

## **Multibeam and Laser – Combined High Resolution Hydrographic Surveying for Civil Engineering Project Support**

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Many towns and cities with port, river and sea frontage are in the process of developing these areas either for commercial offices or residential development. The state of the dock walls and water frontage has historically been achieved by diver surveys and traditional land survey methods. Access to these areas can often be difficult and visibility is normally very limited for the divers. A good example of the scale of this new development is the Docklands region in the East of London, UK.

NetSurvey Limited and the Port of London Authority have undertaken a number of surveys for Civil Engineering companies to ascertain the state of these walls using high resolution multibeam data. The quality and accuracy of the results has astounded the Civil Engineering Companies involved. Recently we completed a survey using Laser Scanning Data for the topographic features as well as multibeam data for the hydrographic features, both being collected at the same time from the same survey platform.

This paper describes the process and the results of these surveys. It details the issues involved with surveying in these types of areas and how they were overcome. The paper concludes with a look into the size of this potential new market for survey companies and also other areas where this combination of technology could be used to good affect.