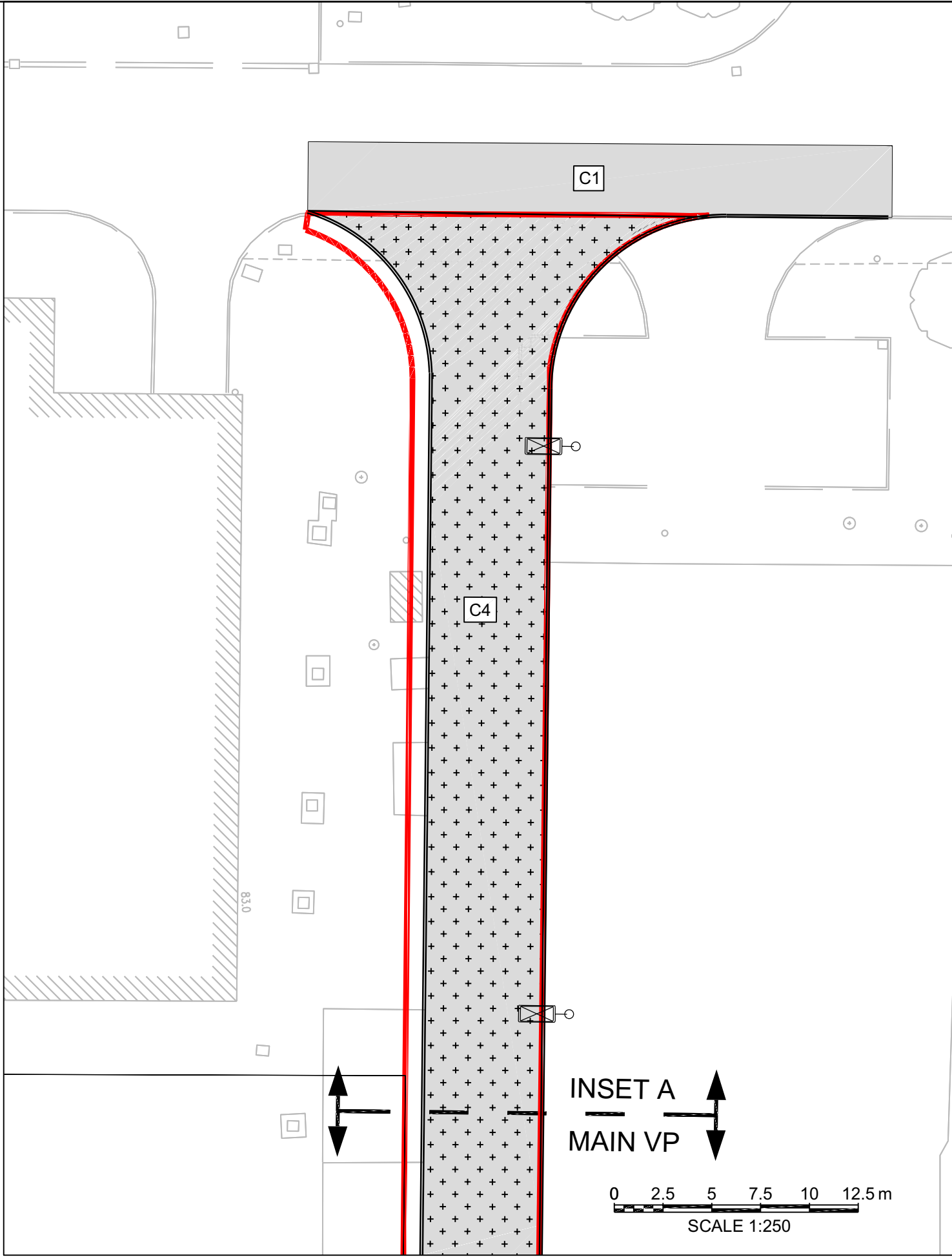
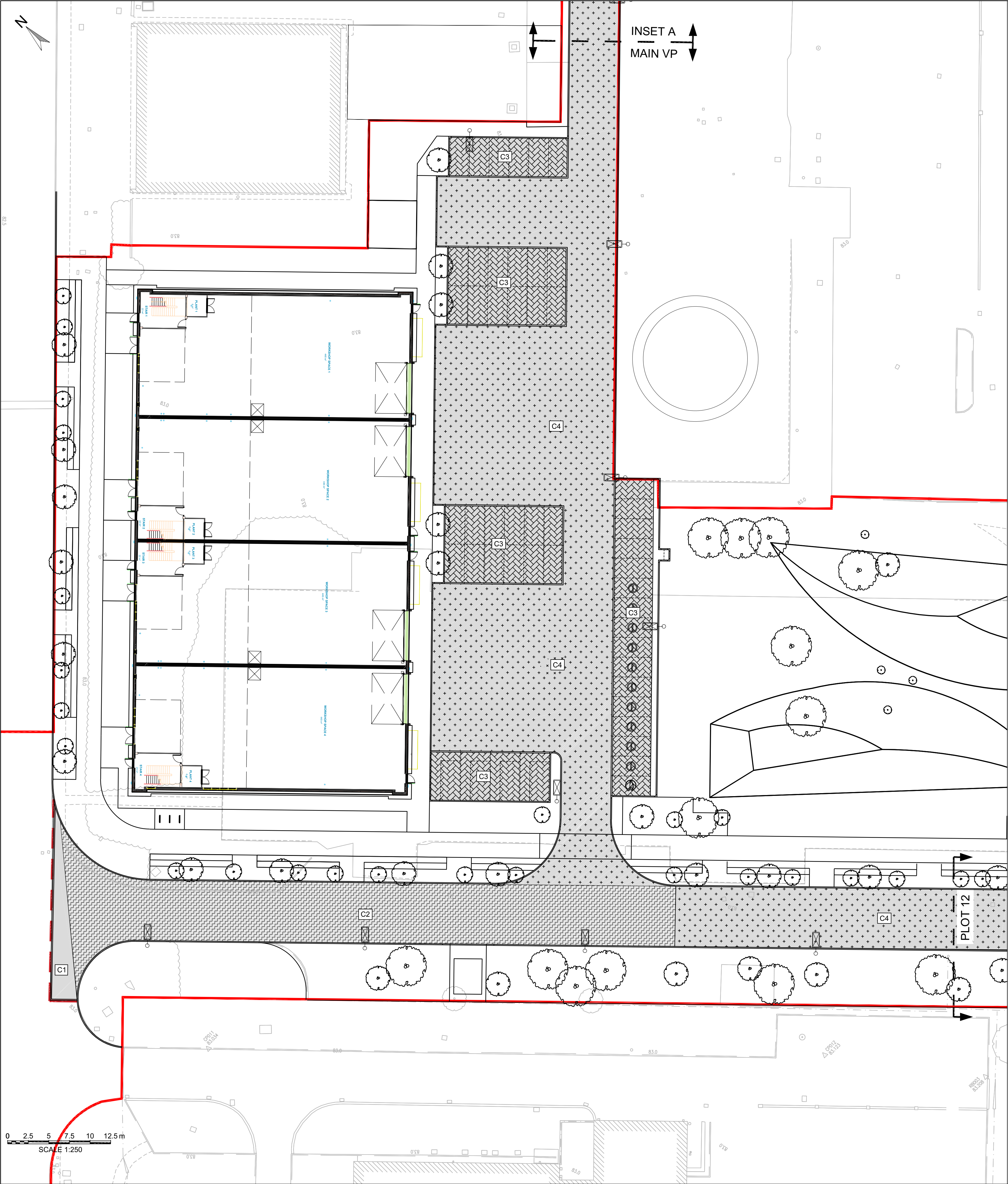




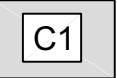
Notes - Pavements

- All works are to be undertaken in accordance with the Specification For Highways Works (SHW). Any Clauses referred to by these drawings are contained in the version of the SHW which was current prior to the September 2025 document restructuring.
- All surface course to be 60 PSV and AAV to be 14.
- Where narrow widening is required, the base course can be substituted for 300mm ST4 concrete in accordance with Cumberland Councils Standard Detail 'SD_720a_Am0'.
- Where tying in of new construction is required, please refer to Cumberland Councils Standard Detail 'SD_730_Am0'.
- The following design standards have been used in the production of this design.
 - Cumberland Council Standard Details
 - DMRB Pavement design standards
 - BS 7533-13 - Guide for the design of permeable pavements constructed with concrete paving blocks and flags, natural stone slabs and setts and clay pavers
- All units are in metres unless stated otherwise.
- The contractor is to check all dimensions and levels and report any discrepancies or omissions back to the engineer.
- Open graded sub-bases can be stabilized with cement to increase the structural capacity or to reduce the sub-base thickness required. The use of cement will reduce the water storage capacity of the sub-base. To maintain high void space, only enough cement to coat the aggregate should be used, taking care not to fill the voids with excessive paste. The amount of cement to achieve this is typically 170 kg/m3.
- Depth of sub-base given is a minimum depth. The base of permeable paving should be flat or sloping at 0.5% towards the outfall location.
- 150mm is for CBR values equal to or greater than 5%. CBR values to be confirmed on site and if the value is less than 5% then the depth of capping should be increase in accordance with BS 7533-13, Table 10.

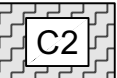
TABLE 1 - PAVEMENT FOUNDATION			
CBR(%)	SUBBASE ONLY (mm)	SUBBASE ON CAPPING (mm)	
	Class 2 Foundation from Fig 3.18 CD 225	Class 2 Foundation from Fig 3.20 CD 225	
	SUBBASE	SUBBASE	CAPPING
15 or more	200	150	150
14	210	150	160
13	210	150	170
12	220	150	180
11	220	150	190
10	230	150	200
9	230	150	210
8	240	160	220
7	250	170	230
6	260	190	240
5	270	200	250
4	310	220	320
3	370	230	380
2.5	420	250	430
less than 2.5	not covered by Fig 3.18 of CD 225	not covered by Fig 3.2 of CD 225	not covered by Fig 3.2 of CD 225

- Sub-base to be to Cl.803 of the Specification for Highway Works (SHW) Type 1 Limestone. Sub-base shall never be less than 150mm thick.
- Capping layers 300mm thick or more shall be 6F1 to Cl.613
- Capping layers less than 300mm shall be Type 2 Sub-base or similar approved.
- No material within 450mm of finished surface levels shall be frost-susceptible.
- When the subgrade is below 2.5% refer to Cumberland standard detail SD_745.

Key



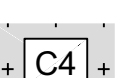
Access Road- Resurfacing
Plane out 40mm of existing carriageway then re-surface with;
Surface Course: 40mm HRA 55/10F 40/60 rec DES to Clause 911



Access Roads- Full Construction
Surface Course: 40mm HRA 55/10 F 40/60 rec DES to Clause 911
Binder Course: 60mm AC20 HDM bin 40/60 DES to Clause 929.
Base Course: 140mm AC32 HDM Dense Base 40/60 DES .
Sub-base: 310mm Type 1 unbound mixture based CBR levels of 4% which was minimum achieved in this area during site investigations. Contractor to confirm exact CBR levels on site.



Car Park Bay Construction- Permeable Paving
Laying Course: 80mm block paving laid in Herringbone pattern. Please refer to landscape architects plan for Colour. 2-6mm grit brushed into joints.
Blocks to be laid on 50mm aggregate in accordance with BS 7533-13:2009 Table A.2
Permeable geotextile membrane separation layer is implemented as per standard detail drawings.
Hydraulically Bound Base: 200mm Hydraulically bound base, refer to Note 8.
Sub-base-280mm Coarse aggregate 4/40 to BS7533-13:2009, refer to Note 9.
Impermeable Membrane sits at the bottom of Sub-base.
Capping: 150mm Granular Type 6f4 Capping, refer to Note 10.
Base, Sub-base and capping layers determined using Tables, 5, 8 and 10 of BS 7533-13:2009 based on 1 in 100 yr event plus 20% climate change and Category E loading.



Car Park Road Full Construction
Surface Course: 40mm HRA 55/10 F 40/60 rec DES to Clause 911
Binder Course: 60mm AC20 HDM bin 40/60 DES to Clause 929.
Base Course: 120mm AC32 HDM Dense Base 40/60 DES
Sub-base: Refer to Table 1. Ground Investigation Indicates that the CBR value where this construction is used varies significantly. CBR is to be tested at frequent intervals to determine foundation thickness.

Red line boundary

FOR APPROVAL

Rev.	Description	Date	LJB	MB	LB
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Client

MORGAN SINDALL

Project Name

CMIQ PHASE 2 LUF - PLOT 9

Sheet Title

PAVEMENTS
SHEET 1 OF 2

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B065555	LJB	Jun '25	MB	Jun '25	LB	Jun '25	1:250	S0

Client Project Number	Originator	Volume/System Level/Location	Type/Code	Role	Number	Revision
LUF	- TTE	- ZZ	- XX	- D	- H	- 0700

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