1.3.5 INSTALLATION AND TESTING OF ACTIVES
See Section 8, “Activation and Testing.”

1.4 PRE-ENGINEERING

1.4.1 DRIVE-OUTS
Drive-outs should be done from the perspective of the construction contractor as well as the project manager. A drive-out of the system is recommended before construction and during design of the system. This can be done by the system construction manager.

1.4.1.1 Log Problems
Log all locations with potential problems and locations needing makeready changes on the strand maps. These could be street cuts, pole relocates, questionable rights-of-way, special concerns regarding permits, potential traffic congestion problems for the contractor, alternate routes, building entry problems, potential power problems, required tree trimming, trenching not previously noted, and route bridge crossings.

1.4.1.2 Utility Relocates
Phone line drops may be detached and reattached during construction, if permitted by the local utility company. However, costs will be incurred for the telephone company to lower main phone lines. Have these costs estimated by a representative from the telephone company. Power service lines may have to be relocated. Have these costs estimated by a representative of the power company.

1.4.1.3 Documentation
Document everything that will require time and manpower to complete. Include anything the project manager may not have planned for that will prevent the project from being completed on time and within budget.

1.4.2 EVALUATE EXISTING PLANT
Consider the condition of the existing plant. Identify bad cable strand, then repair or replace it. If an overlash is intended, will poles and/or strand support the load requirements?

1.4.3 SPLICES
Plan splice locations from design maps.

1.4.4 SPAN SAG AND TENSIONING
Verify the sag factor percentages and strand strength during the design process. Is the strand and pole strong enough to accommodate an overlash?

All pre-engineering information needs to be coordinated with the system designer and contractor.

1.5 WALKOUTS
Walkouts are recommended when there are questions about accuracy or if the information on existing maps is old. Estimate time required for walkout and coordinate with walkout crew or contractor at pre-walkout meeting.

Walkouts should be used to:
- Define the correct distance between poles.
- Define all rights-of-way.
- Point out potential hazards.
- Define optional alternate routes.
- Define utility clearance violations.
Coaxial cable overlashing is acceptable provided that the following conditions are met.

- Existing strand must be tested to assure that it is adequate for the support of the additional loads (ice, wind and temperature).
- In areas subject to ice loading special consideration must be given to assure adequate support (i.e., span lengths may have to be shortened).

3.12.7 EXPANSION LOOPS
Adequate span sag is important to maximizing expansion loop life. Where the recommended span sag of 1.5%-2.0% is not achievable, hand-forming expansion loops with a non-mechanical template (Figure 3-28) is not advisable. It is recommended that all expansion loops be formed with a mechanical bender (Figure 3-29) to prevent damage to the cable that may not be immediately apparent. However, when hand-forming expansion loops with a template, use care to avoid kinking the cable.

Cable diameters of .750-inch and larger must be formed with a system-approved mechanical loop forming tool. Refer to cable bender manufacturer for recommended procedures.

Place expansion loops in feeder cable at the output side of every pole.

Corners greater than 45° should have an expansion loop in .750-inch or larger cable on the next adjacent pole (or output side). Locate the loop on the opposite side of the pole from any collocated device.

At cable expansion loops, support straps should be left loose to allow for cable expansion and contraction, yet snug enough to prevent the cable from rolling upward.
APPA Pole Attachment Work Book

by

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VI. Treatment of Overlashng

A. Permit Requirement

The Model Agreement defines an “Attachment” as follows:

\[
\text{Attachment(s): means Licensee’s Communications Facilities that are placed directly on Utility’s Poles or Overlashed onto an existing Attachment or that are placed within Utility’s Conduit System, but does not include either a Riser or a service drop attached to a single Pole where Licensee has an existing Attachment on such Pole.}
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Under the terms of this definition, the overlashing of existing facilities is considered a separate attachment requiring prior authorization through the permitting process. Absent such authorization, overlashing constitutes an unauthorized attachment. The rationale for treating overlashing in the same manner as other attachments, in terms of access, is that overlashing can have significant impacts on pole loading and required separations. Accordingly, entities seeking to overlash their own facilities or those of a third party should be required to submit a permit application complete with a pre-permit and post-installation surveys, and pay any necessary make-ready costs. In addition, entities seeking to overlash facilities other than their own should be required to obtain a license Agreement with the utility and written evidence of concurrence from the party whose facilities they propose to overlash.

B. Rates for Overlashng

1. Common Space

The issue of the appropriate rate for overlashing is more complex. While overlashers arguably obtain the same benefits from the common space as any other attaching party, it is not clear that an existing entity that overlashes its own attachment should be counted twice for the apportionment of the common space. For ease of administration, the Model Agreement recommends that, irrespective of the actual number of attachments that a party has on a pole, each “attaching entity” only be counted once for the apportionment of the common space. For example, an entity that overlashes a third party’s existing attachment would be counted as an attaching entity.