



Types of Services



Definitions

Engineering advisory services - Environmental

Studies, advice and recommendations to support the management of environmental problems. This may include, for example, studies on matters related to environmental standards, environmental impact assessments, air, soil and water pollution control, waste management (reduction, collection, disposal and treatment) and resource conservation.

Engineering advisory services - Other

Studies, advice and recommendations concerning other engineering matters. This may include, for example, the study of the impact of topography and geology on the design, construction and cost of a road, pipeline or other transportation infrastructure, the study of the quality and suitability of materials intended for use in a construction project and the impact on design, construction and cost of using different materials, the study of the efficiency gains in production as a result of alternate process, technology or plant layout, the appraisal of the structural, mechanical and electrical installations of buildings, the provision of expert testimony in litigation cases, assistance to government bodies in drafting laws.

Design services - Environmental

Design services for projects related to air, water and soil pollution control, waste (hazardous and non-hazardous) collection, disposal and treatment, noise abatement and resource conservation. Design services include the preparation of preliminary and final plans, specifications and cost estimates necessary for tender submission and expert advice to the client at the time of calling for and accepting those tenders; it may also include construction management services.



Design services - Other

Design services for other engineering projects such as the construction of buildings (structure and mechanical and electrical installations), civil works (except water supply and sanitation works and industrial and solid waste treatment plants which should be included in design services - environmental), industrial process traffic control systems, prototype development. Design services include the preparation of preliminary and final plans, specifications and cost estimates necessary for tender submission and expert advice to the client at the time of calling for and accepting those tenders; it may also include construction management services.

Construction management

Advice and technical assistance to the client during construction to ensure that construction work is in conformity with the final design. This service involves both office and field activities such as the review of shop drawings, periodic visits to the site to assess progress and quality of the work, guiding the client and the contractor in the interpretation of contract documents and any other advice on technical questions that may develop during construction.

Project management

Management of an engineering/construction project on behalf of the owner/client. This typically includes planning and scheduling, providing cost estimates for various phases of the project, issuing and analyzing tenders, awarding contracts (architecture, engineering, construction), controlling the flow of documents, controlling costs, accounting, reviewing and monitoring construction and may also include procurement of material and equipment.

Geotechnical engineering and materials testing services

The gathering and analysis of information necessary to undertake and/or insure the quality of engineering/construction projects. This service can include, for example, site investigations (soil boring and laboratory testing, shoring investigations, slope and stability investigations, foundation investigation, etc.) for buildings, roads and civil engineering structures, the testing and inspection of construction materials (cement, concrete, asphalt, aggregates, masonry, structural steel, waterproofing membrane and other construction material), welding inspection and failure analysis.