Sydney WATER

3 October 2024 **Our reference**: 218552, 213132

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RE: Response to Submissions for SSD-46983729 at 1030-1048 & 1050-1064 Mamre Road, 59-62 & 63 Abbotts Road, 290- 308 Aldington Road

Westlink Industrial Estate Stage 2

Thank you for notifying Sydney Water of SSD-46983729 at 1030-1048 & 1050-1064 Mamre Road, 59-62 & 63 Abbotts Road, 290- 308 Aldington Road, which proposes site preparation works; site servicing and utility infrastructure including stormwater infrastructure; subdivision of the site into six individual lots; and construction and operation of a warehouse and distribution centre (Warehouse 2) with a total GFA of 38,640m^2.

Sydney Water understands design refinements and amendments have been made since public exhibition of SSD-46983729, including increases to building setbacks from the trunk drainage channel, amendments to carparking layouts, development of detailed trunk drainage drawings, and revised subdivision layouts, among other changes.

We have reviewed the following documents supplied and provide the following comments to assist in understanding the servicing needs of the proposed development.

- Civil Works Package – On lot works- Stage 2 by AT&L Rev E 14.08.24
- Civil Works Package – Infrastructure works- Stage 2 by AT&L Rev D 27.09.23
- Westlink Stage 2, Kemps Creek – Naturalised Trunk Drainage Channel Design by JWP Rev A 14.0824
- Trunk Drainage Detailed Concept Design by JWP Rev1
- Water and Stormwater Management Plan Stage 2 by AT&L Rev 5 16.08.24
- Flooding Response by Stantec 15.08.24

Sydney Water requests additional information and further clarification regarding the following stormwater matters. The Department is advised to re-refer this SSDA for Sydney Water's review once the following matters have been addressed.

General

- There are several inconsistencies identified in the responses provided by the proponent to address Sydney Water comments across the following documents. It is recommended that the proponent provide a consolidated and consistent response to the EIS comments for Sydney Water's review.
    1. Submissions Report Westlink Industry Park – Stage 2
    2. Appendix I – Trunk Drainage Design Report
    3. Appendix O – Flooding Response

Note: The responses provided as part of Trunk drainage design report and flooding response are only considered as latest and has been referred in preparing this advice.

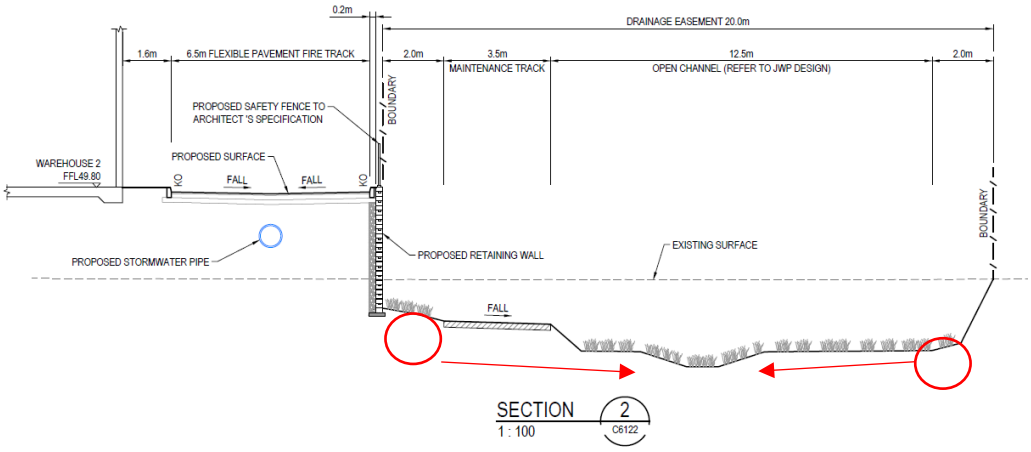
- It has been observed that the on-lot and estate civil drawings and updated water management plan by AT&L, indicate a 20m wide drainage easement, whereas the updated Trunk Drainage Report and drawings by JWP show an 18.9m wide drainage easement. All documentation should be revised to reflect the correct width of drainage easement based on the 2D modelling.
- The on-lot civil drawings show a retaining wall on the northern side of the trunk drainage adjacent to Mamre Road. However, the updated trunk drainage drawings and the flood modelling do not reflect this retaining wall. Please ensure the civil drawings are updated accordingly.
- The trunk drainage section detail in the on-lot civil drawings needs to be revised to align with the 2D modelling and be consistent with the trunk drainage drawings.
- The cross-section detail of the OSD in Lot 2 and its connection to the trunk drainage are inconsistent between the trunk drainage drawing and the on-lot civil drawings. The OSD volume must be designed with the appropriate tailwater condition to the satisfaction of Council.

Consistency with the Scheme Plan

- The trunk drainage location has been shifted to the northern boundary of the lot, deviating from the published Stormwater Scheme Plan. As a result, a skewed culvert is now necessary under Mamre Road to connect to Sedimentation Basin 17 and to avoid spatial conflict with the sewage pumping station. Written in principle agreement from Transport for NSW is required regarding the realignment of the culvert, which has not been provided. The Work Agreement Deed and the detailed design drawings provided are not considered adequate.
- The set of drawings referenced in the Approval Letter (Transgrid Reference Number 2023-058) must be provided for Sydney Water's review. The summary of findings under Section 2 (Technical Conditions) notes that "Proposed stormwater line and retaining wall are outside the easement", whereas part of the trunk drainage channel is within the Transgrid easement. Please ensure that these discrepancies are addressed and that the relevant drawings are made available for review.

Trunk Drainage

- The design of trunk drainage by Hydraulic Toolbox is deemed inadequate. The proponent has submitted a reduced width trunk drainage channel that triggers the need for 2D modelling to accurately determine the capacity of trunk drainage system.
- The determination of the PMF by extrapolation is not acceptable. The PMF is to be determined using the GSDM for trunk drainage design.
- The current design does not achieve the target for Sinuosity.
    - Sydney Water recommend increasing the average wavelength.
    - After retaining a minimum 1m buffer, the proponent could potentially transfer the remaining portion of the 2m buffer next to the maintenance track to the upper bank to allow for an appropriate channel wavelength.



- A rock lined low flow channel is proposed for a 27m section. Rock lined low flow channels are a poor outcome and should be designed out as much as possible. Sydney Water recommends increasing the slope to 0.7% or greater with a short rock chute rather than the rock lined low flow channel. Compliance with Shear stress and velocities are to be confirmed through 2D modelling.
- The proponent is to use 4EY flowrate for designing the low flow channel as outlined in the Draft Stormwater Scheme Infrastructure Design Guideline (Sydney Water, 2024) rather than 0.5X12EY.
- The channel slope adopted between chainage 242.84 to 323.05 is documented as 2% in the calculation, while it is shown as 0.7% in the longitudinal section. This discrepancy must be addressed.
- The headwall outlet section shown in CD042 is to be updated to accurately reflect the incoming 1350dia pipe.
- The channel long section should indicate the critical locations such as off-take to Sediment Basin 17 and discharge to Kemps Creek.
- The drawings indicate that overflow from IOP is discharged into the trunk drainage. Sewer overflows should not be discharged to the trunk drainage upon establishment. Please clarify if this is an interim arrangement and provide details about the timing of construction of the channel and IOP overflow as well as ownership and maintenance responsibility during the interim period and for the decommissioning of the overflow pipe.

Cross section

- The cross section at chainage CH300 shows battering towards Stage 2 development area. Please plot 1% AEP water levels in the cross section to show that the flow is contained within the channel. Additional cross section at chainage CH315 is to be provided.
- The retaining walls that support the maintenance track between chainage CH255 and CH300 are to be marked in the cross sections and sandstone retaining walls to be used consistent with the Stage 1 channel design.

It is advised that the proponent refer to Draft Stormwater Scheme Infrastructure Design Guideline (Sydney Water, 2024) and Appendix C – Engineering Requirements Checklist for the documentation required during the DA stage, when changes are proposed to the scheme plan.

As a minimum, the proponent is to provide mapping of water levels, velocity and shear stress for 1% AEP storm for the designed trunk drainage width. However, the design must not preclude the threshold for the minor storm events. Note Sydney Water may request additional drawings at the detailed design stage.

The proposed trunk drainage affects the downstream trunk drainage connected to the regional basins. The submission documents do not provide sufficient detail to show the proposed alignment for the tail out drainage from Mamre Rd Culvert to Kemps Creek. As the proposal affects alignment downstream of the site, all drawings must demonstrate functional design resolution (as mentioned above) of the full length of proposed channel realignment. The channel levels must be consistent with Sydney Water levels and must be confirmed prior to the detailed design.

Mamre Rd Culvert IL (indicative) - 41.474

Online Sediment Basin EDD - 40.38

Channel invert following online Sediment Basin – 39.273

Channel invert at discharge point to waterway – 36.668

Additionally, Sydney Water notes that the proposal to reduce the width of the trunk drainage from the Scheme plan affects the broader Scheme objectives. Therefore, the proponent must demonstrate that the reduced corridor width meets all required criteria and the equivalent area lost for biodiversity, ecology and cooling will need to be provided elsewhere within the site. Sydney Water will not provide endorsement or support for these works to be undertaken at a later stage as they are fundamental to the scheme plan.

Next Steps

Sydney Water cannot endorse this application until the request for further information has been met.

The Department is advised to defer the approval of this SSD and re-refer this application to Sydney Water for review once stormwater concerns have been addressed.

Should the Department require any further information, please contact the Growth Planning Team via urbangrowth@sydneywater.com.au. .

Yours sincerely,

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