DROP WIRE CLEARANCES

CONTENTS PAGE

1. GENERAL

1.01 This section has been revised to:

(a) Identify power supply voltages.

(b) Describe factors to be considered when determining drop wire clearances.

(c) Combine all drop wire clearance sections into one practice. This information was formerly contained in Sections 460-300-120, 462-070-016, and 462-070-017.

(d) Change the section title.

1.02 This section contains the recommended clearances for drop wires to be placed, or are already in place, which are exposed to vehicular travel, power facilities, buildings, or other conditions. The values specified are in accord with the requirements of the National Electrical Safety Code, with temperatures at 60°F.

1.03 Drop wire tends to elongate as the temperature rises and contracts as the temperature falls. Wire placed during cold weather will, therefore, always have a greater sag in warm weather, even if no permanent stretch is involved.

1.04 In order to avoid having inadequate clearances at 60°F, it is necessary to provide extra clearances in drop wires placed at temperatures below 32°F. This additional clearance is specified in the sag requirements for cold weather conditions. (See Section 462-400-200.) No additional clearance is required when placing a drop wire if the temperature is above 32°F.

1.05 When drop wire sags exceed two or three feet, it will generally be quite advantageous to locate poles to avoid having the middle of the span occur above the traveled part of a road, alley, or driveway. A pole located within 50 feet of the far edge of the road, alley, or driveway (distance A, Fig. 4) will permit the overhead clearance to conform to requirements related to Fig. 4.

1.06 Clearances shown in this section should be used unless the work order or local requirements call for other values. This may occur when engineering forces recognize factors not allowed for in this section or because of local requirements, etc. Clearances for span lengths, voltages, and conditions not covered in this section are an engineering responsibility and will be shown on the work order or detailed plans.

1.07 Clearances over public and private swimming pools are not covered by the National Electrical Safety Code. However, for reasons of safety, sanitation, and appearance, aerial drop wire crossings over swimming pools should be avoided.

2. TERMINOLOGY

2.01 The following is a brief description of conditions applicable to drop wire clearance requirements:

(a) ***Storm Loading Areas:*** Figure 1 identifies the three storm loading areas based upon studies made from records of wire using companies and data from the United States Weather Bureau. The frequency, severity, and effects of ice and windstorms in various sections of the country were the elements considered in establishing the loading area zones. As a result of the weather differences, allowances must be made for the stretching of conductors in their respective loading zones when placing a drop wire.

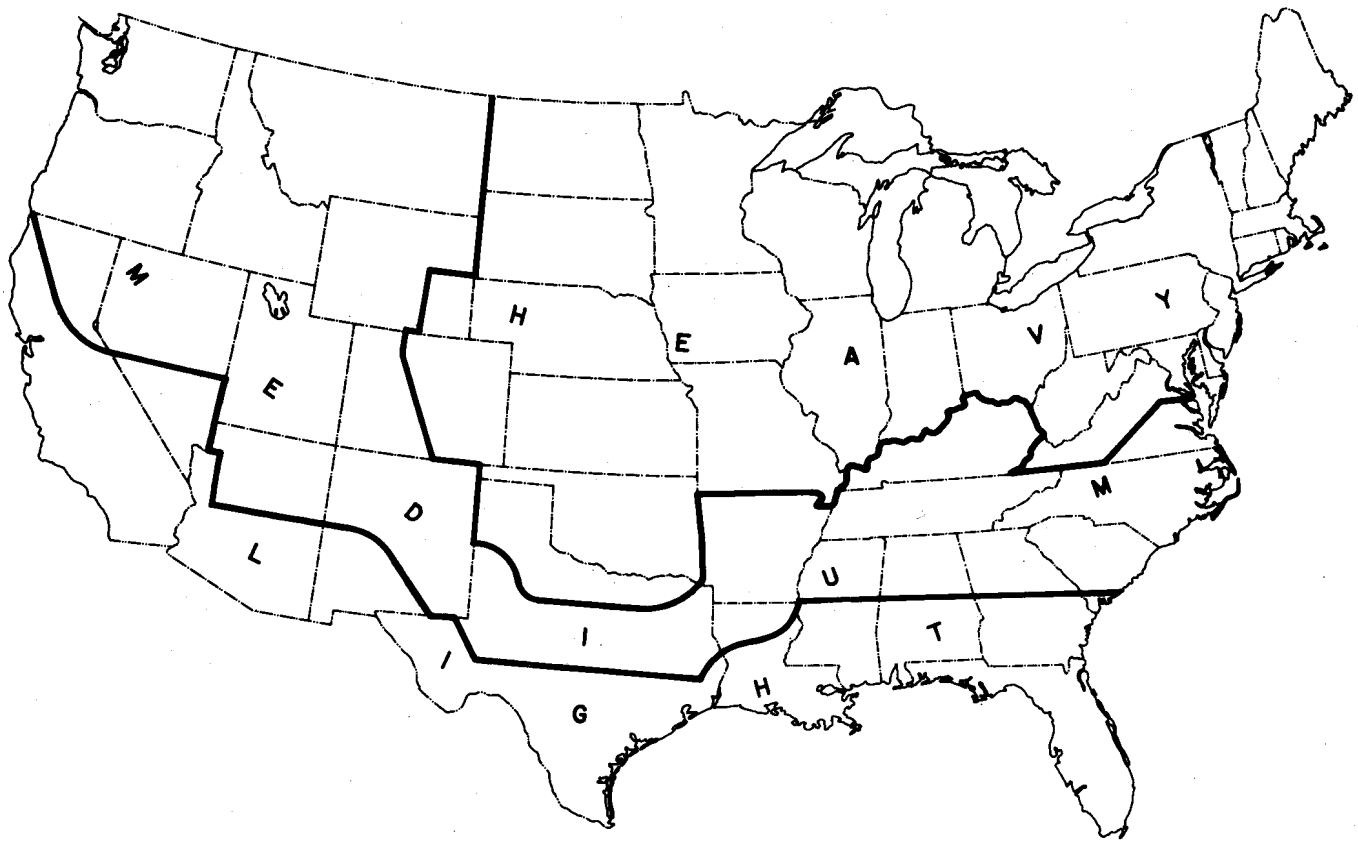


Fig. 1—Storm Loading Areas

(b) ***Drop Wire Sag:*** The sag in a drop wire is measured by comparing the line of sight established by the drop wire attachments and the lowest point in the span. Stringing sags for drop wire is shown in Section 462-400-200.

(1) ***Normal Drop Wire Sag:*** Drop wires are to be strung with normal sags when adequate clearances can be attained. Workmen, on poles, can obtain these sags with normal hand pulling.

(2) ***Minimum Drop Wire Sag:*** A minimum sag in a drop wire can be strung where clearance is limited and normal sags cannot be attained. These smaller sags result in higher stringing tensions in the wire; hence, pulling tools are required to enable the workman to pull the wire up to tension.

(c) ***Placing Clearances:*** Placing value of clearance is the height the drop wire is to clear when placed or replaced.

(d) ***Maintenance Clearances:*** Maintenance value of clearance should exist, after the wire has been exposed to one or more cycles of storm loading and the temperature returns to 60°F.

(e) ***Drop Wire Crossing Above Railroad Tracks:***

(1) ***Generally:*** Clearance required when the drop wire does not parallel a contact wire for a trolley or trackless trolley.

(2) ***Special Case:*** (Fig. 2) Clearance required when the drop wire parallels a contact wire used by a trolley or trackless trolley.

(f) ***Drop Wire Crossing Above Public Roads, Public Alleys, or Residential Drives:***

(1) ***Generally:*** (Fig. 3) Clearance required when the drop wire is attached to a pole further than 50 feet from the far edge of the traveled roadway.

(2) ***Pole at Road's Edge:*** (Fig. 4) Clearance required when the drop wire is attached to a pole located within 50 feet of the far edge of the traveled roadway (distance A, Fig. 4).

(g) ***Major Overhang:*** (Fig. 5) A drop wire which passes over 6 feet or more of the ordinarily traveled part of a roadway.

(h) ***Minor Overhang:*** (Fig. 5) A drop wire which passes over less than 6 feet of the ordinarily traveled part of a roadway.

(i) ***No Overhang—Back of Obstruction:*** (Fig. 6) A pole line located in back of a fence, ditch, embankment, etc, so that the ground beneath the line can ordinarily be traveled by pedestrians only.

(j) ***No Overhang—Not Back of Obstruction:*** (Fig. 7) A pole line not back of a fence, ditch, embankment, etc, and does not overhang the normal traveled road. This category is meant to include ground not ordinarily traveled but can be reached by vehicles. If farm machinery is likely to pass under the line, provide sufficient clearance so that the drop wire will be 2 feet above the highest part of such machinery or the loads it will carry.

3. DROP WIRE CLEARANCES

3.01 The following factors must be considered when determining proper drop wire clearances:

(a) Placing or Maintenance Clearances

(1) Is the drop wire to be placed or replaced?

The clearances for drop wires to be placed or replaced are identified as ***placing clearances.***

(2) Is the drop wire in place?

The clearances for existing drop wires, in place, are identified as ***maintenance clearances.***

(b) The Storm Loading Area

What is the storm loading area applicable to the locality where the drop wire exists or is to be placed? Is it either a light, medium, or heavy loading area?

(c) The Drop Wire Sag

Is the drop wire to be placed or in-service strung with a normal or minimum sag?

(d) The Specific Condition Encountered

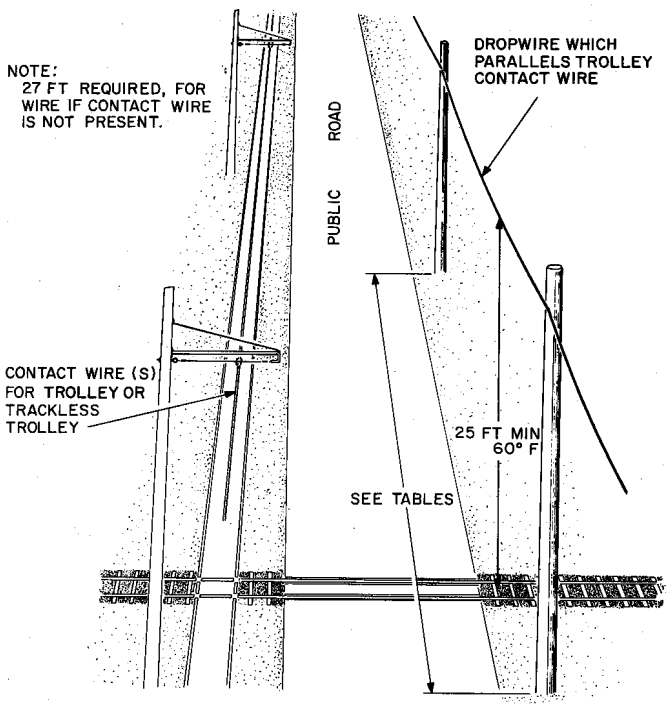


Fig. 2—Wire Crossing Railroad Tracks—Special Case

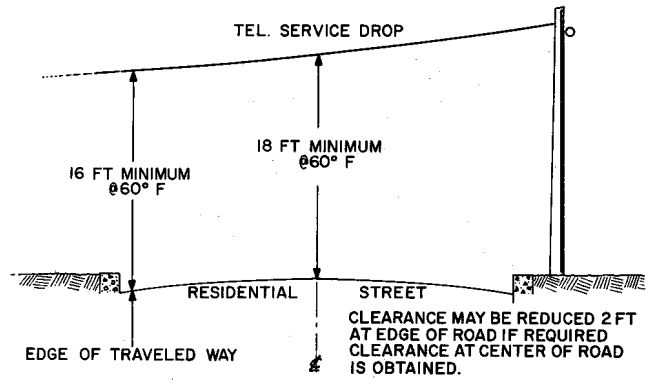


Fig. 3—Service Drop Over Residential Street

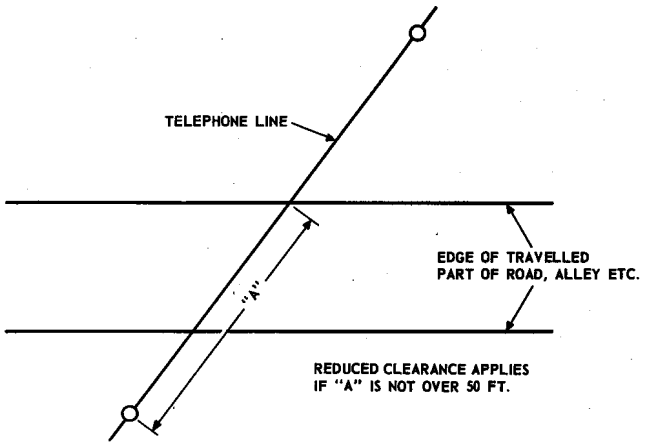


Fig. 4—Wire Crossing Public Road—Pole at Road's Edge

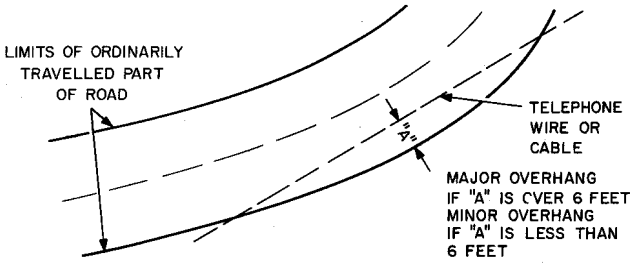


Fig. 5—Wire Running Along Public Roads

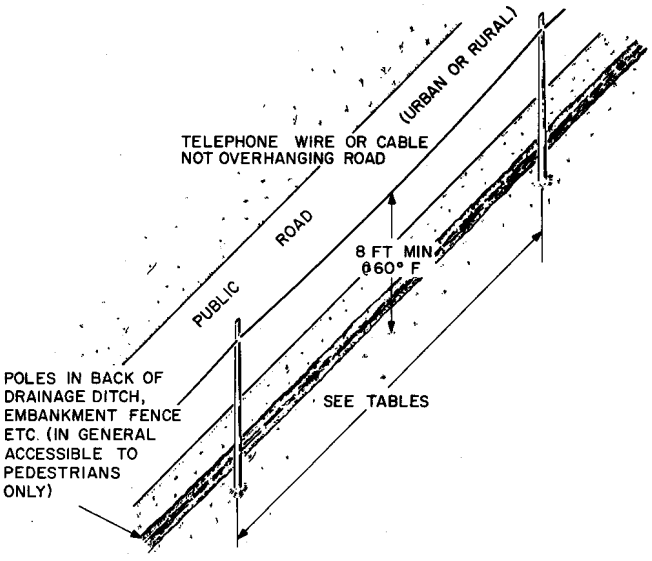


Fig. 6—Wire Running Along Public Roads (Back of Obstruction)

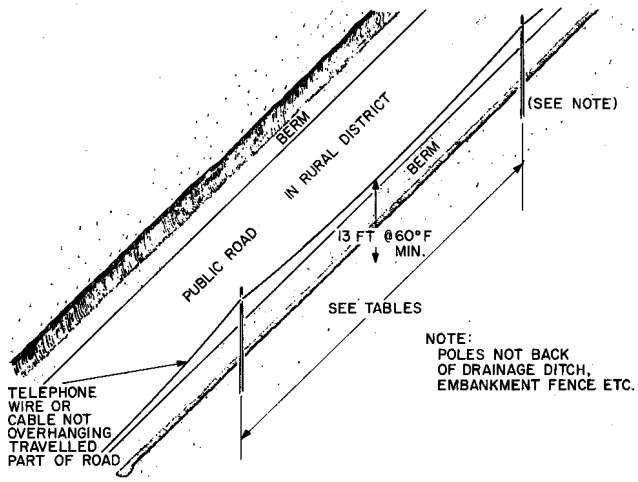


Fig. 7—Wire Running Along, But Not Overhanging Public Roads (Not Back of Obstruction)

Is the drop wire to be placed or in-service, crossing above or along roadways, rails, buildings, or above or below power facilities, foreign equipment, or neon signs?

3.02 Clearance Reference

(a) ***Above Ground or Rails:***

Placing drop wire—see Table A.

Maintenance clearances—see Table B.

Note: The clearance height for span lengths not shown in Table A or B is obtained from the referred tables by locating the point where the span lengths (vertical lines) intersect the drop wire condition encountered. (See 3.03.)

(b) ***Crossing Below Power Wires or Cables:*** (See Part 4)

STORM LOADING AREA	TABLE
Light	C
Medium	D
Heavy	E

(c) ***Above Power Service Drops or Lines:*** (See Part 4)

STORM LOADING AREA	TABLE
Light	C
Medium	F
Heavy	G

(d) ***Below Foreigns Guys or Communication Cables and Neon Signs:***

STORM LOADING AREA	TABLE
Light	C
Medium	F
Heavy	G

(e) ***Alongside Neon Signs***

STORM LOADING AREA	TABLE
Light	C
Medium	F
Heavy	G

3.03 ***Determining Clearances—Using Graph Tables C Through M:*** The clearance required for various job conditions for span lengths not included in Table A or B, can be determined in the following manner:

- Identify the reference letter (A, B, C, etc) associated with the job condition.
- Locate the vertical line associated with the span length encountered.
- The horizontal line, at which the two above lines intersect, will identify the clearance (feet-inches) required.

4. POWER SUPPLY VOLTAGES

4.01 Employees placing a drop wire that may contact a power supply wire or cable shall wear insulating gloves and other protective equipment when performing such a work operation. In joint construction, any one of the following supply voltages could be encountered:

Phase-to-Phase Voltage

- Secondary distribution—600 volts or less
- Primary distribution—2200 to 34,500 volts
- Subtransmission—26,000 to 69,000 volts.

Phase-to-Ground Voltage

- Primary distribution—1270 to 20,000 volts
- Subtransmission—15,000 to 40,000 volts.

4.02 It is imperative that employees be able to identify supply voltages and take additional precautions when exposed to such voltages.

4.03 Power conductors immediately above telephone facilities, if attached to spool type insulators on a crossarm, can safely be assumed to be secondary service, with voltages less than 600 volts.

4.04 It is quite common to have a primary distribution supply, above the secondary distribution with a voltage range of 2200 to 34,500 volts.

4.05 Employees can estimate the voltage of power by observing the size and type of insulator, voltage markings on transformer, position of supply conductors on a pole, etc. (See Fig. 8, 9, and 10.)

4.06 Employees should make it a point to acquaint themselves with the power company facilities in localities where they work, so they may be able to accurately estimate power facilities.

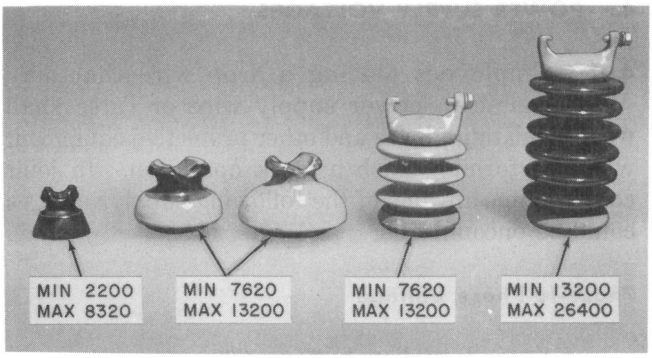


Fig. 8—Typical Power Supply Insulators

Fig. 9—Voltage Marking on Transformer

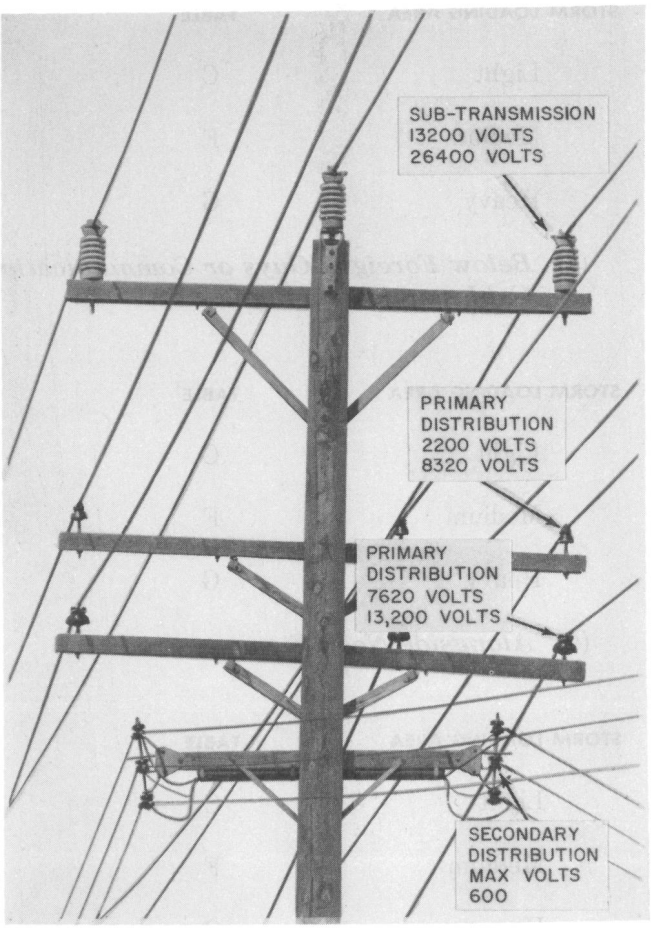


Fig. 10—Position of Supply Conductors

TABLE A

CLEARANCES
PLACING DROP WIRE (AT 60° F)
ABOVE GROUND OR RAILS

STORM LOADING AREA		LIGHT	MEDIUM			HEAVY			
SPAN LENGTH (FT)		300 OR LESS	250 OR LESS	170 OR LESS	OVER 170	75 OR LESS	OVER 75	75 OR LESS	OVER 75
DROP WIRE SAG		NORMAL OR MINIMUM	NORMAL	MINIMUM	MINIMUM	NORMAL	NORMAL	MINIMUM	MINIMUM
Crossing Above:	REF	FT IN	FT IN	FT IN	TABLE	FT IN	TABLE	FT IN	TABLE
Railroad Tracks Generally Special Case	 Fig. 2	† 27 — 0 25 — 0	‡ 27 — 0 25 — 0	‡ 27 — 0 25 — 0		§ 27 — 0 25 — 0		§ 27 — 3 25 — 3	
Public Roads Generally * Pole at Road's Edge*	 Fig. 4	 18 — 0 — —	 18 — 0 — —	 18 — 0 18 — 0		 18 — 0 18 — 0		 18 — 3 18 — 3	
Public Alleys Generally Pole at Road's Edge	 Fig. 4	15 — 0 — — — —	15 — 0 — — — —	 15 — 0 15 — 0	See Table H	 15 — 0 15 — 0	See Table I	 15 — 3 15 — 3	See Table J
Residential Driveways Generally Pole at Road's Edge	 Fig. 4	10 — 0 — — — —	10 — 0 — — — —	 10 — 0 10 — 0		 10 — 0 10 — 0		 10 — 3 10 — 3	
Flat Roof Bldgs		8 — 0	8 — 0	8 — 0		8 — 0		8 — 3	
Peak Roof Bldgs or Billboards		2 — 0	2 — 0	2 — 0		2 — 0		2 — 2	
Neon Signs		4 — 0	4 — 0	4 — 0		4 — 0		4 — 3	
Waterways		Must Be Shown On Detail Plans							
Running Along:									
Public Roads With: Major Overhang	Fig. 5	18 — 0	18 — 0	18 — 0		18 — 0		18 — 3	
Minor Overhang Urban Rural (Lt Traffic)	Fig. 5	 18 — 0 14 — 0	 18 — 0 14 — 0	 18 — 0 14 — 0	See Table H	 18 — 0 14 — 0	See Table I	 18 — 3 14 — 3	See Table J
No Overhang Back of Obstr Not Back of Obstr	 Fig. 6 Fig. 7	 8 — 0 13 — 0	 8 — 0 13 — 0	 8 — 0 13 — 0		 8 — 0 13 — 0		 8 — 3 13 — 3	
Public Alleys		15 — 0	15 — 0	15 — 0		15 — 0		15 — 3	

* Clearance height over residential street may be reduced 2 feet at the edge of the road, if the required clearance at the center of the road is obtained (Fig. 3).

† Must be supported on 6M strand for spans over 150 ft.

‡ Must be supported on 6M strand for spans over 125 ft.

§ Must be supported on 6M strand for spans over 100 ft.

TABLE B

DROP WIRE
MAINTENANCE CLEARANCES (AT 60° F)
ABOVE GROUND OR RAILS

STORM LOADING AREA		LIGHT	MEDIUM			HEAVY			
SPAN LENGTH (FT)		300 OR LESS	250 OR LESS	170 OR LESS	OVER 170	75 OR LESS	OVER 75	75 OR LESS	OVER 75
DROP WIRE SAG		NORMAL OR MINIMUM	NORMAL	MINIMUM	MINIMUM	NORMAL	NORMAL	MINIMUM	MINIMUM
Crossing Above:	REF	FT IN	FT IN	FT IN	TABLE	FT IN	TABLE	FT IN	TABLE
Railroad Tracks		†	‡	‡		§		§	
Generally		27 — 0	27 — 0	27 — 0		27 — 0		27 — 0	
Special Case	Fig. 2	25 — 0	25 — 0	25 — 0		25 — 0		25 — 0	
Public Roads									
Generally *		18 — 0	18 — 0	18 — 0		18 — 0		18 — 0	
Pole at Road's Edge*	Fig. 4	— —	— —	18 — 0		18 — 0		18 — 0	
Public Alleys		15 — 0	15 — 0						
Generally		— —	— —	15 — 0		15 — 0		15 — 0	
Pole at Road's Edge	Fig. 4	— —	— —	15 — 0	See Table K	15 — 0	See Table I	15 — 0	See Table M
Residential Driveways		10 — 0	10 — 0						
Generally		— —	— —	10 — 0		10 — 0		10 — 0	
Pole at Road's Edge	Fig. 4	— —	— —	10 — 0		10 — 0		10 — 0	
Flat Roof Bldgs		8 — 0	8 — 0	8 — 0		8 — 0		8 — 0	
Peak Roof Bldgs or Billboards		2 — 0	2 — 0	2 — 0		2 — 0		2 — 0	
Neon Signs		4 — 0	4 — 0	4 — 0		4 — 0		4 — 0	
Waterways		Must Be Shown On Detail Plans							
Running Along:									
Public Roads With:									
Major Overhang	Fig. 5	18 — 0	18 — 0	18 — 0		18 — 0		18 — 0	
Minor Overhang	Fig. 5								
Urban		18 — 0	18 — 0	18 — 0		18 — 0		18 — 0	
Rural (Lt Traffic)		14 — 0	14 — 0	14 — 0	See Table K	14 — 0	See Table L	14 — 0	See Table M
No Overhang									
Back of Obstr	Fig. 6	8 — 0	8 — 0	8 — 0		8 — 0		8 — 0	
Not Back of Obstr	Fig. 7	13 — 0	13 — 0	13 — 0		13 — 0		13 — 0	
Public Alleys		15 — 0	15 — 0	15 — 0		15 — 0		15 — 0	

* Clearance height over residential street may be reduced 2 feet at the edge of the road, if the required clearance at the center of the road is obtained (Fig. 3).

† Must be supported on 6M strand for spans over 150 ft.

‡ Must be supported on 6M strand for spans over 125 ft.

§ Must be supported on 6M strand for spans over 100 ft.

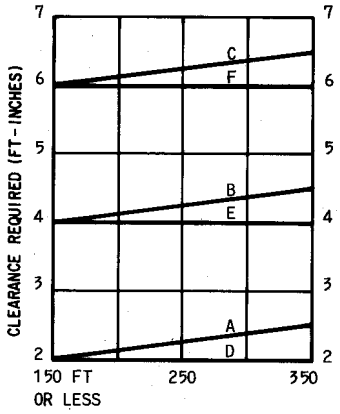
TABLE C
LIGHT LOADING AREA

CLEARANCES
PLACING DROP WIRE
(WITH NORMAL OR MINIMUM SAG)

CROSSING BELOW POWER WIRES OR CABLES

KIND OF FACILITY	REF
300 VOLTS (NOTE 1) OR LESS	
SERVICE WIRES OR CABLES	A
LINE WIRES--GENERALLY	A
IF WITHIN 6 FT OF TELEPHONE POLE (NOTE 2)	B
301-750 VOLTS (NOTE 1)	
PHASE WIRES	B
751-8700 VOLTS (NOTE 1)	
PHASE WIRES--GENERALLY	B
IF WITHIN 6 FT OF TELEPHONE POLE (NOTE 2)	C
8701-50,000 VOLTS (NOTE 1)	
PHASE WIRES--GENERALLY	C
IF NEAR TELEPHONE POLE (NOTE 2)	
GROUNDED NEUTRALS--SYSTEMS OF:	
UP TO 22,000 VOLTS TO GROUND	A
OVER 22,000 VOLTS TO GROUND (NOTE 3)	
OTHER NEUTRALS (NOTE 3)	
GROUNDED METAL SHEATH CABLES OR ANY CABLE LASHED TO GROUNDED STRAND--ANY VOLTAGE	D
SPACER CABLES (NOTE 4)	
300 VOLTS (NOTE 1) OR LESS	
GENERALLY	D
IF WITHIN 6 FT OF TELEPHONE POLE (NOTE 2)	E
301-750 VOLTS (NOTE 1)	E
751-8700 VOLTS (NOTE 1)	
GENERALLY	E
IF WITHIN 6 FT OF TELEPHONE POLE (NOTE 2)	F
8701-50,000 VOLTS (NOTE 1) IF NEAR TELEPHONE POLE (NOTE 2)	F

POWER SPAN LENGTH (FT)



NOTE:
MAINTENANCE CLEARANCES FOR SPAN LENGTHS UP TO 350 FEET TO BE THE SAME AS THAT SPECIFIED IN PLACING THE DROP WIRE FOR SPAN LENGTHS OF 150 FEET OR LESS.

NOTES:
1. VOLTAGE TO GROUND, IF POWER CIRCUIT IS EFFECTIVELY GROUNDED; VOLTAGE BETWEEN WIRES IF NOT GROUNDED.
2. EVERY EFFORT SHALL BE MADE TO AVOID THESE SITUATIONS AND ESTABLISH A COMMON POLE CROSSING INSTEAD.
3. SAME AS ASSOCIATED PHASE WIRES.
4. ILLUSTRATED IN SECTION 620-216-013.
5. PLACE WIRE GUARD AT POINT OF CROSSING.

DROP WIRE ABOVE	DROP WIRE CLEARANCE * FT - IN	DROP WIRE MAX SPAN LENGTH † FT
POWER SERVICE DROPS OR POWER LINE WIRES 300 VOLTS OR LESS	2 0	300
TROLLEY CONTACT WIRES 750 VOLTS OR LESS (NOTE 5)	4 0	250
DROP WIRE BELOW		
FOREIGN GUYS, COMMUNICATION CABLES	2 0	300
NEON SIGN	4 0	300
DROP WIRE ALONGSIDE		
NEON SIGN	2 0	300

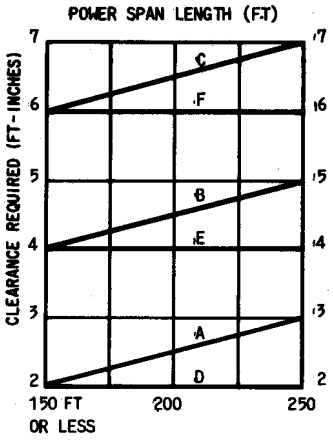
* PLACING OR MAINTENANCE CLEARANCE
† NORMAL OR MINIMUM DROP WIRE SAG

TABLE D
MEDIUM LOADING AREA

CLEARANCES
PLACING DROP WIRE
(WITH NORMAL OR MINIMUM SAG)

CROSSING BELOW POWER WIRES OR CABLES

KIND OF FACILITY	REF
300 VOLTS (NOTE 1) OR LESS	
SERVICE WIRES OR CABLES	A
LINE WIRES--GENERALLY	A
IF WITHIN 6 FT OF TELEPHONE POLE (NOTE 2)	B
301-750 VOLTS (NOTE 1)	
PHASE WIRES	B
751-8700 VOLTS (NOTE 1)	
PHASE WIRES--GENERALLY	B
IF WITHIN 6 FT OF TELEPHONE POLE (NOTE 2)	C
8701-50,000 VOLTS (NOTE 1)	
PHASE WIRES--GENERALLY	C
IF NEAR TELEPHONE POLE (NOTE 2)	
GROUNDED NEUTRALS--SYSTEMS OF:	
UP TO 22,000 VOLTS TO GROUND	A
OVER 22,000 VOLTS TO GROUND (NOTE 3)	
OTHER NEUTRALS (NOTE 3)	
GROUNDED METAL SHEATH CABLES OR ANY CABLE LASHED TO GROUNDED STRAND--ANY VOLTAGE	D
SPACER CABLES (NOTE 4)	
300 VOLTS (NOTE 1) OR LESS	
GENERALLY	D
IF WITHIN 6 FT OF TELEPHONE POLE (NOTE 2)	E
301-750 VOLTS (NOTE 1)	E
751-8700 VOLTS (NOTE 1)	
GENERALLY	E
IF WITHIN 6 FT OF TELEPHONE POLE (NOTE 2)	F
8701-50,000 VOLTS (NOTE 1) IF NEAR TELEPHONE POLE (NOTE 2)	F



NOTE:
MAINTENANCE CLEARANCES FOR SPAN LENGTHS UP TO 250 FEET TO BE THE SAME AS THAT SPECIFIED IN PLACING THE DROP WIRE FOR SPAN LENGTHS OF 150 FEET OR LESS.

NOTES:
1. VOLTAGE TO GROUND, IF POWER CIRCUIT IS EFFECTIVELY GROUNDED; VOLTAGE BETWEEN WIRES IF NOT GROUNDED.
2. EVERY EFFORT SHALL BE MADE TO AVOID THESE SITUATIONS AND ESTABLISH A COMMON POLE CROSSING INSTEAD.
3. SAME AS ASSOCIATED PHASE WIRES.
4. ILLUSTRATED IN SECTION 620-216-013.

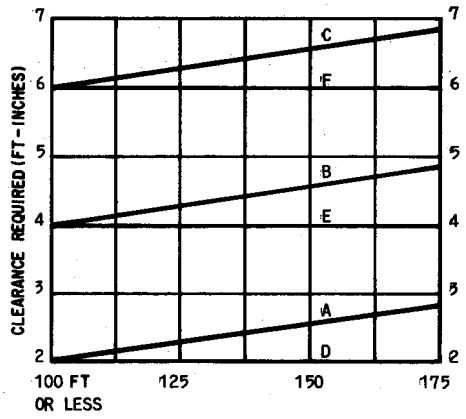
TABLE E
HEAVY LOADING AREA

CLEARANCES
PLACING DROP WIRE
(WITH NORMAL OR MINIMUM SAG)

CROSSING BELOW POWER WIRES OR CABLES

KIND OF FACILITY	REF
300 VOLTS (NOTE 1) OR LESS	
SERVICE WIRES OR CABLES	A
LINE WIRES--GENERALLY	A
IF WITHIN 6 FT OF TELEPHONE POLE (NOTE 2)	B
301-750 VOLTS (NOTE 1)	
PHASE WIRES	B
751-8700 VOLTS (NOTE 1)	
PHASE WIRES--GENERALLY	B
IF WITHIN 6 FT OF TELEPHONE POLE (NOTE 2)	C
8701-50,000 VOLTS (NOTE 1)	
PHASE WIRES--GENERALLY	C
IF NEAR TELEPHONE POLE (NOTE 2)	
GROUNDED NEUTRALS--SYSTEMS OF:	
UP TO 22,000 VOLTS TO GROUND	A
OVER 22,000 VOLTS TO GROUND (NOTE 3)	
OTHER NEUTRALS (NOTE 3)	
GROUNDED METAL SHEATH CABLES OR ANY CABLE LASHED TO GROUNDED STRAND--ANY VOLTAGE	D
SPACER CABLES (NOTE 4)	
300 VOLTS (NOTE 1) OR LESS	
GENERALLY	D
IF WITHIN 6 FT OF TELEPHONE POLE (NOTE 2)	E
301-750 VOLTS (NOTE 1)	E
751-8700 VOLTS (NOTE 1)	
GENERALLY	E
IF WITHIN 6 FT OF TELEPHONE POLE (NOTE 2)	F
8701-50,000 VOLTS (NOTE 1)	F
IF NEAR TELEPHONE POLE (NOTE 2)	

POWER SPAN LENGTH (FT)



NOTE:
MAINTENANCE CLEARANCES FOR SPAN LENGTHS OF 101 TO 175 FEET TO BE THE SAME AS THAT SPECIFIED IN PLACING THE DROP WIRE FOR SPAN LENGTHS OF 100 FEET OR LESS.

NOTES:
1. VOLTAGE TO GROUND, IF POWER CIRCUIT IS EFFECTIVELY GROUNDED; VOLTAGE BETWEEN WIRES IF NOT GROUNDED.
2. EVERY EFFORT SHALL BE MADE TO AVOID THESE SITUATIONS AND ESTABLISH A COMMON POLE CROSSING INSTEAD.
3. SAME AS ASSOCIATED PHASE WIRES.
4. ILLUSTRATED IN SECTION 620-216-013.

TABLE F
MEDIUM LOADING AREA

DROP WIRE ABOVE	PLACING WIRE		MAINTAINING WIRE	
	NORMAL SAG	MINIMUM SAG	NORMAL SAG	MINIMUM SAG
POWER SERVICE DROPS OR POWER LINE WIRES 300 VOLTS OR LESS	A	B	A	A
TROLLEY CONTACT WIRES 750 VOLTS OR LESS (NOTE 1)	C	D	C	C
DROP WIRE BELOW				
FOREIGN GUYS, COMMUNICATION CABLES (NOTE 2)	A	A	A	A
NEON SIGN	C	C	C	C
DROP WIRE ALONGSIDE				
NEON SIGN	A	A	A	A

NOTES:
1. PLACE WIRE GUARD AT POINT OF CROSSING.
2. SPAN LENGTH OF FOREIGN CABLE NOT OVER 250 FEET.

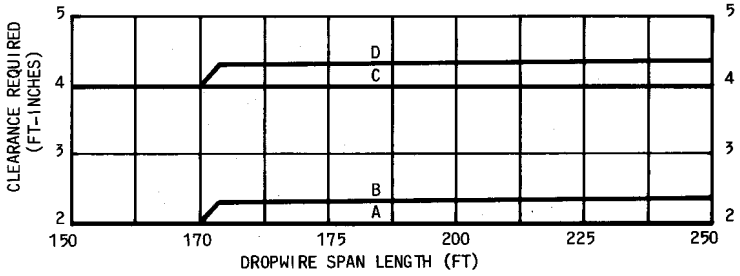


TABLE G
HEAVY LOADING AREA

DROP WIRE ABOVE	PLACING WIRE		MAINTAINING WIRE	
	NORMAL SAG	MINIMUM SAG	NORMAL SAG	MINIMUM SAG
POWER SERVICE DROPS OR POWER LINE WIRES 300 VOLTS OR LESS	A	B	C	C
TROLLEY CONTACT WIRES 750 VOLTS OR LESS (NOTE 1)	D	E	F	F
DROP WIRE BELOW				
FOREIGN GUYS, COMMUNICATION CABLES (NOTE 2)	C	C	C	C
NEON SIGN	F	F	F	F
DROP WIRE ALONGSIDE				
NEON SIGN	C	C	C	C

NOTES:
1. PLACE WIRE GUARD AT POINT OF CROSSING.
2. SPAN LENGTH OF FOREIGN CABLE NOT OVER 175 FEET.

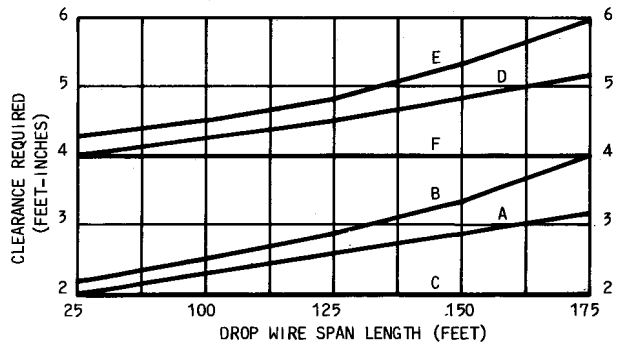


TABLE H
PLACING DROP WIRE IN MEDIUM LOADING AREA WITH MINIMUM SAG

DETERMINING CLEARANCE REQUIRED

- IDENTIFY THE REFERENCE LETTER (A, B, C, ETC) ASSOCIATED WITH THE JOB CONDITION.
  IF THE DROP WIRE CROSSES ABOVE A PUBLIC ROAD (POLE NOT WITHIN 50 FT) THE REFERENCE LETTER WOULD BE C.
- LOCATE THE VERTICAL LINE OF THE DROP WIRE SPAN LENGTH.
  IF THE DROP WIRE SPAN OVER THE PUBLIC ROAD IS 200 FT, IDENTIFY THE VERTICAL LINE OF THE 200 FT SPAN LENGTH.
- THE REQUIRED CLEARANCE HEIGHT IS THE POINT WHERE LINE C AND LINE 200 INTERSECT.
  REFER HORIZONTALLY TO THE CLEARANCE (FEET-INCHES) HEIGHT REQUIRED.

DROP WIRE CROSSING ABOVE	REF
RAILROAD TRACKS	
GENERALLY	A
SPECIAL CASE (FIG. 2)	B
PUBLIC ROADS	
GENERALLY *	C
POLE AT ROADS EDGE (WITHIN 50 FT OF FAR EDGE [FIG. 4]) *	D
PUBLIC ALLEYS	
GENERALLY	E
POLE AT ROADS EDGE (WITHIN 50 FT OF FAR EDGE [FIG. 4])	F
RESIDENTIAL DRIVEWAYS	
GENERALLY	G
POLE AT ROADS EDGE (WITHIN 50 FT OF FAR EDGE [FIG. 4])	H
FLAT ROOF BUILDING	I
PEAK ROOF BUILDING OR BILLBOARD	J
NEON SIGN	K

DROP WIRE RUNNING ALONG

PUBLIC ROAD	
MAJOR OVERHANG (FIG. 5)	L
MINOR OVERHANG (FIG. 5)	
URBAN	M
RURAL (LIGHT TRAFFIC)	N
NO OVERHANG	
BACK OF OBSTRUCTION (FIG. 6)	O
NOT BACK OF OBSTRUCTION (FIG. 7)	P
PUBLIC ALLEY	Q

* THE CLEARANCE OVER RESIDENTIAL STREETS MAY BE REDUCED 2 FEET AT THE EDGE OF THE ROAD IF REQUIRED CLEARANCE IS OBTAINED AT THE CENTER OF THE ROAD. SEE FIG. 3.

NOTE:
MUST BE SUPPORTED ON 6M STRAND FOR SPANS OVER 125 FT.
NOT RECOMMENDED FOR SPAN LENGTHS OVER 250 FT.

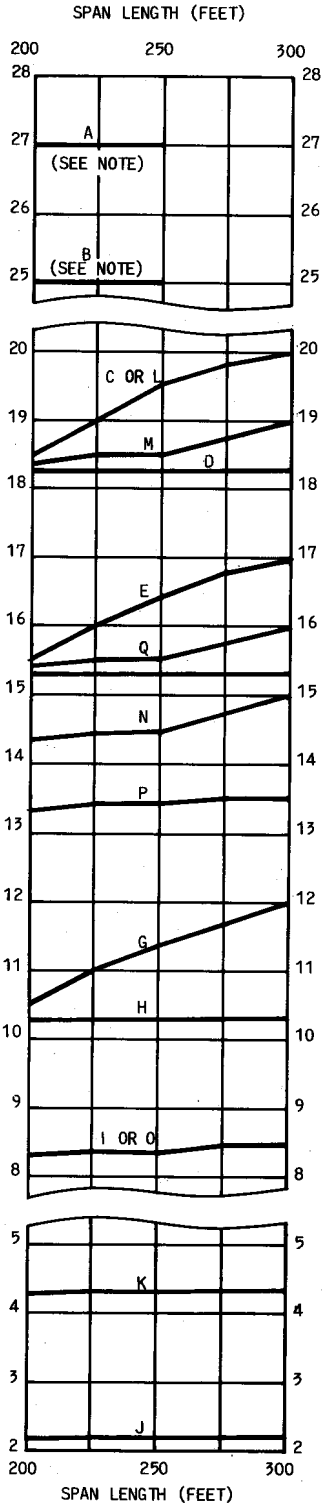


TABLE I
PLACING DROP WIRE IN HEAVY LOADING AREA WITH NORMAL SAG

DETERMINING CLEARANCE REQUIRED

- IDENTIFY THE REFERENCE LETTER (A, B, C, ETC) ASSOCIATED WITH THE JOB CONDITION.
  IF THE DROP WIRE CROSSES ABOVE A PUBLIC ROAD (POLE NOT WITHIN 50 FT) THE REFERENCE LETTER WOULD BE C.
- LOCATE THE VERTICAL LINE OF THE DROP WIRE SPAN LENGTH.
  IF THE DROP WIRE SPAN OVER THE PUBLIC ROAD IS 200 FT, IDENTIFY THE VERTICAL LINE OF THE 200 FT SPAN LENGTH.
- THE REQUIRED CLEARANCE HEIGHT IS THE POINT WHERE LINE C AND LINE 200 INTERSECT.
  REFER HORIZONTALLY TO THE CLEARANCE (FEET-INCHES) HEIGHT REQUIRED.

DROP WIRE CROSSING ABOVE	REF
RAILROAD TRACKS	
GENERALLY	A
SPECIAL CASE (FIG. 2)	B
PUBLIC ROADS	
GENERALLY *	C
POLE AT ROADS EDGE (WITHIN 50 FT OF FAR EDGE [FIG. 4]) *	D
PUBLIC ALLEYS	
GENERALLY	E
POLE AT ROADS EDGE (WITHIN 50 FT OF FAR EDGE [FIG. 4])	F
RESIDENTIAL DRIVEWAYS	
GENERALLY	G
POLE AT ROADS EDGE (WITHIN 50 FT OF FAR EDGE [FIG. 4])	H
FLAT ROOF BUILDING	I
PEAK ROOF BUILDING OR BILLBOARD	J
NEON SIGN	K
DROP WIRE RUNNING ALONG	
PUBLIC ROAD	
MAJOR OVERHANG (FIG. 5)	L
MINOR OVERHANG (FIG. 5)	
URBAN	M
RURAL (LIGHT TRAFFIC)	N
NO OVERHANG	
BACK OF OBSTRUCTION (FIG. 6)	O
NOT BACK OF OBSTRUCTION (FIG. 7)	P
PUBLIC ALLEY	Q

* THE CLEARANCE OVER RESIDENTIAL STREETS MAY BE REDUCED 2 FEET AT THE EDGE OF THE ROAD IF REQUIRED CLEARANCE IS OBTAINED AT THE CENTER OF THE ROAD. SEE FIG. 3.

NOTE:
MUST BE SUPPORTED ON 6M STRAND FOR SPANS OVER 100 FT.
NOT RECOMMENDED FOR SPAN LENGTHS OVER 175 FT.

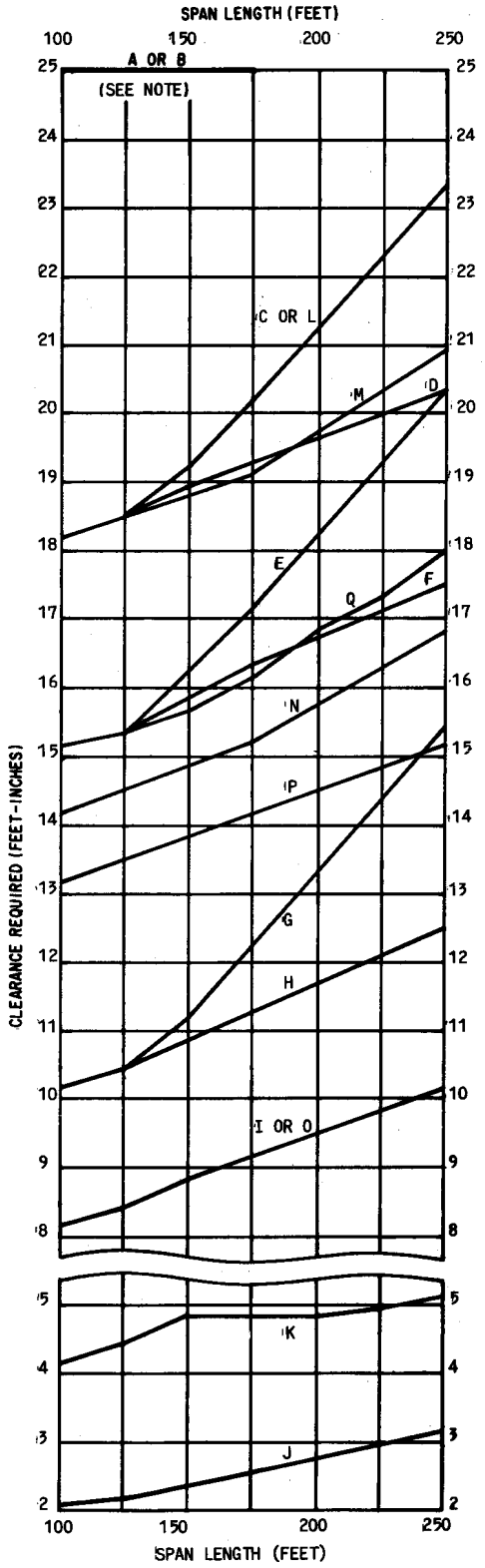


TABLE J
PLACING DROP WIRE IN HEAVY LOADING AREA WITH MINIMUM SAG

DETERMINING CLEARANCE REQUIRED

- IDENTIFY THE REFERENCE LETTER (A, B, C, ETC) ASSOCIATED WITH THE JOB CONDITION.
  IF THE DROP WIRE CROSSES ABOVE A PUBLIC ROAD (POLE NOT WITHIN 50 FT) THE REFERENCE LETTER WOULD BE C.
- LOCATE THE VERTICAL LINE OF THE DROP WIRE SPAN LENGTH.
  IF THE DROP WIRE SPAN OVER THE PUBLIC ROAD IS 200 FT, IDENTIFY THE VERTICAL LINE OF THE 200 FT SPAN LENGTH.
- THE REQUIRED CLEARANCE HEIGHT IS THE POINT WHERE LINE C AND LINE 200 INTERSECT.
  REFER HORIZONTALLY TO THE CLEARANCE (FEET-INCHES) HEIGHT REQUIRED.

DROP WIRE CROSSING ABOVE	REF
RAILROAD TRACKS	
GENERALLY	A
SPECIAL CASE (FIG. 2)	B
PUBLIC ROADS	
GENERALLY *	C
POLE AT ROADS EDGE (WITHIN 50 FT OF FAR EDGE [FIG. 4]) *	D
PUBLIC ALLEYS	
GENERALLY	E
POLE AT ROADS EDGE (WITHIN 50 FT OF FAR EDGE [FIG. 4])	F
RESIDENTIAL DRIVEWAYS	
GENERALLY	G
POLE AT ROADS EDGE (WITHIN 50 FT OF FAR EDGE [FIG. 4])	H
FLAT ROOF BUILDING	I
PEAK ROOF BUILDING OR BILLBOARD	J
NEON SIGN	K

DROP WIRE RUNNING ALONG

PUBLIC ROAD	
MAJOR OVERHANG (FIG. 5)	L
MINOR OVERHANG (FIG. 5)	
URBAN	M
RURAL (LIGHT TRAFFIC)	N
NO OVERHANG	
BACK OF OBSTRUCTION (FIG. 6)	O
NOT BACK OF OBSTRUCTION (FIG. 7)	P
PUBLIC ALLEY	Q

* THE CLEARANCE OVER RESIDENTIAL STREETS MAY BE REDUCED 2 FEET AT THE EDGE OF THE ROAD IF REQUIRED CLEARANCE IS OBTAINED AT THE CENTER OF THE ROAD. SEE FIG. 3.

NOTE:
MUST BE SUPPORTED ON 6M STRAND FOR SPANS OVER 100 FT.
NOT RECOMMENDED FOR SPAN LENGTHS OVER 150 FT.

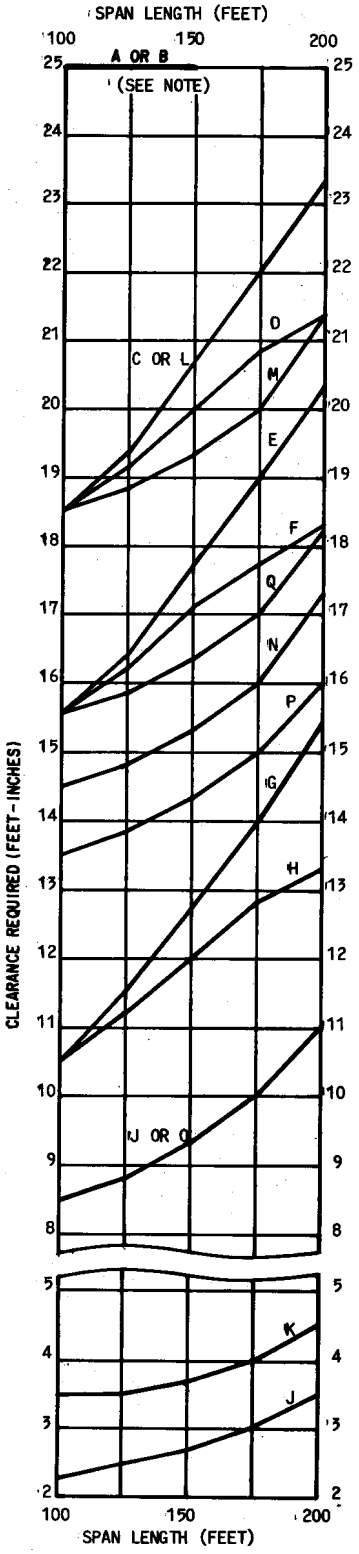


TABLE K
DROP WIRE MAINTENANCE CLEARANCES FOR MEDIUM LOADING AREAS – WIRES WITH MINIMUM SAG

DETERMINING CLEARANCE REQUIRED

- IDENTIFY THE REFERENCE LETTER (A, B, C, ETC) ASSOCIATED WITH THE JOB CONDITION.
  IF THE DROP WIRE CROSSES ABOVE A PUBLIC ROAD (POLE NOT WITHIN 50 FT) THE REFERENCE LETTER WOULD BE C.
- LOCATE THE VERTICAL LINE OF THE DROP WIRE SPAN LENGTH.
  IF THE DROP WIRE SPAN OVER THE PUBLIC ROAD IS 200 FT, IDENTIFY THE VERTICAL LINE OF THE 200 FT SPAN LENGTH.
- THE REQUIRED CLEARANCE HEIGHT IS THE POINT WHERE LINE C AND LINE 200 INTERSECT.
  REFER HORIZONTALLY TO THE CLEARANCE (FEET-INCHES) HEIGHT REQUIRED.

DROP WIRE CROSSING ABOVE	REF
RAILROAD TRACKS	
GENERALLY	A
SPECIAL CASE (FIG. 2)	B
PUBLIC ROADS	
GENERALLY *	C
POLE AT ROADS EDGE (WITHIN 50 FT OF FAR EDGE [FIG. 4]) *	D
PUBLIC ALLEYS	
GENERALLY	E
POLE AT ROADS EDGE (WITHIN 50 FT OF FAR EDGE [FIG. 4])	F
RESIDENTIAL DRIVEWAYS	
GENERALLY	G
POLE AT ROADS EDGE (WITHIN 50 FT OF FAR EDGE [FIG. 4])	H
FLAT ROOF BUILDING	I
PEAK ROOF BUILDING OR BILLBOARD	J
NEON SIGN	K

DROP WIRE RUNNING ALONG

PUBLIC ROAD	
MAJOR OVERHANG (FIG. 5)	L
MINOR OVERHANG (FIG. 5)	
URBAN	M
RURAL (LIGHT TRAFFIC)	N
NO OVERHANG	
BACK OF OBSTRUCTION (FIG. 6)	O
NOT BACK OF OBSTRUCTION (FIG. 7)	P
PUBLIC ALLEY	Q

* THE CLEARANCE OVER RESIDENTIAL STREETS MAY BE REDUCED 2 FEET AT THE EDGE OF THE ROAD IF REQUIRED CLEARANCE IS OBTAINED AT THE CENTER OF THE ROAD. SEE FIG. 3.

NOTE:
MUST BE SUPPORTED ON 6M STRAND FOR SPANS OVER 125 FT.
NOT RECOMMENDED FOR SPAN LENGTHS OVER 250 FT.

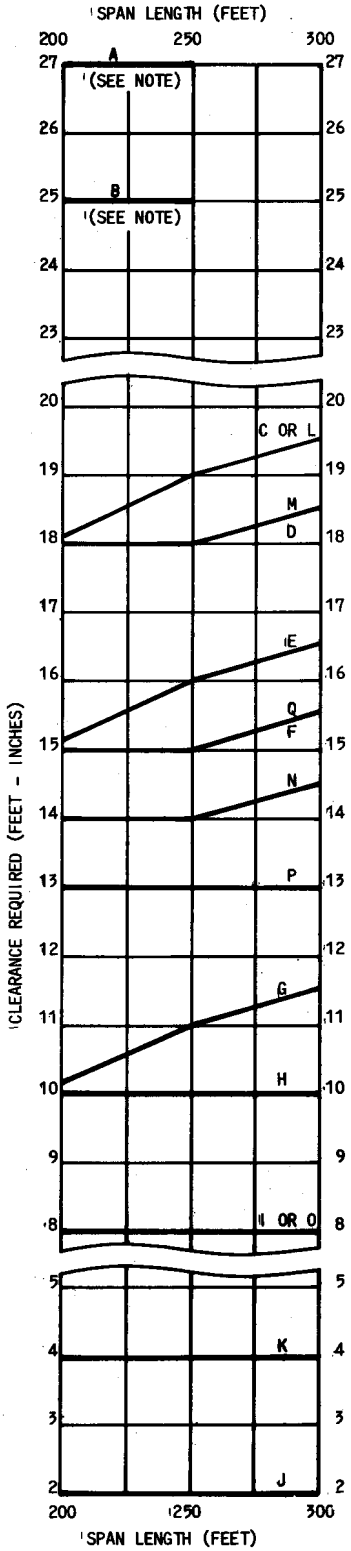


TABLE L
DROP WIRE MAINTENANCE CLEARANCES FOR HEAVY LOADING AREA – WIRES WITH NORMAL SAG

DETERMINING CLEARANCE REQUIRED

- IDENTIFY THE REFERENCE LETTER (A, B, C, ETC) ASSOCIATED WITH THE JOB CONDITION.
  IF THE DROP WIRE CROSSES ABOVE A PUBLIC ROAD (POLE NOT WITHIN 50 FT) THE REFERENCE LETTER WOULD BE C.
- LOCATE THE VERTICAL LINE OF THE DROP WIRE SPAN LENGTH.
  IF THE DROP WIRE SPAN OVER THE PUBLIC ROAD IS 200 FT, IDENTIFY THE VERTICAL LINE OF THE 200 FT SPAN LENGTH.
- THE REQUIRED CLEARANCE HEIGHT IS THE POINT WHERE LINE C AND LINE 200 INTERSECT.
  REFER HORIZONTALLY TO THE CLEARANCE (FEET-INCHES) HEIGHT REQUIRED.

DROP WIRE CROSSING ABOVE	REF
RAILROAD TRACKS	
GENERALLY	A
SPECIAL CASE (FIG. 2)	B
PUBLIC ROADS	
GENERALLY *	C
POLE AT ROADS EDGE (WITHIN 50 FT OF FAR EDGE [FIG. 4]) *	D
PUBLIC ALLEYS	
GENERALLY	E
POLE AT ROADS EDGE (WITHIN 50 FT OF FAR EDGE [FIG. 4])	F
RESIDENTIAL DRIVEWAYS	
GENERALLY	G
POLE AT ROADS EDGE (WITHIN 50 FT OF FAR EDGE [FIG. 4])	H
FLAT ROOF BUILDING	I
PEAK ROOF BUILDING OR BILLBOARD	J
NEON SIGN	K
DROP WIRE RUNNING ALONG	
PUBLIC ROAD	
MAJOR OVERHANG (FIG. 5)	L
MINOR OVERHANG (FIG. 5)	
URBAN	M
RURAL (LIGHT TRAFFIC)	N
NO OVERHANG	
BACK OF OBSTRUCTION (FIG. 6)	O
NOT BACK OF OBSTRUCTION (FIG. 7)	P
PUBLIC ALLEY	Q

* THE CLEARANCE OVER RESIDENTIAL STREETS MAY BE REDUCED 2 FEET AT THE EDGE OF THE ROAD IF REQUIRED CLEARANCE IS OBTAINED AT THE CENTER OF THE ROAD. SEE FIG. 3.

NOTE:
MUST BE SUPPORTED ON 6M STRAND FOR SPANS OVER 100 FT.
NOT RECOMMENDED FOR SPAN LENGTHS OVER 175 FT.

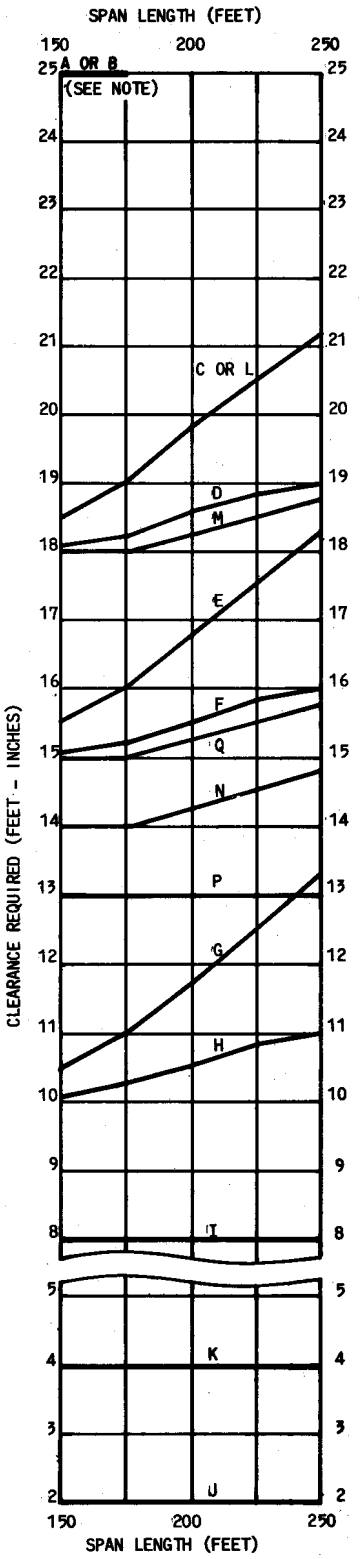


TABLE M
DROP WIRE MAINTENANCE CLEARANCES FOR HEAVY LOADING AREA – WIRES WITH MINIMUM SAG

DETERMINING CLEARANCE REQUIRED

- IDENTIFY THE REFERENCE LETTER (A, B, C, ETC) ASSOCIATED WITH THE JOB CONDITION.
  IF THE DROP WIRE CROSSES ABOVE A PUBLIC ROAD (POLE NOT WITHIN 50 FT) THE REFERENCE LETTER WOULD BE C.
- LOCATE THE VERTICAL LINE OF THE DROP WIRE SPAN LENGTH.
  IF THE DROP WIRE SPAN OVER THE PUBLIC ROAD IS 200 FT, IDENTIFY THE VERTICAL LINE OF THE 200 FT SPAN LENGTH.
- THE REQUIRED CLEARANCE HEIGHT IS THE POINT WHERE LINE C AND LINE 200 INTERSECT.
  REFER HORIZONTALLY TO THE CLEARANCE (FEET-INCHES) HEIGHT REQUIRED.

DROP WIRE CROSSING ABOVE	REF
RAILROAD TRACKS	
GENERALLY	A
SPECIAL CASE (FIG. 2)	B
PUBLIC ROADS	
GENERALLY *	C
POLE AT ROADS EDGE (WITHIN 50 FT OF FAR EDGE [FIG. 4]) *	D
PUBLIC ALLEYS	
GENERALLY	E
POLE AT ROADS EDGE (WITHIN 50 FT OF FAR EDGE [FIG. 4])	F
RESIDENTIAL DRIVEWAYS	
GENERALLY	G
POLE AT ROADS EDGE (WITHIN 50 FT OF FAR EDGE [FIG. 4])	H
FLAT ROOF BUILDING	I
PEAK ROOF BUILDING OR BILLBOARD	J
NEON SIGN	K

DROP WIRE RUNNING ALONG

PUBLIC ROAD	
MAJOR OVERHANG (FIG. 5)	L
MINOR OVERHANG (FIG. 5)	
URBAN	M
RURAL (LIGHT TRAFFIC)	N
NO OVERHANG	
BACK OF OBSTRUCTION (FIG. 6)	O
NOT BACK OF OBSTRUCTION (FIG. 7)	P
PUBLIC ALLEY	Q

* THE CLEARANCE OVER RESIDENTIAL STREETS MAY BE REDUCED 2 FEET AT THE EDGE OF THE ROAD IF REQUIRED CLEARANCE IS OBTAINED AT THE CENTER OF THE ROAD. SEE FIG. 3.

NOTE:
MUST BE SUPPORTED ON 6M STRAND FOR SPANS OVER 100 FT.
NOT RECOMMENDED FOR SPAN LENGTHS OVER 150 FT.