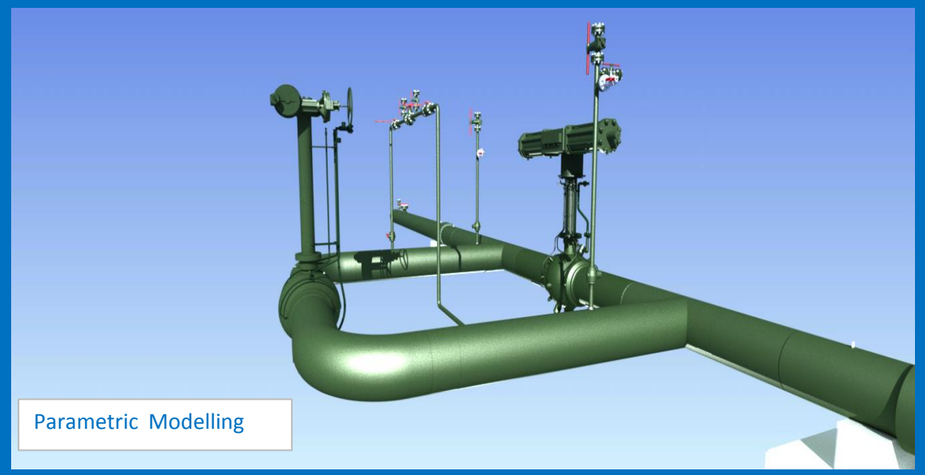
BUILDING INFORMATION MODELLING DASHBOARD

October 2014



Parametric Modelling

Stakeholder Engagement and Collaborative Working

1. Presented BIM progress to IGEM North East Region - 16th October

2. Presented at Low Carbon Network + Innovation Conference, Aberdeen on 21st - 22nd October.

3. Meeting with Safety Engineering to develop 3D hazardous areas and safety related data tags

4. Attending Gas Transmission Day to demonstrate Unity and Oculus Rift Technology - 25th November.

October 2014 Update

Building Information Modelling (BIM) Phase 2 is funded through the Network Innovation Allowance (NIA) scheme.

The 3D laser scanning and photogrammetry standard developed by Jacobs is now available for use. The standard can be applied to surveys for both gas transmission and distribution above ground installations and electrical substations.

Oculus Rift (very low cost Virtual Reality(VR) headset - £200) was utilised as part of a Feeder 9 challenge and review meeting to demonstrate the advantages of the immersive technology and potential for remote collaboration, cutting down on travel time, costs and carbon footprint. The use of VR has been submitted as a collaborative best practice by Capita and Premtech.

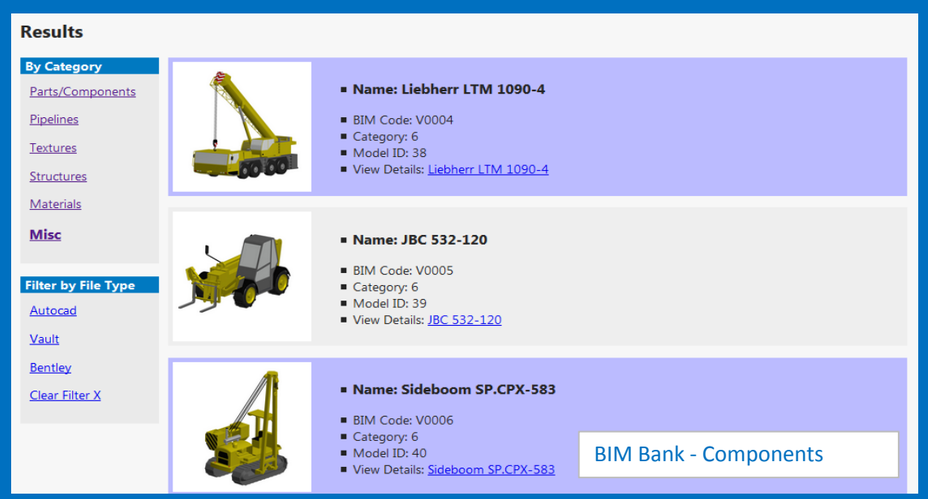
Parametric modelling has also been used to develop stopple and minimum offtake connection assemblies (including temporary working area requirements) in accordance National Grid technical specifications.

Unity (games engine) continues to be tested for site layout reviews and training needs. Premtech have modelled Tirley Pressure Reduction Installation within the unity environment to provide the basis for training demonstrations for routine and non routine operations being developed by Morsons. As an exe file, it runs on any laptop, without the need for specialist hardware or software.

Photogrammetry - Recompression Model

October Key Outputs

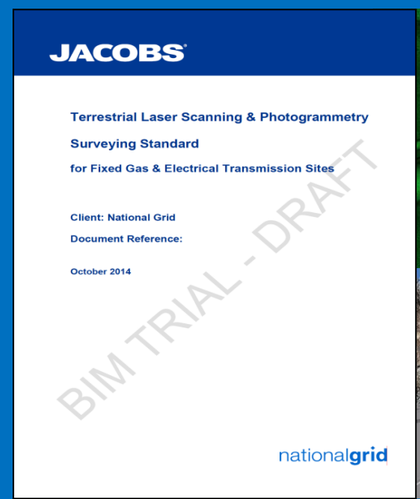
1. Minimum offtake connection model generation based on GTAM / Capital Delivery standardised design.
2. Development of stopple parametric components / assemblies.
3. Completion of Unmanned Aerial Vehicle photogrammetric survey and generation of point cloud model for virtual reality training module.
4. Development of best practice for VR technology for design review and customer engagement.

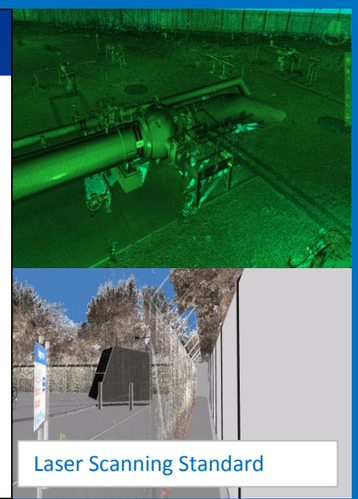


BIM Bank - Components

Monthly Lookahead - November 2014

1. Refinement of Minimum Offtake Connection models, focussing on cost and carbon reductions.
2. Commence development of workflows for BIM with CADline.
3. Development of Recompression Storyboard for training demonstration
4. Demonstration of augmented reality technology to aid on site identification of buried assets / pipelines.





Laser Scanning Standard

www.smarternetworks.org

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