# 4.0 ALTERNATIVES

## 4.1 INTRODUCTION

This Chapter of the Environmental Impact Assessment Report (EIAR) addresses the topic of Alternatives in relation to the soil recovery facility the Applicant proposes to develop at their Lands at Kilmartin, Coynes Cross, Co. Wicklow.

## 4.2 ALTERNATIVE LOCATIONS

The Site is considered to be strategically well located as it is close to high quality national and/or regional road networks, and relatively close to areas where were activities that generate inert soils and stone are undertaken (e.g. construction contractors and/or site developers in greater Dublin area). There is a commercial and strategic benefit to locating the soil recovery facilities near to, and within easy access of the markets they serve as it reduces the distance materials have to travel via truck to reach a suitable facility. This in turn reduces carbon emissions associated with road haulage of Construction and Demolition (C&D) waste to disposal and/or recovery facilities and aligns with the principles of sustainable development.

It should be noted that an alternative site is not available to the applicant who owns this land that has a naturally occurring landform feature (a valley) that forms suitable conditions for the Proposed Development of a soil recovery facility.

Upon completion of operations of the facility there will be the local benefits associated with the land raising. It is anticipated that raising the land with allow for wider agricultural use benefitting the landowner. It is anticipated that employment will be soured locally to the Site to operate the site for the duration of the filing activities.

## 4.3 ALTERNATIVE WASTE MANAGEMENT PRACTICES

The inclusion of an aggregate recycling facility was considered within the Proposed Development design, however due to the topographical constraints on the Site, and limited availability of level working space on the Site it does not provide for a suitable location for such a facility.

## 4.4 ALTERNATIVE DESIGN

Design is constrained by the location and nature of the void which is a valley landform located within agricultural lands.

The location of the N11/M11 access to the south of the site makes this the most appropriate route for haulage trucks as it minimises routes on local roads and noise impacts to residential receptors located to the north of the site.

Design considerations included the need to create suitable water drainage conditions during works phase of the facility, and upon the facilities closure and the return to agricultural land use. Various fill designs were considered during the evolution of design using the existing topographical levels, including consideration of local road levels.

An alternative site access located was considered further south, towards the roundabout at the junction to the N11/M11, near the stream. However, steeper topographical levels occur at that part of the site in comparison to the (more favourable) lands located adjacent to the existing site entrance.

The design process considered raising the valley to the levels in keeping with the highest ground contour within the Site however a similar design was previously considered in the 2008 application but was not considered favourable. The proposed fill levels were selected to be sympathetic to the surrounding landscape and to allow the surrounding contours to provide a natural buffer to noise and so as not to impact on the visual landscape.

### 4.4.1 ALTERNATIVE PHASING

Alternative phasing arrangements were considered for ease of construction and health and safety purposes. The phasing of the filling aligns with best practice guidance which advocates that deposited waste should generally be compacted into shallow layers of up to two metres. Also, that the working slope should be maintained at a slope no greater than 1 in 3 to ensure the effectiveness of the compaction equipment (EPA, 1997).

The proposed phasing allows for the reinstatement of stored topsoil at the earliest opportunity as the final contour levels for the fill are reached.

The absence of phasing would create conditions with the likely potential for developing unstable/unworkable slopes, greater surface water run-off rates, inadequate drainage, and inadequate compaction of materials. It is also anticipated that topsoil reinstatement would be less efficient, potentially leading to greater soil exposure time and subsequent soil loss though erosion and/or reduction in soil quality on the Site.

### 4.4.2 THE DO-NOTHING ALTERNATIVE

If no future works or Proposed Development is undertaken within Site, the existing landform and valley would remain in its current state. The existing established hedgerow and occasional trees along the valley slope would continue in the same condition. The floor of the valley would continue to be periodically water-logged.

In the absence of any development, the lands will continue to have provide for low quality agricultural use and the use will continue to be mainly for sheep grazing. Therefore, the long-term land-use would continue to have relatively low agricultural potential.

The waste statistics report for reference year 2021 reported an increased generation of 10% for C&D waste from 8.2 million tonnes in 2020 to 9 million tonnes in 2021 and soil and stone comprised 85% of the C&D waste generated in Ireland (EPA, 2023). The C&D growth trends over the years are growing significantly and the draft National Waste Plan identifies that C&D waste generation is expected to continue over the short to medium term. Ireland will need to continue to deliver adequate soil recovery facilities to manage the waste generated appropriately. Should this Proposed Development not be granted, alternative sites in the Leinster area are likely to be required considering the ambitions for housing development and other pending significant large infrastructure projects to be constructed.

## 4.5 REFERENCES

EPA (1997), ‘Landfill manuals, Landfill Operation Practices’. Available at: https://www.epa.ie/publications/licensing--permitting/waste/EPA-Landfill-Operational-Practices.pdf (Accessed 04/07/2025)

EPA (2023), ‘Circular Economy and Waste Statistics Highlights Report 2021’. Available at: https://www.epa.ie/publications/monitoring--assessment/waste/national-waste-statistics/circular-economy-and-waste-statistics-highlights-report-2021.php (Accessed 03/07/2025)