Capital Delivery Alliance
Cynghrair Cyflawni Cyfalaf

PRIORESS MILL RAW WATER PUMPING STATION

Volume 1 Non-Technical Summary

2873-W-201-HYD-XX-XX-RP-NX-10084

JANUARY 2017

Incorporating
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Hyder

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CONTENTS

1 Introduction

1.1 Project Context

1.1.1 This is the Non-Technical Summary of the Environmental Statement (ES) submitted as part of the planning application for the proposed development at Prioress Mill Raw Water Pumping Station (RWPS), near Usk. The development works at Prioress Mill RWPS are hereafter referred to as 'the proposed Development'.

1.1.2 The Environmental Statement has been produced by Arcadis (UK) on behalf of the Applicant, Dŵr Cymru Welsh Water (DCWW), which owns and operates Prioress Mill RWPS. Prioress Mill RWPS abstracts water from the River Usk and pumps it along underground pipes to Llandegfedd Reservoir, which subsequently feeds Sluvad Water Treatment Works (WTW). DCWW is proposing to replace the existing RWPS at Prioress Mill with a new RWPS in order to meet stricter rules relating to water abstraction, and to ensure a reliable future water supply to the Cardiff area.

1.1.3 The proposed Development is located approximately 1.2km north-west of the town of Usk in Monmouthshire. The location of the proposed Development is shown in Figure 1, Site Location Plan. The proposed Development would be located within the DCWW land ownership boundary and would include works within the existing RWPS site. In addition, agricultural land to the south west of the RWPS would be utilised for a temporary construction compound. A full description of the existing Site and the proposed Development is provided in Chapter 3: Description of the Proposed Development.

1.1.4 This Non-Technical Summary for the ES accompanies the Applicant's planning application to Monmouthshire County Council (MCC). It is prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2016 (Ref 1-1) 'the EIA Regulations'.

1.1.5 The Non-Technical Summary describes in non-technical language the findings of the Environmental Impact Assessment, as reported in Volume 2: Environmental Statement.

1.2 Environmental Impact Assessment

1.2.1 A statutory Environmental Impact Assessment (EIA) has been undertaken in accordance with the EIA Regulations. EIA is a process that is undertaken to ensure that information from the developer (i.e. DCWW), consultees and members of the public on the potential likely significant effects, both beneficial and adverse, of a proposed Development are considered in full by the decision-maker prior to deciding whether a development should be granted planning consent. The EIA has:

- Gathered information on the existing environment and identified environmental constraints and opportunities which may be affected by the proposed Development;
- Identified and assessed potential effects that may arise from the construction and operation of the proposed Development, and identified whether they are classified as significant effects with respect to the EIA Regulations; and
- Outlined measures and/or design criteria that may be pursued to mitigate potential concerns or environmental effects.

1.2.2 The ES presents the information that the Applicant is required to provide as part of the process of EIA.

1.3 Scoping and Consultation

1.3.1 The scope of the ES was agreed with MCC through a scoping process that defined the study area, the environmental topics to be included in the EIA, and how they should be assessed. This took the form of a Scoping Report which was issued to MCC and key statutory and non-statutory bodies in July 2016. There has been an ongoing dialogue with MCC and other statutory and non-statutory bodies since this time.

1.3.2 The scoping process confirmed that the following topics should be studied in detail within the EIA:

- Ecology and Nature Conservation;
- Hydrology and Surface Water Quality; and
- Ground Conditions.

1.3.3 The findings of the assessments for each of these environmental topics is summarised in Sections 4.2 – 4.4 of this Non-Technical Summary.

1.3.4 Certain environmental topics which were concluded at the scoping stage to be unlikely to result in significant environmental effects have been considered outside of the EIA process, and in these instances standalone technical reports have been prepared for submission with the planning application. These topics include Landscape and Visual Impact, Historic Environment, Operational Noise and Construction Traffic.

1.3.5 Consultation with key statutory and non-statutory bodies is recognised as being critical to the preparation of the ES. It focuses attention on key environmental issues, and opens a dialogue to discuss methodologies for undertaking further investigations and possible mitigation throughout the Development. As such, consultation has formed a key part of the EIA process and has continued through all stages of the design of the Development.

1.3.6 A pre-application submission including an ES and supporting documents will be made to MCC and specialist and community consultees prior to submission of the formal planning application. During the pre-application consultation period consultees will have the opportunity to review and comment on the approach and findings of the ES and the other supporting documents.

1.3.7 DCWW are committed to public consultation, so in addition to the consultation with statutory and non-statutory bodies, engagement has also been undertaken with the local residents of Prioress Mill Lane.

2 Need and Alternatives

2.1 Need for the proposed Development

2.1.1 Dŵr Cymru Welsh Water ('DCWW') have identified three main drivers that have contributed to the proposed Development at Prioress Mill RWPS.

2.1.2 Prioress Mill is reaching the end of its operational life and has been identified as a high risk asset with operational and maintenance issues based upon the reliability, age and safety of the installed mechanical and electrical equipment. All mechanical and electrical assets are estimated to be 35 years old and are considered to be in poor condition.

2.1.3 Natural Resources Wales (NRW) allow DCWW to abstract water from the River Usk under specific conditions. These conditions are set to be tightened in December 2018 and the existing RWPS at Prioress Mill is not considered suitable to achieve operational consent conditions that would be applied from December 2018 onwards.

2.1.4 Finally, new European environmental laws require water intakes at pumping stations to be fitted with fish screens to prevent harm to fish and eel populations within the river. The existing water intake at Prioress Mill is not fitted with fish screens and therefore redevelopment of the water intake is required in order to comply with environmental law.

2.2 Alternatives

2.2.1 In line with the EIA Regulations, the ES provides a description of the main alternatives to the proposed Development, considered by the Applicant.

2.2.2 A 'No Action' alternative was considered by DCWW however under the circumstances described above this was not considered appropriate.

2.2.3 Refurbishing the existing RWPS at Prioress Mill was not considered to be a viable option. Although the refurbishment option would result in less impact to on site ecology compared to a complete replacement, undertaking refurbishment works would mean that pumping station operation would need to be shut down for a period exceeding six months over two successive years, which would prevent replenishment of Llandeggfedd Reservoir in 2017/18. In addition, due to the need to maintain flows during the refurbishment the construction programme would be significantly longer than for a new build project, resulting in a longer period of environmental disturbance to nearby sensitive receptors, including local residents.

2.2.4 Alternative locations for a new pumping station building in the immediate locality were considered, however the chosen location was considered to be the best option in terms of flood risk and ecological impact.

2.2.5 The option of re-using the existing intake location was considered, however in order to install fish screens the existing intake would need to be made much bigger. Due to various engineering and operational reasons the decision was made to construct a new water intake.

2.2.6 The size of the pumping station has largely been determined by the size of the pumping equipment and requirements for maintenance of the equipment. However, the overall building height was reduced following consideration of the visual impact by changing the method by which certain pieces of equipment were accessed for maintenance.

2.2.7 Various options were considered for the temporary construction access from the surrounding highways. Two options from Prioress Mill Lane were considered, one utilising the southern of the existing RWPS site accesses and one entering the site compound through the existing hedgerow opposite the abandoned piggery buildings. Due to the narrow and rural nature of Prioress Mill Lane, and the presence of residential traffic on this lane, the decision was taken to not use Prioress Mill Lane for construction traffic. Alternative access options from the A472 were therefore progressed.

3 The Proposals

The Existing Site

3.1.1 The existing site layout of Prioress Mill RWPS is shown in Figure 2. A selection of Site photographs are presented below.

3.1.2 The existing RWPS site is accessed from Prioress Mill Lane and comprises of a pumping station building adjacent to the southern bank of the River Usk which draws water in from the river via the water intake, removing any debris, and pumping it using 10 pumps to an offsite reservoir through two large underground pipes to the west of the pumping station. The existing pumping station building is approximately 7m high and was built in the early 1970s (with subsequent extensions).

The Existing Raw Water Pumping Station

The Existing Raw Water Pumping Station Viewed from the River Usk

Prioress Mill Lane

3.1.3 An area of surface car parking for eight cars is provided to the south of the pumping station building, and to the east of the existing pumping station building is a single storey brick built electrical transformer building. An area of woodland is located in the north western corner of the Site, which extends beyond the Site boundary to the west. Other soft landscaping on the existing RWPS site includes areas of amenity grassland, hedgerow, scrub, shrubs and coniferous hedgerow. In the north eastern corner of the Site is an area utilised by a neighbouring property as an informal allotment. The operational RWPS site is bound by 2.4m metal palisade or chain link fencing. To the west of the RWPS site part of the proposed Site comprises of an agricultural field, currently in arable use. This field is bound with hedgerows.

3.1.4 An electrical substation is located off site to the south of the RWPS. Overhead power cables connect to this substation to the north, west and south and some of these overhead lines cross the western edge of the RWPS site and the agricultural field to the west of the RWPS.

3.1.5 The River Usk borders the northern boundary of the proposed Site, beyond which are agricultural fields. The nearest main road is the A472 located approximately 250m to the south-west of the existing RWPS. Prioress Mill Lane, which is a single track dead end lane, runs north-eastwards from the A472 to the south east of the Site. The land use surrounding the existing RWPS is predominantly agricultural with scattered residential properties. The closest residential properties are located on Prioress Mill Lane, approximately 5m from the site boundary and 45m from the existing pumping station building. It should be noted however that the closest residential property will be approximately 35m away from the main construction works. A public right of way (PROW) (the Usk Valley Walk) is located to the north of the Site, but transects the Site as it heads north-south between the existing RWPS site and the agricultural field part of the Site.

The Proposed Development

3.1.6 The proposed Development layout is shown in Figure 3 and a site elevation is shown in Figure 4.

3.1.7 The proposed Development comprises the following elements:

- Setting up and operating a temporary construction compound to the west of the RWPS site in an adjacent agricultural field;

- Access to the construction compound from the public highway would initially be via a single access gate off Prioress Mill Lane (close to the junction with the A472), and then subsequently from a single 6m gate directly off the A474 (approximately 50m west of the junction with Prioress Mill Lane). Field reinstatement, with hedge re-planting, would be undertaken post construction;
- Temporary diversion of the Usk Valley Walk PROW;
- Temporary undergrounding of overhead powerlines on the western edge of the existing DCWW site to facilitate construction of the new pumping station building;
- Permanent overhead line diversion to the west of the new pumping station, involving building one new wooden pylon in the agricultural field on the northern bank of the River Usk;
- Formation of a temporary coffer-dam within the River Usk to enable construction of a new water intake with debris and fish screens, and stabilisation works for the new pumping station building (localised bank reinstatement to be undertaken, ensuring minimal changes to river flow path);
- Excavation and construction of new underground structures within the footprint of the new pumping station;
- Construction of new pumping station building containing six pumps, motors, internal surge control vessels and associated plant and equipment;
- New electrical equipment/ transformer equipment within the boundary of the existing DCWW site;
- New underground pipework connecting the new pumping station to the existing underground pipes that connect to the reservoir;
- Minor modifications to the existing site entrances on Prioress Mill Lane to increase the turning in radius of entrances 1 and 2 for large vehicles; and
- The existing pumping station would be decommissioned and then demolished, with underground voids filled.

3.1.8 The new pumping station would operate under a new abstraction license from NRW, however total abstraction volumes will not change compared to the existing license.

3.1.9 The new pumping station and water intake would be located immediately to the west of the existing pumping station building on land currently occupied by hard standing, amenity grassland, shrubs and woodland. The building would be roughly rectangular in plan and would comprise a pump hall in its northern half, and a Motor Control Centre (MCC) hall in the southern half of the building. The pump hall element of the building would have a pitched roof and would be a maximum height of 9.9m above ground level. The MCC hall to the south of the pump hall would also have a pitched roof, and would have a maximum height of approximately 6.4m above ground level.

3.1.10 A new underground structure would be constructed beneath the footprint of the pump hall which would also extend to the river bank to facilitate the water intake structure. The underground structure would extend to 10.5m below ground level at its deepest point adjacent to the river. A basement with a slab level 3m below ground level would be constructed beneath the footprint of the pump hall which would contain the six pumps, surge control vessels and associated valves. The screen and intake structure on the southern bank of the River Usk would include seven fish and debris screens.

3.1.11 Access to the new RWPS would be from the existing site entrance on Prioress Mill Lane. The proposed facility would entirely replace the existing facility at the Site and would operate under similar conditions once commissioned, with limited vehicle activity associated. Car parking for operational staff is currently available on the RWPS site and this existing car parking provision would continue to be used.

3.1.12 Once the replacement pumping station is operational, the existing pumping station would be decommissioned and demolished. The existing intake from the river would be re-instated to match the profile of the river bank upstream and downstream.

3.1.13 Proposed landscape proposals include areas of wildflower meadow together with native tree and shrub planting. In addition, species specific ecological measures will be implemented subject to licence agreements with NRW.

3.1.14 A new security fence would be installed around the perimeter of the RWPS site, and new lighting, security systems and CCTV would be installed where required.

Construction

3.1.15 Construction of the proposed Development is due to begin in early 2017 and by summer 2019 the replacement RWPS should be operational and the existing RWPS demolished. The existing RWPS would continue to operate while the construction of the replacement RWPS takes place.

3.1.16 The works can be divided into four main phases as detailed in Table 3-1. The works would mainly follow the order detailed in this table however many activities would be carried out simultaneously to reduce the overall length of the construction programme.

Table 3-1 Summary of Construction Phases

Phase	Activity	Approximate Date of Commencement	Approximate Duration
Phase 1 - Mobilisation and Advance Works	Tree/vegetation clearance. Establishment of site enabling, welfare and site compound	Early 2017	1 month
Phase 2 - Construction	Main Works – installation of coffer dam, excavate, pile, civils, construction, mechanical and electrical installation.	Spring 2017 – Summer 2018	16 months
Phase 3 - Commissioning	Commissioning of new intake, mechanical and electrical systems.	Summer - Winter 2018	7 months
Phase 4 – Decommissioning and Demolition of Existing Facility	Demolition of existing facility, landscaping.	Winter 2018 – Summer 2019	6 months
Phase 5 - Demobilisation, Handover and Completion	Reinstatement of construction compound, handover.	Summer 2019	1 month

3.1.17 It is anticipated that there will be approximately 20 staff based on site throughout the construction period, which will be increased to 30 staff during the peak phase of the construction. Typical working hours will be 07:00 to 19:00 hours on Monday to Friday and 08:00 to 13:00 hours on Saturday. The site will be closed on Sundays and Public Holidays. Construction works outside of the times specified would be with prior agreement with the local authority.

3.1.18 A temporary construction compound would be set up in the field adjacent to the RWPS which would contain site management offices, car parking, welfare facilities, machinery and equipment storage, fuel storage area, material storage and waste management facilities.

3.1.19 Access to the construction compound from the public highway would initially be via a single access gate off Prioress Mill Lane (close to the junction with the A472 where an existing field access is present), and then subsequently from a single 6m gate directly off the A474 (approximately 50m west of the junction with Prioress Mill Lane). A Construction Traffic Management Plan (CTMP) would be in place for the duration of the works which would help to minimise the impact of construction vehicles on the local highway. A CTMP has been submitted with the planning application.

3.1.20 In order to control and manage the potential environmental effects typically associated with the construction phase of projects, a Project Environmental Management Plan (PEMP) would be developed and implemented. This would specify a range of measures to manage the environmental effects that could arise and would provide, for example, details of controls in relation to noise and vibration; dust; protection of water and ecological resources. Contractors would be required to implement the PEMP, ensuring that monitoring and auditing is undertaken where this has been specified. PEMPs are an established method of managing environmental effects resulting from demolition and construction works and they are successfully adopted for other DCWW construction projects. A Site Waste Management Plan (SWMP) would also be adopted to ensure best practice management of waste, and to identify opportunities for minimising waste generated on site.

4 Description of Environmental Impacts

4.1.1 This Chapter of the Non-Technical Summary explains the outcome of the EIA for the proposed Development at Prioress Mill RWPS. The following sections describe the impacts of the proposed Development on each environmental topic listed in paragraph 1.3.2 above. They identify any mitigation measures needed to reduce impacts, and any environmental impacts that are likely to remain after mitigation has been applied.

4.2 Ecology and Nature Conservation

4.2.1 An assessment has been undertaken of the potential effects of the proposed Development on ecology and nature conservation. The assessment has been undertaken in accordance with Guidelines for Ecological Impact Assessment in the UK, produced by the Chartered Institute of Ecology and Environmental Management (CIEEM). This ecological impact assessment has been informed by a desk study, consultation with Natural Resource Wales (NRW) and detailed and targeted ecological field surveys.

4.2.2 The proposed Development would lie close to the River Usk, which is designated as a Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI) and is of international importance. The primary reasons for designation are the habitats and species present, including otters and a range of fish species. The proposed Development site contains woodland and species-rich hedgerows which are used by dormice, foraging/commuting bats and nesting birds. In addition, invasive plants including Indian Balsam and Giant Hogweed have been recorded within the proposed Development site.

4.2.3 The proposed Development will require the removal of areas of hedgerow and woodland within the Site boundary. Measures embedded into the scheme design to minimise impacts to otters and dormice would be agreed with National Resources Wales as part of the process of obtaining a

licence for clearing vegetation on the Site. Other embedded design measures (notably the use of a coffer dam during construction of the new intake, appropriate timing of the works, implementation of a Project Environmental Management Plan (PEMP), following best practice guidance when working in/near areas of invasive plants) would ensure that the impact of construction activities on ecological receptors are not anticipated to be significant.

4.2.4 The installation of fish screens to the new water intake would reduce the impact to fish within the River Usk compared to the existing water intake. The proposals include a considerable amount of native tree and shrub planting, as well as areas of wildflower meadow, which will improve the biodiversity of the Site.

4.2.5 Overall, effects of the proposed Development, during construction and operation are considered to be not significant, with respect to the EIA Regulations.

4.3 Hydrology and Surface Water Quality

4.3.1 An assessment has been undertaken of the potential effects of the proposed Development on the water environment, in particular hydrology, flood risk and surface water quality.

4.3.2 The proposed Development is situated on the southern bank of the River Usk, on the site of the existing operational RWPS. The River Usk potentially poses the greatest flood risk to the area as well as being the water feature most likely to be affected by the construction or operation of the new pumping station, as well as by demolition of the existing pumping station. Other nearby sensitive receptors include Berthin Brook, Cayo Brook and an unnamed stream, which are all tributaries of the River Usk.

4.3.3 NRW Flood Risk Maps indicate that over 90% of the Site is at a low risk of flooding from fluvial, reservoir and surface water sources. Less than 10% of the Site is described as at medium-high risk of flooding from these sources; these areas are located along the northern boundary of the Site, adjacent to the River Usk, and at the location of the existing operational pumping station. However, NRW Flood Maps do not account for the presence of all flood defences. There is negligible risk of flooding from coastal, tidal and groundwater sources.

4.3.4 There is a concrete retaining wall that runs along the majority of the northern boundary of the existing operational site and, together with a flood bund, protects the Site from river flooding to above the 0.1% AEP (1 in 1000 year) standard. Although this wall will be demolished, the site will be raised to a level above the 0.1% AEP level and hence, in addition to the incorporation of an internal flood bund, flood warning service and flood awareness activities, it is considered that the risk of flooding to the site is negligible during the construction, demolition and operational phases.

4.3.5 The proximity of the Site to the River Usk means that there is potential for pollutant releases or sedimentation to affect the river. Best working practices will be implemented through application of a Project Environmental Management Plan (PEMP) to mitigate the risk of pollution during construction, including the collection and treatment of surface water on the site using appropriate sustainable drainage system techniques and the creation of bunded, dry working areas. An application would be submitted to NRW for a Flood Risk Activity Permit (FRAP). The FRAP would ensure that works do not lead to a deterioration in river flows or water quality, cause harm to the environment or lead to an increase in flood risk. Any additional water quality monitoring or construction measures required by NRW beyond those included in the PEMP would be provided in order to mitigate any remaining potential water quality impacts from in-channel works and to obtain the FRAP. Following the application of these mitigation measures, the potential for significant effects on the water quality of the Usk to occur during construction is considered negligible.

4.3.6 The proposed Development will operate in a similar fashion to the existing pumping station, therefore there are no predicted effects to surface water quality during the operational phase.

4.4 Ground Conditions

4.4.1 An assessment has been carried out which considers the potential effects of the proposed Development on contamination associated with the previous historical use of the site and surrounding area. The assessment has been carried out in accordance with current guidelines and best practice approaches, with due regard for relevant legislation and policy.

4.4.2 The published geology of the proposed Development site comprises alluvium deposits of clay, silt, sand and gravel underlain by mudstone, and ground investigations undertaken during 2016 indicate that ground conditions are consistent with this. In terms of previous historical use, ordnance survey plans indicate that the existing RWPS was constructed in the 1970s, prior to which the Site was occupied by Prioress (Corn) Mill and agricultural fields since 1886.

4.4.3 Potential impacts considered in the assessment included the risk of pollution to the River Usk, ground water, ecological receptors and future site users from disturbed contamination, and the potential impact to the proposed buildings from contamination. The proposed Development has been designed with due regard to ground conditions, a Project Environmental Management Plan (PEMP) and Site Waste Management Plan (SWMP) would be put in place prior to the commencement of the construction phase, and good practice methods would be employed throughout the construction phase to mitigate potential impacts on receptors. In particular, the contractor would prepare detailed method statements and protocols for activities such as excavation and dewatering, storage of fuels, chemicals and oils, vehicle washing, pollution control and emergency contingency, during construction.

4.4.4 Measures to protect underground building foundations and services from potential risks arising due to contamination within the application Site would be designed for; such measures are likely to include the introduction of appropriate concrete classification and design, installation of gas protection measures if applicable and use of appropriate pipework for services.

4.4.5 Overall, effects of the proposed Development, during construction and operation are considered to be not significant, with respect to the EIA Regulations.

Cumulative Effects

4.4.6 Two types of cumulative effects have been considered:

- Intra-project Effects: The combination of individual environmental effects from one development (in this case, the proposed Development) on a particular receptor; and
- Inter-project Effects: The combination of effects from several developments (in this case, the proposed Development together with other reasonably foreseeable schemes (hereafter referred to as ‘cumulative schemes’)), which individually might be insignificant, but when considered together could create a significant cumulative effect.

4.4.7 In relation to intra-project effects, taking into account the results of the technical assessments reported within the ES, it has been determined that there is limited potential for intra-project cumulative effects to arise as a result of the Development. This is due mainly to the proposed implementation of a Project Environmental Management Plan (PEMP) and the nature of any predicted effects which tend to be receptor specific.

4.4.8 In relation to inter-project effects, the combined effects of the proposed Development together with other 'reasonably foreseeable' development proposals ('cumulative schemes') have been assessed. The cumulative schemes are located quite a distance from the proposed Development. The implementation of mitigation measures via a PEMP for the proposed Development and the cumulative schemes would minimise inter-project cumulative effects during construction.

5 Conclusion

5.1.1 The assessment has followed the process required by the EIA Regulations. It has assessed likely impacts and concludes that the proposed improvement works would result in environmental effects that are not significant with respect to the EIA Regulations.

6 Further Information

6.1.1 A full copy of the ES will be available to view at MCC offices, together with selected deposit locations.

6.1.2 Copies of the ES documents or information on the development may be obtained from:

Dŵr Cymru Welsh Water
Pentwyn Road
Nelson
Treharris
Mid Glamorgan
CF46 6LY.
Telephone: 0800 052 0145.

6.1.3 A copy of Volume 1: Non-Technical Summary is available free of charge (both English and Welsh language versions). The ES (Volumes 1, 2, 3 and 4) is also available for purchase as a hard copy and on CD/DVD.

7 References

Ref 1-1 Welsh Government (2016) Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations.

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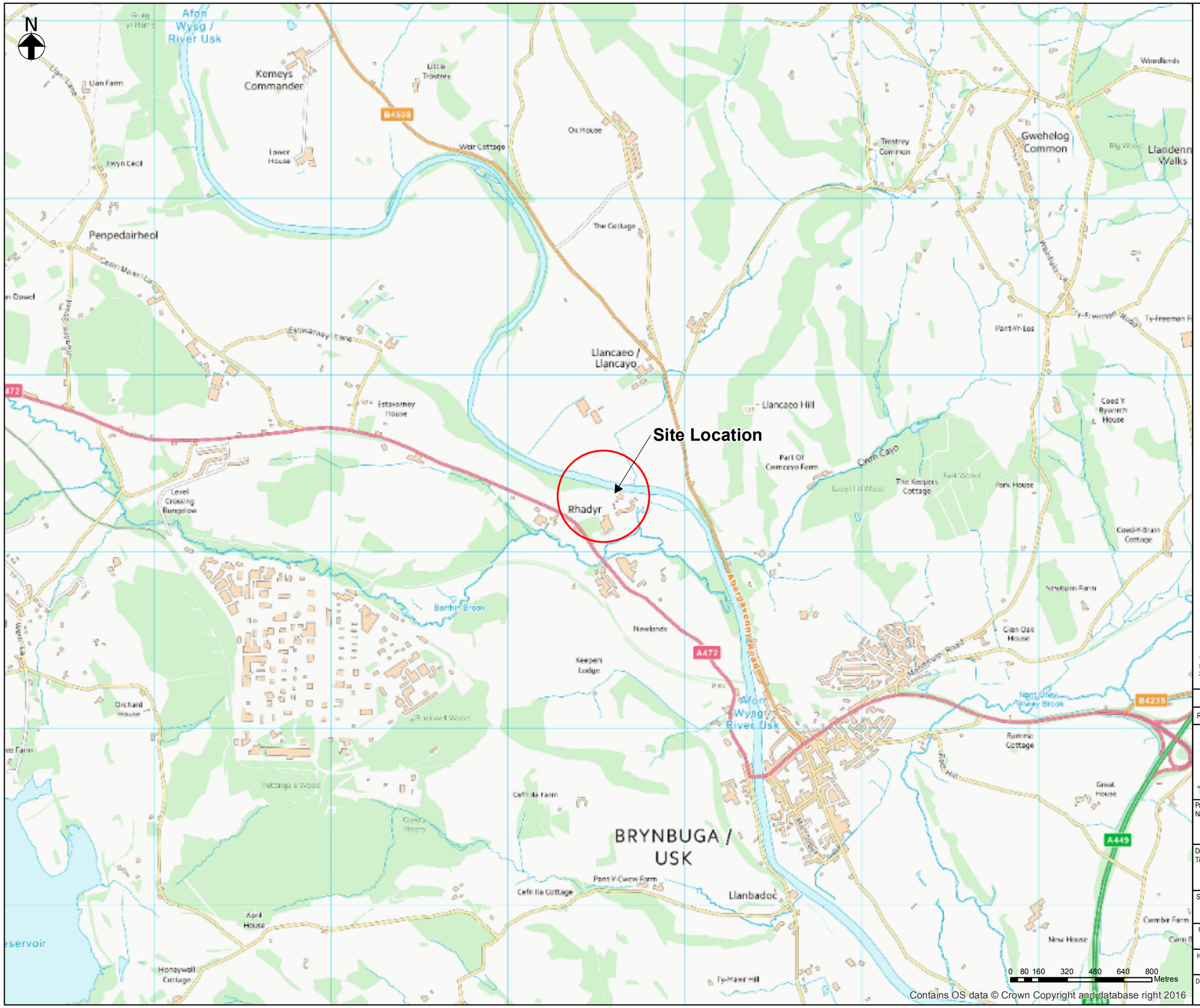

Rev.	Date.	Drawn.	Description.	Chkd.	Appd.	Date.
02	2016-11-15	AD	Amended as per comments	KT	LW	2016-11-15

Capital Delivery Alliance
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Project Name.
PRIORESS MILL RAW WATER PUMPING STATION

Drawing Title.
FIGURE 1
SITE LOCATION

Suitability.	Suitability Code.
ISSUED FOR INFORMATION	02

Originator	Designer	Date.
AD	AD	15/11/2016

Internal Project Number	Scale	Rev.
UA007902	1:20,000	02

Drawing Number.
2873-W-201-HYD-XX-XX-DR-NX-05401

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NOTES:

1. DRAWING DETAIL IS INDICATIVE AND ISSUED FOR INFORMATION PURPOSE ONLY.
2. THE DRAWING IS BEST VIEWED IN COLOUR AND AT A1 SIZE

KEY:

PLANNING APPLICATION BOUNDARY

Rev.	Date.	Drawn.	Description.	Chkd.	Appd.	Date.
P02	06.01.17	RM	AMENDED ISSUE	CD	KT	06.01.17
P01	14.10.16	RM	FIRST ISSUE	JB	NJ	14.10.16

Capital Delivery Alliance
Cynghrair Cyflawni Cyfalaf

Ty Awen, Spooner Close, Coed Kernew, Newport, NP10 8FZ

Project Name.	PRIORESS MILL RWPS
Drawing Title.	FIGURE 2 PLANNING APPLICATION BOUNDARY
Suitability.	ISSUED FOR INFORMATION
Suitability Code.	02
Originator.	RM
Designer.	JAB
Date.	06.01.17
Internal Project Number.	–
Scale.	1:1000
Rev.	P02
Drawing Number.	2873-W-201-HYD-XX-XX-DR-NX-05402

Dwr Cymru Cyf gives this information as to the position of its underground apparatus by way of general guidance only on the strict understanding that it is based on the best information available and no warranty as to its correctness is relied upon in the event of excavations or other works made in the vicinity of the company's apparatus and any onus of locating the apparatus before carrying out any excavations rests entirely on you. It must be understood that the furnishing of the information is entirely without prejudice to the provision of the New Roads and Streetworks Act 1991 and of the Company's right to be compensated for any damage to its apparatus.

Dwr Cymru Cyf has no duty to identify private apparatus and the information as to the position of the private apparatus is given by way of general guidance only on the strict understanding that it is based on the best information available and no warranty as to its correctness is relied upon. Not all private apparatus is identified but their presence should be anticipated.

A1

NOTES:

1. DRAWING DETAIL IS INDICATIVE AND ISSUED FOR INFORMATION PURPOSE ONLY.
2. EXISTING SERVICES DRAWN AT APPROXIMATE POSITION FROM RELEVANT SERVICE PLANS
3. THE ACCURACY OF SERVICES INFORMATION SHOULD BE CONFIRMED BY THE CONTRACTOR. DCWW ACCEPT NO RESPONSIBILITY FOR THE ACCURACY OF UTILITIES INFORMATION
4. THE DRAWING IS BEST VIEWED IN COLOUR AND AT A1 SIZE
5. DRAFT COMPOUND LAYOUT SUBJECT TO CHANGE, INDICATIVE ONLY

KEY:

- PLANNING APPLICATION BOUNDARY
- PROPOSED COMPOUND ACCESS GATE

TEMPORARY COMPOUND AREA KEY:

- HAUL/MUCK HAUL ROAD
- PLANT & LAYDOWN
- WORKSPACE
- SITE WELFARE
- CAR PARK SPACE
- TOP SOIL & MUCH STORAGE
- GATE MAN

Craig y Garcyd
Path (um)
PUBLIC RIGHT OF WAY (TO BE DIVERTED/CLOSED DURING WORKS)
ROW
ROW
BANK
OVERHEAD 11kV
PROPOSED OVERHEAD PERMANENT DIVERSION
ETL
OVERHEAD 66kV
BURIED 11kV
PROPOSED INTAKE
EXISTING INTAKE
EXISTING RWPS
BANK
MUCK HAUL ROAD
PLANT & LAYDOWN
OVERHEAD LENGTH TO BE DIVERTED UNDERGROUND FOR DURATION OF WORKS
OVERHEAD 66kV
EXISTING PRE-STRESSED CONCRETE RISING MAINS
WORK SPACE
HAUL ROAD
TOP SOIL & MUCK STORAGE
EXISTING AIR VALVES (TO BE ABANDONED)
EXISTING TRANSFORMER INFRASTRUCTURE
PROPOSED LANDSCAPING
Millers Cottage
Prioress Mill Cottage (Mill)
BURIED 11kV
SITE WELFARE
SITE WELFARE
EXISTING ISOLATION VALVE (TO BE ABANDONED)
NCE 2
El Sub Sta
ENTRANCE
Millstream Cottage
Pond
Pond
PROPOSED TRANSFORMER INFRASTRUCTURE
OVERHEAD 66kV
HAUL ROAD
PYLON
GATE MAN
CAR PARK SPACE
ACCESS OPTION 1 6m WIDE COMPOUND ACCESS GATE TO HAUL ROAD
A472
PRIORESS MILL LANE
Vehicle Disinfectant Dip
Coleg Gwent
FB
Cleddon Cottage
ACCESS OPTION 2 ≈4m WIDE EXISTING FIELD ACCESS
Coleg Gwent Equestrian Centre
Sluices
New Villas
Berthin
LB
Bwthyn Bach

Dwr Cymru Cyf gives this information as to the position of its underground apparatus by way of general guidance only on the strict understanding that it is based on the best information available and no warranty as to its correctness is relied upon in the event of excavations or other works made in the vicinity of the company's apparatus and any onus of locating the apparatus before carrying out any excavations rests entirely on you. It must be understood that the furnishing of the information is entirely without prejudice to the provision of the New Roads and Streetworks Act 1991 and of the Company's right to be compensated for any damage to its apparatus.

Dwr Cymru Cyf has no duty to identify private apparatus and the information as to the position of the private apparatus is given by way of general guidance only on the strict understanding that it is based on the best information available and no warranty as to its correctness is relied upon. Not all private apparatus is identified but their presence should be anticipated.

Rev.	Date.	Drawn.	Description.	Chkd.	Appd.	Date.
P11	06.11.17	RM	AMENDED BOUNDARY	CD	KT	06.01.17
P10	15.11.16	JAB	AMENDED BOUNDARY	JAB	JAB	15.11.16
P09	07.11.16	RM	ADDED TOPO INFORMATION	JAB	JAB	07.11.16
P08	12.10.16	RM	ADDED CIVIL LAYOUT	JAB	JAB	12.10.16
P07	11.10.16	RM	REVISED SCREENS	JAB	JAB	11.10.16
P06	06.10.16	RM	REVISED PS FOOTPRINT	JAB	JAB	06.10.16
P05	09.09.16	JAB	REVISED PS FOOTPRINT	JAB	JAB	09.09.16
P04	07.07.16	JAB	REVISED PS FOOTPRINT	JAB	DS	08.07.16
P03	22.06.16	JAB	REVISED ACCESS OPTIONS	JAB	NJ	22.06.16
P02	27.05.16	JAB	ADDED ACCESS OPTION	NJ	SH	31.05.16
P01	19.05.16	JAB	WORK IN PROGRESS	NJ	SH	19.05.16

Capital Delivery Alliance
Cynghrair Cyflawni Cyfalaf

Ty Awen, Spooner Close, Coed Kernew, Newport, NP10 8FZ

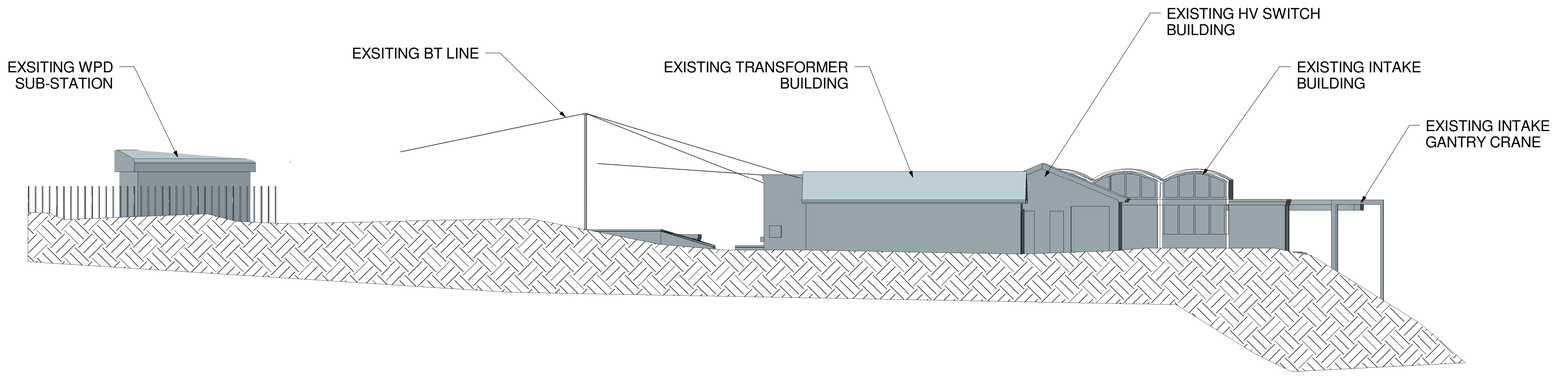
Project Name. PRIORESS MILL RWPS

Drawing Title. FIGURE 3 PROPOSED DEVELOPMENT LAYOUT

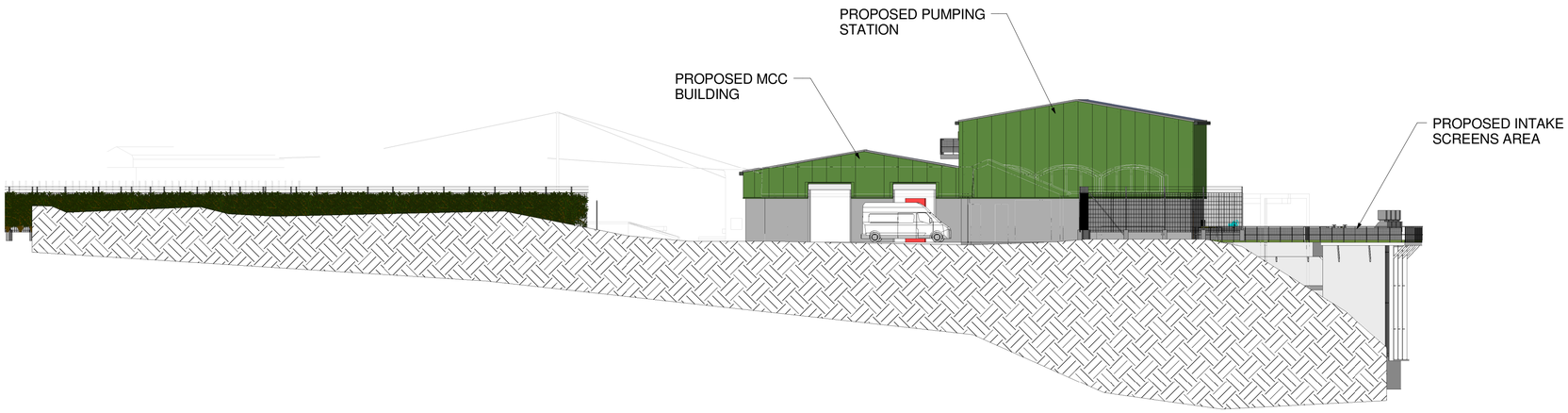
Suitability.	Suitability Code.
ISSUED FOR INFORMATION	S2

Originator.	Designer.	Date.
JAB	JAB	06/01/17
Internal Project Number.	Scale.	Rev.
–	1:1000	P11

Drawing Number. 2873-W-201-HYD-XX-XX-DR-XX-05200



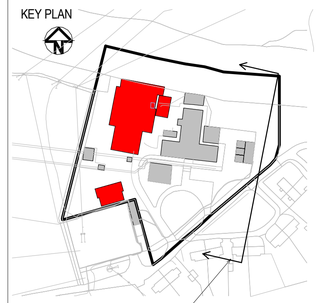
1 Existing Elevation Looking West
1 : 200



2 Proposed Elevation Looking West
1 : 200

NOTES: A1

KEY PLAN



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
2. ALL LEVELS ARE IN METRES RELATIVE TO AOD.
3. DO NOT SCALE FROM THIS DRAWING.

Rev.	Date.	Drawn.	Description.	Chkd.	Appd.	Date.

Capital Delivery Alliance
Cynghrair Cyflawni Cyfalaf

Ty Awen, Spooner Close, Coed Kernew, Newport, NP10 8FZ

Project Name.	PRIORESS MILL RWPS
Drawing Title.	FIGURE 4 ELEVATIONS (WEST)
Suitability.	ISSUED FOR INFORMATION
Suitability Code.	S2
Originator.	JPS
Designer.	JB
Date.	09/11/16
Internal Project Number.	UA007902
Scale.	As indicated
Rev.	P2
Drawing Number.	09-ZZ-DR-XX-05205

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