



**7-02.1 GENERAL.** The Missouri Highways and Transportation Commission has established criteria for the uniform handling and the desired location or relocation of utility facilities on the right of way for each type of highway in the state highway system. This policy is intended to provide maximum safety to the highway user, to preserve the traffic-carrying capacity of the highways and to minimize interference with maintenance.

The principles set forth in the policy apply to all public and private utilities, including power transmission, telephone, telegraph, water, gas, oil petroleum products, steam, sewer, drainage and other facilities. Such utilities involve underground, surface or overhead facilities, either singly or in combination. The policy applies to utilities located on right of way owned or leased by the utility owners and to utilities on existing public streets, roads and highways which are being included in new highway right of way. It is not the intent of the policy to impose restrictions on future installations of utility crossings to the extent that it would obstruct the development of areas adjacent to the highways.

This policy does not apply to utilities to service facilities required to operate the highways.

The policy is contained in [Subsection 7-03.1](#).

**7-02.2 LOCATION OF EXISTING UTILITIES.** The review of existing utilities on a proposed improvement and the determination of the necessity of adjustment is the responsibility of the district with assistance from Central Office Design.

The location of existing utilities should be established by a field survey and shown on the roadway plans. Early contact with local utility representatives may be necessary to accurately locate underground facilities.

**7-02.3 REQUEST FOR UTILITY ADJUSTMENT PLAN.** [Figure 7-02.1](#) is a flow diagram for project specific utility adjustments. The flow diagram has fewer stops when the Master Reimbursable Utility Agreement (MRUA) has been signed. (See [Figure 7-02.2](#) for MRUA process and [Figure 7-02.3](#) for MRUA flow chart). Roadway plans are furnished to utility companies (includes cities, water and sewer districts and other quasi-public bodies) for use in planning required utility adjustments. They should be transmitted by letter so that the utility is informed whether the adjustment costs are to be borne by the utility, the state or shared by both parties. If any part is reimbursable, they should be advised, with each submittal that (1) they are authorized to proceed with preliminary engineering with their own personnel; (2) replacement right of way or easements cannot be purchased without specific approval and authorization; (3) NO WORK of actually adjusting or relocating their facilities to accommodate the proposed highway improvement SHOULD BE PERFORMED; (4) COSTS, except for "preliminary engineering", for work performed in advance of date of written authorization to proceed will not qualify for reimbursement; and (5) that they may employ a consultant to do this work provided they request and obtain PRIOR approval. If the utility uses option No. (5), their request should be forwarded to the Office of Audits and Investigations in accordance with the latest policy on prenegotiation reviews for approval and must contain the following information:

- A statement that they are not staffed or able to perform the preliminary and/or construction engineering with their own personnel.
- A statement describing the process used to select the consultant; or, if a consultant is to be employed under a "continuing contract," a copy of such contract will be supplied.
- The name and address of the consultant they desire to employ.
- The consultant's fixed (lump sum) or estimated fee (actual cost) and the contract maximum.
- A cost summary providing a detailed breakdown of the basis for the consultant's compensation, including estimated labor hours, hourly rates for each classification, overhead rate (if used), the amount of profit charged, and any other estimated charges such as travel expenses, telephone etc. If an overhead rate is used, the consultant must also submit the supporting overhead rate calculations.
- An estimate of the cost of the utility adjustment provided in as much detail as possible (it being understood that this is only an intelligent estimate similar to what the consultant would use when furnishing their usual proposal

for engineering services).

- A statement that the "Certification of Consultant" will be furnished immediately upon award of the contract to the consultant, or if the request is for the use of a consultant employed by the utility under a "continuing contract", the "Certification of Consultant" is furnished with the request. The "Certification of Consultant" is shown in [Figure 7-02.4](#).
- A copy of the continuing contract shall be kept in the District Utilities Engineer's (DUE's) file.

Normally it is advantageous to suggest a corridor plan of relocation to the company for adjustments required to their facilities. Proper coordination and use of available right of way with other utility facilities could thus be more readily accomplished. Detailing should be left to the company to avoid department liability.

Timely follow-ups and close communication with involved utilities will be necessary in order to insure timely submittals of relocation plans.

**7-02.4 PROPOSED UTILITY ADJUSTMENT PLANS.** It is preferred that utility relocations or adjustments be shown on our roadway plan and profile sheets or special utility sheets which should be furnished to the utility for their use. If the utility desires to prepare plans similar to those used for their own work, these plans must contain a legend on the first sheet identifying the utility symbols used and must show the existing facilities, their disposition, the location of the new or adjusted facilities, the existing and new right of way lines, the limited or fully controlled access symbols (where applicable), the existing and proposed roadways, ramps, and outer roadways and any other pertinent roadway information. The width of right of way at the time of construction of the original utility facility is most important in determining the proportionment of cost. Relocated and/or existing facilities that will remain in place must be dimensioned or indicated in a manner to show their location in respect to the right of way lines.

Plans received from the utility company are to be checked for compliance with the applicable policy, standards and regulations contained in [Section 7-03](#). They are also checked to insure compatibility with the roadway design. Any conflicts are worked out through negotiations with the utility.

Occasionally it is impractical to locate in accordance with policy requirements and the utility requests approval of a plan of adjustment that does not conform with the policy. Deviation from the Utility Policy is a variance. The DUE should review the proposal and if it can be recommended for approval, follow the procedure outlined in the flow chart depicted in Fig. 7-02.21, using the variance checklist, Fig 7-02.22. If the variance is approved, furnish one copy of the request, variance approval form, Fig 7-02.23, along with approval justification to Central Office Design.

**7-02.5 COST RESPONSIBILITY.** The division of cost is determined under the provisions of [Subsection 7-03.2](#).

Adjustments determined to be the sole cost of the utility are to be completed under the terms of a permit issued by the district. A "Waiver of Hearing" statement, as shown in [Figure 7-02.6](#), is to be obtained for each adjustment that is the sole cost or partial cost of the utility.

Adjustments determined to be partially or entirely reimbursable are to be completed under the terms of an agreement executed between the Commission and the utility. Agreements are prepared in accordance with [Subsection 7-02.9](#).

All such utility adjustment work, whether by permit or agreement, is to be inspected by the district and the location recorded on the final plans of the project.

**7-02.6 RIGHT OF WAY.** The Commission is obligated to acquire only that width of right of way required by the design standards for each highway classification. When utility facilities are located on company's private right of way, the company may obtain its own new easements. A determination should be made in the planning stage whether these easements can be readily obtained. If the company cannot negotiate or by company policy will not condemn, the easement can be acquired by the Commission in the same manner that the roadway right of way is being obtained. Every effort should be made to establish the need for the Commission to obtain these easements prior to final negotiations or filing of the plans for condemnation. The company may request that the Commission obtain the replacement easements. Central Office Right of Way should be asked to acquire them.

It is possible that the utility is located on private land without written easement rights. The Commission will honor

this oral right provided acceptable documentation is furnished to Central Office Design. An example of acceptable documentation is shown in [Figure 7-02.7](#). Other forms of documentation will be considered on an individual basis.

Replacement right of way is reimbursable, providing it is included in the plan and estimate supporting the agreement and that the purchase is made either after specific authority is given to purchase right of way or after authorization to proceed with all adjustment work is given. If the company desires, or needs to purchase the right of way prior to the state being able to authorize it as part of the utility adjustment work, the request is to be made, to the district office. The review and approval process is described in [Figure 7-02.18](#). The request is to be supported with two copies of a plan showing the existing location and proposed location of the company's facilities and an estimate of the right of way cost.

Occasionally, when negotiations cannot be completed for utility easements and adjustment of utility facilities, it will become necessary to resort to condemnation to resolve matters. Procedures established jointly with Central Office Right of Way and district personnel (R/W – DUE) require coordination of overlapping responsibilities. District right of way personnel, prior to filing condemnation proceedings for the project, will inquire on the status of utility adjustments. At that time the district must make the decision whether or not it will be necessary to include the utility company in these condemnation proceedings. This decision will require the exercise of good judgment in reaching the conclusion that further negotiations are futile and condemnation is necessary to maintain the scheduled letting.

Easement and other right of way documents used with utility companies are handled in accordance with procedures established jointly with Central Office Right of Way and district personnel (R/W – DUE).

Land descriptions for use in utility easements are prepared by district right of way personnel. The District Utilities Engineer is responsible for the completion of the easements in the correct form and scope. A sketch delineating the area described is attached to the easement for reference purposes only and is generally not to be recorded. This sketch may be very helpful in computing the proportionment of costs for future adjustments that may be required. Communication with Central Office Design will ensure use of proper forms, corporate names and locations, and particular wording required in joint ownerships. The description for utility easements is to be referenced to the nearest land corner shown on the plans. Easements can be found on the CCO's intranet website under the contracts link on the left side of the site, then "DE", "Utility" (<http://wwwi/intranet/cc/contracts.asp?f=DE/Utility&nav=>).

**7-02.7 SERVICE LINES OWNED BY PROPERTY OWNERS.** When a proposed project requires utility company-owned facilities to be adjusted or relocated, the service lines may require adjustment also. The Missouri Highways and Transportation Commission will pay to adjust the property owner's service lines located on existing right of way. For residents living within the boundaries of St. Louis County, the Commission will seek reimbursement from the St. Louis County Water Line Capital Improvement Program for adjustment of service lines supplying four (4) or fewer residential units as specified in Section 66.405, RSMo 2000.

Adjustment of service lines owned by property owners is included in roadway contracts. Bid items for relocating service connections are provided for the different types of anticipated adjustments. See [Figure 7-02.9](#) for a list of utility companies who do not own the service line from their main lines. This list is subject to change and GHQ Design should be advised of additions or deletions to this list.

**7-02.8 NOTICE OF HEARING.** When relocation or other problems with utility facilities on public right of way arise which prevent resolution by negotiation, formal hearings will be required.

Requests for a utility relocation hearing is to be initiated by the district by letter to the Chief Counsel's Office, with a copy to Central Office Design, requesting a hearing date. The Chief Counsel's Office will arrange for a hearing room, court reporter, etc. and advise the district of the hearing date.

The district will prepare the notice of hearing by strictly following the format shown in [Figure 7-02.16](#) and serve the notice on all persons and utility owners listed. The property and utility owner must be served only by personal service or by mailing a certified letter, return receipt requested, no later than 15 days before the date of hearing. This will require the district to make every effort to identify the correct property owner before preparing the notice of hearing. In order to avoid delays, every attempt should be made to issue the hearing notice at least 30 days prior

to the hearing date in case any property has changed ownership and an additional property owner must be served. A notice of hearing on service line connections should also be served on the private or public owner of the main or distribution line to which the service lines are connected. A notarized "Report of Personal Service", as shown in [Figure 7-02.17](#) is to be completed when notification by certified mail is not used.

One copy of the hearing notice and attachments, "Report of Personal Service" and certified mail notices are to be submitted to the Chief Counsel's Office after notification is complete.

Prior to the hearing, the district's representative should become familiar with the details of the utility adjustment in order to provide concise testimony and expedite the hearing process. The Chief Counsel's Office will assign an attorney to work with the district and present the case.

#### 7-02.9 AGREEMENTS.

**7-02.9 (1) GENERAL.** Standard Utility Agreements have been approved by the Chief Counsel's office. They can be found on the CCO's intranet website under the contracts link on the left side of the site, then "DE", "Utility" (<http://wwwi/intranet/cc/contracts.asp?f=DE/Utility&nav=>). They are identified in the upper left hand corner of each agreement such as CCO Form: UT1 (Master Reimbursable Utility Agreement). These agreements are updated by Chief Counsel as necessary. These are to serve as a guide in the preparation of the agreement to be executed with the utility company for the adjustments required to their facilities to accommodate the highway construction. Be sure you have the latest revisions before sending a copy to the company. See [Figure 7-02.8](#) for a list of utility agreements. The DUE should encourage utility companies to use Master Reimbursable Utility Agreement. (See [Figures 7-02.2 - MRUA Process](#) and [7-02.3 - Flow Diagram - Utility Adjustments for MRUA.](#))

It is intended and desired that these forms be copied word for word. Revisions or additions are made to cover the specific details. The intent of each paragraph should be retained, although the words are revised to fit the situation. No paragraphs are deleted without prior approval from CCO. Drafts of agreements having major revisions or complications are to be submitted, with supporting data, to Central Office Design for comment and approval.

The reference to Federal-Aid Policy Guide, (FAPG 23 CFR 645A) and the FHWA is included in all agreements. Utility companies should be acquainted with these requirements and procedures and the incorporation of FAPG 23 CFR 645A by reference in all agreements eliminates the need for and confusion of a second set of regulations.

The agreement for the adjustment of a utility is prepared by the district and submitted to the company for execution. The agreement shall be signed, sealed and notarized by the utility. If they do not have or use a corporate seal, write "NO SEAL" under the company signatures. The agreement is based on the company's plan and estimate of cost which were prepared in accordance with FAPG 23 CFR 645A. Exhibit "A" referred to in the agreement is the company's plan of adjustment. Exhibit "B" is the estimate of cost with supporting statements as prepared by the company. A minimum of three copies of each agreement are to be executed by the company or municipal officials and forwarded to the Chief Counsel's Office for further handling. Agreements with cities are to be supported by city ordinance, a copy of which is to be submitted with the executed agreements. One fully executed copy of the agreement will be retained in Central Office Design's files. The remaining fully executed agreements will be returned to the district after approval. Copies of the executed agreements should be forwarded to district construction personnel for use during the adjustment period.

Authorization to proceed is furnished when the fully executed agreement is returned to the district. The company's copy of the fully executed agreement, along with one copy of the plan and estimate of cost, should be transmitted to them by letter with specific instructions concerning "authorization to proceed". Utility relocation work can be authorized to begin as long as right of way or construction funds are shown in the current year of the Statewide Transportation Improvement Program. If authorization has not been given, they should be advised that materials may be ordered but that no work is to be performed until they are given written notice to proceed. The company, for reasons of planning their work load or due to seasonal situations, may

request early authorization to perform the work. These requests are forwarded with the district's recommendations to Central Office Design for advancement of the necessary funds, further handling, and approval.

A separate utility project has distinct advantages when utility work is extensive, must be performed in accordance with company's seasonal requirements, extends beyond the limits of the construction project, or must be performed considerably in advance of the roadway contract. The length of the utility project should not exceed the limits of the right of way project. It may be necessary in these cases to have a second agreement with the company to cover work that must be performed concurrently with the roadway contract. These latter agreements will use the roadway construction job number. Early need for utility projects is to be determined at the time when the PATS form is revised each year. The utility construction funds will be shown in the year right of way funds are assigned. This should be done whenever possible to secure early adjustment to utility facilities. A request to program funds is sent to Central Office Planning. This request is to be made by the district. Estimated amounts of utility adjustments are needed. These don't have to be extremely accurate. When a special utility project has been set up, it is preferred, if possible, that all utility adjustments necessary for the roadway project be included. If funds are available, additional agreements can be added to these utility projects until the final invoice for the first completed agreement is received for payment.

- 7-02.9 (2) **LUMP SUM AGREEMENTS.** The use of "lump sum" agreements is preferred. See [Figure 7-02.8](#), "List of Utility Agreements." Use of this agreement eliminates the need for keeping detailed records of cost and auditing of cost records. Estimates of cost must be prepared in *detail* for use of this agreement. See [Figure 7-02.10](#), "Lump Sum Estimates." When detailed estimates are not practical or costs appear unreasonable, "actual cost" agreements are to be used. Advantages in the use of "lump sum" agreements should be discussed with companies requesting use of "actual cost" agreements. Use of special forms of agreements, such as "subordination agreements", which are desired by certain companies will be acceptable. These, too, must be revised to cover the particular situation.
- 7-02.9 (3) **ACTUAL COST AGREEMENTS.** Actual cost agreements are acceptable when detailed estimates are not practical or costs appear questionable. See [Figure 7-02.8](#) for "List of Utility Agreements" and [Figure 7-02.11](#) for "Actual Cost Estimate."
- 7-02.9 (4) **MASTER REIMBURSABLE UTILITY AGREEMENTS.** This is a generic agreement, which addresses all future reimbursable utility relocations between a particular utility company and the Commission. Once a MRUA is executed, no other utility agreements are executed. All project specific items such as type of agreement (lump sum or actual cost), estimated total cost, and percent obligation is addressed in the letter from the DUE to the utility company.
- 7-02.9 (5) **UTILITY AGREEMENT FOR UTILITY WORK INCLUDED IN ROAD PROJECT.** This agreement allows for final reimbursement to be based on actual cost. Utility work (either water or sewer) is performed by our road contractor. Records of quantities of each bid item are all that is maintained. If a substantial change is made in the original plan and extent of work, a change order having the utility company's and MoDOT's approval is needed.
- 7-02.9 (6) **ADVANCE PAYMENTS.** Arrangements for making advance payments (before work commences) to utility companies are included in all agreements. If a company doesn't want advance payments, or the DUE determines it would be in the best interest of MHTC, the company can be reimbursed after the work is complete. The language in the agreement must be altered to reflect the payment method if other than prepayment.

An invoice and request for prepayment shall be submitted by the utility company prior to any advance payments. Route, county, and job number shall be included in the request. The DUE shall submit this request to the Controllers Office ([Figures 7-02.12](#) and [7-02.13](#)) with copies sent to Central Office Construction, District Construction and the Resident Engineer.

The final bill for the completed adjustment of actual cost agreements shall include a detailed statement of costs for all stages of construction.

**7-02.9 (7) CITY/COUNTY OWNED UTILITIES.** When roadway improvements are within the corporate limits of cities, towns, and villages, a municipal agreement is negotiated between Missouri Highways and Transportation Commission and the municipality. Likewise, when roadway improvements are within the limits of a county and outside the municipal limits, a county agreement must be negotiated between the Missouri Highways and Transportation Commission and the County Commission. Included in these agreements are provisions regarding reimbursement for adjusting city/county owned facilities. Normally reimbursement is provided for adjustment of city/county owned facilities which are now located on city/county streets not state highway right of way. Proper reference to the municipal or county agreement for authority of payment is to be made in the utility agreement.

**7-02.9 (8) UTILITY PLANS.** Plans of utility adjustment are identified as "Exhibit A" to the agreement. The plans are prepared in accordance with [Subsection 7-02.4](#). The plans should contain sufficient details concerning location, elevation, compaction, clean up, etc. to permit adequate inspection support. Three sets of plans are submitted to Chief Counsel's Office with the agreement and "MHTC Contract Submittal Form" (see [Figure 7-02.14](#)). This form may be found in Microsoft Word by selecting file, new, MoDOT tab, MHTC Contract Submittal Form.

When the plans are too bulky to attach to the agreement, the identification stamp, as shown below, is placed on the first sheet, completely filled in except for the date:

**EXHIBIT A**

Part of Contract dated \_\_\_\_\_  
Between Highways and Transportation Commission and \_\_\_\_\_  
Route, \_\_\_\_\_, County, \_\_\_\_\_  
Job No. \_\_\_\_\_  
Sheet 1 of \_\_\_\_\_

**7-02.9 (9) ESTIMATES.** Estimates of cost are identified as "Exhibit B" to the agreement.

District personnel negotiate with local utilities, cities and interstate pipeline companies to determine reimbursable costs of adjustments required to their facilities in accordance with [Subsection 7-03.1](#) (Location) and [7-03.2](#) (Division of Costs). These estimates are prepared in accordance with the provisions of FAPG 23 CFR 645A and any amendment thereto. These estimates must reflect the same procedures and costs used by the companies in their normal operations and must also accurately represent the expected costs of the work.

The utility's estimate is to be reviewed to ensure compliance with FAPG 23 CFR 645A. One copy of the utility's estimate is to be submitted to the Office of Audits and Investigations for pre-audit review and approval prior to preparation of the agreement. After approval, three copies of the estimate identified as "Exhibit B" should be submitted to the Chief Counsel's Office with the agreements.

**7-02.9 (9) (a) QUALIFYING STATEMENTS.** To supplement the agreement and support the costs set out in the estimate, the utility company must furnish statements concerning the scope of work, betterment, salvage credit, location of cost records, schedule, and additional costs that will add to an understanding of the work. These latter statements may involve use of bypasses, special equipment, need for larger facilities, etc. It is preferred that these statements be a part of the estimate of cost.

**7-02.9 (9) (a) 1. SCOPE OF WORK.** This is a concise summary of the work to be performed, such as "an estimate of cost covering the work of relocating Company's 12-inch Cushing-Woodriver pipe line to accommodate construction of Route 47 in Franklin County on Job No. J6P0172".

**7-02.9 (9) (a) 2. BETTERMENT.** This shall mean and include any upgrading of the facility being relocated, made solely for the benefit of and at the election of the utility and not attributable to the highway construction. Credit is required for the additional costs incurred for the betterments introduced in the adjusted facility. Additional costs incurred due to the utility being required to comply with established governmental or industry codes are not considered betterments although in some cases the utility may

realize a more capable or valuable facility. Full details and documentation pertaining to the requirements of compliance with established codes resulting in additional cost must be furnished by the company if exceptions of betterment credit are requested. Reimbursement to the company for additional costs incurred due to adherence to the codes does not preclude the necessity of accrued depreciation credits when applicable, as required in [Subsection 7-02.9\(9\)\(a\)3](#).

Following are some example statements concerning betterments:

- The proposed 16 in. size main is necessary to replace the function of the existing 10 in. size main because of additional length and bends. No significant increase in capacity is being achieved and there will be no service improvements; therefore, betterment credits are not being given.
- Comparative estimates have been prepared for prorating the cost of constructing a replacement-in-kind facility and the company desired bettered facility.
- Attached is a copy of City Code Number which requires this company, in replacing any of its facilities used in fire protection, to install a minimum size main. No betterments are involved in this adjustment.

**7-02.9 (9) (a) 3. ACCRUED DEPRECIATION CREDIT.** Credit is required for the accrued depreciation of utility facility being replaced such as a building, structure, pumping station, filtration plant, power plant, substation, or other similar operational unit. Credit for accrued depreciation shall not be required for a segment of the utility's service, distribution or transmission lines. It is also not required when the building, structure, etc. is being moved as necessitated by the highway project. Accrued depreciation credit acceptable shall be determined by use of the following formula:

$$\frac{\text{Actual Length of Service of Replaced Facility (Years)}}{\text{Total Estimated Service Life of Replaced Facility (Years)}} \times \text{Original Cost} = \text{Credit}$$

**7-02.9 (9) (a) 4. REMOVAL AND SALVAGE OF MATERIALS.** This statement, to explain the salvage credit or lack of credit, should reflect routine company policy as well as the particular situation. For example:

- Existing facilities to be abandoned in place, since the cost of salvaging, based on our past experience, will exceed their value.
- Only those items will be salvaged for which salvage credit will exceed the cost of removal and salvage.
- Company liability requires our removal of the retired facilities, even though the cost of removal will exceed allowable credit for salvage.
- Salvage credits are in accordance with established company accounting procedures.

**7-02.9 (9) (a) 5. COST RECORDS.** A statement concerning the location of the company's cost records is included, such as, "Company cost records will be available in our office at 2134 Industrial Avenue, Tulsa, Oklahoma".

**7-02.9 (9) (a) 6. SCHEDULE.** The utility company shall provide a work schedule to the DUE showing approximate start date and completion time.

**7-02.9 (9) (a) 7. OTHER.** Additional statements that will explain or further clarify the work should be included.

**7-02.9 (9) (b) MATERIAL COSTS.** Quantities, description of item, unit cost, and extended totals are shown. Percentage computations should be shown immediately following "total cost" so that the company's and Commission's cost obligations are properly set out. Unit assembly costs similar to those used by several of the Rural Electric Association (R.E.A.) Cooperatives are acceptable, provided the same units and charges are used in the company's regular operations. A handling charge conforming with company's regular procedures may be included.

**7-02.9 (9) (c) LABOR CHARGES.** Hours, individual or crew rates, and extended totals are shown. Payroll additives

such as insurance, retirement, social security, vacation and other benefits are shown as a separate item under this heading in accordance with company's regular procedures. Adequate explanation must be given for total percentage used, especially in those cases where materials and labor are combined as unit costs or where labor percentages include additives and equipment requirements.

**7-02.9 (9) (d) OVERHEAD COSTS.** This charge is usually a percentage of the total labor cost. Rental equipment rates, in most cases, include this cost. This item must be in accordance with the company's established accounting procedures, which in some cases may include handling costs or be a percentage of the total cost of the work involved.

**7-02.9 (9) (e) EQUIPMENT CHARGES.** Hours, description and charges for equipment expected to be used must be shown. Rates charged for equipment usage must be justified by company's established accounting procedures. When the company does not have an established accounting procedure or a capitalization and depreciation schedule which is used in their own operations, the rates are to be established by the company subject to approval by the state. These rates may be established by using rental rate publications as a guide. A reasonable amount should be deducted, when using rental rate schedules, for profit that the rental company realizes. A full explanation of the methods used in establishing the rates should also be submitted to support the company's request.

Equipment may be rented when company-owned equipment is not available or is inadequate, with the rental rate justified by appropriate solicitation of bids.

Unusual accounting procedures may be accepted with adequate prior explanations and GHQ Design approval.

**7-02.9 (9) (f) REMOVAL COSTS.** These costs are estimated and shown similarly but separately from installation costs. When removal costs exceed salvage credits by more than the estimated cost of removal by our roadway contractor, an effort should be made to persuade the company to abandon the facilities in place. An exception is made when the utility company is required to remove abandoned facilities because of company liability, because of hazards, or by specific agreement with the Commission. Abandoned facilities can be included with the miscellaneous removals in the roadway contract. It may be possible for the company to remove those portions of the facility for which credits will exceed removal costs, with the remainder of the facility to be abandoned for removal in the roadway contract. Materials removed must be itemized, with company's customary salvage credit given. Items to be scrapped or junked should be so indicated. Whenever a facility or portion thereof is shown on the plans to be abandoned, a letter from the company to that effect must be on file in the district's project records. This eliminates ownership problems if these facilities are removed or salvaged by the roadway contractor.

When the utility facility is no longer needed and removal is necessary to accommodate the highway project, the removal of the item may be handled either as a right of way item or a utility adjustment. When handled as a right of way item, the damages allowed are to equal the depreciated value of the facility, with the necessary removals being accomplished by the roadway contractor. If accomplished as a utility adjustment, the state, by utility agreement, will reimburse the company for removal costs and receive salvage credit for the material removed, up to but not exceeding removal costs. Normally, the cost of removal of service lines is not reimbursable, because in most cases the utility company does not hold a written easement which establishes a compensable interest in these areas.

**7-02.9 (9) (g) ENGINEERING.** Costs of engineering, whether preliminary or construction, must be shown as a separate item and are not to be included with the "labor costs". Concurrent cost accounting procedures of the FHWA and the department make this a necessity.

**7-02.9 (9) (h) PRORATING COSTS.** The need for prorating utility adjustment costs occurs when the adjustment involves work to be paid for by the state and work to be done at the expense of the utility. Generally the two following conditions require this division of cost:

- The existing facility occupies both public and private right of way.

- Betterments are included in the necessary replacement facility.

Normally, the procedure for prorating costs for facilities located partly on the public and partly on private right of way is based on the individual lengths affected on public and private right of way. When confronted with pole lines, a count of existing poles affected by the highway construction on and off public right of way, can be used in lieu of the length of facility. When the existing length or pole count methods are unsuitable to meet conditions, a variation in prorating procedures may be negotiated between the company and the state.

When the adjustment involves betterments, the percentage determination is normally calculated by the fractional results of comparative estimates; one estimate reflecting the cost of the replacement-in-kind facility and the other being an estimate of the bettered facilities.

The following are examples of methods of determining pro rata costs:

- Pole line partly on and partly off public right of way. Ninety-five poles are to be adjusted, with 25 being located on public property.  $25/95 = 0.26$  or 26% company cost; therefore, 74% is state cost.
- Pipeline adjustment. 585 ft. of pipeline to be adjusted, with 66 ft. located on public right of way.  $66/585 = 0.11$  or 11% company cost; therefore, 89% state cost.
- Proration of costs due to betterments. Cost of replacement-in-kind facility, \$10,000. Cost of utility-selected facility, \$20,000. State's obligation, 50%.

**7-02.9 (9) (i) LUMP SUM ESTIMATES.** The cost estimate in support of the lump sum agreement must be accurate, comprehensive, verifiable, and in sufficient detail to give a clear picture of the work involved and the cost of the individual items. The estimate may cover only that portion of the adjustment to the existing facility that is located on private right of way for which the Commission is obligated to reimburse the utility.

A final audit of the adjustment costs is not required for reimbursement of lump sum contracts. The utility's final invoice is submitted for payment after district personnel receive certification that the work was completed in accordance with the approved plan.

Lump sum estimates are limited to a maximum of \$100,000 Commission obligation; however, exceptions may be made for special situations having prior approval from the Design Division. These exceptions usually cover major relocations for which the Commission's proportionate obligation is extremely small. All lump sum estimates exceeding \$50,000 must be submitted to the Audits & Investigations Unit for review.

An example of a lump sum estimate is shown in [Figure 7-02.10](#).

**7-02.9 (9) (j) ACTUAL COST ESTIMATES.** These estimates are prepared in sufficient detail to determine the reasonable expected cost of the work. Reimbursement is based on the actual costs with a final audit of the company's cost records eliminating the need for every nut and bolt to be shown in the estimate. The total adjustment to be performed must usually be detailed in these estimates even though the existing facility is "partly" on private right of way. Normally, the work to accomplish utility adjustments cannot be separated so that cost records will reflect actual costs of work on private right of way from work on public right of way. By establishing a percentage obligation, there is no time lost or unnecessary recording costs and operations. A pre-negotiation review is required for actual cost estimates greater than \$100,000; however, a review can be performed on an actual cost estimate of any size if the Department has limited experience with the utility company.

An example of an actual cost estimate is shown in [Figure 7-02.11](#).

Detailed records of materials, labor and equipment are maintained by project office personnel during construction if the utility relocation is performed by the utility company's own forces. If the utility relocation is bid, then records of quantities of each bid item is all that is maintained. If a utility company's

ongoing contractor performs the relocation, records should be maintained which are consistent with the method of pay in the ongoing contract.

If the utility company is utilizing a private consulting firm, whose work will be reimbursed by State funds, a review of the consultant agreement should be performed.

A checklist is available for reviewing consultant engineering contracts to ensure the contracts conform to MoDOT policy and comply with applicable federal regulations (see [Figure 7-02.15](#)).

All consultant contracts totaling \$100,000 or more must be submitted to the Audits & Investigations Unit prior to contract approval.

If a consultant contract is less than \$100,000, a pre-negotiation review may be required if the department has no previous experience with the company and there is insufficient knowledge of the consultant's accounting system, there is previous unfavorable experience regarding the reliability of the consultant's accounting system, or the contract involves procurement of new equipment or supplies for which cost experience is lacking.

**7-02.9(10) CONFIDENTIALITY AND PAYMENT.** Pre-negotiation memorandums and related documentation prepared by the Audits & Investigations Unit are considered confidential documents and should not be disseminated outside the department without the express approval of the Audits and Investigations Unit.

The Controller's Office will not pay a utility invoice unless a pre-negotiation review, if required, has been performed.

Cost Estimates should indicate the following:

- Lump Sum or Actual Cost.
- MHTC's percent obligation of the total cost.
- If the utility company plans to upgrade their facilities, the difference in cost must be depicted in the cost estimate and the difference in cost shall be borne by the utility company.
- The cost estimate must include the total cost of the utility adjustment (reimbursable and non-reimbursable). If partly reimbursable, show entire cost with a percent obligation.

**7-02.10 LIGHTCORE, A CENTURYTEL COMPANY AGREEMENT.** LightCore and Missouri Highways and Transportation Commission entered into a partnership agreement, "Amended and Restated Fiber Optic Cable on Freeway in Missouri," executed June 5, 2002. Special utility rules apply to LightCore in accordance with this agreement on designated routes.

**7-02.11 PERFORMANCE OF THE WORK.** Generally the utility will perform the work with its own personnel and equipment. Most telephone companies don't have enough staff, so they contract the work. When the utility is not adequately staffed or equipped to do so, and all or part of the cost of the work is reimbursable, the work may be done by contract using the following procedures:

- The utility is to advise the district in writing of their need to contract all or a portion of the work because they are not staffed or equipped to do so themselves. The district advises the utility to proceed with the solicitation of bids, but will not be permitted to award the contract without the DUE's concurrence.
- The utility is to develop and document a list of bidders (minimum of 3) whom they intend to do the work. Cities and some other utilities such as water districts may be required to advertise for the work, and such a procedure is satisfactory.
- The utility is to furnish the district a tabulation of bids received, two (2) copies of the proposal used in securing the bids, and any other information to support their recommendation for award to the lowest qualified bidder.
- The district is to review and approve the utility's bid information prior to the award of the contract. Central Office Design is available to assist the district with review of bid information should the need arise.
- The utility may wish, at times, to utilize a contractor they have retained for their on-going work (continuing contracts). The utility is to submit a copy of the contract to the district. The district should review the contract

for reasonableness of cost and submit it to the Office of Audits and Investigations. As long as the contract is still in effect, AI will only approve the original submittal.

Low cost incidental work such as tree trimming and sidewalk replacement may be performed by contract without competitive bidding provided the district considers the cost to be reasonable.

Adjustments of utility facilities must be closely coordinated with the roadway contract work. When it is to the Commission's advantage to do so, the adjustment of utility facilities may be included in the roadway contract. Such work could include water and sewer facilities. Generally, this could be used when the cost of the work is to be borne mostly or entirely by the Commission. Plan ahead to get this work in the roadway contract. Guidelines for including utility work in the roadway contract plans are shown in [Figure 7-02.19](#).

Frequently it will be expedient and/or economical to adjust critical, large, or seasonal utility facilities well in advance of the roadway contract. The district office is encouraged to program utility adjustments prior to the anticipated year of construction of the project. Usually, the utility project is programmed in the year right of way is authorized.

- 7-02.11 (1)** Utility Permit Application Provisions for work on MHTC right of way. Purpose: To provide guidance to Utility Companies for work performed on MHTC right of way.
- 7-02.11 (2)** In the case of Interstate and other limited access roadways, Applicant agrees, if permission is granted, to install, maintain, and service said facilities without entering and leaving the through traffic roadways and interchange ramps except at points provided for that purpose and without parking any equipment or storing any materials upon the medians, through roadways and ramps or the shoulders thereof. A temporary support pole to facilitate an aerial crossing may be placed in the median provided it is stipulated on the face of the permit application and adequate flaggers or law enforcement officers are utilized to protect the traveling public. Support poles will not be permitted within 30 foot of the edge of the traveled way. The support poles shall be removed within one week unless specifically permitted otherwise by the District Engineer.
- 7-02.11 (3)** Location of Parallel Utility Facilities:
  - 7-02.11 (3) (a)** Applicant will be expected to determine Commission's right of way location from Commission's plans. Upon written request and adequate advance notice, the Commission will re-establish missing right of way markers. This will be accomplished on a permit by permit basis and then only if Commission has adequate personnel available.
  - 7-02.11 (3) (b)** Any right of way markers damaged, disturbed, or destroyed during permit operations shall be re-established by a registered land surveyor at the applicant's expense.
  - 7-02.11 (3) (c)** Applicant will be responsible for staking between highway right of way markers as needed to assure accurate and uniform installation of the parallel facilities in the utility corridor.
- 7-02.11 (4)** Applicant is to provide adequate protection and marking of the underground facilities as follows:
  - 7-02.11 (4) (a)** Fiber optic cable crossings are to be encased in steel pipe or other approved encasement material in accordance with the utility policy from utility corridor to utility corridor. Variations due to encountering rock will be determined in the field by the District Engineer.
  - 7-02.11 (4) (b)** Warning signs will be installed at the right of way lines at road crossings (all underground utilities).
  - 7-02.11 (4) (c)** For parallel underground facilities, warning signs shall be installed and maintained at the right of way lines showing the offset location of the utility when the utility is permitted to locate beyond the normal six foot wide utility corridor.
- 7-02.11 (5)** Applicant will construct the utility facility in such a manner that it may be accurately located both horizontally and vertically after installation. A detectable tape or trace wire will be installed with non-metallic buried

facilities. Wherever feasible the metallic tracer line should be a part of the utility facility. Acceptable alternatives will be considered for approval.

**7-02.11 (6)** All voids resulting from boring casing or other facilities under the roadways or approaches will be filled to the satisfaction of the District Engineer. Method and materials must be approved by the District Engineer.

**7-02.11 (7)** Manhole covers will be installed at grade, as flush as possible with finished ground line so highway maintenance vehicles and equipment may operate over them.

**7-02.11 (8)** Highway plant materials, including trees and shrubs, will be protected by Applicant. Such materials and turf that are disturbed will be restored as directed by the District Engineer. Trees and shrubs will not be trimmed, cut, moved or sprayed without specific permission from the District Engineer.

**7-02.12 ROADWAY PLANS AND JOB SPECIAL PROVISIONS.** A legend showing all applicable utility symbols and the names of the utility companies is shown on the first special utility sheet. In the absence of special utility sheets, this information may be shown on the title sheet or the first plan and profile sheet. The Job Special Provisions are to include the name, address and telephone number of all utilities located on the project. The anticipated relocation completion date of each utility is also to be shown based on written dates, duration, or completion dates from the utility. The purpose of this information is to inform the bidder of the status of utilities for proper work coordination that could affect the bids for our work. Status notations should include general notations such as: "N/A", "Work is in progress", "Work has not started", "Work is complete", and "Work is included in contract". See [Figure 7-02.20](#). The Utility Job Special Provisions should include the following verbiage: "The Commission does not warrant that the above information or the depiction of utility lines or facilities on other bidding documents are complete or accurately reflect either all utilities or their precise locations within or adjacent to the project limits, or the status of any relocation work."

### **7-02.13 CHANGES IN APPROVED WORK**

#### **ACTUAL COST UTILITY AGREEMENT**

- A utility change order is required when a substantial change is made to the original utility relocation plan. If uncertain the change in work is substantial, write a change order.
- Slight modifications in quantities do not substantiate a change order.
- The addition of minor items not included in the approve estimate does not substantiate a change order.
- A change order is needed if there is a change in the percentage of cost which is the Commission's obligation. (i.e., agreement indicates 50% obligation of Commission, additional work is to be 100% obligation of Commission, this must be documented on change order)

#### **LUMP SUM UTILITY AGREEMENT**

- Any change in original scope of a utility relocation requires a change order.
- Normal overruns are not considered as changes in approved work and shall not be reimbursed.
- Underestimating materials, labor or equipment is not considered a change in approved work and shall not be reimbursed.

#### **UTILITY AGREEMENT FOR WORK INCLUDED IN ROAD PROJECT**

- Handle changes in utility work the same as you would handle changes in road work.
- Change orders for utility work shall be accomplished through the roadway contractor. These change orders require the utility company's signatures.