Highway Attachment – Lighting Specifications

Tempe, Arizona

HWY18MH010

(8 pages)

GE
Lighting Solutions

Area Lighting

Decashield™ 400 (DSMT, DSME & DSMR)

imagination at work

Product Features

Designed for superior photometric performance and architectural appeal, GE Outdoor Area Sightlighters provide broad application flexibility. From parking lots to downtown areas, hospitals to shopping malls, business complexes to residential neighborhoods, these fixtures will satisfy your large area lighting needs, while complementing your aesthetic desires.

Applications

- Walkways, driveways, tennis courts, malls, shopping centers, commercial and industrial complexes
- Residential areas and parkway lighting

Housing

- Heavy-duty die-cast aluminum housing and door

Finish

- Polyester powder paint finish in dark bronze, black, gray, white or aluminum

Rating

- UL/cUL 1598 Listed Suitable for Wet Locations

Mounting

- Decorative Mounting Arm standard for flat or curved (for 3.5 to 4.5) OD pole (drilling templates are the same as those for the Decashield 1000™ and Dimension™ luminaires)

Reflectors

- ALGLAS™ finish on Type II, Type III and Type V reflectors, anodized finish on Forward Throw reflector

Unique Features

- No-tool access stainless steel latch design
- Heat and impact resistant tempered flat glass lens
- Type II, Type III metal halide, and all Forward Throw reflectors are field rotatable
- Enclosed and gasketed optical
- Mogul base socket – E39 standard, except 150W Pulse MH and below supplied with Medium Base
- Plug-in ignitor
- Unit shipped complete in one carton (Ballast secured to housing)
- Removable ballast tray
- Magnapack packaging available

Ordering Number Logic

Decashield™ 400 (DSMT, DSME & DSMR)

____ - __ - _ - _ - _ - _ - G - ___ - __ - _

PROD. ID	WATTAGE	LIGHT SOURCE	VOLTAGE	BALLAST TYPE SELECTION	PE FUNCTION	LENS TYPE	IES DISTRIBUTION TYPE	COLOR	OPTIONS
DSMT = Decashield 400 Luminaire with Ballast Tray Flat Surface & Mounting Arm **DSME** = Decashield 400 Luminaire with 2" External Slipfitter Installed **DSMR** = Decashield 400 Luminaire with Ballast Tray & Direct Mounting Arm to Round Pole	**15** = 150 (55V) **17** = 175 **20** = 200 **24** = 250/400* **25** = 250 **32** = 320 **35** = 350 **40** = 400 *250/400 connected 250W for HPS only	**E** = Energy Act Compliant Pulse MH (EPMH) **S** = HPS **P** = Pulse MH **Standard:** Mogul base lamp not included.	**60Hz** **0** = 120/208/240/277 Multivolt **1** = 120 **2** = 208 **3** = 240 **4** = 277 **5** = 480 **D** = 347 **F** = 120X347 **T** = 220 **50Hz** **Y** = 240 **NOTE:** 120 X 347 connected for 120V	See Ballast and Photometric Selection Table **A** = Autoreg **D** = Bi-Level **G** = Mag-Reg with Grounded Socket Shell **H** = HPF Reactor or Lag **K** = Hot Restrike (Must also order "P" option at right. (Non-UL) Contact Factory) **M** = Mag-Reg **P** = CWI with Grounded Socket Shell	**1** = None **2** = PE Receptacle **4** = PE Receptacle and Shorting Cap **NOTE:** Receptacle connected same voltage as unit.	**G** = Flat Glass	See Ballast and Photometric Selection Table **MC2** = Medium Cutoff Type II * **MC3** = Medium Cutoff Type III * **FWC** = FWT w/ILS* **FWT** = Forward Throw* **HTV** = Horizontal Type V * * = Previously IESNA Full Cutoff Optics	**AL** = Aluminum **BL** = Black **DB** = Dark Bronze (Standard) **CG** = Charcoal Gray **WH**= White **NOTE:** Contact Manufacturer for other colors.	**C** = Charcoal Filter (Not available with FWT) **F** = Fusing (Not available with multivolt or 120X347V) **J** = Line Surge Protector, Expulsion Type (UL not available) **P** = Prewire with 6' of 14/3 cable. **R** = No Mounting Arm or Slipfitter

Ballast and Photometric Selection Table

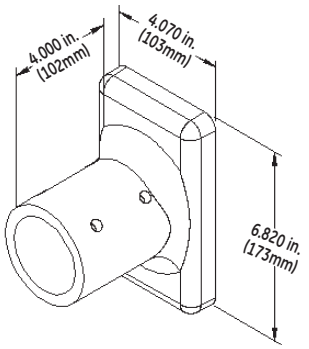
All light sources are clear unless otherwise indicated.

	Ballast Type/Voltage 60Hz						50Hz	IES Distribution Type Photometric Curve Number 35-				
Wattage	Light Source	Multivolt	120	208,240 277,480	347, 120X347	220	240	MC2	MC3	FWT	HTV	FWC
150(55V)	HPS	**H,K,A**	**G,H,M,A**	**G,M,A**	**H**	N/A	N/A	178591	178596	178604	178599	452557
250, 400	HPS	**A, K**	**A, P**	**A**	**A**	**A,H**	**A**	178592	177315	178605	178600	452555
**150	PMH	N/A	**A,H**	**H***	**H**	N/A	N/A	454163	454165	454164	454182	C/F
175, 320	EPMH	**A**	**A**	**A***	N/A	N/A	N/A	178594	178597	178607	178602	452559
250	EPMH	**A**	**A**	**A**	N/A	N/A	N/A	178594	178597	178607	178602	452559
350, 400	EPMH	**A**	**A**	**A***	N/A	N/A	N/A	178595	178598	178608	178603	452554

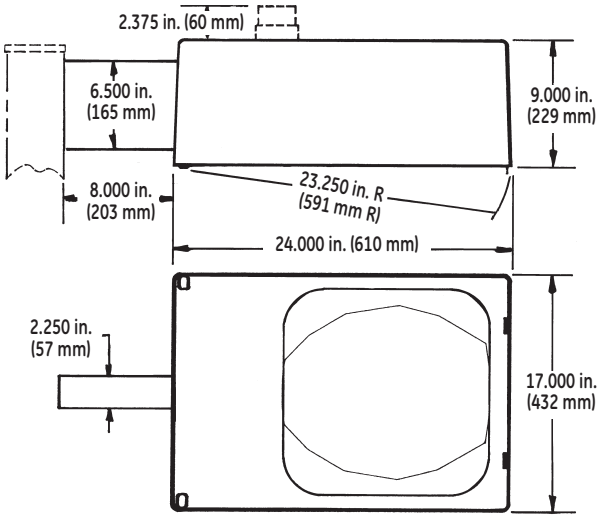
NOTE: N/A = Not available. C/F = Contact Manufacturer *150, 320 and 350W PMH N/A 480V **Medium Base Socket

Product Dimensions

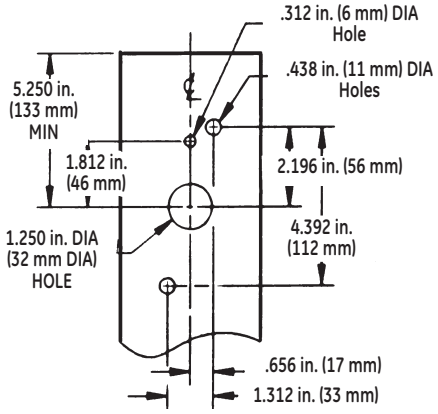
DSME MOUNTING



DSMT

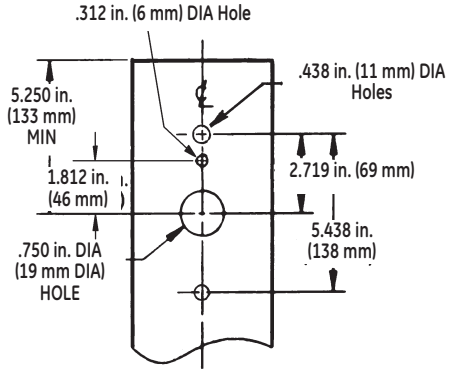


DSMT SQUARE POLE MOUNTING: STANDARD



DRILLING TEMPLATE

DSMR ROUND POLE MOUNTING 3.5 to 4.5-inch (89 to 114mm) OD round pole



DRILLING TEMPLATE

DATA

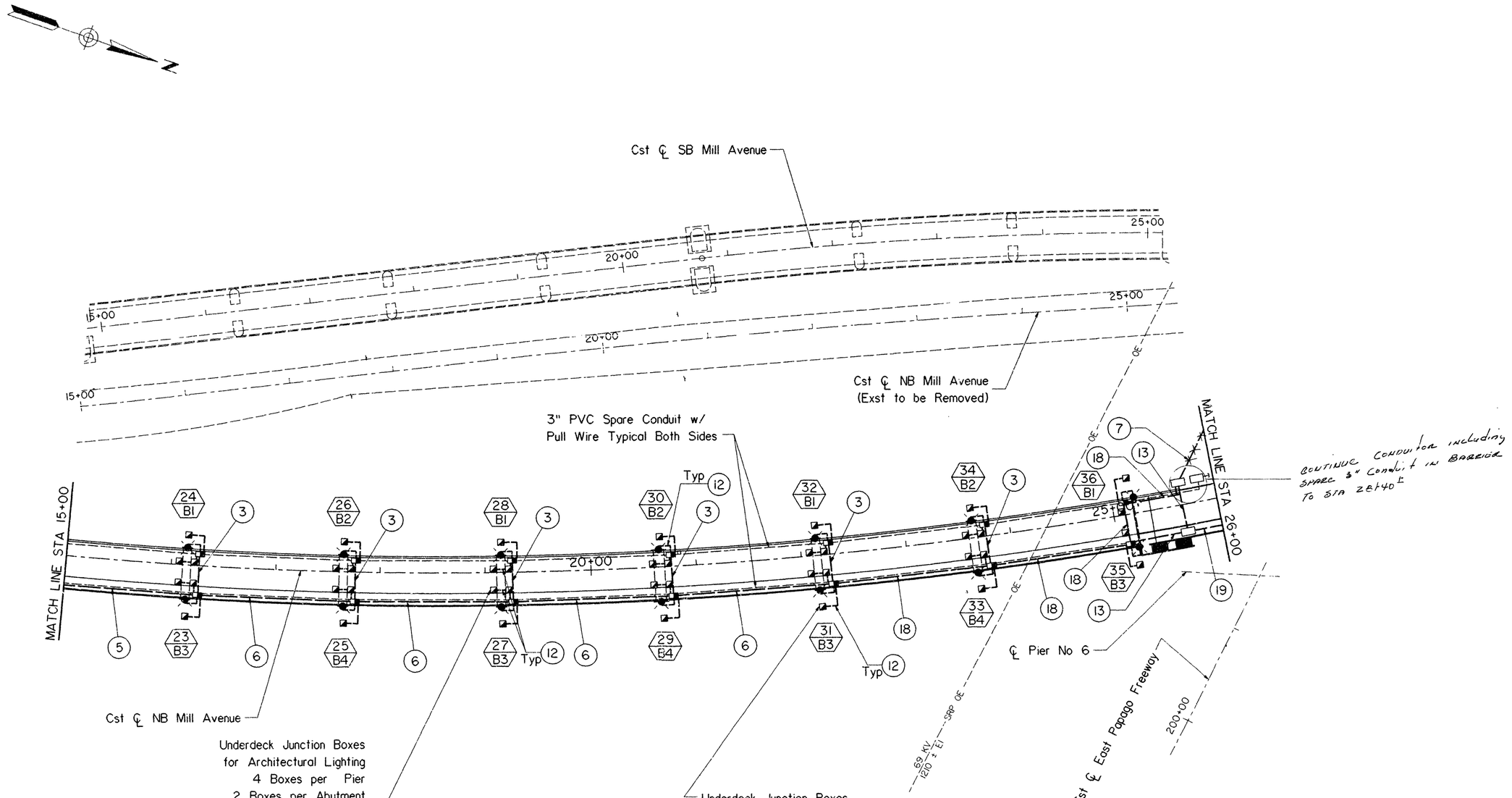
- Approximate Net Weight: 35-45 lbs (16-18 kgs)
- Suggested Mounting Height: 20-40 ft. (6-12 M)
- Effective Projected Area:

No Mounting Arm	1.4 sq. ft. max. (0.13 sq. M max.)
Single with 8 in. (203mm) Mounting Arm	1.8 sq. ft. max. (0.17 sq. M max.)
Double with 8 in. (203mm) Mounting Arm at 180°	3.6 sq. ft. max. (0.33 sq. M max.)
Triple with 8 in. (203mm) Mounting Arm at 90°	4.3 sq. ft. max. (0.40 sq. M max.)
Quad with 8 in. (203mm) Mounting Arm at 90°	4.9 sq. ft. max. (0.46 sq. M max.)
Double with 8 in. (203mm) Mounting Arm at 90°	2.5 sq. ft. max. (0.23 sq. M max.)

NOTE: The wind loading of Decashield Luminaires, when mounted to poles in multiples radially about the axis of the pole, do not necessarily have the EPA of a single luminaire multiplied by the number of luminaires.

GE Lighting Solutions • 1-888-MY-GE-LED • www.gelightingsolutions.com
1-888-69-43-533

DATE	REV #	REVISION	DSGN	DRWN	CHKD	APPD
	1					



NOTE:
See Dwg No. 9.1 for General Notes and Legend.

	NAME	DATE
DESIGN	P Ilercil	7/91
DRAWN	J.DelBusso	3/91
CHECKED	D Hartig	7/91

Parsons Brinckerhoff ® 100 YEARS

PROJECT NO. 906335

DEPARTMENT OF PUBLIC WORKS
CITY OF TEMPE
DIVISION OF ENGINEERING
P.O. BOX 5002 TEMPE ARIZONA

SECOND MILL AVENUE BRIDGE
LIGHTING PLAN

Certificate No. 16373 Daniel J. Hartig Date Signed 10/1/91 Arizona

DWG. NO. T-9.5

SURVEY NO	FINISHED PLANS	REVISIONS	LOCATION	DATE

N

Cst ℄ East Papago Freeway

APS to Disconnect Temporary ADOT Service Conductors from APS Pull Box when APS Installs New Service Conductors from APS Transformer to Load Center B.

Exst 120/240V Load Center, C

Remove and Salvage Exst Light Poles

Exst Light Pole To Remain

Exst 120/240V Load Center, B

Connect to Exst Stubs

Cst ℄ SB Mill Avenue

Cst ℄ Washington Street

25+00

30+00

35+00

75+00

42 APS

40 APS

41 APS

39 APS

37 APS

38 APS

43 CI

16

7

24

19

17

1

Cst ℄ NB Mill Avenue (Exst to be removed)

℄ Pier No. 5

Typ

APS Primary

Exst APS Transformer

Exst Elec Meter

Remove and Salvage Exst Modular A-1 Signal Pole. Install New Modular A-2 Signal Pole on Exst Foundation.

Cst ℄ Curry Road

MATCH LINE STA 26+00

Verify Horizontal Clearance from Overhead Electrical Line prior to Installing Foundation (Min. Horizontal Clearance Shall be 18')

Run New Conduit to Exst Pull Box and Splice to Exst System

See Underdeck Plans

℄ Pier No.6

200+00

69 KV 3 Ø

SRP OE

OE

NOTE:
See Dwg No. 9.1 for General Notes and Legend.

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CHECKED	D. Harlig	7/91

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DIVISION OF ENGINEERING
P.O. BOX 5002 TEMPE ARIZONA

SECOND MILL AVENUE BRIDGE
LIGHTING PLAN

DWG NO. T-9.4

48 OF 161

DATE | REV # | REVISION | DSGN | DRWN | CHKD | APPD

DATE | LOCATION | REVISIONS

LIGHTING POLE SCHEDULE

				LUMINAIRE				POLE			FOUNDATION	
POLE NO.	CIRCUIT NO.	STATION	OFFSET (From ℄)	TYPE	NO. OF	WATT	VOLT	TYPE	MAST ARM	MNT HGT	TYPE	BASE
1	NO.	NOT USED										
2	A7	4+45	22' RT	SD ◪	1	150	240	SD 14.5	N/A	16.5'	SD	SD
3	A6	5+05	23' RT	SD ◪	1	150	240	SD 14.5	N/A	16.5'	SD	SD
4	A7	5+63	32.7' RT	SD	1	250	240	SD 9.5	N/A	19.4'	△	SD
5	A6	6+35	32.7' RT	SD	1	250	240	SD 9.5	N/A	19.4'	△	SD
6	NO.	NOT USED										
7	A7	7+07	33.1' RT	SD	1	250	240	SD 9.5	N/A	19.4'	△	SD
8	A6	7+07	16.6' LT	SD	1	250	240	SD 14.5	N/A	16.5'	SD	SD
9	A6	7+79	33.1' RT	SD	1	250	240	SD 9.5	N/A	19.4'	△	SD
10	A7	7+79	16.6' LT	SD	1	250	240	SD 14.5	N/A	16.5'	SD	SD
11	A7	8+51	33.1' RT	SD	1	250	240	SD 9.5	N/A	19.4'	△	SD
12	A6	8+51	16.6' LT	SD	1	250	240	SD 14.5	N/A	16.5'	SD	SD
13	A6	9+23	33.1' RT	SD	1	250	240	SD 9.5	N/A	19.4'	△	SD
14	A7	9+23	16.6' LT	SD	1	250	240	SD 14.5	N/A	16.5'	SD	SD
15	B3	10+15	33.1' RT	SD	1	310	240	SD 12.5	N/A	24'	◐	SD
16	B1	10+15	15.5' LT	SD	1	310	240	SD 12.5	N/A	24'	◐	SD
17	B4	11+65	32.5' RT	SD	1	310	240	SD 14.5	N/A	24'	◐	SD
18	B2	11+65	15.3' LT	SD	1	310	240	SD 14.5	N/A	24'	◐	SD
19	B3	13+15	32.5' RT	SD	1	310	240	SD 14.5	N/A	24'	◐	SD
20	B1	13+15	15.3' LT	SD	1	310	240	SD 14.5	N/A	24'	◐	SD
21	B4	14+65	33.1' RT	SD	1	310	240	SD 12.5	N/A	24'	◐	SD
22	B2	14+65	15.5' LT	SD	1	310	240	SD 12.5	N/A	24'	◐	SD
23	B3	16+15	32.5' RT	SD	1	310	240	SD 14.5	N/A	24'	◐	SD
24	B1	16+15	15.3' LT	SD	1	310	240	SD 14.5	N/A	24'	◐	SD
25	B4	17+65	32.5' RT	SD	1	310	240	SD 14.5	N/A	24'	◐	SD
26	B2	17+65	15.3' LT	SD	1	310	240	SD 14.5	N/A	24'	◐	SD
27	B3	19+15	32.5' RT	SD	1	310	240	SD 14.5	N/A	24'	◐	SD
28	B1	19+15	15.3' LT	SD	1	310	240	SD 14.5	N/A	24'	◐	SD
29	B4	20+65	33.1' RT	SD	1	310	240	SD 12.5	N/A	24'	◐	SD
30	B2	20+65	15.5' LT	SD	1	310	240	SD 12.5	N/A	24'	◐	SD
31	B3	22+15	32.5' RT	SD	1	310	240	SD 14.5	N/A	24'	◐	SD
32	B1	22+15	15.3' LT	SD	1	310	240	SD 14.5	N/A	24'	◐	SD
33	B4	23+65	32.5' RT	SD	1	310	240	SD 14.5	N/A	24'	◐	SD
34	B2	23+65	15.3' LT	SD	1	310	240	SD 14.5	N/A	24'	◐	SD
35	B3	25+15	33.1' RT	SD	1	310	240	SD 12.5	N/A	24'	◐	SD
36	B1	25+15	15.5' LT	SD	1	310	240	SD 12.5	N/A	24'	◐	SD
37	APS	28+00	31.2' RT	SB	1	250	240	A	8'	32'	A	A
38	APS	29+25	33.6' RT	SB	1	250	240	A	8'	32'	A	A
39	APS	30+55	33.6' RT	SB	1	250	240	A	8'	32'	A	A
40	APS	30+45	36.6' LT	SB	1	250	240	A	8'	32'	A	A
41	APS	32+60	43.6' RT	SB	1	250	240	A	8'	32'	A	A
42	APS	32+60	36.6' LT	SB	1	250	240	A	8'	32'	A	A
43	C1	34+75	35' RT	SB	1	250	120	SGNL ◇	3.2'	30'	(EXST)	(EXST)
44	B5	26+05	36.6' RT	UD	1	150	240	N/A	N/A	18'	N/A	N/A
45	B6	26+75	36.6' RT	UD	1	150	240	N/A	N/A	18'	N/A	N/A

SB - Shoe Box HPS Luminaire with an IES Type III Full Cut Off Light Distribution
UD - Underdeck HPS Luminaire with an IES Type IV Full Cut Off Light Distribution
SD - Special District HPS Luminaire with an IES Type V Full Cut Off Light Distribution
SD 14.5 - Special District Light Pole 14'-6" Per City of Tempe Std Dtl T-653
SD 12.5 - Special District Light Pole 12'-6" Per City of Tempe Std Dtl T-653
SD 9.5 - Special District Light Pole 9'-6" Per City of Tempe Std Dtl T-653
A - Architectural Street Light Pole Per City of Tempe Std Dtl T-652
el - Elevation
N/A - Not Applicable
SGNL - Luminaire Mounted on A-2 Signal Pole

CONDUCTOR SCHEDULE

	CONDUIT RUN NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
	CONDUIT SIZE (IN)	2	2	2	2	2	2	3	(2)	(2½)	(1½)	(2)	1	3	1	1	2	(2)	2	2	(1)	(1)	(2)	(1)	3							
AWG	CONDUCTOR USE	NUMBER OF CONDUCTORS PER CONDUIT																														
#8	Lighting Circuit	2	4						⟨2⟩						2	4																
#8	Insulated Bond	1	1						⟨1⟩						1	1					⟨1⟩	⟨1⟩	⟨1⟩	⟨1⟩								
#6	Lighting Circuit			2	4	8			4	4	4	4																				
#6	Insulated Bona			1	1	1			1																							
#6	Existing Lighting Circuit									⟨3⟩	⟨5⟩	⟨5⟩																				
#6	Existing Insulated Bond									⟨1⟩	⟨1⟩	⟨1⟩																				
#4	Lighting Circuit						8												4													
#4	Insulated Bond						1												1													
#2	Lighting Circuit							8											4													
#2	Insulated Bond							1											1													
	Future Lighting Circuit												☐	☐						☐				☐								
#10	Lighting Circuit																	1			2	⟨2⟩	⟨4⟩									
#10	Insulated Bond																	1														
APS DESIGN	Street Lighting Circuit																☐								☐							

○ Existing Conduit
⬡ Existing Conductor
☐ Install Conduit w/Pull Cord (Conductors by Others)

△ Pole Mounted on Retaining Wall
◐ Pole Mounted on Pier
◪ Relocate Existing Pole and Luminaire
◇ Luminaire Mounted on A-2 Signal Pole

	NAME	DATE	DEPARTMENT OF PUBLIC WORKS
DESIGN	P. Ilercil	7/91	CITY OF TEMPE DIVISION OF ENGINEERING
DRAWN	J. DeiBusso	7/91	
CHECKED	D. Hartig	7/91	P.O. BOX 5002 TEMPE ARIZONA

Parsons Brinckerhoff ® 100 YEARS

PROJECT NO. 906335

SECOND MILL AVENUE BRIDGE
LIGHTING SCHEDULE

Registered Professional Engineer (Civil) Certificate No. 16373 Daniel Hartig 10/2/91

DWG. NO. T-9 5

TRACS NO. H 2413 01 C

DSGN DRWN CHKD APPD
REVISION
DATE REV #
SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE