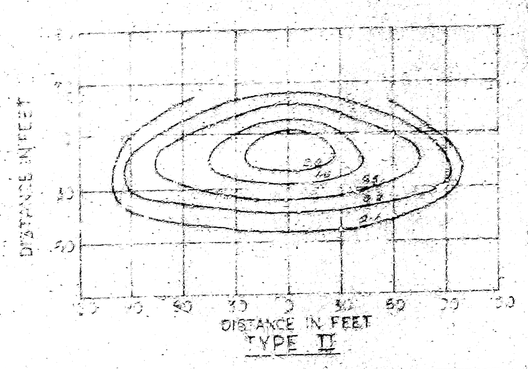
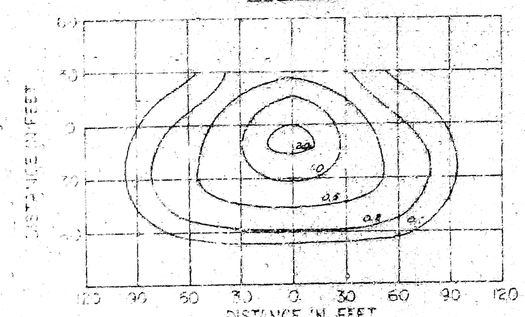


TYPE II



TYPE III

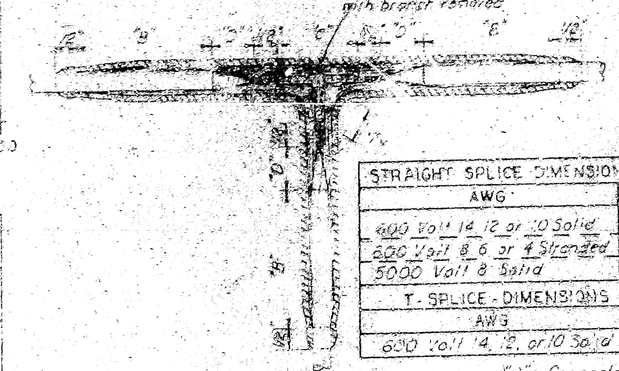
Shielded Highway Lighting Luminaire 30' Mounting Height, 20,000 Lumen Mercury Vapor Lamp

ISOLUX LINES OF MINIMUM HORIZONTAL FOOT CANDLES

Scale: 1" = 50'

STRAIGHT SPLICE (600 V or 5,000 V)

Use 4-way pressure sleeve connector with bronze remover.



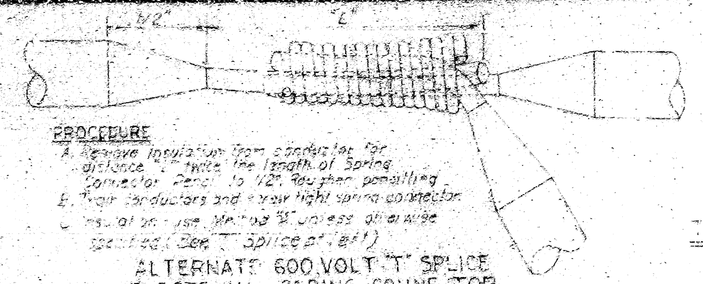
STRAIGHT SPLICE DIMENSIONS - Inches		
AWG	"B"	"D"
600 Volt 14, 12 or 10 Solid	2"	1/2"
600 Volt 8, 6 or 4 Stranded	2 1/2"	1/2"
5000 Volt 8 Solid	2 1/2"	1/2"
T-SPLICE-DIMENSIONS Inches		
AWG	"B"	"C"
600 Volt 14, 12, or 10 Solid	2"	1/2"

"L" = Connector length

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

PROCEDURE

A. Remove insulation from each conductor to distance 1/2 C + 1/2" and penetration of 3. Rubber parking.
B. Twist conductors and place connector, covering over butted cable ends.
C. Crimp and solder connector.
D. Insulate according to Method A, unless otherwise specified.



PROCEDURE

A. Remove insulation from conductor for distance of twice the length of Spring Connector. Penetration 1/2" then pencilling.
B. Twist conductors and crimp light spring connector.
C. Insulate in accordance with Method "B" unless otherwise specified. (See "T" Splice at "B")

ALTERNATE 600 VOLT "T" SPLICE
ELECTRICAL SPRING CONNECTOR
(No. 14 AWG and larger)

INSULATING METHOD "A"

1. Apply one coat of approved rubber cement and let 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

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 concave roller.

INSULATING METHOD "B"

1. Apply two layers, 1/2 lap, synthetic, oil resistant self fusing rubber tape.
2. Apply .030" thick P.V.C. 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.

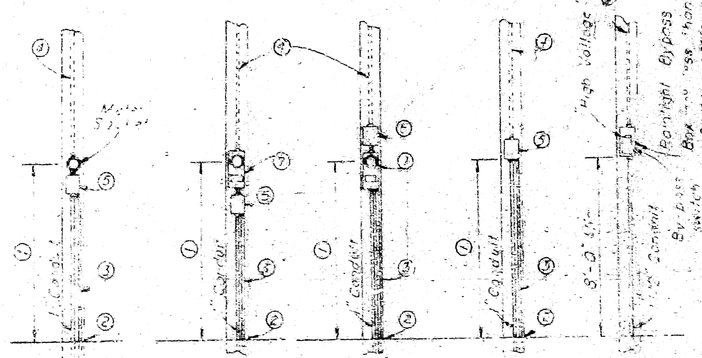
SPLICING DETAILS

NO SCALE

TYPICAL GUARD POST

SYMBOLS

PROPOSED	EXISTING	
		Street standard
		Lighting standard
		Pull box
		Luminaire, post arm type (Type I standard)
		Luminaire, post top type
		Feeder pole
		Telephone pole
		Fire hydrant
		Overhead conductor

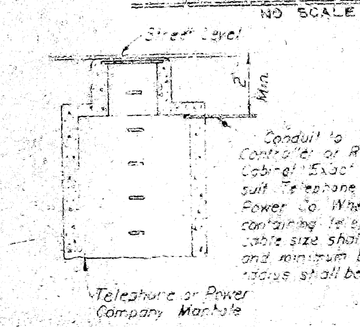


MULTIPLE SYSTEMS TYPE A | MULTIPLE SYSTEMS TYPE C | MULTIPLE SYSTEMS TYPE E | MULTIPLE SYSTEMS TYPE F | SERIES LIGHTING TYPE G

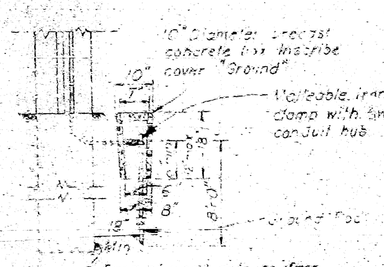
1. Height of service equipment to be obtained from serving utility.
2. See grounding details at right for Types A, C, E & F.
3. Grounding conductor raceway shall be 1/2" conduit or hardwood molding.
4. If service pole is utility owned service conductors, raceway and entrance fittings shall be furnished by contractor and installed by serving utility. On State owned poles contractor shall also install the service conductors, raceway and entrance fittings. Service riser conduit shall be terminated with a service head or shall be sealed to prevent the entrance of water as approved by the serving utility.
5. Switch as specified, i.e. Rainlight Cabinet.
6. Switch as specified, Flasher Mechanism in 18"x10"x4 1/2" rainlight box.
7. Meter Socket Box as approved by serving utility with either manual circuit closing device or space for test block, as specified.

SERVICE DETAILS

NO SCALE



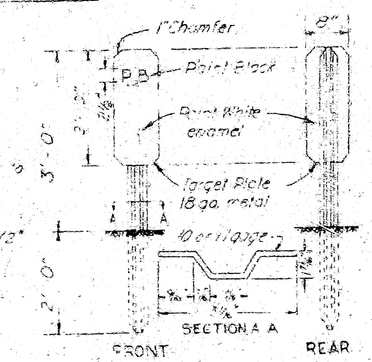
UNDERGROUND



TYPE B (Installed where required) (on plans)

Note:
When water pipe is used for ground, wire shall be installed in galvanized rigid conduit, or equivalent mechanical protection.
Ground rod of the following minimum requirements shall be used. Depth below ground surface - 8'-0"
Diameter of rod 3/4" if galvanized rod or pipe 1/2" if solid rod of brass, bronze or copper covered steel.

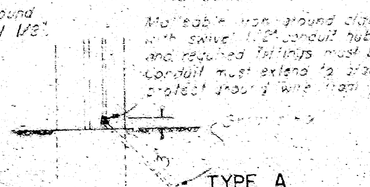
SERVICE GROUNDING DETAILS



(Type A Guide Post - No Reflectors)

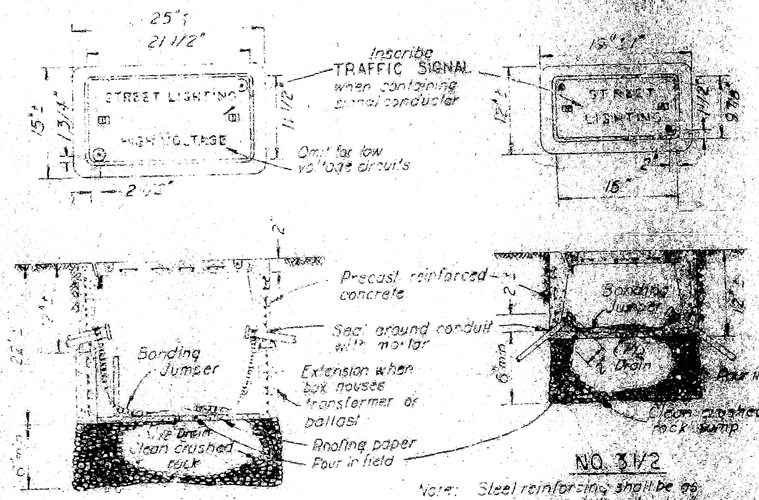
PULL BOX MARKER

NO SCALE



Malleable iron ground clamp with swivel 1/2" conduit hub and required fittings must be accessible. Conduit must extend to ground rod to protect ground wire from mechanical injury.

TYPE A



Ground rod when box houses series multiple transformer (when specified)

NO. 5

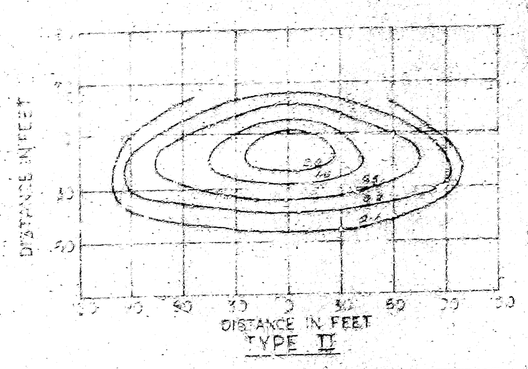
NO. 3 1/2

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

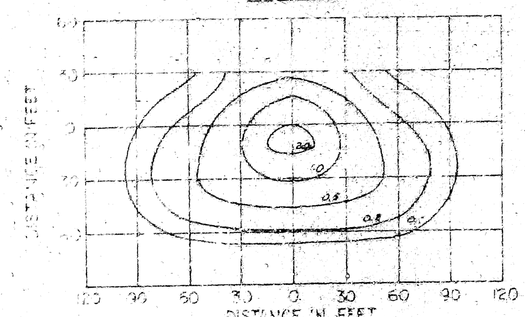
PULL BOXES

NO SCALE

REDEVELOPMENT AGENCY OF THE CITY OF SAN BERNARDINO	DEPARTMENT OF ENGINEERING CITY OF SAN BERNARDINO		STATE OF CALIFORNIA DEPARTMENT OF PUBLIC WORKS DIVISION OF HIGHWAYS
MEADOWBROOK PROJECT AREA NO. 1 CALIF R-10			STANDARD DETAILS HIGHWAY LIGHTING INSTALLATIONS
ACCEPTED BY: D. C. Hulbert STAFF ENGINEER REGISTERED CIVIL ENGINEER NO. 22211	SUBMITTED BY: Lloyd S. Brooks REGISTERED CIVIL ENGINEER NO. 23594 APPROVED December 11, 1961 Robert Fisher Acting CITY ENGINEER REGISTERED CIVIL ENGINEER NO. 10486	REFERENCE / DRAWN BY / CHECKED BY	DRAWING NO. 2875 SHEET 6 OF 10 SHEETS
		SCALE AS NOTED	REV. DATE: 6-1-59 G.E.L. DRAWING E-



TYPE II



TYPE III

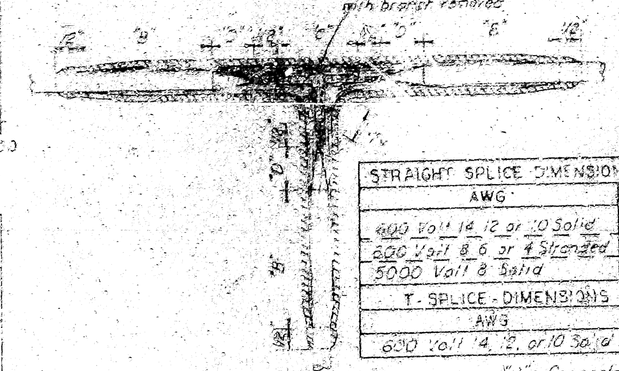
Shielded Highway Lighting Luminaire 30' Mounting Height, 20,000 Lumen Mercury Vapor Lamp

ISOLUX LINES OF MINIMUM HORIZONTAL FOOT CANDLES

Scale: 1" = 50'

STRAIGHT SPLICE (600 V or 5,000 V)

Use 4-way pressure sleeve connector with bronze remover.



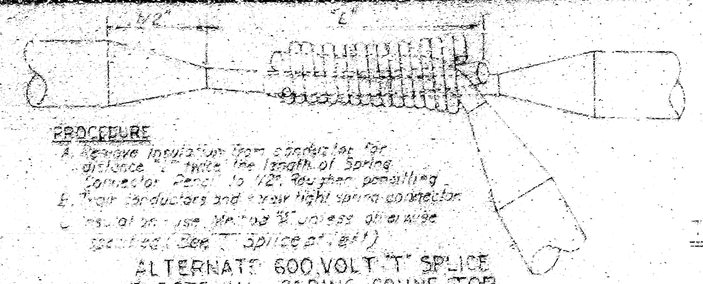
STRAIGHT SPLICE DIMENSIONS - Inches		
AWG	"B"	"D"
600 Volt 14, 12 or 10 Solid	2"	1/2"
600 Volt 8, 6 or 4 Stranded	2 1/2"	1/2"
5000 Volt 8 Solid	2 1/2"	1/2"
T-SPLICE-DIMENSIONS Inches		
AWG	"B"	"C"
600 Volt 14, 12, or 10 Solid	2"	1/2"

"L" = Connector length

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

PROCEDURE

A. Remove insulation from each conductor to distance 1/2 C + 1/2" and penetration of 3. Rubber parking.
B. Twist conductors and place connector, covering over butted cable ends.
C. Crimp and solder connector.
D. Insulate according to Method A, unless otherwise specified.



PROCEDURE

A. Remove insulation from conductor for distance of twice the length of Spring Connector. Penetration 1/2" then pencilling.
B. Twist conductors and crimp light spring connector.
C. Insulate in accordance with Method "B" unless otherwise specified. (See "T" Splice at "B")

ALTERNATE 600 VOLT "T" SPLICE
ELECTRICAL SPRING CONNECTOR
(No. 14 AWG and larger)

INSULATING METHOD "A"

1. Apply one coat of approved rubber cement and let 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

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 concave roller.

INSULATING METHOD "B"

1. Apply two layers, 1/2 lap, synthetic, oil resistant self fusing rubber tape.
2. Apply .030" thick P.V.C. 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.

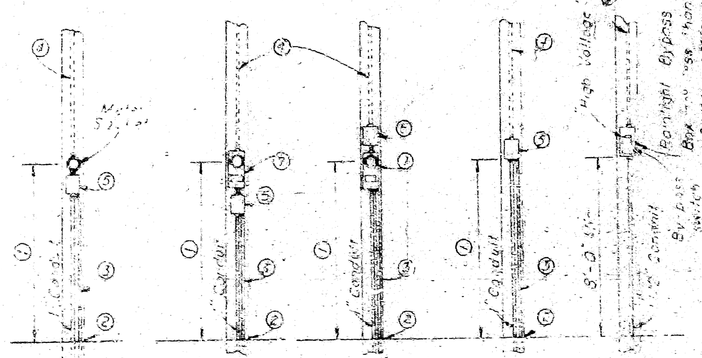
SPLICING DETAILS

NO SCALE

TYPICAL GUARD POST

SYMBOLS

PROPOSED	EXISTING	
		Street standard
		Lighting standard
		Pull box
		Luminaire, post arm type (Type I standard)
		Luminaire, post top type
		Feeder pole
		Telephone pole
		Fire hydrant
		Overhead conductor

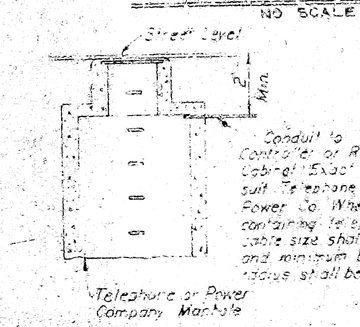


MULTIPLE SYSTEMS TYPE A | MULTIPLE SYSTEMS TYPE C | MULTIPLE SYSTEMS TYPE E | MULTIPLE SYSTEMS TYPE F | SERIES LIGHTING TYPE G

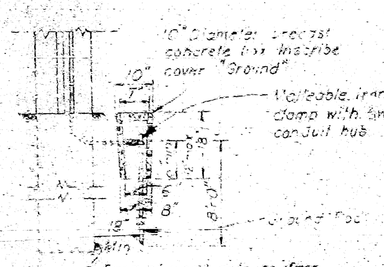
1. Height of service equipment to be obtained from serving utility.
2. See grounding details at right for Types A, C, E & F.
3. Grounding conductor raceway shall be 1/2" conduit or hardwood molding.
4. If service pole is utility owned service conductors, raceway and entrance fittings shall be furnished by contractor and installed by serving utility. On State owned poles contractor shall also install the service conductors, raceway and entrance fittings. Service riser conduit shall be terminated with a service head or shall be sealed to prevent the entrance of water as approved by the serving utility.
5. Switch as specified, i.e. Rainlight Cabinet.
6. Switch as specified, Flasher Mechanism in 18"x10"x4 1/2" rainlight box.
7. Meter Socket Box as approved by serving utility with either manual circuit closing device or space for test block, as specified.

SERVICE DETAILS

NO SCALE



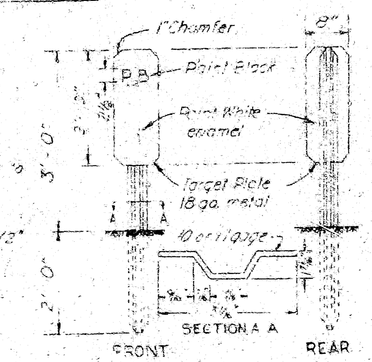
UNDERGROUND



TYPE B (Installed where required) (on plans)

Note:
When water pipe is used for ground, wire shall be installed in galvanized rigid conduit, or equivalent mechanical protection.
Ground rod of the following minimum requirements shall be used. Depth below ground surface - 8'-0"
Diameter of rod 3/4" if galvanized rod or pipe 1/2" if solid rod of brass, bronze or copper covered steel.

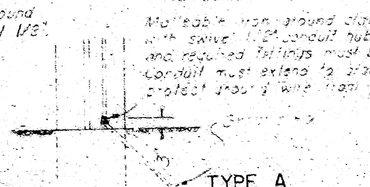
SERVICE GROUNDING DETAILS



(Type A Guide Post - No Reflectors)

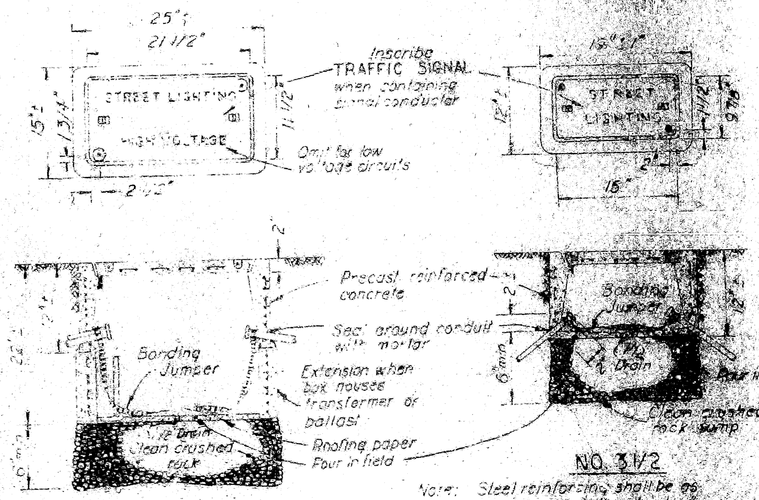
PULL BOX MARKER

NO SCALE



Malleable iron ground clamp with swivel 1/2" conduit hub and required fittings must be accessible. Conduit must extend to ground rod to protect ground wire from mechanical injury.

TYPE A



Ground rod when box houses series multiple transformer (when specified)

NO. 5

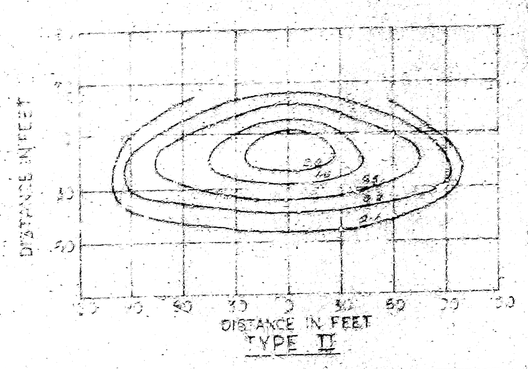
NO. 3 1/2

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

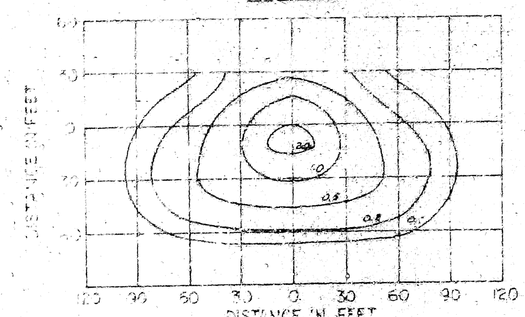
PULL BOXES

NO SCALE

REDEVELOPMENT AGENCY OF THE CITY OF SAN BERNARDINO	DEPARTMENT OF ENGINEERING CITY OF SAN BERNARDINO		STATE OF CALIFORNIA DEPARTMENT OF PUBLIC WORKS DIVISION OF HIGHWAYS
MEADOWBROOK PROJECT AREA NO. 1 CALIF R-10			STANDARD DETAILS HIGHWAY LIGHTING INSTALLATIONS
ACCEPTED BY: D. C. Hulbert STAFF ENGINEER REGISTERED CIVIL ENGINEER NO. 22211	SUBMITTED BY: Lloyd S. Brooks REGISTERED CIVIL ENGINEER NO. 23594 APPROVED December 11, 1961 Robert Fisher Acting CITY ENGINEER REGISTERED CIVIL ENGINEER NO. 10486	REFERENCE / DRAWN BY / CHECKED BY	DRAWING NO. 2875 SHEET 6 OF 10 SHEETS
		SCALE AS NOTED	REV. DATE: 6-1-59 G.E.L. DRAWING E-



TYPE II



TYPE III

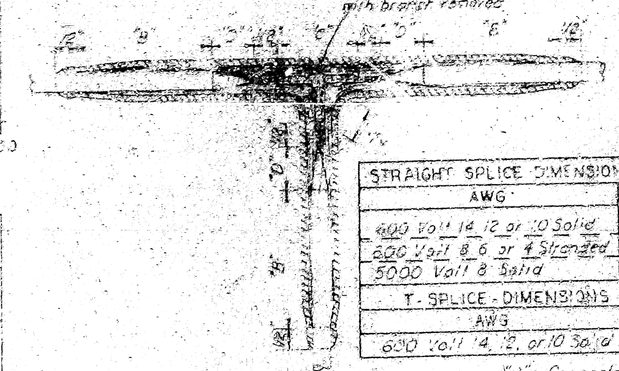
Shielded Highway Lighting Luminaire 30' Mounting Height, 20,000 Lumen Mercury Vapor Lamp

ISOLUX LINES OF MINIMUM HORIZONTAL FOOT CANDLES

Scale: 1" = 50'

STRAIGHT SPLICE (600 V or 5,000 V)

Use 4-way pressure sleeve connector with bronze remover.



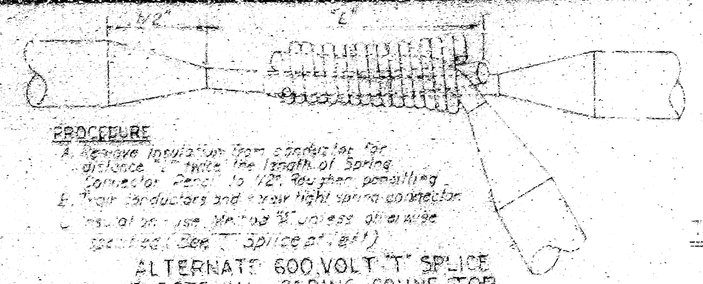
STRAIGHT SPLICE DIMENSIONS - Inches		
AWG	"B"	"D"
600 Volt 14, 12 or 10 Solid	2"	1/2"
600 Volt 8, 6 or 4 Stranded	2 1/2"	1/2"
5000 Volt 8 Solid	2 1/2"	1/2"
T-SPLICE-DIMENSIONS Inches		
AWG	"B"	"C"
600 Volt 14, 12, or 10 Solid	2"	1/2"

"L" = Connector length

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

PROCEDURE

A. Remove insulation from each conductor to distance 1/2 C + 1/2" and penetration of 3. Rubber parking.
B. Twist conductors and place connector, covering over butted cable ends.
C. Crimp and solder connector.
D. Insulate according to Method A, unless otherwise specified.



PROCEDURE

A. Remove insulation from conductor for distance of twice the length of Spring Connector. Penetration 1/2" then pencilling.
B. Twist conductors and crimp light spring connector.
C. Insulate in accordance with Method "B" unless otherwise specified. (See "T" Splice at "B")

ALTERNATE 600 VOLT "T" SPLICE
ELECTRICAL SPRING CONNECTOR
(No. 14 AWG and larger)

INSULATING METHOD "A"

1. Apply one coat of approved rubber cement and let 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

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 concave roller.

INSULATING METHOD "B"

1. Apply two layers, 1/2 lap, synthetic, oil resistant self fusing rubber tape.
2. Apply .030" thick P.V.C. 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.

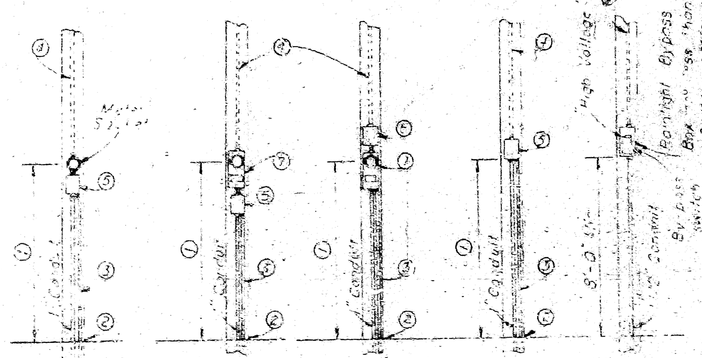
SPLICING DETAILS

NO SCALE

TYPICAL GUARD POST

SYMBOLS

PROPOSED	EXISTING	
		Street standard
		Lighting standard
		Pull box
		Luminaire, post arm type (Type I standard)
		Luminaire, post top type
		Feeder pole
		Telephone pole
		Fire hydrant
		Overhead conductor

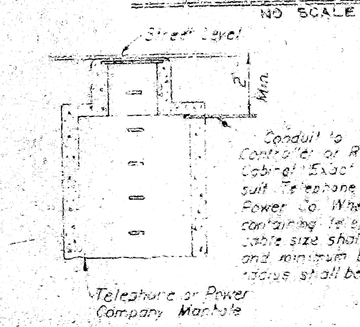


MULTIPLE SYSTEMS TYPE A | MULTIPLE SYSTEMS TYPE C | MULTIPLE SYSTEMS TYPE E | MULTIPLE SYSTEMS TYPE F | SERIES LIGHTING TYPE G

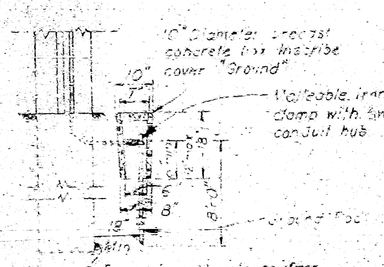
1. Height of service equipment to be obtained from serving utility.
2. See grounding details at right for Types A, C, E & F.
3. Grounding conductor raceway shall be 1/2" conduit or hardwood molding.
4. If service pole is utility owned service conductors, raceway and entrance fittings shall be furnished by contractor and installed by serving utility. On State owned poles contractor shall also install the service conductors, raceway and entrance fittings. Service riser conduit shall be terminated with a service head or shall be sealed to prevent the entrance of water as approved by the serving utility.
5. Switch as specified, i.e. Rainlight Cabinet.
6. Switch as specified, Flasher Mechanism in 18"x10"x4 1/2" rainlight box.
7. Meter Socket Box as approved by serving utility with either manual circuit closing device or space for test block, as specified.

SERVICE DETAILS

NO SCALE



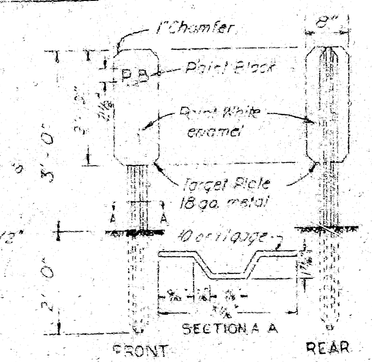
UNDERGROUND



TYPE B (Installed where required) (on plans)

Note:
When water pipe is used for ground, wire shall be installed in galvanized rigid conduit, or equivalent mechanical protection.
Ground rod of the following minimum requirements shall be used. Depth below ground surface - 8'-0"
Diameter of rod 3/4" if galvanized rod or pipe 1/2" if solid rod of brass, bronze or copper covered steel.

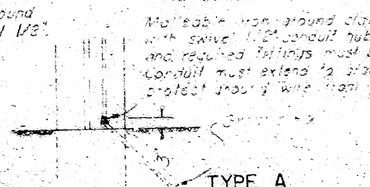
SERVICE GROUNDING DETAILS



(Type A Guide Post - No Reflectors)

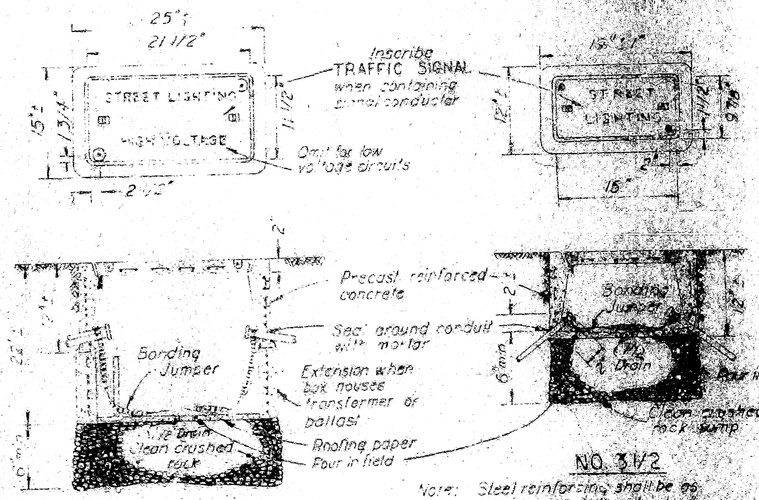
PULL BOX MARKER

NO SCALE



Malleable iron ground clamp with swivel 1/2" conduit hub and required fittings must be accessible. Conduit must extend to ground rod to protect ground wire from mechanical injury.

TYPE A



Ground rod when box houses series multiple transformer (when specified)

NO. 5

NO. 3 1/2

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

PULL BOXES

NO SCALE

REDEVELOPMENT AGENCY OF THE CITY OF SAN BERNARDINO	DEPARTMENT OF ENGINEERING CITY OF SAN BERNARDINO		STATE OF CALIFORNIA DEPARTMENT OF PUBLIC WORKS DIVISION OF HIGHWAYS
MEADOWBROOK PROJECT AREA NO. 1 CALIF R-10			STANDARD DETAILS HIGHWAY LIGHTING INSTALLATIONS
ACCEPTED BY: D. C. Hulbert STAFF ENGINEER REGISTERED CIVIL ENGINEER NO. 22211	SUBMITTED BY: Lloyd S. Brooks REGISTERED CIVIL ENGINEER NO. 23594 APPROVED December 11, 1961 Robert Fisher Acting CITY ENGINEER REGISTERED CIVIL ENGINEER NO. 10486	REFERENCE / DRAWN BY / CHECKED BY	DRAWING NO. 2875 SHEET 6 OF 10 SHEETS
		SCALE AS NOTED	REV. DATE: 6-1-59 G.E.L. DRAWING E-