

BORD@NAMÓNA

Naturally Driven

Derryadd Wind Farm

**Haul Route Assessment
N6 Junction 12
Preliminary Scope of Works**

July 2018
Revision: A

TOBIN CONSULTING ENGINEERS



REPORT

PROJECT:

Derryadd Wind Farm, Haul Rout Assessment N6
Junction 12 Preliminary Scope of Works

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1 INTRODUCTION

Initial assessment was undertaken for the haul of abnormal loads for the Derryadd Wind Farm project. It identified the main access routes via Motorways, National Roads and Regional Roads. The assessment is based on available width and clearance being available on the motorway sections. This assessment investigates the haul route options available for the transport of the proposed 28 no. wind turbines with a 65m (maximum) length blade, from the motorway to the site accesses at Derryadd, Co. Longford. The preferred and only viable route (without encroachment into private third party lands) is via the N6 Junction 12 at Athlone onto the N61 towards Roscommon and then to the site via the N63 and R392.

The origin of the turbines has not been determined at this time, however, delivery from all parts of the country is anticipated to be via the nearest motorway to the port of origin. The routes are the M6 / M4 from either Dublin or Galway ports to the N6 Junction 12. The assessment is based on origin to destination with the assumption that the unloaded vehicle can return along the same route due to reduced profile following unloading of the turbine elements.

1.1 SCOPE OF THE REPORT

The purpose of this report is to outline the advanced works / enabling works that will be required at the N6 Junction 12 within the red line boundary of motorway maintenance and renewal contract (MMaRC) Network B (see Figure 1) which is maintained by Colas Roadbridge JV on behalf of Transport Infrastructure Ireland.

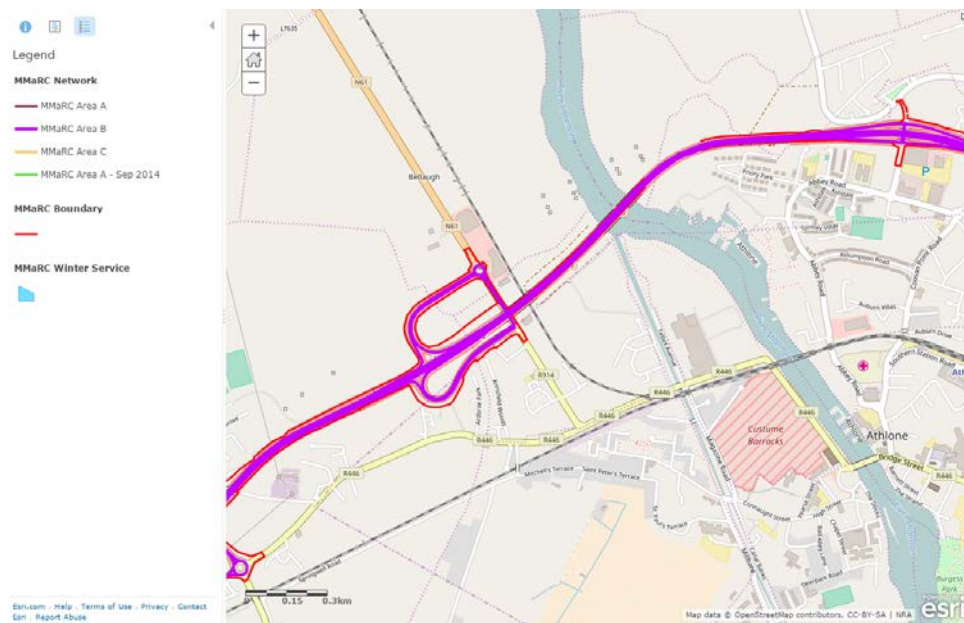


Figure 1 Location of the N6 Junction 12, MMaRC Area B

2 ADVANCED WORKS

Advanced works will be required at either the eastbound or westbound slip road exits from the N6 at Junction 12 in Athlone, following procurement of the successful tenderers for the wind turbines on grant of planning. To establish the extents of the advanced works required, swept path analysis is undertaken at both locations.

Temporary traffic management will be required for the duration of the advanced works. The details of the advanced works are outlined in the following section with itemised list in the Tables in Appendix A for each haul route origin. Drawings indicating the locations of the advanced works due to the swept path of the vehicle and the abnormal load have been prepared and are included in Appendix B.

2.1 N6 SLIP EASTBOUND TO N61

2.1.1 *Exit from N6 Dual Carriageway to N6 Slip Road*

Turning from the N6 dual carriageway onto the N6 slip road to Ganly's roundabout, the vehicle's cab will cross into the oncoming / merging slip lane with the vehicles trailer tyres on the slip lane exit. A temporary stone surface will be required at this location to facilitate the clean movements of the vehicle without becoming grounded / stuck in the grass verge between the N6 dual carriageway and N6 merging lane. This temporary surface will be removed and ground reinstated to suit existing upon completion of deliveries. As the autotrack extents are based on a bespoke type vehicle, some allowance will need to be provided, where a different type of vehicle may be proposed by a Contractor. To allow for this, the extent of allowance for temporary stone surfacing both in verges, within roundabouts and traffic islands will be 2m beyond the autotrack extents shown.

As indicated on the drawings 8057-SK-R-101-01 to 8057-SK-R-101-03 a number of signs and delineators are located within the swept path of the vehicle between the cab and trailer tyres.



Photo 1 N6 Dual Carriageway Eastbound at Junction 12 Exit (from Galway)

It is required that the signs be modified to include sockets that will allow for temporary removal (i.e. demountable). These signs will be removed just ahead of each delivery convoy and will be

reinstalled immediately, once the delivery convoy has passed through safely. Adjacent to the west of the N6 dual carriageway and located behind the chevrons at the N6 exit is a grass mound. To facilitate the manoeuvre, this mound should be levelled and reseeded.



Photo 2 N6 Dual Carriageway Eastbound east of Junction 12 Exit

2.1.2 Exit from N6 Slip Road onto N61 Northbound

The haul vehicle originating in Galway moves into the oncoming traffic lane on approach to Ganly's Roundabout to perform the manoeuvre around the roundabout. The cab tyres move anti-clockwise within the roundabout lanes while the trailer tyres move clockwise around the roundabout. Drawing No. 8057-SK-R-101-03 shows the potential impact of the abnormal load.



Photo 3 Ganly's Roundabout N61 Northbound view at the exit onto the Roundabout



Photo 4 Ganly's Roundabout view of the corner between N6 Slip and N61 Northbound exit



Photo 5 Ganly's Roundabout approaching the N61 southbound exit towards Athlone

Accessing the roundabout the vehicle will impinge on the kerb line on the central island at the exit from the slip road and also on the oncoming lane's kerb line at the eastern corner. It is recommended that temporary ramps are to be installed at the kerbs to allow them to be mounted safely. These ramps are to be installed immediately prior to the delivery convoy arriving at the location and removed immediately after the convoy has safely passed through the area. The overhang of the turbine comes within close proximity of a lighting column and the '50km/h' speed limit sign. Following trial runs of the abnormal load vehicle it will be determined if it is necessary to modify the lighting column and speed sign.



Photo 6 Ganly's Roundabout southbound approach from the N61 Roscommon direction

The trailer load sweeps across the roundabout and also the central island at the exit from the roundabout onto the N61. The vehicles tyres do not impact on the kerbs at either the roundabout or this central island. Advanced works will include demountable signage at all locations indicated. The 3 no. existing trees located within the roundabout will require removal during the haul period and replacement with new trees on completion. The type and size of trees are to match existing where feasible, unless otherwise agreed with TII. The level of the grass area / flower beds within the roundabout may require a reduction in level to allow for clearance of the vehicle trailer and its load over it. However allowances will be made for the provision of temporary ramps to mount the kerbs and temporary stone surfaces around the outer edges of the roundabout, where the Contractor may propose to use a different vehicle which changes the swept paths.

2.2 N6 SLIP WESTBOUND TO N61

2.2.1 Exit from N6 Dual Carriageway to N6 Slip Road

From Dublin, the vehicle will exit at junction 12 onto the N6 Slip Road. There is sufficient space for the vehicles cab and trailers wheels within the existing hardstanding area. The swept path of the vehicle and load will encroach into the grass verge between the slip exit and merging lane. To facilitate this it is required that the signage be modified to include sockets that will allow for temporary removal where required (see drawing No. 8057-SK-R-102-02).



Photo 7 N6 Dual Carriageway Westbound Exit at Junction 12 (from Dublin)

Similar to the Eastbound N6 Slip Road, the Westbound Slip Road has delineators extending from the commencement of the Exit to the junction with the N61 inclusive of the hatch area between the two slip lanes. The majority will need to be taken down during manoeuvres of the abnormal loads and reinstated on completion, with the extents to be agreed.



Photo 8 N6 Slip Lane Exit at Junction 12, Westbound



Photo 9 N6 Slip Lane between Junction 12 Exit and T-Junction with N61 / R914

2.2.2 Exit from N6 Slip Road onto N61 Northbound – T-Junction

To facilitate the tight turn of the long abnormal load at the T-Junction, the vehicle will cross into the oncoming traffic lane, with both the cab and trailer moving into the grass verge / vegetated area to the southeast of the N6 slip (see drawing no. 8057-SK-R-102-03). This is required to limit the impact to the northwest verge at the overbridge. This area needs to be cleared of vegetation and trees. The trees at present provide screening to the back of properties and temporary screening may be required during the construction stage while this section of road is being used as a haul route for abnormal loads. A temporary stone surface is to be provided to take the loading of the vehicle, in areas of overrun, in the verges and traffic islands. The exact type of surface to be provided to be agreed with TII. When this section of road is no longer required as a haul route, trees are to be replanted at the back of the properties. Where it is not feasible to replant the existing trees, new trees to be provided that are the same species and where feasible same maturity as those removed, unless otherwise agreed with TII. At the southern corner of the junction, the existing kerb line will be impacted by the manoeuvre and allowances will be made for the provision of temporary ramps to mount the kerbs.



Image 1 N6 Slip Road oncoming traffic lane on approach to T-Junction with N61 / R914 (© Google Street View April 2011)

There are 3 no. lighting columns within the N6 oncoming slip lane grass verge. These lighting columns are to be replaced where feasible with demountable sockets to facilitate removal and remounting during the haulage. However if this is not feasible these columns could be removed during the construction period and temporary lighting provided if required. Lighting columns to be reinstalled once works complete. Alternatively lighting columns could be relocated so that they do not impact on the turning movements of abnormal loads.



Photo 10 N6 Slip Road approach to T-Junction (approx. 50m from junction)

The swept path of the vehicle and its load will impact on signage and it is required that this is modified to include for sockets to allow for these signs to be removed just ahead of each delivery convoy and to be reinstalled immediately, once the delivery convoy has passed through safely..



Photo 11 N6 Slip Road at T-Junction

To the west of the 'stop' sign, the load will cross over the grass verge and footway. The tyre track will not impinge on this area and hence maintenance of the vegetation is sufficient.



Photo 12 R914 approach to T-Junction with N6 Slip (to west) and N61 (ahead)

It is envisaged that there is sufficient headroom clearance under the overbridge structure for the vehicle and its load. If sufficient clearance is not available, it is proposed as an alternative that the central median on the N6 is temporarily opened to facilitate access to the N61 via the N6 eastbound slip road and Ganly's roundabout as discussed in section 2.1. The temporary replacement for the concrete median is proposed as socketed bollards for quick removal and reinstatement on crossing of the vehicle from one side of the dual carriageway to the other under temporary lane closure.

2.2.3 N61 Northbound at Ganly's Roundabout

To reduce the impact to the existing street furniture and road layout, the vehicle will cross into the oncoming traffic lane on approach to the roundabout (see drawing no. 8057-SK-R-102-04). It will transverse the roundabout in an anticlockwise direction with the wheel tracks of both the cab and trailer within the existing carriageway.



Photo 13 N61 Northbound approach to Ganly's Roundabout

At the central islands on approach to and exit from the roundabout and on the roundabout itself, there is the potential to impact on signage. It is required that these are modified to be demountable to allow for temporary removal.



Image 2 N61 Southbound approach to Ganly's Roundabout (© Google Maps Street View Jul 2011)

The height of the roundabout landscaping may impact on the undercarriage of the trailer. It is required that this is levelled to allow for smooth movement of the vehicle without displacing soil onto the road surface.



Photo 14 Ganly's Roundabout Exit onto N61 Northbound

3 CONCLUSIONS

The preliminary scope of works required for the advanced works for haul of the abnormal loads is outlined in this document. Two haul route options have been investigated as the origin of the turbines will be determined on procurement of the turbines on grant of planning. A detailed list outlining the scope of works and their locations are provided in the tables in Appendix A. Corresponding drawings indicating the location of these works are provided in Appendix B. Further information has been provided in photos in Appendix C of this report.

Appendix A

Table of Scope of Advanced Works

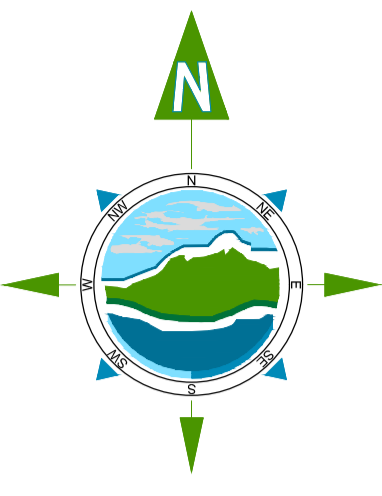
Dublin to Roscommon - via N6 Junction 12 to N61						
N6 Slip Westbound Exit Junction 12 (Dwg No. 8057-SK-R-102-02)						
Item No.	Description	Desc. No.	No. of Sign Supports	Location	TSM Ref.	Comment
1	Exit Sign with Junction Number Panel	1	3	At median between N6 westbound and slip to N61		Signage to be modified to include sockets that will allow temporary removal where required. (i.e. demountable sockets)
2	Delineators	124	NA	Line along outside of N6 slip lane, in grass verge / central hatch markings.		If passive and fixed with bolts, will allow temporary removal where required.
3	Multiple Chevrons	4	12	At median between N6 westbound and slip to N61	W 063L: Multiple Chevrons (Three) (to Left)	Replace with demountable sockets
4	Speed Limit Signs '50kph'	2	2	Approx. 50m from grass median	RUS 043: 50km/h Speed Limit	Replace with demountable sockets
5	Sign 'Two Way Traffic'	2	2	Approx. 55m from grass median	W 080: Two-way Traffic	Replace with demountable sockets
6	Directional Sign	1	2	On approach to the N6 from the N61 (opposite lane)		Replace with demountable sockets
7	Sign 'Keep Left'	1	1	On approach to the N6 from the N61 (opposite lane, start of grass median)	RUS 001: Keep Left	Replace with demountable sockets
8	Sign (unidentified - large rectangular sign)	1	2	On approach to the N6 from the N61, on bend prior to the N6 (opposite lane)	(Possible large directional sign)	Existing poles appear to be Lattix Masts (potentially passive)
9	Bollards 'Keep Left'	3	NA	Intermittent between delineators along centreline hatch	RUS 001: Keep Left	If passive and fixed with bolts, will allow temporary removal where required.
N6 Slip Westbound to N61 T-Junction (Dwg No. 8057-SK-R-102-03)						
Item No.	Description	Desc. No.	No. of Sign Supports	Location	TSM Ref.	Comment
10	Lighting column	2 or 3	NA	On N6 Slip on approach to T-Junction (opposite lane verge)		Where demountable / hinged lighting is not feasible, these lighting columns to be either removed during construction / temporary lighting provided or relocated to a location agreed with TII
11	Vegetation & Haul Track	971 m sq. (625 m sq.)	NA	At T-Junction with N61, to south of N6 Slip road, immediately behind Annsfield Woods		Cut back existing vegetation. Haul track required with removable surface mounted kerbs (with bolts)
12	Speed Limit Signs '50kph'	1	1	N6 slip / N61 T-junction (opposite lane)	RUS 043: 50km/h Speed Limit	Replace with demountable sockets
13	Directional Sign	1	2	R914 at T-junction with N6 slip / N61 northbound, within grass verge		Replace with demountable sockets
14	Sign 'Stop'	1	1	T-Junction N6 slip / N61 (approach to junction)	RUS 027: Stop	Replace with demountable sockets
15	Vegetation	80 m sq.	NA	At T-Junction with N61, to north of carriageway adjacent to overbridge		Cut back existing vegetation
16	Directional Sign	1	2	At T-Junction with N61, to north of carriageway adjacent to overbridge		Replace with demountable sockets
At Ganly's Roundabout - N6 Slip Westbound to N61 (Dwg No. 8057-SK-R-102-04)						
[Note: Changed swept path to opposite side at roundabout to reduce impact]						
Item No.	Description	Desc. No.	No. of Sign Supports	Location	TSM Ref.	Comment
17	Directional Sign	2	5	Central Island northbound approach on N61 to Ganly's roundabout		Replace with demountable sockets
18	Sign 'Keep Left'	1	1	Central Island northbound approach on N61 to Ganly's roundabout	RUS 001: Keep Left	Replace with demountable sockets
19	Directional Sign	1	2	Northbound approach to Ganly's roundabout, eastern verge at footway.		Replace with demountable sockets
20	Multiple Chevrons	1	4	Ganly's roundabout, N61 northbound approach, in grass on roundabout	W 063L: Multiple Chevrons (Two) (to Left)	Replace 2 no. with demountable sockets & remove 2 no. additional posts
21	Vegetation & flowerbeds	135 m sq.	NA	Ganly's Roundabout		Maintain existing vegetation at low height, to allow for overhang of vehicle load. Allowances to be made for the provision of temporary ramps to mount the kerbs and temporary stone surfaces around the outer edges of the roundabout, where the Contractor may propose to use a different vehicle which changes the swept paths.
22	Multiple Chevrons	1	4	Ganly's roundabout, N61 northbound exit from roundabout, in grass on roundabout	W 063L: Multiple Chevrons (Three) (to Left)	Replace 2 no. with demountable sockets & remove 2 no. additional posts
23	Sign 'Yield'	1	1	N61 northbound exit from Ganly's roundabout, in grass verge to east of N61 southbound lane	RUS 026: Yield	Replace with demountable sockets
24	Directional Sign	1	2	Northbound exit from Ganly's roundabout on N61, in central island		Replace with demountable sockets
25	Sign 'Keep Left'	2	1	Central Island northbound exit from Ganly's roundabout onto N61, at central island	RUS 001: Keep Left	Replace with demountable sockets

Galway to Roscommon - via N6 Junction 12 to N61						
N6 Slip Eastbound Exit Junction 12 (Dwg No. 8057-SK-R-101-02)						
Item No.	Description	Desc. No.	No. of Sign Supports	Location	TSM Ref.	Comment
1	Exit Sign with Junction Number Panel	1	3	At median between N6 eastbound lane and slip lane to N61		Signage to be modified to include sockets that will allow temporary removal where required. (i.e. demountable sockets)
2	Delineators	100	NA	Line along outside of N6 slip lane, in grass verge / central hatch markings.		If passive and fixed with bolts, will allow temporary removal where required.
3	Multiple Chevrons	3	9	At median between N6 eastbound lane and slip lane to N61	W 063L: Multiple Chevrons (Three) (to Left)	Replace with demountable sockets
4	Speed Limit Signs '50kph'	2	2	To each sides of slip lane exit	RUS 043: 50km/h Speed Limit	Replace with demountable sockets
5	Sign 'Two Way Traffic'	2	2	To each sides of slip lane exit	W 080: Two-way Traffic	Replace with demountable sockets
6	Grass Soil Mound	70 m sq.	NA	Immediately behind chevrons / directional sign at commencement of slip median		Remove mound and reseed. This area may increase due to either different vehicle being used by Contractor. To be re assessed upon award of Contract.
7	Sign Route Marker 'N6 E'	1	1	Grass verge between N6 eastbound exit & merging slip roads		Replace with demountable sockets
8	Sign 'No Entry'	2	2	On exit slip lane from N6 for traffic approaching the N6 from the N61, within grass median and grass verge of exit lane (facing opposite lane of traffic)	RUS 011: No Entry	Replace with demountable sockets
9	Directional Sign	1	2	On approach to the N6 from the N61, within grass median between N6 exit and merging lanes (opposite lane)		Replace with demountable sockets
10	Sign 'Keep Left'	2	1	On approach to the N6 from the N61, within grass median between N6 exit and merging lanes (opposite lane)	RUS 001: Keep Left	Replace with demountable sockets
11	Haul Track	295 m sq.	NA	Between N6 dual carriageway lane eastbound and N6 slip to N61, immediately behind mound		Temporary stone road / surface required. Extents required may increase as will be dependant on type of vehicle proposed by Contractor. To be reassessed upon award of Contract.
At Ganly's Roundabout - N6 Slip Eastbound to N61 (Dwg No. 8057-SK-R-101-03)						
Item No.	Description	Desc. No.	No. of Sign Supports	Location	TSM Ref.	Comment
12	Sign 'Keep Left'	2	1	Central Island at Ganly's roundabout from northeast approach (N6 exit slip to N61)	RUS 001: Keep Left	Replace with demountable sockets
13	Speed Limit Signs '50kph'	1	1	Approach to Ganly's roundabout from N6 slip, to the southeast of the carriageway (opposite lane verge)	RUS 043: 50km/h Speed Limit	Replace with demountable sockets
14	Lighting column	1	NA	Approach to Ganly's roundabout from N6 slip, to the southeast of the carriageway (opposite lane verge)		Replace with demountable sockets / hinged (impacted by overhang to rear of vehicle)
15	Kerb, grass verge & footway	55 m sq.	NA	Approach to Ganly's roundabout from N6 slip, to the southeast corner		Temporary stone surface to be used / temporary ramps are to be installed at the kerbs to allow them to be mounted safely.
16	Kerbed Central Median (southwest end)	10 m sq.	NA	Approach to Ganly's roundabout from N6 slip, corner of central median		Temporary stone surface to be used / temporary ramps are to be installed at the kerbs to allow them to be mounted safely.
17	Kerbed Central Median (northeast end)	30 m sq.	NA	Approach to Ganly's roundabout from N6 slip, corner of central median		Temporary stone surface to be used / temporary ramps are to be installed at the kerbs to allow them to be mounted safely.
18	Directional Sign	1	2	Approach to Ganly's roundabout from N6 slip, on central median		Replace with demountable sockets
19	Directional Sign ' South Roscommon Drive'	1	1	At Ganly's Roundabout, northwest corner verge between N6 slip and N61 northbound		Replace with demountable sockets
20	Vegetation & flowerbeds & trees	495 m sq.	NA	Ganly's Roundabout		Maintain / allow for reduced height of existing vegetation to allow for sweep of trailer body with load. 3 no. existing trees to be removed and reinstated on completion of the haul of materials. Allowances to be made for the provision of temporary ramps to mount the kerbs and temporary stone surfaces around the outer edges of the roundabout, where the Contractor may propose to use a different vehicle which
21	Multiple Chevrons	3	10	Ganly's Roundabout	W 063L: Multiple Chevrons (Two / Three / Four) (to Left)	Replace 8 no. with demountable sockets & remove 2 no. additional posts
22	Directional Sign	1	2	In grass verge at footway between Ganly's access and N61 south to Athlone.		Replace with demountable sockets
23	Directional Sign	1	2	Central Island at Ganly's roundabout onto N61 northwest, at central island		Replace with demountable sockets [Tractor & trailer run either side of the island, with trailer body sweeping over island]

24	Sign 'Keep Left'	2	1	Central Island at Ganly's roundabout onto N61 northwest, at central island	RUS 001: Keep Left	Replace with demountable sockets
25	Sign 'Yield'	1	1	N61 northbound exit from Ganly's roundabout, in grass verge to east of N61 southbound lane	RUS 026: Yield	Replace with demountable sockets

Appendix B

Drawings of Advanced Works



Red Line Boundary for MMarC Network B
maintained by Colas Roadbridge JV

N6 Junction 12 - Eastbound Slip to N61
Refer to Dwg. 8057-SK-R-101-01 to
8057-SK-R-101-03

N6 To Dublin

R914 To Athlone

N6 To Galway

N6 Junction 12 - Westbound Slip to N61
Refer to Dwg. 8057-SK-R-102-01 to
8057-SK-R-102-04

Rev	Date	Description	By	Chkd.
D01	06.04.2017	Works in Progress for discussion	L.G.	S.T.

Client: **BORD NA MÓNA**
Naturally Driven

Project: Derryadd Wind Farm

Title: Haul Route Assessment
N6 Junction 12
Athlone

Scale @ A1: NTS

Prepared by: L.G. Checked: S.T. Date: April 2017

Project Director: D. Grehan

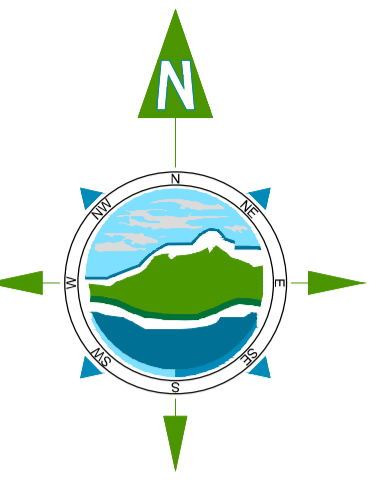
Drawing Status: Preliminary Works in Progress

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Revision: D01



LEGEND:
 Red Line Boundary for MMaRC Network B

Rev	Date	Description	By	Chkd.
D01	06.04.2017	Works in Progress for discussion	L.G.	S.T.

Client: **BORD NA MÓNA**
 Naturally Driven

Project: Derryadd Wind Farm

Title: Haul Route Assessment
 N6 Junction 12
 Eastbound Slip Overview
 Sheet 1 of 3

Scale @ A1: NTS

Prepared by: L.G. Checked: S.T. Date: April 2017

Project Director: D. Grehan

Drawing Status: Preliminary Works in Progress

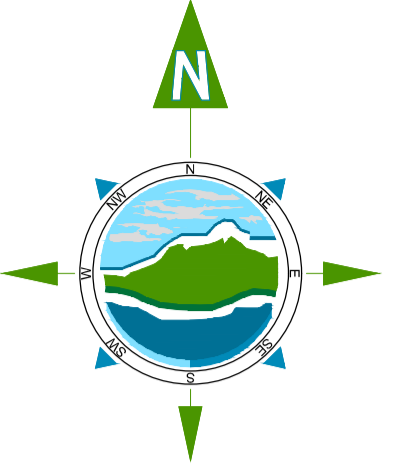
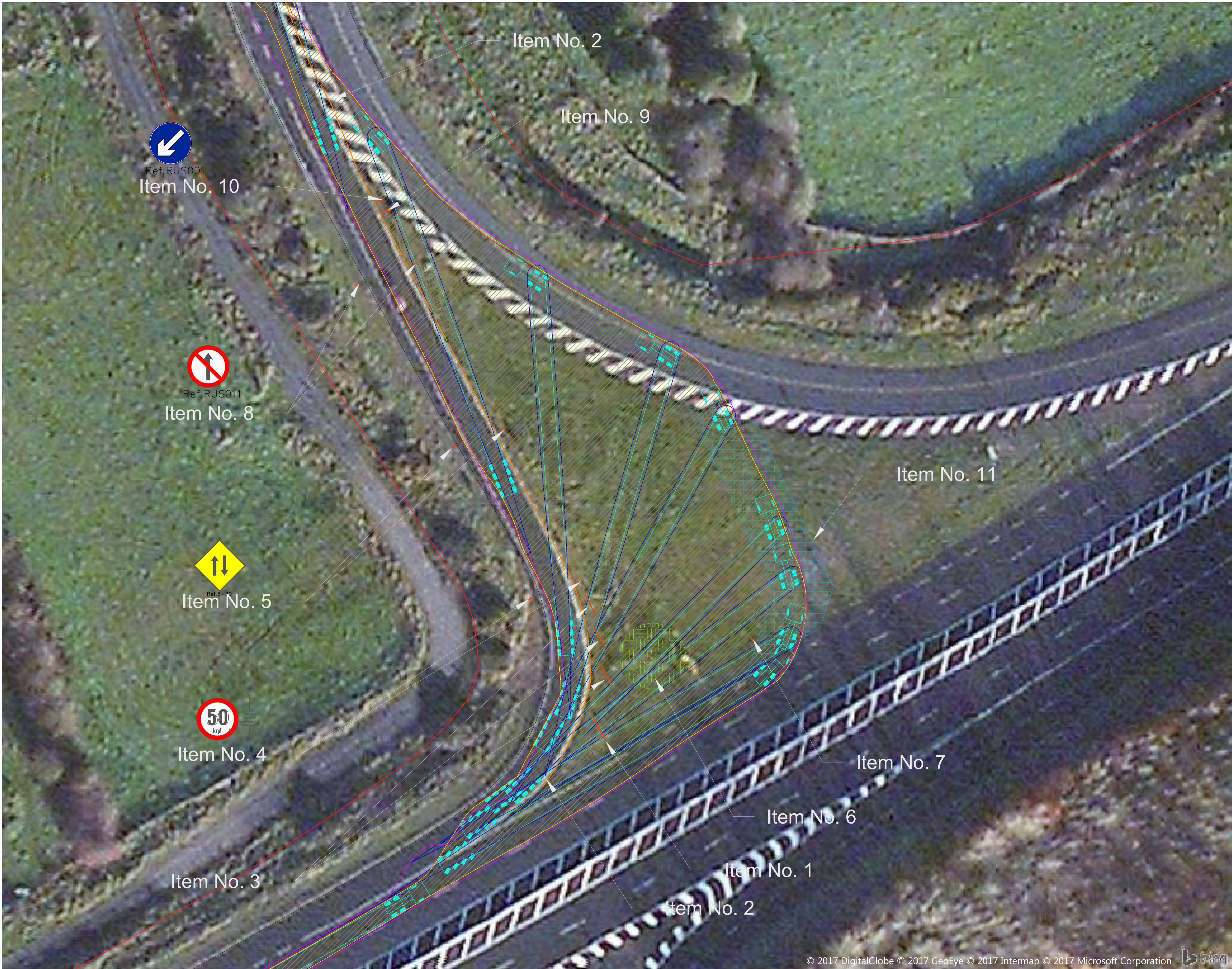
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Drawing No.: 8057-SK-R-101-01

Revision: D01



- LEGEND:**
- Red Line Boundary for MMarC Network B
 - Line of Delineators
 - - - Existing Signage to be modified
 - ▨ Haul Track
 - ▨ Vegetation
 - - - Removable Kerb Line
 - Public Lighting
 - Tree to be removed & later reinstated

Rev	Date	Description	By	Chkd.
D01	06.04.2017	Works in Progress for discussion	L.G.	S.T.

Client: **BORD NA MÓNA**
Naturally Driven

Project: Derryadd Wind Farm

Title: Haul Route Assessment
N6 Junction 12
Eastbound Slip
Sheet 2 of 3

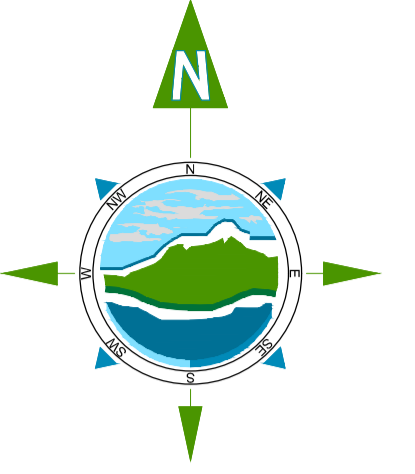
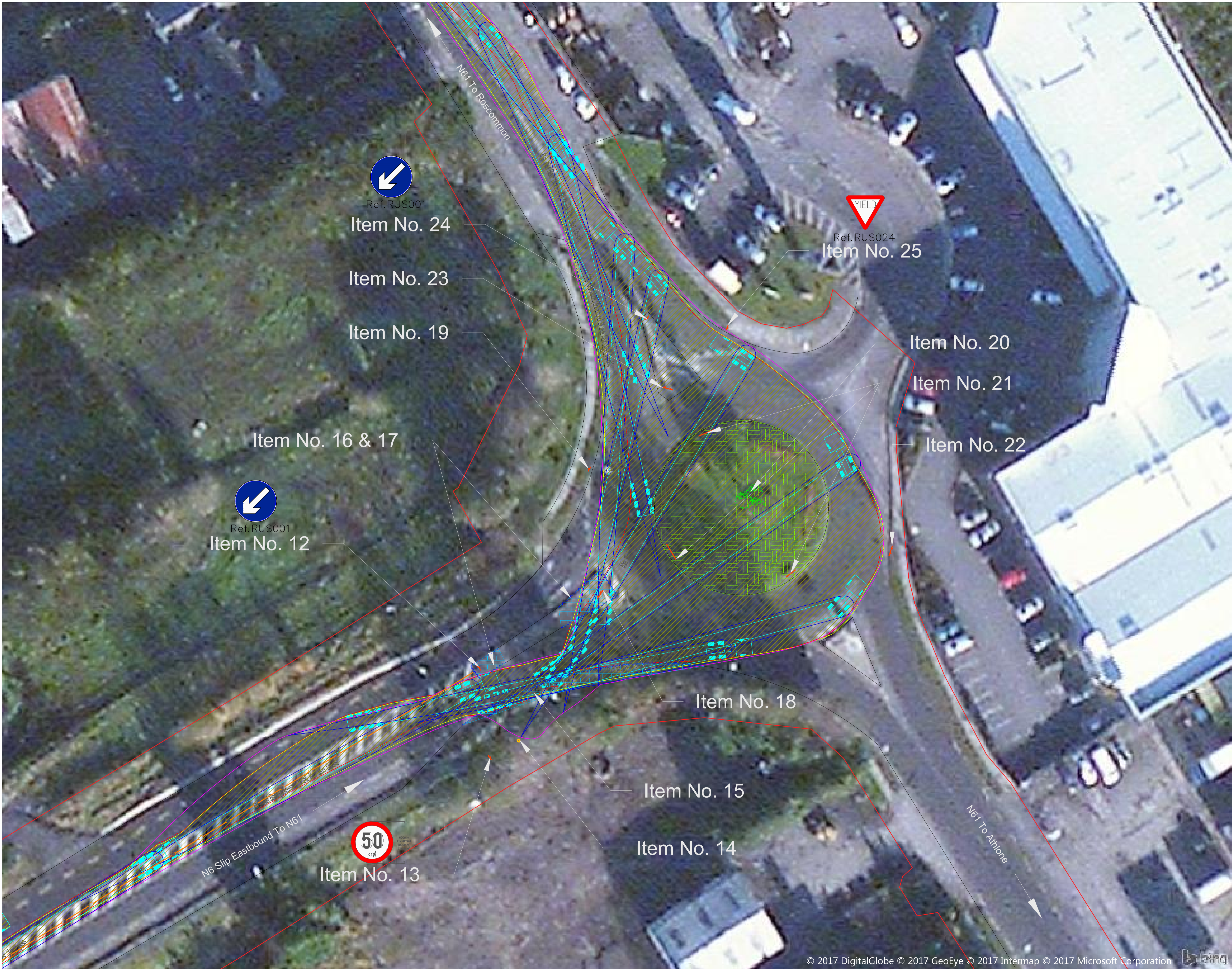
Scale @ A1: NTS

Prepared by:	Checked:	Date:
L.G.	S.T.	April 2017
Project Director:	D. Grehan	
Drawing Status:	Preliminary Works in Progress	

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Drawing No.: 8057-SK-R-101-02	Revision: D01
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- LEGEND:**
- Red Line Boundary for MMaRC Network B
 - Line of Delineators
 - - - Existing Signage to be modified
 - ▨ Haul Track
 - ▨ Vegetation
 - ~ Removable Kerb Line
 - Public Lighting
 - Tree to be removed & later reinstated

Rev	Date	Description	By	Chkd.
D01	06.04.2017	Works in Progress for discussion	L.G.	S.T.

Client: **BORD NA MÓNA**
Naturally Driven

Project: Derryadd Wind Farm

Title: Haul Route Assessment
N6 Junction 12
Eastbound Slip
Sheet 3 of 3

Scale @ A1: NTS

Prepared by:	Checked:	Date:
L.G.	S.T.	April 2017

Project Director: D. Grehan

Drawing Status: Preliminary Works in Progress

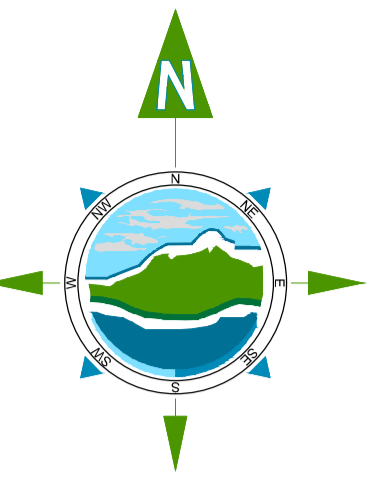
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Drawing No.: 8057-SK-R-101-03

Revision: D01



LEGEND:
 Red Line Boundary for MMaRC Network B

Rev	Date	Description	By	Chkd.
D01	10.04.2017	Works in Progress for discussion	L.G.	S.T.

Client: **BORD NA MÓNA**
 Naturally Driven

Project: Derryadd Wind Farm

Title: Haul Route Assessment
 N6 Junction 12
 Westbound Slip Overview
 Sheet 1 of 4

Scale @ A1: NTS

Prepared by: L.G. Checked: S.T. Date: April 2017

Project Director: D. Grehan

Drawing Status: Preliminary Works in Progress

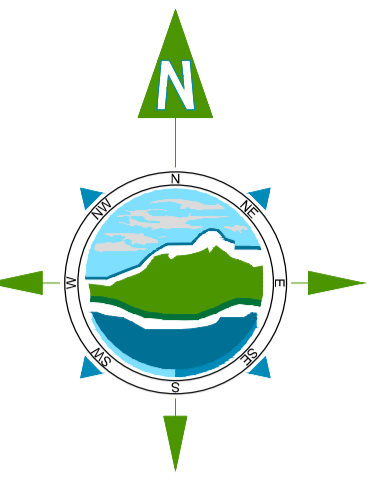
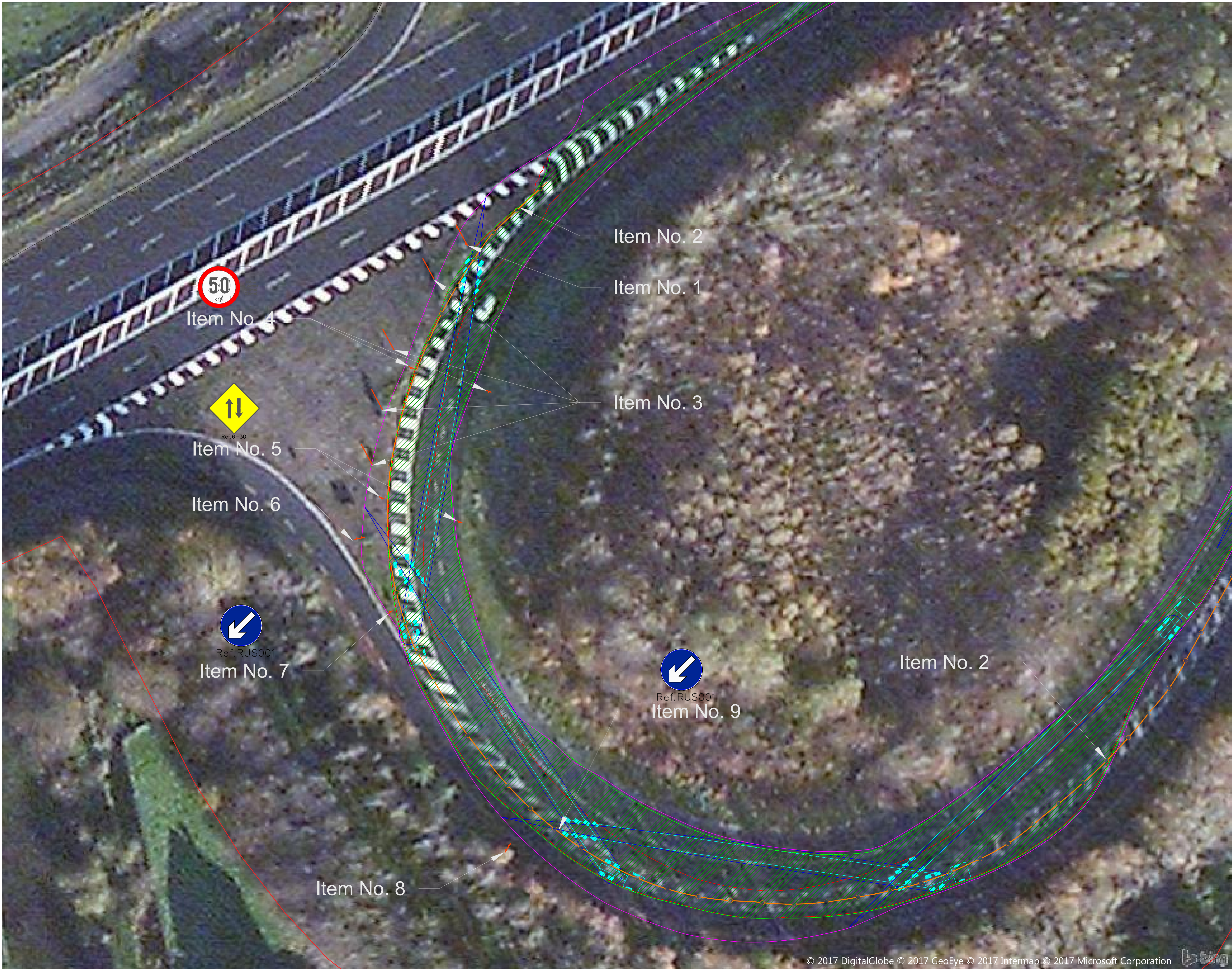
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Drawing No.: 8057-SK-R-102-01

Revision: D01



- LEGEND:**
- Red Line Boundary for MMarC Network B
 - Line of Delineators
 - Existing Signage to be modified
 - Haul Track
 - Vegetation
 - Removable Kerb Line
 - Public Lighting
 - Tree to be removed & later reinstated

Rev	Date	Description	By	Chkd.
D01	10.04.2017	Works in Progress for discussion	L.G.	S.T.

Client: **BORD NA MÓNA**
Naturally Driven

Project: Derryadd Wind Farm

Title: Haul Route Assessment
N6 Junction 12
Westbound Slip
Sheet 2 of 4

Scale @ A1: NTS

Prepared by: L.G. Checked: S.T. Date: April 2017

Project Director: D. Grehan

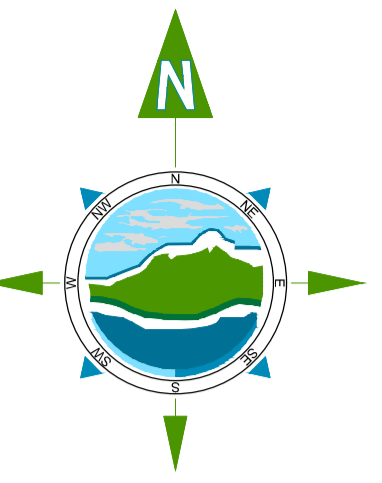
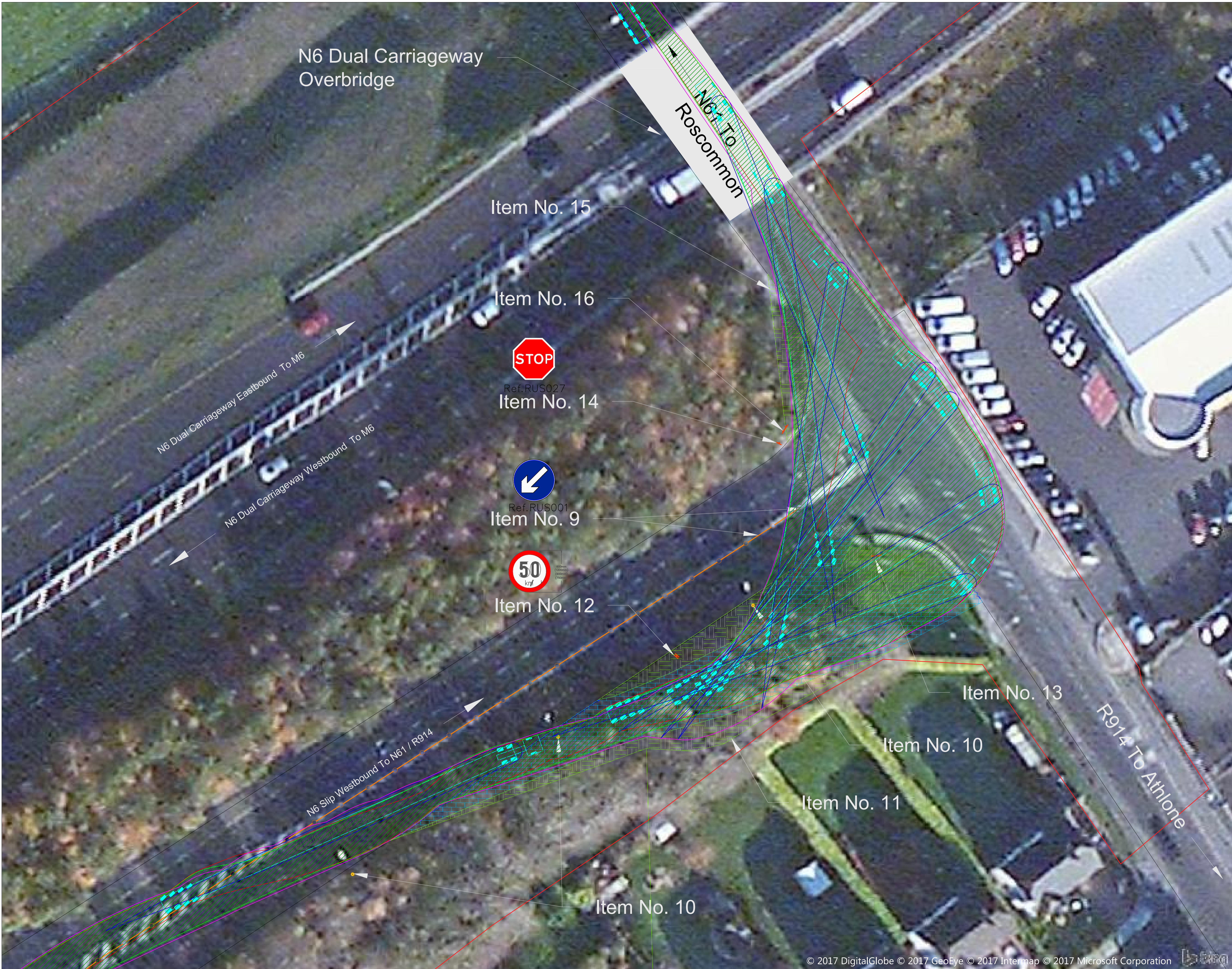
Drawing Status: Preliminary Works in Progress

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Drawing No.: 8057-SK-R-102-02

Revision: D01



- LEGEND:**
- Red Line Boundary for MMarC Network B
 - Line of Delineators
 - - - Existing Signage to be modified
 - ▨ Haul Track
 - ▨ Vegetation
 - ~ Removable Kerb Line
 - Public Lighting
 - Tree to be removed & later reinstated

Rev	Date	Description	By	Chkd.
D01	10.04.2017	Works in Progress for discussion	L.G.	S.T.

Client: **BORD NA MÓNA**
Naturally Driven

Project: Derryadd Wind Farm

Title: Haul Route Assessment
N6 Junction 12
Westbound Slip
Sheet 3 of 4

Scale @ A1: NTS

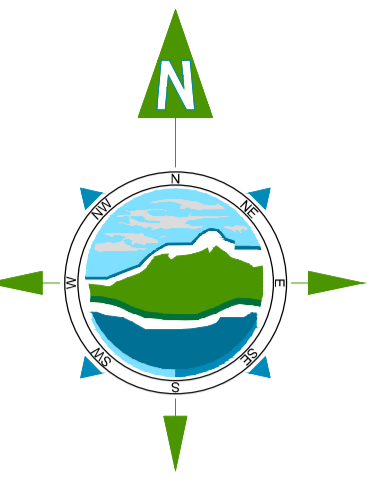
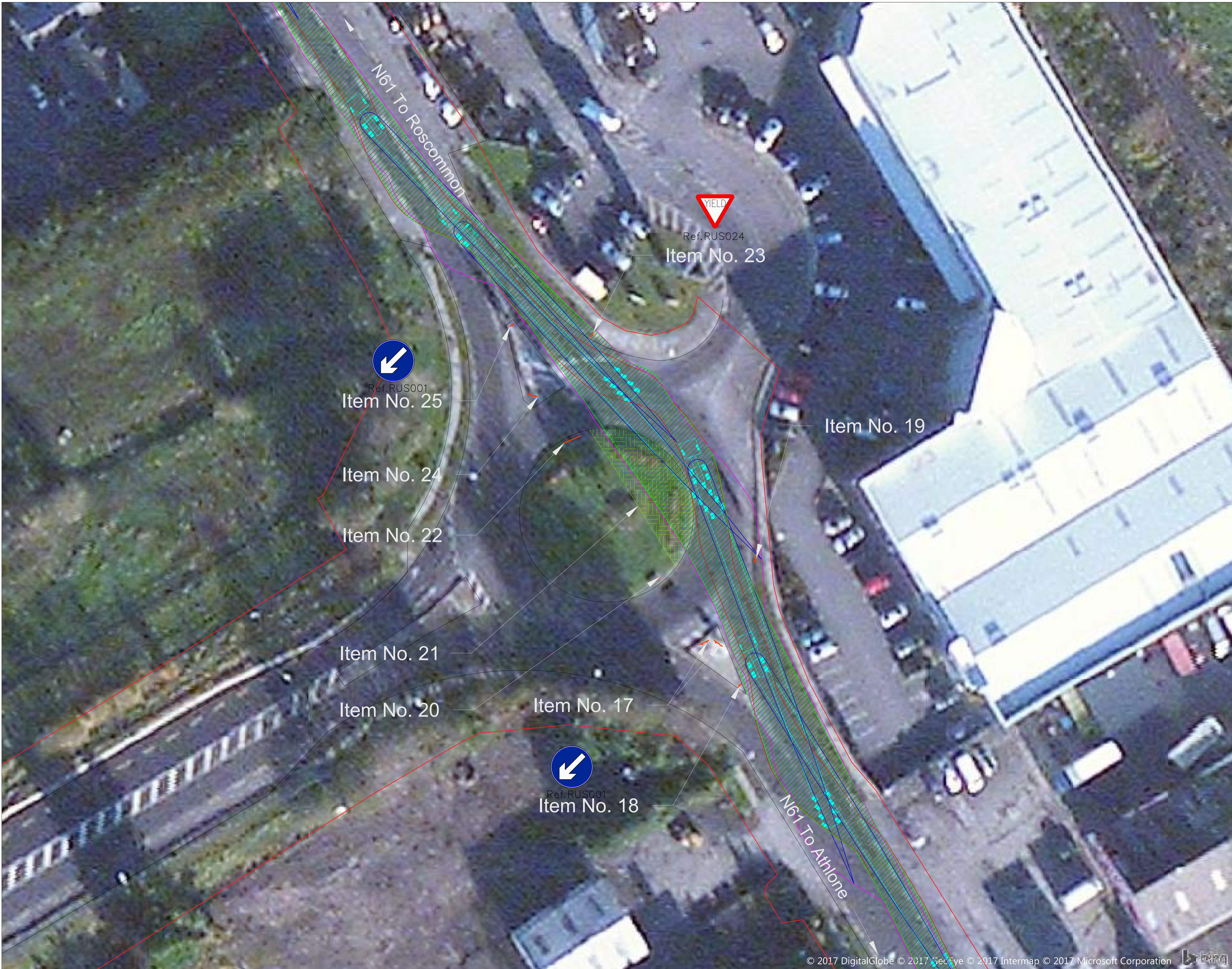
Prepared by:	Checked:	Date:
L.G.	S.T.	April 2017
Project Director:	D. Grehan	
Drawing Status:	Preliminary Works in Progress	

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Drawing No.: 8057-SK-R-102-03	Revision: D01
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- LEGEND:**
- Red Line Boundary for MMarC Network B
 - Line of Delineators
 - - - Existing Signage to be modified
 - Haul Track
 - Vegetation
 - Removable Kerb Line
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Rev	Date	Description	By	Chkd.
D01	10.04.2017	Works in Progress for discussion	L.G.	S.T.

Client: **BORD NA MÓNA**
Naturally Driven

Project: Derryadd Wind Farm

Title: Haul Route Assessment
N6 Junction 12
Westbound Slip
Sheet 4 of 4

Scale @ A1: NTS

Prepared by: L.G.	Checked: S.T.	Date: April 2017
Project Director: D. Grehan		
Drawing Status: Preliminary Works in Progress		

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Drawing No.: 8057-SK-R-102-04

Revision: **D01**

Appendix C

Additional Photos in support of Advanced Works





