

Naturally Trees

'Expert Arboricultural planning, advice and care since 1998'

Arborist Reports, Landscape Design, Flora and Fauna Surveys,
Biodiversity and Ecological Impact Assessments &
Bushfire Protection Assessment Services

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PO Box 7936
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29 July 2021

To whom it may concern,

**TREE IMPACT STATEMENT:
Lot 6, Garfield Road East, Riverstone NSW**

This letter has been commissioned by Orion Consulting Engineers to reiterate the impacts to a row of trees located within an area of proposed civil works. The subject trees had been included within an earlier Arboricultural Impact Appraisal and Method Statement (Revision A) compiled by Naturally Trees dated 21 June 2021. This letter is to be read in conjunction with this earlier report, which provides preliminary information on dimensions and protection of the subject trees.

The subject trees, Trees 77 and 79 to 96, are located to the western side of Clarke Street. As per our previous report, these trees vary in retention value with Trees 80, 81, 84, 86, 90, 91, 94, 95 and 96 having the highest retention values. These trees are indigenous species that have very low tolerance to environmental changes.

The proposed civil works includes the widening of Clarke Street and re-levelling of the road batter. The civil works will impact directly within the tree protection zone (TPZ) and structural root zone (SRZ). The following activities within a TPZ will cause significant long-term impacts:

- Excavation, compaction or disturbance of the existing soil.
- The movement or storage of materials, waste or fill.
- Soil level changes
- Movement or machinery, equipment or vehicles.
- Any activity likely to damage the trunk, crown or root system.

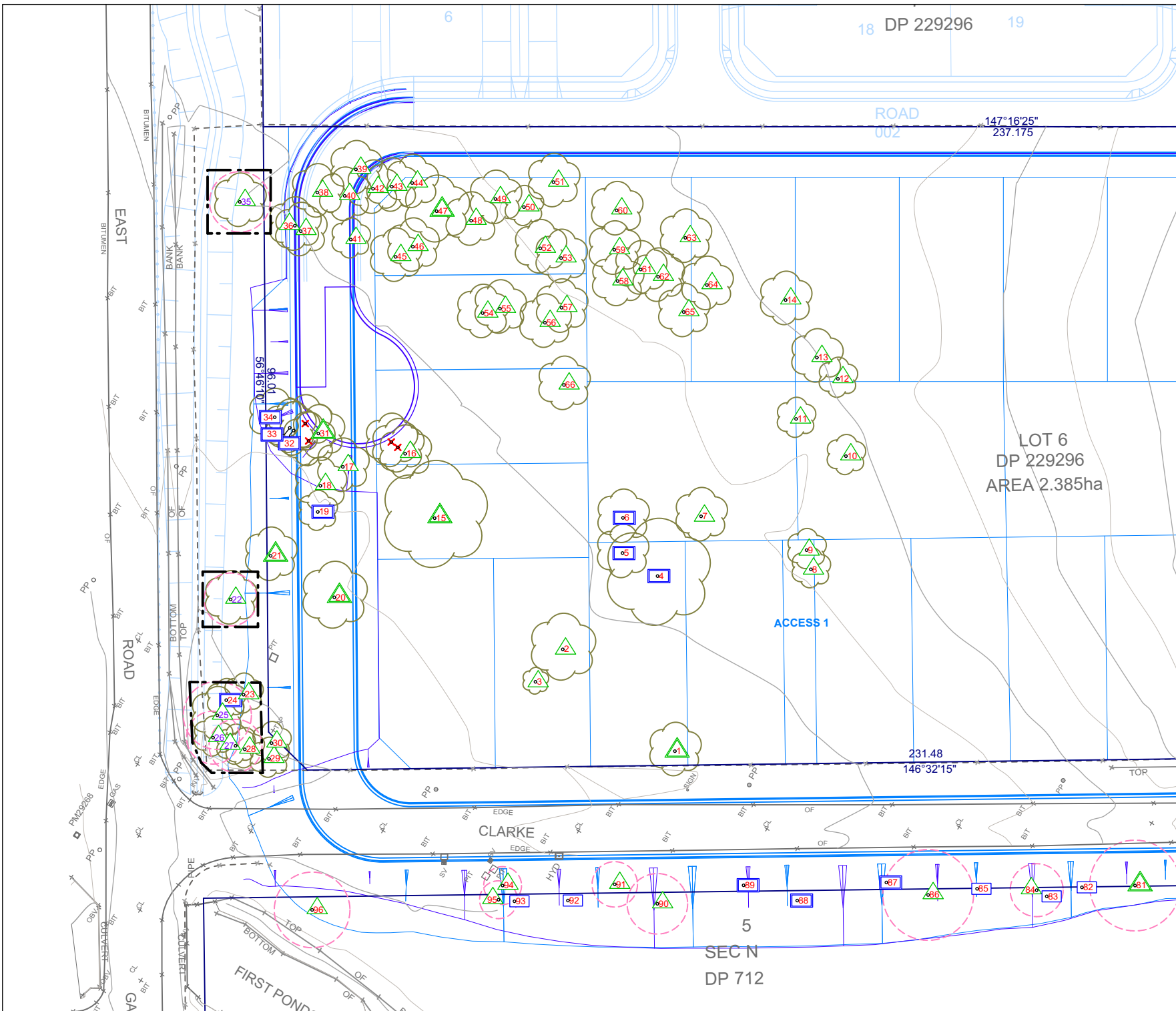
To conclude, the proposed civil works will have detrimental impacts on the longevity of Trees 77 and 79 to 96.

For further information regarding the subject trees, please contact Naturally Trees.

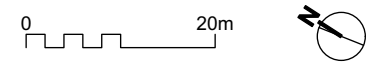
Yours sincerely

A handwritten signature in black ink, appearing to read 'A. Scales', written in a cursive style.

Andrew Scales
Dip. Horticulture
Dip. Arboriculture AQF5



- LEGEND:
- Category AA Trees worthy of being a constraint
 - Category A
 - Category Z Trees not worthy of being a constraint
 - Category ZZ
 - Existing layout
 - Proposed STAGE 1 works
 - Proposed STAGE 2 works
 - Tree protection zone (TPZ) boundaries
 - Protective fencing and TPZ area within
 - TPZ where ground protection must be installed. Retain all existing levels.
 - Tree to be removed for STAGE 1
 - Tree to be removed for STAGE 2
 - Tree no longer on site



| ISSUE | DATE | REVISION |
|--|------|----------|
| NOTE DO NOT SCALE FROM DRAWING. USE FIGURED DIMENSIONS ONLY. CHECK ALL DIMENSIONS ON SITE BEFORE ANY MANUFACTURE OR CONSTRUCTION | | |
| PROJECT | | |
| Lot 6, Garfield Road East, Riverstone | | |
| CLIENT | | |
| Orion Consulting Engineers Pty Ltd | | |
| DRAWING | | |
| Tree Management Plan | | |



| PROJECT # | DWG # | REV |
|--|------------|--------------|
| DATE | 21/06/2021 | |
| SCALE @ A1 | 1:800 | |
| DRAWN | AS | |
| TMP01 A | | Sheet 1 of 3 |
| Naturally Trees Arboricultural Consulting PO Box 5085 Elanora Heights NSW 2101 Australia T: 0417 250 420 W: www.naturallytrees.com.au E: info@naturallytrees.com.au | | |

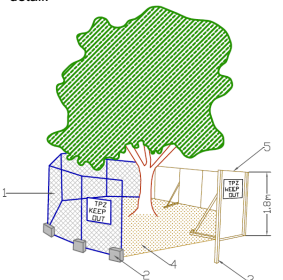
All excavation within the TPZ is to be undertaken by hand only. The top 750mm depth of excavation is to be completed under supervision of the Project Arborist. The soil should be loosened with a pick or fork, then cleared from roots with care not to cause damage. Where roots are to be exposed for lengthy periods, hessian or geotech fabric may be required to prevent damage and maintain moisture around roots.

There should be a predetermined number of site visits undertaken by the project arborist to ensure trees are correctly protected. Stages for monitoring should include (but not limited to) the following:

- a) Installation of temporary infrastructure including site sheds
- b) Demolition of existing structures, bulk earthworks and drainage works
- c) Regular intervals during construction e.g. completion of ground floor slabs, scaffolding installation
- d) Design changes that may encroach into the TPZ
- e) Excavation within the TPZ
- f) Landscaping
- g) Certification of tree protection at practical completion

Protective fencing is to be installed prior to materials and machinery being brought onto the site and before work commences (including demolition). Once installed, protective fencing should not be altered or moved without consent from project arborist. The TPZ is to be secured to restrict access at all times throughout site works.

Appropriate signage should be placed around the edge of the TPZ to identify the protection area. Signage should be visible from within the development site. Sign lettering should comply with AS1319. Refer to example provided for further detail.



1. Wire mesh panels (with shade cloth if required).
2. Concrete support feet.
3. Installation of support struts should avoid damaging roots.
4. Mulch to be placed across surface of TPZ.
5. Alternative pailing or plywood fencing is permitted. This fencing also prevents soil and other building materials entering the TPZ.

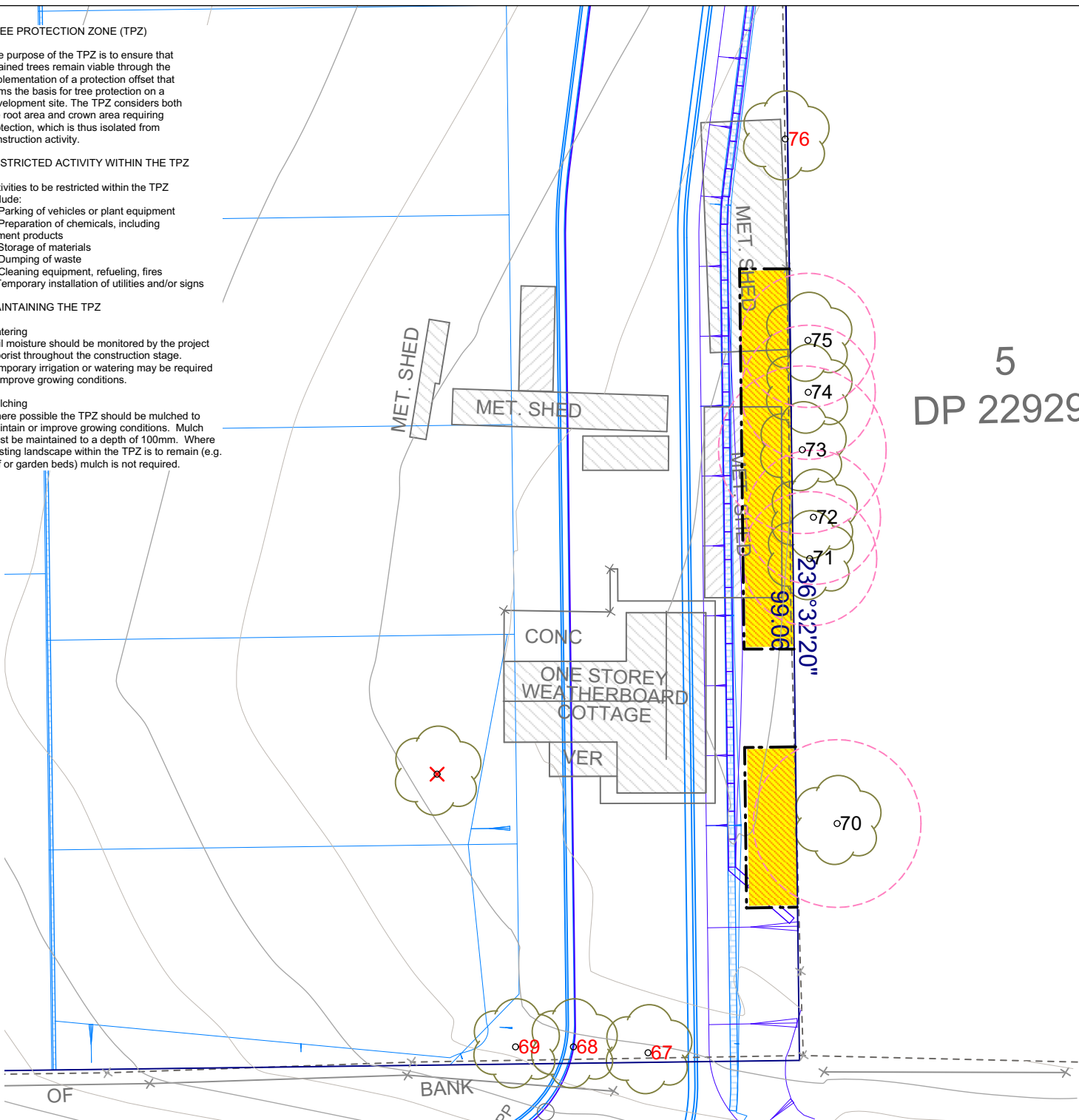
The purpose of the TPZ is to ensure that retained trees remain viable through the implementation of a protection offset that forms the basis for tree protection on a development site. The TPZ considers both the root area and crown area requiring protection, which is thus isolated from construction activity.

Activities to be restricted within the TPZ include:

- a) Parking of vehicles or plant equipment
- b) Preparation of chemicals, including cement products
- c) Storage of materials
- d) Dumping of waste
- e) Cleaning equipment, refueling, fires
- f) Temporary installation of utilities and/or signs

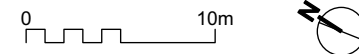
Watering
Soil moisture should be monitored by the project arborist throughout the construction stage. Temporary irrigation or watering may be required to improve growing conditions.

Where possible the TPZ should be mulched to maintain or improve growing conditions. Mulch must be maintained to a depth of 100mm. Where existing landscape within the TPZ is to remain (e.g. turf or garden beds) mulch is not required.



-  Existing layout
-  Proposed layout
-  Tree protection zone (TPZ) boundaries
-  Protective fencing and TPZ area within
-  TPZ where mulch is to be installed to 100mm depth and maintained throughout the works. Retain all existing levels.
-  01 Tree to be removed

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DP 229296



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Lot 6, Garfield Road East, Riverstone

CLIENT

Orion Consulting Engineers Pty Ltd

Tree Management Plan



| | | |
|------------|--------------|-----|
| PROJECT # | DWG # | REV |
| DATE | 21/06/2021 | |
| SCALE @ A1 | 1:400 | |
| DRAWN | AS | |

TMP01 A

Sheet 3 of 3

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