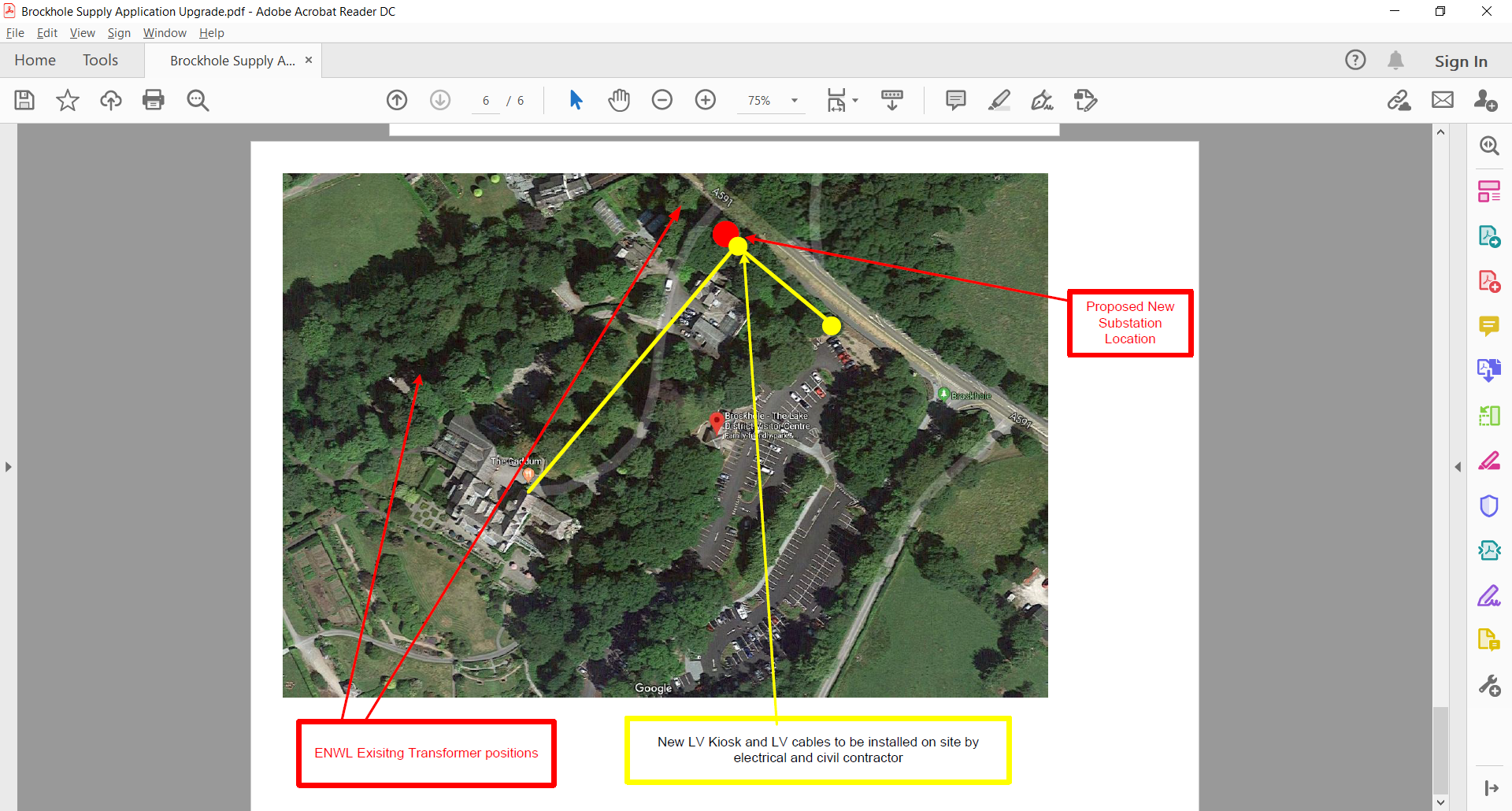
LDNPA Employers requirements/Technical Specification

There are no Tree Protection Orders (TPOs) on the site, but contractors should make allowance in their tender for the fact that the grounds are grade 2 registered and the importance of referring to and following the BS5837 Tree Protection Method Statement.

The contractor will be responsible for ensuring their price include all aspects of the works required, included any required items that are specifically excluded from the ENWL quote provided. This includes, but is not limited to:

* + Clearing the site of trees, vegetation etc. for substation construction / access.
  + Substation civil works e.g. Plinths / base for GRP enclosure.
  + Removal of waste etc.
  + Provision of metering room.
  + Installation of cable entry duct from the substation to your land boundary.
  + The provision and installation of a cable entry duct for new service/s.
  + Alterations to our private network, e.g. wiring back existing supplies
  + The provision and the installation of our LV singles and earth cables, including termination lugs.

A site map has been provided below showing the proposed location of the sub-station and the points of connection to the main White House and the top of the carpark. However we have not specified exact routes for the cable run. We expect the contractor to design, specify and agree with the LDNPA all routes prior to commencement of any ground works and for the contractor to take into account such aspects such as local ground conditions, other utilities, trees etc. Also provide is an existing service plan (Annex 5).



1. New substation connected to ENWL supply in the road.

* A new substation capable of meeting a load requirement for our connections of 1,000kVA.
* A new private submain to be installed from the new meter position in a kiosk adjacent to the proposed substation.
* The contractor will need to design and specify cables and switchgear. Although at the moment we only require a 3 phase supply to the main White House and another 3 phase connection to the top of the carpark for the EV and Battery chargers, we require the contractor to allow for a minimum of 6 additional spare 3 phase ways to be left in the section board to leave spare capacity for the future.
* A sub meter will be required on a new 3 phase feed to the top of the carpark and capacity to install sub metering on all the spare ways left in the section board.
* The contractor will be responsible for all calculations of the required cable sizes (calculations to be included in the tender submission).
* The contractor will be responsible for ensuring their prices include all aspects of the works required included those items specifically excluded from the ENWL quote provided.
* All of the civils specifications should only be as per national guidelines.

2. A supply from the new substation to the main White House.

* Last year we updated the switch gear in the main White House (Visitor Centre) cellar and the incomer supply cable from the courtyard in front of the house. These are now rated at 630 Amps.
* We now require a new supply from the new substation into the main house connecting into this new incomer in the courtyard with a suggested load in the order of 450 Amps per phase for a 3 phase and neutral supply along with the necessary earthing.
* The contractor will need to liaise with the DNO for the disconnection of the old supply to the main White House (Visitor Centre) and to liaise with the metering company as necessary.

3. A supply from the new substation to the top of the carpark for new EV and battery charging.

* We are currently installing 4 dual 22KW Electric Vehicle (EV) charging points at the top of the carpark, along with a solar PV canopy producing around 8KW of power and battery storage of 40KW. The battery storage will be charged from the mains supply when there is insufficient solar power available.
* We anticipate increasing this to 10 dual 22KW chargers and a 100KW of battery storage in the near future.
* We require the contractor to install a new sub-metered supply from the new substation into a draw pit at the top of the carpark with an appropriate 3 phase load and neutral supply along with the necessary earthing.