

**BULLETIN OF REVISIONS  
FOR  
PUBLIC SERVICE FACILITY POLICY AND PROCEDURES FOR HIGHWAYS  
IN CONNECTICUT**

**NEW REVISIONS FOR NOVEMBER 2008:**

Page 19, Section D – “Construction Authorization for a Public Service Company/Municipality”, paragraph 5 (New). This paragraph addresses Utility Funding in the Right-of-Way Phase.

Page 27, Section X – “Equipment Rates”, paragraph D (Revised). This paragraph explains the appropriate reference to be used for force account work only when insufficient data is available to develop equipment rates or the public service company/municipality chooses not to develop its own equipment rates.

Page 28, Section XI, Section A – “Partial Billings”, paragraph 1 (Revised). This paragraph reflects the change in retainage (from 10% to 2.5%) held by the Department for billings from the public service company/municipality to the State.

**PUBLIC SERVICE FACILITY  
POLICY AND PROCEDURES  
FOR  
HIGHWAYS IN CONNECTICUT**



**CONNECTICUT  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING  
&  
HIGHWAY OPERATIONS**

**November 2008**

## TABLE OF CONTENTS

- I. PURPOSE - Page 3**
- II. REIMBURSEMENT – Pages 4**
  - A. General
  - B. Preliminary Engineering Activities
  - C. Construction Activities
  - D. Contractor’s Benefit
  - E. Abandoned, Relocated or Conveyed Section of a State Highway
- III. ENGINEERING – Pages 5 - 11**
  - A. General
  - B. Responsibilities of the Public Service Company/Municipality
  - C. Engineering Services Performed  
By Consultant Forces
  - D. Preliminary Engineering Estimate
  - E. Procedure for Completing Test Pit Activities
    - 1. District Office to Perform Survey of Test Pits
    - 2. State’s Consultant to Perform Survey of Test Pits
  - F. Increased Cost for Preliminary Engineering Services
  - G. Construction Estimate
  - H. Plans
  - I. Notice to Contractor (NTC)
  - J. Specifications
- IV. ENVIRONMENTAL RULES FOR UTILITY WORK WITHIN  
STATE RIGHT-OF-WAY – Pages 12 - 13**
  - A. General
  - B. Contaminated Materials
  - C. Contaminated Facilities
  - D. Abandon-in-Place Facilities
- V. AGREEMENTS (Preliminary Engineering and Construction) – Pages 14 - 16**
  - A. General
  - B. Master Agreement
  - C. Letter Agreement
  - D. Formal Agreement
  - E. Agreement (Right-of-Way Involvement)
    - 1. Responsibilities of the Public Service Company/Municipality and the State  
On Projects with Right-of-Way Involvement
- VI. PERMITS – Page 17**
  - A. General
  - B. Environmental Permits
  - C. Construction Permits

- VII. CONSTRUCTION – Pages 18 - 22**
  - A. General
  - B. Performance of Public Service Company/Municipality Work
  - C. Liability – Public Service Company/Municipality
  - D. Construction Authorization for Public Service Company/Municipality
  - E. Continuing Contractor Certification
  - F. Cost Overruns to Public Service Company/Municipality Construction Work
  - G. Emergency Work
  - H. Incidental Work
  - I. Overtime Work
  
- VIII. LABOR COSTS – Pages 23 - 24**
  - A. General
  - B. Insurance
  
- IX. MATERIALS AND SUPPLIES – Pages 25 - 26**
  - A. Procurement
  - B. Costs
  
- X. EQUIPMENT RATES – Page 27**
  
- XI. UTILITY BILLING PROCEDURE – Pages 28-31**
  - A. Partial Billings
  - B. Documentation for Utility Reimbursement
    - 1. Form CON. 40
    - 2. Form CON. 41
  - C. Final Reimbursement
  - D. Experience Rates
  
- XII. DEFINITIONS – Pages 32 - 34**
  
- XIII. APPENDIX – Pages 35 - 53**
  - A. Special Provision - Example
  - B. Calculation of Depreciation Reserve Credit (DRC) (Example)
  - C. Rates Computed from the experience of a Previous Calendar Year (Example)
  - D. A Procedure for Retaining a Consulting Engineer to Render Services in Connection with Adjustments to Public Service Facilities Affected by State Highway Construction Projects (Document)

## **I. PURPOSE**

The "Public Service Facility Policy and Procedures for Highways in Connecticut" outlines Connecticut Department of Transportation (Department) policies and procedures to be used in the relocation of existing public service facilities in conjunction with all State highway projects and any other public highway projects. This manual establishes policies and procedures which are in conformance with the "23 Code of Federal Regulations (CFR) 645 Subpart A", "A Policy on the Accommodations of Utilities on Highway Rights-of-Way" (23 CFR 645 Subpart B), the "Utility Manual For Documenting and Billing Highway Relocation Work", and the "General Statutes of Connecticut – Statutes 13a-98f and 13a-126". These policies and procedures shall apply to all privately or publicly owned lines, facilities and systems for producing, transmitting or distributing communications, cable television, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water not connected with highway drainage and any other similar commodities, including fire and police signal systems and street lighting systems which directly or indirectly service the public.

## **II. REIMBURSEMENT**

### **A. General:**

Reimbursement is the equitable share that a public service company/municipality shall receive from the State on State highway projects, as governed by the General Statutes of Connecticut. The public service company's/municipality's reimbursement would be for preliminary engineering services and construction activities associated with the relocation, adjustment and removal of public service facilities in conflict with the State highway project.

### **B. Preliminary Engineering Activities:**

The State will participate in the equitable share of the preliminary engineering activities in accordance with the applicable State Statutes.

### **C. Construction Activities:**

The State will participate in the equitable share of the construction activities, in accordance with applicable State Statutes.

### **D. Contractor's Benefit**

The State will not participate in the cost of relocation or temporary work associated with any public service facility, which is performed solely for the benefit or convenience of a contractor.

### **E. Abandoned or Relocated Sections of State Highway and/or Conveyed State Property**

The State will participate in the cost to relocate public service facilities that are in conflict to the alignment of the new or relocated highway when the existing highway is to be relocated or abandoned or existing state property is conveyed. If a conflict does not exist, the owner of the public service facility may:

1. relocate public service facilities to the alignment of the new or relocated highway at his expense, or
2. decide not to relocate public service facilities from the existing alignment or abandoned highway or State property which may be conveyed. However, in the future, he may be required to relocate public service facilities at his expense due to any loss of rights to remain in-place.

**Note:** A conflict exists when the public service facility owner is required to relocate the facility when:

1. The public service facility shall be disturbed or rendered not accessible by the construction.
2. A fire hydrant shall become inaccessible to fire apparatus because of scarifying the pavement mat and loaming and seeding of the road bed.

### **III. ENGINEERING**

#### **A. General**

Preliminary Engineering is the phase of work consisting of activities to be performed by the public service company/municipality for the preparation of plans, specifications and estimates in advance of construction operations. These activities include performing test pits for the location, depth and size of the underground public service facility, field investigations, engineering and any other related activities required to complete the plans, specifications and construction estimates. This section outlines options available and the procedure to be followed by the public service company/municipality. Furthermore, stated herein are the responsibilities of the public service company/municipality to deliver to the State, on all projects, certain required material, as follows:

1. Preliminary Engineering Estimate
2. Construction Estimate (including timetable)
3. Plans
4. Specifications

Construction Engineering is the phase of work consisting of activities to be performed by the public service company/municipality during the construction phase of the project. These activities include performing test pits, field investigations and field inspection and other required work to complete the construction phase of the project.

#### **B. Responsibilities of the Public Service Company/Municipality:**

The public service company/municipality is responsible for delivering the required material to the State in a timely manner as to not adversely affect the State's ability to advertise the Project on schedule.

#### **C. Engineering Services Performed by Consultant Forces:**

When the public service company/municipality is not adequately staffed to pursue the necessary preliminary engineering and related work for the public service company relocation, the public service company/municipality may request that their preliminary engineering be performed by:

1. A consultant, who is retained by the public service company/municipality,
- or
2. A consultant, who is currently retained by the State for the public service company/municipality.

The Procedure for Retaining a Consultant by the Public Service Company/Municipality is as follows:

1. Upon notification from the public service company/municipality, the State will forward to the public service company/municipality, a current copy of "A Procedure for Retaining a Consultant Engineer to Render Services in Connection with Adjustments to Public Service Facilities Affected by State Highway Construction," which indicates the process to be followed.

2. The Preliminary Engineering Agreement between the public service company/municipality and its engineering consultant shall be prepared and submitted to the State for review, prior to its execution.
3. Once the State approves, in writing, the Preliminary Engineering Agreement between the public service company/municipality and its engineering consultant, the Agreement may be executed.
4. A copy of the executed Agreement between the public service company/municipality and its engineering consultant will be forwarded to the State and made part of the Preliminary Engineering Agreement between the State and the public service company/municipality.

The Procedure for Utilizing the State's Consultant for the Public Service Company/Municipality is as follows:

1. The public service company/municipality shall request the services of the State's engineering consultant by written notification to the Utilities Section. The request will be reviewed by the State.
2. Upon approval, the State's engineering consultant shall submit a scope of work to the State. The scope of work shall be reviewed and approved by the State, with concurrence by the public service company/municipality.
3. The public service company/municipality shall provide written comments on all progress plans, specifications and estimates.
4. The public service company/municipality shall provide written approval on final plans, specifications and estimates.

**Note:** The procedure for retaining a consultant for construction engineering services will follow a similar format as for preliminary engineering services.

#### **D. Preliminary Engineering Estimate:**

The preliminary engineering estimate shall include costs for any or all of the following activities:

1. Maintaining the project file for projects.
2. Providing responses to inquiries for map/record information from the State.
3. Reviewing plans and determining potential public service facility conflicts.
4. Preparing a preliminary engineering estimate for submission to the State.
5. Identifying the location of the test pits.
6. Evaluating the test pit results and determining areas of conflict between the proposed design and the existing public service company facilities.



7. Interacting with State engineers and determining remedies to avoid conflicts with public service company facilities.
8. Developing the relocation plans, specifications, estimates and a timetable by the public service company/municipality and/or its consulting engineer, to be included in the project documents for submission to the State.
9. Attending all meetings during the design phase.

#### **E. Procedure for Completing Test Pit Activities on State Projects**

In general, survey of test pits is done by the District Survey Office or by the State's consultant. This section establishes two procedures for completing all test pit activities for a State project, based on whether the survey is to be performed by the District Office or the State's consultant.

##### **1. Procedure When Survey of Test Pits is to be Performed by the District Office:**

- a. The public service company/municipality will prepare a Test Pit List (submitted to the Utilities Section), which consists of the type and size of facility, station and offset.
- b. The Utilities Section shall provide the prime designer with the Test Pit List.
- c. The Prime Designer shall forward a request to the Office of Construction-Surveys for assignment to the District Office.
- d. The District Office shall prepare a Test Pit Agreement between the State and public service company/municipality and coordinate the start of test pit activities.
- e. The public service company/municipality shall dig the test pits, and the District Office shall make record of test pit based on type size, horizontal and elevation.
- f. The District Office shall provide the prime designer with gathered test pit data.

##### **2. Procedure When Survey of Test Pits is to be Performed by the State's Consultant:**

- a. The public service company/municipality will prepare a Test Pit List (submitted to the Utilities Section) consisting of the type and size of facility, station and offset.
- b. The Utilities Section shall provide the Prime Designer with the Test Pit List and prepare the Preliminary Engineering Agreement which includes a line item for test pits between the State and the public service company/municipality.
- c. The Prime Designer shall forward a request to the State's consultant to coordinate the start of test pit activities with the public service company/municipality.
- d. The public service company/municipality shall perform the test pits and the State's consultant shall perform a test pit survey of the size, location and depth, and incorporate the gathered test pit data into the plans, including cross sections for the State project.

## **F. Increased Cost for Preliminary Engineering Services**

The following steps shall be taken to reimburse the public service company/municipality for the increased cost for preliminary engineering services:

1. The public service company/municipality shall submit a letter of request to the Utilities Section, which explains the additional preliminary engineering services to be performed and its cost.
2. Upon review and approval of the request letter, the Utilities Section engineer shall prepare a letter of acceptance for the increased cost of the preliminary engineering services.

## **G. Construction Estimate:**

The construction estimate is a detailed and itemized cost of the work to be performed and shall include all of the following items:

1. Cost of temporary, permanent work and non-participating work
  - a. Cost of permanent work shall include the material, equipment and labor to adjust, relocate or remove the existing facility.
  - b. Cost of temporary work shall include the material, equipment and labor to install and remove the facility by the end of the project.
  - c. Cost of non-participating work shall include the material, equipment and labor to install additional facility for which the State will not be participating in the cost thereof.
2. Depreciation Reserve Credit (DRC) – is the credit for the used life of the replaced facility when a new facility is installed. (See Appendix – Section B)
3. Salvage Value – the amount received from the sale of utility property that has been removed or the amount at which the recovered material is charged to the utility's accounts, if retained for reuse. Estimated salvage value shall be credited to the State.
4. Scrap Value – the amount received from materials recovered and not accepted for reuse by the public service company/municipality, if determined to have a net sale value, shall be sold to the highest bidder and credited to the project by the public service company/municipality.
5. Temporary Material – material recovered from temporary use and accepted for reuse by the Utility shall be credited to the project at 90% of the material costs charged to the project. Temporary work shall be included in the estimate.
6. Betterment – any upgrading of the facility being relocated, that is not attributable to the highway reconstruction and is made solely for the benefit, and at the election, of the public service company/municipality. The estimate shall include a section, where applicable, that the utility intends to construct a facility that shall include a betterment. To compute a

betterment, first determine the cost to replace the existing plant, in kind, including labor, equipment and material. Then determine the cost to replace the existing plant with the proposed plant of greater capacity, including labor, equipment and material. The difference is the betterment credit due to the State.

Note: a betterment credit to the project shall not be required for additions or improvements, if any, if the following conditions exist:

- (a) Required by the highway project.
  - (b) Required by law or regulation.
  - (c) The existing material is no longer regularly manufactured.
  - (d) The existing material is equivalent, but not identical, to the existing plant.
  - (e) Replacement to the next highest grade or size is acceptable.
  - (f) Determined to be less costly than replacing the existing facility in kind.
8. Property Interests - cost of "right-of-way" interest shall include all associated fees for the acquisition of land and/or aerial rights for the relocation and readjustment of public service facilities.
  9. Legal and Administrative Fees - legal and administrative costs incurred by the public service company/municipality.
  10. Calendar Days - a statement of the number of calendar days expected for the actual construction of the readjustment or relocation of the facility.

#### **H. Plans:**

Relocation plans shall be provided by each public service company/municipality, indicating relocations to accommodate the highway project and any betterment anticipated by the public service company/municipality in any manner, as follows:

1. The Department shall provide design plan mylars or electronic files at the request of the public service company/municipality. The mylars or files shall show the existing public service company facilities, the existing roadway features and proposed roadway design.
2. The public service company/municipality shall submit plans that include drawings, on double matte mylars (or an approved equivalent) with a 3-mil thickness, 22 inches by 36 inches in size, which indicate the plan of the proposed relocation work.
3. The public service company/municipality shall show proposed utility poles, above-ground utility structures and underground structures/facilities dimensioned from the proposed edge of road.
4. The public service company/municipality shall show: (a) temporary relocation work, (b) permanent relocation work and (c) non-participating work on the plans.
5. The public service company/municipality shall submit plans for public service facility relocation work to be performed by the public service company/municipality. The plans submitted by the public service company/municipality shall be labeled "FOR

INFORMATION ONLY” and include the public service company/municipality name on each of the plan sheets.

6. The public service company/municipality shall submit plans for public service facility relocation work that will be included in the construction contract in a manner approved by the Department that is consistent with the project plans.
7. The Department shall review and approve all plans, specifications, and estimates submitted by the public service company/municipality.

**I. Notice to Contractor (NTC):**

NTC is language provided by the utility company that informs the State’s contractor of the utility company’s requirements. The utility company shall submit the suggested language for review and approval by the State. The approved NTC shall be incorporated into the State’s contract.

**J. Specifications:**

Detailed specifications are required for each item when work is to be performed by the State’s contractor for the public service company/municipality. The specifications shall be prepared by the public service company/municipality and be included in the contract documents. The specifications shall conform to the Standard Specifications, Supplemental Specifications or Special Provisions.

1. Standard Specifications - Construction items noted in the contract documents shall conform to the specifications outlined in the Department’s publication entitled “Standard Specifications for Roads, Bridges and Incidental Construction.” This document is commonly referred to simply as the “Standard Specifications.” They are basic construction specifications that describe and define the requirements of those items most commonly used in highway construction.
2. Supplemental Specifications - The Supplemental Specifications add to, delete or otherwise revise the Standard Specifications.
3. Special Provisions – A special provision shall be prepared in cases when the Standard Specifications, the Supplemental Specifications are found to inadequately describe a construction activity or pay item.

The public service company/municipality will be required to submit final contract special provisions in electronic (MS Word) format. The State has developed MS Word “Format Files” for use by all parties in the creation of special provisions in the proper format. Furthermore, software files may be available to convert existing files of special provisions into properly formatted contract specifications.

The letter “A” shall be affixed following the item number on all special provisions. This alerts the user of a special condition. Item numbers and names used in the title of a special provision shall conform to the State’s “Bid Master File” of items and numbers. If no new item exists, the public service company/municipality shall request, through a Utilities Section engineer, that a number be issued.

Each Special Provision Shall Include The Following Five Sections:

**Description:** The item or operation is to be fully described in a factual, concise and accurate manner.

**Materials:** In describing the materials to be employed to build this item, this article should refer to the Materials section of the Standard Specifications, if possible. Next in line would be, in preferential order, the AASHTO, ASTM recognized national standards or industry standard. If standards are not available, the physical requirements necessary for the construction of a particular item should be specified and noted in this article. Brand names should only be used as a last resort; however, when they are used, at least three manufacturers of a particular item should be specified. Should a proprietary material be required, a waiver should be requested in accordance with applicable federal regulations.

**Construction Methods:** This section should be written in a fashion that is only detailed enough to convey the intent to the contractor, without being too specific.

**Method of Measurement:** This article directs the measurement of the item in the unit of measurement by which the item will be paid. The unit used must be consistent with the type of construction used. No measurement or computation need be made in the case of a lump sum item.

**Basis of Payment:** This article describes the manner in which payment will be made for a particular item. It is based on the unit of the “Method of Measurement” article. The item name specified in this article shall correspond to the name used in the title of the special provision. Particular care must be taken to state exactly what will be paid for, what part of the operation or under what circumstances no payment will be paid, and what work will be paid for under other specific items.

**Note:** See the State Department of Transportation website for the specific format to be followed for the preparation of the special provision.

#### **IV. ENVIRONMENTAL RULES FOR UTILITY WORK WITHIN STATE RIGHT-OF-WAY**

##### **A. General:**

Compliance with environmental rules and regulations for utility work within the State right-of-way will be adhered to on all State projects involving issues regarding contaminated materials and contaminated facilities. The public service company/municipality will work in conjunction with the Department's Utilities Section and Environmental Compliance Section to address issues associated with encountered contaminated materials or contaminated facilities on State projects. This section provides guidance to the public service company/municipality when 1) encountering contaminated materials, 2) dealing with a contaminated facility, and 3) requesting to abandon in place a contaminated facility on a State Project.

##### **B. Contaminated Materials:**

When it has been determined by environmental site investigations, or any other means, that the public service company/municipality is likely to, or will, encounter contaminated materials during relocation activities within the project limits, the following will apply:

1. The State shall furnish to the public service company/municipality, copies of all environmental site investigation reports, when applicable, prepared by the State within the project limits.
2. The public service company/municipality shall be responsible for the health and safety of their employees and subcontractors.
3. The public service company/municipality shall reuse all excavated suitable material associated with facility relocation, in accordance with the "Connecticut Department of Environmental Protection Guidance for Utility Excavation," dated January 30, 2001, and/or any subsequent revisions. (see <http://www.ct.gov/dep/cwp/view.asp?A=2715&Q=324962>)
4. The public service company/municipality shall provide the State an estimate of the quantity of materials that the public service company/municipality does not expect to be able to reuse for the State project.
5. The State will provide the public service company/municipality with a designated Waste Stockpile Area (WSA) to temporarily store unusable contaminated materials.
6. The public service company/municipality will arrange for the transportation of all materials not suitable for reuse to the designated WSA.
7. The State will arrange for the transportation, disposal or reuse of all contaminated material from the WSA.
8. The public service company/municipality shall provide the State with a schedule of construction activities for the State project, in order for the State to arrange for the handling and disposal of contaminated materials.

9. The public service company/municipality shall arrange for the handling, treatment and disposal of contaminated groundwater generated as a result of construction dewatering activities.
10. In the event the public service company/municipality relocates facilities during the State construction project, and the State's contractor has implemented procedures and/or equipment to manage or treat contaminated groundwater, the State may arrange for the handling, treatment and disposal of contaminated groundwater by the State's contractor. The public service company/municipality shall provide the State with an estimate of the expected generated quantities of contaminated groundwater for the State project.

### **C. Contaminated Facilities:**

When contaminated facilities have been identified to be in conflict with the State project prior to the construction phase or have been discovered during the construction phase of the State project, the following will apply:

1. The public service company/municipality will not be permitted to abandon in place any contaminated facility which is in conflict with the project.
2. The public service company/municipality will be responsible for the removal and proper disposal of the contaminated facility.
3. In the event the State's contractor discovers a contaminated facility during the construction phase of the State Project, the public service company/municipality will be notified promptly, and the State may arrange for removal and temporary storage of the contaminated facility at a WSA by the State's contractor.
4. The public service company/municipality must arrange for the transportation and proper disposal of the contaminated facility discovered by the State's contractor within (60) sixty days of the date of its discovery.
5. A representative of the public service company/municipality shall sign all manifests and/or bills of lading as "generator."

### **D. Abandon-in-Place Facilities**

In the event the public service company/municipality desires to abandon in place contaminated facilities not in conflict with the State project, the following shall apply:

1. The public service company/municipality must request permission in writing from the State and any other regulatory agency having jurisdiction to abandon in place the contaminated facility not in conflict with the State project.
2. In the event, the public service company/municipality is granted permission in writing by the State to abandon in place a contaminated facility, the public service company/municipality will retain ownership of the facility. The public service company/municipality shall be responsible for all costs associated with releases from facilities that are abandoned in place.

## **V. AGREEMENTS (Preliminary Engineering and Construction)**

### **A. General:**

Preliminary Engineering Agreements are agreements executed completely by the State and the public service company/municipality during the design phase of the project for preliminary engineering services to be rendered by the public service company/municipality. The preliminary engineering services are used for preparing the plans, specifications and construction estimate for the adjustment, relocation and/or removal of its public service facilities, as necessitated by the project. Furthermore, preliminary engineering services include test borings, test pit excavations or any other means required to ascertain the exact location, dimensions, or the structural condition of a public service facility for the purposes of developing a proper construction estimate. The Utilities Section Engineer, at the Design/Utility meeting, will request and establish a deadline for submitting preliminary engineering estimates to the public service companies/municipalities.

Construction Agreements are agreements executed completely between the State and the public service company/municipality prior to the award date of the project to a contractor by the State. The plans shall depict the adjustment, relocation and removal of public service facilities for the project. Specifications, including supporting data and any other pertinent documents relative to the installations and adjustments of the public service facilities, shall be provided to the State by the public service company. The construction estimate shall take into consideration, but will not be limited to: (a) costs required to provide a facility of equal capacity; (b) any costs in excess of the costs required to provide a facility of equal capacity clearly showing the betterment and associated costs for which the State is not participating; (c) the value of materials salvaged from existing installations; and (d) depreciation reserve credits, as determined by the cost of the original installation of the facility, the life expectancy of the original facility, and the age of the original facility. The Utilities Section engineer will request and establish a deadline to the public service company/municipality for submitting their construction estimates.

Preliminary Engineering Agreements and Construction Agreements will be executed by the State via variously formatted agreements. The Agreements may be executed via Project Authorization Letters (PAL's) for parties under the Master Agreements, Letter Agreements or Formal Agreements.

### **B. MASTER AGREEMENT**

When a public service company/municipality has executed a Master Agreement with the State, then a Project Authorization Letters (PAL) will be used to handle work associated with preliminary engineering and construction activities to be performed on projects. A public service company/municipality is not party to a Master Agreement will be required to enter into separate project agreements (Letter Agreement / Formal Agreement) for each highway relocation project.

**Note:** The Master Agreement will not replace the current "Master Agreement for Vendor-In-Place Projects" or the need for any "Agreement involving Right-of-Way Involvement."

### **C. LETTER AGREEMENT**

A Letter Agreement will be prepared when the State's share of the cost of the relocation, readjustment, or removal of a public service facility, performed by the public service



company/municipality, is One Hundred Thousand Dollars (\$100,000.00) or less, as shown in the estimate submitted by the public service company/municipality.

#### **D. FORMAL AGREEMENT**

A Formal Agreement must be prepared when the State's share of the cost of relocation, readjustment, or removal of a public service facility, performed by the public service company/municipality, exceeds One Hundred Thousand Dollars (\$100,000.00), as shown in the estimate submitted by the public service company/municipality.

#### **E. AGREEMENT WITH RIGHT-OF-WAY INVOLVEMENT**

A Letter Agreement or Formal Agreement will be executed by the State for a public service company having a right-of-way involvement on a project. This Agreement shall allow payment for the adjustment, relocation or removal of a public service facility which has occupied private or public lands through an estate interest or right in the land, and its modification or removal is necessary to eliminate all physical conflicts to accommodate a State highway improvement. This agreement will define the areas of conflict, the remedial measures to be undertaken, the costs for required property transactions to be consummated and the method of financing.

The General Statutes of the State of Connecticut do not specifically provide for the adjustment, relocation or removal of a public service facility which occupies private or public lands through an estate interest or right in the land, and its modification or removal is necessary to accommodate a State highway improvement. In the absence of any statutory direction, the State shall treat the costs to alter a public service company facility as damage consequent to the taking of an interest or a right in land. The payment of damages are made pursuant to the authority set forth in Section 13a-73 and Section 13a-74 of the General Statutes of Connecticut, as revised, for "land acquisition."

The State's reimbursement of the total net cost of the facility adjustments necessary to eliminate areas of conflict, together with the conveyance of any easements, when granted, compatible with the operating requirements of the highway, will generally be considered equitable compensation for damages resulting from the acquisition of a public service company's easement or land interests, other than a fee interest, and the alteration of its facilities connected therewith.

#### **1. Responsibilities of the Public Service Company/Municipality and the State on Projects with Right-of-Way Involvement:**

The public service company/municipality and the State will be responsible to take one or more of the following required actions to execute a Utility Construction Agreement with a line item for "Property Interests"

- a. The Office of Rights-of-Way, Department of Transportation, will process acquisitions as straight land interest takings. The acquisition of a public service company's fee simple interest or other interests or rights in land, required for highway purposes, shall be considered in this policy only when there is an operating public service facility occupying the land and it is determined that said facility will be in physical conflict with construction or operation of the proposed highway improvement.

- b. Whenever a public service facility conflict is encountered, the State will initiate a property taking that will extinguish all land rights and interests of the operating public service company within the proposed and/or existing highway lines. The public service company will be required to provide, at the request of the State, all requested documentation to the State, reasonably associated with the valuation/relocation process. In all instances, the taking will be affected through the filing of a condemnation.
- c. Whenever a public service company facility conflict occurs on land held in fee by the public service company, the State will acquire the fee interest in the land required for highway purposes by condemnation. Equitable compensation, in this instance, will consist of the fair market value of the fee interest in the land plus the total net cost of the adjustments necessary to eliminate the conflict. Under these circumstances, the public service company may have an option of maintaining its facilities on a permit basis within the highway limits or by permission granted from the State, to purchase the easement desired from the State at fair market value.
- d. In the event a public service company/municipality must purchase the compatible replacement easement from a private landowner, the expense occurred by the public service company in consummating such a purchase shall be reimbursed by the State. However, the public service company's/municipality's evaluation of private land interests must be reviewed by the Administrator - Office of Rights-of-Way, before a purchase commitment is made to an owner, to preclude the possibility of competitive buying between the public service company and the State with the same land owner.
- e. Whenever facility alterations on the public service company's right-of-way are made to eliminate a conflict at a highway crossing, and the right-of-way abuts the State highway but does not extend through the crossing, the public service company's rights will be extinguished for the fair market value from the State. An easement will not be conveyed to the public service company, and the facility crossing will be maintained on a permit basis granted by the State and/or in accordance with any applicable statutory authority.

## **VI. PERMITS**

### **A. General:**

This section outlines the responsibilities of performance of tasks by the public service company/municipality for acquiring environmental permits. These permits are for the relocation of public service facilities by the public service company/municipality within and outside the construction limits on a State project. Any responsibilities the State may have are also covered. Secondly, referenced are the regulations and requirements the public service company/municipality shall conform to, subject to the issuance of a construction permits.

### **B. Environmental Permits**

The public service company/municipality shall be responsible for obtaining any and all permits for the adjustments of their facilities on the project where the work performed by the public service company/municipality or its contractors is outside the limits of construction.

The public service company/municipality shall, upon request, be provided by the State, a guide for the preparation of the permit entitled "The Notice of Environmental Permits Involving Utility Relocations."

The public service company/municipality shall be responsible for filing all the necessary permit applications with the Department of Environmental Protection, U.S. Corps of Engineers, and/or any municipal inland wetland agency.

The public service company/municipality shall exercise a best effort to minimize impact when its relocations will be in regulated areas (watercourses and/or wetlands).

In the event the State's contractor is to perform work for the public service company/municipality, the State will obtain the necessary permits for only those activities performed by the State's contractor. However, the public service company/municipality, via early coordination, shall be responsible for supplying the needed information to the State so that the permits are obtained for work on the public service facilities.

### **C. Construction Permits**

All construction and reconstruction work, proposed by a public service company/municipality to be performed within lands designated rights-of-way for State highway purposes, occasioned by work on a State highway or by any other reason, shall be subject to a permit issued under specifications, as described in the current "Highway Encroachment Permit Regulations" issued by the State.

The District Maintenance Manager shall review the plans submitted to the District Office of the State by a public service company/municipality, in conformance with the requirements contained in the "Highway Encroachment Permit Regulations."

## **VII. CONSTRUCTION**

### **A. General**

Construction is a phase of work consisting of activities to be performed by the public service company/municipality in the readjustment, relocation or removal of their facilities during utility construction operations. These activities include permanent and temporary aerial and underground relocations and other related activities required in completing the relocation of their facilities. Before starting any work, the public service company/municipality shall notify the District Engineer for the project, of his schedule, so that the work may be coordinated with other activities on the project.

### **B. Performance of Public Service Company/Municipality Work**

The performance of the public service company/municipality work can be done in the following ways by:

1. Public service company/municipality relocation work is to be done by its construction forces.
2. A contract administered by the public service company/municipality, which has been awarded to the lowest qualified bidder, based on the appropriate solicitation.
3. Inclusion in the State's highway construction contract let by the State, as agreed to by the public service company/municipality. (10% ENGINEERING AND ADMINISTRATIVES FEES CHARGED BY THE STATE ARE WAIVED)
4. An approved continuing contractor

### **C. Liability-Public Service Company/Municipality**

The public service company/municipality shall indemnify and save harmless the State of Connecticut, its officers, agents and employees from claims, suits, actions, damages, and costs of every name and description resulting from the negligent performance, negligent acts, errors or omissions in the work performed by the public service company/municipality and/or any of its subcontractors under this Agreement, including any supplements thereto, or resulting from the nonperformance of the public service company/municipality and/or any of its subcontractors of any of the covenants and specifications of this Agreement, including any supplements thereto, and such indemnity shall not be limited by reason of any insurance coverage. Unreasonable delays on the part of any public service company/municipality in relocating, adjusting, or removing its facilities, after receiving due notice from the State to do so, may make the public service company/municipality liable to the State's contractor for redress due to the delays the contractor has incurred.

#### **D. Construction Authorization for a Public Service Company/Municipality**

The advancement of utility relocation has been nationally recognized as an innovative way to maintain project schedules and reduce costs related to utility adjustments and construction costs. On most projects, the State will authorize the public service company/municipality to begin the readjustment, relocation or removal of their facilities upon the award of a State construction contract. The Public Service Company/Municipality may start its construction activities, provided two documents have been received by the public service company/municipality:

1. A Construction Agreement with an attached purchase order from the State
2. A "Notice to Proceed" with the relocation from the State on a State-advertised construction project or the city/town on a city/town-advertised construction project. The State will not participate in any eligible construction cost until the State or town issues a notice to the public service company/municipality to proceed to readjust, relocate or remove its facility.

Due to the anticipated schedule of construction activities of a project, the State may request the public service company/municipality to start their work prior to the advertising of the State construction contract. The State shall request and authorize the public service company/municipality to place an order assuring the availability of all essential construction materials that are not already in stock. The Utilities Section shall be notified in writing within ten (10) days as to when the public service company/municipality anticipates receipt of all material required for adjustment.

The Chief Engineer shall give the public service company/municipality written authorization to start its adjustment/relocation work in advance of the State's construction contractor working on the project provided an executed construction agreement and purchase order have been issued to the public service company/municipality. In these instances, the public service company/municipality shall comply with all State specifications, special provisions and/or any requirements which pertain to the project.

Under, the terms of any such authorization, it will be mandatory that the public service company/municipality notifies the State, in writing, seven (7) days prior to the start of any utility construction activities. The notification should be addressed to the appropriate District Engineer, who will be in charge of construction and who will coordinate the public service company's/municipality's activities.

When projects require FHWA authorization and rights-of-way involvement, the Department will program certain projects for advanced utility work prior to the commencement of construction. In these instances, the authorization for utility funding will be requested along with the request to appraise and acquire property. The Utilities Section Engineer will provide a written cost estimate to be included with the Right-of-Way Authorization. FHWA approval to authorize utility funding during the right of way phase will provide early obligation of utility relocation funds and will allow greater flexibility for accomplishing utility work prior to construction.

When several construction projects are proposed for a transportation corridor and/or are advertised together, the public service facility relocation work may be broken out into its own project number. The breakout is for administrative purposes to simplify the accounting and billing for the parent construction projects.

## **E. Continuing Contractor Certification**

Continuing contractors are those contractors that the public service company/municipality intends to use to perform the work. The services of a continuing contractor, certified to the State as competent to perform the work at satisfactory rates, may be used when a public service company/municipality does not have the available staff or specialized skills and/or equipment to perform the required adjustments to its facilities. Such lists shall be furnished to the State on an annual basis. Modifications, incorporating the use of additional continuing contractors on State projects, may be made at any time between annual submissions.

To qualify as a continuing contractor, the public service company/municipality must certify the following to the State:

### **1. Equipment Rates**

The maximum hourly equipment rate allowable shall be the weekly rate as set forth in the Rental Rate Blue Book, published by Primedia, including all Rate Adjustment Tables and amendments, divided by 40 hours. Any equipment charges in excess of this hourly rate will not be eligible for payment by the CDOT.

### **2. Annual Equipment List**

Annually, an equipment list and Blue Book Rates will be provided to the Department's Division of Financial Services prior to the commencement of any work. The equipment list will include equipment number, type, model, year, and capacity. The Blue Book Rate will be submitted with supporting documentation for each piece of equipment, including a reference to the section and page in the blue book.

### **3. Price Basis**

The public service company/municipality and continuing contractor agree to time and material cost or unit price for all work. Furthermore, the public service company/municipality and continuing contractor agree that, when working under the terms of the continuing contractor certification, the Lump Sum method will not be utilized for any aspect of the work in excess of Twenty-Five Thousand Dollars (\$25,000.00).

### **4. Price Quotes**

The continuing contractor will furnish acceptable quotations to the public service company/municipality for performing the work. All rates charged to the public service company/municipality for State highway work would not exceed those, which would be charged the public service company/municipality for other than State highway work.

### **5. Retention of Records**

All cost records and accounts relating to the project will be retained by the public service company/municipality and continuing contractor for a period of at least three years from the date final payment has been received by the public service company/municipality.

6. Audits

The public service company/municipality and continuing contractor agree to permit representatives of the State and the Federal Government to audit all records of the public service company/municipality and continuing contractor pertaining to State highway work for a period of three years from the date final payment has been received by the public service company/municipality.

7. Joint Ownership Prohibition

The use of the continuing contractor is done with the understanding that there is no joint ownership interest between the public service company/municipality and the continuing contractor.

**F. Cost Overruns to Public Service Company/Municipality Construction Work**

A written explanation must be provided by the public service company/municipality to the District Engineer\*/Principal Engineer\*\* when a cost overrun is encountered on a State project. The explanation shall specify the reasons for the cost overrun and state whether the increase is due to a change in the scope of the work from the outlined work in the original estimate and/or due to an increase in cost to the original work.

When a cost overrun is encountered:

1. The public service company/municipality must submit a written explanation for the cost overrun to the District Engineer\*/Principal Engineer\*\*.
2. The Project Engineer\*/District Utility Coordinator\*/Utilities Section Engineer\*\* will be responsible for the review of the overrun explanation from the public service company/municipality. If necessary, the Project Engineer/District Utility Coordinator will consult with the Utilities Section Engineer.
3. The Project Engineer\*/District Utility Coordinator\*/Utilities Section Engineer\*\* will prepare an Authorization for Acceptance of Cost Overrun Letter for signature and distribution by the District Engineer\*/Engineering Administrator\*\*.

\* Cost overruns submitted from the start date for utility construction of the project through sixty (60) days after the construction completion of the project.

\*\* Cost overruns after sixty (60) days, or more, after the construction completion date of the project.

Note: All advance utility work is considered to be in construction phase.

## **G. Emergency Work**

Emergency situations that develop at the project site may be exempt from the usual procurement process, provided that one or more of the following conditions prevail:

1. Time restrictions do not allow for competitive bidding.
2. Specialized nature of adjustments restricts the number of contractors available to perform the work.
3. Undue congestion, which would hinder the progress of the construction project, would result from the presence of two or more contractors at the site of conflict.
4. Contractors with necessary skills, labor force and equipment are immediately available at the project site.

In each such situation, written approval must be obtained from the State based on documentation submitted by the public service company/municipality, showing that the rates for performance of the emergency work are reasonable.

## **H. Incidental Work**

Incidental work is adjustments and/or relocation of public service facilities not exceeding a cost of \$30,000.00. This work shall be exempt from the requirements of the "appropriate solicitation" process, provided it can be demonstrated that the rates to be charged are reasonable.

## **I. Overtime Work**

At times, the public service company/municipality anticipates the use of overtime in order to maintain a schedule that is acceptable to the State. A justification for this overtime cost must be included in the public service company's/municipality's construction estimate. Even though the overtime has been included in the public service company's construction estimate, the public service company/municipality must obtain written authorization from the District Engineer prior to the use of the overtime; otherwise, payment will not be authorized.

In some instances, during the preliminary engineering phase, the public service company/municipality may not have anticipated the use of overtime to be incorporated into its estimate for the State. Approval for this unanticipated overtime work must be requested by the public service company/municipality in writing to the District Engineer, listing the nature of the problem, the estimated man hours involved, as well as the total estimated overtime cost. The District Engineer shall approve the overtime cost if he concurs that the requested use of overtime is in the best interests of the State. The public service company/municipality must obtain written authorization from the District Engineer; otherwise, payment will not be authorized.



## **VIII. LABOR COSTS**

### **A. General**

1. There shall be an equitable sharing of salaries, wages and related expenses paid by the public service company/municipality for individuals for the time worked on the project when supported by adequate records. This includes labor associated with preliminary engineering, construction engineering, right-of-way, and force account construction.
2. There shall be an equitable sharing of the actual cost to a public service company/municipality for the services of general engineering, legal and administrative direction for time directly worked on the project, when the work performed by the individuals is essential to the project and could have not been accomplished as economically by employees outside the overhead organization. This cost shall not exceed five percent (5%) of the total salaries and labor additives billed to a project for services of employees outside the overhead organization.
3. Under provisions of this policy, additional labor costs incurred on the construction of a portion of a public service facility, which are considered as "betterment," will not be included in the cost to be equitably shared.
4. There shall be an equitable sharing of the cost of the actual salaries and related expenses paid by the public service company/municipality to employees who are directly engaged in the billing of cost to the State, and to employees who are directly engaged in essential accounting at the site of the project.
5. The public service company/municipality shall equitably share the cost of labor surcharges and fringe benefits which it has established for the benefit of its employees. The cost of labor surcharges will be reimbursed at actual costs to the public service company/municipality at rates computed from the experience of the previous calendar year (see Appendix C).
6. Thrift and bonus accounts and weather loading shall not be considered as an eligible expense.

### **B. Insurance**

1. A public service company/municipality which is a self-insurer shall be reimbursed at experience rates properly developed from actual costs, provided that said rates do not exceed those charged by a regular insurance company for the class of employment covered.
2. The equitable sharing of the cost of workmen's compensation insurance to the public service company/municipality shall be limited to an experience rate of the salaries and wages paid to employees who are self-insurers. A public service company/municipality, which has not developed acceptable rates of self-insurance, shall be limited to a rate of three and one-half percent (3.5%).

3. The equitable sharing of the costs of public liability and property damage insurance to a public service company/municipality will be limited to a rate which is not in excess of one percent (1%) of the salaries and wages paid to employees who are self-insurers and who have not developed acceptable rates of self-insurance.

## **IX. MATERIALS AND SUPPLIES**

### **A. Procurement**

All materials and supplies required in the work to be performed by a public service company/municipality in connection with the work on a State highway project, which cannot be furnished from the stock of a public service/municipality, shall be purchased under competitive bids, except for minor quantities and proprietary products. This shall not be construed to:

1. Prohibit a public service company/municipality from purchasing materials or supplies under existing continuing contracts or practice under which the lowest acceptable prices are developed.
2. Require a public service company/municipality to change its existing standards for materials which are used in the permanent changes to its public service facilities.

### **B. Costs**

There shall be an equitable sharing of the cost of materials and supplies are as follows:

1. Items furnished from stock shall be billed at the current stock prices for new or used materials at the time of issue.
2. Items not furnished from stock shall be billed at the actual cost to the public service company/municipality, delivered to the project site. The computation of actual cost shall include the deduction of all offered discounts, rebates, and allowances.
3. A reasonable cost for plant inspection and testing may be included when such expense has been incurred.
4. The cost of rehabilitating, rather than replacing, existing public service facilities to meet the requirements of a project is reimbursable, provided this cost does not exceed replacement cost.
5. Material recovered from temporary use and accepted for reuse by the public service company/municipality shall be credited to the project at the current stock prices of such used materials. If current stock prices are not available, credit due shall be at ninety percent (90%) of the original cost.
6. For materials recovered from temporary use and not accepted for reuse by the public service company/municipality, the project shall be credited for depreciation (when facility use is greater than twelve (12) months) and for any applicable salvage or scrap value.
7. Materials recovered from permanent plant removed, which are accepted for return to stock by the public service company/municipality, shall be credited to the project at the current stock prices of such used materials. If current stock prices are not available, credit due shall be at ninety percent (90%) of the original cost.

8. Materials recovered and not accepted for reuse by the public service company/municipality shall be sold to the highest bidder, if determined to have a net sale value. If the public service company/municipality practices a system of periodic disposal by sale, credit to the project shall be at the going prices supported by the records of the public service company/municipality.
9. When a public service company/municipality retains a temporary public service installation as a permanent installation, an amount equal to ninety percent (90%) of the original cost shall be credited to the project.
10. The cost for removing, handling, and transporting materials, following release from temporary use, shall not exceed the value to be credited for the materials recovered, except for the cost of the cleanup required to leave the site of the project in a neat and presentable condition.
11. There shall be an equitable sharing of the actual and direct cost of handling and loading materials and supplies at utility stores and material yards and of unloading and handling recovered materials accepted by the utility at its stores or material yards. In lieu of actual costs of unloading and handling, average rates, which are representative of actual costs, may be used if approved by the State. Said representative rate shall not exceed ten percent (10%), of the amount billed to the project for materials and supplies issued from public service company/municipality stores or material yards or ten percent (10%) of the value of recovered material.
12. At the option of the public service company/municipality, in lieu of actual or average costs for handling, five percent (5%) of the amounts billed for the materials and supplies issued from company stores and material yards, or the value of recovered materials, shall be reimbursed.

## **X. EQUIPMENT RATES**

- A. There shall be an equitable sharing of the average or actual cost of operation, minor repair and depreciation of public service company/municipally-owned equipment.
- B. There shall be an equitable sharing of the operating cost of motor vehicles used for employee transportation at rates which the public service company/municipality has established for its own operations. Where no equipment rates have been established, the rate will be in accordance with the State of Connecticut Office of Policy and Management General Letter No. 97-1, dated November 21, 1996, or any subsequent revisions.
- C. The cost for the loss or damage to small tools on a project will not be reimbursed by the State.
- D. When insufficient data is available for the public service company/municipality to develop its own rates or the public service company/municipality chooses not to develop its own equipment rates, the State's current edition of the "Equipment Rental Rates," as modified by the latest adjustment table, shall be used for force account work only.
- E. When the public service company/municipality does not have the necessary equipment available, the equitable sharing of the cost will be limited to the amount paid the lowest qualified bidder. Under existing continuing contracts, the rental rates shall not exceed those established in the current edition of the "Rental Rate Blue Book for Construction Equipment," as modified by the latest adjustment table. The maximum hourly equipment rate allowable shall be the weekly rate set forth in the Rental Rate Blue Book, published by Primedia, including all Rate Adjustment Tables and amendments, divided by forty (40) hours. Any equipment charges in excess of this hourly rate will not be eligible for payment by the DOT.

## **XI. UTILITY BILLING PROCEDURE**

### **A. Partial Billings**

The Department of Transportation has prepared a "Utility Manual For Documenting And Billing Highway Relocation Work," that must be used as a guide for utility billing procedures. Partial billings of incurred costs may be made to the State by a utility/municipality and should be submitted to the State monthly. Payment will be made by the State for these costs, based on ninety-seven and one-half percent (97.5%) of the State's share billed, the total not to exceed 97.5% of the State's equitable share of the approved estimated cost. An authorized official of the utility/municipality bases these payments on a certification of expenditures. All the billing forms, including a general statement of the work performed, location of the project, town, State Project No., and, if applicable, the Federal Aid Project No. and Vendor Number, shall be submitted in triplicate. All billings shall be supported by the details of cost, and shall include all credits to the State. These details shall be shown on a daily basis, to permit verification by executed CON. 40 and CON. 41 forms.

A daily breakdown of labor, equipment, and materials shall be shown as follows:

#### **1. Labor**

Labor shall be shown by classification of employees, actual hours worked per day, rates per hour, and the total hours for the billing period. Overtime rates shall be designated as O.T. Expenses for subsistence and private car travel shall be shown separately. A summary of labor costs shall be shown, along with any utility-sponsored benefits, taxes, and insurance.

#### **2. Equipment**

Equipment charges are to be shown by type of equipment used, its size and capacity, the days and hours chargeable to the project, and the rates. Rented or sub-contractor's equipment chargeable to the project shall conform to the nomenclature used in the "Rental Rate Blue Book for Construction Equipment." The maximum hourly equipment rate allowable shall be the weekly rate set forth in the Rental Rate Blue Book, published by Primedia, including all Rate Adjustment Tables and amendments, divided by forty (40) hours. Any equipment charges in excess of this hourly rate will not be eligible for payment by the DOT.

#### **3. Material**

Material used shall be shown separately. A description of the material used, quantity, unit cost, amount, and the period during which the material was used shall be indicated. Minor items of material used may be shown as a percentage of major items, based upon past experience computations, provided prior written approval has been obtained from the State. The disposition of salvaged material shall be shown separately, the amounts of temporary material charged to a project, and the value recovered from temporary plant should be segregated from material salvaged from existing plant.

Billing shall be submitted on State Form No. CLA-3 in triplicate, shall be designated as "Partial Bill No. \_\_\_\_\_," and shall indicate the date of the State/utility/municipality agreement. The bill shall show the date on which the first work was performed, or on which the earliest item of billed expense was incurred, and the date on which the last work was performed. If the billing includes costs that will be reimbursed from different types of funds, the billings shall be separated, and shall be properly identified.

The letter forwarding the final billing should indicate that the State and/or the FHWA could audit the location where the records and accounts of the costs incurred. If the final billing is not submitted within six (6) months of the completion of the project by the State, the work order may be cancelled and no funds will be available for payment unless a time extension has been approved by the State.

All CON. 40 and CON. 41 forms shall be used for the daily reporting of labor, inspection, supervision or any other related on site work, as well as equipment and materials used in the work, and will be prepared by the utility, municipality. These forms must be certified by the State inspector or contracting engineer representing the State, and a representative of the utility or municipality. All CON. 40 forms shall be submitted to the State prior to billing.

A Form CON. 82 shall be used to report the start and completion of all utility work. After completion of all work for each individual utility, the District shall conduct a final inspection and submit a final CON. 82 to the Construction Administrator, Utilities Section and Audit Review Unit with a statement "Completed utility work inspected and approved on (date)."

## **B. Documentation for Utility Reimbursement**

### **1. FORM NO. CON. 40**

The Con. 40 (or an approved equivalent) shall be prepared by the utility to report the daily labor, equipment, and materials (permanently) installed within five (5) business days for review by the inspector.

A separate Con. 40 shall be furnished for each public service company/municipality and each of its subcontractors, if applicable. The inspector should be proactive to ensure the Con. 40's are submitted in a timely manner. It should be an issue discussed at coordination or progress meetings and requested in writing, if necessary.

The heading of the Con. 40 must be filled out completely and accurately. Each Con. 40 must include:

- The name of the public service company/municipality.
- The percentage complete.
- The utility subcontractor (if applicable).
- Date(s) of the work.
- The State Project Number (Federal Project Number – if applicable).

#### **a. Labor**

All labor by the utility or its representative, including inspection, engineering, supervision, traffic control, equipment operators, must be included in the Con-40.

Labor must be shown by classification of employee(s), number of employees, and total hours of work.

All overtime must be segregated from regular time and shall be clearly indicated as "O.T."

b. Equipment

Equipment must be listed by type, manufacturer, model, equipment number (if available), size or capacity, with total number of units.

The total number of hours must be reported the same as for labor. Equipment operators shall be listed under labor and not equipment.

c. Materials

All major and minor materials installed for permanent use shall be recorded on the CON. 40.

## 2. FORM NO. CON 41

The CON. 41 shall be used to report all temporary material installed, as well as temporary and existing materials removed. This report is prepared and submitted by the utility. Information reported on the CON. 41 form determines depreciation and salvage credit on permanent material as well as credits for temporary material removed. The CON. 41 is used to determine credits that are due the State.

The inspector shall compare the CON. 41, indicating temporary materials removed, to the previous CON. 40 and/or CON. 41, which list temporary materials charged to the project. The correct reporting of temporary materials used is important because the State receives ninety percent (90%) credit for materials returned to stores or temporary materials installed that the public service company/municipality chooses to retain as their permanent facility.

The CON. 41 must be filled out completely and accurately. Each Con. 41 must include:

- The name of the public service company/municipality.
- Dates of work.
- The State Project Number (Federal Project Number – applicable).
- The temporary material installed and/or materials removed.
- The disposition of removed material, i.e., junked, scrapped or material returned to stores.

### C. Final Reimbursement

Before final reimbursement is made by the State for the cost of work performed by public service company/municipality:

1. The cost records and accounts of the public service company/municipality shall be audited by a representative of the State and/or the FHWA for propriety of the charges and for determination of reimbursable actual costs.
2. Depreciation Reserve credits shall be adjusted to reflect the actual used life of a facility at the time of replacement.



3. During the audit of the records and accounts which support the billed costs, the representative of the State will discuss all items of costs to which exceptions may be taken, or on which comments may be made, with representatives of the public service company/municipality.
4. A representative from the Department of Transportation will refer one copy of the exception taken, and of comments made, directly to the public service company/municipality.
5. The public service company/municipality shall transmit one copy of its statement of explanation or rebuttal to the State within thirty (30) days following the receipt of the audit exceptions and comments, or advise the State in writing as to the date on which the statement will be transmitted.
6. Documentation supporting the position of the public service company/municipality shall be submitted within sixty (60) days following receipt of audit comments and exceptions.
7. Final payment shall be made after final audit by the State and/or the FHWA, and after all exceptions have been resolved.

**D. Experience Rates**

1. The public service company/municipality shall submit to the State, for approval, experience rates for utility sponsored benefits; general, legal, and administrative costs; vacations and holidays; workmen's compensation; payroll taxes; and public liability and property damage insurance costs.
2. The public service company/municipality-sponsored benefits must be a prerequisite of the employee and the obligation of the employing public service company/municipality to receive reimbursement.
3. The public service company/municipality shall submit to the State, for approval, a breakdown of the leading cost, showing the percentage of each benefit, prerequisite, payroll tax, and other allowances, in relation to the total direct labor payroll. Upon written approval from the State, these percentage rates shall be applied to any bill submitted by the public service company/municipality, until revised.
4. The public service company/municipality shall submit for approval each year, a new set of rates, based upon the previous year's experience. However, if a utility/municipality customarily establishes its costs on percentage rates based on the current year's experience, these rates may be used (see Appendix C).
5. In the event the public service company/municipality does not submit rates within one hundred twenty (120) days after the close of the fiscal year, an additive rate of thirty percent (30%) shall be used.

## **XII. DEFINITIONS**

"**Administrator**" means an individual who directs certain highway engineering activities within the Department of Transportation.

"**Appropriate Solicitation**" means requesting bids from a sufficient number of responsible and competent prospective bidders by public legal notice to ensure the development of the lowest acceptable prices for the materials and services required and the highest acceptable prices for the materials to be disposed of.

"**Betterment**" means that portion of the new facility which is determined to be superior to the original facility, based on greater service capability as compared to the original facility.

"**Continuing Contractor**" means a contractor regularly employed by the utility on its own work who is certified by the utility as competent to adjust its facilities on State work, at satisfactory rates.

"**Construction**" means the supervising, inspecting, actual building, and all expenses incidental to the construction or reconstruction of public service facilities, exclusive of preliminary and right-of-way acquisition.

"**Costs of right-of-way**" means the cost of, and the cost incident to, the acquisition of land or interest in land.

"**District Engineer**" means any individual who directs the highway engineering activities in one of the four districts, which the State is divided into for administrative purposes.

"**Federal Surface Transportation Urban Program roadway or facility**" means any State or locally maintained roadway or facility which is deemed eligible for Federal Surface Transportation Urban Program funding, in accordance with the Intermodal Surface Transportation Efficiency Act of 1991, all amendments thereto, and all applicable federal regulations.

"**FHWA**" means the Federal Highway Administration.

"**Limited Access Highway**" means any highway so laid out and constructed as to allow access thereto only at highway intersections or at such other locations as may be designated by the Transportation Commissioner.

"**Municipality**" means any city, incorporated village, borough, county, town, township, district or any department or subdivision thereof.

"**Public Service Facility**" means all privately, publicly or cooperatively owned lines, facilities and systems for producing, transmitting or distributing communications, cable television, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water not connected with highway drainage and any other similar commodities, including fire and police signal systems and street lighting systems which directly or indirectly serve the public.

"**Preliminary Engineering**" means and includes performing the location surveys, sinking of test holes, foundation investigations, and the preparation of plans, specifications, and estimates in advance of construction operations.

"**Reimburse,**" "**Participate**" or their derivatives where used in this Policy and Procedures, mean that State funds may be used to compensate the utility or municipality for work required by the provisions of this policy.

"**State Highway**" means all of the following: (a) State primary highways, (b) State secondary highways, (c) State special service highways, (d) interstate highways.

"**State Special Service Highway**" means a road which provides access from the primary and secondary systems of State highways to federal and State facilities.

"**State**" means the State of Connecticut, Department of Transportation.

"**Right-of-way**" means inclusion of the entire area between the right-of-way lines, which is reserved for or secured by the State for constructing the roadway and appurtenances.

"**Utility**" means a private or municipally owned facility or the owner or operator of such facility, as defined in Sections 13a-98f and 13a-126 of the 2004 Revisions of the General Statutes of Connecticut, and subsequent revisions.

"**Contaminated Facility**" means any facility that (1) is fabricated from contaminated or hazardous materials (including asbestos), (2) is found to contain contaminated or hazardous materials or residues, or (3) is otherwise determined to be contaminated through the nature of their use and the materials they have conveyed or otherwise contacted.

"**Contaminated Material**" is a general term used to describe soils, sediments, groundwater, or other materials that exhibit concentrations of regulated substances above levels generally attributed to background levels (includes polluted soil, controlled material, and hazardous material).

"**Controlled Material**" means (1) soil materials (excluding pavement, subbase, structures, utilities, and ledge/boulders) or railroad ties that contain regulated substances at concentrations exceeding numeric criteria in the Connecticut Department of Environmental Protection Remediation Standard Regulations (RSR's); (2) soil materials that cannot be reused within the project limits that contain detectable concentrations of regulated substances that are below numeric criteria in the Connecticut Department of Environmental Protection Remediation Standard Regulations (RSR's), but are above background concentrations.

"**Facility**" means any buried or partially buried pipeline, conduit, cable, communications equipment, power transmission equipment, manhole, vault, junction box or any other structure owned by any public or private utility or municipality or any appurtenances thereto.

"**Hazardous Materials**" means soil materials (excluding pavement, subbase, structures, or utilities) that exhibit characteristics or contain regulated substances at concentrations exceeding threshold values defined in the Code of Federal Regulations Title 40, Parts 261-265 (40 CFR Parts 261-265) and in Section 22a-449 of the Connecticut General Statutes.

"**Polluted Soil**" means (1) soil materials (excluding pavement, subbase, structures, or utilities) that contain detectable concentrations of regulated substances at concentrations below numeric criteria in the Connecticut Department of Environmental Protection Remediation Standard Regulations (RSR's), but are above what can be attributed to background conditions; and (2) material exhibiting evidence of contamination as determined by ConnDOT.

**“Waste Stockpile Area (WSA)”** means a facility located within the project limits that is specifically designed for the temporary storage of potentially contaminated soils or sediments generated by construction activities to enable their chemical characterization.

## APPENDIX

### A. Special Provision (Example):

#### **ITEM NO. XXXXXXXA – 8” DUCTILE IRON PIPE (SANITARY SEWER)**

**Description:** This item shall consist of the relocation of sanitary sewers at the locations shown on the plans and herein specified, and to the line and grade indicated on the plans. All piping shall be complete, including fittings, connections to existing structures, and other miscellaneous items of work.

**Materials:** Sanitary Sewer pipe shall be Class 54 ductile iron pipe with mechanical joint fittings. Crushed stone shall conform to the requirements of Article M.02.01, Granular fill to Article M.02.01.

**Construction Methods:** Sanitary sewer pipe shall be Class 54 ductile iron pipe laid at the same line and grade as the existing pipe, which shall be removed and disposed of. Pipe shall be laid in a dry trench on a min. bed of 6” of crushed stone. Backfill shall be approved granular fill compacted in 6” layers. Encase sewer pipe in concrete where shown on the drawings.

The contractor is to provide temporary bypass pumping of sewage around the construction area until work is complete.

After the sewer has been completed, the contractor shall furnish water, equipment, plugs, meters and all labor and materials necessary, and, in general, assist the engineer in conducting such leakage tests at such times and such locations as the engineer deems necessary.

The maximum rate of infiltration or exfiltration, as determined by suitable measurement procedures, shall not exceed 100 gallons per 1” of pipe diameter per 28,000’ of pipe per day, tested at a minimum head of water of 24” above the top of the pipe. Where infiltration tests are to be used, the groundwater table must be at least 24” above the top of the pipe; otherwise, exfiltration tests are to be conducted. Where a groundwater table exists, and is above the bottom of the pipe and less than 24” above the top of the pipe, exfiltration tests are to be conducted at a head equal to the pipe diameter plus 24” above the groundwater table. Piping may be tested separately from manholes, but the leakage tests will include any house service piping and chimneys.

Manholes are to be tested with the sewer or separately, as desirable, and the allowable leakage will be subject to the same limitations as the pipe.

Testing may be done using water pressures or an equivalent pneumatic pressure. In any case, suitable measuring procedures shall be employed to provide a reasonable degree of accuracy, as determined by the engineers.

The attention of the contractor is directed to the strict requirements relative to maximum rates of infiltration and to the importance of these specifications relative to tight joints required. Sewers not meeting the above requirements shall be repaired or replaced, as necessary, at the contractor's expense.

**Method of Measurement:** This work will be measured for payment by the actual number of feet completed and accepted and measured in place along the invert. Sewage bypass pumping and leakage testing shall not be measured for payment, but the cost thereof shall be included in the contract unit price per meter for the size and type of pipe being installed.

**Basis of Payment:** Sanitary sewer pipe will be paid for at the contract unit price per foot for “Ductile Iron Pipe (Sanitary Sewer)” of the type and size specified, complete in place, including the excavation, bedding material, backfill, removal and disposal of existing pipe, temporary sewage pumping, all materials, equipment, tools and labor incidental thereto.

**ITEM NO. XXXXXXXX**

**B. Calculation for Depreciation Reserve Credit (DRC) (Example):**

$$\text{DRC} = \frac{(\text{Years of Used Life of Facility (yrs.)})(\text{Original Cost of Facility})}{\text{Life Expectancy of Original Facility (yrs.)}}$$

Needed Information:

1. Original Cost of Facility.

If the Original Cost is not known, information from a current issue of "Engineering News Record" (ENR) shall be used to trend back present day construction costs.

EXAMPLE

Year of Estimate 2003      Year Installed = 1980      Life Expectancy 50 years

$$\text{Original Cost} = \frac{(\text{Average Annual Index for Year of Original Construction})(\text{Present Cost})}{\text{Average Monthly Index for Present Construction Year}}$$

$$\begin{aligned} &= \frac{(3237)(\$10,000.00)}{6538} \\ &= \$4951.05 \end{aligned}$$

2. Installation Year of Original facility
3. Life Expectancy of Original facility
4. Replacement Year

$$\text{DRC} = (23 \text{ years}) (\$4951.05) / (50 \text{ years}) = \$2,277.48$$

**C. Rates Computed from the Experience of the Previous Calendar Year (Example):**

[Eligible costs criteria contained in the Federal Acquisition Regulations 48CFR, Part 31.2.]:

- a. Authorized Absences: These shall include, but are not be limited to, vacation, holiday, sick leave, military leave and personal leave.
- b. Other Fringe Benefits: These shall include, but are not limited to, the actual cost to the utility or municipality for pension expense, hospital and major medical insurance and group life insurance.

FFF = Payroll Base, which shall be calculated as follows:

Total Payroll	XXX
Less: Overtime Premium	AAA
Other Premium payments in excess of base pay	<u>BBB</u>
	<u>CCC</u>
Total Payroll - Straight Time	DDD
Less: Vacation, Holiday, Sick Leave and Other Authorized Absences	<u>EEE</u>
Payroll Base	FFF

\*\* Authorized Absence Rate (1) =  $\frac{* \text{Authorized Absence Pay}}{\text{Payroll Base (FFF)}}$

\*\* Fringe Benefit Rate (2) =  $\frac{* \text{Cost of Fringe Benefit}}{\text{Payroll Base (FFF)}}$

\* Previous Calendar Year

\*\* 1 and/or 2 are to be applied to the straight time payroll on a project-by-project basis.



**D. A PROCEDURE FOR RETAINING A CONSULTING ENGINEER TO RENDER SERVICES IN CONNECTION WITH ADJUSTMENTS TO PUBLIC SERVICE FACILITIES AFFECTED BY STATE HIGHWAY CONSTRUCTION PROJECTS (Revised February 9, 2007) - (Document)**

**PURPOSE**

Whenever a public service company/municipality has the need for engineering services related to relocation and/ or adjustment of public service facilities which cannot be provided by its own forces, it may apply to the Transportation Commissioner for approval to retain a consulting engineer. The purpose of this guide is to establish a procedure for the authorization of a public service company/municipality to retain a consulting engineer and comply with federal regulations and State policies.

Whenever the preliminary engineering and/or construction engineering portion of the a public service company/municipality cost for the construction project is to be financed in part by the Federal Government, the Transportation Commissioner may be required to secure authorization from the U. S. Federal Highway Administration (F.H.W.A.) to permit the public service company/municipality to retain the named consultant.

Whenever a public service company/municipality desires to retain a consulting engineer under the above-mentioned circumstances, the following procedure shall be adhered to:

**Procedure**

1. The public service company/municipality shall send a letter to the attention of Mr. Sohrab Afrazi, Transportation Principal Engineer, Utilities, 2800 Berlin Turnpike, P. O. Box 317546, Newington, Connecticut 06131-7546, stating that it is confronted by a need to perform the described engineering work on the named project, and, because of a lack of staff capable of performing such work or not having a staff available for assignment, permission is requested to retain the specifically named consulting engineer.

2. The following procedure shall be followed:

The public service company/municipality will submit three (3) copies of the agreement similar to Attachment "A," for review by the State with ***Procedure 1***. The percentage for the burden, fringe and overhead (BF&O) to be used in Article 3, paragraph (a) shall be determined by the audited experience of the consultant for previous years.

- (a) The consultant engineer indicated in ***Procedure 1*** will be checked by the State against a list of State-audited firms to determine the proper percentage to be used for the required Agreement (Article 3).
- (b) If the proposed consultant has not been audited, the consultant shall provide an audit of their BF&O to the State.
- (c) The public service company/municipality will be informed by the State of the percentage resulting from (a) or (b) above.
- (d) The public service company/municipality will then prepare and execute three Agreements and submit same to the State for review.

In addition, the public service company/municipality **must submit** the following documentation to the Department:

- (e) That the selection of the consultant engineer was accomplished solely using qualification-based criteria.
- (f) That the consultant engineer's fee was not based on a percentage of the cost of relocation.
- (g) The scope of services to be provided and the negotiated fee.

***Note: The public service company/municipality may utilize an existing written continuing contract, provided it documents that the work is regularly performed for the public service company in its own work and that the costs are reasonable.***

Upon review by the State and the F.H.W.A. (if required), the public service company/municipality will be advised to proceed in accordance with the terms of the approved agreement.

3. The following attachments are required to the Agreements:

- a. Certification of payroll with named individuals employed by the consultant who will be assigned to the work, the title and hourly rate of pay of each for the periods to be covered by this Agreement.

The Certification of payroll shall read as follows:

I (Name of Company Official and Title) do hereby certify that during the period covered by this Agreement, the listed personnel are expected to be working on the items listed in Article 2 of the Agreement.

The above statement shall be dated and signed.

- b. A sketch showing location of the zone, project, or areas containing the public service facilities affected, in connection with which services of the consultant are to be rendered.
  - c. Certificate of Consultant.
  - d. Proposal estimate indicating estimated hours of each title shown under 1 above, expected to be involved in each activity listed under Article 2 of the Agreement, with a total of same.
  - e. Exhibit "A" (Administrative and Statutory Requirements) and its attachments.
4. The State will not make payment for work performed prior to a date established by the State, authorizing the employment of a consultant.
5. The State and the F.H.W.A. reserve the right to require a public service company/municipality and its consultant to provide, upon request, a resume' of experience and training of any person proposed to be assigned to the project.

6. Where practicable, the Agreement shall state that the consultant shall commence work immediately after notice to proceed and shall agree to complete the work in the time therein specified. If this cannot be defined, the Agreement shall contain a provision that the consultant shall proceed diligently with rendering all services as the development of planning and design permits.

7. Maintenance of Records

When consultant services are to be rendered for more than one project under a single Agreement, the consultant shall maintain sufficient records to show the actual cost of services for each project.

The authority for determining allowable costs under the Agreement shall be "Title 48 CFR Chapter 1, Federal Acquisition Regulation, Subparts # 31.0, 31.1, and 31.2," and State Office of Policy and Management General Letter No. "97-1," dated November 21, 1996, which are incorporated herein by reference.

The term "projects," as used above, refers to the projects that are programmed for preliminary engineering/construction engineering under procedures of the U. S. Federal Highway Administration and for which federal funds will pay a portion of the cost of consultant engineering services.

The project hereinabove referred to may or may not coincide with proposed construction projects.

The consultant will be required to maintain separate records for federal-aid non-participating work, when involved.

8. Additional Information

If a public service company/municipality or consulting engineer, after reviewing the procedures outlined above, finds that additional information is required prior to requesting authorization to retain such services, such public service company/municipality or consulting engineer may write to the State of Connecticut, at the following address.

Mr. Sohrab Afrazi  
Transportation Principal Engineer, Utilities  
Department of Transportation  
2800 Berlin Turnpike  
P. O. Box 317546  
Newington, Connecticut 06131-7546

**ATTACHMENT "A"**

**AGREEMENT  
(SAMPLE FORMAT OF AGREEMENT TO RETAIN A CONSULTANT)  
(Revised May 30, 2006)**

**THIS AGREEMENT**, entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between the (name of public service company/municipality) of (city), (state), hereinafter called the public service company/municipality, party of the first part, and (name of consulting engineer(s)), a (company-corporation-partnership) organized and existing under the laws of the State of \_\_\_\_\_, and having its principal office in (city), (state), hereinafter known as the Engineer, party of the second part:

**WHEREAS:**

The Public Service Company/Municipality has received approval by the State of Connecticut, Department of Transportation, Bureau of Engineering and Highway Operations, hereinafter referred to as the "State" to enter into an Agreement to retain an engineering consultant for design services.

**WITNESSETH: THAT,**

**ARTICLE 1.** The (name of public service company/municipality) agrees to employ the Engineer to furnish preliminary engineering and/or construction engineering services, and the Engineer, for the considerations hereinafter specified, agrees to perform and furnish the preliminary engineering and/or construction engineering services required to develop the plans, specifications and estimates essential to the adjustment of the facilities of the (name of public service company/municipality) within the area bounded by (identity by description of zone, terminal points of project, or other), specifically within State Project No. (and Federal Aid Project No., if applicable).

**ARTICLE 2. SCOPE OF PROJECT** - The preliminary engineering and/or construction engineering work and services to be provided shall include:

- a) (Be specific. Vague terms will not be accepted.)
- b) (Do not include inspection of construction.)
- c) (Do not list items which are the functions of the State to provide.)
- d) \_\_\_\_\_
- e) \_\_\_\_\_

**ARTICLE 3. PAYMENT FOR WORK** - Payment for the work stipulated in Article 2. shall be as follows:

- a) A certified payroll indicating classification and maximum hourly rate shall be attached to and made a part of this Agreement.

**NOTE:** The maximum hourly rate of pay permitted for principals is \$35.00, including Burden, Fringe, Overhead and Profit.

b) The Contracting Engineer may bill direct costs for transportation and subsistence (if applicable) in accordance with the Standard State Travel Regulations - State Manager's limiting amounts and transportation (mileage) will conform to Office of Policy and Management General Letter "97-1," dated November 21, 1996. All mileage, including that for rental cars, will be reimbursed at current rates only.

c) The estimated cost of payroll including Burden, Fringe and Overhead, as shown on the attached project proposal, is \$ [REDACTED].

d) To the certified payroll, plus Burden, Fringe and Overhead costs, shall be added a Profit of \$ [REDACTED] for work specified in Article 2.

e) The Profit will not vary with the actual cost of the work, but it may be increased by a Supplemental Agreement if the scope of the work under this Agreement is enlarged. The fee may be decreased without a Supplemental Agreement if (a) the work under this Agreement is decreased, (b) a termination occurs.

f) Overtime work, when authorized by the Public Service Company/Municipality, shall be paid for by the Public Service Company/Municipality at "straight time" rates, except when otherwise required by law or regulation, or when otherwise approved by the Public Service Company/Municipality. The surcharge for Burden, Fringe and Overhead shall be applied only to the "straight time" portion of overtime pay.

g) Direct costs related to work under Article 2, such as: (1) photographic plan reproduction, (2) plan printing, (3) travel expenses, and (4) soils, boring and analysis will be directly reimbursable by the Public Service Company/Municipality, subject to a maximum payment of \$ [REDACTED]. All direct cost must be substantiated by receipts and may not exceed the actual cost to the Contracting Engineer.

h) The total payment for work specified under this Agreement, exclusive of extra work, shall not exceed \$ [REDACTED].

**ARTICLE 4. WORK PERIOD** - The Engineer shall complete all work stipulated in Article 2 of this Agreement within [REDACTED] calendar days, commencing from the date stipulated by the Public Service Company/Municipality in a formal notice to proceed. A calendar day shall be every day of the week, Saturdays, Sundays, and holidays included.

**NOTE:** The Profit shall not exceed 15% of the estimated costs of contract, exclusive of this fee and direct costs.

The Public Service Company/Municipality may extend the allotted time from the period specified above when the work has been delayed for reasons beyond the control of the Engineer. The Engineer may present to the Public Service Company/Municipality, in writing, a request for an extension of the allotted time for completion of the work. The Public Service Company/Municipality will evaluate such requests and if the Public Service Company/Municipality determines such requests are based on valid grounds, it shall grant such extension of time for completion of the work as the Public Service Company/Municipality deems warranted. All requests for extension of time must be made prior to the time that the Engineer is in default. Decisions made by the Public Service Company/Municipality relative to the granting of extension of time shall be final and binding.

The maximum hourly rates of pay specified in the attached Schedules may be renegotiated and revised by a Supplemental Agreement if, through no fault of the Engineer; the total calendar days

specified above are exceeded by more than 180 calendar days. The revised rates shall apply only to work performed after the expiration of the total specified calendar days plus 180.

The Engineer further agrees that no charges or claim for damages or additional compensation shall be made by him for any delays or hindrances from any cause whatsoever during the progress of any portion of the services specified in this Agreement. Such delays or hindrances, if any, shall be compensated for by an extension of time for such reasonable period as the Public Service Company/Municipality may determine; it being understood, however, that permitting the Engineer to proceed to complete any services or any part of them after the date of completion or after the date to which the time of completion may have been extended, shall in no way operate as a waiver on the part of the Public Service Company/Municipality or any of its rights herein.

**ARTICLE 5. EXTRA WORK** - The Engineer shall make any revisions, additions, deletions, modifications, corrections, substitutions or changes to the plans or changes in the layout as may be ordered by the Public Service Company/Municipality or any of its duly authorized representatives at any time during the life of this Agreement. No additional payment will be made for such revisions, additions, deletions, modifications, corrections, substitutions or changes to the plans or layout, unless such changes constitute Extra Work.

Extra Work is defined as follows:

- (a) Such additional work, as ordered by the Public Service Company/Municipality, beyond the scope of this Agreement, to the extent that such work will not be reflected in the fee payment specified in this Agreement.
- (b) Such work, as shall supersede or revise completed work that has been accepted in writing by the Public Service Company/Municipality. Changes such as those to effect refinements in the designs and such as those made necessary by errors, omissions, oversight or neglect on the part of the Engineer, will not be considered Extra Work.

In the event that changes in the Engineer's proposed design are suggested, which, in the opinion of the Engineer, would result in Extra Work, the Engineer shall immediately submit complete documentation of the claim, including an estimate of the cost for the Extra Work, and refrain from working in the area while the Public Service Company/Municipality reviews the claim, or proceed otherwise if specifically directed by the Public Service Company/Municipality. If approval is denied, the Engineer shall continue to process the work without delay, and payment will be made according to the terms of this Agreement. No work, other than that for which a claim is being reviewed, shall be delayed pending a decision of the Public Service Company/Municipality.

Unless the Engineer identifies, and the Public Service Company/Municipality acknowledges, Extra Work prior to its performances, the Public Service Company/Municipality will not be obligated to consider it as Extra Work after the fact.

Classification of any work as Extra Work, and also the method of evaluation of the amount of fee to be paid for such Extra Work, shall be the function of the Public Service Company/Municipality, and the Public Service Company's/Municipality's decision shall be final and binding. Where the extent and cost of work to be performed can be determined in advance with reasonable accuracy, a mutually agreed upon fee payment may be the basis for payment. If the Public Service Company/Municipality finds that the extent and cost of work to be performed cannot be determined in advance with reasonable accuracy, the payment for Extra Work shall be determined on the basis of the cost to the Engineer for performing such Extra Work.

Extra Work costs shall be segregated by the Engineer to facilitate an audit at a later date by the State or the Federal Highway Administration.

Extra Work that results in an accumulative fee of ten percent (10%) or more of the fee included in Article 3 shall be performed and paid for under a Supplemental Agreement specifically drawn for this work.

**ARTICLE 6. RESPONSIBILITY FOR ACCURACY OF WORK** - The Engineer shall assume full responsibility for the accuracy of all products of his engineering work produced under this Agreement, including any supplements thereto, and shall indicate acceptance of said responsibility by affixing his signature and Connecticut Professional Engineer's Seal on the Title Sheet(s) of all plans, designs, and/or documents so produced. Each partner listed herein shall be registered as a Professional Engineer in Connecticut throughout the life of this Agreement, including any supplements thereto, all in accordance with existing Statutes of the State of Connecticut and the regulations of the State Board of Registration for Professional Engineers and Land Surveyors.

With prior written approval of the Public Service Company/Municipality, the Consulting Engineer shall retain a Connecticut registered Land Surveyor License, either as a member of his organization or as an independent subcontractor to perform and accept complete responsibility for all survey operations required under this Agreement, including any supplements thereto, all such performance being in strict conformance to all specifications and requirements established herein. Said Connecticut registered Land Surveyor shall assume full responsibility for the accuracy of all products of his surveying work produced under this Agreement, including any supplements thereto and shall indicate acceptance of said responsibility by affixing his signature and Connecticut Land Surveyor's Seal on the Title Sheet(s) of all maps, plans, and/or other documents so produced.

**or**

**ARTICLE 6. RESPONSIBILITY FOR ACCURACY OF WORK** - The Engineer shall assume full responsibility for the accuracy of all products of its work under this Agreement and shall so indicate by affixing the Connecticut Certificate of Registration Number for the Corporate Practice of Engineering **by a corporation or limited liability company** on the Title Sheet(s) of all plans and/or documents, as well as the signature and Connecticut Professional Engineer's seal of the individual(s) in charge of the work performed under the terms of this Agreement. Each individual listed on the said **Connecticut** Corporate Certificate of Registration as an engineer or land surveyor **for a corporation or limited liability company**, or so listed on the subsequently amended Corporate Certificate of Registration, shall be registered as a Professional Engineer or Land Surveyor (whichever is appropriate) in Connecticut, throughout the life of this Agreement including any supplements thereto, all in accordance with existing Statutes of the State of Connecticut and the regulations of the State Board of Examiners for Professional Engineers and Land Surveyors.

With prior written approval of the Public Service Company/Municipality, the Engineer shall retain a Connecticut registered land surveyor, either as a member of his organization or as an independent subcontractor to perform and accept complete responsibility for all survey operations required under this Agreement, including any supplements thereto; all such performance being in strict conformance to all specifications and requirements established herein. The Engineer shall assume full responsibility for the accuracy of all products of his surveying work produced under this Agreement, including any supplements thereto, and shall indicate acceptance of said responsibility by affixing the Connecticut Certificate of Registration number for the Corporate Practice of Land Surveyors **by a corporation or limited liability company**, as well as the signature and Connecticut Land Surveyor's Seal of the

individual(s) in charge of the work performed, on the Title Sheet(s) of all maps, plans, and/or documents so produced.

**ARTICLE 7. RESPONSIBILITY FOR CLAIMS AND LIABILITY** - The Engineer shall indemnify and save harmless the Public Service Company/Municipality, the State of Connecticut, its officers, agents, and employees from claims, suits, actions, damages, and costs of every name and description resulting from the negligent performance, negligent acts, errors or omissions in the work performed by the Engineer and/or any of its subcontractors under this Agreement, including any supplements thereto, or resulting from the nonperformance of the Engineer and/or any of its subcontractors of any of the covenants and specifications of this Agreement, including any supplements thereto, and such indemnity shall not be limited by reason of any insurance coverage.

**ARTICLE 8. CONDITIONS FOR SUBCONTRACT OF WORK** - The Engineer shall not subcontract any portion of the work required for the completion of this Agreement without the written approval of the Public Service Company/Municipality. The form of the Subcontractor's Agreement shall be as developed by the Engineer and approved by the Public Service Company/Municipality. The Engineer shall furnish to the Public Service Company/Municipality, certification of Public Liability and Property Damage Insurance Coverage, including the use of motor vehicles, for the operations to be performed by subcontract. Any work subcontracted by the Engineer will be paid for by the Public Service Company/Municipality at the actual cost to the Engineer with no additions.

**ARTICLE 9. COVENANT AGAINST CONTINGENT FEES** - The Engineer shall warrant that he has not employed or retained any company or person other than a bona fide employee working solely for the Engineer to solicit or secure this Agreement and that he has not paid or agreed to pay any company or person, other than bona fide employees working solely for the Engineer, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this Agreement. For breach or violation of the above stipulation, the Public Service Company/Municipality shall have the right to annul this Agreement without liability or in its discretion to deduct from the agreed price or consideration or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee.

**ARTICLE 10. OWNERSHIP OF ENGINEERING DOCUMENTS** - The Engineer shall agree that all products of the work under the terms of this Agreement shall become and remain the property of the State. This shall include all partially completed work in the event that the Agreement is terminated before completion for any reason.

**ARTICLE 11. PRE-QUALIFICATIONS AND RIGHT OF REMOVAL** - The Public Service Company/Municipality reserves the right to pre-qualify every employee of the Engineer and the subcontractor(s) working on this project and the salary classification of each. The Public Service Company/Municipality further reserves the right to require removal from the project, any person or persons employed by the Engineer or subcontractor(s) performing services under this Agreement who in the opinion of the Public Service Company/Municipality has himself misconducted or is incompetent or negligent in the due and proper performance of his duties or who neglects or refuses to comply with the requirements of this Agreement.

**ARTICLE 12. ADMINISTRATIVE AND STATUTORY REQUIREMENTS** - The Engineer shall comply with the provisions contained in Exhibit "A" entitled "Administrative and Statutory Requirements" (including attachments), a copy of which is attached and hereby made part of this agreement.



**ARTICLE 13. AUDIT PROCEDURE** - The Engineer agrees to permit the State, the U. S. Department of Transportation and the Comptroller General of the United States, or any of their duly authorized representatives to inspect and audit all data and records of the Engineer or its subcontractors relative to the Engineer's performance under this Agreement.

**ARTICLE 14. RETENTION OF RECORDS** - The Engineer agrees that it shall preserve all of its records and accounts concerning the implementation of this Agreement for a period of three (3) years after final payment under this Agreement. If any litigation, claim or audit is started before the expiration of the three (3) year period, the records shall be retained until all litigation, claims, or audit findings involving the records have been resolved.

**ARTICLE 15. ALLOWABLE COSTS** – The authority for determining allowable costs under the Agreement shall be “Title 48 CFR Chapter 1, Federal Acquisition Regulation, Subparts # 31.0, 31.1, and 31.2.”

#### **ARTICLE 16. INSURANCE**

With respect to the operations performed by the Engineer under the terms of this Agreement and also those performed for the Engineer by its subcontractors, the Engineer will be required to carry for the duration of this Agreement, and any supplements thereto, with the State being named as an additional insured party for paragraphs (A) and (B) below, the following minimum insurance coverages at no direct cost to the State. In the event the Engineer secures excess/umbrella liability insurance to meet the minimum requirements specified in paragraphs (A) and/or (B) below, the State of Connecticut shall be named as an additional insured.

#### **COMMERCIAL GENERAL LIABILITY**

The Engineer shall carry Commercial General Liability Insurance, including Contractual Liability Insurance, providing for a total limit of One Million Dollars (\$1,000,000) for all damages arising out of bodily injuries to or death of all persons in any one accident or occurrence, and for all damages arising out of injury to or destruction of property in any one accident or occurrence, and subject to that limit per accident, a total (or aggregate) limit of Two Million Dollars (\$2,000,000) for all damages arising out of bodily injuries to or death of all persons in all accidents or occurrences and out of injury to or destruction of property during the policy period.

#### **AUTOMOBILE LIABILITY**

The operation of all motor vehicles, including those hired or borrowed, used in connection with this Agreement, shall be covered by Automobile Liability Insurance providing for a total limit of One Million Dollars (\$1,000,000) for all damages arising out of bodily injuries to or death of all persons in any one accident or occurrence, and for all damages arising out of injury to or destruction of property in any one accident or occurrence. In cases where an insurance policy shows an aggregate limit as part of the automobile liability coverage, the aggregate limit must be at least Two Million Dollars (\$2,000,000).

#### **VALUABLE PAPERS INSURANCE**

The Engineer shall secure and maintain a Valuable Papers Insurance Policy at no direct cost to the State until the complete design has been accepted by the State, and all original tracings, highway and bridge design computations, survey data, documents or data will have been returned to the State. This will assure the State that all records, papers, maps, statistics, survey notes, all tracings, highway and bridge design and other data or documents will be re-established, recreated, or restored if made

unavailable by fire, theft, or any other cause. When survey data is furnished by the State, it shall retain in its possession, duplications of all survey plans and field notes. The Engineer shall retain in his possession, duplications of all products of his work under this Agreement if and when it is necessary for the originals to be removed from his possession during the time that this policy is in force. This policy shall provide coverage in the amount of Seventy-Five Thousand Dollars (\$75,000) when the insured items are in his possession and in the amount of Twenty Thousand Dollars (\$20,000), regardless of the physical location of the insured items.

**PROFESSIONAL LIABILITY INSURANCE**

The Engineer shall secure and maintain at no direct cost to the State, a Professional Liability Insurance policy for errors and omissions in the minimum amount of (*AMOUNT BASED ON CONSTRUCTION COST TABLE*). The Engineer shall obtain the appropriate and proper endorsement to its Professional Liability Policy to cover the Indemnification clause in this contract as the same relates to negligent acts, errors, or omissions in the work performed by the Engineer. The Engineer may, at his election, obtain a policy containing a maximum (*AMOUNT BASED ON CONSTRUCTION COST TABLE*) deductible clause, but if he should obtain a policy containing such a clause, the Engineer shall be liable, as stated above herein, to the extent of the deductible amount. The Engineer shall continue this liability insurance coverage for a period of three (3) years from the date of acceptance of the completed design or work subject to the continued commercial availability of such insurance.

It is understood that the above insurance may not include standard liability coverage for pollution and/or environmental impairment. However, the Engineer agrees to acquire and maintain pollution and environmental impairment coverage as part of this Professional Liability Insurance if such insurance is applicable to the work performed by the Engineer under this agreement as soon as such coverage is available.

Failure of the Engineer to maintain insurance coverage in accordance with the terms of the agreement shall constitute a violation of the agreement and shall subject the Engineer to liquidated damages in the amount of ten percent (10%) of the total contract price, subject to the continued commercial availability of such insurance.

**PROFESSIONAL LIABILITY INSURANCE**

**CONSTRUCTION COST TABLE**

The following chart will be used as a guide to determine the minimum amount of Professional Liability Insurance and maximum deductible necessary for the Engineer's Agreements pertaining to design or construction inspection:

<b><u>Construction Cost</u></b>	<b><u>Minimum For Projects With Bridges</u></b>	<b><u>Minimum For Projects Without Bridges</u></b>	<b><u>Maximum Deductible</u></b>
\$0 to \$1,000,000	\$500,000	\$250,000	\$100,000
\$1,000,000 to \$3,000,000	\$500,000	\$500,000	\$100,000
\$3,000,000 to \$10,000,000	\$750,000	\$500,000	\$250,000
\$10,000,000 to \$25,000,000	\$1,000,000	\$750,000	\$250,000
\$25,000,000 to \$50,000,000	\$2,000,000	\$1,000,000	\$250,000
\$50,000,000 to \$100,000,000	\$3,000,000	\$1,500,000	\$250,000
Over \$100,000,000	\$4,000,000	\$2,500,000	\$500,000

**ARTICLE 17. TERMINATION CLAUSES** - The Public Service Company/Municipality, by written notice to the Engineer, may suspend, postpone, abandon, or terminate this Agreement for the convenience of the Public Service Company/Municipality, for violation by the Engineer of any provision contained in this Agreement, or for any failure by the Engineer to render to the satisfaction of the Public Service Company/Municipality, the services required under this Agreement, including any failure to make acceptable progress with work required under this Agreement. Such action on the part of the Public Service Company/Municipality shall in no event be deemed a breach of contract. Upon receipt of written notification from the Public Service Company/Municipality that this Agreement is to be suspended, postponed, abandoned, or terminated, the Engineer shall immediately cease operations on work required under this Agreement. Upon receipt of written notification that this Agreement is to be abandoned or terminated, the Engineer shall also immediately assemble all materials which are in its possession or custody and which have been prepared, developed, furnished, or obtained under the terms of this Agreement, and shall transmit the same, together with the Engineer's evaluation of the cost of the work performed, to the Public Service Company/Municipality, on or before the fifteenth day following the receipt of written notice of abandonment or termination. Said materials shall include, but not be limited to, documents, plans, computations, drawings, notes, records, and correspondence. Upon receipt of these materials, the Public Service Company/Municipality shall make settlement with the Engineer in one of the following manners:

(a) If the Public Service Company/Municipality terminates this Agreement for its convenience, the Public Service Company/Municipality shall make an equitable adjustment of the contract price, but in so doing, shall include no payment or other consideration for anticipated profit on unperformed services.

(b) If the Public Service Company/Municipality terminates this Agreement because the Engineer has failed to fulfill its obligations under the Agreement, the Public Service Company/Municipality may complete the work required hereunder by contracting with another party or by any other means, and the Engineer shall be liable for any additional costs incurred by the Public Service Company/Municipality in so doing.

(c) If the Public Service Company/Municipality, after terminating the Engineer for alleged failure to fulfill its obligations under this Agreement, determines that the Engineer has not failed to fulfill those obligations, the rights and remedies of the parties shall be the same as if the Public Service Company/Municipality had terminated the Agreement for convenience.

In determining the basis for such equitable settlement for items (a), (b), and (c), as indicated above, the Public Service Company/Municipality shall take into account any monies owed the Engineer for work previously performed under this Agreement, less any payments previously made for said work, and the amount of reimbursable expenses incurred by the Engineer, less any payments previously made, to reimburse the Engineer for those expenses.

The Engineer agrees to accept the Public Service Company's/Municipality's valuation of the work performed under this Agreement, and the Public Service Company/Municipality will not be liable for any profit that the Engineer expected or might have expected to make on portions of the Project work that have not been performed.

If postponement, suspension, abandonment, or termination is ordered by the Public Service Company/Municipality because it lacks sufficient funding to complete or proceed with the Project, the Engineer may not make a claim against the Public Service Company/Municipality in any form or forum for loss of anticipated profit or for any other reason related to the Project or this Agreement.

The rights and remedies of the Public Service Company/Municipality under this Article are in addition to any other rights and remedies that the Public Service Company/Municipality may possess by law under this Agreement.

Decisions of the Public Service Company/Municipality on matters discussed in this Article shall be final or binding.

**ARTICLE 18. CERTIFICATE OF CONSULTANT** - The attached Certificate of Consultant is made a part of this Agreement.

**ARTICLE 19. AGENT FOR SERVICE OF PROCESS** - The Engineer agrees that the Secretary of State of the State of Connecticut or his/her successor in office is appointed as agent for service of process, for any action arising out of or as a result of this Agreement; such appointment to be in effect throughout the life of this Agreement, including any supplements thereto, and six (6) years thereafter. (To be used only if the Engineer is organized Outside the State of Connecticut.)

**ARTICLE 20. STATE APPROVAL** - It is understood and agreed to by the principals to this Agreement that the Agreement is subject to approval by the State Transportation Commissioner before becoming a valid Agreement between parties of the first and second parts, and that the State's liability under this Agreement is limited to \$ [REDACTED] as outlined in Exhibit # [REDACTED]. Anticipated expenditures beyond the \$ [REDACTED] must receive prior approval from the State by an Amendment to the State/Public Service Company/Municipality Agreement. It is the intention of the parties hereto to be legally bound by this Agreement.

**ARTICLE 21. REVISIONS IN ORGANIZATION OF CORPORATION** – That the Consulting Engineer shall notify the Public Service Company/Municipality in writing when there is a change in its **Connecticut** Certificate of Registration for the Corporate Practice of Engineering or Land Surveying **by a corporation or limited liability company** in the State of Connecticut or a change in the individual(s) in charge of the work specified herein. Neither change shall relieve the Consulting Engineer of any responsibility for the accuracy and completeness of all products of the work under this Agreement, including **any** supplements thereto.

**OR**

**ARTICLE 22. REVISIONS IN ORGANIZATION OF PARTNERSHIP** – That the Consulting Engineer, on written notice by the Public Service Company/Municipality of changes in the partnership structure of the organization, may enter into a Supplemental Agreement with the new partners providing releases are provided to the Public Service Company/Municipality from the former partner, or partners, stating that he/she has been compensated in full for all work performed under the terms of this Agreement and a financial statement is submitted showing that solvency of the partnership is maintained. The death of a partner shall not release the partnership from the performance of this Agreement and the remaining functions must be performed by the surviving partner(s) until the terms of this Agreement are fully executed. The withdrawal of any partner from the partnership shall not relieve him from his liability for performance of this Agreement.

**IN WITNESS WHEREOF**, the parties hereto, through their duly authorized officials, have executed this Agreement on the day and year indicated:

**WITNESSES:**

*(NAME OF PUBLIC SERVICE COMPANY/  
MUNICIPALITY)*

Sign: \_\_\_\_\_  
Print:

By: \_\_\_\_\_ (Seal)  
Name:  
Title:

Sign: \_\_\_\_\_  
Print:

Date: \_\_\_\_\_

*(NAME OF CONSULTANT)*

Sign: \_\_\_\_\_  
Print:

By: \_\_\_\_\_ (Seal)  
Name:  
Title:

Sign: \_\_\_\_\_  
Print:

Date: \_\_\_\_\_

**CERTIFICATION OF CONSULTANT**

I hereby certify that I am \_\_\_\_\_ (Title) , a duly authorized representative of the firm of \_\_\_\_\_, whose address is \_\_\_\_\_, and that neither I nor the above firm I hereby represent has:

- (a) Employed or retained for a commission, percentage, brokerage contingent fee, or other consideration, any firm or person (other than a bona fide employee working solely for me or the above consultant to solicit or secure this agreement);
- (b) Agreed, as an express or implied condition for obtaining this agreement, to employ or retain the services of any firm or person in connection with carrying out the agreement; or
- (c) Paid, or agreed to pay, to any firm, organization or person (other than a bona fide employee working solely for me or the above or in connection with, procuring or carrying out the agreement).

I acknowledge that this certificate is to be furnished to the Connecticut Department of Transportation, Bureau of Engineering and Highway Operations, and the Federal Highway Administration, U. S. Department of Transportation, in connection with this agreement involving participation of federal-aid highway funds, and is subject to applicable State and Federal laws, both criminal and civil.

\_\_\_\_\_  
*(Date)*

\_\_\_\_\_  
*Signature*

**CERTIFICATION OF THE PUBLIC SERVICE COMPANY/MUNICIPALITY**

I hereby certify that I am \_\_\_\_\_ (Title) and that the above consulting firm or its representative has not been required, directly or indirectly as an express or implied condition in connection with obtaining or carrying out this agreement to:

- (a) Employ or retain, or agree to employ or retain, any firm or person, or
- (b) Pay, or agree to pay, to any firm, person, or organization, any fee, contribution, donation, or consideration of any kind.

I acknowledge that this certificate is to be furnished the Federal Highway Administration, U. S. Department of Transportation, in connection with this agreement involving participation of federal-aid highway funds, and is subject to applicable State and Federal laws, both criminal and civil.

\_\_\_\_\_  
*(Date)*

\_\_\_\_\_  
*Signature*

**EXHIBIT "A"**

**ADMINISTRATIVE AND STATUTORY REQUIREMENTS**

**(Revised August 11, 2008)**

*It is agreed that, as used in Exhibit "A," attached hereto, the following words shall mean "the Engineer":*

□ *"Public Service Company/Municipality" in  
ADMINISTRATIVE AND STATUTORY REQUIREMENTS,  
Pages 1 through 6*

*SPECIAL PROVISIONS-DISADVANTAGED AND WOMEN BUSINESS ENTERPRISES  
AS SUBCONTRACTORS AND MATERIAL SUPPLIERS OR MANUFACTURE FOR FEDERAL AND/OR  
STATE FUNDED PROJECTS INVOLVING UTILITY ADJUSTMENT AND RELOCATIONS,  
Pages 1 through 4*

□ *"Second Party" in APPENDIX-CR (ED061077)*

□ *"Contractor" in  
STATE OF CONNECTICUT-EXECUTIVE ORDER NUMBER 3*

*GUIDELINES AND RULES OF STATE LABOR COMMISSIONER IMPLEMENTING GONERNOR'S  
EXECUTIVE ORDER NUMBER 3*

*STATE OF CONNECTICUT-EXECUTIVE ORDER NUMBER 17*

*CONNECTICUT DEPARTMENT OF TRANSPORTATION-POLICY STATEMENT  
POLICY NO. ADMIN. 19*

□ *"Company" in CONNECTICUT REQUIRED CONTRACT/AGREEMENT PROVISIONS  
April 6, 1994, Pages 1 through 5*