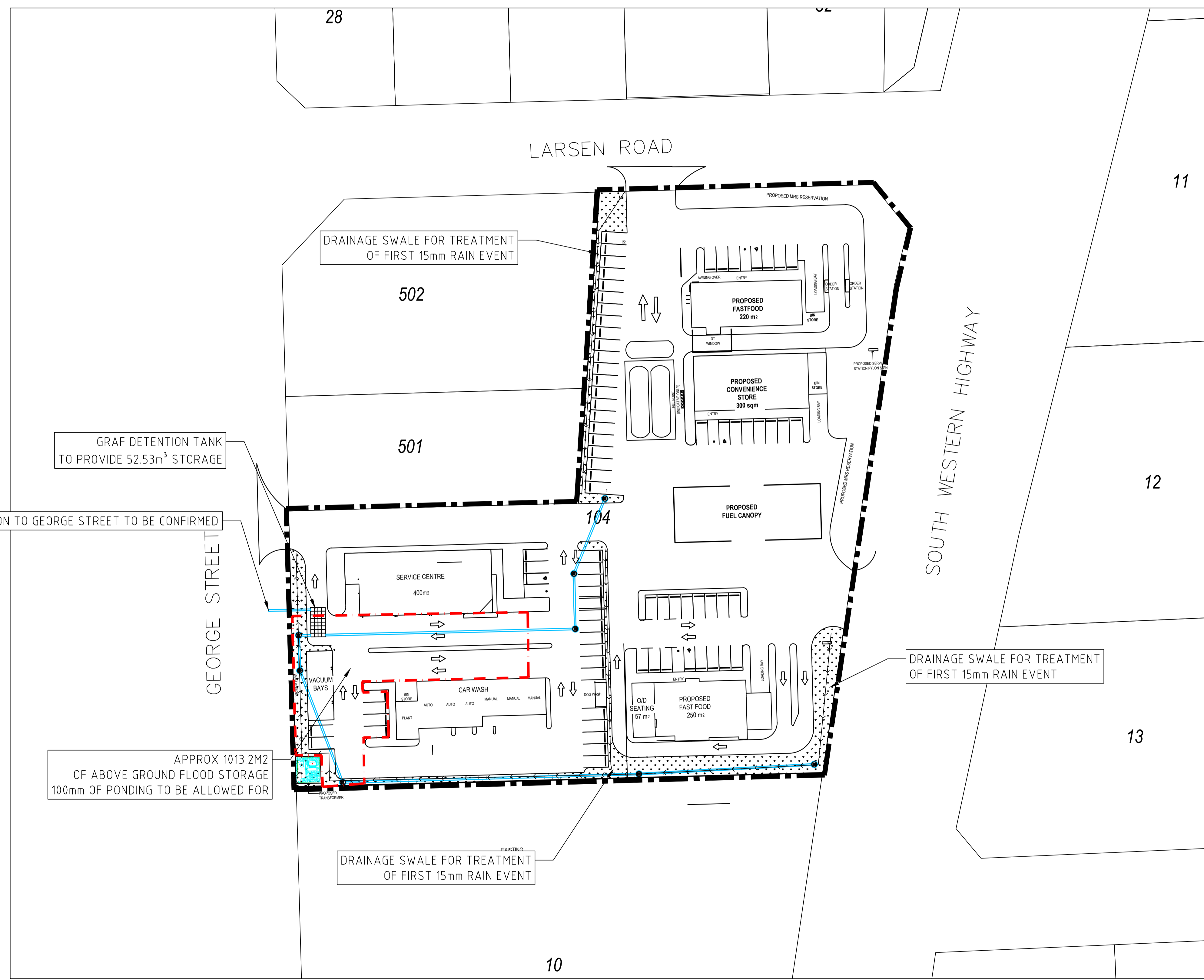


LEGEND
 WORKS BOUNDARY 
 SWALE 
 ABOVE GROUND STORAGE 

STORMWATER CALCULATION SUMMARY
 SITE AREA: 11,630m²
 FIRST 15mm RUNOFF TO BIORETENTION SWALES: 134.61m³
 SWALE STORAGE PROVIDED 350m³
 PRE-DEVELOPMENT 10 YR ARI : 0.19 m³/s
 POST-DEVELOPMENT 10 YR ARI: 0.30 m³/s
 PRE-DEVELOPMENT 100 YR ARI: 0.37m³/s
 POST DEVELOPMENT 100 YR ARI: 0.58 m³/s
 MINIMUM STORAGE REQUIRED FOR ATTENUATION 10YR ARI: 52.53m³ (TANK)
 MINIMUM STORAGE REQUIRED FOR ATTENUATION 100YR ARI: 153.85m³ (CALCULATED AS A SUM OF BELOW STORAGES)
 UNDERGROUND STORAGE REQUIRED: 52.53m³
 ABOVE GROUND STORAGE/PONDING VOL REQUIRED: 101.32m³



1:500 AT A1
 0 5m 10m 20m 30m

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	DRAWN	DATE
A	ISSUED FOR INFORMATION	CF	23/11/23



PERTH: P: 08 6336 9299 A: 74 GODDARD PDE BURSWOOD, WA 6100 E: ENQUIRE@PERITASGROUP.COM.AU
 MELBOURNE: P: 03 8657 9292 A: 1 QUEENS ROAD, MELBOURNE, VIC 3004 E: ENQUIRE@PERITASGROUP.COM.AU

CLIENT:



DESIGNED	DRAWN	CHECKED
CF	CF	OO
SURVEY DATUM	WAPC No.	SCALE
PCG94		AS SHOWN @ A1
DWG IS NOT FOR CONSTRUCTION UNLESS SIGNED BELOW		DATE CREATED
		20/10/23

PROJECT:
 3 LARSEN ROAD
 BYFORD, WA, 6122
 PROPOSED MIXED USE DEVELOPMENT

TITLE:
STORMWATER DRAINAGE PLAN

PROJECT NUMBER	ORG NUMBER	REV.
PC23356	CI-04.00	A

Ordinary Council Meeting - 20 May 2024

Calculation Sheet

Project 3 Larsen Road
 Client Jack Bennet - Capital Prudential
 Date 19-Oct-23
 Revision A

Author CF
 Approver OO
 Doc Ref 1

6.0 Post-Development

6.1 Post-Development Catchment

Area (A)	1.16	ha	Input from 3.0 "Allowable Outflow"
Flow Length (L)	0.20	km	
Slope (S)	1.00	m	
	200.00	m	
Horton retardance (n)	0.01		
Fraction Impervious (f)	1.00		
ARI	10	yr	Input from 3.0 "Allowable Outflow"

6.2 Post-Development Runoff ^{7.0}

Note: Flow rate calculation based on AR&R 1987 book VIII method.
 Use this calculator to determine pre-development discharge (Allowable).

$$Q = CIA/360$$

t_c	8.00	min
C (Calculated)	0.90	
C (Engineers input)	0.90	
Q	0.30	m ³ /s

6.4 Storage Volume

Design Infiltration Area	0.00	m ²
Design Storage Volume	0.00	m ³
Critical Duration	5	min
Minimum Storage Required	52.53	m ³