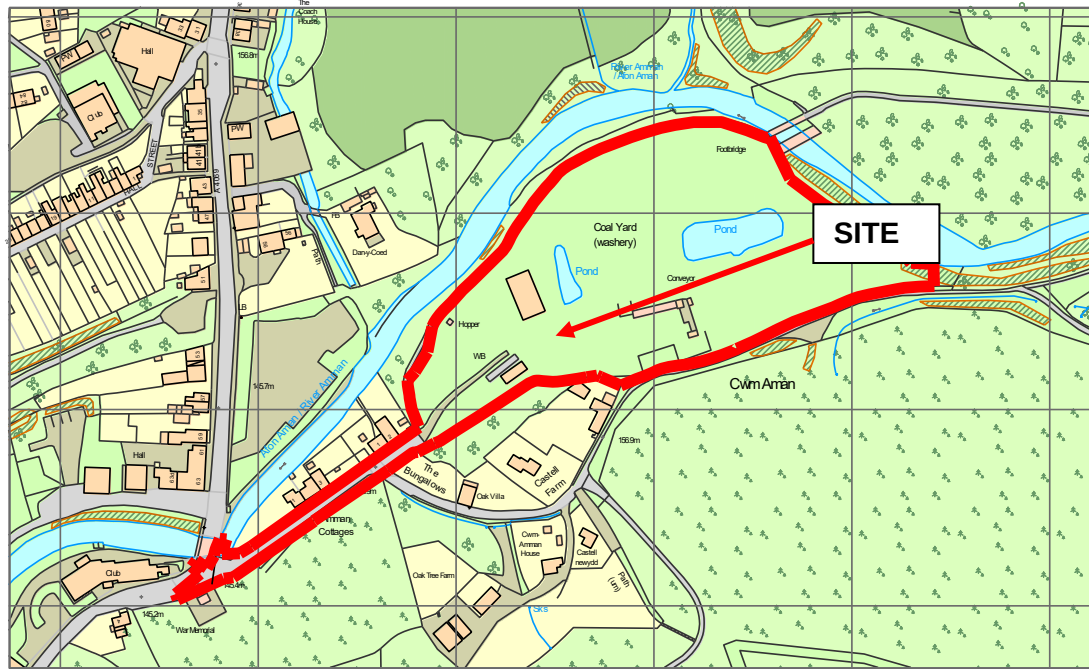


# SUDS Maintenance Management Plan

## Forge Washery Residential Development, Brynaman



## July 2021

## Development

It is proposed to construct 26 detached houses and four semidetached houses along with an access road off an existing lane (see Figure 1 to 4).

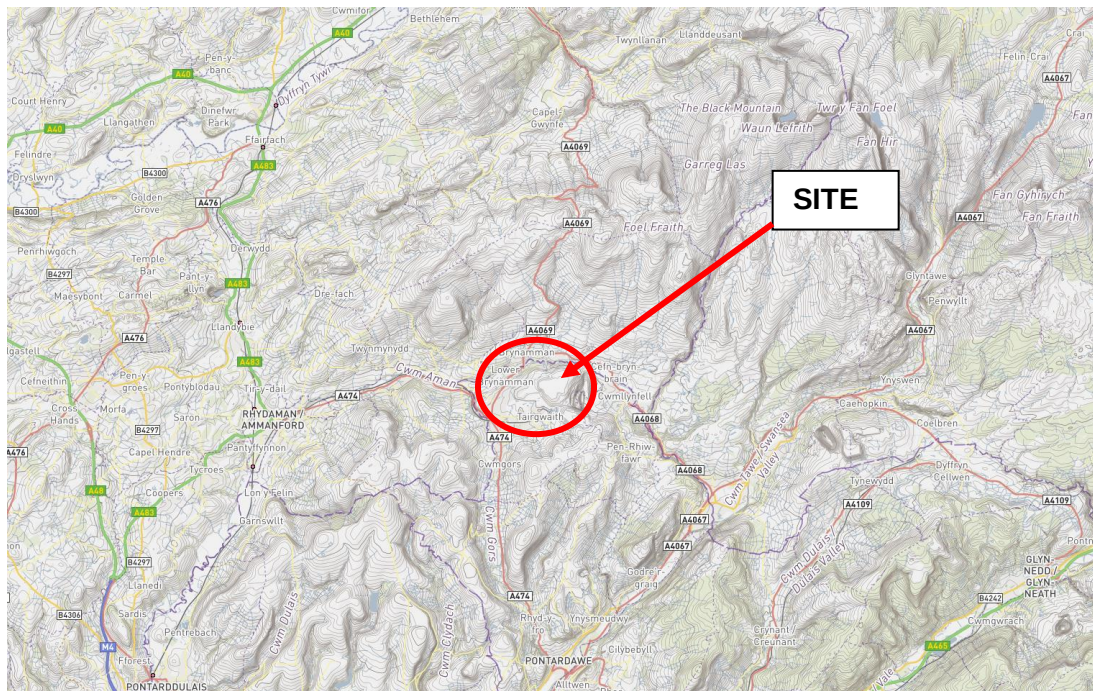


Figure 1 – Location Plan

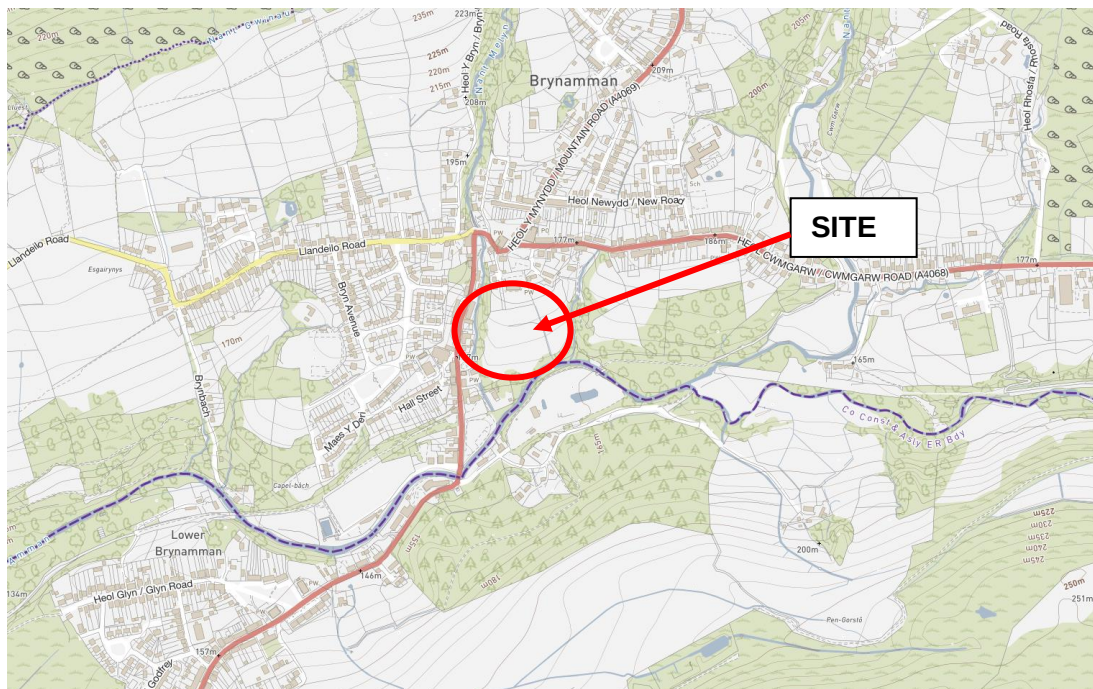
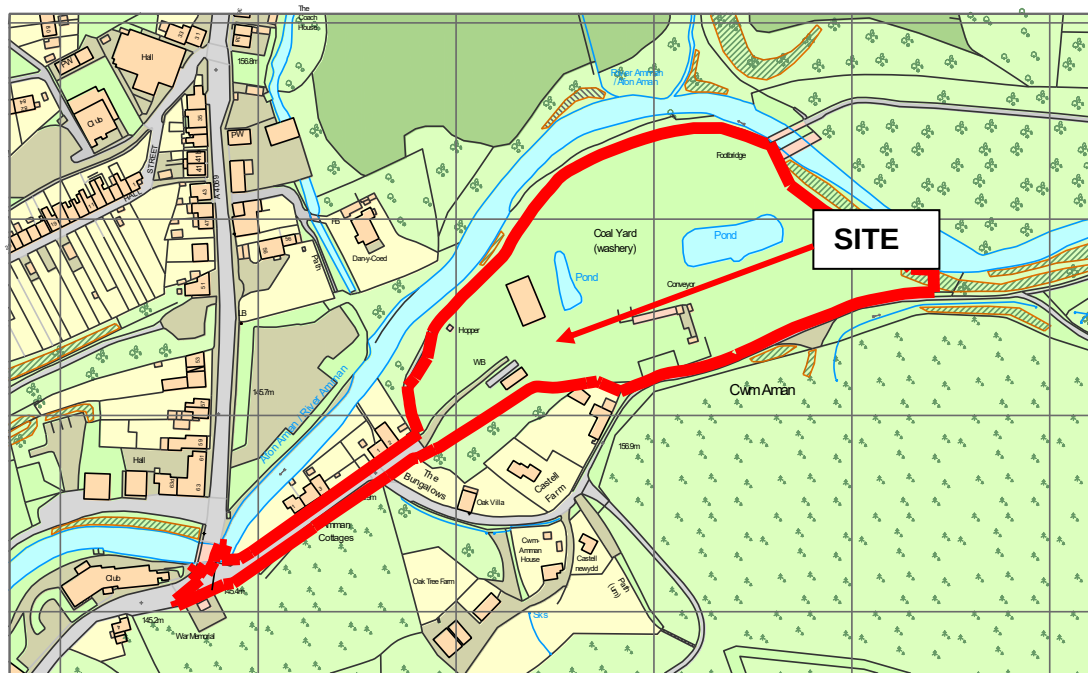
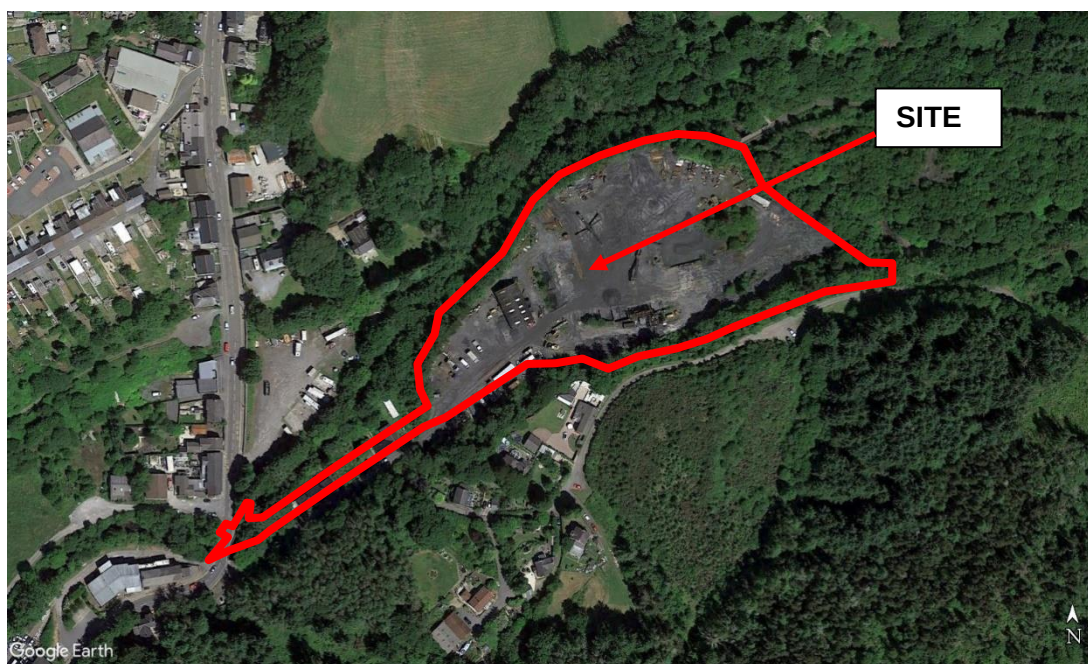


Figure 2 – Plan of Area



### Figure 3 – Plan of Street



### Plate 1 – Aerial Photograph of Site



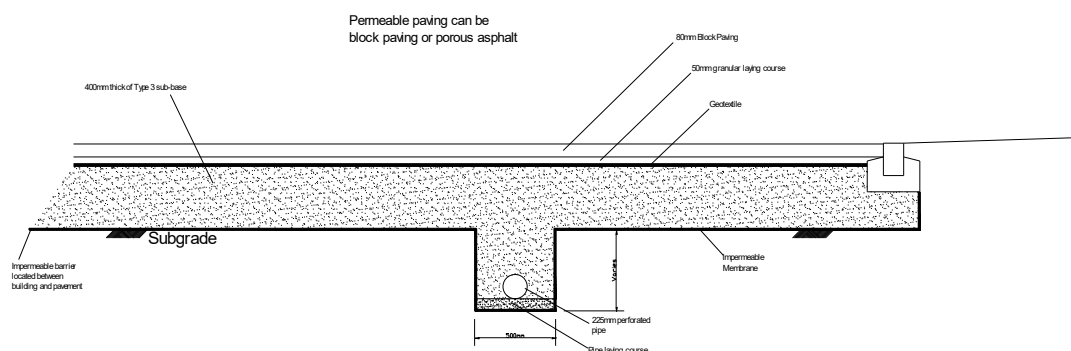
**Figure 4 – Plan of Proposed Development**

### Description of the Drainage System

The rear roofs of the proposed dwellings will initially be drained into water butts. The overflow from the water butts, along with the rainfall from the remainder of the roof areas and surface water draining from the paths surrounding the house, will then be drained into a Type C permeable paving forming the parking area (see Figure 5, 6). The access road will also be constructed using a permeable paving solution with three large attenuation basins (two off line and one on line). Planting around the basins will provide an opportunity to enhance biodiversity and amenity.



**Figure 5 - Proposed Solution**



**Figure 6 - Typical Section Through the Permeable Paving**

### SUDS Type Present

| Table 1 - SUDS Type Present  |   |                                              |
|------------------------------|---|----------------------------------------------|
| SUDS Type                    |   | Comments                                     |
| Rainwater Harvesting         | ✓ | In the form of water butts                   |
| Green Roofs                  |   |                                              |
| Infiltration System          |   |                                              |
| Proprietary Treatment System |   |                                              |
| Filter Strip                 |   |                                              |
| Filter Drain                 |   |                                              |
| SWALES                       |   |                                              |
| Bioretention System          |   |                                              |
| Trees                        |   |                                              |
| Pervious Pavements           | ✓ | Permeable paving for parking and access road |
| Attenuation Storage Tanks    |   |                                              |
| Detention Basins             | ✓ |                                              |
| Ponds and Wetlands           |   |                                              |

### Who is responsible for maintenance?

| Table 2 - Body Responsible For Drainage Element |                 |
|-------------------------------------------------|-----------------|
| Element of Drainage                             | Responsible     |
| Rainwater goods and catchpit                    | House Owner     |
| Parking Area                                    | House Owner     |
| Access Road                                     | Local Authority |
| Attenuation Basin                               | Local Authority |

## Elements of the drainage system requiring maintenance

**Table 3 - Maintenance Schedule**

| Element            | Inspection          | Regular Maintenance                                       | Occasional Maintenance               |
|--------------------|---------------------|-----------------------------------------------------------|--------------------------------------|
| Rainwater goods    | Monthly, 6 monthly  | 6 Monthly                                                 | As required                          |
| Manhole            | Annual              |                                                           | As required                          |
| Catch pit          | Annual              |                                                           | Silt removed as required             |
| Attenuation Basins | Monthly<br>Annually |                                                           | As required                          |
| Plants             | As used             | As stipulated by the supplier                             | As required                          |
| Permeable Paving   | Annually            | To be swept with a high-pressure spray and vacuum sweeper | Sections to be replaced as necessary |

### *Rainwater goods*

The grating over the gullies are to be inspected regularly (monthly) and any debris collected should be removed. The troughs should be inspected every six months and all debris removed.

### *Manholes*

The manholes should be inspected annually and maintenance undertaken as necessary.

### *Catchpit*

The catch pit should be inspected annually. If the silt rises to 100mm or less below the invert level the silt should be sucked from the pit by vacuum pumping and removed from site.

### *Attenuation Basins*

The basins will need to be inspected monthly for any pooling and annually from backing up of water in the catch pit. If necessary, the stone should be removed and washed. The plants / grass within and surrounding the attenuation basins should be maintained in accordance with the supplier's instructions.

### *Permeable Paving*

The parking areas and access roads should be swept annually with a high pressure spray and vacuum sweeper. If water is seen to pool on the surface the paving should be replaced.

**Residential Inspection Form**  
**Forge Washery Residential Development, Brynaman**

| <b>Date:</b>                                                   | <b>Y/N/<br/>NI</b> | <b>Comment</b> | <b>Action</b> | <b>Date<br/>completed</b> |
|----------------------------------------------------------------|--------------------|----------------|---------------|---------------------------|
| Is there sediment in the trough?                               |                    |                |               |                           |
| Is there excessive sediment in the catchpit?                   |                    |                |               |                           |
| Does the water back up in the catch pit?                       |                    |                |               |                           |
| Any signs of damage to the rainwater goods?                    |                    |                |               |                           |
| Any signs of damage to the catch pits?                         |                    |                |               |                           |
| Are there any cracking or depressions in the permeable paving? |                    |                |               |                           |
| Is there any pooling on the permeable paving?                  |                    |                |               |                           |

Y - yes / N - no / NI - Not inspected