PLANZ
Town Planning Pty Ltd

PO Box 181 Edge Hill
QLD 4870
Suite 26 City Arcade
76-80 Grafton St, Cairns

plan@planztp.com
07 4041 0445
ABN: 83 128 085 870

Council Ref: #779975
Our Ref 71631

18 August 2016

Chief Executive Officer
Douglas Shire Council
PO Box 723
Mossman QLD 4873

Attention: Daniel Lamond

Dear Daniel,

Information Response
MCU Multi-Unit Housing & Holiday Accommodation
33 Davidson St, Port Douglas

Further to Council's information request of 28 July 2016, I am pleased to provide this information response.

1a. Lawful Point of Discharge. The lawful point of discharge will be Davidson Street. The design has been amended to:

a. allow roof water to be piped to Davidson Street by raising the basement level from RL 2.05 to RL3.05, which in turn raises the building 1m higher, as discussed in Item 5 of this Information Response.
b. include fill at the front of the site so that it drain towards Davidson Street.

The attached report from Flanagan Consulting Group contains full details on the proposal and confirms that there will be a slight increase in flows to the road reserve, however there is sufficient capacity to accommodate the increase.

1b. Basement parking – stormwater flows. Minimal stormwater is expected in the basement. The flows will be managed through standard basement construction techniques of perimeter spoon drains and a small sump pump will collect the flow and pump it to the roof water pit located near the front boundary. Refer attached sketch plan 4964 SK01.

1c. Drainage plan showing lawful point of discharge. Site concept drainage plan 4694 SK01 showing the kerb and channel as lawful point of discharge for piped drainage. This is similar to other developments in Davidson Street.

1d. Show basement level plans demonstrating location of services. Indicative concept drainage plan 4694 SK01 attached showing drainage services in the basement.

2. **Provide a geotechnical report addressing Acid Sulfate Soils at the site.** Council is requested to include a condition relating to the requirement for a geotechnical report.

   The amended design results in the basement being 1m higher out of the ground, significantly reducing the amount of excavation. As with similar developments in the area, excavation should be achievable using a conventional excavator. The basement construction is likely to involve removal of loose to medium denser sands as well as cemented sands, coral and greywacke rock. The fill generated by the excavation can be reused across the front of the site as per the Flanagan Consulting Group plan for drainage.

   Engineering and Geotechnical reports will be prepared as part of the future development application for building works.

3. **Demonstrate how on-street works relate to significant trees and existing landscaping within the road reserve.** The access has been re-designed by Flanagan Consulting Group engineers to include a split driveway, that retains the trees see attached plan 4694 SK01.

4. **Demonstrate how the proposed access will address the bus stop area / location of new bus stop.** The "existing bus zone" consists of a faded sign, which is proposed to be moved 3m to the north – in line with the common boundary with the adjoining property. It is standard practice to put infrastructure on the boundary rather than in the front of a property, it is likely that because the site was vacant, no detailed thought was given to the original location.

   There is no change to the width of the road reserve or the location of the existing bus zone. The bus zone as shown below is still a minimum of 9.5m in length with additional room for pulling in and pulling out. Refer to attached Drawing DANBRY001 A.3 REV A. There is sufficient capacity in the road reserve for the bus stop in its current location. It is only the sign that needs to be relocated.

5. **Height.** As discussed at the site meeting between Council's planners and Hunt Design, in achieving a lawful point of discharge to Davidson Street, the building is now raised 1m higher out of the ground. The floor to ceiling heights have not changed nor has the overall roof height, however the basement has now been raised 1m higher out of the ground.

The table below shows the new height for the amended design still allows for compliance with the overall height provisions.

Element	Scheme	As Lodged	Amended Design	Complies
Basement	2.8m	2.85m	2.85m	✓
Building	10m maximum	9m	9m	✓
Roof	3.5m maximum	1.0m – 1.5m	1.0m – 1.5m	✓
Overall Height	13.5	12	13m	✓

The figures below are extracts from to attached Drawing DANBRY001 A.8 REV A and A.9 REV A, which shows that the proposed building is at the same height as the adjoining buildings. The built form of the proposed building is less than the adjoining uses – in length of façade facing the street and use of a variety of materials, and also due to vegetation retained on street.

EAST ELEVATION **E02**

WEST ELEVATION **E04**

6. Amended Plans for Application

Finally, the amended plans and supporting documents are listed here to assist Council.

Drawing or Document	Reference	Date
Hunt Design - Basement Level	DANBRY001 A.2 REV A	16/08/2016
Hunt Design - Level 1	DANBRY001 A.3 REV A	16/08/2016
Hunt Design - Level 2	DANBRY001 A.4 REV A	16/08/2016
Hunt Design - Level 3	DANBRY001 A.5 REV A	16/08/2016
Hunt Design - Roof Level	DANBRY001 A.6 REV A	16/08/2016
Hunt Design - Elevations North and East	DANBRY001 A.8 REV A	16/08/2016
Hunt Design - Elevations South & West	DANBRY001 A.9 REV A	16/08/2016
Hunt Design - Elevation Sections	DANBRY001 A.10 REV A	16/08/2016
Hunt Design - Survey Plan & Planning Analysis	DANBRY001 A.12 REV A	16/08/2016
Hunt Design - Rendered Drawing: Proposed New Apartment Building. Davidson St looking South-West	DANBRY001 A.1 REV A	16/08/2016
Hunt Design - Rendered Drawing: Proposed New Apartment Building. Davidson St looking West	DANBRY001 A.7 REV A	16/08/2016
Hunt Design - Rendered Drawing: Proposed New Apartment Building. Davidson St looking North-West	DANBRY001 A.11 REV A	16/08/2016
Flanagan Consulting Group - Engineering Statement - Filling & Excavation	FCG L-GA0143 RFI RESPONSE	15/08/2016
Flanagan Consulting Group – Stormwater Concept Plan 4694-SK01	FCG 4694-SK01	12/08/2016

If you require any further information please do call me.

Yours faithfully,

Nikki Huddy
Town Planner

Att. Flanagan Consulting Group – Engineering Statement regarding Filling and Excavation
Flanagan Consulting Group – Stormwater Concept Plan 4694-SK01
Hunt Design Amended Proposal Plans – DANBRY001 16 August Rev A

FLANAGAN CONSULTING GROUP
Trusted Advisor to Northern Australia

Our Ref: 4694-01
L-GA0143 RFI RESPONSE

15/08/16

Chief Executive Officer
Douglas Shire Council
PO Box 359
CAIRNS, QLD 4870

Attention: Paul Hoye

Dear Paul,

RESPONSE TO ITEM 1 OF INFORMATION REQUEST #779975
MCU MULTI-UNTI HOUSING AND HOLIDAY ACCOMMODATION
33 DAVIDSON ST, PORT DOUGLAS

Further to Council's Information Request (REF: #779975), the following responses are provided to Item 1 :

- address the Filling and Excavation Code, and specifically A3.1, A3.2, A3.3 and A3.4 in more detail to show compliance;

Response:

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTION	COMMENTS
P3 Filling and excavation does not result in a change to the run off characteristics of a Site which then have a detrimental impact upon the Site or nearby land or adjacent Road reserves.	*A3.1 Filling and excavation does not result in the ponding of water on a Site or adjacent land or Road reserves.*	Works proposed on the site do not create ponding issues. Complies.
	A3.2 Filling and excavation does not result in an increase in the flow of water across a Site or any other land or Road reserves.	Currently the entire site overlands flows to the property at the rear. Development works will pipe the Q20 roof water flows and the front filled section of the site will be relevelled and drain towards Davidson Street thus reducing post development flows across the rear property. There will be a slight increase in flows to Davidson Street, but given the road reserve width this slight increase will pose no adverse impact. Complies.
	A3.3 Filling and excavation does not result in an increase in the volume of water or concentration of water in a Watercourse and overland flow paths.	Post development overland flows are reduced by piping Q20 roof water to Davidson Street. Complies.
	A3.4 Filling and excavation complies with the specifications set out in the Planning Scheme Policy No 6 – FNQROC Development Manual.	Complies.

- demonstrate how storm water flows will be managed at the basement car park level;

Response:

Roof water drainage will be connected to the basement soffit and piped to Davidson Street kerb and channel. Storm water entering the basement will be very minimal. This will enter the basement from cars driving into the basement during rain events and water seepage through the basement wall. These flows are very minimal and standard basement construction techniques of perimeter spoon drains and a small sump pump will collect the flow and pump it to the roof water pit located near the front boundary. Refer attached sketch plan 4964 SK01.

- a Drainage Plan, detailing a lawful point of discharge, prepared by suitably qualified persons should be submitted as part of the response to the above; and

Response:

Please find attached our site concept drainage plan 4694 SK01 showing the kerb and channel as our legal point of discharge for piped drainage. This is similar to other developments in Davidson Street.

- provide basement level plans which demonstrate where all relevant services are to be located, this should also indicate how the storm water services (pumps etc.) can be accommodated within the development.

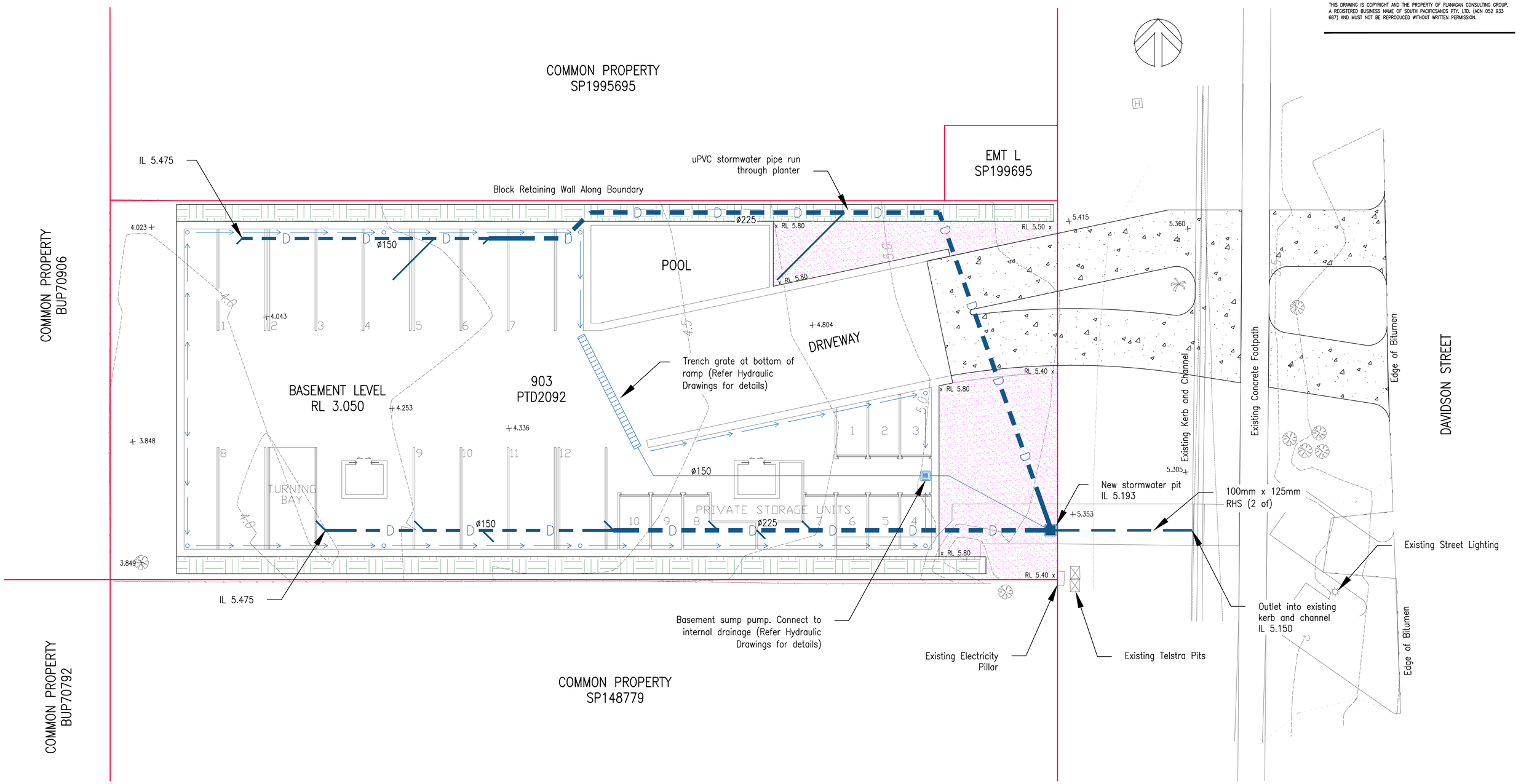
Response:

Please find attached our site concept drainage plan 4694 SK01 showing drainage services in the basement. Please note our plan is indicative and subject to future coordination with the hydraulic consultant.

We trust the above information and attached plan sufficiently address item 1 of the RFI and should you have any queries regarding the responses, please contact Greg Applin at the Cairns office.

Yours faithfully
FLANAGAN CONSULTING GROUP

GREG APPLIN
Senior Civil Engineer
RPEQ: 6073



LEGEND

- Proposed 100x125 RHS Pipe (2 of)
- Proposed uPVC roof water drainage pipe hung from basement soffit
- Proposed Planter Box
- Proposed Concrete Driveway
- Proposed fill area, graded to drain to frontage
- Proposed Basement perimeter spoon drain and pits (Refer Hydraulic Drawings)
- x RL 5.80 Proposed Spot Levels
- Existing Surface Contour (0.25m Interval)
- Existing Lot Boundary
- Existing Fence
- + 4.839 Existing Spot Levels

GENERAL NOTES

1. This drawing is to be read in conjunction with the Architect's Drawings and Building Hydraulic Drawings.
2. The Contractor shall verify the location of all existing services with the relevant authority prior to construction commencing. The location of all existing services are approximate only.
3. Check all existing levels where new works match into existing works prior to construction.

DRAINAGE SUMMARY

Pre–development

Site falls from east to west at a slope of 2.5–3.0%. All stormwater from site sheet flows over the western boundary.

Catchment Area = 1000 m^2
Impervious Area = 0 m^2
T_C = 5.0 Minutes
Q_{100} = 0.079 M^3/S

Post–development

The developed site is comprised of two catchments, a eastern and a western catchment. Stormwater runoff from the eastern catchment includes overland flow at the site frontage and roof water up to Q20 flows, all discharging into Davidson Street. The roof water network will be sized to cater for Q_{20} flows.

Eastern Catchment
Frontage fill area = 133 m^2 (54 m^2 impervious)
T_C = 5.0 Minutes
Q_{100} = 0.012 M^3/S

Roof Catchment Area = 574 m^2 (574 m^2 Impervious)
T_C = 5.0 Minutes
Q_{20} = 0.040 M^3/S

Runoff from the western catchment comprises of overland flow from the balance of the site (outside the building footprint and site frontage area) and roof water above Q20, discharging over the western boundary.

Western Catchment
Catchment area = 293 m^2 (54 m^2 impervious)
T_C = 5 Minutes
Q_{100} = 0.040 M^3/S

Excess flows from roof catchment
$Q_{100} - Q_{20}$ = 0.014 m^3/S

Total Q_{100} FLOW = 0.054 m^3/S

FLANAGAN CONSULTING GROUP
DEVELOPMENT CONSULTANTS • PROJECT MANAGERS • ENGINEERS • PLANNERS
CAIRNS (07) 4031 3199 DARWIN (08) 8911 0046 MACKAY (07) 4944 1200 TOWNSVILLE (07) 4724 5737
www.flanaganconsulting.com.au

33 DAVIDSON ST DEVELOPMENT

STORMWATER CONCEPT

Sheet 1 of 1

4694-SK01 1:100 A1 Full Size

Acad No. 4694-SK01.DWG 12 August 2016

PROJECT : PROPOSED NEW APARTMENT BUILDING
AT : 33 DAVIDSON STREET (LOT 903 ON PTD2092) PORT DOUGLAS, QLD, 4877, AUSTRALIA
FOR : FOXWISE DEVELOPMENTS PTY LTD

PROJECT No: DANBRY001
DATE : 16/08/2016
DRAWING No : A.1 REV A

hunt DESIGN
Architecture
Master Planning
Interiors

NOTE: REFER DRAWING A.12 FOR SURVEYORS DRAWING (APPENDIX A) & PLANNING ANALYSIS

B A.10

E01 A.8

INDICATIVE LOCATION OF STORMWATER DRAIN

BOUNDARY

POOL OVER

1 2 3 4 5 6 7

8.42 %

16.84 %

8.42 %

A A.10

BOUNDARY

REFER CIVIL DRAWINGS FOR BASEMENT DRAINAGE AND STORMWATER DETAILS

E04 A.9

8 9 10 11 12

TURNING BAY

LIFT

LIFT

1 2 3

PRIVATE STORAGE UNITS

10 9 8 7 6 5 4

BOUNDARY

E02 A.8

A A.10

BOUNDARY

INDICATIVE LOCATION OF STORMWATER DRAIN

E03 A.9

DISCHARGE STORMWATER TO KERB. BENEATH LINEAR CROSSOVER DRAIN

B A.10

BASEMENT LEVEL

SCALE 1:200

PROJECT : PROPOSED NEW APARTMENT BUILDING
AT : 33 DAVIDSON STREET (LOT 903 ON PTD2092) PORT DOUGLAS, QLD, 4877, AUSTRALIA
FOR : FOXWISE DEVELOPMENTS PTY LTD

N

PROJECT No: DANBRY001
DATE : 16/08/2016
DRAWING No : A.2 REV A

hunt DESIGN
Architecture
Master Planning
Interiors

NOTE: REFER DRAWING A.12 FOR SURVEYORS DRAWING (APPENDIX A) & PLANNING ANALYSIS

LEVEL 1

SCALE 1:200

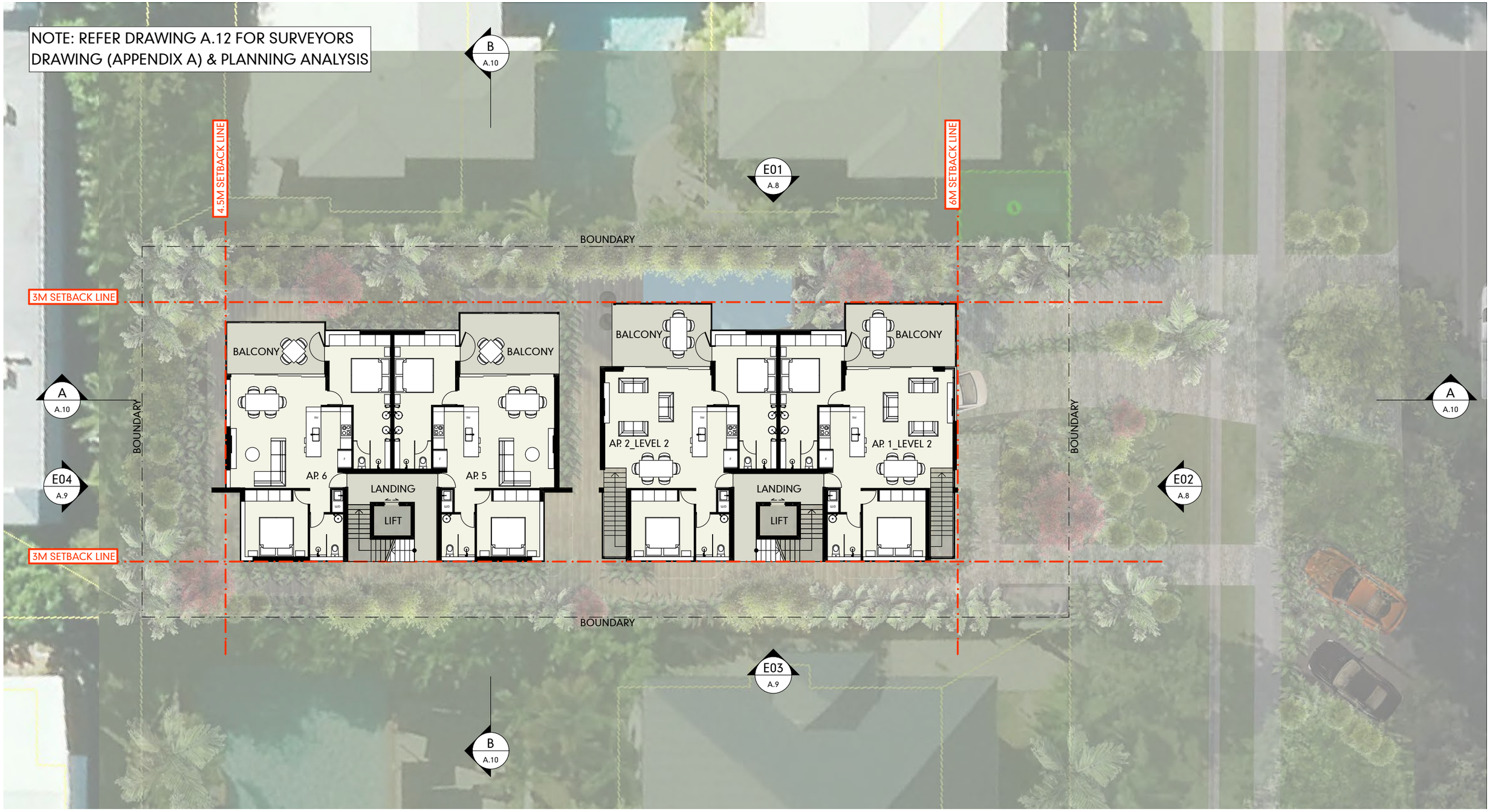
PROJECT : PROPOSED NEW APARTMENT BUILDING
AT : 33 DAVIDSON STREET (LOT 903 ON PTD2092) PORT DOUGLAS, QLD, 4877, AUSTRALIA
FOR : FOXWISE DEVELOPMENTS PTY LTD

N

PROJECT No: DANBRY001
DATE : 16/08/2016
DRAWING No : A.3 REV A

hunt DESIGN
Architecture
Master Planning
Interiors

NOTE: REFER DRAWING A.12 FOR SURVEYORS DRAWING (APPENDIX A) & PLANNING ANALYSIS



LEVEL 2

SCALE 1:200

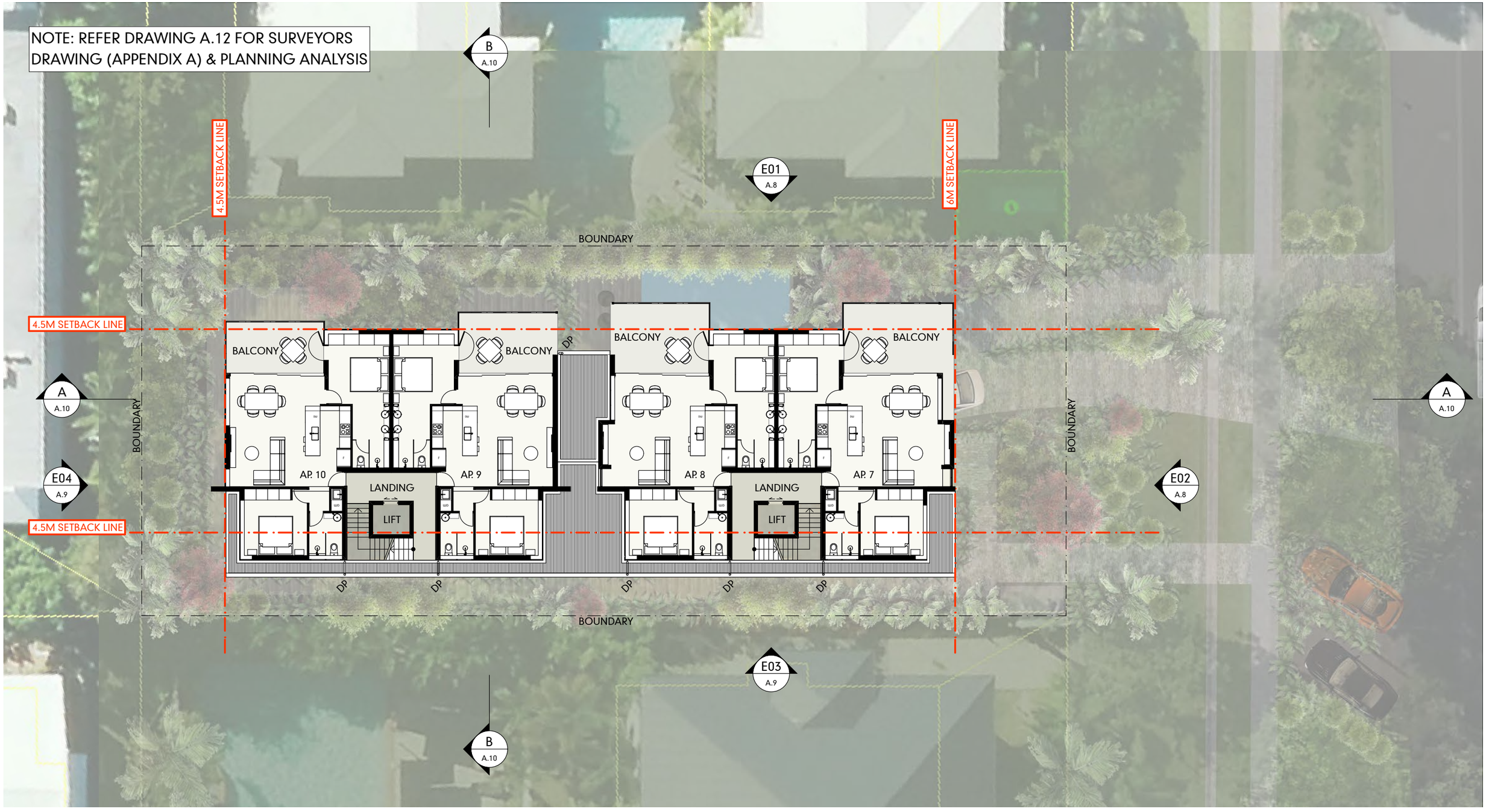
PROJECT : PROPOSED NEW APARTMENT BUILDING
AT : 33 DAVIDSON STREET (LOT 903 ON PTD2092) PORT DOUGLAS, QLD, 4877, AUSTRALIA
FOR : FOXWISE DEVELOPMENTS PTY LTD

N

PROJECT No: DANBRY001
DATE : 16/08/2016
DRAWING No : A.4 REV A

hunt DESIGN
Architecture
Master Planning
Interiors

NOTE: REFER DRAWING A.12 FOR SURVEYORS DRAWING (APPENDIX A) & PLANNING ANALYSIS



LEVEL 3

SCALE 1:200

PROJECT : PROPOSED NEW APARTMENT BUILDING
AT : 33 DAVIDSON STREET (LOT 903 ON PTD2092) PORT DOUGLAS, QLD, 4877, AUSTRALIA
FOR : FOXWISE DEVELOPMENTS PTY LTD

N

PROJECT No: DANBRY001
DATE : 16/08/2016
DRAWING No : A.5 REV A

hunt DESIGN
Architecture
Master Planning
Interiors

NOTE: REFER DRAWING A.12 FOR SURVEYORS DRAWING (APPENDIX A) & PLANNING ANALYSIS

ROOF LEVEL

SCALE 1:200

PROJECT : PROPOSED NEW APARTMENT BUILDING
AT : 33 DAVIDSON STREET (LOT 903 ON PTD2092) PORT DOUGLAS, QLD, 4877, AUSTRALIA
FOR : FOXWISE DEVELOPMENTS PTY LTD

N

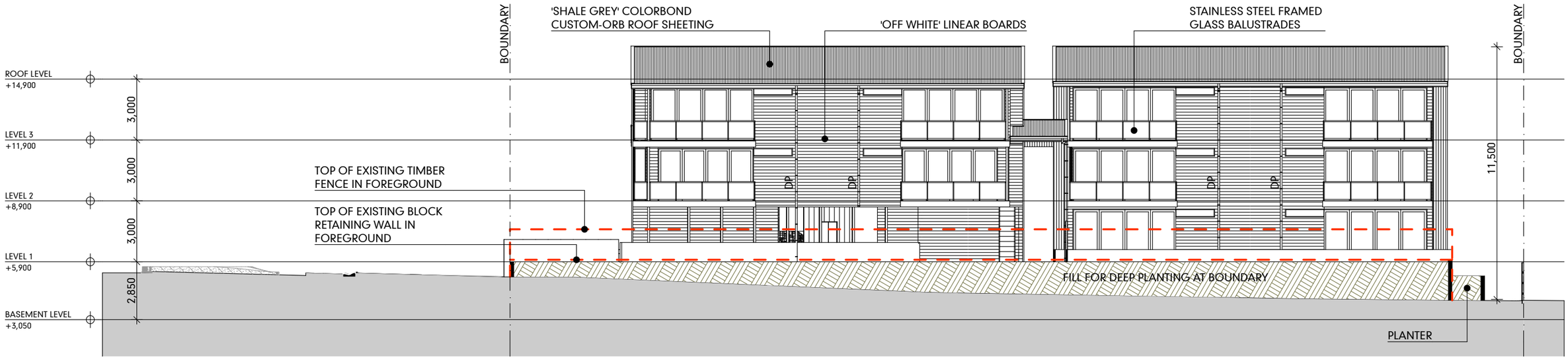
PROJECT No: DANBRY001
DATE : 16/08/2016
DRAWING No : A.6 REV A

hunt DESIGN
Architecture
Master Planning
Interiors

PROJECT : PROPOSED NEW APARTMENT BUILDING
AT : 33 DAVIDSON STREET (LOT 903 ON PTD2092) PORT DOUGLAS, QLD, 4877, AUSTRALIA
FOR : FOXWISE DEVELOPMENTS PTY LTD

PROJECT No: DANBRY001
DATE : 16/08/2016
DRAWING No : A.7 REV A

hunt DESIGN
Architecture
Master Planning
Interiors

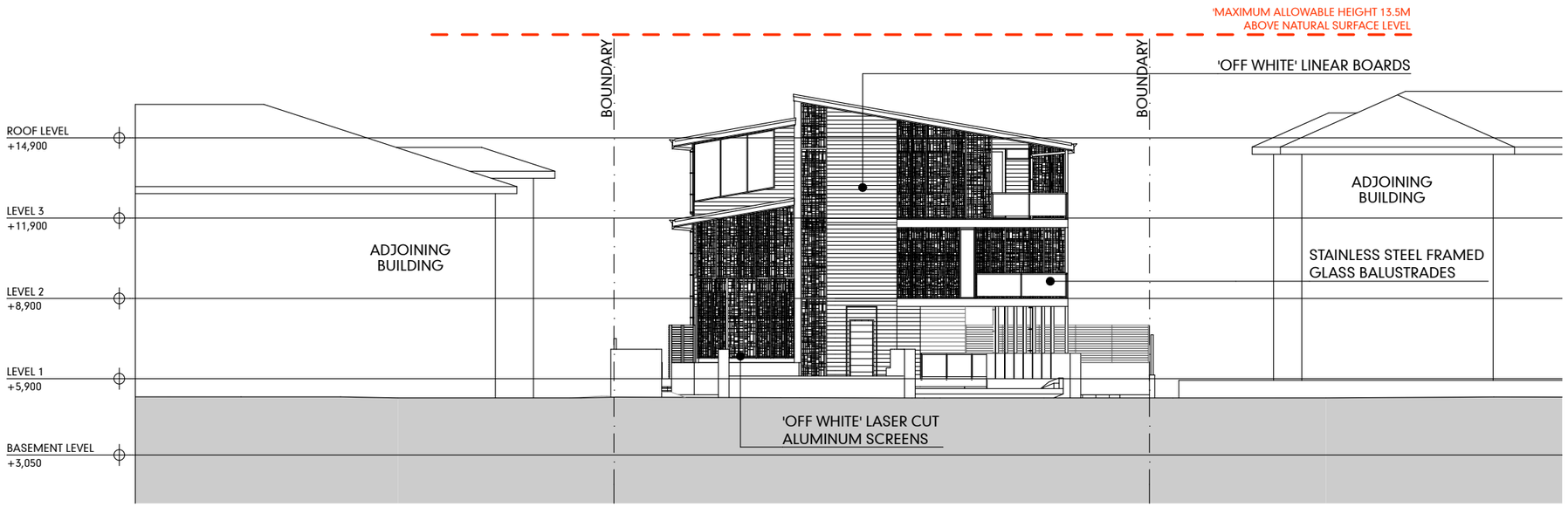


NORTH ELEVATION

SCALE 1:200

E01

A.2, A.3, A.4, A.5, A.6



EAST ELEVATION

SCALE 1:200

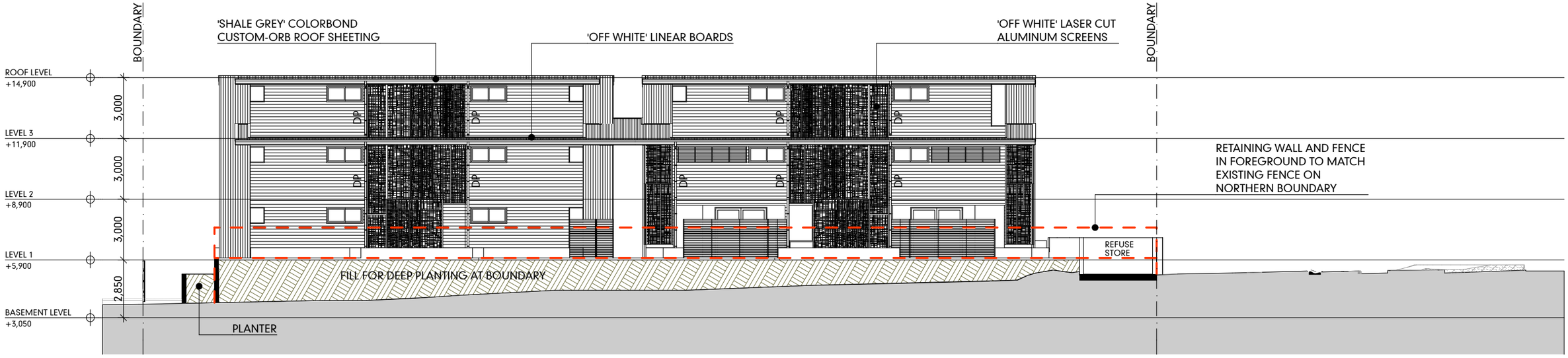
E02

A.2, A.3, A.4, A.5, A.6

PROJECT : PROPOSED NEW APARTMENT BUILDING
AT : 33 DAVIDSON STREET (LOT 903 ON PTD2092) PORT DOUGLAS, QLD, 4877, AUSTRALIA
FOR : FOXWISE DEVELOPMENTS PTY LTD

PROJECT No: DANBRY001
DATE : 16/08/2016
DRAWING No : A.8 REV A

hunt DESIGN
Architecture
Master Planning
Interiors

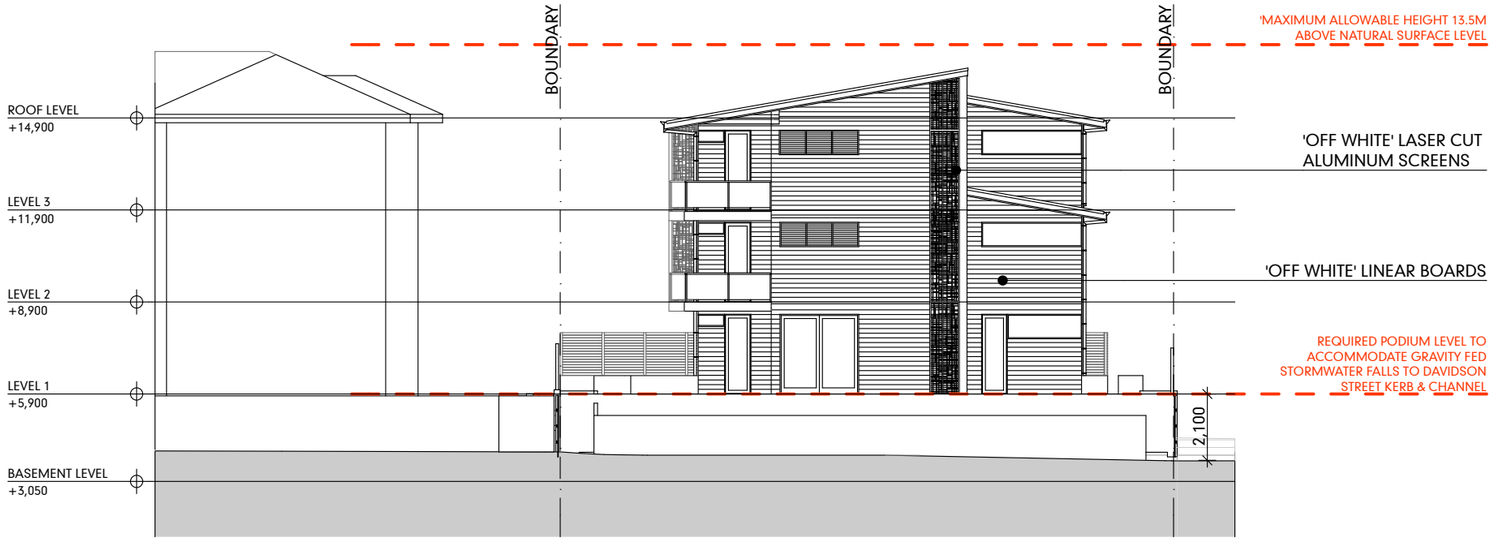


SOUTH ELEVATION

SCALE 1:200

E03

A.2, A.3, A.4, A.5, A.6



WEST ELEVATION

SCALE 1:200

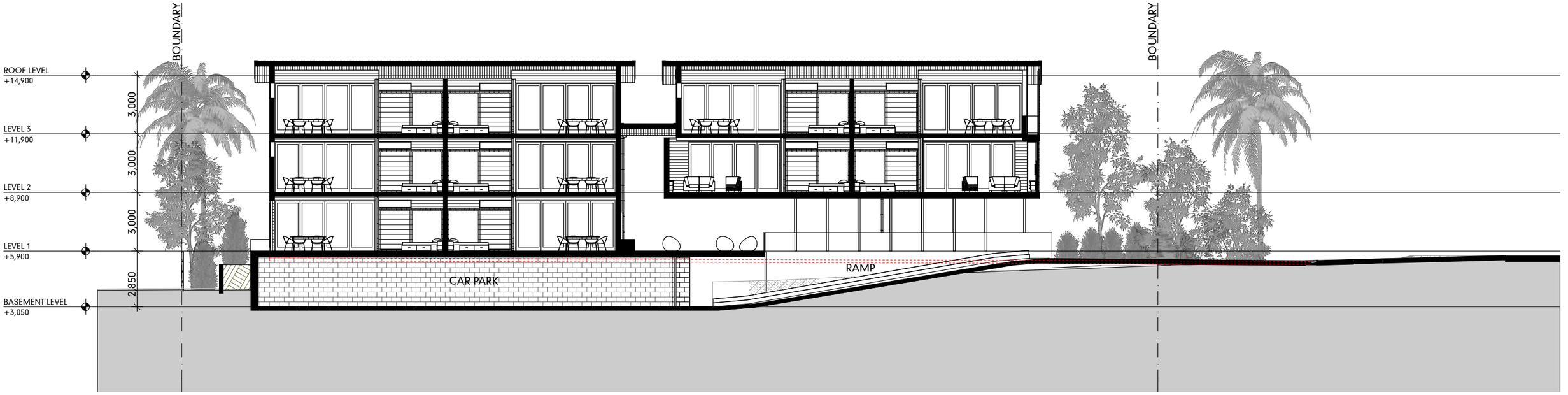
E04

A.2, A.3, A.4, A.5, A.6

PROJECT : PROPOSED NEW APARTMENT BUILDING
AT : 33 DAVIDSON STREET (LOT 903 ON PTD2092) PORT DOUGLAS, QLD, 4877, AUSTRALIA
FOR : FOXWISE DEVELOPMENTS PTY LTD

PROJECT No: DANBRY001
DATE : 16/08/2016
DRAWING No : A.9 REV A

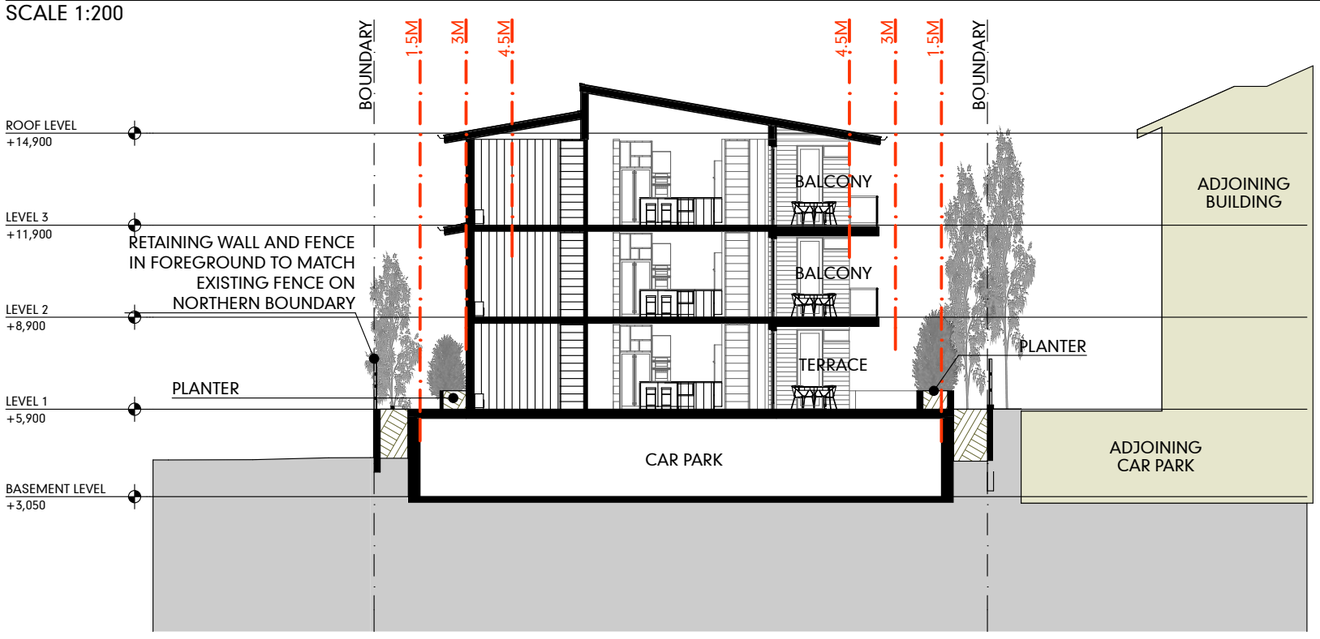
hunt DESIGN
Architecture
Master Planning
Interiors



SECTION A

SCALE 1:200

A.2, A.3, A.4, A.5, A.6



SECTION B

SCALE 1:200

A.2, A.3, A.4, A.5, A.6

PROJECT : PROPOSED NEW APARTMENT BUILDING
AT : 33 DAVIDSON STREET (LOT 903 ON PTD2092) PORT DOUGLAS, QLD, 4877, AUSTRALIA
FOR : FOXWISE DEVELOPMENTS PTY LTD

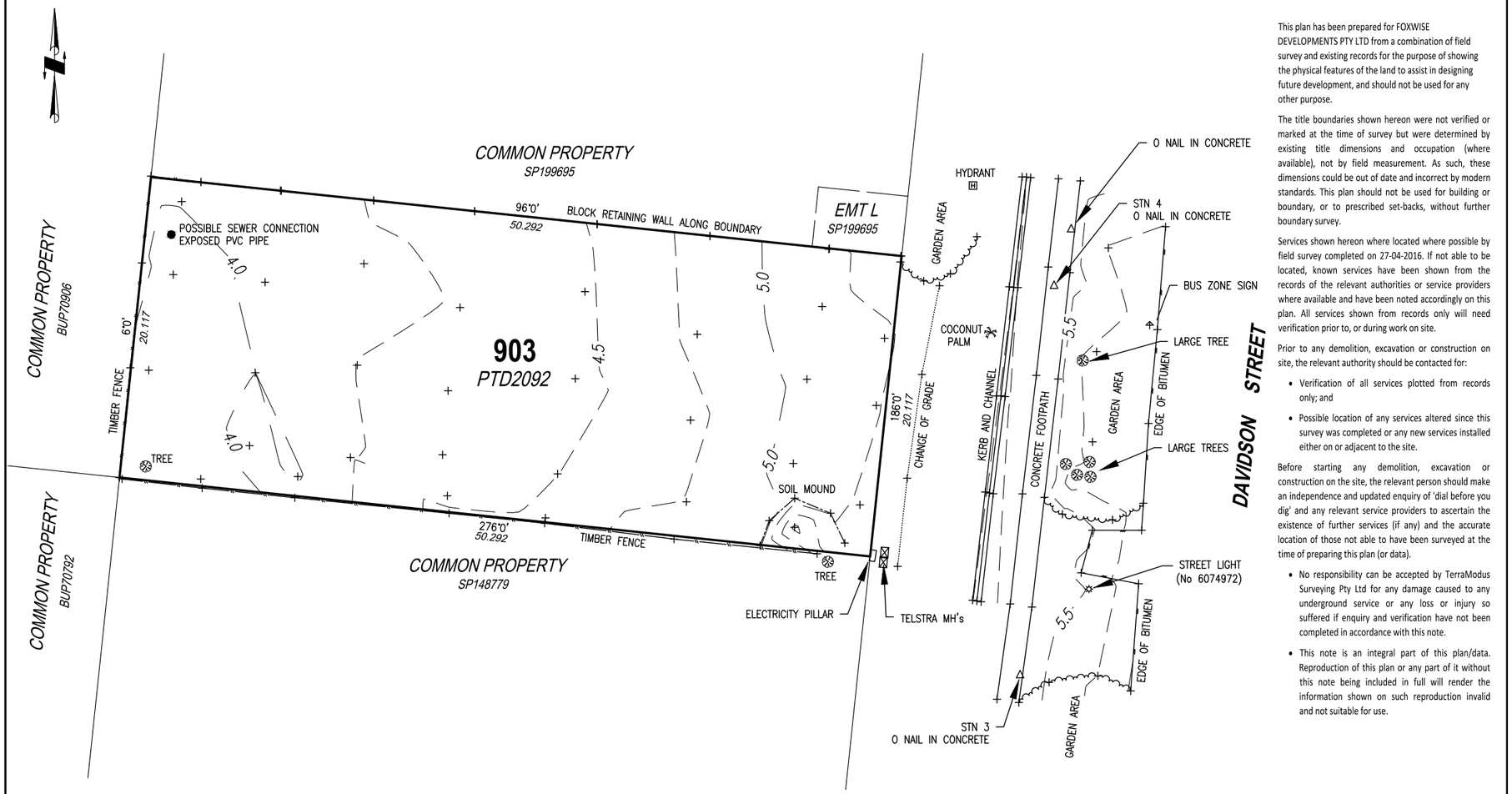
PROJECT No: DANBRY001
DATE : 16/08/2016
DRAWING No : A.10 REV A

hunt DESIGN
Architecture
Master Planning
Interiors

PROJECT : PROPOSED NEW APARTMENT BUILDING
AT : 33 DAVIDSON STREET (LOT 903 ON PTD2092) PORT DOUGLAS, QLD, 4877, AUSTRALIA
FOR : FOXWISE DEVELOPMENTS PTY LTD

PROJECT No: DANBRY001
DATE : 16/08/2016
DRAWING No : A.11 REV A

hunt DESIGN
Architecture
Master Planning
Interiors



IMPORTANT NOTE

This plan has been prepared for FOXWISE DEVELOPMENTS PTY LTD from a combination of field survey and existing records for the purpose of showing the physical features of the land to assist in designing future development, and should not be used for any other purpose.

The title boundaries shown hereon were not verified or marked at the time of survey but were determined by existing title dimensions and occupation (where available), not by field measurement. As such, these dimensions could be out of date and incorrect by modern standards. This plan should not be used for building or boundary, or to prescribed set-backs, without further boundary survey.

Services shown hereon where located where possible by field survey completed on 27-04-2016. If not able to be located, known services have been shown from the records of the relevant authorities or service providers where available and have been noted accordingly on this plan. All services shown from records only will need verification prior to, or during work on site.

Prior to any demolition, excavation or construction on site, the relevant authority should be contacted for:

- Verification of all services plotted from records only; and
- Possible location of any services altered since this survey was completed or any new services installed either on or adjacent to the site.

Before starting any demolition, excavation or construction on the site, the relevant person should make an independence and updated enquiry of 'dial before you dig' and any relevant service providers to ascertain the existence of further services (if any) and the accurate location of those not able to have been surveyed at the time of preparing this plan (or data).

- No responsibility can be accepted by TerraModus Surveying Pty Ltd for any damage caused to any underground service or any loss or injury so suffered if enquiry and verification have not been completed in accordance with this note.
- This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid and not suitable for use.

SCALE 1:250 @ A3

0 10|m 20|m 30|m 40|m

NOTES
Level Datum: AHD
Origin of Levels: PSM 40000 RL 3.141m
Meridian: Vide PTD2092
Some RL's may be omitted for clarity.

Coordinate Datum: Arbitrary
Origin of Coordinates: STN 4 (O Nail in Conc) 1000.000 E 5000.000 N
Major Contours ——— 1.0 ———
Minor Contours
Contour Index: 0.25m

Rev. no.	Date	Revision	By
A	04/05/16	Original	ELP

FOXWISE DEVELOPMENTS PTY LTD

PROJECT
CONTOUR AND DETAIL SURVEY
LOT 903 ON PTD2092
33 DAVIDSON STREET
PORT DOUGLAS

SURVEYED ELP 27-04-2016
DRAWN ELP 29-04-2016
SHEET SIZE A3 SHEET 1 OF SHEETS 1
FIELD BK. No 36 / LB 2
DIGITAL FILE REFERENCE 129001.dwg
LOCAL AUTHORITY DOUGLAS SHIRE COUNCIL
LOCALITY PORT DOUGLAS
CLIENT REFERENCE
TITLE REF 20019170
SCALE 1:250

TerraModus SURVEYING
PO Box 6594 Cairns Qld 4870
Ph: 0413580146 admin@terramodus.com.au

AMENDED
ISSUE A
DRAWING NO. 1290-01

PLANNING ANALYSIS

PLANNING AREA -		TOURIST & RESIDENTIAL
SITE AREA		1000 M^2
BASEMENT AREA (NOT INCLUDING RAMP)		540 M^2
LEVEL 1 GFA (INCLUDING ACCESS STAIR & LANDING)	(50 M^2)	314 M^2
LEVEL 2 GFA (NOT INCLUDING ACCESS STAIR & LANDING)	(48 M^2)	304 M^2
LEVEL 3 GFA (NOT INCLUDING ACCESS STAIR & LANDING)	(48 M^2)	297 M^2
TOTAL GFA (NOT INCLUDING STAIR, LIFT & LANDINGS)		**915 M^2**
PLOT RATIO		**0.915**
SITE COVERAGE		
LEVEL 1	324 M^2	(33%)
LEVEL 2	412 M^2	(41%)
LEVEL 3	395 M^2	(40%)
10 APARTMENTS		8 x 2 BEDROOM 2 x 3 BEDROOM
CAR PARKING		13 SPACES PROVIDED
		1 SPACE PER 2 BED APARTMENT 2 SPACES PER 3 BED APARTMENT 2 SPACE ON STREET (NEW)

APPENDIX A - DRAWING NOT TO SCALE

-

PROJECT : PROPOSED NEW APARTMENT BUILDING
AT : 33 DAVIDSON STREET (LOT 903 ON PTD2092) PORT DOUGLAS, QLD, 4877, AUSTRALIA
FOR : FOXWISE DEVELOPMENTS PTY LTD

PROJECT No: DANBRY001
DATE : 16/08/2016
DRAWING No : A.12 REV A

hunt DESIGN
Architecture
Master Planning
Interiors