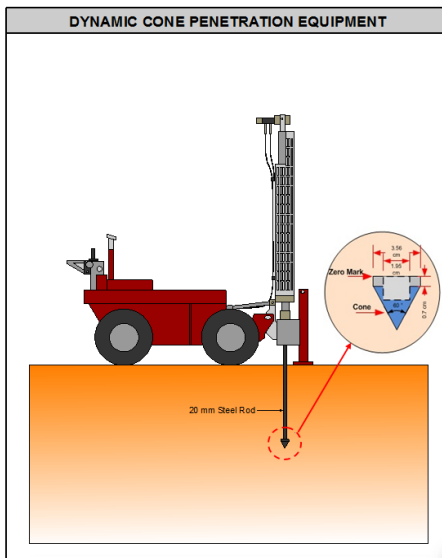


## Schematic of DCPT



## Field Test



Dynamic cone penetration test (DCPT) is an in-situ test and developed at 1959. This test is used to determine the in-situ strength of undisturbed soil or compacted material.

DCPT is carried out in accordance with ASTM D6951. The DCP equipment comprises of a 60° cone, driving rods, measuring tape or ruler and a rammer with specified weight of 30 kg with drop height of 20 cm.

The borehole at the test location is drilled by using the rotatory wash drilling method. The Dynamic Cone Penetrometer (DCP) consists of two shafts which are fitted together to form a single shaft in operation. The cone is fitted at the lower part of the shaft. When the test is carried out the cone is lowered down and positioned at the bottom of the borehole. Then the cone is driven into the ground by hammering action of the rammer. The penetration per blow which represents the stiffness of the soil is recorded for each 10 cm. The equivalent SPT N obtained from DCPT results when compared with cone penetration test results and SPT N showed good consistency. The blow count from DCP can be correlated with the soil properties and the other in-situ testing such as SPT and CBR, etc to determine the required soil parameter.

## Results

