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Tree Assessment Report:
Neighbouring Trees

Project – Eleebana Shores, Seniors Living

project no: **9961.5**
date: **Friday, 11 April 2014**
revision: **a**

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project no: 9961.5
site: 40 Burton Road, Mount Hutton
council: Lake Macquarie city Council (LMCC)
proposal: Eleebana Shores, Seniors Living

Contents

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Arboriculture Australia MEMBER

1 Introduction

In response to recommendations made by LMCC's SEPP 65 Urban Design Review Panel (12 March 2014), an inspection and impact assessment was made of all trees growing within 5 metres (approx) outside the project site boundary on adjoining properties.

The purpose of this work was to determine whether the proposed development would have a detrimental effect on neighbouring trees and if so what actions would be required to allow the project to proceed.

2 Assessing Arborist

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3 Client

Eleebana Shores Retirement Living Pty Ltd
C/- Coastplan Group Pty Ltd
PO Box 568
Forster, NSW, 2428

4 Methodology and Discussion

The site was visited on 26th March 2014.

The following methods have been employed in preparing this report:

- A Visual Tree Inspection (VTA) (Mattheck & Breloer, 1994) was undertaken from the project site due to issues with access onto adjoining properties. The visual tree inspection included all visible above ground parts of the tree including exposed roots, trunk, branches and foliage. Generally individual trees were assessed, however, in some instances, groups of trees were considered. The assessment included the noting of the Diameter at Breast Height (DBH) of neighbouring trees and the distance they were off-set from the existing fenceline.

At the time of inspection it was assumed that the fenceline was located on the boundary. This was later found not to be the case in some instances. Adjustments to dimensions were made to allow for these variations to ensure that all offsets were made in reference to the site boundary.

Although condition and sizes of trunks were noted, as the trees were located on neighbouring properties, the aim was to ensure that the majority, if not all trees could be retained.

- The data collected was then used to calculate the Structural Root Zones (SRZ) and Tree Protection Zones (TPZ) in accordance with the requirements of *AS 4970 – Protection of trees on development sites.*

- The neighbouring trees were then plotted onto a combined survey drawing/site plan along with SRZs and TPZs.

- The trees were then assessed and rated based on the degree of disturbance the proposed development would have on SRZs and TPZs and how this would affect their long term viability.

  Once again the requirements of "AS 4970 – Protection of trees on development sites" were used having regard to incursions into SRZs and TPZ. At this stage it was generally found that the SRZs of most trees were unaffected although some TPZs were being reduced by more than 10% with one tree having a 30% incursion. Of major concern were treees growing hard against the fenceline (boundary).

- Discussions were then held with the project architect, civil engineer and landscape architect with aim of adjusting the proposed development to ensure the retention of neighbouring trees.

  The discussions generally resulted in the reshaping and repositioning of swales and the replanning of some dwellings to adjust their configuration. In most cases locating the drainage swales 2m inside the property boundary was sufficient, however, in some instances the buildings needed to be redesigned and the swales adjusted to achieve a satisfactory result.

- The trees were then reassessed with the results being included in Table 1 and on Drawings 01-04.

5 Results and Conclusion

The following table and drawings show the final impact of the trees on the neighbouring properties after adjustments had been made to the design and location of buildings and drainage swales.

In all instances it was possible to ensure that the trees growing on neighbouring properties could be retained by the modified, proposed development.

Table 1: Tree Data and Evaluation Table

#	BOTANICAL NAME	DBH [MM]	OFF-SET	SRZ [M]	TPZ [M]	COMMENTS
01	*Casuarina glauca*	360	0	2.15	4.32	THIS TREE HAS A 20% INCURSION INTO ITS TPZ HOWEVER BASED ON THE TYPE OF TREE, ITS VIGOUR AND HAVING CONSIDERATION OF THE SHAPE OF THE SWALE, IT IS CONSIDERED THAT THIS TREE WOULD BE ABLE TO HANDLE THE REDUCTION IN ITS ROOT PLATE.
02	*Melaleuca linariifolia*	120	0	1.35	1.44	
03	*Numerous (refer comments)*	175	0	1.59	2.1	GROUP OF TREES GROWING WITHIN AREA OF IMPEDED DRAINAGE. ALONGSIDE THE BOUNDARY WITH SOME TREES LOCATED CLOSE TO THE FENCELINE BUT THE MAJORITY OCCURRING BEYOND 2 M AWAY. SPECIES INCLUDE: *Melaleuca stypheliodes, M. linariifolia, Glochidion ferdinandi and Pittosporum undulatum.* WORST CASE USED IN FIGURES WHICH WOULD APPLY TO ONLY ABOUT 5 TREES.
04	*Angophora costata*	430	0	2.32	5.16	9.4% INCURSION INTO TPZ
05	*Corymbia gummifera*	140	0.5	1.45	1.68	
06	*Angophora costata*	180	0.6	1.6	2.16	
07	*Corymbia gummifera*	500	0.6	2.47	6.0	7.4% INCURSION INTO TPZ
08	*Corymbia gummifera*	200	0.6	1.68	2.4	GROWING VERY CLOSE TO TREE 7. POSSIBLY CO-DOMINANT TRUNKS
09	*Angophora costata*	380	0.9	2.20	4.56	
10	*Corymbia gummifera*	270	1.0	1.91	3.24	
11	*Eucalyptus sp.*	160	0.5	1.53	1.92	POSSIBLY *Eucalyptus tereticornis.* TO BE CONFIRMED.
12	*Angophora costata*	550	1.8	2.57	6.6	5.3% INCURSION INTO TPZ
13	*Corymbia gummifera*	750	4	2.93	9	4.6% INCURSION INTO TPZ
14	*Eucalyptus sp.*	650	7	2.76	7.8	POSSIBLY *Eucalyptus Tereticornis.* (TO BE CONFIRMED)
15	*Eucalyptus sp.*	1200	1.2	3.57	14.4	POSSIBLY *Eucalyptus Tereticornis.* (TO BE CONFIRMED). SWALE CONSTRUCTION WILL INTRUDE INTO TPZ APPROX 9.9%.
16	*Eucalyptus sp.*	850	4	3.09	10.2	2.7% INCURSION INTO TPZ
17	*Eucalyptus sp.*	1000	2.8	3.31	12	9.9% INCURSION INTO TPZ
18	*Eucalyptus spp.* (GROUP)	400	1	2.25	4.8	GROUP OF MIXED GUM TREES OF VARYING VIGOUR. TYPICAL. WORST CASE CITED. SWALE CONSTRUCTION WILL INTRUDE INTO TPZ <5%.
19	*Callistemon sp.* (GROUP)	160	2.2	1.53	1.92	
20	*Eucalyptus robusta*	230	0.85	1.79	2.76	
21	*Melaleuca linariifolia*	120	.4	1.36	1.44	
22	*Cinnamomum camphora*	150	1.8	1.49	1.8	
23	*Eucalyptus robusta*	380	1.3	2.20	4.56	SWALE CONSTRUCTION WILL INTRUDE INTO TPZ <10%
24	*Melaleuca linariifolia/ (Pittosporum undulatum)*	250	0	1.85	3	SWALE CONSTRUCTION WILL INTRUDE INTO TPZ <10%
25	*Eucalyptus sp.*	280	0.4	1.94	3.36	SWALE CONSTRUCTION WILL INTRUDE INTO TPZ <10%
26	*Melaleuca linariifolia* (GROUP)	120	0	1.36	1.44	A GROUP GROUP ALONG BOUNDARY
27	*Eucalyptus robusta*	520	0	2.51	6.24	9.5% INCURSION INTO TPZ
28	*Syagrus romanzoffiana* (GROUP)	250	500	1.85	3	LIKELY TO NBE UNAFFECTED BY WORKS DUE TO ROOT STRUCTURE

neighbouring tree assessment

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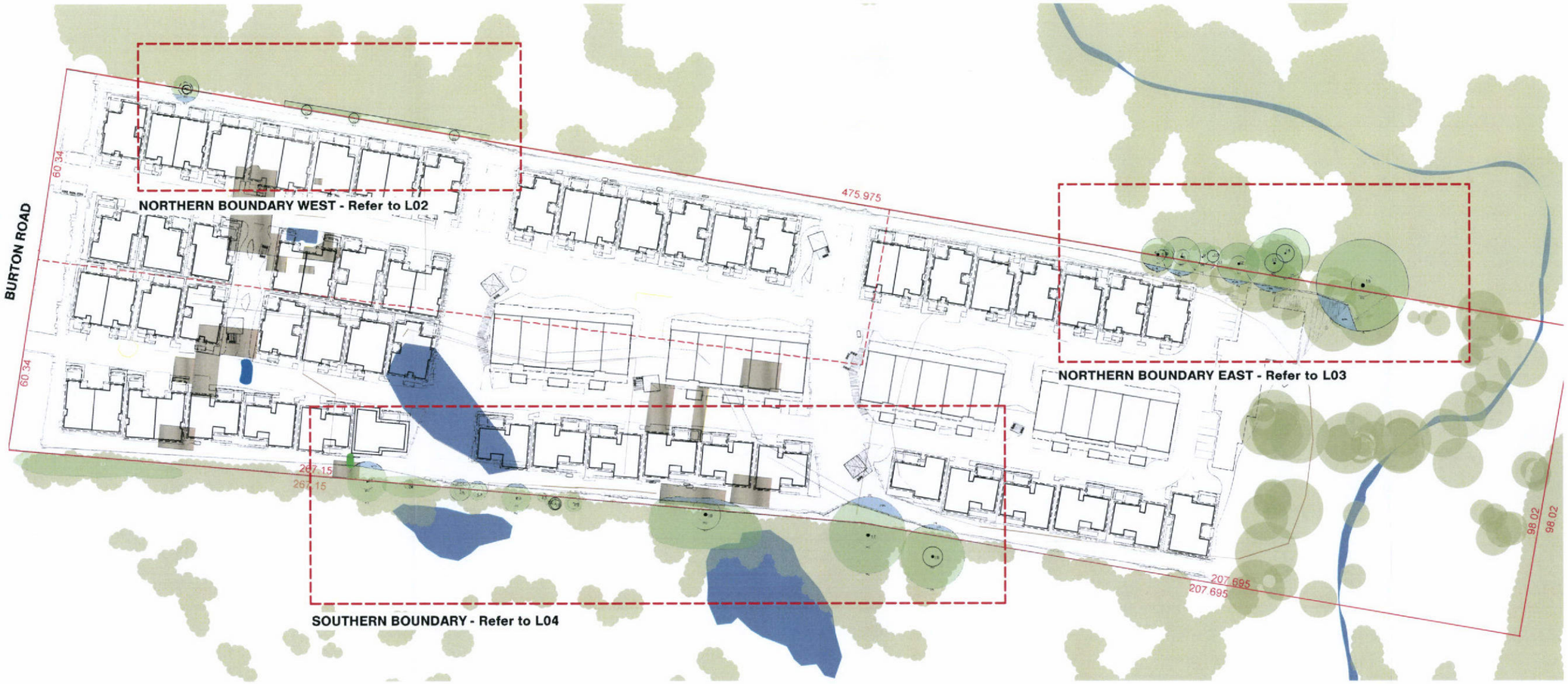
01



PROJECT:
Eleebana Shores
SITE:
Burton Road, Mt Hutton
CLIENT:
Elebana Shores Retirement Pty Ltd.
DATE:
11.4.2014
JOB NUMBER:
9861.5
DRAWN:
BJR
SCALE:
1:700 @ A1 - 1:1400 @ A3
NO. IN SET:
1 of 4
REVISION:
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northern boundary - west

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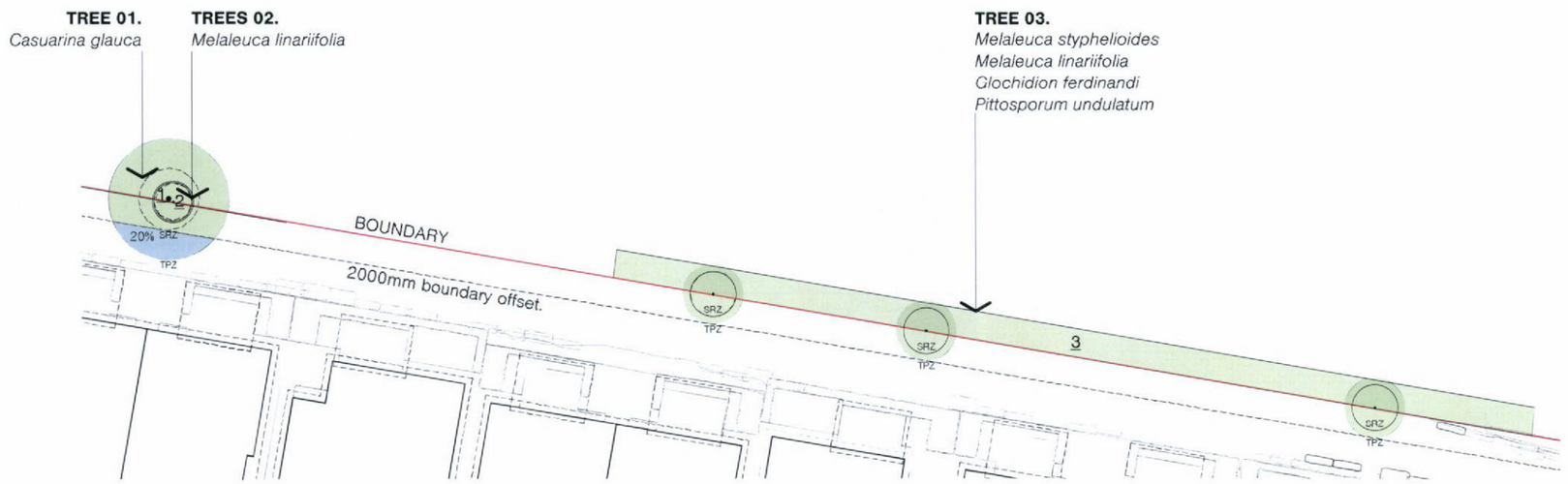
02



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northern boundary - east

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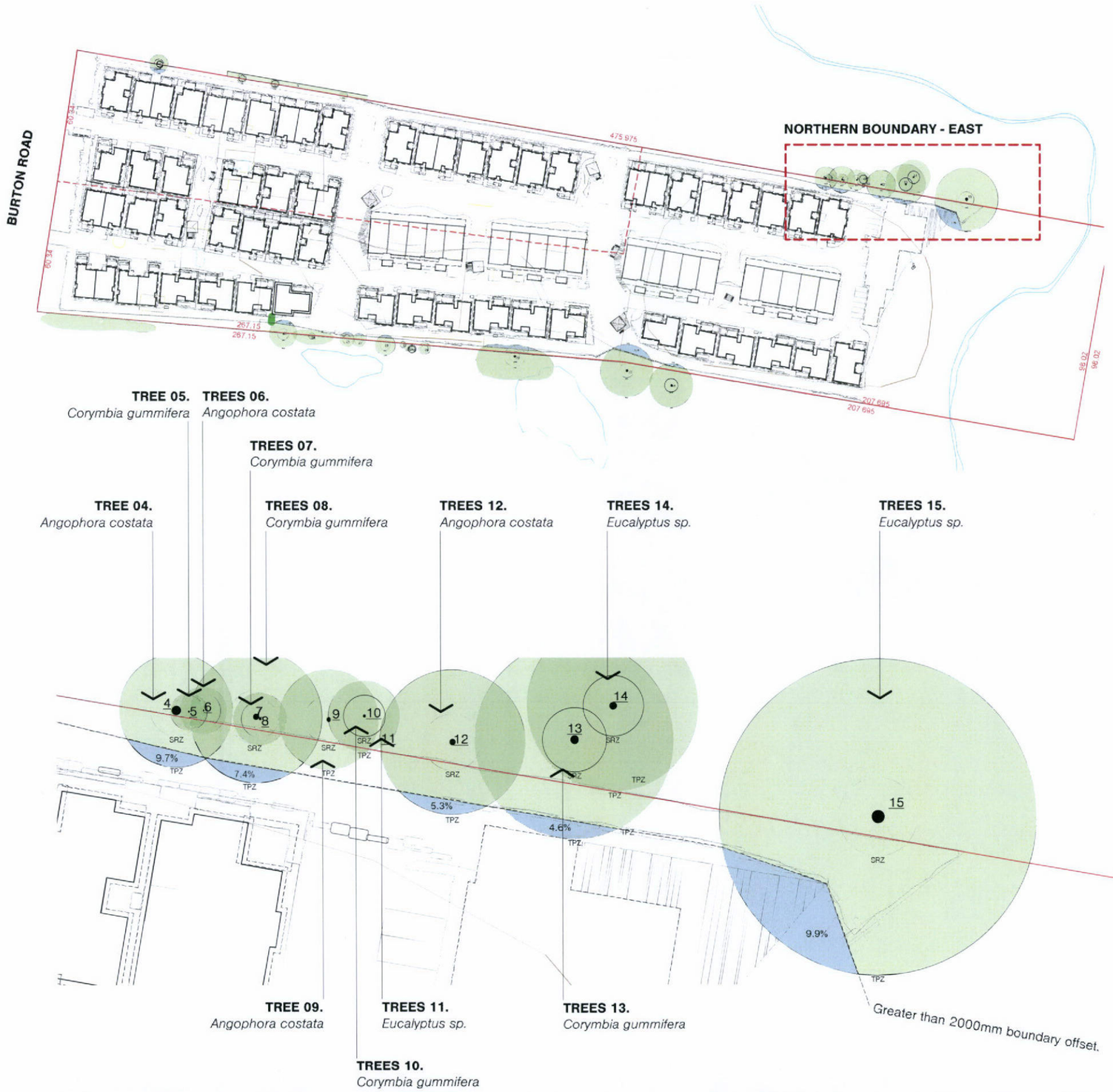
03



north

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04

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NO. IN SET:
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REVISION:
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6 References

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