



U.S. Department  
of Transportation

**Federal Highway  
Administration**

# **Utility Relocation and Accommodation: A History of Federal Policy Under the Federal-Aid Highway Program**

Part II: Utility Accommodation

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Office of Engineering  
Railroads and Utilities  
Branch

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James E. Kirk  
Special Consultant

**"A HISTORY OF FEDERAL POLICY ON THE RELOCATION AND  
ACCOMMODATION OF UTILITIES UNDER THE FEDERAL-AID HIGHWAY PROGRAM"**

**PART II: A HISTORY OF FEDERAL POLICY ON THE ACCOMMODATION  
OF UTILITIES**

(For more information see Part I: "A History of Federal Policy on  
Utility Relocations and Adjustments")

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ABBREVIATIONS USED THROUGHOUT THE TEXT

AASHO	American Association of State Highway Officials
AASHTO	American Association of State Highway and Transportation Officials
APWA	American Public Works Association
ARWA	American Right-of-Way Association
BPR	Bureau of Public Roads
CFR	Code of Federal Regulations
CM	Circular Memorandum
FHPM	Federal-Aid Highway Program Manual
FHWA	Federal Highway Administration
GAM	General Administrative Memorandum
NACE	National Association of County Engineers
HRB	Highway Research Board
IM	Instructional Memorandum
PPM	Policy and Procedure Memorandum
TRB	Transportation Research Board
USC	United States Code

NOTE:

The Federal-aid highway program is currently administered by the Federal Highway Administration (FHWA), an agency of the U. S. Department of Transportation. Over the period of this history the program has been administered at the Federal level as follows:

- July 1918 – Bureau of Public Roads - Department of Agriculture
- July 1939 – Public Roads Administration – Federal Works Agency
- July 1949 – Bureau of Public Roads – General Services Administration
- August 1949 – Bureau of Public Roads – Department of Commerce
- April 1967 – Bureau of Public Roads – Department of Transportation
- August 1970 – Federal Highway Administration – Department of Transportation

INTRODUCTION

Historically it has been in the public interest for public utility facilities to use and occupy the rights-of-way of public roads and streets. This is especially the case on local roads and streets that primarily provide a land service function to abutting residents, as well as on conventional highways that serve a combination of local, State, and regional traffic needs. This practice has generally been followed nationwide since the early formation of utility and highway transportation networks. Over many years, it has proven to offer the most feasible, economic and reliable solution for transporting people, goods, and public service commodities (water, electricity, communications, gas, oil, etc.), all of which are vital to the general welfare, safety, health, and well being of our citizens. To have done otherwise would have required a tremendous increase in the acquisition of additional rights-of-way for utility purposes alone. This could have also resulted in significant added costs to be borne by the utility consumers through increased rates for utility services so provided.

Under the practice of jointly using a common right-of-way there are two broad areas of concern to highway and utility officials alike. First is the cost of relocating, replacing or adjusting utility facilities that fall in the path of proposed highway improvement projects, commonly referred to as, Utility Relocations and Adjustments. Second, is the installation of utility facilities along or across highway rights-of-way and the manner in which they occupy and jointly use such rights-of-way, commonly referred to as the Accommodation of Utilities.

Accordingly, Part I is a history of Federal policy on Utility Relocations and Adjustments. Part II is a history of Federal policy on the Accommodation of Utilities.

## II

### THE EARLY YEARS

#### 1916 to 1954

During this early period, the modest attention given by highway officials to utilities in connection with the Federal-aid highway program was mostly directed toward the matter of relocating, replacing or adjusting utility facilities that fell in the path of highway construction projects. For more information on this, see Part I: A History of Federal Policy for Utility Relocations and Adjustments.

#### THE 1954 AND 1955 STUDIES

As pointed out in Part I of this history, one of the provisions of the Federal-Aid Highway Act of 1954 (Section II) directed the Secretary (of Commerce) to make a study, in cooperation with the State highway departments and other parties of interest, on the problems posed by the relocation and reconstruction of public utilities resulting from highway improvements. A report on the study was submitted to Congress in April, 1955, by President Eisenhower and subsequently published as House Document No 127, 84th Congress, 1st Session, entitled, Public Utility Relocation Incident to Highway Improvement. While the main purpose and thrust of the report was focused on the problems associated with the physical relocation, replacement, or adjustment of utility facilities that fall in the path of Federal-aid highway construction projects, much additional information was included on the use and occupancy of highway rights-of-way by utilities.

Also, as pointed out in Part I of this history, later that same year (1955), a more detailed version of the legal aspects of the study was published by the Highway Research Board (HRB), as Special Report 21, Relocation of Public Utilities due to Highway Improvement, an Analysis of Legal Aspects. Again, much of in the information in the HRB Report 21 concerned the use and occupancy of highway rights-of-way by utilities. This was obtained from a detailed examination of 250 judicial decisions affecting public utility relocations associated with highway improvement projects. A summary of legal principles enunciated by the courts, as revealed by the analysis of these cases in Special Report 21, follows:

- State legislatures possess and exercise sovereign and complete control over all highways within their jurisdiction, and are responsible to the general public for the construction, maintenance and improvement of those highways.
- Quite often the legislatures delegate their control over some of those highways to State highway departments, and their control over other highways to the various local governmental units traversed by those highways. Any such delegated agency of the State, as well as the State itself, is considered by the courts to be a trustee for the general public. This is true whether the State has obtained a fee simple title in the lands it uses for the highways, or whether it merely acquired an easement over those lands for highway purposes.

- The highways are, naturally, designed primarily for the use of the traveling public. They may, however, be used for any purpose which serves the public's interest in transportation, communication, or health.
- Thus, it is a generally accepted principle, often codified in statute, that public utilities designed to serve these public purposes may also make use of designated classes of the highways for the location of their facilities and equipment, provided that this use does not inconvenience or hamper the public in its ordinary use of the highways, and subject to various qualifications and regulations.
- Many of those States which have specific authorizations require the utilities first to obtain the consent of the highway department or of the municipality through which the highway passes. And in all States, the erection, maintenance and repair of the utility facilities are subject to the supervision and control of the highway department or local governmental unit, as provided either specifically by the terms of the statute or other permission, or implied under general common law principles. Even if the utility constructs its facilities within the public right-of-way of the highway pursuant to express permission of the State, of the highway department, or of the local community, the utility's rights are secondary and subordinate to the interests of the traveling public.
- If the utility locates without consent in the public right-of-way, then it is generally treated by the courts as a trespasser, or at most, as a tenant at the will of the public, or by sufferance of the public, and can be required to move its facilities whenever required to do so and at its own cost.
- When the utility obtains the express or implied consent of the appropriate highway authority and expends money in reliance on that consent, it does secure an interest in the highway location which might be termed a "right" or, more accurately, a "privilege," in that location. This means that the municipality or highway department cannot arbitrarily, without a valid reason, rescind the consent and require the utility to move its facilities, or impose a charge for the use of the highway after having permitted its use free of charge, or arbitrarily impair the obligation of its "contract" with the utility. On the other hand, the utility's right or franchise to locate in the public ways may be taxed by the city or State, or a charge can be imposed as a condition of the municipality's original consent.
- Even if the courts should label the utility's privilege as a "vested property right," for purposes of protecting it from the arbitrary extinction of this right, they have also recognized that no utility can acquire a vested right to remain in any specific locations in the highway.
- This conclusion follows from the fact that no government or its agency--State or local--can make any contract or agreement which impairs its police power. The police power has been defined as the power to make all reasonable regulations necessary for the preservation



of the health, safety, welfare and convenience of the public. Accordingly, any consent granted to a utility to occupy the public highways is always subject to reasonable exercises of that police power. This is true whether the condition is express or not.

- It is universally recognized that the control of highways is a proper subject for the exercise of the police powers. Accordingly, users of the highways, whether travelers thereon or utilities whose facilities are located therein, are required to obey without compensation reasonable regulations designed to facilitate the use of those highways, by the traveling public.

- The courts have uniformly held that the State, acting through its legislature, its highway department, or its local governmental units, can require utilities to relocate, at their own expense, any facilities located within the right-of-way of a public highway to another position within the highway right-of-way whenever the necessities of highway improvement require.

- This is true whether the utility facilities are located under, over, in, or upon the highway, and regardless of the type of improvement of the highway, whether it be the widening of an existing highway, a change in alignment or grade, the elimination of a crossing at grade of the highway with railroad tracks or with another highway, the construction of access and feeder roads or traffic interchanges, or any other necessary engineering betterment.

- In fact, utilities can be required to relocate their facilities to other positions within the highway when other "governmental" functions require. They cannot, however, be required to bear the cost of relocation merely to benefit some other privately-owned utility or some "proprietary" activity of the government, such as the operation of certain municipal utilities. The courts, however, are not uniform in classifying various municipal activities as "governmental" or "proprietary."

- However, no one has suggested that highway construction or improvement is designed for private, rather than public, benefit. It is universally held to constitute a "governmental" activity.

- Nothing in the nature of the Federal program of aid to the States for their highways alters this conclusion that the States can compel utilities to relocate at their own cost facilities located within the public highway right-of-way. Federal aid to highways consists merely in the appropriation of money to be matched by the States and to be spent on a designated system of highways, provided that minimum standards of construction are met. The Federal Government does not initiate highway construction projects. The States have unfettered discretion to determine whether or not any highway projects are to be undertaken, the nature of the project, and whether the project is to be financed entirely from State funds or under the Federal-aid provisions.

– Thus Federal participation does not prevent the State from invoking its police powers in connection with any highway project. Nor does the Federal Government exercise control over the projects sufficient to transform the States into agents for the Federal authorities in carrying out the projects. The Federal grants merely recognize a legitimate national interest in the improvement of existing highways.

– In addition to the Federal-aid highway program, the Federal Government participates in other highway projects, by cooperating with other Federal departments in constructing highways to and in National Parks, National Forests, National Monument areas, military and naval reservations, Indian lands, and other Federal lands. In aid of these projects, the Federal Government exercises a power akin to that of the police power of the State, and can compel utilities to relocate their facilities located within the right-of-way of the highways when highway improvement requires.

Pertinent constitutional provisions, as related only to the occupation of roads and streets, were found in 18 State constitutions. Such provisions required that permission of the appropriate local governing body must be obtained before utilities could occupy the streets or highways of cities, towns, or other local units of government.

Statutory provisions permitting the use of public highways and streets by public utilities were found in each of the 48 States, the District of Columbia, Hawaii and Puerto Rico. Such laws specifically applicable to the occupation of State highways, as distinguished from other types of public highways, were found in 43 jurisdictions. The remaining jurisdictions had statutory provisions applicable to all public roads, which presumably included State highways.

While such use of the highways was universally permitted by statute, restrictions of various kinds were usually placed on the occupancy by utilities of public highway rights-of-way. A franchise, permit, or other permission to occupy the highway rights-of-way by all utilities, obtained from the State highway department or other appropriate body was required by statute in 15 jurisdictions. In 26 other States, a franchise, permit or other permission had to be so obtained by designated utilities (not all utilities) for occupancy of the State highways. In five additional jurisdictions, statutes required such franchise, permit or other permission to be obtained by designated utilities (not all utilities), for the occupancy of all public highways, as distinguished from State highways only.

Statutory provisions relating to the occupancy of the public highway rights-of-way by utilities sometimes required that such utilities conform to regulations promulgated by the State highway department or other appropriate body. With respect to State highways only, 17 States had laws containing such requirements for all utilities. Similar laws involving only specified (rather than all) utilities were to be found in 19 other jurisdictions. In five additional States, statutes required specified utilities occupying any public street or highway to conform to regulations promulgated by the appropriate public agencies.

The laws of 24 jurisdictions contained another statutory provision permitting specified public utilities to occupy State highway rights-of-way on the condition that their facilities do not interfere with the ordinary use of the highway. Similar laws applicable to any public street or highway (rather than State highways only) were found in 21 other jurisdictions. Finally the study noted that there were 37 States which then had specific legal authority to control highway access.

Much other information on utility relocations and adjustments was included in the study as pointed out in Part 1 of this history. For more details, see Report 21 and House Document 127 which are maintained in the U. S. Department of Transportation Library, the files of the Transportation Research Board, and the files of the Railroad and Utilities Branch, Office of Engineering, Federal Highway Administration, in Washington, D. C.

## IMPACT OF THE INTERSTATE PROGRAM

THE GEOMETRIC DESIGN STANDARDS

The impact of the Interstate highway program on the development of Federal and State policies for the use and occupancy of highway rights-of-way by utilities cannot be overstated. It served as a catalyst by concentrating the attention of Federal and State highway officials on the need to establish the conditions under which public or private utilities could be accommodated on the rights-of-way of Interstate highways.

Section 108 (i), Standards, of the 1956 Federal-Aid Highway Act (now 23 U. S. C. 109) provided that "the geometric and construction standards to be adopted for the Interstate System shall be those approved by the Secretary of Commerce in cooperation with the State highway departments, as soon as practicable after enactment of the 1956 Act." And so it was that the Geometric Design Standards for the National System of Interstate and Defense Highways were adopted by AASHO on July 12, 1956, and were accepted by BPR on July 17, 1956. These standards provided for control of access on all sections of the Interstate system, which was needed to preserve the traffic carrying capacity of these important highways, thus warranting the large public fund expenditure being made for their construction. Control of access was also needed to provide the maximum degree of safety to the highway user insofar as could be done through highway planning, design, construction and operation.

At this stage, highway officials recognized that control of access could be materially affected by the extent and manner in which utilities were permitted to cross or otherwise occupy the rights-of-way of Interstate highways. Highway officials were also aware of several other factors that could make it very difficult, if not impossible, to effectively carry out the intent of the overriding highway legislation (23 U. S. C), unless a uniform national policy was developed to establish the conditions under which public and private utilities could be accommodated on the rights-of-way of Interstate highways. These other factors included the information gathered in the 1954 and 1955 studies by BPR and HRB (see forepart of text), and the fact the State highway departments at that time had various degrees of authority, some adequate and some not, to effectively control the use of rights-of-way acquired for public highways, including those on the Interstate System. Such authorities depended upon State laws or regulations, which differed from State to State and could be different in some States for highways utilizing existing rights-of-way and for highways on new location for which rights-of-way had to be acquired. Some States also had separate laws or regulations, different from those applicable Statewide, for highways on rights-of-way not under State control, say for highways on rights-of-way subject to the jurisdiction of a local government, such as a large city.

## DEVELOPMENT OF THE AASHO POLICY

In keeping with the need for establishing a uniform national policy for accommodating utilities on Interstate highways, the AASHO Committee on Planning and Design Policies began the task of developing such a policy in the autumn of 1957. Many similar policies that were required to meet a legislative requirement, such as in this case, for preserving and protecting the control of access feature and for providing the maximum degree of safety to the highway users, have over the years been developed through the work of AASHO Committees, with BPR assisting. These became State policies, not Federal standards. They were adopted by AASHO through a ballot vote of the member States, and where found satisfactory, accepted for use by BPR on Federal-aid highway projects.

After several meetings and discussions, the Committee adopted a draft of a "Policy on the Accommodation of Utilities on the National System of Interstate and Defense Highways" (hereinafter referred to as the AASHO Policy) at its November, 1958, meeting in San Francisco. At that time and in the interest of establishing effective liaison with the nationwide utility industry, several meetings were arranged with a number of national utility associations and groups. Included were the American Water Works Association, American Telephone and Telegraph Company, United States Independent Telephone Association, American Public Power Association, Federation of Sewage and Industrial Wastes Associations, National Association of Electric Companies, American Public Works Association, American Gas Association, American Petroleum Institute, Committee for Oil Pipelines, Edison Electric Institute, and the American Right-of-Way Association. Through these meetings, the consensus view of the utility industry was made available to the highway officials and appropriate adjustments and changes made to the 1958 draft.

In June, 1959, at Chicago, the policy was adopted by the AASHO Committee on Planning and Design Policies and approved by the AASHO Executive Committee for submission to the States for letter ballot. And so on August 7, 1959, AASHO announced that the document, A Policy on the Accommodation of Utilities on the National System of Interstate and Defense Highways had been approved by letter ballot of the States and was then an official policy of the AASHO. Policy and Procedure Memorandum (PPM) 40-2 (6), issued on September 30, 1959, by BPR accepted the AASHO Policy as a design standard for Interstate projects.

## OBJECTIVES AND INTENT

The primary objectives of the AASHO Policy were: (1) developing and maintaining access control, (2) increasing highway safety and function to the maximum, and (3) insuring uniformity of utility treatment among the States. At the same time, the policy recognized the public interest in avoiding unnecessary and costly operations to public utility companies. Thus, a provision was made for approving extreme case exceptions when the conditions encountered were extraordinary and costly.

Two statements about the intent of the policy are worth repeating here. First, the policy stated that it was not its intent to impose restrictions on future installations of utility crossings to the extent that would obstruct the development of expanding areas adjacent to Interstate highways. A look at the development adjacent to Interstate freeways today is living testimony that the fore mentioned intent was carried out most satisfactorily. Second, the policy stated that it was its intent to establish procedures whereby the individual State highway authorities may uniformly administer the same. This is exactly what has happened over the past 21 years of operations under the policy. Finally, it must be said that the policy has been most successful in accomplishing all of its objectives, and still remains in force and effect today.

#### EXTENDING THE APPLICATION

On October 15, 1966, when BPR published the second edition of PPM 30-4 (see Part I: A History of Federal Policy on Utility Relocations and Adjustments), a provision was included under paragraph 15b (Accommodation and Installation) that extended the application of the AASHO Policy from Interstate highways to all Federal-aid freeways. On February 15, 1969, AASHO also changed the title of the Policy to its current name, "A Policy on the Accommodation of Utilities on Freeway Rights-of-ways, as it still remains today.

Extension of the AASHO criteria for Interstate highways to all freeways was a logical and rational thing to do. The funding of a highway project should not dictate the safety standards by which the highway is constructed. A freeway is a high type highway improvement and its construction is reserved for these specific situations requiring the movement of large volumes of traffic in an efficient, safe, and free flowing manner. Important features of a freeway are the provisions of a high degree of safety and full control of access. A decision to construct a non-Interstate freeway is based on traffic requirements, community planning and a recognized need to provide a highway with built in safety.

#### OTHER RELATED TRANSMITTALS

During the time the AASHO Policy was under development, several CM s were issued that related directly to the matter. On April 11, 1958, a CM was issued on the topic, Showing of Control of Access on Plans for Interstate System Projects and other Federal-aid Projects for which Access Rights Have Been Acquired. <sup>9</sup> These instructions required that each approved access point be shown on the plans for all Federal-aid projects for which access rights were being acquired, that were to be approved after May 1, 1958. On October 13, 1958, just prior to the AASHO Committee meeting in San Francisco

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<sup>9</sup> Refers to Attachment No. 9 at end of text. Numerical references to other attachments used throughout text.

mentioned above, a memorandum was issued to Regional Engineers on the topic, Utilities on Interstate Highways, <sup>10</sup> which transmitted a draft of the proposed AASHO Policy for review and comment by BPR's Regional Engineers.

On February 25, 1959, a CM was issued on the topic, Future Utility Installations on Interstate Right-of-Way. <sup>11</sup> The States and BPR field offices were advised that any proposal to permit a utility to install a new crossing of an Interstate highway made by a State, subsequent to the approval of the PS&E by BPR's division engineer, would require approval by BPR prior to the time the State approved the utility's request. Further, that the approval of such requests was being retained in BPR's Washington Headquarters by the Federal Highway Administrator. On March 31, 1959, another CM <sup>15</sup> was issued on the same topic, supplementing and explaining the scope of the instructions in the February 25, 1959, CM. These later instructions provided added qualifications on which requests had to be submitted to Washington Headquarters and which could be approved locally by BPR's division engineer. On September 30, 1959, a CM <sup>16</sup> on the topic, The Accommodation of Utilities on Interstate Highways, announced the formal approval by AASHO and acceptance by BPR of the new AASHO Policy and delegated the approval authority for new utility crossings to the BPR field offices. It also emphasized the distinction to be made between cases involving existing utility installations as compared to proposals for new utility installations. Finally, it provided that all requests for extreme case exceptions under the AASHO Policy be transmitted for prior review by the Office of Engineering in BPR's Washington Headquarters before approval was given in the field.

## IV

### SOME ADDITIONAL GUIDES

#### FREEWAY CROSSINGS OF SERVICE CONNECTIONS

One of the early questions received by BPR after the AASHO Policy was issued involved a case requesting approval of a permit to install a power line crossing of an Interstate highway for the sole purpose of lighting a motel sign located just outside the Interstate right of way. In general, the approval of such requests involving Interstate highway crossings of minor service connections was questioned in respect to being in the public interest. A CM dated June 14, 1960, on the topic, Crossings of Interstate Highways by Utility Service Connections, <sup>14</sup> advised the field offices that requests for approving indiscriminate crossings of Interstate highways by utility service connections, such as for the sole purpose of lighting a motel sign, should be denied. It also advised that in expanding areas along Interstate highways it was expected that utility companies would provide primary or feeder lines crossing the Interstate highway where needed to serve a general area. Otherwise, within and near urban and suburban areas the frequency and extent of requests for indiscriminate crossings of utility service connections would be endless. Likewise the overhead clutter would not only mar the appearance of the area being traversed but could create serious problems of maintenance and adversely affect the free and safe flow of traffic. An abbreviated restatement of this CM was later included as paragraph 6f in the first edition of PPM 30-4.1, Accommodation of Utilities, "dated November 29, 1968."<sup>2</sup>

#### ENCASEMENT - PIPELINE CROSSINGS

The encasing of pipeline crossings posed two questions, namely (1) whether or not underground utilities, such as pipelines, should be encased throughout the entire right-of-way limits of Interstate highways or only within the control of access lines, and (2) how far should the BPR field offices go in the interest of economy in insisting upon certain variations from otherwise acceptable standards of utility design or construction?

The CM dated August 4, 1960, on the topic, Encasement of Underground Pipelines Crossing Interstate Projects, <sup>15</sup> advised that on (1) above, where underground crossings of high or low pressure pipelines for gas, oil, water or other commodities are involved, encasement should generally be required within the control of access limits. The CM proceeded to identify several other situations: (A) where encasement might be required a reasonable distance outside the shoulders depending upon the depth of embedment and the availability of a frontage road, a trail, or a public street for access; (B) where encasement might possibly be omitted on crossings involving mains having a long record of trouble-free installations and it would be feasible to jack a new main under the through traffic roadways, as in sections of embankments; and (C) crossings of frontage roads and ramps.



Regarding (2) above, the CM advised that there is no reasonable justification in any State for practicing a rigid or inflexible application of design or construction standards, such as encasing every underground crossing from right-of-way line to right-of-way line, without regard to the principle of economy and without giving consideration to the variable conditions to be encountered for each case.

#### CONVERSION TO UNDERGROUND LINES AND SPARE DUCTS

The CM, dated August 15, 1960, on the topic, Conversion of Overhead Utility Lines to Underground Installations and Provision for Expansion of Any Underground Utility Crossings of Interstate Highways, <sup>16</sup> provided guidelines for approving (1) the conversion of overhead lines to underground crossings and (2) requests for approving the cost of installing spare conduits or ducts for expansions of underground utility crossings. On (1) above, where in certain urban areas, by ordinance on a city-wide basis, utility crossings of local major streets and highways were required to be underground, the CM advised that Interstate construction should comply. On the other hand where this was not the case, a straight, simple type of overhead crossing was not deemed to be so unsightly or unsafe as to justify the extra cost to go underground. The CM gave several examples of where conversion to underground might be warranted and where it would not.

On (2) above, the CM offered a guideline to follow in most cases encountered where an overhead utility crossing was required to be installed underground by reason of the highway construction. The guideline was that approval may be given to requests for the cost of providing conduits with one spare duct in addition to the ducts needed to accommodate the existing cables, where it was demonstrated that the installation of one spare duct was of appreciable benefit to or for the protection of the highway and its operation.

#### PIPELINE CROSSINGS ON GRADE SEPARATIONS

The CM, dated October 14, 1960, on the topic, Pipeline Crossings of Interstate Grade Separation Structures, <sup>17</sup> provided guidelines for (1) installing pipelines on grade separation structures, (2) expressed disagreement with the contention that the presence of a low pressure gas or water line on a grade separation structure is a hazard to highway traffic, and (3) recommended that wide variations from State to State in the application of policy for carrying pipelines on grade separations be reexamined to seek improvements and more flexibility in carrying such lines on grade separations where warranted.

#### EARLY STEPS TO ACCOMMODATION

From the standpoint of utility accommodation policy at the Federal level, 1960 to 1966 was a quiet period. It was not until 1966 when a new paragraph 15, Accommodation and Installation, was included in the second edition of PPM 30-4, Utility Relocations and Adjustments, dated October 15, 1966. This <sup>2</sup> proved to be the forerunner of PPM 30-4.1 (Accommodation of Utilities), <sub>2</sub> first published on November 29, 1968.

On March 13, 1967, <sup>1a</sup> CM on the topic, Accommodation of Utilities - Paragraph 15 - PPM 30-4 <sup>1b</sup> provided some guidelines on (1) a State's responsibility to meet the requirements of paragraph 15 of the PPM on projects within the boundaries of cities, towns, and other political subdivisions of the State and (2) application of the requirements in paragraph 15d (5) of the PPM, especially in urban places. The problem under (2) above concerned the difficulty in locating existing underground utilities in urban places and the associated problem of including such data on the construction plans.

The next policy statement issued on the accommodation of utilities was IM 30-6-67, dated May 2, 1967, on the topic, Utilities - Scenic Enhancement. <sup>1</sup> There were five distinct areas covered by the IM, all of them guarding against the improper use of scenic strips, overlooks, rest areas, landscaped areas, and other areas of roadside development or particular scenic enhancement. These provisions were directed toward avoiding any use by utilities that might detract from the appearance of these and adjacent areas and diminish the value of public fund investment for highway beautification and scenic enhancement. An abbreviated restatement and transfer of numbered paragraphs (1), (2), and (3) of this IM was later included as paragraph <sup>2</sup> 6g of the first edition of new PPM 30-4.1 (Accommodation of Utilities) <sup>2</sup> dated November 29, 1968.

It was also during this period that AASHO issued its Report on Highway Design and Operational Practices Related to Highway Safety, dated February 1967, popularly referred to as the Yellow Book. This publication called attention to the fact that a large percentage of the vehicles which run off the roadway wind up in serious crashes with one or more fixed objects on the roadside. Guardrail, sign structures, trees and utility poles, were some of the types of objects frequently encountered.

On June 21, 1968, Vice President Humphrey established the Working Committee on Utilities at the Federal level and instructed the Committee to report to him as chairman of the President's Council on Recreation and Natural Beauty by January 1, 1969, on "actions required to assure that utility transmission and distribution lines and utility plant sites are compatible with environmental values." (A BPR representative served as an advisor to the Committee)

In discharging this responsibility the Committee considered the recommendations in the June 1967 Annual Report to the President and to the President's Council on Recreation and Natural Beauty and the Report on the Electric Utility Industry and the Environment.

The Working Committee on Utilities submitted its Report to the Vice President on December 27, 1968, as a balanced program for action which would serve to minimize the impact of necessary utility facilities upon the quality of the Nation's environment.

Between safety and environmental quality or between the Yellow Book and the Report of the President's Council on Recreation and Natural Beauty, highway officials got the message to establish the conditions under which utility facilities could be accommodated on the rights-of-way of all highways, not just freeways, and to reflect the growing emphasis on safety and preservation of natural beauty. The next step was for BPR to develop PPM 30-4.1 (Accommodation of Utilities) and for AASHO to develop a companion guide,

**A Guide for Accommodating Utilities on Highway Rights-of-Way, to assist the States in updating and strengthening their existing policies or in developing new ones to meet the requirements of the new PPM**

DEVELOPMENT STAGE

The PPM was under development for more than a year prior to its issuance on November 29, 1968. During this period, discussion drafts were circulated for review and comment by the Joint Liaison Committee of AASHO and ARWA, utility companies, State highway departments and BPR's field offices on three occasions: on August 2, 1967 (by CM on the topic, Proposed Instructional Memorandum on the Accommodation of Utilities), <sup>19</sup> on March 4, 1968 (by CM on the topic, Proposed New PPM 30-4.1 on the Accommodation of Utilities and Related Revisions to PPM 30-4 and IM 30-6-67, <sup>20</sup> including a paragraph by paragraph briefing of review notes, dated February 16, 1968, on the proposed PPM), and on October 4, 1968 (by CM on the topic, Revised Final Draft - Proposed PPM 30-4.1 - Accommodation of Utilities, <sup>22</sup> including another set of review notes dated October 3, 1968). Meetings were also held with the Committee on November 15, 1967, May 27, and October 30, 1968 to discuss each draft. Again, this nationwide review process, modeled after the liaison meetings held for PPM 30-4 in 1966, afforded an opportunity for the utility industry, the State highway departments and BPR to jointly participate in the development of Federal policy.

AUTHORITY AND RESPONSIBILITY

Under the highway program, it was, and continues to be, the responsibility of each State highway department to maintain, or cause to be maintained, the rights-of-way of Federal-aid highway projects to preserve the integrity, operational safety and function of the highway facility. Based on the experience gained under the accelerated highway program, there was ample evidence to show that the manner in which utility facilities crossed or otherwise occupied the right-of-way of a Federal-aid project could materially affect the appearance, safe operation and maintenance of the road. Thus, it was reasoned that the use of the right-of-way by utilities must of necessity be acceptable to highway authorities. In order for a State to fulfill its responsibilities in this area, it must exercise, or cause to be exercised, reasonable regulation over such use and occupancy through the establishment and enforcement of utility accommodation policies and procedures. It was to this end that the PPM was directed.

Public Roads authority and responsibility to prescribe policy for these matters stemmed from 23 CFR 1.23, Right-of-Way (Use and Occupancy) <sup>5</sup> and 1.27, Maintenance <sup>7</sup> and from 23 U.S.C. 116, Maintenance. <sup>6</sup> A brief review of these provisions of Federal regulations and law clearly indicates the authority and responsibility of the Federal Highway Administrator to prescribe policy for these matters. Under 23 U.S.C. 116 <sup>6</sup> the States have the responsibility to maintain, or cause to be maintained, any and all Federal-aid highway projects. Under 23 C.F.R. 1.27 <sup>7</sup> the Administrator has authority and is charged with the responsibility for prescribing policy for these matters. Under 23 C.F.R. 1.23 <sup>5</sup> the State highway department is responsible for preserving the right-of-way free of all public and private installations, facilities or encroachments, except as otherwise noted in that section. Further, the Administrator is given broad authority to approve

the use and occupancy of such right-of-way where he determines that it is in the public interest and will not impair the highway or interfere with the free and safe flow of traffic.

### SCOPE AND OBJECTIVES

With the foregoing as a background, the new PPM gathered together in one document a variety of directives that had been issued by Public Roads on this general topic during the previous several years. New provisions were also included; ones that reflected the growing emphasis on safety and preservation of the natural beauty by highway authorities and the Congress.

The new policy asked the States to re-examine their existing utility accommodation policies and to strengthen them, or develop new ones, as necessary for the development and preservation of safe roadsides. In fact, the major thrust of the new PPM was directed to that end. It did not deny the use of highway right-of-way by utility facilities. Rather, it regulated the manner and location where such use could be exercised. Moreover, it was concerned with the installation of new facilities, not the relocation of existing ones. However, where existing utility facilities constituted a serious hazard to the highway user, the PPM encouraged appropriate corrective measures by the responsible highway authority to provide a safe traffic environment.

The new PPM called for a prospective application. It applied principally to new utility installations made after the effective date (November 29, 1968) within the rights-of-way of active and completed Federal or Federal-aid highway projects. Its application to existing utility lines was restricted to those facilities which fell within the path of a proposed highway construction project, authorized after the effective date or to special cases where a hazardous condition existed.

One provision of the PPM that received much comment from the State highway departments was paragraph 6d, that applied where the State was without legal authority to regulate the use by utilities of the rights-of-way of the Federal-aid projects. Common examples were Federal-aid highway projects on a State highway system in cities and Federal-aid secondary highway projects on a county highway system. The PPM called for all such projects authorized after the effective date to include a special provision in the project agreement for regulating utilities' use of the highway right-of-way. The provision required that the State would, by formal agreement with appropriate officials of a county or municipal government, regulate, or cause to be regulated, such utility use of right-of-way on a continuing basis and in accordance with a satisfactory utility accommodation policy for the type of highway involved. In this respect, the PPM defined a satisfactory policy as one that prescribes a degree of protection to the highway at least equal to the protection provided by the State's utility accommodation policy, i. e., the one approved by the Regional Federal Highway Administrator under paragraphs 7c and d of the PPM.

From the above, three basic but separate actions were needed when applying the PPM to projects where the State is without legal authority to regulate the use of the right-of-way. First, was the clause in the project agreement. It was required for each project on a project-by-project basis.

Second was the formal agreement between State and local highway officials. It was required once at the onset of implementing the PPM and could be referred to on future projects. Existing agreements could be amended for this purpose, such as State-City or State-County maintenance agreements.

The third, and perhaps the most important action, concerned the utility accommodation policy that would be used by local highway authorities to regulate the use of the project right-of-way. Where the local highway agency had an existing policy, it could be reviewed to determine whether it complied with the PPM, i.e., whether it prescribed a degree of protection to the highway at least equal to the protection to the highway provided by the State's accommodation policy. Where the local highway agency did not have a utility accommodation policy, the State could develop minimum criteria for local highway authorities to meet for accommodating utilities on Federal-aid highway projects. This latter approach was presented as a suggestion for consideration by the several parties of interest (County, City and State officials) as a means of reducing the work load and simplifying the task on hand. In any event, the PPM did not concern itself with the approach or method to be used for accomplishing this task but only with the results to be obtained.

Perhaps the two provisions receiving more comment than any others were (1) the scenic enhancement provisions under paragraph 6g and (2) the requirements for Federal approval of certain utility installations under paragraph 7f. With respect to (1) above, the scenic enhancement provisions of the policy were developed in keeping with the Federal-Aid Highway Act of 1968, Title 23, U. S. C., Section 138, which was a declaration of national policy that special effort should be made to preserve the natural beauty of the countryside, public park and recreation lands, and historic sites. It required the development of plans and programs that include measures to maintain or enhance the natural beauty of the lands traversed.

It was costly to construct highways through the areas cited in Section 138 (public parks, etc.) and to provide scenic overlooks, rest areas and scenic strips. The cost impact of Section 138 was borne entirely by public highway funds. When utilities could not avoid installing their facilities through these areas, they were being asked to follow reasonable measures to preserve and protect the appearance of these areas so developed for the benefit and enjoyment of the traveling public, as well as the investment of public highway funds for this purpose. In short, the message of this provision to utilities was the same as the message to highway officials under Section 138, that is, to avoid construction within such areas, wherever feasible and possible. Application of these provisions, insofar as the Federal interest was concerned, was required only when such areas were acquired or improved with Federal or Federal-aid highway funds. Extension of these provisions beyond this point was not intended.

Next, with respect to (2) above, the frequency of occasion for a State to refer utility use and occupancy agreements (permits, licenses, etc.) to BPR for review and concurrence was reduced to a reasonable minimum one that afforded the field offices an opportunity to monitor the State's practices on a continuing but selective basis. Such referrals were limited to cases involving exceptions to the State's approved policy and to the

scenic enhancement provisions of the PPM to extreme case exceptions including cases for establishing utility strips along the outer border of freeway rights-of-way, and to installations on or across Interstate highways. This last requirement was in effect since 1959. Under the foregoing arrangements, virtually 95 percent or more of the cases involving utility installations within highway rights-of-way were processed and approved by State or local highway officials without referral to BPR.

#### FEDERAL VERSUS STATE STANDARDS

One question that seems to arise again and again over the years concerned the requirement in the PPM for each State to have individually submitted the policies and procedures it employed, or proposed to employ, for accommodating utilities on Federal-aid projects. Also, for BPR to review them to see if they met the requirements of the PPM and, if so, approve them for use on Federal-aid projects in that State. Why go through this agonizing process on a State by State basis? Why not prescribe one set of Federal standards and require all States to follow the one standard?

There were several reasons why the State by State approach was taken. First were the differences imposed by State and local laws, regulations, franchises, governmental and industry codes, climate, geography, topography, and variations in the degrees of authority by the several State highway departments to regulate the use of highway right-of-way by utilities. It would be difficult to devise a national standard that would comfortably fit all these variations and differences. Next, the entire matter was viewed as being primarily a maintenance function, e.g. the issuing of a permit to a utility to occupy the highway, and traditionally BPR did not get involved in prescribing detailed national standards for a State's day to day maintenance operations. Also, the matter was not confined to active projects but could and would be for application at any point in time when a utility company so requested permission to use and occupy the highway rights-of-way. Finally, and perhaps the most important, the State by State approach was used very effectively under the Secondary Road Plan, and this seemed to offer the best approach to take for developing detailed standards in each State for the accommodation of utilities.

One other factor that was most important to the selection of the Secondary Road Plan approach was the corresponding and concurrent development of a companion guide by AASHO. It was intended that guidelines to assist the States in establishing and administering reasonably uniform utility accommodation policies would be developed and published by AASHO and that they would be available at about the same time or shortly thereafter the first edition of the PPM was published. Unfortunately, AASHO's work on the guide did not proceed as expeditiously as anticipated and the AASHO, A Guide For Accommodating Utilities on Highway Rights-of-Way <sup>26</sup> did not get approved by the AASHO Committee on Planning and Design Policies until October 25, 1969 and was not made available until December, 1969.

## BRIEFING SESSIONS

About four months after publishing the first edition of PPM 30-4.1 (November 29, 1968), arrangements were made by BPR to conduct a series of briefing sessions on the new PPM and on the updated edition of PPM 30-4, dated February 14, 1969. An elaborate set of briefing session notes <sup>23</sup> and a list of questions and answers were prepared in advance as an aid to conduct the sessions and as information for distribution to those attending each session. There were sessions held at five locations (Kansas City, Baltimore, San Francisco, Atlanta, and Springfield, Illinois), all during the month of April, 1969. Each session was for three days duration, with the first two days for BPR's regional and division office personnel and State highway representatives, with the third day open to representatives from the utility industry, with BPR and State highway officials in attendance if they so wished. These sessions were well appreciated, most successful and effective in getting a reasonably uniform application of the new policies nationwide.



## FOUR LANDMARK DECISIONS

During 1969, four landmark decisions were made by highway officials for accommodating utilities within highway rights-of-way. Two of them were policy statements issued by BPR and the other two were publications by AASHO.

JOINT DEVELOPMENT AND MULTIPLE USE CONCEPTS FOR  
FREEWAYS AND UTILITIES

During the development and review of the first edition of PPM 30-4.1 (November 29, 1968) and thereafter, several complaints were received from utility representatives concerning differences from one State to another in the application of the AASHO Policy for accommodating utilities on Interstate freeways. Some States were reported as being very conservative when considering requests for extreme case exceptions under the AASHO policy while others were not. In response to these requests a CM, dated October 1, 1969, was issued by BPR on the topic, Application of <sup>24</sup> Joint Development and Multiple Use Concepts to Freeways and Utilities.

The CM acknowledged that the provisions for extreme case exceptions to the AASHO Policy had served well to preserve and protect the access control feature of Interstate highways. Further, that experience had demonstrated the need and merit for continuing this protection on all freeways. The CM advised that it outlined additional BPR views on these matters, as follows:

It provided a practical method for applying both the AASHO policy and joint development and multiple use concepts for freeways and utilities, especially at locations within and approaching metropolitan areas where land was scarce and rights-of-way was expensive. It preserved the access control feature of these important highways but recognized the merit and need for accommodating trunkline and transmission type utility facilities under strictly controlled conditions. Finally, it established a basis for accommodating the highest type utility facilities along and within the rights-of-way of the highest type of highway facilities under conditions where the construction, maintenance, and operations of one did not adversely affect those of the other.

In the advancement of these concepts, and when the State had legal authority to do so, and so requested, the CM provided that BPR's approval could be given for installing trunkline or transmission type utility facilities within a utility strip on and along the outer border of existing freeway rights-of-way under certain stated strictly controlled conditions.

State highway departments were then encouraged by BPR to endorse these principles and to make provision for them in their utility accommodation policies. As a practical matter, the end result of this effort was that some States welcomed the new provisions, while the more conservative ones did not change or alter their views.

All of this CM was later incorporated into the third edition of PPM 30-4.1 dated November 29, 1972, as Appendix A.

### SECOND EDITION OF PPM 30-4.1 <sup>3</sup>

The second edition of PPM 30-4.1 Accommodation of Utilities, was issued on October 1, 1969, less than a year after the first one (November 29, 1968). The best way to explain the reason for this sudden revision would be that it reflected a sanitizing substitution of a few words and phrases of the first edition that had upset some alarmists in the utility industry who sincerely believed that the first edition was a conspiracy of Federal bureaucrats to deprive them of their State's rights. For example, the first edition of the PPM contained such words and phrases as scenic appearance, aesthetics, aesthetic considerations, aesthetic values, but the revised PPM substituted the term "visual quality" for all of the above throughout the PPM. The term, "visual quality", was also defined in the new edition. In paragraph 2b (Policy) the new PPM included an added phrase, "reflecting sound engineering principles and economic factors" after "measures" in the first sentence and substituted "shall not be construed to" for "does not" in the last sentence. In paragraph 7f(2) the word "unusual" was substituted for "extreme". There was more of the same but the only change of any consequence was to the scenic enhancement provisions in paragraph 6g. In any event once the new edition had been published, operations in the field proceeded in an orderly manner, relatively free from the earlier expressions of concern from those segments of the utility industry that had greeted its initial publication with great alarm.

This <sup>25</sup> second edition of PPM 30-4.1 was distributed by a CM dated October 3, 1969. <sup>25</sup> An important feature of this CM was that it reiterated the BPR's longstanding policy of having the States make a special distribution of BPR utility directives to the utility industry (also see Attachment 41 of Part I of this History).

### AASHO, A GUIDE FOR ACCOMMODATING UTILITIES ON HIGHWAY RIGHTS-OF-WAY

The AASHO Guide was approved by the AASHO Committee on Planning and Design Policies on October 25, 1969. An advance copy of the guide was distributed to BPR field offices and State highway departments by the CM dated December 10, 1969, on the topic, AASHO Guide "A Guide for Accommodating Utilities on Highway Rights-of-Way." <sup>26</sup> The CM advised that BPR accepted the guide for use by divisions and regions, along with PPM 30-4.1 and the Briefing Notes of the April, 1969 Briefing Sessions on the PPM, as a suitable basis for reviewing and approving State utility accommodation policies submitted under paragraph 7c of the PPM. The main purpose of the guide was to serve as a vehicle for implementing, or taking action under, the PPM. It provided a uniform basis and offered a sound approach for all State highway departments to follow in developing new or modernizing existing utility accommodation policies.

The April 1966 guide published by the National Association of County Engineers (County Development - Volume III, Location of Utilities) also was available for use on county roads. The intent of the NACE guide was to present material in a form that was adaptable for use by county highway

officials in regulating the use of highway rights-of-way by utilities in small population counties or in counties where urban development had not reached metropolitan proportions.

Both guides offered safe, rational practices to follow for accommodating all types of utility facilities which are to cross or otherwise occupy highway rights-of-way. One important feature was a recommendation for limiting longitudinal installations of overhead lines along roadsides to single pole type of construction. Joint-use single pole construction was also encouraged. Both of these features contributed substantially to highway safety and appearance. Other important features included recommendations for locating poles, guys, and related facilities beyond clear roadside areas or as far as practical behind curbs and, where feasible, behind sidewalks; for establishing minimum depths of bury for cased and uncased underground lines; for encouraging placement of spare conduit or duct to accommodate expansion of underground plant; for attachments to bridges; and for controls for markers, installation and trenched and untrenched construction (jacking or boring) on underground crossings.

#### AASHO, A POLICY ON THE ACCOMMODATION OF UTILITIES ON FREEWAY RIGHTS-OF-WAY

Extension of the AASHO Policy from application to Interstate highways to all freeways was adopted by letter ballot of the member States on February 15, 1969. For additional comments on this topic see Chapter III, Extending the Application. The provisions of the 1959 Policy were not revised at all; only the application was broadened to include all freeways and the title was changed accordingly.

One other activity associated with the AASHO Policy should be mentioned at this time. In 1974, American Telephone and Telegraph Co. (AT&T) requested AASHTO (by this time AASHO had been changed to AASHTO to include Transportation and Highway officials) to sanction a study to be conducted by AT&T on the feasibility of locating a transmission type communication system (wave guide) longitudinally within the rights-of-way of the Interstate highway system. The AASHTO endorsed a two-phased study proposal by AT&T. The first phase was to determine the technical, environmental and economic feasibility; the second was to formulate possible changes to the AASHTO Policy for Accommodating Utilities on Freeway Rights-of-Way. At the completion of phase 1 (1975) and the submission of a comprehensive study report for review and comment by AASHTO, AT&T was advised that some of the conditions imposed by AASHTO for AT&T to meet on phase 1 before advancing to phase 2 had not been fully covered to the extent that warranted AASHTO's approval to proceed with phase 2. Members of AASHTO's Standing Committee on Engineering and Operations (SCEO) recommended that the broad aspects of longitudinal occupancy of freeways by all types of transmission and trunkline utilities, not just communication lines, should be the subject of further study under Project 20-7 of the National Cooperative Highway Research Program (NCHRP) under the umbrella of the Transportation Research Board, National Academy of Sciences. AASHTO's Executive Committee concurred in this recommendation and the following year another study was launched by the NCHRP with a consultant under its Project 20-7. Early in 1978 the second study was completed and presented to the AASHTO's Standing Committee on Highways as the final report on NCHRP Project 20-7, Task 11 - "Longitudinal Occupancy of Freeways by Utilities."

The report advised that with proper controls utilities can use freeways without adversely affecting safety and recommended that AASHTO policy be modified to allow for more utility-freeway joint use. The report also recommended substantial additional research to establish warrants and design criteria for such utility joint use of freeways. FHWA took the position at that time that such additional research was not needed and that resolution of this matter could be accomplished by revising the policies on the basis of the information now available from the operating experience over the past 21 years and from the foregoing studies (for the latest information on the AASHTO policy, see Chapter VIII, Current Activities).

VII  
MORE STUDIES AND GUIDES

AASHO GEOMETRIC DESIGN GUIDE FOR LOCAL ROADS AND STREETS

The Geometric Design Guide for Local Roads and Streets was developed by the AASHO Committee on Planning and Design Policies; Part I - Rural was approved on October 26, 1969; and Part II - Urban on November 7, 1970. The guides are presented on a functional basis and are applicable to (1) collector rural roads and collector streets, and (2) local rural roads and local streets. In some cases, they may also apply to arterial roads and streets. In a jurisdictional highway classification, they apply generally to village or city streets, township and county roads and State secondary roads and streets.

Insofar as utility accommodations and joint use of rights-of-way are concerned, several provisions of the Part II - Urban section of the guide recognize the merit to meet the needs of all public transportation facilities (including utilities) so that the construction, maintenance and operations of one do not adversely affect those of the other. A list of those features follow:

- A street includes the entire area within the right-of-way.
- A street often accommodates public utilities.
- At least 2 feet clearance to obstructions, including utility poles, from face of the curve or edge of shoulder should be provided.
- Utility poles should be located at or near the right-of-way line.
- A border area of adequate width should be provided for placement of utilities and sidewalks. The width should be 4 to 8 feet or wider plus a sidewalk width.
- The right-of-way width should be sufficient to accommodate the planned highway facility, sidewalks and public utility strips in the border areas.
- The utilities use of street right-of-way should be done in a manner which insures the least interference with traveling public.

Insofar as application is concerned, it is important to keep in mind that the use of more liberal values than the minimums set forth in the guide are to be used where it is economically feasible. In the special cases of tight or unusual conditions, it may not be practical to even meet

the guide values. On the other hand, the guide encourages that in all cases every effort should be made to get the best possible design consistent with the terrain, the development (present and anticipated) and the funds available.

The foregoing showed that highway officials adopted a straight forward position on these matters; one that considered the interests of both the highway user and the utility consumer. They did this by assuring that where new improvements are designed along the lines recommended by the overriding design guide, generally there should be sufficient space within the highway rights-of-way to meet present and foreseeable needs for adequately accommodating those public transportation facilities authorized by law to occupy highway rights-of-way.

#### STUDY ON UTILITY TUNNELS IN URBAN AREAS

The American Public Works Association (APWA) in February, 1971, concluded an 18 month investigation of the feasibility of utility tunnels in urban areas. The study was conducted by Stanford Research Institute, APWA Staff, and special consultants and was funded by FHWA, private utility organizations, and several municipalities. The results of the investigations were published in "Special Report No. 39 - Feasibility of Utility Tunnels in Urban Areas" by APWA. The study concluded that the primary potential advantages of utility tunnel systems were: (1) Reduction or elimination of street cuts, thereby eliminating interferences with traffic, street noise and damage to other systems; (2) Expansion of services without disrupting the use of public streets; (3) Improvement of aesthetic appearances and (4) Reduction of utility right-of-way requirements.

The primary disadvantages were (1) Possible increased cost requirements for the mitigation of inter-system effects; (2) Susceptibility of major outages of all systems due to system faults, sabotage or vandalism, and (3) Difficulty in coordinating installation and maintenance activities as compared to conventional methods.

A Summary of other conclusions were: (1) Economic feasibility was expected to be found primarily in the high density districts; (2) From past experience it was concluded that gas, electric, power distribution, telephone, water, steam and other utilities found in the urban street right-of-way could be safely and dependably accommodated in a utility tunnel system if proper precautions were taken and coordination among the utilities was developed; (3) Legal, regulatory and management problems, while complex, could be resolved, and (4) The provision of customer services leading from the utility tunnel may be one of the more difficult problems to be solved.

#### THIRD EDITION OF PPM 30-4.1 <sup>4</sup>

The third edition of PPM 30-4.1 (Accommodation of Utilities) was published on November 29, 1972. It was mostly a routine updating with no significant changes. For example, reference to the Bureau of Public Roads was changed to the Federal Highway Administration throughout. It incorporated as Appendix A the provisions of the October 1, 1969 CM on

the topic, Application of Joint Development and Multiple Use Concepts to Freeways and Utilities. All of the changes are shown on the transmittal memorandum dated November 29, 1972. <sup>4</sup>

There were two major difficulties encountered with this edition of the PPM. One was due to the absence of a designated suspense or target date for approving the utility accommodation policies in all States on or before a specified date. The earlier editions had included instruction on this, although the delay in approving and publishing the AASHO Guide had delayed the States in meeting the previously established target dates of November 29, 1969 and June 30, 1970. As a result, 10 years after all the States were requested to submit this information under the 1969 edition of the PPM, there were still five States that had not yet done so and several other States had delayed this action for years after first being asked to do so. Thus, the inclusion of a suspense date in the PPM requiring each State to submit a utility accommodation policy to FHWA within one year after the PPM had been issued could have avoided all the foot dragging and delay. The other difficulty was due to the reluctance of a few States to follow the AASHO guide and prescribed format for developing a State policy. Where the States voluntarily used the Guide, there was no problem. Where they did not follow the Guide, it was difficult to get a satisfactory policy.

#### STATE OF THE ART REPORT AND THE MANUAL OF IMPROVED PRACTICE

The report and manual are an in-depth study of the accommodation of utility plant within the rights-of-way of urban streets and highways. The purpose of the study and reports was to provide guidance and assistance to FHWA personnel, together with those individuals in State and local highway, street, and other public agencies responsible for regulating the use and occupancy of urban street and highway rights-of-way by utility facilities, including the adjustment or relocation of such facilities that fall in the path of proposed street or highway improvement projects. The report and manual were prepared by the American Public Works Association (APWA) under contract with FHWA. The report includes the results of an extensive review of the state of the art for accommodating utility facilities within the rights-of-way of urban streets and highways. The review involved in-depth on-site interviews of 40 communities in the United States and Canada, a mail survey of 500 local agencies, of which 222 submitted replies, and the assistance and cooperation of representatives of all major utility associations, the American Society of Civil Engineers, APWA's Institute for Municipal Engineering, FHWA, and several other national associations and organizations. The manual presents guidelines for improving existing practices for accommodating utility facilities within urban streets and highways. This report and manual was first distributed to FHWA's field offices in February 1975 and again in 1976. The manual and report set forth principles and practices under which utility facilities can be successfully accommodated within urban rights-of-way. These principles and practices can be characterized by five steps.

- a. Enabling legislation to establish rights of local agencies to control use of the right-of-way;

- b. Provision of adequate staff and budget to protect the public's investment in its streets and highways;
- c. Establishment and implementation of adequate permit, inspection, and pavement restoration controls;
- d. Implementation of cooperation and coordination mechanisms and record systems among all major utilities; and
- e. Provision of accurate information to the field forces who excavate in the right-of-way to allow them to work safely and protect the existing utility plant.

NCHRP SYNTHESIS OF HIGHWAY PRACTICE REPORT NO. 34 <sup>8</sup>

This report by the National Cooperative Highway Research Program (NCHRP) is on the topic, Policies for Accommodation of Utilities on Highway Rights-of-Way, Report No. 34 (A 1976 Transportation Research Board publication). <sup>8</sup> Information is presented on current policies of highway and transportation agencies for accommodating pipelines, power lines, communication lines, and other utilities on highway rights-of-way. Among the matters discussed are location, bury, encasement, and installation of underground utilities; location, clearances, and nature of installation of overhead utilities; positioning and method of attachment to highway structures; scenic enhancement; and permits and fees. Recommendations for the improvement of accommodation policies are made where believed warranted.

Findings of the synthesis included:

- Most agencies have used the AASHTO Guide as the model for their policies on utility accommodation. Some have used the exact language of the Guide; others have added to or revised the suggestions of the Guides to meet local needs.
- There are policy variations from state to state in such items as: location, bury, encasement, and installation of underground utilities; location and clearance of overhead facilities; and position and method of attachment of utilities to highway structures. Location requirements are often oriented to different baselines, such as right-of-way line, pavement edge, or curb line.
- Differences in location, alignment, bury, clearance, encasement, etc., are not always attributable to differences in geographic area, climate, terrain, or other factors.
- All policies reflect a desire to locate utilities as far as possible from the traveled way. Another common denominator is the almost complete banning of longitudinal placement of facilities under pavements, except in urban areas. The policies are also in agreement that attachment of utilities to highway structures should be discouraged whenever possible and, when permitted, should be rigidly regulated.



- Some policies related location, bury, and encasement requirements with relative hazards involved, such as power or communication lines, voltages, pressures, and the nature of material transmitted in a pipeline.

- Most agencies are aware of the need for scenic enhancement of roadsides, particularly areas such as overlooks, rest areas, and parks, and thus have adopted the exact or similar wording of the AASHTO Guide on scenic enhancement for utility installations.

- The need for coordination of the practices and procedures of all utilities that use the right-of-way is not adequately covered by the AASHTO Guide, nor do individual state policies make specific references to utility accommodation coordination.

Recommendations for the improvement of policies on accommodation of utilities were made, as follows:

- Periodic conferences should be conducted for the purpose of developing possible concurrences between state policies and for examining the views of the utilities.

- Efforts should be made to foster dual and multiple use of utility facilities where such uses are compatible, safe, and workable.

- The AASHTO Guide has been helpful to state agencies in preparing their policies. However, it provides only minimal guidance for accommodating utilities in urban areas or sections of road with narrow rights-of-way. Some agencies have included additional material and established procedures beyond those in the Guide. An appropriate AASHTO group should undertake revision of the Guide. Similarly, each agency should periodically review its policy to ascertain the need for revisions.

- Agencies that do not now have sections in their policies covering permits, inspections, fees, and bonding requirements should consider adding these.

- The formation of local-regional utility coordination committees with the participation of highway agencies is encouraged.

- Standard color markings should be adopted for stakes used to mark the location of underground utilities.

- Some responsibilities for certain facets of utility accommodation belong to highway agencies, others belong to the utilities, and some belong to both.

Areas where specific research is needed include:

- New and improved methods for placing, repairing, and replacing utilities within highway rights-of-way.

- Optimization of standards for location, alignment, bury, encasement, structure attachments, etc.

- Determination of: the nature and extent of the problems of accommodating utilities on highways, the effects that adoption of policies have had on these problems, and the cost/benefit of the policy requirements.

As a follow up measure to the foregoing recommendations, two of them were discussed by the Joint AASHTO/ARWA Highway-Utility Liaison Committee at its meeting of September 29, 1976, in Lake Buena Vista, Florida. The Committee unanimously made the following recommendations:

Recommendations by the Joint AASHTO/ARWA  
Highway-Utility Liaison Committee at Its Meeting  
of September 29, 1976, in Lake Buena Vista, Florida

(1). In the interest of avoiding and reducing the occasion for accidental dig-ups of underground utility lines the Joint Committee unanimously recommends that AASHTO adopt the use of standard color markings for stakes used to mark the location of such underground utility lines located within the rights-of-way of highway construction projects. Except as may otherwise be provided for by State law, the colors shall be in accordance with the recommendation for standard color markings, as contained in Chapter Nine of the 1976 NCHRP. Synthesis of Highway Practice, Report No. 34, "Policies for Accommodation of Utilities on Highway Rights-of-Way, as follows:

Yellow for gas, oil, petroleum, and other hazardous liquid or gaseous materials; red for electric power; orange for communication; blue for water; and green for storm and sanitary sewers.

(2). The Joint Committee unanimously recommends that AASHTO encourage that periodic conferences be conducted, as appropriate, between highway and utility officials for the purpose of developing new ideas, making improvements, modernizing and updating utility accommodation policies, and coordination of these matters within and between States, in accordance with the findings and recommendations contained in Chapter Nine of the 1976 NCHRP Synthesis of Highway Practice, Report No. 34, "Policies for Accommodation of Utilities on Highway Rights-of-Way."

At its meeting in Birmingham, Alabama on November 12, 1976, the AASHTO Standing Committee on Engineering and Operations made a recommendation that the Liaison Committee update and revise the Guide for Accommodating Utilities on Highway Rights-of-Way along the lines indicated by (1) above. No action was taken on the other recommendation.

## VIII

### CURRENT ACTIVITIES

#### A PROPOSED UPDATING

By a memorandum <sup>27</sup> dated September 29, 1976, FHWA's Director, Office of Engineering, advised the Regional Federal Highway Administrators that plans were underway for a routine updating of PPM 30-4 and PPM 30-4.1. Comments were solicited from FHWA's division offices and the States. An advance notice of proposed rulemaking, <sup>28</sup> FHWA Docket 76-16 (41 FR 42220, September 27, 1976) discussed the proposed updating and invited interested parties to comment.

As only two comments were received on the proposed rulemaking, and as FHWA had meanwhile decided to make a more significant revision to many of its regulations and policies in the interest of simplifying them and cutting red tape, the proposed routine updating of PPM 30-4 and PPM 30-4.1 was dropped at that time.

#### SURFACE TRANSPORTATION ASSISTANCE ACT OF 1978

Section 113 (Utilities on Rights-of-Way) of the 1978 Act, amended 23 U. S. C. 109, Standards, as follows:

PUBLIC LAW 95-599 -- Nov. 6, 1978	92 STAT. 2696
	92 STAT. 2697

Sec. 113. Section 109 of title 23, United States Code, is amended by adding at the end thereof the following new subsection:

"(1)(1) In determining whether any right-of-way on an Federal-aid system should be used for accommodating any utility facility, the Secretary shall --

"(A) first ascertain the effect such use will have on highway and traffic safety, since in no case shall any use be authorized or otherwise permitted, under this or any other provision of law, which would adversely affect any aspect of safety;

"(B) evaluate the direct and indirect environmental and economic effects of any loss of productive agricultural land or any impairment of the productivity of any agricultural land which would result from the disapproval of the use of such right-of-way for the accommodation of such utility facility; and

"(C) consider such environmental and economic effects together with any interference with or impairment of the use of the highway in such right-of-way which would result from the use of such right-of-way for the accommodation of such utility facility.

(2) For the purpose of this subsection --

"(A) the term 'utility facility' means any privately, publicly, or cooperatively owned line, facility, or system for producing transmitting, or distributing communications, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water not connected with highway drainage, or any other similar commodity, including any fire or police signal system or street lighting system, which directly or indirectly serves the public; and

"(B) the term 'right-of-way' means any real property, or interest therein, acquired, dedicated, or reserved for the construction, operation, and maintenance of a highway. "

FHWA found that a close reading of the requirements in section 109(1)(1) (A), that " in no case" will any utility accommodation be permitted which would "adversely affect any aspect of safety" (underscoring provided) is overly restrictive in that any such accommodation must, in fact, affect some aspect of safety. This created severe difficulties for the implementation of this section since the provision can be interpreted such that the only legal policy possible is to preclude any accommodation of utilities on highway rights-of-way. Moreover, this restrictive reading works to "write out" the provision of subsections (B) and (C) of this section.

FHWA did not think this was the intent of the Public Works Committee. Rather FHWA believed that it was the committee's intent to make the issue of highway and traffic safety of paramount, but not sole, importance when considering the accommodation of utility facilities within highway rights-of-way. Also that, design, location, and manner in which utility installations are to be made within the highway rights-of-way are to be adequate to ensure compliance with clear roadside policies and to provide for a reasonably safe traveling environment.

FHWA proceeded to request the Committee to consider a technical amendment to Section 109 (1)(1)(A). The change was designed to make the foregoing intent clear and not to represent any lessening of Congressional concern over highway and traffic safety, as follows:

#### Technical Amendment

Amendment: Section 109(1)(1)(A) is amended by deleting the words "adversely affect any aspect of safety" and inserting in lieu thereof the words "adversely affect safety. "

The amendment was so approved on November 9, 1979, as Section 3 of Public Law 96-106, Surface Transportation Assistance Act of 1978, Amendment.

#### A PROPOSAL TO CUT RED TAPE

No further official action was taken to revise PPM 30-4.1 until February, 1979 at which time FHWA engaged a consultant to prepare a set of written recommendations for updating current FHWA regulations and procedures on utility-highway requirements. The objective was to update and simplify

FHWA's utility-highway directives on utility relocations and adjustments. As part of this contract the consultant was to also prepare this history of Federal policy on the relocation and accommodation of utilities under the Federal-aid highway program

At that time (March 6, 1979) FHWA issued another advance notice of proposed rulemaking, <sup>29</sup> FHWA Docket No 79-8, inviting interested parties to comment on its proposed effort to simplify FHWA's regulations on utility relocations and adjustments (FHPM 1-4-4). No mention was made at that time about FHPM 6-6-3-2 (Accommodation of Utilities) because the Congress had not yet approved the foregoing described technical amendment to 23 U. S. C. 109(1) (1) (A).

#### CONSULTANT'S REPORT <sup>30</sup>

The Consultant's Report for updating FHWA's regulations and procedures on utility-highway requirements was presented to FHWA on September 14, 1979. The report includes recommendations for updating current regulations and procedures for utility relocations and adjustments as well as for the accommodation of utilities. The report also contains numerous attachments, including drafts of proposed new directives submitted by the consultant for consideration by FHWA. These attachments are not included as part of this history but are located and maintained in the files of FHWA's Railroads and Utilities Branch, HNG-14, Office Engineering in its Washington, D. C. Headquarters.

#### UPDATE OF AASHTO POLICY AND GUIDE

In October 1979 AASHTO also began an effort to review its existing utility accommodation policies and guidelines to determine whether or not there should be revisions to reflect the requirements of Section 113 of the 1978 Act and to further improve these policies and guidelines to ensure uniform application in accordance with present day utility accommodation needs throughout the country. This effort was on-going at the time this history was written.

#### A LOOK AHEAD

The Consultant's Report along with all its attachments, including drafts of proposed new directives, were next transmitted by FHWA to a Technical Advisory Panel for Updating Utility Directives (a special group of five highway engineers selected from FHWA's field offices and assembled for this purpose). Following review and deliberations on this matter, the Panel submitted its recommendations to FHWA's headquarters office. A draft of a proposed new FHPM 6-6-3-2 (Accommodation of Utilities) was then reviewed by various offices within FHWA's headquarters and the product that emerged from this review process was published in the Federal Register on April 17, 1980, as a notice of proposed rulemaking, <sup>31</sup> FHWA Docket 80-4 (45 FR 26280, April 17, 1980). Comments were invited on or before June 16, 1980.

In looking ahead, it is reasonable to expect that the placement of utilities within the rights-of-way of public streets and roads, especially underground installations in roadbed areas, will continue to pose major problems during the 1980's to highway agencies, utility companies, and contractors. Until and unless new and improved methods and techniques for accommodating utilities within such rights-of-way are developed and put into practice, highway officials will likely continue to be plagued with serious car accidents involving collisions with utility poles, guys, or other ground-mounted utility appurtenances located at critical and hazardous points along the roadsides and damaging pavement cuts resulting in rough riding surfaces as well as costly and annoying delays and interferences to highway traffic, all of which stem from making new utility installations, from repairing and modernizing existing installations, or from routine servicing operations. Utility companies should continue to experience more and more damage to their facilities located within the roadway, stemming from construction operations by other utility companies and from new construction, maintenance, and repair operations by highway contractors and highway agencies. Likewise, contractors employed by either highway agencies or utility companies should continue to experience similar delays and added costs to their construction operations. In fact, all parties of interest stand to suffer from the bad public image generated by these problems.

Suggestions for resolving some of these problems that deserve special attention by highway and utility officials alike, include the following:

- Encourage more widespread development and use of uniform location standards for placing utility facilities in streets and roads with a designated space or location reserved within the public rights-of-way for each type of utility line. Under this concept, arrangement of utility lines is designated in a definite cross-sectional pattern.
- Encourage more extensive utilization of joint-use of utility poles thereby reducing the number of potential roadside obstacles.
- Encourage placing utility poles as far as possible behind curbs and sidewalks wherever practical to increase off-set distances from the travel way.
- If poles must be located in the public rights-of-way where encroachments by highway vehicles are likely, encourage the use of breakaway poles, impact attenuation devices or shielding to protect highway traffic.
- Where conditions are crowded and space is limited, encourage underground installations in lieu of conventional above ground construction. In addition, encourage more extensive use of a common trench to accommodate several different types of utility lines as opposed to the present widespread practice of providing separate trenches for each type of utility.
- Explore the feasibility of placing only transmission or trunk-line type utility facilities between the curbs of important urban streets and highways. These facilities are the highest

type, most durable, and most costly part of utility plant. They generally have a longer service life expectancy and do not need repairs to the extent and as frequently as distribution plant. As they do not directly serve consumers, they do not require numerous service drops to abutting consumers. Distribution plant, except where space is not available, could be placed back of curbs. This should greatly reduce the frequency of occasion for disturbing the roadbed areas of important urban streets and highways and resultant interference to motorists from these operations.

- Explore the feasibility of a dual system for utility distribution plant, say where a main or buried cable is placed along each side of a street or road along the outer border of the public right-of-way or back of the curbs, so as to reduce the frequency of occasion for excavating the roadbed for repairs to mains and service drops to abutting consumers and for installing new utility lines. This, in turn, should require further study and analysis of the maintenance records of various utilities and highway agencies to determine the extent and frequency of repairs, pavement cuts, costs, and damages to highways, economic losses in travel time to motorists, effects on abutting residents, businesses, and customers, effects on other utility plants, and the like. One objective would be to identify the benefits to the highway and highway user where a dual system is employed, especially from the standpoint of safety, convenience and costs. Another objective would be to determine whether the initial cost for a dual system would be less to the overall public (the utility consumer and highway user) than the ultimate cost of single line installations, now commonly used.
- Reduce the present day imbalances between the availability and demand for space within highway rights-of-way by acquiring sufficient rights-of-way for future highway improvement projects to accommodate and reasonably meet the foreseeable needs of both the highway and those utilities that are authorized bylaw to use and occupy the public rights-of-way. Where such uses are authorized by law, the rights-of-way so acquired for new highway improvement projects should be adequate to meet present and foreseeable demands (i. e. the ones stemming from legislative authorizations) for the use of space within the public rights-of-ways so that the construction, maintenance, and operations of one facility (the utility), do not adversely affect those of the other (the highway). Where the rights-of-way is not adequate to meet these demands, the utility consumer and the highway user continue to suffer from the consequences, both from the standpoint of inconveniences and added costs.

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U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
BUREAU OF PUBLIC ROADS  
WASHINGTON, D.C. 20591

2

May 2, 1967

INSTRUCTIONAL MEMORANDUM 30-6-67  
39-30

SUBJECT: Utilities - Scenic Enhancement

The manner and extent to which utility facilities are permitted to use scenic strips, overlooks, rest areas, landscaped areas and other areas of roadside development or particular scenic enhancement is of increasing concern to Public Roads. Since such use by utilities can materially detract from the appearance of these and adjacent areas and diminish the value of the investment of public funds for highway beautification and scenic enhancement, the need for control is evident. For these reasons, the following policy statement is adopted for immediate use and application on all projects involving the expenditure of Federal-aid funds or funds provided by Section 319(b) of Title 23, U.S.C., for beautification purposes.

(1) The interests in land to be acquired for a scenic strip, overlook, rest area or recreation area shall be of such nature and extent as are adequate to control and regulate the use of those strips and areas by utilities. Utility installations shall not be permitted within such strips or areas, except where it is demonstrated to the satisfaction of the division engineer that the installations will not now or later adversely affect or otherwise mar the appearance of the area being traversed.

(2) Where Federal-aid funds have been or are to be expended for the costs of landscaping or roadside development of areas within the right-of way limits of a Federal-aid project, utility installations will not be permitted within such landscaped or enhanced areas or other areas of significant natural beauty or view within the highway right-of-way, except as provided for by paragraph (1) above and as further provided by other pertinent requirements for accommodating utilities within the right-of-way of Federal-aid projects.

(3) Underground utility installations are preferred where utility services are to be provided to serve rest or recreational areas. Aerial installations may be approved where it is determined they will not adversely affect or otherwise mar the appearance of the highway or the area being served and provided they qualify under the clear roadside provisions of IM 21-6-66.

-more-

(4) Where a utility company has a real property interest in the area or strip to be acquired for the purposes described in paragraph (1) above, the State shall take whatever steps are necessary to protect and preserve the area or strip being acquired. This will require a determination by the State as to whether retention of the utility at its existing location, will now or later adversely affect the appearance of the area being acquired, and whether it will be necessary to extinguish, subordinate or acquire the utility's interests therein, or to rearrange, screen or relocate the utility's facilities thereon, or both. Where the adjustment or relocation of utility facilities are necessary, the provisions of PPM 30-4 are to be applied. In such cases, the State shall determine, subject to concurrence by the division engineer, whether the added cost of acquisition attributable to the utility's property interest and/or facilities which may be located thereon outweigh the aesthetic values to be received.

(5) Highway Beautification Act funds or Federal-aid funds should not be used to relocate, adjust, rearrange or convert (aerial lines) existing utility facilities for the sole purpose of enhancing the area of highway right-of-way being traversed unless it represents a minor part of an effort to preserve a scenic or landscaped area.

It is not the intent of this policy statement to impose restrictions on future installations of utility crossings of Federal-aid highways to the extent that would obstruct the development of expanding areas adjacent thereto. It is the intent that due consideration be given by appropriate authorities to the location and manner in which such crossings are made. It is also the intent to protect and preserve the appearance of enhanced sections of the highway and adjacent areas of scenic beauty and the investment of public funds.



**F. C. Turner**  
Director of Public Roads

ATTACHMENT 1

A-4

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
BUREAU OF PUBLIC ROADS  
WASHINGTON, D.C. 20591  
POLICY AND PROCEDURE MEMORANDUM

Transmittal 140  
November 29, 1968  
34-30

1. MATERIAL TRANSMITTED

PPM 30-4. 1, Accommodation of Utilities

2. EXISTING ISSUANCES AFFECTED

Supersedes: Paragraph 15, PPM 30-4, dated October 15, 1966,  
(Except as needed for interim procedure under  
Paragraph 3d of PPM 30-4.1).

IM 30-6-67, dated May 2, 1967, (that part under  
Numbered paragraphs (1), (2), and (3)).



F. C. Turner  
Director of Public Roads



Lowell K. Bridwell  
Federal Highway Administrator

Distribution:  
Basic

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
BUREAU OF PUBLIC ROADS  
POLICY AND PROCEDURE MEMORANDUM

Transmittal 140  
**30-4.1**  
November 29, 1968

ACCOMMODATION OF UTILITIES

- Par. 1. Purpose  
2. Policy  
3. Application  
4. Definitions  
5. General Provisions  
6. Requirements  
7. Reviews and Approvals  
8. State Accommodation Policies and Procedures  
9. Use and Occupancy Agreements

1. PURPOSE

To prescribe policies and procedures for accommodating utility facilities on the rights-of-way of Federal and Federal-aid highway projects. It implements the applicable provisions of Section 1.23 and 1.27 of Title 23, C.F.R., and Section 116 of Title 23, U. S. C., with respect to the maintenance obligations of the State thereunder as affected by the use of the rights-of-way of Federal-aid highway projects for accommodating utility facilities.

2. POLICY

a. It is in the public interest for utility facilities to be accommodated on the rights-of-way of a Federal of Federal-aid highways project when such use and occupancy of the highway rights-of-way does not interfere with the free and safe flow of traffic or otherwise impair the highway or its scenic appearance and does not conflict with the provisions of Federal, State or local laws or regulations or the provisions of this memorandum.

b. These provisions concern the location and manner in which utility installations are to be made within the rights-of-way of Federal and Federal-aid highway projects and the measures to be taken by highway authorities to preserve and protect the integrity of the highway, including aesthetic considerations and the safety of highway traffic. This memorandum does not alter the authority of utilities to install their facilities on public highways pursuant to law or franchise and reasonable regulation by highway authorities with respect to location and manner of installation.

3. APPLICATION

- a. Effective on date of issuance.

b. It applies to new utility installations, made after the effective date, within the rights-of-way of active and completed Federal and Federal-aid highway projects, except that application to the projects described under paragraphs 6a and d will be limited to projects that are authorized after the effective date.

c. It also applies to existing utility installations which are to be retained, relocated, or adjusted within the rights-of-way of active highway projects, as described in paragraph 3b, and to existing lines which are to be adjusted or relocated under paragraph 6c.

d. Until approval is given to the utility accommodation policies and procedures of the State or its political subdivision by the Regional Administrator under paragraph 7c of this memorandum, utility installations within the rights-of-way of Federal and Federal-aid highway projects shall be in accordance with the provisions of paragraph 15 of PPM 30-4 dated October 15, 1966, and paragraph 6 of this memorandum.

4. DEFINITIONS

For the purpose of this memorandum, the following definitions shall apply:

a. "Utility facilities and/or utilities" means and includes all privately, publicly or cooperatively owned lines, facilities and systems for producing, transmitting or distributing communications, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water not connected with highway drainage, and other similar commodities, including fire and police signal systems and street lighting systems, which directly or indirectly serve the public or any part thereof. The term "utility" means that the utility company, i.e. any person or private or public entity owning and/or operating utility facilities as defined in this paragraph, including any wholly owned or controlled subsidiary.

b. "Private lines" means privately owned facilities which convey or transmit the commodities outlined in paragraph 4a, but are devoted exclusively to private use.

c. "Federal highway projects" are those projects involving the use of funds administered by the Federal Highway Administration where the location, design or construction of the project is under the direct supervision of the Bureau of Public Roads.

d. "Federal-aid highway projects" are those projects administered by as State which involve the use of Federal-aid highway funds for the construction or improvement of a Federal-aid highway or related

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ATTACHMENT 2

highway facilities or for the acquisition of rights-of-way for such projects, including highway beautification projects under Section 319, Title 23, U.S. C.

e. "Active Federal or Federal-aid highway projects" are those projects for which any phase of development has been programed for Federal or Federal-aid highway funds and the State or other highway authority has control of the highway rights-of-way. A project will be considered active until the date of its final acceptance by the Bureau of Public Roads and thereafter will be considered completed.

f. "Rights-of-way" means real property or interests therein, acquired, dedicated or reserved for the construction, operation and maintenance of a highway in which Federal-aid or Federal highway funds are or may be involved in any stage of development. Lands acquired under Section 319(b), Title 23, U. S. C. (Scenic strips - 1965 Highway Beautification Act) shall be considered to be highway rights-of-way.

g. "Highway" means any public way for vehicular travel, including the entire area within the rights-of-way and related facilities, constructed or improved in whole or part with Federal-aid or Federal highway funds.

h. "Freeway" means a divided arterial highway with full control of access.

i. "Director" means the Director of the Bureau of Public Road, Federal Highway Administration.

j. "Regional Administrator" means the Regional Administrator of the Federal Highway Administration.

k. "Division Engineer" means the division engineer of the Bureau of Public Roads, Federal Highway Administration.

l. "State" means that department, commission, board, or official of any state charged by its laws with the responsibility for highway administration.

m. "Use and Occupancy Agreement" means the document by which the state, or other highway authority, approves the use and occupancy of highway rights-of-way by utility facilities or private lines.

n. "Utility Service Connection" means a service connection from a utilities distribution or feeder line or main to the premises served.

o. "Secondary Road Plan" -- is a statement, prepared by a State highway department and approved by the director, in which the State outlines the standards and procedures it will use

to plan, design and construct projects on the Federal-aid Secondary Highway System which are to be financed in part with Federal-aid Secondary Highway Funds in accordance with Sec. 117, Title 23, U. S. C., and PPM 20-5.

p. "Clear Roadside Policy" means that policy employed by a highway authority to increase safety, improve traffic operation and improve the appearance of highways by designing, constructing and maintaining highway roadides as wide, flat and rounded as practical and as free as practical from physical obstructions above the ground such as trees, drainage structures, massive sign supports, highway lighting standards, utility poles and other ground-mounted obstructions. The policy is also directed at the removal of roadside obstacles which are likely to be associated with accident or injury to the highway user. Where such obstacles are essential, they must be constructed to yield under specified levels of impact or placed at a location which affords adequate protection to an out-of-control vehicle. In all cases full consideration shall be given to sound engineering principles and economic factors.

5. GENERAL PROVISIONS

a. It is the responsibility of each State to maintain, or cause to be maintained, Federal-aid highway projects as necessary to preserve the integrity, appearance, operational safety, and function of the highway facility.

b. Since the manner in which utilities cross or otherwise occupy the rights-of-way of a Federal or Federal-aid highway project can materially affect the highway, its appearance, safe operation, and maintenance, it is necessary that such use and occupancy, where authorized, be regulated by highway authorities. In order for a State to fulfill its responsibilities in this area, it must exercise, or cause to be exercised, reasonable regulation over such use and occupancy through the establishment and enforcement of utility accommodation policies and procedures.

c. Due to the increasing competition between public transportation and other service facilities for available space, such as for highway, rapid transit, railroad and utility purposes, it is important that rights-of-way be used in the most efficient manner consistent with the overall public interest.

6. REQUIREMENTS

a. On Federal highway projects authorized after the effective date of this memorandum, the Regional Administrator will apply, or cause to be applied, utility accommodation policies similar to those required on Federal-aid highway projects, as appropriate and necessary to accomplish the

objectives of this memorandum. Where appropriate, agreements should be entered into between the Regional Administrator and the State or local highway authorities or other government agencies, or existing agreements should be amended, as may be necessary for the Regional Administrator to establish, or cause to be established, adequate control and regulation of use by utilities and private lines of the rights-of-way of Federal highway projects.

b. Secondary Road Plans shall be amended as necessary to comply with the provisions of this memorandum. Project actions by the division engineer or submissions by the State to the division engineer which are not now required should not be established for Secondary Road Plan projects as a result of this memorandum.

c. Where the State, or other highway authority, determine that existing utility facilities are likely to be associated with injury or accident to the highway user, as indicated by accident history or safety studies, the responsible highway authority is to initiate appropriate corrective measures to provide a safe traffic environment. Any requests received from the State involving Federal fund participation in the cost of adjusting or relocating utility facilities pursuant to this paragraph shall be subject to the provisions of PPM 30-4.

d. The following procedures apply where the State is without legal authority to regulate the use by utilities or private lines of the rights-of-way Federal-aid highway projects. Common examples are Federal-aid highway projects on a State highway system in cities and Federal-aid secondary highway projects on a county highway system.

(1) All such projects authorized after the effective date of this memorandum shall include a special provision in the project agreement for regulating such use of the highway rights-of-way. The provision shall require that the State will, by formal agreement with appropriate officials of a county or municipal government, regulate, or cause to be regulated, such use by highway authorities on a continuing basis and in accordance with a satisfactory utility accommodation policy for the type of highway involved.

(2) For the purpose of this paragraph, a satisfactory utility accommodation policy is one that prescribes a degree of protection to the highway, at least equal to the protection provided by the State's utility accommodation policy approved under paragraphs 7c and d.

(3) Such projects may be conditionally authorized in accordance with the provisions of paragraph 3d, pending approval of a satisfactory utility accommodation policy by the Regional Administrator under paragraph 7c.

e. Pending the adoption of the American Association of State Highway Officials of a policy for accommodating utilities on freeways, other than Interstate highways, utilities that are to cross or otherwise occupy the rights-of-way of Interstate highways and other Federal-aid freeways shall meet the requirements of the AASHO "Policy on the Accommodation of Utilities on the National System of Interstate and Defense Highways," adopted July 30, 1959.

f. In expanding areas along Federal-aid freeways it is expected that utilities will normally install distribution or feeder line crossings of freeways, spaced as needed to serve consumers in a general area along either or both sides of a freeway, so as to minimize the need for crossings of a freeway by utility service connections. In areas where utility services are not available within reasonable distance along the side of the freeway where the utility service is needed, crossings of Federal-aid freeways by utility service connections may be permitted.

g. The type and size of utility facilities and the manner and extent to which they are permitted within areas of scenic enhancement and natural beauty can materially alter the appearance and view of highway roadides and adjacent areas. Such areas include scenic strips, overlooks, rest areas, recreation areas and the rights-of-way of highways adjacent thereto. Also included are the rights-of-way sections of highways which pass through public parks, recreation areas, wildlife and waterfowl refuges and historic sites, as described under Title 23, U.S.C., Section 138.

(1) New utility installations within the foregoing described strips, overlooks, areas or rights-of-way, when acquired or improved with Federal or Federal-aid funds, are not to be permitted, except as follows:

(a) New underground utility installations may be permitted within such strips, overlooks, areas or rights-of-way where they do not require extensive removal or alteration of trees visible to the highway user or impair the appearance of the area.

(b) New overhead (aerial) installations of communication and electric power lines (35 K. V. or less) will not be permitted at such locations. However, overhead (aerial) installations of

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electric power lines (above 35 K. V.) may be permitted where it is demonstrated to the satisfaction of the division engineer that;

1 Other utility locations are not available or are extremely difficult and unreasonably costly or are less desirable from the standpoint of scenic appearance,

2 Underground installations are not technically or economically feasible or are more detrimental to the scenic appearance of the area, and

3 The proposed installation will be made at a location and in a manner that will not significantly detract from the appearance of the area being traversed, and will employ suitable designs and materials which give the greatest weight to aesthetic values, for example, self-supporting, harmless, single-pole construction with vertical configuration of conductors and cable.

(2) The provisions of this paragraph also apply to utility installations that are needed for a highway purpose, such as for highway lighting, or to serve a weigh station, rest or recreational area.

(3) There may be cases of extreme hardship or other extenuating circumstances encountered involving some degree of variance with the provisions of this paragraph. Such cases shall be subject to prior review and concurrence by the Director. Where the State proposes to approve a request from a utility involving a hardship case, the State shall submit its proposal and a full report of the circumstances to the division engineer. Where a hardship case involves a proposed installation within the rights-of-way of a highway passing through a public park, area, refuge, or site, as described under Title 23, U. S. C. 138, the State's report shall include the views of appropriate planning or resource authorities having jurisdiction over the land through which the highway passes. The division engineer shall review and submit the State's proposal along with his report and recommendations through the Regional Administrator to the Director.

h. Where the utility has a compensable interest in the land occupied by its facilities and such land is to be jointly owned and used for highway and utility purposes, the responsible highway authority and utility shall agree in writing as to the obligations and responsibilities of each party. Such agreements shall incorporate the conditions of occupancy for each party, including the rights vested in the highway authority and the rights and privileges retained by the utility. In any event, the interest to be acquired by or vested in the highway

authority in any portion of the rights-of-way of a Federal or Federal-aid highway project to be vacated, used or occupied by utilities or private lines shall be of a nature and extent adequate for the construction, safe operation and maintenance of the highway project.

7. REVIEWS AND APPROVALS

a. Each State shall submit a report to the division engineer on the authority of utilities to use and occupy the rights-of-way of State highways, the State's authority to regulate such use and the policies and procedures the State employs or proposes to employ for accommodating utilities within the rights-of-way of Federal-aid highways under its jurisdiction. Where applicable, the State shall include similar information on the use and occupancy of such highways by private lines where permitted under State law. The State shall identify those sections, if any, of the Federal-aid highways systems within its borders where the State is without legal authority to regulate use by utilities.

b. The division engineer shall review the information presented to him by the State under paragraph 7a and prepare a report outlining his recommendations to the Regional Administrator. Similar report shall be prepared and referred to the Regional Administrator, as the policies to be employed pursuant to paragraph 6d are received from the State.

c. Upon determination by the Regional Administrator that a State's policies and procedures under paragraph 7a and the policies to be employed pursuant to paragraph 6d meet the requirements of this memorandum, he shall approve their use on Federal-aid highway projects in that State or political subdivision. It is expected that the preparatory work attendant to such approval action will get underway and proceed as expeditiously as possible following the issuance of this memorandum, leading to the approval of the accommodation policies in all States within about one year from the effective date of this memorandum. A copy of the reports, approved policies and procedures and related actions taken pursuant to paragraphs 6c, 7b, c and d shall be furnished to the Office of Right-of-Way and Location.

d. Any changes, additions or deletions the State or political subdivision proposes to the policies and procedures approved by the Regional Administrator pursuant to this memorandum shall be subject to the provisions of paragraph 7a, b, and c.

e. The State's practices under the policies and procedures or agreements approved under

paragraph 7c shall be periodically reviewed by the division engineer and reported to the Regional Administrator.

f. When a utility files a notice or makes an individual application or request to a State to use or occupy the rights-of-way of a Federal-aid highway project, the State is not required to submit the matter to the Bureau of Public Roads for prior concurrence, except under the following circumstances:

(1) Installations on Federal-aid highway where the State proposes to permit the use and occupancy by utilities not in accordance with the policies and procedures approved by the Regional Administrator under paragraph 7c.

(2) Installations involving extreme hardship cases pursuant to paragraph 6g.

(3) Installations on Federal-aid freeways involving extreme case exceptions, as described in the AASHO "Policy on the Accommodation of Utilities on the National System of Interstate and Defense Highways", adopted July 30, 1959.

(4) Installations on or across Interstate highways.

8. STATE ACCOMMODATION POLICIES AND PROCEDURES

a. This paragraph outlines provisions considered necessary to establish policies and procedures for accommodating utility facilities on the rights-of-way of Federal-aid highway projects. These policies and procedures shall meet the requirements of paragraph 6c through 6h and shall include adequate provisions with respect to the following:

(1) Utilities must be accommodated and maintained in a manner which will not impair the highway or interfere with the safe and free flow of traffic.

(2) Consideration shall be given to the effect of utility installations in regard to safety, aesthetics and the cost or difficulty of highway and utility construction and maintenance.

(3) The use and occupancy of highway rights-of-way by utilities must comply with the State's standards regulating such use. These standards must include but are not limited to the following:

(a) The horizontal and vertical location requirements and clearances for the various types of utilities must be clearly stated. These must be adequate to insure compliance with clear roadside policies for

the particular highway involved. The roadside clearances for above ground utility facilities shall be consistent with those clearances applicable to other roadside obstacles on the type of highway involved, reflecting good engineering and economic considerations.

(b) The applicable provisions of government or industry codes required by law or regulation must be set forth or appropriately referenced, including highway design standards or other measures which the State deems necessary to provide adequate protection to the highway, its safe operation, appearance and maintenance.

(c) Specifications for and methods of installation; requirements for preservation and restoration of highway facilities, appurtenances, and natural features on the rights-of-way; and limitations on the utility's activities within the rights-of-way should be prescribed as necessary to protect highway interests.

(d) Measures necessary for protection of traffic and its safe operation during and after installation of facilities, including control-of-access restrictions, provisions for rerouting or detouring of traffic, traffic control measures to be employed, limitations on vehicle parking and materials storage, protection of open excavations and the like must be provided.

(4) Compliance with applicable State laws and approved State accommodation policies must be assured. The responsible highway authority's file must contain evidence in writing as to the terms under which utility facilities are to cross or otherwise occupy highway rights-of-way in accordance with paragraph 9. All utility installations made on highway rights-of-way after the effective date of this memorandum shall be subject to approval by the State or by other highway authorities under paragraph 6d, as is required by State law and applicable regulations. However, such approval will not be required where so provided in the use and occupancy agreement for such matters as facility maintenance, installation of service connections on highways other than freeways or emergency operations.

(5) Every effort should be made to avoid conflict between utility installations and existing or planned uses of highway rights-of-way for highway purposes. Proposed utility installations and future highway projects shall be coordinated to avoid, to the fullest extent possible, any conflict in location, construction, or method of installation.

9. USE AND OCCUPANCY AGREEMENTS

a. The use and occupancy agreements setting forth the terms under which the utility is to cross

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or otherwise occupy the highway rights-of-way must include or by reference incorporate:

(1) The State standards for accommodating utilities. Since all of the standards will not be applicable to an individual utility installation, the use and occupancy agreement must, as a minimum, describe the requirements for location, construction, protection of traffic maintenance, access restrictions and any special conditions applicable to each installation.

(2) A general description of the size, type, nature and extent of the utility facilities being located within the highway rights-of-way.

(3) Adequate drawings or sketches showing the existing and/or proposed location of the utility facilities within the highway rights-of-way with respect to the existing and/or planned highway improvement, the traveled way, the rights-of-way lines and, where applicable, the control of access lines and approved access points.

(4) The extent of liability and responsibilities associated with future adjustment of the utilities to accommodate highway improvements.

(5) The action to be taken in case of noncompliance with the State's requirements.

(6) Other provisions as deemed necessary to comply with laws and regulations.

b. The form of the use and occupancy agreement is not prescribed. At the State's option, the use and occupancy provisions may be incorporated as a part of the reimbursement agreement required by paragraph 7 of PPM 30-4.

c. Area or Statewide master agreements covering the general terms of a utility's use and occupancy of the highway rights-of-way may be used provided individual requests for such use and occupancy are processed in accordance with paragraph 8a(4) of this memorandum.



**F. C. Turner**  
Director of Public Roads



**Lowell K. Bridwell**  
Federal Highway Administrator

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U.S. DEPARTMENT OF TRANSPORTATION  
 FEDERAL HIGHWAY ADMINISTRATION  
 BUREAU OF PUBLIC ROADS  
 WASHINGTON, D.C. 20591

POLICY AND PROCEDURE MEMORANDUM

Transmittal 161  
 October 1, 1969  
 34-30

1. MATERIAL TRANSMITTED

PPM 30-4.1, Accommodation of Utilities

2. EXISTING ISSUANCES AFFECTED

Supersedes: PPM 30-4.1, Accommodation of Utilities,  
 dated November 29, 1968

3. COMMENTS

Changes to PPM 30.4.1 are identified as follows:

2a: (Also 2b, 4p, 5a, 5b, 6g, and 8a): Substitutes "visual quality" for "scenic appearance," "appearance," "aesthetics," "aesthetic considerations" and "aesthetic values" throughout the PPM.

2b: Adds "reflecting sound engineering principles and economic factors" after "measures" in the first sentence. Substitutes "Shall not be construed to" for "does not" in the last sentence.

3c: Adds statement on application to minor segments of existing lines and clarifies application to facilities that are to be retained in place without adjustment.

3e: New paragraph. Clarifies application of paragraph 6g.

4g: New paragraph. Defines "visual quality."

4r: New paragraph. Defines "new utility installations."

6e: Revised as necessary to update reference to AASHO policy (February 15, 1969, issue) and denote acceptance under PPM 40-2.

(NOTE: For more information on this, see the Circular Memorandum of this date from the director to Regional Administrators and Division Engineers on the subject: "Application of Joint Development and Multiple Use Concepts to Freeways and Utilities.")

- More -

6g: Combines second and third sentences of opening paragraph for simplification. Deletes reference to voltages, communication and power lines. Provides clarification as to funds involved by adding "highway" after "Federal" and "Federal-aid" in paragraph 6g(1). Provides new policy statement for aerial installations under 6g(1)(b). Emphasizes that aerial installations are to be avoided at these locations unless there is no feasible or prudent alternative to the use of these lands by aerial facilities. Outlines the conditions and warrants for approving an aerial installation. Substitutes "unusual" for "extreme" in paragraph 6g(3).

7c: Deletes approximate date for approval of State's accommodation policy. Shifts last sentence of former paragraph to new paragraph 7g.

(NOTE: It is expected that the preparatory work attendant to the approval action under paragraph 7c will continue as expeditiously as possible following the publication of this new issue of PPM 30-4.1, leading to the approval of the accommodation policies in all States on or before June 30, 1970).

7f: Substitutes "unusual" for "extreme" under 7f(2). Updates reference to AASHO policy under 7f(3).

7g: New paragraph. Formerly included as last sentence of 7c. Adds reference to 7e and 7f(1), (2), and (3).

*R. R. Bartelsmeyer*

**R. R. Bartelsmeyer  
 Director of Public Roads**

*F. C. Turner*

**F. C. Turner  
 Federal Highway Administrator**

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1 thru 6	November 29, 1968	1 thru 6

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ATTACHMENT 3

# POLICY AND PROCEDURE MEMORANDUM

## ACCOMMODATION OF UTILITIES

- Par. 1. Purpose
- 2. Policy
- 3. Application
- 4. Definitions
- 5. General Provisions
- 6. Requirements
- 7. Reviews and Approvals
- 8. State Accommodation Policies and Procedures
- 9. Use and Occupancy Agreements

### 1. PURPOSE

To prescribe policies and procedures for accommodating utility facilities on the rights-of-way of Federal and Federal-aid highway projects. It implements the applicable provisions of Section 1.23 and 1.27 of Title 23, C. F. R., and Section 116 of Title 23, U. S. C., With respect to the maintenance obligations of the State thereunder as affected by the use of the rights-of-way of Federal-aid highway projects for accommodating utility facilities.

### 2. POLICY

a. It is in the public interest for utility facilities to be accommodated on the rights-of-way of a Federal or Federal-aid highway project when such use and occupancy of the highway rights-of-way does not interfere with the free and safe flow of traffic or otherwise impair the highway or its visual quality and does not conflict with the provisions of Federal, State or local laws or regulations or the provisions of this memorandum.

b. These provisions concern the location and manner in which utility installations are to be made within the rights-of-way of Federal and Federal-aid highway projects and the measures, reflecting sound engineering principles and economic factors, to be taken by highway authorities to preserve and protect the integrity and visual qualities of the highway and the safety of highway traffic. This memorandum shall not be construed to alter the authority of utilities to install their facilities on public highways pursuant to law or franchise and reasonable regulation by highway authorities with respect to location and manner of installation.

### 3. APPLICATION

a. Effective on date of issuance.

b. It applies to new utility installations, made after the effective date, within the rights-of-way of active and completed Federal and Federal-aid highway projects, except that application to the projects described under paragraphs 6a and d will be limited to projects that are authorized after the effective date.

c. It also applies to existing utility installations which are to be retained, relocated, or adjusted within the rights-of-way of active highway projects, as described in paragraph 3b, and to existing lines which are to be adjusted or relocated under paragraph 6c. It shall not be applied to a minor segment of an existing utility installation in such a manner as to result in misalignment of the installation or adjustment of the entire installation except in those cases where a hazardous condition exists as defined in paragraph 6c. Where existing installations are to remain in place within the rights-of-way without adjustment, the State and utility are to enter into an agreement under paragraphs 6h or 9, as may govern, or existing agreements in effect at the time of the highway construction may be accepted, or amended, as may be appropriate.

d. Until approval is given to the utility accommodation policies and procedures of the State or its political subdivision by the Regional Administrator under paragraph 7c of this memorandum, utility installations within the rights-of-way of Federal and Federal-aid highway projects shall be in accordance with the provisions of paragraph 15 of PPM 30-4 dated October 15, 1966, and paragraph 6 of this memorandum.

e. The provisions of paragraph 6g of this memorandum apply only to the lands described therein which are acquired or improved with Federal highway or Federal-aid highway funds.

### 4. DEFINITIONS

For the purpose of this memorandum, the following definitions shall apply:

a. "Utility facilities and/or utilities" means and includes all privately, publicly or cooperatively owned lines, facilities and systems for producing, transmitting or distributing communications, power,

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electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water not connected with highway drainage, and other similar commodities, including fire and police signal systems and street lighting systems, which directly or indirectly serve the public or any part thereof. The term "utility" means that the utility company, i.e. any person or private or public entity owning and/or operating utility facilities as defined in this paragraph, including any wholly owned or controlled subsidiary.

b. "Private lines" means privately owned facilities which convey or transmit the commodities outlined in paragraph 4a, but are devoted exclusively to private use.

c. "Federal highway projects" are those projects involving the use of funds administered by the Federal Highway Administration where the location, design or construction of the project is under the direct supervision of the Bureau of Public Roads.

d. "Federal-aid highway projects" are those projects administered by as State which involve the use of Federal-aid highway funds for the construction or improvements of a Federal-aid highway or related highway facilities or for the acquisition of rights-of-way for such projects, including highway beautification projects under Section 319, Title 23, U. S. C.

e. "Active Federal or Federal-aid highway projects" are those projects for which any phase of development has been programed for Federal or Federal-aid highway funds and the State or other highway authority has control of the highway rights-of-way. A project will be considered active until the date of its final acceptance by the Bureau of Public Roads and thereafter will be considered completed.

f. "Rights-of-way" means real property or interests therein, acquired, dedicated or reserved for the construction, operation and maintenance of a highway in which Federal-aid or Federal highway funds are or may be involved in any stage of development. Lands acquired under Section 319(b), Title 23, U. S. C. (scenic strips - 1965 Highway Beautification Act) shall be considered to be highway rights-of-way.

g. "Highway" means any public way for vehicular travel, including the entire area within the rights-of-way and related facilities, constructed or improved in whole or part with Federal-aid or Federal highway funds.

h. "Freeway" means a divided arterial highway with full control of access.

i. "Director" means the director of the Bureau of Public Road, Federal Highway Administration.

j. "Regional Administrator" means the Regional Administrator of the Federal Highway Administration.

k. "Division Engineer" means the division engineer of the Bureau of Public Roads, Federal Highway Administration.

l. "State" means that department, commission, board, or official of any State charged by its laws with the responsibility for highway administration.

m. "Use and Occupancy Agreement" means the document by which the State, or other highway authority, approves the use and occupancy of highway rights-of-way by utility facilities or private lines.

n. "Utility Service Connection" means a service connection from a utilities distribution or feeder line or main to the premises served.

o. "Secondary Road Plan" -- is a statement, prepared by a State highway department and approved by the director, in which the State outlines the standards and procedures it will use to plan, design and construct projects on the Federal-aid Secondary Highway System which are to be finances in part with Federal-aid Secondary Highway Funds in accordance with Sec. 117, Title 23, U. S. C., and PPM 20-5.

p. "Clear Roadside Policy" means that policy employed by a highway authority to increase safety, improve traffic operation and enhance the visual quality of highways by designing, constructing and maintaining highway roadsides as wide, flat and rounded as practical and as free as practical from physical obstructions above the ground such as trees, drainage structures, massive sign supports, highway lighting standards, utility poles and other ground-mounted obstructions. The policy is also directed at the removal of roadside obstacles which are likely to be associated with accident or injury to the highway user. Where such obstacles are essential, they must be constructed to yield under specified levels of impact or placed at a location which affords adequate protection to an out-of-control vehicle. In all cases full consideration shall be given to sound engineering principles and economic factors.

q. "Visual quality" means those desirable characteristics of the appearance of the highway and its environment, such as harmony between or blending of natural and man-made objects in the environment, continuity of visual form without distracting, interruptions, and simplicity of designs which are desirably functional in shape but without clutter

r. "New utility installations" means initial installations on the highway rights-of-way and the replacement of existing facilities with those of a different type, capacity, or design or replacement at a new location on the rights-of-way. Any replacement of an existing facility or portion thereof with another of the same type, capacity, and design at the same location is considered to be maintenance.

5. GENERAL PROVISIONS

a. It is the responsibility of each State to maintain, or cause to be maintained, Federal-aid highway projects as necessary to preserve the integrity, visual quality, operational safety, and function of the highway facility.

b. Since the manner in which utilities cross or otherwise occupy the rights-of-way of a Federal or Federal-aid highway project can materially affect the highway, its visual quality, safe operation, and maintenance, it is necessary that such use and occupancy, where authorized, be regulated by highway authorities. In order for a State to fulfill its responsibilities in this area, it must exercise, or cause to be exercised, reasonable regulation over such use and occupancy through the establishment and enforcement of utility accommodation policies and procedures.

c. Due to the increasing competition between public transportation and other service facilities for available space, such as for highway, rapid transit, railroad and utility purposes, it is important that rights-of-way be used in the most efficient manner consistent with the overall public interest.

6. REQUIREMENTS

a. On Federal highway projects authorized after the effective date of this memorandum, the Regional Administrator will apply, or cause to be applied, utility accommodation policies similar to those required on Federal-aid highway projects, as appropriate and necessary to accomplish the objectives of this memorandum. Where appropriate, agreements should be entered into between the Regional Administrator and the State or local highway authorities or other government agencies, or existing agreements should be amended, as may be necessary for the Regional Administrator to establish, or cause to be established, adequate control and regulation of use by utilities and private lines of the rights-of-way of Federal highway projects.

b. Secondary Road Plans shall be amended as necessary to comply with the provisions of this memorandum. Project actions by the division engineer or submissions by the State to the division engineer which are not now required should not be established for Secondary Road Plan projects as a result of this memorandum.

c. Where the State, or other highway authority, determine that existing utility facilities are likely to be associated with injury or accident to the highway user, as indicated by accident history or safety studies, the responsible highway authority is to initiate appropriate corrective measures to provide a safe traffic environment. Any requests received from the State involving Federal fund participation in the cost of adjusting or relocating utility facilities pursuant to this paragraph shall be subject to the provisions of PPM 30-4.

d. The following procedures apply where the State is without legal authority to regulate the use by utilities or private lines of the rights-of-way of Federal-aid highway projects. Common examples are Federal-aid highway projects on a State highway system in cities and Federal-aid secondary highway projects on a county highway system.

(1) All such projects authorized after the effective date of this memorandum shall include a special provision in the project agreement for regulating such use of the highway rights-of-way. The provision shall require that the State will, by formal agreement with appropriate officials of a county or municipal government, regulate, or cause to be regulated, such use by highway authorities on a continuing basis and in accordance with a satisfactory utility accommodation policy for the type of highway involved.

(2) For the purpose of this paragraph, a satisfactory utility accommodation policy is one that prescribes a degree of protection to the highway, at least equal to the protection provided by the State's utility accommodation policy approved under paragraphs 7c and d.

(3) Such projects may be conditionally authorized in accordance with the provisions of paragraph 3d, pending approval of a satisfactory utility accommodation policy by the Regional Administrator under paragraph 7c.

e. Utilities that are to cross or otherwise occupy the rights-of-way of Federal-aid freeways, including Interstate highways, shall meet the requirements of the AASHO "Policy on the Accommodation of Utilities on Freeway Rights-of-Way" adopted February 15, 1969, and accepted by Public Roads under PPM 40-2, dated May 12, 1969.

f. In expanding areas along Federal-aid freeways it is expected that utilities will normally install distribution or feeder line crossings of freeways, spaced as needed to serve consumers in a general area along either or both sides of a freeway, so as to minimize the need for crossings of a freeway by utility service connections. In areas where utility

services are not available within reasonable distance along the side of the freeway where the utility service is needed, crossings of Federal-aid freeways by utility service connections may be permitted.

g. The type and size of utility facilities and the manner and extent to which they are permitted within areas of scenic enhancement and natural beauty can materially alter the appearance and view of highway roadsides and adjacent areas. Such areas include scenic strips, overlooks, rest areas, recreation areas and the rights-of-way of highways adjacent thereto, and the rights-of-way of highways which pass through public parks, and historic sites, as described under Section 138, Title 23, U. S. C.

(1) New utility installations are not to be permitted within the foregoing described lands, when acquired or improved with Federal highway or Federal-aid highway funds, except as follows:

(a) New underground installations may be permitted where they do not require extensive removal or alteration of trees visible to the highway user or impair the visual quality of the lands being traversed.

(b) New aerial installations are to be avoided at such locations unless there is no feasible or prudent alternative to the use of such lands by the aerial facility and it is demonstrated to the satisfaction of the division engineer that:

1 Other locations:

a Are not available or are unusually difficult and unreasonably costly, or

b Are less desirable from the standpoint of visual quality,

2 Undergrounding is not technically feasible or is unreasonably costly, and

3 The proposed installation will be made at a location and will employ suitable designs and materials which give the greatest weight to the visual qualities of the area being traversed. Suitable designs will include, but are not limited to, self-supporting, armless, single-pole construction with vertical configuration of conductors and cable.

(2) The provisions of this paragraph also apply to utility installations that are needed for a highway purpose, such as for highway lighting, or to serve a weigh station, rest or recreational area.

(3) There may be cases of unusual hardship or other extenuating circumstances encountered involving some degree of variance with the provisions of this paragraph. Such cases shall be subject to prior review and concurrence by the Director. Where the State proposes to approve a request from a utility involving a hardship case, the State shall submit its proposal and a full report of the circumstances to the division engineer. Where a hardship case involves a proposed installation within the rights-of-way of a highway passing through a public park, area, or site, as described under Section 138, Title 23, U.S.C., the State's report shall include the views of appropriate planning or resource authorities having jurisdiction over the land through which the highway passes. The division engineer shall review and submit the State's proposal along with his report and recommendations through the Regional Administrator to the Director.

h. Where the utility has a compensable interest in the land occupied by its facilities and such land is to be jointly owned and used for highway and utility purposes, the responsible highway authority and utility shall agree in writing as to the obligations and responsibilities of each party. Such agreements shall incorporate the conditions of occupancy for each party, including the rights vested in the highway authority and the rights and privileges retained by the utility. In any event, the interest to be acquired by or vested in the highway authority in any portion of the rights-of-way of a Federal or Federal-aid highway project to be vacated, used or occupied by utilities or private lines shall be of a nature and extent adequate for the construction, safe operation and maintenance of the highway project.

7. REVIEW AND APPROVALS

a. Each State shall submit a report to the division engineer on the authority of utilities to use and occupy the rights-of-way of State highways, the State's authority to regulate such use and the policies and procedures the State employs or proposes to employ for accommodating utilities within the rights-of-way of Federal-aid highways under its jurisdiction. Where applicable, the State shall include similar information on the use and occupancy of such highways by private lines where permitted under State law. The State shall identify those sections, if any, of the Federal-aid highways systems within its borders where the State is without legal authority to regulate use by utilities.

b. The division engineer shall review the information presented to him by the State under paragraph 7a and prepare a report outlining his recommendations to the Regional Administrator. Similar report shall be prepared and referred to the Regional Administrator as the policies to be employed pursuant to paragraph 6d are received from the State.

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c. Upon determination by the Regional Administrator that a State's policies and procedures under paragraph 7a and the policies to be employed pursuant to paragraph 6d meet the requirements of this memorandum, he shall approve their use on Federal-aid highway projects in that State or political subdivision.

d. Any changes, additions or deletions the State or political subdivision proposes to the policies and procedures approved by the Regional Administrator pursuant to this memorandum shall be subject to the provisions of paragraph 7a, b, and c.

e. The State's practices under the policies and procedures or agreements approved under paragraph 7c shall be periodically reviewed by the division engineer and reported to the Regional Administrator.

f. When a utility files a notice or makes an individual application or request to a State to use or occupy the rights-of-way of a Federal-aid highway project, the State is not required to submit the matter to the Bureau of Public Roads for prior concurrence, except under the following circumstances:

(1) Installations on Federal-aid highway where the State proposes to permit the use and occupancy by utilities not in accordance with the policies and procedures approved by the Regional Administrator under paragraph 7c.

(2) Installations involving unusual hardship cases pursuant to paragraph 6g.

(3) Installations on Federal-aid freeways involving extreme case exceptions, as described in the AASHO "Policy on the Accommodation of Utilities on Freeway Rights-of-Way," adopted February 15, 1969, and accepted by Public Roads under PPM 40-2, dated May 12, 1969.

(4) Installations on or across Interstate highways.

g. A copy of the reports, approved policies and procedures and related actions taken pursuant to paragraphs 6c, 7b, 7c, 7d, 7e, and 7f (1), (2), and (3) of this memorandum shall be furnished to the Office of Right-of-Way and Location.

#### 8. STATE ACCOMMODATION POLICIES AND PROCEDURES

a. This paragraph outlines provisions considered necessary to establish policies and procedures for accommodating utility facilities on the rights-of-way of Federal-aid highway projects. These policies and procedures shall meet the requirements of paragraph 6e through 6h and shall include adequate provisions with respect to the following:

(1) Utilities must be accommodated and maintained in a manner which will not impair the highway or interfere with the safe and free flow of traffic.

(2) Consideration shall be given to the effect of utility installations in regard to safety, aesthetics and the cost or difficulty of highway and utility construction and maintenance.

(3) The use and occupancy of highway rights-of-way by utilities must comply with the State's standards regulating such use. These standards must include but are not limited to the following:

(a) The horizontal and vertical location requirements and clearances for the various types of utilities must be clearly stated. These must be adequate to insure compliance with clear roadside policies for the particular highway involved. The roadside clearances for above ground utility facilities shall be consistent with those clearances applicable to other roadside obstacles on the type of highway involved, reflecting good engineering and economic considerations.

(b) The applicable provisions of government or industry codes required by law or regulation must be set forth or appropriately referenced, including highway design standards or other measures which the State deems necessary to provide adequate protection to the highway, its safe operation, visual quality and maintenance.

(c) Specifications for and methods of installation; requirements for preservation and restoration of highway facilities, appurtenances, and natural features on the rights-of-way; and limitations on the utility's activities within the rights-of-way should be prescribed as necessary to protect highway interests.

(d) Measures necessary for protection of traffic and its safe operation during and after installation of facilities, including control-of-access restrictions, provisions for rerouting or detouring of traffic, traffic control measures to be employed, limitations on vehicle parking and materials storage, protection of open excavations and the like must be provided.

(4) Compliance with applicable State laws and approved State accommodation policies must be assured. The responsible highway authority's file must contain evidence in writing as to the terms under which utility facilities are to cross or otherwise occupy highway rights-of-way in accordance with paragraph 9. All utility installations made on highway rights-of-way after the effective date of this memorandum shall be subject to approval by the State or by other highway authorities under paragraph 6d, as is required by State law and applicable regulations. However, such approval will not be required where so provided in the use and occupancy agreement for such matters as facility maintenance, installation of service connections on highways other than freeways or emergency operations.

(5) Every effort should be made to avoid conflict between utility installations and existing or planned uses of highway rights-of-way for highway purposes. Proposed utility installations and future highway projects shall be coordinated to avoid, to the fullest extent possible, any conflict in location, construction, or method of installation.

#### 9. USE AND OCCUPANCY AGREEMENTS

a. The use and occupancy agreements setting forth the terms under which the utility is to cross or otherwise occupy the highway rights-of-way must include or by reference incorporate:

(1) The State standards for accommodating utilities. Since all of the standards will not be applicable to an individual utility installation, the use and occupancy agreement must, as a minimum, describe the requirements for location, construction, protection of traffic maintenance, access restrictions and any special conditions applicable to each installation.

(2) A general description of the size, type, nature and extent of the utility facilities being located within the highway rights-of-way.

(3) Adequate drawings or sketches showing the existing and/or proposed location of the utility facilities within the highway rights-of-way with respect to the existing and/or planned highway improvement, the traveled way, the rights-of-way lines and, where applicable, the control of access lines and approved access points.

(4) The extent of liability and responsibilities associated with future adjustment of the utilities to accommodate highway improvements.

(5) The action to be taken in case of noncompliance with the State's requirements.


(6) Other provisions as deemed necessary to comply with laws and regulations.

b. The form of the use and occupancy agreement is not prescribed. At the State's option, the use and occupancy provisions may be incorporated as a part of the reimbursement agreement required by paragraph 7 of PPM. 30-4.

c. Area or Statewide master agreements covering the general terms of a utility's use and occupancy of the highway rights-of-way may be used provided individual requests for such use and occupancy are processed in accordance with paragraph 8a(4) of this memorandum.



**R. R. Bartelmeier**  
Director of Public Roads



**F. C. Turner**  
Federal Highway Administrator



U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
WASHINGTON, D.C. 20590

POLICY AND PROCEDURE MEMORANDUM

Transmittal 268  
November 29, 1972  
HNG-14

- 2 -

7g: "Office of Engineering" replaces "Office of Right-of-Way and Location."

R. R. Bartelsmeyer  
Acting Federal Highway Administrator

1. MATERIAL TRANSMITTED

PPM 30-4.1, Accommodation of Utilities

2. EXISTING ISSUANCES AFFECTED

Supersedes: PPM 30-4.1, Accommodation of Utilities, dated October 1, 1969

3. COMMENTS

Changes to PPM 30-4.1 are identified as follows:

Reference to Bureau of Public Roads changed throughout.

3b, 6a, 6d(1), and 8a(4), revised to reflect effective date of previous issuance (October 1, 1969).

3b: Deletes application to Secondary Road Plan projects.

6b: Substitutes new paragraph. Procedures for Secondary Road Plan projects to be in accordance with the approved plan.

6d: Deletes references to Secondary Road Plan projects.

6e: Adds statement incorporating the provisions of October 1, 1969, Circular Memorandum on, "Application of Joint Development and Multiple Use Concepts to Freeways and Utilities." (Provisions incorporated as Appendix A.)

7f: Expands 7f(3). Adds reference to cases involving application of joint development and multiple use concepts. (Appendix A).

Revises 7f(4). FHWA concurrence in installations on or across Interstate highways no longer required for those States operating under an approved State utility accommodation policy.

DISTRIBUTION:  
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REMOVE		INSERT
<u>Page(s)</u>	<u>Date</u>	<u>Page(s)</u>
1-6	October 1, 1969	1-6
		Appendix A, A-1 thru A-3

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ATTACHMENT 4

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# POLICY AND PROCEDURE MEMORANDUM

## ACCOMMODATION OF UTILITIES

- Par. 1. Purpose
- 2. Policy
- 3. Application
- 4. Definitions
- 5. General Provisions
- 6. Requirements
- 7. Reviews and Approvals
- 8. State Accommodation Policies and Procedures
- 9. Use and Occupancy Agreements

### 1. PURPOSE

To prescribe policies and procedures for accommodating utility facilities on the rights-of-way of Federal and Federal-aid highway projects. It implements the applicable provisions of 23 CFR 1.23 and 1.27 and 23 U.S.C. 116, with respect to the maintenance obligations of the State thereunder as affected by the use of the rights-of-way of Federal-aid highway projects for accommodating utility facilities.

### 2. POLICY

a. It is in the public interest for utility facilities to be accommodated on the rights-of-way of a Federal or Federal-aid highway project when such use and occupancy of the highway rights-of-way does not interfere with the free and safe flow of traffic or otherwise impair the highway or its visual quality and does not conflict with the provisions of Federal, State or local laws or regulations or the provisions of this memorandum.

b. These provisions concern the location and manner in which utility installations are to be made within the rights-of-way of Federal and Federal-aid highway projects and the measures, reflecting sound engineering principles and economic factors, to be taken by highway authorities to preserve and protect the integrity and visual qualities of the highway and the safety of highway traffic. This memorandum shall not be construed to alter the authority of utilities to install their facilities on public highways pursuant to law or franchise and reasonable regulation by highway authorities with respect to location and manner of installation.

### 3. APPLICATION

a. Effective on date of issuance.

b. It applies to new utility installations within the rights-of-way of active and completed Federal and Federal-aid highway projects, except Secondary Road Plan Projects. Application to the projects described under paragraphs 6a and d will be limited to projects that are authorized after October 1, 1969.

c. It also applies to existing utility installations which are to be retained, relocated, or adjusted within the rights-of-way of active highway projects, as described in paragraph 3b, and to existing lines which are to be adjusted or relocated under paragraph 6c. It shall not be applied to a minor segment of an existing utility installation in such a manner as to result in misalignment of the installation or adjustment of the entire installation except in those cases where a hazardous condition exists as defined in paragraph 6c. Where existing installations are to remain in place within the rights-of-way without adjustment, the State and utility are to enter into an agreement under paragraphs 6h or 9, as may govern, or existing agreements in effect at the time of the highway construction may be accepted, or amended, as may be appropriate.

d. Until approval is given to the utility accommodation policies and procedures of the State or its political subdivision by the Regional Administrator under paragraph 7c of this memorandum, utility installations within the rights-of-way of Federal and Federal-aid highway projects shall be in accordance with the provisions of paragraph 15 of PPM 30-4 dated October 15, 1966, and paragraph 6 of this memorandum.

e. The provisions of paragraph 6g of this memorandum apply only to the lands described therein which are acquired or improved with Federal or Federal-aid highway funds.

### 4. DEFINITIONS

For the purpose of this memorandum, the following definitions shall apply:

a. "Utility facilities and/or utilities" means and includes all privately, publicly or cooperatively owned lines, facilities and systems for producing, transmitting or distributing communications, power,

electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water not connected with highway drainage, and other similar commodities, including fire and police signal systems and street lighting systems, which directly or indirectly serve the public or any part thereof. The term "utility" means the utility company, i.e. any person or private or public entity owning and/or operating utility facilities as defined in this paragraph, including any wholly owned or controlled subsidiary.

b. "Private lines" means privately owned facilities which convey or transmit the commodities outlined in paragraph 4a, but are devoted exclusively to private use.

c. "Federal highway projects" are those projects involving the use of funds administered by the Federal Highway Administration (FHWA) where the location, design or construction of the project is under the direct supervision of the FHWA.

d. "Federal-aid highway projects" are those projects administered by a State which involve the use of Federal-aid highway funds for the construction or improvement of a Federal-aid highway or related highway facilities or for the acquisition of rights-of-way for such projects, including highway beautification projects under Section 319, Title 23, United States Code.

e. "Active Federal or Federal-aid highway projects" are those projects for which any phase of development has been programmed for Federal or Federal-aid highway funds and the State or other highway authority has control of the highway rights-of-way. A project will be considered active until the date of its final acceptance by the FHWA and thereafter will be considered completed.

f. "Rights-of-way" means real property or interests therein, acquired, dedicated or reserved for the construction, operation and maintenance of a highway in which Federal-aid or Federal highway funds are or may be involved in any stage of development. Lands acquired under 23 U.S.C. 319(b) (scenic strips - 1965 Highway Beautification Act) shall be considered to be highway rights-of-way.

g. "Highway" means any public way for vehicular travel, including the entire area within the rights-of-way and related facilities, constructed or improved in whole or part with Federal-aid or Federal highway funds.

h. "Freeway" means a divided arterial highway with full control of access.

i. "Administrator" means the Administrator of the FHWA.

j. "Regional Administrator" means the Regional Administrator of the FHWA.

k. "Division Engineer" means the division engineer of the FHWA.

l. "State" means that department, commission, board, or official of any State charged by its laws with the responsibility for highway administration.

m. "Use and Occupancy Agreement" means the document by which the state, or other highway authority, approves the use and occupancy of highway rights-of-way by utility facilities or private lines.

n. "Utility Service Connection" means a service connection from a utilities distribution or feeder line or main to the premises served.

o. "Secondary Road Plan" - is a statement, prepared by a State highway department and approved by the Director, in which the State outlines the standards and procedures it will use to plan, design and construct projects on the Federal-aid Secondary Highway System which are to be financed in part with Federal-aid Secondary Highway Funds in accordance with 23 U.S.C. 117 and PPM 20-5.

p. "Clear Roadside Policy" means that policy employed by a highway authority to increase safety, improve traffic operations, and enhance the visual quality of highways by designing, constructing and maintaining highway road-sides as wide, flat and rounded as practical and as free as practical from physical obstructions above the ground such as trees, drainage structures, massive sign supports, highway lighting standards, utility poles and other ground-mounted obstructions. The policy is also directed at the removal of roadside obstacles which are likely to be associated with accident or injury to the highway user. Where such obstacles are essential, they must be constructed to yield under specified levels of impact or placed at a location which affords adequate protection to an out-of-control vehicle. In all cases full consideration shall be given to sound engineering principles and economic factors.

q. "Visual quality" means those desirable characteristics of the appearance of the highway and its environment, such as harmony between or blending of natural and man-made objects in the environment, continuity of visual form without distracting interruptions, and



simplicity of designs which are desirably functional in shape but without clutter.

r. "New utility installations" means initial installations on the highway rights-of-way and the replacement of existing facilities with those of a different type, capacity, or design or replacement at a new location on the rights-of-way. Any replacement of an existing facility or portion thereof with another of the same type, capacity, and design at the same location is considered to be maintenance.

5. GENERAL PROVISIONS

a. It is the responsibility of each State to maintain, or cause to be maintained, Federal-aid highway projects as necessary to preserve the integrity, visual quality, operational safety, and function of the highway facility.

b. Since the manner in which utilities cross or otherwise occupy the rights-of-way of a Federal or Federal-aid highway project can materially affect the highway, its visual quality, safe operation, and maintenance, it is necessary that such use and occupancy, where authorized, be regulated by highway authorities. In order for a State to fulfill its responsibilities in this area, it must exercise, or cause to be exercised, reasonable regulation over such use and occupancy through the establishment and enforcement of utility accommodation policies and procedures.

c. Due to the increasing competition between public transportation and other service facilities for available space, such as for highway, rapid transit, railroad and utility purposes, it is important that rights-of-way be used in the most efficient manner consistent with the overall public interest.

6. REQUIREMENTS

a. On Federal highway projects authorized after October 1, 1969, the Regional Administrator will apply, or cause to be applied, utility accommodation policies similar to those required on Federal-aid highway projects, as appropriate and necessary to accomplish the objectives of this memorandum. Where appropriate, agreements should be entered into between the Regional Administrator and the State or local highway authorities or other government agencies, or existing agreements should be amended, as may be necessary for the Regional Administrator to establish, or cause to be established, adequate control and regulation of use by utilities and private lines of the rights-of-way of Federal highway projects.

b. Utility accommodation policies and procedures for Federal-aid secondary highway

projects will be in accordance with a State's approved Secondary Road Plan under PPM 30-5.

c. Where the State, or other highway authority, determines that existing utility facilities are likely to be associated with injury or accident to the highway user, as indicated by accident history or safety studies, the responsible highway authority is to initiate appropriate corrective measures to provide a safe traffic environment. Any requests received from the State involving Federal fund participation in the cost of adjusting or relocating utility facilities pursuant to this paragraph shall be subject to the provisions of PPM 30-4.

d. The following procedures apply where the State is without legal authority to regulate the use by utilities or private lines of the rights-of-way Federal-aid highway projects. Common examples are Federal-aid highway projects on a State highway system in cities.

(1) All such projects authorized after October 1, 1969, shall include a special provision in the project agreement for regulating such use of the highway rights-of-way. The provision shall require that the State will, by formal agreement with appropriate officials of a county or municipal government, regulate, or cause to be regulated, such use by highway authorities on a continuing basis and in accordance with a satisfactory utility accommodation policy for the type of highway involved.

(2) For the purpose of this paragraph, a satisfactory utility accommodation policy is one that prescribes a degree of protection to the highway at least equal to the protection provided by the State's utility accommodation policy approved under paragraphs 7c and d.

(3) Such projects may be conditionally authorized in accordance with the provisions of paragraph 3d, pending approval of a satisfactory utility accommodation policy by the Regional Administrator under paragraph 7c.

e. Utilities that are to cross or otherwise occupy the rights-of-way of Federal-aid freeways, including Interstate highways, shall meet the requirements of the AASHO "Policy on the Accommodation of Utilities on Freeway Rights-of-Way" adopted February 15, 1969, and accepted under PPM 40-2. Application of joint development and multiple use concepts dictates that maximum use of the highway be made for other purposes where such use does not adversely affect the design, construction, integrity, and operational characteristics of the freeway. In the advancement of these

concepts and when the State has legal authority to do so and so requests, approval may be given for installing trunkline or transmission type utility facilities within a utility strip on and along the outer border of existing freeway rights-of-way. (See Appendix A)

f. In expanding areas along Federal-aid freeways it is expected that utilities will normally install distribution or feeder line crossings of freeways, spaced as needed to serve consumers in a general area along either or both sides of a freeway, so as to minimize the need for crossings of a freeway by utility service connections. In areas where utility services are not available within reasonable distance along the side of the freeway where the utility service is needed, crossings of Federal-aid freeways by utility service connections may be permitted.

g. The type and size of utility facilities and the manner and extent to which they are permitted within areas of scenic enhancement and natural beauty can materially alter the visual quality and view of highway roadsides and adjacent areas. Such areas include scenic strips, overlooks, rest areas, recreation areas, the rights-of-way of highways adjacent thereto, and the rights-of-way of highways which pass through public parks and historic sites, as described under Section 138, Title 23, United States Code.

(1) New utility installations are not to be permitted within the foregoing described lands, when acquired or improved with Federal highway or Federal-aid highway funds, except as follows:

(a) New underground installations may be permitted where they do not require extensive removal or alteration of trees visible to the highway user or impair the visual quality of the lands being traversed.

(b) New aerial installations are to be avoided at such locations unless there is no feasible and prudent alternative to the use of such lands by the aerial facility and it is demonstrated to the satisfaction of the division engineer that:

1 Other locations:

a Are not available or are unusually difficult and unreasonably costly.

b Are less desirable from the standpoint of visual quality.

2 Undergrounding is not technically feasible or is unreasonably costly.

3 The proposed installation will be made at a location and will employ

suitable designs and materials which give the greatest weight to the visual qualities of the area being traversed. Suitable designs will include, but are not limited to, self-supporting, armless, single-pole construction with vertical configuration of conductors and cable.

(2) The provisions of this paragraph also apply to utility installations that are needed for a highway purpose, such as for highway lighting, or to serve a weigh station, rest or recreational area.

(3) There may be cases of unusual hardship or other extenuating circumstances encountered involving some degree of variance with the provisions of this paragraph. Such cases shall be subject to prior review and concurrence by the Administrator. Where the State proposes to approve a request from a utility involving a hardship case, the State shall submit its proposal and a full report of the circumstances to the division engineer. Where a hardship case involves a proposed installation within the rights-of-way of a highway passing through a public park, area, or site, as described under 23 U.S.C. 138, the State's report shall include the views of appropriate planning or resource authorities having jurisdiction over the land through which the highway passes. The division engineer shall review and submit the State's proposal along with his report and recommendations through the Regional Administrator to the Administrator.

h. Where the utility has a compensable interest in the land occupied by its facilities and such land is to be jointly owned and used for highway and utility purposes, the responsible highway authority and utility shall agree in writing as to the obligations and responsibilities of each party. Such agreements shall incorporate the conditions of occupancy for each party, including the rights vested in the highway authority and the rights and privileges retained by the utility. In any event, the interest to be acquired by or vested in the highway authority in any portion of the rights-of-way of a Federal or Federal-aid highway project to be vacated, used or occupied by utilities or private lines shall be of a nature and extent adequate for the construction, safe operation and maintenance of the highway project.

7. REVIEWS AND APPROVALS

a. Each State shall submit a report to the division engineer on the authority of utilities to use and occupy the rights-of-way of State highways, the State's authority to regulate such use and the policies and procedures the State employs or proposes to employ for accommodating utilities within the rights-of-way

of Federal-aid highways under its jurisdiction. Where applicable, the State shall include similar information on the use and occupancy of such highways by private lines where permitted under State law. The State shall identify those sections, if any, of the Federal-aid highways systems within its borders where the State is without legal authority to regulate use by utilities.

b. The division engineer shall review the information presented to him by the State under paragraph 7a and prepare a report outlining his recommendations to the Regional Administrator. Similar report shall be prepared and referred to the Regional Administrator as the policies to be employed pursuant to paragraph 6d are received from the State.

c. Upon determination by the Regional Administrator that a State's policies and procedures under paragraph 7a and the policies to be employed pursuant to paragraph 6d meet the requirements of this memorandum, he shall approve their use on Federal-aid highway projects in that State or political subdivision.

d. Any changes, additions or deletions the State or political subdivision proposes to the policies and procedures approved by the Regional Administrator pursuant to this memorandum shall be subject to the provisions of paragraph 7a, b, and c.

e. The State's practices under the policies and procedures or agreements approved under paragraph 7c shall be periodically reviewed by the division engineer and reported to the Regional Administrator.

f. When a utility files a notice or makes an individual application or request to a State to use or occupy the rights-of-way of a Federal-aid highway project, the State is not required to submit the matter to the Federal Highway Administration for prior concurrence, except under the following circumstances:

(1) Installations on Federal-aid highway where the State proposes to permit the use and occupancy by utilities not in accordance with the policies and procedures approved by the Regional Administrator under paragraph 7c.

(2) Installations involving unusual hardship cases pursuant to paragraph 6g.

(3) Installations on Federal-aid freeways involving extreme case exceptions, as described in the AASHO "Policy on the Accommodation of Utilities on Freeway Rights-of-Way," adopted February 15, 1969, and accepted under PPM 40-2. (Includes cases

involving the application of multiple use and joint development concepts to freeways and utilities, Appendix A.)

(4) Installations on or across Interstate highways where approval has not been given to the utility accommodation policies and procedures under paragraph 7c.

g. A copy of the reports, approved policies and procedures and related actions taken pursuant to paragraphs 6c, 7b, 7c, 7d, 7e, and 7f(1), (2), and (3) shall be furnished to the Office of Engineering.

8. STATE ACCOMMODATION POLICIES AND PROCEDURES

a. This paragraph outlines provisions considered necessary to establish policies and procedures for accommodating utility facilities on the rights-of-way of Federal-aid highway projects. These policies and procedures shall meet the requirements of paragraph 6e through 6h and shall include adequate provisions with respect to the following:

(1) Utilities must be accommodated and maintained in a manner which will not impair the highway or interfere with the safe and free flow of traffic.

(2) Consideration shall be given to the effect of utility installations in regard to safety, visual quality, and the cost or difficulty of highway and utility construction and maintenance.

(3) The use and occupancy of highway rights-of-way by utilities must comply with the State's standards regulating such use. These standards must include but are not limited to the following:

(a) The horizontal and vertical location requirements and clearances for the various types of utilities must be clearly stated. These must be adequate to insure compliance with clear roadside policies for the particular highway involved. The roadside clearances for above ground utility facilities shall be consistent with those clearances applicable to other roadside obstacles on the type of highway involved, reflecting good engineering and economic considerations.

(b) The applicable provisions of government or industry codes required by law or regulation must be set forth or appropriately referenced, including highway design standards or other measures which the State deems necessary to provide adequate protection to the highway, its safe operation, visual quality and maintenance.

(c) Specifications for and methods of installation; requirements for preservation and restoration of highway facilities, appurtenances, and natural features on the rights-of-way; and limitations on the utility's activities within the rights-of-way should be prescribed as necessary to protect highway interests.

(d) Measures necessary for protection of traffic and its safe operation during and after installation of facilities, including control-of-access restrictions, provisions for rerouting or detouring of traffic, traffic control measures to be employed, limitations on vehicle parking and materials storage, protection of open excavations and the like must be provided.

(4) Compliance with applicable State laws and approved State accommodation policies must be assured. The responsible highway authority's file must contain evidence in writing as to the terms under which utility facilities are to cross or otherwise occupy highway rights-of-way in accordance with paragraph 9. All utility installations made on highway rights-of-way shall be subject to approval by the State or by other highway authorities under paragraph 6d, as is required by State law and applicable regulations. However, such approval will not be required where so provided in the use and occupancy agreement for such matters as facility maintenance, installation of service connections on highways other than freeways or emergency operations.

(5) Every effort should be made to avoid conflict between utility installations and existing or planned uses of highway rights-of-way for highway purposes. Proposed utility installations and future highway projects shall be coordinated to avoid, to the fullest extent possible, any conflict in location, construction, or method of installation.

9. USE AND OCCUPANCY AGREEMENTS

a. The use and occupancy agreements setting forth the terms under which the utility is to cross or otherwise occupy the highway rights-of-way must include or by reference incorporate:

(1) The State standards for accommodating utilities. Since all of the standards will not be applicable to an individual utility installation, the use and occupancy agreement must, as a minimum, describe the requirements for location, construction, protection of traffic maintenance, access restrictions and any special conditions applicable to each installation.

(2) A general description of the size, type, nature and extent of the utility facilities being located within the highway rights-of-way.

(3) Adequate drawings or sketches showing the existing and/or proposed location of the utility facilities within the highway rights-of-way with respect to the existing and/or planned highway improvement, the traveled way, the rights-of-way lines and, where applicable, the control of access lines and approved access points.

(4) The extent of liability and responsibilities associated with future adjustment of the utilities to accommodate highway improvements.

(5) The action to be taken in case of noncompliance with the State's requirements.

(6) Other provisions as deemed necessary to comply with laws and regulations.

b. The form of the use and occupancy agreement is not prescribed. At the State's option, the use and occupancy provisions may be incorporated as a part of the reimbursement agreement required by paragraph 7 of PPM 30-4.

c. Area or Statewide master agreements covering the general terms of a utility's use and occupancy of the highway rights-of-way may be used provided individual requests for such use and occupancy are processed in accordance with paragraph 8a(4).



R. R. Bartelsmeyer  
Acting Federal Highway Administrator

A-16

Application of Joint Development and Multiple  
Use Concepts to Freeways and Utilities

The third paragraph of Item 2 of the AASHO "Policy on the Accommodation of Utilities on Freeway Rights-of-Way," dated February 15, 1969, provides that a utility may be permitted along a freeway on new location under certain stated conditions.

These provisions for extreme case exceptions to the AASHO policy have served well to preserve and protect the access control feature of Interstate highways. Experience has demonstrated the need and merit for continuing this protection on all freeways. This Appendix outlines additional FHWA views on these matters. It provides a practical method for applying both the AASHO policy and joint development and multiple use concepts to freeways and utilities, especially at location within and approaching metropolitan areas where land is scarce and right-of-way is expensive. It preserves the access control feature of these important highways but recognizes the merit and need for accommodating trunkline and transmission type utility facilities under strictly controlled conditions. Finally, it establishes a basis for accommodating the highest type of utility facilities along and within the rights-of-way of the highest type of highway facilities under conditions where the construction, maintenance, and operations of one do not adversely affect those of the other.

The provisions of this Appendix are for application to Interstate highways and other Federal-aid freeways that are open to traffic or under construction. They do not apply to installations on freeway bridge structures or within freeway tunnels and do not alter the provisions for these matters under Items 4 and 6 of the AASHO policy. They may be applied to planned freeway projects as necessary to accommodate the longitudinal relocation of existing trunkline or transmission type facilities which fall in the path of the planned highway construction. However, establishing a utility strip shall not be the basis for expanding Federal-aid highway funds for acquiring rights-of-way widths in excess of that needed for the construction, operation, and maintenance of the freeway.

Where a utility files notice or makes application to a State to use or occupy freeway rights-of-way along routes of one of the Federal-aid highway systems under the foregoing conditions, the matter is to be referred by the State to FHWA for prior concurrence under the well-established procedures for processing cases under the AASHO policy. In each instance there is to be a showing that the provisions of the AASHO policy have been met and the following conditions have been satisfied:

1. A utility strip will be established by an inward relocation of the access control line to the extent necessary to permit installation of the utility facility outside the access control limits.
2. The utility strip may be established only where the freeway rights-of-way are of ample width to accommodate utility facilities without adverse effect to the design, construction, integrity, and operational characteristics of the freeway, only where such rights-of-way will not be needed for the foreseeable expansion of the freeway, and only where there can be satisfactory provision for any needed highway and/or utility maintenance within the utility strip.
3. Normally, a utility strip is not to be established at locations where it is feasible to accommodate utilities on frontage roads or adjacent public roads or streets.
4. The State or its political subdivision is to retain ownership of the freeway rights-of-way so utilized, including control and regulation of the use and occupancy of the rights-of-way by utilities.
5. Existing fences should be retained and, except along sections of freeways having frontage roads, planned fences should be located at the freeway right-of-way line.
6. In each case, there must be a showing that installation on the freeway right-of-way is the most feasible and prudent location available from the standpoint of the highway user and utility consumer.
7. The lateral location of underground installations shall be suitably offset from the slope, ditch, and/or curb line. For poles or other ground-mounted utility facilities, the lateral location shall comply with the clearances set forth in Item 5B of the AASHO policy.
8. Aerial installations are to be limited to self-supporting single pole construction, preferably with vertical configuration of conductors and cables. Not more than one line of support poles for aerial facilities will be permitted within an utility strip. Joint-use facilities will be allowed.
9. Service connections from the trunkline or transmission type facilities to utility consumers will not be permitted from the utility strip.
- (10) Suitable advance arrangements are to be made for servicing the utility facilities without access from through-traffic roadway or ramps, in accordance with Item 7 of the AASHO policy. At interchanges, access

to utility supports, manholes, or other appurtenances may be permitted from the through-traffic roadways or ramps in accordance with Item 7 of the AASHO policy, but only by permits issued by the highway agency to the utility owner setting forth the conditions for policing and other controls to protect highways users.

(11) Where the freeway passes through or along areas of scenic enhancement and natural beauty, as described in paragraph 6g of PPM 30-4.1, utility installations shall be made as provided therein.

(12) The facilities installed within a utility strip shall be of durable materials designed for long service life expectancy and relatively free from routine servicing and maintenance.

ATTACHMENT 5

**§ 1.23 Rights-of-way.**

(a) *Interest to be acquired.* The State shall acquire rights-of-way of such nature and extent as are adequate for the construction, operation and maintenance of a project.

(b) *Use for highway purposes.* Expect as provided under paragraph (c) of this section, all real property, including air space, within the right-of-way boundaries of a project shall be devoted exclusively to public highway purposes. No project shall be accepted as complete until this requirement has been satisfied. The State highway department shall be responsible for preserving such right-of-way free of all public and private installations, facilities or encroachments, except (1) those approved under paragraph (c) of this section; (2) those which the Administrator approves as constituting a part of a highway or as necessary for its operation, or use maintenance for public highway purposes and (3) informational sites established and maintained in accordance with § 1.35 of the regulations in this part.

(c) *Other use or occupancy.* Subject to 23 U.S.C. 111, the temporary or permanent occupancy or use of right-of-way, including air space, for nonhighway purposes and the reservation of subsurface mineral rights within the boundaries of the rights-of-way of Federal-aid highways, may be approved by the Administrator, if he determines that such occupancy, use or reservation is in the public interest and will not impair the highway or interfere with the free and safe flow of traffic thereon.

ATTACHMENT 6

**§ 116. Maintenance.**

(a) It shall be the duty of the State highway department to maintain, or cause to be maintained, any project constructed under the provisions of this chapter or constructed under the provisions of prior Acts. The State's obligation to the United States to maintain any such project shall cease when it no longer constitutes a part of a Federal-aid system.

(b) In any State wherein the State highway department is without legal authority to maintain a project constructed on the Federal-aid secondary system, or within a municipality, such highway department shall enter into a formal agreement for its maintenance with the appropriate officials of the county or municipality in which such project is located.

(c) If at any time the Secretary shall find that any project constructed under the provisions of this chapter, or constructed under the provisions of prior Acts, is not being properly maintained, he shall call such fact to the attention of the State highway department. If, within ninety days after receipt of such notice, such project has not been put in proper condition of maintenance, the Secretary shall withhold approval of further projects of all types in the entire State until such project shall have been put in proper condition of maintenance, unless such project is subject to an agreement pursuant to subsection (b) of this section, in which case approval shall be withheld only for secondary or urban projects in the county or municipality where such project is located.

(d) The Secretary in consultation with the State highway departments and interested and knowledgeable private organizations and individuals shall as soon as possible establish national bridge inspection standards in order to provide for the proper safety inspection of bridges. Such standards shall specify in detail the method by which inspections shall be conducted by the State highway departments, the maximum time lapse between inspections and the qualifications for those charged with the responsibility for carrying out such inspections. Each State shall be required to maintain written reports to be available to the Secretary pursuant to such inspections together with a notation to the action taken pursuant to the findings of such inspections. Each State shall be required to maintain a current inventory of all bridges.

(e) The Secretary shall establish, in cooperation with the State highway departments, a program designed to train appropriate employees of the Federal Government and the State governments to carry out bridge inspections. Such a program shall be revised from time to time in light of new or improved techniques. For the purpose of this section the Secretary may use funds made available pursuant to the provisions of section 104(a) and section 307(a) of this title.

ATTACHMENT 7

**§ 1.27 Maintenance.**

The responsibility imposed upon the State highway department, pursuant to 23 U.S.C. 116, for the maintenance of projects shall be carried out in accordance with policies and procedures issued by the Administrator. The State highway department may provide for such maintenance by formal agreement with any adequately equipped county, municipality or other governmental instrumentality, but such an agreement shall not relieve the State highway department of its responsibility for such maintenance.

NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM  
SYNTHESIS OF HIGHWAY PRACTICE

34

POLICIES FOR  
ACCOMMODATION OF UTILITIES ON  
HIGHWAY RIGHTS-OF-WAY

RESEARCH SPONSORED BY THE AMERICAN  
ASSOCIATION OF STATE HIGHWAY AND  
TRANSPORTATION OFFICIALS IN COOPERATION  
WITH THE FEDERAL HIGHWAY ADMINISTRATION

AREAS OF INTEREST  
TRANSPORTATION ADMINISTRATION  
LAND ACQUISITION  
HIGHWAY DESIGN

TRANSPORTATION RESEARCH BOARD  
NATIONAL RESEARCH COUNCIL  
WASHINGTON, D.C. 1976

NATIONAL COOPERATIVE HIGHWAY  
RESEARCH PROGRAM

Systematic, well-designed research provides the most effective approach to the solution of many problems facing highway administrators and engineers. Often, highway problems are of local interest and can best be studied by highway departments individually or in cooperation with their state universities and others. However, the accelerating growth of highway transportation develops increasingly complex problems of wide interest to highway authorities. These problems are best studied through a coordinated program of cooperative research. In recognition of these needs, the highway administrators of the American Association of State Highway and Transportation Officials initiated in 1962 an objective national highway research program employing modern scientific techniques. This program is supported on a continuing basis by funds from participating member states of the Association and it receives the full cooperation and support of the Federal Highway Administration, United States Department of Transportation. The Transportation Research Board of the National Research Council was requested by the Association to administer the research program because of the Board's recognized objectivity and understanding of modern research practices. The Board is uniquely suited for this purpose as: it maintains an extensive committee structure from which authorities on any highway transportation subject may be drawn; it possesses avenues of communications and cooperation with federal, state, and local governmental agencies, universities, and industry; its relationship to its parent organization, the National Academy of Sciences, a private, nonprofit institution, is an insurance of objectivity; it maintains a full-time research correlation staff of specialists in highway transportation matters to bring the findings of research directly to those who are in a position, to use them.

The program is developed on the basis of research needs identified by chief administrators of the highway and transportation departments and by committees of AASHTO. Each year, specific areas of research needs to be included in the program are proposed to the Academy and the Board by the American Association of State Highway and Transportation Officials. Research projects to fulfill these needs are defined by the Board, and qualified research agencies are selected from those that have submitted proposals. Administration and surveillance of research contracts are responsibilities of the Academy and its Transportation Research Board.

The needs for highway research are many, and the National Cooperative Highway Research Program can make significant contributions to the solution of highway transportation problems of mutual concern to many responsible groups. The program, however, is intended to complement rather than to substitute for or duplicate other highway research programs.

NCHRP Synthesis 34

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The members of the advisory committee selected to monitor this project and to review this report were chosen for recognized scholarly competence and with due consideration for the balance of disciplines appropriate to the project. The opinions and conclusions expressed or implied are those of the research agency that performed the research, and, while they have been accepted as appropriate by the advisory committee, they are not necessarily those of the Transportation Research Board, the National Research Council, the National Academy of Sciences, or the program sponsors.

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# POLICIES FOR ACCOMMODATION OF UTILITIES ON HIGHWAY RIGHTS-OF-WAY

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**SUMMARY** Highway are planned, designed, and constructed to serve the public by carrying people and goods from place to place. Public- and private-owned utilities also have a similar public-serving function, often between the same points served by the highway systems. It is inevitable, in many cases, that utilities follow and cross highways and seek to be accommodated within highway rights-of-way.

This dual interest in the use of highway rights-of-way is recognized by the American Association of State Highway and Transportation Officials (AASHTO) in *A Guide for Accommodating Utilities on Highway Rights-of-Way*, including guidelines for meeting the needs of both highways and utilities. Each state highway or transportation agency has adopted its own utility accommodation policy, generally following the criteria contained in the AASHTO *Guide*. This report explores the requirements of state policies with respect to the various facets of utility accommodation: pipelines, power and communication lines, installation on structures, scenic enhancement, permits and fees, utility accommodation coordination, and others.

Findings of the synthesis include:

! Most agencies have used the AASHTO *Guide* as the model for their policies on utility accommodation. Some have used the exact language of the *Guide*, others have added to or revised the suggestions of the *Guide* to meet local needs.

! There are policy variations from state to state in such items, as: location, bury, encasement, and installation of underground utilities; location and clearance of overhead facilities; and position and method of attachment of utilities to highway structures. Location requirements are often oriented to different baselines, such as right-of-way line, pavement edge, or curb line.

! Differences in location, alignment, bury, clearance, encasement, etc., are not always attributable to differences in geographic area, climate, terrain, or other factors.

! All policies reflect a desire to locate utilities as far as possible from the traveled way. Another common denominator is the almost complete banning of longitudinal placement of facilities under pavements, except in urban areas. The policies are also in agreement that attachment of utilities to highway structures should be discouraged whenever possible and, when permitted, should be regulated rigidly.

! Some policies relate location, bury, and encasement requirements with relative hazards involved, such as power or communication lines, voltages, pressures, and the nature of material transmitted in a pipeline.

! Most agencies are aware of the need for scenic enhancement of roadsides particularly areas such as overlooks, rest areas, and parks, and thus have adopted the exact or similar wording of the AASHTO *Guide* on scenic enhancement for utility installations.

! The need for coordination of the practices and procedures of all utilities that use the right-of-way is not adequately covered by the AASHTO *Guide*, nor do individual state policies make specific references to utility accommodation coordination.

Recommendations for the improvement of policies on accommodation of utilities have been made, as follows:

! Periodic conferences should be conducted for the purpose of developing possible concurrences between state policies and for examining the views of the utilities.

! Efforts should be made to foster dual and multiple use of utility facilities where such uses are compatible, safe, and workable.

! The AASHTO *Guide* has been helpful to state agencies in preparing their policies. However, it provides only minimal guidance for accommodating utilities in urban areas or sections of road with narrow rights-of-way. Some agencies have included additional material and established procedures beyond those in the *Guide*. An appropriate AASHTO group should undertake revision of the *Guide*. Similarly, each agency should periodically review its policy to ascertain the need for revisions.

! Agencies that do not now have sections in their policies covering permits, inspections, fees, and bonding requirements should consider adding these.

! The formation of local-regional utility coordination committees with the participation of highway agencies is encouraged.

! Standard color markings should be adopted for stakes used to mark the location of underground utilities.

! Some responsibilities for certain facets of utility accommodation belong to highway agencies, others belong to the utilities, and some belong to both.

Areas where specific research is needed include:

! New and improved methods for placing, repairing, and replacing utilities within highway rights-of-way.

! Optimization of standards for location, alignment, bury, encasement, structure attachments, etc.

! Determination of: the nature and extent of the problems of accommodating utilities on highways, the effects that adoption of policies have had on these problems, and the cost/benefit of the policy requirements.

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## INTRODUCTION

### THE DUALITY OF INTERESTS AND RIGHTS

Highway systems in the United States have been planned, designed, and constructed to expedite vehicular traffic with the utmost safety and with a minimum impedance of movement. Any condition that limit the free movement of traffic, affect the structural integrity of road systems, or interfere with roadway construction, operation, maintenance, and life expectancy must be controlled. Yet, highways do not exist in a vacuum. They are a part of the areas they traverse and of the communities they serve.

Privately and publicly owned utilities have a public-serving function similar to that of highways. The needs of utilities (power lines, communication lines, gas and other pipelines, water mains and sewers) to go from place to place in the public interest—often to or from the same points served by the highway system—should be recognized.

The franchise rights and responsibilities of private and public utilities are often based on their ability and legal rights to use the best and most economical routes. In many cases, then, these utilities follow and cross highways and seek accommodation within highway rights-of-way (R.O.W.).

This dual interest in highway and utility routing need not become a duel of interests. It can be resolved to the mutual benefit of all concerned through careful planning by highway agencies and through acceptance of space allocations and procedures by the utilities that occupy highway rights-of-way. Agreements between the two interests can provide utilities with reasonable accommodations without impairing the serviceability of highway systems.

Any accommodation of utility plant on, in, under, over, or along highway rights-of-way must be accomplished with a minimum of detrimental effect on, or interference with, the purposes of the road system. The challenge is to develop techniques that will permit two facilities to occupy the same space without adverse effects on either. The answer is cooperation and participation.

To foster this duality of right-of-way use by utilities and highways, the Federal Highway Administration (FHWA) has established policies and procedures for accommodating utilities on federal-aid highway projects (1). In addition, most states have adopted policies for the use of rights-of-way by utilities.

The AASHTO *Guide for Accommodating Utilities on Highway Rights-of-Way* (2)\* recognizes the dual interest highways and utilities suggests equitable guidelines

for meeting the needs of both. The policies adopted by state transportation agencies are intended to supplement and implement these guidelines to preserve their inherent right to regulate the use of their rights-of-way in order to satisfy transportation needs. This synthesis explores and interprets the provisions of the AASHTO *Guide* and the state policies on utility accommodation.

### ACCOMMODATION OF UTILITIES ON FREEWAYS

AASHTO has published *A Policy on the Accommodation of Utilities on Freeway Rights-of-Way* (3). This policy was adopted for use by all state highway agencies and has been officially adopted by the Federal Highway Administration as a highway design policy applicable to all federal-aid freeways. Basically, this policy does not permit the longitudinal installation of utilities on freeway rights-of-way, except in extreme cases and under strictly controlled conditions. Other specific criteria are included in the policy. For example, supporting poles (a) are to be located at least 30 ft (9.1 m) beyond the edge of the shoulder of through-traffic lanes; (b) must be at least 20 ft (6.1 m) from edge-of-ramp shoulders; and (c) shall not be placed in medians 80 ft (24 m) or less in width.

The FHWA policy on accommodation of utilities (1) is contained in the *Federal-Aid Highway Program Manual* (PPM 30-4.1). The policy provides a practical method for applying both the AASHTO policy and joint development and multiple use concepts to freeways and utilities, especially for locations within and approaching metropolitan areas where land is scarce and right-of-way is expensive. This preserves the access control feature of freeways but recognizes the merit and need for accommodating trunkline and transmission-type utilities under strictly controlled conditions.

### UTILITY ACCOMMODATION IN URBAN AREAS

The AASHTO *Guide* is directed toward the accommodation of utilities on highway rights-of-way in rural areas and provides minimal guidance for urban areas or highways with narrow rights-of-way. Two reports have recently been prepared for FHWA by the American Public Works Association (APWA) that address this problem: a *Manual of Improved Practice* (4) and a *State of the Art* (5). Both reports have been reproduced and distributed by the FHWA. Much of the information of construction techniques in these reports is also applicable to utility work on rural highway rights-of-way.

<AASHTO>

## PIPELINES AND APPURTENANCES

Of all the utilities that can affect the performance and permanence of highway pavements and structures, those occupying underground space (including pipelines and appurtenances) are the most critical. Their physical size and strength, life expectancy, and maintenance characteristics, as well as the substances they carry, dictate their accommodation in the highway right-of-way. Occupation of space under traffic lanes and along right-of-way lands can have a marked effect on the highway.

The location, burial, encasement, protection, and installation of utilities within rights-of-way must be regulated by highway agencies. With such regulations, highway systems can provide safe, dependable and economical traffic flow condition and, at the same time, utilities occupying the right-of-way can realize comparable benefits. When both highways and pipelines achieve joint use of the right-of-way, the public interest is best served.

Pipeline transmission of gases and hazardous liquids (including petroleum) is subject to regulations issued by the U.S. Department of Transportation, Office of Pipeline Safety. These regulations outline minimum safety standards that must be met by virtually all pipeline operators.

### LOCATION AND ALIGNMENT

Despite variations in policies from state to state, one basic principle of pipeline location and alignment is recurring: Utilities preferably should not be installed longitudinally under any rural traveled way. Utilities are permitted under a traveled way for crossing purposes. However, such crossings must be made in the shortest possible distance (at, or approximating, a right angle to the roadway). In urban areas it is often necessary to place utilities longitudinally beneath the traveled way ( 4, 5). Some states make a distinction between transmission and distribution lines in longitudinal installations, allowing the former and prohibiting the latter.

The AASHTO *Guide* states that longitudinal installations preferably should be located at or adjacent to the right-of-way line, and that crossings should be as near perpendicular to the highway as is practical. All state policies cover the location and alignment of pipelines in general conformity with *Guide*. Twenty-one agencies have adopted policies that either use exact AASHTO language or slight modification thereof. However, many policies do not follow the same format as the AASHTO *Guide*, making it difficult to determine that the policy is, in fact, essentially the same as the *Guide*.

In many agencies, the general principles set forth in the AASHTO *Guide* have been supplemented by specific dimensions for location and alignment. It should be noted that these specific dimensions are often qualified by certain

exceptions. Offset distances vary from state to state. The use of different baselines for measuring offsets further clouds the issue. It is difficult to explain the differences in terms of local conditions such as geographical, topographical, or geological factors, or to attribute them to the personal or professional opinions of the drafters of the policies.

### Discussion of Pipeline Location Policies

A review of the pipeline policies discloses no significant offset location policy that could serve as a model in making more uniform requirements. Those states that do not have specific dimensional policies could clarify their requirements by not only limiting alignments to as close to the R.O.W. line as possible, but by also giving preferred locations.

**TABLE 1**  
**PIPELINE LOCATION POLICIES**

State	Baseline	Offset from Baseline <sup>a</sup>
Colo.	Edge of traveled lane	30 ft min.
Ga.	Slope line, curb line, or ditchline	3 ft min.
Ill.	R. O. W. <sup>b</sup>	8 ft max.
Kans.	R. O. W.	3 ft min. 5 ft max.
La.	R. O. W.	2 ft max.
Minn.	R. O. W.	10 ft max.
Mo.	R. O. W.	6 ft max.
Nev.	Slope or curb line	6 ft min.
N. M.	R. O. W.	5 ft max.
Wash.	Slope line, curb line, or ditchline	6 ft min.

<sup>a</sup> Preferred offsets, exceptions permitted

<sup>b</sup> Right-of-way

## Examples of Pipeline Location Policies

Location policies of longitudinal pipelines for several states that have specific dimensions are given in Table 1. A number of other states use the AASHTO wording without specific dimensions. In Hawaii, longitudinal pipelines may be located within the shoulder or median if approved by the Highway Utility Encroachment Committee. Tennessee permits longitudinal installations of lines carrying flammable, corrosive, or expansive transmittants only in cases of extreme hardship. In North Dakota, crossings must be as close to 90 degrees as practicable but in no case less than 30 degrees.

### BURY OF PIPELINES

The depth of bury of longitudinal pipelines and crossings, varies from state to state and region to region. In general, it is more dependent on local geological, meteorological, and hydrological conditions, and on roadway traffic load-

ings than on longitudinal position and alignment.

The AASHTO *Guide* recognizes this situation by reference to lateral drainage and frost penetration as factors in specifying minimum depth of bury. The relationship between bury, encasement and mechanical protection is treated in general terms by the *Guide* with the provision that lines with less than minimum bury should have encasement or slab cover protection to ensure the safety of crossings, particularly those crossings in the vicinity of ditches. However, cover for lines carrying hazardous transmittants that are flammable, corrosive, expansive, or pressure-energized must not be reduced below acceptable safety limits.

In most cases the rules in the *Guide* are made more definitive in state policy documents. Bury requirements vary from state to state and are not always explainable in terms of differences in local conditions. As in the case of location and alignment requirements, different baselines for determining depth of bury are used, adding to the lack of uniformity.

### Discussion of Pipeline Bury Policies

In most states, there is an effort to protect pipelines against damage and to safeguard maintenance personnel against injury. In addition, highway pavements, slopes, shoulders, curbs, drainage ditches, and other right-of-way features must be maintained. Policy variations among states are basically variations of data for depth preference rather than actual ultimate depth of bury. Any effort to standardize burial depth requirements on a national basis must recognize the legal authority of state and federal agencies to regulate pipeline utility practices. There must also be a recognition of differences in climate, foundation conditions, and traffic loadings.

### Examples of Pipeline Bury Policies

Requirements for depth of bury for a number of states are given in Table 2. Generally, pipelines located at depths less than the minimums must have encasement or mechanical protection. Other state requirements included:

! Additional cover over flexible pipes (Georgia, Nevada, and some other states).

! Minimum depths that vary depending on type of pipeline and location within the R.O.W. (Massachusetts and Ohio). Several other states specify different cover for different types of pipelines.

! Depths of cover that are different for cased and uncased pipelines (Tennessee).

### ENCASEMENT OF PIPELINES

The encasement of underground pipeline crossings is a common practice, motivated by the desire to provide added protection to utilities, to minimize any damage to the highway system, and to facilitate maintenance, replacement, or enlargement of the utilities involved. Most states have adopted policies that follow the AASHTO *Guide*, with variations in the types of pipelines requiring encasement and the means of encasement. These policies translate the general principles of AASHTO into specific criteria.

The AASHTO *Guide* establishes general rules for encasement of pipeline crossings of highways including the following:

—Encasement should be considered for structural protection from external loads of shock.

—Encasement protection may be needed for pressurized lines and lines used for conveyance of flammable, corrosive, and other potentially hazardous substances.

—Encasement should be considered for lines with less than minimum bury, lines close to hazardous locations, and lines that require protection from damage due to jacking or boring.

—Where used, encasement should be extended beyond the slope line or ditchline.

—Where appropriate, encasement should extend to the access control lines or to a line that allows for future widening.

### Discussion of Encasement Policies

Lack of uniformity on encasement practices is evident in terms of type of pipe, nature of transmittants, depth of cover and other pertinent factors. Variance among states is less a matter of language and baseline dimensioning (as in the case of location and depth of burial) and more one of differences in engineering opinion and local engineering experience. It may be difficult to rationalize differences in policies for the same type of pipeline carrying the same substances, such as water and sewers, but the only way such variances could be standardized would be to undertake unified research on individual pipeline applications, or to achieve a meeting of the minds by means of seminars and group explorations.

### Examples of Encasement Policies

Most of the states have followed the AASHTO *Guide* for encasement requirements, wish additional provisions outlining the conditions under which these protective measures are required for pipeline crossings.

Examples of state encasement policies follow.

TABLE 2

## PIPELINE BURY POLICES

State	Minimum Depths (a)			
	Below Ditches	Below Road Grade	Below Subgrade	Within R.O.W.
Ala.	30 in.	4 ft (b)		
Ark.	2.5 ft		3.5 ft	2.0 ft
Conn.		36 in.	18 in.	
Del.	24 in.			18 in.
Fla.	30 in.	36 in.		30 in.
Ga.	2 ft	4 ft		3 ft
Hawaii	2 ft (c)	3 ft		3 ft
Idaho	2 ft (d)	4 ft		3 ft
Ind.	3 ft	4 ft		
Iowa		48 in.		36 in.
Kans.	3 ft	5 ft		3 ft
La.	24 in.	4 ft		24 in.
Maine		24 in.		12 in. (e)
N.H.		24 in.	6 in.	24 in.
N.J.				30 in. (e)
N.M.				36 in.
Ore.	24 in.	30 in.		30 in.
Pa.	3 ft (d)	3 ft	6 in.	36 in.
P.P.	0.5 m			1.2 m
R. I.	3 ft	5 ft		
S.C.		4 ft		3 ft
Utah	2 ft (f)	3 ft		2 ft
Wash.	3 ft, 6 in.	5 ft		

(a) Preferred minimums exceptions permitted in most states.

(b) For curb and gutter sections.

(c) 1 ft below paved ditch.

(d) 2 ft below paved ditch.

(e) 1.5 feet below paved ditch.

! Alabama requires encasements to extend beyond the toe of slope or beyond the ditchline. A minimum distance of 6 ft (1.8 m) behind the face of the curb is stipulated.

! California prefers sleeves 4 in. (100 mm) larger than the pipeline outside diameter, with concrete jacketing of lines larger than 24 in. (610 mm). Encasement must extend to access control lines of freeways, with a minimum of 5 ft (1.5 m) beyond slope limits, or curb or shoulder lines. Pipelines for flammables and other hazardous transmittants must be encased or provided with protective coatings and cathodic protection. Water and sewers must be encased, but gravity irrigation lines are exempted.

! Connecticut relates pipeline size and pressure to encasement. Pressurized lines less than 30 in. (760 mm) in diameter crossing major highways, and all high-pressure gas lines must be encased.

! Georgia requires encasement for all installations over 10 in. (250 mm) diameter that are jacked or bored unless there is positive assurance against damage to roadbed. Pipes over 4 in. (100 mm) in diameter carrying hazardous transmittants are to be encased.

! Hawaii requires encasements of all pipelines under free-

! Cathodic protection is required for virtually all pipelines subject to regulation by the US Dept of Transportation, Office of Pipeline Safety

ways but offers leeway for other highways unless protective provisions are deemed necessary by the director.

! Illinois exempts continuous welded ductile water mains from encasement if they can be jacked into place.

! Iowa allows uncased natural gas lines if casing-size carrier pipe and higher safety factors are provided; however, encasement is required for pressure sewers, water mains and carriers of hazardous substances. Casings must be two pipe sizes larger than the carrier pipe.

! Kansas requires sewer lines of fiber, asbestos-cement and clay to be encased from right-of-way line to right-of-way line.

! Louisiana relates encasement to size and pressure of pipelines. Encasement is not required for lines 6 in. (150 mm) or smaller with less than 200 psig (1400 kPa). Gravity line are exempted.

! Minnesota requires crossings to be made by boring inside a casing or carrier pipe, or by jacking, unless modified by special permit.

! Missouri requires encasement except for adequately coated and cathodically protected welded steel pipe carrying gaseous or liquid petroleum materials; gas service connections of steel or copper; water lines of copper, if less than 2 in. (50 mm) in diameter; and new sanitary trunk sewer crossings.

! New Mexico requires that all crossing lines be steel, cast iron or reinforced concrete and or be encased. Each question of carrier material and or encasement is considered on an individual basis.

! North Carolina permits uncased lines where open cut is allowed. Bores of greater than 6 in. (150 mm) must be encased.

! North Dakota requires pressurized pipelines of 100 psig (690 kPa) or greater to be encased. Encasement must extend at least 2ft (0.6 m) beyond the toe of slopes.

! Ohio does not require encasement of water and sewer lines. Nonplastic pipes carrying petroleum or gas must be encased if stresses produced by internal pressures are greater than 30 percent of minimum yield. Plastic pipe must be encased if pressure exceeds 100 psig (690 kPa).

! Pennsylvania offers exemption from encasement on free-access highways in urban areas. Exemption is also made whenever the utility can justify non-encasement and also agrees to carry out all pipe replacement work by boring.

! Puerto Rico exempts gravity irrigation lines, but requires encasement or protection of water and sewer lines.

! South Dakota requires encasement or use of extra-heavy pipe for lines greater than 6 in. (150 mm) diameter with over 80 psig (550 kPa). Encasement must extend to 5 ft (1.5 m) beyond the ditchline.

! Tennessee (and other states) distinguishes between utilities laid across highways during construction and those installed under existing roadways. It stipulates that lines other than water or sewer, laid in trench during construction, can be unencased if the pipe wall thickness, coating and wrapping, welds, and cathodic protection are in accordance with applicable ANSI (American National Standards Institute) standards.

! In Utah, water and sewer lines may be unencased if extra-heavy pipe is used.

! Vermont stipulates that all pressure pipe, including water and sewer lines, must be laid in conduit.

! Wisconsin requires encasement if depth of cover is less than specified.

#### MECHANICAL PROTECTION AND APPURTENANCES

The AASHTO *Guide* links encasement requirements with alternative protective measures such as added strength of pipe structures, wrapping, coating, and cathodic protection. The *Guide* stipulates certain parameters, including the following:

- Use of encasement or higher safety factors.
- Unencased crossings by open trench construction.
- Bridging or other means of protection for vulnerable pipe installations.
- Venting at ends of encasements.
- Markers at right-of-way line.
- Drain for leaking liquids or liquified gaseous transmittant.
- Manholes not located in roadway of major highways, but permissible in urban roads with ADT (average daily traffic) of less than 750.
- Shut-off valves at or near ends of structures.

#### Discussion of Mechanical Protection and Appurtenance Policies

In general, most state policies conform to the provisions of the AASHTO *Guide*. Mechanical protection and appurtenances are aspects of utility right-of-way facilities that should, and do, reflect the consolidated experiences of highway and utility officials.

#### Examples of Mechanical Protection and Appurtenance Policies

A few examples of policies that have requirements in addition to the AASHTO *Guide* include:

! Connecticut stipulates that markers located within 30 ft (9 m) of any travelway shall give an impact.

! Hawaii requires protective measures for lines carrying explosive or flammable transmittants at pressures of over 65 psig (450 kPa), as deemed necessary by the Highway Utility Encroachment Committee.

! North Dakota augments its encasement and protective requirements with a stipulation that vents must be at least 2 in. (50 mm) in diameter and extend at least 3 ft (0.9 m) above grade.

! Puerto Rico requires the venting of casings longer than 40 m (130 ft).

#### INSTALLATION OF PIPELINES

The importance of underground pipeline utilities make it necessary to regulate their installation methods. No utility in the highway right-of-way is better, safer, or more dependable than the case used in placing it under or adjacent to the traveled way. Although most agencies have based their utility accommodation policies on the AASHTO *Guide*, many have supplemented it with their own concepts of what constitutes the best engineering construction practice for this situation.

For trenched construction, AASHTO recognizes the adequacy of highway agencies' standard specifications. The *Guide* considers:

- Width of trenches and vertical faces.
- Use of bedding.
- Backfill layers and compaction.
- Driving of small pipe with pilot shoes, including use of casings or corrosion-resistant pipe.
- Coring-drilling for small casings.
- Boring for larger pipe jacked through oversized bores.
- Wet-boring sluced by slurry, with the pipe pushed through the slurry.
- Suggested controls for untrenched construction and grouting.

#### Discussion of Installation Policies

Although highway agencies generally follow the AASHTO *Guide* for controlling trenching work, they often use their own bedding and backfill specifications. It does not appear practical to develop a uniform procedure because of differences in soil and foundation conditions. Because highway agencies have had relatively little experience with bor-

ing and grouting techniques, instructions and controls could be prepared jointly by AASHTO, and utilities companies and equipment manufacturers.

#### Examples of Installation Policies

Open cuts are permitted in New York only with adequate justification. Kentucky prefers augering, jacking, boring, pushing or tunnelling. Open trenching is permitted only with departmental approval. North Carolina permits no cuts on roads with more than 2,000 ADT, except in unusual cases. Pennsylvania permits trenching when it can be justified for economic and engineering reasons. Tennessee stipulates that cuts are permitted only in extreme hardship cases. Texas allows trenching on low-traffic roads or non-controlled access urban roads where condition justify. West Virginia requires jacking or boring under existing roads except where unusual conditions are encountered.

### CHAPTER THREE

#### OVERHEAD POWER AND COMMUNICATION LINES

The need for electrical and communication organizations to occupy fair and reasonable space in, on, and over highway right-of-way lands, in keeping with their franchise requirements to serve the public need, cannot be considered as a "blank check" for accommodation of their facilities. The type of plant they install, where and how construction will be permitted, and how they must maintain, repair and enlarge their structures are decisions that highway authorities must regulate to protect the primary purpose of the highway systems (i.e., the safe and expeditious movement of traffic).

Technological, legal, aesthetic, and economic considerations dictate whether power and communication line are located underground or overhead. Overhead lines affect road systems and their right-of-way lands in different ways than underground utility structures. Overhead lines may involve less effect on other utilities and the road structure, and cause less disturbance to the roadway in case of line failures or utility relocation or augmentation. However, their exposed location may represent a safety hazard to highway users, or may interfere with highway maintenance operations.

Overhead line facilities use the right-of-way for the installation of poles and supports (guys and other stabilizing facilities). Problems include avoidance of physical interference with other overhead lines and their appurtenances, as well as interference with highway structures; prevention of electrical or telecommunication interferences; and the

Colorado limits trenching to situations where boring or pushing are impractical. Delaware requires that in trenching work, only one-half of the travelway can be open at any one time, and Florida stipulates that one-way traffic must be maintained during daylight hours and two-way traffic at night.

Alabama requires certification of backfill compaction by a registered professional engineer or certified testing laboratory. Wet-boring is prohibited in Georgia, Indiana, Louisiana, New Mexico, North Dakota, Ohio, Pennsylvania, Rhode Island and South Carolina. Wet-boring is not permitted under major highways in Massachusetts, New Jersey and Vermont. Tennessee does not permit wet-boring without prior written approval. Wet-boring is allowed by special approval in South Dakota and for lines less than 2 in. (50 mm) diameter in Illinois. Alabama permits wet-boring, but includes a detailed specification on this method in its policy.

problem of overhang in the airspace over roads, interchanges or other roadway system features.

To avoid these problems, AASHTO has suggested guidelines of a general nature, and state highway agencies have established specific policies relation to location, vertical clearance, and type of construction.

#### LOCATION OF OVERHEAD LINES

The AASHTO *Guide* offers criteria for the location of overhead power and communication utilities in highway rights-of-way, subject to translation of these suggestions into policy parameters that suit conditions in individual states. As with all types of utilities occupying space of any type in the right-of-way, overhead lines should be as far from the traveled way as possible, and contain as few physical structures as possible. The AASHTO *Guide* includes the following provisions on location:

- For rural areas, overhead lines should be located at or near the right-of-way line, and at least outside the clear roadside area [30 ft (9 m)] where there is sufficient space.\*
- For urban areas, overhead lines should be located at or near the right-of-way line.
- In curbed sections, overhead lines should be as far as practical behind the face of the curb, and where feasible, behind the sidewalk.

\* The 1974 AASHTO "Yellow Book" (6) indicates (p 38) that the "30-ft distance is not a magic number the application of engineering judgment is still required in providing a safe roadside"

TABLE 3

## OVERHEAD POWER AND COMMUNICATION LINE LOCATION POLICIES

State	Maximum Distance from R.O.W Line	Minimum Distance from			
		Pavement Edge	Shoulder	Curb Face	Guardrail
Ala.	5 ft	30 ft > 50 mph 20 ft , 50 mph		6 ft	
Cal.	Close as possible			2 ft	
Conn.		12 ft or y	8 ft	Cable 13 ft Beam (weak post) 9 ft Beam (strong post) 5 ft	
Fla.	6-1/2 ft	30 ft . 50 mph 18 ft , 50 mph		4 ft	
Hawaii	5 ft	30 ft rural 20 ft urban		6 ft	
Kans.	2 ft	30 ft			
La.	1/2 crossarm, plus 1 ft				
N.M.	1 ft				
P.R.		12 m			
S.D.		30 ft . 750 ADT <sup>a</sup> 15 ft , 750 ADT		6 ft	
Tex.	1 to 3 ft				
Va.		30 ft			

—On narrow rights-of-way, self-supporting, single arm-less poles should be considered before relaxing the right-of-way line requirement. As an alternative, poles should be located behind guardrails, beyond open ditches, slopes or retaining walls, or similarly protected locations.

—In irregular rights-of-way, location variances can be permitted to provide reasonable alignment patterns.

—Longitudinal installations should not be permitted in medians.

—For crossings, poles are not permissible in medians of less than 80 ft (24 m) in width.

These suggestions are so clear-cut that many states have adopted them as official policy in total, and others have accepted them with a minimum amount of additions and specifics to meet their own concepts and conditions.

**Discussion of Overhead Line Location Policies**

Among the variations in location requirements, the intent to keep overhead lines and their supporting structures as far

as possible from traffic remains. The repetitive references to the 30-foot criterion is evidence that highway agencies tend to agree with the AASHTO *Guide*.

**Examples of Overhead Line Location Policies**

Location requirements for overhead power and communication lines for a number of states are given in Table 3. Several other agencies use the exact language of the AASHTO *Guide* as their policy.

Some other policy requirements include:

! Maine ties its utility location on rural highways to right-of-way width. For 100-ft (30-m) rights-of-way without curbs, poles must be set not less than 30 ft (9 m) from the edge of the traveled way; on narrower rights-of-way without curbs, the location is established as not less than 10 ft (3 m) beyond the edge of the shoulder. Minimum distance beyond curbs is 10 ft, and not less than 8 ft (2.4 m) behind beam-type guardrails. On urban roads with curbs, poles shall be not less than 6 ft (1.8 m) from

the face of the curb when the right-of-way is from 10 to 14 ft (3.0 to 4.3 m) behind the curb. For R.O.W. greater than 14 ft, locations shall approach standards for rural highways. No poles are permitted less than 1 ft (0.3 m) from a curb face.

! Missouri requires poles to be within 2 ft (0.6 m) of the R.O.W. line except in the relocation of existing poles. These may be within 5 ft (1.5 m) of the R.O.W. lines.

! New Hampshire has a minimum distance of 30 ft (9 m) from the pavement edge or 5 ft (1.5 m) behind the ditch bottom. However, there are exceptions. Poles may be located 14 ft (4.3 m) behind the guardrail. On a rural road when there is insufficient right-of-way width, poles should be located within one-half the crossarm width from the right-of-way line but not closer than 8 ft (2.4 m) from the pavement edge, shoulder, or face of the guardrail.

! New York requires that for speeds over 35 mph (56 km hr), nonfrangible structural members must be located not less than 30 ft (9 m) from the pavement edge; for speeds of under 35 mph, location shall be at the right-of-way line. If this is not feasible, poles may be set behind the sidewalk or minimum distance of 2 ft (0.6 m) behind the face of the curb.

! Oregon draws a correlation between location of poles and the number of lanes in the roadway. For two-lane roads, poles must be located within 1 ft (0.3 m) of the right-of-way line when the land width on the side of the highway occupied by utility supports is up to 50 ft (15 m); for four-lane roads, location must be within 1 ft when right-of-way widths are up to 62 ft (19 m) on the pole side. For wider rights-of-way, poles must be located within 5 ft (1.5 m) of the R.O.W. line. Subject to right-of-way width, no pole must be within 30 ft (3 m) of the edge of a traveled way unless protected by a wall, guardrail, slope, etc. Poles must be located at least 5 ft behind guardrails.

#### VERTICAL CLEARANCE BENEATH OVERHEAD LINES

States add vertical clearance requirements to their horizontal location stipulations to assure that highway traffic will not be affected by overhead electrical power and communication lines and, conversely, that the safety of these utilities will be protected. AASHTO has offered the simple guideline that clearances should conform to National Electrical Safety Code requirements ( 7 ), or subject to greater heights required by each state's own laws, regulations, or policy.

#### Discussion of Vertical Clearance Policies

Vertical clearance of electrical and communication lines is one area in which there is substantial agreement among the states. Almost all policies require conformance to the National Electrical Safety Code as suggested by the AASHTO *Guide*, although some require slightly greater minimum

clearances than the Code. The few states with minimums considerably in excess of those in the Code might want to re-evaluate their requirements to determine if they are compatible with the requirements of adjacent states.

#### Examples of Vertical Clearance Policies

Almost all state policies following the AASHTO *Guide* in referring to the National Electrical Safety Code for vertical clearance requirements. However, about half of the policies also specify an absolute minimum clearance over pavements. The most common of these is 18 ft (5.5 m) or 20 ft (6.1 m), but a few states specify considerably higher clearances.

Of the few states that make no reference to the Code, one simply uses an abbreviated form of the Code's minimum clearance table. The others refer to the state public utility commission as the arbiter of clearance requirements.

Some examples of policies on vertical clearance follow.

! Minimum vertical clearance for overhead power and communication lines . . . shall conform with the National Electrical Safety Code. However, in no instance should an aerial crossing have less vertical clearance over the roadway than eighteen (18) feet. (states with a specific minimum in addition to the Code.)

! Some states have different minimums for freeways and other roads: typically, 20 or 24 ft (6.1 or 7.3 m) for freeways and 18 ft (5.5 m) for other highways.

! A number of policies differentiate between communication and electrical lines in specifying the minimum clearance: typically 18 ft (5.5 m) for communication and 20 or 22 ft (6.1 or 6.7 m) for electrical lines.

#### TYPES OF POLE CONSTRUCTION

The types of poles are regulated by states in order to control the use of their rights-of-way and to provide optimum use of the supports allowed within the right-of-way.

The AASHTO *Guide* recommends single-pole construction for longitudinal lines. Joint use of poles is encouraged in accordance with Rule 222 of Part 2 of the National Electrical Safety Code.

#### Discussion of Pole Construction Policies

Of all the facets of overhead line installations on highway rights-of-way, the policies covering types of poles and the use thereof show the greatest consensus.

Most policies use the language of the AASHTO *Guide* without addition or exception. A few states have added requirements that permit only one pole line on each side of the road. One state requires cable television lines to use existing poles. Although the joint use of poles along roadsides is encouraged in most states, it is not required by policy. The AASHTO *Guide* has served to produce a general unanimity regarding type of pole construction.

## UNDERGROUND ELECTRIC POWER AND COMMUNICATION LINES

The policy outlining under what circumstances underground electric power and communication facilities are accommodated may influence a utility company's choice of overhead or underground locations, their method of construction and safety, or the choice of a highway or private right-of-way. In any event, highway routes are still the most economical and efficient path that allows electric power and communication facilities to reach their consumers. The joint use of rights-of-way by highways and utilities reduces the added impact on the environment that would otherwise occur with single-use rights-of-way.

Technological, legal, economic, and other considerations dictate whether power and communication lines are located overhead or underground. Included in these considerations are highway policies, public utility commission requirements, environmental impacts, native soil conditions, climate, groundwater table, comparative construction and maintenance costs, proximity to other utilities, and other local conditions. Recent public efforts to replace overhead lines with underground facilities to enhance scenic quality add another dimension to the decision-making problems facing power and communication utility officials.

When underground routes are used for these utilities, the highway agency policies for location and alignment, encasement, and installation dictate how and where they are permitted to occupy the right-of-way.

### LOCATION AND ALIGNMENT

The AASHTO *Guide* is framed in terms of general practices that state highway policies can translate into specific requirements to meet local conditions and engineering standards. To this end, AASHTO criteria suggest that longitudinal power and communication lines be installed as close to the right-of-way line as possible, that crossings be as near normal to the highway alignment as possible, and that crossings avoid deep cuts, footings, intersections, drains, and wet or rocky terrain.

### Discussion of Location and Alignment Policies

Location and alignment policies for underground electric power and communication lines are less varied than for pipelines; however, there is still a tendency to use slightly different distances and varying baseline points for specifying location of longitudinal facilities. Concurrence with the AASHTO *Guide* predominates in all policies, and the mix of distances for locations does not detract from the general policy of keeping lines as far from the roadway as possible. It all of the distance requirements were expressed in comparable terms, it is probable that the variations would be small. However, it is recognized that road prism and right-of-way dimensions vary and that some flexibility is required

to obtain the best accommodation of utility facilities and the best protection of highway systems to meet indigenous conditions.

### Examples of Location and Alignment Policies

Most policies use wording identical or similar to that of the AASHTO *Guide* without adding any specific location requirements. Other policies have recommended or required locations for underground power and communication lines:

! Georgia and Indiana use the slope, ditch or curb as a baseline and require a minimum distance of 3 ft (0.9 m) and 5 ft (1.5 m), respectively, to underground lines.

! Hawaii, Pennsylvania, and Washington have requirements for location of underground power and communication lines that are the same as those for pipelines.

! Illinois, Minnesota, and New Mexico require that the underground lines be within 5 ft (1.5 m) of the right-of-way line. In Missouri, this distance is 6 ft (1.8 m), and in Kansas the maximum distance from the R.O.W. line is 5 ft. with a 3-ft (0.9-m) minimum.

! South Dakota recommends that underground power lines be located about 5 ft (1.5 m) from the R.O.W. line and communication lines at about 10 ft (3.0 m).

### ENCASEMENT

Protection of power and communication lines against impacts and loadings from highway traffic, and against action by soils, groundwater and other sub-surface hazards is achieved with conduits, ducts, or other encasements. In addition, these measures provide a means for repair and maintenance of lines and may allow for future growth or expansion of utility lines.

This means of protection is aimed more at the needs of the buried utilities than at preserving the integrity of the highway structure itself. Failure of cables under a roadway does not threaten the foundation of the highway in the same manner as failure of a pipeline does. However, any underground damage to uncased electrical power or communication lines could involve the highway structure and cause interference with traffic whenever repairs or replacements must be undertaken.

The AASHTO *Guide* suggests that:

—Electric power and communication lines may be installed under highways without protective conduit or duct if installation is limited to open trench construction or to small bores for wire or cable facilities.

—Where crossings are encased in protective conduit or duct, the encasement should extend a suitable distance beyond slope line or ditchline and, where appropriate, to access control lines.



—Consideration should be given to encasement or other protection of facilities with less than minimum bury, near bridge footings, or other hazardous locations.

#### Discussion of Encasement Policies

Despite variations in encasement policies from state to state, all policies adhere to the general criteria contained in the AASHTO *Guide*. The major differences in policies relate to the actual details of crossing protection. Nearly all agencies seek the greatest protection under local conditions in conformity with local engineering opinion and experience.

Although some encasement policies do not differentiate between electrical lines and communication lines, a sizable number diminish requirements for communication lines. Perceived hazard (or lack thereof) can play a part in establishing protective policies.

Many states still require the encasement of crossings of underground distribution power cables (5 to 15 kV) even when they are equipped with circuit-interrupting devices that operate to clear cable failure or accidental damage because of excavations. Some states fail to draw any distinction between the greater hazard in pipeline crossings and the lesser effects of failure of electrical and communication lines, but others show a trend toward relating encasement policies to actual hazards. Any attempt to standardize these two aspects of encasement would be fruitless unless it is possible to gain acceptance of a statement which recognizes that potential hazards and protective measures are inter-related.

#### Examples of Encasement Policies

Some examples of policies for encasement of underground power and communication lines follow.

! Alabama requires encasement of power lines within the highway prism, but communication line need not be encased if the utility agrees not to open cut for maintenance purposes.

! Colorado allows service connections or crossings to be made without conduit if the utility company believes they do not need reinforcement: other crossings require conduits of sufficient strength to carry the weight of construction equipment and highway traffic, and of sufficient capacity to meet anticipated future needs of the utility.

! Connecticut requires crossings to be installed with protective conduit or duct.

! Georgia specifies encasement in protective conduit extending a minimum of 3 ft (0.9 m) beyond slope lines or ditchlines.

! Illinois requires crossings of power lines operating above 600 V to be encased for the full length of the crossing.

! Iowa allows communication cables to be unencased, provided that a casing is placed alongside the facility when installed. Electrical cables must be encased with rigid steel or concrete conduit.

! Missouri requires encasement of lines crossing highways, except for telephone and electric cables installed in ducts.

! Nebraska requires encasement to extend from toe to toe of fill slopes. When multicell ducts are used, they should be placed in large casings or tunnels.

! North Carolina requires freeway crossings to be encased, but no encasement is required for nonfreeway systems if open-cut construction or bores of 6 in. (150 mm) or less are used.

! Utah requires underground lines to be suitably encased in protective conduit extending 30 ft (9 m) beyond the edge of the traveled way, or curb line, whichever is greater.

! West Virginia requires cable placed under paved roads to have a casing with a minimum diameter of 2 in. (50 mm) and to extend 5 ft (1.5 m) beyond the edge of pavement, shoulder, ditchline or curb line.

#### GENERAL INSTALLATION REQUIREMENTS

General provisions covering installation and construction of underground electric power and communication lines vary from state to state because of differences in local conditions and long-established engineering specifications of highway agencies.

The AASHTO *Guide* can only suggest that each agency establish its own criteria to best serve its own needs, its own particular highway right-of-way conditions, and its own engineering judgment. The *Guide* suggests that:

—Each agency should establish a minimum depth of bury.

—Consideration should be given to installation of spare conduit or ducts for future expansion.

—Proposed locations should be reviewed to prevent conflicts with existing or planned highways or with operation and maintenance.

—The general controls for pipelines as related to markers, installation, trenched and untrenched construction, and adjustment should be followed, as applicable.

#### Discussion of General Installation Policies

There is no consensus among states on installation policies. Perhaps there can be none, but survey of national practices points out the feasibility of relation depth of bury and protection of electrical and communication lines to potential hazard and failure experiences. Distinctions between requirements for electrical and communication lines in many states are motivated by differences in apparent line failure hazards. However, a number of states regulate these lines in the same manner as more hazardous pipeline structures, without recognition of obvious hazard variances.

#### Examples of General Installation Policies

A number of state policies use the wording of the AASHTO *Guide*, but most supplement it with at least minimum requirements for depth of bury.

! Alabama permits cable installation by plowing outside of the roadway prism and within 1 ft (0.3 m) of the approved horizontal location. Minimum depths of bury for power lines are 42 in. (1.07 m) under R.O.W., 48 in (1.22 m) under pavement; minimums for communication

lines are 30 in. (0.76 m) under nonfreeway R.O.W., 36 in. (0.91 m) under freeway rights-of-way, and 48 in. under pavement.

! Arkansas specifies minimum crossing depths as 2.5 ft (0.76 m) below the lowest point of the highway, or 3.5 ft (1.07 m) below the bottom of the road surfacing, whichever is greater. Longitudinal lines must be buried at least 2 ft (0.61 m).

! California stipulates a minimum cover of 30 in. (0.76 m), but increases the minimum to 60 in. (1.52 m) for clay ducts under roadbeds. Crossings must be made by boring or jacking under existing roads.

! Colorado requires a depth of 30 in. (0.76 m) for power lines carrying voltages up to 750 V, and a depth of 42 in. (1.07 m) for 750 V and greater.

! Connecticut requires conduits to have a minimum depth of 36 in. (0.91 m) within paved areas. Buried cable must have a minimum depth of 24 in. (0.61 m), with 36 in. for electric lines.

! Georgia uses its pipeline policy as a general control for cable installations. Plowed-in cable must have a minimum bury of 24 in. (0.61 m).

! Idaho sets a minimum depth of 2½ ft (0.76 m) but will allow 2 ft (0.6 m) if necessary to clear drainage facilities and other critical features. Depths less than 2 ft require encasement.

! Illinois requires longitudinal lines to have markers every 300 ft (91 m) and a minimum cover of 30 in. (0.76 m). Minimum cover for crossings is 30 in. below bottom of ditch. Power cables of 600 V or greater require

an outer metallic ground shield plane consisting of concentric wire stranding or a lead sheath.

! Iowa requires a minimum bury of 48 in. (1.22 m) under roadways and 36 in. (0.91 m) elsewhere for communication lines. The policy requires 48 in. in all locations for electrical lines.

! Kansas stipulates that longitudinal communication lines must be buried 24 in. (0.61 m), but requires 3-ft (0.91 m) cover for power lines.

! Maine has a minimum cover requirement of 24 in. (0.61 m) under pavement and shoulders and 12 in. (0.30 m) elsewhere.

! Missouri requires a minimum cover of 30 in. (0.76 m). However, parallel direct burial cable has a minimum of 24 in. (0.61 m).

! New Jersey recognizes that cased lines should require less cover than uncased facilities [30 in. (0.76 m) and 42 in. (1.07 m), respectively].

! North Carolina specifies minimum bury for the following conditions: crossings under roadways, 3 ft (0.91 m); crossing under ditches and sidewalks, 2 ft (0.61 m); longitudinal electric primary, 3 ft; electric power secondary and trenched communication, 2 ft; and plowed-in communication lines, 18 in. (0.46 m).

! Texas stipulates that underground power and communication lines must meet the requirements for water pipelines.

! Washington applies the general controls for pipelines to underground power and communication lines with a minimum cover of 3 ft 6 in. (1.07 m) below ditches and 5 ft (1.5 m) from the surface of the roadway.

## CHAPTER FIVE

### INSTALLATION OF UTILITIES ON HIGHWAY STRUCTURES

Under certain conditions, it may become necessary, and even desirable, to use highway structures to carry utility facilities. Circumstances can arise when it would be more expeditious, economical and aesthetically favorable to attach private and public utility plant to bridges, viaducts, overpass structures, etc., rather than installing independent support facilities to effectuate utility crossings. This arrangement involves a special use of right-of-way space in state highway systems and special provisions must be made to accommodate the needs of utilities without impairing the usefulness, safety and life of the structures. Although the scenic effect of utility accommodation in the highway right-of-way may be enhanced by such piggyback arrangements, the hazards must be evaluated and balanced against the benefits derived.

The attachment of utilities to highway structures exposes pipelines and electric power and communication lines to

the elements and to a different set of impact and contact conditions than those involved on in underground crossings. Careful engineering is necessary to care for the effects of expansion and contraction. The hazards of utility detects, breaks, leakages, explosion and fire can affect the highway structures involved and expose vehicles and people to hazards.

These factors have been recognized by the AASHTO *Guide*, and general suggestions on how to cope with the practices and problems involved in attachment of utilities to structures are recommended:

—Such attachments should be permitted when the public interest will be served thereby, and then should conform to logical engineering considerations.

—Attachment locations should occupy a position beneath the structure's floor, between outer beams, or within a cell, and located above the lowest steel or masonry members.

—The general controls for providing encasement of pipelines crossing highways should be followed for pipelines attached to bridges.

—Electric power and communication lines should be suitably insulated, grounded, and preferably carried in conduits or pipes that are insulated from power line attachments.

#### DISCUSSION OF STRUCTURE ATTACHMENT POLICIES

Expressed or implied in all policy statements covering the attachment of utilities to highway structures is a consensus that the AASHTO *Guide* contains the best principles for this facet of right-of-way use. The basic preference is that no such accommodations be provided; however, the needs of utility location can require attachment in many cases. The goal, then, is to permit attachments of certain facilities under certain conditions that will preserve and protect supporting structures, prevent utility damage and interferences, and assure the safety of highway users.

Although most states adhere to the AASHTO *Guide*, variances in permitted attachments and prohibited facilities are found from state to state. These differences may be based on local concepts of safety and equitable use of structures to facilitate the location of utility plant. Whether such variables as gas line pressure, pipe sizes, encasement, locations and types of attachments types of transmittants permitted, insulations and other protective measured can be standardized nationally is debatable. However, an engineering consensus may be achievable by means of an exchange of opinions and explanations of why certain special requirements have been used by some states and not others.

#### EXAMPLES OF STRUCTURE ATTACHMENT POLICIES

Most policies on structure attachments follow the spirit of the AASHTO *Guide* although many add specific requirements or restrictions.

! Alabama stipulates that pipelines must not be attached to bridges over highways or railroads except under extreme conditions, and then only if properly encased. Gas lines with pressures exceeding 80 psig (550 kPa) must be encased. Attachment to high-pressure pipelines more than 600 psig (4100 kPa) is prohibited.

! Arkansas suggest that attachment of pipelines carrying hazardous transmittants be avoided whenever possible, when permitted, such lines must be given 24-hour hydrostatic tests at pressures of 1.4 times the maximum to be carried. Bridge attachments are permitted only when the structure is deemed capable of supporting the added load. Utility mountings must be nonrattling. Open-wire transmission lines with 35-kV ratings or higher are not permitted. Owners of utility attachments are charged an annual rental fee. However, there is no fee for telephone or electric utility lines.

! Colorado may charge utilities and equitable share of any additional cost of design and construction to accommodate their attachments.

! Hawaii permits attachment of fuel oil lines but prohibits other liquid fuel lines. The maximum size of gas lines

in box girders is 6 in. (150 mm). Maximum pressure in gas lines on any bridge is 65 psig (450 kPa).

! Illinois prohibits welding of structural steel members for attachment of utilities. Gas pipelines more than 4 in. (100 mm) in size or carrying more than over 75 psig (520 kPa) are not permitted. Utility companies are assessed a portion of the cost of the bridge, under most circumstances.

! Indiana discourages attachment of utilities on structures. Lines carrying flammable, corrosive or explosive transmittants are completely prohibited. Pipelines are not permitted on overpasses of highway or railroads.

! Iowa permits attachment of water and steam lines serving a municipality. Natural gas lines can be attached to bridges longer than 200 ft (61 m), with a fee charge: no other pipelines are permitted. A fee is also charged for attached telephone or electric power lines.

! Kentucky requires cushioned supports for attached utilities when they are permitted. A charge is made for the cost of additional supports to permit attachments if the cost is more than nominal.

! Massachusetts will not permit facilities carrying volatile liquids or gases. Gas lines rated for 100 psig (690 kPa) are not permitted.

! Minnesota limits pipeline attachments to water, sewer and natural gas lines.

! Missouri bans attachment of any utilities on structures carrying freeways. The only utilities permitted on grade separation structures are wires, and these are authorized only when no other practicable crossing means is available. A charge is made for attachments to cover increased maintenance expenses.

! New York has an extensive list of detailed requirements regarding utility attachments to structures. Support of utilities from the bottom of concrete structural slab is not permitted: electrical conduits must be placed in sidewalks whenever possible and be of galvanized steel or fiber covered by a steel plate. Lines of 115 V or less may be carried beneath slabs in fiber conduit, but lines of greater than 115 V must be carried in galvanized steel conduit. Power lines of more than 440 V, gas mains, and sewers are permitted only in extraordinary circumstances; carrier lines must have shut-offs at the ends of structures; and the cost of any additional structural items due to the added load of the utility shall be paid by the utility.

! North Carolina requires cathodic protection where stray currents may be experienced.

! Ohio specifies that gas lines must not be stressed in excess of 30 percent of the minimum yield strength. Water mains must be protected with insulated wrappings against freezing.

! Oregon permits structure attachments where utility poles or other areas have been provided. If not previously provided, utilities may be carried on hangers affixed between outside beams. Locations below parapets on structures over freeways are banned, but attachments to the outside of other structures may be made if interior locations are not feasible. All pipe exposed to view must be painted to blend with supporting structure.

! Puerto Rico requires that high-pressure pipeline, over

200 psig ( 1400 kPa). cannot be stressed to more than 40 percent of the minimum yield strength, and the radiographic inspections must be made of all field welds. The system must be tested for a 24-hour period with the pressure maintained 150 percent of the maximum operating pressure or greater. Pipelines carrying water, sewage and low-volatile fluids must be encased when they cross freeways or primary highways. Encasement is required for all pipelines carrying volatile fluids or gas.

• South Dakota normally installs utilities under bridge curbs or sidewalks by means of hangers or brackets. Encasement is required for all utilities, including power and communication lines, except where conditions permit cradling or hanger-type construction. Shut-offs for flammable or corrosive transmittant lines must be provided within

## CHAPTER SIX

### ADDITIONAL POLICY REQUIREMENTS

#### SCENIC ENHANCEMENT

The effects of utilities on the scenic quality of highways are recognized by the AASHTO *Guide*. The *Guide* suggests additional controls for scenic areas such as overlooks, rest and recreation areas, scenic strips, and parks and historic sites through which highways pass. The *Guide* states that new underground installations in scenic areas should be allowed only where extensive removal of trees or other visible features is not required. New aerial installations should be avoided in scenic areas if there is a feasible alternative. If not, they should be considered only (a) where other locations are unusually difficult and unreasonably costly or less desirable visually, (b) where undergrounding is not technically feasible or is unreasonable costly, or (c) where the proposed installation uses designs and materials that give adequate attention to the visual qualities of the area traversed.

#### Discussion of Scenic Enhancement Policies

The scenic enhancement policies of almost all agencies contain wording identical or similar to that of the *Guide*. A few policies have no section on scenic enhancement: in one case, an explanatory note accompanying the policy indicates that the state has no legal authority in this area but encourages utility owners to voluntarily achieve an aesthetic environment.

#### IRRIGATION AND DRAINAGE FACILITIES

Irrigation and drainage facilities are utilities that are not found as frequently as other utility types. Because of the similarity to highway drainage, the AASHTO *Guide* states that irrigation and drainage facilities crossing highways

300 ft (91 m) of the structure. For structures less than 75 ft (23 m) long, some restrictions may be eliminated and other alternatives considered.

• Tennessee will not allow attachment of pipes or conduits over 12 in. (300 mm) in diameter. Also prohibited are pipelines or transmission lines, as defined in ANSI-B31 series, transmitting flammable liquids or gases. Pipelines transmitting liquids must be encased or otherwise protected.

• West Virginia does not permit drilling of concrete or steel members on existing bridges for the attachment of utilities. Pipelines carrying combustible materials are prohibited.

• Wisconsin requires that pressure in pipelines on structures not exceed 150 psig (1000 kPa).

should be designed and constructed in accordance with highway culvert specifications. Ditches and canals paralleling the highway should be discouraged and special consideration given to ditch rider roads.

#### Discussion of Irrigation Drainage Facility Policies

About half of the state policies make no mention of requirements for irrigation and drainage facilities. In most instances, there are probably few or no such facilities in these states.

Most of the policies with requirements follow the AASHTO *Guide*, although a few have additional requirements.

• Arkansas requires encasement across controlled-access highways for water siphons, flumes, or pressure lines from irrigation pumps. Other irrigation pipes must be smooth- or spiral-welded steel, cast or ductile iron, corrugated metal with watertight bands and asphaltic coating, or concrete pressure pipe.

• California prohibits longitudinal canals and ditches unless no other alternative is available.

• Idaho requires irrigation line and pipe siphon crossings to be buried from R.O.W. line to R.O.W. line. Crossings of canals and ditches may be made through culverts or bridges. Parallel open canals or ditches are not permitted within the right-of-way.

#### MISCELLANEOUS REQUIREMENTS

Whereas the major sections of the AASHTO *Guide* are directed toward the regulation of specific utility installations on, in, and over the highway right-of-way, the miscellaneous provisions provide general controls for construction and

maintenance. In the category of preservation, restoration and cleanup, the AASHTO *Guide* recommends:

—That disturbed areas be kept to a minimum.

—That restoration be in accord with agency specifications.

—That existing drainage should not be disturbed and adequate drainage provided for the utility facility.

—That jetting or puddling under the highway not be permitted.

—That spraying, cutting or trimming of trees be prohibited without written permission.

For safety and convenience, traffic control should conform to the *Manual on Uniform Traffic Control Devices* (8). The *Manual* recommends that operations should be planned to keep traffic interference to a minimum, that all facilities should be kept in good state of repair, and that the permits held by utility companies should identify permitted maintenance operations and notification procedures.

## CHAPTER SEVEN

### PERMITS, INSPECTIONS, FEES, AND BONDS

No utility is given carte blanche to locate its plant in, on, or over highway rights-of-way. It must be authorized to do so, at designated locations, and with the required quality of physical plant and workmanship. Knowledge and control of utility installations is made possible by: instituting and administering a system of applications; careful review of proposals: issuance of permits to place, modify or maintain a plant in a required manner and location; inspection of utility work for compliance with permit requirements; and imposition of adequate and equitable fees, bonds or deposits to assure proper performance. Without these regulatory steps, the requirements for utility placement outlined in the foregoing chapters would be unfulfilled.

The state of the art report prepared for the Federal Highway Administration by APWA ( 5 ) addresses this subject. The FHWA *Manual of Improved Practice* ( 4 ) proposes systems of applications and permits, inspections, and fee and bonding practices to improve local government control over the accommodation of utilities in urban streets and highways.

This Report characterizes application-permit systems as effective in: registering utilities intentions to carry out work within the right-of-way, stipulating the nature and extent of the work, providing information necessary for the coordination of utility accommodation plans, assuring the effectiveness of utility compliance with regulations, and protecting governmental agencies against improper work. In addition, the Report stresses the importance of inspection

#### Discussion of Miscellaneous Requirements

Approximately half of the states have incorporated the *Guide* wording in their own utility accommodation policies, either completely or in a slightly modified form. A few have added other requirements:

• For sod or cover disturbed and replaced by the utility. Alabama requires maintenance for a sufficient time to assure that the turf is alive and growing.

• Louisiana and North Carolina include detailed regulations covering the removal or trimming of trees or other vegetation in the right-of-way.

• Washington has specific regulations relating to the use of chemicals for roadside spraying operations.

• West Virginia has details for traffic control in addition to the *Manual on Uniform Traffic Control Devices* and the department's traffic control manual.

procedures and fee, bonding, and deposit provisions in protecting roadways and their users against unforeseen difficulties.

The *Manual of Improved Practice* lists 15 application, permit, inspection, fee, and bonding practices that improve operations, improve public and utility relations, and protect the public interest.

The AASHTO *Guide* is limited in this phase of utility accommodation. It places the responsibility for plant design on the utility owner and stipulates that "the highway authority should be responsible for review and approval of the utility's proposal with respect to the location of the utility facilities to be installed and the manner of attachment" (2). AASHTO has a more specific policy for accommodation of utilities in the rights-of-way of freeway systems: "The public agency which constructs or maintains freeways shall reserve the right to review and approve the location design of all utility installations, adjustments or relocations affecting the highway and issue permits for the contemplated work" (3).

#### DISCUSSION OF POLICIES FOR PERMITS, FEES, AND BONDS

A review of utility accommodation policies indicates that procedures are not uniform with respect to receipt of applications for utility work, issuance of permits, imposition of fee charges and/or bonding and escrow deposit procedures, and agency inspection of utility installation work.

policies vary on whether local, district, or regional offices handle these procedures, and on whether or not the authority is retained in the highway agency's central headquarters.

The issuance of permits for utility work without follow-up inspections by qualified personnel leaves the responsibility for work quality and compliance with standards unresolved. Most highway agencies probably do perform inspections of utility construction and reconstruction in their highway rights-of-way, but in many states no explicit references are made to this control procedure in policy statements. Inclusion of specific references to job inspections should be included in such statements, if only by reference.

Imposition of fees for issuance of permits and inspections varies from state to state; uniformity of policies covering utility or contractor performance bonding does not exist, nor should a general consensus be expected. Each state may have different reasons for fee-bonding-deposit policies; they should be based on past experiences, fiscal requirements, the nature of the utilities or contractors involved in installation projects, and other indigenous conditions. There need be no apology for the imposition of fees or for bonding-escrow policies. Costs for administering a regulatory program should be recaptured and additional cost for structures that support utility attachments are a rational reason for rental, fee or other monetary recompense. Services that require some payment therefor achieve greater recognition and dignity when charges are made for them on a rational and equitable basis. Bonding to guarantee performance and deposits held in escrow to assure proper performance must be based on the individual experiences and policies of each agency.

#### EXAMPLES OF POLICIES FOR PERMITS, FEES, AND BONDS

##### Permit Applications

A number of policies make no specific reference to the filing of applications for utility work, although there must be some procedure because all have some requirement for obtaining a permit.

! Arkansas and New Jersey require filing of applications with the "department"; and New Mexico has a similar requirement with a post office box number given. Hawaii requires filing with the director of transportation; Nebraska to the "appropriate governmental subdivision"; Rhode Island to the permit supervisor; and Puerto Rico to the Department of Public Works, with plans submitted to the Highway Authority.

! A large percentage of states requires the filing of applications with district offices, district engineers, or division engineers of maintenance or utilities.

! Illinois distinguishes between "general permits" and "working permits." for the former, applications are processed through the Bureau of Maintenance at the department headquarters; applications for the latter are filed with district engineers.

! Indiana has a different filing procedure for construction of transmission or distribution lines, and for installation and repair of service connections. Applications for transmission or distribution lines are handled by the district

permit engineer, while those of the latter category are filed with the superintendent of the highway subdistricts.

! New Hampshire distinguishes between interstate, turnpike, and other highways. Applications for work in the interstate network are sent to the utilities engineer, for turnpikes to the director of turnpikes, and for other roads to the division engineer.

In most cases, permits for work are issued by district offices when applications are filed with them.

Ten state policy statements contain no reference to application procedures, but define the office that approves permits for proposed utility work. On the other hand, six policies designate the recipients of applications, but make no reference to the approval of permits.

##### Fees and Charges

About one-third of the policies have some provision for a fee or other charge for accommodation of utilities.

! Arkansas charges an annual rental for attachments to highway structures, except for telephone and electrical lines.

! Colorado, Illinois, and Kentucky charge for the added cost of design and construction of structures upon which utility facilities are attached.

! Connecticut charges inspection costs if more than two hours of inspection per day are required.

! Hawaii has a fee based on the number of linear feet or square yards that are occupied by the utility.

! Iowa bases its structure attachment charges on the type of utilities, and lists a fee schedule for each type.

! Missouri imposes a maintenance charge for utilities attached to structures.

! Maine and Rhode Island charge a fee equal to the cost of repairing pavement cuts. A similar fee is charged by Ohio and Vermont if the repair is to be done by the department.

! Oklahoma imposes a flat fee of \$5 per permit.

! Washington's fees range from \$20 to \$150, depending on whether the project application entails a new franchise, a renewal, an assignment, etc.

##### Bonds and Deposits

Bonding practices and requirements for deposits are no more uniform than those relating to permit fees. About half of the policies make reference to bonds, either required, or subject to being required, at the decision of the issuer of permits.

Most agencies do not list the amount of bond coverage, but some are more specific. Arkansas requires bonds in an amount to cover the cost of right-of-way restoration if the utility fails to perform this work; Massachusetts sets bond limits from \$2,000 to \$10,000; Missouri specifies a minimum bond of \$1,000; Oklahoma stipulates a maximum bond limit of \$10,000; and Washington requires bonding, with a minimum of \$1,000.

Deposits to guarantee proper consummation of right-of-way utility plant projects are required by some agencies; Kansas requires a deposit of \$25 to \$500, depending on the type of work; Louisiana's ranges from \$10 to \$1,000 per mile, depending on the nature of the project.

## CHAPTER EIGHT

### UTILITY ACCOMMODATION COORDINATION

The rights-of-way of state highways are used by utilities as convenient pathways to utility consumers. As complex and multitudinous as this accommodation is today, it will be even more demanding in the future. Highways will face increased problems in accommodating utilities in right-of-way space. The only way to provide each utility with its own space requirements and to fit them all into an orderly composite is to establish policies and to adhere to them through cooperation, coordination, compromise, and compulsion. Compulsion implies strict enforcement of regulations to minimize competition for right-of-way space.

Without planned coordination of utility accommodations, the public usefulness of highways could be diminished. In addition, each utility using right-of-way space could be affected by the work and plant of other users and threatened by excavation and installation operations.

The upshot of the problem is that competition for right-of-way space will become more acute in the future and that a coordinated effort is the only rational solution. This cooperation and coordination is two-phased, that is, cooperation between highway agencies and the utilities that depend on them for right-of-way accommodations, and coordination of practices among the utilities themselves in the allocation and use of space for their physical plant.

The practices suggested for utility installations by AASHTO are examples of a rational compromise between the needs of utilities and the responsibility of highway agencies to protect the public investment in their systems. The relationship among the utilities themselves, as exemplified by the recent development of voluntary utility location and coordination committees, is symbolic of the second facet of cooperation and partnership.

Such coordination groups are often motivated by the need to protect utilities against physical plant damage. These groups tend to operate within restricted local areas, but the trend is toward the broadening of their operations into regional areas. Their purpose is to coordinate utility placement, to establish liaison with governmental regulatory agencies, to place utility locations and details on record, and to sponsor alert systems that will prevent digging damage to their facilities.

Many local committees are engaged in coordination programs. A recent bulletin issued by the New York-New Jersey Metropolitan Chapter of APWA, entitled "Stop Before You Plan, Design, Dig or Blast," is an example of the efforts of a regional group which represents an area served by approximately forty public and private utilities. The bulletin appeals for a "call-before-you-dig" program that will minimize utility damage.

The need for utility coordination efforts is admittedly more acute in urban areas where rights-of-way are more restricted, where more space is required by utilities, con-

tractors, city services, drainlayers, and others. But, there is a need for the same spirit and practice of utility location coordination for rural highways.

#### APWA UTILITY COORDINATION STUDY

Utility coordination was explored in FHWA's *State of the Art (5)* and *Manual of Improved Practice (4)* for utilities in urban streets and highways. Both reports outline the benefits of coordination programs, how they can be achieved, and how present practices and experiences are being used in cooperative groups in widespread parts of the United States.

The *Manual of Improved Practice* lists seven basic precepts of coordination and recommends: the establishment of utility coordination committees, preferably authorized, recognized, and financed by local legislative actions and participant support; the widening of scope of such agencies to serve total regions; the keying of "call-before-you-dig" programs to centralized one-call systems; the use of joint trenching and supporting facilities for compatible utilities; and the maintenance of key maps and other utility records under the aegis of a single agency.

These urban coordination practices cannot be provincial; they must be cosmopolitan, not only in terms of area of coverage but in the composition of the agencies and interests represented. They must include government representatives from the central community and from surrounding areas. They should also include representatives of highway agencies. Such a membership base ensures that utilities that serve wide regions are guided and regulated by integrated rights-of-way policies.

## PLEASE NOTE!

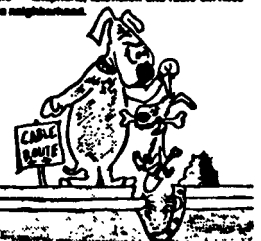
### Don't Dig Up Trouble . . . Call Before You Dig!

When underground telephone cables are accidentally dug up or cut by power shovels, trenching or earth boring machines, bulldozers, pipe-puffers, or even by picks, bars or shovels — telephone, television and radio services may be disrupted for the whole neighborhood.

... For

#### BURIED CABLE LOCATION

before digging, call REPAIR SERVICE (see "Service Calls" sign). We'll quickly locate and mark the location of the cable for you.



## DISCUSSION OF POLICIES ON UTILITY COORDINATION

The AASHTO *Guide* and the AASHTO *Policy on the Accommodation of Utilities on Freeway Rights-of-Way (3)* make no specific references to utility coordination and the role of highway agencies in this program. However, AASHTO's participation in the new national utility coordination council program (see below) is proof of the relationship between AASHTO and effective location coordination programs.

Examination of the highway utility accommodation policies has disclosed no specific references to, nor participation in, utility coordination efforts. The absence of such references in policy statements cannot be taken as a lack of interest in, or cooperation with, existing utility coordination groups. Some agencies may consider this subject to be unrelated to their policy statements. However, such statements would be an effective means of asserting interest in coordinated programs and in the spirit of joint action to resolve joint problems.

## UTILITY LOCATION AND COORDINATION COUNCIL

Evidence of the current interest in utility location and coordination is found in the fact that the APWA studies for FHWA have led to the formation of a National Utility Location and Coordination Council within the past year.

### CHAPTER NINE

## FINDINGS AND RECOMMENDATIONS

This synthesis examines procedural regulations covering highway utility impacts referred to in the AASHTO *Guide (2)*. The findings from the exploration of individual agency policy statements have been evaluated and interpreted in various chapters of this synthesis. Each chapter of the synthesis describes how policies have been stated, vis-a-vis the AASHTO *Guide*, and how these policies compare with the policies of other agencies.

It is the purpose of this chapter to extract a few highlights from the findings on highway utility accommodation policies and to offer selected recommendations for improved procedures.

## FINDINGS

! Most agencies have used AASHTO criteria as the model in drafting their policies on what utilities will be accommodated in highway rights-of-way, where they are to be located, how they must be constructed and protected, and the manner in which they are to be controlled.

under the sponsorship of APWA. Organization meetings have been held, subgroups have been formed to develop guidelines for the creation of local and regional coordinating committees and for establishing unified programs of action, and an Advisory Panel of over twenty organizations has been set up to guide the growth of the Council. It is significant that AASHTO is a member of the Panel.

AASHTO's participation in the work of the Utility Location and Coordination Council is important. It can act as the catalyst for participation of all highway agencies in regional coordination programs, wherever they now exist, and in helping form groups where utility coordination is not now in effect. Participation by highway officials is essential to the functioning of such groups. With this participation, these utility groups can have a full impact, and can convert segregated local coordination programs into unified regional policies and practices.

Just how the *Guide*, the *Utilities on Freeways Policy*, and individual agency utility accommodation policies can be cognizant of the trend toward coordination group actions cannot be defined in this report. The means for adequate recognition for this worthwhile movement may become clear through AASHTO's involvement in the work of the Advisory Panel of the new Council. It is sufficient, here, to point out the need for active participation of highway agencies in the principle and practice of utility location coordination.

! The duality of interest in the rights-of-way by highway authorities and utilities is broadly recognized, but this is not taken to mean that these utilities are free to install their plant in manners determined by them alone. Every agency has established policies to regulate accommodation.

! Some agencies have established policies for all facets of highway utility accommodation, which others have included policies for some facets and left others unstated. Many agencies have followed the AASHTO *Guide* by using direct phrasing or slight modifications thereof. Others have written into their policy statements specific variations or clarifications of the general suggestions in the *Guide*. The agencies that have bolstered or augmented the AASHTO language have been guided by the need to translate the generalities of some suggestions into the specifics of individual state needs.

! Most of the accommodation policies show variances from state to state in: location, bury, encasement, and installation of underground utilities; the location, clearances, and nature of installation of overhead facilities; and the

position and method of attachment of utilities to highway structures. Further variances result because of location requirements oriented to different base points, such as right-of-way outer limits, highway shoulders, pavement edges and curb lines.

! The basic reasons for variations in locations, alignment, bury, overhead utility clearances, encasement and protection of underground plant, and other accommodation criteria are not always attributable to geographical areas, climatic conditions or other factors. In many cases, the stated policies can be rationalized only on the basis of the opinions, experiences, and decisions of individual state highway authorities. Dimensional differences are of the character of hairsplitting in some instances, and could be readily standardized.

! One common trust is present in all policies: The desire to keep utilities as far as possible from the traveled way and in the remotest points of the right-of-way. Other common denominators are the almost complete banning of longitudinal placement of utility facilities under pavements, except in urban areas, and the requirement that utility crossings be made by the most direct path under highway traffic lanes.

! Minimizing the number of pole lines for overhead utilities and limiting their location in the right-of-way are desirable according to all states. Although joint use of poles is encouraged, it is not required by the policies.

! Some policies correlate location, depth of bury, protection, and encasement requirements with the relative hazards involved in specific utilities such as electrical power or communication lines, the nature of materials transmitted by pipelines, electrical power voltages, pipeline pressure, and other factors of a rational nature. Others take no cognizance of the relationship between hazards and their accommodation regulations.

! Agency policies are in general agreement that attachment of utilities to highway structures should be discouraged whenever possible, but when permitted, it should be rigidly regulated as to effective support, proper isolation, and payment of adequate charges or fees to compensate for added costs of design, construction, and maintenance of the supporting members.

! Many agencies do not cover irrigation and drainage facilities in their policy documents, presumably because they are not involved in irrigation-drainage utility problems or services.

! Most agencies are aware of the need for scenic enhancement of roadsides, particularly in scenic areas such as overlooks, rest areas, and parks, and thus have adopted either the exact AASHTO language on scenic enhancement for utility installation, or similar wording.

! There is a need for coordination of the practices and protective procedures of all utilities that use the right-of-way to avoid accidental dig-ups and to promote the most efficient use of available space within the right-of-way. This is not adequately covered by the AASHTO *Guide* nor do state policies make specific references to these matters.

These findings do not detract from the excellence of the AASHTO *Guide* and *Utilities on Freeways Policy*. Similarly, the lack of uniformity of highway utility policies is

not necessarily a fault. The individuality of some policies is often a reflection of specific experiences in the design, construction, operation, and protection of rights-of-way and highways built thereon, and of engineering opinions based on such experiences. However, differences in details just for the sake of differences merit elimination or modification whenever standardization can be achieved. The above findings should be interpreted in this spirit.

## RECOMMENDATIONS

The recommendations for the improvement of accommodation of utilities that follow are over and above the commentaries offered in each chapter on each phase of accommodation policies.

! Many variances in utility accommodation in highway rights-of-way are often explainable in terms of differences in climate, terrain, and local needs and experiences. However, some differences in practice are not readily understandable, particularly between states in the same geographical parts of the nation. Such differences might be resolved by an exchange of ideas and technical opinions through the medium of seminars, workshops, or other means. It is recommended that periodic conferences be conducted for the purpose of developing new ideas, making improvements, modernizing and updating policies, and coordinating these matters between states. Such conferences could also include the views of utilities on their location, alignment, construction, protection and encasement, attachment to structures and other needs in highway rights-of-way.

! Consolidation of utility space requirements, such as joint use of trenches, poles and other facilities, would mitigate future demands for accommodation of utility plant in highway rights-of-way. It is recommended that efforts be made to foster dual and multiple use of such facilities whenever such consolidated uses are compatible, safe and workable.

! The 1969 AASHTO *Guide* has been most helpful to state agencies as they prepared their policies. However, it provides only minimal guidance for accommodating utilities in urban areas or sections of roads with narrow rights-of-way. In the course of developing policy statements some agencies have been able to include additional material, provide examples, or establish procedures that are beyond those given in the *Guide*. It is recommended that an appropriate AASHTO group revise and update the present *Guide*.

! It is recommended that all states review their policy documents at periodic intervals to ascertain the need for clarification and revision of their policies in the light of ever-changing practices, products, and protective measures. The utility industry should be consulted on this review.

! Erosion control for construction projects has received considerable attention by highway agencies in recent years. However, few agencies have regulations on erosion control in their utility accommodation policies. It is recommended that this phase of right-of-way protection and preservation be incorporated in policy documents.

! A number of agencies make no reference to regulations

covering formal applications for utility work in their rights-of-way, the issuance of permits, the recording of utility location and construction details, the inspection of utility work for compliance with permit provision, and the imposition of fees or bonding-insurance requirements to assure proper utility work performance and highway protection. Although such stipulations may be provided in other rules and regulations issued by highway agencies, the appropriate place for them, if they are in effect, is in the policy statements. It is recommended that agencies that do not now cover this regulatory phase in their policy statements do so, and that they adhere to these procedures in authorizing utility use of right-of-way space. Records will be enhanced and greater respect for regulations will result. Imposition of fees needs no defense, but the purpose of such charges should be improved control and greater respect for the privilege of right-of-way use, and not the mere raising of revenues.

! The value of utility accommodation coordination is indisputable. The creation of the new National Utility Location and Coordination Council by the American Public Works Association attests to current interest in this area. AASHTO's membership on the Advisory Panel of this Council demonstrates its importance in the proper control of utility accommodation in highway rights-of-way. It is recommended that all highway agencies encourage the formation of local-regional utility coordination committees and participate in their efforts to improve plant location and protection through "call-before-you-dig" programs, record-keeping procedures and other cooperative practices. The need for a central depository for plans and records is recognized; however, the specific agency to assume this responsibility will vary.

! Although concern has been expressed over high costs and the infeasibility of extending scenic enhancement of utility installations to include total highway networks, consideration of this extension is warranted by the present interest in aesthetics of highways. Within the limitations of costs and feasibility, new utility installations should be planned, designed, and constructed to blend with the highway and the environment.

! Those agencies without requirements covering removal, trimming and spraying of trees should consider appropriate additions to their policies.

! Standard color markings should be adopted for stakes used to mark the location of underground utility plant within highway rights-of-way. The APWA Utility Location and Coordination Council has adopted the following standard color markings: yellow for gas, oil, petroleum, and other hazardous liquid or gaseous materials; red for electric power; orange for communication; blue for water; and green for storm and sanitary sewers.

! Many agency policies do not consider the three different types of utility accommodation. Policies should provide for (a) accommodation of utilities on existing highway rights-of-way, (b) adjustment of utilities for highway re-

construction, and (c) concurrent construction on new highways and utilities.

! It is recommended that some responsibilities for certain facets of utility accommodation belong to highway agencies, others belong to the utilities, and some belong to both. Examples of areas where the highway agency should be responsible include:

- Establishment of minimum horizontal and vertical clearances.
- Minimum clearance to highway appurtenances such as drainage, structure footings, traffic signals, and lighting.
- Locations where trenching is not permitted.
- Backfill procedures.
- Pavement replacement.
- Work hours on high-volume facilities.
- Attachments to structures.

Examples of areas where the utilities should have responsibility include:

- Clearances for safety and utility system protection.
- Installations for future expansion.
- Development of industry standard procedures.

Responsibility should be shared in such areas as:

- Utility location coordination.
- Bury policies.
- Encasement.
- Pipe weights, classes, and strengths.

#### Research

Some areas where specific research is needed include:

! New and improved methods for placing, repairing, and replacing utilities on highway rights-of-way should be

investigated.

! Requirements for high-strength pipe, encasement, and other protection methods should be evaluated.

! Optimization of standards for location, alignment, bury, encasement, structure attachments, etc., warrants study.

! Various techniques have been used for identification and location of utilities on maps, plans, etc. These should be studied and some direction developed to ensure accuracy, speed and uniformity in entering and disseminating information.

! The literature does not provide a basis for the various utility accommodation policies. A study should be undertaken to determine: (a) the nature and extent of the problems of accommodating utilities on highways, (b) the effects that adoption of policies has had on these problems, and (c) the cost/benefits of the policy requirements.

! The effect of utility cuts on pavement life and pavement restoration standards should be measured.

! Simplification and standardization of permit forms, formats, systems, and processing should be explored.

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U. S. DEPARTMENT OF COMMERCE  
Bureau of Public Roads  
Washington, D. C.

- 2 -

April 11, 1958

CIRCULAR MEMORANDUM TO: Regional and Division Engineers

FROM : G. M. Williams, Assistant Commissioner

SUBJECT: Showing of Control of Access on plans for Interstate System projects and other Federal-aid projects for which access rights have been acquired.

Section 112 of the 1956 Highway Act provides that "all agreements between the Secretary of Commerce and the State highway departments for construction projects on the Interstate System shall contain a clause providing that the State will not add any point of access to or exit from the project, in addition to those approved by the Secretary in plans for subject project, without prior approval of the Secretary."

Under present delegations of authority the division engineers approve the PS&E for all Interstate System projects. This approval is to cover all permitted points of access to the through-traffic roadways and entry to the right-of-way, in addition to other features of the project. The division engineers do not have authority to approve changes in the approved points of access or entry after the State has been authorized to advertise for bids for a project under an approved set of PS&E. Any such changes proposed by a State after authorization has been given to advertise for bids are to be referred to the Washington office for consideration by the Federal Highway Administrator who will either approve or deny approval.

The plans for many of the Interstate System projects that have been received at Washington do not clearly show the points of access or of entry that have been approved nor the control of access line between such points.

The division engineers are to advise the State highway departments that the approved points of access or entry to the Interstate System highways, or to other Federal-aid highways for which rights of access are acquired, are to be shown on the plans for Federal-aid projects. It is expected that such data will be shown on all plans that are to be submitted for approval and are approved after the date May 1, 1958.

Each approved point of access other than by a ramp at an interchange should be listed by station in a tabulation or show by symbol at the appropriate point on the plan and profile sheet. The control of access line should be shown as well as the right-of-way line even where such lines are coincident. If control of access is effected through a frontage road it will not be necessary to detail the entrances to the frontage road from the lands abutting the highway right-of-way. However, the control of access line should be shown between the frontage road and the Interstate traffic lanes and any access points between the frontage road and the Interstate traffic lanes shown. If an approved point of access is a temporary measure under stage development, it shall be so identified with appropriate note as to how it will be eliminated in the future.

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ATTACHMENT 9



U. S. DEPARTMENT OF COMMERCE  
Bureau of Public Roads  
Washington 25, D. C.

October 13, 1958

MEMORANDUM TO: Regional Engineers

FROM: Joseph Barnett, Deputy Assistant Commissioner  
22-20 Washington, D. C.

SUBJECT: Utilities on Interstate Highways

The Committee on Planning and Design Policies, AASHO, is preparing a policy on the accommodation of utilities on Interstate highways. A copy of the preliminary discussion of the subject which will be considered by the committee on November 28 is attached for your information. Since the proposed policy is still in the discussion stage, there may be significant changes in the attached version and for this reason a single copy only is being furnished each regional office.

As secretary of the committee, I would appreciate your comments on the proposed policy, first as to the practicability of application within your region, and second, as to any significant omissions or needed changes that are apparent. Any conflict between the policy you are following and that outlined in the attached draft should be mentioned.

To assure consideration prior to the committee meeting, comments should be received prior to November 14.

Attachment

A PRELIMINARY DISCUSSION ON  
THE ACCOMMODATION OF UTILITIES  
ON THE NATIONAL SYSTEM OF INTERSTATE AND DEFENSE HIGHWAYS

Committee on Planning and Design Policies  
American Association of State Roadway Officials

SEPTEMBER 1958

INTRODUCTION

The Geometric Design Standards for the National System of Interstate and Defense Highways adopted by the AASHO on July 12, 1956, and accepted by the Bureau of Public Roads on July 17, 1956, provide, in accordance with Section 108(i) of the Federal-Aid Highway Act of 1956, for control of access on all sections of the Interstate system. These provisions were established to preserve the traffic-carrying capacity of these important highways, thus warranting the large public fund expenditure being made for their construction, and to provide the maximum degree of safety to the users thereof insofar as can be done through highway planning, design, construction and operation.

Control of access can be materially affected by the extent and manner in which public utilities cross or otherwise occupy the highway right-of-way. The sections of the 1956 Federal-Aid Highway Act pertinent to accommodation of public utilities follow:

"Section 111-RELOCATION OF UTILITY FACILITIES.--

"(a) Availability of Federal funds for Reimbursement To States.--Subject to the conditions contained in this section, whenever a State shall pay for the cost of relocation of utility facilities necessitated by the construction of a project on the Federal-aid primary or secondary system or on the Interstate System, including extensions thereof within urban areas, Federal funds may be used to reimburse the State

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ATTACHMENT 10

for such cost in the same proportion as Federal funds are on the project: Provided, That Federal funds shall not be apportioned to the States under this section when the payment to the utility violates the law of the State or violates a legal contract between the utility and the State."

"(b) Utility Defined.--For the purposes of this section, the term "utility shall include publicly, privately, and cooperatively owned utilities."

"(c) Cost of the Relocation Defined.--For the purposes of this section, the term "cost of relocation" shall include the entire amount paid by such utility properly attributable to such relocation after deducting therefrom any increase in the value of the new facility and any salvage value derived from the old facility."

Section 1.11(c) of the Regulations under the Federal-Aid Road Act of July 11, 1916, amended and supplemented and effective February 21, 1957, provides:

"Section 1.11(c)--The rights-of-way provided for Federal-aid highway projects shall be held inviolate for public highway purposes. No project shall be accepted as complete until all encroachments have been removed from the rights-of-way. No signs (other than those specified in 1.17), posters, billboards, automotive service stations or other commercial establishments for serving motor vehicle users, roadside stands, or any other private installations shall be permitted within the right-of-way limits; neither shall any portion of the rights-of-way be used in connection with any private business or undertaking. Exceptions to the provisions of this paragraph may be made under circumstances approved by the Administrator on portions of rights-of-way acquired for future use."

The above Sections of the 1956 Federal-Aid Highway Act and Regulations thereunder affect the accommodation of utility facilities as related to the use that can be made of rights-of-way of the National System of Interstate and Defense Highways that have been or are to be acquired, or have been or are to be transferred to a State highway department from public lands or reservations of the United States.

The State highway departments have various degrees of authority to designate and to control the use made of rights-of-way acquired for public highways, including those of the Interstate System. Their authorities depend upon State laws or regulations. These laws and regulations differ in the several States and may be different in a State for highways utilizing

existing rights-of-way and for highways on new location for which rights-of-way are to be acquired. A State may also have separate laws and regulations, different from those applicable Statewide, for highways on rights-of-way subject to jurisdiction of a local Government such as that of a large city.

In order to carry out the intent of the Federal-Aid Highway Act, a uniform policy is needed to establish the conditions under which public and private utilities may be accommodated on the rights-of-way of Interstate highways. The following statement constitutes such a policy. Those States in which laws will not permit the application of this policy in its entirety should strive for uniformity through the enactment of appropriate legislation.

STATEMENT OF POLICY

(1) Utilities to Which Policy Applies

The principles set forth in this policy apply to all public and private utilities including power transmission, telephone, telegraph, water, gas, oil, steam, sewage, drainage, irrigation, and similar lines. Such utilities may involve construction and maintenance of underground, surface, or overhead facilities, either singly or in combination. Public and private utilities for mass transit operations are not covered herein.

This policy shall apply to utilities located on right-of-way owned or leased by the utility owners and to utilities on public highway rights-of-way.

(2) Utilities Along Interstate Highways on New Location

Where an Interstate highway is on new location, utility installations will not be permitted to be located longitudinally within the right-of-way of the Interstate highway except where frontage roads are provided, in which case utilities may be located along the frontage roads (outside the control of access lines) where they can be serviced without use of the through-traffic roadways.

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An exception may be made in the case of gravity-flow sewer systems and other tax-supported publicly-owned underground utilities where topography and land use are such that there is great economy and outstanding justification for locating the utility on the Interstate highway right-of-way and its design and construction are to be such that access to it for servicing is rarely required. As justification for locating such utilities within the right-of-way, it must be further established that (a) a considerable saving will accrue to the taxpayer, (b) maintenance operations no matter how rarely needed will not disturb the roadbed or interfere with the movement of traffic, and (c) manholes and other points of access to the utility will be excluded from the pavement and shoulders of the through roadways.

(3) Utilities Along Interstate Highways on Existing Location

A utility presently located on the right-of-way of an existing highway that is incorporated in the Interstate highway system may be permitted to remain thereon without relocation provided it can be serviced without use of the through-traffic roadways. Where such utility in its original location can be serviced only by use of the through-traffic roadways, it shall be relocated or other provisions made so that it can be serviced without use of the through-traffic roadways. No new or additional utility installations shall be made along the Interstate highway except along a frontage road (outside the control of access lines).

(4) Major Valley Crossings

Where an Interstate highway crosses a major valley or river on an existing high value structure any utility carried by said structure at the time the highway route is improved may continue to be so carried when to relocate that utility would be very costly and provided the utility can be serviced without serious difficulty or hazard to road users.

Where an Interstate highway crosses a major valley or river on a new structure no utilities are to be carried thereon except in extreme cases where a separate utility crossing structure would be unreasonably costly to the utility owner and consumer and provided the utility can be conveniently supported on the highway structure in such manner that it can be serviced without serious difficulty or hazard to road users.

(5) Utilities Crossing Interstate Highways

New utility installations and adjustments or relocations of existing utilities shall be permitted to cross the Interstate highway as necessary. To the extent feasible and practical they shall cross on a line generally normal to the highway alignment.

A. Utilities Along Roads or Streets Crossing the Interstate Highway

Where a utility follows a crossroad or street which is carried over or under an Interstate highway provision should be made for the utility to cross the Interstate highway on the location of the crossroad or street in such manner that the utility can be serviced without use of the Interstate through-traffic roadways. Generally the utilities are to be located within the normal right-of-way of the crossroad or street, existing or relocated. Where distinct advantage and appreciable cost saving is effected by locating the utilities outside the normal right-of-way of the crossroad or street they may be so located in which case they shall be located and treated in the same manner as utility lines crossing the Interstate highway at points removed from grade separation structures as in (B) and (C) which follow.

Where the crossroad or street is carried on a structure that overpasses the Interstate highway, provision may be made to accommodate utilities on the structure. Underground utilities should be concealed within the structure and, depending upon the structure type, appropriately encased in sleeves or

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ducts, suspended between girders, suspended through sleeves in floor beams, located inside box girders, etc. Pipelines carrying gas or volatile fluids should be encased and vented as necessary for safety. Pipes carrying fluids should be constructed in a manner to prevent damage to the structure in event of leaks. Overhead lines on the approach crossroad or street right-of-way may be carried over or concealed within the structure in a manner suitable to the utility, site and structure.

Where the crossroad or street structure underpasses the Interstate highway, underground utilities should be carried through in the same manner as at other such structures on that road or street system. Overhead utility lines may be adjusted to adequate clearance above the Interstate highway, to a lower clearance to pass under the structure (outside the crossroad traffic lanes) or may be converted to underground lines through the structure, as appropriate for the utility, site and structure.

B. Overhead Utility Crossings

Overhead utility lines crossing the Interstate highway at points removed from grade separation structures, or those crossing near a grade separation but not within the normal right-of-way of a crossroad or street, in general, should be adjusted so that supporting structures are located outside the outer edges of through-traffic roadway side slopes and preferably outside the control of access lines. In any case supporting poles are to be located at least 30 (40?) (50?) feet beyond the edge of usable shoulder, either right or left, along the ultimate through-traffic roadways. In extraordinary cases where such spanning of the roadways is not feasible, consideration may be given to conversion to underground facilities to arise the Interstate highway.

At interchange areas, in general, supports for overhead utilities should be permitted only where all of the following conditions are met; (a) the above indicated clearance is provided with respect to the Interstate through-traffic lanes, (b) there is a lateral clearance of at least 20 feet from edge of ramp usable shoulder, (c) essential sight distance is not impaired, and (d) the conditions of item (7) "Access for Serving Utilities", are satisfied.

The vertical clearance to overhead utility lines crossing the Interstate highway shall in no case be less than the clearance required by The National Electrical Safety Code\*, U. S. Department of Commerce, National Bureau of Standards.

B. Underground Utility Crossings

Utilities crossing underground below the traffic roadways of Interstate highways shall be of durable materials and so installed as to virtually preclude any necessity for disturbing the roadways to perform maintenance or expansion operations. The design and types of materials shall conform with appropriate codes of State and Federal regulatory agencies.

Manholes and other points of access to underground utilities may be permitted within the rights-of-way of Interstate highways only where they can be serviced or maintained without requiring use of the through-traffic roadways. This restriction shall apply to all valves, traps, blowoffs and similar installations for underground lines for gas, oils, steam and water facilities. In any case manholes and other devices for reaching and servicing underground utilities shall be located beyond the edge of usable shoulders of the ultimate through-traffic roadways.

* Voltage	0 to 750	750 to 15,000	15,000 to 50,000
Minimum vertical clearance where wires cross over, feet	18	20	22

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D. Irrigation and Water Supply Canals

Except for necessary crossings, water canals and irrigation ditches should be excluded from the rights-of-way of Interstate highways. Existing canals should be avoided in the initial location of the highway. Crossings may be made by underground syphon, or through culverts, or bridges as appropriate to the size of canal, topographic conditions, and highway safety aspects. In general, locations and structures are to be designed in the same manner as are facilities for natural transverse drainage.

Where there is great economy and consequent justification, a tax-supported publicly-owned irrigation facility may be located longitudinally within the highway right-of-way for limited distances provided it does not affect the safety of the highway, does not require additional work chargeable to the cost of the highway and can be inspected, maintained, and serviced without use of the through-traffic roadways.

All access and egress for servicing or patrolling such facilities shall be outside the control of access lines. Ditch-walkers or ditch-riders shall not be permitted to indiscriminately cross the Interstate highway at grade. Under appropriate traffic control arrangements, special ditch cleaning equipment may be permitted to cross in those cases where considerable extra travel distance would be required otherwise to utilize grade separation structures.

E. Provision for Expansion of Utilities

When existing utilities are relocated or adjusted in conjunction with construction of the Interstate highway, provision should be made for known and foreseeable expansion of the utility facilities, particularly those underground. They should be planned to avoid interference with traffic at some future date when additional or new overhead or underground lines will be necessary.

(6) Utilities in Tunnels

Where a utility occupies space in an existing tunnel that is incorporated in the Interstate system, relocation of the utility will not be required.

As a general rule utilities will not be permitted to occupy tunnels on new locations of an Interstate highway, and new utilities will not be permitted in existing tunnels that are incorporated in the system. Exception may be made in extreme cases where a separate utility crossing would be unreasonably costly to the utility owner and consumer and provided the utility can be conveniently installed in the tunnel in such manner that it can be serviced with a minimum of hazard and interference with through traffic.

(7) Access for Servicing Utilities

Vehicles or equipment engaged in the operation, servicing, or maintenance of a utility shall not be permitted access to and egress from through-traffic roadways and ramps of an Interstate highway at points other than the approved public access connections shown in the highway plans. The access to the utility along an Interstate highway normally should be (a) via frontage roads where provided, (b) via nearby or adjacent public reads and streets, (c) via trails along or near the highway right-of-way lines, connecting only to an intersecting road, from any one or all of which entry may be made to the outer portion of the Interstate highway right-of-way.

Under emergency conditions, temporary permits may be issued to utility company for its vehicles or equipment to leave or enter the through-traffic lanes at locations which are not public accesses, under controls that would protect the highway users.

(8) Construction and Location Details

The public agency which is constructing or maintaining the highways shall reserve the right to review and approve the location and design of

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all utility installations, adjustments or relocations related to the highway and issue permits for the contemplated work.

(9) Manner of Making Utility Adjustments

In general, any utility installations, adjustments and relocations are to be so located and made in a manner that there will be negligible hazard to the highway users, there will be the least possible interference with the highway facilities and their operation, and the difficulty of or cost of maintenance of the highway will not be increased.

U. S. DEPARTMENT OF COMMERCE  
Bureau of Public Roads  
Washington 25, D C.

22-00

February 25, 1959

CIRCULAR MEMORANDUM TO: Regional and Division Engineers

FROM: G. M. Williams, Assistant Commissioner

SUBJECT: Future Utility Installations on Interstate Right-of-Way

Whether or not an additional utility facility is to be permitted to cross the right-of-way of an Interstate System highway after the PS&E for that portion of the highway involved have been approved by the division engineer without provision therein for the future utility crossing requires consideration of two matters, namely rights-of-way and control of access.

Section 6 of PPM 21-4.1 provides that the right-of-way for Federal-aid highways may not be disposed of without prior approval of the Administrator. Granting of a right to a utility to use the highway right-of-way, whether by easement or permit, would constitute disposal of highway right-of-way.

Under Section 111, Title 23, a State may not add any points of access to, or exit from, projects on the Interstate system, in addition to those approved in the plans, without the prior approval of the Secretary. The intent of this provision was to control points of access for vehicular traffic, but in its broad sense it controls access to the highway right-of-way by any type of traffic or by any type of facility, such as a utility.

Accordingly, a proposal by a State highway department, made subsequent to the approval of the PS&E by the Bureau's division engineer, to permit a utility to add a crossing of the Interstate System right-of-way by its facility requires approval by the Bureau of Public Road prior to the time the State may grant such a right to the utility. Under present law and procedural memorandums the approval of such requests has not been delegated to the field but is retained to the Administrator.

The State highway departments should, when submitting any such proposals for added utility crossings, provide data of the type of utility facility involved and the manner in which it is to be installed, operated and maintained. To evaluate the propriety of the manner of installation, operation and maintenance of that portion of the utility facility proposed to be on the highway right-of-way, the State and the Bureau field personnel should use the contents of the memorandum to Regional Engineer B. M. French dated September 6, 1957, as a guide. While the policy statement on the accommodation of utilities on rights-of-way of Interstate System highways adopted by the AASHO Committee on Planning and Design Policies, in late 1958, has not been approved by the AASHO Executive Committee for letter ballot by the States, the statement reflects the current considered judgment of a large segment of the chief engineers of the State highway departments, and may also be used as a guide.

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ATTACHMENT 11

DEPARTMENT OF COMMERCE  
BUREAU OF PUBLIC ROADS  
Washington 25, D.C.

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22-00

March 31, 1959

CIRCULAR MEMORANDUM TO: Regional and Division Engineers

FROM: G. M. Williams, Assistant Commissioner

SUBJECT: Future Utility Installations on Interstate Right-of-Way  
(Supplement to Circular Memorandum dated February 25, 1959).

Several inquiries have been received concerning the scope of application of the instructions contained to the cited Circular Memorandum dated February 25, 1959. The following statements are to supplement those of the previous memorandum and to provide answer to the inquiries so far received.

The instructions issued February 25 were titled as for "Interstate Right-of-Way", and this term "Interstate" is the one used in paragraph four of the memorandum. The references for guide lines as to manner of installation, operation and maintenance of the utility facility proposed to be on the highway right-of-way, referred to in paragraph five of the memorandum, are both titled as pertaining to Interstate System highways. There was not, and there is not now, any intention to make the instructions applicable to Federal-aid highways other than Interstate System highways, and no inferences should be drawn from the administrative declarations set forth in paragraphs two and three to apply these declarations to other than Interstate highways.

The instructions are applicable to all designated Interstate System routes, except for those portions of the designated routes which are toll facilities not under the jurisdiction of a State highway department. In application of the instructions for portions of the designated routes which are under the jurisdiction of a State highway department, the following procedures are to be followed.

(a) Sections of Interstate System highway for which completed physical construction projects have been accepted by the Bureau's division engineer since June 29, 1956. A proposal by a State highway

department, made subsequent to the acceptance by the Bureau's division engineer of a completed physical construction project, to permit a utility to add a crossing of the Interstate System right-of-way by its facility within the limits of such project is to be submitted to the Washington Office of the Bureau for review and approval action.

(b). Sections of Interstate System highway for which completed physical construction projects have not been approved by the Bureau's division engineer since June 29, 1956. A proposal by a State highway department made after June 29, 1956, but prior to the time that a physical construction project has been accepted by the Bureau's division engineer, to permit a utility to add a crossing of the Interstate System right-of-way by its facility, is to be submitted to the division office of the Bureau for review and may be approved by the division engineer. Following the acceptance of any completed physical construction project, any subsequent proposals by a State highway department for additional crossings of the Interstate System right-of-way are to be processed for approval as outlined under subparagraph (a) herein.

Considerable mileage of the Interstate System highways has been improved since June 29, 1956, and to accordance with the geometric design standards for such highways as approved July 17, 1956. It is essential that the safety, permanence and utility provided by the improvements made to date and by those to be undertaken to complete that System in all States be protected and preserved. The Bureau of Public Roads does not object to utility facilities crossing the Interstate System right-of-way provided such crossings are in the over-all public interest and are installed, operated and maintained in a manner which is not detrimental to the highway interests, including those of costs.

It is expected that a Policy on the Accommodation of Utilities on the National System of Interstate and Defense Highways will be adopted by the AASHO some time in the calendar year 1959 and subsequently acted upon by the Bureau of Public Roads for use on Federal-aid projects on that System. When that action has been accomplished, or should the instructions issued on February 25, 1959, and hereby supplemented become unduly burdensome, the manner of administration of requests for additional crossings of the Interstate System rights-of-way by utilities will be appropriately revised.

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ATTACHMENT 12



U. S. DEPARTMENT OF COMMERCE  
BUREAU OF PUBLIC ROADS  
Washington 25, D. C.

September 30 , 1959

**CIRCULAR MEMORANDUM TO: Regional and Division Engineers**

**FROM: G. M. Williams, Assistant Commissioner**

**22-53**

*GMW*

**SUBJECT: The Accommodation of Utilities on Interstate Highways  
(PPM 40-2; AM 1-10.2; Circular Memorandums 2/25/59 and 3/31/59)**

By letter of August 7, 1959, the Executive Secretary of the AASHO advised that the document, "A Policy on Accommodation of Utilities on the National System of Interstate and Defense Highways" had been approved by letter ballot of the AASHO, is now an official policy of the AASHO and will be printed and distributed. Policy and Procedure Memorandum 40-2(6), issued the same date as the date of this memorandum accepts this Policy as a design standard for Interstate Projects. Mimeographed copies of the Policy as accepted by the Administrator were transmitted with the circular memorandum (blue) dated June 19, 1959. Future Federal-aid Interstate projects should be in accordance with the conditions of the cited Policy with due consideration or tolerance given to those projects for which designs are now complete and the State is ready to proceed with construction.

Circular memorandums (white) dated February 25 and March 31, 1959 set the requirement that proposals by a State highway department, made subsequent to the acceptance by the Bureau's division engineer of a completed physical construction project, to permit a utility to add a crossing of the Interstate System right-of-way by its facility within the limits of such project are to be submitted to the Washington Office of the Bureau for review and approval action. Administrative Memorandum 1-10.2(4), issued the same date as the date of this memorandum, delegates the cited Washington Office approval action to the field.

The accepted Policy assures preservation of the principles of control of access and yet permits the installation, adjustment, or relocation of utilities across the interstate right-of-way when they do not adversely affect the design, construction, stability, traffic safety, or operation of the interstate highway. In some cases the retention of the existing utilities along the Interstate right-of-way is permitted. As the Policy has a continual nationwide application, it is expected that situations will arise that are not specifically covered therein and require resolution through the use of independent engineering judgment.

- more -

There may be cases encountered where the Policy calls for relocating or adjusting an existing utility either along or across an Interstate highway and yet the probable need for getting to the utility installation for its servicing is so remote that it would be good common sense to permit the utility to remain in place. As long as such an existing utility can remain in place with negligible interference to the highway and its structures and is not affected by the Interstate static and traffic loads, it could be allowed to remain until such time as it has to be replaced because of depreciation, obsolescence, or breakdown. In other words, relocation or adjustment of such a utility should not be required merely because theoretical service to it would be required from the through traffic roadways or ramps. In the determination of whether or not a utility installation can be accommodated on the Interstate highway in such cases, due consideration shall be given to the costs to the utility consumer, the highway user, the State and the Federal Government, and to the type of utility, its life expectancy, and the kind or manner of its installation. Special attention shall be given to the amount, the frequency, and manner of service that is to be required in the maintenance and operation of the utility.

You will note that the foregoing discussion applies particularly to existing installations of utilities. New utility installations are quite another matter.

The provisions for accommodation of utilities along an Interstate highway on new location under "extreme" cases as described in the third paragraph of Item 2 of the Policy and all other references thereto, are of special concern. These provisions recognize that "extreme" cases may be encountered whereby exceptions may be made to the criteria set forth in the Policy under Items 2, 3, 4, 5d, and 6. It is anticipated that proposals for exceptions of "extreme" cases for new utility installations along an Interstate highway will be infrequent and that approval thereof will be given only when the conditions are extraordinary.

In order to establish national uniformity in application of the Policy, all requests for "extreme" case exceptions shall be transmitted to the Office of Engineering for advice prior to approval thereof. Field submissions for such cases shall present the facts pertinent to each case and contain statements that the proposal is or is not considered justifiable for approval and reasons therefor. After a sufficient period of experience, it is expected that this method of Washington Office prior review of "extreme" case applications will be appropriately revised.

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ATTACHMENT 13

U. S. DEPARTMENT OF COMMERCE  
**BUREAU OF PUBLIC ROADS**  
WASHINGTON 25, D. C.

June 14, 1960

**CIRCULAR MEMORANDUM TO: Regional and Division Engineers**

**FROM: G. M. Williams, Assistant Commissioner**  
**22-53 Washington, D. C.**

**SUBJECT: Crossings of Interstate Highways by Utility**  
**Service Connections**

One regional engineer recently requested information as to the position which should be taken on a matter relating to a crossing of an Interstate highway by a power line for the sole purpose of serving a motel sign which was to be located just outside the Interstate right-of-way. In general, the approval of such requests involving minor service connections was questioned in respect to being in the public interests. The pertinent portion of our reply to the regional engineer is included below.

" The AASHO policy on the accommodation of utilities clearly states, 'It is not the intent of this policy to impose restrictions on the future installations of utility crossings to the extent that would obstruct the development of expanding areas adjacent to Interstate highways.' In expanding areas along Interstate highways, it is expected that utility companies will provide primary or feeder lines crossing the Interstate highway where needed to serve a general area. Accordingly, any requests for approving such utility crossings should be given careful consideration under the provisions of the governing Policy.

" However, requests for approving indiscriminate crossings of Interstate highways by utility service connections such as, in this instance, for lighting a motel sign, should be denied. This cannot be construed to be imposing restrictions to the development of expanding areas. Such requests, if approved, would establish an undesirable precedent for any and all similar situations. Within and near urban and suburban areas, the frequency and extent of requests for indiscriminate crossings for utility service connections would be endless. Crossings of Interstate highways by service connections are not considered to be within the purview of Section 5 of the AASHO Utility Policy.

" Of course there may be extreme cases as described in the last paragraph of Section 2 of the Utility Policy for which approval may be justified but a service connected to a motel sign surely cannot be so considered.

" Service connection crossings of Interstate highways may be considered analogous to requests for roadway connections to private property, whereby public ways are sometimes permitted to cross Interstate highways but private ways are not. However, a private way can lead from a public crossroad or a public frontage road. In the same manner, a private utility service connection can lead from either a crossing of a utility's primary or secondary feeder line or from such a utility line located along a frontage road outside the control of access line or along but outside of the Interstate highway right-of-way. "

U. S. DEPARTMENT OF COMMERCE  
**BUREAU OF PUBLIC ROADS**  
WASHINGTON 25, D. C.

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August 4, 1960

**CIRCULAR MEMORANDUM TO: Regional and Division Engineers**

**FROM: G. M. Williams, Assistant Commissioner**  
**22-53 Washington, D. C.**

*BMW.*

**SUBJECT: Encasement of Underground Pipelines**  
**Crossing Interstate Projects**

One regional engineer recently requested the advice of this office on a matter concerned with the application of State design standards for various types of utility adjustments or construction. The pertinent part of our reply to the regional engineer relating to the encasement of underground pipelines crossing Interstate projects is included below.

"The State contends that paragraph 8 of the AASHO Policy for the accommodation of utilities gives them the authority to adopt such standards and rigidly adhere thereto in every instance. While you and the division engineer are in general agreement with the State's contention of its right to adopt such standards, both of you have questioned the advisability of rigid and inflexible application thereof without regard to either changing conditions or economy aspects. You have submitted two questions on this matter, namely (1) whether or not underground utilities, such as pipelines, should be encased throughout the entire right-of-way limits or only within the control of access lines, and (2) how far should you go in the interest of economy in insisting upon certain variations from otherwise acceptable standards of utility design or construction?

"Regarding (1) above, where underground crossings of high or low pressure pipelines for gas, oil, water, or other commodities are involved, encasement thereof should generally be required within the control of access limits. Where access to service or inspect such utility facilities can be accomplished via (a) frontage roads where provided, (b) nearby or adjacent public roads and streets, or (c) trails along or near the highway right-of-way lines in the manner provided by Section 7 of the AASHO Utility Accommodation Policy, encasement should be required under the median, the through traffic roadways, the shoulders, and a reasonable distance outside the shoulders depending on the depth of embedment. In some cases involving mains having a long record of trouble-free installations, encasement might be omitted, particularly where it would be feasible to jack a

(more)

new main under the through traffic roadways, as in sections of embankments. The objective here is to avoid direct access from through traffic roadways to service or inspect such utility facilities and appurtenances thereto, thus allowing utility repairs or inspections to be made, including withdrawing sections of mains, without disrupting through-traffic or disturbing the highway and its structures.

"Whether the same treatment should be accorded mains under frontage roads depends on the importance of the frontage road. A frontage road, except for the section acting as a ramp, is a local road or street and mains thereunder should be accorded similar treatment that is given to other local roads and streets. Ramps and frontage roads acting as ramps should be accorded the same treatment as a through traffic roadway as regards protection from underground utilities.

"Regarding (2) above, it is not often that the conditions governing the installation of utility facilities in one locality will correspond exactly with the conditions in another locality. The AASHO Policy for accommodating utilities, as any national policy should do, recognizes this by providing only the general principles to be followed when encountering the variable conditions surrounding the adjustment or installation of utility facilities. We know of no reasonable justification in this, or any other State, for the Bureau's approval of an inflexible or rigid application of design or construction standards without regard to the foregoing considerations, particularly when such an application may result in a State-wide increase in costs therefor. Further, we cannot agree that such an extreme interpretation is either reasonable or practical as intended by the governing policy. Neither the States nor the Federal Government can ignore the principle of economy, regardless of whether the cost is borne by highway users or utility users.

"In the particular case submitted for our advice, we believe the State's request should be reconsidered along the lines indicated above. The same consideration should be given to other similar cases that are encountered, whereby there will be a continued effort to effect economies in construction by the use of sensible and practical judgment as opposed to the blanket approval and application of State-wide design or construction standards without regard to the variable conditions encountered."

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U. S. DEPARTMENT OF COMMERCE  
**BUREAU OF PUBLIC ROADS**  
WASHINGTON 25, D. C.

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August 15, 1960

**CIRCULAR MEMORANDUM TO: Regional and Division Engineers**

**FROM: G. M. Williams, Assistant Commissioner**  
**22-53 Washington, D. C.**

**SUBJECT: Conversion of Overhead Utility Lines to Underground**  
**Installations and Provision for Expansion of Any**  
**Underground Utility Crossings of Interstate Highways**

*bmw.*

Inquiries have been received from several regional engineers indicating there is a need for establishing general guide lines to follow in connection with the subject matter. The pertinent portion of our recent reply to one regional engineer is included below.

"There are two general areas involving interpretations of the policies governing utility in installations and accommodations, namely, those areas concerning (1) conversion of overhead utility lines to underground installations, and (2) provision for expansion of any underground utility installations. The following general guidelines are provided for your consideration in making the determination needed in this particular case and in any other similar cases.

(1) Conversion of Overhead Utility Lines to Underground Installations

"Under Section 5 of the AASHO Utility Accommodation Policy the opening paragraph provides, to the extent feasible and practical, utilities should cross on a line generally normal to the highway alignment and preferably under the highway. The latter stated preference is not a mandatory requirement but may be applied where feasible and practical, after having considered the economics and other engineering aspects involved in each situation.

"Additional amplification is provided in Section 5(B), which states, 'In extraordinary cases where such spanning of the roadways is not feasible, consideration may be given to conversion to underground facilities to cross the Interstate highways'. On the other

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hand, where such spanning or overhead utility crossings are feasible, Section 5(B) of the Policy permits the installation of utility poles, supports, or other appurtenances on the Interstate right-of-way when specified conditions are met and Section 7 permits access to such installation located in medians or interchange areas by permits to be issued by the State highway agency. Report to these permissive uses of the right-of-way and of issuance of permits for access to areas lying between the control of access lines is expected to be infrequent and to be adopted only when the movements for inspection or maintenance of the installations will be few in number and the added cost to place the utility facilities outside the control of access lines would be excessive. The same permissive access to manholes of underground utility crossings situated between the control of access lines is acceptable under provisions of Section 7 despite the provisions of Section 5(C).

"The Bureau recognizes that certain urban areas, by ordinance on a city-wide basis, require utility crossings of local major streets and highways to be underground for the purpose or safety, improved appearance, and to provide freedom from obstructions above the ground. Interstate construction should comply with such ordinances, but where they do not exist there may not be a compelling reason to place utilities underground, especially if this practice is not followed for the same utility on or across other major streets and highways in that area.

"Properly constructed overhead installations involve little or no hazard of breaking and falling lines across the highway. The record is excellent in this regard. Furthermore, a straight, simple type of overhead crossing of a highway is not deemed to be so unsightly as to justify the cost to go underground. At interchanges, particularly of the cloverleaf type, overhead lines are usually unsightly and difficult to maintain without direct access from the through-traffic lanes or ramps. Poles within such areas frequently have to be located between ramps and very often not on a straight line, requiring guy wires for anchorage. A change to underground under these circumstances may be justified for purposes of both improved appearance and to permit greater accessibility without conflict with access control.

"The placing of high tension power lines underground is another matter. As an example, proper insulation of underground installations of such utilities is generally troublesome but is a requirement to assure proper in-service performance. Such installations generally are very costly. Therefore, in situations involving the conversion of overhead high tension power line crossings to underground installations, such costs and safety aspects should be given careful consideration.

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(2) Provisions for Expansion of Any Underground Utility Installations

"In the particular case involving the facilities of the . . . , both the State and the utility company contend that, in case of subsequent cable failure, a spare duct is of benefit to both the highway and the utility, whereby the pulling of a replacement cable through the extra duct will greatly facilitate utility maintenance without interfering with traffic operations. They contend that the old cable may then be removed, thus providing a spare conduit for any other subsequent cable failures. The State also contends that Sections 5(C) and (E) of the AASHO Utility Accommodation Policy may be interpreted to advocate and encourage such treatment as a general practice for underground installations.

"Apparently some confusion has arisen from the statement by the . . . that a spare duct was allowed under similar circumstances in connection with . . . . The facts for the . . . case show, that the . . . placed two treated cables in a trench and installed an empty duct along side of each cable as opposed to pulling the cables through the ducts. It is reported this procedure was used so that the empty ducts would be available in case of subsequent cable failure and would provide better protection to the highway than otherwise would be afforded if the cables were initially placed in ducts. We do not have objection to this practice as has been approved by the Bureau field personnel in several States for telephone cable installations.

"When an overhead utility facility is required to be installed underground by reason of the highway construction, approval may be given to requests for providing conduits with one spare duct in addition to the ducts needed to accommodate the existing cables, where it is demonstrated that the installation of one spare duct is of appreciable benefit to or for the protection of the highway and its operation.

"Section 5(E) of the Policy calls for provision to be made for known and planned expansion of utility facilities, particularly those underground, and advocates planning to avoid interference with traffic at some future date when additional or new lines are installed. Under the present expanding population and economy, most utility companies may anticipate future increases in the demands for their services and commodities. However, the intent of the foregoing provision for known and planned expansion is to call special attention to the need for providing adequate protection to the highway and its operation under such circumstances. It was never intended that this or any other provision of the Policy would establish reimbursement procedures. In fact, the next to last paragraph of the Introduction

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to the Policy expressly states, "This policy makes no reference to reimbursement to utility owners for the costs of adjusting or installing utilities on Interstate highways".

"In situations where future underground utility installations or expansions to existing underground utility facilities are planned, we agree it is proper to plan for accommodation thereof in a manner that will avoid interference with traffic at some future date. However, when such future installations, in part or in whole, or expansions to existing facilities neither existed nor were located on the land occupied by the highway right-of-way at the time when such right-of-way was acquired, there could not be a subsequent "relocation of utility facilities necessitated by the construction of a project on the Federal-aid . . . system . . . ". Hence, there would not be occasion for "cost of relocation" nor for Federal-aid reimbursement to the State. If the State wishes to provide accommodations for such planned future utility installations or expansions to existing utility facilities, we would offer no objections but consider the responsibility of payment therefor as a matter to be resolved between the utility company and the State.

U.S. DEPARTMENT OF COMMERCE  
BUREAU OF PUBLIC ROADS  
WASHINGTON 25, D. C.

October 14, 1960

**CIRCULAR MEMORANDUM TO: Regional and Division Engineers**

**FROM: G. M. Williams, Assistant Commissioner**  
**22-53 Washington, D. C.** *SMW.*

**SUBJECT: Pipeline Crossings of Interstate Grade**  
**Separation Structures**

Our recent reply to one regional engineer reflects our views on the subject matter and provides appropriate clarification of the pertinent provisions of the AASHO Utility Accommodation Policy. The memorandum to the regional engineer has been edited in order that it may be generally applied and pertinent provisions thereof are included below.

(1) The provisions under the opening paragraph of Section 5 of the AASHO Utility Accommodation Policy, to which you referred, simply indicates a preference for utilities to cross under Interstate highways instead of overhead and is intended to encourage the conversion of overhead utility lines to underground installations. It is not considered to be applicable to situations involving the accommodation of pipelines on grade separation structures. In any event, the indicated preference for underground crossings is not a mandatory requirement and should be applied only where feasible and practical after having considered the economics and other engineering aspects involved in each situation.

(2) As you have noted, Section 4(A) of said Policy permits utility facilities to be carried on or through the highway grade separation structures, where the installation or servicing thereof can be accomplished without access from the Interstate through-traffic roadways and ramps. In many instances, such facilities can be installed in a manner that access to them may be accomplished directly from the cross street either by providing manholes or by providing ducts or conduits that will permit the old lines to be pulled out and new ones pulled through. In other instances, where it will rarely be necessary to service the utility lines and alternate means of utility accommodation are more costly and difficult to maintain, utilities preferable should be located under the deck between the beams of such structures. In such cases arrangements could be made between the State and the owner for servicing the utility on the rare occasions at a time when there would be minimum interference with traffic.

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(3) We do not agree that the presence of either gas or water pipelines on an overhead structure is necessarily a hazard to Interstate traffic. We see no objection to carrying low pressure lines on overhead structures crossing the Interstate, provided adequate measures are taken to protect the highway, its structures, and its users.

While we agree with your contention that leaking overhead water lines, during periods of intermittent freezing and thawing, present a hazard to the underlying traffic, recent developments by the water industry for new and improved methods for these installations should, in most instances, minimize such hazard. In some areas, the present practice utilized for such installations is to provide steel pipe with plain end welded joints, expansion couplings, and installation on rollers as opposed to cast iron pipe, with bell and spigot joints, joint sealer, and no other provision for expansion.

Likewise, there should be no objection to locating low pressure gas lines on bridges where there is evidence that adequate protective measures will be provided for the highway and its users.

From the information submitted, it is indicated that existing Bureau policy in one State for carrying utilities on grade separation structures is being applied more restrictively than the policy utilized by that State in connection with State financed projects and more restrictive than in other States. The AASHO Utility Accommodation Policy, as any national policy should do, provides only the general principles to be followed in the installation of utilities. Extreme interpretations of any of these principles are usually not reasonable or practical and frequently ignore the principle of economy, especially when applied as an inflexible and rigid standard.

In view of the foregoing remarks, it is recommended that the policy application being followed in your region be reexamined to determine if a greater degree of flexibility along the lines indicated above is feasible. It is important to note here that the foregoing remarks are not intended to have application to cases involving high pressure pipelines carrying explosive or inflammable fluids or gases. Their installation on structures could be considered more hazardous than locating them under the through-traffic roadways.

We are informed that recent requests by one utility company for installing pipelines on separation structures have been turned down by the State. Also, it appears that this is in accord with Bureau policy in that State. Under these circumstances, we suggest

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that appropriate arrangements be made with the State for a general discussion and review of this matter. When such review is completed, the utility company should be advised of the State's position in this regard. Our position with respect to a utility should be that within the limitations outlined above; the decision rests with the State.

Of interest is a procedure followed in another State where underground utilities are frequently located on bridges crossing over Interstate highways. Where it is necessary to maintain the existing service, a replacement line is located underground on the line of the detour road provided to maintain vehicular traffic while the grade separation is constructed. The bridge is designed to accommodate the utility but the space is not used initially; the line under the detour providing the service. When and if some years later, this line develops trouble, it will be abandoned and a new line located on the bridge. The result is maximum economy and minimum interference with Interstate traffic.



U.S. DEPARTMENT OF COMMERCE  
BUREAU OF PUBLIC ROADS  
WASHINGTON, D.C. 20235

March 13, 1967

CIRCULAR MEMORANDUM TO, Regional and Division Engineers

FROM : E. H. Swick, *E. H. Swick* Director of Right-of-Way and Location  
39-30 Washington, D. C.

SUBJECT: Accommodation of Utilities - Paragraph 15 - PPM 30-4

This concerns an inquiry recently received from a regional engineer on the accommodation provisions of PPM 30-4. The inquiry was twofold. One part concerned a State's responsibility to meet the requirements of paragraph 15 of the PPM on projects within the boundaries of cities, towns and other political subdivisions of a State. The other part concerned the application of the requirements of paragraph 15d(5) of the PPM, especially in urban places. Since similar questions will likely arise in other States, the pertinent portions of our reply to the regional engineer are provided for your information and use as follows:

The State may wish to utilize a city-State agreement as a means of insuring or effecting compliance with Federal regulations and policies within cities. However, the fact that a State highway department enters into an agreement with a city under which the city agrees to arrange for and bear the total cost of any necessary utility relocation work, does not relieve the State of demonstrating to the satisfaction of the division engineer that there has, in fact been compliance with the accommodation provisions of the PPM. The utility facilities covered by the accommodation provisions of the PPM include all facilities located on the right-of-way of the proposed project, regardless of who bears the cost of adjustment and who has the responsibility for accomplishing the utility work involved.

We anticipated that problems would arise in applying these provisions of the new PPM. This is particularly true for projects in cities and towns, say where the State either lacks authority under law, or is not fully exercising its legal authority, to the extent necessary to adequately control the use of the highway right-of-way by utilities in urban places. Where the State has such legal authority, it should proceed to use it as necessary to meet the accommodation requirements of the PPM. Where the State lacks such authority, it could enter into agreements with cities or towns on the utility accommodation standards and practices to be followed by the local political subdivision on Federal-aid projects within its boundaries similar to those by which the State controls the use of right-of-way by utilities on rural sections of highways under its jurisdiction. Where this is the case, the local political subdivision having jurisdiction over the State highways within its boundaries would continue to exercise its authority and control, but under the terms of the accommodation standards outlined in the agreement. The State, in turn, would be held accountable to see that these standards were followed on proposed and active Federal-aid

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projects, as required by paragraph 15 of the PPM, and as provided by Sections 1.4 and 1.5 of the Regulations. On the other hand, if the State and its local political subdivision cannot reach satisfactory agreement on the standards to be followed for these matters, the State will find it necessary to seek legislative authority to take whatever action is necessary to comply, along the lines provided by Section 1.3 of the Regulations. In summing up, paragraph 15 requires the State to exercise adequate control over the use and occupancy by utilities of the right-of-way of proposed and active Federal-aid projects. Where the State has legal authority to do this, it should proceed as necessary to meet the requirements of paragraph 15. Where it does not have legal authority and cannot make suitable arrangements by agreements with local political subdivisions to comply with the provisions of paragraph 15, it must seek such authority from the legislature.

The requirements of paragraph 15d(5) are for application on all Federal-aid highway projects regardless of location. It is realized that compliance with these requirements may be difficult in urban areas where numerous utilities are involved. One of the problems encountered within cities is the locating of existing underground utilities. It is our view that the degree of accuracy in locating these utilities at the plan preparation stage is dependent upon their potential for conflict with the highway construction. In some instances a general location may suffice, while in others it may be necessary to more accurately determine the utility location. Judgment must be used in this regard. We view the showing of utility facilities on the project plans as being advisory only, except where their adjustment is included as part of the highway contract. One of the prime purposes is to inform the highway contractor and project engineers of the general location and disposition of the utilities located within the project. Such information should be of assistance to the highway contractor at the bidding stages and during the actual highway construction.

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ATTACHMENT 18




U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
BUREAU OF PUBLIC ROADS  
WASHINGTON, D.C. 20591

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August 2, 1967

CIRCULAR MEMORANDUM TO: Regional Federal Highway Administrators  
and Division Engineers

**FROM:**   
**39-30** E. H. Swick, Director of Right-of-Way and Location  
Bureau of Public Roads  
Washington, D. C.

**SUBJECT:** Proposed Instructional Memorandum on the Accommodation of  
Utilities (Report due on or before September 15, 1967)

We are enclosing copies of a discussion draft of a proposed new policy  
statement on the Accommodation of Utilities for your review and comment.

Briefly, the proposed Instructional Memorandum:

- (1) Extends the pertinent provisions of paragraph 15 of PPM 30-4 (subparagraphs 15a, b, c, d(2), d(3), f and g) for use and application on all completed projects. Under present policy, application is restricted to proposed and active projects.
- (2) Requires the State highway departments to reexamine their existing utility accommodation policies and to modify them as necessary to insure the development and preservation of safe roadsides on Federal-aid highways.
- (3) Requires each division to review the State's existing utility accommodation policies and practices and to report on their adequacy for application of Federal-aid highways to the Regional Federal Highway Administrator.
- (4) Authorizes the Regional Federal Highway Administrator to approve the State's utility accommodation policies for application on Federal-aid highways when he determines a State's policies and practices thereunder are adequate.
- (5) Requires the division to make continuing periodic reviews of State practices, say once a year, as part of the annual Statewide utility review program.
- (6) Encourages the States to establish a corrective safety program where existing utility poles, guys and other ground-mounted utility appurtenances constitute a serious and major hazard to traffic.

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(7) Establishes minimum requirements for such policies, standards, occupancy permits of licenses and for approvals by Public Roads.

We urge that the discussion draft be given high priority for early review by division and regional staffs. Comments from each division should be submitted to the Regional Federal Highway Administrator, and his comments along with those from each division, referred to this office on or before September 15, 1967.

In addition to internal review by the field offices, each Regional Federal Highway Administrator is asked to select two States in his region and arrange for a review of the proposed statement by the State highway departments and the utility industry in the States selected. We suggest selecting one State where utility requests to occupy highway right-of-way represent a major workload and one where such workload is minor.

Each State selected should be urged to arrange for a review of the discussion draft with representatives from each of the several utility industries in that State, i.e., water, electric power, gas, telephone and pipelines. Unless a State prefers to adopt another method, we suggest that correlation with the utility industry could be expeditiously and effectively accomplished through the Local Chapter Utility Liaison Committee of the American Right-of-Way Association. These groups seem to be ideally suited for this task. They were recently called upon to assist in the review and correlation of PPM 30-4 with the nationwide utility industry and State highway departments.

Suitable arrangements should be made so that those comments received by the State from the industry and comments by the State highway departments are referred through channels to this office on or before September 15, 1967.

In the interests of providing assistance to the division engineers in reviewing the State utility accommodation policies (paragraph 6a of the discussion draft) and to the Regional Federal Highway Administrators in making the determinations concerning the adequacy of such policies (paragraphs 2c and 6c of the discussion draft) and for establishing a reasonable uniformity in accommodation policy among the States in his region (paragraph 6b of the discussion draft), the preparation of guidelines for safe rational practices to be followed (paragraph 4a of the discussion draft) for accommodating various types of utility facilities on highway rights-of-way and bridges is now under study. As an example, we refer you to the 70 Guides to Good Practice for High-Pipeline Crossings as outlined in Volume 90, No. HW-1, January 1964, issue of the Journal of the Highway Division - Proceedings of the ASCE. Other examples are the Circular Memorandums on Crossings of Interstate Highways by Utility Service Connections (dated 6-14-60), Encasement of Underground Pipelines Crossing Interstate Projects (dated 8-14-60) and Pipeline Crossings of Interstate Grade Separation Structures (dated 10-14-60).

Your suggestions and recommendations with respect to the merit for providing such guides and the extent and type of guidelines needed will be appreciated.

Enclosures  
Special Distribution (5 copies to each region and division)

ATTACHMENT 19

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Proposed Instructional Memorandum  
Subject: Accommodation of Utilities

1. Purpose and Application

This memorandum prescribes policies and procedures for accommodating utility facilities which are to cross or otherwise occupy rights-of-way of highways where Federal funds have been or are proposed to be expended for highway improvements. It applies regardless of whether Federal funds have been or are to be used for acquiring the highway right-of-way and regardless of who is to bear the cost of installing or adjusting the utility facilities.

2. General

a. Section 1.23, Title 23, C.F.R., governs the use of Federal-aid highway rights-of-way. The right-of-way must be devoted exclusively to public highway purposes, except as otherwise provided by said Section 1.23. The State highway departments are responsible for preserving the right-of-way free of all public and private installations, facilities or encroachments except those approved under subsection 1.23(c).

b. The manner in which utilities cross or otherwise occupy the right-of-way of a Federal-aid project can materially affect the highway, its appearance, safe operation, and maintenance. A state or local law or regulation permitting utilities to use and occupy public highways and streets does not change the Administrator's responsibility and authority under Title 23, U.S.C.

c. Where authorized by State law and regulation, the use and occupancy of the right-of-way of Federal-aid highways by utilities may be considered as being in the public interest provided it is determined by the Regional Federal Highway Administrator that a State's utility accommodation policies and practices meet the requirements of this memorandum.

d. IM 21-11-67 dated May 19, 1967, as amended by IM 21-11-67(1) dated June 29, 1967, approves the February 1967 Report of the Special AASHO Traffic Safety Committee -- HIGHWAY DESIGN AND OPERATIONAL PRACTICES RELATED TO HIGHWAY SAFETY-- for use on Federal-aid highways. The Report confirms the provisions of paragraph 15 of PPM 30-4. Its pertinent provisions are extended for immediate use and application on all completed projects.

e. Each State highway department is asked to establish an active corrective program to apply the findings of the 1967 Report of the Special AASHO traffic Safety Committee to utility installations. Where existing utility poles, guys, and other ground-mounted utility appurtenances constitute a serious and major hazard to traffic, correction should be assigned high priority. Additionally, to insure the continued development and preservation of safe roadsides on Federal-aid projects, present State utility accommodation policies and practices are to be reviewed and modified, as necessary, to reflect the requirements of this memorandum.

3. State Accommodation Policies

a. The policies and practices in each State for regulating the use of highway right-of-way by utilities must make adequate provision with respect to each of the following:

- (1) The utility's use of the highway must be authorized by law or regulation.
- (2) Utilities must be accommodated in a manner that will not impair the highway, detract from its appearance, interfere with the safe and free flow of traffic or increase the cost or difficulty of its maintenance.
- (3) Utility installations on freeway projects must meet the requirements of the AASHO "A Policy on the Accommodation of Utilities on the National System of Interstate and Defense Highways".

(4) All utility requests to cross or otherwise occupy the highway right-of-way shall require prior approval by the State highway department; or in cases involving agreements with political subdivisions entered into by the State pursuant to paragraph 3b of this memorandum, by appropriate county or municipal highway authorities; or by both State and local highway authorities where so required by the State.

(5) The terms of the utility's use and occupancy of the right-of-way and the manner in which the utility facilities are to be installed and accommodated thereon shall be set forth in an occupancy permit in accordance with the provision of paragraph 15c of PPM 30-4 and paragraph 5 of this memorandum. In cases involving utility installations within areas of the right-of-way jointly owned and used by the State and utility under the terms of a joint-use or common-use agreement, a construction permit should be issued by the State, setting forth the manner in which the utility facilities are to be installed and accommodated.

(6) The utility's use of the highway right-of-way must comply with the design, location and maintenance standards set forth in paragraph 4 of this memorandum and any other additional standards deemed necessary by the State.

(7) New utility installations shall not conflict with existing or planned uses of the highway, including planned future highway improvement projects.

b. Where the State highway department is without legal authority to regulate the use of the right-of-way of Federal-aid projects by utilities, as on county roads or in cities and towns, the State highway officials shall enter into a

formal agreement with the appropriate local authorities having jurisdiction over the highway to insure adequate control over the use of the highway right-of-way by utilities. Existing maintenance agreements between State and county or municipal highway authorities may be amended for this purpose. Where appropriate, similar agreements should be entered into with other State agencies, public service commissions and the like, as may be necessary for State highway authorities to adequately control and regulate the use of the highway right-of-way. If satisfactory agreement cannot be reached the State highway department should seek the necessary authority from the legislature.

4. State Standards

a. The design, location and maintenance standards employed by each State for accommodating utilities on Federal-aid highways must be included in the State's utility accommodation policy. These standards must make adequate provision with respect to safe rational practices to be followed for accommodating various types of utilities, such as for pipeline encasement, protective coatings, cathodic protection, depth of bury, location of facilities on the highway right-of-way or on highway structures, vertical and lateral clearances, backfilling, protection of access control and other similar features.

b. The design and types of materials for all utility installations within the highway right-of-way shall conform with appropriate governmental codes and specifications as required by Federal, State and local law and regulation. As a minimum, all new utility installations to be made within such right-of-way involving communication or electric power facilities must comply with the National Electric Safety Code, and those installations involving pressure pipelines must comply with the United States of American Standards Institute (USASI) Industry Standards for pressure pipelines, B31.1, B31.4 and B31.8.

c. Since utility poles, guys and other ground-mounted utility appurtenances can constitute a definite hazard to traffic, their location on the highway is of critical importance. To insure that these hazards are reduced to the maximum extent feasible and practicable, the following procedures are for application on all Federal-aid projects:

(1) On proposed and active Federal-aid projects other than freeways, including corrective action projects under IM 21-11-67, utility poles, guys and other ground-mounted utility appurtenances may be installed, retained or relocated, within the highway right-of-way provided:

- (a) in rural areas, they are located at least 30 feet or more from the edge of the traveled way; and
- (b) in cities, towns and urban places, on curbed sections, they are located back of the sidewalk or at least 6 feet or more back of the face of curb. Where curbs are not provided, they shall be located at least 20 feet from the edge of the traveled way.

(2) On previously constructed Federal-aid projects other than freeways:

- (a) new or replacement utility installations, poles, guys and other ground-mounted utility appurtenances shall be located as provided for in paragraph 4c(1) or at the right-of-way line; and
- (b) existing substandard utility installations should be handled as outlined in paragraph 2e of this memorandum.

(3) On proposed, current and previously constructed Federal-aid freeway projects, all utility installations shall be in accordance with the AASHO "A Policy on the Accommodation of Utilities on the National System of Interstate and Defense Highways".

d. The lateral clearances outlined in paragraph 4c are consistent with the AASHO POLICIES ON ARTERIAL HIGHWAYS IN URBAN AREAS (Table E-2, page 216, 1957 edition) and on GEOMETRIC DESIGN OF RURAL HIGHWAYS (Figure V-1, page 263, 1965 edition). Where the highway border areas are of minimum width, say in congested areas where buildings and other improvements are near or abut the right-of-way, consideration should be given to designs employing vertical alignment of wires and cables, cantilevered cross-arms, added insulation or any other similar designs permitted under the National Electric Safety Code that will facilitate compliance with the provisions of paragraph 4c. Where it is not possible to meet such clearances, consideration should be given to alternate utility locations or designs, such as rerouting the facilities or converting them from aerial to underground installations. Exceptions to the lateral clearances outlined in paragraph 4c may be made where adequate protection is provided the highway user, say where such facilities are located behind guardrails or beyond drainage ditches, the toe or top of steep slopes, retaining walls and the like. Other exceptions are subject to prior approval by the Regional Federal Highway Administrator on a case by case basis before installation is made on the highway right-of-way.

#### 5. State-Utility Permits or Licenses

a. The occupancy permit issued to the utility for crossing or otherwise occupying the highway right-of-way must, as a minimum:

- (1) Include, or make appropriate reference to pertinent provisions of the State's design, location and maintenance standards for accommodating utilities.
- (2) Describe what is required of the utility with respect to the protection of the highway and its safe operation during and after installation of the facilities. Adequate provisions for traffic control measures during the installation and maintenance or replacement of the

utility facilities must be included. Where applicable, control of access limitations should be included in the permit.

(3) Be explicit as to construction practices or procedures required.

For example, the requirements for vehicle parking, the cutting of pavement, trenching and backfill, boring and jacking under pavements, blocking of highway lanes, protecting open excavations, barricades and signs, the use of flagmen, tree trimming, storage of materials and the like, must be covered directly or by reference.

(4) Adequately describe the facility which will be located on the right-of-way and the operating conditions pertinent to the installation. Adequate drawings or sketches should be included. The location and means of access allowed the utility should be shown.

(5) Set forth the liability and responsibilities associated with future adjustment of the utility facilities to accommodate highway improvements.

(6) Recite explicitly in standard clauses, the penalty for noncompliance with the State's requirements for liability, revocation and/or abatement.

#### 6. Approvals

a. To ensure that the use by utilities of Federal-aid highway right-of-way is adequate, each division engineer must review the State's utility policies and practices thereunder. Each State should be requested to furnish information pertaining to their authority, operations and practices for regulating the use of highway rights-of-way by utilities. Copies of each State's published utility accommodation policies and standards should be obtained. The review made by the division engineer should provide a clear picture of the State's utility accommodation practices. A report of the initial review and the division engineer recommendations shall be submitted to the Regional Federal Highway Administrator, with a copy to the Office of Right-of-Way and Location.

b. Each Regional Federal Highway Administrator should establish a reasonable uniformity in utility accommodation policy among the States in his region.

c. When it is determined that the State's utility accommodation policies and practices are adequate, the Regional Federal Highway Administrator may approve them for application on Federal-aid highways as provided by paragraph 2c of this memorandum. Once approval is given to the State's policies, periodic reviews should be made by the division engineer of the State's practices thereunder for referral to the Regional Federal Highway Administrator. As a minimum the review should be made on an annual basis, say as a part of the Statewide utility review program. Information copies of the review and reports made should be furnished to the Office of Right-of-Way and Location.

d. The referral to Public Roads of individual requests received for the use and occupancy of Federal-aid highways by utilities is not required except under the following circumstances:

- (1) All cases where the State proposes to permit such use and occupancy by utilities not in accordance with the policies approved by the Regional Federal Highway Administrator under paragraphs 2c and 6c or with the provisions of this memorandum.
- (2) All cases requiring approval under PPM 30-4 or IM 30-6-67 on Scenic Enhancement.
- (3) All cases on Federal-aid freeways involving extreme case exceptions to the AASHO, "A Policy for the Accommodation of Utilities on interstate and Defense Highways". Installations involving extreme case exceptions on Interstate freeways shall be submitted for prior review by the Office of Right-of-Way and Location. On other Federal-aid freeways, such extreme case exceptions shall be submitted for prior review by the Regional Federal Highway Administrator.
- (4) All cases involving installations on Interstate freeways.

U.S. DEPARTMENT OF TRANSPORTATION  
 FEDERAL HIGHWAY ADMINISTRATION  
 BUREAU OF PUBLIC ROADS  
 WASHINGTON, D.C. 20591

March 4, 1968

**CIRCULAR MEMORANDUM TO: Regional Federal Highway Administrators  
 and Division Engineers**

**FROM: J. A. Swanson, Director of Right-of-Way and Location  
 39-30 Washington, D.C.**

**SUBJECT: Proposed New PPM 30-4.1 on the Accommodation of Utilities and  
 Related Revisions to PPM 30-4 and IM 30-6-67. (Report due  
 within 60 days from the date of this memorandum.)**

We are enclosing copies of a revised discussion draft of our proposed policy statement on the Accommodation of Utilities and related revisions to PPM 30-4 and IM 30-6-67.

A discussion draft on the Accommodation of Utilities was previously submitted to you for review and comment by Mr. E. H. Swick's Circular Memorandum dated August 2, 1967. The new draft reflects the views and recommendations received from you, the State highway departments, the utility industry and the Ad Hoc Committee of the National Liaison Committee of the American Right-of-Way Association. It also consolidates, in one document, the accommodation features of paragraph 15 of PPM 30-4 and IM 30-6-67 with other provisions for accommodating utilities, as new PPM 30-4.1. The proposed new PPM prescribes the policy to be followed for accommodating utilities on proposed and active, as well as completed, Federal and Federal-aid projects. As a result, there will be two companion policy and procedure memorandums on utilities; one on Relocations and Adjustments under PPM 30-4 and the other on the Accommodation of Utilities under PPM 30-4.1.

As a general comment, the new draft policy statement is primarily directed at obtaining adequate control and regulation by each State of the use and occupancy of highway rights-of-way by utilities. To accomplish this, each State is asked to develop a utility accommodation policy and procedure along the lines provided for by the PPM. Once the State's policy and procedure is approved by the Regional Federal Highway Administrator for use on Federal-aid highway projects, the State will then operate under the approved policy similar to the Secondary Road Plan, with minimum referral to the division engineer. The division engineer will periodically monitor the State's practices for compliance.

The PPM is to be effective on the date of its issuance. However, all provisions cannot be fully implemented until each State's utility policy is

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approved by the Regional Federal Highway Administrator under paragraph 7c. A time limit will be established to allow for this, for instance, six months after the PPM is issued. If a satisfactory policy cannot be approved by then, conditional approval could be given pending resolution of the matters in question.

The new policy applies primarily to utility installations which are to be made on the rights-of-way of active or completed Federal and Federal-aid projects after the effective date of the PPM. It also applies to existing installations where they are to be retained, relocated or adjusted within the rights-of-way of active Federal and Federal-aid projects. Where existing installations constitute a definite hazard to the travelling public, the State is to take corrective measures to provide a safe traffic environment.

All State highway departments should be invited to comment on the proposed policy statement and to solicit comments from other parties of interest within the State. Comments from the State, other parties of interest, and each division should be submitted to the Regional Federal Highway Administrator, and his comments along with others so received should be referred to this office within 60 days from the date of this memorandum.

In addition to the foregoing, copies of the proposed policy are being furnished to the Joint Liaison Committee of the American Association of State Highway Officials and the American Right-of-Way Association for its review and comment. The Committee plans to conduct a nationwide review of the proposed policy with the State highway departments and the utility industry. The reviews to be made under the preceding paragraph and those to be conducted by the Committee will be underway at the same time. The objective is to afford as many parties of interest as reasonably possible an opportunity for making their views known and participating in the nationwide review.

For your information, we understand that the AASHO Committee on Planning and Design Policies plans to prepare a guide on the safe rational practices to be followed for accommodating utilities on highway rights-of-way. Public Roads has pledged its assistance to the Committee in this undertaking.

To assist you and others in reviewing the proposed new policy and related revisions to existing policy, we are enclosing a copy of our review notes of a paragraph by paragraph briefing on the new draft, and comparisons with the former draft, including related revisions to PPM 30-4 and IM 30-6-67.

Enclosures - 3

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ATTACHMENT 20

Paragraph by paragraph briefing on draft of proposed PPM 30-4.1 and comparisons with former draft of IM circulated by Mr. E. H. Swick's circular memorandum of August 2, 1967.

The format of policy has been changed from an IM to a PPM. All accommodation features are grouped together under the new PPM. Most of paragraph 15 of PPM 30-4 and portions of IM 30-6-67 have been transferred to the new PPM.

#### 1. PURPOSE

The purpose and application section of the earlier draft has been separated into two paragraphs under the new PPM. Appropriate reference is made to the pertinent provisions of law and regulation which establish the authority and responsibility for regulating the use of Federal-aid highway rights-of-way.

#### 2. POLICY

This is a new section. A statement of policy has been included to amplify Public Roads position with respect to the use of highway rights-of-way by utilities. As utilities are engaged in an essential transportation function in providing necessary services and commodities to the public, this public interest factor is recognized in the statement of policy. However, it is conditioned upon compliance with law, regulation and the provision of adequate protection to the highway and its users.

#### 3. APPLICATION

The new application paragraph more clearly defines the scope of application. The new policy applies primarily to utility installations which are to be made after the effective date of the PPM. It applies to existing installations that are being replaced, say due to functional or economic obsolescence, and to facilities which are to be retained, adjusted or relocated under an active Federal or Federal-aid project, regardless of who bears the cost. (Restatement of the latter part of paragraph 1 of earlier draft)

#### 4. DEFINITIONS

This is a new section. It has been added to aid those who are not familiar with terminology common to the Federal-aid highway program.

#### 5. GENERAL PROVISIONS

This is a new section. It expands upon the purpose and policy sections by describing the responsibilities and public interest factors. (Restatement and expansion of 2a and b of earlier draft)

#### 6. REQUIREMENTS

(This section consolidates and modifies the requirements in the earlier draft, paragraph 15 of PPM 30-4 and portions of IM 30-6-67. It includes other requirements from existing circular memorandums.)

- a. Provides for application of new PPM to Federal highway projects. (See 4c for definition.) A similar provision is made for relocations or adjustments under 1f of PPM 30-4.
- b. Provides for revisions to Secondary Road Plans. (Restatement of 15f of PPM 30-4)
- c. Provides for corrective measures to be taken by State to provide a safe traffic environment where existing utility installations constitute a definite hazard to the traveling public. This does not contemplate a massive relocation of existing pole lines. It may, however, result in the relocation of some lines at critical locations or, say the installation of guard rail to protect the motorist. (Restatement of 2e of earlier draft)
- d. Concerns agreements between the State and other highway authorities, where the State is without legal authority to regulate the use by utilities of sections of the Federal-aid highway systems. (Formerly included in 3b of earlier draft and in Circular Memorandum dated March 13, 1967, from Mr. E. H. Swick to Regional and Division Engineers on Subject: "Accommodation of Utilities - Paragraph 15 - PPM 30-4")
- e. Provides for application of AASHO Policy (Accommodation of Utilities) on Federal-aid freeways. (Formerly included in 3a(3) of earlier draft and 15b of PPM 30-4)
- f. This concerns the installation of service line crossings of Federal-aid freeways. Except in remote areas, it is expected that utilities will normally provide primary or feeder line crossings of freeways where needed to serve a general area. The policy discourages indiscriminate crossings of freeways by service lines, but allows for extreme case exceptions. (Abbreviated restatement and transfer of the Circular Memorandum of June 14, 1960, from Mr. G. M. Williams to Regional and Division Engineers on the Subject: "Crossings of Interstate Highways by Utility Service Connections." Extends application to all Federal-aid freeways)
- g. This concerns utility installations within scenic strips, overlooks, rest areas, landscaped areas, and areas of natural beauty within the highway rights-of-way. (Abbreviated restatement and transfer of numbered paragraphs (1), (2), and (3) of IM 30-6-67, dated May 2, 1967, on Subject: "Utilities - Scenic Enhancement")
- h. This is a new provision on joint-use or common-use agreements between State and utility where utility has a compensable interest in the land occupied by its facilities and such land is needed for highway purposes and is to be jointly used for highway and utility purposes. (Restatement of latter part of 3a(5) of earlier draft)

#### 7. REVIEWS AND APPROVALS

This section outlines steps to be taken by State and Public Roads to implement policy, including the preparation of reports, making of reviews,

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recommendations and approval actions. (It is essentially a restatement of Section 6 of earlier draft.)

- a. Provides for initial steps to get implementation underway. Requires a report from the State to division engineer. (Restatement of forepart of 6a of earlier draft)
- b. Requires review and report by division engineer to Regional Administrator. (Formerly included in latter part of 6a of earlier draft)
- c. Provides for approval by Regional Administrator of State's utility accommodation policies and procedures for application on Federal-aid projects. (Formerly included in 2c and 6c of earlier draft)
- d. This is a new provision concerning approval of the State's policies and procedures for regulating use of rights-of-way by privately-owned lines, i.e. lines which do not qualify under the definition for utilities under paragraph 4a. Requires prior review by Director before approval is given.
- e. This is a new provision to account for subsequent changes, additions or deletions to the policies and procedures that are approved by the Regional Administrator under 7c.
- f. Provides for periodic reviews of State's practices under the approved policies and procedures by the division engineer. (Formerly included in latter part of 6c of earlier draft)
- g. Provides for minimum referral of utility use and occupancy agreements to Public Roads. Identifies circumstances where referral is necessary. (Restatement of 6d of earlier draft)

8. STATE ACCOMMODATION POLICIES AND PROCEDURES

(This section is a restatement of paragraphs 3, 4, and 5 of earlier draft.)

- a.(1) Provides for protection to the highway and its safe operation. (Restatement of part of 3a(2) of earlier draft and part of 15b of PPM 30-4)
- a.(2) Provides for consideration to be given to aesthetics and cost of difficulty of highway maintenance. (Restatement of part of 3a(2) of earlier draft)
- a.(3)(a) Provides for horizontal and vertical clearances for utilities and highways and for compliance with clear roadside policies. Such clearances must be clearly stated in State's policies and procedures. (Restatement of 4c and d of earlier draft)
- a.(3)(b) Requires appropriate reference to and compliance with government and industry codes. (Restatement of 4b of earlier draft)
- a.(3)(c) Requires provision to be made for utility's construction and maintenance practices, specifications and methods of installation and

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Proposed PPM 30-4.1

SUBJECT: Accommodation of Utilities

1. PURPOSE

This memorandum prescribes policies and procedures for accommodating utility facilities on the rights-of-way of Federal and Federal-aid highway projects. It implements the applicable provisions of Section 116, Title 23, U.S.C. and Sections 1.23 and 1.27, Title 23, CFR, as they relate to regulating the use of Federal-aid highway rights-of-way.

2. POLICY

Utility facilities may be accommodated on the rights-of-way of a Federal or Federal-aid highway project provided such use and occupancy of the highway rights-of-way does not impair the highway or interfere with the free and safe flow of traffic and does not conflict with the provisions of Federal, State or local laws or regulations or the provisions of this memorandum.

3. APPLICATION

This memorandum is effective on the date of issuance. It applies to utility installations which are to cross or otherwise occupy the rights-of-way of active or completed Federal or Federal-Aid highway projects. It also applies to existing utility facilities which are to be retained, relocated or adjusted on the rights-of-way of active Federal or Federal-aid highway projects regardless of who is to bear the cost of installing or adjusting the utility facilities.

4. DEFINITIONS

a. "Utility facilities" means and includes all privately, publicly or cooperatively owned lines, facilities and systems for producing, transmitting or distributing communications, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water not connected with highway drainage, and other similar commodities, including publicly owned fire and

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police signal systems and street lighting systems, which directly or indirectly serve the public or any part thereof. The term "utility" also means the utility company, inclusive of any wholly owned or controlled subsidiary.

b. "Privately owned lines" means privately owned facilities which convey or transmit the commodities outlined in paragraph 4a, but are devoted exclusively to private use.

c. "Federal highway projects" includes all projects involving the use of Federal funds for the construction of highways, roads and trails, or related facilities including the acquisition of rights-of-way for such projects, which are constructed under the control or supervision of the Federal Highway Administration. The project may be either completed or active.

d. "Federal-aid highway projects" includes all projects administered by a State which involve the use of Federal-aid highway funds for the construction or improvement of a Federal-aid highway or related highway facilities or for the acquisition of rights-of-way for such projects, including highway beautification projects under Section 319, Title 23, U.S.C. The project may be either completed or active.

e. "Active Federal or Federal-aid highway projects" are those for which any phase of development has been programed for Federal highway funds (Stage 1 or 2). A project will be considered active until the date of its final acceptance by the Bureau of Public Roads.

f. "Rights-of-way" means land, property and interests therein, acquired or reserved for the construction, operation and maintenance of a highway in which Federal-aid or Federal highway funds are involved in any stage of development. For the purpose of this memorandum, lands outside of the normal rights-of-way acquired under Section 319(b), Title 23, U.S.C. (scenic strips - 1965 Highway Beautification Act) shall be considered to be highway rights-of-way.

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g. "Highway" means any public way for vehicular travel and related facilities constructed or improved in whole or in part with Federal-aid or Federal highway funds and includes the entire area within the rights-of-way.

h. "Freeway" means a divided arterial highway for through traffic with full control of access and grade separations at intersections.

i. "Director" means the Director of the Bureau of Public Roads, Federal Highway Administration.

j. "Regional Administrator" means the Regional Administrator of the Federal Highway Administration.

k. "Division Engineer" means the division engineer of the Bureau of Public Roads, Federal Highway Administration.

l. "State" means that department, commission, board, or official of any State charged by its laws with the responsibility for highway administration.

m. "Use and Occupancy agreement" means the document by which the State, or other highway authority, authorizes the use and occupancy of highway rights-of-way by utility facilities.

##### 5. GENERAL PROVISIONS

a. It is the responsibility of each State highway department to maintain or cause to be maintained the rights-of way of Federal-aid highway projects as necessary to preserve the integrity, operational safety, and function of the highway facility.

b. Since the manner in which utilities cross or otherwise occupy the rights-of-way of a Federal-aid project can materially affect the highway, its appearance, safe operation, and maintenance, it is necessary that such use and occupancy, where authorized, be controlled. In order for a State to fulfill its responsibilities in this area, it must exercise control over such use and occupancy through the establishment and enforcement of satisfactory and reasonably uniform utility accommodation policies and procedures.

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c. Due to the increasing competition for available space in congested urban areas between public transportation and other service facilities, such as for highway, rapid transit, railroad and utility purposes, it is important that rights-of-way be used in the most efficient manner consistent with the overall public interest.

6. REQUIREMENTS

a. The Regional Administrator will apply procedures on Federal highway projects similar to those required on Federal-aid projects as appropriate and necessary to accomplish the objectives of this memorandum. Where appropriate, agreements should be entered into with State or local highway authorities or other government agencies, or existing agreements should be amended, as may be necessary for the Regional Administrator to establish adequate control and regulation of use by utilities of the rights-of-way of Federal highway projects.

b. Secondary Road Plans shall be revised as necessary to comply with the provisions of this memorandum. Project actions by the division engineer or submissions by the State to the division engineer which are not now required should not be established for Secondary Road Plan projects as a result of this memorandum.

c. Where existing utility facilities constitute a definite hazard to the travelling public, the State is to take corrective measures to provide a safe traffic environment.

d. Where the State is without legal authority to regulate the use of the rights-of-way of Federal-aid highway projects by utilities or privately owned lines, as on county roads or in cities, the State highway officials shall enter into written agreements with the appropriate local authorities having jurisdiction over the highway to insure adequate control over the use of the highway rights-of-way. Existing maintenance agreements between the State and such local highway authorities may be amended or supplemented for this purpose.

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Where appropriate, similar agreements should be entered into with other government agencies, public service commissions and the like, as may be necessary for State highway authorities to establish generally uniform Statewide policies and procedures controlling and regulating such use of Federal-aid highway rights-of-way. If satisfactory agreement cannot be reached under the provisions of this paragraph, the State highway department should seek the necessary authority from the legislature.

e. Utilities that are to cross or otherwise occupy the rights-of-way of Federal-aid freeways shall meet the requirements of the AASHO "Policy on the Accommodation of Utilities on the National System of Interstate and Defense Highways."

f. Crossings of Federal-aid freeways by utility service connections shall not be permitted except where they qualify as an extreme case exception under Section 2 of the AASHO "Policy on the Accommodation of Utilities on the National System of Interstate and Defense Highways."

g. Utility facilities shall not be permitted within scenic strips, overlooks, rest areas, or recreation areas acquired with the use of Federal funds or within areas which are to be or have been landscaped with Federal-aid funds or other areas of significant natural beauty or view within the highway rights-of-way, except under the following circumstances:

(1) Where the installation can be made at a location and in a manner that will not now or later adversely affect the appearance of the area being traversed or diminish the value of the investment of public funds for highway beautification, or

(2) Where utility services are needed for a highway purpose, such as highway lighting or to serve a weigh station, rest or recreational area. In this case, underground utility installations are preferred. However,

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aerial lines may be installed as described in paragraph 6g(1).

h. Where the utility has a compensable interest in the land occupied by its facilities and such land is to be jointly used for highway and utility purposes, the State and utility shall agree in writing to the obligations and responsibilities of each party. Such agreements shall incorporate the applicable provisions of paragraph 9a in addition to setting forth the rights vested in the State and the rights and privileges retained by the utility. In any event, the interest to be acquired by or vested with the State in any portion of the rights-of-way of a Federal or Federal-aid highway project to be vacated, used or occupied by utilities or privately owned lines shall be of a nature and extent adequate for the construction, operation and maintenance of the highway project.

#### 7. REVIEWS AND APPROVALS

a. Each State shall submit a report to the division engineer on the authority of utilities to use and occupy the rights-of-way of State highways, the State's authority to regulate such use and the policies and procedures the State employs or proposes to employ for accommodating utilities on the rights-of-way of highways under its jurisdiction. Where applicable, the State shall include similar information on the use and occupancy of its highways by privately owned lines. The State shall identify those sections, if any, of the Federal-aid highway systems within its borders where the State is without legal authority to regulate use by utilities and shall describe and evaluate the adequacy of the policies and procedures employed by local authorities for regulating such use. Where appropriate, the State shall indicate any measures it has taken or proposes to take under paragraph 6d.

b. The division engineer shall review the information presented to him by the State under paragraph 7a and prepare a report outlining his recommendations to the Regional Administrator.

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c. Upon determination by the Regional Administrator that a State's policies and procedures under paragraph 7a and the agreements entered into by a State under paragraph 6d meet the requirements of this memorandum, he shall approve their use on Federal-aid projects in that State.

d. The policies and procedures employed by a State for regulating the use of the rights-of-way of Federal-aid projects by privately owned lines shall be subject to prior review by the Director.

e. Any changes, additions or deletions the State proposes to the policies and procedures or agreements approved by the Regional Administrator shall be subject to the provisions of paragraphs 7 a,b,c, and d.

f. The State's practices under the policies and procedures or agreements approved under paragraph 7c shall be periodically reviewed by the division engineer and reported to the Regional Administrator.

g. Submission to or prior concurrence by Public Roads of individual requests or applications by a utility to use or occupy the rights-of-way of a Federal-aid project will not be required except under the following circumstances:

(1) Installations on other than Federal-aid freeways where the State proposes to permit the use and occupancy by utilities not in accordance with the policies and procedures approved by the Regional Administrator under paragraph 7c.

(2) Installations on Federal-aid freeways involving extreme case exceptions, as described in the AASHO "Policy on the Accommodation of Utilities on the National System of Interstate and Defense Highways."

(3) Installations on or across Interstate freeways.

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8. STATE ACCOMMODATION POLICIES AND PROCEDURES

a. This paragraph outlines provisions considered necessary to establish satisfactory and reasonably uniform policies and procedures for accommodating utility facilities on the rights-of-way of Federal-aid highway projects.

These policies and procedures shall meet the requirements of paragraphs 6e through 6h and shall include adequate provision with respect to the following:

(1) Utilities must be accommodated in a manner which will not impair the highway or interfere with the safe and free flow of traffic.

(2) Consideration shall be given to the effect of utility installations in regard to aesthetics and the cost or difficulty of highway maintenance.

(3) The use and occupancy of highway rights-of-way by utilities must comply with the State's standards regulating such use. These standards must include but are not limited to the following:

(a) The horizontal and vertical location requirements and clearances for the various types of utilities must be clearly stated. These must be adequate to insure compliance with the clear roadside policies for the particular highway involved. The roadside clearances for above ground utility facilities shall equal or exceed those required for highway appurtenances and fixtures on the type of highway involved.

(b) The applicable provisions of government or industry codes required by law or regulation must be set forth or appropriately referenced. Where existing required codes are not adequate to insure the protection of the highway and its users, the State shall adopt additional design and construction standards as it deems necessary to provide adequate protection.

(c) Construction and maintenance practices and procedures required for installing, adjusting, servicing, inspecting or retaining utility facilities on highway rights-of-way are to be set forth. Specifications for

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and methods of installation; requirements for preservation and restoration of highway facilities, appurtenances, and natural features on the rights-of-way; and limitations on the utility's activities within the rights-of-way should be prescribed as necessary to protect highway interests.

(d) Measures necessary for protection of traffic and its safe operation during and after installation of facilities, including control-of-access restrictions, provisions for rerouting or detouring of traffic, traffic control measures to be employed, limitations on vehicle parking and materials storage, protection of open excavations and the like must be specifically provided.

(4) Compliance with applicable State laws and approved accommodation policies must be assured. The State and utility must agree in writing to the terms under which utility facilities are to cross or otherwise occupy highway rights-of-way in accordance with paragraph 9. All utility proposals to use and occupy highway rights-of-way shall be subject to prior approval by the State or by other highway authorities under paragraph 6d. However, such prior approval will not be required where so provided in the use and occupancy agreement for such matters as facility maintenance, installation of service connections on highways other than freeways or emergency operations.

(5) New utility installations should not conflict with existing or planned uses of existing highway rights-of-way, for highway purposes. Proposed utility installations and future highway projects shall be coordinated to avoid to the fullest extent possible any conflict in location, construction, or method of installation.

9. USE AND OCCUPANCY AGREEMENTS

a. The use and occupancy agreement setting forth the terms under which the utility is to cross or otherwise occupy the highway rights-of-way must include or by reference incorporate:

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(1) The State's standards for accommodating utilities. Since all of the standards will not be applicable to an individual utility installation, the use and occupancy agreement must explicitly state the requirements for location, construction, protection of traffic, maintenance, access restrictions and any special conditions applicable to each installation.

(2) A description of the size, type, nature and extent of the utility facilities being located within the highway rights-of-way.

(3) Adequate drawings or sketches showing the existing and/or proposed location of the utility facilities within the highway rights-of-way with respect to the planned highway improvement, the rights-of-way lines and, where applicable, the control of access lines and approved access points.

(4) The extent of liability and responsibilities associated with future adjustment of the utilities to accommodate highway improvements.

(5) The penalty or action to be taken for noncompliance with the State's requirements.

(6) Other provisions as deemed necessary to comply with laws and regulations.

b. The form of the use and occupancy agreement is not prescribed. At the State's option, the use and occupancy provisions may be incorporated as a part of the reimbursement agreement required by paragraph 7 of PPM 30-4.

c. Area or Statewide master agreements covering the general terms of a utility's use and occupancy of the highway rights-of-way may be used provided individual requests for such use and occupancy are processed in accordance with paragraph 8a(4) of this memorandum.

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Proposed Transfer of Numbered Paragraphs (4) and (5) of IM 30-6-67 (dated May 2, 1967, on the Subject: Utilities - Scenic Enhancement) to PPM 30-4 as New Paragraphs 4f and g.

Note: This does not involve a change in policy. It is merely a transfer of policy from an IM to a PPM so that the IM can be eliminated. The remaining portions of the IM (numbered Paragraphs (1) through (3)) have been rewritten and are being proposed for inclusion as paragraph 6g of new PPM 30-4.1.

New 4 f of PPM 30-4

Where a utility company has a real property interest in land to be acquired for a scenic strip, overlook, rest area or recreation area, the State shall take whatever steps are necessary to protect and preserve the area or strip being acquired. This will require a determination by the State as to whether retention of the utility at its existing location, will now or later adversely affect the appearance of the area being acquired, and whether it will be necessary to extinguish, subordinate or acquire the utility's interests therein, or to rearrange, screen or relocate the utility's facilities thereon, or both. Where the adjustment or relocation of utility facilities is necessary, the provisions of this memorandum are to be applied. In such cases, the State shall determine, subject to concurrence by the division engineer, whether the added cost of acquisition attributable to the utility's property interest or facilities which may be located thereon outweigh the aesthetic values to be received.

New 4 g of PPM 30-4

Highway Beautification Act funds or Federal-aid funds should not be abated to relocate, adjust, rearrange or convert existing utility facilities (aerial lines) for the sole purpose of enhancing the area of highway right-of-way being traversed unless it represents a minor part of an effort to preserve a scenic or landscaped area.

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Proposed New Sub-paragraph 7a(5) of PPM 30-4.

Note: This is a new provision. It is needed so that we can rescind the present requirement under 7k(3) of PPM 30-4 for submitting copies of use and occupancy agreements for prior review by division engineer at the stage he authorizes the utility relocation work to proceed. (See 7k(3) below.)

New 7a(5) of PPM 30-4

That the facilities to be relocated to a position within the highway right-of-way will be accommodated in accordance with the provisions of the State's utility accommodation policies and procedures and PPM 30-4.1.

Proposed Revision to Sub-paragraph 7k(3) of PPM 30-4

Note: This deletes the latter part of the existing sub-paragraph which requires the State to furnish copies of use and occupancy agreements at the stage the division engineer authorizes the relocation work to proceed. (See 7a(5) above.)

New 7k(3) of PPM 30-4

when the division engineer has been furnished and has reviewed the proposed or executed agreement between the State and the utility, and

Proposed Revision to Paragraph 15 of PPM 30-4

Note: Most of the existing provisions of paragraph 15 of PPM 30-4 are being proposed for transfer to new PPM 30-4.1, except for paragraph 15d which has been rewritten and retained as new paragraph 15b. New paragraph 15a is needed to make appropriate reference to new PPM 30-4.1. The transfer of the remaining provisions of paragraph 15 do not involve any major change in policy. Some have been rewritten as necessary to transfer them from PPM 30-4 to PPM 30-4.1.

New Paragraph 15a

Any utility facilities which are to be retained, installed, adjusted or relocated within the right-of-way of a Federal-aid project shall be accommodated in accordance with the provisions of PPM 30-4.1.

New Paragraph 15b

In any instance where utility facilities are to use and occupy the right-of-way of a proposed Federal-aid project, on or before the State is

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authorized to proceed with the physical construction of the highway project, the State shall demonstrate to the satisfaction of the division engineer that:

- (1) A satisfactory agreement has been reached between the State and all utility owners or the owners of privately owned lines involved, in accordance with PPM 30-4.1, and
- (2) The interest acquired by, or vested with, the State in that portion of the highway right-of-way to be vacated, used, or occupied by the utility facilities or privately owned lines is of a nature and extent adequate for the construction, operation and maintenance of the highway project, and
- (3) Suitable arrangements have been made between such owners and State for accomplishing, scheduling and completing the relocation or adjustment work, for the disposition of any facilities to be removed from or abandoned within the highway right-of-way, and for the proper coordination of such activities with the planned highway construction. Such arrangements should be made at the earliest feasible date in advance of the planned highway construction, and
- (4) The plans for the highway project have been prepared in accordance with the provisions of paragraph 4i of PPM 40-3.1.

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
BUREAU OF PUBLIC ROADS  
WASHINGTON, D.C. 20591

March 5, 1968

**CIRCULAR MEMORANDUM TO: Regional Federal Highway Administrators  
and Division Engineers**

**FROM: J. A. Swanson, Director of Right-of-Way and Location  
39-30 Washington, D.C.**

**SUBJECT: Accommodation of Utilities - Proposed Revision to Paragraph 17,  
AM 1-10.2, February 2, 1968, Delegation of Authority. (Report  
due within 60 days from date of this memorandum.)**

We are enclosing a copy of a proposed revision to paragraph 17, AM 1-10.2 which delegates authority for approval actions under proposed new PPM 30-4.1 (Accommodation of Utilities). Please review the proposed revisions with the material transmitted to you by my (white) Circular Memorandum of March 4, 1968, on proposed new PPM 30-4.1 and related revisions to PPM 30-4 and IM 30-6-67.

Comments from each division should be submitted to the Regional Federal Highway Administrator, and his comments, along with those from each division, referred to this office within 60 days from the date of this memorandum. The report may be combined with the report called for by my (white) Circular Memorandum of March 4, 1968.

Enclosure

Proposed Revision to Paragraph 17 AM 1-10.2 - Delegation of Authority

17. Accommodation of Utilities on Federal and Federal-aid Highway Projects

a. Regional Federal Highway Administrators are delegated authority to approve:

(1) Policies and procedures of a State highway department for accommodating utilities on the rights-of-way of Federal-aid highway projects, under paragraph 7c of PPM 30-4.1, provided such policies and procedures met the requirements of PPM 30-4.1.

(2) Agreements entered into, or amendments to existing agreements, by a State highway department with local highway authorities or other State agencies for regulating the use by utilities of the rights-of-way of Federal-aid projects, under paragraph 6d of PPM 30-4.1, provided such agreements and the policies and procedures thereunder meet the requirements of PPM 30-4.1.

(3) The execution of agreements, or amendments to existing agreements, between the Bureau of Public Roads, Federal Highway Administration and a State, or local highway authority or other government agency, where necessary to regulate the use by utilities of the rights-of-way of Federal highway projects, under paragraph 6a of PPM 30-4.1, provided such agreements and the policies and procedures thereunder meet the requirements of PPM 30-4.1.

b. Regional Federal Highway Administrators are delegated authority to approve requests by a State to permit a utility to use or occupy the right-of-way of Federal-aid projects, as follows:

(1) Installations on other than Federal-aid freeways where the State proposes to permit such use and occupancy by utilities not in accordance with the policies and procedures approved by the Regional Federal Highway Administrator under paragraph 7c of PPM 30-4.1, provided there is a showing that such use and occupancy of the highway right-of-way does not conflict with the provisions of PPM 30-4.1. This authority may be redelegated to division engineers.

(more)

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ATTACHMENT 21

(2) Installations on Federal-aid freeways involving extreme case exceptions, provided the proposed installations meet the requirements for permitting such extreme cases, so described in Section 2 of the AASHO "Policy on the Accommodation of Utilities on the National System of Interstate and Defense Highways." Utility installations involving extreme case exceptions on Interstate freeways shall be submitted for prior review by the Office of Right-of-Way and Location.

(3) Installations, other than the extreme cases described in 17b(2) above, on or across Interstate freeways, provided they meet the requirements of the AASHO "Policy on the Accommodation of Utilities on the National System of Interstate and Defense Highways." This authority shall be redelegated to division engineers.



U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
BUREAU OF PUBLIC ROADS  
WASHINGTON, D.C. 20591

October 4, 1968

**CIRCULAR MEMORANDUM TO: Regional Federal Highway Administrators  
and Division Engineers (1-9)**

**FROM : J. A. Swanson, Director of Right-of-Way and Location  
34-30 Washington, D.C.**

**SUBJECT: Revised Final Draft - Proposed PPM 30-4.1 - Accommodation  
of Utilities (Reply due as promptly as possible, but not  
later than October 31, 1968)**

On September 4, 1968, Mr. F. C. Turner transmitted the final draft of proposed PPM 30-4-1 (Accommodation of Utilities) to the AASHO/ARWA Joint Liaison Committee, affording the Committee an opportunity to review the draft before its formal issuance as a new PPM. Copies of Mr. Turner's letter and the draft were furnished to you as information by my memorandum of September 4, 1968, individually addressed to each Regional Federal Highway Administrator (1-9). Distribution was to be made to each Division Engineer by the Regional Federal Highway Administrators.

Since transmitting the foregoing draft, several utility members of the Committee met with the Administrator to discuss the scenic enhancement provisions outlined in paragraph 6g. These provisions have since been revised and included in a revised final draft of the PPM (dated October 3, 1968), copies of which are enclosed. Also enclosed are copies of Mr. Turner's letter of October 4, 1968, to the Committee, which transmits the revised draft for their review.

To assist in reviewing the revised draft, we have prepared review notes, copies of which are enclosed, We have also underscored, for emphasis, all portions of the present draft which represent a change from the one issued by my March 4, 1968, Circular Memorandum.

We urge that this draft be given high priority for early review by division and regional staffs. Each Division Engineer is asked to invite the state to submit comments on the proposed PPM. Comments from the division, region and State are to be referred through channels to this office as promptly as possible, but not later than October 31, 1968.

Enclosures

Distribution  
Regions - 5 - copies  
Divisions - 10 - Copies (5 for State)

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
BUREAU OF PUBLIC ROADS  
WASHINGTON, D.C. 20591

**OCT 4 - 1968**

IN REPLY REFER TO:  
34-30

Mr. E. M. Johnson  
Chairman AASHO Highway Utility Committee  
Mississippi State Highway Department  
Post Office Box 1850  
Jackson, Mississippi 39025

Mr. Karl E. Baetzner  
Chairman, National Liaison Committee  
American Rights-of-Way Association  
Washington Gas Light Company  
Washington, D.C. 20005

Dear Messrs. Johnson and Baetzner

This supplements my letter to you of September 4, 1968, which transmitted our final draft of proposed PPM 30-4.1 (Accommodation of Utilities) for review by your Committee.

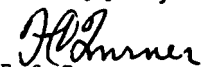
Following the recent meeting of several utility members of your Committee with Mr. Bridwell, the scenic enhancement provisions of the proposed PPM (paragraph 6g) have now revised and included in a new revised final draft (dated October 3), copies of which are enclosed.

To assist you in reviewing the new draft, portions of the draft that represent a change from the September 3, 1968, version have been enclosed in brackets. [See portions of paragraphs 2a, 5a and all of 6g.]

The revised final draft is also being sent to our field offices and to the State highway departments for review and comment to be received here on or before October 31, 1968. We would also appreciate having your comments on or before that date.

Thank you again for your cooperation and assistance.

Sincerely yours,

  
F. C. Turner  
Director of Public Roads

Enclosures

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ATTACHMENT 22

October 3, 1968

Bureau of Public Roads  
Review Notes on Final Draft  
Proposed Policy on Accommodation of Utilities

Paragraph by paragraph briefing on final draft of proposed PPM 30-4.1 and comparisons with former draft circulated by Mr. J. A. Swanson's circular memorandum of March 4, 1968.

The new provisions reflect the suggestions received in response to the March 4, 1968 circular memorandum. They include suggestions received from our field offices and other offices in Washington, the State highway departments, the utility industry and the Ad Hoc Committee of the AASHO-ARWA Joint Liaison Committee.

1. PURPOSE

Minor change made to second sentence to include reference to maintenance obligation of States.

2. POLICY

- a. Revised to amplify the public interest factor for utilities to be accommodated within the highway rights-of-way. Adds the words "or its scenic appearance" following the word "highway" in the fourth line. (See our review notes on paragraph 6g for information)
- b. The committee's suggestion for adding a new paragraph 10 under the heading of "Compliance with State Laws", has been revised and included here as new paragraph 2b.

3. APPLICATION

The entire section has been revised and subdivided as follows:

- a. Establishes an effective date.
- b. Relates application to new utility installations made after effective date, on completed and active,
  - (1) Federal-aid highway projects on a State highway system, and
  - (2) Limits application on both F.A.S. highway projects on a county road system and Federal highway projects to only those projects authorized after the effective date.
- c. Relates application to existing utility installations and limits it to active projects.
- d. Provides for extending existing policy under paragraph 15 of PPM 30-4, dated October 15, 1966, and the application of paragraph 6 of this memorandum to utility installations made during interim stages of policy implementation until approval is given to the utility accommodation policies and procedures of a State or its political subdivision by the Regional Administrator. This will vary from State to State, depending upon the time needed to reach agreement.

4. DEFINITIONS

Introductory phrase added as information that the definitions are for

the purpose of this memorandum only.

- a. Minor change made to last sentence.
  - b. Term changed from "Privately Owned Lines" to Private Lines" so as to distinguish from privately owned lines serving the public, as included under 4a.
  - c. Provides new definition for Federal Highway Projects to limit application to only those projects where funds are administered by the Federal Highway Administration and supervision is by Public Roads.
  - d. No change
  - e. Last sentence is expanded to amplify distinction between active and completed projects. Deletes reference to Stage 1 or 2.
  - f. Adds the word "real" and substitutes "or" for "and" and deletes the words, "land or," in the first line. Adds the word "dedicated" in the second line. Deletes the phrases "for the purposes of this memorandum" and "outside of the normal rights-of-way" in the last sentence.
  - g. Reworded for clarity.
  - h. Reworded for clarity.
  - i. No change
  - j. No Change
  - k. No change
  - l. No change
  - m. Substitutes "approves" for authorizes" in second line. Adds the term "private lines" at end of sentence.
  - n. Defines new term, "Utility Service Connection", as relates to 6f.
  - o. Defines new term, "Secondary Road Plan", as relates to 6b.
  - p. Defines new term, "Clear Roadside Policy", as relates to 8a(3)(a).
5. GENERAL PROVISIONS
- a. Deletes the phrase, "the rights-of-way of", in second line of former draft. Adds the words, "scenic quality" in third line.
  - b. Adds "highway" before "project" in second line. Substitutes the phrase, "be regulated by highway authorities", for, "be controlled," at end of second sentence. Substitutes the phrase, "or cause to be exercised, reasonable regulation", for the word, "control", in last sentence.
  - c. Deletes reference to congested urban areas and reworded for clarity.

(more)

6. REQUIREMENTS

- a. Revised as necessary to conform with new paragraph 3b(2) and reworded to clarify Regional Administrator's role.
- b. Substitutes "amended" for "revised" in first line.
- c. Expanded to identify conditions where corrective measures to existing utility installations may be needed to provide a safe traffic environment. Provides basis for participation of Federal-aid funds, should requests be received from State.
- d. Revised to make this a requirement on all projects of this type, i.e., where the State is without legal authority to regulate the use by utilities or private lines of the rights-of-way of Federal-aid projects. Removes any doubt where this section applies and what is to be done. Limits application to only those projects authorized after the effective date. In the interest of avoiding delays to construction of projects of this type, provides for conditional authorization to proceed pending approval by the Regional Administrator of a satisfactory utility accommodation policy. Application of this section will be on a case-by-case basis as requests are received from the State. For example, requests for approving projects in some cities or counties may not be received for several years after the effective date.
- e. Adds the phrase, "as a minimum", in second line as some States have adopted additional measures not specifically outlined in AASHO policy. Adds the phrase, "adopted July 30, 1959", at end of sentence. This provision of the PPM is not a new one; rather it is a restatement of current policy which has been in effect since October 15, 1966, (Paragraph 15 of PPM 30-4). Its retention will afford the same degree of protection and safe operation to all Federal-aid freeways, regardless of whether they are on the Interstate System or another Federal-aid system. The type or method of funding the highway project should not dictate the standards of safety to be employed in the design, construction and use of the highway facility.
- f. Revised for clarification. Deletes former reference to the AASHO policy for accommodating utilities. Makes distinction between utility service connections to individual consumers and distribution or feeder line facilities. Provides a reasonable means for avoiding indiscriminate crossings of freeways by utility service connections See definition under 4n.
- g. This section has been revised as a result of a review by the Federal Highway Administration for conformity with the Federal-aid Highway Act of 1968, Title 23, U.S.C., Section 138 and in keeping with the goals of the President's Council on Recreation and Natural Beauty. Section 138 is a declaration of national policy that special effort should be made to preserve the natural beauty of the country side and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. It requires the development of plans and programs that include measures to maintain or enhance the natural beauty of the lands traversed. The goals of the Presidents Council on Recreation and Natural Beauty include recommendations with respect to actions required to assure that utility plant sites and transmission lines are compatible with environmental values.  
(more)

- h. Adds "owned and" following the word "jointly" in second line. Substitutes the phrase, "the conditions of occupancy for each party including", for the phrase, "the applicable provisions of paragraph 9a, in addition to setting forth". Substitutes "private lines", for "privately owned lines" in last sentence.

7. REVIEWS AND APPROVALS

- a. Substitutes "within" for "on" at end of fourth line. Substitutes "private lines" for "privately owned lines" at end of second sentence. Deletes latter part of former paragraph which required the State to evaluate and describe in advance, the policies employed by local authorities. Eliminates former reference to actions taken or proposed under paragraph 6d.
- b. Adds last sentence to account for review and reporting by Division Engineer on utility accommodation policies to be employed pursuant to paragraph 6d.
- c. Substitutes the phrase, "the policies to be employed pursuant to" for the former one, "the agreements entered into by a State under". Adds the phrase, "or political subdivision", at end of sentence. Adds sentence which establishes target date for accomplishing preparatory work leading to approval of utility accommodation policies in all States within about one year from the effective date of the PPM.
- (old) d. Deletes all of the former paragraph.
- (new) d. Adds "or political subdivision" following the word "State" in first line. Deletes "or agreements" from second line of former draft.
- (new) e. No change.
- (new) f. Clarifies conditions under which State is to obtain prior concurrence by Public Roads on a utility's application to install its lines within the rights-of-way of a Federal-aid highway project.
  - (1) Reworded to Clarify.
  - (2) New provision to account for hardship cases pursuant to paragraph 6g.
- (new) (3) Adds phrase, "adopted July 30, 1959", at end of sentence.
- (new) (4) No Change

8. STATE ACCOMMODATION POLICIES AND PROCEDURES

- a. Deletes the phrase, "satisfactory and reasonably uniform", from first sentence of former draft.
  - (1) No change
  - (2) Adds "and utility", near and of sentence.
  - (3) No change
- (a) Last sentence revised to conform with definition of new term under 4p.

(more)

- (b) Combines both sentences of former draft as one, making appropriate reference to both industry codes and highway standards.
  - (c) Deletes first sentence of former draft.
  - (d) Deletes "specifically" from the last sentence of former draft.
  - (4) Substitutes the phrase, "State's file must contain evidence in writing", for the phrase in the former draft, "State and utility must agree in writing", at beginning of second sentence. Third sentence has been rewritten to reflect effective date.
  - (5) Substitutes the phrase, "Every effort should be made to avoid conflict", for the phrase in the former draft, "New utility installations should not conflict", at beginning of first sentence.
9. USE AND OCCUPANCY AGREEMENTS
- a. No change
    - (1) Substitutes the phrase, "as a minimum, describe", for the words of the former draft, "explicitly state".
    - (2) Adds the word "general"
    - (3) No change
    - (4) No change
    - (5) Minor rewording
    - (6) No change
  - b. No change
  - c. No change

PROPOSED CHANGES TO PPM 30-4

- 7a(5) Minor rewording of latter part of sentence to relate to State's utility accommodation policies and procedures, approved under PPM 30-4.1
- 7k(3) No change
- 15a Substitutes the phrase, "the State's utility accommodation policies and procedures, approved under PPM 30-4.1", for the reference to "PPM 30-4.1" in the former draft.
- 15b (1), (2), (3), and (4) Substitutes, "private lines", for, "privately owned lines", in sub paragraph (1) and (2).

Proposed PPM 30-4.1

SUBJECT: Accommodation of Utilities

1. PURPOSE

This memorandum prescribes policies and procedures for accommodating utility facilities on the rights-of-way of Federal and Federal-aid highway projects. It implements the applicable provisions of Sections 1.23 and 1.27 of Title 23, C.F.R. and Section 116 of Title 23, U.S.C., with respect to the maintenance obligations of the State thereunder as affected by the use of the rights-of-way of Federal-aid highway projects for accommodating utility facilities.

2. POLICY

a. It is in the public interest for utility facilities to be accommodated on the rights-of-way of a federal or Federal-aid highway project when such use and occupancy of the highway rights-of-way does not interfere with the free and safe flow of traffic [or otherwise impair the highway or its scenic appearance] and does not conflict with the provisions of Federal, State or local laws or regulations or the provisions of this memorandum.

b. The provisions of this memorandum concern the location and manner in which utility installations are to be made within the rights-of-way of Federal and Federal-aid highway projects and the measures to be taken by highway authorities to preserve and protect the integrity of the highway, including aesthetic considerations and safety of highway traffic. There is no intent to alter the authority of utilities to install their facilities on public highways pursuant to law or franchise and reasonable regulation by highway authorities.

(more)

3. APPLICATION

a. This memorandum is effective on the date of issuance.

b. It applies to new utility installations, made after the effective date, within the rights-of-way of active and completed,

(1) Federal-aid highway projects on a State highway system, and

(2) Federal-aid secondary highway projects on a county highway system not under the jurisdiction of the State and Federal highway projects which are authorized after the effective date.

c. It also applies to existing utility installations which are to be retained, relocated or adjusted within the rights-of-way of active highway projects, as described in paragraphs 3b (1) and (2).

d. Until approval is given to the utility accommodation policies and procedures of the State or its political subdivision by the Regional Administrator under paragraph 7c of this memorandum, utility installations within the rights-of-way of Federal and Federal-aid highway projects shall be in accordance with the provisions of paragraph 15 of PPM 30-4 dated October 15, 1966, and paragraph 6 of this memorandum.

4. DEFINITIONS

For the Purpose of this memorandum, the following definitions shall apply:

a. "Utility facilities" means and includes all privately, publicly or cooperatively owned lines, facilities and systems for producing, transmitting or distributing communications, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water not connected with highway drainage, and other similar commodities, including fire and police signal

(more)

systems and street lighting systems, which directly or indirectly serve the public or any part thereof. The term "utility" means the utility company, i.e. (any person or private or public entity) owning and/or operating utility facilities as defined in this paragraph, including any wholly owned or controlled subsidiary.

b. "Private lines" means privately owned facilities which convey or transmit the commodities outlined in paragraph 4a, but are devoted exclusively to private use.

c. "Federal highway projects" are those projects involving the use of funds administered by the Federal Highway Administration where the location, design or construction of the project is under the direct supervision of the Bureau of Public Roads.

d. "Federal-aid highway projects" are those projects administered by a State which involve the use of Federal-aid highway funds for the construction or improvement of a Federal-aid highway or related highway facilities or for the acquisition of rights-of-way for such projects, including highway beautification projects under Section 319, Title 23, U.S.C.

e. "Active Federal or Federal-aid highway projects" are those for which any phase of development has been programmed for Federal or Federal-aid highway funds. A project will be considered active until the date of its final acceptance by the Bureau of Public Roads and thereafter will be considered completed.

f. "Rights-of-way" means real property or interests therein, acquired, dedicated or reserved for the construction, operation and maintenance of a highway in which Federal-aid or Federal highway funds are or may be involved in any stage of development. Lands acquired under Section 319(b),

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Title 23, U.S.C. (scenic strips - 1965 Highway Beautification Act)

shall be considered to be highway rights-of-way.

g. "Highway" means any public way for vehicular travel, including the entire area within the rights-of-way and related facilities, constructed or improved in whole or in part with Federal-aid or federal highway funds.

h. "Freeway" means a divided arterial highway with full control of access.

i. "Director" means the Director of the Bureau of Public Roads, Federal Highway Administration.

j. "Regional Administrator" means the Regional Administrator of the Federal Highway Administration.

k. "Division Engineer" means the Division Engineer of the Bureau of Public Roads, Federal Highway Administration.

l. "State" means that department, commission, board, or official of any State charged by its laws with the responsibility for highway administration.

m. "Use and Occupancy agreement" means the document by which the State, or other highway authority, approves the use and occupancy of highway rights-of-way by utility facilities or private lines.

n. "Utility Service Connection" means a service connection, from a utilities distribution or feeder line or main to the premises served.

o. "Secondary Road Plan"-- is a statement, prepared by a State highway department and approved by the Director, in which the State outlines the standards and procedures it will use to plan, design and construct projects on the Federal-aid Secondary Highway System which are to be financed in part with Federal-aid Secondary Highway Funds, in accordance with Sec. 117, Title

(more)

23, U.S.C. and PPM 20-5.

p. "Clear Roadside Policy" means that policy employed by a highway authority to increase safety and traffic operation and improve the appearance of highways by designing, constructing and maintaining highway roadides as flat and rounded an practical and as free as possible from physical obstructions above the ground such as trees, drainage structures, massive sign supports, utility poles and other ground-mounted obstructions. The policy is also directed at the removal of roadside obstacles which are likely to be associated with accident or injury to the highway user. Where such obstacles are absolutely essential, they mat be constructed to yield under specified levels of impact or otherwise be protected from collision by an out of control vehicle.

#### 5. GENERAL PROVISIONS

a. It is the responsibility of each State highway department to maintain, or cause to be maintained, Federal-aid highway projects as necessary to preserve the integrity, [scenic quality,] operational safety, and function of the highway facility.

b. Since the manner in which utilities cross or otherwise occupy the rights-of-way of a Federal-aid highway project can materially affect the highway, its appearance, safe operation, and maintenance, it is necessary that such use and occupancy, where authorized, be regulated by highway authorities. In order for a State to fulfill its responsibilities in this area, it must exercise, or cause to be exercised, reasonable regulation over such use and occupancy through the establishment and enforcement of utility accommodation policies and procedures.

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c. Due to the increasing competition for available space between public transportation and other service facilities, such as for highway, rapid transit, railroad and utility purposes, it is important that rights-of-way be used in the most efficient manner consistent with the overall public interest.

6. REQUIREMENTS

a. On Federal highway projects authorized after the effective date of this memorandum, the Regional Administrator will apply, or cause to be applied, utility accommodation policies similar to those required on Federal-aid highway projects, as appropriate and necessary to accomplish the objectives of this memorandum. Where appropriate, agreements should be entered into between the Regional Administrator and the State or local highway authorities or other government agencies, or existing agreements should be amended, as may be necessary for the Regional Administrator to establish, or cause to be established, adequate control and regulation of use by utilities and private lines of the rights-of-way of Federal highway projects.

b. Secondary Road Plans shall be amended as necessary to comply with the provisions of this memorandum. Project actions by the Division Engineer or submissions by the State to the Division Engineer which are not now required should not be established for Secondary Road Plan projects as a result of this memorandum.

c. Where existing utility facilities are likely to be associated with injury or accident to the highway user, as determined by accident history or safety studies, the State is to initiate appropriate corrective measures to provide a safe traffic environment. Any requests received from the State involving Federal fund participation in the cost of adjusting or relocating utility facilities pursuant to this paragraph shall be subject

(more)

to the provisions of PPM 30-4.

d. The following procedures apply where the State is without legal authority to regulate the use by utilities or private lines of the rights-of-way of Federal-aid highway projects. Common examples are Federal-aid highway projects on a State highway system in cities and Federal-aid secondary highway projects on a county highway system.

(1) All such projects authorized after the effective date of this memorandum shall include a special provision in the project agreement for regulating such use of the highway rights-of-way. The provision shall require that the State will, by formal agreement with appropriate officials of a county or municipal government, regulate, or cause to be regulated, such use by highway authorities on a continuing basis and in accordance with a satisfactory utility accommodation policy for the type of highway involved.

(2) For the purpose of this paragraph, a satisfactory utility accommodation policy is one that prescribes a degree of protection to the highway, at least equal to the protection provided by the State's utility accommodation policy approved under paragraph 7c and d.

(3) Such projects may be conditionally authorized in accordance with the provisions of paragraph 3d, pending approval of a satisfactory utility accommodation policy by the Regional Administrator under paragraph 7c.

e. Utilities that are to cross or otherwise occupy the rights-of-way of Federal-aid freeways shall, as a minimum, meet the requirements of the AASHO "Policy on the Accommodation of Utilities on the National System of Interstate and Defense Highways", adopted July 30, 1959.

f. In expanding areas along Federal-aid freeways it is expected that utilities will normally install distribution or feeder line crossings of freeways, spaced as needed to serve consumers in a general area along either or both sides of a freeway, so as to minimize the need for crossings of a freeway by utility service connections, Except in areas where utility services are not

(more)

available within reasonable distance along the side of the freeway where the utility service is needed, crossings of Federal-aid freeways by utility service connections should not be permitted.

g. [The type and size of utility facilities and the manner and extent to which they are permitted within areas of scenic enhancement and natural beauty can materially alter the scenic quality, appearance and view of highway roadsides and adjacent areas, Such areas include scenic strips, overlooks, rest areas, recreation areas and the rights-of-way of highways adjacent thereto. Also included are the right-of-way of sections of highways which pass through public parks, recreation areas, wildlife and waterfowl refuges and historic sites, as described under Title 23 USC Section 138.

(1) New utility installations within the foregoing described strips, overlooks, areas or rights-of-way, when acquired or improved with Federal or Federal-aid funds, are not to be permitted, except as follows:

(a) Now underground utility installations may be permitted within such strips, overlooks, areas or rights-of-way where they do not require extensive removal or alteration of trees visible to the highway user or impair the appearance of the area.

(b) New overhead (aerial) installations of communication and electric power lines (35 K.V. or less) will not be permitted at such locations. However, overhead (aerial) installations of electric power lines (above 35 K.V.) may be permitted where it is demonstrated to the satisfaction of the Division Engineer that,

- (i) other utility locations are not available or are extremely difficult and unreasonably costly or are less desirable from the standpoint of scenic appearance,
- (ii) undergrounding is not technically or economically

- More -

feasible or is more detrimental to the scenic appearance of the area, and

(iii) the proposed installation will be made at a location and in a manner that will not significantly detract from the scenic quality of the area being traversed, and will employ suitable designs and materials which give the greatest weight to aesthetic values, such as self-supporting, armless, single-pole construction with vertical configuration of conductors and cable.

(2) The provisions of this paragraph also apply to utility installations that are needed for a highway purpose, such as for highway lighting, or to serve a weigh station, rest or recreational area.

(3) There may be cases of extreme hardship or other extenuating circumstances encountered involving some degree of variance with the provisions of this paragraph. Such cases shall be subject to prior review and concurrence by the Director. Where the State proposes to approve a request from a utility involving a hardship case, the State shall submit its proposal and a full report of the circumstances to the Division Engineer. Where a hardship case involves a proposed installation within the rights-of-way of a highway passing through a public park, area, refuge, or site, as described under Title 23 USC 138, the State's report shall include the views of appropriate planning or resource authorities having jurisdiction over the land which the highway passes through. The Division Engineer shall review the States proposal and submit his report and recommendations through the Regional Administrator to the Director.]

- More -



h. Where the utility has a compensable interest in the land occupied by its facilities and such land is to be jointly owned and used for highway and utility purposes, the State and utility shall agree in writing as to the obligations and responsibilities of each party. Such agreements shall incorporate the conditions of occupancy for each party, including the rights vested in the State and the rights and privileges retained by the utility. In any event, the interest to be acquired by or vested in the State in any portion of the rights-of-way of a Federal or Federal-aid highway project to be vacated, used or occupied by utilities or private lines shall be of a nature and extent adequate for the construction, safe operation and maintenance of the highway project.

7. REVIEWS AND APPROVALS

a. Each State shall submit a report to the Division Engineer on the authority of utilities to use and occupy the rights-of-way of State highways, the State's authority to regulate such use and the policies and procedures the State employs or proposes to employ for accommodating utilities within the rights-of-way of Federal-aid highways and, its jurisdiction. Where applicable, the State shall include similar information on the use and occupancy of each highways by private lines. The State shall identify those sections, if any, of the Federal-aid highway systems within its borders where the State is without legal authority to regulate use by utilities.

- More -

b. The Division Engineer shall review the information presented to him by the State under paragraph 7a and prepare a report outlining his recommendations to the Regional Administrator. Similar reports shall be prepared and referred to the Regional Administrator, and the policies to be employed pursuant to paragraph 6d are received from the State.

c. Upon determination by the Regional Administrator that a State's policies and procedures under paragraph 7a and the policies to be employed pursuant to paragraph 6d meet the requirements of this memorandum, he shall approve their use on Federal-aid highway projects in that State or political subdivision. It is expected that the preparatory work attendant to such approval action will get underway and proceed as expeditiously as possible following the issuance of this memorandum. Leading to the approval of the accommodation policies in all States within about one year from the effective date of this memorandum. A copy of the reports, approved policies and procedures and related actions taken pursuant to paragraphs 6c, 7b, c and d shall be furnished to the Office of Right-of-Way and Location.

d. Any changes, additions or deletions the State or political subdivision proposes to the policies and procedures approved by the Regional Administrator pursuant to this memorandum shall be subject to the provisions of paragraph 7a, b, and c.

e. The State's practices under the policies and procedures or agreements approved under paragraph 7c shall be periodically reviewed by the Division Engineer and reported to the Regional Administrator.

f. When a utility files a notice or makes an individual application or request to a State to use or occupy the rights-of-way of a Federal-aid highway project, the State to not required to submit the matter to the Bureau of Public Roads for prior concurrence, except under the following circumstances:

(more)

(1) Installations on Federal-aid highways other than freeways where the State proposes to permit the use and occupancy by utilities not in accordance with the policies and procedures approved by the Regional Administrator under paragraph 7c.

(2) Installations involving extreme hardship cases pursuant to paragraph 6g.

(3) Installations on Federal-aid freeways involving extreme case exceptions, as described in the AASHO "Policy on the Accommodation of Utilities on the National System of Interstate and Defense Highways", adopted July 30, 1959.

(4) Installations on or across Interstate freeways.

#### 8. STATE ACCOMMODATION POLICIES AND PROCEDURES

a. This paragraph outlines provisions considered necessary to establish policies and procedures for accommodating utility facilities on the rights-of-way of Federal-aid highway projects. These policies and procedures shall meet the requirements of paragraph 6e through 6h and shall include adequate provision with respect to the following:

(1) Utilities must be accommodated in a manner which will not impair the highway or interfere with the safe and free flow of traffic.

(2) Consideration shall be given to the effect of utility installations in regard to aesthetics and the cost or difficulty of highway and utility maintenance.

(3) The use and occupancy of highway rights-of-way by utilities must comply with the State's standards regulating such use. These standards must include but are not limited to the following:

(4) The horizontal and vertical location requirements and clearances for the various types of utilities must be clearly stated. These

(more)

must be adequate to insure compliance with the clear roadside policies for the particular highway involved. The roadside clearances for above ground utility facilities shall be consistent with those clearances applicable to other roadside obstacles on the type of highway involved, reflecting good engineering and economic considerations.

(4) The applicable provisions of government or industry codes required by law or regulation must be set forth or appropriately referenced, including highway design standards or other measures which the State deems necessary to provide adequate protection to the highway, its safe operation appearance and maintenance.

(c) Specifications for and methods of installation; requirements for preservation and restoration of highway facilities, appurtenances, and natural features on the rights-of-way; and limitations on the utility's activities within the rights-of-way should be prescribed as necessary to protect highway interests.

(d) Measures necessary for protection of traffic and its safe operation during and after installation of facilities, including control-of-access restrictions, provisions for rerouting or detouring of traffic, traffic control measures to be employed, limitations on vehicle parking and materials storage, protection of open excavations and the like must be provided.

(4) Compliance with applicable State laws and approved State accommodation policies must be assured. The State's file must contain evidence in writing as to the terms under which utility facilities are to cross or otherwise occupy highway rights-of-way in accordance with paragraph 9. All utility installations made on highway rights-of-way after the

(more)

effective date of this memorandum shall be subject to prior approval by the State or by other highway authorities under paragraph 6d. However, such prior approval will not be required where so provided in the use and occupancy agreement for such matters as facility maintenance, installation of service connections on highways other than freeways or emergency operations.

(5) Every effort should be made to avoid conflict between utility installations and existing or planned uses of highway rights-of-way for highway purposes. Proposed utility installations and future highway projects shall be coordinated to avoid, to the fullest extent possible, any conflict in location, construction, or method of installation.

#### 9. USE AND OCCUPANCY AGREEMENTS

a. The use and occupancy agreements setting forth the terms under which the utility to cross or otherwise occupy the highway rights-of-way must include or by reference incorporate:

(1) The State standards for accommodating utilities. Since all of the standards will not be applicable to an individual utility installation, the use and occupancy agreement must, as a minimum, describe the requirements for location, construction, protection of traffic, maintenance, access restrictions and any special conditions applicable to each installation.

(2) A general description of the size, type, nature and extent of the utility facilities being located within the highway rights-of-way.

(3) Adequate drawings or sketches showing the existing and/or proposed location of the utility facilities within the highway rights-of-way with respect to the planned highway improvement, the rights-of-way lines and, where applicable, the control of access lines and approved access points.

(4) The extent of liability and responsibilities associated with future adjustment of the utilities to accommodate highway improvements.

(more)

(5) The action to be taken in case of noncompliance with the State's requirements.

(6) Other provisions as deemed necessary to comply with laws and regulations.

b. The form of the use and occupancy agreement is not prescribed. At the State's option, the use and occupancy provisions may be incorporated as a part of the reimbursement agreement required by paragraph 7 of PPM 30-4.

c. Area or Statewide master agreements covering the general terms of a utility's use and occupancy of the highway rights-of-way may be used provided individual requests for such use and occupancy are processed in accordance with paragraph 8a(4) of this memorandum.

#### Proposed Change to PPM 30-4

#### 4f

Where a utility company has a real property interest in land to be acquired for a scenic strip, overlook, rest area or recreation area, the State shall take whatever steps are necessary to protect and preserve the area or strip being acquired. This will require a determination by the State as to whether retention of the utility at its existing location, will now or later adversely affect the appearance of the area being acquired, and whether it will be necessary to extinguish, subordinate or acquire

(more)

the utility's interests therein, or to rearrange, screen or relocate the utility's facilities thereon, or both. Where the adjustment or relocation of utility facilities is necessary, the provisions of this memorandum are to be applied. In such cases, the State shall determine, subject to concurrence by the division engineer, whether the added cost of acquisition attributable to the utility's property interest or facilities which may be located thereon outweigh the aesthetic values to be received.

4g

Highway Beautification Act funds or Federal-aid funds should not be used to relocate, adjust, rearrange or convert existing utility facilities (aerial lines) for the sole purpose of enhancing the area of highway right-of-way being traversed unless it represents a minor part of an effort to preserve a scenic or landscaped area.

7a(5)

That the facilities to be relocated to a position within the highway right-of-way will be accommodated in accordance with the utility accommodation policies and procedures of the State or its political subdivision approved under PPM 30-4.1.

7k(3)

When the division engineer has been furnished and has reviewed the proposed or executed agreement between the State and the utility, and

15a

Any utility facilities which are to be retained, installed, adjusted or relocated within the right-of-way of a Federal-aid project shall be accommodated in accordance with the provisions of the utility accommodation policies and procedures of the State or its political subdivision approved under PPM 30-4.1.

(more)

15b

In any instance where utility facilities are to use and occupy the right-of-way of a proposed Federal-aid project, on or before the State is authorized to proceed with the physical construction of the highway project, the State shall demonstrate to the satisfaction of the division engineer that:

(1) A satisfactory agreement has been reached between the State and all utility owners or the owners of private lines involved, in accordance with PPM 30-4.1, and

(2) The interest acquired by, or vested with, the State in that portion of the highway right-of-way to be vacated, used, or occupied by the utility facilities or private lines is of a nature and extent adequate for the construction, operation and maintenance of the highway project, and

(3) Suitable arrangements have been made between such owners and State for accomplishing, scheduling and completing the relocation or adjustment work, for the disposition of any facilities to be removed from or abandoned within the highway right-of-way, and for the proper coordination of such activities with the planned highway construction. Such arrangement should be made at the earliest feasible date in advance of the planned highway construction, and

d. The plans for the highway project have been prepared in accordance with the provisions of paragraph 4i of PPM 40-3.1.

March 21, 1969

**U.S. DEPARTMENT OF TRANSPORTATION**  
**FEDERAL HIGHWAY ADMINISTRATION**  
**BUREAU OF PUBLIC ROADS**  
**WASHINGTON, D.C. 20591**

UTILITY-HIGHWAY  
BRIEFING SESSION NOTES  
PUBLIC ROADS UTILITY POLICIES

2

(PPM 30-4. 1, ACCOMMODATION OF UTILITIES, DATED NOVEMBER 29. 1968, AND  
PPM 30-4, UTILITY RELOCATIONS AND ADJUSTMENTS, DATED FEBRUARY 14, 1969).

THESE NOTES AND A LIST OF QUESTIONS AND ANSWERS HAVE BEEN PREPARED AS AN AID  
FOR CONDUCTING BRIEFING SESSIONS AT THE DATES AND LOCATIONS DESCRIBED BELOW.  
COPIES OF BACK ARE PLANNED FOR DISTRIBUTION TO PARTICIPANTS FOR THEIR INFORMATION,  
GUIDANCE AND CONVENIENCE. THEY ARE NOT OFFICIAL POLICY STATEMENTS OF THE BUREAU  
OF PUBLIC ROADS.

LOCATIONS AND DATES

- (1) APRIL 1, 2 AND 3 AT THE BELLERIVE HOTEL, 214 E AMOUR BOULEVARD AT  
WARWICK BOULEVARD, KANSAS CITY, MISSOURI 64111.
- (2) APRIL 9, 10 AND 11 AT MARYLAND STATE ROADS COMMISSION (AUDITORIUM),  
300 W PRESTON STREET, BALTIMORE, MARYLAND 21201.
- (3) APRIL 15, 16 AND 17 AT CALIFORNIA STATE OFFICE BUILDING, ROOM 1194,  
455 GOLDEN GATE AVENUE, SAN FRANCISCO, CALIFORNIA 94102. (THE BUILDING  
IS LOCATED ACROSS THE STREET FROM THE FEDERAL OFFICE BUILDING IN DOWNTOWN  
SAN FRANCISCO.)
- (4) APRIL 22, 23 AND 24 AT GEORGIA STATE HIGHWAY DEPARTMENT (AUDITORIUM),  
NO. 2 CAPITOL SQUARE, ATLANTA, GEORGIA 30334.
- (5) APRIL 29, 30 AND MAY 1 AT ILLINOIS DIVISION OF HIGHWAYS (AUDITORIUM),  
2300 SOUTH 31st STREET, SPRINGFIELD, ILLINOIS 62706.

(PRESIDING AT SESSIONS (1), (2), AND (4) - MESSRS. J. E. KIRK AND  
L. M. BOLON, UTILITIES STAFF, WASHINGTON, D. C., OFFICE; AT SESSIONS (3)  
AND (5) - MESSRS. J. E. KIRK, CHIEF, UTILITIES STAFF, AND C. H. SNOW,  
REGION 8 UTILITIES ENGINEER.)

I. AGENDA

FIRST DAY SESSION (State, BPR and FHWA Representatives)

8:00 TO 8:20 A. M. (OPENING REMARKS - WELCOME - ANNOUNCEMENTS BY HOSTING  
REGIONAL OFFICE AND STATE)

8:20 TO NOON (BRIEFING ON PARAGRAPHS 1 THROUGH 4 OF PPM 30-4.1)

1:00 TO 5:00 P. M. (BRIEFING ON PARAGRAPHS 5 THROUGH 7 OF PPM 30-4.1)

SECOND DAY SESSION (State, BPR and FHWA Representatives)

8:00 TO 10:00 A. M. (BRIEFING ON PARAGRAPHS 8 AND 9 OF PPH 30-4.1)

10:00 TO NOON (OPEN DISCUSSION OF PPM 30-4.1 - QUESTION AND ANSWERS)

1:00 TO 5:00 P. M. (REVISIONS TO PPM 30-4 BRIEFING AND DISCUSSION)

THIRD DAY SESSION (Utility Representatives)\*

8:00 TO 8:20 A. M. (OPENING REMARKS - WELCOME - ANNOUNCEMENTS BY HOSTING  
REGIONAL OFFICE AND STATE)

8:20 TO NOON (BRIEFING ON PPM 30-4.1)

1.00 TO 3:00 P. M. (BRIEFING ON PPM 30-4.1)

3:00 TO 4:00 P. M. (BRIEFING ON PPM 30-4)

4:00 TO 5:00 P. M. (OPEN DISCUSSION)

(MID-MORNING AND MID-AFTERNOON COFFEE BREAKS AND LUNCH HOUR MAY BE ADJUSTED  
AS CONVENIENT.)

\* State representatives invited to attend Third Day Session.

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ATTACHMENT 23

II INTRODUCTION

A. PURPOSE

- (1) TO PROVIDE ASSISTANCE IN ESTABLISHING A REASONABLE UNIFORMITY NATIONWIDE IN OPERATIONS UNDER THE NEW POLICIES.
- (2) THESE ARE INFORMAL WORKSHOPS OF SPECIAL INTEREST TO THOSE HAVING MAJOR DUTIES AND RESPONSIBILITIES IN THE ACCOMMODATION, RELOCATION AND ADJUSTMENT OF UTILITIES.
- (3) SOME OF THE QUESTIONS RECEIVED IN ADVANCE OF THESE SESSIONS HAVE EXPRESSED CONCERN ABOUT CERTAIN PROVISIONS OF PPM 30-4.1. SOME HAVE ANTICIPATED THAT APPLICATION OF ITS PROVISIONS WILL BE DETRIMENTAL TO THE UTILITY INDUSTRY OR CAUSE IT GREAT ADDED EXPENSE. WE RECOGNIZE THE CONCERN BUT DO NOT SHARE THESE VIEWS. ONE PURPOSE OF THESE SESSIONS IS TO SHED SOME LIGHT ON THOSE PROVISIONS WHICH MAY TROUBLE YOU. HOWEVER, PLEASE BEAR IN MIND, THAT THESE SESSIONS ARE NOT PUBLIC HEARINGS OR FORUMS FOR CHANGING OR REVISING THE PPM OR FOR DEBATING THE POPULARITY OR MERIT OF ITS PROVISIONS.
- (4) AS IS THE CASE WITH ANY NEW POLICY STATEMENT, OPERATION AND APPLICATION OF ITS PROVISIONS WILL BE CAREFULLY OBSERVED FOR A PERIOD OF TIME TO SEE IF CHANGES ARE WARRANTED. IN THIS RESPECT, WE INVITE THE STATE HIGHWAY AND UTILITY INDUSTRY REPRESENTATIVES TO JOIN WITH US. IF SERIOUS PROBLEMS ARISE OR APPLICATION OF THE POLICY CAUSES UNDUE HARDSHIP OR

DISPROPORTIONATE INCREASE IN UTILITY CONSTRUCTION OR OPERATING COSTS, FEDERAL OFFICIALS WILL, OF COURSE, BE GLAD TO TAKE A SERIOUS LOOK AT CHANGING THE POLICY.

- (5) IN GENERAL, PEOPLE IN AND OUT OF GOVERNMENT TALK MORE COMFORTABLY THAN THEY WRITE, LISTEN BETTER THAN THEY READ. WE HOPE THIS FACE-TO-FACE DIALOGUE IS REWARDING.

III DEVELOPMENT OF PPM 30-4.1

A. EXISTING POLICY STATEMENTS AND NEED FOR FURTHER POLICY DEVELOPMENT

SINCE 1956, TWO POLICY STATEMENTS HAVE BEEN DEVELOPED FOR ACCOMMODATING UTILITIES ON THE RIGHTS-OF-WAY OF FEDERAL-AID HIGHWAYS. BOTH ARE SOMEWHAT LIMITED IN THEIR APPLICATION AND SCOPE.

IN 1959, AASHO ISSUED "A POLICY ON THE ACCOMMODATION OF UTILITIES ON THE NATIONAL SYSTEM OF INTERSTATE AND DEFENSE HIGHWAYS".\* ITS PRIMARY PURPOSE IS TO PRESERVE THE ACCESS CONTROL FEATURE BY KEEPING THESE IMPORTANT HIGHWAYS RELATIVELY FREE FROM LONGITUDINAL ENCROACHMENT BY UTILITY LINES. IN 1966, PUBLIC ROADS EXTENDED THIS POLICY FOR APPLICATION TO ALL FEDERAL-AID FREEWAY PROJECTS.

THE OTHER EXISTING POLICY FOR ACCOMMODATING UTILITIES HAS BEEN AS OUTLINED IN PARAGRAPH 15 OF PPM 30-4 ON "UTILITY RELOCATIONS AND ADJUSTMENTS". THIS PROVISION WAS ADDED TO THE OCTOBER 1966 VERSION OF THE PPM. ITS APPLICATION WAS LIMITED TO PROPOSED OR ACTIVE FEDERAL-AID PROJECTS.

\*AASHO RECENTLY CHANGED THE TITLE TO "A POLICY ON THE ACCOMMODATION OF UTILITIES ON FREEWAY RIGHTS-OF-WAY", ADOPTED FEBRUARY 15, 1969. IT NOW APPLIES TO ALL FREEWAYS, NOT JUST INTERSTATE HIGHWAYS. (SEE COMMENTS ON PAR. 6e)

WHILE THE FOREGOING POLICIES ARE SOUND AND THE RESULTS OBTAINED FROM THEIR APPLICATION HAVE BEEN HIGHLY SUCCESSFUL, FURTHER EXPANSION AND EXTENSION OF THESE MATTERS WERE NEEDED TO ALL FEDERAL-AID HIGHWAYS. THE EXPANSION OF UTILITY SERVICES, PARTICULARLY IN AND AROUND URBAN AREAS, MAKES NECESSARY ADEQUATE REGULATION OF THE USE OF FEDERAL-AID HIGHWAYS BY UTILITIES ON COMPLETED AS WELL AS ON PROPOSED OR ACTIVE PROJECTS. THE MANNER IN WHICH UTILITY FACILITIES CROSS OR OTHERWISE OCCUPY THE RIGHT-OF-WAY MUST BE REGULATED TO PROTECT THE HIGHWAY, ITS SAFE OPERATION, APPEARANCE AND EFFICIENCY OF MAINTENANCE.

AASHO DOES NOT HAVE A POLICY FOR ACCOMMODATING UTILITIES ON HIGHWAYS OTHER THAN FREEWAYS. (A GUIDE ON THIS GENERAL TOPIC IS NOW UNDER PREPARATION BY THE AASHO COMMITTEE ON PLANNING AND DESIGN POLICIES. THIS WILL BE DISCUSSED LATER IN THE PROGRAM). THE VARIOUS STATE HIGHWAY DEPARTMENTS HAVE DEVELOPED THEIR OWN POLICIES FOR REGULATING THE USE BY UTILITIES OF HIGHWAYS OTHER THAN FREEWAYS. THERE IS CONSIDERABLE VARIATION IN POLICY FROM STATE TO STATE ON HIGHWAYS OTHER THAN FREEWAYS. MODIFICATIONS AND IMPROVEMENTS IN THE POLICIES AND PRACTICES OF MANY STATES ARE NEEDED AND LONG OVERDUE.

WHILE THE FOREGOING FACTORS HAVE EXISTED, THE RECENT EMPHASIS ON SAFETY AND PRESERVATION OF NATURAL BEAUTY BY HIGHWAY AUTHORITIES AND THE CONGRESS HAS SERVED AS A CATALYST FOR THE PREPARATION OF PPM 30-4.1. APPLICATION OF THE PPM SHOULD RESULT IN REASONABLE

UNIFORMITY IN THE OPERATIONS, PRACTICES AND ENGINEERING REQUIREMENTS EMPLOYED BY THE SEVERAL STATE HIGHWAY DEPARTMENTS FOR REGULATING USE BY UTILITIES OF HIGHWAY RIGHTS-OF-WAY.

A. MEETINGS AND COORDINATION WITH THE AASHO-ARWA JOINT LIAISON COMMITTEE

THE PPM HAS BEEN UNDER DEVELOPMENT FOR MORE THAN A YEAR. DURING THIS PERIOD, DISCUSSION DRAFTS WERE CIRCULATED FOR REVIEW AND COMMENT BY THE AASHO/ARWA JOINT LIAISON COMMITTEE, UTILITY INDUSTRY REPRESENTATIVES, STATE HIGHWAY DEPARTMENTS AND OUR FIELD OFFICES ON THREE OCCASIONS; AUGUST 2, 1967, MARCH 4 AND OCTOBER 4, 1968. MEETINGS WERE ALSO HELD WITH THE COMMITTEE ON NOVEMBER 15, 1967, MAY 24 AND OCTOBER 30, 1968, TO DISCUSS EACH DRAFT. THE MEETINGS WERE PRODUCTIVE AND INFORMATIVE. THEY PRODUCED MUCH CONSTRUCTIVE CRITICISM AND MANY GOOD SUGGESTIONS FOR IMPROVING THE PPM. IN EFFECT, THIS NATIONWIDE REVIEW PROCESS AFFORDED AN OPPORTUNITY TO RESPONSIBLE REPRESENTATIVES FROM THE UTILITY INDUSTRY, THE STATES AND FEDERAL GOVERNMENT TO PARTICIPATE IN THE POLICY DEVELOPMENT.

C. AASHO GUIDE

THERE HAS BEEN SOME CONFUSION ABOUT THE RELATIONSHIP BETWEEN PUBLIC ROADS PPM 30-4.1 (ACCOMMODATION OF UTILITIES) AND A PROPOSED AASHO GUIDE ON THIS TOPIC. BOTH HAVE BEEN UNDER DEVELOPMENT DURING THE PAST YEAR. THE MAJOR DISTINCTIONS BETWEEN THE TWO ARE:

- (1) THE PPM IS AN OFFICIAL POLICY AND PROCEDURE MEMORANDUM OF PUBLIC ROADS. THE GUIDE, WHEN PUBLISHED, WILL BE AN INFORMATIONAL GUIDE OF AASHO.
- (2) THE PPM HAS BEEN ISSUED (NOVEMBER 29, 1968). THE AASHO GUIDE IS STILL IN THE DEVELOPMENT STAGE.
- (3) THE PPM ASKS THE STATE HIGHWAY DEPARTMENTS TO ESTABLISH NEW OR TO MODERNIZE EXISTING UTILITY ACCOMMODATION POLICIES AND STANDARDS. THE GUIDE SHOULD PROVIDE A REASONABLY UNIFORM BASIS FOR ALL STATES TO FOLLOW IN ESTABLISHING SUCH POLICIES AND STANDARDS.

THE PROPOSED GUIDE IS BEING PREPARED BY THE AASHO COMMITTEE ON PLANNING AND DESIGN POLICIES. DURING ITS DEVELOPMENT PERIOD, DRAFTS OF THE PROPOSED GUIDE WERE TRANSMITTED FOR REVIEW AND COMMENT BY:

- (1) AN AD HOC COMMITTEE OF THE NATIONAL LIAISON COMMITTEE OF THE AMERICAN RIGHT-OF-WAY ASSOCIATION. THIS IS A UTILITY INDUSTRY GROUP WHO TOOK ON THE TASK OF SOLICITING COMMENTS FOR THE COMMITTEE FROM THE SEVERAL SEGMENTS OF THE INDUSTRY, NAMELY ELECTRIC POWER, COMMUNICATIONS, GAS, WATER AND PIPELINES. IN EFFECT, THE AD HOC INDUSTRY COMMITTEE SERVES AS A CLEARING HOUSE FOR INDUSTRY COMMENTS ON THE PROPOSED GUIDE.
- (2) OTHER AASHO COMMITTEES HAVING AN INTEREST IN THIS MATTER, INCLUDING THE COMMITTEES ON DESIGN, MAINTENANCE, ROADSIDE DEVELOPMENT AND OTHERS.

(3) THE OFFICE OF PIPELINE SAFETY IN THE U.S. DEPARTMENT OF TRANSPORTATION, AND

(4) THE TWENTY (20) STATE HIGHWAY DEPARTMENTS WHO ARE REPRESENTED ON THE P. & D. COMMITTEE.

AS OF MARCH, 1969 COMMENTS FROM THE FOREGOING SOURCES HAVE BEEN RECEIVED BY THE COMMITTEE AND A REVISED DRAFT (THIRD) OF THE GUIDE IS NOW UNDER PREPARATION. WHEN WORK ON THIS IS COMPLETED, WE UNDERSTAND THE COMMITTEE PLANS TO FURNISH COPIES OF THE NEW DRAFT TO ITS MEMBERS FOR FURTHER CONSIDERATION AT THE COMMITTEE'S PLANNED SUMMER MEETING ON JUNE 23, 1969, AT JACKSON HOLE, WYOMING.

D. SUGGESTED INTERIM ACTIONS AT FIELD LEVEL ON PPM 30-4.1

(EXCLUSIVE OF PARAGRAPH 3D)

STATE - REVIEW PRESENT LAW AND POLICY

STATE - DETERMINE AREAS OF DEFICIENCIES

STATE - DETERMINE COURSE OF ACTIONS NECESSARY TO OBTAIN CHANGES

STATE - START DEVELOPING DESIRED POLICY REVISIONS. DON'T WAIT FOR AASHO GUIDE TO BE ISSUED.

BPR - DON'T INSIST ON STATE TAKING FINAL ACTION WITHOUT GUIDE

BPR - PROCEED WITH ACTION ON ANY REQUEST THE STATE SUBMITS, BUT POINT OUT ADVANTAGES OF HAVING GUIDE AVAILABLE.

STATE & BPR - BEFORE TAKING FINAL ACTION CHECK ON STATUS OF GUIDE.

NOTE: FROM THIS POINT ON, THE BRIEFING SESSION NOTES ARE SUPPLEMENTED BY VISUAL AIDS TO AMPLIFY MOST OF THE PROVISIONS. THIS IS ONLY REFERRED TO OCCASIONALLY THROUGHOUT THE TEXT, E.G. - "SEE CHART SHOWING SKETCH " HOWEVER, A CHART (VISUAL AID) HAS BEEN PREPARED FOR MOST OF THE PARAGRAPHS OF PPM 30-4.1 AND REVISIONS TO PPM 30-4.



IV PARAGRAPH BY PARAGRAPH BRIEFING ON PROVISIONS OF PPM 30-4.1

(IN THE ORDER OUTLINED IN THE PPM)

1. PURPOSE

MAKE BRIEF REFERENCE TO CITED SECTIONS OF LAW AND REGULATION

2. POLICY

a. EXPLANATION OF TERM:

- (1) FREE AND SAFE FLOW OF TRAFFIC
- (2) IMPAIR THE HIGHWAY
- (3) SCENIC APPEARANCE

(AS RELATES TO SUBJECT, ACCOMMODATION OF UTILITIES)

FREE AND SAFE FLOW OF TRAFFIC

(LOCATE UTILITY LINES WITHIN HIGHWAY RIGHTS-OF-WAY TO ACCOMPLISH FOLLOWING):

- (a) SAFE ENVIRONMENT FOR TRAFFIC OPERATIONS.
- (b) PRESERVE SPACE FOR FUTURE HIGHWAY IMPROVEMENTS OR OTHER UTILITY INSTALLATIONS.
- (c) PERMIT ACCESS FOR SERVICING UTILITIES WITH MINIMUM INTERFERENCE TO HIGHWAY TRAFFIC.
- (d) HORIZONTAL AND VERTICAL LOCATION CONFORM WITH CLEAR ROADSIDE POLICIES.
- (e) PROVIDE SPACE FOR KNOWN OR PLANNED EXPANSION OF UTILITIES, PARTICULARLY UNDERGROUND OR ATTACHMENTS TO STRUCTURES.

IMPAIR THE HIGHWAY

(USE DURABLE MATERIALS)

- (a) LONG SERVICE LIFE EXPECTANCY
- (b) RELATIVELY FREE FROM ROUTINE MAINTENANCE.

(c) ADEQUATE DEPTH OF BURY (CABLE OR PIPE)

(d) MECHANICAL OR WELDED LEAK-PROOF JOINTS (PRESSURE PIPING).

(e) RESISTANCE TO CORROSION (PIPES).

(f) ENCASEMENT.

SCENIC APPEARANCE

STRIVE TO AVOID INSTALLATIONS AT THE FOLLOWING LOCATIONS:

- (a) REST ARRAS
- (b) SCENIC STRIPS AND OVERLOOKS
- (c) HIGHWAYS PASSING THROUGH PUBLIC PARKS RECREATION AREAS WILDLIFE AND WATERFOWL REFUGES HISTORIC SITES.

WHERE THE ABOVE LOCATIONS CANNOT BE AVOIDED SEE PARAGRAPH 6G - PPM 30-4.1

- b. 1. LOCATION WITHIN RIGHT-OF-WAY
- 2. MANNER OF INSTALLATION (e.g. OPEN CUT VERSUS BORING OR JACKING).
- 3. MEASURES TO PRESERVE AND PROTECT:
  - (a) SAFETY OF TRAFFIC (PARAGRAPHS 6 AND 8).
  - (b) STRUCTURAL INTEGRITY (PARAGRAPH 8).
  - (c) APPEARANCE (PARAGRAPH 6G).

DOES NOT ALTER EXISTING AUTHORITY TO INSTALL FACILITIES ON RIGHT-OF-WAY

3. APPLICATION

(a) EFFECTIVE NOVEMBER 29, 1968

(b) (NEW INSTALLATIONS)

APPLIES TO ALL:

A-82

(1) COMPLETED, ACTIVE AND FUTURE FEDERAL-AID HIGHWAY PROJECTS, WHERE STATE HAS AUTHORITY TO REGULATE USE OF RIGHTS-OF-WAY BY UTILITIES.

(2) FEDERAL HIGHWAY PROJECTS AUTHORIZED AFTER NOVEMBER 29, 1968.

(3) FEDERAL-AID HIGHWAY PROJECTS WHERE STATE LACKS AUTHORITY TO REGULATE USE OF RIGHTS-OF-WAY BY UTILITIES AND WHERE PROJECT WAS AUTHORIZED AFTER NOVEMBER 29, 1968.

(c) (EXISTING INSTALLATIONS- FALLING IN THE PATH OF PROPOSED HIGHWAY PROJECTS)  
- MUST BE RETAINED, RELOCATED OR ADJUSTED TO ACCOMMODATE THE HIGHWAY PROJECT - APPLIES TO ALL:

(1) PRESENTLY ACTIVE AD FUTURE FEDERAL-AID HIGHWAY PROJECTS WHERE THE STATE HAS AUTHORITY TO REGULATE USE OF RIGHTS-OF-WAY BY UTILITIES.

(2) FEDERAL HIGHWAY PROJECTS AUTHORIZED AFTER NOVEMBER 29, 1968.

(3) FEDERAL-AID HIGHWAY PROJECTS WHERE THE STATE LACKS AUTHORITY TO REGULATE USE OF RIGHTS-OF-WAY BY UTILITIES AND WHERE PROJECT WAS AUTHORIZED AFTER NOVEMBER 29, 1968.

(INCLUDES APPLICATION TO PROJECTS FOR ELIMINATING ROADSIDE HAZARDS UNDER PARAGRAPH 6C).

(d) INTERIM PROCEDURE TO BE USED PENDING APPROVAL OF THE UTILITY ACCOMMODATION POLICIES OF THE STATE OR ITS POLITICAL SUBDIVISION BY THE REGIONAL ADMINISTRATOR UNDER PARAGRAPH 7C APPLIES TO ALL PROPOSED AND ACTIVE FEDERAL-AID AND FEDERAL HIGHWAY PROJECTS DURING THIS PERIOD.

(1) PARAGRAPH 15, PPM 30-4, DATED OCTOBER 15, 1966.

(2) PARAGRAPH 6, PPM 30-4.1.

(DOES NOT APPLY TO COMPLETED PROJECTS)

#### 4. DEFINITIONS

a. "UTILITIES" - SAME AS DEFINITION IN PPM 30-4.

b. "PRIVATE LINES" - THESE ARE THE FARMERS WATER LINES OR THE INDUSTRIAL PIPELINES, PRIVATELY OWNED AND PRIVATELY USED. THEY DO NOT SERVE PUBLIC AND NORMALLY DO NOT HAVE RIGHT OF HIGHWAY OCCUPANCY, EXCEPT AS A STATE MAY AUTHORIZE THEM TO CROSS A HIGHWAY. STATE REGULATION FOR THESE LINES IS LIKELY TO BE MORE STRINGENT THAN FOR UTILITIES. EACH STATE IS ASKED TO REPORT ON ITS AUTHORITY FOR REGULATING THESE LINES (SEE PARAGRAPH 7a).

c. "FEDERAL HIGHWAY PROJECTS" - THE KEY PHRASE IS . . . " INVOLVING THE USE OF FUNDS ADMINISTERED BY FHWA . . . " WHERE THIS IS THE CASE THE PPM APPLIES. AS FAR AS WE CAN DETERMINE AT THIS TIME UNDER THIS DEFINITION THE ONLY PROGRAM DIRECTLY INVOLVED ARE FOREST HIGHWAYS (APPROXIMATELY \$33 MILLION ANNUALLY APPROPRIATED TO BPR) AND THE SO-CALLED "O AND C" PROJECTS (OREGON AND COOS BAY RAILROAD GRANT LANDS ROADS) IN THE BLM PROGRAM. (ANNUAL EXPENDITURE ON THIS PROGRAM IS ABOUT \$4 to \$5 MILLION).

OTHER FEDERAL AGENCIES SHOULD BE ENCOURAGED TO FOLLOW THE PPM.

CONSIDERATION WILL BE GIVEN TO APPROACH THIS ON THE BASIS OF AN EXCHANGE OF CORRESPONDENCE BETWEEN FHWA AND OTHER FEDERAL AGENCIES AT HEADQUARTERS LEVEL SIMILAR TO WHAT WAS DONE RECENTLY IN DEVELOPING THE BRIDGE INSPECTION PROGRAM, WHICH RESULTED FROM EXECUTIVE ACTION FOLLOWING THE COLLAPSE OF THE SILVER BRIDGE AT POINT PLEASANT, WEST VIRGINIA, DECEMBER, 1967.

- d. "FEDERAL-AID HIGHWAY PROJECTS" - SELF EXPLANATORY.
- e. "ACTIVE PROJECTS" - THE KEY QUALIFICATIONS ARE (1), PROGRAM NOTIFICATION OF INTENT TO IMPROVE WITH F.H.P OR F.A. FUNDS AND (2) THE STATE OR OTHER HIGHWAY AUTHORITY HAS CONTROL OF THE HIGHWAY RIGHT-OF-WAY. THIS LATTER QUALIFICATION IS MOST IMPORTANT, FOR THE STATE CAN'T BE EXPECTED TO EXERCISE CONTROL OVER THE USE OF LAND NOT UNDER ITS JURISDICTION. SHOULD A PROBLEM ARISE IN THIS RESPECT, A SUGGESTED APPROACH WOULD BE TO EXPLORE THE MERITS FOR ADVANCED RIGHT-OF-WAY ACQUISITION, AS A SO-CALLED "HARDSHIP CASE."
- f. "RIGHTS-OF-WAY" - AS FAR AS THE PPM IS CONCERNED, IT IS NOT NECESSARY TO MAKE A DISTINCTION BETWEEN "OPERATING" AND "NON-OPERATING" RIGHT-OF-WAY. THE PPM APPLIES IN EITHER CASE.
- g. - 1 (SELF EXPLANATORY)
- h. "USE AND OCCUPANCY AGREEMENT" - FROM STATE TO STATE, THESE DOCUMENTS ENJOY A VARIETY OF LABELS, SUCH AS ENCROACHMENT PERMIT, LICENSE, REVOCABLE PERMIT ETC. WE ARE NOT CONCERNED WITH THE LABEL BUT ONLY THAT THE STATE OR OTHER HIGHWAY AUTHORITY AND UTILITY USE A DOCUMENT ALONG THE LINES DESCRIBED IN PARAGRAPH 9. THIS IS REQUIRED REGARDLESS OF WHETHER UTILITY ENJOYS RIGHT TO OCCUPY HIGHWAY RIGHTS-OF-WAY UNDER STATE LAW.
- i. "UTILITY SERVICE CONNECTION" - SEE CHART SHOWING SKETCH
- j. "SECONDARY ROAD PLAN" - EXPLAIN TO UTILITIES.
- k. "CLEAR ROADSIDE POLICY" - STATE MUST HAVE SUCH A POLICY. MANY FEATURES OF THIS PPM RELATING TO SAFETY ARE TIED INTO THIS POLICY. TO BE EFFECTIVE THE PPM AND CLEAR ROADSIDE POLICY MUST BE APPLIED SIMULTANEOUSLY.

A CRITICAL REQUIREMENT FOR LOCATING POLES AND OTHER GROUND-MOUNTED UTILITY FACILITIES ALONG A ROADSIDE IS THE WIDTH OF THE HIGHWAY BORDER AREA AND ITS AVAILABILITY AND SUITABILITY FOR ACCOMMODATING SUCH FACILITIES. THIS IS THE SPACE BETWEEN THE EDGE OF PAVEMENT, PAVED SHOULDER OR CURB LINE AND THE RIGHT-OF-WAY LINE. THE SAFETY, MAINTENANCE EFFICIENCY AND APPEARANCE OF HIGHWAYS ARE ENHANCED BY KEEPING THIS SPACE AS FREE AS POSSIBLE FROM ENCROACHMENT BY OBSTACLES ABOVE THE GROUND. WHERE GROUND MOUNTED UTILITY FACILITIES ARE TO OCCUPY THIS SPACE THEY SHOULD BE PLACED AS FAR AS POSSIBLE FROM THE TRAVELLED WAY AND BEYOND THE CLEAR ROADSIDE AREA.

THERE IS NO SINGLE MINIMUM DIMENSION FOR THE WIDTH OF A CLEAR ROADSIDE. ON PROPOSED NEW HIGHWAY IMPROVEMENT PROJECTS, 30 FEET IS COMMONLY USED AS A DESIGN SAFETY CONCEPT GUIDE WHERE THE DESIGN SPEED IS 50 M.P.H. OR MORE AND THE CURRENT ADT IS 750 OR MORE. SEVERAL DM'S HAVE BEEN ISSUED ON THIS MATTER DURING THE LAST FEW YEARS, AS FOLLOWS:

IM 21-6-66	(AUGUST 1, 1966)
IM 21-11-67	(MAY 19, 1967)
IM 21-11-67(1)	(JUNE 29, 1967)
IM 21-14-67	(NOVEMBER 14, 1967)

ANOTHER IMPORTANT DOCUMENT DEALING WITH THESE MATTERS IS THE REPORT OF THE SPECIAL AASHO TRAFFIC SAFETY COMMITTEE ENTITLED "HIGHWAY DESIGN AND OPERATIONAL PRACTICES RELATED TO HIGHWAY SAFETY" DATED FEBRUARY, 1967 (COMMONLY REFERRED TO AS THE "YELLOW BOOK").

ON EXISTING HIGHWAYS, AN "EFFECTIVE" CLEAR ROADSIDE AREA (WIDTH) CAN BE ESTABLISHED FOR THE SECTION OF HIGHWAY WHERE THE UTILITY LINE IS TO BE INSTALLED, TAKING INTO ACCOUNT,

DESIGN SPEED - TRAFFIC VOLUME

RIGHT-OF-WAY WIDTH\*

EXISTING OBSTACLES

FORESEEABLE FUTURE HIGHWAY IMPROVEMENTS

\* FEDERAL-AID HIGHWAY FUNDS ARE NOT AVAILABLE TO PURCHASE RIGHT-OF-WAY FOR UTILITIES, EXCEPT AS REPLACEMENT RIGHT-OF-WAY, AS NOTED IN PARAGRAPH 4 OF PPM 30-4. HOWEVER, WE HAVE FOUND WHERE RIGHT-OF-WAY IS ACQUIRED IN SUFFICIENT WIDTHS TO MEET HIGHWAY OBJECTIVES, NORMALLY THERE IS SUFFICIENT SPACE TO ACCOMMODATE UTILITIES. (THIS WILL BE DISCUSSED IN MORE DETAIL LATER UNDER PARAGRAPH 5C).

5. GENERAL PROVISIONS

a. STATE IS RESPONSIBLE FOR:

HIGHWAY MAINTENANCE

REGULATION OF USE

\*\*1. PROTECTING THE INVESTMENT IN HIGHWAY PLANT INCLUDES:

a. HIGHWAY STRUCTURAL INTEGRITY

FUNCTION (CAPACITY)

(b) APPEARANCE

(c) SAFE OPERATION

(d) MAINTENANCE (EFFICIENCY AND COST)

\*\*b. UTILITY OCCUPANCY OF RIGHT-OF-WAY AFFECTS ALL OF THESE FEATURES.

(REGULATION IS ESSENTIAL FOR STATE TO MEET ITS OBLIGATION, WHICH INCLUDES REGULATION BY BOTH STATE AND LOCAL HIGHWAY AUTHORITIES)

(REGULATION INVOLVES BOTH ESTABLISHMENT AND ENFORCEMENT OF POLICY.

IT CAN BE EFFECTIVE ONLY IF CONTROL IS REASONABLE).

(PRIOR PLANNING FOR SUCH ITEMS AS MAINTENANCE IS A MUST!)

c. IT IS ESSENTIAL THAT RIGHTS-OF-WAY BE USED EFFICIENTLY AND IN THE BEST

INTEREST OF THE PUBLIC. THE MESSAGE OF THIS PROVISION IS TWO FOLD.

FIRST, IT ENCOURAGES THE ACQUISITION OF RIGHTS-OF-WAY IN WIDTHS AMPLE TO MEET HIGHWAY OBJECTIVES, I.E., SAFETY, APPEARANCE, EFFICIENCY OF

MAINTENANCE AND POTENTIAL, EXPANSION IN FORESEEABLE FUTURE. WHERE THIS IS THE CASE, NORMALLY THERE SHOULD BE AVAILABLE SPACE TO ACCOMMODATE

UTILITIES WITHIN THE HIGHWAY RIGHTS-OF-WAY. (SEE CHART SHOWING SKETCHES OF TYPICAL SECTIONS OF MINIMUM AND DESIRABLE RIGHT-OF-WAY WIDTHS FOR

2-LANE AND MULTI LANE DIVIDED HIGHWAYS - PAGES 263 AND 293 - CHAPTER V,

HIGHWAY TYPES - AASHO, A POLICY ON GEOMETRIC DESIGN OF RURAL HIGHWAYS - 1965 - "BLUE BOOK". ALSO SEE PAGE 216, TABLE E-2, "RED BOOK").

SECOND, IT ENCOURAGES COOPERATIVE PLANNING FOR JOINT USE OF A COMMON

CORRIDOR IN THOSE AREAS WHERE A SINGLE TRANSPORTATION CORRIDOR WOULD

BE MORE IN KEEPING WITH THE PUBLIC INTEREST THAN SEVERAL SEPARATE CORRIDORS,

SAY FOR ACCOMMODATING HIGHWAYS AND RAPID TRANSIT FACILITIES OR A PARELLEL

UTILITY STRIP, BUT NOT AT THE SOLE EXPENSE OF PUBLIC HIGHWAY FUNDS. WITH

RESPECT TO THE COSTS OF ACQUIRING ADDITIONAL WIDTHS OF RIGHTS-OF-WAY,

OUR PARTICIPATION IS LIMITED TO THE COSTS OF RIGHTS-OF-WAY NEEDED FOR

HIGHWAY PURPOSES OR AS REPLACEMENT RIGHTS-OF-WAY TO RELOCATE FACILITIES

THAT FALL IN THE PATH OF HIGHWAY CONSTRUCTION PROJECTS (SEE PARAGRAPH 4

OF PPM 30-4).

CHART SHOWING SKETCH OF HELIUM SKY HOOKS! (THIS LITTLE GEM WAS SENT TO US BY AN UNKNOWN SOURCE WITH A NOTE AS FOLLOWS: "DON'T CIRCULATE THIS AMONG HIGHWAY ENGINEERS AS SOME DAMN FOOL MAY ADOPT IT AS A STANDARD PROCEDURE WHILE IT IS STILL IN A TENTATIVE STAGE").

(6) REQUIREMENTS

a. (SEE SKETCH)

THIS PROVISION APPLIES ONLY TO FEDERAL HIGHWAY PROJECTS (NOT FEDERAL-AID PROJECTS) AND ONLY TO THOSE FEDERAL PROJECTS AUTHORIZED AFTER NOVEMBER 29, 1968. (FOR MORE INFORMATION ON THIS SEE COMMENT ON PARAGRAPH 4c).

WITH AT LEAST THREE AGENCIES PLUS A UTILITY COMPANY DIRECTLY INVOLVED, AN ORDERLY PROCEDURE IS A MUST! (SEE SKETCH).

b. FOR REVISING SECONDARY ROAD PLANS, SEE THE "BLUE" CIRCULAR MEMORANDUM DATED DECEMBER 20, 1968, FROM MR. G. M. WILLIAMS TO REGIONAL FEDERAL HIGHWAY ADMINISTRATORS AND DIVISION ENGINEERS ON THE SUBJECT: AMENDMENTS TO STATES SECONDARY ROAD PLANS.

c. THIS PROVISION CONCERNS EXISTING UTILITY INSTALLATIONS (ABOVE GROUND FACILITIES) ALONG THE ROADSIDE WHERE ACCIDENT HISTORY OR SAFETY STUDIES (BY OR ON BEHALF OF STATE) INDICATE CORRECTIVE MEASURES ARE NEEDED TO PROVIDE A SAFE TRAFFIC ENVIRONMENT, SUCH AS

- (1) RELOCATE THEM (AS AERIAL PLANT) TO ANOTHER LOCATION, SAY BEYOND THE CLEAR ROADSIDE AREA, OR
- (2) CONVERT THEM TO UNDERGROUND INSTALLATIONS, OR
- (3) INSTALL GUARDRAIL

WHERE THIS OCCURS, REQUESTS FOR FEDERAL-AID PARTICIPATION IN THE COSTS OF ADJUSTING OR RELOCATING UTILITIES ARE SUBJECT TO THE PROVISIONS OF PPM 30-4. ANY PROGRAM UNDERTAKEN IN A STATE TO ELIMINATE "LIKELY" HAZARDS WILL NORMALLY

BE PART OF A MORE EXTENSIVE PROGRAM TO PROVIDE A SAFE TRAFFIC ENVIRONMENT, SAY FLATTENING HIGHWAY SLOPES, EXTENDING DRAINAGE CULVERTS AS HEAD WALLS, WIDENING PAVEMENTS AND SHOULDERS, FLATTENING HORIZONTAL AND VERTICAL CURVES AND THE LIKE. IF UTILITIES ARE THE ONLY HAZARD PRESENT, IT MAY BE APPROPRIATE TO RELOCATE THEM AS A SEPARATE HIGHWAY SAFETY PROJECT. WE ARE NOT ENCOURAGING NOR DO WE ENVISION A MASS RELOCATION PROGRAM OF NON-PARTICIPATING UTILITY ADJUSTMENTS.

d. STATE LACKS LEGAL AUTHORITY TO REGULATE USE OF RIGHTS-OF-WAY.

COMMON EXAMPLES ARE:

STATE HIGHWAYS THROUGH CITIES  
COUNTY ROADS  
LOCAL STREETS - PARKWAYS

(1) PROJECTS OF THIS NATURE AUTHORIZED AFTER NOVEMBER 29, 1968, REQUIRE:

(SPECIAL PROVISION IN PROJECT AGREEMENT)

(FORMAL AGREEMENT BETWEEN STATE AND LOCAL OFFICIALS FOR REGULATING UTILITY'S USE OF HIGHWAY RIGHT-OF-WAY, ON A CONTINUING BASIS AND UNDER A SATISFACTORY UTILITY ACCOMMODATION POLICY).

(THE CLAUSE IN THE PROJECT AGREEMENT IS REQUIRED FOR EACH PROJECT, ON A PROJECT BY PROJECT BASIS. THE FORMAL AGREEMENT BETWEEN THE STATE AND THE LOCAL HIGHWAY AUTHORITY IS REQUIRED ONCE AND CAN BE REFERRED TO ON FUTURE PROJECTS. EXISTING AGREEMENTS MAY BE AMENDED FOR THIS PURPOSE, SUCH AS A STATE-CITY OR STATE-COUNTY MAINTENANCE AGREEMENT).

(EXAMPLE OF PROJECT AGREEMENT SPECIAL PROVISION - "AS THE STATE HIGHWAY DEPARTMENT IS WITHOUT LEGAL AUTHORITY TO REGULATE THE USE OF THE RIGHTS-OF-WAY OF THIS PROJECT BY UTILITIES AND/OR PRIVATE LINES IT WILL BY FORMAL AGREEMENT WITH APPROPRIATE LOCAL GOVERNMENT OFFICIALS REGULATE, OR CAUSE TO BE REGULATED

SUCH USE ON A CONTINUING BASIS IN ACCORDANCE WITH A SATISFACTORY UTILITY ACCOMMODATION POLICY MEETING THE REQUIREMENTS OF PPM 30-4.1." A STANDARD PROVISION WHICH MIGHT BE PRINTED ON THE BACK OF FORM PR-2 MAY BE WORDED DIFFERENTLY - SEE PPM 21- 7).

(2) THE UTILITY ACCOMMODATION POLICY OF THE LOCAL HIGHWAY AUTHORITY MUST PROVIDE A DEGREE OF PROTECTION TO THE HIGHWAY AT LEAST EQUAL TO THE STATE'S POLICY.

AS INFORMATION AND IN THE INTEREST OF IMPLEMENTING THE PROVISIONS OF THIS PARAGRAPH AS RELATE TO COUNTY ROADS NOT UNDER JURISDICTION OF STATE, WE REFER YOU TO THE APRIL, 1966 GUIDE PUBLISHED BY THE NATIONAL ASSOCIATION OF COUNTY ENGINEERS ENTITLED, COUNTY DEVELOPMENT - VOLUME III, LOCATION OF UTILITIES. \*(NACE HAS MADE COPIES AVAILABLE TO US AS A HANDOUT - ONE TO EACH STATE, BPR DIVISION AND REGION). THE INTENT OF THE GUIDE IS TO PRESENT MATERIAL IN A FORM THAT IS ADAPTABLE FOR USE BY COUNTY HIGHWAY AUTHORITIES IN REGULATING THE USE OF HIGHWAY RIGHTS-OF-WAY BY UTILITIES IN SMALL POPULATION COUNTIES OR COUNTIES WHERE URBAN DEVELOPMENT HAS NOT REACHED METROPOLITAN PROPORTIONS. SMALL CITIES MAY ALSO FIND IT HELPFUL.

ANOTHER POSSIBLE APPROACH FOR IMPLEMENTING THIS PROVISION OF THE PPM WOULD BE FOR THE STATE TO DEVELOP MINIMUM CRITERIA FOR LOCAL HIGHWAY AUTHORITIES TO MEET FOR ACCOMMODATING UTILITIES ON FEDERAL-AID HIGHWAY PROJECTS. THIS IS PRESENTED AS A SUGGESTION FOR CONSIDERATION BY THE SEVERAL PARTIES OF INTEREST (COUNTY, CITY AND STATE OFFICIALS) AS A MEANS OF REDUCING THE WORK LOAD AND SIMPLIFYING THE TASK ON HAND.

(3) THIS PROVISION ESTABLISHES AN INTERIM PROCEDURE AS OUTLINED AND PREVIOUSLY DISCUSSED IN PARAGRAPH 3d. CONDITIONAL AUTHORIZATION OF HIGHWAY PROJECTS IS ALLOWED SO AS NOT TO DELAY HIGHWAY WORK OR SACRIFICE REIMBURSEMENT OF COSTS.

\*DEFER DISTRIBUTION TO PARTICIPANTS UNTIL END OF FIRST DAY'S SESSION.

e. THE ADOPTION OF A NEW POLICY BY AASHO (AS REFERRED TO IN THIS PARAGRAPH) IS NO LONGER PENDING. AASHO ADOPTED ITS NEW UTILITY ACCOMMODATION POLICY ON FEBRUARY 15, 1969. THE ONLY CHANGE HAS BEEN IN THE TITLE AND THE TERM "FREEWAY" HAS BEEN SUBSTITUTED FOR THE TERM "INTERSTATE HIGHWAY" THROUGHOUT THE TEXT. THE NEW POLICY IS ENTITLED "A POLICY ON THE ACCOMMODATION OF UTILITIES ON FREEWAY RIGHTS-OF-WAY". AS SUCH IT APPLIES TO ALL FREEWAYS, NOT JUST TO INTERSTATE HIGHWAYS (AS THE FORMER POLICY DID) AND IS CONSISTENT WITH PUBLIC ROADS POLICY.

\*(WE HAVE A SUPPLY OF THESE AS HANDOUTS - ONE TO EACH STATE, BPR DIVISION AND REGION)

f. UTILITY SERVICE CONNECTIONS (SEE CHART SHOWING SKETCHES)  
THE PURPOSE OF THIS PROVISION IS TO REDUCE THE OCCASION FOR CROSSINGS OF FREEWAYS BY UTILITY SERVICE CONNECTIONS TO A REASONABLE MINIMUM, I.E., TO AVOID UNNECESSARY CROSSINGS OF FREEWAYS BY NETWORKS OF OVERHEAD AND UNDERGROUND SERVICE LINES TOO PRIVATE CONSUMERS. WE BELIEVE IT DOES THIS EFFECTIVELY WITHOUT UNDUE HARDSHIP OR PROHIBITIVE COST TO THE UTILITY AND ITS CONSUMER. IT DOES NOT APPLY TO CONVENTIONAL FREE ACCESS HIGHWAYS BUT ONLY TO FREEWAYS, WHICH ARE DEFINED IN THE PPM AS DIVIDED ARTERIAL HIGHWAYS WITH FULL CONTROL OF ACCESS. IT DOES NOT PROHIBIT SUCH CROSSINGS: IN FACT, IT PERMITS THEM IN AREAS WHERE UTILITY SERVICES ARE NOT AVAILABLE WITHIN A REASONABLE DISTANCE ALONG THE SIDE OF THE FREEWAY WHERE THE UTILITY SERVICE IS NEEDED. ACTUALLY, IT IS LESS RESTRICTIVE THAN OUR FORMER POLICY OUTLINED IN THE BLUE CIRCULAR MEMORANDUM FROM MR. G. M. WILLIAMS TO REGIONAL AND DIVISION ENGINEERS, DATED JUNE 14, 1960, ON THE SUBJECT: CROSSINGS OF INTERSTATE HIGHWAYS BY UTILITY SERVICE CONNECTIONS.

\*DEFER DISTRIBUTION TO PARTICIPANTS UNTIL END OF FIRST DAY'S SESSION.

e. UTILITIES - SCENIC ENHANCEMENT

(BACKGROUND INFORMATION)

PUBLIC ROADS ISSUED A POLICY STATEMENT ON THIS TOPIC UNDER IM 30-6-67, DATED MAY 2, 1967. PARAGRAPH 6g SUPERSEDES NUMBERED PARAGRAPHS (1), (2), (3) AND (5) OF THE IM. (PARAGRAPH (4) OF THE IM WAS TRANSFERRED TO PPM 30-4).

THE CHART ILLUSTRATES THE VARIOUS REPORTS AND DOCUMENTS WHICH SERVED AS A CATALYST LEADING TO THE PREPARATION OF THIS PROVISION. \*(THANKS TO THE CITIZENS ADVISORY COMMITTEE ON RECREATION AND NATURAL BEAUTY AND THE FEDERAL POWER COMMISSION, WE HAVE OBTAINED A SUPPLY OF HANDOUTS - ONE TO EACH STATE, DIVISION AND REGION - INCLUDED ARE THE 1968 REPORT OF THE ELECTRIC UTILITY INDUSTRY TASK FORCE ON ENVIRONMENT, THE JUNE 1968 REPORT OF THE CITIZENS ADVISORY COMMITTEE ON RECREATION AND NATURAL BEAUTY AND THE DECEMBER 1968 REPORT OF THE (FEDERAL-WIDE) WORKING COMMITTEE ON UTILITIES. ALSO INCLUDED IS A COPY OF A PAPER ON THE USE OF UNDERGROUND RESIDENTIAL DISTRIBUTION (URD) CABLE IN RURAL AREAS BY THE CASS COUNTY ELECTRIC COOPERATIVE, INCORPORATED, KINDRED, NORTH DAKOTA).

SECTION 138, TITLE 23, U.S.C., (FEDERAL-AID HIGHWAY ACT OF 1968) IS A DECLARATION OF NATIONAL POLICY THAT SPECIAL EFFORT SHOULD BE MADE TO PRESERVE THE NATURAL BEAUTY OF THE COUNTRYSIDE, PUBLIC PARK AND RECREATION LANDS, WILDLIFE AND WATERFOWL REFUGES AND HISTORIC SITES. IT REQUIRES THE DEVELOPMENT OF PLANS AND PROGRAMS THAT INCLUDE MEASURES TO PRESERVE OR ENHANCE THE NATURAL BEAUTY OF THE LANDS TRAVERSED. THE GOALS OF THE PRESIDENT'S COUNCIL ON RECREATION AND NATURAL BEAUTY INCLUDE RECOMMENDATIONS WITH RESPECT TO ACTIONS REQUIRED TO ASSURE THAT UTILITY TRANSMISSION AND DISTRIBUTION FACILITIES ARE COMPATIBLE WITH ENVIRONMENTAL VALUES. THESE GOALS ARE SUPPORTED BY THE REPORT OF THE

\*DEFER DISTRIBUTION TO PARTICIPANTS UNTIL END OF FIRST DAY'S SESSION.

ELECTRIC UTILITY INDUSTRY TASK FORCE ON ENVIRONMENT. THE REPORT OF THE (FEDERAL-WIDE) WORKING COMMITTEE ON UTILITIES ASSESSES THOSE FINDINGS AND FAVORABLY RECOMMENDS ACTIONS FOR ADOPTION AT THE FEDERAL, STATE AND INDUSTRY LEVEL.

THE PROVISIONS OF THIS PARAGRAPH ARE IN KEEPING WITH ALL OF THE FOREGOING AND ARE FOR APPLICATION AT THE FOLLOWING LOCATIONS.

- SCENIC STRIPS
- OVERLOOKS
- REST AND RECREATIONAL AREAS
- HIGHWAYS PASSING THROUGH:
  - PUBLIC PARKS
  - RECREATION AREAS
  - WILDLIFE AND WATERFOWL REFUGES
  - HISTORIC SITES

g(1) THE FOLLOWING LIST ILLUSTRATES THE ACCEPTABILITY OF INSTALLING UTILITY

FACILITIES UNDER THE SEVERAL CONDITIONS OUTLINED IN THE PPM:

- UNDERGROUND, NOT DETRIMENTAL - YES
- UNDERGROUND, DETRIMENTAL - NO
- OVERHEAD, 35 KV OR LESS - NO
- OVERHEAD, OVER 35 KV
- ALTERNATE LOCATION, FEASIBLE AND ECONOMICAL - NO
- OBJECTIONAL DESIGN OR LOCATION - NO
- SUITABLE DESIGN, PROPERLY LOCATED, AND NOT SIGNIFICANTLY DISTRACTING - YES

THE UNDERGROUND PROVISIONS OF THIS PARAGRAPH ARE DIRECTED TOWARD PRESERVING THE AREAS OF NATURAL BEAUTY AND SCENIC ENHANCEMENT DESCRIBED ABOVE. EXTENSION OF THESE PROVISIONS BEYOND THIS POINT IS NOT INTENDED. AN ARBITRARY POLICY FOR PLACING ALL COMMUNICATION AND POWER LINE CROSSINGS OF FREEWAYS UNDERGROUND IGNORES THE PRINCIPLE OF ECONOMY AND, IN MANY INSTANCES, SERVES NO USEFUL PURPOSE FROM THE STANDPOINT OF HIGHWAY SAFETY OR APPEARANCE. FOR EXAMPLE, AN AERIAL PLANT MAY BE COMPLETELY COMPATIBLE WITH THE SURROUNDINGS WHERE THE ENDS OF A CROSSING ARE TIED TO AERIAL LINES VISIBLE TO THE MOTORIST OR WHERE THE HIGHWAY TRAVERSES AN INDUSTRIAL, COMMERCIAL OR SIMILAR AREA. SAFETY REQUIREMENTS UNDER PPM 30-4.1 AND THE AASHO POLICY FOR ACCOMMODATING UTILITIES ARE MET AS LONG AS UTILITY POLES ARE PLACED OUTSIDE THE CLEAR ROADSIDE AREA AND DIRECT ACCESS TO THEM (FOR UTILITY SERVICING) FROM THE MAIN LANES OR RAMPS IS NOT REQUIRED.

ON FEDERAL-AID HIGHWAY PROJECT ACTIONS, FUNDS ARE ELIGIBLE TO PARTICIPATE IN THE ADDED COSTS OF CONVERTING EXISTING AERIAL PLANT UNDERGROUND WHERE IT IS DEMONSTRATED TO BE IN THE INTEREST OF HIGHWAY SAFETY OR APPEARANCE AND SUCH ADDED COSTS ARE CONSISTENT WITH THE VALUES RECEIVED. ON NEW UTILITY INSTALLATIONS NOT ASSOCIATED WITH HIGHWAY CONSTRUCTION PROJECTS, THE STATE IS ASKED TO DEVELOP A UTILITY ACCOMMODATION POLICY THAT, AS A MINIMUM, SATISFIES PPM 30-4.1. AN EXCEPTION TO THE FOREGOING WOULD BE IN AREAS WHERE STATE OR LOCAL LAW OR REGULATION IS MORE STRINGENT THAN PUBLIC ROADS POLICY. (SEE PARAGRAPH 9c OF PPM 30-4).

OUR TASK IS TO ATTAIN A REASONABLE APPLICATION OF THIS PROVISION WITHIN THE FRAMEWORK OF THE PPM. TO DO OTHERWISE WOULD BE INCONSISTENT WITH OUR OWN POLICY.

g(2) THIS PROVIDES FOR APPLICATION OF THE PROVISIONS OF THIS PARAGRAPH (6g) TO UTILITY INSTALLATIONS SERVING A HIGHWAY PURPOSE (A REST AREA, HIGHWAY LIGHTING ETC.)

g(3) EXCEPTIONS TO THE REQUIREMENTS OF PARAGRAPHS 6g(1) AND (2) ARE TO BE APPROVED BY THE DIRECTOR IN CASES OF EXTREME HARDSHIP OR OTHER EXTENUATING CIRCUMSTANCES. STRESS NEED FOR FULL REPORT OF ALL AVAILABLE DATA, INCLUDING VIEWS OF PLANNING OR RESOURCE AUTHORITIES HAVING JURISDICTION OVER PARK OR OTHER LANDS WHICH THE HIGHWAY PASSES THROUGH AND THE VIEWS OF THE STATE, UTILITY, DIVISION ENGINEER AND REGIONAL FEDERAL HIGHWAY ADMINISTRATOR.

h JOINT USE AGREEMENTS - THE PREREQUISITES FOR USING A JOINT USE AGREEMENT ARE: (1) THE UTILITY HAS A COMPENSABLE INTEREST IN LAW OCCUPIED BY ITS FACILITIES AND (2) THE FACILITIES ARE TO BE ADJUSTED OR RELOCATED TO ACCOMMODATE THE HIGHWAY PROJECT OR RETAINED WITHIN THE HIGHWAY RIGHTS-OF-WAY. IN SOME CASES THE UTILITY CAN BE ADJUSTED WITHIN THE LIMITS OF ITS FORMER EASEMENT (THAT PORTION WITHIN THE HIGHWAY RIGHT-OF-WAY) WHILE IN OTHER CASES IT MUST BE MOVED TO A NEW LOCATION. IN THE LATTER CASE, IT IS NECESSARY FOR THE UTILITY TO CONVEY ITS RIGHTS AT THE FORM LOCATION (THAT PORTION WITHIN THE HIGHWAY RIGHT-OF-WAY BEING VACATED) TO THE STATE FOR HIGHWAY PURPOSES IN EXCHANGE FOR IT RIGHTS WITHIN THE AREA OF JOINT USAGE AT THE NEW LOCATION.

THE FORM OF THE JOINT USE AGREEMENT IS NOT PRESCRIBED. HOWEVER, THE AGREEMENT, AS A MINIMUM, SHOULD INCLUDE (1) A GENERAL DESCRIPTION OF THE FACILITIES, (2) A LOCATION SKETCH, (3) THE EXTENT OF LIABILITY AND RESPONSIBILITIES OF EACH PARTY FOR FUTURE WORK, (4) THE STATE'S RIGHTS,



(5) THE UTILITY'S, IS RIGHTS, (6) SPECIAL MAINTENANCE PROVISIONS AND (7) OTHER PROVISIONS DEEMED NECESSARY TO COMPLY WITH STATE LAW AND STANDARDS. (SEE PARAGRAPH 9 OF PPM 30-4.1).

## 7. REVIEWS AND APPROVALS

### a. REPORT REQUIRED FROM STATE:

1. AUTHORITY OF UTILITY TO USE AND OCCUPY HIGHWAY RIGHTS-OF-WAY.  
(LEGAL OPINION OR REVIEW AND CONCURRENCE BY STATE'S ATTORNEY).
  - (2) LEGAL AUTHORITY OF HIGHWAY AGENCY TO REGULATE USE OF RIGHTS-OF-WAY BY UTILITIES (LEGAL OPINION OR REVIEW AND CONCURRENCE BY STATE'S ATTORNEY).
  - (3) STATE'S POLICIES AND PROCEDURES FOR ACCOMMODATING UTILITIES (EXISTING AND PROPOSED).
  - (4) LIMITATIONS OF STATE'S AUTHORITY - INTENDED TO BE GEOGRAPHICAL BUT OTHER LIMITATIONS MAY EXIST, E.G., TYPE OF UTILITY (SAY THE STATE REGULATES USE OF RIGHTS-OF-WAY BY PRIVATELY OWNED PUBLIC UTILITIES WITHIN CITY BUT NOT CITY OWNED FACILITIES).
- b. DIVISION ENGINEER REVIEWS AND REPORTS RECOMMENDATIONS ON STATES SUBMISSION (TO REGIONAL ADMINISTRATOR). SAME PROCEDURE REQUIRED FOR PROCESSING LOCAL UTILITY POLICIES UNDER 6d.
- c. APPROVAL ACTION RESTS WITH REGIONAL ADMINISTRATOR. TARGET DATE FOR COMPLETING THIS ACTION IN ALL STATES IS NOVEMBER 29, 1969. DON'T DELAY PREPARATORY WORK LEADING TO APPROVAL. GET UNDERWAY AS PROMPTLY AS POSSIBLE. AASHO GUIDE MAY BE PUBLISHED LATER THIS YEAR. (SEE PREVIOUS COUNTS ON THIS MATTER).
- d. CHANGES IN STATE OR LOCAL UTILITY ACCOMMODATION POLICIES (PREVIOUSLY APPROVED BY REGIONAL ADMINISTRATOR) ARE TO BE PROCESSED IN SAME MANNER AS ORIGINAL SUBMISSION.

- e. FREQUENCY AND EXTENT OF PERIODIC REVIEWS OF STATES PRACTICES BY DIVISION ENGINEER WILL BE ESTABLISHED LATER THIS YEAR (PROPOSED PPM 30-4.2).
- f. WHERE UTILITY FILES NOTICE OR MAKES APPLICATION TO STATE (OR OTHER HIGHWAY AUTHORITY) FOR INSTALLING FACILITIES WITHIN HIGHWAY RIGHTS-OF-WAY, UTILITY'S REQUEST NEED NOT BE REFERRED TO PUBLIC ROADS, EXCEPT:
1. CASES NOT IN ACCORD WITH APPROVED STATE (OR OTHER HIGHWAY AUTHORITY) POLICY.
  2. EXTREME HARDSHIP CASES UNDER PARAGRAPH 6g.
  3. EXTREME CASE EXCEPTIONS ON FREEWAYS. (INTERSTATE AND OTHER FREEWAYS)
  4. INSTALLATIONS ON OR ACROSS INTERSTATE HIGHWAYS.

DELEGATION OF AUTHORITY (AM 1-10.2-PARAGRAPH 17) NOW BEING REVISED. WILL BE ISSUED LATER THIS YEAR.

(PROPOSED DELEGATION FOLLOWS):

- (1) REGIONAL ADMINISTRATOR (PERMISSION TO REDELEGATE TO DIVISION ENGINEER).
- (2) DIRECTOR
- (3) WASHINGTON OFFICE (BPR) - INTERSTATE HIGHWAYS  
REGIONAL ADMINISTRATOR - OTHER FREEWAYS
- (4) DIVISION ENGINEER.

NOTE: PARAGRAPH 6b DOES NOT REQUIRE REFERRAL OF AGREEMENTS TO PUBLIC ROADS UNDER SECONDARY ROAD PLAN.

## 8. STATE ACCOMMODATION POLICIES AND PROCEDURES

- a. MUST MEET REQUIREMENTS OF PARAGRAPHS 6e THROUGH 6h:
- (6e) AASHO FREEWAY POLICY
  - (6f) SERVICE CONNECTIONS
  - (6g) SCENIC ENHANCEMENT
  - (6h) JOINT USE AGREEMENTS

MUST MAKE ADEQUATE PROVISION FOR:

- (1) SAFE AND FREE FLOW OF TRAFFIC
- (2) SAFETY - APPEARANCE - COST OR DIFFICULTY OF HIGHWAY AND UTILITY CONSTRUCTION AND MAINTENANCE
- (3) COMPLIANCE WITH STATES STANDARDS FOR REGULATING USE AND OCCUPANCY OF HIGHWAY RIGHTS-OF-WAY. STANDARDS MUST INCLUDE:

(a) HORIZONTAL AND VERTICAL LOCATION REQUIREMENTS AND CLEARANCES

SOME OF THE FEATURES TO CONSIDER IN ESTABLISHING SUCH REQUIREMENTS AND CLEARANCES FOLLOW:

GENERAL

(DEPTH OF BURY - PIPES AND CABLES; CRITICAL POINT IS DITCH GRADE - ON CROSSINGS)

(VERTICAL CLEARANCE - AERIAL LINES OVER TRAVELLED WAY AND BRIDGES - NATIONAL ELECTRIC SAFETY CODE)

(LATERAL CLEARANCE - ABOVE GROUND APPURTENANCES - FROM NEAR EDGE OF TRAVELLED WAY AND BRIDGES)

(ABOVE GROUND OBSTACLES MUST BE OUTSIDE CLEAR ROADSIDE AREA\* OR OTHERWISE PLACED IN PROTECTED LOCATION OR SHIELDED FROM TRAFFIC)

\*ON NEW PROJECTS, 30 FEET IS COMMONLY USED AS DESIGN SAFETY CONCEPT GUIDE. (SEE COMMENT ON PARAGRAPH 4p)

CROSSINGS

(NORMAL TO HIGHWAY ALINEMENT, WHERE FEASIBLE AND PRACTICAL)

(OVERHEAD - USE SELF SUPPORTING POLES OR TOWERS AND/OR DEAD-END CONSTRUCTION. PLACE POLES AS NEAR AS POSSIBLE TO RIGHT-OF-WAY LINE OR BEYOND)

(UNDERGROUND - ANGLE OF CROSSING FOR SMALL PIPES OR TRENCHED CONSTRUCTION SHOULD BE NORMAL, OR NEARLY SO, TO HIGHWAY ALINEMENT; FOR LARGE PIPES - RELY ON ECONOMICS. AVOID CROSSINGS AT: DEEP CUTS, STEEP SLOPES, NEAR FOOTING OF BRIDGES AND RETAINING WALLS, INTERSECTIONS AT GRADE OR RAMP TERMINALS AND WET OR ROCKY TERRAIN. AVOID LOCATING MANHOLES IN PAVEMENT OR SHOULDERS OF MAIN HIGHWAYS OR IN BRIDGE DECKS. PLACE IDENTIFICATION MARKERS AT RIGHT-OF-WAY LINE.)

LONGITUDINAL INSTALLATIONS

(CONVENTIONAL HIGHWAYS)

(OVERHEAD - LOCATE AS NEAR AS POSSIBLE TO RIGHT-OF-WAY LINE; ON CURBED SECTIONS - AS FAR AS PRACTICAL BEHIND FACE OF CURB, PREFERABLY BEHIND SIDEWALK. CONSIDER VERTICAL CONFIGURATION ON NARROW RIGHT-OF-WAY OR URBAN SECTIONS WITH ABUTTING DEVELOPMENT. GUYS SHOULD NOT ENCROACH UPON CLEAR ROADSIDE AREA. USE SINGLE POLE CONSTRUCTION, ENCOURAGE JOINT USE. AVOID PLACING POLES IN MEDIAN AREAS. POLES MAY BE PLACED AT PROTECTED LOCATIONS, SUCH AS BEHIND GUARDRAIL, BEYOND DEEP DITCHES OR TOE OR TOP OF STEEP SLOPES, RETAINING WALLS AND THE LIKE. MAINTAIN REASONABLY UNIFORM ALINEMENT OF UTILITY LINES.)

(UNDERGROUND - LOCATE AT OR NEAR THE RIGHT-OF-WAY LINE; AS A MINIMUM, BEYOND THE SLOPE , DITCH OR CURB LINE).

BRIDGE ATTACHMENTS

(AVOID WHERE IT IS FEASIBLE AND REASONABLE TO LOCATE UTILITY ELSEWHERE)

(CONSIDER EACH CASE ON ITS OWN MERITS)

(BRIDGE MUST BE ADEQUATE TO SUPPORT LOAD AND ACCOMMODATE UTILITY WITHOUT COMPROMISE OF HIGHWAY FEATURES, INCLUDING REASONABLE EASE OF BRIDGE MAINTENANCE).

(AVOID MANHOLES IN DECK. DON'T INHIBIT ACCESS TO PAINT OR REPAIR BRIDGE)

(PLACE UTILITY SO AS NOT TO REDUCE VERTICAL CLEARANCE OF BRIDGE ABOVE STREAM, PAVEMENT OR RAILS)

(LOCATE UTILITY BENEATH DECK BETWEEN OUTER GIRDERS, OR BEAMS OR WITHIN A CELL - ABOVE LOW SUPER STRUCTURE STEEL OR MASONARY)

(AVOID ATTACHMENTS TO THE OUTSIDES OF BRIDGES)

(USE SUPPORT ROLLERS, SADDLES OR HANGERS, PADDED OR COATED TO MUFFLE VIBRATION NOISE)

(PIPES AND CONDUITS THAT ARE CARRIED THROUGH ABUTMENTS SHOULD BE "SLEEVED" AND TIGHT SEALED WITH MASTIC)

(WHEN LEAVING THE BRIDGE, ALIGN UTILITY OUTSIDE THE ROADWAY IN AS SHORT A DISTANCE AS OPERATIONALLY PRACTICABLE)

(SUSPEND HANGER OR ROLLERS FROM INSERTS BELOW DECK OR HANGER RODS CLAMPED TO FLANGE OF BEAM.

AVOID BOLTING THROUGH BRIDGE FLOOR)

(WHERE APPROPRIATE PROVIDE FOR LINEAL EXPANSION AND CONTRACTION DUE TO TEMPERATURE CHANGES, SAY LINE BENDS OR EXPANSION COUPLINGS).

(PROVIDE SUITABLE PROTECTION AGAINST CORROSION)

(COMMUNICATION AND ELECTRIC POWER LINE ATTACHMENTS SHOULD BE SUITABLY INSUALTED, GROUNDED AND CARRIED IN PROTECTIVE CONDUIT OR PIPE FROM POINT OF EXIT FROM GROUND TO RE-ENTRY).

8a(3)(b) SEE HANDOUT OF REFERENCE LIST SHOWING VARIOUS CODES.

STATE MAY ADOPT HIGHWAY DESIGN STANDARDS MORE STRINGENT THAN CODE OR NOT ACCOUNTED FOR IN CODE, SUCH AS DEPTH OF BURY, TRENCHING AND BACK FILLING SPECIFICATION, BRIDGE AND CULVERT PRACTICE, VERTICAL AND HORIZONTAL CLEARANCES AND THE LIKE.

8a(3)(c) SPECIFICATIONS - METHODS

(FOR INSTALLATIONS)

SOME OF THE FEATURES TO CONSIDER IN ESTABLISHING SPECIFICATIONS AND CRITERIA FOR METHODS OF INSTALLATION FOLLOW:

TRENCHING - BEDDING - BACKFILLING

PAVEMENT PATCHING

(CONFORM TO HIGHWAY AGENCY STANDARDS AND PRACTICES)

(AVOID TRENCHES UNDER ROADWAYS, WHEREVER POSSIBLE)

(PROTECT PIPE AGAINST DEFORMATION CAUSING LEAKAGE -  
ENCASEMENT)

(AVOID AGAINST TRENCH BECOMING DRAINAGE CHANNEL OR  
DRAINAGE BLOCKED BY BACKFILL)

\*(RESTORE STRUCTURAL INTEGRITY OF ENTRENCHED ROADBED)

(PRIMARY CONCERN - INTEGRITY OF PAVEMENT, SHOULDERS AND  
EMBANKMENT)

(BEDDING IS IMPORTANT FOR LARGE PIPES)

#### UNTRENCHED CONSTRUCTION

\*(USE UNTRENCHED CONSTRUCTION FOR ALL CROSSINGS OF CONTROLLED  
ACCESS AND OTHER MAJOR HIGHWAYS. ON FREEWAYS, EXPRESSWAYS  
AND OTHER MAJOR HIGHWAYS EXTEND THROUGH ENTIRE ROADWAY PRISM;  
ON OTHER MAJOR HIGHWAYS EXTEND UNDER AND ACROSS SURFACED  
AREA OF HIGHWAY; ON MINOR HIGHWAYS IN RURAL AREAS, LOCAL  
CONDITIONS SHOULD GOVERN).

(ESTABLISH SAFE PORTAL LIMITS BEYOND HIGHWAY SURFACE)

(RESTRICT OVER SIZE OF BORE)

(REQUIRE BACKFILL ON LARGE BORES)

(GROUT OVERBREAKS)

(REFER TO PUBLICATION, ENTITLED "HORIZONTAL BORING TECHNOLOGY:  
A STATE-OF-THE-ART STUDY, INFORMATION CIRCULAR 8392 - BUREAU  
OF MINES - U.S. DEPARTMENT OF INTERIOR, SEPTEMBER 18, 1968" -  
SEE REFERENCE LIST HANDOUT - ONE COPY TO EACH REGION)

#### UTILITY TUNNELS AND BRIDGES

(CONFORM IN APPEARANCE, LOCATION, BURY, EARTHWORK AND MARKERS  
TO CULVERT AND BRIDGE PRACTICES AND SPECIFICATIONS OF HIGHWAY  
AGENCY)

#### 8a(3)(c) PRESERVATION - RESTORATION - CLEAN-UP

(CONFORM TO HIGHWAY AGENCY PRACTICE)

(KEEP SIZE OF DISTURBED AREA TO MINIMUM)

(AVOID SPRAYING, CUTTING OR TRIMMING OF TREE EXCEPT

AT PERMISSION OF HIGHWAY AGENCY; THEN ONLY LIGHT TRIMMING)

(WHERE TREE IS REMOVED, REMOVE STUMP AND BACK FILL HOLE)

#### 8a(3)(d) PROTECTION TO TRAFFIC

(TRAFFIC CONTROL - CONFORM WITH PART V OF \*MANUAL ON UNIFORM

TRAFFIC CONTROL DEVICES - \*ITEM 7 ON REFERENCE LIST)

(KEEP TRAFFIC INTERFERENCE TO ABSOLUTE MINIMUM)

(ON HEAVILY TRAVELLED ROADS - AVOID INSTALLATION WORK DURING

PEAK PERIODS OF TRAFFIC FLOW - ALSO MAINTENANCE)

(AVOID CLOSURES OF INTERSECTING STREETS, ROAD APPROACHES OR

OTHER POINTS OF ACCESS - HOLD TO MINIMUM)

#### 8a(3)(d) SERVICING - MAINTENANCE - REPAIRS

(KEEP FACILITIES IN GOOD STATE OF REPAIR - STRUCTURALLY AS WELL  
AS FROM STANDPOINT OF APPEARANCE)

(IDENTIFY MAINTENANCE OPERATIONS IN AGREEMENT - INDICATE THOSE  
REQUIRING PRIOR NOTIFICATION)

#### 8a(4)

EVIDENCE OF COMPLIANCE WITH LAW, REGULATION AND APPROVED POLICY  
MUST BE DOCUMENTED IN FILES OF STATE OR OTHER HIGHWAY AUTHORITY.  
ALL INSTALLATIONS WITHIN RIGHTS-OF-WAY OF FEDERAL AND FEDERAL-AID  
HIGHWAY PROJECTS MADE AFTER NOVEMBER 29, 1968, ARE SUBJECT TO  
APPROVAL BY HIGHWAY AUTHORITY, EXCEPT FOR:

\* (1) ROUTINE MAINTENANCE

\* (2) INSTALLATION OF SERVICE CONNECTIONS ON  
CONVENTIONAL FREE ACCESS HIGHWAYS

\* (3) EMERGENCY OPERATIONS

\*(IF SO PROVIDED FOR IN USE AND OCCUPANCY AGREEMENTS)

UTILITY- HIGHWAY  
BRIEFING SESSION NOTES  
ON  
REVISED PPM 30-4

8a(5) MOST CONFLICTS BETWEEN HIGHWAY AND UTILITY PLANTS CAN BE AVOIDED

THROUGH COORDINATED PLANNING EFFORTS. EXAMPLES OF POOR PLANNING  
ARE TEARING UP A NEW HIGHWAY PAVEMENT TO CONSTRUCT A SEWER OR  
OTHER PIPELINE OR RELOCATING A NEWLY INSTALLED UTILITY TO ACCOMMODATE  
HIGHWAY CONSTRUCTION. EFFECTIVE LIAISON IS A MUST!

I INTRODUCTION

REVISED PPM 30-4 WAS PUBLISHED ON FEBRUARY 14, 1969. THERE WERE SEVERAL  
REASONS FOR REVISING IT. TWO MAJOR REASONS STEMMED FROM (1) TRANSFERRING  
THE ACCOMMODATION REQUIREMENTS OF PARAGRAPH 15 TO NEW PPM 30-4.1 and  
(2) ADDING AN ALTERNATE METHOD FOR PROCESSING AND APPROVING MINOR COST  
UTILITY RELOCATION AGREEMENTS (THOSE COSTING \$25,000 OR LESS). OTHER  
REASONS WERE TO CORRECT REFERENCES TO CURRENT RIGHT-OF-WAY PPM'S, TO ADD  
A FEW CLARIFYING STATEMENTS AND TO TRANSFER NUMBERED PARAGRAPH (4) OF  
IM 30-6-67 (ON UTILITIES-SCENIC ENHANCEMENT) TO PPM 30-4.

9. USE AND OCCUPANCY AGREEMENTS

(a) MUST INCLUDE OR BY REFERENCE INCORPORATE:

- (1) STATE STANDARDS - (PARAGRAPH 8)
- (2) GENERAL DESCRIPTION
- (3) SKETCH
- (4) LIABILITY - FUTURE WORK
- (5) ACTION IN CASE OF NON-COMPLIANCE
- (6) SPECIAL PROVISIONS

(b) FORM OF AGREEMENT IS NOT PRESCRIBED. IT MAY BE COMBINED AS PART  
OF REIMBURSEMENT AGREEMENT\* (PARAGRAPH 7 - PPM 30-4) \*PREFERENCE  
IS FOR USING TWO SEPARATE DOCUMENTS, ONE IS A CONTRACTUAL MATTER  
FOR RELOCATING FACILITIES WHILE THE OTHER IS NOT.

(c) MASTER AGREEMENTS ARE OK, PROVIDED INDIVIDUAL REQUESTS ARE PROCESSED  
IN ACCORDANCE WITH PARAGRAPH 8a(4).

THE ALTERNATE PROCEDURE, UNDER NEW PARAGRAPH 16, STREAMLINES FEDERAL  
APPROVAL ACTIONS AND REDUCES PROCESSING DELAYS. ANOTHER OBJECTIVE IS TO  
PROVIDE MORE TIME FOR ENGINEERS TO WORK ON OTHER AREAS OF THE HIGHWAY  
PROGRAM. THE ADOPTION OF THESE PROCEDURES TO THE MAXIMUM EXTENT FEASIBLE  
SHOULD NOT ONLY FURTHER THE FEDERAL OBJECTIVES, BUT ALSO BENEFIT THE STATES  
AND UTILITIES BY INCREASING LEAD TIME, REDUCING THE CORRESPONDENCE LOAD,  
AND IMPROVING RELATIONS WITH UTILITY COMPANIES THROUGH THE MORE EXPEDITIOUS  
HANDLING OF UTILITY AGREEMENTS AND PAYMENT OF UTILITY CLAIMS.

BEFORE GETTING INTO A DETAILED DISCUSSION OF THE NEW PROVISIONS YOUR  
ATTENTION IS CALLED TO THE NOTE AT THE BOTTOM OF THE TRANSMITTAL MEMORANDUM.  
THE OCTOBER 15, 1966, ISSUE OF PPM 30-4 WILL BE IN USE UNTIL THE PROVISIONS  
OF PPM 30-4.1 HAVE BEEN FULLY IMPLEMENTED. DO NOT MAKE THE MISTAKE OF  
DISCARDING IT PREMATURELY.

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II PARAGRAPH BY PARAGRAPH BRIEFING ON REVISIONS TO PPM 30-4

1b. NEW PPM 30-4 IS A COMPANION POLICY TO PPM 30-4-1. THE FORMER NO LONGER CONTAINS DETAILED ACCOMMODATION PROCEDURE REQUIREMENTS. THEREFORE, UNTIL THE PROVISIONS OF PPM 30-4.1 HAVE BEEN IMPLEMENTED IT WILL BE NECESSARY TO FOLLOW THE REQUIREMENTS OF PARAGRAPH 15 OF THE OCTOBER 15, 1966, ISSUE OF PPM 30-4. OTHERWISE THE PPM IS EFFECTIVE UPON ITS DATE OF ISSUANCE (FEBRUARY 14, 1969).

1c. THIS PARAGRAPH AND SEVERAL OTHERS IN THE PPM HAVE BEEN UPDATED TO MAKE REFERENCE TO OUR CURRENT RIGHT-OF-WAY POLICIES AS APPROPRIATE. SINCE THE REFERENCES ARE BROAD IN NATURE WE HAVE GENERALLY REFERRED TO THE PPM 80-SERIES.

IT HAS BEEN A LONGSTANDING PRACTICE TO APPLY THE PRINCIPLES OF PPM 30-4 TO COST-TO-CURE SITUATIONS. THESE SITUATIONS HAVE GENERALLY INVOLVED PRIVATE LINES AS DEFINED IN PPM 30-4.1, THAT IS, THEY CONVEY OR TRANSMIT UTILITY COMMODITIES BUT ARE NOT PUBLIC UTILITIES. HOWEVER, THE PRINCIPLES OUTLINED IN PPM 30-4 ARE SUITABLE FOR APPLICATION TO MANY CASES WHERE A COST-TO-CURE OFFERS THE MOST ECONOMICAL SOLUTION: FOR EXAMPLE, AN INDUSTRIAL PIPELINE SYSTEM OR A FARMERS WATER SYSTEM. PARAGRAPH 1C NOW OFFICIALLY RECOGNIZES THE APPLICATION OF THE PRINCIPLES OF PPM 30-4 TO SUCH CASES.

1d. THIS PARAGRAPH HAS BEEN REVISED TO PROVIDE APPROPRIATE REFERENCE TO PPM 80-3.

2c. THE TERM "DIVISION ENGINEER" HAS BEEN REVISED TO MAKE APPROPRIATE REFERENCE TO THE FEDERAL HIGHWAY ADMINISTRATION.

2d. A NEW DEFINITION HAS BEEN ADDED WHICH DEFINES "DIRECTOR" AS THE DIRECTOR OF THE BUREAU OF PUBLIC ROADS, FEDERAL HIGHWAY ADMINISTRATION.

4c. THE LAST TWO SENTENCES OF THIS PARAGRAPH ARE NEW. THIS PARAGRAPH FORMERLY REQUIRED (AND STILL REQUIRES) ADEQUATE AND FORMAL APPRAISALS OF RECORD WHERE THE COST OF ANY REPLACEMENT RIGHT-OF-WAY TRACT IS MORE THAN \$500. THIS PROVISION HAS BEN BROADENED TO BE CONSISTENT WITH CURRENTLY ACCEPTED APPRAISAL PRACTICES TO PERMIT ADEQUATELY SUPPORTED, ABBREVIATED APPRAISAL REPORTS TO BE USED IN DETERMINING THE MARKET VALUE OF UNCOMPLICATED TAKINGS WHERE THE VALUE ESTIMATE IS LESS THAN \$2500. EXAMPLES OF UNCOMPLICATED TAKINGS ARE PROVIDED IN THE PPM.

4d and 4e. CHANGES HAVE BEEN MADE IN THESE PARAGRAPHS ONLY TO MAKE REFERENCE TO THE PPM 80-SERIES.

4f. THIS PARAGRAPH IS TO BE APPLIED WHENEVER IT IS PROPOSED TO RELOCATE UTILITY FACILITIES OR TO ACQUIRE UTILITY PROPERTY INTERESTS TO PROTECT AND PRESERVE SCENIC AREAS OR STRIPS. THE STATE MUST DETERMINE WHAT STEPS WILL BE NECESSARY TO INSURE PROTECTION AND PRESERVATION AND WHETHER THE BENEFITS OR ESTHETIC VALUES TO BE RECEIVED WILL OUTWEIGH THE INVESTMENT OR COST OF ACQUISITION AND/OR COST-TO-CURE. THIS PROVISION WAS PREVIOUSLY CONTAINED IN NUMBERED PARAGRAPH (4) OF IM 30-6-67 AND HAS BEEN INCLUDED HERE WITH ONLY MINOR CHANGES IN THE WORDING. THE REMAINDER OF IM 30-6-67 HAS BEEN REWRITTEN AND TRANSFERRED TO PARAGRAPH 6g OF PPM 30-4.1.

7a(5) THIS IS A NEW PARAGRAPH WHICH REQUIRES THAT EACH REIMBURSEMENT AGREEMENT FOR A UTILITY RELOCATION CONTAIN A PROVISION, OR BY SUPPLEMENT THERETO, THAT WHERE FACILITIES ARE TO BE RELOCATED TO A POSITION WITHIN THE HIGHWAY RIGHT-OF-WAY, THEY WILL BE ACCOMMODATED IN ACCORDANCE WITH THE PROVISIONS OF PPM 30-4.1. THIS REPLACES THE REQUIREMENT OF THE SECOND PART OF FORM PARAGRAPH 7k(3) WHICH REQUIRED THAT THE DIVISION ENGINEER BE FURNISHED A COPY OF THE UTILITY USE AND OCCUPANCY AGREEMENT PRIOR TO AUTHORIZING THE STATE TO PROCEED WITH THE PHYSICAL ADJUSTMENT. A MINOR

CHANGE OF WORDING HAS BEEN INCLUDED IN REVISED PARAGRAPH 7k(3).

A MINOR CHANGE HAS BEEN MADE TO PARAGRAPH 7P TO DESIGNATE THE DIRECTOR OF THE BUREAU OF PUBLIC ROADS RATHER THAN THE FEDERAL HIGHWAY ADMINISTRATOR AS THE PERSON WHO CAN APPROVE SPECIAL PROCEDURES OR EXCEPTIONS TO THE PPM REQUIREMENTS.

15a. THIS PARAGRAPH REPLACES THE DETAILED OCCUPANCY REQUIREMENTS OF OLD PARAGRAPH 15, EXCLUDING PARAGRAPH 15d, AND IDENTIFIES PM 30-4.1 AS THE DOCUMENT WHICH NOW PRESCRIBES OCCUPANCY REQUIREMENTS FOR UTILITIES LOCATED WITHIN THE RIGHTS-OF-WAY OF FEDERAL-AID HIGHWAY PROJECTS.

15b. FORMER PARAGRAPH 15d HAS BEEN REWRITTEN AND RETAINED AS NEW PARAGRAPH 15b DUE TO THE TRANSFER OF OTHER REQUIREMENTS TO PPM 30-4-1. THESE PROVISIONS CONTAIN PREREQUISITES FOR THE DIVISION ENGINEER'S AUTHORIZATION OF THE PHYSICAL CONSTRUCTION OF A HIGHWAY PROJECT. PROVISIONS (2), (3), and (5) PERTAINING TO ACQUISITION OF SUFFICIENT INTEREST IN THE RIGHT-OF-WAY, AGREEMENT REGARDING WORK ARRANGEMENTS AND TIMING, AND PREPARATION OF HIGHWAY PLANS REMAIN UNCHANGED FROM THE OCTOBER 15, 1966, ISSUE OF THE PPM. PROVISION (1) ALLOWS MORE TIME FOR THE STATE AND UTILITY TO ENTER INTO AGREEMENT (PRIOR TO FINAL ACCEPTANCE OF TO HIGHWAY PROJECT) AND PROVISION (4) CALLS ATTENTION TO A REQUIREMENT OF PPM 21-12, PARAGRAPH 7b, THAT PROSPECTIVE BIDDERS BE NOTIFIED OF UTILITY CONFLICTS AND THE NEED FOR COORDINATION OF WORK BY AN APPROPRIATE NOTATION IN THE BID PROPOSAL.

16. ALTERNATE PROCEDURE

a. PURPOSE - TO PROVIDE A MEANS FOR UTILITY RELOCATION AGREEMENTS, INCLUDING INDIVIDUAL TRANSACTIONS UNDER A MASTER AGREEMENT TO BE PROCESSED WITHOUT THE NEED FOR REVIEW OF THE DETAILED AGREEMENT, SUPPORTING PLANS, ESTIMATES, AND OTHER RELATED ITEMS BY THE DIVISION ENGINEER.

(1) SCOPE - AGREEMENTS AMOUNTING TO \$25,000 OR LESS, INCLUDING LUMP-SUM AGREEMENTS NOT EXCEEDING \$5000 IN COST, CAN BE PROCESSED UNDER THIS PROCEDURE UPON APPLICATION BY THE STATE AND APPROVAL OF THE PROCEDURE BY THE REGIONAL FEDERAL HIGHWAY ADMINISTRATOR. THE \$25,000 CEILING AMOUNT IS THE COST TO THE STATE. FOR EXAMPLE, IN CASES WHERE THE LINES TO BE ADJUSTED ARE LOCATED ON AND OFF THE PUBLIC RIGHT-OF-WAY AND THE STATE IS RESPONSIBLE FOR ONLY THAT PORTION LOCATED OFF THE PUBLIC RIGHT-OF-WAY, THE \$25,000 LIMITATION WOULD APPLY TO THE STATE'S SHARE ONLY. ON THE OTHER HAND, A COSTLY ADJUSTMENT, SAY ONE COSTING \$100,000, SHOULD NOT BE ARBITRARILY SUBDIVIDED INTO SEVERAL SEPARATE AGREEMENTS MERELY TO QUALIFY UNDER THE \$25,000 CEILING. THIS WOULD ALSO APPLY TO CASES WHERE PORTIONS OF AN ADJUSTMENT WERE DELIBERATELY MADE NON-PARTICIPATING FOR THE EXPRESS PURPOSE OF AVOIDING THE REQUIREMENTS OF THE PPM. IN SUMMARY, THE PROVISIONS OF THIS PARAGRAPH APPLY TO CASES WHERE THE STATE'S SHARE OF THE COST OF RELOCATION FOR ADJUSTING THE FACILITIES OF A COMPANY UNDER ONE AGREEMENT IS ESTIMATED TO BE \$25,000 OR LESS. WE RECOGNIZE THERE WILL BE CASES WHERE THE STATE AND A PARTICULAR UTILITY COMPANY MAY ENTER INTO MORE THAN ONE AGREEMENT WITHIN THE LIMITS OF A HIGHWAY PROJECT. WHERE THERE IS GOOD REASON FOR THIS, SUCH AS ISOLATED CROSSINGS OF THE HIGHWAY AT VARIOUS POINTS THROUGHOUT A PROJECT, SAY WHERE THERE IS STAGE CONSTRUCTION, WE WOULD NOT QUESTION THE USE OF SEPARATE AGREEMENTS.

(2) STATE WILL ACT IN THE POSITION OF THE DIVISION ENGINEER IN REVIEWING AND APPROVING:

- (a) ARRANGEMENTS
- (b) FEES\*
- (c) PLANS
- (d) ESTIMATES
- (e) AGREEMENTS

\*UNDER THE ALTERNATE PROCEDURE IT IS EXPECTED THAT THE STATE WOULD, AS PART OF ITS APPLICATION, INCLUDE A STATEMENT ON THE PROCEDURES IT WILL FOLLOW WHERE THE UTILITY PROPOSES TO EMPLOY AN ENGINEER CONSULTANT - SEE PARAGRAPHS 5b (1) AND (2).

b. ANY STATE DESIRING TO OPERATE UNDER THE PROVISIONS OF THIS PARAGRAPH MAY FILE A FORMAL APPLICATION WITH PUBLIC ROADS REQUESTING APPROVAL OF IT'S PROCEDURE. THE APPLICATION MUST DESIGNATE THE CEILING AMOUNT (25,000 OR LESSER CEILING AMOUNT) IN ADDITION TO THE FOLLOWING:

- (1) WRITTEN POLICIES AND PROCEDURES TO BE FOLLOWED BY THE STATE IN ADMINISTERING AND PROCESSING FEDERAL-AID UTILITY AGREEMENTS. PROVISIONS MUST BE MADE FOR:
  - (a) COMPLIANCE WITH PPM 30-4 AND PPM 30-4.1
  - (b) LIAISON, PLANNING AND COORDINATION
  - (c) REVIEW AND COORDINATION PROCEDURE; ADMINISTRATIVE, LEGAL AND ENGINEERING
  - (d) DOCUMENTATION OF ACTIONS TAKEN
- (2) STATE'S CERTIFICATION SIGNED BY ITS CHIEF ADMINISTRATIVE OFFICER COMMITTING THE STATE TO THE FOLLOWING:
  - (a) COMPLIANCE WITH PPM 30-4 AND STATE POLICIES
  - (b) OBJECTIVES - FEASIBILITY, ECONOMY, SAFETY, APPEARANCE
  - (c) CLAIMS FOR REIMBURSEMENT - ONLY FOR ELIGIBLE COSTS SUBMITTED AFTER AUDIT.

c. THE DIVISION ENGINEER WILL REVIEW AND EVALUATE THE SUBMISSION AND THE STATE'S POTENTIAL IN RESPECT TO THE FOLLOWING: (1) PROCEDURE (2) CAPABILITY, (3) PERFORMANCE; HE WILL REPORT HIS FINDINGS TO THE REGIONAL ADMINISTRATOR.

d. REVIEW AND APPROVAL OF THE PROCEDURE BY THE REGIONAL ADMINISTRATOR IS REQUIRED BEFORE THE DIVISION ENGINEER CAN AUTHORIZE THE PROCESSING OF

AGREEMENTS UNDER THIS PROCEDURE. COPIES OF ALL PROCEDURES, REPORTS, ETC., ARE TO BE SUBMITTED TO THE OFFICE OF RIGHT-OF-WAY AND LOCATION.

e. THE DIVISION ENGINEER'S AUTHORIZATION MAY BE GIVEN WHEN AND IF:

- (1) THE UTILITY WORK IS INCLUDED IN AN APPROVED PROGRAM.
- (2) THE STATE REQUESTS APPROVAL OF THE WORK (RELOCATIONS) INVOLVED AND AUTHORIZATION TO PROCEED UNDER THE ALTERNATE PROCEDURE. THE REQUEST INCLUDES A DESCRIPTION OF THE WORK AND THE ESTIMATED COST FOR EACH AGREEMENT. SUCH A DESCRIPTION SHOULD INDICATE THE FOLLOWING:
  1. NAME OF UTILITY COMPANY
  2. TYPE, SIZE, AND MATERIAL BEING USED E.G., 35 KV ELECTRIC (U.R.D.) POWER CABLE, 50 PAIR (AERIAL) TELEPHONE (COPPER) CABLE, 12" STEEL GAS, 6" CAST IRON WATER MAIN, 24" CONCRETE SEWER, OR OTHER PIPELINES
  3. APPROXIMATE LENGTH OF LINES TO BE ADJUSTED AND LOCATION BY HIGHWAY STATIONING
  4. OPERATING PRESSURE OF LINES CARRYING HAZARDOUS TRANSMITTANTS
  5. ON COMMUNICATION AND ELECTRIC POWER LINES, INDICATE WHETHER OVERHEAD OR UNDERGROUND OR A CONVERSION
  6. BRIDGE ATTACHMENTS
  7. HIGHWAY CROSSINGS OR LONGITUDINAL OCCUPANCY

RELATING THIS TO A HYPOTHETICAL TYPICAL CASE WOULD RESULT IN THE FOLLOWING NARRATIVE DESCRIPTION:  
 NEWTOWN GAS COMPANY- 300 FT. OF 6-INCH (STEEL) GAS PIPELINE (60 P.S.I.) CROSSING AT HIGHWAY STATION 40+20 (BRIDGE ATTACHMENT) AT ESTIMATED COST OF \$24,000.

f. IT WAS STATED EARLIER THAT ONE OF THE PURPOSES OF ADOPTING PARAGRAPH 16 WAS TO STREAMLINE PROCEDURES AND REDUCE PROCESSING DELAYS. IF THIS TIME



SAVINGS IS TO BE OF BENEFIT IT CANNOT BE WASTED AWAY. IT IS ESSENTIAL FOR ADVANCE AUTHORIZATION PROCEDURES TO BE USED TO GET THE MAXIMUM BENEFIT FROM THIS TIME SAVINGS. IF CONSTRUCTION COSTS AND DELAYS CAN BE REDUCED, THE ALTERNATE PROCEDURE WILL HAVE ACHIEVED ONE OF ITS OBJECTIVES. ON THE OTHER HAND, IF NO BENEFITS ARE REALIZED, WE MAY BE CRITICIZED FOR NOT RETAINING A GREATER DEGREE OF CONTROL OVER THE UTILITY AGREEMENT PROCESS.

IN KEEPING WITH OUR DESIRE TO SIMPLIFY THE PAPERWORK OPERATIONS WE HAVE INDICATED THAT ALL ADVANCE AUTHORIZATIONS (UNDER BOTH REGULAR AND ALTERNATE PROCEDURES) CAN BE REQUESTED AND AUTHORIZED CONCURRENTLY.

g. TO MAINTAIN A DEGREE OF CONTROL OVER AGREEMENTS PROCESSED UNDER THE ALTERNATE PROCEDURE, IT IS NECESSARY THAT SOME LIMITS BE ESTABLISHED ON THE EXTENT TO WHICH AN AGREEMENT CAN BE MODIFIED WITHOUT REFERRAL TO THE DIVISION ENGINEER. HOWEVER, IT WOULD BE CONTRARY TO THE PURPOSE OF THE PROCEDURE TO LIMIT THE STATE STRICTLY TO THE ORIGINALLY APPROVED TRANSACTION. THE RANGE OF MODIFICATION PERMITTED BY PARAGRAPHS 16g(1) AND (2) WITHOUT THE NEED FOR REFERRAL TO THE DIVISION ENGINEER IS CONSIDERED REASONABLE.

REFERRAL TO DIVISION ENGINEER IS REQUIRED IF:

- (1) REVISED TOTAL COST EXCEEDS THE ORIGINALLY APPROVED ESTIMATED COST BY MORE THAN 25%.
- (2) REVISED TOTAL ESTIMATED COST EXCEEDS THE APPROVED CEILING AMOUNT BY MORE THAN 10%.

h. THE DIVISION ENGINEER IS REQUIRED TO REVIEW A REPRESENTATIVE SAMPLE OF THE AGREEMENTS PROCESSED UNDER PARAGRAPH 16 AT LEAST ONCE A YEAR AND TO REPORT HIS FINDING TO THE REGIONAL ADMINISTRATOR. THE REPRESENTATIVE SAMPLE

SHOULD INCLUDE ALL TYPES OF WORK APPROVED DURING THE PERIOD (REFER TO LIST ON CHART).

i. ANY CHANGES, ADDITIONS, OR DELETIONS IN THE APPROVED PROCEDURE WHICH MAY BE PROPOSED BY THE STATE ARE TO BE PROCESSED IN THE SAME MANNER AS THE ORIGINAL APPLICATION AND SUBMITTED TO THE REGIONAL ADMINISTRATOR FOR HIS REVIEW AND APPROVAL.

THE CHIEF ADMINISTRATIVE OFFICER OF THE STATE MUST REAFFIRM HIS CERTIFICATION UNDER PARAGRAPH 16b(2) IN A STATEMENT ACCOMPANYING THE APPLICATION.

UTILITY WORK MAY BE AUTHORIZED UNDER THE PREVIOUSLY APPROVED PROCEDURES PENDING THE REGIONAL ADMINISTRATOR'S APPROVAL OF THE PROPOSED MODIFICATIONS.

j. WHERE PUBLIC ROADS REVIEWS DISCLOSE INSTANCES OF NONCOMPLIANCE WITH THE TERMS OF THE STATE'S CERTIFICATION THE REGIONAL ADMINISTRATOR MAY SUSPEND APPROVAL OF THE CERTIFIED PROCEDURE. SUCH ACTION WILL LIKELY BE BASED ON THE DIVISION ENGINEER'S RECOMMENDATION. IT IS NOT ANTICIPATED THAT SUCH ACTION WOULD BE TAKEN FOR ISOLATED DISCLOSURES OF NONCOMPLIANCE BUT ONLY UPON CONFIRMATION THAT OPERATIONS UNDER THE APPROVED PROCEDURES ARE NOT REASONABLY RELIABLE AND EFFECTIVE.

INELIGIBLE COSTS CANNOT, OF COURSE, BE REIMBURSED AND APPROVAL OF THE ALTERNATE PROCEDURE AND THE GENERAL SCOPE OF THE WORK TO BE ACCOMPLISHED IS NOT TO BE CONSTRUED TO CONSTITUTE APPROVAL OF ANY OTHERWISE INELIGIBLE ITEMS OF WORK OR COST.

k. IT IS NOT ANTICIPATED THAT THE STATE'S PROCEDURE CAN BE WRITTEN TO COVER ALL ITEMS WHICH COULD POSSIBLY BE ENCOUNTERED IN PROCESSING UTILITY AGREEMENTS FALLING WITH THE APPROVED CEILING AMOUNT. THE PURPOSE OF THIS PARAGRAPH IS TO ENCOURAGE THE STATE TO SUBMIT FOR PRIOR REVIEW AND ADVICE UNUSUAL OR QUESTIONABLE AGREEMENTS.

PROPOSED UTILITY AGREEMENTS INVOLVING A BASIS OF REIMBURSEMENT NOT PREVIOUSLY ESTABLISHED TO THE SATISFACTION OF PUBLIC ROADS (PARAGRAPH 3b), AND CASES WHERE THE STATE AND UTILITY CANNOT REACH AGREEMENT UNDER THE PROVISIONS OF PARAGRAPH 7p OF PPM 30-4 MUST BE SUBMITTED TO PUBLIC ROADS FOR PRIOR APPROVAL.

IN INSTANCES WHERE THE STATE SEEKS THE DIVISION ENGINEER'S ADVICE, IT IS ESSENTIAL THAT ALL PERTINENT FACTS BE PRESENTED FOR CONSIDERATION.

**U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
BUREAU OF PUBLIC ROADS  
WASHINGTON, D.C. 20591**

UTILITY - HIGHWAY

BRIEFING SESSIONS

QUESTIONS AND ANSWERS

ON

PUBLIC ROADS PPM 30-4.1, ACCOMMODATION OF UTILITIES

DATED NOVEMBER 29, 1968

(THESE QUESTIONS WERE SUBMITTED - INFORMALLY - TO PUBLIC ROADS UTILITIES STAFF FROM FEDERAL HIGHWAY ADMINISTRATION FIELD OFFICES AND STATE HIGHWAY DEPARTMENTS TO AID IN PREPARING FOR BRIEFING SESSIONS OF THE PPM AT SELECTED LOCATIONS DURING APRIL, 1969. THE QUESTIONS AND ANSWERS ARE GROUPED BY SUBJECT MATTER IN THE ORDER OUTLINED IN THE PPM. COPIES ARE PLANNED FOR DISTRIBUTION TO PARTICIPANTS IN THE BRIEFING SESSIONS FOR THEIR INFORMATION, GUIDANCE, AND CONVENIENCE. THEY ARE NOT OFFICIAL POLICY STATEMENTS OF THE BUREAU OF PUBLIC ROADS).

2. POLICY

2a. IS IT THE INTENT OF PPM 30-4.1 TO DENY THE USE OF HIGHWAY RIGHTS-OF-WAY BY UTILITIES IF THE RIGHT-OF-WAY IS NOT ADEQUATE TO ACCOMMODATE THE UTILITY IN A MANNER WHICH, IN THE OPINION OF SOME FEDERAL HIGHWAY OFFICIAL, VIOLATES THIS PARAGRAPH?

ANSWER

NO. THE INTENT IS EXPRESSED IN POSITIVE NOT NEGATIVE TERMS. THE TEST OF OCCUPANCY IS WHETHER THE UTILITY'S REQUEST QUALIFYS UNDER THE STATE'S APPROVED POLICY AND IS ACCEPTABLE TO STATE OFFICIALS. EXCEPT IN THE FEW INSTANCES REQUIRED BY THE PPM, SUCH REQUESTS ARE NOT REFERRED TO PUBLIC ROADS FOR APPROVAL. WHEN THEY ARE, THE OBJECTIVE WILL BE TO SEEK WAYS AND MEANS TO ACCOMMODATE THE UTILITY WITHIN THE RIGHTS-OF-WAY, NOT TO DENY SUCH USE. IF AND WHEN QUESTIONABLE CASES ARISE, A SATISFACTORY RESOLUTION WILL BE SOUGHT WITH THIS OBJECTIVE IN MIND.

2. POLICY

2b. IN STATES WHERE UTILITY COMPANIES HAVE LEGAL AUTHORITY FOR INSTALLING THEIR FACILITIES ON HIGHWAY RIGHT-OF-WAY, ARE THE REGULATIONS REFERRED TO IN THE PPM REASONABLE? DOES THE PPM TAKE INTO ACCOUNT THE RIGHTS OF UTILITIES UNDER STATE LAW TO LOCATE FACILITIES ON HIGHWAY RIGHTS-OF-WAY?

ANSWER

YES TO BOTH QUESTIONS. A UTILITY'S AUTHORITY TO USE HIGHWAY RIGHT-OF-WAY IS NORMALLY CONDITIONED WITH A PROVISIO THAT ITS USE OF THE RIGHTS-OF-WAY WILL NOT INCOMMODE OR ENDANGER THE PUBLIC USE AS A HIGHWAY. AS SUCH, THE USE FOR HIGHWAY PURPOSES IS PARAMOUNT AND THE PROVISIONS OF THE PPM PROVIDE FOR REASONABLE REGULATION OF SUCH USE BY UTILITIES.

3. APPLICATION

3b. WHAT IS MEANT BY COMPLETED PROJECTS IN THIS PARAGRAPH? COMPLETED WHEN? SINCE BUREAU OF PUBLIC ROADS YEAR 1?

ANSWER

ANY AND ALL PROJECTS COMPLETED UNDER FEDERAL-AID HIGHWAY PROGRAM, PROVIDED THEY ARE STILL ON A FEDERAL-AID SYSTEM.

3b. WHEN DOES WORK ON A UTILITY INSTALLATION CEASE TO BE CLASSED AS "REPAIR OR MAINTENANCE" AND BECOME A "NEW INSTALLATION."

ANSWER

AS A SUGGESTED GUIDE, ANY WORK TO REPLACE AN EXISTING FACILITY OR PORTION THEREOF WITH ANOTHER OF THE SAME TYPE, CAPACITY, AND DESIGN AT THE SAME LOCATION OR REPLACEMENT WORK OF AN EMERGENCY NATURE CAN BE CLASSED AS MAINTENANCE. ANY REPLACEMENT OF A DIFFERENT TYPE, CAPACITY OR DESIGN OR REPLACEMENT AT A NEW LOCATION CAN BE CLASSED AS A NEW INSTALLATION.

3d. DOES PPM 30-4.1 APPLY TO ALL RELOCATIONS AND ADJUSTMENTS UNDER PPM 30-4?

ANSWER

YES - SEE NEW PARAGRAPH 15a OF REVISED PPM 30-4, DATED FEBRUARY 14, 1969.

4. DEFINITIONS

4b. 1. DO PRIVATE LINES HAVE THE SAME STATUS AND PRIVILEGE OF A PUBLIC UTILITY FACILITY? 2. ARE THEY CONSIDERED A PUBLIC UTILITY? 3. ARE FEDERAL FUNDS ELIGIBLE TO PARTICIPATE IN THE COST OF RELOCATING A PRIVATE LINE?

ANSWER

1. \*NO 2. \*NO 3. WHERE THE OWNER HAS A COMPENSABLE INTEREST IN THE LAND OCCUPIED BY THE LINES TO BE RELOCATED, YES. (SEE PARAGRAPH 1c OF PPM 30-4) \*EACH STATE IS ASKED TO REPORT ON THIS UNDER PARAGRAPH 7a.

4b. ON MINOR LOCAL ROADS, UNDER LOCAL CONTROL SAY AT CROSSINGS OF STATE HIGHWAYS, WHICH HAPPEN TO FALL IN THE PATH OF A FEDERAL-AID HIGHWAY PROJECT, DOES THE PPM APPLY TO UTILITY INSTALLATIONS ON THE LOCAL ROAD?

ANSWER

NO. BUT IT DOES APPLY TO THAT PORTION CROSSING THE FEDERAL-AID HIGHWAY PROJECT.

A-100

4d. WHAT IS THE MEANING OF "RELATED FACILITIES" AS THEY MAY EFFECT THE LOCATION OF UTILITIES?

ANSWER

THE TERM "RELATED FACILITIES" MEANS HIGHWAY LIGHTING, SIGNING, LANDSCAPING AND SIMILAR IMPROVEMENTS TO HIGHWAY FACILITY. REGARDLESS OF THEIR EFFECT ON THE LOCATION OF UTILITIES, THE PPM IS FOR APPLICATION ON THOSE SECTIONS OF HIGHWAYS SO IMPROVED WITH FEDERAL-AID HIGHWAY FUNDS.

4e. DO ACTIVE PROJECTS INCLUDE PROPOSED PROJECTS IN THE STATES APPROVED PROGRAM BUT NOT YET COVERED BY AN APPROVED FEDERAL-AID PROGRAM ACTION?

ANSWER

WITHIN THE AUTHORITY OF THIS PPM A PROJECT CAN ONLY BE CONSIDERED ACTIVE WHEN SOME PHASE OF THE WORK HAS BEEN PROGRAMED, IN STAGE 1 OR STAGE 2, INDICATING THE INTENT TO FINANCE SUCH WORK WITH FEDERAL-AID HIGHWAY FUNDS. HOWEVER, WE WOULD HOPE THAT THE STATE WOULD DEVELOP A POLICY FOR APPLICATION TO ALL STATE HIGHWAYS, NOT JUST FEDERAL-AID PROJECTS. AS SUCH THE STATE COULD APPLY THE POLICY BEFORE MAKING A DETERMINATION TO FINANCE WORK WITH FEDERAL-AID FUNDS. ALSO IN A STATE WHICH FINANCES ONLY A PORTION OF THE WORK WITH FEDERAL-AID FUNDS (E.G., CONSTRUCTION) IT IS TO THE STATE'S ADVANTAGE TO APPLY ITS POLICIES IN ALL AREAS WHERE IT HAS ACQUIRED RIGHT-OF-WAY RATHER THAN WAITING UNTIL WORK HAS BEEN PROGRAMED. NOTE THAT THE PROVISIONS OF PARAGRAPH 3c WILL EVENTUALLY APPLY IF PROGRAMING IS DEFERRED UNTIL FUNDS ARE ACTUALLY NEEDED.

5. GENERAL PROVISIONS

5d. WHERE A STATE LACKS THE AUTHORITY TO EFFECT AND ENFORCE THE PPM, WHAT PERIOD OF TIME IS PRESCRIBED TO OBTAIN THE NECESSARY LEGISLATION?

ANSWER

NO PERIOD OF TIME IS PRESCRIBED. WHERE THIS IS THE CASE, A LEGAL OPINION BY THE STATES ATTORNEY MAY BE SUBMITTED THROUGH CHANNELS TO THE OFFICE OF RIGHT-OF-WAY AND LOCATION FOR REFERRAL TO THE CHIEF COUNSEL'S OFFICE. THIS COULD BE ACCOMPLISHED AS PART OF THE INITIAL REPORT REQUIRED UNDER PARAGRAPH 7a. GENERALLY WHERE A QUESTION OF THIS NATURE ARISES, IT IS SUGGESTED THAT THE MATTER BE THOROUGHLY STUDIED TO DETERMINE WHETHER LEGISLATIVE AUTHORITY IS NEEDED TO COMPLY WITH THE PPM. FOR EXAMPLE, THE PPM DOES NOT REQUIRE THE STATE TO SEEK LEGISLATION WITH RESPECT TO COMPLYING WITH THE REQUIREMENTS, UNDER PARAGRAPH 6d.

5c. THIS PROVISION MAY ENCOURAGE UTILITIES TO OCCUPY HIGHWAY RIGHTS-OF-WAY UNDER CONDITIONS NOT COMPATIBLE WITH HIGHWAY INTERESTS. CLARIFY AND EXPAND INTENT OF THIS PROVISION. WHAT IS THE MESSAGE FOR HIGHWAY OFFICIALS? DOES IT IMPLY THAT LONGITUDINAL INSTALLATIONS WITHIN FREEWAY RIGHTS-OF-WAY ARE BEING CONSIDERED?

ANSWER

THIS PROVISION DOES NOT ALTER OR ENCOURAGE RELAXING OTHER PROVISIONS OF THE PPM AT THE SACRIFICE OF HIGHWAY SAFETY, CAPACITY OR APPEARANCE. ITS MESSAGE IS TWOFOLD. FIRST, IT ENCOURAGES THE ACQUISITION OF RIGHTS-OF-WAY IN WIDTHS

AMPLE TO MEET HIGHWAY OBJECTIVES, I.E., SAFETY, APPEARANCE, EFFICIENCY OF MAINTENANCE AND POTENTIAL EXPANSION IN FORESEEABLE FUTURE. WHERE THIS IS THE CASE, NORMALLY THERE SHOULD BE AMPLE SPACE AVAILABLE TO ACCOMMODATE UTILITIES WITHIN THE HIGHWAY RIGHTS-OF-WAY.

SECOND, IT ENCOURAGES COOPERATIVE PLANNING FOR JOINT USE OF A COMMON CORRIDOR IN THOSE AREAS WHERE A SINGLE TRANSPORTATION CORRIDOR WOULD BE MORE IN KEEPING WITH THE PUBLIC INTEREST THAN SEVERAL SEPARATE CORRIDORS, SAY FOR ACCOMMODATING HIGHWAY AND RAPID TRANSIT FACILITIES OR A PARELLEL UTILITY STRIP, BUT NOT AT THE SOLE EXPENSE OF PUBLIC HIGHWAY FUNDS. WITH RESPECT TO THE COSTS OF ACQUIRING ADDITIONAL WIDTHS OF RIGHTS-OF-WAY, OUR PARTICIPATION IS LIMITED TO THE COSTS OF RIGHTS-OF-WAY, NEEDED FOR HIGHWAY PURPOSES OR AS REPLACEMENT RIGHTS-OF-WAY TO RELOCATE FACILITIES THAT FALL IN THE PATH OF HIGHWAY CONSTRUCTION PROJECTS. (SEE PARAGRAPH 4 OF PPM 30-4 AND BRIEFING SESSION NOTES ON PARAGRAPH 5c).

6. REQUIREMENTS

6a. ARE THE REGIONAL ADMINISTRATORS EXPECTED TO PREPARE THE SAME REPORT THE STATE IS ASKED TO PREPARE UNDER PARAGRAPH 7a? WHAT IS BEING DONE IN AREAS OF DIRECT FEDERAL HIGHWAY CONSTRUCTION WORK TO COMPLY WITH PPM?

ANSWER

A FORMAL REGIONAL REPORT IS NOT REQUIRED. BUT INFORMATION, SIMILAR TO WHAT THE STATE IS ASKED TO PREPARE UNDER 7a, SHOULD BE OBTAINED AND MADE A MATTER OF RECORD. COPIES SHOULD BE FURNISHED TO THE OFFICE OF RIGHT-OF-WAY AND LOCATION AS INFORMATION AND GUIDANCE, SAY FOR OTHER REGIONS. COORDINATION OF THESE MATTERS WITH OTHER FEDERAL AGENCIES IS NOW UNDER STUDY AT HEADQUARTERS LEVEL, SAY BY AN EXCHANGE OF CORRESPONDENCE OR BY MEMORANDUMS OF UNDERSTANDING. (SEE BRIEFING SESSION NOTES ON PARAGRAPHS 4c AND 6a).

6b. DISCUSS SECOND SENTENCE OF THIS PARAGRAPH.

ANSWER

IT MEANS THAT UTILITY USE AND OCCUPANCY AGREEMENTS FOR INSTALLATIONS ON SECONDARY ROAD PLAN PROJECTS NEED NOT BE REFERRED TO PUBLIC ROADS. ALSO THAT THIS MEMORANDUM DOES NOT IMPOSE ANY ADDITIONAL PROJECT ACTIONS BY PUBLIC ROADS ON SECONDARY ROAD PLAN PROJECTS NOT REQUIRED PRIOR TO ITS ISSUANCE.

6b. WHAT SECONDARY ROAD PLAN AMENDMENT DOES PUBLIC ROADS CONSIDER NECESSARY TO COMPLY?

ANSWER

SEE THE "BLUE" CIRCULAR MEMORANDUM DATED DECEMBER 20, 1968, FROM MR. G. M. WILLIAMS TO REGIONAL FEDERAL HIGHWAY ADMINISTRATORS AND DIVISION ENGINEERS ON THE SUBJECT: AMENDMENTS TO STATE'S SECONDARY ROAD PLANS.

6c. CAN COSTS EXPENDED FOR ELIMINATING UTILITY HAZARDS BE APPLIED TOWARD STATE SAFETY EXPENDITURE GOALS?

ANSWER  
YES

6c. DISCUSS AREA OF REIMBURSEMENT AND FINAL ESTABLISHMENT OF HAZARDS. CAUSES OF POTENTIAL HAZARDS OBVIOUSLY WILL BE LOCATED ON PUBLIC HIGHWAY RIGHT-OF-WAY, THUS MAKING FEDERAL PARTICIPATION AND REIMBURSEMENT QUESTIONABLE.

ANSWER  
FOLLOWING APPROVAL OF THE STATES ACCOMMODATION POLICY UNDER PARAGRAPH 7c, INSTALLATIONS WILL NOT BE QUESTIONED IF THEY WERE INSTALLED IN ACCORD WITH THE STATES APPROVED POLICY OR AS AN EXCEPTION THERETO, APPROVED BY PUBLIC ROADS UNDER PARAGRAPH 7f. INSTALLATIONS MADE PRIOR TO THIS WILL NOT BE QUESTIONED. IN ALL CASES, PARTICIPATION IS SUBJECT TO QUALIFY UNDER PPM 30-4.

6c. HOW DOES THIS PARAGRAPH RELATE TO THE TOPICS PROGRAM?

ANSWER  
IT DOESN'T. THE RELOCATION OF OVERHEAD LINES ALONG A ROADSIDE MAY BE INCLUDED AS PART OF A HIGHWAY SAFETY PROJECT, OR AS A SEPARATE HIGHWAY SAFETY PROJECT, PROVIDED THEY QUALIFY FOR REIMBURSEMENT UNDER PPM 30-4. (SEE BRIEFING SESSION NOTES ON PARAGRAPH 6c).

6c. WOULD THE PHRASE "OTHER HIGHWAY AUTHORITY" INCLUDE AGENCIES SUCH AS THE INTERSTATE COMMERCE COMMISSION?

ANSWER  
THE TERM OTHER HIGHWAY AUTHORITY WAS INTENDED TO INCLUDE CITIES, COUNTIES AND OTHER POLITICAL SUBDIVISIONS HAVING JURISDICTION OVER THE OPERATION AND MAINTENANCE OF THE HIGHWAY FACILITY. IT WAS NOT INTENDED TO APPLY TO ORGANIZATIONS SOLELY RESPONSIBLE FOR MOTOR VEHICLE SAFETY OR ACCIDENT INVESTIGATION. HOWEVER, ALL HIGHWAY AUTHORITIES SHOULD COOPERATE WITH AND BE RESPONSIVE TO SUGGESTIONS FROM ORGANIZATIONS OF THIS TYPE.

6d. WHAT RESTRICTIONS SHOULD BE PLACED ON THE ACCOMMODATION OF UTILITIES ON SECONDARY ROADS CARRYING LOW VOLUMES OF TRAFFIC?

ANSWER  
STANDARDS SIMILAR TO THOSE APPLIED ON PRIMARY ROADS, DEPENDING UPON THE DESIGN SPEED, TRAFFIC, WIDTH OF RIGHT-OF-WAY AND OTHER CONTROLLING FEATURES. SOME REQUIREMENTS MAY BE LESS RESTRICTIVE, (E.G., CLEAR ROADSIDE) WHILE OTHERS MAY NOT, (E.G., DEPTH OF BURY). (SEE BRIEFING SESSION NOTES, PARTICULARLY ON PARAGRAPHS 4p, 6d AND 8).

6d. IS THE STATE TO OBTAIN UTILITY USE AND OCCUPANCY AGREEMENTS IN AREAS WHERE THEY DO NOT HAVE LEGAL AUTHORITY TO REGULATE THE USE OF RIGHT-OF-WAY BY UTILITIES?

ANSWER

THE STATE IS TO ENTER INTO WRITTEN AGREEMENT WITH LOCAL HIGHWAY AUTHORITIES TO REGULATE, OR CAUSE TO BE REGULATED, THE USE OF SUCH PROJECT RIGHTS-OF-WAY BY UTILITIES. THE PPM DOES NOT REQUIRE THE STATE TO OBTAIN COPIES OF THE USE AND OCCUPANCY AGREEMENTS ISSUED BY THE LOCAL HIGHWAY AUTHORITY FOR INDIVIDUAL INSTALLATIONS WITHIN THE PROJECT RIGHTS-OF-WAY. THIS IS A MATTER FOR CONSIDERATION BETWEEN STATE AND LOCAL HIGHWAY AUTHORITIES.

6d. SECTION LINE COUNTY AND SECONDARY ROADS IN OUR STATE ARE BUILT ON A STANDARD 66 FOOT WIDE, RIGHT-OF-WAY EASEMENT DEDICATED FOR ROADWAY PURPOSES. WHAT SHOULD BE DONE IN ESTABLISHING A CLEAR ROADSIDE AREA? WHERE SHOULD THE POLES FOR OVERHEAD UTILITY PLANT BE PLACED?

ANSWER

THE ANSWER TO THE FIRST PART IS A HIGHWAY DESIGN MATTER, NOT A UTILITY-HIGHWAY PROBLEM. THE OBVIOUS SOLUTION IS TO ACQUIRE RIGHT-OF-WAY AMPLE TO MEET HIGHWAY OBJECTIVES. WHERE THIS IS THE CASE, THERE SHOULD BE SPACE AVAILABLE FOR UTILITIES. THE ANSWER TO THE SECOND PART IS TO PLACE THE POLES AS NEAR AS POSSIBLE TO THE RIGHT-OF-WAY LINE. (SEE BRIEFING SESSION NOTES ON PARAGRAPHS 4p AND 8a(3)(a)).

6d. WHAT DEGREE OF IDENTIFICATION IS REQUIRED FOR SECTIONS OF THE FEDERAL-AID HIGHWAY SYSTEM WHERE TO STATE IS WITHOUT LEGAL AUTHORITY TO REGULATE USE BY UTILITIES? IS A STATEWIDE SYSTEM MAP SUFFICIENT? WHEN SHOULD SUCH IDENTIFICATION BE PROVIDED? IS IT SATISFACTORY TO IDENTIFY IN FEDERAL TERMS, SUCH AS ALL FEDERAL-AID HIGHWAYS IN THE (NAME OF CITY)?

ANSWER

IDENTIFICATION ON A STATEWIDE SYSTEM MAP WILL SUFFICE. IDENTIFICATION OF INDIVIDUAL PROJECTS AT THE PROGRAM STAGE WILL PROVIDE INFORMATION THAT THE PROJECT REQUIRES A SPECIAL PROVISION IN THE PROJECT AGREEMENT. NARRATIVE DESCRIPTIONS FOR A GENERAL AREA SHOULD BE SUPPORTED BY A MAP, WITH ROUTES PROPERLY MARKED AND IDENTIFIED.

6d(1) THIS PROVISION REQUIRES FORMAL AGREEMENT WITH EACH COUNTY. IS THIS A NECESSITY IF THE SECONDARY ROAD PLAN AND INSTRUCTIONS TO THE COUNTIES BY THE STATE PROVIDE FOR A PERMIT SYSTEM? WILL A MASTER AGREEMENT WITH MUNICIPAL GOVERNMENTS AND COUNTIES BE SATISFACTORY OR WILL IT TAKE A SEPARATE AGREEMENT FOR EACH PROJECT?

ANSWER

YES. THERE MUST BE WRITTEN AGREEMENT ENTERED INTO BETWEEN THE COUNTY AND STATE, OR AN EXISTING AGREEMENT AMENDED FOR THIS PURPOSE. THE AGREEMENT CAN THEN BE REFUSED TO ON ALL FUTURE PROJECTS. IF THE SO-CALLED PERMIT SYSTEM INCLUDES A UTILITY ACCOMMODATION POLICY ACCEPTABLE UNDER THIS PARAGRAPH IT COULD BE INCORPORATED INTO THE STATES-COUNTY AGREEMENT BY REFERENCE.

6d(1) WILL THE "SPECIAL PROVISION" DISCUSSED IN THIS PARAGRAPH BE FURNISHED BY OUR WASHINGTON OFFICE?

ANSWER AN EXAMPLE HAS BEEN INCLUDED IN THE BRIEF SESSION NOTES ON PARAGRAPH 6d.

6d(2) AT THIS TIME THE STATE PROPOSES TO REQUIRE ALL LOCAL HIGHWAY AUTHORITIES TO REGULATE THE USE OF HIGHWAY RIGHTS-OF-WAY BY UTILITIES IN ACCORDANCE WITH THE STATE'S POLICY. THIS WILL BE DONE BY ADDING A SPECIAL PARAGRAPH TO THE STATE AND LOCAL AUTHORITY MAINTENANCE AGREEMENT WHICH IS EXECUTED ON EACH PROJECT. IF THIS IS DONE, WOULD THE SUBMISSION OF A SINGLE REPORT SATISFY THE REQUIREMENTS OF THE LAST SENTENCE OF PARAGRAPH 7b?

ANSWER YES. OTHER REPORTS WOULD BE NECESSARY ONLY WHEN EXCEPTIONS TO THIS PROCESS ARE MADE.

6d(3) WE ASSUME THAT IT IS NOT NECESSARY TO INCLUDE A CONDITION IN EACH PROJECT AUTHORIZATION. IS THIS CORRECT?

ANSWER PROJECT AGREEMENT FOR EACH PROJECT AUTHORIZED MUST CONTAIN SPECIAL CLAUSE AS DESCRIBED IN PARAGRAPH 6d. CONDITION SHOULD BE INCLUDED IN LETTER OF AUTHORIZATION FOR EACH PROJECT UNTIL SATISFACTORY UTILITY ACCOMMODATION POLICY IS APPROVED.

6d(3) DISCUSS INTERIM APPROVAL FOR PROJECTS READY FOR BIDS, BUT BEFORE APPROVAL OF AN ACCOMMODATION POLICY. WHAT IS TO BE EXPECTED BY PUBLIC ROADS IN QUALIFYING A PROJECT FOR FEDERAL-AID, PARTICULARLY WHEN COUNTIES AND CITIES ARE INVOLVED?

ANSWER ALL PROJECTS OF THIS NATURE (UNDER 6d) AUTHORIZED AFTER NOVEMBER 29, 1968, REQUIRE A SPECIAL CLAUSE IN PROJECT AGREEMENT. THE REVIEW AND APPROVAL OF AN EXISTING OR NEW UTILITY ACCOMMODATION POLICY OF THE LOCAL HIGHWAY AUTHORITY MAY BE DEFERRED UNTIL LATER. PARAGRAPH 7c, ESTABLISHES A TARGET DATE (NOVEMBER 29, 1969) FOR APPROVING THE ACCOMMODATION POLICIES IN ALL STATES. A LOCAL HIGHWAY AUTHORITY MAY BE AFFORDED A SIMILAR PERIOD OF TIME, SAY FROM THE DATE THE FIRST PROJECT IN THAT POLITICAL SUBDIVISION WAS AUTHORIZED UNDER PPM 30-4.1. (SEE BRIEFING SESSION NOTES ON PARAGRAPH 6d).

6e IS THERE A NEED FOR A LOCKED GATE POLICY ON FREEWAYS FOR SERVICING UTILITIES?

ANSWER EXISTING POLICIES ARE AVAILABLE AND CONSIDERED ADEQUATE FOR PROVIDING ACCESS TO UTILITIES FOR SERVICING UTILITY FACILITIES. SEE NEW AASHO, "POLICY FOR THE ACCOMMODATION OF UTILITIES ON FREEWAY RIGHTS OF WAY" (ADOPTED FEBRUARY 15, 1969), THE AASHO "INFORMATIONAL GUIDE ON FENCING CONTROLLED ACCESS HIGHWAYS" AND THE AASHO "POLICY ON ACCESS BETWEEN ADJACENT RAILROADS AND INTERSTATE HIGHWAYS." THE GENERAL PRINCIPLES OUTLINED IN THE FOREGOING POLICIES AND GUIDE MAY BE USED FOR PROVIDING ACCESS FOR SERVICING UTILITIES.

6e WHAT PROGRESS IS AASHO MAKING ON A POLICY FOR ACCOMMODATING UTILITIES ON FREEWAYS OTHER THAN INTERSTATE HIGHWAYS?

ANSWER AASHO ADOPTED A NEW POLICY ON FEBRUARY 15, 1969, ENTITLED "A POLICY FOR THE ACCOMMODATION OF UTILITIES ON FREEWAY RIGHTS-OF-WAY." (SEE BRIEFING SESSION NOTES ON PARAGRAPH 6e).

6e WHAT IS PUBLIC ROADS POLICY FOR PERMITTING PRIVATE LINES ON FREEWAYS?

ANSWER SECTION 1.23 TITLE 23 C.F.R. AND IM 21-8-62 ON SUBJECT: ENCROACHMENTS DATED OCTOBER 25, 1962 (WE HAVE ASKED EACH STATE TO FURNISH INFORMATION ON THIS UNDER PARAGRAPH 7a).

6e FOR THE PURPOSE OF THIS PARAGRAPH, ON STAGE CONSTRUCTION OF A FREEWAY, SAY INITIALLY BUILT AS AN EXPRESSWAY WITH SOME CROSSINGS AT GRADE, IS THE FACILITY CONSIDERED TO BE A "FREEWAY" INITIALLY OR ONLY AFTER GRADE CROSSINGS ARE ELIMINATED? WHEN AN ENTIRE PROJECT MEETS FREEWAY REQUIREMENTS BUT ADJACENT SECTIONS DO NOT, DOES THE AASHO POLICY APPLY? IF NOT, WHAT GUIDELINES SHOULD BE FOLLOWED?

ANSWER FREEWAYS ARE FREQUENTLY BUILT AS STAGE CONSTRUCTION. THIS MAY INVOLVE SHORT SEGMENTS BUILT TO FREEWAY STANDARDS OR SEGMENTS BUILT INITIALLY TO TWO LANES OR WITH INTERSECTIONS AT GRADE. UNTIL SUCH TIME AS THE ENTIRE ROUTE SECTION IS UPGRADED THE NON-CONFORMING SECTIONS SHOULD BE CONSIDERED AS PLANNED FREEWAYS. PARAGRAPH 8a(5) OF THIS MEMORANDUM REQUIRES STATE POLICIES AND PROCEDURES TO MAKE EVERY EFFORT TO AVOID CONFLICTS AND TO COORDINATE PROPOSED UTILITY LOCATIONS AND FUTURE HIGHWAY PROJECTS. UTILITY INSTALLATIONS ALONG OR ACROSS PROPOSED FREEWAYS SHOULD CONFORM TO FREEWAY STANDARDS TO THE MAXIMUM EXTENT FEASIBLE TO AVOID THESE FUTURE CONFLICTS. UTILITIES MAY BE GRANTED TEMPORARY CONCESSIONS WHERE FREEWAYS DO NOT PRESENTLY EXIST WITH THE UNDERSTANDING THAT WHEN THE FREEWAY IS CONSTRUCTED THE FREEWAY STANDARDS WILL BE ENFORCED. ULTIMATE PLANS SHOULD BE DEVELOPED AT THE CONCEPTION STAGE SO THAT THE UTILITY WON'T BE FACED WITH REQUESTING A HARDSHIP EXCEPTION AFTER THE FREEWAY IS BUILT. (FOR EXAMPLE, DENIAL OF ACCESS).

6f MEANING OF THIS PROVISION SHOULD BE DISCUSSED. REGARDLESS OF EXISTING PARALLEL FACILITY, CAN A PROPERLY ENGINEERED CROSSING OF A FREEWAY BE REJECTED UNDER STATE LAW?

ANSWER THIS PARAGRAPH REDUCES THE OCCASION FOR CROSSINGS OF FREEWAYS BY UTILITY SERVICE CONNECTIONS TO A REASONABLE MINIMUM. IT RESTRICTS THEN TO CERTAIN LOCATIONS. SEE BACKGROUND INFORMATION IN (BLUE) CIRCULAR MEMORANDUM DATED JUNE 14, 1960, FROM MR. G. M. WILLIAMS. ALSO SEE BRIEFING SESSION NOTES ON PARAGRAPH 6f. FINALLY, CONSULT STATE'S ATTORNEY. PLEASE KEEP IN MIND THAT THIS PROVISION DOES NOT APPLY TO CROSSINGS OF A UTILITY'S DISTRIBUTION OR TRANSMISSION LINES.

6f ARE WE CORRECT IN ASSUMING THAT SERVICE CONNECTIONS MAY BE PERMITTED TO CROSS ALL FREEWAYS, INCLUDING INTERSTATE HIGHWAYS, WITHOUT QUALIFYING AS AN EXTREME CASE EXCEPTION TO THE AASHO POLICY, AS PREVIOUSLY REQUIRED UNDER THE (BLUE) CIRCULAR MEMORANDUM OF JUNE 14, 1960? WAS IT YOUR INTENT THAT A MORE LIBERAL POLICY BE USED FOR THESE MATTERS?

ANSWER

UNDER THE NEW POLICY, FREEWAY CROSSINGS BY UTILITY SERVICE CONNECTIONS DO NOT REQUIRE APPROVAL AS AN EXTREME CASE EXCEPTION. EXCEPT AS INDICATED BY PARAGRAPH 6f, THEY ARE TO BE TREATED THE SAME AS ANY OTHER FREEWAY CROSSING. HOWEVER, ALL CROSSINGS OF INTERSTATE HIGHWAYS ARE SUBJECT TO PRIOR CONCURRENCE BY PUBLIC ROADS (THE DIVISION ENGINEER) SEE BRIEFING SESSION NOTES ON PARAGRAPHS 6f AND 7f.

6f PLEASE DEFINE "NEED" IN THIS PARAGRAPH AS RELATES TO UTILITY SERVICE CONNECTION TO SIGNS (ADVERTISING).

ANSWER

STATE'S UTILITY ACCOMMODATION POLICY SHOULD TAKE THIS INTO ACCOUNT. PROVIDING ESSENTIAL SERVICES TO PEOPLE (PUBLIC HEALTH AND WELFARE) SEEM TO WARRANT A HIGHER PRIORITY THAN LIGHTING A COMMERCIAL SIGN. (SEE "BLUE" CIRCULAR MEMORANDUM DATED JUNE 14, 1960).

6f THERE APPEARS TO BE A NEED FOR DEVELOPMENT OF CRITERIA ON ACCEPTABLE NUMBERS OF UTILITY SERVICE CONNECTIONS.

ANSWER

WE DO NOT FEEL IT WOULD BE ADVISABLE TO ESTABLISH NUMERICAL CRITERIA FOR EVALUATING SERVICE LINE CROSSINGS VS. PARALLEL FEEDER LINES. OF GREATER IMPORTANCE IS THE CHARACTER OF THE AREA BEING TRAVERSED, ITS POTENTIAL FOR DEVELOPMENT AND THE ACCEPTABILITY OF ALTERNATE LINE ROUTINGS.

6g IS THE LIMITATION IN PARAGRAPH 6g TO "NEW INSTALLATIONS" INTENDED?

ANSWER

PARAGRAPH 4f OF PPM 30-4 COVERS EXISTING INSTALLATIONS. IF A RELOCATION OR ADJUSTMENT IS MADE, THE PROVISIONS OF 6g ARE TO BE FOLLOWED.

6g DEFINE SCENIC STRIPS AND OVERLOOKS.

ANSWER

SEE AASHO HIGHWAY DEFINITIONS (1968).

6g WHAT IS THE MAXIMUM SIZE (KV) POWER LINES THAT ONE COULD REASONABLY REQUIRE TO BE PLACED UNDERGROUND?

ANSWER

IT DEPENDS UPON SEVERAL FACTORS, SUCH AS LOCATION, AMOUNT OF LAND DEVELOPMENT AND SUB-SURFACE CONDITIONS. FROM THE STANDPOINT OF RELIABILITY, DISTRIBUTION PLANT, (ABOVE 35 KV) , IS PLACED UNDERGROUND IN MANY CITIES AND LOCATIONS THROUGHOUT THE COUNTRY. FROM THE STANDPOINT OF THE PPM, WE ARE SATISFIED THAT ITS REQUIREMENTS ARE REASONABLE.

6g WHAT ARE THE LEGAL ASPECTS OF THIS REQUIREMENT WHEN STATE LAW GRANTS A UTILITY THE RIGHT OF OCCUPANCY ON HIGHWAY RIGHT-OF-WAY?

ANSWER

THIS PROVISION DOES NOT DENY THE RIGHT OF OCCUPANCY BUT REGULATES THE MANNER AND LOCATION WHERE THE RIGHT IS TO BE EXERCISED. ANY LEGAL QUESTIONS ON THIS MAY BE CONSIDERED BY THE STATE'S ATTORNEY AS PART OF THE STATE'S REPORT REQUIRED UNDER PARAGRAPH 7a AND SHOULD BE SUBMITTED THROUGH THE OFFICE OF RIGHT-OF-WAY AND LOCATION FOR REFERRAL TO THE CHIEF COUNSEL'S OFFICE.

6g HOW ARE WE GOING TO APPLY PROVISIONS OF 6g TO PUBLIC PARKS, RECREATION AREAS, WILDLIFE AND WATERFOWL REFUGES WHEN THEY INCLUDE LARGE LAND AREAS? ALSO, WHEN THEY ARE NOT UNDER STATE OR FEDERAL JURISDICTION?

ANSWER

THE PROVISIONS APPLY TO HIGHWAYS PASSING THROUGH THE CITED AREAS. NORMALLY HIGHWAY RIGHTS-OF-WAY WILL BE UNDER THE JURISDICTION OF STATE OR LOCAL HIGHWAY AUTHORITIES. IN SOME INSTANCES, THE USE OF THE HIGHWAY RIGHT-OF-WAY TRAVERSING THE CITED AREAS MAY BE SUBJECT TO REVIEW BY PLANNING OR RESOURCE AUTHORITIES HAVING JURISDICTION OVER THE OVERALL PARK, RECREATION AREA, ETC. SUCH AGENCIES MAY ALSO HAVE SIMILAR POLICIES ON AESTHETICS, PARTICULARLY FEDERAL LAND AGENCIES. OUR PRIMARY INTEREST IS IN THE HIGHWAY AND THE REGULATION OF ITS USE AND OCCUPANCY BY UTILITIES.

6g WHAT IS REQUIRED ON THE ADJUSTMENT OF EXISTING UTILITIES WITHIN THE CITED AREAS, SAY WHERE THE UTILITY HAS A REAL PROPERTY INTEREST?

ANSWER

NEW PARAGRAPH 4f OF PPM 30-4 PROVIDES FOR THIS (ALSO SEE PARAGRAPH 9c OF PPM 30-4 AND BRIEFING SESSION NOTES ON 6g OF PPM 30-4.1 AND 4f OF PPM 30-4).

6g DISCUSS THE REQUIREMENTS FOR UNDERGROUND CONSTRUCTION OF UTILITIES AROUND AND WITHIN THE CITED AREAS, WHICH WILL INVOLVE CONSIDERABLE EXPENSE IN MANY REMOTE AREAS.

ANSWER

THE COST OF UNDERGROUNDING UTILITY DISTRIBUTION AND TRANSMISSION PLANT IS OUTLINED IN THE DECEMBER 1968 REPORT OF THE (FEDERAL-WIDE) WORKING COMMITTEE ON UTILITIES, THE 1968 REPORT OF THE ELECTRIC UTILITY INDUSTRY TASK FORCE ON ENVIRONMENT, AND A PAPER ON THE USE OF UNDERGROUND RESIDENTIAL DISTRIBUTION (URD) CABLE IN RURAL AREAS BY THE CASS COUNTY ELECTRIC COOPERATIVE, INCORPORATED, KINDRED, NORTH DAKOTA. (ONE COPY OF EACH OF THESE DOCUMENTS IS BEING FURNISHED TO EACH STATE, BPR DIVISION AND REGION REPRESENTED AT OUR BRIEFING SESSIONS ON THE PPM - SEE BRIEFING SESSION NOTES ON PARAGRAPH 6g.) PLEASE KEEP IN MIND THAT IT IS COSTLY TO CONSTRUCT HIGHWAYS THROUGH THE CITED AREAS (PUBLIC PARKS, ETC.) AND TO PROVIDE SCENIC OVERLOOKS, REST AREAS AND SCENIC STRIPS. IN THIS RESPECT (COSTS) THE IMPACT OF SECTION 138 OF TITLE 23, U.S.C., OF THE 1968 FEDERAL-AID HIGHWAY ACT IS BORNE BY PUBLIC HIGHWAY FUNDS. THE UTILITIES ARE BEING ASKED TO FOLLOW REASONABLE MEASURES TO PRESERVE AND PROTECT THE APPEARANCE OF THE AREA BEING TRAVERSED AND EXPOSED TO THE MOTORIST'S VIEW AS WELL AS THE INVESTMENT OF PUBLIC HIGHWAY FUNDS FOR THIS PURPOSE.

6g IS THERE A NEED FOR A STATEMENT OF POLICY ON THE USE OF FEDERAL-AID FUNDS IN RELOCATION OF UTILITIES FOR PURELY ESTHETIC REASONS?

ANSWER

THE PROVISIONS OF PARAGRAPHS 6g OF PPM 30-4.1 AND 4f OF PPM 30-4 SHOULD ADEQUATELY SERVE THIS NEED. (SEE BRIEFING SESSION NOTES ON PARAGRAPH 6g)

6g WHO WILL DETERMINE WHAT CONSTITUTES AESTHETIC CONSIDERATIONS?

ANSWER

APPROPRIATE HIGHWAY OFFICIALS, WHO ALSO HAVE THE RESPONSIBILITY FOR ACQUIRING AND DEVELOPING SCENIC STRIPS, OVERLOOKS, REST AREAS AND FOR PLANNING AND CONSTRUCTING HIGHWAYS THAT PRESERVE OR ENHANCE THE NATURAL BEAUTY OF THE LANDS TRAVERSED. (SEE BRIEFING SESSION NOTES ON PARAGRAPH 6g AND HANDOUT MATERIAL FOR REFERENCE ON THIS TOPIC).

6g IN WHOSE JUDGEMENT IS VERTICAL CONFIGURATION OF WIRES AND CABLES MORE SCENIC THAN CONVENTIONAL CROSS-ARM CONSTRUCTION FOR AERIAL UTILITY PLANT?

ANSWER

IT IS NOT NECESSARILY CONSIDERED MORE SCENIC BUT IT ELIMINATES CROSS-ARM CLUTTER, PERMITS INSTALLATION CLOSER TO THE RIGHT-OF-WAY LINE AND REDUCES THE AMOUNT OF TREE TRIMMING OR REMOVAL.

6g MAY EXISTING AERIAL FACILITIES BE ADJUSTED OR RELOCATED WITHOUT GOING UNDERGROUND?

ANSWER

EXISTING INSTALLATIONS WITHIN THE CITED AREAS THAT MUST BE ADJUSTED OR RELOCATED AS PART OF A HIGHWAY IMPROVEMENT PROJECT ARE TO COMPLY WITH 6g OF PPM 30-4.1 AND 4f OF PPM 30-4.

6g WHERE OVERLOOKS SCENIC STRIPS ETC., ARE ON ONE SIDE OF THE HIGHWAY, IS IT THE INTENT OF THE PPM TO PREVENT AERIAL INSTALLATIONS ALONG THE OTHER SIDE?

ANSWER

THE INTENT IS TO PRESERVE AND PROTECT THE APPEARANCE OF THE AREA BEING TRAVERSED AND EXPOSED TO THE MOTORIST'S VIEW, INCLUDING THE PUBLIC HIGHWAY FUND INVESTMENT FOR THIS PURPOSE.

6g(1)(b) A COMMON INSTALLATION COMBINES A HIGH VOLTAGE (OVER 35 KV) TRANSMISSION LINE ON THE SAME POLES AS A LOWER VOLTAGE (UNDER 35 KV) DISTRIBUTION LINE. WE WOULD EXPECT THAT, IN THE CASE WHERE THE HIGH VOLTAGE LINE WOULD BE PERMITTED AS AN OVERHEAD LINE, THERE WOULD BE NO NEED TO INSIST ON BURIAL OF THE LOW VOLTAGE LINE.

ANSWER

IF THE ENTIRE FACILITY IS TO BE SCREENED THERE WOULD BE LITTLE MERIT FOR BURYING THE LOW VOLTAGE WIRES. IF THE FACILITY IS NOT BEING SCREENED AND BURYING THE LOW VOLTAGE LINES WOULD ELIMINATE CONSIDERABLE CROSS-ARM CLUTTER OR SIGNIFICANTLY REDUCE DAMAGE TO TREES, SUCH A SOLUTION MAY BE APPROPRIATE. EACH SITUATION SHOULD BE HANDLED ON ITS OWN MERITS.

6g(1)(b) WHY WAS 35 KV SELECTED?

ANSWER

IT WAS SELECTED ON THE BASIS OF THE RECOMMENDATIONS OUTLINED IN THE (FEDERAL-WIDE) WORKING COMMITTEE'S REPORT (DECEMBER, 1968) TO THE PRESIDENT'S COUNCIL ON RECREATION AND NATURAL BEAUTY AND THE (1968) REPORT OF THE ELECTRIC UTILITY INDUSTRY TASK FORCE ON ENVIRONMENT TO THE CITIZENS ADVISORY COMMITTEE ON RECREATION AND NATURAL BEAUTY. (A COPY OF EACH OF THESE WAS FURNISHED AS A HANDOUT TO EACH STATE, BPR DIVISION AND REGION AT UTILITY-HIGHWAY BRIEFING SESSIONS - SEE BRIEFING SESSION NOTES ON THIS PARAGRAPH).

6g(2)

1. WHERE PLACEMENT OF LINES (35 KV OR LESS) UNDERGROUND IS NOT FEASIBLE, CAN AERIAL LINES BE INSTALLED? 2. CAN THIS TYPE OF REQUEST BE SUBMITTED FOR CONSIDERATION BY THE DIRECTOR UNDER 6g(3)?

ANSWER

1. IN RARE AND UNUSUAL CASES. 2. YES.

6g(3)

WE HAVE HEARD OF A MOVE TOWARD PLACING AS MUCH AUTHORITY AS POSSIBLE AT THE DIVISION LEVEL. SHOULD THE RETENTION OF EXTREME HARDSHIP CASE APPROVALS BE HELD AT THE DIRECTOR'S LEVEL?

ANSWER

YES, FOR THE PRESENT: AT THE VERY LEAST UNTIL ALL OF US GAIN ADDITIONAL OPERATING EXPERIENCE. THIS IS A CONTROVERSIAL PROVISION AND WE WANT TO MAINTAIN A REASONABLY UNIFORM APPLICATION NATIONWIDE.

6g(3)

DO THE VARIANCE PROVISIONS OF THIS PARAGRAPH (EXCEPTIONS) APPLY TO PARAGRAPH 6g OR ALL OF PARAGRAPH 6?

ANSWER

6g.

6h

UTILITIES OBJECT TO PUNITIVE CLAUSES IN DOCUMENTS WHERE THEY HAVE PRIOR RIGHTS. WHAT SUGGESTIONS OR COMMENTS COULD BE OFFERED TO MAKE THESE UTILITY REQUIREMENTS LESS OBJECTIONABLE TO UTILITY COMPANIES?

ANSWER

THE PPM DOES NOT CALL FOR PUNITIVE CLAUSES IN A JOINT USE AGREEMENT. A USE AND OCCUPANCY AGREEMENT UNDER PARAGRAPH 9 REQUIRES INCLUSION OF, OR BY REFERENCE, THE ACTION TO BE TAKEN IN CASE OF NON-COMPLIANCE WITH THE STATES REQUIREMENTS. A PERMIT OR LICENSE IS USUALLY REVOCABLE.

7. REVIEWS AND APPROVALS

7a

SHOULD THE STATE SPECIFICALLY IDENTIFY ITS AUTHORITY TO REGULATE THE USE OF RIGHTS-OF-WAY BY UTILITIES AND THE AUTHORITY OF THE UTILITIES TO USE AND OCCUPY SUCH RIGHTS-OF-WAY? CAN THIS BE DONE BY GENERAL REFERENCE TO LAW?

ANSWER

YES TO THE FIRST PART; NO TO THE SECOND.



7a SHOULD INCLUSION OF PPM 30-4.1 BY REFERENCE BE IN STATE'S ACCOMMODATION POLICY PLUS REFERENCE TO IT IN USE AND OCCUPANCY AGREEMENT AND/OR STANDARDS?

ANSWER

YES TO THE FIRST PART; NO TO THE SECOND PART.

7a REGARDING THE PROPOSED POLICY ON ACCOMMODATION OF UTILITIES, WOULD IT NOT BE TO THE INTEREST OF THE STATE TO DEFER ACTION UNTIL THE NEW AASHO POLICY IS ADOPTED?

ANSWER

FINAL ACTION, PERHAPS, IF AASHO DOES NOT DEFER ISSUANCE OF ITS PROPOSED GUIDE (NOT A POLICY) INDEFINATELY, BUT NOT ON THE PREPARATORY WORK. (SEE BRIEFING SESSION NOTES ON PARAGRAPH 7c AND INTRODUCTORY PARAGRAPHS III-c AND d).

7b&c ARE GUIDELINES OF WHAT IS CONSIDERED AN ACCEPTABLE ACCOMMODATION POLICY TO BE FURNISHED BY WASHINGTON OFFICE FOR USE BY FIELD OFFICES IN REVIEWING STATE'S POLICIES?

ANSWER

AASHO HAS A GUIDE ON THIS TOPIC NOW IN THE LATTER STAGE OF DEVELOPMENT. WE HOPE THAT THE GUIDE WILL BE AVAILABLE AND SATISFACTORY FOR USE BE THE STATES AND PUBLIC ROADS, FOR THIS PURPOSE. (SEE BRIEFING SESSION NOTES ON INTRODUCTORY PARAGRAPHS III c AND d).

7d IS IT INTENDED THAT THE REGIONAL ADMINISTRATOR APPROVE REVISIONS OR CHANGES TO THE STATE'S POLICY WHICH HAVE LITTLE OR NO EFFECT UPON FEDERAL-AID PROJECTS --E.G., STATE PROCEDURES AS TO ROUTING OF DOCUMENTS ETC.?

ANSWER

NO

7e WHAT REVIEW PROCEDURES WILL BE FOLLOWED BY PUBLIC ROADS IN MONITORING THE STATES PRACTICES UNDER PPM 30-4.1?

ANSWER

PUBLIC ROADS WILL EMPLOY A MANAGEMENT BY SELECTION PROCESS, BY REVIEWING A REPRESENTATIVE SAMPLE OF USE AND OCCUPANCY AGREEMENTS PROCESSED BY THE STATE DURING A FIXED PERIOD OF TIME, SAY A YEAR. THE SAMPLE WILL INCLUDE VARIOUS TYPES OF INSTALLATIONS MADE DURING THIS PERIOD. THE FREQUENCY AND EXTENT OF REVIEWS TO BE MADE WILL BE ESTABLISHED LATER THIS YEAR UNDER PROPOSED PPM 30-4.2.

7f CAN THE STATES POLICY EXCLUDE REFERRAL OF ALL UTILITY USE AND OCCUPANCY AGREEMENTS TO PUBLIC ROADS FOR PRIOR CONCURRENCE, SAY EXCEPT FOR INTERSTATE HIGHWAYS?

ANSWER

ALL OF THE INSTALLATIONS DESCRIBED IN THIS PARAGRAPH ARE SUBJECT TO REFERRAL TO PUBLIC ROADS FOR PRIOR CONCURRENCE. OTHERWISE THE STATE'S POLICY WOULD NOT MEET THE REQUIREMENTS OF THE PPM AND WOULD NOT WARRANT APPROVAL BY THE REGIONAL ADMINISTRATOR UNDER PARAGRAPH 7c.

7f IS IT NECESSARY FOR A STATE TO INDICATE ON HIGHWAY PROJECT PLANS, PROPOSED UTILITY WORK ON PROJECTS WHERE FEDERAL-AID PARTICIPATION IN UTILITY WORK IS NOT REQUESTED?

ANSWER

YES. SEE PARAGRAPH 15b OF REVISED PPM 30-4, FEBRUARY 14, 1969. HIGHWAY PROJECT PLANS ARE TO BE PREPARED IN ACCORDANCE WITH PARAGRAPH 4i OF PPM 40-3.1.

7f THE STATE HAS EXPRESSED CONCERN AS TO WHETHER IT SHOULD ADOPT A COMPREHENSIVE POLICY OR ONLY A GENERAL ONE IN THE INTEREST OF REDUCING THE NECESSITY FOR GRANTING EXCEPTIONS AND SEEKING APPROVAL BY PUBLIC ROADS, TO THE MINIMUM. THEY WOULD PREFER TO OPERATE UNDER A STRONG GUIDE.

ANSWER

IT WOULD BE EXTREMELY DIFFICULT, IF NOT IMPOSSIBLE, FOR A STATE UTILITY ACCOMMODATION POLICY TO ACCOUNT FOR ALL SITUATIONS ARISING IN THIS AREA. WE APPRECIATE THE STATES DESIRE TO MINIMIZE THE FREQUENCY AND OCCASION FOR GRANTING EXCEPTIONS TO ITS POLICY AND FOR REFERRING USE AND OCCUPANCY AGREEMENTS TO PUBLIC ROADS FOR APPROVAL. HOWEVER, WE WOULD PREFER THAT A STATE SET REASONABLY HIGH STANDARDS TO WHICH JUSTIFIABLE EXCEPTIONS COULD BE APPROVED RATHER THAN TRYING TO INCLUDE NEARLY ALL CASES UNDER A GENERAL POLICY AND RUN THE RISK OF HAVING TO PERMIT MANY UNDESIRABLE INSTALLATIONS.

7f (4) WHAT IS THE POSSIBILITY OF THE STATE ASSUMING FULL RESPONSIBILITY FOR APPROVING ALL INSTALLATIONS ON OR ACROSS INTERSTATE HIGHWAYS UNDER 7f (4) WITHOUT REFERRAL TO PUBLIC ROADS? ASSUMING THAT THE STATE'S POLICY AND PROCEDURES ARE APPROVED UNDER PARAGRAPH 7c, WHY SHOULD INTERSTATE INSTALLATIONS BE SUBJECT TO PRIOR BUREAU CONCURRENCE ON AN INDIVIDUAL CASE BASIS?

ANSWER

RETAINING THIS REQUIREMENT GIVES US THE OPPORTUNITY TO MONITOR THE STATES PRACTICES ON A CONTINUING AND SELECTIVE BASIS. THE FREQUENCY OF OCCASION FOR REFERRING USE AND OCCUPANCY AGREEMENTS TO PUBLIC ROADS HAS BEEN REDUCED TO THE MINIMUM NECESSARY FOR SELECTIVE CONTROL AT THIS TIME.

8. STATE ACCOMMODATION POLICIES AND PROCEDURES

8 HOW MUCH DETAIL IS REQUIRED IN COMPLYING WITH THE SEVERAL PROVISIONS OF THIS PARAGRAPH? FOR EXAMPLE, IF A STATE DOES NOT HAVE A WRITTEN POLICY OR ITS OWN STANDARDS FOR REGULATION A UTILITY'S USE OF HIGHWAY RIGHTS-OF-WAY, WILL A GENERAL REFERENCE TO PERTINENT INDUSTRY OR GOVERNMENTAL CODES SUFFICE? OR SHOULD THE STATE BE ASKED TO DEVELOP A COMPREHENSIVE POLICY STATEMENT?

ANSWER

GENERAL REFERENCE TO CODES WILL NOT SUFFICE. A COMPREHENSIVE POLICY AND STANDARDS ARE REQUIRED. (SEE BRIEFING SESSION NOTES ON THIS PARAGRAPH).

8a(3)(a) FIRST DRAFTS OF THIS PPM PROPOSED MINIMUM OFFSETS FOR UTILITY POLES ALONG ROADSIDES. WHAT, IF ANY, ARE THE DISTANCES (ROADSIDE CLEARANCES) NOW RECOMMENDED BY PUBLIC ROADS? CONSIDER PRIMARILY URBAN PROJECTS.

ANSWER

SEE BRIEFING SESSION NOTES ON PARAGRAPH 4p AND 8a(3)(a).

8a(3)(a) AT THIS TIME THE STATES POLICY PROVIDES "IN GENERAL UTILITIES ARE TO BE INSTALLED AS CLOSE TO THE OUTER EDGE OF THE RIGHTS-OF-WAY AS POSSIBLE AND ARE LIMITED TO THAT AREA BEYOND THE HIGHWAY'S NORMAL DITCH LINE." THIS APPLIES PRIMARILY TO ABOVE GROUND UTILITIES ON HIGHWAYS OTHER THAN FREEWAYS, EITHER EXISTING OR NEW ROADS. IS THIS SUFFICIENT TO SATISFY THE PROVISIONS OF THIS SECTION FOR CLEARLY STATING THE STATE'S HORIZONTAL CLEARANCE REQUIREMENTS?

ANSWER

NO. (FOR MORE INFORMATION ON THIS SEE THE BRIEFING SESSION NOTES ON PARAGRAPH 8a(3)(a).

8a(3)(a) THE STATE ANTICIPATES PROBLEMS WITH RESPECT TO LOCATING LONGITUDINALLY UNDERGROUND INSTALLATIONS NEAR THE RIGHT-OF-WAY LINE ON CONVENTIONAL FREE ACCESS HIGHWAYS. THE STATE WOULD PREFER PLACING THEM ALONG THE AREA BETWEEN EDGE OF SHOULDER AND DITCH LINE IN CUT AREAS AND JUST OUTSIDE THE SHOULDER IN EMBANKMENT AREAS. THEY WOULD BE LESS EFFECTED BY ABUTTING DEVELOPMENT, DRIVEWAY CONSTRUCTION AND THE LIKE.

ANSWER

SEVERAL FACTORS AFFECT THE SELECTION OF THE OPTIMUM LOCATION OF UTILITY FACILITIES WITHIN THE RIGHT-OF-WAY. ONE GENERAL RULE FOR GUIDANCE IS THAT LONGITUDINAL INSTALLATIONS SHOULD BE LOCATED ON REASONABLY UNIFORM ALIGNMENT AS NEAR AS POSSIBLE TO THE RIGHT-OF-WAY LINE. THIS IS INTENDED TO PROVIDE A SAFE ENVIRONMENT FOR TRAFFIC OPERATIONS AND PRESERVE SPACE FOR FUTURE HIGHWAY IMPROVEMENTS. WITH UNDERGROUND INSTALLATIONS THE FACILITY HAS VERY LITTLE EFFECT ON HIGHWAY SAFETY EXCEPT DURING INSTALLATION AND SERVICING. IN SOME CASES, SUCH AS IN ROUGH TERRAINS WITH THE PROBABILITY OF FUTURE MARGINAL DEVELOPMENT, INSTALLATION NEAR THE RIGHT-OF-WAY LINE MAY HAVE DISADVANTAGES. THE DISRUPTION AND HAZARD TO TRAFFIC DURING INSTALLATION AND SERVICING MUST BE WEIGHED AGAINST THE POSSIBLE DISTURBANCE AND ECONOMIC FACTORS ASSOCIATED WITH ADJUSTMENTS FOR MARGINAL DEVELOPMENT. FUTURE HIGHWAY NEEDS MUST BE FAIRLY EVALUATED. THE BEST SOLUTION IN EACH USE WILL DEFEND UPON INDIVIDUAL CIRCUMSTANCES. HOWEVER, FOR UNDERGROUND INSTALLATIONS, LOCATION AS NEAR AS POSSIBLE TO THE RIGHT-OF-WAY LINE AND, AS A MINIMUM, BEYOND THE SLOPE, DITCH OR CURB LINE, IS THE PREFERRED STANDARD, WHILE LOCATION ELSEWHERE COULD BE TREATED AS AN EXCEPTION.

8a(3)(b)&(c) IS IT INTENDED THAT THESE PARAGRAPHS TAKE INTO ACCOUNT ORDINANCES AND STANDARDS OF THE VARIOUS LOCAL MUNICIPALITIES?

ANSWER

YES. BUT LOCAL STANDARDS ARE TO PROVIDE A DEGREE OF PROTECTION TO THE HIGHWAY AT LEAST EQUAL TO THE STATES STANDARDS, (SEE PARAGRAPH 6d).

8a(3)(d) ARE LONGITUDINAL UTILITY INSTALLATIONS TO BE PERMITTED WITHIN THE ACCESS CONTROL LIMITS OF A PARTIALLY CONTROLLED ACCESS HIGHWAY?

ANSWER

EXCEPT FOR FREEWAYS, PUBLIC ROADS HAS NOT ESTABLISHED AN OFFICIAL POLICY FOR LONGITUDINAL UTILITY INSTALLATIONS. A PRIMARY PURPOSE OF THE AASHO POLICY (FREEWAYS) IS TO INCREASE HIGHWAY SAFETY AND PROTECT AND PRESERVE THE ACCESS CONTROL FEATURE OF THESE IMPORTANT HIGHWAYS. SOME DEGREE OF PROTECTION IS ALSO WARRANTED ON A PARTIALLY CONTROLLED ACCESS HIGHWAY, SAY AN EXPRESSWAY. A STATE MAY WISH TO APPLY FREEWAY STANDARDS OR MODIFIED FREEWAY STANDARDS FOR THIS PURPOSE. THE NEW AASHO POLICY STATES THAT IT HAS VALUE AS A GUIDE FOR APPLICATION TO ALL HIGHWAYS WITH PARTIAL CONTROL OF ACCESS.

8a(4) WHAT IS THE MEANING OF THE LAST SENTENCE IN THIS PARAGRAPH? IT APPEARS TO LEAVE THE MATTERS OF UTILITY FACILITY MAINTENANCE AND EMERGENCY OPERATIONS UP TO THE UTILITY.

ANSWER

APPLICATION AND APPROVAL OF REQUESTS FOR HIGHWAY USE AND OCCUPANCY WILL NOT NORMALLY BE REQUIRED TO COVER SUCH ACTIVITIES AS FACILITY MAINTENANCE, INSTALLATION OF SERVICE CONNECTIONS ON HIGHWAYS OTHER THAN FREEWAYS, OR EMERGENCY OPERATIONS PROVIDING THE BASIC POLICY, REGULATIONS, AND STANDARDS ARE INCLUDED OR REFERRED TO IN THE USE AND OCCUPANCY AGREEMENT. THE REASONS FOR THIS IS THAT THESE ACTIVITIES CAN NOT BE SCHEDULED WITH ANY DEGREE OF CERTAINTY, THE REVIEW PROCESS WOULD PLACE AN EVEN HEAVIER BURDEN ON THE UTILITY AND STATE HIGHWAY PEOPLE, AND VERY LITTLE WOULD BE GAINED IN ADDED CONTROL. WHERE THIS IS THE CASE ALL FACTORS ARE EITHER KNOWN OR FIXED WITHIN FAIRLY WELL DEFINED LIMITS. HENCE, THERE IS NO APPARANT NEED FOR REQUIRING ADDITIONAL SUBMISSIONS.

8a(5) THERE WILL BE NEED FOR SOMEONE TO PAY FOR UTILITY WORK ACCOMPLISHED TO AVOID FUTURE CONFLICTS. IS THERE A NEED FOR GROUND RULES ON THE EXTENT OF FEDERAL PARTICIPATION?

ANSWER

THE SOLUTION TO THIS IS GOOD EFFECTIVE LIAISON BETWEEN HIGHWAY AGENCIES AND UTILITY INDUSTRY. THE RULES ARE WELL ESTABLISHED. THE MATTER OF PAYMENT IS PRESCRIBED BY LAW AND REGULATION (SEE SECTION 123, TITLE 23, U.S.C., AND PPM 30-4).

8 WITH RESPECT TO THE PROPOSED AASHO GUIDE FOR ACCOMMODATING UTILITIES ON STATE HIGHWAYS, DOES PUBLIC ROADS INTEND TO AMEND PPM 30-4.1 WHEN THE GUIDE IS PUBLISHED AND MAKE THE GUIDE MANDATORY "AS A MINIMUM"?

ANSWER

IF AND WHEN THE GUIDE IS PUBLISHED AND PUBLIC ROADS FINDS THAT IT IS IN KEEPING WITH THE OBJECTIVES OUTLINED IN THE PPM, IT MAY ENDORSE IT AS A GUIDE FOR USE IN REVIEWING STATE POLICIES.

9. USE AND OCCUPANCY AGREEMENT

9a(1) COULD THE DESCRIPTION OF REQUIREMENTS IN USE AND OCCUPANCY AGREEMENTS FOR INDIVIDUAL CASES BE ACCOMPLISHED BY PROPER REFERENCE TO APPROPRIATE SECTIONS OF THE STATES APPROVED STANDARD?

ANSWER

YES.

9a(3) WHO IS TO PREPARE THE DRAWINGS OR SKETCHES REQUIRED UNDER THIS PARAGRAPH? HOW ACCURATE AND COMPLETE MUST THEY BE?

ANSWER

THE OWNER OF THE FACILITY SHOULD PREPARE THE SKETCH; WHERE NEEDED, PERHAPS WITH THE STATES ASSISTANCE. THEY ARE REFERRED TO AS DRAWINGS OR SKETCHES, NOT PLANS, AND NEED NOT BE TO SCALE. THEY SHOULD BE SUFFICIENTLY INFORMATIVE TO PROVIDE THE STATE WITH A CLEAR SHOWING OF THE INSTALLATION TO BE MADE AND ITS LOCATION WITHIN THE RIGHT-OF-WAY.

9a(5) THERE ARE ONLY TWO ACTIONS TO BE TAKEN IN THE CASE OF NON-COMPLIANCE: (1) ORDER COMPLIANCE, (2) TAKE OFFENDER TO COURT. WHAT IS THE USE AND OCCUPANCY AGREEMENT SUPPOSED TO SAY? WHAT IS EXPECTED IN CASES OF NON-COMPLIANCE?

ANSWER

AN EXAMINATION OF THE DOCUMENTS (PERMITS - LICENSES - USE AND OCCUPANCY AGREEMENTS) EMPLOYED BY SEVERAL STATE HIGHWAY DEPARTMENTS FOR THIS PURPOSE INDICATES THE INCLUSION OF STANDARD REVOCABLE CLAUSES FOR CASES OF NON-COMPLIANCE. GENERALLY, THESE CLAUSES PROVIDE THAT WHERE THE STATE FINDS THE UTILITY IS NOT COMPLYING WITH THE TERMS AND CONDITIONS OF USE AND OCCUPANCY OF THE HIGHWAY RIGHTS-OF-WAY AS OUTLINED, OR INCORPORATED BY REFERENCE, IN THE PERMIT, THE STATE WILL NOTIFY THE UTILITY, REQUEST CORRECTIVE MEASURES TO BE TAKEN, ALLOWING A REASONABLE PERIOD OF TIME FOR THE SAME. SOME CLAUSES PROVIDE THAT IF THE UTILITY FAILS TO RESPOND, THE STATE MAY ARRANGE FOR APPROPRIATE MEASURES TO BE TAKEN AND BILL THE UTILITY COMPANY FOR THE COSTS. THIS IS A MATTER FOR CONSIDERATION IN EACH STATE UNDER STATE LAWS AND REGULATION.

## 10 - GENERAL QUESTIONS

(NOT RELATED TO ANY PARTICULAR PROVISION OF THE PPM)

1. IS IT PERMISSIBLE TO AUTHORIZE UTILITY MOVES PRIOR TO THE DESIGN HEARINGS?

ANSWER

NOT AT THE PRESENT TIME. SEE PARAGRAPH 10d (2) OF PPM 20-8 DATED JANUARY 14, 1969. HOWEVER, PARAGRAPH 10e OF PPM 20-8 PROVIDES FOR CRITERIA TO BE DEVELOPED BY THE FEDERAL HIGHWAY ADMINISTRATOR WHICH MAY ALLOW THE DIVISION ENGINEER, IN CERTAIN INSTANCES, TO AUTHORIZE THE ACQUISITION OF RIGHTS-OF-WAY BEFORE A DESIGN HEARING. IN DEVELOPING THIS CRITERIA, CONSIDERATION WILL BE GIVEN TO INSTANCES WHERE UTILITY RELOCATIONS MAY BE AUTHORIZED BEFORE A DESIGN HEARING.

2. CAN TOPICS FUNDS BE USED FOR UTILITY RELOCATION, WHERE ONLY A UTILITY PROBLEM EXISTS?

ANSWER

REGARDLESS OF FUNDING, ELIGIBILITY OF PARTICIPATION WOULD BE AS PROVIDED BY SECTION 123 TITLE 23, U.S.C., AND PPM 30-4. (SEE PARAGRAPH 3f OF PPM 21-18). THE USE OF TOPICS FUNDS WOULD BE A MATTER FOR DETERMINATION BY THE OFFICE OF TRAFFIC OPERATIONS THROUGH OFFICIAL CHANNELS.

3. WHEN DOES THE WASHINGTON OFFICE INTEND TO ISSUE A UTILITY INDEX FOR PPMs, AMS, IMS AND LAWS AND REGULATIONS ON UTILITY-HIGHWAY MATTERS?

ANSWER

LATER THIS YEAR.

4. WOULD THE WASHINGTON OFFICE CONSIDER COMPILING ALL RELATED FHWA UTILITY DIRECTIVES INTO A LOOSE BOOK FORM FOR FIELD USE?

ANSWER

WE WILL EXPLORE THE DESIRABILITY AND MERIT FOR THIS WITH PARTICIPANTS AT OUR PLANNED BRIEFING SESSIONS ON UTILITY-HIGHWAY POLICIES.

5. WHEN CAN ALL OF PARAGRAPH 15 OF PPM 30-4, DATED OCTOBER 15, 1966, BE ELIMINATED?

ANSWER


IT CAN'T. MOST OF IT WAS TRANSFERRED TO PPM 30-4.1, EXCEPT FOR PARAGRAPH 15d WHICH HAS BEEN REVISED AND RETAINED AS NEW PARAGRAPH 15b OF THE FEBRUARY 14, 1969, VERSION OF PPM 30-4. (SEE BRIEFING SESSION NOTES ON PARAGRAPH 15b OF PM 30-4).

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
BUREAU OF PUBLIC ROADS  
WASHINGTON, D.C. 20591

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October 1, 1969

CIRCULAR MEMORANDUM TO: Regional Federal Highway Administrators and  
Division Engineers

FROM : R. R. Bartelsmeyer  
34-30 Director of Public Roads  
Washington, D.C. 

SUBJECT : Application of Joint Development, and Multiple Use Concepts  
to Freeways and Utilities

The third paragraph of Item 2 of the AASHO "Policy on the Accommodation of Utilities on Freeway Rights-of-Way," dated February 15, 1969, and accepted by the Bureau of Public Roads under PPM 40-2, dated May 12, 1969, provides that a utility may be permitted along a freeway on new location under certain stated conditions.

These provisions for extreme case exceptions to the AASHO policy have served well to preserve and protect the access control feature of Interstate highways. Experience has demonstrated the need and merit for continuing this protection on all freeways. This memorandum outlines additional Public Roads views on these matters. It provides a practical method for applying both the AASHO Policy and joint development and multiple use concepts to freeways and utilities, especially at locations within and approaching metropolitan areas where land is scarce and right-of-way is expensive. It preserves the access control feature of these important highways but recognizes the merit and need for accommodating trunkline and transmission type utility facilities under strictly controlled conditions. Finally, it establishes a basis for accommodating the highest type of utility facilities along and within the rights-of-way of the highest type of highway facilities under conditions where the construction, maintenance, and operations of one do not adversely affect those of the other.

Application of the joint development and multiple use concepts dictates that maximum use of the highway be made for other purposes where such use does not adversely affect the design, construction, integrity, and operational characteristics of the freeway.

In the advancement of these concepts and when the State has legal authority to do so and so requests, approval may be given for installing trunkline or transmission type utility facilities within a utility strip on and along the outer border of existing freeway rights-of-way when the following conditions have been satisfied:

- (1) A utility strip will be established by an inward relocation of the access control line to the extent necessary to permit installation of the utility facility outside the access control limits.

- (2) The utility strip may be established only where the freeway rights-of-way are of ample width to accommodate utility facilities without adverse effect to the design, construction, integrity, and operational characteristics of the freeway, only where such rights-of-way will not be needed for the foreseeable expansion of the freeway, and only where there can be satisfactory provision for any needed highway and/or utility maintenance within the utility strip.
- (3) Normally, a utility strip is not to be established at locations where it is feasible to accommodate utilities on frontage roads or adjacent public roads or streets.
- (4) The State or its political subdivision is to retain ownership of the freeway rights-of-way so utilized, including control and regulation of the use and occupancy of the rights-of-way by utilities.
- (5) Existing fences should be retained and, except along sections of freeways having frontage roads, planned fences should be located at the freeway right-of-way line.
- (6) In each case, there must be a showing that installation on the freeway rights-of-way is the most feasible and prudent location available from the standpoint of the highway user and utility consumer.
- (7) The lateral location of underground installations shall be suitably offset from the slope, ditch, and/or curb line. For poles or other ground-mounted utility facilities, the lateral location shall comply with the clearances set forth in Item 5B of the AASHO policy.
- (8) Aerial installations are to be limited to self-supporting single pole construction, preferably with vertical configuration of conductors and cables. Not more than one line of support poles for aerial facilities will be permitted within a utility strip. Joint-use facilities will be allowed.
- (9) Service connections from the trunkline or transmission type facilities to utility consumers will not be permitted from the utility strip.
- (10) Suitable advance arrangements are to be made for servicing the utility facilities without access from through-traffic roadways or ramps, in accordance with Item 7 of the AASHO policy. At interchanges, access to utility supports, manholes, or other appurtenances may be permitted from the through-traffic roadways or ramps in accordance with Item 7 of the AASHO policy.

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ATTACHMENT 24

but only by permits issued by the highway agency to the utility owner setting forth the conditions for policing and other controls to protect highway users.

(11) Where the freeway passes through or along areas of scenic enhancement and natural beauty, as described in paragraph 6g of PPM 30-4.1, utility installations shall be made as provided therein.

(12) The facilities installed within a utility strip shall be of durable materials design for long service life expectancy and relatively free from routine servicing and maintenance.

The provisions of this memorandum are for application to Interstate highways and other Federal-aid freeways that are open to traffic or under construction. They do not apply to installations on freeway bridge structures or within freeway tunnels and do not alter the provisions for these matters under Items 4 and 6 of the AASHO policy. They have application to planned freeway projects as necessary to accommodate the longitudinal relocation of existing trunkline or transmission type facilities which fall in the path of the planned highway construction. However, establishing a utility strip shall not be the basis for expending Federal-aid highway funds for acquiring rights-of-way widths in excess of that needed for the construction, operations, and maintenance of the freeway.

Where a utility files notice or makes application to a State to use or occupy freeway rights-of-way along routes of one of the Federal-aid highway systems under the foregoing conditions, the matter is to be referred by the State to Public Roads for prior concurrence under the well-established procedures for processing cases under the AASHO policy. In each instance there is to be a showing that the provisions of this memorandum and the AASHO policy have been met. Such requests are subject to approval by the Regional Federal Highway Administrator. A copy of each request and related correspondence on the action taken is to be furnished to the Office of Right-of-Way and Location. Appropriate amendment to AM 1-10.2 (paragraph 17) will be made at an early date.

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U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
BUREAU OF PUBLIC ROADS  
WASHINGTON, D.C. 20591

October 3, 1969

**CIRCULAR MEMORANDUM TO: Regional Federal Highway Administrators  
and Division Engineers**

**FROM : John A. Swanson, Associate Director for  
34-30 Right-of-Way and Location  
Washington, D. C.**

*John A. Swanson  
P.S.*

**SUBJECT: Distribution of PPM 30-4.1 and Circular Memorandum dated  
October 1, 1969, pertaining to accommodation of utilities**

Normal distribution of revised PPM 30-4.1, Accommodation of Utilities, dated October 1, 1969, and Mr. Bartelsmeyer's Circular Memorandum, "Application of Joint Development and Multiple Use Concepts to Freeways and Utilities", dated October 1, 1969, is being made at this time to Federal Highway Administration field offices and State highway departments.

In accordance with long-standing arrangements for furnishing additional copies of directives pertaining to utilities to the States for distribution to utilities on their mailing list, a supplemental distribution of PPM 30-4.1 will be made in approximately 2 - 3 weeks.

A supplemental distribution of the Circular Memorandum is not planned by Public Roads. Furnishing additional copies of the Circular Memorandum to utilities will be a matter for determination by and the responsibility of each State highway department.

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ATTACHMENT 25



U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
BUREAU OF PUBLIC ROADS  
WASHINGTON D.C. 20591

December 10, 1969

CIRCULAR MEMORANDUM TO: Regional Federal Highway Administrators and  
Division Engineers

FROM : R. R. Bartelsmeyer *R. R. Bartelsmeyer*  
Director of Public Roads  
Washington, D.C.

SUBJECT : AASHO Guide, "A Guide for Accommodating Utilities on  
Highway Rights-of-Way"

The AASHO Committee on Planning and Design Policies completed work and, at their recent meeting, approved "A Guide for Accommodating Utilities on Highway Rights-of-Way". Subsequently the Executive Committee authorized the printing of the guide and it should be available early in 1970. An advance copy of the guide is forwarded to you and the State highway departments at this time so that it will be available for immediate use by the States in developing utility accommodation policies pursuant to PPM 30-4.1.

In keeping with the principles set forth in the last paragraph of the Introduction in the guide, Public Roads accepts the guide for use by divisions and regions, along with PPM 30-4.1 and the Briefing Notes of the April, 1969 Briefing Sessions on the PPM, as a suitable basis for reviewing and approving the State's policies submitted under paragraph 7c of the PPM. In the interest of avoiding a crash program of last minute requests for reviewing State policies, the planning and scheduling for their development and approval should be at an early date so they may proceed in an orderly manner between now and June, 1970.

Sufficient copies of this memorandum and the advance copy of the guide are furnished for the following distribution:

Regional office - 2

Division office - 1

State highway departments - 2

It is requested that the Division Engineer promptly pass along the State copies to the proper officials. Full distribution is to be made when the AASHO printed guide is issued; additional advance copies are not available.

Enclosure

Special distribution

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ATTACHMENT 26

UNITED STATES GOVERNMENT

**Memorandum**

DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION  
Washington, D.C. 20590

DATE: **SEP 29 1976**  
In reply  
refer to: HNG-14

SUBJECT: Proposed Updating, Utility-Highway Directives  
(PPM 30-4 and PPM 30-4.1) (Due November 1, 1976)

FROM : Director  
Office of Engineering

TO : Regional Federal Highway Administrators  
Regions 1 and 3 - 10

All States, divisions, and regions are invited to submit any comments they wish to offer with respect to our proposed routine updating of the subject directives and along the lines provided for by the Advance Notice of Proposed Rulemaking (copy attached). Please forward the information to the divisions and States. Comments should be referenced to the existing directives and should be submitted through channels to the Office of Engineering (HNG-14) on or before November 1, 1976, as per the attached Notice.

Also attached for your information is a copy of AASHTO Committee Correspondence dated September 27, 1976, concerning the establishment of an Ad Hoc Task Force of the Joint AASHTO /ARWA Highway-Utility Liaison Committee for reviewing the proposed updated directives.

*Joseph W. Burdell, Jr.*  
for **W. J. Wilkes**

2 Attachments

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ATTACHMENT 27



AMERICAN ASSOCIATION OF STATE HIGHWAY  
AND TRANSPORTATION OFFICIALS

2

COMMITTEE CORRESPONDENCE

September 27, 1976

Address Reply to

James E. Kirk, Secretary  
Joint AASHTO/ARWA Highway-  
Utility Liason Committee  
Office of Engineering (HNG-1  
Federal Highway Administrati  
Washington, D.C. 20590

TO: Members  
Ad Hoc Task Force of Joint AASHTO/ARWA Highway-  
Utility Liaison Committee (See attached membership list)

SUBJECT: Proposed Updating of FHWA's Directives Utility Relocations and  
Adjustments (PPM 30-4) and on the Accommodation of Utilities (PPM 30-4.1)

As authorized by Co-Chairmen T. B. Webb, Jr., (AASHTO-Florida) and A. F. Laube  
(ARWA-Virginia), six members of the Joint Committee have been designated to serve on  
an Ad Hoc Task Force (see attached membership list). The purpose is to review and  
Adjustments on FHWA's proposed updating of its current directives for Utility Relocations  
and Adjustments (PPM 30-4, dated June 29, 1973) and the Accommodation of Utilities  
PPM 30-4.1, dated November 29, 1972).

The proposed updating of PPM 30-4 essentially involves two different tasks. The first  
is to convert the existing directive into two separate directives using the new  
format prescribed by the Federal-Aid Highway Program Manual (FHPM). One directive  
will contain reimbursement provisions alone, while the other will contain administrative  
and operational policy. The second task is to streamline and simplify both new  
directives with a goal of attaining at least a 10 percent reduction in the content of  
the existing directive. No major or significant policy changes are contemplated at  
this time.

The recently modernized versions of FHWA's railroad-highway directives (FHPM 1-4-3,  
Reimbursement for Railroad Work, and FHPM 6-6-2-1, Railroad-Highway Projects, both  
dated April 25, 1975) have been used as models for pursuing both of these tasks.

The proposed updating of PPM 30-4.1 is essentially editorial in nature along with  
some pruning, as indicated above for PPM 30-4. No major or significant policy changes  
are contemplated at this time.

Drafts of the proposed new directives are attached for your review and comment. For  
your convenience and as assistance, all of the existing provisions of PPM 30-4 have  
been included in the new draft of Utility Relocations and Adjustments, FHPM 6-6-3-1.  
with notes along margins showing what provisions are to be transferred to the new  
reimbursement directive (FHPM 1-4-4), what provisions are to be deleted, and what  
changes are proposed. Similar notes have been included along margins of the drafts of  
the proposed new directives on Reimbursement of Utility Work, FHPM 1-4-4, and  
Accommodation of Utilities, FHPM 6-6-3-2.

A briefing session will be held on the matter for those members of the task force,  
or their representatives, attending the September 29, 1976, meeting of the Joint  
Committee at Lake Buena Vista, Florida. Those members not attending or repre-  
sented at the September 29 meeting will be furnished drafts of the proposed new  
directives by mail immediately following the September 29 meeting.

Any comments or suggestions you wish to offer should be made available to me, as  
Secretary of the Joint Committee, on or before November 1, 1976. Thank you for  
your cooperation.

Sincerely yours,

  
James E. Kirk  
Secretary

Enclosures

NOTE: An Advanced Notice of Proposed Rulemaking is planned prior to  
the meeting of the task force in Florida on September 29, 1976.  
(Copy enclosed)

cc:  
Mr. H. E. Stafseth  
Executive Director, AASHTO

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DEPARTMENT OF TRANSPORTATION

2

Federal Highway Administration

[23 CFR Part 645]

[FHWA Docket No. 76-16]

UTILITIES

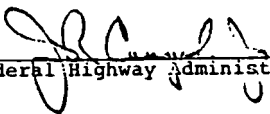
Advance Notice of Proposed Rulemaking

The Federal Highway Administration is now considering a routine updating of its existing administrative requirements concerning utility relocation and adjustments (23 CFR Part 645 subpart A) and accommodation of utilities (23 CFR Part 645 subpart B). No significant changes to the existing utility-highway requirements are contemplated at this time.

Interested persons are invited to submit any views or comments they may desire with respect to updating the requirements of 23 CFR Part 645, on Utilities. Any communication should be identified by Docket No. 76-16 and be submitted to the Federal Highway Administration, Room 4230, Docket No. 76-16, 400 7th Street, S.W., Washington, D.C. 20590. All communications should be received no later than November 1, 1976.

This advance notice of proposed rulemaking is issued under the authority of 23 U.S.C. 315 and 49 CFR 1.48(b).

Issued on: **SEP 22 1976**

  
Federal Highway Administrator

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D.C. 20590. All comments and suggestions received will be available for examination at the above address between 7:45 a.m. and 4:15 p.m. ET, Monday through Friday.

**FOR FURTHER INFORMATION CONTACT:**

James A. Carney, Office of Engineering, 202-426-0104; or Stephen C. Rhudy, Office of the Chief Counsel, 202-426-0800. Federal Highway Administration, 400 Seventh Street,

SW., Washington, D.C. 20590.

**SUPPLEMENTARY INFORMATION: BACKGROUND**

A previously issued advance notice of proposed rulemaking, 41 FR 42220. FHWA Docket No. 76-16, discussed a proposed updating of FHWA's regulation dealing with utility relocations and adjustments (23 CFR Part 645, Subpart A).

There are approximately 30,000 utility companies in the United States. Potentially, the facilities of the majority of these utility companies may at some time have to be altered due to conflicts with Federal-aid highway construction projects. States who pay the costs of utility relocations may be eligible for proportional reimbursement by the FHWA under 23 U.S.C. 123.

FHWA has developed policies and procedures in its regulations that prescribe the extent to which Federal funds may be applied to the costs incurred by States for the relocation or adjustment of utility facilities required by construction of Federal-aid highway projects.

The FHWA has recently decided to rewrite and update its regulations dealing with utility relocations and adjustment. The primary purpose in rewriting the regulations will be to simplify them, and eliminate unnecessary requirements in accordance with FHWA's emphasis on reducing red tape. Only those requirements considered essential to satisfying the provisions of Title 23, United States Code, or maintaining orderly and uniform administration of FHWA's program will be retained.

Interested Persons are invited to comment specifically in regard to the following areas:

1. What requirements of the existing regulations (23 CFR Part 645, Subpart A) should be retained or modified as appropriate for assuring compliance with the provisions of law as set forth in 23 U.S.C. 123?

2. What requirements of the existing regulations should be retained or modified to assure fair, responsible and uniform administration of the relocation and adjustment of utilities under the Federal-aid highway program?

3. What requirements of the existing regulations as considered not to be essential for compliance with 23 U.S.C. 123 or uniform and reasonable program administration?

4. What additional requirements should be included in the regulations that would result in a more efficient and effective management of the utility relocation and adjustment program?

Those desiring to comment on this advance notice of proposed rulemaking are asked to submit their views in writing. Comments will be available for public inspection both before and after the closing date at the above address. All comments received in response to this advance notice will be considered before further rulemaking action is undertaken.

Note—The Federal Highway Administration has determined that this document does not contain a significant proposal according to the criteria established by the Department of Transportation pursuant to E.O. 12044.

(23 U.S.C. 123,315 and 49 CFR 1.43(b))

Issued on February 27, 1979.

KARL S. BOWERS.

*Federal Highway Administrator.*

[FR Doc. 79-6691 Filed 3-5-79; 8:45am]

(4910-22-M)

**DEPARTMENT OF TRANSPORTATION**

**Federal Highway Administration**

[23 CFR Part 645]

[FHWA Docket No. 79-8]

**UTILITY RELOCATION AND ADJUSTMENTS**

**Advance Notice of Proposed Rulemaking**

**AGENCY:** Federal Highway Administration, DOT.

**ACTION:** Advance notice of proposed rulemaking.

**SUMMARY:** The Federal Highway Administration (FHWA) is issuing this advance notice to solicit comments, in anticipation of a future revision of its regulations concerning utility relocations and adjustments associated with Federal-aid highway construction.

**DATES:** Written comments must be received by April 30, 1979. Comments received after that date will be considered to the extent practicable.

**ADDRESS:** Submit written comments (preferably in triplicate) to Federal Highway Administration, FHWA Docket No. 79-8, Room 4205, HCC-10, 400 Seventh Street, SW., Washington,

September 14, 1979

SUBJECT: Consultant's Report on Contract for Updating  
FHWA's Regulations and Procedures on  
Utility-Highway Requirements  
(Order No. 9-1-0312 dated February 7, 1979)

FROM: James E. Kirk, Consultant *James E. Kirk*  
7910 Kentbury Drive  
Bethesda, Maryland 20014  
Telephone: (301) 656-9272

TO: James A. Carney (Contract Manager)  
Chief, Railroads and Utilities Branch, HNG-14  
Federal-Aid Division, Office of Engineering  
Federal Highway Administration  
400 Seventh Street, SW  
Washington, D. C. 20590

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1. INTRODUCTION
  2. OBJECTIVE
  3. NEED
  4. RECOMMENDATIONS
  5. PROGRESS
  6. FORMAT
  7. PPM 30-4, UTILITY RELOCATION AND ADJUSTMENTS
  8. PPM 30-4.1, ACCOMMODATION OF UTILITIES
  9. SEPARATE CONTRACT - RAILROAD DIRECTIVES
  10. OPTIONS
  11. ADDITIONAL BACKGROUND INFORMATION

Attachments -

Stage Development, Additional Background Information (List)

Drafts of New Directives:

FHPM 6-6-3-1 and Appendix dated July 19, 1979

FHPM 1-4-4 and Appendix dated July 19, 1979

FHPM 6-6-3-2 dated July 25, 1979

Statement of Work

Advance Notice of Proposed Rulemaking

Public Law 95-599 -- November 6, 1978

Section 113, 23 U.S.C. 109(1) and Proposed Technical Amendment

PPM 30-4, dated June 29, 1973

PPM 30-4.1 dated November 29, 1972

1. INTRODUCTION

The subject contract calls for the preparation of a set of written recommendations for updating current FHWA regulations and procedures on utility-highway requirements. Current regulations for these matters are contained in 23 CFR 645, Subparts A and B. Current procedures are in FHPM 1-4-4, Utility Relocations and Adjustments and FHPM 6-6-3-2, Accommodation of Utilities. Both of these directives are now in the old format for Policy and Procedure Memorandums (PPM s); one as PPM 30-4, Utility Relocations and Adjustments, dated June 29, 1973, and the other as PPM 30-4.1, Accommodation of Utilities, dated November 29, 1972. Copies of both PPM s are attached.)

2. OBJECTIVE

The objective is to update and simplify existing utility-highway regulations and procedures. The purpose is to reduce and eliminate unnecessary and burdensome requirements.

3. NEED

The need for doing this work stems from the longstanding government-wide effort at the Federal level to cut red-tape and simplify Federal programs. As far as can be determined, day to day operations under the current regulations and procedures are reasonably satisfactory and relatively free from major problems and complaints. For this reason, it may be difficult for FHWA to convince some State highway agencies and utility companies on the need and merit for undertaking this task at this time. Nevertheless, it will be shown here that the existing regulations and procedures can be substantially reduced and simplified with corresponding benefits to all parties of interest.

4. RECOMMENDATIONS

- a. It is recommended that FHWA accept the attached drafts of the three proposed new directives, namely FHPM 1-4-4, Reimbursement for Utility Work, dated July 19, 1979; FHPM 6-6-3-1, Utility Relocations and Adjustments, dated July 19, 1979; and FHPM 6-6-3-2, Accommodation of Utilities, dated July 25, 1979, as a suitable basis for updating and revising current FHWA utility-highway regulations and procedures, but with the following suggestions:

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ATTACHMENT 30

- (1) FHWA will temporarily defer using the attached drafts on FHPM 1-4-4 and FHPM 6-6-3-1 as Notices of Proposed Rulemaking until the work under the terms of a separate contract with the Office of Engineering (Order No. 9-1-0348, dated August 31, 1979) can fully explore the feasibility and merit for combining selected portions of the utility-highway directives system with corresponding portions of the railroad-highway directive system (more information on this follows at the end of this report).
- (2) FHWA will temporarily defer using the attached draft on FHPM 6-6-3-2 as a Notice of Proposed Rulemaking until the Congress approves FHWA's request for approval of a proposed technical amendment to 23 U.S.C. 109(1) (a copy of the proposed technical amendment and law is attached).
- b. It is recommended that FHWA obtain additional information from the States for supporting the proposed change to the provisions of PPM 30-4 which use expired service life to measure an increase in value. Under the proposed new directive (FHPM 6-6-3-1, paragraph 9b) a credit for expired service life would not be required on the replacement of segments (regardless of length) of a utility's service, distribution, or transmission lines. Conversely, under the proposed new directive, a credit for accrued depreciation would be required, but only in cases involving the replacement of major and costly plant facilities that are used for the production, transfer, or storage of the utility's products. It is suggested that FHWA's Technical Advisory Panel for Updating Utility Directives be requested to obtain such supporting information as available from the States in their Regions (1, 3, 4, 6, and 8 -- For more information on this topic see paragraphs 7c and 10d of this report.).
- c. Following approval by the Congress of the proposed technical amendment to 23 U.S.C. 109(1), and in the interest of complying with the provisions of said Section 109(1), especially those requirements relating to safety, it is recommended that,
- (1) FHWA request AASHTO to review and update the AASHTO publications, A Guide for Accommodating Utilities on Highway Rights-of-Way, dated October 25, 1969, and A Policy on the Accommodation of Utilities on Freeway Rights-of-Way, dated February 15, 1969, as deemed appropriate, desirable or necessary, and
- (2) FHWA make suitable arrangements with the States for reviewing and updating State Utility Accommodation Policies and related actions under paragraphs 10a(1) and (2) and 8 of the proposed new directive, FHPM 6-6-3-2 on Accommodation of Utilities. (see attached draft.)
- d. It is recommended that FHWA establish a suspense date for States to submit updated State utility accommodation policies within 1 year after the date of issuance of the new directive, FHPM 6-6-3-2, Accommodation of Utilities (see paragraph 10a(1) of the attached draft).
- e. It is recommended that paragraph 3e(7) of FHPN 6-2-1-1, Design Standards for Highways, dated April 7, 1968, be revised from its current nonregulatory (nonitalicized) to regulatory (italicized) language and to read as follows: "A Guide for Accommodating Utilities on Highway Rights-of-way, AASHTO, 1969. The FHWA shall use this guide to evaluate the adequacy of State utility accommodation policies in making the determinations required under paragraph 10a(2) of FHPM 6-6-3-2, Accommodation of Utilities." (See attached draft and paragraph 8 of the same.)
- f. It is recommended that paragraph 7e of existing PPM 30-4 be transferred to an appropriate directive in Chapter 8 -- Traffic Operations of the FHPM. This was informally discussed with a representative of the Office of Traffic Operations who suggested the matter be included in a memorandum from the Office of Engineering to the Office of Traffic Operations at an early date.

#### PROGRESS

- a. Work got underway on March 5, 1979, and has now advanced to the point where all tasks have been completed (see attached Statement of Work) except for subtask 1 (Historical Background) under the Report Requirements for this contract. The contract completion date is September 30, 1979, and subtask 1 should be done by that time.
- b. An Advance Notice of Proposed Rulemaking announcing a proposed updating of 23 CFR 645, Subpart A - PPM 30-4, Utility Relocations and Adjustments, dated June 29, 1973, was published in the Federal Register, Vol. 44, No. 45, Tuesday, March 6, 1979 (copy attached). Public Notice of Rulemaking on

23 CFR 645, Subpart B - PPM 30-4.1, Accommodation of Utilities, dated November 29, 1972, has been deferred by FHWA until the Congress approves FHWA's proposed technical amendment to 23 U.S.C. 109(1).

6. FORMAT

Following early informal discussions with representatives from the several offices within FHWA's Washington Headquarters having an interest in utility-highway matters, a decision was made to use Appendixes to house nonregulatory material. With minor exception this basic rule was followed and two of the three proposed new directives developed under this contract have such Appendixes. All material contained in each Appendix is presented in the form of nonregulatory guidelines for use by the FHWA field offices, State highway agencies, utility companies and others as background information for expediting the advancement of utility relocations and for minimizing delays to associated highway construction projects. The reason for using the Appendix was twofold. First, it permits the regulatory requirements to be physically separated from the nonregulatory guidelines. This separation seems especially helpful for emphasizing the distinction between regulatory and nonregulatory material. Second, and most important, it assures that both regulatory and nonregulatory material will be housed in one document within the FHPM and will routinely reach all parties of interest, especially State highway and utility company personnel who are engaged in day to day operations under utility/highway programs. Some of these advantages would likely be diminished if the nonregulatory material was housed in another document, say as a Technical Advisory Memorandum and issued separately from the FHPM material. In this respect, it is important to keep in mind the longstanding special arrangements between FHWA and the States for supplying several thousand additional copies of utility-highway directives for distribution to utility companies on the States' mailing lists. This practice was established years ago by Mr. F. C. Turner in the interest of assuring that utility companies would be continuously kept informed of any changes to or modifications of FHWA's utility-highway requirements.

7. PPM 30-4, UTILITY RELOCATIONS AND ADJUSTMENTS, dated June 29, 1973  
(23 CFR 645, Subpart A)

a. Conversion

At the onset it was decided to convert the current (1973) issue of PPM 30-4 (and 23 CFR 645, Subpart A) into two separate directives; one on Reimbursement for Utility Work as FHPM 1-4-4

and the other on Utility Relocations and Adjustments as FHPM 6-6-3-1. The current directives on Reimbursement for Railroad Work, FHPM 1-4-3 and on Railroad-Highway Projects, FHPM 6-6-2-1, were used as models for making the proposed conversion. This is in keeping with the fact that old PPM 30-3 and PPM 30-4 were for many years companion policy memorandums for third party railroad and utility work under the Federal-aid highway program. Also, such an arrangement offers the potential for combining selected portions of the railroad and utility directive systems into combined single, rather than separate directives in the FHPM thus completely eliminating one or more directives or portions thereof. For example, a combined single directive entitled, Reimbursement for Utility and Railroad Work, would result in the complete elimination of one directive.

b. Reduction

Much of the regulatory material in current PPM 30-4 was also revised and converted to nonregulatory guidelines and included in an appendix to each of the proposed new directives (FHPM 1-4-4 and FHPM 6-6-3-1). Several provisions of the current PPM have been entirely deleted while another has been recommended for transfer to another directive in the FHPM. In terms of reducing and eliminating unnecessary and burdensome procedures and simplifying the regulatory and review process for advancing Federal-aid highway projects, it is estimated that the regulatory language has nearly been cut in half, from about 11,600 words in the current regulations (23 CFR 645, Subpart A) to about 6,500 regulatory words in the two proposed new directives (FHPM 1-4-4 and FHPM 6-6-3-1). About 3,500 words have been converted and retained in appendixes as nonregulatory guidelines. Another 2,600 have been completely eliminated from the old PPM which contains an estimated total of about 12,600 regulatory and nonregulatory words. While the basic principles of FHWA's existing procedures have been left intact, the regulatory material has been substantially reduced.

c. Expired Service Life

With one exception, all of the above mentioned reduction, revision, and conversion has been accomplished with only minor change to the existing provisions for establishing the eligibility of Federal fund participation. The exception involves a proposed change in the provisions which use expired service life as a measurement for an increase in value. (See paragraph 9. Reimbursement Basis of PPM 30-4 and paragraph 9. Credits and Betterments of proposed new FHPM 6-6-3-1) Briefly, the new directive proposes to

require a credit for accrued depreciation on only those cases involving the replacement of major facilities which are used for the production, transfer, or storage of the utility's products such as buildings, pumping stations, filtration plants, power plants and substations and other similar facilities. Such credit would no longer be required on cases involving the replacement of segments (regardless of length) of a utility's service, distribution, or transmission lines. The basis for making this change stems from reports from the field offices and States that the cost of administering the present policy for obtaining credit on expired service life frequently exceeds the amount of credit obtained. Also that the present policy, in many instances, discourages utility companies from voluntarily installing replacement facilities of greater functional capacity than the ones being replaced so as to avoid paying both the cost of betterments plus a credit for expired service life. In any instance where the utility's replacement facility is located within the highway right-of-way it is usually advantageous to the highway for the utility to install replacement facilities of a greater functional capacity at the time of the relocation rather than at a later date. Please note that the proposed change does not eliminate the requirement for credit, it merely confines it to situations involving major and costly plant relocations somewhat like the former policy adopted in 1957 for major and independent segments under paragraph 7f of the first issue of PPM 30-4, dated December 31, 1957. It also is consistent with the policy followed for obtaining credit for accrued depreciation in cases involving the replacement of buildings and other depreciable structures of a railroad on railroad-highway projects (see paragraph 9c(2) of FHPM 6-6-2-1, on Railroad-Highway Projects, dated April 25, 1975). As such it offers the potential for combining still another portion of the utility and railroad directives systems (CREDITS and BETTERMENTS) as part of a combined single directive rather than as separate directives in the FHPM

d. Lump Sums and Preliminary Engineering

In addition to the above, minor changes are proposed for raising the ceiling on lump sum utility agreements from \$10,000 to \$25,000 (paragraph 7g of FHPM 6-6-3-1) and for raising the amount that permits the Division Administrator to forego preaward review and/or approval of consultant contracts from \$5,000 to \$10,000, unless the State specifically requests preaward assistance (paragraph 5b of FHPM 6-6-3-1).

8. PPM 30-4.1, ACCOMMODATION OF UTILITIES, dated November 29, 1972  
(23 CFR 645, Subpart B)

a. 23 U.S.C. 109(1)

The most difficult problem to resolve in updating PPM 30-4.1 stems from the requirements in 23 U.S.C. 109(1). The consultant was authorized to proceed under two assumptions. One was that the Congress will eventually approve FHWA's request for a proposed technical amendment to 23 U.S.C. 109(1)(1)(A). The other was that FHWA would continue its longstanding application of national policy to highway projects, not highway systems, as mentioned in 23 U.S.C. 109(1)(1)(A). (A copy of the proposed technical amendment and the law is attached.)

In the interest of implementing the (to be) amended law several new provisions have been included in the proposed new directive on Accommodation of Utilities. These provisions include: appropriate reference to 23 U.S.C. 109 has been added throughout the new directive; a new paragraph 3a has been added to give additional emphasis to safety as being of paramount (but not sole) importance; the requirements imposed by 23 U.S.C. 109(1)(1)(B) and (C) as relate to agricultural land have been added to the list of other requirements under the standards for State utility accommodation policies, as new paragraph 8c(5). Under this arrangement, the State would be making the determinations required by 23 U.S.C. 109(1), for or on behalf of the Secretary, but pursuant to State policy. In turn, if the State proposes to permit an installation not in accordance with its own policy, the matter would be submitted to the FHWA for prior concurrence under paragraph 10a(5)(a) of the proposed new directive, FHPM 6-6-3-2.

b. Scenic Enhancement and Natural Beauty

The special provision under existing paragraph 6g requires that hardship cases involving new utility installations within areas of scenic enhancement and natural beauty be submitted to Washington Headquarters for concurrence by the Administrator. As this provision has rarely been invoked (none within the last 3 years) it has been simplified and the approval authority recommended for transfer from the Administrator to the Division Administrator (see new paragraph 6e of FHPM 6-6-3-2).

c. State Utility Accommodation Policies

Instructions for FHWA's review of State accommodation policies have been added to new paragraph 8. State Accommodation Policies which, in turn, should increase the importance and use of the criteria contained in the AASHTO publication, A Guide for Accommodating Utilities on Highway Rights-of-Way, dated October 25, 1969. As such, it seems highly desirable for FHWA to request AASHTO to review and update the Guide at an early date so that it would be available for use in reviewing the adequacy of State utility accommodation policies, especially from the standpoint of safety. It should also be available for use by the States in updating and strengthening their existing policies. Along these same lines, and for similar reasons, it would also seem highly desirable for FHWA to request AASHTO to review its publication, A Policy on the Accommodation of Utilities on Freeway Rights-of-Way, adopted February 15, 1969, and accepted under FHPM 6-6-1-1, Design Standards for Highways. As an alternate consideration to the above, FHWA may wish to explore the feasibility and merit for upgrading and converting the AASHTO Guide to an AASHTO policy. Since the Congress has evidently considered the matter of accommodating or installing utilities within highway rights-of-way important enough from the standpoint of safety to warrant inclusion under 23 U.S.C. 109 Standards, it would also seem important enough for FHWA and AASHTO to treat utility accommodation as a policy matter on all highways, not just freeways.

There are two loopholes in the existing provisions of PPM 30-4.1 that need to be closed. One is the need for a suspense date for all States to submit or resubmit the statement, updated policies and other information required under paragraph 10a(1) of the proposed new directive, FHPM 6-6-3-2. For example, 10 years after all the States were first requested to submit this information under paragraph 7a of PPM 30-4.1, dated October 1, 1969, there are still five States that have not yet done so (Virginia, Mississippi, Michigan, Alaska, and Montana). Several other States delayed this action for years after first being asked to do so. It is strongly recommended that a suspense date of 1 year after the date of issuance of the proposed new directive be adopted (see new paragraph 10a(1)). The other loophole concerns the lack of any officially designated criteria or format for the States to follow and use in preparing a policy and for FHWA to use in reviewing a State's policy. Where the States voluntarily used the AASHTO Guide for Accommodating Utilities on Highway Rights-of-Way, there was no problem. When they choose to

ignore the Guide, FHWA had a difficult, if not impossible task to get a satisfactory policy. Recommendations on this have been made elsewhere in this report (see above and paragraphs 4c and e of this report).

d. Highlights of Other Proposed Changes

With respect to the list of conditions that must be met for establishing a utility strip on and along the outer border of existing freeways, a new condition has been added as paragraph 7e(13) of the proposed new directive to account for cases qualifying under 23 U.S.C. 109(1)(1)(B) and (C).

The existing provisions in Appendix A for establishing utility strips on and along the outer border of freeways (and other provisions in Appendix B and C as proposed in preliminary drafts of the proposed new directive) have all been moved to several new paragraphs within the proposed new directive (FHPM 6-6-3-2) so that the need for any Appendix has been completely eliminated.

Additional instructions have been provided in new paragraph 10b (Interim Approvals) on what steps need to be taken on projects until approval is made by FHWA to the utility accommodation policies of the State or its political subdivision.

The amount of material previously required to be furnished to the Office of Engineering has been substantially reduced to include only a copy of the approved utility accommodation policy from each State (see new paragraph 10a(6)).

A requirement for traffic control plans and devices to be in conformance with MUTCD has been added as new paragraphs 6g and 10b(3)(e).

A few minor provisions have been deleted from existing PPM 30-4.1 that are no longer considered necessary, routine housekeeping changes have been made throughout, and most approval actions have been assigned to FHWA so that the persons responsible for making approvals can be designated under delegations of authority rather than in the regulations.

9. SEPARATE CONTRACT FOR UPDATING RAILROAD-HIGHWAY REQUIREMENTS

Under the terms of a separate contract with the Office of Engineering (Order No. 9-1-0348, dated August 31, 1979) the consultant, James E. Kirk, is to prepare a set of written recommendations for updating current FHWA regulations and



procedures on rail road-highway requirements. The work is to include recommendations, as deemed appropriate, on which requirements in the utility-highway directive system can be combined with corresponding requirements in the railroad-highway directive system and included under one or more combined directives. In this light, the consultant now plans to fully explore the feasibility and merit of combining several portions of the two directive systems. As a first step, it is planned to put together a new draft entitled, Reimbursement for Railroad and Utility Work. Next it is planned to combine several provisions of both directive systems into a single directive entitled, General Procedures for Railroad and Utility Work. At this point, it is expected that such topics as Preliminary Engineering, Rights-of-way, Agreements and Authorizations, Credits and Betterments, Construction Procedures, and Alternate Procedures can be combined in the proposed new directive on General Procedures for Railroad and Utility Work. It is envisioned that the remaining portions of the two directive systems can then be reorganized and retained as separate directives, one on Railroad-Highway Projects and the other on Utility Relocations and Adjustments.

It seems that this approach offers the best solution for attaining maximum reduction and elimination of regulations and procedures in both utility-highway and railroad-highway requirements. As such, it is strongly recommended that FHWA temporarily defer using the proposed new drafts (attached) of FHPM 1-4-4, Reimbursement for Utility Work, and FHPM 6-6-3-1, Utility Relocations and Adjustments as Notices of Proposed Rulemaking until this approach has been fully explored and evaluated. It is estimated that the above mentioned first step of preparing a new draft on Reimbursement for Utility and Railroad Work can be ready for review sometime next month, say by key personnel from Washington Headquarters and members of the Technical Advisory Panel for Updating Utility Directives (see March 29, 1979, memorandum from Mr. R. D. Morgan to Regional Federal Highway Administrators, Regions 1, 3, 4, 6, and 8 for establishment of Advisory Panel).

#### 10. OPTIONS

- a. Should the Congress fail to approve FHWA's proposed technical amendment of 23 U.S.C. 109 (1)(A), it may be necessary for FHWA to issue entirely new regulations for accommodating utilities rather than attempting to update PPM 30-4.1. It is not likely that many situations will be encountered where utilities can, in fact, be installed within the highway rights-of-way "without adversely affecting any aspect of safety."

- b. Should FHWA decide that it does not wish to combine portions of the utility-highway and railroad-highway directive systems as previously discussed in paragraph 9 of this report, the attached final drafts on FHPM 1-4-4 and FHPM 6-6-3-1 are considered suitable for use as Notices of Proposed Rulemaking, subject to any modifications FHWA wishes to make.
- c. Should FHWA prefer not to include the nonregulatory material in Appendices to FHPM 1-4-4 and FHPM 6-6-3-1 as recommended by this report, the nonregulatory guidelines can be issued separately under a Technical Advisory Memorandum. To dispose of these guidelines entirely would not be in the best interest of FHWA, the State highway agencies or utility industry.
- d. Should FHWA prefer not to relax its present requirements for making determinations on whether a credit is due to a project for expired service life to the extent recommended by this report (see paragraph 7c), FHWA may wish to consider a more modest approach by deleting the phrase (less than 1 mile in length) from existing paragraph 9b(1)(b) of PPM 30-4 and by deleting all of existing paragraph 9b(2)(a). This change would eliminate the present requirements for making determinations on whether a credit is due to a project on segments of lines of more than 1 mile in length involving only a replacement-in-kind but would retain the present requirements for credit on segments of lines, regardless of length, that are of greater functional capacity or capability and include betterments, excluding any crossings of the highway. This change would represent a modest improvement over the present procedures for this matter but would fall far short of the reduction in red-tape and simplification to be attained under the changes recommended by paragraph 7c of this report.

#### 11. ADDITIONAL BACKGROUND INFORMATION

A packet of background information reflecting the chronological steps taken at each stage of development leading to the final drafts of the attached proposed new directives (FHPM 1-4-4 and Appendix on Reimbursement of Utility Work, FHPM 6-6-3-1 and appendix on Utility Relocations and Adjustments, both dated July 19, 1979, and FHPM 6-6-3-2, Accommodation of Utilities, dated July 25, 1979) has been compiled and is available in the files of FHWA's Railroads and Utilities Branch, Office of Engineering. A list of this material entitled Stage Development is attached to this report.

STAGE DEVELOPMENT

ADDITIONAL BACKGROUND INFORMATION

The following list shows the chronological steps taken at each stage of development leading to the final drafts of the proposed new directives (FHPM 1-4-4 and Appendix on Reimbursement for Utility Work, FHPM 6-6-3-1 and Appendix on Utility Relocations and Adjustments, both dated July 19, 1979, and FHPM 6-6-3-2 on Accommodation of Utilities, dated July 25, 1979).

1. Advance Notice of Proposed Rulemaking on proposed updating of 23 CFR 645, Subpart A (PPM 30-4).
2. Tabulation, dated March 12, 1979, Classification of PPM 30-4. This classifies each provision of PPM 30-4 with respect to the source, need and impact of each requirement, and makes appropriate recommendations for deletions, revisions, and retentions, either in regulatory form or as nonregulatory guidelines.
3. Working draft of proposed new directive on Utility Relocations and Adjustments, FHPM 6-6-3-1 and Appendix, dated April 10, 1979.
4. Working draft of proposed new directive on Reimbursement for Utility Work, FHPM 1-4-4 dated April 16, 1979, and Appendix dated April 18, 1979.
5. Typed preliminary draft of FHPM 6-6-3-1 and Appendix on Utility Relocations and Adjustments, dated April 30, 1979.
6. Typed preliminary draft of FHPM 1-4-4 and Appendix on Reimbursement for Utility Work, dated April 30, 1979.
7. May 8, 1979, Memorandum from J. E. Kirk to Addressees which distributed copies of above material for review and comment by various offices of FHWA's Washington, D. C., Headquarters.
8. Handwritten notes on the preliminary drafts listed in 5 and 6 above reflecting the review process from the May 8, 1979, memorandum at Washington, D. C., Headquarters.
9. Tabulation, dated June 4, 1979, Classification of PPM 30-4.1. This classifies each provision of PPM 30-4.1 with respect to the source, need, and impact of each requirement and makes appropriate recommendations for deletions, revisions, and retentions, either in regulatory form or as nonregulatory guidelines.
10. Working draft of proposed new directive on Accommodation of Utilities, FHPM 6-6-3-2 and Appendixes, dated June 4, 1979.
11. Typed preliminary draft of FHPM 6-6-3-2 and Appendixes on Accommodation of Utilities, dated June 4, 1979.
12. June 4, 1979, Memorandum from J. E. Kirk to Addressees which distributed copies of the material in 9, 10, and 11 above for review and comment by various offices of FHWA's Washington, D. C., Headquarters.
13. Handwritten notes on the preliminary draft listed in 11 above reflecting the review process from the June 4, 1979, memorandum at Washington, D. C., Headquarters.

## DEPARTMENT OF TRANSPORTATION

## Federal Highway Administration

## 23 CFR Part 645

## (FHWA Docket No. 80-4)

## Accommodation of Utilities

**AGENCY:** Federal Highway Administration (FHWA), DOT.  
**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** The FHWA proposes to revise its regulations concerning the accommodation of utility facilities on the rights-of-way of Federal and Federal-aid highway projects to simplify existing regulations and eliminate unnecessary requirements in accordance with the FHWA's emphasis on reducing red tape.

**DATE:** Comments must be received on or before June 16, 1980.

**ADDRESS:** Submit written comments (preferably in triplicate) to Federal Highway Administration, FHWA Docket No. 80-4, Room 4205, HCC-10, 400 Seventh Street, SW., Washington DC 20590. All comments and suggestions received will be available for examination at the above address between 7:45 a.m. and 4:15 p.m., ET, Monday through Friday. Those persons desiring notification of receipt of comments must include a self-addressed stamped postcard.

**FOR FURTHER INFORMATION CONTACT:** James A. Carney, Office of Engineering, 202-426-0104, or William B. Clemmens, Jr., Office of the Chief Counsel, 202-426-0792, Federal Highway Administration 400 Seventh Street, SW., Washington, DC 20590. Office hours are from 7:45 a.m. to 4:15 p.m., ET, Monday through Friday.

**SUPPLEMENTARY INFORMATION:** An advance notice of proposed rulemaking, FHWA Docket 76-16 (41 FR 42220, September 27, 1976), discussed a proposed updating of FHWA's regulations dealing with the accommodation of utility facilities on the rights-of-way of Federal and Federal-aid highway projects (23 CFR Part 645, Subpart B). Two comments were received on the advance notice of proposed rulemaking, one from a utility company and the other from the American Association of State Highway and Transportation Officials (AASHTO). Only the comment by AASHTO addressed utility accommodation, and AASHTO suggested a general reduction in regulatory material.

Historically, it has been recognized that it is in the public interest for utility facilities to be accommodated on highway rights-of-way, provided that such use does not interfere with the primary purpose of the highway facility. Many of the 30,000 utility companies in the United States have placed a portion of their facilities within highway rights-of-way.

The FHWA has developed regulations setting forth conditions for utility use and occupancy of the rights-of-way on Federal-aid highway projects. The primary purpose in revising these regulations has been to simplify them and eliminate unnecessary requirements in accordance with FHWA's emphasis on reducing red tape. In the proposed revision, only those requirements considered essential to satisfy the law and to orderly and uniformly administer FHWA's programs are being retained.

The majority of the proposed revisions are editorial. In addition, the following modifications are proposed:

(1) Section 113 of the Surface Transportation Assistance Act of 1978 (Pub. L. 95-599, 92 Stat. 2689) amended 23 U.S.C. 109 by adding a new subsection (l) relating to the Secretary of Transportation's approval of the use of Federal-aid highway rights-of-way by utility facilities. Further, 23 U.S.C. 109(l)(1)(A) was amended by Pub. L. 96-106, 93 Stat. 796, which deleted the words "any aspect of" leaving the text to read "which would adversely affect safety." the intent of this statutory amendment was not to deemphasize congressional concern with safety, but to clarify Federal policy on utility accommodations. Proposed implementing procedures for 23 U.S.C. 109(l) have been developed as part of this rulemaking process.

(2) Appendix A, which refers to certain sections of the AASHTO publication entitled "A Policy of the Accommodation of Utilities on Freeway Rights-of-Way," would be eliminated. The material contained in this appendix has been sufficiently referenced in the text of the proposed rule, making the appendix unnecessary.

(3) Section 645.207(i) of the proposed rule requires utility companies to develop traffic control plans in accordance with the "Manual on Uniform Traffic Control Devices" (MUTCD).

(4) The current regulations require a State highway authority to submit a statement to the FHWA on the authority of utilities to use and occupy the rights-of-way of State highways, the State's authority to regulate such use, and the policies the State highway authority employs, or proposes to employ, for

accommodating utilities within the rights-of-ways of Federal-aid highways under its jurisdiction. The proposed rule retains this requirement, but adds a clause that would permit State highway authorities merely to update previously submitted statements rather than to submit new ones.

(5) A reference to private lines would be added to § 645.201, which states the purpose of the rule. This change is intended only to highlight the FHWA's existing authority to prescribe policies and procedures for accommodating private lines on the rights-of-ways of Federal and Federal-aid highway projects and does not represent any change from the current rule.

(6) "A Policy on the Accommodation of Utilities on Freeway Rights-of-Way," 1969, has been incorporated by reference at 23 CFR Part 625, Design Standards for Highways. This AASHTO publication is referenced in both the existing and proposed 23 CFR Part 645. An additional AASHTO publication, "Guide for Accommodating Utilities on Highway Rights-of-Way," 1969, is currently referenced in the Federal-aid Highway Program Manual (FHPM) 6-2-1-1, Design Standards for Highways. The FHWA propose to use the Guide, which has been incorporated by reference in the proposed rule, when evaluating the adequacy of State highway authority utility accommodation policies.

Interested persons are invited to comment on the adequacy of these AASHTO policies and guidelines for controlling the use of highway rights-of-way by utilities. These publications are on file with the Office of the Federal Register in Washington DC, and are available for inspection and copying from the FHWA Washington Headquarters and all FHWA division and regional offices, in accordance with 49 CFR Part 7, Appendix D.

**Note.**—The Federal Highway Administration has determined that this document does not contain a significant proposal according to the criteria established by the Department of Transportation pursuant to Executive Order 12044. The anticipated economic impact of these amendments is so minimal as not to require preparation of a full regulatory evaluation at this time. Based on comments received in response to this notice, the FHWA will review the need for a regulatory evaluation in conjunction with the preparation of a final rule.

In consideration of the foregoing, the Federal Highway Administration proposes to amend Chapter I of Title 23, Code of Federal Regulations, Part 645, Subpart B, as set forth below.

Issued on April 10, 1980  
**John S. Hassell, Jr.,**  
*Deputy Administrator.*

## Part 645—UTILITIES

## Subpart B—Accommodation of Utilities

Sec.  
645.201 Purpose.  
645.203 Policy.  
645.205 Definitions.  
645.207 General requirements.  
645.209 State highway authority accommodation policies.  
645.211 Use and occupancy agreements (permits).  
645.213 Approvals.  
Authority: 23 U.S.C. 109,116; 23 CFR 1.23 and 1.27; 49 CFR 1.49(b).

## Subpart B—Accommodation of Utilities

## § 645.201 Purpose.

To prescribe policies and procedures for accommodating utilities facilities and private lines on the rights-of-way of Federal and Federal-aid highway projects.

## § 645.203 Policy.

(a) It is in the public interest for utility facilities to be accommodated on the rights-of-way of a Federal or Federal-aid highway project when such use and occupancy of the highway rights-of-way do not adversely affect highway or traffic safety or otherwise impair the highway or its aesthetic quality and do not conflict with the provisions of Federal, State or local laws or regulations.

(b) The manner in which utilities cross or otherwise occupy the rights-of-way of a Federal or Federal-aid highway project can materially affect the highway, its safe operation, aesthetic quality, and maintenance. Therefore, it is necessary that such use and occupancy, where authorized, be regulated by State highway authorities in a manner which preserves the operational safety and the functional and aesthetic quality of the highway facility.

## § 645.205 Definitions.

For the purpose of this regulation, the following definitions shall apply:

(a) *Clear roadside policy*—that policy employed by a State highway authority to ensure a reasonably safe environment for the traveling public by providing roadides as free from physical obstructions as practical.

(b) *Federal-aid highway projects*—those projects administered by a State highway authority which involve or have involved the use of Federal-aid highway funds for the development, construction or improvement of the highway or related facilities, including

highway beautification projects under 23 U.S.C. 319

(c) *Federal highway projects*—those projects involving the use of funds administered by the Federal Highway Administration (FHWA) where the location, design or construction of the project is under the direct supervision of the FHWA.

(d) *Freeway*—a divided arterial highway with full control of access.

(e) *Highway*—any public way for vehicular travel, including the entire area within the rights-of-way and related facilities constructed or improved in whole or in part with Federal-aid or Federal highway funds.

(f) *Private lines*—privately owned facilities which convey or transmit the commodities outlined in paragraph (k) of this section, but devoted exclusively to private use.

(g) *Rights-of-way*—real property, or interests therein, acquired, dedicated or reserved for the construction, operation, and maintenance of a highway in which Federal-aid or Federal highway funds are or have been involved in any stage of development. Lands acquired under 23 U.S.C. 319. Landscaping and scenic enhancement, shall be considered to be highway rights-of-way.

(h) *State*—any one of the 50 States, the District of Columbia, or Puerto Rico.

(i) *State highway authority*—that department agency, commission board, or official of any State or political subdivision thereof, charged by its law with the responsibility for highway administration.

(j) *Use and occupancy agreement*—the document (written agreement or permit) by which the State highway authority approves the use and occupancy of highway rights-of-way by utility facilities or private lines.

(k) *Utility facility*—Privately, publicly or cooperatively owned line, facility, or system for producing, transmitting, or distributing communications, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water not connected with highway drainage, or any other similar commodity, including any fire or police signal system or street lighting system, which directly or indirectly serves the public. The term utility shall also mean the utility company inclusive of any wholly owned or controlled subsidiary.

## § 645.207 General requirements.

(a) Highway and traffic safety is of paramount, but not of sole, importance when accommodating utility facilities within highway rights-of-way. Utilities provide an essential public service to the general public. Traditionally, as a matter of sound economic public policy

and law, utilities have used public road rights-of-way for transmitting and distributing their services. However, due to the nature and volume of highway traffic, the effect of such joint use of the traveling public must be carefully considered by highway authorities before approval of utility use of the rights-of-way of Federal or Federal-aid highway projects is granted.

Adjustments in the operating characteristics or other special efforts may be necessary to increase the compatibility of utility-highway joint use. In any event, the design, location, and manner in which utilities use and occupy the rights-of-way of Federal or Federal-aid highway projects must conform to the clear roadside policies for the highway involved and otherwise provide for a safe traveling environment as required by 23 U.S.C. 109 (l)(1).

(b) Utility installations on freeway rights-of-way shall conform to the provision of the American Association of State Highway and Transportation Officials (AASHTO) publication, "A Policy of the Accommodation of Utilities on Freeway Rights-of-Way," AASHTO, 1969, which has been accepted as a Federal-aid design standard. However, utility transmission facilities and warranted and justified installations proposed under 23 U.S.C. 109(l)(1) (B) and (C), to mitigate damage to agricultural lands, shall generally be considered to qualify under the extreme case exception provision of the AASHTO policy, provided such use does not adversely affect highway safety or otherwise impair the use of the highway. Access to such installations shall conform to the AASHTO policy.

(c) In order for a State highway authority to fulfill its responsibilities to control utility use of Federal-aid highway rights-of-way within the State and its political subdivision, it must exercise or cause to be exercised, adequate regulation over such use and occupancy through the establishment and enforcement of reasonable uniform utility accommodation policies.

(d) Because there are circumstances where private lines may be allowed on the rights-of-way of Federal-aid projects, the State highway authorities should establish uniform policies for properly controlling such use.

(e) On Federal highway projects, the FHWA will apply, or cause to be applied, utility and private line accommodation policies similar to those required of Federal-aid highway projects. Where appropriate, agreements will be entered into between the FHWA and the State highway authorities or other government agencies to ensure adequate control and regulation of use

by utilities and private lines of the rights-of-way of Federal highway projects.

(f) Where the State does not have legal authority to regulate highway use by utilities and private lines, the State must enter into formal agreements with those local officials who have such authority as necessary to ensure adequate control of such use on Federal-aid highway projects in conformance with this regulation and applicable law. The project agreement between the State and the FHWA on all such Federal-aid highway projects shall contain a special provision incorporating the formal agreements with the responsible local officials.

(g) New utility installations, including those needed for a highway purpose, such as for highway lighting or to serve a weigh station, rest area or recreational area, are not permitted on highways that pass through areas of scenic enhancement and natural beauty, public park and recreational lands, wildlife and waterfowl refuges, and historic sites (as described under 23 U.S.C. 138) when such land was acquired or improved with Federal highway or Federal-aid highway funds, except as follows:

(1) New underground installations may be permitted where they do not require extensive removal or alteration of trees visible to the highway user or impair the aesthetic quality of the lands being traversed.

(2) New aerial installations are to be avoided at such locations unless there is no feasible and prudent alternative to the use of such lands by the serial facility. Before approving such cases, FHWA should be satisfied that:

(i) Other locations:

(A) Are not available or are unusually difficult and unreasonably costly.

(B) Are less desirable from the standpoint of aesthetic quality.

(ii) Undergrounding is not technically feasible or is unreasonably costly.

(iii) The proposed installation will be made at a location and will employ suitable designs and materials which give the greatest weight to the aesthetic qualities of the area being traversed. Suitable designs include, but are not limited to, self-supporting armless, single-pole construction with vertical configuration of conductors and cable.

(h) Where the utility has a compensable interest in the land occupied by its facilities and such land is to be jointly owned and used for highway and utility purposes, the State highway authority and utility shall agree in writing as to the obligations and responsibilities of each party. Such joint-use agreements shall incorporate the conditions of occupancy for each

party, including the rights vested in the State highway authority and the rights and privileges retained by the utility. In any event, the interest to be acquired by or vested in the State highway authority in any portion of the rights-of-way of a Federal or Federal-aid highway project to be vacated, used or occupied by utilities or private lines, shall be adequate for the construction, safe operation, and maintenance of the highway project.

(i) Whenever a utility installation, adjustment of maintenance activity will affect the movement of traffic, the utility shall develop a traffic control plan. The traffic control plan and the application of any traffic control devices shall conform to the standards set forth in the "Manual on Uniform Traffic Control Devices" (MUTCD)<sup>1</sup> and 23 CFR Part 630, Subpart J.

(j) Where the State highway authority determines that existing utility facilities are likely to be associated with injury or accident to the highway user, as indicated by accident history or safety studies, the State highway authority shall initiate appropriate corrective measures to provide a safe traffic environment. Any requests received involving Federal participation in the cost of adjusting or relocating utility facilities pursuant to this paragraph shall be subject to the provisions of 23 CFR Part 645, Subpart A, Utility Relocation and Adjustments, and 23 CFR Part 924, Highway Safety Improvement Program.

**§ 645.209 State highway authority accommodation policies.**

The FHWA shall use the AASHTO publication, "A Guide for Accommodating Utilities on Highway Rights-of-Way," AASHTO, 1969, to evaluate the adequacy of State highway authority utility accommodation policies. As a minimum, such policies shall make adequate provisions with respect to the following:

(a) Utilities must be accommodated and maintained in a manner which will not impair the highway or adversely affect highway or traffic safety.

(b) Consideration shall be given to the effect or utility installations in regard to safety, aesthetic quality, and the costs or difficulty of highway and utility construction and maintenance.

(c) The State highway authority's standards for regulating the use and

<sup>1</sup> The "Manual on Uniform Traffic Control Devices," 1978 edition, is available for inspection and copying as prescribed in 49 CFR Part 7, Appendix D. It may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, Stock No. 050-001-81001-8.

occupancy of highway rights-of-way by utilities must include, but not limited to, the following:

(1) The horizontal and vertical location requirements and clearances for the various types of utilities must be clearly stated. These must be adequate to ensure compliance with clear roadside policies for the particular highway involved.

(2) The applicable provisions of government of industry codes required by law or regulation must be set forth or appropriately referenced, including highway design standards or other measures which the State highway authority deems necessary to provide adequate protection to the highway, its safe operation, aesthetic quality, and maintenance.

(3) Specifications for and methods of installation; requirements for preservation and restoration of highway facilities, appurtenances, and natural features on the rights-of-way; and limitations on the utility's activities within the rights-of-way should be prescribed as necessary to protect highway interests.

(4) Measures necessary to project traffic and its safe operation during and after installation of facilities, including control-of-access restrictions, provisions for rerouting or detouring traffic, traffic control measures to be employed, limitations on vehicle parking and materials storage, protection of open excavations, and the like must be provided.

(5) Measures must be provided to evaluate the direct and indirect environmental and economic effects of any loss of productive agricultural land or any impairment of the productivity of any agricultural land that would result from the disapproval of the use of highway right-of-way for the accommodation of utilities. The environmental and economic effects on productive agricultural land together with the possible interference with or impairment of the use of the highway must be considered in the decision to disapprove any proposal by a utility to use such highway rights-of-way.

(d) Compliance with applicable State laws and approved State highway authority utility accommodation policies must be assured. The responsible State highway authority's file must contain evidence in writing as to the terms under which utility facilities are to cross or otherwise occupy highway right-of-way. All utility installations made on highway rights-of-way shall be subject to written approval by the State highway rights-of-way shall be subject to written approval by the State highway authority. However, such approval will not be required where so provided in the use and occupancy

agreement for such matters as facility maintenance, installation of service connections on highway other than freeways, or emergency operations.

**§ 645.211 Use and occupancy agreements (permits).**

The use and occupancy agreements setting forth the terms under which the utility is to cross or otherwise occupy the highway rights-of-way must include or incorporate by reference:

(a) The State highway authority's standards for accommodating utilities. Since all of the standards will not be applicable to each individual utility installation, the use and occupancy agreement must, as a minimum, describe the requirements for location, construction, protection of traffic, maintenance, access restriction, and any special conditions applicable to each installation.

(b) A general description of the size, type, nature, and extent of the utility facilities being located within the highway rights-of-way.

(c) Adequate drawings or sketches showing the existing and/or proposed location of the utility facilities within the highway rights-of-way with respect to the existing and/or planned highway improvements, the traveled way, the rights-of-way lines and, where applicable, the control of access lines and approved access points.

(d) The extent of liability and responsibilities associated with future adjustment and the utilities to accommodate highway improvements.

(e) The action to be taken in case of noncompliance with the State highway authority's requirements.

(f) Other provisions as deemed necessary to comply with laws and regulations.

**§ 645.213 Approvals.**

(a) Each State highway authority shall submit a statement to the FHWA, or update the one previously submitted to the FHWA under paragraph 7a of the Federal-aid Highway Program Manual 6-6-3-2 (Policy and Procedure Memorandum 30-4.1, Accommodation of Utilities dated November 29, 1972),<sup>2</sup> on the authority of utilities of use and occupy the rights-of-way of State highways, the State highway authority's power to regulate such use, and the policies the State highway authority employs or proposes to employ for accommodating utilities within the rights-of-way of Federal-aid highway under its jurisdiction. Where applicable, the State highway authority shall

<sup>2</sup> FHPM 6-6-3-2 (PPM 30-4.1) is available for inspection and copying as prescribed in 49 CFR Part 7, Appendix D.

include similar information on the use and occupancy of such highway by private lines where permitted by law. The State shall identify those sections, if any, of the Federal-aid highway systems within its borders where the State is without legal authority to regulate use by utilities.

(b) Upon determination by the FHWA that a State highway authority's policies satisfy the provisions of 23 U.S.C. 109 and 116, 23 CFR 1.23 and 1.27, and meet the requirements of this regulation, the FHWA may approve their use on Federal-aid highway projects in that State.

(c) Any changes, additions or deletions the State highway authority proposes to the approved policies are subject to FHWA approval.

(d) When a utility files a notice or makes an individual application or request to a State highway authority to use or occupy the rights-of-way of a Federal-aid highway project, the State highway authority is not required to submit the matter to the FHWA for prior concurrence, except under the following circumstances:

(1) The proposed installation is not in accordance with the State highway authority's utility accommodation policy approved by FHWA for use on Federal-aid highway projects under the provisions of this regulation.

(2) The proposed installation involves cases described in § 645.207(g) of this part.

(3) Installations on Federal-aid freeways involving extreme case exceptions, as described in the AASHTO publication, "A Policy on the Accommodation of Utilities on Freeway Rights-of-Way," and § 645.207(b) of this part.

(e) The State highway authority's practices under the policies or agreements approved under § 645.213(b) of this part shall be periodically reviewed by the FHWA.

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