

ALTERATIONS/ADDITIONS TWO STOREY HOUSE

16 MULAWA PL FRENCHS FOREST NSW 2086

MICHAEL

NORTHERN BEACHES COUNCIL

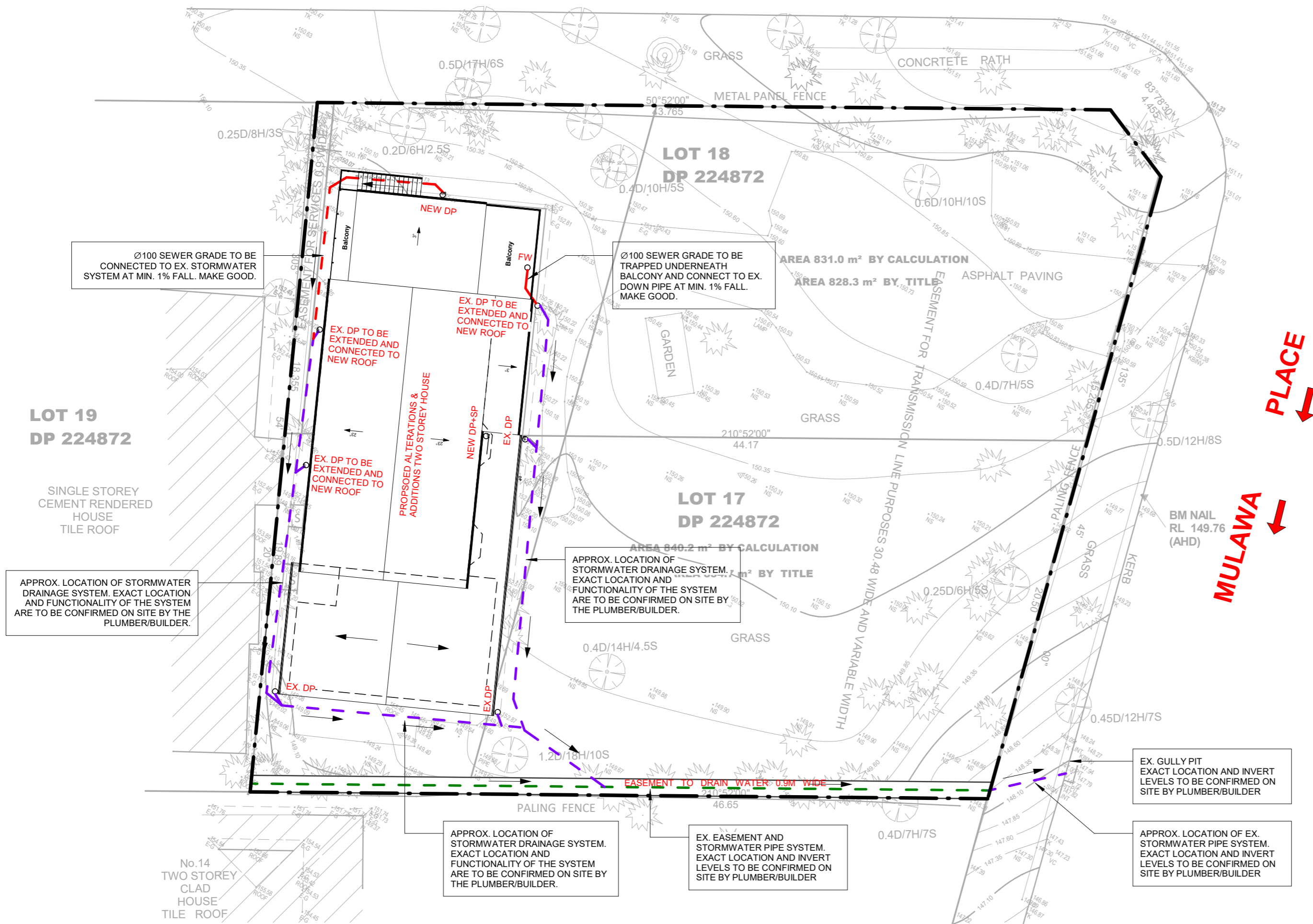
SHEET LIST			
SHEET NUMBER	SHEET NAME	REV	DATE
SW01	COVER SHEET	A	29/10/2019
SW02	DRAINAGE PLAN	A	29/10/2019

PAPER SIZE: A2							<div><div></div><div>SS PROJECTS CONSULTING ENGINEERS PTY LTD ABN 38 634 702 113 PO BOX 445 EDGECLIFF, NSW 2027 M: 0426 476 868 E: info@ssprojects.com.au W: ssprojects.com.au</div></div>	DRAWINGS / DESIGN PREPARED BY	CLIENT	PROJECT: ALTERATIONS/ADDITIONS TWO STOREY HOUSE			
										PROJECT ADDRESS: 16 MULAWA PL FRENCHS FOREST NSW 2086			
	A	ISSUED FOR CDC/DA	29/10/2019	HP	ET	LGA: NORTHERN BEACHES COUNCIL				DRAWING TITLE COVER SHEET		SCALE	A2
	-	ISSUED FOR CLIENT COMMENT	11/10/2019	HP	ET					DRG NUMBER	FSP-DWG-19114 -SW01	REV	A
	REV	DESCRIPTION	DATE	DRAWN	CHECKED					APPROVED			

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POUND AVENUE



GENERAL

- 1 THE PLUMBER/ DRAINER SHALL INSPECT THE SITE AND CONFIRM THE EXISTING SITE STRUCTURES, SERVICES AND CONDITIONS PRIOR TO PROCEEDING. SHOULD ANY DISCREPANCIES BE FOUND, CONTACT THE ENGINEER FOR DISCUSSION PRIOR TO PROCEEDING THE WORKS.
- 2 LOCATION OF STORMWATER SYSTEMS, INCLUDING DOWNPIPES, PIPES, PITS, ONSITE DETENTION AND RAINWATER TANK ARE INDICATIVE ONLY. EXACT LOCATION SHALL BE DETERMINED ON SITE BY THE PLUMBER/BUILDER TO SUIT SITE CONDITIONS.
- 3 THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL AND OTHER CONSULTANT DRAWINGS. IF ANY DISCREPANCIES FOUND, CONTACT THE ENGINEER FOR DISCUSSION PRIOR TO PROCEEDING THE WORKS.
- 4 ALL MATERIAL AND WORKMANSHIP TO BE CARRIED OUT IN ACCORDANCE WITH AS3500.3:2018 STORMWATER DRAINAGE, BCA AND LOCAL COUNCIL POLICY, CONSENT AND REQUIREMENTS. IT IS THE RESPONSIBILITY OF THE PLUMBER/ DRAINER TO OBTAIN ANY APPROVALS/ PERMITS/ LICENSES ISSUED BY THE AUTHORITIES PRIOR TO PROCEEDING WITH STORMWATER WORKS.
- 5 ALL DIMENSIONS AND LEVELS ARE TO BE VERIFIED AND CONFIRMED ONSITE BY THE PLUMBER/BUILDER PRIOR TO COMMENCEMENT OF THE WORKS.
- 6 THESE DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS NOR TO BE USED FOR SETOUT PURPOSES.
- 7 THESE DRAWINGS DEPICT THE DESIGN OF SURFACE STORMWATER RUNOFF DRAINAGE SYSTEMS ONLY AND DO NOT DEPICT ROOF DRAINAGE OR SUBSOIL DRAINAGE SYSTEM. UNLESS NOTED OTHERWISE, THE DESIGN OF ROOF AND SUBSOIL DRAINAGE SYSTEMS IS THE RESPONSIBILITY OF OTHERS.
- 8 ALL DOWNPIPES TO BE ≥ 100 SEWER GRADE AND FULLY SEALED U.N.O. ALL STORMWATER PIPES TO BE ≥ 100 SEWER GRADE AT 1% MIN. FALL U.N.O. ALL MATERIALS USED IN THE WORK SHALL BE NEW AND CONFORM WITH RELEVANT AUSTRALIAN STANDARDS AND BEAR THE REQUIRED STANDARDS MARK.
- 9 INSPECTION AND CERTIFICATION, IF REQUIRED, SHALL BE DONE PRIOR TO BACKFILLING. ALLOW 24 HOUR NOTICE FOR THE ENGINEER TO CARRY OUT INSPECTION.
- 10 ANY DAMAGE TO SERVICES DURING CONSTRUCTION SHALL BE REPAIRED IMMEDIATELY AT THE PLUMBER/ DRAINER'S OWN EXPENSE.

DRAINAGE NOTES

- 1 UNLESS NOTED AS OTHERWISE, ALL DOWNPIPES TO BE ≥ 100 ROUND (OR 100X75 RECTANGULAR) AND FULLY SEALED; ALL STORMWATER PIPES TO BE ≥ 100 SEWER GRADE. ALL STORMWATER PIPES TO BE LAID AT 1% MIN. FALL. ALL MATERIALS USED IN THE WORK SHALL BE NEW AND CONFORM WITH RELEVANT AUSTRALIAN STANDARDS AND BEAR THE REQUIRED STANDARDS MARK.
- 2 UNLESS NOTED AS OTHERWISE, THE MINIMUM PIPE COVER, MEASURED FROM THE TOP OF THE PIPE TO THE FINISHED SURFACE, SHALL BE AS PER THE TABLE BELOW

PIPE LOCATION	MINIMUM COVER
NOT SUBJECT TO VEHICULAR LOADING	100MM FOR SINGLE DWELLING 300MM FOR ALL OTHER DEVELOPMENTS
SUBJECT TO VEHICULAR LOADING	450MM WHERE NOT UNDER ROAD
UNDER SEALED ROAD	600MM
UNDER UNSEALED ROAD	750MM
UNDER FOOTPATHS	400MM
PARKS	400MM
PAVED DRIVEWAY	100MM BELOW UNDER SIDE OF PAVEMENT

- 3 ANY PIPES BENEATH RELEVANT LOCAL AUTHORITY ROAD TO BE RUBBER RING JOINTED RCP, UNLESS NOTED AS OTHERWISE.
- 4 ALL STORMWATER PIT WITHIN THE PROPERTY ARE TO BE FITTED WITH "WELDLOCK" OR APPROVED EQUIVALENT GRATE OF:
 - LIGHT DUTY FOR LANDSCAPED AREAS
 - HEAVY DUTY WHERE SUBJECT TO VEHICULAR TRAFFIC
- 5 UNLESS NOTED AS OTHERWISE, MINIMUM INTERNAL DIMENSIONS FOR STORMWATER AND INLET PITS SHALL BE GIVEN IN TABLE BELOW:

DEPTH TO IVERT OF OUTLET	MINIMUM INTERNAL DIMENSION (mm)	
	WIDTH	LENGTH
UP TO 450mm	450	450
450mm TO 600mm	600	600
600mm TO 900mm	600	900
900mm TO 1500mm (*)	900	900
1500mm TO 2000mm (*)	1200	1200

(*) NOTE: STEP IRONS SHALL BE PROVIDED FOR PITS WITH DEPTHS EXCEEDING 1200 MM

- 6 ALL PITS IN ROADWAY SHALL BE FITTED WITH HEAVY DUTY GRATES WITH LOCKING BOLTS AND CONTINUOUS HINGES.
- 7 SUB-SOIL DRAINS FOR RETAINING WALL AND EMBANKMENTS SHALL BE INSTALLED BY THE BUILDER AND CONNECTED TO STORMWATER LINES. ALL AGG. LINES SHALL BE 100MM DIA., UNLESS NOTED OTHERWISE.

UTILITIES

- 1 THE LOCATION OF UTILITIES SHOWN ON THESE DRAWINGS ARE INDICATIVE ONLY. THE CONTRACTOR SHALL, BEFORE COMMENCING ANY WORKS:
 - a DETERMINE THE EXTENT OF EXISTING UTILITY SURVEY AND INFORMATION REFERENCED ON THESE DRAWINGS.
 - b OBTAIN CURRENT DIAL BEFORE YOU DIG PLANS AND INFORMATION BY TELEPHONING 1100 OR FAX 1300 682 077 TO ASCERTAIN THE EXACT LOCATION OF UTILITIES.



- c MAKE ANY OTHER ENQUIRIES AS THE CONTRACTOR CONSIDERS NECESSARY TO SATISFY ITSELF AS TO THE EXACT LOCATION OF UTILITY SERVICES; AND
 - d ENSURE THAT THE ADOPTED WORK METHOD WILL AVOID DAMAGE TO ALL UTILITIES.
- 2 THE CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING IN THE VICINITY OF EXISTING UTILITY SERVICES.
 - 3 THIS FIRM WILL NOT BE LIABLE FOR ANY COSTS ARISING FROM DAMAGE TO ANY UTILITY SERVICES CAUSED BY THE CONTRACTOR.

1 PLAN-STORMWATER DRAINAGE PLAN

1 : 200

LEGEND:

- DP DOWN PIPE
- DP+SP DOWN PIPE WITH SPREADER BAR
- FW $\varnothing 100$ FLOOR WASTE
- ➔ FALL OF LAND
- SEWER GRADE PIPE FOR ROOF RUNOFF
- SEWER GRADE PIPE FOR SURFACE RUNOFF
- EXISTING DRAINAGE PIPE SYSTEM
- ▣ GRATED PIT
- SL: SURFACE LEVEL | INV.: INVERT LEVEL

EXISTING STORMWATER SYSTEM NOTES:

- THE EXISTING STORMWATER SYSTEM IS INDICATIVE ONLY AND HAS BEEN ASSUMED IN WORKING ORDER.
- THE LOCATION AND FUNCTIONALITY OF THE EXISTING STORMWATER SYSTEM ARE TO BE CONFIRMED BY THE PLUMBER/BUILDER PRIOR TO ANY CONSTRUCTION WORK.
- NUMBER OF DOWN PIPES SHOWN ON THE PLAN IS MINIMUM REQUIREMENT. LOCATION OF THE EXISTING DOWN PIPE ARE INDICATIVE AND ASSUMED TO BE IN SOUND AND WORKING CONDITION.
- IN CASE THE EXISTING DOWNPIPE FOUND TO BE STRUCTURALLY UNSOUND OR/AND NOT IN WORKING ORDER, IT IS REQUIRED TO BE DEMOLISHED AND REPLACED BY NEW DOWN PIPE.

BASIX REQUIREMENTS NOTES:

THIS DEVELOPMENT IS AN ALTERATIONS AND ADDITIONS TO AN EXISTING SINGLE DWELLING ONLY. THERE IS NO COMMITMENT TO RAINWATER REUSE UNDER BASIX CERTIFICATE.

PAPER SIZE: A2						
A	ISSUED FOR CDC/DA	29/10/2019	HP	ET	Eric Tran Structural/Civil Engineer B.E (Civl) MIE Aust, CPEng NER, RPEQ	
-	ISSUED FOR CLIENT COMMENT	11/10/2019	HP	ET		
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LGA: NORTHERN BEACHES COUNCIL			DRAWING TITLE: DRAINAGE PLAN
			SCALE: As indicated
			DRG NUMBER FSP-DWG-19114-SW02
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