

Report Ref No:

Report of the Service Director
Economic Regeneration to the
Planning Regulatory Board on
20th February 2015

CHANGE TO STAGGERED TIMES AT HORIZON COMMUNITY COLLEGE, DODWORTH ROAD

1. Purpose of Report

- 1.1 To seek the approval of PRB for a proposed change to the staggered times in accordance with the officer recommendation.

2. Recommendation

- 2.1 That Members approve the removal of the 10:00am – 16:15 start/exit times for year 11 pupils and allow them to instead be merged with the existing 09:30 – 15:45 times subject to the following:

1. The submission and approval of a revised Travel Plan prior to commencement of the proposed arrangements.
2. The submission and approval of a road safety plan prior to commencement of the proposed arrangements.

Thereafter, the Travel Plan and Road Safety Plan shall be implemented in accordance with the approved details.

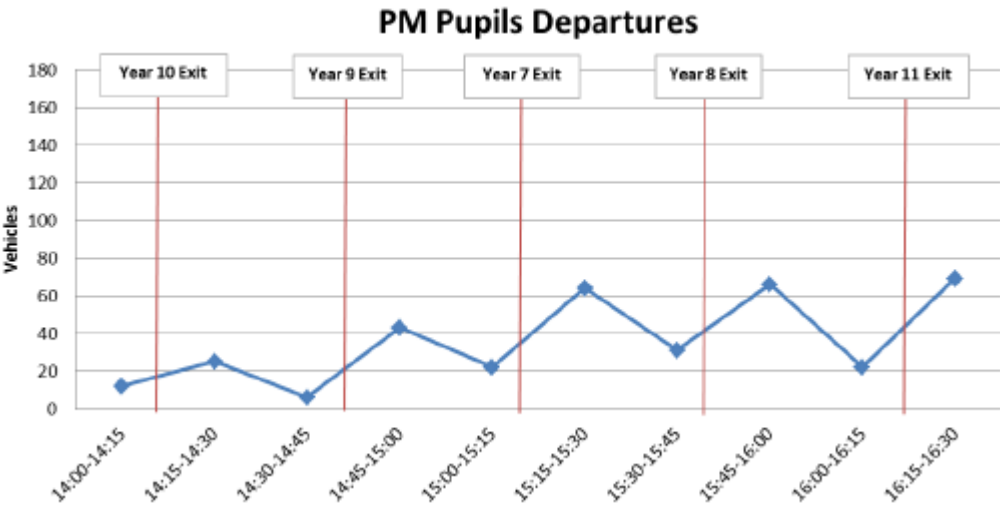
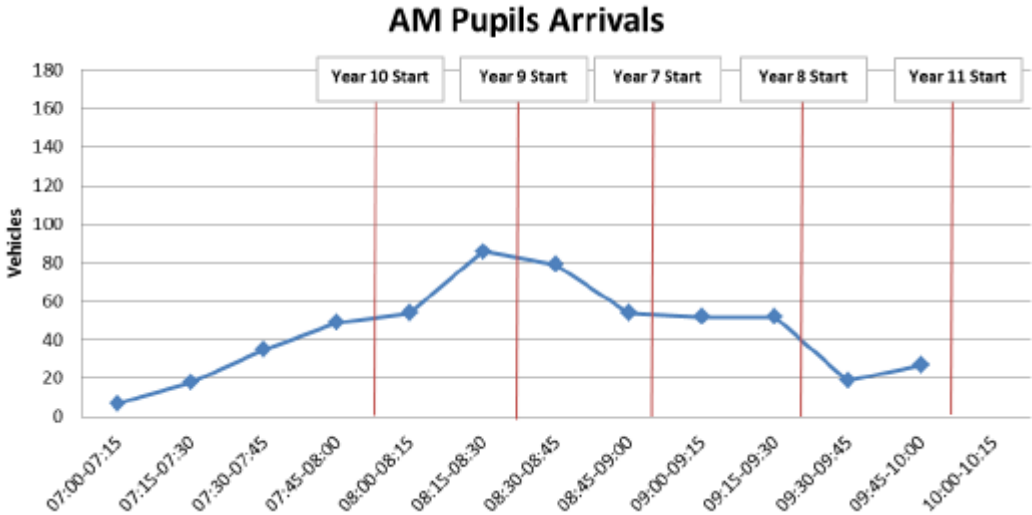
3. Background

- 3.1 The site is located immediately to the south of the A628 Dodworth Road and east of the A6133 Broadway, approximately 1.5 miles west of Barnsley Town Centre. Outline planning permission was granted for an ALC in 2009 (2009/0451) and reserved matters were subsequently approved in 2010. This resulted in the merger of the Kingstone and Holgate Schools into Horizon Community College (HCC). However, given the sensitive location of the site in relation to traffic congestion during morning and afternoon peaks and the associated air quality implications along Dodworth Road, a five stage staggered start / leaving time was secured in order to enable the granting of outline planning permission. These times are as follows:

Table 1 - Horizon CC start/exit times

Start time	Exit time	Existing
08:00	14:15	Year 10
08:30	14:45	Year 9
09:00	15:15	Year 7
09:30	15:45	Year 8
10:00	16:15	Year 11

- 3.2 For the reasons explained in section 4, there are significant benefits for college if the staggered periods are reduced. This requires an amendment to the planning permission and is therefore presented to members for consideration.
- 3.3 It is recognised that these changes are likely to impact upon the profile of vehicular traffic accessing the development which could have further consequences on the operation of the local road network. This is considered to be particularly likely in the morning where the college arrivals coincide with the general traffic AM peak. In turn, any increase in congestion could detrimentally impact on air quality along Dodworth Road, which is designated as an Air Quality Management Area (AQMA).
- 3.4 To support the appraisal of these proposals, both AM and PM peak micro-simulation VISSIM models have been developed by AECOM to assess the potential impact of changes in college traffic profiles on the local highway network operation, focussing particularly on the Dodworth Road junction with Pogmoor Road and Junction 37 of the M1.
- 3.5 The first stage of developing the model was to establish the baseline for the number of vehicles arriving and leaving and how these are distributed under the current arrangements. These are displayed in the graphs below.



As can be seen, arrivals currently peak between 8:15 and 8:45 at approximately 80 vehicles per 15 minute period. Departures peak at just over 60 vehicles per 15 minute period.

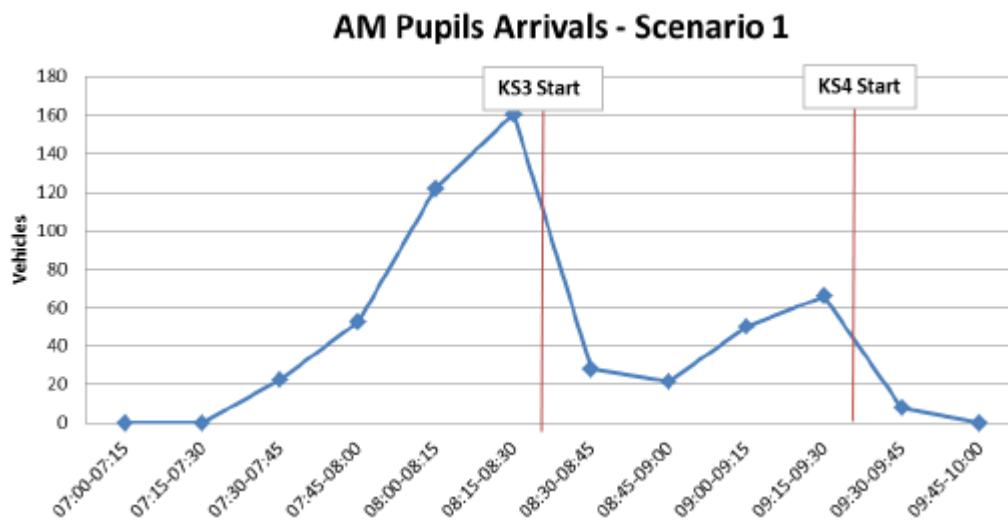
4. Options

At the outset the College were hoping to be able to reduce the number of staggers from five to two. They identified two possible ways of doing this and these are shown in scenarios 1 & 2. The 3rd scenario, which is the one recommended, merges the final two staggers into one. The three scenarios are shown in the table below:

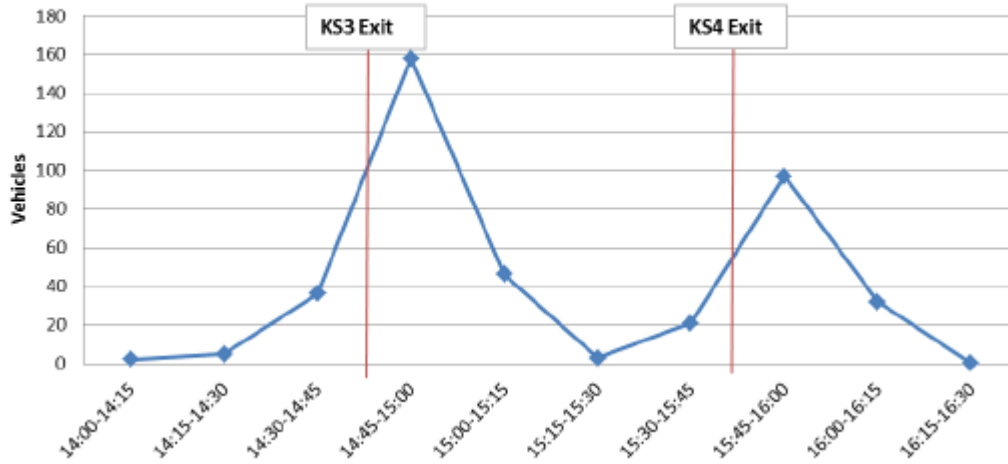
Start time	Exit time	Scenario 1	Scenario 2	Scenario 3
08:00	14:15	-	-	Year 10
08:30	14:45	Key Stage 3 (Years 7, 8 & 9)	Key Stage 4 (Years 10 & 11)	Year 9
09:00	15:15	-	-	Year 7
09:30	15:45	Key Stage 4 (Years 10 & 11)	Key Stage 3 (Years 7, 8 & 9)	Years 8 & 11
10:00	16:15	-	-	-

N.B. Although scenario 3 refers to years 8 & 11 arriving and departing at the same time, the proposal is for years 10 & 11 to do so. Given that pupil numbers are the same for each year, this does not materially affect or invalidate the findings of the modelling.

- 4.2 The results of the modelling clearly demonstrate that reducing the number of staggers will have a significantly harmful impact on the operation of the network, as demonstrated by the following graphs:



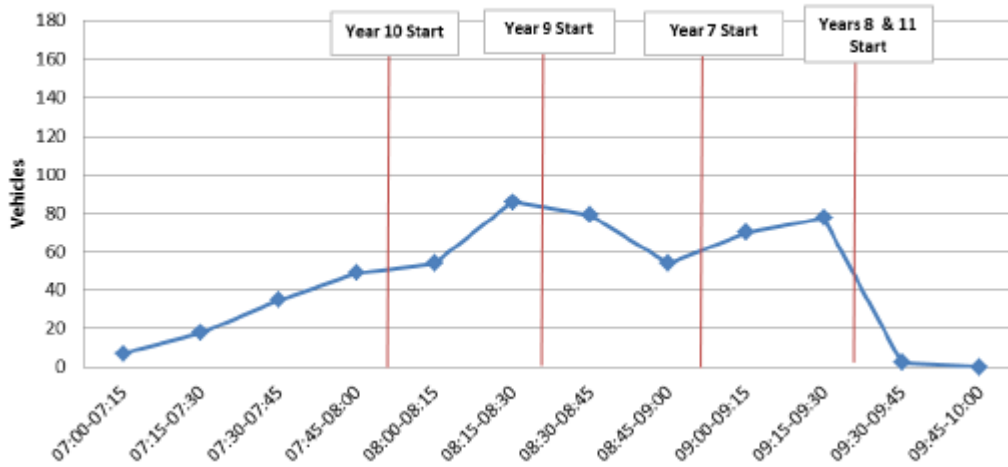
PM Pupils Departures - Scenario 1



4.3 For scenario 2 the height of the peak (160 vehicles per 15 mins) is similar but it would occur between 9 & 9:15 in the morning and between 15:45 and 16:00 in the evening.

4.4 In contrast with the results for scenarios 1 and 2, the AM graph for scenario 3 shows no obvious peak, within a consistent distribution between 8:15 & 9:15. There is a significant peak for pupil departures at 15:45 but by 16:15 almost all vehicles would have left and this peak is still 25% below the maximum peaks generated by scenarios 1 & 2 (120 vehicles rather than 160).

AM Pupils Arrivals - Scenario 3



PM Pupils Departures - Scenario 3



5. Benefits of the Reduction in Staggers

5.1 Although the five staggers were agreed at the outset, it was always likely that the College would want to review the effectiveness of this arrangement. Given that it has operated in this way for several terms, it is considered that enough time has elapsed to warrant a review. Having given full consideration to the various options and implications, the College considers that merging the final two staggers will have the following benefits:

- It will significantly benefit parents with children in different school years, particularly if they happen to have children in years 10 & 11.
- By finishing 30 mins earlier, between late November and mid-January, pupils would be able to leave before it is dark. This significantly improves safety and potentially reduces the number of parents arriving in cars to collect them.
- There is anecdotal evidence that the late finish has a detrimental impact on learning.
- Staff availability for out-of-hours clubs would be improved.
- Reduces the length of the teaching day, making it possible to adopt a more efficient timetable. In turn, this makes it easier to recruit staff and offer training opportunities.

5.2 Given the size of the college and the corporate emphasis on raising academic attainment within the borough, it is considered that substantial weight should be attributed to the identified academic benefits. In addition, there is potential for further weight to be attributed to the benefits to pupil safety. This is considered in more detail in paragraphs 8.5 – 8.7.

6. Policy Context

6.1 Core Strategy policy CSP26 states that all new development will be expected to be designed and built to provide safe, secure and convenient access for all road users.

6.2 Policy CSP41 indicates that we will only allow development in Air Quality Management Areas which could cause more air pollution where the developer provides an assessment that shows there will not be a significantly harmful effect on air quality.

7. Consultations

7.1 Whilst Highways objected to the first two options put forward, which would have reduced the number of staggers to two, they are content that four staggers would not have a significantly adverse impact on highway safety or the free flow of traffic.

7.2 The Air Quality Officer notes that the proposal will not materially affect overall traffic movements and whilst emissions would be concentrated into slightly shorter periods, this is considered not to have a significant impact on air pollution concentrations within the Dodworth Road AQMA.

8. Assessment

Traffic Flows

8.1 This results of the modelling indicate that the greatest impact on the local road network would be likely at the Dodworth Road junction with the Broadway in Scenarios 1 and 2. There are significant increases in modelled journey time, confirming model simulation observations which show this junction operating at/over

capacity due to the increased number of right turning vehicles from Broadway into Dodworth Road at critical times during the peak.

- 8.2 The analysis suggests that the proposed start/exit time changes in Scenario 1 and Scenario 2 are likely to have a significant detrimental impact on the operation of the Dodworth Road / Broadway junction in the AM peak. This is due to the concentration of right turning traffic from Broadway into Dodworth Road during the worst times in the peak period leading to an increase in delay on the Broadway approach. In the PM peak the changes to the leaving times would have minimal impact and it would be unlikely that the network would see a discernible change.
- 8.3 Whilst scenario 3 would lead to increased queues within the college car park in the PM peak when compared to the existing, in contrast to Scenarios 1 and 2, the proposed redistribution in Scenario 3 does not seem to cause a material impact on the network in either of the peaks. Nevertheless, anecdotal evidence suggests that increased queuing within the car park will increase the queue on Dodworth Road westbound, which can often begin as far east as the Shaw Lane junction. However, it is important to note that the queuing in the car park will occur prior to 4pm. As such, there is less likelihood of conflict between school traffic and commuters/shoppers heading home in the early evening.
- 8.4 Further analysis demonstrates that pupils in years 10 & 11 are more likely to use a bus or walk so merging these years is deemed preferable to merging earlier years.

Highway & Pedestrian Safety

- 8.5 The merging of departure times for years 10 & 11 will intensify the number of pupils leaving the site and utilising pedestrian crossings etc, particularly given that they are more likely to walk or use a bus. Although in the winter months there would be clear benefits associated with pupils departing whilst it remains light, at all other times the arrangement has the potential to detrimentally impact on pedestrian safety.
- 8.6 By way of mitigation, the loss of a stagger will free up staff resources to enable the college to better manage the car park and the road area outside of school. This would include strategically locating staff along the route out of school and working with the Council's road safety team and the police to formulate a road safety plan.
- 8.7 The college has also committed to producing a new travel plan, a road safety audit/plan, which will involve South Yorkshire Police and road safety education programmes being timetabled for delivery within school.
- 8.8 Subject to this mitigation, it is considered that the benefits to pupil safety during winter months significantly weigh in favour of the proposed reduction to four staggers.

Air Quality

- 8.9 The proposal will not impact on overall traffic movements and emissions but increased queuing within the car park could have a detrimental impact on air quality. However, the area where cars queue within the car park is relatively remote from residential properties, particularly when compared with the distance between the carriageway and the front elevations of dwellings on Dodworth Road. This area of queuing traffic is also mostly located outside the boundary of the AQMA. Regulatory Services will also continue to measure pollutant concentrations along Dodworth Road to assess long term trends.

9. Conclusion

- 9.1 Whilst the modelling has demonstrated that it would not be possible to reduce the number of staggers from 5 to 2, it has shown that merging the final two staggers would not have a significantly adverse impact on traffic flows. Inevitably there would be some increases in queuing and journey times but this is considered to be outweighed by the benefits to the school, parents and pupils. In addition, to mitigate the impact of two years departing at the same time, a road safety plan can be secured to ensure better management and supervision of pupils leaving the site. Accordingly, it is considered that the proposed reduction to four staggers is acceptable.

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Date: 4th February 2015