

Review of Environmental Factors Multi-program - Category B

Sewer Realignment Fulton Avenue, Wentworthville.

1 Determination

This Review of Environmental Factors Multiprogram - Category B (Category B REF) is to be read in conjunction with the Review of Environmental Factors Multi-program pipeline and related infrastructure replacement, repair and upgrades (Multi-program REF) (May 2023). Together both documents assess the potential environmental impacts of Fulton Avenue, Wentworthville Sewer Realignment. These documents were prepared under Division 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), with Sydney Water both the proponent and determining authority.

The Sydney Water Project Manager is accountable for ensuring the proposal is carried out as described in this Category B REF and Multi-program REF. Additional environmental impact assessment may be required if the scope of work or work methods described in either the Multi-program REF or this Category B REF change significantly following determination.

Decision Statement

The main potential construction environmental impacts of the proposal include impacts to biodiversity and from noise. During operation, the new alignment will address odour issues, having a long-term benefit for nearby residences. The proposal will not be carried out in a declared area of outstanding biodiversity value and is not likely to significantly affect threatened species, populations or ecological communities, or their habitats. Therefore, a Species Impact Statement (SIS) and/or Biodiversity Development Assessment Report (BDAR) is not required.

Given the nature, scale and extent of impacts and implementation of the mitigation measures outlined in this Category B REF and the Multi-program REF, the proposal is unlikely to have a significant impact on the environment. Therefore, Environmental Impact Statement (EIS) is not required and the proposal may proceed.

Certification

I certify that I have reviewed and endorsed this REF and, to the best of my knowledge, it is in accordance with the EP&A Act and the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation). The proposal has been considered against matters listed in section 171 (Appendix A) and the guidelines approved under section 170 of the EP&A Regulation. The information it contains is neither false nor misleading.

Prepared by:	Reviewed by:	Endorsed by:	Approved by:
Sam Brandley Environmental Scientist Sydney Water Date: 5/12/2024	Jude Gregory for John Eames Snr Env Scientist Sydney Water Date: 5/12/2024	Alan Leones Project Manager Sydney Water Date: 10/12/2024	Murray Johnson Senior Manager Environment and Heritage Sydney Water Date: 31/01/2025

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2 Proposal Summary



Table 1 Description of proposal

Aspect	Detailed description
Location	The Fulton Avenue Wentworthville Sewer Realignment (the proposal) comprises works within the Fulton Avenue Reserve at 65-67 Fulton Avenue, Wentworthville and residential property at 71 Fulton Avenue, Wentworthville NSW 2145, in the City of Parramatta local government area (LGA). The study area spans the City of Parramatta LGA and is within land zoned under Paramatta Local Environmental Plan 2023 as RE1 Public Recreation zoned bushland in Lot 71 DP8039 and Lot 70 DP8039 and private residential property zoned R2 Low Density Residential at Lot 1 DP102903, Lot 72 DP8039 and Lot 1 DP102904. The proposal site is within a vegetated section of a suburban residential area. The topography is generally flat on both sides of Coopers Creek, which runs west to east through the site. The creek lies within a 5 to 10 m wide incision that is approximately 3 m below the surrounding ground surface level. The assumed flow direction of Coopers Creek at the site is east toward the Parramatta River.
Approved REF	Review of Environmental Factors Multi-program pipeline and related infrastructure replacement, repair and upgrades (Multi-program REF) (May 2023)
Proposal description	 The proposal is part of the Sewer and Stormwater Rehabilitation program as detailed in the Multi-program REF. It involves realigning the Coopers Creek sewer to enable continued operation of the sewer asset & allow safe condition assessment and maintenance to: eliminate odour reduce impacts to customers and customer complaints minimise pollution impacts to the environment reduce risk of EPL infringement. The proposed realignment includes the establishment of a new sewer line and associated maintenance holes (MHs), which tie into the existing sewer network. The existing sewer network runs south to north, crossing beneath Coopers Creek along the central portion of proposal site. The portion of the existing sewer line beneath Coopers Creek will be decommissioned and capped following the completion of works. The proposal works comprise of: site setup activities including fencing, signage, scaffolding, and installing environment controls vegetation clearing and trimming trenching across Coopers Creek for new pipeline installation installation of three new MHs along alignment commissioning including testing decommissioning existing sewer under Coopers Creek revegetation and rehabilitation of disturbed areas. The proposal is required as Sydney Water's existing DN150 concrete encased sewer near 71 Fulton Avenue has become exposed, partially obstructing the flow of the realigned creek. The concrete encasement, along with the protective gabions installed at the creek crossing, have deteriorated over time. The gabions degradation has led to





	sediment accumulation from upstream wet weather sewage overflows, causing ponding and resulting in odour issues for local residents. To address these ongoing issues, Sydney Water proposes to decommission and cap the old sewer partially blocking the creek and construct a new sewer alignment under Coopers Creek near Fulton Avenue. The concrete encasement will be left as it is, with any litter and build up removed and disposed of (see Figure 1).
Compounds	The construction compound location has yet to be confirmed. Consultation with appropriate landowners and Council must be sought prior to establishment of construction compound as per mitigation measure 1.3 in Table 4.
Equipment	The equipment list for the proposal includes:
Proposal timing	The proposal is expected to take approximately six months from July 2025 to January 2026. Work and deliveries will be scheduled to occur during standard daytime hours: 7am to 6pm, Monday to Friday and 8am to 1pm, Saturdays, where possible. Out of hours work is needed for excavation dewatering (see section 5 for more detail). Night work mitigation measure will be implemented, if required.





d: 29/10/2024

Figure 1 Location of proposal and environmental constraints



Sydney WATER

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Legend







3 Consultation

Sydney Water must consult with councils and other authorities for work in sensitive locations or where the work may impact other agencies' infrastructure or land. This requirement is specified in the State Environmental Planning Policy (Transport and Infrastructure) 2021 (TISEPP). No formal consultation was required under the TISEPP (refer to Appendix B)

Additionally, adjoining landowners and the community, particularly at 1 Clarence Street and 69-71 Fulton Avenue, were consulted during the initial planning and development stages of the proposal. Consultation was via various communication channels such as phone calls, emails and face to face meetings. This ensured they are well-informed about upcoming activities, any potential access restrictions, initial site investigation, delivery schedule and potential impacts to affect properties. All stakeholders were cooperative and supportive of the realignment works.

4 Legislative requirements

There are additional legislative requirements beyond those already assessed in the Multi-program REF.

5 Additional environmental impacts and mitigation measures

The tables below list the additional environmental impacts that could result from the proposal and the additional mitigation measures. All other environmental impacts and mitigation measures identified in the Multi-program REF remain the same and will be incorporated into the Contractor's Construction Environmental Management Plan (CEMP).

Aspect	Additional impacts	Additional mitigation measures
Topography, geology and soils	The pipeline works have the potential to impact topography, geology and soils from excavation and other ground disturbance. There are no Acid Sulfate Soils (ASS), contaminated land or saline soil mapped within the pipeline works area.	Refer to Table 4 for additional soil mitigation measures.
	Impacts will be managed by implementing relevant mitigation measures outlined in the Multi-program REF (2023).	
Water and drainage	The proposal would directly intersect Coopers Creek. Coopers Creek is considered a first order stream, with permanent yet limited flow towards Toongabbie Creek and eventually the Parramatta River, which are both mapped as key fish habitat. Groundwater was detected at four test locations. Based on groundwater measurements from boreholes, test pits, and auger sites, as well as the observed level of Coopers Creek, the groundwater table is assumed to be at a constant elevation of about 13 mAHD (Confluence Water, 2024). Groundwater levels may vary seasonally.	Refer to Table 4 for additional water mitigation measures.
	A groundwater report (Confluence Water, November 2024) calculated that the inflows to construction excavations would be about 0.56 megalitres (ML). A Water Supply Work Approval (WSWA) for the temporary dewatering of groundwater will be required. Groundwater impacts will be managed through the	

Table 3 Environmental impacts table



implementation of mitigation measures outlined in this REF and the Multi-program REF (2023).

During construction, vegetation clearing, minor excavations and MH installations would increase the risk of erosion, sedimentation, and pollution to adjacent waterways. Trenching is required across Coopers Creek, including the installation of a cofferdam. The potential impacts would be temporary with a cofferdam installed for up to 3 weeks, temporarily restricting water movements during its deployment. The flow within Coopers Creek will be diverted around the construction area and back into the Creek during excavation works. Therefore, no surface water will be taken for use or discharged to the surrounding environment.

Prior to construction a water management plan and dewatering management plan must be developed and implemented. The potential impacts to waterways would be managed through the implementation of mitigation measures outlined in Table 4

During operation, the proposal would improve the potential improve water quality by minimising the risk of sewer overflows into adjacent waterways and improving stream flow by removing exposed infrastructure.

Flora and fauna Existing environment

An ecological assessment was carried out in October 2024 by Jacobs on behalf of Confluence Water (Confluence Water, 2024b) and an Arboricultural Impact Assessment in July 2024 (Canopy Consulting, 2024), to assess the proposal's potential biodiversity impacts. The key findings of each assessment are discussed below.

Plant community type (PCT) 4025 Cumberland Red Gum Riverflat Forest was observed in moderate to low condition with weed incursion across the ground storey and non-locally native species throughout the midstorey (Canopy Consulting, 2024). This PCT is associated with the following threatened ecological communities:

- BC Act listed Endangered 'River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions'
- EPBC Act listed Critically Endangered 'River-flat eucalypt forest on coastal floodplains of southern New South Wales and eastern Victoria'.

One hollow bearing tree (HBT) was observed within the Fulton Avenue Reserve portion of the study area. Based on current proposed design, the HBT is unlikely to be impacted (Confluence Water, 2024b).

Riparian vegetation associated with Coopers Creek is restricted to the higher banks and consists of low condition PCT 4025 to the south and 'Planted native and exotics' to the north. Despite low Refer to Table 4 for additional flora and fauna mitigation measures.



condition vegetation dominated by exotics, canopy connectivity is maintained with surrounding vegetation and is likely to provide suitable flyways and foraging habitat for microbats (Confluence Water, 2024b).

During the field survey, eight fauna species were incidentally recorded. No threatened fauna species were recorded; however, no targeted fauna species were undertaken (Confluence Water, 2024b).

Potential impacts

Vegetation will be impacted from clearing a 6 m wide trench for pipeline and MH installation. Vegetation impacts include:

- Clearing about 141 m² (0.01 ha) of native vegetation (PCT 4025), which is consistent with the BC Act listed EEC 'River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions'.
- Removing up to eight trees consisting of planted natives and exotics.

The arboricultural impact assessment concluded that a total of 22 trees would be removed, 3 of which are weed species (refer to Figure 2). Additionally, minor trimming would be required along the existing tracks and edges of impact areas to enable access where overhanging branches are present.

Clearing of all vegetation layers would occur within the impact areas, however, large mature trees would be avoided as far as practicable. Clearing would generally comprise cutting vegetation to the ground via brush cutters, chainsaws, and other hand tools. Native vegetation (free of weeds) that is cleared would be left on the ground or relocated to nearby areas within the bushland to maintain the local biomass, where suitable. Where possible, branches would be temporarily held or tied aside instead of clearing/trimming.

Upon completion of construction, revegetation and rehabilitation of the impact areas would be undertaken.

Native vegetation impacts would remove foraging habitat for various terrestrial species, including threatened woodland birds and mammals. Foraging resources generally comprise flowering native species and fungi. During field surveys, only one HBT was noted within the study area, and is unlikely to be impacted during works. It is unlikely the clearance of native vegetation would result in the loss of suitable roosting or nesting habitat for fauna species (bats, birds and owl). The proposal would temporarily impact foraging habitat for the Cumberland Plain Land Snail (BC Act listed) and Dural Land Snail (BC Act and EPBC Act listed). Both snail species





were recorded on BioNet and identified as moderately likely to occur within the proposal site.

In accordance with the Test of Significance under Part 7 of the BC Act and Assessment of Significance under the EPBC Act Significant Impact Guidelines 1.1, the proposed works are considered to have a negligible and non-significant impact on the listed threatened ecological community, threatened species or populations, and their habitat. However, mitigation measures have been outlined in Table 4 to minimise unnecessary impacts (refer to the Appendix E in the ecological assessment).

Offsetting

The proposal requires offsetting in accordance with the Sydney Water Biodiversity Offset Guide (SWEMS0019.13), including:

- Offsetting moderate impacts from clearance of a TEC at a multiplier of 3:1. Total offset required is 195.75 m2 (moderate condition PCT 4025) and 228.54 m2 (low condition PCT 4025) (total offset 424.29m2), this is based on impacting about 141 m² (0.01 ha) of native vegetation (PCT 4025)
- Offsetting removal of trees (non-locally native or exotic tree or street tree) at a multiplier of 1:1 (approximately 8 trees to be offset).
- The arboricultural impact assessment concluded that a total of 22 trees would be removed and require offsetting. The exact number will be confirmed during construction by the contractor.
- Heritage The closest heritage item is Toongabbie Creek in Arrunga Reserve (ID I048) listed in Parramatta Local Environmental Plan 2023 about 120 m east of the proposal, and impacts are considered very unlikely.

No additional mitigation measures are required.



Works are in a high risk landscape for Aboriginal Heritage (<200m from a waterway). However, the proposal site has been highly disturbed during the construction of the existing sewer main, utility, roads and residential development. An Aboriginal heritage Due Diligence Assessment, concluded the proposal is unlikely to impact Aboriginal objects and that the works can proceed.

Noise and The nearest sensitive receiver to the proposal site is a residence vibration about 15 m to the north, with a direct line of sight of the works.

Refer to Table 4 for additional noise and



The Transport for NSW Construction and Maintenance Noise Estimator (TfNSW, 2022) was used to assess potential noise impacts. The noise management levels (NMLs) were established using the Rating Background Level (RBL) for the R3 representative environment defined in the noise estimator. This level best reflects the surrounding traffic volumes and noise catchment, which is characterised mainly by residential activities. The selected ground type used for the assessment was for 'developed settlements' (urban and suburban). The background noise levels for the assessment were:

- Day 50 dBA
- Evening 45 dBA
- Night 40 dBA

The distance based assessment assessed the nosiest plant as concrete saw during standard construction hours and concluded:

- Affected distance (>NML) is 155 m
- Sensitive receivers within 60 m may experience moderately intrusive noise levels (20-30 dBA > background)
- Sensitive receivers within 35 m may experience highly intrusive (>30 dBA> background).

The noise contours are displayed in Figure 3.

The distance based assessment assessed the nosiest plant as generator during out of hours night works and conclude:

- Affected distance (>NML) is 145 m
- Sensitive receivers within 35 m may experience moderately intrusive noise levels (20-30 dBA > background)
- Sensitive receivers within 15 m may experience highly intrusive (>30 dBA> background).

The noise contours are displayed in Figure 4.

This desktop assessment of potential impacts provides a conservate estimate of the noise levels associated with the proposal at any given period, the construction plant and equipment are assumed to operate at maximum sound levels only for brief stages. Additionally, it is highly unlikely that all construction equipment would be operating at maximum sound levels at any one time. As such, it should be noted that the predicted noise levels are highly conservative and actual noise levels are likely to be lower.

Nightworks are required for dewatering excavations and it is likely that generators would run a submersible pump continuously over this period. The equipment would be located in a suitable area at the greatest distance from sensitive receivers as possible. Night works would only be required for dewatering of excavations which would be short term and temporary (up to 3 weeks). vibration mitigation measures.



	Night work mitigation in the Multi program REF should be followed for night works and all reasonable/feasible mitigations should be considered including noise blankets and other suitable noise attenuation barriers and use of quiet/low noise generators. It is recommended for night works that sensitive receivers are notified of the works (via phone call and letterbox drop) 7 calendar days prior. Appropriate mitigation measures have been identified to reduce the risk of construction noise impacts. Through the implementation of the outlined mitigation measures, potential noise impacts would be minor and short term. Vibration may be experienced during the use of excavator for ground disturbing activities. However, sensitive receivers are outside the minimum working distance for vibration intensive equipment and vibration impacts are considered negligible.	
Air and energy	Air quality of the study area may be impacted by dust generated during excavation particularly for works within or adjacent to residential properties. The potential impacts are expected to be minor with the implementation of the Multi-program REF mitigation measures.	No additional mitigation measures are required.
Waste and hazardous materials	The Soil, Groundwater, and Surface Water Investigation (Confluence Water, 2024) identified and collected three fragments of potential asbestos-containing materials (PACM). Laboratory analysis of the PACM fragments returned positive detections for asbestos at HA5, TP1 and TP3 (refer to Figure 5 for locations). The fragments of asbestos cement were considered to be non- friable.	Refer to Table 4 for additional waste management measures.
	fill soils across select investigation locations onsite to a maximum depth of 3 mbgl.	
	Asbestos impacted fill samples analysed from the site have been preliminarily classified as 'Special Waste (Asbestos) – General Solid Waste (non-putrescible) containing asbestos' and Non- asbestos impacted fill samples analysed from the site have been preliminarily classified as 'General Solid Waste (non-putrescible)' in accordance with NSW EPA (2014) Waste Classification Guidelines.	
	Where natural soil / rock is encountered below fill profile (generally >3.20 mbgl), this would be classified as VENM in accordance with the POEO Act.	
	The potential impacts can be managed with the implementation of mitigation measures in the Multi-program REF and additional measures in Table 4.	



Traffic and

access



No additional mitigation measures are required

No additional mitigation

measures are required

Traffic

construction.

Vehicle movements include light vehicles for contractors commuting to and from the site, and heavy vehicles for earth works, spoil transportation and deliveries of plant and material. The proposal would only result in a minor increase in traffic volumes, which would be short term and restricted to the construction period. As such, construction traffic impacts would be minor.

During construction, access through to the cul de sac at the

only. This could potentially impact two residential properties, however access to their properties will be maintained throughout

northern end of Fulton Avenue would be restricted to residents

During operation, there would be minor periodic maintenance works on the sewer main. These activities are not expected to result in additional traffic impacts to the surrounding road network, access, parking and public transport.

Parking

Some on-street parking space would be reduced along the local roads due to the road closure. Heavy vehicles would be parked in the partially closed road sections. Light vehicles may be parked around local streets.

Social andThe proposal is within urban areas surrounded by residentialNo additional mitigationvisualproperties. All affected residential receivers would be notified
before construction begins with potential impacts anticipated to be
temporary and minor.measures are requiredOnce completed, the proposal would improve water quality inonceonce

Coopers Creek and reduce potential odours by minimising sewer overflow. Overall, the proposal is expected to have long term positive benefits.

Cumulative and future trends

A search of the Department of Planning Housing and Infrastructure's Major Project Register on 29 October 2024 identified multiple projects within 1 km of the proposal site. The potential cumulative impacts may include:

- noise and vibration from construction plant and equipment
- air quality impacts from dust caused by excavation and emissions from construction plant and equipment
- increased traffic volume related to construction activities such as delivery of plant and equipment and construction staff.

However, due to the small scale nature of this proposal, cumulative impacts would be minor.

Development Applications

Major Projects





A search of determined development applications on the City of Paramatta Council website on the 9 November 2024 indicates there are multiple local developments within the City of Parramatta LGA including multiple alterations and construction of dwellings. It is not expected that a cumulative impact would result due to their small-scale and residential nature.





Figure 3 Noise contour (Standard construction hours)







Figure 4 Noise contour (Night works)







Table 4 Environmental mitigation measures

Genera	
1.1	Should the proposal change from the EIA, no further environmental assessment is required provided the change:
	 remains within the assessment/study area for the EIA and has no net additional environmental impact or
	 is outside the assessment/study area for the EIA but:
	 reduces impacts to biodiversity, heritage or human amenity or avoids engineering (for example, geological, topographical) constraints and after consultation with any potentially affected landowners and relevant agencies.
	The Contractor must demonstrate in writing how the changes meet these requirements, for approval by
	Sydney Water's Project Manager in consultation with the environmental and community
	representatives.
1.2	Assign single person with accountability for coordinating communication and information flow across
	contractors and consultants and provide the contact details of this person in the Environmental Works Method Statement and/or CEMP.
	Sydney Water's Project Manager (after consultation with the environmental and community
1.3	representatives and affected landowners) can approve temporary ancillary construction facilities (such
	as compounds and access tracks), without additional environmental assessment or approval if the
	facilities:
	limit proximity to sensitive receivers



General

- do not disrupt property access
- have no impact to known items of non-Aboriginal and Aboriginal heritage
- are outside high risk areas for Aboriginal heritage
- use existing cleared areas and existing access tracks
- have no impacts to remnant native vegetation or key habitat features
- be positioned at least 10 m from waterways and have no indirect impacts
- do not require additional safeguards beyond those included in the EIA
- do not disturb contaminated land or acid sulfate soils
- compound locations selected with consideration to potential noise impacts to nearby receivers.
- will be rehabilitated at the end of construction.

The Delivery Contractor must demonstrate in writing how the proposed ancillary facilities meet these principles. Any facilities that do not meet these principles will require additional environmental impact assessment.

The agreed location of these facilities must be shown on the CEMP site plan and appropriate environmental controls installed.

Topography, geology and soils			
2.1	A construction Contamination Management Plan must be prepared by a suitably qualified person as part of the CEMP and reviewed by Sydney Water's Environmental Representative in consultation with the Contamination and Hazardous Materials Team. The plan must identify the type and location of known/potential contamination, land-owner notification, management requirements (waste minimisation, waste segregation and classification) and reuse, offsite recycling and/or disposal measures.		
Water and	d Drainage		
3.1	 Minimise the impacts to creeks where creek crossings are required. Prior to construction the methodology will be assessed based on: geotechnical and constructability issues (eg depth of cover, potential for future scouring) construction footprint and duration ease of reinstatement environmental issues (flora and fauna, geomorphology, contamination, heritage, water quality and hydrology) prepare a water management plan prior to construction commencing. 		
3.2	 Sydney Water will obtain a groundwater Water Supply Works Approval. Where dewatering is >3ML per water year (from 1 July), Sydney Water will also obtain a Water Access Licence from NRAR. The Contractor is responsible for: preparing a Dewatering Management Plan prior to construction complying with the conditions of the above approvals (such as protecting water quality, minimising aquifer extraction volumes, monitoring extraction with flow meters and recording volumes). 		
3.3	Minimise groundwater ingress during detailed design. As part of the CEMP, prepare a Dewatering Management Plan for groundwater dewatering. This should include elements such as how water quality will be protected and how extraction volumes will be monitored.		





Flora and fauna			
4.1	Offset residual impacts to native vegetation and trees in accordance with the Biodiversity Offset Guideline (<u>SWEMS0019.13</u>).		
4.2	Prior to construction commencing, prepare a revegetation management plan to rehabilitate the impacted areas after construction. This plan will be designed based on the existing environment and aim to restore the vegetation and habitats to better than existing condition. The plan will be in accordance with the 'Guideline for managing native re-vegetation for construction projects'.		
4.3	If HBT removal is required, cleared tree hollows will be removed in a manner to retain the hollow for later installation on a suitable nearby donor tree. This will be done by a suitably qualified arborist under the supervision of the Project ecologist. Where salvage of hollows is not feasible, the hollow will be relocated on the ground in a nearby suitable area to provide ground habitat. During removal of hollows, the following data will be collected to inform the installation of replacement nest boxes or salvaged hollows:		
	 The tree species The hollow size Any fauna, or signs of fauna, present The aspect of the hollow The height of the hollow. 		
4.4	Snails observed within the impact areas must be assumed to be the Dural Land Snail or Cumberland Plain land Snail. Toolbox information sheets and worksite inductions will be employed to help personnel identify the snail and provide guidance on what to do if observed. If a snail is observed during works, stop work, and contact the Project environmental representative		
	for advice. The snails will be moved outside the impact area by hand using gloves by a suitably qualified personnel.		
4.5	Avoid impeding/blocking fish passage for extended periods. Retain snags and natural obstructions in waterways where possible. In-stream works (e.g., coffer dams, sediment controls) should be designed and staged to avoid blocking the entire waterway, where practicable.		
	Use appropriate controls to avoid potential sedimentation to waterbodies (e.g. floatation boom).		
Waste Ge	neration		
5.1	Prepare a Waste and Resource Recovery Plan (WRRP) to appropriately manage and classify any materials including soils, construction/demolition wastes and associated stockpiles. The plan will be prepared by the Contractor (or nominated environmental consultant) and approved by		
	the Sydney Water Project Manager in consultation with the Environmental Representative and Contamination and Hazardous Materials Team		
5.2	As fibro or other asbestos containing material has been identified, restrict access and follow Sydney Water's Asbestos Management – Minor Works procedure, Document Number 746607 and SafeWork NSW requirements. Consult with Contamination and Hazardous Materials Team (propertyenvironmental@sydneywater.com.au).		
5.3	Excavated fill materials containing asbestos must be handled under Class-A (friable) conditions, in compliance with relevant asbestos regulations, waste management protocols, and sediment/dust control measures. These materials would only be disposed of at an offsite landfill facility that is properly licensed to accept asbestos waste.		
5.4	Management and handling of any asbestos identified onsite must adhere to a Sydney Water endorsed asbestos management plan (AMP), detailing the mitigation measures, controls, and disposal requirements for asbestos-impacted fill soil materials onsite.		





5.5	An asbestos clearance certificate (ACC) is to also be issued by a licensed asbestos assessor (LAA) upon completion of all removal works to provide evidence that no visual ACM remains within the excavation extent onsite. In addition to this, validation samples will be required and results reporting no further asbestos detections prior to re-commencement of construction works.		
5.6	Where fill soil materials are to be disposed off-site, the soil material should be handled, transported, and disposed of at a suitably licensed waste facility in accordance with the requirements specified by the NSW EPA (2014) Waste Classification Guidelines for 'General Solid Waste (non-putrescible)' or 'Special Waste (Asbestos) – General Solid Waste (non-putrescible) containing asbestos' (whichever is applicable).		
5.7	Where material is to be taken off-site as VENM, all overlying fill materials should be excavated and the surface of the VENM should be validated as being visually free of fill materials prior to excavation and removal of the VENM from site.		
Noise and vibration			
6.1	The contractor should consider opportunity to move works to standard daytime hours, where practical.		
6.2	Carry out ongoing community engagement on an ad-hoc basis including regular follow-up (e.g. phone discussions) for sensitive receivers/ highly impacted residents. Sensitive receivers should be notified of construction works within 7 calendar days of proposed works.		
6.3	Noise blankets and other suitable noise attenuation barriers and use of quiet/low noise generators should be considered for night works.		

6 Conclusion

This Category B REF outlines potential environmental impacts associated with Fulton Avenue, Wentworthville Sewer Realignment. Any additional environmental impacts are considered minor and potential impacts can be mitigated through implementation of the measures outlined in this Category B REF and the Multi-program REF. The proposal is not likely to significantly impact the environment.





Appendix A – Section 171 checklist

Section 171 checklist	REF finding
Any environmental impact on a community	There may be short-term impacts on the community from potential noise and biodiversity impacts. There will be environmental improvements by providing a reliable wastewater service to the local community.
Any transformation of a locality	The proposal will not result in the transformation of a locality.
Any environmental impact on the ecosystems of the locality	The proposal will not result in environmental impacts to ecosystems of the locality. The proposal will lead to environmental improvements by ensuring a reliable wastewater service to collect wastewater, minimising any impacts on the ecosystem.
Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of the locality	There may be localised and temporary reduction of aesthetic and recreational values of work sites during construction, however these would be restored to pre-existing conditions after the works. The proposal will not reduce the aesthetic, recreational, scientific or other environmental quality or value of the locality.
Any effect upon a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or any other special value for present or future generations	The proposal will not have any effect upon a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or any other special value for present or future generations.
Any impact on the habitat of any protected animals (within the meaning of the <i>Biodiversity Conservation Act 2016</i>)	The proposal will have a minor impact on the habitat of protected animals. Native vegetation and tree clearance offsetting requirements have been identified to mitigate the impact.
Any endangering of any species of animal or plant or other form of life, whether living on land, in water or in the air	The proposal will not be endangering any species of animal, plant or other form of life, whether living on land, in water or in the air.
Any long-term effects on the environment	The proposal will not have any long-term impacts on the environment but will have a long-term benefit by providing a reliable wastewater service for the area.
Any degradation of the quality of the environment	The proposal will not cause the degradation of the quality of the environment.
Any risk to the safety of the environment	The proposal will not increase risk to the safety of the environment. In addition, the proposal will remove the existing asbestos contamination onsite before construction activities



Section 171 checklist	REF finding
	commence. This would ultimately reduce the existing environmental safety risk.
Any reduction in the range of beneficial uses of the environment	The proposal will not reduce the range of beneficial uses of the environment.
Any pollution of the environment	Mitigation measures will mitigate the potential for the proposal to pollute the environment. There will be environmental improvements by providing a reliable wastewater service to the local community.
Any environmental problems associated with the disposal of waste	Waste disposal will be in accordance with the environmental mitigation measures, and no environmental problems associated with the disposal of waste are expected.
Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply	The proposal will not increase demand on resources, that are, or are likely to become, in short supply.
Any cumulative environmental effect with other existing or likely future activities	The proposal will result in a minor cumulative environmental effect with other existing or likely future activities.
Any impact on coastal processes and coastal hazards, including those under projected climate change conditions	The proposal will not have any impact on coastal processes or hazards, and coastal processes and coastal hazards will not have any impact on the proposal.
Any applicable local strategic planning statements, regional strategic plans or district strategic plans made under the EP&A Act, Division 3.1	There are no applicable strategic planning statements or plans, as the proposal forms part of a sewer realignment program of works.
Any other relevant environmental factors.	The proposal has been assessed against the factors listed above, and there are no other relevant environmental factors to consider.



Appendix B – Consideration of TISEPP consultation

TISEPP section	Yes	No
Section 2.10, council related infrastructure or services – consultation with council		
Will the work:		
Potentially have a substantial impact on stormwater management services provided by council?		х
Be likely to generate traffic that will strain the capacity of the road system in the LGA?		х
Connect to, and have a substantial impact on, the capacity of a council owned sewerage system?		х
Connect to, and use a substantial volume of water from a council owned water supply system?		х
Require temporary structures on, or enclose, a public space under council's control that will disrupt pedestrian or vehicular traffic that is not minor or inconsequential?		Х
Excavate a road, or a footpath adjacent to a road, for which the council is the roads authority, that is not minor or inconsequential?		Х
Section 2.11, local heritage – consultation with council	-	1
Is the work likely to affect the heritage significance of a local heritage item, or of a heritage conservation area (not also a State heritage item) more than a minor or inconsequential amount?		Х
Section 2.12, flood liable land – consultation with council	1	
Will the work be on flood liable land (land that is susceptible to flooding by the probable maximum flood event) and will works alter flood patterns other than to a minor extent?		Х
Section 2.13, flood liable land – consultation with State Emergency Services		
Will the work be on flood liable land (land that is susceptible to flooding by the probable maximum flood event) and undertaken under a relevant provision*, but not the carrying out of minor alterations or additions to, or the demolition of, a building, emergency works or routine maintenance? * (e) Div.14 (Public admin buildings), (g) Div.16 (Research/ monitoring stations), (i) Div.20 (Stormwater systems)?		x
Section 2.14, development with impacts on certain land within the coastal zone- council consu	ultation	
Is the work on land mapped as coastal vulnerability area and inconsistent with a certified coastal management program?		Х
Section 2.15, consultation with public authorities other than councils		
Will the proposal be on land adjacent to land reserved under the National Parks and Wildlife Act 1974 or land acquired under Part 11 of that Act? If so, consult with DPE (NPWS).		Х
Will the proposal be on land in Zone C1 National Parks and Nature Reserves or on a land use zone that is equivalent to that zone? <i>If so, consult with DPE (NPWS)</i> .		х
Will the proposal include a fixed or floating structure in or over navigable waters? If so, consult TfNSW.		х
Will the proposal be on land in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017? If so, consult with Subsidence Advisory NSW.		х
Will the proposal be on land in a Western City operational area specified in <i>the Western Parkland City Authority Act 2018,</i> Schedule 2 and have a capital investment value of \$30 million or more? <i>If so, consult the Western Parkland City Authority.</i>		X
Will the proposal clear native vegetation on land that is not subject land (ie non-certified land)? <i>If so, notify DPE at least 21 days prior to work commencing. (Requirement under s3.24 Chapter 3 Sydney Region Growth Centres - of the SEPP (Precincts – Central River City) 2021).</i>		X





Appendix C – Ecological Assessment (Confluence Water, October 2024)





Appendix D – Arboricultural Impact Assessment and Tree Protection Management Plan (Canopy Consulting, July 2024)





Appendix E – Soil, Groundwater, and Surface Water Investigation (Confluence Water, June 2024)