## **Civil Engineering**

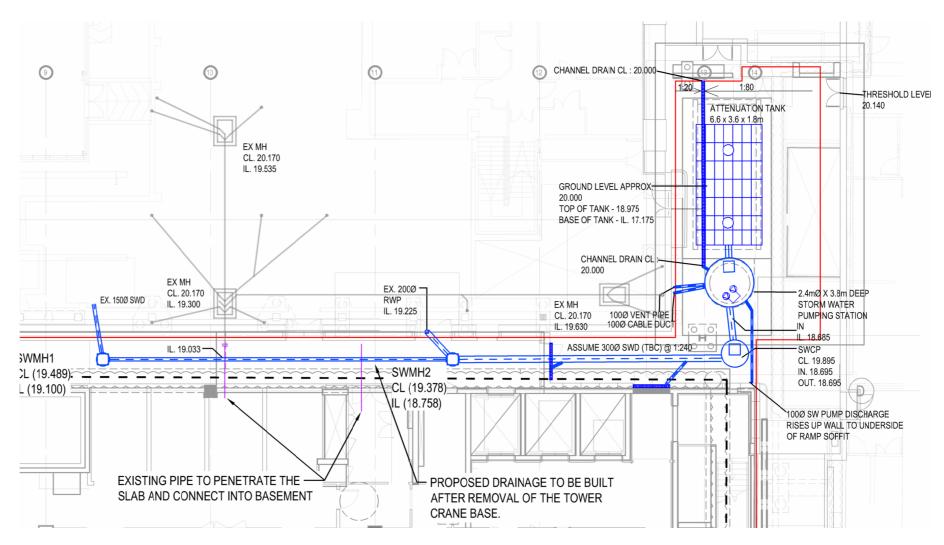
Civil Engineering proposals are appended to this document and include the below ground pipework routes and connections to proposed attenuation tanks and pumping station below the services yard. The basis of the proposals is that the existing setup is replicated with an attenuation tank of the same volume and a packaged GRP pumping station provided to house three surface water pumps which will be arranged to operate as duty, duty, standby. The design drawings also illustrate how surface water from the services yard connect to this system. Build ups to achieve the finished surface in the services yard are also provided.

## **Services Engineering**

The pump discharge from the existing pumping station is currently fixed to the external face of the Frontage building and is then routed through the Frontage Building to connect to drainage contained in the front lightwell on Great Ormond Street side of the building.

This pipe will need to be remain live until such time as the new installation is complete and the new pumping station can be brought on line.

As part of the proposed works, a temporary pump discharge is to be routed from the new permanent surface water pumping station which will be concealed within GOSHCCC proposed external wall construction, rise to the underside of the OBW service yard ramp where it will be routed towards the entrance gates. From here the pump discharge pipe will then drop and connect into the existing drainage contained within the front lightwell.



Below ground drainage proposal

## Appendices

Application Drawings	
Civil and Services Engineering Proposals	48

## A.1 Application Drawings