SYMBOLS

PROPOSED	EXISTING	
		Signal conduit
		Lighting conduit
		Pull box
		Non-directional pressure detector
		Non-directional magnetic detector
		Directional pressure detector
		Controller
		Traffic signal, each arrow one-way three color
		Traffic signal one way three-color with backplate
		Traffic signal one way three-color with green arrow (GRT Type II standard unless otherwise specified) (Red and yellow louvered)
		Walk-Wait pedestrian signal
		Pedestrian signal, 2-dot head
		Mast arm traffic signal (with backplate) (un Type II standard)
		Electrolier, mast arm type with mast arm traffic signal with backplate (Type III standard)
		Electrolier, mast arm type (Type X standard)
		Electrolier, upright type
		Pedestrian push button on post
		Power pole
		Telephone pole
		Fire hydrant
		Flashing beacon, one way
		Traffic signal with all colors louvered
		Overhead conductor
		Fire alarm box

Phase Loop Bands
Equipment location number
(Top 2 Bands)
Circuit Band

Point of conductor

TYPICAL BANDING OF CONDUCTOR ENDS

PLAN

ELEVATION

PRESSURE DETECTOR

INSTALLATION NOTES

CONDUIT

1. Unless otherwise indicated, service and detector runs and conduit into sign structure foundations shall be 1 inch and all other conduit shall be not less than 1/2 inch.
2. Conduit shall be installed 18" minimum below curb grade in sidewalk areas and 24" minimum below grade or finished surface in all other areas, except that conduit installed within curbed dividing strips constructed on existing pavement may be laid on and secured to the pavement.
3. Conduit runs parallel to curbs shall be placed adjacent to back of curb, except where in conflict with existing facilities.
4. Existing underground conduit to be incorporated into new systems shall be cleaned with a mandrel and blown out with compressed air.
5. Conduit terminating in standards and pedestals shall extend 2" max above finished top of foundation and shall slope toward the handhole.
6. Service risers shall be terminated with a service head or shall be sealed to prevent the entrance of water as approved by the serving utility.

PULL BOXES

1. Pull boxes shown in the vicinity of curbs shall be placed adjacent to back of curb, except when in conflict with existing facilities.
2. Top of pull boxes shall be flush with top of curb or sidewalk grade or 1" above surrounding ground when no finished grade is established.
3. Pull boxes shown adjacent to standards shall be installed against but not on roadway side of foundation.

CONDUCTOR AND WIRING

1. Unit heaters shall be a separate 120 volt conductor.
2. Conductors between controllers or transformers and luminaires shall be #8 AWG, 600 volt.
3. Conductors between series-to-multiple transformers and sign switch shall be #12 AWG, 600 volt.
4. Number of conductors in indicated traffic signal system conduit includes 3 #14 AWG spares.
5. Conductors shall be identified with bands.
6. Underground conductors in runs shall be run without splice, except that at whole intersections, splices being permitted, signal conductors may be spliced within the cabinet.
7. Neutral conductors may be spliced in pull boxes.
8. Two feet of slack shall be provided in each conductor in each pull box.
9. A lead the signal, other than neutral, shall be run from each detector or pedestrian push button to controller cabinet.
10. Wiring to the walk-don't walk pedestrian signals shall be as specified for "Pedestrian Signal" plus the "Walk" indications.
11. Number of conductors, other than series-to-multiple transformers, shall be limited to 25 conductors. The ground rod shall be the right hand rod, 5/8" x 8' copper rod installed through conduit.

SIGNAL EQUIPMENT

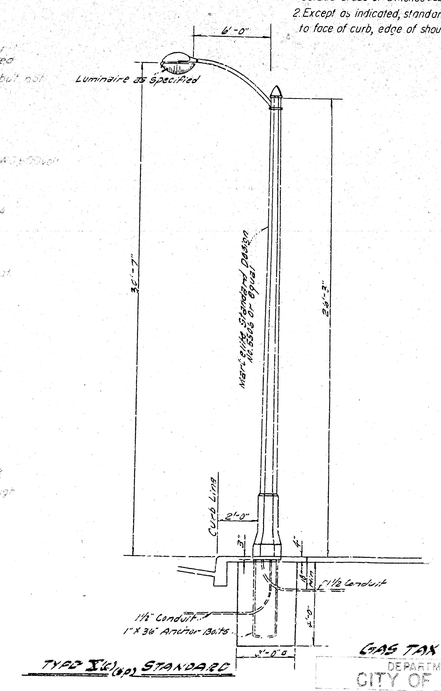
1. Pressure detectors shall be 6 feet long, non-directional, unless otherwise indicated.
2. Detector position dimensions refer to contact unit.
3. Top of detector foundation shall be flush and true with pavement surface.
4. Detector contact unit surface shall be level with rim of frame or no more than 1/8-inch higher.
5. Vehicular and pedestrian signal mountings shall be oriented so as to provide maximum horizontal clearance to adjacent roadway.

ELECTROLIERS

1. A Mercury-vapor lamp ballast shall be installed in a pull box adjacent to each electrolier, except as indicated.

FOUNDATIONS

1. Top of foundations for standards shall be level with top of curb in curbed areas or 6 inches above surrounding grade in other areas.
2. Except as indicated, standards shall be installed with 2 foot clearance to face of curb, edge of shoulder, back of dikes, and back of ditchs.



TYPE X(G)(P2) STANDARD

GAS TAX PROJECT NO. 230
DEPARTMENT OF ENGINEERING
CITY OF SAN BERNARDINO

"E" STREET
GENERAL DETAILS, HIGHWAY LIGHTING INSTALLATIONS

DESIGNED	C.L.S.
DRAWN	M.A.N.
TRACED	M.A.N.
DATE	62-63
SCALE	None

NESTE & BRUDIN
CIVIL ENGINEERS
157 West Fifth St. San Bernardino, Calif.
Date December, 1962 Cad. Eng. No. R.C.E. 8613

SUBMITTED BY Lorman Clerk REFERENCE DRAWING NO. 3027
APPROVED March 15 1963 DRAWN BY
Aug. 7 24 to 7 30 CHECKED BY 6
REGISTERED CIVIL ENGINEER NO. 14981 7

78-6-111

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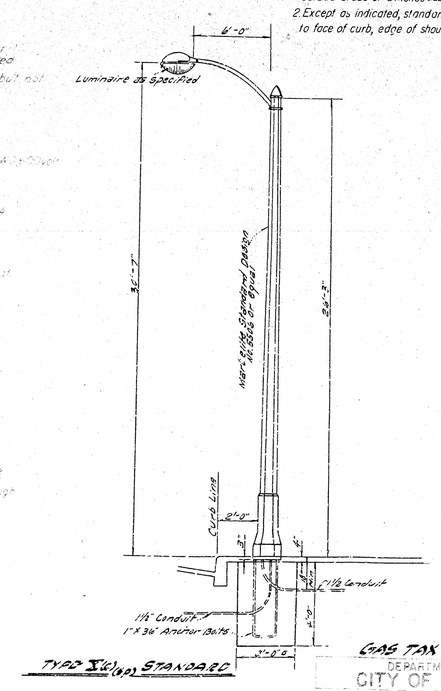

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