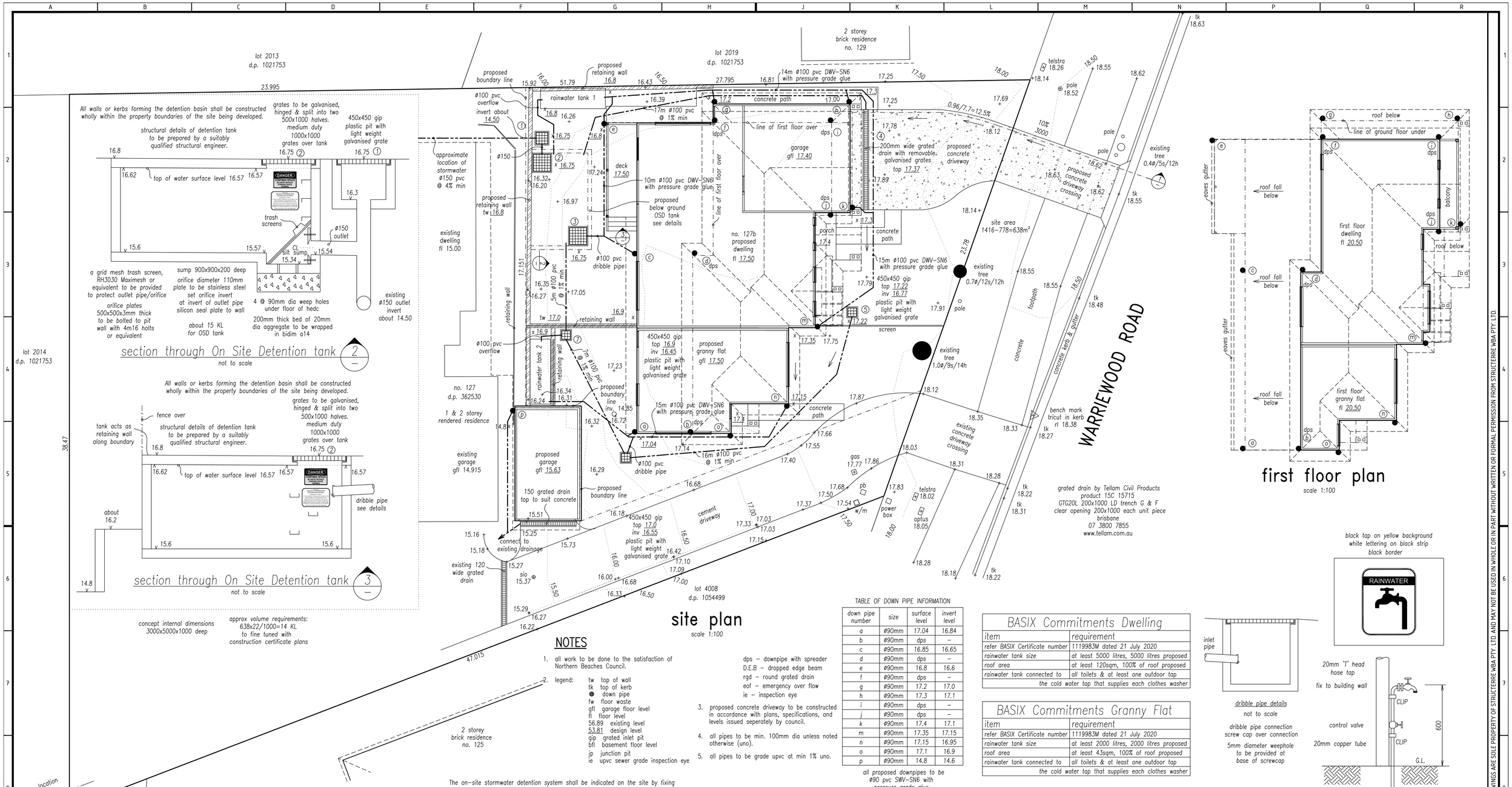


All walls or kerbs forming the detention basin shall be constructed wholly within the property boundaries of the site being developed.

structural details of detention tank to be prepared by a suitably qualified structural engineer.

grates to be galvanised, hinged & split into two 500x1000 halves. medium duty 1000x1000 grates over tank

450x450 gip plastic pit with light weight galvanised grate

top of water surface level 16.57

DANGER CONFINED SPACE NO ENTRY WITHOUT CONFINED SPACE TRAINING

trash screens

ø150 outlet

CL silt sump

a grid mesh trash screen, RH3030 Maximesh or equivalent to be provided to protect outlet pipe/orifice

orifice plates 500x500x3mm thick to be bolted to pit wall with 4m16 holts or equivalent

sump 900x900x200 deep

orifice diameter 110mm plate to be stainless steel set orifice invert at invert of outlet pipe silicon seal plate to wall

about 15 KL for OSD tank

4 @ 90mm dia weep holes under floor of hedc

200mm thick bed of 20mm dia aggregate to be wrapped in bidim a14

existing ø150 outlet invert about 14.50

section through On Site Detention tank 2

not to scale

All walls or kerbs forming the detention basin shall be constructed wholly within the property boundaries of the site being developed.

tank acts as retaining wall along boundary

fence over

structural details of detention tank to be prepared by a suitably qualified structural engineer.

grates to be galvanised, hinged & split into two 500x1000 halves. medium duty 1000x1000 grates over tank

top of water surface level 16.57

DANGER CONFINED SPACE NO ENTRY WITHOUT CONFINED SPACE TRAINING

dribble pipe see details

about 16.2

section through On Site Detention tank 3

not to scale

concept internal dimensions 3000x5000x1000 deep

approx volume requirements: 638x22/1000=14 KL to fine tuned with construction certificate plans

site plan

scale 1:100

NOTES

1. all work to be done to the satisfaction of Northern Beaches Council.
2. legend:
   - tw top of wall
   - tk top of kerb
   - ● down pipe
   - fw floor waste
   - gfl garage floor level
   - fl floor level
   - 56.89 existing level
   - 53.81 design level
   - gip grated inlet pit
   - bfl basement floor level
   - jp junction pit
   - ie upvc sewer grade inspection eye

dps – downpipe with spreader
D.E.B – dropped edge beam
rgd – round grated drain
eof – emergency over flow
ie – inspection eye

3. proposed concrete driveway to be constructed in accordance with plans, specifications, and levels issued seperately by council.
4. all pipes to be min. 100mm dia unless noted otherwise (uno).
5. all pipes to be grade upvc at min 1% uno.

TABLE OF DOWN PIPE INFORMATION

down pipe number	size	surface level	invert level
a	ø90mm	17.04	16.84
b	ø90mm	dps	–
c	ø90mm	16.85	16.65
d	ø90mm	dps	–
e	ø90mm	16.8	16.6
f	ø90mm	dps	–
g	ø90mm	17.2	17.0
h	ø90mm	17.3	17.1
i	ø90mm	dps	–
j	ø90mm	dps	–
k	ø90mm	17.4	17.1
m	ø90mm	17.35	17.15
n	ø90mm	17.15	16.95
o	ø90mm	17.1	16.9
p	ø90mm	14.8	14.6

all proposed downpipes to be ø90 pvc SWV-SN6 with pressure grade glue (green glue) in joints

BASIX Commitments Dwelling

item	requirement
refer BASIX Certificate number	1119983M dated 21 July 2020
rainwater tank size	at least 5000 litres, 5000 litres proposed
roof area	at least 120sqm, 100% of roof proposed
rainwater tank connected to	all toilets & at least one outdoor tap
	the cold water tap that supplies each clothes washer

BASIX Commitments Granny Flat

item	requirement
refer BASIX Certificate number	1119983M dated 21 July 2020
rainwater tank size	at least 2000 litres, 2000 litres proposed
roof area	at least 43sqm, 100% of roof proposed
rainwater tank connected to	all toilets & at least one outdoor tap
	the cold water tap that supplies each clothes washer

grated drain by Tellam Civil Products
product 15C 15715
GTG20L 200x1000 LD trench G & F
clear opening 200x1000 each unit piece
brisbane
07 3800 7855
www.tellam.com.au

first floor plan

scale 1:100

inlet pipe

dribble pipe details

not to scale

dribble pipe connection screw cap over connection

5mm diameter weephole to be provided at base of screwcap

black tap on yellow background
white lettering on black strip
black border

RAINWATER

20mm 'T' head hose tap
fix to building wall
CLIP
control valve
20mm copper tube
CLIP
600
G.L.

hose tap detail

not to scale

d=orifice diameter
300
250
300
non corrosive fittings
non corrosive fittings
3mm stainless steel plate
circular hole with sharp edges machined to 0.5mm accuracy

orifice plate

scale 1:10

invert of orifice at invert of outlet pipe

approx. location of sewer mains

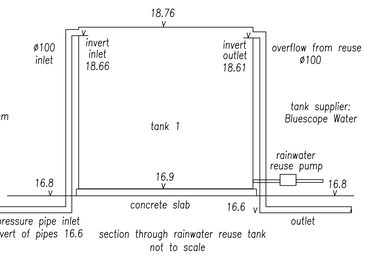
DANGER
CONFINED SPACE
NO ENTRY WITHOUT CONFINED SPACE TRAINING

sign at each entrance to osd & reuse tanks

The on-site stormwater detention system shall be indicated on the site by fixing a marker plate in a prominent position. This plate is to be of minimum size 150mm x 100mm and is to be made from non-corrosive metal or 4mm think laminated plastic. It is to be fixed to the nearest concrete or permanent surface in a prominent position. The wording on the marker plate is to be:

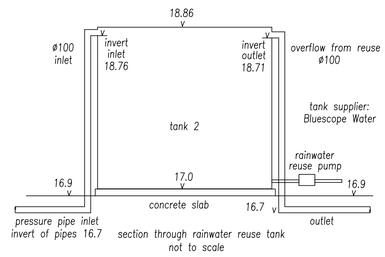
THIS IS AN
ON-SITE STORMWATER DETENTION SYSTEM
REQUIRED BY COUNCIL
IT IS AN OFFENCE TO REDUCE THE VOLUME OF THE TANK OR BASIN OR TO INTERFERE WITH THE ORIFICE PLATE THAT CONTROLS THE OUTFLOW
THE BASE OF THE OUTLET CONTROL PIT AND THE DEBRIS SCREEN MUST BE CLEANED OF DEBRIS AND SEDIMENT ON A REGULAR BASIS BY ON THE OWNER
THIS PLATE MUST NOT BE REMOVED

reuse required per BASIX 5000 litres
proposed 5000 litres storage rainwater reuse tanks per suppliers specifications
Slimline 5000, 2800 long 1860 high 1175 wide tank system supplier Bluescope Water
any openings shall be meshed or sealed to prevent access by insects such as mosquitos
pump to be suitably soundproofed
the drainage system & the downpipes & fittings are to be DWV-SN6 pvc pipes with pressure glue specified in AS3500.1:2015



section through rainwater reuse tank
not to scale

reuse required per BASIX 2000 litres
proposed 2000 litres storage rainwater reuse tanks per suppliers specifications
Slimline 2000TA 1800 long 1860 high 710 wide tank system supplier Bluescope Water
any openings shall be meshed or sealed to prevent access by insects such as mosquitos
pump to be suitably soundproofed
the drainage system & the downpipes & fittings are to be DWV-SN6 pvc pipes with pressure glue specified in AS3500.1:2015



section through rainwater reuse tank
not to scale

complying development certificate issue

OWNER : The owner is responsible for maintenance of building and site. Refer to the CSIRO 'Guide to Home Owners on Foundation Maintenance and Performance'.

ISSUE/REVISIONS	REV	BY	DATE	ISSUE / REVISION DESCRIPTION	CHK	APP
	A	LS	JUL 2020	COMPLYING DEVELOPMENT CERTIFICATE ISSUE	LS	LS

TITLE	NAME	DATE
DRAFTER	DK	JUN 2020
DESIGNER	LS	JUN 2020
ENG. CHECK	LS	JUN 2020

AUTHORISED BY:
GERVASE PURICH
FIEAust CPEng NER BPB RBP RPEQ

NORTH

CLIENT: PATRICK LANZON

STRUCterre consulting engineers
Structerre Consulting Engineers (NSW) Pty Ltd (ACN 131 748 260)
SUITE 1, LEVEL 2, 42 BIRNIE AVENUE, LIDCOMBE NSW 2141
TEL (02) 9475 3000 FAX (02) 9646 2311 EMAIL sydney@structerre.com.au

PROJECT
PROPOSED DWELLING & GRANNY FLAT
AT
127B WARRIEWOOD ROAD,
WARRIEWOOD NSW 2102

STORMWATER DRAINAGE, RAINWATER REUSE & ON SITE DETENTION.

CLIENT REF. No. N/A
SCALE 1:100
STRUCTERRE JOB No. 3.19.23425.1
DRAWING REF. No. -
REV A
SHEET SIZE A1

COPYRIGHT STRUCTERRE WBA PTY LTD. THESE DRAWINGS ARE SOLE PROPERTY OF STRUCTERRE WBA PTY. LTD. AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT WRITTEN OR FORMAL PERMISSION FROM STRUCTERRE WBA PTY. LTD.