

ENGINEERING DIRECTIVES AND STANDARDS

Volume	Chapter	Section	Directive Number	Effective Date
IV	2	1	8	11/7/1983

SUBJECT: COMMUNICATION CABLE INSTALLATION ON HIGHWAY STRUCTURES

1. **PURPOSE:** To establish policy and procedure for the installation of cable for communication systems on highway structures.
2. **BACKGROUND:** Louisiana R.S. 36:504(B)(l)(d) allows the Department of Transportation and Development to permit installation of cables for communications systems on the Department's bridges.
3. **POLICY:** Communication cables may be attached to highway structures, provided that such attachments do not overstress structural members, damage the structure, obstruct the clear roadway or waterway, interfere with structure maintenance, or create a hazard to the traveling public. Where it is feasible and reasonable to locate communication lines elsewhere, attachments to highway structures will be avoided. Communication system owners shall be charged a one-time lump sum fee prior to installation, which will be non-refundable, and an annual rental for the installation.
4. **PROCEDURE:** The Right of Way Permits Engineer will be responsible for the implementation and coordination of these procedures.
 - A. Any request for the attachment of a communication cable to a highway structure will be made using the attached supplement and application for Project Permit Form Nos. DOTD 03-41-3035 or DOTD 03-41-0593, copies of which will be maintained in each District Office.
 - B. The application for permit shall be reviewed and approved at the District Office then sent to the Right of Way Permits Unit in Baton Rouge for further handling.
 - C. The owners shall be charged an annual rental for the privilege, but not as a payment for a property right or use and occupancy of the highway structure. A schedule shall be maintained by the Right of Way Permits Engineer of reasonable annual rental rates to be charged owners.
 - D. A guarantee deposit to insure the satisfactory completion of the work shall accompany the application for permit. No inspection fee is charged and the guarantee deposit will be refunded promptly upon receipt of notice from the District Administrator that the work has been satisfactorily completed.
 - E. Plans will be submitted to the Bridge Design Engineer and the Structures and Facilities Maintenance Engineer for approval.
 - F. The request must be accompanied by plans of the proposed method of attachment and shall be in accordance with the attached "Regulations for installing of cables for communication systems on highway structures" supplement.
5. **OTHER ISSUANCES AFFECTED:** All directives, memoranda or instructions issued heretofore in conflict with this directive are hereby rescinded.
6. **EFFECTIVE DATE:** This directive will become effective immediately upon receipt

PAUL HARDY
SECRETARY

REGULATIONS FOR INSTALLATION OF CABLES FOR COMMUNICATION SYSTEMS ON HIGHWAY STRUCTURES

1. Where it is feasible and reasonable to locate communication lines elsewhere, attachments to highway structures will be avoided.
2. Attachments to a structure shall not materially affect the structural characteristics, the safe operation of traffic, the efficiency of maintenance, and the appearance of the structure.
3. The owner shall submit five prints of plans of method of attaching, showing size and weight of communication cable, and support and attachment details.
4. It is preferred that the installation occupy a location beneath the structure floor or deck, between the outer girder or beams, or within a cellular area at an elevation above low superstructure steel or masonry.
5. There shall be no encroachments on the waterway or roadway of the structure.
6. The installation shall not be below low steel or masonry of the structure.
7. The installation shall be on the downstream side of the structure.
8. The hangers supporting the communication system shall be designed to clamp to the structure as generally no burning or drilling of holes or welding is permitted.
9. The construction and maintenance of the communication cable and its supports shall be done without any closure of any traffic lane and inconvenience or interference with highway traffic. All safety precautions for the protection of the traveling public must be observed. Undue delay to traffic will not be tolerated.
10. The communication cables shall be suitably insulated, grounded, and preferably carried in protective conduit or pipe from the point of exit from the ground to re-entry. Only low frequency voltage will be permitted in the communications cable.
11. The permit shall be reviewed and approved by the Bridge Design Engineer and the Structures and Facilities Maintenance Engineer.
12. Communication cables owned by private individuals or concerns and not serving a segment of the general public, shall not be permitted on highway structures.
13. Should the owner fail to maintain his facilities in a condition acceptable to the Department, the Department, after notifying the owner, will perform the maintenance and bill the owner for the cost or take other appropriate action to ensure the safety and convenience of the traveling public.
14. All materials and workmanship shall conform to the requirements of the applicable industry code and to Department specifications.

15. All excavations within the limits of the right of way shall be backfilled and tamped in six inch layers to the density of the adjacent undisturbed soil. Where sod is removed or destroyed, it shall be replaced. Where it is necessary to make excavations in the shoulder, the top six inches of backfill shall be sand-clay gravel or equivalent. Where existing spoil material is, at the discretion of the Department unsuitable for backfill, select material shall be furnished in lieu thereof and the existing material disposed of by approved methods.
16. A guarantee deposit to insure the satisfactory completion of the work shall accompany the application for permit. The amount of the guarantee deposit shall be calculated in accordance with schedules given below. No inspection fee is charged and the guarantee deposit will be refunded promptly upon receipt of notice from the District Administrator that the work has been satisfactorily completed.
17. This permit may be terminated by either party upon thirty (30) days' notice in writing to the other party after which the Communication Company will be given a reasonable period of time to remove his system. The Department may revise the annual rental rate upon thirty (30) days' notice in writing to the owner.
18. The one-time lump sum fee and one year's rental for this privilege shall accompany the application for permit. The amount of the lump sum fee and the annual rental shall be calculated in accordance with schedules given below.

Guarantee Deposit Schedule

	Bridges 300' and less	Bridges over 300'
Per cable not over 1" dia	\$500.00	\$1,000.00
In excess of 1" dia	\$700.00	\$1,400.00

Lump Sum Fee and Annual Rental Schedule

Bridges over 300 Ft long

Computed Charges

Lump Sum Fee = \$1.25/Ft./Lb of Wt.
Annual Rental = \$0.15/Ft./Lb.

Minimum Charges

Lump Sum = \$50,000
Annual Rental = \$5,000 Bridges under 300 Ft long

Computed Charges

Lump Sum Fee = \$0.50/Ft./Lb of Wt.
Annual Rental = \$500.00

Minimum Charges

Lump Sum Fee \$5,000.00
Annual Rental = \$0.15/Ft./Lb of Wt.