

Southampton to London Pipeline Project

Surface Water and Foul Water Drainage Plan

Revision No. 1.0

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London Borough of Hounslow





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1 Introduction

1.1 Introduction to the Project

- 1.1.1 Esso Petroleum Company, Limited (Esso) has been granted a Development Consent Order (DCO) by the Secretary of State to replace 90km (56 miles) of an existing pipeline with 97km of new pipeline to transport aviation fuel between Boorley Green in Hampshire and the Esso West London Terminal storage facility in Hounslow. The replacement pipeline is 97km long, taking into account that it cannot follow the line of the existing pipeline along its whole length due to new developments and environmental constraints.
- 1.1.2 Esso has already replaced 10km of pipeline between Hamble and Boorley Green in Hampshire. The replacement pipeline starts near Boorley Green at the end point of the previously replaced pipeline. The route runs generally in a northeast direction via Esso's Pumping Station in Alton. It terminates at the Esso West London Terminal storage facility. The areas of land to be permanently or temporarily used for the project are known as the Order Limits.
- 1.1.3 It is anticipated that works to install the pipeline will start in 2021 and be completed in 2023. The installation of the pipeline is planned to be completed within a two-year construction period. On completion of the installation works, the contractor will hydrotest the pipeline and any post-construction monitoring required will be carried out.
- 1.1.1 This Surface Water and Foul Water Drainage Plan (SFWDP) is standardised across all of the discharging authorities however reference is made in para 2.1.6 of this document specifically in relation to works in London Borough of Hounslow.

1.2 Purpose of the Surface Water and Foul Water Drainage Plan

- 1.2.1 This SFWDP relates only to the permanent drainage works relevant to the project. It does not apply to the temporary drainage that may be required during the construction phase of the project. This SFWDP is in accordance with the Outline SFWDP. This has been produced in accordance with Requirement 9 in the DCO.
- 1.2.2 The SFWDP should be read alongside the Water Management Plan (Appendix B of the CEMP), which contains the commitments relating to water management for the construction phase of the project.

1.3 Aims and Objectives

- 1.3.1 The overarching aim of the SFWDP is to give consideration to permanent foul water and surface water drainage for the project.
- 1.3.2 It should be noted that no discharge of water under article 18 (discharge of water) of the DCO must be made until details of the location and rate of discharge have been submitted to and approved in writing by the relevant sewerage and/or drainage authority or, where applicable, the Environment Agency and/or the Lead Local Flood



Authority. However, it has been confirmed that there will be no discharge of water for permanent foul water and surface drainage for the project.

2 Surface Water and Foul Water Drainage Plan

2.1 Surface Water

Introduction

2.1.1 The Southampton to London pipeline will be installed below ground and therefore the pipeline itself will not have a permanent effect on surface water drainage.

Above Ground Installations

2.1.2 Along the route of the pipeline, there are above ground installations comprising:

- Winchester District B:
 - Boorley Green Pipeline Inspection Gauge (Pigging) Station, Netherhill Lane. Includes Valve VA-2A
 - Valve VA-2B, Cross Lane
 - Valve VA-2C, Track to Betty Mundy's Bottom, off Lower Preshaw Lane
 - Valve VA-2D, Uncle Bill's Lane
- East Hampshire District:
 - Valve VA-2E, Kitwood Lane
 - Pressure Transducer (PT), Headmore Lane
 - Valve VA-2G, Selbourne Road
 - Alton AGI, includes Valve VA-2H, Track off A31
- Hart District:
 - Valve VA-2I, Bourley Road
- Rushmoor District:
 - Valve VA-2J, Concorde Road
- Surrey Heath:
 - Valve VA-2K, Frimley Green Road
 - Valve VA-2L, Guildford Road
 - Valve VA-2M, Steep Hill
- Runnymede:
 - Valve VA-2N, Track to Pannells Farm, off The Knoll
- Spelthorne District B:
 - Valve VA-2O, Ashford Road

2.1.3 The design is such that above ground installations have some impermeable hardstanding areas. The extent of their areas is very small; circa 160m² at the Boorley Green Pigging Station and circa 10m² at each of the valve and pressure



transducer chambers. Each small area of hardstanding is surrounded by gravel which allows the water to drain freely to the surrounding ground.

- 2.1.4 A very small amount of aviation fuel is removed from the pipe during pigging. The Pigging Station is designed to safely and securely capture such discharges during pigging operations and these would be removed by tanker for disposal. At all other times surface water from the hardstanding areas would be free to drain to the surrounding ground.
- 2.1.5 A Flood Risk Assessment (FRA) was carried out in May 2019 and submitted with the original DCO application. Further details can be found in Environmental Statement Chapter 7 (**Application Document APP-134**). Due to the relatively small impermeable areas and limited above ground permanent works, the FRA concluded the risk to and from the project in the operational phase is considered to be very low and therefore no specific mitigation measures are required. A summary of the risk of impact to and from the project pre- and post-mitigation is included in Table 2.1 below, as concluded in the original FRA. It should be noted that this summary table represents the worst-case assessment based on the areas identified to have the highest risk associated with each flood source.
- 2.1.6 In London Borough of Hounslow, the new pipeline reception facilities will be installed in an existing part of the Esso West London Terminal storage facility making use of existing infrastructure including roads. As such there will be no requirement for new surface water drainage systems or for new tie ins to existing systems, therefore the rate of discharge of surface water will be unchanged vs the operation today.

Table 2.1: Summary of Flood Risk Impact

Source	Operational Phase Risk	
	Unmitigated	Post-mitigation
Tidal/coastal	Very low	Not required
Fluvial	Low	Very low
Surface water	Very low	Very low
Groundwater	Low	Very low
Reservoirs	Very low	Very low
Canals	Very low	Very low
Water Infrastructure	Very low	Very low

2.2 Foul Water Drainage for New Infrastructure

- 2.2.1 During the operation of the pipeline and above ground installations, the project does not expect any foul water to be generated and therefore there is no permanent foul water drainage required.