DIVERSION OF 64.2016 HA. OF FOREST LAND FOR CONSTRUCTION OF NORTH CAMPUS CENTRAL UNIVERSITY AT DHARAMSHALA, DISTRICT KANGRA (H.P.)

FILE NO. : **FP/HP/Others/39044/2019**

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RECLAMATION PLAN / MUCK MANAGEMENT PLAN FOR CONSTRUCTION OF CENTRAL UNIVERSITY NORTH CAMPUS AT DHARAMSHALA, DISTRICT KANGRA (H.P.)

Introduction

A large quantity of muck is expected to be generated as a result of the construction of blocks of Central University. The most of the muck produced from all the components would be self utilized and the balance shall be utilized to uplift the level of the Playgrounds proposed in the Non Forest Land with due consideration of its distance from the component, suitability of the area and Topography point of view.

Muck Generation

The total quantity of muck expected to be generated has been estimated to be of the order of 73970 m^3 including swell factor. The component wise detail of muck to be generated is given below. Based on the geological nature of the rocks and engineering properties of the soil, a part of the muck can be used as construction material. However, this aspect has not been adopted. Most of the muck shall be self utilized for back-filling of the buildings and protection works and balance requires being suitably disposed. Normally, muck is disposed in low-lying areas or depressions. The excess muck shall be utilized to uplift the level of Playgrounds and levelling of Parkings and Parks.

Sr. No.	Name of Component	Qty of Muck Excavated (m^3)		
		Open Excavation	Underground Excavation	Total
1	Boys Hostel I	5,800	-	5,800
2	Access Roads	12,157	-	12,157
3	Boys Hostel II	547	-	547
4	Boys Hostel III	697	-	697
5	Shopping Arcade	239	-	239

6	International Hostel	1,160	-	1,160
7	Type III Quarters I	1,114	-	1,114
8	Boys Hostel IV	2,227	-	2,227
9	Registrar's Residence	131	-	131
10	CoE Residence	174	-	174
11	Finance Officer Residence	152	-	152
12	PVC Residence	174	-	174
13	Admisnistrative Block I	870	-	870
14	Lecture Hall	532	-	532
15	Academic Block - School of Earth & Environment Sciences Phase I	1,061	-	1,061
16	Academic Block - School of Commerce & Management Phase I	728	-	728
17	Academic Block - School of Tourism, Travel & Hospitality Management Phase I	987	-	987
18	Academic Block - School of Performing & Visual Arts Phase I	504	-	504
19	Academic Block - School of Education Phase I	384	-	384
20	Auditorium	363	-	363
21	Multipurpose Hall	109	-	109
22	Administrative Block II	435	-	435
23	Academic Block - I School of Agriculture in Phase I	580	-	580
24	Academic Block - II School of Agriculture in Phase I	580	-	580

25	Academic Block - III School of Agriculture in Phase I	580	-	580
26	Academic Block - I School of Engineering in Phase I	580	-	580
27	Academic Block - II School of Engineering in Phase I	580	-	580
28	Academic Block - III School of Engineering in Phase I	580	-	580
29	Incubation Centre	435	-	435
30	Expansion of Existing Academic Block - School of Earth & Environment Sciences in Phase II	435	-	435
31	Expansion of Existing Academic Block - School of Commerce & Management in Phase II	435	-	435
32	Expansion of Existing Academic Block - School of Tourism, Travel & Hospitality Management in Phase II	435	-	435
33	Expansion of Existing Academic Block - School of Performing & Visual Arts in Phase II	435	-	435
34	Expansion of Existing Academic Block in Phase II	435	-	435
35	Examination / CoE Centre	232	-	232
36	Computer & Informatics Centre	145	-	145
37	Central Instrumentiation Lab	290	-	290
38	Central Library	435	-	435
39	University School	290	-	290
40	Expansion of Existing Academic Block - School of Agriculture in Phase II	435	-	435
41	Expansion of Existing Academic Block - School of Agriculture in Phase II	870	-	870

42	Expansion of Existing Academic Block - School of Agriculture in Phase II	870	-	870
43	Expansion of Existing Academic Block - School of Agriculture in Phase II	435	-	435
44	Expansion of Existing Academic Block - School of Engineering in Phase II	435	-	435
45	Expansion of Existing Academic Block - School of Engineering in Phase II	435	-	435
46	Expansion of Existing Academic Block - School of Engineering in Phase II	870	-	870
47	Expansion of Existing Academic Block - School of Engineering in Phase II	435	-	435
48	Disaster Training Centre	145	-	145
49	Student Activity Centre	58	-	58
50	Academic Staff College Building	145	-	145
51	Sub Station	979	-	979
52	Stadium	763	-	763
53	Indoor Sports Hall / Gym	218	-	218
54	Water Sports Complex	58	-	58
55	Faculty Club	139	-	139
56	STP - I	261	-	261
57	Girls Hostel I	328	-	328
58	Girls Hostel II	418	-	418
59	International Hostel - II	331	-	331

60	Guest House	142	-	142
61	Shopping Arcade	167	-	167
62	Health Centre	104	-	104
63	Transit Hostel I	706	-	706
64	Transit Hostel II	804	-	804
65	Transit Hostel III	651	-	651
66	Transit Hostel IV	1,628	-	1,628
67	Transit Hostel V	496	-	496
68	Transit Hostel VI	2,180	-	2,180
69	Girls Hostel - III	4,060	-	4,060
70	Hon'ble VC Residence	590	-	590
71	WTP	-	239	239
72	STP - II	-	326	326
73	Type III Quarters - III	371	-	371
74	STP - III	-	309.00	309
75	Main Road	10,789	-	10,789
76	Pump House	625	-	625
77	Water Pipe Line	942	-	942
78	Sewerage Line	1,404	-	1,404
79	STP - IV	-	407	407
Total Muck to be Generated		**72,314**	**1,281**	**73,595**

MUCK DUMPING PLAN FOR CENTRAL UNIVERSITY NORTH CAMPUS DHARAMSHALA, DISTRICT KANGRA (H.P.)

Sr. No.	Name Of Component From Where Muck Is To Be Produced	Actual Size Of Component In sqm	Total Qty. Of Muck Is To Be Produced (in cum)	Factor Of Increase In Volume After Excavation	Total Qty. Of Muck To Be Dumped On The Basis Of Increased Qty (In cum)	Qty OF Muck To Be Utilised (In cum)	Total Qty Of Muck Remaining After Utilisation	Name Of Dumping Place	Area Of Dumping Place In sqm	Remaining Height Of Muck Dumped	Capacity Of Muck To Be Dumped	Quantity to be Dumped	Remarks
1	Boys Hostel I	200 m x 100 m	4000	0.45	5800	1160	4,640	Playgrounds, Parkings and Open Parks	37320	1.34 (avg)	53550	51287	Muck Produced shall be utilised for the levelling of Low Lying Areas Like Playground, Parkings and Open Parks
2	Access Roads	7767 m x 8 m	8093.04	0.45	12157	4955	7,202						
3	Boys Hostel II	65 m x 29 m	377	0.45	547	109	438						
4	Boys Hostel III	60.1 m x 40 m	481	0.45	697	139	558						
5	Shopping Arcade	40 m x 20.6 m	165	0.45	239	48	191						
6	International Hostel	80 m x 50 m	800	0.45	1160	232	928						
7	Type III Quarters I	80 m x 48 m	768	0.45	1114	223	891						
8	Boys Hostel IV	96 m x 80 m	1536	0.45	2227	445	1,782						
9	Registrar's Residence	20 m x 15 m	90	0.45	131	26	105						
10	CoE Residence	20 m x 15 m	120	0.45	174	35	139						
11	Finance Officer Residence	20 m x 15 m	105	0.45	152	30	122						
12	PVC Residence	20 m x 15 m	120	0.45	174	35	139						
13	Admisnistrative Block I	75 m x 40 m	600	0.45	870	174	696						
14	Lecture Hall	47 m x 39 m	366.6	0.45	532	106	426						
15	Academic Block - School of Earth & Environment Sciences Phase I	73.2 m x 50 m	732	0.45	1061	212	849						
16	Academic Block - School of Commerce & Management Phase I	65 m x 38.6 m	501.8	0.45	728	146	582						
17	Academic Block - School of Tourism, Travel & Hospitality	74 m x 46 m	680.8	0.45	987	197	790						
18	Academic Block - School of Performing & Visual Arts Phase I	69.5 m x 50 m	347.5	0.45	504	101	403						

19	Academic Block - School of Education Phase I	53 m x 50 m	265	0.45	384	77	307
20	Auditorium	50 m x 50 m	250	0.45	363	73	290
21	Multipurpose Hall	30 m x 25 m	75	0.45	109	22	87
22	Admisnistrative Block II	60 m x 50 m	300	0.45	435	87	348
23	Academic Block - I School of Agriculture in Phase I	80 m x 50 m	400	0.45	580	116	464
24	Academic Block - II School of Agriculture in Phase I	80 m x 50 m	400	0.45	580	116	464
25	Academic Block - III School of Agriculture in Phase I	80 m x 50 m	400	0.45	580	116	464
26	Academic Block - I School of Engineering in Phase I	80 m x 50 m	400	0.45	580	116	464
27	Academic Block - II School of Engineering in Phase I	80 m x 50 m	400	0.45	580	116	464
28	Academic Block - III School of Engineering in Phase I	80 m x 50 m	400	0.45	580	116	464
29	Incubation Centre	60 m x 50 m	300	0.45	435	87	348
30	Expansion of Existing Academic Block - School of Earth &	60 m x 50 m	300	0.45	435	87	348
31	Expansion of Existing Academic Block - School of Commerce &	60 m x 50 m	300	0.45	435	87	348
32	Expansion of Existing Academic Block - School of Tourism, Travel &	60 m x 50 m	300	0.45	435	87	348
33	Expansion of Existing Academic Block - School of Performing &	60 m x 50 m	300	0.45	435	87	348
34	Expansion of Existing Academic Block in Phase II	60 m x 50 m	300	0.45	435	87	348
35	Examination / CoE Centre	40 m x 40 m	160	0.45	232	46	186
36	Computer & Informatics Centre	40 m x 25 m	100	0.45	145	29	116
37	Central Instrumentiation Lab	50 m x 40 m	200	0.45	290	58	232
38	Central Library	60 m x 50 m	300	0.45	435	87	348
39	University School	50 m x 40 m	200	0.45	290	58	232
40	Expansion of Existing Academic Block - School of Agriculture in	60 m x 50 m	300	0.45	435	87	348

41	Expansion of Existing Academic Block - School of Agriculture in	60 m x 50 m	600	0.45	870	174	696
42	Expansion of Existing Academic Block - School of Agriculture in	60 m x 50 m	600	0.45	870	174	696
43	Expansion of Existing Academic Block - School of Agriculture in	60 m x 50 m	300	0.45	435	87	348
44	Expansion of Existing Academic Block - School of Engineering in	60 m x 50 m	300	0.45	435	87	348
45	Expansion of Existing Academic Block - School of Engineering in	60 m x 50 m	300	0.45	435	87	348
46	Expansion of Existing Academic Block - School of Engineering in	60 m x 50 m	600	0.45	870	174	696
47	Expansion of Existing Academic Block - School of Engineering in	60 m x 50 m	300	0.45	435	87	348
48	Disaster Training Centre	40 m x 25 m	100	0.45	145	29	116
49	Student Activity Centre	20 m x 20 m	40	0.45	58	12	46
50	Academic Staff College Building	40 m x 25 m	100	0.45	145	29	116
51	Sub Station	75 m x 60 m	675	0.45	979	196	783
52	Stadium	200 m x 131.5 m	526	0.45	763	229	534
53	Indoor Sports Hall / Gym	50 m x 30 m	150	0.45	218	44	174
54	Water Sports Complex	20 m x 10 m	40	0.45	58	12	46
55	Faculty Club	40 m x 20 m	96	0.45	139	28	111
56	STP - I	40 m x 30 m	180	0.45	261	52	209
57	Girls Hostel I	65 m x 29 m	226.2	0.45	328	66	262
58	Girls Hostel II	60.1 m x 40 m	288	0.45	418	84	334
59	International Hostel - II	50 m x 38 m	228	0.45	331	66	265
60	Guest House	50 m x 16.3 m	97.8	0.45	142	28	114
61	Shopping Arcade	40 m x 20.6 m	115.36	0.45	167	33	134
62	Health Centre	32 m x 16.75 m	71.68	0.45	104	21	83
63	Transit Hostel I	61 m x 59.6 m	487.2	0.45	706	141	565

64	Transit Hostel II	66 m x 60 m	554.4	0.45	804	161	643						
65	Transit Hostel III	80.2 m x 40 m	449.12	0.45	651	130	521						
66	Transit Hostel IV	100 m x 80.2 m	1122.8	0.45	1628	326	1,302						
67	Transit Hostel V	60 m x 44.75 m	342.3	0.45	496	99	397						
68	Transit Hostel VI	179 m x 60 m	1503.6	0.45	2180	436	1,744						
69	Girls Hostel - III	400 m x 50 m	2800	0.45	4060	812	3,248						
70	Hon'ble VC Residence	50 m x 40 m	407	0.45	590	118	472						
71	WTP	44 m x 31.25 m	165	0.45	239	48	191						
72	STP - II	50 m x 45 m	225	0.45	326	65	261						
73	Type III Quarters - III	64 m x 40 m	256	0.45	371	74	297						
74	STP - III	38 m x 28 m	212.8	0.45	309	62	247						
75	Main Road	8046 m x 8 m	7991.52	0.35	10789	5,395	5,394						
76	Pump House	30 m x 20 m	150	0.35	625	-	625						
77	Water Pipe Line	3586 m x 1 m	358.6	0.45	942	942.00	-						
78	Sewerage Line	6770 m x 1 m	677	0.45	1404	1,404.00	-						
79	STP - IV	55 m x 51 m	280.5	0.35	407	81.40	326						
	Total		**50151**		**73595**	**22308**	**51,287**		**37320**	**-**	**53550**	**51287**	

Nodal Officer
Central University of Himachal Pradesh
North Campus, Dharamshala, Distt. Kangra H.P.

Disposal of Muck

As per the existing proposal for the construction of Central University North Campus at Dharamshala about 50409 m^3 of muck is to be generated. The total quantity of muck to be generated considering 45% / 35% swelling factor is 73595 m^3. It is proposed that 37320 m^3 of muck shall be utilized for backfilling of the construction areas and protection works. Hence the balance quantity of muck to be disposed off shall be about 51287 m^3. The Muck shall be disposed off at the Non Forest Land proposed for construction of Playgrounds to uplift the level of Playground from the river bed for protection and levelling of Parking areas and Open Areas for Park. The details are given below :

Muck Required for the Levelling of the Areas

Sr. No.	Component	Size	Height (m)	Qty of Muck Required (cu. m)	Qty of Muck Produced (cu m)
1	Playground I	80 m x 75 m	1.40	8400	51287
2	Playground II	90 m x 76 m	1.25	8550	
3	Parking Areas	150 m x 120 m	1.25	22500	
4	Open Area Gym & Park	100 m x 60 m	1.15	6900	
5	Open Park	120 m x 40 m	1.50	7200	
	Total	**37320**	**1.34 Avg.**	**55550**	**51287**

Rehabilitation Proposal

Since there is no displacement of any population due to the Construction of Central University North Campus, there will be no rehabilitation problem.

Afforestation

Compensatory afforestation shall be done by the Forest Department on double the degraded forest land proposed for diversion, however trees shall be planted at appropriate places in

the vicinity of the proposed Central University to create green lungs and healthy environment and reduce the pollution levels in the area. The species to be planted shall be decided by the forest Department, state government of Arunachal Pradesh

Retaining walls

RR Masonry / GI Wire crate filled with boulders/ stones reclaimed from excavation of various project components shall be used for back-fillings of the construction area, construction of retaining walls for retaining the surplus excavated earth / muck as per standards adopted with due consideration to site condition.

Use of muck/debris

The most of the muck/debris obtained from the Civil Components shall be used for manufacture of aggregates for construction work, back filling in wire creates, stone masonry works and breast wall, etc. and the balance shall be dumped in the Playgrounds proposed in the Non Forest Land.

Plantation

The affected area and various sites shall be properly leveled after the completion of the project. The area will be landscaped the plantation carried out so as to merge with the natural surroundings.

Dated: 15-06-2022
Place : Dharamshala

Nodal Officer
Central University, North Campus
Dharamshala, District Kangra

Countersigned by :

Divisional Forest Officer
Dharamshala Forest Division
Dharamshala

Divisional Forest Officer,
Dharamshala Forest Division,
Dharamshala (Kangra) H. P.