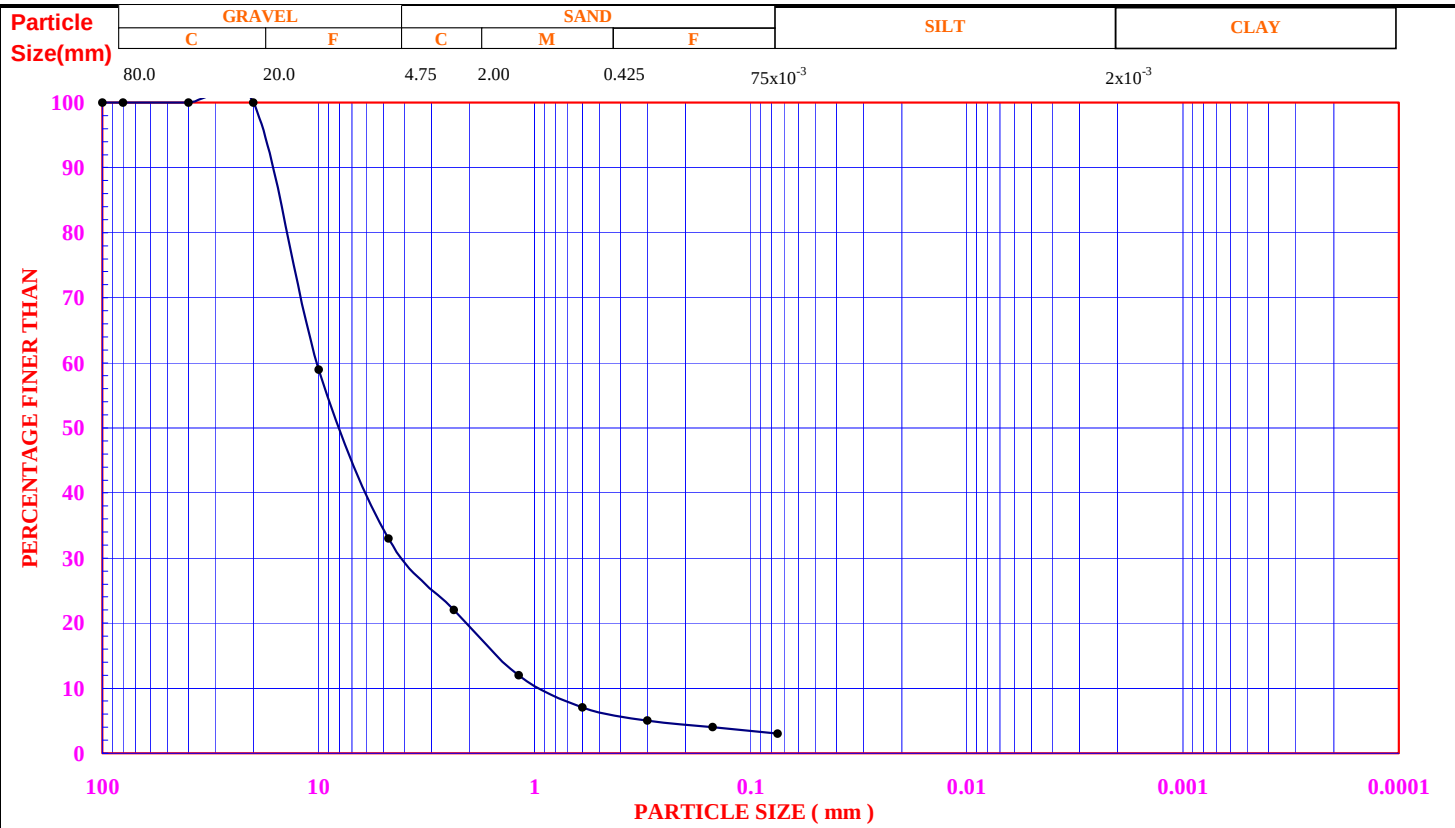
DBM GEOTECHNICS & CONSTRUCTIONS PVT. LTD.



Location: Shikhachiwadi

Project : Geotechnical Investigation for Road Network Project at Nanded City.

GRAIN SIZE DISTRIBUTION ANALYSIS

Job No. : 1576

Symbol	Road No.	Quarry Sample No	Classifi--cation (IS)	Gravel %	Sand %	Silt %	Clay %	$\phi_{10\%}$ mm	$\phi_{30\%}$ mm	$\phi_{60\%}$ mm	Coeff. of Uniformity, $C_u = D_{60} / D_{10}$	Coeff. Of Curvature C_c $D_{30}^2/(D_{60}*D_{10})$	Liquid Limit, W_l	Plastic Limit, W_p	Plasticity Index, I_p	Remarks
●—●	---	6	GW	67	30	3		0.92	4.02	10	10.87	1.76	----	----	----	DS
■—■																
▲—▲																
✳—✳																
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SOIL TEST DATA SHEET

Project : Geotechnical Investigation for Road Network Project at Nanded City. FLB 04

Location : Shikhachiwadi DATE: 09.06.2006

Road No.	Quarry Sample No	Sample Type UD / D	Modified Proctor Test		Soil Classification (I.S)	Mechanical Analysis				Consistancy Limits			Shear Strength Test			Energy for CBR	Lab.CBR Test Unsoaked		Lab.CBR Test Soaked		Specific Gravity	Remarks
			MDD gm\cc	OMC %		Gravel %	Sand %	Silt %	Clay %	Liquid %	Plastic %	Plasticity Index, I_p %	Type	Cohesion C_u kg/cm^2	Degree ϕ		Penetration at 2.5 mm in %	Penetration at 5 mm in %	Penetration at 2.5 mm in %	Penetration at 5 mm in %		
---	6	DS	1.96	10.5	GW	67	30	3		----	----	----	-----	-----	-----	-----	23.16	21.22	20.785	19.400	----	

CHEM : Chemical Analysis
COMP : Compaction Test
DS : Direct Shear
K : Permeability Test
FSI : Free Swell Test

Tuu : Triaxial Test (Unconsolidated Undrained)
Tcu : Triaxial Test (Consolidated Undrained)
Tcd : Triaxial Test (Consolidated Drained)
NP : Non Plastic
SL : Shrikage Limit Test

SP : Swelling Pressure or Swelling Potential Test
SPT : Standard Penetration Test Sample
UDS : Undisturbed Soil Sample
VL : Laboratory Vane Shear Test
UC : Unconfined Compression Test

ϕ : Angle of Internal Friction
Cc : Undrained Cohesion
ϕ' : Effective Angle of Internal Friction
Cc' : Effective Cohesion
-----> : Combined Silt + Clay

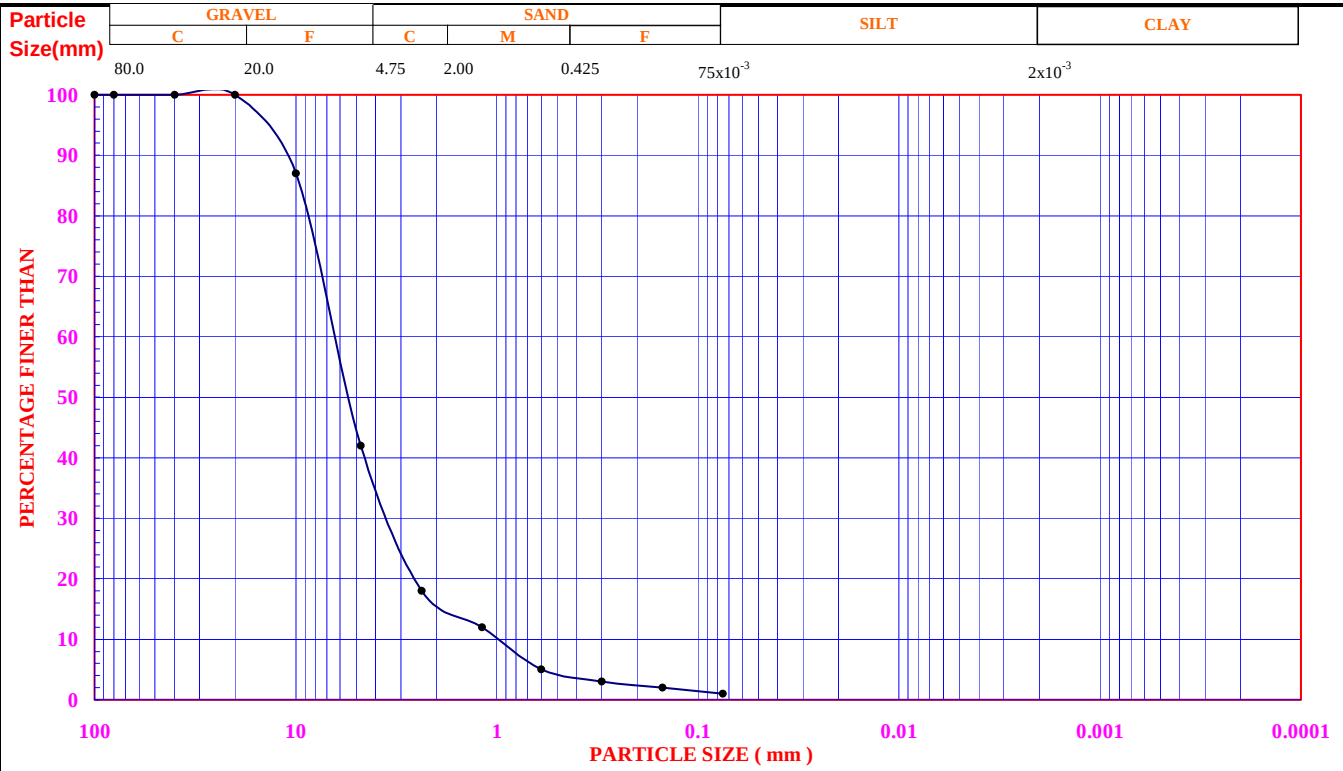
DBM GEOTECHNICS & CONSTRUCTIONS PVT. LTD. Job. No. : **1576**

DBM GEOTECHNICS & CONSTRUCTIONS PVT. LTD.

Location: Zari

Project : Geotechnical Investigation for Road Network Project at Nanded City.

GRAIN SIZE DISTRIBUTION ANALYSIS



Job No. : 1576

Symbol	Road No.	Quarry Sample No	Classification (IS)	Gravel %	Sand %	Silt %	Clay %	$\phi_{10\%}$ mm	$\phi_{30\%}$ mm	$\phi_{60\%}$ mm	Coeff. of Uniformity, $C_u = D_{60} / D_{10}$	Coeff. Of Curvature C_c $D_{30}^2/(D_{60}*D_{10})$	Liquid Limit, W_l	Plastic Limit, W_p	Plasticity Index, I_p	Remarks
●—●	------	3	GW	58	41	1		0.95	3.70	6.40	6.74	2.25	----	----	----	DS
■—■																
▲—▲																
✳—✳																
◆—◆																

SOIL TEST DATA SHEET

Project : **Geotechnical Investigation for Road Network Project at Nanded City.** FLB 04

Location : **Zari** DATE: 21.06.2006

Road No.	Quarry Sample No	Sample Type UD / D	Modified Proctor Test		Soil Classification (I.S)	Mechanical Analysis				Consistancy Limits			Shear Strength Test			Energy for CBR	Lab.CBR Test Unsoaked		Lab.CBR Test Soaked		Specific Gravity	Remarks
			MDD gm/cc	OMC %		Gravel %	Sand %	Silt %	Clay %	Liquid %	Plastic %	Plasticity Index, I_p %	Type	Cohesion C_u kg/cm^2	Degree ϕ		Penetration at 2.5 mm in %	Penetration at 5 mm in %	Penetration at 2.5 mm in %	Penetration at 5 mm in %		
------	3	DS	2.05	11.40	GW	58	41	1		----	----	----	-----	-----	-----	-----	26.13	25.73	23.161	21.379	----	

CHEM	: Chemical Analysis	Tuu	: Triaxial Test (Unconsolidated Undrained)	SP	: Swelling Pressure or Swelling Potential Test	ϕ	: Angle of Internal Friction
COMP	: Compaction Test	Tcu	: Triaxial Test (Consolidated Undrained)	SPT	: Standard Penetration Test Sample	Cc	: Undrained Cohesion
DS	: Direct Shear	Tcd	: Triaxial Test (Consolidated Drained)	UDS	: Undisturbed Soil Sample	ϕ'	: Effective Angle of Internal Friction
K	: Permeability Test	NP	: Non Plastic	VL	: Laboratory Vane Shear Test	Cc'	: Effective Cohesion
FSI	: Free Swell Test	SL	: Shrikage Limit Test	UC	: Unconfined Compression Test	----->	: Combined Silt + Clay

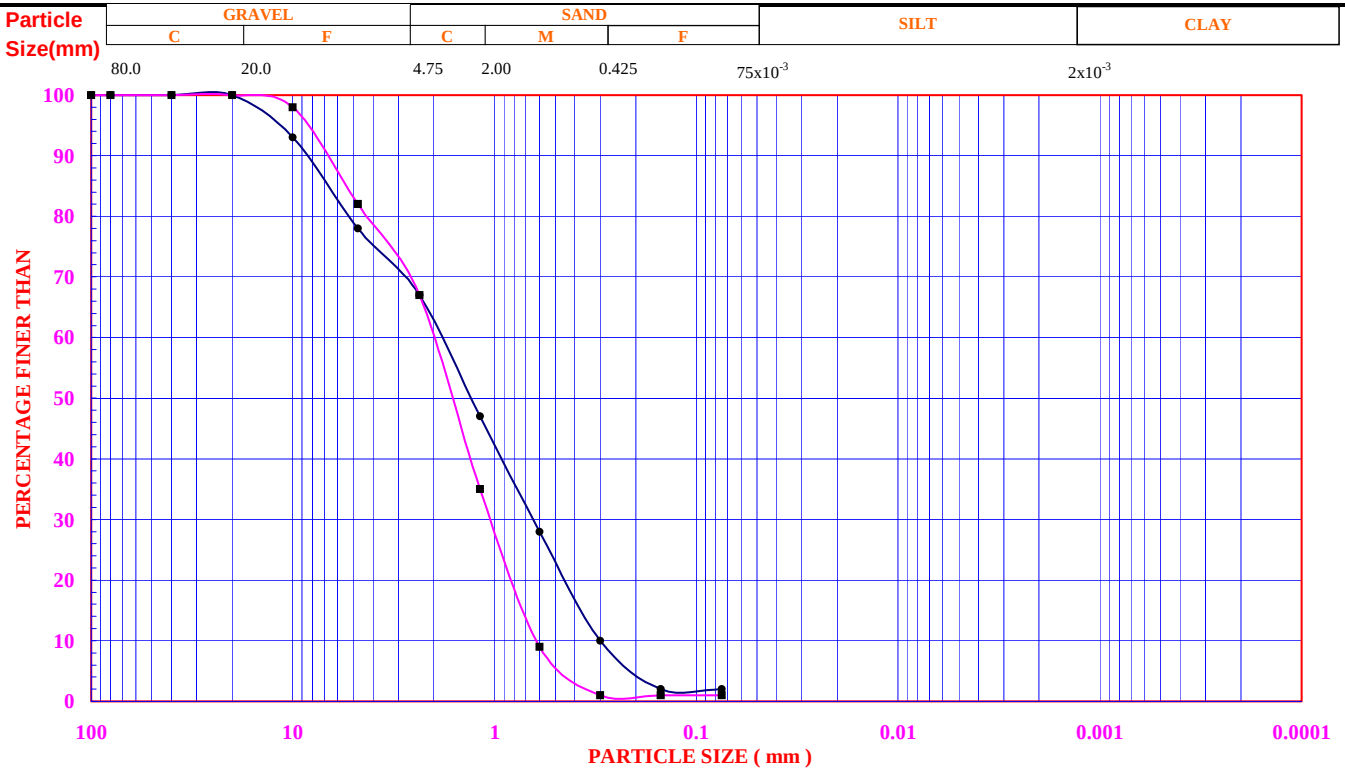
DBM GEOTECHNICS & CONSTRUCTIONS PVT. LTD. Job. No. : **1576**

TEST ON AGGREGATES SAMPLES

NAME OF PROJECT : Geotechnical Investigation work for Road Networking Project at Nanded City. Date : 21.06.2006
CONSULTANT : C. E. S. (I) LTD.
CLIENTS : -----

Sr. No.	DESCRIPTION	IS Sieve Designation in mm	Sikhachivadi Quarry Sample No.2 Metal 60 mm		Zari Quarry Sample No.1 Metal 20 mm	Musalman Wadi Sample No.1 Metal 20 mm	REMARKS
1	Particle Size Test	63.00	100	-----	100	100	
		40.00	99.30	-----	1.80	58.64	
		20.00	0.70	-----	12.50	41.36	
		10.00	0.00	-----	73.30	0.00	
		6.30	0.00	-----	11.50	0.00	
		4.75	0.00	-----	0.20	0.00	
2	Particle Size Test	40.00	-----	100	-----	-----	
		25.00	-----	49.4	-----	-----	
		20.00	-----	43.7	-----	-----	
		12.50	-----	6.9	-----	-----	
3	Particle Size Test	12.50	-----	-----	-----	-----	
		10.00	-----	-----	-----	-----	
		4.75	-----	-----	-----	-----	
		2.36	-----	-----	-----	-----	
4	Particle Size Test	10.00	-----	-----	-----	-----	
		4.75	-----	-----	-----	-----	
		2.36	-----	-----	-----	-----	
		1.18	-----	-----	-----	-----	
		0.60	-----	-----	-----	-----	
		0.30	-----	-----	-----	-----	
		0.15	-----	-----	-----	-----	
5	Specific Gravity	-----	2.78	2.80	2.76	2.78	
6	Flakiness Index	-----	-----	-----	35.53	19.98	
7	Elongation Index	-----	-----	-----	10.23	10.00	
8	Impact Test value	-----	6.41	6.39	7.04	4.58	
DBM GEOTECHNICS AND CONSTRUCTIONS PVT. LTD.						Job No.	1576

DBM GEOTECHNICS & CONSTRUCTIONS PVT. LTD.



Location ----

Project : Geotechnical Investigation For Road Network Project at Nanded City.

GRAIN SIZE DISTRIBUTION ANALYSIS

Job No. : 1576

Symbol	Sample No.	Location	Classifi-cation (IS)	Gravel %	Sand %	Silt %	Clay %	$\phi_{10\%}$ mm	$\phi_{30\%}$ mm	$\phi_{60\%}$ mm	Coeff. of Uniformity, $C_u = D_{60} / D_{10}$	Coeff. Of Curvature C_c $D_{30}^2/(D_{60}*D_{10})$	Liquid Limit, W_l	Plastic Limit, W_p	Plasticity Index, I_p	Remarks
●–●	1	Nanded - Nagpur Highway	SP	22	76	2		0.30	0.90	1.70	5.67	1.59	-----	-----	-----	DS -1
■–■	2	VARSI	SP	18	81	1		0.62	0.11	1.90	3.06	0.01	-----	-----	-----	DS - 2
▲–▲																
✳–✳																
◆–◆																

SOIL TEST DATA SHEET

Project : **Geotechnical Investigation For Road Network Project at Nanded City.** FLB 04

Location : **-----** DATE: 14.06.2006

Sample No.	Location	Sample Type UD / D	Proctor Compaction Test		Soil Classification (I.S)	Mechanical Analysis				Consistancy Limits			Shear Strength Test			Energy for CBR	Lab.CBR Test Unsoaked		Lab.CBR Test Soaked		Specific Gravity	Remarks
			MDD gm/cc	OMC %		Gravel %	Sand %	Silt %	Clay %	Liquid %	Plastic %	Plasticity Index, I_p %	Type	Cohesion C_u kg/cm^2	Degree ϕ		Penetration at 2.5 mm in %	Penetration at 5 mm in %	Penetration at 2.5 mm in %	Penetration at 5 mm in %		
1	Nanded - Nagpur Highway	DS -1	------	------	SP	22	76	2		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
2	VARSI	DS - 2	------	------	SP	18	81	1		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	

CHEM	: Chemical Analysis	Tuu	: Triaxial Test (Unconsolidated Undrained)	SP	: Swelling Pressure or Swelling Potential Test	ϕ	: Angle of Internal Friction
COMP	: Compaction Test	Tcu	: Triaxial Test (Consolidated Undrained)	SPT	: Standard Penetration Test Sample	Cc	: Undrained Cohesion
DS	: Direct Shear	Tcd	: Triaxial Test (Consolidated Drained)	UDS	: Undisturbed Soil Sample	ϕ'	: Effective Angle of Internal Friction
K	: Permeability Test	NP	: Non Plastic	VL	: Laboratory Vane Shear Test	Cc'	: Effective Cohesion
FSI	: Free Swell Test	SL	: Shrikage Limit Test	UC	: Unconfined Compression Test	----->	Combined Silt + Clay

DBM GEOTECHNICS & CONSTRUCTIONS PVT. LTD. Job. No. : **1576**

FIELD DENSITY OBSERVATIONS

SITE : Geotechnical Investigation For Road Network Project At Nanded City.

Location : CES NANDED **Date :** 24.06.2006

Sr. No.	ROAD NO	Trial Pit No.	Core Cutter No.	Volume in cc	Weight of Empty Core Cutter gm	Weight of Core Cutter with Soil in gms.	Weight of Wet Soil in gm	Density in gm/cc		Moisture Content %
								Bulk	Dry	
1	Road No.1	1.00	1	863.50	1394	2862	1468	1.70	**1.45**	**17**
2	Road No.1	2.00	3	840.00	1530	2992	1462.0	1.74	**1.50**	**16**
3	Road No.2	1.00	2	847.80	1604	3064	1460	1.72	**1.49**	**15**
4	Road No.2	2.00	1	863.50	1394	2866	1472	1.70	**1.49**	**14**
5	Road No.3	1.00	5	871.35	1560	3080	1520	1.74	**1.48**	**17**
6	Road no.4	1.00	3	840.00	1530	2972	1442	1.72	**1.52**	**13**
7	Road No.5	1.00	5	871.35	1560	3060	1500	1.72	**1.53**	**12**
8	Road No.7	1.00	1	863.50	1394	2864	1470	1.70	**1.42**	**19**
9	Road No.7	2.00	2	847.80	1604	3085	1482	1.74	**1.49**	**17**
10	Road No.7	3.00	3	840.00	1530	2976	1446	1.72	**1.44**	**19**
11	Road No.7	4.00	4	847.80	1582	3050	1458	1.73	**1.46**	**18**
12	Road No.7	5.00	5	871.35	1560	3046	1486	1.71	**1.42**	**20**
13	Road No.7	6.00	6	832.10	1480	2905	1425	1.71	**1.42**	**21**
14	Road No.7	7.00	7	824.25	1424	2846	1422	1.73	**1.44**	**20**
15	Road No.7	8.00	8	879.20	1552	3022	1470	1.57	**1.41**	**18**
16	Road No.8	1.00	1	863.50	1394	2878	1484	1.72	**1.44**	**19**
17	Road No.8	2.00	2	847.80	1604	3089	1485	1.75	**1.51**	**16**
18	Road No.8	3.00	3	840.00	1530	2980	1450	1.73	**1.46**	**18**
19	Road No.8	4.00	4	847.80	1582	3056	1474	1.74	**1.47**	**18**
20	Road No.8	5.00	1	863.50	1394	2888	1494	1.73	**1.49**	**16**
21	Road No.9	1.00	1	863.50	1394	2882	1488	1.72	**1.48**	**16**
22	Road No.9	2.00	5	871.35	1560	3060	1500	1.72	**1.47**	**17**
23	Road No.9	3.00	7	824.25	1424	2858	1454	1.74	**1.59**	**9**
24	Road No.10	1.00	2	847.80	1604	3084	1480	1.74	**1.50**	**16**
25	Road No.10	2.00	5	871.35	1560	3088	1528	1.75	**1.49**	**17**
26	Road No.10	3.00	6	832.10	1480	2926	1446	1.73	**1.47**	**18**
DBM GEOTECHNICS & CONSTRUCTIONS PVT. LTD								Job No.		**1576**

FIELD DENSITY OBSERVATIONS

SITE : Geotechnical Investigation For Road Network Project At Nanded City.

Location : CES NANDED **Date :** 24.06.2006

Sr. No.	ROAD NO	Trial Pit No.	Core Cutter No.	Volume in cc	Weight of Empty Core Cutter gm	Weight of Core Cutter with Soil in gms.	Weight of Wet Soil in gm	Density in gm/cc		Moisture Content %
								Bulk	Dry	
27	Road No 12	1.00	3	840.00	1530	2999	1469	1.74	1.46	19
28	Road No 13	1.00	1	863.50	1394	2882	1488	1.72	1.47	17
29	Road No 14	1.00	8	879.20	1552	3058	1506	1.71	1.48	16
30	Road No 14	2.00	7	824.25	1424	2856	1432	1.74	1.46	19
31	Road No 15	1.00	6	832.10	1480	2930	1450	1.74	1.52	15
32	Road No16	1.00	4	847.80	1582	3058	1476	1.74	1.51	15
33	Road No 17	1.00	1	863.50	1394	2846	1452	1.68	1.49	13
34	Road No 17	2.00	4	847.80	1582	3044	1462	1.72	1.50	15
35	Road No 18	1.00	2	847.80	1604	3106	1502	1.77	1.50	18
36	Road No 19	1.00	4	847.80	1582	3060	1478	1.74	1.49	17
37	Road No 19	2.00	2	847.80	1604	3104	1500	1.77	1.49	19
38	Road No 19	3.00	1	863.50	1394	2886	14912	1.73	1.57	10
39	Road No 22	1.00	5	871.35	1560	3054	1494	1.71	1.47	16
40	Road No 23	1.00	4	847.80	1582	3058	1476	1.74	1.51	15
41	Road No. 24	1.00	4	847.80	1582	3052	1470	1.73	1.50	15
42	Road No. 24	2.00	3	840.00	1530	2972	1442	1.72	1.48	16
43	Road No 26	1.00	7	824.25	1424	2832	1408	1.71	1.49	15
44	Road No 27	1.00	5	871.35	1560	3065	1505	1.73	1.48	17
45	Road No 27	2.00	4	847.80	1582	3034	1452	1.71	1.49	15
46	Road No.28A	1.00	1	863.50	1394	2892	1498	1.73	1.50	15
47	Road No.28A	2.00	2	847.80	1604	3092	1488	1.76	1.50	17
48	Road No 28	1.00	3	863.50	1394	2892	1498	1.73	1.54	12
49	Road No 28	2.00	6	832.10	1480	2910	1430	1.72	1.46	18
50	Road No 28	3.00	4	847.80	1582	3060	1478	1.74	1.59	9
51	Road No 28	4.00	5	871.35	1560	3049	1488	1.71	1.51	13
DBM GEOTECHNICS & CONSTRUCTIONS PVT. LTD								Job No.		**1576**

FIELD DENSITY OBSERVATIONS

SITE : Geotechnical Investigation For Road Network Project At Nanded City.

Location : CES NANDED **Date :** 24.06.2006

Sr. No.	ROAD NO	Trial Pit No.	Core Cutter No.	Volume in cc	Weight of Empty Core Cutter gm	Weight of Core Cutter with Soil in gms.	Weight of Wet Soil in gm	Density in gm/cc		Moisture Content %
								Bulk	Dry	
52	Road No.29	1.00	1	863.50	1394	2852	1458	1.69	**1.48**	**14**
53	Road No.29	2.00	3	840.00	1530	2962	1432	1.70	**1.52**	**12**
54	Road No.30	1.00	1	863.50	1394	2910	1516	1.76	**1.44**	**22**
55	Road No.30	2.00	2	847.80	1504	3112	1508	1.79	**1.48**	**20**
56	Road No.30	3.00	3	840.00	1530	3018	1488	1.77	**1.43**	**24**
57	Road No.30	4.00	4	847.80	1582	3117	1535	1.81	**1.44**	**26**
58	Road No.31	1.00	5	871.35	1560	3145	1585	1.82	**1.44**	**26**
59	Road No.31	2.00	6	832.10	1480	2939	1459	1.75	**1.45**	**21**
60	Road No.31	3.00	7	824.25	1424	2864	1440	1.74	**1.46**	**19**
61	Road No.32	1.00	1	863.50	1394	2898	1504	1.74	**1.48**	**18**
62	Road No.32	2.00	2	847.80	1604	3098	1494	1.76	**1.48**	**19**
63	Road No.32	3.00	3	840.00	15300	2998	1468	1.75	**1.43**	**22**
64	Road No.32	4.00	4	847.80	1582	3067	1485	1.75	**1.47**	**19**
65	Road No.32	5.00	6	832.10	1480	2916	1436	1.73	**1.44**	**20**
66	Road No.32	6.00	7	824.25	1424	2860	1442	1.75	**1.46**	**20**
67	Road No.32	7.00	2	847.80	1604	30945	1491	1.76	**1.49**	**18**
68	Road No.32	8.00	4	847.80	1582	3071	1489	1.76	**1.48**	**19**
69	Road No.32	9.00	1	863.50	1394	2907	1513	1.75	**1.45**	**21**
70	Road No.32	10.00	5	871.35	1560	3059	1499	1.72	**1.46**	**18**
DBM GEOTECHNICS & CONSTRUCTIONS PVT. LTD								Job No.		**1576**

FIELD DENSITY OBSERVATIONS

SITE : Geotechnical Investigation For Road Network Project At Nanded City.

Location : NANDED **Date :** 24.06.2006

Sr. No.	ROAD NO	Trial Pit No.	Core Cutter No.	Volume in cc	Weight of Empty Core Cutter gm	Weight of Core Cutter with Soil in gms.	Weight of Wet Soil in gm	Density in gm/cc		Moisture Content %
								Bulk	Dry	
71	Road No 34	1.00	3	840.0	1530	2916	1386	1.65	**1.44**	**14**
72	Road No 34	2.00	2	847.8	1604	3032	1428	1.68	**1.42**	**18**
73	Road No 35	1.00	2	847.8	1604	3082	1478	1.74	**1.51**	**15**
74	Road No 35	2.00	1	863.5	1394	2906	1512	1.75	**1.50**	**16**
75	Road No 35	3.00	7	824.3	1424	2874	1450	1.75	**1.47**	**20**
76	Road No 35	4.00	3	840.0	1530	3005	1475	1.76	**1.43**	**23**
77	Road No 37	1.00	1	863.5	1394	2872	1478	1.71	**1.46**	**17**
78	Road No.38A	1.00	1	863.5	1394	2966	1512	1.75	**1.53**	**14**
79	Road No.38A	2.00	4	847.8	1582	3072	1490	1.75	**1.49**	**18**
80	Road No.39	1.00	2	847.8	1604	3112	1508	1.78	**1.48**	**20**
81	Road No.39	2.00	4	847.8	1582	3072	1490	1.76	**1.51**	**16**
82	Road No.39	3.00	1	863.5	1394	2899	1505	1.74	**1.51**	**15**
83	Road No.39	4.00	3	840.0	1530	2992	1462	1.74	**1.47**	**18**
84	Road No.39	5.00	5	871.4	1560	3062	1502	1.72	**1.49**	**16**
85	Road No40	1.00	1	863.5	1394	2917	1523	1.76	**1.44**	**22**
86	Road No40	2.00	6	832.1	1480	2926	1446	1.74	**1.42**	**22**
87	Road No40	3.00	8	879.2	1552	3064	1512	1.72	**1.43**	**20**
88	Road No 40	4.00	4	847.8	1582	3078	1502	1.72	**1.44**	**22**
89	Road No 40	5.00	3	840.0	1530	3002	1472	1.75	**1.47**	**19**
90	Road No 41	1.00	2	847.8	1504.4	3138	1534	1.81	**1.48**	**22**
91	Road No 41	2.00	4	847.8	1582	3120	1538	1.81	**1.47**	**23**
92	Road No 41	3.00	3	840.0	1530	3029	1499	1.78	**1.45**	**22**
93	Road No 41	4.00	1	863.5	1394	2953	1559	1.80	**1.44**	**25**
94	Road No 42	1.00	5	871.4	1560	3140	1580	1.81	**1.46**	**24**
95	Road No 42	2.00	7	824.3	1424	2876	1452	1.76	**1.45**	**21**

DBM GEOTECHNICS & CONSTRUCTIONS PVT. LTD Job No. **1576**

SOIL TEST DATA SHEET

Project : **Geotechnical Investigation for Road Network Project at Nanded City.** FLB 04

Location : **0.5Km From Railway Station (Guru Hotel)** DATE: 28.06.06

Road No.	Trial Pit No	Sample Type UD / D	Modified Proctor Test		Soil Classification (I.S)	Mechanical Analysis				Consistancy Limits			Shear Strength Test			Free Swell Index %	Lab.CBR Test Unsoaked		Lab.CBR Test Soaked		Specific Gravity	Remarks
			MDD gm/cc	OMC %		Gravel %	Sand %	Silt %	Clay %	Liquid %	Plastic %	Plasticity Index, I_p %	Type	Cohesion C_u kg/cm^2	Degree ϕ		Penetration at 2.5 mm in %	Penetration at 5 mm in %	Penetration at 2.5 mm in %	Penetration at 5 mm in %		
1	T.P. 2	DS	1.445	26.90	CH	4	21	38	37	52	24	28	-----	-----	-----	50	9.20	8.31	6.829	6.335		

CHEM : Chemical Analysis
COMP : Compaction Test
DS : Direct Shear
K : Permeability Test
FSI : Free Swell Test

Tuu : Triaxial Test (Unconsolidated Undrained)
Tcu : Triaxial Test (Consolidated Undrained)
Tcd : Triaxial Test (Consolidated Drained)
NP : Non Plastic
SL : Shrikage Limit Test

SP : Swelling Pressure or Swelling Potential Test
SPT : Standard Penetration Test Sample
UDS : Undisturbed Soil Sample
VL : Laboratory Vane Shear Test
UC : Unconfined Compression Test

ϕ : Angle of Internal Friction
Cc : Undrained Cohesion
ϕ' : Effective Angle of Internal Friction
Cc' : Effective Cohesion
-----> : Combined Silt + Clay

DBM GEOTECHNICS & CONSTRUCTIONS PVT. LTD. Job. No. : **1576**

SOIL TEST DATA SHEET

Project : Geotechnical Investigation for Road Network Project at Nanded City. FLB 04

Location : 300 M From Gurudwara Gate No. 1 DATE: 28.06.2006

Road No.	Trial Pit No	Sample Type UD / D	Modified Proctor Test		Soil Classification (I.S)	Mechanical Analysis				Consistancy Limits			Shear Strength Test			Free Swell Index	Lab.CBR Test Unsoaked		Lab.CBR Test Soaked		Specific Gravity	Remarks
			MDD gm\cc	OMC %		Gravel %	Sand %	Silt %	Clay %	Liquid %	Plastic %	Plasticity Index, I_p %	Type	Cohesion C_u kg/cm^2	Degree ϕ		Penetration at 2.5 mm in %	Penetration at 5 mm in %	Penetration at 2.5 mm in %	Penetration at 5 mm in %		
3	T. P. 1	DS	1.56	24.3	CH	14	15	29	42	54	28	26	-----	-----	-----	45	11.40	11.56	8.73	8.24	----	

CHEM : Chemical Analysis
COMP : Compaction Test
DS : Direct Shear
K : Permeability Test
FSI : Free Swell Test

Tuu : Triaxial Test (Unconsolidated Undrained)
Tcu : Triaxial Test (Consolidated Undrained)
Tcd : Triaxial Test (Consolidated Drained)
NP : Non Plastic
SL : Shrikage Limit Test

SP : Swelling Pressure or Swelling Potential Test
SPT : Standard Penetration Test Sample
UDS : Undisturbed Soil Sample
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ϕ : Angle of Internal Friction
Cc : Undrained Cohesion
ϕ' : Effective Angle of Internal Friction
Cc' : Effective Cohesion
-----> : Combined Silt + Clay

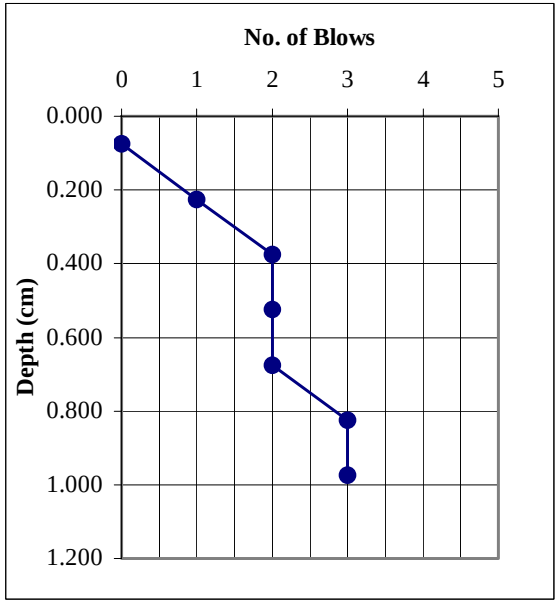
DBM GEOTECHNICS & CONSTRUCTIONS PVT. LTD. Job. No. : **1576**

DYNAMIC CONE PENETERATION TEST

Project **CES NANDED**
DCPT No. : **DCPT 01-TP1**
ROAD NO: 01
Location: Ambedkar Chowk (Near Railway Station)

Diameter of Cone : 50 mm
Weight of Hammer : 65 kg.
Height of fall : 750mm
Apex angle : 60 **Date** : 30.05.2006

Sr. No.	Depth (m)		Depth Of Penetration (m)	Avearge Depth (m)	No Of Blows (N_{cd})
	From	To			
1	0	0.15	0.15	0.075	0
2	0.15	0.30	0.15	0.225	1
3	0.30	0.45	0.15	0.375	2
4	0.45	0.60	0.15	0.525	2
5	0.60	0.75	0.15	0.675	2
6	0.75	0.90	0.15	0.825	3
7	0.90	1.05	0.15	0.975	3



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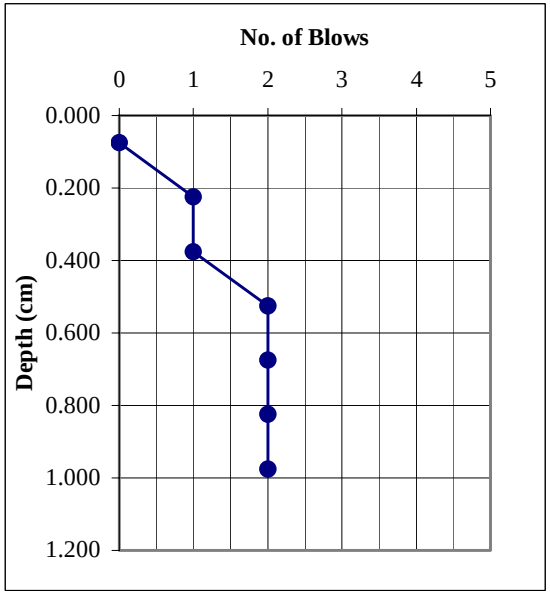
DYNAMIC CONE PENETERATION TEST

Project **CES NANDED**
DCPT No. : **DCPT 01-TP2**
ROAD NO: 02
Location: 500m from Vazirabad police station (Near Sitlai Manc

Diameter of Cone : 50 mm
Weight of Hammer : 65 kg.
Height of fall : 750mm
Apex angle : 60
Date : 30.05.2006

Sr. No.	Depth (m)		Depth Of Penetration (m)	Averge Depth (m)	No Of Blows (N_{cd})
	From	To			
1	0	0.15	0.15	0.075	0
2	0.15	0.30	0.15	0.225	1
3	0.30	0.45	0.15	0.375	1
4	0.45	0.60	0.15	0.525	2
5	0.60	0.75	0.15	0.675	2
6	0.75	0.90	0.15	0.825	2
7	0.90	1.05	0.15	0.975	2



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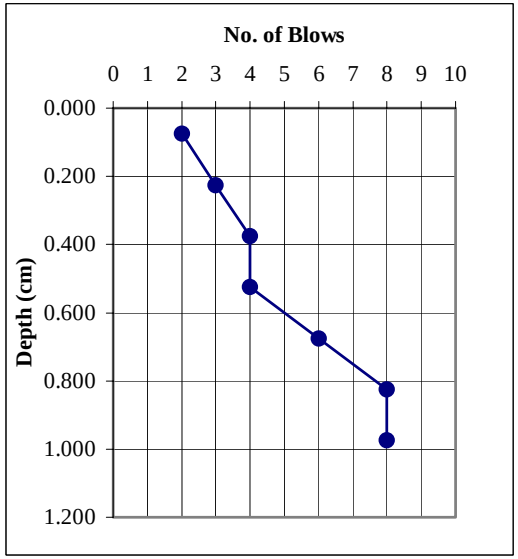
DYNAMIC CONE PENETERATION TEST

Project **CES NANDED**
DCPT No. : **DCPT 01-TP2**
ROAD NO: 03
Location: Opposite BS tyres (300 m from Gate No.1)

Diameter of Cone : 50 mm
Weight of Hammer : 65 kg.
Height of fall : 750mm
Apex angle : 60 **Date** : 30.05.2006

Sr. No.	Depth (m)		Depth Of Penetration (m)	Avearge Depth (m)	No Of Blows (N_{cd})
	From	To			
1	0	0.15	0.15	0.075	2
2	0.15	0.30	0.15	0.225	3
3	0.30	0.45	0.15	0.375	4
4	0.45	0.60	0.15	0.525	4
5	0.60	0.75	0.15	0.675	6
6	0.75	0.90	0.15	0.825	8
7	0.90	1.05	0.15	0.975	8



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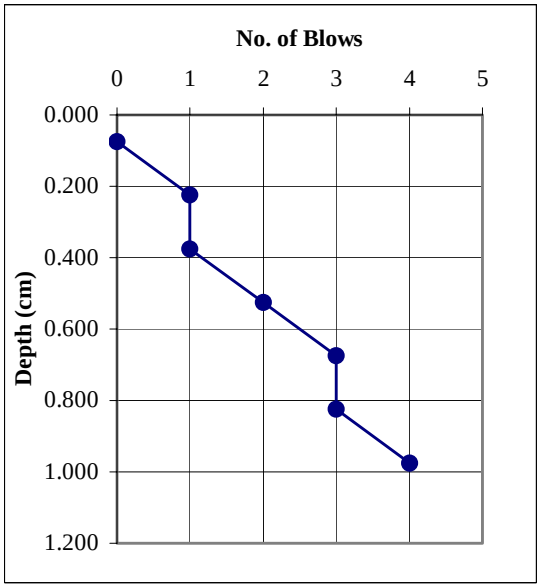
DYNAMIC CONE PENETERATION TEST

Project **CES NANDED**
DCPT No. : **DCPT 01-TP1**
ROAD NO: 07
Location: Raj Corner

Diameter of Cone : 50 mm
Weight of Hammer : 65 kg.
Height of fall : 750mm
Apex angle : 60 **Date** : 26.05.2006

Sr. No.	Depth (m)		Depth Of Penetration (m)	Avearge Depth (m)	No Of Blows (N_{cd})
	From	To			
1	0	0.15	0.15	0.075	0
2	0.15	0.30	0.15	0.225	1
3	0.30	0.45	0.15	0.375	1
4	0.45	0.60	0.15	0.525	2
5	0.60	0.75	0.15	0.675	3
6	0.75	0.90	0.15	0.825	3
7	0.90	1.05	0.15	0.975	4



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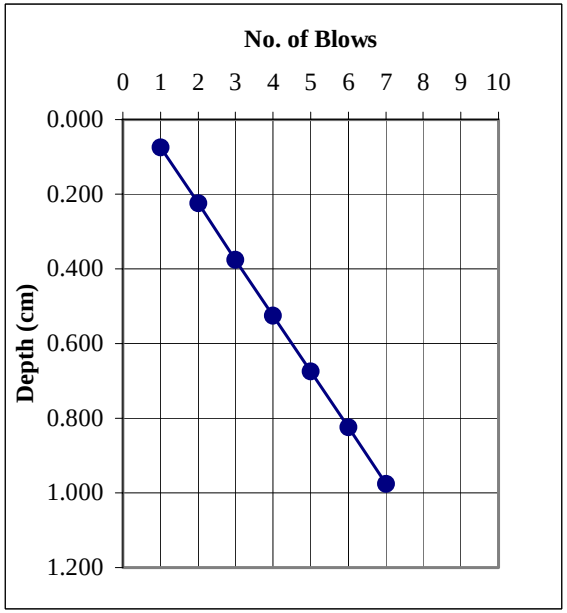
DYNAMIC CONE PENETERATION TEST

Project **CES NANDED**
DCPT No. : **DCPT 01-TP1**
ROAD NO: 08
Location: Near Hanuman Temple

Diameter of Cone : 50 mm
Weight of Hammer : 65 kg.
Height of fall : 750mm
Apex angle : 60 **Date** : 26.05.2006

Sr. No.	Depth (m)		Depth Of Penetration (m)	Avearge Depth (m)	No Of Blows (N_{cd})
	From	To			
1	0	0.15	0.15	0.075	0
2	0.15	0.30	0.15	0.225	1
3	0.30	0.45	0.15	0.375	1
4	0.45	0.60	0.15	0.525	R
5	0.60	0.75	0.15	0.675	R
6	0.75	0.90	0.15	0.825	R
7	0.90	1.05	0.15	0.975	R



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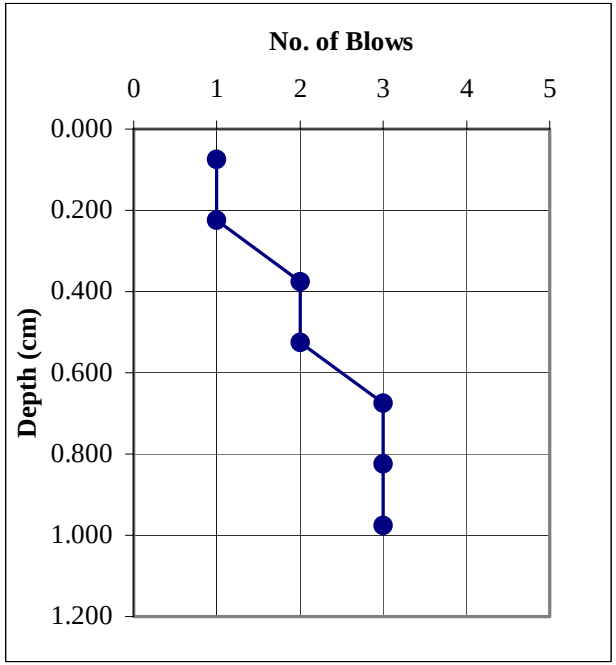
DYNAMIC CONE PENETERATION TEST

Project **CES NANDED**
DCPT No. : **DCPT 01-TP2**
ROAD NO: 09
Location: Safa Communication 1000m from Dengunur Naka

Diameter of Cone : 50 mm
Weight of Hammer : 65 kg.
Height of fall : 750mm
Apex angle : 60 **Date** : 03.06.2006

Sr. No.	Depth (m)		Depth Of Penetration (m)	Avearge Depth (m)	No Of Blows (N_{cd})
	From	To			
1	0	0.15	0.15	0.075	1
2	0.15	0.30	0.15	0.225	1
3	0.30	0.45	0.15	0.375	2
4	0.45	0.60	0.15	0.525	2
5	0.60	0.75	0.15	0.675	3
6	0.75	0.90	0.15	0.825	3
7	0.90	1.05	0.15	0.975	3



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