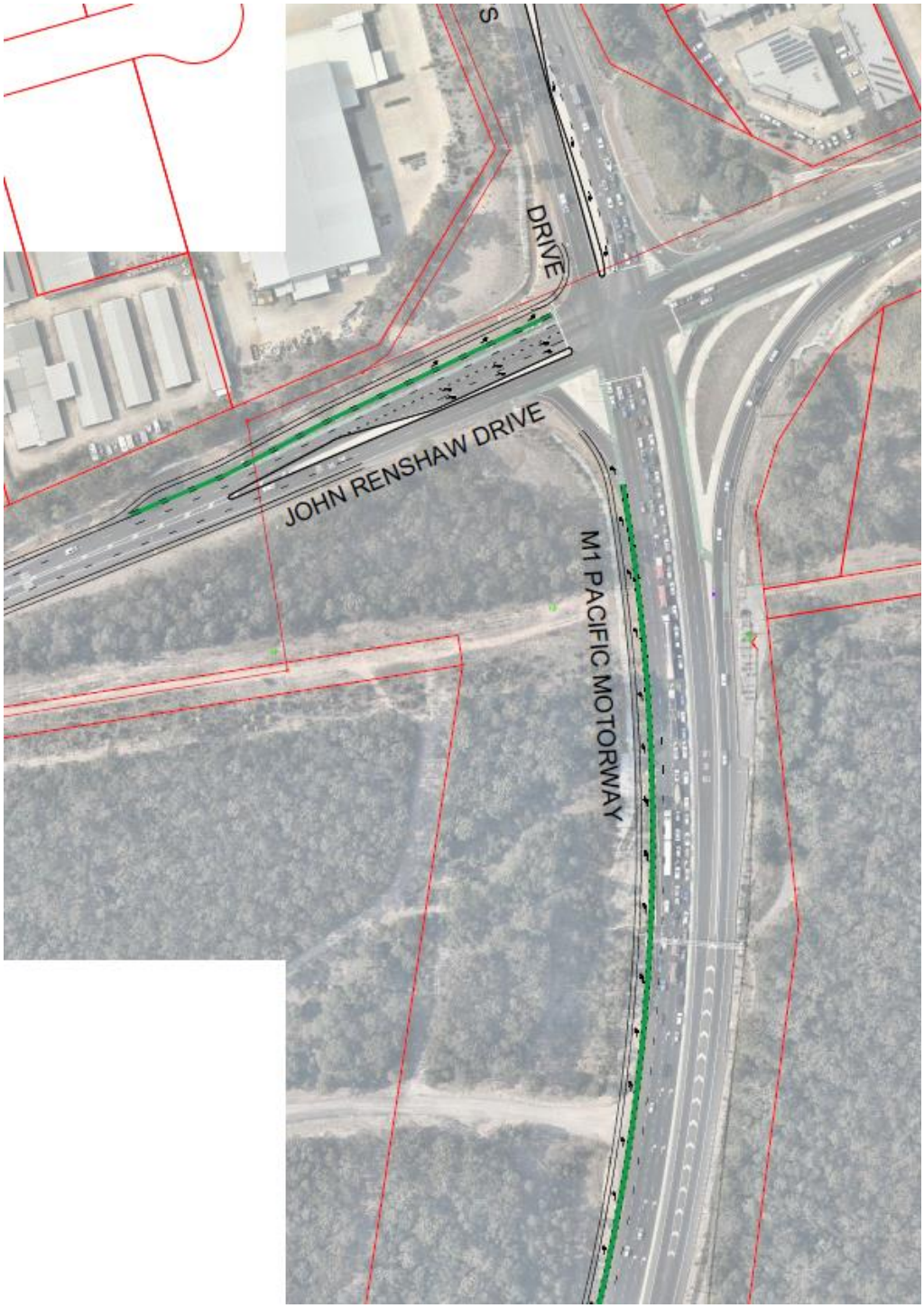

Figure 3: Proposed intersection upgrades (ADW Johnson 2020).

3 Existing environment

3.1 Summary

The location the proposed works cover is approximately 8 kilometres in length. It compromises of the suburbs Beresfield, Thornton, East Maitland, and Chisholm.

Beresfield is located in the Newcastle Local Government Area (LGA). To the east of the suburb is Woodberry, to south is Tarro, to the north is Thornton and to the west is Black Hill. The suburb is bisected by the New England Highway. With the land on the west of the highway predominantly industrial land, and the land on the east predominantly residential land. In the Greater Newcastle Metropolitan Plan (GNMP) 2036 the suburb is described as catalyst area for housing, employment, and infrastructure investment. The proposed sewer line will run along Weakleys Drive in the industrial precinct in Beresfield.

Thornton is located in the Maitland LGA. To the north of Thornton is Chisholm, to the west is Ashtonfield and to the south is Woodberry and Beresfield. The suburb is predominantly residential, rural, environmental conservation with a business precinct. Thornton is classified as a local centre in the GNMP 2036. The proposed sewer line runs west along Thornton Road through the business precinct and then north west following the Northern Main Railway with residential land to the east and bushland to the west.

East Maitland is in the Maitland LGA. Many suburbs border east Maitland, including; Metford to the west and south, Chisholm to the east, Tenambit to the west and north, Ashtonfield to the south, Tenambit to the east and Pitnacree to the north. East Maitland is predominantly residential, recreational, environmental and rural lands with business precincts throughout. In the Hunter Regional Plan (HRP) 2036 East Maitland is a strategic centre. In the GNMP 2036 East Maitland is a strategic centre and described as an emerging health and retail service centre. The proposed sewer line is located in the most southern portion of East Maitland running along the Northern Main Railway then turning west to the end point.

3.2 Location of works

Figure 5 shows the location of the sewer and traffic works and the applicable land zonings. The areas these works traverse are referred to throughout the following assessment.

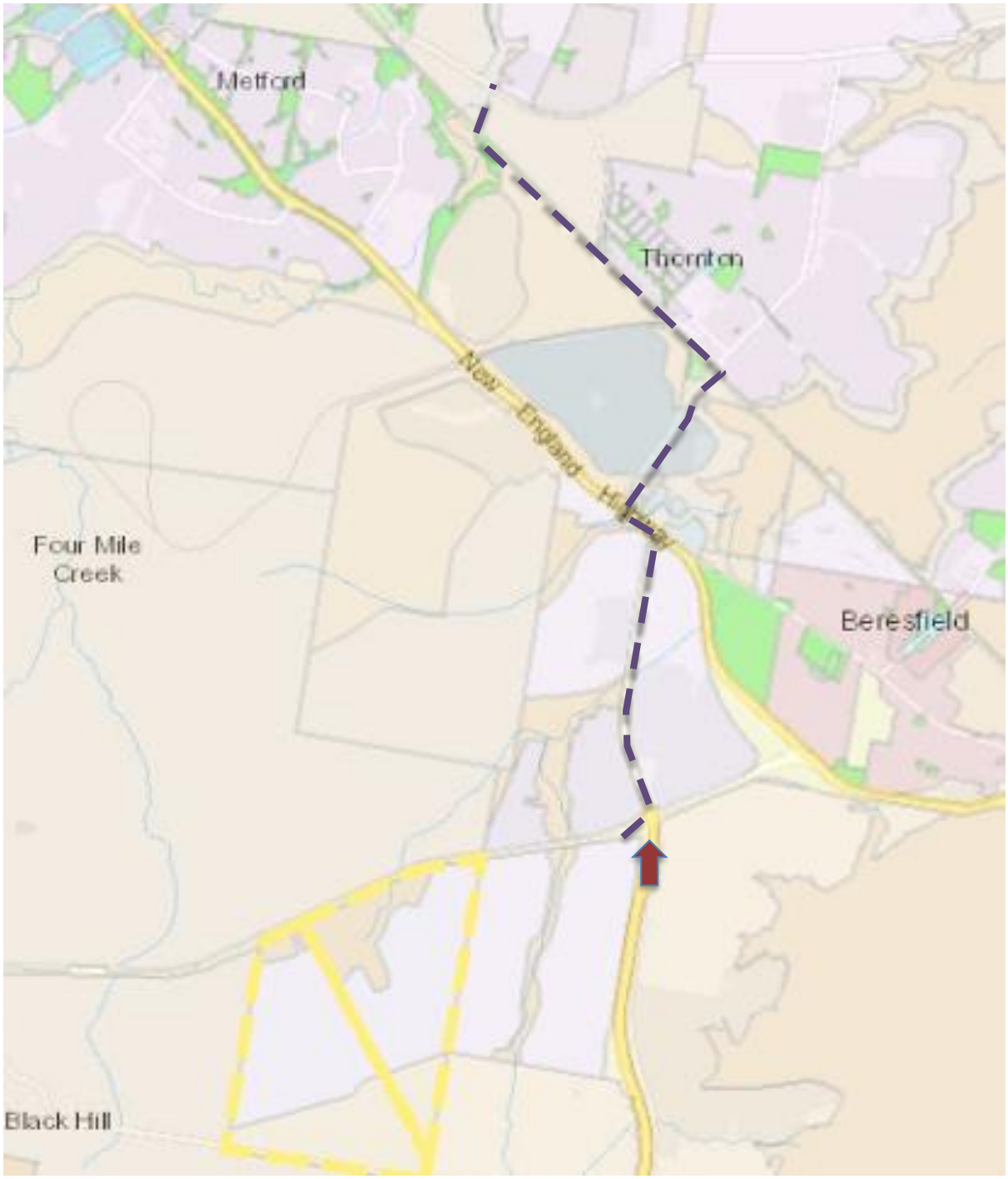

Figure 4: Proposed sewer shown in purple dashed line. Intersection upgrade in red arrow (ePlanning Spatial Viewer 2020).

4 Environmental Assessment

4.1 Topography, geology and soils

4.1.1 Acid Sulphate Soils

The upgrades to the intersection of John Renshaw Drive and Weakleys Drive is located in an area of Class 5 Acid Sulphate Soils.

The sewer servicing proposed will run through areas mapped as Class 2, 3 and 5 Acid Sulphate Soils (ASS). In order to manage the environmental risks associated with excavating in areas of ASS the preferential sequence is:

1. Avoidance – where possible, disturbance of ASS should be avoided.
2. Minimisation – should disturbance of ASS be required; the amount of disturbance and potential exposure time should be minimised or restricted.
3. Neutralisation – where disturbance and/ or exposure is required, neautralisation of the actual and potential acidity should be undertaken through the addition of neautralising agents, such as lime.
4. Strategic placement of spoil - disposal of the excavated spoil within a void excavated to below the permanent standing groundwater level.

It is expected that disturbance of actual and potential ASS will be required as part of the construction of the required underground services, given that ASS are present at very shallow depths. Consequently, all soil disturbance must be managed in accordance with the methodologies outlined within an Acid Sulphate Soils Management Plan which should be prepared by the respective agencies when completing their REFs.

4.1.2 Erosion and Sediment Control

As a result of the works proposed, sediment and erosion control will be required due to the amount of excavation and soil disturbance likely required. To ensure all areas where works are being completed are adequately protected at all stages of construction, the provision of erosion and sedimentation controls should be staged over the course of the construction.

During pre-construction measures could include:

- All barrier, no go and sediment fencing to be installed,
- Stabilised site access/s to be constructed,
- Clean water diversion drains along any required boundaries,
- Sediment basin and associated controls to be constructed:
- Excess material excavated to construct the basin is to be appropriately stockpiled.

During works measures could include:

- Dirty water cut off drains along the western and southern boundaries should remain in place,
- Where required clean water diversion drains should be provided,
- Sediment fences should be constructed around the perimeter of all works and kept in place until they have been stabilised,
- Mulch mounds should be placed halfway up berms to capture any sediment runoff,
- Any berms should be stabilised as soon as possible,
- All stormwater pit and pipes to be constructed. Inlet filter traps to be provided around all inlet pits.

These measures should be included in a sediment and erosion control plan prior to construction.

4.1.3 Geotechnical testing

Prior to the commencement of any works, geotechnical investigations will need to be carried out to confirm the soil types to factor into the design and location of the sewer services.

4.2 Water quality

4.2.1 Watercourses

The traffic works are not in the vicinity of any watercourses.

The sewer service works will be in the vicinity of two water courses. Viney Creek which crosses Weakleys Drive and Scotch Dairy Creek which crosses the New England Highway. If works occur within 40m of these watercourses approvals will be required under the Water Management Act (WMA Act) 2000.

4.3 Flora, Fauna and ecosystems

4.3.1 Flora

The Biodiversity Assessment Report conducted on 1134 John Renshaw Drive found that the following plant community types (PCT) were present:

- PCT 1592: Spotted Gum - Red Ironbark - Grey Gum shrub - grass open forest of the Lower Hunter which is commensurate with the listed Endangered Ecological Community Lower Hunter Spotted Gum Ironbark Forest of the Sydney Basin; and
- PCT 1584: White Mahogany - Spotted Gum - Grey Myrtle semi-mesic shrubby open forest of the central and lower Hunter Valley.

These PCTs could be present as well as others in the locality. It is expected a Biodiversity Assessment Report will be conducted by the relevant agencies as part of their Part 5 Review of Environmental Factors (REF) assessment to determine any threatened species and how to mitigate the sewer and traffic works impacts upon them. It is important to note, that without the final location being known, the assessment cannot be accurately undertaken.

4.3.2 Fauna

The Biodiversity Assessment Report conducted on 1134 John Renshaw Drive found that the following threatened species were observed or recorded:

- Grey Crowned Babbler Pomatostomus temporalis temporalis
- Grey-headed Flying Fox Pteropus poliocephalus was also observed flying over and foraging on blossom, no camp was observed on site; and
- Little Bentwing Bat (Miniopterus australis), Eastern Bentwing Bat (Miniopterus schreibersii oceanensis), East-coast Freetail Bat (Mormopterus norfolkensis).

There were also common species of mammals such as; Brown Antechinus (Antechinus stuartii) and Black Rat (Rattus rattus). Common Brushtail Possum (Trichosurus vulpecula) Red-necked Wallaby (Macropus rufogriseus) and Red Fox (Vulpes vulpes), on the site. It would be expected that these species could be present within the broader locality where the proposed sewer and traffic works are proposed. It is expected a Biodiversity Assessment Report will be conducted by the relevant agencies as part of their REF assessment to determine the fauna present and how to mitigate any adverse impacts.

4.3.3 Vegetation Mapping

Local Land Services Act 2013

The Native Vegetation Regulatory (NVR) Map is part of the Local Land Services Act 2013 (LLS Act), Part 5A and guides the application of the land management code and allowable activities as part of the land management framework for NSW. Most of the area the sewer and traffic works will be contained in is excluded from the LLS Act. The area in Chisholm to the north may contain sewer works which are within proximity to a portion of land that is mapped Vulnerable Regulated Land. This will need to be assessed by the relevant agency prior to final location of the sewer works being decided upon.

Figure 5: Area sewer may cross Vulnerable Regulated Land in red (Native Vegetation Regulatory Map Viewer)

Biodiversity Conservation Act 2016

The Biodiversity Values Map identifies land with high biodiversity value that is particularly sensitive to impacts from development. The map forms part of the Biodiversity Offsets Scheme Threshold which is one of the triggers for determining whether the Biodiversity Offset Scheme applies to a clearing or development proposal. Figure 7 shows the areas in the locality mapped as having Biodiversity Value.

The areas the sewer or traffic works may impact upon are the mapped Viney Creek, Scotch Dairy Creek, and Four Mile Creek and an area of land along the east of Thornton Road. The works proposed will take into consideration these areas of Biodiversity Value and avoid any clearing where possible. If works are to occur in this area a Biodiversity Assessment Report will be required.

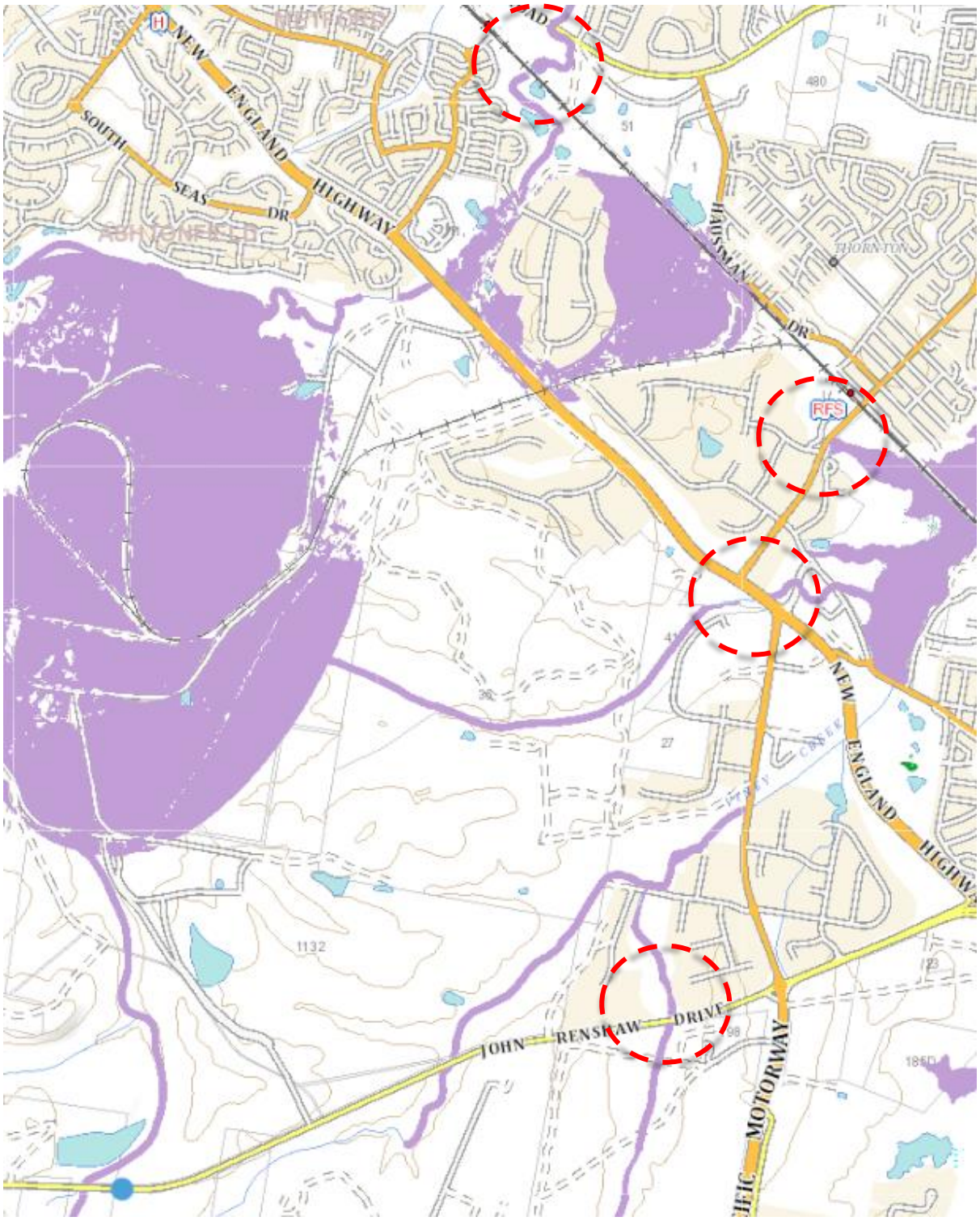

Figure 6: Areas that may be impacted by sewer works in red (Biodiversity Values Map and Threshold Tool)

State Environmental Planning Policy (Coastal Management) 2018

There are coastal wetlands in proximity to the proposed works as shown in Figure 8. Proposed sewer works along Thornton Road are likely to be within the 'proximity area for coastal wetlands'. In accordance with Clause 11 of this policy, prior to determination of consent for the works, the consent authority must be satisfied that the development will not have a significant impact upon:

> *(a) the biophysical, hydrological or ecological integrity of the adjacent coastal wetland or littoral rainforest, or*
> *(b) the quantity and quality of surface and ground water flows to and from the adjacent coastal wetland or littoral rainforest.*

This assessment would be undertaken as part of the future REF by Hunter Water.

Figure 7: Development site outlined in yellow (Coastal Management SEPP Mapping).

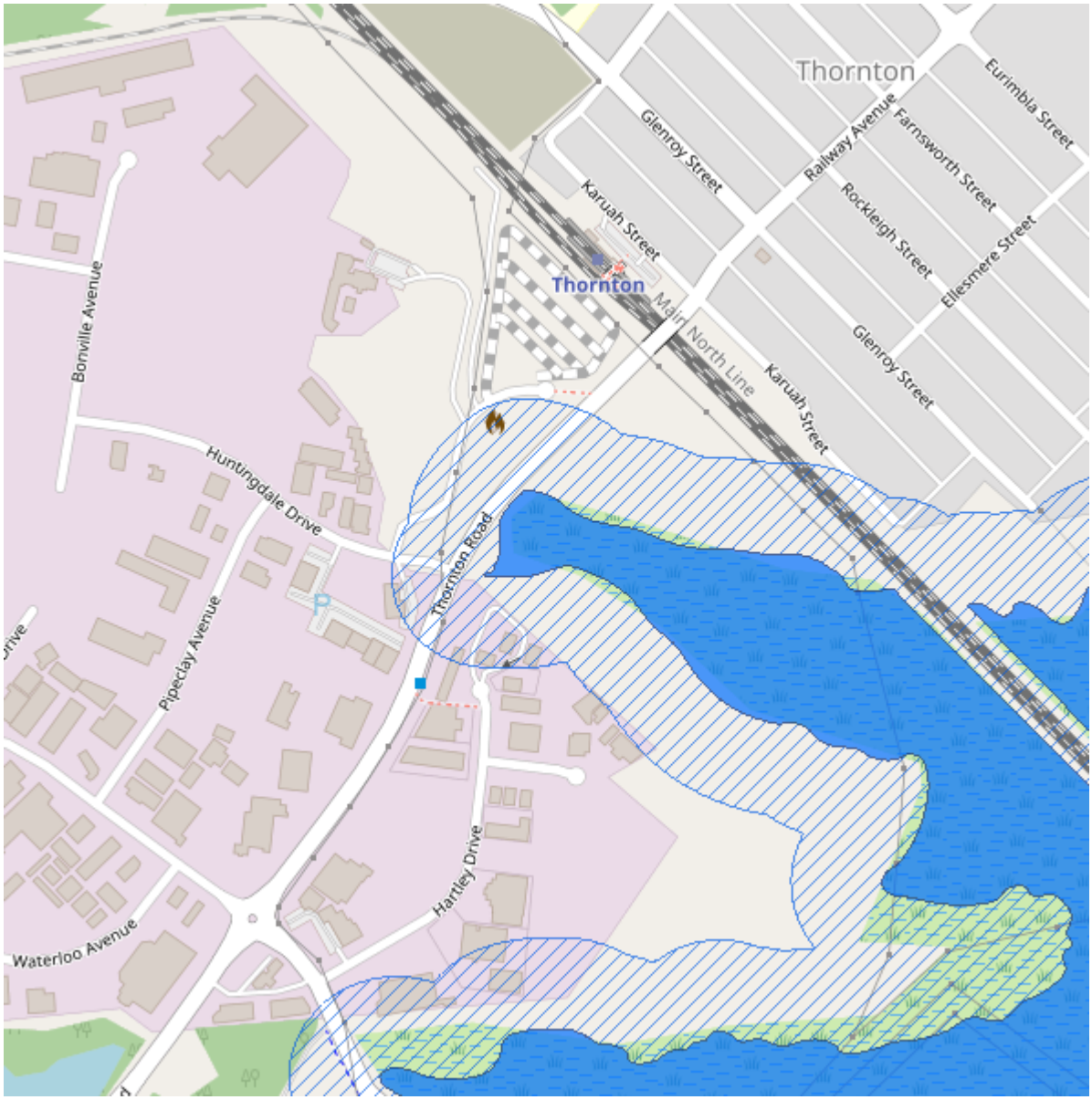

Figure 8: Area of sewer (red dashed line) within coastal wetland proximity area (Coastal Management SEPP Map).

4.4 Air quality

The air quality impacts of the proposal have been considered in the context of the proposed works. Construction works can result in the generation of fugitive dust emissions with the potential to result in elevated Total Suspended Particulates (TSP), Particulate Matter (PM) PM10 and PM2.5 concentrations and dust deposition rates in the vicinity of the works.

Ambient dust can be generated from the movement of vehicles and construction equipment, excavation and rehabilitation, demolition, clearing and grading. Combustion emissions from vehicles and equipment can also create pollutants such as oxides of nitrogen (NOx), carbon monoxide (CO),

particulate matter (as TSP and PM10), Sulphur dioxide (SO2), volatile organic compounds (VOCs) and lead (Pb).

Air quality impacts from construction activities should be assessed using qualitative assessment methodologies prior to the issue of a Construction Certificate, to target key sources of construction emissions for mitigation and control.

4.5 Heritage

4.5.1 Aboriginal Heritage

A search of the Aboriginal Heritage Information Management System identified that there are several items of Aboriginal significance within the area of sewer servicing and traffic upgrades. The proposed offsite works will require excavation and ground disturbance which could impact existing Aboriginal heritage items.

To ensure that no adverse impacts occur, a Due Diligence report will be required to locate these existing items and identify any other items not recorded. This will be required as part of the respective agencies REFs.

4.5.2 Non-Aboriginal Heritage

There are several heritage items within the locality. The proposed works will only impact upon one heritage item which is the local heritage item I119 'Government railway' in the Maitland LEP. The physical description of the item on the NSW Heritage register is:

> *'Two track railway, generally on embankments and elevated structures through study areas, stations at Central Maitland and East Maitland (closed) with ancillary buildings'.*

This item is located along various parts of the main northern railway. The proposed traffic upgrades will not impact this area. The proposed sewer servicing will be located along the south of the heritage item and cross to the north towards Chisholm.

The listed historical Australian theme of this item is:

> *'Transport-Activities associated with the moving of people and goods from one place to another, and systems for the provision of such movements'.*

The works will take place underground. It is expected that Hunter Water as part of the REF will have to provide an assessment of the final works location and impact upon this heritage item. It is considered due to the works that the heritage value of the item is unlikely to be adversely affected as

the completed works will not be noticeable above ground or affect the ongoing operation of the train line.

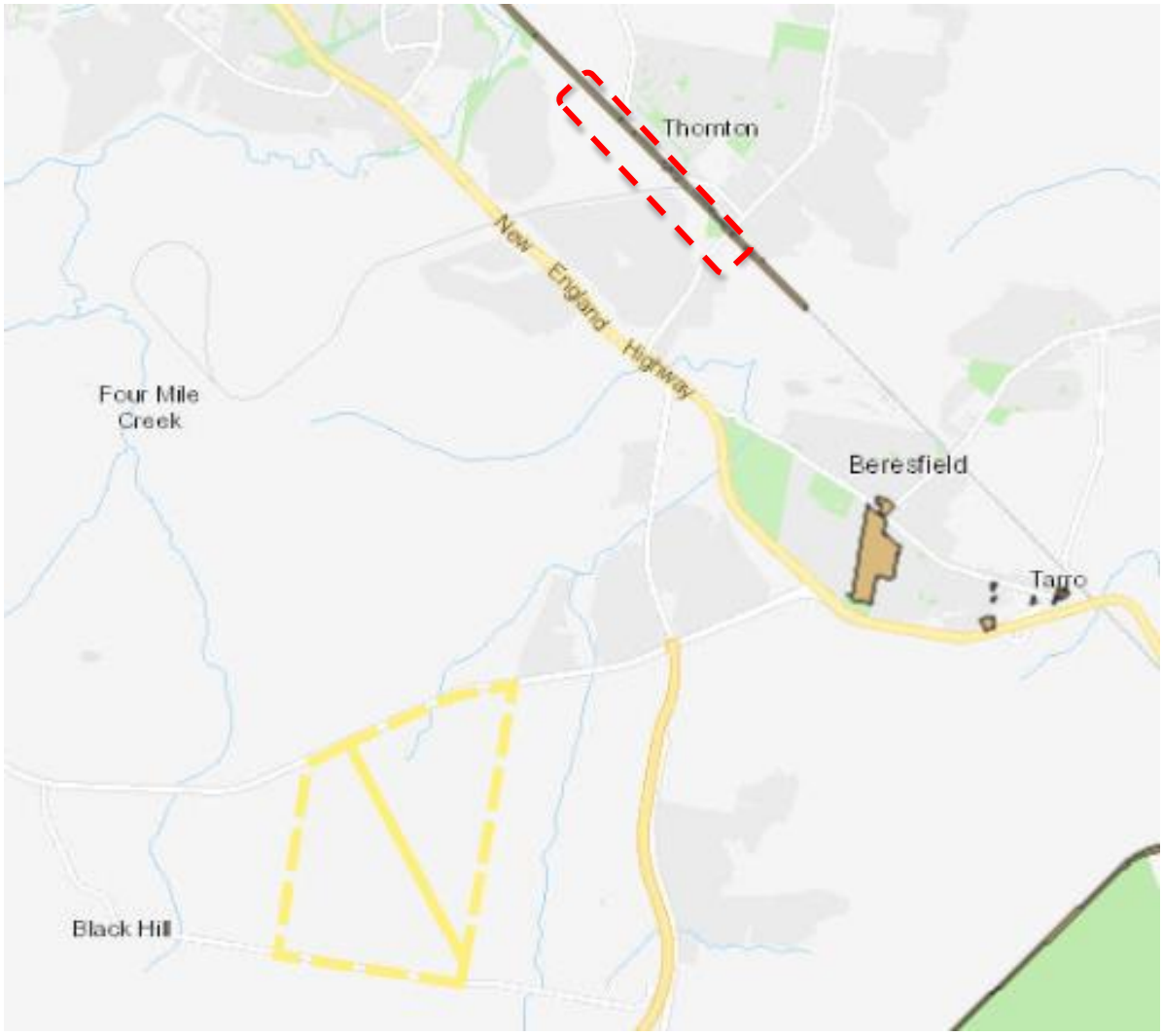

Figure 9: Local and State heritage items surrounding the assessment area. Sewer works proposed shown in red dashed area (ePlanning Spatial Viewer 2020).

4.6 Visual Environment

4.6.1 Sewer servicing

The proposed sewer works will all be located underground. There will be a noticeable visual impact during the contrustion phase as contractors will need to fence off areas of construction, will have large equpment for construction on site and excavate below ground to lay services.

As these works are completed and progress, the topsoil and grass will be reinstated to match the existing landscape. There may be the requirement for some vegetation removal, mainly street trees in areas which may conflict with the route of the sewer services.

The location of the services has been determined as being the most effective route and will all primarily be contained in road reserves, not on private land where possible. Hunter Water will need to consult with any private land owners who may be affected by the works as part of their REF process.

Figure 10: Typical view travelling north along Weakleys Drive (Google Maps 2020).

Figure 11: Typical view travelling north-east along Thornton Road (Google Maps 2020).

Figure 12: View looking from above over the trainline at Thornton Road (Google Maps 2020).

Figure 13: View looking north along Raymond Terrace Road near where the sewer will cross into Chisholm (Google Maps 2020).

4.6.2 Traffic upgrades

The upgrades to the intersection at John Renshaw Drive and Weakleys Drive will change the visual appearance of the existing intersection. However, the visual impact is not considered to be adverse as there is an existing large intersection existing in the location. The additional works to the intersection may require some vegetation removal and re-levelling of land. The intersection is not visible to residences and will only be visible to the industrial development to the north-east of the intersection.

This intersection does not need to be upgrades solely for the proposed development at 1134 John Renshaw Drive but will be required as the area develops along with the other surrounding proposed industrial developments and background traffic increases. The visual impact is considered to be acceptable and compatible with the existing and future character of the locality.

4.7 Noise and vibration

The sewer works stretch 8km and 1.2km of this work is adjacent or in the vicinity to sensitive receivers such as residential development. Between the proposed works and the residential area (Thornton) is a road width and a vegetation buffer with an approximate minimum distance of 60 metres. An assessment will be required of the potential noise and vibration impacts from machinery on these residents as part of the future agencies REFs. Hours of work would typically be Monday to Friday 7:00am – 5:00pm, Saturday 8:00am – 2:00pm, with no construction work proposed on Sundays or Public Holidays to mitigate potential impact.

The traffic upgrades works are not located near any residential areas. There are industrial businesses within the area that may be impacted by noise throughout the day time. A noise and vibration management plan would be expected to be required prior to any works commencing.

4.8 Traffic and access

The sewer works may impact traffic flows when carried out along John Renshaw, Weakleys Drive and Thornton Road. This may be due to excavation areas and fencing encroaching upon the roadway requiring traffic management or reduced speeds in these areas whilst construction occurs. A Traffic Management Plan will be required prior to any works occurring to manage the impacts.

The traffic upgrades will have an impact during the construction stage along John Renshaw Drive and will impact the functioning of the intersection for a period of time. A Traffic Management Plan must be provided prior to works to ensure pedestrian and vehicle safety and management during construction. As John Renshaw Drive is a major transport corridor night works should be considered to be less disruptive to the functioning for this road.

4.9 Land use and services

The impact of the sewer servicing and the traffic upgrades will be minimal during construction if appropriate mitigation measures are taken including the following:

- Before construction, a DBYD search will be undertaken to avoid underground services and fibre cables.
- Existing electrical poles and wires are to be protected and retained during construction.

- If disruption to water services are scheduled Hunter Water will need to consult with any private landowners who may be affect by the works as part of their REF process.

Post construction the sewer will have a positive impact on land use and services. The traffic upgrades to the accesses and intersection will improve the flow of traffic throughout Black Hill and Beresfield. An assessment on the impact to available services during works will be required as part of the respective agencies REFs.

4.10 Waste generation

4.10.1 Spoil Management

For both the excavation involved with the sewer servicing and construction of the road works, all excavated soils should be assessed and stockpiled with like material excavated from the same general area. The separation and strict control of the excavated materials will ensure the prevention of cross-contamination with soils from other areas or depths. The prevention of cross-contamination is crucial for the successful reuse of excavated spoil at the site. If intended for reuse, topsoil's should be stockpiled separately to subsoils to ensure that the soils are suitable for plant growth or fill at later stages.

Reuse of spoil generated from excavation works requires safeguards to ensure the suitability of the soil for its intended future use. Future reuse of the excavated material on-site could reasonably include:

- Use of the excavated topsoil as topdressing or growing media for plants, and
- Use of excavated subsoil for fill or structural subsoils in planted areas.

For both potential reuses, the suitability of the material should be assessed prior to reinstatement.

4.11 Other

4.11.1 Community Consultation

Community consultation will be required as part of the relative agencies REFs. The Blackhill Residents Association is the main community group that has been identified in this area that will require consultation. Local Aboriginal groups should also be consulted.

5 Factors

This assessment has been based off factors listed in clause 228 of the EPA Reg 2000. The below table lists the factors and the relevant sections of this report which have addressed them.

Factor	Sections Addressed
any environmental impact on a community	4.3, 4.11
any transformation of a locality	4.3, 4.6, 4.9
any environmental impact on the ecosystems of the locality	4.2, 4.3
any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality	4.3, 4.5, 4.6
any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations	4.5
any impact on the habitat of protected animals (within the meaning of the Biodiversity Conservation Act 2016)	4.3
any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air	4.3
any long-term effects on the environment	4.3, 4.6
any degradation of the quality of the environment	4.3, 4.4, 4.6
any risk to the safety of the environment	4.3
any reduction in the range of beneficial uses of the environment,	4.8
any pollution of the environment,	4.4, 4.10
any environmental problems associated with the disposal of waste	4.10
any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply	-
any cumulative environmental effect with other existing or likely future activities	4.3, 4.6
any impact on coastal processes and coastal hazards, including those under projected climate change conditions	4.3

6 Conclusion

This assessment provided a high level environmental assessment per the factors outlined in Environmental Planning and Assessment Regulation (EPA Reg) 2000, Part 5 Section 228 Clause (2). Whilst the development application is approved under Part 4 of the Environmental Planning and Assessment (EPA Act) 1979, the factors outlined provided a suitable framework for assessing the offsite impacts.

It is considered that the sewer and traffic works proposed will impact upon the locality. The impact, however, is positive as it enables the subject development as well as surrounding developments to benefit from the use of these services in the future.

The visual and physical changes to the environment are considered negligible as the sewer works are underground and the surface will be made good to match the existing environment. The traffic works are located at an existing intersection and will improve the flow of traffic throughout the locality.

Once the final location of the works is determined by the respective agencies, they will be required to complete REFs to consider the impacts upon the locality in much greater detail. This assessment has shown that there are no obvious constraints prohibiting the ability to move forward with these works when they are required.