

Technical Note — Supporting Document to the Further Issues Letter (DEV2020/1099)

53 Seventeen Mile Rocks Road, Oxley
Prepared for Economic Development Queensland
25 August 2020

Job 9216 E



Background

Saunders Havill Group were engaged by Economic Development Queensland to provide a technical note in support of the response to the further issues letter by Queensland Government Department of State Development, Manufacturing, Infrastructure and Planning on 23 July 2020 for the proposed PDA development application over land at 53 Seventeen Mile Rocks Road Oxley and 113 Cliveden Avenue Oxley described as Lot 600 on SP236626 and Lot 551 on SP142916 (Qld Government reference: DEV2020/1099).

Stage 1 Removal Comparison

A comparison of the total tree removal for Stage 1 June 2020 layout and the current August 2020 layout is provided below in **Table 1**. This total tree removal includes all trees (native & non-native) proposed to be removed associated with the Stage 1 development.

Table 1: Stage 1 Tree Removal Comparison

| Tree Size – Diameter at Breast Height (DBH) (mm) | Tree Removal – Stage 1 Submission (June 2020) | Tree Removal – Stage 1 Submission (August 2020) |
|--|---|---|
| 0-300 mm DBH | 238 | 231 |
| 300-500 mm DBH | 84 | 79 |
| >500 mm DBH | 50 | 36 |
| Total | 372 | 346 |

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As demonstrated in **Table 1**, the proposed amended layout for the Stage 1 development has resulted in the net retention of 26 trees, of which, 14 trees contain a DBH greater than 500 mm. This net retention of significant mature specimens is considered a positive ecological gain. **Table 2** and **Table 3** below expands further on the Stage 1 retention.

Stage 1 Retention Comparison

A comparison of the total tree retention for Stage 1 June 2020 layout and the current August 2020 layout is provided below in **Table 2**.

Table 2: Stage 1 Tree Retention Comparison

| Tree Size – Diameter at Breast Height (DBH) (mm) | Tree Retention – Stage 1 Submission (June 2020) | Tree Retention – Stage 1 Submission (August 2020) |
|--|---|---|
| 0-300 mm DBH | 55 | 64 |
| 300-500 mm DBH | 21 | 25 |
| >500 mm DBH | 14 | 27 |
| Total | 90 | 116 |

The retention of significant mature native specimens has occurred in the south-west corner, north-east corner and northern boundary adjacent to Cliveden Avenue.

Stage 1 Additional Tree Retention – August 2020 Submission

Table 3 outlines the location of the trees which form part of the ‘net’ retention figures presented in **Table 1**.

Table 3: Location of Additional Trees

| Tree Size – Diameter at Breast Height (DBH) (mm) | Tree located within the Significant Vegetation Overlay | Tree located elsewhere within Stage 1 |
|--|--|---------------------------------------|
| 0-300 mm DBH | 5 | 4 |
| 300-500 mm DBH | 2 | 2 |
| >500 mm DBH | 6 | 7 |
| Total | | 26 |

As shown in **Table 3**, the proposed Stage 1 layout amendments have resulted in the retention of an additional 13 trees within the ‘significant vegetation’ overlay and an additional 13 trees external of the ‘significant vegetation’ overlay. Importantly, the additional tree retention beyond the ‘significant vegetation’ overlay is located in the north-eastern corner of the site where mature *Melaleuca quinquenervia* are located and along the Cliveden Avenue interface. The retention of these specimens will assist in providing visual amenity to future residents of the proposed development and existing surrounding residents.

Significant Vegetation Overlay – South-west Corner

Plan 1 and **Table 4** provide an analysis of the vegetation removal within the ‘significant vegetation’ overlay located in the south-western corner of the site. This analysis classifies the vegetation into five (5) categories being:

- Earthworks (road construction);
- Services;
- Roof water drainage;
- BLEs; and
- Other

Table 4: South-west Corner Significant Vegetation Overlay Tree Removal Analysis

| Tree Size | Earthworks (road construction) | Services | Roof Water Drainage | BLEs | Other | Total Removal | Retain |
|---------------------------------------|--------------------------------------|----------|------------------------|-----------|----------|------------------|-----------|
| 0-300mm DBH | 3 | 0 | 0 | 12 | 0 | 15 | 19 |
| 300-500mm DBH | 1 | 0 | 1 | 7 | 0 | 9 | 14 |
| >500mm DBH | 2 | 0 | 2 | 1 | 0 | 5 | 8 |
| Weed / Introduced Tree | 5 | 0 | 2 | 7 | 1 | 15 | 0 |
| Total Removal | 11 | 0 | 5 | 27 | 1 | 44 | 41 |

Significant Vegetation Overlay – South-central Area

Plan 2 and **Table 5** provide an analysis of the vegetation removal within the ‘significant vegetation’ overlay located in the south-central area of the site. This analysis classifies the vegetation into five (5) categories being:

- Earthworks (road construction);
- Services;
- Roof water drainage;
- BLEs; and
- Other

Table 5: South-central Area Significant Vegetation Overlay Tree Removal Analysis

| Tree Size | Earthworks (road construction) | Services | Roof Water Drainage | BLEs | Other | Total Removal | Retain |
|---------------------------------------|--------------------------------------|----------|------------------------|-----------|-----------|------------------|-----------|
| 0-300mm DBH | 52 | 0 | 1 | 29 | 8 | 90 | 16 |
| 300-500mm DBH | 11 | 0 | 1 | 12 | 2 | 26 | 3 |
| >500mm DBH | 4 | 0 | 4 | 3 | 0 | 11 | 5 |
| Weed / Introduced Tree | 1 | 0 | 0 | 0 | 1 | 2 | 0 |
| Total Removal | 68 | 0 | 6 | 44 | 11 | 129 | 24 |

Significant Vegetation Overlay Tree Removal Discussion

As demonstrated in **Table 6**, the greatest contributor to the removal of native vegetation within the 'significant vegetation' overlay is earthworks associated with the construction of the road network. These works are necessary to provide essential access to future residents. Impacts on the significant vegetation overlay as a result of the road network construction have been redesigned and minimised (following the June 2020 submission), with the cul-de-sac head being pulled eastward away from the south-western corner vegetation. This alteration in road layout has allowed for additional retention in the south-west corner with a rearrangement of BLE's and boundaries.

The construction of the BLEs is the second highest contributor to native tree removal within the 'significant vegetation' overlay, with the majority of these impacts occurring within the south-central area, while impacts on vegetation within the 'significant vegetation' overlay associated with roof water drainage and 'other' reasons are both minor contributors. Impacts associated with the construction of the BLEs has been avoided and minimised, with BLE and boundary rearrangements to retain significant vegetation and in particular mature native specimens considered and implemented where possible.

Despite all reasonable efforts to retain additional native vegetation within the significant vegetation overlay, necessary works to facilitate construction of the proposed road network infrastructure result in unavoidable impacts. The unavoidable clearing of native vegetation within the significant vegetation overlay has been reviewed by all consultants on the project to explore alternative options and ensure impacts are minimised. The proposed layout submitted as part of this further issues response is considered to avoid to the greatest extent practical native vegetation, and where avoidance is not possible, minimise impacts. Additionally, the compensatory measures proposed within the ecological assessment report are considered to mitigate any significant residual impacts on biodiversity values.

Table 6: Summary of Significant Vegetation Overlay Tree Removal

| Tree Size | Earthworks (road construction) | Services | Roof Water Drainage | BLEs | Other | Total Removal | Retain |
|--|--------------------------------------|-----------|------------------------|---------------|--------------|------------------|-----------|
| 0-300mm DBH | 55 | 0 | 1 | 41 | 8 | 105 | 35 |
| 300-500mm DBH | 12 | 0 | 2 | 19 | 2 | 35 | 17 |
| >500mm DBH | 6 | 0 | 6 | 4 | 0 | 16 | 13 |
| Weed / Introduced Tree | 6 | 0 | 2 | 7 | 2 | 17 | 0 |
| Total Removal | 79 | 0 | 11 | 71 | 12 | 173 | 65 |
| Total Percentage (%) of removal | 45.66% | 0% | 6.36% | 41.04% | 6.94% | 100% | - |

Conclusion

If you have any questions, please do not hesitate to contact me on 07 3251 9458 or jamesgautrey@saundershavill.com. We are always happy to discuss prior to any further information requests are made to expedite the approval process.

Kind regards,



James Gautrey
Senior Environmental Scientist – Saunders Havill Group

Supporting Plans

PLAN 1.2 STAGE 1 SIGNIFICANT VEGETATION OVERLAY (REMNANT VEGETATION)



NOTES:

This plan was prepared as a desktop assessment tool. The information on the plan is not suitable for any other purpose. Property dimensions, area, numbers of lots and contours and other physical features shown have been compiled from existing information and may not have been verified by field survey. These may need verification if the development application is undertaken or in order to comply with development approval conditions. No reliance should be placed on the information on this plan for detailed design or for any financial dealing involving the land. Saunders Hault Group is not responsible for any liability for any loss or damage whatsoever or howsoever incurred arising from any party relying on this plan for any purpose other than as a document prepared for the sole purpose of the development approval. The Saunders Hault Group undertakes no development approval control otherwise, this is not an approved plan.

Layer Sources
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Legend

- | Project Site | Stage Boundary | Indicative Bushfire Setback | Design layout | Exemtion | Bioretention Basin | DCDB / Survey | Building envelope | Roof water drainage | Stormwater services | Water services | Sewer services | Electrical services | Road design | Sleepervall | Batter - BOB | Batter -TOB | Batter - temporary | Batter - roads | Batter - pad | Major design contours | Minor design contours |
|--------------|----------------|-----------------------------|---------------|----------|--------------------|---------------|-------------------|---------------------|---------------------|----------------|----------------|---------------------|-------------|-------------|--------------|-------------|--------------------|----------------|--------------|-----------------------|-----------------------|
| Project Site | Stage Boundary | Indicative Bushfire Setback | Design layout | Exemtion | Bioretention Basin | DCDB / Survey | Building envelope | Roof water drainage | Stormwater services | Water services | Sewer services | Electrical services | Road design | Sleepervall | Batter - BOB | Batter -TOB | Batter - temporary | Batter - roads | Batter - pad | Major design contours | Minor design contours |

Significant Vegetation Overlay

- | NUKHT | Native tree to remove in Stage 1
significant vegetation area for roof
Water Drainage (9) | Native tree to remove in Stage 1
significant vegetation area for BLE & required earthworks
vegetation area for roof earthworks (72) | Native tree to remove in Stage 1
significant vegetation area (10) | Native tree retention in Stage 1
significant vegetation area (58) | Significant NUKHT to retain
in Stage 1 significant vegetation area (7) | Native tree status subject to remediation
work extent / requirements | Non-native tree to remove in Stage 1 |
|-------|--|---|--|--|---|---|--------------------------------------|
| ○ | ● | ● | ● | ● | ● | ● | ● |

| Issue | Date | Description | Drawn | Checked |
|-------|------------|-------------|-------|---------|
| A | 29/07/2020 | Preliminary | MP | JG |
| B | 25/08/2020 | Preliminary | MP | JG |



PLAN 1.3 STAGE 1 SIGNIFICANT VEGETATION OVERLAY (REMNANT VEGETATION)

NOTES

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Legend

- | | |
|--|-----------------------------|
| | Project Site |
| | Stage Boundary |
| | Indicative Lushfire Setback |
| | Design layout |
| | Easement |
| | Bioretention Basin |
| | DCDB / Survey |
| | Building envelope |
| | Roof water drainage |
| | Stormwater services |
| | Water services |
| | Sewer services |
| | Electrical services |
| | Road design |
| | Sleeper wall |
| | Batter - BOB |
| | Batter - TOB |
| | Batter - temporary |
| | Batter - roads |
| | Batter - pad |
| | Major design contours |
| | Minor design contours |

Significant Vegetation Overlay

- | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|
| NHKIT | | | | | | | | |
| Native tree to remove in Stage 1 | | | | | | | | |
| significant vegetation area for Roof Water Drainage (9) | | | | | | | | |
| Native tree to remove in Stage 1 significant vegetation area for BLE & required earthworks | | | | | | | | |
| Native tree to remove in Stage 1 significant vegetation area for road earthworks (72) | | | | | | | | |
| Native tree to remove in Stage 1 significant vegetation area (10) | | | | | | | | |
| Native tree retention in Stage 1 Significant vegetation area (58) | | | | | | | | |
| Significant NHKIT to retain in Stage 1 significant vegetation area (7) | | | | | | | | |
| Native tree status subject to remediation works extend / requirements | | | | | | | | |
| Non-native tree to remove in Stage 1 significant vegetation area (18) | | | | | | | | |

| Issue | Date | Description | Drawn | Checked |
|-------|------------|-------------|-------|---------|
| A | 29/07/2020 | Preliminary | MP | JG |
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