

2003 Street Lights - Gensler

Oxford

NO. 753 1/3

ESSELITE

10%





AGENDA
Town of Addison
Lighting Standards
27 October 2003

- Lighting Solutions Development
 - Color Options
 - Banner Options
 - K Clad
 - Color Kinetics
- Addison Road Simulation
- Lighting Issues
 - Curb Setback
 - D.O.T. Compliance
 - Accessory Power
 - Other Utilities
 - “Back of House”
- Schedule Update
- Next Steps

55

Financial Cost Comparison

Arapaho Phase III - Surveyor Blvd. to Addison Rd.

ASSUMPTIONS:

Using Tariff 6.1.1.6 - Lighting Service	
Evaluation period:	Years 15
Oncor Schedule A:	\$ 14.00
Number of lights:	24
Oncor Cust. & Meter Chg.	\$ -
kWh Consumption per light	160
Oncor Schedule D:	4.85
kWh non-bypassable charges	\$ 0.0015
REP power rate:	\$ 0.05
Annual Town Maintenance	\$ 3,000

OPTION A (done this way in Phase II)

Assumptions:

- Contractor provides light foundations, conduit, and pullboxes
- Oncor provides wiring, light standards (poles, luminaires, mast arms), and power service (riser, transformer, controller).
- Oncor provides electricity, operations and maintenance for flat monthly rate per light (no meter).

DESCRIPTION	UNIT	QUANTITY	COST/UNIT	TOTAL
Foundation, 40' street light pole	EA	24	\$ 800.00	\$ 19,200.00
Pullbox	EA	4	\$ 650.00	\$ 2,600.00
Conduit, 2" schedule 40 PVC	LF	5,364	\$ 7.00	\$ 37,548.00
Roadway Illumination Assembly, 40' MH, 400W Rectangular Luminaire	EA	24	\$ 2,427.00	\$ 58,248.00
Electrical Conductor (No. 8) Insulated	LF	10,728		\$ -
Electrical Conductor (No. 8) Bare	LF	5,364		\$ -
Electrical Service Type D (120/240) 060 (ns) (t) tp (o)	EA	1		\$ -
Subtotal:				\$ 117,596.00
Flat monthly rate paid to Oncor for operations, maintenance non-bypassables). (Assumes 24 standards & luminaires @ Schedule A Rate)			\$ 341.76	
Monthly cost of estimated electricity paid to REP: (assumes \$.05 per kwh chg.)			\$ 192.00	
TOTAL:				\$ 213,672.80

This is a lump sum cost per light paid to Oncor

OPTION B

Assumptions:

- Contractor provides light foundations, conduit, and pullboxes
- Contractor provides wiring, light standards (poles, luminaires, mast arms), and power service (riser, transformer, controller).
- Town of Addison provides operations and maintenance.
- Oncor provides metered service and charges Town of Addison for electricity usage.

DESCRIPTION	UNIT	QUANTITY	COST/UNIT	TOTAL
Foundation, 40' street light pole	EA	24	\$ 800.00	\$ 19,200.00
Pullbox	EA	4	\$ 650.00	\$ 2,600.00
Conduit, 2" schedule 40 PVC	LF	5,364	\$ 7.00	\$ 37,548.00
Roadway Illumination Assembly, 40' MH, 400W Rectangular Luminaire	EA	24	\$ 3,000.00	\$ 72,000.00
Electrical Conductor (No. 8) Insulated	LF	10,728	\$ 0.62	\$ 6,651.36
Electrical Conductor (No. 8) Bare	LF	5,364	\$ 0.55	\$ 2,950.20
Electrical Service Type D (120/240) 060 (ns) (t) tp (o)	EA	1	\$ 3,500.00	\$ 3,500.00
Subtotal:				\$ 144,449.56
Monthly cost of metered electricity paid to Oncor (assumes \$4.85 charge & \$.0015 per kwh chg.)				
Monthly cost of metered electricity paid to REP: (assumes \$.05 per kwh chg.)				
Cost of Town of Addison staff for operations, and maintenance:				
TOTAL:				\$ 245,998.36

Note that Subtotal is an up front one time cost, while the monthly rate is continuous overtime. In order to add the two, a life expectancy of the structure will have to be assumed and the net present value of the monthly rate over that time period calcul

Financial Cost Comparison

Arapaho Phase III - Surveyor Blvd. to Addison Rd.

ASSUMPTIONS:

Using Tariff 6.1.1.6 - Lighting Service
 Evaluation period: Years 15
 Oncor Rectangular Rate: \$ 35.45
 Number of lights: 24
 Oncor Cust. & Meter Chg. \$ 13.50
 kWh Consumption per light 160
 kWh metered distribution charge \$ 0.0348
 REP power rate: \$ 0.05
 Annual Town Maintenance \$ 3,000

OPTION A (done this way in Phase II)

Assumptions:

Contractor provides light foundations, conduit, and pullboxes
 Oncor provides wiring, light standards (poles, luminaires, mast arms), and power service (riser, transformer, controller).
 Oncor provides electricity, operations and maintenance for flat monthly rate per light (no meter).

DESCRIPTION	UNIT	QUANTITY	COST/UNIT	TOTAL
Foundation, 40' street light pole	EA	24	\$ 800.00	\$ 19,200.00
Pullbox	EA	4	\$ 650.00	\$ 2,600.00
Conduit, 2" schedule 40 PVC	LF	5,364	\$ 7.00	\$ 37,548.00
Roadway Illumination Assembly, 40' MH, 400W Rectangular Luminaire	EA	24	\$ 2,427.00	\$ 58,248.00
Electrical Conductor (No. 8) Insulated	LF	10,728		\$ -
Electrical Conductor (No. 8) Bare	LF	5,364		\$ -
Electrical Service Type D (120/240) 060 (ns) (t) tp (o)	EA	1		\$ -
			Subtotal:	\$ 117,596.00
Flat monthly rate paid to Oncor for operations, and maintenance over 15 years. (Assumes 24 standards & luminaries @ Rectangular Rate)			\$ 850.80	
Monthly cost of estimated electricity paid to REP: (assumes \$.05 per kwh chg.)			\$ 192.00	
			TOTAL:	\$ 352,416.80

This is a lump sum cost per light paid to Oncor

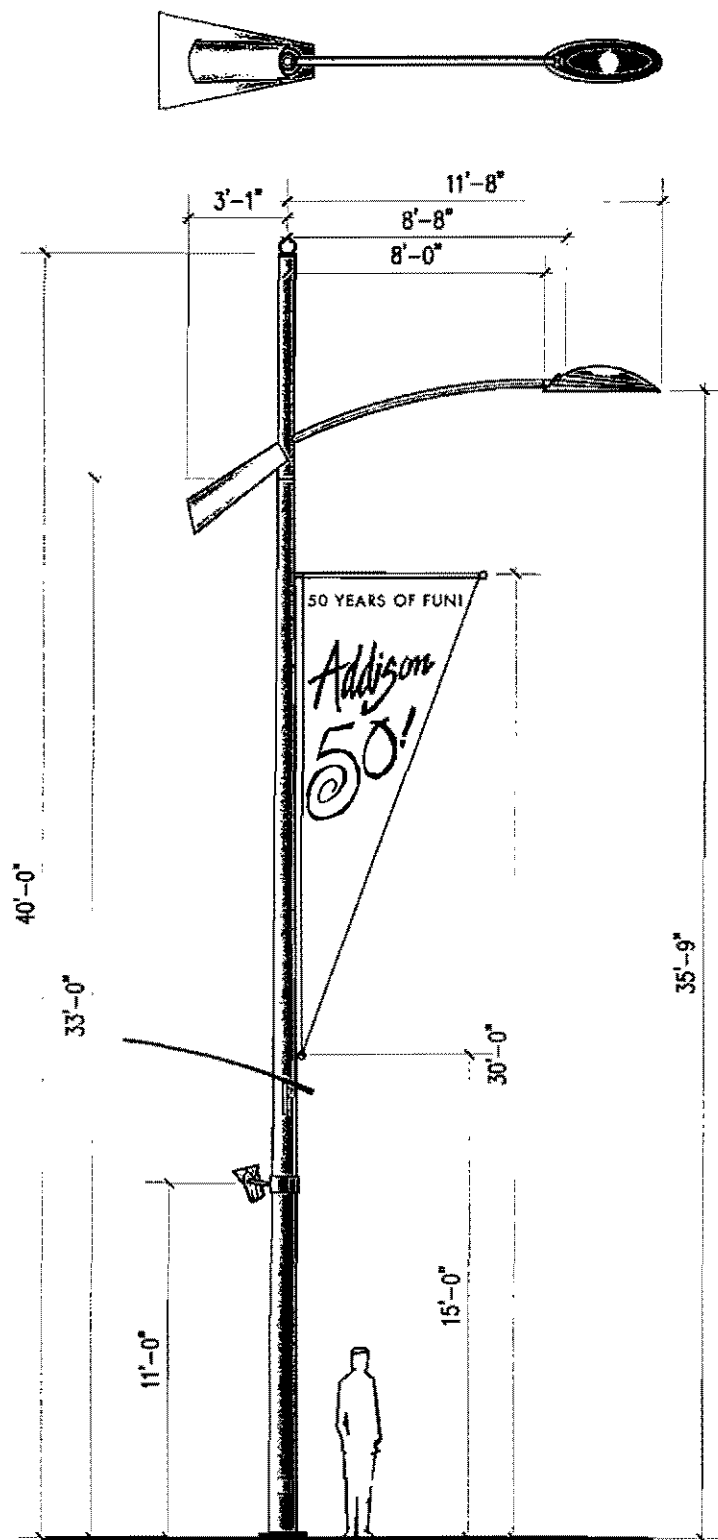
OPTION B

Assumptions:

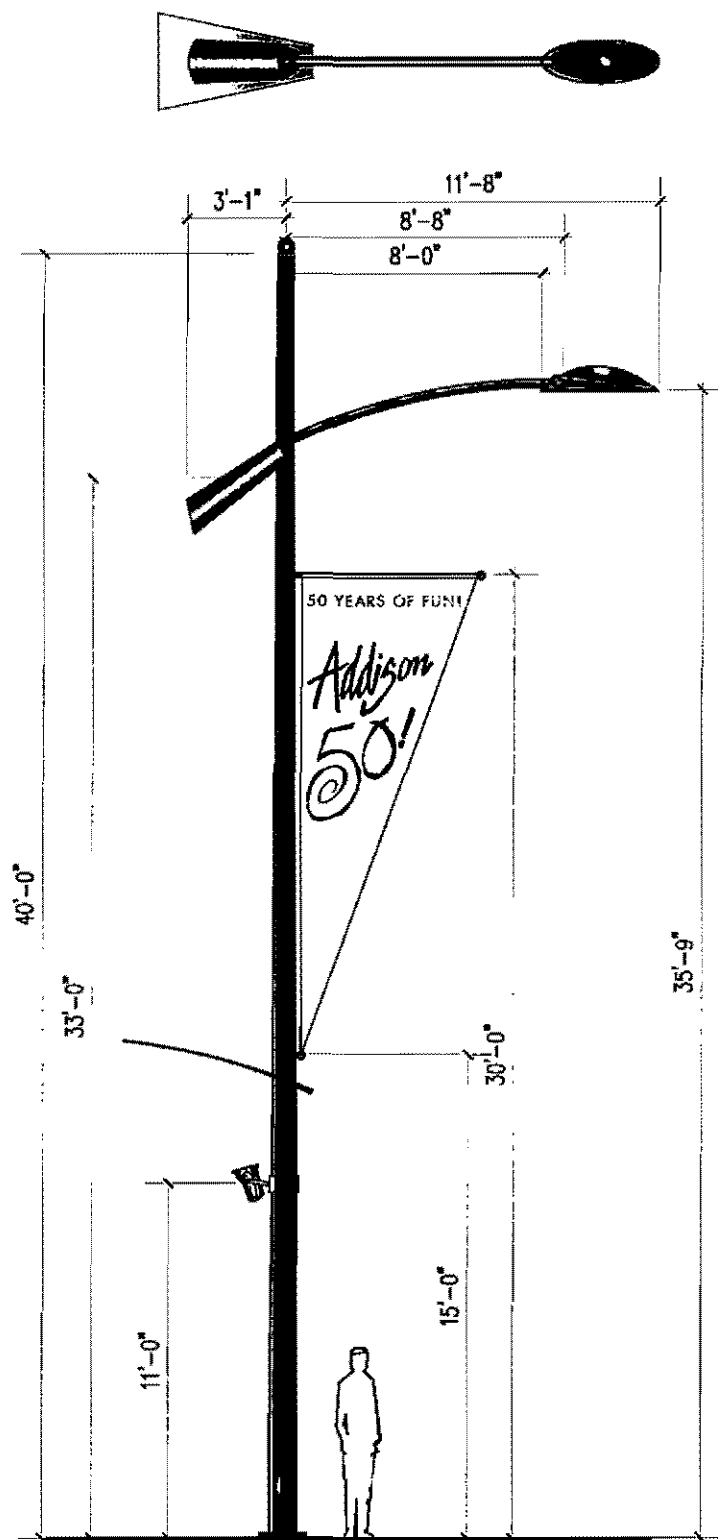
Contractor provides light foundations, conduit, and pullboxes
 Contractor provides wiring, light standards (poles, luminaires, mast arms), and power service (riser, transformer, controller).
 Town of Addison provides operations and maintenance.
 Oncor provides metered service and charges Town of Addison for electricity usage.

DESCRIPTION	UNIT	QUANTITY	COST/UNIT	TOTAL
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Electrical Conductor (No. 8) Insulated	LF	10,728	\$ 0.62	\$ 6,651.36
Electrical Conductor (No. 8) Bare	LF	5,364	\$ 0.55	\$ 2,950.20
Electrical Service Type D (120/240) 060 (ns) (t) tp (o)	EA	1	\$ 3,500.00	\$ 3,500.00
			Subtotal:	\$ 144,449.56
Monthly cost of metered electricity paid to Oncor (assumes \$13.50 fixed charge & \$.034 per kwh chg.)				
Monthly cost of metered electricity paid to REP: (assumes \$.05 per kwh chg.)				
Cost of Town of Addison staff for operations, and maintenance:				
			TOTAL:	\$ 249,940.36

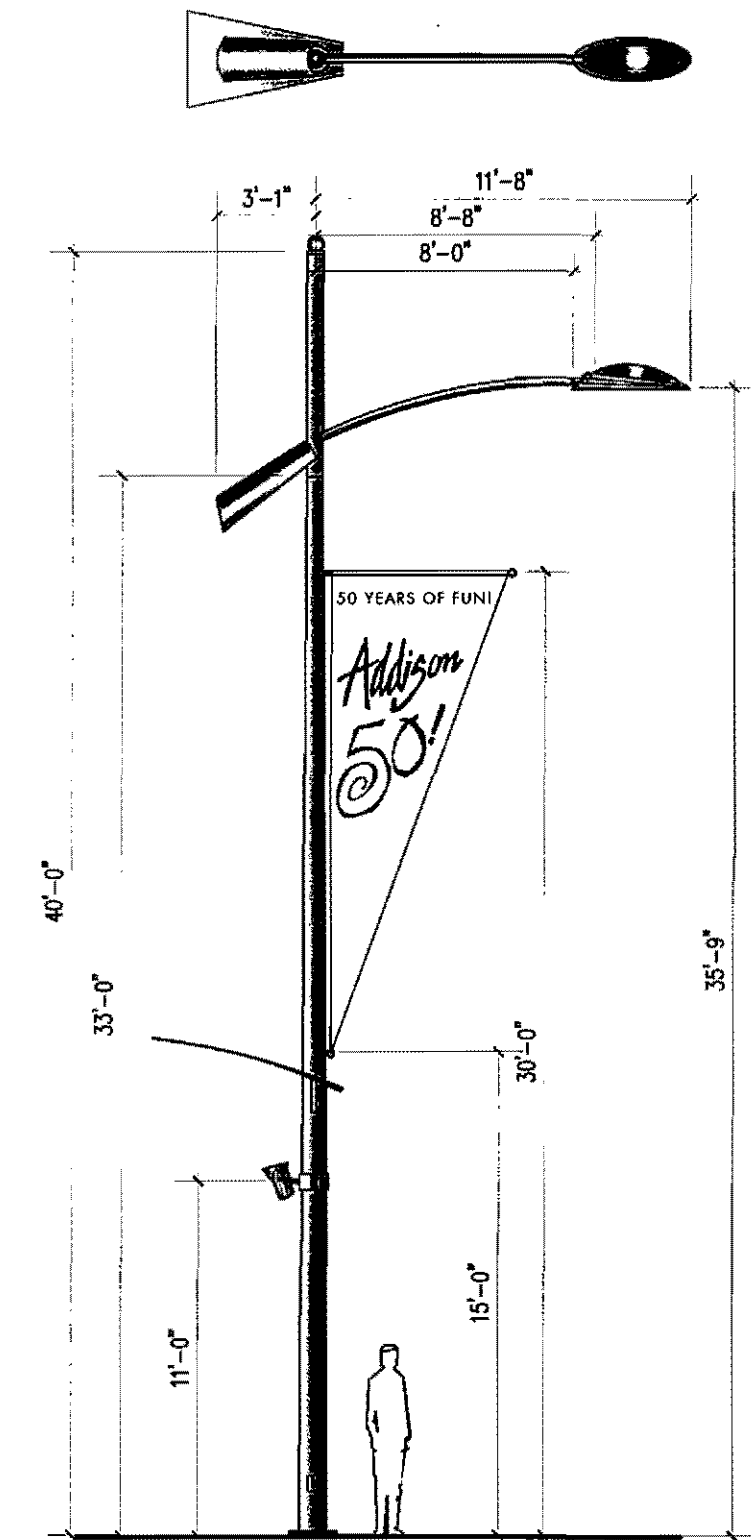
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GRAY



BLACK



SHARPIE BLUE

Addison!

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 3430 LBJ Freeway
 Suite 400
 Dallas, TX 75240
 Telephone 214.233.1500
 Facsimile 214.233.1505

Issue Date & Issue Description By Check

Issue	Date & Issue Description	By	Check

Scale/Signature

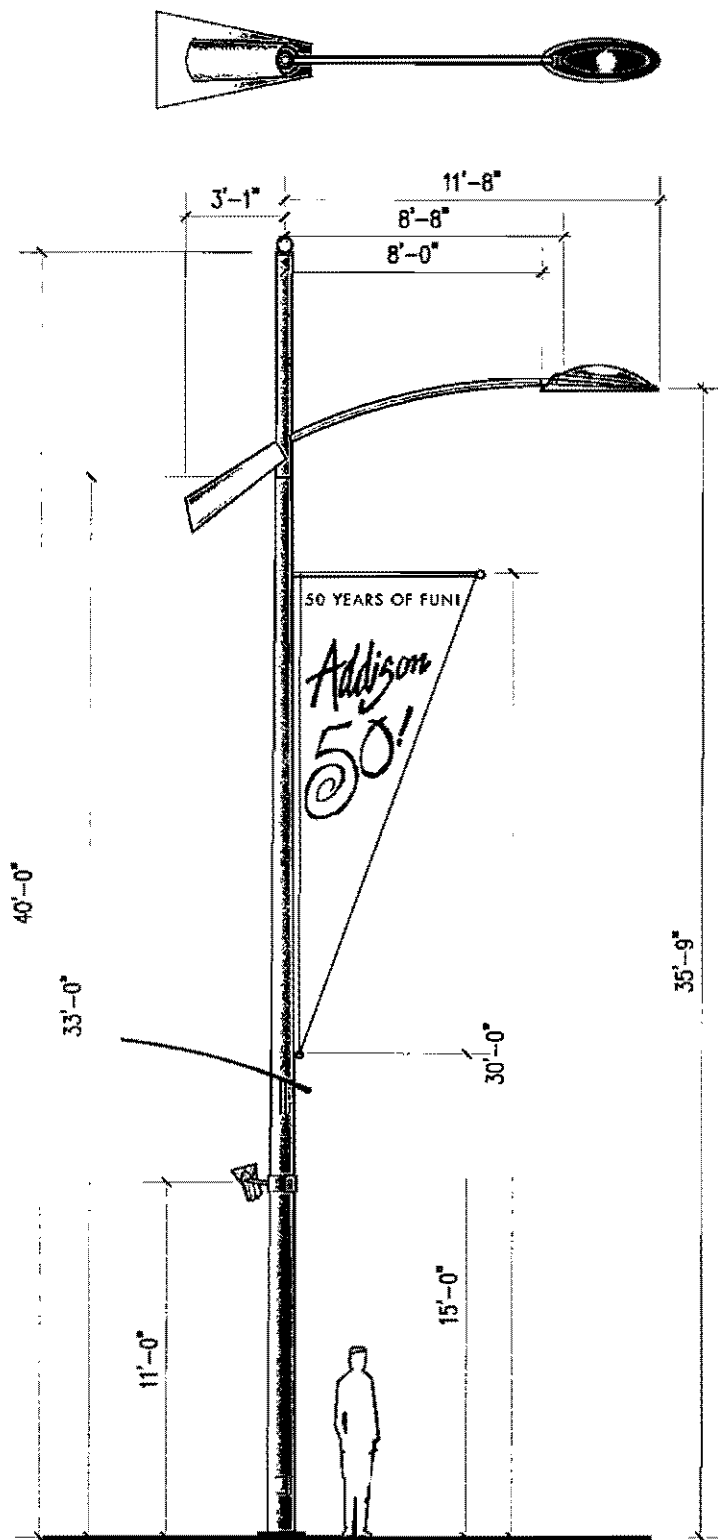
Project Name
 TOWN OF ADDISON
 LIGHTING MASTER PLAN

Project Number
 00.0627.000

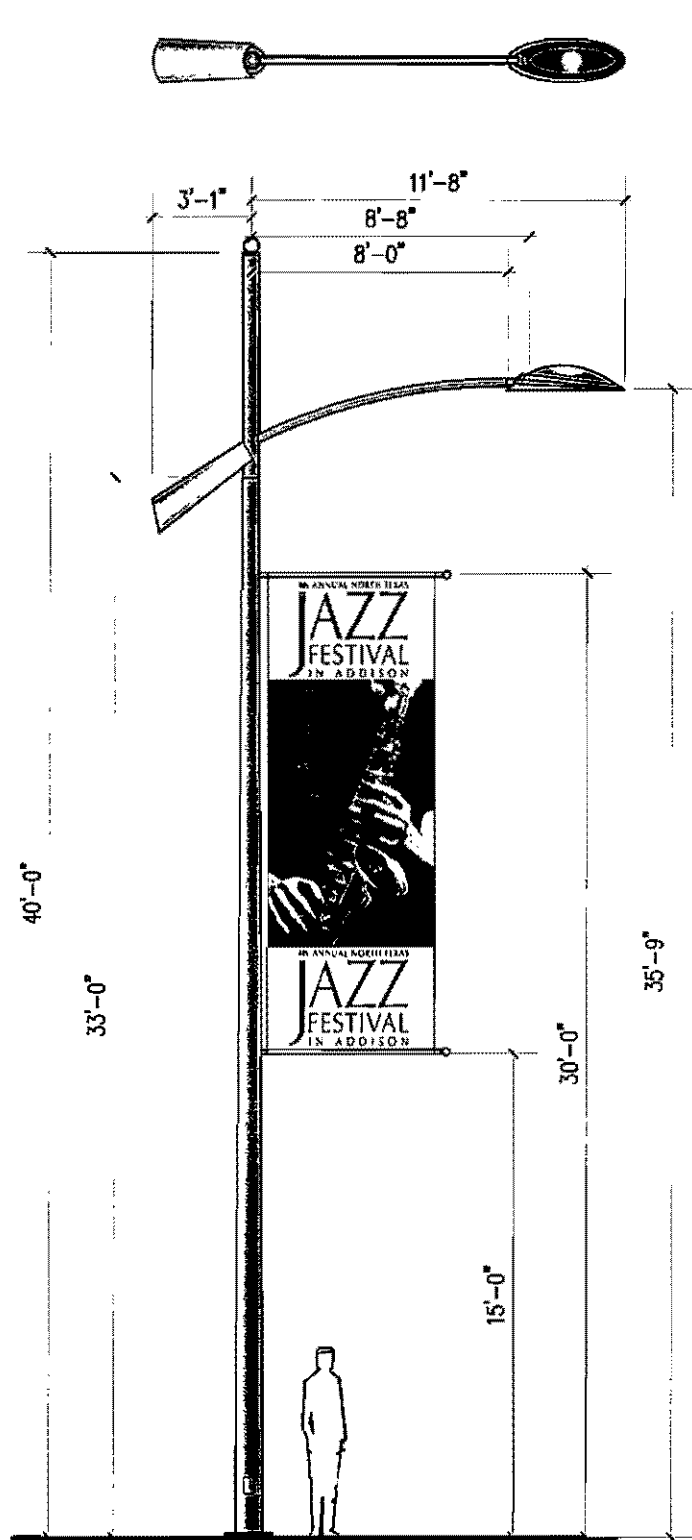
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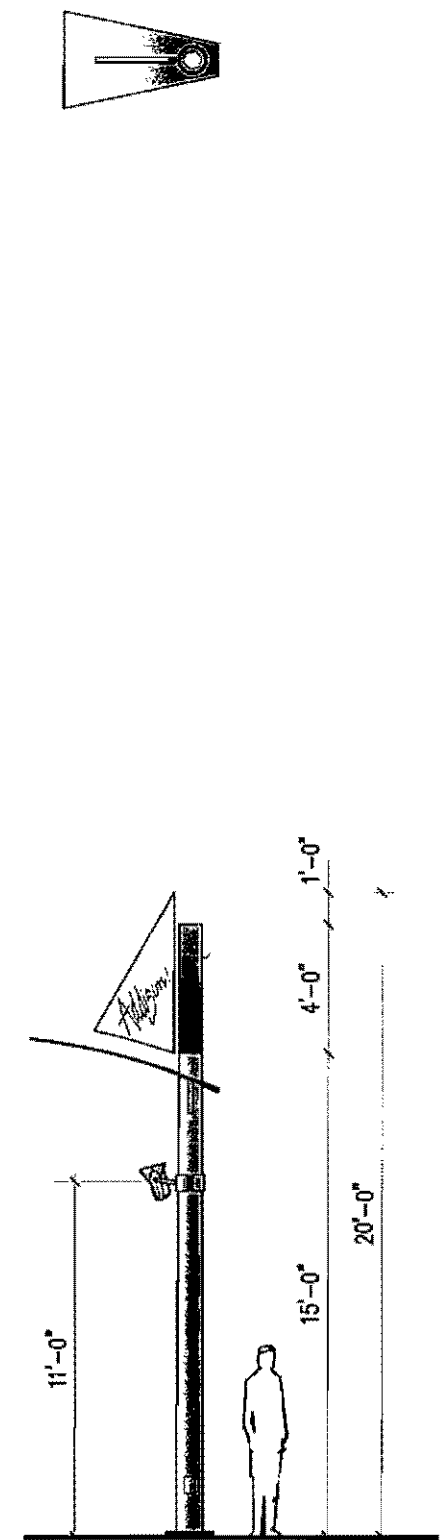
Scale



MAIN THOROUGHFARE



FEEDER



RESIDENTIAL

Addison![®]

Gensler

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Dallas TX 75240
Telephone 214.273.1500
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Issue	Date & Issue Description	By	Check

 Signature

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Project Number
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