

Appendix F

Traffic
RPS-MCCS Ltd.

For inspection purposes only.
Consent of copyright owner required for any other use.

TABLE OF CONTENTS

1.0	TRAFFIC.....	2
1.1	INTRODUCTION.....	2
1.2	BACKGROUND INFORMATION.....	2
1.3	SITE OBSERVATIONS.....	2
1.4	TRAFFIC SURVEYS.....	3
1.5	PEAK TRAFFIC.....	4
1.6	EXISTING LANDFILL MOVEMENTS.....	4
1.7	FUTURE YEAR.....	4
1.8	CONSTRUCTION TRAFFIC.....	5
1.9	TRAFFIC GROWTH.....	5
1.10	NETWORK CAPACITY IN DESIGN YEAR.....	5
1.11	IMPACT OF LANDFILL TRAFFIC.....	6
1.12	CONCLUSIONS.....	7

*For inspection purposes only.
Consent of copyright owner required for any other use.*

1.0 TRAFFIC

1.1 INTRODUCTION

RPS-MCOS have undertaken a Transportation Assessment of Gortadroma Landfill Site to assess the impact of the operational generated traffic on traffic levels on the surrounding network and to review the suitability of the road network to cater for the vehicles accessing the site over the lifetime of the landfill extension.

The assessment included carrying out traffic surveys to establish current traffic levels on the existing network. A site visit allowed assessment of the suitability of existing junctions, which included checking visibility standards and kerb radii. Furthermore the site visit considered carriageway condition, signing and carriageway markings.

1.2 BACKGROUND INFORMATION

Gortadroma is a townland in rural Limerick, 50 km south of Limerick City. The primary land-use in the area is agriculture with some forestry also. The area is sparsely populated and there are no significant industries or commercial developments in the vicinity of the landfill.

It is proposed to extend the life of the landfill to facilitate acceptance of waste for the next 15 to 20 years depending on the implementation of the Limerick/Clare/Kerry Waste Management Plan. The landfill is currently licensed to accept a maximum of 130,000 tonnes of waste per annum and it is proposed to maintain this figure. The landfill has been accepting the maximum licensed amount of waste over the last few years but the annual intake for 2003 was 82,183 tonnes. The landfill currently accepts waste from Limerick City and County. There are two main routes, which are used to gain access to the landfill site, as follows:

- From Limerick City via the N69 Limerick to Foynes road westbound, to the junction with the R521. South on the Regional Road, R521 through the village of Shanagolden to the junction with CR306. Westbound on the County Road, CR306 to the entrance of the Gortadroma Landfill Site. County Road CR306 is referred to locally as the 'Kerry Line'. (See Fig 1)
- Other traffic arrives at the landfill by travelling northbound on the R521 through Ardagh village, as far as the junction with the CR306, where traffic travels westbound as far as the landfill entrance.

A small quantity of waste also arrives at the landfill site by travelling eastbound on the CR306 as far as the landfill entrance.

The Gortadroma Landfill Site hours of opening are from 8:00am to 4:30pm on weekdays and from 8:00am to 4:30 on Saturdays preceding bank holidays (otherwise closed on Saturday).

1.3 SITE OBSERVATIONS

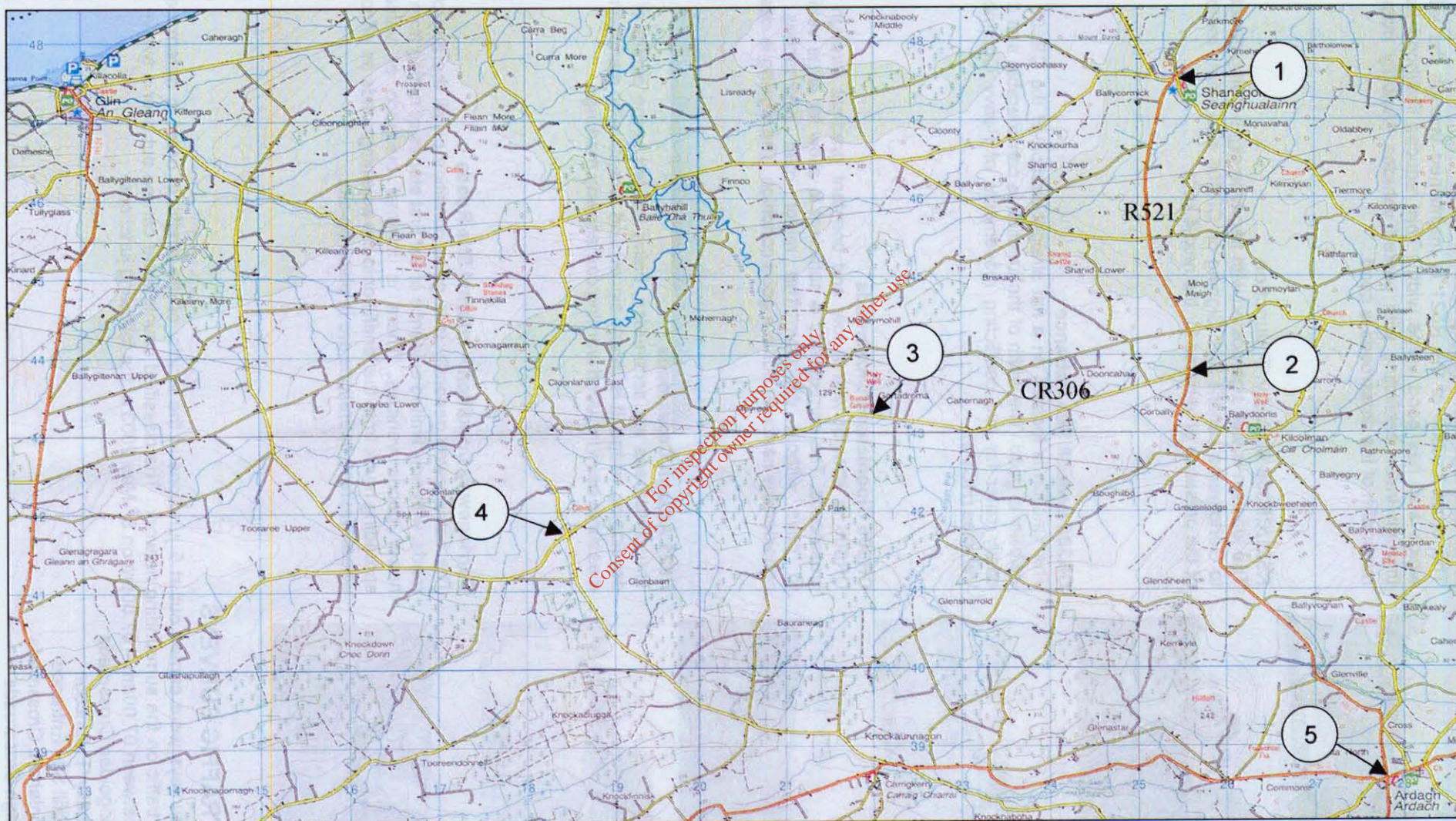
Observations were made at a number of important junctions on the approach roads to the landfill site, in order to determine their suitability to handle the traffic arising as a result of the operation of the landfill.



N69/R521

The junction has a ghost island right turn facility and the R521 arm is positioned on the outside of the bend. This affords good visibility to right turning traffic. The junction is well sign posted and the carriageway markings are in good condition

LOCATION OF TRAFFIC COUNTS



Ashurst
Mount Merrion Avenue
Blackrock
Co. Dublin
Ireland

Tele: (+353) 01-2884499
Fax : (+353) 01-2835676
E-mail: info@dublin.mcos.ie

Project

GORTADROMA LANDFILL
EXTENSION

Title

LOCATION OF TRAFFIC COUNTS
(DATE COUNTED 8TH MAY 2003)

Drawn: M.M.

Checked: T.E.

Appr.: S.L.

Scale: N.T.S.

Date: June '03

Project No. MDE0148

FileRef. MDE0148DG0001

Figure No.

1

Rev.

A01



R521 Shanagolden Crossroads

The cross section of the R521 is maintained through the village, which also has good verge width. This reduces likelihood landfill through traffic conflicting with parked vehicles. Visibility from the minor arm of the crossroads is good.



R521/CR306 Corbally 'T' Junction

The junction is well sign posted with flag type signs giving directions to Gortadroma Landfill Site. Signing on CR306 also warns motorists of the presence of vehicles for the next 4 km's.



CR306 Landfill Site Entrance

The junction is located on a flat straight section of the CR306 and visibility is good. The width of the junction is considerable and it can easily cater for two conflicting movements of Heavy Commercial Vehicles (HCV's).



CR306 Cloonlahard Crossroads

CR306 is straight with a low and constant gradient through this crossroads. The carriageway is sufficient to allow for large vehicles to pass without difficulty. The minor road approaches are considerably narrower but in a good condition. The signing is clear.



R521 Ardagh Crossroads

The crossroads are semi-urban, being located in the centre of the developing village. It is clearly signed and recent traffic management measures have included warning carriageway markings.



Carriageway Condition – internal Site Roads

The carriageway generally is in good condition on all the approach roads, with only limited evidence of the first stages of rutting from the heavy goods vehicles. There is minimal evidence of vehicles spreading muck from the landfill onto the adjoining roads as effective wheel washing operations are in place on-site.

1.4 TRAFFIC SURVEYS

Traffic surveys were carried out at 5 junctions in the vicinity of the landfill in order to determine the level of traffic on the surrounding network. The classified counts were carried out over a twelve hour period between 07.00am – 07.00pm on 8th May 2003 at the following junctions:

1. Shangolden Crossroads
2. Corbally 'T' Junction
3. Landfill Site Entrance
4. Cloonlahard Crossroads
5. Ardagh Crossroads

The results of the traffic surveys area presented showing the Annual Average Daily Traffic (AADT) and the peak periods of the AM (08:00am to 09:00am) and PM (15:30pm to 16:30pm) when the landfill is open. The existing situation is represented with the existing movements to and from the landfill removed to allow for a clearer indication of the impact of the landfill. Figure No.'s 2, 3, and 4 illustrate existing traffic movements on the road network for AADT, AM Peak and PM Peak respectively.

1.5 PEAK TRAFFIC

The peak traffic hours for the road network and the landfill were found by looking at both the peaks in local traffic on the CR306 'The Kerry line' and peaks in landfill waste traffic taken from landfill records. A traffic count was carried out on the 8th of May 2003, The peak traffic on the road 'The Kerry line' just outside the landfill was found to be between 08:00am – 09:00am.

The daily landfill traffic was found to average 48 waste vehicles per day. From this daily rate an average hourly rate of 7 vehicles per hour was found over the course of the 7 hour 50 minute day. It was found from the existing landfill records that the busiest time at the landfill is between 10:30am – 11:30am, but from the survey it was found that the traffic on the road network between 10:30 – 11:30am was a lot lower (35% lower). Once the landfill traffic was added to the existing traffic, the overall peak of both the local traffic and the landfill traffic was found to be from 08:00 – 09:00am.

1.6 EXISTING LANDFILL MOVEMENTS

The landfill weigh-bridge log was used to ascertain typical daily movements to the site. A total of 48 waste vehicle's/per day deliver to the landfill. There is also a certain amount of operational vehicle movements, with trucks bringing subsoil to the site. This material is used in the main to cover the waste in order to minimise wind blown litter occurring.

Table 1.1: Typical daily landfill traffic

Typical Movements	18 articulated/HGV's	8 compactors HGV's	3 Skips	6 roll-on-roll-off	13 car/vans	16 Subsoil trucks
--------------------------	----------------------	--------------------	---------	--------------------	-------------	-------------------

Figure No. 5 illustrates existing typical daily landfill traffic. Figure No.'s 6, 7, and 8 illustrate existing traffic movements on the road network including landfill traffic, for AADT, AM Peak and PM Peak respectively. These best represent the existing situation. The table below shows the total number of vehicles entering the landfill at the peak hour (8:00AM to 9:00AM). The numbers of HGVs entering the landfill are shown in brackets. The proportion of traffic entering the landfill is approximately 10% of the annual average daily traffic on the CR306.

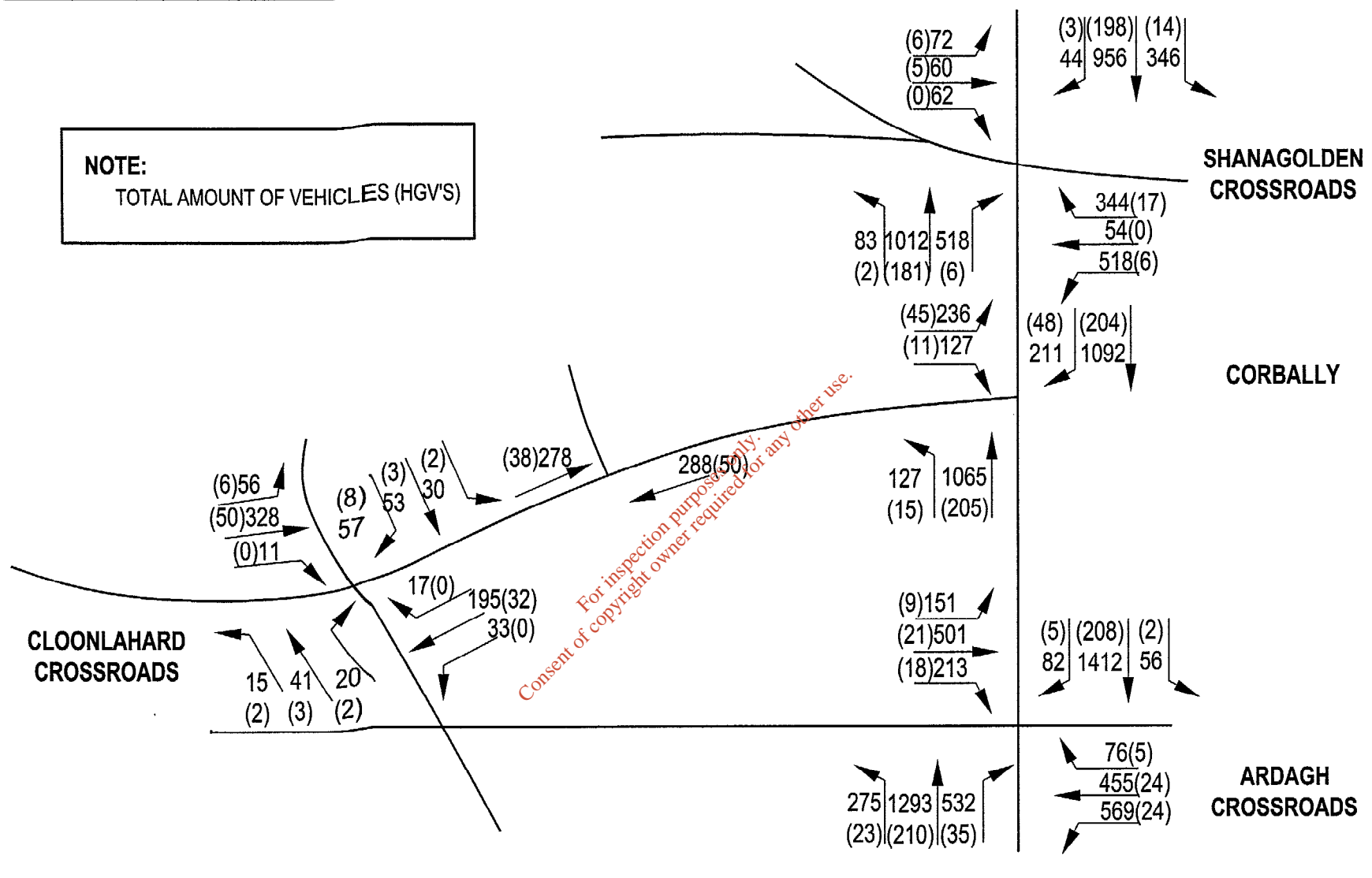
Table 1.2: Traffic entering the Landfill

Movements	Existing situation 2003		Proposed situation 2018	
	Peak Hour	AADT	Peak Hour	AADT
Right Turn From CR306 into landfill	7 (6)	58 (45)	9 (7)	72 (57)
Left Turn From CR306 into landfill	2(1)	13(8)	2(1)	14(10)
Right Turn From Landfill To CR306	2(1)	13(8)	2(1)	14(10)
Left Turn From Landfill To CR306	7 (6)	58 (45)	9 (7)	72 (57)

1.7 FUTURE YEAR

It is recommended that a landfill disposal capacity of approximately 2 million tonnes is required to serve the needs of the Region over the next 15 to 20 years. The worst case scenario is assumed to be an annual waste intake of 130,000 tonnes, which is the maximum quantity allowable under the

NOTE:
TOTAL AMOUNT OF VEHICLES (HGVS)



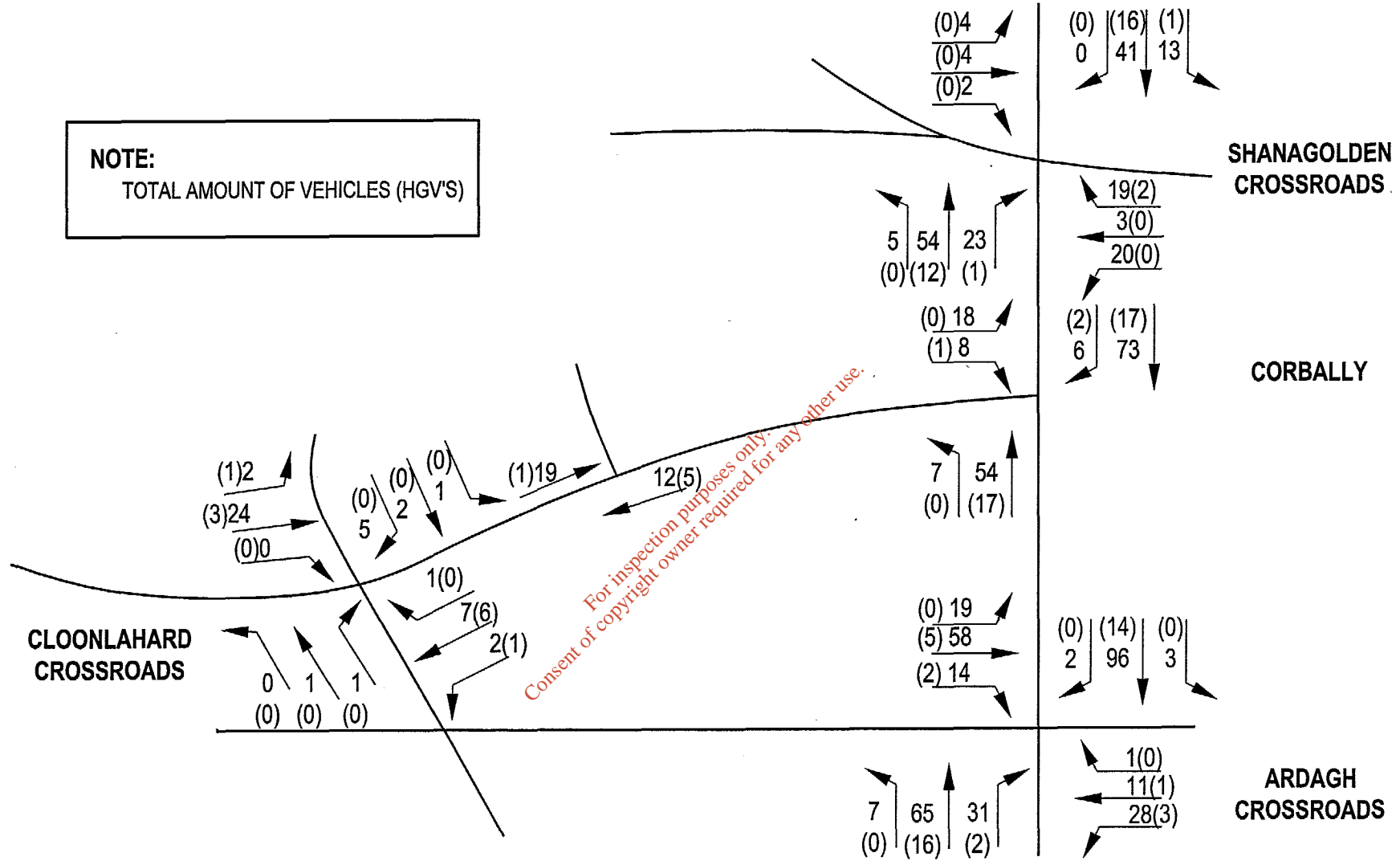
Ashurst,
Mount Merrion Avenue,
Blackrock,
Co. Dublin,
Ireland
Tele (+353) 01-2884499
Fax (+353) 01-2835676
Email info@dublin.mcos.ie

Project	GORTADROMA LANDFILL EXTENSION
Title	EXISTING AADT (2003) WITHOUT LANDFILL

Drawn :	M.M.
Checked :	T.E.
Approved :	S.L.
Scale :	N.T.S.
Date :	June'03

Project No. MDE0148	
File Ref : MDE0148DG0001A01	
Figure No.	Rev.
2	A01

NOTE:
TOTAL AMOUNT OF VEHICLES (HGV'S)

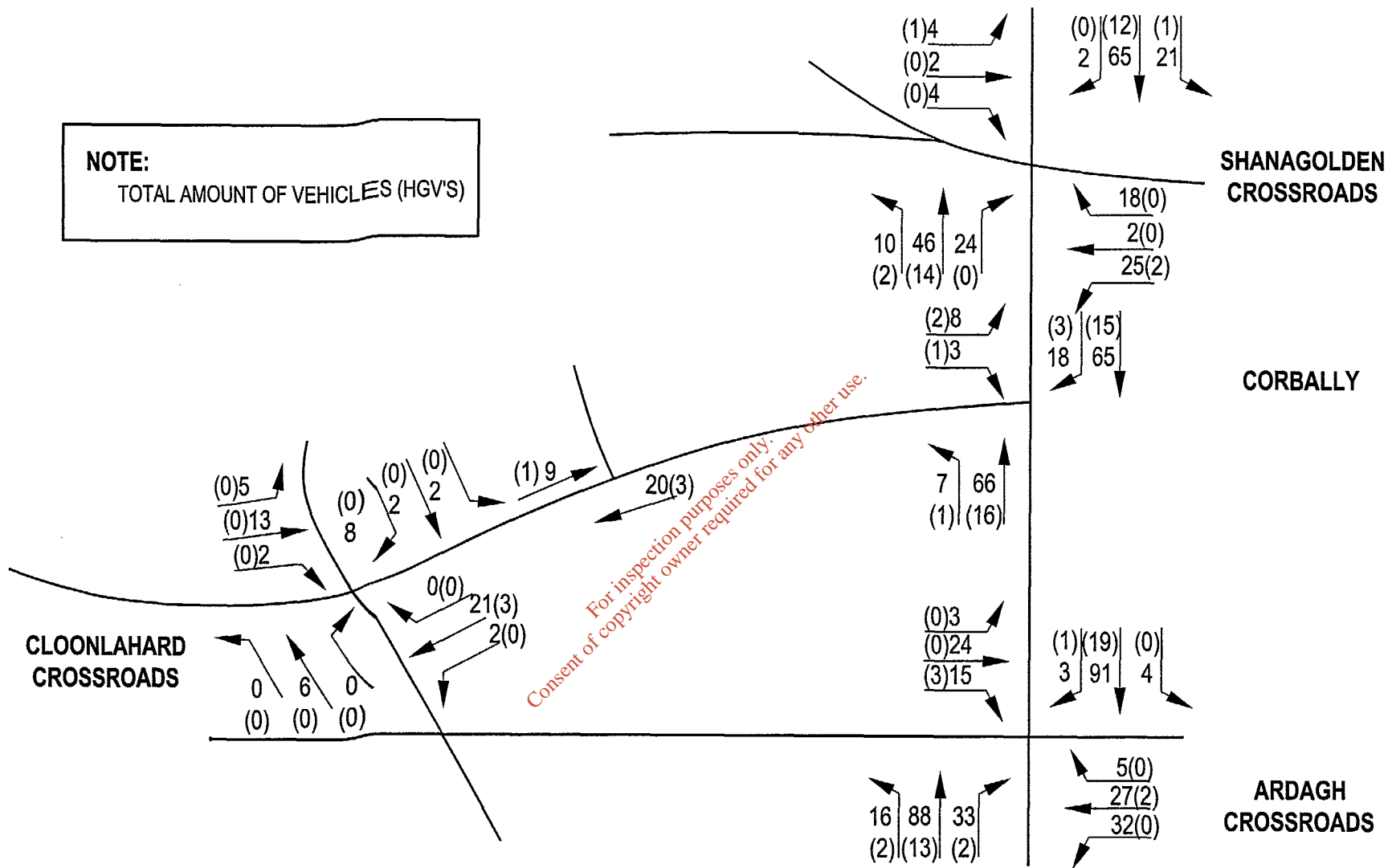


www.mcos.ie

Ashurst,
Mount Merrion Avenue,
Blackrock,
Co Dublin,
Ireland
Tele (+353) 01-2884499
Fax (+353) 01-2835676
Email info@dublin.mcos.ie

Project	GORTADROMA LANDFILL EXTENSION		Drawn : M.M.	Project No. MDE0148	
	Title	EXISTING AM PEAK (08:00-09:00) WITHOUT LANFILL		Checked : T.E.	File Ref : MDE0148DG0001A01
		Approved : S.L.	Figure No.		
		Scale : N.T.S.	3		
		Date : June'03	Rev. A01		

NOTE:
TOTAL AMOUNT OF VEHICLES (HGV'S)



www.mcos.ie

Ashurst
Mount Merrion Avenue,
Blackrock
Co. Dublin,
Ireland

Tele: (+353) 01-2884499
Fax: (+353) 01-2835676

Email: info@dublin.mcos.ie

Project

GORTADROMA LANDFILL
EXTENSION

Title

EXISTING PM PEAK
(15:30-16:30)
WITHOUT LANDFILL

Drawn : M.M.

Checked : T.E.

Approved : S.L.

Scale : N.T.S.

Date : June'03

Project No. MDE0148

File Ref : MDE0148DG0001A01

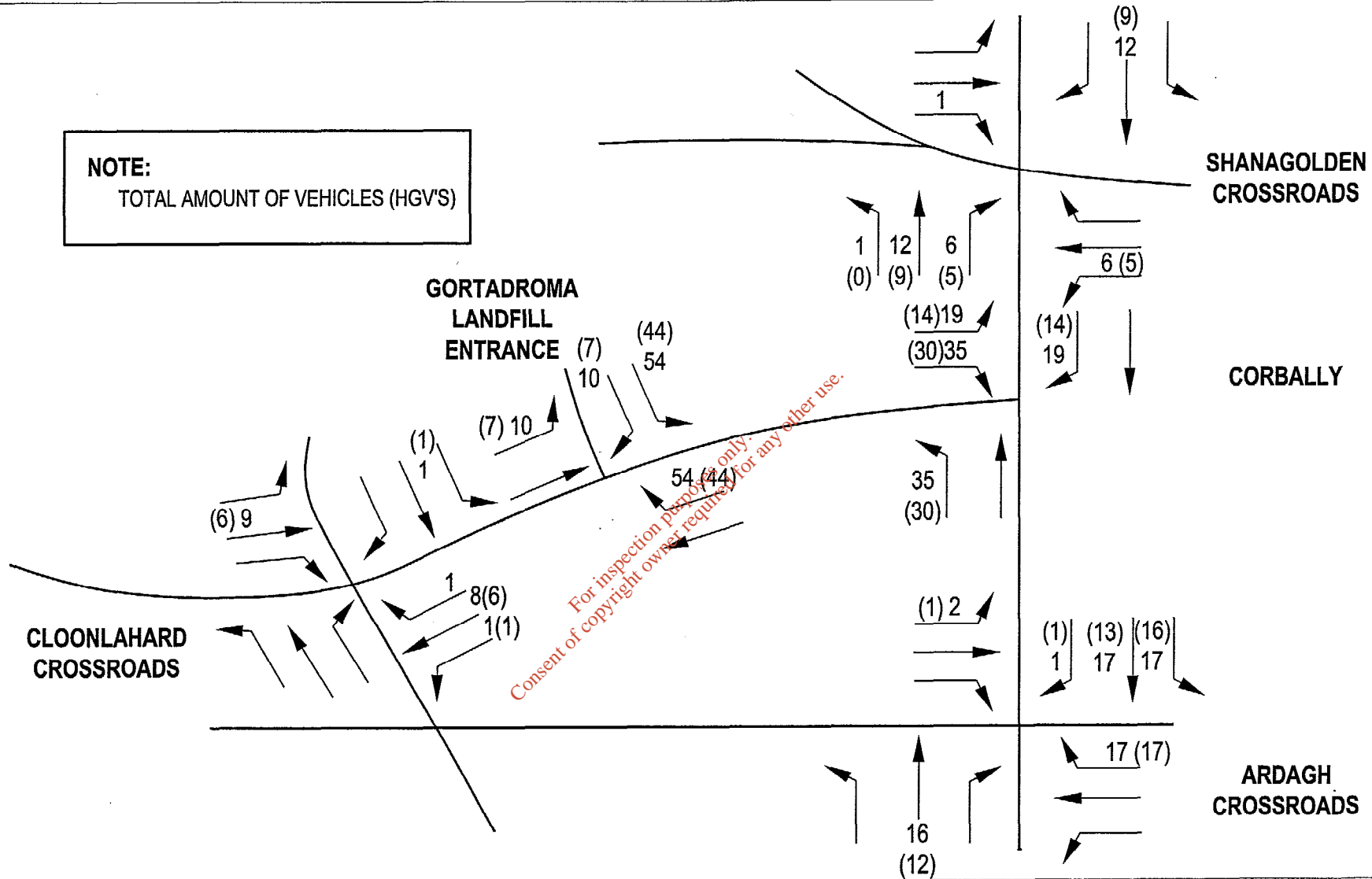
Figure No.

4

Rev.

A01

NOTE:
TOTAL AMOUNT OF VEHICLES (HGV'S)



www.mcos.ie

Ashurst,
Mount Merrion Avenue,
Blackrock,
Co Dublin,
Ireland

Tele (+353) 01-2884499
Fax (+353) 01-2835676

Email info@dublin.mcos.ie

Project GORTADROMA LANDFILL
EXTENSION

Title TYPICAL DAILY
LANDFILL TRAFFIC
2003

Drawn : M.M.

Checked : T.E.

Approved : S.L.

Scale : N.T.S.

Date : June'03

Project No. MDE0148

File Ref : MDE0148DG0001A01

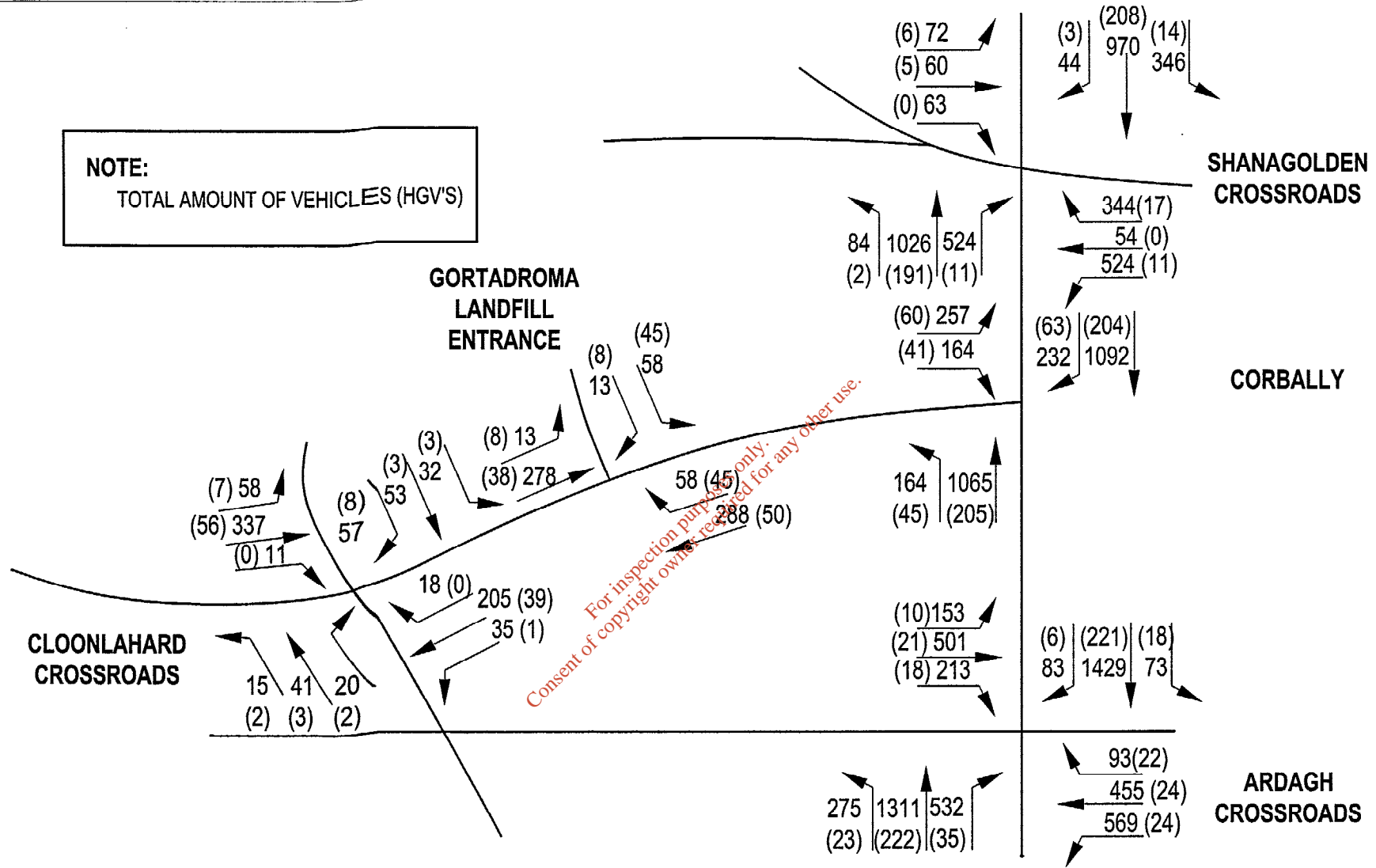
Figure No.

5

Rev.

A01

NOTE:
TOTAL AMOUNT OF VEHICLES (HGV'S)



Ashurst,
Mount Merrion Avenue,
Blackrock,
Co. Dublin,
Ireland

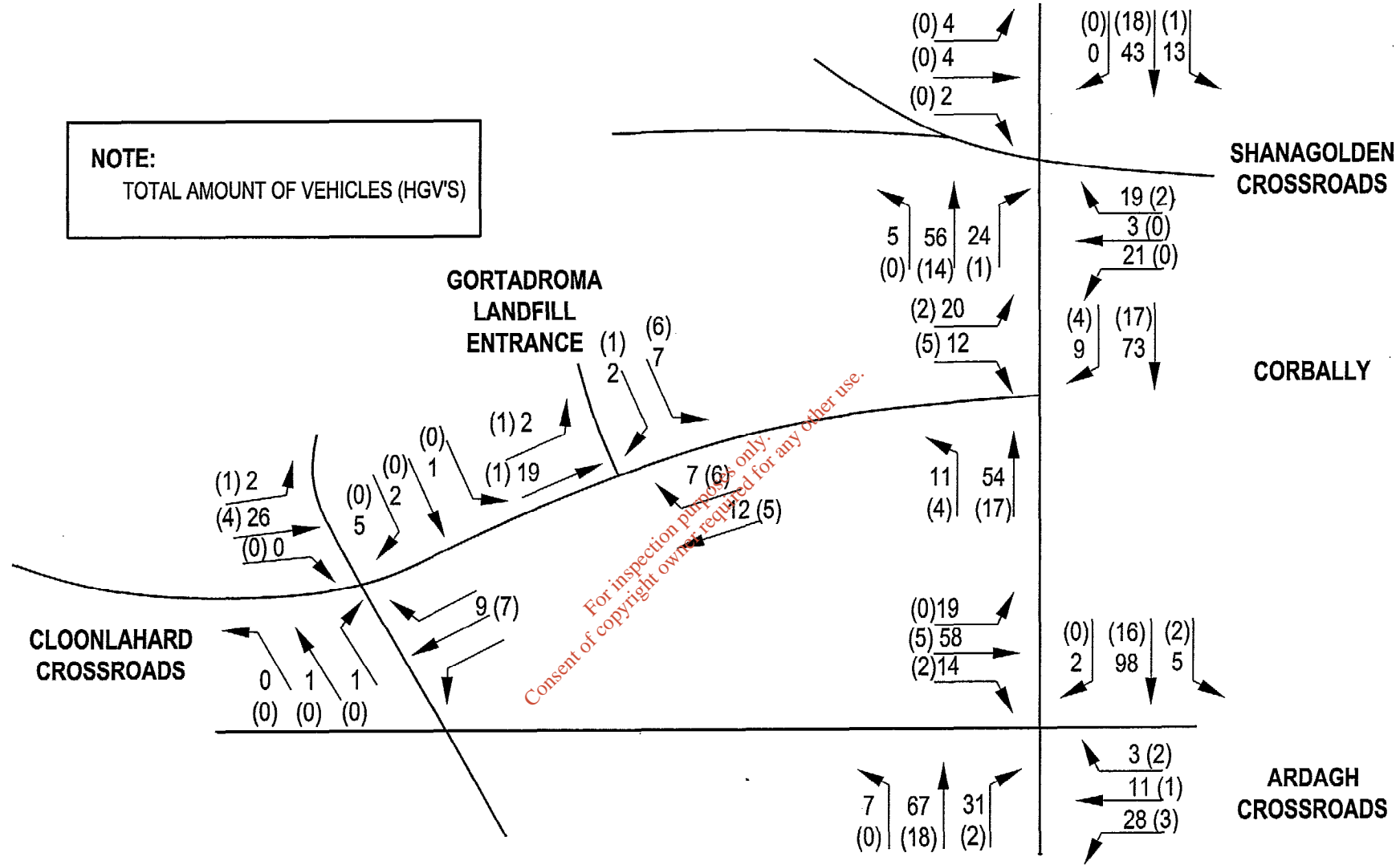
Tele (+353) 01-2884499
Fax (+353) 01-2835676
Email info@dublin.mcos.ie

Project	GORTADROMA LANDFILL EXTENSION
Title	EXISTING AADT (2003) WITH LANDFILL

Drawn :	M.M.
Checked :	T.E.
Approved :	S.L.
Scale :	N.T.S.
Date :	June'03

Project No. MDE0148	
File Ref : MDE0148DG0001A01	
Figure No.	Rev.
6	A01

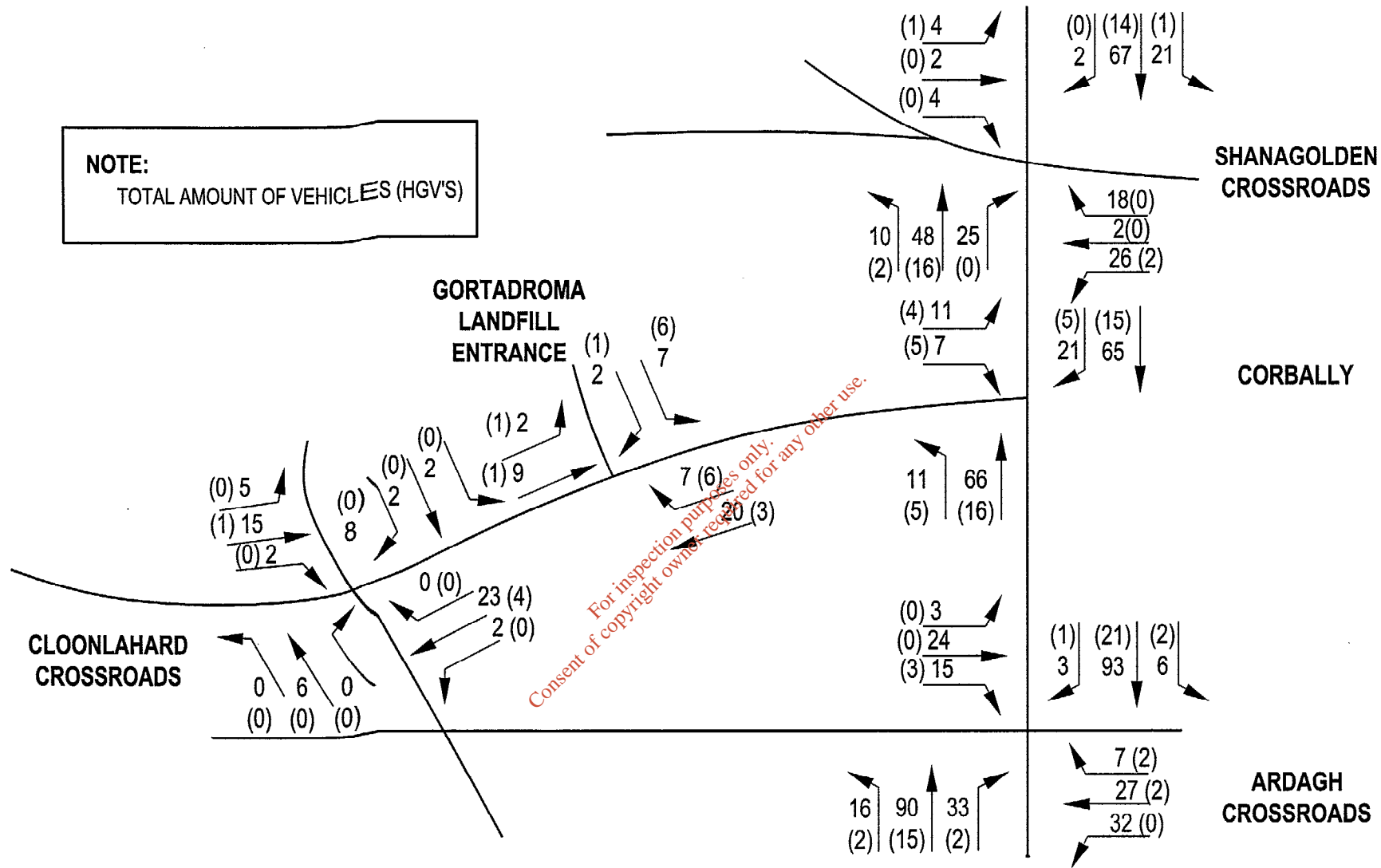
NOTE:
TOTAL AMOUNT OF VEHICLES (HGV'S)



Ashurst,
Mount Merrion Avenue,
Blackrock,
Co Dublin,
Ireland
Tete (+353) 01-2884499
Fax: (+353) 01-2835676
Email: info@dublin.mcos.ie

Project	GORTADROMA LANDFILL EXTENSION		Drawn : M.M.	Project No. MDE0148	
	Title	EXISTING AM PEAK (08:00 - 09:00) WITH LANDFILL		Checked : T.E.	File Ref : MDE0148DG0001A01
		Approved : S.L.	Figure No.		
		Scale : N.T.S.	7		
		Date : June'03	A01		

NOTE:
TOTAL AMOUNT OF VEHICLES (HGV'S)



www.mcos.ie

Ashurst,
Mount Merrion Avenue,
Blackrock,
Co. Dublin,
Ireland

Tele (+353) 01-2884499
Fax (+353) 01-2835676

Email info@dublin.mcos.ie

Project	GORTADROMA LANDFILL EXTENSION
Title	EXISTING PM PEAK (15:30 - 16:30) WITH LANDFILL

Drawn :	M.M.
Checked :	T.E.
Approved :	S.L.
Scale :	N.T.S.
Date :	June'03

Project No.	MDE0148
File Ref :	MDE0148DG0001A01
Figure No.	8
Rev.	A01

current waste license for the next 15 to 20 years. Therefore, a design year of 2018 has been used to test the network for its capacity to cater for the additional traffic due to the extension of the landfill.

As the landfill is currently operating within the same annual capacity as is expected for the extension it is anticipated that existing movements to and from the site will be representative of future movements. However, to ensure a robust assessment it is assumed that the maximum annual tonnage of 130,000 tons a year is fulfilled. This will show a slight increase in the number of movements recorded as estimated under the projected worst case scenario over and above the current number of traffic movements. In relation to the amount of subsoil needed, it will remain the same due to the fact that the same amount of subsoil will be used to cap existing and future cells.

Table 1.3: Future Landfill Traffic - Estimated for the worst case scenario.

Maximum tonnage of waste per annum =	130,000 tonnes
Assuming approximately 255 working days in a year i.e. 255 days when the landfill would be accepting waste	255 days
Average tonnage of waste per day =	510 tonnes/day
Worst Case Scenario.	
Movements include 26 articulated/HGV's, 12 compactor's HGV', 4 skips, 9 roll-on-roll-off, 19 car/vans and 16 subsoil trucks	
Average traffic generation to the site will be	86 Vehs/day

The majority of the waste traffic to the landfill will come from the Shanagolden direction and the Ardagh direction. Approximately 40% of the total waste traffic from each direction. However, a percentage will come from the Cloonlahard crossroad also, the remaining 20% of the landfill traffic. The projected traffic associated with the landfill site is illustrated in Figure 9.

1.8 CONSTRUCTION TRAFFIC

At the Landfill cells are used to contain the waste. In all 11 cells must be constructed. The construction of these cells will be on a phased basis with 2-3 cells under various stages of construction in each phase taking approximately nine months to construct. During the construction phases there will be a certain amount of construction traffic. There will be approximately 63 truck movements per day. These movements will be spread out over the course of the day.

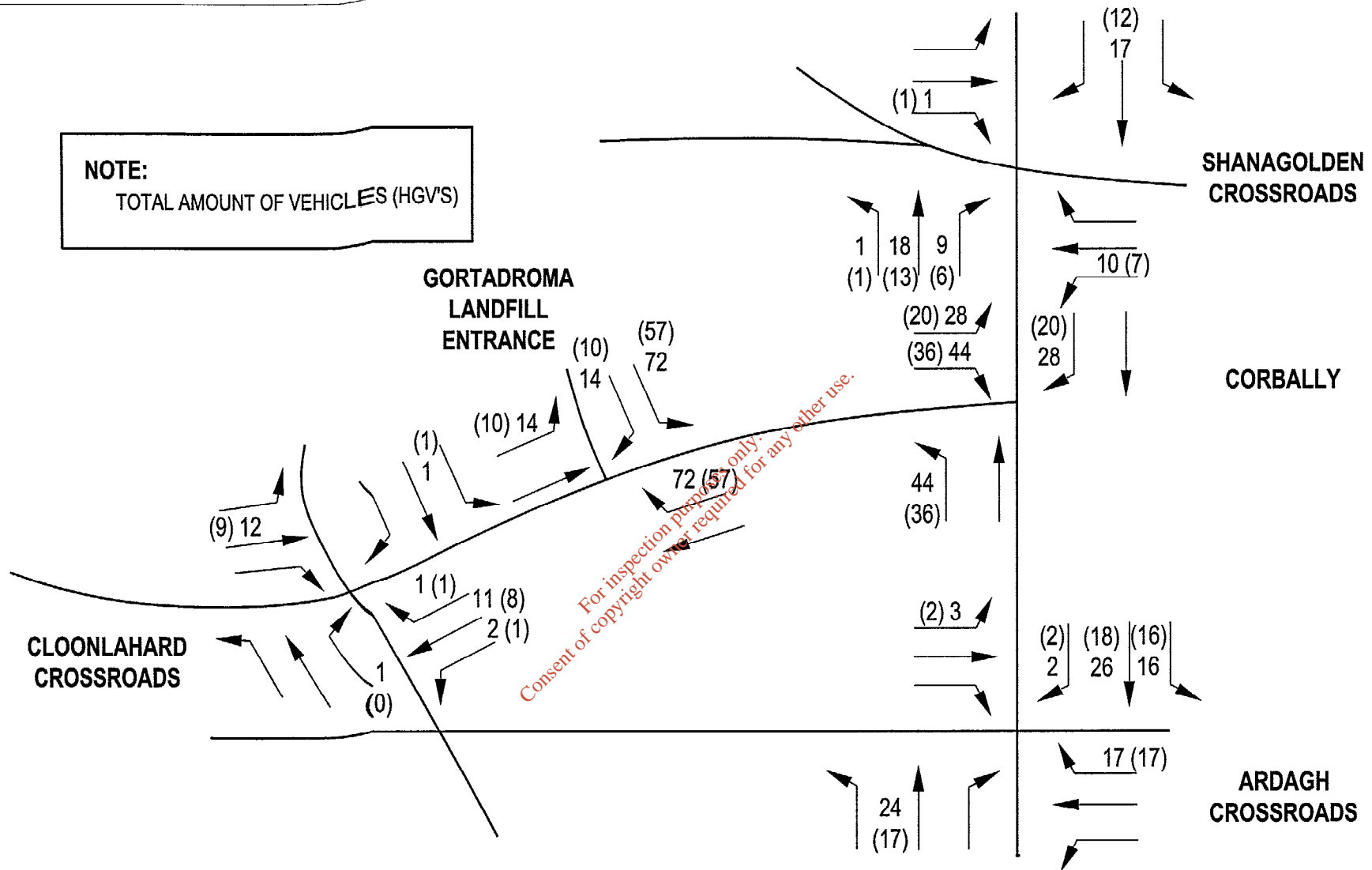
1.9 TRAFFIC GROWTH

The NRA National Road Needs Study quotes growth rates for National routes up to the year 2035. The roads in the vicinity of the landfill are of Regional or County Road status. However, in order to be robust, a growth rate equivalent to that of National Secondary non tourist route has been used. This growth rate has been taken as 1.27 (approx. 1.8% per annum) over the period of 2003 – 2018. The traffic flows for the design year 2018 represented in AADT, AM Peak and PM Peak periods without landfill traffic are illustrated in Figure No.'s 10, 11 and 12 respectively. The design Year 2018 traffic flow represented in AADT, AM Peak and PM Peak periods, with landfill traffic (worst case scenario), are illustrated in Figure No.'s 13, 14 and 15 respectively.

1.10 NETWORK CAPACITY IN DESIGN YEAR

During the Design Year (2018) the road network will operate within capacity at LOS C (Level of service) for a standard 2 lane road, in a rural area. International experience shows that it is best practice to design new facilities with an objective level of service C. The level of service capacities were obtained from The 'National Road Needs Study' published by The National Roads Authority. The maximum AADT on the local road network in the vicinity of Gortadroma is 3050 AADT. Given that a level of service D would be generally regarded as the minimum acceptable standard, the fact the road network will comfortably operate within the level of service C, demonstrates the impact of the landfill traffic on the network in the future year will be negligible.

NOTE:
TOTAL AMOUNT OF VEHICLES (HGVS)



www.mcos.ie

Ashurst,
Mount Merrion Avenue,
Blackrock,
Co Dublin,
Ireland

Tele (+353) 01-2884499
Fax (+353) 01-2835676

Email info@dublin.mcos.ie

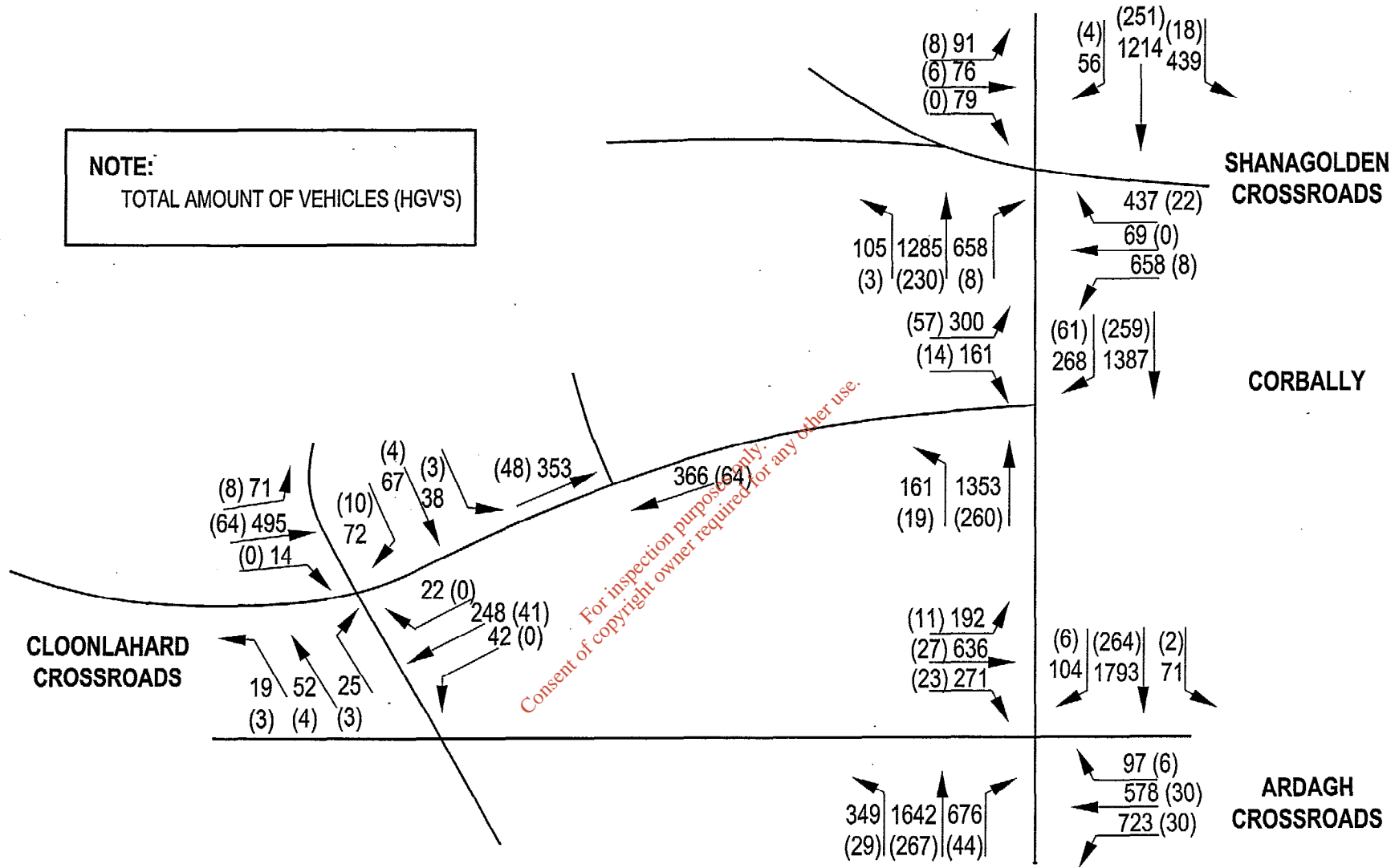
Project	GORTADROMA LANDFILL EXTENSION
Title	PROJECTED DAILY LANDFILL TRAFFIC (WORST CASE SCENARIO)

Drawn : M.M.
Checked : T.E.
Approved : S.L.
Scale : N.T.S.
Date : June'03

Project No. MDE0148	
File Ref : MDE0148DG0001A01	
Figure No.	Rev.
9	A01

NOTE:

TOTAL AMOUNT OF VEHICLES (HGV'S)



www.mcos.ie

Ashurst,
Mount Merrion Avenue,
Blackrock,
Co Dublin,
Ireland

Tele (+353) 01-2884499
Fax (+353) 01-2835676

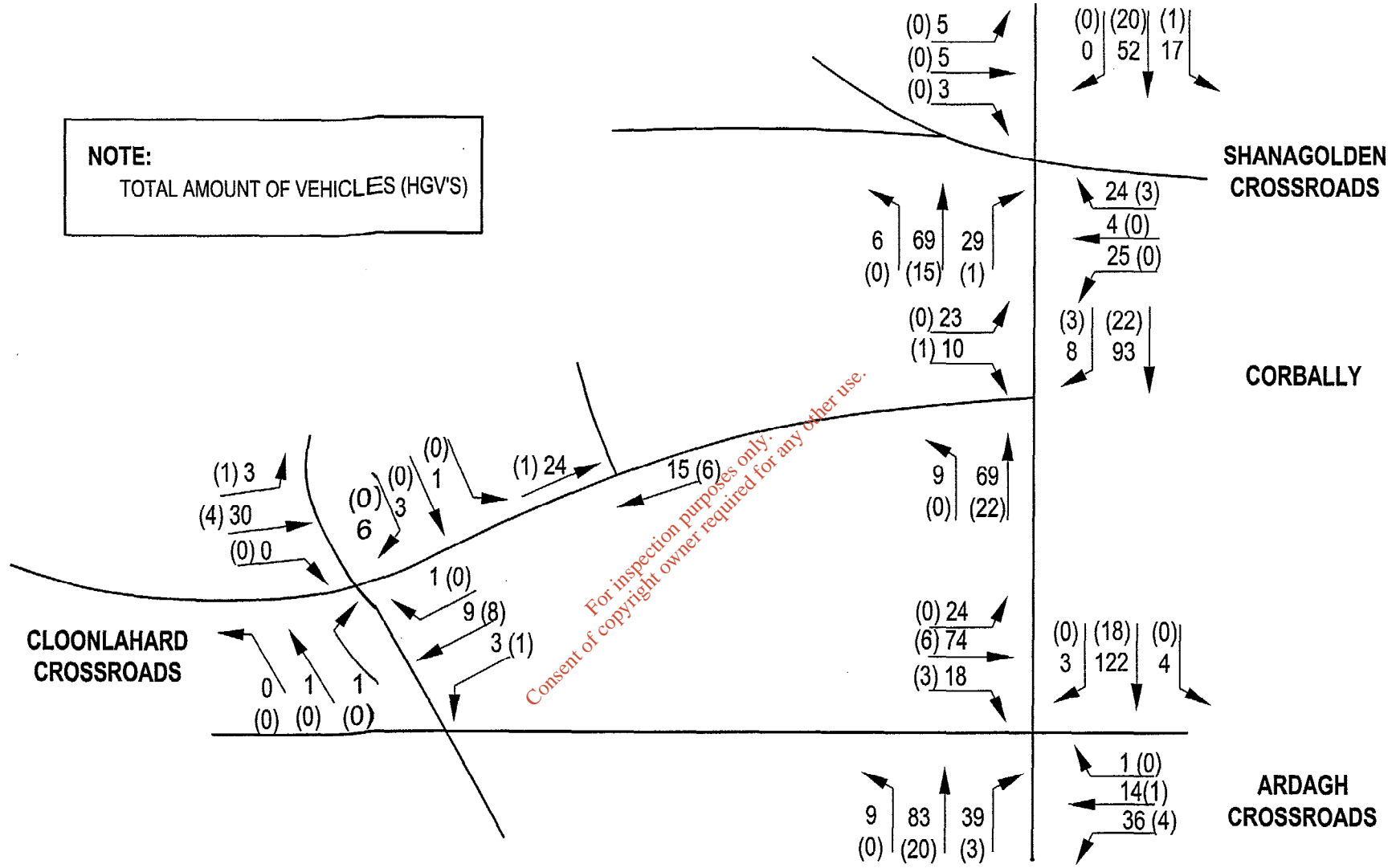
Email: info@dublin.mcos.ie

Project	GORTADROMA LANDFILL EXTENSION
Title	DESIGN YEAR (2018) AADT WITHOUT LANDFILL

Drawn :	M.M.
Checked :	T.E.
Approved :	S.L.
Scale :	N.T.S.
Date :	June'03

Project No. MDE0148	
File Ref : MDE0148DG0001A01	
Figure No.	Rev.
10	A01

NOTE:
TOTAL AMOUNT OF VEHICLES (HGV'S)



Ashurst,
Mount Merrion Avenue,
Blackrock,
Co Dublin,
Ireland

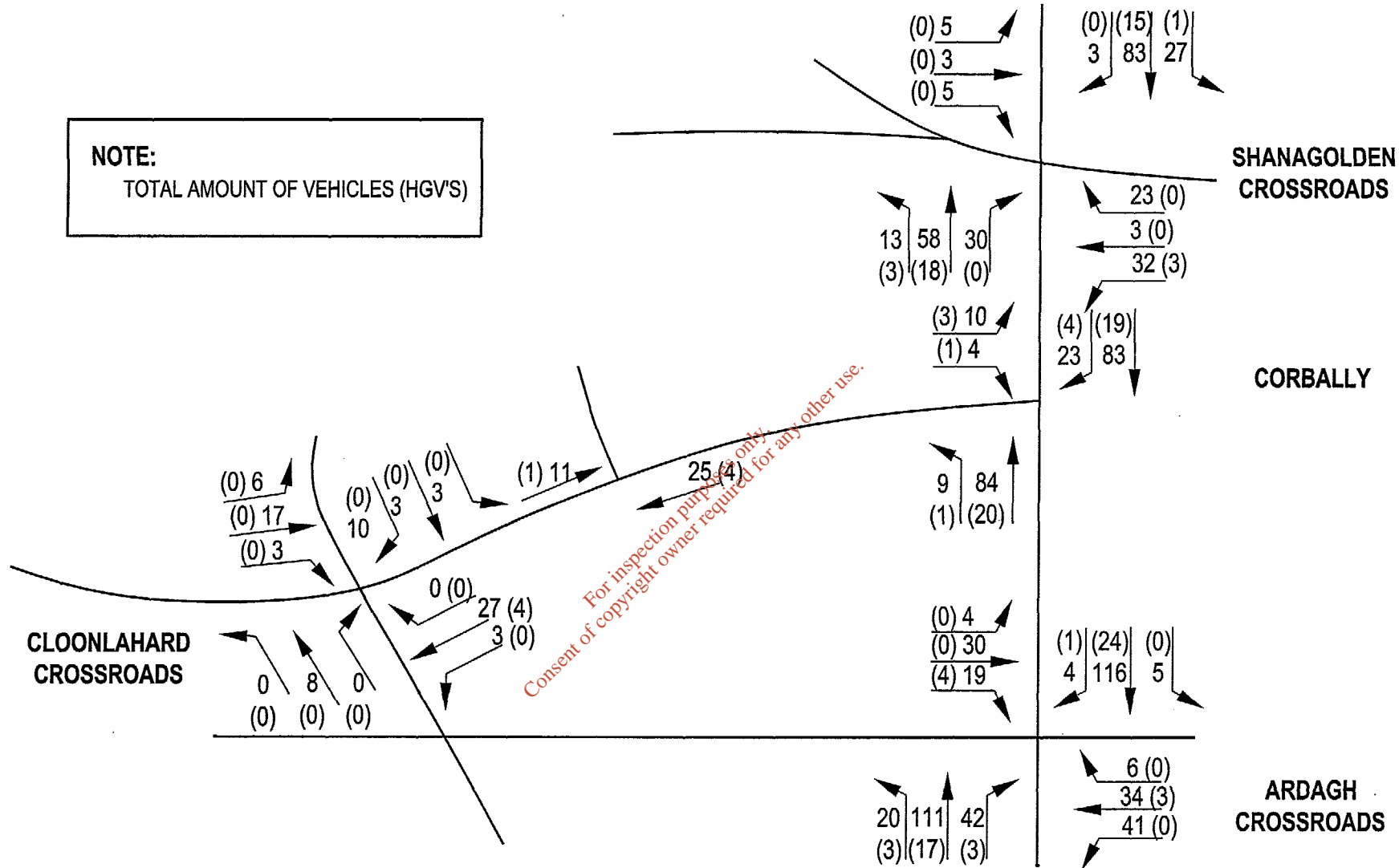
Tele (+353) 01-2884499
Fax (+353) 01-2835676

Email info@dublin.mcos.ie

www.mcos.ie

Project	GORTADROMA LANDFILL EXTENSION		Drawn : M.M.	Project No. MDE0148	
	Title	DESIGN YEAR (2018) AM PEAK (08:00 - 09:00) WITHOUT LANDFILL		Checked : T.E.	File Ref : MDE0148DG0001A01
		Approved : S.L.	Figure No.		
		Scale : N.T.S.	11 A01		
		Date : June'03	Rev.		

NOTE:
TOTAL AMOUNT OF VEHICLES (HGV'S)



www.mcos.ie

Ashurst,
Mount Merrion Avenue,
Blackrock,
Co Dublin,
Ireland

Tele (+353) 01-2884499
Fax (+353) 01-2835676

Email info@dublin.mcos.ie

Project

GORTADROMA LANDFILL
EXTENSION

Title

DESIGN YEAR (2018)
PM PEAK (15:30 - 16:30)
WITHOUT LANDFILL

Drawn : M.M.

Checked : T.E.

Approved : S.L.

Scale : N.T.S.

Date : June'03

Project No. MDE0148

File Ref : MDE0148DG0001A01

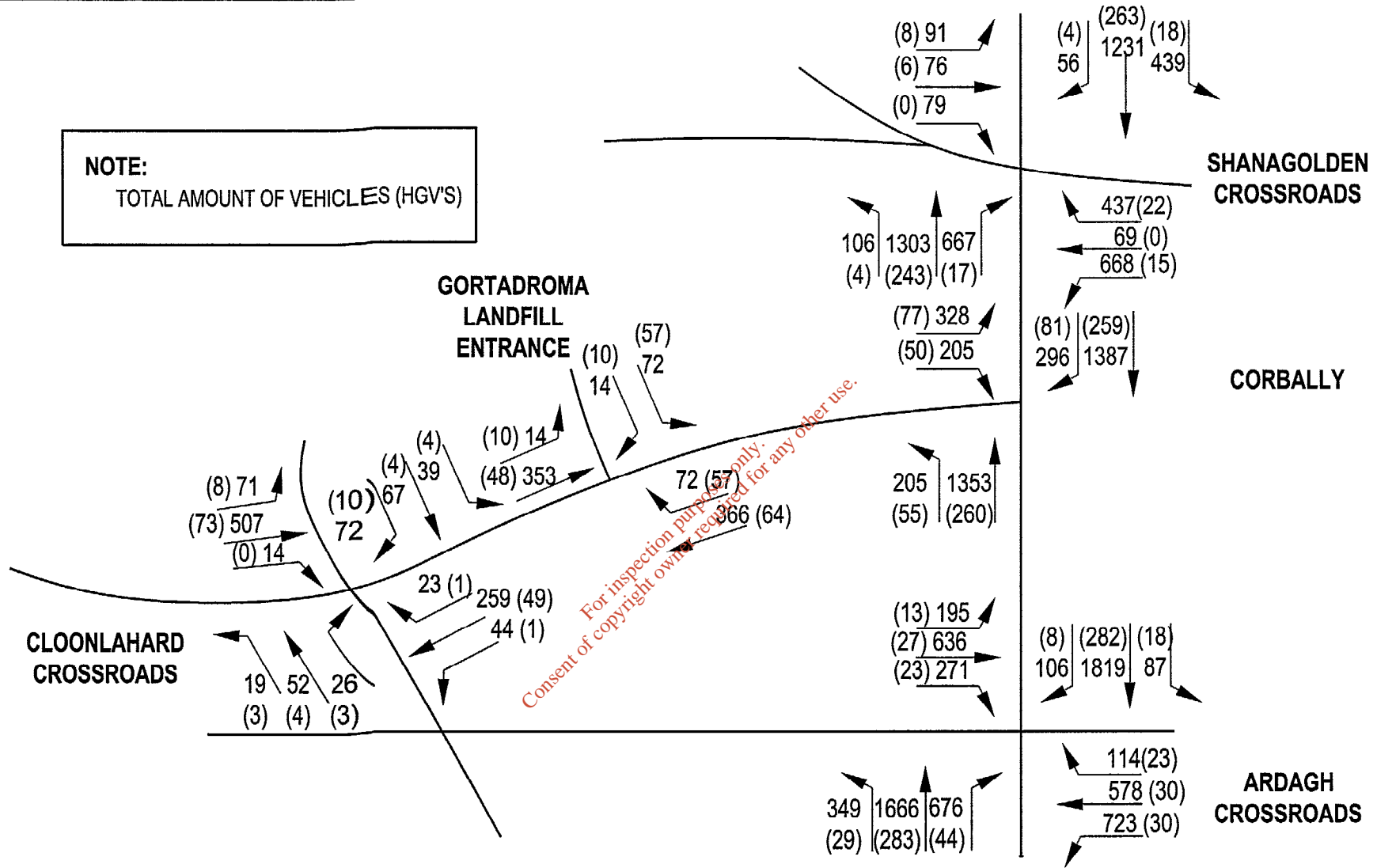
Figure No.

12 A01

Rev.

NOTE:

TOTAL AMOUNT OF VEHICLES (HGV'S)



www.mcos.ie

Ashurst,
Mount Merrion Avenue,
Blackrock,
Co Dublin,
Ireland

Tele (+353) 01-2884499
Fax (+353) 01-2835676

Email info@dublin.mcos.ie

Project

GORTADROMA LANDFILL
EXTENSION

Title

DESIGN YEAR (2018) WITH LANDFILL
WORST CASE SCENARIO
AADT

Drawn : M.M.

Checked : T.E.

Approved : S.L.

Scale : N.T.S.

Date : June'03

Project No. MDE0148

File Ref : MDE0148DG0001A01

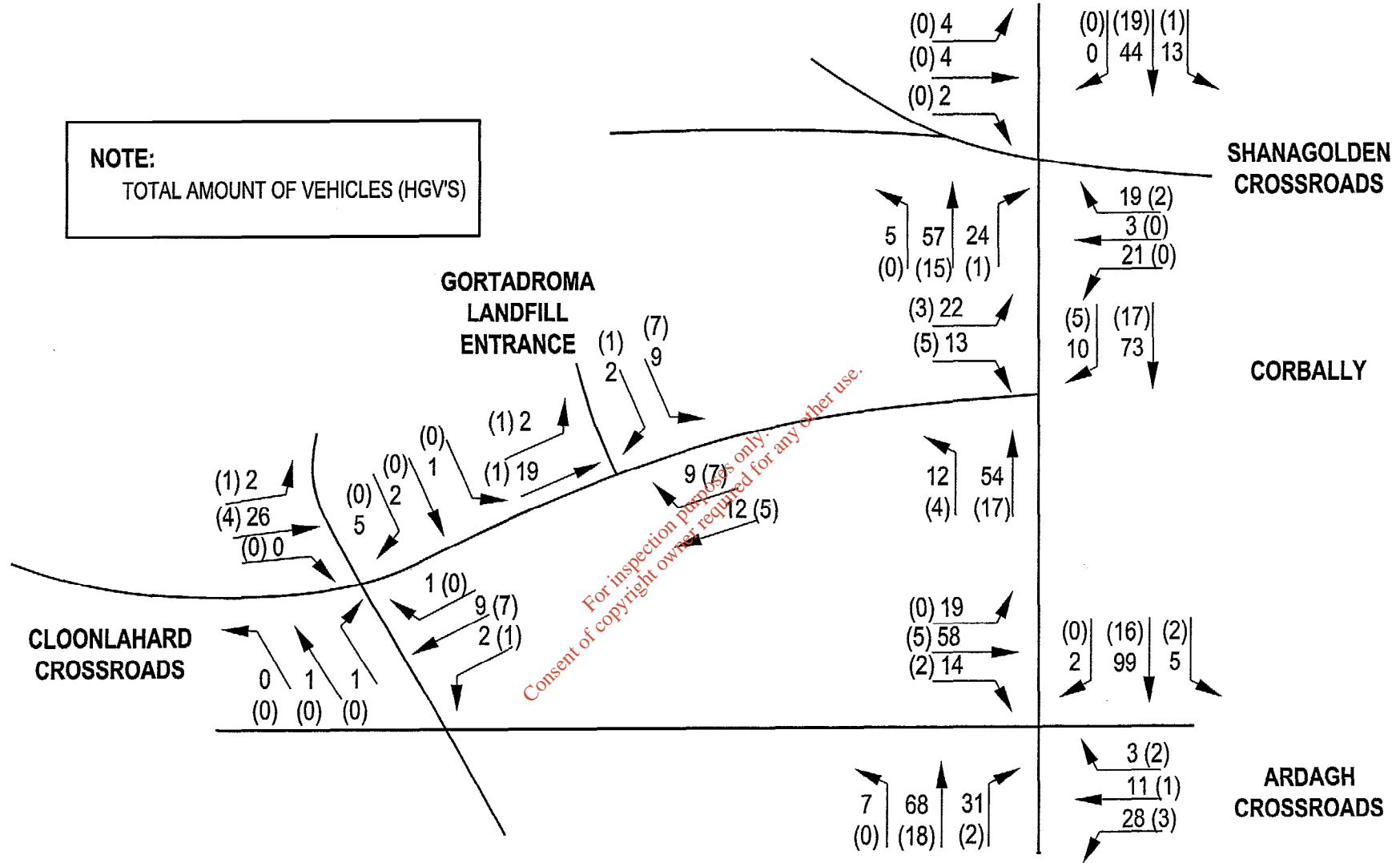
Figure No.

13

Rev.

A01

NOTE:
TOTAL AMOUNT OF VEHICLES (HGV'S)



www.mcos.ie

Ashurst,
Mount Merrion Avenue,
Blackrock,
Co Dublin,
Ireland

Tele (+353) 01-2884499
Fax (+353) 01-2835676

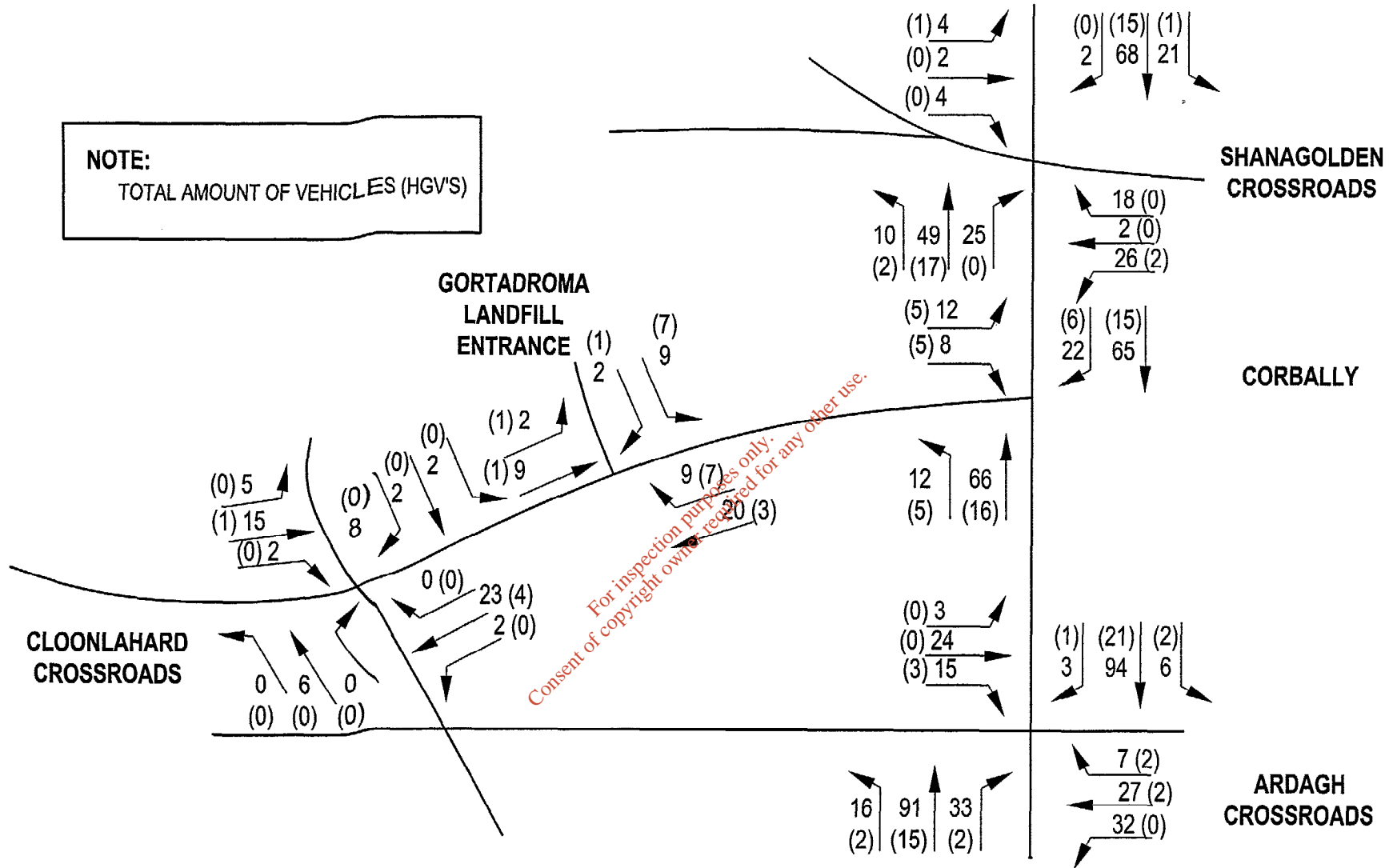
Email info@dublin.mcos.ie

Project	GORTADROMA LANDFILL EXTENSION
Title	DESIGN YEAR (2018) WITH LANDFILL WORST CASE SCENARIO AM PEAK (08:00-09:00)

Drawn :	M.M.
Checked :	T.E.
Approved :	S.L.
Scale :	N.T.S.
Date :	June'03

Project No. MDE0148	
File Ref : MDE0148DG0001A01	
Figure No.	Rev.
14	A01

NOTE:
TOTAL AMOUNT OF VEHICLES (HGV'S)



Ashurst,
Mount Merrion Avenue,
Blackrock
Co Dublin,
Ireland

Tele: (+353) 01-2884499
Fax: (+353) 01-2835676
Email: info@dublin.mcos.ie

Project
GORTADROMA LANDFILL
EXTENSION

Title DESIGN YEAR (2018) WITH LANDFILL
WORST CASE SCENARIO
PM PEAK (15:30-16:30)

Drawn: M.M.
Checked: T.E.
Approved: S.L.
Scale: N.T.S.
Date: June'03

Project No. MDE0148
File Ref: MDE0148DG0001A01
Figure No. **15**
Rev. A01

Table 1.4: Level of Service Classification

Road Menu Type	Classification	Terrain	Maximum AADT For Given LOS (12% HGV)		
			C	D	E
Standard Two Lane	Rural	Level	6500	11600	20600

1.11 IMPACT OF LANDFILL TRAFFIC

The following tables compares AADT (Annual Average Daily Traffic) traffic turning movements with and without the associated landfill traffic at the Corbally T-Junction, the Ardagh Cross Roads and the Shanagolden Cross Roads for both the existing and design years. It shows the total amount of vehicles and then in brackets the amount of HGV's. This allows comparisons to be readily made between traffic levels on the road network with and without the landfill. Furthermore it allows observations on the impact the landfill traffic has on the network.

Table 1.5: Corbally T junction

Movements	Existing without Landfill	Existing with Landfill	% traffic increase due to landfill	Design Year without Landfill	Design Year with Landfill Worst Case Scenario	% traffic increase due to landfill
Right Turn From R521 To CR306	211 (48)	232 (63)	10 (31)	268 (61)	296 (81)	10 (33)
Left Turn From R521 To CR306	127 (15)	164 (45)	29 (200)	161 (19)	205 (55)	27 (189)
Right Turn From CR306 To R521	127 (11)	164 (41)	29 (273)	161 (14)	205 (50)	27 (257)
Left Turn From CR306 To R521	236 (45)	257 (60)	9 (33)	300 (57)	328 (77)	10 (35)

Table 1.6: R521 Ardagh Cross Roads

Movements	Existing without Landfill	Existing with Landfill	% traffic increase due to landfill	Design Year without Landfill	Design Year with Landfill Worst Case Scenario	% traffic increase due to landfill
Right Turn From R521 To R523	82 (5)	83 (6)	1 (20)	104 (6)	106 (8)	2 (33)
Straight ahead R521 Southbound	1412 (208)	1429 (221)	1 (6)	1793 (264)	1819 (282)	2 (7)
Left Turn From R521 To R523	56 (2)	73 (18)	30(800)	71 (2)	87 (18)	23 (800)
Left Turn From R523 To R521	151 (9)	153 (10)	1 (11)	192 (11)	195 (13)	2 (18)
Right Turn from R523 to R521	76 (5)	93 (22)	22 (340)	97 (6)	114 (23)	18 (283)
Straight Ahead R521 Northbound	1293 (210)	1311 (222)	1 (6)	1642 (267)	1666 (283)	2 (6)

Table 1.7: Shanagolden Cross Roads

Movements	Existing without Landfill	Existing with Landfill	% traffic increase due to landfill	Design Year without Landfill	Design Year with Landfill Worst Case Scenario	% traffic increase due to landfill
Right Turn From CR To R521	62(0)	63(0)	2 (0)	79(0)	79(0)	0 (0)
Straight ahead R521 Southbound	956(198)	970(208)	2 (5)	1214(251)	1231(263)	2 (5)
Left Turn From CR To R521	518(6)	524(11)	1 (83)	658(8)	668(15)	2 (88)
Left Turn From R521 To CR	83(2)	84(2)	1 (0)	105(3)	106(4)	1 (33)
Straight Ahead R521 Northbound	1012(181)	1026(191)	14 (6)	1285(230)	1303(243)	1 (6)
Right Turn from R521 to CR	518(6)	524(11)	1 (83)	658(8)	667(17)	3 (113)

Whilst it can be seen that the landfill traffic can contribute significantly in percentage terms to a number of movements at the junctions particularly with regard to HGV movements, the actual volume of traffic is very low and no delay or congestion will be resultant over the lifetime of the landfill.

1.12 CONCLUSIONS

The impact of the extension of the landfill will not be noticeable as the landfill is currently operational and the associated traffic is already on the road network. The analysis demonstrates that whilst the extension of the Gortadroma Landfill site will continue the generation of operational traffic movements on the surrounding road network, it is clear that the network will continue to operate with acceptable capacity limits. The operational traffic will not significantly impact on the surrounding road network and there are no mitigation measures required.