

## Epping Forest District Council Representations to the Draft Local Plan Consultation 2016 (Regulation 18)

Stakeholder ID	3473	Name	National Grid	Amex Foster Wheeler on behalf of National Grid
Method	Letter			
Date	21/11/2016			

This document has been created using information from the Council's database of responses to the Draft Local Plan Consultation 2016. Some elements of the full response such as formatting and images may not appear accurately. Should you wish to review the original response, please contact the Planning Policy team: [ldfconsult@eppingforestdc.gov.uk](mailto:ldfconsult@eppingforestdc.gov.uk)

### Letter or Email Response:

National Grid has appointed Amec Foster Wheeler to review and respond to development plan consultations on its behalf. We are instructed by our client to submit the following representation with regard to the current consultation on the above document. National Grid owns and operates the high voltage electricity transmission system in England and Wales and operates the Scottish high voltage transmission system. National Grid also owns and operates the gas transmission system. In the UK, gas leaves the transmission system and enters the distribution networks at high pressure. It is then transported through a number of reducing pressure tiers until it is finally delivered to our customers. National Grid own four of the UK's gas distribution networks and transport gas to 11 million homes, schools and businesses through 81,000 miles of gas pipelines within North West, East of England, West Midlands and North London. To help ensure the continued safe operation of existing sites and equipment and to facilitate future infrastructure investment, National Grid wishes to be involved in the preparation, alteration and review of plans and strategies which may affect our assets. Specific Comments - Proposed sites crossed or in close proximity to National Grid infrastructure: Gas Distribution • SR-0153 (our reference GD95) • SR-0390 (our reference GD96) • SR-0158A (our reference GD97) Please see enclosed plans referenced GD95, GD96 & GD97 at Appendix 2. The proposed Residential Site is crossed by a National Grid high pressure and intermediate pressure pipelines. Our underground pipelines are protected by permanent agreements with landowners or have been laid in the public highway under our licence. These grant us legal rights that enable us to achieve efficient and reliable operation, maintenance, repair and refurbishment of our gas distribution network. Hence we require that no permanent structures are built over or under pipelines or within the zone specified in the agreements, materials or soil are not stacked or stored on top of the pipeline route and that unrestricted and safe access to any of our pipeline(s) must be maintained at all times. If further information is required in relation to an easement please contact Spencer Jefferies, Development Liaison Officer at [box.landandacquisitions@nationalgrid.com](mailto:box.landandacquisitions@nationalgrid.com) Please note that gas distribution pipeline diversions may take several years and might not be possible at all. Electricity Transmission • SR-0069/33 (our reference ET123) Please see enclosed plan referenced ET123 at Appendix 1. The proposed Residential Site is crossed by a National Grid high voltage electricity transmission overhead line. National Grid prefers that buildings are not built directly beneath its overhead lines. This is for two reasons, the amenity of potential occupiers of properties in the vicinity of lines and because National Grid needs quick and easy access to carry out maintenance of its equipment to ensure that it can be returned to service and be available as part of the national transmission system. Such access can be difficult to obtain without inconveniencing

### Response to the Draft Local Plan Consultation 2016 (Regulation 18)

Stakeholder ID	3473	Name	National Grid
----------------	------	------	---------------

and disturbing occupiers and residents, particularly where properties are in close proximity to overhead lines. National Grid seeks to encourage high quality and well planned development in the vicinity of its high voltage overhead lines. Land beneath and adjacent to the overhead line route should be used to make a positive contribution to the development of the site and can for example be used for nature conservation, open space, landscaping areas or used as a parking court. National Grid, in association with David Lock Associates has produced 'A Sense of Place' guidelines, which look at how to create high quality development near overhead lines and offers practical solutions which can assist in avoiding the unnecessary sterilisation of land in the vicinity of high voltage overhead lines. Potential developers of the sites should be aware that it is National Grid policy to retain our existing overhead lines in-situ. The relocation of existing high voltage overhead lines will only be considered for projects of national importance which has been identified as such by central government. The statutory safety clearances between overhead lines, the ground, and built structures must not be infringed. To comply with statutory safety clearances the live electricity conductors of National Grid's overhead power lines are designed to be a minimum height above ground. Where changes are proposed to ground levels beneath an existing line then it is important that changes in ground levels do not result in safety clearances being infringed. National Grid can, on request, provide to developers detailed line profile drawings that detail the height of conductors, above ordnance datum, at a specific site. 'A Sense of Place' is available from National Grid and can be viewed at: <http://www.nationalgrid.com/uk/Senseofplace/Download/> Further information regarding development near overhead lines and substations is available here:

[http://www.nationalgrid.com/uk/LandandDevelopment/DDC/devnearohl\\_final/pdf/brochure.htm](http://www.nationalgrid.com/uk/LandandDevelopment/DDC/devnearohl_final/pdf/brochure.htm) General information: Electricity Transmission National Grid has four high voltage overhead lines (listed below) within Epping Forest District Council's administrative area. These form an essential part of the electricity transmission network in England and Wales. Line Ref. Description ZB Route 275kV two circuit route from Waltham Cross substation in Epping Forest to Elstree substation in Hertsmere. 4ZM Route 400kV two circuit route from Waltham Cross substation in Epping Forest to Pelham substation in East Hertfordshire. ZBC Route 400kV two circuit route from Waltham Cross substation in Epping Forest to Tottenham substation in Haringey. ZBD Route 400kV two circuit route from Waltham Cross substation in Epping Forest to Tottenham substation in Haringey. National Grid has provided information in relation to electricity transmission assets via the following internet link: <http://www2.nationalgrid.com/uk/services/land-and-development/planning-authority/shape-files/> Gas Transmission National Grid has four high pressure gas transmission pipelines within the administrative area of Epping Forest District Council: Pipeline Feeder Detail FM18 Matching Green to Rye House PS FM18 Matching Green to Stapleford Tawney FM05 Roxwell to Abridge FM05 Abridge to Luxborough Lane National Grid has provided information in relation to gas transmission assets via the following internet link:

<http://www2.nationalgrid.com/uk/services/land-and-development/planning-authority/shape-files/> National Grid requests that any High Pressure Major Accident Hazard Pipelines (MAHP) are taken into account when site options are developed in more detail. These pipelines form an essential part of the national gas transmission system and National Grid's approach is always to seek to retain our existing transmission pipelines in situ. Gas Distribution National Grid has a high number of gas distribution apparatus within the administrative area of Epping Forest District Council. This includes:

- Low Pressure (LP) and Medium Pressure (MP) (below 2 bar) Gas Pipes and associated equipment
- Two High Pressure (HP) and one intermediate pressure (IP) (above 2 bar) Gas Pipelines and associated equipment as listed below:

Pipe Pressure Description HP 2443 (NOP) - Hedgerley to Romford 30" HP 2440 Chigwell to Beckton 24" IP 0038 Sewardstone to Chingford 16" The first point of contact for all works within the vicinity of gas distribution assets is Plant Protection ([plantprotection@nationalgrid.com](mailto:plantprotection@nationalgrid.com)). Please note that Gas pipeline diversions may take up to three years, please bear this in mind when engaging with National Grid. National Grid may have a Deed of Easement for each asset which prevents the erection of permanent/ temporary buildings, or structures, changes to existing ground levels, storage of materials etc. Additionally written permission will be required before any works commence within the National Grid easement strip, and a deed of consent is required for any crossing of the easement. In the first instance please consider checking with the Land Registry for the development area. If further information is required in relation to an easement please contact Spencer Jefferies, Development Liaison Officer,

[box.landandacquisitions@nationalgrid.com](mailto:box.landandacquisitions@nationalgrid.com) Gas transmission and HP GD lines in site allocations Our underground pipelines are protected by permanent agreements with landowners or have been laid in the public highway under our licence. These grant us legal rights that enable us to achieve efficient and reliable operation, maintenance, repair and refurbishment of our gas transmission network. Hence we require that no permanent structures are built over or under pipelines or within the zone specified in the agreements, materials or soil are not stacked or stored on top of the pipeline route and that unrestricted and safe access to any of our pipeline(s) must be maintained at all times. Local

## Response to the Draft Local Plan Consultation 2016 (Regulation 18)

authorities have a statutory duty to consider applications for development in the vicinity of high pressure (above 7 bar) pipelines and to advise the developer on whether the development should be allowed on safety grounds on rules provided by HSE. This advice is provided by the HSE Land Use Planning (LUP) Public Safety Advice. The relevant HSE guidance can be accessed via the following link: <http://www.hse.gov.uk/landuseplanning/methodology.pdf> In order to ensure that National Grid's pipelines are protected from uncontrolled development in the vicinity of the pipeline please also read the following guidance prepared by National Grid: ? Specification for Safe Working in the Vicinity of National Grid High Pressure Gas Pipelines and Associated Installations - Requirements for Third Parties [http://www.nationalgrid.com/NR/rdonlyres/50ACAC0A-ED26-41A7-91FA-83163A98270F/23790/TSPSSW22\\_J537\\_Rev0807.pdf](http://www.nationalgrid.com/NR/rdonlyres/50ACAC0A-ED26-41A7-91FA-83163A98270F/23790/TSPSSW22_J537_Rev0807.pdf) ? Gas Transmission Underground Pipelines - Guidance [http://www.nationalgrid.com/NR/rdonlyres/446009BF-ABB5-42E1-B9FE-44E90D577DD5/18653/APTGasGuidance\\_2\\_.pdf](http://www.nationalgrid.com/NR/rdonlyres/446009BF-ABB5-42E1-B9FE-44E90D577DD5/18653/APTGasGuidance_2_.pdf) Should these sites be taken forward as development sites in the future, the developers should be made aware of the above issues. National Grid Gas Distribution would like to take this opportunity to advise prospective land developers and the local authority of the following: Crossing of assets: Construction traffic should only cross the pipeline at locations agreed with National Grid. To facilitate these crossings protection or diversion may be required; depending on site condition and pipe parameters. Cable Crossings: For all assets, the contractor / developer will need to consider the clearance and necessary protection measures. The crossing must be perpendicular to the asset. The crossing may require a deed of consent to be agreed prior to work commencing. Piling: No piling should take place within 15m of gas distribution assets without prior agreement from a National Grid Representative. Pipeline Safety: National Grid will need to ensure that access to the pipelines is maintained during and after construction. Our HP/IP pipelines are normally buried to a depth cover of 1.1 metres, however; actual depth and position must be confirmed on site by trial hole investigation to be monitored by a National Grid representative. Ground cover above gas distribution mains should not be reduced or increased. Our MP/LP mains will not be as deep as the pipelines. A National Grid representative may be required to monitor any excavations or any embankment or dredging works within 3 metres of a HP/IP pipeline or within 10 metres of an Above Ground Installations (AGI). Monitoring of works in relation to MP/LP assets may be required by a National Grid representative. National Grid steel pipelines are cathodically protected to prevent corrosion to the pipeline. For further information please refer to SSW/22 (see further advice section below). If you require any further information in relation to the above please contact National Grid's Plant Protection team via the email address at the top of this letter. Electricity Distribution UK Power Networks owns and operates the local electricity distribution network in Epping Forest District Council. Contact details can be found at [www.energynetworks.org.uk](http://www.energynetworks.org.uk). Appendices - National Grid Assets Please find attached in: • Appendix 1 provides maps of the sites referenced above in relation to the affected National Grid Transmission assets outlined above. • Appendix 2 provides maps of the sites referenced above in relation to the affected National Grid Gas Distribution (Intermediate Pressure /High Pressure) assets outlined above. Further Advice: National Grid is happy to provide advice and guidance to the Council concerning our networks. If we can be of any assistance to you in providing informal comments in confidence during your policy development, please do not hesitate to contact us. In addition the following publications are available from the National Grid website or by contacting us at the address overleaf: ? National Grid's commitments when undertaking works in the UK - our stakeholder, community and amenity policy; ? Specification for Safe Working in the Vicinity of National Grid High Pressure Gas Pipelines and Associated Installations - Requirements for Third Parties; and ? A sense of place - design guidelines for development near high voltage overhead lines. ? T/SP/SSW22 - Specification for safe working in the vicinity of National Grid high pressure gas pipelines and associated installations - requirements for third parties. <http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=33968> ? IGE/SR/18 - Safe working practices to ensure the integrity of gas pipelines and associated installations. ? HS(G)47 - Avoiding Danger from Underground Services. Please remember to consult National Grid on any Development Plan Document (DPD) or site-specific proposals that could affect our infrastructure. We would be grateful if you could add our details shown below to your consultation database: •Development must be sensitive to landscape character

## Response to the Draft Local Plan Consultation 2016 (Regulation 18)