4.0 Pole Set Spacing

4.1 Pole set spacing must maintain minimum clearances to allow ample space to work on and around the pole without obstruction.

4.2 Minimum set distance for adjacent structures without equipment on them is to be no less than 15 feet. This accounts for both poles having no equipment being set on them.

4.3 Minimum set spacing for adjacent structures with equipment installed on them is to be no less than 25 feet. This spacing is required when one or both structures have equipment installed

5.0 Pole Heights

5.1 Selection is dependent on the amount of pole−top space that is required for the type of construction that is being used. Specific Construction Standards indicate the amount of pole space that is required.

5.2 In general, 45 foot poles shall be the minimum height used for circuit backbones and 40 foot poles shall be the minimum height used for single- & three- phase lateral construction.

5.3 Secondary attachments should be positioned near the bottom of the allotted pole space and care shall be taken to provide adequate clearances in the span as shown in **DTR Section 04**.

5.4 35-foot poles shall only be used for the following applications:

5.4.1 Stub poles used for guying purposes.

5.4.2 Service and streetlighting poles with secondary cable only on the pole.

5.4.3 Poles installed on private property and in rights of way that will only support secondary conductors; 40-foot poles shall be used if it is determined that primary conductors may be installed in the future.

5.4.4 In NH, solely owned line extensions where it appears reasonable that sole ownership will remain beyond three years.

5.5 When proper clearances may be obtained on existing poles that are involved in line rebuilds, economics dictate that poles in good condition remain in use. See **DSEM 06.241**.

6.0 Pole Class Size

6.1 The minimum pole class size installed on the backbone shall be Class 2. For rebuilds do not replace existing poles if the poles meet minimum loading requirements. Refer to Table 1 for more detail on minimum pole class requirements.

6.2 New poles installed in Eversource three-phase lines in distribution Rights−of−Way are to be direct embedded self−weathering steel poles, class and height to be determined by Engineering. Pole options other than steel will require approval from managers or above in Operations and Engineering.

6.3 The use of steel poles in other situations such as single-phase lines, jointly owned facilities, or other special situations is by exception only and requires approval from managers, or above, in Operations and Engineering. Steel poles shall not be used for service poles.

6.4 The following table details the minimum pole class requirements for specific installations on the distribution system.

Table 1 – Minimum Pole Class Requirements

Construction Type	Minimum Pole Class Required
Roadside	
Primary (Three-Phase) Backbone	45-foot, Class 2
Primary (Single- & Three-Phase) Laterals	40-foot, Class 2
Primary Junction & Equipment Poles*	Class 1
Distribution Right of Way	
Standard Construction & Junction Poles	Class 1 Steel
Equipment Poles*	Class 1**

NOTE: Wood poles are the primary pole choice for Distribution construction, but composite has been approved as an alternative option for environmentally sensitive areas. For service, secondary and stub poles, calculation software determines pole minimum pole class required for stub poles. Minimum class 3 poles should be installed.

* Equipment pole construction is defined as major assets installed on the pole, e.g., Reclosers, Switches, Regulators, Capacitor Banks, Stepdown Transformers, or a Three-phase Bank of Transformers, etc. Basic equipment such as cutouts, single phase transformers, stand-off brackets, etc., are not to be considered a part of the equipment requirement.

** Steel poles are the primary pole choice for ROW construction, but wood shall be used for equipment poles or poles with additional attachments outside of typical construction with Manager approval.

DTR Section 10 in the Overhead Construction book details steel pole construction, both in open and spacer configurations. For pole replacement guidelines see **DSEM 06.301**.

6.5 To determine the proper minimum pole class required, applied loads on conductors, cables, equipment, and supporting structures in both the vertical and horizontal direction must be taken into account.

6.6 Applied loads occur from weight and wind on the following: conductors and cables including ice, equipment, support equipment, and hardware. Additional loads on the pole include the effects due to guying, and guy attachment height locations.

6.7 Use IKEP PoleForeman computer program, or other Company approved program, to determine the proper pole class required. PoleForeman program can be accessed requesting to Eversource IT Department with supervisor approval.

6.7.1 Select Users Guide under the Help drop down menu for PoleForeman User Manual.