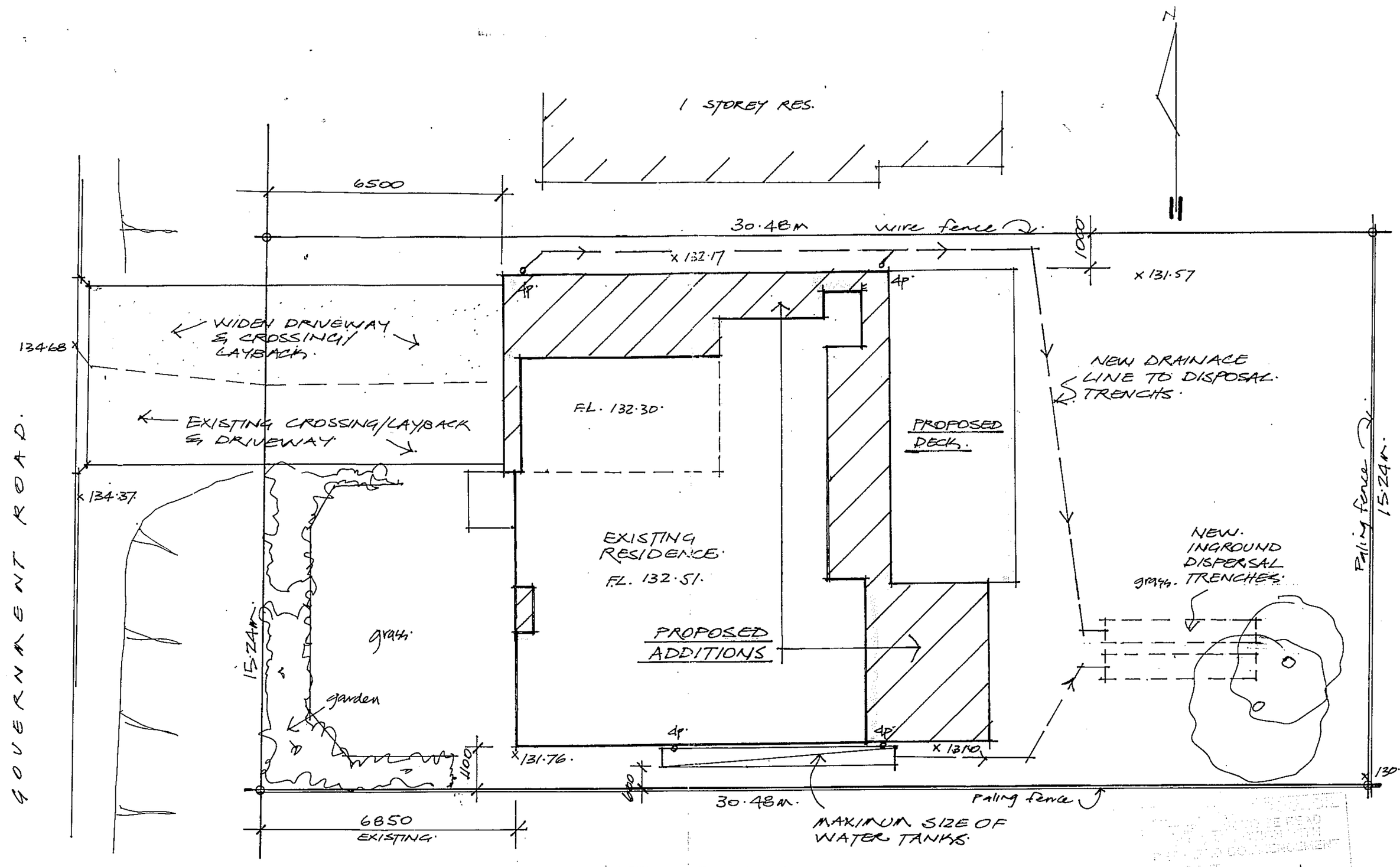


SITE PLAN

1:100

DA2007/0571.

SITE SCHEDULE:

AREA: 464.52 m2.

COVERAGE:

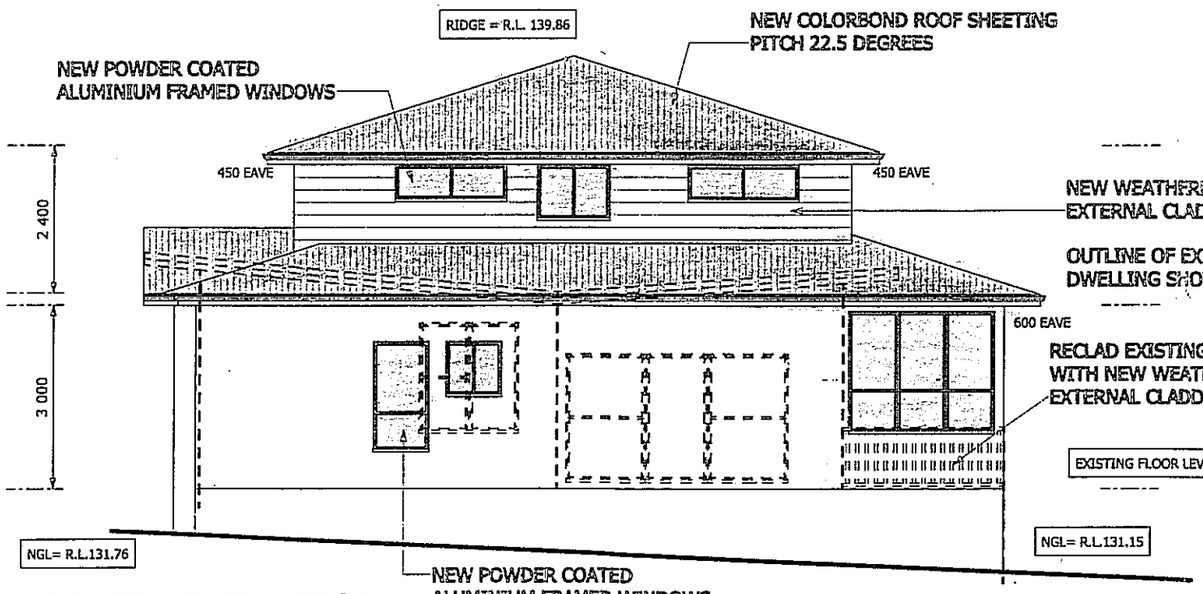
DWELLING	148.60m2
DRIVEWAY	32.50m2
DECK	29.40 m2
TOTAL (45.3%)	210.60m2.

LANDSCAPING 46.1% 214.32m2.

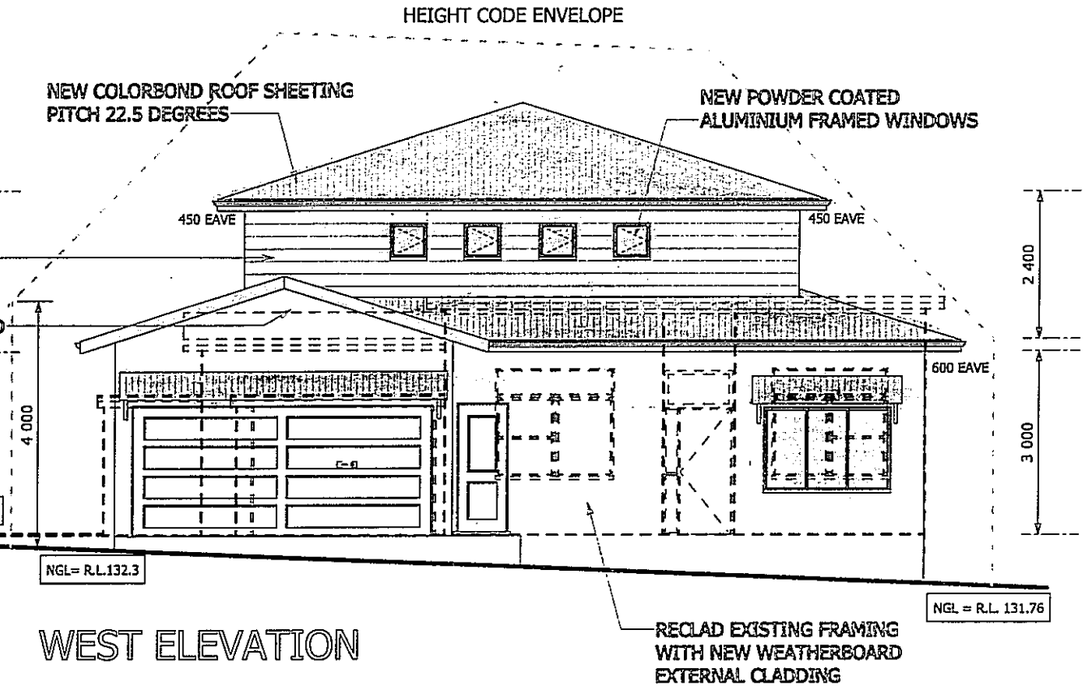
2 STOREY RES.

PROPOSED ADDITIONS AT
23 GOVERNMENT ROAD
BEACON HILL 2100
MR & MRS RAWSON.

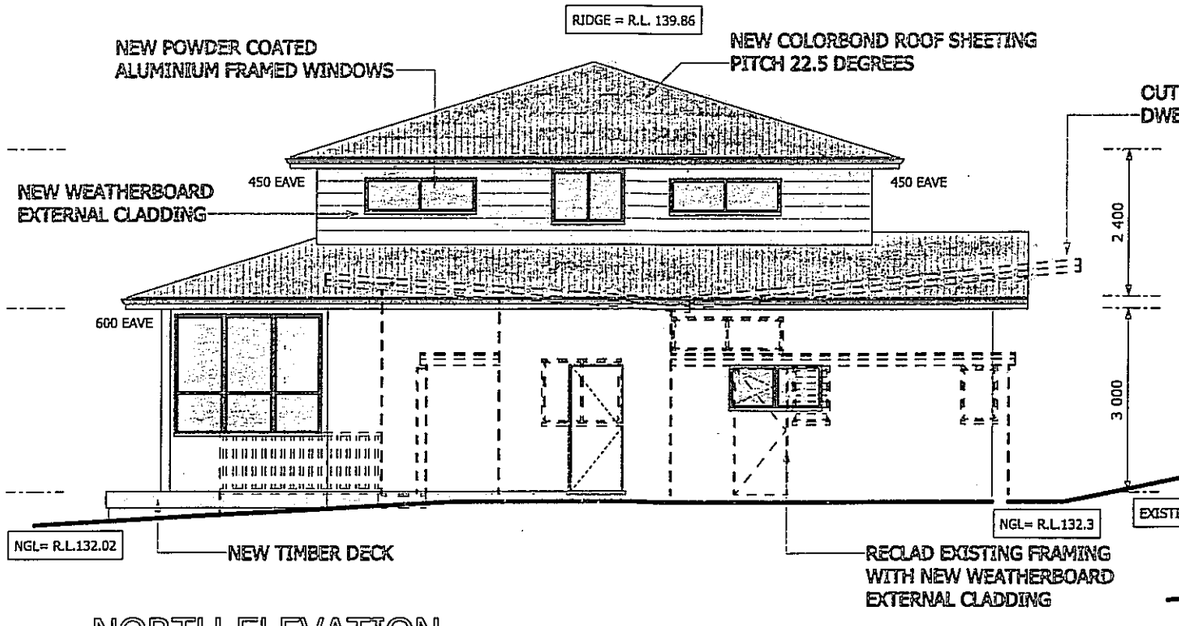
DRAWING 450-00



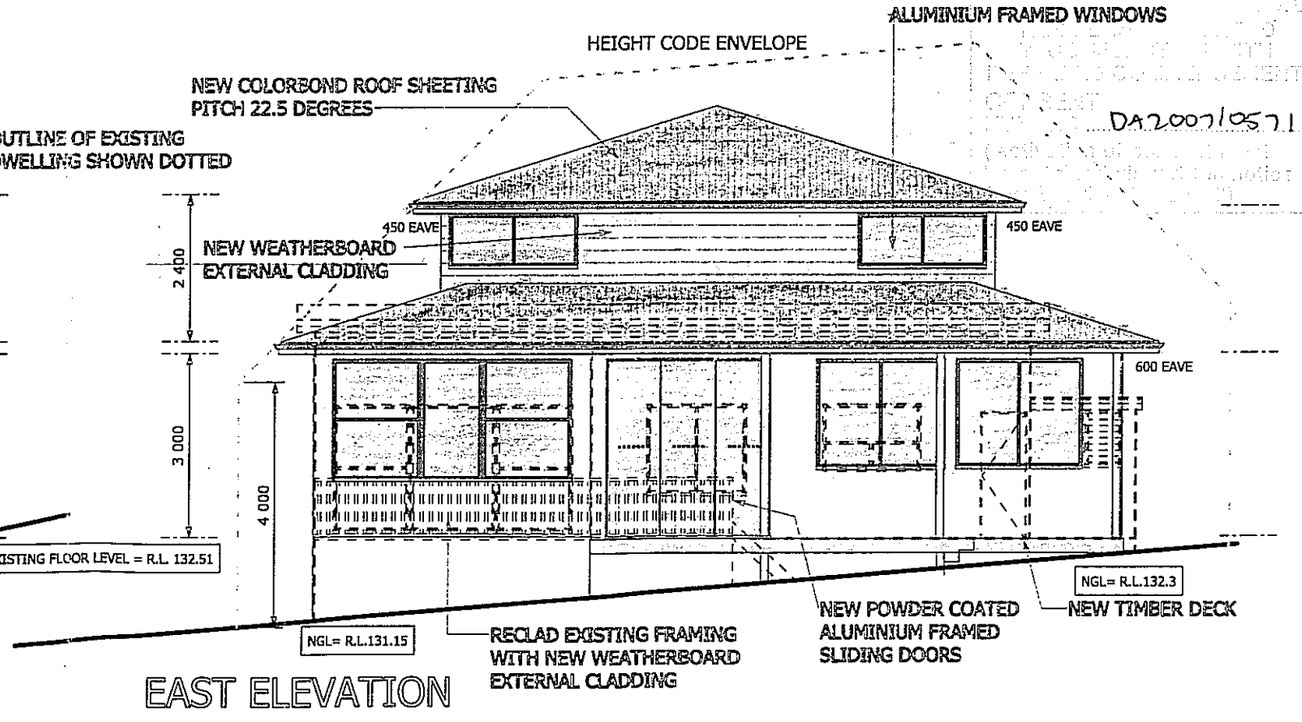
SOUTH ELEVATION



WEST ELEVATION



NORTH ELEVATION



EAST ELEVATION

PROPOSED RESIDENTIAL ADDITIONS

AT 23 GOVERNMENT ROAD BEACON HILL

FOR MR & MRS RAWSON

Drawn by : SB

Checked by : AR

SCALE 1:100

Date : 17-05-2007

AMENDMENTS.

MILTON DRAFTING & DESIGN.
P.O. BOX 294 MILTON 2538
PHONE 0244 554207
FAX 0244 554210
arhle@shoalhaven.net.au

DWG 450 - 03

AMENDMENT

GOVERNMENT ROAD

NOTE: CHECK & LOCATE DEPTH OF EXISTING MAINS & SERVICES PRIOR TO CONSTRUCTION OF STORMWATER SYSTEM AS VARIATIONS IN POSITION OF MAINS COULD AFFECT DRAINAGE CONSTRUCTION DETAILS.

200 WIDE GRATED DRAIN (H.D. GALV.) ACROSS THE FRONT OF THE GARAGE.

ϕ100 DOWNPIPE (TYPICAL)

PROVIDE SPREADER FROM UPPER ROOF TO LOWER ROOF AS NECESSARY(TYP)

LINE OF ROOF SHOWN DASHED. (TYP.)

PIT3-450 SQ. INLET GRATE R.L. - 131.20 INVERT R.L. - 130.75

PIT 2-600 SQ. INLET GRATE R.L. - 130.45 INVERT R.L. - 130.00

PLANTER

BRICK GARDEN BOX

ϕ150 P.V.C. AT 8.5%

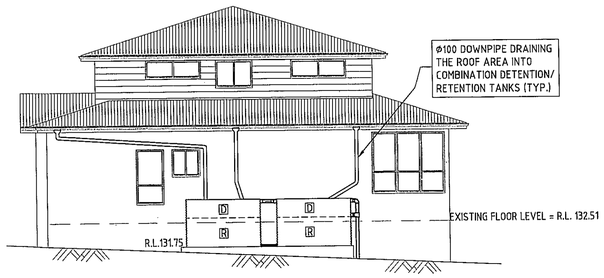
STRAP ϕ100 DOWNPIPE TO WALL WITH 1.0% FALL (MIN.) AS NECESSARY FOR DISCHARGE INTO THE TOP OF RETENTION/DETENTION TANK

COMBINED DETENTION/RETENTION STORAGE TANKS
FLOOR LEVEL = 131.75
RAINWATER STORAGE VOLUME = 2493 LITRES
DETENTION STORAGE VOLUME = 1506 LITRES
PROVIDE ϕ100 HIGH LEVEL OVERFLOW OUTLET WITH INVERT R.L. 133.18 & CONNECT TO LOW LEVEL OUTLET AT INVERT R.L. 132.70 FOR DISCHARGE OF FLOWS TO PIT 3.

1000 WIDE DRAINAGE EASEMENT

ϕ150 OUTLET AT 8% TO GERTRUDE STREET VIA THE DRAINAGE EASEMENT SEE SHEET 2 FOR DETAILS

SITE DRAINAGE PLAN
SCALE 1:100



SOUTH ELEVATION
SCALE 1:100
SHOWING DETENTION/RETENTION DRAINAGE SYSTEM LOCATION.

NOTES

1. × DENOTES EXISTING GROUND LEVEL
2. FALL STORMWATER PIPES AT 1% MIN. UNLESS OTHERWISE NOTED.
3. SURFACE GRATES 450 SQ. UNLESS OTHERWISE NOTED.
4. SUB-SOIL DRAINAGE TO BE CONNECTED TO THE STORMWATER SYSTEM AS NECESSARY.
5. ALL STORMWATER PIPES TO HAVE SOLVENT CEMENT WATERTIGHT JOINTS.
6. CHECK & LOCATE DEPTH OF EXISTING MAINS & SERVICES PRIOR TO CONSTRUCTION OF STORMWATER SYSTEM AS VARIATIONS IN POSITION OF MAINS COULD AFFECT DRAINAGE CONSTRUCTION DETAILS.
7. INSPECTIONS MUST BE UNDERTAKEN BY THIS OFFICE (BY PRIOR ARRANGEMENT WITH ENGINEER) DURING CONSTRUCTION TO ENABLE FULL CERTIFICATION UPON COMPLETION OF WORKS.
8. ALL CONSTRUCTION OF COUNCIL DRAINAGE WORKS TO COMPLY WITH COUNCIL STANDARD.
9. REMOVE REDUNDANT DRAINAGE PITS AND SEAL PIPES.
10. PIT BENCHING TO BE HALF THE OUTGOING PIPE DIAMETER. CONCRETE FOR BENCHING TO BE 20 MPa MASS CONCRETE.
11. APPROVED PRE-CAST PITS MAY BE USED.
12. CONNECTIONS TO EXISTING DRAINAGE PITS SHALL BE MADE IN A TRADESMAN LIKE MANNER AND THE INTERNAL WALL OF THE PIT AT THE POINT OF ENTRY SHALL BE CEMENT RENDERED TO ENDURE A SMOOTH FINISH.
13. ALL PIPES TO BE LAID ON COMPACTED FINE CRUSHED ROCK OR SAND BEDDING 75mm THICK & PIPES BACKFILLED WITH COMPACTED SAND TO 300mm ABOVE TOP OF PIPE.
14. UNDERPIN EXISTING BUILDINGS AND STRUCTURES AS NECESSARY TO FUTURE DETAIL, PRIOR TO CONSTRUCTION OF PROPOSED DRAINAGE LINE. TRENCH SHORING TO BE PROVIDED AS NECESSARY DURING CONSTRUCTION OF DRAINAGE LINE.
15. STORMWATER TANK REQUIRES SIGNIFICANT MAINTENANCE DUE TO POTENTIAL HIGH POLLUTANT LOAD. FILTERS AND POLLUTANT TRAPS SHOULD BE CHECKED AFTER LARGE STORM EVENTS AND CLEANED EVERY 6 MONTHS.
16. PIPE ROUTES SHOWN ARE INDICATIVE ONLY AND SHOULD BE AS NECESSARY ACCORDING TO SITE CONDITIONS, TREE POSITIONS ETC. CONFIRM SIGNIFICANT CHANGES IN PIPES SYSTEM DETAILS WITH SUPERVISING ENGINEER PRIOR TO COMMENCEMENT OF DRAINAGE CONSTRUCTION WORKS.
17. PLUMBING AND DRAINAGE WORKS TO COMPLY WITH AS-3500, THE NATIONAL DRAINAGE & PLUMBING CODE.
18. 'CHARGING ' OF DRAINAGE LINES NOT PERMITTED.
19. LAY PIPELINES WITH SPIGOT ENDS IN THE DIRECTION OF FLOW.

RAINWATER RE-USE NOTES AND SPECIFICATIONS

1. ROOF WATER ONLY TO BE DRAINED TO THE RAINWATER STORAGE TANK.
2. THE RAINWATER STORAGE TANK NEED TO BE CONNECTED FOR RE-USE AS REQUIRED BY THE OWNER.
3. RAINWATER STORAGE TANK TO BE CONFIGURED IN ACCORDANCE WITH SYDNEY WATER SPECIFICATIONS 'GUIDELINES FOR RAINWATER TANKS ON RESIDENTIAL PROPERTIES'.
4. PROVIDE MAINS 'TOP-UP' SUPPLY TO RAINWATER TANK. MAINS TOP-UP ZONE TO BE BASED ON THE DAILY NON-POTABLE USAGE THAT MAY BE EXPECTED FROM THE TANK.
5. PROVIDE A MECHANICAL PUMPING ARRANGEMENT (IN SOUND-PROOF HOUSING) TO PUMP SUPPLIERS SPECIFICATION TO SUIT INTENDED USAGE OF RAINWATER STORAGE. PUMPING ARRANGEMENTS MUST COMPLY WITH EPA GUIDELINES.
6. INLETS TO RAINWATER TANK MUST BE SCREENED TO PREVENT THE ENTRY OF FOREIGN MATTER, ANIMALS OR INSECTS.
7. A SIGN MUST BE AFFIXED TO THE RAINWATER TANK CLEARLY STATING THAT THE WATER IN THE TANK IS RAINWATER AND IS NOT TO BE USED FOR HUMAN CONSUMPTION.
8. RAINWATER TANK TO BE PLACED ON A STRUCTURALLY ADEQUATE BASE IN ACCORDANCE WITH THE MANUFACTURER'S OR STRUCTURAL ENGINEER'S DETAILS.
9. THE TANK MUST NOT BE INSTALLED OVER ANY MAINTENANCE STRUCTURE OR FITTINGS USED BY A PUBLIC AUTHORITY.
10. RAINWATER TANK AND ASSOCIATED PLUMBING WORKS TO BE INSTALLED AND CONFIGURED BY A LICENSED PLUMBER. PUMP TO BE INSTALLED BY A LICENSED ELECTRICIAN.

OSD SYSTEM DESIGN DATA

SITE DATA

SITE AREA = 464sqm
EXISTING MODELLED IMPERVIOUS PERCENTAGE = 35%
EXISTING GRASS FLOW LENGTH = 15m
EXISTING GRASS SLOPE = 6%
DEVELOPED IMPERVIOUS AREA = 299sqm
DEVELOPED MODELLED IMPERVIOUS PERCENTAGE =64%

EXISTING SITE FLOWS
5 YR ARI = 18 l/s
20 YR ARI = 24 l/s
100 YR ARI = 30 l/s

DEVELOPED SITE FLOWS
5 YR ARI = 18 l/s
20 YR ARI = 24 l/s
100 YR ARI = 29 l/s

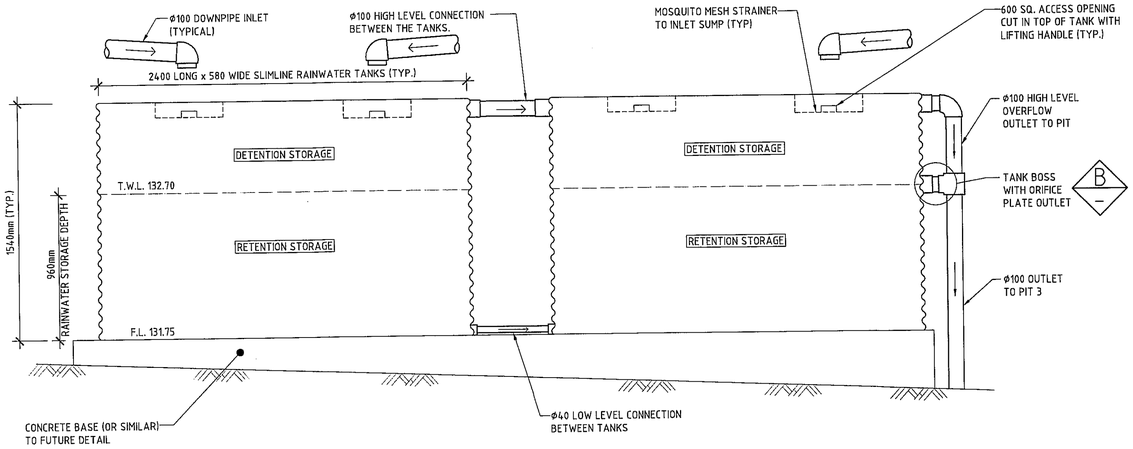
DETENTION SYSTEM DATA

AREA DRAINING TO THE TANK = 102sqm
ORIFICE DIAMETER = 59 mm
SSR = 3 cums

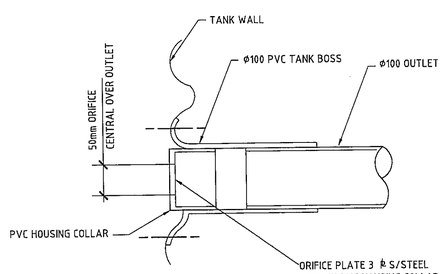
NOTE: DETENTION STORAGE REQUIREMENT HAS BEEN OFFSET BY 50% VIA THE PROVISION OF 2493 LITRES OF RAINWATER STORAGE.

WARRINGAH COUNCIL
THIS PLAN TO BE READ IN CONJUNCTION WITH DEFERRED COMMENCEMENT CONSENT NUMBER DA2007/0571
(Activation of consent must be obtained via written notice from Warringah Council)

THE ON-SITE STORMWATER DETENTION SYSTEM AND/OR DRAINAGE WORKS HAVE BEEN ASSESSED BY THE DEVELOPMENT ENGINEERING SECTION AND ARE
☐ SATISFACTORY ☐ UNSATISFACTORY
☐ SATISFACTORY SUBJECT TO AMENDMENT/ADDITIONS SHOWN IN RED.
DEVELOPMENT ENGINEER 6/11/08 DATE



DETAIL A
SCALE 1:20
SHOWING RAINWATER/DETENTION STORAGE CONFIGURATION



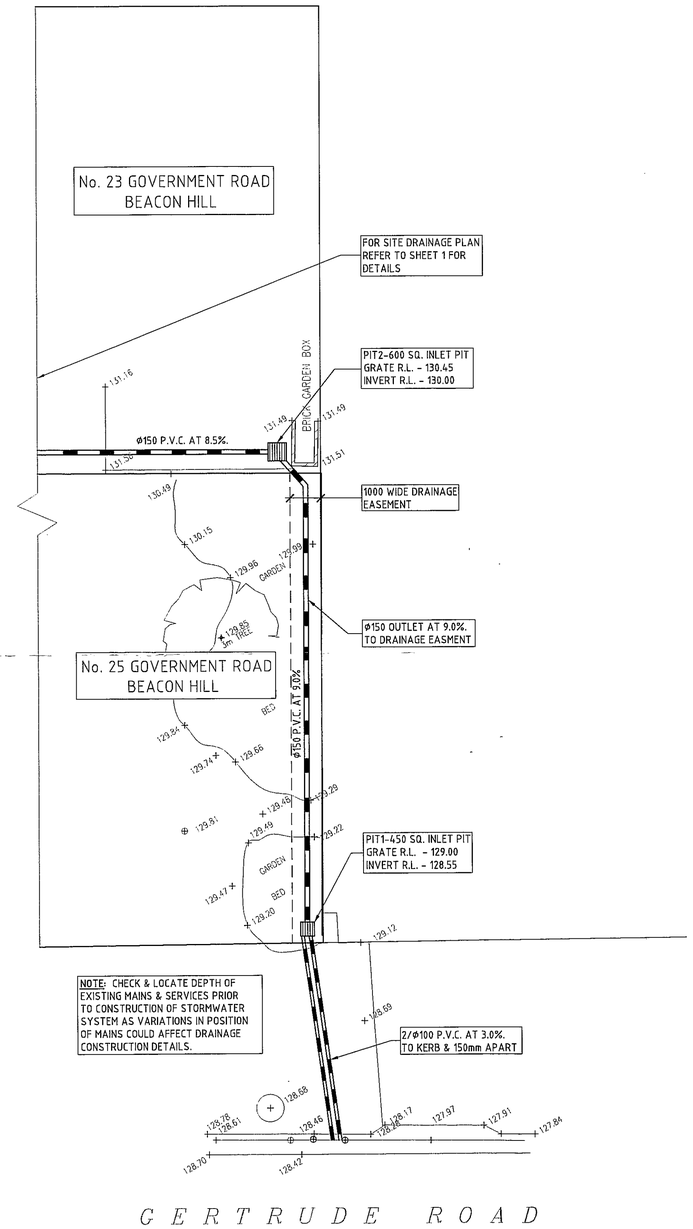
DETAIL B
SCALE 1:5

	DATE	REVISION	BY	CHK

T. J. TAYLOR CONSULTANTS PTY LIMITED
Consulting Civil and Structural Engineers
A.C.N. 002 380 054
22 Fisher Road, Dee Why, NSW 2099 Telephone: 9982 7092 Fax: 9982 5898

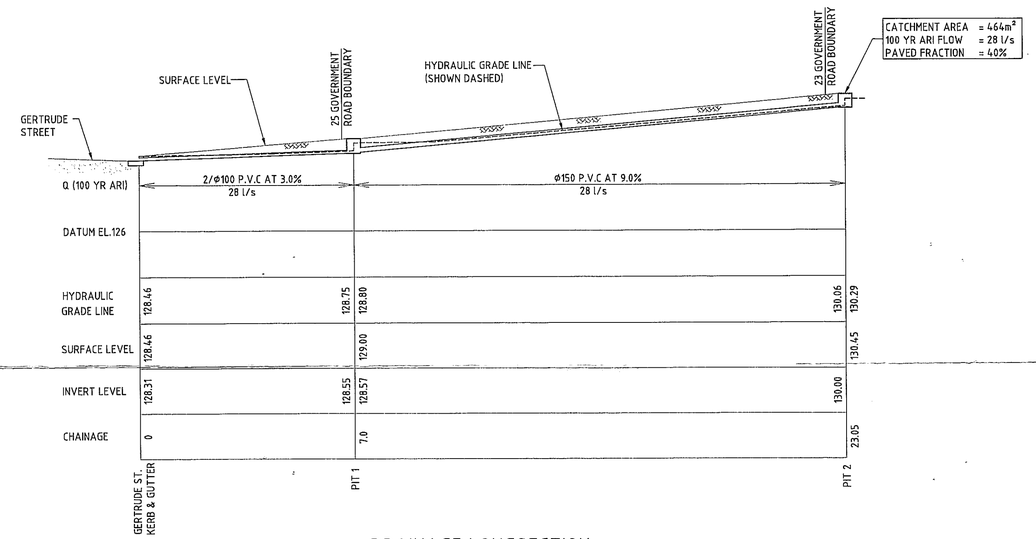
DRAINAGE CONCEPT PLAN
23 GOVERNMENT ROAD , BEACON HILL

DRAWN	CHECKED	SCALE		DRAWING No.
DK	JTT/HEAD HICKEN	1:100	1:5	25208-1
AUG 2008	SEPT 08	1:20		



INTERALLOTMENT DRAINAGE PLAN

SCALE 1:100
SHOWING INTERALLOTMENT DRAINAGE LINE TO
GERTRUDE STREET KERB & GUTTER



DRAINAGE LONGSECTION

SCALE 1:100
SHOWING THE PROPOSED DRAINAGE LINE TO
GERTRUDE STREET

WARRINGAH COUNCIL
THIS PLAN TO BE READ IN CONJUNCTION WITH DEFERRED COMMENCEMENT CONSENT NUMBER DA2007/0511
(Activation of consent must be obtained via written notice from Warringah Council)

THE ON-SITE STORMWATER DETENTION SYSTEM AND/OR DRAINAGE WORKS HAVE BEEN ASSESSED BY THE DEVELOPMENT ENGINEERING SECTION AND ARE:
☒ SATISFACTORY ☐ UNSATISFACTORY
☐ SATISFACTORY SUBJECT TO AMENDMENTS/ADDITIONS SHOWN IN RED
DEVELOPMENT ENGINEER 6/11/08 DATE

△	DATE	REVISION	BY	CHK

T. J. TAYLOR CONSULTANTS PTY LIMITED
Consulting Civil and Structural Engineers
A.C.N. 002 360 084
22 Fisher Road, Dee Why, NSW 2099 Telephone: 9982 7092 Fax: 9982 5898

INTERALLOTMENT DRAINAGE DETAILS 23 GOVERNMENT ROAD , BEACON HILL

DRAWN	CHECKED	SCALE	DRAWING No.
DK	MEAUST	1:100	25208-2
AUG 2008	5/11/08		