

Queensferry Community Council

Q & A – MONDAY 30 JUNE 2025





QUESTION AND ANSWER

1. Does the pipeline run under houses?

No, the pipeline will not run under houses. Please see figure 1 below.



Figure 1 Boundary of pipeline through Queensferry

2. How big (diameter) are the pipelines and what depth? 3ft (900mm) diameter and at 3 metre depth is the best information I can find.

The pipeline ranges from 20 inches (1.6foot)) to 36 inches (3 foot) in diameter. It will be 36" in the Chester Road area, this is part of the pipeline running from the Stanlow AGI to the Flint AGI.

- Ince Above Ground Installation (AGI) to the Stanlow AGI
 - o Distance = 4km
 - o Diameter = 20"
- Stanlow AGI to Flint AGI
 - o Distance = 32km
- Diameter = 36"
- Flint AGI to Flint Connection Pipeline
 - o Distance = 400m
 - o Diameter = 24"
- Flint Connection to Point of Ayr (PoA) Terminal (existing natural gas pipeline that will be repurposed and reused to transport Carbon Dioxide CO₂)
 - o Distance = 24km
 - o Diameter = 24"
- 3. How long is the construction work going to last? 17 to 23 months from media articles.

From start to end, the construction is anticipated to take 32 months. This will not be focused all in one area, as the construction on the 36" pipeline are scheduled across 12 months. As such, Queensferry will likely see construction-related activities intermittently throughout this period.





We will shortly publish more information about preparation activities and construction of the Main Onshore Pipeline on the HyNet Hub.

4. How much noise, dust, vibration, and disruption will this cause residents and businesses?

Noise and Vibration

The impact of construction noise and vibration will be kept as low as reasonably practicable by undertaking all work in accordance with BS 5228-1:2014 - Code of practice for noise and vibration control on construction and open sites.

Mitigation measures will include:

- The use of machinery that conforms to the relevant noise emission standards, for example white noise reversing alarms. Additionally, where possible electrically powered plant and machinery will be used.
- Use of acoustic barriers, screens or covers where required. Additionally, acoustic enclosures will be set up around static plant to reduce noise disturbance.
- Work and deliveries will only take place within core working hours which are:
 - o 8am to 6pm Monday to Friday
 - o 8am to 1pm on Saturday

Deliveries outside these working hours will be agreed with Flintshire County Council in advance.

- Works which would have higher noise levels will be scheduled for times that will have the least impact on the local area. Some locations where trenchless crossings are being carried out will require working 24 hours a day, but this will be for short periods.
- There will be 24-hour noise monitoring that will trigger and notify the Construction Contractor(s) at the Centralised Compounds and where there is a potential impact outside of core working hours at trenchless crossings, including at Chester Road.
- If necessary, enhanced mitigation measures will be agreed with Flintshire County Council and communicated with.

Dust

Dust emissions will be carefully monitored and managed by the construction contractors onsite.

Additionally, all work will be carried out wherever possible in accordance with best practice codes of conduct such as the Control of Dust from Construction Sites (BRE BTi Feb 2003).

Mitigation measures include:





- Stripping and stockpiling of soil shall be kept to a minimum. Where stockpiling is required they will be covered, seeded of fences to prevent wind whipping
- Site layout will be planned to keep machinery and dust-causing activities away from the community.
- **Dust suppression** measures will also be in place and will include:
 - o Bowsers to dampen surfaces in dry weather
 - o Wheel washers to limit dust being tracked off-site by construction vehicles
 - o Solid screens shall be put up around dusty activity or the site boundary where possible
 - o If necessary, works will be stopped or postponed if dust levels are too high for example during dry or windy weather
- 5. Road closures and road works on an already busy road that is often gridlocked at the morning and late afternoon.

To avoid disruption to Chester Road and Church Lane the Pipeline will be constructed using a trenchless tunnelling method, meaning that the road will not need to be closed.

Trenchless methods bury the pipeline at a greater depth than open cut methods and allow for installation while the road remains open.

6. How will it affect school start and finish times when traffic is totally gridlocked?

Construction of the Pipeline should have no impact on school start and finish times as the road will not be closed.

7. What are the ecological effects of this project as it must pass protected species – Badgers, Owls, Great Crested Newts, Bats Etc?

As part of the pre-construction activities, surveys are being conducted to understand the ecological sensitivities of the site. These surveys will consider badgers, bats, water voles, otters, great crested newts, fish, barn owls.

All surveys and construction works will be overseen by third-party Ecological Clerk of Works (ECoW) who will oversee pre-construction surveys and monitor ecological conditions during construction. The ECoW will also monitor the implementation of mitigation measures and ensure all site personnel are working appropriately.

8. The "trenchless construction" bored section in Mancot / Pentre from Glendale Avenue to Mancot Lane along Chester Road is proposed to be under existing services which are main public sewers, drainage ditches, electric, gas, water and telecommunications. How can they be sure that these will not be severely affected by the work? The subsoil is sand / shale, and the area has a high water table, which is as little as 300mm below ground level. The major concern here is that excavation or boring a pipeline could undermine the road and cause sinkholes or rupture to services.

The location of existing underground services has been obtained from service providers and has been considered when producing the Pipeline's detailed design. We are continuing to work with utility providers to understand their requirements for asset protection.





Ground investigation works have been undertaken and are ongoing to assess the ground conditions prior to detailed design being finalised.

Tunnel detail designs shall be completed that include Ground Movement Analysis and shall consider strain limits on all utilities. Works shall be designed in accordance with BS EN 1997-1:2004 Eurocode 7: Geotechnical Design and CD 622 - Managing geotechnical risk for highways

9. Many of the properties along the proposed pipeline route were constructed well over 100 years ago. Foundations were usually brick footings or early concrete often not more than 450mm below ground level and as lime mortar was used in that era were designed to allow movement. The proposed work could easily cause cracking and movement or even total collapse of such properties.

The risk of ground subsidence associated with the construction of the pipeline has been assessed and details of the assessment are included in the Environmental Statement, Chapter 11 Land and Soils (ref: D.6.2.11). This assessment is published as part of the Development Consent Order (DCO) and is considered to be low.

Additionally, Ground Movement Analysis to demonstrate that all properties are outside of potential settlement risks.

10. How safe is the pipeline, it will be transporting Carbon Dioxide and later Hydrogen which is highly flammable and explosive? See the link <u>A pipeline rupture in Satartia</u>, <u>Mississippi has lessons for future CO2 projects: NPR</u> This was a similar pipeline in Mississippi in the US that exploded and caused 45 people to be hospitalised.

The Pipeline will only transport CO₂ for storage in existing natural gas reservoirs; it will not transport hydrogen.

- o Liverpool Bay CCS Limited (LBCCS) is responsible for the transport and storage project, this is the CO_2 pipeline from Ince to PoA.
- o Cadent is responsible for the separate Hydrogen Pipeline. The Hydrogen Pipeline is focused in north west England. More information is available here: hynethydrogenpipeline.co.uk

LBCCS has extensive experience designing, building, and operating safe and effective high-pressure gas pipelines and is using this expertise to develop and construct the Main Onshore Pipeline to the highest safety standards.

The UK is home to a range of high-hazard industries and has developed a world-class safety regulatory regime. The UK government regulates all Carbon Capture and Storage (CCS) projects, their infrastructure and their operation. The safety of the Pipeline will be regulated by the Health and Safety Executive (HSE) and the North Sea Transition Authority (NSTA). Both regulatory bodies have a long track record of effectively regulating safety in the UK hydrocarbon sector.





LBCCS will carefully monitor the Pipeline, throughout all the operation phases, CO_2 transportation, injection and safe containment within the reservoir, using state of the art techniques.

11. How will the pipeline affect property values and saleability? Will anyone want to buy property near this pipeline?

We cannot comment on the subjective nature of house prices. However, aside from the occasional marker post, the majority of the pipeline will be buried and not visible to local residents.

The Pipeline will provide wider economic benefits by supporting economic growth in the industrial heartlands. It will create and preserve jobs and unlock billions of pounds of private sector investment into the region.

12. What effect will it have on the Irish Sea, the gas is to be pumped into depleted gas fields. How can the company be sure this will not leak or affect sea water and sea life?

LBCCS has extensive experience designing, building, and operating safe and effective high-pressure gas pipelines and it will use this expertise to develop the Pipeline to the highest safety standards.

Gas has remained safely trapped in geological structures such as sandstone reservoirs, like the ones in Liverpool Bay, for millions of years. These reservoirs are deep below the surface of the seabed. The Liverpool Bay CO_2 store will be up to 1km below the seabed and approximately 20 miles offshore. Hundreds of metres of shale lie over the top of these sandstone reservoirs, making an impermeable layer which traps the gas in place. The CO_2 will be stored in the same way as the original natural gas and will remain safely contained in the sandstone reservoirs.

The Pipeline has been designed to comply with well-established codes and standards, the applicable UK Regulations (including the Pipelines Safety Regulations 1996) and industry best practices. Together with detailed safety assessments, operation and integrity management systems, these will ensure the potential for any leakage of CO_2 is minimised and risks are as low as reasonably practicable.

To ensure the safety of the offshore storage under Liverpool Bay, a programme of monitoring, measurement and evaluation will assess the behaviour and integrity of the CO_2 throughout the planned 25-year life span. This will include advanced methods such as geophysical surveys, pressure sensors, seabed surveys and specialised monitoring wells.





Monitoring and maintenance of the pipeline will be regularly performed. The pipeline network will be fitted with leak detection systems with early warning and remote identification ensuring that it can be safely managed in the event of any leakage. CO₂ point gas detectors will also be installed externally at the AGI's.

13. What is the carbon footprint of the construction work for the Hynet pipeline?

As part of the Main Onshore Carbon Dioxide Pipeline, we conducted a calculation to determine the effect of the Pipeline on carbon emissions. Based on the estimated CO_2 captured from the wider HyNet infrastructure, the beneficial effect of reducing carbon emissions will outweigh the emissions from the construction and operation of the Pipeline. Therefore, as a result of the captured emissions, the Pipeline is expected to have a positive impact and a low carbon footprint. This calculation is set out in Chapter 10 of the Environmental Statement (document reference: D.6.2.10) consented as part of the Development Consent Order.

