[redacted]

From: Northfield, Rachel <rachel.northfield@addenbrookes.nhs.uk>
Sent: 30 July 2021 12:44
To: 'Paul Humphrey'; TRANSPORTINFRASTRUCTURE
Subject: Cambridge South - TWAO objection letter sent on behalf of CUH
Attachments: 2021 07 30 - Cambridge South TWAO Response - CUH.pdf

Dear Sirs,
Please find attached a letter of objection to the TWAO in relation to the NETWORK RAIL (CAMBRIDGE SOUTH INFRASTRUCTURE ENHANCEMENTS ORDER) and request for deemed planning permission - Cambridge South Transport Works Act Order – Consultation – July 2021. This is sent on behalf of Cambridge University Hospitals.
We look forward to working with you to resolve the matters of objection and the scheme is welcomed to support transport infrastructure to the CBC campus.
Please can acknowledgement of this message be issued.
Kind regards
Rachel

Rachel Northfield - Estates and Facilities, Head of Quality and Safety Governance
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The Trust is: part of the National Institute for Health Research - Cambridge Biomedical Research Centre | and a member of Cambridge University Health Partners

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Cambridge University Hospitals
NHS Foundation Trust

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30 July 2021

Transport Infrastructure Planning Unit,
Department for Transport,
Great Minster House,
33 Horseferry Road,
London, SW1P 4DR.
Via Email (transportinfrastructure@dft.gov.uk)

Dear Sir / Madam,

RE: NETWORK RAIL (CAMBRIDGE SOUTH INFRASTRUCTURE ENHANCEMENTS ORDER) and request for deemed planning permission Cambridge South Transport Works Act Order – Consultation – July 2021

Thank you for advising Cambridge University Hospitals NHS Foundation Trust (CUH), of the above TWAO, and providing links to the consultation information.

CUH is delighted that the plan to create a new station adjacent to the Cambridge Biomedical Campus is being brought forward and the opportunities it will bring. Not only will the station improve access to the Campus, but it will also improve rail services across the county; strengthen Cambridge's position to promote the life sciences agenda; and open up housing corridors to the west.

I write on behalf of the Cambridge University Hospitals NHS Foundation Trust to first and foremost express our firm support for a station adjacent to the Campus, however, as the plans currently stand, and with limited detail within the consultation documentation, it gives rise to a number of concerns that CUH feels must be addressed to our satisfaction. This is to ensure that the vital operation of our estate and delivery of patient services can continue without unacceptable compromise.

Until such time as the issues outlined within this letter can be addressed satisfactorily, CUH will unfortunately need to register its objection to the

proposals. It is hoped that as the detail of the scheme is developed in consultation and with our engagement, the issues will be resolved with the provision of additional information to resolve our concerns.

About the Cambridge Biomedical Campus and Cambridge University Hospitals

Cambridge University Hospitals sits at the heart of the Cambridge Biomedical Campus (CBC) which form part of the UK's and Europe's leading life sciences cluster. The CBC is a vibrant, international healthcare community and a global leader in medical science, research, education and patient care. CUH has the largest presence on campus in terms of estate, staff, patients and visitors.

The site has grown considerably in recent years and the organisations on the site reflect the strength of healthcare and life sciences in Cambridge:

- Healthcare and the NHS: Cambridge University Hospital NHS Foundation Trust, Royal Papworth Hospital NHS Foundation Trust and Cambridgeshire and Peterborough NHS Foundation Trust

- Education: The Deakin Centre and Cambridge Academy for Science and Technology

- University & Research Institutes: University of Cambridge School of Clinical Medicine – housed in multiple buildings across the CBC and comprising twelve Academic Departments, four Research Institutes and five Medical Research Council (MRC) units, The Medical Research Council Laboratory of Molecular Biology (MRC LMB), Cancer Research UK Cambridge Institute, Heart and Lung Research Institute and Addenbrooke's Centre for Clinical Investigation

- Industry & Expansion: AstraZeneca Strategic R&D Centre, GlaxoSmithKline's (GSK) Experimental Medicine and Clinical Pharmacology Unit, Abcam PLC Headquarters and ideaSpace – a co-working community of start-ups

The campus will continue to grow (with work underway on the 2050 vision), creating jobs and bringing investment to Cambridge but we do this in collaboration with the city and its residents. The achievements and success reflect the endeavour, persistence and brilliance of the people who live and work here.

The campus has 21,000 researchers, industry and clinicians all working on one site. By 2031, it is estimated there will be 26,000 people working on the campus and up to 40,000 in the years following. Investment in the campus over the past five years has exceeded more than £750m. The CBC is the biggest employment site in Cambridge.

Sustainable access to the site is a key factor alongside affordable housing to ensure the campus can attract and retain the best staff. With the further predicted growth in and around Cambridge as well as the predicted growth on the campus, increased transport links, such as rail routes and the Cambridge South Station, will become even more pressing.

The proposal:

The development of the station is recognised by CUH as a strategically important piece of infrastructure as noted in the submitted Planning Statement, the Greater Cambridge Partnership study of the 'Transport Needs for the Campus' (2019), and the Campus developed 'Transport Strategy' (2019).
A railway station adjacent to the CBC will also be important transport infrastructure for the Local Industrial Strategy to facilitate future growth of the Cambridge Life Science Cluster. CUH strongly supports the proposal for the Cambridge South Station and the contribution its development would make to available sustainable travel options, reducing local congestion and single driver occupancy rates.

Issues and concerns:

Comments from Previous Consultation Responses
CUH engaged with Network Rail on previous consultations, providing support for the scheme and offering observations on cycle parking, cycle routes and the need for inter-modal connectivity in letters dated 26th February 2020 and 23rd November 2020.
CUH reviewed the additional information within the TWAO submission. CUH would welcome the opportunity to discuss the following observations further with Network Rail to clarify position:

- **Cycle Access and Cycle Parking** – it is noted that 1,000 cycle parking spaces are to be provided at Cambridge South Station. The provision of sufficient cycle parking is imperative. CUH welcomes significantly high volumes of cyclists to the campus each day, year round and in all weathers. The provision of high quality and secure cycle parking is welcomed and will enable users to seamlessly carry on their onward

journeys be it inbound to the campus and the local area or outbound to destinations further afield. The cycle parking facility should be well lit and have proactively monitored CCTV coverage. However, CUH is concerned that the split of cycle parking provided east and west of the station does not appear sufficient to accommodate the identified needs. The Transport Assessment indicates 75% of trips arriving and departing the station via the east, but the areas on the plans do not reflect this. No split is confirmed. Sufficient cycle parking is imperative in the context of the growth ambitions for CUH and promoting active modes of travel.

CUH would like to see the installation of infrastructure to support cycling such as at least two cycle repair stations and bicycle pumps (either side of the station), to allow cyclists to make any minor repairs necessary to support their onward journey. These should be situated in well-lit and ideally covered areas and it is unclear from the consultation documents if they are to be included.

It is unclear from the consultation documents whether any motorcycle access and parking is to be provided. This is an area which is regularly raised from the motorcycle community therefore due consideration and acknowledgement should be provided.

As we discuss later in this letter, we request a review of the volume of cycle parking provided. There are concerns about the appropriateness of applying standard national rail station forecast methodologies to a station where the associated land-use it serves is 24hr a day 7-day a week operation, and also within a city with one of the highest levels of cycling in the UK. A shortfall in cycle parking has the potential to blight the Campus and be of detriment to the public realm so we would welcome further discussions with Network Rail on cycle parking proposals to resolve this.

- **Impacts on Blue Light Routes** - It is noted that the majority of travellers accessing in a private vehicles are likely to be accessing the station from the direction of Addenbrooke's Road. The road can already be congested at peak times and HGV deliveries, buses and ambulances all regularly use this access point to and from the campus. Addenbrooke's Road and Francis Crick Avenue are 'blue light' route for emergency vehicles so must remain free of obstruction. The Transport Assessment and Environmental Statement Chapter do assess growth at the Campus, but do not confirm that there would be no detrimental impacts on these blue light routes as a result of the Station proposals. We would welcome confirmation from Network Rail what the impacts on the blue light routes are likely to be.

- **Avoiding through traffic** - It is acknowledged that there would need to be a drop off for taxi services and facilities for those who need additional support e.g. blue badge holders. Network Rail is reminded that there is a 'no-through-route' obligation through the campus, to avoid 'rat-running' which is governed by ANPR.

  CUH is currently preparing an updated Masterplan to support future growth at the Campus. Part of this work includes a review of the role of Francis Crick Avenue. Bearing in mind that we would be seeking to reduce traffic on Francis Crick Avenue near the station in the longer term, and promote attractive walking, cycling and public transport interchanges near the station, we question whether drop offs for general traffic could be displaced away from the Station entrance towards the south of the Campus, reducing potential conflicts around the station and providing a clear priority for sustainable transport for access to and from Cambridge South. This would also avoid Francis Crick Avenue becoming a busy distributor road at the expense of attractiveness for walking and cycling. CUH is keen to support conversations to work to the best possible solution for all, ensuring that the campus does not become a through-route and work towards a solution that allows ANPR to continue to work effectively and enforce no-through routes within the Campus.

- **Personal Safety of Cycle Routes** - Personal safety is a high priority for CUH; concerns are often raised by staff that use off-road pedestrian, cycle and busway routes. The station has a great part to play in addressing these concerns, not only at the station itself, but also the paths which connect to the station, on to the campus and other public routes. CUH therefore advise that footpaths and cycle ways are designed to be in open, well laid out spaces which enable paths to be protected. Adequate street-style lighting; suitable CCTV coverage and pro-active monitoring of CCTV cameras along with good quality surfaces and on-going maintenance are essential to encourage users onto these routes and to support them in feeling safe whilst doing so.

- **Integration of Transport Projects and Solutions** - For the Cambridge South Station to be truly transformational, it is important that the overarching travel and transport strategy take due account of the existing and future transport schemes underway and that the relationships between each of the developments are carefully integrated. The relationships between the Sawston Greenway and Cambridge South East Transport (CSET) project will be important to ensure seamless transfer between modes of transport within Cambridge South Station.

CUH request that further detailed consideration is given to the design of routes between modal interchange points between Guided Bus, Cambridge Station and CSET to ensure this is seamless and high-quality. For example, cycle access into the Station from the south as sought through the TWAO is not reflected in the CSET plans. The Guided Busway opens up east-west connectivity within the City, and Cambridge South Station opens up north-south connectivity, but the Design and Access Statement does not set out how these interchanges will be linked. It is imperative that the interchange is efficient and attractive to successfully support sustainable growth and we welcome the opportunity to discuss options further in this location.

Additionally, the technical assessment work must demonstrate that the station forecourt and volumes of users travelling between these key interchanges will not be detrimental to critical life-saving operation requirements for Francis Crick Avenue. The assessment work to date uses highway modelling software based on demands averaged over an hour for the peak hours only. This does not capture the complexity of movement around this part of the Station, particularly for pedestrians and cyclist volumes and interactions with road users, taxis, drop offs and the Guided Bus. We consider that Microsimulation work should be undertaken to model the complex interactions likely to be taking place around Francis Crick Avenue and the Station Access and Guided Busway crossing to "stress-test" the forecourt and access to verify the design principles being applied for are sound and CUH operations are not compromised. We welcome the opportunity to discuss our specific concerns further with Network Rail's technical team.

Land Acquisition

CUH has reviewed the Deposited Plans and has the following observations:

- CUH notes that Long Road and Robinson Way are highlighted as construction and access routes to and from the Station. CUH objects to the use of Long Road and Robinson Way as routes for access to the Station due to the conflicts that are already experienced here between pedestrians, cyclists and vehicle users. School children regularly use Robinson Way as a walking and cycling route to access Long Road 6th Form College and University Technical College as well as other schools in the City. There is also a day nursery accessed from Robinson Way.
- Significant infrastructure for utilities run along Robinson way and there is concern that works associated with the station do not prejudice future

requirements or infrastructure changes. It is also noted that significant wear and tear may result on the roads owned by CUH as a result of the development (including rail replacement services) and CUH would be looking to ensure that agreements were in place to support the local operation and management of the roads in a coordinated fashion (e.g. when roadworks or road repairs are required).

- Francis Crick Avenue, Robinson Way and Addenbrookes Road are used by other parties within the Cambridge Biomedical Campus and therefore the proposals for these routes should also be presented to them as part of this consultation. The level of engagement regarding potential land acquisition has been limited and CUH would welcome the opportunity for further discussion regarding alternatives to some of these arrangements.

- CUH has a number of essential infrastructure services within the roads identified which Network Rail is seeking access rights upon. There is major utilities infrastructure in Robinson Way including high voltage cables and the Granta Backbone Network (University's privately owned fibre network). We request that provisions are incorporated into any drafting of access rights that they should not impinge on CUH's current arrangements to maintain and access its own sub-surface services.

- We also request further discussions regarding compensation in relation to impacts on the main construction and operational routes within the Campus.

- The red line planning boundary for the TWAO around the MRC building does not include the southern car park so it is assumed nothing is applied for, yet the deposited plans indicate that access rights are requested as part of the TWAO to use this land.

Cumulative Impacts of CSETS and Cambridge South

CUH is aware that the access to Cambridge South Station is not fixed in the same location within the current proposals for CSETS. Furthermore, we understand that CSETS is proposed to run up the centre of Francis Crick Avenue, with traffic lanes split to operate either side of the CSETS route. This would therefore necessitate all junctions to all existing and future buildings on Francis Crick Avenue to become left-in left-out junctions, significantly increasing the volume of u-turning traffic at the roundabouts.

We support the provision of priority for CSETS vehicles through a modal priority filter at the Addenbrookes Roundabout but the journey time benefits of segregation to the north of this roundabout we expect to be minimal, and at significant expense to pedestrian and cycle experience.

Relevant to the Cambridge South TWAO, is that there are potentially opportunities missed to integrate bus access directly around Cambridge South Station, through the creation of a single CSETS / Guided Bus interchange close to the station. It has long been an objective to improve east-west connectivity through the Campus and the integration of Cambridge South and CSETS with the Guided Bus is central to achieving this. The Design and Access Statement refers only once to the Addenbrookes Bus Station to the east, and also only refers to the proximity of CSETS and the Guided Bus to the Station, but does not address the linkages themselves and opportunities to integrate the interchanges. Users of the Guided Bus will need to walk from Papworth to get to the Station or CSETS, when there could be an opportunity to integrate interchange between CSETS and Cambridge South to create a seamless solution. CUH request further consideration be given to cross-project connectivity (including the Guided Bus).

Whilst we understand the necessity of two separate TWAO processes for the schemes and a need to illustrate each scheme can “stand-alone” from a planning perspective, we are concerned that the cumulative impacts of these schemes have not been addressed, both during construction and operation within the Transport and Environmental Assessments. Nor have the cumulative opportunities been given due consideration. We believe this must be fully considered for either scheme to have an implementable and robust content. The current dates for inquiry for the Cambridge South TWAO and Deemed Planning Permission is November 2021, which is likely to fall within the consultation period for the TWAO for CSETS. As the schemes contain different access arrangements for the station and for crossings and connectivity with Francis Crick Avenue both of which have differing comments associated with them, we are unclear how these conflicts will be resolved in such a way that CUH can be sure that the construction and operational phases of the schemes are joined-up and will not result in detriment to daily campus operations and growth aspirations. Also from a planning perspective, how two separate planning permissions would be implemented which have different proposals for a common area. We would welcome the opportunity for a stakeholder group to be set up containing all parties involved with construction planning for both schemes with CUH. This would allow phase by phase construction proposals to be discussed and coordinated with ongoing CUH construction activities within the Campus.

Technically, CUH request that a cumulative impact assessment is undertaken with CSETS in place, particularly considering the impact of the additional pedestrian, cycle and public transport demands on crossings and at interchange points in the vicinity of the station to verify that the arrangements for the forecourt have capacity to accommodate the increased demand, and provide a high quality seamless interchange between modes, without detriment to CUH operations. This assessment should be consistent across both TWAOs and Deemed Planning Permissions, even though the procurement routes are separate.

Whilst the practicalities of interfaces between the two projects and their differing proposals is not given any assessment within the Transport Assessment, we note that the future year (2031) transport modelling work submitted for the junctions within the site apply highway trip reductions arising from CSETS completion within the baseline, as well as highway trip reductions associated with a range of other transport schemes at varying levels of progress which may or may not be in place by 2031. This acts to reduce background traffic volumes within the Campus within the assessment year, improving the operation of the junctions but without considering the volumes of additional walk, cycle or public transport trips and whether the current infrastructure has capacity to accommodate this.

Finally, paragraph 17.5.52 states that although there is no information to evidence this, the cumulative impacts of CSETS and Cambridge South during construction are unlikely to generate a significant impact. Unless there is evidence to demonstrate this, these impacts should be considered “unknown”, not assumed to be insignificant as small aspects of construction have the potential to have a significant impact on operations within the Campus unless coordinated and communicated effectively.
We would therefore welcome the opportunity for a stakeholder group to be set up containing all parties involved with construction planning for both schemes with CUH to coordinate these schemes alongside CUH construction and maintenance commitments.

This is particularly relevant for the works proposed to the Guided Bus Bridge as any closure here would have a significant impact on those cycling and using public transport to access the site.

Accessibility for All

In addition to earlier comments relating to cyclist and motorcyclist provision, we note that no commentary is provided on how deliveries will be accommodated to and from the new station and whether these are likely to be required, e.g. an on-site coffee shop. With the large swept path to accommodate the fire tenders, the

design solution provided here should ensure taxis, drop offs and deliveries do not park within this turning head as this could result in blocking back which would be of detriment to the blue light route on Francis Crick Avenue.
Furthermore, there is limited evidence provided on the capacity of existing pedestrian and cyclist routes (and crossings) within the Campus to accommodate the additional pedestrian and cycle drawn through the Campus to access the station.

Disruption and Impacts during Construction

The role of Francis Crick Avenue and Addenbrooke's Road as a 'blue light' route means that the potential impact of the Station proposals during construction and must be understood for the principle of the proposed layout and construction phasing to be supported through planning.

Regarding the construction phase, we support the principle of preparing a Code of Construction Practice (CoCP) and a Construction Traffic Management Plan (CTMP). We request that alongside existing transport forums, a stakeholder forum is established as part of this process so construction proposals are discussed with CUH well in advance, enabling a collaborative approach to managing the impacts of construction across the Campus and to avoid unforeseen impacts on critical care operations of the hospital. This includes the consideration of wayfinding and construction signage.

Regarding potential disruption during operation, we request that micro-simulation work is undertaken for the operational phase of the Station around the Station Access forecourt and Francis Crick Avenue / Guided Busway junction. Firstly this is to verify that the current arrangement and assumptions regarding drop off and taxi bays will not have a detrimental impact on Francis Crick Avenue. Secondly, we request that the arrangement is "stress-tested" within the model using an envelope of demand assumptions, essentially allowing for deviation around the single forecast of car / taxi / pedestrian / cycle users within the Transport Assessment.

This will enable an understanding of the operational capacity of the current arrangements and thus reassure CUH that the current arrangement is not over-sensitive to slight fluctuations in demand which are inevitable on a daily basis.
CUH also wish to be involved in emergency planning in case of emergencies / incidents on the trainline at Cambridge Station, where passengers may be required to terminate their journeys early.
Wayfinding for the station once operational will also need close consideration prior to implementation so it is requested the CUH are involved within the

development of any wayfinding and signage strategy for the Station within the Campus.

Enforcement and Monitoring

Network rail is aware that an ANPR system operates within the Campus to prevent the Campus becoming a “through-route” for traffic. We note there is an allowance for drop-offs within the Station Forecourt, although we anticipate this may trigger issues with the ANPR system and would ask whether drop offs could be provided away from the Station at the edge of the Campus. We have raised this in previous consultations but this will need to be resolved if fines are to be avoided for those dropping off at the station and to keep traffic volumes through the campus sensible.

We note within the submitted documentation that the Train Operating Company will have responsibility over the Station Forecourt and its operation. However, in the event that there are issues with the forecourt that unacceptably impact the campus and its operation, CUH wishes to understand what recourse CUH has to resolve these issues and whose responsibility the enforcement of proper use lies with? This is particularly of concern for taxis who currently park in unauthorised locations whilst waiting to pick up elsewhere across the Campus. There is also the potential for pick-ups to circulate within the Campus, cause congestions on already busy roads and create pollution, if the drop off bays are full, causing congestion along Francis Crick Avenue at the roundabouts at either end.

With regards to car parking, the Transport Assessment states that due to the high price of long stay within the multi-storey car parks, it is unlikely that the car parks will be used for commuters departing from Cambridge South Station, referring to CUH having controls on these car parks to prevent unauthorised use. As the car parks on-site are relatively empty during peak commute hours (i.e. 0700 – 0800) the use of these car parks by commuters is a significant risk, despite the costs. The Wayfinding strategy for the station and the car park hospitals must be clear that the multi-storey car parks are not for Station use and enforcement is required.

Drainage

The drainage designs will need to demonstrate that discharge rates of surface water runoff to existing watercourses are attenuated to acceptable levels to ensure there is no increase flood risk. Based on the level of detail currently provided, it is not possible to confirm whether the sizing of proposed drainage features is adequate.

The proposals will need to make sure there are no significant detrimental impacts upon the route, character, hydrology and biodiversity of Hobson’s Brook and its

tributaries. Hobson's Brook passes through the proposed Development site, via a network of smaller watercourses and drainage ditches. It is proposed to discharge surface water run-off from the proposed station to the existing North Ditch. The North Ditch is a tributary of the Hobson's Brook.
To enable construction of the new station forecourt, we note it is proposed to re-locate an existing attenuation pond serving part of the Cambridge Biomedical Campus. CUH requests that further information is provided and ongoing consultation is provided during detailed drainage design to make sure the proposals are not detrimental to the existing surface water drainage network.
Additionally, during the construction phase, the railway station development could potentially impact on the existing water quality by generating polluted runoff to watercourses. Temporary works proposals should ensure that the construction does not cause pollution incidents and we request to review the Construction Environmental Management Plan and specific construction details in advance of the works.
During the operational phase, the main potential for water quality effects is linked to the discharge of surface water runoff from the Station. We note that a Simple Index Approach (SIA) assessment has been undertaken to provide an assessment of water quality pollution risks from the operation of the scheme. The outline information appears satisfactory but we request that CUH is consulted during the detailed design stage to agree how these risks will be managed.
We accept the principles of the proposed runoff rates as stated in the Flood Risk Assessment; however we wish to be consulted further at detailed design stage, particularly around the discharge locations and how the schemes aim to demonstrate that surface water will be managed onsite to ensure there is no flooding off the site up to and including the 1 in 100 year event plus climate change taking account for the future growth within the Campus.

Transport Assessment and Environmental Statement Observations

CUH has reviewed the Transport Assessment and Transport Chapter of the Environmental Statement supporting the proposals. Whilst we fundamentally strongly support the Station coming forward, we have concerns that the methodology used to forecast trips associated with the Station underestimates the demand for the station. We are also concerned that the beneficial highway trip reductions from transport schemes have been included within the baseline (CSETS, EWR etc), but no subsequent quantification of pedestrian, cycle and public transport demand increases have fed into the assessment.
Our main technical observations are:

- **Patronage estimates for Cambridge South** – Whilst it is noted that patronage for rail stations is derived using MOIRA, some of the outputs

produced by this methodology are a mismatch with travel patterns already observed at CUH. For example, MOIRA forecasts that 80% of demand is likely to occur during weekdays with 20% at weekends. Whilst this might be typical for a commuter-based station, CUH operates 24 hours a day, 7 days a week so we would not expect this to be as disparate. Furthermore, MOIRA forecasts a split of 47/53 between arrivals and departures at the station during the AM peak. However, given the principal role of the station is to act as a destination station for CBC, we would expect the arrivals and departures to be reflective of the forecasts in the Atkins "Transport Needs Review" which forecast 81% with destinations within CBC and 19% using Cambridge South to travel elsewhere.

CUH is concerned that due to the standard methodology applied for generating the forecasts without any cross checking back to CUH staff / visitor numbers and modal shares, the trip making to and from the Campus at the Station has been underestimated and therefore the impact assessment and layouts designs does not accommodate the required capacity for the proposals. For example, in 2031 it is acknowledged that 26,500 staff would be working at CBC, plus 1.32m annual visitors. Yet the total number of people arriving at CBC at Cambridge South Station in the peak hour is just 337.

CUH request that a cross-check is undertaken between the MOIRA patronage forecasts, and what rail mode share this would be equivalent to at CBC to check whether these are sensible. Also checks around the MOIRA forecasts and Atkins Transport Needs Review work to identify disparities and their impacts, as the latter is informed by detailed demand information associated with the Campus itself whereas MOIRA is unlikely to generate forecasts reflective of a Station predominately provided to serve CUH / CBC.

- **Cycle Parking Spaces** – the derivation of cycle parking spaces is unclear and how it relates to overall patronage so clarity is requested as sufficient provision is imperative for the success of the Station. For example, parts of the report refer to cycle parking being calculated based on 5,800 trips per day, then elsewhere it refers to 6,428 trips per day, then somewhere else it refers to 1.8m passengers per year which equates to 4,931 per day on average. We recommend that cycle parking provision is cross checked back to cycle modal share and staff travel patterns identified within Atkin's "Transport Needs Review".

- **The need for "Stress-testing" and "Scenario Testing"** – as set out earlier, the station forecourt and the junction assessments and conclusions around impact of the Station on the Campus operations have been designed around a single set of forecasts produced within the Transport Assessment. Given the importance of the Station to the Campus and potential impact on its operation, CUH requests that "stress-testing" is undertaken (i.e. testing the sensitivity of the station forecourt design by pushing specific demand parameters) and "Scenario-testing" is also undertaken (i.e. testing how the outcomes and conclusions change if fundamental assumptions within the core assessment are different e.g. transport schemes do not come forward). Within the technical assessment, only the construction year (2023) and a future year five years beyond opening of the scheme (2031) is assessed. Crucially this future year assumes a swathe of other transport projects is complete, and the reductions in highway trips associated with them are built into the baseline. It also assumes East West Rail will be operational at the Station which increases the service frequency and thus the impact assessment. Scenario testing should be undertaken to understand the impact of a variation in these assumptions on the outcomes of the assessment and impacts on Campus. Particularly in terms of sustainable mode demand as the Transport Assessment and Environmental Impact Assessment currently focus heavily on vehicular impacts, particularly in the peak hours. The Transport Assessment should also verify that the busiest periods within the Campus have been assessed (i.e. these may differ from traditional network peak hours) given the direct impacts will be felt within CBC.

- **Sufficient weighting provided to blue light routes** – blue light routes are very sensitive to congestion. The impact on the blue light routes should be acknowledged explicitly within the Transport Assessment and Environmental Statement.

- **Capacity to accommodate additional sustainable mode trips** – in addition to the micro-simulation of modal interactions and conflicts around the Station, further information is required about the changes in sustainable mode demand arising from the Station and the impact on routes through the Campus. For example, the Transport Assessment indicates that 30% will be new trips and 70% will abstract from Cambridge Station. However, the impact assessment for sustainable modes only considers the impacts of the new trips.

- **Overestimation of beneficial impacts of Station on Francis Crick Avenue and Robinson Way** – in the ES Chapter for Transport, we note that the highway trip reduction forecast to be generated by Cambridge South is applied to flows on Robinson Way and Francis Crick Avenue. These reductions are likely to occur across the full Campus and therefore the benefits are likely to be lower in these locations but spread across the Campus.

- **The lack of consideration of the public transport interface between train, CSETS, the Guided Busway and any future potential public transport connections through the site** – As mentioned earlier, the Design and Access Statement does not seek to improve the interface and linkages between the Station and Guided Bus, only referring to CSETS stops. The Station, CSETS and Guided Bus create a confluence of public transport within the Campus, yet there have been no design solutions within either scheme to integrate these three key routes at an interchange.

Summary

Whilst CUH firmly support the provision of a new rail station adjacent the Campus at Cambridge South, there are aspects of the submitted documentation and proposals that require further investigation and clarification by Network Rail for CUH to support the specifics of the scheme proposals in full.
These include comments already raised in previous consultations around cycle parking but particularly the need for transport schemes in the Campus to come forward in a coordinated way, and drawn from a robust and consistent technical evidence base which considers the cumulative impacts of one another, during construction and operation. Monitoring and enforcement issues require further clarity, particularly to confirm what powers CUH will have to address problems arising from users at the station, e.g. taxis and drop-offs in particular but also how the current ANPR system will work in the context of station drop-offs and whether there is flexibility to move drop offs in the future away from the Station as part of the Masterplan work.

From a drainage perspective, we note there are proposals to move attenuation ponds currently used by the Cambridge Biomedical Campus. We request that consultation with CUH continues within the detailed design of these schemes to ensure there are no unforeseen impacts on the Campus drainage. Furthermore, we request to see further details on the management of water quality during construction and operation phases.

From a transport perspective, the Station design requires stress-testing before CUH can accept that the layout is sufficient. We suggest this includes focused simulation of the forecourt, Francis Crick Avenue and the Guided Bus to verify the envelope within which these junctions can operate effectively without detriment to the Campus and the blue light routes.
We also suggest testing alternative future year scenarios which incorporate more conservative assumptions around completion of other transport schemes (i.e. reducing the amount of highway trips extracted from the baseline assessment) to understand the potential impact on the Francis Crick Avenue / Station access if the single forecast outcome were not to materialise. Finally, we'd suggest a first principles review should be undertaken of the forecast patronage for the station, given the specialist nature of the site that it serves and the unique transport characteristics of the Hospital, but also the level of cycling in the area. This is to ensure that the station has the level of sustainable mode provision appropriate for a world-class employer and healthcare provider with significant sustainable growth aspirations.

Overall, CUH strongly encourages the project to be brought forward as soon as possible to support existing and expected demand for travel to the Campus and would very much welcome further dialogue with the South Station project team and others throughout the delivery of this project.

CUH welcomes the positive intentions of this consultation and believes the Cambridge South Station will provide a vital link in connecting the Campus to Cambridge, London and beyond. The station will also improve rail services across the county; strengthen Cambridge's position to promote the life sciences agenda; and open up housing corridors to the west.

Yours faithfully

Carin Charlton
Director of Capital Estates and Facilities Management – Cambridge University Hospitals NHS Foundation Trust