Enginee

ALTERATIONS AND ADDITIONS

at: 9 BEATRICE STREET, CLONTARF

for: SPITFIRE CONTROL

Project Manager: SPITFIRE CONTROL

Prepared By:

Consulting Engineers STRUCTURAL - CIVIL - STORMWATER - REMEDIAL

A.C.N. 076 121 616 A.B.N. 24 076 121 616

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DRAWING SCHEDULE:

DOI - STORMWATER MANAGEMENT DRAINAGE PLAN - SHEET 1 DO2 - STORMWATER MANAGEMENT DRAINAGE PLAN - SHEET 2 DO3 - STORMWATER MANAGEMENT DRAINAGE PLAN - SHEET 3 DO4 - STORMWATER MANAGEMENT DRAINAGE PLAN - SHEET 4

ISSUED FOR SECTION 4.55 SUBMISSION ONLY NOT FOR CONSTRUCTION

1 - ALL PIPES TO BE 100mm & UNLESS NOTED OTHERWISE.

- 2 ALL PIPES TO BE UPVC TO AS 1254-2002 UNLESS NOTED OTHERWISE.
- 3 ALL PIPES TO BE LAYED AT 1 % MINIMUM GRADE UNLESS NOTED OTHERWISE.
- 4 ALL PIPES SHALL BE LAID ON A 75mm SAND BED, COMPACTED TO 100% S.M.D.D. BELOW PAVEMENTS.

(NO COMPACTION REQUIRED BELOW LANDSCAPING) COVER TO SURFACE FROM TOP OF PIPE TO BE 300mm MINIMUM. BACKFILL TO BE ADEQUATELY CONSOLIDATED AROUND PIPES BY METHOD OF RAMMING AND WATERING IN. TRENCHES TO BE FILLED WITH GRANULAR MATERIAL AS SPECIFIED.

- 5 ALL DOWN PIPES TO BE 100mm & UNLESS NOTED OTHERWISE.
- 6 DOWN PIPE LOCATIONS ARE INDICATIVE ONLY. LOCATIONS TO BE CONFIRMED WITH ARCHITECT PRIOR TO COMMENCEMENT WITH WORK.
- 7 PROVIDE CLEANING EYES AT ALL DOWNPIPES.
- 8 ALL PITS TO BE CAST INSITU OR, IF PRECAST, APPROVED BY ENGINEER CAST INSITU PITS TO HAVE 150mm THICK CONCRETE WALLS AND BASE. WALLS TO BE REINFORCED WITH 1 N12 TOP TIE UNLESS NOTED OTHERWISE. CAST INSITU PITS GREATER THAN 1000 DEEP TO BE MINIMUM 900x600 AND TO HAVE 150mm THICK CONCRETE WALLS AND BASE. WALLS TO BE REINFORCED WITH NI2 AT 300 EACH WAY UNLESS NOTED OTHERWISE.
- 9 ALL PITS GREATER THAN 1000mm DEEP SHALL HAVE STEP IRONS AS PER COUNCIL STANDARDS.
- 10 ALL WORK TO BE IN ACCORDANCE WITH LOCAL COUNCIL STANDARDS AND SPECIFICATIONS.
- 11 PRIOR TO COMMENCING ANY SITE WORKS THE CONTRACTOR SHALL IMPLEMENT EROSION CONTROL MEASURES TO APPROVED SEDIMENT AND EROSION CONTROL PLAN, EPA GUIDELINES AND COUNCIL SPECIFICATIONS. ALL MEASURES TO REMAIN IN PLACE UNTIL COMPLETION AND STABILIZATION OF THE SITE TO COUNCIL SATISFACTION.
- 12 ALL LEVELS SHOWN ARE TO AHD
- 13 ENSURE THAT ALL PITS AND STORMWATER PIPES ARE LOCATED CLEAR FROM TREE ROOT SYSTEMS.
- 14 ALL EXISTING EARTHENWARE PIPES TO BE UPGRADED TO UPVC.
- 15 ALL WORKS TO BE IN ACCORDANCE WITH AS 3500-2003 NATIONAL PLUMBING DRAINAGE CODE PART 3 - STORMWATER DRAINAGE.
- 16. UNLESS NOTED OTHERWISE, SUB-SOIL DRAINS ARE TO BE INSTALLED IN ACCORDANCE WITH AS3500.3 ALONGSIDE WALLS THAT IMPEDE THE NATURAL FLOW OF GROUNDWATER. THIS MAY ALSO INVOLVE TRENCHING INTO THE CLAY OR ROCK SUBGRADE TO DIRECT GROUNDWATER AWAY FROM STRUCTURES.
- 17. IF NOT INDICATED ON PLANS, PROVIDE LEAF CATCHERS TO ALL DOWNPIPES.
- 18. 100mm 0 x 3000 LONG TAIL OUT SUBSOIL LINE TO BE PROVIDED ON THE UPSTREAM SIDE OF ALL PITS. SUBSOIL LINE TO BE COVERED WITH GEOTEXTILE FILTER SOCK FOR THE FULL LENGTH AND END COVERED.

BALCONY/TERRACE OVERFLOW NOTE

BUILDER TO PROVIDE A MINIMUM 100mm WIDE x 30mm HIGH OR 50mm DIA OVERFLOW FOR EVERY 6m2 OF EXPOSED TERRACE/BALCONY AREA. THE FULL OVERFLOW DEPTH MUST BE LOCATED BELOW THE ADJACENT INTERNAL FLOOR LEVEL TO PROTECT AGAINST INCIDENTAL FLOODING DUE TO A BLOCKED FLOOR OUTLET

NOTE: EXISTING STORMWATER SYSTEM EXISTING STORMWATER SYSTEM TO BE CHECKED AND UPGRADED AS REQUIRED. BUILDER TO INSPECT PRIOR TO CONSTRUCTION AND UPGRADE IF REQUIRED IN ACCORDANCE WITH AS3500.3.

NOTE: DRAINAGE LINE INDICATIVE ONLY DRAINAGE LINE LOCATIONS ARE INDICATIVE ONLY AND MAY VARY DUE TO CONSTRAINTS. IF IN DOUBT CONTACT THE ENGINEER.

NOTE: EXISTING SERVICES

CONTRACTOR TO LOCATE ALL EXISTING SERVICES PRIOR TO EXCAVATION AND NOTIFY ENGINEER OF ANY POTENTIAL CLASHES WITH THE PROPOSED DRAINAGE

SUBSOIL DRAINAGE NOTE: SUBSOIL DRAINAGE BY OTHERS. ALL SUBSOIL DRAINAGE TO DISCHARGE TO STORMWATER SYSTEM IN AN APPROVED MANNER TO AS3500.3.

RETAINING STRUCTURES NOTE:

RETAINING WALLS, BATTERS AND SHORING INCLUDING DRAINAGE BY OTHERS REFER ARCHITECT FOR SPECIFICATIONS & DETAILS

NOTE: EXISTING COUNCIL PIPE **‡ PRIVATE PIPE CONNECTION** STORMWATER PIPELINE TO BE CONFIRMED ON PROPERTY TITLE TO BENEFIT THE SUBJECT PROPERTY

PRIOR TO CONSTRUCTION

ONSITE DETENTION SYSTEM SUMMARY NOTES IN ACCORDANCE WITH NORTHERN BEACHES (MANLY) COUNCIL DCP

 714 m^2 TOTAL SITE AREA

PRE DEVELOPMENT APPROVED IMPERVIOUS AREA

THAN 5 YEARS OLD

AS PER DEVELOPMENT APPROVAL PLANS GREATER

350 m² (49 %)

 $383 \text{ m}^2 (54 \%)$

POST DEVELOPMENT IMPERVIOUS AREA

SINCE THE INCREASE IN IMPERVIOUS AREA IS LESS THEN 50 m2 AND THE TOTAL IMPERVIOUS AREA IS LESS THEN 60% OF THE SITE AREA, OSD IS NOT REQUIRED FOR THIS DEVELOPMENT.

CONNECTION TO R.C. PIPE

THE R.C. STORMWATER PIPE SHALL BE PIERCED BY A NEAT OPENING AS SHOWN TO ALLOW THE CONNECTION OF A SQUARE, SLOPED JUNCTION OR BEND WHICH SHALL NOT PROTRUDE BEYOND THE INNER SURFACE OF THE R.C. STORMWATER PIPE

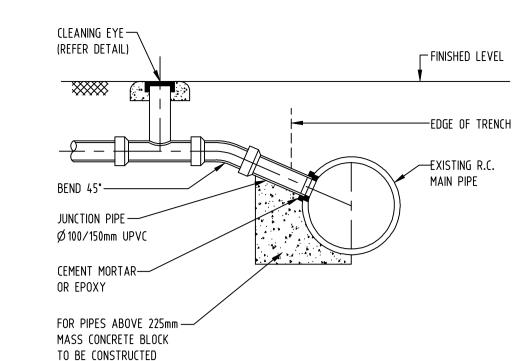
THE INTERNAL JUNCTION SHALL BE SMOOTHLY FINISHED WITH 2:1 CEMENT MORTAR OR EPOXY CEMENT SO AS TO PRESENT NO OBSTRUCTION WITHIN THE INTERNAL SURFACE OF THE R.C. STORMWATER PIPE. THE LINE IS NOT TO EXTEND BEYOND POINT 1 UNTIL APPROVED BY COUNCIL

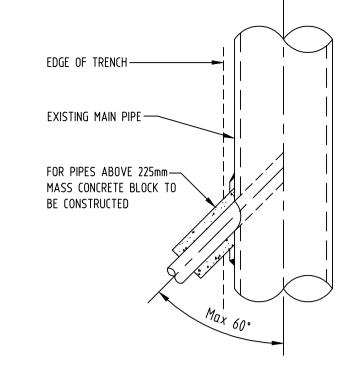
THE HOLE IN COUNCIL'S PIPE IS TO BE FORMED BY CAREFUL DRILLING TO NEATLY ACCEPT THE OUTSIDE DIAMETER OF THE

ANY DAMAGE TO THE STRUCTURE OF COUNCIL'S PIPE IS TO BE MADE GOOD TO THE SATISFACTION OF COUNCIL'S ENGINEER, IF NECESSARY BY THE REPLACEMENT OF THE PIPE

PIPE FITTINGS ARE TO BE VETRIFIED CLAY OR SEWER QUALITY

COUNCIL PIPELINE IS TO BE LEFT FREE OF DROPPED CLAY, CONCRETE, MORTAR, ETC...





PLAN

TYPICAL CONNECTION TO EXISTING R.C. PIPE DETAILS

SCALE = N.T.S.

INCONVENIENCE USERS OF FLECTRICITY. GAS. WATER AND COMMUNICATIONS LEAD TO CRIMINAL PROSECUTION AND DAMAGES CLAIMS - CAUSE EXPENSIVE FINANCIAL LOSSES TO BUSINESS CUT OFF EMERGENCY SERVICES

NOTES:

ALL DIMENSIONS AND LEVELS

COMMENCING WITH WORK.

2. FOR GENERAL NOTES REFER

TO DRAWING NUMBER: DOI.

www.dialbeforeyoudig.com.au

NO INVESTIGATION OF UNDERGROUND SERVICES HAS BEEN MADE. ALL RELEVANT AUTHORITIES

DEVELOPERS & EXCAVATORS MAY BE HELD

FINANCIALLY RESPONSIBLE BY THE ASSET OWNER

SHOULD THEY DAMAGE UNDERGROUND NETWORKS.

SHOULD BE NOTIFIED PRIOR TO ANY

CARELESS DIGGING CAN:

- CAUSE DEATH OR SERIOUS INJURY TO

WORKERS AND THE GENERAL PUBLIC

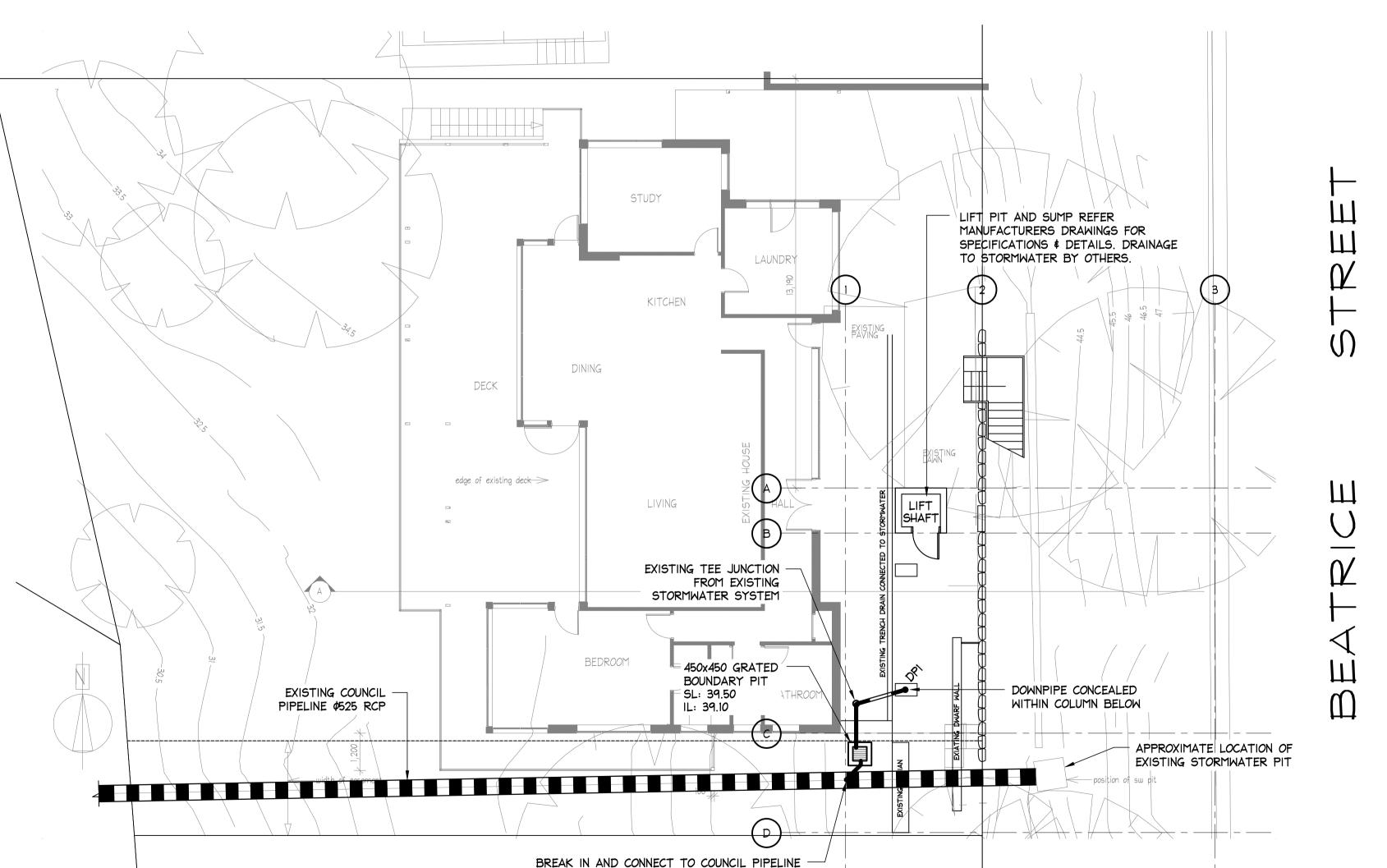
BEFORE YOU DIG. - TEL. 1100

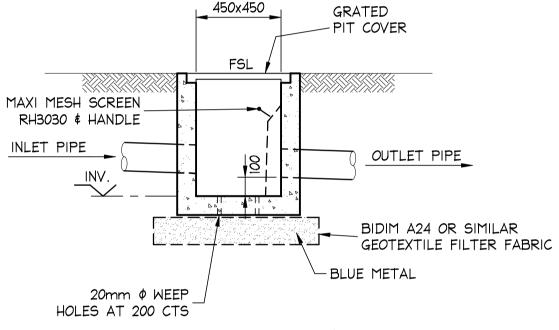
EXCAVATION ON OR NEAR THE SITE

BUILDER BEFORE

TO BE VERIFIED ON SITE BY

DELAY PROJECT COMPLETION TIMES WHILE THE DAMAGE IS REPAIRED MINIMISE YOUR RISK AND DIAL

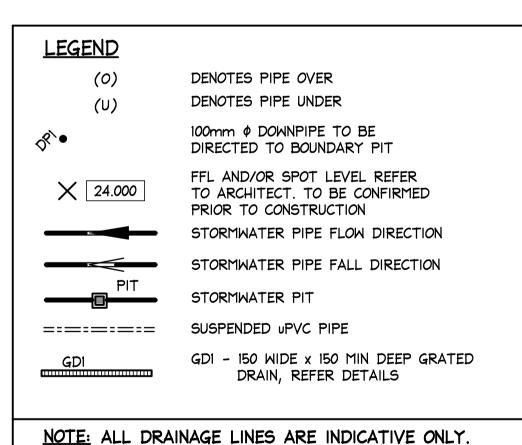




PRECAST OR CAST INSITU PIT REFER STORMWATER NOTES ALTERNATE POLYPROPYLENE PIT BY MANUFACTURER

450x450 BOUNDARY PIT DETAIL

SCALE = 1 : 20



LOCATION MAY VARY DUE TO CONSTRAINTS.

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ISSUED FOR

IF IN DOUBT ASK

Design:

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Al					
22/07/2020	В	REVISED PLANS	D.K.	M.W.	
17/07/2020	Α	ISSUED FOR SECTION 4.55 SUBMISSION ONLY - NOT FOR CONSTRUCTION	D.K.	M.W.	
Date:	Issue:	Description:	Ву:	Review:	(

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GROUND FLOOR DRAINAGE PLAN

USING FLOWCON CONNECTION TO COUNCIL

CONNECTION TO COMPLY WITH AS3500.3.

WITH DIRECTION OF FLOW. PIPELINE

SPECIFICATIONS. CONNECT PIPE AT 45° ANGLE

SPITFIRE CONTROL Client: SPITFIRE CONTROL

ALTERATIONS AND ADDITIONS AT 9 BEATRICE ST, CLONTARF Drawing Title: STORMWATER MANAGEMENT DRAINAGE PLAN - SHEET

JUL 2020

C.H.

Drawing No: D01 B

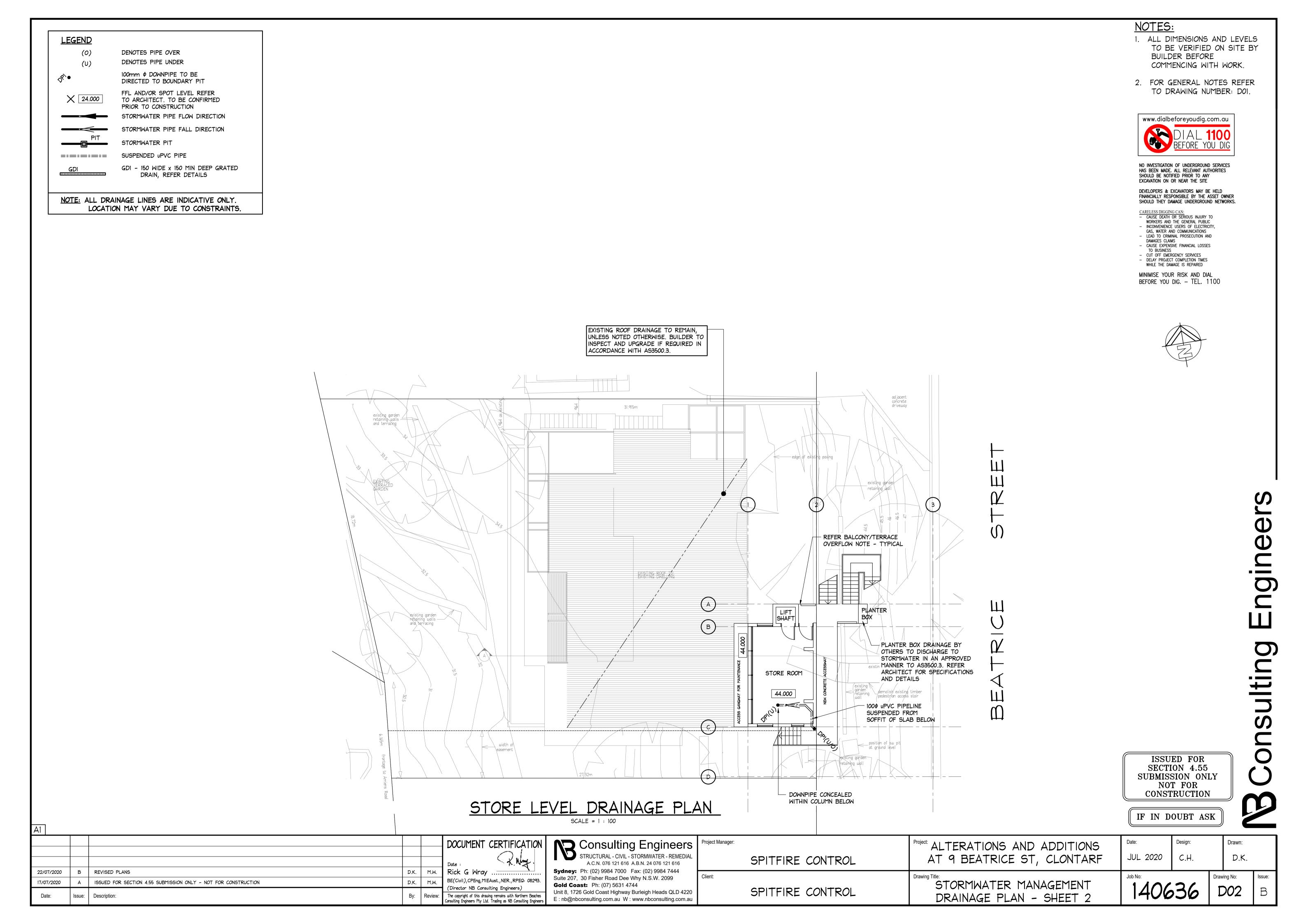
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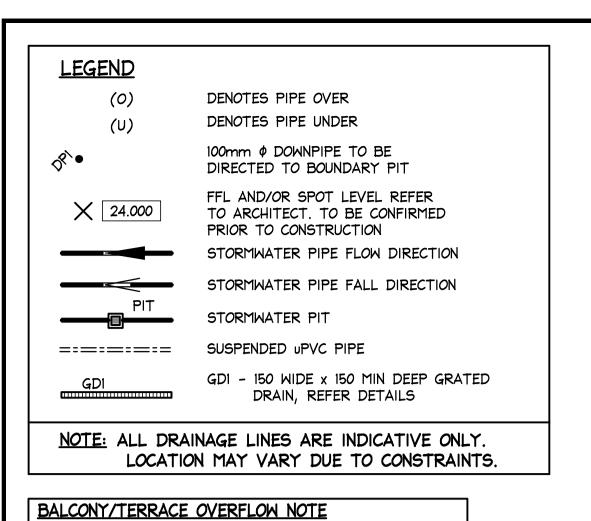
D.K.

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CONSTRUCTION AND UPGRADE IF REQUIRED

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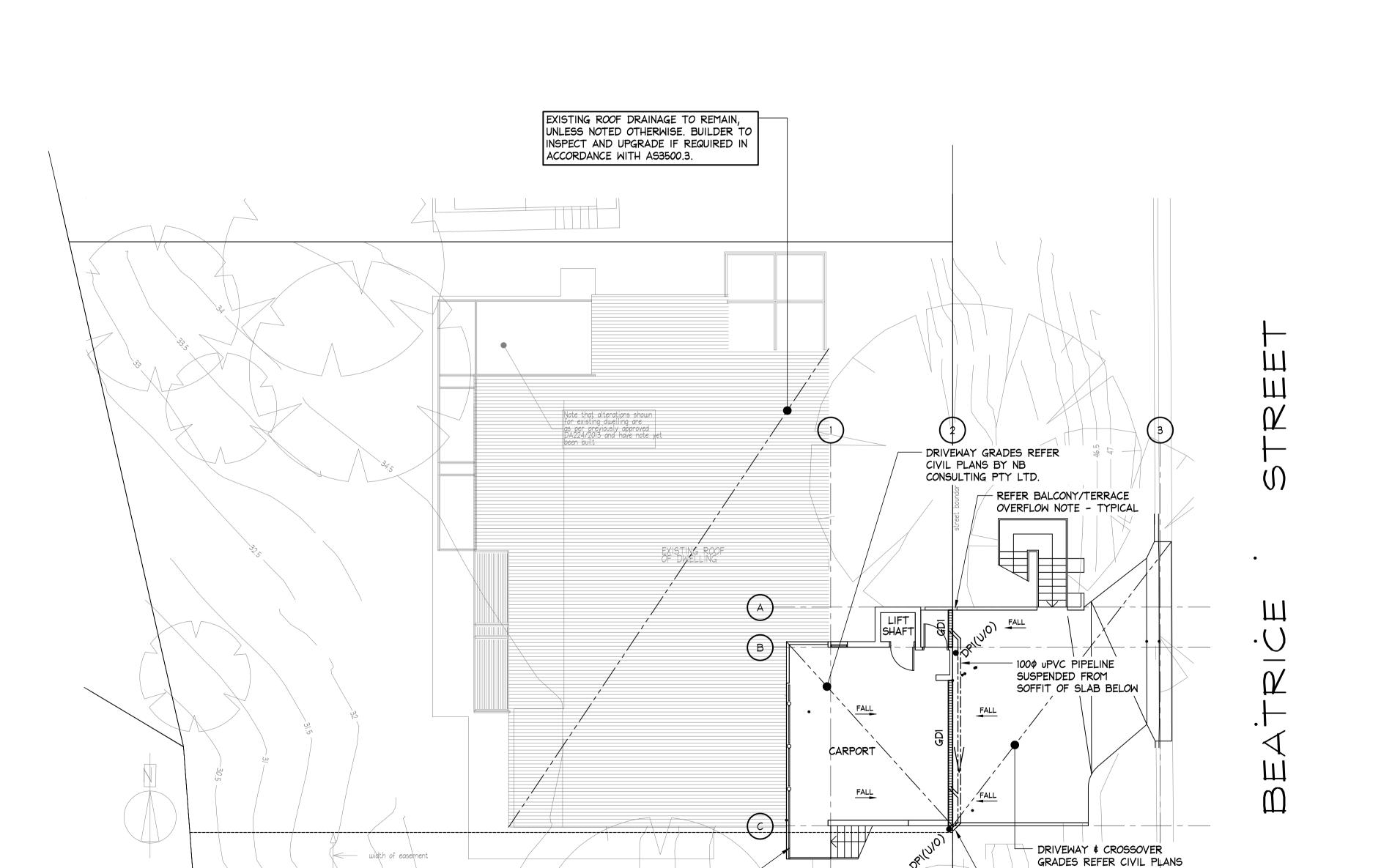
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Description:

Issue:



REFER BALCONY/TERRACE

OVERFLOW NOTE - TYPICAL

Unit 8, 1726 Gold Coast Highway Burleigh Heads QLD 4220

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CARELESS DIGGING CAN:
- CAUSE DEATH OR SERIOUS INJURY TO

- WORKERS AND THE GENERAL PUBLIC INCONVENIENCE USERS OF ELECTRICITY.
- GAS, WATER AND COMMUNICATIONS - LEAD TO CRIMINAL PROSECUTION AND DAMAGES CLAIMS
- CAUSE EXPENSIVE FINANCIAL LOSSES
- CUT OFF EMERGENCY SERVICES DELAY PROJECT COMPLETION TIMES WHILE THE DAMAGE IS REPAIRED

MINIMISE YOUR RISK AND DIAL BEFORE YOU DIG. – TEL. 1100



Drawn:

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D03

D.K.

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JUL 2020

BY NB CONSULTING PTY LTD.

PROVIDE ADEQUATE OPENING FOR GRATED DRAIN OVERFLOW IN CASE OF BLOCKAGE

DRAINAGE PLAN - SHEET 3

SPITFIRE CONTROL

IF IN DOUBT ASK

A1			CARPORT LEVEL DRAINAGE PLAN SCALE = 1 : 100					IN CASE OF BLOCKAGE			
				Date:	Consulting Engineers STRUCTURAL - CIVIL - STORMWATER - REMEDIAL A.C.N. 076 121 616 A.B.N. 24 076 121 616 Structural Phy (02) 0084 7000 Few (02) 0084 7444	Project Manager:	SPITFIRE CO		Project: ALTERATIONS AND ADDITIONS AT 9 BEATRICE ST, CLONTARF		
22/07/2020 B	REVISED PLANS	D.K.		Rick G Wray	Sydney: Ph: (02) 9984 7000 Fax: (02) 9984 7444 Suite 207, 30 Fisher Road Dee Why N.S.W. 2099	Client:			Drawing Title:		
17/07/2020 A	ISSUED FOR SECTION 4.55 SUBMISSION ONLY - NOT FOR CONSTRUCTION	D.K.	M.W.	(Director NB Consulting Engineers)	Gold Coast: Ph: (07) 5631 4744		CDITTIDE CO	NTDO	STORMWATER MANAGEMENT		

(Director NB Consulting Engineers)

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LEGEND

100mm & DOWNPIPE TO BE DIRECTED TO BOUNDARY PIT

NOTE: ALL DRAINAGE LINES ARE INDICATIVE ONLY. LOCATION MAY VARY DUE TO CONSTRAINTS. NOTES:

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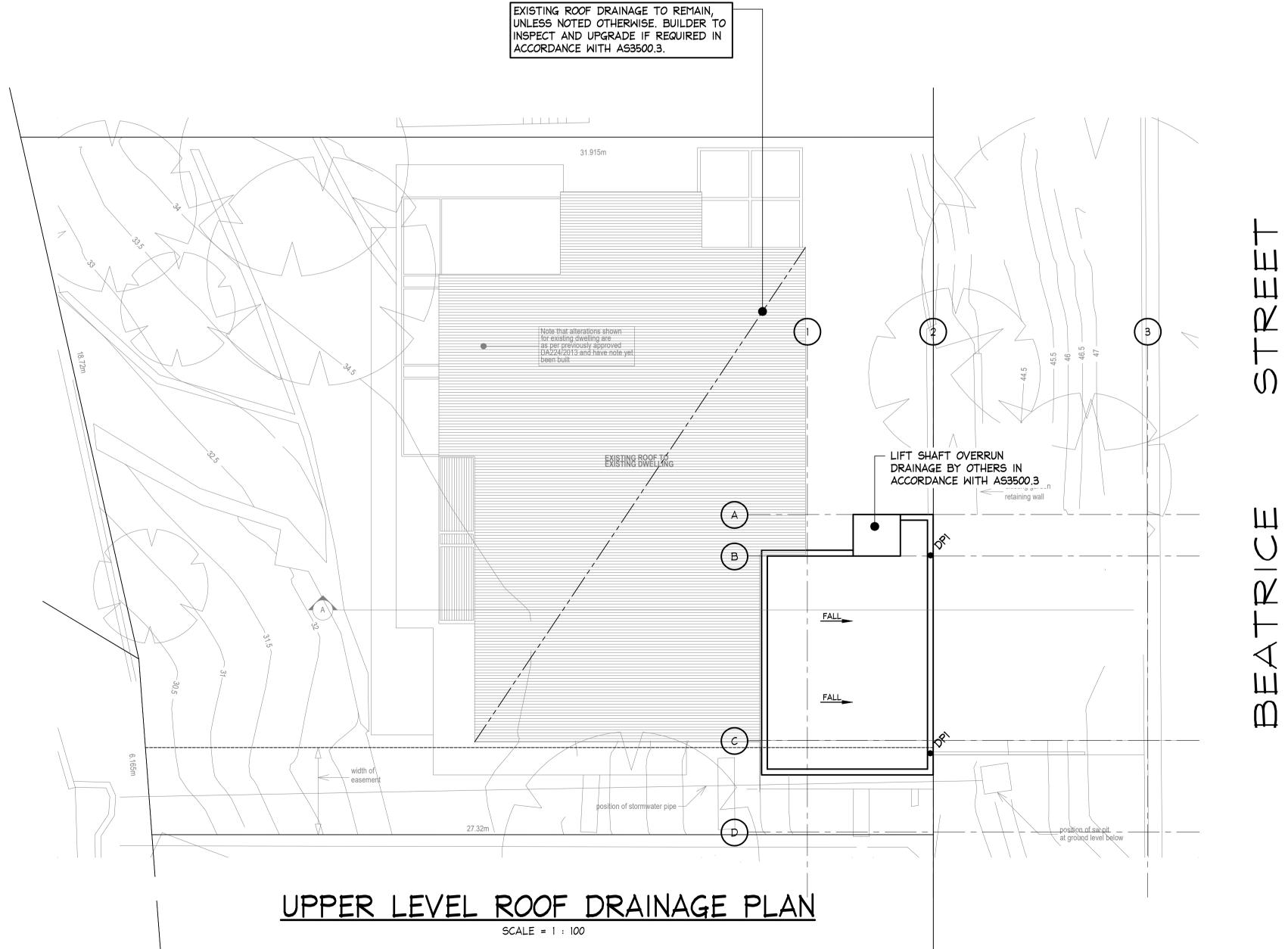
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MINIMISE YOUR RISK AND DIAL BEFORE YOU DIG. - TEL. 1100





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A1									
		DOCUMENT CERTIFICATION	Consulting Engineers	Project Manager:	Project: ALTERATIONS AND ADDITIONS	Date:	Design:	Drawn:	
		Date:	STRUCTURAL - CIVIL - STORMWATER - REMEDIAL A.C.N. 076 121 616 A.B.N. 24 076 121 616	SPITFIRE CONTROL	AT 9 BEATRICE ST, CLONTARF	JUL 2020	C.H.	D.K.	
22/07/2020	B REVISED PLANS D.K.	.w. Rick G Wray	Sydney: Ph: (02) 9984 7000 Fax: (02) 9984 7444	Client:	Drawing Title:	Job No:	<u>'</u>	Drawing No:	Issue:
17/07/2020	A ISSUED FOR SECTION 4.55 SUBMISSION ONLY - NOT FOR CONSTRUCTION D.K.	.W. BE(Civil),CPEng,MIEAust.,NER.,RPEQ: 08293.	Suite 207, 30 Fisher Road Dee Why N.S.W. 2099 Gold Coast: Ph: (07) 5631 4744	Client:	STORMWATER MANAGEMENT			ĭ	issuc.
Date:	Issue: Description:	(Director NB Consulting Engineers) The copyright of this drawing remains with Northern Beaches Consulting Engineers Pty Ltd. Trading as NB Consulting Engineers	Unit 8, 1726 Gold Coast Highway Burleigh Heads QLD 4220	SPITFIRE CONTROL	DRAINAGE PLAN - SHEET 4	1406	036	D04	B