

#### THE CITY OF SAN DIEGO

### MEMORANDUM

DATE:

December 14, 2016

TO:

Distribution

FROM:

Marnell Gibson, Assistant Director, City Engineer, Public Works Department

SUBJECT: Adoption of Street Lighting Standards and Drawings

This memo is to announce new City standards for outdoor lighting within the public right-of-way (ROW) and City properties. Effective **February 1, 2017**, the installation of outdoor street lighting shall comply with the attached new Lighting Updates (which will be reflected in the future ROW Street Design Manual), Standard Drawings SDE-105 through SDE-111 for Street Lighting, and Lighting and Controls Approved Materials List.

The new lighting standards updates are part of the implementation of the City's Climate Action Plan, and will facilitate significant energy reduction and cost savings for the City. These new standards comply with the Federal Department of Energy and Statewide Standards for outdoor lighting. Previous standards included induction technology, which have been typically used on City projects. Induction lighting and replacement parts are obsolete, as **light-emitting diode (LED)** fixtures and adaptive control systems are now the industry standard.

All new projects within the public ROW or at City properties will be required to upgrade outdoor lighting per these standards. All future contract documents must reflect compliance with the new standards. Projects currently under design must be reviewed by Environmental Services Department for conformance with the new lighting standards.

#### Implementation:

#### 1. Private Projects Submitted to Development Services:

- a. Projects submitted on or after February 1, 2017 shall comply with the new street lighting standards.
- b. Projects currently in review and have not had permits issued by February 1, 2017 shall comply with the new street lighting standards.
- c. Projects with permits issued on or before February 1, 2017 may use the previous standards.

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## 2. City Projects:

a. Projects that have final design signed and stamped by the Deputy City Engineer, and have advertised prior to February 1, 2017 shall be allowed to comply with the previous standards.

The attached documents are located in the following City websites:

Type of Document	City Website
Lighting Updates 2016 of the	https://www.sandiego.gov/planning/programs/t
Street Design Manual	ransportation/library/stdesign
Lighting & Controls Approved	https://www.sandiego.gov/publicworks/edocref
Materials List	
Standard Drawings SDE-105	https://www.sandiego.gov/publicworks/edocref/
through SDE-111	standarddraw/updates2016
Control of the Contro	

Please notify your Project Managers, designers, consultants, and maintenance crews of the new standards. If you have any questions or need additional information, contact Lorie Cosio-Azar at 858-627-3552.

Marnell Gibson, P.E., City Engineer

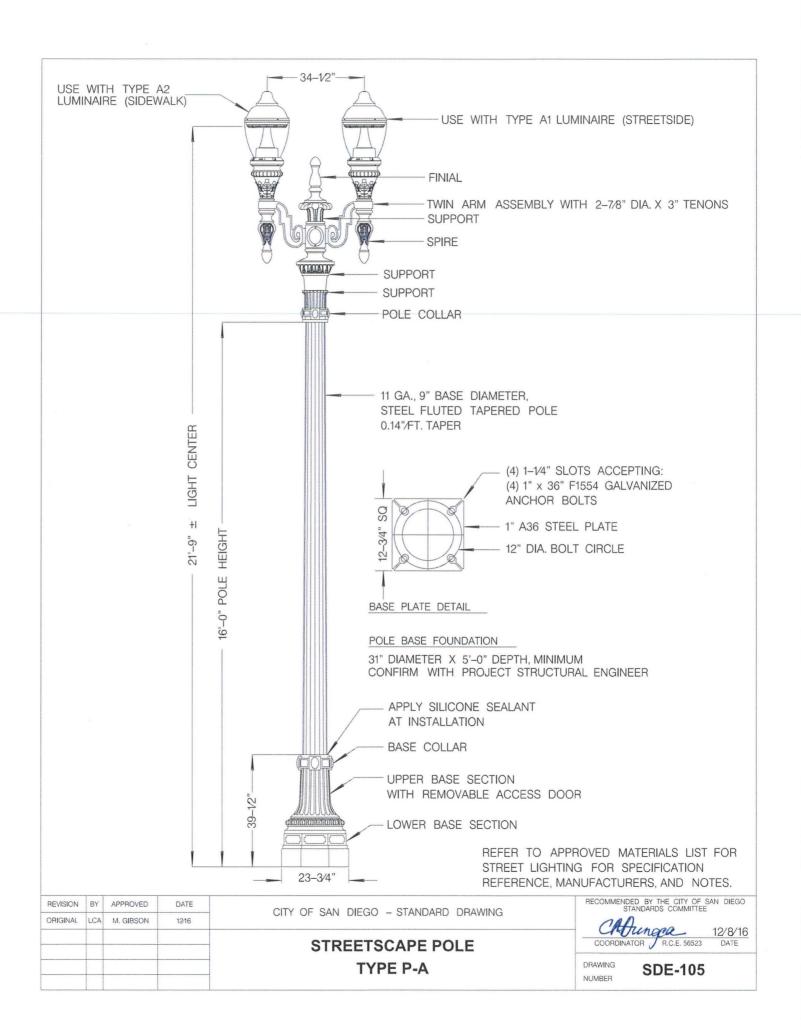
Attachments:

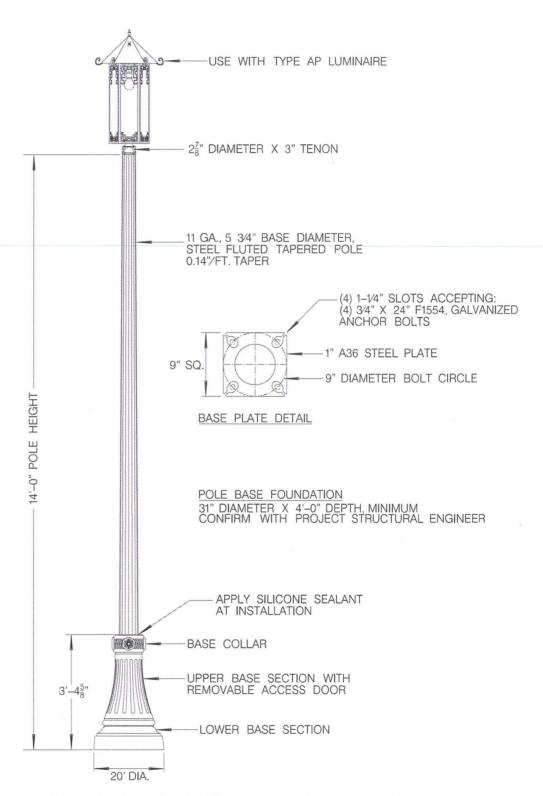
City Standard Drawings SDE-105 through SDE-111 Lighting Updates to the Street Design Manual (2016) Lighting and Controls Approved Materials List

### Distribution List:

**Deputy City Engineers** 

Scott Chadwick, Chief Operating Officer Stacey LoMedico, Assistant Chief Operating Officer Paz Gomez, Deputy Chief Operating Officer, Infrastructure/Public Works Kevin Ester, Assistant Fire Chief, San Diego Fire-Rescue Robert Vacchi, Director, Development Services Department Mario X. Sierra, Director, Environmental Services Department Misty Jones, Director, Library Herman Parker, Director, Park and Recreation Department Halla Razak, Director, Public Utilities Department James Nagelvoort, Director, Public Works Department Cybele Thompson, Director, Real Estate Assets Department Kris McFadden, Director, Transportation & Storm Water Department Tom Tomlinson, Assistant Director, Planning Department Thyme Curtis, Executive Director, ADA Compliance & Accessibility Stephen Guile, Program Manager, Economic Development Daniel Kay, Civic San Diego

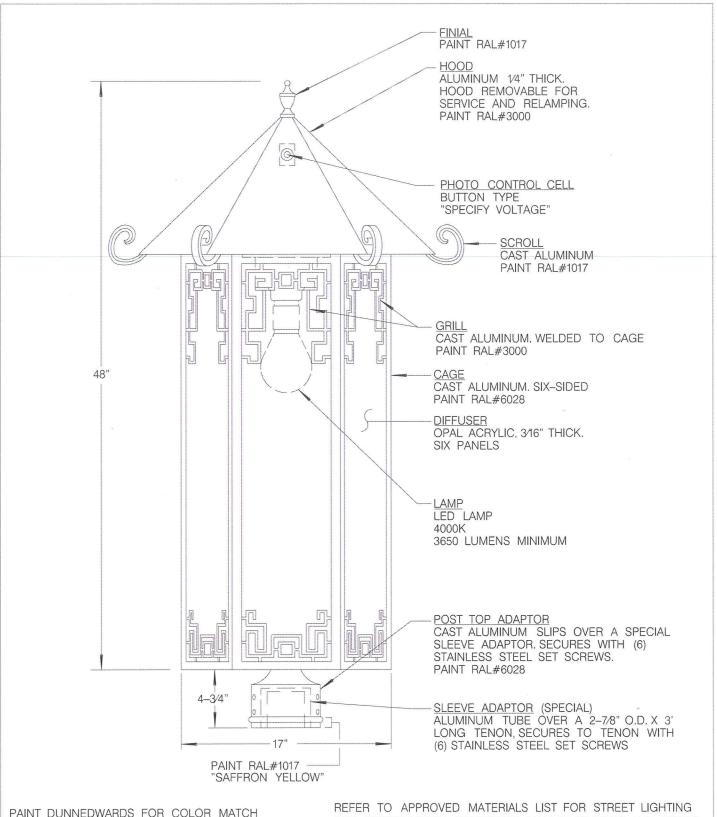




REFER TO APPROVED MATERIALS LIST FOR STREET LIGHTING FOR SPECIFICATION REFERENCE, MANUFACTURERS, AND NOTES.

				TYPE P-AP	DRAWING NUMBER	SDE-106	
				STREETSCAPE POLE	COORDINA	TOR R.C.E. 56523	12/8/16 DATE
ORIGINAL	LCA	M. GIBSON	1216	OTT OF OUR BLEGO - OTHER WIND BLANKING	CAL	Tren con	10/0/10
REVISION	BY	APPROVED	DATE	CITY OF SAN DIEGO - STANDARD DRAWING		ANDARDS COMMITTEE	

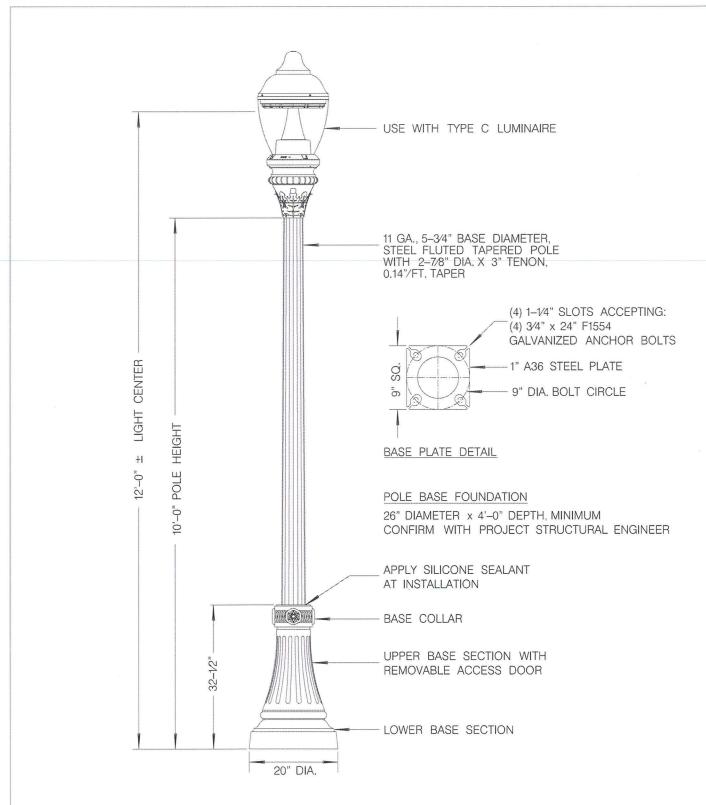
BECOMMENDED BY THE CITY OF SAN DIEGO



PAINT DUNNEDWARDS FOR COLOR MATCH SUBMIT SAMPLES

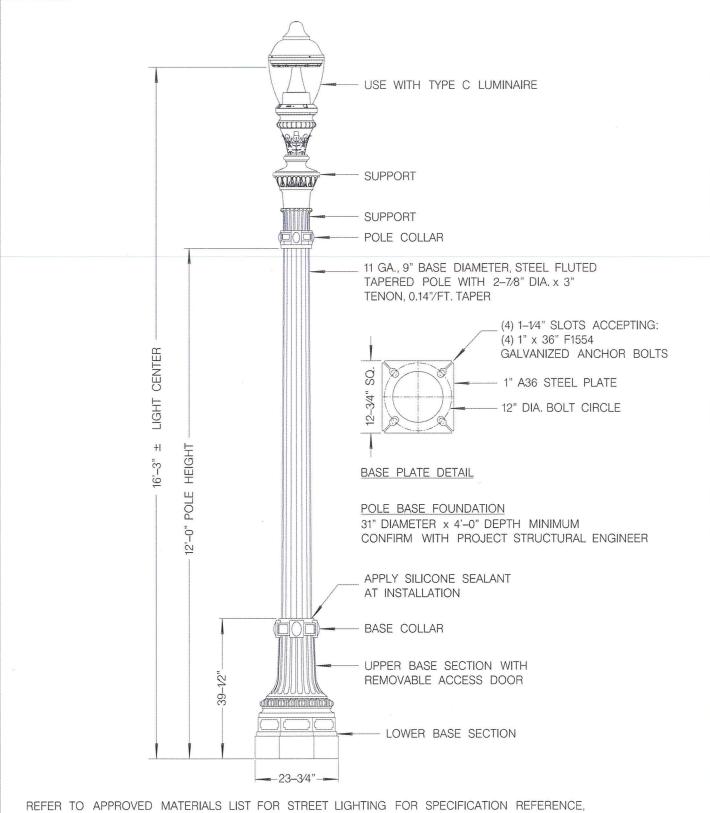
FOR SPECIFICATION REFERENCE, MANUFACTURERS, AND NOTES.

				LUMINAIRE TYPE AP	DRAWING NUMBER	SDE-107	7
				STREETSCAPE	COORDINATO	R.J. R.C.E. 56523	12/8/16 DATE
ORIGINAL	LCA	M. GIBSON	12/16	off of our bleds something blowning	CAR	11 000	10/0/10
REVISION	BY	APPROVED	DATE	CITY OF SAN DIEGO - STANDARD DRAWING		BY THE CITY OF DARDS COMMITTE	



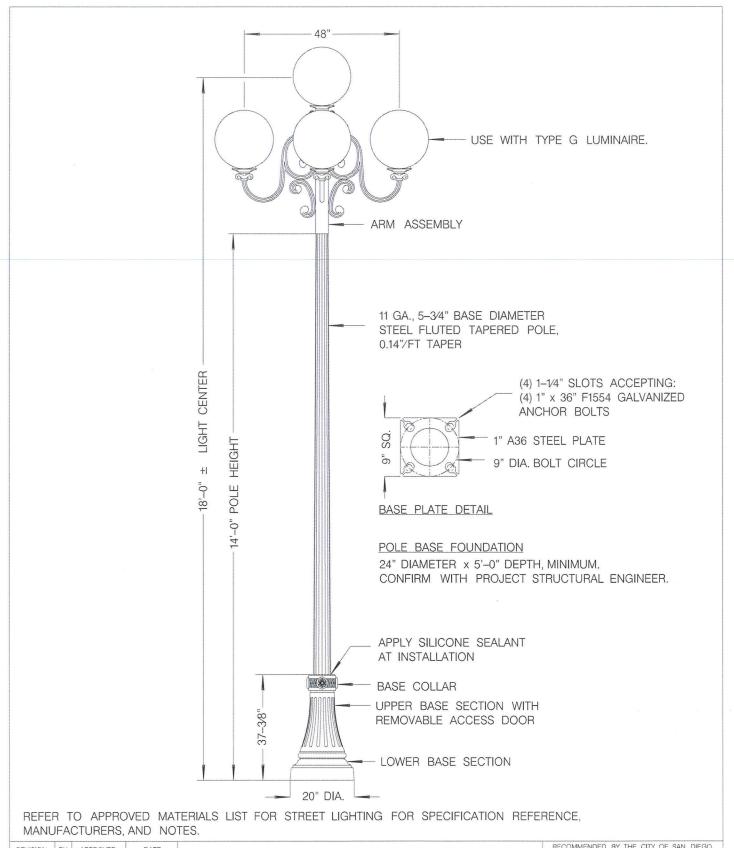
REFER TO APPROVED MATERIALS LIST FOR STREET LIGHTING FOR SPECIFICATION REFERENCE, MANUFACTURERS, AND NOTES.

REVISION	BY	APPROVED M. GIBSON	DATE 1216	CITY OF SAN DIEGO - STANDARD DRAWING	RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE
				STREETSCAPE POLE	COORDINATOR R.C.E. 56523 DATE
				TYPE P-C	DRAWING SDE-108

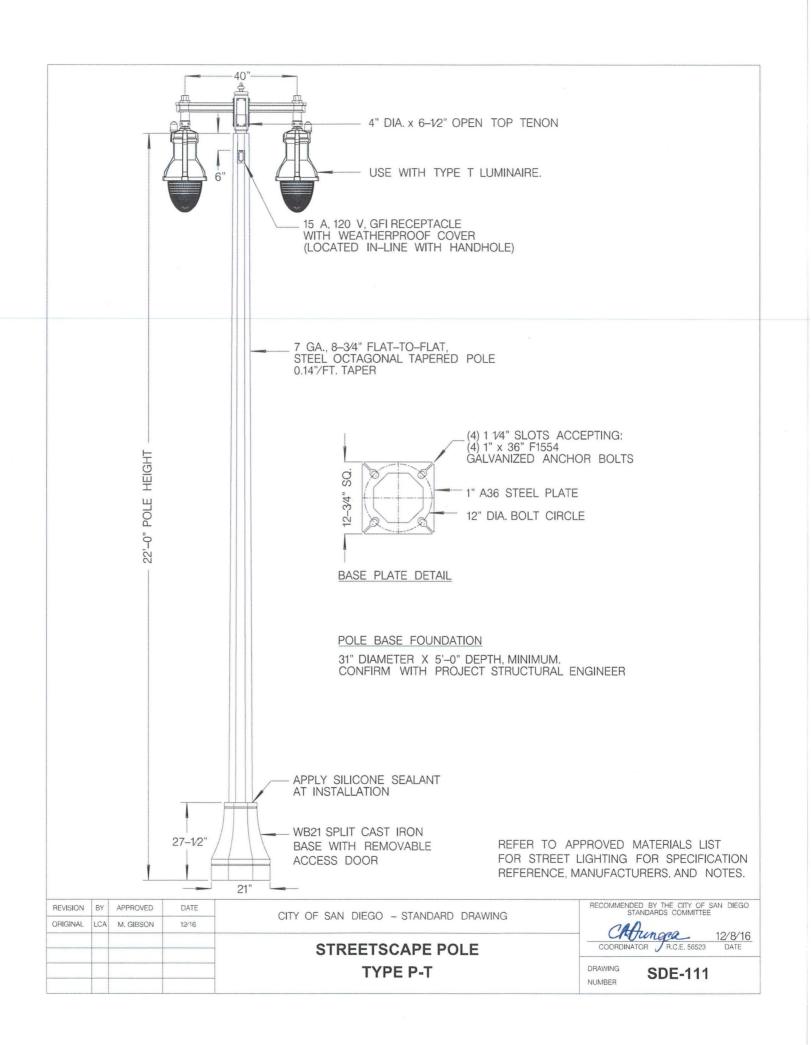


REFER TO APPROVED MATERIALS LIST FOR STREET LIGHTING FOR SPECIFICATION REFERENCE, MANUFACTURERS, AND NOTES.

ORIGINAL	LCA	M. GIBSON	12/16	STREETSCAPE POLE	COORDINATOR		2/8/16 DATE
				TYPE P-CE/CL	DRAWING NUMBER	SDE-109	



				TYPE P-G	DRAWING NUMBER	SDE-110	)
				STREETSCAPE POLE	COORDINA	TOR R.C.E. 56523	12/8/16 DATE
ORIGINAL	LCA	M. GIBSON	12/16	off of our bledo of the browning	CAL	2000	10/0/10
REVISION	BY	APPROVED	DATE	CITY OF SAN DIEGO - STANDARD DRAWING		ANDARDS COMMITTE	



#### **A Street Lights**

#### 1. General:

- a. All street lighting shall be broad spectrum light sources no greater than 4000K correlated color temperature (CCT) except for areas which are designated for a maximum of 3000K CCT or for low pressure sodium vapor (LPS). Refer to "San Diego 3000 and 4000 Kelvin CCT Map" in Council Resolution #306251. Contact the Development Services Department for current information.
- b. Street Lighting shall be non-continuous.
- c. Street Luminaires shall be as defined in the City of San Diego Approved Materials List.
- d. Street Lighting Standards, arms, bases, and mounting heights shall conform to the City of San Diego Standard SDE-101 for intersection and Mid-block lighting.
- e. Locations of additional poles to be determined by special conditions such as marked cross walks or traffic volumes as determined by the City Engineer.

#### 2. Intersection Street Lighting:

- a. Lighting shall be installed at all street intersections and it shall conform to Table L-1.
- Street Lighting at Signalized
   Intersections shall conform to Chapter 9
   of the Caltrans Traffic Manual.
- 3. Midblock street lighting shall be installed as follows:

- a. On Residential and collector streets,
  - (1) Within 1,320 feet of a transit stop, or
  - (2) In a residential or commercial district within a high-crime census tract staggered at 150 foot intervals, or else staggered at 300 foot intervals.
- b. On Four lane Urban Major or higher classification streets with center medians:
  - (1) Within 1,320 feet or a transit stop, or
  - (2) In a residential or commercial district within a high-crime census tract on both sides of the street at 150 foot intervals, or else on both sides of the street no to exceed 300 foot intervals.
- c. Near the end of a cul-de-sac that exceeds 150 feet in length.
  - (1) Within 1,320 feet of a transit stop, or
  - (2) In a residential or commercial district within a high-crime census tract or else near the end of a cul-desac that exceeds 200 feet in length.
- d. One light on each side of the street at agrade railroad crossings to illuminate the side of the train facing the motorist.
- e. Immediately adjacent to areas of high pedestrian activity, including schools, parks transit centers, access to transit, and commercial and recreational facilities that draw large numbers of pedestrians.
- f. At other locations, such as at abrupt changes in horizontal or vertical alignment, as determined by the City Engineer.

#### 4. Exempt Areas:

 Agriculture-zoned or natural open space land may be exempted from midblock street lighting provisions, at the direction of the City Engineer.

#### 5. Luminaires:

- a. Midblock street lighting shall use fully shielded (Type U0) luminaires and shall conform to the following:
  - (1) Type X, in alleys.
  - (2) Type Y-MID, for local residential streets (any width) and streets classified as collector or higher with curb-to-curb width up to and including 40 feet.
  - (3) Type Z-MID, for streets classified as collector or higher with curb-to-curb width greater than 40 feet up to and including 52 feet.
  - (4) Type Z-MID, as applicable, for streets classified as collector or higher with curb-to-curb width greater than 52 feet.
  - (5) At the end of a cul-de-sac, use a Type Y-INT luminaire to minimize impact to houses adjacent to luminaire.

#### 6. Pedestrian Scale Lighting

 a. Where pedestrian-scale lighting is installed, sidewalk or walkway lighting shall be continuous and shall provide adequate lighting for pedestrians of all abilities and shall conform to the following:

- (1) In commercial areas, the average maintained horizontal illuminance (FC) on the sidewalk or walkway shall be as shown in the current version of IES-RP-8 for High Pedestrian Conflict areas (Pedestrian Only).
- (2) In mixed-use areas, the average maintained horizontal illuminance on the sidewalk or walkway shall be as shown in the current version of IES-RP-8 for Medium Pedestrian Conflict areas.
- (3) In residential areas, the average maintained horizontal illuminance on the sidewalk or walkway shall be as shown in the current version of IES-RP-8 for Low Pedestrian Conflict areas.
- (4) In commercial areas, contributions from other nearby storefront lighting, private lighting, sign lighting and/or reflections from structures on the private property should not be considered as a reason for reducing the sidewalk or walkway illuminance levels indicated above.
- (5) Sidewalk or walkway lights shall have shielded fixtures that keep light pollution, trespass, and glare to drivers to a minimum, as approved by the City Engineer. Manufacturer models for sidewalk and walkway lighting shall be approved by the City Engineer.
- (6) Agriculture-zoned land or open space may be exempt, at the discretion of the City Engineer, from pedestrian scale lighting provisions.
- (7) Further design guidelines can be found in the current version of RP-8 publication of the Illuminating

- Engineering Society of North America, "America National Standard Practice for Roadway Lighting."
- (8) Energy code regulations for exterior lighting are in the current version of California's Title 24
- (9) All street lighting shall have shielding to cutoff illumination above an angle 90 degrees above the nadir.

#### C. Post Top Luminaires

The following post top luminaires and poles have been standardized for use in the City. Refer to City of San Diego Standard Drawings, Part 7 of the Street Lighting and Traffic Signal Systems of the Standard Specification, the "Whitebook", and Approved Materials List. Pole shall match luminaire color. All new and replacement luminaires shall be LED.

- a. Type A1 & A2, 'Gateway', Dual Acorn style on decorative Pole with dual arm support assembly
  - Distribution: One Type III & One Type V
  - BUG: U2 Max.
  - Lumens: 5900 Lumens, Min each
  - · Color: CCDC Blue
  - Light Center Height: 21'-9"
  - Pole: Std. Dwg. # SDE-105
- b. Type AP, 'Asian Pacific', Single Hexagonal style on decorative pole.
  - Distribution: Type V
  - BUG: N/A
  - Lumens: 5900 Lumens, Min.
  - Color: RAL#6028
  - Light Center Height: 16'-0"

- Pole: Std. Dwg. # SDE-106
- c. Type C, 'Standard', Single Acorn style on decorative pole.
  - Distribution: Type V
  - BUG: U2 Max.
  - Lumens: 5900 Min
  - · Color: CCDC Blue
  - Light Center Height: 12'-0"
  - Pole: Std. Dwg. # SDE-108
- d. Type CE, 'Enhanced', Single Acorn style
   on-decorative-pole-with-extended-luminaire support assembly.
  - Distribution: Type V
  - BUG: U2 Max.
  - Lumens: 5900 Min.
  - · Color: CCDC Blue
  - Light Center Height: 16'-3"
  - Pole: Std. Dwg. # SDE-109
- e. Type CL, 'Little Italy', Same as CE except dark green color.
  - Distribution: Type V
  - BUG: U2 Max.
  - Lumens: 5900 Min.
  - · Color: RAL#6005, Dark Green
  - Light Center Height: 16'-3"
  - Pole: Std. Dwg. # SDE-109'
- f. Type G, 'Gaslamp', five head, globe style on decorative pole with five arm luminaire support assembly.
  - Distribution: Type V, each head.
  - BUG: N/A
  - Lumens: 4,000 Min, each head.
  - Color: Federal Standard #27038
     Black
  - Light Center Length: 18'-0: to Top Head
  - Pole: Std. Dwg. # SDE-110
- g. Type T, 'Teardrop', Dual hung style on decorative pole with dual arm support assembly.
  - Distribution: Type III

BUG: U3 Max.

• Lumens: 6900, Min., each

Color: CCDC Blue

• Light Center Length: 20'-6"

• Pole: Std. Dwg. # SDE-111

# D. Center City Street Lighting Application Guidelines

1. Pedestrian street lights should be located approximately seventy-five (75) to ninety-five (95) feet apart; with three lights located on each 200-foot block frontage and four lights located on each 300-foot block frontage. Street lights should be triangulated on opposite sides of the street (Figure L2). When installed near street trees using four (4) foot by six (6) foot tree grates, the street lights are to be installed two (2) feet from the back of curb, measured from the back of curb to center of the pole base. When installed near street trees using five (5) foot by five (5) foot tree grates, the street lights are to be installed two and a half (2½) feet from the back of curb, measured from the back of curb to center of the pole base.

#### E. Street Light Conformance

 Design of street lighting systems shall conform to the Electrical Components of the "Greenbook" Standard Specifications for Public Works Construction; National Electric Code; Part 7 of the Standard Special Provisions for Street Lighting and Traffic Signal Systems for the City of San Diego, the "Whitebook"; Caltrans Standard

- Plans; applicable amendments; and this Manual.
- 2. All luminaires shall be LED.
- All luminaire designs shall minimize upward light were possible and shall conform to the 'U' ratings above.

#### F. Center City Luminaires and Poles

The street lighting program for downtown includes Type C - Standard,
 Type CE - Enhanced Standard, Type A Gateway, Type G - Gaslamp, Type AP Asian Pacific, and Type T - Tear-Drop
 Lights. These light standards are
 designed primarily for mid-block
 lighting. All signalized intersections shall
 utilize cobra head style luminaires on
 Type 15 standards per City
 requirements. Operation of the street
 light systems shall be network
 controlled unless otherwise noted.

#### G. Street Lighting Classifications:

1. **District Street Lights** (see Figure L-3):

DISTRICT	STREET LIGHT
Ballpark District,	TYPE C
Columbia, Core,	Standard Light
Cortez, East Village,	(SDE-108)
Marina	
Gaslamp Quarter	TYPE G
- 20	Gaslamp Light
	(SDE-106)
Horton Plaza	TYPE A
	Gateway Light
	(SDE-105)
Little Italy	TYPE CL
	Little Italy Light (SDE-
	110)

# 2. **Special Street Lights** (see Figure L-4):

STREET	STREET LIGHT
4th Ave. (Broadway	TYPE CE
to C St.), 5th Ave.	Enhanced Standard
(Broadway to C St.),	Light (SDE-109)
6th Ave. (Broadway	
to C St.), Kettner	
Blvd. (Ash St. to	
Laurel St.)	
3rd Ave. (Market St.	TYPE AP
to J St.), Island Ave.	Asian Pacific Light
(2nd Ave. to 6th	(SDE-107)
Ave.)	
C St.	Special per MTDB
(west of Park Blvd.)	(Induction Shoebox
	Lights)
J St.	TYPE A
(6th Ave. to 14th St.)	Gateway Light
	(SDE-105)

# 3. Gateway Street Lights (See Figure L-5):

STREET	STREET LIGHT
1 <sup>st</sup> Ave., 10 <sup>th</sup> Ave.	TYPE A
(south of Ash St.),	Gateway Light
11 <sup>th</sup> Ave., A St., Ash	(SDE-105)
St., F St. (east of 6 <sup>th</sup>	
Ave.), Front St., G St.	
(west of 4 <sup>th</sup> Ave. and	
east of 6 <sup>th</sup> Ave.),	
Grape St., Hawthorn	
St., Laurel St., Pacific	
Highway	

# 4. **Ceremonial Street Lights** (See Figure L-6):

STREET	STREET LIGHT
Broadway, Cedar St.	TYPE A
(west of 1 <sup>st</sup> Ave.),	Gateway Light
Imperial Ave.,	(SDE-105)
Market St. (west of	
4 <sup>th</sup> Ave. and east of	
6 <sup>th</sup> Ave.)	
Harbor Dr.	Under Port of San
	Diego jurisdiction
Park Blvd.	TYPE T
	Tear-Drop Light (SDE-
	110)

Table L-1: Street Lighting at Non-Signalized Intersections

Street A	B1	B2	В3
A1 Local residential Streets (any width) and	Local residential Streets (any width) and collector or higher streets up to and including 40 ft wide, curb to curb A1 to B1	Collector or higher	B3 Collector or higher streets greater than 52 ft wide, curb to curb  A1 to B3 (Same as A3 to B1)
collector or higher streets up to and including 40 ft wide, curb to curb	one of the corners of the wider street		
Collector or higher streets greater than 40 ft and up to and including 52 ft. wide, curb to curb	A2 to B1 Install (2) poles with a Type Z-INT luminaire on both of the corners of the wider street	A2 to B2 (Same as A2 to B1)	A2 to B3 (Same as A3 to B2)
A3 Collector or higher streets greater than 52 ft wide, curb to curb		A3 to B2 Install (4) poles with a Type Z-INT luminaire on each corner.	A3 to B3 (Same as A3 to B2)

#### Notes:

1. Refer to Sections "1. General" and "2. Intersection Street Lighting" for additional information.

# Reference

Type X	3500 Lumens, Min.	Type II	55W LPS
Type Y - INT	6500 Lumens, Min.	Type III	90W LPS
Type Y - MID	6500 Lumens, Min.	Type II	90W LPS
Type Z - INT	11000 Lumens, Min.	Type III	180W LPS
Type Z - MID	11000 Lumens, Min.	Type III	180W LPS

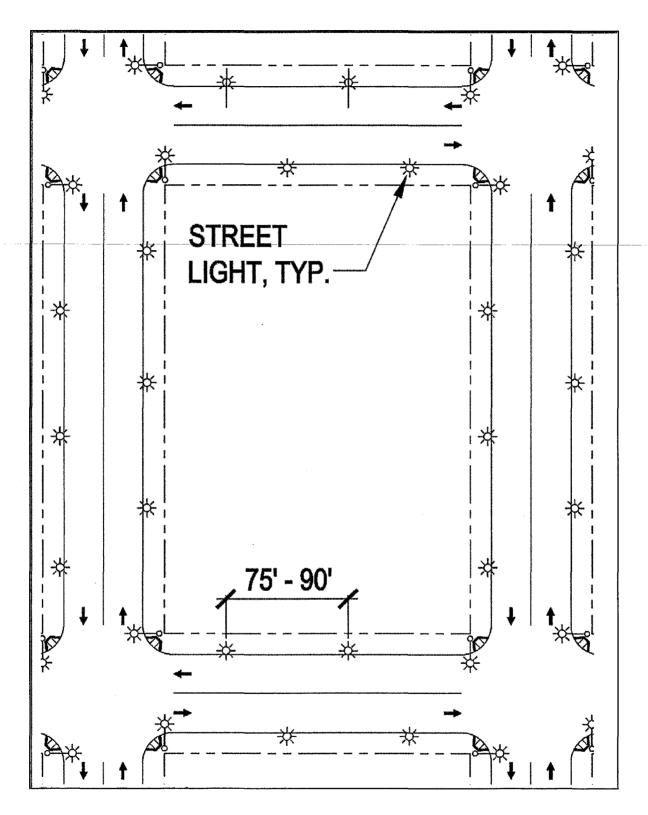


Figure L-2: Typical Center City Street Light Layout

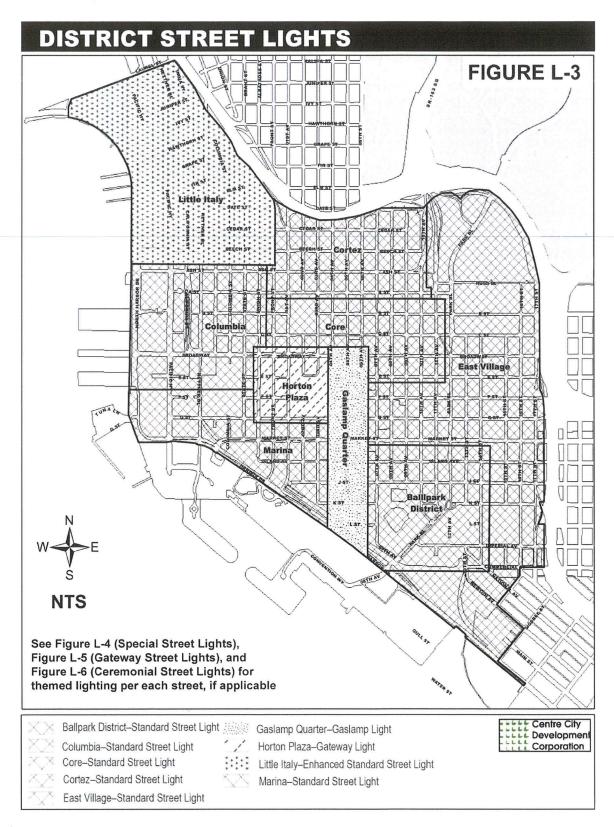


Figure L-3: District Street Lights

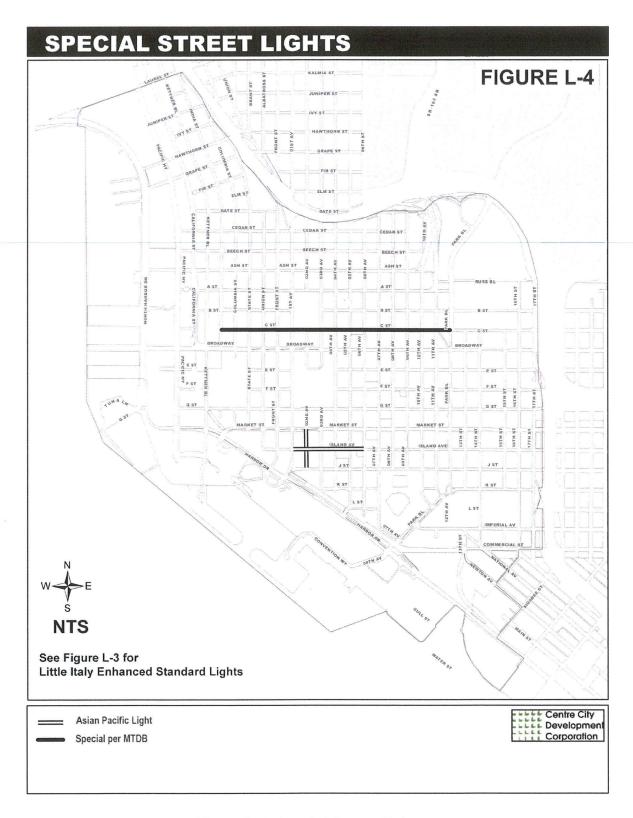


Figure L-4: Special Street Lights

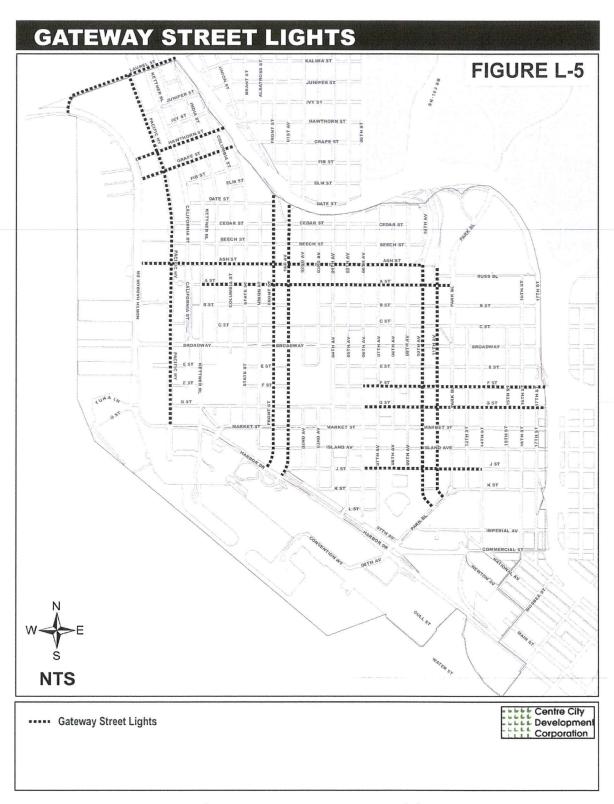


Figure L-5: Gateway Street Lights

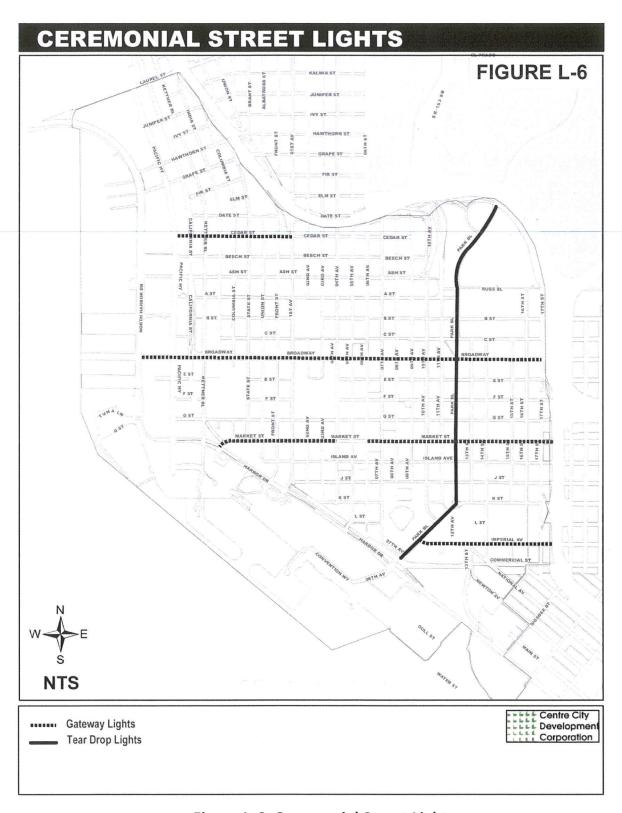


Figure L-6: Ceremonial Street Lights

LUMINA	<u></u>	CDCC	BAASHIFACTIDEDC	ADDITIONAL
Item *	SUBJECT / PRODUCT DESCRIPTION	SPEC. REF	MANUFACTURERS	ADDITIONAL REQUIREMENTS / NOTES
A1	LED Post Top Luminaire, Gateway, Streetside 4000K CCT, Symmetric Type V	700-6.7	General Electric Cat.#: EPAS-0-C5-A-40-G-A-A- XXXX-007EMH with ELWN0A5UG5-FU467 FINISH: CCDC BLUE IES File: quad fold PTLED14E18457-0-1-A001.ies	Provide each new luminaire with Item #AC7 Adaptive Contol Node
			Spring City Cat.#: ALMAGS-LE080/EVX/X2- 40-CN5-YPLF-FPA-M2-TR7P-XX- CU FINISH: CCDC BLUE IES File: AGS-LE080-X2-40-CN5- YPLL.IES	
A2	A2 LED Post Top Luminaire, Gateway, Sidewalk 4000K CCT, Asymmetric Type III	700.6.7	General Electric Cat.#: EPAS-0-C3-A-40-G A-A- XXXX-007EMH with ELWN0A5UG5-FU467 FINISH: CCDC BLUE IES File: 0_180_fold_PTLED14E18456-0- 1-A001.ies	Provide each new luminaire with Item #AC7 Adaptive Contol Node
			Spring City Cat.#: ALMAGS-LE080/EVX/X2- 40-CR3-YPLF-FPA-M2-TR7P-XX- CU FINISH: CCDC BLUE IES File: AGS-LE080-X2-40-CR3- YPLL.IES	
AP	LED Post Top Luminaire, Asian Pacific See SDE-106 for Dimensions, Details, and Finishes	700.6.7	Visco Cat.#: AP-C-107-40LED-UNV-40- 5-SS	Control is by button photocell on luminaire
			ELA Cat.#: AP-ELA-40LED-40K-V- DSR1	Control is by button photocell on luminaire

С	LED Post Top Luminaire, Standard 4000K CCT, Type V  *Note: Type C is used on Type P-C and P-CE Poles	700-6.7	General Electric Cat.#: EPAS-0-C5-A-40-G-7-A- XXXX-007EMH with ELWN0A5UG5-FU467 FINISH: CCDC BLUE IES File: quad fold PTLED14E18457-0-1-A001.ies	Provide each new luminaire with Item #AC7 Adaptive Contol Node
			Spring City Cat.#: ALMAGS-LE080/EVX/X2- 40-CN5-YPLF-FPA-M2-TR7P-XX- CU FINISH: CCDC BLUE IES File: AGS-LE080-X2-40-CN5- YPLL.IES	§
CL	LED Post Top Luminaire, Little Italy 4000K CCT, Type V	700-6.7	General Electric Cat.#: EPAS-0-C5-A-40-G-7-A- XXXX-007EMH with ELWN0A5UG5-FU467 FINISH: RAL#6005 DARK GREEN IES File:quad fold PTLED14E18457-0-1-A001.ies	Provide each new luminaire with Item #AC7 Adaptive Contol Node
			Spring City Cat.#: ALMAGS-LE080/EVX/X2- 40-CN5-YPLF-FPA-M2-TR7P-XX- CU FINISH: RAL#6005 DARK GREEN IES File: AGS-LE080-X2-40-CN5- YPLL.IES	#AC7 Adaptive Contol Node

G	LED Post Top Luminaire,	700-6.7	Visco	
	Gaslamp, Five head assembly		Arm Assembly:	
			Cat.#: VI-CR3-EMN-18-30LED-	
			FEDERAL STANDARD COLOR	
			27038 "BLACK"	
			Luminaire:	
			LED LAMP, 30W, 4000K, 4500	
			Lumens, E27 Mogul base, 120V	
			ELA	
			Arm Assembly:	
			Cat.#: GL-ELA-30LED-40K-V-	
			DSR1-FEDERAL STANDARD	
			COLOR 27038 "BLACK"	
			Luminaire:	
			Cat.#: ELA L2800-18/CR3E 5-	
			WAY POST MOUNT	
			LED LAMP, 30W, 4000K, 4500	
			Lumens, E27 Mogul base, 120V	
T	LED Tear Drop Luminaire,	700-6.7	Spring City	Provide each new
'	4000K CCT, Type III	700-0.7	Cat.#: ALMCLU-LE080/EVX/X2-	luminaire with Item
	4000K CCT, Type III		40-CR3-GR14-TR7P-XX-CU-	#AC7 Adaptive Contol
			GLOSS BLACK	Node
·			WITH ALAVBC-2.00FNPT-	14000
			1.25MNPT ADAPTOR	
			IES File: CLU-LE080-X2-40-CR3-	
			GR14.IES	
}			Sun Valley	Provide each new
	·		Cat.#: LCLS-D-APA-III-80LED-	luminaire with Item
			NW-UNV-2-180-GLOSS BLACK-	#AC7 Adaptive Contol
			GR	Node
			IES File: LCLS-APA-3-80LED-	
			NW.IES	e e je e e e
L		1	1.	

Х4	LED Cobra Head Luminaire, Type X, 4000K CCT	700.6.5	General Electric Cat.#: ERS1-0-23B1-7-40-A- Gray-D IES File: ERS1_23B1740-120- 277V_tcm201-95048.IES	Provide each new luminaire with Item #AC7 Adaptive Contol Node
			LED Roadway Ltg. Cat.#: NXT-24S-5-7-2LB-5-GY-3-UL-X-2H IES File: NXT-24S-525mA-2LB-4000K.IES	Provide each new luminaire with Item #AC7 Adaptive Contol Node
Х3	LED Cobra Head Luminaire, Type X, 3000K CCT	700.6.5	General Electric Cat.#: ERS1-0-A3B1-5-30-A- Gray-D IES File: ERS1_A3B1530-120- 277V_tcm201-94909.IES	Provide each new luminaire with Item #AC7 Adaptive Contol Node
			LED Roadway Ltg. Cat.#: NXT-24S-5-7-2LB-5-GY- 3000K-UL-X-2H IES File: NXT-24S-525mA-2LB- 3000K.IES	Provide each new Iuminaire with Item #AC7 Adaptive Contol Node
YI4	LED Cobra Head Luminaire, Type Y-INT, 4000K CCT	209.6.5	General Electric Cat.#: ERS1-0-B3D1-7-40-A- Gray-D IES File: ERS1_B3D1740-120- 277V_tcm201-95058.IES	Provide each new luminaire with Item #AC7 Adaptive Contol Node
			LED Roadway Ltg. Cat.#: NXT-36S-5-7-3LB-7-GY-3- UL-X-2H IES File: NXT-36S-700mA-2LB- 4000K.IES	Provide each new luminaire with Item #AC7 Adaptive Contol Node

YI3	LED Cobra Head Luminaires, Type Y-INT, 3000K CCT	209.6.5	General Electric Cat.#: ERS1-0-C3D1-7-30-A- Gray-D IES File: ERS1_C3D1730-120- 277V_tcm201-95039.IES	Provide each new luminaire with Item #AC7 Adaptive Contol Node
			LED Roadway Ltg. Cat.#: NXT-36S-5-7-3LB-7-GY- 3000K-UL-X-2H IES File: NXT-36S-2LB-700mA- 3000K.IES	Provide each new luminaire with Item #AC7 Adaptive Contol Node
Z14	LED Cobra Head Luminaire, Type Z-INT, 4000K CCT	700.6.5	General Electric Cat.#: ERS1-0-11-D1-40-A- GRAY-L IES File: ERS1_11D1X40tcm201- 110991.ies	Provide each new luminaire with Item #AC7 Adaptive Contol Node
	·		LED Roadway Ltg. Cat.#: NXT-60M-5-7-3LB-7-GY- 3-UL-X-2H IES File: NXT-60M-700mA-3LB- 4000K.IES	#AC7 Adaptive Contol
ZI3	LED Cobra Head Luminaire, Type Z-INT, 3000K CCT	700.6.5	General Electric Cat.#: ERS1-0-13-D1-30-A- GRAY-L IES File: ERS1_13D1X30tcm201- 111004.ies	Provide each new luminaire with Item #AC7 Adaptive Contol Node
			LED Roadway Ltg. Cat.#: NXT-60M-5-7-3LB-7-GY-3000K-UL-X-2H IES File: NXT-60M-700mA-3LB-3000K.IES	Provide each new luminaire with Item #AC7 Adaptive Contol Node

YM4	LED Cobra Head Luminaire, Type Y-MID, 4000K CCT	700.6.5	General Electric Cat.#: ERS1-0-B3B1-7-40-A- Gray-D IES File: ERS1_B3B1740-120- 277V_tcm201-95050.IES	Provide each new luminaire with Item #AC7 Adaptive Contol Node
			LED Roadway Ltg. Cat.#: NXT-36S-5-7-2LB-7-GY-3- UL-X-2H IES File: NXT-36S-700mA-2LB- 4000K.IES	Provide each new luminaire with Item #AC7 Adaptive Contol Node
· YM3	LED Cobra Head Luminaires, Type Y-MID, 3000K CCT	700.6.5	General Electric Cat.#: ERS1-0-C3B1-7-30-A- Gray-D IES File: ERS1_C3B1730-120- 277V_tcm201-95031.IES	Provide each new luminaire with Item #AC7 Adaptive Contol Node
			LED Roadway Ltg. Cat.#: NXT-36S-5-7-2LB-7-GY- 3000K-UL-X-2H IES File: NXT-36S-2LB-700mA- 3000K.IES	Provide each new luminaire with Item #AC7 Adaptive Contol Node
ZM4	LED Cobra Head Luminaire, Type Z-MID, 4000K CCT	700.6.5	General Electric Cat.#: ERS1-0-11-C1-40-A- GRAY-L IES File: ERS1_11C1X40tcm201- 110989.ies	Provide each new luminaire with Item #AC7 Adaptive Contol Node
			3-UL-X-2H	Provide each new luminaire with Item #AC7 Adaptive Contol Node

ZM3	LED Cobra Head Luminaire,	700.6.5	General Electric	Provide each new
	Type Z-MID,		Cat.#: ERS1-0-13-C1-30-A-	luminaire with Item
	3000К ССТ		GRAY-L	#AC7 Adaptive Contol
			IES File:	Node
			ERS1_13C1X30tcm201-	
			111002.ies	
			LED Roadway Ltg.	Provide each new
			Cat.#: NXT-60M-5-7-3LB-7-GY-	luminaire with Item
			3000K-UL-X-2H	#AC7 Adaptive Contol
			IES File: NXT-60M-700mA-3LB-	Node
			3000K.IES	

7	IRE ACCESSORIES	·		
AC7	Adaptive Controls Node, ANSI 5 Pin (For use on luminaires equiped with ANSI Standard C136.41-2013, 7 pin socket)	700.6.6	General Electric Cat.#: ELWN0A5UG5-FU467	Proprietary item due to compatibility with City wide contol system.
			Mfr #2: No others allowed.	
AC5	Adaptive Controls Node, GE 5 Pin (For use on Luminaires equiped with GE propietary 5 pin socket.)	700.6.6	General Electric Cat.#: ELWN0DXUG5-SD	Proprietary item due to compatibility with City wide contol system.
			Mfr #2: No others allowed.	
HSSX	House Side Shield for Type X	700.6.5	General Electric Cat.#: ELSHS-ERS1 LED Roadway Lighting Cat.#:	
			NXT-S-HSS	
HSSY	House Side Shield for Type Y	700.6.5	General Electric Cat.#: ELSHS-ERS1 LED Roadway Lighting Cat.#: NXT-S-HSS	
HSSZ	House Side Shield for Type Z	700.6.5	General Electric Cat.#: ELSHS-ERS1 LED Roadway Lighting Cat.#: NXT-M-HSS	

Item *	SUBJECT / PRODUCT DESCRIPTION	SPEC. REF	MANUFACTURERS	ADDITIONAL REQUIREMENTS / NOTES
P-A	Streetscape Pole with Type A1 & A2 Luminaires, Gateway, See SDE-104	700.6.8.1	Visco Cat.#: VI-C-C2-F/16'-3" TENONS-CCDC BLUE-AB WITH 18C FINIAL, C2 ARM ASSEMBLY, 17C SUPPORT, 20C SPIRE, 15C AND 14C SUPPORT, 13C POLE COLLAR, 12C/F BASE	All cast iron and steel light pole parts are to be factory powder coated "CCDC Blue"
			COLLAR, 11C UPPER BASE, 10C LOWER BASE  ELA  Cat.#: ELA-16-9-TA-GLSD  WITH 18C FINIAL, C2 ARM  ASSEMBLY, 17C SUPPORT, 20C  SPIRE, 15C AND 14C SUPPORT, 13C POLE COLLAR, 12C/F BASE  COLLAR, 11C UPPER BASE, 10C  LOWER BASE	All cast iron and steel light pole parts are to be factory powder coated "CCDC Blue"
P-AP	Streetscape Pole with Type AP Luminaire, Asian Pacific See SDE-105	700.6.8	Visco Cat.#: VI-A-F/14'-3" TENON- TIGER DRYLAC RAL#6028 WITH 12A/F BASE COLLAR, 11A UPPER BASE, 10A LOWER BASE	All cast iron and stee light pole parts are to be factory powder coated "RAL#6028"
			ELA Cat.#: ELA-14-534-PT-GLSD TIGER DRYLAC RAL#6028 WITH 12A/F BASE COLLAR, 11A UPPER BASE, 10A LOWER BASE	All cast iron and stee light pole parts are to be factory powder coated "RAL#6028"

P-C	Streetscape Pole with Type C Luminaire, See SDE-107	700.6.8	Visco Cat.#: VI-A-F/10'-3" TENON- CCDC BLUE-AB WITH 12A/F BASE COLLAR, 11A UPPER BASE, 10A LOWER BASE ELA	All cast iron and steel
			Cat.#: ELA-10-534-PT-GLSD- CCDC BLUE-AB WITH 12A/F BASE COLLAR, 11A UPPER BASE, 10A LOWER BASE	light pole parts are to be factory powder coated "CCDC Blue"
P-CE	Streetscape Enhanced Pole, with Type C Luminaire See SDE-108	700.6.8	Visco Cat.#: VI-C-F/12'-3" TENON- CCDC BLUE-AB WITH 15C SUPPORT, 14C SUPPORT, 13C POLE COLLAR, 12C/F BASE COLLAR, 11C UPPER BASE, 10C LOWER BASE	All cast iron and steel light pole parts are to be factory powder coated "CCDC Blue"
			ELA Cat.#: ELA-12-9-PT-GLSD-CCDC BLUE-AB WITH 15C SUPPORT, 14C SUPPORT, 13C POLE COLLAR, 12C/F BASE COLLAR, 11C UPPER BASE, 10C LOWER BASE	All cast iron and steel light pole parts are to be factory powder coated "CCDC Blue"

P-CL	Streetscape Pole with Type CL Luminaire See SDE-108	700.6.8.5	Visco Cat.#: VI-C-F/12'-3" TENON- TIGER DRYLAC RAL #6005 DARK GREEN WITH 15C SUPPORT, 14C SUPPORT, 13C POLE COLLAR, 12C/F BASE COLLAR, 11C UPPER BASE, 10C LOWER BASE	All cast iron and steel light pole parts are to be factory powder coated "DARK GREEN"
			ELA Cat.#: ELA-12-9-PT-GLSD-TIGER DRYLAC RAL #6005 DARK GREEN WITH 15C SUPPORT, 14C SUPPORT, 13C POLE COLLAR, 12C/F BASE COLLAR, 11C UPPER BASE, 10C LOWER BASE	All cast iron and steel light pole parts are to be factory powder coated "DARK GREEN"
P-G	Streetscape Pole with Type G Luminaire, Gaslamp See SDE-109	700.6.8	Visco Cat.#: VI-A-CR3EMN-F/14'-18"- 55QL-BLACK -AB WITH CR3EMN ARM ASSEMBLY, 12A/F BASE COLLAR, 11A UPPER BASE, 10A LOWER BASE ELA Cat.#: ELA-14-534-PT-GLSD WITH CR3EMN ARM ASSEMBLY, 12A/F BASE COLLAR, 11A UPPER BASE, 10A LOWER BASE	All cast iron and steel light pole parts are to be factory powder coated "FEDERAL
P-T	Streetscape Pole, with type T Luminaires, Teardrop See SDE-110	700.6.8	Visco Cat.#: VI-WB21-OCT/22'-4" TENON-AB  ELA Cat.#: ELA-22-834-PT-PKSD	All cast iron and steel light pole parts are to be factory powder coated "CCDC Blue"  All cast iron and steel light pole parts are to be factory powder coated "CCDC Blue"

LUMINAIRE APPLICATION CODES	
STREET TYPE CODE:	
X	Alley
Υ	Street Width up to 52'
Z	Street Width over 52'
LOCATION CODE:	
l	Intersection & Cul-de-sac
M	Mid-Block
COLOR CODE:	
3	3000 Kelvin
4	4000 Kelvin
LUMINAIRE ACCESSORY CODES	
AC	Adaptive Control Node
HSS	House Side Shield
POLE APPLICATION CODES	
P-C	Street Light Pole with Type Designation