1.0 **INTRODUCTION**

1.1 Form of Report

WS Atkins-were commissioned by Warrington Borough Council on behalf of a group of authorities and organisations to investigate and report on the feasibility of restoring the St Helens Canal to navigation throughout its length from Spike Island, Widnes to the various feeder branches in St Helens as shown in Figure 1.1.

The Feasibility Study Report is contained within six volumes:

Volume 1	Technical Report
Volume 2	Technical Appendix - Structures
Volume 3	Technical Appendix - Geotechnics
Volume 4	Technical Appendix - Planning and Ecology
Volume 5	Technical Appendix - Restoration Proposals Drawings
Volume 6	Executive Summary

This volume, the Technical Report, presents the following information:

- A brief summary of the canal history, pointing to its importance in terms of the country's industrial heritage
- A brief description of the canal's present condition identifying the key issues affecting restoration
- An analysis of the canal's likely need for water after restoration and a discussion of the potential of possible sources to meet this demand
- A discussion of options considered to remove barriers to navigation and other constraints to full restoration of the canal
- A description of proposals for restoration, with estimated costs
- Identification of the direct and indirect benefits to be gained from restoration and of potential sources of funding
- A suggested strategy and programme for restoration of the canal

The supporting documents, in the form of technical appendices, provide data on various specialist topics covered by the feasibility study and form the background against which the restoration proposals have been prepared. More specifically:

- Volume 2 comprises the technical appendix on canal structures, containing reports on the site inspections and surveys, recommendations for repairs and maintenance, proposals for the replacement of structures, diversion of services and provision of new structures to enable the canal to be re-opened to navigation
- Volume 3 comprises the technical appendix on geotechnics containing the findings of a desk study into ground conditions along the canal route, a site investigation of the infilled sections and an investigation of the contaminated land issues involved in the proposed canal restoration
- Volume 4 comprises the technical appendix on planning and ecology and describes both the present position with regard to the canal and the issues raised by its proposed restoration in the context of local planning policy, ecology and nature conservation, heritage and industrial archaeology together with potential opportunities for development, environmental enhancement, leisure and tourism
- Volume 5 contains drawings illustrating the restoration proposals
- Volume 6 is a non-technical summary of the issues, conclusions and recommendations resulting from the feasibility study

All structures have been allocated a reference number in accordance with the system contained in the "Guide to the Sankey Canal Towpath" published by the Sankey Canal Restoration Society, with chainages based on zero chainage at Widnes.

The term "canal authority" has been used as meaning the owner or other organisation with responsibility for the maintenance of the canal and its associated structures.

1.2 Study Objectives

The scope of the feasibility study is described in the Consultant's Brief, with the stated objective of examining the feasibility of restoration to navigation of the entire length of the St Helens Canal, entailing:

- An investigation of existing and potential water supplies which would be necessary to keep a restored canal in operation
- A physical study of the canal and all structures and barriers crossing its line and suggestion of ways in which the problems of navigation could be overcome
- Examination and appraisal of alternative sources of labour and finance currently available to undertake works
- The production of a costed work programme over 10 years for restoration including provision for management and maintenance
- An assessment of environmental, economic, social and community benefits which would accrue from restoration of the canal

1.3 Approach to the Study

To meet the aims of the study and comply with the brief it has been necessary to undertake the study in two phases.

The first comprised essentially an asset survey and inventory to establish the nature and extent of the constraints to full restoration of the canal and, also, to determine the maintenance liabilities of the canal's owners.

This was achieved through a number of walkover inspections covering topics such as bridges and other structures, planning, environment and ecology, supplemented by a series of consultations with interested parties and a limited topographical survey at specific locations. A ground investigation was carried out on the sections of canal that have been infilled and a programme of testing for contaminants was undertaken on samples of fill material and of silt taken from the in-water sections.

Preliminary proposals for restoration were formulated, with options where appropriate, and their costs, environmental impacts and benefits assessed in broad

terms. The restoration proposals then evolved through a re-iterative process towards the aim of achieving navigation over the full length of the canal. The engineering proposals are not necessarily the lowest cost options but represent practicable solutions that can be costed with a good degree of confidence and have resultant positive benefits.

1.4 Consultations

The study has been overseen by officers of Warrington Borough Council on behalf of the consortium consisting of:

Warrington Borough Council
St Helens Borough Council
Halton Borough Council
Sankey Canal Restoration Society (SCARS)
English Partnerships
Inland Waterways Association

During the progress of the study there have been meetings and correspondence with officers from the above organisations. In addition, the National Rivers Authority (now part of the Environment Agency), North West Water plc, British Waterways, Railtrack, Pilkington plc, highway authorities, public utilities and other interested parties have been contacted. (A full list is given in Appendix 1).

Reference: AY2311.850/JMH/jp/120.7521