




Proposed Development at Knockharley Landfill (ABP Planning Ref. PL17.303211

Response to Request for Further Information – Query No. 3

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PREPARED FOR:

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30 YEARS

CREATED:

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1 LANDSCAPE & VISUAL IMPACT

Knockharley Landfill Ltd. submitted an application for a proposed strategic infrastructure development at Knockharley Landfill in December 2018. This application for permission was accompanied by an EIAR, of which Chapter 13 identifies, describes and assesses in an appropriate manner, the direct and indirect significant effects of the project in terms of Landscape and Visual Impact. In a request for further information dated 16th May 2019, at paragraph 3, An Bord Pleanála requested the applicant to submit the following supplementary information in respect of Landscape and Visual Impact:

a. A revised series of clear photomontages from the 9 no. viewpoint locations used in the visual impact assessment. The photomontages should be presented in a larger format and provide clear images towards the landfill site, supported by wireframes showing the existing and proposed post settlement landfill height. Each photomontage/wireframe should indicate both existing and proposed views and the distance to the existing/proposed development.

b. Provide additional photomontages showing the impact of the proposed development from the Hill of Skreen.

c. Submit the following longitudinal and cross sections through the site to an appropriate scale:

   i. North-south longitudinal section from the local road to the north of the site through the centre of the landfill footprint to the southern site boundary.

   ii. East-west cross section through the northern section of the site from the local road to the east through cell Numbers 29-31 and Cells 21-22 to the western site boundary.

   iii. East-west cross section through the southern section of the site from the local road to the east through the proposed biological and Cells 5-6 to the western site boundary.

Each section drawing shall include appropriate detail to enable the Board to fully assess the impact of the proposed development, to include details of existing ground levels, existing/proposed post settlment landfill height, existing or proposed berms/planting heights and buildings/structure heights as appropriate.

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1.1 Response to RFI No. 3 (a) and (b)

In response to sub-paragraphs 3(a) 9 no. A3 wireframe photomontages have been prepared in response to this RFI and are included in Appendix 1 to this response. A tenth A3 wireframe photomontage has been prepared in response to 3(b). The first 9 no. photomontages in Appendix 1 represent the revised series of clear photomontages from the 9 no. viewpoint locations used in the visual impact assessment in Chapter 13 of the EIAR. The tenth photomontage is taken from a new location as requested by ABP (i.e., the Hill of Skreen). This was not originally included in the EIAR because the Hill of Skreen is located greater than 5 km from the proposed development and due to other developments in the line of sight. A described in Section 13.2.4 of Volume 2 of the EIAR, the study area extended to 20 km. A Zone of Theoretical Visibility Map (ZTV) up to 20 km was prepared. The areas shown on the ZTV 20 km map were visited in clear weather conditions to determine if the facility was visible. The viewpoints were selected based on that assessment. Viewpoint 10 in this response confirms that the existing facility is barely discernible from the Hill of Skreen, and then only by someone familiar with the facility who is actively trying to find the facility within the view. The distances from the 10 no. viewpoint locations to the facility boundary are included in Table 1.1.

Macro Works Ltd. was engaged to take the photographs and to prepare the photomontages. Fehily Timoney and Company prepared this response.

The photographs were taken on 27 June 2019 on a clear day. The photographs were taken at the same locations as shown in the EIAR for all locations VP1-VP4 and VP6 to VP9. The view at VP5 was shifted slightly to the east to exclude the residence in the foreground. The same property is now visible in the left of the new photomontage, the exterior of which has been changed slightly.

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VP10 is a new location 6.5 km from the site boundary as requested by ABP. An assessment of the potential visual impact from this viewpoint is included in this response document. The wireframe photomontages are included in Appendix 1 of this response document.

All of the viewpoint photographs were taken at GPS verified locations. These were captured as 360 degree image sets and prepared as calibrated panoramas. A 3D model of the site and the proposed works was prepared using a combination of professional standard GIS, CAD and 3D Modelling software. Each recorded viewpoint position was used to accurately position a virtual camera in the model thus allowing for the model to be rendered at the precise scale and position relative to the photograph. Image processing software is then used to match each render to its associated viewpoint photo. Terrain and surface features enable a very accurate match to be achieved. Once matched, masking techniques enable foreground elements such as landform, buildings and vegetation to be brought to the fore of the image and screen the proposal where relevant. Where screen planting has been specifically planned, poles of set height were added to the 3D model. These were subsequently replaced with real tree imagery extracted from photos of screen planting as it currently exists on site. The final mitigated montages accurately portray how the proposed development will look once mitigation is established.

Table 10.1 is an updated version of Table 13.7 from the EIAR. It provides further detail on distances to the nearest element of the existing development and proposed development in addition to the distance to the facility boundary. Original text has a grey highlight and new text is in bold font. There are slight differences in the grid reference locations as expected due to the use of different GPS units and accuracy, the placement of the tripod and avoidance of vegetation but the differences are less than 8 m.

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Table 1-1: Viewpoint Locations

Viewpoint No.	Location	Viewpoint Type	Grid Reference	Grid Reference	Approximate Distance from Site Boundary	Approximate Distance from Existing Development	Approximate distance from Proposed Development
1	Local Road to the South	Roadside	696616, 765891	696**618,** 765**88**	870 m	**1 km**	**900 m**
2	CR384 Roadside North West of Site	Roadside/Amenity	696520, 767809	696523**,** 7678**10**	70 m/Adjacent	**465 m**	**75 m**
3	CR384 Roadside North East of Site	Roadside	697653, 768191	697653**,** 76819**0**	387 m	**500 m**	**395 m**
4	CR384 Roadside East of Site	Roadside/Residential	697856, 767398	697856, 76739**6**	26 m/Adjacent	**300m**	**160 m**
5	Kentstown Primary School	School	697675, 765856	6976**78,** 765**860**	134 m [725 m]	**780 m**	**1 km**
6	CR384 Roadside North of Site	Roadside	697252, 768063	69**7**25**7,** 76806**4**	Adjacent	**424 m (280 m to permitted not yet constructed)**	**130 m**
7	Local County Road Network West of Site	Roadside/Residential	695828, 767037	695828, 7670**29**	845 m	**1 km**	**870 m**
8	Country Road Network West of the Site	Roadside	694186, 766913	69418**0**, 76691**5**	2.4 km	**2.7 km**	**2.47 km**
9	Country Road Immediately East of the Site	Roadside	697947, 767068	69794**9**, 76706**9**	130 m	**425 m**	**400 m**
10	**Hill of Skreen**	**Skreen Tower/CDP Protected View and Prospect**		**695158, 760529**	**6.5 km**	**6.4 km**	**6.4 km**

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1.1.1 Potential Visual Impacts

There is no change to the potential impacts from Viewpoints 1-4 and 6-9 from those presented in Section 13.4.3 of Volume 2 of the EIAR. For clarity, text from the original EIAR is shaded in grey, new text is in bold font.

Viewpoint 10 (Hill of Skreen)

ITM 695158, 760529
Direction of the view- 20° east of grid north

The existing and proposed view from this location is shown in Figures VP10 Page 1 of 2 and VP10 Page 2 of 2 in Appendix 1.

Description of View

Viewpoint 10 is from Skreen[1] Tower on Skreen Hill on Co. Meath. It is located 6.4 km from the proposed development boundary (southern boundary) and from the proposed screening berm on the western side of the southern boundary. VP10 is 6.5 km from the existing development, the nearest point is the wetland at the southern attenuation pond. The view of the facility is from the south-south-west. The photomontage is representative of the view from Skreen Hill towards the existing facility.

Existing View

The view shows a house and pitch and putt facility buildings in the foreground. The existing facility is not distinguishable in the wider landscape because of the distance and because the predominant colours are brown and green which are the same as the surrounding landscape. The restoration of the facility is carried out in a phased manner in accordance with the licence, therefore mitigation is ongoing with development. Kentstown village is south of the facility and is barely discernible in the photomontage.

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Proposed View and Mitigation

The proposed development will be barely discernible from this location as it will be restored with a grassed cap.

VIA Result

The viewpoint sensitivity is considered to be High as it is identified as having panoramic views over the area and is a protected view under the CDP 2013-2019 of national significance. The visual magnitude of the proposed development is Negligible as the restored facility will be returned to grassland and forestry. Therefore, the significance of the visual impact from this location will be Imperceptible.

The proposed development will not act in combination with any other known proposed development to result in a cumulative impact on the Hill of Skreen.

[1] Also spelled as Skyrne

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Viewpoint 5

ITM 697675,765856
Direction of the view- North

The existing and proposed view from this location is shown in Figures VP5 Page 1 of 2 and VP5 Page 2 of 2 in Appendix 1.

Due to the slight repositioning of the location of the camera at this viewpoint, the viewpoint of the potential visual impact has changed slightly and an updated VIA has been carried out. There is also a potential cumulative impact from this viewpoint (see Section 1.1.3). The text from Section 13.4.3 of Volume 2 of the EIAR is shaded in grey. New text is included in bold font.

Description of View

Viewpoint 5 is from the Kentstown Primary School, at 134 m south of the boundary of the proposed development. This photomontage is representative of the views from this school and from residences in this area.

Existing View

This is a view from the south of site, taken from the adjacent local road towards the west. A residential building adjacent to the road is in left foreground. The rest of the view is comprised by a rural setting of field patterns and hedgerows. The existing landfill is visible in the background, however, the portion of the existing landfill that is visible is that portion of the landfill that is currently fully capped and restored to grassland.

Proposed View and Mitigation

The proposed development will be visible from this viewpoint. The proposed IBA facility will increase the height of the development from 342° and to the east. The proposed biological treatment facility will be visible at 353° but it is partially screened by an existing tree. The colour of the building combined with the distance from the viewpoint makes it barely discernible. The forestry planting will screen the berm to the east and the IBA facility will be planted in grass creating a similar view to that of the existing landfill.

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VIA Conclusion

The viewpoint sensitivity is considered to be High as there is a group of susceptible receptors (school users and residents). However, there are no features or recorded routes referable to the view. The visual magnitude of the proposed development is **Low.** The visual significance from this viewpoint will be **Moderate-Slight.**

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1.1.2 Cumulative Impact

As stated in Section 13.5 of Volume 2 of the EIAR, a solar farm of 3MW of photovoltaic panels has been granted permission by Meath County Council over an area of 3.87Ha in the existing landfill (Plan. Ref. AA180145). The cumulative visual impact of the proposed development in conjunction with the solar farm is at VP5 addressed here.

The viewpoint sensitivity is at VP5 considered to be High as there is a group of susceptible receptors (school users and residents). However, there are no features or recorded routes referable to the view. **The visual magnitude of the proposed development, in combination with the proposed solar farm is Medium, as there will be a moderate intrusion into the available vista from the proposed solar farm on the existing landfill cap and the proposed landfill intensification development. The cumulative visual significance from this viewpoint will be Substantial-Moderate.**

1.1.3 Summary -Visual Impact

At the macro level, views of the proposed development site are constrained by a combination of extensive existing hedgerow and woodland vegetation and the nature of the gently rolling topography in which there are relatively few vantage points. From those locations that do facilitate views towards the site, distance tends to have a significantly diminishing effect. In addition, the nature of the proposed landfill is such that it integrates well in the local environment aided by the sequential grass seeding and greening up of the finished profile as the filling operations progress.

In distant views the proposed biological treatment facility is well integrated by virtue of its low position on the site and the nature of the screening provided by the landfill cells themselves as well as the adjacent existing screen vegetation. **The significance of the visual impact from the Hill of Skreen (VP10) will be Imperceptible and there are no cumulative impacts from the Hill of Skreen. The highest potential visual impact is discernible from VP5 and arises from the combination of the permitted solar farm development in conjunction with the proposed landfill intensification development and would be Substantial-Moderate from this location. However, there are no significant visual impacts from the proposed development as per the guidelines[2] and as reproduced in Table 13-3 in Chapter 13 of Volume 2 of the EIAR.**

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1.2 Response to RFI No. 3 (c)

The original application documentation comprised 5 no. cross sections, A through F. In response to the RFI, FT has prepared 2 no. additional cross sections, G and H. The existing cross section C shows the proposed East-west cross section through the southern section of the site from the local road to the east through the biological and Cells 5-6 to the western site boundary as requested in item 3 c iii.

The cross-section drawings were labelled as Sheet 1 of 3 etc, and thus all cross sections have been updated to reflect the new total sheet number. The drawing list has also been revised to reflect this change. The new drawings are included in Appendix 2 of this submission.

i. North-south longitudinal section from the local road to the north of the site through the centre of the landfill footprint to the southern site boundary. Please refer to Drawing No. LW14-821-01-P-103-005 Proposed Cross Sections Sheet 5 of 6 (Cross Section G).

ii. East-west cross section through the northern section of the site from the local road to the east through cell Numbers 29-31 and Cells 21-22 to the western site boundary. Please refer to Drawing No. LW14-821-01-P-103-005 Proposed Cross Sections Sheet 5 of 6 and Drawing No. LW14-821-01-P-103-006 Proposed Cross Sections Sheet 6 of 6 (Cross Section H).

iii. East-west cross section through the southern section of the site from the local road to the east through the proposed biological and Cells 5-6 to the western site boundary. Please refer to existing cross section C on Drawing LW14-821-01-P-103-002 Proposed Cross Sections Sheet 2 of 6.

[2] Landscape and Landscape Assessment. Consultation Draft of Guidelines for Planning Authorities, Department of Environment and Local Government, 2000.

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Finally in this context, it should be noted that, in the context of preparing this RFI response, it was noted that the height of the existing landfill was shown to be higher on the originally submitted photomontages than as actually constructed. Accordingly, for the avoidance of doubt, the revised cross sections submitted with this RFI Response contain the correct dimensions of the as-constructed landfill. Similar modifications have been made to the proposed layout drawings contained in Appendix 2.

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APPENDIX 1

WIREFRAME PHOTOMONTAGES

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ENVIRONMENTAL BALANCE IN DESIGN AND CONSTRUCTION

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APPENDIX 2

DRAWINGS – A1 Drawings – RQ3 Landscape and Visual Impact

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