



CLARECASTLE SITE DECOMMISSIONING

Roche Ireland Clarecastle Site Decommissioning

Landfill Remediation Preparatory Works Sheet Piling – Short-term noise disruption



Dear Clarecastle resident,

Having successfully completed phase 1 of the Clarecastle Site Decommissioning project, with minimal disruption to the community, we are now preparing for the more complex element of the overall decommissioning project - the remediation of the landfill. This will involve the excavation of waste from the landfill and its transportation to Holland for thermal treatment.

This excavation work will be undertaken in specially constructed temporary enclosures to mitigate dust, odour, vapour and noise. The first of two enclosures to be erected on the landfill is currently being constructed. These enclosures need to be adequately secured into the ground to enable them to withstand the harshest weather conditions. This requires the building of foundations to support the enclosure structures. The foundations being used on the landfill are interlocking sheets of steel (sheet piles) driven into the ground. This technique avoids the requirement to use large quantities of concrete, thereby significantly reducing truck movements to and from the site during this phase of construction.

One of the challenges of sheet piling is noise disruption while the piling is being carried out. I can assure you that the on-site project team are ever conscious of the nuisance factor of such noise disruption on the community and are taking every precaution to minimise noise levels while the work is underway.

The purpose of this leaflet is to give you some background information on sheet piling, why it is being undertaken and the measures in place to reduce noise levels. I hope this will reassure you that we are taking every step to minimise the impact of noise on the community.

Piling is scheduled for completion by year end.

Yours sincerely

Joe Murphy
Project Owner





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What is Sheet Piling?

Sheet piling is a construction technique used to retain soil, water, or both. It involves driving large, interlocking sheets of steel into the ground to form a continuous barrier or wall. This method is widely used in civil engineering for constructing foundations, seawalls, retaining walls, cofferdams, and various other structures.



April 2024: The steel sheet piles arriving to-site.





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Why Sheet Piling?

The remediation of the landfill is a fundamental element of Roche's pledge to restore the site to a brownfield status, capable of attracting new investment.

Constructing enclosures on the landfill requires the building of foundations to support their installation. This involves driving interlocking sheets of steel into the ground to which the enclosures will be attached.



The landfill prior to the commencement of preparatory works.



May 2024: Enabling works underway to facilitate sheet piling.



May 2024: Sheet piling commences



August 2024: Sheet piling in place to enable the construction of the first enclosure on the landfill.



September 2024: The first enclosure being secured onto the sheet piles.





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Alternatives considered

Pile driving was not used during the construction of the phase 1 enclosure at the first remediated area last year. This was due to the relatively small size of the area and the solid ground on which the enclosure was installed. Nevertheless, concrete was transported to-site to enable these works, and this incurred additional HGV movements to and from the site. Given the underlying conditions of the landfill and the fact that multiple enclosures will be used during the excavation of waste from the landfill, placing the enclosures on sheet-piled foundations was considered to be the most sustainable methodology. It avoids the requirement to use large quantities of concrete, thereby significantly reducing truck movements to and from the site during this phase of construction, minimising disruption to the community.

Noise mitigation measures

Minimising the impact on the community is a key consideration in carrying out the remediation works on-site. The following steps have been taken to minimise the noise impact on the community:

1. The most efficient equipment is being used to drive the piles into the ground and minimise noise levels. The piling hammer is acoustically dampened with a cushion.
2. Acoustic sound absorption curtains have been placed on fencing at various locations in the landfill and in front of the sheet piling hammer to absorb the piling noise. (Sample in image opposite.)
3. An acoustic shroud has been fitted around the hammer to reduce the noise generated.
4. Noise levels are monitored continuously to ensure that they are within the limits permitted in the Industrial Emissions (IE) licence and Planning Permission.



Acoustic barriers in place at the piling site to help reduce noise levels.

Duration / Hours of Work

- Piling is undertaken between the hours of 9am and 5pm, Monday to Friday.
- Piling work is undertaken intermittently, for short periods of time with frequent stoppages - typically the piling time is up to 2 hours per day in total.



Sheet piling commenced in May 2024 and is scheduled for completion by year end. Roche can assure the community that this careful attention to detail will continue until the pile driving works are completed.

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