

Planning, design and installation of irrigation schemes —

Part 6: Guide for feasibility and implementation procedures

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Agricultural Machinery and Implements Standards Policy Committee (AGE/-) to Technical Committee AGE/30, upon which the following bodies were represented:

- Agricultural Engineers' Association
- British Agricultural and Garden Machinery Association Ltd.
- Health and Safety Executive
- Ministry of Agriculture, Fisheries and Food
- National Farmers' Union
- Silsoe College
- Silsoe Research Institute
- UK Irrigation Association
- Water Services Association of England and Wales
- Well Drillers' Association

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Contents

	Page
Committees responsible	Inside front cover
Foreword	ii
1 Scope	1
2 References	1
3 Definitions	1
4 Proposals	1
5 Equipment supply, installation and commissioning	6
6 Roles of persons involved in proposals	7
List of references	Inside back cover

Foreword

This Part of BS 7562 has been prepared under the direction of the Agricultural Machinery and implements Standards Policy Committee and contains recommendations on good practice in the planning, design and installation of irrigation schemes in the UK, together with information and guidance. It is intended for the use of engineers and farmers having some knowledge of the subject. It embodies the experience of engineers successfully engaged in the design and construction of irrigation schemes so that other reasonably qualified engineers may use it as a basis for the design of similar irrigation schemes.

A guide represents good practice at the time it is written and inevitably, technical developments may render parts of it obsolescent in time. It is the responsibility of engineers concerned with the design and construction of schemes to remain conversant with developments in good practice, which have taken place since publication of the guide.

BS 7562 has been prepared in six Parts as follows.

- *Part 1: Glossary of terms;*
- *Part 2: Acquisition of site data¹⁾;*
- *Part 3: Irrigation water requirements¹⁾;*
- *Part 4: Water resources¹⁾;*
- *Part 5: Distribution systems and irrigation equipment¹⁾;*
- *Part 6: Guide for feasibility and implementation procedures.*

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 10, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

¹⁾ In preparation.

1 Scope

This Part of BS 7562 gives guidance on feasibility and implementation procedures. These procedures include various types of proposal and equipment supply, installation and commissioning.

2 References

This Part of BS 7562 incorporates, by reference, provisions from a specific edition of another publication. This normative reference is cited, at the appropriate point in the text and the publication is listed on the inside back cover. Subsequent amendments to, or revisions of, this publication apply to this Part of BS 7562 only when incorporated in it by updating or revision.

3 Definitions

For the purposes of this Part of BS 7562, the definitions given in BS 7562-1:1992 apply.

4 Proposals

4.1 Estimates

4.1.1 *Functions of estimates*

The function of an estimate is to provide a guide cost for the irrigation system proposed based on preliminary data and site considerations and initial discussions with the client.

Often an estimate is presented verbally and discussed with alternative systems or variations within a system. The range of costs that may be incurred may vary with various major or minor changes to the indicated requirements, e.g. change of command area.

An estimate may be used as a first guide for costs and economics prior to discussions with any authorities or bodies that may be involved, e.g. National Rivers Authority (NRA).

An estimate is useful in exploring the requirements of the customer and much time in design and specification work may be saved by effective discussions at the estimating stage.

An indication of supply and installation times required by the customer and the budget allocated may also be discussed.

4.1.2 *Contents of estimates*

The contents of the estimate should usually only include a guide cost with a simple qualification of the basis for the costs.

The costs themselves may give either an overall price for the scheme or a breakdown for sections or alternatives within the estimate, such as the cost of different types of drive for pumps, or the difference in cost between above ground and underground supply mains.

The technical basis upon which the estimate is based may simply state the area irrigated within the irrigation cycle and the amount of water to be applied. The system flow rate and water volumes are often estimated at this stage to check on available water sources, either flowing and/or storage requirements.

Often the verbal estimate is given at the time of the first visit and discussion of the irrigation requirements.

A simple diagram of the proposed system may be sketched out to illustrate the concept and layout considered and to provide a basis for discussions and clarification.

4.2 Quotations

4.2.1 *Function of quotations*

The function of the quotation should be to provide an accurate cost of the irrigation system with a clear indication of the performance of the equipment. It should present the client with enough detail to enable a budget for both capital costs and running costs to be worked and enable accurate calculations of water requirements and system operation programming through the season.

It should summarize the equipment offered for the price and provide details of the equipment and system layout.

4.2.2 *Contents of quotations*

4.2.2.1 *General*

The contents of the quotation should include a covering letter, system description, basis of design and performance, the quotation, drawings, literature and the planned system layout.

4.2.2.2 *Index*

The index, often on the title page should list the contents of the quotation so that any part of the offer can easily be located.

4.2.2.3 *Covering letter*

The covering letter should include any particular aspects discussed and agreed. Both commercial and technical points may be recorded; or, if they are complex, a separate section may be appointed for this purpose. Points to be investigated further may also be referred to in the covering letter.