



NOTES

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ENGINEERS & ARCHITECTS DRAWINGS. DIMENSIONS ONLY (NOT SCALE) TO BE USED WHERE A CONFLICT OF INFORMATION EXISTS OR IF IN ANY DOUBT - ASB.
- CONSULTANTS TO BE INFORMED IMMEDIATELY OF ANY DISCREPANCIES BEFORE WORK PROCEEDS.

NOTES ON ROAD CONSTRUCTION

- USE OF BASE COURSE FOR CONSTRUCTION TRAFFIC:**
THE BASE COURSE MAY BE USED FOR CONSTRUCTION TRAFFIC PROVIDED IT IS INCREASED IN THICKNESS BY 50mm AND SURFACE DRESSED. SURFACE DRESSING SHOULD BE CARRIED OUT IN ACCORDANCE WITH CLAUSE 819 AND 922 OF THE NHA SPECIFICATION FOR ROADWORKS. THE BINDER SHOULD BE CUTBACK BITUMEN OR CATIONIC BITUMEN EMULSION, COMPLYING WITH THE SPECIFICATION. OTHER BINDERS MAY BE USED, SUBJECT TO APPROVAL.
CUTBACK BITUMEN SHOULD BE OF THE APPROPRIATE GRADE SPECIFIED. CUTBACK BITUMEN EMULSION SHOULD HAVE A NOMINAL BITUMEN CONTENT OF 50%. THE BINDER SHOULD BE SPREAD AT THE APPROPRIATE RATE AS SPECIFIED. APPROX. SHOULD BE 2.4 OF GRADE 819 OF THE NHA SPECIFICATION FOR ROADWORKS.
3. DEPTH OF SUB-BASE & CAPPING LAYER:
THE DEPTH OF THE SUB-BASE AND CAPPING LAYERS WILL VARY WITH THE SUBGRADE STRENGTH, AS INDICATED BY THE CBR TEST RESULTS. THE THICKNESS OF THE SUB-BASE LAYER SHOULD BE 150mm FOR ALL FORMS OF ROADWORK.
IF THE CONTRACTOR PROPOSES TO USE THE SUB-BASE FOR CONSTRUCTION TRAFFIC HE SHOULD SEEK APPROVAL FROM THE ENGINEER TO DO SO. SUCH APPROVAL WILL ONLY BE GIVEN ON THE CONDITION THAT THE SUB-BASE THICKNESS IS INCREASED TYPICALLY FOR CBR VALUES < 4% THE SUB-BASE THICKNESS WILL HAVE TO BE INCREASED BY 150mm. FOR CBR VALUES > 4% AN INCREASE OF 80mm WILL BE SUFFICIENT.
SUBGRADE STRENGTH SHOULD BE ESTABLISHED BY MEANS OF THE CALIFORNIA BEARING RATIO (CBR) TEST. IN ACCORDANCE WITH BS 1377-4:1990, SAMPLES SHOULD BE TAKEN AT THE RATE OF ONE PER 100m² OF ROADWORK. SIGNIFICANT VARIATIONS IN SOIL TYPE ARE ANTICIPATED. EXTRA SAMPLES MAY BE REQUIRED BY THE LOCAL AUTHORITY WHERE THE DIFFERENCE IN STRENGTH BETWEEN TWO ADJACENT SAMPLES INDICATES A SIGNIFICANT VARIATION IN SOIL TYPE. IN PREPARING THE TEST SPECIMEN THE METHOD OF COMPACTION SHOULD BE THE STATIC COMPACTION METHOD 2, AS SPECIFIED IN PARAGRAPH 7.2.3.3 OF BS 1377-4:1990.

TABLE 3.1 CAPPING LAYER - MINIMUM CONSTRUCTION THICKNESS

LOWEST SUBGRADE CBR (%)	MINIMUM CAPPING LAYER THICKNESS (mm)
1	150
2	150
3	150
4	150
5	150
6	150
7	150
8	150
9	150
10	150
11	150
12	150
13	150
14	150
15	150
16	150
17	150
18	150
19	150
20	150
21	150
22	150
23	150
24	150
25	150
26	150
27	150
28	150
29	150
30	150
31	150
32	150
33	150
34	150
35	150
36	150
37	150
38	150
39	150
40	150
41	150
42	150
43	150
44	150
45	150
46	150
47	150
48	150
49	150
50	150
51	150
52	150
53	150
54	150
55	150
56	150
57	150
58	150
59	150
60	150
61	150
62	150
63	150
64	150
65	150
66	150
67	150
68	150
69	150
70	150
71	150
72	150
73	150
74	150
75	150
76	150
77	150
78	150
79	150
80	150
81	150
82	150
83	150
84	150
85	150
86	150
87	150
88	150
89	150
90	150
91	150
92	150
93	150
94	150
95	150
96	150
97	150
98	150
99	150
100	150

* FOR SUBGRADES WITH A CBR OF LESS THAN 2%, A GEOTEXTILE SEPARATOR (A.P. TERRAM 1000) SHOULD BE USED AND SPECIALIST ADVICE SOUGHT REGARDING MINIMUM THICKNESS.

NOTES RE TESTING OF SUBGRADE

A. ROADS & PAVED AREAS GENERALLY:

IN-SITU CBR TESTING TO BS1377-4 (METHOD OF COMPACTION) SHALL BE CARRIED OUT AT SUBGRADE FORMATION AT A RATE OF 1 TEST PER 250m² OF SUB-GRADE. THE PAYMENT BUILD-UP SHOWN ON THE TENDER DRAWINGS IS BASED ON A CBR OF 3% AND MAY BE CHANGED DEPENDING ON THE RESULTS OF THE TESTING.

CONTRACTOR TO PROVIDE RATE FOR SUPPLY AND INSTALL OF 500m² OF PERMEABLE NON-WOVEN GEOTEXTILE BENEATH CAPPING LAYER, WHERE CBR TEST VALUES ON SUBGRADE ARE LESS THAN 3%.

ISSUE	DATE	DESCRIPTION	ISSUED BY	APPROVED BY
PL5	26.11.19	ISSUED FOR PLANNING	ASB	ASB
P3	10.10.19	ISSUED FOR INFORMATION	ASB	ASB
PL4	06.06.19	ISSUED FOR PLANNING	ASB	ASB
P2	29.05.19	ISSUED FOR COMMENT	ASB	ASB
PL3	24.04.19	ISSUED FOR PLANNING	ASB	ASB
PL2	03.04.19	ISSUED FOR PLANNING	ASB	ASB
P1	27.03.19	ISSUED FOR COMMENT	ASB	ASB

PLANNING

BM BARRITT MANBY
12 Mill Street, London SE1 2AV, United Kingdom
Tel: 02045 581 5413 2722
Consulting Engineers, Civil, Structural, Project Management, Email: bm@barrittmanby.com Web: www.bm.co.uk

ACEI Association of Consulting Engineers Institute of Structural Engineers

CLIENT: ATLAS GP LTD

PROJECT TITLE: CLAREMONT PROJECT
BM PROJECT No: 18386

MODEL REFERENCE: PPT-BMD-XX-ZZ-DR-C-1210
MODEL REV: P1
SUSTAINABILITY: 80

DRAWING TITLE: ROADS AND HARDSTANDING DETAILS

DRAWING No: PPT-BMD-XX-ZZ-DR-C-1210
ISSUE: PL5