# Article information:

Full-scale tests on laterally loaded railway overhead line equipment mast foundations  
<https://www.icevirtuallibrary.com/doi/epdf/10.1680/jgeot.20.P.312>

# Article summary:

1. The article discusses the use of full-scale tests to extend the OLEMI design methodology to 610 mm diameter CHS steel piles and high in-service loads associated with Series 1 OLE masts.

2. The paper reports a series of field tests conducted on piles installed in a railway embankment at the Network Rail High Marnham test track in Nottinghamshire, UK.

3. The main factor militating against the use of OLEMI was that, at the higher end, the associated loads were outside (greater than) those in the empirical evidence base that supports and justifies its use.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy as it provides detailed information about full-scale tests conducted on laterally loaded railway overhead line equipment mast foundations. It is well-researched and provides evidence for its claims by citing relevant sources such as Eurocode 7 (BSI, 2014a, 2014b), UIC-ORE (1957), Atkins (2010), Krechowiecki-Shaw & Alobaidi (2015), Brinch (1961), Broms (1964a, 1964b), Fleming et al. (1994, 2009) and API (2014). Furthermore, it also provides an overview of the test site and piezocone tests carried out prior to pile installation which adds credibility to its claims.

However, there are some potential biases present in the article which could be addressed. For instance, it does not provide any counterarguments or explore alternative approaches which could be used instead of OLEMI for determining pile lengths for new Series 1 OLE structures used on GWEP. Additionally, it does not mention any possible risks associated with using this approach or discuss any potential drawbacks or limitations of using this method which should have been noted for providing a balanced view of the topic. Moreover, it does not provide any information about how these results can be applied in practice or what implications they may have for future research or development in this area which could have been explored further.

# Topics for further research:

* Alternative approaches for determining pile lengths for OLE structures
* Risks associated with using OLEMI for pile length determination
* Drawbacks of using OLEMI for pile length determination
* Implications of full-scale tests on laterally loaded railway overhead line equipment mast foundations
* Application of full-scale tests results in practice
* Future research and development in laterally loaded railway overhead line equipment mast foundations

# Report location:

<https://www.fullpicture.app/item/c357ec68334696a6406df9c0a62ed91f>