











# Public Exhibition Presentation - July 2020

Date and time	Location
Tuesday 7 <sup>th</sup> July 2020, 6:30pm	Held via video call on Microsoft Teams
Attendees	
<b>Attendees from the community</b> <ul style="list-style-type: none"><li>Alex Kuzin (77 Mayfair)</li><li>Alex Maitland (University Women’s Club)</li><li>Beatrix Silvano (University Women’s Club)</li></ul>	<b>Project team attendees</b> <ul style="list-style-type: none"><li>Alahna Dunbar (Careys) - Neighbour Liaison</li><li>Marc Daly (Careys) - Project Director</li><li>John McInerney (Careys) - Contracts Manager</li><li>Mark Ruane (Careys) - Project Engineer</li><li>Thomas Kane (CP109) - Dir. Asset Management</li><li>Kevan Buckley (CP109) - Project Director</li><li>Clementine Sketchley (CP109) - Office Manager</li></ul>
<b>Project recap</b>	<p>Careys Civil Engineering have been appointed by Caudwell Properties (109) Ltd to deliver the Groundworks and Reinforced Concrete elements of the Audley Square Development.</p> <p>Our works on site are scheduled to commence in July 2020, with completion scheduled for February 2023.</p> <p>Scheme Overview:</p> <ul style="list-style-type: none"><li>Pile installation</li><li>Ground Source Heat Pump scheme installation</li><li>Bulk Excavation for 5 levels of basement (Top Down and Blue Sky zones)</li><li>Waterproofing system installation to basement</li><li>Drainage installation</li><li>Construction of Reinforced Concrete basement elements</li><li>Construction of Reinforced Concrete and Post-tensioned Concrete Superstructure elements</li></ul> <p>For more information, please visit <a href="http://AudleySquareRedevelopmentMayfair.com">AudleySquareRedevelopmentMayfair.com</a>.</p>

Item	Minutes
1. Introductions	<p>Alahna Dunbar of Careys opened the meeting, and all attendees introduced themselves.</p> <p>Marc Daly made a point to give a brief introduction of Careys as a company, expressing that Careys have experience delivering many projects in the Mayfair area.</p>
2. Project Overview	<p>Marc Daly of Careys took over for the beginning of the presentation. He emphasised Careys desire to prove to be an excellent neighbour as a construction site within a residential area.</p> <p>He also noted that Careys have taken their neighbourly impact into great consideration when designing and programming their works.</p>
3. Audley Square Project Team	<div data-bbox="546 587 1361 1075" style="border-left: 2px solid red; padding-left: 10px;">  <p>3. Audley Square House Project Team</p> <div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="text-align: center; width: 150px;">   <small>Marc Daly Head of Delivery</small> </div> <div style="text-align: center; width: 150px;">   <small>John McInerney Contracts Manager</small> </div> <div style="text-align: center; width: 150px;">   <small>Michael Bassett Project Manager</small> </div> <div style="text-align: center; width: 150px;">   <small>Alahna Dunbar Neighbour Liaison Manager</small> </div> <div style="text-align: center; width: 150px;">   <small>Daniel Botma HSE Manager</small> </div> <div style="text-align: center; width: 150px;">   <small>Jack Hughes Senior Engineer</small> </div> <div style="text-align: center; width: 150px;">   <small>Mark Ruane Project Engineer</small> </div> <div style="text-align: center; width: 150px;">   <small>Steve Payne Project Engineer</small> </div> <div style="text-align: center; width: 150px;">   <small>Praba Perayeravar Project Engineer</small> </div> </div> </div> <p>Marc introduced the project leadership team who were not present on the call:</p> <ul style="list-style-type: none"> <li>• Michael Bassett, Project Manager, will oversee the day-to-day operations on site.</li> <li>• Daniel Botma is our Health, Safety and Environmental Manager</li> <li>• Jack Hughes, Senior Engineer, will directly oversee a number of engineering projects, specifically piling works</li> <li>• Steve Payne, Project Engineer, will oversee temporary works</li> <li>• Praba Perayeravar, Project Engineer, will oversee monitoring building movements</li> </ul>

<p>4. Best Practicable Means - Commitment To Community</p>	<p>Marc reviewed the concept of Best Practicable Means (BPM), as included in the Section 72 Control of Pollution Action. He identified that the key areas of concern for a community in proximity to a construction site are the impacts of noise, dust and vibration that can result from construction works. Committing to BPM means that a contractor will take into consideration the impacts of their works and employ measures that reduce the impacts as much as reasonably practicable.</p> <p>Careys' commitment to employ BPM means that they have looked at the Audley Square Redevelopment scope in its entirety and in its individual activities through the lens of BPM in order to ensure we carry out our works with as minimal impact on our neighbours, as practicable. Careys have considered BPM from conceptualising the scope of the project to the design of the works to the implementation of the methods and by regularly reviewing our activities.</p>
<p>5. Hybrid Basement Construction</p>	<p>What is a Hybrid Construction technique?</p> <p>It is a construction technique whereby the basement levels and the upper floor levels are constructed at the same time in order to reduce the overall project duration as well as providing stability to surrounding properties.</p> <p>The two leading factors influencing the decision to implement the Hybrid construction methodology were:</p> <ul style="list-style-type: none"> <li>• To control movements to surrounding properties within acceptable movement criteria</li> <li>• To minimise disruption to the surrounding properties and extended local area</li> </ul> <p>When conceptualising and designing the project, Careys performed a complete analysis matrix of all possible methods of construction and determined this hybrid technique is the most reasonable method of construction, causing the least impact to neighbours.</p>

## 6. Hybrid Basement Construction - Benefits

### 4. Hybrid Basement Construction - Benefits

#### Reduce Disruption to Community

The scheme provides a large area logistics slab and route through site

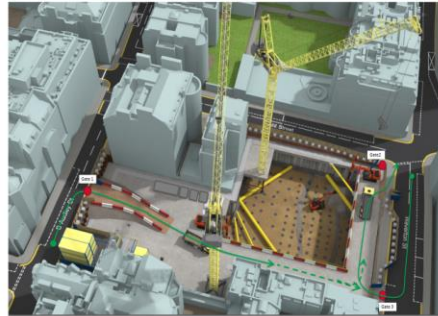
This allows us to keep more construction vehicles on site and off the surrounding roads

A full top-down would require large, noisy ventilation units running full time

The open-faced top-down zone reduces this disturbance by providing natural ventilation to the work area.

The top-down zone conceals the breaking of most of the existing basement slab and suppresses overall noise impact.

The hybrid solution provides the quickest overall programme to minimise the period of inconvenience



CAREYS  
Civil Engineering  
A Gifford Group Company

This slide demonstrates Careys' optimised logistics plan enabled through their Hybrid Construction.

## 7. Hybrid Basement Construction - Benefits

### 4. Hybrid Basement Construction - Benefits

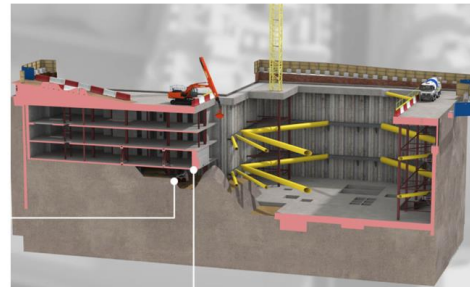
#### Movement Control

Hybrid system balances the lateral and vertical (heave) movements to provide the most efficient solution

The Top-down zone incorporates stiff garden slab and progressive slab construction to prop the properties most sensitive to lateral movement

The Open-cut zone provides the shortest excavation period before raft slab construction, reducing long term heave and providing lateral restraint with 3 level propping scheme

Logistics slab around the open-cut also benefits the propping scheme by providing stiff propping against lateral movement at GF



CAREYS  
Civil Engineering  
A Gifford Group Company

This slide demonstrates Careys' optimised ability to manage movement, enabled through their Hybrid Construction. This technique also gives Careys a more efficient programme, which also reduces their construction timeline and impact on neighbours.

<p>8. Environmental Control Strategy</p>	<p>Mark Ruane discussed Careys’ environmental control strategy for noise, dust and vibration. Some of the measures employed to reduce noise, dust and vibration are, but are not limited to:</p> <ul style="list-style-type: none"> <li>• Plant Selection - We will endeavour to use electrically powered fixed items of construction plant rather than diesel- or petrol-driven plant as a way of minimising noise. Vehicle and mechanical plant used for the purpose of the works will be maintained in good and efficient working order and operated in such a manner as to minimise noise emissions.</li> <li>• Noise acoustic barriers will be utilised throughout the site to minimise noise outputs.</li> <li>• CadnaA Noise Prediction Software will be utilised to understand noise outputs and allow development of alternative/mitigation measures</li> <li>• Realtime Noise, Dust and Vibration monitoring equipment will be installed as indicated to help manage and control the works.</li> </ul>
<p>9. Neighbour Liaison</p>	<p>Alahna Dunbar discussed our neighbourhood liaison and engagement commitment.</p> <p>To enhance our communications with our neighbours, we have appointed a dedicated Neighbour Liaison Manager, Alahna Dunbar, to be a first point of contact for any construction-related queries. Alahna will be regularly based on site once permitted by government guidelines concerning COVID-19 and will be dedicated to addressing any questions and concerns from our neighbours.</p> <p>Alahna can be reached Monday to Friday from 8:30am to 5:30pm on 07738 621992, or by email at <a href="mailto:audleysquareneighbourliaison@careysplc.co.uk">audleysquareneighbourliaison@careysplc.co.uk</a>.</p> <p>Once we have taken full possession of the site, we will establish 24/7 security with an out-of-hours and emergency phone number, which will be shared with all stakeholders.</p> <p>For general enquiries about the development please contact Kanda Consulting at <a href="mailto:AudleySquareHouse@kandaconsulting.co.uk">AudleySquareHouse@kandaconsulting.co.uk</a>.</p> <p>Development Website</p> <p>We will manage the construction website for the Audley Square Development: <a href="http://www.audleysquareredevelopmentmayfair.com">www.audleysquareredevelopmentmayfair.com</a></p>

Important site and contact information, newsletters, annual public exhibition materials and other project updates will be uploaded to the site.

#### Newsletters

We will also produce a quarterly newsletter to keep all project neighbours and stakeholders informed of current and impending activities. All newsletters will be uploaded to the project construction website. To opt-in to receive a posted copy of these newsletters, please email our Neighbour Liaison Officer.

#### Public Exhibitions

Each year, prior to the commencement of annual works, we shall undertake a Public Exhibition in order to familiarise and engage all neighbours and stakeholders with the project's activities for the upcoming year of works.

We intend to hold these exhibitions over two days at a local venue. However, should government guidelines around COVID-19 social distancing continue, these exhibitions and all public meetings will be held virtually.

Details of all in-person or virtual meetings will be communicated in advance via our newsletters posted on the project website and posted to those who opt-in to hardcopy newsletters.

#### Neighbour Liaison Meetings

Each month following the yearly Public Exhibitions, we will host monthly Neighbour Liaison Meetings in order to maintain regular engagement with neighbours and other project stakeholders.

**The first Neighbourhood Liaison Meeting will be held at 6:30pm 11th August 2020.** These monthly meetings will go forward virtually until further notice. In order to attend the meeting and receive call-in details, please RSVP by emailing Alahna Dunbar at [audleysquareneighbourliaison@careysplc.co.uk](mailto:audleysquareneighbourliaison@careysplc.co.uk)

10. Site Operational Information

John McLnerney of Careys covered the key contacts, site security, and working hours for the project.

**Standard Site Working Hours:**

Monday to Friday: 08:00hrs - 18:00hrs

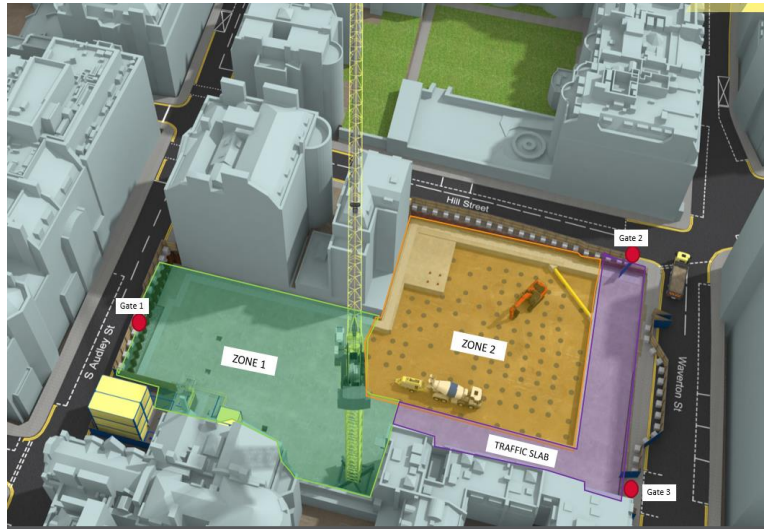
Saturdays: 08:00hrs - 13:00hrs - (There will quieter works taking place on Saturday)

Sundays: No works

In exceptional circumstances it may be necessary to work outside these hours (for example, tower crane erection and piling rig delivery). In such instances Careys will ensure that Westminster City Council and all community members are informed.

Any queries or concerns to be directed to Neighbour Liaison Manager, Alahna Dunbar.

11. Logistics and Traffic Management



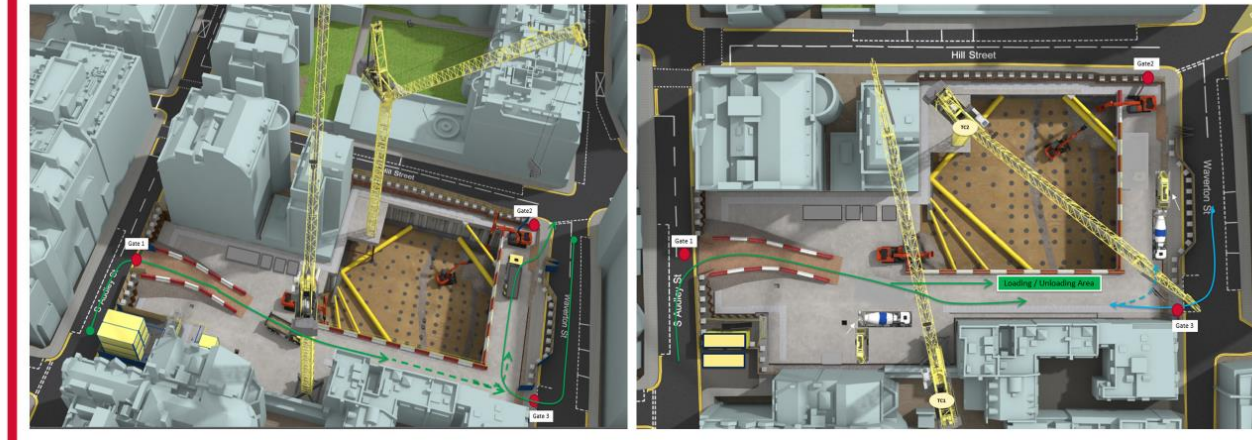
John also covered site Logistics and Traffic Management.

The main criteria we set out to satisfy when considering site logistics was to keep more construction vehicles on site and off the surrounding roads and highways.

Our hybrid scheme allows us to cast the Zone 1 Garden slab and Zone 2 traffic route as early as possible to provide on site capacity to hold wagons for loading/off-loading.



## 12. Traffic Routes - Vehicle Access and Egress

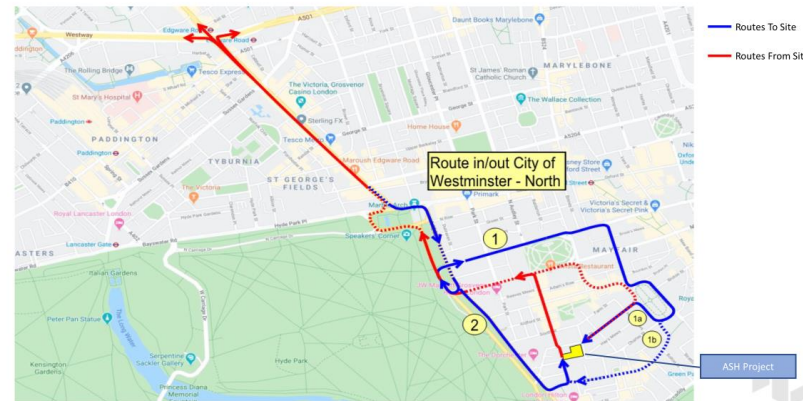


John McInerney discussed how the onsite logistics slab will enable traffic to turn directly from South Audley Street or Waverton Street onto site, be unloaded in a designated loading bay on-site before exiting site on Waverton Street.

This will prevent traffic congestion, as well as preventing the need for vehicles to reverse into or out of site.

## 13. Traffic Route - In/Out City of Westminster

### 7. Traffic Route – In/Out City of Westminster

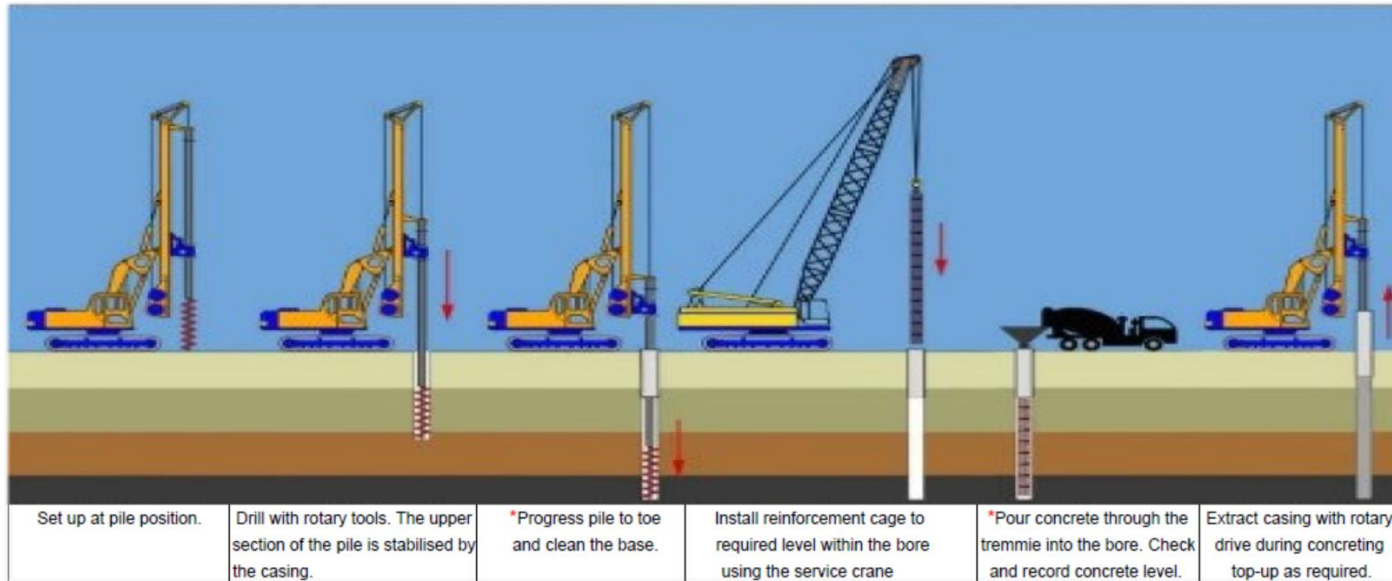




	<p>John went over the local traffic routes to and from site, as shown above. Westminster City Council identified the routes Careys will be allowed to use and these routes will be communicated with all of Careys' supply chain.</p>	
<p>14. Structure Timeline</p>	<p>John ran through the overall construction timeline:</p> <p><b>Q3 2020 - Q1 2021</b></p> <ul style="list-style-type: none"> <li>• Commence works on site</li> <li>• Pile installation</li> <li>• Ground Source Heat Pump works</li> </ul> <p>(John noted that our CadnaA noise mapping software has allowed us to anticipate and mitigate the noise produced by our activities.)</p> <p><b>Q1 2021 - Q2 2021</b></p> <ul style="list-style-type: none"> <li>• Commence excavation works</li> <li>• Form logistics slabs</li> </ul> <p style="padding-left: 40px;">Form Garden Slab to Zone 1</p> <p><b>Q2 2021 - Q3 2021</b></p> <ul style="list-style-type: none"> <li>• Excavation ongoing to Zone 1 and Zone 2</li> <li>• Removal of existing basement slab</li> </ul> <p>(One of the ways we will be reducing noise and vibration will be by using a 'drill and burst' hydraulic method to remove the existing concrete basement slab, rather than traditional breaking)</p>	<p><b>Q3 2021 - Q4 2021</b></p> <ul style="list-style-type: none"> <li>• Excavation ongoing to Zone 1 and Zone 2</li> <li>• Construction of intermediate slabs to Zone 1</li> </ul> <p><b>Q4 2021 - Q2 2022</b></p> <ul style="list-style-type: none"> <li>• B5 slab in Zone 2 complete</li> <li>• Jumpform core construction commenced</li> <li>• Ongoing excavation works to B5 in Zone 1</li> <li>• Superstructure works commenced</li> </ul> <p><b>Q2 2022 - Q1 2023</b></p> <ul style="list-style-type: none"> <li>• Zone 1 works complete</li> <li>• Jumpform progressing to completion in Zone 2</li> <li>• Superstructure works ongoing to Zone 2</li> </ul> <p><b>Q1 2023</b></p> <p>Works complete</p>
<p>15. Piling Works</p>	<p>Marc Daly covered our piling works.</p> <p><b>Piling Phase Duration: 27th July 2020 to March 2021 (8 months)</b></p> <p>Careys recognise that Piling operations by their nature can create noise and vibration, however the impact on those living and working in the vicinity must be minimised as far as is reasonably practicable.</p>	

Careys will implement and demonstrate that we have introduced numerous BPM control measures in order to reduce the impact of noise during the Piling phase, including working with a preferred contractor, Bauer Piling, to carry out the piling works. Careys have also reviewed lessons learned from previous piling projects within the Mayfair area and similar residential areas in order to ensure best practice is applied on the Audley Square Redevelopment.

16. Piling  
Construction  
Methodology  
Rotary Bored  
Piling  
Technique



Above is an example of the piling method Careys will employ.

Because of the nature of installing a pile, piling is a continuous activity usually taking several hours to complete one pile. However, Marc noted that while piling is a continuous activity, it is typically the initial 'Drill with rotary tools' step that is associated with any noise due to the oscillation of the auger, or drill bit, as it shakes the muck off the drill. This oscillation is what can result in the clanging noise associated with this type of piling.

Careys have undertaken to significantly reduce this source of noise by employing new equipment that dampens down the sound of the auger cleaning itself and by also using new technology to entirely remove the need to oscillate the auger.

17. Piling Works -  
Best Practical

Additional measures in place to reduce the noise impact of piling:

<p>Control Measures ( To Reduce Noise &amp; Vibration)</p>	<ul style="list-style-type: none"> <li>• Ultra Modern &amp; Efficient Equipment : Increasing productivity and reducing overall working durations.</li> <li>• Well maintained and serviced plant and equipment to reduce operational noise.</li> <li>• Piling Rigs manufactured for low noise emission.</li> <li>• Use of dampened Kelly Bar. This system reduces high-frequency sound emissions.</li> <li>• Use of slow speed spoil discharge method which reduces noise outputs.</li> <li>• Local acoustic screens around smaller plant.</li> <li>• Machines will be turned off when not in use and there will be designated access routes to minimise vehicle noise.</li> <li>• Noise Prediction Software utilised to understand noise outputs and allow development of mitigation measures.</li> <li>• Highly skilled and trained rig operators will be used.</li> <li>• The Rotatory method of Piling chosen causes the least noise &amp; vibration compared to any other method available.</li> <li>• Real Time Noise &amp; Vibration monitoring will be carried out during construction phase.</li> </ul> <p>Additionally, Careys will continue audit their processes to ensure best practice.</p> <p><b>Marc noted that any piling or construction activities in a quiet residential area will produce a degree of noise or disruption, but that Careys promise to do everything they can ensure disruption is brought to a minimum.</b></p>
<p>18. Questions</p>	<p><b>Q: Where will the site entrance be for your operatives and how will Careys manage operative behaviour, including smoking?</b></p> <p>A: The site entrance will be located on South Audley Street. We will have marshals stationed at the entrance to ensure none of our operatives are loitering, littering or smoking outside of site. We will have onsite smoking and canteen facilities for our operatives. We also train all of our operatives and staff during our inductions on how to respect the local community.</p> <p><b>Q: What will the welfare cabins look like?</b></p> <p>A: We are currently working with a contractor to develop a wrap with an appropriate image to enclose our welfare cabins. There will be no windows in our welfare cabins that look onto any properties or that can be viewed from neighbouring properties.</p>

	<p><b>Q: Will vehicles be allowed to wait to enter site?</b></p> <p>A: No, we will have traffic marshals at all site gates to ensure any site vehicles are brought directly onto site or sent away to avoid traffic congestion.</p> <p><b>Q: How much notice will be given for exceptional out-of-hours works?</b></p> <p>A: In exceptional circumstances it may be necessary to work outside normal working hours (for example, tower crane erection and piling rig delivery). Certain plant being delivered to or collected from site falls within the Met Police’s designation for ‘oversized or abnormal loads,’ which must be mobilised outside of peak traffic times (i.e. before or after working hours). We will be able to provide around 2 months’ notice for our tower crane delivery and endeavour to provide, at least, one month’s notice for all other planned ‘abnormal loads’. In the event of unpredictable events resulting in out-of-hours works, we will always notify Westminster Council and our neighbours as soon as we are made aware of the event.</p>
19. FAQs	<p><b>Q: What is being developed at Audley Square House?</b></p> <p>A: In 2016 Caudwell Properties received planning permission from Westminster City Council to redevelop the former Audley Square car park, Ascott hotel and 4 Red Lion yard to introduce a world-class new residential scheme in Mayfair. The redevelopment will create a legacy building that is both respectful of its surroundings and makes its own positive statement, reinforcing the historic character of this important area.</p> <p><b>Q: What has been happening at the site over the past year?</b></p> <p>A: Demolition of the previous buildings completed with the initial phase of work undertaken by Cantillon. Over the past year, Caudwell have been appointing a contractor to undertake the next phase of the redevelopment. Careys have now been appointed to undertake the piling, excavation, install ground source heat pumps, make the new basement watertight and build the new superstructure of the building at above ground.</p> <p><b>Q: What else have Careys done?</b></p> <p>A: We have accumulated vast experience in delivering some of the country’s most complex and challenging basements and structures, delivering bespoke solutions for our clients and overcoming numerous challenges. Some of our flagship projects include; Battersea Power Station, Principal Place Tower London, 22 Bishopsgate London.</p>

Within the area of Mayfair, we are currently constructing a luxury hotel at 30 Grosvenor Square, the former US Embassy.

**Q: What are ground source heat pumps and why do you need them?**

A: Ground source heat pumps absorb the energy from the sun warming the ground. They comprise a series of pipes buried underground which extract this solar energy. This energy is then converted into heat for use in the home. They are a more efficient way and environmentally-friendly way of heating homes.

**Q: Will the piling be noisy and how long will it go on for?**

A: We recognise that any development can be disruptive. We are doing everything we can to minimise disruption for our neighbours, this includes adopting a methodology whereby we will be screwing the piles into the ground (as opposed to hammering them). The Rotatory Method of Piling chosen causes the least noise & vibration compared to any other method available. We will be commencing piling in July 2020 and expect to have completed the piling of the site by February 2021.

**Q: Why are you seeking to dig out the basement and build the structure above ground at the same time?**

A: This is the quickest and least disruptive way to undertake the redevelopment. After undertaking the piling, we will build a concrete slab over much of the site and start digging out the basement beneath this whilst also building the structure above ground. It also means we can accommodate more trucks onto the site itself whilst works are underway.

**Q: What are you doing to monitor noise and vibrations? How did you choose the locations for the noise and vibration sensors?**

A: The locations were chosen following a technical analysis of neighbouring properties and consultation with Westminster City Council. The locations chosen cover all the sensitive receptors capturing an accurate noise and vibration output for the site.

**Q: If I have concerns, who should I contact?**

A: Please contact Alahna Dunbar, Careys Neighbour Liaison Manager. Alahna can be reached Monday to Friday from 8:30am to 5:30pm on 07738 621992, or by email at [audleysquareneighbourliaison@careysplc.co.uk](mailto:audleysquareneighbourliaison@careysplc.co.uk). We will also be setting up an out of hours number once we commence works on site.

**Q: Will you be hosting a Community Liaison Group?**

A: We are hosting a virtual public exhibition and webinar on 7th and 8th July 2020 to introduce the Careys team and present the methodology for the redevelopment. We will then be looking to host a monthly Neighbour Liaison Meeting as well as providing quarterly newsletters, updating on progress, to our neighbours. Our first scheduled monthly meeting is on 11 th August 2020. For further details and to RSVP for a webinar or monthly meeting, please email Alahna.

**Q: When is the development due to conclude?**

A: Carey's phase of work is expected to complete in Q1 2023. After this a contractor will be introducing the façade and roof and internal works will commence. This is with a view to the Audley Square House opening in 2025.