



Sky Castle Ltd 5665 29 August 2022 Onli Wiening Frunchs Weath PRELIMINARY DESIGN REPORT

Maynooth Outer Orbital Road

PRELIMINARY DESIGN REPORT

MAYNOOTH OUTER ORBITAL ROAD



Multidisciplinary Consulting Engineers

NOTICE

This document has been produced by O'Connor Sutton Cronin & Associates for its client, *Sky Castle Ltd*. It may not be used for any purpose other than that specified by any other person without the written permission of the authors.



DOCUMENT CONTROL & HISTORY

ocsc
Job
No.:
S665

Project Code	Originator	Zone Volume	Level	File Type	Role Type	Number	Status / Suitability Code	Revision
S665	ocsc	MR	ХX	RP	С	0001	S4	P01

Rev.	Status	Authors	Checked	Authorised	Issue Date
P01	S4	WM	AH	AH	29.08.2022



Project: S665

Issued: 29 August 2022



TABLE OF CONTENTS

1	INTRODUCTION & DESCRIPTION	1
	APPOINTMENT	
	SETTING	1
	ADMINISTRATIVE JURISDICTION	2
	PURPOSE OF THE DESIGN REPORT	
	STUDY AREA	. (3
	EXISTING SITE OVERVIEW	
	DEVELOPMENT DESCRIPTION	
	MASTERPLAN CONTEXT	7
	NEED FOR SCHEME	<u>ç</u>
	NEED FOR SCHEME	<u>s</u>
2	CHARACTERISTICS OF THE DEVELOPMENT	11
	DEVELOPMENT & SITE OVERVIEW	
3	TRAFFIC IMPACT	
4		
5	GEOMETRY & DESIGN STANDARDS	. 21
	APPLICABLE TECHNICAL STANDARDS	
	ROAD CLASSIFICATION	
	ROAD DESIGN SPEEDS	
	ROAD CROSS SECTIONS	
	HORIZONTAL AND VERTICAL GEOMETRY	
	BRIDGE STRUCTURES	
6	JUNCTION STRATEGY	
7	GROUND INVESTIGATIONS, SOIL CLASSIFICATION & EARTHWORKS	
_	ANCE OPTIMISATION	
8	DRAINAGE, STRUCTURES & PAVEMENT	
	SURFACE WATER DRAINAGE OVERVIEW	
	SURFACE WATER DESIGN CRITERIA	
	SURFACE WATER CATCHMENTS & ATTENUATION	
	FLOOD RISK ASSESSMENT	
	SECTION 50 APPLICATION	
	WASTEWATER DRAINAGE OVERVIEW	
	POTABLE WATER OVERVIEW	
9	CONCLUSIONS & RECOMMENDATIONS	
10	CONCLUSIONS	
)	RECOMMENDATIONS	
10	VERIFICATION	
	4 = 171, 4 4 4 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1	





APPENDICES

APPENDIX A TRAFFIC SURVEY DATA

LIST OF FIGURES

Figure 1: Development Locality Plan	4
Figure 2: MOOR Western Kildare Tie-In	11
Figure 3: MOOR Eastern Kildare Tie-In	12
Figure 4: Road Section to be Realigned	13
Figure 5: Center of Arc (L2214 - Kilcloon Road)	14
Figure 6: Realigned Signalised Junction on Eastern	
Figure 7: Existing R157/Dunboyne Road Realignment	16
Figure 8: MOOR Bridges	17
Figure 9: Collision History	19
Figure 10: DMURS Hierarchy of Streets	
Figure 11: MOOR Proposed Speed Limits	24
Figure 12: MOOR Cross Section	25
Figure 13: DMURS Carriageway Widths	
Figure 14: SMURS Figure 4.34 Width	27
Figure 15: NCM Width Calculator	28
Figure 16: DMURS Carriageway Geometric Parameters	30
Figure 17: Location of Bridges on the MOOR	31
Figure 18: Junctions Along MOOR	33
LIST OF TABLES	
Table 1: Moygaddy Masterplan Phasing	7
Table 2: RSA Collision Data MOOR Study Area	20
Table 3: DMURS Road Terminology	23
Meath Con	
Me de la company	





1 INTRODUCTION & DESCRIPTION

APPOINTMENT

O'Connor Sutton Cronin & Associates (OCSC) have been appointed by Sky Castle Ltd to carry out the design of the civil engineering services associated with the development of the proposed Maynooth Outer Orbital Road (MOOR) on lands at Moygaddy, Co. Meath, which is located northeast of the town of Maynooth, Co. Kildare.

SETTING

Maynooth environs is a large growth area, category II Town status located in south County Meath, and is an economically vibrant area with high-quality transport links to larger towns/cities. The Meath Development Plan 2021-2027 outlines the social, economic, and planning context for the Maynooth environ lands, setting the framework for the plan's policies and objectives. It has a core strategic vision that seeks to ensure that future growth is based on principles of sustainable development that meet the needs of residents per National and Regional guidelines. The environs of Maynooth is a Core Economic Area included in the Gateway Core Economic Area located on the M4 corridor. The wider Maynooth Environs Lands proposed land-use zoning includes A2 – New Residential, E1 – Strategic Employment Zones, G1 – Community Infrastructure, D1 – Tourism and H1 – High Amenity.

The delivery of the Maynooth Outer Orbital Route (MOOR) is critical to facilitating residential, high-end employment, tourist, and leisure development in the Maynooth environ lands and fulfilling the transport infrastructure needs in proximity to Maynooth University and Maynooth town.



OCSC O'CONNOR I SUTTON I CRONIN

Project: S665

ADMINISTRATIVE JURISDICTION

The proposed development is located primarily in the jurisdiction of Meath County Council (MCC), and therefore the Maynooth Outer Orbital Route design and the associated civil engineering services were carried out with reference to the following:

- · Meath County Development Plan 2021-2027;
- Maynooth Environs Local Area Plan 2014 (incorporated into adopted MCDP);
- Regional Spatial and Economic Strategy for the Eastern and Midland Region (2019);

Even though Maynooth Environs is situated in the Meath County Council administrative area, the Maynooth Environs Local Area Plan contains an objective to liaise with Kildare County Council in the identification, design, reservation and delivery of the section of the Maynooth Outer Relief Road located within the administrative area of Meath County Council. The administrative area of Kildare County Council is located immediately adjacent to the LAP environs lands and some infrastructure improvements will be located within the Kildare County Council (KCC) administrative area. Therefore, the design will also be conducted with due regard to:

- Maynooth LAP
- Kildare County Development Plan
- Maynooth Traffic Management Plan

PURPOSE OF THE DESIGN REPORT

This report sets out to:

- 1. Coalate all of the work done to date and in particular the preliminary design of the Maynooth Outer Orbital Road
- 2. Validate the need for the scheme
- 3. Examine the implications and impacts of the scheme
- 4. Ensure that appropriate design standards will be applied.



Project: S665 Issued: 29 August 2022



STUDY AREA

The subject site is located on the southernmost extent of County Meath, as shown in Figure 1, aligning with the county boundary to Co. Kildare. It is approximately 1.5km north of the town of Maynooth, Co. Kildare, which forms part of a larger strategic landbank on zoned lands known as Maynooth Environs. The site is immediately bound by:

- R157 Maynooth Dunboyne Road, to the east;
- · Agricultural lands, to the north and west; and
- River Rye Water, to the south;

Project: S665

Issued: 29 August 2022



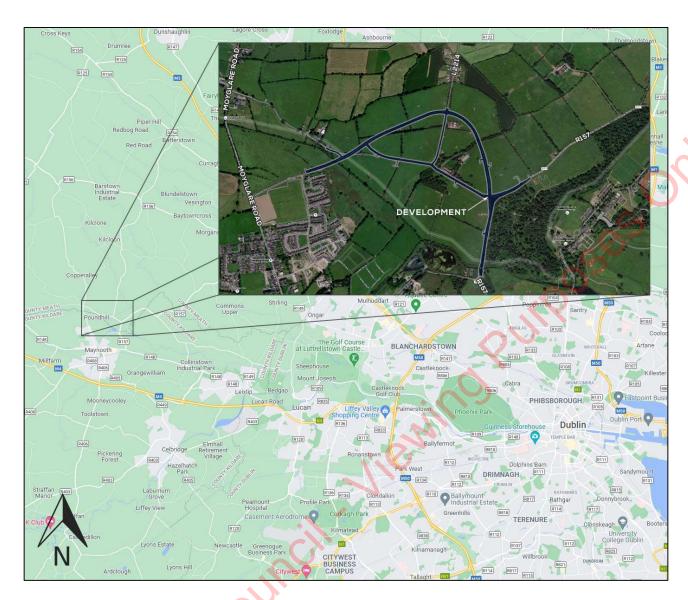


Figure 1: Development Locality Plan

The above image highlights the location of the overall road area and there are small areas of incidental works outside of that for elements such as attenuation facilities, demolition of existing roads, etc.

EXISTING SITE OVERVIEW

The overall total site area is **c.95.7-hectares** and is zoned by Meath County Council for various uses including employment and residential.





The site is currently greenfield and used for agricultural purposes, and can be accessed from the L6219, L2214 and R157 roads that bisect the site.

Ground levels across the site typically fall gently across the site, with a sharp decline at the southern boundary and in the centre of the site, both locations bound the River Rye Water and Blackhall Little Stream respectively.

DEVELOPMENT DESCRIPTION

Planning Permission is sought by Sky Castle Ltd. for the development of the Maynooth Outer Orbital Road (MOOR) in the townland of Moygaddy, Maynooth Environs, Co. Meath.

The proposed road development will consist of the following:

- 1. Provision of approximately 1,700m of new distributor road (MOOR Arc) comprising of 7.0m carriageway with turning lane where required, footpaths, cycle tracks and grass verges. All associated utilities and public lighting including storm water drainage with SuDS treatment and attenuation.
- 2. Proposed road improvement and realignment works including:
 - (i) realignment of a section of the existing L6219 local road, which will entail the demolition of an existing section of the road which extends to circa 2,500 sqm.
 - (ii) Provision of pedestrian and cycle improvement measures along the L6219 and L22143 which abuts the boundary of Moygaddy House which is a Protected Structure (RPS ref 91558).
 - (iii) Provision of pedestrian and cycle improvement measures along the R157 which abuts the Carton Demense Wall which is a Protected Structure (RPS Ref 91556).
 - (iv) Realignment of a section of the existing L22143 local road and R157, which will entail the demolition of an existing section of the road which extends to circa 3,200 sqm.



OCSC O'CONNOR I SUTTON I CROMIN

- (v) Provision of a new signalised junction at the realigned junction between the L22143 and R157.
- (vi) Provision of a new signalised junction between the L2214 local road and the MOOR with right-turn lanes on approaches.
- (vii) Reconfiguration of the L2214 section within the MOOR arc to a one-way from north to south with right-turn lanes, where applicable.
- (viii) Reconfiguration of the northbound lane of the L2214 within the arc to a shared facility for use by pedestrians and cyclists.
- (ix) Addition of chicanes on the L6219 and L22143 local road to reduce traffic flow and encourage utilisation of the MOOR.
- 3. Provision of 4 no. bridge structures comprising:
 - (i) an integral single span bridge at Moyglare Hall over the River Rye Water to connect with existing road infrastructure in County Kildare and associated floodplain works and embankments.
 - (ii) a new pedestrian and cyclist bridge at Kildare Bridge which will link the proposed site with the existing road network in County Kildare.
 - (iii) a new pedestrian and cycle bridge across Blackhall Little Stream on the L22143 adjacent to the existing unnamed bridge.
 - (iv) an integral single span bridge on the north-eastern section of the MOOR arc, over the Blackhall Little Stream, and associated floodplain works and embankments.
- 4. Provision of site landscaping, public lighting, site services and all associated site development works.
- 5. A Natura Impact Statement (NIS) and Environmental Impact Assessment Report (EIAR) has been included with this application.



OCSC O'CONNOR I SUTTON I CRONN

MASTERPLAN CONTEXT

The various masterplan development applications will be submitted on the basis that the MOOR will be delivered in phases, linked to individual planning applications which form part of the wider Masterplan for the Maynooth Environs/Moygaddy lands.

The colour of the first three columns links to the figure on the next page. Specific road infrastructure upgrades will be required depending on the timetable when each phase is constructed. The last column of the table indicates in which scenario year the trip generation of that section of the development will be relevant.

Item	Linked Road Infrastructure	Trip Generation Year				
	Medical Phase					
Primary Care Centre & Nursing Home	Upgrade the R157 from the roundabout in the south up to the access to medical facility	Opening Year (2025)				
Medical Research Campus	Full MOOR already operational	Design Year (2040)				
Public Hospital	Full MOOR already operational	Design Year (2040)				
	Office Phase					
	Upgrade the R157 north of medical facility access up to the junction between the R157 and the L6219	Opening Year (2025)				
Office Buildings Phase 1 x2	Upgrade R157/L6219 junction to 3-leg signalised junction	Opening Year (2025)				
	Upgrade R157 east of junction towards Dunboyne	Opening Year (2025)				
Office Buildings Phase 2 x1	Construct the first section of the eastern leg of the MOOR (northern leg of junction) up to the stream	Opening Year (2025)				
Office Buildings Phase 3 & 4 x6	Full MOOR already operational	Design Year (2040)				
	Residential Phases					
Residential Phase 1A, Park & Creche	Construct link road in the west and upgrade road up to junction with R157	Opening Year (2025)				
Residential Phase 1B	Full MOOR already operational	Opening Year + 5 (2030)				
Residential Phase 2	Full MOOR already operational	Design Year (2040)				
Residential Phase 3	Full MOOR already operational	Design Year (2040)				
1/1	Other Phases					
Tourism and Sports Campus	Full MOOR already operational	Opening Year + 5 (2030)				
Hotel	Full MOOR already operational	Design Year (2040)				

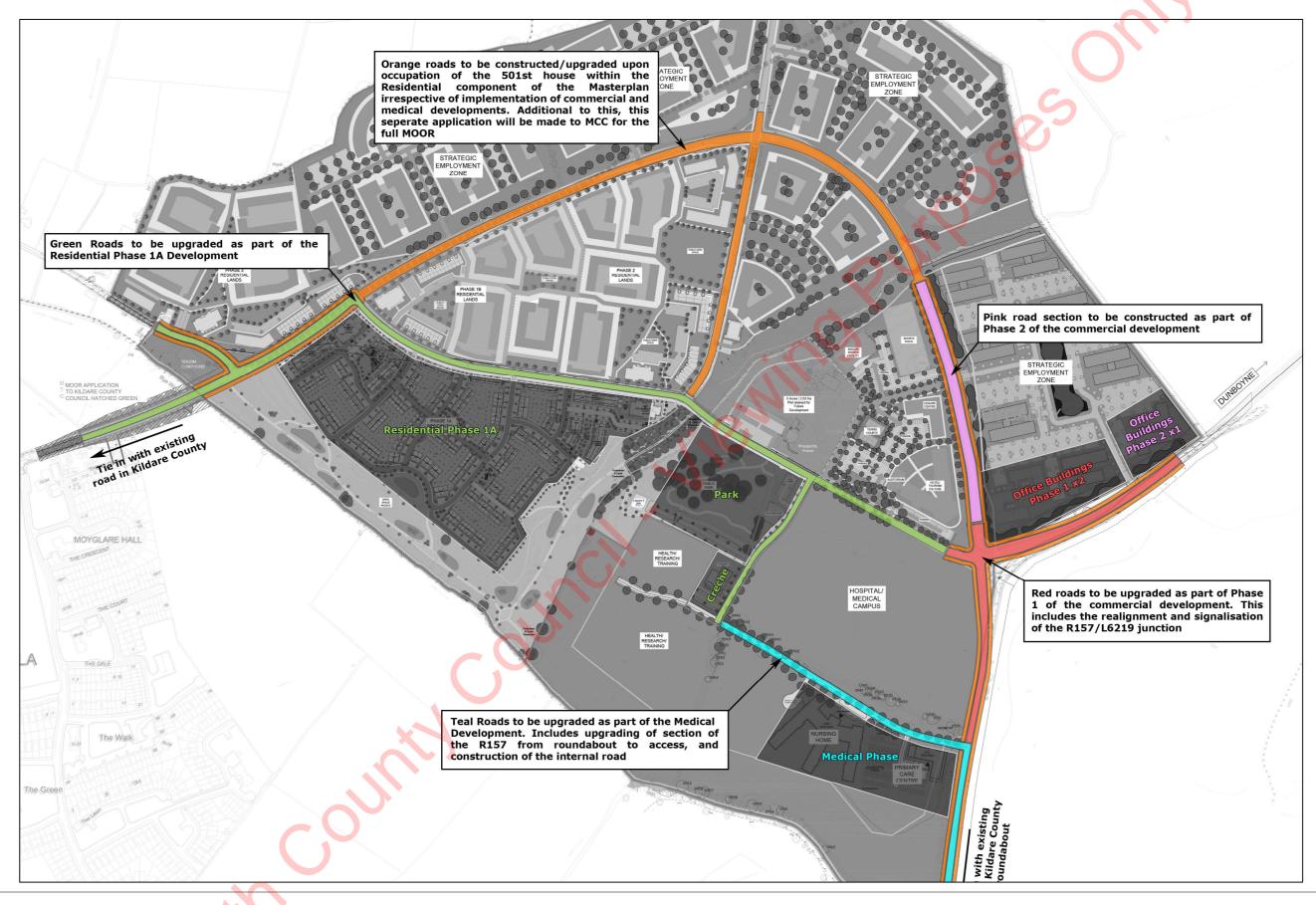
Table 1: Moygaddy Masterplan Phasing



Project: S665

Issued: 29 August 2022









NEED FOR SCHEME

The provision of the Maynooth Outer Orbital Route (MOOR) is an objective of the Meath County Development Plan 2021-2027 within the Maynooth Environs Written Statement objective CER OBJ 1 that states:

"It is an objective of the Planning Authority to require the submission with any application for development of lands at Moygaddy a Master Plan for the written agreement of the Executive of the Planning Authority which shall address the following:

- Proposals for accessing of lands which shall adhere to the permitted Part VIII realignment of the junction of the R157 Regional Road and Moygaddy Road.
- Proposals providing for the delivery of the Maynooth Outer Relief Road in tandem with development."

It is an objective within the Maynooth Local Area Plan to provide the Outer Orbital Route to ease traffic congestion and to improve quality of life in Maynooth. This plan notes strategic transport improvements are required and the Maynooth Local Area Plan has a critical role in ensuring the needs of the future population are planned for, this includes the delivering of strategic transport improvements particularly the completion of the Maynooth Outer Orbital Route.

CONSULTATION

OCSC held discussions with Kildare County Council (KCC) and Meath County Council (MCC) on this scheme, as detailed below:

• OCSC met with MCC on 19 July 2021 to open preliminary discussions on the design of the MOOR. In attendance were Martin Murry (Director of Services for Infrastructure) and Nicholas Whyatt (Senior Engineer Transportation). Since this meeting, a Traffic Modelling Scoping Report has been issued to MCC. It should be





noted that KCC specifically requested a Dynamically Assigned traffic model for this scheme. The Developer opted to request OCSC to utilise the PTV Vissim microsimulation software package to prepare the requested model, which could then be incorporated into the wider KCC transport study for Maynooth as a whole.

- As noted previously, although the scheme is planned within the MCC jurisdiction, a separate application will be made to KCC for infrastructure within the County. It is however noted that as the largest nearby urban centre is within KCC jurisdiction, they have been consulted as a stakeholder. OCSC met with KCC on 9 August 2021, and 23 September 2021. In attendance were Brigette Rea, Daragh Conlan, George Willoughby, Jonathan Hennessy, and Lisa Kirwan, all from KCC. The same Traffic Modelling Scoping Report has also been issued to KCC.
- OCSC met with MCC on 20 June 2022. In attendance were Michael Costelloe, Joe McGarvey and Paul McNulty. This meeting aimed to establish the outstanding design requirements of the MOOR. Several comments were received, which were included in the design.

In addition, the following submissions were made as part of the proposed development:

- A submission was made on the Maynooth Transport Strategy as part of public consultation no. 1 on the 12th of November 2021. This submission outlines the proposed plans for the area and noted that it should be considered as part of the future Transport Strategy (Appended as Annexure D).
- A submission was made to BusConnects on the 15th of November 2021 noting the upcoming proposals as part of the MOOR that noted the BusConnects project should take cognisance of the upcoming works.





2 CHARACTERISTICS OF THE DEVELOPMENT

DEVELOPMENT & SITE OVERVIEW

The MOOR will be a single carriageway road connecting the Maynooth environs between the east and west. A portion on the western side will be constructed in County Kildare and tie in with existing infrastructure by means of a new bridge and road section. This can be seen in the figure below.

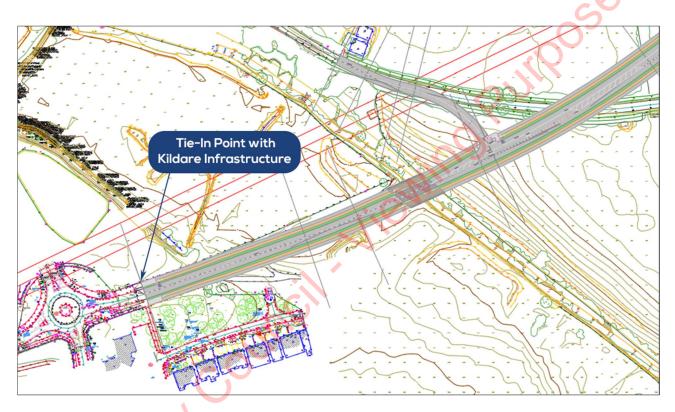


Figure 2: MOOR Western Kildare Tie-In





On the eastern side, the road will again tie in in County Kildare, just north of the roundabout on the R157. A separate cycle and pedestrian bridge will be constructed alongside the existing bridge to allow for continuation of this infrastructure, tying in with existing infrastructure in County Kildare. The tie-in location has been agreed with Kildare and on review of planning compliance submission made by Cairn Homes. This can be seen in the figure below.

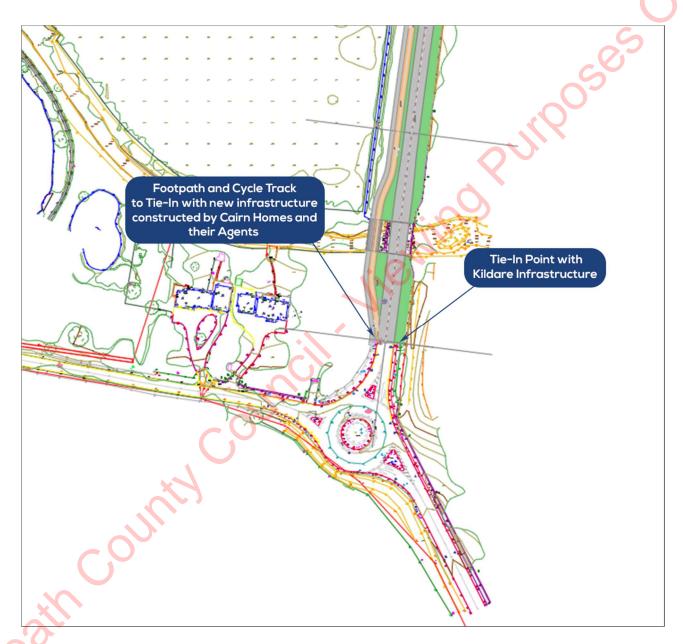


Figure 3: MOOR Eastern Kildare Tie-In



Project: S665

Issued: 29 August 2022



The rest of the MOOR will form an arc through the Maynooth Environs, connecting the western and eastern ends. A portion of the L6219 on the western side will be realigned to accommodate the arc. This section in the shown in the figure below.

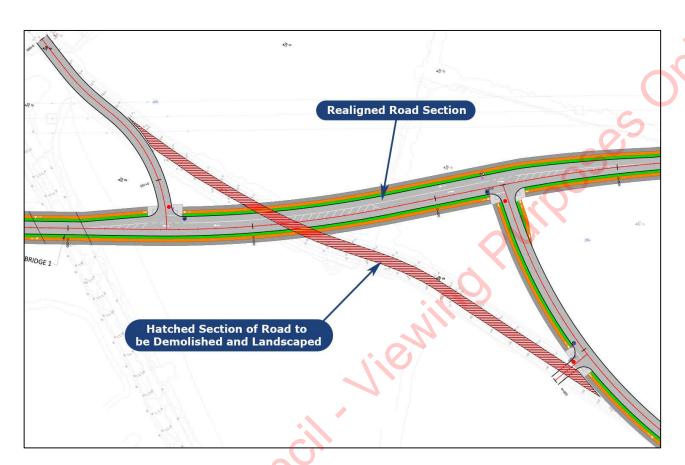


Figure 4: Road Section to be Realigned

13

Issued: 29 August 2022

Project: S665



The current L2214 (Kilcloon Road) will change to a north-to-south one-way road within the arc. The current south-to-north lane will be converted to a shared facility which can be used by pedestrians and cyclists. The new northern junction between the MOOR and the L2214 will be constructed as a signalised junction. The is shown in the figure below.

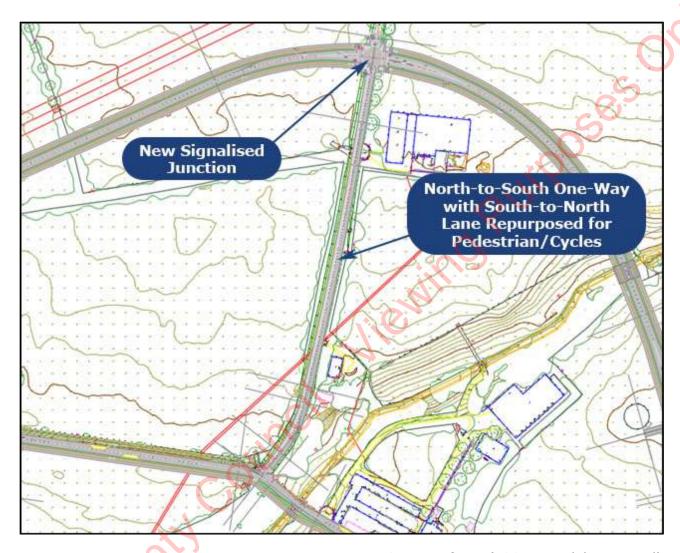


Figure 5: Center of Arc (L2214 - Kilcloon Road)



14

Issued: 29 August 2022

Project: S665



The junction between the R157, L6219, MOOR and Dunboyne Road on the eastern side of the arc will be realigned and constructed as 4-leg signalised junction, as shown below.

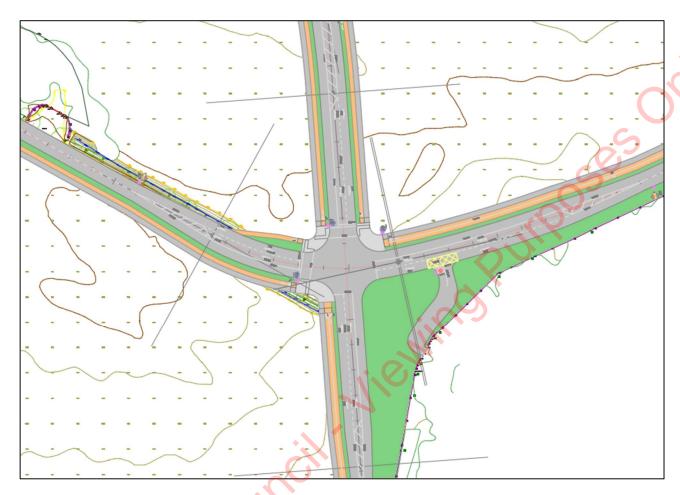


Figure 6: Realigned Signalised Junction on Eastern





For the construction of this junction, a portion of the existing R157 and Dunboyne Road will be realigned, as shown in the figure below.

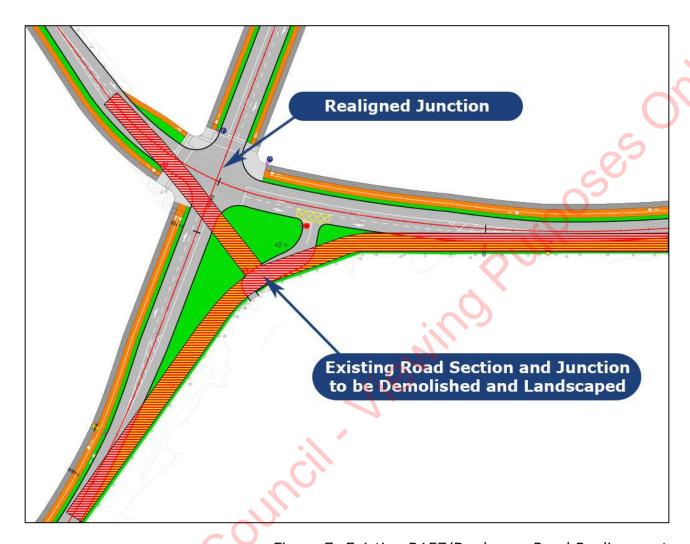


Figure 7: Existing R157/Dunboyne Road Realignment





Four different bridges will be constructed as part of the MOOR. These are highlighted in the figure below.

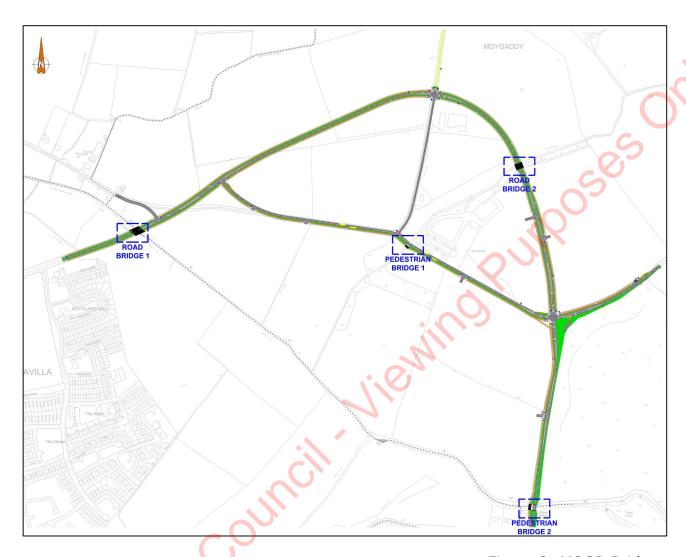


Figure 8: MOOR Bridges

Road bridges 1 and 2 will be new bridges which will be constructed as part of the MOOR. Pedestrian bridges 1 and 2 will be additional structures constructed adjacent to the existing bridge structures to accommodate pedestrian and cycle permeability. More information on these bridges is available in OCSC report "Bridge Options Report" submitted separately.





3 TRAFFIC IMPACT

A traffic assessment was carried out, paying due consideration to the following guidelines below, in order to ensure that the orbital route is designed accordingly to cater for all future development in the nearby lands.

- Traffic & Transport Assessment Guidelines (2014) as published by the former
 National Roads Authority (NRA) now Transport Infrastructure Ireland (TII);
- Guidelines for Traffic Impact Assessment (1997) as published by the Chartered Institute of Highways & Transportation;
- Meath County Council Development Plan 2021-2027.
- Project Appraisal Guidelines for National Roads Unit 5.3 Travel Demand Projections,
 TII (October 2016)
- Project Appraisal Guidelines for National Roads Unit 16.1 Expansion Factors for Short Period Traffic Counts, TII (October 2016)
- TA 79/99 "Traffic Capacity of Urban Roads" from the DMRB

The Traffic Impact Assessment was done by means of a Dynamically Assigned Vissim Micro-Simulation model, as requested by Kildare County Council, with the overall aim of defining each junction along the MOOR and detailing the required size of each junction including number of lanes, requirements of turning lanes etc. This document has been submitted as part of this application, under separate cover.





4 COLLISION HISTORY

OCSC interrogated the Road Safety Authority (RSA) website https://www.rsa.ie/en/RSA/Road-Safety/RSA-Statistics/ in order to ascertain the number, location, date, and severity of collisions in the area in recent years. The site provides details of all accidents by year between 2005 and 2016 (latest available statistics). Collisions/accidents are categorised by severity i.e. fatal, serious, and minor. The statistics also identify what the collision type was i.e. vehicle only, pedestrian, cyclist/motorcyclist etc. In that regard the dataset provides a host of information that can be used to identify the requirements for, and potential benefits of, any road upgrade. The figure below shows an extract from the dataset for the MOOR environs.

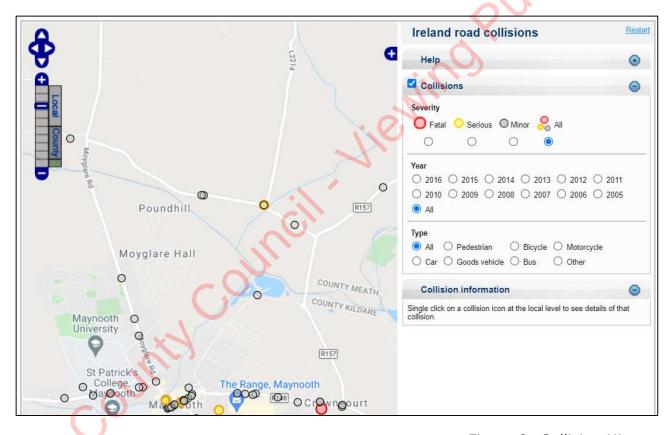


Figure 9: Collision History





Project: S665

OCSC collated the raw collision data into a table in order to assist in the assessment of same. This is shown in table below. The table summarises only those recorded accidents which took place along the L6219 & L2214 that directly relate to the provision of the Maynooth Outer Orbital Route.

RSA Collision History					
Year	Fatal	Serious	Minor		
2005	0	0	0 6		
2006	0	0	0.0		
2007	0	0	0		
2008	0	0	0		
2009	0	0	0		
2010	0	0	0		
2011	0	1	2		
2012	0	0	0		
2013	0	0	0		
2014	0	0	1		
2015	0	0	0		
2016	0	0	1		
Total	0	1	3		

Table 2: RSA Collision Data MOOR Study Area

While there were no fatal accidents over the period, 1 no. serious accidents, and 3 no. minor accidents occurred. There is, therefore, potential safety benefits accruing from completing the remaining section of the MOOR. The provision of the Maynooth Outer Orbital Route will also help alleviate traffic congestion with the centre of Maynooth itself.





5 GEOMETRY & DESIGN STANDARDS

APPLICABLE TECHNICAL STANDARDS

The scheme has been designed in accordance with the Design Manual for Urban Roads and Streets (DMURS) and the following standard documents:

- DMURS;
- National Cycle Manual;
- TD 36/93;
- Report of the Study Group on Dimensions of Agricultural Bridges and Underpasses (UK Dept. Transport; Oct 1985);
- NRA TD 19/13;
- Traffic Signs Manual 2010 with Amendments (July 2013);
- HD 26/06;
- Greater Dublin Strategic Drainage Study (GDSDS);
- Greater Dublin Code of Practice for Drainage Works;
- The SUDS Manual CIRIA 2007;
- The Flood Studies Report (1975) and Supplementary Reports;
- HD 19/12;
- NRA Design Manual for Roads and Bridges (NRA DMRB);
- NRA IAN 02/11 Interim Requirements for the Use of Eurocodes for the Design of Road Structures Amendment No. 1.

ROAD CLASSIFICATION

The movement function of a street is described on DMURS using a hierarchy system that classifies streets into the following categories, as shown in Figure 10:

- Arterial Streets
- Link Streets



21

Issued: 29 August 2022

Project: S665



Local Streets

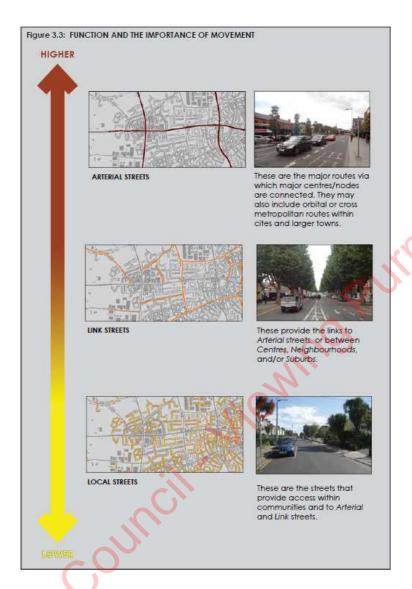


Figure 10: DMURS Hierarchy of Streets

The proposed MOOR will be classified as a **Link Road**. Table 3.1 of DMURS illustrates how this road hierarchy relates to other relevant documents, shown in the table below.



OCSC

DMURS Description	Roads Act/NRA DMRB	Traffic Management Guidelines	National Cycle Manual		
Arterial	National	Primary Distributor Roads	Distributor		
Link	Regional (see note 1)	District Distributor Local Collector (see Notes 1 and 2)	Local Collector		
Local	Local	Access	Access		
Notes Note 1: Larger Regional/District Distributors may fall into the category of Arterial where they are the main links between major centres (i.e. towns) or have an orbital function. Note 2: Local Distributors may fall into the category of Local street where they are relatively short in length and simply link a neighbourhood to the broader street network.					

Table 3.1: Terminology used within this Manual compared with other key publications.

Table 3: DMURS Road Terminology

This designation is appropriate as the nearby M4 serves as a primary distributor road. The proposed link road will provide high quality infrastructure to serve local traffic and cyclists and cater for the future development in the study area.

ROAD DESIGN SPEEDS

The design speed is the maximum speed at which it is envisaged/intended that the majority of vehicles will travel under normal conditions.

The current speed limits within the Study Area are as follows:

- Moyglare Road Speed Limit 50 km/h;
- L6219 Speed Limit 80 km/h;
- R157 North of Roundabout Speed limit 80km/h;
- R157 South of Roundabout Speed limit 50km/h;
- L2214 Speed Limit 80 km/h.





The proposed speed limits, which have been workshopped with Meath County Council and ties in with existing speed limits, are shown in the figure below.

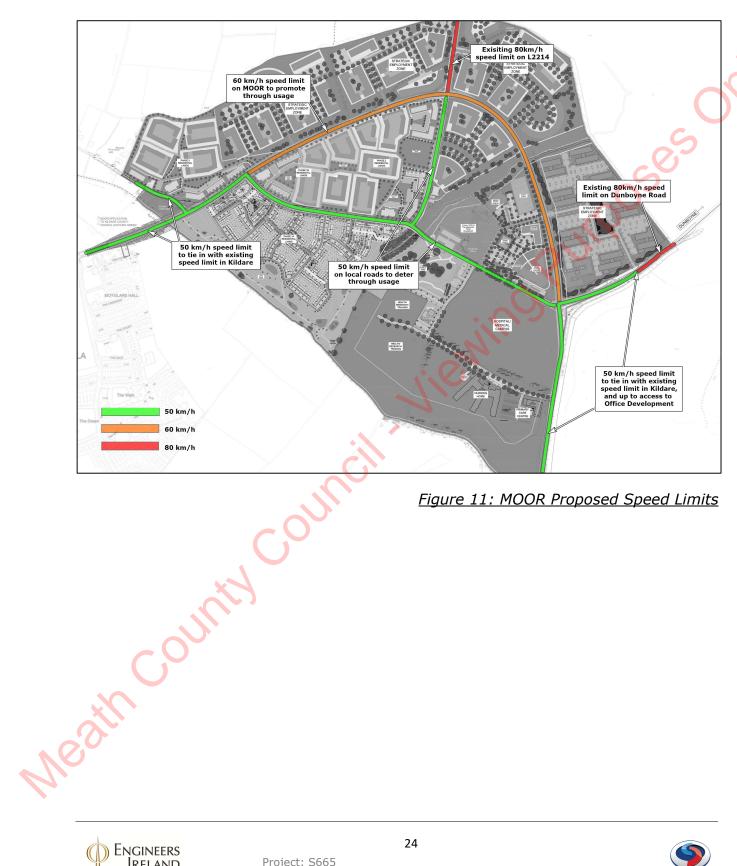


Figure 11: MOOR Proposed Speed Limits



ROAD CROSS SECTIONS

INTRODUCTION

The proposed MOOR is considered as consisting of four main elements. The carriageway, the verge, the footpath, and a cycle track. The proposed cross section is shown below.

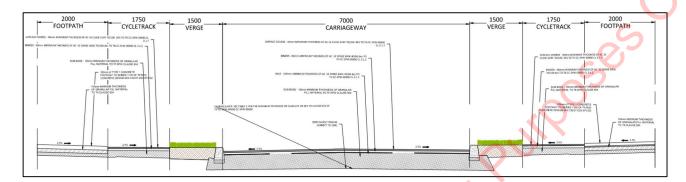


Figure 12: MOOR Cross Section

CARRIAGEWAY

The carriageway cross-section is 7.00m wide (DMURS 4.4.1) as the road will be classified as a Link Road with low to moderate Design Speeds (60 km/h), and will be frequently used by large vehicles, i.e. buses. This carriageway width is selected from Figure 4.55 of DMURS, which is shown overleaf.





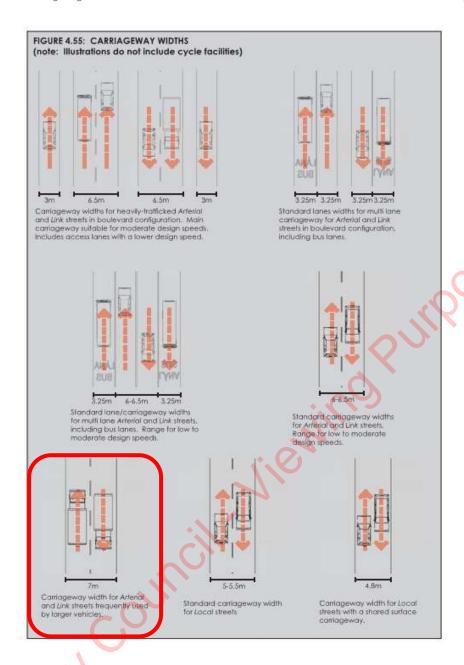


Figure 13: DMURS Carriageway Widths

The selection of this width of carriageway is considered appropriate by OCSC and is in line with the previous Part VIII for the MOOR and also in line with the recently approved Maynooth Eastern Ring Road.

Upgrade works to the R157 will also utilise a 7.0m carriageway width to comply with the MOOR and MERR design.



OCSC

FOOTPATHS

The width of the footpaths is determined by reference to DMURS Section 4.3.1. with a minimum required width of 1.8m based on the space needed for two wheelchairs to pass each other.

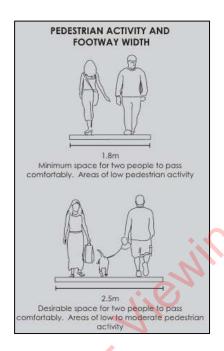


Figure 14: SMURS Figure 4.34 Width

It is determined that the Link Road is defined as suburban in character and as such OCSC regard 2.0m as an appropriate provision given the expected demand. This is in line with the previous Part VIII application.

A minimum of a 2.0m footpath will also be provided along the R157 including pedestrian infrastructure adjacent to the Kildare Bridge to the junction of the R157 & Dunboyne Road.

CYCLE TRACKS

The cycle lanes and crossings were designed in accordance with the National Cycle Manual (NCM). All cycle facilities along the MOOR are off-road and segregated facilities.





Based on the Cycle Width Calculator in the NCM, the estimated appropriate cycle path width is 1.75m, giving room for a single file lane with overtaking room. These cycle paths are one-way and will be located on both sides of the proposed road. The cycle paths are separated from traffic by a kerb and there will be a horizontal separation on the inside, between the cycle path and footpath.

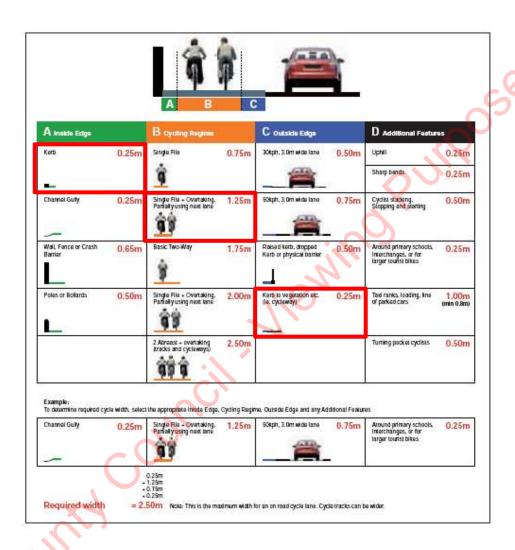


Figure 15: NCM Width Calculator

It should be noted that Meath County Council have indicated that they wish the design of the MOOR to be consistent and tie into the already completed section at Maria Villa, this may change the requirements set out above from 1.75m in line with the NCM to 2.0m. Further consultation will be required with Meath County Council to clarify this requirement.



OCSC

Cycle facilities will also be provided along the R157 from the masterplan lands to the Junction of the R157 with the Dunboyne Road. Cycle facilities will also be provided adjacent to the Kildare Bridge. The design of cycle infrastructure along the R157 will be in line with the proposed MOOR design and will take cognisance of the current design of the Maynooth Eastern Ring Road (MEER).

All priority T-Junctions and signalised junctions have been designed in order to achieve the requirements of the National Cycle Manual.

PLANTED VERGE

OCSC have considered the requirements of the width of the planted verge as set out in section 4.3.1 of DMURS and have determined that a minimum of 1.5m is appropriate. Consideration was given to the use of space for a SUDS design that will complement the drainage design of the MOOR. Consideration has also been given to the requirements of the ESB HV wayleave so that the width of the footpath, cycle track and verge could potentially accommodate this service. In addition, the verge can accommodate road signage, lighting columns and other street furniture in order to reduce clutter in the footway.

HORIZONTAL AND VERTICAL GEOMETRY

The alignment of the MOOR was designed so that the geometric elements, including horizontal and vertical curvature, super elevation and sight distance are in line with DMURS, having values consistent with the design speed of 60 km/h.

The relevant horizontal and vertical geometric design values are highlighted in DMURS Table 4.3 overleaf for the 60 km/h Design Speed. A standard carriageway cross fall of 2.5% was adopted throughout with super elevation applied if necessary, noting that adverse camber is allowable under DMURS designs in accordance with Table 4.3. A cross fall of 2.5% was also used for footpaths and cycle facilities.





Design Speed (km/h)	10	20	30	40	50	60					
Minimum Radius with adverse camber of 2.5%	-	11	26	56	104	178					
Minimum Radius with superelevation of 2.5 %	-	-	-	46	82	136					
VERTICAL CURVATURE											
Design Speed (km/h)	10	20	30	40	50	60					
Design Speed (km/h) Crest Curve K Value	10 N/A	1	30 N/A	2.6	50 4.7	60 8.2					

Table 4.3: Carriageway geometry parameters for horizontal and vertical curvature.

Figure 16: DMURS Carriageway Geometric Parameters

Upgrade works to the R157 also follows the horizontal and vertical geometry set out in DMURS, for the applicable speeds shown in Figure 11. A standard carriageway cross fall of 2.5% and a cross fall of 2.5% was also used for footpaths and cycle facilities.

BRIDGE STRUCTURES

All of the bridges to be constructed as part of the scheme share a number of key characteristics. They all have:

- · Piled foundations;
- Cast in situ abutments;
- Precast deck elements;
- On deck cast in situ slabs or screeds;
- Post-fix parapets.

The bridges will be constructed both over and adjacent to the live water courses as shown in the figure overleaf.





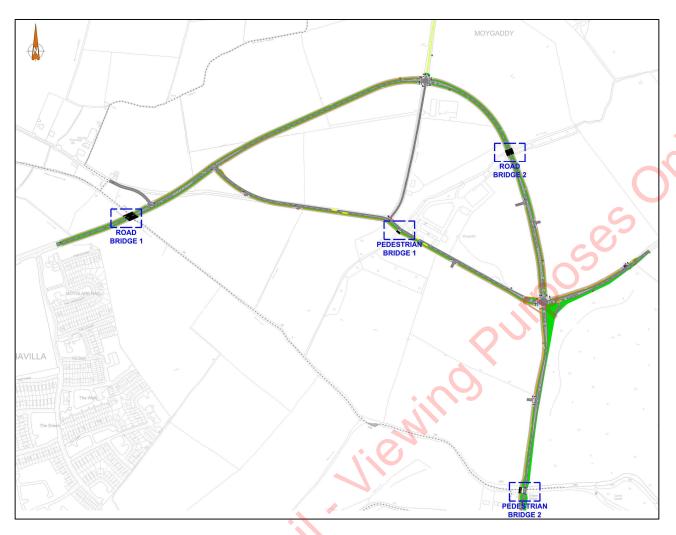


Figure 17: Location of Bridges on the MOOR

A separate "Bridge Options Report" has been prepared and submitted as part of this application under separate cover. More information on the design of the bridges are detailed therein.





6 JUNCTION STRATEGY

The primary principle in the design of junctions along the route was to provide junctions that are safe and consistent with existing layouts in order to present a uniformity of approach to drivers. In addition, junctions will have sufficient capacity to accommodate design year peak traffic flows thus optimising network capacity. The primary junction strategy objectives were:

- To optimise road safety by ensuring adequate visibility and consistency;
- To ensure capacity for the design year;
- · To function as traffic calming measures;
- To provide safe crossing facilities for pedestrians and cyclists;
- To provide an economic solution, so that the cost of implementing the design will be, to the maximum possible extent, offset by the economic benefits derived;
- To optimise road construction costs;
- To minimise environmental impacts, such as air pollution and engine noise, by minimising fuel consumption through reductions in the number of speed changes and the number of stop/starts required.

Section 4.4.3 of DMURS Junction Design states that priority junctions should be applied where Local streets meet Link streets. In addition to the aforementioned, after discussions with Meath County Council it was decided that priority type T-Junctions should be applied throughout the scheme where possible as priority type T-Junctions are typically more cost effective and require less space than other solutions such as large roundabouts or signalised junctions.

The junction of the MOOR and the R157 under the approved R157 realignment under Meath County Council planning refence P8/10011 was shown as a roundabout. Meath County Council have indicated to OCSC that a signalised junction would be in line with their current preferences and this solution should be explored. The provisions of a signalised junction at this location would significantly reduce the current footprint required by the Part VIII roundabout. This junction has been designed as a signalised junction.





Furthermore, the junction between the L2214 and the MOOR has also been designed as a signalised junction, with the remainder of junctions operating as priority T-junctions. All junctions on the MOOR also includes right-turn lanes. This was not shown as a requirement as per the traffic analysis, however MCC have indicated that this is required for traffic management.

The following Figure 18 indicates the location and operations of junctions along the MOOR.



Figure 18: Junctions Along MOOR



Project: S665

Issued: 29 August 2022



JUNCTION 1

Realigned junction of the L6219 and the MOOR. This junction takes the form of a priority type junction with a right-turn lane from the MOOR into the L6219.

JUNCTION 2

Access to Phase 1 & 2 residential lands. This junction takes the form of a priority type junction with a right-turn lane from the MOOR into the L6219.

JUNCTION 3

Junction of the MOOR & L2214. This junction takes the form of a signalised junction. It should be noted that south-to-north lane on the L2214, within the arc, will be repurposed to a shared pedestrian and cyclist facility. This means that the portion of the L2214 within the arc will change to a one-way north-to-south lane. Right-turn movements on the western approach will be prohibited, which means that this road can only be accessed by a through movement on the L2214, or a left-turn movement on the eastern approach.

JUNCTION 4

Junction of the L6219 & L2214. This junction takes the form of a priority T-junction. It should be noted that south-to-north lane on the L2214, within the arc, will be repurposed to a shared pedestrian and cyclist facility. This means that the portion of the L2214 within the arc will change to a one-way north-to-south lane.

JUNCTION 5

Junction of the MOOR and R157. This junction takes the form of a four-legged signalised junction with accompanying right-turn lanes on all approaches.



OCSC

7 GROUND INVESTIGATIONS, SOIL CLASSIFICATION & EARTHWORKS BALANCE OPTIMISATION

OCSC instructed Site Investigations Ltd (SIL) to complete a ground investigation at the site. The report presents the factual geotechnical data obtained from the field and laboratory testing with interpretation of the ground conditions.

The full Site Investigation report has been included as Appendix A of this report.



OCSC

8 DRAINAGE, STRUCTURES & PAVEMENT

SURFACE WATER DRAINAGE OVERVIEW

The general principals behind the drainage design will be as follows:

- The proposed road will cross existing watercourses, namely the river Ryewater and the Blackhall Little stream. These crossings have been designed so as not to interfere with the surface water drainage regime of the area through which the road passes, nor cause any adverse flood impact;
- Existing overland flows which the proposed road crosses and may block, will be intercepted and discharged to a suitable outfall;
- The drainage of the proposed road will be designed such that surface water drainage and sub-grade drainage will be provided for the mainline carriageway and all new sections of minor roads. This discharge will be directed to the existing watercourses and discharged properly, following attenuation and treatment through fuel separators;
- The maintenance or improvement to the quality of the existing drainage network;
- The application of Sustainable Drainage Systems (SuDS) to the surface water drainage system where possible.

The road drainage for the scheme has been designed in accordance with the GDSDS. The elements of the drainage to be constructed will be constructed in accordance with the *Greater Dublin Region Code of Practice for Drainage Works*, and Traffic Infrastructure Ireland's (TII) *RCD 500 series* and *Drainage Design for National Road Schemes*. Any SuDS elements incorporated into the scheme will be designed in accordance with The SuDS Manual, C753 (published by CIRIA, 2007). All drainage designs have been carried out with regard to both Meath and Kildare County Council's respective Development Plans and Frameworks.

All rainfall runoff on the new MOOR is the be captured by adequately spaced trapped road gullies, which connect to a main carrier drain under the road. The rainfall runoff on the aligning footpath and cycle-track shall be intercepted by the dividing tree-lined grass verge, with excess runoff only being collected by the road's gully network.



36

Issued: 29 August 2022

Project: S665



Surface water attenuation will be used to control surface water runoff rates from all hard surfaces in accordance with the GDSDS, with these being restricted to a maximum flow rate of 5.5 l/s/ha, which is less than the calculated greenfield runoff equivalent.

The rate of discharge from the storage facility will be controlled by means of a flow restricting device at the outfall i.e., vortex Hydrobrake, or similar approved. The level of discharge will be restricted to that of the natural catchment and the remainder of the flow will be attenuated upstream of the flow restriction. The size and volume of storage facilities will in general be based on the 1 in 100-year storm event. For flows in excess of the 1-in-30-year storm event up to the 1-in-100-year storm event, attenuated runoff will be retained within the site of the road. Where feasible, this will be stored in areas such as landscaped areas and carriageway surfaces, and returned to the drainage system to be discharged through the flow control device following the storm event. Where storage of this volume in surface areas is not feasible, the attenuation facilities will be increased in size to accommodate the 1-in-100-year storm event. For larger events (i.e., in excess of the 1-in-100-year storm event), excess runoff will be directed overland to receiving watercourses via designated routes.

The attenuation systems are to largely comprise enclosed vegetated ponds, and shall be preceded by a Class 1 bypass fuel separator.

SURFACE WATER DESIGN CRITERIA

The proposed surface water network is to be designed in accordance with the GDSDS, using MicroDrainage Network Design package, by Innovyze Inc., which simulates the performance of the integrated drainage network for varying rainfall return periods and storm durations.

The MicroDrainage Network Design software applies the Flood Studies Report (FSR) methodology for analysis of the rainfall profiles. However, the input design parameters that were used, as part of this design, were based on the available Flood Studies Update (FSU) data, i.e., the return period rainfall depths for sliding durations, which determine



OCSC

the M5-60 and R values, and the standard annual average rainfall (SAAR); as sourced from Met Éireann. The primary design parameters used in design are as follows:

Parameter		Value
Annual Average Rainfall (AAR) Value		799mm
Rainfall 'M5-60' Value		15.70mm
Ration R		0.281
Impermeability Factor for paved areas		1.0
Time of Entry		minutes
Smallest pipe diameter to use for carriageway drainage		225mm
Roughness Coefficient		0.6
Minimum permissible velocity (self-cleansing velocity)		1.0 m/s
Maximum velocity	00	2.99 m/s
Minimum cover to pipes (unprotected)		1200mm
Line up pipe soffits at connection		YES
Return Period for carriageway drainage		2 years
Return period for culvert design		100 years
Return period for bridge design		1000 years

SURFACE WATER CATCHMENTS & ATTENUATION

The proposed surface water network is to be split into a 4nr. catchments, in order to optimise the network based on the natural topography of the site, and therefore replicating natural discharge rates and volumes.

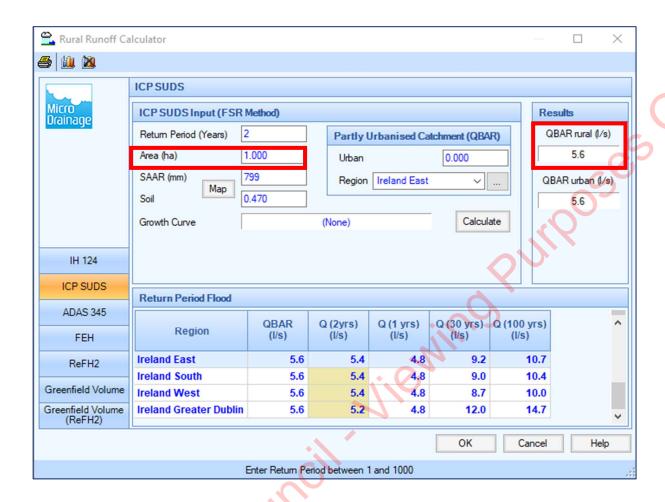
The new road and associated footpath and cycle track is to discharge the treated and attenuated rainfall runoff from each catchment to the existing watercourse along its southern and eastern boundaries, namely the river Ryewater and the Blackhall Little stream.

The discharge rates are to be restricted to a maximum flow rate from each catchment of **5.5** I/s/ha, which is *less than* the current greenfield equivalent runoff rate. Refer





to the image below for details of the existing greenfield runoff rate, which has been calculated using the ICPSuDS Input, (Flood Studies Report, FSR).

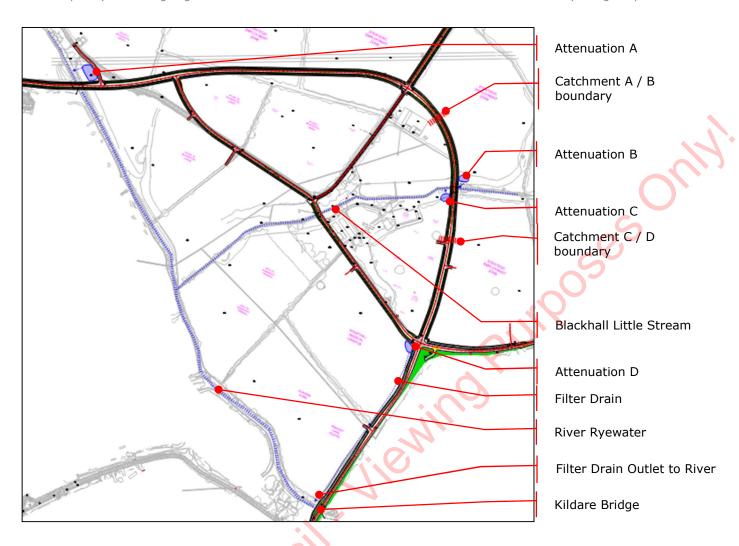


Attenuation ponds are to be provided upstream of the outfall location from each catchment. Each of the attenuation systems have been designed to attenuate the design 1% AEP event, with an additional 20% factor for Climate Change projections, and shall comprise a grassed / vegetated pond, with protected headwalls.

An overview of the surface water catchment boundaries, along with the attenuation zones and outfall locations are illustrated on the following image.







A summary of the attenuation strategy is as follows:

Attenuation A: 765m³ – discharge to River Ryewater;

Attenuation B: 125m³ – discharge to Blackhall Little stream; Attenuation C: 120m³ – discharge to Blackhall Little stream;

Attenuation D: 140m³ – discharge to new filter drain that discharges to river Ryewater.

As note previously, each drainage network is to discharge at a flow rate of 5.5 l/s/ha, which is less than the calculated greenfield equivalent rate.

While catchment areas A, B and C comprise all new road infrastructure, and are do discharge treated and attenuated runoff to the watercourse immediately adjacent, Catchment D is to discharge its attenuated and treated flows to a new filter dreain that





is to replace an existing open drain as part of the upgrade of the R157 road, which is to form part of the MOOR. This section of the proposed MOOR, on the eastern side of the Maynooth Environs, is to consist of realigned and upgrade of the existing R157road infrastructure, with rainfall runoff to be directed to the new filter drain via repositioned road gullies (along with some new ones).

A non-return valve is to be fixed to the headwall of each outfall to watercourse.

FLOOD RISK ASSESSMENT

JBA Consulting have carried out a detailed Flood Risk Assessment (FRA) on the masterplan area foe the Maynooth Environs. This FRA included a detailed update to the model of the river Ryewater and its local tributaries, based on a recent detailed topographic survey. The new model also included the new bridge structures that have been discussed elsewhere within this report.

The results of the FRA, and its associated output flood extent mapping, confirmed that there was no adverse impact on existing lands in the vicinity of the study area, with no additional nuisance flooding caused as a result of the proposed new road or associated developments.

Refer to JBA Consulting's Masterplan Flood Risk Assessment Report, submitted under separate cover for further details.

SECTION 50 APPLICATION

A Section 50 application to the Office of Public Works (OPW) is to be submitted following grant of planning permission, for each of the proposed bridge structures.

It is noted that an assessment on potential flood risk, in line with OPW's Section 50 specific requirements, have been assessed as part of JBA consulting's flood study and risk assessment for the Maynooth Environs, with no adverse impact noted.





WASTEWATER DRAINAGE OVERVIEW

OCSC and the applicant have had continued detailed discussions with Irish Water in relation to the delivery of a new strategic wastewater pumping station, which is to be sited on Applicant owned lands within Maynooth Environs, as part of a separate planning application. New wastewater drainage infrastructure is to be installed along the route of the proposed MOOR, which is to facilitate new development in the Maynooth Environs by allowing for a connection to the new WWPS. All new wastewater infrastructure shall be in accordance with Irish Water's requirements.

POTABLE WATER OVERVIEW

New watermain infrastructure is to be installed along the route of the proposed MOOR, which is to facilitate new development in the Maynooth Environs. These are to be routed along the footpath / cycle track on both sides of the carriageway, and shall be in accordance with Irish Water's requirements.





9 CONCLUSIONS & RECOMMENDATIONS

CONCLUSIONS

Having completed the preliminary design of the scheme, the following conclusions can now be made:

- The need for the scheme has been established.
- The scheme will also relieve pressure at certain key junctions within the existing road network.
- The new bridge on the western side will provide a second river crossing for traffic from Moyglare Road to Maynooth environs and eastwards.
- The scheme will bring a reduction in the frequency and severity of road collisions
- The design of the scheme has been carried out in accordance with DMURS.

RECOMMENDATIONS

It is recommended that the Maynooth Outer Orbital Road as described in this Preliminary Design Report be approved by Meath County Council so that it will form the basis for the detailed design and construction of the Road.





10 VERIFICATION

This report was compiled and verified by:

Wian Marais BE (US), BE (Hons) (UP), Professional Engineer (ECSA) Civil Engineer

O'Connor Sutton Cronin & Associates







Appendix A SITE INVESTIGATION REPORT

County



Project: S66

Issued: 29 August 2022



S.I. Ltd Contract No: 5863

Client: Sky Castle Ltd

Engineer: OCSC

Contractor: Site Investigations Ltd

Moygaddy, Maynooth, Co. Meath Site Investigation Report

Prepared by:

Stephen Letch

Issue Date:	12/08/2021
Status	Final
Revision	2

Contents:		Page No.	
1.	Introduction	1	
2.	Site Location	1	
3.	Fieldwork	1	11,
4.	Laboratory Testing	4	
5.	Ground Conditions	4	
6.	Recommendations and Conclusions	5	S
		S	
Appendices	<u>s:</u>	:00	
1.	Cable Percussive Borehole Logs		
2.	Rotary Corehole Logs and Photographs	No.	
3.	Trial Pit Logs and Photographs		
4.	Soakaway Test Results		
5.	Dynamic Probe Logs	10	
6.	Geotechnical Soil Laboratory Test Results		
7.	Geotechnical Rock Laboratory Test Results		
8.	Survey Data		

Appendices:

- 1. Cable Percussive Borehole Logs
- 2. Rotary Corehole Logs and Photographs
- 3. Trial Pit Logs and Photographs
- 4. Soakaway Test Results
- 5. Dynamic Probe Logs
- Geotechnical Soil Laboratory Test Results 6.
- Geotechnical Rock Laboratory Test Results

1. Introduction

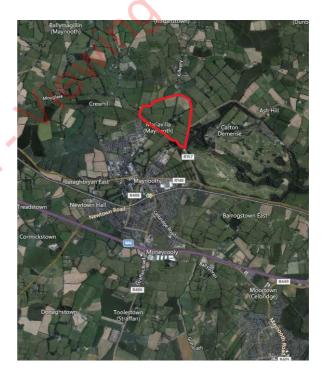
On the instructions of OCSC, Site Investigations Ltd (SIL) was appointed to complete a ground investigation at Moygaddy, Maynooth, Co. Meath. The investigation was completed for the residential development on the site and was completed on behalf of the Client, Sky Castle Ltd. The fieldworks were started in June and completed in July 2021.

This report presents the factual geotechnical data obtained from the field and laboratory testing with interpretation of the ground conditions discussed.

2. Site Location

The site is located to the north of Maynooth with the Kildare-Meath border running to the south of the site with Maynooth in Kildare and the site in Meath. Carton Demense is to the east of site with Dublin city further to the east. The first map below shows the location of the site to the east of Dublin and the second map shows the location of the site to the north of Maynooth town.





3. Fieldwork

The fieldworks comprised a programme of cable percussive boreholes, rotary coreholes, trial pits and dynamic probes. All fieldwork was carried out in accordance with BS 5930:2015, Engineers Ireland GI Specification and Related Document 2nd Edition 2016 and Eurocode 7: Geotechnical Design.

The fieldworks comprised of the following:

- 18 No. cable percussive boreholes
- 16 No. rotary coreholes
- 21 No. trial pits with soakaway tests
- 84 No. dynamic probes

3.1. Cable Percussive Boreholes with Rotary Coreholes

Cable percussion boring was undertaken at 18 No. locations using a Dando 150 rig and constructed 200mm diameter boreholes. The boreholes terminated at depths ranging from 3.00mbgl (BH10) to 6.80mbgl (BH15 and BH16) after 1.5hrs chiselling with no further progress. It was not possible to collect undisturbed samples due to the granular soils encountered so bulk disturbed samples were recovered at regular intervals.

To test the strength of the stratum, Standard Penetration Tests (SPT's) were performed at 1.00m intervals in accordance with BS 1377 (1990). In soils with high gravel and cobble content it is appropriate to use a solid cone (60°) (CPT) instead of the split spoon and this was used throughout the testing. The test is completed over 450mm and the cone is driven 150mm into the stratum to ensure that the test is conducted over an undisturbed zone. The cone is then driven the remaining 300mm and the blows recorded to report the N-Value. The report shows the N-Value with the 75mm incremental blows listed in brackets (e.g., BH01 at 2.00mbgl where N=16-(2,3/3,4,4,5)). Where refusal of 50 blows across the test zone was encountered was achieved during testing, the penetration depth is also reported (e.g., BH01 at 1.00mbgl where N=50-(3,4/50 for 85mm)).

The cable percussive borehole logs are presented in Appendix 1.

3.2. Rotary Coreholes

At 16 No. locations, rotary coreholes were completed to investigate the depth and type of bedrock. After the investigation started, RC01, RC02, RC03 and RC15 were cancelled but the numbering remained as scheduled so these numbers are missing in the sequence of rotary coreholes. The rotary drilling was carried out using a Sondeq SS71 top drive rig. Open hole drilling techniques were used to advance through the overburden where encountered and bedrock was recovered at 10 No. locations and the bedrock was then cored with the corehole terminated when 3m of core was recovered. At 6 No. locations, no bedrock was encountered when the corehole reached 8mbgl and the corehole was terminated and backfilled.

Once the coreholes were completed, the rock cores were returned to SIL, where they were logged and photographed by a SIL geotechnical engineer. Provided on the logs are engineering

geological descriptions of the rock cores with details of the bedding/discontinuities and mechanical indices for each core run, i.e., TCR, SCR, RQD and Fracture Index.

The rotary corehole logs and photographs are presented in Appendix 2.

3.3. Trial Pits with Soakaway Tests

21 No. trial pits were excavated using a wheeled excavator. The pits were logged and photographed by SIL geotechnical engineer and representative disturbed bulk samples were recovered as the pits were excavated, which were returned to the laboratory for geotechnical testing. Groundwater ingresses and pit wall stability were also recorded as the excavations

progressed.

At the base of the trial pits, soakaway tests were completed and logged by SIL geotechnical engineer. BRE Special Digest 365 stipulates that the pit should be filled three times and that the final cycle is used to provide the infiltration rate. The time taken for the water level to fall from 75% volume to 25% volume is required to calculate the rate of infiltration. However, if the water level does not fall at a steady rate, then the test is deemed to have failed and the area is

unsuitable for storm water drainage.

The trial pit logs and photographs are presented in Appendix 3 and soakaway test results are presented in Appendix 4.

3.4. Dynamic Probes

At 84 No. locations, dynamic probes were completed using a track mounted Competitor 130 machine. The testing complies with the requirements of BS1377: Part 9 (1990) and Eurocode 7: Part 3. The configuration utilised standard DPH (Heavy) probing method comprising a 50kg weight, 500mm drop height and a 50mm diameter (90°) cone. The number of blows required to drive the cone each 100mm increment into the sub soil is recorded in accordance with the standards. The dynamic probe provides no information regarding soil type or groundwater

conditions.

The dynamic probe results can be used to analyse the strength of the soil strata encountered by the probe. 'Proceedings of the Trinity College Dublin Symposium of Field and Laboratory Testing of Soils for Foundations and Embankments' presents a paper by Foirbart that is most relevant to Irish soil conditions and within this paper the following equations were included:

Granular Soils: DPH N₁₀₀ x 2.5 = SPT N value

Cohesive Soils: $C_u = 15 \times DPH N_{100} + 30 \text{ kN/m}^2$

3

These equations present a relationship between the probe N₁₀₀ value and the SPT N value for granular soils and the undrained shear strength of cohesive soils.

The dynamic probe logs are presented in Appendix 5.

3.5. Surveying

Following completion of all the fieldworks, a survey of the exploratory hole locations was completed using a GeoMax GPS Rover. The data is supplied on each individual log along with a site plan in Appendix 8.

4. Laboratory Testing

Geotechnical soil laboratory testing was completed on representative soil samples in accordance with BS 1377 (1990). Testing included:

- 10 No. moisture contents
- 10 No. Atterberg limits
- 10 No. particle size gradings
- 21 No. California Bearing Ratio tests
- 8 No. pH, sulphate and chloride content

Geotechnical rock testing was also completed on the core samples and consisted of the following:

• 20 No. point loads

The geotechnical soil laboratory test results are presented in Appendix 6 with the rock laboratory tests provided in Appendix 7.

5. Ground Conditions

5.1. Overburden

The natural ground conditions in the boreholes and trial pits are consistent with brown overlying black slightly sandy gravelly silty CLAY with cobbles and boulders. These natural soils are overconsolidated lodgment till which is encountered across the North Leinster region with several papers discussing the engineering characteristics of the soil. The brown and brown grey soils are the weathered surface of the underlying black clays and the gravel and cobbles are generally angular to subrounded and predominantly limestone in origin.

The SPT N-values range from 7 to 15 at 1.00mbgl and increase to between 12 and 21 at 2.00mbgl although BH14 did record a value of 7 at this depth. The values then continue to increase with depth as the very stiff black CLAY is encountered.

Laboratory tests of the shallow cohesive soils recorded CLAY soils with low and intermediate plasticity indices of 12% to 18% recorded. The particle size distribution curves were poorly sorted straight-line curves with 21 to 53% fines content.

5.2. Bedrock

Bedrock was recovered from depths ranging from 2.80mbgl (RC10) to 7.80mbgl (RC20) and was greater than 8m deep at 5 No. locations to the east of the site. The core recovered shows that bedrock is strong to very strong light grey fine grained argillaceous LIMESTONE interbedded with moderately strong dark grey calcareous MUDSTONE with pyrite crystals, occasional fossils and calcite veins. The core showed a fresh to slightly weathered state. The discontinuities are generally smooth to rough, planar to slightly undulating, tight to open, dip angles ranging from sub-horizontal to sub-vertical and the surfaces are clean with some grey stained, calcite crystals on the surface and some clay infill.

5.3. Groundwater

Groundwater details in the boreholes and trial pits during the fieldworks are noted on the logs in Appendices 1 and 2. Groundwater ingresses were recorded in five boreholes, at 1.90mbgl at BH07 and between 3.20mbgl and 3.60mbgl in BH05, BH14, BH16 and BH17. All ingresses were sealed off by the casing as the drilling advanced and therefore indicates perched water lenses. There were water ingresses into 10 No. trial pits across the site, at depths ranging from 1.50mbgl (TP12) to 2.60mbgl (TP21) with ingresses logged as seepages to medium rates

6. Recommendations and Conclusions

Please note the following caveats:

The recommendations given, and opinions expressed in this report are based on the findings as detailed in the exploratory hole records. Where an opinion is expressed on the material between the exploratory hole locations or below the final level of excavation, this is for guidance only and no liability can be accepted for its accuracy. No responsibility can be accepted for adjacent unexpected conditions that have not been revealed by the exploratory holes. It is further recommended that all bearing surfaces when excavated should be inspected by a suitably qualified Engineer to verify the information given in this report.

Excavated surfaces in clay strata should be kept dry to avoid softening prior to foundation placement. Foundations should always be taken to a minimum depth of 0.50mBGL to avoid the effects of frost action and possible seasonal shrinkage/swelling.

If it is intended that on-site materials are to be used as fill, then the necessary laboratory testing should be specified by the Client to confirm the suitability. Also, relevant lab testing should be specified where stability of side slopes to excavations is a concern, or where contamination may be an issue.

6.1. Shallow Foundations

Due to the unknown depth of foundation and no longer-term groundwater information, this analysis assumes the groundwater will not influence the construction or performance of these foundations.

The borehole encountered firm brown slightly sandy slightly gravelly silty CLAY at 1.00mbgl and the SPT N-value at this depth generally ranges from 9 to 15. Two holes, BH14 and BH17, recorded lower values of 7 and 8 respectively but the value of 9 has been chosen for analysis of the soils.

Using a correlation proposed by Stroud and Butler between SPT N-values and plasticity indices, the SPT N-value can be used to calculate the undrained shear strength. With the low to intermediate plasticity indexes recorded in the laboratory for the soils encountered on site, this correlation is C_u=6N. Therefore, using the lower value of 9, this indicates that the undrained shear strength of the CLAY is 54kN/m². This can be used to calculate the ultimate bearing capacity, and this has been calculated to be 295kN/m². Finally, a factor of safety is applied and with a factor of 3, an allowable bearing capacity of 100kN/m² would be anticipated using the lower SPT values.

The soils recorded values of 12 to 21 at 2.00mbgl. This SPT N-value of 12 indicates a C_u of $72kN/m^2$, an ultimate bearing capacity of $405kN/m^2$ and finally an allowable bearing capacity of $135kN/m^2$.

The dynamic probes confirm that the soils are firm to stiff with values of 2 or greater recorded across the site and would correlate with the SPT N-values.

The following assumptions were made as part of these analyses. If any of these assumptions are not in accordance with detailed design or observations made during construction these recommendations should be re-evaluated.

- Foundations are to be constructed on a level formation of uniform material type (described above).
- The bulk unit weight of the material in this stratum has a minimum density of 19kN/m³.
- All bearing capacity calculations allow for a settlement of 25mm.

The trial pits indicate that excavations in the cohesive soils should be stable for a short while at least although TP05 did record pit wall instability. Therefore, all slopes should be evaluated upon excavation and regular inspections should be completed during construction to ensure that all slopes are stable. Temporary support should be used on any excavation that will be left open for an extended period.

6.2. Groundwater

The caveats below relating to interpretation of groundwater levels should be noted:

There is always considerable uncertainty as to the likely rates of water ingress into excavations in clayey soil sites due to the possibility of localised unforeseen sand and gravel lenses acting as permeable conduits for unknown volumes of water.

Furthermore, water levels noted on the borehole and trial pit logs do not generally give an accurate indication of the actual groundwater conditions as the borehole or trial pit is rarely left open for sufficient time for the water level to reach equilibrium.

Also, during boring procedures, a permeable stratum may have been sealed off by the borehole casing, or water may have been added to aid drilling. Therefore, an extended period of groundwater monitoring using any constructed standpipes is required to provide more accurate information regarding groundwater conditions. Finally, groundwater levels vary with time of year, rainfall, nearby construction and tides.

Pumping tests would be required to determine likely seepage rates and persistence into excavations taken below the groundwater level. Deep trial pits also aid estimation of seepage rates.

As discussed previously, groundwater was encountered in five boreholes and ten trial pits at depths ranging from 1.50mbgl to 3.60mbgl.

There is always considerable uncertainty as to the likely rates of water ingress into excavations in cohesive soil sites due to the possibility of localised unforeseen sand and gravel lenses acting as permeable conduits for unknown volumes of water. Based on this information at the exploratory hole locations to date, it is considered likely that any shallow ingress (less than 2.00mbgl) into excavations of the CLAY will be slow to medium. If granular soils are encountered in shallow excavations, then the possibility of water ingressing into an excavation increase.

If groundwater is encountered during excavations then mechanical pumps will be required to remove the groundwater from sumps. Sumps should be carefully located and constructed to ensure that groundwater is efficiently removed from excavations and trenches.

6.3. Soakaway Tests

At 10 No. locations, the soakaway tests failed the specification as water ingressed into the pits. This indicates that the soils are already saturated and therefore, unsuitable for soakaway design.

At the remaining locations, the soakaway tests failed the specification as the water level did not fall sufficiently enough to complete the test. The BRE Digest stipulates that the pit should half empty within 24hrs, and extrapolation indicates this condition would not be satisfied. The tests were terminated at the end of the first (of a possible three) fill/empty cycle since further testing would give even slower fall rates due to increased soil saturation. The unsuitability of the soils for soakaways is further suggested by the soil descriptions of the materials in this area of the site where the soakaway was completed, i.e., well compacted clay soils.

6.4. Pavement Design

The CBR test results in Appendix 4 indicate CBR values ranging from 4.1% to 11.6%.

The CBR samples were recovered from 0.50mbgl and inspection of the formation strata should be completed prior to construction of the pavement. Once the exact formation levels are finalised then additional in-situ testing could be completed to assist with the detailed pavement design.

6.5. Aggressive Ground Conditions

The chemical test results in Appendix 4 indicate a general pH value between 8.59 and 8.80, which is close to neutral and below the level of 9, therefore no special precautions are required.

The maximum value obtained for water soluble sulphate was 127mg/l as SO_3 . The BRE Special Digest 1:2005 – 'Concrete in Aggressive Ground' guidelines require SO_4 values and after conversion ($SO_4 = SO_3 \times 1.2$), the maximum value of 152mg/l shows Class 1 conditions and no special precautions are required.

ehole Logs Weath County Council Weath County County

Contra		Cable Percussion	n Bo	orel	nole	Lo	g		В	orehole			
Contrac	ot:	Moygaddy	Easting	j:	693986	6.514		Date Started:	30/06	6/2021			
Locatio	n:	Maynooth, Co. Meath	Northin	g:	739217	7.399		Date Completed:			30/06/2021		
Client:		Sky Castle Ltd	Elevation	on:	56.45			Drilled By:	G. Macken				
Engine	er:	ocsc	Boreho Diamet		200mm	200mm		Status:	FINA	L			
Depth		Stratum Description	Legend.				and Insitu Tes		Water Strike	Backfill			
Scale	Depth 0.20	TOPSOIL. Firm brown sandy slightly gravelly silty CLAY with low cobble content.	20 X 0 F	Scale	Depth 56.25	Depth	Туре	Result					
1.0 —	1.60	Stiff brown sandy slightly gravelly silty CLAY with high cobble content.		55.5	54.85	1.00 1.00 2.00 2.00	B C B C	GM75 50 (3,4/50 85mm) GM76 N=16 (2,3/3,) for	0			
3.0	2.80	Very stiff black slightly sandy gravelly silty CLAY with low cobble content.	× 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0	53.5	53.65	3.00 3.00	B C	GM77 50 (8,11/50 200mm	0 for				
4.0 —				52.5		4.00 4.00	B C	GM78 N=48 (12,13/11,14					
5.0 —	5.40 5.50	Obstruction - possible boulders. End of Borehole at 5.50m		51.5 —	51.05 50.95	5.00 5.00 5.50	B C C	GM79 50 (25 fo 135mm/50 125mm 50 (25 fo	or) for ı) or				
6.0		*400		50.5				5mm/50 for	omm)				
7.0		Ollur,		49.5									
8.0 —				48.5 —	-								
8.5	O N			48.0 —									
9.0	<i>)</i>			47.5 — - - - 47.0 — - - -									
		Chiselling: Water Strikes: Water Details: From: To: Time: Strike: Rose: Depth Sealed Date: Depth Depth: Water Details: 1.30 1.50 01:00 20/07 5.50 Dry 6.20 6.30 01:30 01:00	Install From: To		e: From:	Backfill: To: Tyl 5.50 Aris		Remarks: sorehole terminate o obstruction.		Legend: B: Bulk D: Disturb U: Undisti ES: Envir W: Water C: Cone S S: Split sp	urbed onmental		

Contract 5863		Cable Percussion	n Bo	orel	nole	Lo	g		В	orehole BH0	
Contract:		Moygaddy	Easting	j:	693926	5.010		Date Started:	29/06	6/2021	
Location:		Maynooth, Co. Meath	Northin	g:	739294	1.840		Date Completed:	29/06	6/2021	
Client:		Sky Castle Ltd	Elevation	on:	56.95			Drilled By:	G. Macken		
Engineer:	:	ocsc	Boreho Diamet		200mm	200mm		Status:	FINA	L	
Depth (r		Stratum Description	Legend.		(mOD)			and Insitu Tes		Water	Backfill
Scale De	0.20 0.20 1.20	TOPSOIL. Firm brown sandy slightly gravelly silty CLAY with low cobble content. Stiff brown sandy slightly gravelly silty CLAY with high cobble content. Very stiff black slightly sandy gravelly silty CLAY with low cobble content. Obstruction - possible boulders. End of Borehole at 5.20m	Legend White Park Park Park Park Park Park Park Park	Scale 56.5 - 56.0 - 55.5 - 54.5 - 54.0 - 54.0 - 54.0 - 54.0 - 54.0 - 54.0 - 49.0 - 49.5 - 49.0 - 48.5 - 48.5 -	Depth 56.75 55.75 51.75	Depth 1.00 1.00 2.00 2.00 3.00 3.00 4.00 4.00 5.00 5.20	Type B C B C C		2,3,3) 4,5,6) 2,14) or for	Strike	Backfill
9.0	0			48.0 —							
		Chiselling: Water Strikes: Water Details:	Install	ation:	E	Backfill:		Remarks:		Legend:	
\$		Doubt Hale Meter	From: To			То: Тур		orehole terminate o obstruction.	d due	B: Bulk D: Disturb U: Undisto ES: Enviro W: Water C: Cone S	urbed onmental

Contra		Cable Percussion	n Bo	orel	nole	Lo	g		В	orehole BH0	
Contrac	ct:	Moygaddy	Easting	j:	694117	7.023		Date Started:	22/07	7/2021	
Locatio	n:	Maynooth, Co. Meath	Northin	g:	739155	5.527		Date Completed:	22/07	7/2021	
Client:		Sky Castle Ltd	Elevation	on:	55.01			G. Macken			
Engine	er:	ocsc	Boreho		200mm	1		Status:	FINA	L	
Depti		Stratum Description	Legend	Level (mOD) Samples and		and Insitu Tes		Water Strike	Backfil		
Scale	Depth 0.20	TOPSOIL.		Scale	Depth 54.81	Depth	Туре	Result		Strike	
0.5 —	0.20	Firm brown sandy slightly gravelly silty CLAY with low cobble content.	× × × ×	54.5	04.01						
1.0			× 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0	54.0		1.00 1.00	B C	GM66 N=10 (2,2/3,		9	
1.5	1.50	Firm brown sandy slightly gravelly silty CLAY with	X-0-X X-0-X X-0-X	53.5	53.51			0,)		
2.0		high cobble content.	× · · · ×	53.0		2.00 2.00	B C	GM67 N=12 (4,5/3,	3,3,3)		
2.5			× × · · · ×	52.5 —	-		ζ,		,		
3.0	2.80	Very stiff black slightly sandy gravelly silty CLAY with low cobble content.	× × · · · ×	52.0	52.21	3.00 3.00	ВС	GM68 N=49			
3.5 -			× × · · · ×	51.5	111			(6,6/11,12,1	3,13)		
4.0			x 0 - x	51.0		4.00 4.00	B C	GM69 N=50 (8,11/5	50 for		
4.5 —				50.5				255mm)		
5.0	4.90 5.00	Obstruction - possible boulders. End of Borehole at 5.00m		50.0	50.11 50.01	5.00	С	50 (25 fo 5mm/50 for			
5.5				49.5 —							
6.0				49.0	- - -						
6.5		<i>w</i> 1		48.5 —							
7.0				48.0							
7.5		C.00		47.5 —	-						
8.0				47.0							
8.5	N N			46.5	-						
9.0				46.0	-						
9.5				45.5 — -							
-		Chiselling: Water Strikes: Water Details:	Install	ation:	- 	Backfill:		Remarks:		Legend:	
			From: To			Го: Тур		orehole terminated obstruction.	d due	B: Bulk D: Disturb U: Undistr ES: Envir W: Water C: Cone S S: Split sp	urbed onmental SPT

Contract No	Cable Percussion	n Boı	reh	ole	Lo	g		В	orehole BH0	
Contract:	Moygaddy	Easting:		693732	.812		Date Started:	02/07	7/2021	
Location:	Maynooth, Co. Meath	Northing: 739457.539 Date Completed:		Date Completed:	02/07	7/2021				
Client:	Sky Castle Ltd	Elevation	1:	56.85 Drilled By:		Drilled By:	G. Ma	acken		
Engineer:	ocsc	Borehole Diameter			Status:	FINA	L			
Depth (m)	Stratum Description	Legena		(mOD)		mples and Insitu Tes			Water Strike	Backfill
Scale Dept 0.20 0.5 -	TOPSOIL. Firm brown sandy slightly gravelly silty CLAY with low cobble content. Stiff brown sandy slightly gravelly silty CLAY with high cobble content. Very stiff black slightly sandy gravelly silty CLAY with low cobble content.		Scale	Depth 56.65 55.35 50.65 50.55	1.00 1.00 2.00 2.00 3.00 3.00 4.00 4.00 5.00 6.00 6.30	B C B C B C C	GM86 N=15 (3,4/4, GM87 N=17 (4,4/3, GM88 N=49 (5,8/8,12,14 GM89 50 (9,12/50 200mm GM90 50 (12,13/5 110mm GM91 50 (15,10/5 100mm 50 (25 fc 5mm/50 for	5,3,3) 5,5,4) 4,15) 0 for 0 for 0 for	Strike	Backlin
8.5 — 9.0 — 9.5 —		4	49.0 — - 48.5 — - 48.0 — - 47.5 — - 47.0 —							
	Chiselling: Water Strikes: Water Details:	Installati	ion:	E	Backfill:		Remarks:		Legend:	
	Doub Hale Weter	From: To:	Pipe	: From: T	o: Typ		orehole terminated obstruction.	d due	B: Bulk D: Disturb U: Undistu ES: Enviro W: Water C: Cone S	urbed onmental

Contra		Cable Percussion Borehole Log							В	orehole BH0	
Contrac	ot:	Moygaddy	Easting	j :	693928	3.844		Date Started:	21/07	7/2021	
Locatio	n:	Maynooth, Co. Meath	Northin	g:	739604	1.500		Date Completed:	21/07/2021		
Client:		Sky Castle Ltd	Elevation	on:	58.72			Drilled By:	G. Macken		
Engine	er:	ocsc	Boreho		200mm	1		Status:	FINA	L	
Depth		Stratum Description	Legend	Level			nples and Insitu Tes			Water Strike	Backfil
Scale	Depth 0.20	TOPSOIL.		Scale - 58.5 -	Depth 58.52	Depth	Туре	Result		Strike	
0.5	0.20	Brown sandy slightly gravelly silty CLAY with low cobble content.	× · · · ×	-	00.02						
1.0	4.40			58.0 —	57.00	1.00	В	GM61		9	
4.5	1.10	Firm becoming stiff brown sandy slightly gravelly silty CLAY with high cobble content.	**************************************	57.5 -	57.62	1.00	С	N=9 (1,1/2,2	2,3,2)		
1.5			X - 0 - X X - 0 - X	57.0				100			
2.0			× × ×	56.5		2.00 2.00	B C	GM62 N=20 (3,5/5,			
2.5			× · · · ×				?`				
3.0	2.80	Very stiff black slightly sandy gravelly silty CLAY with low cobble content.	0 - x	56.0 —	55.92	3.00	В	GM63			
3.5		TOW CODDIO CONTONIA.		55.5		3.00	С	N=43 (5,8/8,9,12	,14)		
3.5 —				55.0							
4.0			8 - 0 - X	54.5		4.00 4.00	B C	GM64 N=48			
4.5			× 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0	·				(8,10/10,11,1	13,14)		
5.0	T 40		× × · · · · · · · · · · · · · · · · · ·	54.0 —	52.00	5.00	В	GM65			
5.5	5.10 5.20	Obstruction - possible boulders. End of Borehole at 5.20m		53.5	53.62 53.52	5.00 5.20	C	50 (25 fo 60mm/50	for		
5.5				53.0				15mm) 50 (25 fo 5mm/50 for	or		
6.0				52.5				311111/30 101	Ommy		
6.5				-							
7.0				52.0 — - -							
7.5 —				51.5							
7.0		()		51.0							
8.0				50.5							
8.5	N.			50.0							
9.0				30.0 —							
9.5				49.5							
				49.0							
		Chiselling: Water Strikes: Water Details:	Install	ation [.]	F	Backfill:		Remarks:		Legend:	
			From: To			Го: Тур		orehole terminated obstruction.	d due	B: Bulk D: Disturb U: Undistr ES: Envir W: Water C: Cone S	urbed onmental

Contract 1		Cable Percussion	n Bo	orel	nole	Lo	g		В	orehole BH0	
Contract:		Moygaddy	Easting):	693927	7.326		Date Started:	20/07	//2021	
Location:		Maynooth, Co. Meath	Northin	g:	739421	1.930		Date Completed:	20/07	7/2021	
Client:		Sky Castle Ltd	Elevation	on:	57.55			· ·		G. Macken	
Engineer:		ocsc	Boreho Diamet		200mm	200mm		Status:	FINA	L	
Depth (n	-	Stratum Description	Legend.	Level (mOD) Samples and Insitu Te				Water Strike	Backfill		
	epth .20	TOPSOIL. Firm brown sandy slightly gravelly silty CLAY with low cobble content.		Scale	Depth 57.35	Depth	Type	Result			
1.0 —	.40	Stiff brown sandy slightly gravelly silty CLAY with high cobble content.		56.5	56.15	1.00 1.00 2.00 2.00	B C	GM57 N=10 (1,2/2, GM58 N=20 (3,4/4,	2,3,3)	9	
3.0 — 2.		Very stiff black slightly sandy gravelly silty CLAY with low cobble content.	\$ 0	54.5 —	54.65	3.00 3.00	B C	GM59 N=50 (6,8/9,12,14			
	.70 .80	Obstruction - possible boulders. End of Borehole at 4.80m		53.5	52.85 52.75	4.00 4.00 4.80	B C	GM60 50 (9,12/50 210mm 50 (25 fc 5mm/50 for	ofor) or		
5.5 -		CONUCY		52.5 — 					ŕ		
7.0		Kin		51.0 —							
7.5 —		CO.		50.0							
8.0				49.5 —							
9.0	× ×			49.0							
9.5				48.0							
\$)	Chiselling: Water Strikes: Water Details: From: To: Time: Strike: Rose: Depth Seeled Date: Hole Depth: Depth: Popth: Popth: From: 14.70 4.80 01:30 14/07 4.80 Dry	Install From: To		: From:	Backfill: To: Typ .80 Arisi		Remarks: orehole terminated obstruction.	d due	Legend: B: Bulk D: Disturb U: Undistr ES: Envir W: Water C: Cone S S: Split sp	urbed onmental SPT

Contra		Cable Percussion	n Bo	rel	nole	Lo	g		В	orehole BH0			
Contra	ct:	Moygaddy	Easting	:	69424	1.270	I	Date Started:	19/07	7/2021			
Locatio	n:	Maynooth, Co. Meath	Northing	g:	73941	1.796		Date Completed:	19/07/2021		19/07/2021		
Client:		Sky Castle Ltd	Elevation	n:	58.99			Drilled By:	G. Ma	G. Macken			
Engine	er:	ocsc	Borehol		200mn	n	:	Status:	FINA	L			
Dept		Stratum Description	1	Level	(mOD)			and Insitu Tes	sts	Water	Backfill		
Scale		TOPSOIL.		Scale	Depth	Depth	Туре	Result		Strike	XV/XXV/X		
0.5	0.20	Firm brown sandy slightly gravelly silty CLAY with low cobble content.		58.5	58.79								
1.0			× × · · ·	58.0		1.00 1.00	B C	GM53 N=11 (1,2/2,					
1.5 —	1.60	Firm brown sandy slightly gravelly silty CLAY with		57.5	57.39			.\O,)				
2.0		high cobble content.	× 0 × 0 €	57.0		2.00 2.00	B C	GM54 N=13 (2,3/3,					
2.5 —	2.60	Very stiff black slightly sandy gravelly silty CLAY with	0 X 0 X	56.5	56.39		2						
3.0		low cobble content.	0 X 0 F	56.0	(3.00 3.00	B C	GM55 N=50 (8,8/5	50 for				
3.5 —				55.5	11,			255mm	1)				
4.0			X	55.0	-	4.00 4.00	B C	GM56 50 (11,11/5	0 for				
4.5 —	4.40 4.50	Obstruction - possible boulders. End of Borehole at 4.50m		54.5	54.59 54.49	4.50	С	200mm 50 (25 fo 5mm/50 for	or				
5.0 —		cill		54.0	-								
5.5 -				53.5									
6.0				53.0									
6.5		×4		52.5									
7.0		ille,		52.0									
7.5		C.00		51.5									
8.0 —				51.0									
8.5 —	N.			50.5									
9.0				50.0									
9.5				49.5 — -									
=													
		Chiselling: Water Strikes: Water Details:	Installa			Backfill:	no: D	Remarks:	d due	Legend: B: Bulk	<u>'</u>		
		From: To: Time: Strike: Rose: Seeled Date: Hole Depth: Depth: Depth: Open Seeled Date: Hole Depth: Form Seeled Date: Hole Depth: Form Seeled Date: Hole Depth: Open Seeled D	From: To	: Pipe				orehole terminate obstruction.	a ane	D: Disturb U: Undistr ES: Envir W: Water C: Cone S	urbed onmental		

Contra		Cable Percussion Borehole Log							orehole BH0		
Contrac	ot:	Moygaddy	Easting	g:	69433	1.307	Date Started:	16/07	7/2021		
Locatio	n:	Maynooth, Co. Meath	Northin	ıg:	73969	1.333	Date Completed: 16/07/2		6/07/2021		
Client:		Sky Castle Ltd	Elevati	on:	61.30		Drilled By:	G. Macken			
Engine	er:	ocsc	Boreho		200mm	า	Status:	FINA	L		
Depth		Stratum Description	Legend		(mOD)		ples and Insitu Tes		Water Strike	Backfill	
Scale	Depth	TOPSOIL.		Scale	Depth	Depth T	ype Result		Otrike		
0.5	0.40	Firm brown sandy slightly gravelly silty CLAY with low cobble content.	× × · · ·	61.0 —	60.90						
1.0				60.0	-		B GM48 C N=11 (1,1/2,		9		
1.5	1.70	Stiff brown sandy slightly gravelly silty CLAY with high cobble content.	X X	59.5 —	59.60		.00				
2.0 —		copple content.		59.0		2.00	B GM49 C N=19 (3,3/4,				
3.0	2.90	Very stiff black slightly sandy gravelly silty CLAY with low cobble content.	X X 0. E	58.5 — -	58.40		B GM50 C N=35				
3.5		iow cossic content.	× × · · · · × · · · · · · · · · · · · ·	58.0		3.00	(5,6/8,8,1)	0,9)			
4.0				57.5 — 57.0 —		4.00 4.00	B GM51 C 50 (10,11/5 225mm				
4.5			0 × 0 · × 0 · × 0 · × 0 · × 0 · × 0 · × 0 · ×	56.5 —				•			
5.0 —				56.0		5.00 5.00	B GM52 C 50 (25 for 125mm/50 100mm	or) for			
6.0	5.70 5.80	Obstruction - possible boulders. End of Borehole at 5.80m		55.5 — -	55.60 55.50	5.80	C 50 (25 fo 5mm/50 for	or			
6.5				55.0 — - - -							
7.0				54.5 — - - 54.0 —							
7.5				53.5							
8.0	×			53.0							
9.0	()			52.5 —							
9.5				52.0 —							
				51.5	-						
		Chiselling: Water Strikes: Water Details: From: To: Time: Strike: Rose: Depth Sealed Date: Hole Depth: Water Details: 2.80 3.00 00:45 12/07 5.80 Dry 5.70 5.80 01:30 12/07 5.80 Dry	Install			Backfill: To: Type: 6.80 Arisings	Remarks: Borehole terminate to obstruction.		Legend: B: Bulk D: Disturb U: Undistu ES: Enviro W: Water C: Cone S S: Split sp	urbed onmental	

Contract No: 5863		Cable Percussion Borehole Log							Borehole No: BH09		
Contract:		Moygaddy	Easting:		694598.661			Date Started:	14/07/2021		
Location:		Maynooth, Co. Meath	Northing:		739652.377			Date Completed:	14/07/2021		
Client:		Sky Castle Ltd	Elevation:		61.68			Drilled By: G. Ma		acken	
Engineer:		ocsc	Borehole Diameter:		200mm			Status:	FINA	FINAL	
Depth (m)		Stratum Description	Legena				and Insitu Tes		Water	Backfill	
Scale _	Depth 0.20	TOPSOIL.		Scale 61.5 -	Depth 61.48	Depth	Туре	Result		Strike	
0.5		Firm brown sandy slightly gravelly silty CLAY with low cobble content.	\$ \times	=							
1.0			× × · · · ×	61.0 —		1.00	В	GM41		9	
-			× × ×	60.5		1.00	Č	N=10 (2,2/2,	3,2,3)		
1.5 —	1.80		X X 0 X	60.0	59.88						
2.0	1.00	Stiff brown sandy slightly gravelly silty CLAY with high cobble content.	× ×	59.5 —	39.00	2.00 2.00	ВС	GM42 N=21 (3,3/4,			
2.5			× × · · ×	59.5 - - -		2.00),	11-21 (3,3/4,	3,3,7)		
-	2.70	Very stiff black slightly sandy gravelly silty CLAY with	2 × 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0 ×	59.0	58.98						
3.0		low cobble content.	× × ×	58.5	(3.00 3.00	B C	GM43 N=39			
3.5 -			× × ×	58.0	11.			(4,7/9,9,11	,10)		
4.0			8 × ×	00.0		4.00	В	GM44			
=			X 0, -X	57.5		4.00	С	50 (6,9/50 200mm	for		
4.5 —			8 × 0 × 0	57.0							
5.0			x - 0 - x	56.5 —		5.00 5.00	B C	GM45 50 (9,12/50			
5.5	5.30 5.40	Obstruction - possible boulders. End of Borehole at 5.40m	0 0	-	56.38 56.28	5.40	С	100mm 50 (25 fc)		
				56.0				5mm/50 for			
6.0				55.5							
6.5				55.0 —							
7.0				-							
				54.5 —	-						
7.5 — — —		69		54.0							
8.0				53.5							
8.5	X			-							
	0			53.0 —							
9.0				52.5	-						
9.5				52.0 —							
		Chiselling: Water Strikes: Water Details: From: To: Time: Strike: Rose: Sealed Date: Hole Water Death: Deat	Installation: From: To: Pipe		Backfill: : From: To: Type: B		Remarks:		Legend: B: Bulk		
		Troffi: 10. Tiffle: Strike: Rose: Sealed Date: Depth: Depth: Toph: Depth: Toph: Depth:		ioni. io. Pipe		.40 Arisi		obstruction.		D: Disturbed U: Undisturbed ES: Environmental W: Water	
6									W: Water C: Cone SPT S: Split spoon SPT		

Contract No.	Cable Percussion	n Bo	orel	nole	Lo	g		В	orehole BH1	
Contract:	Moygaddy	Easting	j:	694446	6.855		Date Started:	15/07	//2021	
Location:	Maynooth, Co. Meath	Northin	g:	739466	6.694		Date Completed:	15/07	7/2021	
Client:	Sky Castle Ltd	Elevation	on:	59.25			Drilled By:	G. Ma	acken	
Engineer:	ocsc	Boreho Diamet		200mm	า		Status:	FINA	L	
Depth (m)	Stratum Description	Legend		(mOD)			and Insitu Tes		Water Strike	Backfill
Scale Dep	TOPSOIL.		Scale	Depth	Depth	Туре	Result		Otriko	
0.5	Firm brown sandy slightly gravelly silty CLAY with low cobble content.	× · · · ×	59.0 — - - - - 58.5 —	58.95						
1.0		× 0 × 0	-	-	1.00 1.00	B C	GM46 N=11 (2,2/3,		9	
1.5 - 1.5	Stiff brown sandy slightly gravelly silty CLAY with high	\$ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	58.0 — - -	57.75	1.00		17 11 (2,20,)		
2.0	cobble content.	× × · · ·	57.5 — -		2.00	В	GM47			
24		× × ×	57.0	56.85	2.00	C	N=20 (5,4/5,			
2.5 - 2.8	low cobble content.	× × · · · ×	56.5	56.45						
3.0	IL INSTRUCTION - NOSSINIE NOLLIGERS		56.0 —	56.25	3.00	С	50 (25 fo 5mm/50 for	or 0mm)		
3.5			30.0							
4.0		*	55.5							
4.5		1	55.0	-						
4.5			54.5							
5.0	C		54.0 —							
5.5			-							
6.0			53.5 — - -	-						
6.5	, O		53.0							
0.0	Ex.		52.5							
7.0			52.0							
7.5 -	CO		- - - -							
8.0			51.5 — - - -							
8.5			51.0 —							
			50.5							
9.0			50.0							
9.5 -			49.5 —	-						
=			-10.0							
(A)		Install From: To			Backfill:		Remarks: orehole terminate		Legend: B: Bulk D: Disturb	
	2.80 3.00 02:00 09/07 3.00 Dry						o obstruction.		U: Undisto ES: Envir W: Water C: Cone S	urbed onmental

Contra 58		Cable Percussion	n Bore	hole	Log	l	В	orehole BH1	
Contrac	ot:	Moygaddy	Easting:	69479	0.229	Date Started:	13/07	7/2021	
_ocatio	n:	Maynooth, Co. Meath	Northing:	73930	7.430	Date Completed:	13/07	7/2021	
Client:		Sky Castle Ltd	Elevation:	59.88		Drilled By:	G. Ma	acken	
Engine	er:	ocsc	Borehole Diameter:	200mn	n	Status:	FINA	L	
Depth	n (m)	Stratum Description	 	(mOD)	Sam	ples and Insitu Tes	sts	Water	Backfill
Scale	Depth	TOPSOIL.	Scale	Depth	Depth -	Type Result		Strike	WAWA
0.5 —	0.20	Firm brown sandy slightly gravelly silty CLAY with low cobble content.	59.5 -	59.68	1.00	B GM36 C N=13 (2,2/3,		5	
2.0	1.70	Stiff brown sandy slightly gravelly silty CLAY with high cobble content.	58.5 - 58.0 - 58	58.18	2.00 2.00	B GM37 C N=21 (4,4/5,	9		
3.0	2.90	Very stiff black slightly sandy gravelly silty CLAY with low cobble content.	57.0	56.98	3.00	B GM38 C N=43 (5,5/9,10,1			
4.0 —			56.0 - 56.5 - 55.5 -		4.00 4.00	B GM39 C N=50 (7,9/5 275mm	50 for		
5.0 —	5.70	Incil	55.0 – 54.5 – 54	54.18	5.00 5.00	B GM40 C 50 (10,12/5 175mm	50 for 1)		
6.0 —	5.80	Obstruction - possible boulders. End of Borehole at 5.80m	54.0 -	54.08	5.80	C 50 (25 fo 5mm/50 for			
7.0		Pin.	53.0 —						
7.5		~ OV	52.5						
8.0			52.0 —						
8.5 — -	N N		51.5 -						
9.0			51.0 — 50.5 -						
9.5			50.0 -						
		Chiselling: Water Strikes: Water Details: From: To: Time: Strike: Rose: Depth Sealed Date: Depth Depth: Water Depth: Pubpth: Pubpth:<	Installation: From: To: Pip		Backfill: To: Type: 5.80 Arising			Legend: B: Bulk D: Disturb U: Undist ES: Envir W: Water C: Cone S S: Split sp	urbed onmental

Contra		Cable Percussion	n Bo	orel	nole	Log	g		В	orehole BH1	
Contrac	ot:	Moygaddy	Easting	j :	694615	5.966		Date Started:	12/07	7/2021	
Locatio	n:	Maynooth, Co. Meath	Northin	g:	739002	2.198		Date Completed:	12/07	7/2021	
Client:		Sky Castle Ltd	Elevation	on:	56.86			Drilled By:	G. Ma	acken	
Engine	er:	ocsc	Boreho		200mm	1		Status:	FINA	L	
Depth		Stratum Description	Legend	Level	(mOD)			and Insitu Tes		Water Strike	Backfil
Scale - - -	Depth 0.20	TOPSOIL. Firm brown sandy slightly gravelly silty CLAY with low	X	Scale - - 56.5 -	Depth 56.66	Depth	Туре	Result		Stike	
0.5		cobble content.		56.0		4.00	-	01400		b	
1.0 —	1.30	Stiff brown sandy slightly gravelly silty CLAY with high	× × × × × × × × × × × × × × × × × × ×	55.5 —	55.56	1.00	B C	GM30 N=10 (1,1/3,			
2.0		cobble content.		55.0	-	2.00	В	GM31			
2.5				54.5	-	2.00	C	N=21 (3,5/5,	6,5,5)		
3.0	3.20	Very stiff black slightly sandy gravelly silty CLAY with		54.0	53.66	3.00 3.00	B C	GM32 N=47			
3.5 —		low cobble content.		53.5	11,			(5,4/9,9,14	,15)		
4.0				52.5		4.00 4.00	B C	GM33 50 (9,13/50 175mm) for		
4.5 — - - 5.0 —			× 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0	52.0	-	5.00	В	GM34			
5.5		"UCI.		51.5 —	-	5.00	C	N=50 (7,9/5 250mm	60 for)		
6.0		C.O.		51.0	-	6.00 6.00	B C	GM35 50 (10,13/5			
6.5 —	6.30 6.40	Obstruction - possible boulders. End of Borehole at 6.40m		50.5	50.56 50.46	6.40	С	140mm 50 (25 fc 5mm/50 for) or		
7.0		$M_{f,j}$		50.0					,		
7.5				49.5 — - - 49.0 —							
8.0 —	X			48.5	-						
9.0	(A)			48.0							
9.5				47.5 —	-						
=				47.0							
		Chiselling: Water Strikes: Water Details: From: To: Time: Strike: Rose: Depth Sealed Date: Hole Depth: Depth: Depth: O6/07 6.40 Dry	Install			Backfill: To: Typ .40 Arisir		Remarks: orehole terminated o obstruction.	d due	Legend: B: Bulk D: Disturb U: Undistr ES: Envir W: Water C: Cone S S: Split sp	urbed onmental SPT

Contra		Cable Percussion	n Bo	orel	nole	Log	3		В	orehole BH1	
Contra	ct:	Moygaddy	Easting	g:	694659	9.374		Date Started:	08/07	7/2021	
Locatio	n:	Maynooth, Co. Meath	Northin	ıg:	738763	3.773		Date Completed:	08/07	7/2021	
Client:		Sky Castle Ltd	Elevati	on:	52.09			Drilled By:	G. Ma	acken	
Engine	er:	ocsc	Boreho		200mm	1		Status:	FINA	L	
Dept		Stratum Description	Legend	Level	(mOD)	San		and Insitu Tes		Water Strike	Backfi
0.5 - 1.0 - 1.5 -	0.20 1.70	TOPSOIL. Firm brown sandy slightly gravelly silty CLAY with low cobble content.		52.0 — 51.5 — 51.0 — 50.5 —	51.89	1.00	Type B C	GM18 N=9 (2,2/2,	0	6	
2.0 —	2.50	Firm brown sandy slightly gravelly silty CLAY with high cobble content. Very stiff black slightly sandy gravelly silty CLAY with low cobble content.		50.0 —	49.59	2.00 2.00	ВС	GM19 N=14 (4,4/3,			
3.0 —				49.0	iis	3.00	B C	GM20 N=45 (8,8/11,11,1			
4.0 — - - - 4.5 — -			X X 0 X 0 X 0 X 0 X 0 X 0 X 0 X 0 X 0 X	48.0 — - - - 47.5 —		4.00 4.00	B C	GM21 N=41 (7,9/9,10,1			
5.0 —		all City		47.0 — - - - 46.5 —		5.00 5.00	B C	GM22 50 (8,10/50 210mm) for		
6.5 —	6.10 6.20	Obstruction - possible boulders. End of Borehole at 6.20m		46.0 — 	45.99 45.89	6.00 6.00 6.20	B C C	GM23 50 (26 fc 85mm/50 10mm) 50 (25 fc 5mm/50 for	or for) or		
7.5 —		Con		44.5 -							
8.5	O N			44.0 — - - - - 43.5 — -							
9.0	<i>)</i>			43.0 — - - - - 42.5 — - -							
		Chiselling: Water Strikes: Water Details: From: To: Time: Strike: Rose: Depth Sealed Date: Depth Depth: I 3.70 3.80 01:00 01:30 02/07 6.20 Dry	Install From: To			Backfill: Fo: Typ		Remarks: orehole terminated o obstruction.	d due	Legend: B: Bulk D: Disturb U: Undistr ES: Envir W: Water C: Cone S S: Split sp	urbed onmenta SPT

Contra		Cable Percussio	n Bo	orel	nole	Log		В	orehole BH1	
Contrac	ct:	Moygaddy	Easting	j:	694546	6.422	Date Started:	06/07	7/2021	
Locatio	n:	Maynooth, Co. Meath	Northin	g:	738784	1.570	Date Completed:	06/07	7/2021	
Client:		Sky Castle Ltd	Elevation	on:	53.46		Drilled By:	G. M	acken	
Engine	er:	ocsc	Boreho		200mm	1	Status:	FINA	L	
Depti		Stratum Description	Legend		(mOD)		oles and Insitu Tes		Water	Backfi
3.5	2.10 3.20 6.20 6.30	TOPSOIL. Soft brown sandy slightly gravelly silty CLAY with low cobble content. Soft brown sandy slightly gravelly silty CLAY with high cobble content. Very stiff black slightly sandy gravelly silty CLAY with low cobble content. Obstruction - possible boulders. End of Borehole at 6.30m	Mar. Mar.	53.0	Depth 53.26 51.36 47.26 47.16	1.00 1.00 2.00 2.00 3.00 3.00 4.00 4.00 5.00 5.00 6.00 6.00	B GM07 C N=7 (1,1/2, B GM08 C N=7 (2,1/2, B GM09 C N=48 (2,3/9,11,1) B GM10 C 225mm B GM11 C 50 (9,9/50 225mm C 50 (8,10/5 175mm 50 (25 f 5mm/50 for	1,3,1) 1,1,3) 3,15) 0 for 1) 0 for	Strike	
9.0				44.0						
		Chiselling: Water Strikes: Water Details: From: To: Time: Strike: Rose: Depth Sealed Date: Hole Depth: Water Details: 1.70 1.80 00:45 3.40 3.10 3.70 30/06 6.30 Dry 6.20 6.30 01:30 01:30 01:30 00:45 <t< td=""><td>Install From: To</td><td></td><td></td><td>Backfill: To: Type: .30 Arisings</td><td>Remarks: Borehole terminate to obstruction.</td><td></td><td>Legend: B: Bulk D: Disturb U: Undistr ES: Envir W: Water C: Cone S S: Split sp</td><td>urbed onmenta SPT</td></t<>	Install From: To			Backfill: To: Type: .30 Arisings	Remarks: Borehole terminate to obstruction.		Legend: B: Bulk D: Disturb U: Undistr ES: Envir W: Water C: Cone S S: Split sp	urbed onmenta SPT

Contra		Cable Percussion	n Bo	orel	nole	Lo	g		В	orehole BH1	
Contrac	ct:	Moygaddy	Easting	J:	694458	3.907		Date Started:	09/07	7/2021	
Locatio	n:	Maynooth, Co. Meath	Northin	g:	738814	1.666		Date Completed:	09/07	7/2021	
Client:		Sky Castle Ltd	Elevation	on:	54.44			Drilled By:	G. M	acken	
Engine	er:	ocsc	Boreho Diamet		200mm	1		Status:	FINA	L	
Depti		Stratum Description	Legend.	Level	(mOD)			and Insitu Tes		Water Strike	Backfill
Scale -	Depth 0.20	TOPSOIL.		Scale	Depth	Depth	Туре	Result		Strike	
0.5	0.20	Firm brown sandy slightly gravelly silty CLAY with low cobble content.	× × × ×	54.0	54.24						
1.0			X × · ·	53.5		1.00	В	GM24		5	
1.0				- - -		1.00	С	N=10 (2,2/3,			
1.5	4.00		× × 0 +	53.0 —				60 .			
2.0	1.80	Firm brown sandy slightly gravelly silty CLAY with high cobble content.	× × ×	52.5	52.64	2.00	В	GM25			
2.5	2.30	Very stiff black slightly sandy gravelly silty CLAY with	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	52.0 —	52.14	2.00	C	N=14 (3,2/4,	,3,3,4)		
		low cobble content.	× · · · ×	=							
3.0				51.5 — - -	(3.00	B C	GM26 N=50 (8,7/5	50 for		
3.5			× × · · · ×	51.0				255mm	1)		
4.0				50.5		4.00	В	GM27			
=			× × · · · ×	50.0		4.00	C	50 (11,13/5 210mm	0 for		
4.5 —				50.0 —					,		
5.0			\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	49.5		5.00	B C	GM28			
5.5			× × • • • × • • • × • • • × • • • • × •	49.0		5.00	C	50 (10,12/5 190mm	1)		
			x x x	-							
6.0		$C_{\mathcal{O}}$	*	48.5 — - -		6.00 6.00	B C	GM29 50 (11,13/5	0 for		
6.5	0.70		**************************************	48.0	47.74			140mm	1)		
7.0	6.70 6.80	Obstruction - possible boulders. End of Borehole at 6.80m		47.5	47.74 47.64	6.80	С	50 (25 fo 5mm/50 for	or 0mm)		
				47.0 —							
7.5 —		69		=							
8.0				46.5 —							
8.5	X			46.0							
	0			45.5 —							
9.0				- -							
9.5				45.0 —							
=											
/II		Chiselling: Water Strikes: Water Details: From: To: Time: Strike: Rose: Depth Sealed Date: Hole Depth: Dep	Install			Backfill:	ne· R	Remarks:		Legend: B: Bulk	and and
(§	()	2.80 2.90 01:00 05/07 6.80 Dry 6.70 6.80 01:30	.5	. Tipe		.80 Arisi		obstruction.		D: Disturb U: Undisto ES: Enviro W: Water	urbed onmental
6										C: Cone S	

Contra		Cable Percussion	n Bo	orel	nole	Lo	g		В	orehole BH1	
Contrac	ot:	Moygaddy	Easting	j:	693655	5.329		Date Started:	01/07	7/2021	
Locatio	n:	Maynooth, Co. Meath	Northin	g:	739258	3.288		Date Completed:	01/07	7/2021	
Client:		Sky Castle Ltd	Elevation	on:	49.53			Drilled By:	G. M	acken	
Engine	er:	ocsc	Boreho Diamet		200mm	1		Status:	FINA	L	
Depth		Stratum Description	Legend		(mOD)			and Insitu Tes		Water Strike	Backfill
Scale	Depth 0.20	TOPSOIL.		Scale	Depth 49.33	Depth	Туре	Result		Strike	
0.5	0.20	Firm brown sandy slightly gravelly silty CLAY with low cobble content.	× × · ·	49.0	49.33						
			2 0 X	- - -		4.00	Б	CMOO		0	
1.0 —			× × ×	48.5 —		1.00 1.00	B C	GM80 N=9 (1,2/2,3			
1.5			×	48.0				90,			
2.0	1.80	Stiff brown sandy slightly gravelly silty CLAY with high cobble content.	× × · ×	47.5 —	47.73	2.00	В	GM81			
2.5 —	2.50		0 × 0 × 0	-	47.03	2.00	C	N=16 (2,3/3,	5,4,4)		
2.5	2.50	Stiff becoming very stiff black slightly sandy gravelly silty CLAY with low cobble content.	× × · · ·	47.0 —	47.03						
3.0			× × ×	46.5		3.00	B C	GM82 N=24 (4,4/5,			
3.5			× · · ×	46.0	111						
4.0			x - 0 - X			4.00	В	GM83			
4.0			× × 0 × 0	45.5 — - -		4.00	С	N=34 (5,6/6,8,9)			
4.5			0 X 0 Y	45.0				(0,0/0,0,0,	, ,		
5.0				44.5		5.00	В	GM84			
5.5				-	-	5.00	C	N=48 (5,8/11,11,1	2,14)		
			x - 0 x	44.0 —							
6.0				43.5		6.00 6.00	B C	GM85 N=50 (7,8/5	50 for		
6.5			\$ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	43.0				275mm	1)		
7.0	6.70 6.80	Obstruction - possible boulders. End of Borehole at 6.80m		42.5 —	42.83 42.73	6.80	С	50 (25 fo 5mm/50 for	or 5mm)		
				42.5 - -					,		
7.5 —		60		42.0							
8.0				41.5							
8.5	X			41.0 —							
	(D)			-							
9.0				40.5							
9.5				40.0							
		Chiselling: Water Strikes: Water Details:	Install			Backfill:		Remarks:		Legend: B: Bulk	
		From: To: Time: Strike: Rose: Depth Sealed Date: Hole Depth: Water Depth: F 2.80 2.90 01:00 3.60 3.40 4.00 21/07 6.80 Dry	From: To	o: Pipe		To: Typ 5.80 Aris		orehole terminate o obstruction.	d due	D: Disturb U: Undist ES: Envir W: Water C: Cone S	urbed onmental

Contra		Cable Percussion	n Bo	orel	nole	Log		В	orehole BH1	
Contrac	ct:	Moygaddy	Easting	j:	694518	3.865	Date Started:	05/07	7/2021	
Locatio	n:	Maynooth, Co. Meath	Northin	g:	738836	6.591	Date Completed:	05/07	7/2021	
Client:		Sky Castle Ltd	Elevation	on:	54.89		Drilled By:	G. M	acken	
Engine	er:	ocsc	Boreho		200mn	า	Status:	FINA	L	
Dept		Stratum Description	Legend		(mOD)		les and Insitu Tes		Water Strike	Backfill
Scale	Depth 0.20	TOPSOIL. Firm brown sandy slightly gravelly silty CLAY.	X	Scale 	Depth 54.69	Берш Т	/pe Result		C	
1.0 —			X - X - X - X - X - X - X - X - X - X -	54.0			B GM01 C N=8 (1,2/2,	1,2,3)	9	
2.0 —	2.20	Stiff brown sandy slightly gravelly silty CLAY with low cobble content.		53.0 —	52.69	2.00 2.00	B GM02 C N=14 (2,5/3,			
3.0 —				52.0	111	3.00 3.00	B GM03 C N=16 (3,3/3,			
4.0	3.80	Very stiff black slightly sandy gravelly silty CLAY with low cobble content.	X X X X X X X X X X	51.0	51.09	4.00 4.00	B GM04 C N=47 (8,6/9,10,1)			
4.5 — 5.0 — 5.5 —		incil.		50.0 —			B GM05 C 50 (7,13/18			
6.0 —	6.50	Obstruction - possible boulders.		49.0 —	48.39	6.00	B GM06 C 50 (25 fo 100mm/50 C 20mm)	or) for)		
7.0 —		End of Borehole at 6.50m		48.0 —			50 (25 fd 5mm/50 for	or 5mm)		
8.0 — 8.5 —	×			47.0 —						
9.0				46.0						
9.5				45.5 — - - - 45.0 —						
		Chiselling: Water Strikes: Water Details: From: To: Time: Strike: Rose: Depth Sealed Seale	Install From: To			Backfill: To: Type: 5.50 Arisings	Remarks: Borehole terminate to obstruction.		Legend: B: Bulk D: Disturb U: Undistr ES: Enviro W: Water C: Cone S S: Split sp	urbed onmental SPT

586	ct No: 63	Cable Percussion	n Bo	rel	nole	Lo	g		Во	orehole BH1	
Contrac	et:	Moygaddy	Easting:		694562	2.423]	Date Started:	07/07	/2021	
_ocatio	n:	Maynooth, Co. Meath	Northing	g:	738770	0.148		Date Completed:	07/07	/2021	
Client:		Sky Castle Ltd	Elevatio	n:	52.93			Drilled By:	G. Ma	acken	
Engine	er:	ocsc	Borehol		200mn	า	5	Status:	FINA	L	
Depth		Stratum Description	Legend_	Level	(mOD)			and Insitu Tes	ts	Water	Backfill
Scale	Depth	TOPSOIL.		Scale	Depth	Depth	Туре	Result		Strike	W/XWX
0.5	0.20	Firm brown sandy slightly gravelly silty CLAY with low cobble content.		52.5 — 52.0 —	52.73						
1.0			× × 0.	=		1.00 1.00	B C	GM13 N=9 (1,1/3,2	2,2,2)		
1.5	4.00		× · · · · · · · · · · · · · · · · · · ·	51.5 —				90,			
2.0	1.80	Firm brown sandy slightly gravelly silty CLAY with high cobble content.		51.0	51.13	2.00	B C	GM14 N=13 (3,3/2,	3,4,4)		
2.5 —	2.50	Very stiff black slightly sandy gravelly silty CLAY with low cobble content.	× × · · · ×	50.5	50.43		3,				
3.0		TOW CODDIO CONTONIA	× · · · ×	50.0	•.•	3.00 3.00	B C	GM15 N=50 (8,8/5			
3.5 -			× · · · ×	49.5	11.			250mm)		
4.0				49.0		4.00 4.00	B C	GM16 N=50 (8,9/5	0 for		
4.5 -			× · · · · · · · · · · · · · · · · · · ·	48.5				230mm)		
5.0		cill	X	48.0		5.00 5.00	B C	GM17 50 (10,13/5 135mm	0 for		
5.5	5.70 5.80	Obstruction - possible boulders.	× × · · · ×	47.5 —	47.23 47.13	5.80	С	50 (25 fc	or		
6.0	0.00	End of Borehole at 5.80m		47.0				5mm/50 for	0mm)		
6.5 —		· Ex		46.5 —							
7.0				46.0 —							
7.5 -		C.00		45.5 —							
8.0				45.0 —							
8.5	N.			44.5							
9.0				44.0							
9.5				43.5							
=				43.0 —							
		Chiselling: Water Strikes: Water Details: From: To: Time: Strike: Rose: Depth Sealed Date: Hole Depth: Water Details: 4.70 4.80 01:00 01/07 5.80 Dry 5.70 5.80 01:30 01/07 5.80 Dry	Installa From: To:			Backfill: To: Tyl		Remarks: prehole terminate obstruction.	d due	Legend: B: Bulk D: Disturb U: Undistr ES: Envir W: Water C: Cone S	urbed onmental

Photographs poses Photographs poses Weath County Photographs poses Weath Photographs poses Weath Photographs poses Phot

Contract No: 5863	Rotary Core	ehole L	.og		Corehole No: RC04
Contract:	Moygaddy	Easting:	693637.963	Date Started:	19/07/2021
_ocation:	Maynooth, Co. Meath	Northing:	739436.766	Date Completed:	19/07/2021
Client:	Sky Castle Ltd	Elevation:	56.84	Drilled By:	MEDL
Engineer:	ocsc	Rig Type:	Sondeq	Status:	FINAL
Depth (m)	Stratum Description	Level (mOD) Samples		k Indices Backfi
Scale Depth Op	ben hole drilling - driller reports returns of sandy gravelly silty	Scale De	epth	TCR/% SCR	/% RQD/% FI/m
0.5 — CL	AY with cobbles.	0.5 - 0.5 - 0.5 - 0.5 -			
1.0		56.0			
1.5		55.5		70,	
2.0		55.0		3	
2.5		54.5	0	\	
		54.0			
3.0		53.5			
3.5 -		× × × × × × × × × × × × × × × × × × ×			
1.0 -		53.0			
4.5		52.5			
5.0		52.0			
-	701.	51.5			
5.5 —		51.0			
6.0		31.0 - 20 - 20 - 20 - 20 - 20 - 20 - 20 - 2			
6.5		50.5			
70 LIN	ong to very strong light grey fine grained argillaceous MESTONE interbedded with moderately strong dark grey Icareous MUDSTONE with occasional fossils and calcite	50.0	0.14		
- ¢al - vei - 7.5 - s	icareous MUDS I ONE with occasional fossils and calcite ins (2mm thick). Fresh to slightly weathered. Discontinuities - smooth to rough, planar to slightly undulating, tight to open, sub-horizontal and 45° dip, clean with occasional grey staining and occasional	49.5	6.70 - 7.70	96 57	12
	sub-horizontal and 45° dip, clean with occasional grey staining and occasional clay infill.	49.0			14
3.0			7.70 - 8.70	97 77	36
8.5	Discontinuities - smooth to rough, planar to undulating, tight to open, sub-	48.5			
	norizontal and sub-vertical dip, clean with occasional grey staining and occasional clay infill.	48.0			19
9.5		47.5	8.70 - 9.70	97 68	3 0 19
9.70	End of Corehole at 9.70m	47.0	7.14		
	Installation: Backfill: F	Remarks:			

Contract No 5863	Rotary Core	ehc	ole L	_0	g					ehole RC05	
ontract:	Moygaddy	Eastii	ng:	69	93935.222	Date	e Starte	ed:	15/07/2	2021	
ocation:	Maynooth, Co. Meath	North	ing:	73	39548.071	Date	e npleted	:	15/07/2	2021	
ient:	Sky Castle Ltd	Eleva	ition:	58	3.60		ed By:		MEDL		
ngineer:	ocsc	Rig T	уре:	S	ondeq	Stat	us:		FINAL		
Depth (m)	Stratum Description	Legend		D)	Samples	•			Indices		Backfill
	Open hole drilling - driller reports returns of sandy gravelly silty CLAY with cobbles.	× 0 0	Scale D	epth	1		TCR/% S	SCR/9	% RQD/%	FI/m	
.5 —	ZEAT WILL CODDIES.	\$ 0 X	58.0)
1.0		\$ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	57.5						01,		
.5 —		× × ×						C			
		× × -	57.0 —				0)			
2.0			56.5								
2.5 —		* * X	56.0		No.						
.0 _		× × c	55.5								
.5 —			55.5	. 1							
5.5		**************************************	55.0	1							
.0 -		0 X	54.5 —								
1.5		8 × 0	54.0								
5.0			53.5								
5.5	.,00	8 × 0	33.3								
5.70	Strong to very strong light grey fine grained argillaceous	8 0	53.0 — 5	52.90							
J. J	IMESTONE interbedded with moderately strong dark grey calcareous MUDSTONE with occasional fossils, pyrite crystals and calcite veins (2mm thick). Fresh to slightly weathered.		52.5 —		5.70 - 6.70		96	83	28	11	
6.5	Discontinuities - smooth to rough, planar, tight to open, sub-horizontal dip, clean with occasional grey staining. Discontinuities - smooth to rough, planar to slightly undulating, tight to open, sub-horizontal and sub-vertical dip, clean with occasional grey staining.		52.0 —								
7.0	sub-horizontal and sub-vertical dip, clean with occasional grey staining.		51.5							14	
7.5			31.3		6.70 - 7.70		96	52	16	1-7	
~ <u> </u>	Discontinuities - smooth to rough, planar, tight to open, sub-horizontal, occasional sub-vertical dip, clean with occasional grey staining.		51.0								
3.0	The second september of the second september s		50.5		7.70 - 8.70		92	88	22	11	
3.5 = 8.70			50.0	19.90							
.0	End of Corehole at 8.70m		49.5	.J.JU							
.5 —			40.0								
-			49.0								
	Installation Buildly										
	Installation: Backfill: From: To: Pipe Type: From: To: Type: -	Remar	KS:								

Meath Stratum Description iller reports returns of sandy gravelly silty		ng: tion: /pe:	73 57	9390.864 .65	Date Com	Started: pleted:	15/07/2 15/07/2 MEDL		
Stratum Description	Elevat	tion: /pe:	57	.65	Com	pleted:		2021	
·	Rig Ty	/pe: Leve				-	MEDI		
·	Legend_	Leve	So			,	INIEDE		
·		Leve		ondeq	Statu	ıs:	FINAL		
iller reports returns of sandy gravelly silty		(mOD))	Samples		Roo	ck Indices		Backfill
		57.5		'0'	S	20	.05		
light grey fine grained argillaceous ided with moderately strong dark grey NE with occasional fossils and calcite esh to slightly weathered. To rough, planar to slightly undulating, tight to open, p, clean with occasional		53.5 - 52.5 - 52.0 - 51.5 - 51.5 - 51.5 - 52.0 - 52.0 - 52.	22.35	5.30 - 6.30		93 70	0 47	10	
o rough, planar, tight to open, 10-20° and sub- occasional grey staining, calcite crystals and		51.0 —		6.30 - 7.30		98 75	5 39		
light grey fine grained argillaceous lided with moderately strong dark grey NE with frequent pyrite crystals, d calcite veins (3mm thick). Fresh to		50.0 —		7.30 - 8.30		80 76	32	10	
:nα oτ Corenole at 8.30m		49.0 —	,						
ld NI d d	ed with moderately strong dark grey E with frequent pyrite crystals,	ed with moderately strong dark grey E with frequent pyrite crystals, calcite veins (3mm thick). Fresh to	ght grey fine grained argillaceous ed with moderately strong dark grey E with frequent pyrite crystals, calcite veins (3mm thick). Fresh to	ed with moderately strong dark grey E with frequent pyrite crystals, calcite veins (3mm thick). Fresh to d of Corehole at 8.30m 49.35	ght grey fine grained argillaceous ed with moderately strong dark grey E with frequent pyrite crystals, calcite veins (3mm thick). Fresh to	ght grey fine grained argillaceous ed with moderately strong dark grey E with frequent pyrite crystals, calcite veins (3mm thick). Fresh to d of Corehole at 8.30m 49.5 49.5 49.5	gnt grey fine grained argillaceous ed with moderately strong dark grey E with frequent pyrite crystals, calcite veins (3mm thick). Fresh to d of Corehole at 8.30m 49.0 48.5	gnt grey fine grained argillaceous ed with moderately strong dark grey E with frequent pyrite crystals, calcite veins (3mm thick). Fresh to d of Corehole at 8.30m 49.0 48.5	ght grey fine grained argillaceous ed with moderately strong dark grey E with frequent pyrite crystals, calcite veins (3mm thick). Fresh to

Contract 5863	Potary Cor	ehc	ole I	Corehole No:						
Contract:	Moygaddy	Eastir	ng:	69	94142.350	Date	e Started:	14/07/	2021	
ocation:	Maynooth, Co. Meath	North	orthing: 739365.230 Date Comp		e npleted:	14/07/	2021			
Client:	Sky Castle Ltd	Eleva	ition:	57	7.84		ed By:	MEDL		
Engineer:	ocsc	Rig T	ype:	S	ondeq	Status:		FINAL		
Depth (m)	Stratum Description	Legend		D)	Samples			k Indice		Backfill
Scale Dept	Open hole drilling - driller reports returns of sandy gravelly silty	<u> </u>	Scale [Depth	ו		TCR/% SCR	/% RQD/%	FI/m	
0.5 -	CLAY with cobbles.		57.5 —					C)`
1.5			56.5				C			
2.0			56.0 —			4	6			
2.5		× 0 × 0	55.5 —		ZQ'	プ				
3.0 - 3.5 -			54.5	•	100					
4.0			54.0	1						
4.5 —		× 0 × 0	53.5							
5.0	cill		53.0 —							
5.5 - 5.60	Strong to very strong light grey fine grained argillaceous LIMESTONE interbedded with moderately strong dark grey calcareous MUDSTONE with occasional fossils and calcite		52.0	52.24						
6.5	veins (1mm thick). Fresh to slightly weathered. Discontinuities - smooth, occasionally rough, planar, tight to open, sub- horizontal, occasional sub-vertical dip, clean with occasional grey staining.		51.5 —		5.60 - 6.60		97 97	66	12	
7.0 —	Discontinuities - smooth to rough, planar to slightly undulating, tight to open, sub-horizontal and sub-vertical dip, clean with occasional grey staining and occasional clay infill.		51.0 —		6.60 - 7.60		99 65	5 41	11	
7.5	Discontinuities - smooth to rough, planar, tight to open, sub-horizontal and sub- vertical dip, clean with occasional grey staining.		50.0 —		7.00 0.00		00			
8.5 - 8.60	End of Corehole at 8.60m		49.5	49.24	7.60 - 8.60		90 75	5 53	8	
9.0	Line of obtained at 0.00m		49.0 —							
9.5			48.5 — — — — 48.0 —							
	Installation: Backfill: From: To: Pipe Type: From: To: Type:	Remar	ks:							
(A)	10 Pipe Type. Profile 10 Type. 10 10 10 10 10 10 10 1	-								

Contract I 5863		Rotary Core	eho	le I	Lc	og				rehole N	
Contract:		Moygaddy	Eastin	ıg:	6	94212.597	Date :	Started:	d: 16/07/2021		
_ocation:		Maynooth, Co. Meath	Northi	ng:	7	39630.304	Date Completed		16/07/2	2021	
Client:		Sky Castle Ltd	Elevat	tion:	6	0.48	Drilled		MEDL		
Engineer:		ocsc	Rig Ty	/pe:	S	Sondeq	Status	s:	FINAL		
Depth (m)		Stratum Description	Legend	Lev (mO	D)	Samples			k Indices		Backfill
Scale Depti	Op	pen hole drilling - driller reports returns of sandy gravelly silty	× 4 0	Scale [Dept	h	T	CR/% SCR	/% RQD/%	FI/m	
0.5 —	CL	AY with cobbles.	ν <u> </u>	60.0)
1.0			\$ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	59.5					S	2	
1.5			× × 0	59.0				0,			
2.0				58.5				5			
2.5			× × 0	58.0		0)				
3.0			× × 0	57.5		0					
			× × 0	=	<						
3.5 —			0 X 0	57.0	1						
4.0 —			0 × 0	56.5	,						
4.5 -			× 0 × 0	56.0							
5.0			8 × 0	55.5 —							
5.5 —				55.0							
6.0 —			× × 0	54.5							
6.5			\$\frac{\times \times 0}{\times 0}\$	54.0 —							
7.0	LIN	rong to very strong light grey fine grained argillaceous MESTONE interbedded with moderately strong dark grey Icareous MUDSTONE with frequent calcite veins (3mm		53.5	53.88					Ni_	
	thic	Calculation (Shiff) with request calculation (Shiff) city). Ciscontinuities - non-intact. Discontinuities - smooth to rough, planar to undulating, tight to open, sub-		-		6.60 - 7.60		98 63	3 23	11	
7.5 — - - -	c	norizontal and sub-vertical dip, clean with occasional grey staining, calcite crystals and occasional clay infill.		53.0						-	
3.0 —		Discontinuities - non-intact. Discontinuities - smooth to rough, planar to slightly undulating, tight to open,		52.5		7.60 - 8.60	,	100 69	32	Ni	
8.5	C	sub-horizontal and sub-vertical dip, clean with occasional grey staining, calcite crystals and occasional clay infill. Discontinuities - non-intact.		52.0 —						13 Ni	
9.0	s	Discontinuities - smooth to rough, planar to slightly undulating, tight to open, sub-horizontal and sub-vertical dip, clean with occasional grey staining, calcite crystals and occasional clay infill.		51.5		8.60 - 9.60		98 75	5 21		
9.5				51.0	E0 01					17	
9.60		End of Corehole at 9.60m			50.88						
		Installation: Backfill: F	Remark	(S:							
(\$)	From: To: Pipe Type: From: To: Type: - 0.00 9.60 Bentonite									

Contract N 5863	Rotary Core	eho	le L	og						ehole	
Contract:	Moygaddy	Easting	g:	69449	7.168	Date Started:			: 13/07/2021		
ocation:	Maynooth, Co. Meath	Northin	ng:	739610	0.386	Date Completed:			13/07/2021		
Client:	Sky Castle Ltd	Elevati	on:	61.10		Drilled By:			MEDL		
Engineer:	ocsc	Rig Typ	pe:	Sonde	q	Statı	us:	F	FINAL		
Depth (m)	Stratum Description	Legend	Level (mOD))	Samples				Indices		Backfill
Scale Depth	Open hole drilling - driller reports returns of sandy gravelly silty		Scale De	epth	<u> </u>		TCR/% S0	CR/%	RQD/%	FI/m	
1.0 — 1.5 — 2.0 — 2.5 — 3.0 — 4.5 — 4.5 — 5.5 — 6.0 —	CLAY with cobbles.		59.0		P	J	200				
6.30	Strong to very strong light grey fine grained argillaceous LIMESTONE interbedded with moderately strong dark grey	- 0 5 - 0 × 0	55.0 — 54	.80							
7.0	calcareous MUDSTONE with some pyrite crystals and calcite veins (2mm thick). Fresh to slightly weathered. Discontinuities - smooth, occasionally rough, planar to undulating, tight to open, sub-horizontal, occasional sub-vertical dip, clean with occasional grey staining.		54.0		6.30 - 7.30		94	85	50	9	
7.5	Co		53.5		7.30 - 8.30		95	69	33		
	Discontinuities - non-intact.		53.0 —							Ni	
9.0	Discontinuities - smooth to rough, planar to slightly undulating, tight to open, sub-horizontal and sub-vertical dip, clean with occasional grey staining and calcite crystals.		52.5		8.30 - 9.30		99	75	12	14	
9.30	End of Corehole at 9.30m	5	51.5 —	.80							
\$	Installation: Backfill: From: To: Pipe Type: From: To: Type: - 0.00 9.30 Bentonite	Remarks	S:								

Contract No: 5863	Rotary Core	ehc	ole I	Lc	og					ehole RC1(
Contract:	Moygaddy	Eastir	ng:	6	94428.449	Date	Started	d: 1:	3/07/2	2021	
ocation:	Maynooth, Co. Meath	North	ing:	7	39378.834	Date	pleted:	1	13/07/2021		
lient:	Sky Castle Ltd	Eleva	ition:	5	7.86		ed By:	M	1EDL		
ngineer:	ocsc	Rig T	ype:	S	Sondeq	Statu	JS:	F	INAL		
Depth (m)	Ctrature Description		Lev		Camples		Ro	ock li	ndices		Backfill
Scale Depth	Stratum Description	Legend	Scale	Dept	Samples h		TCR/% SC	CR/%	RQD/%	FI/m	Dackilli
2.5 - 2.80 \$ 3.0 - 4.0 - 4.5 - 5.0 -	pen hole drilling - driller reports returns of sandy gravelly silty LAY with cobbles. Trong to very strong light grey fine grained argillaceous MESTONE interbedded with moderately strong dark grey alcareous MUDSTONE with occasional calcite veins (1mm ick). Fresh to slightly weathered. Discontinuities - smooth, planar, occasionally stepped, tight to open, 10-30° dip, clean with occasional grey staining and occasional clay infill. Discontinuities - non-intact. Discontinuities - smooth, planar, occasionally stepped, tight to open, 10-20° dip, occasionally sub-vertical, clean with occasional grey staining and occasional clay infill. Discontinuities - non-intact. End of Corehole at 5.80m		54.5	55.06	2.80 - 3.80 3.80 - 4.80 4.80 - 5.80	S	95 7	70	28	10 Ni 9 Ni	
5.5 — — —	, XV		51.5 —								
7.0 —											
7.5			50.5								
.0.			50.0 —								
.5 =			49.5 —								
.0			49.0								
			48.5								
5 —											
+ +			48.0 —								

Contract N 5863	Rotary Core	ehc	ole	Lc	og				ehole N	lo:
Contract:	Moygaddy	Easti	ng:	6	94711.726	Date Start	ed:	12/07/2	021	
Location:	Maynooth, Co. Meath	North	ing:	7		Date Completed	d:	12/07/2	021	
Client:	Sky Castle Ltd	Eleva	ation:	5	9.49	Drilled By:	:	MEDL		
Engineer:	ocsc	Rig T	уре:	S	Sondeq	Status:		FINAL		
Depth (m)	Stratum Description	Legend		D)	Samples			Indices		Backfill
	Open hole drilling - driller reports returns of sandy gravelly silty	<u>0</u> 0 0	Scale	Dept	h	TCR/%	SCR/	% RQD/%	FI/m	
0.5	CLAY with cobbles.	0 X 0	59.0 —							
		× × ·						C		
1.0		8 × 0	58.5					C		
1.5		0 × 0	58.0				1			
		× × ×								
2.0		0 × 0	57.5							
2.5		\$ × 0	57.0		0)				
-		× × 0								
3.0 —		0 × 0	56.5							
		× × ×		•						
3.5 —		× × ×	56.0	2						
4.0		× 0 × 0	55.5							
=		X 0 X								
4.5		<u> </u>	55.0							
5.0		8 × ×	54.5							
	2C1	× × ×								
5.5		X . X	54.0							
		8 × ×	53.5							
6.0 —	\sim	× × × ·	53.5							
6.5 = 6.50	Strong to very strong light grey fine grained argillaceous	0 × 0	53.0	52.99	9					
	LIMESTONE interbedded with moderately strong dark grey calcareous MUDSTONE with occasional calcite veins (2mm									
	thick). Fresh to slightly weathered. Discontinuities - smooth, planar to slightly undulating, tight to open, 40-50° dip,		52.5		6.50 - 7.50	97	83	43	9	
7.5	clean surfaces.		52.0							
7.80	Strong to very strong light grey fine grained argillaceous			51.69) Э					
8.0 —	LIMESTONE interbedded with moderately strong dark grey calcareous MUDSTONE with occasional calcite veins (1mm		51.5		7.50 - 8.50	97	89	50		
8.5	thick). Fresh to slightly weathered. Discontinuities - smooth, planar to slightly undulating, tight to open, 30-50° dip,		51.0							
12	clean surfaces.								7	
9.0			50.5		8.50 - 9.50	95	91	71		
0.50	End of Corehole at 9.40m		50.0	40.0						
9.5 — 9.50			30.0	49.99						
			=					+		
		l Remar	ks:		1					
	From: To: Pipe Type: From: To: Type:									
	/									

Contract No: 5863	Rotary Core	ehc	le L	_0	g			1	hole No: C12	
Contract:	Moygaddy	Eastir	ng:	69	4562.423	Date	Started:	08/07/20)21	
ocation:	Maynooth, Co. Meath	North	ing:	73	8770.148	Date	pleted:	08/07/20)21	
Client:	Sky Castle Ltd	Eleva	tion:	52	93		d By:	MEDL		
Engineer:	ocsc	Rig Ty	/pe:	Sc	ondeq	Statu	s:	FINAL		١.
Depth (m)	Stratum Description	Legend	Leve (mOE	 el O)	Samples		Roc	k Indices	Backfi	- iff
Scale Depth			Scale D	epth	Campios		rcr/% scr	/% RQD/%	FI/m	
1.0 — 1.5 — 2.0 — 1.5 —	pen hole drilling - driller reports returns of sandy gravelly silty. AY with cobbles.		52.5 — 52.0 — 51.5 — 51.0 — 50.5 — 49.5 — 48.5 — 47.5 — 47.0 — 46.5 — 46.5 —		50 (4,5/50 for 30n	nm)	50.			
7.0		\$ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	46.0							
7.5	COUNT		45.5 —							
8.0	End of Corehole at 8.00m	\$\disp\chi_{\text{\tint{\text{\tin}\text{\ti}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tin}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tin}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\text{\text{\text{\ti}\text{\text{\text{\text{\text{\texi}\text{\text{\texi}\text{\text{\tex{\text{\text{\text{\text{\text{\texi}\text{\texi}\text{\texit{\ti}\tinttit{\texi}\text{\texi}\text{\texitit}\\tiint{\t	45.0 4	4.93	N=41 (3,6/8,9,10,	14)				
8.5			44.5							
9.0			44.0							
			10.5							
9.5			43.5 —							
			43.0 —							_
	Installation: Backfill: From: To: Pipe Type: From: To: Type: -	Remarl	KS:							

Contract No: 5863	Rotary Core	ehole	L	og				1	ehole N	0:
Contract:	Moygaddy	Easting:		694473.8	06	Date	Started:	07/07/2	021	
ocation:	Maynooth, Co. Meath	Northing:		738837.2	:04	Date	oleted:	07/07/2	021	
lient:	Sky Castle Ltd	Elevation:		55.00		Drille		MEDL		
ingineer:	ocsc	Rig Type:		Sondeq		Statu	s:	FINAL		
Depth (m)	Stratum Description	Legend (r	evel)	Samples		Roc	k Indices	B	ackfill
Scale Depth	pen hole drilling - driller reports returns of sandy gravelly silty	Scal	e De	pth	Campics	Т	CR/% SCR	/% RQD/%	FI/m	ackilli
1.5	End of Corehole at 8.00m	54.5 54	47		5/50 for 95n					
	Installation: Backfill: From: To: Pipe Type: From: To: Type: - 0.00 8.00 Bentonite	Remarks:								

Contract No: 5863	Rotary Core	eho	le L	.00	j			Coreho RC		
Contract:	Moygaddy	Eastin	g:	694	269.076	Date Start	ed:	07/07/202	1	
ocation:	Maynooth, Co. Meath	Northi	ng:	739		Date Completed	d:	07/07/202	1	
lient:	Sky Castle Ltd	Elevat	ion:	55.6		Drilled By:		MEDL		-
Ingineer:	ocsc	Rig Ty	pe:	Son	deq	Status:		FINAL		
Depth (m)	Stratum Description	Legend	Level (mOD)) 	Samples		Rock	Indices	Backfil	
Scale Depth			Scale De	epth	Gamples	TCR/%	SCR/	% RQD/% FI/I	m Backilli	
Or CI 0.5 -	Den hole drilling - driller reports returns of sandy gravelly silty. AY with cobbles. End of Corehole at 8.00m		47.5 —		N=39 (3,5/7,9,10, N=40 (3,4/6,10,10,					
73			46.5							
9.5			46.0							
-				_						-
	Installation: Backfill: From: To: Pipe Type: From: To: Type: -	L L	(S:							_

Contract No: 5863	Rotary Core	eho	le L	.0	g				hole No: C16	
Contract:	Moygaddy	Eastir	ng:	694	4648.959	Date 9	Started:	08/07/20)21	1
ocation:	Maynooth, Co. Meath	Northi	ing:	738	8608.023	Date Comp	leted:	08/07/20)21	
Client:	Sky Castle Ltd	Eleva	tion:	45.	.96	Drilled		MEDL		1
Ingineer:	ocsc	Rig Ty	/pe:	So	ndeq	Status	3:	FINAL		
Depth (m)	Stratum Description	Legend	Leve (mOD)))	Samples		Roc	k Indices	Bac <mark>kf</mark> i	- iff
Scale Depth	pen hole drilling - driller reports returns of sandy gravelly silty		Scale De	epth		Т	CR/% SCR	/% RQD/%	FI/m	
1.0 — 1.5 —	End of Corehole at 8.00m		45.5	7.96	N=37 (3,3/5,8,11, N=43 (3,6/8,9,12,					
9.5			36.5							
-										_
	Installation: Backfill: From: To: Pipe Type: From: To: Type: - 0.00 8.00 Bentonite	Remark	(S:							

Contract No: 5863	Rotary Core	ehole L	.og		Corehole No:
Contract:	Moygaddy	Easting:	693707.911	Date Started:	19/07/2021
_ocation:	Maynooth, Co. Meath	Northing:	739303.990	Date Completed:	19/07/2021
Client:	Sky Castle Ltd	Elevation:	54.78	Drilled By:	MEDL
Engineer:	ocsc	Rig Type:	Sondeq	Status:	FINAL
Depth (m)	Stratum Description	Level (mOD) Samples		k Indices Backfill
Scale Depth	pen hole drilling - driller reports returns of sandy gravelly silty	Scale De	epth	TCR/% SCR	/% RQD/% FI/m
0.5	AY with cobbles.	54.5 —			
10		54.0			S
1.0		53.5			
1.5		× × · · · · · · · · · · · · · · · · · ·		~ 0,	
2.0		53.0		19	
=		52.5	0	ン	
2.5 —		52.0	X		
3.0 —					
3.5		51.5			
		51.0	7		
4.0					
4.5		50.5			
5.0		50.0			
-		49.5			
5.5					
6.0 —		49.0			
_ =		48.5			
6.5 - 6.80		48.0 4	7.98		
7.0	rong to very strong light grey fine grained argillaceous MESTONE interbedded with moderately strong dark grey Icareous MUDSTONE with occasional calcite veins (2mm				Ni
7.5 — thi	ck). Fresh to slightly weathered. Discontinuities - non-intact.	47.5	6.80 - 7.80	98 57	45
	Discontinuities - smooth to rough, planar to slightly undulating, tight to open, 30-50° dip, occasionally sub-horizontal and sub-vertical, clean with occasional clay infill.	47.0			
8.0		46.5	7.80 - 8.80	98 66	3 43
8.5			7.00 - 0.00	90 00	9
9.0		46.0			
		45.5	8.80 - 9.80	97 69	59
9.5		450	100		
9.80	End of Corehole at 9.80m	45.0 42	1.98		
1		Remarks:		1	
(\$)	From: To: Pipe Type: From: To: Type: - 0.00 9.80 Bentonite				

Date Started: 20/07/2021 Date Completed: 20/07/2021 Drilled By: MEDL
Drilled By: MEDL eq Status: FINAL Rock Indices Backfill
Drilled By: MEDL eq Status: FINAL Rock Indices Backfill
Samples Rock Indices Backfill
SamplesBacktill
TCR/% SCR/% RQD/% FI/m
=45 (5,7/9,11,12,13) =45 (6,6/9,10,12,14)
= 4 :

5863	Rotary Core	eho	le L		Corehole No:						
Contract: N	Moygaddy	Eastin	ıg:	69	94613.822	Date Started:		ed:	12/07/2	2021	
_ocation: N	Maynooth, Co. Meath	Northi	ng:	73	39485.171	Date Complete		1:	12/07/2	2021	
Client: S	Sky Castle Ltd	Elevat	tion:	58	3.39		ed By:		MEDL		
Engineer: C	DCSC	Rig Ty	/pe:	Sondeq		Status:			FINAL		
Depth (m)	Stratum Description	Legend	Leve (mOI	D)	Samples				Indices		Backfill
Scale Depth Oper	n hole drilling - driller reports returns of sandy gravelly silty		Scale D	epth			TCR/%	SCR/%	% RQD/%	FI/m	
1.0 — CLA' 1.0 —	Y with cobbles.		58.0 —			3	R		000		
5.5 — LIME 5.5 — calca	ing to very strong light grey fine grained argillaceous ESTONE interbedded with moderately strong dark grey areous MUDSTONE with occasional pyrite crystals and ite veins (5mm thick). Fresh to slightly weathered. scontinuities - smooth to rough, planar, occasionally stepped, tight to open, b-horizontal dip, occasionally 60° dip and sub-vertical, clean.		53.5 - 5	53.29	5.10 - 6.10		98	97	45	11	
6.5 — Dissub	scontinuities - smooth to rough, planar, occasionally stepped, tight to open, be-horizontal and sub-vertical dip. clean with occasional grey staining.		52.0 —		6.10 - 7.10		100	98	53		
7.5 -	Con		51.0	-0.00	7.10 - 8.10		94	73	0	18	
8.10	End of Corehole at 8.10m		50.0	50.29							
3.5			49.5								
0.0			-								
9.5			49.0								
			48.5								

Contract No: 5863	Rotary Core	ehole	e L	og		Corehole RC2	
Contract:	Moygaddy	Easting: 694717.266			Date Started:	: 09/07/2021	
ocation:	Maynooth, Co. Meath	aynooth, Co. Meath Northing: 739392.581		Date Completed:	09/07/2021		
Client:	Sky Castle Ltd	Elevation	Completed			MEDL	
Engineer:	ocsc	Rig Type	:	Sondeq	Status:	FINAL	
Depth (m)	Stratum Description	Legend (Level (mOD))Samp	Roc	k Indices	Backfill
Scale Depth	pen hole drilling - driller reports returns of sandy gravelly silty	Sca	ale De	epth	TCR/% SCR	RQD/% FI/m	
0.5 — CL	AY with cobbles.	58.5 58.5				65), [
					C		
1.5 —		57.5	;				
2.0		57.0) =				
2.5		56.5	; -		20		
3.0							
3.0		56.0	'=	: (
3.5		55.5					
4.0		\$\frac{1}{2} \frac{1}{2} \frac					
		X 0	=				
4.5 —		54.5	; <u>-</u>				
5.0		54.0	, =				
5.5		<u>\$\$</u> \$\$ 0 53.5	. =				
		X X 0					
6.0		53.0	· -				
6.5		52.5	; =				
7.0		**** o					
		52.0	,				
7.5		51.5					
8.0 — 7.80 Or	pen hole drilling - driller reports returns of limestone bedrock.	51.0	-	.22			
8.5	v *	50.5					
9.0		50.0					
9.30	End of Corehole at 9.30m	49.5	-	.72			
=		49.5	`				
			-				
	From: To: Pipe Type: From: To: Type: -	Remarks: -					
	0.00 9.30 Bentonite						

RC04 Box 1 of 1



RC05 Box 1 of 1



Negi

RC06 Box 1 of 1



RC07 Box 1 of 1



Negi

RC08 Box 1 of 1



RC09 Box 1 of 1



Vest

RC10 Box 1 of 1



RC11 Box 1 of 1



Nes

RC17 Box 1 of 1



RC19 Box 1 of 1



Nes

notographs wie wind Purposes Only Weath County Council.

Contract No: 5863 Trial Pit Log											Trial Pit No: TP01		
Contr	act:	t: Moygaddy Easting:				693958	3.608		Date:	1	16/06/2021		
ocat	ion:	Maynooth, Co. Meath		No	orthing:	739151	1.571		Excavato	r: JCB 3CX			
Client	:	Sky Castle Ltd		Ele	evation:	55.32			Logged B	By:	M. Kaliski		
ngin	eer:	ocsc		Di	mensions xWxD) (m)	4.30 x	0.60 x	2.10	Status:		FINAL		
_evel	(mbgl)					Legend	Level	(mOD)	Samp	oles / F	/ Field Tests Wate		
Scale:	Depth		ratum Description	OH		Legenu	Scale:	Depth	Depth	Туре	e Result	Strike	
1.0 —	1.80	Stiff grey brown slightly sar coarse, angular to subround subrounded of limestone. Stiff grey brown slightly sar cobble and low boulder cor fine to coarse, angular to sub coulders are angular to sub diameter). Obstruction - boulders.	and is fine to coaded of limeston	relly silty CLAY we ne to coarse. Gravel is fine. Cobbles are a mestone. Cobble estone (up to 400)	ne to angular to vith high avel is and		53.5 — 53.5 — 52.5 — 52.0 —	55.22	0.50 1.00	В	MK14 MK15		
3.5	Š						52.0 — - - - 51.5 —						
	\sim	Termination: Pit V	Vall Stability:	Groundwater R	ate: Rema	arks:			Key:				
			/alls stable.	Dry	-				B = D = CBR	Bulk o Smal = Undi	disturbed I disturbed sturbed CBR nmental		

Contract No: 5863 Trial Pit Log										Trial Pit No: TP02			
Contr	ntract: Moygaddy Easting:				asting:	693988	8.420		Date:	,	16/06/2021		
Locati	ion:	Maynooth, Co. Mea	ath	N'	Northing:	739286	6.118		Excavator: JCB 3CX				
Client	::	Sky Castle Ltd		E	Elevation:	57.37			Logged B	3y: [/: M. Kaliski		
Engin	eer:	ocsc			Dimensions LxWxD) (m)	4.00 x	0.60 x	3.00	Status:		FINAL		
Level	(mbgl)		Stratum Description	1.	-XVV/D) (111)	Legend	Level	(mOD)) Samp	oles / F	/ Field Tests Wate		
Scale:	Depth		— Stratum Description			Legenu	Scale:	Depth	: Depth	Тур	e Result	Strike	
0.5 —	0.10	content. Sand is fine subrounded of limest limestone. Firm grey brown slight cobble content. Sand angular to subrounded subrounded of limest subrounded in subrounded subrounded in subrounded subrou	andy slightly gravelly s to coarse. Gravel is fitone. Cobbles are angular to sandy slightly gravely sandy slightly gravely sandy slightly gravely sandy slightly sandy slightly sandy slightly sandy sandy slightly sandy sand	fine to coarse, argular to subroun avelly silty CLAY avel is fine to co ples are angular andy slightly grave bottent. Sand is fit o subrounded of	ringular to inded of with high parse, to velly silty ine to f limestone.		57.0 —	57.27	0.50	В	R MK07		
2.5 —			14 CO1	>			55.0 —						
3.0 —	3.00	0	Pit terminated at 3.00	lm		X.0.2.12	54.0 —	54.37	3.00	В	MK10		
3.5	30						53.5 —						
		Termination:	Pit Wall Stability:	Groundwater R	Rate: Rema	arks:			Key:				
		Scheduled depth.	Pit walls stable.	Dry	-				B = D = CBR	Bulk Smal = Undi	disturbed ill disturbed listurbed CBR onmental	\tag{\text{\tin}\text{\tint{\text{\tetx{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tin}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\ti}}\\\ \ti}\\\ \tintte{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\ti}\}\tittt{\text{\text{\ti}\tittt{\text{\text{\text{\text{\text{\text{\ti}\tittt{\text{\text{\text{\text{\text{\text{\texit{\tet{\text{\ti}}\\tittt{\titt{\text{\ti}\text{\text{\texit{\t	

Contract No: 5863 Trial Pit Log										Trial Pit No: TP03		
Contra	act:	Moygaddy										
ocati	ion:	Maynooth, Co. Mea	ath	N	orthing:	739286	6.781	ı	Excavato	tor: JCB 3CX		
lient	t:	Sky Castle Ltd		E	levation:	55.26		ı	Logged By: M.		M. Kaliski	
ngir	neer:	ocsc			imensions xWxD) (m		(0.60 x	1.40	Status:	F	FINAL	•
.evel	el (mbgl) Stratum Description		.XVVXD) (III	Legend	L evel (<u> </u>		/ Field Tests Wate			
cale:	Depth	TOPSOIL.	Oliatum Dosonpu			Legena	Scale:	Depth:	Depth	Туре	e Result	Strike
	0.10	Firm brown slightly sa and boulder content. angular to subrounde angular to subrounde Firm brown slightly sa cobble and medium b is fine to coarse, angi	andy slightly gravelly sand is fine to coarse of of limestone. Cobbied of limestone (up to andy slightly gravelly spoulder content. Sand ular to subrounded of limestone of limestone of limestone subrounded of limestone sand subrounded of limestone subrounded of limestone sand subrounded of limestone sand subrounded of limestone subrounded of limestone sand subrounded s	e. Gravel is fine ples and boulders 300mm diameters silty CLAY with lid is fine to coars of limestone. Cob	to coarse, s are er). high e. Gravel obles and		55.0	54.36	0.50 0.50 1.00	B ICBF	MK01 MK02	
.5 —	1.40	Qbstruction - boulder	'S. Pit terminated at 1.40	im	116	**************************************	- - - 53.5 —	53.86				
- 2.0 — - -			الم	ncill			53.0					
2.5 — - - -			in Co				52.5 —					
3.0 —		Con					52.0					
3.5	30						51.5 —					
		Termination:	Pit Wall Stability:	Groundwater R	Parta: Dam	narks:			Kov:			
		Obstruction - boulders.	Pit walls stable.	Dry	-	arks:				Bulk o Small = Undi	disturbed I disturbed isturbed CBR nmental	₹

	act No: 863		og					Trial Pit No: TP04					
Contra	act:	Moygaddy		Eastir	ng:	693682	2.930		Date:		17/06/2021		
_ocati	ion:	Maynooth, Co. Meath Northing: 739502.916 Excavator					or: JCB 3CX						
Client	:	Sky Castle Ltd		Eleva	tion:	56.95			Logged E	Ву:	M. Kaliski		
Engin	eer:	er: OCSC Dimensions (LxWxD) (m): 4.20 x (0.60 x	2.40	Status:		FINAL					
Level	(mbgl)		Stratum Descript	1.		egend	Level	(mOD)	Samp	oles / F	/ Field Tests Wate		
Scale:	Depth		Stratum Descript			egenu	Scale:	Depth	Depth	Тур	e Result	Strike	
0.5 —	0.10	cobble content. Sand angular to subrounde subrounded of limest Firm grey brown sligh cobble and low bould fine to coarse, angula	andy slightly gravelly d is fine to coarse. Gred of limestone. Cobb tone. htly sandy slightly grader content. Sand is far to subrounded of limestoned of limestoned of limestoned of limestoned.	ravel is fine to coarse bles are angular to avelly silty CLAY with fine to coarse. Grave imestone. Cobbles a	high		56.5 —	56.85		ICB	MK43		
1.0 —		diameter).					56.0	3,	1.00	В	MK44		
1.5 —				cil '			55.5 — - - - 55.0 — - - - - - - - - - - - - -					•	
2.5 —	2.40	and medium boulder coarse, angular to su	dy slightly gravelly si content. Sand is fine ubrounded of limestor unded of limestone (urs.	e to coarse. Gravel is ne. Cobbles and bou up to 500mm diamete	fine to		54.5 — - - - -	54.65 54.55		В	MK45		
3.0 —	Ş	Con					54.0 — - -						
3.5	30						53.5						
							53.0 —						
		Termination: Obstruction - boulders.	Pit Wall Stability: Pit walls stable.	Groundwater Rate: 2.00 Seepage	Remark	(S:			Key: B = D =	Bulk Sma	disturbed Il disturbed isturbed CBF		

	act No: 863		Log						Trial Pit TP0			
ontr	act:	Moygaddy		Ea	asting:	69397	1.792		Date:		17/06/2021	
ocat	ion:	Maynooth, Co. Mea	ath	No	orthing:	739656	6.168		Excavato	or:	JCB 3CX	
Client	:	Sky Castle Ltd		EI	evation:	58.70			Logged E	Ву:	M. Kaliski	
Engin	eer:	OCSC			imensions xWxD) (m)	3.90 x	0.60 x	2.60	Status:		FINAL	
Level	(mbgl)		Ctuatura Daganinti	1.	XVVXD) (III)		Level	(mOD)	Samp	oles / F	Field Tests	Water
	Depth		Stratum Descripti	on		Legend	Scale:					Strike
0.5 — — — — — — — — — — — — — — — — — — —	0.10	cobble content. Sand angular to subrounde subrounded of limest	andy slightly gravelly s d is fine to coarse. Gra ed of limestone. Cobb tone.	avel is fine to coa ples are angular t clayey SILT. Sar	arse, to		58.5 —	58.60	0.50	В	MK40	
- 1.5 — - - - 2.0 —		cobble and low bould fine to coarse, angula	htly sandy slightly gra der content. Sand is fi ar to subrounded of lin r to subrounded of lim	ine to coarse. Gramestone. Cobble	avel is es and		57.0 — - - - - - 56.5 —	57.20	2.00	В	MK41	•
- 2.5 — - -	2.60	and medium boulder coarse, angular to su	ndy slightly gravelly si content. Sand is fine ubrounded of limeston unded of limestone (u rs.	to coarse. Grave ne. Cobbles and l up to 500mm diar	el is fine to boulders		56.0 —	56.30	2.50	В	MK42	
3.0 —		Con					- - - 55.5 -					
3.5	30						55.0 —					
		Tormination	Dit Well Statility	Croundwater	oto: D	vrko:			1/			
		Termination: Pit wall instability.	Pit Wall Stability: Walls collapsing between 1.50mbgl and 2.40mbgl.	Groundwater R 1.70 Slow	ate: Rema	arks:			_	Bulk Sma = Und	disturbed Il disturbed isturbed CBF onmental	₹

	act No: 863		٦	Γrial Pit	Log						Trial Pit TP0	
ontr	act:	Moygaddy		E	Easting:	693989	9.839		Date:		17/06/2021	
ocat	ion:	Maynooth, Co. Meath		N	Northing:	739437	7.563		Excavato	r: .	JCB 3CX	
Client	t:	Sky Castle Ltd		E	Elevation:	57.88			Logged B	By: I	M. Kaliski	
Engin	eer:	ocsc			Dimensions LxWxD) (m)	. 4.40 x	0.60 x	2.50	Status:	1	FINAL	
_evel	(mbgl)	Str	ratum Descripti	1.	LXVVXD) (III)	Legend	Level	(mOD)	Samp	oles / F	Field Tests	Water
3cale:	Depth		- Control			Logona	Scale:	Depth:	Depth	Тур	e Result	Strike
-	0.10	TOPSOIL. Soft brown slightly sandy sl coarse. Gravel is fine to coa					_	57.78				
- 0.5 — - -		Firm grey brown slightly sai cobble and low boulder con fine to coarse, angular to su coulders are angular to sub diameter).	ntent. Sand is fi ubrounded of lir	ne to coarse. G mestone. Cobbl	ravel is les and		57.5 —	57.58	0.50	ICBI	R MK46	
- 1.0 -							57.0	5,	1.00	В	MK47	
- 1.5 — -		Firm brown slightly sandy s cobble content. Sand is fine angular to subrounded of lin subrounded of limestone.	e to coarse. Gra	avel is fine to co	oarse,		56.5 —	56.58	1.50	В	MK48	
- 2.0 — - -		Firm grey brown slightly sal cobble and low boulder con fine to coarse, angular to su boulders are angular to sub	ntent. Sand is fi ubrounded of lir	ne to coarse. G mestone. Cobbl	ravel is les and		56.0 —	55.88	2.20	В	MK49	•
_	2.40	diameter).	abtly argually a	ilty CLAV with h	اطمع معاماء		55.5 —	55.48				
2.5 — - -	2.50	Stiff black slightly sandy slig and medium boulder conter coarse, angular to subrounded are angular to subrounded Obstruction - boulders.	nt. Sand is fine ded of limeston	to coarse. Grav ne. Cobbles and p to 500mm dia	vel is fine to I boulders		- - -	55.38	2.50	В	MK50	
3.0 — –		Conn.					55.0 —					
- 3.5 —	, O						54.5 —					
	O T						54.0 —					
							_					
		Obstruction - Pit w	/all Stability:	Groundwater F 2.00 Seepage		arks:			Key:	Bulk	disturbed	
(boulders.								= Undi	ll disturbed isturbed CBF onmental	3

	act No: 863		7	Γrial Pit	Log						Trial Pit TP0	
Contra	act:	Moygaddy		Ea	asting:	694176	6.647		Date:		17/06/2021	
_ocati	ion:	Maynooth, Co. Meat	h	No	orthing:	739446	6.736		Excavato	r:	JCB 3CX	
Client	:	Sky Castle Ltd		Ele	evation:	58.93			Logged E	By:	M. Kaliski	
Engin	eer:	ocsc			mensions xWxD) (m):	4.20 x	0.60 x	2.50	Status:	ı	FINAL	•
_evel	(mbgl)		Stratum Description			Legend	Level	(mOD)	Samp	oles / F	Field Tests	Water
Scale:	Depth	TOPSOIL.				zegena	Scale:	Depth	: Depth	Тур	e Result	Strike
0.5	0.10	Soft brown slightly san coarse. Gravel is fine to Firm becoming stiff grace CLAY with high cobble coarse. Gravel is fine to Cobbles and boulders 400mm diameter).	to coarse, angular to ey brown slightly sar e and low boulder co to coarse, angular to	o subrounded of I ndy slightly grave ontent. Sand is fir o subrounded of I	imestone./ elly silty ne to imestone.		58.5	58.83		В	MK52	
2.0 —	2.50	Stiff black slightly sand and medium boulder c coarse, angular to sub are angular to subrour	content. Sand is fine prounded of limeston	to coarse. Grave ie. Cobbles and l	el is fine to coulders		57.0 — 56.5 —	56.53 56.43		В	MK53	
3.0 —		Dbstruction - boulders			neter).		56.0 —					
3.5	Š						55.5 —					
		To read in a 41 a ray	Dit Wall Otal III.	Cwaller divisit in 5	oto. D	velse -						
			Pit Wall Stability: Pit walls stable.	Groundwater Ra	ate: Rema	arks:				Bulk Smal = Undi	disturbed Il disturbed isturbed CBR onmental	t

	act No: 863		7	Γrial Pit	Log						Trial Pit TP0	
ontra	act:	Moygaddy		Ea	asting:	694199	9.733		Date:	1	17/06/2021	
ocati	ion:	Maynooth, Co. Mea	ath	No	orthing:	739712	2.642		Excavato	r: c	JCB 3CX	
lient	:	Sky Castle Ltd		El	evation:	61.26			Logged B	By:	И. Kaliski	
ngin	eer:	ocsc			mensions xWxD) (m	3.80 x	0.60 x	1.40	Status:	F	FINAL	4
.evel	(mbgl)	1	Stratum Description	1.	(11, 2)	Legend	Level	(mOD)	Samp	oles / F	ield Tests	Water
cale:	Depth	TOPSOIL.				g	Scale:	Depth	Depth	Туре	e Result	Strike
	0.10	Soft brown slightly sa cobble content. Sand angular to subrounde subrounded of limest Firm grey brown sligh and medium boulder coarse, angular to su	andy slightly gravelly sit is fine to coarse. Graved of limestone. Cobbinence. Interpretation of the standard of limestone of limestone of limestone (upper land of limestone).	avel is fine to coa les are angular to ty CLAY with high to coarse. Grave ne. Cobbles and b	n cobble el is fine to		61.0 —	61.16	0.50	В	MK37	
- 1.5 — - -	1.40	Obstruction - boulder	'S. Pit terminated at 1.40	im	116	<u> </u>	59.5	59.86				
2.0 —			Con	ncill			59.0 —					
3.0 —	٥	Con					58.5 —					
3.5	30						57.5 —					
		Termination:	Pit Wall Stability:	Groundwater Ra	ate: Rem	l arks:			Key:			
		Obstruction - boulders.	Pit walls stable.	Dry	-					Smal = Undi	disturbed I disturbed sturbed CBR nmental	?

Contract No: 5863		7	Trial Pit L	.og						Trial P	Pit No:
Contract:	Moygaddy		East	ing:	694508	8.798		Date:		17/06/202	.1
ocation:	Maynooth, Co. Mea	ath	Nort	hing:	73970	1.821		Excavato	r:	JCB 3CX	
lient:	Sky Castle Ltd		Elev	ation:	62.01			Logged B	By:	M. Kaliski	
ngineer:	ocsc		Dime (LxV	ensions VxD) (m):	4.00 x	0.60 x	1.60	Status:		FINAL	•
evel (mbgl)		Stratum Description	1.		Legend	Level	(mOD) Samp	les /	Field Tests	
cale: Depth	TOPSOIL.	Ollatum Decompa			///XV///XV	Scale:	Depth	: Depth	Тур	pe Resul	lt Strike
0.10	Firm becoming stiff gr CLAY with high cobbl coarse. Gravel is fine Cobbles and boulders 400mm diameter).	le and low boulder co e to coarse, angular to es are angular to subro	ontent. Sand is fine to subrounded of limounded of limeston	to nestone.		61.5	61.91	1.20	В		
	Termination:	Pit Wall Stability:	Groundwater Rate	- Remar	rks:			Key:			
	Obstruction - boulders.	Pit walls stable.	Dry	-				B = D = CBR	Bulk Sma	disturbed all disturbed disturbed CE conmental	

	act No: 863		•	Trial Pit	Log						Trial Pit TP1	
Contra	act:	Moygaddy		E	asting:	694486	6.386		Date:		17/06/2021	
ocati	ion:	Maynooth, Co. Mea	ath	N	orthing:	739434	4.493		Excavato	r:	JCB 3CX	
Client	:	Sky Castle Ltd		E	levation:	58.96			Logged E	By: I	M. Kaliski	
Engin	eer:	ocsc			imensions xWxD) (m	4.30 x	0.60 x	< 2.40	Status:	-	FINAL	
Level	(mbgl)	1	Stratum Descript	1.	-XVVXD) (III)	Legend	Level	(mOD)	Samp	oles / F	Field Tests	Water
Scale:	Depth		Stratum Descript	lion		Legenu	Scale:	Depth	: Depth	Тур	e Result	Strike
0.5 —	0.10	TOPSOIL. Soft brown slightly sa cobble content. Sand angular to subrounded subrounded of limest Firm becoming stiff g CLAY with high cobblecoarse. Gravel is fine Cobbles and boulder 400mm diameter).	I is fine to coarse. Gred of limestone. Cobbone. rey brown slightly sale and medium bould to coarse, angular to	ravel is fine to co bles are angular andy slightly grav der content. Sand to subrounded of	arse, to elly silty d is fine to limestone.		58.5 — 58.5 — 58.0 — 57.5 —	58.86		В	5	
2.0 —	2.40	Obstruction - boulder	Pit terminated at 2.40	0m			56.5	56.56	2.40	В	MK64	•
3.5		Termination:	Pit Wall Stability:	Groundwater F		arks:	55.5		Key:			
		Termination: Obstruction - boulders.	Pit Wall Stability: Pit walls stable.	Groundwater R 2.10 Seepage		arks:	1	1	B = D = CBR	Bulk Smal = Undi	disturbed Il disturbed isturbed CBF onmental	₹

	act No: 863		Log							I Pit No:			
Contr	act:	Moygaddy		Ea	sting:	694739	9.889		Date:		17/06/2	021	
ocat	ion:	Maynooth, Co. Mea	th	No	rthing:	739363	3.529		Excavato	r:	JCB 3C	X	
lient	t:	Sky Castle Ltd		Ele	evation:	59.42			Logged E	Ву:	M. Kalis	ski	
ngin	eer:	ocsc			mensions (WxD) (m)	4.10 x	(0.60)	< 2.30	Status:		FINAL		
_evel	(mbgl)		Stratum Descripti	1.	(III)	Legend	Level	(mOD)	Samp	oles /	L Field Te		ater
Scale:	Depth		Stratum Descripti			Legenu	Scale:	Depth	: Depth	Тур	e Re	sult Str	ike
0.5 —	0.10	FOPSOIL. Soft brown slightly sa coarse. Gravel is fine firm becoming stiff grace CLAY with high cobblectors. Gravel is fine Cobbles and boulders 400mm diameter).	rey brown slightly sale and low boulder co	o subrounded of li ndy slightly grave ontent. Sand is fin o subrounded of li	lly silty e to mestone.		59.0 —	59.32		ICB	GR MK	C57	
- 1.5 — - - - 2.0 —					jie		58.0 — - - - 57.5 —		1.50	В	Wk	(58 	Z
- - -	2.30	Stiff grey brown slight cobble and boulder co coarse, angular to sul are angular to subrou Obstruction - boulders	ontent. Sand is fine t brounded of limestor inded of limestone (u	to coarse. Gravel in ne. Cobbles and bup to 400mm diam	is fine to oulders		57.0	57.32	2.20	В	MK	(59	
2.5 — - - -		. 1		•••			- - - 56.5 -	-					
3.0 —	×	Con					-	-					
3.5 -	200	~					56.0 — - - - - 55.5 —	-					
		Tormination	Dit Mall Stability	Groundwater D	nto: Dom	rke:			I/a				\exists
		Termination: Obstruction - boulders.	Pit Wall Stability: Pit walls stable.	Groundwater Ra 1.80 Seepage	ate: Rema	arks:				Bulk Sma	disturbe all disturb disturbed onmenta	ed CBR	

	act No: 863		•	Trial Pit L	og						Trial Pit TP1	
Contra	act:	Moygaddy		Easti	ng:	69447	1.269		Date:		17/06/2021	
Locati	ion:	Maynooth, Co. Mea	ath	North	ing:	739060	0.502		Excavato	r:	JCB 3CX	
Client	:	Sky Castle Ltd		Eleva	ition:	56.97			Logged E	By: I	M. Kaliski	
Engin	eer:	ocsc			nsions xD) (m):	3.70 x	0.60 x	2.30	Status:	ı	FINAL	
Level	(mbgl)	ı	Stratum Descript	1.		Legend	Level	(mOD)	Samp	oles / F	Field Tests	Water
Scale:	Depth		Ottatum Descript	1011		Legenu	Scale:	Depth	Depth	Тур	e Result	Strike
0.5 —	0.10	content. Sand is fine subrounded of limest limestone. Firm grey brown slight cobble and low bould	andy slightly gravelly to coarse. Gravel is tone. Cobbles are an htly sandy slightly gra der content. Sand is f	fine to coarse, angu gular to subrounded avelly silty CLAY with ine to coarse. Grave	ar to of high		- - - 56.5 —	56.87		ICBI	R MK34), ,
1.0 —	ļ.		ar to subrounded of li				56.0	5,	1.00	В	MK35	
1.5 —			dy fine to coarse, ang e with high cobble an		nt.		55.5 —	55.47 55.37				•
2.0 —	\ : : 1	Sand is fine to coars subrounded of limes! Firm grey brown slight cobble and low bould fine to coarse, angular boulders are angular	e. Cobbles and bould tone (up to 400mm d htly sandy slightly gra der content. Sand is f ar to subrounded of linter	lers are angular to iameter). avelly silty CLAY witl ine to coarse. Grave imestone. Cobbles a	n high I is		- - - 55.0 —		2.00	В	MK36	
2.5 —	2.20	and medium boulder coarse, angular to su	ndy slightly gravelly s content. Sand is fine ubrounded of limeston unded of limestone (u	to coarse. Gravel is ne. Cobbles and boo	fine to		- - 54.5 —	54.77 54.67				
- - -			Pit terminated at 2.3	0m			- - -					
3.0 —	×	COS					54.0 —					
3.5	30						53.5 —					
							-	-				
		T	Dia Mall Otal 30	One on the second		ulca	53.0 —					
		Termination: Obstruction - boulders.	Pit Wall Stability: Pit walls stable.	Groundwater Rate 1.50 Seepage	: Rema	rks:			Key: B = D =	Bulk Smal	disturbed Il disturbed isturbed CBR	

Contract No: 5863		•	Trial Pit	Log							Pit No:
Contract:	Moygaddy		E	asting:	69456	2.423		Date:		16/06/20)21
.ocation:	Maynooth, Co. Mea	th	N	orthing:	73877	0.148		Excavato	r:	JCB 3C	X
Client:	Sky Castle Ltd		E	levation:	52.93			Logged B	By:	M. Kalisl	ki
Engineer:	ocsc			imensions xWxD) (m)	3.90 x	(0.60 x	2.10	Status:		FINAL	
_evel (mbgl)		Stratum Descript	1.	-XVVAD) (III)	Legend	Level	(mOD) Samp	oles /	Field Tes	
Scale: Depth	T0000H	——————————————————————————————————————			Z//XX//XX	Scale:	Depth	: Depth	Тур	pe Res	sult Strike
- 0.10 - 0.5	Grey brown silty sand GRAVEL of limestone Sand is fine to coarse subrounded of limestone Sand is fine to coarse. Gravel is fine Cobbles and boulders 400mm diameter).	ent. Sand is fine to cobrounded of limestor one. dy fine to coarse, angle with high cobble and bould one (up to 400mm direy brown slightly sale and low boulder coto coarse, angular to subris are angular to subr	gular to subround not low boulder coders are angular iameter). andy slightly grave ontent. Sand is fire subrounded of limes	ded ontent. to elly silty ne to limestone.		52.5 — 52.0 — 51.5 — 51.0 — 50.5 — 49.5 — 49.0 —	51.73 51.33	0.50 1.00 1.50	B B	MK2	28
	Termination:	Pit Wall Stability:	Groundwater F		ırks:			Key:		- 11:-1	
	Obstruction - boulders.	Pit walls stable.	1.80 Seepage	-					Sma Und =	disturbed all disturbed disturbed (onmental	ed

Contract No: 5863		7	Log						Trial Pit TP1		
contract:	Moygaddy		E	asting:	694240	0.465		Date:		16/06/2021	
ocation:	Maynooth, Co. Meat	th	N	orthing:	739010	0.894		Excavato	r:	JCB 3CX	
lient:	Sky Castle Ltd		EI	levation:	55.01			Logged B	sy:	M. Kaliski	
ngineer:	ocsc			imensions xWxD) (m)	3.90 x	(0.60 x	2.00	Status:		FINAL	•
evel (mbgl)		Stratum Descripti	,	X V V A D ; (11.)	Legend	Level	(mOD)) Samp	les / I	Field Tests	Water
cale: Depth	=====	Ottatum Dosonya			Legena	Scale:	Depth	: Depth	Тур	e Result	Strike
0.10	Soft becoming firm browith low cobble contectors, angular to subsubrounded of limestons subrounded of limestons subrounded of limestons subrounded low boulders are angular to coarse, a	nt. Sand is fine to co brounded of limeston one. Ity sandy slightly graver content. Sand is fine to subrounded of lime to subrounded of lime	velly silty CLAY vine to coarse. Gravel is fine.	with high avel is es and		54.5	54.91	0.50 1.00	В	MK25	
	Tamination	Dit Mall Stability:	Craundwater P	Pote: Dom				Kovi			
	Termination: Obstruction - boulders.	Pit Wall Stability: Pit walls stable.	Groundwater R Dry	ate: Rema	3rks: 				Bulk Sma = Und	disturbed Ill disturbed Iisturbed CBR onmental	₹

	act No: 863		-	Log						Trial Pit		
ontr	act:	Moygaddy		E	asting:	69413	1.238		Date:		16/06/2021	
ocat	ion:	Maynooth, Co. Mea	ath	N	orthing:	739202	2.931		Excavato	r:	JCB 3CX	
lient	:	Sky Castle Ltd		E	evation:	55.37			Logged B	By: I	M. Kaliski	
ngin	eer:	ocsc			mensions xWxD) (m)	4.20 x	0.60 x	1.60	Status:	ı	FINAL	
evel	(mbgl)		Stratum Descripti		, ()	Legend	Level	(mOD)	Samp	oles / F	Field Tests	Water
cale:	Depth	TODEOU				×//××//××	Scale:	Depth	Depth	Тур	e Result	Strike
	0.50	content. Sand is fine subrounded of limest imestone. Firm becoming stiff gwith high cobble and Gravel is fine to coars	andy slightly gravelly sto coarse. Gravel is fone. Cobbles are angrey brown slightly sailow boulder content. se, angular to subrous are angular to subrous are angular to subrous.	fine to coarse, ar gular to subround ndy gravelly silty Sand is fine to counded of limestor	ded of CLAY oarse. ne.		55.0 — 54.5 — 54.0 —	55.27	1.00	В	MK22	
- - 2.0 — - - - 2.5 —			Pit terminated at 1.60	Om Cillian			53.5 —					
3.0 —		Coni					52.5 —					
3.5 -	SO.						52.0 — — — — — — — — — — — — — — — — — — —					
		Termination:	Pit Wall Stability:	Groundwater R	ate: Rema	arks:			Key:			
		Obstruction - boulders.	Pit walls stable.	1.60 Medium	-				B = D = CBR	Bulk Smal = Und	disturbed Il disturbed isturbed CBI onmental	R

	act No: 863		_og						Trial Pit TP1			
Contra	act:	Moygaddy		Eas	ting:	694580	0.524		Date:	,	17/06/2021	
.ocati	ion:	Maynooth, Co. Meath		Nor	thing:	739205	5.916		Excavato	r:	JCB 3CX	
Client	:	Sky Castle Ltd		Ele	vation:	58.33			Logged B	By:	И. Kaliski	
ngin	eer:	ocsc			nensions WxD) (m)	4.10 x	0.60 x	2.20	Status:	F	FINAL	
	(mbgl)		Stratum Description	1.	· · · · · · · · · · · · · · · · · · ·	Legend	Level	(mOD)	Samp	oles / F	Field Tests	Water
3cale:	Depth	TOPSOIL.				g	Scale:	Depth:	Depth	Тур	e Result	Strike
		Firm becoming stiff grey CLAY with high cobble at coarse. Gravel is fine to cobbles and boulders and 400mm diameter).	nd low boulder co coarse, angular to	ntent. Sand is fine subrounded of lir	to nestone.		58.0 — 57.5 — 57.0 —	58.23	1.00	В	MK54	
2.0 —	2.20	Stiff black slightly sandy and medium boulder con coarse, angular to subroure angular to subrounder boulders.	itent. Sand is fine unded of limeston	to coarse. Gravel e. Cobbles and bo p to 500mm diam	is fine to oulders		56.5 — - 56.0 — - - - - - - - - - - - - -	56.23	2.20	В	MK56	
3.0 —		Conu					55.5 — - - -					
3.5	Š						55.0 — - - - 54.5 —					
		Termination: Pit	t Wall Stability:	Groundwater Ra	te: Rema	ırks [.]			Key:			
			t walls stable.	Dry	-	u No.			B = D = CBR	Bulk o Smal = Undi	disturbed I disturbed sturbed CBF nmental	3

Contract No: 5863		Trial Pit Log										No: 7
Contract:		Moygaddy	asting:	693968	693968.747			,	16/06/2021			
Location:		Maynooth, Co. Meath Northing:				739114.742			Excavator:		JCB 3CX	
Client	t:	Sky Castle Ltd Elevation:				54.52	54.52			By:	M. Kaliski	
Engin	leer:	OCSC Dimensions (LxWxD) (m)				4.20 x	4.20 x 0.60 x 1.70			F	FINAL	
Level	l (mbgl)	Stratum Description				Legend	Level (mOD) Samples		/ Field Tests Wate	
Scale:	Depth		Ottatum Docompt.			V//A\//A\/	Scale:	Depth:	Depth	h Type	e Result	Strike
0.5 —	0.10 g	TOPSOIL. Soft becoming firm browith medium cobble coarse, angular to subsubrounded of limesto	content. Sand is fine t brounded of limeston one.	to coarse. Grave	el is fine to		54.0 —	54.42	0.50	В	MK17	
2.0 —			id Con	ncill			52.5 —					
3.0 —	X	ic Con					51.5 — — — — — 51.0 —					
			Pit Wall Stability: Pit walls stable.	Groundwater R	Rate: Rema	arks:	-		Key:	Bulk	disturbed	
(boulders.							D = CBR	Smal = Undi	ll disturbed isturbed CBR onmental	1

Contract No: 5863		Trial Pit Log										No:
Contract:		Moygaddy		E	asting:	693940	0.121		Date:		16/06/2021	
Location:		Maynooth, Co. Meath Northing:					739224.755			r: .	JCB 3CX	
Client		Sky Castle Ltd Elevation:				55.98	55.98			By: I	M. Kaliski	
Engin	eer:	OCSC Dimensions (LxWxD) (m):				4.10 x	4.10 x 0.60 x 2.50			ı	FINAL	•
Level	(mbgl)	Stratum Description					Level	(mOD)) Samples /		Field Tests Wate	
Scale:	Depth		Ottatum Docompa.			Legend	Scale:	Depth	: Depth	Тур	e Result	Strike
1.5 —	1.00	Firm becoming stiff gr CLAY with high cobbles and boulders 400mm diameter).	rey brown slightly sare and low boulder co to coarse, angular to sare angular to subro	ine to coarse, angular to subround ndy slightly grave ontent. Sand is fing subrounded of	elly silty ne to limestone.		55.5 —	55.88	1.00	В	MK12	
- - -	2.50	Obstruction - boulders	S. Pit terminated at 2.50	lm			-	53.48	2.50	В	MK13	
3.0 —	×	Co					53.0 —					
3.5	30						52.5 — - - - -					
	$\overline{}$	Termination:	Pit Wall Stability:	Groundwater R	ate: Rema	arks:			Key:			
		Strength of soil and boulders.	-	Dry	-				B = D = CBR	Bulk Smal = Undi	disturbed Il disturbed isturbed CBR onmental	

Contract No: 5863		Trial Pit Log										No: 9
Contract:		Moygaddy		E	asting:	693876	6.942		Date:		16/06/2021	
Location:		Maynooth, Co. Mea	ath	N	orthing:	739296	739296.996 E			r: .	JCB 3CX	
Client	t:	Sky Castle Ltd Elevation			levation:	55.71			Logged By:		M. Kaliski	
ngin	eer:	ocsc			imensions xWxD) (m	4.00 x	4.00 x 0.60 x 1.90			F	FINAL	
Level (mbgl)							Level (mOD) Samples /		/ Field Tests Water	
cale:	Depth	TOPSOIL.				Legend	Scale:	Depth:	Depth	Тур	e Result	Strike
1.5	1.70	Soft brown slightly sa content. Sand is fine subrounded of limest imestone. Firm grey brown slight cobble and medium be sine to coarse, angular diameter). Stiff grey slightly sand and low boulder controllers, angular to su	andy slightly gravelly sit to coarse. Gravel is forme. Cobbles are angular to subrounded of to subrounded of the subrounded of the subrounded of limestone (urs. Pit terminated at 1.90	Ity CLAY with higoarse. Gravel is not avelly silty CLAY do is fine to coarse of limestone. Cobbinestone (up to 40)	ngular to ded of with high e. Gravel bles and 00mm		55.5 — 55.0 — 54.5 — 54.0 — 53.5 — 53.0 — 52.5 — — — — — — — — — — — — —	55.61 55.51 54.01 53.81	1.00	В	MK05	•
-		Termination:	Pit Wall Stability:	Groundwater R	Rate: Rem	arks:	52.0 —		Key:			
		Obstruction - boulders.	Pit walls stable.	1.70 Seepage					B = D = CBR	Bulk (Smal = Undi	disturbed Il disturbed isturbed CBR onmental	1

Contract No: 5863		Trial Pit Log										No: 0
Contract:		Moygaddy Easting:					694084.588				16/06/2021	
Location:		Maynooth, Co. Meath Northing:				739079.517			Excavator:		JCB 3CX	
Client:		Sky Castle Ltd Elevation:				55.01			Logged By:		M. Kaliski	
Engineer:		ocsc			mensions (WxD) (m)	3.90 x	3.90 x 0.60 x 1.90				FINAL	
_evel (mbgl)							Level (mOD)) Samples /		/ Field Tests Wate	
cale:	Depth		Ottatum Bescription			Legend	Scale:	Depth	: Depth	Тур	e Result	Strike
	0.40	Firm becoming stiff gCLAY with high cobbicoarse. Gravel is fine	andy slightly gravelly set to coarse, angular to entry sandy slightly gravent. Sand is fine to constrounded of limeston cone. Trey brown slightly sar le and low boulder come to coarse, angular to subrounder to coarse, angular to subrounder to subrounder to subrounder to coarse, angular to subrounder to coarse, angular to subrounder to	o subrounded of livelly silty CLAY warse. Gravel is find the company of the compa	with ne to ngular to		54.5 -	54.91	0.50	В	MK20	
2.0 —	1.90	Obstruction - boulder	Pit terminated at 1.90	Dm .			53.0 —	53.11				
3.0 —	×	Con					52.0 — - -					
3.5 -	30						51.5 — - - -					
		Termination:	Pit Wall Stability:	Groundwater Ra	ate: Rema	arks:	<u> </u>	<u> </u>	Key:	1		
		Obstruction - boulders.	Pit walls stable.	Dry	-				B = D = CBR	Bulk Sma = Und	disturbed Il disturbed isturbed CBR onmental	1

Contract No 5863	Trial Pit Log										t No: 21
Contract:	Moygaddy	694518	8.865		Date:		16/06/2021				
Location:	Maynooth, Co. Meath Northing:					738836.591			r:	JCB 3CX	
Client:	Sky Castle Ltd Elevation:					54.89			sy:	M. Kaliski	
Engineer:	ocsc	OCSC Dimensions (LxWxD) (m):				4.00 x 0.60 x 2.90				FINAL	
Level (mbgl										/ Field Tests Wate	
Scale: Depth		Stratum Descript			Legend	Scale:	Depth	: Depth	Тур	e Result	Strike
- 0.10 - 0.5	with low cobble cont coarse, angular to si subrounded of limes Stiff grey brown slight cobble and low boulfine to coarse, angulation boulders are angulation diameter).	htly sandy slightly gra der content. Sand is t lar to subrounded of l r to subrounded of lin	avelly silty CLAY fine to coarse. G limestone. Cobb nestone (up to 4	with high Gravel is les and		54.5 — 54.0 — 53.5 — 53.0 — 52.5 — 51.0 — 51.0 —	51.99	0.50 1.00	В	MK32	▼
						51.0 —					
	Termination:	Pit Wall Stability:	Groundwater I	Rate: Rema	rks:			Key:			
	Obstruction - boulders.	Pit walls stable.	2.90 Medium	-				B = D = CBR	Bulk Sma = Und	disturbed all disturbed disturbed CBI onmental	R

TP01 Sidewall



TP01 Spoil



TP02 Sidewall



TP02 Spoil



TP03 Sidewall



TP03 Spoil



TP04 Sidewall



TP04 Spoil



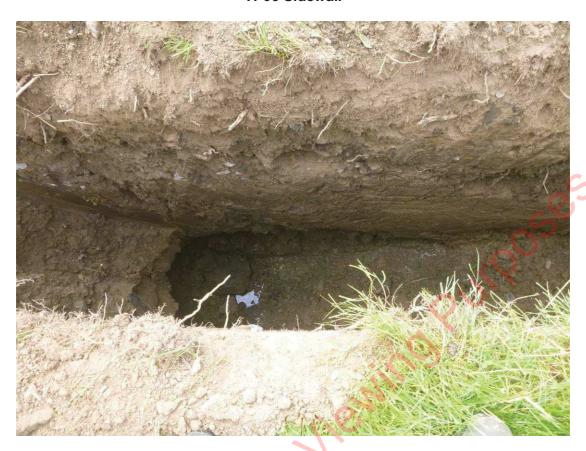
TP05 Sidewall



TP05 Spoil



TP06 Sidewall



TP06 Spoil



Meg

TP07 Sidewall



TP07 Spoil



Meg

TP08 Sidewall



TP08 Spoil



TP09 Sidewall



TP09 Spoil



Mes

TP10 Sidewall



TP10 Spoil



TP11 Sidewall



TP11 Spoil



TP12 Sidewall



TP12 Spoil



TP13 Sidewall



TP13 Spoil



TP14 Sidewall



TP14 Spoil



TP15 Sidewall



TP15 Spoil



TP16 Sidewall



TP16 Spoil



Mes

TP17 Sidewall



TP17 Spoil



TP18 Sidewall



TP18 Spoil



Mes

TP19 Sidewall



TP19 Spoil



TP20 Sidewall



TP20 Spoil



TP21 Sidewall



TP21 Spoil



desults with the wind purposes only weath country council and the wind purposes only weather with the wind purpose of the

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath

and low boulder content.



TP01 Test No: 16/06/2021

Date:

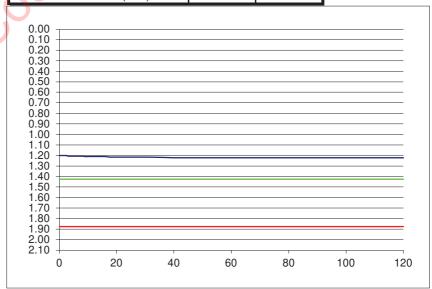
Ground Conditions			
From	То		
0.00	0.10	TOPSOIL.	
0.10	1.80	Soft becoming firm brown slightly sandy slightly gravelly silty CLAY with medium cobble content.	
1.80	2.10	Stiff grey brown slightly sandy slightly gravelly silty CLAY with high cobble	

Remarks:

Obstruction at 2.10mbgl.

Obstruction at 2	
Elapsed Time	Fall of Water
(mins)	(m)
0 0.5	1.20
0.5	1.20
1	1.20
1.5	1.20
2 2.5	1.20
2.5	1.20
3 3.5	1.21
3.5	1.21
4	1.21
4.5	1.21
5	1.21
6	1.21
7	1.21
8	1.21
9	1.21
10	1.21
12	1.21
14	1.21
16	1.21
18	1.22
20	1.22
25	1.22
30	1.22
40	1.22
50	1.22
60	1.22
75	1.22
90	1.22
120	1.22

		4
Pit Dimensions (m)		
Length (m)	4.30	m
Width (m)	0.60	m
Depth	2.10	m
Water		
Start Depth of Water	1.20	m
Depth of Water	0.90	m
75% Full	1.43	m
25% Full	1.88	m
75%-25%	0.45	m
Volume of water (75%-25%)	1.16	m3
Area of Drainage	20.58	m2
Area of Drainage (75%-25%)	6.99	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec



<u>Fail</u> f = **Fail** or m/min m/s

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath
Test No:	TP02
Date:	16/06/2021



Ground Conditions

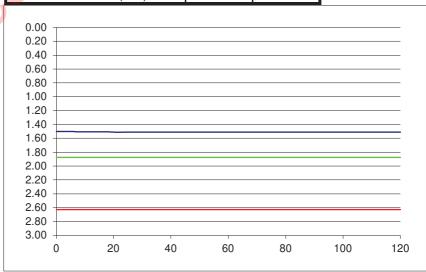
directing contains			
From	То		
0.00	0.10	TOPSOIL.	
0.10	0.60	Soft brown slightly sandy slightly gravelly silty CLAY with low cobble content.	
0.60	1.50	Firm grey brown slightly sandy slightly gravelly silty CLAY with high cobble content.	
1.50	3.00	Firm becoming stiff grey brown slightly sandy slightly gravelly silty CLAY with high cobble and low boulder content.	

Remarks:

Test completed at base of pit.

Test completed	
Elapsed Time	Fall of Water
(mins)	(m)
0	1.50
0.5	1.50
1	1.50
1.5	1.50
2	1.50
2.5	1.50
3	1.50
3.5	1.50
4	1.50
4.5	1.50
5	1.50
6	1.50
7	1.51
8	1.51
9	1.51
10	1.51
12	1.51
14	1.51
16	1.51
18	1.51
20	1.51
25	1.51
30	1.51
40	1.51 1.51
50	1.51
60	1.51
75	1.51
90	1.51
120	1.51

Pit Dimensions (m)		
Length (m)	4.00	m
Width (m)	0.60	m
Depth	3.00	m
Water		
Start Depth of Water	1.50	m
Depth of Water	1.50	m
75% Full	1.88	m
25% Full	2.63	m
75%-25%	0.75	m
Volume of water (75%-25%)	1.80	m3
Area of Drainage	27.60	m2
Area of Drainage (75%-25%)	9.30	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec



f = Fail or Fail m/min

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath
T . N.	TDOO



Test No:

TP03 16/06/2021 Date:

Ground	Conditions
--------	-------------------

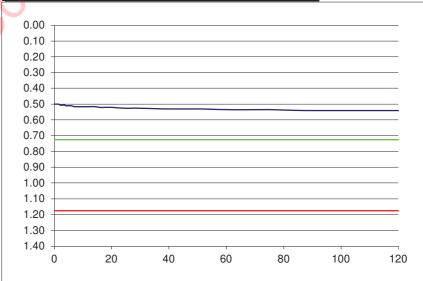
From	То		
0.00	0.10	TOPSOIL.	
0.10		Firm brown slightly sandy slightly gravelly silty CLAY with low cobble and boulder content.	
0.90	_	Firm brown slightly sandy slightly gravelly silty CLAY with high cobble and medium boulder content.	

Remarks:

Obstructions at 1.40mbgl.

Elapsed Time	Fall of Water
(mins)	(m)
0	0.50
0.5	0.50
1	0.50
1.5	0.50
2	0.51
2.5	0.51
3	0.51
3.5	0.51
4	0.51
4.5	0.51
5	0.51
6	0.51
7	0.52
8	0.52
9	0.52
10	0.52
12	0.52
14	0.52
16	0.52
18	0.52
20	0.52
25	0.53
30	0.53
40	0.53
50	0.53
60	0.54
75	0.54
90	0.54
120	0.54

Pit Dimensions (m)		
Length (m)	4.20	m
Width (m)	0.60	m
Depth	1.40	m
Water		
Start Depth of Water	0.50	m
Depth of Water	0.90	m
75% Full	0.73	m
25% Full	1.18	m
75%-25%	0.45	m
Volume of water (75%-25%)	1.13	m3
Area of Drainage	13.44	m2
Area of Drainage (75%-25%)	6.84	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec



<u>Fail</u> f = <u>Fail</u> or m/min m/s

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath
Test No:	TP04
Date:	17/06/2021



Date:

Ground Conditions

around come	11110113		
From	То		
0.00	0.10	TOPSOIL.	
0.10	0.50	Soft brown slightly sandy slightly gravelly silty CLAY with medium cobble content.	
0.50	2.30	Firm grey brown slightly sandy slightly gravelly silty CLAY with high cobble and low boulder content.)
2.30	2.40	Stiff grey slightly sandy slightly gravelly silty CLAY with high cobble and medium boulder content.	

Remarks:

Obstruction at 2.40mbgl.

Water ingress at 2.00mbgl - soils saturated and unsuitable for soakaway design.

Elapsed Time	
(mins)	(m)
0	-
0.5	-
1	-
1.5	-
2	-
2.5	-
3	-
3.5	-
4	-
4.5	-
5	-
6	-
7	-
8	-
9	-
10	-
12	
14	
16	-
18	
20	-
25	-
30	-
40	-
50	-
60	-
75	-
90	-
120	-

Pit Dimensions (m)		
Length (m)	4.20	m
Width (m)	0.60	m
Depth	2.40	m
Water		
Start Depth of Water		m
Depth of Water	-	m
75% Full	-	m
25% Full	-	m
75%-25%	-	m
Volume of water (75%-25%)		m3
Area of Drainage	-	m2
Area of Drainage (75%-25%)	-	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec

f =	<u>Fail</u>	or	<u>Fail</u>
	m/min		m/s

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath
Test No:	TP05
Date:	17/06/2021



Ground Conditions

Ground Cond	1110113	
From	То	
0.00	0.10	TOPSOIL.
0.10	0.60	Soft brown slightly sandy slightly gravelly silty CLAY with medium cobble content.
0.60	1.50	Firm brown slightly sandy slightly gravelly clayey SILT.
1.50	2.40	Firm grey brown slightly sandy slightly gravelly silty CLAY with high cobble and low boulder content.
2.40	2.60	Stiff black slightly sandy slightly gravelly silty CLAY with high cobble and medium boulder content.

Remarks:

Obstruction at 2.60mbgl.

Water ingress at 1.70mbgl - soils saturated and unsuitable for soakaway design.

Elapsed Time	
(mins)	(m)
0	-
0.5	-
1	-
1.5	-
2	-
2.5	-
3	-
3.5	-
4	-
4.5	-
5	-
6	-
7	-
8	-
9	-
10	-
12	
14 16 18	
16	.
18	-
20	-
25	-
30	-
40	-
50	-
60	-
75	-
90	-
120	-

Pit Dimensions (m)		
Length (m)	3.90	m
Width (m)	0.60	m
Depth	2.40	m
Water		
Start Depth of Water	-	m
Depth of Water	-	m
75% Full	-	m
25% Full /	-	m
75%-25%	-	m
Volume of water (75%-25%)	-	m3
Area of Drainage	-	m2
Area of Drainage (75%-25%)	-	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec

f =	<u>Fail</u>	or	<u>Fail</u>
	m/min		m/s

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath
Test No:	TP06
Date:	17/06/2021



Ground Condi	แบบร	
From	То	
0.00	0.10	TOPSOIL.
0.10	0.30	Soft brown slightly sandy slightly gravelly silty CLAY.
0.30	1.30	Firm grey brown slightly sandy slightly gravelly silty CLAY with high cobble
		and low boulder content.
1.30	2.00	Firm brown slightly sandy slightly gravelly clayey SILT with low cobble
2.00	2.40	Firm grey brown slightly sandy slightly gravelly silty CLAY with high cobble
		and low boulder content.
2.40	2.50	Stiff black slightly sandy slightly gravelly silty CLAY with high cobble and
		medium boulder content.

Remarks:

Obstruction at 2.50mbgl.

Water ingress at 2.00mbgl - soils saturated and unsuitable for soakaway design.

Elapsed Time	
(mins)	(m)
0	-
0.5	-
1	-
1.5	-
2	-
2.5	-
3	-
3.5	-
4	-
4.5	-
5	-
6	-
7	-
8 9	-
9	
10	
12	
14	
16	-
18	-
20	-
25	-
30	-
40	-
50	-
60	-
90	-
120	-

Pit Dimensions (m)		
Length (m)	4.40	m
Width (m)	0.60	m
Depth	2.50	m
Water		
Start Depth of Water	-	m
Depth of Water	-	m
75% Full 🔪	-	m
25% Full	-	m
75%-25%	-	m
Volume of water (75%-25%)	-	m3
Area of Drainage	-	m2
Area of Drainage (75%-25%)	-	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec

f =	<u>Fail</u>	or	<u>Fail</u>
	m/min		m/s

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath
Test No:	TP07
Date:	17/06/2021



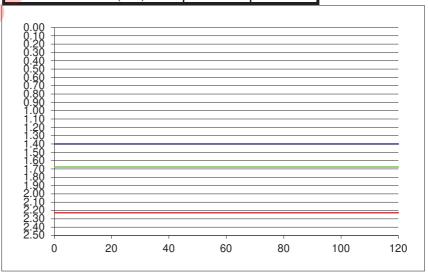
Ground Condi	แอกร	
From	То	
0.00	0.10	TOPSOIL.
0.10	0.20	Soft brown slightly sandy slightly gravelly silty CLAY.
0.20	2.40	Firm becoming stiff grey brown slightly sandy slightly gravelly silty CLAY with
		high cobble and low boulder content.
2.40	2.50	Stiff black slightly sandy slightly gravelly silty CLAY with high cobble and
		medium boulder content.

Remarks:

Obstructions at 2.50mbgl.

Obstructions at	
Elapsed Time	Fall of Water
(mins)	(m)
0	1.40
0.5	1.40
1	1.40
1.5	1.40
2	1.40
2.5	1.40
3	1.40
3.5	1.40
4	1.40
4.5	1.40
5	1.40
6	1.40
7	1.40
8	1.40
9	1.40
10	1.40
12	1.40
14	1.40
16	1.40
18	1.40
20	1.40
25	1.40
30	1.40
40	1.40
50	1.40
60	1.40
75	1.40
90	1.40
120	1.40

Pit Dimensions (m)		
Length (m)	4.20	m
Width (m)	0.60	m
Depth	2.50	m
Water		
Start Depth of Water	1.40	m
Depth of Water	1.10	m
75% Full	1.68	m
25% Full	2.23	m
75%-25%	0.55	m
Volume of water (75%-25%)	1.39	m3
Area of Drainage	24.00	m2
Area of Drainage (75%-25%)	7.80	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec



Fail f = <u>Fail</u> or m/min m/s

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath



Test No: TP08 **Date:** 17/06/2021

	Ground	Conditions
--	--------	------------

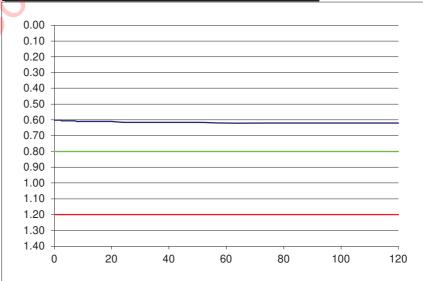
From	То	
0.00	0.10	TOPSOIL.
0.10		Soft brown slightly sandy slightly gravelly silty CLAY with medium cobble content.
0.80	1.40	Firm grey brown slightly sandy slightly gravelly silty CLAY with high cobble and medium boulder content.

Remarks:

Obstructions at 1.40mbgl.

Elapsed Time	Fall of Water
(mins)	(m)
0	0.60
0.5	0.60
1	0.60
1.5	0.60
2	0.60
2.5	0.61
3	0.61
3.5	0.61
4	0.61
4.5	0.61
5	0.61
6	0.61
7	0.61
8	0.61
9	0.61
10	0.61
12	0.61
14	0.61
16	0.61
18	0.61
20	0.61
25	0.62
30	0.62
40	0.62
50	0.62
60	0.62
75	0.62
90	0.62
120	0.62

Pit Dimensions (m)		
Length (m)	3.80	m
Width (m)	0.60	m
Depth	1.40	m
Water		
Start Depth of Water	0.60	m
Depth of Water	0.80	m
75% Full	0.80	m
25% Full	1.20	m
75%-25%	0.40	m
Volume of water (75%-25%)	0.91	m3
Area of Drainage	12.32	m2
Area of Drainage (75%-25%)	5.80	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec



f = Fail or Fail m/min

Location:	Maynooth, Co. Meath
Contract name:	Moygaddy
Project Reference:	5863



Test No: TP09 **Date:** 17/06/2021

Ground	Conditions
--------	------------

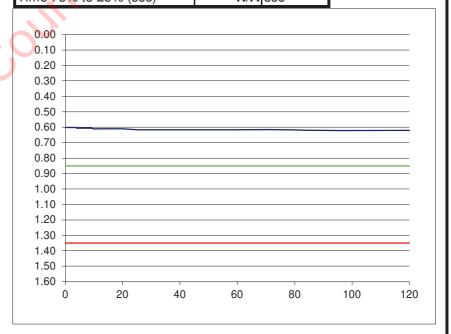
From	То		
0.00	0.10	TOPSOIL.	
0.10	1.60	Firm becoming stiff grey brown slightly sandy slightly gravelly silty CLAY	with
		high cobble and low boulder content.	

Remarks:

Obstructions at 1.60mbgl.

Elapsed Time	Fall of Water
(mins)	(m)
0	0.60
0.5	0.60
1	0.60
1.5	0.60
2	0.60
2.5 3	0.60
3	0.60
3.5	0.60
4	0.61
4.5	0.61
5	0.61
6	0.61
7	0.61
8	0.61
9	0.61
10	0.61
12	0.61
14	0.61
16	0.61
18	0.61
20	0.61
25	0.62
30	0.62
40	0.62
50	0.62
60	0.62
75	0.62
90	0.62
120	0.62

Pit Dimensions (m)		
Length (m)	4.00	m
Width (m)	0.60	m
Depth	1.60	m
Water		
Start Depth of Water	0.60	m
Depth of Water	1.00	m
75% Full	0.85	m
25% Full	1.35	m
75%-25%	0.50	m
Volume of water (75%-25%)	1.20	m3
Area of Drainage	14.72	m2
Area of Drainage (75%-25%)	7.00	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec



f = <u>Fail</u> or <u>Fail</u> m/min m/s

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath
Toet No:	ITP10

17/06/2021



Ground Conditions

arouna conai	tions		
From	То		
0.00	0.10	TOPSOIL.	
0.10	0.40	Soft brown slightly sandy slightly gravelly silty CLAY with medium cobble content.	
0.40		Firm becoming stiff grey brown slightly sandy slightly gravelly silty CLAY high cobble and medium boulder content.	with

Remarks:

Date:

Obstruction at 2.40mbgl.
Water ingress at 2.10mbgl - soils saturated and unsuitable for soakaway design.

water ingress a	
Elapsed Time	Fall of Water
(mins)	(m)
0	-
0.5	-
1	-
1.5	-
2	-
2.5	-
3	-
3.5	-
4	-
4.5	-
5	-
6	-
7	-
8	-
9	-
10	-
12	-
14	-
16	- 6-
18	
20	
25	
30	-
40	-
50	-
60	-
90	-
120	-

<u>aturated and unsultable for soal</u>	kaway desig	JII.
Pit Dimensions (m)		
Length (m)	4.30	m
Width (m)	0.60	m
Depth	2.40	m
Water		
Start Depth of Water	-	m
Depth of Water	-	m
75% Full		m
25% Full	-	m
75%-25%	-	m
Volume of water (75%-25%)	-	m3
Area of Drainage	-	m2
Area of Drainage (75%-25%)	-	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec

f =	<u>Fail</u>	or	<u>Fail</u>
	m/min		m/s

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath
Test No:	TP11

17/06/2021



Date: Ground Conditions

arbana bona		
From	То	
0.00	0.10	TOPSOIL.
0.10	0.50	Soft brown slightly sandy slightly gravelly silty CLAY.
0.50		Firm becoming stiff grey brown slightly sandy slightly gravelly silty CLAY with
		high cobble and low boulder content.
2.10	2.30	Stiff grey brown slightly sandy slightly gravelly silty CLAY with high cobble
		and boulder content.

Remarks:

Obstruction at 2.30mbgl.

Water ingress at 1.80mbgl - soils saturated and unsuitable for soakaway design.

Elapsed Time	Fall of Water
(mins)	(m)
0 0.5	-
	-
1	-
1.5	-
2	-
2.5	-
3	-
3.5	-
4	-
4.5	-
5	-
6	-
7	-
8	-
9	-
10	-
12	-
14	
16	
18	
20	.
25	-
30	-
40	-
50	-
60	-
90	-
120	-

Pit Dimensions (m)	•	
Length (m)	4.10	m
Width (m)	0.60	m
Depth	2.30	m
Water		
Start Depth of Water	-1	m
Depth of Water		m
75% Full	-	m
25% Full	-	m
75%-25%	-	m
Volume of water (75%-25%)	-	m3
Area of Drainage	-	m2
Area of Drainage (75%-25%)	-	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec

f =	<u>Fail</u>	or	<u>Fail</u>
	m/min		m/s

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath
Test No:	TP12
Date:	17/06/2021



Ground Condi	itions	
From	То	
0.00	0.10	TOPSOIL.
0.10	0.50	Soft brown slightly sandy slightly gravelly silty CLAY with low cobble content.
0.50	1.50	Firm grey brown slightly sandy slightly gravelly silty CLAY with high cobble
		and low boulder content.
1.50	1.60	Grey brown silty sandy GRAVELwith high cobble and low boulder content.
1.60	2.20	Firm grey brown slightly sandy slightly gravelly silty CLAY with high cobble
		and low boulder content.
2.20	2.30	Stiff black slightly sandy slightly gravelly silty CLAY with high cobble and
		medium boulder content.

Remarks:

Obstruction at 2.30mbgl.

Water ingress at 1.50mbgl - soils saturated and unsuitable for soakaway design.

Elapsed Time	Fall of Water
(mins)	(m)
0	-
0.5	-
1	-
1.5	-
2	-
2.5	-
3	-
3.5	-
4	-
4.5	-
5	-
6	-
7	-
8	-
9	
10	
12	
14	7)-
16	-
18	-
20	-
25	-
30	-
40	-
50	-
60	-
90	-
120	-

Pit Dimensions (m)		
Length (m)	3.70	m
Width (m)	0.60	m
Depth	2.30	m
Water		
Start Depth of Water	-	m
Depth of Water	-	m
75% Full 🔪 🧪	-	m
25% Full	-	m
75%-25%	-	m
Volume of water (75%-25%)	-	m3
Area of Drainage	-	m2
Area of Drainage (75%-25%)	-	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec

f =	<u>Fail</u>	or	<u>Fail</u>
	m/min		m/s

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath
Test No:	TP13
Date:	16/06/2021



Ground Condi	แบบร	
From	То	
0.00	0.10	TOPSOIL.
0.10	1.20	Soft becoming firm brown slightly sandy slightly gravelly silty CLAY with high
1.20	1.60	Grey brown silty sandy GRAVEL with high cobble and low boulder content.
1.60	2.10	Firm becoming stiff grey brown slightly sandy slightly gravelly silty CLAY with
		high cobble and low boulder content.

Remarks:

Obstruction at 2.10mbgl.

Water ingress at 1.80mbgl - soils saturated and unsuitable for soakaway design.

	it it commeg.
Elapsed Time	Fall of Water
(mins)	(m)
0	-
0.5	-
1	-
1.5	-
2	-
2.5	-
3	-
3.5	-
4	-
4.5	-
5	-
6 7	-
	-
8	-
9	-
10	-
12	-
14	-
14 16 18	
18	
20	
25	7)-
30	-
40	-
50	-
60	-
90	-
120	-

Pit Dimensions (m)		
Length (m)	3.90	m
Width (m)	0.60	m
Depth	2.10	m
Water		
Start Depth of Water	-	m
Depth of Water	-	m
75% Full		m
25% Full	-	m
75%-25%	-	m
Volume of water (75%-25%)		m3
Area of Drainage	-	m2
Area of Drainage (75%-25%)	-	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec

f =	<u>Fail</u>	or	<u>Fail</u>
	m/min		m/s

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath
Tool No.	ITD14



 Test No:
 TP14

 Date:
 17/06/2021

Ground (Conditions
----------	------------

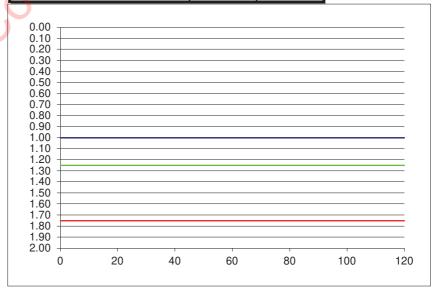
From	То		
0.00	0.10	TOPSOIL.	
0.10		Soft becoming firm brown slightly sandy slightly gravelly silty CLAY with locobble content.)
1.60	2.00	Stiff grey brown slightly sandy slightly gravelly silty CLAY with high cobble and low boulder content.	

Remarks:

Obstructions at 2.00mbgl.

Elapsed Time	Fall of Water
(mins)	(m)
0	1.00
0.5	1.00
1	1.00
1.5	1.00
2	1.00
2.5	1.00
3	1.00
3.5	1.00
4	1.00
4.5	1.00
5	1.00
6	1.00
7	1.00
8	1.00
9	1.00
10	1.00
12	1.00
14	1.00
16	1.00
18	1.00
20	1.00
25	1.00
30	1.00
40	1.00
50	1.00
60	1.00
75	1.00
90	1.00
120	1.00

Pit Dimensions (m)		
Length (m)	3.90	m
Width (m)	0.60	m
Depth	2.00	m
Water		
Start Depth of Water	1.00	m
Depth of Water	1.00	m
75% Full	1.25	m
25% Full	1.75	m
75%-25%	0.50	m
Volume of water (75%-25%)	1.17	m3
Area of Drainage	18.00	m2
Area of Drainage (75%-25%)	6.84	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec



f = <u>Fail</u> or <u>Fail</u> m/min m/s

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath



Test No: TP15 16/06/2021 Date:

Ground Conditions

0		
From	То	
0.00	0.10	TOPSOIL.
0.10	0.50	Soft brown slightly sandy slightly gravelly silty CLAY with low cobble content.
0.50	1.60	Firm becoming stiff grey brown slightly sandy slightly gravelly silty CLAY with high cobble and low boulder content.
		riight cobbie and lew bediedt content.

Remarks:

Obstruction at 1.60mbgl.
Water ingress at 1.60mbgl - soils saturated and unsuitable for soakaway design.

water ingress a	
Elapsed Time	Fall of Water
(mins)	(m)
0	-
0.5	-
1	-
1.5	-
2	-
2.5	-
3	-
3.5	-
4	-
4.5	-
5	-
6	-
7	-
8	-
9	-
10	-
12	-
14	-
16	-
18	
20	
25	
30	
40	<u> </u>
50	-
60	-
90	-
120	-

<u>aturated and unsultable for soal</u>	kaway desig	gn. 🦨
Pit Dimensions (m)		
Length (m)	4.20	m
Width (m)	0.60	m
Depth	1.60	m
Water		
Start Depth of Water	-	m
Depth of Water	-	m
75% Full	-	m
25% Full		m
75%-25%	-	m
Volume of water (75%-25%)		m3
Area of Drainage	-	m2
Area of Drainage (75%-25%)	-	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec

f =	<u>Fail</u>	or	<u>Fail</u>
	m/min		m/s

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath
Took No.	TD10



 Test No:
 TP16

 Date:
 17/06/2021

Ground Conditions

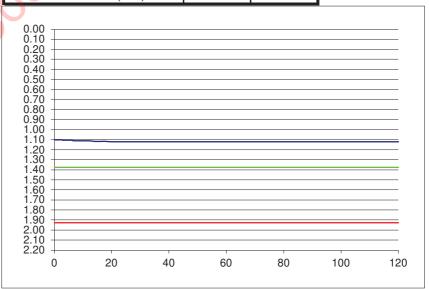
Ground Conditions			
From	То		
0.00	0.10	TOPSOIL.	
0.10		Firm becoming stiff grey brown slightly sandy slightly gravelly silty CLAY high cobble and low boulder content.	with
2.10	_	Stiff black slightly sandy slightly gravelly silty CLAY with high cobble and medium boulder content.	

Remarks:

Obstructions at 2.20mbgl.

Obstructions at	
Elapsed Time	Fall of Water
(mins)	(m)
0	1.10
0.5	1.10
1	1.10
1.5	1.10
2 2.5	1.10
2.5	1.10
3	1.11
3.5	1.11
4	1.11 1.11
4.5	1.11
5	1.11
6	1.11
7	1.11
8	1.11 1.11
9	1.11 1.11
10	1.11
12	1.11
14	1.12
16	1.12
18	1.12
20	1,12 1.12
25	1.12
30	1.12
40	1.12 1.12
50	1.12
60	1.12
75	1.12
90	1.12
120	1.12

		4
Pit Dimensions (m)		
Length (m)	4.10	m
Width (m)	0.60	m
Depth	2.20	m
Water		
Start Depth of Water	1.10	m
Depth of Water	1.10	m
75% Full	1.38	m
25% Full	1.93	m
75%-25%	0.55	m
Volume of water (75%-25%)	1.35	m3
Area of Drainage	20.68	m2
Area of Drainage (75%-25%)	7.63	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec



f = Fail or Fail m/min

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath



 Test No:
 TP17

 Date:
 16/06/2021

Ground Conditions

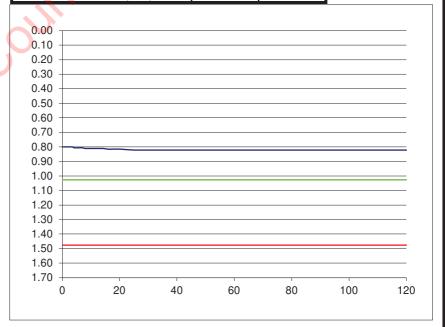
arouna conar	dibula boliations		
From	То		
0.00	0.10	TOPSOIL.	
0.10	1.70	Soft becoming firm brown slightly sandy slightly gravelly silty CLAY with medium cobble content.	

Remarks:

Obstructions at 1.70mbgl.

Obstructions at	1.70mbgi.
Elapsed Time	Fall of Water
(mins)	(m)
0	0.80
0.5	0.80
1	0.80
1.5	0.80
2	0.80
2.5	0.80
3	0.80
3.5	0.80
4	0.81
4.5	0.81
5	0.81
6	0.81
7	0.81
8	0.81
9	0.81
10	0.81
12	0.81
14	0.81
16	0.82
18	0.82
20	0.82
25	0.82
30	0.82
40	0.82
50	0.82
60	0.82
75	0.82
90	0.82
120	0.82

Pit Dimensions (m)		
Length (m)	4.20	m
Width (m)	0.60	m
Depth	1.70	m
Water		
Start Depth of Water	0.80	m
Depth of Water	0.90	m
75% Full	1.03	m
25% Full	1.48	m
75%-25%	0.45	m
Volume of water (75%-25%)	1.13	m3
Area of Drainage	16.32	m2
Area of Drainage (75%-25%)	6.84	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec



f = Fail or Fail m/min

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath



Test No: TP18
Date: 16/06/2021

Ground Conditions

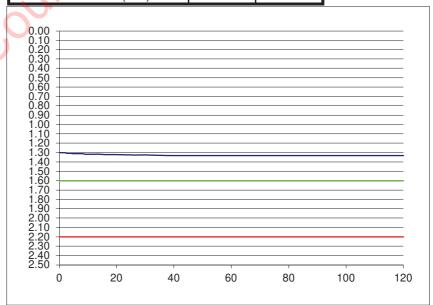
Ground Conditions		
o		
0.10	TOPSOIL.	
1.00	Soft brown slightly sandy slightly gravelly silty CLAY with low cobble content.	
	Firm becoming stiff grey brown slightly sandy slightly gravelly silty CLAY with high cobble and low boulder content.	
	0.10 1.00 2.50	

Remarks:

Obstructions at 2.50mbgl.

	Obstructions at 2.30mbgr.				
Elapsed Time					
(mins)	(m)				
0	1.30				
0.5	1.30				
1	1.30				
1.5	1.30				
2	1.30				
2.5	1.31				
3	1.31				
3.5	1.31 1.31				
4					
4.5	1.31				
5 6 7	1.31				
6	1.31				
	1.31 1.31				
<u>8</u> 9	1.31				
	1.32				
10	1.32				
12	1.32				
14	1.32				
16	1.32				
18	1.32				
20	1.32				
25	1.33				
30	1.33				
40	1.33				
50	1.33				
60	1.33				
75	1.33				
90	1.33				
120	1.33				

Pit Dimensions (m)		
Length (m)	4.10	m
Width (m)	0.60	m
Depth	2.50	m
Water		
Start Depth of Water	1.30	m
Depth of Water	1.20	m
75% Full	1.60	m
25% Full	2.20	m
75%-25%	0.60	m
Volume of water (75%-25%)	1.48	m3
Area of Drainage	23.50	m2
Area of Drainage (75%-25%)	8.10	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec



f = <u>Fail</u> or <u>Fail</u> m/min m/s

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath
Test No:	TP19
Date:	16/06/2021



Ground Conditions

From	То	
0.00	0.10	TOPSOIL.
0.10	0.20	Soft brown slightly sandy slightly gravelly silty CLAY with low cobble content.
0.20	1.70	Firm grey brown slightly sandy slightly gravelly silty CLAY with high cobble and medium boulder content.
1.70	1.90	Stiff grey slightly sandy slightly gravelly silty CLAY with high cobble and low boulder content.

Remarks:

Obstruction at 1.90mbgl.

Water ingress at 1.70mbgl - soils saturated and unsuitable for soakaway design.

Elapsed Time	
(mins)	(m)
0 0.5	-
	-
1	-
1.5	-
2	-
2.5	-
3	-
3.5	-
4	-
4.5	-
5	-
6	-
7	-
8	-
9	-
10	-
12	-
14	- 6-
16	
18	
20	
25	-
30	-
40	-
50	-
60	-
90	-
120	-

aturated and unsultable for soal	raway ucsi	111.
Pit Dimensions (m)		
Length (m)	4.00	m
Width (m)	0.60	m
Depth	1.90	m
Water		
Start Depth of Water	-1	m
Depth of Water		m
75% Full	-	m
25% Full	-	m
75%-25%	-	m
Volume of water (75%-25%)	-	m3
Area of Drainage	-	m2
Area of Drainage (75%-25%)	-	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec

f =	<u>Fail</u>	or	<u>Fail</u>
	m/min		m/s

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath
Test No:	TP20
Date:	16/06/2021



Ground Conditions

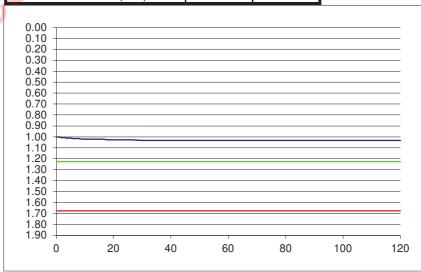
arbana bona		
From	То	
0.00	0.10	TOPSOIL.
0.10	0.40	Soft brown slightly sandy slightly gravelly silty CLAY.
0.40		Firm grey brown slightly sandy slightly gravelly silty CLAY with medium cobble content.
1.30		Firm becoming stiff grey brown slightly sandy slightly gravelly silty CLAY with high cobble and low boulder content.

Remarks:

Obstructions at 1.90mbgl.

Obstructions at	r.sombgi.
Elapsed Time	Fall of Water
(mins)	(m)
0	1.00
0.5	1.00
1	1.00
1.5	1.01
2 2.5	1.01
2.5	1.01
3	1.01
3.5	1.01
4	1.01
4.5	1.01
5	1.01
6	1.02
7	1.02
8	1.02
9	1.02
10	1.02
12	1.02
14	1.02
16	1.02
18	1.03
20	1.03
25	1.03
30	1.03
40	1.03
50	1.03
60	1.03
75	1.03
90	1.03
120	1.03

Pit Dimensions (m)		
Length (m)	3.90	m
Width (m)	0.60	m
Depth	1.90	m
Water		
Start Depth of Water	1.00	m
Depth of Water	0.90	m
75% Full	1.23	m
25% Full	1.68	m
75%-25%	0.45	m
Volume of water (75%-25%)	1.05	m3
Area of Drainage	17.10	m2
Area of Drainage (75%-25%)	6.39	m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec



<u>Fail</u> f = <u>Fail</u> or m/min m/s

Project Reference:	5863
Contract name:	Moygaddy
Location:	Maynooth, Co. Meath
Test No:	TP21
Date:	16/06/2021



Ground Conditions

arouna cona	1110113		
From	То		
0.00	0.10	TOPSOIL.	
0.10	1.80	Soft becoming firm brown slightly sandy slightly gravelly silty CLAY with lov cobble content.	W
1.80	2.90	Stiff grey brown slightly sandy slightly gravelly silty CLAY with high cobble and low boulder content.	

Remarks:

Obstruction at 2.90mbgl.
Water ingresses at 2.60mbgl and 2.90mbgl - soils saturated and unsuitable for soakaway design.

water ingresses	
Elapsed Time	
(mins)	(m)
0	-
0.5	-
1	-
1.5	-
2	-
2.5	-
3	-
3.5	-
4	-
4.5	-
5 6 7	-
6	-
	-
8	-
9	-
10	-
12	-
14	-
16	
18	
20	
25	1)-'
30	-
40	-
50	-
60	-
90	-
120	-

.90mbgi - solis saturated and di	isultable lo	i soanaway
Pit Dimensions (m)		
Length (m)	4.00	m
Width (m)	0.60	m
Depth	2.90	m
Water		
Start Depth of Water	-	m
Depth of Water	7	m
75% Full		m
25% Full	-	m
75%-25%	-	m
Volume of water (75%-25%)	-	m3
Area of Drainage	-	m2
Area of Drainage (75%-25%)		m2
Time		
75% Full	N/A	min
25% Full	N/A	min
Time 75% to 25%	N/A	min
Time 75% to 25% (sec)	N/A	sec

f =	<u>Fail</u>	or	<u>Fail</u>
	m/min		m/s

Logs Logs Logs Purposes Only Weath County Council. Weath Meath

Contract No: 5863			Dyn	amic P	robe L	og			Probe N	
Contract:	Moygaddy				Easting:	694395.69	93	Date Started:	21/06/2021	
_ocation:	Maynooth, Co.	Meath			Northing:	739790.4	16	Logged By:	E. Magee	
Client:	Sky Castle Ltd				Elevation:	62.17		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	1,0			robe	25	30	35		Level (mOD)
1.5 — 2.5 — 3.5 — 4.0 — 4.0 — 4.0	4	8 7	10 13 14 10 10 11 13 10 12 12 12		22					62.0 — 61.5 — 61.0 — 60.5 — 59.5 — 59.5 — 58.5 — 658.5
4.5										58.0 — - - - - 57.5 —
		Terminat	tion:	<u></u>	Probe Details:	<u> </u>	Remarks			
	Depth: 2.40m		Reason: uction - boulders	Type: s. DPH	Mass 50kg	Drop: 500mm	- Nemarks	<u>-</u>		

Contract No: 5863			Dyn	amic P	robe L	og			Probe N	
Contract:	Moygaddy				Easting:	694488.5	32	Date Started:	24/06/2021	
Location:	Maynooth, Co. I	Meath			Northing:	739787.6	64	Logged By:	E. Magee	
Client:	Sky Castle Ltd				Elevation:	61.87		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth					robe					Level
0.5 - 1.0 - 1.5 -	5 2 4 4 4 5 3 2 6	10	14	16 15	20	25	30	35	.05	61.5 — 61.0 — 60.5 —
2.0 —	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	9	12	15 15	10					60.0 —
3.5			13	19		25		38	5	59.0 —
4.0	?. C ₀									58.0 — - - - - 57.5 —
4.5 -		Townsia			Droha D. (57.0
(A)	Depth:	Termination:	ason:	Type:	Probe Details Mass	Drop:	Remarks	5.		
	3.70m		n - boulders		50kg	500mm				

Contract No: 5863		Dyn	amic P	robe L	og			Probe N	I
Contract:	Moygaddy			Easting:	693987.68	86	Date Started:	22/06/2021	
_ocation:	Maynooth, Co. Me	eath		Northing:	739685.90	08	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	58.58		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		robe	25	30	35		Level (mOD)
1.0	4 5 7 3 4 3 4 7 7 4 4 4 5 5 5 4 4 4 5 5 5 4 4 4 5 5 5 6 6 6 6	11	15 15 18	10			35		58.5 — 58.0 — 57.5 — 57.0 — 56.5 — 56.5 — 55.5 —
3.5	SU COOL								55.0 —
(A)	Depth:	ermination: Reason:	Type:	Probe Details:	: Drop:	Remarks	<u>:</u>		
		Obstruction - boulders		50kg	500mm	1			

Contract No: 5863		Dyn	amic P	robe Lo	og			Probe N	
Contract:	Moygaddy			Easting:	694088.24	48	Date Started:		
_ocation:	Maynooth, Co. Meath			Northing:	739692.82	29	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	59.34		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth				Probe					Level
(m)	5	10 1	15	20	25	30	35		(mOD)
0.5	5 8							65	59.0 —
1.0	5 5	13					,,00	5	58.5 — —
1.5	5 5 3		16		12	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	3 .		58.0 — - -
2.0	8	12 12 12	16	10					57.5 —
2.5		10 11 10 11	16						57.0 —
3.0			15 15	20	27	28			56.5 — —
3.5		3	17	22	26				56.0 —
4.0				20 22			35	5	55.5 —
4.0									55.0
4.5									-
_									54.5 —
	Termir			Probe Details:		Remarks	<u>s:</u>		
(§)	Depth: 3.70m Obs	Reason: struction - boulders	Type:	Mass 50kg	Drop: 500mm	_			

Contract No: 5863		Dyna	amic P	robe L	og			Probe N	I .
Contract:	Moygaddy			Easting:	694187.7	16	Date Started:	22/06/2021	
_ocation:	Maynooth, Co. Me	eath		Northing:	739683.6	31	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	60.98		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		obe	25	30	35		Level (mOD)
0.5 - 1.0 - 1.5 - 2.0 - 2.5 - 3.0 - 4.0 - 4.5 - 1	5	13 13 13 13 13	18 5 5 5 5 5 16 17 17		26		32 35		60.5 — 60.0 — 59.5 — 59.0 — 58.5 — 57.0 — 56.5 — 56.5 —
-									_
	Te	ermination:		Probe Details:		Remarks:			
	Depth:	Reason: Obstruction - boulders	Type: . DPH	Mass 50kg	Drop: 500mm				

Contract No: 5863		Dynai	mic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	694288.9	59	Date Started:		
_ocation:	Maynooth, Co. Meath			Northing:	739687.7	09	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	61.12		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth	1			robe					Level
(m) 0	5	10 15		20	25	30	35		(mOD) 61.0 —
	4								
0.5	6							0,5	-
2	3								60.5 —
1.0	2						40		-
1.0	7						7//		60.0
	6								_
1.5	3					3			-
2	2								59.5 —
2.0	7			0					
	7	11		11,0					59.0 —
	6								_
2.5							35	5	58.5 —
-									-
3.0									-
-									58.0 —
-	X	3							-
3.5 —									57.5 —
-	600								_
4.0	$\overline{}$								
									57.0 —
									-
4.5									56.5
	T			Proho Datail		Denis			
(A)	Termin Depth:	nation: Reason:	Type:	Probe Details Mass	: Drop:	Remarks): 		
		truction - boulders.	DPH	50kg	500mm				

Contract No: 5863		Dyna	amic P	robe Lo	og			Probe N	
Contract:	Moygaddy			Easting:	694385.49	97	Date Started:	21/06/2021	
_ocation:	Maynooth, Co. Me	eath		Northing:	739682.42	 25	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	61.53		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		robe	25	30	35		Level (mOD)
1.0 — 1 1.5 — 2 2.0 — 2 2.5 — 3.5 — 4.0 — 4.5	3	9 11	15	110	24		35		61.0 — 61.0 — 60.5 — 60.0 — 59.5 — 59.0 — 57.5 — 57.0 — 57.0 —
_									
				Dark Datalla					
(A)	Depth:	ermination: Reason:	Type:	Probe Details:	: Drop:	Remarks	:		
(\$1)		Obstruction - boulders		50kg	500mm				

Contract No: 5863			Dyna	amic P	robe L	og			Probe N	I .
Contract:	Moygaddy				Easting:	694489.06	69	Date Started:	24/06/2021	
ocation:	Maynooth, Co.	Meath			Northing:	739686.52	 27	Logged By:	E. Magee	
Client:	Sky Castle Ltd				Elevation:	61.51		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10	15		robe	25	30	35		Level (mOD)
0.5 - 1.0 - 1.5 - 2.0 - 3.5 4.0 - 4.5	3 6 5 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		12	16	23 23 22 22	24 25	23	35		61.0 — 61.0 — 60.5 — 60.0 — 59.5 — 59.0 — 58.5 — 57.5 — 57.5 — 57.0 —
_										
		Termination	on:		Probe Details:	:	Remarks	3:		
	Depth:	F	Reason:	Type:	Mass	Drop:				
	2.30m	Obstruc	ction - boulders.	DPH	50kg	500mm				

Contract No: 5863		Dyna	mic P	robe L	og			Probe N	I .
Contract:	Moygaddy			Easting:	694590.8	17	Date Started:	24/06/2021	
Location:	Maynooth, Co. Meath	١		Northing:	739686.4	75	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	61.71		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)				robe					Level (mOD)
0 1	5	10 15		20	25	30	35		61.5 —
0.5	6 6 3 3 3							05	61.0 —
1.0	6 4 8						7(0)		60.5
1.5		11 14 15	17			5			- - - -
2.0	8	11 10		10					60.0 —
2.5	5 3 3 5								59.5 —
		11 12					35	5	59.0 — - -
3.0		40							58.5 —
3.5 — — — — — — —	COUR								58.0 —
4.0									57.5
4.5									
-									57.0 —
		ination:	Type	Probe Details		Remarks:			
(\S)	Depth: 2.90m Ob	Reason: struction - boulders.	Type: DPH	Mass 50kg	Drop: 500mm				

Contract No: 5863	Dynamic Probe Log							Probe No: DP10	
Contract:	Moygaddy			Easting:	694693.928	28	Date Started:	: 24/06/2021	
₋ocation:	Maynooth, Co. N			Northing:	739687.42	23	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	60.58		Scale:	1:25	
Engineer:	ocsc			Rig Type: Competitor 130		Sheet No: Sheet 1 of		1	
Depth (m)	5	10 15		robe	25	30	35		Level (mOD)
1.0 — — — — — — — — — — — — — — — — — — —		9 10 10 10 11 12 8 8			4		35		60.5 — 60.0 — 59.5 — 59.5 — 58.5 — 58.0 — 57.5 — 56.5 — 56.0 — 56.0 —
-									
		Termination:		Probe Details:		Remarks:			
(\$)	Depth: 2.70m	Reason: Obstruction - boulders.	Type: DPH	Mass 50kg	Drop: 500mm				

Contract No: 5863	Dynamic Probe Log							Probe No: DP11	
Contract:	Moygaddy			Easting: 693887.836		Date Started:	22/06/2021		
_ocation:	Maynooth, Co. Mea	ath		Northing:	739587.0	12	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	58.01		Scale:	1:25	
Engineer:	ocsc			Rig Type: Competitor 130 Sheet No:			Sheet 1 of 1		
Depth (m)	5	10 15		robe	25	30	35		Level (mOD)
1.0 — 2.0 — 2.5 — 3.5 — 4.0 — 4.5 —		10	17				35		57.5 - 57.0 - 56.5 - 55.
	Ter	mination:		Probe Details:	 :	Remarks:			
(In	Depth:	Reason:	Type:	Mass	Drop:	r verrial NS.	<u> </u>		
	2.80m C	Obstruction - boulders.	DPH	50kg	500mm				

Contract No: 5863		Dyna	amic P	robe Lo	og			Probe N	
Contract:	Moygaddy			Easting:	693990.19	98	Date Started:	22/06/2021	
_ocation:	Maynooth, Co. Me	eath		Northing:	739586.78	89	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	58.63		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth				robe					Level
(m)	5 4 3 5 5 5 7 7 7 4 3 7	10 15		20	25	30	35		58.5 — 58.0 — 57.5 — 57.0 — 56.5 — 55.5 — 55.5 — 54.5 —
4.5 — — — — —									54.0 —
		ermination:		Probe Details:		Remarks	:		
(\$)	Depth: 2.00m	Reason: Obstruction - boulders.	Type: . DPH	Mass 50kg	Drop: 500mm				

Contract No: 5863			Dyn	amic P	robe L	og			Probe N	
Contract:	Moygaddy				Easting:	694087.58	87	Date Started:	22/06/2021	
Location:	Maynooth, Co.	Meath			Northing:	739588.54	45	Logged By:	E. Magee	
Client:	Sky Castle Ltd				Elevation:	58.95		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth					robe					Level (mOD)
(m) 0.5 - 1.0 - 1.5 - 2.0 - 3.5 4.0 - 4.5 - 4.5 - 4.5	5 6 6		10 14 10 11 11 12	15 15 15 15	20	25	30	35		58.5 — 58.0 — 57.5 — 56.5 — 56.5 — 55.5 — 55.0 — 54.5 —
		Terminat	tion:		Probe Details:		Remarks	:		54.0
	Depth:		Reason:	Type:	Mass	Drop:				
	2.60m	Obstru	uction - boulder	rs. DPH	50kg	500mm				

Contract No: 5863		Dyn	amic P	robe L	og		Probe No: DP14
Contract:	Moygaddy			Easting:	694188.942	2 Date Started:	22/06/2021
ocation:	Maynooth, Co. Meath			Northing:	739587.683	3 Logged By:	E. Magee
Client:	Sky Castle Ltd			Elevation:	59.62	Scale:	1:25
Engineer:	ocsc			Rig Type:	Competitor	130 Sheet No:	Sheet 1 of 1
Depth	I			Probe			Level
(m) 0	5	10 1	5	20	25	30 35	
0.5	7 7	12	18 16 16 17			Ji O	59.5 — — — — — — — — — — — — — — — — — — —
1.5	6 5 2	14	15 17 17	0	25	>	58.0 —
2.5	4 4 6 8	10 11	cill	22	24		57.5 — 57.5 — 57.0 —
3.0			18	21 23 23 20 21	24	35	56.5 —
4.0	30						55.5 —
	Termii Depth:	nation: Reason:	Type	Probe Details Mass	s: [F	Remarks:	
(\$)		Reason: struction - boulders	Type: s. DPH	Mass 50kg	500mm		

Contract No: 5863		Dynar	mic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	694289.42	24	Date Started:	22/06/2021	
Location:	Maynooth, Co. Meath	l		Northing:	739586.18	83	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	59.97		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		obe		30	35		Level (mOD)
2.0		10 12 15			25		35		59.5 — 59.5 — 59.5 — 59.5 — 58.5 — 58.5 — 57.5 — 56.5 — 56.5 — 55.5 —
_									
(Also	Termi	nation: Reason:	Type:	Probe Details Mass	: Drop:	Remarks:	:		
(\S)		struction - boulders.	DPH	50kg	500mm				

Contract No: 5863		Dyr	namic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	694488.04	48	Date Started:		
_ocation:	Maynooth, Co. M	/leath		Northing:	739589.54	40	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	60.82		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	•
Depth				robe	1				Level
(m)	5 3 4 3 7	10 9 11 10 10 10	15	20	25	30	35		60.5 — 60.5 — 60.5 — 59.5 — 59.5 — 59.5 — 57.5 — 57.0 — 56.5 —
4.5									56.0 —
(AS)	Depth:	Termination: Reason:	Type:	Probe Details:	: Drop:	Remarks	:		
	2.20m	Obstruction - boulder		50kg	500mm				

Contract No: 5863		Dyna	mic P	robe Lo	og			Probe N	I .
Contract:	Moygaddy			Easting:	694589.07	 76	Date Started:		
_ocation:	Maynooth, Co. Meath			Northing:	739587.35	 54	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	60.73		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)				robe					Level (mOD)
0	2 4	10 15		20	25	30	35	5	60.5 —
0.5	5 4 8	11					,00	.05	60.0 —
1.5	7	12	18			18,	71,		59.5 — -
	6	11 10 12 12		. 01					59.0 —
2.0		10 13		710			35	5	58.5 —
2.5			UCII						58.0 —
3.0	×	4							57.5 —
3.5 -	Con								57.0 —
4.5									56.5 —
-									56.0 —
		nation:		Probe Details:		Remarks	S:		
(\$)	Depth: 2.40m Obs	Reason: struction - boulders.	Type: DPH	Mass 50kg	Drop: 500mm	_			

Moygaddy				robe Lo	9			DP1	8
1				Easting:	694688.7	72	Date Started:	24/06/2021	
Maynooth, Co. I	Meath			Northing:	739584.72	29	Logged By:	E. Magee	
Sky Castle Ltd				Elevation:	60.89		Scale:	1:25	
ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
	10	15			25	20	25		Level (mOD)
4 7 4 3 3 5 4		12 1	15 15 15	20	25		7,,60		60.5 — 60.0 — 59.5 — 59.0 — 58.5 — 57.5 — 57.0 — 56.5 —
	Terminatio	on:		Probe Details:		Remarks	:		56.0
Depth:			Type:	Mass	Drop:				
-	5 4 3 3 3 5 4 1	OCSC 5 10 4 7 4 3 3 3 5 4 Termination Depth:	OCSC Termination: Depth: Reason:	OCSC P	OCSC Probe Probe 10 15 20 15 10 15 15 10 15 15 10 15 15	New Probe Probe	Note	Note Probe Probe	Neet No. Sheet

Contract No: 5863		Dyna	mic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	693691.5	19	Date Started:	23/06/2021	
ocation:	Maynooth, Co. Meath			Northing:	739485.2	 59	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	57.06		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth				robe					Level
(m)	5	10 15		20	25	30	35		(mOD) 57.0
0.5	4 6 6 6 5 7 7						(, OO	.es	56.5 —
1.5	4 4 4 4 4 5 6			0		\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	.		55.5 —
2.5	4 4 7 7 9	11	acil '						55.0 —
3.0		14	,*		25				-
	×	40					35	;	54.0 —
3.5 -	COUNT								53.5 —
4.0									53.0 —
4.5 =									52.5 — — — —
	Termina	ation:		Probe Details:		Domorto			
1	Depth:	Reason:	Type:	Mass	Drop:	Remarks	<u> </u>		
		ruction - boulders.	DPH	50kg	500mm				

Contract No: 5863		Dyna	ımic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	693789.64	42	Date Started:	23/06/2021	
₋ocation:	Maynooth, Co. Meath			Northing:	739485.08	89	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	56.56		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth				robe					Level
(m) 0	5	10 15		20	25	30	35		(mOD) 56.5
0.5	2 3 4 6 6 7						,00	.es	56.0
1.5	7 6 5 2 4 2					\$\alpha \cdot \cdo	71.		55.5 —
2.0	2 3 6 6	10		7,0			35	5	54.5 — - - -
2.5			CCI						54.0 — - - - -
3.5 —	×	3							53.5 —
4.0	Conn								53.0 —
Ö	S								52.5 — — — —
4.5									52.0 — - - -
	Termin			Probe Details		Remarks	5:		
(\S)	Depth: 2.50m Obs	Reason: struction - boulders.	Type: DPH	Mass 50kg	Drop: 500mm	_			

Contract No: 5863		Dyna	amic P	robe Lo	og			Probe N	I .
Contract:	Moygaddy			Easting:	693889.60	02	Date Started:	22/06/2021	
Location:	Maynooth, Co. Me	eath		Northing:	739486.38	89	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	57.21		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		robe	25	30	35		Level (mOD)
1.5	4 7 5 3 3 3 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5	11 14 14 14 14 15 12 14 15 16 17 18 18 19 10		21	25		35		57.0 — 56.5 — 56.0 — 55.5 — 55.0 — 54.5 — 53.5 — 53.0 — 53.0 —
									52.5 —
-									_
		rmination:		Probe Details:		Remarks	:		
(\S)	Depth: 3.80m	Reason: Obstruction - boulders.	Type: DPH	Mass 50kg	Drop: 500mm	_			

Contract No: 5863		Dyna	amic P	robe L	og			Probe N	I
Contract:	Moygaddy			Easting:	693990.0 ⁷	17	Date Started:		
_ocation:	Maynooth, Co. Mea	ath		Northing:	739487.25	50	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	58.16		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth				robe					Level
(m) 0 1 0.5 - 2 1.0 - 2 2.0	5 3 3 3 3 5 5 5 7 7 7 7 7 8 8 8	10 15	Cill	20	25	30	35		58.0 — 57.5 — 57.0 — 56.5 — 55.5 — 55.5 —
3.0	Coni	14 CO	<u>, </u>						55.0 —
4.5	Ter	rmination:		Probe Details	::	Remarks	:		54.0 —
1	Depth:	Reason:	Type:	Mass	Drop:	i veillai NS	•		
	2.00m C	Obstruction - boulders.	. DPH	50kg	500mm				

		Dyn	amic P	robe L	og			Probe N	
Moygaddy				Easting:	694089.7	64	Date Started:	22/06/2021	
Maynooth, Co.	. Meath			Northing:	739487.2	08	Logged By:	E. Magee	
Sky Castle Ltd				Elevation:	58.44		Scale:	1:25	
ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
					1				Level
5	1	0 15	5	20	25	30	35		(mOD)
4) -
6	7							5	58.0 —
4								.0	
4								9	-
3							40		57.5
4							7/ /		
3									
3		10				3			57.0 —
							35	5	
					20				
				1110)				56.5
				7					
			•						56.0 —
									-
									55.5
									55.0 —
									-
<u></u> C O									
4									54.5 —
									54.0
									54.0 —
									53.5 —
	Termina					Remarks	:		
Depth: 1.70m		Reason: uction - boulders	Type: DPH	Mass 50kg	Drop: 500mm				
	Sky Castle Ltd OCSC 5 4 4 4 4 5 Compared to the second se	Maynooth, Co. Meath Sky Castle Ltd OCSC Termina Depth:	Moygaddy Maynooth, Co. Meath Sky Castle Ltd OCSC 5 10 11 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Moygaddy Maynooth, Co. Meath Sky Castle Ltd OCSC F 5 10 15 4 4 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Moygaddy Maynooth, Co. Meath Northing: Sky Castle Ltd COSC Rig Type: Probe 5 10 15 20 10	Maynooth, Co. Meath Sky Castle Ltd CCSC Rig Type: Competite Probe 5 10 15 20 25 4 4 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	Easting: 694089.764	Maypooth, Co. Meath	Dynamic Probe Log

Contract No: 5863			Dyn	amic P	robe Lo	og			Probe N	I .
Contract:	Moygaddy				Easting:	694198.13	33	Date Started:	22/06/2021	
ocation:	Maynooth, Co.	Meath			Northing:	739492.6	19	Logged By:	E. Magee	
Client:	Sky Castle Ltd				Elevation:	59.24		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)					robe		20			Level (mOD)
0	5	10	15	5	20	25	30	35		(IIIOD)
0.5	3 4 5									59.0 — - - -
1.0	6	8 8						,00		58.5 — —
15	6	9	11 14	15		Ċ	8	7, ,		58.0 —
1.5		8	11 13		23					57.5 —
2.0		9	11		25					57.0 —
2.5		8	11 13	16 16						56.5
3.0			14	15				35	5	56.0 —
3.5 —		717	<i>(</i> *,							- - - 55.5 —
4.0										33.3
4.5 -										55.0 —
-										54.5 — ———————————————————————————————————
(As)	Depth:	Terminat	tion: Reason:	Type:	Probe Details:	: Drop:	Remarks	S:		
(1)	3.30m		uction - boulders		50kg	500mm				

Contract No: 5863			Dyn	amic P	robe L	og			Probe N	
Contract:	Moygaddy				Easting:	694385.7	16	Date Started:		
ocation:	Maynooth, Co.	. Meath			Northing:	739486.59	93	Logged By:	E. Magee	
Client:	Sky Castle Ltd	t l			Elevation:	59.28		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth					Probe					Level
(m) 0	5	10	0 15	5 	20	25	30	35		(mOD)
1	5									59.0 —
	6								5	59.0
0.5	f*	1	10						.0	
			11 11						9	58.5 —
				15	20			40		30.5
1.0					20					
				17 18				0,		58.0 —
				17 17		C				
1.5			12				, S			
		1	10			7//				57.5
		9 7			0					
2.0		7	10							
	5		10							57.0 —
	4		10	•/						
2.5	6	l ₇		C),						
		7	•							56.5
			11	15						
3.0		9	14							
			14					35	5	56.0
-										
3.5 —										
-										55.5
4.0										
4.0										
										55.0 —
10.0										
4.5 —										
										54.5
-										
		Terminat	tion:		Probe Details		Remarks): ::		
(F)	Depth:		Reason:	Type:	Mass	Drop:				
	3.30m	Obstru	uction - boulders	s. DPH	50kg	500mm				

Contract No: 5863		Dyna	mic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	694489.02	24	Date Started:	24/06/2021	
Location:	Maynooth, Co. Mea	ath		Northing:	739485.19	94	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	59.56		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth				obe					Level
(m) 0	5	10 15		20	25	30	35		(mOD) 59.5 —
1				22					
	3 5							5	
0.5	6	42						.0	59.0 —
	6	12						9	
1.0	5						10x		
1.0		9							58.5
	7	12							-
1.5	7					3			
	6					,			58.0 —
	6	13			21,				
2.0	7	12		1.0					57.5
		14		11.			21	-	37.5
-							35)	
2.5 —									57.0 —
]									
- -									-
3.0		109							56.5
-									
-		***							
3.5 —									56.0 —
- -									-
4.0									
									55.5 — —
-0									
4.5									55.0 —
1 -									35.0
_									
				Drob - Diffi					
1	Depth:	mination: Reason:	Type:	Probe Details Mass	: Drop:	Remarks	<u>:</u>		
		Obstruction - boulders.	DPH	50kg	500mm	1			

Contract No: 5863		Dy	namic F	Probe L	og			Probe N	I .
Contract:	Moygaddy			Easting:	694586.78	81	Date Started:	24/06/2021	
Location:	Maynooth, Co. N	Лeath		Northing:	739491.8	52	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	58.59		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10	15	Probe	25	30	35		Level (mOD)
0		11							58.5 —
0.5	7 5	10						.05	58.0 —
1.0	5	10	_			0	7,0		57.5 —
1.5	3		14			3			57.0 —
2.0	3 6	9 11 12		110					56.5 —
2.5 -		11 12	17	20					56.0 —
3.0			16	20 23		28			55.5 —
3.5 —							36	5	55.0 —
4.0									54.5
4.5									54.0
-		Towns in a first		Death D. C.					_
1	Depth:	Termination: Reason:	Type:	Probe Details : Mass	: Drop:	Remarks	:		
	3.40m	Obstruction - bould			500mm				

Contract No: 5863		Dyna	mic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	694688.95	53	Date Started:	24/06/2021	
ocation:	Maynooth, Co. Meath			Northing:	739488.63	32	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	58.31		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	r 130	Sheet No:	Sheet 1 of 1	
Depth				obe				1	Level
(m) 0.5 - 1.0 - 1.5 - 2.0 - 3.5 - 3.5 - 4.0 - 4.0 - 4.0 - 4.0	5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11 14 10 10 15 13 13 13 13 13 13 13 13 13 13 13 13 13		21 20 20	25	30	35		57.0 — 56.5 — 55.5 — 55.0 — 54.5 —
4.5	Tamain	Aliana.		Draha Dataila					54.0 — - - - - 53.5 —
	Termina Depth:	Reason:	Type:	Probe Details Mass	Drop:	Remarks	:		
(\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		ruction - boulders.	DPH	50kg	500mm				

Contract No: 5863		Dyna	mic P	robe L	og			Probe N	I
Contract:	Moygaddy			Easting:	694780.80	02	Date Started:	24/06/2021	
ocation:	Maynooth, Co. Mea	ath		Northing:	739491.93	34	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	56.47		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		robe		30	35		Level (mOD)
0.5			18		25				56.0 — 56.0 — 55.5 — 55.5 — 55.5 — 55.5 — 55.0 — 54.0 — 53.5 — 52.5 — 52.0 — 52.0 —
_									
(In)	Tern Depth:	mination: Reason:	Type:	Probe Details Mass	: Drop:	Remarks	:		
		Obstruction - boulders.	DPH	50kg	500mm				

Contract No: 5863		Dyna	amic P	robe L	og			Probe N	I .
Contract:	Moygaddy			Easting:	693593.2	73	Date Started:	23/06/2021	
ocation:	Maynooth, Co. Mea	ath		Northing:	739395.73	30	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	56.03		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		robe	25	30	35		Level (mOD)
1.5		9 10 10 13	17 18		26				55.5 — 55.5 — 55.5 — 54.5 — 54.5 — 53.5 — 52.5 — 52.0 — 52.0 —
4.5									51.5 —
		mination: Reason:	Type:	Probe Details:	: Drop:	Remarks	:		
(1)	Depth: 2.80m O	Reason: Obstruction - boulders	Type: DPH	Mass 50kg	500mm				

Contract No: 5863		Dyna	mic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	693688.9	22	Date Started:	23/06/2021	
Location:	Maynooth, Co. Meath			Northing:	739386.7	95	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	57.17		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth	1			robe					Level
(m)	5	10 15		20	25	30	35		(mOD)
0.5	5 7 5 4 7 9 9 9						00	,es	57.0 —
1.5	6 6 6 6 6 6					2			56.0 —
2.0	6 6	12 14		je					55.5 — — — — — 55.0 —
2.5			17 18						- - - 54.5 —
3.0		3	16				38	5	54.0 —
4.0	Conn								53.5 —
4.5									53.0 —
-		notion		Droke Data"		D			52.5 —
(A)	Depth:	nation: Reason:	Type:	Probe Details Mass	: Drop:	Remarks): 		
		struction - boulders.	DPH	50kg	500mm	•			

Contract No: 5863		Dyna	mic P	robe L	og			Probe N	I .
Contract:	Moygaddy			Easting:	693787.84	43	Date Started:	23/06/2021	
ocation:	Maynooth, Co. Mea	ath		Northing:	739388.25	55	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	56.49		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		robe		30	35		Level (mOD)
1.5 — 2.0 — 3.5 — 4.0 — 4.5 — 4.5	3 5 5 3 3 8 8 8 8 7 7 5 5 5 3 3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	11 10			25		36		56.0 — 55.5 — 55.0 — 53.5 — 53.5 — 52.5 — 52.0 —
7,-									
									_
	Teri	mination:		Probe Details:	:	Remarks	<u> </u> :		
	Depth:	Reason:	Type:	Mass	Drop:	· ioniano	-		
	3.20m C	Obstruction - boulders.	DPH	50kg	500mm				

Contract No: 5863		Dyna	amic P	robe Lo	og			Probe N	
Contract:	Moygaddy			Easting:	693889.68	56	Date Started:	22/06/2021	
ocation:	Maynooth, Co. Mea	ith		Northing:	739385.77	77	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	56.89		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		robe	25	30	35		Level (mOD)
1.5 - 2.5 - 3.5 - 4.0 - 4.5 - 4.5	5 6 5 6 6 5 6 6 6 7 7 4 9 7 7 5 5 8 7 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	10 14 10 14 14 14 14 14 14 14 14 14 14 14 14 14	19 16 17 17	10		29	35		56.5 — 56.0 — 55.5 — 55.0 — 54.5 — 53.0 — 53.0 — 52.5 —
-									52.0 —
		mination:		Probe Details:		Remarks	<u>;</u>		
	Depth: 3.30m O	Reason: Obstruction - boulders.	Type: DPH	Mass 50kg	Drop: 500mm				

Contract No: 5863		Dyna	mic P	robe Lo	og			Probe N	
Contract:	Moygaddy			Easting:	693987.34	46	Date Started:		
_ocation:	Maynooth, Co. Meath			Northing:	739387.48	84	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	57.60		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth				robe					Level
(m) 0	5	10 15		20	25	30	35		(mOD)
0.5	2 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8						.00		57.5 — — — — 57.0 — —
1.5	5 6 6 7 7 7 6				dill	2			56.5 —
2.0 - 2	3 3 2 3 3 4 4			1,0					55.5 — - - -
3.0	7 8 7	10							55.0 —
3.5		12 13 15	16						54.0 —
4.5		15	16 19						53.5 —
	Termina	ation:		Probe Details:		Remarks	35	; 	_
	Depth: 4.80m Obsti	Reason: ruction - boulders.	Type: DPH	Mass 50kg	Drop: 500mm				
	7.0011 Opsil	- Doulders.	Diffi	Jong					

Contract No: 5863		Dyna	amic P	robe L	.og			Probe N	
Contract:	Moygaddy			Easting:	694086.86	1 Date 9	Started:	22/06/2021	
Location:	Maynooth, Co. Meath			Northing:	739385.87	1 Logge	ed By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	57.91	Scale	:	1:25	
Engineer:	ocsc			Rig Type:	Competitor	r 130 Sheet	: No:	Sheet 1 of 1	
Depth (m)	5 1	10 15		robe	25	30	35		Level (mOD)
1.0	5 6 4 2 5 5 5 7 7 7 7 7 7 7 7 7 7 7 7 7	10 10 12 14 15		20					57.5 — 57.0 — 56.5 — 56.5 — 56.5 — 54.5 — 54.5 —
4.5		15	1						53.5 —
							35		_
									53.0 —
(As)	Termina Depth:	ation: Reason:	Type:	Probe Details Mass	s: Drop:	Remarks:			
		ruction - boulders.	DPH	50kg	500mm				

Contract No: 5863			Dyn	amic P	robe L	.og			Probe N	
Contract:	Moygaddy				Easting:	694190.23	:31	Date Started:	22/06/2021	
₋ocation:	Maynooth, Co). Meath			Northing:	739385.9	157	Logged By:	E. Magee	
Client:	Sky Castle Ltd	d			Elevation:	58.35		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	4
Depth	.1				robe					Level (mOD)
(m)			10	19	20 20 20 20	25	30	35	S C	58.0 — 57.5 — 57.0 — 56.5 — 56.5 — 56.5 — 54.5 — 54.0 — 54.0 —
										53.5 —
13	Depth:	Termina	ntion: Reason:	Type:	Probe Details Mass	s: Drop:	Remarks	5:		
	1.60m	Obstru	ruction - boulders		50kg	500mm				

Contract No: 5863		Dyna	mic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	694288.4	56	Date Started:	22/06/2021	
₋ocation:	Maynooth, Co. Meat	h		Northing:	739387.7	53	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	58.62		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	•
Depth (m)				robe					Level (mOD)
1.0 — 1.5 — 2.0 — 2.5 — 3.5 — 4.0 — 4.5 —	5 6 5 6 7 4 8		18	22 20	26	30	35		58.5
7/-									54.0
									_
(As)	Depth:	nination: Reason:	Type:	Probe Details Mass	: Drop:	Remarks	:		
(\S)		ostruction - boulders.	DPH	50kg	500mm	-			

Contract No: 5863		Dynai	mic P	robe Lo	og			Probe N	
Contract:	Moygaddy			Easting:	694370.56	68	Date Started:	24/06/2021	
Location:	Maynooth, Co. Meath	1		Northing:	739380.64	43	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	58.45		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		robe	25	30	35		Level (mOD)
1.0 — 1.5 — 2.0 — 3.5 — 4.0 — 4.5 —							35		58.0 — 58.0 — 57.5 — 57.0 — 56.5 — 56.0 — 55.5 — 54.5 — 54.0 — 54.0 —
-									53.5 —
		nation:		Probe Details:		Remarks:	:		
(\S)	Depth: 2.60m Obs	Reason: struction - boulders.	Type: DPH	Mass 50kg	Drop: 500mm	_			

Contract No: 5863			Dyna	amic P	robe L	og			Probe N	
Contract:	Moygaddy				Easting:	694486.82	26	Date Started:	24/06/2021	
_ocation:	Maynooth, Co.	Meath			Northing:	739390.24	43	Logged By:	E. Magee	
Client:	Sky Castle Ltd				Elevation:	58.25		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth					robe					Level
(m) 0	5	1	0 15		20	25	30	35		(mOD)
	2	9								58.0 —
	7	7							5	-
0.5	5								.0	
	5	8							2	57.5 —
	6		11					·07		
1.0					20					
	5		13					5		57.0 —
			12 10							-
1.5	-		10				5			-
	7	7								56.5
-			11		0					
2.0			13							
			14					35	5	56.0
- 2.5 —										
2.5 —				~C/,						
=										55.5 —
3.0				<i></i>						
-										
-			1							55.0
- 3.5 —										
-										
-										54.5 —
4.0	<u>U</u>									
-										
										54.0 —
4.5										
7,=										
-										53.5 —
(As)	Depth:	Termina	ition: Reason:	Type:	Probe Details:	: Drop:	Remarks	31		
(61-	2.30m	01.1	uction - boulders.		50kg	500mm	1			

Contract No: 5863		Dyna	mic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	694569.04	43	Date Started:		
ocation:	Maynooth, Co. Me	eath		Northing:	739386.6	11	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	54.78		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)				obe					Level (mOD)
0.5 - 1.0 - 2.0 - 2.5 - 3.0 - 4.0 - 4.5 -	5 2 2 2 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2	10 15		20	25		35		54.5 — 54.0 — 53.5 — 53.0 — 52.5 — 51.5 — 51.0 — 50.5 — - - 50.5 — - - - - - - - - - - - - -
									50.0 —
_									_
		rmination:		Probe Details		Remarks:			
(\$)	Depth:	Reason: Obstruction - boulders.	Type: DPH	Mass 50kg	Drop: 500mm				

Contract No: 5863		Dyna	amic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	694691.6	16	Date Started:	23/06/2021	
ocation:	Maynooth, Co. Me	eath		Northing:	739389.83	31	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	59.36		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		robe	25	30	35		Level (mOD)
1.0 — — — — — — — — — — — — — — — — — — —		11 13 13	19				35		59.0 — 59.0 — 58.5 — 58.0 — 57.5 — 57.0 — 56.5 — 55.5 — 55.0 — 55.0 —
-									- 54.5 —
									_
(A)	Depth:	ermination: Reason:	Type:	Probe Details Mass	: Drop:	Remarks	:		
		Obstruction - boulders		50kg	500mm				

Contract No: 5863		Dyna	mic P	robe Lo	og			Probe N	
Contract:	Moygaddy			Easting:	694791.21	12	Date Started:	23/06/2021	
ocation:	Maynooth, Co. Meath			Northing:	739385.88	83	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	58.94		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		obe		30	35		Level (mOD)
0.5	2 3 5 5 2 3 5			20	25			.65	58.5
1.5	5 5 7 3 3 3	13		20		2	2/1/		58.0 — - - - - 57.5 — - -
2.0	7 7 9		cil	110			35	5	57.0 —
3.0		COIX							56.0 —
3.5	Conly								55.5 — — — — — 55.0 —
4.5									54.5 —
	Tormin			Proba Dataila:		Damada			54.0 —
(\$)	Depth: 2.40m Obs	Reason: struction - boulders.	Type:	Probe Details: Mass 50kg	Drop: 500mm	Remarks	<u>:</u>		

Contract No: 5863			Dyna	amic P	robe Lo	og			Probe N	
Contract:	Moygaddy				Easting:	693688.64	42	Date Started:	18/06/2021	
_ocation:	Maynooth, Co	. Meath			Northing:	739290.84	47	Logged By:	E. Magee	
Client:	Sky Castle Ltd	ł			Elevation:	52.18		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5		15		robe	25	30	35		Level (mOD)
2.0	3 5 5 4 4 4 4 3 3 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	7 9		18				35		52.0 — 51.5 — 51.5 — 51.0 — 50.5 — 49.5 — 48.5 — 48.0 — 47.5 —
_										47.5
-										
	_	Termina			Probe Details:		Remarks	:		
(\S)	Depth: 3.30m	Obstri	Reason: ruction - boulders	Type: DPH	Mass 50kg	Drop: 500mm	_			

Contract No: 5863		Dynar	mic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	693788.25	58	Date Started:	18/06/2021	
ocation:	Maynooth, Co. Meath			Northing:	739285.16	61	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	56.04		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		robe	25	30	35		Level (mOD)
1.5 — 2.5 — 3.0 — 4.5 — 4.5 — — 4.5 — — — — — — — — — — — — — — — — — — —				23 23	25	28	35		56.0 —
, -									
-									_
	Termir	 nation:		Probe Details	<u> </u>	Remarks			
1	Depth:	Reason:	Type:	Mass	Drop:	, tomanto	•		
		truction - boulders.	DPH	50kg	500mm				

Contract No: 5863		Dyna	mic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	694091.48	32	Date Started:	18/06/2021	
Location:	Maynooth, Co. Me	eath		Northing:	739278.29	90	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	56.67		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth				robe					Level
(m) 0	5	10 15		20	25	30	35		(mOD)
	5								56.5 —
0.5	5							S	-
	4							.0	56.0 —
	5	11							-
1.0				23	4		(V)		_
		10	19)		55.5
	6	9							_
1.5	5				.0	5)			
	6								55.0 —
2.0	P		17				25		-
							35	Ď.	54.5
									-
2.5 —									-
-									54.0
-									
3.0		(2)							52.5
-		121							53.5 —
3.5 —		43							
-									53.0
_	60								-
4.0									-
									52.5 —
00									
4.5									52.0
									52.0 —
-									
(In)	Depth:	rmination: Reason:	Type:	Probe Details:	Drop:	Remarks	:		
((1)		Obstruction - boulders.	DPH	50kg	500mm				

Contract No: 5863		Dynar	nic P	robe L	og			Probe N	I .
Contract:	Moygaddy			Easting:	694430.38	86	Date Started:	23/06/2021	
_ocation:	Maynooth, Co. Meath	l		Northing:	739324.23	35	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	53.90		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth				robe					Level
(m) 0	5	10 15		20	25	30	35		(mOD)
0.5	5 8							65	53.5 —
1.0	6 6 7						,00		53.0 —
1.5	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2					8	3. .		52.5
1.0	2 2	+		• 0		7)	35	5	52.0 —
2.0				110					-
2.5			Cill						51.5 — — — — — — 51.0 —
3.0		700							- - - -
3.5 —	OUN								50.5 —
4.0									50.0 —
4.5									49.5 —
-									49.0
(As)	Termi Depth:	nation: Reason:	Type:	Probe Details:	: Drop:	Remarks	:		
(1)		struction - boulders.	DPH	50kg	500mm				

Contract No: 5863		Dyna	mic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	694493.47	72	Date Started:	23/06/2021	
_ocation:	Maynooth, Co. Meath	l		Northing:	739282.72	26	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	58.49		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		robe	25	30	35		Level (mOD)
0.5 - 1.0 - 2.0 - 3.5 - 3.5 - 4.0 - 4.5 4.5				.0	24		35		58.0 — 57.5 — 57.0 — 56.5 — 56.5 — 55.5 — 55.0 — 54.5 — 54.0 — 54.0 —
13	Termi	nation: Reason:	Type:	Probe Details:	: Drop:	Remarks	:		
		struction - boulders.	DPH	50kg	500mm	-			

Contract No: 5863			Dyn	amic	Pro	be L	Probe No: DP48				
Contract:	Moygaddy				Eas	sting:	694590.1	16	Date Started:	23/06/2021	
_ocation:	Maynooth, Co.	Meath			Nor	thing:	739288.6	13	Logged By:	E. Magee	
Client:	Sky Castle Ltd				Ele	vation:	59.21		Scale:	1:25	
Engineer:	ocsc				Rig	Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth					Probe		1				Level
(m) 0	5	10	0 1	5	20		25	30	35		(mOD)
	5										59.0
	6 5									5	
0.5	3									.0	
	2								O.	9	58.5 —
1.0	6								40		
1.0	5										
			12					V	35	5	58.0 —
1.5 —										-	
-											57.5 —
-							27,				37.5
2.0						S/					
-						7,					57.0 —
-											
2.5 —											
]				3							56.5
=), ,							-
3.0			7								
_			1								56.0
-		X									
3.5 —											
=											55.5 —
4.0											
											-
											55.0 —
4.5											
7,-											54.5 —
_											-
(A)	Depth:	Termina	tion: Reason:	Tv	pe:	be Details Mass	Drop:	Remark	S:		
	1.40m	Obstru	uction - boulders		PH	50kg	500mm	1			

Contract No: 5863			Dyna	amic P	robe L	Probe No: DP49				
Contract:	Moygaddy				Easting:	694682.45	 52	Date Started:		
ocation:	Maynooth, Co. M	 ∕leath			Northing:	739291.23	33	Logged By:	E. Magee	
Client:	Sky Castle Ltd				Elevation:	59.96		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth	1				Probe					Level
(m) 0	5	10	15	<u> </u>	20	25	30	35		(mOD)
0.5	4 4 5 3							C	.es	59.5 —
1.0	5 6 7	8					O	7,100		59.0 — - -
1.5	7	8 9 11	14				3			58.5 —
2.0		11	13 14 13	15	1,6				_	58.0 — - - -
2.5			15	15				35	5	57.5 —
- - - -				ilo,						- - -
3.0			50							57.0 —
3.5 —		76,7								56.5 —
4.0										56.0 —
4.5										- - 55.5 —
-										55.0 —
15		Termination:		Time	Probe Details		Remarks	:		
(\$)	Depth: 2.50m	Reas Obstruction		Type: DPH	Mass 50kg	Drop: 500mm	-			

Contract No: 5863			Dyn	amic P	robe L	Probe No: DP50				
Contract:	Moygaddy				Easting:	694788.30	63	Date Started:	23/06/2021	
ocation:	Maynooth, Co.	Meath			Northing:	739288.1	37	Logged By:	E. Magee	
Client:	Sky Castle Ltd				Elevation:	59.82		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)			0		robe	0.5	20	25		Level (mOD)
0.5	5 6 6 5 5 5		10	18 19	20	25	30	35	.05	59.5 — 59.0 — 58.5 — 58.0 —
3.0				15 16 15	21			35	5	57.5 —
3.5	00		,)							56.0 —
4.5										55.5 —
(A)	Depth:	Termina	tion: Reason:	Type:	Probe Details:	: Drop:	Remarks	S:		
	2.70m	Obstru	uction - boulders		50kg	500mm				

Contract No: 5863			Dyn	amic P	robe L	Probe No: DP51				
Contract:	Moygaddy				Easting:	693890.1	21	Date Started:	18/06/2021	
₋ocation:	Maynooth, Co.	. Meath			Northing:	739187.5	54	Logged By:	E. Magee	
Client:	Sky Castle Ltd	1			Elevation:	55.56		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5				robe		20	35		Level (mOD)
1.0	2 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	8		17 18		25	30	35	, es	55.5 - - - - - - - - - - - - - -
- - -	C,0	5								-
4.0										51.5 —
7										51.0 —
(AS)	Depth:	Terminat	tion: Reason:	Type:	Probe Details Mass	S: Drop:	Remarks	3:		
	1.20m	Obstru	uction - boulders		50kg	500mm				

Contract No: 5863		Dyna	mic P	robe L	Probe No: DP52				
Contract:	Moygaddy			Easting:	693984.69	93	Date Started:	18/06/2021	
ocation:	Maynooth, Co. Mea	ath		Northing:	739184.9	50	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	56.07	-	Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		robe		30	35		Level (mOD)
1.5					26	28	35		56.0 — 56.0 — 55.5 — 55.5 — 55.0 — 54.5 — 53.5 — 53.5 — 52.0 — 51.5 —
7/-									51.5
-									
(In)	Depth:	mination: Reason:	Type:	Probe Details Mass	Drop:	Remarks	3:		
		Dbstruction - boulders.	DPH	50kg	500mm	-			

Contract No: 5863		Dyn	amic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	694089.48	81	Date Started:	18/06/2021	
Location:	Maynooth, Co. M	/leath		Northing:	739189.9	 55	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	55.39		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)				robe					Level (mOD)
1.5	5 4 5 4 3 3 3 3 2 3 4 4 4 7 3 4 5 7				25	30	35		55.0 — 54.5 — 54.5 — 54.5 — 54.5 — 54.5 — 53.5 — 53.0 — 51.5 — 51.0 —
4.5									50.5 —
(As)	Depth:	Termination: Reason:	Type:	Probe Details:	: Drop:	Remarks:	:		
(1)	2.60m	Reason: Obstruction - boulders		50kg	Drop: 500mm	-			

Contract No: 5863		Dyna	amic P	robe L	og		Probe No: DP54
Contract:	Moygaddy			Easting:	694189.06	9 Date Starte	d: 18/06/2021
ocation:	Maynooth, Co. Meath			Northing:	739183.97	4 Logged By:	E. Magee
Client:	Sky Castle Ltd			Elevation:	55.51	Scale:	1:25
Engineer:	ocsc			Rig Type:	Competito	130 Sheet No:	Sheet 1 of 1
Depth				robe			Level
(m) 1 1 1 0.5 - 1 1.0 - 1 2.0 - 2 3.5 - 1 4.0 - 1		10 15 14 14 11 13 13 13 13 13 13 15 15 15 15 15 15 15 15 15 15 15 15 15	5	20 22 23	25	30 3	55.0— 55.0— 54.5— 54.0— 53.5— 52.5— 51.5— 51.5—
	Termin		Type	Probe Details		Remarks:	51.0 —
	Depth: 2.40m Obst	Reason: ruction - boulders.	Type: DPH	Mass 50kg	Drop: 500mm		

Contract No: 5863		Dyna	amic P	robe Lo	og			Probe N	I .
Contract:	Moygaddy			Easting:	694250.67	76	Date Started:	18/06/2021	
_ocation:	Maynooth, Co. Me	eath		Northing:	739180.87	73	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	51.64		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth				robe					Level
(m) 1	5	10 15		20	25	30	35		(mOD)
0.5	2 2 3 4 5							. O'S	51.5 — 51.0 — -
1.0	3 3 4 5					(8)	71,1		50.5 —
1.5	7	9 10 11		. 01	NIV.				50.0 —
2.0			19				35	5	49.5
2.5			mcil						49.0 —
3.5 —		City							48.5 —
4.0	Con								48.0 —
4.5									47.5 —
									47.0 —
(As)	Depth:	ermination: Reason:	Type:	Probe Details:	: Drop:	Remarks			
(1)		Obstruction - boulders		50kg	500mm	-			

Contract No: 5863		Dyna	mic P	robe L	Probe No: DP56				
Contract:	Moygaddy			Easting:	694409.93	31	Date Started:	21/06/2021	
Location:	Maynooth, Co. Mo	eath		Northing:	739184.7	74	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	55.98		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		obe		30	35		Level (mOD)
1.0		10			25		35		55.5
-									
	Te	ermination:		Probe Details	:	Remarks			
	Depth:	Reason:	Type:	Mass	Drop:	, tomains	•		
	1.80m	Obstruction - boulders.	DPH	50kg	500mm				

Contract No: 5863		Dyna	mic P	robe L	Probe No: DP57				
Contract:	Moygaddy			Easting:	694513.64	46	Date Started:	23/06/2021	
ocation:	Maynooth, Co. Meath			Northing:	739200.8	14	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	58.11		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	1			robe			35		Level (mOD)
1.5 — 2.0 — 3.5 — 4.5 — 4.5 — 4.5 — —	5 4 4 4 4 4 7 7 7 7 7 5 6 5 7	13	16	23	25	30			58.0 — 57.5 — 57.0 — 56.5 — 56.5 — 56.5 — 54.5 — 54.5 — 53.5 —
-									
	Termina			Probe Details:		Remarks	::		
	Depth:	Reason:	Type:	Mass	Drop:				
	2.50m Obst	ruction - boulders.	DPH	50kg	500mm				

Contract No: 5863		Dyna	amic P	robe L	Probe No: DP58				
Contract:	Moygaddy			Easting:	694584.20	06	Date Started:	23/06/2021	
_ocation:	Maynooth, Co. Meath			Northing:	739182.48	39	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	58.08		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		robe	25	30	35		Level (mOD)
0.5 - 1.0 - 2 1.0 - 2 1.5 - 2 2.5 - 3.0 - 3.5		10					33		58.0 — - 57.5 — 57.0 — 56.5 — 56.0 — 55.5 — 54.5 — 54.5 — 53.5 —
	Termin			Probe Details		Remarks	:		
	Depth: 2.80m Obst	Reason: ruction - boulders	Type: . DPH	Mass	Drop: 500mm				
	2.50111 ODSI	Taodon - Doulders.	. 051	50kg	Joonnill				

Contract No: 5863		Dynai	mic P	robe Lo	og			Probe N	
Contract:	Moygaddy			Easting:	694690.63	32	Date Started:	23/06/2021	
_ocation:	Maynooth, Co. Meath			Northing:	739192.59	94	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	58.36		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	4
Depth (m)	5	10 15		obe	25	30	35		Level (mOD)
0.5				21			35		58.0 — 58.0 — 57.5 — 57.0 — 56.5 — 56.0 — 55.5 — 54.5 — 54.0 — 54.0 —
-									53.5 —
		nation:		Probe Details:		Remarks	:		
(\$)	Depth: 2.30m Obs	Reason: struction - boulders.	Type: DPH	Mass 50kg	Drop: 500mm				

Contract No: 5863		Dynar	nic P	robe Lo	og			Probe N	
Contract:	Moygaddy			Easting:	694784.38	83	Date Started:	23/06/2021	
₋ocation:	Maynooth, Co. Meath			Northing:	739187.50	02	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	58.33		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)		4045		robe			35		Level (mOD)
0.5	5 1 6 9 5 4 2 5	10 15		20	25	30	3	,es	58.0 —
1.0	7 6 8 7 5 3	14				\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Ji Qu		57.5 — - - - 57.0 — - - - - - - - - - - - - - - - - - - -
2.0	6	11 14	6	Jie					56.0 —
3.0	COUNT	3					38	5	55.5 —
4.5									54.0 —
	Termina			Probe Details:		Remarks): 		
	Depth:	Reason: ruction - boulders.	Type: DPH	Mass 50kg	Drop: 500mm				

Contract No: 5863			Dyn	amic P	robe L	og			Probe N	
Contract:	Moygaddy				Easting:	693991.06	61	Date Started:		
ocation:	Maynooth, Co.	Meath			Northing:	739083.7	55	Logged By:	E. Magee	
Client:	Sky Castle Ltd				Elevation:	53.29		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5) 15		robe			35		Level (mOD)
1.5 — 1.5 — 2.5 — 3.5 — 4.0 — 4.5 —		8 1						35	.05	53.0 — 53.0 — 52.5 — 52.5 — 51.5 — 51.0 — 50.5 — 49.5 — 49.0 — 48.5 —
				I						40.5
		Terminat			Probe Details		Remarks	:		
(\S)	Depth: 0.90m		Reason: uction - boulders	Type: s. DPH	Mass 50kg	Drop: 500mm				

Contract No: 5863			Dyn	amic P	robe L	og			Probe N	
Contract:	Moygaddy				Easting:	694185.44	43	Date Started:		
_ocation:	Maynooth, Co	o. Meath			Northing:	739087.74	42	Logged By:	E. Magee	
Client:	Sky Castle Lt	d			Elevation:	49.21		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)					robe					Level (mOD)
0.5	2		0 15		20	25	30	35	.05	49.0 —
1.0	5 3 3	9					, R'	7,00	<i>-</i>	48.5 —
2.0			10 10 10 10 12	15	20 22		-			47.5 — - - - - 47.0 —
2.5				incil				35		46.5 —
3.5 —			3							46.0 — - - -
4.0	Co)								45.5 — — — —
4.5										45.0 — - - - - 44.5 —
-										-
	Donth:	Termina		Tuna	Probe Details:		Remarks	:		
(\S)	Depth: 2.30m	Obstr	Reason: uction - boulders	Type: s. DPH	Mass 50kg	Drop: 500mm	_			

Contract No: 5863			Dyn	amic P	robe L	og			Probe N	I .
Contract:	Moygaddy				Easting:	694290.24	40	Date Started:	18/06/2021	
ocation:	Maynooth, Co.	. Meath			Northing:	739085.76	62	Logged By:	E. Magee	
Client:	Sky Castle Ltd				Elevation:	55.96		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5		0 1		Probe	25	30	35		Level (mOD)
0.5 - 1.5 - 1.5	2 4 6	8				27			5	55.5 —
2.5				mcil	7,6					53.5 —
3.5	C)O	JUL								52.5 —
4.5										51.5 —
	Donth:	Termina	ation: Reason:	Type:	Probe Details		Remarks	<u> </u>		
(1)	Depth: 1.10m	Obstri	ruction - boulders	Type: s. DPH	Mass 50kg	Drop: 500mm	1			

Contract No: 5863			Dyn	amic P	robe L	og			Probe N	I .
Contract:	Moygaddy				Easting:	694385.1	54	Date Started:	18/06/2021	
_ocation:	Maynooth, Co. I	Meath			Northing:	739082.18	80	Logged By:	E. Magee	
Client:	Sky Castle Ltd				Elevation:	56.76		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth					robe					Level
(m) 0	5	10) 1	5	20	25	30	35		(mOD)
0.5	6	9	12 12						65	56.5 —
1.0	5	9	13	16				.,00		56.0 —
1.5	7		10				8	<i>7.</i> .		55.5 —
2.0	4 4 4 4		12	15	0					55.0 —
	6	8		18						54.5 —
2.5				(0)			30	35	5	_
3.0			روح							54.0 —
3.5 —		N.	4							53.5 —
4.0) ,								53.0 —
4.0										-
4.5										52.5 —
-										52.0 —
(As)	Depth:	Terminat	tion: Reason:	Type:	Probe Details:	: Drop:	Remarks	»:		
(1)	2.70m	Obstru	uction - boulders		50kg	500mm				

Contract No: 5863		Dyna	mic P	robe L	og			Probe N	I .
Contract:	Moygaddy			Easting:	694488.36	62	Date Started:	21/06/2021	
ocation:	Maynooth, Co. Mea	ath		Northing:	739086.28	89	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	57.03		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth				robe					Level
(m) 0	5	10 15		20	25	30	35		(mOD)
0.5	5 3 5						9		56.5
1.0	7 7 7	11				<i>\(\)</i>	7100	_	56.0 —
1.5	3 3 3 4 3 5					3			55.5 —
2.0	3 6	13 14		7,0					55.0 —
2.5			1701				35	5	54.5 — — — — — —
3.5 —		434							54.0 —
4.0	Con								53.0
4.5	5								- - -
-									52.5 — — — —
		mination:		Probe Details:		Remarks	:		
(\$)	Depth: 2.50m C	Reason: Obstruction - boulders.	Type: DPH	Mass 50kg	Drop: 500mm	-			

Contract No: 5863		Dyn	amic P	robe L	og		Probe No: DP66	
Contract:	Moygaddy			Easting:	694588.54	3 Date Started	I: 21/06/2021	
Location:	Maynooth, Co. Meath			Northing:	739090.20	6 Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	57.41	Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	r 130 Sheet No:	Sheet 1 of 1	
Depth (m)	I			robe		<u> </u>		evel
1.0 — 1.5 — 2.0 — 2.5 — 3.0 — 3.5 —	5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12 12 12 12	15 15 15 15 15	20		30 33 C		66.5
4.0		13		20 20 22			35	i3.5 — — — — — — — —
4.5								- - - - 52.5 —
(A)	Termina Depth:	ation: Reason:	Type:	Probe Details Mass	: Drop:	Remarks:		
		ruction - boulders		50kg	500mm			

Contract No: 5863		Dyna	amic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	694682.81	14	Date Started:		
ocation:	Maynooth, Co. Meath			Northing:	739084.42	 21	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	57.54		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		robe	25	30	35		Level (mOD)
1.0 — 1.5 — 2.0 — 3.5 — 4.0 — 4.0 — —		14 14 14 11 11	5 16 19	22 20 21			35		57.5 — 57.0 — 56.5 — 56.0 — 55.5 — 54.5 — 54.5 — 53.5 — 53.5 —
4.5 -	Termina			Probe Details		Remarks	5:		53.0 —
(C)	Depth: 3.20m Obsti	Reason: ruction - boulders.	Type: . DPH	Mass 50kg	Drop: 500mm				

Contract No: 5863			Dyna	amic P	robe Lo	Probe No: DP68				
Contract:	Moygaddy				Easting:	694787.25	54	Date Started:	23/06/2021	
_ocation:	Maynooth, Co	. Meath			Northing:	739083.9	14	Logged By:	E. Magee	
Client:	Sky Castle Ltd	i			Elevation:	56.22		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10) 15		robe	25	30	35		Level (mOD)
1.0		8 7 7 7	13 14 10 10 10 10 12	17 18 5			8,	7,160		56.0 — - - - 55.5 — - - - - - - - - - - - - -
2.0	3	9 9 8	11	16	10					54.5 —
3.0	<u>()</u>	JUL	3		23	4		35	5	53.0 —
4.5		Terminati			Probe Details:		Remarks	:		52.0 —
	Depth: 3.20m		Reason: uction - boulders	Type: . DPH	Mass 50kg	Drop: 500mm				

Contract No: 5863		Dyna	mic P	robe Lo	og			Probe N	I .
Contract:	Moygaddy			Easting:	694090.9	59	Date Started:	18/06/2021	
Location:	Maynooth, Co. Me	eath		Northing:	738991.0	35	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	49.72		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth				obe	1				Level
(m)	5	10 15	:	20	25	30	35		(mOD)
0.5	4 6 7 6 6 6 6 6 6						.00		49.5 —
1.5		10 9 12 13	16			8	7//		48.5 —
2.0		12	16 17 16 17	10					48.0 —
2.5	7	12 11 9	18	20					47.5 —
3.0		CO	17 17	23 2.	4		35	5	- - - - 46.5 —
3.5 —	all all	K12							46.0
4.0	<u></u>								-
4.5	. *								45.5 — — — — — 45.0 —
- -									-
	Te	ermination:		Probe Details:	<u> </u>	Remarks	<u> </u>		
	Depth:	Reason: Obstruction - boulders.	Type: DPH	Mass 50kg	Drop: 500mm				

Contract No: 5863			Dyn	amic F	robe L	og			Probe N	
Contract:	Moygaddy				Easting:	694187.89	90	Date Started:	18/06/2021	
ocation:	Maynooth, Co. N	Meath			Northing:	738981.73	35	Logged By:	E. Magee	
Client:	Sky Castle Ltd				Elevation:	52.48		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5				Probe			35		Level (mOD)
0.5 — 1.0 — 2.0 — 2.5 — 3.5 — 4.0 — 4.5 —		9 9 9	10	15	20	27	30			52.0 — 51.5 — 51.0 — 50.5 — 49.5 — 48.5 — 48.5 — 48.0 — 48.0 —
-										
1										
		Terminat	l tion:		Probe Details	:	Remarks	<u> </u> :		
	Depth:		Reason:	Type:	Mass	Drop:				
	2.60m	Obstru	uction - boulders	s. DPH	50kg	500mm				

Contract No: 5863		Dyna	amic P	robe Lo	og			Probe N	I .
Contract:	Moygaddy			Easting:	694289.18	89	Date Started:	18/06/2021	
ocation:	Maynooth, Co. Me	eath		Northing:	738983.57	78	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	55.45		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	•
Depth (m)	5	10 15		robe		30	35		Level (mOD)
0.5 — 1.0 — 1.5 — 2.0 — 3.5 — 4.0 — 4.5 —	3 4 3 4 5 5	9 12 15 8 10 10 12 10 10 10 10 10 10 10 10 10 10 10 10 10	19		26		31		55.0 — 55.0 — 54.5 — 54.0 — 53.5 — 53.5 — 53.5 — 51.5 — 51.0 —
		ermination:		Probe Details:	<u> </u>	Remarks			50.5
	Depth:	Reason:	Type:	Mass	Drop:	. Comains	•		
	2.70m	Obstruction - boulders.	DPH	50kg	500mm				

Contract No: 5863		Dyn	amic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	694384.73	33	Date Started:		
_ocation:	Maynooth, Co. Meath		-	Northing:	738989.60	07	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	56.10		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		robe	25	30	35		Level (mOD)
1.0 2.0 3.5 4.0		10 13 10 14	19 19 19	21			35		56.0 —
-									51.5 —
(As)	Termin Depth:	ation: Reason:	Type:	Probe Details Mass	S: Drop:	Remarks	:		
(1)		ruction - boulders		50kg	500mm				

Contract No: 5863		Dyna	ımic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	694486.8	22	Date Started:	21/06/2021	
Location:	Maynooth, Co. Meath			Northing:	738986.5	10	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	56.87		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth				robe					Level
(m)	5	10 15		20	25	30	35		(mOD)
0.5	5 6 6 3 5 5						.00		56.5 —
1.5	5 5 7 8	12				2			55.5 —
2.0 —	4 4 4 3 4			10	23				55.0 —
2.5	7 7 8	14	Cill				35	5	54.0 —
3.0	×	700							53.5
4.0	Conn								53.0 —
4.5									52.5 —
-	T	ation		Droke Data					52.0 —
(A)	Termina Depth:	ation: Reason:	Type:	Probe Details Mass	: Drop:	Remarks	:		
		ruction - boulders.	DPH	50kg	500mm				

Contract No: 5863		Dyn	namic P	robe L	Probe No: DP74				
Contract:	Moygaddy			Easting:	694586.96	60	Date Started:	22/06/2021	
₋ocation:	Maynooth, Co. I	Meath		Northing:	738983.39	95	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	56.54		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 1		robe		30	35		Level (mOD)
1.0 — — — — — — — — — — — — — — — — — — —	2 4 5 4 3 3 3 3 2 2 2 3 3 4 4 7 7 6 6 7		15		25		35		56.5 — 56.0 — 55.5 —
4.5									52.0 — - - - -
(As)	Depth:	Termination: Reason:	Type:	Probe Details:	: Drop:	Remarks	:		
(1)	2.70m	Obstruction - boulders		50kg	500mm	-			

Contract No: 5863			Dyn	amic P	robe L	og			Probe N	
Contract:	Moygad	dy			Easting:	694691.1	01	Date Started:	22/06/2021	
ocation:	Maynoo	th, Co. Meath			Northing:	738989.2	16	Logged By:	E. Magee	
Client:	Sky Cas	tle Ltd			Elevation:	56.20		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth					robe	1				Level
(m)	5	j 1	1	5	20	25	30	35		(mOD)
0.5 —										56.0 — - - - - - 55.5 —
1.0							\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Jifo		55.0 —
2.0					Jie?					54.0 —
3.0			رور	NO.						53.5 —
3.5 -		OUNT	4							53.0 —
4.0	5)								52.0
	David	Termina	ation:	Time	Probe Details Mass		Remarks): ::		51.5 —
(1)	5.00		ruction - boulder	Type: s. DPH	50kg	Drop: 500mm				

Contract No: 5863		Dyna	mic P	robe L	Probe No: DP76				
Contract:	Moygaddy			Easting:	694188.86	62	Date Started:		
_ocation:	Maynooth, Co. Meath			Northing:	738882.93	36	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	48.76		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)				robe					Level (mOD)
1.5	5 5 5 5 4 4 4 4 8 7 8 9			20	25		35		48.5 — 48.0 — 47.5 — 46.5 — 46.5 — 45.5 — 44.5 —
4.5									44.0 —
		nation:		Probe Details:		Remarks	:		
(\$)	Depth: 2.10m Obs	Reason: struction - boulders.	Type: DPH	Mass 50kg	Drop: 500mm	-			

Contract No: 5863			Dyn	amic P	robe L	Probe No: DP77				
Contract:	Moygaddy				Easting:	694291.40	09	Date Started:	18/06/2021	
ocation:	Maynooth, Co.	Meath			Northing:	738890.28	82	Logged By:	E. Magee	
Client:	Sky Castle Ltd				Elevation:	54.52		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	•
Depth					robe					Level
1.5	3	7	12 14 14		22	25	30	35		54.0 — 53.5 — 52.5 — 51.5 — 550.5 — 5
4.5										50.0
(Also	Depth:	Termina	ation: Reason:	Type:	Probe Details Mass	: Drop:	Remarks	:		
(1)	2.40m	Obstru	Reason: ruction - boulders		50kg	Drop: 500mm				

Contract No: 5863			Dyn	amic P	robe L	og			Probe N	
Contract:	Moygaddy				Easting:	694392.5	33	Date Started:	21/06/2021	
_ocation:	Maynooth, Co	. Meath			Northing:	738890.20	01	Logged By:	E. Magee	
Client:	Sky Castle Ltd	t			Elevation:	54.87		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5		10 1		Probe	25	30	35		Level (mOD)
0.5 - 1.0 - 22 1.5 - 22 2.0 - 3.5			14 14	16		25				54.5 — 54.0 — 53.5 — 53.0 — 51.5 — 51.5 — 50.5 — 50.5 —
										50.0 —
		Termina	ation:		Probe Details	<u> </u>	Remarks	<u> </u> 		
	Depth:		Reason:	Type:	Mass	Drop:	- Comand			
	2.40m	Obstri	ruction - boulders	s. DPH	50kg	500mm				

Contract No: 5863		D	nic P	robe L	Probe No: DP79					
Contract:	Moygaddy				Easting:	694490.60	09	Date Started:	21/06/2021	
_ocation:	Maynooth, Co. N	/leath			Northing:	738885.30	08	Logged By:	E. Magee	
Client:	Sky Castle Ltd				Elevation:	55.95		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)					obe					Level (mOD)
0.5 - 1.0 - 1.5 - 2.0 - 3.5 4.0 - 4.5 - 4.	5 4 4 5 7 8	10 11 8 8 10 10 8 9 11	15		220	25	30	33 33 34 35		55.5 — 55.5 — 55.0 — 54.5 — 54.5 — 53.5 — 52.5 — 51.5 —
7,]										51.0
		Termination:			Probe Details	:	Remarks): ::		51.0 —
	Depth: 2.60m	Reason: Obstruction - bou	ılders.	Type: DPH	Mass 50kg	Drop: 500mm				

Contract No: 5863		Dyn	amic P	robe Lo	og			Probe N	I
Contract:	Moygaddy			Easting:	694587.97	72	Date Started:	22/06/2021	
₋ocation:	Maynooth, Co. Mea	ath		Northing:	738887.14	43	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	55.82		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 15		robe	25	30	35		Level (mOD)
1.5 — 2.0 — 3.5 —		9 10 12 10 9 9 9 11 11 11 11 12 11 12 11 11 11 12 11 12 11 11	19			5	J.*(O		55.5 — 55.0 — 54.5 — 54.0 — 53.5 — 53.0 — 52.5 —
			19	20					-
4.0				23	25				52.0 —
							35	5	
4.5									51.5 —
		min ation:		Deah - Ditti	<u></u>				
(A)	Depth:	mination: Reason:	Type:	Probe Details:	: Drop:	Remarks	:		
		Obstruction - boulders		50kg	500mm				

Contract No: 5863		Dyn	amic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	694688.90	09	Date Started:	22/06/2021	
Location:	Maynooth, Co. Mo	eath		Northing:	738889.70	61	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	54.95		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	10 1		robe	25	30	35		Level (mOD)
1.0	4 6 6 6 7 7 7 5 5 5 5 3 3 3 3 3 3 3 3 5 5 6 6 6 6 6 6	9 10 13 8 10 9	16	10		S	7,.60		54.5 —
3.0			15 15 15 17 17						52.0 —
4.0	. C.			22			35	5	51.0 —
		ermination:	T	Probe Details:		Remarks	:		
	Depth: 3.90m	Reason: Obstruction - boulders	Type: s. DPH	Mass 50kg	Drop: 500mm				

Contract No: 5863		Dyna	mic P	robe L	og			Probe N	
Contract:	Moygaddy			Easting:	694286.00	07	Date Started:		
_ocation:	Maynooth, Co. Me	eath		Northing:	738783.74	40	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	47.18		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth				obe					Level
(m) 0	5	10 15		20	25	30	35		(mOD)
0.5	2 6 6 3 3 3 2						.00	es (47.0 —
1.0	7 7					8			46.0 —
		11					35	-	45.5 —
2.0				0			35		_
-				1					45.0 —
2.5			ncil						44.5 —
3.0		43							44.0 —
	600								43.5 —
4.0									_
4.5									43.0 —
-									42.5 — — — —
		ermination:		Probe Details		Remarks	:		
(\S)	Depth: 1.90m	Reason: Obstruction - boulders.	Type: DPH	Mass 50kg	Drop: 500mm				

Contract No: 5863			Dyn	amic P	robe L	og	Probe No: DP83			
Contract:	Moygaddy				Easting:	694396.54	49	Date Started:	21/06/2021	
ocation:	Maynooth, Co	. Meath			Northing:	738786.80	09	Logged By:	E. Magee	
Client:	Sky Castle Ltd	d			Elevation:	53.35		Scale:	1:25	
Engineer:	ocsc				Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth (m)	5	1	10 1		robe	25	30	35		Level (mOD)
1.0 — 1.5 — 2.0 — 3.5 — 4.0 — 4.0	3	7	13	17	21	25	30	35		53.0 — 53.0 — 52.5 — 51.5 — 51.0 — 50.5 — 49.5 — 49.0 —
4.5										48.5 —
(In)	Depth:	Termina	ation: Reason:	Type:	Probe Details Mass	S: Drop:	Remarks): 		
	1.70m	Obstru	ruction - boulders		50kg	500mm	1			

Contract No: 5863		Dyna	mic P	robe Lo	og			Probe N	I
Contract:	Moygaddy			Easting:	694589.39	96	Date Started:		
ocation:	Maynooth, Co. Me	eath		Northing:	738787.69	97	Logged By:	E. Magee	
Client:	Sky Castle Ltd			Elevation:	53.34		Scale:	1:25	
Engineer:	ocsc			Rig Type:	Competito	or 130	Sheet No:	Sheet 1 of 1	
Depth				obe	1				Level
(m) 0 1	3	10 15		20	25	30	35		(mOD)
0.5	6 6 4 4						O.	05	53.0 —
1.0	4	10 11 11 3					1,0,		52.5 — — —
1.5		10 3 13				2			52.0 — - -
	7 6	3 12		01					51.5 —
2.0		10		22					-
							35	5	51.0 —
2.5 —			cill						- - - -
30									50.5 — —
3.0									50.0 —
3.5 —									- - -
-									49.5 —
4.0									-
4.5									49.0 —
7,									
									48.5 — —
		ermination:		Probe Details:		Remarks	:		
(\$)	Depth: 2.30m	Reason: Obstruction - boulders.	Type: DPH	Mass 50kg	Drop: 500mm				

ry Test Results poses viewing County County

Classification Tests in accordance with BS1377: Part 4

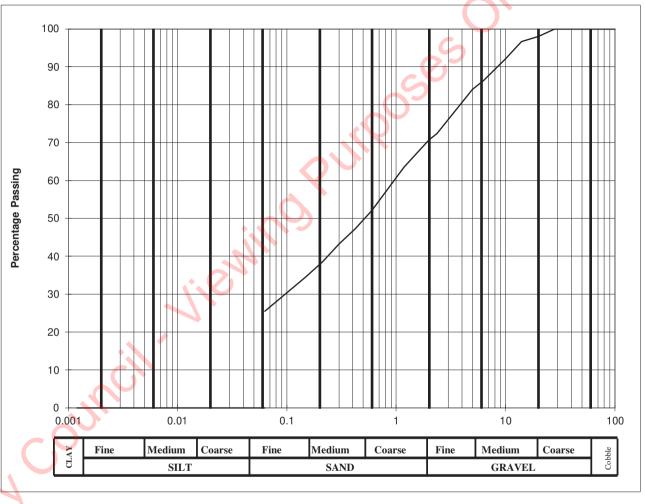
Client	Sky Castle Ltd.	
Site	Moygaddy	
S.I. File No	5863 / 21	Ca
Test Lab	Site Investigations Ltd., Carhugar The Grange, 12th Lock Rd., Lucan Co. Dublin. Tel (01) 6108768	Email info@siteinvestigations.ie
Report Date	12th July 2021	

Hole ID	Depth	Sample	Lab Ref	Sample	Natural	Liquid	Plastic	Plastic	Min. Dry	Particle	%	Comments	Remarks C=Clay;
		No	No.	Type	Moisture	Limit	Limit	Index	Density	Density	passing		M=Silt Plasticity:
					Content	%	%	%	Mg/m ³	Mg/m ³	425um		L=Low; I=Intermediate;
					%								H =High; V =Very High;
													E=Extremely High
TP01	1.00	MK15	21/856	В	17.6	32	18	14		7	47.3		CL
TP04	1.00	MK44	21/860	В	14.3	38	20	18			60.7		CI
TP06	1.00	MK47	21/863	В	15.6	37	20	17			63.5		CI
TP08	1.00	MK38	21/866	В	8.4	31	19	12			30.0		CL
TP10	1.00	MK63	21/869	В	14.6	35	18	17			55.7		CL/CI
TP11	1.00	MK58	21/871	В	18.0	34	18	16			62.3		CL
TP12	1.00	MK35	21/873	В	17.5	36	20	16			60.3		CI
TP13	1.50	MK29	21/875	В	11.5	32	18	14			37.9		CL
TP15	1.00	MK23	21/878	В	12.8	34	20	14	·		48.5		CL
TP19	1.00	MK05	21/883	В	12.2	34	• 19	15	·	•	51.9		CL

Printed 04/08/2021
Sheet 1 of 1
Paddy McGonagle
Site Investigations Ltd

BS Sieve	Percent	Hydrometer	analysis
size, mm	passing	Diameter, mm	% passing
100	100	0.0630	
90	100	0.0200	
75	100	0.0060	
63	100	0.0020	
50	100		
37.5	100		
28	100		
20	98		
14	96.6		
10	92.1		
6.3	86.3		
5.0	84		
2.36	72.4		
2.00	70.7		
1.18	63.5		
0.600	52		
0.425	47.3		
0.300	43.2		
0.212	38.5		
0.150	34.6		
0.063	26		

Cobbles, %	0
Gravel, %	29
Sand, %	45
Clay / Silt, %	26



Client:	Sky Castle Ltd.	
Project:	Moygaddy	

Lab. No :	21/856
Sample No:	MK15

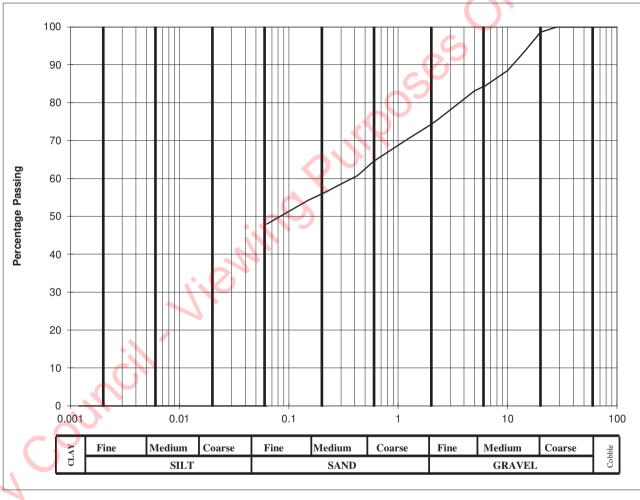
Hole ID :	TP 01
Depth, m:	1.00

Material description:	sandy slightly gravelly silty CLAY
Damanisa	Soils with clay or silt content between 15% - 35% can be classified as clay or silt depending on the field Engineers assessment of in-situ behaviour.
Keiliaiks.	Where material is for re-use and therefore disturbed, only soils with clay or silt >35% are classified as clay or silt

BS Sieve	Percent	Hydrometer	analysis
size, mm	passing	Diameter, mm	% passing
100	100	0.0630	
90	100	0.0200	
75	100	0.0060	
63	100	0.0020	
50	100		
37.5	100		
28	100		
20	98.6		
14	93.2		
10	88.4		
6.3	84.5		
5.0	83.1		
2.36	75.8		
2.00	74.2		
1.18	70.1		
0.600	64.5		
0.425	60.7		
0.300	58.5		
0.212	56.2		
0.150	54.2		
0.063	48		

Cobbles, %	0
Gravel, %	26
Sand, %	26
Clay / Silt, %	48

Remarks:



Client:	Sky Castle Ltd.
Project:	Moygaddy

Lab. No:	21/860
Sample No:	MK44

Hole ID:	TP 04
Depth, m:	1.00

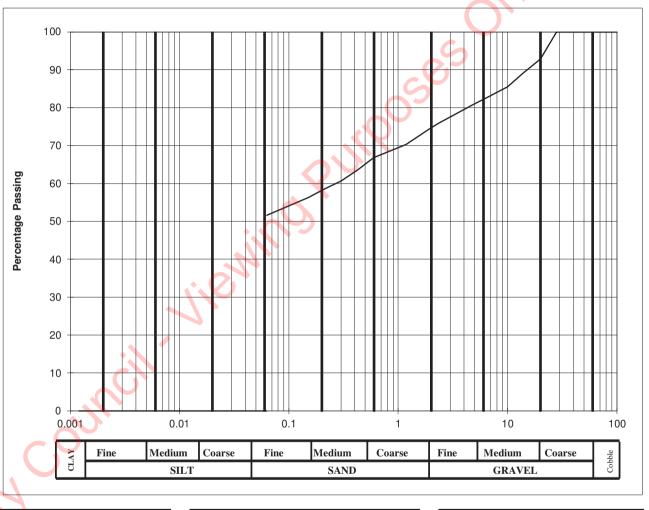
Material description:	slightly sandy	slightly gravelly	silty CLAY
			150 00

Soils with clay or silt content between 15% - 35% can be classified as clay or silt depending on the field Engineers assessment of in-situ behaviour.

Where material is for re-use and therefore disturbed, only soils with clay or silt >35% are classified as clay or silt

BS Sieve	Percent	Hydrometer	analysis
size, mm	passing	Diameter, mm	% passing
100	100	0.0630	
90	100	0.0200	
75	100	0.0060	
63	100	0.0020	
50	100		
37.5	100		
28	100		
20	92.8		
14	89.2		
10	85.5		
6.3	82.4		
5.0	81		
2.36	75.9		
2.00	74.7		
1.18	70.3		
0.600	66.8		
0.425	63.5		
0.300	60.6		
0.212	58.5		
0.150	56.2		
0.063	52		

Cobbles, %	0
Gravel, %	25
Sand, %	23
Clay / Silt, %	52



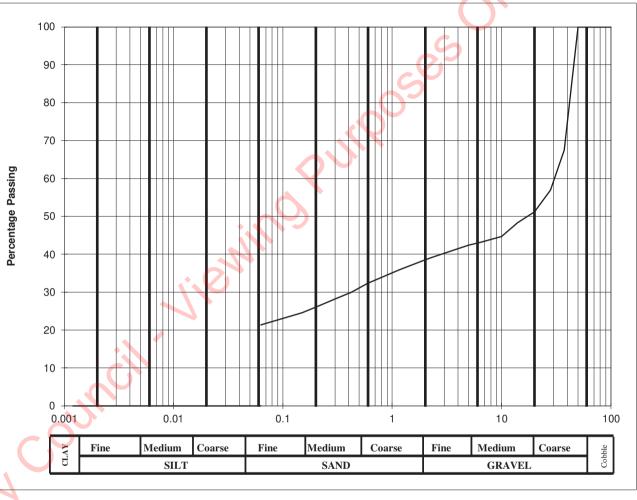
Client:	Sky Castle Ltd.	Lab
Project:	Moygaddy	Sampl

Lab. No:	21/863	Hole ID:	TP 06
Sample No:	MK47	Depth, m:	1.00

Material description:	slightly sandy slightly gravelly silty CLAY
	Soils with clay or silt content between 15% - 35% can be classified as clay or silt depending on the field Engineers assessment of in-situ behaviour.
Remarks	Where material is for re-use and therefore disturbed, only soils with clay or silt >35% are classified as clay or silt

BS Sieve	Percent	Hydrometer	analysis
size, mm	passing	Diameter, mm	% passing
100	100	0.0630	
90	100	0.0200	
75	100	0.0060	
63	100	0.0020	
50	100		
37.5	67.5		
28	56.9		
20	51.2		
14	48.3		
10	44.7		
6.3	43.1		
5.0	42.4		
2.36	39.3		
2.00	38.5		
1.18	36		
0.600	32.3		
0.425	30		
0.300	28.2		
0.212	26.3		
0.150	24.6		
0.063	21		

Cobbles, %	0
Gravel, %	62
Sand, %	18
Clay / Silt, %	21



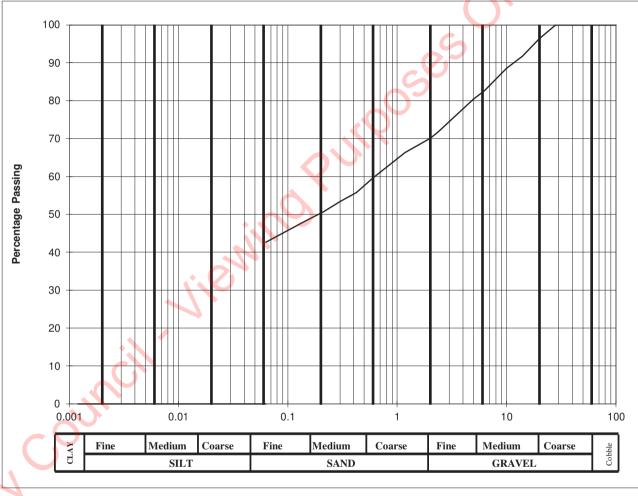
				_		
Client:	Sky Castle Ltd.	Lab. No:	21/866		Hole ID :	TP 08
Project:	Moy <mark>gadd</mark> y	Sample No:	MK38		Depth, m:	1.00

	Material description:	slightly sandy gravelly silty CLAY
Г	Damanda	Soils with clay or silt content between 15% - 35% can be classified as clay or silt depending on the field Engineers assessment of in-situ behaviour.
Remarks:	Where material is for re-use and therefore disturbed, only soils with clay or silt >35% are classified as clay or silt	

BS Sieve	Percent	Hydrometer	analysis
size, mm	passing	Diameter, mm	% passing
100	100	0.0630	
90	100	0.0200	
75	100	0.0060	
63	100	0.0020	
50	100		
37.5	100		
28	100		
20	96.4		
14	91.7		
10	88.5		
6.3	82.6		
5.0	80.4		
2.36	71.7		
2.00	70		
1.18	66.3		
0.600	59.5		
0.425	55.7		
0.300	53.4		
0.212	50.7		
0.150	48.5		
0.063	43		

Cobbles, %	0
Gravel, %	30
Sand, %	27
Clay / Silt, %	43

Remarks:



Client:	Sky Castle Ltd.	
Project:	Moygaddy	Sa

Lab. No:	21/869
Sample No:	MK63

Hole ID:	TP 10
Depth, m:	1.00

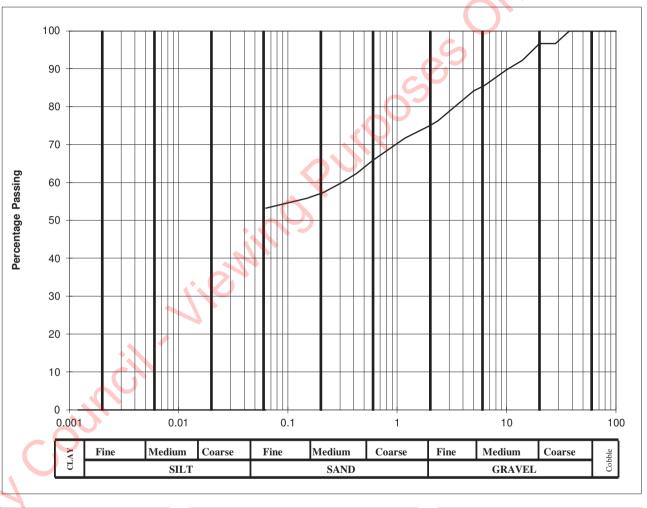
Material description:	slightly sandy slightly	gravelly silty CLAY
	0.11. 21. 1	

Soils with clay or silt content between 15% - 35% can be classified as clay or silt depending on the field Engineers assessment of in-situ behaviour.

Where material is for re-use and therefore disturbed, only soils with clay or silt >35% are classified as clay or silt

BS Sieve	Percent	Hydrometer analysis	
size, mm	passing	Diameter, mm	% passing
100	100	0.0630	
90	100	0.0200	
75	100	0.0060	
63	100	0.0020	
50	100		
37.5	100		
28	96.6		
20	96.6		
14	92.2		
10	89.7		
6.3	85.6		
5.0	84.1		
2.36	76.3		
2.00	75		
1.18	71.7		
0.600	65.8		
0.425	62.3		
0.300	59.7		
0.212	57.3		
0.150	55.8		
0.063	53		

Cobbles, %	0
Gravel, %	25
Sand, %	22
Clay / Silt, %	53



Client:	Sky Castle Ltd.	
Project:	Moygaddy	

Lab. No:	21/871
Sample No:	MK58

Hole ID:	TP 11
Depth, m:	1.50

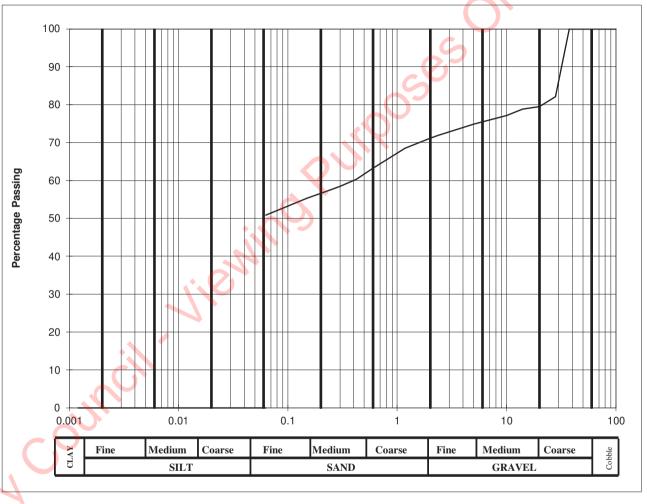
Material description: slightly sandy slightly gravelly silty CLAY

Remarks: Soils with clay or silt content between 15% - 35% can be classified as clay or silt depending on the field Engineers assessment of in-situ behaviour. Where material is for re-use and therefore disturbed, only soils with clay or silt >35% are classified as clay or silt

BS Sieve	Percent	Hydrometer analysis	
size, mm	passing	Diameter, mm	% passing
100	100	0.0630	
90	100	0.0200	
75	100	0.0060	
63	100	0.0020	
50	100		
37.5	100		
28	82.1		
20	79.5		
14	78.8		
10	77.1		
6.3	75.6		
5.0	74.8		
2.36	71.9		
2.00	71.1		
1.18	68.5		
0.600	63.2		
0.425	60.3		
0.300	58.4		
0.212	56.8		
0.150	55.3		
0.063	51		

Cobbles, %	0
Gravel, %	29
Sand, %	20
Clay / Silt, %	51

Remarks:



Client:	Sky Castle Ltd.	
Project:	Moygaddy	Sa

Lab. No:	21/873
Sample No:	MK35

Hole ID :	TP 12
Depth, m:	1.00

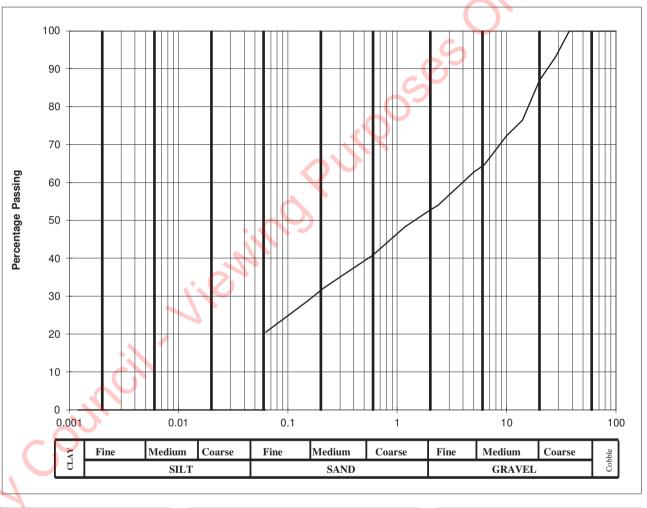
Material description:	slightly sandy slightly	gravelly silty CLAY
	0.11 1.11	1 . 150/ 25

Soils with clay or silt content between 15% - 35% can be classified as clay or silt depending on the field Engineers assessment of in-situ behaviour.

Where material is for re-use and therefore disturbed, only soils with clay or silt >35% are classified as clay or silt

BS Sieve	Percent	Hydrometer	analysis
size, mm	passing	Diameter, mm	% passing
100	100	0.0630	
90	100	0.0200	
75	100	0.0060	
63	100	0.0020	
50	100		
37.5	100		
28	93.1		
20	86.9		
14	76.4		
10	72.3		
6.3	64.7		
5.0	62.7		
2.36	54		
2.00	52.7		
1.18	48.3		
0.600	40.8		
0.425	37.9		
0.300	35		
0.212	32.1		
0.150	28.6		
0.063	21		

Cobbles, %	0
Gravel, %	47
Sand, %	32
Clay / Silt, %	21



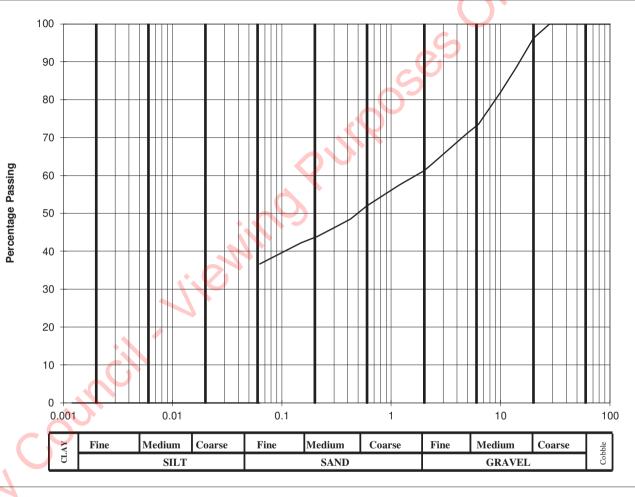
Client:	Sky Castle Ltd.	Lab. N
Project:	Moygaddy	Sample N

Lab. No:	21/875	Hole ID:	TP 13
Sample No:	MK29	Depth, m:	1.50

L	Material description :	slightly sandy gravelly silty CLAY
		Soils with clay or silt content between 15% - 35% can be classified as clay or silt depending on the field Engineers assessment of in-situ behaviour.
L	Remarks:	Where material is for re-use and therefore disturbed, only soils with clay or silt >35% are classified as clay or silt

BS Sieve	Percent	Hydrometer	analysis
size, mm	passing	Diameter, mm	% passing
100	100	0.0630	
90	100	0.0200	
75	100	0.0060	
63	100	0.0020	
50	100		
37.5	100		
28	100		
20	96.2		
14	88.6		
10	81.9		
6.3	73.5		
5.0	71.2		
2.36	63		
2.00	61.2		
1.18	57.4		
0.600	51.9		
0.425	48.5		
0.300	46.2		
0.212	43.9		
0.150	42.2		
0.063	37		

Cobbles, %	0
Gravel, %	39
Sand, %	24
Clay / Silt, %	37

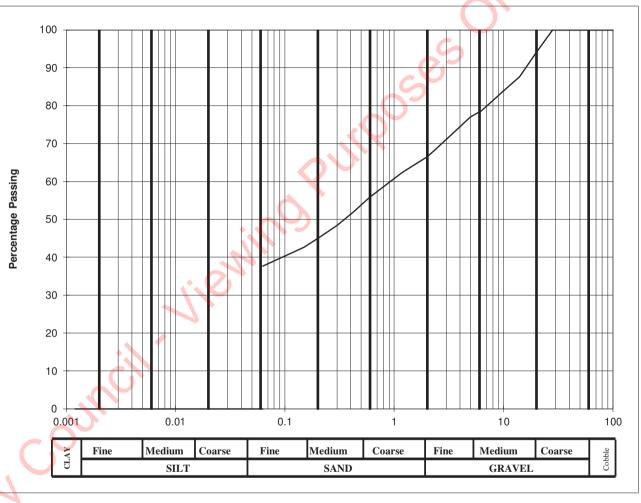


Client:	Sky Castle Ltd.	Lab. No:	21/878	Hole ID:	TP 15
Project :	Moygaddy	Sample No:	MK23	Depth, m:	1.00

ı	Material description:	slightly sandy gravelly silty CLAY
ı		Soils with clay or silt content between 15% - 35% can be classified as clay or silt depending on the field Engineers assessment of in-situ behaviour.
	Remarks :	Where material is for re-use and therefore disturbed, only soils with clay or silt >35% are classified as clay or silt

BS Sieve	Percent	Hydrometer	analysis
size, mm	passing	Diameter, mm	% passing
100	100	0.0630	
90	100	0.0200	
75	100	0.0060	
63	100	0.0020	
50	100		
37.5	100		
28	100		
20	94.1		
14	87.6		
10	83.9		
6.3	78.6		
5.0	77		
2.36	68.3		
2.00	66.5		
1.18	62.3		
0.600	55.8		
0.425	51.9		
0.300	48.4		
0.212	45.4		
0.150	42.6		
0.063	38		

Cobbles, %	0
Gravel, %	34
Sand, %	29
Clay / Silt, %	38



Client:	Sky Castle Ltd.	Lab. No :	21/883	Hole ID:	TP 19
Project :	Moygaddy	Sample No:	MK05	Depth, m:	1.00

١	Material description:	slightly sandy slightly gravelly silty CLAY
١		Soils with clay or silt content between 15% - 35% can be classified as clay or silt depending on the field Engineers assessment of in-situ behaviour.
١	Remarks:	Where material is for re-use and therefore disturbed, only soils with clay or silt >35% are classified as clay or silt

California Bearing Ratio (CBR) In accordance with BS1377: Part 4: Method 7

Client	Sky Castle Ltd.	0.2
Site	Moygaddy	
S.I. File No	5863 / 21	
Test Lab	Site Investigations Ltd., Carhugar The Grange, 12th Lock Rd., Lucan Co. Dublin.	Tel (01) 6108768 Email info@siteinvestigations.ie
Report Date	12th July 2021	

CBR No	Depth	Sample	Sample	Lab Ref	Moisture Content	CBR Value (%)	Location / Remarks
	(mBGL)	No	Type		(%)		
TP01	0.50	MK14	CBR	21/855	10.3	7.5	
TP02	0.50	MK07	CBR	21/857	14.8	5.2	
TP03	0.50	MK02	CBR	21/858	16.5	5.2	
TP04	0.50	MK43	CBR	21/859	8.8	9.7	
TP05	0.50	MK39	CBR	21/861	12.3	8.2	
TP06	0.50	MK46	CBR	21/862	10.4	9.5	
TP07	0.50	MK51	CBR	21/864	12.9	8.8	
TP08	0.50	MK37	CBR	21/865	17.0	4.3	
TP09	0.50	MK60	CBR	21/867	15.3	7.4	
TP10	0.50	MK62	CBR	21/868	10.1	10.9	
TP11	0.50	MK57	CBR	21/870	17.5	5.0	
TP12	0.50	MK34	CBR	21/872	14.8	8.9	
TP13	0.50	MK27	CBR	21/874	12.1	11.2	
TP14	0.50	MK24	CBR	21/876	9.1	11.6	
TP15	0.50	MK22	CBR	21/877	17.9	4.1	
TP16	0.50	MK54	CBR	21/879	17.6	5.2	
TP17	0.50	MK17	CBR	21/880	12.7	6.8	
TP18	0.50	MK11	CBR	21/881	10.8	9.3	
TP19	0.50	MK04	CBR	21/882	15.7	5.3	
TP20	0.50	MK19	CBR	21/884	12.6	11.4	
TP21	0.50	MK31	CBR	21/885	10.8	10.3	

Chemical Testing In accordance with BS 1377: Part 3

Client	Sky Castle Ltd.	
Site	Moygaddy	
S.I. File No	5863 / 21	Co
Test Lab	Site Investigations Ltd., Carhugar The Grange, 12th Lock Rd., Lucan Co. Dublin. Tel (01) 6108768	Email:info@siteinvestigations.ie
Report Date	12th July 2021	

Hole Id	Depth	Sample	Lab Ref	рН	Water Soluble	Water Soluble	Loss on	Chloride	% passing	Remarks
	(mBGL)	No		Value	Sulphate Content	Sulphate Content	Ignition	ion	2mm	
					(2:1 Water-soil	(2:1 Water-soil	(Organic	Content		
					extract) (SO ₃)	extract) (SO ₃)	Content)	(water:soil		
					g/L	%	%	ratio 2:1)		
								%		
TP01	1.00	MK15	21/856	8.59	0.120	0.085		0.26	70.7	
TP04	1.00	MK44	21/860	8.75	0.126	0.093		0.21	74.2	
TP06	1.00	MK47	21/863	8.80	0.126	0.094		0.23	74.7	
TP08	1.00	MK38	21/866	8.73	0.117	0.045		0.22	38.5	
TP10	1.00	MK63	21/869	8.66	0.122	0.085		0.24	70.0	
TP12	1.00	MK35	21/873	8.71	0.127	0.090		0.24	71.1	
TP15	1.00	MK23	21/878	8.73	0.123	0.075		0.24	61.2	
TP19	1.00	MK05	21/883	8.67	0.120	0.080		0.26	66.5	

Paddy McGonagle
Site Investigations Ltd.

Test Results of the wind purify council. The wind purify council. The wind purify council. The wind purify council and the wind purify council

Point Load Test Broch, E. & Franklin, J.A., IRSM Point Load Test Method Uniaxial Compressive Strength in accordance with BS1881

Client	Sky Castle Ltd.	
Site	Moygaddy	
S.I. File No	5863 / 19	
Test Lab	Site Investigations Ltd., Carhugar The Grange, 12th Lock Rd., Lucan Co. Dublin. Tel (01) 6108768	Email:info@siteinvestigations.ie
Report Date	22nd July 2021	

Hole ID	Depth (m)	Lab Ref No.	Sample Type	Diameter / Height (mm)	Test Type	Is (MN/m²)	Compressive Strength (MPa)	Strength Designation
RC04	6.78	21/931	С	65	PL	4.73		Very Strong
RC04	8.47	21/932	C	65	PL	3.79		Strong
RC05	6.20	21/933	C	65	PL	4.50		Very Strong
RC05	8.17	21/934	C	65	PL	2.13		Strong
RC06	5.45	21/935	С	65	PL	3.43		Strong
RC06	6.96	21/936	С	65	PL	4.50	116	Very Strong
RC07	6.20	21/937	С	65	PL	4.50		Very Strong
RC07	7.10	21/938	С	65	PL	4.26		Very Strong
RC08	7.07	21/939	С	65	PL	1.70		Moderately Strong
RC08	8.24	21/940	C	65	PL	2.96		Strong
RC09	6.40	21/941	C	65	PL	5.21		Very Strong
RC09	7.00	21/942	С	65	PL	1.23		Moderately Strong
RC10	3.27	21/943	С	65	PL •	4.38		Very Strong
RC10	4.10	21/944	C	65	PL	2.60		Strong
RC11	6.80	21/945	С	65	PL	4.38		Very Strong
RC11	8.90	21/946	С	65	PL	3.79		Strong
RC17	8.35	21/947	C	65	PL	3.55		Strong
RC17	8.29	21/948	C	65	PL	4.50		Very Strong
RC19	5.50	21/949	C	65	PL	4.14		Very Strong
RC19	6.80	21/950	C	65	PL	4.62		Very Strong

Approx.
Equivalent
UCS Value
(MPa)
119.5
96.0
114.0
54.0
87.0
114.0
114.0
108.0
43.0
75.0
132.0
31.0
111.0
66.0
111.0
96.0
90.0
114.0
104.5
108.0

Remarks
Tested Diametrically

Weath County

	Irish Transve	rse Mercator	F1	Irish Nati	onal Grid
Location	Easting	Northing	Elevation	Easting	Northing
		Bore	holes		
BH01	693986.514	739217.399	56.45	294056.159	239192.090
BH02	693926.010	739294.840	56.95	293995.641	239269.547
BH03	694117.023	739155.527	55.01	294186.696	239130.205
BH04	693732.812	739457.539	56.85	293802.400	239432.280
BH05	693928.844	739604.500	58.72	293998.473	239579.274
BH06	693927.326	739421.930	57.55	293996.956	239396.665
BH07	694241.270	739411.796	58.99	294310.968	239386.531
BH08	694331.307	739691.333	61.30	294401.022	239666.129
BH09	694598.661	739652.377	61.68	294668.434	239627.166
BH10	694446.855	739466.694	59.25	294516.597	239441.442
BH11	694790.229	739307.430	59.88	294860.046	239282.145
BH12	694615.966	739002.198	56.86	294685.748	238976.846
BH13	694659.374	738763.773	52.09	294729.167	238738.369
BH14	694546.422	738784.570	53.46	294616.190	238759.170
BH15	694458.907	738814.666	54.44	294528.656	238789.272
BH16	693655.329	739258.288	49.53	293724.902	239232.986
BH17	694518.865	738836.591	54.89	294588.627	238811.202
BH18	694562.423	738770.148	52.93	294632.195	238744.745
		Rotary C	oreholes		
RC04	693637.963	739436.766	56.84	293707.531	239411.502
RC05	693935.222	739548.071	58.60	294004.853	239522.833
RC06	694016.492	739390.864	57.65	294086.142	239365.593
RC07	694142.350	739365.230	57.84	294212.027	239339.954
RC08	694212.597	739630.304	60.48	294282.287	239605.086
RC09	694497.168	739610.386	61.10	294566.919	239585.165
RC10	694428.449	739378.834	57.86	294498.187	239353.562
RC11	694711.726	739248.236	59.49	294781.526	239222.938
RC12	694562.423	738770.148	52.93	294632.195	238744.745
RC13	694473.806	738837.204	55.00	294543.558	238811.815
RC14	694269.076	739051.513	55.61	294338.783	239026.170
RC16	694648.959	738608.023	45.96	294718.751	238582.586
RC17	693707.911	739303.990	54.78	293777.495	239278.698
RC18	693667.400	739242.451	49.86	293736.976	239217.145
RC19	694613.822	739485.171	58.39	294683.599	239459.924
RC20	694717.266	739392.581	59.02	294787.066	239367.314
		Tria	Pits		
TP01	693958.608	739151.571	55.32	294028.247	239126.247
TP02	693988.420	739286.118	57.37	294058.064	239260.824
TP03	693767.173	739286.781	55.26	293836.770	239261.486
TP04	693682.930	739502.916	56.95	293752.507	239477.667

	Irish Transve	rse Mercator	Florestion	Irish Nati	onal Grid
Location	Easting	Northing	Elevation	Easting	Northing
TP05	693971.792	739656.168	58.70	294041.430	239630.954
TP06	693989.839	739437.563	57.88	294059.483	239412.302
TP07	694176.647	739446.736	58.93	294246.331	239421.478
TP08	694199.733	739712.642	61.26	294269.420	239687.442
TP09	694508.798	739701.821	62.01	294578.551	239676.620
TP10	694486.386	739434.493	58.96	294556.136	239409.234
TP11	694739.889	739363.529	59.42	294809.695	239338.256
TP12	694471.269	739060.502	56.97	294541.019	239035.162
TP13	694562.423	738770.148	52.93	294632.195	238744.745
TP14	694240.465	739010.894	55.01	294310.166	238985.542
TP15	694131.238	739202.931	55.37	294200.914	239177.620
TP16	694580.524	739205.916	58.33	294650.296	239180.608
TP17	693968.747	739114.742	54.52	294038.389	239089.410
TP18	693940.121	739224.755	55.98	294009.756	239199.447
TP19	693876.942	739296.996	55.71	293946.562	239271.703
TP20	694084.588	739079.517	55.01	294154.255	239054.179
TP21	694518.865	738836.591	54.89	294588.627	238811.202
		Dynamic	c Probes		
DP01	694395.693	739790.416	62.17	294465.421	239765.234
DP02	694488.532	739787.664	61.87	294558.280	239762.481
DP03	693987.686	739685.908	58.58	294057.327	239660.700
DP04	694088.248	739692.829	59.34	294157.911	239667.624
DP05	694187.716	739683.631	60.98	294257.400	239658.424
DP06	694288.959	739687.709	61.12	294358.665	239662.504
DP07	694385.497	739682.425	61.53	294455.224	239657.219
DP08	694489.069	739686.527	61.51	294558.818	239661.323
DP09	694590.817	739686.475	61.71	294660.588	239661.271
DP10	694693.928	739687.423	60.58	294763.721	239662.220
DP11	693887.836	739587.012	58.01	293957.456	239561.782
DP12	693990.198	739586.789	58.63	294059.841	239561.560
DP13	694087.587	739588.545	58.95	294157.250	239563.317
DP14	694188.942	739587.683	59.62	294258.627	239562.455
DP15	694289.424	739586.183	59.97	294359.131	239560.956
DP16	694488.048	739589.540	60.82	294557.798	239564.315
DP17	694589.076	739587.354	60.73	294658.847	239562.129
DP18	694688.772	739584.729	60.89	294758.565	239559.504
DP19	693691.519	739485.259	57.06	293761.098	239460.006
DP20	693789.642	739485.089	56.56	293859.242	239459.837
DP21	693889.602	739486.389	57.21	293959.224	239461.138
DP22	693990.017	739487.250	58.16	294059.660	239461.999
DP23	694089.764	739487.208	58.44	294159.429	239461.958

Lasation	Irish Transve	erse Mercator	Flavotian	Irish Nati	onal Grid
Location	Easting	Northing	Elevation	Easting	Northing
DP24	694198.133	739492.619	59.24	294267.821	239467.371
DP25	694385.716	739486.593	59.28	294455.444	239461.345
DP26	694489.024	739485.194	59.56	294558.775	239459.946
DP27	694586.781	739491.852	58.59	294656.553	239466.606
DP28	694688.953	739488.632	58.31	294758.747	239463.386
DP29	694780.802	739491.934	56.47	294850.615	239466.689
DP30	693593.273	739395.730	56.03	293662.832	239370.457
DP31	693688.922	739386.795	57.17	293758.501	239361.521
DP32	693787.843	739388.255	56.49	293857.444	239362.982
DP33	693889.656	739385.777	56.89	293959.278	239360.504
DP34	693987.346	739387.484	57.60	294056.989	239362.212
DP35	694086.861	739385.871	57.91	294156.526	239360.599
DP36	694190.231	739385.957	58.35	294259.918	239360.686
DP37	694288.456	739387.753	58.62	294358.164	239362.483
DP38	694370.568	739380.643	58.45	294440.294	239355.372
DP39	694486.826	739390.243	58.25	294556.577	239364.974
DP40	694569.043	739386.611	54.78	294638.812	239361.342
DP41	694691.616	739389.831	59.36	294761.411	239364.563
DP42	694791.212	739385.883	58.94	294861.028	239360.615
DP43	693688.642	739290.847	52.18	293758.222	239265.552
DP44	693788.258	739285.161	56.04	293857.859	239259.865
DP45	694091.482	739278.290	56.67	294161.149	239252.995
DP46	694430.386	739324.235	53.90	294500.125	239298.952
DP47	694493.472	739282.726	58.49	294563.225	239257.434
DP48	694590.116	739288.613	59.21	294659.890	239263.323
DP49	694682.452	739291.233	59.96	294752.246	239265.944
DP50	694788.363	739288.137	59.82	294858.180	239262.848
DP51	693890.121	739187.554	55.56	293959.745	239162.238
DP52	693984.693	739184.950	56.07	294054.337	239159.634
DP53	694089.481	739189.955	55.39	294159.148	239164.641
DP54	694189.069	739183.974	55.51	294258.757	239158.659
DP55	694250.676	739180.873	51.64	294320.378	239155.557
DP56	694409.931	739184.774	55.98	294479.667	239159.460
DP57	694513.646	739200.814	58.11	294583.404	239175.504
DP58	694584.206	739182.489	58.08	294653.979	239157.176
DP59	694690.632	739192.594	58.36	294760.428	239167.284
DP60	694784.383	739187.502	58.33	294854.199	239162.191
DP61	693991.061	739083.755	53.29	294060.708	239058.417
DP62	694185.443	739087.742	49.21	294255.131	239062.406
DP63	694290.240	739085.762	55.96	294359.951	239060.426
DP64	694385.154	739082.180	56.76	294454.885	239056.844

Location Easting Northing Elevation Easting Northing DP65 694488.362 739086.289 57.03 294558.116 239060.3 DP66 694588.543 739090.206 57.41 294658.318 239064.3 DP67 694682.814 739083.914 56.22 294857.072 239058.3 DP68 694787.254 739083.914 56.22 294857.072 239058.3 DP69 694090.959 738991.035 49.72 294160.628 238965.1 DP70 694187.890 738981.735 52.48 294257.580 238956.3 DP71 694289.189 738983.578 55.45 294358.901 238958.3 DP72 694384.733 738989.607 56.10 294454.465 238964.3 DP73 694486.822 738986.510 56.87 294556.576 238961.3 DP75 694691.101 738989.216 56.20 294760.899 238953.3 DP76 694188.862 738882.936 48.76 294258.5
DP66 694588.543 739090.206 57.41 294658.318 239064.8 DP67 694682.814 739084.421 57.54 294752.609 239059.8 DP68 694787.254 739083.914 56.22 294857.072 239058.8 DP69 694090.959 738991.035 49.72 294160.628 238965.1 DP70 694187.890 738981.735 52.48 294257.580 238956.1 DP71 694289.189 738983.578 55.45 294358.901 238958.1 DP72 694384.733 738989.607 56.10 294454.465 238964.1 DP73 694486.822 738986.510 56.87 294556.576 238961.1 DP74 694586.960 738983.395 56.54 294656.736 238958.1 DP75 694691.101 738989.216 56.20 294760.899 238963.1 DP76 694188.862 738882.936 48.76 294258.553 238857.1 DP78 694291.409 738890.201 54.87 294560.3
DP67 694682.814 739084.421 57.54 294752.609 239059. DP68 694787.254 739083.914 56.22 294857.072 239058. DP69 694090.959 738991.035 49.72 294160.628 238965. DP70 694187.890 738981.735 52.48 294257.580 238956. DP71 694289.189 738983.578 55.45 294358.901 238958. DP72 694384.733 738989.607 56.10 294454.465 238964. DP73 694486.822 738986.510 56.87 294556.576 238961. DP74 694586.960 738983.395 56.54 294656.736 238958. DP75 694691.101 738989.216 56.20 294760.899 238963. DP76 694188.862 738882.936 48.76 294258.553 238857. DP77 694291.409 738890.201 54.87 294462.268 238864. DP79 694490.609 738887.143 55.82 294560.365
DP68 694787.254 739083.914 56.22 294857.072 239058. DP69 694090.959 738991.035 49.72 294160.628 238965. DP70 694187.890 738981.735 52.48 294257.580 238956. DP71 694289.189 738983.578 55.45 294358.901 238958. DP72 694384.733 738989.607 56.10 294454.465 238964. DP73 694486.822 738986.510 56.87 294556.576 238961. DP74 694586.960 738983.395 56.54 294656.736 238958. DP75 694691.101 738989.216 56.20 294760.899 238963. DP76 694188.862 738882.936 48.76 294258.553 238857. DP77 694291.409 738890.282 54.52 294361.122 238864. DP78 694392.533 738890.201 54.87 294462.268 238864. DP79 694490.609 738887.143 55.82 294560.365
DP69 694090.959 738991.035 49.72 294160.628 238965. DP70 694187.890 738981.735 52.48 294257.580 238956. DP71 694289.189 738983.578 55.45 294358.901 238958. DP72 694384.733 738989.607 56.10 294454.465 238964. DP73 694486.822 738986.510 56.87 294556.576 238961. DP74 694586.960 738983.395 56.54 294760.899 238963. DP75 694691.101 738989.216 56.20 294760.899 238963. DP76 694188.862 738890.282 54.52 294361.122 238864. DP77 694291.409 738890.282 54.52 294361.122 238864. DP78 694392.533 738890.201 54.87 294462.268 238864. DP80 694587.972 738887.143 55.82 294657.749 238861. DP81 694688.909 738783.740 47.18 294355.719
DP70 694187.890 738981.735 52.48 294257.580 238956.3 DP71 694289.189 738983.578 55.45 294358.901 238958.3 DP72 694384.733 738989.607 56.10 294454.465 238964.3 DP73 694486.822 738986.510 56.87 294556.576 238961.3 DP74 694586.960 738983.395 56.54 294656.736 238958.3 DP75 694691.101 738989.216 56.20 294760.899 238963.3 DP76 694188.862 738882.936 48.76 294258.553 238857.3 DP77 694291.409 738890.282 54.52 294361.122 238864.3 DP78 694392.533 738890.201 54.87 294462.268 238864.3 DP79 694490.609 738885.308 55.95 294560.365 238859.3 DP80 694587.972 738887.143 55.82 294758.707 238864.3 DP81 694286.007 738783.740 47.18 294355.7
DP71 694289.189 738983.578 55.45 294358.901 238958.5 DP72 694384.733 738989.607 56.10 294454.465 238964. DP73 694486.822 738986.510 56.87 294556.576 238961. DP74 694586.960 738983.395 56.54 294656.736 238958. DP75 694691.101 738989.216 56.20 294760.899 238963. DP76 694188.862 738882.936 48.76 294258.553 238857. DP77 694291.409 738890.282 54.52 294361.122 238864. DP78 694392.533 738890.201 54.87 294462.268 238864. DP79 694490.609 738885.308 55.95 294560.365 238859. DP80 694587.972 738887.143 55.82 294657.749 238864. DP81 694688.909 738783.740 47.18 294355.719 238758. DP83 694396.549 738786.809 53.35 294466.285
DP72 694384.733 738989.607 56.10 294454.465 238964. DP73 694486.822 738986.510 56.87 294556.576 238961. DP74 694586.960 738983.395 56.54 294656.736 238958. DP75 694691.101 738989.216 56.20 294760.899 238963. DP76 694188.862 738882.936 48.76 294258.553 238857. DP77 694291.409 738890.282 54.52 294361.122 238864. DP78 694392.533 738890.201 54.87 294462.268 238864. DP79 694490.609 738885.308 55.95 294560.365 238859. DP80 694587.972 738887.143 55.82 294657.749 238861. DP81 694688.909 738889.761 54.95 294758.707 238864. DP82 694286.007 738783.740 47.18 294355.719 238758. DP83 694396.549 738786.809 53.35 294466.285
DP73 694486.822 738986.510 56.87 294556.576 238961. DP74 694586.960 738983.395 56.54 294656.736 238958.0 DP75 694691.101 738989.216 56.20 294760.899 238963.3 DP76 694188.862 738882.936 48.76 294258.553 238857.3 DP77 694291.409 738890.282 54.52 294361.122 238864.3 DP78 694392.533 738890.201 54.87 294462.268 238864.3 DP79 694490.609 738885.308 55.95 294560.365 238859.3 DP80 694587.972 738887.143 55.82 294657.749 238861.3 DP81 694688.909 738783.740 47.18 294355.719 238758.3 DP82 694286.007 738786.809 53.35 294466.285 238761.4 DP84 694589.396 738787.697 53.34 294659.174 238762.3
DP74 694586.960 738983.395 56.54 294656.736 238958.0 DP75 694691.101 738989.216 56.20 294760.899 238963.8 DP76 694188.862 738882.936 48.76 294258.553 238857.8 DP77 694291.409 738890.282 54.52 294361.122 238864.8 DP78 694392.533 738890.201 54.87 294462.268 238864.8 DP79 694490.609 738885.308 55.95 294560.365 238859.8 DP80 694587.972 738887.143 55.82 294657.749 238861.1 DP81 694688.909 738889.761 54.95 294758.707 238864.3 DP82 694286.007 7387883.740 47.18 294355.719 238758.3 DP83 694396.549 738786.809 53.35 294466.285 238761.4 DP84 694589.396 738787.697 53.34 294659.174 238762.3
DP75 694691.101 738989.216 56.20 294760.899 238963.3 DP76 694188.862 738882.936 48.76 294258.553 238857.3 DP77 694291.409 738890.282 54.52 294361.122 238864.3 DP78 694392.533 738890.201 54.87 294462.268 238864.3 DP79 694490.609 738885.308 55.95 294560.365 238859.3 DP80 694587.972 738887.143 55.82 294657.749 238861.3 DP81 694688.909 738889.761 54.95 294758.707 238864.3 DP82 694286.007 738783.740 47.18 294355.719 238758.3 DP83 694396.549 738786.809 53.35 294466.285 238761.4 DP84 694589.396 738787.697 53.34 294659.174 238762.3
DP76 694188.862 738882.936 48.76 294258.553 238857.3 DP77 694291.409 738890.282 54.52 294361.122 238864.3 DP78 694392.533 738890.201 54.87 294462.268 238864.3 DP79 694490.609 738885.308 55.95 294560.365 238859.3 DP80 694587.972 738887.143 55.82 294657.749 238861.3 DP81 694688.909 738889.761 54.95 294758.707 238864.3 DP82 694286.007 738783.740 47.18 294355.719 238758.3 DP83 694396.549 738786.809 53.35 294466.285 238761.4 DP84 694589.396 738787.697 53.34 294659.174 238762.3
DP77 694291.409 738890.282 54.52 294361.122 238864.9 DP78 694392.533 738890.201 54.87 294462.268 238864.9 DP79 694490.609 738885.308 55.95 294560.365 238859.9 DP80 694587.972 738887.143 55.82 294657.749 238861.1 DP81 694688.909 738889.761 54.95 294758.707 238864.9 DP82 694286.007 738783.740 47.18 294355.719 238758.3 DP83 694396.549 738786.809 53.35 294466.285 238761.2 DP84 694589.396 738787.697 53.34 294659.174 238762.3
DP78 694392.533 738890.201 54.87 294462.268 238864.8 DP79 694490.609 738885.308 55.95 294560.365 238859.8 DP80 694587.972 738887.143 55.82 294657.749 238861.3 DP81 694688.909 738889.761 54.95 294758.707 238864.3 DP82 694286.007 738783.740 47.18 294355.719 238758.3 DP83 694396.549 738786.809 53.35 294466.285 238761.4 DP84 694589.396 738787.697 53.34 294659.174 238762.5
DP79 694490.609 738885.308 55.95 294560.365 238859.9 DP80 694587.972 738887.143 55.82 294657.749 238861. DP81 694688.909 738889.761 54.95 294758.707 238864. DP82 694286.007 738783.740 47.18 294355.719 238758.3 DP83 694396.549 738786.809 53.35 294466.285 238761.4 DP84 694589.396 738787.697 53.34 294659.174 238762.3
DP80 694587.972 738887.143 55.82 294657.749 238861. DP81 694688.909 738889.761 54.95 294758.707 238864.3 DP82 694286.007 738783.740 47.18 294355.719 238758.3 DP83 694396.549 738786.809 53.35 294466.285 238761.4 DP84 694589.396 738787.697 53.34 294659.174 238762.3
DP81 694688.909 738889.761 54.95 294758.707 238864.3 DP82 694286.007 738783.740 47.18 294355.719 238758.3 DP83 694396.549 738786.809 53.35 294466.285 238761.4 DP84 694589.396 738787.697 53.34 294659.174 238762.3
DP82 694286.007 738783.740 47.18 294355.719 238758.3 DP83 694396.549 738786.809 53.35 294466.285 238761.4 DP84 694589.396 738787.697 53.34 294659.174 238762.3
DP83 694396.549 738786.809 53.35 294466.285 238761.4 DP84 694589.396 738787.697 53.34 294659.174 238762.3
DP84 694589.396 738787.697 53.34 294659.174 238762.2
Country Country

