

Watch outthere's a pipeline about!





ConocoPhillips

Revision No. 06.1

special requirements for Safe Working in close proximity to high pressure pipelines





For pipelines owned and or operated by:

BP

BPA

ConocoPhillips

E-ON

Esso Petroleum Company Limited

Government Pipelines & Storage System

Huntsman

Mainline Pipelines Limited

Manchester Jetline Limited

Shell

Total

GOVERNMENT PIPELINES AND STORAGE SYSTEM



MAINLINE PIPELINES LIMITED









Note: This manual supersedes all previous issues, which should now be sent for recycling.

Linewatch Products Available



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Colour Map Books



Markerpost Brochures



Emergency Cards



Toolbox Talk Handouts



Linewatch Presentations



Linewatch Trailer

Contact Linewatch for further information www.linewatch.co.uk

- BP
- BPA
- E-ON
- CONOCOPHILLIPS
- ESSO PETROLEUM COMPANY LIMITED
- GOVERNMENT PIPELINES & STORAGE SYSTEM
- HUNTSMAN
- MANCHESTER JETLINE LIMITED
- MAINLINE PIPELINES LIMITED
- SHELL
- TOTAL

Special requirements for safe working in close proximity to high pressure pipelines

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Special Requirements for Safe Working in Close Proximity to pipeline systems owned or operated by BP, BPA, ConocoPhillips, E-On, Esso, GPSS, Huntsman, Mainline, Manchester Jetline Limited, Shell and Total.

The purpose of this booklet is to provide guidance on the basic requirements for safe working in close proximity to buried pipelines owned and/or operated by BP, BPA, ConocoPhillips, E-On, Esso Petroleum Co. Ltd, The Government Pipelines and Storage System (GPSS), Huntsman, Mainline Pipelines Ltd, Manchester Jetline Limited, Shell and Total. They are not exhaustive and a safe system of work, including any specific requirements of the operator, should be agreed prior to work commencing.

To fulfil their duty to specify safe systems of work near the pipelines, the operators require notification of the intention to carry out underground works (as more fully defined in pp18-21) when within 50metres of the pipe and in the same parcel of land, i.e. not separated by a fence or other identifiable division. The operator is then responsible for clearly marking the detailed route of the pipe (a free service) and the specification of any constraints on the proposed method of working.

All works require prior approval except routine agricultural operations; however, drainage operations and mole ploughing must be approved.

When planning works which could involve crossing or working close to a high-pressure pipeline then the land owner, occupier, utility company or contractor should supply details of the proposed works to the Pipeline Operator or his Agent. These should include:

- **1** A brief description of the proposed works.
- 2 A plan with a National Grid reference.
- 3 A proposed time scale for the works.

No works shall take place within 3m (10ft) on either side of a pipeline without prior approval of the pipeline operator in accordance with the provisions of the Deeds of Grant and the following Acts of Parliament: -

- Requisitioned Land and War Works Act 1948.
- The Land Powers (Defence) Act 1958.
- Shell-Mex and BP (London Airport Pipeline) Act 1959.
- Esso Petroleum Company Act 1961.
- Pipelines Act 1962.
- Pipeline Safety Regulations 1996.

Section 16 of The Land Powers (Defence) Act 1958 prohibits most works within the easement without the prior consent of the Secretary of State. (See guidance note 15).

For the purposes of this document the term "easement", as used, includes property rights arising under Deeds of Grant, Wayleaves and other rights in land granted under the above Acts.

Details of the relevant operators or their agents are listed in this booklet.

Basic Guidelines for any work near Pipelines

- 1 All work shall be in accordance with the Guidance Notes. (Contained in this booklet). Prior to commencement of all works a written task risk assessment and method statement will be required. In general a legal consent will be required prior to any works within the wayleave. Adequate time should be allowed for the completion of these consents.
- 2 No raising or lowering of ground level throughout the easement without written consent from the pipeline operator.
- 3 Concrete slab protection will be required over the pipeline at permanent road crossings and parking areas, including temporary construction areas, typically, as per example (Appendix I). Prior to installation the developer shall expose the pipeline under the supervision of a representative of the Pipeline Operator and arrange for the existing protective pipe wrapping to be inspected, repaired and then double wrapped at the Promoter's expense by a contractor approved by the Pipeline Operator or his Agent.
- 4 The easement shall be pegged out and fenced off prior to works commencing. Agreed crossing points across the easement for construction machines shall be protected by tied timber mat, "Bog Mat" or a temporary concrete slab or hardcore, as per example (Appendix II).
- 5 To prevent indiscriminate crossings along the pipeline, service crossings (i.e. drains, cables, pipes, etc.), should be grouped together at a common point. These should be ducted if possible.

- 6 Pipeline marker posts shall be installed at the Promoter's expense each side of all road crossings and elsewhere as necessary, to mark the pipeline route. The Pipeline Operator to supply markers (2 weeks notice required).
- **7** No buildings, structures or caravans to be within the pipeline easement.
- 8 The pipeline easement should always be in an open area, as access to the easement and/or the pipeline is required at all times.
- **9** Attention is drawn to the fact that the pipeline is cathodically protected. This can corrode metal structures in the vicinity and it is the Promoter's responsibility to protect their constructions against this.
- 10 Tree planting is restricted.
- 11 No explosives to be used within 400 metres (1300 ft) of the pipeline without prior agreement with the Pipeline Operator or his Agent.
- 12 No pile driving within 30 metres (100 ft) of the pipelines without prior agreement with the Pipeline Operator or his Agent.
- 13 No 3D seismic survey using the Vibrosis method within 30 metres (100ft) of the pipeline without prior agreement.
- **14** Directional drilling, thrust boring or other trenchless techniques will be considered as an alternative method of crossing the pipelines subject to certain conditions being fully adhered to.
- **15** High voltage electric cable crossing may require special consideration.

This manual relates to the following pipeline systems only:-

- BP
- BPA
- ConocoPhillips
- E-ON
- Esso Petroleum Company Ltd
- Huntsman
- Government Pipelines & Storage System. (GPSS)
- Mainline Pipelines Ltd.
- Manchester Jetline Limited
- Shell
- Total

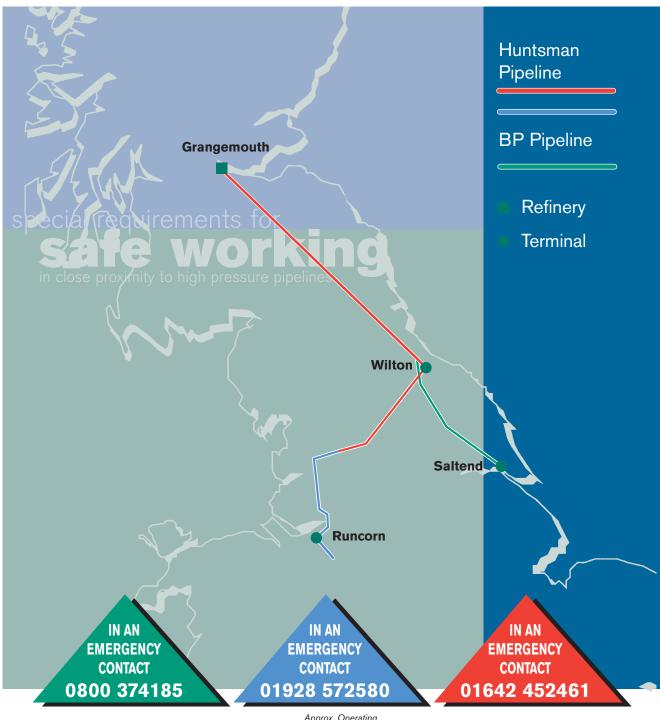
It is emphasised that not all pipelines in the UK are represented and that owners of pipelines, which do not appear in this booklet, should be consulted regarding procedures to be followed when working close to their pipelines.

General Information

- All the pipelines mentioned are high pressure, steel pipelines containing petroleum products.
- Sizes vary from 150mm, (6") to 750mm (30") diameter.
- Nominal depth of cover is 0.9m, (3ft) although in some locations this cover may be less. e.g. Canal towpaths.
- The employing authority (or his contractor) shall be responsible for all or any liability under the Health and Safety at Work Act, 1974, etc.

The following pages indicate the routes and provide details of the pipelines, which make up these systems.

BP & Huntsman



WGEP

TPEP

3 Holford Link

TSEP 4

Approx. Operating	
Pressure	Pipeline (NB

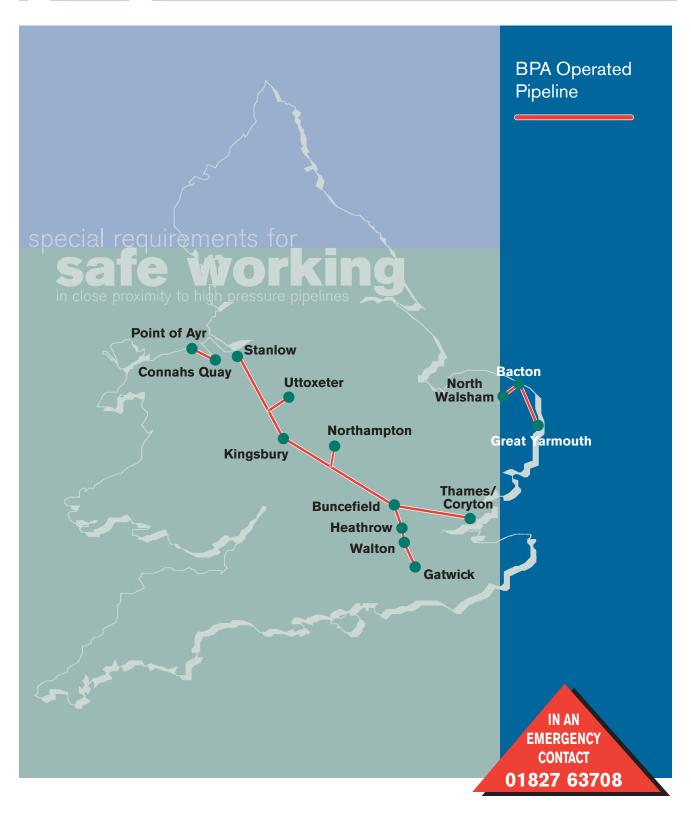
1160psi

= Nominal Bore) Ethylene 10" NB (250mm) 1390psi 1410psi Ethylene 8" NB (200mm) Ethylene 8" NB (200mm) 1410psi

Ethylene 12" NB (300mm)

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BPA Operated



BPA Operated

	Route	Approx. Operating Pressure	Pipeline (NB = Nominal Bore)
1	Stanlow - Kingsbury	1200psi	Multiproducts 10" NB (250mm)
2	Kingsbury - Buncefield	1200psi	Multiproducts 12" NB (300mm)
	Kingsbury - Buncefield	1200psi	Multiproducts 10" NB (250mm)
3	Buncefield - Thames	1200psi	Multiproducts 14" NB (350mm)
4	Buncefield - Heathrow	1200psi	Multiproducts 8" NB (200mm)
	Buncefield - Heathrow	1200psi	Multiproducts 6" NB (150mm)
5	Heathrow - Walton	1300psi	Multiproducts 10" NB (250mm)
6	Walton - Gatwick	1300psi	Multiproducts 10" NB (250mm)
7	Walton - Heathrow	720psi	Multiproducts 6" NB (150mm)
	Walton - Heathrow	720psi	Multiproducts 6" NB (150mm)
8	Bacton - North Walsham	720psi	Gas Condensates 6" NB (150mm)
9	Bacton - Great Yarmouth	1100psi	Natural Gas 12" NB (300mm) *
10	Point of Ayr - Connahs Quay	640psi	Natural Gas 24"NB (600mm) *

^{*}Additional safety precautions apply to these high pressure gas pipelines. Please consult BPA.

ConocoPhillips

pipelines



Rout

1 Theddlethorpe-HOR (Killingholme)

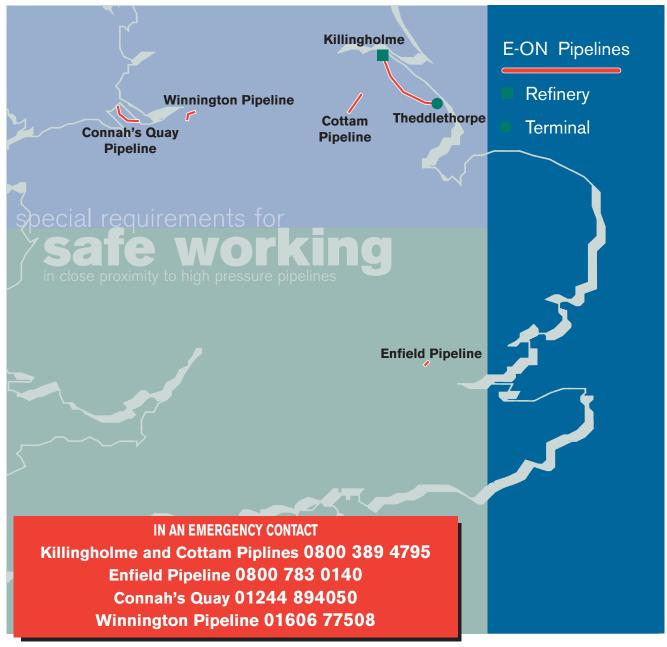
Approx. Operating Pressure

900psi

Pipeline (NB = Nominal Bore)

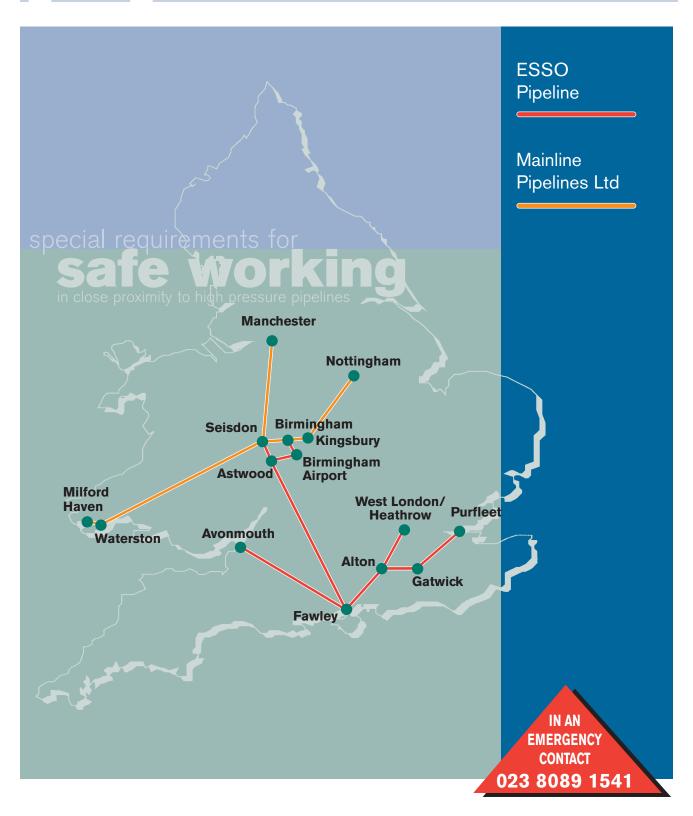
Condensate 6" NB (150mm)

E-ON



1	Route Killingholm - Theddlethorpe	Approx. Operating Pressure 1100psi	Pipeline (NB = Nominal Bore) Gas 20" NB (508mm) 52km
2	Cottam Pipeline	1015psi	Gas 24" NB (609mm) 24km
3	Enfield Pipeline	827psi	Gas 24" NB (600mm)
4	Connah's Quay - Burton Point	1100psi	Gas 30" NB (750mm)
5	Winnington Pipeline	1100psi	Gas 12" NB (300mm) 11km

Esso and Mainline



Esso

pipelines

	Route	Approx. Operating Pressure	Pipeline (NB = Nominal Bore)
1	Fawley - West London	1000psi	Ex Fuel Oil (insulated) 10" NB (250mm)
	Fawley - West London	1100psi	Multiproducts 12" NB (300mm)

*1 Gas Pipeline 8" NB (200mm)

^{*}This pipeline is in the same trench as the 12" Esso pipeline, but is owned by BG Transco and operated by their Local Distribution Zones (LDZ) as follows:

	Hamble - Frimley (Colony Gate) Frimley (Colony Gate) - West Bedfont	BG Transco, South LDZ, Chandlers Ford BG Transco, North London LDZ, Slough	
2	Alton - Purfleet (via Gatwick)	1100psi	Multiproducts 10" NB (250)
3	Fawley - Avonmouth	1440psi	Multiproducts 6" NB (150)

4 Fawley - Seisdon 1100psi Multiproducts 14" NB (350) (Nr. Wolverhampton)

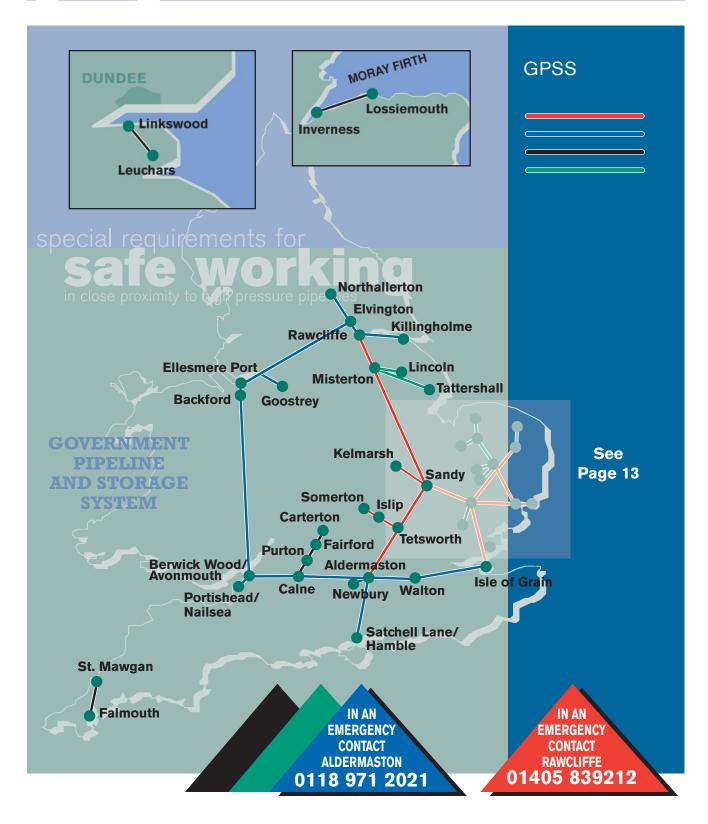
5 Astwood - Birmingham 1200psi Multiproducts 12" NB (300) (Birmingham Airport Link)

6 Heathrow Feeder Lines (Perry Oaks)

Mainline

1 Waterston - Seisdon	1400psi	Multiproducts 16" NB (410mm)
2 Seisdon - Kingsbury	1400psi	Multiproducts 12" NB (300mm)
3 Kingsbury - Nottingham	1400psi	Multiproducts 10" NB (250mm)
4 Seisdon - Manchester	1400psi	Multiproducts 12" NB (300mm)
5 Texaco, Pembroke - Waterston		Multiproducts 16" NB (410mm)
6 Elf, Milford Haven - Waterston		Multiproducts 16" NB (410mm)
7 Carrington - Cadishead		Multiproducts 12" NB (300mm)

GPSS



GPSS

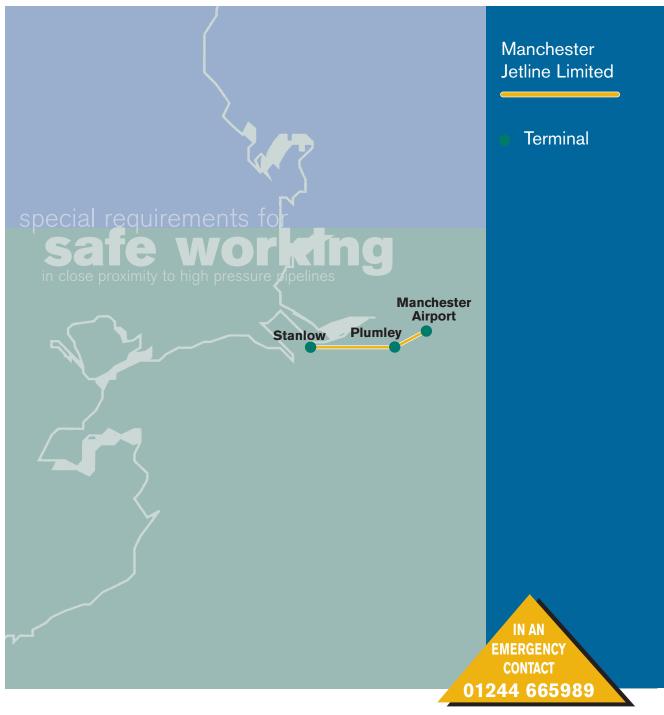


Principle GPSS

	Route	Approx. Opera Pres	
1	Backford - Rawcliffe	1100psi	Multiproducts 10"/12" NB (250/300mm)
2	Rawcliffe - Killingholme	1100psi	Multiproducts 12" NB (300mm)
3	Rawcliffe - Sandy	725psi	Multiproducts 6"/8" NB (150/200mm)
4	Sandy - Saffron Walden	725psi	Multiproducts 8" NB (200mm)
5	Saffron Walden - Hethersett	725psi	Multiproducts 8" NB (200mm)
6	Saffron Walden - Claydon	1200psi	Multiproducts 8" NB (200mm)
7	Saffron Walden - Thames	1200psi	Multiproducts 10" NB (250mm)
8	Sandy - Aldermaston	725psi	Multiproducts 8" NB (200mm)
9	Aldermaston - Satchell Lane	725psi	Multiproducts 8" NB (200mm)
10	Satchell Lane - Hamble	725psi	Multiproducts 8" NB (200mm)
11	Aldermaston - Walton	725psi	Multiproducts 8"/10" NB (200/250mm)
12	Walton - Isle of Grain	725psi	Multiproducts 8" NB (200mm)
13	Aldermaston - Berwick Wood	725psi	Multiproducts 8"/10" NB (200/250mm)
14	Berwick Wood - Backford	725psi	Multiproducts 10" NB (250mm)
15	Falmouth - St Mawgan	1100psi	Multiproducts 8" NB (200mm)
16	Inverness - Lossiemouth	1100psi	Multiproducts 8" NB (200mm)
17	Calne - Fairford/Carterton	1100psi	Multiproducts 6" and 10" NB
18	Rawcliffe - Elvington/Northallerton	725psi	Multiproducts 8" NB (200mm)
19	Misterton - Lincoln/Tattershall	725psi	Multiproducts 8" NB (200mm)
20	Claydon - Thetford	1200psi	Multiproducts 8" NB (200mm)
21	Claydon - Woodbridge/Tunstall	725psi	6" NB (150mm)
22	Hethersett - Buxton	725psi	6" NB (150mm)
23	Thetford - Ingham/Barton Mills	725psi	6"/8" NB (150/200mm)
24	Tetsworth - Islip/Somerton	725psi	6"/8" NB (150/200mm)
25	Backford - Bromborough/Ellesmere Port	725psi	10" NB (250mm)
26	Berwick Wood - Portishead/Nailsea	725psi	16" NB (400mm)
27	Linkswood - Leuchars	232psi	6" NB (150mm)
28	Sandy - Kelmarsh	725psi	8" NB (200mm)
29	Thetford - Shouldham/Tattersett	725psi	8" NB (200mm)
30	Saffron Walden - Stanstead	1100psi	6" NB (150mm)
31	Aldermaston - Newbury	725psi	6" NB (150mm)
32	Plumley - Goostrey	450psi	10" NB (250mm)
	•	•	

Manchester Jetline Limited

pipelines



Route

1 Stanlow to Manchester Airport

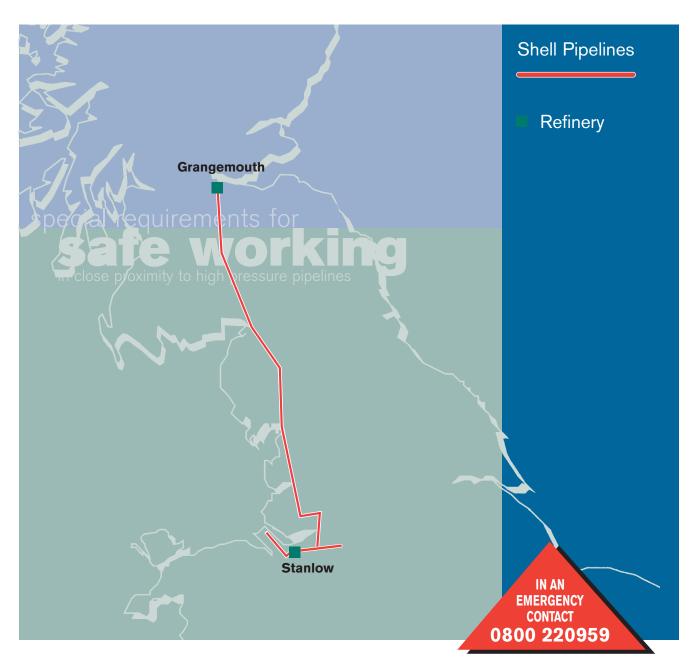
Approx. Operating Pressure

Pipeline (NB = Nominal Bore)

450psi

Jet Fuel 10" NB (250mm)

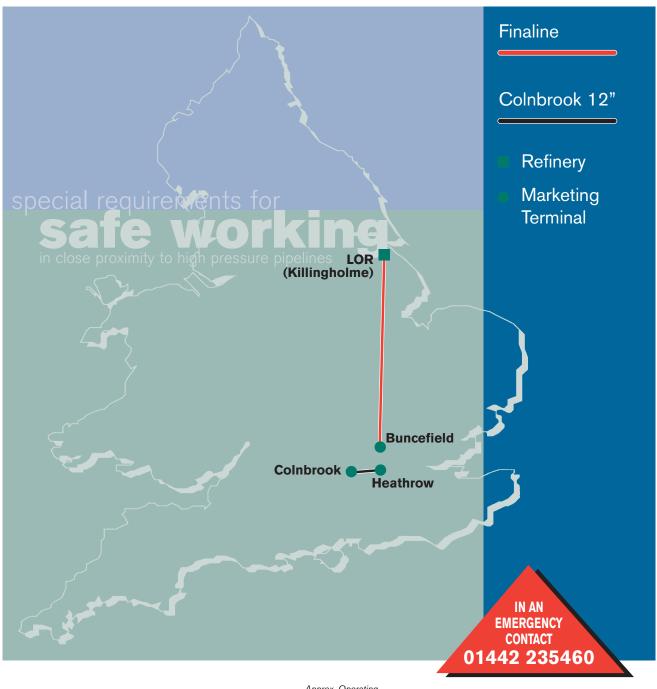
Shell



	Route	Approx. Operating Pressure Pipeline (NB = Nominal Bore)		
1	Tranmere - Stanlow	696psi	Crude Oil	24/28" NB (610mm)
2	Tranmere - Stanlow	652psi	Fuel Oil	16" NB (400mm)
3	Tranmere - Eastham	696psi	Crude Oil	12" NB (300mm)
4	Stanlow - Runcorn	1305psi	HP Ethylene	8" NB (200mm)
5	Stanlow - Carrington	652psi	Propylene	4" NB (100mm)

Total

pipelines



Route

Killingholme - Buncefield (Finaline)

2 Colnbrook - Heathrow (12")

Approx. Operating Pressure

Pipeline (NB = Nominal Bore)

1500psi 200psi Multiproducts 10" NB (250mm) Aviation fuel 12" NB (300mm)

List of Contacts relating to Pipelines in this booklet

BPA Operated

pipelines

Operators:

In an emergency contact: 01827 63708

Agent:

 Land and Wayleaves Department BPA

5-7 Alexandra Road HEMEL HEMPSTEAD Hertfordshire HP2 5BS

Tel: (01442) 242200 Fax: (01442) 214077 Email: landlands@bpa.co.uk

ConocoPhillips

pipelines

Contact for enquiries and general information:

In an emergency contact: 01507 475546

ConocoPhillips
 Theddlethorpe Gas Terminal
 Theddlethorpe St. Helen
 Mablethorpe
 Lincolnshire LN12 1NQ

Tel: (01507) 475665/475575

Fax: (01507) 475431

Esso

pipelines

Pipeline

Fawley - Avonmouth

Fawley - Seisdon

Fawley - London (including Perry Oaks)

Alton - Purfleet

Astwood - Birmingham

In an emergency contact: 023 8089 1541

Agent:

FisherGerman Chartered Surveyors
 Pipelines Office
 New Road
 Hardley, Hythe
 Southampton

Hampshire SO45 3NW

Tel: 023 8088 3150 Fax: 023 8088 3155

Email: pipelines@fishergerman.co.uk

Mainline

pipelines

Waterston - Seisdon

Elf Refinery - Waterston

Texaco Refinery - Waterston

Seisdon - Nottingham

Seisdon - Manchester

Carrington - Cadishead

In an emergency contact:

023 8089 1541

FisherGerman Chartered Surveyors

Pipelines Office

New Road

Hardley, Hythe

Southampton

Hampshire

SO45 3NW

Tel: 023 8088 3150

Fax: 023 8088 3155

Email: pipelines@fishergerman.co.uk

E-ON

pipelines

Contact for enquiries and general information:

Killingholme And Cottam Pipelines

Engineering & Maintenance Dept. (Pipelines)

Chase Hill Road

North Killingholme

North Lincolnshire

DN40 3LU

Tel: 01469 504080

Fax: 01469 504082

Email: pipelines@eon-uk.com

Connah's Quay Pipeline

Connah's Quay Power Station

Kelsterton Road

Connah's Quay

Clwyd

CH5 4BP

Tel: 01244 894015 or 01244 894036

Fax: 01244 811477

Email: michael.edwards@eon-uk.com

Emergency No: 01244 894050

Emergency No: 0800 389 4795

Enfield Pipeline

Enfield Energy Centre

975 Mollison Avenue

Enfield

Middlesex

EN3 7NN

Tel: 0208 804 4646

Email: richard.sheardown@eon-uk.com

Emergency No: 0800 783 0140

Winnington Pipeline

E.ON UK CHP Limited

Winnington

Northwich

Cheshire

CW8 4GX

Tel: 012476 425664

Fax: 01606 783195

Email: matt.britton@eon-uk.com

Emergency No: 01606 77508

In an emergency contact above numbers

GPSS

pipelines

Contact for enquiries and general information:

GPSS
 PO Box 7273

 Ashby de la Zouch
 LE65 2BY

Tel: 0845 070 1245 Fax: 0845 070 1250 Email: gpss@gpss.info In an emergency contact:

(South) Aldermaston Control: 0118 971 2021

(North) Rawcliffe Control:

01405 839212

BP and Huntsman

pipelines

Contact for enquiries and general information:

 Huntsman Petrochemicals (UK) Ltd Olefins Offices
 PO Box 99
 Wilton Site
 Redcar TS10 4YA

TPEP (West) Office Tel:01928 512677

TSEP, TPEP (East) and WGEP Office Tel: 01642 834531

The dividing point on TPEP is ngr SD 769 452 NE of Clithroe

In an emergency contact:

TPEP (West):

01928 572 580

TPEP (East) and WGEP:

01642 452461

TSEP: 0800 374185

Manchester Jetline Limited

pipelines

Contact for enquiries and general information:

In an emergency contact: 01244 665989

Unipen
 Unit 17 Dalby Court
 Gadbrook Business Centre
 Northwich
 Cheshire CH9 7TN

Tel: (01606) 42735 Fax: (01606) 42751

Shell

pipelines

Contact for enquiries and general information:

In an emergency contact: 24hour freephone 0800 220959

Shell UK Limited
 The Sidings Industrial Estate
 Tebay
 Cumbria
 CA10 3XR

Tel: 015396 24845 Fax: 015396 24195

Email: unipenrpalmer@penspen.com

Total

pipelines

Contact for enquiries and general information:

In an emergency contact: 01442 235460

Pipeline Operations
 Hertfordshire Oil Storage Ltd
 Buncefield Oil Terminal
 Green Lane
 Hemel Hempstead
 Hertfordshire HP2 7HZ

Tel: (01442) 263738 Fax: (01442) 234698

Website: www.totalpipelines.co.uk

Guidance Notes for works in close proximity to Pipeline Systems owned or operated by BP, BPA, ConocoPhillips, E-ON, Esso, GPSS, Huntsman, Mainline, Manchester Jetline Limited, Shell and Total

- 1 Pursuant to the provision of the applicable Acts, a Consent is required before commencing any work within 3m (10 ft) of a point on the surface of the land vertically above the position of the pipeline. Such works shall include, but not be limited to:-
- (a) the erection or construction of a building, structure, road or path
- (b) excavation or the deposit of earth, refuse, spoil or other material on the ground.

or,

(c) the crossing by a utility or other service.

Full details of the proposed work should be submitted to the appropriate Pipeline Operator or his Agent.

Applicants are normally requested to enter into a form of indemnity before Consent is given. The employing authority should note that any one incident involving damage to the pipelines could result in claims in excess of £5,000,000 and they should ensure that they have adequate insurance cover. The Pipeline Operator or their Agent shall have the right to inspect all relevant policies and premium receipts.

2 The conditions mentioned herein are common to most works but are not exhaustive. Other conditions may be imposed depending on the nature of the work.

3 Prior to any work commencing the following applies:

- (a) The location of the pipe must be verified and pegged on site by the Pipeline Operator's representative and witnessed by a representative of the employing authority or contractor.
- (b) On receipt of written approval of the proposed works, and subject to the approval, if required, of the Secretary of State and the landowner, the employing authority or contractor shall give not less than 3 working days notice to the respective Pipeline Operator or his Agent of intention to commence the works and access for them will be afforded at all times.
- (c) Work includes any structure, erection, plant or equipment being placed on or within the easement. The pipeline owners consent to the variation of property rights, necessary for the purpose, must be obtained and completed.
- 4 Any plant crossing the easement can be hazardous to the pipeline especially if the ground is soft or wet. The Pipeline Operator or his Agent will require the contractors to mark out the easement with a paling fence or similar if this is considered to be in the best interest of a safe operation. Where access over the easement is required, a tied timber mat, "bog mat" or temporary concrete slab is necessary to prevent a reduction in earth cover. This protection will be required unless authority in writing to the contrary is given by the Pipeline Operator or his Agent. (See Appendix II).

- 5 Where road construction schemes or similar are to encroach over the pipeline, the employing authority or their contractor will be required to place a protective concrete pad over the pipeline unless written permission to the contrary is given by the Pipeline Operator or his Agent. The protective pad should be similar to the example in Appendix I.
- 6 All excavations above, below or within 3m (10 feet) on either side of the pipeline must always be supervised by a representative of the Pipeline Operator. Manual digging will be employed unless another method is specifically authorised by the representative.
- 7 Where a new service passes under or over the existing pipeline, there should be ideally a 600mm (24") clearance between them and cross at an angle of not less than 60°. A lesser clearance or angle of crossing will not be permitted without authority in writing from the Pipeline Operator or his Agent. A concrete separation slab, marker tiles or warning tape may be required. If the new service or works includes a high pressure gas pipe or other pipe containing material whose escape might endanger the pipeline(s), sleeving and/or construction in pre-tested pipe across the width of the easement may be required.
- 8 If it is proposed to use explosives within 400m (1300 ft) or drive piles within 30m (100 ft) of a pipeline then agreement must be reached with the Pipeline Operator or his Agent.
- 9 Suitable fire extinguishers must be provided if contractor's plant or equipment is working near the exposed pipeline. Any

- work involving a naked flame or likely to cause a spark within 3m (10 ft) of an exposed section of a pipeline will only be permitted subject to approval of the methods by, and presence of, the representative of the Pipeline Operator. The Pipeline Operator reserves the right of his representative to check the availability of fire extinguishers on site to reduce the risk to the pipeline should the plant or equipment catch fire, and to prohibit any work until they are reasonably satisfied.
- 10 Backfilling shall be in layers of maximum depth of 300mm (12") and consolidated before any further backfilling takes place. Backfill must be free of flints or any other material, which may damage the anti-corrosion wrapping. If the backfill material is not suitable in the opinion of the representative of the Pipeline Operator, imported sand, stone dust or other approved fine material shall be provided to give a minimum 150mm (6") surround to the pipeline.
- 11 The pipeline is wrapped to prevent corrosion and any damage to the pipe or its wrapping must be notified immediately to the Pipeline Operator or his Agent who will arrange for repairs to be carried out. The Pipeline Operator reserves the right to recover the cost of repairs.
- 12 Cathodic protection of the pipelines is provided by an impressed current system and sacrificial anodes which could adversely affect any ferrous structure or service that crosses or runs parallel to the pipeline for any distance. It is recommended that test leads be installed at the point of intersection of the two to facilitate interference testing, according to British Standard BS 7361 Part 1 1991.

The fitting of the test lead to the pipeline will be carried out by a representative of the Pipeline Operator and the two leads taken to a Cathodic Protection Test Post supplied by them and installed at the nearest convenient point. Any work required will be at the expense of the Promoter. The Pipeline Operator does not accept responsibility for any damage to the new service by virtue of electric corrosion protection systems applied to the pipeline(s). It would be in the Promoter's interest for him to make provision for precautionary measures during planning and construction stages of the new service or works.

13 Ideally no trees or shrubs should be planted within the easement and before any shrub or tree planting is carried out within the easement area, written approval must be obtained from the Pipeline Operator or his Agent. Any approval granted will be subject to the Pipeline Operator retaining the right to remove, at any time in the future, all trees and shrubs which, in his opinion, might become a danger to the pipeline and, in consequence, a potential hazard to personal safety, or prevent access for maintenance purposes.

Where permission is granted for planting within the easement only species, such as hazel, oak, ash, sweet chestnut and many others which are tolerant to coppicing, will be acceptable (i.e. they will sprout from the stump if it is necessary to cut them down to ground level in order to provide access). Many garden shrubs are acceptable, but conifers are not acceptable.

14 Where permission is granted for a new pipe, cable, etc., to cross a pipeline, that permission will only be granted subject to the following condition:

"If at any time during the course of the new construction it is discovered that the Pipeline Operator requires to carry out emergency works on their pipeline then work on the new construction must cease until the pipeline repair work has been completed. This repair work will be carried out with the shortest possible delay. In these circumstances the Pipeline Operator will not be responsible for any delay or associated costs on the new construction."

15 Supervision of Works

The Pipeline Operators require strict controls to be applied on all third party works that could affect the pipeline, which are administered by the Pipeline Operator or Agent. The minimum controls are:

- A minimum of three working days prior notice shall be given by the third party to the Pipeline Operator or Agent before commencement of any works within 3m (10ft) ft of the pipeline.
- All works within the pipeline wayleave shall be supervised by the Pipeline Operator or Agent and shall not commence without the written authority of the Pipeline Operator or Agent.
- There will be no charge for such supervision for the first three working days, (of 8 hours), but, thereafter, the costs will be recovered by the pipeline operator from the third party. Current contract rates for supervision charges will be provided by the Pipeline Operator to the third party on request.

16 Trenchless techniques

Directional drilling, thrust boring or other trenchless techniques will be considered as an alternative method of crossing pipelines subject to the following conditions being fully adhered to.

Method statement complete with drawings for the completion of pipeline crossings using trenchless methods shall be approved by the pipeline operator.

Approval shall be requested at least thirteen weeks prior to commencement of the works. Approval by the pipeline operator shall in no way reduce the responsibilities and liabilities of the third party for the safe and successful completion of the crossing works.

Clearance between the pipeline and the drilling auger (or similar) should be maximised. The minimum clearance shall be 1.5 metres

77 Special requirements specific to GPSS and Fina Line pipelines:

Any works within a GPSS wayleave (easement) are subject to the provisions of The Land Powers (Defence) Act 1958.

Section 16 of this act prohibits most works within the pipeline wayleave without the consent of the Secretary of State, i.e. within 3m (10ft) either side of the pipeline. Any works within the Fina-Line Demised Strip will require a legal wayleave agreement to be completed with Total before any works can commence.

Planning of Works

When planning any works which could involve crossing or working within the wayleave of an oil pipeline, the Pipeline Operator or his Agent must be contacted who will then

- locate and mark the pipeline and
- obtain a Section 16 Consent (GPSS)
- Instruct solicitors (Fina-Line).

This can be achieved by providing the Pipeline Operator or his Agent with the following: -

- A detailed description of the proposed works including a method statement.
- Six copies of an OS 1:2500 scale plan showing the proposed works and with an eight figure OS Map Reference.
- A proposed time scale for the works.

It should be noted that a Section 16
Consent can take up to four weeks to process from the date the required information is received by the Pipeline
Operator or his Agent. The Fina-Line Legal Agreement is dependant on both party's solicitors. Normally it takes between two and four months.

In addition, works outside the wayleave but which may jeopardise the integrity of an oil pipeline, such as blasting or piling, must be discussed with, and agreed by, the Pipeline Operator.

For all GPSS enquiries and general information contact the Pipeline Operator:

GPSS PO Box 7273 Ashby de la Zouch LE65 2BY

Tel: 0845 070 1245 Fax: 0845 070 1250 Email: gpss@gpss.info

18 Emergencies:

BPA 01827 63708

ConocoPhillips 01507 475546

Esso 023 8089 1541

Mainline 023 8089 1541

E-ON Killingholm and Cottam Pipelines

01469 504080

E-ON Enfield Pipeline 0208 804 4646

or

E-ON Connah's Quay Pipeline

01244 894015 01244 894036

E-ON Winnington Pipeline

02476 425664

GPSS Aldermaston 0118 9712021 GPSS Rawcliffe 01405 839212

(For Falmouth - St Mawgan, Inverness - Lossiemouth and Linkswood - Leuchars call GPSS Aldermaston)

Huntsman TPEP (West)

01928 572580

Huntsman TPEP (East) and WGEP

01642 452461

BP (TSEP) 0800 374185

Manchester Jetline Limited

01244 390318

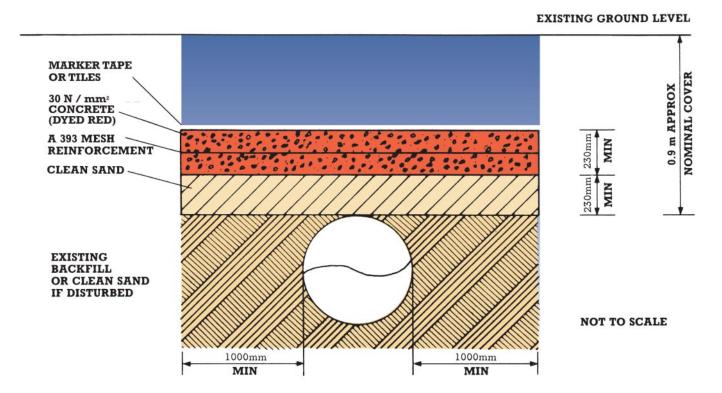
Shell 0800 220959 Total 01442 263738 Action to be taken by the Owners of the new service or works in the event of a leak in the pipeline:

- a) Dial 999 and call the Fire Brigade and Police.
- b) Contact the Pipeline Operations Control Rooms (24 hours)
- c) Remove all personnel from immediate vicinity.
- d) Remove all sources of ignition for at least 200 metres upwind and 500 metres downwind from the area of leak, e.g. stop engines, stop smoking, extinguish all naked flames, and do not use any electrical apparatus.
- e) Prevent approach of traffic and general public.
- f) Assist in safeguarding persons and property as necessary or as requested by the Police, Fire Service or Pipeline Operator.
- g) Do not attempt to seal any leak of gas or oil at source, but if oil is leaking from pipeline(s) construct [with regard to limits applied by c) or d) above] dams or bunds with earth or boards to prevent it flowing into ditches, streams, drains, manholes or other such water courses or ducts.
- **19** Action to be taken if damage has not caused leakage:
- a) Contact the Pipeline Operator or his Agent.
- b) Do not backfill and await the representative of the Pipeline Operator to inspect the damage and decide on the action required.

Appendix I

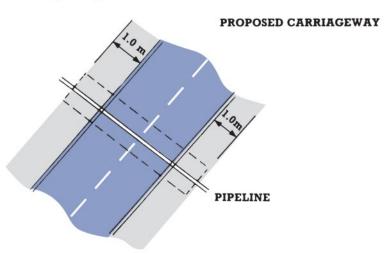
Typical sectional drawing and specification for protection of Pipelines under carriage ways.

(Each case will be treated separately)



Notes:

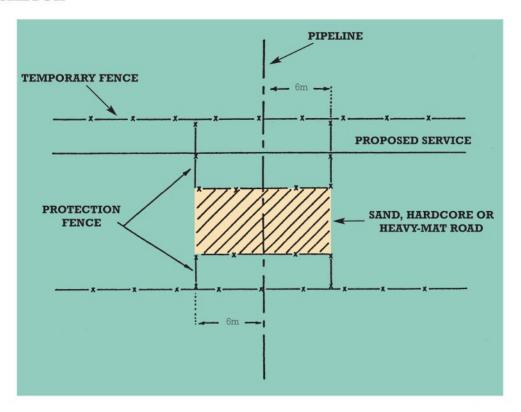
- 1. Backfill between pipeline and concrete slab to be:
 - **Either** existing backfill (undisturbed)
 - Or sand clean of any inclusions.
- 2. The concrete slab is to extend a minimum of 1.0 metre (3'3") beyond the proposed crossing area, i.e.



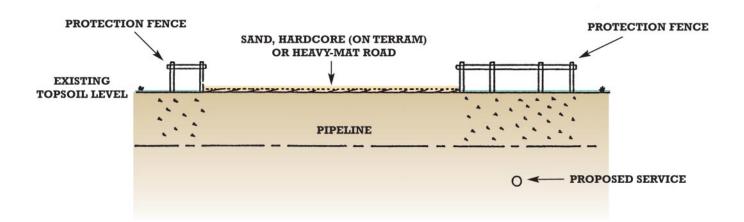
Appendix II

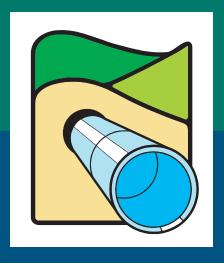
Surface Protection for Temporary Plant Crossing

PLAN SKETCH



SECTION SKETCH





LINEWATCH WEBSITE www.linewatch.co.uk













GOVERNMENT PIPELINES AND STORAGE **SYSTEM**

MAINLINE PIPELINES LIMITED





