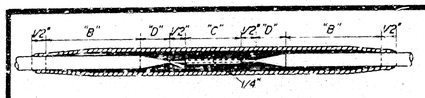
D.P.W. STD. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	CALIF.				

DIST.	COUNTY	ROUTE	SECTION	SHEET NO.	TOTAL SHEETS

APPROVED January 9, 1959

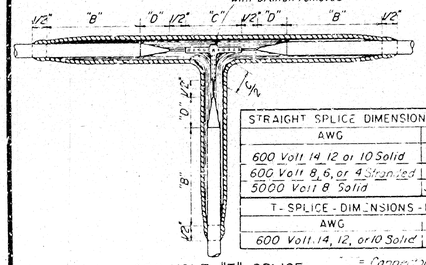
TRAFFIC ENGINEER, CIVIL ENGINEER (REGISTERED)

TO ACCOMPANY PLANS DATED _____



STRAIGHT SPLICE (600 V or 5000 V)

Use 4-way pressure sleeve connector with branch removed

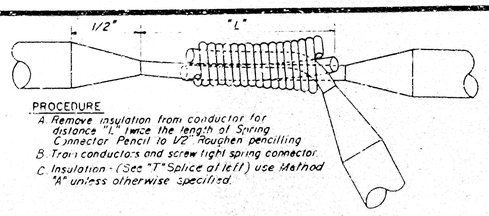


STRAIGHT SPLICE DIMENSIONS - Inches		
AWG	"B"	"D"
600 Volt 14, 12 or 10 Solid	2"	1/2"
600 Volt 8, 6, or 4 Stranded	2 1/2"	1/2"
5000 Volt 8 Solid	3 1/4"	1"

T-SPLICE - DIMENSIONS - Inches		
AWG	"B"	"D"
600 Volt 14, 12, or 10 Solid	2"	1/2"

600 VOLT "T" SPLICE
(Up to 10 AWG only)

" = Connector length



PROCEDURE

A. Remove insulation from conductor for distance "L" twice the length of Spring Connector. Pencil to 1/2" Roughen pencilling.
B. Train conductors and screw tight spring connector.
C. Insulation - (See "T" Splice at left) use Method "A" unless otherwise specified.

ALTERNATE 600 VOLT "T" SPLICE
ELECTRICAL SPRING CONNECTOR

No. 14 AWG and larger

INSULATING METHOD "A"

1. Apply one coat of approved rubber cement, allow to dry.

For Circuits Up to 2,000 Volts

2. Apply self-fusing synthetic rubber tape to a thickness equal to original insulation.

For Circuits Above 2,000 Volts Air Series Lighting.

2. Apply self-fusing ozone resistant natural rubber tape to a thickness equal to original insulation.
3. Apply two layers of self-fusing synthetic rubber tape, half lapped.
4. Rubber tapes shall be rolled, after application, with conductor roller.

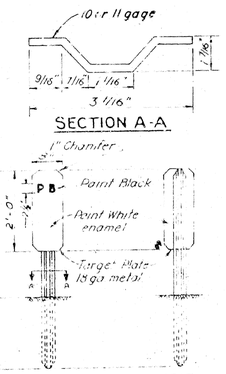
INSULATING METHOD "B"

1. Apply two layers, 1/2 lap synthetic oil resistant self fusing rubber tape.
2. Apply .007 thick PVC tape to thickness equal to original insulation.
3. Apply two layers of asphalt-impregnated open meshed fabric tape.
4. Coat splice with same compound as in tape and fuse in.

PROCEDURE

A. Remove insulation from each conductor to distance 1/2 C+1/2" and pencil to dimension D. Roughen pencilling.
B. Train conductors and place connector, centering over butted cable ends.
C. Crimp and solder connector.
D. Insulate according to Method "A" unless otherwise specified.

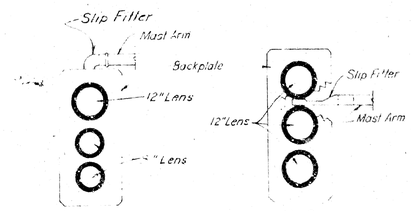
SPLICING DETAILS



(Type A Guide Post - No Reflectors)

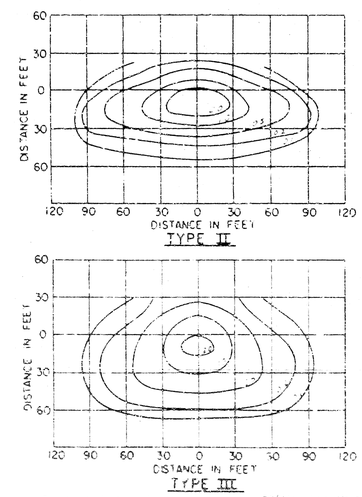
PULL BOX MARKER

No Scale



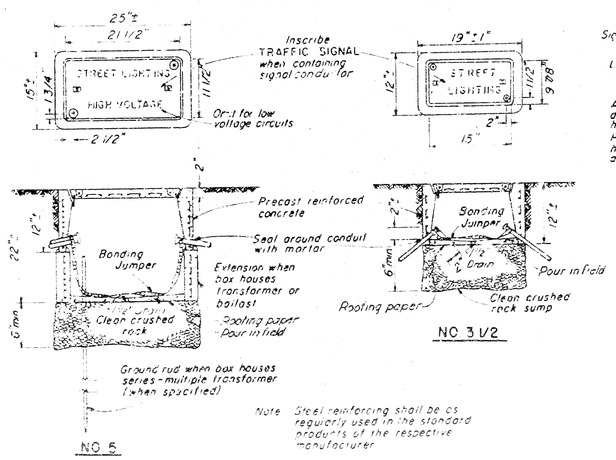
MAST ARM MOUNTING

No Scale



Shielded Highway Lighting Luminaire 30' Mounting Height, 20,000 Lumen Mercury Vapor Lamp

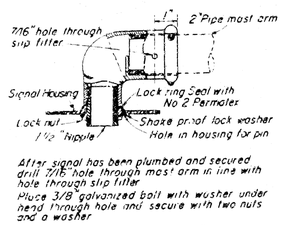
ISOLUX LINES OF MINIMUM HORIZONTAL FOOT CANDLES



Note Steel reinforcing shall be as regularly used in the standard products of the respective manufacturer.

PULL BOXES

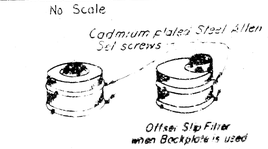
NO SCALE



After signal has been plumbed and secured drill 7/16" hole through mast arm in line with hole through slip fitter.

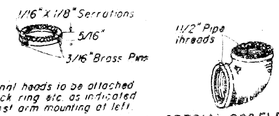
Place 3/8" galvanized bolt with washer under head through hole and secure with two nuts and a washer.

SLIP FITTER FOR MAST ARM MOUNTING



Note Serrations in fittings shall match those in lock ring.

SLIP FITTER FOR POST TOP MOUNTING



All signal heads to be attached with lock ring etc. as indicated for mast arm mounting at left.

Ring to be of brass, of sufficient contact area to cover flange on signal housing.

LOCK RING

SPECIAL 90° ELBOW

One for each face, except those with special slip fitter mounting.

SIGNAL HEAD ATTACHMENT DETAILS

NO SCALE

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

STANDARD DETAILS NO. 3
TRAFFIC SIGNAL AND HIGHWAY LIGHTING INSTALLATIONS

SCALE AS NOTED

ES-2

SHEET 2 OF 3 SHEETS

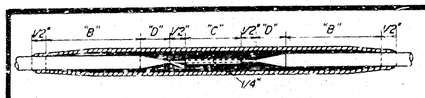
D.P.W. STD. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	CALIF.				

DIST.	COUNTY	ROUTE	SECTION	SHEET NO.	TOTAL SHEETS

APPROVED January 9, 1959

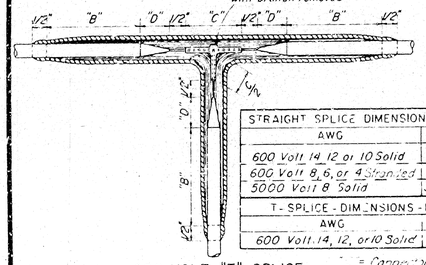
TRAFFIC ENGINEER, CIVIL ENGINEER (REGISTERED)

TO ACCOMPANY PLANS DATED _____



STRAIGHT SPLICE (600 V or 5000 V)

Use 4-way pressure sleeve connector with branch removed

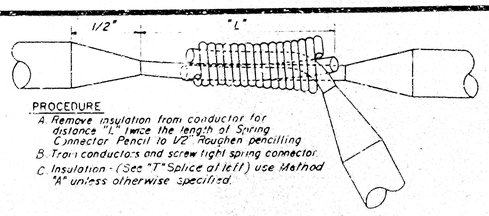


STRAIGHT SPLICE DIMENSIONS - Inches		
AWG	"B"	"D"
600 Volt 14, 12 or 10 Solid	2"	1/2"
600 Volt 8, 6, or 4 Stranded	2 1/2"	1/2"
5000 Volt 8 Solid	3 1/4"	1"

T-SPLICE - DIMENSIONS - Inches		
AWG	"B"	"D"
600 Volt 14, 12, or 10 Solid	2"	1/2"

600 VOLT "T" SPLICE
(Up to 10 AWG only)

" = Connector length



PROCEDURE

A. Remove insulation from conductor for distance "L" twice the length of Spring Connector. Pencil to 1/2" Roughen pencilling.
B. Train conductors and screw tight spring connector.
C. Insulation - (See "T" Splice at left) use Method "A" unless otherwise specified.

ALTERNATE 600 VOLT "T" SPLICE
ELECTRICAL SPRING CONNECTOR

No. 14 AWG and larger

INSULATING METHOD "A"

1. Apply one coat of approved rubber cement, allow to dry.

For Circuits Up to 2,000 Volts

2. Apply self-fusing synthetic rubber tape to a thickness equal to original insulation.

For Circuits Above 2,000 Volts Air Series Lighting.

2. Apply self-fusing ozone resistant natural rubber tape to a thickness equal to original insulation.
3. Apply two layers of self-fusing synthetic rubber tape, half lapped.
4. Rubber tapes shall be rolled, after application, with conductor roller.

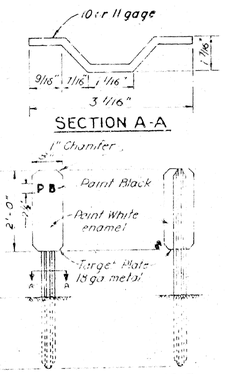
INSULATING METHOD "B"

1. Apply two layers, 1/2 lap synthetic oil resistant self fusing rubber tape.
2. Apply .007 thick PVC tape to thickness equal to original insulation.
3. Apply two layers of asphalt-impregnated open meshed fabric tape.
4. Coat splice with same compound as in tape and fuse in.

PROCEDURE

A. Remove insulation from each conductor to distance 1/2 C+1/2" and pencil to dimension D. Roughen pencilling.
B. Train conductors and place connector, centering over butted cable ends.
C. Crimp and solder connector.
D. Insulate according to Method "A" unless otherwise specified.

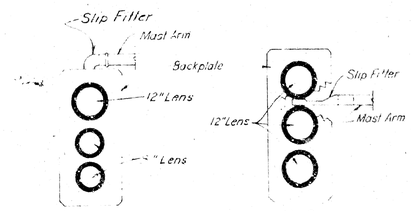
SPLICING DETAILS



(Type A Guide Post - No Reflectors)

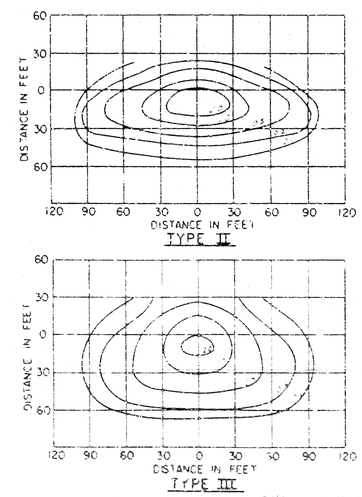
PULL BOX MARKER

No Scale



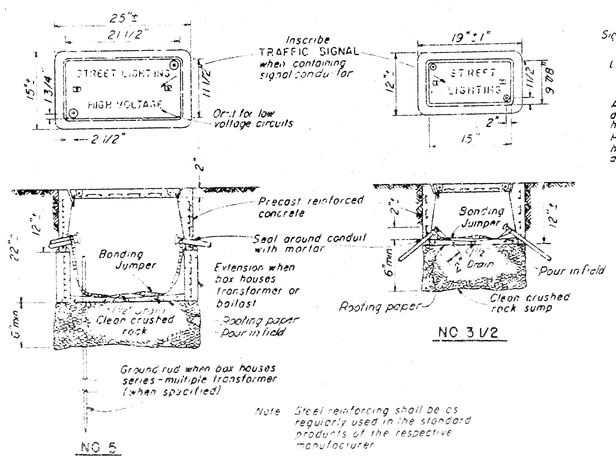
MAST ARM MOUNTING

No Scale



Shielded Highway Lighting Luminaire 30' Mounting Height, 20,000 Lumen Mercury Vapor Lamp

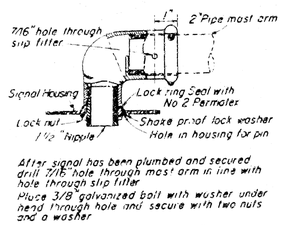
ISOLUX LINES OF MINIMUM HORIZONTAL FOOT CANDLES



Note Steel reinforcing shall be as regularly used in the standard products of the respective manufacturer.

PULL BOXES

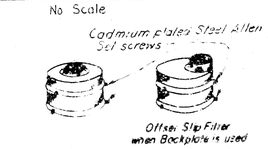
NO SCALE



After signal has been plumbed and secured drill 7/16" hole through mast arm in line with hole through slip fitter.

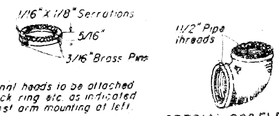
Place 3/8" galvanized bolt with washer under head through hole and secure with two nuts and a washer.

SLIP FITTER FOR MAST ARM MOUNTING



Note Serrations in fittings shall match those in lock ring.

SLIP FITTER FOR POST TOP MOUNTING



All signal heads to be attached with lock ring etc. as indicated for mast arm mounting at left.

Ring to be of brass, of sufficient contact area to cover flange on signal housing.

LOCK RING

SPECIAL 90° ELBOW

One for each face, except those with special slip fitter mounting.

SIGNAL HEAD ATTACHMENT DETAILS

NO SCALE

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

STANDARD DETAILS NO. 3
TRAFFIC SIGNAL AND HIGHWAY LIGHTING INSTALLATIONS

SCALE AS NOTED

ES-2

SHEET 2 OF 3 SHEETS

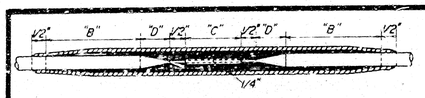
D.P.W. STD. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	CALIF.				

DIST.	COUNTY	ROUTE	SECTION	SHEET NO.	TOTAL SHEETS

APPROVED January 9, 1959

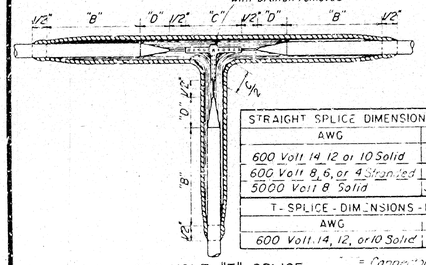
TRAFFIC ENGINEER, CIVIL ENGINEER (REGISTERED)

TO ACCOMPANY PLANS DATED _____



STRAIGHT SPLICE (600 V or 5000 V)

Use 4-way pressure sleeve connector with branch removed

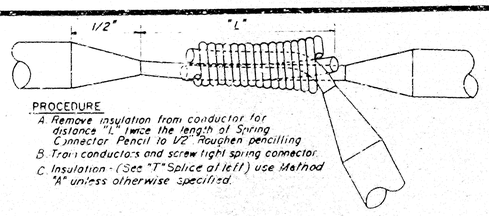


STRAIGHT SPLICE DIMENSIONS - Inches		
AWG	"B"	"D"
600 Volt 14, 12 or 10 Solid	2"	1/2"
600 Volt 8, 6, or 4 Stranded	2 1/2"	1/2"
5000 Volt 8 Solid	3 1/4"	1"

T-SPLICE - DIMENSIONS - Inches		
AWG	"B"	"D"
600 Volt 14, 12, or 10 Solid	2"	1/2"

600 VOLT "T" SPLICE
(Up to 10 AWG only)

" = Connector length



PROCEDURE

A. Remove insulation from conductor for distance "L" twice the length of Spring Connector. Pencil to 1/2" Roughen pencilling.
B. Train conductors and screw tight spring connector.
C. Insulation - (See "T" Splice at left) use Method "A" unless otherwise specified.

ALTERNATE 600 VOLT "T" SPLICE
ELECTRICAL SPRING CONNECTOR

No. 14 AWG and larger

INSULATING METHOD "A"

1. Apply one coat of approved rubber cement, allow to dry.

For Circuits Up to 2,000 Volts

2. Apply self-fusing synthetic rubber tape to a thickness equal to original insulation.

For Circuits Above 2,000 Volts Air Series Lighting.

2. Apply self-fusing ozone resistant natural rubber tape to a thickness equal to original insulation.
3. Apply two layers of self-fusing synthetic rubber tape, half lapped.
4. Rubber tapes shall be rolled, after application, with conductor roller.

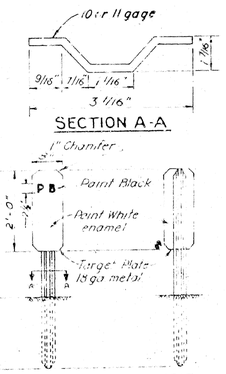
INSULATING METHOD "B"

1. Apply two layers, 1/2 lap synthetic oil resistant self fusing rubber tape.
2. Apply .007 thick PVC tape to thickness equal to original insulation.
3. Apply two layers of asphalt-impregnated open meshed fabric tape.
4. Coat splice with same compound as in tape and fuse in.

PROCEDURE

A. Remove insulation from each conductor to distance 1/2 C+1/2" and pencil to dimension D. Roughen pencilling.
B. Train conductors and place connector, centering over butted cable ends.
C. Crimp and solder connector.
D. Insulate according to Method "A" unless otherwise specified.

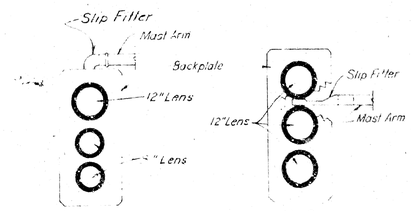
SPLICING DETAILS



(Type A Guide Post - No Reflectors)

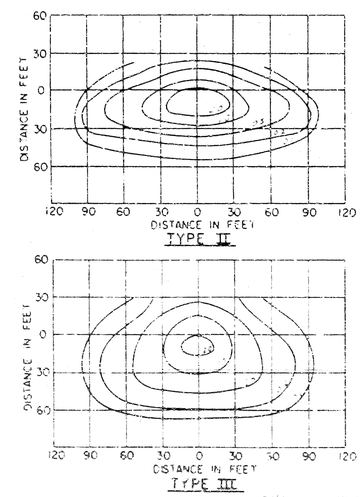
PULL BOX MARKER

No Scale



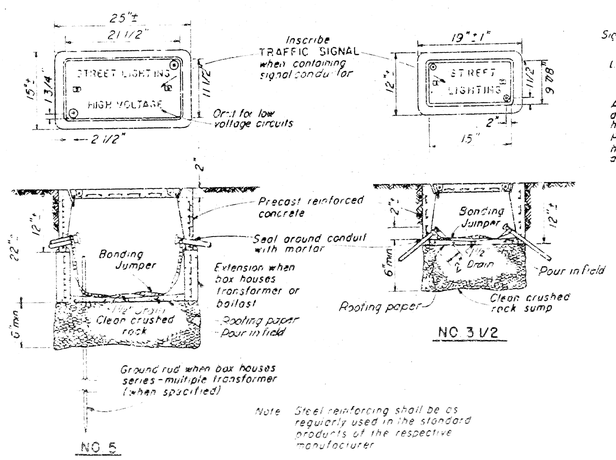
MAST ARM MOUNTING

No Scale



Shielded Highway Lighting Luminaire 30' Mounting Height, 20,000 Lumen Mercury Vapor Lamp

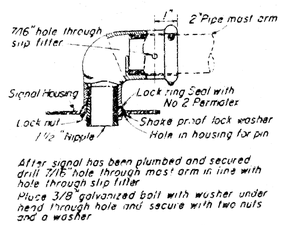
ISOLUX LINES OF MINIMUM HORIZONTAL FOOT CANDLES



Note Steel reinforcing shall be as regularly used in the standard products of the respective manufacturer.

PULL BOXES

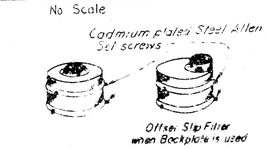
NO SCALE



After signal has been plumbed and secured drill 7/16" hole through mast arm in line with hole through slip fitter.

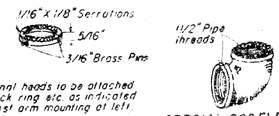
Place 3/8" galvanized bolt with washer under head through hole and secure with two nuts and a washer.

SLIP FITTER FOR MAST ARM MOUNTING



Note Serrations in fittings shall match those in lock ring.

SLIP FITTER FOR POST TOP MOUNTING



All signal heads to be attached with lock ring etc. as indicated for mast arm mounting at left.

Ring to be of brass, of sufficient contact area to cover flange on signal housing.

LOCK RING

SPECIAL 90° ELBOW

One for each face, except those with special slip fitter mounting.

SIGNAL HEAD ATTACHMENT DETAILS

NO SCALE

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

STANDARD DETAILS NO. 3
TRAFFIC SIGNAL AND HIGHWAY LIGHTING INSTALLATIONS

SCALE AS NOTED

ES-2

SHEET 2 OF 3 SHEETS

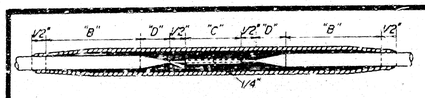
D.P.W. STD. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	CALIF.				

DIST.	COUNTY	ROUTE	SECTION	SHEET NO.	TOTAL SHEETS

APPROVED January 9, 1959

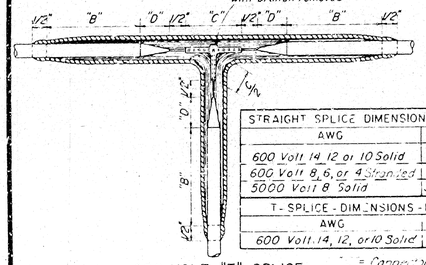
TRAFFIC ENGINEER, CIVIL ENGINEER (REGISTERED)

TO ACCOMPANY PLANS DATED _____



STRAIGHT SPLICE (600 V or 5000 V)

Use 4-way pressure sleeve connector with branch removed

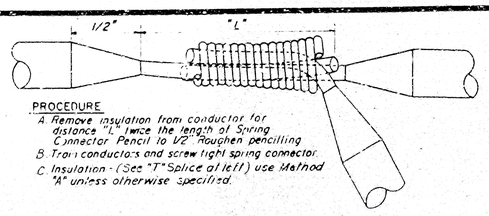


STRAIGHT SPLICE DIMENSIONS - Inches		
AWG	"B"	"D"
600 Volt 14, 12 or 10 Solid	2"	1/2"
600 Volt 8, 6, or 4 Stranded	2 1/2"	1/2"
5000 Volt 8 Solid	3 1/4"	1"

T-SPLICE - DIMENSIONS - Inches		
AWG	"B"	"D"
600 Volt 14, 12, or 10 Solid	2"	1/2"

600 VOLT "T" SPLICE
(Up to 10 AWG only)

" = Connector length



PROCEDURE

A. Remove insulation from conductor for distance "L" twice the length of Spring Connector. Pencil to 1/2" Roughen pencilling.
B. Train conductors and screw tight spring connector.
C. Insulation - (See "T" Splice at left) use Method "A" unless otherwise specified.

ALTERNATE 600 VOLT "T" SPLICE
ELECTRICAL SPRING CONNECTOR

No. 14 AWG and larger

INSULATING METHOD "A"

1. Apply one coat of approved rubber cement, allow to dry.

For Circuits Up to 2,000 Volts

2. Apply self-fusing synthetic rubber tape to a thickness equal to original insulation.

For Circuits Above 2,000 Volts Air Series Lighting.

2. Apply self-fusing ozone resistant natural rubber tape to a thickness equal to original insulation.
3. Apply two layers of self-fusing synthetic rubber tape, half lapped.
4. Rubber tapes shall be rolled, after application, with conductor roller.

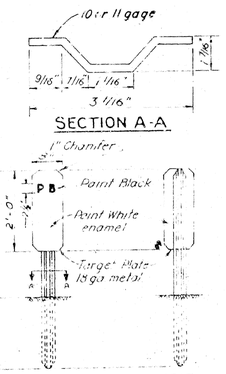
INSULATING METHOD "B"

1. Apply two layers, 1/2 lap synthetic oil resistant self fusing rubber tape.
2. Apply .007 thick PVC tape to thickness equal to original insulation.
3. Apply two layers of asphalt-impregnated open meshed fabric tape.
4. Coat splice with same compound as in tape and fuse in.

PROCEDURE

A. Remove insulation from each conductor to distance 1/2 C+1/2" and pencil to dimension D. Roughen pencilling.
B. Train conductors and place connector, centering over butted cable ends.
C. Crimp and solder connector.
D. Insulate according to Method "A" unless otherwise specified.

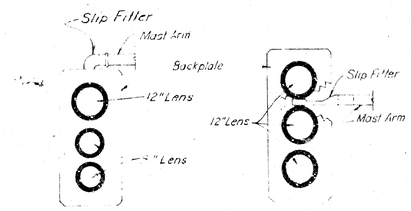
SPLICING DETAILS



(Type A Guide Post - No Reflectors)

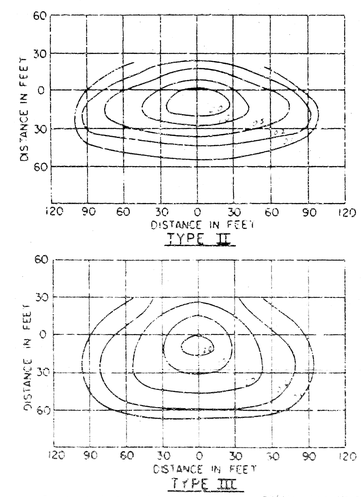
PULL BOX MARKER

No Scale



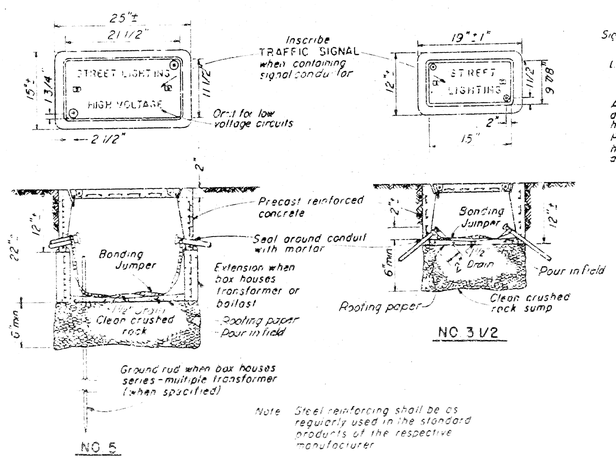
MAST ARM MOUNTING

No Scale



Shielded Highway Lighting Luminaire 30' Mounting Height, 20,000 Lumen Mercury Vapor Lamp

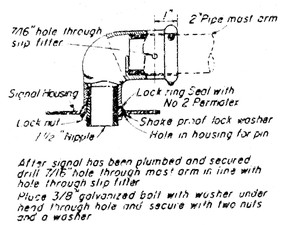
ISOLUX LINES OF MINIMUM HORIZONTAL FOOT CANDLES



Note Steel reinforcing shall be as regularly used in the standard products of the respective manufacturer.

PULL BOXES

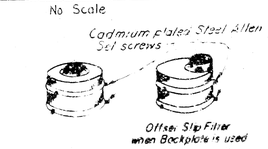
NO SCALE



After signal has been plumbed and secured drill 7/16" hole through mast arm in line with hole through slip fitter.

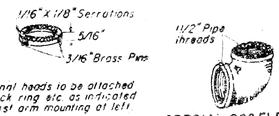
Place 3/8" galvanized bolt with washer under head through hole and secure with two nuts and a washer.

SLIP FITTER FOR MAST ARM MOUNTING



Note Serrations in fittings shall match those in lock ring.

SLIP FITTER FOR POST TOP MOUNTING



All signal heads to be attached with lock ring etc. as indicated for mast arm mounting at left.

Ring to be of brass, of sufficient contact area to cover flange on signal housing.

LOCK RING

SPECIAL 90° ELBOW

One for each face, except those with special slip fitter mounting.

SIGNAL HEAD ATTACHMENT DETAILS

NO SCALE

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

STANDARD DETAILS NO. 3
TRAFFIC SIGNAL AND HIGHWAY LIGHTING INSTALLATIONS

SCALE AS NOTED

ES-2

SHEET 2 OF 3 SHEETS

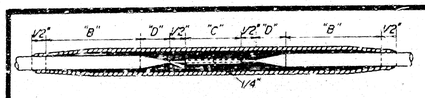
D.P.W. STD. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	CALIF.				

DIST.	COUNTY	ROUTE	SECTION	SHEET NO.	TOTAL SHEETS

APPROVED January 9, 1959

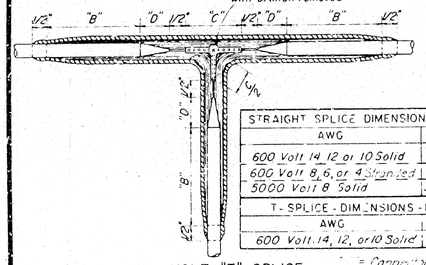
TRAFFIC ENGINEER, CIVIL ENGINEER (REGISTERED)

TO ACCOMPANY PLANS DATED _____



STRAIGHT SPLICE (600 V or 5000 V)

Use 4-way pressure sleeve connector with branch removed

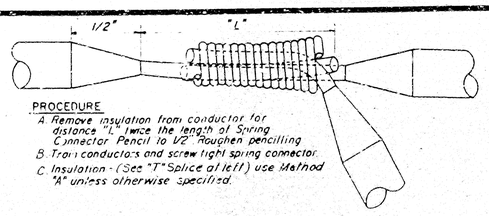


STRAIGHT SPLICE DIMENSIONS - Inches		
AWG	"B"	"D"
600 Volt 14, 12 or 10 Solid	2"	1/2"
600 Volt 8, 6, or 4 Stranded	2 1/2"	1/2"
5000 Volt 8 Solid	3 1/4"	1"

T-SPLICE - DIMENSIONS - Inches		
AWG	"B"	"D"
600 Volt 14, 12, or 10 Solid	2"	1/2"

600 VOLT "T" SPLICE
(Up to 10 AWG only)

" = Connector length



PROCEDURE

A. Remove insulation from conductor for distance "L" twice the length of Spring Connector. Pencil to 1/2" Roughen pencilling.
B. Train conductors and screw tight spring connector.
C. Insulation - (See "T" Splice at left) use Method "A" unless otherwise specified.

ALTERNATE 600 VOLT "T" SPLICE
ELECTRICAL SPRING CONNECTOR

No. 14 AWG and larger

INSULATING METHOD "A"

1. Apply one coat of approved rubber cement, allow to dry.

For Circuits Up to 2,000 Volts

2. Apply self-fusing synthetic rubber tape to a thickness equal to original insulation.

For Circuits Above 2,000 Volts Air Series Lighting.

2. Apply self-fusing ozone resistant natural rubber tape to a thickness equal to original insulation.
3. Apply two layers of self-fusing synthetic rubber tape, half lapped.
4. Rubber tapes shall be rolled, after application, with conductor roller.

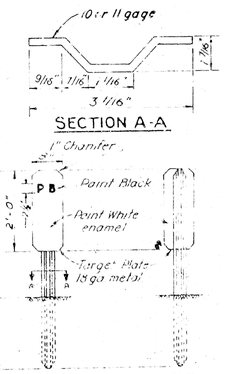
INSULATING METHOD "B"

1. Apply two layers, 1/2 lap synthetic oil resistant self fusing rubber tape.
2. Apply .007 thick PVC tape to thickness equal to original insulation.
3. Apply two layers of asphalt-impregnated open meshed fabric tape.
4. Coat splice with same compound as in tape and fuse in.

PROCEDURE

A. Remove insulation from each conductor to distance 1/2 C+1/2" and pencil to dimension D. Roughen pencilling.
B. Train conductors and place connector, centering over butted cable ends.
C. Crimp and solder connector.
D. Insulate according to Method "A" unless otherwise specified.

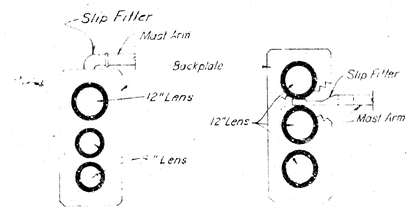
SPLICING DETAILS



(Type A Guide Post - No Reflectors)

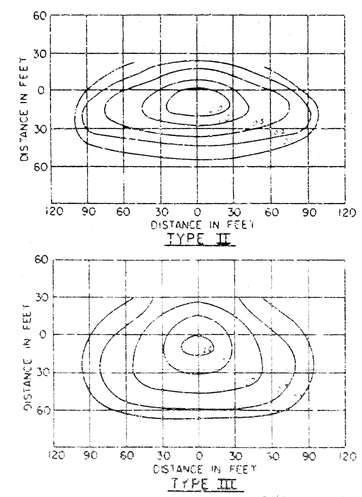
PULL BOX MARKER

No Scale



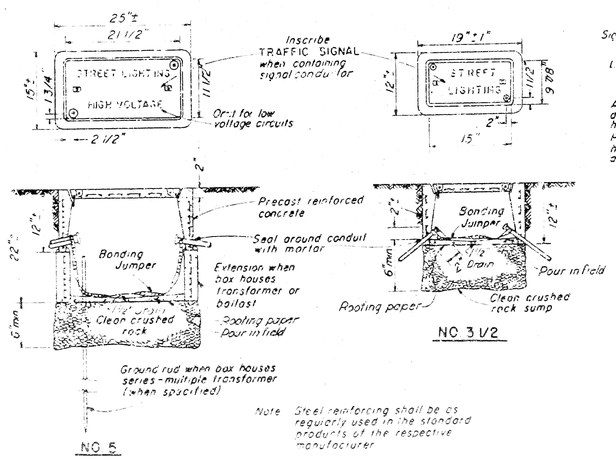
MAST ARM MOUNTING

No Scale



Shielded Highway Lighting Luminaire 30' Mounting Height, 20,000 Lumen Mercury Vapor Lamp

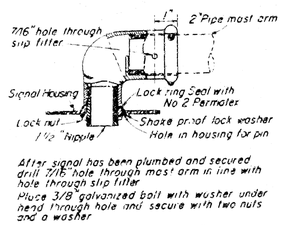
ISOLUX LINES OF MINIMUM HORIZONTAL FOOT CANDLES



Note Steel reinforcing shall be as regularly used in the standard products of the respective manufacturer.

PULL BOXES

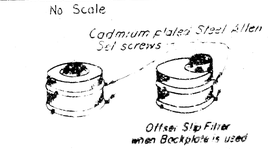
NO SCALE



After signal has been plumbed and secured drill 7/16" hole through mast arm in line with hole through slip fitter.

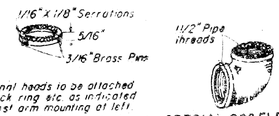
Place 3/8" galvanized bolt with washer under head through hole and secure with two nuts and a washer.

SLIP FITTER FOR MAST ARM MOUNTING



Note Serrations in fittings shall match those in lock ring.

SLIP FITTER FOR POST TOP MOUNTING



All signal heads to be attached with lock ring etc. as indicated for mast arm mounting at left.

Ring to be of brass, of sufficient contact area to cover flange on signal housing.

LOCK RING

SPECIAL 90° ELBOW

One for each face, except those with special slip fitter mounting.

SIGNAL HEAD ATTACHMENT DETAILS

NO SCALE

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

STANDARD DETAILS NO. 3
TRAFFIC SIGNAL AND HIGHWAY LIGHTING INSTALLATIONS

SCALE AS NOTED

ES-2

SHEET 2 OF 3 SHEETS