

- Pit and pipe networks shall be designed to convey all storms up to and including the 1% Annual Exceedance Probability (AEP) event.

Site Data

- Site Area: 3,728 m²;
- Roof Area: 1,919 m²;
- Landscaped Area: 971 m²;
- Other Impervious Area: 838 m²;
- Site Impervious Fraction: 74%;
- Treated Catchment: 3,223 m²; and
- Un-treated Catchment: 505 m².

3. Stormwater Quantity Assessment

As per discussions with Councils Senior Development Officer Rajnesh Prakash, no detention storage has been proposed for this development due to the close proximity of the site to the harbour (Throsby Basin). However, re-use storage volume is proposed to be provided (see Section 4 below for detail).

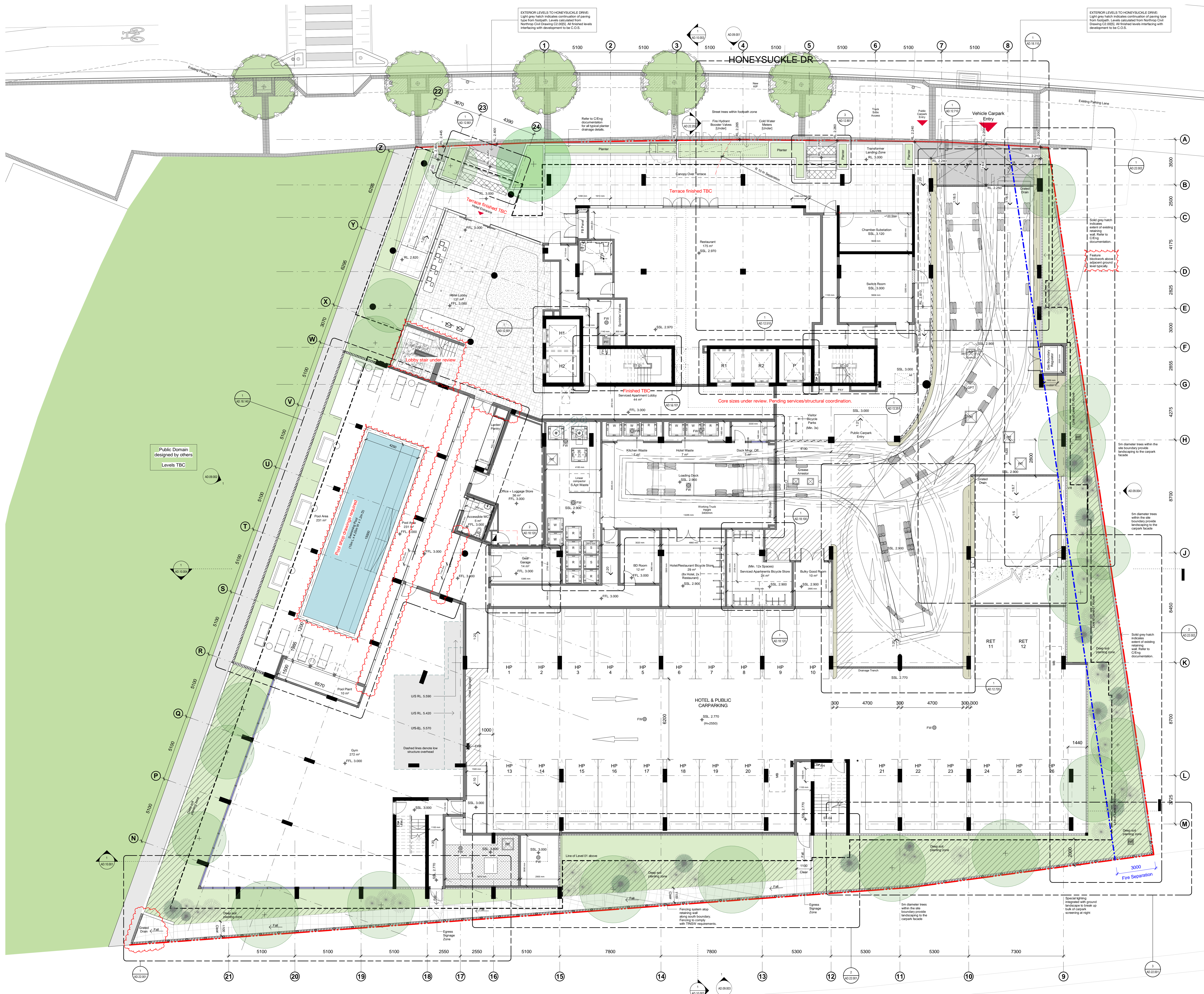
4. Stormwater Quality Assessment

In order to minimise any adverse impacts upon the ecology of the downstream watercourses; stormwater treatment devices have been incorporated into the design of the development. Council's DCP 7.06 (2012) identifies the level of stormwater quality treatment to be provided for the proposed development (refer to Treatment Targets in Table 1).

The performance of the proposed stormwater management strategy was assessed against these targets using the conceptual software MUSIC (Version 6.2.1). The MUSIC model was developed using recommended parameters presented in the document "Draft NSW MUSIC Modelling Guidelines" (WBM, 2010) as recommended in the CN Technical Manual (2013) and MUSIC LINK.

The catchment area was broken down into three sub-catchments to effectively simulate the proposed treatment measures along the treatment train. A schematic of the MUSIC model can be seen below in Figure 1. A catchment plan is included in Appendix C.

APPENDIX A – ARCHITECTURAL PLAN



Check all dimensions and site conditions prior to commencement of any work, the purchase or ordering of any materials, fittings, plant, services or equipment and the preparation of shop drawings and or the fabrication of any components. Do not scale drawings - refer to figured dimensions only. Any discrepancies shall immediately be referred to the architect for clarification. All drawings may not be reproduced or distributed without prior permission from the architect.

Overall Parking Schedule	
Comments	Subtotal
Accessible Hotel and Public	8
Accessible Residential	4
Hotel and Public	121
Residential	90
Retail	2
Visitor	12
Total Amount	237

Ground Floor - Carspaces	
Comments	Subtotal
Hotel and Public	24
Retail	2
Total Amount	26

Ground Floor - Motorbikes	
Comments	Subtotal
Motorbikes	1
Total Amount	1

Ground Floor - Bicycles	
Comments	Subtotal
Serviced Apartments - Floor Mount	19
Serviced Apartments - Visitors - Floor Rail	3
Total Amount	22

Legend - General Arrangement Plans

- XX-XX Refer to A20.*** for Materials and Products schedule for code references.
- DXX Door Code #
- W.XX Window Code #
- Property Boundary
- Penetration Void/Zone
- TGS/Is
- Feature Wall - Ventilated (GF Level Only)
- Planting Zone - Refer to L/Arch Documents
- FFL XX.XX Finished Floor Level
- SSL XX.XX Structural Slab Level
- RL XX.XX Relative Level

NOTE:
 Typical ceiling heights:
 -Bedrooms, kitchen and living areas 2.7m clear
 -Vest areas 2.4m clear
 -Bulkhead locations below above heights to be confirmed
 Refer to AD.05-series for Wall Types
 Refer to AD.30 and AD.31-series for Window and Door Types

EXTERIOR DRAINAGE UNDER REVIEW
 Hydraulic/Civil input required:
 -Ramp landing.
 External Perimeter Blockwork/ facade treatment under review

- Typical Cloud - Recorded change
- Reversed Cloud - Design under review as noted

Revision	Date	Description	Drawn	Checked
A	11/04/19	ISSUED FOR CONSTRUCTION	JT	DE
15	27/03/19	ISSUED FOR COORDINATION	JT	DE
14	22/03/19	ISSUED FOR COORDINATION	JT	DE
13	04/03/19	ISSUED FOR COORDINATION	JT	DE
12	02/03/19	ISSUED FOR COORDINATION	JT	DE
11	24/01/19	ISSUED FOR COORDINATION	JT	DE
10	16/01/19	ISSUED FOR COORDINATION	JT	DE
9	12/01/19	ISSUED FOR COORDINATION	JT	DE
8	22/01/19	ISSUED FOR 50% TENDER	CO	DE
7	03/01/19	ISSUED FOR 50% TENDER	CO	DE

42 Honeysuckle Drive
42 Honeysuckle Drive,
Newcastle

General Arrangement Plan
 Ground Floor Plan

Status: CONSTRUCTION DOCUMENTATION
 Scale: 1:100 @ A0
 Drawn: JT
 Author: JT
 Checked: DE
 Project No: 512109
 Plot Date: 11/04/2019 4:08:19 PM
 Plot File: 42HONEYSUCKLEDRIE_ARCH
 Drawing no. AD.03.101
 Revision: A

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APPENDIX B – MUSIC-LINK REPORT



MUSIC-*link* Report

Project Details		Company Details	
Project:	NL171278 - 42 Honeysuckle Drive	Company:	Northrop Consulting Engineers
Report Export Date:	1/05/2019	Contact:	Sophie Croft
Catchment Name:	NL171278_music_v2.SC	Address:	Level 1, 215 Pacific Highway Charlestown 2290
Catchment Area:	0.373ha	Phone:	02 4943 1777
Impervious Area*:	73.84%	Email:	scroft@northrop.com.au
Rainfall Station:	61078 WILLIAMTOWN		
Modelling Time-step:	6 Mminutes		
Modelling Period:	1/01/1995 - 31/12/2008 11:54:00 PM		
Mean Annual Rainfall:	1125mm		
Evapotranspiration:	1735mm		
MUSIC Version:	6.3.0		
MUSIC-link data Version:	6.31		
Study Area:	Newcastle		
Scenario:	Newcastle		

* takes into account area from all source nodes that link to the chosen reporting node, excluding Import Data Nodes

Treatment Train Effectiveness		Treatment Nodes		Source Nodes	
Node: Post-Development Node	Reduction	Node Type	Number	Node Type	Number
Flow	3.22%	Rain Water Tank Node	1	Urban Source Node	3
TSS	86.8%	Buffer Node	1		
TP	72.2%	Generic Node	2		
TN	47.7%				
GP	92.6%				

Comments

Passing Parameters

Node Type	Node Name	Parameter	Min	Max	Actual
Buffer	Buffer	Proportion of upstream impervious area treated	None	None	1
Post	Post-Development Node	% Load Reduction	None	None	3.22
Post	Post-Development Node	GP % Load Reduction	90	None	92.6
Post	Post-Development Node	TN % Load Reduction	45	None	47.7
Post	Post-Development Node	TP % Load Reduction	65	None	72.2
Post	Post-Development Node	TSS % Load Reduction	85	None	86.8
Rain	Rainwater Tank	% Reuse Demand Met	70	None	94.1481
Urban	By-pass Landscape - 505m2	Area Impervious (ha)	None	None	0.014
Urban	By-pass Landscape - 505m2	Area Pervious (ha)	None	None	0.036
Urban	By-pass Landscape - 505m2	Total Area (ha)	None	None	0.051
Urban	Landscape - 1304m2	Area Impervious (ha)	None	None	0.069
Urban	Landscape - 1304m2	Area Pervious (ha)	None	None	0.060
Urban	Landscape - 1304m2	Total Area (ha)	None	None	0.13
Urban	Roof - 1919m2	Area Impervious (ha)	None	None	0.192
Urban	Roof - 1919m2	Area Pervious (ha)	None	None	0
Urban	Roof - 1919m2	Total Area (ha)	None	None	0.192

Only certain parameters are reported when they pass validation



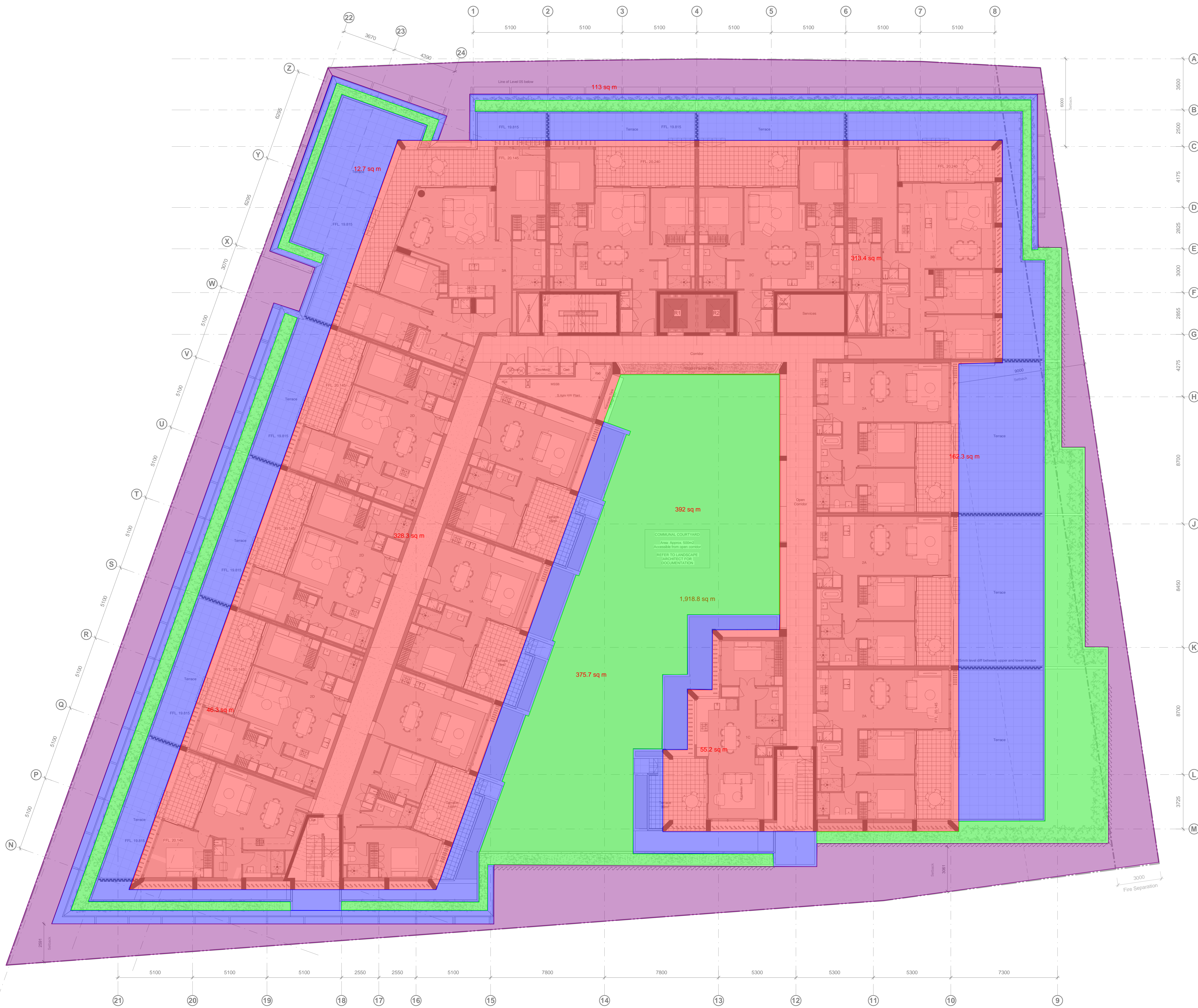
THE CITY OF NEWCASTLE

music^elink

NOTE: A successful self-validation check of your model does not constitute an approved model by The City of Newcastle
MUSIC-*link* now in MUSIC by eWater – leading software for modelling stormwater solutions

CATCHMENT PLAN

- By-passing Catchment
- Impervious Area
- Pervious Area
- Roof Catchment



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Legend - General Arrangement Plans

- XXX-XX Refer to A20-*** for Materials and Products schedule for code references.
- 0XX Door Code #
- W.XX Window Code #
- Property Boundary
- Penetration Void Zone
- TGS's
- Feature Wall - Ventilated (GF Level Only)
- Planting Zone - Refer to L/Arch Documents
- F.FL. XX.XX Finished Floor Level
- SSL. XX.XX Structural Slab Level
- RL. XX.XX Relative Level

NOTE:
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XXXX Typical Cloud - Recorded change
XXXX Reversed Cloud - Design under review as noted

10	22/03/19	ISSUED FOR COORDINATION	JT	DE
9	24/01/19	ISSUED FOR COORDINATION	JF	DE
8	27/09/18	ISSUED FOR SOIL TENDER	CO	DE
7	03/09/18	ISSUED FOR SOIL TENDER	CO	DE
6	11/07/18	ISSUED FOR SOIL TENDER	CO	DE
5	03/07/18	ISSUED FOR COORDINATION	CO	DE
4	13/06/18	ISSUED FOR COORDINATION	CO	DE
3	14/05/18	ISSUE FOR COORDINATION	CO	DE
2	24/04/18	ISSUE FOR DOCUMENTS	CO	DE
1	12/03/18	ISSUE FOR COORDINATION	CO	DE

42 Honeysuckle Drive
42 Honeysuckle Drive,
Newcastle

General Arrangement Plan
Level 05

Status	CONSTRUCTION DOCUMENTATION		
Scale	1:100	@ A0	
Drawn	Author	Checked	Checker
Project No.	s12109		
Plot Date	25/03/2019 10:43:00 AM		
Plot File	42HONEYSUCKLEDRIE_ARCH		
Drawing no.	Revision		
AD.03.107	10		

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By-passing Catchment Pervious Area
By-passing Catchment Impervious Area

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 -Ramp landing.
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Typical Cloud - Revised change
 Revised Cloud - Design under review as noted

Revision	Date	Description	Issue	Checked
A	11/04/19	ISSUED FOR CONSTRUCTION	DE	DE
10	27/02/19	ISSUED FOR COORDINATION	JT	DE
11	22/02/19	ISSUED FOR COORDINATION	JT	DE
12	04/03/19	ISSUED FOR DA MODIFICATION	BS	DE
13	05/02/19	ISSUED FOR COORDINATION	JT	DE
14	24/01/19	ISSUED FOR COORDINATION	JT	DE
15	19/01/19	ISSUED FOR COORDINATION	JT	DE
16	22/01/19	ISSUED FOR COORDINATION	JT	DE
17	12/01/19	ISSUED FOR COORDINATION	JT	DE
18	22/01/19	ISSUED FOR SOI TENDER	CD	DE
19	03/01/19	ISSUED FOR SOI TENDER	CD	DE

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