## NOTES:

ALL INFORMATION IN THESE TABLES ARE INTENDED TO PRODUCE A LIGHTING DESIGN WITH LUMINANCE LEVELS AND UNIFORMITY FOR STRAIGHT AND CURVED ROADWAYS, AND ILLUMINANCE LEVELS AND UNIFORMITY FOR INTERSECTIONS. LIGHT LEVELS AND UNIFORMITY VALUES MEET OR EXCEED THOSE IN THE I.E.S., LIGHTING HANDBOOK, RP-8-21. INSTALLATION OF ADDITIONAL LIGHTS MAY BE NECESSARY TO MEET THE INTENT OF THIS STANDARD.

- 1. AVERAGE MAINTAINED LUMINANCE IS MEASURED IN CANDELA PER SQUARE METER. AVERAGE MAINTAINED ILLUMINANCE IS MEASURED IN FOOTCANDLES.
- 2. AT SIGNALIZED INTERSECTIONS, THE AVERAGE MAINTAINED ILLUMINANCE SHALL BE AS NOTED IN THE ILLUMINATION FOR INTERSECTIONS TABLE ON STANDARD PLAN T21-01C. FOR INTERSECTIONS WITH ONLY ONE ROADWAY LIT, THE AVERAGE MAINTAINED ILLUMINANCE SHALL BE 1.5 TIMES THE HIGHEST LIT APPROACH.
- 3. LUMINANCE UNIFORMITY: AVERAGE UNIFORMITY RATIO IS THE RATIO OF THE AVERAGE TO MINIMUM LUMINANCE. MAXIMUM UNIFORMITY IS THE RATIO OF THE MAXIMUM TO MINIMUM LUMINANCE. VALUES OUTSIDE THE ROADWAY SHALL NOT BE INCLUDED IN THE RATIO.
- 4. THE LATERAL LOCATION OF THE LIGHT STANDARD FOUNDATION SHALL BE A MINIMUM OF 2 FT. FROM THE FACE OF CURB TO THE FACE OF THE LIGHT POLE. SEE THE LIGHTING STANDARD PLANS FOR ADDITIONAL INFORMATION. THE LATERAL LOCATION OF THE CONDUIT AND JUNCTION BOXES SHALL BE ADJACENT TO THE BACK OF CURB, EXCEPT WHEN AN ALTERNATE LOCATION BETWEEN THE CURB AND SIDEWALK IS SHOWN ON THE PLANS. WHERE A PLANTING STRIP IS NOT PROVIDED AND THE SIDEWALK IS ADJACENT TO THE BACK OF CURB, THE LIGHT STANDARD SHALL NOT BE LOCATED MORE THAN 8 FT. FROM THE BACK OF CURB. WHERE THE SIDEWALK IS ATTACHED TO THE BACK OF CURB, THE CONDUITS AND JUNCTION BOXES SHALL BE LOCATED BEHIND THE SIDEWALK, BUT NOT MORE THAN 8 FT. FROM THE BACK OF CURB.
- 5. LIGHTING PLANS WILL REQUIRE APPROVAL AND POSSIBLE ADJUSTMENT TO MEET THE COV LIGHTING OBJECTIVES AND I.E.S. STANDARDS.
- 6. LIGHTING STANDARDS TYPE D, TYPE O, TYPE P, AND TYPE R SHALL ONLY BE USED IN THE DESIGNATED LIGHTING DISTRICTS. LIGHT STANDARDS LISTED ARE DEFINED IN MORE DETAIL IN THE "STANDARDS AND SPECIFICATIONS FOR TRAFFIC CONTROL DEVICES AND LIGHTING" DOCUMENT AND THE CITY'S APPROVED PRODUCTS LIST. STANDARD DETAILS FOR THE LIGHT STANDARDS ARE AVAILABLE.
- 7. ALL LIGHTING FIXTURES SHALL BE LIGHT EMITTING DIODE (LED) UNLESS OTHERWISE DIRECTED BY THE CITY. POST TOP FIXTURES IN RESIDENTIAL LAND USE AREAS SHALL BE I.E.S. TYPE V DISTRIBUTION. SEE THE "STANDARDS AND SPECIFICATIONS FOR TRAFFIC.
- 8. THE MOUNTING HEIGHT OF THE FIXTURE IS MEASURED FROM THE ROADWAY SURFACE TO THE CENTER OF THE LIGHT SOURCE. 6 FT. ARMS ARE USED IN ROADWAYS WITH PLANTER STRIPS, 10 FT. ARMS IN AREAS WITH CURB TIGHT SIDEWALK, OR AS DIRECTED BY THE CITY'S TRAFFIC ENGINEER.
- 9. ALTERNATIVE LIGHTING LAYOUTS MAY BE SUBMITTED FOR REVIEW. WHERE LIGHTING IS REQUIRED ON BOTH SIDES, DESIGNS SHALL BE "OPPOSITE LIGHTING" ON MAJOR ROADWAYS GREATER THAN 48 FEET IN WIDTH. THE USE OF STAGGERED LIGHTING SHALL ONLY BE USED WHERE "OPPOSITE LIGHTING" IS NOT PRACTICAL. LIGHTING LAYOUTS ON LOCAL RESIDENTIAL STREETS WITHIN A SUBDIVISION MAY VARY FROM SIDE TO SIDE.
- 10. LOW, MEDIUM, AND HIGH PEDESTRIAN CONFLICT AREAS ARE AS DEFINED IN THE ANSI/IES RP-8-21. THE PEDESTRIAN CONFLICT DESIGNATION FOR AN AREA USED FOR A LIGHTING SYSTEM DESIGN, SHALL BE PER THE CITY'S TRAFFIC ENGINEER'S DETERMINATION.



## STREET LIGHTING REQUIREMENTS NOTES

CITY OF VANCOUVER DEPARTMENT OF PUBLIC WORKS TRANSPORTATION DIVISION

4	Æ.	3/24
REVISION	APPROVED BY	APPROVAL DATE
CDC	H	1/15
DRAWN BY	APPROVED BY	APPROVAL DATE

