

Tab. 14 Corrected Census Reports at C12 C13 C27

Mott MacDonald

LEVEL CROSSING TRAFFIC CENSUS

SURVEY REPORT JUNE 2016

3267-LON SITE C12 – SILT DROVE LEVEL CROSSING

Job Number	3267-LON-C12
Checked	
Date	02-02-2017
Contact	Ross De Vere
Revision	4



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Introduction

Tracsis Traffic Data Limited were commissioned by Mott MacDonald to undertake a level crossing survey at Silt Drove Level Crossing. The survey consisted of a nine day video traffic census. A location plan is shown in Figure 1, which shows the exact position of the crossing surveyed.

Contract Specification

The table below shows the analysis carried out, and any further analysis that is possible from the camera views:

Analysis Type	Status
Nine Day Census	Appendix A
Road Closure	not available
Traffic Turning	not available
Blocking Back	not available
Speed Survey	not available

In addition to this, further analysis could be carried out in the form of different pedestrian classifications, if requested.

Survey Conduct/Data Presentation – Traffic Census (Appendix A)

The pedestrian surveys were undertaken at the level crossing by telescopically mounted cameras that were installed over nine consecutive days from Saturday 18th June 2016 to Sunday 26th June 2016 over the hours 00:00 – 24:00 each day. The camera equipment was installed from the highway and at no time did we go onto Network Rail land or property. Resulting camera images recorded at each crossing were then analysed by experienced staff, all closely supervised. The traffic and pedestrian data was recorded in 15 minute intervals classifying the movements over the crossing into the categories shown below, all in accordance with the specification:

- The Number of Road Vehicles Using the Crossing by Direction, Classified to:
 1. Cars
 2. Light Goods Vehicles
 3. Motorcycles
 4. Heavy Goods Vehicles
 5. Agricultural Vehicles
 6. Buses
 7. Equestrians, mounted
 8. Equestrians, walking
 9. Pedal Cycles being ridden
 10. Pedal Cycles being walked
 11. Herded Animals
 12. Large/Slow Vehicles
- Type of Foot Traffic Using the Crossing by Direction, Classified to:
 1. Adults
 2. Accompanied Children
 3. Unaccompanied Children
 4. Elderly
 5. Impaired
 6. Wheelchair
 7. Pushchair/Pram
 8. Mobility Scooter
 9. Railway Personnel

The daily number of pedestrians that used the level crossing over the 24 hours are summed for each category as specified. The specification also requires the busiest quarter hour period for pedestrians. In addition, Tracsis Traffic Data Limited have added any relevant observations during the analysis, relating to crossing misuse or unusual occurrences.

Busiest Quarter Hourly Periods

For Cars/Lgvs, there were multiple days with the highest period/multiple periods/total number.

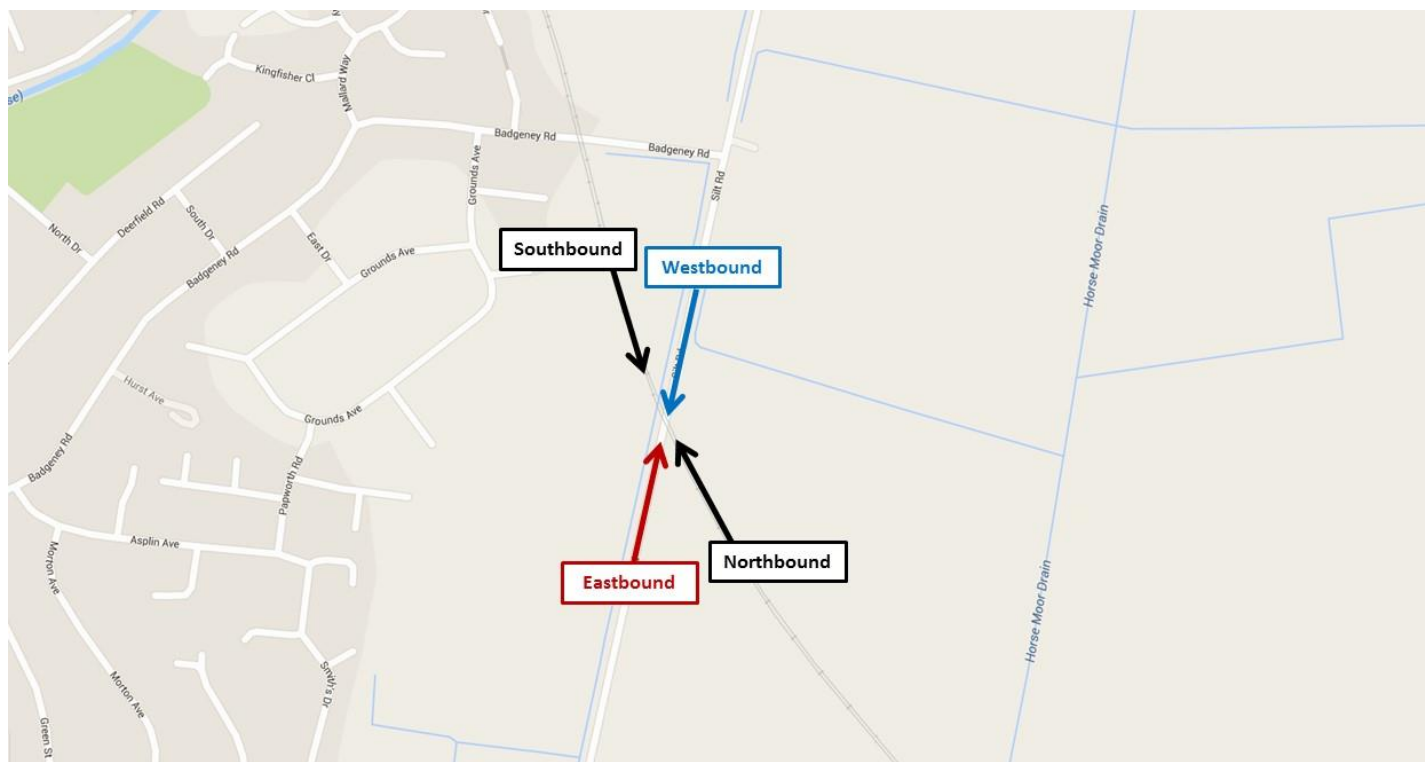
For Hgvs/Large Vehicles, the busiest quarter hourly period occurred at 13:45 on Day 6 with 2 vehicles.

For Vehicles, the busiest quarter hourly period occurred at 13:30 on Day 9 with 5 vehicles (all bicycles).

For Pedestrians, the busiest quarter hourly period occurred at 19:00 on Day 5 with 20 pedestrians.

Overall, the busiest quarter hourly period occurred at 19:00 on Day 5 with 21 vehicles and/or pedestrians.

Figure 1 - Location Plan



Camera View/Site Equipment



Summary

The surveys undertaken at the Level Crossing were successfully undertaken in accordance with the specification.

The Manual Level Crossing Count, for pedestrian users, started on Saturday 18th June 2016 and continued for nine days until Sunday 26th June 2016 with survey hours of 00:00 to 24:00. This data is summarised below.

Throughout the whole period of the survey pedestrian traffic operated in normal free flow conditions and was only restricted by train movements at this site.

Footage will be provided for the survey, as per the specification. The busiest day for 3267-LON Site C12, Silt Drove Level Crossing, is Sunday 26th June 2016.

Vehicles

	Car	Lgv	Mcl	Hgv	Tractor & Trailers	Bus	Eques- trian, mounted	Eques- trian, walking	Riding Bicycle	Walking Bicycle	Herded Animals & Horses	Large / Slow Vehicle s	Total
Saturday 18/06/2016	0	0	0	0	1	0	0	0	0	0	0	0	1
Sunday 19/06/2016	1	0	0	1	0	0	0	0	2	14	0	0	18
Monday 20/06/2016	1	0	0	0	0	0	0	0	0	7	0	0	8
Tuesday 21/06/2016	1	0	0	0	0	0	0	0	0	0	0	0	1
Wednesday 22/06/2016	0	0	1	0	0	0	0	0	0	7	0	0	8
Thursday 23/06/2016	0	0	0	2	2	0	0	0	0	3	0	0	7
Friday 24/06/2016	1	0	0	1	0	0	0	0	0	0	0	0	2
Saturday 25/06/2016	1	0	0	0	1	0	0	0	0	10	0	0	12
Sunday 26/06/2016	1	0	0	0	0	0	0	0	0	19	0	0	20
	6	0	1	4	4	0	0	0	2	60	0	0	77

Pedestrians

	Adult	Accom- panied Child	Unaccom- panied Child	Elderly	Impaired	Wheel- chair	Pushchair / Pram	Mobility Scooter	Railway Personnel	Total
Saturday 18/06/2016	46	11	0	0	0	0	4	0	0	61
Sunday 19/06/2016	43	2	0	0	0	0	1	0	0	46
Monday 20/06/2016	27	0	0	0	0	0	1	0	0	28
Tuesday 21/06/2016	32	0	0	0	0	0	1	0	0	33
Wednesday 22/06/2016	28	14	0	0	0	0	0	0	0	42
Thursday 23/06/2016	13	0	0	0	0	0	0	0	0	13
Friday 24/06/2016	30	0	0	0	0	0	1	0	0	31
Saturday 25/06/2016	25	2	0	0	0	0	1	0	0	28
Sunday 26/06/2016	47	4	0	0	0	0	1	0	0	52
	291	33	0	0	0	0	10	0	0	334

Weather

AM

PM

Saturday	18/06/2016	Dry, Cloudy	Dry, Cloudy
Sunday	19/06/2016	Sunny, passing clouds	Dry, passing clouds
Monday	20/06/2016	Rain, Overcast	Cloudy, sunny later on
Tuesday	21/06/2016	Sunny, passing clouds	Sunny, passing clouds
Wednesday	22/06/2016	Partial rain, cloudy	Rain, cloudy
Thursday	23/06/2016	Rain, Cloudy	Overcast
Friday	24/06/2016	Sunny, passing clouds	Partial Rain, Cloudy
Saturday	25/06/2016	Dry, Sunny	Dry, Sunny
Sunday	26/06/2016	Dry, Sunny	Dry, Sunny

Appendix A – Nine-Day Census

See Excel spreadsheet “3267-LON Site C12 Silt Drove 9-day Census”

Mott MacDonald

LEVEL CROSSING TRAFFIC CENSUS

SURVEY REPORT JUNE 2016

3267-LON SITE C13 – MIDDLE DROVE LEVEL CROSSING

Job Number	3267-LON-C13
Checked	
Date	05/01/2017
Contact	Ross De Vere
Revision	2



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Introduction

Tracsis Traffic Data Limited were commissioned by Mott MacDonald to undertake a level crossing survey at Middle Drove Level Crossing. The survey consisted of a nine day video traffic census. A location plan is shown in Figure 1, which shows the exact position of the crossing surveyed.

Contract Specification

The table below shows the analysis carried out, and any further analysis that is possible from the camera views:

Analysis Type	Status
Nine Day Census	Appendix A
Road Closure	not available
Traffic Turning	not available
Blocking Back	not available
Speed Survey	not available

In addition to this, further analysis could be carried out in the form of different pedestrian classifications, if requested.

Survey Conduct/Data Presentation – Traffic Census (Appendix A)

The surveys were undertaken at the level crossing by telescopically mounted cameras that were installed over nine consecutive days from Saturday 18th June 2016 to Sunday 26th June 2016 over the hours 00:00 – 24:00 each day. The camera equipment was installed from the highway and at no time did we go onto Network Rail land or property. Resulting camera images recorded at each crossing were then analysed by experienced staff, all closely supervised. The traffic and pedestrian data was recorded in 15 minute intervals classifying the movements over the crossing into the categories shown below, all in accordance with the specification:

- The Number of Vehicles Using the Crossing by Direction, Classified to:
 1. Equestrians, mounted
 2. Equestrians, walking
 3. Pedal Cycles being ridden
 4. Pedal Cycles being walked
- Type of Foot Traffic Using the Crossing by Direction, Classified to:
 1. Adults
 2. Accompanied Children
 3. Unaccompanied Children
 4. Elderly
 5. Impaired
 6. Wheelchair
 7. Pushchair/Pram
 8. Mobility Scooter
 9. Railway Personnel

The daily number of pedestrians, equestrians and cyclists that used the level crossing over the 24 hours are summed for each category as specified. The specification also requires the busiest quarter hour period for pedestrians. In addition, Tracsis Traffic Data Limited have added any relevant observations during the analysis, relating to crossing misuse or unusual occurrences.

Data loss occurred between 07:25 and 11:30 on Day 2 of the census, Sunday 19th June 2016.

Middle Drove Level Crossing – Busiest Quarter Hourly Periods

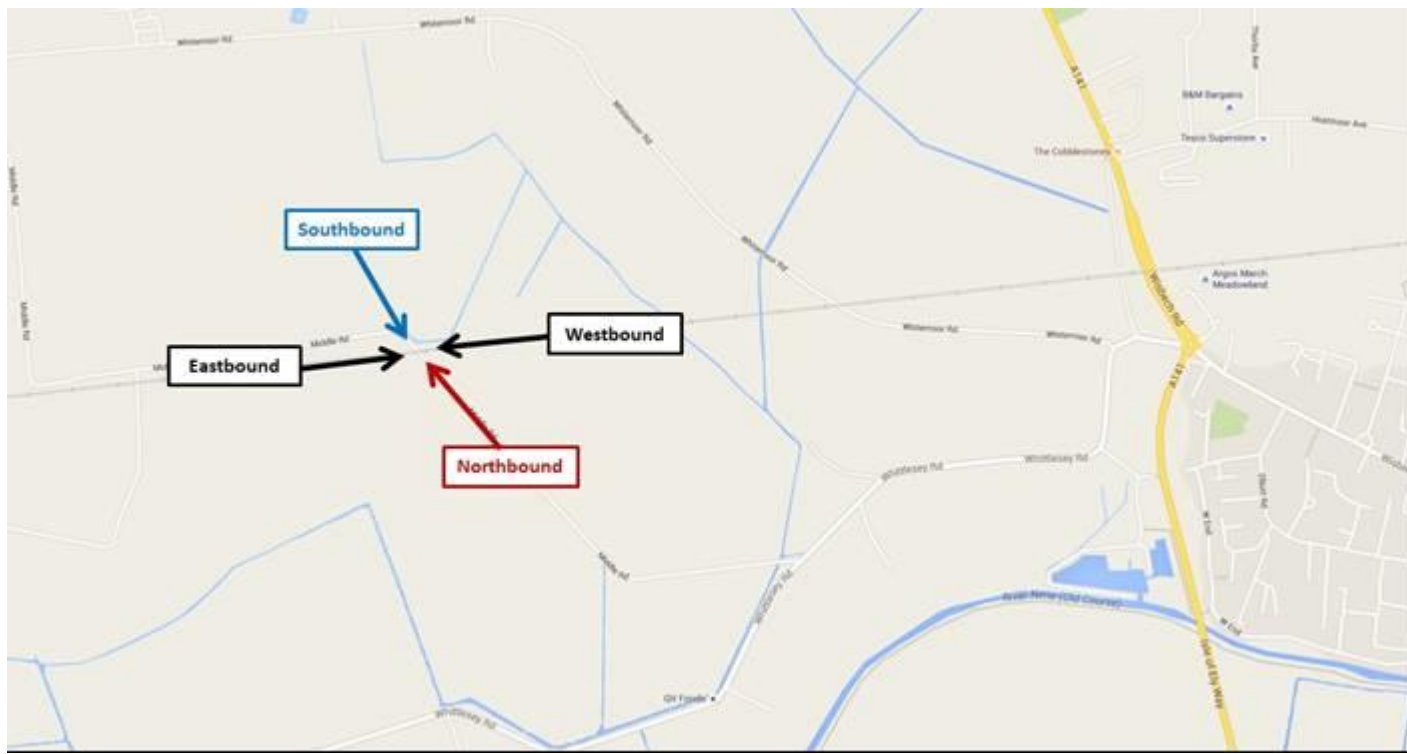
1 horse-rider was observed on the level crossing during this census, on Day 4.

For cyclists, the busiest quarter hourly period occurred at 11:45 on Day 6* with 3 cyclists. 26 cyclists were observed during the census; all bicycles were pushed over the crossing by the users.

For pedestrians, the busiest quarter hourly period occurred at 16:00 on Day 2* with 4 pedestrians.

* This time period is the first occurrence of the busiest period, but not the only occurrence.

Figure 1 - Location Plan



Camera View/Site Equipment



Summary

The surveys undertaken at the Level Crossing were successfully undertaken in accordance with the specification.

The Manual Level Crossing Count, for pedestrian users, started on Saturday 18th June 2016 and continued for nine days until Sunday 26th June 2016 with census hours of 00:00 to 24:00. Data loss occurred between 07:25 and 11:30 on Day 2, Sunday 19th June 2016. This data is summarised below.

Throughout the whole period of the survey pedestrian traffic operated in normal free flow conditions and was only restricted by train movements at this site.

Footage will be provided for the survey, as per the specification. The two busiest days for 3267-LON Site C13, Middle Drove Level Crossing, are Sunday 19th and Tuesday 21st June 2016.

Pedestrians

	Adult	Accompanied Child	Unaccompanied Child	Elderly	Impaired	Wheel-chair	Pushchair / Pram	Mobility Scooter	Railway Personnel	Total
Saturday 18/06/2016	11	0	0	0	0	0	0	0	0	11
Sunday 19/06/2016	11	1	0	0	0	0	0	0	0	12
Monday 20/06/2016	2	0	0	0	0	0	0	0	0	2
Tuesday 21/06/2016	9	0	0	0	0	0	0	0	2	11
Wednesday 22/06/2016	6	0	0	0	0	0	0	0	0	6
Thursday 23/06/2016	5	0	0	0	0	0	0	0	0	5
Friday 24/06/2016	4	0	0	0	0	0	0	0	0	4
Saturday 25/06/2016	0	0	0	0	0	0	0	0	0	0
Sunday 26/06/2016	0	0	0	0	0	0	0	0	0	0
	48	1	0	0	0	0	0	0	2	51

Equestrians and cyclists

Equestrian, mounted	Equestrian, walking	Bicycle riding	Bicycle walking	Total
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Saturday 18/06/2016	0	0	0	4	4
Sunday 19/06/2016	0	0	0	4	4
Monday 20/06/2016	0	0	0	0	0
Tuesday 21/06/2016	1	0	0	1	2
Wednesday 22/06/2016	0	0	0	2	2
Thursday 23/06/2016	0	0	0	3	3
Friday 24/06/2016	0	0	0	0	0
Saturday 25/06/2016	0	0	0	5	5
Sunday 26/06/2016	0	0	0	7	7
	1	0	0	26	27

Weather

AM

PM

Saturday	18/06/2016	Overcast	Sunny periods, some showers
Sunday	19/06/2016	Sunny spells, passing clouds	Sun, scattered clouds, rain later
Monday	20/06/2016	Overcast, rain	Partly sunny, broken clouds, clearing later
Tuesday	21/06/2016	Sunny, Passing Clouds	Sunny, Passing Clouds
Wednesday	22/06/2016	Dry, Cloudy	Dry, Cloudy
Thursday	23/06/2016	Dry, Dark Clouds	Dry, Clouds
Friday	24/06/2016	Sunny, passing clouds	dry, cloudy
Saturday	25/06/2016	Dry, Cloudy	Dry, Cloudy
Sunday	26/06/2016	Dry, Sunny	Dry, Sunny

Appendix A – Nine-Day Census

See Excel spreadsheet “3267-LON Site C13 Middle Drove Census”

Mott MacDonald

LEVEL CROSSING TRAFFIC CENSUS

SURVEY REPORT JANUARY 2017

3480-LON SITE C27 – WILLOW ROW / WILLOW ROAD LEVEL CROSSING

Job Number	3480-LON-C27
Checked	
Date	06/02/2017
Contact	Denitsa Ivanova
Revision	



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Introduction

Tracsis Traffic Data Limited were commissioned by Mott MacDonald to undertake a level crossing survey at Willow Row / Willow Road Level Crossing. The survey consisted of a nine day video traffic census. A location plan is shown in Figure 1, which shows the exact position of the crossing surveyed.

Contract Specification

In accordance with our contract, the Surveys were carried out in association with Network Rail Specification GRD 007 dated 2nd February 2013. The table below shows the analysis carried out, and any further analysis that is possible from the camera views:

Analysis Type	Status
Nine Day Census	Appendix A
Road Closure	not available
Traffic Turning	not available
Blocking Back	not available
Speed Survey	not available

In addition to this, further analysis could be carried out in the form of different vehicle/pedestrian classifications, if requested.

Survey Conduct/Data Presentation – Traffic Census (Appendix A)

The vehicle and pedestrian surveys were undertaken at the level crossing by telescopically mounted cameras that were installed over nine days, from Saturday 21st, and also from Sunday 8th January 2017 to Sunday 15th January 2017, over the hours 00:00 – 24:00 each day. The camera equipment was installed from the highway and at no time did we go onto Network Rail land or property. The resulting camera images (consisting of nine days, 24 hours per day) recorded at each crossing were then analysed by experienced staff, all closely supervised. The traffic and pedestrian data was recorded in 15 minute intervals classifying the movements over the crossing into the categories shown below, all in accordance with the Network Rail specification:

- The Number of Road Vehicles Using the Crossing by Direction, Classified to:
 1. Cars
 2. Light Goods Vehicles
 3. Motorcycles
 4. Heavy Goods Vehicles
 5. Agricultural Vehicles
 6. Buses
 7. Equestrians
 8. Pedal Cycles
 9. Herded Animals
 10. Large/Slow Vehicles
- Type of Foot Traffic Using the Crossing by Direction, Classified to:
 1. Adults
 2. Accompanied Children
 3. Unaccompanied Children
 4. Elderly
 5. Impaired
 6. Wheelchair
 7. Pushchair/Pram
 8. Mobility Scooter
 9. Railway Personnel
- The Number of Trains Passing, by Direction

For each of the crossings the daily number of vehicles and pedestrians that used the level crossing over the 24 hours are summed for each category as specified. The specification also requires the busiest quarter hour period for both vehicles and pedestrians. These are detailed below for each level crossing. In addition, Tracsis Traffic Data Limited have added any relevant observations during the analysis, relating to crossing misuse or unusual occurrences.

Willow Row / Willow Road Level Crossing – Busiest Quarter Hourly Periods

For Cars/Lgvs, the busiest quarter hourly period occurred at 15:00 on Day 4 with 2 vehicles.

No Hgvs/Large Vehicles crossed the level crossing during this survey period.

For Vehicles, the busiest quarter hourly period occurred at *10:15 on Day 5 with 2 vehicles.

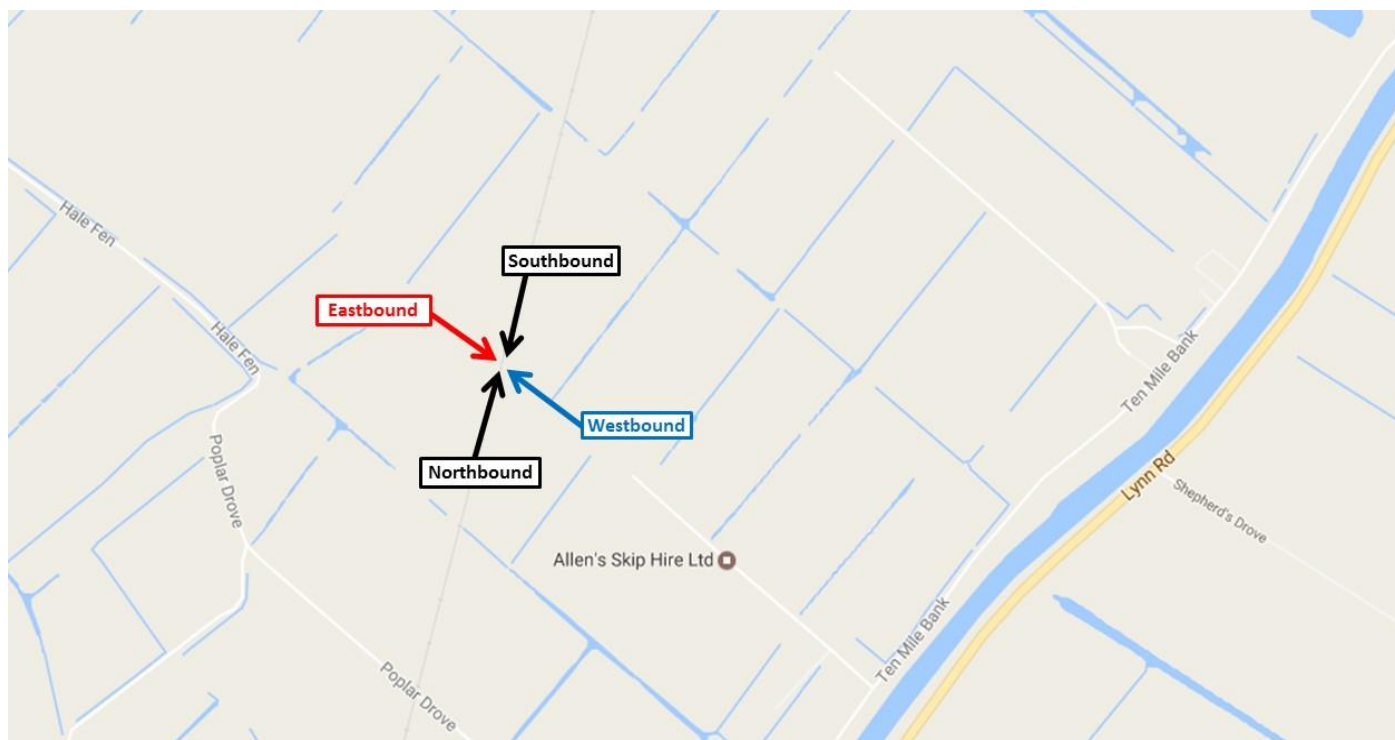
For Pedestrians, the busiest quarter hourly period occurred at *11:30 on Day 3 with 2 pedestrians.

For Trains, there were multiple days with the highest total number.

Overall, the busiest quarter hourly period occurred at 11:30 on Day 3 with 3 vehicles and/or pedestrians.

* This time period is the first occurrence of the busiest period, but not the only occurrence.

Figure 1 - Location Plan



Camera View/Site Equipment



Summary

The surveys undertaken at the Level Crossing were successfully undertaken in accordance with the specification.

The Manual Level Crossing Count for road, rail, and pedestrian users, took place on Saturday 21st January 2017 and also from Sunday 8th January for eight consecutive days until Sunday 15th January 2017, with survey hours of 00:00 to 24:00. This data is summarised below.

Throughout the whole period of the survey traffic operated in normal free flow conditions and was only restricted by train movements at the site.

Footage will be provided for the survey, as per the specification. The busiest day for 3480-LON Site C27, Willow Row / Willow Road Level Crossing, is Monday 9th January 2017.

Vehicles

		Car	Lgv	Mcl	Hgv	Tractor& Trailer	Bus	Horse Rider	Pcl	Herded Animals & Horses	Large / Slow Vehicle	Total
Saturday	21/01/2017	2	0	0	0	0	0	0	0	0	0	2
Sunday	08/01/2017	0	0	0	0	0	0	0	0	0	0	0
Monday	09/01/2017	2	0	0	0	2	0	0	0	0	0	4
Tuesday	10/01/2017	5	0	0	0	0	0	0	0	0	0	5
Wednesday	11/01/2017	1	0	0	0	4	0	0	0	0	0	5
Thursday	12/01/2017	2	0	0	0	0	0	0	0	0	0	2
Friday	13/01/2017	0	0	0	0	2	0	0	0	0	0	2
Saturday	14/01/2017	1	0	0	0	0	0	0	0	0	0	1
Sunday	15/01/2017	0	0	0	0	0	0	0	0	0	0	0
		13	0	0	0	8	0	0	0	0	0	21

Pedestrians

		Adult	Accom- panied Child	Unaccom- panied Child	Elderly	Impaired	Wheel- chair	Pushchair / Pram	Mobility Scooter	Railway Personnel	Total
Saturday	21/01/2017	0	0	0	0	0	0	0	0	0	0
Sunday	08/01/2017	0	0	0	0	0	0	0	0	0	0
Monday	09/01/2017	6	0	0	0	0	0	0	0	0	6
Tuesday	10/01/2017	2	0	0	0	0	0	0	0	0	2
Wednesday	11/01/2017	0	0	0	0	0	0	0	0	0	0
Thursday	12/01/2017	2	0	0	0	0	0	0	0	0	2
Friday	13/01/2017	0	0	0	0	0	0	0	0	0	0
Saturday	14/01/2017	0	0	0	0	0	0	0	0	0	0
Sunday	15/01/2017	0	0	0	0	0	0	0	0	0	0
		10	0	0	0	0	0	0	0	0	10

Trains

		Northbound	Southbound	Train Totals
Saturday	21/01/2017	24	24	48
Sunday	08/01/2017	19	13	32
Monday	09/01/2017	29	29	58
Tuesday	10/01/2017	30	27	57
Wednesday	11/01/2017	30	29	59
Thursday	12/01/2017	30	29	59
Friday	13/01/2017	28	29	57
Saturday	14/01/2017	23	24	47
Sunday	15/01/2017	16	16	32
		229	220	449

Appendix A – Nine-Day Census

See Excel spreadsheet “3480-LON Site C27 Willow Row / Willow Road Census”