

NOTES:

ANY SURPLUS SPOIL FROM SITEWORKS IS THE OWNERS RESPONSIBILITY AND SHOULD BE REMOVED OR DISPERSED AS APPROPRIATE, UNLESS STATED OTHERWISE IN THE BUILDING CONTRACT. THIS SPOIL SHOULD BE STOCKPILED SUCH THAT IT DOES NOT OBSTRUCT SITE ACCESS AND CAN BE EASILY REMOVED FROM THE SITE.

THE RETAINING WALLS SHOWN ON THIS PLAN ARE TO BE CONSTRUCTED BY THE OWNER EXCEPT WHERE THE RETAINING WALL FORMS PART OF THE BUILDING STRUCTURE OR WHERE SPECIFIED OTHERWISE WITHIN THE BUILDING CONTRACT.

ANY RETAINING WALLS ADJACENT EXCAVATIONS, A SERVICE TRENCH/EASEMENT (PROPOSED OR EXISTING) OR IF FOUND IN FILL SHOULD HAVE AN UNDERMINING COMPONENT INCORPORATED IN THE DESIGN OF THEIR FOOTING/PIER SUPPORT SYSTEM.

--- : STORMWATER PIPES UNDER GRAVITY FLOW USED TO CONNECT ROOF & SURFACE STORMWATER DRAINS TO THE STREET WATER TABLE.

WHERE SURFACE STORMWATER SUMPS ARE USED GRADE SOIL/PAVING IN TOWARDS SUMPS IN ACCORDANCE WITH THE "BENCH" NOTES ON THIS PAGE. ALTERNATIVELY CONSTRUCT LINED SPOON DRAINS WITH 0.3% GRADIENT AS PER THE DETAILS ON ATTACHMENT SHEET PD1.

SUMP SIZES AND QUANTITY ARE DIAGRAMMATIC ONLY. ADDITIONAL AND/OR LARGER SUMPS MAY BE REQUIRED DEPENDING ON AREAS THEY SERVICE AND PAVEMENT TYPE USED.

USE THE "SUBSTITUTE" VERTICAL FLEXIBLE CONNECTION SET-UP AS SHOWN ON DETAIL SHEET SD1 WHERE DP'S CONNECT INTO THE DRAINPIPE (THIS SET-UP IS NOT TO BE UTILISED IN A SEALED SYSTEM)

RECYCLED WATER CONNECTION AVAILABLE FOR THIS SITE THEREFORE SITE RETENTION IS NOT REQUIRED.

NOTE: DOWNPIPE LOCATIONS AS PER ARCHITECTURAL DRAWINGS. TO BE CONFIRMED BY THE BUILDER/BUILDING DESIGNER/ROOF PLUMBER (NOT PART OF RCI CONSULTING ENGINEERS EXTENT OF DESIGN CONSIDERATION).

NOTE: REFER TO DETAIL SHEET PD1 FOR RECOMMENDED PAVEMENT SETDOWN FROM UNDERSIDE OF REBATE FOR CLASS "E-D" SITE SOIL CLASSIFICATION. DUE TO THE HIGHLY REACTIVE NATURE OF THE SOIL PROFILE, IT IS RECOMMENDED SEGMENTAL BRICK/BLOCK PAVING BE UTILISED FOR PERIMETER AND DRIVEWAY PAVING NOT INSITU CONCRETE.

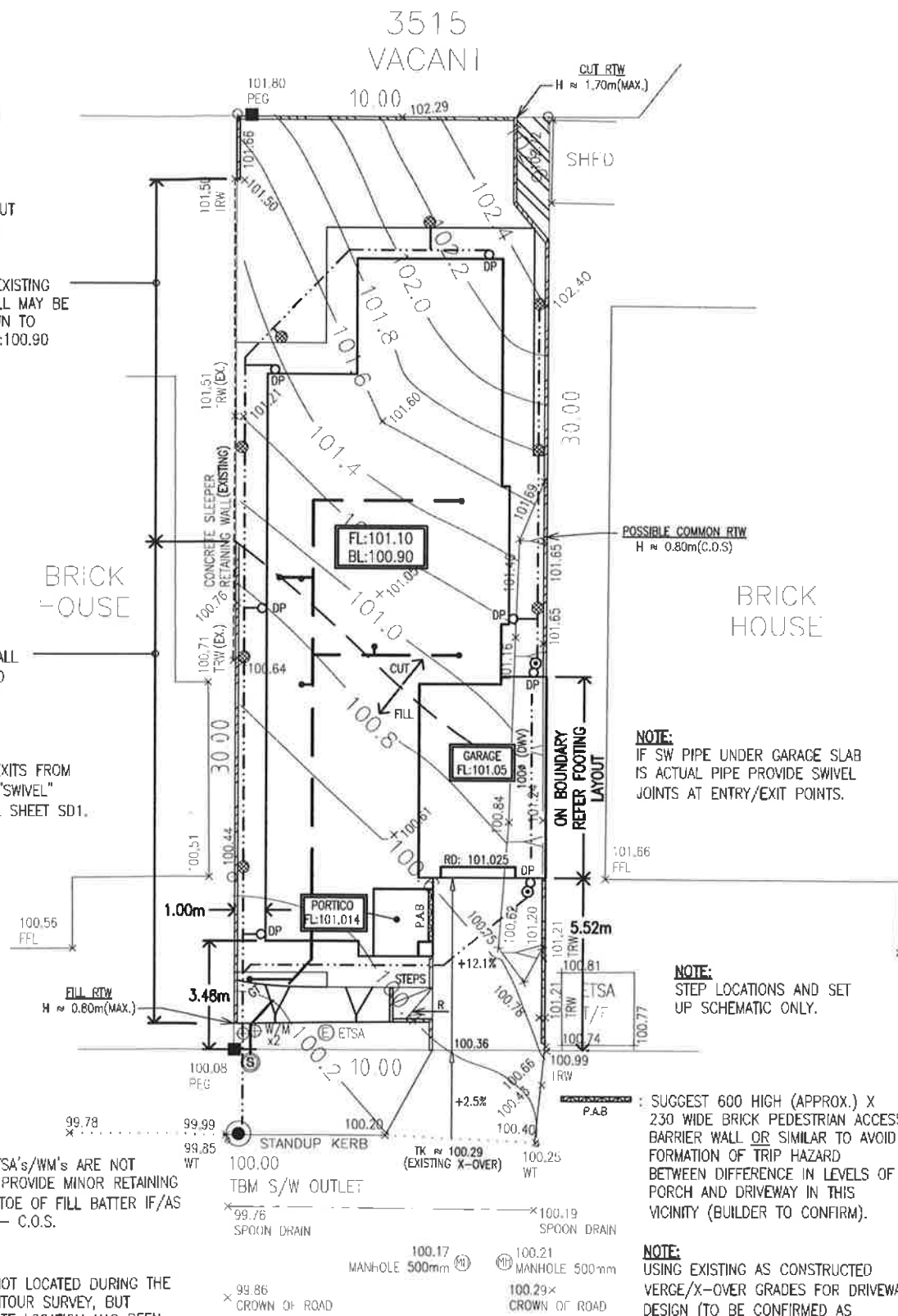


NO CUT ZONE

NOTE: PORTION OF EXISTING RETAINING WALL MAY BE REMOVED DOWN TO PROPOSED BL:100.90

NOTE: NEW FILL RETAINING WALL UPRIGHTS/SLEEPERS TO START FROM ADJOINING OWNERS BENCH LEVEL.

NOTE: WHERE SEWER DRAIN EXITS FROM UNDER SLAB PROVIDE "SWIVEL" JOINT(S). REFER DETAIL SHEET SD1.



KEY	
TK	TOP OF KERB
WT	WATER TABLE
BL	BENCH LEVEL
FL	FLOOR (POURED) LEVEL
FFL	FINISHED FLOOR LEVEL (ie tiled/paved level)
~	APPROXIMATE
U.N.O.	UNLESS NOTED OTHERWISE
C.O.S	CHECK ON SITE
RD	ROLLER DOOR REBATE
DW	DRIVEWAY
(EX)	EXISTING
DP	DOWNPIPE
⊙	SCREW CAP STORMWATER INSPECTION POINTS IN GRAVITY FLOW/SEALED SYSTEM SW RUN (AS A MINIMUM) TO FINISHED PAVING/GROUND LEVELS (PROVIDE PROPRIETARY CONCRETE SURROUND AND LID WHERE FOUND IN DRIVEWAY).
GT	SUGGESTED GULLY TRAP LOCATION
TRW	TOP OF RETAINING WALL
BRW	BOTTOM OF RETAINING WALL
▬	CONCRETE SLEEPER RETAINING WALL
▬	RAMP PAVING AT 12.5% (MAX) (LOCATION & SETUP SCHEMATIC ONLY)

DESIGN LEGEND

- : 250 SQUARE x 285 DEEP "RELN" RAINWATER PIT (PVC), (SERIES 250) OR SIMILAR (U.N.O.)
- ⊙ : GRATED SURFACE STORMWATER DRAIN 90# (U.N.O.)
- : STORMWATER PIPE (GRAVITY FLOW) - 90# PVC (U.N.O) AT 1 IN 250 (0.4%) MIN FALL (U.N.O) EXCEPT ON SEALED SYSTEM
- : STORMWATER PIPE (SEALED SYSTEM) - 90# PVC (U.N.O)
- : 90# AGRIC DRAIN (U.N.O)
- ⊙ : INTERNAL SEWER DRAIN LOCATION (TO BE CONFIRMED BY BUILDER)
- : SEWER PIPE 100# AT 1.65% MIN (1 IN 60)
- TOP OF BATTER / BOTTOM OF BATTER : BATTERS/EARTHWORK EMBANKMENTS TO BE 50% (1 IN 2) UNLESS NOTED OTHERWISE
- ⊙ : EXISTING TREES AND STRUCTURES ON SITE TO BE DEMOLISHED/REMOVED BY OWNER PRIOR CONSTRUCTION. UNLESS OTHERWISE STATED.

SURVEY LEGEND

- ⊙ : TEMPORARY BENCH MARK
- ⊥ : SIOBIF
- ⊕ : WATER METR
- : MFTAI PIN/SPIKE/RAMSET NAIL
- : EXISTING RTW
- ⊙ : IRFF
- ⊙ : GAS
- ⊙ : ELSIRA
- ⊙ : PSM
- ⊙ : PINE TREE
- ⊙ : C:TRUNK CIRCUMFERENCE
- ⊙ : B:TRUNK DIAMETER
- ⊙ : S:RFF CANOPY SPRFAD
- ⊙ : GAS
- ⊙ : ELSIRA
- ⊙ : PEG FOUND
- ⊙ : SEWER AP
- ⊙ : PALM TREE
- ⊙ : IRFF

SURVEY: THIS IS NOT A BOUNDARY SURVEY. THEREFORE THE RELATIONSHIP BETWEEN OCCUPATION AND THE PLOTTED BOUNDARY IS INDICATIVE. LEVELS ARE BASED ON A TEMPORARY DATUM (UNO). THE DATUM (SHOWN ON THIS PLAN) IS TO BE LOCATED PRIOR TO COMMENCING SITEWORKS.

SITWORKS PLAN

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JOB No. C21815 SHEET No. 1 of 1 ISSUE No. B.

DRAWN: L.G. DESIGN: D.A. DATE: 27-Jun-16



No.	REVISION	BY	DATE
A.	FOR CONSTRUCTION SUBJECT TO APPROVAL	R.L.W.	11.07.16
B.	RETAINING WALL/NO CUT ZONE AMENDED	D.A.	01/08/16

GENERAL NOTES: SITEWORKS AND STORMWATER DRAINAGE ARE TO BE CONSTRUCTED BY THE OWNER OR THE OWNERS REPRESENTATIVE (I.E. THE BUILDER WHERE STATED WITHIN THE BUILDING CONTRACT). THIS DOCUMENT IS TO BE READ IN CONJUNCTION WITH THE FOOTING CONSTRUCTION REPORT AND ARCHITECTURAL DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THIS OFFICE IMMEDIATELY.

SOIL CLASSIFICATION: E-D
 • 40mm THICK CLOSED-CELL POLYETHYLENE LAGGING AROUND STORMWATER AND SEWER DRAIN PENETRATIONS THROUGH EXTERNAL FOOTINGS.
 • FLEXIBLE CONNECTIONS IN SEWER & STORMWATER DRAINS ARE REQUIRED - REFER DETAIL SHEET SD1

BENCH: BUILDING AREA TO BE BENCHED TO 200mm BELOW THE FINISHED FLOOR LEVEL.
 GRADE SITE AWAY FROM HOUSE AS FOLLOWS:-
 • GRADE PAVED AREAS 45mm IN 1000mm
 • GRADE GRASSED AREAS 5mm IN 1000mm

IMPORTANT NOTE: TO ASSIST IN AVOIDING A "DOWNHILL" MOVEMENT OF FILL ONCE IT HAS BEEN PLACED, A SERIES OF HORIZONTAL BENCHED PLATFORMS SHOULD BE EXCAVATED INTO THE GROUND WHEN THE EXISTING SLOPE IS 1 IN 8 OR GREATER. THIS BENCHING SHOULD BE UNDERTAKEN OVER THE ENTIRE AREA WHERE FILLING IS TO OCCUR.

SEWER: THIS SEWER DESIGN IS BASED ON THE SHORTEST POSSIBLE RUN. BUILDER/PLUMBER TO CONFIRM SEWER CONNECTION INVERT LEVEL AND ASSUMED LAYOUT PROVIDED ON THIS DRAWING. CONTACT THIS OFFICE IMMEDIATELY IF ANY DISCREPANCIES EXIST AS THE FLOOR LEVEL AND/OR UNDERMINING PIER DEPTHS MAY NEED TO BE REVISED. TOP OF FLOOD GULLY AND PAVING AROUND FLOOD GULLY TO BE CONSTRUCTED 150mm BELOW THE LOWEST FIXTURE CONNECTED TO THE DRAIN.

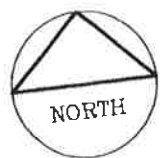
STORMWATER: GRAVITY FLOW STORMWATER SYSTEM IS TO BE LAID @ 1 IN 250 MIN GRADE WITH 100mm MIN COVER EXCEPT AS NOTED BELOW UNDERSIDE OF PAVING:-
 • 50mm (SUBJECT TO PEDESTRIAN TRAFFIC)
 • 75mm (SUBJECT TO LIGHT VEHICULAR TRAFFIC)
 • 450mm (UNPAVED DRIVEWAYS)
 WHERE COVER CANNOT BE ACHIEVED ENCASE STORMWATER PIPE WITHIN A CAST IRON SLEEVE OF THICKNESS:
 • 2.9mm (SUBJECT TO PEDESTRIAN TRAFFIC)
 • 5.0mm (SUBJECT TO LIGHT VEHICULAR TRAFFIC)

SUGGEST 600 HIGH (APPROX.) X 230 WIDE BRICK PEDESTRIAN ACCESS BARRIER WALL OR SIMILAR TO AVOID FORMATION OF TRIP HAZARD BETWEEN DIFFERENCE IN LEVELS OF PORCH AND DRIVEWAY IN THIS VICINITY (BUILDER TO CONFIRM).

NOTE: USING EXISTING AS CONSTRUCTED VERGE/X-OVER GRADES FOR DRIVEWAY DESIGN (TO BE CONFIRMED AS ACCEPTABLE BY RELEVANT CHECKING AUTHORITY PRIOR TO ANY WORKS PROCEEDING OR BUILDING/PLANNING APPROVALS FOR CONSTRUCTION BEING ISSUED).

NOTE: ENSURE ETSAs/WMs ARE NOT BURIED - PROVIDE MINOR RETAINING WALLS AT TOE OF FILL BATTER IF/AS REQUIRED - C.O.S.

NOTE: SIP WAS NOT LOCATED DURING THE LEVEL CONTOUR SURVEY, BUT APPROXIMATE LOCATION HAS BEEN SUPPLIED BY SA WATER. BUILDER/BUILDERS PLUMBER TO CHECK AND CONFIRM LOCATION AND THAT FALL CAN BE ACHIEVED PRIOR TO COMMENCEMENT OF EARTHWORKS. WHERE FALL CAN NOT BE ACHIEVED WITH THE PROPOSED FLOOR LEVEL, CONTACT THIS OFFICE IMMEDIATELY FOR REVISED LEVELS.



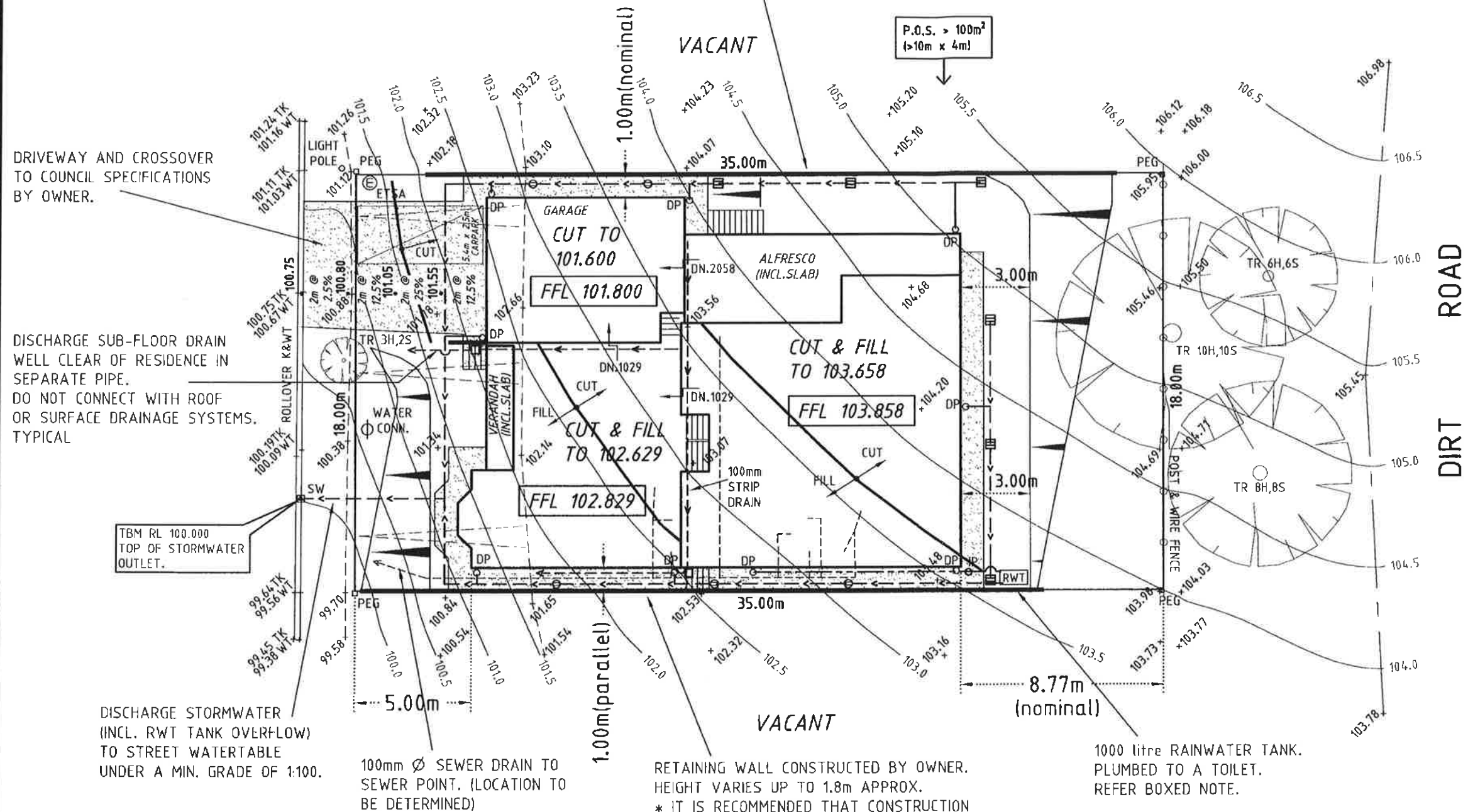
FLOOR LEVEL HAS BEEN DETERMINED FOR THE DWELLING BY THE MAXIMUM ALLOWABLE DRIVEWAY GRADE

RETAINING WALL CONSTRUCTED BY OWNER. HEIGHT VARIES UP TO 2.4m APPROX.
 * IT IS RECOMMENDED THAT CONSTRUCTION OF THIS RETAINING WALL BE DELAYED UNTIL THE ADJACENT ALLOTMENT IS DEVELOPED AS THIS HAS THE POTENTIAL TO SIGNIFICANTLY ALTER RETAINED SOIL HEIGHTS.

NOTE:
 A RAINWATER TANK (MIN. 1000 litre) IS TO BE PROVIDED COLLECTING A MIN. 50m² OF ROOF AREA (NOT SHOWN) AND PLUMBED TO A TOILET. TANK LOCATION AS SHOWN, OWNER MAY RELOCATE TO A PREFERRED LOCATION IN CONSULTATION WITH A MASTER PLUMBER. OWNER IS TO PROVIDE THE ABOVE AFTER HANDOVER IN ACCORDANCE WITH THE SOUTH AUSTRALIAN HOUSING CODE. NOTE: WHERE A RECYCLED WATER CONN. EXISTS A RAINWATER TANK IS NOT REQUIRED.

GENERAL NOTES

1. SETOUT DIMENSIONS PROVIDED BY BUILDER. **PRIOR TO ANY SITE WORKS COMMENCING**, WHERE BOUNDARY PEGS DO NOT EXIST ON THE SUBJECT LAND, A BOUNDARY IDENTIFICATION SURVEY IS REQUIRED BY **OWNER**. ALL DETAIL ON ENGINEERING SURVEY INCLUDING ANY TREE AND BOUNDARY DIMENSIONS SHALL BE CONFIRMED ON SITE. CERTIFICATE OF TITLE IS TO BE REFERENCED FOR EASEMENT DETAILS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND DEPTHING OF ALL SERVICES.
2. ANY NECESSARY OR NOMINATED SPOONDRAINS, SUMPS, GRATED INLETS, GRATED BOX DRAINS, AGRICULTURAL DRAINS AND FINISHED SURFACE FALLS ARE TO BE PROVIDED BY THE **OWNER** TO ENSURE **ALL SURFACE WATER** IS COLLECTED AND DISCHARGED DIRECTLY TO THE STREET. U.N.O. WHERE SURFACE WATER CAN NOT BE DISCHARGED TO THE STREET OR A REAR OF ALLOTMENT STORMWATER CONNECTION POINT UNDER A GRADE, AN APPROPRIATE SUMP PUMP IS TO BE USED. (NOT SHOWN) SPOON DRAINS ARE TO BE PRECAST OR FORMED CONCRETE SET A MINIMUM 20mm DOWN BELOW ADJACENT PAVING LEVEL WITH THE INVERT OF THE DRAIN AT A MINIMUM GRADE OF 1:100.
3. **ROOF STORMWATER** DRAIN PIPES ARE TO BE PROVIDED BY THE **BUILDER**. UNLESS NOTED OTHERWISE, PIPES ARE TO BE 90mm PVC WITH GLUED JOINTS LAID ON A MIN. GRADE OF 1:100 WITH SLIDING (UNGLUED) CONNECTION AT BASE OF DOWNPIPE. IN SEALED SYSTEMS PROVIDE PROPRIETARY FLEXIBLE CONNECTION AT BASE OF DOWNPIPE.
4. BATTERS SHOWN ARE INDICATIVE ONLY AND MAY CHANGE DUE TO LOCAL VARIATIONS IN SITE LEVELS & SOIL CONDITIONS. SIGNIFICANT RETAINING WALLS HAVE BEEN SHOWN, HOWEVER FURTHER RETAINING WALLS MAY BE REQUIRED DEPENDING ON FINAL BATTER SLOPES AND LANDSCAPING REQUIREMENTS. ALL RETAINING WALLS ARE TO BE PROVIDED BY THE **OWNER**.
5. PERIMETER PAVING IN ACCORDANCE WITH THE DETAILS CONTAINED IN THE CONSTRUCTION FOOTING REPORT IS TO BE PROVIDED BY THE **OWNER**.
6. SURPLUS SOIL REMOVED BY **BUILDER** U.N.O.



DRIVEWAY AND CROSSOVER TO COUNCIL SPECIFICATIONS BY OWNER.

DISCHARGE SUB-FLOOR DRAIN WELL CLEAR OF RESIDENCE IN SEPARATE PIPE. DO NOT CONNECT WITH ROOF OR SURFACE DRAINAGE SYSTEMS. TYPICAL

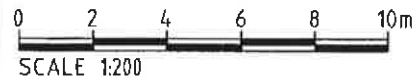
TBM RL 100.000 TOP OF STORMWATER OUTLET.

DISCHARGE STORMWATER (INCL. RWT TANK OVERFLOW) TO STREET WATERTABLE UNDER A MIN. GRADE OF 1:100.

100mm Ø SEWER DRAIN TO SEWER POINT. (LOCATION TO BE DETERMINED)

RETAINING WALL CONSTRUCTED BY OWNER. HEIGHT VARIES UP TO 1.8m APPROX.
 * IT IS RECOMMENDED THAT CONSTRUCTION OF THIS RETAINING WALL BE DELAYED UNTIL THE ADJACENT ALLOTMENT IS DEVELOPED AS THIS HAS THE POTENTIAL TO SIGNIFICANTLY ALTER RETAINED SOIL HEIGHTS.

1000 litre RAINWATER TANK. PLUMBED TO A TOILET. REFER BOXED NOTE.



NOTE: THIS IS AN ENGINEERING DETAIL SURVEY. BOUNDARIES HAVE NOT BEEN CHECKED.
 COUNCIL : CITY OF PLAYFORD
 DATE SURVEYED : 3/10/2013

LOT AREA = 630m²
 DWELLING AREA = 314m²
 ROOF AREA = 346m²
 SITE COVERAGE = 49.8%
 ROOF SITE COVERAGE = 54.9%

* SEWER CONNECTION NOT FOUND AT TIME OF SURVEY

LEGEND

- ▤ GRATED BOX DRAIN
- GRADED STORMWATER PIPE
- — — SEALED STORMWATER PIPE
- — — SEWER DRAIN
- ⊙ 90 Ø GRATED INLET
- ⊞ 300 SQ. GRATED INLET
- DP DOWNPIPE
- IP INSPECTION POINT
- 100.15 DESIGN LEVEL
- ▨ PAVING
- TOP SLOPING BATTERS AT 2H:1V U.N.O (REFER ALSO NOTE 4)
- BOTTOM

Herriot CONSULTING CIVIL AND STRUCTURAL ENGINEERS 173 Fullarton Road Dulwich SA 5066 P : 08 8431 4555 F : 08 8431 4500 CIVSTRUCT PTY LTD ABN : 49 112 016 467	A		CHANGE IN FLOOR PLAN		JR	MAY 14	SCALE 1:200	CLIENT: HICKINBOTHAM GROUP		DATE OF ISSUE: NOVEMBER 2013		
	No.	REVISION	BY	DATE	CHECKED	AL	DRAWN JR	PROPOSED DWELLING AT:		SHEET 1 OF 1	A3	
								DESIGNED JR	SITWORKS AND DRAINAGE PLAN		FILE No. C1310-013	Rev. A
								CHECKED AL				