

Department of Planning and Environment



Our ref: DOC23/114337

Your ref: SSD-9138102

David Schwebel
Planning Group
Department of Planning and Environment
4 Parramatta Square, 12 Darcy Street
Parramatta NSW 2150

7 March 2023

Subject: Westlink Industrial Estate - Stage 1 (SSD-9138102), 290-308 Aldington Road, 59-62 Abbotts Road and 63 Abbotts Road, Kemps Creek (Penrith) – Response to Request for Further Information

Dear David

I refer to your request received on 15 February 2023 seeking comments from the Environment and Heritage Group (EHG) regarding the Westlink Industrial Estate Stage 1 (SSD-9138102) Response to Request for Further Information dated 14 February 2023 (RFI response).

EHG understands that the proposed amendments to the proposal include the addition of a trunk drainage channel on Lot 4 and revisions to retaining walls on Lot 1.

EHG has reviewed the relevant documents and provides comments in regard to waterway health in Attachment 1.

If you have any queries, please contact the Greater Sydney Planning Team on rog.gsrplanning@environment.nsw.gov.au

Yours sincerely,

A handwritten signature in black ink, appearing to read "MStewart".

Marnie Stewart
A/Senior Team Leader Planning
Greater Sydney
Biodiversity and Conservation

Attachment 1 – EHG comments - Westlink Industrial Estate Stage 1 (SSD-9138102) RFI response

Waterway health

Erosion and Sediment Control

EHG raises the following concerns about the submitted Erosion and Sediment Control (ESC) plans:

- The submitted information does not contain suitable detail or calculations to illustrate how the stormwater targets will be achieved.
- The ESC plans do not meet the requirements of the Mamre Road Precinct Development Control Plan (DCP) Sections 2.4 and 4.4.2 and *Technical guidance for achieving Wianamatta–South Creek stormwater management targets* (DPE, 2022).
- A separate ESC plan certified by a Certified Professional in Erosion and Sediment Control (CPESC) which outlines how the construction phase stormwater targets are achieved has not been provided.
- The ESC plans are considered deficient for the scale of disturbance proposed.

Information required

It is recommended that the applicant provide a revised ESC plan which meets the requirements of the Mamre Road Precinct DCP Sections 2.4 and 4.4.2 and *Technical guidance for achieving Wianamatta–South Creek stormwater management targets* (DPE, 2022). The revised ESC plan should be certified by a CPESC and address the following:

- Plans for each major phase of works, including clearing and grubbing, bulk earthworks (existing and final levels), civil works, and stabilisation/practical completion.
- Identify the type of sediment basin and provide details for all functional components (eg. forebay, level spreader, spillway, dosing system, flocculant type). Note that sediment basin Type-A/B will likely be required to achieve the DCP Table 5 design targets.
- Provide sediment basin calculations demonstrating compliance with the DCP Table 5 design targets.
- Provide catchment plans identifying the sub catchments for all major drainage and sediment controls for each phase of works.
- Provide calculation tables and sizing/dimensions for all major controls during all phases of works.
- Provide a construction sequence identifying the order and timing for both the implementation and decommissioning of all controls, relative to specific site activities/hold points.
- Provide details on the timing, methods and performance requirements for stabilisation of each area of site disturbance.
- Provide specific advice in relation to dispersive soil management – particularly in relation to excavated drainage controls.
- Provide details on how external catchment flows will be managed around or through the works without becoming contaminated.

Water and Stormwater Management Plan (and MUSIC model)

A separate Water and Stormwater Management Plan (and MUSIC model) which outlines how the operational phase stormwater targets are achieved has not been provided. A high level summary of the strategy has been included in the Civil Infrastructure Plan (prepared by AT&L). The stormwater strategy provided in the Civil Infrastructure Plan proposes a strategy which has a number of issues:

- Catchment Plan / Table – A drainage catchment plan is provided in the Civil Infrastructure Plan but the catchment plan / table does not match the MUSIC model.
- GPT
 - The GPT is located within the trunk drainage land. This should be discussed with Sydney Water.

- Drainage into and out of the GPT needs to be confirmed and how the drainage passes under the trunk drainage line.
- SPELFilter
 - The SPELFilter is located within the trunk drainage land. This should also be discussed with Sydney Water.
 - The 525mm pipe on which the SPELfilter is placed does not appear to drain freely to the trunk drainage (below the earthworks at the headwall) or it drains to the invert of the drain. This means the SPELFilter will not drain properly or be backwatered when there are any flows in the trunk drainage and therefore will not provide suitable treatment. Further resolution of this design needs to occur to ensure it can function at this location, otherwise an alternative measure will need to be resolved.
- Evaporation Pond – It is recommended that the value and purpose of the proposed 5700m² evaporation ponds be reviewed. Based on the MUSIC model it evaporates only ~1.8ML/yr of flow of a total 100ML/yr flow in the MUSIC model. This appears to be inefficient. EHG recommends reviewing alternative pond and irrigation strategies which link with the proposed harvesting pond to reduce the depth of the harvesting pond and deliver a more efficient infrastructure outcome.
- Harvesting pond and OSD:
 - The land tenure should be confirmed.
 - The proposed harvesting pond water level is RL 52.05 and base level RL 45.0 making the pond 7m deep. It is considered that this is excessive and has a number of water quality, management and safety implications which are high risk. It is recommended that the applicant review alternatives to reduce the depth (to 3m max) in the interim involving pumping flows out of this pond to another pond on the balance land which can be used for irrigation purposes. Ultimately, it is recommended that this pond is filled in and revegetated once the regional scheme is implemented. Further, appropriate design for safety must be considered with this pond.
 - Given the water level is RL 52.05, it is not clear how the pond will drain in storm events to the trunk drainage given the inverts at the outfall headwall appears higher than RL 52.05. It is considered that this needs to be resolved.

Information required

As per the requirements of the Mamre Road DCP and *Technical guidance for achieving Wianamatta-South Creek stormwater management targets* (DPE, 2022), the applicant should submit a separate Water and Stormwater Management Plan (and MUSIC model and spreadsheet) certified by a suitably qualified engineer which illustrates how the operational phase stormwater targets are achieved on the site in the interim until the Regional Stormwater Scheme is available. The Water and Stormwater Management Plan should include all the information outlined in the Mamre Road DCP and *Technical guidance for achieving Wianamatta-South Creek stormwater management and targets* (DPE, 2022) as well as address the issues raised in this letter.

Reliance on undeveloped land to achieve Stormwater Targets and Staging

This application focusses on the first stage of the development only and does not illustrate how the targets will be achieved in future stages.

Importantly, the proposal relies on the ‘undeveloped’ portion of the site to comply with the stormwater targets. If any further development is to occur on the site, then these stormwater targets will no longer be achieved without an update to the stormwater management strategy.

Further, it also relies on undeveloped land external to the site (not controlled or owned by the applicant) to achieve the stormwater targets. These areas appear to be used in the MUSIC model and the Excel Toolkit to illustrate compliance with the stormwater targets. Given the applicant does

not control this land, these external areas cannot be relied on by the subject development to achieve the stormwater targets.

Information required

As part of the Water and Stormwater Management Plan (and associated MUSIC modelling and Excel Toolkit), it is recommended that the applicant provide details of how the stormwater targets will be achieved for all stages of the development.

Further, for the Stage 1 application:

- External catchments not under the control of the applicant must be either:
 - Excluded from the model and Excel (to avoid those external catchments adding to the water balance and 'diluting' stormwater flows from the proposed development), or
 - Included as fully developed with stormwater management in place to achieve the stormwater targets so their potential flows are properly represented.
- All areas which form part of the interim stormwater management strategy (undeveloped land, ponds and irrigation areas) are to be clearly identified in the Water and Stormwater Management Plan.

Performance assessment (MUSIC model)

EHG has identified a range of concerns with the submitted MUSIC model (refer below).

Information required

It is recommended that the applicant update the MUSIC model for this stage and future stages of the development to be consistent with the *Technical guidance for achieving Wianamatta–South Creek stormwater management targets* (DPE, 2022). Specific issues which should be addressed include:

- Ensure the correct climate series is used as per *Technical guidance for achieving Wianamatta–South Creek stormwater management targets* (DPE, 2022).
- Ensure the catchments achieve the following:
 - Match the tables and catchments plans in the Water and Stormwater Management Plan (e.g. Table 5 in the submitted report does not match the MUSIC model).
 - Ensure all development areas in question are included in the MUSIC model (i.e. catchment B4 appears to be missing from the MUSIC model).
 - The total area in the model matches the area used in the Excel Toolkit Stormwater Flow Duration.
 - As noted above, external catchments not under the control of the applicant must be either:
 - Excluded from the model and Excel (to avoid those external catchments adding to the water balance and 'diluting' stormwater flows from the proposed development), or
 - Included as fully developed with stormwater management in place to achieve the stormwater targets so their potential flows are properly represented.
 - Direct baseflows from pervious areas on Lots 1 and 4 into the stormwater management systems. Baseflows from large pervious areas (undeveloped lots and trunk drainage areas) can be directed to the outlet.
 - The pond has an extended detention depth of 0.25m and notional design time of 38hrs. This 0.25m needs to be excluded from the flood modelling.

Stormwater Flow Duration Curve (EXCEL)

The stormwater flow (duration) EXCEL toolkit submitted is incorrect. The toolkit uses either 53.96ha or 84.57ha as the development area depending on whether the southern catchment is included. The MUSIC model adopted 58.717ha. The area in the toolkit must match the catchment area total in the MUSIC model.

Information required

As noted above, it is recommended the applicant ensure that the toolkit catchment areas matches the catchment areas in the MUSIC model and does not include external catchments not under the control of the applicant (unless these are modelled as fully developed as well with stormwater management).

Regional Stormwater Scheme (Sydney Water)

It is noted that no commitment to the regional stormwater scheme (Sydney Water) is made.

Information required

It is recommended that the applicant and DPE Planning discuss this issue with Sydney Water, noting that a regional approach to achieve the targets has been established by DPE.

End of Submission