



WASTE DISPOSAL LICENCE APPLICATION

WELSH WATER INDUSTRIAL SERVICES LTD

EFFLUENT TREATMENT PLANT MERLIN'S BRIDGE SEWAGE TREATMENT WORKS

WORKING PLAN

1 INTRODUCTION

Welsh Water Industrial Services Limited propose to develop an Environmental Management Facility (EMF) incorporating waste treatment and transport which will aim to offer a service to the adjacent St Ivel factory, the local Authority and neighbouring industry.

This facility will be provided within the existing site of Merlin's Bridge Sewage Treatment works

The Facility will cater primarily for wastes suitable for biological treatment in admixture with sewage. It will provide an appropriately licensed plant, operated to the highest technical and environmental standards which will assist St Ivel and other waste producers to meet their obligations under the Duty of Care provisions (Section 34) of the Environmental Protection Act 1990.

The Facility will:

- Provide a comprehensive service to waste producers.
- Allow a limited range of wastes to be received by tanker.
- Provide balancing and pre-treatment of wastes
- Treat liquid waste by means of biological oxidation.

2 SITE INFRASTRUCTURE

The Facility will consist of a waste reception area comprising of a reception tank, and will make use of existing infrastructure and services. These facilities will include the approved (for Planning) effluent treatment plant installed to treat the liquid waste from St Ivel's.

A visual inspection of incoming wastes will be undertaken including appearance, smell and solids concentration. Regular samples will be taken for analysis at the Bridgend laboratories of Acer Environmental (Wallace Evans Ltd).

Office and welfare accommodation will be provided within the offices of Dwr Cymru adjacent to the pre-treatment plant.

The waste reception tank will be of sufficient size to accommodate the largest tanker served and constructed of mild steel, such that it is impervious to oil and water, resistant to chemical attack, and bunded to 110%.

The site layout is detailed in the Site Plan Drawing No [] .

3 SECURITY

The site is located within the Merlin's Bridge Sewage Treatment works which is surrounded by a 2m high pvc coated chain link security fence with 3 strands of barbed wire, erected in accordance with Dwr Cymru-Welsh Water standards.

Access gates to the site will be kept locked shut at all times when the site is unmanned.

All visitors to the site during operational hours will have to report to reception.

Security lighting will be installed as necessary to provide adequate illumination for the whole site.

4 SITE SERVICES

The site is provided with mains water and electricity.

Effluent from the treatment process will discharge to Merlin's Bridge Sewage Treatment Works under a Trade Effluent Agreement to be issued by Dwr Cymru Welsh Water.

Surface water falling and collecting within tank bunds on the bunded area will be pumped to the reception tank.

No drains within the site area will be connected to the surface water drainage system

5 SITE OPERATION

The Facility will store, balance, blend and treat liquid wastes prior to disposal to foul sewer under a Trade Effluent Agreement to be issued by Dwr Cymru Welsh Water.

Oil/water mixtures will be separated and the recovered oil will be transferred for recycling.

Solids will be transferred, after analysis, to Merlin's Bridge Sewage Treatment Works for recycling or disposal in admixture with sewage sludges. Recycling/disposal will be carried out in accordance with the Sludge (Use in Agriculture) Regulations 1989, enforced by HMIP.

5.1 Reception of Wastes

Before contracts are made with waste producers, a specification will be determined for each waste stream, and each waste stream will be given an identification code which relates to the determined specification, this will assist management control. The waste producer will be required to use the identification code on the documentation associated with each load of waste.

It is anticipated that tankered in wastes will only be transported by Dwr Cymru-Welsh Water or Preseli DC.

Bulk wastes received for treatment will be checked for volume on arrival or accompanied by a weigh ticket. Representative samples will be taken for subsequent analysis to ensure conformity with the specification Site Licence, the Duty of Care documentation. The analysis will also be used to assess compatibility with wastes already held in the reception tank, to determine other relevant parameters and to assess handling hazards and precautions.

If the wastes are certified by the site Controller, or his/her authorised deputy, to comply with the licence conditions and waste stream specification, the wastes will be directed under supervisory control to the reception tank. Details of all waste arriving at the EMF will be entered into a database so that the quantities and types of waste held in store at any time can be determined, and the wastes can be traced through the treatment process.

5.2 Handling and Treatment of Wastes

Liquid waste from the St Ivel factory will be delivered to the effluent treatment plant via a dedicated pipeline.

The pipework layout will enable wastes stored in the reception area, and which are capable of being processed within the plant, to be transferred to the inlet to the sewage treatment works. An overall process schematic showing waste handling operations is attached.

All tanks and pipework will be constructed of, or lined with, materials compatible with the wastes to be handled.

All waste will be treated under the control of the appropriate plant supervisor. A record will be kept relating to each particular waste stream as follows:

- the quantity of material treated
- the date on which the material is treated
- the process involved in the treatment
- the quantity and analysis of residues not discharged to the foul sewer under the Trade Effluent Agreement
- the name and location of the disposal site used for the final disposal of the residues not discharged to the foul sewer under the Trade Effluent Agreement.

All plant and equipment for the treatment of waste materials will have appropriate instrumentation and will be monitored by properly trained operatives.

The point of entry from the effluent treatment plant to the sewer will be monitored to ensure that the discharge liquor falls within the limits of the Trade Effluent Agreement.

Solid wastes from the treatment process suitable for discharge to the foul sewer will be directed to Merlin's Bridge Sewage Treatment Works for final recycling/disposal, as specified above.

It is proposed that flows of treated effluent to sewer will take place over 24 hours, and be controlled to balance the hydraulic load at Merlin's Bridge STW. Flows will be determined by Dwr Cymru-Welsh Water and specified in the Trade Effluent Agreement.

Operations procedures for off-loading and discharging bulk liquids from tankers are detailed in Appendix I.

Additionally, procedures will be drawn up to cope with accident scenarios such as a major spillage or a fire. Flow charts indicating incident procedures in the case of fire or the identification of an intruder to site are in Appendix II. These procedures and the operating procedures outlined above will be modified as necessary in the light of operational experience and the introduction of any new legislation, and will be deposited with all the local offices of statutory and other relevant authorities.

A record will be kept to include the following information:

- total daily volume treated
- the balance of waste in store at any time
- details of waste materials received to include:
 - analysis carried out by the producer or his agent
 - analysis carried out on reception of the waste
 - date of waste reception
- the weight or volume of waste materials received for storage/treatment

5.3 Staffing

The facility will be operated by the Pembrokeshire operations area of Dwr Cymru-Welsh Water's South West Division

The operational area is under the control of an Area Manager who reports directly to a Director of Dwr Cymru - Welsh Water.

The area operational structure is detailed in Appendix III. All staff are trained to the appropriate level to enable them to carry out their responsibilities.

The facility will only receive tankered waste when Dwr Cymru - Welsh Water staff are present on site.

It is intended the Facility will operate to achieve BS 5750 [and BS 7750] accreditation.

5.4 Health and Safety

Drench showers, eye irrigators and personal respiratory protective equipment will be provided adjacent to high risk areas for use by personnel in the event of contamination. A high risk area is an area where waste is stored, handled and treated to which exposure for 15 minutes or less would be likely to cause serious damage to human tissues by inhalation, skin contact or eye contact.

Personnel involved in the off-loading and treatment of waste materials will be instructed in the dangers associated with the wastes, and all reasonable precautions, including the provision of protective clothing, such as overalls, gloves and goggles, and other equipment, will be taken to prevent any contamination of personnel taking place.

The design and operation of the proposed plant will comply with the requirements of the following legislation:

- the Health and Safety at Work etc Act 1974, and related regulations and guidance notes
- the Factories Act 1961 and all relevant regulations relating to equipment to be used at the proposed facility
- all relevant current EC Directives.

5.5 Environmental Controls

Regular inspections shall be undertaken to identify manifestations of vermin and insects in accordance with the existing contract arrangements. Immediate action will be taken to rid the site of any such infestations if any such infestations are found to exist. A record will be kept of all inspections and treatments.

A full odour control system, utilising peat absorption, is an integral part of the treatment plant.

5.6 Accident and Emergency Procedures

If any leakage or spillage occurs, whether inside or outside a designated unloading or storage area, immediate steps will be taken to isolate or absorb and collect the spilled material.

All transfer/loading operations will be carried out in such a manner so as to prevent the spillage of waste materials, employing measures such as permanent supervision.

In the event of a fire an emergency procedure, to be compiled in consultation with the Fire Brigade, the Health and Safety Executive, the Waste Regulation Authority, Dwr Cymru, the National Rivers Authority, [] District Council Environmental Health Department and the Emergency Planning Officer, will be adopted.

APPENDIX I

OFF-LOADING AND DISCHARGING LIQUIDS FROM TANKERS

Prior to Off-loading

The checks made are;

- sampling and inspection
- compliance with contract waste specification
- compliance with licence
- document check
- handling requirements

Delivery

The tanker driver will be directed to take the tanker to a designated discharge point on the discharge manifold.

On arrival at the discharge point the tanker driver will be directed by the plant operator into position for discharge and the manifold cap removed.

The driver will then connect the tanker to the manifold under supervision.

When the delivery is complete the driver will disconnect from the manifold and refit the manifold cap.

The delivery note will be signed to confirm acceptance of the delivery. One copy will be retained.

The tanker will be witnessed during departure until it leaves the site.

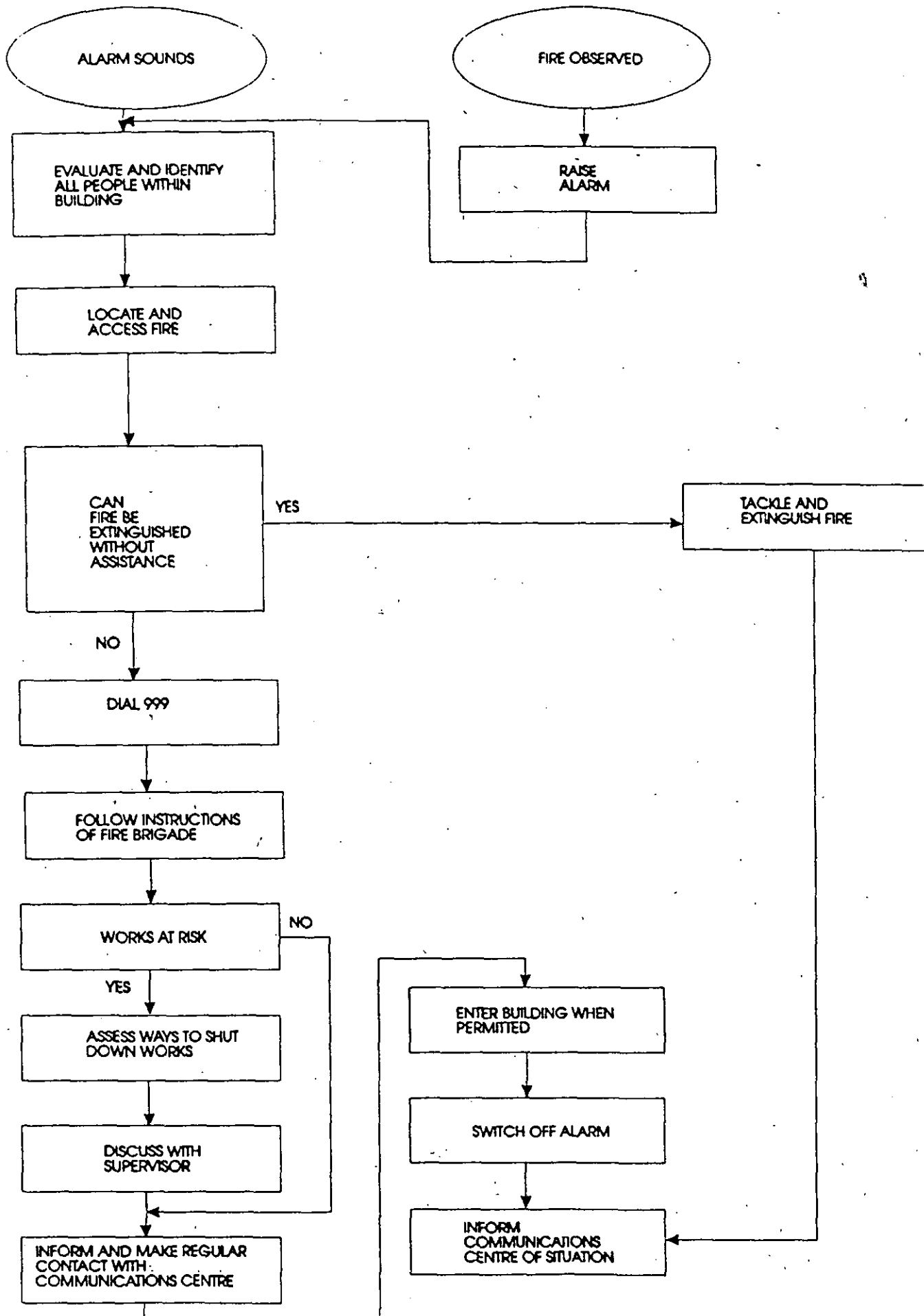
The retained copy of the original delivery note will be sent to the site office for safe keeping.

APPENDIX II

INCIDENT PROCEDURES - FIRE

FIRE

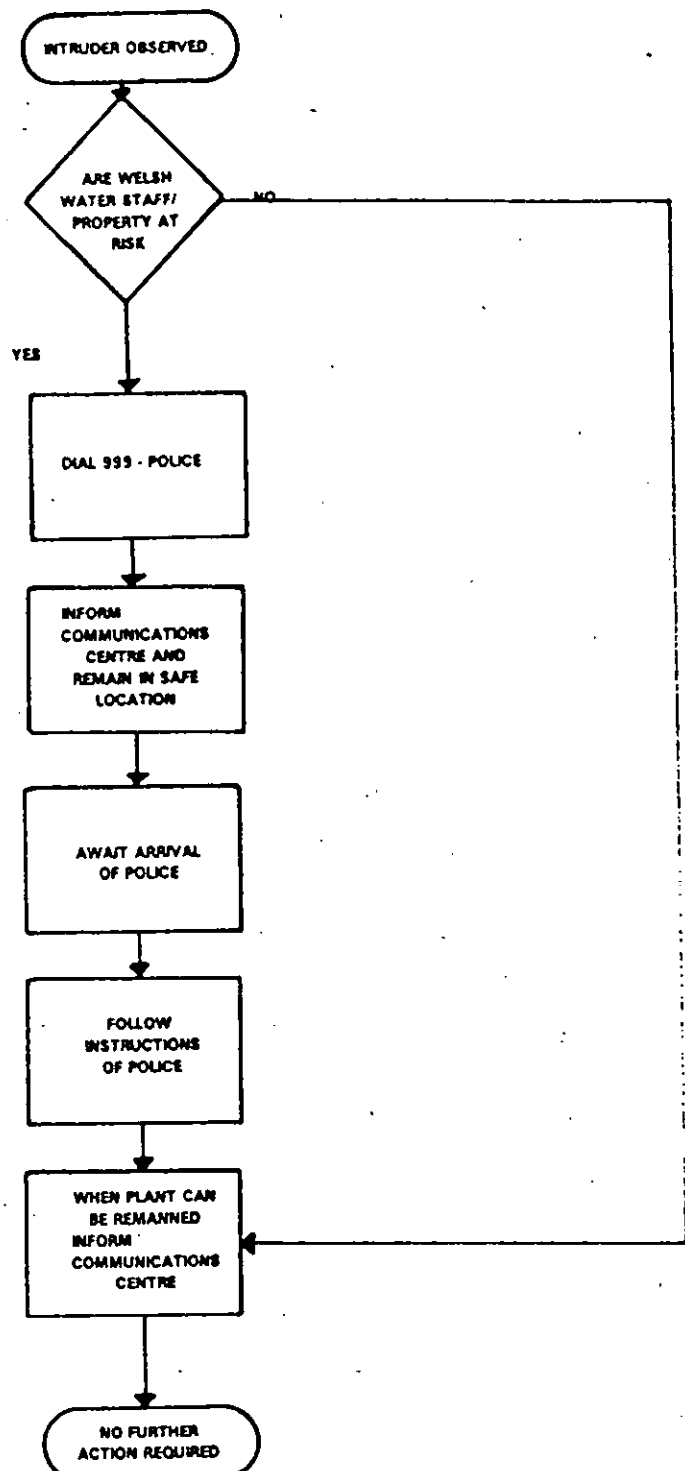
Fire - personnel on site



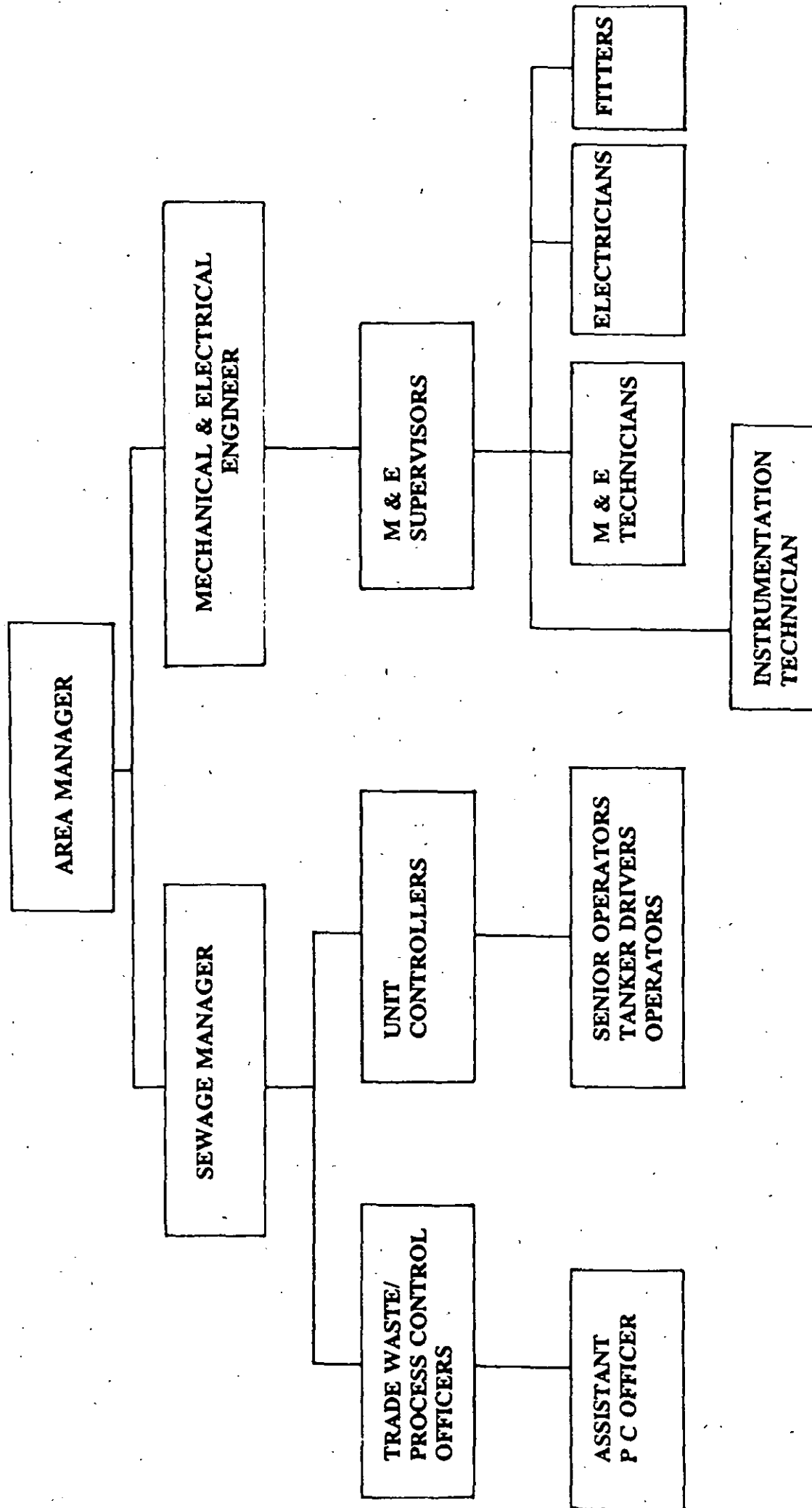
INTRUDER

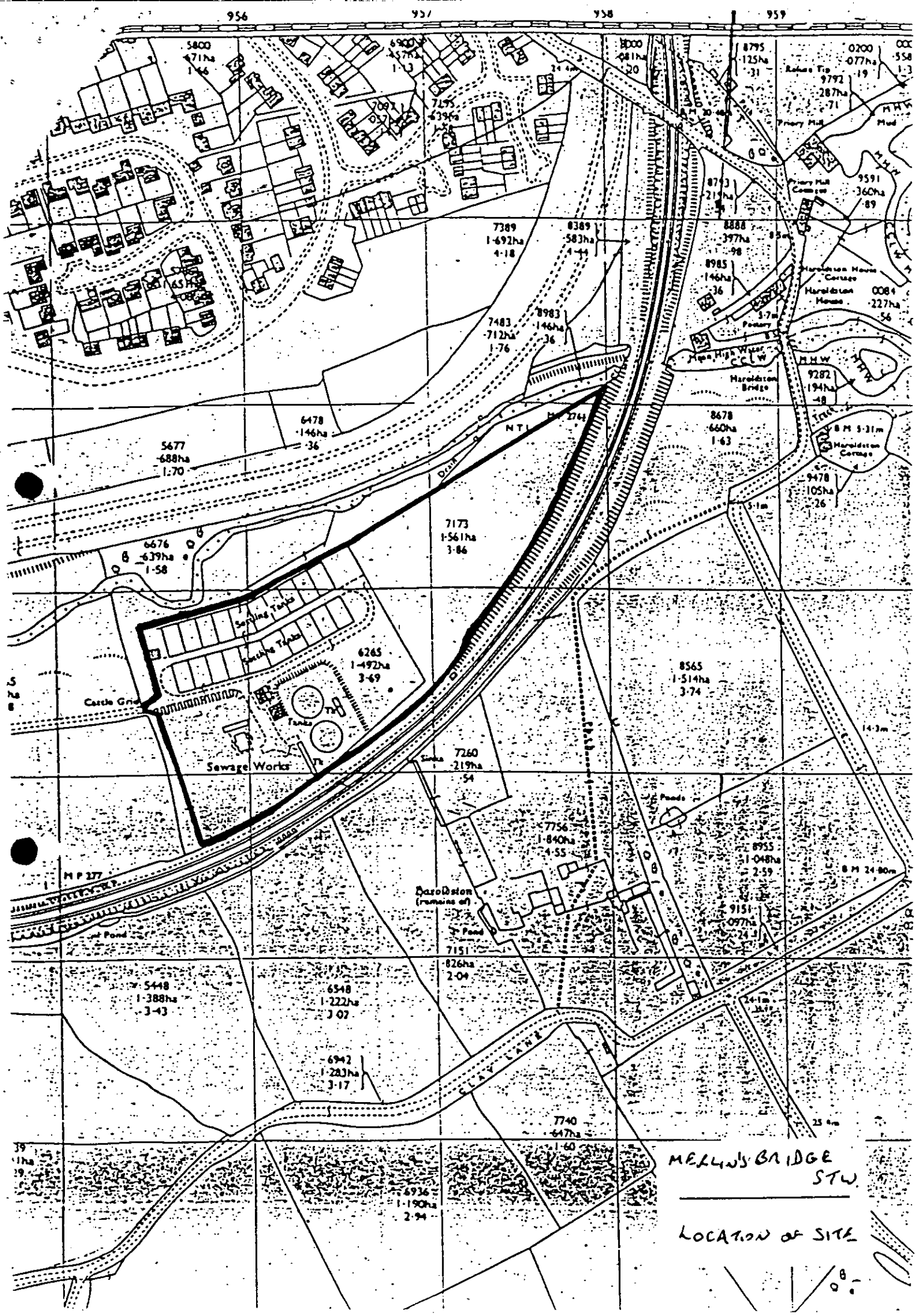
INTRUDER

Intruder - site manned



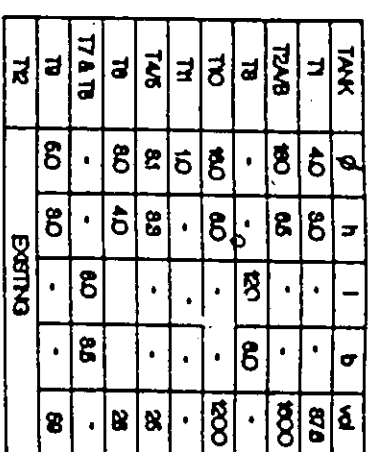
APPENDIX III





MELLYN'S BRIDGE
STW

LOCATION OF SITE



ONLY pH CONTROLS SHOWN, WITHOUT CONTROL
LOOPS, OTHER CONTROLS OMITTED

2 DIMENSIONS APPROXIMATE, DEPTHS EXCLUDE ULLAGE

9 FEAT CONTENT OF DAF SLUDGE ASSUMED
NONDETRIMENTAL TO TREATMENT/DISPOSAL ROUTE

4177-1B IS ASSUMED TO BE COMBINED
DAF-SLUDGE RECEPTION MODULE

617B IS COMBINED NEUTRALISATION/DAF/PRIMARY
EFFLUENT MIXING AND PUMPING TANK

WALLACE EVANS LTD., PROCESS DIVISION, PENARTH
OUTLINE FLOWSHEET FOR PRETREATMENT OF
S.I. MEL. OCEANIC EFFLUENT AT DQ.WWV
MELINS BRIDGE S.T.W. (1957/4)

SEPROWN 17/02/83

**SAFETY STATEMENT ON CONTAINMENT OF ANY
SPILLAGE FROM NEW EFFLUENT TREATMENT
PLANT INSIDE MERLINS BRIDGE SEWAGE
WORKS FOR WELSH WATER INDUSTRIAL
SERVICES.**

AUTHOR: CONTRACTOR FOR WWIS

**S. LONGLEY
AQUAPURE SYSTEMS LTD
UNIT 3 REGENTS COURT
SOUTH WAY
WALWORTH INDUSTRIAL ESTATE
ANDOVER
HAMPSHIRE
SP10 5NX**

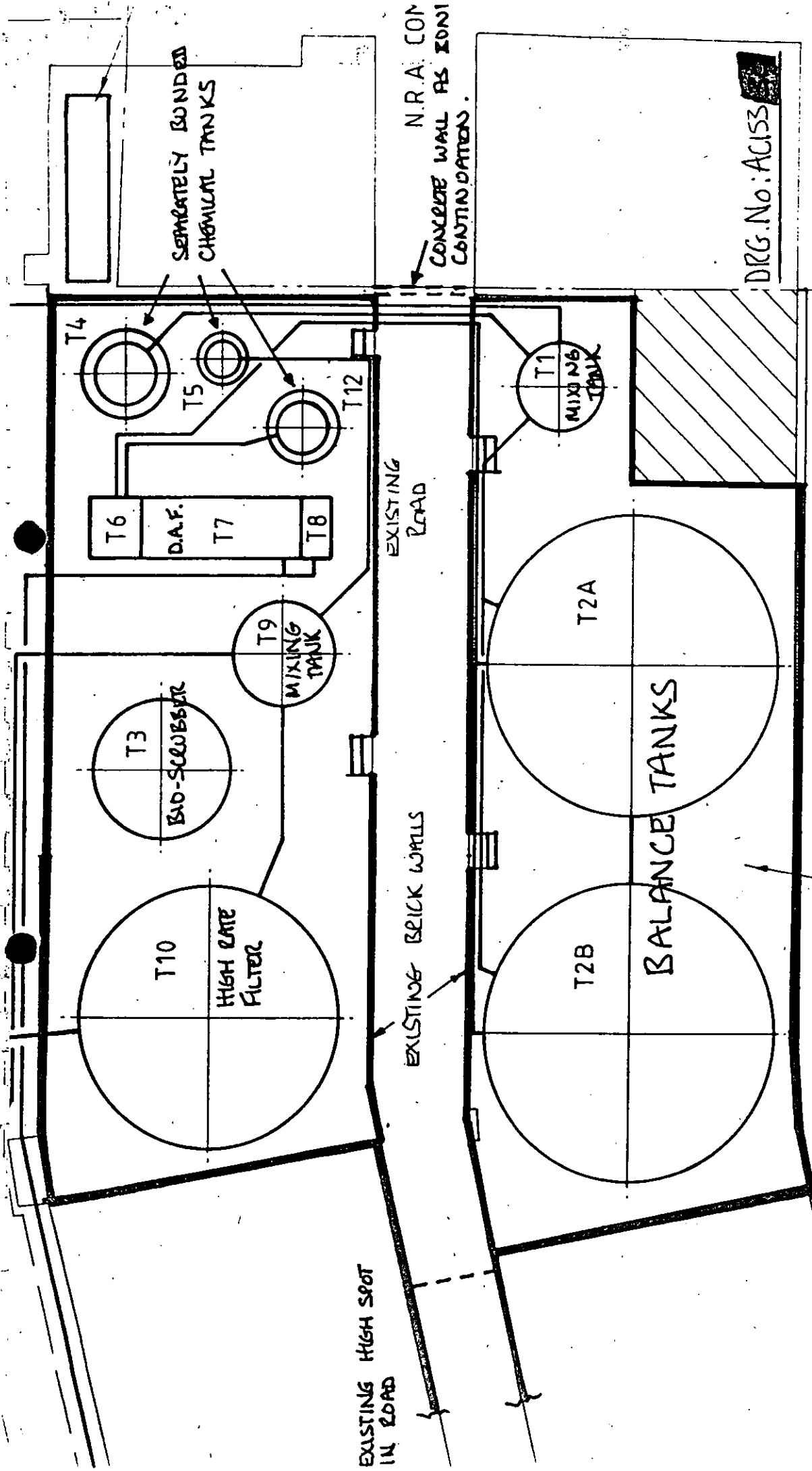
STATEMENT

The new Effluent Treatment Plant has been sited in an area within the existing sewage treatment works, which provides containment in the event of an accidental spillage. Although such a spillage is very unlikely to occur, it may be caused as a result of malicious damage to some part of the new plant, by a third party, or by a pipe fracture/failure or similar. Containment is provided by utilisation of existing brick walls which originally bounded the old works sludge drying beds and are now the peripheral walls around the new effluent plant as shown on Drawing No. AC153/30. In order to assist the treatment process in the new plant chemicals area dosed into the effluent at designed rates.

These chemicals are safely stored in polypropylene tanks, which are individually bonded as shown on Drawing AC153/30.

The containment philosophy is based upon the following:-

- a) In the event of a tank/pipe failure from the Balance Tank area, shown as AREA A, and hence spillage the effluent would first start to fill the areas around the tanks, see Drawing No. AC153/31.
- b) Once the flood spillage level reached a height of approximately 650 mm above the base level, the effluent would gravitate across the access road into the other bunded area, shown as AREA B containing the rest of the new effluent plant. See Drawing No. AC153/32.
- c) Once the flood level reaches a height in this area of approximately 300mm above base level the effluent will drain down a new manhole, shown on Drawing No. AC153/33.
- d) This manhole gravitates to an existing sump within the existing sewage treatment works and would then pump the effluent spillage back into the main sewage works for treatment. These existing pumps are rated as duty/assist, so in the event of a large spillage and a high level in this sump as a result, the both pumps would run, discharging a total flow of approximately 40 L/S safely back into the works.
- e) In the event of a spillage in the area shown AREA B on Drawing No. AC153/31, the effluent would drain into the same manhole as shown on Drawing No. AC153/33. This area is contained in the exact same manner as AREA A shown on Drawing No. AC153/30.

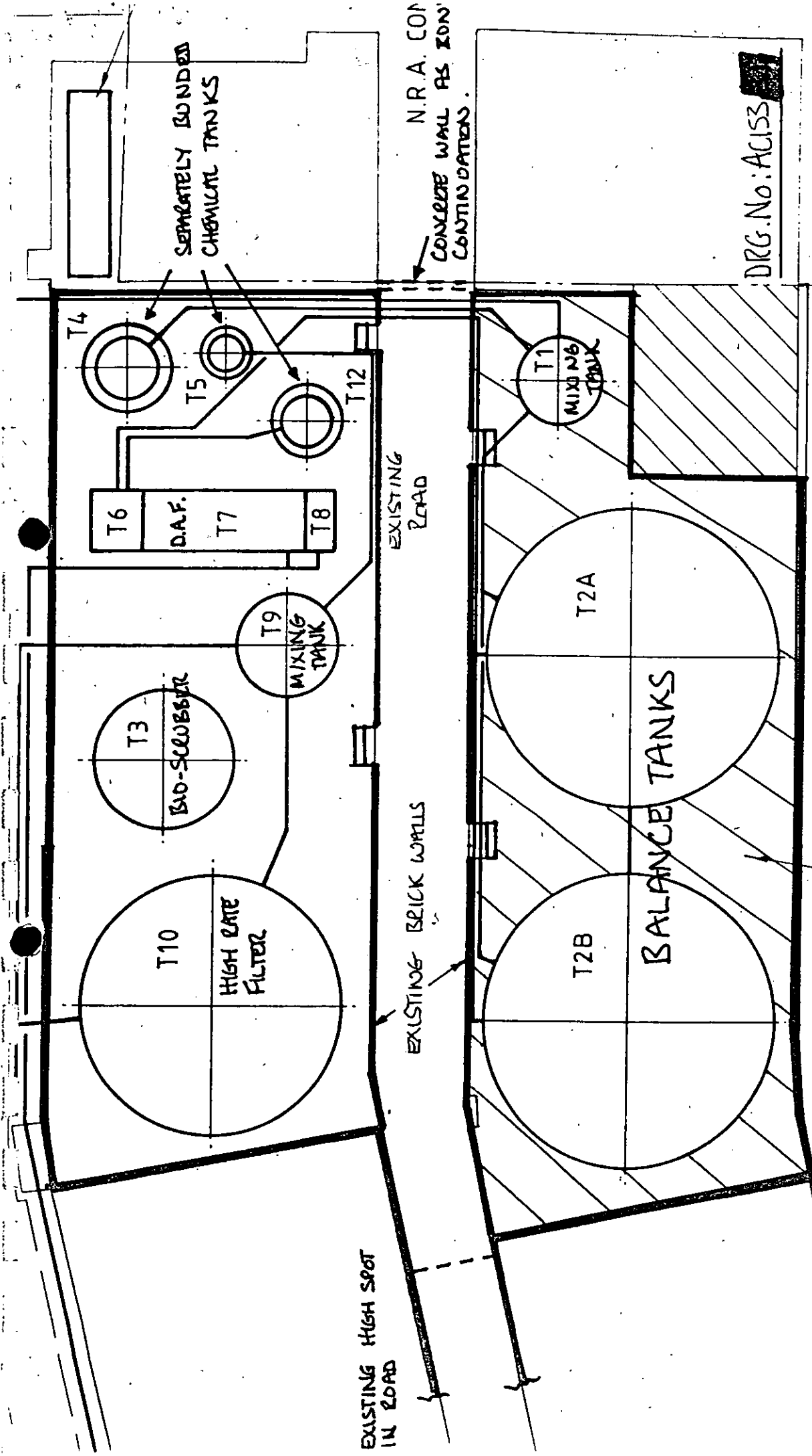


DRG. No: ACISS

WELSH WATER
INDUSTRIAL SERVICES
MELBURN RINSE E.T.P.
CONTAINMENT OF SITE
LAYOUT

DRAWN: £ DATE: 3/9/4

AQUAPURE
Pumping & Treatment Systems
Aquapure Systems Ltd
Unit 3, Regents Court, South Way,
Walworth Industrial Estate, Andover, Hants. SP10 5NX
Tel: (0264) 334833 Fax: (0264) 334799



DRG. No: AC153

WELSH WATER
INDUSTRIAL SERVICES
MERLINS REINSE E.T.P.
CONTAINMENT OF SITE
LAYOUT.

DRAWN: £ DATE: 3/94

AQUAPURE
Pumping & Treatment Systems
Aquapure Systems Ltd
Unit 3, Regents Court, South Way,
Walworth Industrial Estate, Andover, Hants. SP10 5NX
Tel: (0264) 334833 Fax: (0264) 334799

AREA A

AREA B

EXISTING HIGH SPOT
IN ROAD

EXISTING BRICK WALLS

EXISTING SALVAGE ROUTE

EXISTING ROAD

N.R.A. CON
CRETE WALL AS ZONE
CONTINUATION.

SEPARATELY BONDED
CHEMICAL TANKS

DRG. No: ACISS

Pumping &
Treatment
Systems

AQUAPURE

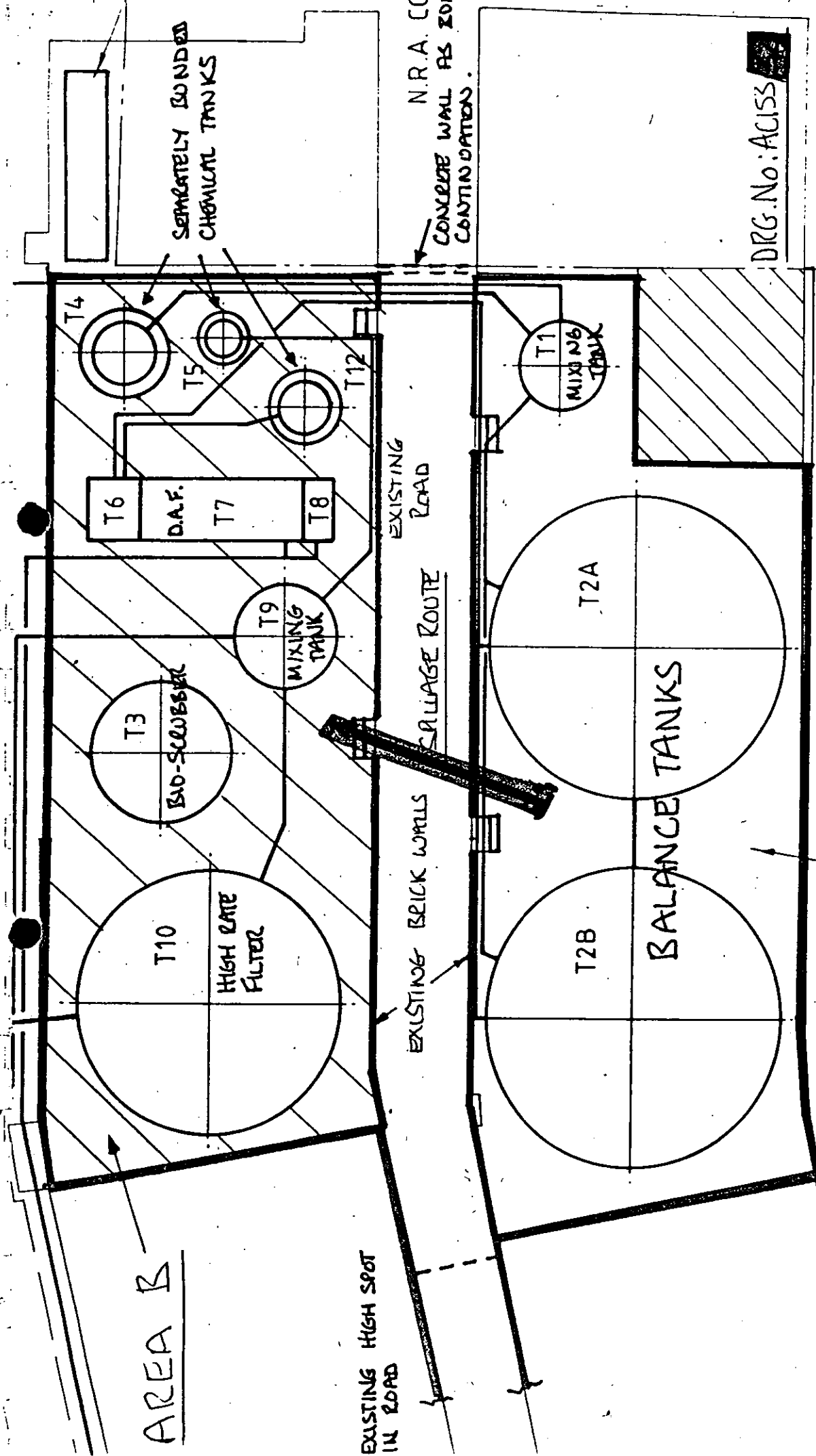
Aquapure Systems Ltd

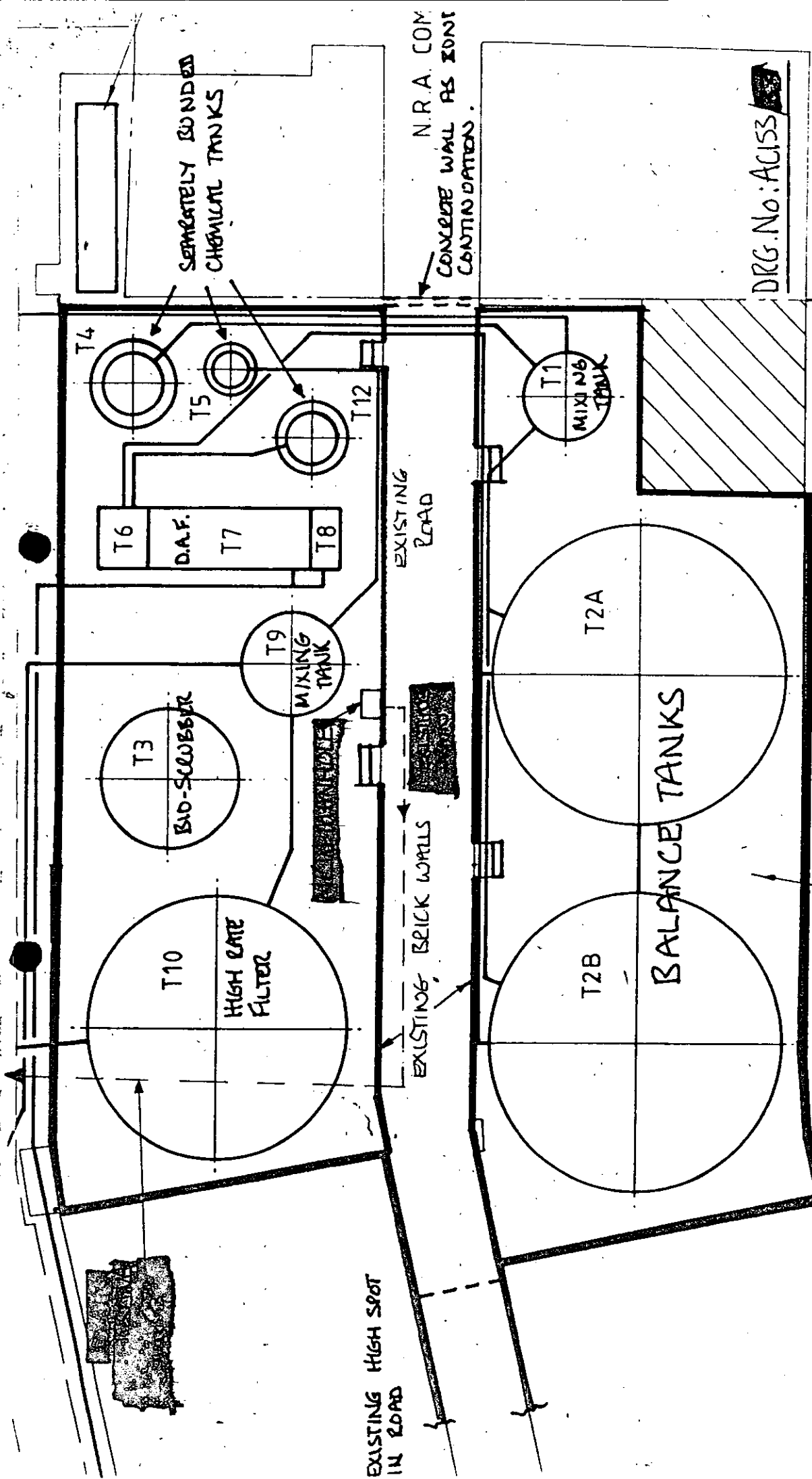
Unit 3, Regents Court, South Way,
Wulworth Industrial Estate, Andover, Hants. SP10 5NX
Tel: (0264) 334833 Fax: (0264) 334799

WELSH WATER
INDUSTRIAL SERVICES

MELINS BRIDGE E.T.P.
CONTAINMENT OF SITE
LAYOUT.

DRAWN: S DATE: 3/94





WELSH WATER
INDUSTRIAL SERVICES
MERLINS BRIDGE E.T.P.
CONTAINMENT OF SITE
LAYOUT.

Pumping &
Treatment
Systems
AQUAPURE

Aquapure Systems Ltd

Unit 3, Hegens Court, South Way,
Walworth Industrial Estate, Andover, Hants. SP10 5NX
Tel: (0264) 334833 Fax: (0264) 334799

DRAWN: £ DATE: 3/44

1.10 DAF UNIT

Process design data on which Aquapure Systems Ltd have based their Plant Sizing, Performance and Prices.

Application	-	Milk Waste
Rate	-	75m ³ /Hr
Equivalent DAF Loading Rate	-	
Feed Solids Average	-	0.5%
Volumetric Loading	-	2.0m ³ /m ² /Hr
Surface Area of DAF Cell	-	35.0m ²
Retention Time	-	0.8 hour approximately
Recycle Rate	-	50%
Cell Total Volume	-	8.5m ³
Cell Dimensions	-	3.5 depth x 3.5 wide x 10.0m long approx
Cell Sloped Floor	-	30° to 40°

Item 1

1 off 75.0m³/Hr DAF Tank

In order that there will be an adequate air/solids ratio the recycle rate will be 50%.

The Unit will be fabricated from 6mm mild steel and will be skid mounted. The air saturation vessel, the recycle pump air compressors and air injection controls will be mounted on the integral skid. The Unit will have an access ladder and an elevated walkway on one side of the DAF Tank. Floated sludge will be removed by a full width chain driven mechanical flight scraper. The paint finish will be in accordance with your standard finish.

Item 2

1 off Air Compressor - Duty/Standby - 2.2kw

The compressor will supply air into the 5m³ air saturation vessel at the required rate controlled by a level switch in the air saturation vessel.

Item 3

2 off Recycle Pump - 12.5kw

The recycle pump draws supernatant liquor from the DAF tank and pumps into the air saturation vessel where it is saturated with air. The recycle pump is fixed speed developing a pressure of approximately 5.5 bar.

Item 4

1 off Scraper System and Geared Motor - 0.5kw

The Scraper system removes the thickened sludge that has floated to the top of the DAF Tank, by scraping it into a sludge pocket at the end of the DAF Tank. It comes on periodically and is operated by a timer.

1.16

ODOUR REMOVAL EQUIPMENT

1 No

Biofilter module to treat 4826m³/hr of odorous air drawn from Tanks.

The odorous air is to be ducted from the source to the biofilter module where micro-organisms immobilised on the biofibrous materials oxidise and remove the odorous components of the gas.

We propose to install 1 No Modular Biofilter. The overall dimensions of the module housing are 13 (L) x 6 (W) x 1 (H).

The odorous air is to be ducted to the flanged inlet on the Biofilter module, and out through one locally located stack to atmosphere.

The specific requirements of vent gases for effective and efficient elimination of odours are as follows:

Temperature - 10-15°C

Relative Humidity - 90-100%

Foul Air Static Pressure at Filter - 75mm (max)
25mm (normal)

In this instance it is assumed that the exhaust gases will be above 80% RH, and will not require humidification.

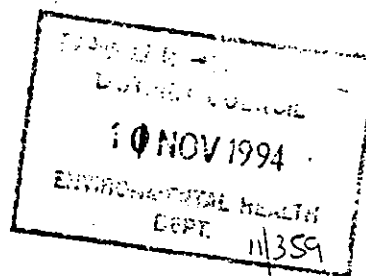
Duct work 300mm UPVC light gauge between Tanks and Filter Unit.

8 November 1994

Our Ref RR/ACC



Mr R G Spate
Waste Regulation Officer
Preseli Pembrokeshire District Council
Cambria House
Haverforwest
Pembrokeshire
Dyfed SA61 1TP



Dear Mr Spate

Merlins Bridge Treatment Plant - Waste Disposal Licence No WD078

Further to our meeting of the 3 November and your subsequent letter of 7 November, I have the following comments to make in respect of the site licence to be issued under the Control of Pollution Act 1974.

Schedule B - Site Preparation

- 5 The site control office is the administration block and is the brick built building located to the right upon entering through the entrance gate. This office is currently used by the operatives based at the site and is fitted and furnished to Dwr Cymru - Welsh Water standards.
- 6 Dwr Cymru - Welsh Water have undertaken to improve the road. Short term repairs have been completed and a plan is in place to substantially repair the road within three months of the issue of the licence.
- 7 & 8 Whilst we agreed a trial period of 3 months for wastes brought to the facility by road tanker, there may be no need for this. My interpretation is that once the licence is issued this will cover the disposal of a particular tankered waste stream.
- 10 The site access road has the benefit of street lighting. The plant also has the benefit of lighting. Further details will be provided by ourselves with respect to the positioning of lighting.



W W Industrial Services,
Cambrian Way,
Brecon, Powys.
Telephone: (01874) 614452
Fax: (01874) 614729

W W Industrial Services,
Ffordd Cambria,
Aberhonddu, Powys.
Ffôn: (01874) 614452
Teleffacs: (01874) 614729

Welsh Water Industrial Services Limited is registered in Wales No. 236659 Registered Office: Plas y Ffynnon, Cambrian Way, Brecon, Powys LD3 7HP.
Welsh Water Industrial Services Limited trading as WW Industrial Services is part of the Water Services business of Welsh Water PLC.

Cofrestrir Welsh Water Industrial Services Cyfyngedig yng Nghymru Rhif 236659. Swyddfa Cofrestrredig: Plas y Ffynnon, Ffordd Cambria, Aberhonddu, Powys, LD3 7HP
Mae Welsh Water Industrial Services Cyfyngedig sy'n masnachu fel WW Industrial Services yn rhan o fusnes Water Services cwmni Welsh Water PLC.

Emergency Plan

There are three types of emergency that may occur at the facility, these are:-

- intruder
- spillage of effluent/waste
- fire.

Intruder

The management procedure is contained in Appendix I.

Spillage of Effluent/Waste

The drainage system at the Merlin's Bridge waste treatment facility is designed so that all spillages are retained within the curtilage of the plant in accordance with the plans already submitted. This provides a level of process security, as any spillage will be stored prior to controlled treatment through the STW. It is not anticipated that wastes/effluents of a significantly different specification than that specified in the site licence will be on site at any time. The integrity of the drainage system ensure that spills cannot escape from the site.

Chemicals delivered to site are discharged within the bunded area to dedicated and labelled tanks.

In the event of a spillage, the spilled effluent/waste will be hosed down with copious quantities of final effluent from Merlins Bridge STW.

Staff, adequately trained and wearing suitable protective equipment, will work on the spillage incident and maintain process operations.

Automatic systems for pH monitoring ensure that there is an automatic shutdown of the pH dosing system should a problem be identified. Problems are identified through the 24 hour telemetry monitoring system and actioned through the existing management procedure.

Tank capacities are also monitored by the telemetry system and communicated through to Dwr Cymru - Welsh Water offices at Velindre.

Fire

Any fire at the facility shall be treated as an emergency and immediate steps taken to extinguish it. The fire service will be informed immediately. The management procedure is contained in Appendix I.

In addition, any incidence of fire will be reported to the Waste Regulation Authority at the earliest opportunity.

Fire fighting equipment is installed at Merlins Bridge STW and will be utilised in the event of a fire at the facility. Staff have already received training in the use of all personal protection equipment and emergency procedures such as fire, spillages and intruders entering the site.

Schedule C - Type of Waste

- 1 Please treat the following design parameters for the plant in commercial confidence.

Flow 1500m³/day
BOD 2.7 tonnes/day
SS 0.7 tonnes/day

These are the anticipated loadings for the next twelve months. The 2000m³ volume allowed for in the draft site licence is, therefore, a suitable figure for this facility.

Schedule D - Operations

- 5 This specifically relates to chemical storage. The appropriate tanks are bunded and clearly labelled. These tanks are identified in the site plans already submitted.

- 8 I accept that the operational hours will be:

0600 - 1800 Monday - Friday
0600 - 1630 Saturday
0600 - 1630 Sunday
0600 - 1630 Bank Holidays

- 15 The plant will be regularly inspected and preventative breakdown maintenance operated.

- 26 The treatment facility is connected to the telemetry system operated by Dwr Cymru - Welsh Water. This system ensures that any malfunction of the plant, including any spillage is detected at the earliest opportunity.

During manned working hours the operator will be contactable by telephone through the telemetry communication system. Whilst manned the operator will closely monitor the performance of the works. This operation is assisted further by the installation of a warning light which comes on at the control panel in the event of an alarm sent to the telemetry system.

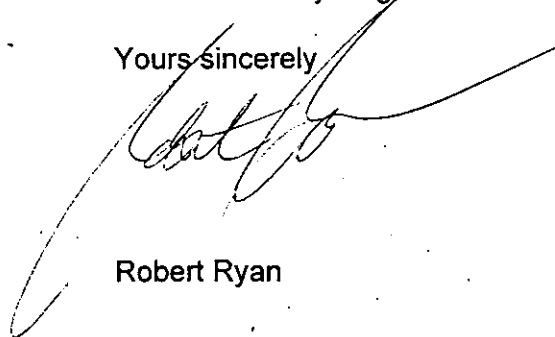
- 28 As there are only likely to be two waste streams entering the facility in the foreseeable future and these will have consistent characteristics, I consider that these waste streams will only require characterisation every 3 months or every 6 months. These characteristics are to be identified by yourself. I have supplied sample details of a landfill leachate and these probably cover the initial requirements. With regard to the effluent arriving by pipeline from St Ivel, the relevant parameters are; COD, SS, pH.

- 29 With reference to site sampling, every load brought in by tanker will be sampled and stored for a period of 14 days. However, a selected number will be analysed. Again, this is to be determined by the Waste Regulation Authority. I would suggest, due to the consistency of the waste stream that only one sample will require analysis every week. This would probably equate to 1 sample analysed in every 20 loads.

I also enclose a copy of the discharge consent in respect of the discharge from the industrial waste water treatment plant issued by Dwr Cymru - Welsh Water.

I trust that everything is in order and I look forward to receiving the issued site licence.

Yours sincerely



Robert Ryan

Enc Appendix I - Emergency Plan
 Appendix II - Discharge Consent issued by DCWW

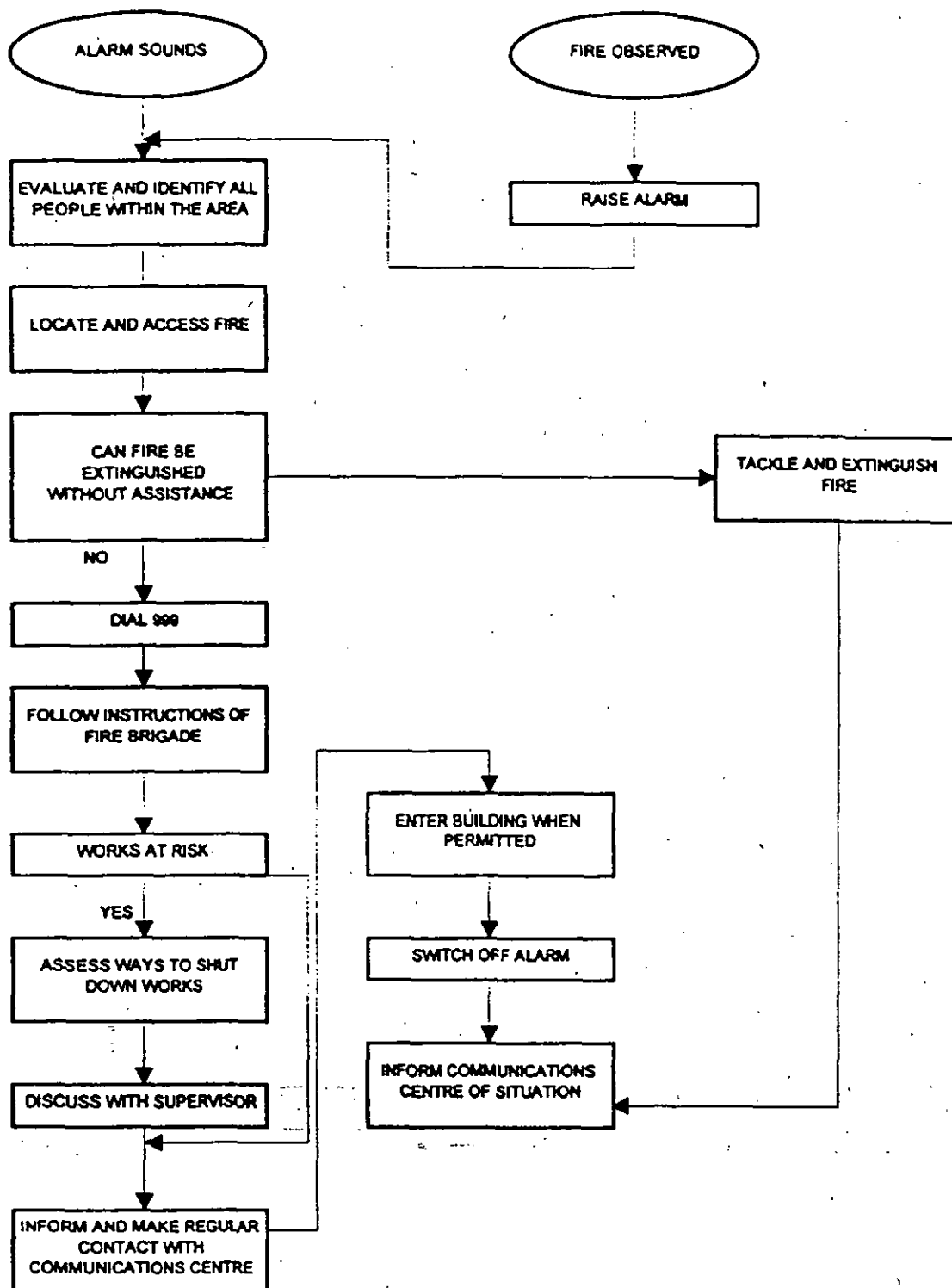
APPENDIX I

EMERGENCY PLAN

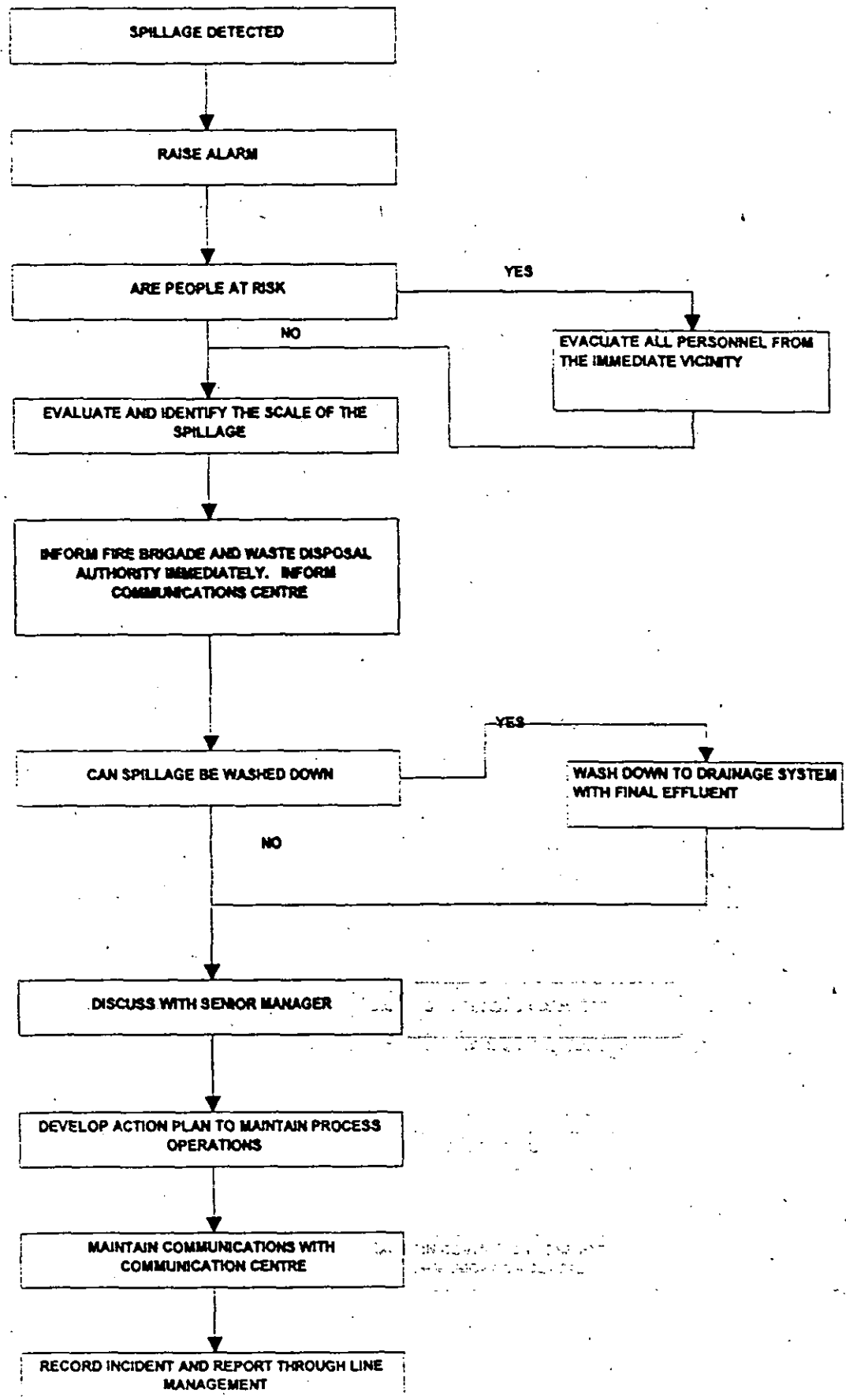
INCIDENT PROCEDURES -

FIRE

Fire - personnel on site

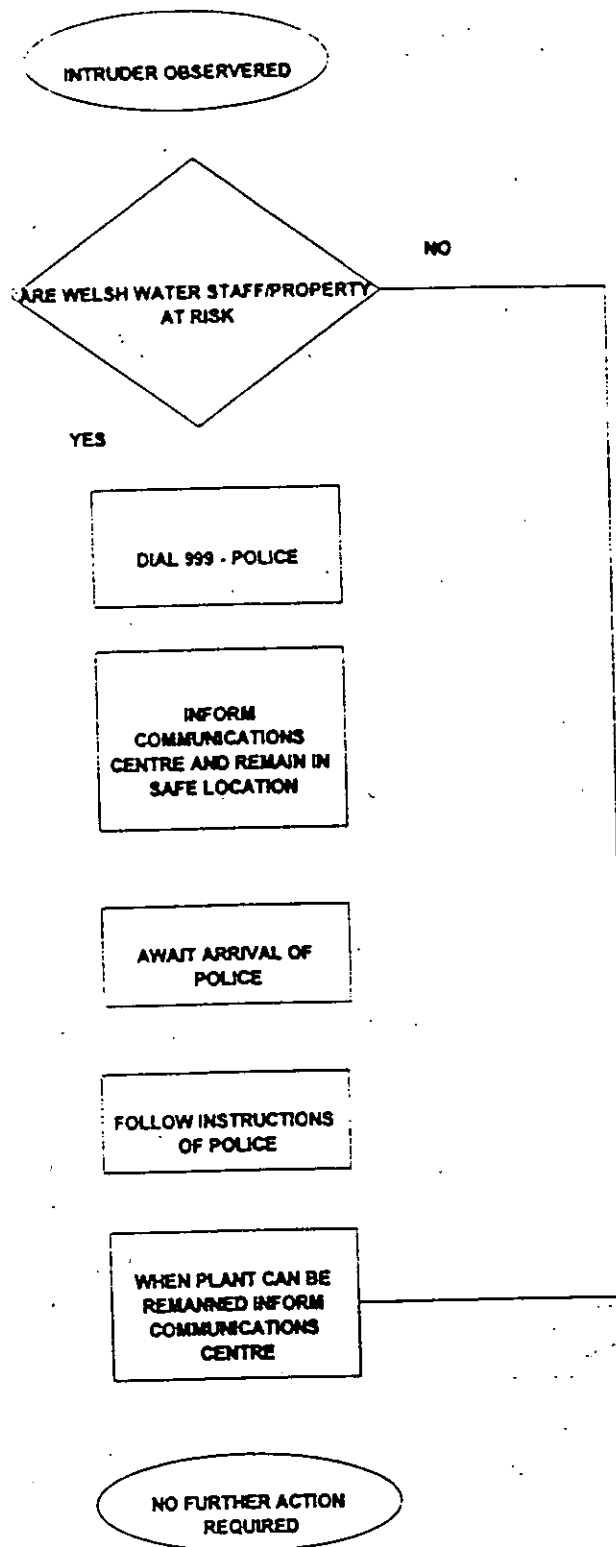


SPILLAGE PROCEDURE

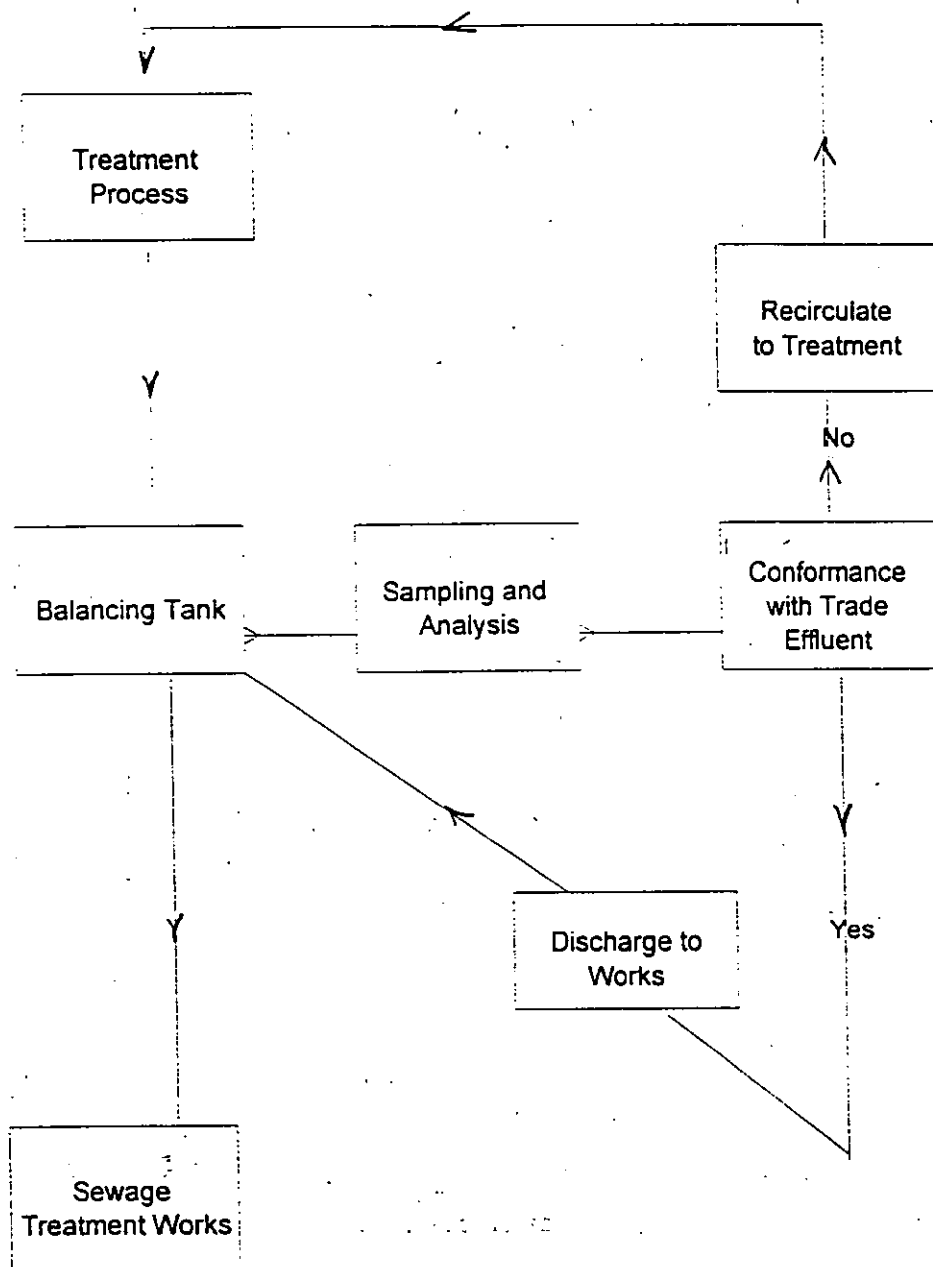


**INCIDENT PROCEDURES
INTRUDER**

Intruder - site manned



Balancing Tank Quality Failure Procedure



APPENDIX II

DISCHARGE CONSENT ISSUED BY DCWW

- 8 NOV 1994

Dŵr Cymru - Welsh Water
South Western Division

West Wales Area, Fishguard Road Industrial Estate, Withybush,
Haverfordwest, Pembrokeshire, SA62 4EQ

MEMORANDUM

TO: Mr Kevin Houston ✓
WWIS
Brecon

FROM: Mr John Lloyd
Waste Water Manager

REF: JL/NJ/164

DATE: 7 November 1994

WWIS Pre Treatment Plant - Merlins Bridge

Following our discussions regarding the formal consent between Dŵr Cymru and WWIS, the following was agreed:-

BOD	-	190 mg/l
S.S.	-	75 mg/l
COD	-	400 mg/l
Ammonia	-	20 mg/l
ph	-	6 to 10
Flow	-	1,545 m ³ /day max.
Chrome	-	0.4 mg/l
Copper	-	0.4 mg/l
Lead	-	0.4 mg/l
Nickel	-	0.4 mg/l
Zinc	-	0.4 mg/l
Cadmium	-	0.02 mg/l

It was agreed that Dŵr Cymru reserves the right to amend any of the above determinants should the quality of the final effluent from the sewage works threaten breach of the NRA consent conditions.

It should also be borne in mind that all sludge produced at the works is injected into agricultural farmland. The sludge is sampled on a regular basis in order to ensure compliance with the "Code of Practice for Agricultural Use of Sewage Sludge". Should the impact of the WWIS plant adversely affect the sludge then it will be necessary to re-evaluate the figures specified in the consent.

I trust the above is in line with your own perceptions of what the agreements should contain. Please advise if acceptable or if you have other proposals.

John Lloyd

John Lloyd
Waste Water Manager