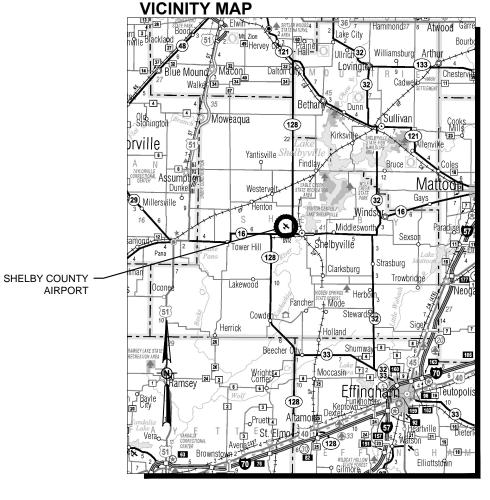
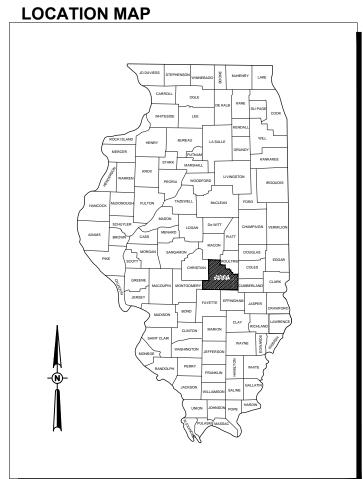
# **CONSTRUCTION PLANS**

# CONSTRUCT ACCESS TO SNOW REMOVAL EQUIPMENT STORAGE BUILDING

SHELBY COUNTY AIRPORT AND LANDING FIELD COMMISSION SHELBY COUNTY AIRPORT (2H0) SHELBYVILLE, SHELBY COUNTY, ILLINOIS

**IDA PROJECT NO. 2H0-4341** 

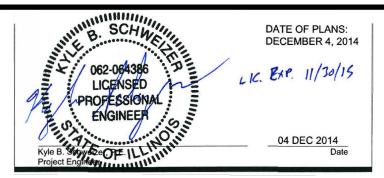




## NOTICE TO CONTRACTORS AND BIDDERS

THESE CONSTRUCTION PLANS RELY UPON THE SPECIAL PROVISIONS AND THE SPECIFICATIONS TO PROVIDE FOR A COMPLETE DESCRIPTION OF THE WORK AND CONSTRUCTION REQUIREMENTS. THE PLANS SHALL ONLY BE USED IN COMBINATION WITH ALL CONTRACT DOCUMENTS.

No.	Issue/Description	Sheets Changed	Date	Ву



HANSON	
HANSON PROFESSIONAL SERVICES INC.	
1525 South Sixth Street	
Springfield, Illinois 62703-2886	
Telephone: 217.788.2450	
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CAN h. CM	04 DEC 2014
Robert A. Waller, P.E.	Date
Project Manager	

SHELBY COUNTY AIRPORT AND LANDING FIELD COMMISSION P. O. Box 295
Assumption, Illinois 62510

Steve K.	Wangen	12.5-14
Steve R. Wempen	1	Date
Secretary	,	

SUMMARY OF QUANTITIES						
ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	AS-BUILT QUANTITY		
AR125962	RELOCATE BASE MOUNTED LIGHT	EA.	1			
AR150510	ENGINEER'S FIELD OFFICE	L.S.	1			
AR150520	MOBILIZATION	L.S.	1			
AR152410	UNCLASSIFIED EXCAVATION	C.Y.	900			
AR152540	SOIL STABILIZATION FABRIC	S.Y.	1,733			
AR156520	INLET PROTECTION	EA.	5			
AR209510	CRUSHED AGGREGATE BASE COURSE	TON	830			
AR401613	BIT, SURF. CSEMETHOD I, SUPERPAVE	TON	390			
AR401900	REMOVE BITUMINOUS PAVEMENT	S.Y.	702			
AR501600	PCC SIDEWALK	S.F.	1,041			
AR602510	BITUMINOUS PRIME COAT	GAL.	490			
AR603510	BITUMINOUS TACK COAT	GAL.	163			
AR620520	PAVEMENT MARKING-WATERBORNE	S.F.	830			
AR620525	PAVEMENT MARKING-BLACK BORDER	S.F.	830			
AR701006	6" PVC STORM SEWER	L.F.	36			
AR701512	12" RCP, CLASS IV	L.F.	191			
AR701900	REMOVE PIPE	L.F.	74			
AR701960	RELOCATE PIPE	L.F.	38			
AR751411	INLET-TYPE A	EA.	3			
AR751540	MANHOLE 4'	EA.	2			
AR751900	REMOVE INLET	EA.	2			
AR800457	UTILITY INVESTIGATION	L.S.	1			
AR901510	SEEDING	ACRE	0.6			
AR908510	MULCHING	ACRE	0.6			

INDEX TO SHEETS				
SHEET NO. DESCRIPTION				
1	COVER SHEET			
2	SUMMARY OF QUANTITIES AND INDEX TO SHEETS			
3	SAFETY PLAN AND GENERAL NOTES			
4	EXISTING SITE AND DEMOLITION PLAN			
5 CONSTRUCTION PLAN				
6 GRADING PLAN				
7	TYPICAL SECTION AND DETAILS			
8	MARKING AND LIGHT RELOCATION PLAN			
9 ELECTRICAL DETAILS				
10 ELECTRICAL NOTES				
11	EXISTING HIGH VOLTAGE WIRING SCHEMATIC			



Offices Nationwide www.hanson-inc.com

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Illinois Licensed Professional Service Corporation #184-001084

SHELBY COUNTY AIRPORT

P. O. BOX 295 ASSUMPTION, IL. 62510

CONSTRUCT ACCESS TO SNOW REMOVAL EQUIPMENT STORAGE BUILDING

IDA No: 2H0-4341 SBG No: 3-17-SBGP-XX

CONTRACT No: SE005

	NO.	DATE	DESCRIPTION		
	INO.		DES	DWN	REV
ISSUE: DECEMBER 4, 2014					
	PROJECT NO: 13A0082				
	CADEIL	E. C 00	2600	DMC	

CAD FILE: G-002SOQ.DWG

DESIGN BY: KBS 11/14/2014

DRAWN BY: KBS 11/14/2014

DRAWN BY: KBS 11/14/2014 REVIEWED BY: RAW 12/04/2014

SHEET TITLE

SUMMARY OF QUANTITIES AND INDEX TO SHEETS

THE LOCATION, SIZE, AND TYPE OF MATERIAL OF EXISTING UNDERGROUND AND/OR ABOVEGROUND UTILITIES INDICATED ON THE PLANS ARE NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY WHATEVER IN RESPECT TO THE ACCURACY, COMPLETENESS, OR SUFFICIENCY OF THE INFORMATION. THERE IS NO GUARANTEE. EITHER EXPRESSED OR IMPLIED. THAT THE LOCATIONS, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED IN THE CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION. THE OWNER'S REPRESENTATIVE AND/OR THE RESIDENT ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY DAMAGE TO SUCH MAINS AND SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT. ALL UTILITY CABLES AND LINES SHALL BE LOCATED BY THE RESPECTIVE UTILITY. CONTACT JULIE (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS) FOR UTILITY INFORMATION, PHONE: 1-800-892-0123, CONTACT THE FAA (FEDERAL AVIATION ADMINISTRATION) FOR ASSISTANCE IN LOCATING FAA CABLES AND UTILITIES. LOCATION OF FÁA POWER, CONTROL, AND COMMUNICATION CABLES SHALL BE COORDINATED WITH AND/OR LOCATED BY THE FAA. ALSO CONTACT AIRPORT DIRECTOR/MANAGER AND AIRPORT PERSONNEL FOR ASSISTANCE IN LOCATING UNDERGROUND AIRPORT CABLES AND/OR UTILITIES. ALSO COORDINATE WORK WITH ALL ABOVEGROUND UTILITIES.

## HAUL ROUTE AND EQUIPMENT PARKING

THE CONTRACTOR WILL USE THE DESIGNATED HAUL ROUTE AND EQUIPMENT PARKING AREA AS SHOWN ON THIS SHEET. THE PROPOSED PARKING AREA WILL BE 50' X 50'. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN THE PROPOSED HAUL ROUTE AND PARKING AREA THROUGHOUT THE COURSE OF THE PROJECT. ANY AREAS DAMAGED OUTSIDE OF THESE AREAS WILL BE REPAIRED BY THE CONTRACTOR AND AT THE CONTRACTOR'S OWN EXPENSE. AT THE CONCLUSION OF THE PROJECT THE CONTRACTOR WILL GRADE, FERTILIZE, SEED AND MULCH THE EQUIPMENT PARKING AREA AS NEEDED TO RESTORE IT TO ITS' ORIGINAL STATE. RESTORATION OF THE HAUL ROUTE AND PARKING AREA WILL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

## CONTRACTOR RESPONSIBILITIES

THE CONTRACTOR'S EQUIPMENT PARKING AND STORAGE AREA WILL BE AS SHOWN ON THIS SHEET. THE CONTRACTOR'S EMPLOYEES WILL PARK THEIR VEHICLES IN THE AUTO PARKING LOT. ONLY CONTRACTOR VEHICLES WILL BE ALLOWED OUTSIDE THIS AREA.

THE CONTRACTOR AND HIS EMPLOYEES WILL BE RESTRICTED TO THE WORK AREA AND ALL OTHER AREAS OF THE AIRPORT ARE "OFF LIMITS" TO THEM.

THE CONTRACTOR SHALL KEEP ALL RUNWAYS OPEN AT ALL TIMES. TAXIWAY "A" SHALL BE CLOSED ANYTIME THE CONTRACTOR IS WORKING WITHIN 66' OF THE TAXIWAY "A" CENTERLINE.

ALL WORK PERFORMED SHALL BE DONE IN AN ORDERLY AND EFFECTIVE MANNER TO MINIMIZE TAXIWAY CLOSURE.

## BARRICADES AND TRAFFIC CONES

IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE AND MAINTAIN BARRICADES AND TRAFFIC CONES AS DIRECTED BY THE AIRPORT MANAGER. THE BARRICADES WILL BE EQUIPPED WITH RED FLASHING OR RED STEADY-BURN LIGHTS AND 20" SQUARE ORANGE FLAGS. THE BARRICADES THEIR MAINTENANCE, PLACEMENT AND REMOVAL WILL BE CONSIDERED AS AN INCIDENTAL ITEM TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BF ALLOWED

	CRITICAL POINTS						
POINT #	DESCRIPTION LATITUDE LONGITUDE		GRND. ELEV. (MSL)	HEIGHT (AGL)			
1	CONST. EQUIP.	N039* 24' 24.466"	W088* 50' 43.532"	614.0	25		
2	CONST. EQUIP.	N039* 24' 25.909"	W088* 50' 43.614"	614.0	25		
3	CONST. EQUIP.	N039* 24' 26.821"	W088* 50' 43.125"	613.0	25		
4	CONST. EQUIP.	N039* 24' 27.286"	W088* 50' 42.417"	614.0	25		
5	CONST. EQUIP.	N039* 24' 27.285"	W088* 50' 41.992"	614.0	25		
6	CONST. EQUIP.	N039* 24' 26.882"	W088* 50' 41.382"	614.0	25		
7	BARRICADES	N039° 24′ 27.432″	W088* 50' 49.304"	618.0	N/A		

## SCOPE OF WORK

THIS PROJECT CONSISTS OF CONSTRUCTING A BITUMINOUS ACCESS TO THE SNOW REMOVAL EQUIPMENT BUILDING. PROJECT INCLUDES PAVEMENT REMOVAL, UNCLASSIFIED EXCAVATION, DRAINAGE INSTALLATION, PAVED DITCH, AGGREGATE BASE COURSE, BITUMINOUS PAVEMENT, PAVEMENT MARKING, SEEDING AND MULCHING.

## AIRPORT SECURITY NOTE

AIRPORT SECURITY WILL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR WILL CLOSE AND LOCK THE EXISTING GATE IN THE HAUL ROUTE AT THE END OF FACH WORKING DAY

## HEIGHT OF CONSTRUCTION EQUIPMENT

THE MAXIMUM ANTICIPATED HEIGHT OF THE CONSTRUCTION EQUIPMENT WILL BE 25 FEET. THE TALLEST EQUIPMENT IS EXPECTED TO BE A DUMP TRUCK.

ALL CONSTRUCTION/OPERATIONS ARE TO BE PERFORMED IN ACCORDANCE WITH FAA ADVISORY CIRCULAR (AC) 150/5370-2F "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION" AND AC 150/5300-13A "AIRPORT DESIGN"

ALL CONSTRUCTION EQUIPMENT ON THE AIRPORT SHALL BE MARKED, LIGHTED AND/OR FLAGGED IN ACCORDANCE WITH AC 150/5210-5 AND 70/7460-1.

-2

50' 100'

HALF SIZE SCALE: 1"= 200 FULL SIZE SCALE: 1"= 100' ADDITIONAL BARRICADE

TAXIWAY "A" CLOSURES

CONSTRUCTION DURATION

PROPOSED SRE

GRADING LIMITS

ACCESS RD

(CP3)-

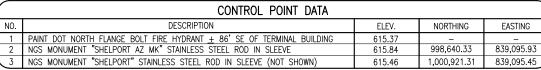
BARRICADE PLACEMENT FOR ENTIRE

PROPOSED EQUIPMENT PARKING AREA 50'x50'

1

AIRCRAFT OPERATIONS AREA LIMIT

PLACEMENT DURING



## CERTIFIED PAYROLLS

THE RESIDENT ENGINEER CANNOT FORWARD CONSTRUCTION REPORTS TO THE ILLINOIS DIVISION OF AERONAUTICS FOR PROCESSING UNTIL ALL CERTIFIED PAYROLLS FOR THE PERIOD HAVE BEEN RECEIVED.

## MATERIAL CERTIFICATION

MATERIAL TO BE INCORPORATED INTO THE PROJECT CANNOT BE USED WITHOUT PRIOR APPROVAL. ALL MATERIAL TO BE USED IN THE PROJECT MUST BE SUBMITTED TO THE RESIDENT ENGINEER FOR APPROVAL. USE OF MATERIAL WITHOUT PRIOR APPROVAL AND ULTIMATELY DETERMINED TO BE UNACCEPTABLE BY THE ILLINOIS DIVISION OF AERONAUTICAL ARE SUBJECT TO REMOVAL AND/OR NON-PAYMENT

SOD RUNWAY 4-22

-EXISTING LARGE HANGAR

-EXISTING SRE BUILDING

ILLINOIS ROUTE 16

-EXISTING TERMINAL BUILDING

PROPOSED HAUL ROUTE

CONTROL POINT DATA						
).	DESCRIPTION	ELEV.	NORTHING	EASTING		
	PAINT DOT NORTH FLANGE BOLT FIRE HYDRANT $\pm$ 86' SE OF TERMINAL BUILDING	615.37	-	-		
	NGS MONUMENT "SHELPORT AZ MK" STAINLESS STEEL ROD IN SLEEVE	615.84	998,640.33	839,095.93		
	NGS MONUMENT "SHELPORT" STAINLESS STEEL ROD IN SLEEVE (NOT SHOWN)	615.46	1,000,921.31	839,095.45		

S

## J.U.L.I.E. INFORMATION

COUNTY	SHELBY
CITY	SHELBYVILLE
TOWNSHIP	T-11-N
RANGE	R-3-E
SECTION NO	10,11
ADDRESS	SHELBY COUNTY AIRPORT
	RR # 2

SHEÜBYVILLE, ILLINOIS 62565 SHELBY COUNTY AIRPORT

> P. O. BOX 295 ASSUMPTION, IL. 62510

Hanson Professional Services Inc.

Professional Service Corporation

1525 S. 6th Street

fax: 217-788-2503

Illinois Licensed

#184-001084

Springfield, IL 62703

phone: 217-788-2450

PROPOSED SAFETY PLAN

GENERAL - THE SHELBY COUNTY AIRPORT IS COMPRISED OF THREE RUNWAYS. THE PROPOSED CONSTRUCTION WILL NOT CLOSE ANY RUNWAY. ANY TIME THE CONTRACTOR IS WORKING WITHIN 66' OF THE TAXIWAY CENTERLINE THE TAXIWAY WILL BE CLOSED. THE TAXIWAY WILL BE CLOSED ONLY DURING THE CONSTRUCTION DAY. AT THE END OF EACH CONSTRUCTION DAY THE CONTRACTOR WILL SMOOTH GRADE ALL AREAS. WITHIN THE SAFETY AREA TO THE SATISFACTION OF THE RESIDENT ENGINEER AND RE-OPEN THE TAXIWAY. IF THE EARTH SHOULDER HAS BEEN EXCAVATED FOR THE PROPOSED TAXIWAY, THEN THE CONTRACTOR WILL PLACE THE BARRICADES INTO THE EXCAVATED AREA TO DELINEATE IT FOR PILOTS USING TAXIWAY "A" OR "B". ALL WORK INCLUDED IN OPENING AND CLOSING A TAXIWAY WILL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

IDENTIFICATION - WHEN THE CONTRACTORS VEHICLES AND EQUIPMENT ARE ON THE AIRPORT THEY SHALL BE PROPERLY MARKED WITH THREE (3') FOOT SQUARE CHECKERED FLAGS (INTERNATIONAL ORANGE AND WHITE). THE CONTRACTOR WILL ALSO PROVIDE WORKERS WITH SOME TYPE OF TAG OR GARMENT TO IDENTIFY THE PERSON AS BEING PART OF THE CONSTRUCTION

RADIO CONTROL - THE CONTRACTOR WILL BE REQUIRED TO BE IN TWO-WAY RADIO CONTACT (122.80 MHz.) WITH THE AIRPORT UNICOM. THIS WILL KEEF THE CONTRACTOR IN CONSTANT CONTACT WITH THE SHELBY COUNTY AIRPOR AND ENABLE THE AIRPORT TO IMMEDIATELY CONTACT THE CONTRACTOR IN CASE OF AN AERONAUTIC EMERGENCY THAT WOULD REQUIRE ACTION BY THE CONTRACTOR AND/OR HIS PERSONNEL.

## 150-ENGINEER'S FIELD OFFICE NOTES

THE PROPOSED ENGINEER'S FIELD OFFICE WILL BE FURNISHED, MAINTAINED, AND REMOVED IN ACCORDANCE WITH ITEM AR150510 "ENGINEER'S FIELD OFFICE" AS STATED ON PAGE 49 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION OF AIRPORTS APRIL 1, 2012.

THE LOCATION OF THE PROPOSED ENGINEER'S FIELD OFFICE SHALL BE COORDINATED WITH THE AIRPORT MANAGER. EXISTING AIRPORT FACILITIES MAY BE AVAILABLE FOR USE, CONTACT THE AIRPORT MANAGER FOR FURTHER

THE CONTRACTOR WILL FURNISH A WIRELESS PHONE TO THE RESIDENT ENGINEER FOR HIS EXCLUSIVE USE FOR THE DURATION OF THIS PROJECT. THE RESIDENT ENGINEER WILL USE THIS PHONE FOR PROJECT BUSINESS ONLY. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL CHARGES ASSOCIATED WITH THIS CELL PHONE.

THE PROPOSED ENGINEER'S FIELD OFFICE WILL BE PAID FOR UNDER ITEMS: AR150510 ENGINEER'S FIELD OFFICE \_\_\_\_ 1 L.S.

## **EROSION CONTROL**

THIS PROJECT WILL DISTURB LESS THAN 1 ACRE OF LAND, THEREFORE NO N.P.D.E.S. PERMIT WILL BE REQUIRED.

## **LEGEND**



PROPOSED HAUL ROUTE AND EQUIPMENT PARKING AREA

(1) SURVEY CONTROL POINT

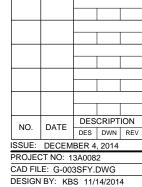
(CP1) CRITICAL POINT PROPOSED LOW PROFILE BARRICADES

SAFETY PLAN AND **GENERAL NOTES** 

CONSTRUCT ACCESS TO SNOW REMOVAL **EQUIPMENT STORAGE** BUILDING IDA No: 2H0-4341

SBG No: 3-17-SBGP-XX

CONTRACT No: SE005



DRAWN BY: KBS 11/14/2014 REVIEWED BY: RAW 12/04/2014

SHEET TITLE

- 1. ALL REMOVED OR EXCAVATED MATERIALS SHALL BE DISPOSED OF OFFSITE, UNLESS OTHERWISE DIRECTED BY THE RESIDENT ENGINEER. THE AIRPORT HAS FIRST RIGHT OF REFUSAL FOR ALL MATERIALS.
- 2. REMOVAL OF THE GRAVEL INSIDE THE GRADING LIMITS IS INCLUDED IN THE QUANTITY OF AND SHALL BE PAID FOR UNDER PAY ITEM: AR152410 "UNCLASSIFIED EXCAVATION" - PER CUBIC YARD.
- 3. PRIOR TO BEGINNING ANY EXCAVATION OR DRAINAGE INSTALLATION, THE CONTRACTOR SHALL HAVE ALL UNDERGROUND UTILITIES LOCATED, AND THEN STAKE THE PROPOSED GRADING LIMITS, FLOWLINES, PAVEMENT, AND DRAINAGE ITEMS. THE CONTRACTOR WILL THEN EXPOSE OR POTHOLE THE UTILITIES AND SURVEY THEIR ELEVATIONS IN ANY POTENTIAL AREAS OF CONFLICT WITH THE PROPOSED WORK. THIS WORK SHALL BE PAID FOR UNDER PAY ITEM "UTILITY INVESTIGATION" - PER LUMP SUM.
- 4. IF A UTILITY CONFLICT CANNOT BE RESOLVED BY GRADING OR DRAINAGE ADJUSTMENTS, THEN THE UTILITY WILL BE ADJUSTED AS NEEDED BY THE CONTRACTOR ON A FORCE ACCOUNT BASIS OR AS DETERMINED BY THE ENGINEER AND AIRPORT.
- 5. FULL-DEPTH SAW CUTS SHALL BE MADE AT ALL LOCATIONS WHERE PAVEMENT TO BE REMOVED IS SEPARATED FROM PAVEMENT TO REMAIN IN PLACE TO ESTABLISH A CLEAN VERTICAL FACE. ALL SAW CUTTING IS INCIDENTAL TO THE APPLICABLE REMOVAL ITEM.
- 6. ANY EXISTING PAVEMENTS, STRUCTURES, OR UTILITIES DAMAGED DURING DEMOLITION SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
- 7. REMOVAL OF EXISTING CONCRETE SIDEWALK AS SHOWN ON THIS SHEET SHALL BE INCIDENTAL TO THE PROPOSED BITUMINOUS PAVEMENT REMOVAL
- 8. THE PORTION OF THE EXISTING 12" CORRUGATED PLASTIC PIPE TO BE RELOCATED SHALL BE CAREFULLY EXCAVATED AROUND AND REMOVED TO AVOID DAMAGING THE PIPE, AND REINSTALLED PER 701 SPECIFICATIONS AT THE LENGTH AND LOCATION SHOWN ON THE CONSTRUCTION PLAN SHEET. ALL WORK AND MATERIALS ASSOCIATED WITH REMOVAL AND REPLACEMENT SHALL BE PAID FOR UNDER PAY ITEM: AR701960 "RELOCATE PIPE" - PER LINEAR FOOT.

## EXISTING BASE MOUNTED EDGE LIGHT TO BE RELOCATED TAXIWAY A PROPOSED BITUMINOUS PAVEMENT REMOVAL -670 S.Y. @ ~4" THICK EXISTING INLET TO REMAIN -EXISTING FLUME DRAIN PROPOSED GRADING FXISTING INLET TO LIMITS (TYP.) RE REMOVED AND REPLACED WITH - SAW CLOSED STR PROPOSED PAVEMENT LIMITS (TYP.) EXISTING 12" PLASTIC PIPE-146 L.F. 100 L.F. TO REMAIN IN PLACE 38 L.F. TO BE RELOCATED 8 L.F. TO BE REMOVED SEE NOTE #8 - SAW EXISTING, SIDEWALI SIDEWALK TO BE REMOVED LOOSE GRAVEL AREA - EXISTING -NLET TO BE AIRPORT THICKNESS VARIES BEACON EXISTING EXISTING 10 FENCE PROPOSED PLASTIC PIPE 66\0F 122 L.F. TO GRADING \ \BE REMOVED LIMITS (TYP.) EXISTING AIRFIELD LIGHTING EXISTING HANGAR HOMERUN CABLES POWER SERVICE IN UNIT DUCTS EXISTING BEACON POWER AND PHOTOCELL BYPASS \ \switch circuits in UNIT DUCTS ABANDONED POWER SERVICE **EXISTING** GATE PROPOSED BITUMINOUS PAVEMENT REMOVAL - ABANDONED ELECTRICAL DUCTS EXISTING TRANSFORMER HALF SIZE SCALE: 1"= 40

Hanson Professional Services Inc. 1525 S. 6th Street Springfield, IL 62703 phone: 217-788-2450 fax: 217-788-2503

Illinois Licensed Professional Service Corporation #184-001084

SHELBY COUNTY AIRPORT

P. O. BOX 295 ASSUMPTION, IL. 62510

CONSTRUCT ACCESS TO SNOW REMOVAL **EQUIPMENT STORAGE** BUILDING

IDA No: 2H0-4341 SBG No: 3-17-SBGP-XX

**CONTRACT No: SE005** 

DESCRIPTION NO. DATE DES DWN REV ISSUE: DECEMBER 4, 2014

PROJECT NO: 13A0082 CAD FILE: C-111-PRP.DWG

DESIGN BY: KBS 11/14/2014 DRAWN BY: MLH 11/14/2014 REVIEWED BY: RAW 12/04/2014

SHEET TITLE

**EXISTING SITE AND DEMOLITION PLAN** 

## **UTILITY NOTE**

THE LOCATION, SIZE, AND TYPE OF MATERIAL OF EXISTING UNDERGROUND AND/OR ABOVEGROUND UTILITIES INDICATED ON THE PLANS ARE NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY WHATSOEVER IN RESPECT TO THE ACCURACY, COMPLETENESS, OR SUFFICIENCY OF THE INFORMATION. THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED. THAT THE LOCATIONS, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED IN THE CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION. THE OWNER'S REPRESENTATIVE AND/OR THE RESIDENT ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY DAMAGE TO SUCH MAINS AND SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT. ALL UTILITY CABLES AND LINES SHALL BE LOCATED BY THE RESPECTIVE UTILITY. CONTACT JULIE (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS) FOR UTILITY INFORMATION, PHONE: 1-800-892-0123. CONTACT THE FAA (FEDERAL AVIATION ADMINISTRATION) FOR ASSISTANCE IN LOCATING FAA CABLES AND UTILITIES. LOCATION OF FAA POWER, CONTROL, AND COMMUNICATION CABLES SHALL BE COORDINATED WITH AND/OR LOCATED BY THE FAA. ALSO CONTACT AIRPORT DIRECTOR/MANAGER AND AIRPORT PERSONNEL FOR ASSISTANCE IN LOCATING UNDERGROUND AIRPORT CABLES AND/OR UTILITIES. ALSO COORDINATE WORK WITH ALL ABOVEGROUND UTILITIES.

## **LEGEND**

PROPOSED BITUMINOUS PAVEMENT REMOVAL PROPOSED SIDEWALK REMOVAL (INCIDENTAL)

++++/ &/++++ PROPOSED PIPE REMOVAL

PROPOSED INLET REMOVAL EXISTING GRAVEL AREA

EXISTING INLET

EXISTING BUILDINGS

EXISTING MANHOLE

---- < EXISTING STORM SEWER

EXISTING FLUME DRAIN ---- EXISTING AIRFIELD ELECTRIC CABLES

— E — EXISTING ELECTRICAL POWER CABLES

—— G —— EXISTING GAS

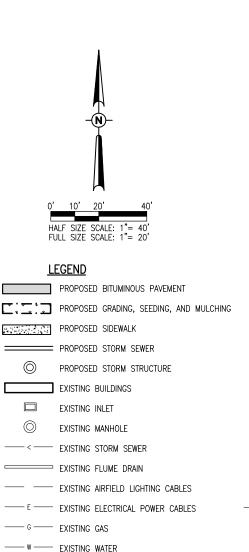
----- w ---- EXISTING WATER

---- T ---- EXISTING TELEPHONE

---- x ---- EXISTING FENCE

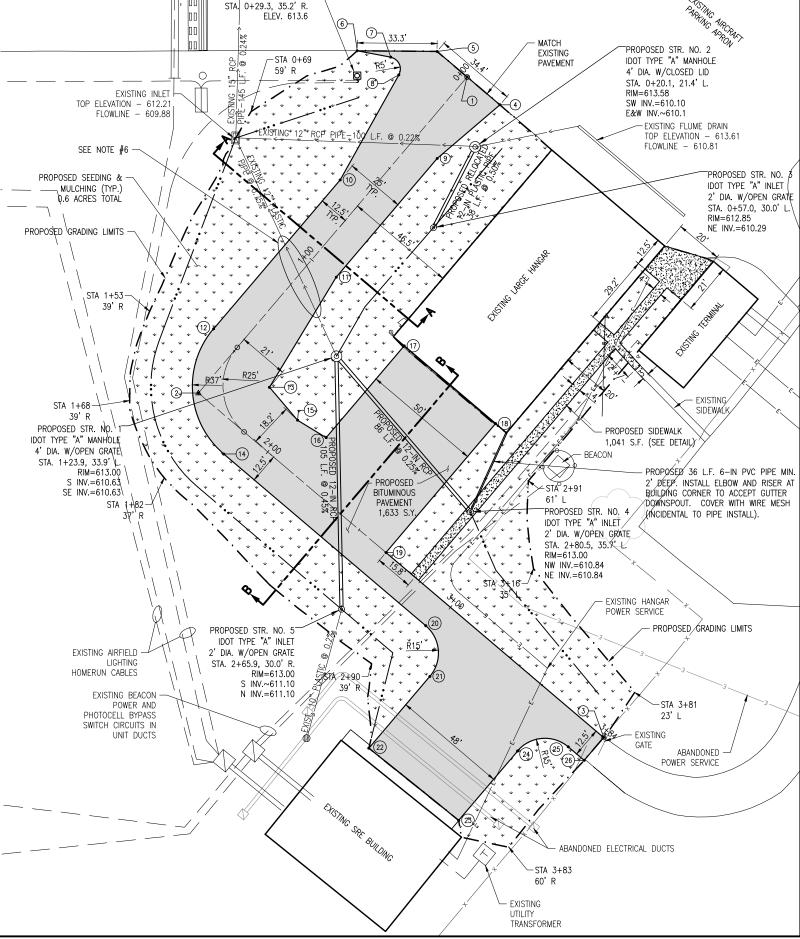
- 1. STRUCTURE NUMBERS 1 & 2 SHALL CONFORM TO IDOT STANDARD 602401-03 "MANHOLE TYPE A".
- 2. STRUCTURE NUMBERS 3, 4, & 5 SHALL CONFORM TO IDOT STANDARD 602301-04 "INLET TYPE A".
- 3. ALL CASTINGS SHALL BE NEENAH R-2553 FOR OPEN GRATE (TYPE G) AND R-1553 FOR CLOSED LID, OR APPROVED EQUAL.
- 4. ALL WORK AND MATERIALS REQUIRED TO MAKE PROPOSED DRAINAGE CONNECTIONS ARE INCIDENTAL TO THE APPLICABLE PROPOSED DRAINAGE PAY ITEM, INCLUDING CONNECTIONS TO EXISTING PIPES OR STRUCTURES.
- 5. FINAL SIDEWALK CONFIGURATION AND JOINTING LAYOUT SHALL BE COORDINATED WITH AND APPROVED BY THE RESIDENT ENGINEER AND AIRPORT MANAGER.
- 6. THE CONTRACTOR SHALL TAKE EXTRA PRECAUTION WHEN CROSSING OR COMPACTING OVER THE EXISTING 12" CORRUGATED PLASTIC PIPE TO REMAIN IN PLACE. ANY PORTIONS OF THE PIPE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.

CONTROL POINTS					
POINT #	STATION	OFFSET (FT)	NORTHING	EASTING	
1	0+00.00	0'	998514.2984	839685.1479	
2	1+67.52	10.35' RT.	998382.5731	839573.1802	
3	3+83.73	0'	998239.0686	839742.0073	
4	0+00.00	17.94'LT.	998502.6758	839698.8214	
5	0+00.00	16.39' RT.	998524.9145	839672.6585	
6	0+21.36	41.96'RT.	998525.1969	839639.3419	
7	0+14.35	29.6'RT.	998522.5408	839653.2995	
8	0+17.73	22.24' RT.	998515.1953	839656.7145	
9	0+33.96	12.5' LT.	998480.3307	839672.6806	
10	0+66.96	12.5' RT.	998471.3781	839632.2597	
11	0+98.88	12.5' LT.	998430.8607	839630.6307	
12	1+48.22	12.5' RT.	998409.3362	839579.5235	
13	1+67.52	19.34'LT.	998384.9730	839602.7815	
14	1+86.82	12.5' RT.	998357.1814	839583.7520	
15	2+00.94	18.14'LT.	998371.2773	839614.4886	
16	2+14.73	20.35' LT.	998364.0317	839626.4275	
17	1+02.36	52.57'LT.	998402.2499	839658.9133	
18	2+64.73	70.51' LT.	998369.8663	839697.0113	
19	2+64.73	0'	998316.1363	839651.3403	
20	2+97.08	12.5' RT.	998285.6609	839667.8928	
21	3+12.08	27.5' RT.	998264.5171	839669.6071	
22	3+12.08	66.73' RT.	998234.6226	839644.1965	
23	3+60.08	65.43' RT.	998204.5256	839681.6113	
24	3+60.08	27.5' RT.	998233.4298	839706.1799	
25	3+75.08	12.5' RT.	998235.1441	839727.3238	
26	3+83.73	12.5' RT.	998229.5444	839733.9116	



— T — EXISTING TELEPHONE

— X — EXISTING FENCE



RELOCATED BASE

MOUNTED TAXIWAY LIGHT



Offices Nationwide

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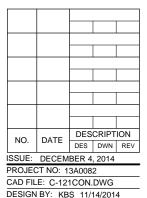
SHELBY COUNTY AIRPORT

P. O. BOX 295 ASSUMPTION, IL. 62510

CONSTRUCT ACCESS TO SNOW REMOVAL EQUIPMENT STORAGE BUILDING

IDA No: 2H0-4341 SBG No: 3-17-SBGP-XX

CONTRACT No: SE005



SHEET TITLE

CONSTRUCTION PLAN

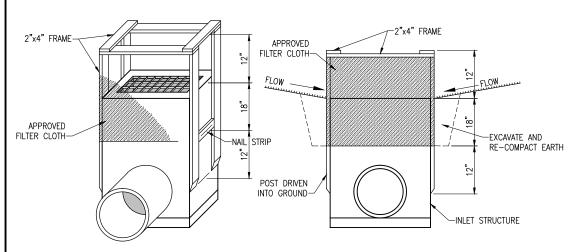
DRAWN BY: MLH 11/14/2014

REVIEWED BY: RAW 12/04/2014

## **GRADING PLAN NOTES**

- 1. ALL REMOVED OR EXCAVATED MATERIALS SHALL BE DISPOSED OF OFFSITE, UNLESS OTHERWISE DIRECTED BY THE RESIDENT ENGINEER.
- 2. REMOVAL OF THE GRAVEL INSIDE THE GRADING LIMITS IS INCLUDED IN THE QUANTITY OF AND SHALL BE PAID FOR UNDER THE ITEM: AR152410 "UNCLASSIFIED EXCAVATION" - PER CUBIC YARD.
- 3. THE GENERAL AREA NOTED AS CONTAINING DEBRIS WAS PART OF A FORMER T-HANGAR SITE. DEBRIS SHALL BE REMOVED AS ENCOUNTERED AS AN INCIDENTAL COST TO THE UNCLASSIFIED EXCAVATION PAY ITEM. CONTACT THE AIRPORT MANAGER TO INSPECT THE
- 4. THE CONTRACTOR SHALL ENSURE THAT A MINIMUM THICKNESS OF 4" OF TOPSOIL MATERIAL IS PRESENT AT FINISHED GRADE IN ALL TURF AREAS. ANY UNDERCUTTING REQUIRED FOR TOPSOIL REPLACEMENT IS INCIDENTAL TO THE UNCLASSIFIED EXCAVATION PAY ITEM.
- 5. THE CONTRACTOR SHALL INSTALL INLET PROTECTION AROUND ALL EXISTING AND PROPOSED INLETS WITHIN THE GRADING LIMITS PRIOR TO BEGINNING THE GRADING IN THOSE AREAS.
- 6. INLET PROTECTION SHALL BE INSTALLED AS PER THE DETAIL ON THIS SHEET, OR AS PER THE IDOT APPROVED METHODS LISTED IN SECTION 41-3.02 OF THE BUREAU OF DESIGN AND ENVIRONMENT MANUAL.
- 7. EARTHWORK QUANTITIES

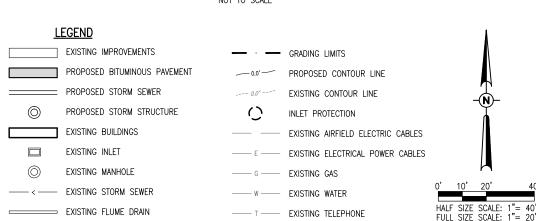
PROPOSED PAVEMENT AREA 575 C.Y. CUT 0 C.Y. FILL PROPOSED TURF AREA 325 C.Y. CUT
TOTAL UNCLASSIFIED EXCAV. 900 C.Y. CUT 20 C.Y. FILL 20 C.Y. FILL

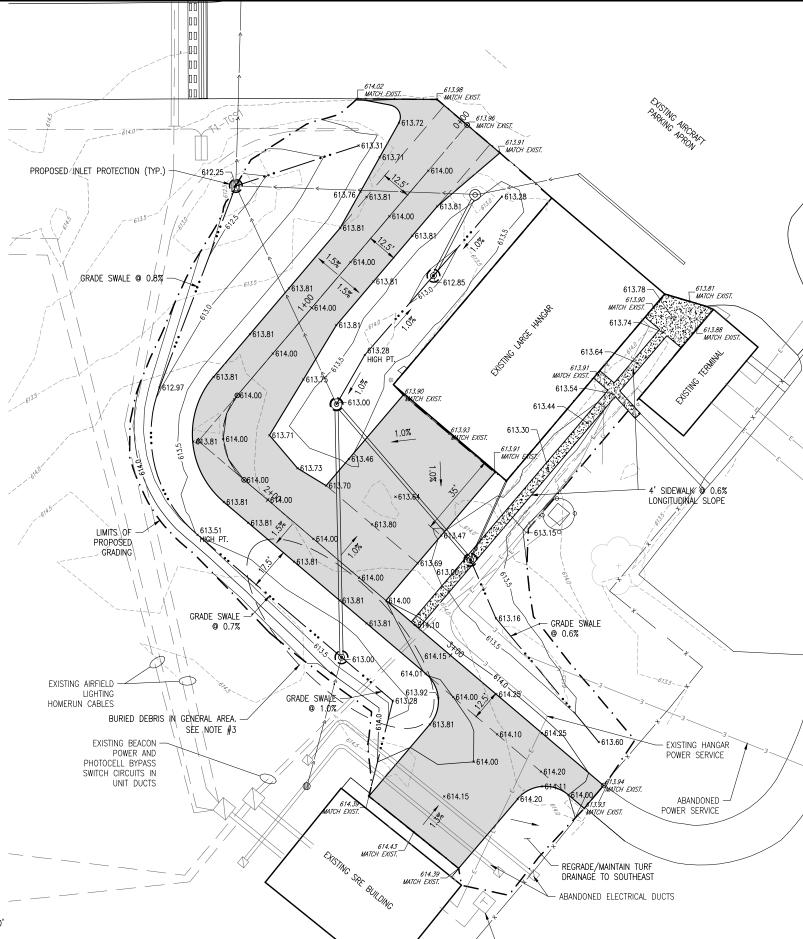


## INLET PROTECTION DETAIL

---- x ---- EXISTING FENCE

NOT TO SCALE





**EXISTING** UTILITY

TRANSFORMER



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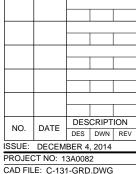
SHELBY COUNTY AIRPORT

P. O. BOX 295 ASSUMPTION, IL. 62510

CONSTRUCT ACCESS TO SNOW REMOVAL **EQUIPMENT STORAGE** BUILDING

IDA No: 2H0-4341 SBG No: 3-17-SBGP-XX

CONTRACT No: SE005

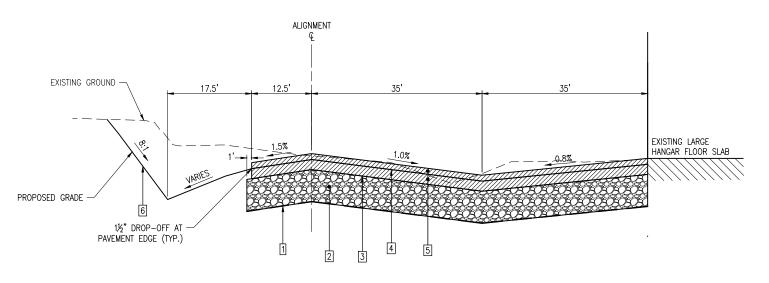


PROJECT NO: 13A0082

DESIGN BY: KBS 11/14/2014 DRAWN BY: MLH 11/14/2014 REVIEWED BY: RAW 12/04/2014

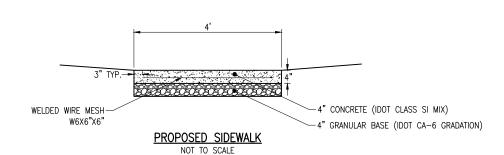
SHEET TITLE

**GRADING PLAN** 



TYPICAL SECTION B-B

- AR152540 SOIL STABILIZATION FABRIC
- 2 AR209510 CRUSHED AGGREGATE BASE COURSE (8" THICKNESS)
- 3 AR602510 BITUMINOUS PRIME COAT (0.3 GAL/S.Y.)
- 4 AR603510 BITUMINOUS TACK COAT (0.1 GAL/S.Y.)
- 5 AR401613 BIT. SURF. CSE. SUPERPAVE, METHOD I (4" THICKNESS PLACED IN 2½" & 1½" LIFTS)
- 6 AR901510 SEEDING/AR908510 MULCHING



## SIDEWALK NOTES

- 1. SIDEWALK SHALL HAVE A FLAT CROSS SLOPE UNLESS OTHERWISE NOTED ON THE PLAN SHEETS.
- 2. SIDEWALK SHALL BE CONSTRUCTED AS DETAILED ON THESE SHEETS AND PAID FOR UNDER ITEM AR501600 "PCC SIDEWALK" - PER SQUARE FOOT.
- 3. EXPANSION JOINTS SHALL BE FORMED AT JUNCTIONS WITH OTHER STRUCTURES AND PAVEMENTS USING A FULL WIDTH AND DEPTH 1/2" THICK PREFORMED EXPANSION JOINT FILLER.
- 4. THE SURFACE SHALL HAVE A BRUSHED FINISH AND ALL EDGES SHALL BE ROUTED WITH AN EDGING TOOL.
- 5. CONTRACTION JOINTS SHALL BE CUT OR TOOLED EVERY 4-6', AND THEN SEALED WITH DOW 890 SILICONE JOINT SEALER OR APPROVED EQUAL. ALL JOINTING AND SEALING IS INCIDENTAL TO SIDEWALK PAY ITEMS.

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P. O. BOX 295 ASSUMPTION, IL. 62510

CONSTRUCT ACCESS TO SNOW REMOVAL **EQUIPMENT STORAGE** BUILDING

IDA No: 2H0-4341 SBG No: 3-17-SBGP-XX

CONTRACT No: SE005

DESCRIPTION NO. DATE DES DWN REV ISSUE: DECEMBER 4, 2014 PROJECT NO: 13A0082

CAD FILE: C-300-TYP.DWG DESIGN BY: KBS 11/14/2014 DRAWN BY: MLH 11/14/2014

REVIEWED BY: RAW 12/04/2014

SHEET TITLE

TYPICAL SECTION AND DETAILS

## LIGHT RELOCATION NOTES

- 1. ALL WORK, POWER OUTAGES, AND/OR SHUT DOWN OF EXISTING SYSTEMS SHALL BE COORDINATED WITH THE AIRPORT DIRECTOR/MANAGER. ONCE SHUT DOWN, THE CIRCUITS SHALL BE LABELED AS SUCH TO PREVENT ACCIDENTAL ENERGIZING OF THE RESPECTIVE CIRCUITS. ALL PERSONNEL SHALL FOLLOW U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) 29 CFR PART 1910 OCCUPATIONAL SAFETY & HEALTH STANDARDS FOR ELECTRICAL SAFETY AND LOCKOUT/TAGOUT PROCEDURES INCLUDING. BUT NOT LIMITED TO. 29 CFR SECTION 1910.147 THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT).
- 2. CONTRACTOR SHALL EXAMINE THE SITE TO DETERMINE THE EXTENT OF THE WORK. CONTRACTOR SHALL FIELD VERIFY EXISTING SITE CONDITIONS. CONTRACTOR SHALL FIELD VERIFY RESPECTIVE CIRCUITS AND POWER SOURCES PRIOR TO REMOVING, DISCONNECTING, OR RELOCATING THE RESPECTIVE AIRFIELD LIGHTING, NAVAIDS, OR OTHER DEVICE.
- CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF FAA AC NO. 150/5370-2F (OR MOST CURRENT ISSUE) "OPERATIONAL SAFETY ON AIRPORT DURING CONSTRUCTION".
- 4. CONTRACTOR SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF NFPA 70E STANDARD FOR ELECTRICAL
- EXISTING AIRFIELD LIGHTS THAT ARE DESIGNATED FOR RELOCATION SHALL BE DISCONNECTED AND CAREFULLY REMOVED BY THE CONTRACTOR AS NOT TO DAMAGE THE LIGHT. THE LIGHT ASSEMBLY AND ISOLATION TRANSFORMERS SHALL BE RELOCATED AND INSTALLED IN THE LOCATIONS SHOWN. WHERE THE EXISTING LIGHT FIXTURE HAS A GROUND ROD, THE GROUND ROD MAY BE RELOCATED WHERE DETERMINED THAT IT IS SUITABLE FOR USE.
- THE CONTRACTOR IS ENCOURAGED TO INSPECT EACH EXISTING LIGHT PRIOR TO RELOCATION AND IDENTIFY TO THE RESIDENT ENGINEER ANY DAMAGED OR INOPERATING PARTS. ONCE THE EXISTING LIGHT IS REMOVED, THE CONTRACTOR IS RESPONSIBLE FOR ALL FIXTURES DAMAGED DURING THE RELOCATION. ALL LIGHTS WILL BE REINSTALLED IN PROPER WORKING ORDER, OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- THE EXISTING DUCTS AND CABLES ASSOCIATED WITH AIRFIELD LIGHTING REMOVALS, RELOCATIONS, AND/OR CABLE OR DUCT REPLACEMENTS SHALL BE ABANDONED IN PLACE UNLESS IT CONFLICTS WITH THE INSTALLATION OF THE AIRFIELD LIGHT, SIGN, DUCT, CABLE, HANDHOLE, MANHOLE, SITE WORK, PAVEMENT OR OTHER WORK, THEN IT SHALL BE DISCONNECTED, REMOVED AND DISPOSED OF OFF SITE AT NO ADDITIONAL COST TO THE CONTRACT. CONTRACTOR MAY REMOVE ABANDONED CABLES AT NO ADDITIONAL COST TO THE CONTRACT AND SHALL HAVE THE SALVAGE RIGHTS TO ABANDONED CABLES
- THE CONTRACTOR IS REQUIRED TO FILL IN ALL HOLES AND DEPRESSIONS RESULTING FROM THE LIGHT REMOVAL, SIGN REMOVAL, OR OTHER REMOVAL WITH EARTH FROM WITHIN THE CONSTRUCTION LIMITS. THE AREAS SHALL BE COMPACTED TO PREVENT FUTURE SETTLEMENT AND FERTILIZED, SEEDED, AND MULCHED IN ACCORDANCE WITH ITEMS 901 AND 908 RESPECTIVELY.
- 9. ALL ABOVE GROUND JUMPERS SHALL BE IN A DUCT WITH ALL CONNECTIONS SEALED. THE CONTRACTOR SHALL SECURE, IDENTIFY AND PLACE ALL TEMPORARY EXPOSED WIRING IN CONDUIT, DUCT OR UNIT DUCT TO PREVENT ELECTROCUTION AND FIRE IGNITION SOURCES AS PER THE REQUIREMENTS OF FAA 150/5370-2F, - OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION, PART 218, PARAGRAPH c.
- 10. NO CONNECTION TO AN ACTIVE LIGHTING CIRCUIT WILL BE BROKEN UNTIL THE CIRCUIT HAS BEEN TURNED OFF IN ACCORDANCE WITH NOTE 1.

12" (TYP.)

6" BLACK BORDER

TAXILANE CENTERLINE -

TAXIWAY CENTERLINE DETAIL

NOT TO SCALE

STRIPE (YELLOW IN COLOR)

**LEGEND** 

---- G ---- EXISTING GAS

---- w ---- EXISTING WATER ---- T ---- EXISTING TELEPHONE

---- x ---- EXISTING FENCE

PROPOSED BITUMINOUS PAVEMENT

EXISTING TAXIWAY EDGE LIGHT

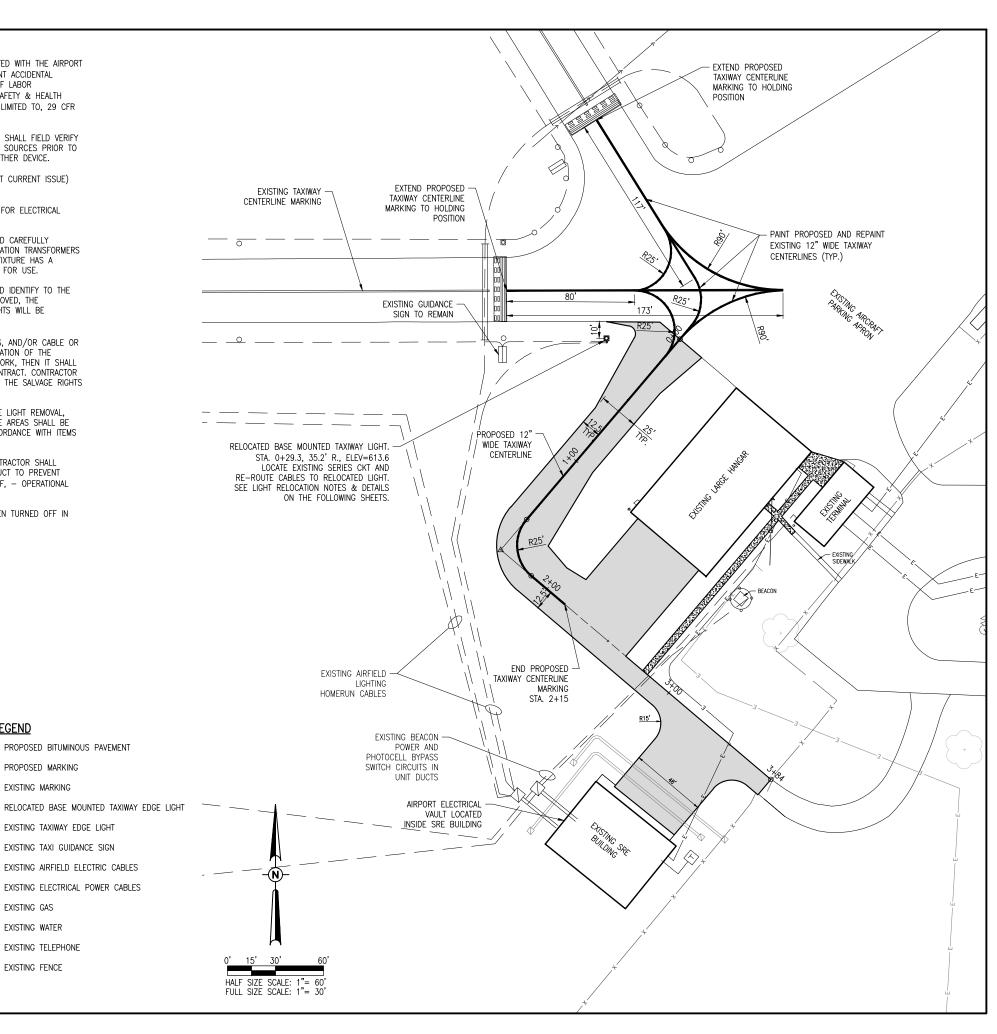
EXISTING TAXI GUIDANCE SIGN

--- FXISTING AIRFIFLD FLECTRIC CABLES

E EXISTING ELECTRICAL POWER CABLES

PROPOSED MARKING

EXISTING MARKING





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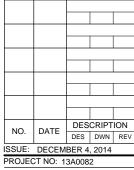
SHELBY COUNTY AIRPORT

P. O. BOX 295 ASSUMPTION, IL. 62510

CONSTRUCT ACCESS TO SNOW REMOVAL **EQUIPMENT STORAGE** BUILDING

IDA No: 2H0-4341 SBG No: 3-17-SBGP-XX

**CONTRACT No: SE005** 

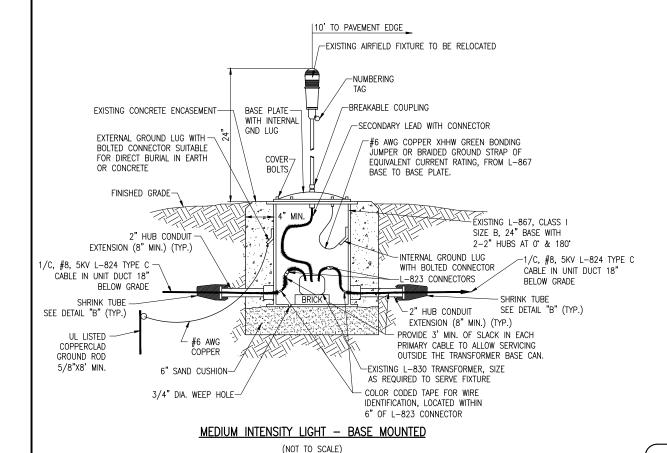


PROJECT NO: 13A0082 CAD FILE: C-141-MKG.DWG

DESIGN BY: KBS 11/14/2014 DRAWN BY: MLH 11/14/2014 REVIEWED BY: RAW 12/04/2014

SHEET TITLE

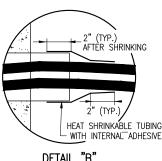
MARKING AND LIGHT **RELOCATION PLAN** 



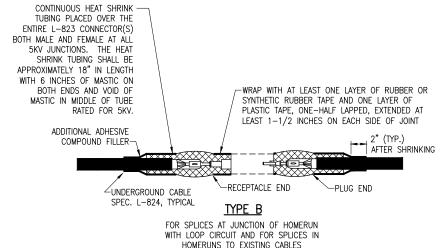
## NOTES

- 1. THE EXISTING AIRFIELD LIGHTS DESIGNATED FOR RELOCATION WILL REQUIRE THE CONTRACTOR TO REMOVE THE DESIGNATED LIGHT IN A MANNER AS NOT TO DAMAGE THEM. THE CONTRACTOR WILL NEED TO FIELD VERIFY THE EXISTING SITE CONDITIONS. THE CONCRETE BASE—MOUNTED LIGHT WILL BE EXCAVATED AND MOVED TO ITS DESIGNATED LOCATION IN ITS ENTIRETY. ALL COMPONENTS OF THE MEDIUM—INTENSITY LIGHT WILL BE RELOCATED IN ITS CURRENT CONDITION. ANY DAMAGE, BEYOND WHAT IS DOCUMENTED AND CONFIRMED BY THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE, TO THE EXISTING LIGHTING SYSTEM WILL BE REPAIRED/REPLACED AT THE CONTRACTOR'S EXPENSE. GROUND RODS SHALL BE PROVIDED FOR EACH RELOCATED LIGHT FIXTURE AS DETAILED ON THE PLANS AND AS SPECIFIED HEREIN. WHERE THE EXISTING LIGHT FIXTURE HAS A GROUND ROD, THE GROUND ROD MAY BE RELOCATED WITH THE RESPECTIVE LIGHT FIXTURE, WHERE DETERMINED THAT THE GROUND ROD MAY BE RELOCATED WITH THE RESPECTIVE LIGHT FIXTURE, WHERE DETERMINED THAT THE GROUND ROD IS SUITABLE FOR USE. THE CONTRACTOR SHALL LOCATE, DISCONNECT, REROUTE, AND RECONNECT THE RESPECTIVE 1/C #8 5KV UG CABLE—IN—UNIT DUCT TO THE RELOCATED LIGHT FIXTURE. PROVIDE NEW L-823 CABLE CONNECTORS AS APPLICABLE TO CONNECT THE RELOCATED LIGHT FIXTURE.
- THE RESPECTIVE PERSONNEL PERFORMING AIRFIELD LIGHTING WORK SHALL BE FAMILIAR WITH AND QUALIFIED TO WORK ON 5,000 VOLT AIRFIELD LIGHTING SERIES CIRCUITS.
- 3. EVERY AIRFIELD LIGHTING CABLE SPLICER SHALL BE QUALIFIED IN MAKING CABLE SPLICES AND TERMINATIONS ON CABLES RATED AT AND/OR ABOVE 5,000 VOLTS AC. THE CONTRACTOR SHALL SUBMIT TO THE PROJECT ENGINEER PROOF OF THE QUALIFICATIONS OF EACH PROPOSED CABLE SPLICER FOR THE CABLE TYPE AND VOLTAGE LEVEL TO BE WORKED ON. CABLE SPLICING/TERMINATING PERSONNEL SHALL HAVE A MINIMUM OF THREE (3) YEARS CONTINUOUS EXPERIENCE IN TERMINATING/SPLICING MEDIUM VOLTAGE CABLE.
- 4. NOTE SOME EXISTING LIGHT BASES MIGHT HAVE ONE 3-INCH HUB INSTEAD OF TWO 2-INCH HUBS. CONTRACTOR WILL NEED TO FIELD VERIFY EXISTING SITE CONDITIONS FOR THE RESPECTIVE LIGHT FIXTURES.

PER FAA AC 150/5340-30H DESIGN AND INSTALLATION DETAILS FOR AIRPORT VISUAL AIDS, A LIGHT BASE GROUND MUST BE INSTALLED AT EACH LIGHT FIXTURE. A LIGHT BASE GROUND SHALL BE INSTALLED AT EACH STAKE MOUNTED LIGHT AND EACH TRANSFORMER BASE/LIGHT CAN ASSOCIATED WITH RUNWAY LIGHTS, TAXIWAY LIGHTS, AND LIGHTED TAXI GUIDANCE SIGNS. THE LIGHT BASE GROUND SHALL BE A #6 AWG BARE COPPER CONDUCTOR BONDED TO THE GROUND LUG ON THE RESPECTIVE L-867 TRANSFORMER BASE/LIGHT CAN OR MOUNTING STAKE AND A 5/8-INCH DIAMETER BY 8-FOOT LONG (MINIMUM) UL LISTED COPPER CLAD GROUND ROD.



DETAIL "B"
(NOT TO SCALE)



HEAT SHRINKABLE TUBING WITH INTERNAL ADHESIVE. HEAT SHRINKABLE TUBING SHALL EXTEND FROM THE CABLE TO AT LEAST AN INCH PAST THE COMPLETED CONNECTION ADDITIONAL ADHESIVE RECEPTACLE END-COMPOUND FILLER AFTER SHRINKING -PLUG FND WRAP WITH AT LEAST ONE LAYER OF RUBBER OR FACTORY MOLDED SYNTHETIC RUBBER TAPE AND ONE LAYER OF TRANSFORMER LEADS-PLASTIC TAPE, ONE-HALF LAPPED, EXTENDED AT LEAST 1-1/2 INCHES ON EACH SIDE OF JOINT -RECEPTACLE END -ADDITIONAL ADHESIVE L-823 PLUG END-COMPOUND FILLER 2" (TYP.) AFTÈR SHRINKING TYPE C FOR SPLICES AT RUNWAY HEAT SHRINKABLE TUBING WITH AND TAXIWAY LIGHTS INTERNAL ADHESIVE. HEAT SHRINKABLE TUBING SHALL EXTEND FROM THE CABLE TO AT LEAST AN INCH PAST THE COMPLETED CONNECTION

CABLE SPLICES
(NOT TO SCALE)

**NOTES:** 

INSIDE DIAMETER OF CONNECTOR SHALL PROPERLY MATCH THE OUTSIDE DIAMETER OF CABLE.

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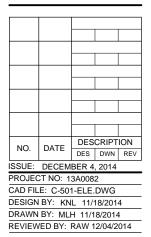
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CONSTRUCT ACCESS TO SNOW REMOVAL EQUIPMENT STORAGE BUILDING

IDA No: 2H0-4341 SBG No: 3-17-SBGP-XX

CONTRACT No: SE005



ELECTRICAL DETAILS

SHEET TITLE

## GENERAL NOTES

- 1. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 NATIONAL ELECTRICAL CODE (NEC) MOST CURRENT ISSUE IN FORCE, THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES, AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE U.L. LISTING, ETL LISTING (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE WILL NOT BE PERMITTED.
- 2. CONTRACTOR SHALL KEEP A COPY OF THE LATEST NEC IN FORCE ON SITE AT ALL TIMES DURING CONSTRUCTION FOR USE AS A REFERENCE.
- 3. CONTRACTOR SHALL COORDINATE WORK AND ANY POWER OUTAGES AND/OR SHUT DOWN OF SYSTEMS WITH THE RESPECTIVE FACILITY OWNER PERSONNEL AND THE AIRPORT MANAGER/DIRECTOR. ONCE SHUT DOWN, THE CIRCUITS SHALL BE LABELED AS SUCH TO PREVENT ACCIDENTAL ENERGIZING OF THE RESPECTIVE CIRCUITS. ALL PERSONNEL SHALL FOLLOW U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) 29 CFR PART 1910 OCCUPATIONAL SAFETY & HEALTH STANDARDS FOR ELECTRICAL SAFETY AND LOCKOUT/TAGOUT PROCEDURES INCLUDING, BUT NOT LIMITED TO, 29 CFR SECTION 1910.147 THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT).
- 4. THE CONTRACTOR SHALL ASCERTAIN THAT ALL LIGHTING SYSTEM COMPONENTS FURNISHED BY HIM, INCLUDING FAA APPROVED EQUIPMENT, ARE COMPATIBLE IN ALL RESPECTS WITH EACH OTHER AND THE REMAINDER OF THE NEW/EXISTING SYSTEM. ANY NONCOMPATIBLE COMPONENTS FURNISHED BY THIS CONTRACTOR SHALL BE REPLACED BY HIM AT NO ADDITIONAL COST TO THE AIRPORT SPONSOR WITH A SIMILAR UNIT, APPROVED BY THE ENGINEER (DIFFERENT MODEL OR DIFFERENT MANUFACTURER) THAT IS COMPATIBLE WITH THE REMAINDER OF THE AIRPORT LICHTING SYSTEM.
- 5. IN CASE THE CONTRACTOR ELECTS TO FURNISH AND INSTALL AIRPORT LIGHTING EQUIPMENT REQUIRING ADDITIONAL WIRING, TRANSFORMERS, ADAPTORS, MOUNTINGS, ETC., TO THOSE SHOWN ON THE DRAWINGS AND/OR LISTED IN THE SPECIFICATION, ANY COST FOR THESE ITEMS SHALL BE INCIDENTAL TO THE EQUIPMENT COST.
- 6. THE CONTRACTOR INSTALLED EQUIPMENT (INCLUDING FAA APPROVED) SHALL NOT GENERATE ANY ELECTROMAGNETIC INTERFERENCE IN THE EXISTING AND/OR NEW COMMUNICATIONS, WEATHER, AIR NAVIGATION, AND AIR TRAFFIC CONTROL EQUIPMENT. ANY EQUIPMENT GENERATING SUCH INTERFERENCE SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST WITH THE EQUIPMENT MEETING THE APPLICABLE SPECIFICATIONS AND NOT GENERATING ANY INTERFERENCE.
- 7. WHEN A SPECIFIC TYPE, STYLE, CLASS, ETC. OF FAA APPROVED EQUIPMENT IS SPECIFIED ONLY THAT TYPE, STYLE, CLASS, WILL BE ACCEPTABLE, EVEN THOUGH EQUIPMENT OF OTHER TYPES STYLES, CLASSES, ETC. MAY BE APPROVED.
- 8. ANY AND ALL INSTRUCTIONS FROM THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE TO THE CONTRACTOR REGARDING CHANGES IN OR DEVIATIONS FROM THE PLANS AND SPECIFICATIONS SHALL BE IN WRITING WITH COPIES SENT TO THE AIRPORT SPONSOR AND THE ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF AERONAUTICS). THE CONTRACTOR SHALL NOT ACCEPT ANY VERBAL INSTRUCTIONS FROM THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE REGARDING ANY CHANGES FROM THE PLANS AND SPECIFICATIONS.
- LOW VOLTAGE (600 V.) AND HIGH VOLTAGE (5000 V.) CONDUCTORS SHALL NOT BE INSTALLED IN THE SAME WIREWAY, CONDUIT, DUCT. RACEWAY. OR HANDHOLE.
- 10. THE RESPECTIVE PERSONNEL PERFORMING AIRFIELD LIGHTING WORK, VAULT WORK, AND/OR TESTS SHALL BE FAMILIAR WITH, AND QUALIFIED TO WORK ON, 5000 VOLT AIRFIELD LIGHTING SERIES CIRCUITS, CONSTANT CURRENT REGULATORS, AND ASSOCIATED AIRPORT FLECTRICAL VALUE FOULDMENT

## GROUNDING NOTES FOR AIRFIELD LIGHTING

- GROUNDING FOR RUNWAY LIGHTS, TAXIWAY LIGHTS, AND LIGHTED TAXI GUIDANCE SIGNS SHALL BE AS DETAILED ON THE PLANS AND AS SPECIFIED HEREIN. PER FAA AC 150/5340-30H DESIGN AND INSTALLATION DETAILS FOR AIRPORT VISUAL AIDS, CHAPTER 12, PART 12.6; A GROUND MUST BE INSTALLED AT EACH LIGHT FIXTURE. THE PURPOSE OF THE LIGHT BASE GROUND IS TO PROVIDE A DEGREE OF PROTECTION FOR MAINTENANCE PERSONNEL FROM POSSIBLE CONTACT WITH AN ENERGIZED LIGHT BASE OR MOUNTING STAKE THAT MAY RESULT FROM A SHORTED POWER CABLE OR ISOLATION TRANSFORMER. A LIGHT BASE GROUND SHALL BE INSTALLED AT EACH TRANSFORMER BASE/LIGHT CAN ASSOCIATED WITH RUNWAY LIGHTS, TAXIWAY LIGHTS, AND LIGHTED TAXI GUIDANCE SIGNS. A LIGHT BASE GROUND SHALL ALSO BE INSTALLED AT EACH STAKE MOUNTED LIGHT FIXTURE. A LIGHT BASE GROUND SHALL BE INSTALLED AND CONNECTED TO THE METAL FRAME OF FACH TAXI GUIDANCE SIGN AS DETAILED ON THE PLANS AND IN ACCORDANCE WITH THE RESPECTIVE TAXI GUIDANCE SIGN MANUFACTURER RECOMMENDATIONS. THE LIGHT BASE GROUND SHALL BE A #6 AWG BARE COPPER CONDUCTOR BONDED TO THE GROUND LUG ON THE RESPECTIVE L-867 TRANSFORMER BASE/LIGHT CAN OR MOUNTING STAKE AND A 5/8-INCH DIAMETER BY 8-FOOT LONG (MINIMUM) UL LISTED COPPER CLAD GROUND ROD. CONNECTIONS TO GROUND LUGS ON THE L-867 TRANSFORMER BASE/LIGHT CAN OR MOUNTING STAKE SHALL BE WITH A UL LISTED GROUNDING CONNECTOR SUITABLE FOR DIRECT BURY IN EARTH OR CONCRETE. CONNECTIONS TO GROUND RODS SHALL BE MADE WITH EXOTHERMIC WELD TYPE CONNECTORS, CADWELD BY ERICO PRODUCTS, INC., SOLON, OHIO, (PHONE: 800-248-9353), THERMOWELD BY CONTINENTAL INDUSTRIES, INC., TULSA, OKLAHOMA (PHONE: 918-663-1440), ULTRAWELD BY HARGER, GRAYSLAKE, ILLINOIS (PHONE: 800-842-7437), OR APPROVED EQUAL. EXOTHERMIC WELD CONNECTIONS SHALL BE INSTALLED IN CONFORMANCE WITH THE RESPECTIVE MANUFACTURER'S DIRECTIONS USING MOLDS AS REQUIRED FOR EACH RESPECTIVE APPLICATION. BOLTED CONNECTIONS WILL NOT BE PERMITTED AT GROUND RODS. TOP OF GROUND RODS SHALL BE BURIED 12 INCHES MINIMUM BELOW GRADE, UNLESS SPECIFIED OTHERWISE HEREIN, FOR RESPECTIVE APPLICATIONS.
- 2. FOR BASE MOUNTED LIGHT FIXTURES THE LIGHT FIXTURE MUST BE BONDED TO THE LIGHT BASE INTERNAL GROUND LUG VIA A #6 AWG STRANDED COPPER WIRE RATED FOR 600 VOLTS WITH GREEN XHHW INSULATION OR A BRAIDED GROUNDING STRAP OF EQUIVALENT CURRENT RATING. THE GROUND WIRE LENGTH MUST BE SUFFICIENT TO ALLOW THE REMOVAL OF THE LIGHT FIXTURE FROM THE LIGHT BASE FOR ROUTINE MAINTENANCE. SEE THE LIGHT FIXTURE MANUFACTURER'S INSTRUCTIONS FOR PROPER METHODS OF ATTACHING A BONDING WIRE
- 3. CLEAN ALL METAL SURFACES BEFORE MAKING GROUND CONNECTIONS. METALLIC SURFACES TO BE JOINED SHALL BE PREPARED BY THE REMOVAL OF ALL NON-CONDUCTIVE MATERIAL PER 2014 NATIONAL ELECTRICAL CODE ARTICLE 250-12.
- PER FAA 150/5340-30H THE RESISTANCE TO GROUND OF THE RESPECTIVE MOUNTING STAKE OR LIGHT BASE (WITH GROUND ROD CONNECTED) MUST BE 25 OHMS OR LESS.
- 5. FOR EACH AIRFIELD LIGHT FIXTURE, TAXI GUIDANCE SIGN, AND NAVAID THE CONTRACTOR SHALL TEST THE MADE ELECTRODE GROUND SYSTEM WITH AN INSTRUMENT SPECIFICALLY DESIGNED FOR TESTING GROUNDING SYSTEMS. TEST RESULTS SHALL BE RECORDED FOR EACH GROUNDING ELECTRODE SYSTEM. IF GROUND RESISTANCE EXCEEDS 25 OHMS CONTACT THE PROJECT ENGINEER FOR FURTHER DIRECTION. COPIES OF THE GROUND SYSTEM TEST RESULTS SHALL BE FURNISHED TO THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE.
- 6. STEEL USED TO MANUFACTURE GROUND RODS SHALL BE 100% DOMESTIC.

### AIRFIELD LIGHTING NOTES

- UNLESS OTHERWISE NOTED, ALL UNDERGROUND AIRFIELD LIGHTING SERIES CIRCUIT CONDUCTORS WHETHER DEB OR IN DUCT/CONDUIT SHALL BE FAA APPROVED 5000 VOLT L-824 TYPE. ALL UNDERGROUND FIELD POWER LOW VOLTAGE (600 VOLT & BELOW) CIRCUIT CONDUCTORS WHETHER DEB OR IN DUCT/CONDUIT SHALL BE UL LISTED 600 VOLT, TYPE XLP-USE-2 COPPER CONDUCTORS. CONDUCTOR SIZES SHALL BE AS SPECIFIED, HEREIN.
- NO COMPONENTS OF PRIMARY CIRCUIT SUCH AS CABLE, CONNECTORS AND TRANSFORMERS SHALL BE BROUGHT ABOVE GROUND AT EDGE LIGHTS, SIGNS, REIL, PAPI, ETC.
- . THERE SHALL BE NO EXPOSED POWER/CONTROL CABLES BETWEEN THE POINT WHERE THEY LEAVE THE UNDERGROUND (DEB OR L-867 BASES) AND WHERE THEY ENTER THE EQUIPMENT (SUCH AS TAXIWAY SIGNS, PAPI, REIL, ETC.) ENCLOSURES. THESE CABLES SHALL BE ENCLOSED IN RIGID CONDUIT OR IN FLEXIBLE, WATERTIGHT CONDUIT WITH BREAKABLE COUPLING(S) AT THE GRADE OR THE HOUSING COVER, AS SHOWN IN APPLICABLE POTAILS.
- 4. THE JOINTS OF THE L-823 PRIMARY CONNECTORS SHALL BE WRAPPED WITH AT LEAST ONE LAYER OF RUBBER OR SYNTHETIC RUBBER TAPE AND ONE LAYER OF PLASTIC TAPE, ONE-HALF LAPPED, EXTENDING AT LEAST 1-1/2 INCHES ON EACH SIDE OF THE JOINT, AS SHOWN ON ELECTRICAL DETAILS SHEET 1.
- 5. THE CABLE ENTRANCE INTO THE FIELD-ATTACHED L-823 CONNECTORS SHALL BE ENCLOSED BY A HEAT-SHRINKABLE TUBING WITH CONTINUOUS INTERNAL ADHESIVE, AS SHOWN ON ELECTRICAL DETAILS SHEET 1.
- L-823 TYPE II, TWO-CONDUCTOR SECONDARY CONNECTORS SHALL BE CLASS 'A' (FACTORY MOLDED).
- . THERE SHALL BE NO SPLICES IN THE SECONDARY CABLE(S) WITHIN THE STEMS OF A RUNWAY/TAXIWAY EDGE/THRESHOLD LIGHTING FIXTURE AND THE WIREWAYS LEADING TO TAXIWAY SIGNS AND PAPI/RFII FOUIPMENT.
- ELECTRICAL INSULATING GREASE SHALL BE APPLIED WITHIN THE L-823, SECONDARY, TWO
  CONDUCTOR CONNECTORS TO PREVENT WATER ENTRANCE. THESE CONNECTORS SHALL
  NOT BE TAPED.
- DEB ISOLATION TRANSFORMERS SHALL BE BURIED AT A DEPTH OF TEN (10") INCHES ON A LINE CROSSING THE LIGHT AND PERPENDICULAR TO THE RUNWAY/TAXIWAY CENTERLINE AT A LOCATION TWELVE (12") INCHES FROM THE LIGHT OPPOSITE FROM THE RUNWAY/TAXIWAY.
- 10. A SLACK OF THREE (3') FEET, MINIMUM, SHALL BE PROVIDED IN THE PRIMARY CABLE AT EACH TRANSFORMER/CONNECTOR TERMINATION. AT STAKE-MOUNTED LIGHTS, THE SLACK SHALL BE LOOSELY COILED IMMEDIATELY BELOW THE ISOLATION TRANSFORMER.
- DIRECTION OF PRIMARY CABLES SHALL BE IDENTIFIED BY COLOR CODING AS FOLLOWS: WHEN FACING LIGHT WITH BACK TO PAVEMENT, CABLE TO THE LEFT IS CODED RED AND CABLE TO RIGHT IS CODED BLUE. THIS APPLIES TO STAKE MOUNTED LIGHTS AND BASE MOUNTED LIGHTS WHERE THE BASE HAS ONLY ONE ENTRANCE.
- 12. L-867 BASES SHALL BE SIZE B, 24" DEEP, CLASS I, UNLESS OTHERWISE NOTED.
- BASE MOUNTED BREAKABLE COUPLINGS SHALL NOT HAVE WEEP HOLES TO THE OUTSIDE. PLUGGED UP HOLES SHALL NOT BE ACCEPTABLE. IT SHALL BE A 1/4" DIAMETER, MINIMUM, OR EQUIVALENT OPENING FOR DRAINAGE FROM THE SPACE AROUND THE SECONDARY CONNECTOR INTO THE L-867 BASE.
- 4. THE ELEVATION OF THE BREAKABLE COUPLING GROOVE SHALL NOT EXCEED 1-1/2" ABOVE THE EDGE OF THE COVER IN CASE OF BASE MOUNTED COUPLINGS, OR THE TOP OF THE STAKE IN CASE OF STAKE MOUNTED COUPLINGS.
- 15. WHERE THE BREAKABLE COUPLING IS NOT AN INTEGRAL PART OF THE LIGHT FIXTURE STEM OR MOUNTING LEG, A BEAD OF SILICON SEAL SHALL BE APPLIED COMPLETELY AROUND LIGHT STEM OR WIREWAY AT BREAKABLE COUPLING TO PROVIDE A WATERTIGHT SFAI
- 16. TOPS OF THE STAKES SUPPORTING LIGHT FIXTURES SHALL BE FLUSH WITH THE SURROUNDING GRADE.
- 17. PLASTIC LIGHTING FIXTURE COMPONENTS, SUCH AS LAMP HEADS, STEMS, BREAKABLE COUPLINGS, BASE COVERS, BRACKETS, STAKES, SHALL NOT BE ACCEPTABLE.
- 18. THE TOLERANCE FOR THE HEIGHT OF RUNWAY/TAXIWAY EDGE LIGHTS SHALL BE: ONE (1) INCH. IN CASE OF STAKE MOUNTED LIGHTS, THE SPECIFIED LIGHTING FIXTURE HEIGHT SHALL BE MEASURED BETWEEN THE TOP OF THE STAKE AND THE TOP OF THE LENS. IN CASE OF BASE MOUNTED LIGHTS, THE SPECIFIED LIGHTING FIXTURE HEIGHT SHALL BE MEASURED BETWEEN THE TOP OF THE BASE FLANGE AND THE TOP OF THE LENS, THUS INCLUDING THE BASE COVER, THE FRANGIBLE COUPLING, THE STEM, THE LAMP HOUSING AND THE LENS.
- THE TOLERANCE FOR THE LATERAL SPACING (LIGHT LANE TO RUNWAY/TAXIWAY CENTERLINE) OF RUNWAY/TAXIWAY EDGE LIGHTS SHALL BE ONE (1) INCH. THIS ALSO APPLIES AT INTERSECTIONS TO LATERAL SPACING BETWEEN LIGHTS OF A RUNWAY/TAXIWAY AND THE INTERSECTING RUNWAY/TAXIWAY.
- D. ENTRANCES INTO L-867 BASES SHALL HAVE CONDUIT COUPLINGS OR REDUCERS TO INTERFACE UNIT DUCT/CONDUIT TO L-867 BASE HUBS, OR SHALL BE SEALED WITH HEAT SHRINK AS SHOWN IN DETAIL "B" ON ELECTRICAL DETAILS SHEET 1.

## AIRFIELD LIGHTING NOTES (CONTINUED)

- 21. GALVANIZED/PAINTED EQUIPMENT/COMPONENT SURFACES SHALL NOT BE DAMAGED BY DRILLING, FILING, ETC. DRAIN HOLES IN METAL TRANSFORMER HOUSINGS SHALL BE MADE BEFORE GALVANIZING.
- 22. EDGE LIGHT NUMBERING TAGS SHALL BE FACING THE PAVEMENT.
- 23. CABLE/SPLICE/DUCT MARKERS SHALL BE PRECAST CONCRETE OF THE SIZE SHOWN.

  LETTERS/NUMBERS/ARROWS FOR THE LEGEND TO BE IMPRESSED INTO THE TOPS OF THE

  MARKERS SHALL BE PRE-ASSEMBLED AND SECURED IN THE MOLD BEFORE THE

  CONCRETE IS POURED. LEGEND INSCRIBED BY HAND IN WET CONCRETE SHALL NOT BE

  ACCEPTABLE.
- 24. ALL UNDERGROUND CABLE RUNS SHALL BE IDENTIFIED BY CABLE MARKERS AT 200 FEET MAXIMUM SPACING, WITH AN ADDITIONAL MARKER AT EACH CHANGE OF DIRECTION OF THE CABLE RUN. CABLE MARKERS SHALL BE INSTALLED IMMEDIATELY ABOVE THE CABLES.
- 25. THERE SHALL BE NO SPLICES BETWEEN THE ISOLATION TRANSFORMERS. L-823
  CONNECTORS ARE ALLOWED AT TRANSFORMER CONNECTIONS ONLY, UNLESS OTHERWISE
  SHOWN
- 26. APPLY AN OXIDE INHIBITING, ANTI-SEIZING COMPOUND TO ALL SCREWS, NUTS AND BREAKAGE COUPLING THREADS.
- 27. LOCATIONS OF ENDS OF ALL UNDERGROUND DUCTS SHALL BE IDENTIFIED BY DUCT MARKERS.
- 28. WHERE A PARALLEL, CONSTANT VOLTAGE PAPI SYSTEM IS PROVIDED, THE "T" SPLICES SHALL BE OF THE CAST TYPE.
- CONCRETE USED FOR SLABS, FOOTINGS, BACKFILL AROUND TRANSFORMER HOUSINGS, MARKINGS, ETC. SHALL BE 3500 PSI, AIR-ENTRAINED.
- 30. ALL POWER AND CONTROL CABLES IN MAN/HAND HOLES SHALL BE TAGGED. USE EMBOSSED COPPER STRIPS TO BE ATTACHED AT BOTH ENDS TO THE CABLE BY THE USE OF PLASTIC STRAPS. MINIMUM OF TWO TAGS SHALL BE PROVIDED ON EACH CABLE IN A MAN/HAND HOLE—ONE AT THE CABLE ENTRANCE AND ONE AT THE CABLE EXIT.
- THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND AND/OR ABOVEGROUND UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY WHATEVER IN RESPECT TO ACCURACY, COMPLETENESS OR SUFFICIENCY OF THE INFORMATION. THERE IS NO GUARANTEE EITHER EXPRESSED OR IMPLIED, THAT THE LOCATIONS, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED IN THE CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION. THE OWNER'S REPRESENTATIVE AND/OR THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY DAMAGE TO SUCH MAINS AND SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT. ALL UTILITY CABLES AND LINES SHALL BE LOCATED BY THE RESPECTIVE UTILITY. CONTACT J.U.L.I.E. FOR UTILITY INFORMATION AT 1-800-892-0123. ALSO CONTACT AIRPORT DIRECTOR/MANAGER AND AIRPORT PERSONNEL FOR ASSISTANCE IN LOCATING UNDERGROUND AIRPORT CABLES AND/OR UTILITIES. ALSO COORDINATE WORK WITH ALL ABOVEGROUND UTILITIES.
- WHEN PREPARING CABLE FOR SPLICES, THE CONTRACTOR SHALL USE A CABLE STRIPPER/PENCILLER WHENEVER CABLE CONNECTIONS ARE MADE.

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SHELBY COUNTY AIRPORT

P. O. BOX 295 ASSUMPTION, IL. 62510

DESIGN BY: KNL 11/18/2014

DRAWN BY: MLH 11/18/2014

REVIEWED BY: RAW 12/04/2014

SHEET TITLE

**ELECTRICAL NOTES** 

TO RWY. 18-36

## EXISTING HIGH VOLTAGE WIRING SCHEMATIC

MANSFIELD, OHIO 44901

## LEGEND

"CCR" DENOTES CONSTANT CURRENT REGULATOR

"I" DENOTES PLUG CUTOUT WITH PLUG INSERTED

"P" DENOTES PLUG CUTOUT WITH PLUG PULLED

## NOTES:

TO TAXIWAY

- 1. ALL WORK, POWER OUTAGES, AND/OR SHUT DOWN OF EXISTING SYSTEMS SHALL BE COORDINATED WITH THE AIRPORT MANAGER/DIRECTOR AND THE RESPECTIVE FAA ATCT PERSONNEL. ONCE SHUT DOWN, THE CIRCUITS SHALL BE LABELED AS SUCH TO PREVENT ACCIDENTAL ENERGIZING OF THE RESPECTIVE CIRCUITS. ALL PERSONNEL SHALL FOLLOW U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) 29 CFR PART 1910 OCCUPATIONAL SAFETY & HEALTH STANDARDS FOR ELECTRICAL SAFETY AND LOCKOUT/TAGOUT PROCEDURES INCLUDING, BUT NOT LIMITED TO, 29 CFR SECTION 1910.147 THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT).
- 2. CONTRACTOR SHALL EXAMINE THE SITE TO CONFIRM AND FIELD VERIFY EXISTING SITE CONDITIONS.
  CONTRACTOR SHALL CONFIRM POWER SOURCES FOR RESPECTIVE SYSTEMS PRIOR TO WORKING ON
  THE RESPECTIVE CIRCUITS.
- 3. THE RESPECTIVE PERSONNEL PERFORMING AIRFIELD LIGHTING WORK, VAULT WORK, AND/OR TESTS SHALL BE FAMILIAR WITH, AND QUALIFIED TO WORK ON, 5000 VOLT AIRFIELD LIGHTING SERIES CIRCUITS, CONSTANT CURRENT REGULATORS, AND ASSOCIATED AIRPORT ELECTRICAL VAULT FOULDMENT.
- 4. CONTRACTOR SHALL EXERCISE CAUTION, PRACTICE SAFETY, AND DISCONNECT THE SERIES CIRCUITS FROM THE RESPECTIVE CONSTANT CURRENT REGULATORS, AS APPLICABLE WHEN PERFORMING WORK ON THE AIRFIELD LIGHTING OR WORK THAT MIGHT AFFECT THE AIRFIELD LIGHTING. CONTRACTOR SHALL MAKE NECESSARY ARRANGEMENTS TO DISCONNECT POWER AND LOCKOUT CIRCUITS FOR PROTECTION OF PERSONNEL.
- 5. CONDUCT TESTS FOR AREAS OF WORK WHERE THE RESPECTIVE CIRCUITS MIGHT BE AFFECTED.
  MEGGER TEST AND RECORD EXISTING SERIES CIRCUITS PRIOR TO CABLE WORK AND AGAIN AFTER
  AIRFIELD LIGHTING MODIFICATIONS, ADDITIONS, AND/OR UPGRADES HAVE BEEN COMPLETED. ALSO
  TEST AND RECORD SERIES CIRCUIT LOOP RESISTANCE.
- 6. RUNWAY 18-36 CCR, BACKUP CCR FOR RUNWAY 18-36, TAXIWAY CCR, AND ASSOCIATED CUTOUTS ARE EXISTING.
- 7. THE RESPECTIVE CCR'S SHALL BE TESTED FOR PROPER OPERATION BEFORE ANY AIRFIELD WORK THAT MIGHT AFFECT LIGHTING CIRCUITS, REMOVAL WORK, MODIFICATIONS, AND/OR ADDITIONS AND AFTER THE AIRFIELD WORK AND ADDITIONS HAVE BEEN COMPLETED. CONTRACTOR SHALL TEST AND RECORD THE INPUT CURRENT AND OUTPUT CURRENT FOR EACH CONSTANT CURRENT REGULATOR IN THE AUTOMATIC AND MANUAL MODES (WHERE APPLICABLE) OF OPERATIONS. CONTRACTOR SHALL REPORT CONCERNS AND/OR DEFICIENCIES TO THE RESIDENT PROJECT REPRESENTATIVE/RESIDENT ENGINEER.



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SHELBY COUNTY AIRPORT

P. O. BOX 295 ASSUMPTION, IL. 62510

CONSTRUCT ACCESS TO SNOW REMOVAL EQUIPMENT STORAGE BUILDING

IDA No: 2H0-4341 SBG No: 3-17-SBGP-XX

CONTRACT No: SE005

	NO.	DATE	DESCRIPTION		
	INO. DATE		DES	DWN	REV
ISSUE: DECEMBER 4, 2014					
	PROJECT NO: 13A0082				
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DESIGN BY: KNL 11/14/2014

DRAWN BY: MLH 11/14/2014

DRAWN BY: MLH 11/14/2014 REVIEWED BY: RAW 12/04/2014

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EXISTING HIGH VOLTAGE WIRING SCHEMATIC