

Your Reference :
Our Reference :
Task for :
Direct Dialling No. :
Date :

EH/EP/SEB
S E Bodycote
831857
23rd August 1993

62

City of
Coventry

HOUSING AND ENVIRONMENTAL
SERVICES DIRECTORATE

Director Howard T. Farrand
Providing Housing, Environmental and
Client Agency Services

Michael J. Green
City Environment Officer
Broadgate House
Broadgate
Coventry, CV1 1NH

Telephone : 0203 85 1832/34
Telecom Gold Mailbox : 76 : END042
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THE ENVIRONMENTAL PROTECTION ACT 1990

The Environmental Protection (Prescribed Processes and Substances)
Regulations 1991, SI 472.

The Environmental Protection (Application, Appeals and Registers)
Regulations 1991, SI 507.

Authorisation No: 062
Application Received: 19th October 1992

Notice is hereby given that under the Environmental Protection Act
1990 Coventry City Council (hereafter called the Authority) gives
authorisation to:


Brown & White (Coventry) Ltd
Allesley
Coventry
CV5 9AN

Register in England No: 2258193

For the respraying of road vehicles as described on Page 2 at:

Brown & White (Coventry) Ltd
Allesley
Coventry
CV5 9AN

Subject to the conditions specified on the attached pages, Nos 1
to 4, and within the process boundary as indicated on Plan No. 1.

Signed 
City Environment Officer

Dated 25th day of August 1993

1. **DESCRIPTION OF PROCESS**

- 1.1 This authorisation is for the respraying of motor vehicles, as described in the Environmental Protection (Prescribed Processes and Substances) Regulations 1991, SI472, Section 6.5 Part B paragraph (b) within the process boundary outlined in red on the attached Plan numbered 1 and specifically relates to the processes outlined below.
- 1.2 The delivery and storage of paints, diluents and cleaning solvents in the paint store as shown in the Plan numbered 1.
- 1.3 The dry sanding of vehicles by hand.
- 1.4 The mixing of paints on the ICI Autocolor mixing machine using self sealing pouring facilities.
- 1.5 The spraying and low temperature bake curing of vehicles in 2 Spraybake booths, as shown on the Plan numbered 1, employing conventional spray guns and HVLV spray guns.
- 1.6 The application of wax underseal and panel sealants by brush or injection methods.
- 1.7 Any change to the above descriptions must not take place without the prior consent from this Authority.

2. **EMISSION LIMITS AND CONTROLS**

- 2.1 All emissions to air shall be free from offensive odour outside the process boundary, as perceived by the local Authority Inspector.
- 2.2 There shall be no emissions of particulate matter noticeable beyond the process boundary.
- 2.3 All pollution concentrations shall be expressed at standard conditions of 273K and 101.2Kpa without correction for water vapour content.
- 2.4 The introduction of dilution air to achieve the emission concentration limits in this authorisation is not permitted. Exhaust flow rates should be consistent with the efficient capture of emissions.

3. **MONITORING SAMPLING AND MEASUREMENT OF EMISSIONS**

- 3.1 A visual assessment of particulate emissions from the spray booths shall be carried out at least once a day while spraying operations are in progress. This shall be carried out by making an assessment of paint deposits beyond the process boundary.

- 3.2 An olfactory assessment of emissions of volatile organic compounds shall be carried out at least once a day from the position marked x on the plan numbered 1.
- 3.3 The results of monitoring to comply with 3.1 and 3.2 shall be recorded in a log book. This shall include the date, time, wind strength and direction, the name of the observer and an assessment of the emissions. This log book shall be retained, on site, for a minimum of four years.
- 3.4 Any adverse results from the monitoring required in 3.1 and 3.2 shall be followed up immediately by the investigation of the cause of the emission and any corrective action taken, with this also being recorded in the log book.
- 3.5 A detailed record shall be kept of all organic solvents used in the prescribed processes. This shall include cleaning solvent usage, diluent solvent usage and solvents contained within coatings used. This inventory shall be forwarded to the local Authority at least once every six months and shall include a determination for the total organic solvent usage for that period.

4. **MATERIALS HANDLING**

- 4.1 The cleaning of spray guns and other equipment shall only be carried out in the fully enclosed gun wash machine in the paint mixing room as shown on the plan numbered 1.
- 4.2 The mixing of paint shall only be carried out in the area marked paint mixing room as shown on the plan numbered 1. This shall only be done while the extractor fan is in operation.
- 4.3 Spray gun testing, following cleaning shall only be carried out in the spray booths. This shall only be undertaken while the spray booths are in proper working order.
- 4.4 Spraying shall only be carried out in the spraybooths and these must be in proper working order.
- 4.5 All full, partially full and nominally empty containers which hold or have held materials which contain organic solvents must be stored in the paint mixing room and paint store and have lidded containers. All paints that are partially full must be stored on the ICI Autocolor paint mixing rack.

5. **CHIMNEYS, VENTS AND PROCESS EXHAUSTS**

- 5.1 Emissions from the spraying or curing of coatings in the two Spraybake booths shall only be emitted to atmosphere via the cascading water filtration system.

6. GENERAL OPERATIONS

- 6.1 Any mechanical malfunction or spillage of material shall be attended to and remedied as soon as possible. Any incident likely to give rise to atmospheric emissions shall be noted in detail in the process log book as described in 3.3.
- 6.2 Any incidents likely to give rise to emissions which may have an impact on neighbouring residents shall be reported immediately to this Authority.
- 6.3 A copy of this authorisation shall be displayed so it can be conveniently read by persons having duties which are or maybe affected by this authorisation.
- 6.4 The operator shall supply, to this Authority, on demand and without charge, a copy of all or part of the monitoring records kept in accordance with this authorisation.

7. UPGRADING OF THE PROCESS

- 7.1 No later than twelve months from the date of this authorisation, a programme for upgrading the process shall be submitted to this Authority. The upgrading programme shall have regard to the Secretary of State's Guidance:

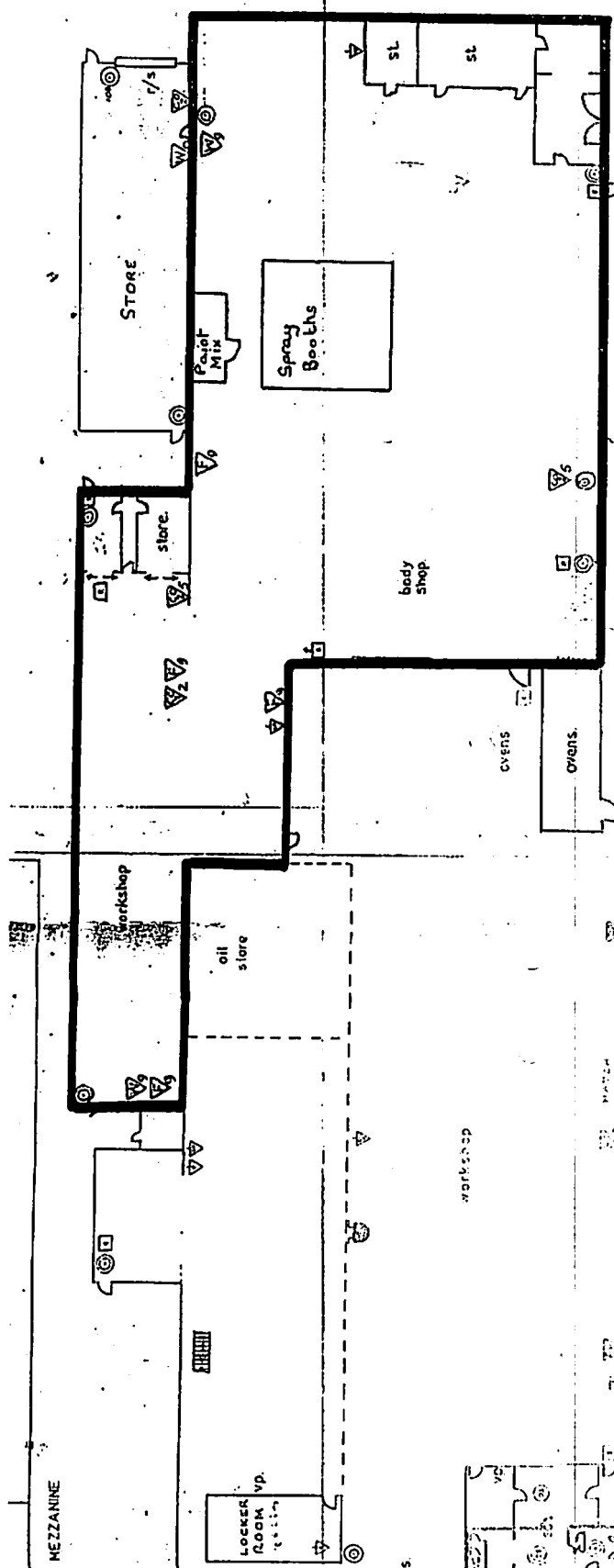
Respraying of Road Vehicles PG 6/34 (92).

- 7.2 Any proposed methods for non-continuous emission sampling for the purposes of complying with the authorisation must be agreed in writing with this Authority.

SUPPLEMENTARY NOTES

THESE NOTES ARE NOT PART OF THE AUTHORISATION

1. Your attention is drawn to your obligation under Section 7(2) of the Environmental Protection Act 1990 to ensure that the best available techniques, not entailing excessive cost (BATNEEC) for:
 - A) preventing the release of prescribed substances into the air or where that is not practicable by such means, for reducing the release into the air of such substances to the minimum and for rendering harmless any such substances that are so released, and
 - B) for rendering harmless any other substances which might cause harm if released into the air.
2. The authority for contact purposes should be taken to mean the head of the Environmental Protection Department, Tel 831810 during office hours, 832222 outside office hours.
3. You will note that condition 7.1 of the authorisation requires you to submit a schedule of works for approval by this Authority, within twelve months of the issue date. This schedule must describe the procedures and improvements that you intend to implement in order to meet the requirements of the relevant guidance note referenced within the authorisation. From observations and inspections of the process I would recommend that the following topics are specifically included.
 - a) The results of non-continuous emission sampling of emissions from the Spraybake booths to indicate what improvements (if any) are required to ensure compliance with the emission limits stated in the Process Guidance Note.
 - b) The proposed frequency of further non-continuous emission sampling, taking into account the results of the initial monitoring exercise.
 - c) The adoption of HVLP or other spraying techniques to ensure a transfer efficiency of >65%.
 - d) The fitting of positive pressure alarms to warn of an over pressure situation occurring in the Spraybake booths.
 - e) The increase in height of the final discharge points from the Spraybake booths according to the requirements of the Process Guidance Note. This should include a calculation of the proposed ground level pollutant concentration around the prescribed process.
 - f) An initial indication of the intended options for emissions of volatile organic compounds to be pursued according to Clause 19 of the Process Guidance Note.
 - g) Adoption of dust extraction systems.

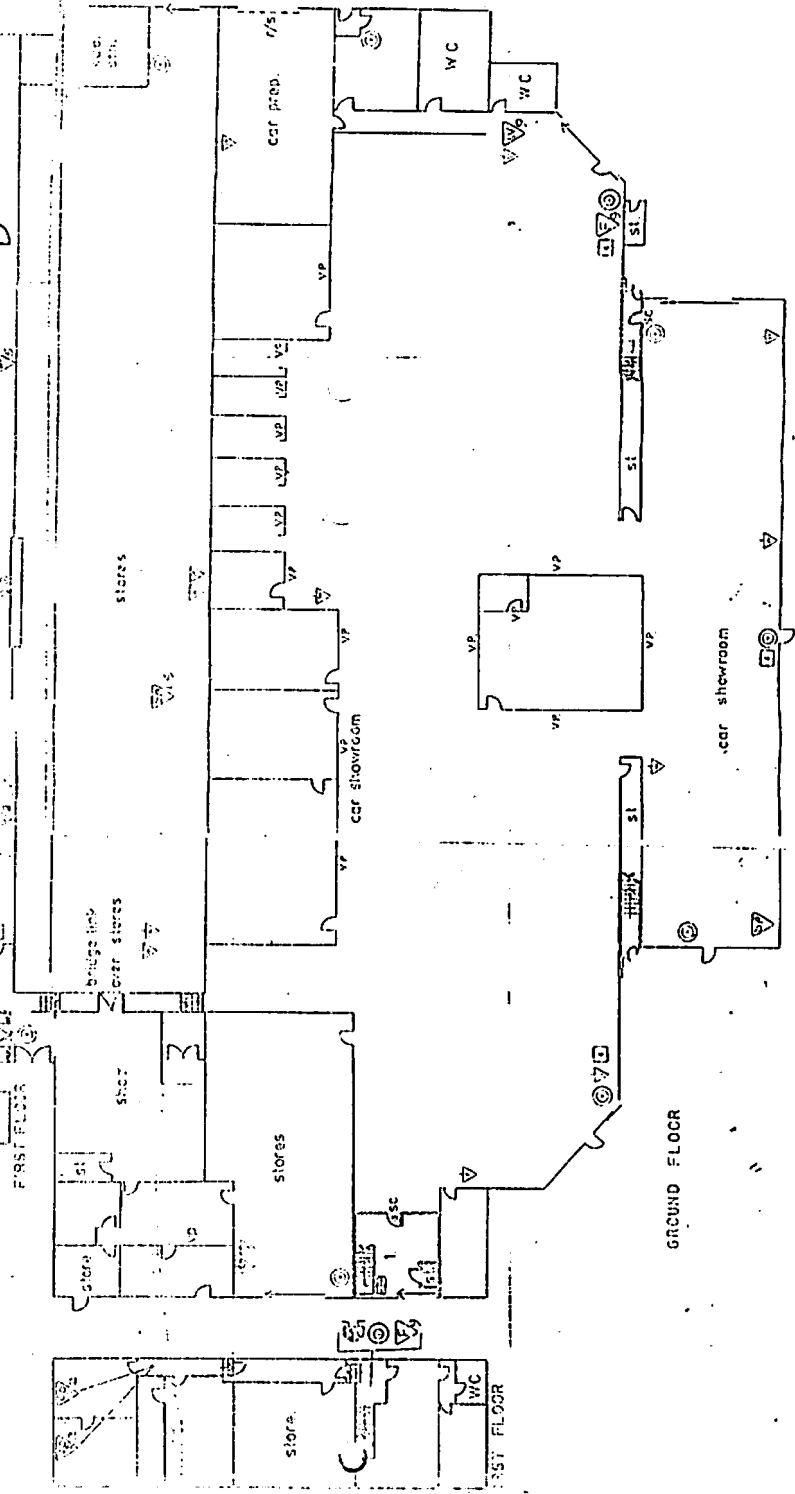


MEZZANINE

PLAN NUMBER 1

SITE PLAN
BROWN & WHITE (CON.) LTD

REF:- BW/001



GROUND FLOOR

FIRST FLOOR

FIRST FLOOR

APPLICATION FOR
AUTHORISATION TO CARRY OUT PRESCRIBED PROCESS
UNDER SECTION 6
of the
ENVIRONMENTAL PROTECTION ACT 1990

*received. K1-10-92
Cheque £900. No/ 005078.*

Application Made By:
Dated:

Brown and White (Coventry) Limited
30 September, 1992

ENVIRONMENTAL PROTECTION ACT 1990, PART I THE ENVIRONMENTAL PROTECTION (PRESCRIBED PROCESSES AND SUBSTANCES) REGULATIONS 1991, SI 472 THE ENVIRONMENTAL PROTECTION (APPLICATIONS, APPEALS AND REGISTERS) REGULATIONS 1991, SI 507.

APPLICATION FOR AUTHORISATION UNDER SECTION 6 OF THE ENVIRONMENTAL PROTECTION ACT 1990.

1. Process for which authorisation is sought.

THE RESPRAYING OF ROAD VEHICLES

2. a) name, address and telephone number of applicant* (or address of applicant's principal place of business - for mobile plant).

BROWN & WHITE (COVENTRY) LIMITED

ALLESLEY

COVENTRY CV 5 9AN

TEL NO: (0203) 402177

b) name, number and registered office of applicant company* (if applicable).

JLB HOLDINGS,

PROJECT HOUSE, ARMLEY ROAD

ARMLEY, LEEDS LS12 2EA

REG. N°: 2258193 TEL N°: 0532 434554

*The person/consultant who will operate the process, not eg the person/consultant who is writing the application on the operator's behalf.

c) address for correspondence (if different from a) or b) above).

ADDRESS AS IN a)

CONTACT: K. M. J. GAUGHAN

3. Name and address of premises where process is or will be carried on (not applicable to mobile processes).

BROWN & WHITE (COVENTRY) LIMITED
ALLESLEY
COVENTRY CV5 9AN

4. Name of local authority in whose area the process will be operated (or local authority area in which the operator has his principal place of business - for mobile plant).

COVENTRY CITY COUNCIL

5. List of maps or plans enclosed with the application showing the location of the premises where the process will be carried on.

SITE PLAN - BROWN & WHITE COV. (BW/001)
LOCAL MAP - SHOWING LOCATION (BW/002)

Where the process is or will be carried on on only part of the premises whose address is given at 3 above, either describe which part of the premises or list the plan(s) which identifies these parts.

SITE PLAN - (BW/001)

6. The process.

i) Description of the prescribed process.

SEE ATTACHED

ii) List of Prescribed Substances (and any other substances which might cause harm if released into the air) which will be used in connection with, or will result from, the carrying on of the prescribed process.

SEE ATTACHED

iii) Techniques to be used for preventing releases to the air of prescribed substances, for reducing such substances to a minimum and for rendering harmless any substances that are released.

SEE ATTACHED

iv) Details of any proposed release of prescribed substances into the air and an assessment of the environmental consequences.

SEE ATTACHED

v) Proposals for monitoring any releases of such substances, the environmental consequences of such releases and the use of techniques for preventing or minimising such releases.

SEE ATTACHED

vi) Information to demonstrate that the objectives mentioned in section 7(2) of the Act will be achieved and that the condition implied in section 7(4) of the Act will be complied with.***

SEE ATTACHED

vii) Additional information which the operator wishes the Local Authority to take into account in considering the application (eg plans for improvements etc).

7. Name of newspaper in which it is proposed to advertise the application.

COVENTRY EVENING TELEGRAPH

8. Fee enclosed (cheques should be made payable

to COVENTRY CITY COUNCIL (Council).

I hereby certify that all the information contained in this application is, to the best of my knowledge, correct.

[Redacted signature]

(signature)

J. F. BYNOTH
Co. ACCOUNTANT

(name in BLOCK CAPITALS

and capacity in which signing)

29/9/92

(date)

SECTION 6

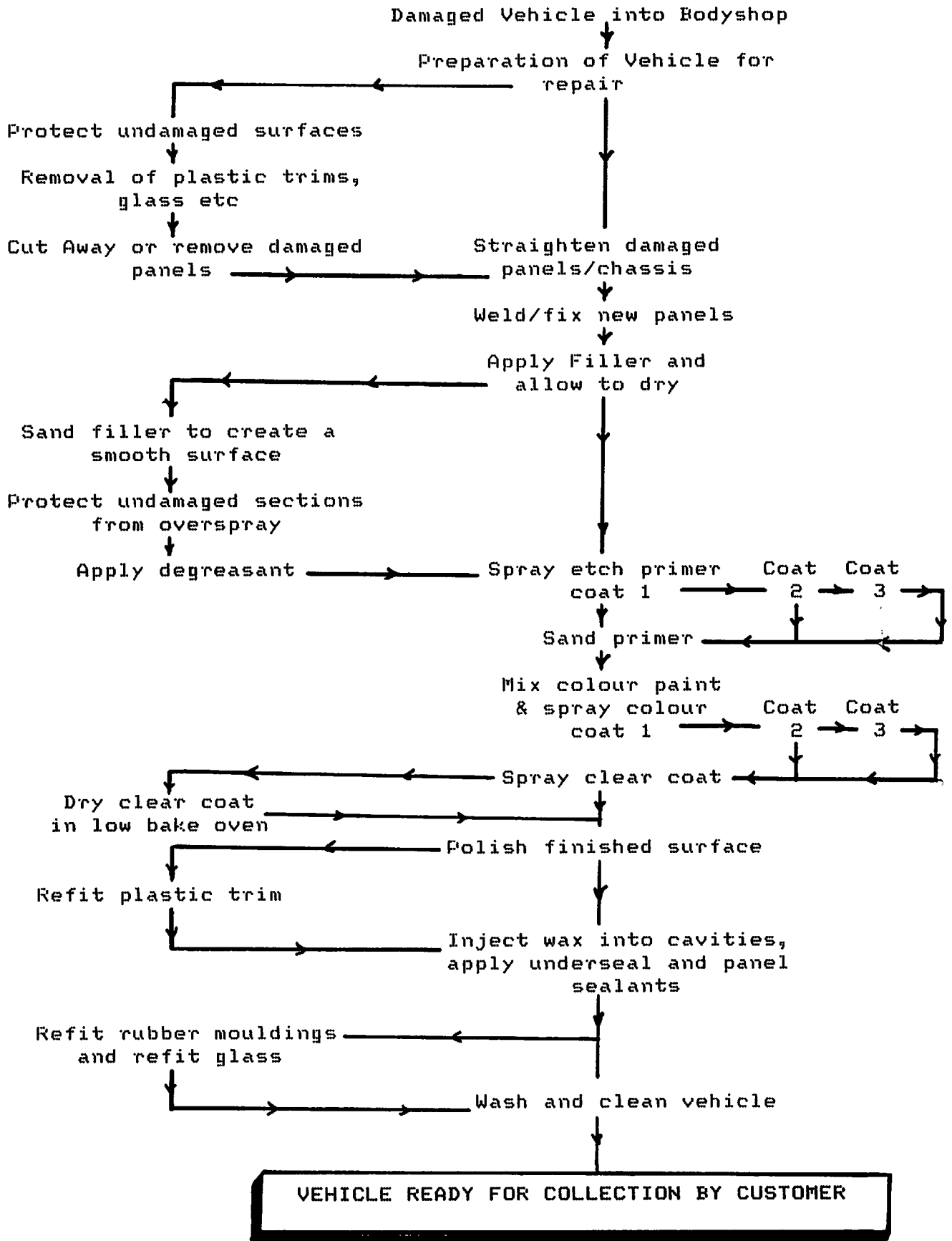
Describe the prescribed process:-

The repairing/replacing of damaged vehicle panels; filling, priming and painting the substrate to return it to an 'as new' condition. A typical repair involves the following procedure:

- a. Protect undamaged sections of vehicle from dust by covering with plastic sheeting. Remove undamaged plastic trim, glass, rubber mouldings etc., and cut away or remove damaged panels from the vehicle.
- b. Straighten adjacent panels. Straighten chassis (if necessary). Weld or fix new panels to the vehicle.
- c. Sand damaged areas to remove surface contaminants. Apply filler to fill indentations and scratches.
- d. Sand filler to create a level surface and protect undamaged sections of paint work from overspray by masking with plastic sheeting or paper secured with masking tape.
- e. Apply degreasant. Apply spirit wipe. Spray etch primer to protect substrate from corrosion. Dry etch primer. Mix the primer according to manufacturer's instructions. Spray primer (1,2 or 3 coats) to provide foundation for colour coat.
- f. Sand primer to provide smooth surface. Mix colour paint to match vehicle's original paint. Spray colour coat (2 or 3 coats).
- g. Allow solvents to 'flash off'. Spray clear coat ie a glossy 'varnish' to protect the colour coat. Dry the clear coat by heating in a low bake oven. Polish the finished surface (if required). Clean spray gun.
- h. Refit any plastic trim (eg bumpers). Inject wax into cavities beneath repaired panels as recommended by Motor Manufacturers to protect vehicle from corrosion.
- i. Apply underseal to underside of affected vehicle panels to protect from corrosion.
- j. Apply panel sealants or seam sealants as recommended by Motor Manufacturers.
- k. Refit rubber mouldings, fixed using adhesives. Refit glass.
- l. Wash and clean vehicles.

NB. A minority of repairs may also involve the repair of plastic parts by welding or the repair of fibreglass substrates using new fibreglass.

FLOW CHART TO SHOW PRESCRIBED PROCESS



Coating and Solvent Consumption

During the aforementioned process we consume 5534 litres of the above materials per annum containing 6 tonnes of solvent. This is made up of 3826 litres of topcoat, 503 litres undercoat, 441 litres fillers and 764 litres of others.

However, it must be noted that gunwash is recycled and contained within a closed container. Consequently there is very little loss to the environment. We are currently assessing exactly how much solvent is lost into the environment and will contact the relevant authorities if and when this proves to be less than 2 tonnes.

Coating Application Methods

Coatings are applied using:-

Conventional Airspray Gun
HVLP Gun
Was injection Gun
Underbody Schutz Gun
Aerosols
2 Pack Seater Gun

Curing Schedule

Coatings are normally cured using the following methods:-

Fillers : Air dry
Primers : Infra red
Top Coats : Low bake oven at eg: 30 mins at 60oC

Location and Methods of Storage of Raw Materials and Wastes

See Site Plan - Storage of Raw Materials and Wastes - Appendix III.

Receipt and Despatch Method for Raw Materials and Wastes

Suppliers are deliver materials in sealed 25 litre drums, which are then stored in sealed containers and placed into a cool vented stock room which has been purpose built.

The waste products are then collected by a recognised collection agency. See Appendix IV.

Procedures for Handling Spillages

Any materials spilled while being handled or stored are cleared up immediately/promptly by the member of staff closest at hand.

Emissions Containment Methods

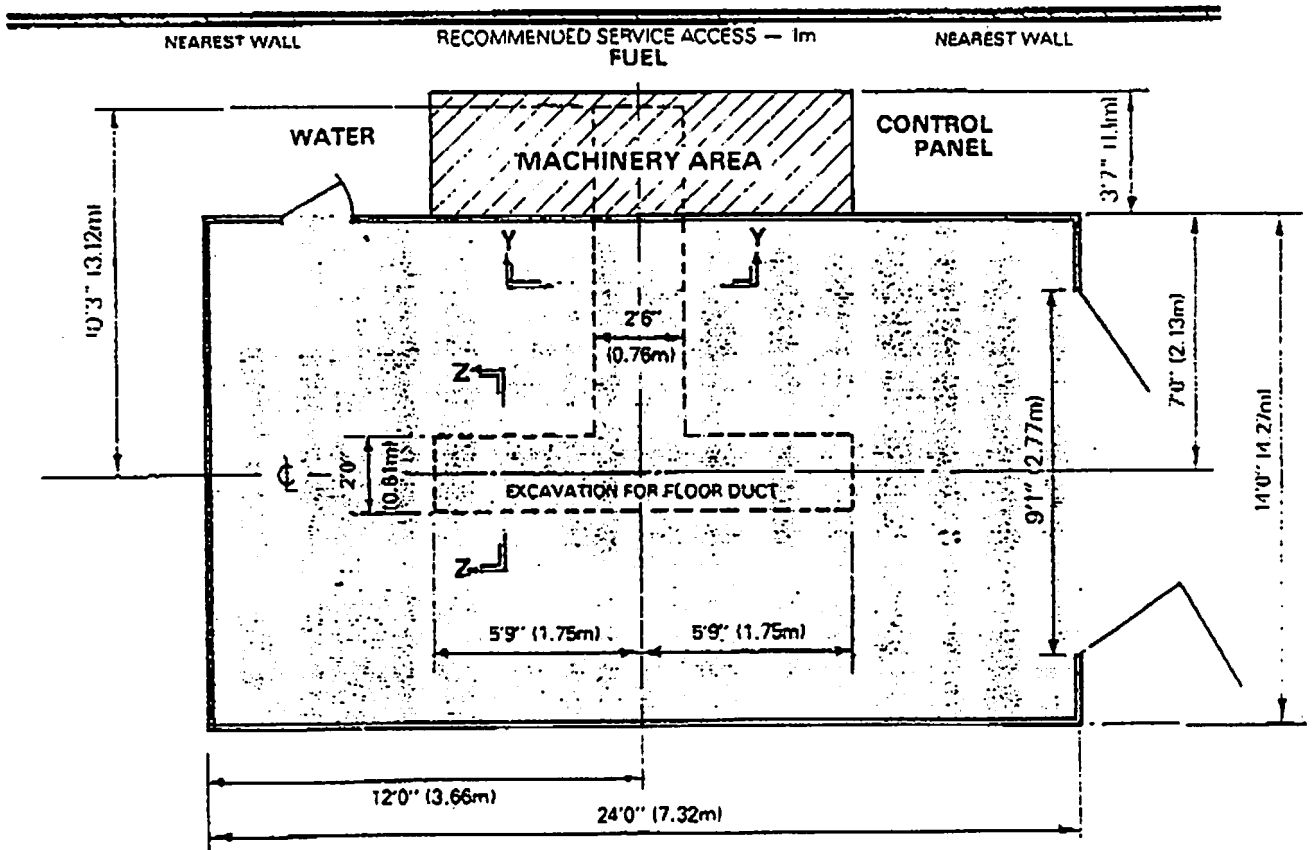
SOURCE OF EMISSIONS	FILTERED & EXTRACTED	EXTRACTED DIRECTLY	NOT CONTROLLED
Storage of materials (emissions of solvent vapour)		✓	
Cutting/grinding/sanding	✓		
Degreasing			✓
Spirit-wiping			✓
Spraying of coatings	✓		
Polishing			✓
Curing of coatings	✓		
Equipment cleaning		✓	
Application of sealants			✓
Spillages			✓

Spraybake LIMITED

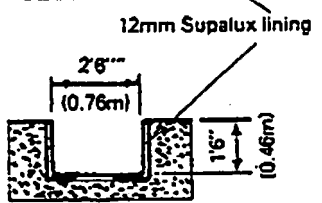
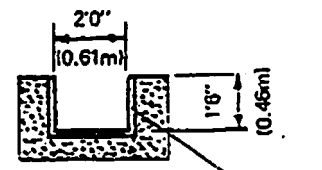
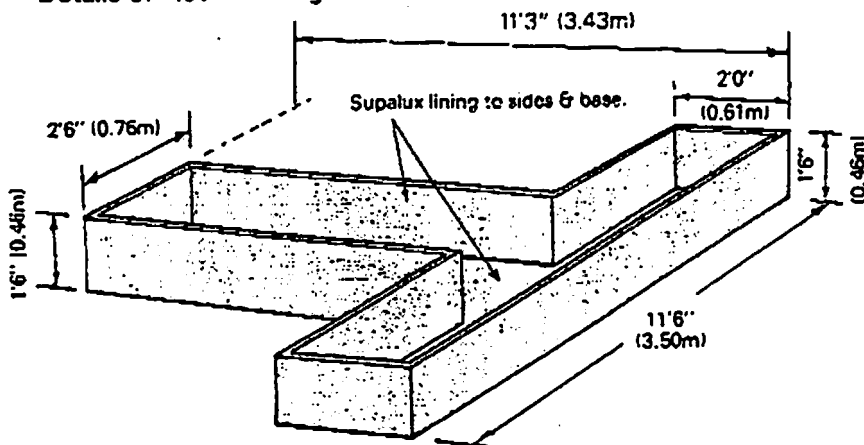
INSTALLATION DATA

800 & 1000 Series 8ft & 10ft Combined Vehicle Spray Booth & Low Stoving Unit

Right side extract



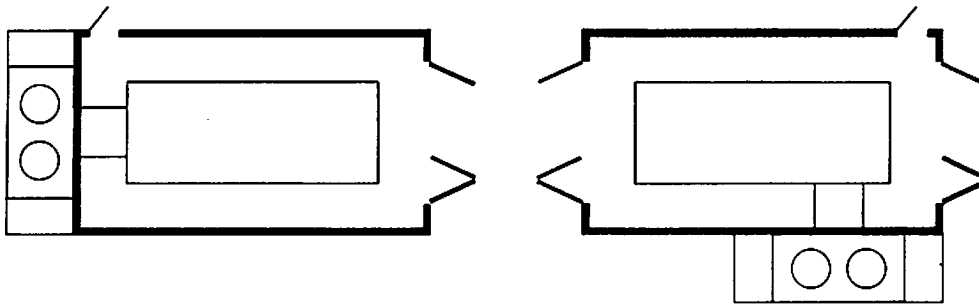
Details of Floor Ducting



See overleaf for further details.

TECHNICAL

DATA



DIMENSIONS	M 900	M 1000	M 1200
Interior Height	2.667 (8' 9")	2.972 (9' 9")	3.581 (11' 9")
Overall Height	3.092 (10' 2")	3.397 (11' 2")	4.007 (13' 2")
Booth Width	4.267 (14' 0")	4.267 (14' 0")	4.267 (14' 0")
Max Overall Width (Side Fired)	5.487 (18' 0")	5.487 (18' 0")	5.487 (18' 0")
Max Overall Length	7.085 (23' 3")	7.085 (23' 3")	7.085 (23' 3")
Max Overall Length (End Fired)	8.305 (27' 3")	8.305 (27' 3")	8.305 (27' 3")

CONSTRUCTION

Walls and doors are constructed from galvanised steel with a white polyester coating. Double panelled construction incorporates cavity insulation to retain heat and reduce noise levels. All floor channels, pallet joiners and cappings are stainless steel.

FLOOR ARRANGEMENT

The vehicle stands upon a gridded floor area approximately 2 metres wide x 5 metres long with paint arrestor filter media underneath. Site preparation requirements involve the excavation and formation of a large rectangular duct with a connection to the end or side located heated gear.

INLET AIR FILTRATION

The large overhead filter plenum contains 18 sq. metres of top quality viledon filter media in two easily handled pieces retained by a simple but effective clamping system to ensure a secure seal.

LIGHTING

High efficiency metal halide light units designed specifically for spraybooth environment provide maximum lighting level with minimum glare reducing operator fatigue. Each unit is individually mounted in the ceiling to give a virtually shadow free working environment and high lighting levels over the whole vehicle.

FANS

Two 5.5 h.p. fans provide a fully balanced condition within the booth. Adjustable aerofoil fan blades enable precise fine tuning on commissioning to produce between four and five complete air changes every minute.

DIRECT GAS FIRED BURNER

For maximum economy and minimal temperature fluctuation, the Spraybake direct gas fired heating system owes its development to the harsh winter conditions of North America and Canada for which it was originally produced. Indirect fired gas, oil or LPG systems are also available.

DOORS

Built in the same way as wall panels and with white polyester interior and exterior finish, the main doors are fitted with stainless steel cappings and continuous hinges and provided with georgian wired glass windows.

Main doors are constructed in a three leaf format with a single leaf fitted with a hold and check door closer so that it can be used as a personnel access door. Doors may be fitted in one end or both ends to provide a drive through facility. Side doors are also available where space is limited or where a lateral vehicle movement system is involved.

PERSONNEL DOORS

May be fitted in any wall panel and are made in galvanised steel coated with white polyester both inside and outside. They are fitted with wired glass viewing panels and automatic door closers. Door size 0.9M wide x 2.1M high.

ELECTRONIC CONTROL PANEL

Conveniently situated, the electronic control panel enables the operator to select the required spraying and drying or low bake temperatures and times. All main control functions are provided by Spraybake designed and produced printed circuits with pre-programmable micro processor controllers. In tests they have exceeded all design parameters thus ensuring complete reliability throughout the life of the booth. A remote control station provides the added advantage of automatic operation and remote monitoring. Standard electrical power requirements are 380/440 volts 50Hz TPN.

SPRAYING CYCLE

Fresh air is drawn from atmosphere, heated to the required temperature and passed through 18 sq. metres of top quality filter media into the booth. The downdraft airflow carries away paint overspray which is trapped in a paint arrestor filter mat under the gridded floor and is thus cleaned prior to discharge to atmosphere.

FORCED DRY/BAKE CYCLE

After spraying is complete the operator initiates the drying mode whereby the recirculating airflow rapidly attains high temperature and maintains this for the duration preset by the operator. On completion of the cycle the unit reverts automatically to spray mode and an audible alarm operates.

AFTER SALES

A comprehensive service department handles all commissioning and subsequent service business, and administers a service contract package. The national team of competent, qualified commissioning and service engineers are there to ensure that Spraybake equipment continues to provide the service for which it was purchased.

List the prescribed substances used in connection with or which might be released into the air resulting from the prescribed process.

Oxides of Carbon
Organic Compounds
Particulate Matter

Equipment typically used in such repairs:-

Hand tools
Hydraulic lift
Oxyacetylene cutters
Grinders
Body jig/dozers/alignment equipment
Conventional spray gun/HVLP spray gun
Paint mixing scheme
Paint brushes
Spray booth
Low bake oven (gas fired)
Infra-red drying equipment
Personal air-fed respiration equipment
Gun cleaning equipment
Wax injection gun
Underbody Schutz gun
Aerosols
Sealer gun.

Materials Used

Refer to distributor produced print-out Appendix I

Coating Materials Specifications

Refer to attached photocopies of Material Safety Data Sheets
Appendix II

-
Describe the techniques to be used for preventing releases into the air of substances listed above.

See attached appendix V.

Key:-

1. Direct extraction of solvents via vent. Potential source of odour.
2. Filtered extraction of solvents and particulate matter from paint spraying/curing. Potential source of odour.
3. As described in 2.
4. Emissions of oxides of carbon from oven burner chimney. Potential source of occasional visible mist on oven start-up. Duration approximately 10 seconds.
- 5 - 8. Uncontrolled (fugitive) emission of solvents from degreasing and spirit-wiping. Potential source of odour.
9. Uncontrolled emission of solvents from gun-cleaning machine. Potential source of odour.

Assessment of the likely environmental consequences of the emissions to air.

i. **Particulate Matter Emissions**

The majority of particulate matter is contained by arrestment equipment. The effect of emissions of any residual particulate matter will mainly be visible ie: they add to dust in the environment.

ii. **Emissions of Volatile Organic Compounds (VOC's)**

In general VOC emissions from respraying of road vehicles are colourless, free from liquid particulate matter and the aim is that all emissions are free of odour at the boundary of our premises. The main environmental effect of VOC emissions from respraying will be in certain circumstances to contribute to the complex atmospheric chemistry which results in the development of ozone in the lower atmosphere.

Monitoring of such emissions:-

- i. **Equipment Checks**
- ii. **Odour and Visible Emission Checks**
- iii. **Solvent Inventory**

State how we will achieve the objectives:-

As a responsible business and member of the community we have fully supported and complied with previous legislation eg COSHH. We are willing to work actively to achieve the implementation of BATNEEC (Best Available Techniques Not Entailing Excessive Cost) as laid down in Guidance Notes PG6/34 to achieve the objective of reducing/rendering harmless emissions from our process.

APPENDIX I

DISPLACED PARTS / NEW PANEL STORE

BLACKHAWK P188

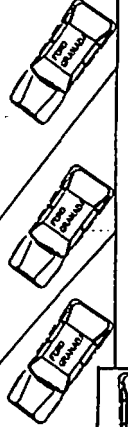
mobile measuring system



MAJOR CRASH REPAIR
CAR BENCH
4 post, 5g

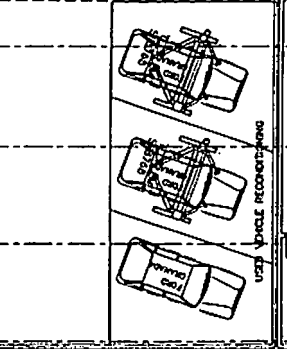
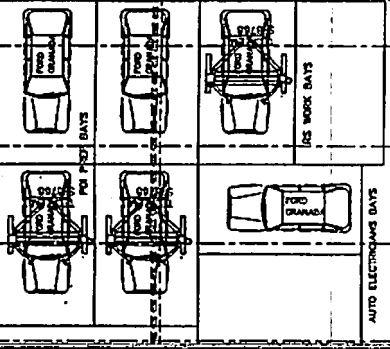
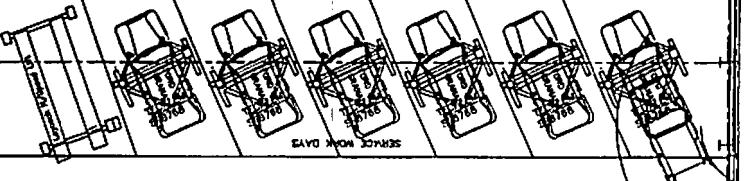
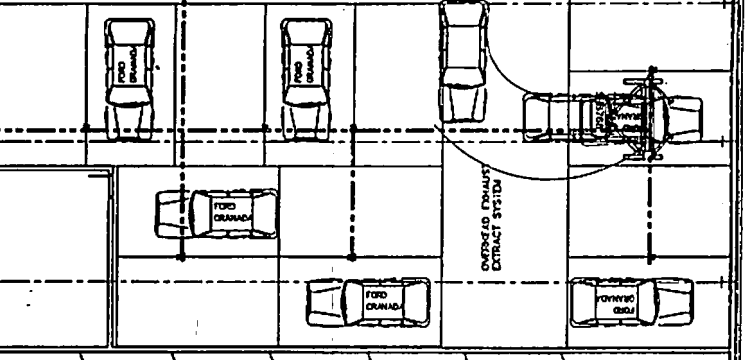
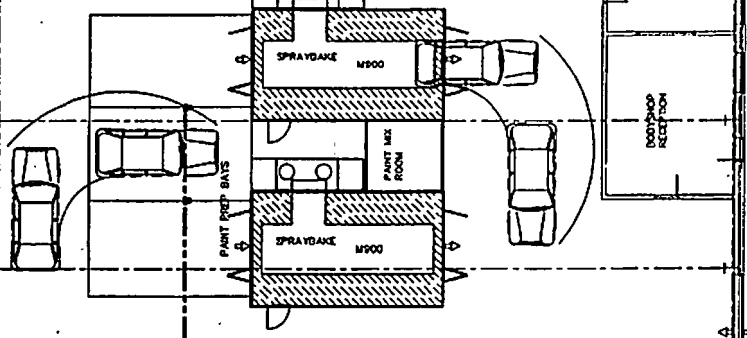
HEATED SEATER

CLEANERS REST ROOM
STORE



VALETING WORKSHOP

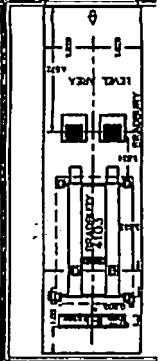
WORKSHOP
GARDEN AREA

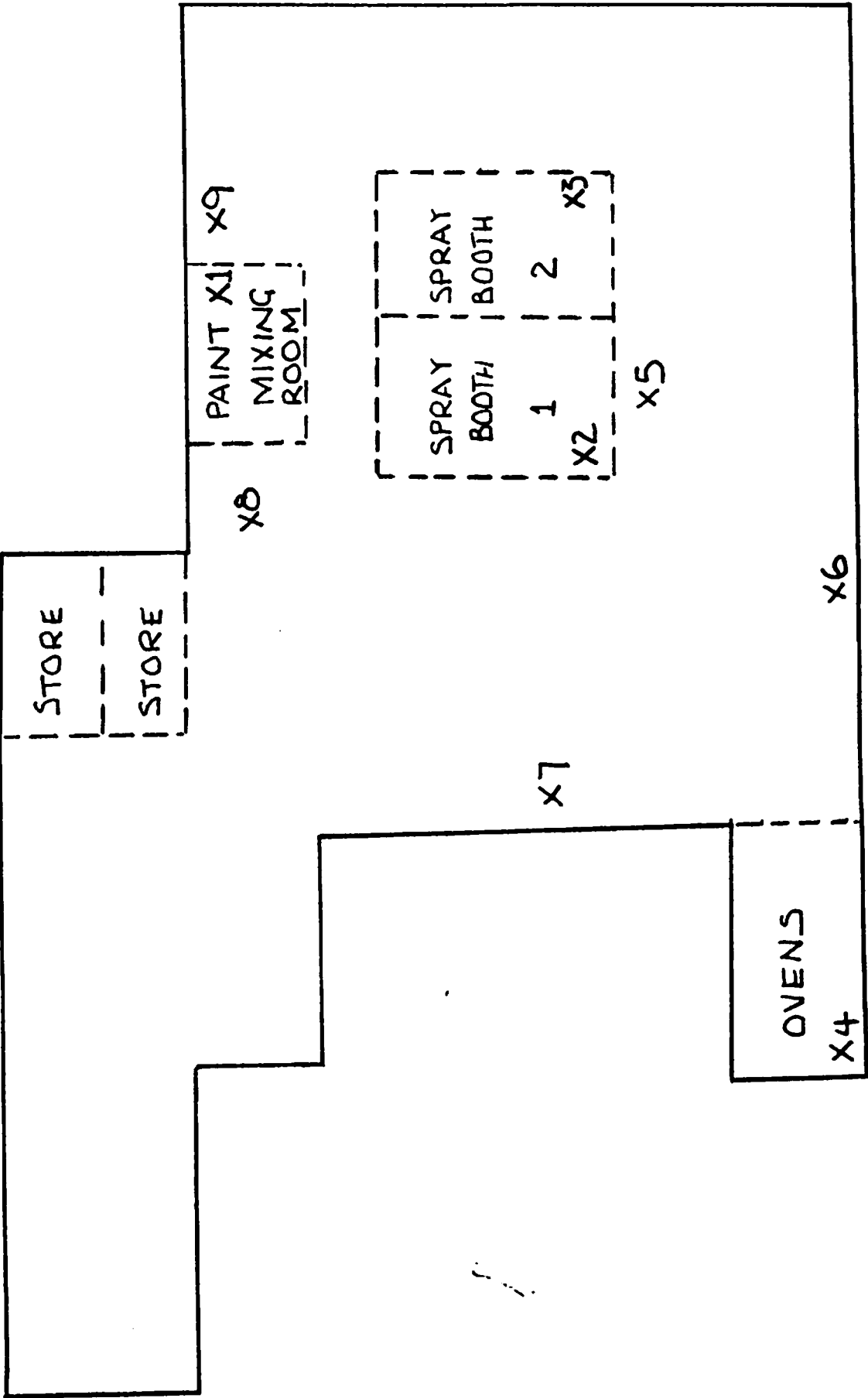


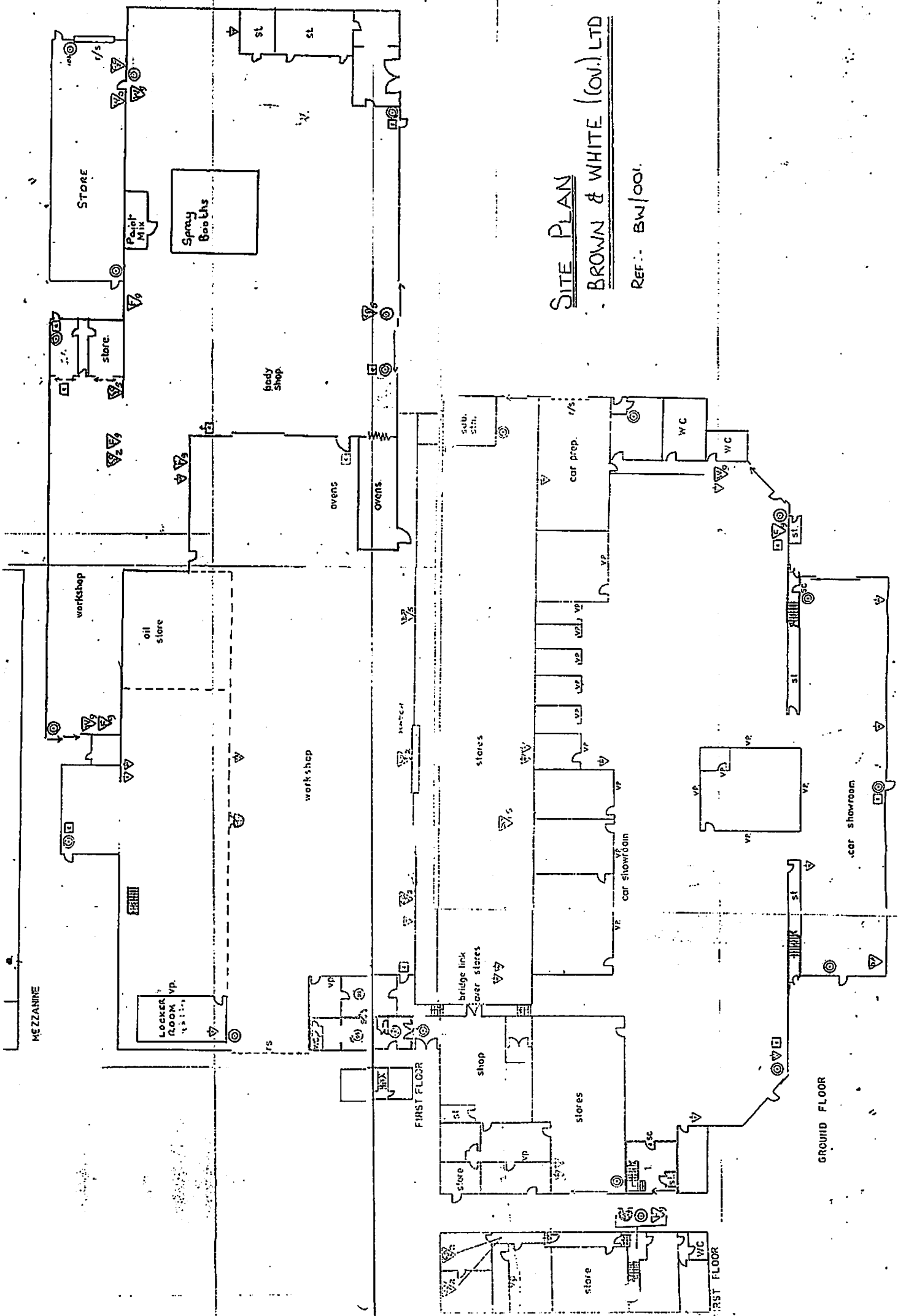
OFFICE
WARRANTY OFFICE
WORKS CONTROL OFFICE
PARTS ISSUANCE COUNTER

ELECTRIC SUB STATION

PARTS STORE







SITE PLAN
BROWN & WHITE (COU.) LTD

REF:- BW/001.

