

Installation of
Compressed Natural Gas Refuelling Station

At

Ocado CFC Depot
Gypsy Moth Avenue
Hatfield
Herts
AL10 9BD

DESIGN & ACCESS STATEMENT



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Project Quality Assurance Information Sheet

CNG Refuelling Equipment, Ocado, Hatfield

Design & Access Statement

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Drawing Schedule

Drawing Name	Drawing Number
Site Location Plan	GR1043/01/01
Existing Site & Planning Application Boundary	GR1043/01/02
Proposed General Arrangement	GR1043/01/03
Swept Path Analysis	GR1043/01/04
Proposed Services	GR1043/01/05
Compressor Housing Elevations	GR1043/01/06
Gas Cylinder Storage Module Elevations	GR1043/01/07
Typical CNG Dispenser	GR1043/01/08
Gas Kiosk Elevations	GR1043/01/10

1. Introduction

1.1. Purpose of this Design & Access Statement

- 1.1.1. This Design & Access Statement has been prepared by Gasrec Limited, in support of an application for planning permission for the installation of a Compressed Natural Gas (CNG) Refuelling Station at Ocado Customer Fulfilment Centre (CFC), Gypsy Moth Avenue, Hatfield, AL10 9BD.
- 1.1.2. The purpose of a Design and Access Statement is to allow the applicant to demonstrate that development proposals are based on a thoughtful design process and a sustainable approach to access. The Design and Access Statement should also demonstrate how the development proposals have evolved during the design process.

1.2. Location

- 1.2.1. The application site is part of the Ocado CFC located at Gypsy Moth Avenue, Hatfield. The CFC lies within an Employment Area as identified in Welwyn Hatfield District Plan 2005.

1.3. Context

- 1.3.1. The application site forms part of the Ocado CFC which is within the Hatfield Business Park Employment Area (EA6) – see Site Location Plan GR1043/01/01.
- 1.3.2. The application site represents a small portion of the CFC as a whole. At the back of the CNG Station compound is a large office car park. To the front and either end is the one way CFC site road and yard area.
- 1.3.3. The wider Ocado CFC has the aforementioned office and car park to the north, other distribution warehouses to the east and west and residential properties to the south. See Location Plan GR1043/01/01 and Site Plan GR1043/01/02.

1.4. Use

- 1.4.1. The CNG Refuelling Station will provide a cleaner fuel for Heavy Goods Vehicles (HGVs) operated by Ocado from this Hatfield CFC. Ocado have a commercial agreement with Gasrec for the supply of the station equipment and the gas for the vehicles.
- 1.4.2. Refuelling operations will be available on a 24/7 basis in line with the CFC's current operating hours.

1.5. Layout and Scale

- 1.5.1. The CNG Refuelling Station has been designed and located in response to the operations on site and maintaining clear traffic flows to and past the refuelling area. There are no changes to the existing site access and egress or the one-way traffic system.
- 1.5.2. An area at the very north west point of the CFC yard was also considered, however, this was deemed less optimal as refuelling traffic flows would have been restricted and trailer parking space would have been used.
- 1.5.3. The proposed development, as shown on Drawing GR1043/01/03, will consist of:
- Up to 2 off CNG compressors, housing and air cooling units
 - Up to 8 off CNG storage cylinder racks
 - 2 off CNG dispensers and Fuel Management Unit

Compressor Housing

- 1.5.4. Each compressor housing is divided into two internal compartments and will contain the station controls and electrical connections in one end with the gas compressor in the larger main compartment. This compressor will take gas from the mains and compress it up to 250bar for storage in the CNG storage cylinder packs.
- 1.5.5. The compressor to be used is a well proven design with more than 1,000 in operation around the world and 20 in the UK.

Figure 1.5.1 – Compressor Housing



CNG Storage Cylinder Racks

1.5.6. There will be six CNG storage cylinder packs – three in Phase 1 with an additional three for Phase 2. These cylinders hold the CNG at 250bar for dispensing into the HGVs. The total stored weight of natural gas will be 3,400kgs after Phase 2 is rolled out.

Figure 1.5.2 – CNG Storage Cylinder Racks



CNG Dispensers

1.5.7. There will be two CNG dispensers for refuelling the gas powered vehicles. These will fill the HGVs with CNG at 200bar pressure. There will be a Fuel Management Unit that will control the CNG dispenser so that only staff with the correct training and fuel card or key fob can fill from these dispensers.

Figure 1.5.3 – CNG Dispenser and Fuel Management Unit



1.6. Landscaping and Appearance

1.6.1. The proposed development has been designed to be compatible with the existing site infrastructure and use whilst giving consideration to the nature of its surroundings. The proposed CNG Refuelling Station will be ancillary to the main use of the site as a groceries distribution depot.

- 1.6.2. The compressor housing and cylinder storage racks are well below the height of the HGV trailers that park at the depot. There is a single 2 inch wide pipe of circa 5 metres that is used as a vent for the compressor in rare cases of an automatic shutdown. This would vent a small amount of gas from the compressor to release pressure within the piston cylinders.
- 1.6.3. The station equipment will be painted white. There will be Gasrec logos on the dispensers and the compressor housing. These will be inward facing to the Ocado CFC only and, therefore, Advertising Consent will not be required.
- 1.6.4. A small area of van parking will be lost to the proposed development, however, these vans can be accommodated elsewhere on the CFC. Palisade fence will be used around the equipment compound in keeping with current fencing around the CFC.

1.7. Access

- 1.7.1. The overall CFC site is served by an entrance and exit off Gypsy Moth Avenue – this will remain. The CFC uses a one-way traffic system for all vehicles using the yard area.
- 1.7.2. Appropriate signage and road marking will be installed as well as the implementation of traffic management procedures to ensure the safe operation of the site access, egress and one-way system. The Swept Path Analysis Drawing (No. GR1043/01/04) shows traffic flows around the proposed CNG station.