East Cork Pipeline System and Curra Leigh West to Midleton Pipeline
Introduction:

Brian Sheehan – Bord Gais Networks

- Degree in Mechanical Engineering from University of Limerick (1998)
- Joined Bord Gais in 2000 as a Transmission Design Engineer
- Moved to Project Management area in 2005.
- Construction Manager for all Transmission Projects since 2008.
Overview:

- Background to projects
- East Cork Pipeline System
- Curraleigh West to Midleton Pipeline
- Overview of Pipeline Construction Activities
Background to Projects:

- Enquiries received by Bord Gais Networks in 2006

1. High pressure gas supply to feed a 400MW CCGT for ESB at the existing Aghada site.

2. High pressure gas supply to feed a 440MW for Bord Gais Strategic Investments at the Whitegate Refinery Site.

3. 19bar supply to Conoco Phillips at the Whitegate Refinery Plant.
**Design Solution:**

- Combined pipeline solution to feed Aghada CCGT and Whitegate CCGT from high pressure network north of Midleton Compressor Station.

- New Above Ground Installations at Aghada and Whitegate to supply the CCGT plants.

- Supply to Conoco Phillips at Whitegate Oil Refinery from the new AGI at Whitegate.

- Network Analysis indicated deep system reinforcement required due to changes to supplies at Inch (Curraleigh West to Midleton Pipeline).
Overview of East Cork Pipeline System:
East Cork Pipeline Details:

- Diameter: 450mm
- Length: 18km
- Above Ground Installations: 3 New AGI’s, Modifications to 1
- Pipeline Design Pressure: 85 Bar
- Road Crossings: 10
  - Key Road Crossings: 2 No. Crossings of Aghada – Whitegate Road
- Other Crossings
  - ESB overhead services
Key Project Milestones/Activities

- Consent to Construct received from CER – December 2007.
- Hot tap at Midleton Compressor Station – September 2008.
- Reinstatement of all lands – Spring 2009.
Overview of Aghada Pipeline Spread:
Ariel View of AGI at Whitegate:
Overview of Curraleigh West to Midleton Pipeline:
Curraleigh West to Midleton Pipeline Details:

- Diameter: 600mm
- Length: 47km
- Quantity of Steel: 9500 Tonnes
- Design Pressure: 85 Bar
- Road Crossings: 51
  - Key Road Crossings: N72 Fermoy-Lismore, N25 Cork-Waterford
- River/Watercourse Crossings: 16
  - Key River Crossings: Blackwater, Bride, Araglin and Dungourney
Key Project Milestones/Activities

- Appointment of Project Consultants Fingleton White/ Fehily Timoney JV - June 2007
- Public Information Evenings - January 2008
- Planning Pre-Consultations with ABP - August 2007 to May 2008
- Planning and CAO Applications submitted to ABP- June 2008
- Oral Hearing - October 2008
- Linepipe delivered from Corinth Pipeworks, Greece – October 2008
- Planning Granted by ABP - December 2008
- Award of Construction Contract to Sicim Roadbridge Ltd – January 2009
- Mainline Construction Activities - March 2009 to October 2009
- Stopple Operations at Curraleigh West – September 2009
- Commissioning - October 2009
- Reinstatement – Spring 2010
Overview of Midleton Pipe Dump:
Pipeline Reinstatement:
Pipeline Construction: Spread Method

- Right of Way Preparation and Fencing
- Topsoil Strip
- Pipe Stringing
- Pipe Bending
- Welding and Radiography
- Trenching and Pipelaying
- Backfilling
- Testing and Commissioning
- Reinstatement
- Special Crossings
- Above Ground Installation Modifications
Right of Way Preparation and Fencing
Topsoil Strip
Pipe Stringing: Pipe Carriers
Pipe Stringing
Welding
Trenching and Pipelaying
Backfill
Reinstatement
Special Crossings
Above Ground Installation (AGI) Modifications

Existing Site Boundary (Blue)

Development Area (Red)

Pipeline Route
Questions?