

SUDS MAINTENANCE PLAN

JJL Design and Build

New Parking Provisions, Caterpillar

Peckleton Lane, Desford

Revision Ø

2023097-PCE-XX-XX-SMM-CS-001

June 2025



Revision Log

Revision	Description	By	Date
Ø	Initial issue	MQ	17 th June 2025

Introduction

The proposed development comprises 3No. extensions to the existing carpark and this report should be read in conjunction with flood risk assessment reference 2023097-FRA-001 dated March 2024.

It is proposed the car parking spaces for the site are to be constructed as a permeable tarmac surface with subterranean storage with a connection to the main system. The flows from the main access road will be drained via a lined system that will drain down to a perforated pipe and convey the remaining flows to the existing private drainage

The application total is 0.889Ha.

There is no foul water for the site.

Construction Phase

During the construction phase, the main contractor will be responsible for the maintenance and management of the surface water drainage.

The Main Contractor has not been appointed yet and details can be provided when available.

Responsibility for Maintenance

Caterpillar will assume responsibility for maintenance.

Inspection and reporting

Caterpillar will perform inspections of the system on a based on the maintenance schedule appended to this report.

Drainage Maintenance Schedule / Requirements

All private drainage to be maintained by Caterpillar.

Section 1 - General Maintenance & Inspection Recommendations for Below Ground Gravity

Drainage

(Including Drainage Channels)

1. No work shall be carried out on the drainage system without permission from a nominated person, who has access to information/a working knowledge of the system.
2. Maintenance/inspection work shall be carried out in a safe/planned manner.
3. All work is to be carried out by competent persons suitably trained and equipped in accordance with current statutory safe working policies.
4. Entry into confined spaces shall be kept to a minimum and be restricted to suitably qualified/equipped persons working in accordance with current statutory safe working policies.
5. High levels of hygiene shall be maintained at all times, with adequate welfare facilities being provided for the personnel.
6. Drainage systems shall be inspected on a regular basis or should any problems be suspected. Any debris/ defects discovered shall be recorded and a programme of cleaning/ repair initiated. Urgent repairs/ cleaning shall be actioned as soon as practicable.
7. The following operations should be carried out annually.
 - a) Covers of inspection chambers and manholes shall be removed and the sides, benchings and channels cleared.
 - b) Accumulated deposits of silt in soakaways, catchpit manholes, drainage channels, gullies etc. shall be removed. Any traps shall then be plunged and thoroughly flushed out with clean water.
 - c) Main and branch drains shall be cleared as required and afterwards be flushed with clean water. Any obstructions found shall be removed and not flushed down the system.
 - d) Covers of inspection chambers, manholes, gullies etc. shall be replaced, bedded in suitable grease or other sealing material as required and bolted/locked down as appropriate. Missing bolts and broken items shall be replaced in accordance with the manufacturer's details.
8. Trapped gullies shall be checked and replenished as necessary in order to maintain the seal, preventing the escape of odours.
9. Clearing of the drainage system can be achieved by a number of methods depending on the nature of the work
 - a) Rodding – Manual/Mechanical with flexible rods.
 - b) Jetting – High pressure water jetting.
 - c) Plunging.

Section 2 – Specific Drainage Items

Maintenance schedule for permeable tarmac parking bays

Regular Monitoring		
Element	Maintenance/Action required	Frequency
Permeable Tarmac	Regular cleaning will be required, brushing should suffice to remove surface dirt and silt build up.	Bi-Annual – In the spring Autumn after leaf fall
Regular Monitoring		
Permeable Tarmac: Initial Inspections	1. Inspect for poor operation 2. Inspect for evidence of poor operation and or weed growth. Take remedial action if required.	1- Monthly for 3 months after installation Every 3 months, 48 hours after large storms
Permeable Tarmac Future: Site works	Avoid placing loose building / land scape materials on the surface as this could clog the pores of the permeable tarmac	Note
Permeable Tarmac : Oil spillages	Oil and fuel spillages can be cleaned up using absorbent clothes with any residues left for treatment within the pavement itself	As required
Permeable Tarmac: Storms	Check surface is draining adequately during storms. During a period of heavy rain, an annual assessment of the surface should be undertaken to identify any areas which over time begin to hold water. Should any areas of ponding begin to show over 50% of the total surface area, we would recommend Hydraulic Conductivity testing is undertaken and an appropriate course of cleaning agreed.	Annually – during storm conditions
Permeable Tarmac: Litter, Leaves etc	Litter, leaves and spillages should be brushed or if possible vacuumed off the surface. - Periodic use of a standard road sweeper is permitted.	As required Leafs-Autumn after leaf fall
Permeable Tarmac:	-Winter maintenance can be undertaken	Winter

Winter maintenance	using BS 3247 Fine Grade 6.3mm rock salt however, effective dispersal across the surface is highly recommended and reduces clogging of the asphalt pores. As such, applicators or spreaders should be employed. • Snow clearance by unmodified or general plant must be prohibited. All clearance equipment such as JCB type loading shovels or tractors should use either plastic/rubber ploughs or buckets protected with rubber sheaths to prevent damage to the surface	
--------------------	--	--

Appendix A – Drainage Layout

HEALTH AND SAFETY NOTES:

THE FOLLOWING KEY RESIDUAL HEALTH AND SAFETY RISKS HAVE NOT BEEN ELIMINATED BY DESIGN AND ARE IDENTIFIED BELOW.

REFER TO DESIGN RISK ASSESSMENT, REF 2023097-DRA

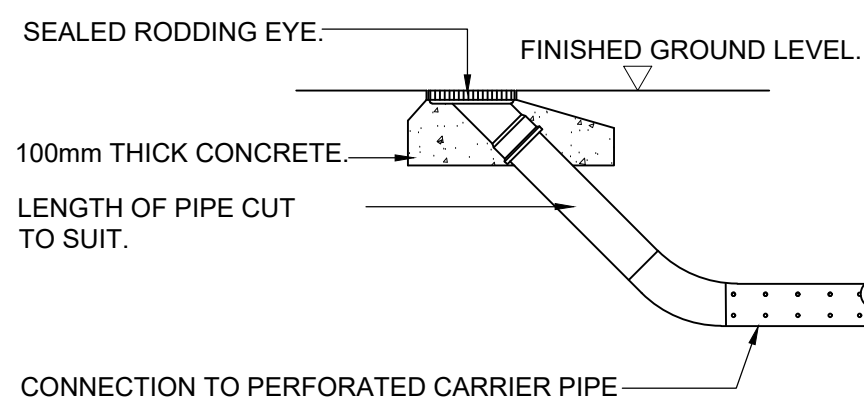
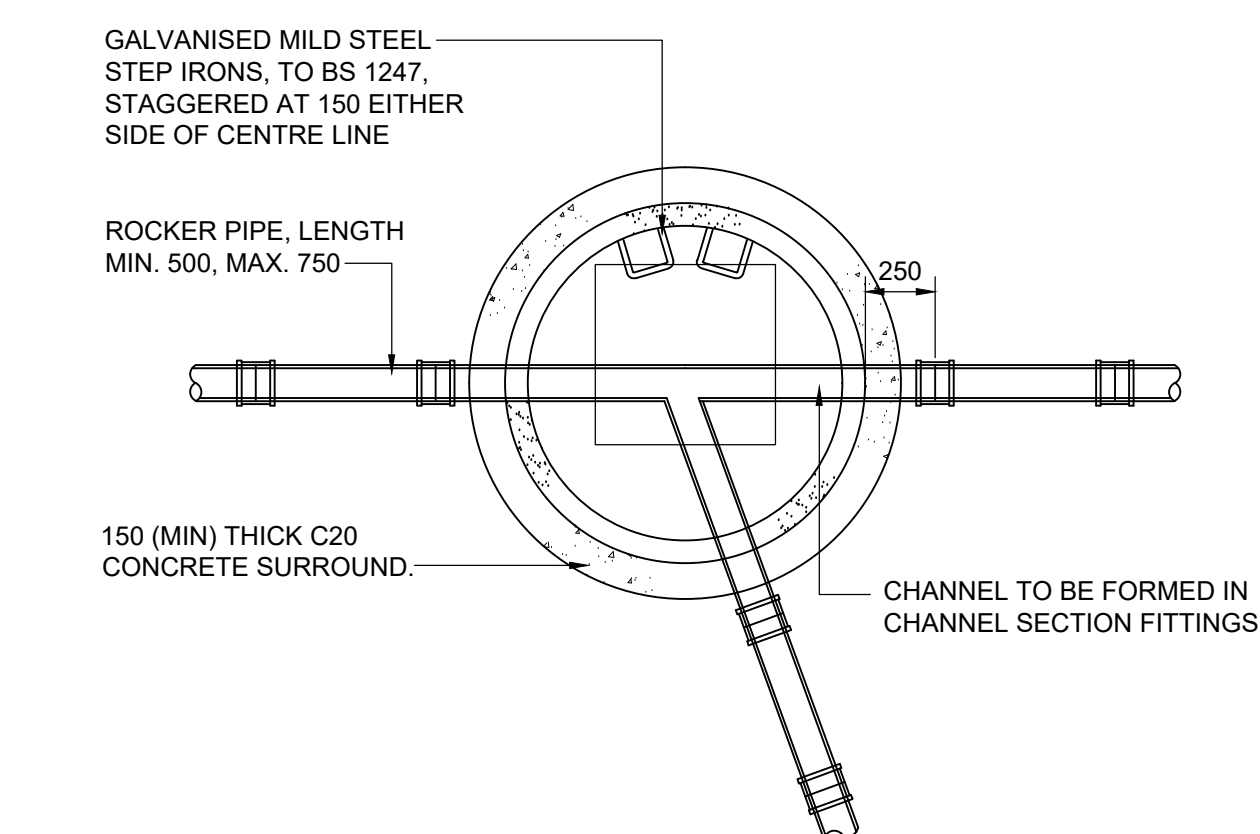
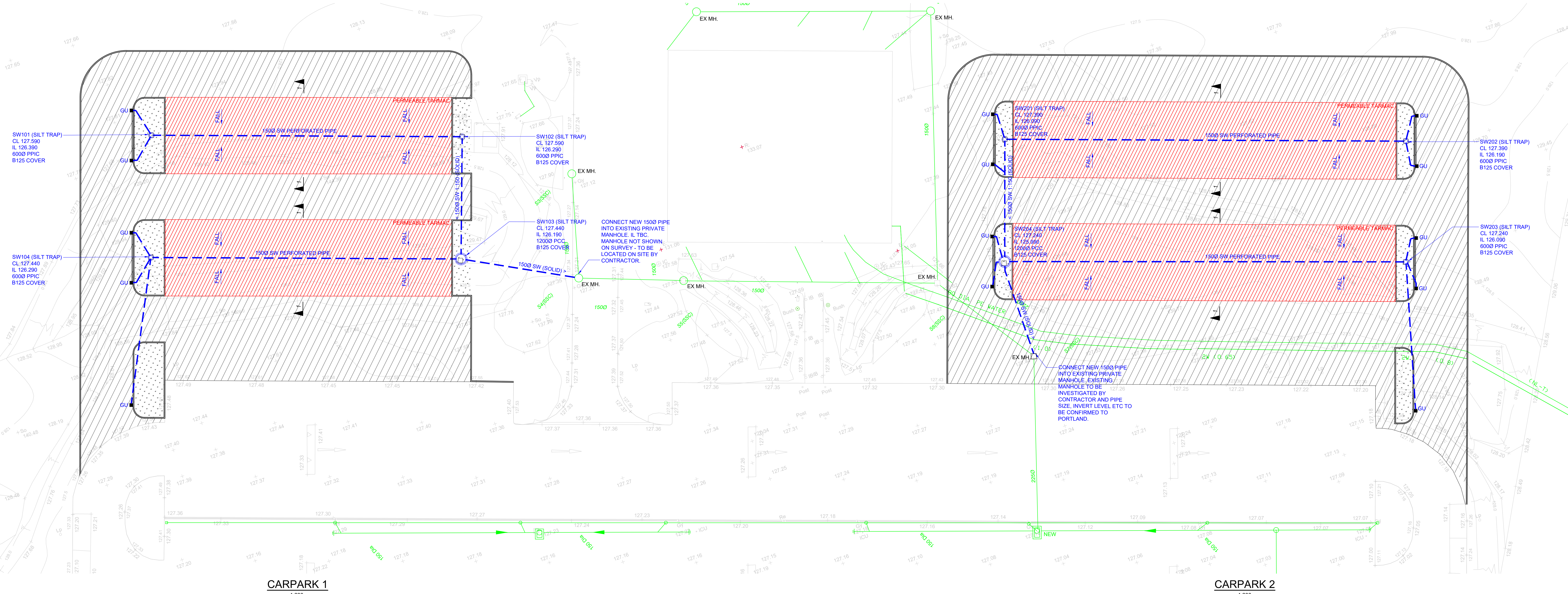
SAFE METHODS AND SYSTEMS OF WORK REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE FOLLOWING SPECIFICATIONS: 2023097-PCE-XX-XX-S-001 AND 2023097-PCE-XX-XX-SP-C-005-C-001 DRAINAGE

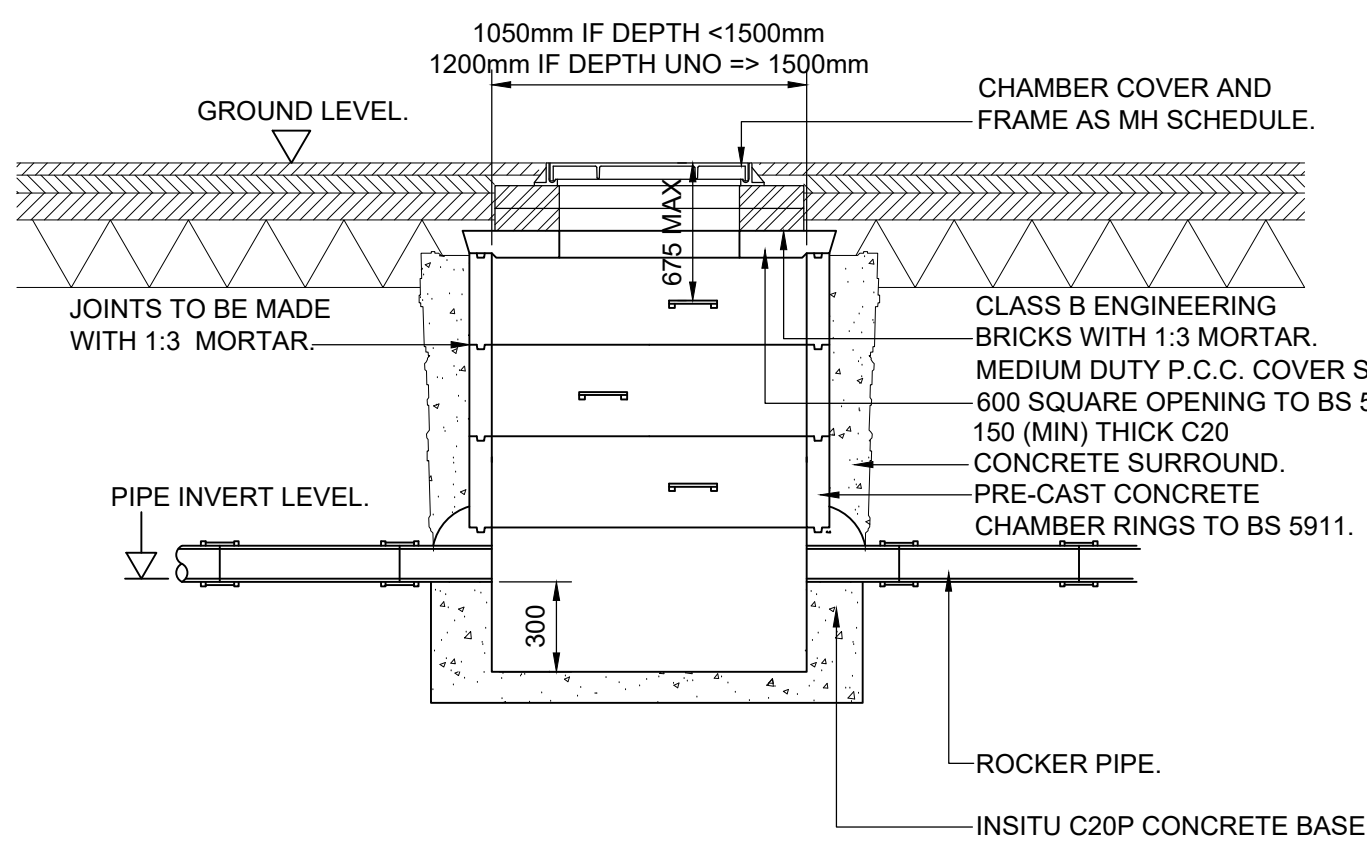
ALL DRAINS WITH LESS THAN 1.2m COVER (FROM FINISHED GROUND LEVEL TO CROWN OF PIPE) ARE TO BE CONCRETE ENCASED.

ALL BRANCHES FROM GULLIES TO BE 1500

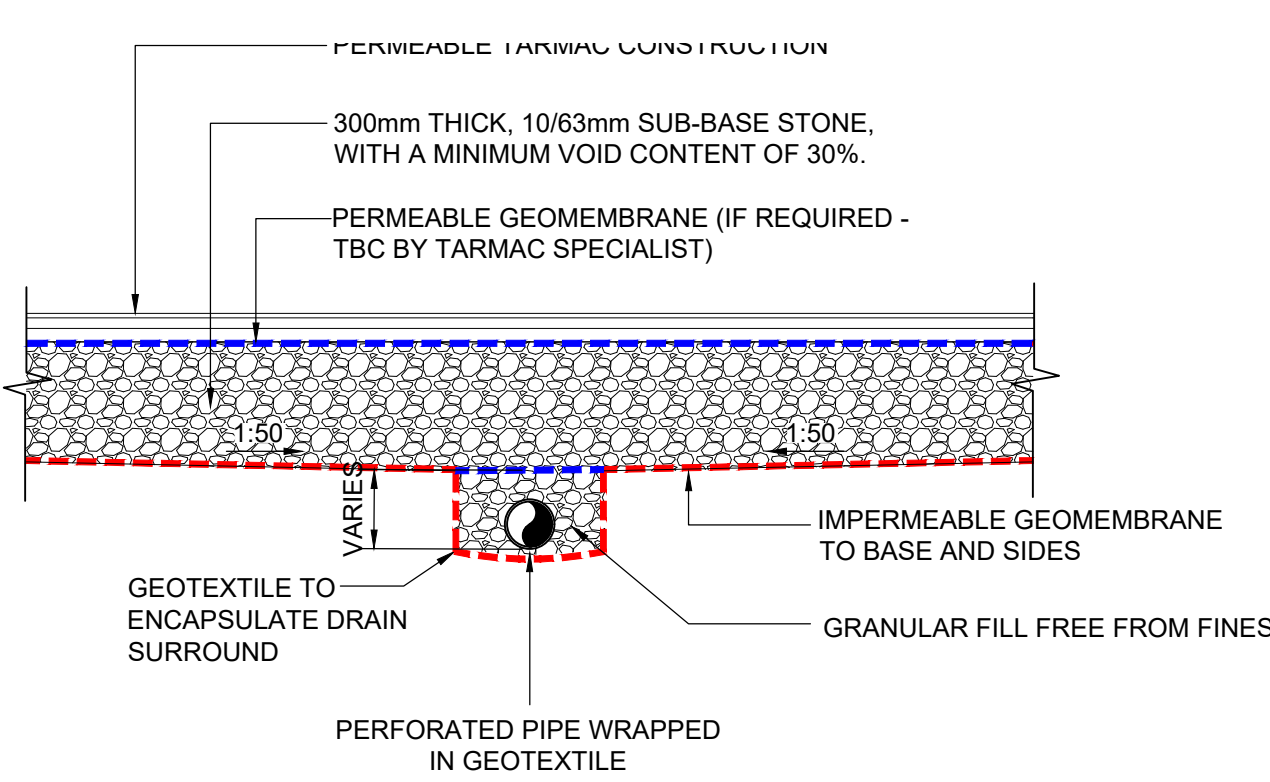
PV CANOPY STEELWORK AND FOUNDATIONS BY OTHERS



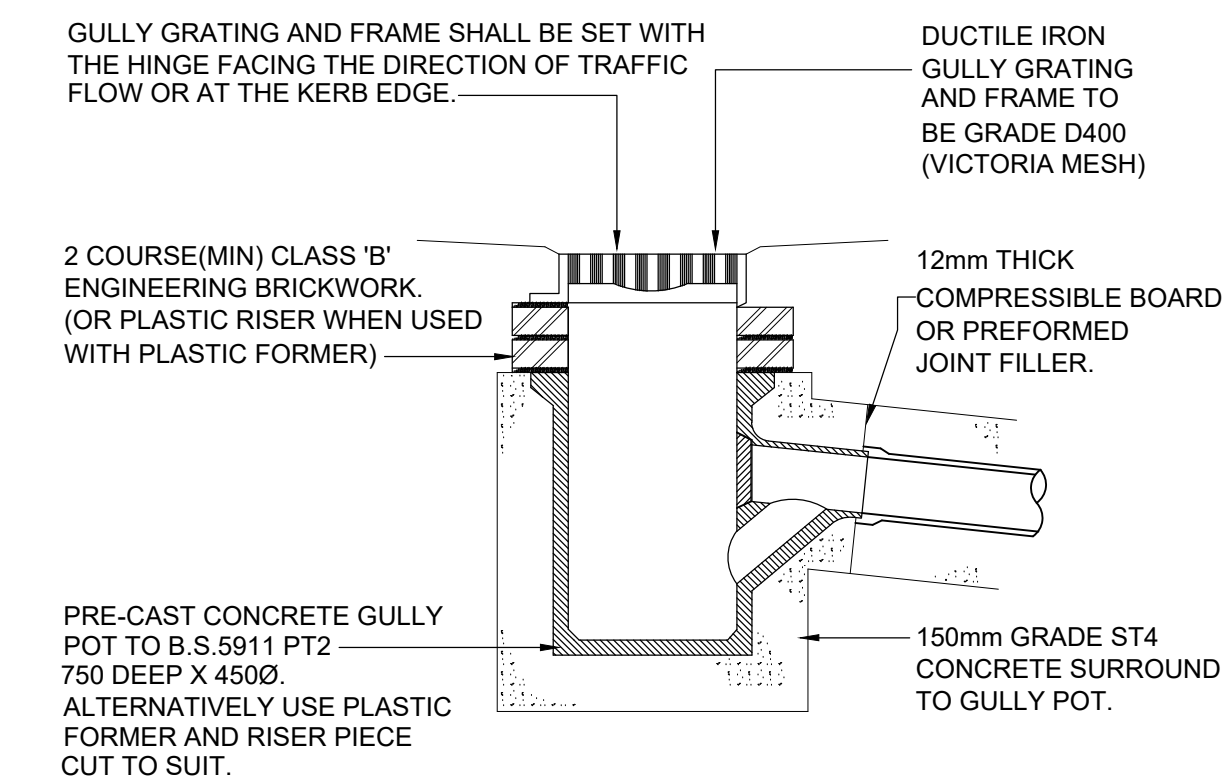
PERFORATED PIPE ACCESS POINT (AP)



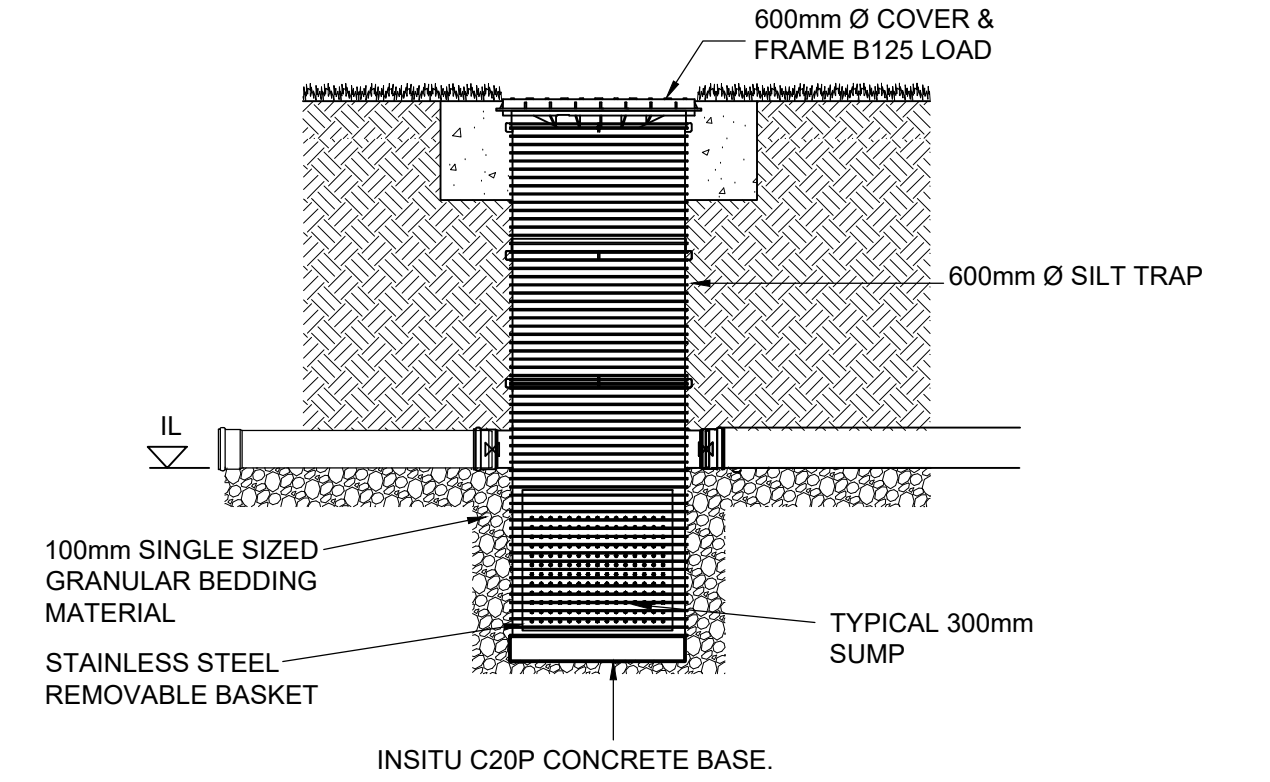
PRE-CAST CONCRETE CHAMBER WITH SUMP



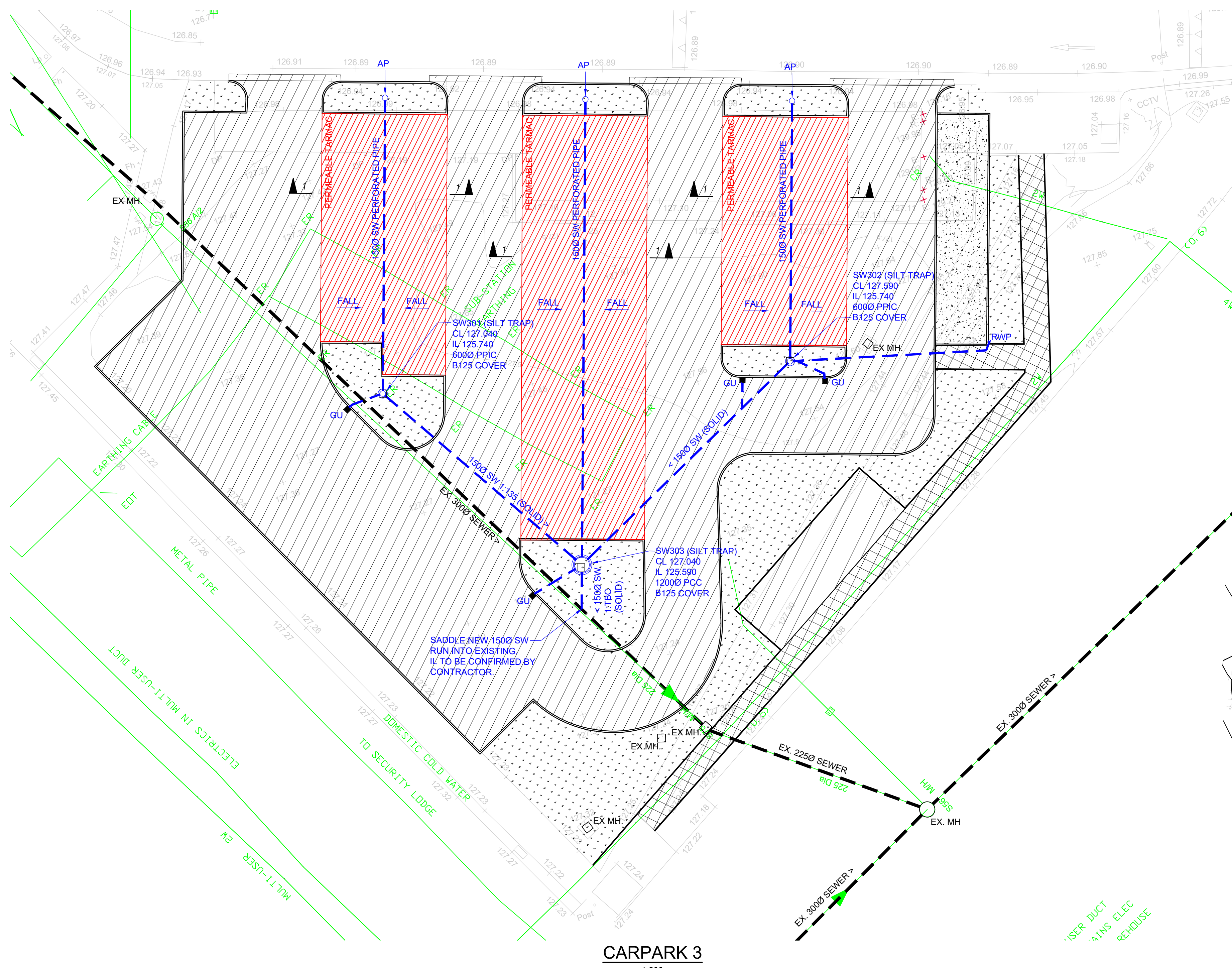
SECTION 1-1 THROUGH PERMEABLE TARMAC



TYPICAL ROAD GULLY



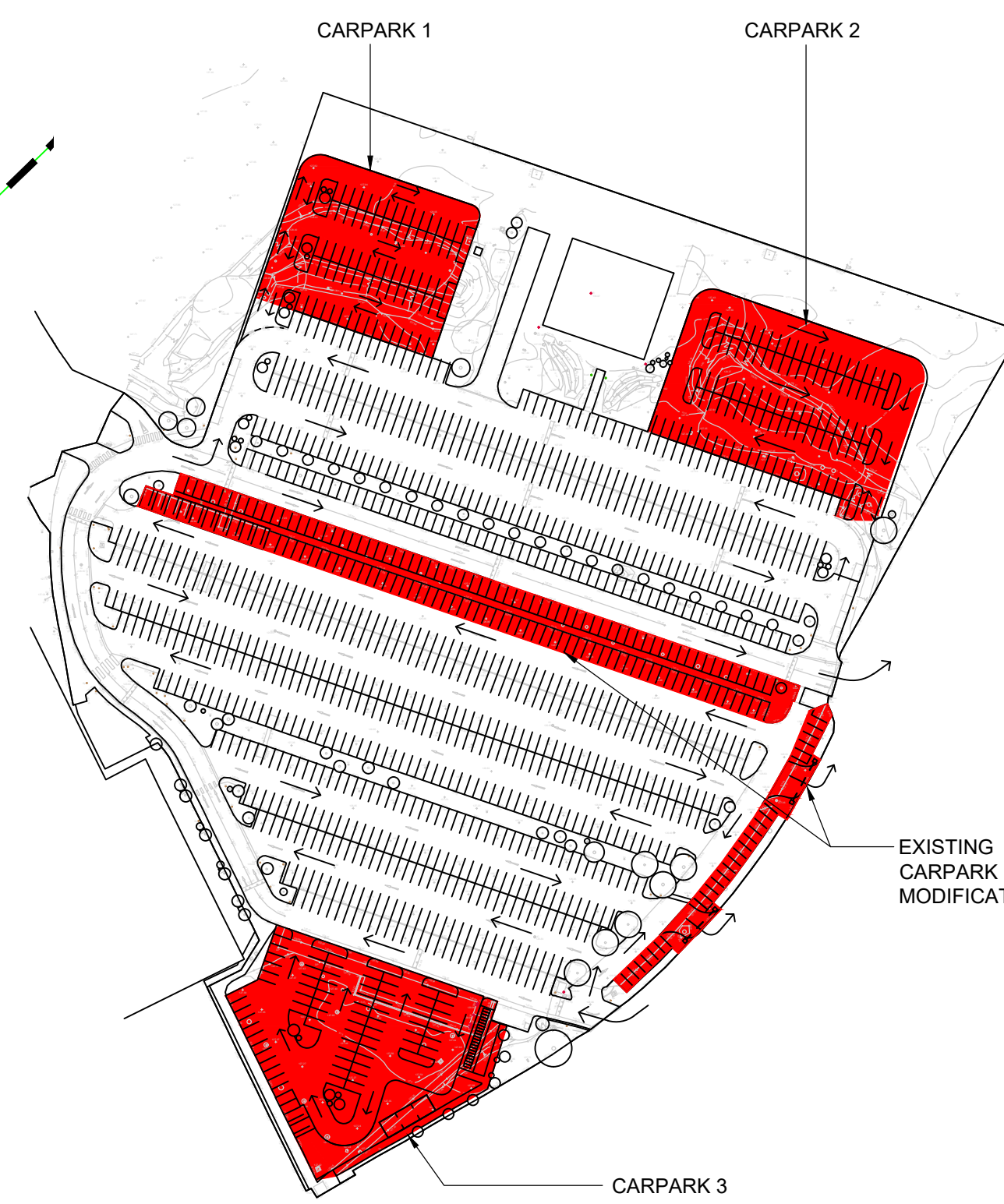
PLASTIC CATCHPIT / SILT TRAP MANHOLE



CARPARK 3

DRAINAGE TO BE REVIEWED AGAINST ANY FUTURE PLANNING CONDITIONS (PLANNING CURRENTLY AWAITED)

EXISTING INVERT LEVELS TO BE CONFIRMED BY CONTRACTOR. SEE INDIVIDUAL NOTES ON EACH PLAN.



KEY PLAN

T01	ISSUED FOR TENDER	MQ	SH	SH	28/02/25
0	ISSUED FOR COMMENT	MQ	MG	MG	15/03/24
REV.	REVISION NOTES	BY	CHK.	APP.	DATE

PORTLAND CONSULTING ENGINEERS

10 BANKSIDE, THE WATERMARK, GATESHEAD, TYNE & WEAR, NE11 9SY
T: 0191 4619770 E: INFO@PORTLANDCONSULTING.CO.UK
WWW.PORTLANDCONSULTING.CO.UK

CUSTOMER JUL DESIGN AND BUILD

PROJECT TITLE
NEW PARKING PROVISIONS
CATERPILLAR UK LTD
PECKLETON LANE, DESFORD

DRAWING TITLE
CARPARKS 1-3
DRAINAGE LAYOUT

SCALE	AS SHOWN	SHEET SIZE	A0
DRAWING BY	MG	CHECKED BY	MG
DRAWING STATUS	TENDER	DATE	15/03/24
SUITABILITY			

PROJECT / DRAWING NUMBER
2023097-PCE-XX-XX-DR-C-005
T01

THIS DRAWING AND DESIGN IS FOR USE SOLELY IN CONNECTION WITH THE ABOVE PROJECT. THIS DRAWING IS THE PROPERTY OF PORTLAND CONSULTING ENGINEERS AND MUST NOT BE REPRODUCED, LOANED OR COPIED WITHOUT WRITTEN CONSENT. ALL DIMENSIONS AND SETTINGS MUST BE CHECKED ON SITE BEFORE CONSTRUCTION. DO NOT SCALE FROM THIS DRAWING. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER INFORMATION RELEVANT TO THE PROJECT. ANY APPARENT DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF PORTLAND CONSULTING ENGINEERS.