ARBORICULTURAL IMPACT REPORT

13A OCEAN ROAD
PALM BEACH NSW

29 MAY 2019

PREPARED FOR MICHELE MATTHEWS

Prepared by:
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1. BACKGROUND

Landscape Matrix Pty Ltd has been engaged by Michele Matthews to prepare an Arboricultural Impact Report in respect to 7 trees potentially affected by a proposed swimming pool at 13A Ocean Road Palm Beach (the site). The trees assessed for this report are located within the site and on the adjoining properties to the north and south.

This report has been prepared by Guy Paroissien a Director of Landscape Matrix Pty Ltd. The site was inspected on 9th April 2019 to collect the data for 7 trees at and adjacent to the site.

The assessment of the trees is based upon a visual inspection of the trees from ground level using elements of the Visual Tree Assessment (VTA) method described by Mattheck & Breloer (1994). The Useful Life Expectancy (ULE) categories identified in the report follows Barrell (1996).

The inspection was limited to visual inspection of the trees without dissection, probing or coring. No aerial inspection of the trees was carried out and the assessment did not include any woody tissue testing or subterranean root investigation.

The tree heights and canopy spreads were estimated and are expressed in metres and the tree diameters at breast height (DBH) were measured using a standard metal tape and are expressed in millimetres. The DBH for tree numbers 2, 3 6 and 7 was estimated from the nearest boundary.

Measurements from the trees referred to in this report are to be taken as if measured from the centre of the trees' trunks.

2. TREES ASSESSED FOR THIS REPORT

Seven mature trees have been assessed in preparing this report. The trees assessed for this report are located within the site and on the adjoining properties to the north and south. The location and context of the site is illustrated in the photograph on the cover page of this report.

A summary of these trees, their dimensions, condition, Useful Life Expectancy (ULE) and landscape significance is attached in Appendix B. The ULE categories identified in Appendix B follow those of Barrell (1996).

The locations of the trees are shown on the attached Plan - Pool prepared by MacCormick and Associates Architects dated 29th May 2019 and identified as Drawing Number DA02.02 Revision A.

The seven trees are summarised in table 1 as follows:

Table 1: Summary of trees assessed at 13A Ocean Road Palm Beach

Tree Number	Species and Common Name	Summary
1	*Livistona australis* (Cabbage Tree Palm)	A semi mature, single trunked palm approximately 2 metres in height with a canopy spread of 2.5 metres and a diameter at breast height (DBH) of ca. 320mm. In good health and of low to moderate landscape significance.
2	*Banksia integrifolia* (Coast Banksia)	A mature, single trunked specimen approximately 6 metres in height with a canopy spread of 5 metres and a DBH of ca. 300mm. In good health and of moderate landscape significance. The tree's past canopy development has been suppressed. At the time of inspection the tree was of fair vigour and exhibited reduces foliage size and density and moderate levels of dieback (high exposure to salt laden winds).
3	*Banksia integrifolia* (Coast Banksia)	A mature, single trunked specimen approximately 7.5 metres in height with a canopy spread of 6 metres and a DBH of ca. 300mm. In good health and of moderate landscape significance. The tree displays fair branch attachment with evidence of past failures. At the time of inspection the tree was of fair vigour and exhibited reduces foliage size and density and moderate levels of dieback (high exposure to salt laden winds). Upper central crown dead (or possibly reduction pruned in past).
4	*Pittosporum undulatum* (Native Daphne, Sweet Pittosporum)	A mature, multi trunked specimen approximately 4.5 metres in height with a canopy spread of 2.5 metres and DBH of up to 140mm (240mm above the root flare). In poor health and of low landscape significance. The tree displays fair branch attachment with multiple leaders from 0.6 metres with some evidence of poor attachment at junctions - not considered at risk of failure. At the time of inspection the tree was of poor health and poor vigour and exhibited significant levels of dieback and epicormic growth. Short ULE.
5	*Banksia integrifolia* (Coast Banksia)	A mature, multi trunked specimen approximately 10 metres in height with a canopy spread of 4 x 8 metres and DBH of 150, 180 and 260mm. In good health and of moderate to high landscape significance. At the time of inspection the tree was of fair vigour and exhibited reduced foliage size and density and moderate to high levels of dieback(high exposure to salt laden winds). Eastern leader/branch leaning on and supported by exposed sandstone outcrop (reliant on outcrop for support).
6	*Ficus rubiginosa* (Port Jackson Fig, Rusty Fig)	A mature, single trunked specimen approximately 6 metres in height with a canopy spread of 8 metres and a DBH of ca. 500mm. In good health and of moderate to high landscape significance. The tree's past canopy development has been suppressed. Located on top edge of exposed sandstone outcrop with large diameter exposed roots growing down the outcrop.
7	*Ficus rubiginosa* (Port Jackson Fig, Rusty Fig)	A mature, multi trunked specimen approximately 8 metres in height with a canopy spread of 16 metres and DBH of up to ca. 450mm (ca. 800mm above the root flare). In good health and of high landscape significance. Continued next page…

		The tree's past canopy development has been suppressed (slight to moderate canopy bias to NE). Located on top edge of exposed sandstone outcrop with large diameter exposed roots growing down the outcrop. Th tree displays fair branch attachment with multiple leaders - limited view of junctions from low side of sandstone outcrop - structural integrity of junctions not able to be confirmed.

3. IDENTIFICATION OF SETBACKS FOR THE TREES

A number of methods to determine the likely extent of root zones and appropriate setbacks for tree root protection zones for trees on development sites have been developed in the past. The key criteria used in determining setbacks is the tree's trunk diameter at breast height (DBH) in conjunction with other factors including the sensitivity of the species in question to environmental disturbance/change, the age of the tree and the tree's health and vigour at the time.

Harris et al (2004) provide formulae for calculating tree protection zones based on the above criteria and modified from the 1991 British Standard for protection of trees on construction sites (BS 5837:1991). The 2005 version of the British Standard (BS 5837:2005) recommends a radius of 12 times the tree's DBH. For multi trunked trees BS 5837:2005 recommends a setback of 10 times the basal trunk diameter.

The Australian Standard AS 4970-2009 Protection of Trees on Construction Sites also identifies a 'Tree Protection Zone' of 12 times the tree's DBH. The Australian Standard also provides a formula for calculating the "Structural Root Zone' of trees on development sites. In regard to palms, other monocots, cycads and tree ferns the Standard identifies the Tree Protection Zone should not be less than 1 metre outside the crown projection. (Australian Standards Association 2009)

The tree protection zones identified below have been calculated using the Australian Standard AS 4970 Protection of Trees on Construction Sites and are the optimum setback from the trees where disturbance (e.g. soil level changes, compaction, excavation etc) should be minimised to reduce potential impacts on the long term health of the trees.

Table 2: Tree Protection Zones - 13A Ocean Road Palm Beach

Tree Number	Species and Common Name	Tree Protection Zone	Structural Root Zone
1	*Livistona australis* (Cabbage Tree Palm)	2.3 metres	N/A

2	*Banksia integrifolia* (Coast Banksia)	3.6 metres	2.1 metres
3	*Banksia integrifolia* (Coast Banksia)	3.6 metres	2.1 metres
4	*Pittosporum undulatum* (Native Daphne, Sweet Pittosporum)	2.9 metres	1.8 metres
5	*Banksia integrifolia* (Coast Banksia)	5.3 metres	2.1 metres
6	*Ficus rubiginosa* (Port Jackson Fig, Rusty Fig)	6 metres	2.8 metres
7	*Ficus rubiginosa* (Port Jackson Fig, Rusty Fig)	9.6 metres	3 metres

Preferably, no more than 10% of the tree protection zone should be disturbed with compensation made by extension of other areas of the tree protection to compensate for the area(s) disturbed. Where greater than 10% of the tree protection zone is potentially disturbed the tree's viability needs to be investigated and demonstrated by the project arborist.

The structural root zone is the area required for stability and where disturbance of any sort should be avoided

4. POTENTIAL IMPACTS ON THE TREES

The extent of impacts to the trees has been assessed on the basis of the information provided in the Plan - Pool prepared by MacCormick and Associates Architects dated 29th May 2019 and identified as Drawing Number DA02.02 Revision A.

The extent of potential impacts to the trees is summarised in the table 3 as follows and has been rated using the following guideline:

0% of root zone impacted – no impact of significance
0 to 10% of TPZ impacted – low level of impact
10 to 15% of TPZ impacted – low to moderate level of impact
15 to 20% of TPZ impacted – moderate level of impact
20 to 25% of TPZ impacted – moderate to high level of impact
25 to 35% of TPZ impacted – high level of impact
>35% of TPZ impacted – significant level of impact

The root zone calculations referred to in this report were made using scale drawings of the trees' identified tree protection zones (TPZ) in a CAD program (TurboCAD®) with potentially affected areas added to the drawing. The area of potential impact was converted to a percentage of TPZ using a spreadsheet (Microsoft Excel®).

Table 3: Summary of potential impacts on the trees – 13A Ocean Road Palm Beach

Tree Number	Species and Common Name	Summary
1	*Livistona australis* (Cabbage Tree Palm)	The proposed stairs are located 0.85 metres from the tree at the closest point and are calculated to encroach within 4.36m^2 or 27.43% of the tree's identified TPZ – while this is a high level of encroachment this species (like most palms) is resilient to significant levels of disturbance. If the stairs are constructed as an elevated structure supported by isolated piers this will reduce the impacts. The proximity of the stairs to the tree will require pruning of fronds on the stairs side for pedestrian clearance until the frond height is above the required clearance height – this will affect the tree's vigour and landscape value during this time.
2	*Banksia integrifolia* (Coast Banksia)	The proposed stairs and pool area are located 4.42 metres from the tree at the closest point and are outside the tree's identified TPZ – no impact of substance.
3	*Banksia integrifolia* (Coast Banksia)	The proposed stairs and pool area are located 4 metres from the tree at the closest point and are outside the tree's identified TPZ – no impact of substance.
4	*Pittosporum undulatum* (Native Daphne, Sweet Pittosporum)	The proposed towel lawn is located 2.56 metres from the tree at the closest point and is calculated to encroach within 0.13m^2 or 0.5% of the tree's identified TPZ – this is a low level of impact and within an acceptable threshold.
5	*Banksia integrifolia* (Coast Banksia)	The proposed towel lawn is located 6.72 metres from the tree at the closest point and is outside the tree's identified TPZ – no impact of substance. The proposed steel mesh staircase is located 0.55 metres from the tree at the closest point – disturbance from this structure will be minimised as it is a lightweight structure supported by isolated piers – it is recommended the pier locations be determined by hand excavation under the direction of an AQF Level 5 arborist to avoid removal of, or damage to, any roots of 35mm diameter or greater.
6	*Ficus rubiginosa* (Port Jackson Fig, Rusty Fig)	The proposed towel lawn is located 5.43 metres from the tree at the closest point and is calculated to encroach within 1.17m^2 or 1.03% of the tree's identified TPZ – this is a low level of impact and within an acceptable threshold. The proposed steel mesh staircase is located 1 metre from the tree at the closest point – disturbance from this structure will be minimised as it is a lightweight structure supported by isolated piers – it is recommended the pier locations be determined by hand excavation under the direction of an AQF Level 5 arborist to avoid removal of, or damage to, any roots of 35mm diameter or greater.
7	*Ficus rubiginosa* (Port Jackson Fig, Rusty Fig)	The proposed towel lawn is located 4.48 metres from the tree at the closest point, the spa 7.5 metres from the tree and the pool 7.2 metres from the tree – these areas are calculated to encroach within

		23.23m^2 or 8.03% of the tree's identified TPZ – this is a low level of impact and within an acceptable threshold. The proposed steel mesh staircase is located 2.37 metres from the tree at the closest point – disturbance from this structure will be minimised as it is a lightweight structure supported by isolated piers – it is recommended the pier locations be determined by hand excavation under the direction of an AQF Level 5 arborist to avoid removal of, or damage to, any roots of 35mm diameter or greater.

<u>The potential impacts can be summarised as follows:</u>

- The proposed works are at the outer edge or outside the identified TPZs of tree numbers 2, 3 and 5 and no impact of substance is predicted for these trees.
- The proposed works will impact on less than 10%% of the identified TPZs of tree numbers 4, 6 and 7 and is a low level of impact and within an acceptable threshold for these trees.
- The proposed works will impact on 27.43% of the identified TPZ of tree number 1 - while this is a high level of encroachment this species is resilient to significant levels of disturbance. If the stairs are constructed as an elevated structure supported by isolated piers this will reduce the impacts. The proximity of the stairs to the tree will require pruning of fronds on the stairs side for pedestrian clearance until the frond height is above the required clearance height – this will affect the tree's vigour and landscape value during this time.
  The proposed steel mesh staircase is located is close proximity to tree numbers 5, 6 and 7 – disturbance from this structure will be minimised as it is a lightweight structure supported by isolated piers – it is recommended the pier locations be determined by hand excavation under the direction of an AQF Level 5 arborist to avoid removal of, or damage to, any roots of 35mm diameter or greater from these trees.

5. TREE PROTECTION MEASURES

The following generic tree protection measures are recommended to assist in minimising potential impacts to trees proposed for retention at the site.

A. Measures to be implemented prior to the commencement of any works on the site.

1. Tree to be retained are to be clearly identified by signage as protected trees.

2. The tree protection zones (TPZ) of trees to be retained are to be protected by fencing during the entire construction period except for specific areas directly required to achieve construction works.

3. The tree protection fence shall be constructed of galvanised pipe at 2.4 metre spacing and connected by securely attached chain mesh fencing to a minimum height of 1.8 metres and shall be installed prior to work commencing.

4. The tree protection fencing shall be installed as closely as possible to the alignment of the identified TPZ and shall be approved and certified by the site arborist prior to commencement of any construction or demolition works on the site.

B. Measures to be implemented and maintained during the life of construction works on the site.

5. Any excavation within the identified TPZ of trees to be retained shall be carried out by hand to minimize disturbance to tree roots. Roots greater than 40mm are not to be damaged or severed without prior assessment by an arborist to determine likely level of impact and the restorative actions required to minimise the impacts of root damage.

6. The following activities/actions are prohibited from the tree protection zones:

- Soil cut or fill including excavation and trenching
- Soil cultivation, disturbance or compaction
- Stockpiling storage or mixing of materials
- The parking, storing, washing and repairing of tools, equipment and machinery
- The disposal of liquids and refueling
- The disposal of building materials
- The sitting of offices or sheds
- Any action leading to the impact on tree health or structure

7. Canopy pruning of trees identified for protection which is necessary to accommodate approved building works shall be undertaken in accordance with *Australian Standard 4373-2007 'Pruning of Amenity Trees'*.

6. CONCLUSION

Seven mature trees have been assessed for this report. The trees assessed for this report are located within the site and on the adjoining properties to the north and south.

The trees comprise remnant trees in a modified natural setting. The majority of the trees were in good health at the time of inspection with the exception of tree number 4 which is of poor health.

A number of the trees were of fair or reduced vigour and exhibited reduced foliage size and density and moderate levels of dieback – it is concluded that high levels of exposure to salt laden winds has contributed to their reduced vigour.

<u>The potential impacts can be summarised as follows:</u>

- The proposed works are at the outer edge or outside the identified TPZs of tree numbers 2, 3 and 5 and no impact of substance is predicted for these trees.
- The proposed works will impact on less than 10%% of the identified TPZs of tree numbers 4, 6 and 7 and is a low level of impact and within an acceptable threshold for these trees.
- The proposed works will impact on 27.43% of the identified TPZ of tree number 1 - while this is a high level of encroachment this species is resilient to significant levels of disturbance. If the stairs are constructed as an elevated structure supported by isolated piers this will reduce the impacts. The proximity of the stairs to the tree will require pruning of fronds on the stairs side for pedestrian clearance until the frond height is above the required clearance height – this will affect the tree's vigour and landscape value during this time.
- The proposed steel mesh staircase is located is close proximity to tree numbers 5, 6 and 7 – disturbance from this structure will be minimised as it is a lightweight structure supported by isolated piers – it is recommended the pier locations be determined by hand excavation under the direction of an AQF Level 5 arborist to avoid removal of, or damage to, any roots of 35mm diameter or greater from these trees.

Generic tree protection measures are identified in section 5 of this report.

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Director
Landscape Matrix Pty Ltd
29th May 2019

BIBLIOGRAPHY/REFERENCES

Australian Standards Association (2007) AS 4373- 2007 - Australian Standard 4373-2007 'Pruning of Amenity Trees'.

Australian Standards Association (2009) AS 4790- 2009 - Australian Standard 4790-2009 'Protection of trees on development sites'.

Barrell J (1996) - Pre-planning Tree Surveys: SULE is the Natural Progression. Arboricultural Journal 17, 33-46.

Harris et al (2004). Harris RW, Clark JR, Matheny NP: Arboriculture – Integrated Management of Landscape Trees Shrubs and Vines 4TH Edition. Prentice Hall, New Jersey 07458.

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MacCormick and Associates Architects (2019) - Plan - Pool prepared by MacCormick and Associates Architects dated 29th May 2019 and identified as Drawing Number DA02.02 Revision A

APPENDIX A

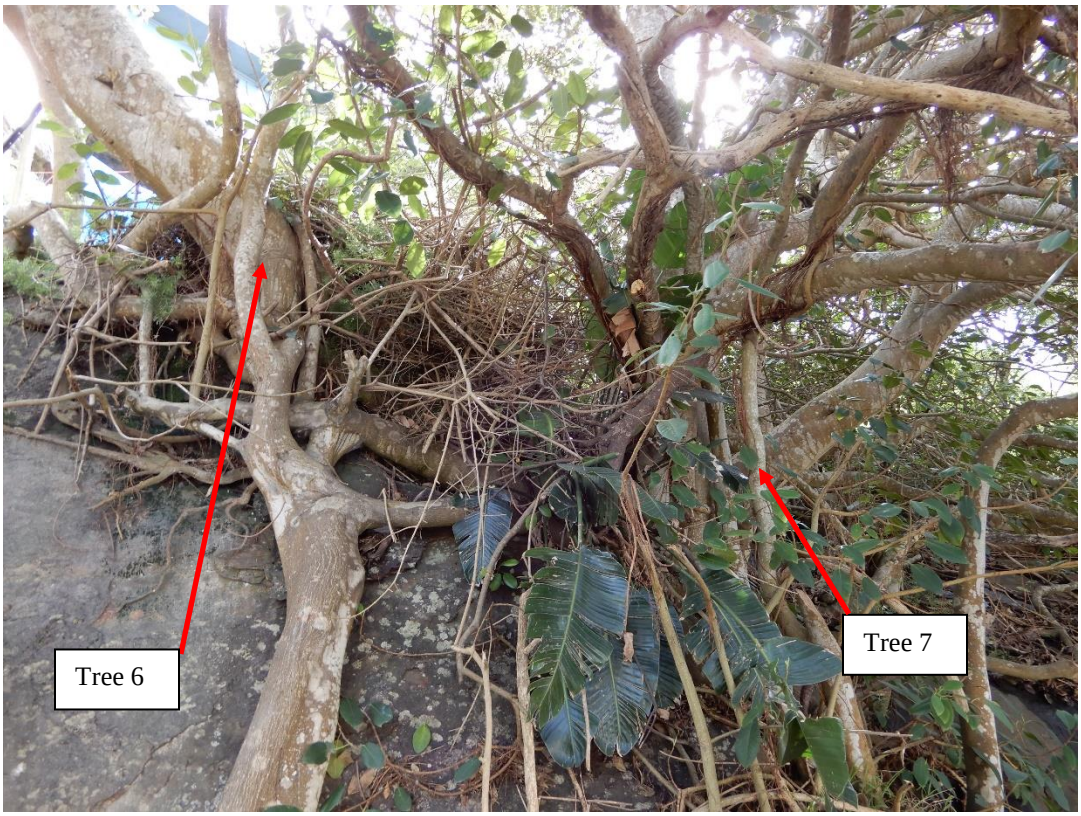
Photograph 1: Illustrating the location and context of trees 1, 2 and 3.


Photograph 2: Tree # 2 – Illustrating the dieback.

Photograph 3: Tree # 3 – Illustrating the past failure and dieback in upper crown.

Photograph 4: : Tree # 6 – Illustrating the location and context.

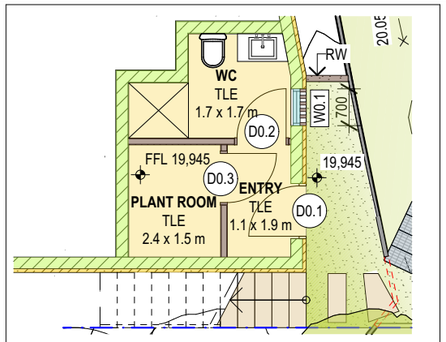
Photograph 5: : Tree # 7 – Illustrating the location and context.



Photograph 6: Illustrating the location and context of tree numbers 6 and 7.

APPENDIX B - TREE DATA SUMMARY - 13A OCEAN ROAD PALM BEACH - POOL APPLICATION

Tree No.	*Genus, Species (Common Name)*	Height (m)	Canopy (m)	DBH (mm)	DBH for TPZ	DGL for SRZ	Foliage Condition	Age Class	Trunk	Trunk Lean	Crown balance	Past Pruning	Stability	Branch Attachment	Health	Vigour	Dead Wood	Pest or disease	ULE	Landscape Significance	Retention Value*	Comments
1	*Livistona australis* (Cabbage Tree Palm)	2	2.5	ca. 320	N/A	N/A	Good foliage condition	Semi Mature	Single trunk	Upright trunk	Balanced canopy area	No evidence of significant past pruning	Appears stable	N/A	Good health	Good vigour	<5%	No visual evidence of significant pest or disease	1 Long (> 40 years)	Low to moderate landscape significance	3	
2	*Banksia integrifolia* (Coast Banksia)	6	5	ca. 300	300	350	Fair foliage condition	Mature	Single trunk	Slight trunk lean SE	Majority of canopy to the east	No evidence of significant past pruning	Appears stable	Sound branch attachment	Good health	Fair vigour	15%	No visual evidence of significant pest or disease	2 Medium (15 to 40 years)	Moderate landscape significance	2	The tree's past canopy development has been suppressed. At the time of inspection the tree was of fair vigour and exhibited reduces foliage size and density and moderate levels of dieback (high exposure to salt laden winds).
3	*Banksia integrifolia* (Coast Banksia)	7.5	6	ca. 300	300	350	Fair foliage condition	Mature	Single trunk	Upright trunk	Balanced canopy area	No evidence of significant past pruning	Appears stable	Fair branch attachment	Good health	Fair vigour	20%	No visual evidence of significant pest or disease	2 Medium (15 to 40 years)	Moderate landscape significance	2	The tree displays fair branch attachment with evidence of past failures. At the time of inspection the tree was of fair vigour and exhibited reduces foliage size and density and moderate levels of dieback (high exposure to salt laden winds). Upper central crown dead (or possibly reduction pruned in past).
4	*Pittosporum undulatum* (Native Daphne, Sweet Pittosporum)	4.5	2.5	Up to 140 (240 above the root flare)	240	240	Poor foliage condition	Mature	Multi trunked	Upright trunk	Balanced canopy area	Lower limbs pruned in past to 1.5 metres and appears to have been dead wooded in past	Appears stable	Fair branch attachment	Poor health	Poor vigour	35 to 40%	Leaf Miner present	3 Short (5 to 15 years)	Low landscape significance	3	The tree displays fair branch attachment with multiple leaders from 0.6 metres with some evidence of poor attachment at junctions - not considered at risk of failure. At the time of inspection the tree was of poor health and poor vigour and exhibited significant levels of dieback and epicormic growth. Short ULE.
5	*Banksia integrifolia* (Coast Banksia)	10	4 x 8	150, 180, 260	445	320	Good foliage condition	Mature	Multi trunked	Upright trunk	Majority of canopy on an east x west axis	Lower limbs pruned in past to 1.8 metres	Appears stable	Fair branch attachment	Good health	Fair vigour	15 to 20%	No visual evidence of significant pest or disease	2 Medium (15 to 40 years)	Moderate to high landscape significance	2	At the time of inspection the tree was of fair vigour and exhibited reduced foliage size and density and moderate to high levels of dieback(high exposure to salt laden winds). Eastern leader/branch leaning on and supported by exposed sandstone outcrop (reliant on outcrop for support).
6	*Ficus rubiginosa* (Port Jackson Fig, Rusty Fig)	6	8	ca. 500	500	700	Good foliage condition	Mature	Single trunk	Upright trunk	Majority of canopy to the south	Lower limbs pruned in past to 2 metres	Appears stable	Fair branch attachment	Good health	Good vigour	<5%	No visual evidence of significant pest or disease	1 Long (> 40 years)	Moderate to high landscape significance	2	The tree's past canopy development has been suppressed. Located on top edge of exposed sandstone outcrop with large diameter exposed roots growing down the outcrop.
7	*Ficus rubiginosa* (Port Jackson Fig, Rusty Fig)	8	16	Up to ca. 400 (ca. 800 above the root flare)	800	800	Good foliage condition	Mature	Multi trunked	Upright trunk	Majority of canopy to the NE	Lower limbs pruned in past to 2.5 metres	Appears stable	Fair branch attachment	Good health	Good vigour	<5%	No visual evidence of significant pest or disease	1 Long (> 40 years)	High landscape significance	1	The tree's past canopy development has been suppressed (slight to moderate canopy bias to NE). Located on top edge of exposed sandstone outcrop with large diameter exposed roots growing down the outcrop. Th tree displays fair branch attachment with multiple leaders - limited view of junctions from low side of sandstone outcrop - structural integrity of junctions not able to be confirmed.
ca = approximate diameter at breast height (DBH) estimated from nearest property boundary or fence where trees were located on adjoining properties																						
* Retention Values: 1 - High (Priority for retention); 2 - Moderate (Consider for retention); 3 - Low or short ULE (Not warranting specific design consideration) and 4 - Remove (very short ULE, structurally unsound, weed species etc.)																						



2 PLANT ROOM 1:100

NOTE :
- PLANTS SHOWN ARE DIAGRAMMATIC ONLY. SPECIES OF PLANTS - REFER TO LANDSCAPE PLAN
- TREE REFERENCE NUMBER - REFER TO SITE PLAN

T7
T6
T4
T5
T3
T2
T1

LIGHTWEIGHT STEEL MESH STAIR DESCENDING ALONG SIDE OF ROCK FACE, SCREENED FROM BEACH BY EXISTING FIG TREE CANOPY

ROCK RETAINED: DAY BED MOULDS TO ROCK

LANDSCAPE GARDEN BED REFER TO LANDSCAPE PLAN.

BOUNDARY 48.475m

1m SIDE & POOL SETBACK

CONCRETE STAIRWELL BETWEEN HOUSE + ROCK FACE

TOW 7.51

REMOVE EXISTING WALL

EL 7,000

6,950

10,090

LANDING ACCESS FROM HOUSE

EL 20,695

1 DA04.03

21,454

RAISED GARDEN BED

BAL

MESH WALKWAY. HIDDEN FROM BEACH BY HOUSE.

PROPOSED RETAINING WALL APPROX. 800 HIGH

REMOVE EXISTING WALL

SHOT CRETE + ROCK WALL WITH VINES GROWTH

12,861

EXISTING HOUSE

12,660 GUTTER

14,060 RIDGE

16,181

17,099

1.2m PALISADE POOL FENCE WITH NON-CLIMBABLE PLANTS

GB 21,400

EX. RETAINING WALL

1.2m HIGH POOL GLASS FENCE

PLANT ROOM UNDER. SEE PLAN ABOVE

18,956 REMOVE EXIST. RETAINING WALL

19,945

19,950

RW 23,500

TOWEL LAWN

21,800

POOL
V= 28 kl
WL=22,250

21,200

20,800

GB

EX. ROCK

FFL 22,950

SPA

FFL 22,400

TLE

TERRACE
TLE
24.02 m²

BREAKOUT TERRACE 23,660

1 DA04.02

25,280

INCLINATOR STATION 2

INCLINATOR STATION 1

INCLINATOR

1 DA04.01

2m INCLINATOR CARRIAGE SETBACK

2.5m SIDE SETBACK

LANDSCAPE SCREENING REFER TO LANDSCAPE PLAN.

CANOPY TREES IN ACCORDANCE WITH DA CONSENT N0373/17

EX. RW

BOUNDARY 57.16m

31,065

LINE OF DWELLING ABOVE UNDER CONSTRUCTION

COL

EX. ROCK

APPROVED RW UNDER CONSTRUCTION

EX. SUBFLOOR AREA

19.99 m²

PROPOSED ACCESS DECK

BAL

TFL

FFL 31,620

RAINWATER TANK IN ACCORDANCE WITH BASIX CERTIFICATE

EX. ROCK CLIFF

27.724

ACCESS STAIR UNDER CONSTRUCTION

1 POOL PLAN 1:100

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Rev.	Description	Date

NOT FOR CONSTRUCTION

0 1 2

S:\01 Projects\14\1408_Matthews 2 Palm beach\D_design\02_ConceptDA\20_Pool \1408_Matthews Palm Beach_Pool_220519.pln

Project Name: MATTHEWS POOL
Owner: MICHELE MATTHEWS
Address: 13A OCEAN ROAD PALM BEACH NSW
LOT 1 / DP 121833

N

Drawing Name: PLAN - POOL
Drawing Status: DEVELOPMENT APPLICATION

Paper Size: A3	Date Printed: 29/05/2019
Drawn By: ML	Checked By: MM
Project No: 1408	Drawing #: DA02.02_A Rev: