



UTILITIES SHOWN ARE DIAGRAMMATIC ONLY, CONTRACTORS ARE RESPONSIBLE TO LOCATE AND AVOID DAMAGE TO THEM AS SPECIFIED BY EACH UTILITIES EXCAVATION GUIDE LINES AND STANDARDS

NOTE: UTILITIES SHOWN MAY NOT INCLUDE ALL SERVICES WITHIN THE LIMIT OF WORKS

217A BEACH ROAD DENHAMS BEACH

LOT 2 DP 773132

CIVIL ENGINEERING PLANS

SHEET INDEX

DWG No.	DESCRIPTION
681-01	TITLE SHEET & LOCALITY
681-02	SEWER & WATER CONCEPT PLAN
681-03	SEWER LONG SECTION
681-04	STORMWATER MANAGEMENT PLAN
681-05	STORMWATER DETAILS SHEET
681-06	VEHICLE MANOEUVRING (1 of 3)
681-07	VEHICLE MANOEUVRING (2 of 3)
681-08	VEHICLE MANOEUVRING (3 of 3)

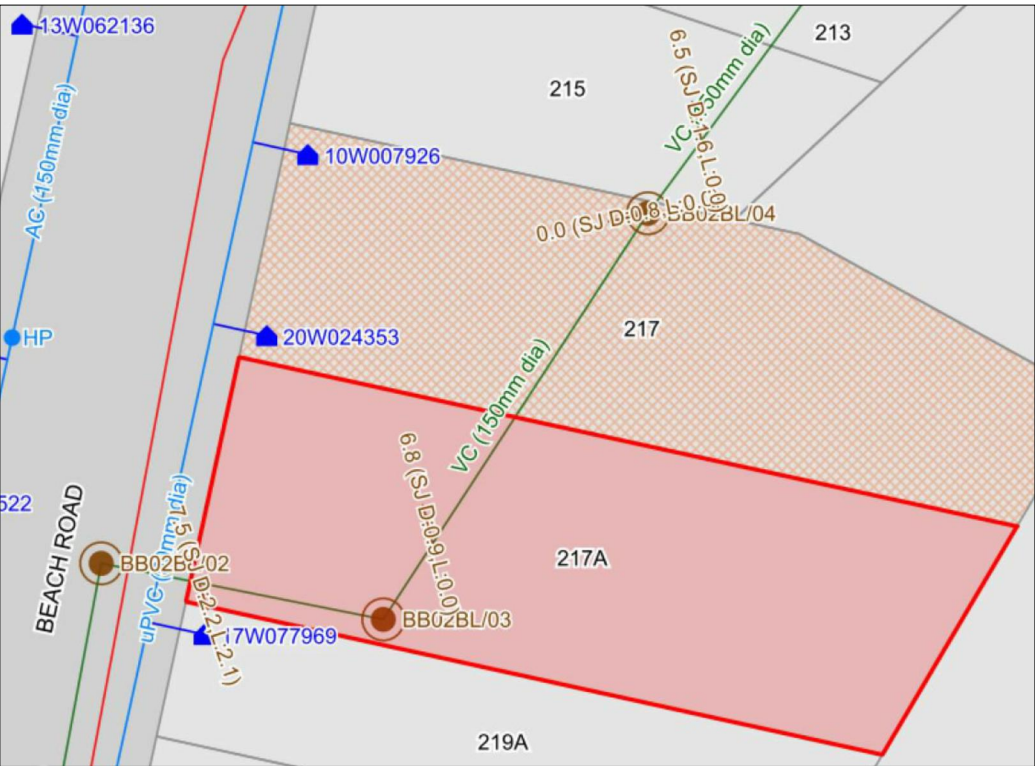


LOCALITY
NOT TO SCALE



SITE PLAN
SCALE 1:400@A3

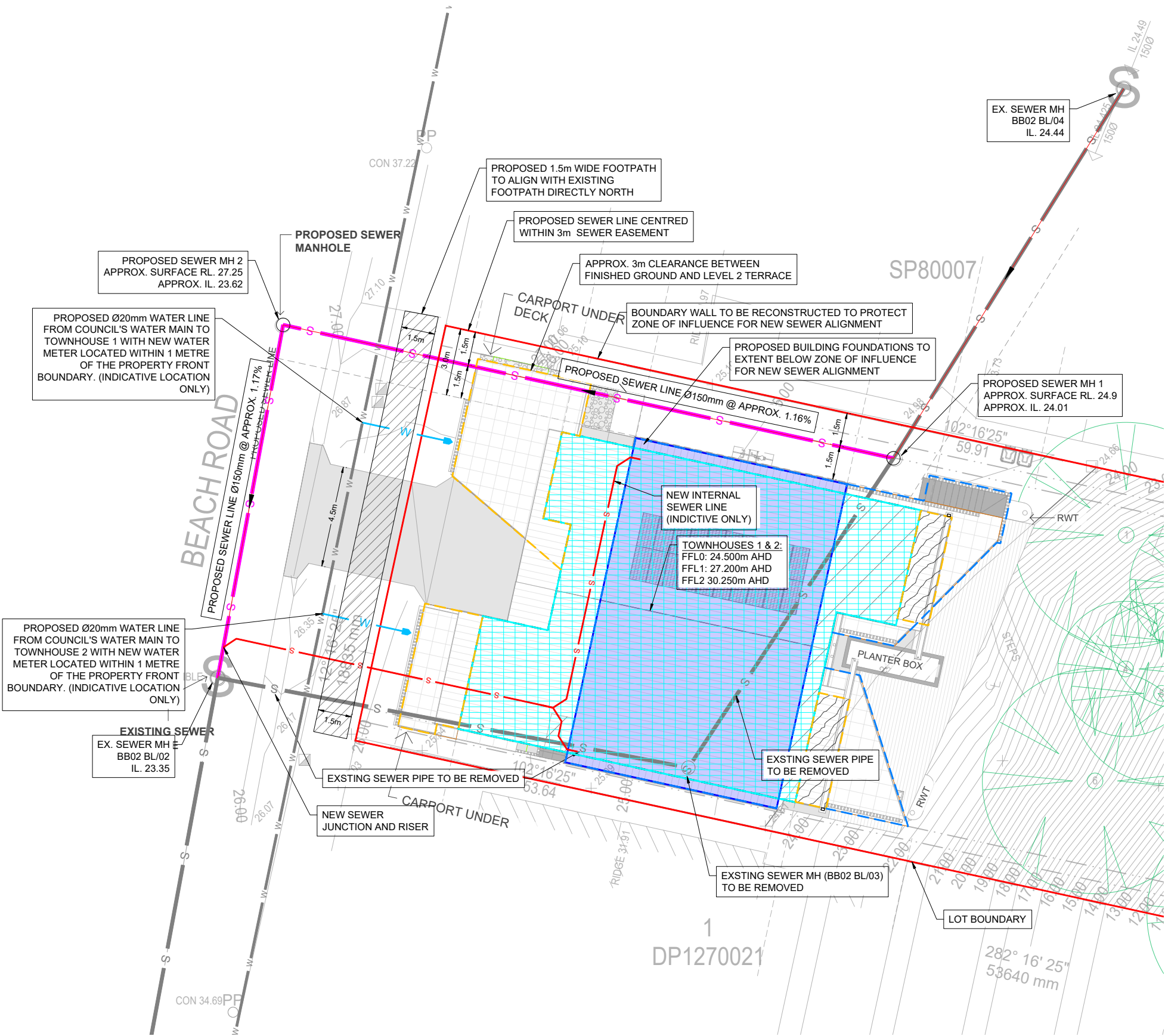
REV	DESCRIPTION	BY	DATE	REV	DESCRIPTION	BY	DATE
A	FOR DA	AT	10/10/2022				
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COUNCIL SEWER DIAGRAM
NOT TO SCALE

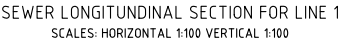
LEGEND

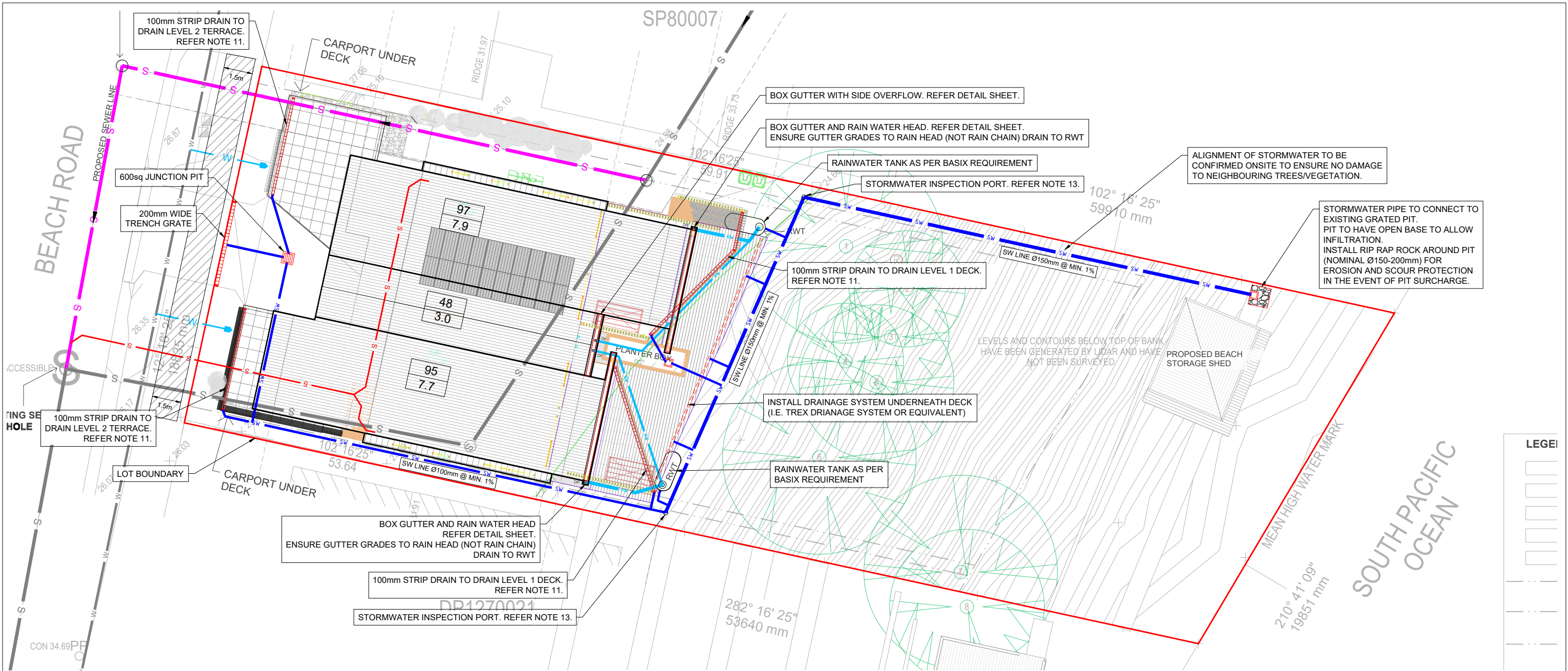
	PROPOSED L0/ L1 FOOTPRINT
	PROPOSED L2 FOOTPRINT
	PROPOSED L2 TERRACE FOOTPRINT
	EXISTING WATER (INDICATIVE ONLY)
	PROPOSED WATER
	EXISTING SEWER
	PROPOSED SEWER (COUNCIL MAIN)
	PROPOSED SEWER (INTERNAL)
	PROPOSED GRAVITY STORMWATER PIPE
	PROPOSED GRAVITY RAINWATER PIPE
	PROPOSED GRATED INLET PIT
	PROPOSED GRATED TRENCH GRATE / STRIP DRAIN



PROPOSED SEWER & WATER GENERAL ARRANGEMENT
SCALE 1:200

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LEGEND	
	PROPOSED SEWER (COUNCIL MAIN)
	PROPOSED SEWER (INTERNAL)
	PROPOSED GRAVITY STORMWATER PIPE
	PROPOSED GRAVITY RAINWATER PIPE
	PROPOSED GRADED INLET PIT
	PROPOSED GRADED TRENCH GRATE / STRIP DRAIN

LEGEND

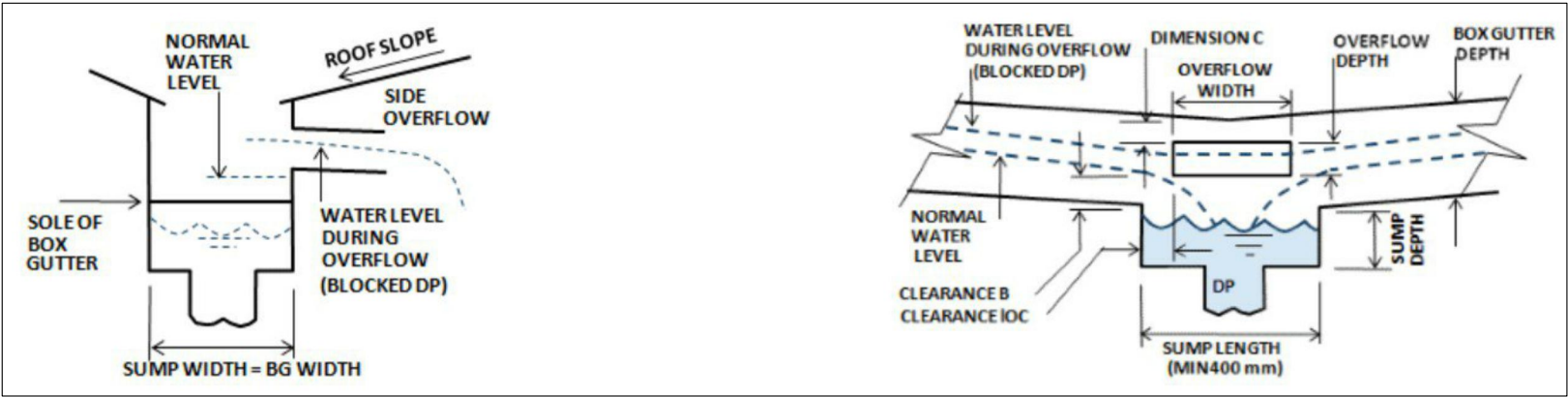
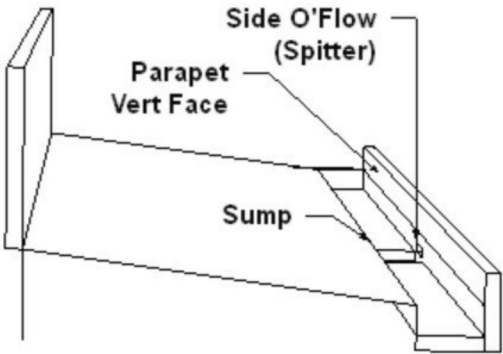
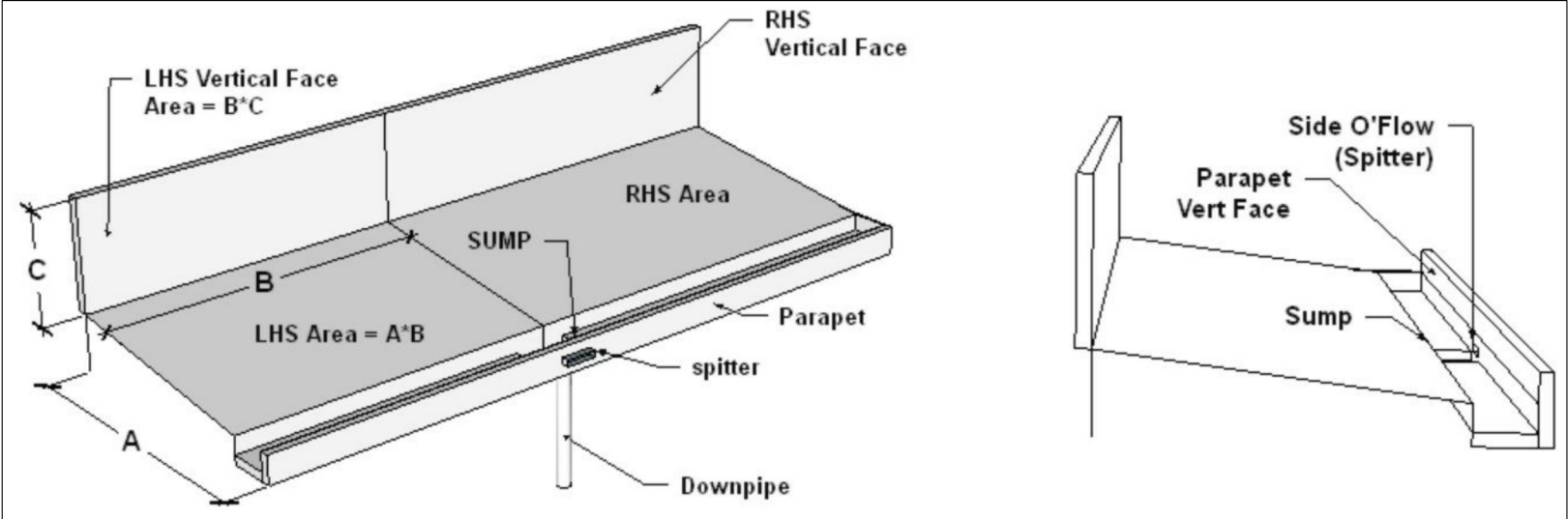
	W	W	EXISTING WATER (INDICATIVE ONLY)
	W	W	PROPOSED WATER
	S	S	EXISTING SEWER
	S	S	PROPOSED SEWER (COUNCIL MAIN)
	S	S	PROPOSED SEWER (INTERNAL)
	SW	SW	PROPOSED GRAVITY STORMWATER PIPE
	RW	RW	PROPOSED GRAVITY RAINWATER PIPE
			PROPOSED GRADED INLET PIT
			PROPOSED GRADED TRENCH GRATE / STRIP DRAIN

STORMWATER NOTES

- EXISTING SERVICES SHOWN ON THESE PLANS ARE NOT GUARANTEED COMPLETE OF CORRECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORKS AND MAKE ARRANGEMENTS WITH THE RELEVANT AUTHORITY TO RELOCATE OR ADJUST AS REQUIRED.
- ALL DRAINAGE WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH AS3500.
- ALL PIPES TO BE PVC DWV UNO. PIPES SHALL BE INSTALLED IN ACCORDANCE WITH AS2566.2 (2002). ALL DN 100 UNO.
- MINIMUM PIPE COVER TO BE 300mm IN LANDSCAPED AREAS AND 450mm UNDER DRIVEWAYS AND TRAFFICABLE AREAS UNO. CONTRACTOR TO ENSURE ADEQUATE COVER IS MAINTAINED TO SUIT CONSTRUCTION LOADS.
- ALL INVERT AND COVER LEVELS SPECIFIED MAY BE ADJUSTED TO SUIT AS REQUIRED PROVIDED THE CATCHMENT SHOWN DRAINS TO THE INTENDED DISCHARGE POINT. MINIMUM PIPE GRADE 1%.
- DOWNPIPE LOCATIONS INDICATIVE ONLY AND CAN BE MOVED TO ACCOMMODATE WINDOWS AND DOORS ETC.
- FLOW RATES SPECIFIED FOR REGULAR GUTTERS/ DOWNPIPES ARE 5% AEP FLOWS IN LITRES PER SECOND AND HAVE BEEN DETERMINED FROM 5 MINUTE STORM EVENT WITH AN INTENSITY OF 213mm/hr (ZONE 1 OF THE ESC (2012) IDS).
- FLOW RATES SPECIFIED FOR BOX GUTTERS/ DOWNPIPES ARE 1% AEP FLOWS IN LITRES PER SECOND AND HAVE BEEN DETERMINED FROM 5 MINUTE STORM EVENT WITH AN INTENSITY OF 281mm/hr (ZONE 1 OF THE ESC (2012) IDS).
- ALL DOWNPIPES TO HAVE LEAF DIVERTERS.
- MINIMUM GUTTER CROSS SECTIONAL AREA AS SHOWN.
- BALCONY DRAINS TO BE DIRECTED TO NEAREST STORMWATER PIPE OR PIT. NOT TO BE CONNECTED TO RAINWATER LINE/ RAINWATER TANK.
- FINISHED GROUND SURFACES AROUND BUILDINGS TO BE GENERALLY GRADED AWAY FROM AND AROUND BUILDINGS TO AVOID LOW POINTS WHERE WATER CAN ACCUMULATE. NEW PAVED AREAS TO BE DIRECT TO LOW POINTS AROUND PROPOSED STORMWATER INLET PITS
- COMBINED RAINWATER TANK OVERFLOW AND COLLECTED STORMWATER TO BE PIPED DOWN TO A SAFE OUTLET POINT AT THE BOTTOM OF THE CLIFF TO THE EAST OF THE PROPERTY TO AVOID RISK OF EROSION AND INCISION.
- SEDIMENT AND EROSION CONTROLS SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE REQUIREMENTS OF MANAGING URBAN STORMWATER: SOIL AND CONSTRUCTION HANDBOOK.
- MINIMUM 28 DAY CONCRETE COMPRESSIVE STRENGTH FOR ANY CAST IN SITU CONCRETE DRAINAGE ELEMENTS SHALL BE $f_c = 32\text{MPa}$ MINIMUM UNO.
- CLEAR COVER TO REINFORCEMENT NEAREST CONCRETE SURFACE SHALL BE 55mm IF NO DIMENSIONS IS SHOWN.
- CORNERS SHALL BE CHAMFERED 20mm AND RE-ENTRANT ANGLES SHALL BE FILLETED 20mm IF NO DIMENSION IS SHOWN.
- THE CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF STRUCTURES DURING BACKFILLING (BY CONTROLLED BACKFILLING, PROPPING OR OTHERWISE).

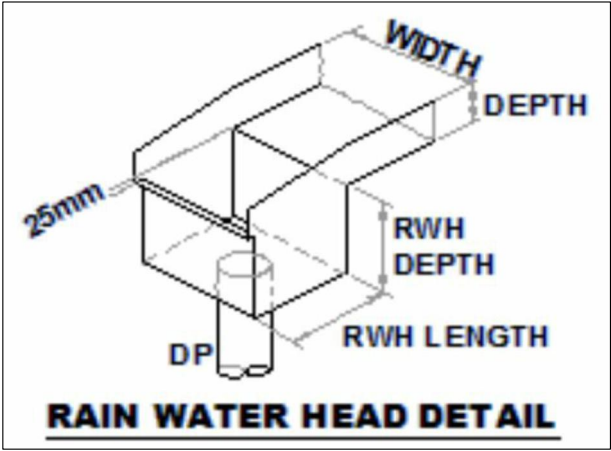


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BOX GUTTER WITH SIDE OVERFLOW DIMENSIONS	
BOX GUTTER WIDTH	200
BOX GUTTER DEPTH	150
OVERFLOW WIDTH	250
OVERFLOW DEPTH	65
SUMP WIDTH	200
SUMP DEPTH	115
SUMP LENGTH	400
MINIMUM CLEARANCE LOC	25
MINIMUM CLEARANCE LOC B	20
DIMENSION C	40
DOWNPIPE	100 x 75

PROPOSED BOX GUTTER WITH SIDE OVERFLOW
NOT TO SCALE



BOX GUTTER WITH RAINHEAD DIMENSIONS	
BOX GUTTER WIDTH	200
BOX GUTTER DEPTH	200
MIN. BOX GUTTER LONGITUDINAL GRADE	0.5%
RWH LENGTH	200
RWH WIDTH	200
RWH DEPTH	200
DOWNPIPE	150 x 100

PROPOSED BOX GUTTER TO RAINHEAD
NOT TO SCALE



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SP800007

BEACH ROAD

INACCESSIBLE

CARPORT

DRIVEWAY

CARPORT

RIDGE 31.97

RIDGE 33.72

LEVEL 1

55.5 m² INTERNAL

DINING

DECK

35.2 m²

KITCHEN

ENTRY

ENTRY

KITCHEN

LEVEL 1

55.8 m² INTERNAL

DINING

DECK

23.5 m²

TOP OF BANK

southeast
engineering + environmental

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mark@south-east.com.au

PROJECT: 217A Beach Road Denhams Beach
Civil Engineering Services

CLIENT: Nabil Adhami - Adhami Pender Architecture

DRAWING TITLE: Vehicle manoeuvring (1 of 3)
Entering from Beach Road

DRAWING NUMBER: 681- 06
SCALE: 1:100@A3
SHEET: 06/08
DESIGNED: AT
CHECKED: BA

PURPOSE: Development Application

DATE OF ISSUE: 10/07/2023



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SP80007

BEACH ROAD

INACCESSIBLE

CARPORT

DRIVEWAY

CARPORT

SITTING
FFL 27200 AHD

LEVEL
1

55.5 m² INTERNAL

DINING

KITCHEN

DECK
35.2 m²

TOP OF BANK

ENTRY

ENTRY

KITCHEN

LEVEL
1

SITTING
FFL 27200 AHD

55.8 m² INTERNAL

DINING

DECK
23.5 m²

102°16'25"
53.64

southeast
engineering + environmental

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PROJECT: 217A Beach Road Denhams Beach
Civil Engineering Services

CLIENT: Nabil Adhami - Adhami Pender Architecture

DRAWING TITLE: Vehicle manoeuvring (3 of 3)
Exiting to Beach Road

DRAWING NUMBER: 681- 08
SCALE: 1:100@A3
SHEET: 08/08
DESIGNED: AT
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