APPENDIX 5.3

Mountfield Park, Canterbury

2018 UPDATED BASELINE CONDITIONS

Traffic Survey Results Comparison and Update

Date: August 2018 **Ref: CORL/2017/3500/TN05**

1 INTRODUCTION

1.1 This Technical Note sets out the results of a series of traffic surveys undertaken during March 2018 around the South Canterbury area. The surveys were conducted by Modal Data Limited, at the request of RGP, to ascertain whether changes in traffic flows have occurred since the original traffic surveys undertaken in 2014 and 2015 associated with the proposed Mountfield Park development in South Canterbury (planning application ref: CA/16/00600). This work was undertaken at the instruction of the Applicant, Corinthian Land Ltd, with the intention of maintained the integrity of information relevant to the development proposals, and providing an up-to-date baseline scenario for further assessment work.

1.2 The original Transport Assessment (TA), Overarching Travel Plan and Environmental Statement (ES) which accompany the original planning application, together with the subsequent Transport Assessment Addendum, were based upon traffic surveys undertaken across the local highway network during March 2014 and November 2014, and a small number of follow up surveys were conducted in 2015.

1.3 The main 2014 surveys were used to form the baseline scenario from which the assessment work for future 'with and without development' Scenarios within the TA and ES were based. This information was then used for other subsequent assessments including that relating to Air Quality, for example.

1.4 The purpose of the most recent 2018 traffic surveys was to establish whether the predictions and estimations given in the TA are sound, and therefore whether the conclusions of the TA, ES and Air Quality Assessment can be relied upon. The most recent surveys have also been used to establish a new up-to-date baseline from which further assessments of impact can be undertaken, to inform the ES Addendum.

2 UPDATED TRAFFIC SURVEYS CONDUCTED

2.1 A number of traffic surveys were conducted across the highway network local to the proposed Mountfield Park development, as indicated on the plan attached hereto at **Appendix A**, as follows:

i) Biffrons Hill (ATC);

ii) High Street, Bridge (ATC);

iii) New Dover Road – South-east of Gate Roundabout (ATC);

iv) Nackington Road (ATC);

v) Old Dover Road (ATC);

vi) New Dover Road (ATC);

vii) St George's Roundabout (Manual Classified Count – MCC);

viii) Riding Gate Roundabout (MCC);

ix) St George's Place / Chantry Lane Traffic Signals (MCC).

2.2 The ATC surveys were conducted for a week's duration from Thursday 22nd March through to Wednesday 28th March 2018 inclusive, whilst the MCC surveys were conducted on Thursday 22nd March 2018. The traffic surveys were conducted during school term time and also when both the University of Kent and Christ Church University were within term time.

2.3 The location and timing of the surveys, which were agreed with Officers at Kent County Council (KCC), as appropriate for comparison purposes. With regard to the timing of the surveys, it is typical to undertake surveys during neutral periods although it is important to ensure that such surveys are not affected by temporary works on the highway or holiday periods. Neutral months are defined in the Design Manual for Roads and Bridges, (DMRB), Volume 12, Section 1 "Traffic Appraisal in Urban Areas", dated March 1996, an extract of which is below:

> 3.1.4 ***Surveys should be carried out during a 'neutral', or representative, month*** avoiding main and local holiday periods, local school holidays and half terms, and other abnormal traffic periods. National experience is that the following Monday to Thursdays can be neutral a) late March and April - excluding the weeks before and after Easter, b) May - excluding the Thursday before and all of the week of each Bank Holiday, c) most of June, d) late September, e) all of October, f) all of November - provided adequate lighting is available; this requirement often dictates the timescale of the appraisal. Data processing may also add substantially to the study timescale. In addition, ***if existing data are to be re-used, ample time must be allowed for them to be identified, obtained from their current custodian, reprocessed as necessary, and checked for consistency and validity***. Further delays may be incurred if these checks reveal that the data cannot be used.

2.4 Late March is defined as a neutral period and it is important to note that KCC had planned road works to the A28 ring road during much of the summer of 2018 and as such the traffic surveys are most appropriate. It is also important to note that the other previous surveys were conducted in late March and November, both of which are defined as neutral periods of time for traffic flow. Therefore, no seasonal adjustment is required.

2.5 The full survey results are attached hereto at **Appendix B**.

3 TRAFFIC COMPARISON

3.1 The traffic flows observed during the most recent 2018 surveys have been compared with the 2014 baseline surveys originally conducted and the assumed 2018 traffic flows based on the growth rates assumed within the TA and ES.

3.2 The traffic flows have been compared for 13 road links around the local highway network, 11 of which correspond with the links used with the original ES chapter. A further 2 links have been assumed for comparison purposes at the south-eastern end of the local highway network at Biffrons Hill and High Street, Bridge and reflect the edge of the cordon in the eastern part of the highway network assessed.

3.3 The locations provide a cordon within which the proposed development lies and so, although traffic on each link is likely to fluctuate across a day, week or year, when considered in its entirety it is a reasonable basis for comparison of the total traffic which is using the local highway network.

3.4 Attached at **Appendix C** is a schedule of how the recent surveys compare with that assumed as part of the planning application, with the following traffic flows compared for the AADT (Average Annual Daily Traffic):

i) 2014 Observed Baseline;

ii) 2018 Estimated (based on TA assumed growth rates from 2014 to 2018);

iii) 2018 Observed (from recent surveys).

3.5 The schedule provides a comparison between what was estimated to be the case in 2018, from the TA, to what was observed in March 2018, by way of the traffic surveys. A negative percentage difference (highlighted in green on the schedule) indicates that the March 2018 observed flow is less than the 2018 estimated flow. A positive percentage difference (highlighted in red on the schedule) indicates that the March 2018 observed flow is greater than the 2018 estimated traffic flow from the 2016 ES and TA.

3.6 It is important to note that traffic flows fluctuate from one day to the next and also from one link to the next and so when comparing information it is important to look at the general trends and not be focussed on a small number of links.

3.7 Overall, when one considers the 13 links assessed, it is clear that the trend is that in most locations a lower traffic level was recorded in 2018 than that which was expected and assessed by way of the TA. This means that the TA assessment is robust in that the growth in traffic expected to occur between 2014 and 2018, and assessed, has not occurred in reality.

3.8 With regard to the AADT comparison, it is clear from the schedule at **Appendix C**, that the traffic differences range from a decrease of 43% to an increase of only 11%, with the dominant indication being that there is a decrease in traffic flows compared to that assumed within the TA.

3.9 For completeness, the second part of the schedule attached at **Appendix C** sets out the traffic comparison for specific areas and junctions to allow a comparison to be more realistic since spot observations on one link in isolation may not be representative of the overall traffic conditions across the network as a whole or at a specific junction which was assessed within the TA.

3.10 It is evident from this further assessment that none of the areas or junctions experienced a higher traffic flow in March 2018 compared to that which was expected within the TA. This was the case for both the AM and PM peak hours and the AADT as a whole. As such the junction modelling work undertaken within the Transport Assessment over-estimates the traffic travelling through the junctions and is therefore robust.

4 UPDATED 2017/18 BASELINE

4.1 In order to inform the 2018 ES Addendum, the March 2018 traffic surveys have been used to establish an updated baseline position. The surveys were conducted in March 2018 and as such represent the latest point within the financial year 2017/18. It therefore represents a robust baseline for future assessments, based on the updated housing trajectory figures, which are for financial years (i.e. April to March).

4.2 The links which were not surveyed as part of the March 2018 traffic surveys have been subjected to a calculation which uses the nearest parts of the road network to the link to forecast the new 2018 baseline from the 2014 original baseline as appropriate. The links which have been subject to calculations as listed below in **Figure 4.1** with an associated calculation explanation as to which link(s) has/have been used as a basis to uplift the original 2014 data to 2018.

4.3 There are a few links which have been split to have "a", "b" and "c" suffixes within them due to interim work between the 2016 Transport Assessment and the Air Quality Assessment which required more detailed levels of flows for each of the links, hence some were split.

Link number and location	Growth factor calculation
Links 1-4 (St Dunstan's Place, A2050 Rheims Way, A290 Rheims Way and Wincheap)	Average of growth factor from Link 5 (A28 Pin Hill), Link 6 (A28 Upper Bridge St) and Link 10 (A28 Lower Bridge St)
Link 8a – A257 Longport	Same growth factor as Link 8b (A257 Lower Chantry Lane)
Link 13a – Old Dover Road (between Ethelbert Rd and Cowdrey Place)	Same growth factor as Link 13b (Old Dover Road - between Ethelbert Road and Nunnery Fields)
Link 14 – St Lawrence Rd	Average of growth factors on Link 13b (Old Dover Road - between Ethelbert Road and Nunnery Fields) and Link 17 (A2050 New Dover Road - south of Gate roundabout)
Link 15a – Nackington Road (south of Langton Lane Link 15c – Nackington Road (north, at junction with Old Dover Road	Same growth factor as Link 15b (Nackington Road – between Langton Lane and Underwood Close)
Link 16 – Old Dover Road (north of Gate roundabout)	Average of Link 18 (A2050 New Dover Road (south of Gate roundabout), Link 15c (Nackington Road - north, at junction with Old Dover Road) and Link 13b (Old Dover Road - between Ethelbert Road and Nunnery Fields)
Link 17 – A2050 New Dover Road (south of Gate roundabout)	Average of Link 18 (A2050 New Dover Road (south of Gate roundabout) and Link 12 (New Dover Road – between St Augustine's Road and Stanmore Court)

Figure 4.1: 2014-2018 Baseline Traffic Growth Calculation Methodology for Links not Surveyed

4.4 The A2 traffic flows were originally derived in 2015 as a result of Automatic Number plate Recognition (ANPR) surveys. The ANPR exercise has not been recommissioned and therefore RGP has used DfT permanent traffic counter data (included in **Appendix D**) to establish a new 2017/18 baseline for links 21 and 22 in the same way as the urban area.

4.5 The latest counts east and west of Bridge were derived from DfT counter locations 56104 and 17813 which provide AADT flows. The counts were last updated in 2016 and 2017, therefore growth rates for 'Rural Trunk' were derived for 2016-2018 and 2017-2018 to bring the DfT counter flows up to the 2017/18 baseline.

5 SUMMARY AND CONCLUSIONS

5.1 The recent traffic surveys conducted to validate the previous assessment into the traffic impact of the proposed development at Mountfield Park, Canterbury have demonstrated that overall the existing 2018 traffic flows through the local highway network are less than those which were assumed in the TA, ES and other documents which accompanied the planning application for Mountfield Park, Canterbury in 2016.

5.2 Therefore, the traffic flows in Canterbury have not increased in the past 4 years as much as was expected, and therefore the assessments conducted as part of the TA, ES and Air Quality Assessment are robust.

5.3 The updated observed traffic data, March 2018, has been used to determine a new updated baseline for the financial year 2017/18, which has been used in the further assessments conducted as part of the ES Addendum.