

FIGURE 4.18

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KEY:

- Licence Boundary
- Inferred Zone Boundary
- Remediated Waste Extents
- Active Extraction Well - Zones 1 and 3 (Detail 1)
- Perimeter Gas Monitoring Borehole (Detail 2)
- Perimeter Venting Trench
- Zone 1 Carrier Main
- Zone 3 Carrier Main
- 63mm Collection Pipework from Wells to Manifold
- Manifold
- Existing Perimeter Gas Monitoring Borehole
- In-Waste Gas Monitoring Borehole (Subject to Remediation/Development works)

NOTES:

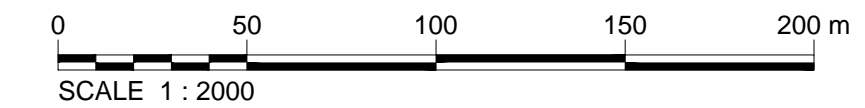
1. For detailed description of Zones, refer to Chapters 3 and 12 of the EIAR

2. All levels to metres OD (Main Head)

Zone	Description	Gas management
1	Primarily MSW with high methane generation.	Vertical extraction wells, linked to active extraction and flaring.
1A	C&D wastes (hard core, plastic, wood), lower methane generation than Zone 1.	Due to proximity to Zone 1, some wells installed linked to the active extraction system.
2A	Mixed MSW and C&D with some isolated areas of high methane where wastes thickest.	Gas collection layer under low permeability capping, linked to perimeter vent trench. Vent trench installed with vents which can be converted to include vertical stacks and cowls if required. Vent trench can also be adapted to include bio-oxidation layer if required.
2B	C&D waste with some MSW (low methane)	As Zone 2A.
3	Lined cell principally MSW, and fire wastes with high methane generation.	Vertical extraction wells, linked to active extraction and flaring. Extraction lines independent to that of Zone 1 to provide gas field flexibility.
4	Above ground mounds and bunds (C&D or processed waste), majority of which are to be removed during remediation, anticipated limited gas generation.	Natural methane oxidation within capping expected to further limit any fugitive releases of gas, bringing emissions to acceptable levels.
5	Waste largely absent (to be confirmed by GI)	None proposed but to be confirmed following GI, and on-going monitoring.

Table for carrier main falls:

	Minimum pipework fall
Stable ground, fall and gas flow in same direction	1 in 100
Stable ground, fall and gas flow in opposite direction	1 in 50
Over fill, fall and gas flow in same direction	1 in 50
Over fill, fall and gas flow in opposite direction	1 in 25



2	07/08/2017	EIAR SUBMISSION	AR	CD	CD	RR
1	30/06/2017	EIAR SUBMISSION	KMA	CD	CD	RR
0	24/10/2016	EIS SUBMISSION	AR	SC	CD	RR
Rev	Rev. Date	Purpose of revision	Drawn	Checked	Rev'd	Appr'd

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Kildare County Council
Comhairle Contae Chill Dara

Project
**KERDIFFSTOWN LANDFILL
REMEDATION PROJECT**

Drawing title
**FIGURE 4.18
OUTLINE LANDFILL GAS MANAGEMENT PLAN
FOR THE PROPOSED PROJECT**

Drawing status
EIAR SUBMISSION

Scale	1:2000 @A1	DETAILS SHOWN ARE NOT FOR CONSTRUCTION PURPOSES HENCE DRAWING SHOULD NOT BE SCALED
Jacobs No.	32EW5604	
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Drawing number	32EW5604-00-043	Rev	2
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