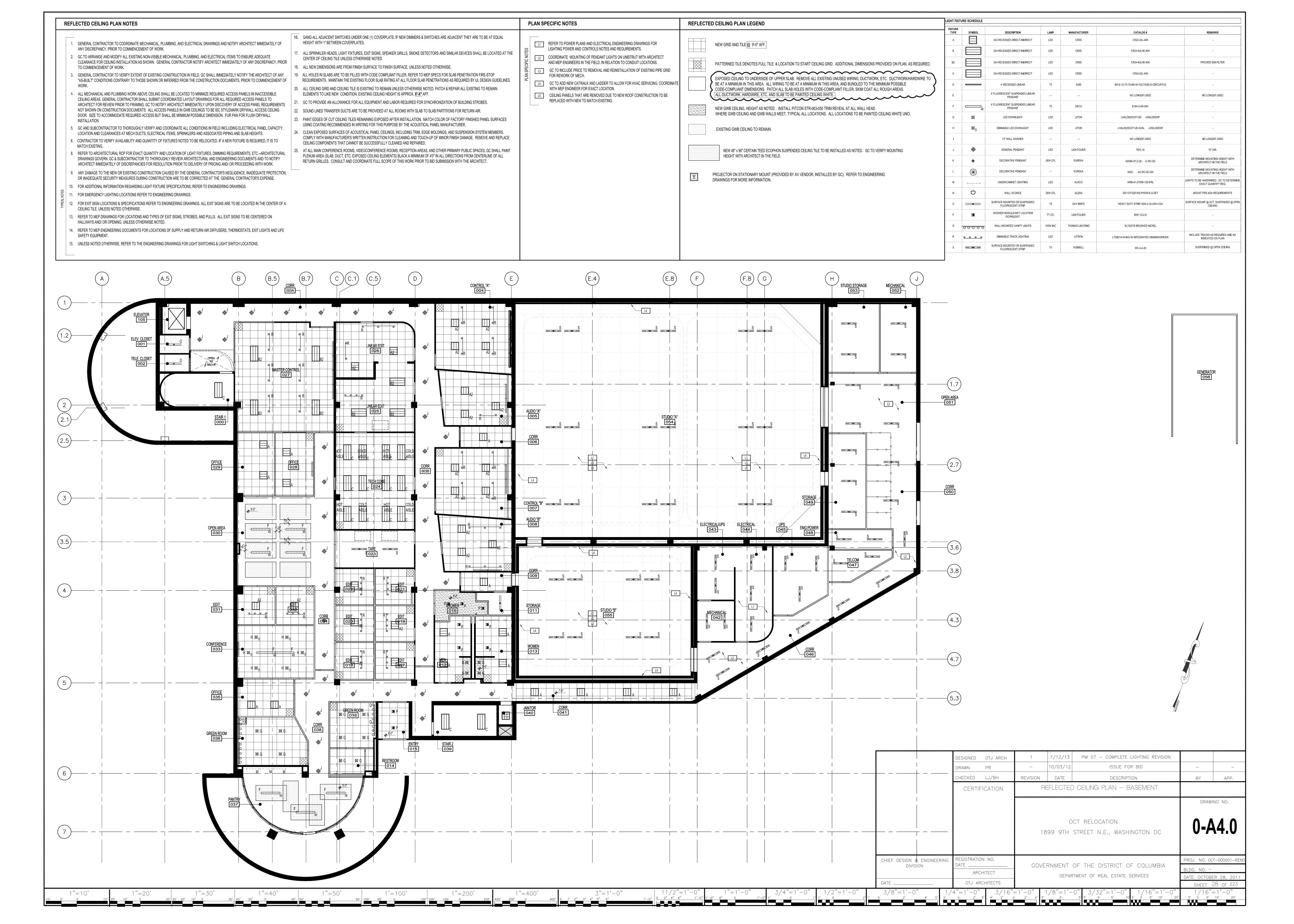
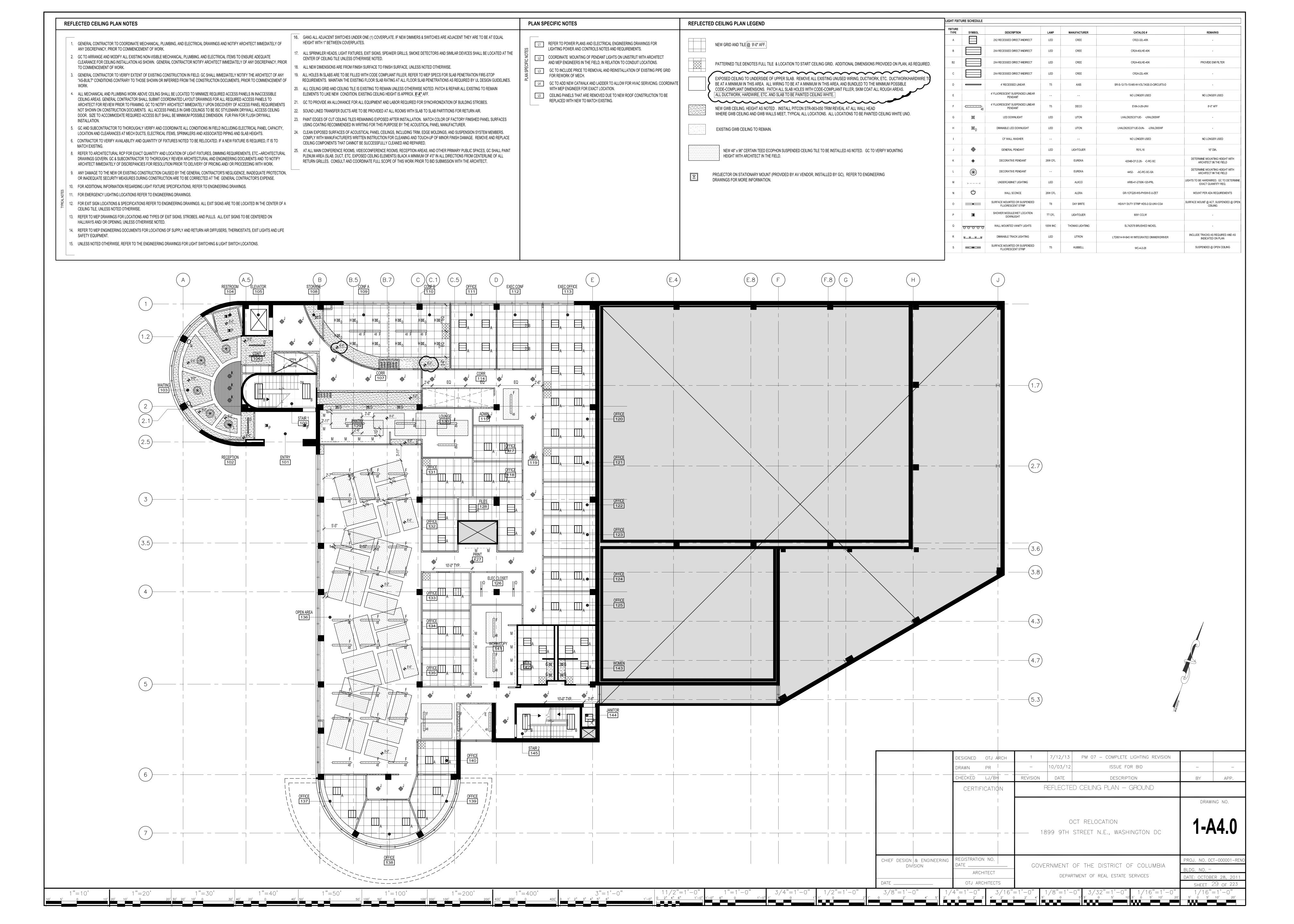
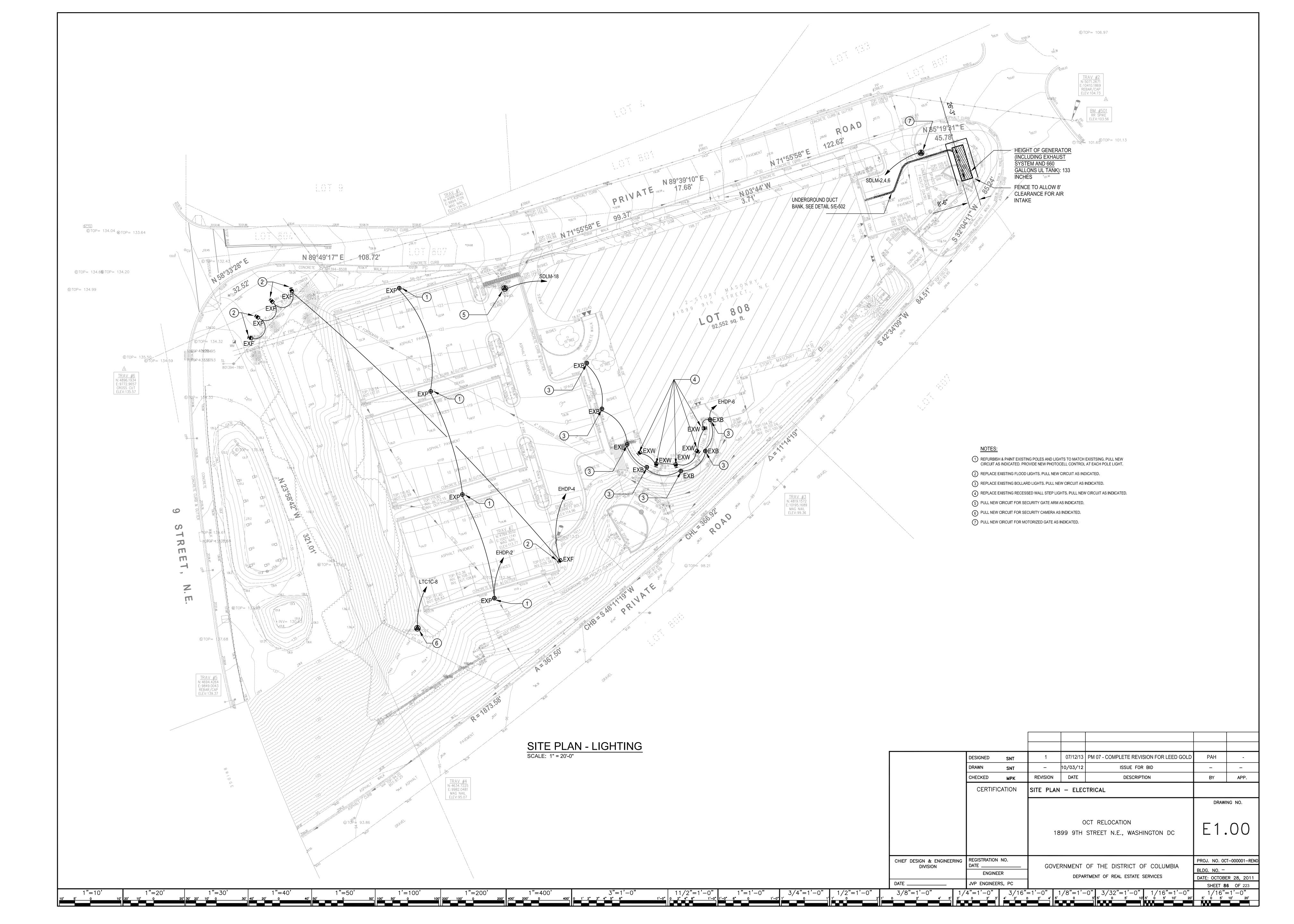
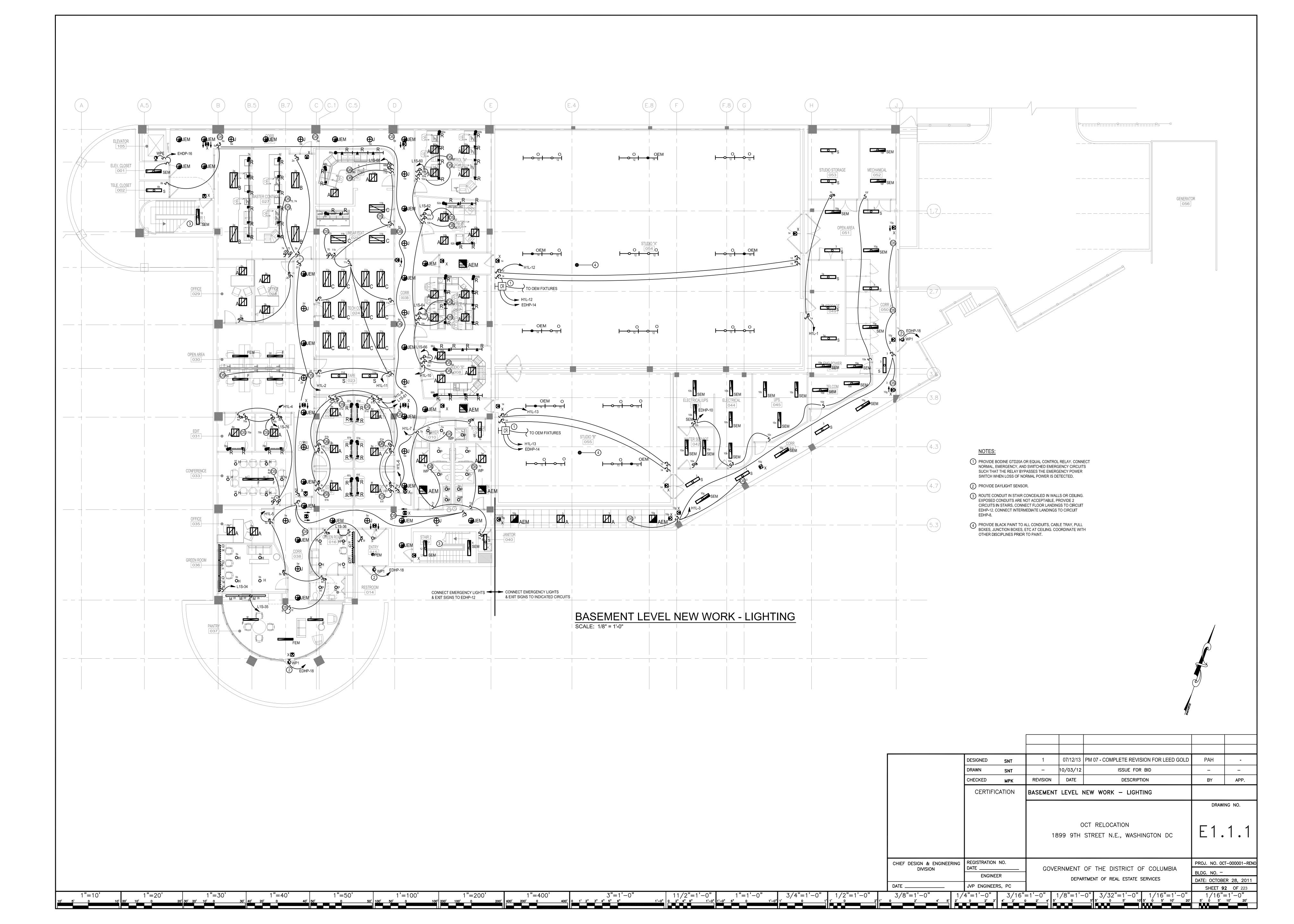
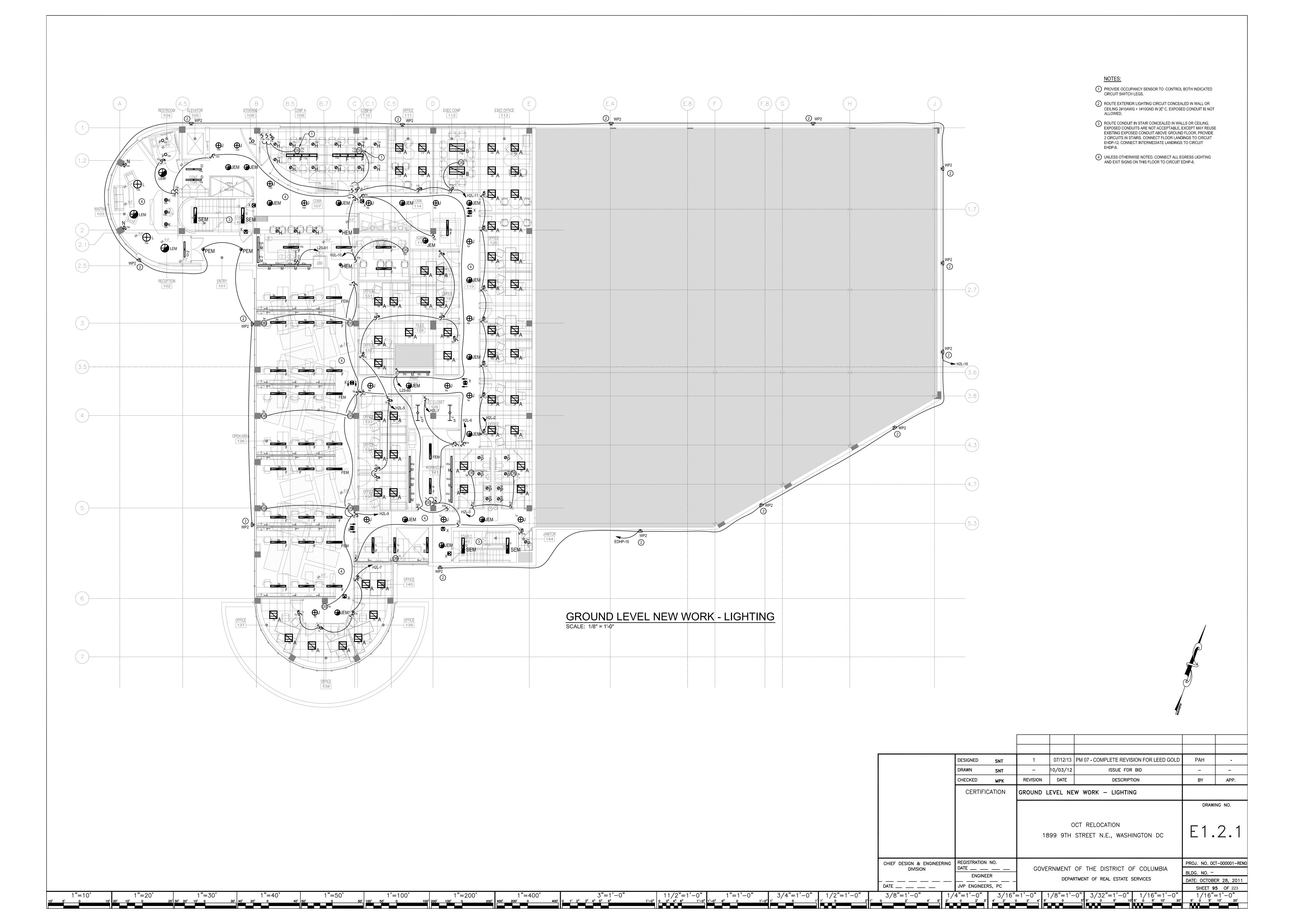
Attachment E-40

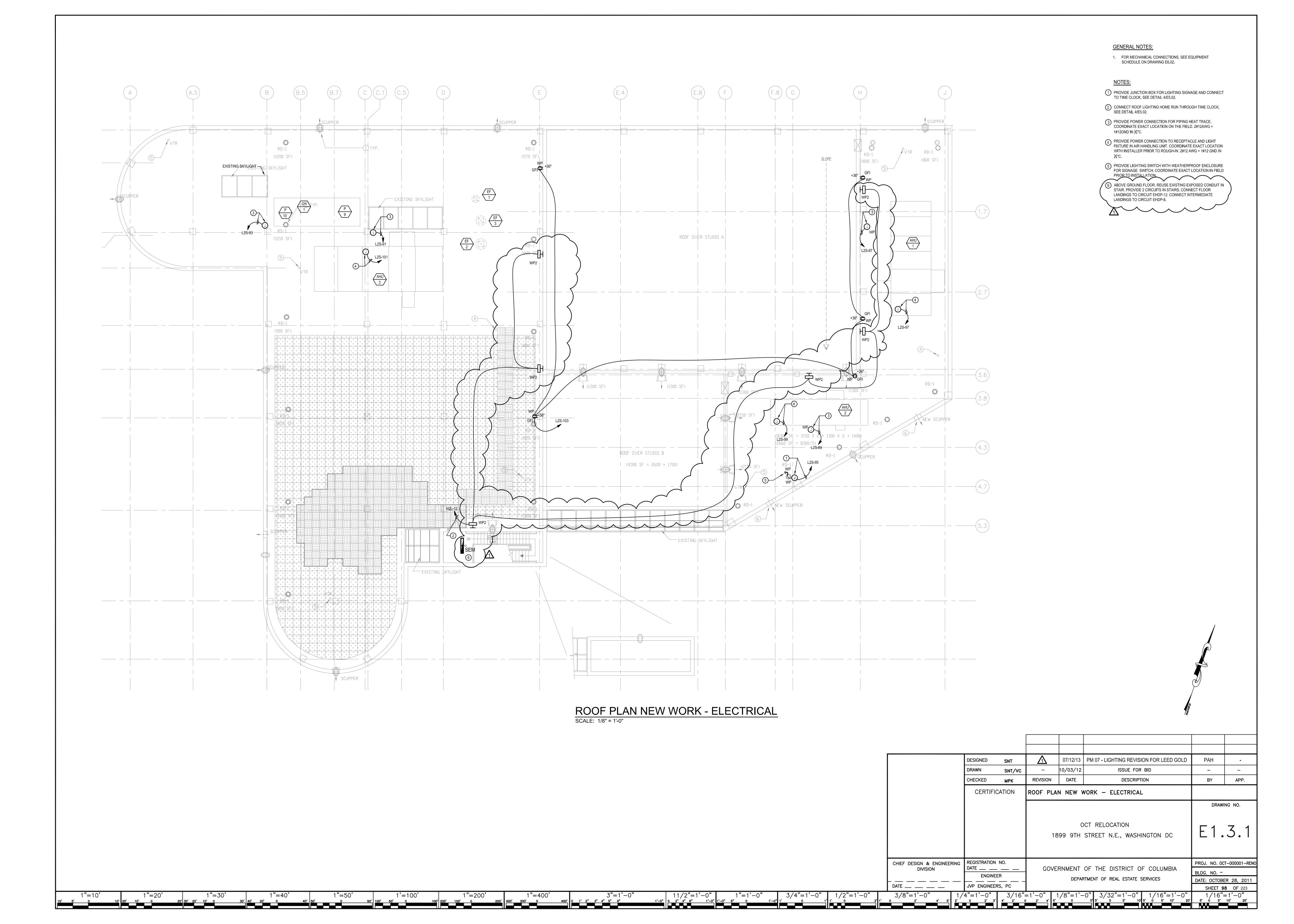












MECHANICAL EQUIPMENT SCHEDULE														
TAG	DESCRIPTION	EQUIP. LOADS HP, FULL LOAD AMPS	VOLTS	Ø	MOTOR COI STARTER NEMA SIZES	NTROLLERS MOTOR STARTERS	SWITCH SIZES (A)	VOLTAGE (V)	SWITCHES FUSE (A)	ENCLOSURE	FEEDER SIZES	PANELBOARD	LOCATION	REMARKS
AHU 1	AIR HANDLING UNIT # 1	40HP (SUPPLY) 20HP (RETURN)	480	3	4 3	SOLID STATE DRIVE	100 60	480	70 40	NEMA 3R NEMA 3R	3# 4AWG + 1# 8GND IN 1"C 3# 8AWG + 1# 10GND IN 1"C	DPM - 1,3,5 DPM - 7,9,11	-	-
AHU 2	AIR HANDLING UNIT # 2	15HP (SUPPLY) 7.5HP (RETURN)	480	3	2 1	SOLID STATE DRIVE	30 30	480	30 15	NEMA 3R NEMA 3R	3# 8AWG + 1# 10GND IN 1"C 3# 12AWG + 1# 12GND IN ³ / ₄ "C	DPM - 13,15,17 DPM - 19,21,23	-	-
AHU 3	AIR HANDLING UNIT # 3	60HP (SUPPLY) 30HP (RETURN)	480	3	-	-	100 60	480	100 50	NEMA 3R NEMA 3R	3# 1AWG + 1# 6GND IN 1½"C 3# 6AWG + 1# 10GND IN 1"C	DPM - 25,27,29 DPM - 31,33,35	-	VFD STARTER FURNISHED WITH EQUIPMENT
CH 1	CHILLER # 1	328 KW	480	3	-	-	800	480	650	NEMA 3R	2 SETS OF (3# 400KCMIL + 1# 1/0GND IN 3"C.)	SDHM - 2,4,6	-	VFD STARTER FURNISHED WITH EQUIPMENT
BOILER 1	BOILER # 1	12 FLA	120	1	-	_	30	250	15	NEMA 1	2# 12AWG + 1# 12GND IN ³ / ₄ "C	L1G - 10	-	STARTER AND SWITCH FURNISHED WITH EQUIPM
BOILER 2	BOILER#2	12 FLA	120	4	_	_	30	250	15	NEMA 1	2# 12AWG + 1# 12GND IN ³ / ₂ "C	L1G - 14		STARTER AND SWITCH FURNISHED WITH EQUIPM
				1	-						<u> </u>			
BOILER 3	NOT USED	11 FLA	120	1	-	-	30	250	15	NEMA 1	2# 12AWG + 1# 12GND IN ⅔°C	L1G - 18		STARTER AND SWITCH FURNISHED WITH EQUIPM
FCU 1	FAN COIL UNIT #1	⅓ HP	120	1	-	-	-	-	-	-	2# 12AWG + 1# 12GND IN ³ / ₄ "C	L1S - 57		STARTER AND SWITCH FURNISHED WITH EQUIPM
FCU 2	FAN COIL UNIT #2	⅓ HP	120	3	-	-	-	-	-	-	2# 12AWG + 1# 12GND IN ³ / ₄ "C	L1S - 56	-	STARTER AND SWITCH FURNISHED WITH EQUIPM
FCU 3	FAN COIL UNIT #3	⅓ HP	120	3	-	<u>-</u>	-	-	-	-	2# 12AWG + 1# 12GND IN 3"C	L1S - 56	-	STARTER AND SWITCH FURNISHED WITH EQUIPM
FCU 4	FAN COIL UNIT # 4	⅓ HP	120	3	-	-	-	-	-	-	2# 12AWG + 1# 12GND IN ³ "C	L1S - 56	-	STARTER AND SWITCH FURNISHED WITH EQUIPM
FCU 5	FAN COIL UNIT	1 ½ HP	480	3	0	SOLID	30	480	5	NEMA 1	3# 12AWG + 1# 12GND IN ³ "C	MDPM - 37,39,41	-	-
FCU 6	# 5 FAN COIL UNIT	1 ½ HP	480	3	0	STATE DRIVE SOLID	30	480	5	NEMA 1	3# 12AWG + 1# 12GND IN ³ "C	MDPM - 32,34,36		
	# 6 FAN COIL UNIT	_			0	STATE DRIVE	30	400		INCIVIA I	<u> </u>		-	
FCU 7	#7	1⁄4 HP	120	1	-	-	-	-	-	-	2# 12AWG + 1# 12GND IN 4"C	L1S - 58	-	STARTER AND SWITCH FURNISHED WITH EQUIPM
FCU 8	FAN COIL UNIT #8	2 HP	480	3	0	SOLID STATE DRIVE	30	480	5	NEMA 1	3# 12AWG + 1# 12GND IN 3"C	MDPM - 32,34,36	-	-
FCU 9	FAN COIL UNIT #9	123 W	120	1	-	-	-	-	-	-	2# 12AWG + 1# 12GND IN ¾"C	L1S - 59	-	STARTER AND SWITCH FURNISHED WITH EQUIPM
FCU 10	FAN COIL UNIT # 10	123 W	120	1	-	-	-	-		-	2# 12AWG + 1# 12GND IN ¾"C	L1S - 59	-	STARTER AND SWITCH FURNISHED WITH EQUIPM
FCU 11	FAN COIL UNIT # 11	123 W	120	1	-	-	-	-	-	-	2# 12AWG + 1# 12GND IN ¾"C	L1S - 59	-	STARTER AND SWITCH FURNISHED WITH EQUIPM
FCU 12	FAN COIL UNIT	123W	120	1	-	-	-	-	-	_	2# 12AWG + 1# 12GND IN ³ 4"C	L1S - 59	-	STARTER AND SWITCH FURNISHED WITH EQUIPM
CRAC 1	# 12 COMPUTER ROOM AIR	7.5 HP				SOLID STATE	30 60	480	15	NEMA 1	3# 12AWG + 1# 12GND IN ¾"C	SDHM - 7,9,11	_	
	CONDITIONING UNIT # 1 COMPUTER ROOM AIR	25 KW 7.5 HP	480	3	1	DRIVE SOLID STATE			40 15	NEMA 1 NEMA 1	3# 8AWG + 1# 10GND IN $\frac{3}{4}$ " C. 3# 12AWG + 1# 12GND IN $\frac{3}{4}$ "C	MDPM - 14,16,18 SDHM - 13,15,17	-	
CRAC 2	CONDITIONING UNIT # 2	25 KW	480	3	1	DRIVE	30 60	480	40	NEMA 1	3# 8AWG + 1# 10GND IN ³ / ₄ " C.	MDPM - 20,22,24	-	-
CRAC 3	COMPUTER ROOM AIR CONDITIONING UNIT # 3	5 HP 15 KW	480	3	1	SOLID STATE DRIVE	30 60	480	10 25	NEMA 1 NEMA 1	$3# 12AWG + 1# 12 GND IN \frac{3}{4}"C 3# 10AWG + 1#10 GND IN \frac{3}{4}" C.$	SDHM - 19,21,23 MDPM - 26,28,30	-	-
ESP 1	ELEVATOR SUMP PUMP # 1	<u>1</u> HP	120	1	-	-	MOTOR RATED SWITCH	-	- -	NEMA 1	2# 12AWG + 1# 12GND IN ³ "C	L1S - 51	-	CONTROL PANEL FURNISHED WITH EQUIPMENT
SEP 1	SEWAGE EJECTOR PUMP # 2	3 HP	480	3	-	-	30	480	6	NEMA 3R	3# 12AWG + 1# 12GND IN ¾"C	SDHM - 20,22,24	-	CONTROL PANEL FURNISHED WITH EQUIPMENT
EF 1	EXHAUST FAN	<u>1</u> HP	120	1	_	-	MOTOR RATED SWITCH	125	_	NEMA 3R	2# 12AWG + 1# 12GND IN 3"C	L1S - 53		_
EF 2	#1 EXAUST FAN #	1/2 HP	480	3	0	SOLID STATE	30	480	3	NEMA 3R	3# 12AWG + 1# 12GND IN ³ "C	L1S - 55		
<u> </u>	2 EXHAUST FAN					DRIVE	MOTOR RATED				<u> </u>			
(EF)	#3	¹ / ₄ HP	120	1	-	-	SWITCH MOTOR RATED	125	-	NEMA 3R	2# 12AWG + 1# 12GND IN 3"C	DPM - 8,10,12	-	-
EF 4	EXHAUST FAN # 4	818 W	120	1	-	-	SWITCH	125	-	NEMA 1	2# 12AWG + 1# 12GND IN 3 "C	SDLM - 8	-	CONNECT TO EMERGENCY POWER
SF 1	SUPPLY FAN # 1	½ HP	480	3	0	SOLID STATE DRIVE	30	480	3	NEMA 1	3# 12AWG + 1# 12GND IN ³ "C	MDPM - 8,10,12	-	-
EWH 1	ELECTRIC WATER HEATER TANK # 1	1 KW	120	1	-	-	30	250	12	NEMA 1	2# 12AWG + 1# 12GND IN ³ "C	L2S - 86	-	-
EWH 2	ELECTRIC WATER HEATER TANK # 2	1 KW	120	1	-	-	30	250	12	NEMA 1	2# 12AWG + 1# 12GND IN ³ "C	L2S - 92	-	-
EWH 3	ELECTRIC WATER HEATER	4.5 KW	208	1	_	_	30	250	30	NEMA 1	2# 10AWG + 1# 10GND IN ³ /4"C	L2S - 88,80	_	_
	TANK # 3 ELECTRIC WATER HEATER			'										
EWH 4	TANK # 4 ELECTRIC WATER HEATER	6 KW	208	1	-	-	60	250	40	NEMA 1	2# 8AWG + 1# 10GND IN ³ / ₄ "C	L1S - 47,49	-	-
EWH 5	TANK # 5	24 KW	480	3	-	-	60	480	40	NEMA 1	3# 8AWG + 1# 10GND IN 3"C	SDHM - 32,34,36	-	- -
P 1	PUMP # 1	1 ¾ HP	480	3	1	SOLID STATE DRIVE	30	480	5	NEMA 1	3# 12AWG + 1# 12GND IN ⅔"C	MDPM - 25,27,29	-	STARTER FURNISHED WITH PUMP
P 2	PUMP # 2	1 ³ / ₄ HP	480	3	1	SOLID STATE DRIVE	30	480	5	NEMA 1	3# 12AWG + 1# 12GND IN ¾"C	SDHM - 25,27,29	-	STARTER FURNISHED WITH PUMP
P 3	PUMP#3	³ / ₄ HP	480	3	-	-	30	480	3	NEMA 1	3# 12AWG + 1# 12GND IN ¾"C	MDPM - 1,3,5	-	STARTER FURNISHED WITH PUMP
P 4	PUMP # 4	1½ HP	480	3	-	-	30	480	4	NEMA 1	3# 12AWG + 1# 12GND IN ³ "C	MDPM - 7,9,11	-	STARTER FURNISHED WITH PUMP
P	PUMP#5						MOTOR RATED				<u> </u>	L1G - 8	_	
_5		½ HP	120		<u> </u>	<u> </u>	SWITCH MOTOR RATED	-	_	<u> </u>	2# 12AWG + 1# 12GND IN 3 C			STARTER FURNISHED WITH PUMP
P 6	PUMP # 6	½ HP	120	1	-	-	SWITCH	-	-	-	2# 12AWG + 1# 12GND IN ³ "C	L1G - 20	-	STARTER FURNISHED WITH PUMP
P 7	PUMP # 7	½ HP	120	1	-	-	MOTOR RATED SWITCH	-	-	-	2# 12AWG + 1# 12GND IN ³ "C	L1G - 22	-	STARTER FURNISHED WITH PUMP
P 8	PUMP#8	½ HP	120	1	-	-	MOTOR RATED SWITCH		-	-	2# 12AWG + 1# 12GND IN ³ "C	L1G - 24	-	STARTER FURNISHED WITH PUMP
P 9	PUMP#9	7 ½ HP	480	3	-	VFD	30	480	15	NEMA 3R	3# 12AWG + 1# 12GND IN ¾"C	SDHM - 8,10,12	-	
P 10	PUMP # 10	7 ½ HP	480	3	-	VFD	30	480	15	NEMA 3R	3# 12AWG + 1# 12GND IN ¾"C	SDHM - 14,16,18	-	-
P 11	PUMP # 11	2 HP	480	3	-	-	30	480	5	NEMA 1	3# 12AWG + 1# 12GND IN ³ ***C	DPM - 2,4,6	-	STARTER FURNISHED WITH PUMP
11 / P 12	PUMP # 12	3∕4" HP	480	3			30	480	3	NEMA 1	<u>'</u>	DPM - 26,28,30	_	<u> </u>
					-	-					3# 12AWG + 1# 12GND IN ¾"C			
P 13	PUMP # 13	2 HP	480	3	-	-	30	480	5	NEMA 1	3# 12AWG + 1# 12GND IN ³ / ₄ "C	MDPM - 19,21,23	-	STARTER FURNISHED WITH PUMP
P 14	PUMP # 14	2 HP	480	3	-	-	30	480	5	NEMA 1	3# 12AWG + 1# 12GND IN ¾"C	MDPM - 13,15,17	-	STARTER FURNISHED WITH PUMP
P 15	PUMP # 15	¾ HP	120	1	-	-	MOTOR RATED SWITCH	<u>-</u>	-	-	2# 12AWG + 1# 12GND IN ³ "C	L1S - 46		STARTER FURNISHED WITH PUMP
P 15A	PUMP # 15A	½ HP	120	1	-	-	MOTOR RATED SWITCH	-	-	-	2# 12AWG + 1# 12GND IN ³ / ₄ "C	SDLM - 8		STARTER FURNISHED WITH PUMP
P 16	PUMP # 16	¾ HP	480	3	-	-	-	-	-	-	3# 12AWG + 1# 12GND IN ³ "C	DPM - 14,16,18	-	STARTER FURNISHED WITH PUMP
P 17	PUMP # 17	¼ HP	120	1	_	<u>-</u>	_	-	_	_	2# 12AWG + 1# 12GND IN ³ "C	L1S - 60		STARTER FURNISHED WITH PUMP
17 P		_		<u>'</u>							·			
18	PUMP # 18	1 HP	480	3	-	-	30	480	4	NEMA 1	3# 12AWG + 1# 12GND IN ¾"C	DPM - 20,22,24		STARTER FURNISHED WITH PUMP
ATPV 1	AUTOMATIC TRAP PRIME VALVE	10 FLA	120	1	-	-	MOTOR RATED SWITCH	125	-	-	2# 12AWG + 1# 12GND IN ¾"C	L1S - 43		-
ATPV 2	AUTOMATIC TRAP PRIME VALVE	10 FLA	120	1	-	-	MOTOR RATED SWITCH	125	-	-	2# 12AWG + 1# 12GND IN ³ "C	L1S - 45		
CHILLER 1	SMALL CHILLER ABOVE CEILING	6.0 FLA	120	1	-	-	MOTOR RATED SWITCH	125	-	-	2# 12AWG + 1# 12GND IN 3"C	L1S - 50	-	
	UNIT HEATER #1	1/6 HP	120	1	0	SOLID STATE DRIVE	MOTOR RATED SWITCH	125	-	-	2# 12AWG + 1# 12GND IN ³ "C	L1S-52	-	-
$\overline{}$	I		<u> </u>	<u> </u>					-		7	1		1
UH 1 UH 2	UNIT HEATER #2	1 HP	120	1	_	SOLID STATE DRIVE	MOTOR RATED SWITCH	125	_	_	2# 12AWG + 1# 12GND IN ³ / ₄ "C	L1S-54	<u>-</u>	-

		LIGHTING	FIXTURE S	CHED	ULE			
PE	AVAILABLE PRODUCTS		LAMPS	COLOR	VOLTS	WATTS	EM. LUMENS	REMARKS
M	CREE CR22-32L-30K OR APPROVED EQUAL	2X2 LED DIRECT/INDIRECT TROFFER	LED 3200 Lm	3000K CRI 85	120-277	1 @ 32.6W		TYPE AEM CONNECT TO EMER CIRCUI
	CREE CR24-40LHE-35K OR APPROVED EQUAL		LED 4000 Lm	3500K CRI 92	120-277	1 @ 36W		
	CREE CR24-22L-35K OR APPROVED EQUAL	2X4 LED DIRECT/INDIRECT TROFFER	LED 2200 Lm	3500K CRI 92	120-277	1 @ 22W		
	AXIS BEAM2 BDR-S-4-T5-1	RECESSED 4' LINEAR T5 WITH SATIN LENS	(1) 28T5	3500K	277	1 @ 31W		
	OR APPROVED EQUAL DECO IKARUS I 1-54	WALL-MOUNTED DIRECT/INDIRECT	LOW Hg CONTENT (1) 54T5HO	CRI 85 3500K	277	1 @ 65W		
	OR APPROVED EQUAL		LOW Hg CONTENT	CRI 85				
3	DECO D309-LED-43-25-50-UNV-BL-PC OR APPROVED EQUAL	FLAT TOP, CLEAR BOLLARD, BLACK FINISH, PHOTOCELL	LED	5000K CRI 80+	120-277V	1 @ 25W		PHOTOCELL OPTION IS AVAILABLE
:	DECO D211-LED-60-50-UNV-BL-PC OR APPROVED EQUAL	MEDIUM, ROUND BACK FLOOD, BLACK FINISH, PHOTOCELL	LED	5000K CRI 80+	120-277V	1 @ 60W		
)	EXTERIOR POLE	REFURBISH EXISTING						PROVIDE NEW PHOTOCELL CONTROL
V	DECO D418-LED-20-50-UNV-BL-PC OR APPROVED EQUAL	LOUVERED WALLPACK, BLACK FINISH, PHOTOCELL	LED	5000K CRI 80+	120-277V	1 @ 20W		
M	DECO EVIAN 3-28 OR APPROVED EQUAL	PENDANT DIRECT/INDIRECT	(3) 28T5 LOW Hg CONTENT	3500K CRI 85	277	1 @ 78.9W		TYPE FEM CONNECT TO EMER CIRCUIT
M	LITON LHALD625 OR APPROVED EQUAL	6" LED DOWNLIGHT, SATIN REFLECTOR, WHITE FLANGE, 0-10 V 10% DIMMABLE DRIVER	LED 2000 Lm	3000K CRI 80+	277	1 @ 30W		TYPE HEM CONNECT TO EMER CIRCUI
1	LIGHTOLIER OPTIMO R01L16 OR APPROVED EQUAL	16" TAPERED ROUND DECORATIVE LENSED PENDANT LED LUMINAIRE	LED 1022 Lm	3500K CRI 80+	120	1 @ 33W	-	TYPE JEM CONNECT TO EMER CIRCUIT SEE ARCH MOUNTING DETAIL
	EUREKA 4204B CALANDO OR APPROVED EQUAL	PENDANT DECORATIVE LUMINAIRE	(1) CFL 26W LOW Hg CONTENT	3500K CRI 85	277	1 @ 26W	-	
M	EUREKA 4452 KOLOKOL OR APPROVED EQUAL	PENDANT DECORATIVE LUMINAIRE	(1) CFL 26W LOW Hg CONTENT	3500K CRI 85	277	1 @ 26W	-	TYPE LEM CONNECT TO EMER CIRCUIT
	ALKO ARIS 41-301-120 OR APPROVED EQUAL	120V UNDERCABINET LED TASK LIGHT	LED		120	1 @ 20.8W	-	
	EUREKA 3600A5 QUADRETTO OR APPROVED EQUAL		(2) CFL 18W LOW Hg CONTENT	3500K CRI 85	277	1 @ 54W	-	
	DAY-BRITE 5F254HO-PPS OR APPROVED EQUAL		(2) F54T5HO LOW Hg CONTENT	3500K CRI 85	277	1 @ 111W	-	TYPE OEM CONNECT TO EMER CIRCUIT
M	LIGHTOLIER 8091CCLW OR APPROVED EQUAL	8" CFL DOWNLIGHT, CLEAR LENS, WET/DAMP LOCATION	(1) CFL 32W LOW Hg CONTENT	3500K CRI 85	277	1 @ 35W	-	TYPE PEM CONNECT TO EMER CIRCUIT
	THOMAS VANITY STRIP OR APPROVED EQUAL	8-LIGHT BATH VANITY IN BRUSHED NICKEL FINISH	(8) 60W G25 INCANDESCENT		120	1 @ 480W	-	FOR GREEN ROOM MAKE-UP/HAIR
	LITON LTD8014W-B45 WITH LP303 ACCESSORIES HOLDER AND LP922 BARN DOOR SHUTTERS OR APPROVED EQUAL	120V 4" LED STUDIO TRACK HEAD, BASIC REFLECTOR NARROW FLOOD, FOR 1 CIRCUIT TRACK CHANNEL MOUNTING	LED 650 Lm	3000K CRI 80+	120	1 @ 14W	-	
M	HUBBELL COLUMBIA WC4-228 OR APPROVED EQUAL		(2) 28T5 LOW Hg CONTENT	3500K CRI 85	277	1 @ 56	-	TYPE SEM CONNECT TO EMER CIRCUIT
E	DECO D406-LED-60-50-UNV OR APPROVED EQUAL	60W LED SLIMLINE WALL PACK, STANDARD FINISH, WET LOCATION	LED	5000K CRI 80+	120-277V	1 @ 60W	-	FOR ELEVATOR PIT
1	DECO D420-LED-30-50-UNV-BL-PC OR APPROVED EQUAL	LARGE TRAPEZOIDAL CUTOFF 30W LED WALLPACK, BLACK FINISH, PHOTOCELL, WET LOCATION	LED	5000K CRI 80+	120-277V	1 @ 30W	-	
2	DECO D403-LED-60-50-UNV-BL-PC OR APPROVED EQUAL	LARGE CURVED SEMI-CUTOFF 60W LED WALLPACK, BLACK FINISH, PHOTOCELL, WET LOCATION	LED	5000K CRI 80+	120-277V	1 @ 60W	-	
	H. E. WILLIAMS EXIT/EL SERIES LIGHTOLIER LU SERIES HUBBELL DUAL-LITE LE OR LES SERIES COOPER SURE-LITES ES OR ELX SERIES	EDGE LIT LED EXIT SIGN, MIRRORED PANEL, ALUMINUM OR BLACK TRIM, SELF-POWERED, NICd BATTERY, SELF DIAGNOSTIC	LED	RED	120/277	< 5W CHARGING	-	PROVIDE FACES AND DIRECTION CHEVRONS AS INDICATED ON DWGS

			<u> </u>	07/12/13	PM 07 - LIGHTING REVISION FOR LEED GOLD	PAH	-
	DESIGNED	SNT	Â	11/12/12	BID REVISIONS	-	-
	DRAWN	SNT	_	10/03/12	ISSUE FOR BID	_	-
	CHECKED	МРК	REVISION	DATE	DESCRIPTION	BY	APP.
	CERTIFIC	ATION	LUMINAIRE	AND ME			
			18	C 99 9TH	E6.02		
CHIEF DESIGN & ENGINEERING DIVISION DATE	REGISTRATION DATE ENGINEE JVP ENGINEER:	 R 	GOVE	RNMENT depar	PROJ. NO. OCT-000001-RENO BLDG. NO DATE: OCTOBER 28, 2011 SHEET 104 OF 223		
3/8"=1'-0" 1/	'4"=1'-0"	3/16"	=1'-0" 1	/8"=1'-	-0" 3/32"=1'-0" 1/16"=1'-0"	1/16"=	=1'-0"