

## 12. Ballinrobe, Co. Mayo.

### 12.1. Summary Details

Ballinrobe is the largest town in South Mayo. The population of Ballinrobe is currently 3,160 as per the preliminary results of the 2006 Census, this is projected to increase to 4,240 by 2016 (see Appendix A Table 1). It is forecast that 400 new residential connections will be made in Ballinrobe over the next ten years.

There is one potential Large I/C customer operating in Ballinrobe, Irish Pride Bakery's. A number of Medium and Small potential I/C customers also operate in the area.

Ballinrobe is 17.5km from the Corrib Natural Gas transmission pipeline. The proposed connection point is valve block No. 8509 Knockroe BV Station.

### 12.2. Summary Load Analysis:

*Ballinrobe, Co. Mayo.*

Source: Networks cost estimates report July 2006.

#### I/C Load Summary Forecast:

<b>Total EAC 2014</b>	3,257 (Mwh)	111,174 (Therms)
<b>Peak Day 2014</b>	21,127 (Kwh)	721 (Therms)

#### New Housing Summary Forecast:

<b>New Housing Load (Therm)</b>	208,000 ( year 10)
<b>New Housing Load (Mwh)</b>	6,096 (year 10)

### 12.3. Solutions:

It would be necessary to install 85 to 4 Bar pressure reduction facilities at Knockroe AGI on the existing Mayo – Galway pipeline. This AGI would feed the local network comprising of approximately 17.5km of 180mm & 125mm PE (SDR 11) feeder main and 4.35km of 180 & 125 PE (SDR 11) distribution main.

## 12.4. Cost Estimates:

*Ballinrobe, Co. Mayo.*

Source: Networks cost estimates report July 2006.

### Estimated Capital expenditure Costs for feeder and Distribution Mains:

Item	Costs €
<i>Feeder / Distribution Main Construction*</i>	€3,750,630
<b>Total Estimated Costs</b>	<b>€3,750,630</b>

#### These estimated costs include for the following:

District regulator installations, special engineering difficulties (crossings), archaeological survey, local authority charges, adverse ground conditions, pre-tender investigations, insurance, design, administration, material procurement and construction contracts.

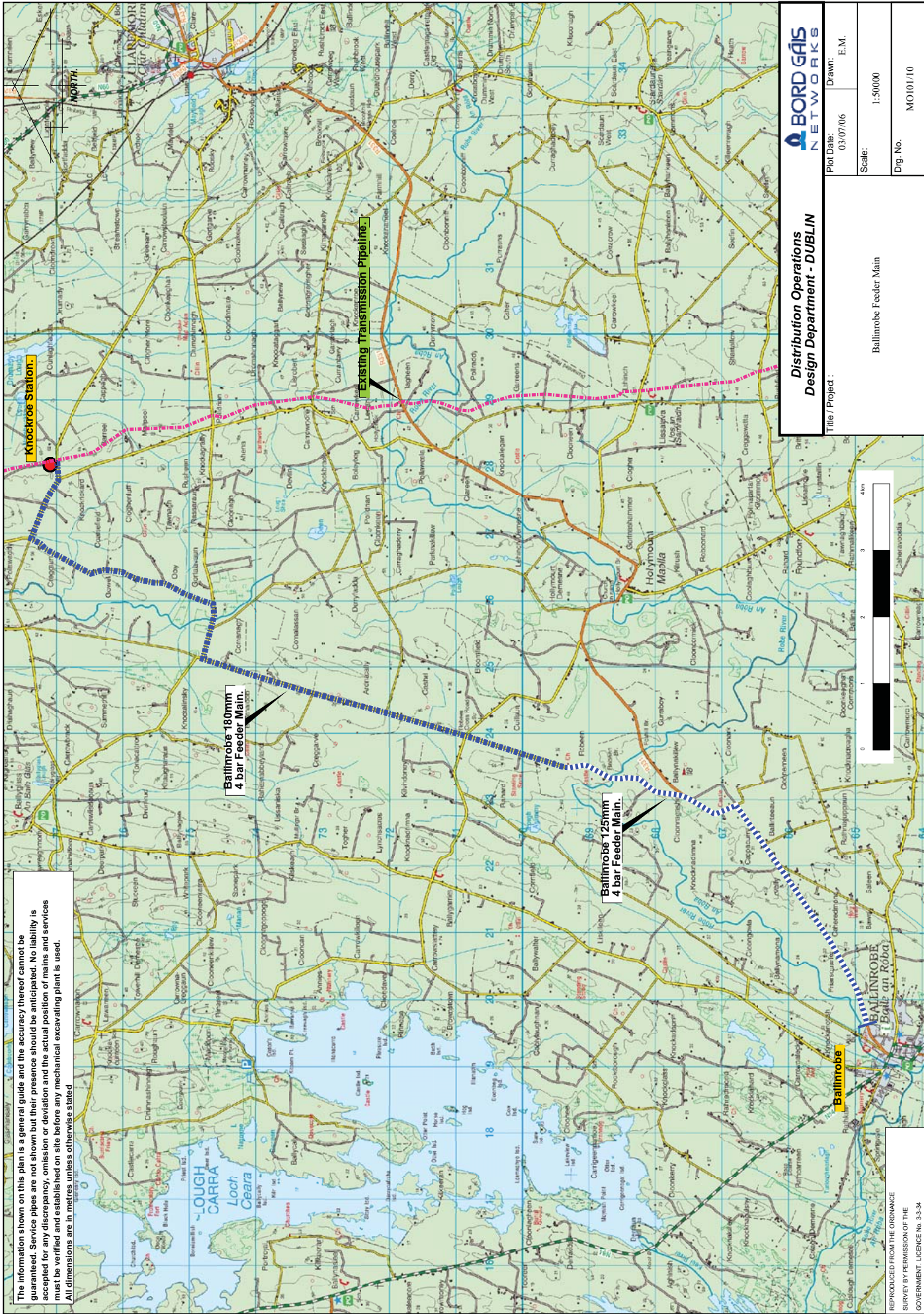
#### \* The estimates do not include for:

First response costs and AGI costs.  
New housing estate mains, service or meter costs.  
Industrial / Commercial mains, service or meter costs.

## 12.5. Business Modelling:

€m	NPV @ 5.74%
<b>Distribution</b>	
Revenue	1.1
Capex	-4.0
Contributions	0.1
Opex	-0.9
<b>Distribution NPV</b>	<b>-3.7</b>
<b>Transmission</b>	
Onshore Revenue	0.3
Entry Revenue	0.2
Capex - AGI	0.0
Initial Capex - Land & Tee	
Opex	0.0
<b>Transmission NPV</b>	<b>0.5</b>
<b>Total NPV</b>	<b>-3.12</b>

Connection of Ballinrobe to the network would result in a negative net present value (NPV) of €3.12m and therefore appears to be uneconomic on a stand-alone basis.



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**BORD GÁIS NETWORKS**

**Distribution Operations  
Design Department - DUBLIN**

Title / Project : Ballinrobe Feeder Main

Plot Date: 03/07/06 Drawn: E.M.

Scale: 1:50000

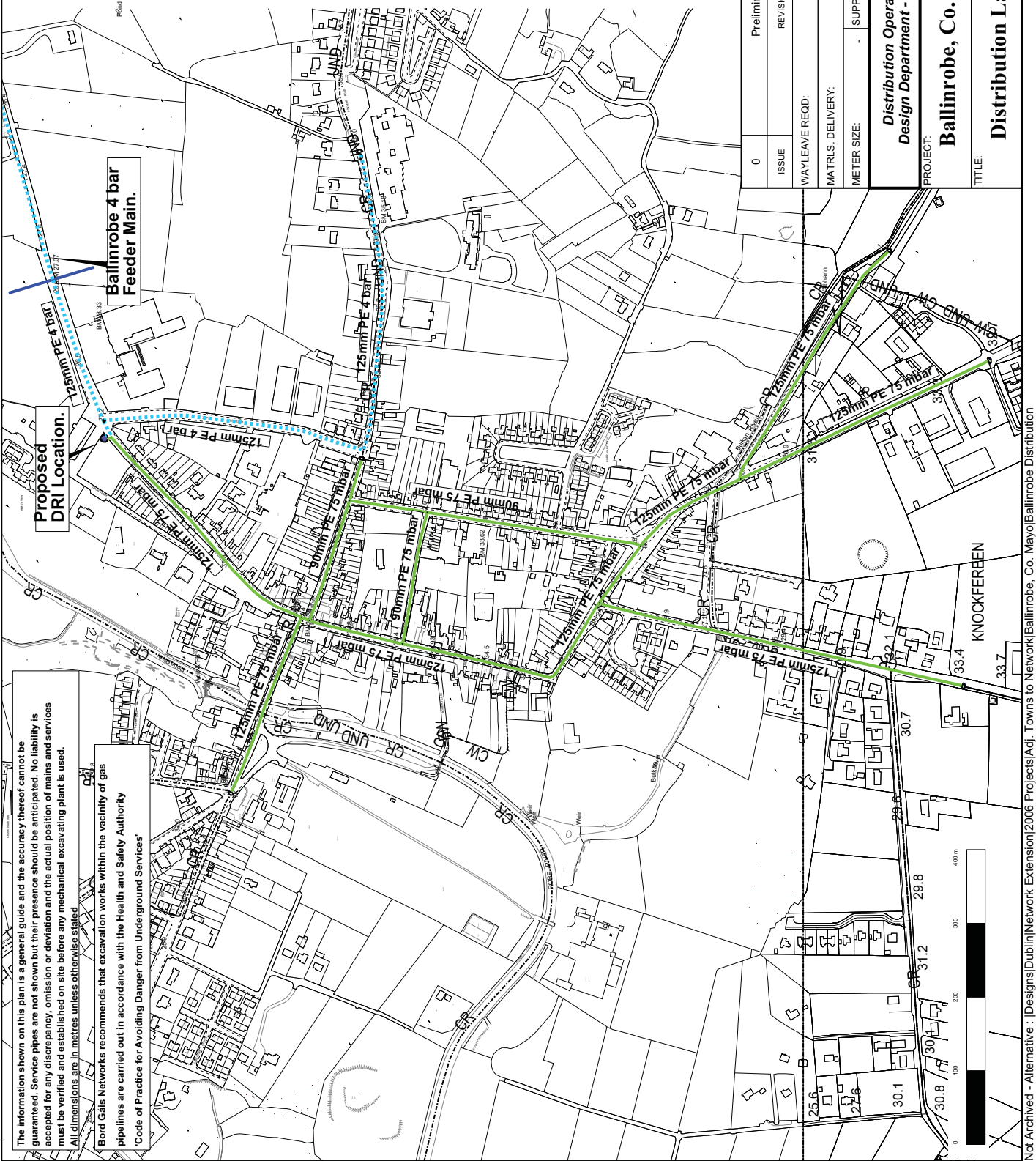
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Not Archived - Alternative - [Designs|Dublin|Network Extension|2006 Projects|Adj. Towns to Network|Ballinrobe, Co. Mayo|Ballinrobe FM

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NORTH



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Bord Gáis Networks recommends that excavation works within the vicinity of gas pipelines are carried out in accordance with the Health and Safety Authority 'Code of Practice for Avoiding Danger from Underground Services'

ISSUE	0	E.M.	03/07/06	CHECKED BY	APPROD BY
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OUTLET PRESS:					
<b>BORD GÁIS NETWORKS</b>					
PROJECT: <b>Distribution Operations Design Department - DUBLIN</b>					
DATE: 03/07/2006 SCALE: 1:5000					
DRAWING: <b>Ballinrobe, Co. Mayo</b>					
E.M. APPR.: A.T.					
DRG. NO. PROJ. NO. SH.					
MO101/11 MO/101 -					
TITLE: <b>Distribution Layout</b>					

### 13. Foxford, Swinford & Kiltimagh, Co. Mayo.

The towns of Foxford, Swinford and Kiltimagh were analysed on both a stand-alone and a grouped basis.

#### 13.1. Foxford (Stand Alone):

##### 13.1.1. Summary Details

Foxford is situated on the river Moy, approximately 16 km from Ballina and 34 km from Knock. The population of Foxford is currently 878 as per the preliminary results of the 2006 Census, this is projected to increase to 1,420 by 2016 (see Appendix A Table 1). It is forecast approximately 200 new residential connections will be made over the next ten years.

There is one potential Large I/C customer in Foxford, O’Hara’s Bakery. There are seven potential Medium I/C customers and approximately 44 Small Commercial entities.

Foxford is located 17.5km from the Corrib Natural Gas Transmission Pipeline. For the purposes of this study Foxford is grouped with Kiltimagh and Swinford and the three towns share a common feeder main from Rockfield Station to Bohola. The dedicated feeder main from Bohola to Foxford would run 9.8km

##### 13.1.2. Summary Load Analysis:

Source: Networks cost estimates report July 2006.

*Foxford, Co. Mayo.*

###### I/C Load Summary Forecast:

<b>Total EAC 2014</b>	3,911 (Mwh)	133,475 (Therms)
<b>Peak Day 2014</b>	23,432 (Kwh)	800 (Therms)

###### New Housing Summary Forecast:

<b>New Housing Load (Therm)</b>	104,000 (year 10)
<b>New Housing Load (Mwh)</b>	3,048 (year 10)

### 13.1.3. Cost Estimates

Source: Networks cost estimates report July 2006.

#### Estimated Capital expenditure Costs for feeder and Distribution Mains:

*Foxford, Co. Mayo.*

Item	Costs €
<i>Feeder / Distribution Main Construction*</i>	€3,771,399
<b>Total Estimated Costs</b>	<b>€3,771,399</b>

#### These estimated costs include for the following:

District regulator installations, special engineering difficulties (crossings), archaeological survey, local authority charges, adverse ground conditions, pre-tender investigations, insurance, design, administration, material procurement and construction contracts.

#### \* The estimates do not include for:

First response costs and AGI costs.  
New housing estate mains, service or meter costs.  
Industrial / Commercial mains, service or meter costs.

### 13.1.4. Business Modelling:

€m	NPV @ 5.74%
<b>Distribution</b>	
Revenue	0.8
Capex	-3.9
Contributions	0.1
Opex	-0.7
<b>Distribution NPV</b>	<b>-3.8</b>
<b>Transmission</b>	
Onshore Revenue	0.2
Entry Revenue	0.1
Capex - AGI	0.0
Initial Capex - Land & Tee	
Opex	0.0
<b>Transmission NPV</b>	<b>0.4</b>
<b>Total NPV</b>	<b>-3.38</b>

Connection of Foxford to the network as a group would result in a negative net present value (NPV) of €3.38m and therefore is uneconomic on a stand-alone basis.

## 13.2. Swinford (Stand Alone):

### 13.2.1. Summary Details

Swinford is located in East Mayo and is a thriving commercial town serving a large rural hinterland. The population of Swinford is currently 2,678 as per the preliminary results of the 2006 Census, this is projected to increase to 3,760 by 2016 (see Appendix A Table 1). It is forecast approximately 400 new residential connections will be made over the next ten years.

There are three potential Large I/C customer in Swinford, HSE Swinford Health Centre, Swinford District Hospital and Baxters. There are two potential Medium I/C customers and approximately 112 Small Commercial entities.

Swinford is located 22.7km from the Corrib Natural Gas Transmission Pipeline. The dedicated feeder main from Bohola to Swinford would run 8.9km

### 13.2.2. Summary Load Analysis:

Source: Networks cost estimates report July 2006.

*Swinford, Co. Mayo.*

#### I/C Load Summary Forecast:

<b>Total EAC 2014</b>	8,271 (Mwh)	280,458 (Therms)
<b>Peak Day 2014</b>	46,495 (Kwh)	1,587 (Therms)

#### New Housing Summary Forecast:

<b>New Housing Load (Therm)</b>	208,000 (year 10)
<b>New Housing Load (Mwh)</b>	6,096 (year 10)

### 13.2.3. Cost Estimates

Source: Networks cost estimates report July 2006.

#### Estimated Capital expenditure Costs for feeder and Distribution Mains:

*Swinford, Co. Mayo.*

Item	Costs €
<i>Feeder / Distribution Main Construction*</i>	€4,889,964
<b>Total Estimated Costs</b>	<b>€4,889,964</b>

#### These estimated costs include for the following:

District regulator installations, special engineering difficulties (crossings), archaeological survey, local authority charges, adverse ground conditions, pre-tender investigations, insurance, design, administration, material procurement and construction contracts.

\* The estimates do not include for:

First response costs and AGI costs.

New housing estate mains, service or meter costs.

Industrial / Commercial mains, service or meter costs.

### 13.2.4. Business Modelling:

€m	NPV @ 5.74%
<b>Distribution</b>	
Revenue	1.5
Capex	-5.2
Contributions	0.1
Opex	-0.7
<b>Distribution NPV</b>	<b>-4.2</b>
<b>Transmission</b>	
Onshore Revenue	0.5
Entry Revenue	0.3
Capex - AGI	0.0
Initial Capex - Land & Tee	
Opex	0.0
<b>Transmission NPV</b>	<b>0.8</b>
<b>Total NPV</b>	<b>-3.46</b>

Connection of Swinford to the network as a group would result in a negative net present value (NPV) of €3.46m and therefore is uneconomic on a stand-alone basis.

## 13.3. Kiltimagh (Stand Alone):

### 13.3.1. Summary Details

Kiltimagh is located centrally in County Mayo, approximately 24km from Knock and 26 km from Castlebar. The population of Kiltimagh is currently 1,538 as per the preliminary results of the 2006 Census, this is projected to increase to 2,000 by 2016 (see Appendix A Table 1). It is forecast approximately 185 new residential connections will be made over the next ten years.

There is one potential Large I/C customer in Kiltimagh, the New Park Hotel. There are six potential Medium I/C customers and approximately 94 Small Commercial entities.

Kiltimagh is located 21 km from the Corrib Natural Gas Transmission Pipeline. The dedicated feeder main from Bohola to Kiltimagh would run 8.1 km.



### 13.3.2. Summary Load Analysis:

Source: Networks cost estimates report July 2006.

*Kiltimagh, Co. Mayo.*

#### I/C Load Summary Forecast:

<b>Total EAC 2014</b>	4,228 (Mwh)	144,301 (Therms)
<b>Peak Day 2014</b>	25,628 (Kwh)	875 (Therms)

#### New Housing Summary Forecast:

<b>New Housing Load (Therm)</b>	96,200 (year 10)
<b>New Housing Load (Mwh)</b>	2,819 (year 10)

### 13.3.3. Cost Estimates

Source: Networks cost estimates report July 2006.

#### Estimated Capital expenditure Costs for feeder and Distribution Mains:

*Kiltimagh, Co. Mayo.*

<b>Item</b>	<b>Costs €</b>
<i>Feeder / Distribution Main Construction*</i>	€3,811,600
<b>Total Estimated Costs</b>	<b>€3,811,600</b>

#### These estimated costs include for the following:

District regulator installations, special engineering difficulties (crossings), archaeological survey, local authority charges, adverse ground conditions, pre-tender investigations, insurance, design, administration, material procurement and construction contracts.

#### \* The estimates do not include for:

First response costs and AGI costs.  
New housing estate mains, service or meter costs.  
Industrial / Commercial mains, service or meter costs.

### 13.3.4. Business Modelling:

€m	NPV @ 5.74%
<b>Distribution</b>	
Revenue	0.8
Capex	-3.9
Contributions	0.1
Opex	-0.7
<b>Distribution NPV</b>	<b>-3.8</b>
<b>Transmission</b>	
Onshore Revenue	0.2
Entry Revenue	0.1
Capex - AGI	0.0
Initial Capex - Land & Tee	
Opex	0.0
<b>Transmission NPV</b>	<b>0.4</b>
<b>Total NPV</b>	<b>-3.40</b>

Connection of Kiltimagh to the network as a group would result in a negative net present value (NPV) of €3.4m and therefore is uneconomic on a stand-alone basis.

### 13.4. Grouped Option:

This option is based on grouping the three towns together and routing the pipeline via Bohola.

#### 13.4.1. Solutions:

All three towns could be serviced through a common feeder from BV no. 8507 Rockfield Station to Bohola before the feeders split for each individual town. It would be necessary to install 85 to 4 Bar pressure reduction facilities at Rockfield AGI. This AGI would then feed the local network comprising of approximately 26.8km of 180mm & 125mm PE (SDR 11) feeder main and 10.8km of 180mm, 125mm & 90mm PE (SDR 11) distribution main in total for the 3 towns.

#### 13.4.2. Cost Estimates

Source: Networks cost estimates report July 2006.

##### Estimated Capital expenditure Costs for feeder and Distribution Mains:

Item	Costs €
<i>Foxford: Feeder / Distribution Main Construction*</i>	€3,528,667
<i>Swinford: Feeder / Distribution Main Construction*</i>	€3,472,380
<i>Kiltimagh: Feeder / Distribution Main Construction*</i>	€2,891,277
<b>Total Estimated Costs</b>	<b>€9,892,324</b>

##### These estimated costs include for the following:

District regulator installations, special engineering difficulties (crossings), archaeological survey, local authority charges, adverse ground conditions, pre-tender investigations, insurance, design, administration, material procurement and construction contracts.

##### \* The estimates do not include for:

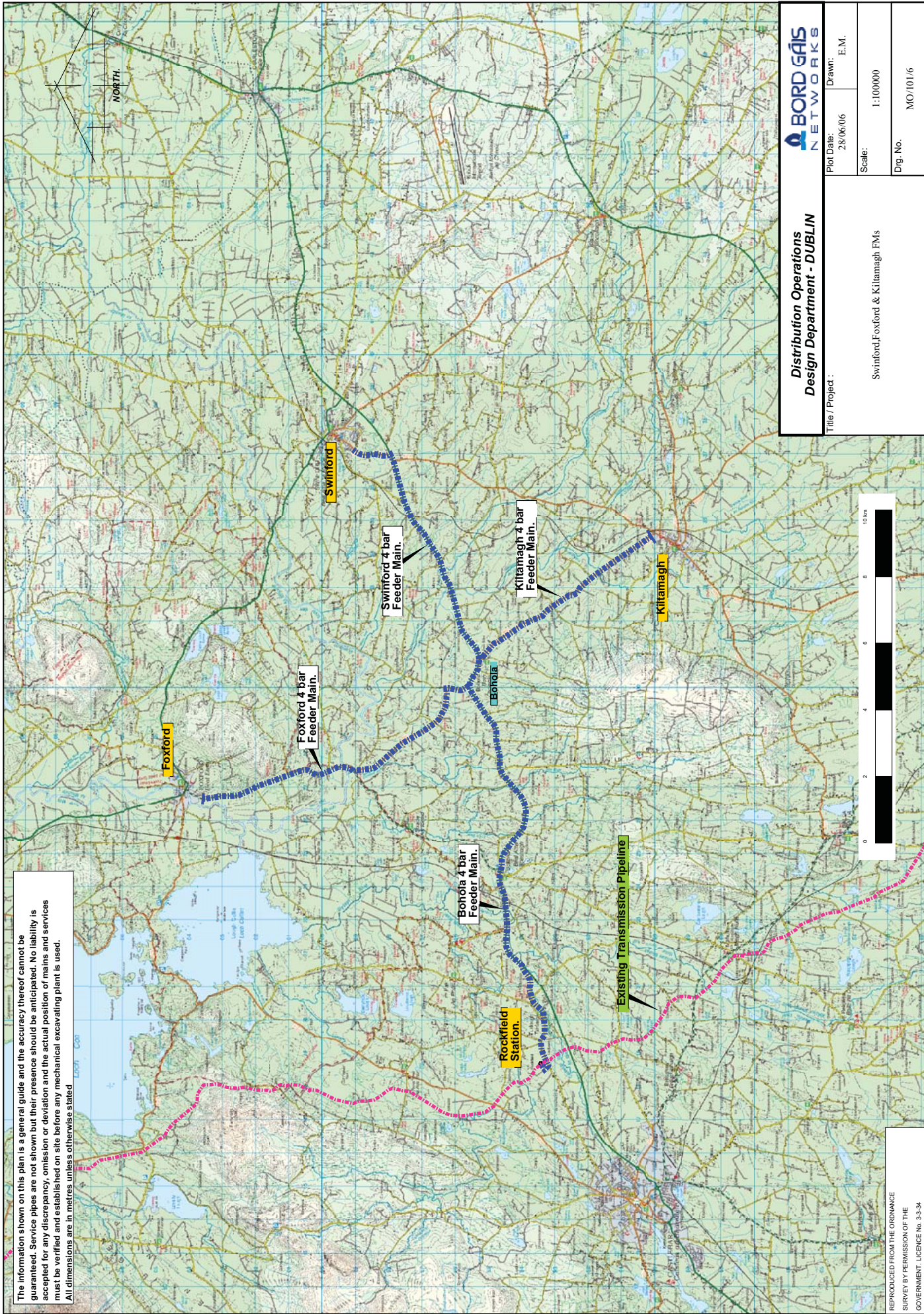
First response costs and AGI costs.  
New housing estate mains, service or meter costs.  
Industrial / Commercial mains, service or meter costs.

### 13.4.3. Business Modelling:

€m	NPV @ 5.74%
<b>Distribution</b>	
Revenue	3.1
Capex	-10.5
Contributions	0.2
Opex	-2.1
<b>Distribution NPV</b>	<b>-9.3</b>
<b>Transmission</b>	
Onshore Revenue	1.0
Entry Revenue	0.6
Capex - AGI	0.0
Initial Capex - Land & Tee	
Opex	0.0
<b>Transmission NPV</b>	<b>1.6</b>
<b>Total NPV</b>	<b>-7.73</b>

Connection of Foxford, Swinford and Kiltimagh to the network as a group would result in a negative net present value (NPV) of €7.73m and therefore connection of these towns is uneconomic on a stand-alone basis.

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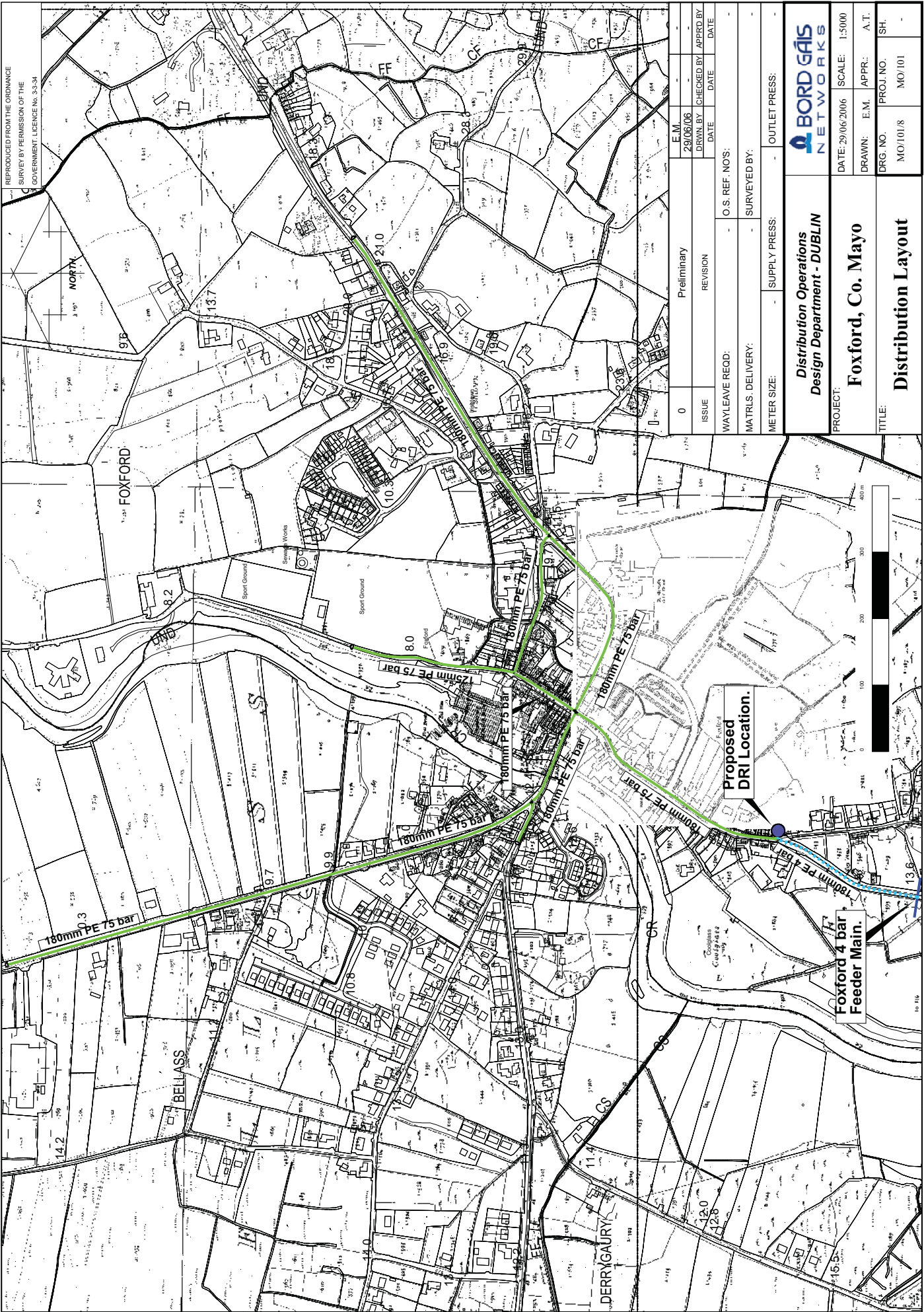
**Distribution Operations  
Design Department - DUBLIN**

Title / Project :		Swinford, Foxford & Kiltamagh FMs	
Plot Date:	28/06/06	Drawn:	E.M.
Scale:	1:100000	Dwg. No.:	MO/101/6



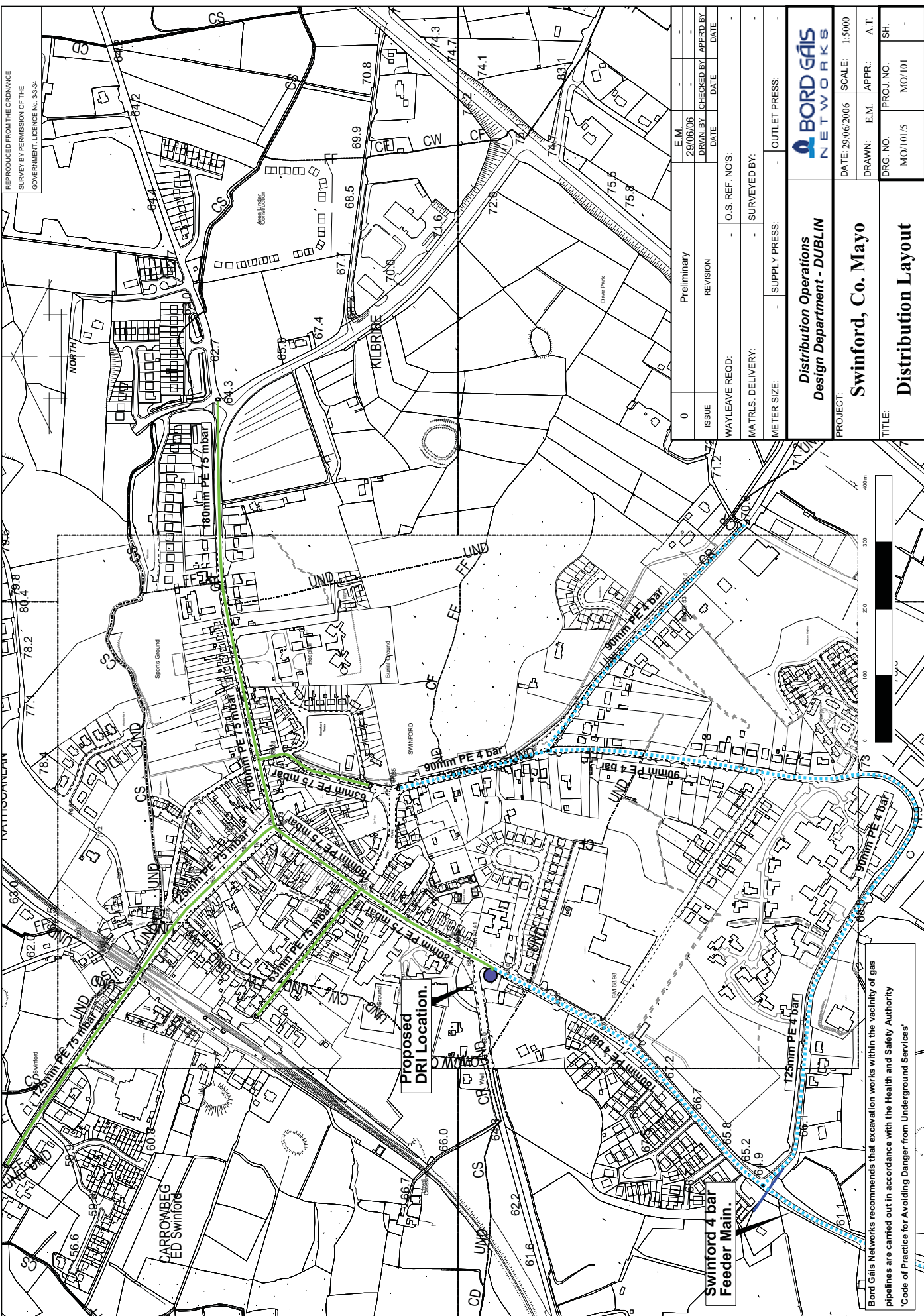
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 GOVERNMENT, LICENCE No. 3-3-34



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PROJECT:	<b>Foxford, Co. Mayo</b>		
TITLE:	<b>Distribution Layout</b>		
DATE: 29/06/2006	SCALE: 1:5000	DRAWN: E.M.	APPR.: A.T.
DRG. NO. MO/101/8	PROJ. NO. MO/101	SH.	

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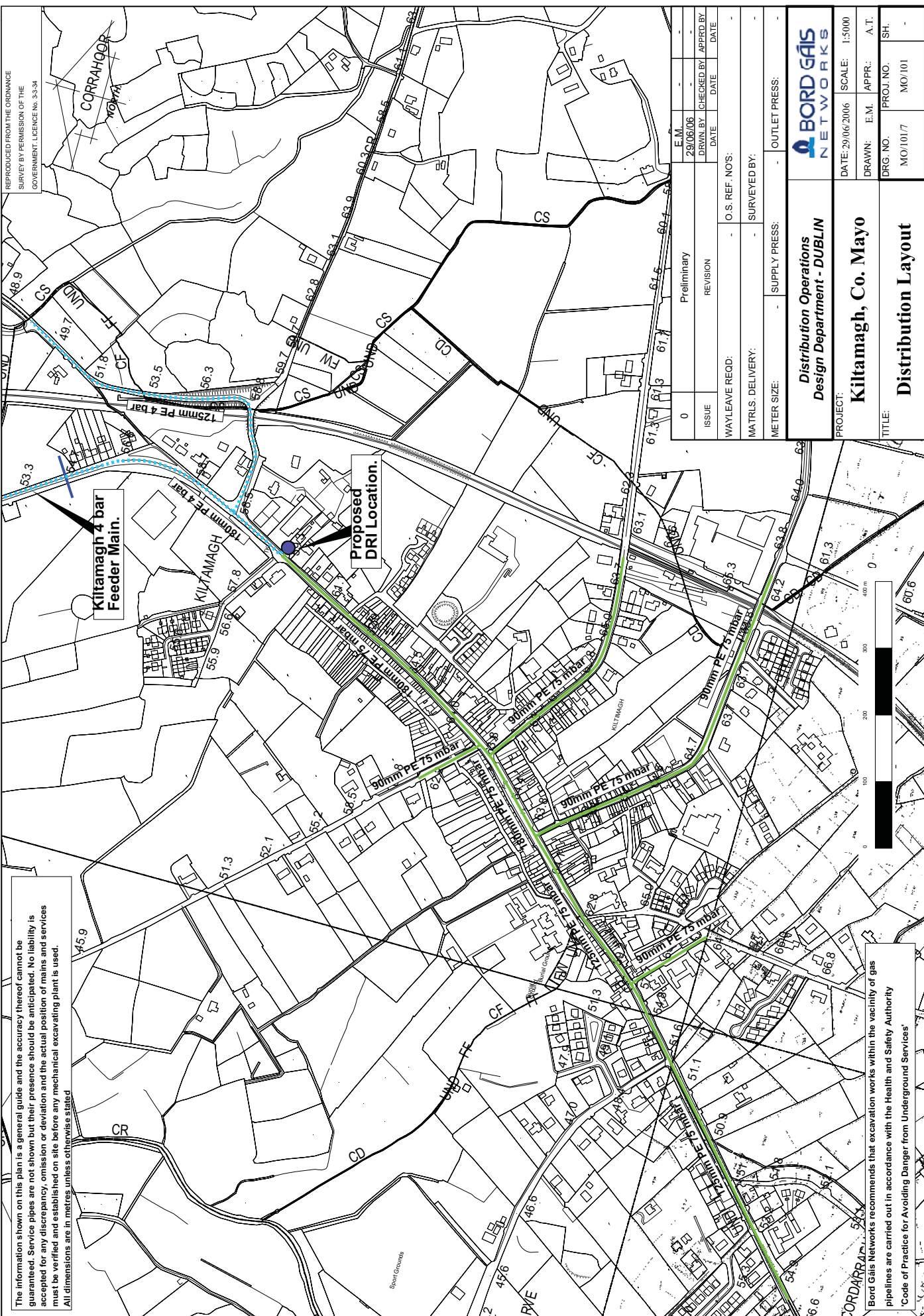
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PROJECT:					
<b>Swinford, Co. Mayo</b>					
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<b>Distribution Layout</b>					
DATE: 29/06/2006			SCALE: 1:5000		
DRAWN: E.M.			APPR: A.T.		
DRG. NO. MO/101/5			PROJ. NO. MO/101		
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Proposed  
DRI Location.

Swinford 4 bar  
Feeder Main.

Bord Gáis Networks recommends that excavation works within the vicinity of gas pipelines are carried out in accordance with the Health and Safety Authority 'Code of Practice for Avoiding Danger from Underground Services'

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ISSUE	0	REVISION	Preliminary
DATE	29/06/06	DATE	
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PROJECT:		SCALE: 1:5000	
Kiltamagh, Co. Mayo		DRAWN: E.M.	
TITLE:		APPR.: A.T.	
Distribution Layout		DRG. NO. PROJ. NO.	
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