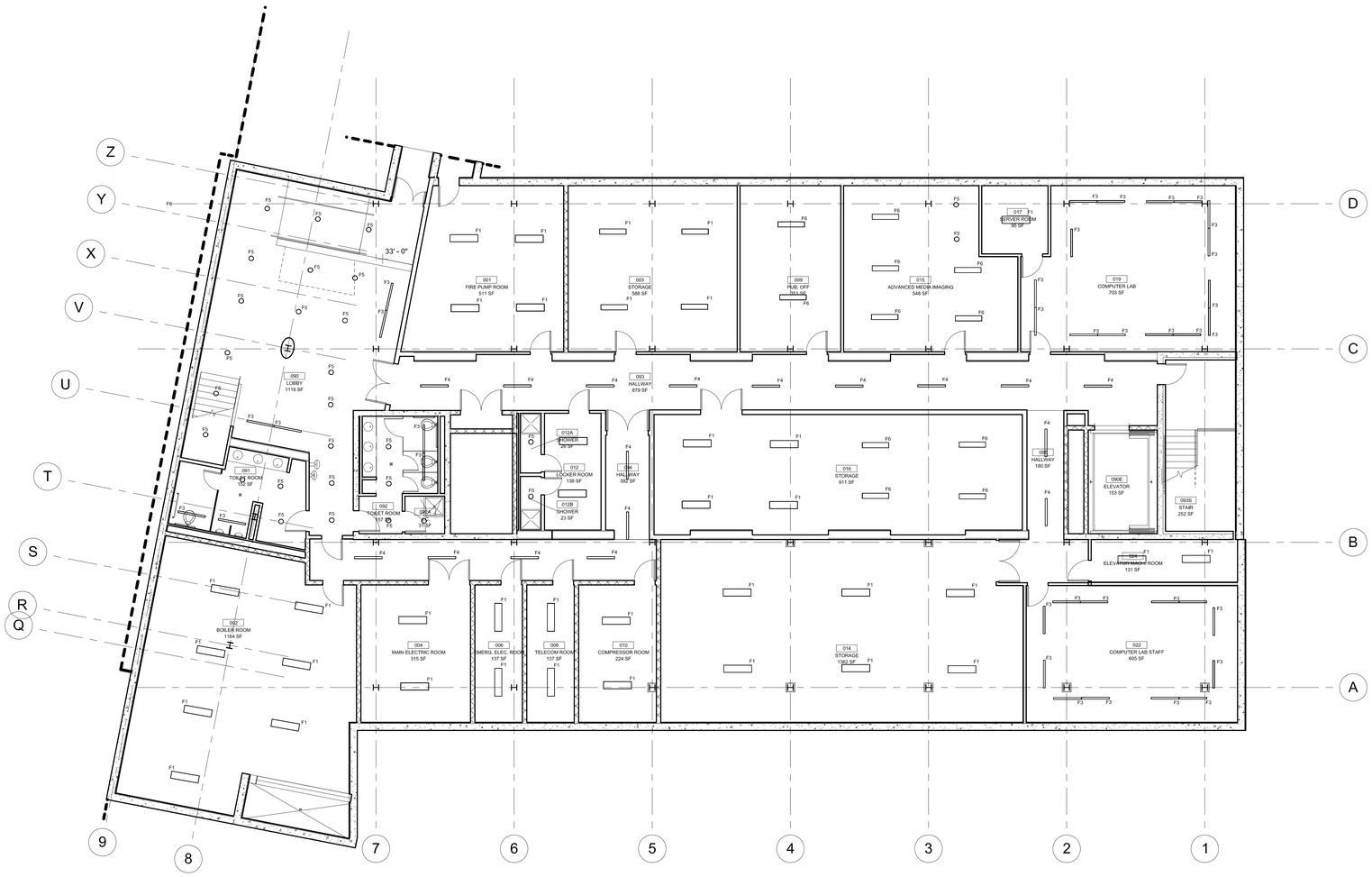

LUMINAIRE SCHEDULE

Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
	F1	34	PV 2 54TSHO	HEAVY DUTY PARABOLIC INDUSTRIAL, 12' X 48' 2 LAMP TSHO, WHITE SLOTTED REFLECTOR,	TWO 54u-WATT T5 LINEAR FLUORESCENT, RATED 4450 LUMENS PER LAMP (25 DEG. C AMBIENT).	LTL5325.IES	4450	0.70	122.6
	F2	0	EGCW4x2-54TSHO	1' 1/2"W X 2 1/4"H ALUMINUM ASYMMETRIC INDIRECT/DIRECT	2-FP54/835/HO RATED @ 5000 LUMENS.	egcw425.ies	5000	0.81	125.4
	F3	35	LVKARN-1x54TSHO	2'W X 3 1/2"H ARCHITECTURAL WASH WITH ASYMMETRIC-THROW	FP54/835/HO RATED @ 5000 LUMENS	lwar9154l.ies	4850	0.81	59.9
	F4	18	LSRib-1x54TSHO	3 1/2"W X 3 3/4"H RIBBED ALUMINUM WHITE FAINTED	FP54/835/HO RATED @ 5000 LUMENS	LSRib54.ies	5000	0.81	59.1
	F5	28	LGF 32TRT dRW FFL	8" LENSED DOWNLIGHT WITH WHITE PAINTED REFLECTOR, 32WT HORIZONTAL LAMP, FRESNEL LENS AND WHITE RECESSED DOOR.	ONE 32-WATT COMPACT FLOURESCENT TRIPLE TUBE, HORIZONTAL POS.	LTL14618.IES	2400	0.70	34
	F6	15	MSRHBST 2 54TSHO SBL WD	FLUORESCENT HIGHBAY, TWO LAMP, SEMI-SPECIAL WIDE DISTRIBUTION, STRAIGHT WHITE BLADE LOUVER, DIRECT	TWO 54 WATT T5 HI OUTPUT LINEAR FLS RATED 4400 LMS/LAMP (25 DEG. AMB.)	LR10568.ies	4400	0.75	124

STATISTICS

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
001 FIRE PUMP	+	28.2 fc	35.7 fc	0.0 fc	N / A	N / A
002 BOILER ROOM	+	27.5 fc	41.3 fc	0.0 fc	N / A	N / A
003 STORAGE	+	31.6 fc	40.9 fc	0.0 fc	N / A	N / A
004 MAIN ELEC ROOM	+	20.5 fc	28.5 fc	7.6 fc	3.8:1	2.7:1
005 HALLWAY	+	13.8 fc	23.5 fc	0.0 fc	N / A	N / A
006 EMERG ELEC ROOM	+	28.6 fc	33.9 fc	15.4 fc	2.2:1	1.9:1
008 TELECOM ROOM	+	29.2 fc	33.6 fc	20.2 fc	1.7:1	1.4:1
009 PUB OFFICE	+	27.9 fc	50.7 fc	0.0 fc	N / A	N / A
010 COMPRESSOR ROOM	+	24.5 fc	31.2 fc	14.9 fc	2.1:1	1.6:1
012 LOCKER ROOM	+	31.2 fc	38.2 fc	20.7 fc	1.8:1	1.5:1
012A SHOWER A	+	7.0 fc	8.4 fc	4.6 fc	1.8:1	1.5:1
012B SHOWER B	+	7.1 fc	8.7 fc	4.3 fc	2.0:1	1.7:1
014 STORAGE	+	19.1 fc	29.7 fc	0.0 fc	N / A	N / A
015 ADV MEDIA	+	49.2 fc	74.5 fc	0.0 fc	N / A	N / A
016 STORAGE	+	31.1 fc	37.8 fc	18.1 fc	2.1:1	1.7:1
017 SERVER ROOM	+	27.5 fc	36.6 fc	18.4 fc	2.0:1	1.5:1
019 COMPUTER LAB	+	29.8 fc	59.3 fc	11.7 fc	5.1:1	2.5:1
022 COMP LAB STAFF	+	27.0 fc	53.7 fc	0.0 fc	N / A	N / A
024 ELEVATOR MACHINE	+	26.1 fc	34.3 fc	0.0 fc	N / A	N / A
090 LOBBY	+	14.6 fc	34.7 fc	0.0 fc	N / A	N / A
091 RESTROOM	+	13.4 fc	30.3 fc	6.4 fc	4.7:1	2.1:1
092 RESTROOM	+	17.3 fc	35.7 fc	8.4 fc	4.3:1	2.1:1
092A JANITOR CLOSET	+	7.3 fc	8.6 fc	5.3 fc	1.6:1	1.4:1
094 HALLWAY	+	16.5 fc	25.3 fc	5.5 fc	4.6:1	3.0:1
LASER CUTTING LAB	+	42.0 fc	63.6 fc	18.5 fc	3.4:1	2.3:1

Calculated values include direct and interreflected components.

POWER DENSITY STATISTICS

Name	# Luminaires	Total Watts	Area	Density
001 FIRE PUMP	4	490.4 W	511.2 ft²	1.0 W/ft²
002 BOILER ROOM	7	858.2 W	1067.0 ft²	0.8 W/ft²
003 STORAGE	4	496.0 W	588.4 ft²	0.8 W/ft²
004 MAIN ELEC ROOM	2	245.2 W	315.5 ft²	0.8 W/ft²
005 HALLWAY	11	650.1 W	1042.8 ft²	0.6 W/ft²
006 EMER ELEC ROOM	2	245.2 W	136.7 ft²	1.8 W/ft²
008 TELECOM ROOM	2	245.2 W	136.7 ft²	1.8 W/ft²
009 PUB OFFICE	2	246.0 W	350.8 ft²	0.7 W/ft²
010 COMPRESSOR ROOM	2	245.2 W	222.1 ft²	1.1 W/ft²
012 LOCKER ROOM	2	245.2 W	136.3 ft²	1.8 W/ft²
012A SHOWER A	1	34.0 W	25.9 ft²	1.3 W/ft²
012B SHOWER B	1	34.0 W	23.3 ft²	1.5 W/ft²
014 STORAGE	6	735.6 W	1364.1 ft²	0.5 W/ft²
015 ADV MEDIA	7	686.0 W	546.4 ft²	1.3 W/ft²
016 STORAGE	4	490.4 W	422.4 ft²	1.2 W/ft²
017 SERVER ROOM	1	122.6 W	95.2 ft²	1.3 W/ft²
019 COMPUTER LAB	15	898.5 W	707.2 ft²	1.3 W/ft²
022 COMP LAB STAFF	12	716.8 W	605.6 ft²	1.2 W/ft²
024 ELEVATOR MACHINE	2	245.2 W	130.9 ft²	1.9 W/ft²
090 LOBBY	17	681.6 W	929.4 ft²	0.7 W/ft²
091 RESTROOM	5	221.8 W	205.1 ft²	1.1 W/ft²
092 RESTROOM	5	221.8 W	163.8 ft²	1.4 W/ft²
092A JANITOR CLOSET	1	34.0 W	31.2 ft²	1.1 W/ft²
094 HALLWAY	6	354.6 W	393.7 ft²	0.9 W/ft²
LASER CUTTING LAB	4	496.0 W	469.8 ft²	1.1 W/ft²

NOTE:

While great efforts have been taken to provide accurate and complete information, please be aware that the information contained herewith is considered a work-in-progress for this thesis project. Modifications and changes related to the original building designs and construction methodologies for this senior thesis project are solely the interpretation of Kha N. Dang. Changes and discrepancies in no way imply that the original design contained errors or was flawed. Differing assumptions, code references, requirements, and methodologies have been incorporated into this thesis project; therefore, investigation results may vary from the original design.

NOT FOR CONSTRUCTION

KHA N DANG 2007

Thesis 2007

Pennsylvania State University
State College, PA 06802

KHA N DANG, LC INTERN
ARCHITECTURAL ENGINEERING
LIGHTING | ELECTRICAL option

T: 267 229 9370
E: knd107@gmail.com
W: www.arche.psu.edu/thesis/eportfolio/2007/portfolios/knd107

C: Dr. Richard Mistrick
C2: Ted Dannerth

NO.	DATE	REVISION

PROJECT NAME
THESIS 2007
SCULPTURE BIDG
PARKING GARAGE

BUILDING NAME & ADDRESS

PROJECT NUMBER

DRAWING TITLE
BASEMENT LIGHTING PLAN

SCALE: $\frac{1}{8}$"=1'-0"
DRAWN BY: KND
CAD FILENAME: XX-XX-XXX.DWG
DATE: 03/11/07

DRAWING NUMBER
EL-100