

3. MAPPING OF INDIAN INSTITUTE OF SCIENCE CAMPUS

Principal Investigator : Mr.H. Hemanth Kumar, KSCST

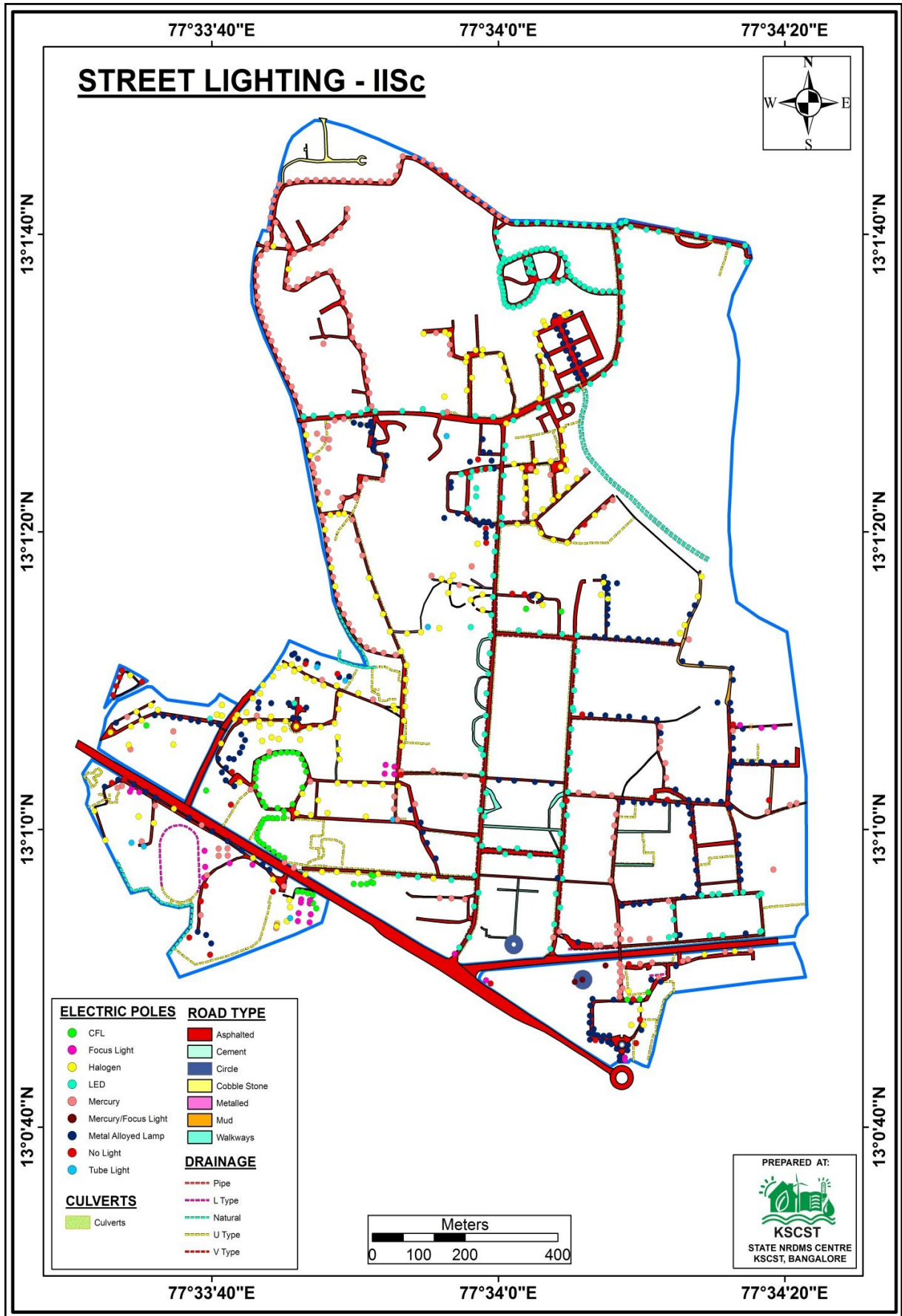
Background:

Prof Amruthur Bharadwaj, Chairman, Robert Bosch Center for Cyber Physical Systems during discussion with Mr H Hemanth Kumar, Principal Scientific Officer of Karnataka State Council for Science and Technology (KSCST) held on 16th March, 2017 requested KSCST to generate GIS layers of Indian Institute of Science to showcase smart city applications specifically in the areas of networked street lighting.

Progress :

The objective of the mapping is to generate seamless GIS layers of IISc using high resolution satellite imageries, GPS, mapping software and extensive field survey. The task involved surveying and mapping of buildings (category/type/utility/height/area), streets (mud/asphalted/ concreted/side-walks/ foot paths etc), street lighting (type and category of lighting including height of the pole and pole material), water facilities (OHT/GWS), drainages & culverts, parking, playgrounds, location of CCTV (height/pole material/lighting), Air strip etc., using publicly available high resolution satellite imageries and GPS. The surveying and mapping of spatial layers took nearly 140 man days and was carried out during April-May, 2017. The seamless GIS layer layers created in GIS lab was integrated with the spatial/non-spatial attributes collected during field work and further each of these features were linked to geo-tagged time-stamped photographs. This activity took 35 man days to complete.

Mr H Hemanth Kumar made a presentation of Indian Institute of Science Campus mapping on 29/06/2017 at Robert Bosch Centre. Col. Arun Sharma, Project Engineer cum-Estate-officer, CCMD also participated in the discussion. The GIS layers have also been shared with Prof Amruthur Bharadwaj and Col. Arun Sharma, Project Engineer cum Estate Officer, CCMD, IISc for further integration with the activities of IISc.



The seamless GIS layer for IISc Campus has been created incorporating all the infrastructure of the Campus.

