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Our Ref: 190395, 194620

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RE: RtS for SSD-10272349 Yiribana Logistics Estate

Thank you for notifying Sydney Water of RtS for SSD-10272349 Yiribana Logistics Estate proposed by The GPT Group (GPT). The development consists of a Concept Development application for an industrial estate consisting of five warehouses including approximately 151,125m² of industrial, warehouse and distribution centre floor space and 6,735m² of ancillary office floor space.

Sydney Water has reviewed the RtS report based on the information supplied and reiterates the following recommendations provided in our initial advice in response to the EIS for your consideration.

- The proponent should outline any sustainability initiatives that will minimise/reduce the demand for drinking water, including any alternative water supply and end uses of drinking and non-drinking water that may be proposed, and demonstrate water sensitive urban design (principles are used), and any water conservation measures that are likely to be proposed. This will allow Sydney Water to determine the impact of the proposed development on our existing and proposed services and the system capacity required to service the development.
- The proponent must obtain endorsement and/or approval from Sydney Water to ensure that the proposed development does not adversely impact any existing water, wastewater, stormwater main, or other Sydney Water asset, including any easement or property.
- When determining landscaping options, the proponent should take into account that certain tree species can cause cracking or blockage of Sydney Water pipes and therefore should be avoided.
- If this proposed development is going to generate trade wastewater, the developer must submit an application requesting permission to discharge trade wastewater to Sydney Water's wastewater system. Applicant must wait for approval and issue of a permit before any business activities can commence. The permit application can be made on Sydney Water's web page through Sydney Water Tap In <http://www.sydneywater.com.au/tapin/index.htm>

The proposed development may impact some of our future trunk stormwater infrastructures therefore specific stormwater requirements will apply. Please find our stormwater comments for the proposed development overleaf.

Adherence to the Sydney Water Stormwater Scheme Plan

1. Sydney Water acknowledge GPT's inclusion of temporary stormwater quality and quantity management infrastructure. This infrastructure would not be required once the development is connected to the regional scheme infrastructure at which point, any temporary stormwater management infrastructure would be expected to be decommissioned/disconnected, including rainwater harvesting tanks, and the development must connect to the purple pipe recycled water reticulation system.
2. The documentation must clearly demonstrate that the mandatory 15% pervious area has been provided for the *ultimate state* development.
3. Any stormwater quality management measures across the development specified by GPT in the Submissions Report must be SQIDEP approved.
4. Street trees are to be designed as passively irrigated street trees. Passively irrigated street trees provide an important component of the stormwater drainage scheme infrastructure sizing which we understand Yiribana will ultimately connect to. The street trees act principally as a stormwater retention device as part of the wider stormwater infrastructure. To achieve the required stormwater retention objectives, the street tree system shall be designed to meet the following requirements:
 - Soil Filter Layer Volume of 126m³ / 0.085 ha of road corridor (inclusive of shared path, tree planting/pervious verge and road carriageway, refer Note 1, 2, 3 and 4)
 - Soil Filter Layer to have a minimum hydraulic conductivity of 50mm/hr
 - Extended detention depth of 0.01m across entire filter layer, which equates to 1.26m³/ 0.085ha of road (refer Note 5)
 - Street tree spacing to achieve government canopy shading targets, nominally spaced at 8m centres.

Information Requirements

• WSUD Plan

No catchment/WSUD Plan or table has been included in the reporting. A plan and table must be provided displaying:

- all natural and proposed developed catchments (including those upstream of the Yiribana estate development boundary) and land use splits (including areas/% impervious)
- drainage locations and any proposed flow diversions
- temporary WSUD systems
- proposed irrigation areas for temporary tanks and ponds

• DRAINS Model data input

The information provided indicates that the flow rate for the channel design is significantly lower than the flow rate considered in Sydney Water's scheme plan assessment. With regard to this, the proponent should provide the parameters utilised in the hydrologic modelling (DRAINS) for the site in an Excel format. This should include the following.

- full catchment mapping
- adopted loss rates
- times of concentration
- flow path lengths
- adopted rainfall

Please note the appropriate hydrologic method to apply in DRAINS Model for a development of this size is either Laurensens (Rafts) or ILSAX.

Additional guidance on appropriate hydrologic and hydraulic modelling will be provided in the Stormwater Scheme Infrastructure Technical Guidelines DRAFT which is expected to be finalised in December 2022.

Trunk Drainage

The trunk drainage channel through the Yiribana Logistics site will be managed by Sydney Water. We provide the following advice in line with the forthcoming Stormwater Scheme Infrastructure Technical Guidelines DRAFT (the Guidelines).

1. Right of access will be required for Sydney Water to manage the asset in perpetuity. Access infrastructure for vehicles along the waterway will also be required. Please refer to the Guidelines for more details.
2. The trunk drainage channel including riparian corridor will be assessed in relation to standards set out in the Guidelines.
3. The Guidelines also advise the following to assist in informing the basin design:
 - drawings have indicated a 5m wide channel with 3.8m base to convey low flows.
 - The low flow channel must be sized to contain the 4EY.
 - Batter slopes should be between 1:4-1:6 wherever feasible, localised steepening of banks with appropriate surface treatment to protect from shear stress and velocity will be accepted to facilitate low flow channel base meander.
 - Sydney Water requires a compound waterway form wherever possible to assist in provision of low flow channel sinuosity.
4. The longitudinal grading of the trunk drainage is significantly greater than 0.8% as such details of shear force calculations are required to be provided for low flows, 1% and 10% AEP flows and demonstration of appropriate surface treatment to protect from erosion. This is particularly important at the entry and exit of the major bends.
5. Part of the function of the naturalised trunk drainage channels is to provide amenity and access to natural, green cool space within the precincts. It is recommended to consider safe access to the perimeters of the corridor albeit above the retaining wall level.
6. Sydney Water will not accept private OSD or interim stormwater retention storage in the naturalised trunk drainage channel.
7. Sydney Water encourages robust planting palette that enhances the ecological value of the site, balanced with considerations of not increasing attraction of wildlife that may be

problematic to airport operations. The proponent should refer to the Guidelines for more details.

8. Documentation must also be provided to demonstrate that the selected planting plan will facilitate flood conveyance appropriately at establishment and full maturity. The proponent should refer to the Guidelines for appropriate Mannings 'n' Values to test.

If you require any further information, please do not hesitate to contact the Growth Planning Team at urbangrowth@sydneywater.com.au.

Yours sincerely,



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