

**ENGINEERING**

**THE NATIONAL GRID GAS PLC (WESTERN GAS NETWORK PROJECT)  
COMPULSORY PURCHASE ORDER 2022**

**SUMMARY STATEMENT OF EVIDENCE**

**JORDAN WRIGHT  
LEAD PROJECT MANAGER  
NATIONAL GRID GAS PLC**

## 1. **QUALIFICATIONS AND EXPERIENCE**

- 1.1 I am Jordan Wright, Lead Project Manager of the Western Gas Network project ("the Project") at National Gas Transmission Plc<sup>1</sup> ("National Gas"). National Gas own and operate the Gas National Transmission System ("NTS") in the UK.

## 2. **OVERVIEW OF THE PROJECT**

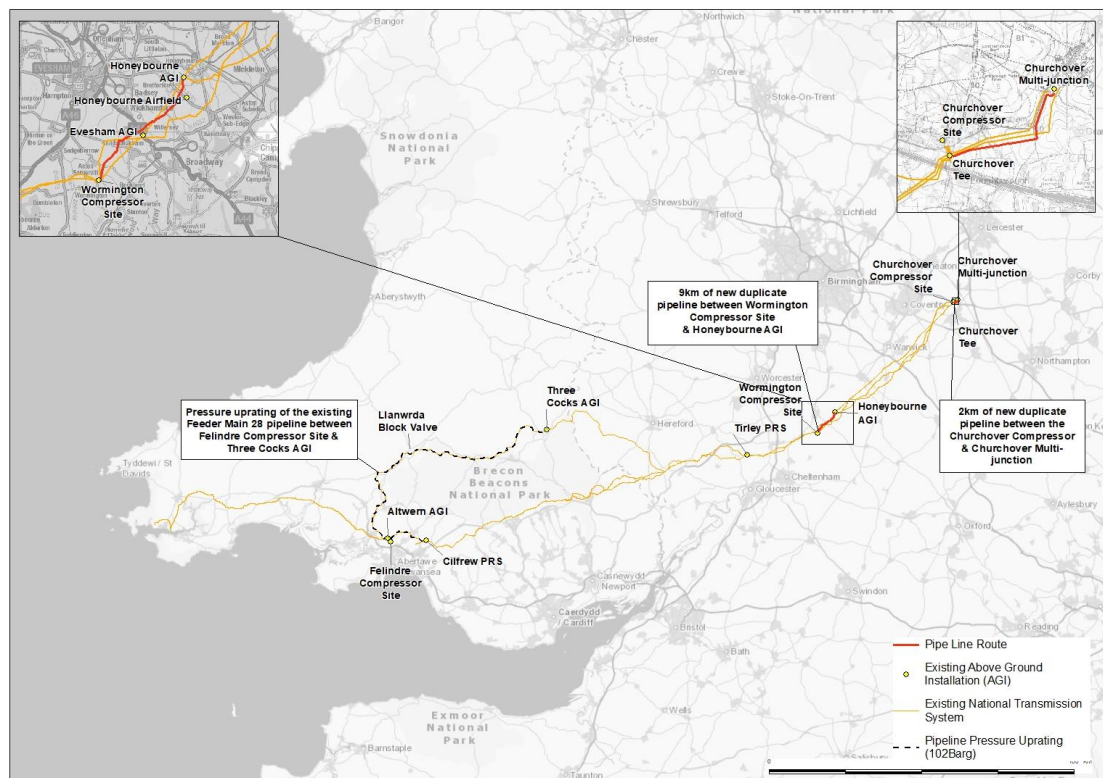
- 2.1 The Project is National Gas' response to South Hook Gas Company Limited's ("SHGCL") Planning and Advanced Reservation of Capacity Agreement ("PARCA") application to reserve capacity to flow approximately 15 million cubic metres of gas per day on to the NTS from Milford Haven Aggregated System Entry Point.
- 2.2 National Gas's duties under the Gas Act 1986 require it to develop and maintain an efficient and economical pipeline system for the conveyance of gas, and to comply, so far as it is economical to do so, with any reasonable request by gas shippers to connect and convey gas to that system (i.e. PARCA requests).
- 2.3 Following a detailed strategic options assessment<sup>2</sup>, the Project was identified as the most economic and efficient solution to meet SHGCL's PARCA request.
- 2.4 The National Grid Gas Plc (Western Gas Network Project) Compulsory Purchase Order 2022 ("the Order") (**CD C1**) is required to facilitate delivery of the Project.

## 3. **PHYSICAL COMPONENTS AND WORKS REQUIRED TO CONSTRUCT THE PROJECT**

- 3.1 The Order (**CD C1**) has been made to enable National Gas to acquire the land and rights needed for the construction, operation, maintenance and protection of the Project, the key components of which comprise:
- 3.1.1 One new pipeline approximately 9km long, running from Wormington Multi-junction (MJ) to Honeybourne MJ. The pipeline will be 914mm in diameter and constructed of mild steel. It will transport compressed gas from Wormington Compressor Station (CS), via the MJ, towards the East. Six drawings are included as Appendix 5, which show the route and associated working areas.
- 3.1.2 Another new pipeline, approximately 2km long running from Churchover Compressor Tee to Churchover MJ. The pipeline will also be 914mm in diameter and constructed of mild steel. It will transport compressed gas from Churchover CS, via the Compressor Tee, to the MJ. A drawing is included as Appendix 2, which shows the route and associated working areas.

3.1.3 Pressure uprating of the existing National Gas pipeline between Felindre (Swansea) and Three Cocks (Powys); and associated works to existing Above Ground Installations (AGIs) and Compressor Stations. Pressure uprating involves systematic checks of pipelines, installations and plant which could be exposed to the higher pressures, to determine if the entire system would be safe, suitable, and sufficient at the uprated pressure. Where problems are identified, components are modified or replaced as necessary before the pressure is physically raised.

3.2 The scope of work is neatly summarised in the below schematic map:



3.3 All the modifications are designed to achieve greater physical capability of the NTS to move gas away from Milford Haven Aggregated System Entry Point.

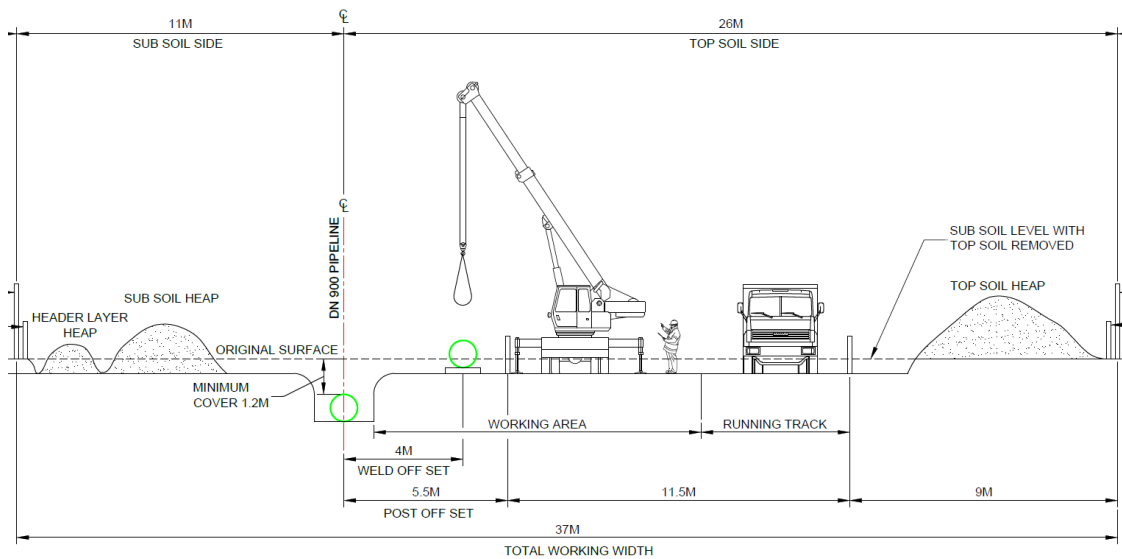
3.4 As explained in James Tomison’s Statement, Section 9, it is intended that the majority of the works comprising the Project will be carried out as permitted development with one full planning permission granted for the permanent extension of Churchover Tee.

**Construction works and spatial extent of the land required**

**Pipeline Construction Rights (required over the land shown coloured light blue on the Order Maps (CD C2))**

3.5 Pipeline Construction Rights are sought to facilitate construction of the new pipelines. This 'corridor' is typically 37m wide for trenched installations across open land, or 52m wide at obstacle crossings.

3.6 Below is a cross-sectional representation of the typical working corridor for trenched installation:



TYPICAL RIGHT OF WAY (ROW) CROSS SECTION  
SCALE 1:100

- 3.7 Image from a previous project shows the working width, topsoil stripped, with the pipe strung out ready to be welded together.



- 3.8 This one shows the same, with welding rigs and a side boom crane in position.



- 3.9 Image showing a welded pipe string being laid into the trench using several side boom cranes. The subsoil heap is also visible now that the pipeline trench has been excavated.



- 3.10 There are various points along the pipeline where the pipe needs to 'cross' (i.e. be installed beneath) obstacles such as minor roads, utilities and watercourses. The working 'corridor' is 52m at these points to allow space for the specialist installation equipment to be set up and used.



3.11 Image showing a pipeline spread with obstacle crossing. The additional land here has been consumed predominantly by excavations and soil.



- 3.12 Photograph of auger bore equipment and associated excavation. Here, additional space has been used for the excavation, crane, spoil and auger bore equipment.



**Pipeline Rights (required over part of the land shown single hatched red on the Order Maps (CD C2))**

- 3.13 Following completion of construction, a package of "Pipeline Rights" will need to be acquired over a narrower 24.4m corridor of land in which the pipeline will be located to enable it to be operated, repaired, maintained, and protected from interference. This 24.4m corridor will be 12.2m either side of the centreline of the pipeline.

**Lagoon Rights (required over the land shown coloured purple on the Order Maps (CD C2))**

- 3.14 Water will be needed to pressure test the pipelines as part of the commissioning process. To ensure that there will be sufficient water available for that purpose at the right time of year (late summer 2024), NGG will create two temporary lagoons which will enable extraction of water from the River Swift and Badsey Brook during periods of higher flow (more likely in winter and spring) and store it until it is required.

**Construction Compound Rights (required over the land shown coloured green on the Order Maps (CD C2))**



- 3.16 Seven Construction Compounds are needed to facilitate the overall mobilisation of Main Works Contractors. The compounds will include office facilities, car parking, meeting rooms, material storage and lay-down areas, areas to pre-fabricate pipework components, areas to assemble plant and equipment, and areas to store topsoil stripped from the compound.

**Access Rights (required over the land shown coloured yellow and orange on the Order Maps (CD C2) for construction and operation and maintenance respectively)**

- 3.17 Access routes will be needed from the nearest public highway to enable (i) construction, and (ii) operation and maintenance of the pipeline.

**Drainage Rights (required over the land shown coloured dark blue on the Order Maps (CD C2))**

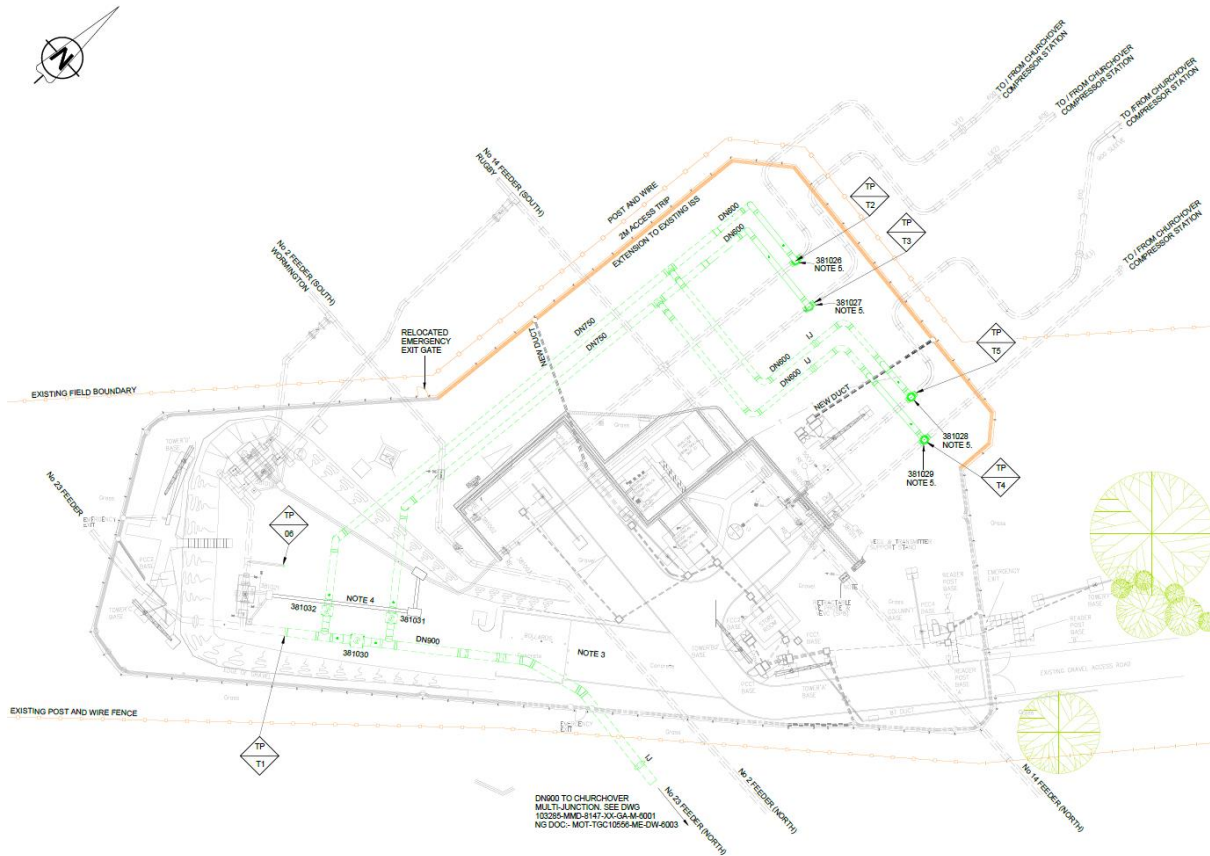
- 3.18 Pre-construction drainage is required to ensure that water draining from adjacent land is carried away from the construction working areas. This drainage system will remain after construction, alongside post-construction drainage systems designed to ensure that the land drains freely and can continue to be used as productive agricultural land.

**Multiple Packages**

- 3.19 In some places two different packages of land rights are proposed to be acquired over the same land.

**Freehold Land at Churchover Tee (shown coloured pink on the Order Maps) and associated Security Rights (required over the land shown coloured brown on the Order Maps (CD C2))**

- 3.20 Acquisition of land is required at Churchover Tee to facilitate the connection of new below-ground infrastructure (new 2km pipeline) into the existing infrastructure. The conceptual design for this is shown below, with the extension to the existing security fence-line shown in orange. The 'post-and-wire' fence represents the extent of the land coloured pink on the CPO Maps.



**Security Rights (shown shaded brown on the Order Maps (CD C2))**

3.21 A package of "Security Rights" is also required over a 5m security 'buffer' outside of the perimeter fence of the Churchover Tee facility. This is to prevent anything which would reasonably foreseeably enable the security fences around the permanent infrastructure to be scaled/breached.

**4. RESPONSE TO OBJECTIONS**

4.1 CRT - I remain committed to providing the necessary technical information to CRT for progression of this matter via the Master Agreement once our detailed designer is appointed in September.

4.2 NGED - Having recently confirmed with NGED that their overhead assets are not impacted by our scheme, I am assured that NGED will instruct their legal representation to withdraw the holding objection.

4.3 Mr Miles – I am confident in the robust process we followed to confirm the need for the Project and the most appropriate route.

**5. REMOVAL OF LAND AT CILFREW**

5.1 Cilfrew modifications are not required to enable more gas to be transmitted from Milford Haven (only to retain current system flexibility). When cost and

complexity of these works increased, we removed them from the Project. This change is in the best interests of the affected landowners, the PARCA customer, and gas end-consumers.

6. **SUMMARY AND CONCLUSIONS**

6.1 I have described the land and rights that are needed to enable the Project to be undertaken safely.

6.2 No more land than is necessary for the purposes of the safe construction, operation and maintenance of the Project has been included in the Order.

7. **DECLARATION**

I confirm that the opinions expressed in this proof of evidence are my true and professional opinions.

A handwritten signature in black ink, appearing to be 'Jordan Wright', written in a cursive style.

Jordan Wright

18 April 2023