



Cyngor Bwrdeistref Sirol
MERTHYR TUDFUL
MERTHYR TYDFIL
County Borough Council

Demolition Method Statement
For
Taff & Crescent Streets
Merthyr Vale
Merthyr Tydfil

ALL PERMANENT AND TEMPORARY WORKS IN CONNECTION WITH: -

**DEMOLITION ,INCLUDING ASBESTOS REMOVAL OF 130 PROERTIES AND 6 GARAGES AT
TAFF AND CRESCENT STREETS, MERTHYR VALE**

Contract Requirements.

Code of Practice BS6187-2011 applies to all aspects of this project.

The Contractor will erect an external heras fencing to the circumference of the whole site. All fencing to be securely fixed and maintained for the duration of the contract. The Contractor will form secure entrance doors to permit access to plant and other vehicles at the point indicated on the attached plan.
The Contractor will secure the site and provide hygiene facilities, all as described elsewhere in this tender documentation. The Contractor will undertake risk assessments of all the planned works and provide details of method statements to the Supervising Officer.

Protected Species.

The buildings have been the subject of a **European Protected Species Survey** for the protection of Bats. A copy of the report and findings has been included within these tender documents

Asbestos.

The Contractor will remove all licensed and non licensed asbestos containing materials as identified in the attached PDR asbestos survey, and in accordance with the Asbestos Removal Specification attached to this specification.
These works will be completed to the satisfaction of the Supervising Officer prior to the demolition works to the main structure.

Soft Strip.

The Contractor will undertake removal of all fixed furniture, shelves, cupboards, staging and flooring.
The Contractor will remove all carpets and soft furnishings.
The Contractor will remove all doors, door linings and architraves.
The Contractor will remove all window boards and remaining blinds etc.
The Contractor will remove all skirting boards, trims and the like.
The Contractor will remove all suspended and fixed ceilings.
The Contractor will remove all hygiene facilities (wc's, baths, handbasins, soap dispensers, towel dispensers etc). All such material above to be recycled and/or disposed of in accordance with current regulations.

Mechanical and Electrical Services.

All services will be disconnected, purged and isolated, prior to the contract start date, and certification will be provided to the Contractor.

The Contractor will remove all heating service pipe work and radiators, all water service pipe work and all mechanical equipment from the building. The Contractor will make allowance for the recycled/scrap value of all recovered materials and show this in his tender documentation as an offset to his costs.
The Contractor will remove all electrical supply equipment and luminaires and fittings from all of the buildings and indicate the cost offset in a like manner.
The Contractor will make allowance for the regulated disposal of all of the above materials that require such disposal.
NOTE. Electrical switchgear itemised in the PDR survey will be disposed of as contaminated waste.
Heating and ventilation equipment so identified will also be disposed of as contaminated waste.

Demolition.

The Contractor will undertake the controlled demolition of the main house structures following the RAMS that has previously been notified.

The Contractor will excavate and remove the foundations below the demolished building, grading and compacting the imported fill material to suit the prevailing ground levels.

The Contractor will grub up all drainage runs and terminate at inspection chambers. All resulting excavations will be backfilled with loose fill material to original level and compacted in accordance with the specification.

The exact order of works will be determined by the Contractor on site, with the exception of removal of the roofs to all blocks which will only be undertaken immediately before final demolition of the main structures

Demolition of structures **will** include removal of concrete slabs and ring beam(s).. The Contractor will dispose of all hazardous material by licensed carrier to licensed disposal site as instructed in the asbestos removal specification. The Contractor will dispose of all demolition materials in accordance with current legislation, and will keep accurate daily records of Tonnages removed from site and records of acceptance at tipping sites.

CONTRACTOR TO COMPLY WITH SPECIAL REQUIREMENTS IN RELATION TO STATUTORY BODIES

The Contractor shall comply with the Special Requirements in relation to:-

- ELECTRICITY GENERATING AND DISTRIBUTION COMPANIES,
- WALES & WEST UTILITIES,
- ENVIRONMENT AGENCY,
- BRITISH TELECOMMUNICATIONS PLC,
- WATER AND SEWERAGE COMPANIES,
- THE HIGHWAY LIGHTING SYSTEM,

as set out in the pages immediately following these Conditions of Contract. Compliance with such Special Requirements shall not relieve the Contractor of any of his other obligations and liabilities under the Contract and fulfilment of such other obligations and liabilities shall not relieve him of his responsibility to comply with the said Special Requirements.

SPECIAL REQUIREMENTS IN RELATION TO ELECTRICITY GENERATING AND DISTRIBUTION COMPANIES

1. In these Special Requirements the following terms shall have the meanings assigned to them:-

(a) 'Company' means:-

Western Power Distribution AND National Grid Companies

or its successors and assigns.

(b) 'Company Representative' means the Chief Civil Engineer of the said 'Company' defined at 1(a) of this Special Requirement or other duly Authorised Engineer Representative and/or Agent appointed for the time being to act on behalf of the said 'Company'.

(c) 'Plant or Equipment' means any plant equipment gear machinery apparatus or appliance or any part thereof as defined in the Construction (General Provisions) Regulations 1961 and the Construction (Lifting Operations) Regulations 1961 owned leased or rented by the said 'Company' defined at 1(a) of this Special Requirement.

(d) 'Electricity Cable(s)' means any cabling including but not limited to 'Overhead Electricity Lines' or 'Buried Electricity Cables' owned leased or rented for the purposes of electricity transmission and supply by the said 'Company' as defined at 1(a) of this Special Requirement.

2. Before commencing any work or moving heavy plant or equipment over any portion of the Site owned occupied leased or rented by the Company the Contractor shall consult the Company Representative as early as possible and in any event not less than fourteen days before it is proposed to commence work to ascertain whether any Electricity Cable(s) or Plant or Equipment will be affected by the Works and to confirm details of any restrictions or requirements that the Company Representative may consider necessary for the safe carrying out of the Works. The Company Representative, can be contacted at the following point:-

Address:- Western Power Distribution
Mapping Centre – NRSWA Section
Lamby Way
Rumney
CARDIFF
CF3 2EQ

Telephone:- 02920 535383

Fax:- 02920 535390

3. Where such details show that the Works or the movement of plant or equipment may endanger the equipment of the Company, the Contractor must ensure that the presence of any Electricity Cable(s) Plant or Equipment can be indicated by markers to be supplied by the Company and placed by the Contractor under the supervision of the Company Representative. The Contractor shall ensure that all Electricity Cable(s) Plant or Equipment are adequately protected from damage to the satisfaction of the Company Representative.

4. The work shall be carried out in conformity with the Requirements of the Health and Safety Executive Guidance Notes:-

(i) No. GS6 'Avoidance of Danger from Overhead Electric Cables'

(ii) No. GS33 'Avoiding Danger from Buried Electricity Cables'

5. Except under such restrictions as the Company Representative may impose for the safety of persons and the protection of property **WORKS SHALL NOT BE CARRIED OUT** or cranes or other plant erected operated and/or dismantled or materials stored **WITHIN THE 'PROHIBITED SPACE' WHICH IS THAT SPACE WITHIN A RADIUS OF:-**

a) 15.0M OF LIVE OVERHEAD ELECTRICITY LINES WHERE LINES ARE CARRIED ON STEEL TOWERS

b) 9.0M OF LIVE OVERHEAD ELECTRICITY LINES WHERE THE LINES ARE CARRIED ON WOOD POLES

TOGETHER WITH ANYWHERE VERTICALLY ABOVE THIS SPACE. These distances shall be maintained at all times between any Overhead Electricity Lines or anything connected to such Overhead Electricity Lines owned leased or rented by the Company.

6. The Contractor and any sub-contractor employed by him shall particularly note and bring to the attention of their respective employees the danger of 'Flash-over' where as a result of the very high voltages being transmitted potentially lethal shocks can occur in close proximity to live Overhead Electricity Lines WITHOUT ANY CONTACT BEING MADE.

7. Debris produced when trimming or felling trees and/or from demolition MUST NOT fall or be projected into the 'Prohibited Space'. Similarly excavation spoil must not be dumped or accumulated so as to cause infringement of the 'Prohibited Space'.

8. Special care MUST be taken when using material, which shall include but not be limited to, rope wire and/or measuring tape and the like.

9. The Contractor shall exercise particular care when carrying out work which involves the use of water jets or piped slurry. Liquids when being carried or used for the purposes of the Works MUST NOT be allowed to splash fall or otherwise be projected into the 'Prohibited Space'.

10. If a crane or other equipment is used crane stops fencing and warning notices shall be provided by the Contractor to ensure that there can be no encroachment on the 'Prohibited Space' by crane load or other equipment even if the crane load or equipment slips fails or overturns.

11. Portable ladders used in the vicinity of the live Overhead Electricity Lines shall be of wood or other non-conducting material and shall not be reinforced by metal attachments running along stiles of the ladders. Even ladders without reinforcement can lead to serious electrical shocks if allowed to come close to live overhead equipment and therefore special precautions must be taken to ensure that the ladder cannot slip and encroach on the 'Prohibited Space'.

12. Any disturbance of or attachment to any Plant or Equipment or Electric Cable(s) shall ONLY be carried out by the staff of the Company or its authorised contractors and/or agents.

13. Long objects, which shall include but not be limited to, pipes scaffold poles ladders and/or long handled tools or any object of such length that if carried vertically could infringe on the 'Prohibited Space' MUST BE CARRIED HORIZONTALLY.

14. Where for the purposes of completing the Works in accordance with the Contract the need arises to operate within and/or travel through the 'Prohibited Space' the Contractor shall give the Company Representative not less than twenty eight days written notice of the dates upon which it is intended to operate plant or equipment or carry out any work. The permission of the Company Representative MUST be obtained in writing BEFORE any plant or equipment is operated or work of any kind is carried out WITHIN the above distances. Such operations or work shall only be carried out in the presence of the Company Representative unless notice shall have been obtained in writing from the Company Representative that such a presence on Site is not required.

15. In the event of the Company requiring emergency and/or maintenance work to be executed on the Electricity Cable(s) whether Overhead Electricity Lines or Buried Electricity Cables during the period of the Contract the Contractor shall afford all reasonable facilities and access to the staff of the Company or its authorised contractors and/or agents.

16. Work should not be carried out in the immediate vicinity of the overhead lines during periods of poor visibility. If this is not reasonably practicable additional precautions MUST be taken including but not limited to the erection of appropriate barriers to ensure maintenance of the appropriate safety clearances.

17. Compliance with the above requirements shall not relieve the Contractor of any of his obligations under the Contract or of the responsibility for taking every precaution to avoid risk to persons and/or damage to property.

SPECIAL REQUIREMENTS IN RELATION TO WALES & WEST UTILITIES

1. In these Special Requirements the following terms shall have the meanings assigned to them:-

- a) 'Company' means WALES & WEST UTILITIES.
- b) 'Company Representative' means the staff of WALES & WEST UTILITIES or its Authorised Representatives and Agents.
- c) 'Apparatus' means all surface or sub-surface equipment and plant including any gas pipeline(s), main and/or service owned leased or rented by WALES & WEST UTILITIES.

2. Before commencing any work or moving heavy plant or equipment over any portion of the Site the Contractor shall confirm details of any Apparatus within the Site with the Company Representative, who can be contacted at the following point:-

WALES & WEST UTILITIES
Wales & West House
Spooner Close
Celtic Springs
Coedkernew
Newport
NP10 8FZ.

Telephone:- 02920 278682

Address: -

Fax:- 01179 536 791

3. Where such details show that the work or the movement of plant or equipment on the Site may endanger any Apparatus, the Contractor shall give the Company Representative at least 7 days written notice of the date on which it is intended to commence such Works or the movement of plant and equipment in order that the presence of any sub-surface Apparatus can be indicated by markers to be supplied by the Company and placed by the Contractor under the supervision of the Company Representative. The Contractor shall ensure that all Apparatus, is adequately protected from damage and such protective measures shall be to the satisfaction of the Company Representative.

4. In the event of a Company marker being disturbed for any reason it shall not be replaced other than in the exact position and to its former depth unless the repositioning is carried out at the direction and under the supervision of a Company Representative.

5. The Contractor shall carry out all work in connection with the Contract with reference to the requirements of the following publications:-

- (i) Institute of Gas Engineers : IGE/SR/18 Part 1 (1990), Communication 1947 - 'Safe Working in The Vicinity of Gas Pipelines, Mains and Associated Installation' (Part 1 : 'Operating at Pressures in Excess of 2 Bar').
- (ii) Health and Safety Executive (HSE) : HS (G) 47 - 'Avoiding danger from underground services'.
- (iii) British Gas Engineering Standard: BGC/PS/SSW2 - 'Code of Practice for Safe Working in The Vicinity of British Gas Transmission Pipelines and Associated Installations Operating at Pressures in Excess of 7 Bar'.
- iv) British Gas Cathodic Protection Standard GBE/ECP1.

6. The Contractor shall avoid the disturbance of Apparatus more than is absolutely necessary for the completion of the Works in accordance with the Contract. In particular 'Thrust Blocks' and other such supports shall NOT be disturbed without the specific written approval of the Company Representative. The Contractor should particularly note that large diameter Gas pipelines may either be:-

- a) Transmission pipelines frequently operating at pressures exceeding 7 bar.
- b) Low pressure local distribution mains.

For differing reasons either type poses a considerable hazard to safety if damaged. The Contractor shall also note that smaller Gas distribution pipes may be of yellow plastic, cast iron, steel or other such material and that unless specifically known to the contrary any such services encountered during the course of the Works should be assumed to be Gas pipelines and treated as such in accordance with these Special Requirements until positively identified otherwise and the Engineer so notified in writing.

7. No vehicle plant or machinery shall cross stand operate or travel within 3.0m of any Apparatus particularly Gas pipelines except as approved by the Company Representative. The Contractor shall agree his methods of working near any Apparatus with the Company Representative and ensure that any Apparatus is adequately protected from damage by the use of wooden sleeper tracks or reinforced concrete rafts at crossing points as appropriate. Temporary fencing of adequate strength shall be erected to regulate the movement of vehicles plant and machinery in the vicinity of Apparatus. All such protective measures shall be to the satisfaction of the Company Representative.

8. Where for the purposes of completing the Works in accordance with the Contract it is necessary to lay a new service across an existing Gas pipeline whether above or below a minimum clearance of 0.6m shall be left between the outside of the Gas pipeline and the new service to be installed. Under no circumstances shall a new service be laid parallel above or below a Gas pipeline. Hydraulic or other form of pressure testing of any new services shall not be permitted within 6.0m of any Gas pipeline unless precautions have been taken involving the use of pre-installation tested pipeline having a design factor of 0.3 for a distance of 6.0m either side of the Gas pipeline and/or such additional precautions including but not limited to sleeving barriers and the like as the Company Representative may require in consultation with the Engineer.

9. The Contractor shall particularly note that Gas pipelines and other Apparatus of the Company is usually cathodically protected to Company standard GBE/ECP1. The Company will require to carry out interaction tests to determine whether its own system will be adversely affected by any new service and/or its protective measures. Any work requiring the removal modification and or movement of Apparatus shall only be carried out by the staff of the Company and/or its authorised contractors and Agents. In the event that any cathodic protection posts and/or associated Apparatus require to be removed replaced and/or moved for the purposes of the Works the Contractor shall give not less than seven days written notice of the requirement to the Company.

10. When excavating or backfilling around Apparatus, the Company Representative shall be given not less than 3 days written notice, of the Contractor's intentions in order that he may supervise the works.

11. Backfilling shall be in 150mm layers, or as may otherwise be directed, consolidated layer by layer to the satisfaction of the Company Representative. Fill shall be free from flints stones and carbonaceous material. Where slabbing reduces such depth clean sand filling shall be used.

12. All excavation adjacent to Apparatus is to be carried out by hand until the exact extent and/or location of Apparatus is known. The Contractor shall note the following:-

- 1) Mechanical borers shall not be used within 5.0m of Apparatus
- 2) Hand held power assisted tools shall not be used within 1.5m of Apparatus without the supervisory presence of a Company Representative

To prevent any movement of Apparatus during excavation, complete shuttering shall be used as directed by the Engineer if:-

- a) Excavation is deeper than the depth of cover of adjacent Apparatus
- b) Excavation is within 3.0m of Apparatus in stable soil
- c) Excavation is within 6.0m of Apparatus in unstable soil

Where excavation results in the exposing of Gas pipelines or other Apparatus protective timber cladding shall be applied to the Gas Pipelines or Apparatus to the satisfaction of the Company Representative and shall be maintained until such excavation is reinstated and backfilled.

13. If for the completion of the Works the Contractor intends using any of the following:-

- i) Pile driving equipment within 15.0m of Apparatus (or such greater distance as may be required to ensure that the MAXIMUM peak particle velocity as measured at the Apparatus does NOT exceed 25mm per second).
- ii) Explosives within:-

a) 400.0m of exposed Apparatus

b) 100.0m of buried Apparatus

iii) Hot Works welding and the like within 15.0m of Apparatus

iv) Hydraulic testing within 6.0m of Apparatus

the Contractor shall advise the Company Representative, giving at least 7 days written notice, in order that any special protective measures for the Apparatus affected may be arranged. The Contractor SHALL NOT proceed with the use of any of the above without the written consent of the Company Representative.

14. All Apparatus manholes and/or other access points and chambers within the Site shall be kept clear and unobstructed. Access for vehicles, winches and/or any further equipment required by the Company for the maintenance of its Apparatus, shall be maintained at all reasonable times and unless otherwise agreed in writing by the Company representative a clearance of 6.0m shall be allowed for such access.

15. The covers to Apparatus manholes and/or other access points and chambers shall only be lifted under the direct supervision of the Company Representative. No employee of the Contractor or of any sub-contractor employed by the Contractor shall enter any chamber and/or Apparatus of the Company unless under the supervision of the Company Representative and in any case not before a gas check as specified by the Company Representative has been carried out in the presence of the Company Representative and such checks have shown it to be safe to enter the Chamber and/or Apparatus. The Company Representative shall be given reasonable access to all Apparatus and chambers when required.

16. In the event of any damage whatsoever even of a minor nature to Apparatus particularly to Gas pipeline coatings and/or test leads the Contractor shall immediately inform the Engineer and report the occurrence by contacting the Company Representative. The Company Representative will arrange for repairs to be carried out.

EMERGENCY ACTION

17. The following actions shall be taken by the Contractor in the event of a gas leak in any Apparatus:-

a) Evacuate all personnel from the vicinity of the pipeline damage or leak.

b) Remove and/or extinguish all sources of ignition for a distance of at least 200m in all directions from the location of the leak. This precaution shall include a ban on the use of any electrical equipment falling within this limit.

c) IMMEDIATELY inform The Company the Engineer and (if required) the Emergency services in that order.

THE EMERGENCY TELEPHONE NUMBER OF THE COMPANY IS: -

0800 111999

d) Secure the area from the approach of all employees' traffic and/or the general public.

e) Render every assistance to the Emergency Services and/or the Company as shall be requested for the purposes of mitigating damage arising from the leak and/or for the purposes of securing public safety.

f) DO NOT ATTEMPT TO SEAL ANY LEAK OF GAS AT THE POINT OF DAMAGE.

18. Compliance with the above requirements shall not relieve the Contractor of any of his obligations under the Contract.

SPECIAL REQUIREMENTS IN RELATION TO THE ENVIRONMENT AGENCY

1. In these Special Requirements the following terms shall have the meanings assigned to them:-
 - a) 'The Authority' means the Environment Agency.
 - b) 'Authority's Representative' means the area engineer and appropriately authorised staff of The Environment Agency or its Authorised Representatives and Agents.
 - c) 'Watercourse' means all water resources including ground and/or percolating water together with all rivers streams ditches drains cuts culverts dykes sluices lakes ponds reservoirs docks channels creeks bays estuaries or arms of the sea together with all associated apparatus and appliances administered by 'The Authority' in pursuit of or as part of its Statutory functions.
2. The Contractor shall give the Authority's Representative at least 14 days written notice before commencing any work or moving heavy plant or equipment over any portion of the Site and shall provide the Authority's Representative with an outline programme for the Works which shall be kept fully updated throughout the period of the contract. The Contractor shall give the Authority's Representative NOT LESS than 7 days written notice of any change in programming which affects any Watercourses. The Authority's Representative can be contacted at the following point:-

Address:- Environment Agency
South Eastern Area
Rivers House
St. Mellons Business Park
CARDIFF
CF3 0EY

Telephone:- 08708506506 (outside office hours this will be diverted to a 24 hour Control Centre)

Fax:- 02920 798555
3. All operations on in or affecting Watercourses property or premises for which The Authority is responsible shall be carried out in such a manner so as not to endanger the Watercourses property or premises for which The Authority is responsible and/or any persons entitled to be present.
4. The Authority's Representative shall at all reasonable times have access to any part of Watercourses property or premises for which The Authority is responsible on the Site.
5. Where for the purposes of completing the Works in accordance with the Contract excavation is required affecting Watercourses property or premises for which The Authority is responsible the Contractor shall give the Authority's Representative 3 days written notice of such excavation work so that the Authority's Representative may attend upon the Site to supervise the excavation.
6. If the execution of the Works requires access onto or over the floodbank of a Watercourse the Contractor shall provide proper means for such access by way of temporary ramps of suitable gradient surfaced with stone or other material as shall be approved by the Authority's Representative. ON NO ACCOUNT shall the level of the floodbank crest be reduced without the written permission of the Authority's Representative and then ONLY under such conditions and restrictions as the Authority's Representative may require.
7. Where for the purposes of completing the Works in accordance with the Contract there is a requirement for a bank and/or floodbank or part thereof to be temporarily removed such removal shall ONLY be carried out with:-
 - a) The written permission of the Authority's Representative and then ONLY under such conditions and restrictions as the Authority's Representative may require.
 - b) The provision of a suitable alternative flood barrier to be approved by the Authority's Representative which shall be maintained to the full height of the original floodbank until such times as reinstatement of the original floodbank is completed to the satisfaction of the Authority's Representative.

8. Throughout the period of the Contract the Contractor MUST take all necessary measures with regard the Watercourses flood plain and/or continued operation of land drainage systems to ensure:-
- a) Flow rates are maintained
 - b) The FULL AND PROPER discharge of any floodwaters.
9. The Contractor SHALL NOT at any time construct temporary access or haul roads within the floodplain area whose surface level is higher than the existing floodplain ground level. Upon the completion of the Works all such Temporary Works shall be removed and the floodplain reinstated to the satisfaction of the Authority's Representative.
10. The Contractor SHALL NOT at any time store or stockpile on the floodplain area equipment and/or materials that will float or contaminate a Watercourse in the event of the floodplain being inundated.
11. Throughout the period of the Contract the Contractor shall ensure that the structural integrity of any fluvial tidal and/or sea defence Works is fully protected and maintained.
12. The Contractor shall take all necessary measures to secure the protection of all Watercourses including water in underground strata against silting erosion flooding and/or pollution of the water so as to affect adversely the quality or appearance thereof or cause injury or death to animal aquatic or plant life and/or damage to property and land. Such protective measures shall include, but not be limited to, the following:-
- a) All fuel lubricating oil and/or other liquid chemicals stored on the Site shall be located as far as reasonably possible and in any case NOT LESS THAN 10.0M from any Watercourse and such stores shall be sited on impervious bases and incorporating a system of impervious containment effectively capable of retaining the full contents of the store plus 10% and with a sealed drainage system with no discharge to any Watercourse land or groundwater. All such stores shall be kept locked or otherwise secured when not in use and all containers therein must bear clear labels giving full descriptions of the contents. A stock of absorbent material suitable for use on the contents of the store MUST be maintained on the Site.
 - b) Any leaking and/or empty oil/fuel/chemical containers shall be removed from the Site immediately.
 - c) All fixed equipment using fuel/oil shall be located as far as reasonably possible from any Watercourse and shall be surrounded with oil absorbent material to contain spills and leaks. All moveable equipment when not in operation during working hours shall be located as far as reasonably possible, and in any case not less than 10.0m from any Watercourse. Outside working hours moveable equipment is to be located in an area which is as far as reasonably possible, and in any case not less than 10.0m from any Watercourse and shall be surrounded with oil absorbent material to contain spills and leaks.
 - d) The refuelling of machines shall be strictly controlled and confined to a location as far as reasonably possible from any Watercourse.
 - e) Providing for silted or discoloured water from the Works and/or the cleaning of vehicles or cement/concrete using plant to be treated or settled in a lagoon prior to discharge into a Watercourse, which discharge shall only take place with the approval of the Authority's Representative.
 - f) Prevention of the unauthorised abstraction, extraction and/or drawing of water for any reason from any Watercourses property or premises for which The Authority is responsible. While protecting any existing abstraction arrangements whether licensed or not together with any domestic abstractions exempt from such licensing requirements. (A list of licensed abstractions is available on a public register).
 - g) Ensure that any ford required to allow plant or vehicles to cross a Watercourse consists of steel plank roadway hardcore road and/or exceptionally a series of concrete pipes sufficient to carry the dry weather flow of the Watercourse topped with concrete slabs at such a level that flood water will overtop the obstruction without causing flooding or other adverse effects and that such construction as is permitted by the Authority is entirely removed from the Watercourse upon the completion of the Works and any access ramps or banks shall be fully reinstated to the satisfaction of the Authority's Representative.
 - h) Ensuring that any plant used in or fording a Watercourse is not noticeably leaking fuel oil and/or any other fluid.
 - i) Ensuring that the use of any concrete mixing plant or ready mix vehicle together with the placing of any wet concrete in or adjacent to any Watercourse is strictly controlled in such a manner that cement contamination of the Watercourse does not occur.

j) Ensuring that only material free from polluting toxic substances is used at locations where drainage from new material can directly or indirectly enter any Watercourse.

k) Where for the purposes of completing the Works in accordance with the Contract any work is required on a sewer of any kind in particular a trunk sewer ensuring that such work is only carried out with the full knowledge of the sewer authority and then ONLY under such conditions and restrictions as The Authority's Representative and the sewer authority may impose.

l) Ensuring that the banks and foreshore of any Watercourse are kept clear of material plant and other items unless actually in use for the purposes of the Works.

m) Ensuring that materials intended for or arising from the Works together with any other plant and/or equipment are not stored or disposed of:-

i) In the Watercourse.

ii) Placed in such a manner where such items might fall slip or be washed into any Watercourse.

n) Preventing the spread of the following plant species:-

i) Japanese Knotweed

ii) Giant Hogweed

In particular any spoil or other such arisings contaminated with or suspected of being contaminated with the rhizomes and/or roots of these species SHALL NOT be spread to areas currently free of these plants but shall be disposed of as directed by the Authority's Representative.

o) In the preparation of his programme for the Works ensuring that the Watercourse is NOT disturbed during:-

i) the period October to March inclusive where significant populations of salmonoid fish are present

and/or

ii) the period April to June inclusive where significant populations of coarse fish are present

unless otherwise specifically agreed in writing by the Authority's Representative (and then ONLY under such conditions and restrictions as the Authority Representative may apply).

p) Regularly scraping and maintaining free from deposits of slurry or other debris haul roads on the Site and the approaches to any Watercourse. Any arisings shall be disposed of as directed by the Authority's Representative.

q) Ensure that surface water drains are not contaminated by any debris or other arisings from the Works.

r) Provide suitable sheeting under any structure over a Watercourse where the structure is to be cleaned by mechanical or chemical means and/or painted in order to prevent material entering the Watercourse.

In the event that notwithstanding the taking of such protective measures any incident occurs which may place the Watercourse including water in underground strata or fish populations at risk the Contractor shall IMMEDIATELY inform the Authority's Representative and the Engineer and shall immediately carry out instructions to abate and remedy the situation.

13. Unless specified as a requirement of the Contract, the Contractor shall NOT without the specific written permission of the Authority's Representative, (and then ONLY under such conditions and restrictions as the Authority's Representative may require), do any of the following:-

a) Remove 'bed' material for use in the construction of the Works or elsewhere.

b) Remove from any part of the bottom channel or bed of a Watercourse a deposit accumulated by reason of any dam weir or sluice and SHALL NOT undertake such removal by causing the deposit to be carried away in suspension in the waters.

- c) Remove vegetation other than fallen trees from or adjacent to any Watercourse.
- d) Allow cut vegetation from approved clearance works to enter any Watercourse.
- e)
 - i) Remove aquatic weeds in the period May to August inclusive.
 - ii) Spray aquatic weeds.
- f) Use floating plant barges and/or pontoons and the like in any Watercourse.
- g) Display any advertisement or other material, except as specifically required by this Special Requirement, on or above Watercourses property or premises for which The Authority is responsible.
- h) Discharge surface water of any kind in any way into Watercourses property or premises for which The Authority is responsible.
- i) Construct any Temporary Works in the Watercourse and/or temporarily divert obstruct and/or pipe any Watercourse and/or obstruct any floodplain by spoil heaps or by any other means except where and to the extent that approval has been specifically given and/or previously obtained.
- j) Close any navigable Watercourse to waterborne craft or traffic without giving the Authority's Representative at least 28 days written notice. (The granting of permission for such a closure MUST NOT be presumed).
- k) Notwithstanding the approval of any other Statutory and/or Regulatory body use explosives in or adjacent to any Watercourse property or premises for which The Authority is responsible (permission for such use by The Authority will ONLY be granted IN THE MOST EXCEPTIONAL CIRCUMSTANCES).

Where any of the above works are specified as a requirement of the Contract the Contractor's method and timing of construction will be subject to the written approval of the Authority's Representative (under such conditions and restrictions as the Authority's Representative may require). The Contractor shall submit his proposals at least 2 weeks in advance of approval being required.

- 14. Where for the purposes of completing the Works in accordance with the Contract any work is required above or in the Watercourse the Contractor shall, except where otherwise specified in the contract or agreed in writing by the Authority's Representative:-
 - a) Provide and maintain a minimum height clearance as shall be specified in writing by the Authority's Representative above the water surface of the Watercourse or highest expected water surface where this is variable.
 - b) Stockpile, keep clean and replace on completion of the Works any 'bed' material necessarily removed from the Watercourse in the course of the construction of the Works.
 - c) Submit to the Authority's Representative written proposals for maintaining at all times the free passage of fish.

THE CONTRACTOR SHOULD PARTICULARLY NOTE WHEN PLANNING ANY WORK IN RELATION TO THE WATERCOURSE THAT THE AUTHORITY CANNOT GUARANTEE ANY PARTICULAR WATER LEVEL OR DEPTH NOR PREVENT ANY FLUCTUATIONS TO SUCH WATER LEVEL DEPTH OR SPEED OF FLOW IN ANY WATERCOURSE.

- 15. Where for the completion of the Works in accordance with the Contract work is required on or near the edge of a navigable Watercourse and such work involves projections of any kind into the navigable channel and/or anywhere vertically above the line of its edge, the Contractor shall:-
 - a) Throughout the course of the Works provide permanent markers on the extremities from the bank of the projection by the placing thereon of warning markers/notices/lights as specified by the Authority's Representative.
 - b) If the projection of the work into the navigable channel exceeds 0.5m the projecting works shall be protected from the impact of passing waterborne craft as specified by the Authority's Representative.

c) Provide notice boards of a type size shape colour and with a written warning as specified by the Authority's Representative shall be sighted on the Watercourse edge as required by the Authority's Representative.

16. Any floating plant barge and/or pontoon on the Watercourse for which the Contractor has obtained the permission of the Authority's Representative shall at all times be properly secured so as not to constitute a hazard to navigation and/or Watercourse management and all reasonable precautions shall be taken by the Contractor to prevent accidental or malicious casting adrift or sinking.
17. If any plant floating plant barge and/or pontoon falls or sinks or is cast adrift in the Watercourse the Contractor shall immediately inform the Authority's Representative and the Engineer and take immediate steps to make the hazard known to users of the Watercourse. The Contractor shall immediately arrange the salvage/re-securing of the plant floating plant barge and/or pontoon from the Watercourse and until such salvage/re-securing has been completed the Contractor shall provide buoys, and markers and erect warning notices indicating the navigation hazard to Watercourse users to the satisfaction of the Authority's Representative.
18. The Contractor shall not reduce the width of any Watercourse at any time without the written approval of the Authority's Representative. In order to consider a request for a temporary reduction in the width of any Watercourse the Authority's Representative will require fully detailed proposals, which show evidence that the Contractor has made every effort to minimise:-
 - a) The risk of damage to the Watercourse and/or its channel;
 - b) The risk of flooding at all potential flow conditions within the Watercourse;
 - c) The length of time such reduction in Watercourse width will be required.
19. If for the purposes of completing the Works in accordance with the Contract work necessitates the closure and/or the reduction in width of any Watercourse access or footpath the Contractor shall give to The Authority at least 7 days written notice and shall provide to the satisfaction of the Authority's representative:-
 - a) An alternative pedestrian access with a minimum width of 2.0 m with adequate fencing to each side which shall be smoothly surfaced with 75 mm of ashes or such similar material as may be specified by the Authority's Representative.
 - b) An alternative emergency access for The Authority's plant and equipment with a minimum width of 3.5 m and adequately surfaced for the passage of vehicles plant and/or equipment which surface shall have a maximum gradient of 1 in 10.
20. The Contractor shall keep the Watercourses property or premises for which The Authority is responsible free from rubbish. The Contractor shall not leave rubbish on or in Watercourses property or premises for which The Authority is responsible and shall subject to the approval of the Engineer clear away and remove all constructional plant surplus materials and Temporary Works from Watercourses property or premises for which The Authority is responsible as and when these cease to be required for the purposes of the Works.
21. Unless otherwise expressly stated in the contract upon completion of the Works the Contractor shall remove any ford cofferdam and/or other Temporary Works from the Watercourses property or premises for which The Authority is responsible.
22. Except where otherwise provided for in the Contract every part of the bank and/or channel of the Watercourse shall be fully reinstated by the Contractor to the surrounding bank profile topsoiled seeded and/or turfed as appropriate.
23. Except where otherwise provided for in the Contract all property and premises affected by the Works for which The Authority is responsible shall be fully reinstated and all damage to land property or premises for which The Authority is responsible shall be made good by the Contractor to the satisfaction of the Authority's Representative.

EMERGENCY ACTION

24. The following actions shall be taken by the Contractor in the event of any breach and/or risk of major pollution to a Watercourse or land drainage area or any incidence of fish kill:-

a) IMMEDIATELY inform the Authority the Engineer and (if required) the Emergency services in that order.

FOR THE AUTHORITY telephone: - 0800 807060

b) Secure the area from the approach of traffic and/or the general public.

c) Render every assistance to The Authority and/or the Emergency Services as shall be requested for the purposes of mitigating damage and/or for the purposes of securing public safety.

d) With regard to landslope and any apparent flow direction of any water flowing from any breach, construct if possible and as necessary dams bunds with earth boards and/or sheet to prevent or restrain loss of water from the Watercourse and/or flows inundating any adjacent property.

e) With regard to landslope and any apparent flow direction of any potentially polluting material or liquid, construct if possible and as necessary dams bunds with earth board and/or sheeting to prevent or restrain such material from reaching the Watercourse and/or flows inundating any adjacent property.

f) Where notwithstanding the above potentially polluting material or liquid has entered a Watercourse construct if possible dams/booms with board and/or sheet materials to retain and limit the extent/effect of such pollutants within the Watercourse pending instructions for full remedial action while permitting the continued flow of water.

25. Compliance with the above requirements shall not relieve the Contractor of any of his obligations under the Contract.

SPECIAL REQUIREMENTS IN RELATION TO BRITISH TELECOMMUNICATIONS PLC

1. In these Special Requirements the following terms shall have the meanings assigned to them:-

a) 'Company' means British Telecommunications PLC

b) 'Company Representative' means the staff of British Telecommunications PLC or its Authorised Representatives and Agents.

c) 'Apparatus' means all surface or sub-surface equipment and plant including any associated cabling and/or ducting owned, leased or rented by British Telecommunications PLC.

2. Before commencing any work or moving heavy plant or equipment over any portion of the Site the Contractor shall confirm details of the Apparatus within the Site with the Company Representative, who can be contacted at the following point:-

Address :- British Telecommunications
B.T. Swamp 3 WW1A
Telecom House
Trinity Street
Hanley
Stoke-on-Trent
ST1 5ND

Telephone:- 0800 800865

Fax:- 01782 204846

3. Where such details show that the works or the movement of plant or equipment may endanger any Apparatus, the Contractor shall give the Company Representative at least 7 days written notice of the date on which it is intended to commence such works or the movement of plant and equipment in order that the presence of any sub-surface Apparatus can be indicated by markers to be supplied by the Company and placed by the Contractor under the supervision of a Company Representative. The Contractor shall ensure that all Apparatus, particularly surface running cabling, is adequately protected from damage and such protective measures shall be approved by the Engineer.

4. In the event of a Company marker being disturbed for any reason it shall not be replaced other than in the exact position and to its former depth unless the repositioning is carried out at the direction and under the supervision of a Company Representative.

5. The Contractor shall take particular care in relation to the protection of Apparatus, where such Apparatus includes the presence within the Site of optical fibre and/or co-axial cabling. The Contractor should particularly note that damage to such Apparatus is extremely disruptive to the Company network and costly to reinstate. The Contractor shall make every effort to avoid the disturbance of Apparatus more than is absolutely necessary for the completion of the Works in accordance with the Contract.

6. When excavating around, moving or backfilling around Apparatus, the Company Representative shall be given adequate notice, which shall not be less than 3 days, of the Contractor's intentions in order that he may supervise the works. The Contractor should note that the normal depth of cover for Apparatus and ducts is as follows:-

a) In carriageways 600mm, which is to be maintained.

b) In footways 450mm, which is to be maintained.

Where the 600/450mm depth of cover cannot be maintained the Contractor shall carry out the instructions of the Engineer for the protection of Apparatus and a Company Representative shall supervise such actions that follow from the Engineer's instruction. Where the required depth of cover cannot be maintained over cabling, such cables as are affected shall be enclosed and protected in UPVC duct to be supplied by the Company as directed by the Company Representative.

With regard to excavation in the vicinity of Apparatus and ducts the Contractor shall have particular regard to the possibility of reduced cover and the encountering of Apparatus and ducts at depths of cover less than that given at a) and b) above.

7. All excavation adjacent to Apparatus shall be carried out by hand until the exact extent and/or location of Apparatus is known. Mechanical borers and/or excavators shall not be used within 1.0m of Apparatus without the supervisory presence of a Company Representative. To prevent any movement of Apparatus during excavation, complete shuttering shall be used as directed by the Engineer if:-

- a) Excavation is deeper than the depth of cover of adjacent Apparatus.
- b) Excavation is within 1.0m of Apparatus in stable soil.
- c) Excavation is within 5.0m of Apparatus in unstable soil.

If for the completion of the Works the Contractor intends using any of the following:-

- i) Pile driving equipment within 10.0m of Apparatus
- ii) Explosives within 20.0m of Apparatus
- iii) Laser equipment within 10.0m of Apparatus

the Contractor shall advise the Company Representative, giving at least 7 days written notice, in order that any special protective measures for the Apparatus affected may be arranged.

8. All Company manholes, joint boxes and/or other access points and chambers within the Site shall be kept clear and unobstructed. Access for vehicles, winches, cabledrums and/or any further equipment required by the Company for the maintenance of its Apparatus, shall be maintained at all reasonable times. The Contractor shall particularly note that footway type jointing chambers are not specified for carriageway loadings and will need to be adequately protected and/or demolished and rebuilt under the supervision of a Company Representative where such chambers are likely to be placed at risk, either temporarily or permanently, from the movement of plant and/or equipment on the Site.

9. The covers to Company chambers and/or Apparatus shall only be lifted by means of appropriate keys obtained from the Company Representative and under the direct supervision of the Company Representative. No employee of the Contractor or of any sub-contractor employed by the Contractor shall enter any chamber and/or Apparatus of the Company unless under the supervision of the Company Representative and in any case not before the mandatory gas check has been carried out in the presence of the Company Representative and such checks have shown it to be safe to enter the Chamber and/or Apparatus. The Company Representative shall be given reasonable access to all Apparatus and chambers when required.

10. In the event of any damage whatsoever to any Apparatus the Contractor shall immediately inform the Engineer and report the occurrence by contacting the Company as follows:-

Telephone:- DIAL 100 and ask operator for 'FREEPHONE 111/Dial before you dig'

11. Compliance with the above requirements shall not relieve the Contractor of any of his obligations under the Contract.

SPECIAL REQUIREMENTS IN RELATION TO WATER AND SEWERAGE COMPANIES

1. In these Special Requirements the following terms shall have the meanings assigned to them:-

(a) 'Company' means: -

Dwr Cymru - Welsh Water

or its successors and assigns.

(b) 'Company Representative' means the Chief Civil Engineer of the said 'Company' defined at 1(a) of this Special Requirement or other duly Authorised Engineer Representative and/or Agent appointed for the time being to act on behalf of the said 'Company'.

(c) 'Mains and Sewers' means any surface or sub-surface pipeline or construction together with any associated apparatus appliance access covers manholes shafts and/or chambers thereto owned leased or rented by the said 'Company' defined at 1(a) of this Special Requirement.

2. Before commencing any work or moving heavy plant or equipment over any portion of the Site the Contractor shall confirm the details and location of any Mains and Sewers with the Company Representative, who can be contacted at the following point:-

Address :- Dwr Cymru/Welsh Water,
Asset Records,
Data Services,O.A.C,
Eastern Business Park,
St Mellons,
Cardiff.
CF3 5EA

Telephone:- 02920 534690

Fax: 02920 361472

After Hrs. Clean Water 0800 052130

3. Where such details show that the Works or the movement of plant or equipment may endanger any Mains and Sewers, the Contractor shall give the Company Representative at least 7 days written notice of the date on which it is intended to commence such works or the movement of plant and equipment in order that the position of any Mains and Sewers (to be ascertained by hand dug trial holes) can be indicated by markers to be supplied by the Company and placed by the Contractor under the supervision of the Company Representative. The Contractor shall ensure that all Mains and Sewers, are adequately protected from damage to the satisfaction of the Company Representative.

4. In the event of a Company marker being disturbed for any reason it shall not be replaced other than in the exact position and to its former depth unless the repositioning is carried out at the direction and under the supervision of the Company Representative.

5. All excavation adjacent to Mains and Sewers, shall be carried out by hand until the exact extent and/or location of Mains and Sewers is known. Mechanical borers and/or excavators shall not be used within 3.0m of Mains and Sewers without the presence of the Company Representative. To prevent any movement of Mains and Sewers during excavation, complete shuttering shall be used as directed by the Engineer if:-

a) Excavation is deeper than the depth of cover of adjacent Mains and Sewers.

b) Excavation is within 3.0m of Mains and Sewers in stable soil.

c) Excavation is within 6.0m of Mains and Sewers in unstable soil.

If for the completion of the Works the Contractor intends using any of the following:-

i) Pile driving equipment within 15.0m of Mains and Sewers

ii) Explosives within 200.0m of Mains and Sewers

iii) Any hot work such as welding and the like within 6.0m of any Mains and Sewers.

the Contractor shall advise the Company Representative, giving at least 7 days written notice, in order that any special protective measures for the Mains and Sewers affected may be arranged.

6. Material of any kind whatsoever comprising part of Mains and Sewers manholes shafts thrust blocks or any other construction shall not be cut away without the prior written approval of the Company Representative.

7. Any temporary roads or access routes within 5.0m of Mains and Sewers, shall be provided with a load bearing surface to the satisfaction of the Company Representative.

8. The Contractor or any sub-contractor employed by him shall not stack pile and/or store materials of any kind or erect temporary structures and/or notice boards of any sort within 5.0m of any Mains and Sewers

9. All Mains and Sewers, especially manholes, shafts and access points and/or chambers within the Site shall be kept clear and unobstructed. A minimum 3.0m access sufficient for heavy vehicles and/or any further plant and equipment required by the Company for the maintenance of its Mains and Sewers, shall be maintained to and around the centre of any Company manholes shafts chambers and or other access points and the Company Representative shall be given access to all Mains and Sewers when required at all reasonable times.

10. The covers to Mains and Sewers, particularly manholes, shafts and access points and/or chambers shall only be lifted under the direct supervision of the Company Representative. Employees of the Contractor or of any sub-contractor employed by the Contractor shall NOT enter any Mains and Sewers manholes shafts access points and/or chambers unless under the supervision of the Company Representative and in any case not before any safety checks required by the Company Representative have been carried out and such checks have shown it to be safe to enter the Mains and Sewers.

11. In the event of any damage whatsoever to Mains and Sewers the Contractor shall immediately inform the Engineer and report the occurrence immediately by contacting the Company Representative.

12. The Contractor and/or any sub-contractor employed by the Contractor shall take all necessary precautions to ensure that any Mains and Sewers are fully protected from any accidental falls or flows of liquids and/or materials, which by themselves or in combination with any existing materials and/or liquids could cause or aggravate pollution create poisonous substances and/or toxic fumes or react with sewer contents to cause toxic substances or fumes and/or could cause harm to persons or property and/or impede any operations of the Company.

13. The Contractor and/or any sub-contractor employed by the Contractor shall not discharge nor cause to be discharged any water or other liquid or tip any condemned or surplus material or waste of any kind whatsoever into Mains and Sewers nor abstract extract and/or draw water from any Mains and Sewers without the written permission of the Company Representative.

14. The Contractor shall particularly note that the Sewer system can be liable to 'surcharge' in certain circumstances and under these conditions is liable to bursting. Stringent safety precautions as directed by the Company Representative shall be applied in such conditions.

EMERGENCY ACTION

15. The following actions shall be taken by the Contractor in the event of a burst to any of the Mains and Sewers:-

a) IMMEDIATELY inform the Company the Engineer and (if required) the Emergency services in that order.

b) Secure the area from the approach of traffic and/or the general public.

c) Render every assistance to the Emergency Services and/or the Company as shall be requested for the purposes of mitigating damage arising from the leak and/or for the purposes of securing public safety.

d) With regard to landslope and any apparent flow direction of any leaking sewerage or water, construct if possible and as necessary dams bunds with earth and/or board to prevent flows inundating any adjacent properties ditches streams drains manholes or other such water courses and ducts.

16. Compliance with the above requirements shall not relieve the Contractor of any of his obligations under the Contract.

SPECIAL REQUIREMENTS IN RELATION TO THE HIGHWAY LIGHTING SYSTEM

1. In this Special Requirement the following terms shall have the meanings assigned to them:-

(a) "Authority" means the Merthyr Tydfil County Borough Council

(b) "Authority's Representative" means the Highway Lighting technical staff of Merthyr Tydfil County Borough Council or its authorised representatives and agents.

(c) "Apparatus" means all surface or sub-surface equipment and any associated cabling and/or ducting owned, leased or rented by the Merthyr Tydfil County Borough Council for the purposes of highway lighting and/or electrical supplies.

2. Before commencing any work or moving heavy plant or equipment over any portion of the site the Contractor shall confirm details of the Apparatus, owned, leased or rented by the Authority within the site with the Authority's Representative, who can be contacted at the following point:-

Address: **Street Lighting Engineer
Merthyr Tydfil County Borough Council
Highways Network Group
Abercynon MUE Depot
The Basin
Abercynon**

Telephone:

Fax:

The approximate positions of such Apparatus within the site where known will be shown on the Contract Drawings. Such Apparatus is usually, but not exclusively, confined to the verges and central reservations of sites. The Contractor shall arrange for the Authority's Representative accurately to locate all buried Apparatus, particularly cable runs, by means of electrically operated cable detection equipment. The Contractor shall verify each location by hand excavated trial holes at 10.0m intervals or at other such intervals as may be deemed necessary by the Authority's Representative. All trial holes shall be excavated with caution and due regard for the prevention of damage to the Apparatus.

3. Where such details and trial excavations show that the Works or the movement of plant or equipment may endanger the Apparatus of the Authority, the Contractor must give the Authority's Representative at least 7 days' notice of the date on which it is intended to commence work and/or the movement of plant and equipment in order that the presence of sub-surface Apparatus previously located and particularly cable runs can be indicated by 1.0m marker pegs and a continuous spray painted line of conspicuous colour which shall be maintained throughout the duration of the Contract. Marker pegs will be supplied by the

Contractor and placed under the supervision of the Authority's Representative. The Contractor shall ensure that all Apparatus of the Authority, particularly surface running cabling, which shall include any cabling specified as "interrupter cable", and/or cabling or "interrupter cabling" previously clipped to fence posts for temporary connection in advance of the Contract by the Authority's Representative, is adequately protected from damage and such protective measures shall be approved by the Engineer. The Contractor should particularly note that surface cabling shall not under any circumstances be aurally suspended without the prior consent of the Engineer and then only in a manner as shall be specified by the Authority.

4. In the event of a marker peg being disturbed for any reason it shall not be replaced other than in the exact position and to its former depth unless the repositioning is carried out at the direction and under the supervision of the Authority's Representative.

5. The work should be carried out to conform with the National Joint Utilities Group document "Recommendations on the Avoidance of Danger from Underground Electricity Cables".

6. On completion of the Works all previously excavated trial holes shall be backfilled with sand of a type and grade approved by the Engineer to a depth of 75mm above the Apparatus of the Authority. Suitable material approved by the

Engineer shall then be used to fill the excavation to within 150mm of the finished ground level. This material shall be compacted in a manner approved by the Engineer prior to final top soiling of the site to finished ground level.

7. Unless the Apparatus, particularly any cabling, is being removed as part of the Works, then before commencing any work, including setting of level pins and the like, the Contractor shall arrange for the Authority's Representative to carry out a limited insulation test on each length of "longitudinal cable" forming part of the Apparatus of the Authority this is likely to be affected by the work. This limited test shall record the insulation resistance values between unused conductors, unused conductors to armour and armour to earth, using a 500-volt DC megger. The Contractor shall furnish two copies of the results of this test to the Engineer. Upon the completion of the works and before the issue of the Certificate of Completion, a similar test shall be carried out on all completed work and two copies of the results of this latter test shall be furnished to the Engineer.

8. The Contractor shall give 24 hours' written notice to the Engineer before commencing any work within 1.5m of the line of surface or sub-surface Apparatus and shall notify all operatives, including any sub-contractors, employed by the Contractor of the presence of such Apparatus, particularly any cabling, together with the need to exercise extreme care and attention to ensure the prevention of any damage. The Contractor shall ensure that all such excavations take place in the presence of a responsible supervisor. The identity of the Contractor's supervisor for the purposes of such excavation shall be made known to the Engineer and be subject to his approval.

9. All excavation adjacent to the Apparatus of the Authority is to be carried out by hand until the exact extent and/or location of such Apparatus is known. Mechanical borers and/or excavators shall not be used within 1.5m of such Apparatus without supervisory presence of the Authority's Representative. To prevent any movement of such Apparatus during excavation, adequate protective and stabilising measures shall be used as directed by the Engineer if:-

- (a) excavation is deeper than the depth of cover adjacent to such Apparatus;
- (b) excavation is within 1.5m of such Apparatus is stable soil;
- (c) excavation is within 5.0m of such Apparatus in unstable soil.

127 AR	Work on or adjacent to the Highway 1. All operations on the site shall be carried out in such a manner so as to avoid risk of damage or danger to persons or vehicular traffic entitled to be on or adjacent to the site and so as to avoid except to the extent previously agreed in writing any interference to and the free movement of persons and/or vehicular traffic. 2. In particular the Contractor may be required to submit a method statement and/or drawing showing the proposed method of using and handling plant and materials in the vicinity of the footway or carriageway. Plant and materials shall not be used or handled in such a manner that even in the event of mishandling or failure such plant and materials could move over or fall within 1 metre of a vertical plane from the traffic face of the footway or carriageway. 3. The use and handling of mechanical plant and materials in the vicinity of the footway or carriageway shall be carried out under the control at all times of an experienced banksman employed by the Contractor. Unless foolproof guard rail locking devices or other safety measures can be provided such work within 1 metre of the traffic face of the adjacent footway or carriageway shall only be carried out while the footway or carriageway is closed to pedestrian or vehicular traffic. 4. The Contractor shall ensure that the method of carrying out the works and all safety arrangements required in connection therewith are approved in writing by the Project Manager and shall ensure that any rules, regulations or instructions imposed by the Project Manager for the protection of pedestrians or vehicular traffic are strictly observed.
128 AR	Approval of Work before Covering up 1. No work shall be covered up or put out of view without the approval of the Supervisor and the Contractor shall afford full opportunity for the Supervisor to examine and measure any work which is about to be covered up or put out of view. The Contractor shall give due notice which shall not be less than two hours of normal working time to the Supervisor whenever any such work is ready or about to be ready for examination and the Supervisor shall without unreasonable delay and within two hours of normal working time unless he considers it unnecessary and advises the Contractor accordingly attend for the purpose of examining such work. Approval shall be in writing.
129 AR	Use of Stand Pipes 1. Any standpipe used for the taking of water from a public supply must be approved and registered with the appropriate Water Authority for the area.
130 AR	Illumination of Working Areas 1. The Contractor shall ensure that all areas of site in which his work is being carried out are lit sufficiently for the safe and satisfactory execution and inspection of the work. The contractor will ensure that there is no uncontrolled escape of such lighting that would cause light nuisance.
131 AR	Cleanliness of Roads The Contractor must make arrangements to ensure that he does not deposit any mud, stones, chippings or other debris on the public highway. If there is any failure in the arrangements, the Contractor must cease the operation until the highway has been cleaned and the arrangements rectified.

132 AR	Duty of Care 1. The Contractor shall comply in all respects with the requirements of Section 34 of the Environmental Protection Act 1990 with regard to controlled waste.
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APPENDIX 0/4: LIST OF DRAWINGS INCLUDED IN THE CONTRACT

1 Contract – specific Drawings supplied to Each Tenderer

Drawing No.	Title	SITE LAYOUT
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2 Standard Drawings

Supplied to each Tenderer

SITE EXTENT AND LIMITATIONS ON USE

1 Extent of the Site

See Drawing

2 Limitations on the use of the Site

To carry out works as described in the Contract.

CONTROL OF NOISE AND VIBRATION

SCHEDULE 1

NOISE CONTROL REQUIREMENTS

1a. TIME RESTRICTIONS FOR WORKING HOURS:

Monday to Friday	0730 - 1900
Saturdays	0800 - 1300
Sundays and Public Holidays	-no permissible hours

1b. PERMISSIBLE HOURS FOR ACTIVITIES CREATING UNREASONABLE NOISE AT FAÇADE TO NEAREST NOISE SENSITIVE PROPERTY:

Monday – Friday	0900 - 1700
Saturdays	1000 - 1300
Sundays and Public Holidays	-no permissible hours

NOISE LEVEL RESTRICTIONS:

During periods defined by (1)a Noise Levels from the site must not exceed 10dB(A) above the background level within the nearest residential premises, with windows open, unless included in times defined by (1)B.

During periods defined by (1)b, Noise Levels from the site, as measured at the façade of the nearest noise sensitive property must not exceed (see note 1).

LAeq, 15 Minutes = 75dB(A)

LA max (slow response) = 85dB(A) – see note 3

Notes:

- 1. Where external measurement points are located 1 metre from the façade of the building, the permitted noise levels can be increased by 3dB(A).**
- 2. The noise levels LAeq, 15 minutes at a noise sensitive property is the total LAeq, 15 minutes from all noise sources associated with construction work over the 15 minute period.**
- 3. Maximum sound level is the highest value indicated on the sound level meter, which meets the requirements of BS: 5969 type 1 or 2 set to SLOW response and frequency weighing A.**

SCHEDULE 2

VIBRATION CONTROL

- 1. The Contractor shall select and utilise methods of working and items of plant so that the maximum measured ground vibrations in the vertical axis do not exceed a peak particle velocity of 5mm per second at any occupied property and 10mm per second at any other property. The preferred measurement position is to be on the foundation of the outer wall or no higher than 0.5m above ground level on the outer wall.**
- 2. In exceptional circumstances the Contractor may apply to the Environmental Health Section consent to carry out works which he considers will exceed the specified limit of ground vibration. The procedure for submitting and processing the application will be as specified for obtaining consent to exceed the specified noise levels.**

PROGRAMME OF WORKS

1. The Contractor shall provide the Programme of Works in the form of a bar chart produced as a result of a "critical path analysis" and must abide by the constraints below. It shall show the level of detail appropriate to each stage of the Works and all activities and restraints, each of which shall be given a short title. All events shall be numbered and annotated with earliest and latest event dates.
2. Schedule of Constraints.
 - (i) Pedestrian and Vehicular access to adjacent footways and highways to be maintained at all times.
 - (ii) The extent of the Site.

PAYMENT APPLICATIONS

TBA

PRIVATELY AND PUBLICLY OWNED SERVICES AND SUPPLIES

- 1 The names, addresses and telephone numbers of the authorities serving in the locality are listed below:

Names	Address/Tel No	Contact
Wales and West Utilities	Wales & West House, Spooner Close, Celtic Springs, Coedkernew, Newport, NP10 8FZ. Tel: 02920278912	
British Telecom Plc	BT Swamp, 3WW1A, Telecom House, Trinity Street, Hanley, Stoke-on-Trent, ST1 5ND. Tel 0800 800865	
Western Power Distribution	Mapping Centre, NRWSA Section, Lamby Way, Rumney, Cardiff, CF3 2EQ. Tel 02920 535383	
Welsh Water Authority	Croespenmaen Industrial Estate Kendon Crumlin. 01495 313621	
Other Authorities		
Merthyr Tydfil County Borough Council	Chief Officer of Neighbourhood Services, Unit 5, Triangle Business Park, Pentrebach, Merthyr Tydfil. CF48 4TQ	

TRAFFIC SAFETY AND MANAGEMENT

Traffic Safety and Management Requirements

1. The contractor shall submit his Traffic Safety and Management proposals, as required in Clause 117.3, at least 14 days prior to the date on which he wishes to implement them. No Traffic Safety and Management measures are to be installed without the approval of the Engineer or his Representative.
2. All measures for the temporary management of pedestrians and road users are to be executed in accordance with the Regulations and Directives current at the time of execution of the Works.

Highways, Private Roads and Other Ways Affected by the Works

Description:

Speed Limit (mph): **All 30 mph.**

Type of Traffic Control:

Special Facilities:

Whether to be Kept Open or Closed: **All Roads and footpaths to be kept open at all times**

LIST OF BUILDINGS, ETC. TO BE DEMOLISHED

Drawing Nos.:

Address: Taff & Crescent Streets, Merthyr Vale, Merthyr Tydfil

Description: 130 Terraced dwellings

Requirements:

(i) Restrictions on when buildings can be demolished.

The properties are currently vacant – demolition can proceed immediately following soft strip of internals and asbestos removal as per the attached specification requirements.

Demolition can only take place after the approval from NRW is received and a Licence is in place and for the mitigation and protection of Bat habitats. All works for the mitigation as required by the NRW Licence must be carried out prior to demolition works starting

(ii) Any particular precautions to be taken during demolition

See Pre-Demolition Information

(iii) Extent of Demolition

(iv) **Hazardous Materials**

The contractor will allow for the removal of Asbestos Containing Materials as described in the accompanying PDR asbestos survey. The contractor may use his own Subsidiary Asbestos Contracting company for this work, provided a current HSE licence is in place. If the contractor does not have a wholly owned subsidiary company, licensed for asbestos removal works, then the contractor may select one of the following approved contractors for these works:-

Severn Insulation Integrated Services
Severn Insulation Co Ltd
Somerton House
South Point
Clos Marion
Cardiff CF10 4LO

Bond Demolition and Asbestos Ltd
Bedwas House Industrial Estate,
Bedwas,
Caerphilly CF83 8DW

All controlled works will be subject to clearance procedures, and RAM/ROCC certification will be required on completion.

The contractor will use the following specialist contractor for all analytical and clearance works.

Lucion Environmental Ltd
Suite F24 James House,
Neport Road
Albrighton
Wolverhampton
WVT 3HA
Contact Ross Boulton-07590776733

Enquin Environmental
1 Ringside Business Centre
Heol Y Rhosog
Cardiff
CF3 2EW
Contact Craig Davies-07817618777

REC Ltd
Unit 19,
Kenfig Industrial Estate,
Margam,
Port Talbot
SA13 2PE

FENCING, GATES AND STILES

- (i) The site will be completely enclosed with a fencing as described elsewhere.

Privately and Publicly Owned Services or Supplies

The information in the Contract as to the whereabouts of existing services and mains is believed to be correct but the Contractor shall not be relieved thereby of his obligations under the Contract. The Contractor shall include in his rates and prices for locating and taking measures for the support and full protection of pipes, cables and other apparatus during the progress of the Works, obtaining the written consent of the appropriate authority to interrupt the service or supply and for keeping the Overseeing Organisation informed of all arrangements he makes with the owners of privately owned services or supplies, Statutory Undertakers and Public Authorities as appropriate. Unless specifically stated to the contrary in the Contract the measurement of the Works affected by the incorporation of the equivalent products and materials shall be based on the Tender documents and not on the Works as amended and completed to incorporate the equivalent products and materials.

