

36a Lambs Conduit Street, London, WC1N 3LD

10 June, 2022

Dear Patrick, Jonathan, and Camden planners,

I am writing to object to the GOSH phase 4 construction plans on a number of environmental fronts:

Acoustics:

The geographical assessment only covers the most immediate area and therefore seems completely inadequate. Sound travels. How far will all of below travel? Can they assess this please? Will we be subjected to noise throughout the entire neighbourhood day and night as the huge list of exemptions for normal working hours seems to imply?

It seems the ‘key potential effects associated with exposure to noise are; activity disturbance, annoyance, and interference with processes or commercial activities.’ How will this damage be compensated for? Can impact reports please be prepared as follows? Impact on the health and well-being of locals; impact on local businesses?

‘Due to the location of the site within close proximity of adjacent clinical buildings of GOSH which are to remain operational during the construction phase, agreed quiet times throughout the working day are to be established prior to the commencement of deconstruction and construction.’ Will such courtesy be extended to the community surrounding GOSH? It’s a stretch to believe GOSH care about the local community it exists within as we are rarely mentioned throughout these reports, except when adhering to legislation.

Were any of the following included in their assessment? Emergency backup generators, construction vehicles, construction noise – eg wrecking balls; workers noise. If not why not? And can this be addressed please?

“9.1 Site Acoustics

Construction activities are likely to give rise to airborne, ground borne and structure borne noise levels. The main activities that are associated with this particular project will be:

- demolition works – concrete breaking and grinding;
- piling works – CFA & secant piling wall operations;
- ground works – reduced level dig to form Level 0 basement;

Figure 44 - GOSH Existing Underground Services
54

- CFA pile cropping;
- reinforced concrete frame formwork installation;
- reinforced concrete slab scabbling; and
- plant and construction vehicle movement.

9.1.1 Acoustic Survey

Sisk has completed a full impact noise assessment during August 2021 in accordance National Policy Framework (NPPF), BS 4142:2014+A1:2019, BS6472-1:2008, BS6472-1:2008, BS7445-1:2003, Pollution Act 1974, Environmental Protection Act 1990 and any specific LBC requirements. Baseline noise monitoring was carried out to establish daytime and night time noise levels through the use of attended and unattended monitoring. As illustrated in image below long term unattended measurements was taken in two locations:

- roof level of existing Frontage Building; and
- roof level of Premier Inn Clinical Building PICB.

Unattended monitor stations recorded noise levels for a minimum of 4 days and included at least one full weekend and two full weekdays / nights.

As illustrated in image below short term attended measurements were taken in six locations:

- street level on Powis Place;
- street level of Great Ormond Street west;
- street level of Great Ormond Street east;
- roof level of Octav Botnar Building OBW;
- roof level of Premier Inn Clinical Building PICB; and
- roof level of Variety Club Building VCB.

Attended monitor stations recorded noise levels for a minimum 20mins.

The key potential effects associated with exposure to noise are; activity disturbance, annoyance, and interference with processes or commercial activities.

9.1.2 Guidance on Acoustic Standards during Demolition and Construction

Management and operational controls will be implemented in order to minimise adverse effects from noise arising from demolition and construction activities, if they occur. The timing and duration of mitigation measures, as described below, have all been designed to minimise impact on sensitive receptors. There will be monitoring of noise, both on-site to protect employees, and off-site, to minimise potential disturbance to the sensitive receptors and comply with noise control limits. This will occur prior to and throughout the main demolition and construction works. This document addresses off-site impacts.

Noise and its emission will be controlled in accordance with the recommendations established in BS 5228-1:2009

Code of practice for noise and vibration control on construction and open sites. 9.1.3 Evaluation of Acoustic Impacts. The calculation of noise levels emitted by conventional plant and stationary machinery systems will be determined using procedures described in British Standards 5228. During the development of pre-construction activities predictions of noise and vibration levels will be generated using 3D modelling exercises.

To understand the noise environment before works commenced onsite, it was necessary to assess the existing situation. Noise measurements will be taken to determine the baseline situation prior to construction works proceeding.

Noise levels arising from demolition and construction at sensitive receptors will not exceed the maximum noise levels given in Figure 46, below. Where the measured ambient background noise levels, excluding construction noise, is >75 dB(A), the maximum permitted resultant noise level will be the cumulative effect of the measured ambient background noise level, plus the maximum permitted construction noise stated below. If, via the monitoring of noise elevated levels are encountered, the source of noise will be identified, and alternative methods or additional control measures will be implemented. These will be agreed with Trust Management Team, as necessary.

55

The key potential effects associated with exposure to noise are; activity disturbance, annoyance, and interference with processes or commercial activities.

9.1.2 Guidance on Acoustic Standards during Demolition and Construction

Management and operational controls will be implemented in order to minimise adverse effects from noise arising from demolition and construction activities, if they occur. The timing and duration of mitigation measures, as described below, have all been designed to minimise impact on sensitive receptors.

There will be monitoring of noise, both on-site to protect employees, and off-site, to minimise potential disturbance to the sensitive receptors and comply with noise control limits. This will occur prior to and throughout the main demolition and construction works. This document addresses off-site impacts.

Noise and its emission will be controlled in accordance with the recommendations established in BS 5228-1:2009 Code of practice for noise and vibration control on construction and open sites.

9.1.3 Evaluation of Acoustic Impacts

The calculation of noise levels emitted by conventional plant and stationary machinery systems will be determined using procedures described in British Standards 5228. During the development of pre-construction activities predictions of noise and vibration levels will be generated using 3D modelling exercises.

To understand the noise environment before works commenced onsite, it was necessary to assess the existing situation.

Noise measurements will be taken to determine the baseline situation prior to construction works proceeding.

Noise levels arising from demolition and construction at sensitive receptors will not exceed the maximum noise levels given in Figure 46, below. Where the measured ambient background noise levels, excluding construction noise, is >75 dB(A), the maximum permitted resultant noise level will be the cumulative effect of the measured ambient background noise level, plus the maximum permitted construction noise stated below. If, via the monitoring of noise elevated levels are encountered, the source of noise will be identified, and alternative methods or additional control measures will be implemented. These will be agreed with Trust Management Team, as necessary.

Due to the location of the site within close proximity of adjacent clinical buildings of GOSH which are to remain operational during the construction phase, agreed quiet times throughout the working day are to be established prior to the commencement of deconstruction and construction. Figure 47 below suggests such quiet time which will have to be adhered to. Subject to GOSH clinical activities certain works may be prohibited during certain working hours. Listed in Figure 47 below are anticipated working hours in accordance with GOSH contractor working policy. These working hours

Day of week Time of Day SPL, DB LAeq. 1hr

Monday – Friday 08:00 – 18:00hrs 75

Saturday 08:00 – 13:00hrs 75

Figure 46- GOSH CCC Maximum Acceptable Acoustic Levels of Construction Activities at Sensitive Receptors 56 are subject to review and agreement during design development. Specific SPL, DB LAeq, 1hr levels for each time-period of a day is to be agreed with Trust Management Team

BASELINE NOISE:

Page | 19 Great Ormond Street Hospital Children's Cancer Centre (GOSHCCC)

Noise Measurement Results Report 297154-RSK-RP-002-(03)/3 // 16 May 2022

Noise Measurement Results

16 Long Term Measurements

16.1 The baseline noise survey was conducted over a five-day period between 20 and 25 August 2021 to quantify the existing noise levels throughout daytime and night-time periods.

16.2 Analysis of the dataset accounting for the 16-hour daytime period (07:00 – 23:00) and 8-hour night-time period (23:00 – 07:00) is provided to quantify the noise fluctuations at those positions during a representative period.

16.3 A summary of the measured noise levels at position UL1 and UL2 are presented in Table 16.1 and Table 16.2.

Measured Noise Levels (b)

Date Time period (T) Average

LAeq,T dB

LAfmax,T dB

Average

LA90,T dB

Average

LA10,T dB

20.08.21 (a) 14:00 – 23:00 58 81 57 59

20.08.21 23:00 – 07:00 58 66 57 58

21.08.21 07:00 – 23:00 60 81 57 59

21.08.21 23:00 – 07:00 58 72 57 59

22.08.21 07:00 – 23:00 59 77 58 59

22.08.21 23:00 – 07:00 57 64 57 58

23.08.21 07:00 – 23:00 59 89 57 60

23.08.21 23:00 – 07:00 57 62 57 58

24.08.21 07:00 – 23:00 59 75 57 59

24.08.21 23:00 – 07:00 57 72 56 58

(a) Measurements not taken throughout full 16hr period

(b) LAeq,T values are the logarithmic average of LAeq,15min samples, and the LA10,T and LA90,T are the arithmetic average PLANT LIMIT – 53 DAY; 52 NIGHT

21.5 7-11PM 89; 11PM-7AM 88"

Vibrations:

This is particularly concerning given that by their own admission, a number of heritage buildings will be subjected to significant vibrations. Additionally, I do not see any vibrational assessment for the construction management plan which would pass by a huge number of listed properties. Can they please provide this?

Were there to be damage to these buildings, will there be a rectification/compensation scheme in place?

"9.2 Site Vibration (Structure-borne Noise)

Current design dictates that construction works are to be carried out within close proximity of adjacent clinical buildings. Further consideration through supply chain engagement will be carried out to consider construction methods that limit vibration levels and not undermine adjacent building structural integrity and operational clinical plant.

In accordance with London Borough of Camden (LBC) requirements, wherever possible to prevent unnecessary vibration arising from above/underground reinforced concrete superstructures should be demolished using equipment fitted with pulveriser/munching attachments. In the case of vibration, measured vibration levels shall be compared with the criteria in BS 5228: 2009 part 2 (i.e. 1mm/s² PPV for potential disturbance in residential and using a suggested trigger criteria of 2mm/s²

59 for commercial). Lower limits are to be agreed with the LBC if there is a risk that vibration levels may interfere with vibration sensitive equipment or other vibration sensitive objects. Construction activities are likely to give rise to increased vibration levels. The main activities that are associated with this particular project will be:

- demolition works – concrete breaking and grinding;
- piling works – CFA & secant piling wall operations;
- ground works – reduced level dig to form Level 0 basement;
- continuous flight auger CFA pile cropping;
- reinforced concrete frame formwork installation;
- reinforced concrete slab scabbling; and
- plant and construction vehicle movement.

In the event that any complaint is received regarding vibration during demolition and construction activities, the matter will be discussed with the Trust Management Team and LBC and if appropriate a measuring exercise will be undertaken. If vibration is encountered then remedial measures will be proposed, agreed, and implemented.

9.2.1 Vibration Survey

Sisk are to undertake a baseline vibration assessment during the pre-construction phase. Ground born vibration levels will be measured at suitable locations on site by installing a vibration meter on the ground for a period of 24 hours. Levels will be measured using accelerometers, adhering to the requirements of BS 6472-1:2008 "Guide to Evaluation of human exposure to vibration in buildings – Part 1: Vibration for sources other than blasting". The vibration meter would be capable of applying appropriate frequency weightings to the measured acceleration levels in the horizontal axis (X- and Y-axis) and vertical axis (Z-axis) in order to calculate the Vibration Dose Values (VDV) m/s^{1.75}.

The results from the vibration monitoring will be compared to the criteria set out in the aforementioned BS 6472-1:2008 which provides the calculation methodology and criteria for the assessment of ground vibration on humans within buildings using VDV's. The assessment determines the likelihood of adverse comment from future inhabitants.

9.2.2 Evaluation of Vibration Impacts Any measurement of vibration will be conducted in accordance with the principles of BS 5228: "Noise Control on Construction sites, Part 4", BS 7385: "Evaluation and measurement for vibration in Buildings" or BS 6472: 'Guide to evaluation of Human Exposure to Vibration in Buildings'. Vibration dose values (VDVs) from BS 6472:1992 may be used for the assessment of subjective reaction to ground born vibration as shown in Table 2 below Where PPV values exceed the recommended values in BS 5228: Part 4 or BS 7385, activities causing vibration hazard will be suspended pending further investigation."

Air Quality:

Dust

GOSH intentions here are extremely confusing. In their circular economy statement, they say they intend to recycle 90% of materials yet this does not seem to be reflected in other reports dealing with the demolition phase such as below. How will they tally? Is recycling concrete even possible to such a high extent? Again, their baseline assessment seems geographically way too narrow. Dust travels. In a recent local build, there was an issue with mitigation measures one day and I could see dust in the air inside my house with all the windows closed. What would happen with the GOSH build in similar circumstances? It's at least eight times larger than the example build.

They say that 'the proposed development is considered as having potential negative effect on local air quality and future ambient air quality at the site.' How do they intend to mitigate this?

They say they will produce a dust management plan prior to construction – surely this needs to be seen and assessed now?

"9.3 Air Quality Management. Air quality management will be carried out in such a way as to limit the emissions of air pollution by employing best practical means. Throughout the deconstruction and construction phase Sisk will be responsible for air quality management. The proposed development is considered as having potential negative

effect on local air quality and future ambient air quality at the site.

9.3.1 Air Quality Assessment

Sisk has carried out an air quality assessment of existing/baseline conditions and potential air quality impacts during the construction and operational phases of the GOSH CCC Project. Included within the assessment the published report contains an air quality neutral assessment and recommends mitigation measures as appropriate.

9.3.2 Construction Phase Air Quality Control and Mitigation Methods

The air quality assessment concluded that emissions of dust (and particulate matter) will increase locally during the construction period, but the residual effect will be minor, with appropriate mitigation in the form of dust control at source, as set out below:

61• Design, implement and monitor philosophy of prevention of dust formation in the first place by utilising dust hierarchy; prevention, suppression and containment;

- hoarding of the site prior to any demolition and construction activities being carried out;
- demolition works of the Frontage Building will be undertaken using primarily non-percussive techniques such as hydraulic crushing with the use of water sprays as necessary to control dust generation. Percussive demolition techniques will be utilised where unavoidable and steps taken to minimise dust generation including the use of water sprays or mists to suppress airborne dust;
- the inclusion of suitable measures for the containment of dust, such as the use of debris screens and sheets; suitable and sufficient water sprays; and enclosed chutes for dropping waste materials to ground level;
- any debris dropped by site traffic will be cleaned away by the relevant sub-contractors before the end every working day or by close of business;
- concrete arisings will be removed from site for crushing at a local plant;
- all waste to be removed from site, materials not to be stockpiled unless it is to be reused in the site development. Any material that is stockpiled on site is to be contained within the hoardings and controlled using water sprays and sheeting to reduce dust generation;
- storage sites, equipment, temporary buildings and fixed plant and machinery etc. will be located to limit adverse environmental effects to sensitive receptors. All reasonable precautions will be taken for the operation of plant and equipment, to avoid nuisance. In common with storage of all waste, controls will be used to prevent release of airborne dust from spoil heaps and roads such as the use of covers or by damping down;
- burning of materials on site will be prohibited. All work areas will be kept clean and tidy and rubbish will be removed at frequent intervals;
- materials handling and storage areas will be sited as far away as reasonably practicable from public/residential areas. These areas will be actively managed where practicable. Prolonged storage of debris on site will be avoided;
- where necessary, other dusty materials will be dampened down using water sprays in dry weather;
- site plant and equipment will be kept in good repair and maintained in accordance with the manufacturer's specifications;
- where practicable, low emission fuels will be employed for demolition plant;
- No plant will be left running when not in use/operation;
- plant with dust arrestment equipment (such as particle traps) will be used where practicable;
- use of vehicle and plant with raised exhausts to minimise dust generation;
- the speed limit on site will be restricted to 10 mph for all site traffic;
- effective wheel cleaning will be undertaken for traffic leaving the site onto haul/public highways by the use of pressure washers. Cleaning of the underside of the vehicle will also be required. Where practical, delivery vehicles will only stand on hard surfaces rather than soil;
- vehicles transporting material capable of generating dust are to be suitably sheeted on each journey, to prevent release of materials and particulate matter. The sheeting material will be 62 maintained in good order and free from excessive rips and tears. Vehicles will be checked before they leave the site to ensure they are properly sheeted and/or washed;
- a mechanical road sweeper is to be used on-site as necessary to supplement manual cleaning and washing of carriageway footpaths, exit haulage routes and hard standing;
- all site vehicles will be kept in a good state of repair and maintenance;
- pile arisings will be cleared on a daily basis to reduce the propagation of dust;
- during prolonged dry periods or as directed by the Sisk Site Manager, haul roads will be dampened down where practicable. If necessary, during excavation works the site will be damped down to suppress dust propagation, using a water spray. The need for and frequency of such damping down operations will be reviewed in line with the prevailing weather conditions;
- exposed dust generating surfaces will be sealed off as quickly as practicable. This applies in particular to the excavation phase when the contractors will work from the existing hard standing in the clearing from east to west and will continue in general throughout the project;
- pre-mixed versions of cementations materials will be used where possible;
- any stockpiles to be screened and covered to minimise dust arising. Demolition sub-contractors will be required to provide detailed screening and covering measures;
- the orientation, shape and location of any stockpiles to be controlled to minimise risk of dust

arising through wind action;

- the handling operations to minimise risk of dust rising, and the materials put onto stockpiles will be dropped from minimal practical height to minimise dust rising;
- spraying of water at work faces or during loading operations to be undertaken to mitigate dust;"

NO2:

Has any attempt been made to understand how many residents in the immediate area are already severely lung compromised?

Has any attempt been made to address the fact that hundreds of children walk past the hospital on their way to school each week and that their alternatives will be to pass by another building site (Tybalds) or along the very busy main road – Theobolds Road? Children are obviously also extremely susceptible. Are we to understand that the health of the children in the community is to be compromised by the children's hospital build?

They say where practical green vehicles and machinery will be used. Who will monitor this? Is there any way to make this less open-ended?

- where practical, electrically operated machinery will be used in preference to petrol or diesel powered equipment. Operators will be instructed to switch off their plant instead of leaving it idling; and
 - NO2 particle filters will be installed to all plant and machinery exhausts onsite.
- The measures proposed for dust control set out in this section are consistent with those that will apply across the site as a whole and are based upon good practice developed during the deconstruction and construction phase. The monitoring proposals build upon the baseline established during pre-construction stage and construction works on other similar John Sisk and Son projects.

Air Quality Impacts:

Will there be a mandatory time limit for GOSH to fix any such reported problems?

They say there will be medium potential impacts on human health – what does this mean? It sounds pretty ominous to me and I object. Can we please have a full health impact assessment for vulnerable locals please?

9.3.4 Evaluation of Air Quality Impacts

Criteria were established with the Trust Management Team, for the construction works carried out on the other Land Parcels.

9.3.5 Reporting and Mitigation

If dust or particulate levels exceed standards agreed with the Trust Management Team and LBC, the findings will be reported, and the source of dust emission investigated with corrective action implemented as required.

The air quality management and monitoring plan will be co-ordinated by the Sisk Environmental Manager for the project and will be subject to periodic review, on an annual basis. This review will cover the scope, requirement and type of monitoring undertaken on an ongoing basis and any necessary changes will be submitted.

Further section on vehicles:

Please note that when residents raised extreme concerns about pollution from vehicles on a proposed delivery route that runs straight through the heart of our neighbourhood (during the consultation phase), we were told that vehicles would be green. This does not seem to be reflected here. Please see above for

basic air pollution concerns. Is it possible to commission an independent air quality impact study?

"6.1.1 Exhaust Emissions from Plant and Vehicles

The operation of plant, goods vehicles, and vehicles used by site personnel, will result in the emission of exhaust gases containing the pollutants NO_x, PM₁₀, volatile organic compounds, and carbon monoxide (CO). The quantities emitted depend on factors such as engine type, service history, pattern of usage and fuel composition.

Vehicle and plant movements will result in emissions to atmosphere of exhaust gases, but vehicle movements to and from the site will be on a temporary basis and can be mitigated following the implementation of construction phase travel plans and construction logistics plans, and plant emissions are unlikely to be significant when compared to background NO₂ and PM₁₀ concentrations. Further details are provided"

Air Quality Effects:

Are they saying here that they will not put receptors in because the air quality on various bases already exceeds the annual mean? If this is the case it is unacceptable. If this is not what they are saying can someone please translate?

And are they saying because increase in things like Carbon Monoxide levels will come from construction traffic that this does not matter? Again, unacceptable.

How will section 7.2 be enforceable?

"G6.4 Significance of Air Quality Effects

This assessment has identified that the development is not expected to introduce proposed development receptors into an area where ambient air quality exceeds the annual mean NO₂, PM₁₀ and PM_{2.5} AQSs, the daily mean PM₁₀ AQS or the hourly mean NO₂ AQS during the development opening year (2026), unless it is assumed that there are no reductions in annual mean NO₂ background concentrations from 2018 and no reduction in background concentrations with height (both of which are considered unrealistic). Therefore, future ambient air quality is not expected to have a significant adverse effect on future site users.

The proposed development is also expected to have a negligible impact on annual mean PM₁₀ and PM_{2.5} concentrations at the modelled existing receptor locations, and is not predicted to lead to exceedances of the daily mean PM₁₀ or hourly mean NO₂ AQS. Whilst some moderate adverse effects were predicted on annual mean NO₂ concentrations in both S3 and S3a (as well as a substantial adverse effect in S3a), these are expected to be derived from the likely overestimated increase in traffic at the Grey's Inn Road/Theobald's Road junction, as well as (for S3a) assuming no reduction in background concentrations and vehicle emissions factors. In both instances, the development did not contribute to a significant increase in emissions from vehicles, as the impacts were identified were predominantly driven by the already high baseline annual mean NO₂ concentrations.

Therefore, on balance and in light of the fact that the development of the new Hospital building itself is not expected to increase car usage and has no on-site car parking, it is

considered that the proposed development is unlikely to have significant adverse effect on local air quality. However, rerouting traffic can reasonably be expected to have some adverse effects on air quality. For this reason, mitigation measures which could be adopted to reduce the residual air quality impacts have been recommended within Section 7.2. It is recommended that plant used on-site comply with the NO_x, PM and CO emissions standards specified in the EU Directive 97/68/EC (as replicated in the MOL SPG) and subsequent amendments as a minimum, where they have net power of between 37kW and 560kW. The emissions standards vary depending on the net power the engine produces. It is recommended that these emissions standards are also applied on site. The following actions can be taken to enable compliance:

- Reorganising the fleet;

- Replacing equipment if required;
- Installing retrofit abatement technology (such as by diesel particulate filters in existing NRMM); and,
- 'Re-engining'

Building Ground Movement:

We are not just talking about one or two buildings here but 95 buildings, most of them heritage buildings – how can this be acceptable? Can an independent report on this be commissioned?

If the situation alters and they need to reassess as stated near the bottom, how will this be monitored and accountability derived?

“4.2. Impact Assessment

4.2.1. General The potential impact/damage induced on primary façade/wall elements of the buildings surrounding the proposed scheme have been evaluated on the basis of the calculated ground movement fields. The masonry walls of concern are shown in Figure 4.6, including the wall nomenclature/reference system adopted. The arrangement is based on the currently available survey information and presents an array of masonry façades running both perpendicular and parallel to the proposed basements (covering the key deformation mechanisms). In total, 95 façades of the neighbouring buildings were considered for the current study and these are grouped in the following manner:

- GH.1.1 – GH.1.7: Paul O’Gorman Building
- GH.2.1 – GH.2.16: Variety Club Building
- GH.3.1 – GH.3.6: Premier Inn Clinical Building
- GH.4.1 – GH.4.8: Octav Botnar Wing
- 47.GS.1 – 47.GS.3: 47 Great Ormond Street
- 29.OS.1 – 29.OS.4: 29 Orde Hall

Great Ormond Street Hospital Children’s Cancer Centre (GOSHCCC) - Building Damage Ground Movement Assessment 12 of 23 1226-A2S-XX-XX-RP-Y-0004-02

After Burland et al. 1977, Boscardin and Cording 1989, and Burland 2001.

Figure 4.8 Building damage classification – relationship between category of damage and limiting strain ϵ_{lim}

4.2.2. Results The results of the assessment indicate that four façades will experience damage

Category 1 – Very Slight throughout the construction works. The affected façades are presented in Table 4.2. The remaining façades are not expected to exceed damage Category 0 – Negligible and are omitted from the table below. Figure 4.11 and Figure 4.12 depict the vertical and horizontal displacements, respectively, induced by the secant wall installation and excavation calculated using CIRIA C760 datasets REVERBERATIONS STUDY P. 23 ON; FIGS: 4.10, 4.12-4.14 INGRESS ON GOSH TERRACES

5. Conclusions & Closing Remarks The interaction between the proposed GOSHCCC development and the neighbouring properties within the zone of influence of the schemes has been reviewed as part of the GMA study presented herein. The proposed development comprises the demolition of demolition of the existing building and erection of a replacement 8 storey hospital building (Class C2 Use) together with 2 basement floors, roof top, balcony and ground floor landscaped amenity spaces, cycle storage, refuse storage and other ancillary and associated works pursuant to the development. The impact of the various construction stages has been reviewed on the basis of two alternative methods, i.e. evaluating the effects of unloading / overburden removal using Pdisp and simulating the excavation-induced ground movement fields using empirical CIRIA curves in Xdisp. In the latter case, a propped embedded retaining wall solution (during the temporary works stage) has been considered, utilising the CIRIA C760 ground movement curves for excavation in front of high stiffness walls in stiff clay. These two different scenarios have been considered in order to bind the potential ground movements arising from excavation operations (i.e. maximum potential heave and settlement respectively). This strategy ensures a robust evaluation of potential impact in light of the bespoke, intricate and workmanship-dependent construction methodology. Both short-term (undrained) and long-term (drained) conditions have been assessed by adopting the relevant soil stiffness parameters for each case.

In order to best limit ground movements in proximity to movement sensitive neighbouring buildings, due consideration may be given to suitable means and methods of construction. For example, reducing the extent of temporary excavations during earth removal operations in close proximity to buildings considered to be at most risk of damage. The results from the GMA (denoting the evaluated damage categorisation in accordance with the Burland criteria described herein) considering neighbouring properties are presented in Table 4.2. It is observed that the maximum damage classification for the neighbouring properties is

Category 1 – Very Slight.

It is noted that the predicted ground movements, the associated wall tensile strains, and the level of damage categorisation are considered to be moderately conservative in view of the relatively cautious data selection and greenfield nature of the assessment undertaken. It is also noted that the GMA will be supplemented by a project-

specific monitoring regime and Action Plan, which will delineate lines of responsibility, trigger levels in accordance with those presented in this GMA, and appropriate mitigation measures. The assessment presented herein is dependent and reliant on the works being undertaken by an experienced contractor, high quality workmanship and appropriate supervision of construction means and methods by experienced personnel. It is recommended that this report is reviewed and understood in full by the project team and relevant stakeholders. Where significant changes are made to items such as construction sequencing, temporary propping arrangements and scheme design, the engineer should thoroughly review the change and evaluate any potential impacts on ground movement and building damage. If necessary, the building damage categories should be re-evaluated. During the design of the secant walls and temporary propping measures, deflection performance criteria for these design elements should be derived on the basis of the results presented herein to ensure that the maximum damage classification of Category 1 – Very Slight is not breached. It is critical that the permanent and temporary works designs are carried out in a coordinated manner between performance specified elements and substructure contractors, with the aim to ensure that such design elements are in alignment with the assumptions / findings of the GMA and overall design intent”

Transport management plan:

I believe that the following Camden Council Policies will be severely breached during the likely four-five years this building will take to complete. Objective 1: To transform our streets and places to enable an increase in walking and cycling’; Objective 6: To deliver an efficient, well-maintained highways network and kerb- side space that prioritises the sustainable movement of goods and people
How does Camden intend to mitigate these effects?

Unless I am reading this wrong this is yet another instance in the GOSH submission where GOSH are suggesting they address these issues at some unspecified time in the future. I have noticed a fair bit of can-kicking in this planning application which is fairly horrifying. How will Camden ensure the interests of the local community in this arena are safeguarded? And that these reports are all delivered, adhere to ideal standards, and are enforced?

I don’t think they have adequately represented the current restrictions in Lambs Conduit Street which might in turn affect the validity of their entire report.

This plan does not seem to mention strictures on cycling in the area during the construction phase.

They say they are in the process of updating their travel plan. Surely this should be a completed portion of this application? I have lost count of how many plans they are still preparing, but this is not impressive.

What they do talk about appears to be a plan for how patients will reach the hospital. I see absolutely nothing on how locals will be able to move around their neighbourhood, or indeed, local businesses will be able to operate. This must be addressed.

“Paragraph 112 of the NPPF states that plans for new development should:

- give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
- address the needs of people with disabilities and reduced mobility in relation to

all modes of transport;

- create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
- allow for the efficient delivery of goods, and access by service and emergency vehicles; and
- be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

This assessment will consider the sustainability of the site in relation to the above Lamb's Conduit Street/ Guilford Place

Lamb's Conduit Street connects the A401 at its southern end with Guilford Street (B502) at its northern end. The southern section is initially two-way, turning one-way northbound through a semi-pedestrianised retail area to meet Great Ormond Street at a give-way. The priority movement is from Great Ormond Street as the western arm to Lamb's Conduit Street as the northern arm, passing further retail premises, and turns into Guilford Place at its northern junction with Guilford Street. Great Ormond Street continues eastwards from Lamb's Conduit Street serving residential properties as minor road.

3.2.4 cycling

"Great Ormond Street Hospital, Children's Cancer Centre (GOSHCCC), Transport Assessment 111057-TA (4.1)

Figure 3.7 Patient and visitor travel survey results

The Trust are currently in the process of updating the Travel Plan,

The Trust are currently in the process of updating the Travel Plan, taking into account changes that may have occurred as a result of the Covid-19 pandemic, either through different travel patterns or operational purposes, such as video appointments and some staff being able to work from home for part of their duties.

The Trust has launched a travel survey in March 2022 that will feed into the new travel plan and seek to understand these changes. the Trust has also created a Safe, Active & Sustainable Travel working group that has made multiple interventions across GOSH:

- Created cycling champions,
- Supported groups/resources
- Introduced cycle repair and training
- Achieved a 'Cycle Friendly Employer' Gold Award.

The travel plan will provide a strategy for The Trust that brings together these existing groups and initiatives under a single umbrella. It will incorporate joint working, such as the support and advocacy of active travel in Camden and The Play Street Programme (in partnership with the London Borough of Camden) which has demonstrated how Great Ormond Street could evolve in the future alongside the hospital. This potential future public realm work could provide wide-ranging benefits to users of the site, easing the transition between the north and south side of Great Ormond Street; improving air quality; and increasing the overall amenity of the street.

The travel plan will also have links to associated strategies such as the Clean Air Hospital Framework and consider how measures can be introduced and monitored to meet objectives surrounding air quality.

4.1 Construction stage

To assist the construction of the new building, there will be the requirement for site offices, welfare unit and storage space for equipment and materials, as well as space to load and offload vehicles.

The northern half of Great Ormond Street including the footway alongside, will be closed to traffic and pedestrians with hoarding and appropriate vehicle protection. Gates will be provided at either end for vehicles to enter and exit in forward gear and loaded / offloaded in between. This will also require a temporary one-way (westbound) order to be implemented on Great Ormond Street and suspend parking on both sides between the junctions of Lamb's Conduit Street and Queen Square. The impact of the one-way order on traffic flows has been assessed in chapter 5.

As a result of the temporary suspension, a Traffic & Pedestrian Survey Report (WSP, 2019) outlines how parking will be reallocated. In summary, this describes that ambulance bays on Great Ormond Street will be relocated to Powis Place and that pay-by-phone bays would be accommodated within existing provision around Queen Square. The main pedestrian entrance to GOSH will be temporarily relocated to Powis Place, which runs along the western side of the hospital and emergency access will be retained. For those approaching from Lamb's Conduit Street during construction, the footway on the southern side of Great Ormond Street will remain available with the exception of any full road closure events.

To provide sufficient segregation between construction phase operations and ongoing GOSH operations Sisk site project offices will be erected on the eastern corner of Great Ormond Street and remain there throughout the duration of the project. Further details of

the construction stage proposals can be found within Sisk Demolition and Construction Management Plan submitted with the planning application.
EASTBOUND TRAFFIC FLOW HIGHER – TABLE 5.1"

Traffic Flow:

There does not seem to be any mention in their 'traffic flowing eastbound...' section at all of traffic coming up Orde Hall Street. This is a huge and extremely objectionable oversight. Once again, suggesting a lack of understanding/interest/care of community life.

They go on to say that traffic flowing westward will be unaffected by proposed restrictions. This shows how little they know about the neighbourhood and how locals navigate it. This lack of understanding must be addressed and mitigated. They also do not take into account the northwards flowing restrictions the construction management plan will inflict which is perhaps the most serious of all, particularly for certain Lambs Conduit Street businesses. They say there will be an effect without offering any solutions...unacceptable. And to suggest all of this will create a nicer cycling environment is laughable to anyone who actually knows these streets well.

Finally, once again, this is a plan for patients and those who work at the hospital, but I can see nothing at all about locals and how they are meant to navigate all of this.

"Traffic flowing eastbound along Great Ormond Street has the potential to be generated through a number of routes, all of which would be affected by the proposed restriction, as follows:

- A. Visitors to Queen Square, exiting to the east
- B. Visitors to GOSH, exiting to the east
- C. People travelling to eastern section of Great Ormond Street
- D. General through traffic between A40 and Guilford Street.

Each of these routes will be affected in a different way and will result in a diversion that will lead to either a reduction or an increase in traffic on other routes. Traffic flowing in a westbound direction will be unaffected by the proposals. The diverted routes are expected to be as follows, as illustrated in Figure 5.2 below:

- A. Exit to A401 via Boswell Street
- B. Enter Great Ormond Street via Guilford Street and Lamb's Conduit Street, exit to A401 via Boswell Street
- C. Re-route via Guilford Street and Millman Street
- D. Re-route in local area

The above diversion routes are therefore likely to result in an increase in traffic on Boswell Street, while reducing traffic on Old Gloucester Street. The net change on Lamb's Conduit Street will be a reduction in northbound flow and an increase in southbound flow.

Using broad assumptions around the origin and destination of traffic using Great Ormond Street, the total traffic flows along Great Ormond Street and Lamb's Conduit Street is expected to reduce by around 25% while the net change on a combination of Old Gloucester Street and Boswell Street will also lead to a reduction in traffic volumes. The equivalent hourly change in traffic volumes on Great Ormond Street will be around 45 vehicles an hour, which is less than one additional westbound vehicle per minute.

Although the westbound traffic flow along Great Ormond Street will increase, this is comfortably within the capacity of the road and will be travelling in a single direction without conflict of oncoming traffic. Therefore, the traffic will flow more consistently along the road, reducing congestion and therefore improving air quality in the area, while creating a more attractive environment for pedestrians and cyclists.

SUMMARY AND CONCLUSION:

RSK has been commissioned by John Sisk & Son (Holdings) Ltd to prepare a Transport Assessment in support of a planning application on behalf of the Applicant, Great Ormond Street Hospital for Children NHS Foundation Trust for a new Children's Cancer Centre.

The current proposals represent Phase 4 of their long-term Masterplan.

The proposed development includes the demolition of the existing Frontage Building

fronting onto Great Ormond Street. A new eight storey building (together with two basement levels) will be constructed to provide a dedicated Children's Cancer Centre and new main entrance to GOSH to give the hospital a greater sense of identity and more welcoming arrival.

The proposals include the promotion of a one-way order along the site frontage in a westbound direction, reducing the congestion that currently occurs and minimise the risk of delays to emergency services. The order will initially be temporary during construction to ensure that delivery vehicles do not cause congestion on the approach routes and facilitate an offloading area. Following completion of the project, all temporary highway adjustments are to revert back to the environment as was prior to commencement of the construction phase. As the design develops there is the potential possibility of maintaining the temporary one-way route through Great Ormond Street as a permanent solution.

WEREN'T THEY TOUTING HEALTHY STREETS ABOVE?

The proposed temporary one-way order for Great Ormond Street is predicted to reduce total traffic flows on local roads by around 25% with some directional increases offset by significant reductions in the opposite direction. However, removing eastbound traffic travelling along Great Ormond Street will reduce conflict and congestion while minimising the risk of obstructing the emergency access route during construction.

6.2 Conclusion

The proposed development is not expected to affect the trip volumes or travel patterns of existing staff and patient visits to the hospital. The proposals will provide much needed improvements to the facilities and their co-location within GOSH to maintain the high standards of treatment and care of children.

The site is already highly accessible by public transport across London and via main line rail stations for access beyond. The provision for pedestrians and cyclists is adequate for staff and visitors and commensurate with the local setting, making active travel attractive even as part of a longer journey by public transport. Notwithstanding, future public realm proposals for Great Ormond Street will deliver an improved environment with a wider route for those accessing the site on foot or by bike.

Overall, the proposed development is acceptable from a transport perspective."

Whole Life Carbon Statement:

Once again, they do not seem to have addressed contaminated land removal and treatment yet. How can an application come in with so many studies still to be done?

Likewise, specialist groundworks. And FFE. And all of these: 8.4 Fencing, railings and walls Excluded from the assessment due to lack of available data

8.5 External fixtures Excluded from the assessment due to lack of available data

8.6 External drainage Excluded from the assessment due to lack of available data

8.7 External services Excluded from the assessment due to lack of available data

8.8 Minor building works and ancillary buildings

No allowance was considered for minor building works and ancillary buildings

What are there conclusions here? I couldn't tell...how will Camden mitigate and protect the local community?

"3.2 Embodied Carbon

The table below lists the building elements covered by the assessment, in line with the Royal Institute of Chartered Surveyors (RICS) Professional Statement: Whole Life Carbon assessment for the built environment.

Inputs

Building Element Group Building Element (NRM level 2) Basis of Information

Demolition 0.1 Toxic/hazardous/contaminated

material treatment

An allowance for contaminated land removal and treatment has not been included for the Proposed Development at this stage of the design

0.2 Major demolition works Pre Demolition audit

0 Facilitating works 0.3 & 0.5 Temporary/enabling works Due to the early stage of the design (mid RIBA Stage 3) this information is not yet available and as such has not been included in the assessment

0.4 Specialist groundworks No specialist ground works were included; individual ground works accounted for in

the relevant substructure / external landscaping sections

1 Substructure 1.1 Substructure OCLCA, using EPDs was used to model the substructure. BIM model and drawings used to determine quantities of materials

2 Superstructure 2.1 Frame OCLCA, using EPDs was used to model the structural steel and concrete frames. BIM model and drawings used to determine quantities of materials

2.2 Upper Floors OCLCA, using EPDs was used to model the precast and insitu concrete upper floors. BIM model and drawings used to determine quantities of materials

2.3 Roof OCLCA, using EPDs was used to model the precast concrete and green roofs. BIM model and drawings used to determine quantities of materials

2.4 Stairs and Ramps OCLCA, using EPDs was used to model the insitu concrete stairs. Material quantities were estimated from drawings and BIM model

2.5 External Walls OCLCA, using EPDs was used to model the precast concrete facade. BIM model and drawings used to determine quantities of materials

2.6 Windows and external doors This was included in the Facade calculation. External doors were included in the glazing component

2.7 Internal walls and partitions OCLCA, using EPDs was used to model the internal partitions. BIM model and drawings used to determine quantities of materials

2.8 Internal doors OCLCA, using EPDs was used to model the internal partitions. Estimations on the area doors was made from the BIM model and drawings

3 Finishes 3.1 Wall finishes Wall finishes were included in the preset internal wall build-ups from the EPDs in OCLCA

3.2 Floor finishes OCLCA, using EPDs was used to model the vinyl flooring. BIM model and drawings used to determine quantities of materials

3.3 Ceiling finishes OCLCA, using EPDs was used to model the general and theatre ceilings. BIM model and drawings used to determine quantities of materials

4 FF&E 4.1 Fittings, furnishings & equipment Due to a lack of data and EPDs at this stage FFE was excluded from the assessment

5 Building services/MEP 5.1–5.14 Services incl. building-related and non-building-related

Building services data uses data provided from the Energy strategy, which align with the proposed services strategy for the project.

The lengths of duct's, electrical distribution and water distribution were calculated on a m2 GIA basis using in-built EPD within OCLCA

6 Prefabricated Buildings and Building Units

6.1 Prefabricated buildings and building units

Not applicable

7 Work to Existing Building 7.1 Minor demolition/alteration works OCLCA tool used to estimate embodied carbon associated with demolition works.

8 External works 8.1 Site preparation works Due to the early stage of the design (mid RIBA Stage 3) this information is not yet available and as such has not been included in the assessment

8.2 Roads, paths, paving and surfacing Modelled in OCLCA using best estimated EPDs. Data for roads, paths, paving and surfacing is based on architectural drawings and cost plans

8.3 Soft landscaping, planting and irrigation systems

Modelled in OCLCA using best estimated EPDs. Data is based on architectural drawings and cost plans

8.4 Fencing, railings and walls Excluded from the assessment due to lack of available data

8.5 External fixtures Excluded from the assessment due to lack of available data

8.6 External drainage Excluded from the assessment due to lack of available data

8.7 External services Excluded from the assessment due to lack of available data

8.8 Minor building works and ancillary buildings

No allowance was considered for minor building works and ancillary buildings”

Local Environment:

Finally, they do not include this but I am going to. There is no impact assessment on the effects of all of this on the character and well-being of our very precious neighbourhood. This should be rectified.

The more I read of their planning application, the more underwhelmed I become in terms of any demonstrated care towards the neighbourhood in which GOSH is situated, or indeed its neighbours. I trust that the Camden will take due notice of this.

Yours Sincerely, Gillian