HUNTINGDONSHIRE DISTRICT COUNCIL

ENVIRONMENTAL PROTECTION ACT 1990, PART 1
THE ENVIRONMENTAL PROTECTION (PRESCRIBED PROCESSES AND SUBSTANCES) REGULATIONS 1991, SI 472 (AS AMENDED)
THE ENVIRONMENTAL PROTECTION (APPLICATIONS, APPEALS AND REGISTERS) REGULATIONS 1991, SI 507 (AS AMENDED)

**Authorisation 01/01**

(i) Name and Address of Operator

**Exel Automotive Management Systems**
**Eaton Court**
**Great North Road**
**St Neots**
**Cambridgeshire**
**PE19 4AG**

**Registered Company No. 528867**

(ii) Address of Authorised Process

**Unit 94**
**Alconbury Airfield**
**Alconbury**
**Huntingdon**
**Cambridgeshire**
**PE28 4WX**

**Marked in red on the**
**Attached drawing**
**Reference number 01/01/A**

**Huntingdonshire District Council hereby authorises Exel Automotive Management Systems to operate a prescribed coating process involving the re-spraying of road vehicles as described below, in accordance with the following conditions, which are based upon guidance from the Secretary of State in process guidance note PG 6/34(97).**

**Description of Process**

The process is prescribed for Local Authority Air Pollution Control under Section 6.5 of Schedule 1 to the Environmental Protection (Prescribed Processes and Substances) Regulations 1991, S472 (as amended). It consists of preparation for and repainting of road vehicles by way of the spray application of various precoats, primer surfaces and topcoats likely to involve the use of 1 tonne or more of organic solvents in a 12 month period. The coatings used are manufactured by Standox UK. Appendix 1 is a letter from Standox to Inside Track (now Exel AMS) stating that Standox coatings comply with the requirements of PG 6/34(97).

The process is carried out in Unit 94 at Alconbury Airfield, the location of which is shown on drawing reference number 01/01/B. The vehicle respraying process operates via a conveyor system as illustrated on drawing reference number 00080020-Inside Track. The initial stage of the process is preparation, which may include minor sanding operations. Local exhaust ventilation is provided throughout Unit 94 by a Rupes S 1404 E extraction system. Vehicles then proceed via conveyor into unit 1 for primer application, as shown on drawing number 00080020-Inside Track, and then onto unit 2 which is the priiner low bake oven. Vehicles then proceed onto units 3, 4 and 5 for base coat application, lacquer application and final baking respectively. Units 1 to 5 are fitted with roller doors.

All the spraybooths and bake ovens were designed and fitted by Harry Dalby Engineering Ltd of Leicester and are fitted with high level filtration and pressure monitoring. The Magnehelic pressure gauges are set to shut down the ovens/spraybooths should positive pressure exist during operation. Appendix 2 shows a Certificate of Conformity for all spraybooths and ovens. Air intake is at units 1, 3 and 4 and each unit (1 to 5) has a discharge to atmosphere via 5 separate stacks, each terminating 3m above point of entry through roof. The burners supplying the ovens are run on mains gas.

Paint and primer storage and mixing is undertaken in one of two mixing rooms, shown as unit 6 and 7 on drawing reference number 00080020-Inside Track. Unit 6 is used for paint storage/mixing and contains an enclosed Iwata gunwashing machine. Unit 7 is used mainly for primer storage/mixing and contains an enclosed Powerclean gunwashing machine. Both units have roof level air intake and ground level extraction. Extracted air from each unit is discharged to atmosphere via a separate stack, each terminating 3m above point of entry through roof.

The spray application of all coatings is carried out using HVLP spray application equipment. The only waste material containing solvents is the gunwash. This is periodically removed from site by a registered waste carrier; at time of writing this service is provided by MK Paints.

# CONDITIONS

## Emission Limits and Controls

1. All emissions to air, other than steam or water vapour, shall be colourless and free from persistent mist.

2. All emissions to air shall be free from persistent fume and free of droplets.

3. All emissions to air shall be free from offensive odour outside the process boundary as perceived by the local enforcing authority.

4. Emissions from the combustion processes serving the booths shall, in normal operations, be free from visible smoke and in any case shall not exceed an equivalent of Ringlemann Shade 1 as described in British Standard BS 2742: 1969.

5. Subject to condition 6 below, the maximum content of organic solvents (in grams per litre) which may be present in the coating as applied shall not exceed the amounts specified below. The measurement of volatile organic compounds contents of coatings shall be undertaken by an approved method, for example, the method described in Appendix 3 of PG 6/34(97), with the exception of precleaner, whose volatile organic content shall be determined as grams of solvent per litre of material including water.

| **Coating** | (g/litre) |
|---|---|
| Gunwash | 850 |
| Pre cleaner | 200 |
| Wash primer (a) | 780 |
| Precoat | 250 |
| Primer surfacer | 250 |
| Non-sand surfacer | 250 |
| Primers for wet-on-wet topcoat application (b) | 250 or 540 |
| Topcoats: | |
| 1-coat conventional | 420 |
| 2-coat base and clear (c) | 420 |
| 3-coat topcoat systems (c) | 420 |
| Special Products (d) | 840 |

See Appendix 3 for notes (a)-(d)

6. Where coatings are used which do not comply with condition 5 above, an emission concentration limit of 50 mg/m$^3$ of volatile organic compounds (VOCs), expressed as total carbon, shall be complied with in respect of the final point of discharge to air from spray booths. The limit value applies as a 2 minute average to the spraying operations and a 15 minute average for baking operations.

7. The concentration of total particulate matter in the final discharge to air from the refinishing booths shall not exceed 10 $mg/m^3$.

8. The spray applications of all coatings to passenger cars and commercial vehicles shall be applied by using one of the following methods:-

    (i) high volume low pressure (HVLP) (maximum atomisation pressure 67.5 kPa) spraying equipment;

    (ii) air assisted airless spraying equipment;

    (iii) electrostatic spraying equipment;

    (iv) any other paint application technique if the local enforcing authority is reasonably satisfied that it can achieve a paint transfer efficiency of at least 65%.

9. All paint spraying operations shall be carried out in a totally enclosed booth so as to prevent fugitive emissions of odour and particulate matter. The booth shall be fitted with a pressure gauge to ensure that the booth is not under positive pressure during the spraying cycle.

**Compliance Demonstration & Measurement of Emissions**

10. Where compliant coatings are used in accordance with condition 5 above, the operator shall submit evidence to this effect on an annual basis. This evidence may consist of a manufacturers technical submission and a guarantee from the operator that only the coatings quoted will be used in accordance with the manufacturers instructions.

11. Where it is elected to demonstrate compliance with the emission concentration specified in condition 6, rather than using compliant coatings, VOC emissions shall be measured at least once in every six months. The results of such measurements shall be forwarded to the local enforcing authority within four weeks of the measurements being undertaken. Emission measurements for VOCs shall be undertaken while the highest organic solvent content product used on site is being sprayed.

12. The local enforcing authority shall be provided with a guarantee from the spraybooth constructor that a newly installed booth will meet the particulate emission concentration limit specified in condition 7. The guarantee shall be supported by emission test data for the spraybooth type that the guarantee relates to. Where no guarantee is obtainable, emissions testing from the specific booth shall be required in accordance with condition 14, in order to demonstrate compliance with the particulate emission concentration limit specified in condition 7.

13. The local enforcing authority shall be provided with evidence of servicing at least once every 12 months. This evidence shall guarantee that the particulate emission concentration specified in condition 7 is being achieved. Where no evidence of

servicing is obtainable, emissions testing from the specific booth shall be required in accordance with condition 14, in order to demonstrate compliance with the particulate emission concentration limit specified in condition 7.

14. The reference test method for particulate emissions in chimneys or ducts is that of British Standard BS 3405:1983 and tests shall be carried out according to the main procedural requirements of that standard, although more stringent test methods are acceptable as and when they become available.

15. For the measurement of the concentration of any prescribed substance, methods shall be submitted by the operator for approval by the local enforcing authority.

16. A detailed record shall be kept of all paint hardener, organic solvent and substrate and equipment cleaning material used. This record shall be kept in such a manner that the total organic solvent usage can be determined. The total quantity of organic solvent used shall be forwarded to the local authority every 12 months.

17. The pressure gauge required by condition 9, shall be checked at the start of each spray/bake cycle and shall be connected to an audible alarm which shall sound in the event of over pressurisation and also cut off the paint spraying equipment when activated.

18. All work involving the mechanical sanding of fillers and painted surfaces shall be carried out in a preparation bay that has a filtered extraction system.

**Materials Handling**

19. All paint mixing shall be carried out in the paint mixing room.

20. All spray gun and associated equipment cleaning shall be carried out in an automatic, totally enclosed equipment cleaning machine or any other equipment cleaning machine that can achieve comparable or lower emissions. The cleaning machine shall be provided with the minimum of exhaust ventilation that is necessary to prevent the fugitive emission of solvent vapour when the machine is opened for introduction or removal of equipment, or for the changing of cleaning solvent.

21. All full, partially full and nominally empty containers that hold or have held materials or wastes containing organic solvents shall be stored tightly lidded.

22. All arisings of dry, dusty material shall be stored in closed containers to prevent wind entrainment.

23. A supply of absorbent material shall be held at the premises for use in the event of spillages of organic solvents. Such spillages shall be cleaned up immediately and the collected material shall be held in an enclosed container pending removal from the site.

**Ancillary Operations**

24. The total particulate matter discharge to the external atmosphere from extracted sources other than spraybooths shall not exceed an emission concentration limit of $50mg/m^3$.

25. Preventive measures shall be adopted to minimise fugitive emissions of odour fumes and particulate matter to the air outside the building from operations such as grinding and mechanical sanding of fillers and painted surfaces. All such operations that could lead to the emission of odours, fume or particulate matter shall be carried out in a building.

26. Where abrasive blasting equipment is installed, the extract from such equipment shall be ducted to arrestment equipment which is capable of meeting the emission concentration limit for particulate matter, as specified in condition 24. Where it becomes apparent that the operation of such arrestment equipment is causing nuisance in spite of correct maintenance, an emissions monitoring exercise shall be undertaken.

**General**

27. Proper use of equipment, proper supervision of process operations and adequate preventative maintenance shall be employed on all plant and equipment concerned with the control of emissions to air. Essential spares and consumables shall be held or arrangements shall be in place to effect essential maintenance without undue delay.

28. Any malfunction or breakdown leading to abnormal emissions above that permitted by this authorisation shall be remedied promptly and process operations shall be suspended until such time.

29. All malfunctions or breakdowns leading to abnormal emissions shall be recorded in the log and the Local Authority is to be informed immediately if there is likely to be an effect on the local community.

30. Staff at all levels shall receive the necessary formal training and instruction in their duties relating to control of the process and emissions to air.

31. Good housekeeping shall be practised at all times.

32. Any records required by the above conditions shall be maintained at the workplace for a minimum of 2 years and made available for examination by the Local Authority.

**Date:** 21st May 2001

Elizabeth A Wilson

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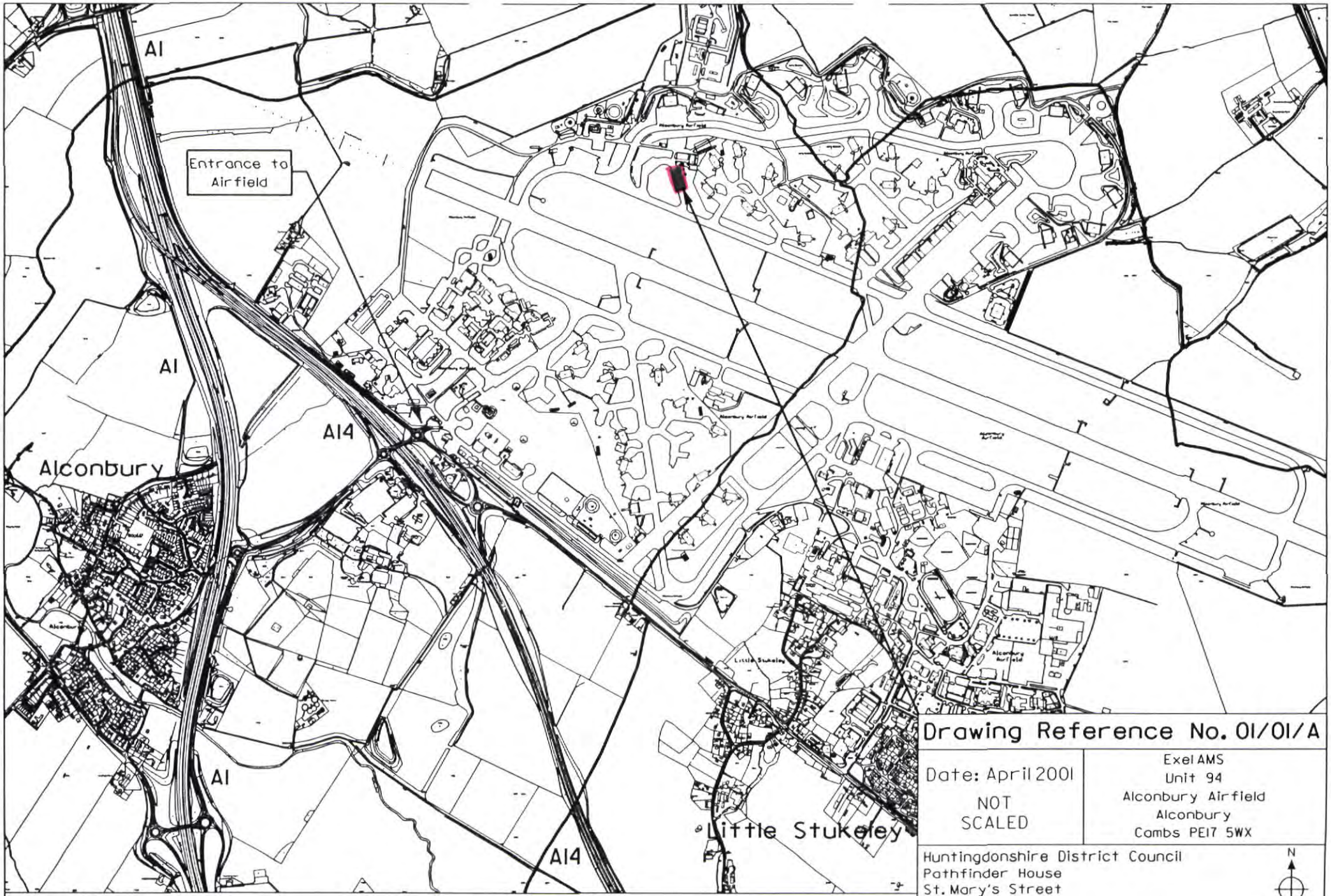
**Director of Operational Services**




# Drawing Reference No. 01/01/A

| | |
|---|---|
| Date: April 2001<br>NOT SCALED | ExelAMS<br>Unit 94<br>Alconbury Airfield<br>Alconbury<br>Cambs PE17 5WX |

Huntingdonshire District Council
Pathfinder House
St. Mary's Street
Huntingdon
Cambs PE29 3TN Licence No. HDC/LA/07828X

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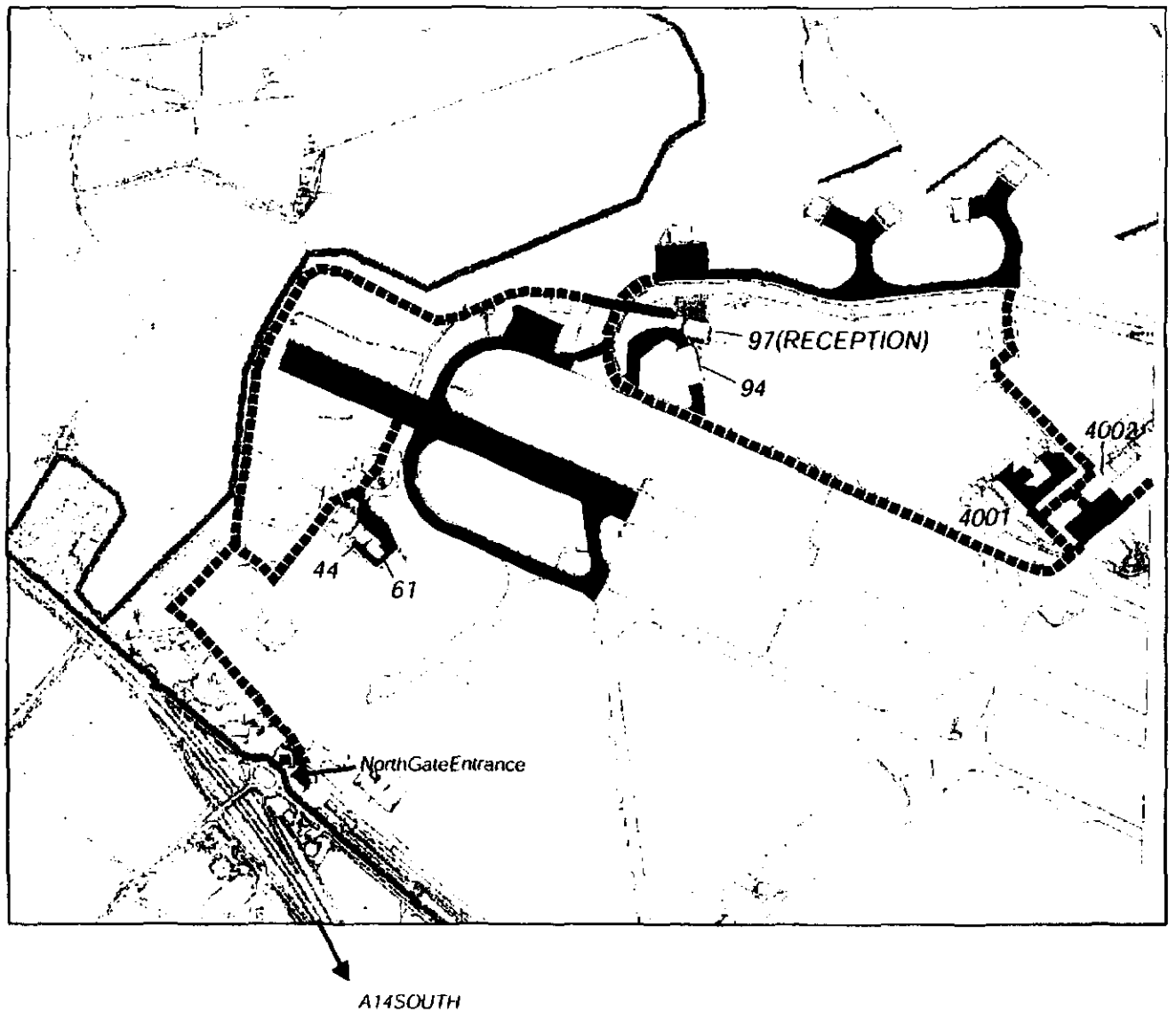



Access roads

Vehicle storage

Staff/visitor car parking

Vehicle holding areas

Exel buildings

Transporter deliveries/collections

exel

**Postal Address**

**Exel**
Automotive Management Services
Eaton Court
Great North Road
St. Neots
Cambridgeshire
PE19 7DB

Telephone 00 44 1480 475757
Facsimile 00 44 1480 219716

**Buildings**

| | |
|---|---|
| 44/61 | Ford Direct |
| 97 | Reception/admin |
| 94 | Paint/daywork/ valet |
| 4001/2 | Workshops |

**Note:**

All site visitors must report to Reception - Building 97

Exel employees and visitors are restricted to the above buildings and designated roads

DRAWING REF. No. 01/01/B

# Alconbury Site Plan

www.exel.com

ALL DIM. ARE IN mm

DO NOT SCALE

IF IN DOUBT ASK!

**UNIT 1**
PRIMER APPLICATION
Proposed Dalby 'Q' Type Booth
7504(L)x 4000(W)x 3000(H) INT.
with tracks and skates
and chest extraction

*1 CONTROL PANEL ELECTRICITY SUPPLY ISOLATOR BY CLIENT 415V 3PH. WITH NEUTRAL & EARTH 63amp

#1 GAS CONNECTION POINT 600,000 BTU/HR

**UNIT 2**
PRIMER BAKE
Proposed Dalby 'Q' Type Booth
6555(L)x 5000(W)x 3000(H) INT.
with tracks and skates
and chest extraction

*2 CONTROL PANEL ELECTRICITY SUPPLY ISOLATOR BY CLIENT 415V 3PH. WITH NEUTRAL & EARTH 32amp

#2 GAS CONNECTION POINT 600,000 BTU/HR

**UNIT 3**
BASE COAT BOOTH
Proposed Dalby 'Q' Type Booth
8007(L)x 4000(W)x 3500(H) INT.
with tracks and skates
and chest extraction

*3 CONTROL PANEL ELECTRICITY SUPPLY ISOLATOR BY CLIENT 415V 3PH. WITH NEUTRAL & EARTH 63amp

#3 GAS CONNECTION POINT 600,000 BTU/HR

**UNIT 4**
LAQUER APPLICATION
Proposed Dalby 'Q' Type Booth
7504(L)x 4000(W)x 3000(H) INT.
with tracks and skates
and chest extraction

*4 CONTROL PANEL ELECTRICITY SUPPLY ISOLATOR BY CLIENT 415V 3PH. WITH NEUTRAL & EARTH 63amp

#4 GAS CONNECTION POINT 600,000 BTU/HR

**UNIT 5**
REFINISH BAKE
Proposed Dalby 'Q' Type Booth
6504(L)x 7005(W)x 3000(H) INT.
with tracks and skates
and chest extraction

*5 CONTROL PANEL ELECTRICITY SUPPLY ISOLATOR BY CLIENT 415V 3PH. WITH NEUTRAL & EARTH 32amp

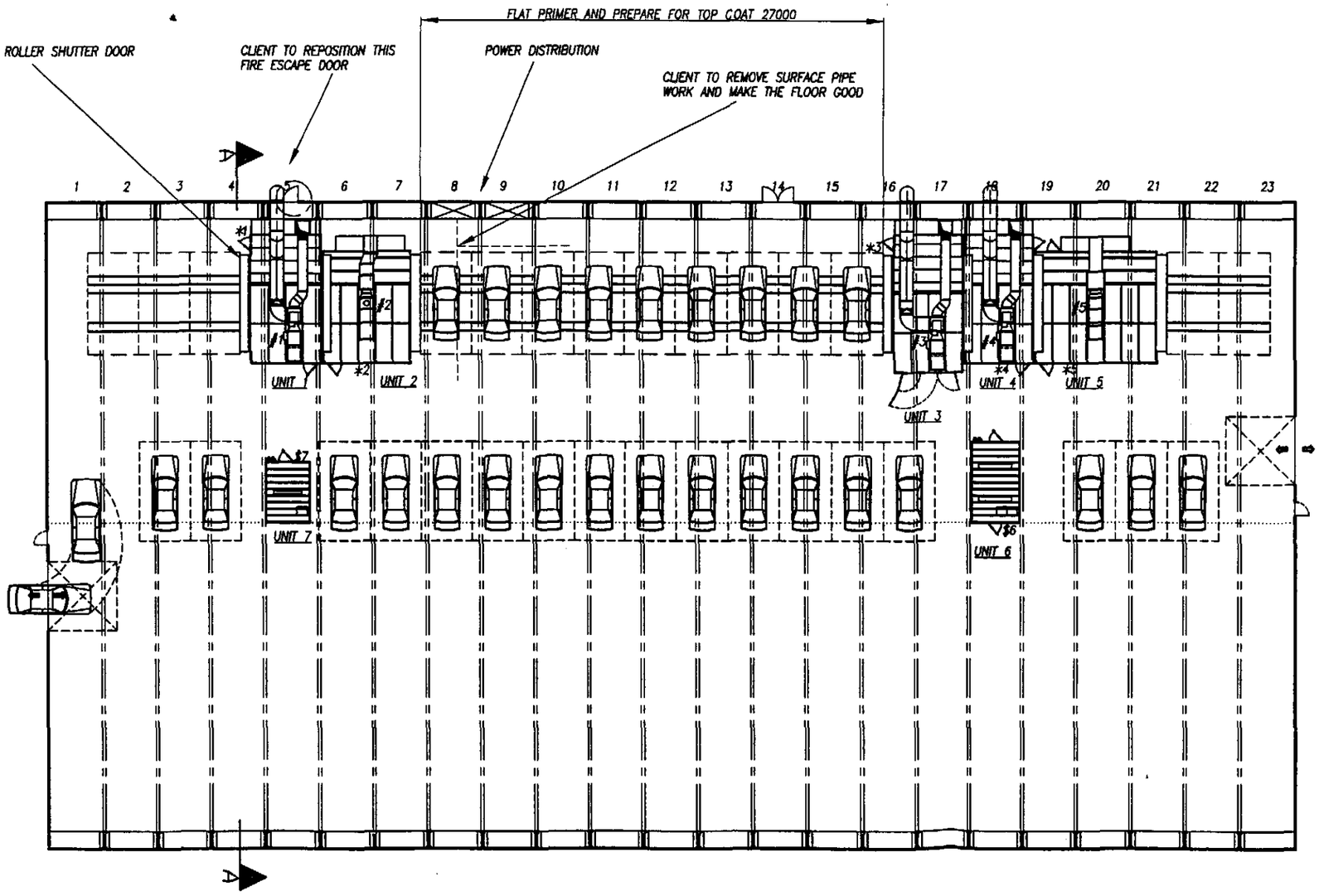
#5 GAS CONNECTION POINT 800,000 BTU/HR

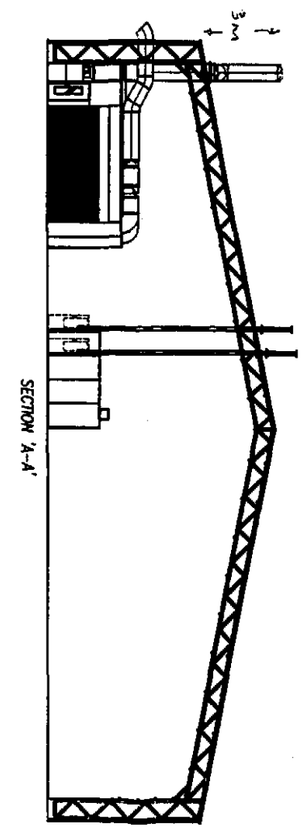
**UNIT 6**
REFINISH MIXING ROOM
Proposed Dalby PMR
4615(L)x 2804(W)x 2500(H) INT.

$6 CONTROL PANEL ELECTRICITY SUPPLY ISOLATOR BY CLIENT 240V SINGLE PHASE 6AMP FUSED SWITCH

**UNIT 7**
PAINT MIXING ROOM
Proposed Dalby PMR
3469(L)x 2504(W)x 2500(H) INT.

$7 CONTROL PANEL ELECTRICITY SUPPLY ISOLATOR BY CLIENT 240V SINGLE PHASE 6AMP FUSED SWITCH




NOTE ON FLOOR
CLIENT TO REMOVE ALL FLOOR COVERING, MAKE GOOD ANY POOR SURFACE AND FINISH FLOOR IN LINE WITH OUR PRE-DELIVERY INSTRUCTION BOOKLET

SALES ILLUSTRATION
THIS DRAWING IS A SALES ILLUSTRATION ONLY PROVIDED FOR DISCUSSION PURPOSES ONLY, AND BEFORE FORMAL CONTRACT DESIGN A FULL SITE SURVEY IS REQUIRED

SITE ADDRESS
ALCONBURY R.A.F. BASE
ALCONBURY
HUNTINGDON
CAMBS.

| | | | |
|---|---|---|---|
| C | R.ELLINGTON 11-OCT-2000 | JWP | SCHEME COMPLETELY ALTERED AS NEW BUILDING BEING USED |
| B | C.J.McARA 12 SEP 00 | DW | SERVICES ADDED |
| A | R.ELLINGTON 05-SEP-2000 | JWP | ORIGINAL ISSUE |
| ISSUE | DRN./DATE | CHKD | CHANGE DETAILS |

CLIENT
INSIDE TRACK
EATON COURT
ST NEOTS
CAMBS
PE19 4AG

TITLE
PROPOSED NEW DALBY TRACKED PAINT RE-FINISHING PLANT

SALES ILLUSTRATION

CONTRACT NO: –
ORIGINAL SCALE: 1:150
DRAWING NO: 00080020-INSIDE TRACK

Dalby


HARRY DALBY ENGINEERING LTD
GLOUCESTER CRESCENT WIGSTON LEICESTER LE18 4YD
TEL: 0116 291 6000 FAX: 0116 291 6001


| GENERAL TOLERANCES | <300mm | <1.2M | >1.2M |
|---|---|---|---|
| CUTTING | ± 0.5 | ± 0.5 | ± 0.5 |
| PUNCHING | ± 0.2 | ± 0.5 | ± 0.5 |
| FORMING/FOLDING | ± 0.5 | ± 1.0 | ± 2.0 |
| DUCTING | ± 1.0 | ± 3.0 | ± 5.0 |
| GENERAL INSTALLATION | ± 2.0 | ± 3.0 | ± 5.0 |
| DUCTING INSTALLATION | ± 3.0 | ± 5.0 | ± 10.0 |



FIRST ANGLE PROJECTION

A1