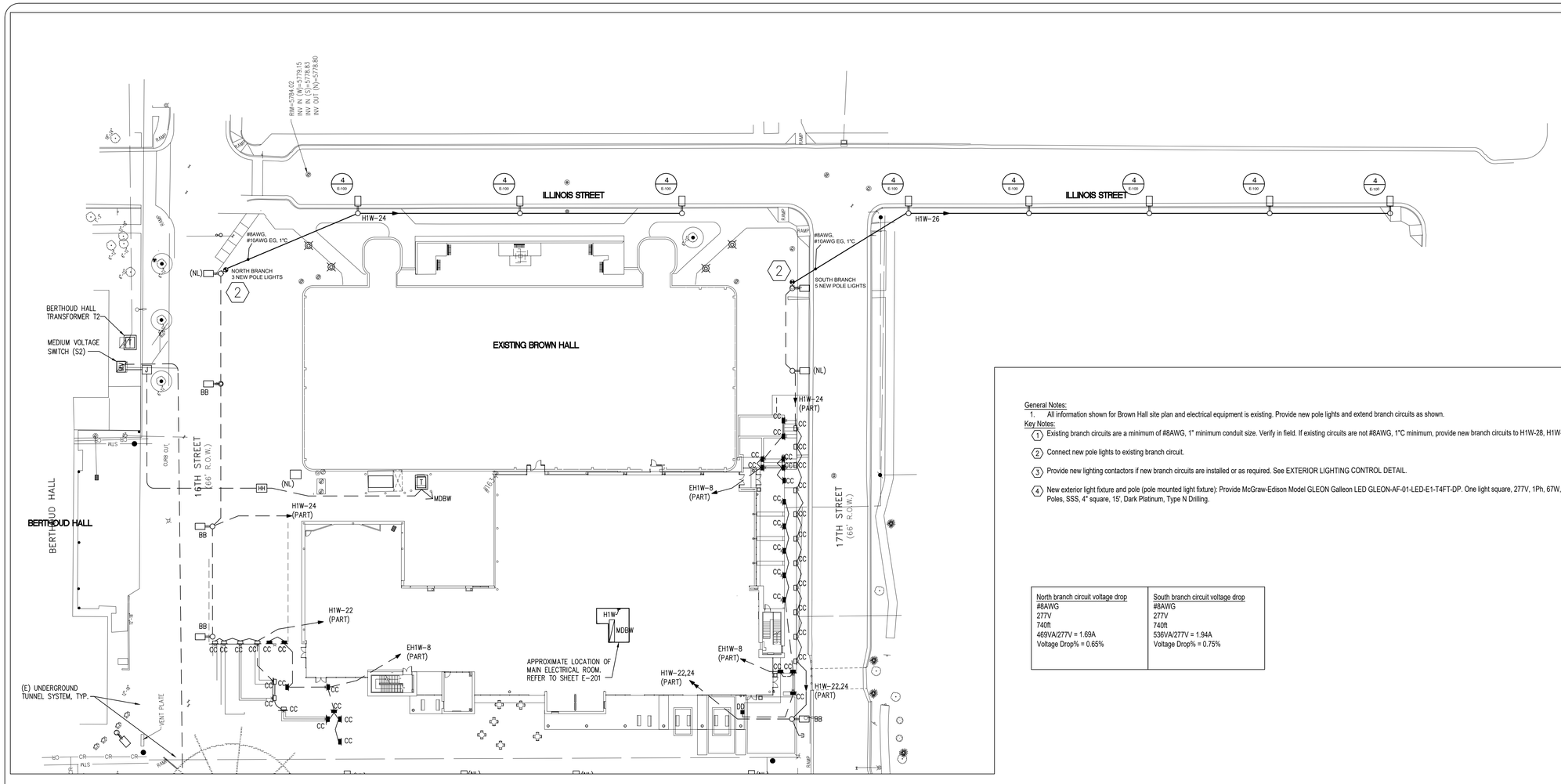


N

BROWN HALL SITE PLAN

1/32" = 1'

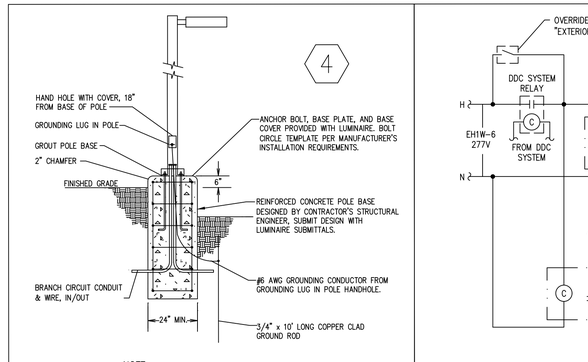
General Notes:

1. All information shown for Brown Hall site plan and electrical equipment is existing. Provide new pole lights and extend branch circuits as shown.

Key Notes:

1. Existing branch circuits are a minimum of #8AWG, 1" minimum conduit size. Verify in field. If existing circuits are not #8AWG, 1"C minimum, provide new branch circuits to H1W-28, H1W-30 with #8AWG, 1"C
2. Connect new pole lights to existing branch circuit.
3. Provide new lighting contactors if new branch circuits are installed or as required. See EXTERIOR LIGHTING CONTROL DETAIL.
4. New exterior light fixture and pole (pole mounted light fixture): Provide McGraw-Edison Model GLEON Galleon LED GLEON-AF-01-LED-E1-T4FT-DP. One light square, 277V, 1Ph, 67W, 0.25A. Eaton Steel Poles, SSS, 4" square, 15', Dark Platinum, Type N Drilling.

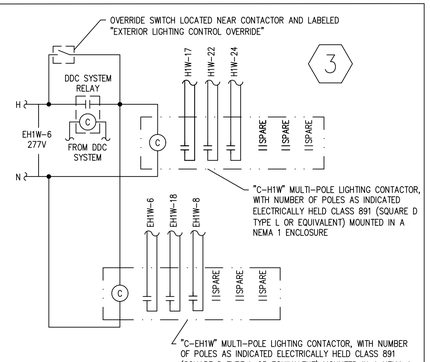
North branch circuit voltage drop	South branch circuit voltage drop
#8AWG	#8AWG
277V	277V
740ft	740ft
469VA/277V = 1.69A	536VA/277V = 1.94A
Voltage Drop% = 0.65%	Voltage Drop% = 0.75%



NOTE:
1. REFER TO LUMINAIRE SCHEDULE FOR POLE HEIGHT.

POLE MOUNTED LUMINAIRE DETAIL

4 / E-100



SEQUENCE OF OPERATION: ON AT DUSK, OFF AT DAWN.

EXTERIOR LIGHTING CONTROL DETAIL

SCALE: NONE

Name H1W | Main Bus Rating (A) 400 | Voltage 277/480 | Phase 3
Fed From: MDBW | Main Lugs Only | SCCR 65,000 | Wire 4 | 60Hz
☐ Surface ☐ PDU ☐ Flush ☐ 200% Neutral

Wire&Conduit		Info	For Panel Loads Only (VA)							VA	Physical			Phase			Physical			VA	Info	Loads Only (VA)						Info	Wire&Conduit	
Wire Size	Cond. (in)	Type	Name:	L	R	LM	M	ME	K	Total:	Breaker	Phase	Circuit	A	B	C	Circuit	Phase	Breaker	Total:	Name:	L	R	LM	M	ME	K	Type	Cond. (in)	Wire Size
12	3/4	L	Classrooms: W160,155A,W180							1736	20	1	1	4268			2	1	20	2532	Lecture AUD. W280							L	3/4	12
12	3/4	L	Classrooms: W155,155B,155C							2128	20	1	3		3696		4	1	20	1568	W255, W270, W275							L	3/4	12
12	3/4	L	Classrooms: W120,130,130A,Stor.							2040	20	1	5			3824	6	1	20	1784	2nd Study Rooms, RR, Support							L	3/4	12
12	3/4	L	Corridor WC150,110,125							2144	20	1	7	5283			8	1	20	3139	MED Classrooms W210, W250							L	3/4	12
12	3/4	L	RR, MECH, ELEC, Tunnel							2364	20	1	9		4426		10	1	20	2062	Classrooms: WC200,WC250							L	3/4	12
12	3/4	L	Chiller Rm							896	20	1	11			3818	12	1	20	2922	Classrooms: WC225,WC275							L	3/4	12
-	-		SPARE								20	1	13	2488			14	1	20	2488	Labs: W220,W230,W215							L	3/4	12
-	-		SPARE								20	1	15		0		16	1	20		Café Future Lighting							L	3/4	12
12	3/4	L	Ext. NE Loading							208	20	1	17			208	18	1	20		SPARE								-	-
-	-		SPARE								20	1	19	0			20	1	20		SPARE								-	-
-	-		SPARE								20	1	21		635		22	1	20	635	Building Mounted Lighting							L	3/4	12
12	3/4	L	Elevator Machine Room/Pit Lighting							202	20	1	23			671	24	**1**	**20**	**469**	**Site Lighting & Illinois St. Lighting North**							**L**	1	8
-	-		SPACE										25	536			26	**1**	**20**	**536**	**Site Lighting & Illinois St. Lighting South**							**L**	1	8
-	-		SPACE										27		0		28				SPACE								-	-
-	-		SPACE										29			0	30				SPACE								-	-
8	3/4	M	Snow Melt Area A							11080	50	1	31	11080			32				SPACE								-	-
8	3/4	M	Snow Melt Area A							11080	50	1	33		22160		34	1	50	11080	Snow Melt Area B							M	3/4	8
8	3/4	M	Snow Melt Area A							11080	50	1	35			22160	36	1	50	11080	Snow Melt Area B							M	3/4	8
8	3/4	M	Snow Melt Area A							11080	50	1	37	22160			38	1	50	11080	Snow Melt Area C							M	3/4	8
8	3/4	M	Snow Melt Area A							11080	50	1	39		22160		40	1	50	11080	Snow Melt Area C							M	3/4	8
8	3/4	M	Snow Melt Area A							11080	50	1	41			22160	42	1	50	11080	Snow Melt Area C							M	3/4	8
													Phase Totals	A	B	C														
														45815	53077	52841														

1

Load Summary

Connected VA		Demand Factor	Demand VA
L - Lighting	29853	125%	37316.25
R - Receptacles (1st 10,000 VA)	0	100%	0
R - Receptacles (Remaining)	0	50%	0
LM - Largest Motor	0	125%	0
M - Remaining HVAC	121880	100%	121880
ME - Mechanical/Miscellaneous	0	100%	0
K - Kitchen	0	100%	0
Total Connected VA	151733		

Total Demand VA	159,196
Total Demand Amps	192
Spare Ampacity In Panel	52.1%

Notes:

COLORADO SCHOOL OF MINES
EARTH ● ENERGY ● ENVIRONMENT
OFFICE OF DESIGN AND CONSTRUCTION
1801 MOLY ROAD, GOLDEN, CO 80401

ISSUE	DESCRIPTION	DATE
A	CODE REVIEW SET	2021-11-04

CLIENT NAME: COLORADO SCHOOL OF MINES - ODC
PROJECT NAME: Illinois St. Site Lighting
DRAWING TITLE: Site Lighting Plan

DESIGNER: JGE
DRAFTER: DRAWN
CHECKER: DPF
PROJECT: IH21-023
CAD FILE: IH21-023_ELEC.dwg

DRAWING NO.
E100
ISSUE A