

## Part B Variation form

# Application for a variation of permit conditions

## Local Authority Pollution Prevention and Control

Pollution Prevention and Control Act, 1999

Environmental Permitting (England and Wales) Regulations 2016

### Introduction

#### When to use this form

This environmental permitting regime is known as and referred to as Local Authority Pollution Prevention and Control ('LAPPC'). Installations permitted under this regime are known as Part 'B' installations. Use this form if you already have a permit and wish to vary the permit conditions or wish to make a change to your installation.

#### Before you start to fill in this form

You are strongly advised to read relevant parts of the Defra [General Guidance Manual](#) issued for LA-IPPC and LAPPC. This contains a list of other documents you may need to refer to when you are preparing your application, and explains some of the technical terms used.

You will also need to read the relevant [Process Guidance Note\(s\)](#) as relevant. The EP Regulations can be obtained from The Office of Public Sector Information, or viewed on their website at: <http://www.opsi.gov.uk/stat.htm>.

#### Which parts of the form to fill in

You should fill in as much of this form as possible. When complete return to:

**Sandwell MBC**  
**Public Health**  
**Pollution Control**  
**PO Box 2374**  
**Sandwell Council House**  
**Oldbury B69 3DE**

Email: [pollution\\_control@sandwell.gov.uk](mailto:pollution_control@sandwell.gov.uk)

**Other documents you may need to submit**

There are number of other documents you may need to send us with your variation application. Each time a request for a document is made in the form you will need to record a document reference number for the document or documents that you are submitting in the space provided on the form for this purpose. Please also mark the document(s) clearly with your permit reference number and the name of the installation.

**Using continuation sheets**

In the case of the questions on the form itself, please use a continuation sheet if you need extra space; but please indicate clearly on the form that you have done so by stating a document reference number for that continuation sheet. Please also mark the continuation sheet itself clearly with the information referred to above.

**Copies**

Please send the original and 2 copies of the form and all other supporting material, to assist the Authority in conducting any necessary consultation process. We strongly advise that you submit an electronic copy, preferably in pdf format to aid the processing of this application.

**If you need help and advice**

We have made the form as straightforward as possible, but please get in touch with us at the local authority address given above if you need any advice on how to set out the information we need.

**Please get in touch with us by:**

**Email:** [pollution\\_control@sandwell.gov.uk](mailto:pollution_control@sandwell.gov.uk)

*End of Introduction*

**A1 Applicant details**

**A1.1** Name of the installation

Applied Coating technologies

---

**A1.2** Please give the address of the site of the installation

Western Road,

---

Oldbury, West Midlands

---

Postcode B69 4LY

Telephone 0121 238 0020

---

**A1.3** Permit reference number

PPC 95018

---

**A2.1** The Operator – Please provide the full name of company or corporate body

Applied Coating technologies

---

Trading/business name (if different)

---

Registered Office address

---

Applied Coating technologies Tipton Road, Oldbury

---

Postcode: B69 3HY

---

Principal Office address (if different)

---

Postcode:

---

Company registration number

04071124

---

### A3.1 Who can we contact about your application?

*It will help to have someone who we can contact directly with any questions about your application. The person you name should have the authority to act on behalf of the operator - This can be an agent or consultant.*

Name \_\_\_\_\_

Position Technical Director

Address Applied Coating technologies

Tipton Road, Oldbury

Postcode B69 3HY

Telephone number \_\_\_\_\_

Fax number \_\_\_\_\_

email address \_\_\_\_\_

### B1 About the installation

Please fill in the table below with details of all the current activities and proposed activities at the whole installation.

#### **In Column 1, Box A, *Activities in the stationary technical unit***

Please identify all activities listed in [Schedule 1](#) to the EP Regulations that are carried out in the stationary technical unit of the installation.

#### **In Column 1, Box A(i), *Proposed new activities in the stationary technical unit***

Please identify all activities listed in Schedule 1 to the EP Regulations that are proposed to be carried out in the stationary technical unit of the installation.

#### **In Column 1, Box B, *Directly associated activities***

Please identify any directly associated activities that are carried out on the same site which:

- \* have a technical connection with the activities in the stationary technical unit
- \* could have an effect on pollution.

#### **In Column 1, Box B(i), *Directly associated activities***

Please identify any directly associated activities that are proposed, to be carried out on the same site which:

- \* have a technical connection with the activities in the stationary technical unit
- \* could have an effect on pollution

In **Column 2, Both Boxes A and B**, please quote the Chapter number, Section number, then paragraph and sub-paragraph number as shown in Part 2 of Schedule 1 to the EP Regulations [For example, *Manufacturing glass and glass fibre where the use of lead or any lead compound is involved*, would be listed as Chapter 3, Section 3.3, Part B(b)].

**B1.1 Installation table for variation of permit conditions**

COLUMN 1	COLUMN 2
<b>Box A</b> Activities in the Stationary Technical Unit	Section in Schedule 1 of the EP Regulations
manual Spray Painting of plastic parts	Section 6.4 - Part B (a) iv
Robotic Spray painting of plastic parts	Section 6.4 - Part B (a) iv
Jig / Gun wash station	Section 6.4 - Part B (a)iv
<b>Box A(i)</b> Proposed new activities in the Stationary Technical Unit	Section in Schedule 1 of the EP Regulations
Additional manual spray painting capacity	Section 6.4 - Part B (a) iv
<b>Box B</b> Directly associated activities	Section in Schedule 1 of the EP Regulations
<b>Box B(i)</b> Proposed new directly associated activities	Section in Schedule 1 of the EP Regulations

## B1.2 Why is the variation application being made?

- specific permit conditions will require amending
- we are unsure whether the proposed changes will require a variation and wish the local authority to advise on this

### B.1.3 Site Maps

Please provide:-

\* A suitable map showing the location of the installation clearly defining extent of the installations in red and indicating the extent of the installation affected by the proposed change

Doc Reference B.1.3\_EP\_WR\_SiteMAP

\* A suitable plan showing the layout of activities on the site, including bulk storage of materials, waste storage areas and any external emission points to atmosphere, indicating which activities will be affected by the proposed change

Doc Reference B\_1.3\_WR\_siteplanA B\_1.3\_New\_plant\_layout

\* A suitable plan showing the site drainage system and all discharge points to drainage or water courses indicating which will be affected by the proposed change

Doc Reference B.1.3\_Sitedrains

## B2 The Installation

*Please provide written information about the aspects of your installation listed below. We need this information to determine whether you will operate the installation in a way in which all the environmental requirements of the EP Regulations are met.*

**B2.1** Describe the proposed change to the installation and activities and identify the foreseeable emissions to air from effecting this change (this will include any foreseeable emissions during start up, shut down and any breakdown/abnormal operation)

*The use of process flow diagrams may aid to simplify the operations*

Doc Reference: B\_2.1-3.1\_Var\_WR

**B2.2** Once all foreseeable changes in emissions as a result of the proposed change have been identified each emission should be characterised (including odour) and quantified.

**Atmospheric emissions** should be categorised under the following

- i. point source, (e.g. chimney / vent, identified by a number and detailed on a plan)
- ii. fugitive source (e.g. from stockpiles / storage areas).

Doc Reference: B\_2.1-3.1\_Var\_WR

**B2.3** For each emission which will be affected by the proposed change describe the current and proposed technology and other techniques for preventing or, where that is not practicable reducing the emissions.

Doc Reference: B\_2.1-3.1\_Var\_WR

**B2.4** Describe the proposed measures for additional monitoring of all identified emissions as a result of the proposed change.

Doc Reference: B\_2.1-3.1\_Var\_WR

**B2.5** Describe the effect the proposed change will have on your environmental management techniques, in relation to the installation activities described.

Doc Reference: B\_2.1-3.1\_Var\_WR

**B2.6** Detail in the table provided below, or on an additional sheet if preferred, the exact conditions you wish to change in your current permit.

Permit condition reference	Proposed new wording of condition

## **B2.7 Additional information**

Please supply any additional information which you would like us to take account of in considering this variation application.

Doc Reference B\_2.1-3.1\_Var\_WR

## **C1 Fees and Charges**

Your application cannot be processed unless the application fee is correct and enclosed

Please contact the Council to find out the current fee and how to pay

Email: [pollution\\_control@andwell.gov.uk](mailto:pollution_control@andwell.gov.uk)

**C1.1** Please give any company purchase order number or other reference you wish to be used in relation to this fee.

---

## **C2 Annual charges**

The application or granting of a permit variation will not affect the level of your annual subsistence charge, nor the requirement to pay it.

## **C3 Commercial confidentiality**

**C3.1** Is there any information in the application for a variation that you wish to justify being kept from the public register on the grounds of commercial confidentiality?

No

Yes

Please provide full justification, considering the definition of [commercial confidentiality](#) within the EP Regulations.

Doc Reference \_\_\_\_\_



**C3.2** Is there any information in the application for a variation that you believe should be kept from the public register on the grounds of national security?

No

Yes

Do not write anything about this information on the form. Please provide full details on separate sheets, plus provide a copy of the variation application form to the Secretary of State/Welsh Ministers for a Direction on the issue of National Security.

#### **C4 Data Protection**

The information you give will be used by the Local Authority to determine your application for a variation. It will be placed on the relevant public register and used to monitor compliance with the permit conditions. We may also use and or disclose any of the information you give us in order to:

- consult with the public, public bodies and other organisations,
- carry out statistical analysis, research and development on environmental issues,
- provide public register information to enquirers,
- make sure you keep to the conditions of your permit and deal with any matters relating to your permit
- investigate possible breaches of environmental law and take any resulting action,
- prevent breaches of environmental law,
- offer you documents or services relating to environmental matters,
- respond to requests for information under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004 (if the Data Protection Act allows)
- assess customer service satisfaction and improve our service.

We may pass on the information to agents/ representatives who we ask to do any of these things on our behalf.

It is an offence under [Regulation 38](#) of the EP Regulations, for the purpose of obtaining a variation to a permit (for yourself or anyone else) to:

- make a false statement which you know to be false or misleading in a material particular,
- recklessly make a statement which is false or misleading in a material particular.

If you make a false statement

- we may prosecute you, and
- if you are convicted, you are liable to a fine or imprisonment (or both).

**C5 Declaration: previous offences** (delete whichever is inapplicable)

I/We certify

EITHER

~~No offences have been committed in the previous five years which are relevant to my/our competence to operate this installation in accordance with the EP Regulations.~~

OR

The following offences have been committed in the previous five years which may be relevant to my/our competence to operating this installation in accordance with the Regulations:

SR213429/PPC95018

\_\_\_\_\_

\_\_\_\_\_

Signature \_\_\_\_\_

Name \_\_\_\_\_

Position \_\_\_\_\_

Date 11/03 \_\_\_\_\_

**C6 Declaration**

**C6.1 Signature of current operator(s)\***

I/We certify that the information in this application is correct. I/We apply for a permit in respect of the particulars described in this application (including supporting documentation) I/We have supplied.

Please note that each individual operator must sign the declaration themselves, even if an agent is acting on their behalf.

For the application from:

Installation name: Applied Coating technologies - Western Road

Signature \_\_\_\_\_

Name \_\_\_\_\_

Position \_\_\_\_\_

Date \_\_\_\_\_

Signature \_\_\_\_\_

Name \_\_\_\_\_

Position \_\_\_\_\_

Date \_\_\_\_\_

*\* Where more than one person is defined as the operator, all should sign. Where a company or other body corporate – an authorised person should sign and provide evidence of authority from the board of the company or body corporate.*

## Applied Coating Technologies Ltd

08/03/2024

Applied Coating Technologies Ltd offers a service to customers to apply EMI/RFI coatings and a range of decorative finishes to plastics. The service undertakes processes that have potential to release emissions to air in a controlled manor

Our variation of permit application is being made to operate under permitted environmental permitting regulations 2010 as part of the Pollution Prevention and Control Act, 1999, and is based on the existing Permit number PPC95018 [Issued 1/6/2022].

Applied Coating Technologies operates over three sites, Tipton Road (B69 3HY), Park Lane (B69 4JX), and Western Road (B69 4HY). The lease for the unit at Park lane will be coming to an end, and the business has decided not to renew the lease due the excessive and unreasonable increase in rent. As such we will be looking to vacate Parke Lane on the 1/6/2024, the relevant permit has been notified for surrender.

To meet increasing customer demands, the equipment from Park Lane site will be amalgamated into the Western road facility. This would involve the dismantling of the R4 UV plant at Western road (on existing permit), and the installation of a new manual spray facility to accommodate 8 manual dry back spray booths at Western road.

The coatings can be broken down in to two application types and are applied by hand and Robotic spray painting equipment.

### **1.The application of EMI RFI shielding paint on to plastic parts.**

Plastic mouldings are supplied in to ACT by various plastic moulders who have varying coating requirements. EMI RFI coatings are applied to the internal surfaces of moulding to prevent control levels of electromagnetic interference on electronic components. There are a wide range of users for this type of application ranging from MOD, to medical application such as life saving drug dispensing machines. The coatings are applied using manual and robotic application techniques, for a number of years conventional spray equipment has been used to apply this type of coatings. ACT use the latest application equipment to obtain the best paint transfer efficiency. Due to the high costs of the base product being used ACT monitor and control the amount of paint being applied to parts to insure maximum efficiency.

### **2. The application of decorative paint on to plastic parts.**

Plastic mouldings are supplied in to ACT by various plastic moulders who have varying coating requirements. The decorative finishes are applied to a wide range of plastic types covering a wide range of the market sector from white goods through to moulding for the automotive market sector. A wide range of solvent and water based paints are used for these applications with an increase in demand for water based paint continually increasing. ACT uses the latest paint application equipment to apply the coatings to insure maximum transfer efficiency, either via robotic paint application or manual spray application.

ACT is invested in UV curing technology, to develop a first in the UK dedicated UV curing plant for decorative coatings, however, the OEMs have not decided to adopt this technology, which meant that the plant was being used as a conventional spray plant. As such, it was not efficient, as its design was not geared for high output with conventional paints. Based on this, the UV-plant has been decommissioned and will be replaced by a new manual spray plant, housing 8 spray booths.

## **B2.1 Installation and Process**

In both the EMI and decorative application plastic parts are removed from customer supplied packaging and loaded on to processing jigs. Parts requiring a decorative finish are then deionised to remove any traces of static from the moulding. Jigs are then loaded on to trolleys and allocated to a spray operative. For decorative finishes the process is essentially the same if it is carried out manually or robotically. The advantage of a robotic spray plant is process efficiency for high volume products.

#### **Current Site Equipment:**

- The application of EMI RFI (electromagnetic interference/radio frequency interference) coatings to the internal surfaces of mouldings to control levels of electromagnetic interference on electronic components. The use of manual application techniques using high efficiency spray equipment, in one of four 3 x 3 metre dry back spray booths. The flashing off of painted parts followed by processing in a box oven to dry the paint on the moulding.
- The application of decorative finishes in one of three dry back spray booths (2 x 5 metre and 1 x 4 metre) involving the use of solvent-based and water-based paints using application equipment designed to ensure maximum transfer efficiency. Painted parts are then cured in a box oven.
- Robotic Plant (R5) which applies high solid content soft feel paints and anti-bacterial coatings for the sanitary industry. The plant runs high volumes with wet-back spray booths and a chemical coagulation sludge system to capture paint waste, and has secondary processes, Assembly and pad printing involved.

#### **Variation on Site Equipment:**

- Decommissioned: The UV dual cure plant (R4) has been decommissioned, reusing what possible to improve the existing robotic plants at Western road and Tipton road.
- New: The area that housed R4 will now be used to house a new manual spray facility, which will house 8 manual sprayers. These decorative plants would not be running on two shifts like the decommissioned R4 plant. These will operate on an 8am-4pm shift pattern, with a 2pm finish on Fridays. The booth design is detailed in document: B\_1.3\_New\_Plant\_layout, with the dimensions of the booths. They will all be dry back filter booths, therefore not requiring any water treatment chemicals. The dry back filters will be changed on the same preventative maintenance plan used for the spray booths at the Park lane site.

New emission source will be from the spray booths, paint mix room, paint stores and ovens. Of these sources the largest contributing zones would be the spray booth, as that is where the paint is flashed off.

### **B2.2 Atmospheric Emissions**

ACT carries has been performing emissions testing for the past couple of years across all three sites. These emission reports have not yielded any out of tolerance recording and are shared with the council.

The latest emissions testing 2023 carried out on dry back decorative booths stacks (containing 3 decorative booths) gave a total particulate matter concentration of 2.4 mg/m<sup>3</sup> below the limit required which is at 50mg/m<sup>3</sup> with a mass emission of 61.8 g/hr. The results from 2022 were comparable coming in at 3.5 mg/m<sup>3</sup> and the mass emission at 80.8 g/hr. This demonstrates that the manual spray booths and the paints that are currently sprayed are within the concentration limits. As such, with the work transferring over the same paints, and the same total number of booth, it suggests that the new manual spray decorative booths would not exceed the measurement limits.

The overall site emissions, based off VOC calculations is currently under limit, for the Western road site. The data below shows the 2023 VOC emissions data. Based on this we can make an estimate that the combined VOCs would be 10,807 vs a target of 10,924, this would be just in, and probably have a bit lower as currently the solvent recycling for Park lane is not factored (on average 1300), keeping the VOC/solids <0.6.

PARK LANE						
Park Lane	Solids(kg)	VOC (kg)	VOC/Solids	Solvent Recycling	Actual Emission	Emission Target
Decorative	4059	6735	1.66	0	6735	2435
<b>Park Lane Total</b>	<b>4059</b>	<b>6735</b>	<b>1.66</b>	<b>0</b>	<b>6735</b>	<b>2435</b>
Western Road						
WR	Solids(kg)	VOC (kg)	VOC/Solids	Solvent Recycling	Actual Emission	Emission Target
Shielding	268	1062	3.96	0	1062	161
R4 +R5	13880	7166	0.52	4156	3010	8328
<b>WR Total</b>	<b>14148</b>	<b>8228</b>	<b>0.58</b>	<b>4156</b>	<b>4072</b>	<b>8489</b>

Offensive odours, such as Ammonia / “Cat-pee” smells are not expected from this installation as it utilizes dry back spray booths. These are managed through the preventative maintenance schedule. The Ammonia / cat-pee smell is a by-product of bacteria which builds up in water wash systems.

**B2.3 Emissions Reduction / Abatement**

The EMI RFI shielding plant and manual spray plants have dry back booths which contain filters to collect particulate matter and reduce the amount going into air. These paper filters are maintained and replaced as necessary to ensure a high level of filtration.

For general decorative painting the company is trying to push as much towards water based paints systems, as this allows a major reduction in VOC emissions. A number of high volume projects with OEMs have been successfully nominated with the use of water based paints.

The Robotic plants utilize a water wash spray booth which looks to capture the majority of the paint waste, and the water is chemically treated via a third party contractor.

To assist with emissions reductions the Western road site uses a solvent recycler, where by waste solvent, majority acetone based, is distilled from paint waste and is able to be re-used in applications such as gun cleaning, paint pots and lines cleaning.

Strategically ACT is committed product evaluation with materials that have a high solid content or are of a low VOC content, which is why the company is investing in UV cure technology. While UV technology has not been developed by OEMs, water based paint systems are a technology which they have been more acceptable to use.

As explained in more details in section 3.1 the company is working with environmental consultants to look at continued improvement strategies to reduce emissions

**B2.5 Measures for Monitoring**

ACT currently monitors paint usages on a daily, weekly and monthly basis, stock takes are carried out at the beginning of each month and VOC emissions are generated by the data entered. ACT then generates quarterly and yearly reports to identify where we are against target, as shown in section 2.2. Yearly emissions data is run with external companies to monitor the different paint facilities. The techniques used for these are Gravimetric Analysis, GCMS, Flame Ionisation and yield information on total particulate matter, specific solvent quantities, water vapour and total VOC’s. The additional manual spray plants would

be added to the yearly emissions testing, and the VOCs from the plant would be combined into the site VOC calculation.

Waste water is chemically treated and weekly measurements are carried out, by a specialist water treatment Company, and this include an odour survey around the site. This does not impact the new manual spray plants.

We have improved our own daily monitoring, to look at the weather conditions, monitoring wind speed, direction, temperature daily as well as carrying out our own odour walks.

Paints are stored in designated flammable storage areas in sealed containers until they are in designated paint mixing areas. Emissions from the paint are only likely if material is spilt or when material is being mixed. ACT control for un-intentional release is by way of a spill kit, which contains soak pads and socks to absorb spilt material. ACT paint stocks are purchased in 5, 10 and 25L containers keeping the raw material spillage amount to a minimum. Environmental risks and hazards are measured by employing COSHH, allocating specific zones in the factory relating to COSHH risks. Waste product from the gun cleaning process are retained in 25lt, 205L drums and IBC's which are collected on a regular basis by Waste Management companies. Bunding is implemented on IBCs and drums to capture any spillages from potential leaks. Waste disposal followed the Company Operating Procedure for disposal of waste – COP 910

### **B2.7 Additional Information- Environmental Effects Assessment**

ACT has had two localised complaints at the current site of Western Road over the last few years, relating to a “cat-pee” ammonia smell, which have now been negated with close work with the local environmental officer [REF SR213429/PPC95018]. This odour was originating from the water wash robotic plant, R5. This was a disappointment for the company, and we have actively worked to improve the situation. The major improvements we have implemented are:

- Trialled various water treatment companies and chemicals to look at finding the optimal water treatment. It took time to find the optimal setup, which results in the second odour complaint, however, this end result was in alternating biocides being used. This enables a reduction in bacteria, as the alternating biocides do not allow the bacteria to develop any resistance. This method has also been implemented at the Tipton road site.
- Improvements to the plant design, movement of water, dosing points, which all lead to reduction in any spots for paint and bacteria build up, and encourage paint removal via the COAG system.
- Increased monitoring, odour walks, monitoring weather conditions.

This has helped to improve the odour control and management for the site, and from recent correspondence with the council, this has resulted in their observations.

Based on that pre-existing odour complaints were related to the water wash robotic plant, R5, the new manual spray booths should not represent an odour issue. The “cat-pee” ammonia smell is from bacteria which exist in the water/paint mix. Therefore there should not be any additional risk of odour from the new manual spray booths.

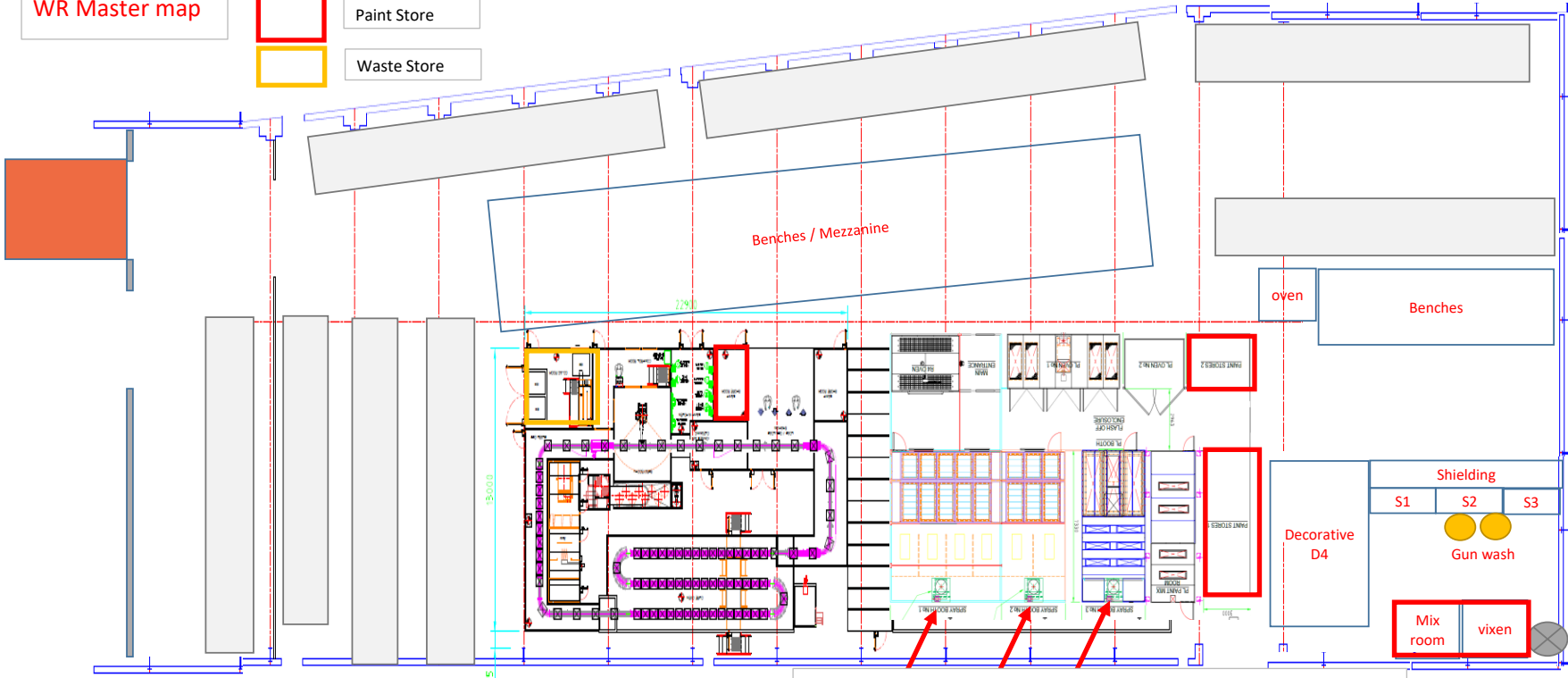
Moving forward we are currently working on an exercise with an external environmental consultant to look at the odour sampling for the site. This is to enable the business to gain some data on the odour emissions from the Robotic plant and look at models for improving this via mitigation technologies to abatement technologies.

WR Master map



Paint Store

Waste Store



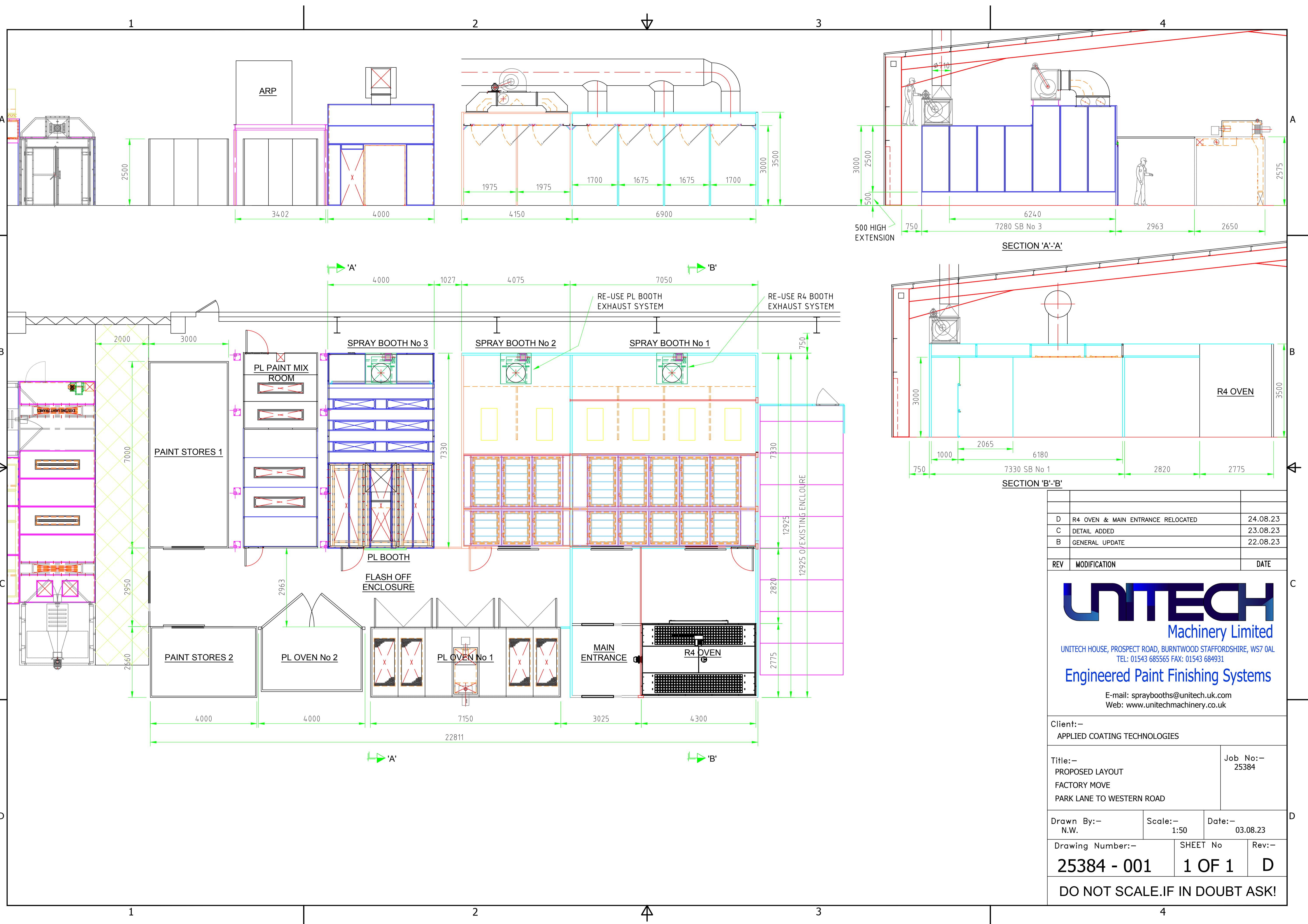
Ducting as seen on document B\_1.3\_New\_plant\_layout







Areas marked in green are site drains. These would not be affected by the new installation, as it does not impact the drains or drainage systems on the Western road site.



REV	MODIFICATION	DATE
D	R4 OVEN & MAIN ENTRANCE RELOCATED	24.08.23
C	DETAIL ADDED	23.08.23
B	GENERAL UPDATE	22.08.23

**UNITECH**  
Machinery Limited

UNITECH HOUSE, PROSPECT ROAD, BURNTWOOD STAFFORDSHIRE, WS7 0AL  
TEL: 01543 685565 FAX: 01543 684931

**Engineered Paint Finishing Systems**

E-mail: spraybooths@unitech.uk.com  
Web: www.unitechmachinery.co.uk

Client:-  
APPLIED COATING TECHNOLOGIES

Title:-  
PROPOSED LAYOUT  
FACTORY MOVE  
PARK LANE TO WESTERN ROAD

Job No:-  
25384

Drawn By:-  
N.W.

Scale:-  
1:50

Date:-  
03.08.23

Drawing Number:-  
**25384 - 001**

SHEET No  
**1 OF 1**

Rev:-  
**D**

**DO NOT SCALE. IF IN DOUBT ASK!**