

16 July 2018

Project No. 1775927.L02.V1

Mr. Cathal Gahan

EPA Regional Inspectorate Dublin
McCumiskey House
Richview
Clonskeagh Road
Dublin 14

REQUEST FOR TECHNICAL AMENDMENT TO CONDITION 3.5.5

Dear Mr. Gahan,

Golder Associates Ireland Limited (Golder) has been retained by Integrated Materials Solutions Limited Partnership (IMS) to provide engineering consultancy services in relation to the Hollywood Landfill at the Naul, Co. Dublin. Hollywood Landfill operates as an inert landfill under Waste Licence W0129-02. This letter constitutes a formal submission to the EPA for filling to formation with Category A inert fill in the south-east corner; this would be as opposed to using site won material as per Condition 3.5.5 of W0129-02 which states:

Condition 3.5.5:

“the formation level of the basal liner prior to emplacement of compacted clay shall be constructed at least one metre above the water table and in any event, the formation level of the liner shall be no lower than 104.5 mAOD Malin. Any excavations deeper than the formation level shall only be backfilled with granular materials quarried from the facility”.

Background

The Hollywood facility formerly operated as a rock quarry from the 1940's until c.2008 when the quarry became unfeasible to operate as a commercial quarry due to the economic collapse and the lack of readily available rock for quarrying at the Site. Waste Licence Register Number W129-02 was issued to Murphy Environmental Hollywood Ltd in December 2002 for the development and operation of an inert landfill. Landfilling activities commenced in 2003 and continue to the present time. Ownership of the Site and status of licensee re: W0129-02 was transferred to IMS in June 2017. Only one constructed cell (Cell 4) is currently available for landfilling activities as all other constructed cells have been filled to capacity or near capacity. The capacity of Cell 4 is rapidly running out and further development of the Site is required to maintain current acceptance levels of waste materials. The standing water at south east corner of the site presents a health and safety risk the proposed works will address this issue through the removal of standing water as part of the backfilling process. It is considered that the Hollywood Landfill currently plays an important part in the overall waste strategy for inert soils for Ireland and it is critical that planning activities are undertaken now to ensure continued acceptance of waste. This submission forms the first aspect of this process and attempts to remove a barrier to future development currently stipulated in W0129-02.

Site Development

The objective of IMS is to develop the remainder of the void space at the Hollywood Great facility in a phased manner over the next few years. A large pond is situated in the south east corner of the site which will require infilling before any developments works in this area can commence.

The presence of this pond which extends below the minimum formation level stipulated in W0129-02, is linked to the previous quarrying operation at the site which was carried out under the previous ownership. As the Site is no longer used for quarrying purposes, there are no site won granular materials available to infill this pond to formation level. As such, Condition 3.5.5, in its current form, presents a barrier to future development of the site and it is not currently possible to prepare a Request for Approval (RfA) for filling this area or subsequently a Specified Engineering Works (SEW) proposal for the construction of the next phase of development. This necessitates this request to the EPA for a technical amendment to Condition 3.5.5 of the licence to allow the use of clean Category A inert fill to backfill the pond to the specified formation level of 104.5 mOD.

Proposed Backfilling Methodology

It is proposed to import Category A materials for use as backfill for the ponded area in the south east corner. The volume of the pond void to be filled to the formation level of 104.5 mOD has been calculated to be 153,300m³ which equates to approximately 306,600 tonnes using a conversion factor of 2 from m³ to tonnes. Drawings showing the existing site conditions in the south east corner where the pond is situated and associated cross sections are attached to this document.

In order to backfill the ponded area, the area will require dewatering. The methodology proposed to be employed to achieve this objective aims to mitigate potential negative effects to groundwater or surface water bodies. To achieve this, it is proposed to construct dividing berms across the width of the pond to create a number of individual sections within the footprint of the pond and pump the water from one section to the adjacent section allowing the water to naturally discharge while backfilling the dewatered area with suitable Category A material. It is proposed that this material will be placed as fill materials in compacted layers to the formation level of at least 104.5 mOD. This strategy shall be employed in an iterative fashion until only a small area remains; this shall minimise the volume of water to be managed. It is proposed that this remaining volume of water is discharged to the nearby stream via surface water discharge Point SWD1 and associated settlement as previously agreed with the Agency in 2006. It is proposed that discharge to the surface water will take place during the drier summer and early autumn months where possible.

Category A Waste Acceptance Criteria

The Category A inert material proposed to backfill the pond shall be clean inert soil and stones, this mitigates potential negative impacts to the ground and surface water environments. Further to this, given that this fill is being used to facilitate the future development of landfill cells, the inert material shall meet the following specification:

- The soil materials shall meet the requirements of Class 1A, 2B, 2C1, 2C2 and/or 2D in accordance with NRA Manual of Contract Documents for Road Works, Series 600 - Earthworks, March 2013 to provide confidence that the formation layers will provide adequate structural foundation strength for future construction in this area;
- The soil materials shall be naturally occurring inert soil and stones and will be readily available from development projects in the Leinster area; material such as Dublin Boulder Clays are considered to be suitable fill materials for example; and

- The source site of soils proposed for use as backfilling materials will be required to present a letter of suitability from a qualified and chartered professional to confirm the source materials suitability for purpose and are uncontaminated in nature. Chemical and physical analysis will form part of the assessment as required.

Recommended Text

It is proposed that Condition 3.5.5 be amended through a Technical Amendment to read as follows (deletions shown as strikethrough with additions underlined):

Condition 3.5.5:

“the formation level of the basal liner prior to emplacement of compacted clay shall be constructed at least one metre above the water table and in any event, the formation level of the liner shall be no lower than 104.5 mAOD Malin. Any excavations deeper than the formation level shall ~~only~~ be backfilled with granular materials quarried from the facility or as approved by the Agency”

This proposed text will allow approval of a RfA for filling this ponded area or an SEW for the next phase of the works, either of which could propose the use of imported Category A inert fill as outlined above for filling to formation. As outlined previously, the remaining void at the Hollywood Landfill is forecast to become constrained over the coming year and the licensee needs to progress a point where SEW approval has been obtained for the next phase of cell development within the coming months. With this in mind, we respectfully ask if this matter can receive your attention as quickly as possible.

If you have any queries in relation to this correspondence or the proposal outlined for filling to formation (104.5 m OD) at Hollywood Landfill, please do not hesitate to contact either of the undersigned or Mr. Cian O’Hora of IMS at your convenience

Yours Sincerely,

Golder Associates Ireland Limited



Ruth Treacy
Environmental Engineer



Peter Corrigan
Principal

RT/PC/ar

CC: Cian O’Hora (IMS)

Attachments: Appendix 1 - Drawings

APPENDIX A

Appendix 1 - Drawings

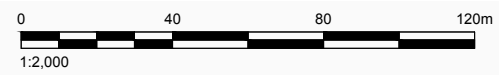


EXISTING ENTRANCE



LEGEND:

- LANDS UNDER CONTROL OF APPLICANT
- EXISTING PLANNING BOUNDARY
- EXISTING GROUND CONTOUR (mOD) - April '17
- - - AREA TO BE DEVELOPED TO 104.5mOD



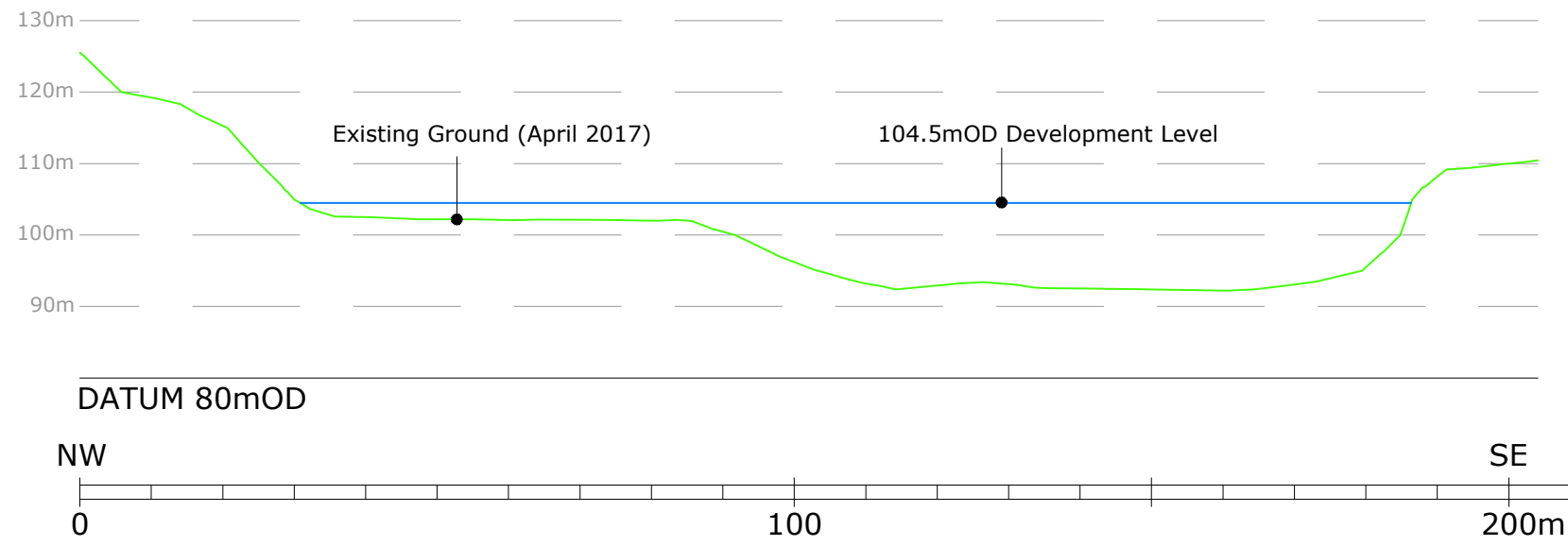
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INTEGRATED MATERIALS SOLUTIONS LTD.		
CONSULTANT		
YYYY-MM-DD	2018-Feb-26	
PREPARED	POB	
DESIGN	PC	
REVIEW	PC	
APPROVED	PC	

PROJECT		
LANDFILL DEVELOPMENT		
SHEET TITLE		
EXISTING CONDITIONS		
PROJECT No.	DRAWING No.	Rev.
1775927	01	A
SCALE		1:2,000 A3

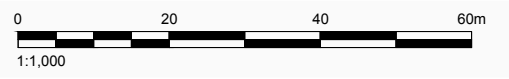
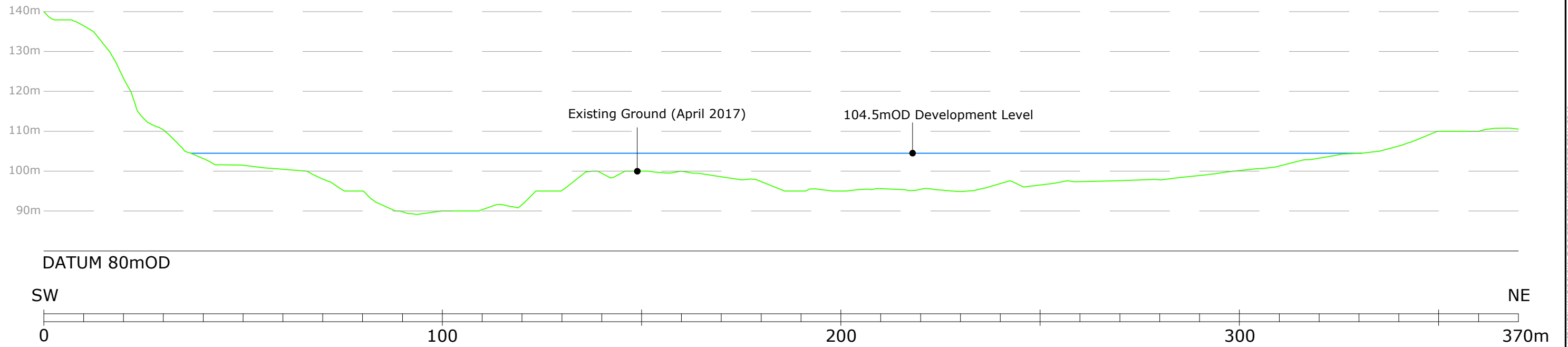
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25 mm IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ISO A3

Xsct A:A' (North West to South East)



Xsct B:B' (South West to North East)



CLIENT		PROJECT	
INTEGRATED MATERIALS SOLUTIONS LTD.		LANDFILL DEVELOPMENT	
CONSULTANT		YYYY-MM-DD	2018-Feb-26
		PREPARED	POB
		DESIGN	PC
		REVIEW	PC
		APPROVED	PC
SHEET TITLE		PROJECT No.	DRAWING No.
CROSS SECTIONS		1775927	02
		Rev.	SCALE
		A	1:1,000 A3

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