

## PREFACE

Web based GIS application assists companies to improve infrastructure operations by managing, supervising, controlling their assets. In this research, Open-source technologies has been employed to build web GIS application such as leaflet JS library for mapping, Geoserver, Tomcat Apache. The system consists of different vector layers like Main line, Lateral Line, Lift station, Manholes. PostgreSQL database is used to handle spatial data with extension of PostGIS. PostGIS is having more than 300 functions to handle geometry and attributes of spatial data.

Basic functionalities of web app zoom in zoom out, scale, search tab, map print, zoom to layer, measurement tool, Basemap gallery incorporated in application enables the user friendly and responsive behaviour. Effective energy utilization is principal factor for any organization, to keep track and monitor web GIS is the adopted approach which will also vitally tool in decision making process.