The additional n	ninimum requirem	ent of field test and	d laboratory test fo	or SI (basement	construction)
			· ·· · · · · · / ···· ·		

Field	Test			
1	Boreholes spacing will vary from site but generally be at intervals of	*	Accepted	
	10m – 30m along the length of the wall.	(bo	rehole Intervals should depend on	
		soil	condition)	
2	An adequate knowledge of the ground water levels (Stand pipes or	*	Accepted	
	piezometers should be installed in the drilled boreholes to determine and	(sta	standpipe should be 2/3 of borehole	
	confirm the ground water conditions at site)	dep	depth)	
3	Permeability test for dominant soil layers (should consider the Seasonal	*	Consult with geotechnical engineer.	
	fluctuation of ground water.	*	SI report must include Permeability	
			test.	
	(must be done for structures with 3 basements and above. (or) must be			
	done for 12 m depth basement and above.)			
4	Elastmeter measurement	*	Pressure meter should also be used.	
	(Determination of E from SPT or Elastmeter)	*	Pressure meter or Elastmeter	
			measurement should be done on	
	(must be done for structures with 3 basements and above. (or) must be		projects which include 3 basements	
	done for 12m depth basements and above.)		and more.	
		*	Determination of E should be done	
			with case by case.	

Laboratory Test					
1	Particles size distribution by sieve analysis	✤ Accepted			
2	Atterberg limits tests to determine liquid limit , plastic limit and plasticity	✤ Accepted			
	index.				
3	Test to determine moisture content , porosity , unit weight , specific gravity.	✤ Accepted			
4	Shear strength tests (Unconsolidated Undrained triaxial test (UU)	 Direct shear test or UU test should 			
		be selected according to soil nature.			
5	Isotropic Consolidated Undrained triaxial test with pore water pressure	✤ (must be done for structures with 3			
	measurements	basements and above. (or) must be			
		done for 12m depth basements and			
		above.)			
6	Unconfined compression test (UCT)	 Need for cohesive soil. 			
7	Consolidation test	 Need for cohesive soil. 			
8	Test on rock cores using UCT for strength and strain gauges can be attached	✤ Accepted			
	to the rock sample to measure modulus of the rock from the test.	Strain gauges should be attached to			
		the rock sample to measure			
		modulus of the rock from the test			

Remarks: The above mentioned tests should be carried out at the bore holes along the wall

Notes***

Seepage pressures

- Determination of seepage pressure should be done according to case by case only.
- In-situ permeability test should be done for structures with 3 basements and more.