



23 November 2021

Mr Nathan Heath
Department of Planning, Industry and Environment
4 Parramatta Square
PARRAMATTA NSW 2150

Dear Nathan,

Sydney Water Recycling Facility Submission (SSI-8609189)

Western Sydney Airport Co (WSA) is writing in response to the public exhibition of the above State Significant Infrastructure, identified as SSI-8609189. We understand that the proposal comprises a water treatment recycling facility, including the first stage approval of works, and concept demonstration that further expansion of the works can be undertaken (but subject to a separate EIS process). Additionally, a range of ancillary piping infrastructure is proposed under this application, including along Elizabeth Drive to the immediate north of Western Sydney International (Nancy-Bird Walton) Airport (WSI).

In summary, WSA recognises that this facility is critical to the delivery of water supply to the Western Parkland City. However, wildlife attraction is also described as a 'very high risk' throughout the documentation submitted with this application (Avisure Sydney Water Wildlife Hazard Assessment). Given this risk, combined with a flexible proposed design approach, WSA requires additional assurance from Sydney Water and the Department of Planning, Industry and Environment (DPIE) to guarantee this risk has appropriate and sufficient management measures in place to adequately protect WSI from wildlife strike. Being directly under the north-east approach path of Runway 1, this will need to be ensured as a long-term outcome for WSI.

Our understanding of the project, as well as key comments are provided through the following sections of this letter. We are available to discuss the matter further once you have reviewed our submission in relation to this application.

Project Summary

Based on the project description in the provided Environmental Impact Statement, WSA understands that the proposed development is seeking approval for the following:

Building and operation of a new facility and associated pipelines to provide wastewater services for the WSAGA and SWGA. The project includes:

- *a new Advanced Water Recycling Centre (AWRC) to collect wastewater from businesses and homes and treat it, producing high-quality treated water, renewable energy and biosolids for beneficial reuse;*
- *a new green space area around the AWRC, adjacent to South Creek and Kemps Creek, to support the ongoing development of a green spine through Western Sydney;*



- *new infrastructure from the AWRC to South Creek, to release excess treated water during significant wet weather events, estimated to occur about 3 – 14 days each year;*
- *a new treated water pipeline from the AWRC to Nepean River at Wallacia Weir, to release high-quality treated water to the river during normal weather conditions;*
- *a new environmental flows pipeline, from Wallacia to Warragamba River, to release high quality treated water to the river just below Warragamba Dam;*
- *a new bring pipeline from the AWRC connecting into Sydney Water's existing wastewater system to transport brine to the Malabar Wastewater Treatment Plant; and*
- *a range of ancillary infrastructure.*

Application Format and Legislative Requirements

1. Having reviewed the application, it is understood that:
 - Stage 1 of the project comprises the construction of the AWRC to a maximum of 50ML/day, as well as all piping infrastructure, etc.
 - Stage 2 of the project, which is not subject to this EIS and will be subject to one or more future EIS's, comprises expansion of the facility to the ultimate capacity (100ML/day).

If the scope of the project changes throughout the assessment process, please let us know as this may affect the comments which have been provided.

2. Section 4.2 of the submitted EIS suggests that components demonstrated in the EIS, including the layout and composition of the water treatment facility, as well as the layout of the green space, are indicatively shown in this application. This suggests that the layout could change as a result of further detailed design, contractor requirements, SSI assessment or the like.

This also appears to also be acknowledged in the Avisure Wildlife Risk Assessment, which has been updated a number of times (most recently in November 2020) to acknowledge the changing context and design of the site. However, the most recent version of this report is almost a year old (published November 2020) and needs to be updated to reflect the changing design at the site, and the changed wildlife context of the surrounding area. Additionally, there must be a review undertaken of the specific final layout by Avisure, given the potential wildlife risks of this application. WSA should also have a chance to review this as part of the process.

As part of this work, the specific measures from the Avisure Report (appended to the Aurecon Airport Safeguarding Report) would need to be detailed, noting:

- a) where such measures are proposed on the detailed design;
- b) which suggested measures have not been proposed in the detailed design; and



c) what the residual wildlife attraction risk is in relation to the proposal.

Recommendation: That during the detailed design phase, the aviation safeguarding documentation, including the Wildlife Risk Assessment, be updated and the final design be reviewed to confirm any additional or changed mitigation measures. This information would be provided to WSA for comment.

3. It is also noted at Section 13.1.2 of the EIS that an assumption has been made that *“construction of the project will be complete before Western Sydney International Airport is operational”*. With operations identified as being complete in ‘mid-2025’ (Section 4.1 of the EIS), there needs to be contingencies planned for in the instance that the project construction period is still underway when the airport becomes operational. With WSI projected to be complete in 2026, with testing occurring as soon as 2025, there is a risk that some overlap could occur between the construction of the Sydney Water and WSI, and therefore there needs to be contingencies in place for if this occurs.

Recommendation: That contingencies be in place, including any further assessment required, in the instance that delays to the Sydney Water facility construction mean that construction activities are occurring in a concurrent manner with operations at WSI.

4. In line with the assumed concept staging, WSA has not provided specific comments in relation to the concept component of the development, except that when construction of that stage is underway WSA will be an operational airport which will affect the manner in which construction activities can be undertaken. This will be a relevant consideration at this future point in time.

Recommendation: That WSA be notified of any changes to the identified staging of the project.

5. The exhibition of the Aerotropolis Planning Package (October 2021), which includes additional relevant aviation safeguarding provisions, and may affect some of the legislative context of the proposed development. This package should be considered as part of the assessment of this application, as well as any future documentation by the Western Sydney Planning Partnership / Department of Planning, Industry and Environment which is likely to be exhibited / finalised in the coming months (noting current DPIE position to finalise majority of assessment by end 2021).

Recommendation: That further assessment of the recently exhibited documentation be considered as part of this application.

6. Section 13.1.2 of the EIS identifies that the aviation assessment *“was limited to impacts from the AWRC ... because pipeline infrastructure is primarily located below ground, with some very small footprint above-ground structures. Pipeline operations are therefore considered to present no risk to airport operations”*.

The phrasing of this qualifying statement could be interpreted that no assessment has been undertaken to the pipeline component of the development. To ensure that all impacts are appropriately assessed, it should be clarified that assessment has been undertaken of the risk of the pipeline, given the potential for matters to impact on aviation safeguarding such as protected airspace intrusions during construction (e.g. machinery use), wildlife attraction to



exit points from the pipeline, and traffic impacts from construction, particularly the pipeline construction on Elizabeth Drive, where there will be other major infrastructure under construction such as the M12 and Sydney Metro Western Sydney Airport line.

Comments in relation to on site WSI impacts from the works (e.g. traffic) are discussed further below.

Recommendation: That further information be provided to WSA to demonstrate that the pipeline system would not result in aviation safeguarding impacts.

Wildlife Attraction

7. Section 3.3.4 of the EIS (Site Layout and Design) identifies that *“the indicative site layout has evolved over time as design has progressed and will continue to evolve through detailed design”*. This flexible approach is maintained throughout many parts of the EIS, however the current Management Measures do not reflect a requirement to provide a detailed assessment at a future point once the detailed design stage is complete.

Management Measure AO01 only requires the Applicant to *“investigate opportunities for additional design measures”*, and does not provide sufficient certainty that:

- the detailed design of a ‘very high risk’ development, to ensure that wildlife risk does not present an adverse risk outcome to the future operations of WSI; and
- the measures identified would actually be implemented in the final design.

The mitigation measures require further detail and specific ‘checkpoints’ to ensure that this development is appropriately managed in relation to wildlife risk.

Recommendation: That the Management Measures identified in Volume 4 of the EIS be revised to provide specific additional certainty that adverse wildlife attraction outcomes would not impact WSI operations.

8. In line with the above, the measures which are identified in the Aviation Risk Assessment (some of which are mentioned at Management Measure AO01), should be identified in a specific, final detailed design in order for the aviation consultant to provide specific comment on their risk, and for WSA to be able to review that position.

Recommendation: That wildlife risk design management measures be identified on a specific and final design, so that an assessment can be undertaken by the wildlife risk consultants for the project. Following, this WSA would have an opportunity to review the final risk assessment and design.

9. The following comments are provided in relation to Section 5.2.1 of the wildlife hazard assessment:
 - In relation to Point 2, further detail is needed to mitigate the identified nesting risk.
 - In relation to Point 3, further detail is needed in relation to the mitigation of risk from water storage facilities, including their form and function as well as how wildlife would be managed in each case. Covering of these water storage facilities is to be considered as part of any risk evaluation and is the preferred outcome.



- In relation to Point 4, specific landscaping and grassed area species selection is to be reflected in an updated wildlife hazard assessment.

Recommendation: That the above specific measures are further reviewed in the context of this submission and specific wildlife hazard risk of detailed design of this site to WSI.

10. As part of the wildlife risk assessment, consideration is to be provided of the cumulative impact of this proposal alongside other wildlife attracting development within proximity of the site, which is likely to impact on the movement of high-risk species.

Recommendation: The wildlife risk assessment be updated to include cumulative assessment, factoring in other nearby high-risk existing sites.

11. The following table identifies listed Management Measures which would require further consideration in a wildlife risk context. These measures should be reviewed to confirm that if they were to be implemented, how wildlife risk would be assessed in each measure.

Reference	Management Measure
G05	Restoration of vegetation, rehabilitation of habitat
UD02	Place management and green space measures
WW11	Riparian planting during detailed design
WW18	Establishment of a vegetated riparian zone
W01	Wildlife Management Plan

Recommendation: That Management Measures, including those listed above, be reviewed to confirm that wildlife attraction risk has been adequately assessed.

12. Table 15-5 of Volume 4 of the EIS identifies key project outcomes. “Ensure that 24-hour operations of WSI and aviation safeguarding is ensured” needs to be included as a key project outcome.

Recommendation: An additional key project outcome is identified in relation to aviation safeguarding of operations at WSI.

13. Specific measures at Table 4.4 of the Landscape Character and Visual Assessment table include revegetation, vegetative screening, and living walls, with the intent to preserve landscape character. These measures don’t appear to have been assessed in the wildlife risk assessment, and the risk of these measures needs to be confirmed as part of the future design. Each of these components would likely increase the wildlife attraction risk assessment, especially on a cumulative basis with other development at the site.

Recommendation: That the measures included in the landscape character and visual assessment be assessed in relation to aviation wildlife risk.

14. Management Measure AO02, requiring the preparation and implementation of a Wildlife Management Plan is supported. This plan should be prepared in consultation with WSA.



Recommendation: That the Wildlife Management Plan identified is prepared in consultation with WSA.

15. Similar to the wildlife management approach of the water treatment plant, it is understood that a final design to the green space area is not detailed in the application and will be subject to a future stage of detailed design. Given that WSA requires further certainty that the final green space layout would not result in adverse wildlife attraction risk, further assessment is required of the species selection, distribution and layout of the final design. This would include any potential for habitat creation in this space.

Recommendation: That wildlife risk design management measures of the green space be identified on a specific and final design, so that an assessment can be undertaken by the project wildlife risk consultants. Following, this WSA would have an opportunity to review the final risk assessment and design.

16. The landscape character visual assessment includes assessment of “indicative wetlands”. It is to be confirmed whether the green space would comprise wetlands, which carry a very high risk of wildlife attraction over and above ‘green space’ which is typically dry in nature and less attractive to the nesting of species.

Recommendation: The ‘wetlands’ included in the landscape character visual assessment be confirmed, which are a very high wildlife risk.

Traffic

17. Noting that a pipeline is proposed along Elizabeth Drive past the WSI site, further consultation should be had with both the TfNSW M12 team and Elizabeth Drive upgrade team, Sydney Metro and WSA, to ensure that impacts of pipeline construction are mitigated.

Recommendation: That further discussions are had with TfNSW, Sydney Metro and WSA, with the intent of minimising cumulative construction impacts of the Sydney Water pipeline against the road upgrades proposed along the corridor.

18. Noting that the western approach of the intersection of Elizabeth Drive and Clifton Avenue is identified to be LOS F with project in 2023, a finding of the traffic assessment is “*To develop appropriate mitigation measures stakeholder engagement will also be required with the M12 project team and TfNSW*”. Further information on how this intersection (which already benefits from a right turn bay) will be upgraded is required, given the unreasonable LOS F outcome at this approach.

Recommendation: That further information be provided in relation to the measures proposed to mitigate the impact of the proposal on Elizabeth Drive, which already operates at LOS F.

Other Issues

19. The landscape character report notes “*lighting at the AWRC will be considered at detailed design, however the impact assessment assumes that the following measures are implemented to reduce potential impacts:*

- Use of downlighting to avoid light spill; and
- Layout of lighting is not to replicate airport runway, given the proximity to WSA

In addition to this, there should be consideration of the Draft Western Sydney Aerotropolis Phase 2 DCP lighting controls.

Recommendation: Consideration is to be given to the lighting provisions outlined in the Draft Western Sydney Aerotropolis Phase 2 Development Control Plan.

20. There is significant topographical change across the site, with the Obstacle Limitation Surface (OLS) height to ground level being approximately 75m in the south-western corner of the site. Based on the information available, none of the proposed buildings appear to extend into the OLS, however it should be noted that the *Airports Act 1996* covers any intrusions into prescribed airspace, which could include:

- constructing permanent structures, such as buildings, into the protected airspace;
- temporary structures such as cranes protruding into the protected airspace; or
- activities causing non-structural intrusions into the protected airspace such as air turbulence from stacks or vents, smoke, dust, steam or other gases or particulate matter.

If it is likely that any of the above components would result in an impact on protected airspace (e.g. operation of the crematorium), then approval will need to be obtained under in accordance with the *Airports Act 1996* and the *Airports (Protection of Airspace) Regulations 1996*. We would require this as a condition on any future consent in relation to this application.

Recommendation: That a condition of any future consent include provisions to ensure that any intrusions into prescribed airspace are referred to WSA.

21. Noting that CASA and Airservices have been contacted prior to lodgement of this application by Sydney Water, this application has been forwarded to these two organisations as well as the Commonwealth Department of Infrastructure, Transport, Regional Development and Communication. Should there be any changes to the development which would affect the comments previously provided by these organisations, then further assessment may be required.

Recommendation: That any changes to the components of the development which pertain to CASA / Airservices comments (e.g. vertical flaring) be forwarded to the respective agencies, as well as WSA, for re-assessment.

22. Given the significant solar panel portion of the site, a review should be undertaken of the angle of these to ensure that aircraft overhead would not be adversely affected by glare from the panels. It is also noted that the identified anti-glare treatment of solar panels is supported.

Recommendation: That the angle of solar panels be reviewed during detailed assessment, to confirm that they will not result in adverse glare outcomes to pilots.

23. Comments do not incorporate those from Bankstown or Camden Airports, and comments from these organisations should be sought separately.



**Western
Sydney
Airport**

Our environment team is currently continuing to review any other documentation submitted as part of this application, and we will provide any future comments to you separately if required. We also request an opportunity to review the CEMPs as they are developed, following any future development consent issue.

Thank you again for the opportunity to comment. We look forward to the applicant's response to each of the above issues. If you would like to discuss further, please contact tsmith@wsaco.com.au.

Yours Sincerely,

A handwritten signature in blue ink that reads "K. Osborne".

Kirk Osborne

Executive Manager, Land Use Planning and Approvals