PANEL DISTRIBUTION: DPP-ELEV

SERVICE: 208/120V, 3PH, 4W + GND

BUS SIZE: 200A	LOAD:			NOTES:
MAIN DEVICE: 150A	CONN	15.0	kVA	
	DEM.	15.0	kVA	
	DEM.	41.7	Amps	

FEEDER No:	FEEDER CONTROLLED	LOAD (kVA) CONN.	LOAD (kVA) DEM.	DEVICES (A) CB		REMARKS	
1	PNL "ELEV-1A"	5.0	5.0	60			
2	PNL "ELEV-1B"	5.0	5.0	60			
3	PNL "ELEV-1C"	5.0	5.0	60			

1

PANEL DISTRIBUTION: EDRP-1 W/TVSS

SERVICE: 208/120V, 3PH, 4W + GND

BUS SIZE: 800A	LOAD:			NOTES:
MAIN DEVICE: 800A	CONN	134.0	kVA	FUSIBLE SWITCH PNL
	DEM.	134.0	kVA	TWO SECTION
	DEM.	372.2	Amps	

FEEDER No:	FEEDER CONTROLLED	LOAD (kVA) CONN.	LOAD (kVA) DEM.	DEVICES (A) SWITCH	DEVICES (A) FUSE	REMARKS	
1	PANEL "ERP-1A"	6.0	6.0	200	200		
2	PANEL "ERP-1B"	12.0	12.0	200	200		
3	PANEL "ERP-1C"	27.0	27.0	200	200		
4	PANEL "ERP-1D"	12.0	12.0	200	200		
5	PANEL "ERP-2A"	13.0	13.0	200	200		
6	PANEL "ERP-2B"	18.0	18.0	200	200		
7	PANEL "ERP-2C"	18.0	18.0	200	200		
8	PANEL "ERP-2D"	8.0	8.0	100	100		
9	PANEL "ERP-3A"	12.0	12.0	200	200		
10	PANEL "ERP-3B"	8.0	8.0	200	200		
11	SPARE			60			

PANEL DISTRIBUTION: RDP-1A

SERVICE: 208/120V, 3PH, 4W + GND

BUS SIZE: 800A	LOAD:			NOTES:
MAIN DEVICE: 800A	CONN	189.0	kVA	CIRCUIT BREAKER PNL
	DEM.	181.0	kVA	1-PROVIDE EMON
	DEM.	502.8	Amps	METER FOR CIRCUIT

FEEDER No:	FEEDER CONTROLLED	LOAD (kVA) CONN.	LOAD (kVA) DEM.	DEVICES (A) CB		REMARKS	
1	PANEL "RP-1A"	22.0	22.0	150			
2	PANEL "RP-1B"	26.0	26.0	150			
3	PANEL "RP-1C"	19.0	19.0	150			
4	PANEL "RP-1D"	36.0	28.0	150			
5	PANEL "RP-2A"	27.0	27.0	150			
6	PANEL "RP-2B"	26.0	26.0	150			
7	PANEL "LP-2B"			150	NOTE 1		
8	PANEL "RP-1E"	10.0	10.0	150			
9	PANEL "RP-2C"	23.0	23.0	150			

PANEL DISTRIBUTION: RDP-3

SERVICE: 208/120V, 3PH, 4W + GND

BUS SIZE: 250A	LOAD:			NOTES:
MAIN DEVICE: 250A	CONN	36.0	kVA	CIRCUIT BREAKER PNL
	DEM.	36.0	kVA	
	DEM.	100.0	Amps	

FEEDER No:	FEEDER CONTROLLED	LOAD (kVA) CONN.	LOAD (kVA) DEM.	DEVICES (A) CB		REMARKS	
1	PANEL "RP-3A"	20.0	20.0	150			
2	PANEL "RP-3B"	16.0	16.0	150			

PANEL DISTRIBUTION: LDP-1A

SERVICE: 480/277V, 3PH, 4W + GND

BUS SIZE: 400A	LOAD:			NOTES
MAIN DEVICE: 400A	CONN	81.0	kVA	
	DEM.	81.0	kVA	
	DEM.	97.5	Amps	

FEEDER No:	FEEDER CONTROLLED	LOAD (kVA) CONN.	LOAD (kVA) DEM.	DEVICES (A) CB		REMARKS	
1	XMFR "T-1A"	7.0	7.0	50			
2	PNL "LP-1A"	34.0	34.0	100			
3	PNL "LP-2A"	40.0	40.0	100			
4	SPARE			200			

PANELBOARD: LP-APRON

SERVICE: 480/277V, 3PH, 4W + GND

BUS SIZE: 60A	LOAD:			NOTES:	SQUARE D POWERLINK PNL
MAIN DEVICE: 60A	CONN	26.4	kVA	1 - PROVIDE CONTROLLABLE CIRCUIT BREAKER	
	DEM.	26.4	kVA	2 - CONTROLLED BY PHOTOCELL	
	DEM.	31.8	Amps		

CKT #	TRIP/ POLE	NOTES	CIRCUIT DESCRIPTION	CONNECTED LOAD (VA) PHASE A		PHASE B		PHASE C		CIRCUIT DESCRIPTION	NOTES	TRIP/ POLE	CKT #
1	20/1	1,2	LTG-APRON	2,200	2,200					LTG-APRON	1,2	20/1	2
3	20/1	1,2	LTG-APRON			2,200	2,200			LTG-APRON	1,2	20/1	4
5	20/1	1,2	LTG-APRON					2,200	2,200	LTG-APRON	1,2	20/1	6
7	20/1	1,2	LTG-APRON	2,200	2,200					LTG-APRON	1,2	20/1	8
9	20/1	1,2	LTG-APRON			2,200	2,200			LTG-APRON	1,2	20/1	10
11	20/1		SPARE						2,200	LTG-APRON	1,2	20/1	12
13	20/1		SPARE		2,200					LTG-APRON	1,2	20/1	14
15	20/1		SPARE							SPARE		20/1	16
17	20/1		SPARE							SPARE		20/1	18
19	20/1		SPARE							SPARE		20/1	20
21	20/1		SPARE							SPARE		20/1	22
23	20/1		SPARE							SPARE		20/1	24
25	20/1		SPARE							SPARE		20/1	26
27	20/1		SPARE							SPARE		20/1	28
29	20/1		SPARE							SPARE		20/1	30
TOTAL CONNECTED LOADS:				4,400	6,600	4,400	4,400	2,200	4,400				

PANELBOARD: LP-1A

SERVICE: 480/277V, 3PH, 4W + GND

BUS SIZE: 100A	LOAD:			NOTES:	SQUARE D POWERLINK PNL
MAIN DEVICE: 100A	CONN	42.7	kVA	1 - PROVIDE CONTROLLABLE CIRCUIT BREAKER	
	DEM.	42.7	kVA	2 - CONTROLLED BY DAYLIGHT SENSOR	
	DEM.	51.4	Amps	3 - CONTROLLED BY PHOTOCELL	

CKT #	TRIP/ POLE	NOTES	CIRCUIT DESCRIPTION	CONNECTED LOAD (VA) PHASE A		PHASE B		PHASE C		CIRCUIT DESCRIPTION	NOTES	TRIP/ POLE	CKT #
1	20/1	1,3	LTG-CANOPY	3,800	180					LTG-EAST STAIR	1	20/1	2
3	20/1	1,3	LTG-CANOPY			3,800	180			LTG-CENTER STAIR	1	20/1	4
5	20/1	1,3	LTG-CANOPY					3,800	1,710	LTG-FLR 1 LOBBY	1	20/1	6
7	20/1	1,3	LTG-CANOPY	3,800	490					LTG-FLR 1 LOBBY	1,2	20/1	8
9	20/1	1,3	LTG-CANOPY			3,800	350			LTG-FLR 1 LOBBY	1,2	20/1	10
11	20/1	1	LTG-FLR 1 VESTIBULES					700	350	LTG-FLR 1 LOBBY	1,2	20/1	12
13	20/1	1	LTG-RAMPS/TUNNEL	2,760						SPARE		20/1	14
15	20/1		LTG-FLR 1 NW			2,573				SPARE		20/1	16
17	20/1		LTG-FLR 1 CBP AREA					1,216		SPARE		20/1	18
19	20/1	1	LTG-FLR 1 CBP AREA	1,660						SPARE		20/1	20
21	20/1	1	LTG-FLR 1 CBIS RM			3,420				SPARE		20/1	22
23	20/1		LTG-FLR 1 NE					1,952		SPARE		20/1	24
25	20/1		LTG-FLR 1 RAC	700						SPARE		20/1	26
27	20/1	1	LTG-FLR 1 ROVER			400				SPARE		20/1	28
29	20/1	1	LTG-FLR 1 CORR.					739		SPARE		20/1	30
31	20/1	1,3	LTG-CANOPY	3,800						SPARE		20/1	32
33	20/1		SPARE							SPARE		20/1	34
35	20/1		SPARE							SPARE		20/1	36
37	20/1		SPARE							SPARE		20/1	38
39	20/1		SPARE							SPARE		20/1	40
41	20/1		SPARE						500	DEVICE ROUTER		20/1	42
TOTAL CONNECTED LOADS:				16,520	670	13,993	530	8,407	2,560				

PANELBOARD: LP-2A

SERVICE: 480/277V, 3PH, 4W + GND

BUS SIZE: 100A	LOAD:			NOTES:	SQUARE D POWERLINK PNL
MAIN DEVICE: 100A	CONN	40.0	kVA	1 - PROVIDE CONTROLLABLE CIRCUIT BREAKER	
	DEM.	40.0	kVA	2 - CONTROLLED BY DAYLIGHT SENSOR	
	DEM.	48.1	Amps		

CKT #	TRIP/ POLE	NOTES	CIRCUIT DESCRIPTION	CONNECTED LOAD (VA) PHASE A		PHASE B		PHASE C		CIRCUIT DESCRIPTION	NOTES	TRIP/ POLE	CKT #
1	20/1	1	LTG-FLR 2 CBP AREA	2,200	3,440					LTG-FLR 2 WAITING	1	20/1	2
3	20/1		LTG-FLR 2 WEST			2,938	3,440			LTG-FLR 2 WAITING	1	20/1	4
5	20/1		LTG-FLR 2 EAST					2,604	3,440	LTG-FLR 2 WAITING	1	20/1	6
7	20/1	1	LTG-FLR 2 CORR.	1,086	210					LTG-ROOF		20/1	8
9	20/1	1,2	LTG-FLR 2 CONCRS.			1,575	2,332			LTG-FLR 3 STOR./OPS		20/1	10
11	20/1	1	LTG-FLR 2 CONCRS.					2,310	3,320	LTG-FLR 3 OPS/OFFICES		20/1	12
13	20/1	1	LTG-FLR 2 TSA/DEPLAN.	2,100	1,990					LTG-FLR 3 RESTRM/OFF.		20/1	14
15	20/1	1	LTG-FLR 2 CONCRS.			1,540	2,580			LTG-FLR 3 EQUIP. RMS		20/1	16
17	20/1	1	LTG-CBP COORD.					200	1,076	LTG-FLR 3 WAIT./CORR.	1	20/1	18
19	20/1		SPARE		1,310					LTG-FLR 3 RECEPT/OFFICE	1	20/1	20
21	20/1		SPARE				300			LTG-FLR 3 RECEPT.	1	20/1	22
23	20/1		SPARE							SPARE		20/1	24
25	20/1		SPARE							SPARE		20/1	26
27	20/1		SPARE							SPARE		20/1	28
29	20/1		SPARE							SPARE		20/1	30
31	20/1		SPARE							SPARE		20/1	32
33	20/1		SPARE							SPARE		20/1	34
35	20/1		SPARE							SPARE		20/1	36
37	20/1		SPARE							SPARE		20/1	38
39	20/1		SPARE							SPARE		20/1	40
41	20/1		SPARE							SPARE		20/1	42
TOTAL CONNECTED LOADS:				5,386	6,950	6,053	8,652	5,114	7,836				

PANELBOARD: LP-2B

SERVICE: 208/120V, 3PH, 4W + GND

BUS SIZE: 225A	LOAD:			NOTES:	SQUARE D POWERLINK PNL
MAIN DEVICE: 150A	CONN	4.2	kVA	1 - PROVIDE CONTROLLABLE CIRCUIT BREAKER	
	DEM.	4.2	kVA	2-VERIFY OCP DEVICE SIZE PER MANUFACTURER'S REQ.	
	DEM.	11.6	Amps		

CKT #	TRIP/ POLE	NOTES	CIRCUIT DESCRIPTION	CONNECTED LOAD (VA) PHASE A		PHASE B		PHASE C		CIRCUIT DESCRIPTION		TRIP/ POLE	CKT #
1	20/1		REC-GENERAL	540	510					GRILLE	2	15/2	2
3	20/1		REC-GENERAL			540	510						4
5	20/1	1	LTG-BAR/COFFEE					525	510	GRILLE	2	15/2	6
7	20/1		LTG-STOR./PREP	330	510								8
9	20/1	1	LTG-VENDING			200				SPARE		20/1	10
11	20/1		SPARE							SPARE		20/1	12
13	20/1		SPARE							SPARE		20/1	14
15	20/1		SPARE							SPARE		20/1	16
17	20/1		SPARE							SPARE		20/1	18
19	20/1		SPARE							SPARE		20/1	20
21	20/1		SPARE							SPARE		20/1	22
23	20/1		SPARE							SPARE		20/1	24
25	20/1		SPARE							SPARE		20/1	26
27	20/1		SPARE							SPARE		20/1	28
29	20/1		SPARE							SPARE		20/1	30
31	20/1		SPARE							SPARE		20/1	32
33	20/1		SPARE							SPARE		20/1	34
35	20/1		SPARE							SPARE		20/1	36
37	20/1		SPARE							SPARE		20/1	38
39	20/1		SPARE							SPARE		20/1	40
41	20/1		SPARE							SPARE		20/1	42
TOTAL CONNECTED LOADS:				870	1,020	740	510	525	510				

RS&H IMPROVING YOUR WORLD

Reynolds, Smith and Hills, Inc.
4525 Airport Approach Rd, Ste A
Duluth, Minnesota 55811
218-722-1227 Fax: 218-722-1052
www.rsandh.com

DULUTH AIRPORT AUTHORITY

DULUTH INTERNATIONAL AIRPORT
DULUTH, MN

NEW PASSENGER TERMINAL

CONSULTANTS

Interior Architects:
SJA ARCHITECTS
11 E Superior Street Se 340, Duluth MN 55802
TEL: (218) 724-8578 / FAX: (218) 724-8717

Structural Engineers:
MBJ CONSULTING ENG.
501 Lake Avenue South, Suite 300, Duluth MN 55802
TEL: (218) 722-1056 / FAX: (218) 722-9306

M/E/P/FP Engineers:
COSENTINI ASSOCIATES INC.
1 South Wacker Drive, 37th Floor, Chicago IL 60606
TEL: (312) 201-7408 / FAX: (312) 201-0031

Baggage Handling Systems Consultants:
BNP ASSOCIATES INC.
101 East Ridge Office Park, Suite 103, Danbury CT 06810
TEL: (203) 792-3000 / FAX: (203) 792-4900

Landscaping Consultants:
APPOLD DESIGN
2432 East First Street, Duluth MN 55812
TEL: (218) 591-5079

ENGINEER CERTIFICATION

I hereby certify that the engineerinhg plans, specifications or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Minnesota.

Print Name: Douglas C. Mass

Signature:

Date: 08/16/10 Reg. No.: 21067

REVISIONS

NO.	DESCRIPTION	DATE
1	ADDENDUM 1	6.11.10
	CONFORMANCE SET	7.12.10
3	PERMIT REVISIONS	7.23.10
	BUILDING PERMIT	8.16.10
	100% REVIEW	12.17.10
	BID PACKAGE 2A	1.24.11
1	BP2A ADDENDUM 2	2.25.11

DATE ISSUED: 02-25-11
REVIEWED BY: XXX
DRAWN BY: JK
DESIGNED BY: JK

AEP PROJECT NUMBER
213-1882-091

© 2010 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE
PANEL SCHEDULES

SHEET NUMBER
E405

BID PACKAGE 2A
ADDENDUM 2