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MG0123 – A49 Warrington, Peel Hall – Changes Registry

1. Introduction

- 1.1. The aim of this note is to provide a detailed technical registry of all changes carried out to the base VISSIM model since the previous audit submission point (September – v5.2). The latest version of the model and all associated spreadsheets and reports will now refer to v6 as the model designation.

2. Speed Control – Reduced Speed Areas (RSA) & Associated Desired Speed Profiles

- **RSA 162, 167, 220, 227** – Southbound A49 approach to Sandy Lane West roundabout – shortened in length to create prior space for the insertion of **RSA 1503, 1507, 1508, 1509** (using 20mph reduced speed profile).
 - Changes aimed at adjusting saturation flow/ queue lengths/ journey times.
- **RSA 1430, 1431, 1445, 1446, 1461, 1462** – Eastbound M62 exit controls – time from and time to points adjusted and associated speed profiles refined in the morning peak.
 - Changes aimed at adjusting saturation flow and queue lengths in order to improve journey times.
- **RSA 1470 & 1471** – Westbound stopline Sandy Lane West – length extended.
 - Changes aimed at adjusting saturation flow to improve queue lengths and journey times.
- **RSA 1473 & 1474** – Eastbound Cromwell Avenue stopline controls at A49 junction – RSA length extended.
 - Changes aimed at adjusting saturation flow in order to improve journey times.
- **RSA 1477** – Westbound Sandy Lane West – RSA length extended further eastwards along Sandy Lane West. Also now assigned a dedicated speed profile (*2113–SandyLaneWestWBDelay*).
 - Changes aimed at replicating delays from multiple side road entry points.
- **RSA 1478** – Westbound Cromwell Avenue stopline control for right turners at Calver Road – RSA length reduced.
 - Changes aimed at adjusting saturation flow.
- **RSA 1500 & 1501 added** – Northbound A49 stopline controls at Delph Lane junction.
 - Changes to aid in queue length formation/journey time calibration (*30mph reduced speed*).

- **RSA 1502** – Eastbound Sandy Lane West – *20mph reduced speed* added.
 - Changes aimed at adjusting delay/speed at/near junction mouth.
- **RSA 1510 & 1511** – Eastbound Cromwell Avenue stopline control at Calver Road junction – RSA inserted (*20mph reduced speed profile*).
 - Changes aimed at adjusting saturation flow to affect queuing and delays.

3. Speed Control – Desired Speed Controls

- **#158-161** – eastbound M62 entry – changed to Motorway profile (70mph)
 - Change to correct the speed profile
- **#578-580** – eastbound M62 at offslip – controls to change to 60mph profile in morning peak
 - Refinement based on HATRIS data.
- **#551-584** – westbound M62 at onslip – controls to change to 70mph profile
 - Refinement based on HATRIS data

4. Priority Control

- **#1832** – Sandy Lane West – settings changed to smooth/alter start-stop effect
- **#1939 & 1940** – Northbound A49 ‘yellow box’ type controls to stop junction blocking at Junction Nine Retail Park junction
- **#1937 & 1938** – Northbound A49 ‘yellow box’ type controls to stop junction blocking at Hawley’s Lane/Long Lane junction

5. Vehicle Inputs

- **#444** – Westbound entry A50 Long Lane – change to volume/profile to affect queue lengths at A49 junction
- **#289** – Westbound entry Sandy Lane West – change to volume/profile to affect queue lengths at A49 junction
- **#269 (plus #273 & #221 in the PM peak)** – Side arm entry to Hawley’s Lane – change to volume/profile to affect queue lengths at A49 junction
- **#255** – Side arm entry to A50 Long Lane – change to volume/profile to affect queue lengths at A49 junction/performance of A50 Long Lane
- **#243** – Side arm entry to Sandy Lane West – change to volume/profile to affect queue lengths at A49 junction/performance of Sandy Lane West
- **#235 (#154 in the PM peak)** – Northway entry to A50 Long Lane – change to volume/profile to affect queue lengths at A49 junction/performance of A50 Long Lane/performance on Northway

- **#233** – Side arm entry to A50 Long Lane – change to volume/profile to affect queue lengths at A49 junction/performance of A50 Long Lane
- **#182** – Eastbound entry to Cromwell Avenue – change to volume/profile to affect queue lengths at A49 junction/performance of Cromwell Avenue
- **#171** – Southbound entry to Calver Road – change to volume/profile to affect queue lengths at Cromwell Avenue junction/A49 junction/performance of Cromwell Avenue
- **#167** – Eastbound entry to Delph Lane – change to volume/profile to affect queue lengths at A49 junction
- **#174** – Northbound entry to A49 (PM peak only) - change to volume/profile to affect queue lengths at Long Lane/Hawley's Lane junction
- **#162** – Southbound entry to A49 Winwick Link Road (PM peak only) - change to volume/profile to affect queue lengths at M62 junction 9