

## Department of Planning and Environment

Our ref: DOC22/282259

Your ref: SSI 8609189

Nathan Heath  
Department of Planning and Environment  
4 Parramatta Square, 12 Darcy Street  
Parramatta NSW 2150

6 May 2022

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**Subject:** Upper South Creek Advanced Water Recycling Centre (SSI-8609189) Response to Submissions Report

Dear Mr Heath

I refer to your email received on 8 April 2022 via the planning portal requesting comments from the Environment and Heritage Group (EHG) in regard to the *Upper South Creek Advanced Water Recycling Centre Submissions Report* dated March 2022 (RtS report).

As the Department is aware, EHG previously provided comments on the Environmental Impact Statement (EIS) on 1 and 8 December 2021, and 11 February 2022 as well as the *Upper South Creek Advanced Water Recycling Centre Amendment Report* (Amendment Report) on 6 April 2022.

EHG has reviewed the RtS report and provides comments in Attachment A in regard to biodiversity, *Environment Protection and Biodiversity Conservation Act, 1999* (EPBC Act) matters of national environmental significance and flood risk management.

As discussed, EHG comments in regard to waterway health and the Sydney Region Growth Centres Biodiversity Certification will be provided separately by 12 May 2022. This will include comments on the *Upper South Creek Advanced Water Recycling Centre Submissions Report – project amendments* dated April 2022.

The Department is advised that a separate submission may be made by the Heritage Branch.

If you have any queries, please contact Marnie Stewart via [marnie.stewart@environment.nsw.gov.au](mailto:marnie.stewart@environment.nsw.gov.au) or 02 9995 6868.

Yours sincerely,



Susan Harrison  
Senior Team Leader Planning  
Greater Sydney, Biodiversity and Conservation

## Department of Planning and Environment

### Attachment A – EHG comments on Upper South Creek Advanced Water Recycling Centre RtS Report

#### Biodiversity

EHG previously raised the issue that the BAM Calculator (BAM-C) had not been finalised and that a credit report had not been provided for the Wollemi IBRA subregion. In response, the RtS report argues that where the subject land is located within more than one IBRA subregion, only one of the cases in the BAM Calculator (BAM-C) needs to be finalised, and that this is consistent with the BAM Operational Manual. However, this is incorrect. Where the subject land is located within more than one IBRA subregion, there are two options of entering the data in the BAM-C. One option, that is described in the BAM 2020 Stage 1 Operational manual, is that the assessment of the entire extent of the project is undertaken within one BOAMS 'child' case. For this option, subsection 2.2.1 BAM 2020 Stage 1 Operational Manual advises "the IBRA subregion selected should be the one where the largest proportion of impact/area of BSA will occur, with justifications provided in the BAR". In the IBRA subregion field within the BAM-C, the assessor can only select one option and hence selects the dominant impacted IBRA subregion.

The second option (which the assessor has chosen for this proposal) is that the proposal is assessed using multiple BOAMS 'child' cases (e.g., separate 'child' cases by subregion). The advice in subsection 2.2.1 of the Operational Manual is not relevant where this second option has been chosen. Where the assessor has chosen this option, each of these cases must be finalised and relevant data and reports submitted with the BDAR. Finalising child cases is necessary to ensure the associated credit obligation/s flow through appropriately into the BOAMS case. Credit obligations displayed within an 'in-progress' BAM-C case will not flow through into BOAMS until finalised. A credit summary report for both the Cumberland and Wollemi IBRA subregions is therefore also required in the BAR.

EHG also previously raised concerns about the proposed level of impact on terrestrial biodiversity as a result of the project. In response, the RtS report notes that impacts have been reduced through several pipeline re-alignments, as outlined in the project's Amendment Report. While it appears that attempts have been made to avoid vegetation and habitat, EHG considers the reduction in impacts is minor - 12.64 ha compared to 13.77 ha with no reduction in the level of impact to the vegetation zone of highest conservation significance, intact Cumberland Plain Woodland CEEC. The DPE Planning Group will need to assess whether the benefits of the proposal outweigh the likely losses of critically endangered and endangered ecological communities and habitats for a number of threatened species.

#### EPBC Act - Listed threatened species and communities

EHG's previous comments in regard to EPBC Act matters remain relevant.

#### EPBC Act - World Heritage properties and National Heritage places

##### *Identification of the Outstanding Universal Values (OUV) of the property*

In response to a request for expanded assessment of OUV values to include indigenous relationships, water systems and natural beauty, the RtS report states that Table 4.2 in Appendix Q of the EIS includes additional significance assessment. However, Table 4.2 lists the values/attributes without undertaking an assessment of the proposal's likely impacts on these values.

##### *Threats to the Outstanding Universal Values of the property generally, and consideration of the State of Conservation report 2004 Greater Blue Mountains Area (Australia)*

The RtS report (Section 5.4.25) assesses that the 'wholeness and intactness' of the World heritage property would not be altered. However, given the project scope that has been assessed includes the release of water into the river systems, the assessment of the 'wholeness and intactness' of the

## Department of Planning and Environment

World heritage property appears incorrect. This is because any impacts to the Greater Blue Mountains Area (GBMA) should be assessed to be an impact to the 'wholeness and intactness' of the World Heritage property, and as Appendix Q of the EIS notes that there would be impacts on terrestrial and aquatic ecosystems in the GBMA.

Section 5.4.42 of the RtS report notes that 'changes in wetted perimeter are minor (less than one metre), with the exception of a short section about 500 m downstream of the confluence of Warragamba and Nepean rivers, where the increase is predicted to be up to seven metres. This may occur where a slight increase in surface water elevation could inundate a bench or engage a wider cross-section which is reflected in larger changes in wetted perimeter.' It is considered that these changes would impact the 'wholeness and intactness' of the World Heritage property.

Further to this, consideration of the State of Conservation report 2004 Greater Blue Mountains Area (Australia) (SoC 2004) was recommended in EHG's previous submission, however the RtS report states that the document was considered and was not referenced because it did not add new information for use in the assessment. Reference to the SoC 2004 was included in EHG's previous submission to highlight that development outside a World Heritage property can have an impact on World Heritage values, which does not appear to have been acknowledged in the RtS report.

The RtS report also notes (Section 5.4.26) that given negligible impacts have been assessed, the project is not considered to be an undesirable action. However even negligible impacts can be adverse and so it is recommended that this assessment needs revisiting.

### ***Use of modelling in determining flow and nutrient load impacts***

The RtS report (Section 5.4.21) reiterates the prediction "that AWRC releases will have an overall positive impact on the...GBMA". However, flows near the upstream boundary of the GBMA are predicted to increase by an average of about 25%, with daily loads of total phosphorus entering the GBMA predicted to increase by an average of about 7% and total nitrogen predicted to increase by an average of about 20%. Given these predictions in particular, concerns remain over the interpretation of these impacts as a positive impact on the GBMA.

### ***Impacts to natural beauty***

In the RtS report, the applicant assesses that the 'project would not visually alter the GBMA [and] there would be no impact on natural beauty.' However, natural beauty is subjective and not just appreciated from lookouts, and parts of the Nepean River within the GBMA will be visibly altered by raised water levels and impacts on riparian vegetation. For instance, Table 5-10 assesses that 'the additional flow will likely raise water levels...increase in wetted perimeter...more frequent inundation of the vegetated bar at the mouth of Glenbrook Creek'. Intermittent recession of water levels could also result in algae/scum and dead vegetation along the wetted perimeter, and so the assessment that there would be no impacts to natural beauty of the GBMA needs reconsideration.

### **Flood risk management**

EHG's previous comments provided on the EIS have not been addressed by the RtS report and therefore are still relevant and need to be addressed. EHG provides the following specific comments on the RtS report to justify and support this conclusion.

### ***Specific comments on the RtS report***

#### **1. Hydraulic Model Validation Section 2.1 and 2.2**

Section 2.1 of the RtS report discusses the comparison to 1988 and 1986 historic flood markers, it states 'Hydrographs provided by INSW were applied to the AWRC EIS hydraulic model and the results were compared to Penrith City Council's 2015 Updated South Creek Flood Study (WorleyParsons, 2015) and INSW data sets below'.

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Also, Section 2.2 of the RtS report states 'The INSW 1% AEP hydrographs were applied to the AWRC EIS hydraulic model and the results were compared to available Penrith City Council's 2015 Updated South Creek Flood Study (WorleyParsons, 2015) results in Figure 2 below'.

EHG raises the following issues.

The sentences above indicates that one of either methodology has been undertaken:

- INSW hydrographs are used to verify the TUFLOW hydraulic model that was based on 'The XP-RAFTS model' which utilised ARR1987 hydrology and benchmarked against Penrith Flood Study 2015 as outlined in Section 4.3 of the Flood Impact Assessment. EHG highlights that this model has not been used in the Aurecon ARUP 2021 hydraulic model. Please refer to EHG's previous comments for further detail.

or

- INSW hydrographs (which is based on AR&R 1987 hydrology) are used to verify the Aurecon ARUP 2021 hydraulic model instead of the hydrographs of Aurecon ARUP 2021 hydrologic model (that is based on 2016 hydrology) and was used in the assessment of the Upper South Creek Advanced Water Recycling Centre.

It is important to note that either option is unacceptable. Flood consultants understand that, changing the inflow inputs (inflow hydrographs) into a hydraulic model will result in different model results. The consultants need to verify the same hydrologic and hydraulic models that have been used in the assessment of the Upper South Creek Advanced Water Recycling Centre i.e., Aurecon ARUP 2021 hydrologic and hydraulic models. Therefore, to validate Aurecon ARUP 2021 hydraulic model, the consultants need to apply the hydrographs that are produced by Aurecon ARUP 2021 hydrologic model not importing different inflow hydrographs from the INSW model.

EHG has previously raised concerns about the very low flow result of Aurecon ARUP 2021 hydrologic model, please refer to EHG's previous comments for further detail.

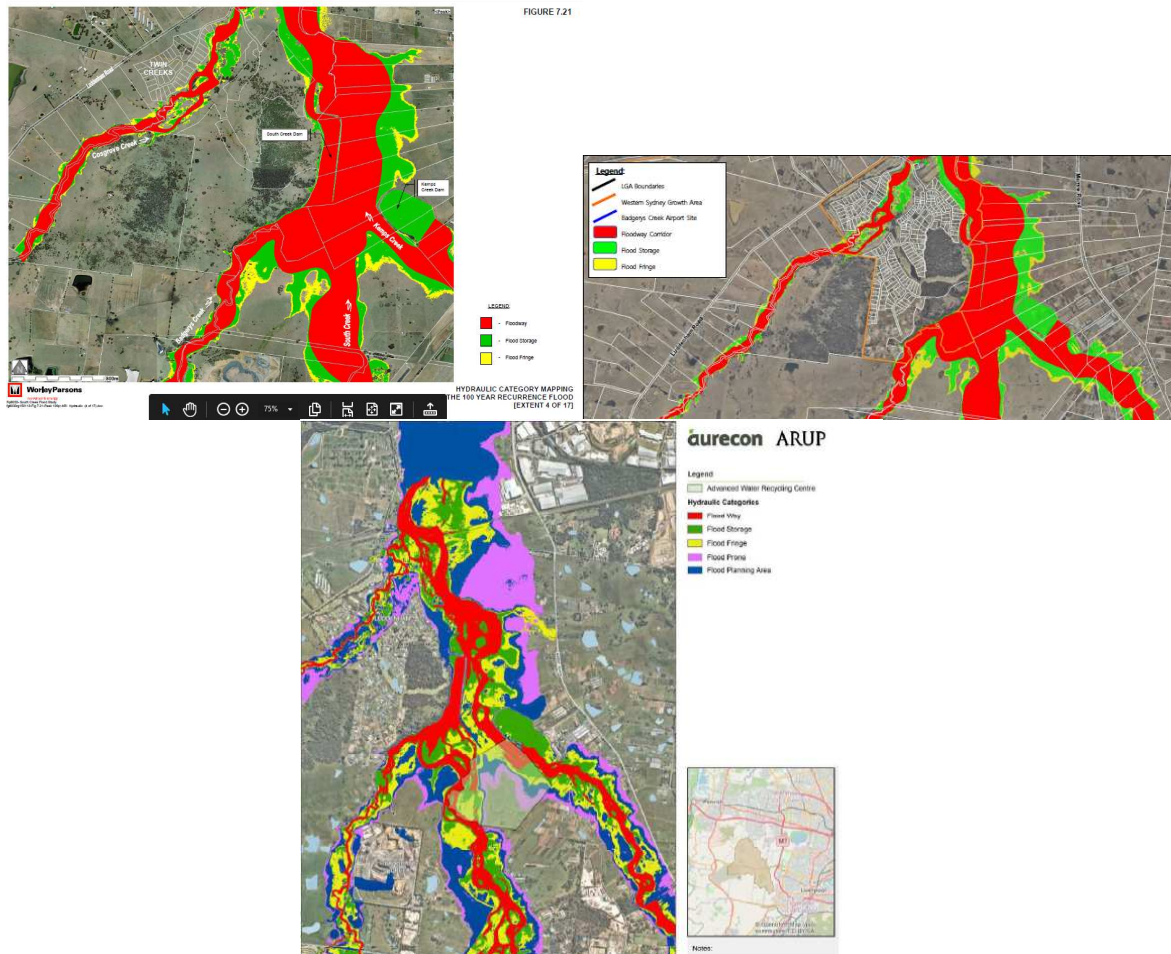
### 2. Hydraulic Model Validation Section 2.3

Section 2.2 of the RtS report states 'The INSW 1% AEP hydrographs were applied to the AWRC EIS hydraulic model and the results were compared to 1% AEP flood extent mapping provided by INSW (Flood extent mapping titled South Ck Sector - 1% AEP Flood Extent [Peak of Peaks]\_Rev G (Oct 2020), as shown in the 2020 Advisian study) which has used recent topographic data of the floodplain.'

EHG raises the following issues:

- It appears that the validation undertaken in Section 2.3 utilised 'The XP-RAFTS model' which utilised ARR1987 hydrology and benchmarked against Penrith Flood Study 2015 as outlined in Section 4.3 of the Flood Impact Assessment. EHG highlights again that, this model has not been used in the Aurecon ARUP 2021 hydraulic model. Please refer to EHG's previous comments for further detail.

EHG has previously addressed the inconsistency between the Aurecon ARUP flood assessment 2021 results and Penrith's WorleyParsons (2015) results. In addition, the figures below highlight the inconsistency between Aurecon ARUP flood assessment 2021 results and INSW 2020 results.



The figures above show significant inconsistency in flood behaviour results by Aurecon ARUP flood assessment 2021 (bottom figure) comparing to Council's 2015 results (upper left figure) and INSW flood assessment (upper right figure).

End of Submission



Our Ref: C22/241

27 April 2022

Your Ref: SSI-8609189

Mr Nathan Heath  
Planning Officer  
NSW Department of Planning, Industry & Environment  
c/o: Major Projects Portal

Mr Heath,

**Request for consultation – Advice Response to Submissions Report - Stage 1 - Upper South Creek Advanced Water Recycling Centre (AWRC) – multiple locations including Warragamba River, Nepean River, Kemps Creek & South Creek**

Thank you for your referral seeking consultation on the above proposal from DPI Fisheries, a division of NSW Department of Primary Industries on the proposed works stated above.

DPI Fisheries provided Advice on SEARs for this proposal to C20/500 on 10/08/2020 and Advice on EIS as C21//628 on 22/10/2021.

DPI Fisheries is responsible for ensuring that fish stocks are conserved and that there is no net loss of key fish habitats upon which they depend. To achieve this, DPI Fisheries ensures that developments comply with the requirements of the *Fisheries Management Act 1994* (FM Act) (namely the aquatic habitat protection and threatened species conservation provisions in Parts 7 and 7A of the Act, respectively), and the associated *Policy and Guidelines for Fish Habitat Conservation and Management (2013)*. DPI Fisheries is also responsible for ensuring the sustainable management of commercial, recreational and Aboriginal cultural fishing, aquaculture, marine parks and aquatic reserves within NSW.

DPI Fisheries has reviewed the *Upper South Creek Advanced Water Recycling Centre Submissions Report* (March 2022, Sydney Water) and makes the following comments:

1. It is noted works crossing South Creek are to be realigned – shifted away from South Creek to provide space for future Sydney Water pipelines in the same corridor.
2. It is noted works crossing Kemps Creek are to be realigned - amended to utilise an existing pipeline corridor. Construction of the waterway crossing will occur by tunnelling rather than open trench.
3. Section 5.7.2 – Aquatic Ecology, construction in and adjacent to waterways addressed DPI Fisheries comments on EIS.
4. Section 5.7.3 – Aquatic Ecology, avoiding impacts to Australian Bass addressed DPI Fisheries comments on EIS.
5. DPI Fisheries request to be consulted when the relevant sections of the Construction Environment Management Plan (CEMP) are available. Particularly, the Biodiversity Management Plan, Soil & Water Management Plan and the Site-Specific Riparian Zone Vegetation Plans.

If you require any further information, please contact me on (02) 4222 8311 or [josi.hollywood@dpi.nsw.gov.au](mailto:josi.hollywood@dpi.nsw.gov.au)

Yours sincerely,

*J. Hollywood*

**Josi Hollywood**  
Fisheries Manager, Coastal Systems Unit

Nathan Heath  
Senior Planning Officer  
Department of Planning and Environment  
PO BOX 404, PARRAMATTA NSW 2124

By email: [nathan.heath@planning.nsw.gov.au](mailto:nathan.heath@planning.nsw.gov.au)

Dear Mr Heath

**Re: Response to Submission - Upper South Creek Advanced Water Recycling Centre (SSI-8609189)**

Thank you for your referral received on 14 April 2022 inviting comments from the Heritage Council of NSW on the above State Significant Infrastructure (SSI) Response to Submissions.

The following document has been considered:

*Upper South Creek Advanced Water Recycling Centre- Submissions Report* prepared by Sydney Water, dated March 2022

In response to Heritage NSW comments, dated 23 November 2021, related to risk of damage from vibration or impact, the Submissions Report notes that monitoring of vibration will be undertaken, which is considered satisfactory.

In response to historical archaeology comments recommending prior archaeological testing to avoid impact, the Submissions Report provides reasons why this is not feasible. However, Heritage NSW does not concur with these reasons and provides the following comments:

*Several PAS where testing is proposed also have Aboriginal heritage constraints and would require an Aboriginal Heritage Impact Permit (AHIP) for archaeological testing. Project approval would override the need for an AHIP and facilitate testing. Given the processing times for AHIPs, it is also likely that a determination on the project would be made before an AHIP could be obtained. Sydney Water also considers it important to align any testing programs for Aboriginal and non-Aboriginal heritage as outlined in management measure AH03 in Table 15-3 of the EIS.*

Comment: It is Heritage NSW's understanding that AHIP are not required after issue of SEARs. Therefore, this is not considered a valid justification.

*Sydney Water has not yet engaged contractors to progress detailed design and construction planning and is unlikely to do so before a decision is made on the project. It is possible the impacts on some PAS will change once detailed design progresses, including opportunities to further minimise or avoid impact. Sydney Water considers an archaeological testing program is most effectively and efficiently done once contracts are awarded to further progress design.*

Comment: This is a project management matter and is not considered as a strong justification.



Therefore, the Submissions Report does not address the previous comments provided by Heritage NSW on the above matter adequately, and these comments remain unchanged.

If you have any questions regarding the above advice, please contact Rajat Chaudhary, Senior Assessments Officer, at Heritage NSW on 02 9873 8521 or [Rajat.Chaudhary@environment.nsw.gov.au](mailto:Rajat.Chaudhary@environment.nsw.gov.au).

Yours sincerely

*Shikha Jhaldiyal*

**Shikha Jhaldiyal**

Manager, Assessments

Heritage NSW

Department of Planning & Environment

**As Delegate of the Heritage Council of NSW**

27/04/2022

28 April 2022

Contact: *Justine Clarke*

Telephone: *0457 535 955*

Our ref: *D2022/32394*

Nathan Heath  
Department of Planning, Industry & Environment  
4 Parramatta Square  
12 Darcy Street  
PARRAMATTA NSW 2150

Dear Mr Heath

**Upper South Creek Advanced Water Recycling Centre – EIS Response to Submissions (RTS) (SSI-8609189)**

Thank you for your Major Projects Planning Portal referral dated 8 April 2022, requesting WaterNSW's advice in relation to the Submissions Report for the proposed Upper South Creek Advanced Water Recycling Centre.

The proponent has addressed WaterNSW's comments sufficiently and it is considered that their response is reasonable in relation to the potential impact to WaterNSW lands, assets and infrastructure. WaterNSW supports this proposal and notes the RTS.

In our original response to the EIS, WaterNSW provided suggested conditions for inclusion in any determination issued by the Department. However, we note that the proponent has since included these conditions as project mitigation measures. WaterNSW expects that Sydney Water will carry out the listed mitigation measures (RTS, Appendix B) as part of the development, and that the Department will condition these commitments accordingly.

With regards to project erosion and sediment controls, WaterNSW notes that the mitigation measures (Appendix B) no longer include a requirement to comply with Landcom's 'Blue Book'. As such, WaterNSW recommends that the following generic condition be included as a condition of consent.

- *Erosion and sediment controls are to be designed, installed and maintained in accordance with the 'Blue Book', Landcom (2004) Managing Urban Stormwater; Soils and Construction.*

If you have any questions regarding this letter, please contact Justine Clarke at [justine.clarke@watarnsw.com.au](mailto:justine.clarke@watarnsw.com.au).

Yours sincerely

A handwritten signature in black ink, appearing to read "AK", with a long horizontal stroke extending to the right.

**ALISON KNIHA**  
**Catchment Protection Planning Manager**



Our reference: MDA20/0010 – SSI-8609189  
Contact: Kathryn Saunders  
Telephone: (02) 4732 8567

6 May 2022

Department of Planning, Industry and Environment  
Attn: Nathan Heath

Email: [nathan.heath@planning.nsw.gov.au](mailto:nathan.heath@planning.nsw.gov.au)

Dear Nathan,

**Response to Submissions – SSI-8609189**  
**Upper South Creek Advanced Water Recycling Centre**

Thank you for providing Council with the opportunity to comment on the applicant's Response to Submissions (**RtS**) associated with the proposed State Significant Infrastructure (**SSI**) application.

**1. Planning Considerations**

**(a) Staging and extent of works**

It remains unclear as to the full extent of works which will be delivered as part of Stage 1.

The Upper South Creek Advanced Water Recycling Centre Submission Report, March 22, prepared by Sydney Water states (p.15) states that Stage 1 comprises the following:

- (i) building and operating the AWRC to treat a daily wastewater flow, known as the average dry weather flow (ADWF), of up to 50 megalitres per day (ML/day); and
- (ii) building all pipelines to cater for up to 100 ML/day flow coming through the AWRC (but only operating them to transport and release volumes produced by Stage 1).

Notwithstanding the above, Page 315 of the Submissions Reports includes that 'Sydney Water is seeking approval to establish the green space area as part of Stage 1'.

The Submission Response also includes that 'Sydney Water is seeking approval for the green space area to be publicly accessible for recreation as part of Stage 1 and is working with DPE to understand whether this aligns with their future intentions for the South Creek corridor. Whether or when a public recreation area is delivered here depends on whether the NSW Government supports use of the land for this purpose'.



Council recommends that Stage 1 include the new green space identified in the EIS and that clarity be provided as to the Stage 1 works noting no approval is sought for later stages.

#### **(b) Sustainability and landscaped areas**

As was raised in Council's previous submissions, it remains unclear if the project includes the production of renewable energy generation infrastructure including generation of renewable energy from co-generation and operation of solar photovoltaic panels. The Submission Report no longer includes this aspect of the proposal in the scope of works at page 15 of the Submissions Report.

To ensure that the proposal offsets the environmental impacts of the development and to support the sustainability objectives of the Aerotropolis precinct, it is recommended that the Department require the installation of the abovementioned sustainability features including the operation of solar photovoltaic panels – as is proposed in the original **EIS** (V1, p.51).

Should the sustainability initiatives be limited to provision of landscaped areas, these areas should be restored, regenerated and sufficiently protected through the imposition of adequate conditions of consent which require maintenance and reporting. If 'offset' areas are proposed these are to be protected in perpetuity.

Fencing surrounding riparian or landscaped areas should not prevent terrestrial movement and connectivity between corridors. Fencing without integrated opportunities for crossings (regular spaces gaps under or at the base of fences etc) can affect the dispersal and survival of terrestrial wildlife, and prevents free movement in times of migration, drought, flood and fire. Entrapment in the fencing affects marsupials, birds, bats and reptiles, and fence hanging is a common threat.

#### **(c) Visual impacts**

In the December 2021 submission Council raised, that detailed designs of the AWRC structures were not provided and requested the submission of architectural and landscape plans for the site.

Council also recommended that a visual impact analysis of the proposed structures on the AWRC site be produced and include an assessment of the administration building, solar collectors, and structures above 20m and 30m and which had regard to the reflectivity of materials.

In the Response to Submission, Sydney Water has provided that '*the detailed design phase of the project has not yet started. It is during this stage that the specific details including design dimensions and related infrastructure will be determined*'.

It is raised for the Department's consideration that impacts on landscape character, cultural heritage and views will not be insignificant noting the scale and height of structures proposed and that the assessment of the impacts of such structures be appropriately informed.

#### **(d) Impacts on Wallacia village and public places**

Council requests that the Department ensure pipeline locations are to avoid bisecting Council reserves and parks. Pipeline locations and the construction

methodologies are to be amended such that the visual and biodiversity impacts, impacts on Aboriginal cultural landscapes and on Council reserves, parks and public places are minimised.

## **2. Traffic**

Council raised in its submission to the EIS, that Clifton Avenue is a local rural road not designed to cater for construction traffic volumes and swept paths, and has noted that the road pavement will prematurely fail as a result on construction activities.

Whilst Sydney Water provides that 'upgrade works to Clifton Avenue to facilitate the construction traffic from the project is out of scope of the project', Council's engineers advise works are required to facilitate the development.

The Department is advised that a 'patch and go' approach to the current roadway insufficiencies should not be supported.

As was included in Council's submission to the EIS, Council requests that Site Specific Traffic Management Plans for compound 8 address:

- (iii) geotechnical testing of existing pavement design life of Clifton Avenue;
- (iv) required pavement upgrade works and localised widening of Clifton Avenue to accommodate expected construction traffic volumes; and
- (v) A dilapidation report of all existing Council assets along Clifton Avenue including drainage assets, signs, pavement, etc.

Council will continue to advocate that road upgrades to any impacted local roads are undertaken by DPE, to ensure the assets are safe, fit for purpose and they do not become a financial and maintenance burdens to Council and a nuisance and safety issue for residents.

## **3. Development Engineering Considerations**

Council reiterates comments provided in its 14 December 2021 submission (specifically Section 12) in relation to engineering and flooding.

## **4. Environmental Management Considerations**

### **(a) Hazardous Development**

The development proposal includes a Preliminary Hazard Analysis prepared by Aurecon Arup (dated 22 June 2021, ref 269002-02).

It is noted within Section 5.5 of the Analysis which assesses goods not classified as dangerous, that at the time of writing, it was not yet confirmed which product is proposed to be used as an antiscalant additive in the reverse osmosis procedure.

The Submissions Report has reiterated that the antiscalant is yet to be confirmed but will be confirmed at the detailed design phase of the proposed development.



No objections are raised with this approach, provided that this is confirmed, and appropriate measures put in place prior to determination by the relevant authority.

Furthermore, in Section 6.6 which discusses release of firewater into the environment, it is stated that the stormwater design for the proposed development was not yet complete at the time of this writing.

Again, the Submissions Report states that this will be confirmed at the detailed design phase. The Department would need to be satisfied with this approach and Council raises no objection, provided that appropriate mitigation measures are implemented should there be insufficient space for fire water, which should be assessed by the relevant authority prior to determination.

#### **(b) Land Contamination**

A Soils & Contamination Impact Assessment prepared by Aurecon Arup (dated 27 July 2021, ref 20036007) has been provided along with the proposal.

The Assessment provides an adequate review of the site and surrounds history, as well as providing insight into Contamination Assessments conducted within the vicinity of the proposed development.

In response to previous concerns, the Submissions Report has stated that a Remediation Action Plan, Unexpected Finds Protocol, and Hazardous Materials Survey will all be implemented within both the **CEMP** and the Soil and Water Management Plan and will be effective prior to commencement of the construction phase of the proposed development.

The Submissions Report has confirmed that all material imported onto any of the subject sites for use will be validated appropriately with correct certification. This is considered satisfactory, provided that each of the documents are reviewed and approved by the relevant authority.

#### **(c) Noise Impacts**

A Noise and Vibration Impact Assessment prepared by Aurecon Arup (dated 28 April 2021, ref AC04) has been provided along with the development proposal for comment.

It is acknowledged that no background acoustic monitoring has been undertaken, and that data from noise monitoring undertaken in 2017 in locations close to the subject area has been adopted for the Assessment.

In response to previous concerns raised, the Submissions Report has confirmed that in relation to the proposed Co-Gen operation, the proposed Co-gen flare, engine and exhaust at the Recycling Centre, the predicted dB(C) will exceed the dB(A) by no more than 15dB. Council considers this satisfactory.

The Submissions Report has stated that proposed release valve sizing will be confirmed at the detailed design phase of the proposed development. This is considered satisfactory, provided that once sizing is confirmed, the Noise and Vibration Impact Assessment will need to be amended accordingly to demonstrate that there will be no adverse impacts on surrounding sensitive receivers because of the proposed release valves during the operational phase of the development.

The Submissions Report has also stated that the Land Use Survey and associated mapping will be updated as part of the CEMP and associated Construction Noise and Vibration Management Plan. No objections are raised to this approach.

## **5. Waterways Considerations**

### **(a) Waterway management and water sensitive urban design (WSUD)**

It is noted in the supporting updated information that a more detailed assessment of risks and mitigation measures would be considered and developed during the detailed design and construction planning.

No objection is raised by Council, provided that the outstanding information can be reviewed by the Department of Planning and Environment (**DPE**) prior to approval of the scheme and commencement of works and prior to the operation of the scheme. Conditions to this effect are recommend to be adopted by DPE, should consent be granted.

The updated information appended to the Response to Submissions document includes a range of management measures and commitments to ensure that the detailed design of waterway crossings further considers geomorphology, aquatic ecology and groundwater. These measures need to be implemented to the satisfaction of the consent authority and to ensure the design minimises potential risks to waterways. In addition, disturbed areas will need to be stabilised and revegetated in accordance with proposed management measures. Conditions to this effect are recommend to be adopted by DPE, should consent be granted.

### **(b) Wianamatta South Creek**

The updated information has also considered the updated pollution reduction and flow management targets for the construction and operational stages of the development site in the context of the new DPE EES targets for Wianamatta South Creek. This assessment indicated that the proposed reference design management measures will meet the DPE EES Wianamatta South Creek Stormwater management targets. However, it is noted that additional details will need to be provided during the detailed design stage, and this will need to be assessed / approved to the satisfaction of DPE.

During construction, impacts to waterways are proposed to be managed by a range of measures included in a Soil and Water Management Plan as part of the CEMP. The CEMP will need to be in place prior to construction and all commitment must be implemented for the duration of construction. This will need to be reviewed and approved by the relevant authority.

### **(c) Operational phase**

During operation of the scheme, the main potential risks result from the treated water releases to South Creek and Nepean and Warragamba rivers. These reports note that releases have the potential to impact on water quality, geomorphology, aquatic ecology and as a result of altered flow regimes.



A review of the information and consideration of the proposed safeguards indicates that the general impacts of the project are not extensive. The supporting studies included in the EIS and Appendix B Updated Management Measures, included numerous recommended mitigation measures and safeguards to manage the risks, as well as commitment to develop and implement a detailed monitoring and reporting program.

**(d) Receiving waters**

With respect to the impact on receiving waterways including Warragamba and the Nepean River, the EIS, and Appendix B Updated Management Measures, includes commitments that a baseline and post-commissioning monitoring program to help understand impacts of the project once it is operational.

Council notes that this will need to have water quality, aquatic ecology, and geomorphic components. It is also noted that some additional monitoring will be implemented, and it will be important that this is sufficient to demonstrate that there are no adverse impacts to the health of the river, including with respect to the community's ability to use the river for recreational and other purposes.

The Department, through its assessment and any consent issues, is to require that the monitoring is sufficient to ensure that impacts and issues are identified at an early stage so that rectification actions can be implemented.

In finalising the detailed design of the project and in finalising operational plans for the scheme, consultation with relevant stakeholders including Council should be undertaken.

In doing so, it will be important that adequate consideration is undertaken to ensure the design and operation of the **AWRC** continues to meet water quality objectives, and that any impacts as a result of the project with respect to water quality management, impacts to creek geomorphology and aquatic species are identified and managed.

Should you require any further information regarding the comments, please contact me on (02) 4732 8567.

Yours Sincerely,

Kathryn Saunders  
**Principal Planner**

27 April 2022

Mr Nathan Heath  
Senior Planning Officer  
NSW Department of Planning and Environment  
[nathan.heath@planning.nsw.gov.au](mailto:nathan.heath@planning.nsw.gov.au)

Dear Mr Heath,

**Response to Submissions (RtS) report on Upper South Creek Advanced Water Recycling Centre (SSI-8609189)**

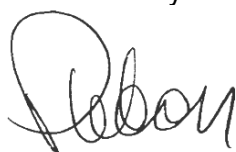
I refer to your email of 8 April 2022 to Canterbury Bankstown Council regarding the above matter.

Council has reviewed the Response to Submissions documents prepared by the Applicant currently on exhibition. Based on our review, Council requests that the following conditions of consent be added to the State Significant Infrastructure Application:

- All areas containing Cumberland Plain Woodland and/or threatened flora species impacted directly or indirectly from the proposal must be restored and/or remediated to a similar or better condition than that existing prior to the commencement of works.
- The BioBank site must not be impacted by any phase of the proposal.
- The applicant shall forward a Construction Traffic Management Plan to Council for information and the relevant road authority for approval.
- The applicant shall coordinate access to the site with Council's City Assets Division. The access shall be agreed and included into the final revision of the Construction Traffic Management Plan.
- Access within Lansdowne Reserve shall be agreed with Council's City Assets Division with required access route requirements determined prior to occupation of the site.

Please contact Ms Amita Maharjan on (02) 9707 9806 or [amita.maharjan@cbc.city.nsw.gov.au](mailto:amita.maharjan@cbc.city.nsw.gov.au) if you require clarification on this matter.

Your sincerely



Patrick Lebon  
**Coordinator Strategic Assessments**

Nathan Heath  
Senior Planning Officer  
Department of Planning and Environment  
GPO Box 39  
**SYDNEY NSW 2000**

**Re: Major Projects – New Request for Advice – Upper South Creek Advanced Water Recycling Centre (SSI-8609189) (Penrith, Canterbury-Bankstown, Wollondilly Shire, Liverpool City, Fairfield City)**

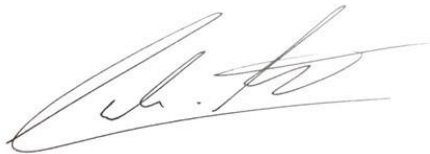
Thank you for the opportunity to provide feedback on the Response to Submissions (RTS) for the State Significant Infrastructure for the Upper South Creek Advanced Water Recycling Centre (AWRC).

Council Officers have reviewed the Submissions Report and are satisfied with the responses. Council reiterates the following points for consideration:

1. Given that there are seldom interim options proposed that cater to demand, the timely construction of this facility is critical in the utility servicing in Liverpool's Growth Areas and a minimisation of delays would be much appreciated.
2. All documents prepared in relation to heritage should be provided to Council's Local Studies section in the Library for future research opportunities in accordance with Council's previous comments.
3. It is anticipated that Council's initial contamination comments are to be actioned by the consent authority.

Thank you for taking the time to consider Liverpool City Council's submission on the AWRC. If you have further questions, please contact Jerard Tungcab, Strategic Planner on 02 8711 7860, or at [tungcabj@liverpool.nsw.gov.au](mailto:tungcabj@liverpool.nsw.gov.au)

Sincerely,



**Luke Oste**  
Coordinator Strategic Planning