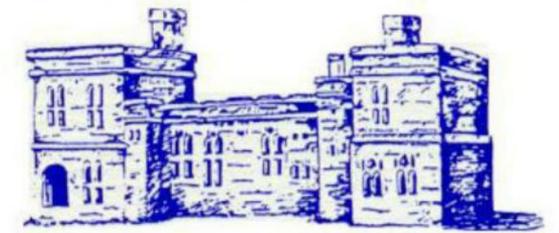
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## Proposed Digestate Storage Lagoon - Castle Farm, Wressle

The govt. has announced that it intends the UK to be carbon neutral by 2050 and agriculture has a big part to play in achieving this goal. Our customers are asking us to demonstrate that we too are working towards being carbon neutral.

As a result we intend to reduce our reliance on artificial fertilisers, which use a high level of fossil fuels for their production, and switch to greener, organic based fertiliser both in the form of organic livestock manures and **anaerobic digestate** from the nearby R100 and Holme Bio anaerobic digester plants.

**Anaerobic digestate** is a by-product of the plants which are operating to produce green energy. All digestate from these sites is PAS110 accredited which means it can be used as agricultural fertiliser providing essential nutrients for crowing crops.

We have used **digestate** for the past 2 seasons with success but as it is a bulky commodity it requires lots of road tankers to each field to keep the applicator supplied. Our proposed lagoon will allow us to build up a buffer store during winter or other times when ground conditions are not favourable for spreading, thus making the spreading operation far more efficient.

We propose to excavate soil to a depth of approximately 2m and use the spoil to create an earth bund around the lagoon 2m in height. The bund will be grassed down.

The lagoon will be lined with a 2mm HDPE (High Density Polyethylene) liner and covered with a floating 1mm LLDPE (Linear Low Density Polyethylene) cover, to eliminate any potential smells. We intend using a company such as Enviroseal, who are very experienced in this field, to provide and install the liner and cover.

The lagoon will be filled to a maximum height 500mm below the top of the bund, to avoid any possibility of overflow. There will be both inlet and outlet pipes. We are unsure exactly where they will be situated but either on the East, or more likely North side of the lagoon. The outlet pipe will have two shut-off valves in series to insure against any possible leakage.