Laboratory	Anand Raj Construction, F-159, P.C. Colony, Kankarbagh, Patna, Bihar		
Accreditation Standard	ISO/IEC 17025: 2005		
Certificate Number	TC-7266	Page 1 of 1	
Validity	18.05.2018 to 17.05.2020	Last Amended on	

SI.	Product / Material	Specific Test	Test Method Specification	Range of Testing /
	of Test	Performed	against which tests are	Limits of Detection
			performed	

## MECHANICAL TESTING

I.	SOIL AND ROCK			
	Soil	Moisture content	IS 2720 (Part 2)	0.7 % to 50 %
		Specific gravity	IS 2720 (Part 3 / Section 1)	2.55 to 2.82
		Grain Size Analysis	IS 2720 (Part 4)	0.075 mm to 4.75 mm
		Liquid Limits	IS 2720 (Part 5)	15 % to 70 %
		Plastic Limit	IS 2720 (Part 5)	15 % to 26 %
		Compaction (Light)	IS 2720 (Part 7)	MDD: 1.40 g/cc to 2.30 g/cc OMC: 3 % to 30 %
		Compaction (Heavy)	IS 2720 (Part 8)	MDD: 1.40 g/cc to 2.16 g/cc OMC: 3 % to 30 %
		Triaxial Test (UU)	IS 2720 (Part 11)	0.1 kg/cm <sup>2</sup> to 3 kg/cm <sup>2</sup> 1° to 40 °
		Direct Shear Test	IS 2720 (Part 13)	0.013 kg/cm <sup>2</sup> to 33 kg/cm <sup>2</sup> 1° to 40 °
		California Bearing Ratio (CBR)	IS 2720 (Part 16)	1 % to 35 %
		Free-Sweel-Index	IS 2720 (Part 40)	5 % to 80 %
		Consolidation	IS 2720 (Part 15)	0.001 cm <sup>2</sup> /s to 1 cm <sup>2</sup> /s
2.	Rock	Water absorption	IS 1124	0.3 % to 3 %
		Density	IS 1124	2 g/cc to 2.9 g/cc
		Point load strength	IS 8764	10 kN to 450 kN
		Unconfined compressive strength (UCS)	IS 9143	10 kg/cm <sup>2</sup> to 3000 kg/cm <sup>2</sup>