



West Cambridge

Servicing Technical Note (Revised September 2020)

Proposed Servicing Access

This note supersedes the Servicing Technical submitted in support of the Outline Planning Application Supplementary Submission in September 2017. The note reflects amended proposals for the servicing of that part of the West Cambridge site east of JJ Thomson Avenue from Clerk Maxwell Road.

The previous proposal, shown in the Access & Movement Parameter Plan (August 2017) extract below (Figure 1) envisaged access and egress into the site from CMR via access I-J and M-N. It envisaged heavy goods vehicles entering the site at I-J exiting the site via egress M-N or K-L. The University committed to only operating one of the two southern access/egress points at any given point in time.

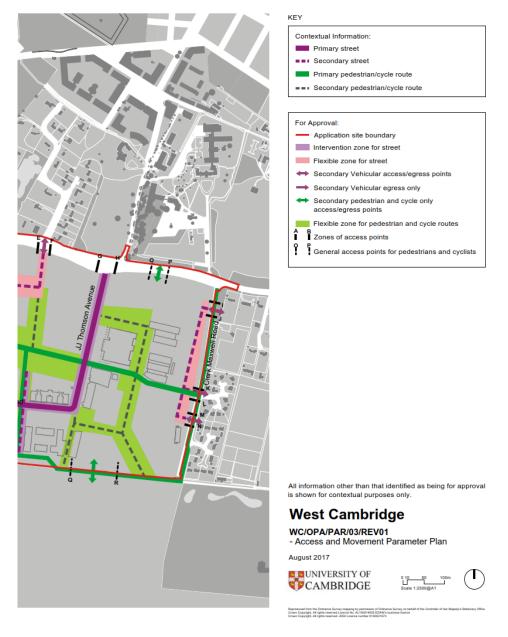


Figure 1: Clerk Maxwell Road access/servicing proposal (August 2017)



The revised proposal is for all servicing access from Clerk Maxwell Road to use access/egress I-J, in the northern part of Clerk Maxwell Road. This is identified on updated Access & Movement Parameter Plan 03 (December 2019), extract shown as Figure 2 below. This change has been made possible by revised proposals which allow HGVs to turn within the site, allowing them to both access and egress via point I-J. As previously, the pedestrian and cyclists (access K-L) will be installed midway down CMR, it will not be used for egress by any servicing vehicles. It will be necessary for some servicing vehicles to cross the east-west pedestrian cycle route. The infrequent movement of HGVs across this route to service the redeveloped Cavendish II site will be managed by a banksman, if necessary.

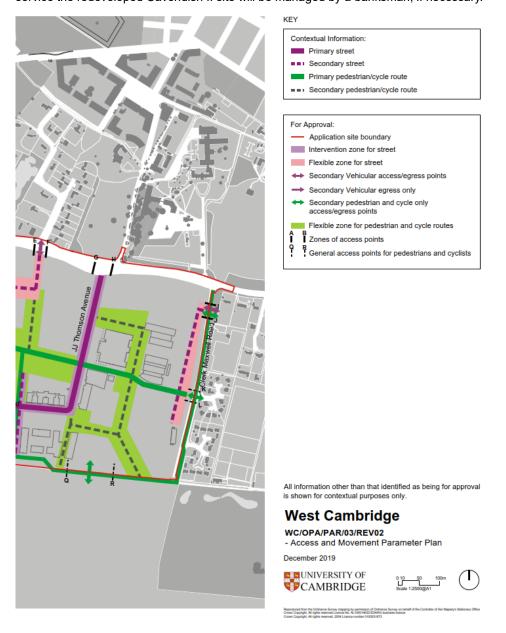


Figure 2: Clerk Maxwell Road revised access/servicing proposal (December 2019)

The revised accesses reflect the current understanding of how the eastern part of the site would be serviced. However, if during detailed design it is determined that a servicing access is required at the southern end of Clerk Maxwell Road, a full planning application will be submitted to Cambridge City Council for the construction of such an access. Any planning application would be the subject of pre- and post-application public consultation.

This note sets out assumptions about the extent of vehicle usage of this servicing access point, based on assumptions around the relocation and growth of the Department of Engineering into the eastern part of the West Cambridge site. In particular, this note focuses on the potential impact on neighbouring properties on two cul-de-sacs accessed off CMR, broadly in the southern part of CMR, The Lawns and Perry Court.



Baseline Position

In assessing any potential impact on neighbouring properties a baseline position needs to be established. Although there are no residential properties fronting onto CMR, the road provides access to two cul-de-sacs (Perry Court and The Lawns). In addition to these properties is 53 Madingley Road which fronts onto Madingley Road, a main arterial route into and out of the city. This dwelling is separated from CMR by well-established planting and a footpath. CMR has well established vegetation along both sides of the road and is currently characterised by (uncontrolled) on-street parking on both sides of the road.

CMR itself currently accommodates around 190 daily car movements on the assumption that 95 on-street parking spaces are used, excluding movements from residents. Although not all cars park towards the southern end of CMR, often cars in the southern half will drive down to Perry Court to turn around before driving north (as the on-street parking restricts the possibility of turning before Perry Court), causing additional movements and disturbance for residents. Behind the landscaped bund within the West Cambridge Site are 560 parking spaces comprising:

- 270 to the rear of the CAPE building and Roger Needham Building (RNB) which are accessed from JJ Thomson Avenue; and
- 290 parking spaces that form the Park and Cycle Facility which is accessed via CMR.

These parking areas account for a significant number of vehicle movements behind the bund each day. The residents at The Lawns and Perry Court currently experience vehicles using CMR as well as hearing noise associated with car use and parking within the site behind the bund.

Although not approved, a planning application (19/1734/FUL) has been submitted to Cambridge City Council for the construction of 35 dwellings at the Former Cock and Hens Tennis Club, accessed via CMR to the north of The Lawns. The application was considered at the Planning Committee on 1st July 2020 where the Committee resolved to grant planning permission, subject to the signing of a S106 agreement. This proposed development has been considered as part of the ES Addendum and implications of this scheme on future junction capacity have been considered in the Revised Transport Assessment.

Current Servicing on the Trumpington Road Site

The eastern part of the West Cambridge site will accommodate the relocation and growth of the Department of Engineering, which is currently located on the Trumpington Road site. The Trumpington Road site currently accommodates around 27,000sqm GIA of Engineering floorspace. The on-site facilities manager has confirmed that for the current operations on the Trumpington Road site there are, on average, 30 deliveries per day (150 deliveries per week). This comprises 25 deliveries, and 5 servicing contractors. Of these deliveries larger vehicles account for only 2 or 3 deliveries per week. The remainder are 'white van' or standard vehicle deliveries (all under 7.5 tonnes).

The Move West

This existing floorspace will move over to West Cambridge. The servicing numbers will move across also (Line 1 in Table 1), and will be supplemented by deliveries from CAPE, Nano-Science, and the Whittle Laboratory, all currently on the West Cambridge site and serviced from JJ Thomson Avenue (Line 3). The Roger Needham Building is assumed to be part of the redevelopment and therefore its servicing is included in Line 1 of Table 1. The masterplan allows for significant growth of the Department, however this will not necessarily mean a 100% increase in servicing. Some of this growth is to enable existing provision/operations to work in better, less cramped/constrained conditions; a factor of 50% growth in servicing has therefore been applied (Line 2).

Some buildings such as Whittle and buildings close to the East Forum will be able to receive some of the deliveries from JJ Thomson Avenue, it is also likely that some of the buildings to the south could be serviced from a servicing layby space combined with trolley deliveries. A factor (Line 4) has been applied to remove these.

Table 1. Servicing Deliveries to the Eastern Part of the West Cambridge Site

Line	Item	<7.5 Tonne Deliveries per Week	>7.5 Tonne Deliveries per Week
1	Servicing from Trumpington Road transferred across	147	3
2	Accounting for growth	74	2
3	Existing buildings where servicing is transferred to Clerk Maxwell Road	125	2



Line	Item	<7.5 Tonne Deliveries per Week	>7.5 Tonne Deliveries per Week
4	Removing deliveries expected to continue from JJ Thomson Avenue	(25)	0
Total		321	7

^{*}figure includes Civil Engineering

The figure below visually illustrates the proposed servicing strategy for the eastern part of the West Cambridge site. This area of the site is broken into four zones and the following identifies the servicing strategy for each zone.



Buildings in the Blue Zone will be accessed from access I-J on CMR. All vehicles will enter and exit via access I-J.

Buildings in the Green Zone will be predominantly serviced from CMR as per the servicing strategy for the Blue Zone. However, some buildings will be able to be serviced from JJ Thomson Avenue via the Orange Zone.

All buildings in the Orange Zone will be serviced from JJ Thomson Avenue.

Buildings in the Purple Zone will be serviced from access I-J, travelling through the Blue Zone.

Consideration has been given to utilising JJ Thomson Avenue for servicing buildings in the Green, Purple and Blue Zones. However, this would require the construction of service roads that would significantly compromise the environmental quality of the key north-south East Green Link and flexible zone for public realm, pedestrians and cyclists which are proposed as per Parameter Plans 3 and 4. As such, this strategy was discounted due to the adverse impact it would have on the public realm within this part of the site and the increased risk of conflict between servicing vehicles and pedestrians/cyclists.

Figure 3: Proposed Servicing East of JJ Thomson Avenue

One of the key visions of the Masterplans is "to create and sustain a high quality place by transforming the physical and social environment for site users and neighbours". The above strategy will ensure that this objective of the vision is achieved.

Breakdown of Access Points Usage

Table 2. Breakdown of Servicing Deliveries

Access Points Usage	Access I-J
Total Deliveries per Week	328
<7.5 Tonne Deliveries per Week	321
>7.5 Tonne Deliveries per Week	7
Total Deliveries per Day ¹	65.6



Access Points Usage	Access I-J
<7.5 Tonne Deliveries per Day	64.2
>7.5 Tonne Deliveries per Day	1.4
Total Deliveries per Hour ²	6.56
<7.5 Tonne Deliveries per Hour	6.42
>7.5 Tonne Deliveries per Hour	0.14

¹ Assumes Monday-Friday ² Assumes 10 hours between 8am-6pm

Analysis

- The majority of deliveries are white van/courier type vehicles. Vehicles over 7.5 tonnes only account for 2% of deliveries.
- The white van and courier deliveries are not materially different in terms of noise impact than that of a normal vehicle.
- All of the delivery vehicles serving the Blue, Purple and Green Zones will ingress and egress out of access I-J
 which will not cause a disturbance issue for residents in the cul-de-sacs which link to CMR.
- It is expected that on average 1.4 >7.5 tonne vehicle deliveries will be made each day. As a worst-case the noise assessment has assessed one >7.5 tonne vehicle delivery <u>per hour</u> which is significantly higher than the number of deliveries forecast. The results of the assessment set out that there will be less than an adverse noise impact during the daytime on residents at The Lawns and Perry Court in this worst-case scenario.
- Behind the central part of the bund the site currently accommodates 270 parking spaces to the rear of the Roger Needham building (assume there is potential for 540 daily movements). There are also approximately 190 movements per day associated with the uncontrolled 95 on-street car parking spaces on CMR (the removal of these spaces has been approved under 19/1763/FUL, which was granted consent 14th July 2020). These will be replaced by 64.2 deliveries per day with similar vehicles and an additional 1.4 deliveries per day by a larger .7.5 tonne vehicle, significantly reducing the number of vehicle movements behind the bund within the site below proposed access I-J.
- CMR (access I-J) will also provide access to the proposed 450 space multi-storey car park. It is recognised that this will give rise to additional movements in comparison to the existing 290 space Park and Cycle facility and 95 uncontrolled on-street parking spaces along Clerk Maxwell Road. The vehicle movements related to the multi-storey car park have been assessed with regard to the properties at The Lawns and Perry Court. The assessment has confirmed that the sound levels associated with the proposed multi-storey car park are not likely to exceed the proposed Lowest Observed Adverse Effect Level (LOAEL) and are therefore considered acceptable (see Noise and Vibration Chapter of the ES Addendum).

Conclusion

The West Cambridge scheme will result in a significant net reduction in the number of vehicle movements in the central and southern part of CMR as all servicing vehicles will enter and egress the site via access I-J which is located in the northern part of CMR and all uncontrolled on-street car parking along CMR will be removed.

Only 65.6 deliveries will enter access I-J via CMR per day, with no vehicles required to travel down CMR to enter the site or turn around. All vehicle turning will occur within the site, behind the existing bund.

It is acknowledged that there will be an increase in the number of vehicles using the northern part of CMR to access the proposed multi-storey car park when compared to the existing Park and Cycle facility. However, the assessment undertaken in the Noise and Vibration chapter of the ES Addendum demonstrates that the impacts will not be unacceptable.

It is therefore considered that the use of CMR for servicing and access to the multi-storey car park will not result in an unacceptable impact on the residential amenity of properties at The Lawns and Perry Court.

The planning application for the Civil Engineering Building (permitted in March 2017 reference 16/1811/FUL) was accompanied by a 'Servicing and Operational Management Plan (October 2016). The intention of The University of Cambridge's Estate Management team and the Department of Engineering is that as later phases of development within the area east of JJ Thomson Avenue come forward through reserved matters applications this document will be updated as necessary. Updates will reference new buildings and any particular amenity issues that need to be managed to ensure the amenity of neighbouring properties is protected. This will enable one comprehensive document to be



referenced by all interested parties to understand the proposed servicing arrangements for this area of the West Cambridge site.

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