

ASSESSMENT REPORT

Modification to Edmondson Park South MP 10_0118 MOD 3

1. INTRODUCTION

This report is an assessment of a request to modify MP 10_0118 for the redevelopment of Edmondson Park. The request has been lodged by JBA Urban Planning on behalf of UrbanGrowth NSW (the Proponent) pursuant to section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The proposal seeks to:

- modify the scope of the approval to include decommissioning, demolition and remediation of a former sewage treatment plant (STP) and oxidation ponds; and
- specify the above works can be carried out without the need for further environmental assessment.

2. SUBJECT SITE

Edmondson Park South is located within the South West Priority Growth Precinct, north-west of the M5 Motorway approximately six kilometres south-west of the Liverpool city centre (**Figure 1**). The site lies within the Liverpool and Campbelltown local government areas.

The site has an area of 413 hectares and is being redeveloped to provide 3,530 new dwellings, a new town centre, 150 hectares of regional parklands and associated infrastructure works.

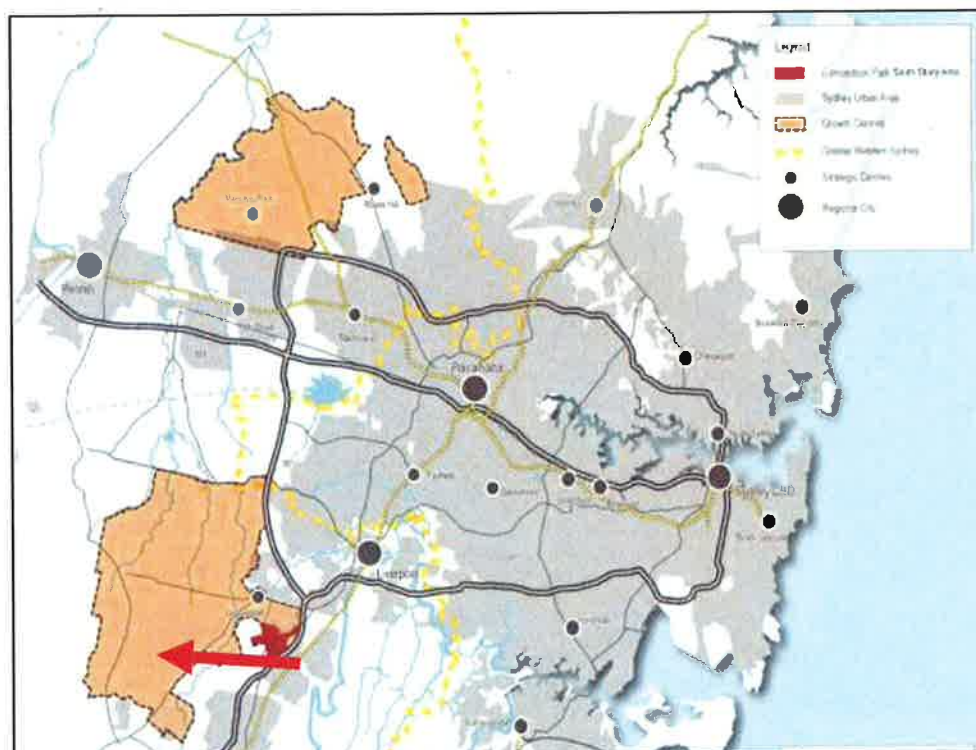


Figure 1: Location plan (source: Proponent's EA)

The STP was constructed to service the former Ingleburn Army Camp, which operated on the site from 1939. The plant was shut down in 2011 and is now redundant. The STP and its associated oxidation ponds are located in the north-eastern part of the Edmondson Park South site (**Figure 2**).

Key contamination issues associated with the STP include:

- E.Coli within the oxidation ponds;
- elevated Total Petroleum Hydrocarbons (TPH) and E.Coli in the sewage sludge drying beds;
- elevated concentrations of ammonia in groundwater and surface water;
- elevated concentrations of lead in the west oxidation pond; and
- Asbestos Containing Material (ACM) in fill materials at the eastern and western oxidation ponds.

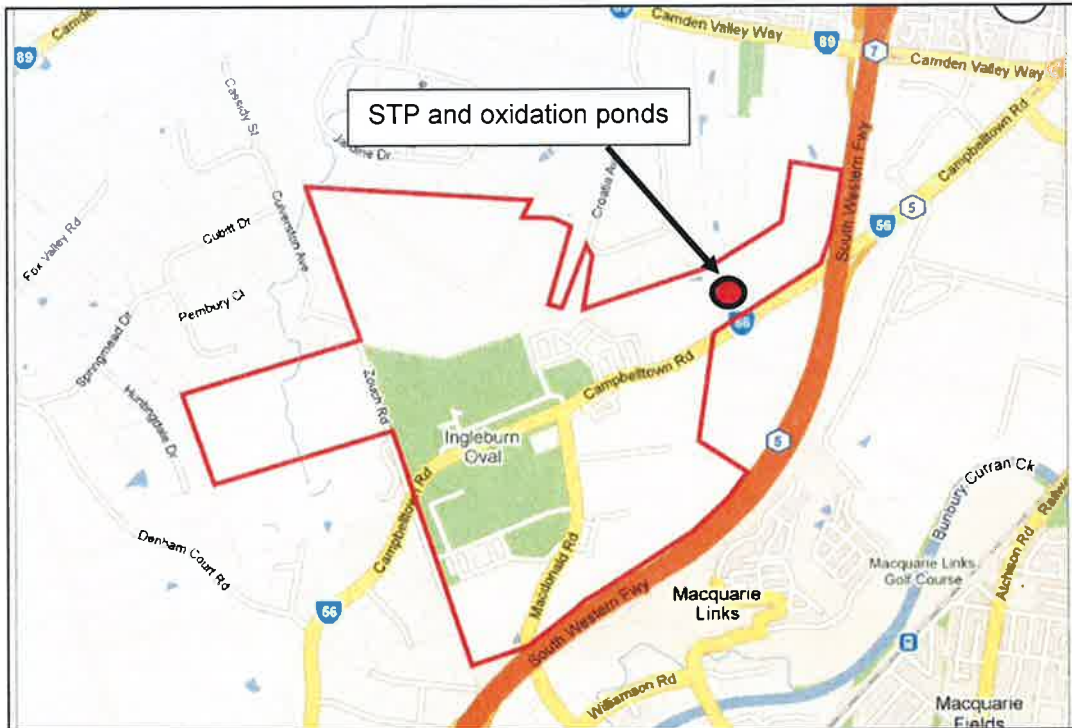


Figure 2: General location of STP and ponds in the context of the Concept Plan site

The STP is being removed and remediated to enable the site to be used as public parklands. The STP and the eastern oxidation pond are identified in the Concept Plan as being within an area designated for future use as a Regional Park to be transferred to the National Parks and Wildlife Service (NPWS). The western oxidation pond is located within the adjoining area zoned for Local Public Open Space which is to be transferred to Liverpool City Council (Council) (see Figure 3).



Figure 3: Aerial photo of STP and oxidation ponds (source: Proponent's EA)

3. APPROVAL HISTORY

On 18 August 2011, the Planning Assessment Commission (Commission) granted Concept Plan and Project Approval (MP 10_0118) for development on approximately 413 hectares comprising:

- residential development for 3,530 dwellings;
- development of the Edmondson Park town centre, including 35,000 sqm – 45,000 sqm of retail business and commercial floor space, along with associated uses, including a single 'landmark development' of up to 30 metres in height within 300 metres of the proposed station;
- protection of approximately 150 hectares of conservation lands within regional parklands;
- adaptive relocation of three heritage listed 'Riley Newsum' pre-fabricated cottages within the open space network, and retention of the Ingleburn Military Precinct and Mont St Quentin Oval;
- upgrade of Campbelltown Road with a maximum road width of 38.8 metres, and construction of three signalised intersections with Campbelltown Road;
- a temporary sales and information office and temporary signage associated with the sale of land;
- site remediation works;
- demolition of a number of existing buildings across the site; and
- associated infrastructure.

The approval has been modified on two occasions:

- Modification 1 - amended Condition 1.2 in relation to the timing for preparation of a rehabilitation plan for the revegetation of remediated areas.
- Modification 2 - approved amendments to the sales and information centre and associated signage.

One other modification is currently under assessment:

- On 18 August 2016, the Proponent lodged a modification request (MP 10_0118 MOD 4) which seeks a range of modifications to the Town Centre, including increased floor space, increased building heights and an increase in the number of dwellings. MOD 4 is currently being assessed.

4. PROPOSED MODIFICATION

4.1 Summary of Modifications

On 8 July 2016, the Proponent lodged a section 75W modification application (MP 10_0118 MOD 3) seeking to:

- modify the scope of the approval to include decommissioning, demolition and remediation of the STP and oxidation ponds
- specify the above works can be carried out without the need for further environmental assessment.

A detailed summary of the proposed modifications is outlined in Table 1:

Table 1: Summary of modifications

Temporary Access Road	Construction of a temporary three metre wide access road from the STP site to Campbelltown Road which is required because the original access was severed by the construction of the South West Rail Link.
Decommissioning and Demolition	Decommissioning and demolition of all buildings and structures associated with the STP, including the pump house, primary settling tanks and sludge digestors. This will involve processing of concrete demolition materials to recycle both the concrete and steel reinforcement components and will also entail handling and disposal of hazardous materials.
Oxidation Pond Dewatering	Water remaining in the oxidation ponds will be discharged to an intermittent tributary of Maxwells Creek. It is noted that when full, the ponds already discharge to this watercourse.
Sediment Removal	Following removal of the water from the oxidation ponds, the sediment within the ponds will require aeration. This may be achieved <i>in situ</i> or alternately a cleared area immediately south-west of the western oxidation pond will be used for drying the sediment. Further validation assessment will be carried out to characterise the distribution of contaminants through the sediments in each pond.

Remediation	<p>Remediation of the STP, oxidation ponds and environs to enable its future use as open space. The remedial works will include excavation of contaminated material and construction of an on-site containment cell to accommodate the material. The Proponent notes that where there is insufficient material to warrant on-site containment, material will be disposed off-site at appropriately licensed facilities.</p> <p>The remediation strategy provides for:</p> <p><i>Asbestos Impacted Material</i></p> <ul style="list-style-type: none"> • Excavation of asbestos impacted material and on-site containment in dedicated containment cells, or removal for off-site disposal at appropriately licensed facilities; and • On-site containment of asbestos impacted material from the site (and potentially from the wider Concept Plan site) within the containment cells, where there is sufficient material to warrant containment (where there is insufficient quantity it will be disposed off-site at appropriately licensed facilities). <p><i>Metal Impacted Soil / Sediment</i></p> <ul style="list-style-type: none"> • Excavation of areas of metal impacted soil/sediment requiring removal; and • On-site containment of lead impacted material within the containment cells. <p><i>Biologically Impacted Soil / Sediment</i></p> <ul style="list-style-type: none"> • Excavation and on-site treatment of biologically (E.Coli) impacted soil / sediments, and on site treatment via land farming / aeration, followed by on-site reuse, potentially as part of the capping media, or off-site disposal. <p><i>Ongoing Management</i></p> <ul style="list-style-type: none"> • Preparation and implementation of an Environmental Management Plan for the management of contaminated materials within containment cells where constructed and utilised.
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4.2 Need for Modification

Pursuant to section 75P(1)(c) of the EP&A Act, the Concept Plan specified approval of a number of aspects of the development for which no further environmental assessment was required, being:

- remediation works in accordance with the RAP relating to Lots 1, 2 and Part Lot 7 and Part Lot 8 DP 1127652;
- remediation of unexpected contamination in accordance with the protocols set out in the Concept Plan;
- demolition of existing buildings and other structures, including paved roadways as set out in the Concept Plan;
- construction of a temporary sales office; and
- temporary signage associated with the sale of the land

The above remediation works were approved without the need for further environmental assessment however, this did not include remediation of the STP and oxidation ponds. The proposal therefore seeks to modify the scope of the approval to:

- include all decommissioning, demolition and remediation works associated with the STP and oxidation ponds; and
- specify no further environmental assessment is required for the above works.

A new RAP has been prepared that describes the remediation works proposed in relation to the decommissioning and remediation of the STP and oxidation ponds. Other information submitted in support of the modification includes:

- an Environmental and Geotechnical Assessment;
- Remediation Works Plan;
- Vegetation Management Plan; and
- a Hazardous Materials Survey.

5. STATUTORY CONSIDERATION

5.1 Section 75W

The project was originally approved under Part 3A of the EP&A Act. Although Part 3A was repealed on 1 October 2011, the project remains a 'transitional Part 3A project' under Schedule 6A of the EP&A Act, and hence any modification to this approval must be made under the former section 75W of the Act.

The Department is satisfied the proposed changes are within the scope of section 75W of the EP&A Act, and do not constitute a new application.

5.2 Approval Authority

The Minister for Planning is the approval authority for the application. However, the modification request may be determined by the Commission under delegated authority.

6. CONSULTATION

The Department made the modification request publicly available on its website, consulted with Council, the Office of Environment and Heritage (OEH) and the Environment Protection Authority (EPA). Given the minor nature of the proposed modification, it was not notified by any other means.

6.1 Submissions

Council object to the proposed remediation strategy for on-site containment and recommended the contaminated materials should be excavated and disposed of off-site as a better strategy for remediation. Council also made specific comments and recommendations, including:

- appropriate water quality treatment must be undertaken prior to discharging any water from the oxidation ponds into Maxwells Creek, to ensure the water meets Council's adopted water quality parameters;
- following the decommissioning and remediation works, the final landform of the site must ensure there will be no increase in the quantum of water flowing into the creek, and must incorporate appropriate water quality control measures to ensure water quality meets Council's requirements;
- the possible need for an Environment Protection Licence (EPL); and
- a Stage 4 validation report will be required prior to Council accepting the transfer of the land which incorporates the western oxidation pond, and which is zoned for public recreation purposes.

EPA raised no objection to the proposed modification but requested additional information in relation to the Proponent's RAPs. It also recommended a series of conditions of approval, including:

- monitoring and implementation of mitigation measures during remedial work in relation to dust and asbestos;
- monitoring of ground and surface waters for all chemicals of concern, including ammonia, during remediation and as part of the validation;
- requirement for full survey, engineering plans and engineering reports to validate the as-built construction of the containment cell;
- validation of existing ground and surface waters, to determine whether further validation is required after remedial works are completed;
- preparation of a Part B Site Audit Statement following completion of validation work to confirm the site is suitable for the proposed use prior to any transfer of the land; and
- preparation of an Environmental Management Plan which identifies ongoing long term management requirements for the land, and to be agreed upon by parties involved in the transfer of the land.

OEH raised no objection to the proposed modification but included a series of comments supported by recommended conditions of approval, including:

- the proposed temporary stockpiles of demolition waste should be included in the RAP and may need to be included in the validation and site audit;
- clarification that there is only one containment cell;

- a requirement for a Final Landform Plan which addresses any variations in topsoil depth and ensures no ponding of water occurs following the removal of the oxidation ponds; and
- a Dewatering Plan to document the process and/or mechanism for dewatering the ponds and address the spread of aquatic weeds.

No **public** submissions were received.

6.2 Response to Submissions

The Proponent submitted a Response to Submissions (RtS) on 12 September 2016 and a further RtS on 3 November 2016. The RtS provided further clarification and information as requested by agencies and it also confirmed acceptance of most of the conditions recommended by Council, OEH and EPA, including:

- the provision of a final landform plan;
- provision of a dewatering plan;
- validation;
- monitoring of surface waters;
- preparation of a new EMP; and
- inclusion of stockpiles in the validation report and site audit.

The Proponent argues the EPA's recommendation for groundwater monitoring during the remediation and validation work (particularly the requirement for monitoring of ammonia) is not necessary as existing data shows ammonia concentrations do not present an unacceptable risk. However, the Proponent has committed to carrying out an additional round of groundwater sampling, to be reviewed by the Site Auditor, who would then confirm the need for any additional groundwater monitoring during remediation works. Should additional monitoring be required, it would be undertaken in accordance with the Site Auditor's requirements.

The Proponent argues the proposed on-site containment strategy recommended by Council is appropriate and consistent with EPA policy.

In relation to Council's comment that the nature of the proposed works may constitute a scheduled activity under the *Protection of the Environment Operations Act 1997*, thereby triggering the need for an EPL, the Proponent advises the remediation works do not meet the thresholds for a scheduled activity. The Proponent also notes the EPA have reviewed the modification and have not requested an EPL for the proposed works.

6.3 Further Submissions

Following the submission of the RtS:

- Council has confirmed it does not support on site containment or capping of contaminated soil; and
- the EPA has advised all of its issues have been satisfactorily addressed and it supports the Proponent's additional commitments in relation to groundwater monitoring.

7. ASSESSMENT

The key assessment issue associated with the proposal relates to the proposed remediation method of containment and capping. All other issues have been assessed in **Table 2**.

7.1 Proposed Remediation Method

A detailed site assessment was undertaken for the remediation of the STP, which identified the following contamination at the site:

- elevated concentrations of lead in the west oxidation pond;
- E.Coli within the oxidation ponds;
- ACM at the eastern and western oxidation ponds;
- elevated concentrations of TPH and E.Coli in the sewage sludge drying beds; and
- elevated concentrations of ammonia in groundwater and surface water.

The Proponent's assessment concludes the site can be made suitable for future use as open space subject to the preparation and implementation of a RAP.

A RAP was also prepared and submitted with this modification. It identifies and considers potential remedial/management options and provides a qualitative assessment of each option to determine the preferred remedial strategy.

The Proponent's preferred remediation measure includes on-site containment of asbestos impacted material, lead impacted material and other sediment potentially containing TPH and EColi, once treated. The proposed containment cell would be located within the general footprint of the existing STP (see **Figure 3**).

Council does not support the strategy for on-site containment and would prefer excavation and disposal of the contaminated materials off-site as it would result in the best long-term outcome in terms of mitigating risks to human health and the environment.

The Department has carefully considered the preferred remediation strategy and the comments made by Council and agencies and is satisfied the remediation strategy is appropriate, noting:

- *The National Environment Protection (Assessment of Site Contamination) Measure 1999*, endorsed by the EPA, establishes a hierarchy of options for the treatment of contaminated material, and on-site containment is preferred to the removal of contaminated material to an off-site facility;
- a suitable and durable physical barrier would be placed over the containment cell to appropriately manage long-term risks associated with human exposure to the asbestos impacted material;
- provisions within the RAP for capping the contaminated material and the ongoing management of the park would ensure the risk of migration of contaminants is appropriately managed in the long-term;
- organic contaminants (TPH and E.Coli) will be treated on-site and / or disposed off-site, and will only be placed within the containment cell following treatment, and confirmation there is no potential for long-term environmental and/or health risk via migration of contaminants into ground and/or surface waters;
- the containment cell would not be located on land to be transferred to Council, but rather on land to be transferred to the NPWS, being part of OEH. OEH has not raised any concerns with the proposed on-site containment strategy; and
- the long-term management obligations of the NPWS would be limited to maintenance of the future vegetation cover and no disturbance of material at depth. The risk of disturbance to the containment cell and the risk to human health and the environment is therefore negligible.

The Department also notes the EPA has not raised concerns with the on-site containment strategy but it recommended conditions requiring monitoring of groundwater and surface water for all chemicals of concern, including ammonia, during the remediation and validation work.

The Proponent has committed to monitor surface water conditions prior to and during oxidation pond dewatering and to carry out an additional round of groundwater sampling prior to the commencement of works. The Proponent would then confirm the need for any additional groundwater monitoring during remediation works. The EPA has advised this approach would be satisfactory.

The Department has recommended conditions requiring ground and surface water monitoring in accordance with the Proponent's commitments. Subject to the recommended conditions, the Department is satisfied the remediation process would not result in any unacceptable impacts on ground or surface waters.

Overall, the Department considers that subject to the recommended monitoring, validation and management measures, the proposed remediation strategy is acceptable and in line with EPA policy.

7.2 Other Issues

Table 2: Assessment of other issues

Issue	Consideration	Recommendation
<i>Biodiversity</i>	<ul style="list-style-type: none"> The construction of the temporary access road would impact on approximately 300 m² of Cumberland Plain Woodland which is a critically endangered ecological community under the <i>Threatened Species Conservation Act 1995</i>. The Department notes any clearing of vegetation at the site is subject to a Biodiversity Certification Order (Order) and the vegetation impacted by the temporary access road is required to be offset at a ratio of 3:1. In addition, the Order requires clearing of native vegetation to be undertaken in accordance with a plan of management, or as agreed to by OEH. The Department considers the impacts associated with the construction of the temporary access road are acceptable, as: <ul style="list-style-type: none"> the vegetation would be offset at a ratio of 5:1 (exceeding the required 3:1 ratio) by replanting 1,500 m² of Cumberland Plain Woodland in Zone 4 (Figure 4, below); removal of any vegetation within the access road corridor will be undertaken in consultation with NPWS and OEH; and a total of 29,000 m² of land will be revegetated as part of the decommissioning and remediation works. The Department also notes OEH has raised no concerns with this aspect of the proposal. The Department has also recommended a condition requiring the works to be completed in accordance with the Vegetation Management Plan. Overall, the Department is satisfied biodiversity impacts would be appropriately offset and any residual impacts would be appropriately mitigated and managed by the recommended condition of approval. 	A condition requiring the works to be completed in accordance with the Vegetation Management Plan has been recommended.
<i>Construction Impacts</i>	<ul style="list-style-type: none"> The Proponent has advised the program for decommissioning and remediation of the STP would take approximately six months to complete. The Department considers the Construction Management Plan (CMP) required under Condition 1.10 of the Concept Plan Approval has sufficient scope to ensure any potential construction impacts associated with the proposed works are appropriately mitigated and managed. The Department also notes the CMP will be supplemented by mitigation measures set out in the RAP and other documentation submitted in support of the modification. The Department is satisfied the impacts associated with the proposed works are temporary in nature and can be appropriately mitigated and managed by the existing conditions of approval. 	No additional conditions or amendments necessary.
<i>Traffic</i>	<ul style="list-style-type: none"> The proposal incorporates a new temporary road providing access to Campbelltown Road (Figure 4). The new road is required as the existing access road was severed by the South West Rail Link. The new access point would be located approximately 280 metres to the north-west of the existing access point. The Proponent advises the remediation works may involve up to 50 truck movements per day. The Department notes traffic would be managed in accordance with a construction traffic management plan, required as part of a CMP as discussed above. The Department considers traffic associated with the temporary access road is not significant and the relocation of the access point to Campbelltown Road would not result in any adverse traffic impacts. 	No additional conditions or amendments necessary.



Figure 4: Vegetation management zones (source: Proponent's EA)

8. CONCLUSION

The Department has assessed the modification application and supporting information in accordance with the relevant requirements of the EP&A Act. The Department's assessment concludes the proposed modification is appropriate on the basis that:


- the proposed remediation method is acceptable and in line with EPA policy;
- vegetation impacted by the construction of the temporary new access road would be appropriately offset; and
- no adverse traffic impacts would arise.

The Department therefore considers the modification is approvable, subject to the conditions at **Appendix A**.

9. RECOMMENDATION

It is **RECOMMENDED** the Planning Assessment Commission:

- **considers** the findings and recommendations of this report;
- **determines** the Proponent's request is a modification under section 75W of the EP&A Act; and
- if the Commission determines to approve the modification request, **signs** the attached notice of modification.


 Anthony Witherdin
 Director
 Modification Assessments


 Anthea Sargeant 4/5/17
 Executive Director
 Key Sites and Industry Assessments