

Water Supply Project

Eastern and Midlands Region



The Preferred Scheme for a New Water Supply for the Eastern & Midlands Region

Frequently Asked Questions



NOVEMBER 2016

The extensive experience of Irish Water's sister company, Gas Networks Ireland (formally Bord Gáis Networks), which has successfully delivered over 2,400km of natural gas transmission pipelines through the lands of over 5,600 landowners since 1977, will be brought to bear during the planning, wayleave acquisition, construction and reinstatement phases of the Water Supply Project – Eastern and Midlands Region.

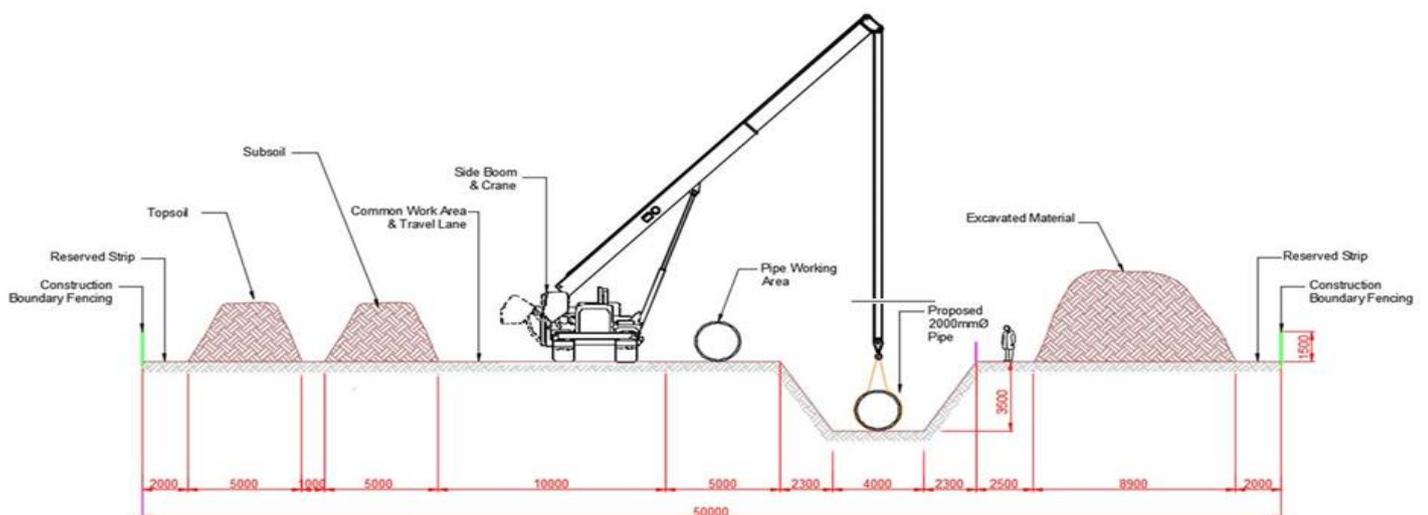
What is a wayleave?

In the context of the Water Supply Project a wayleave is the legal right to construct, operate and maintain a water supply pipeline within a strip of land.

What is a temporary working width and what size is it?

A temporary working width is required in the construction stage only, to manage the operations involved in the construction of the pipeline and the valve chambers. This includes space to properly store the excavated topsoil and subsoil, to transport materials from roads to the working area, to excavate the trench and for staff and machinery to work safely. Additional space may also be required at particular points such as crossings of motorways, railways, canals, etc.

On the Water Supply Project, the temporary working width will typically be 50m wide (inclusive of a permanent wayleave).



Note:
1. Soil Storage Mounds Typically 3000 - 5000 mm High

Typical Construction Width

What is a permanent wayleave and what size is it?

Once construction is complete and the pipeline is operating, a right of access (or wayleave) is required to inspect and maintain the pipeline and chambers. This permanent wayleave which is legally documented by way of a Deed of Easement and is registered as a burden on the title of the affected land will typically be 20m in width. While the land can be farmed in the normal way, there will be restrictions on building development and forestry within the permanent wayleave, in accordance with the Deed of Easement.

How is Irish Water communicating with landowners?

Irish Water is communicating with Landowners through four dedicated Landowner Liaison Officers (LLOs). The role of the LLOs is to provide landowners with a dedicated point of contact throughout the planning phase, through construction, and afterwards. Each landowner whose land may be on the pipeline route has a nominated LLO as an ongoing point of contact for the project.

Landowner Information Evenings and Public Open Days and are being held during the current stage of consultation (14 weeks from 8th November 2016 to 14th February 2017) and ongoing liaison with landowners on the final route will continue throughout 2017.

What is the role of the Agronomist on the Water Supply Project?

An agronomist is an agricultural scientist with particular specialism in the area of soil science and management and plant and crop production. In the context of the Water Supply Project, an agronomist will input to the Code of Practice on aspects such as the care of the soil during construction and land restoration, and to the environmental impact assessment. The project team includes Agronomy specialists.

What is a Pre-Entry Agreement?

A pre-entry agreement is put in place with each individual landowner in advance of construction commencing to document the particular requirements of each landowner in terms of type of fencing required, water supply for stock, location of crossing points across the temporary working width, land drainage etc.

How long will construction take?

The overall construction period for the project is likely to be 3 to 4 years, but disruption will be much shorter than this for each particular landholding.

It is expected that construction works would last approximately 4 to 6 months in each landholding, with the temporary working width required for a period of 18 months in total (including the installation of temporary fencing to the completion of topsoil reinstatement, seeding and removal of the temporary fencing).

In areas of poor or difficult ground, or in areas near major road and river crossings, different construction methods may be required which could result in a longer construction time.

Will construction take place in winter?

Irish Water will wherever practicable carry out the main pipeline activities in the period 1st March to 30th November, and will use all reasonable endeavours to plan its construction programme in order to comply with this time scale. The owner and occupier will be informed of the start and finish dates of the planned programme of work. Construction at other locations which are not seasonally sensitive for soils, such as the Water Treatment Plant site, can continue during wintertime.

How will the land be reinstated?

Lands will be reinstated based on best practice construction methodology which Irish Water's parent company Ervia has used for the construction of over 2,400km of natural gas transmission pipelines over 40 years and summarised in a Code of Practice which will be made available to landowners as part of a wayleave package. This will outline how topsoil and subsoil will be stripped, stored and protected, how backfill in the trench will be compacted, how excavated material will be disposed of, how land drainage will be managed throughout, and how the temporary working width will be prepared to receive subsoil, and then topsoil, prior to seeding.

Will Irish Water restore land to its pre pipeline construction state?

Irish Water is committed to the full and proper restoration of all land disturbed by its operations and for restoring any boundary walls and fences affected by the works.

What size is the pipe?

Hydraulic design work is continuing, but at this time the most likely pipe size is 1,700mm diameter in the rising main section to a high point at the Tipperary/Offaly border and 2,000mm diameter in the gravity section from there to the termination point reservoir in south Dublin.

How deep will the pipe be?

The minimum cover from the ground to the top of the pipe will be 1.2m, but where the overall design tries to minimise the number of valves, and position them where possible near boundaries, for least interference in landholdings, there will be sections of pipe which are at greater depth than 1.2m. Crossings of roads / rivers / rail and canal will also involve an increase of cover to the top of the pipe, generally a minimum of 1.6m.

What is the pipe made of?

There are many materials used worldwide in water transfer pipelines, including concrete, steel, ductile iron and other polyethylene based materials. The pipeline material has not yet been selected and is likely to be the outcome of a procurement competition if the project receives planning consent.

Will the pipeline be visible?

The pipeline will be laid underground, and will not be visible.

What are valve chambers, and what frequency of access will Irish Water need to them?

There are three kinds of valves on the pipeline; air valves, scour (or washout) valves, and line isolation valves.

Air valves permit any air in the pipe to be released, and they permit air to enter the line if it needs to be drained down for maintenance. It is expected that air valves would be located at intervals of 500m to 600m. Generally they are placed at high points along the pipeline, but may also be required at other strategic locations if required and subject to the final design.

Scour (or washout) valves allow sections of the pipeline to be emptied and would be located at a frequency of approximately 500m to 600m, generally at low points along the pipeline. During commissioning of the pipeline they are used for removing silt and sediment which may have accumulated during the construction process. During pipeline operation it is very rare that these valves are used, and are generally only required for emptying sections of pipeline if required for emergency repairs or for routine maintenance programmes every 20 to 30 years.

Line isolation valves would typically be located 4km-6km apart, as buried valves. In some instances it may be necessary to provide electrical power to operate some of the line valves in which case a surface kiosk would be required. Line isolation valves, wherever possible, will be located in close proximity to air or wash out chambers and will be positioned adjacent to public roads.

Wherever possible valves would be located in locations of least interference, such as close to headlands and field boundaries.

Walkover inspections, and maintenance checks on valves would typically be annual in frequency. A requirement to bring plant or equipment to a valve location would rarely arise.

Is there a risk of flooding of lands arising from construction?

Flooding will not arise from construction activities. The timing of construction in land prone to flooding will be timed for dry non-flood periods. The construction of the pipeline and reinstatement of land will be undertaken in a manner which will ensure that the pipeline trench does not become a conduit for water.

How will Irish Water manage construction in bogland?

The extensive experience of Gas Networks Ireland will be taken into consideration in planning construction in bogland. Construction will be designed on an individual basis based on site investigation data and may involve the use of 'piling' technology to ensure a stable foundation for the pipe.

What happens if the pipe leaks?

The pipeline material and construction specifications, as well the high degree of quality control and testing that will be undertaken at construction stage, will ensure that the likelihood of a leak occurring will be very low.

In the unlikely event that a leak should occur, valves along the pipeline will limit the amount of water that can leak from the pipe. A maintenance plan will be put in place so that if a leak does occur it can be detected quickly and the repair will be carried out to minimise the impact on landowners and to the water supply.

What if a well or nearby lake is affected?

Potential impacts on lakes will be assessed during the Environmental Impact Assessment process. Pipeline construction and reinstatement of land will be undertaken in a manner which will ensure that the pipeline trench does not become a conduit or barrier for water movement. This can be achieved by constructing impermeable barriers at regular intervals along the trench or through the use of bedding and backfill mixed with a 'bentonite' clay to ensure or increase impermeability.

Water supply wells will be identified during planning of the proposed pipeline. A water monitoring programme of groundwater wells will be undertaken before, during and after the construction phase. If water supply wells are damaged or the water quality/quantity is affected during the construction phase, an alternative supply will be provided to the landowner as is standard practice on all pipeline projects. In the unlikely event of a well drying up an alternative well will be drilled provided the damage to the well is connected to and traceable to the construction of the pipeline.

Will this project impact on Single Farm Payment for farmers whose land is involved?

In assessing losses, regard will be taken of E.U. and State support schemes (e.g. Basic Payment Scheme, ANC Scheme, GLAS, AEOS, etc.)

If a new reference period is adopted for establishing entitlements for an area based payment scheme, and if this reference period coincides with the pipeline construction programme, Irish Water will consult with the Department of Agriculture, Food and the Marine on the effect that the project might have on establishing a new base line for determining the entitlement to such payments.

Irish Water will initially make a case for "force majeure" to the Department of Agriculture not to penalise the landowner for the loss of farming hectares. In the event of the Department of Agriculture not allowing concessions, then the matter will be treated as a compensation issue.

Will there be additional restrictions on land spreading if the project goes ahead?

The European Communities (Good Agricultural Practice for Protection of Waters) Regulations (also known as the GAP or Nitrates Regulations) gives legal effect to Ireland's Nitrates Action Programme, required by the Nitrates Directive (91/676/EEC). Compliance with the GAP Regulations is overseen by the Department of Agriculture Food and the Marine with Local Authorities responsible for enforcement.

Article 17 of the GAP Regulations regulates the land spreading of organic fertilisers in the vicinity of drinking water abstraction points. For a scheme supplying 100m³ or more per day or serving 500 or more persons a 200m distance from the abstraction point applies.

The map below shows the indicative buffer zone at the proposed abstraction point comprising a circle of 200m radius, centred on the proposed raw water intake location.



Who will own the pipeline?

The pipeline will be owned by Irish Water. Irish Water was established pursuant to the Water Services Act 2013 and is a designated activity company, limited by shares. Irish Water has two shareholders, Ervia and the Irish Government. The ultimate shareholder of Irish Water is the Irish Government and, on that basis, Irish Water is a state-owned entity.

These Frequently Asked Questions and other information on the project can be found at www.watersupplyproject.ie