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FERRY MOOR LANE, UPPER CUDWORTH, BARNSELY
S72 7FZ

Transport Statement

Final Report for:



October 2023

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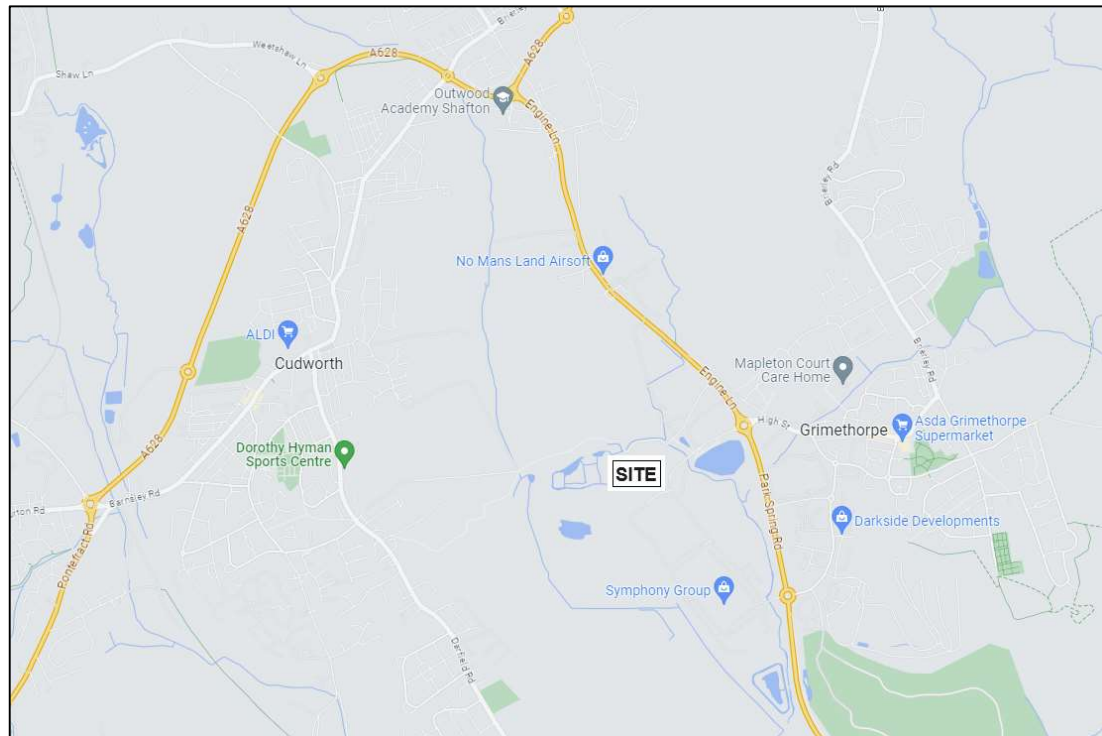
APPENDIX D – PICADY OUTPUT

1.0 INTRODUCTION

1.1 Background & Location

1.1.1 CoraHt have been commissioned by Oakland Golf and Leisure to undertake an assessment of the transport matters arising for an 'Agricultural Restoration & Landscape Enhancement Scheme' at the former Grimthorpe Colliery located off Ferry Moor Lane, Upper Gidwath, Bamsley, S72 7EZ. Figure 1.1 provides the site location.

Figure 1.1: Site Location



1.2 Scope of the Report

1.2.1 This Transport Statement has been prepared in accordance with National Planning Policy Framework and Planning Policy Guidance: Travel Plans, Transport Assessments and Statements in Decision Taking. It sets out the transport matters relating to the development site and provides details of the development proposals, including an assessment of the predicted traffic flows, the corresponding impact on the surrounding highway network and matters associated with accessibility and connectivity.

1.2.2 The report comprises the following sections:

- Section two discusses the development proposals
- Section three assesses the traffic impact;
- Section four summarises the mitigation measures proposed during construction, and
- Section five provides the summary and conclusion

2.0 PROPOSED DEVELOPMENT

2.1 Proposed Development

2.1.1 Having previously been associated with mining and industry, the site has been partly reinstated. The purpose of the proposed development is to return the site to productive use by improving the soil profile so that it is suitable for agriculture and outdoor recreational uses in a restored landscape to include new tree plantations and enhanced biodiversity. The restoration of the site will be achieved through the importation of 430,000m³ of soils and inert material under EAF permit as a waste recovery operation. The restoration works will take 5 years to complete.

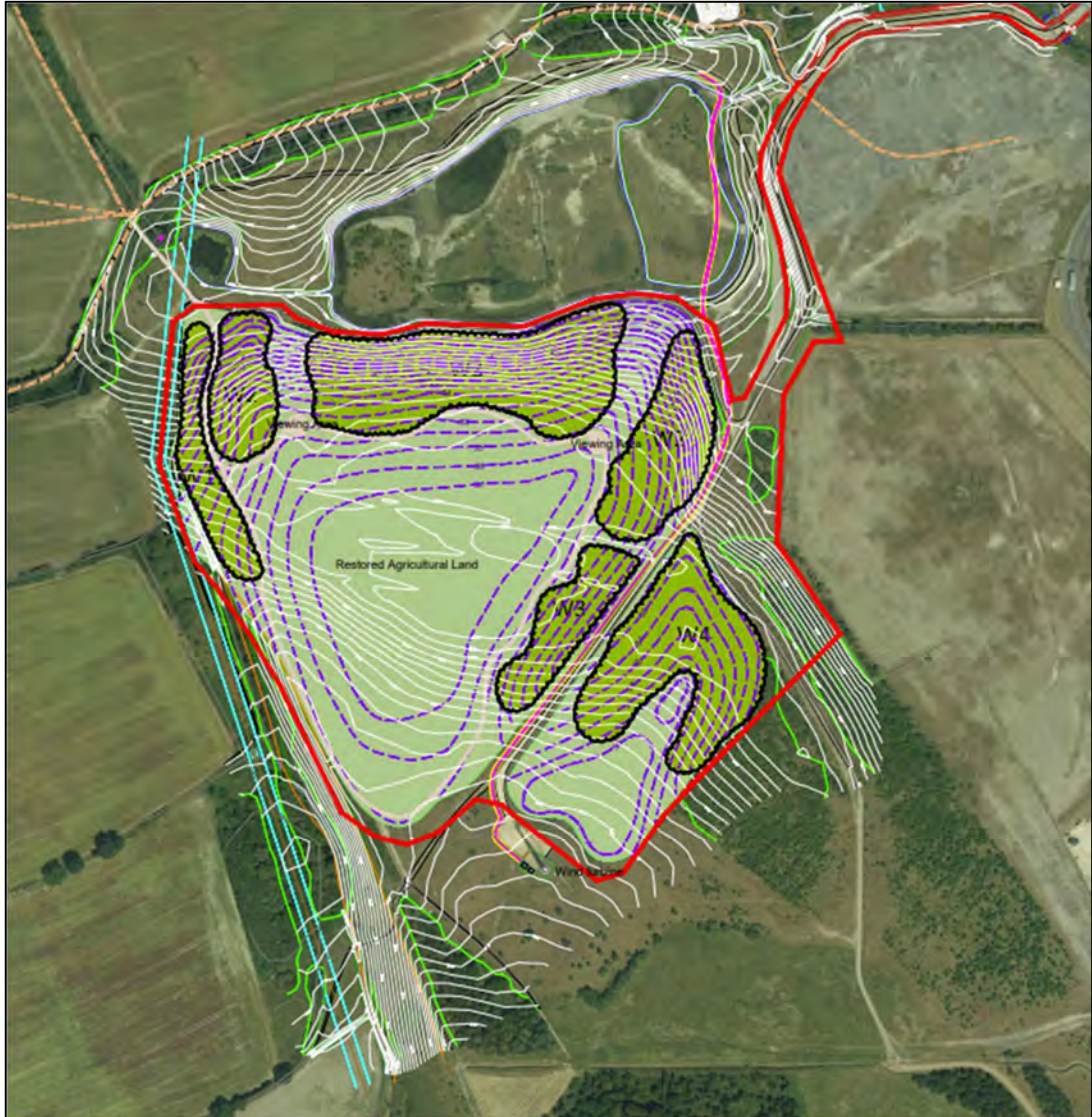
2.1.2 Figure 2.1 shows the application boundary.

Figure 2.1: Application Boundary



213 An extract of the masterplan is provided in Figure 2.2 whilst Appendix A provides the full drawings

Figure 2.2: Masterplan



2.1 Access Arrangement

2.1.1 Access to the site for construction vehicles is proposed via the existing Ferry Moor Lane / Engine Lane (A6195) junction as shown in Figure 2.3. Ferry Moor Lane is an existing industrial road of 7m width

Figure 2.3: Ferry Moor Lane / Engine Lane Junction



2.1.2 The routing of the construction vehicles is described in Section 4 of this report but will be subject to a Construction Management Plan

2.1.3 A compound area is proposed within the site with a ticket office, wheel washing facilities, and HGV turning area. Figure 2.4 shows an extract of the construction route within Ferry Moor Lane to the compound area. Appendix B provides the full compound layout plan

Figure 2.4: Construction Compound



3.0 TRAFFIC IMPACT

3.1 Existing Traffic

3.1.1 A 7 day automatic traffic count was installed on Monday 11th September 2023 to the south of the Ferry Moor Lane / Engre Lane (A6195) junction to ascertain existing traffic flows. Figure 3.1 shows the court location.

Figure 3.1: Traffic Count Location



3.1.2 Table 3.1 summarises the peak hour flows for Wednesday 13th September. Appendix C provides the full survey results.

	AM (0800-0900)		PM (1600-1700)	
	Northbound	Southbound	Northbound	Southbound
Total Vehicles	399	508	618	589
HGVs	57	98	72	66

3.2 Construction Trip Generation

321 The reconstruction consists of an operation involving the transportation of soil and inert materials to the site from various construction sites

322 It is estimated that 430,000m³ of inert materials are to be transported to the site using HGVs carrying an average of 9m³ per deliver which equates to 47,778 HGV arrivals. The estimated volume of material, number of HGV arrivals and total trips for a 60 months construction period are detailed in Table 3.2.

Table 3.2: Estimated Volume of Material and Number of HGV Movements

Duration	Volume of Fill (m ³)	Average Daily HGV Arrival	Total 2-way HGV Trips
60 Months	430,000	80	160

323 In addition to the HGV movements, a maximum of 5 staff would be required during the construction phase that would arrive outside the highway peak hours

324 The construction work will be undertaken in several phases with the normal operational hours of 0700 to 1900 hours Monday to Friday.

325 Table 3.3 summarises the construction average traffic levels over the duration of a typical weekday.

Table 3.3: Average Daily Traffic Movements

Time Beginning	HGVs		Cars	
	Arrival	Departure	Arrival	Departure
0600	0	0	5	0
0700	6	0	0	0
0800	6	6	0	0
0900	7	6	0	0
1000	7	7	0	0
1100	7	7	0	0
1200	7	7	0	0
1300	7	7	0	0
1400	7	7	0	0
1500	6	7	0	0
1600	6	6	0	0
1700	7	6	0	0
1800	7	7	0	0
1900	0	7	0	5
Total	80	80	5	5

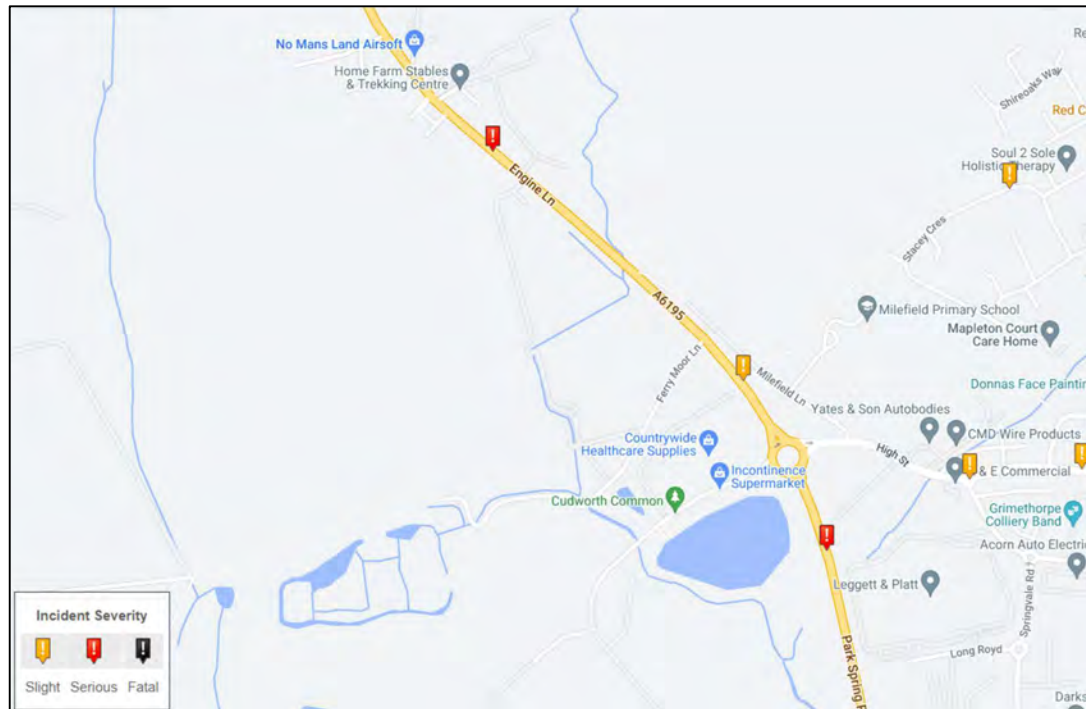
326 From Table 3.3 it can be deduced that the construction traffic associated with the 60 months construction period for the proposed development would result in a maximum of 6 HGV arrivals during the AM and PM peak hours

327 During construction, it can be deduced that there would not have a severe impact on the highway network

3.3 Accident Analysis

331 Accident data has been obtained from the Crashmap website (<http://www.crashmap.co.uk>) for the latest 5 years. Figure 3.2 shows an extract of the accident plot.

Figure 3.2: Crashmap Accident Plan



332 There has been 1 severe and 1 slight accident along Engine lane to the north and south of Ferry Moor Lane respectively. The accident summary does not indicate that there is a safety issue.

333 It can be concluded that further detailed accident analysis is not required.

3.1 Engine Lane / Ferry Moor Lane Capacity

311 The "HOADY" assessment program has been used to assess the capacity at the Engine Lane / Ferry Moor Lane Capacity Junction

312 Tables 3.4 summarises the 2023 with Development capacity assessments respectively. The full output is provided in Appendix D.

313 Note it has been assumed that Engine Lane currently generates a small number of vehicle movements associated with the existing caravan park. For robustness, 20 existing passenger car units have been assumed to enter and exit Ferry Moor Lane. The proposed development would generate additional GPCUs in each direction

Table 3.4: Engine Lane / Ferry Moor Lane Capacity Summary

Arm	2023 Base + Existing + Development AM Peak		2023 Base + Existing + Development AM Peak	
	RFC	Queue	RFC	Queue
Ferry Moor Lane	014	0	016	0
Engine Lane	006	0	006	0

314 The above assessment show that the Engine Lane / Ferry Moor Lane Capacity junction would operate well with capacity

4.0 CONSTRUCTION MITIGATION MEASURES

4.1 Brief

4.1.1 Due to the nature of the areas surrounding the site, this report also includes consideration of the potential nuisance relating to the movement of HGVs by road during construction. This will take into account volving hours, noise, vibration, dust, odour and debris on the highway.

4.1 Vehicle Routing

4.1.1 The routing of HGVs will be considered to minimise the impact on residential areas. The site benefits from easy access via the A roads around the area.

4.1.2 Figures 4.1 and 4.2 present the desired construction routes to the site from the South and North respectively. This would be confirmed and agreed with the highway authority via the Construction Management Plan.

Figure 4.1: Route to Site from South (A635)

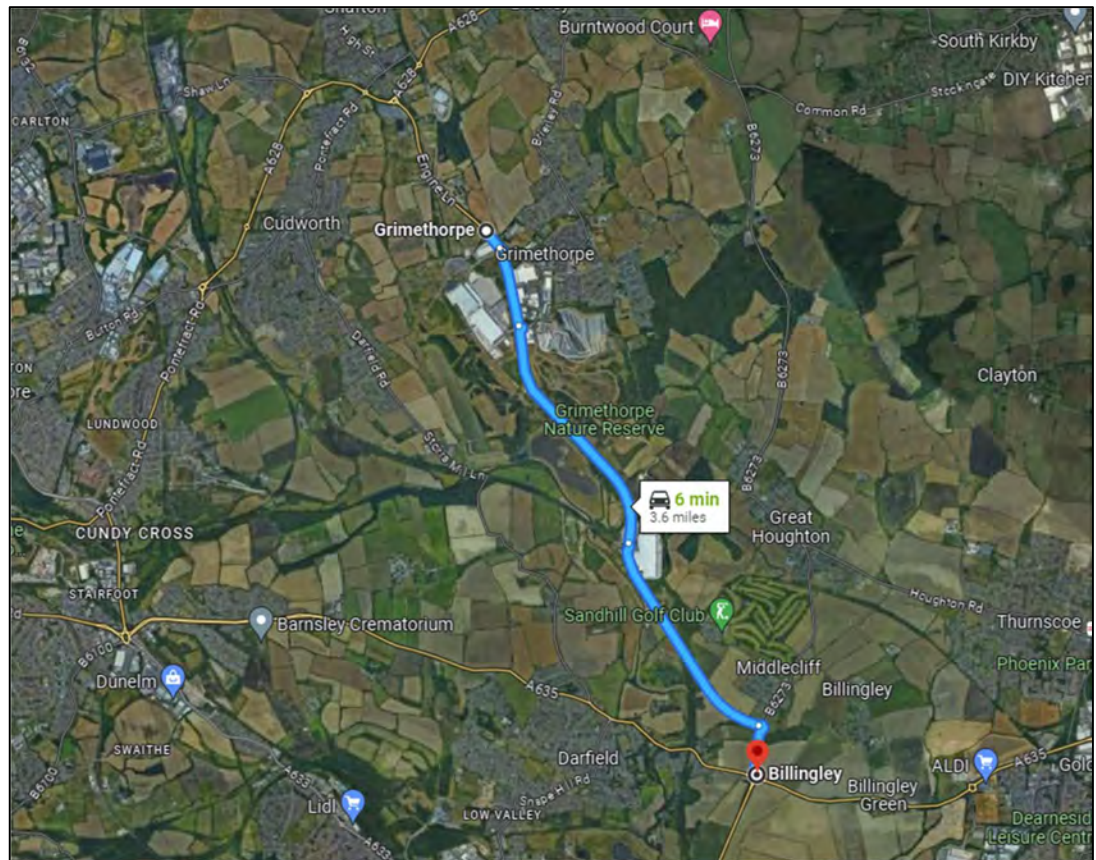
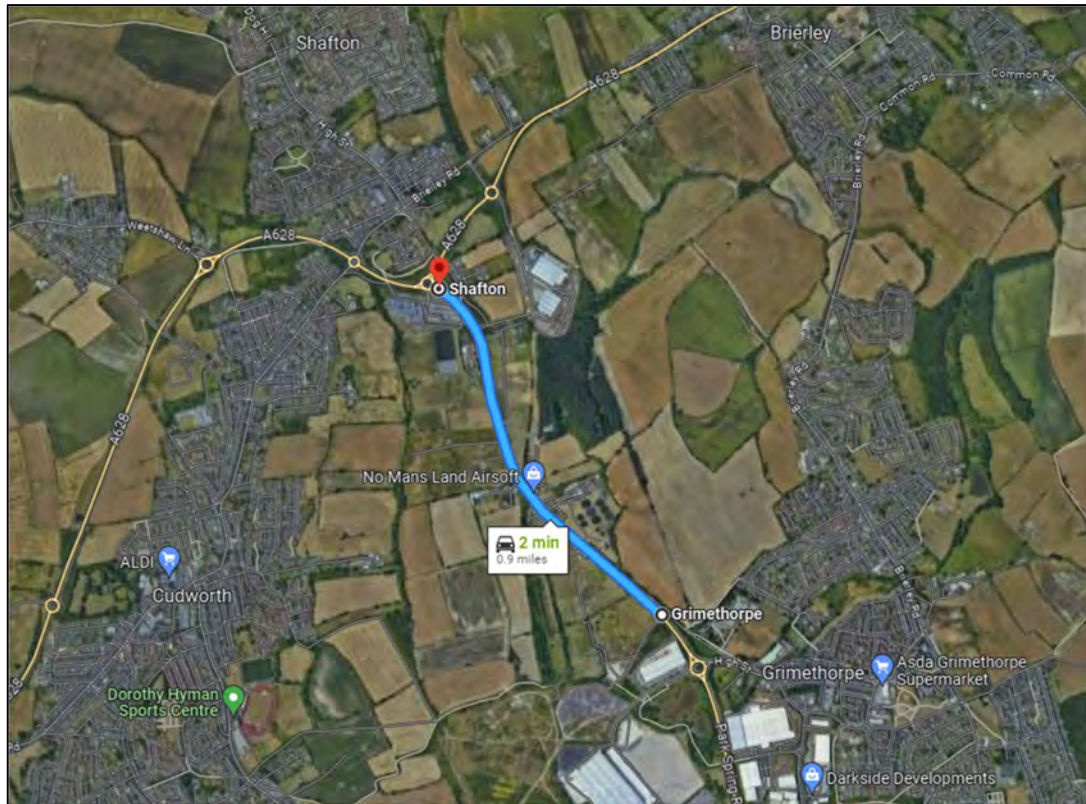


Figure 4.2: Route to Site from North (A628)



4.2 Construction Timings

421 All deliveries will be undertaken within the approved hours. The normal operational hours of the site will be 0700 to 1900 hours Monday to Friday. Occasionally there may be deliveries during the Saturday, however; no material inputs or other routine site operations will be carried out on any Sunday, public or bank holiday without the prior written approval of the planning authority.

4.3 Noise and Vibration

431 The developer remains responsible for managing noise and vibration levels at the site. Mitigation measures may include but are not limited to

- **The use of well-maintained vehicles and equipment;**
- **Vibrations and noise from vehicle and plant movements to and from the site will be managed through the enforcement of the designated site access point and journey route.**

4.4 Dust and Odour

441 The contractor will conduct material handling operations in a manner which

- **Minimises dust and odour generation, through the use of enclosed handling and off-loading facilities;**
- **Minimise dust from being carried beyond the periphery of the site through regular clearing of roadways.**

4.5 *Mud, Litter and Debris*

451 During normal operations, HGV deliveries will be on the agreed routes. The contractor will ensure that site roadways are kept free of mud, litter or debris, to minimise the risk of carry over onto the public highway.

452 The contractor will provide facilities to ensure that, prior to departure from the site, all vehicles shall have wheels free from excessive mud or debris.

5.0 CONCLUSIONS

5.1 Summary

5.1.1 CoraH have been commissioned by Oakland Golf and Leisure to undertake an assessment of the transport matters arising for an "Agricultural Restoration & Landscape Enhancement Scheme" at the former Ginehope Colliery located off Ferry Moor Lane, Upper Gidworth, Bamsley, **S72 7EZ**

5.1.2 The purpose of the proposed development is to return the site to productive use by improving the soil profile so that it is suitable for agriculture and outdoor recreational uses in a restored landscape to include new tree plantations and enhanced biodiversity. The restoration of the site will be achieved through the importation of 430,000m³ of soils and inert material under EAP permit a waste recovery operation. The restoration works will take 5 years to complete.

5.1.3 Access to the site for construction vehicles is proposed via the existing Ferry Moor Lane / Engre Lane (A6195) junction.

5.1.4 It is estimated that 430,000m³ of inert materials are to be transported to the site using HGVs carrying an average of 9m³ per deliver which equates to 47,778 HGV/animals.

5.1.5 The proposed development would result in a maximum of 6 HGV/animals during the AM and PM peak hours. During construction, it can be deduced that there would not have a severe impact on the highway network.

5.1.6 The routing of HGVs will be considered to minimise the impact on residential areas.

5.1.7 The Engre Lane / Ferry Moor Lane Capacity junction would operate well with no capacity with the development works in place.

5.1.8 The recorded accident data within the vicinity of the site does not indicate any existing highway safety patterns or problems.


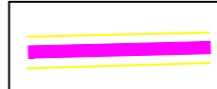
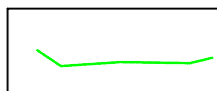
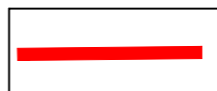
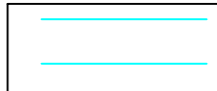

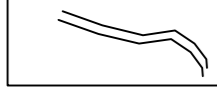

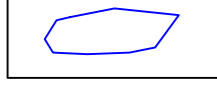



5.2 Conclusion

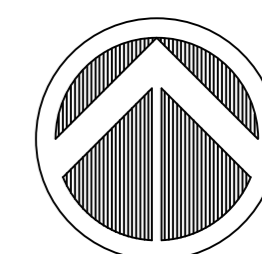
5.2.1 It is concluded that the development proposals are acceptable in highways and transportation terms. There are no highways or transport related reasons upon which a refusal of the planning application for these proposals would be justified.

Agricultural Restoration & Landscape Enhancement Scheme



Key:

- | | | | |
|---|--|---|---|
|  | Existing Contours (1m Metre Intervals) |  | Underground Powerline plus Wayleave |
|  | Existing Scrub Vegetation |  | Application Boundary (See Also Plan 901.05) |
|  | Overhead Powerlines |  | Proposed Contours (1m Intervals) |
|  | Existing Tracks |  | Proposed Amenity Grass |
|  | Existing Wet / Dry Areas |  | Proposed Permissive Public Access Paths |
|  | Existing Public Rights Of Way |  | Proposed Planting |



0 50 100 Meters
Scale 1:1250 @ A1

Drawn By: GW

Revision No.: A-Changes to Key & Red Line Boundary

Scale: 1: 1250 @ A1

Drawing No: 901.07

Project Name: Grimethorpe

Date: 26th May 2023

Drawing Name: Masterplan

Checked By: BW

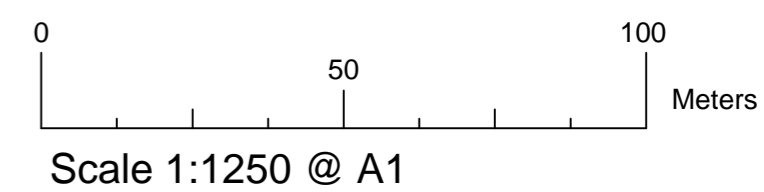
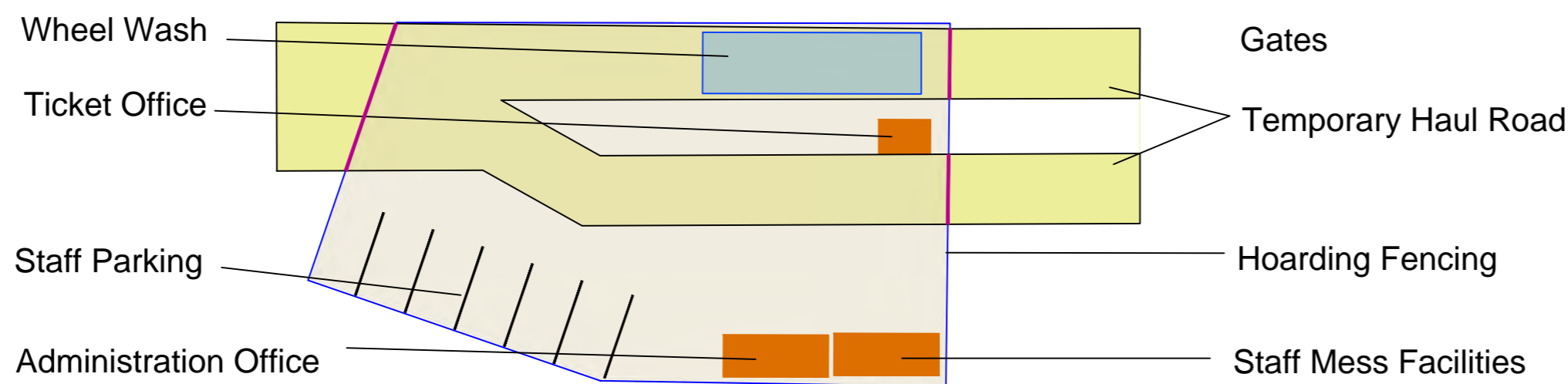


APPENDIX B – CONSTRUCTION ACCESS AND COMPUND PLAN

Agricultural Restoration & Landscape Enhancement Scheme



Key:



Drawn By: GW	Revision No.:
Scale: 1: 1250 @ A1	Drawing No: 901.10
Project Name: Grimethorpe	Date: 25/05/23
Drawing Name: Construction Site Set-up	Checked By BW



APPENDIX C – TRAFFIC SURVEY

Colwell A/C

Report ID: 41323, Site Name: 2nd St (4), Direction: AE/SE, Epsilon Lane, 45m south of Ferry Lane, Northbound

Monday 11 September 2023. Table with columns: Time, Hourly Totals, 05-15, 15-30, 30-45, 45-00, Cycles, Motor Cycles, Car Van, Car Van, 2 Aile Van, 3 Aile Rigid, 4 Aile Rigid, 3 Aile Artic, 4 Aile Artic, 5 Aile Artic, 6 Aile Artic, Double Road Train, Triple Road Train, MPH 0-10, MPH 10-15, MPH 15-20, MPH 20-25, MPH 25-30, MPH 30-35, MPH 35-40, MPH 40-45, MPH 45-50, MPH 50-55, MPH 55-60, P-Title 95%, Average Speed, Standard Deviation.

Tuesday 12 September 2023. Table with columns: Time, Hourly Totals, 05-15, 15-30, 30-45, 45-00, Cycles, Motor Cycles, Car Van, Car Van, 2 Aile Van, 3 Aile Rigid, 4 Aile Rigid, 3 Aile Artic, 4 Aile Artic, 5 Aile Artic, 6 Aile Artic, Double Road Train, Triple Road Train, MPH 0-10, MPH 10-15, MPH 15-20, MPH 20-25, MPH 25-30, MPH 30-35, MPH 35-40, MPH 40-45, MPH 45-50, MPH 50-55, MPH 55-60, P-Title 95%, Average Speed, Standard Deviation.

Wednesday 13 September 2023. Table with columns: Time, Hourly Totals, 05-15, 15-30, 30-45, 45-00, Cycles, Motor Cycles, Car Van, Car Van, 2 Aile Van, 3 Aile Rigid, 4 Aile Rigid, 3 Aile Artic, 4 Aile Artic, 5 Aile Artic, 6 Aile Artic, Double Road Train, Triple Road Train, MPH 0-10, MPH 10-15, MPH 15-20, MPH 20-25, MPH 25-30, MPH 30-35, MPH 35-40, MPH 40-45, MPH 45-50, MPH 50-55, MPH 55-60, P-Title 95%, Average Speed, Standard Deviation.

Thursday 14 September 2023. Table with columns: Time, Hourly Totals, 05-15, 15-30, 30-45, 45-00, Cycles, Motor Cycles, Car Van, Car Van, 2 Aile Van, 3 Aile Rigid, 4 Aile Rigid, 3 Aile Artic, 4 Aile Artic, 5 Aile Artic, 6 Aile Artic, Double Road Train, Triple Road Train, MPH 0-10, MPH 10-15, MPH 15-20, MPH 20-25, MPH 25-30, MPH 30-35, MPH 35-40, MPH 40-45, MPH 45-50, MPH 50-55, MPH 55-60, P-Title 95%, Average Speed, Standard Deviation.

Friday 15 September 2023. Table with columns: Time, Hourly Totals, 05-15, 15-30, 30-45, 45-00, Cycles, Motor Cycles, Car Van, Car Van, 2 Aile Van, 3 Aile Rigid, 4 Aile Rigid, 3 Aile Artic, 4 Aile Artic, 5 Aile Artic, 6 Aile Artic, Double Road Train, Triple Road Train, MPH 0-10, MPH 10-15, MPH 15-20, MPH 20-25, MPH 25-30, MPH 30-35, MPH 35-40, MPH 40-45, MPH 45-50, MPH 50-55, MPH 55-60, P-Title 95%, Average Speed, Standard Deviation.

Saturday 16 September 2023. Table with columns: Time, Hourly Totals, 05-15, 15-30, 30-45, 45-00, Cycles, Motor Cycles, Car Van, Car Van, 2 Aile Van, 3 Aile Rigid, 4 Aile Rigid, 3 Aile Artic, 4 Aile Artic, 5 Aile Artic, 6 Aile Artic, Double Road Train, Triple Road Train, MPH 0-10, MPH 10-15, MPH 15-20, MPH 20-25, MPH 25-30, MPH 30-35, MPH 35-40, MPH 40-45, MPH 45-50, MPH 50-55, MPH 55-60, P-Title 95%, Average Speed, Standard Deviation.

Sunday 17 September 2023. Table with columns: Time, Hourly Totals, 05-15, 15-30, 30-45, 45-00, Cycles, Motor Cycles, Car Van, Car Van, 2 Aile Van, 3 Aile Rigid, 4 Aile Rigid, 3 Aile Artic, 4 Aile Artic, 5 Aile Artic, 6 Aile Artic, Double Road Train, Triple Road Train, MPH 0-10, MPH 10-15, MPH 15-20, MPH 20-25, MPH 25-30, MPH 30-35, MPH 35-40, MPH 40-45, MPH 45-50, MPH 50-55, MPH 55-60, P-Title 95%, Average Speed, Standard Deviation.

Virtual Day (7.00). Table with columns: Time, Hourly Totals, 05-15, 15-30, 30-45, 45-00, Cycles, Motor Cycles, Car Van, Car Van, 2 Aile Van, 3 Aile Rigid, 4 Aile Rigid, 3 Aile Artic, 4 Aile Artic, 5 Aile Artic, 6 Aile Artic, Double Road Train, Triple Road Train, MPH 0-10, MPH 10-15, MPH 15-20, MPH 20-25, MPH 25-30, MPH 30-35, MPH 35-40, MPH 40-45, MPH 45-50, MPH 50-55, MPH 55-60, P-Title 95%, Average Speed, Standard Deviation.

Virtual Day (1.00). Table with columns: Time, Hourly Totals, 05-15, 15-30, 30-45, 45-00, Cycles, Motor Cycles, Car Van, Car Van, 2 Aile Van, 3 Aile Rigid, 4 Aile Rigid, 3 Aile Artic, 4 Aile Artic, 5 Aile Artic, 6 Aile Artic, Double Road Train, Triple Road Train, MPH 0-10, MPH 10-15, MPH 15-20, MPH 20-25, MPH 25-30, MPH 30-35, MPH 35-40, MPH 40-45, MPH 45-50, MPH 50-55, MPH 55-60, P-Title 95%, Average Speed, Standard Deviation.

Junctions 10
PICADY 10 - Priority Intersection Module
Version: 10.0.1.1519 © Copyright TRL Software Limited, 2021
For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 379777 software@trl.co.uk trlsoftware.com
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Ferry Moor Lane, Engine Lane PICADY.j10
Path: C:\Users\mchau\Downloads
Report generation date: 09/10/2023 10:52:27

»2023 With Development, AM
 »2023 With Development, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
2023 With Development										
Stream B-AC	D1	0.2	10.55	0.14	B	D2	0.2	13.00	0.17	B
Stream C-AB		0.1	6.97	0.06	A		0.1	7.84	0.06	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	Ferry Moor Lane / Engne Lane
Location	Grimethorpe
Site number	
Date	09/10/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	LAPTOP-DTQ9HG8B\mchau
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 With Development	AM	ONE HOUR	07:45	09:15	15
D2	2023 With Development	PM	ONE HOUR	15:45	17:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023 With Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.59	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.59	A

Arms

Arms

Arm	Name	Description	Arm type
A	Engine Lane (South)		Major
B	Ferry Moor Lane		Minor
C	Engine Lane (North)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	9.00			70.0	✓	1.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.50	30	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	527	0.083	0.211	0.133	0.301
B-C	675	0.090	0.227	-	-
C-B	615	0.207	0.207	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 With Development	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	482	100.000
B		✓	52	100.000
C		✓	712	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	26	456
	B	26	0	26
	C	686	26	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.14	10.55	0.2	B
C-AB	0.06	6.97	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	39	463	0.085	39	0.1	8.483	A
C-AB	20	558	0.036	20	0.0	6.689	A
C-A	516			516			
A-B	20			20			
A-C	343			343			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	47	436	0.107	47	0.1	9.237	A
C-AB	25	552	0.045	25	0.0	6.821	A
C-A	615			615			
A-B	23			23			
A-C	410			410			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	57	399	0.144	57	0.2	10.537	B
C-AB	31	547	0.057	31	0.1	6.970	A
C-A	753			753			
A-B	29			29			
A-C	502			502			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	57	399	0.144	57	0.2	10.548	B
C-AB	31	547	0.057	31	0.1	6.973	A
C-A	753			753			
A-B	29			29			
A-C	502			502			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	47	436	0.107	47	0.1	9.250	A
C-AB	25	552	0.045	25	0.0	6.826	A
C-A	615			615			
A-B	23			23			
A-C	410			410			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	39	463	0.085	39	0.1	8.501	A
C-AB	20	558	0.036	20	0.0	6.696	A
C-A	516			516			
A-B	20			20			
A-C	343			343			

2023 With Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.60	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.60	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023 With Development	PM	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	746	100.000
B		✓	52	100.000
C		✓	681	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	26	720
	B	26	0	26
	C	655	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.17	13.00	0.2	B
C-AB	0.06	7.84	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	39	420	0.093	39	0.1	9.432	A
C-AB	20	518	0.039	20	0.0	7.235	A
C-A	492			492			
A-B	20			20			
A-C	542			542			

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	47	385	0.122	47	0.1	10.642	B
C-AB	25	505	0.049	25	0.1	7.502	A
C-A	587			587			
A-B	23			23			
A-C	647			647			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	57	334	0.171	57	0.2	12.968	B
C-AB	32	491	0.064	32	0.1	7.836	A
C-A	718			718			
A-B	29			29			
A-C	793			793			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	57	334	0.171	57	0.2	12.995	B
C-AB	32	491	0.064	32	0.1	7.840	A
C-A	718			718			
A-B	29			29			
A-C	793			793			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	47	385	0.122	47	0.1	10.670	B
C-AB	25	505	0.049	25	0.1	7.504	A
C-A	587			587			
A-B	23			23			
A-C	647			647			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	39	420	0.093	39	0.1	9.458	A
C-AB	20	518	0.039	20	0.0	7.240	A
C-A	492			492			
A-B	20			20			
A-C	542			542			

