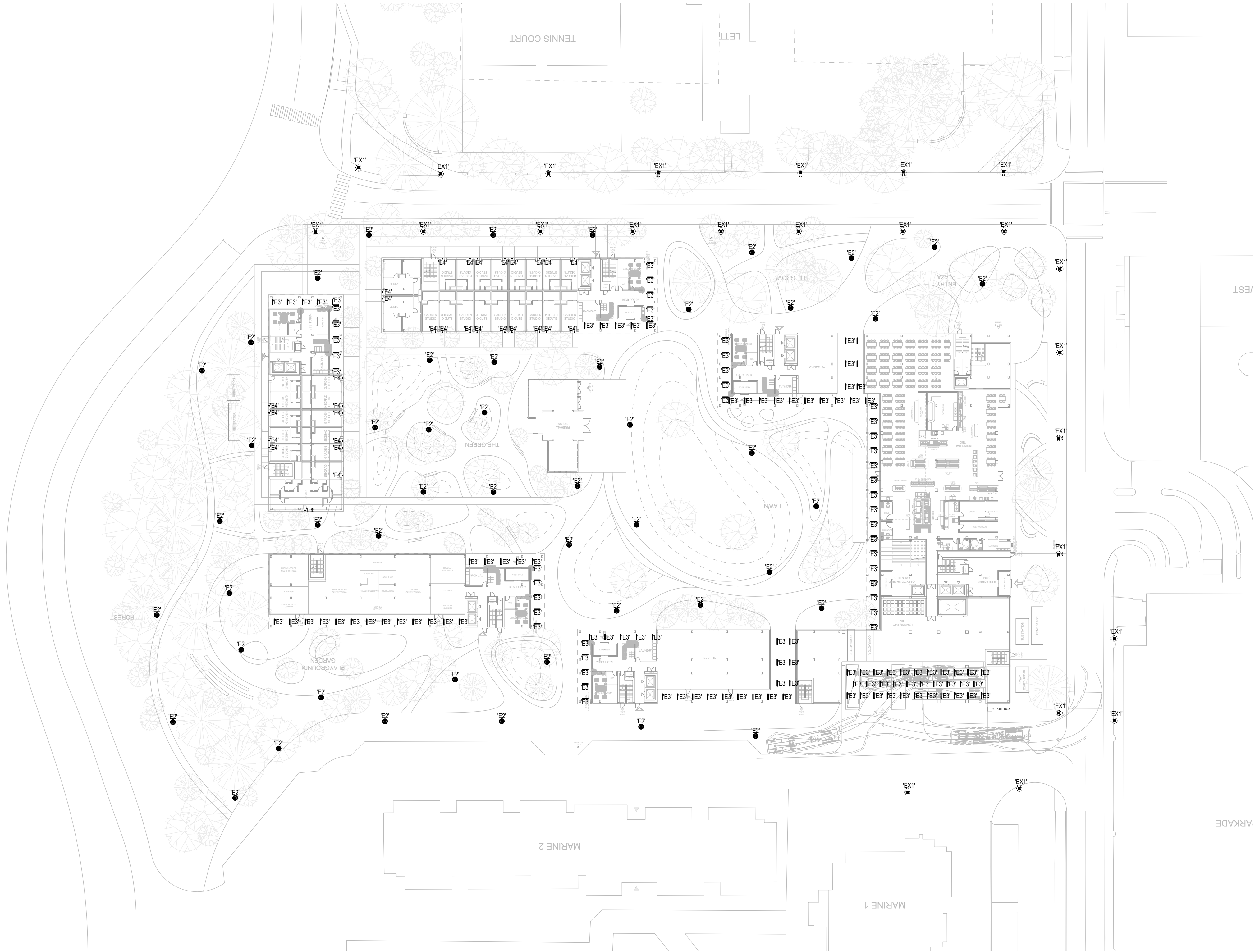
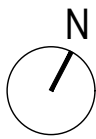
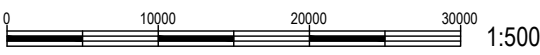




1 SITE LIGHTING, POWER & LOW TENSION PLAN
E002



2	ISSUED FOR DP	2025.04.17
1	ISSUED FOR SCHEMATIC DESIGN	2025.04.17
ISSUE	DESCRIPTION	DATE

OWNER
UNIVERSITY OF BRITISH COLUMBIA
3313 Shrum Lane Suite 200
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T 604 731 3103
UBC PROPERTIES TRUST

DESIGN ARCHITECT
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141 Flushing Ave, Bldg 77, Fl 12, Ste 07
Brooklyn, NY 11205
T +1 646 843 9770

ARCHITECT OF RECORD
RYDER ARCHITECTURE INC.
2330 - 1075 West Georgia Street
Vancouver, BC
T 604 260 7400

CONSULTANTS
AES ENGINEERING LTD
300 - 200 Granville Street
Vancouver, BC V6C 1S4
APLIN MARTIN
201 - 12448 82 Avenue
Surrey, BC V3W 3E9
APEX ELEVATOR INC.
4664 Lougheed Hwy, #101
Burnaby, BC V5C 5T5
BUSH, BOHLMAN & PARTNERS LLP
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Vancouver, BC V6B 2K1
DONALD LUXTON & ASSC. INC.
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Vancouver, BC V6B 2V2
ENTUTIVE
200 - 980 Howe Street
Vancouver, BC V6Z 0C8
GHL CONSULTANTS LTD.
800-700 West Pender Street
Vancouver, BC V6C 1G8
HAPA COLLABORATIVE
402 - 134 Abbott Street
Vancouver, BC V6B 2K4
INTROBA
190 - 200 Granville Street
Vancouver, BC V6C 1S4
PORTER KHOUW CONSULTING, INC.
P.O. Box 4028
Crofton, MD 21114-1410
RELOAD SUSTAINABLE DESIGN INC.
423-119 West Pender St
Vancouver, BC V6B 1S5

UBC LOWER MALL PHASE 1
1935 Lower Mall
Vancouver, BC
V6T 1Z2

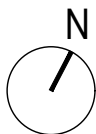
DRAWING TITLE

SITE LIGHTING, POWER & LOW TENSION PLAN

PROJECT NUMBER 0224.0753
SCALE AS INDICATED
SHEET SIZE -

DRAWING NO. **E002**

DATE 2025.04.08
REVIEWED BY EC
SHEET 3 OF 7



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UBC LOWER MALL PHASE 1

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V6T 1Z2

DRAWING TITLE

SITE LIGHTING PHOTOMETRIC CALCULATION PLAN

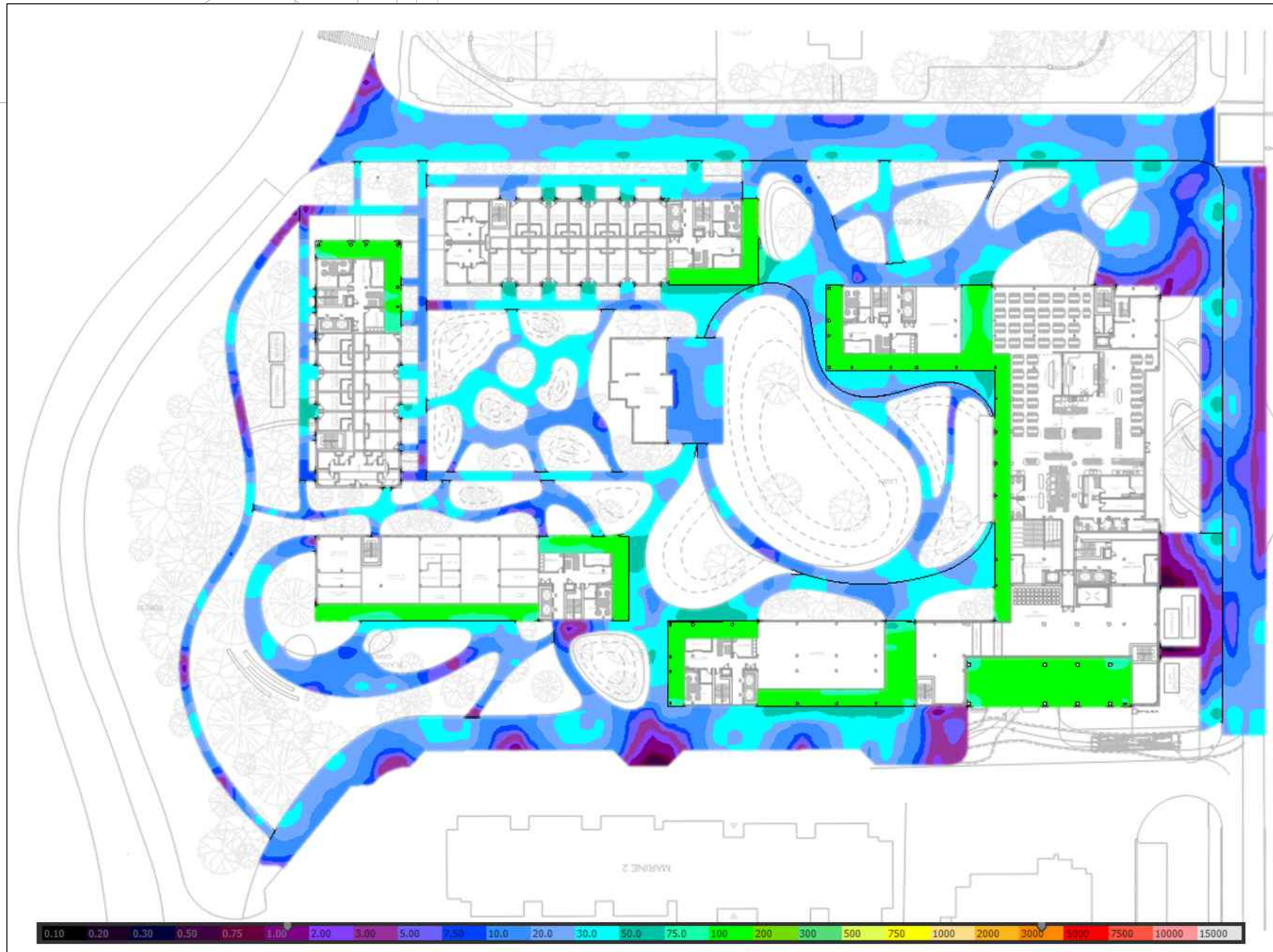
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DRAWING NO. **E003**

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SHEET 4 OF 7

Luminaire list							
Type	Manufacturer	Article name	Mounting	Luminous flux	Maintenance factor	Connected load	Quantity
EX1	Lumenpulse	Pure 100	Pole	5709 lm	0.80	55 W	24
E2	SELUX	Saturn Cutoff 2	Pole	6821 lm	0.80	62 W	48
E3	a.light	4' linear ALD3ST	Recessed Ceiling	2271 lm	0.80	20 W	137
E4	Philips	Slim square downlight	Surface mounted Ceiling	653 lm	0.80	9.1 W	30

Name	Parameter	Min	Max	Average	Min/average	Min/max
Upper Road	Perpendicular illuminance	1.66 lx	59.8 lx	25.6 lx	0.065	0.028
Side Road	Perpendicular illuminance	2.86 lx	40.4 lx	15.0 lx	0.19	0.071
Covered passways	Perpendicular illuminance	68.8 lx	170 lx	103.4 lx	0.66	0.40
Loading bay	Perpendicular illuminance	73.3 lx	157 lx	128 lx	0.57	0.47
Sidewalks	Perpendicular illuminance	1.45 lx	89.1 lx	24.3 lx	0.06	0.02



LUMINAIRE SCHEDULE													
TYPE	DESCRIPTION	LOCATION	PRODUCT	MOUNTING	LED PERFORMANCE				CONTROL	VOLTAGE	BUG RATING	REMARKS	NOTES
					WATTS (W)	LUMENS	CCT (K)	CRI					
EX1	EXISTING SITE POLE	ROADWAYS	LUMENPULSE PURE 100 PUR100-120-CSL-S60-30K-CRI 80-3-BK-DIM-PU1-S1E	POLE/SURFACE FLOOR	55	6000	3000	80	0-10V	120	B1-U0-G1		
E2	12' HIGH POLE WITH 360 LIGHTING DISTRIBUTION	LANDSCAPE	SELUX SATURN CUTOFF 2 LED SAC2L-R5R-1-5G700-30-12-BK-120	POLE-SURFACE FLOOR	62	6537	3000	80	0-10V	120	B2-U0-G2		
E3	4' LED LINEAR, WET LOCATION	LANDSCAPE COVERED AREAS	A LIGHT ACCOLADE D5 RECESSED D5-4'-LS-30-U-HE-XP-B-D-PF-Q	RECESSED	19.2	2300	3000	80	0-10V	120-277	B1-U0-G1		
E4	4" SQUARE DOWNLIGHT	GARDEN STUDIO ENTRANCE	LIGHTOLIER S4S-8-30K-7-BK-Z10U	SURFACE	10	650	3000	80	0-10V	120	B0-U0-G0		
EX			ELECTRICAL DESIGNER TO SPECIFY										
EM			ELECTRICAL DESIGNER TO SPECIFY										
GENERAL NOTES													
A. DUE TO CONSTANT CHANGES IN CATALOGUE NUMBERS, ALL NUMBERS INDICATED MUST BE VERIFIED WITH THE MANUFACTURER PRIOR TO ORDERING.													
B. ALL LUMINAIRE FINISHES TO BE APPROVED BY ARCHITECT PRIOR TO ORDERING.													
C. TYPE OF CONSTRUCTION FOR ALL CEILINGS TO BE COORDINATED WITH ARCHITECTURAL DRAWNGS PRIOR TO ORDERING MOUNTING KITS. CONTRACTOR TO OBTAIN A SET OF IFC ARCHITECTURAL DRAWNGS AND COORDINATE MOUNTING WITH CEILING TYPES SHOWN. NO EXTRAS WILL BE ALLOWED FOR RE-ORDERING OF LUMINAIRES OR MOUNTING KITS TO MATCH CEILING TYPES SHOWN ON ARCHITECTURAL PLANS.													
D. ELECTRICAL CONTRACTOR TO ALLOW A MINIMUM 2 WEEKS FOR INITIAL REVIEW OF ENTIRE LIGHTING SHOP DRAWING PACKAGE. NO DELAY CLAIMS WILL BE ALLOWED FOR ANY SUBSEQUENT REVIEWTIME REQUIRED DUE TO INCORRECT SHOP DRAWNGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE LUMINAIRES ARE DELIVERED IN A TIMELY MANNER TO THE SITE. NO EXTRAS WILL BE ALLOWED FOR SUBSTITUTIONS OR RUSH CHARGES REQUIRED TO MEET PROJECT SCHEDULE AND MUST BE ALLOWED FOR IN TENDER PRICE.													
E. ELETRICAL CONTRACTOR TO COORDINATE MOUNTING HEIGHT OF ALL LUMINAIRES WITH ARCHITECT PRIOR TO ROUGH-IN. COORDINATE SUSPENSION HEIGHT OF ALL SUSPENDED LUMINAIRES WITH ARCHITECT PRIOR TO INSTALLATION.													
F. ALL JUNCTION BOXES FOR SURFACE MOUNT LUMINAIRES SHALL NOT BE WIDER THAN THE LUMINAIRE MOUNTING PLATE.													
G. ALL LED LUMINAIRES ARE TO BE INCLUDED WITH CONSTANT CURRENT DRIVERS UNLESS OTHERWISE SPECIFIED.													
H. LIGHTING CONTROL SYSTEM TO BE COMMISSIONED ON SITE AFTER INSTALL. CONTRACTOR TO ENSURE THAT ALLOWANCE IS MADE FOR ADJUSTING AND COMMISSIONING OF ALL CONTROLS AS REQUIRED.													
I. ALL LUMINAIRES CONTROLLED BY OCCUPANCY/VACANCY SENSORS TO AUTOMATICALLY TURN OFF AFTER 20 MINUTES OF VACANCY UNLESS OTHERWISE NOTED.													
J. EMERGENCY LIGHTING SHALL BE CONTROLLED WITH THE SAME SWITCHING AS THE NORMAL LIGHTING. AT LOSS OF NORMAL POWER, EMERGENCY LIGHTING SHALL TURN ON AT 100% OUTPUT													
K. DEVIATIONS FROM THE SPECIFIED LUMINAIRE INDICATED IN THE LUMINAIRE SCHEDULE AND CONTROLS PACKAGE WILL REQUIRE ASHRAE 90.1 COMPLIANCE FORMS AND THE LIGHTING DESIGN TO BE REVISED AND RESUBMITTED TO THE AUTHORITY HAVING JURISDICTION BY THE ELECTRICAL ENGINEER OF RECORD. IF A REQUEST TO APPROVE AN ALTERNATE PACKAGE IS MADE AT DURING TENDER/BIDDING, THE COST OF REVISING AND RESUBMITTING THE FORMS AND DRAWINGS WILL BE AT THE EXPENSE OF THE LIGHTING SALES AGENCY, AND SHALL BE PAID UP-FRONT TO THE ELECTRICAL CONSULTANT, PRIOR TO ISSUING AN ADDENDUM. SHOULD THIS PROCEDURE NOT BE FOLLOWED, ALTERNATE PRODUCTS WILL BE REJECTED. ELECTRICAL CONTRACTORS WILL NOT BE ALLOWED ADDITIONAL COMPENSATION FOR REJECTED ALTERNATES. ALL APPROVED ALTERNATES WILL BE CONFIRMED BY ADDENDUM. ADDITIONAL FEES SHALL BE AS FOLLOWS: \$5,000 PER SUBMITTED ALTERNATE TO ENSURE ENERGY AND CONTROLS REQUIREMENT; PLUS \$8000 TO COMPLETE ALL COMPLIANCE FORMS, AND REVISE ALL ASSOCIATED DRAWINGS.													
L. ANY THIRD-PARTY LIGHTING PROCUREMENT SERVICES WILL INCUR AN ADDITIONAL \$3,000 FEE FOR REVIEW OF SPECIFIED LIGHTING PACKAGES AFTER LIGHTING HAS BEEN ISSUED FOR TENDER. SUBSTITUTIONS OR ALTERNATE LIGHTING PACKAGES FROM ANY THIRD-PARTY LIGHTING PROCUREMENT SERVICES WILL INCUR AN ADDITIONAL FEE PER ITEM K FOR REVIEW AND APPROVAL AFTER LIGHTING HAS BEEN ISSUED FOR TENDER. ANY LIGHTING RE-DESIGN AS A RESULT OF SUBSTITUTIONS OR ALTERNATE LIGHTING PACKAGES FROM ANY THIRD-PARTY LIGHTING PROCUREMENT SERVICES AFTER LIGHTING HAS BEEN ISSUED FOR TENDER WILL BE SUBJECT TO AN ADDITIONAL FEE BETWEEN AES AND CLIENT AS PER CONTRACT "SERVICES AT ADDITIONAL COST".													
M. ANY LIGHTING SUBSTITUTIONS OR ALTERNATE LIGHTING PACKAGES PROVIDED BY THE AWARDED ELECTRICAL CONTRACTOR TO THE OWNER OR PRIME CONSULTANT WITHOUT APPROVAL FROM AES ENGINEERING WILL BE SUBJECT TO AN ADDITIONAL FEE AS PER ITEM K.													

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DRAWING TITLE

LUMINAIRE SCHEDULE

PROJECT NUMBER	0224.0753
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SHEET	5 OF 7