

# Cross sector infrastructure interactions

Annual Report 2018





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## 1.0 Introduction



### 1.1. Wales & West Utilities

Every day our skilled and dedicated colleagues do their very best to keep our 7.5 million customers safe and warm, with a gas network they can rely on and a level of service they can trust.

We don't sell gas; instead we use our extensive network of pipes to transport gas to homes and businesses throughout Wales and the South West of England. We respond to gas emergencies, and we invest £2 million every day across our network, connecting new properties and upgrading old metal pipes to new long-lasting plastic pipes, to make sure the communities we serve receive a safe and reliable gas supply for generations to come.

It's a vital service, and one we are extremely proud to deliver.

We supply 2.5 million customer meter points on behalf of gas shippers. Our network consists of 2,500km of high pressure pipes known as the Local Transmission System (LTS) operating at pressures between 7-70barg, and 31,000km of distribution pipes that transport gas to homes and businesses operating at pressures up to 7barg.

In addition, there are around 4,000 above ground installations which control pressures or allow inspection and maintenance of our pipelines.

Our company priorities and values play a central role in guiding our key business decisions and are reflected in our day to day work.

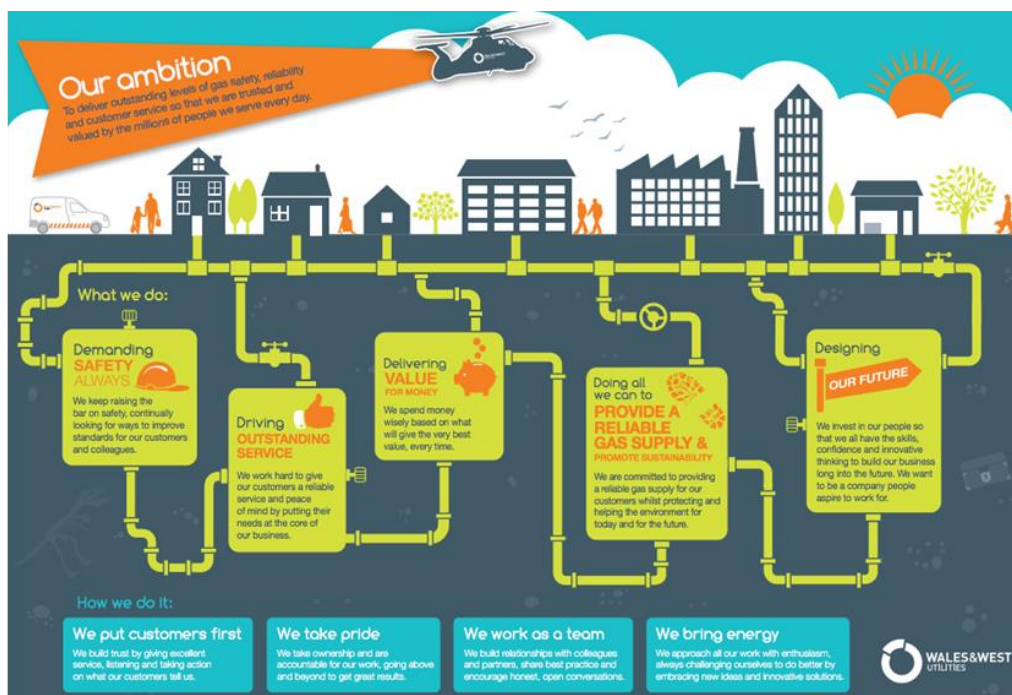
This report details how Wales & West Utilities has supported economic growth in our region and the safety of third parties through efficient engagement, sharing of data between relevant approved parties and delivery of works.





## 1.2. The way we do things

Our company ambition, priorities and values play a central role in guiding our key business decisions and are reflected in our day to day work.



## 1.3. Our obligations

We produce a Safety Case to demonstrate compliance with the Gas Safety (Management) Regulations 1996 (GS(M)R). This is supported by a set of Plant Protection Management procedures and work instructions which are designed to ensure compliance with the New Roads and Streetworks Act 1991, Construction Design and Management Regulations 2015, and the Health & Safety Executive (HSE) publication HS(G)47 'Avoiding Danger from Underground Services'.

We have obligations under the Gas Act and our Gas Transporters Licence to provide quotations where it is reasonable to do so, and the New Roads





and Streets Works Act sets out the circumstances in which diversionary works may be required to apparatus we own.

## 1.4. Putting Customers first

During 2018 we continued to promote the DIG plant protection safety message, as well as continuing to issue our safety business cards:

**We're here to help**

Every day underground gas pipes get damaged by people digging without knowing what's below. This can be catastrophic. It might cause serious injury to you and others around you. The costs of repair, fines and fees can be huge. Your project will be delayed and your reputation damaged.

We have designed this leaflet to help you dig safely. And the first thing to do – long before you start work – is call us.

**What's the number?**  
029 2027 8912

**Need help or advice?**  
Call our Plant Protection team on 029 2027 8912 or email [dig@waleswest.co.uk](mailto:dig@waleswest.co.uk)

**Smell gas?**  
Call the Gas Emergency Service on 0800 111 999.

**We need 10 days' notice**

**Dial Investigate Go ahead**

**YOUR GAS EMERGENCY AND PREVENTION SERVICE**

**WALESWEST**

dig@waleswest.co.uk  
029 2027 8912  
www.waleswest.co.uk  
facebook.com/waleswest  
@waleswest

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CARD POSITION (DO NOT PRINT)

**Can you DIG it?**

We bring the gas to homes and businesses across Wales and the south west of England. We invest money, time and effort every year to make sure our pipelines are protected – but the biggest danger to our network is you.

**Dis for Dial**  
Digging can be dangerous. Hit a gas pipe and you might cause a gas leak, a fire or explosion. So phone us first on 029 2027 8912 or email [dig@waleswest.co.uk](mailto:dig@waleswest.co.uk)

- You can find out where our pipes are.
- You need to give us 10 working days' notice before you start working.

**Dis for Investigate**  
It's the only way to stay safe!

- Before you start work, you must get a copy of our up-to-date gas plans and General Conditions and keep them with you on site.
- Use our online mapping service to find the main pipes under your land.
- Working near a medium-, or intermediate- or high-pressure gas pipe? You might need a site visit – call us so we can arrange it.
- Plan ahead – we need at least 10 days' notice for a site visit.
- You'll also need our publication 'SWM22 Safe working in the vicinity of high-pressure pipelines and associated installations'.
- Remember, you can't work on a Wales & West Utilities wayleave or easement (and which we have rights over) to maintain our gas network) without written permission.
- And you can't work near or move heavy equipment over any gas pipelines until all our conditions have been met and we agree your method of working.
- Watch the video on our website to find out more.

**Dis for Go ahead**

- Make sure you have our up-to-date gas plans on site.
- Need extra advice? Call our Plant Protection team on 029 2027 8912 or email [dig@waleswest.co.uk](mailto:dig@waleswest.co.uk)
- Use cable- and pipe-locating devices.
- Use safe digging practices, taking every precaution to avoid damaging gas pipes, damaging yourself and damaging your bank balance. You will be billed for any costs if something goes wrong.
- If in doubt, phone us again. We're happy to help.

**Smell gas?**

Our Gas Emergency Service is on call 24 hours a day, seven days a week, 365 days a year.

If you cause a gas leak, or think the network might be leaking, call the Gas Emergency Service immediately on 0800 111 999.

- Get everyone away from the leak.
- Ask everyone in nearby buildings to leave until we're sure it's safe.
- Put out all naked flames and other sources of ignition and make sure no one smokes within 15 metres of the leak.
- Don't try to fix the leak by filling the hole, as gas may enter buildings.
- Don't try to operate any valves.
- Don't let anyone go near the leak.
- Help our engineers, the police or fire services if they ask.

**We need 10 days' notice**





**Dial before you dig**

We need **10 days'** notice

- Dial**  
Call **029 2027 8912** before you start work.
- Investigate**  
Before you dig, make sure you know what's below.
- Go ahead**  
Done your research? Now you can dig safely.

**Need help or advice?**  
Call our Plant Protection team on **029 2027 8912** or email **dig@wwutilities.co.uk**

**Smell gas?**  
Call the Gas Emergency Service on **0800 111 999**.

We work with customers to complete site surveys where their enquiry relates to higher risk assets: all work in the vicinity of any asset operating at 2barg and above should have a site visit. The plans and information provided to third parties requires customers to call at least 10 days ahead of any works in order to arrange a site visit. However, a more reactive service is provided to unplanned works.

Where our assets are likely to be impacted by third party works, physical protection may need to be installed on site, such as a concrete slab to protect our network. In 2018, 2 such measures were required and discussions have been held for around 20 sites.

Where a pipe or asset cannot be protected and the customer wishes to proceed with the works, the pipe will require an alteration or diversion. In 2018 there were 616 diversion requests. When fully investigated, 208 diversions quotes were issued with 114 projects accepted and 79 projects completed in the year.

We are proud that we take a proactive approach with customers and other stakeholders. We use data from planning portals and track developments proactively, for example by approaching developers who have not contacted us. We provide Geographic Information System (GIS) shapefiles to local authorities as part of their planning processes and work with other utilities and developers presenting at their safety days on the risks and controls required when working near our assets.





## 1.5. Planning Consultation

We continually engage with the 42 local authorities in our geographical area on local development plan consultations. These take the form of consultation responses and workshops.

In addition, our planners attend local authority coordination meetings to minimise the impact of our works on the communities that we serve.

## 1.6. Accreditations and Awards

Below is a sample of the accreditations and awards attained by Wales & West Utilities:





## 2.0 Our Performance

### 2.1. Working with third parties

This section details our performance in working with third parties during 2018. Wales & West Utilities mapping performance standards are:

Team	Enquiry type / service	Standard of Service	Regulatory/ voluntary	Cost of service
Plant Protection	Initial enquiry for plans	10 working days	Voluntary	Free – except for £36+VAT for companies who charge their customers for the service

The increase in enquires and site visits is reflective of the increased number of new developments including new highways, housing, commercial and other development, as well as an increase in energy generation projects.

This volume of workload is expected to continue to rise through 2019 before levelling out in following years.

### 2.2. Plant protection enquiries

*Note: 95% of enquiries responded to via email*

	2018	2017	2016	Variance 2018 - 2017
Number of written enquiries	23,000	20,000	19,000	+15%
Average days to respond	5	3	3	-67%
% responded within 10 days	94.1%	98.42	97.83%	-5%
Self-serve via website	300,000	300,000	300,000	0
Number of approved organisations to self-serve	750	750	750	







We appraise 42 local authority planning portals and use the data to actively look for higher risk developments where we have not been contacted and proactively send our plans to the developer.

This process has been supported via the use of a third-party company that supports us in reviewing all large planning applications that have been logged with a planning authority within the Wales & West Utilities distribution network. If affected we can then log an enquiry and send out our plans to the local authority. This improvement to our planning application search capabilities has allowed us to interrogate an additional 20,000 planning applications we would have not had visibility of in previous years.

## 2.3. Site visits

*Published SLA: 10 days*

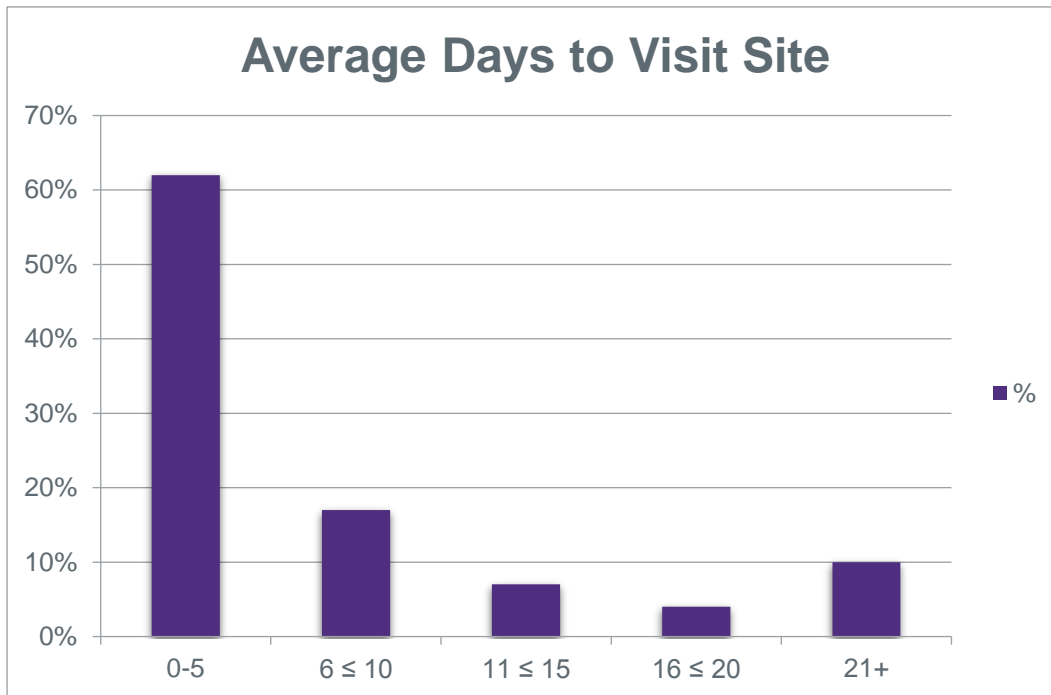
	2018	2017	2016	Variance 2018 - 2017
<b>Number of site surveys</b>	2,978	2,407	2,443	+23%
<b>LTS network</b>	783	752	747	+4%
<b>Intermediate pressure</b>	642	637	680	+1%
<b>Medium pressure</b>	1539	1,008	1,016	+52%
<b>Low pressure</b>	14	10	8	+40%
<b>% responded to within 10 days</b>	78%	75%	70%	+4%
<b>Average time to complete surveys on site</b>	9	10	13	+10%

The average number of days is higher than 10 days as customers may not be ready on site or require multiple visits during their project. We record the number of days from the date of contact to the completion of the site survey records.





The graph below shows the profile of timescale for site visits:



226 jobs were visited on the same day as the contact in response to unplanned works. The longest duration of 196 days was for a site with a six-month duration and works in proximity to medium pressure mains.

In 1949 cases, it was agreed with the customer that works could proceed without a site survey as the works location and safety controls were adequate on site as to reduce the risk to a minimal level.

## 2.4. Aerial Surveillance

During 2018, we continued to complete aerial surveillance of all >7bar pipelines and critical 2-7 bar pipelines, every two weeks. The surveys were undertaken to report any ground activities that might affect the integrity of the pipeline. Ground activity, including mechanical excavation, within 35m of a pipeline, was reported and investigated, with follow up site visits raised to assess the impact of the work, if required.





Area	Pressure	Length (Km)	Desk assessment	Site visit	Total	Immediate
Wales & West Utilities	HP	2362	365	1951	2316	60
Wales & West Utilities	IP	723	127	478	605	11
<b>Total</b>		3085	492	2429	2921	71

## 2.5. Diversions

SLA 30 working days

	2018	2017	2016	Variance 2018 - 2017
Number of diversions enquiries	616	575	584	+7%
Quotes issued	264	249	297	+6%
Diversions accepted	111	100	102	+11%
Diversions completed	79	88	74	-12%
Average days to issue a quotation	18	13	13	+40%
% quotes issued within 30 working days	57%	94.38%	94.65%	-37%
Average time from acceptance to completion	99 days	125 days	113 days	+26%
Shortest timescale	3 days	2 days	2 days	
Longest timescale	229 days	453 days	486 days	
Protective slabs agreed	6	18	20	

We usually quote a 100 days lead time for diversions to allow for efficient planning of resources and ordering of materials. We are generally able to meet the customer's timescales for their developments and the average time reflects the customers accepting works in line with the 100 days lead time. Again, some projects will require multiple visits with on-site durations of up to 6 months.

During 2018 we completed a number of major diversions projects across our network. These have included the IP diversions along Brixham Road, Paignton and to accommodate a new link road in Llangefni, Anglesey. We have also completed the diversion of a 315mm PE LP main in Springhill, Dursley.





The High Pressure Team has completed a project for the Hele Park, Newton Abbot development. Several road schemes and developments are in the detailed planning stage in the South West of England and Wales.





## 3.0 Connections

### 3.1. Future of Energy

We are facilitating the entry of green gases into our network. These green gases are carbon neutral and therefore contribute towards the UK carbon reduction targets.

	Enquiry Type	Total No. of enquiries	Standard of Service	Regulatory / Voluntary	Performance
<b>Biomethane</b>	Initial Enquiry	20	15 working days	Vol	95%
<b>Biomethane</b>	Capacity Study	9	30 working days	Vol	89%

In addition, we have connected 2 biomethane plants in 2018, bringing the total number of biomethane connections to the Wales & West Utilities network to 19. New connections for 5 new gas fired power stations were also complete during 2018, of which 3 were completed under Wales & West Utilities Connections Projects. This increased the total number of power station connections across our network to 37.

### 3.2. Connections Performance

Wales & West Utilities connections business deals with new connections, alterations to existing services, and isolations of supplies.

During 2018 we dealt with over 18,203 requests and an additional 4,500 initial enquiries. In addition to the desk top quotations produced in house, there were also 4857 quotations produced by customers, using our On-line portal.

Quotations were issued within the timescales required under the Gas (Standards of Performance) Regulations in 99.5% of cases. The accepted jobs were planned within the prescribed timescales in 99.93% of cases and work completed on site by the agreed 'gas on' date in 96.74% of cases. Despite this high performance, we still paid out over £36,000 in payments to customers under our standards of service obligations.





During the year we saw high numbers of enquiries about new housing developments, many of which will need reinforcement (upsizing) of our existing network in future years. We have also connected 4 small gas fired power stations which are designed to produce electricity at peak times to compensate for demand issues as coal power stations are phased out. In addition, we also received acceptances for 9 power generation site quotes and 2 CNG filling stations. Increasingly so, we are also seeing these power stations support the UK's steady state energy demand.

In 2018 we connected 11,000 new gas supplies, laid 44km of new mains and altered over 3,300 services.

Our dedicated Connections Call Centre received over 22,000 calls, which enabled over 3500 of the total number quotations issued in 2018, to be completed over the phone with the customer and issued. In 1730 cases, the quotations were not able to be complete over the phone, as additional information was required to produce an accurate quote.

### 3.3. Complaints

All complaints are dealt with via our published complaints procedure. Alongside customer satisfaction surveys these provide valuable information on how we are performing and where our processes and staff need to be developed.

In 2018 we dealt with 81% of complaints on the day we received them with 100% being closed within 31 days. There were no findings by the Ombudsman against Wales & West Utilities in 2018.





## 4.0 Incidents and Major Projects

### 4.1. Complaints

We have a dedicated Plant Protection Team at our head office in Newport that is primarily focused on the plant protection service where they not only forecast workload but also develop robust procedures to respond to both business as usual enquiries and major projects and incidents.

During 2018, there were a few short periods of time when the service had to take account of other business requirements. This included the national load shedding exercise which took two resources for one day in September. Due to training and system testing the team lost a resource during these periods for around 2 weeks. The impact on customers of the plant protection service during these periods was minimal.

Although we experienced some supply loss incidents during the year which required significant customer service and operational resources to resolve, there was a minimal impact on our plant protection service. A member of the team now supports the major incident Customer Advisory Team to ensure that those who are more vulnerable are provided the support and care they need if they experience a loss of supply. The process also gained a clean bill of health from the HSE who attended Wales & West Utilities offices during a national emergency exercise.

Where major projects are concerned, be they infrastructure developments of local, regional or national significance, we want to make sure interactions with us are as simple and as straightforward as they can be. Our team work hard to bring an efficient and cost-effective approach to infrastructure interactions.

### 4.2. Examples of Major Projects

Examples of major projects that we have had discussions regarding our network are:

- Bristol Metro-West Scheme
- St Ederyns, Cardiff Gate
- Plasdwr Development, Radyr
- Weston Supermare Regeneration





- Power generation sites Alders Way Power Station, Paignton, Hele Manor, Taunton and Brecon Power, Ebbw Vale
- Biomethane sites
- Housing and commercial developments
- Regeneration schemes

While our interactions with the developers of major projects can, at times, be onerous, none of these had a significant impact on the service to the wider customer base.

### **4.3. Always more we can do**

Despite the service we provide, we still had over 450 instances of damage or related incidents caused to our assets in 2018. The majority of these were to low and medium pressure pipes caused by mechanical excavators.

In 2018 we reported 6 incidents to the HSE under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) process, down from 14 in 2017.

Our ongoing aim is to reduce damage to our assets year on year. In 2019, in conjunction with our Corporate Affairs Team, a proactive approach to damage prevention is to be adopted, with the overall aim to drive down the number of unnecessary damage occurrences.







## 5.0 Listening to customers and other stakeholders

A key focus is to continue to progress stakeholder engagement to continually improve plant protection and cross sector interactions. We currently have good contact information for land owners with local transmission pipelines running through their land, but want to extend this to land owners with lower pressure tier information. We plan to remind them of the presence and location of plant on their land, safe working measures and remind them how to report issues with marker posts or damaged valve chambers.

In June 2018, Wales & West Utilities attended the inaugural LinesearchbeforeUdig Damage Prevention Conference. The aim of the conference was to actively promote the prevention of infrastructure damage across the utility networks and was supported by the launch of a new industry report on the vulnerability of utility infrastructure. Delegates from 60 companies discussed ways to improve safe working, engagement with stakeholders and understanding the causes of utility strikes. There was also a key note speech from the Health and Safety Executive, regarding the root causes and the unseen costs of workplace incidents.

We participate in the gas transporter's panel which reviews trends in damage to pipes and we try to identify common offender groups to target and educate in plant protection best practice as appropriate. As part of the 2019 Plant Protection message, Wales & West Utilities will be actively engaging with these companies through different platforms, to offer assistance and guidance to reduce the number of damages caused.





## 6.0 Good practice

We meet the good practice principles in all our infrastructure interactions, and example case studies of recent cross sector interactions are attached to demonstrate our clear process in dealing with cross sector interactions.

During 2018 we have implemented updates to our management policies and procedures to prevent damage to our below 7barg assets.

We continued to push our year-round plant protection campaign, DIG: giving developers three simple steps to stay safe (Dial, Investigate, Go ahead).

In 2018 we issued around 5,000 of the new leaflets and business cards to land owners and agents with a reminder to DIG.

The Plant Protection Team (part of the Business Services Directorate) holds bi-monthly meetings with Asset Management and Health, Safety & Environment Directorate where issues relating to infrastructure interaction, projects and incidents are discussed and an action log is maintained to ensure relevant owners are identified and actions closed.

Our Internal Audit Team are scheduled to complete an audit of the below 7barg plant protection process during 2019. Our GIS plant protection system was upgraded in 2018 and a replacement online system of providing map data is currently being developed.

We have continued to note the increase in green energy projects in our network. This has included wind turbines, solar parks and localised electricity generation (gas, LPG and biomass). In July 2018, Wales & West Utilities led an industry wide Future of Energy workshop attended by other Distribution Networks and key stakeholders. This workshop was the first of its kind for all GDNs, with the aim to raise the profile of the risks to our assets and our requirements as detailed in our policies.





## 7.0 Key changes to process

In 2018, there was a significant change to Plant Protection process following the launch of our maps on LinesearchbeforeUdig - LSBUD.

LSBUD is a free to use online search facility that allows its users to obtain the asset information and safety advice for over 60 active members. The system is designed to be used by anybody that requires information regarding the location of utility infrastructure, within a designated area, to ensure the safety of those working within the vicinity.

The system requires users to provide information regarding the type of work they are undertaking as a mandatory requirement, along with a proposed date of their works. This information allows our dedicated Plant Protection Team to proactively identify enquiries within the vicinity of our network that require our intervention, prior to any work being undertaken.

Along with the benefits for Wales & West Utilities, the system enables registered users the ability to access our maps 24 hours a day and 365 days of the year. In addition, LSBUD allows for multiple responses to be received by customer, through the utilisation of a single search option.

Since its launch in December 2018, LSBUD has responded to over 60,000 search requests, with an average response time to each query of around 2 minutes. This almost instant response to queries ensures our maps and associated safety advice, is available to customers far in excess of our agreed SLA of 5 working days, when queries are received direct.

Use of LSBUD ensures our Plant Protection approach is more proactive, and we can actively identify work that poses a greater risk to our infrastructure, with an emphasis on mitigating the associated risk. The key factor behind this approach is to drive down the number of incidents involving our network and provide an essential communication channel between ourselves and those working near infrastructure.

In conjunction with LSBUD, 2019 will also see the launch of a new GIS application that will allow Wales & West Utilities the ability to target network areas based upon the associated risk. The App will provide a visual display of the daily searches undertaken and will be symbolized accordingly based on their risk rating. It will also allow for pre-processed SAP damage data to be view against LSBUD enquiries, providing routes of investigation relating to reported damages.





Further information: <https://www.linsearchbeforeudig.co.uk/>





## 8.0 Further information



**Website:** [www.wutilities.co.uk/services/pipe-locations/](http://www.wutilities.co.uk/services/pipe-locations/)

**Published number:** 02920 278912





## 9.0 Recent Interaction Case Studies

### 9.1. Case Study 1: Bristol Metro West Phase 1

- We were contacted by engineering consultants in relation to the Bristol Metro-West Scheme. The scheme is a package of major rail improvements for the West of England, led by North Somerset Council. Phase 1 of the scheme is proposing to re-open the Portishead rail line to passenger train services. The driver for this scheme is to enhance local passenger train services along the Severn Beach and Bath to Bristol railway lines.
- In order to finalise the application for a Development Consent Order (DCO), engagement was required with individual stakeholders who would be affected by the proposals. Following the initial utilities searches undertaken, it was identified that the proposed designs to accommodate the scheme, had several interactions with our high pressure, medium pressure and low pressure infrastructure.
- Wales & West Utilities met with the consultants, along with representatives from Network Rail during the consultation phase, to discuss the scheme in detail and offer any assistance. Detailed safety advice and guidance was provided as well as the transfer of information that helped improve proactive measures for working safely around our network, to reduce the risk to the public and the contractors undertaking the works.
- We subsequently agreed the form of protective provisions and plant protection guidelines which enabled the scheme to proceed without the requirement for mains diversions, which would have caused significant delays and required as part of the consultation process.
- For more information visit <https://travelwest.info/projects/metrowest>





## 9.2. Case Study 2: Plasdwr Development, Radyr, Cardiff

- The Plasdwr Development, led by Redrow Homes, is a planned new suburb consisting of approximately 7,000 new homes, plus infrastructure consisting of schools, retail units, offices and leisure facilities, in North Cardiff. Wales & West Utilities have a high pressure pipeline within the site boundary, and crossing the public highway which is also being re-developed to accommodate the additional traffic anticipated as a result of the development.
- We have worked proactively with the contractors working on behalf of Redrow Homes, during their intensive ground investigations within the vicinity of the high pressure main. Not only to ensure the safety of the main during the works, but to also assist in the new highway design and protective measure required.
- Wales & West Utilities have also held meetings direct with Redrow Homes regarding the overall site layout, to identify design solutions where diversion of the high pressure pipeline will not be required. All site meetings have been held at nil cost, to ensure that a mutually agreed design can be achieved.
- We have stated our requirements for the site layout in relation to specification WW/SP/SSW/22 and are working closely with Redrow Homes and its contractors to agree an appropriate site layout.
- For more information visit <https://plasdwr.co.uk/>

