

This document has important legal consequences; consultation with an attorney is encouraged with respect to its completion or modification

STANDARD FORM OF AGREEMENT
BETWEEN
OWNER AND ENGINEER
FOR
PROFESSIONAL SERVICES

THIS IS AN AGREEMENT made as of _____, 20____
between _____
_____ (OWNER) and
_____ (ENGINEER).

OWNER intends to _____

_____ (hereinafter called the Project).

OWNER and ENGINEER in consideration of their mutual covenants herein agree in respect of the performance of professional engineering services by ENGINEER and the payment for those services by OWNER as set forth below.

SECTION 1 - BASIC SERVICES OF ENGINEER

1.1. General

1.1.1. ENGINEER shall provide for OWNER professional engineering services in all phases of the Project to which this Agreement applies as hereinafter provided. These services will include serving as OWNER's professional engineering representative of the Project, providing professional engineering consultation and advice and furnishing customary civil, structural, mechanical and electrical engineering services and customary architectural services incidental thereto.

1.2. Study and Report Phase

After written authorization to proceed, ENGINEER shall:

1.2.1. Consult with OWNER to clarify and define OWNER's requirements for the Project and review available data.

1.2.2. Advise OWNER as to the necessity of OWNER's providing or obtaining from others data or services of the types described in paragraph 3.3 and assist OWNER in obtaining such data and services.

1.2.3. Identify and analyze requirements of governmental authorities having jurisdiction to approve the design of the Project and participate in consultations with such authorities.

1.2.4. Provide analysis of OWNER's needs, planning surveys, site evaluations and comparative studies of prospective sites and solutions.

1.2.5. Provide a general economic analysis of OWNER's requirements applicable to various alternatives.

1.2.6. Prepare a Report containing schematic layouts, sketches and conceptual design criteria with appropriate exhibits to indicate clearly the considerations involved (including applicable requirements of governmental authorities having jurisdiction as aforesaid) and the alternative solutions available to OWNER and setting

forth ENGINEER's findings and recommendations. This Report will be accompanied by ENGINEER's opinion of probable costs for the Project, including the following which will be separately itemized: Construction Cost, allowance for engineering costs and contingencies, and (on the basis of information furnished by OWNER) allowances for such other items as charges of all other professionals and consultants, for the cost of land and rights-of-way, for compensation for or damages to properties, for interest and financing charges and for other services to be provided by others for OWNER pursuant to paragraphs 3.7 through 3.11, inclusive. The total of all such costs, allowances, etc. are hereinafter called "Total Project Costs."

1.2.7. Furnish five copies of the Study and Report documents and review them in person with OWNER.

The duties and responsibilities of ENGINEER during the Study and Report Phase are amended and supplemented as indicated in paragraph 2 of Exhibit A "Further Descriptions of Basic Engineering Services and Related Matters."

1.3. Preliminary Design Phase

After written authorization to proceed with the Preliminary Design Phase, ENGINEER shall:

1.3.1. In consultation with OWNER and on the basis of the accepted Study and Report documents, determine the general scope, extent and character of the Project.

1.3.2. Prepare Preliminary Design documents consisting of final design criteria, preliminary drawings, outline specifications and written descriptions of the Project.

1.3.3. Advise OWNER if additional data or services of the types described in paragraph 3.4 are necessary and assist OWNER in obtaining such data and services.

1.3.4. Based on the information contained in the preliminary design documents, submit a revised opinion of probable Total Project Costs.

1.3.5. Furnish five copies of the above Preliminary Design documents and present and review them in person with OWNER.

The duties and responsibilities of ENGINEER during the Preliminary Design Phase are amended and supplemented as indicated in paragraph 3 of Exhibit A "Further Description of Basic Engineering Services and Related Matters."

1.4. Final Design Phase

After written authorization to proceed with the Final Design Phase, ENGINEER shall:

1.4.1. On the basis of the accepted Preliminary Design documents and the revised opinion of probable Total

Project Costs prepare for incorporation in the Contract Documents final drawings to show the general scope, extent and character of the work to be furnished and performed by Contractor(s) (hereinafter called "Drawings") and Specifications (which will be prepared in conformance with the sixteen division format of the Construction Specifications Institute).

1.4.2. Provide technical criteria, written descriptions and design data for OWNER's use in filing applications for permits with or obtaining approvals of such governmental authorities as have jurisdiction to approve the design of the Project, and assist OWNER in consultations with appropriate authorities.

1.4.3. Advise OWNER of any adjustments to the latest opinion of probable Total Project Costs caused by changes in general scope, extent or character or design requirements of the Project or Construction Costs. Furnish to OWNER a revised opinion of probable Total Project Costs based on the Drawings and Specifications.

1.4.4. Prepare for review and approval by OWNER, its legal counsel and other advisors contract agreement forms, general conditions and supplementary conditions, and (where appropriate) bid forms, invitations to bid and instructions to bidders (all of which shall be consistent with the forms and pertinent guide sheet prepared by the Engineers Joint Contract Documents Committee), and assist in the preparation of other related documents.

1.4.5. Furnish five copies of the above documents and of the Drawings and Specifications and present and review them in person with OWNER.

The duties and responsibilities of ENGINEER during the Final Design Phase are amended and supplemented as indicated in paragraph 4 of Exhibit A "Further Description of Basic Engineering Services and Related Matters."

1.5. Bidding or Negotiating Phase

After written authorization to proceed with the Bidding or Negotiating Phase, ENGINEER shall:

1.5.1. Assist OWNER in advertising for and obtaining bids or negotiating proposals for each separate prime contract for construction, materials, equipment and services; and, where applicable, maintain a record of prospective bidders to whom Bidding Documents have been issued, attend pre-bid conferences and receive and process deposits for Bidding Documents.

1.5.2. Issue addenda as appropriate to interpret, clarify or expand the Bidding Documents.

1.5.3. Consult with and advise OWNER as to the acceptability of subcontractors, suppliers and other persons and organizations proposed by the prime contractor(s) (herein called "Contractor(s)") for those

portions of the work as to which such acceptability is required by the Bidding Documents.

1.5.4. Consult with OWNER concerning and determine the acceptability of substitute materials and equipment proposed by Contractor(s) when substitution prior to the award of contracts is allowed by the Bidding Documents.

1.5.5. Attend the bid opening, prepare bid tabulation sheets and assist OWNER in evaluating bids or proposals and in assembling and awarding contracts for construction, materials, equipment and services.

The duties and responsibilities of ENGINEER during the Bidding or Negotiating Phase are amended and supplemented as indicated in paragraph 5 of Exhibit A "Further Description of Basic Engineering Services and Related Matters."

1.6. Construction Phase

During the Construction Phase:

1.6.1. *General Administration of Construction Contract.* ENGINEER shall consult with and advise OWNER and act as OWNER's representative as provided in Articles 1 through 17, inclusive, of the Standard General Conditions of the Construction Contract, No. 1910-8 (1983 edition) of the Engineers Joint Contract Documents Committee. The extent and limitations of the duties, responsibilities and authority of ENGINEER as assigned in said Standard General Conditions shall not be modified, except to the extent provided in paragraph 6 of Exhibit A "Further Description of Basic Engineering Services and Related Matters" and except as ENGINEER may otherwise agree in writing. All of OWNER's instructions to Contractor(s) will be issued through ENGINEER who will have authority to act on behalf of OWNER to the extent provided in said Standard General Conditions except as otherwise provided in writing.

1.6.2. *Visits to Site and Observation of Construction.* In connection with observations of the work of Contractor(s) while it is in progress:

1.6.2.1. ENGINEER shall make visits to the site at intervals appropriate to the various stages of construction as ENGINEER deems necessary in order to observe as an experienced and qualified design professional the progress and quality of the various aspects of Contractor(s)' work. In addition, ENGINEER shall provide the services of a Resident Project Representative (and assistants as agreed) at the site to assist ENGINEER and to provide more continuous observation of such work. Based on information obtained during such visits and on such observations, ENGINEER shall endeavor to determine in general if such work is proceeding in accordance with the Contract Documents and ENGINEER shall keep OWNER informed of the progress of the work.

1.6.2.2. The Resident Project Representative (and any assistants) will be ENGINEER's agent or employee and under ENGINEER's supervision. The duties and responsibilities of the Resident Project Representative (and assistants) are set forth in Exhibit B "Duties, Responsibilities and Limitation of Authority of Resident Project Representative."

1.6.2.3. The purpose of ENGINEER's visits to and representation by the Resident Project Representative (and assistants, if any) at the site will be to enable ENGINEER to better carry out the duties and responsibilities assigned to and undertaken by ENGINEER during the Construction Phase, and, in addition, by exercise of ENGINEER's efforts as an experienced and qualified design professional, to provide for OWNER a greater degree of confidence that the completed work of Contractor(s) will conform generally to the Contract Documents and that the integrity of the design concept as reflected in the Contract Documents has been implemented and preserved by Contractor(s). On the other hand, ENGINEER shall not, during such visits or as a result of such observations of Contractor(s)' work in progress, supervise, direct or have control over Contractor(s)' work nor shall ENGINEER have authority over or responsibility for the means, methods, techniques, sequences or procedures of construction selected by Contractor(s), for safety precautions and programs incident to the work of Contractor(s) or for any failure of Contractor(s) to comply with laws, rules, regulations, ordinances, codes or orders applicable to Contractor(s) furnishing and performing their work. Accordingly, ENGINEER can neither guarantee the performance of the construction contracts by Contractor(s) nor assume responsibility for Contractor(s)' failure to furnish and perform their work in accordance with the Contract Documents.

1.6.3. *Defective Work.* During such visits and on the basis of such observations, ENGINEER may disapprove or reject Contractor(s)' work while it is in progress if ENGINEER believes that such work will not produce a completed Project that conforms generally to the Contract Documents or that it will prejudice the integrity of the design concept of the Project as reflected in the Contract Documents.

1.6.4. *Interpretations and Clarifications.* ENGINEER shall issue necessary interpretations and clarifications of the Contract Documents and in connection therewith prepare work directive changes and change orders as required.

1.6.5. *Shop Drawings.* ENGINEER shall review and approve (or take other appropriate action in respect of) Shop Drawings (as that term is defined in the aforesaid Standard General Conditions), samples and other data which Contractor(s) are required to submit, but only for conformance with the design concept of the Project and compliance with the information given in the Contract Documents. Such reviews and approvals or other action shall not extend to means, methods, techniques,

sequences or procedures of construction or to safety precautions and programs incident thereto.

1.6.6. *Substitutes.* ENGINEER shall evaluate and determine the acceptability of substitute materials and equipment proposed by Contractor(s), but subject to the provision of paragraph 2.2.2.

1.6.7. *Inspections and Tests.* ENGINEER shall have authority, as OWNER's representative, to require special inspection or testing of the work and shall receive and review all certificates of inspections, testings and approvals required by laws, rules, regulations, ordinances, codes, orders or the Contract Documents (but only to determine generally that their content complies with the requirements of, and the results certified indicate compliance with, the Contract Documents).

1.6.8. *Disputes between OWNER and Contractor.* ENGINEER shall act as initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the work thereunder and make decisions on all claims of OWNER and Contractor(s) relating to the acceptability of the work or the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of the work. ENGINEER shall not be liable for the results of any such interpretations or decisions rendered in good faith.

1.6.9. *Applications for Payment.* Based on ENGINEER's on-site observations as an experienced and qualified design professional, on information provided by the Resident Project Representative and on review of applications for payment and the accompanying data and schedules:

1.6.9.1. ENGINEER shall determine the amounts owing to Contractor(s) and recommend in writing payments to Contractor(s) in such amounts. Such recommendations of payment will constitute a representation to OWNER, based on such observations and review, that the work has progressed to the point indicated, and that, to the best of ENGINEER's knowledge, information and belief, the quality of such work is generally in accordance with the Contract Documents (subject to an evaluation of such work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents and to any other qualifications stated in the recommendation). In the case of unit price work, ENGINEER's recommendations of payment will include final determinations of quantities and classifications of such work (subject to any subsequent adjustments allowed by the Contract Documents).

1.6.9.2. By recommending any payment ENGINEER will not thereby be deemed to have represented that exhaustive, continuous or detailed reviews or examinations have been made by ENGINEER to

check the quality or quantity of Contractor(s)' work as it is furnished and performed beyond the responsibilities specifically assigned to ENGINEER in this Agreement and the Contract Documents. ENGINEER's review of Contractor(s)' work for the purposes of recommending payment will not impose on ENGINEER responsibility to supervise, direct or control such work or for the means, methods, techniques, sequences, or procedures of construction or safety precautions or programs incident thereto or Contractor(s) compliance with laws, rules, regulations, ordinances, codes or orders applicable to their furnishing and performing the work. It will also not impose responsibility on ENGINEER to make any examination to ascertain how or for what purposes any Contractor has used the moneys paid on account of the Contract Price, or to determine that title to any of the work, materials or equipment has passed to OWNER free and clear of any lien, claims, security interest or encumbrances, or that there may not be other matters at issue between OWNER and CONTRACTOR that might affect the amount that should be paid.

1.6.10. *Contractor(s)' Completion Documents.* ENGINEER shall receive and review maintenance and operating instructions, schedules, guarantees, bonds and certificates of inspection, tests and approvals which are to be assembled by Contractor(s) in accordance with the Contract Documents (but such review will only be to determine that their content complies with the requirements of, and in the case of certificates of inspection, tests and approvals the results certified indicate compliance with, the Contract Documents); and shall transmit them to OWNER with written comments.

1.6.11. *Inspections.* ENGINEER shall conduct an inspection to determine if the work is substantially complete and a final inspection to determine if the completed work is acceptable so the ENGINEER may recommend, in writing, final payment to Contractor(s) and may give written notice to OWNER and the Contractor(s) that the work is acceptable (subject to any conditions therein expressed), but any such recommendation and notice will be subject to the limitations expressed in paragraph 1.6.9.2.

1.6.12. *Limitation of Responsibilities.* ENGINEER shall not be responsible for the acts or omissions of any Contractor, or of any subcontractor or supplier, or any of the Contractor(s)' or subcontractor's or supplier's agents or employees or any other persons (except ENGINEER's own employees and agents) at the site or otherwise furnishing or performing any of the Contractor(s)' work; however, nothing contained in paragraphs 1.6.1. thru 1.6.11 inclusive, shall be construed to release ENGINEER from liability for failure to properly perform duties and responsibilities assumed by ENGINEER in the Contract Documents.

1.7. Operational Phase

During the Operational Phase, ENGINEER shall, when requested by OWNER:

1.7.1. Provide assistance in the closing of any financial or related transaction for the Project.

1.7.2. Provide assistance in connection with the refining and adjusting of any equipment or system.

1.7.3. Assist OWNER in training OWNER's staff to operate and maintain the Project.

1.7.4. Assist OWNER in developing systems and procedures for control of the operation and maintenance of and record keeping for the Project.

1.7.5. Prepare a set of reproducible record prints of Drawings showing those changes made during the construction process, based on the marked-up prints, drawings and other data furnished by Contractor(s) to ENGINEER and which ENGINEER considers significant.

1.7.6. In company with OWNER, visit the Project to observe any apparent defects in the completed construction, assist OWNER in consultations and discussions with Contractor(s) concerning corrections of such deficiencies, and make recommendations as to replacement or correction of defective work.

The duties and responsibilities of ENGINEER during the Operational Phase are amended and supplemented as indicated in paragraph 7 of Exhibit A "Further Description of Basic Engineering Services and Related Matters."

SECTION 2 - ADDITIONAL SERVICES OF ENGINEER

2.1. Services Requiring Authorization in Advance

If authorized in writing by OWNER, ENGINEER shall furnish or obtain from others Additional Services of the types listed in paragraphs 2.1.1 through 2.1.14, inclusive. These services are not included as part of Basic Services except to the extent provided otherwise in Exhibit A "Further Description of Basic Engineering Services and Related Matters"; these will be paid for by OWNER as indicated in Section 5.

2.1.1. Preparation of applications and supporting documents (in addition to those furnished under Basic Services) for private or governmental grants, loans or advances in connection with the Project; preparation or review of environmental assessments and impact statements; review and evaluation of the effect on the design requirements of the Project of any such statements and documents prepared by others; and assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project.

2.1.2. Services to make measured drawings of or to investigate existing conditions or facilities, or to verify the accuracy of drawings or other information furnished by OWNER.

2.1.3. Services resulting from significant changes in the general scope, extent or character of the Project or its design including, but not limited to, changes in size, complexity, OWNER's schedule, character of construction method of financing; and revising previously accepted studies, reports, design documents or Contract Documents when such revisions are required by changes in laws, rules, regulations, ordinances, codes or orders enacted subsequent to the preparation of such studies, reports or documents, or are due to any other causes beyond ENGINEER's control.

2.1.4. Providing renderings or models for OWNER's use.

2.1.5. Preparing documents for alternate bids requested by OWNER for Contractor(s)' work which is not executed or documents for out-of-sequence work.

2.1.6. Investigations and studies involving, but not limited to, detailed consideration of operations, maintenance and overhead expenses; providing value engineering during the course of design; the preparation of feasibility studies, cash flow and economic evaluations, rate schedules and appraisals; assistance in obtaining financing for the Project; evaluating processes available for licensing and assisting OWNER in obtaining process licensing; detailed quantity surveys of material, equipment and labor; and audits or inventories required in connection with construction performed by OWNER.

2.1.7. Furnishing services of independent professional associates and consultant for other than Basic Services (which include, but are not limited to, customary civil, structural, mechanical and electrical engineering and customary architectural design incidental thereto); and providing data or services of the types described in paragraph 3.4 when OWNER employs ENGINEER to provide such data or services in lieu of furnishing the same in accordance with paragraph 3.4.

2.1.8. If ENGINEER's compensation is on the basis of a lump sum or percentage of Construction Cost or cost-plus a fixed fee method of payment, services resulting from the award of more separate prime contracts for construction, materials or equipment for the Project than are contemplated by paragraph 5.1.1.2. If ENGINEER's compensation is on the basis of a percentage of Construction Cost and ENGINEER has been required to prepare Contract Documents on the assumption that more than one prime contract will be awarded for construction, materials and equipment, but only one prime contract is awarded for construction, materials and equipment for the Project, services attributable to the preparation of contract documentation that was rendered unusable and any revisions or additions to contract documentation used that was necessitated by the award of only one prime contract.

2.1.9. Services during out-of-town travel required of ENGINEER other than visits to the site or OWNER's office as required by Section 1.

2.1.10. Assistance in connection with bid protests, rebidding or renegotiating contracts for construction, materials, equipment or services, except when such assistance is required to complete services called for in paragraph 6.2.2.5.

2.1.11. Providing any type of property surveys or related engineering services needed for the transfer of interest in real property and field surveys for design purposes and engineering surveys and staking to enable Contractor(s) to proceed with their work; and providing other special field surveys.

2.1.12. Preparation of operating, maintenance and staffing manuals to supplement Basic Services under paragraph 1.7.3.

2.1.13. Preparing to serve or serving as a consultant or witness for OWNER in any litigation, arbitration or other legal or administrative proceeding involving the Project (except for assistance in consultations which is included as part of Basic Services under paragraphs 1.2.3 and 1.4.2).

2.1.14. Additional services in connection with the Project, including services which are to be furnished by OWNER in accordance with Article 3, and services not otherwise provided for in this Agreement.

2.2. Required Additional Services.

When required by the Contract Documents in circumstances beyond ENGINEER's control, ENGINEER shall furnish or obtain from others, as circumstances require during construction and without waiting for specific authorization from OWNER, Additional Services of the types listed in paragraphs 2.2.1 through 2.2.6, inclusive (except to the extent otherwise provided in Exhibit A "Further Description of Basic Engineering Services and Related Matters".) These services are not included as part of Basic Services. ENGINEER shall advise OWNER promptly after starting any such Additional Services which will be paid for by OWNER as indicated in Section 5.

2.2.1. Services in connection with work directive changes and change orders to reflect changes requested by OWNER if the resulting change in compensation for Basic Services is not commensurate with the additional services rendered.

2.2.2. Services in making revisions to Drawings and Specifications occasioned by the acceptance of substitutions proposed by Contractor(s); and services after the award of each contract in evaluating and determining the acceptability of an unreasonable or excessive number of substitutions proposed by Contractor.

2.2.3. Services resulting from significant delays, changes or price increases occurring as a direct or indirect result of material, equipment or energy shortages.

2.2.4. Additional or extended services during construction made necessary by (1) work damaged by fire or other cause during construction, (2) a significant amount of defective or neglected work of any Contractor, (3) acceleration of the progress schedule involving services beyond normal working hours, and (4) default by any Contractor.

2.2.5. Services (other than Basic Services during the Operational Phase) in connection with any partial utilization of any part of the Project by OWNER prior to Substantial Completion.

2.2.6. Evaluating an unreasonable or extensive number of claims submitted by Contractor(s) or others in connection with the work.

SECTION 3 - OWNER'S RESPONSIBILITIES

OWNER shall do the following in a timely manner so as not to delay the services of ENGINEER:

3.1. Designate in writing a person to act as OWNER's representative with respect to the services to be rendered under this Agreement. Such person shall have complete authority to transmit instructions, receive information, interpret and define OWNER's policies and decisions with respect to ENGINEER's services for the Project.

3.2. Provide all criteria and full information as to OWNER's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility and expendability, and any budgetary limitation; and furnish copies of all design and construction standards which OWNER will require to be included in the Drawings and Specifications.

3.3. Assist ENGINEER by placing at ENGINEER's disposal all available information pertinent to the Project including previous reports and any other data relative to design or construction of the Project.

3.4. Furnish to ENGINEER, as required for performance of ENGINEER's Basic Services (except to the extent provided otherwise in Exhibit A "Further Description of Basic Engineering Services and Related Matters"), the following:

3.4.1. data prepared by or services of others, including without limitation borings, probings and subsurface explorations, hydrographic surveys, laboratory tests and inspections of samples, materials and equipment;

3.4.2. appropriate professional interpretations of all of the foregoing;

3.4.3. environmental assessment and impact statements;

3.4.4. property boundary, easement, right-of-way, topographic and utility surveys;

3.4.5. property descriptions;

3.4.6. zoning, deed and other land use restriction; and

3.4.7. other special data or consultations not covered in Section 2;

all of which ENGINEER may use and rely upon in performing services under this Agreement.

3.5. Provide engineering surveys to establish reference points for construction (except to the extent provided otherwise in Exhibit A "Further Description of Basic Engineering Services and Related Matters") to enable Contractor(s) to proceed with the layout of the work.

3.6. Arrange for access to and make all provisions for ENGINEER to enter upon public and private property as required for ENGINEER to perform services under this Agreement.

3.7. Examine all studies, reports, sketches, Drawings, Specifications, proposals and other documents presented by ENGINEER, obtain advice of an attorney, insurance counselor and other consultants as OWNER deems appropriate for such examination and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of ENGINEER.

3.8. Furnish approvals and permits from all governmental authorities having jurisdiction over the Project and such approvals and consents from others as may be necessary for completion of the Project.

3.9. Provide such accounting, independent cost estimating and insurance counseling services as may be required for the Project, such legal services as OWNER may require or ENGINEER may reasonably request with regard to legal issues pertaining to the Project including any that may be raised by Contractor(s), such auditing service as OWNER may require to ascertain how or for what purpose any Contractor has used the moneys paid under the construction contract, and such inspection services as OWNER may require to ascertain that Contractor(s) are complying with any law, rule, regulations, ordinance, code or order applicable to their furnishing and performing the work.

3.10. If OWNER designates a person to represent OWNER at the site who is not ENGINEER or ENGINEER's agent or employee, the duties,

responsibilities and limitations of authority of such other person and the affect thereof on the duties and responsibilities of ENGINEER and the Resident Project Representative (and any assistants) will be set forth in an exhibit that is to be identified, attached to and made a part of this Agreement before such services begin.

3.11. If more than one prime contract is to be awarded for construction, materials, equipment and services for the entire Project, designate a person or organization to have authority and responsibility for coordinating the activities among the various prime contractors.

3.12. Furnish to ENGINEER data or estimated figures as to OWNER's anticipated costs for services to be provided by others for OWNER (such as services pursuant to paragraphs 3.7 through 3.11, inclusive and other costs of the types referred to in paragraph 1.2.6) so that ENGINEER may make the necessary findings to support opinions of probable Total Project Costs.

3.13. Attend the pre-bid conference, bid opening, pre-construction conferences, construction progress and other job related meetings and substantial completion inspections and final payment inspections.

3.14. Give prompt written notice to ENGINEER whenever OWNER observes or otherwise becomes aware of any development that affects the scope or timing of ENGINEER's services, or any defect or non-conformance in the work of any Contractor.

3.15. Furnish, or direct ENGINEER to provide, Additional services as stipulated in paragraph 2.1 of this Agreement or other services as required.

3.16. Bear all costs incident to compliance with the requirements of this Section 3.

SECTION 4 - PERIODS OF SERVICE

4.1. The provisions of this Section 4 and the various rates of compensation for ENGINEER's services provided for elsewhere in this Agreement have been agreed to in anticipation of the orderly and continuous progress of the Project through completion of the Construction Phase. ENGINEER's obligation to render services hereunder will extend for a period which may reasonably be required for the design, award of contracts, construction and initial operation of the Project including extra work and required extensions thereto. If in Exhibit A "Further Description of Basic Engineering Services and Related Matters" specific periods of time for rendering services are set forth or specific dates by which services are to be completed are provided and if such dates are exceeded through no fault of ENGINEER, all rates, measures and amounts of compensation provided herein shall be subject to equitable adjustment.

4.2. The services called for in the Study and Report Phase will be completed and the Report submitted within the stipulated period indicated in paragraph 2 of

Exhibit A "Further Description of Basic Engineering Services and Related Matters" after written authorization to proceed with that phase of services which will be given by OWNER within thirty days after ENGINEER has signed this Agreement.

4.3. After acceptance by OWNER of the Study and Report Phase documents indicating any specific modifications or changes in the general scope, extent or character of the Project desired by OWNER, and upon written authorization from OWNER, ENGINEER shall proceed with the performance of the services called for in the Preliminary Design Phase, and shall submit preliminary design documents and a revised opinion of probable Total Project Costs within the stipulated period indicated in paragraph 3 of Exhibit A "Further Description of Basic Engineering Services and Related Matters."

4.4. After acceptance by OWNER of the Preliminary Design Phase documents and revised opinion of probable Total Project Costs, indicating any specific modifications or changes in the general scope, extent or character of the Project desired by OWNER, and upon written authorization from OWNER, ENGINEER shall proceed with the performance of the services called for in the Final Design Phase; and shall deliver Contract Documents and a revised opinion of probable Total Project Costs for all work of Contractor(s) on the Project within the stipulated period indicated in paragraph 4 of Exhibit A "Further Description of Basic Engineering Services and Related Matters."

4.5. ENGINEER's services under the Study and Report Phase, Preliminary Design Phase and Final Design Phase shall each be considered complete at the earlier of (1) the date when the submissions for that phase have been accepted by OWNER or (2) thirty days after the date when such submissions are delivered to OWNER for final acceptance, plus in each case such additional time as may be considered reasonable for obtaining approval of governmental authorities having jurisdiction to approve the design of the Project.

4.6. After acceptance by OWNER of the ENGINEER's Drawings, Specifications and other Final Design Phase documentation including the most recent opinion of probable Total Project Costs and upon written authorization to proceed, ENGINEER shall proceed with performance of the services called for in the Bidding or Negotiating Phase. This Phase shall terminate and the services to be rendered thereunder shall be considered complete upon commencement of the Construction Phase or upon cessation of negotiations with prospective Contractor(s) (except as may otherwise be required to complete the services called for in paragraph 6.2.2.5).

4.7. The Construction Phase will commence with the execution of the first prime contract to be executed for the work of the Project or any part thereof, and will terminate upon written recommendation by ENGINEER of final payment on the last prime contract to be completed. Construction Phase services may be

rendered at different times in respect of separate prime contracts if the Project involves more than one prime contract.

4.8. The Operational Phase will commence during the Construction Phase and will terminate one year after the date of Substantial Completion of the last prime contract for construction, materials and equipment on which substantial completion is achieved.

4.9. If OWNER has requested significant modifications or changes in the general scope, extent or character of the Project, the time of performance of ENGINEER's services shall be adjusted equitably.

4.10. If OWNER fails to give prompt written authorization to proceed with any phase of services after completion of the immediately preceding phase, or if the Construction Phase has not commenced within _____ calendar days (plus such additional time as may be required to complete the services called for under paragraph 6.2.2.5) after completion of the Final Design Phase, ENGINEER may, after giving seven days' written notice to OWNER, suspend services under this Agreement.

4.11. If ENGINEER's services for design or during construction of the Project are delayed or suspended in whole or in part by OWNER for more than three months for reasons beyond ENGINEER's control, ENGINEER shall on written demand to OWNER (but without termination of this Agreement) be paid as provided in paragraph 5.3.2. If such delay or suspension extends for more than one year for reasons beyond ENGINEER's control, or if ENGINEER for any reason is required to render Construction Phase services in respect of any prime contract for construction, materials or equipment more than one year after Substantial Completion is achieved under that contract, the various rates of compensation provided for elsewhere in this Agreement shall be subject to equitable adjustment.

4.12. In the event that the work designed or specified by ENGINEER is to be furnished or performed under more than one prime contract, or if ENGINEER's services are to be separately sequenced with the work of one or more prime contractors (such as in the case of fast-tracking), OWNER and ENGINEER shall, prior to commencement of the Final Design Phase, develop a schedule for performance of ENGINEER's services during the Final Design, Bidding or Negotiating and Construction Phases, in order to sequence and coordinate properly such services as are applicable to the work under such separate contract. This schedule is to be prepared whether or not the work under such contracts is to proceed concurrently and is to be included in Exhibit A "Further Description of Basic Engineering Services and Related Matters," and the provisions of paragraphs 4.4 through 4.10 inclusive, will be modified accordingly.

SECTION 5 - PAYMENTS TO ENGINEER

5.1. Methods of Payment for Services and Expenses of ENGINEER

5.1.1. *For Basic Services.* OWNER shall pay ENGINEER for Basic Services rendered under Section 1 (as amended and supplemented by Exhibit A "Further Description of Basic Engineering Services and Related Matters") as follows:

5.1.1.1. *One Prime Contract.* If only one prime contract is awarded for construction, materials and equipment for the Project, a lump sum fee of \$_____ for all Basic Services (except services of ENGINEER's Resident Project Representative (and assistants) furnished under paragraph 1.6.2.1 and Operational Phase services furnished under paragraph 1.7).

5.1.1.2. *Several Prime Contracts.* If more than one but less than _____ separate contracts are awarded for construction, materials and equipment for the Project, a lump sum fee of \$_____ for all Basic Services (except services of ENGINEER's Resident Project Representative (and assistants) furnished under paragraph 1.6.2.1 and Operational Phase services furnished under paragraph 1.7).

5.1.1.3. *Resident Project Services.* For services of ENGINEER's Resident Project Representative (and assistants) furnished under paragraph 1.6.2.1, on the basis of the fixed hourly rates per Attachment _____ the total of which shall not exceed \$_____ for services rendered by principals and employees assigned to resident Project representation.

5.1.1.4. *Operational Phase Services.* For Operational Phase services furnished under paragraph 1.7, on the basis of the fixed hourly rates per Attachment _____ the total of which shall not exceed \$_____ for services rendered by principals and employees engaged directly on the Project.

5.1.2. *For Additional Services.* OWNER shall pay ENGINEER for Additional Services rendered under Section 2 as follows:

5.1.2.1. *General.* For Additional Services of ENGINEER's principals and employees engaged directly on the Project and rendered pursuant to paragraph 2.1 or 2.2 (except services as a consultant or witness under paragraph 2.1.13), on the basis of the fixed hourly rates per Attachment _____ the total of which shall not exceed \$_____.

5.1.2.2. *Professional Associates and Consultants.* For services and Reimbursable expenses of independent professional associates and consultants employed by ENGINEER to render

Additional Services pursuant to paragraph 2.1 or 2.2, the amount billed to ENGINEER therefore times a factor of _____.

5.1.2.3. *Serving as a Witness.* For services rendered by ENGINEER's principals and employees as consultants or witnesses in any litigation, arbitration or other legal or administrative proceeding in accordance with paragraph 2.1.13, at the rate of \$_____ per day or any portion thereof (but compensation for the time spent in preparing to appear in any such litigation, arbitration or proceeding will be on the basis provided in paragraph 5.1.2.1). Compensation for ENGINEER's independent professional associates and consultants will be on the basis provided in paragraph 5.1.2.2.

5.1.3. *For Reimbursable Expenses.* In addition to payments provided for in paragraphs 5.1.1 and 5.1.2, OWNER shall pay ENGINEER the actual costs of all Reimbursable Expenses incurred in connection with all Basic and Additional Services.

5.1.4. The terms "Salary Costs" and "reimbursable Expenses" have the meanings assigned to them in paragraph 5.4.

5.2. Times of Payments.

ENGINEER shall submit monthly statements for Basic and Additional services rendered and for Reimbursable Expenses incurred. The statements will be based upon ENGINEER's estimate of the proportion of the total services actually completed at the time of billing. OWNER shall make prompt monthly payments in response to ENGINEER's monthly statements.

5.3. Other Provisions Concerning Payment.

5.3.1. In the event of termination by OWNER under paragraph 7.1 upon the completion of any phase of the Basic Services, progress payments due ENGINEER for services rendered through such phase shall constitute total payment for such services. In the event of such termination by OWNER during any phase of the Basic Services, ENGINEER will be paid for services rendered during that phase on the basis of the fixed hourly rates per Attachment _____ the total of which shall not exceed \$_____ for services rendered during that phase to date of termination by ENGINEER's principals and employees engaged directly on the Project. In the event of any such termination, ENGINEER also will be reimbursed for the charges of independent professional associates and consultants employed by ENGINEER to render Basic services, and paid for all unpaid Reimbursable Expenses, plus all termination expenses. Termination expenses mean Reimbursable Expenses directly attributable to termination.

5.3.2. Records of ENGINEER's Salary Costs pertinent to ENGINEER's compensation under this Agreement will

be kept in accordance with generally accepted accounting practices. Copies will be made available to OWNER at cost on request prior to final payment for ENGINEER's services.

5.4. Definitions

5.4.1. The Salary Costs used as a basis for payment mean salaries and wages (basic and incentive) paid to all ENGINEER's personnel engaged directly on the Project, including, but not limited to, engineers, architects, surveyors, designers, draftsmen, specification writers, estimators, other technical and business personnel; plus the cost of customary and statutory benefits including, but not limited to, social security contributions, unemployment, excise and payroll taxes, workers' compensation, health and retirement benefits, sick leave, vacation and holiday pay and other group benefits. For the purposes of this Agreement, the principals of ENGINEER and their current hourly Salary Costs are:

The hourly Salary Costs of principals of ENGINEER will be adjusted equitably to reflect changes in personnel and in ENGINEER's overall compensation procedures and practices.

The amount of customary and statutory benefits of all other personnel of ENGINEER will be considered equal to _____% of salaries and wages, subject to equitable adjustment to reflect changes in ENGINEER's overall compensation procedures and practices.

5.4.2. Reimbursable Expenses mean the actual expenses incurred by ENGINEER or ENGINEER's independent professional associates or consultants, directly or indirectly in connection with the Project, such as expenses for: transportation and subsistence incidental thereto; obtaining bids or proposals from Contractor(s); providing and maintaining field office facilities including furnishings and utilities; subsistence and transportation of Resident Project representatives and their assistants; toll telephone calls and telegrams; reproduction of reports, Drawings, Specifications, Bidding Documents, and similar Project-related items in addition to those required under Section 1; and, if authorized in advance by OWNER, overtime work requiring higher than regular rates.

SECTION 6 - CONSTRUCTION COST AND OPINIONS OF COST

6.1. Construction Cost

The construction cost of the entire Project (herein referred to as "Construction Cost") means the total cost to OWNER of those portions of the entire Project designed and specified by ENGINEER, but it will not include ENGINEER's compensation and expenses, the cost of land, rights-of-way, or compensation for or

damages to, properties unless this Agreement so specifies, nor will it include OWNER's legal, accounting, insurance counseling or auditing services, or interest and financing charges incurred in connection with the Project or the cost of other services to be provided by others to OWNER pursuant to paragraphs 3.7 through 3.11, inclusive. [Construction Cost is one of the items comprising Total Project Costs which is defined in paragraph 1.2.6.]

6.2. Opinions of Cost.

6.2.1. Since ENGINEER has no control over the cost of labor, materials, equipment or services furnished by others, or over the Contractor(s)' methods of determining prices, or over competitive bidding or market conditions, ENGINEER's opinions of probable Total Project costs and Construction Cost provided for herein are to be made on the basis of ENGINEER's experience and qualifications and represent ENGINEER's best judgment as an experienced and qualified professional engineer, familiar with the construction industry; but ENGINEER cannot and does not guarantee that proposals, bids or actual Total Project or Construction Costs will not vary from opinions of probable cost prepared by ENGINEER. If prior to the bidding or Negotiating Phase OWNER wishes greater assurance as to Total Project or Construction Costs, OWNER shall employ an independent cost estimator as provided in paragraph 3.9.

6.2.2. If a Construction Cost limit is established by written agreement between OWNER and ENGINEER and specifically set forth in this Agreement as a condition thereto, the following will apply:

6.2.2.1. The acceptance by OWNER at any time during the Basic Services of the revised opinion of probable Total Project or Construction Costs in excess of the then established cost limit will constitute a corresponding revision in the Construction Cost limit to the extent indicated in such revised opinion.

6.2.2.2. Any Construction Cost limit so established will include a contingency of ten percent unless another amount is agreed upon in writing.

6.2.2.3. ENGINEER will be permitted to determine what types of materials, equipment and component systems are to be included in the Drawings and Specifications and to make reasonable adjustments in the general scope, extent and character of the Project to bring it within the cost limit.

6.2.2.4. If the Bidding or Negotiating Phase has not commenced within six months after completion of the Final Design Phase, the established Construction Cost limit will not be binding on ENGINEER, and OWNER shall consent to an adjustment in such cost limit commensurate with any applicable change in the general level of prices in the construction industry between the date of

completion of the Final Design Phase and the date on which proposals or bids are sought.

6.2.2.5. If the lowest bona fide proposal or bid exceeds the established Construction Cost limit, OWNER shall (1) give written approval to increase such cost limit, (2) authorize negotiating or rebidding the Project within a reasonable time, or (3) cooperate in revising the Project's general scope, extent or character to the extent consistent with the Project's requirements and with sound engineering practices. In the case of (3), ENGINEER shall modify the Contract Documents as necessary to bring the Construction Cost within the cost limit. In lieu of other compensation for services in making such modifications, OWNER shall pay ENGINEER, ENGINEER's cost of such services, all overhead expenses reasonably related thereto and Reimbursable Expenses, but without profit to ENGINEER on account of such services. The providing of such service will be the limit of ENGINEER's responsibility in this regard and, having done so, ENGINEER shall be entitled to payment for services in accordance with this Agreement and will not otherwise be liable for damages attributable to the lowest bona fide proposal or bid exceeding the established Construction Cost.

SECTION 7 - GENERAL CONSIDERATION

7.1. Termination.

The obligation to provide further services under this Agreement may be terminated by either party upon thirty days' written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.

7.2. Reuse of Documents.

All documents including Drawings and Specifications prepared or furnished by ENGINEER (and ENGINEER's independent professional associates and consultants) pursuant to this Agreement are instruments of service in respect of the Project and ENGINEER shall retain an ownership and property interest therein whether or not the Project is completed. OWNER may make and retain copies for information and reference in connection with the use and occupancy of the Project by OWNER and others; however, such documents are not intended or represented to be suitable for reuse by OWNER or others on extensions of the Project or on any other project. Any reuse without written verification or adaptation by ENGINEER for the specific purpose intended will be at OWNER's sole risk and without liability or legal exposure to ENGINEER, or to ENGINEER's independent professional associates or consultants, and OWNER shall indemnify and hold harmless ENGINEER and ENGINEER's independent professional associates and consultants from all claims, damages, losses and expenses including attorney's fees arising out of or resulting therefrom. Any such verification or adaptation will entitle ENGINEER to

further compensation at rates to be agreed upon by OWNER and ENGINEER.

7.3. Insurance.

7.3.1. ENGINEER shall procure and maintain insurance for protection from claims under workers' compensation acts, claims for damages because of bodily injury including personal injury, sickness or disease or death of any and all employees or of any person other than such employees, and from claims or damages because of injury to or destruction of property including loss of use resulting therefrom.

7.4. Controlling Law.

This Agreement is to be governed by the law of the principal place of business of ENGINEER.

7.5. Successors and Assigns.

7.5.1. OWNER and ENGINEER each is hereby bound and the partners, successors, executors, administrators and legal representatives of OWNER and ENGINEER (and to the extent permitted by paragraph 7.5.2 the assigns of OWNER and ENGINEER) are hereby bound to the other party to this Agreement and to the partners, successors, executors, administrators and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements and obligations of this Agreement.

7.5.2. Neither OWNER nor ENGINEER shall assign, sublet or transfer any rights under or interest in (including, but without limitation, moneys that may become due or moneys that are due) this Agreement without the written consent of the other, except to the extent that any assignment, subletting or transfer is mandated by law or the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement. Nothing contained in this paragraph shall prevent ENGINEER from employing such independent professional associates and consultants as ENGINEER may deem appropriate to assist in the performance of services hereunder.

7.5.3. Nothing under this Agreement shall be construed to give any rights or benefits in this Agreement to anyone other than OWNER and ENGINEER, and all duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of OWNER and ENGINEER and not for the benefit of any other party.

7.6. Arbitration.

7.6.1. All claims, counterclaims, disputes and other matters in question between the parties hereto arising out of or relating to this Agreement or the breach thereof will be decided by arbitration in accordance with the

Construction Industry Arbitration Rules of the American Arbitration Association then obtaining, subject to the limitations and restrictions stated in paragraphs 7.6.3 and 7.6.4 below. This Agreement so to arbitrate and any other agreement or consent to arbitrate entered into in accordance herewith as provided in this paragraph 7.6 will be specifically enforceable under the prevailing law of any court having jurisdiction.

7.6.2. Notice of demand for arbitration must be filed in writing with the other parties to this Agreement and with the American Arbitration Association. The demand must be made within a reasonable time after the claim, dispute or other matter in question has arisen. In no event may the demand for arbitration be made after the date when institution of legal or equitable proceedings based on such claim, dispute or other matter in question would be barred by the applicable statute of limitations.

7.6.3. All demands for arbitration and all answering statements thereto which include any monetary claim must contain a statement that the total sum or value in controversy as alleged by the party making such demand or answering statement is not more than \$200,000 (exclusive of interest and costs) and the arbitrators will not have jurisdiction, power or authority to render a monetary award in response thereto against any party which totals more than \$200,000 (exclusive of interest and costs). The arbitrators will not have jurisdiction, power or authority to consider, or make findings (except in denial of their own jurisdiction) concerning any claim, counterclaim, dispute or other matter in question where the amount of controversy of any such claim, counterclaim, dispute or matter is more than \$200,000 (exclusive of interest and costs).

7.6.4. No arbitration arising out of or relating to, this Agreement may include, by consolidation, joined or in any other manner, any person or entity who is not a party to this Agreement.

7.6.5. By written consent signed by all the parties to this Agreement and containing a specific reference hereto, the limitations and restrictions contained in paragraphs 7.6.3 and 7.6.4 may be waived in whole or in part as to any claim, counterclaim, dispute or other matter specifically described in such consent. No consent to arbitration in respect of a specifically described claim, counterclaim, dispute or other matter in question will

constitute consent to arbitrate any other claim, counterclaim, dispute or other matter in question which is not specifically described in such consent or in which the sum or value in controversy exceeds \$200,000 (exclusive of interest and costs) or which is with any party not specifically described therein.

7.6.6. The award rendered by the arbitrators will be final, judgment may be entered upon it in any court having jurisdiction thereof, and will not be subject to modification or appeal except to the extent permitted by Sections 10 and 11 of the Federal Arbitration Act (9 U.S.C. §§10,11).

SECTION 8 - SPECIAL PROVISIONS, EXHIBITS and SCHEDULES

8.1. This Agreement is subject to the following special provisions.

8.1.1. CDBG Exhibit B-8 "CONTRACT FOR PROFESSIONAL SERVICES PART II - TERMS AND CONDITIONS" must be added at this point.

8.2. The following Exhibits are attached to and made a part of this Agreement.

8.2.1. Exhibit A "Further Description of Basic Engineering Services and Related Matters" consisting of _____ pages.

8.2.2. Exhibit B "Duties, Responsibilities and Limitations of Authority of Resident Project Representative" consisting of _____ pages.

8.2.3.

8.3. This Agreement (consisting of pages 1 to _____, inclusive) together with the Exhibits and schedules identified above constitute the entire agreement between OWNER and ENGINEER and supersede all prior written or oral understandings. This Agreement and said Exhibits and schedules may only be amended, supplemented, modified or cancelled by a duly executed written instrument.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the day and year first above written.

OWNER:

ENGINEER:

Address for giving notices:

Address for giving notices:
