### Ham Close Regeneration

Planning Application: Utilities Assessment

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# UTILITIES ASSESSMENT – HAM CLOSE

March 2022

## **1. INTRODUCTION**

This report has been generated in order to outline the Utilities provision to the development at Ham Close, Ham, Richmond Upon Thames, TW10 7PG.

The Ham Close development involves the "Demolition of existing buildings on-site and phased mixed-use development comprising 452 residential homes (Class C3) up to six storeys; a Community/Leisure Facility (Class F2) of up to 3 storeys in height, a "Makers Lab" (sui generis) of up to 2 storeys together with basement car parking and site wide landscaping."



## 2. EXISTING AND ON-SITE UTILITIES

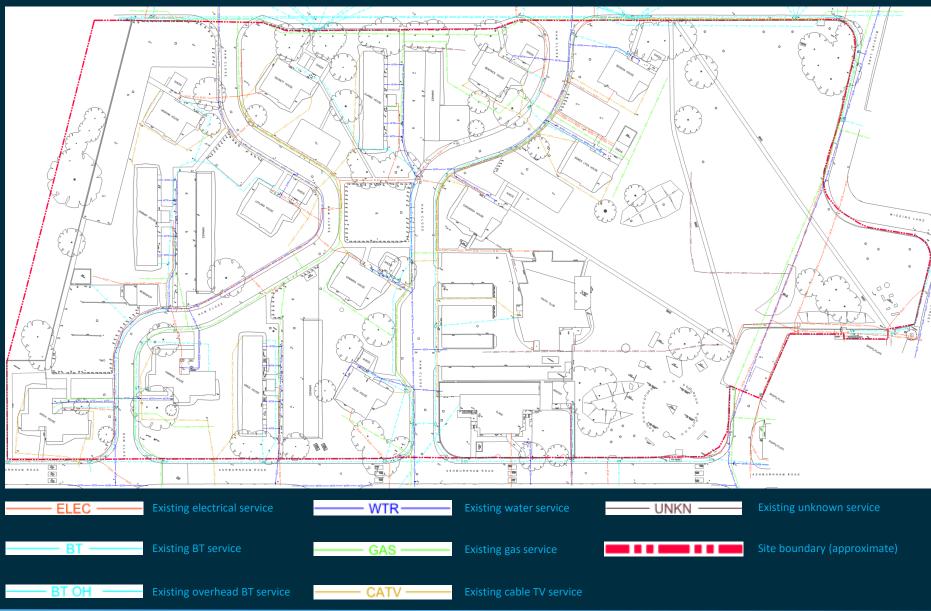
As the existing site contains several existing buildings, there is a significant number of utilities on site serving the existing buildings.

Site surveys have been undertaken to locate the existing utilities and this information is presented in the drawings on the following pages.

- Existing Electric High voltage (HV) and low voltage (LV) services throughout the development along with 2 No. substations within the site boundary supplying buildings both within the site boundary (due to be demolished) and buildings outside the site boundary (being retained). Immediately adjacent to the proposed Community Centre but outside the site boundary is a substation that will be affected by the proposed development.
- Existing Telecoms Openreach and Virgin Media services throughout the site supplying existing buildings
- Existing Water Throughout the site supplying existing buildings. There are also other water services identified interconnecting existing buildings and leaving the site boundary to the South.
- Existing Gas Throughout the site supplying existing buildings. There are also other gas services identified interconnecting existing buildings and leaving the site boundary to the South.

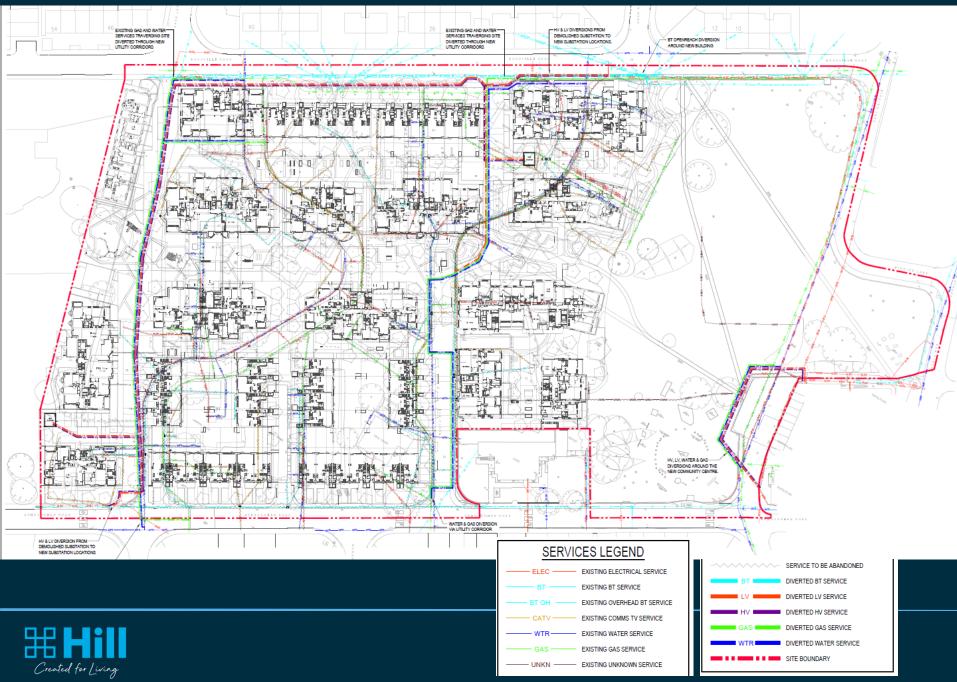


### **Existing on-site Utilities**





#### **Existing Site Services Disconnect**



## **3. ELECTRICITY DIVERSIONS & DISCONNECTIONS**

The demolition and development is to be completed in 3 phases. To facilitate this process several phased electrical diversions/disconnections are required in line with the below process;

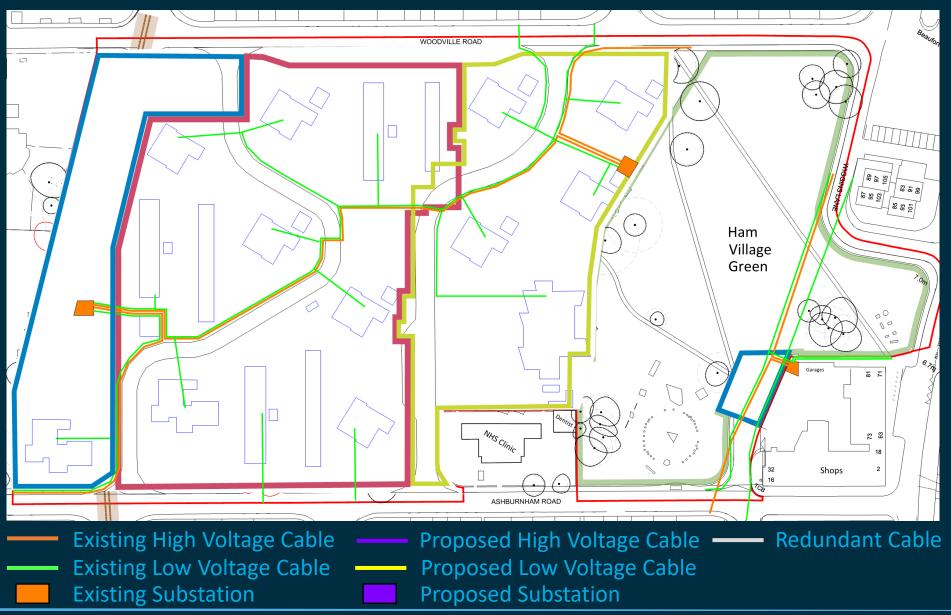
Phase 1: To facilitate the development of Block B, the existing "Ashburnham Road" substation needs to be disconnected and relocated. It is proposed that a new substation is installed between Blocks A & B in replacement. To maintain both the HV and the LV networks for the surrounding area and the existing blocks at Ham Close, new HV and LV cables will be run from the new substation and will connect onto the existing HV and LV cables running through the development. The LV cable supplying Hatch House will also be disconnected as part of the Phase 1 works. Also, to facilitate the construction of the community centre located in the southwest corner of Ham Village Green, HV and LV cables running south out of "The Close" substation will need to be diverted around the footprint of the community centre with connections made to the existing cables north and south of the new community centre.

Phase 2: To facilitate the development of Block V, the existing "Woodville Road" substation needs to be disconnected and relocated. It is proposed that a new substation is installed between Blocks T & V in replacement. To maintain the HV network for the surrounding area, a new HV cable will be installed between the new Phase 1 substation and the new Phase 2 substation. This will run in front of blocks B and W then run within the footpath of Woodville Road prior to entering the new Phase 2 substation. A new HV connection will also be made to the existing HV cable within the southern footpath of Woodville Road to ensure a continuous network is maintained. To ensure the LV network is maintained for residents of Ham Close, a new LV cable will also be installed from the new Phase 2 substation and connect onto the existing LV cable running through the existing estate. The existing LV connections to Benson House, Bentinck House, Bowes Lyon House, Cavendish House and the Youth Centre will all be disconnected.

Phase 3: To facilitate the construction of Phase 3, the existing LV cabling supplying Clarke House, Secrett House, Newman House, Hornby House, Leyland House, Edwards House and Hawkins House will be disconnected, however, to maintain the LV connection between the new Phase 1 substation and the new Phase 2 substation, a new LV cable will be installed. The existing LV connections to Greig House and Field House will also be disconnected

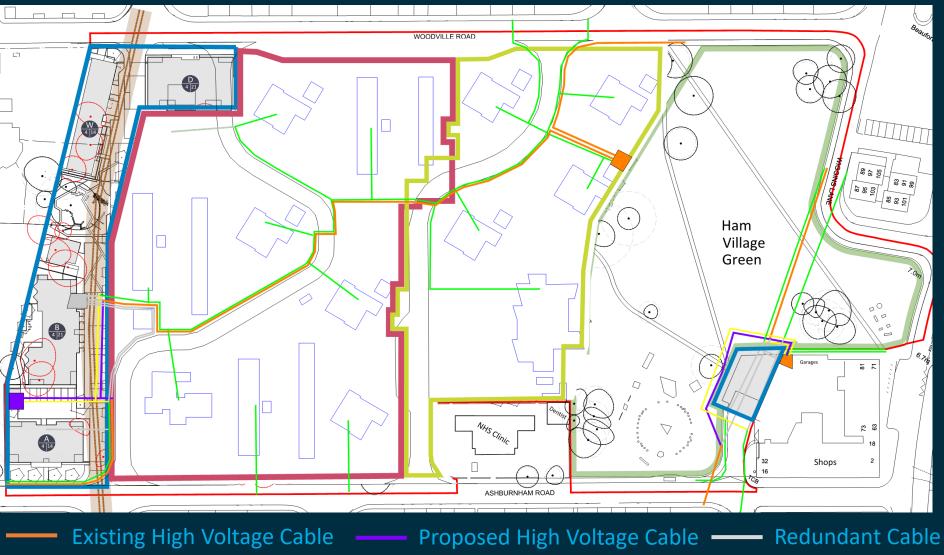


### **Existing Electricity Cables**





### **Phase 1 Electric Diversions**



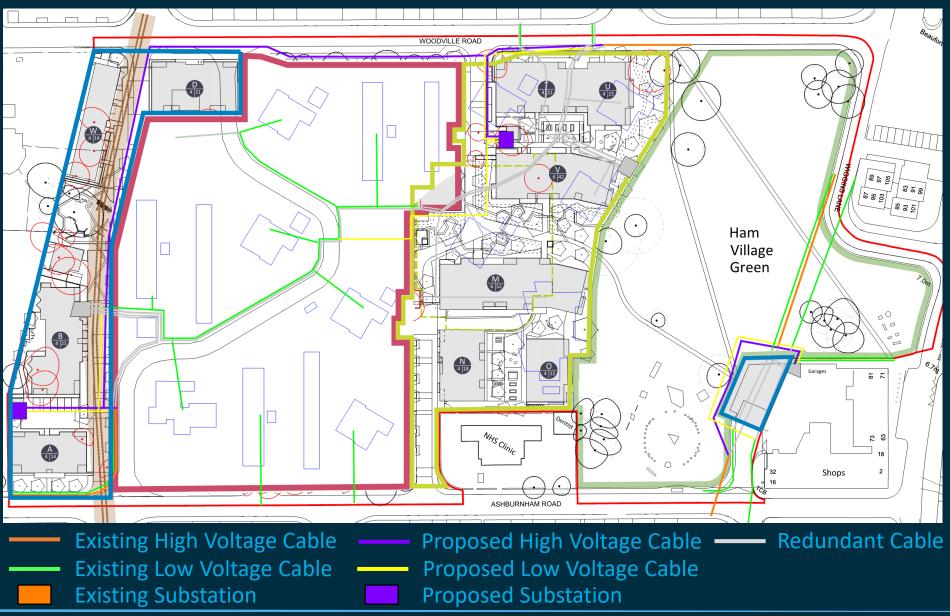
Existing Low Voltage Cable

**Existing Substation** 

Proposed Low Voltage Cable **Proposed Substation** 

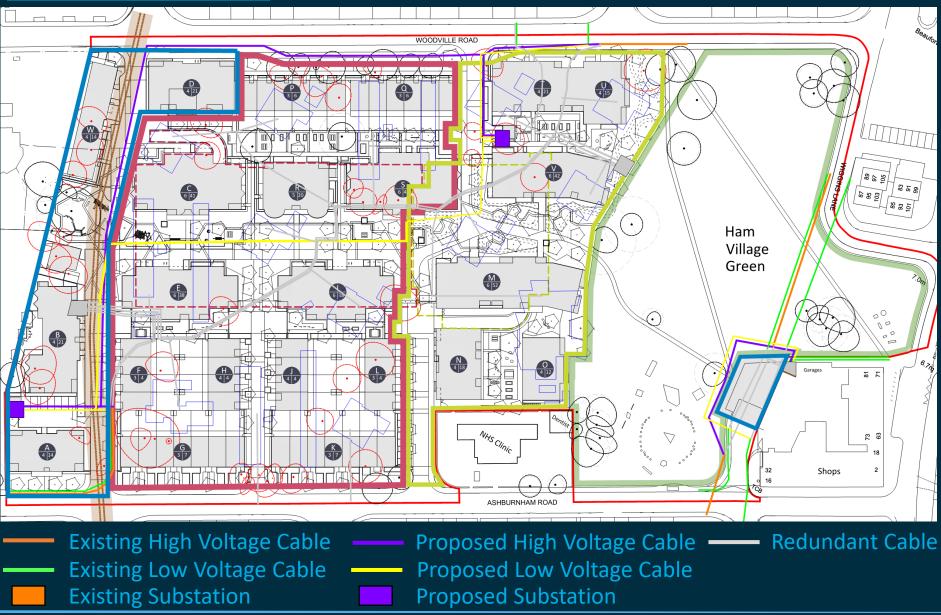


### **Phase 2 Electric Diversions**





#### **Phase 3 Electric Diversions**





### 4. WATER DIVERSIONS AND DISCONNECTIONS

The demolition and development is to be completed in 3 phases. To facilitate this process several phased potable water diversions/disconnections are required in line with the below process;

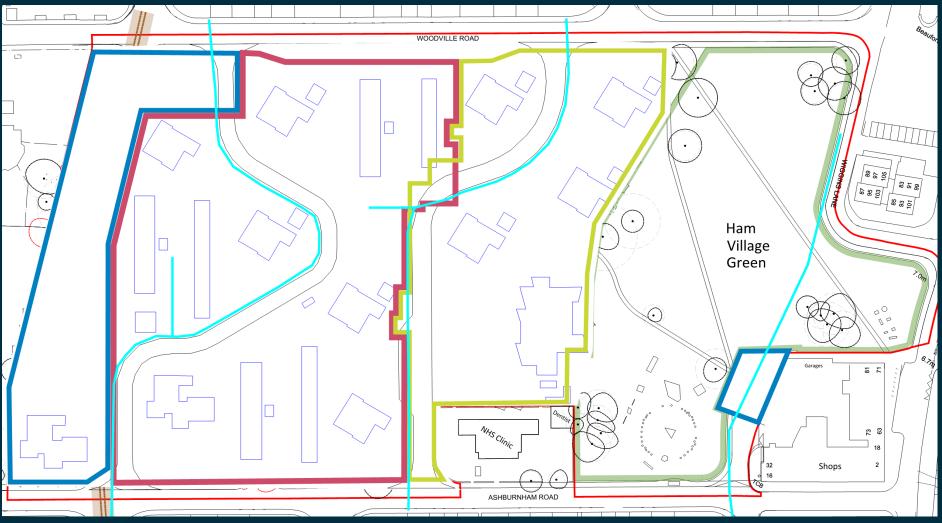
Phase 1: To facilitate the development of Block W, the existing potable water pipe on the western side of the site that runs through the development from Woodville Road to Ashburnham Road needs to be diverted around Block D. Also, to facilitate the construction of the community centre in the southwest corner of Ham Village Green the potable water pipe that runs between Wiggins Lane and Ashburnham Road needs to be diverted around the footprint of the new community centre. As part of these works the potable water supply to Hatch House will be disconnected.

Phase 2: To facilitate the development of Phase 2, the existing potable water pipe in the centre of the site that runs through the development from Woodville Road to Ashburnham Road needs to be replaced with a new potable water pipe in line with the new development proposals. As part of these works the potable water supply to Benson House, Bentinck House, Bowes Lyon House, Cavendish House and the Youth Centre will all be disconnected.

Phase 3: To facilitate the development of Phase 3, the existing potable water pipe on the western side of the site that runs through the development from Woodville Road to Ashburnham Road needs to be replaced with a new potable water pipe in line with the new development proposals. As part of these works the potable water supply to Clarke House, Secrett House, Newman House, Hornby House, Leyland House, Edwards House, Hawkins House, Greig House and Field House will all be disconnected.



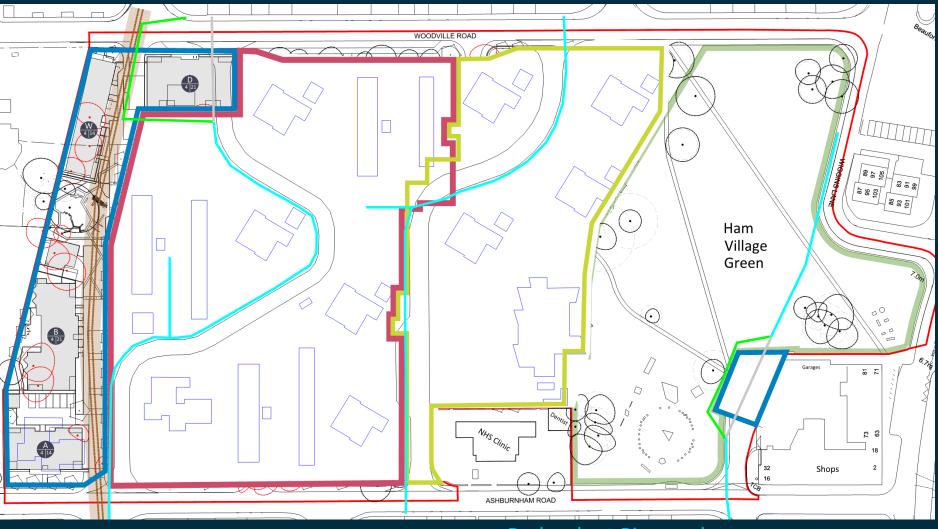
### **Existing Potable Water Pipework**



Existing Potable Water Pipework

Redundant Pipework



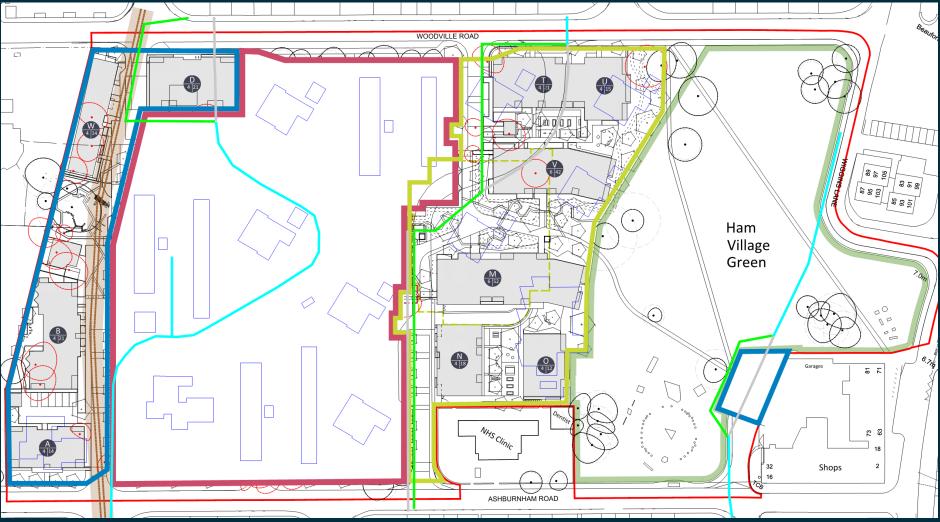


Existing Potable Water Pipework

Redundant Pipework



#### **Phase 2 Potable Water Diversion**

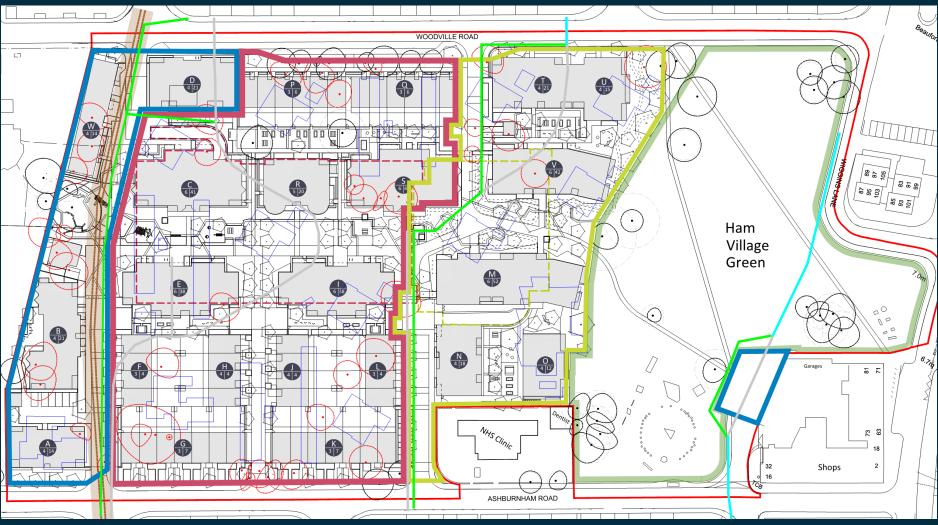


Existing Potable Water Pipework

Redundant Pipework



### **Phase 3 Potable Water Diversion**



**Existing Potable Water Pipework** 

**Redundant Pipework** 



### **5. GAS DIVERSIONS & DISCONNECTIONS**

The demolition and development is to be completed in 3 phases. As this site will be fully served by 100% electric, all gas connections can be removed within the phasing arrangements. To facilitate this process several phased gas diversions/disconnections are required in line with the below process;

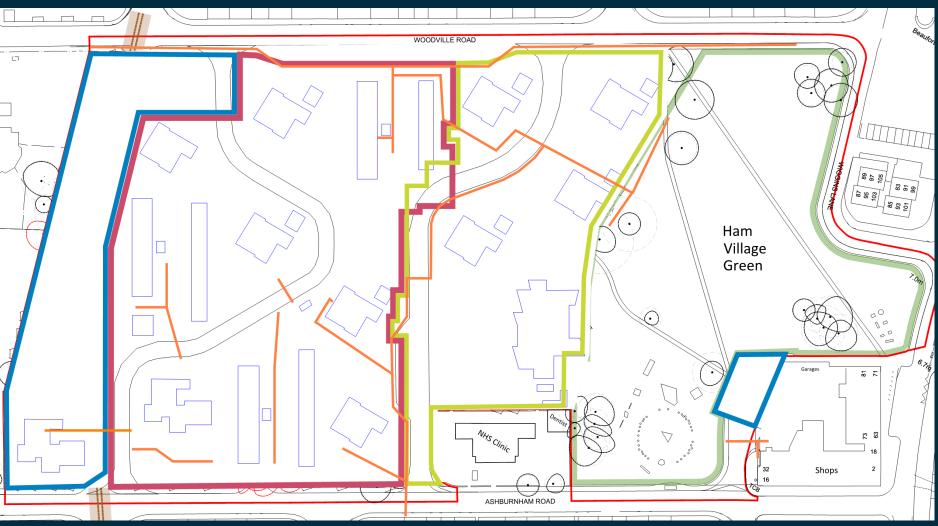
Phase 1: To facilitate the development of Block W, the existing gas pipe on the western side of the site that runs through the development from Woodville Road to Ashburnham Road needs to be diverted around Block D. Also, to facilitate the construction of the community centre in the southwest corner of Ham Village Green the gas pipe that runs between Wiggins Lane and Ashburnham Road needs to be diverted around the footprint of the new community centre. As part of these works the gas supply to Hatch House will be disconnected.

Phase 2: To facilitate the development of Phase 2, the existing gas pipe that runs through the northern half of the development from Woodville Road to Ashburnham Road needs to be replaced with a gas pipe in line with the new development proposals. This is to connect onto the existing gas pipe adjacent to Block M to ensure that the gas supplies to Field House and Edwards House are maintained. The existing gas pipe that runs along the southern side of Woodville Road will also need to be diverted around the corner of Block T. The gas supplies to Benson House, Bentinck House, Bowes Lyon House, Cavendish House and the Youth Centre will all be disconnected.

Phase 3: To facilitate the development of Phase 3, the southern section of the existing gas pipe on the eastern side of the phase 3 land that runs through the development from Woodville Road to Ashburnham Road will be replaced with a gas pipe connecting to the existing pipe in Ashburnham Road. Also the existing gas pipe on the western side of the site that runs through the development from Woodville Road to Ashburnham Road will be replaced with a new gas pipe in line with the new development proposals. As part of these Phase 3 works the gas supply to Clarke House, Secrett House, Newman House, Hornby House, Leyland House, Edwards House, Hawkins House, Greig House and Field House will all be disconnected.



### **Existing Gas Pipework**

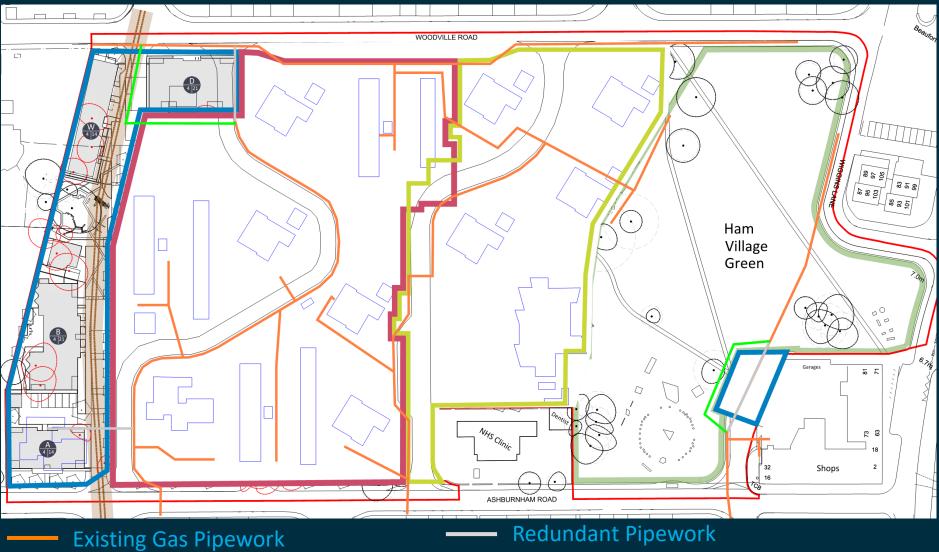


Existing Gas Pipework

Redundant Pipework



### **Phase 1 Gas Diversion**



**Redundant Pipework** 



#### **Phase 2 Gas Diversion**

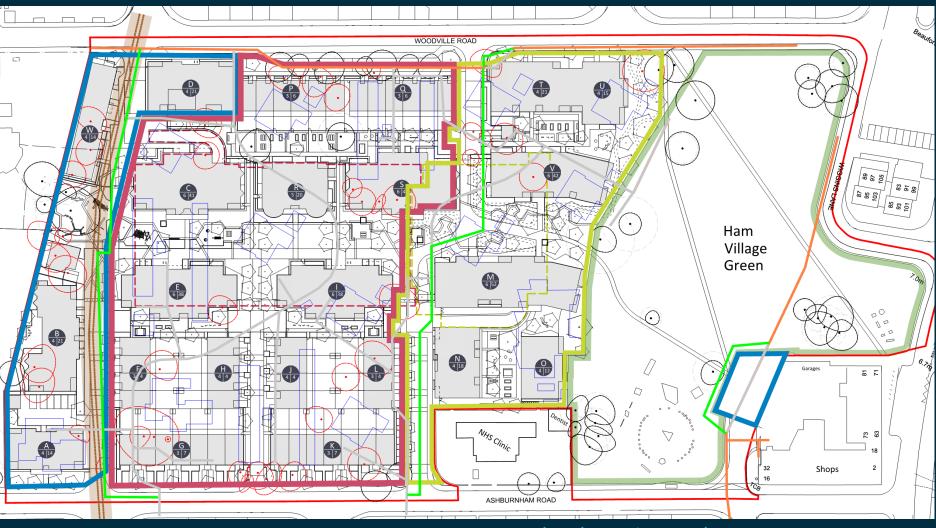


Existing Gas Pipework

Redundant Pipework



### **Phase 3 Gas Diversion**



Existing Gas Pipework

Redundant Pipework



### 6. OPENREACH DISCONNECTIONS

The demolition and development is to be completed in 3 phases and to facilitate this process several phased disconnections of existing Openreach equipment will be required in line with the below process;

Phase 1: To facilitate the development of Phase 1, the existing Openreach cabling to Hatch House and the existing "Ashburnham Road" substation are to be disconnected.

- Phase 2: To facilitate the development of Phase 2, the existing Openreach cabling connecting Ashburnham Road to Benson House, Bentinck House, Bowes Lyon House, Cavendish House and the Youth Centre is to be disconnected. A diversion of existing Openreach services will be required around block U. The existing Openreach cable feeding the NHS clinic on Ashburnham Road will also need to be diverted to facilitate the construction of the new bellmouth onto Ashburnham Road from the new development.
- Phase 3: To facilitate the development of Phase 3, the existing Openreach cabling connecting to Clarke House, Secrett House, Newman House, Hornby House, Leyland House, Edwards House, Hawkins House, Greig House and Field House will all be disconnected.

