

# VILLAGE OF LANSING LANSING, ILLINOIS

CONTRACT NO. LA036  
TOTAL SHEETS = 21

## CONSTRUCTION PLANS FOR LANSING MUNICIPAL AIRPORT

### REHABILITATE AIRFIELD LIGHTING SYSTEM RUNWAY 9/27 AND PARALLEL TAXIWAY

ILLINOIS PROJECT: IGO-3565  
A.I.P. PROJECT: 3-17-0121-B25

02 MARCH 2007

**DESIGN INFORMATION**

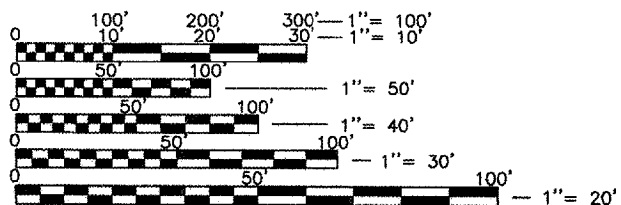
**GEOMETRIC CRITERIA**

AIRPLANE DESIGN GROUP II  
AIRCRAFT APPROACH CATEGORY B

**LANSING MUNICIPAL AIRPORT**

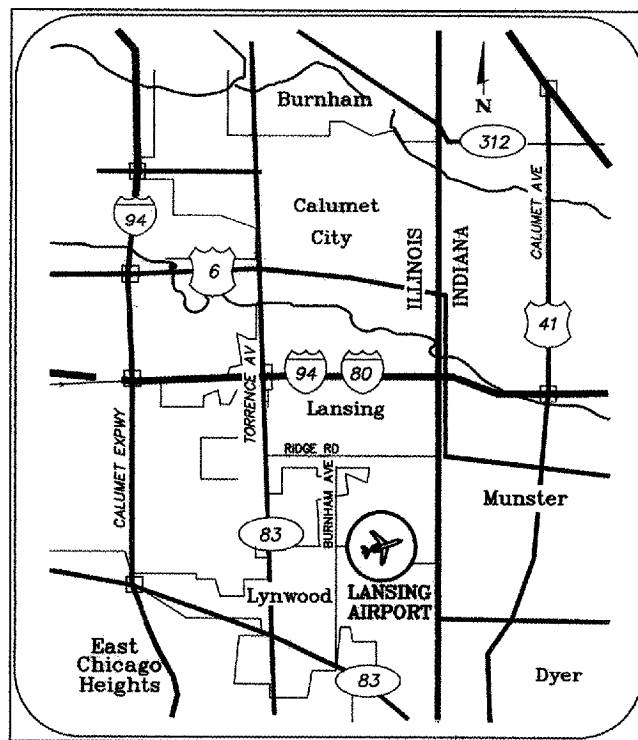
TOWNSHIP: 36 NORTH  
RANGE: 15 EAST  
COOK COUNTY

BLOOM TOWNSHIP  
(SECTION: 8 AND 17)  
OPPOSITE GLENWOOD-LANSING  
ROAD

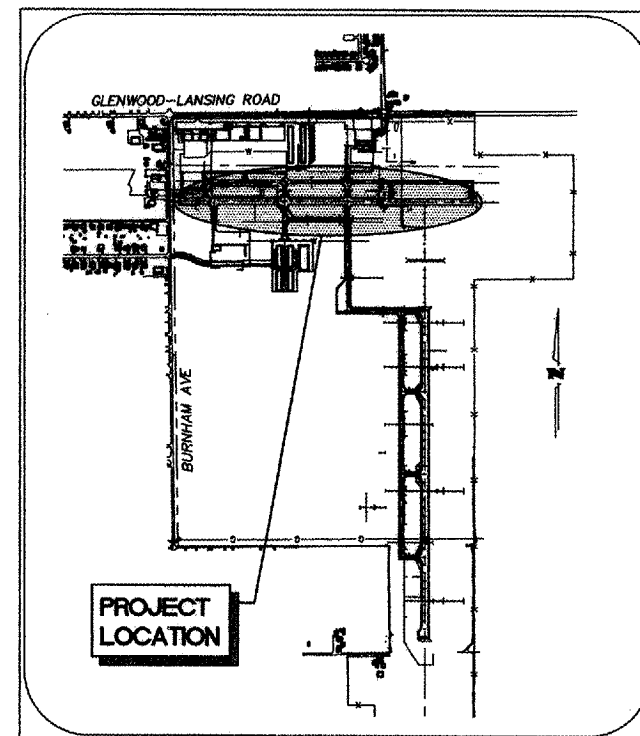


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

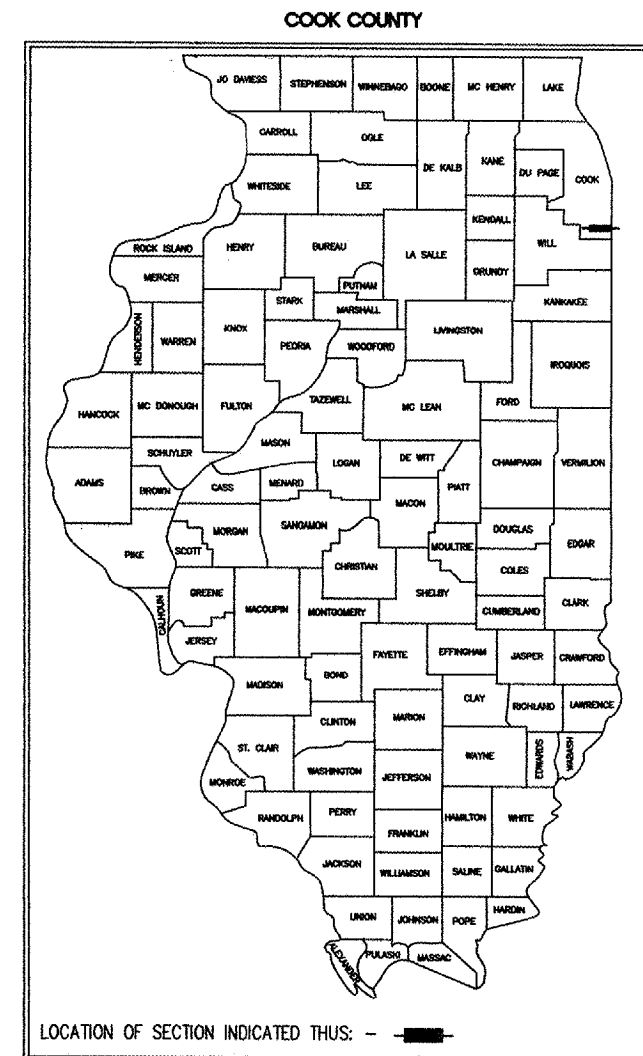
**CALL JULIE BEFORE EXCAVATING**  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123



LOCATION MAP



SITE PLAN



LOCATION OF SECTION INDICATED THUS: - [black rectangle] -

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DAVID K. PEABODY  
062-048437  
3.9.07  
EXP. 11-30-07

SUBMITTED BY D. Kyle Peabody, P.E.  
D. KYLE PEABODY, P.E.

DATE March 9, 2007

Lansing Municipal  
**airport**

APPROVED BY [Signature] MAYOR  
DANIEL PODGORSKI

APPROVED BY [Signature] AIRPORT MANAGER  
ROBERT R. MALKAS

DATE March 2, 2007

DATE: Thursday, March 08, 2007 9:00:17 PM  
 FILE: K:\Lansing\0629\02 Rehab 9-27\Elect\Draw\Sheets\02\_Index\S02.dwg  
 UPDATE BY: Jason Dove  
 LAYOUT: INDEXQUANTITIES  
 IMAGE FILES:  
 SHEET DWG: 0629.dwg

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14	AIRFIELD LIGHTING PLAN - STA. 12+00 TO STA. 26+00
15	AIRFIELD LIGHTING PLAN - STA. 26+00 TO STA. 40+00
16	AIRFIELD LIGHTING PLAN - ELECTRICAL VAULT
17	AIRFIELD SIGNING PLAN - RUNWAY 9-27
18	ELECTRICAL DETAILS - AIRFIELD LIGHTING - GENERAL DETAILS
19	ELECTRICAL DETAILS - AIRFIELD LIGHTING - EDGE LIGHTS
20	ELECTRICAL DETAILS - AIRFIELD LIGHTING - THRESHOLD LIGHTS
21	ELECTRICAL DETAILS - AIRFIELD LIGHTING - WIND CONE

SUMMARY OF QUANTITIES				
ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	RECORD
<b>BASE BID</b>				
AR107408	L - 806 WIND CONE - 8' LIGHTED	EACH	1	
AR107900	REMOVE WIND CONE	EACH	1	
AR108108	1/C #8 5 KV UG CABLE	L.F.	2,550	
AR108158	1/C #8 5 KV UG CABLE IN UD	L.F.	17,500	
AR109210	VAULT MODIFICATIONS	L.S.	1	
AR125100	ELEVATED RETROREFLECTIVE MARKER	EACH	9	
AR125410	MITL - STAKE MOUNTED	EACH	107	
AR125415	MITL - BASE MOUNTED	EACH	11	
AR125505	MIRL, STAKE MOUNTED	EACH	21	
AR125510	MIRL, BASE MOUNTED	EACH	12	
AR125540	MI THRESHOLD LIGHT STAKE MTD	EACH	8	
AR125545	MI THRESHOLD LIGHT BASE MTD	EACH	8	
AR125901	REMOVE STAKE MOUNTED LIGHT	EACH	122	
AR125902	REMOVE BASE MOUNTED LIGHT	EACH	28	
AR125986	REFURBISH REILS	PAIR	2	
AR150510	ENGINEER'S FIELD OFFICE	L.S.	1	
AR401910	REMOVE & REPLACE BIT. PAVEMENT	S.Y.	42	
AR620520	PAVEMENT MARKING - WATERBORNE	S.F.	8,400	
AR620525	PAVEMENT MARKING - BLACK BORDER	S.F.	1,195	
AR620900	PAVEMENT MARKING REMOVAL	S.F.	3,600	
AR800140	2 1/C # 6 XLP-USE, 1/C # 10 GND - 1" UD	L.F.	1,000	
AR800187	THRESHOLD LIGHT BAR	EACH	2	
AR800894	RETROFIT EXIST MITL OR TXY SIGN	EACH	39	
<b>ADD. ALT. NO.1</b>				
AS125442	TAXIWAY GUIDANCE SIGN, 2 CHARACTE	EACH	1	
AS125443	TAXIWAY GUIDANCE SIGN, 3 CHARACTE	EACH	1	
AS125445	TAXIWAY GUIDANCE SIGN, 5 CHARACTE	EACH	2	
AS125904	REMOVE TAXIWAY GUIDANCE SIGN	EACH	4	
<b>ADD. ALT. NO.2</b>				
AT125442	TAXIWAY GUIDANCE SIGN, 2 CHARACTE	EACH	10	

IL. CONTRACT: LA036  
 IL. LETTING ITEM: 2A  
 IL. PROJECT: IGQ-3565  
 A.I.P. PROJECT: 3-17-0121-825

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE

0 1 2  
 THIS BAR IS EQUAL TO 2"  
 AT FULL SCALE (34X22).

VILLAGE OF LANSING  
 LANSING MUNICIPAL AIRPORT  
 LANSING, ILLINOIS

REHABILITATE AIRFIELD LIGHTING SYSTEM  
 INDEX TO SHEETS  
 SUMMARY OF QUANTITIES

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Lansing Municipal  
**airport**

DESIGN BY: JWD  
 DRAWN BY: JWD  
 CHECKED BY: DKP  
 APPROVED BY: ----  
 DATE: 02 MARCH 2007  
 JOB No: 06297-02

G-02



REF: DWG: b:dwg  
 b:tbl.dwg  
 b:base.dwg  
 b:GOV/F01.dwg  
 b:base\_add.dwg

IMAGE FILES: Lansing.mxd  
 2007.11.16






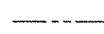

UPDATE BY: Jason Dove  
 LAYOUT: 03\_sitecontrol

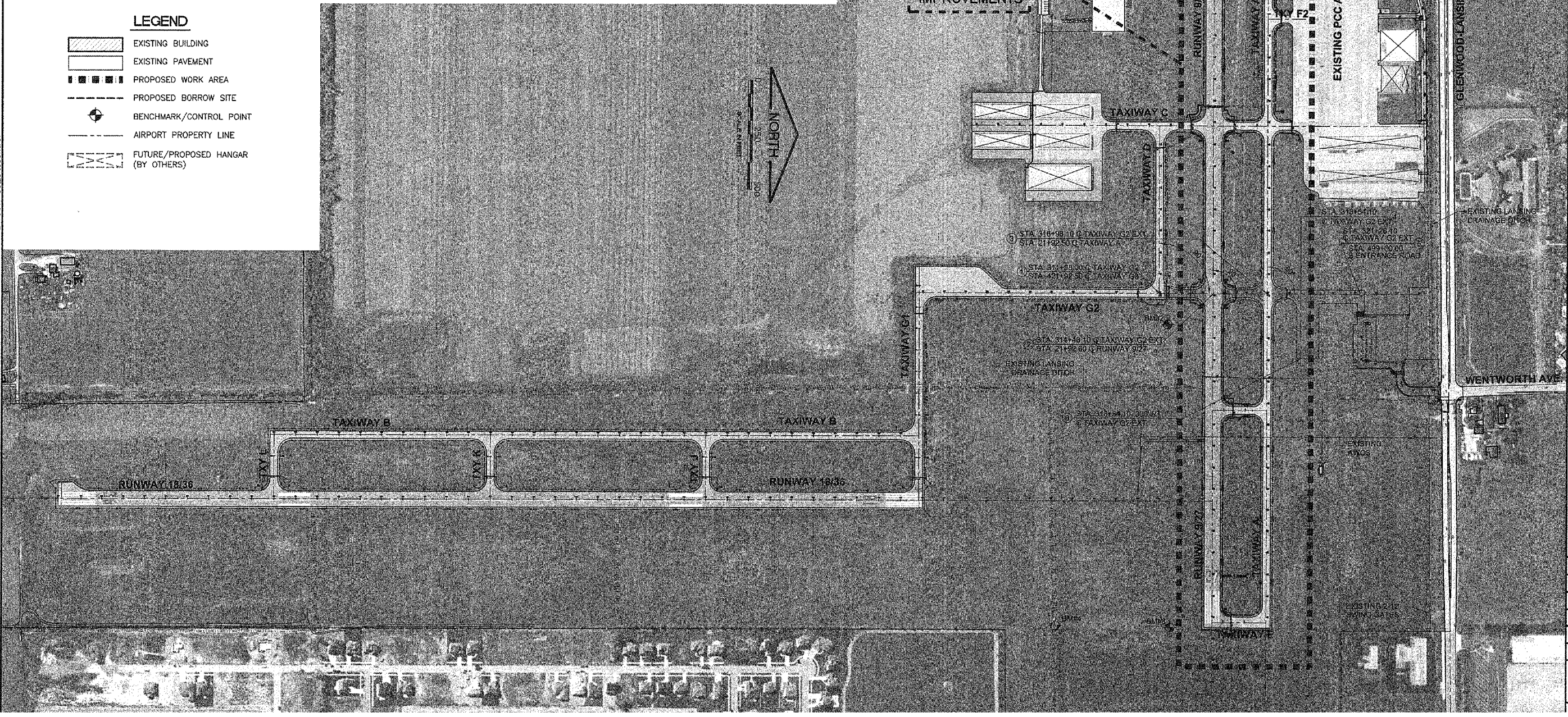
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**HORIZONTAL/VERTICAL CONTROL**

NO.	STATION/OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
1	311+98.00 @ TAXIWAY G2	-	1775650.38	719616.74	INTERSECTION CENTERLINE TAXIWAY G2 AND CENTERLINE TAXIWAY G3
2	314+48.10 @ TAXIWAY G2	-	1775900.49	719615.05	INTERSECTION CENTERLINE TAXIWAY G2 AND CENTERLINE RUNWAY 9/27
3	316+98.10 @ TAXIWAY G2	-	1776150.48	719613.35	INTERSECTION CENTERLINE TAXIWAY G2 AND CENTERLINE TAXIWAY A
4	318+54.10 @ TAXIWAY G2	-	1776306.46	719612.18	INTERSECTION CENTERLINE TAXIWAY G2 AND APRON BASELINE
5	321+26.10 @ TAXIWAY G2	-	1776578.44	719610.29	INTERSECTION CENTERLINE TAXIWAY G2 AND ENTRANCE ROAD BASELINE
6	318+54.10, 300' RT, @ TAXIWAY G2	-	1776308.55	719912.17	EDGE OF APRON
7	502+28.16, @ ENTRANCE RD.	-	1776580.67	719938.45	ENTRANCE ROAD BASELINE
8	503+44.19, @ ENTRANCE RD.	-	1776696.69	719937.64	INTERSECTION ENTRANCE ROAD BASELINE AND BORROW SITE BASELINE
9	504+14.16, @ ENTRANCE RD.	-	1776766.66	719937.16	ENTRANCE ROAD BASELINE
10	507+66.32, @ ENTRANCE RD.	-	1776995.73	720057.13	INTERSECTION ENTRANCE ROAD BASELINE AND CENTERLINE GLENWOOD-LANSING ROAD
11	505+38.08, @ ENTRANCE RD.	-	1776767.53	720061.07	ENTRANCE ROAD BASELINE
12	18+50, @ BORROW SITE	-	1776703.13	720882.47	END OF BORROW SITE BASELINE
13	507+72.06, 99.53' LT, @ ENTRANCE RD.	-	1776999.75	719957.51	PK NAIL ON GLENWOOD-LANSING ROAD MEDIAN
14	325+30.13, 498.64 LT, @ TAXIWAY G2	-	1776979.01	719108.85	PK NAIL ON GLENWOOD-LANSING ROAD MEDIAN
BM1	3+10.61, 215.31' RT, @ RUNWAY 9/27	613.53	1775672.09	717734.60	AZ MARKER "LANSPO" (ROD IN CAN) (#202)
BM2	23+37.02, 209.83' RT, @ RUNWAY 9/27	613.56	1775691.67	719760.92	MARKER "LANSPO 1990" (ROD IN CAN) (#201)
BM3	37+49.70, 195.54' RT, @ RUNWAY 9/27	613.69	1775715.79	721173.47	GPS IGOA MONUMENT (#205)
BM4	146+22.30, 582.00' RT, @ RUNWAY 18/36	614.13	1775185.59	721169.44	CHISELED "X" ON CONCRETE BOX CULVERT

**LEGEND**

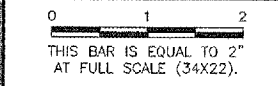
-  EXISTING BUILDING
-  EXISTING PAVEMENT
-  PROPOSED WORK AREA
-  PROPOSED BORROW SITE
-  BENCHMARK/CONTROL POINT
-  AIRPORT PROPERTY LINE
-  FUTURE/PROPOSED HANGAR (BY OTHERS)



IL. CONTRACT: **LA036**  
 IL. LETTING ITEM: **2A**  
 IL. PROJECT: **IGQ-3565**  
 A.I.P. PROJECT: **3-17-0121-B25**

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE



**VILLAGE OF LANSING  
 LANSING MUNICIPAL AIRPORT  
 LANSING, ILLINOIS**  
  
**REHABILITATE AIRFIELD LIGHTING SYSTEM  
 SITE PLAN**  
  
**HORIZONTAL AND VERTICAL CONTROL PLAN  
 LANSING MUNICIPAL AIRPORT**

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DESIGN BY: LAO  
 DRAWN BY: JWD  
 CHECKED BY: DKP  
 APPROVED BY: \_\_\_\_\_  
 DATE: 02 MARCH 2007  
 JOB No: 06297-02

**G-03**  
 SHEET 03 OF 21 SHEETS



**GENERAL NOTES**

- THE SUGGESTED SEQUENCE OF CONSTRUCTION SHOWN IS INTENDED TO ALLOW FOR THE ORDERLY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS WHILE MAINTAINING AIRCRAFT ACCESS AT ALL TIMES. THE PHASING SHOWN IS A SUGGESTED SEQUENCE OF CONSTRUCTION ONLY. THIS SEQUENCE MAY BE MODIFIED; HOWEVER, ALTERNATE STAGING PLANS MUST MAINTAIN AIRPORT OPERATIONS TO THE SATISFACTION OF THE AIRPORT MANAGER AND RESIDENT ENGINEER AND BE APPROVED BY THE DIVISION OF AERONAUTICS AND FEDERAL AVIATION ADMINISTRATION.
- ALL OPERATIONS SHALL BE IN CONFORMANCE WITH AC 150/5370-2E (LATEST EDITION) SAFETY DURING CONSTRUCTION.
- CONTRACTOR'S EQUIPMENT SHALL BE STORED IN THE EQUIPMENT AND MATERIAL STORAGE AREA WHEN CONSTRUCTION IS NOT IN PROGRESS.
- THE AIRPORT MANAGER IN CONSULTATION WITH THE RESIDENT ENGINEER SHALL HAVE FINAL SAY IN THE APPROVAL OF THE CONSTRUCTION OPERATING SEQUENCE AS IT RELATES TO PEDESTRIAN, VEHICULAR AND AIRCRAFT SAFETY.
- ALL EXISTING PAVEMENTS, DRIVES OR ANY OTHER AREAS USED AS A HAUL ROAD OR STORAGE AREA BY THE CONTRACTOR SHALL BE RESTORED IN KIND TO THEIR PRE-CONSTRUCTION CONDITION OR TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT MANAGER. THE COST OF MAINTAINING, REPAIRING OR CONSTRUCTING THESE PAVEMENTS AND AREAS SHALL BE INCIDENTAL TO THE CONTRACT. EXISTING AREAS OUTSIDE THE PROJECT LIMITS WHICH ARE DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY HIM AT HIS EXPENSE TO THE SATISFACTION OF THE RESIDENT ENGINEER AND THE AIRPORT MANAGER.
- THE CONTRACTOR SHALL KEEP ALL TRUCKS, EQUIPMENT AND MATERIALS OFF OF THE EXISTING TAXIWAYS, APRONS AND RUNWAYS OUTSIDE OF THE PROJECT LIMITS EXCEPT AS SHOWN OR WITH THE PRIOR PERMISSION OF THE ENGINEER.
- WORK PERFORMED BY THE CONTRACTOR OUTSIDE OF DAYLIGHT HOURS SHALL BE DONE UNDER SUFFICIENT ARTIFICIAL LIGHTING TO ALLOW FOR PROPER CONSTRUCTION METHODS AND INSPECTIONS. LIGHT SHALL CONSIST OF MOVABLE POLE MOUNTED FLOODLIGHTS AND/OR SPOTLIGHTS OF SUFFICIENT NUMBER TO ILLUMINATE THE WORK AREA. VEHICLE HEADLIGHTS WILL BE ALLOWED ONLY IN ADDITION TO OTHER LIGHTS MENTIONED ABOVE. LIGHTING SHALL BE AS APPROVED BY THE ENGINEER AND SHALL NOT BE USED IF THEY AFFECT FLIGHT SAFETY. CONTRACTOR'S WORK HOURS SHALL BE IN ACCORDANCE WITH LOCAL ORDINANCES.
- THE CONTRACTOR SHALL PROVIDE PORTABLE FLOOD LIGHTING FOR NIGHTTIME CONSTRUCTION. SUFFICIENT UNITS SHALL BE PROVIDED SO THAT WORK AREAS ARE ILLUMINATED TO A LEVEL OF FIVE HORIZONTAL FOOT CANDLES. THE LIGHTING LEVELS SHALL BE CALCULATED AND MEASURED IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE ILLUMINATION ENGINEERING SOCIETY. LIGHTS SHALL BE POSITIONED SO AS NOT TO INTERFERE WITH AIRPORT OPERATIONS.
- THE CONTRACTOR WILL BE REQUIRED TO HAVE A SWEEPER AVAILABLE FOR USE AT ALL TIMES. WHEN ACTIVE AIRFIELD PAVEMENTS ARE UTILIZED AS HAUL ROADS BY THE CONTRACTOR, MATERIAL TRACKED ON TO THE PAVEMENT SHALL BE CONTINUALLY REMOVED WITH SAID SWEEPER. THIS SWEEPING SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- MATERIALS REMOVED FROM THE PROJECT WILL BE DISPOSED OF OFF AIRPORT PROPERTY, UNLESS NOTED OTHERWISE.
- TRAFFIC CONTROL:** PAYMENT FOR TRAFFIC CONTROL INCLUDING, BUT NOT LIMITED TO BARRICADES, SIGNING, RUNWAY CLOSED MARKERS, AIR OPERATIONS AREA (A.O.A.) LATHE AND RIBBON, ETC. SHALL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. BARRICADES AT 10-FOOT CENTERS WITH ONE ORANGE FLAG (24" x 24") BETWEEN EACH SET OF BARRICADES SHALL BE PLACED AT THE LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. BARRICADES SHALL BE WEIGHTED TO PREVENT BLOWING OVER. BARRICADES SHALL HAVE A FLASHING RED LIGHT AND CONFORM TO IDOT STANDARD 702001, TYPE II. BARRICADE INSTALLATION WILL BE REQUIRED PRIOR TO ACCESS TO THE A.O.A. BY CONTRACTOR'S WORKERS, EQUIPMENT OR MATERIAL. SIGNS SHALL BE PLACED AT EACH TAXIWAY/RUNWAY CLOSURE LOCATION AND SHALL BE ATTACHED TO THE BARRICADES. EACH BARRICADE LOCATION SHALL CONSIST OF ONE "DO NOT ENTER" SIGN AND ONE "AIRCRAFT MOVEMENT AREA" SIGN. SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- THE CONTRACTOR SHALL CONTACT THE AIRPORT MANAGER FIVE (5) WORKING DAYS IN ADVANCE OF THE START OF CONSTRUCTION SO THAT THE APPROPRIATE NOTAMS MAY BE ISSUED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ALL CONSTRUCTION ACCESS GATES CLOSED DURING NON WORKING HOURS. THE CONTRACTOR SHALL PROVIDE A SIGN AT THE ACCESS GATE SAYING "AUTHORIZED PERSONNEL ONLY". THE CONTRACTOR SHALL CLOSE AND LOCK THE ACCESS GATE UPON LEAVING THE SITE. THROUGHOUT THE DURATION OF THE CONTRACT, ANY DAMAGES TO THE ACCESS ROAD, ACCESS GATE OR FENCING ADJACENT TO THE PROJECT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE RESIDENT ENGINEER. ALL COST RELATING TO CONTRACTOR'S ACCESS AND SECURITY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR WILL BE REQUIRED TO PUT AIRPORT FLAGS AND HAVE BEACON LIGHTS ON ALL EQUIPMENT AT ALL TIMES DURING CONSTRUCTION. SEE FLAG DETAIL.
- IN THE CASE OF AN EMERGENCY, CONTRACTOR SHALL NOTIFY AIRPORT MANAGER AND THE ENGINEER IMMEDIATELY.
- DURING ADVERSE WEATHER, THE CONTRACTOR SHALL MAKE PROVISIONS FOR ACCESS TO THE WORK AT NO ADDITIONAL COST TO THE CONTRACT. NO EXTENSION OF CONTRACT TIME WILL BE CONSIDERED FOR DELAYS DUE TO LACK OF ADEQUATE ACCESS TO THE WORK.
- THE TALLEST PIECE OF CONSTRUCTION EQUIPMENT IS ANTICIPATED TO BE AN ASPHALT/STONE TRUCK WHICH HAS AN ANTICIPATED MAXIMUM HEIGHT OF **TWENTY (20)** FEET IN A DUMP POSITION.
- IF RUNWAY NUMERALS ARE PRESENT DURING CONSTRUCTION THEN CONTRACTOR SHALL PLACE CLOSED RUNWAY MARKER OVER NUMERALS AS DETAILED, OTHERWISE PLACE RUNWAY CLOSED MARKER IN TURF AT ENDS OF RUNWAY AS DETAILED.
- LANSING MUNICIPAL AIRPORT WILL BE IN OPERATION DURING THE CONSTRUCTION OF THIS PROJECT. COORDINATION OF WORK WITH THE AIRPORT IS MANDATORY SO AS TO MINIMIZE IMPACTS ON AIRPORT OPERATIONS.

- APPROXIMATE LOCATION OF HAUL ROUTES ON THE AIRPORT SITE IS SHOWN ON THE GENERAL PROJECT LAYOUT AND THE PHASING PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF-SITE HAUL ROUTES (STATE HIGHWAYS, COUNTY ROADS OR CITY STREETS) WITH THE APPROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE. ON-SITE ROADS USED AS HAUL ROUTES SHALL BE MAINTAINED BY THE CONTRACTOR AND SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE TO THEIR ORIGINAL CONDITION UPON COMPLETION OF BEING USED AS A HAUL ROUTE. THE BEFORE AND AFTER CONDITION OF ON-SITE HAUL ROUTES SHALL BE JOINTLY INSPECTED AND DETERMINED BY THE CONTRACTOR AND THE ENGINEER. FENCING, DRAINAGE, GRADING AND OTHER MISCELLANEOUS CONSTRUCTION REQUIRED TO CONSTRUCT TEMPORARY HAUL ROUTES OR ACCESS POINTS ON THE AIRPORT WILL BE THE CONTRACTOR'S TOTAL RESPONSIBILITY AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO THE WORK. ALL ON-SITE ACCESS ROADS TO AIRPORT FACILITIES SHALL REMAIN OPEN AND MAINTAINED AT ALL TIMES.
- MOBILIZATION/EQUIPMENT STORAGE AREA WILL BE MADE AVAILABLE FOR CONTRACTOR'S MOBILIZATION AND STORAGE AS SHOWN ON THE PLANS. THIS AREA SHALL BE RESTORED TO THE ORIGINAL CONDITION UPON COMPLETION OF THE PROJECT AT THE CONTRACTOR'S EXPENSE.
- LOCATION OF KNOWN EXISTING AIRPORT UNDERGROUND CABLES ARE SHOWN ON THE PLANS AND MUST BE VERIFIED BY THE CONTRACTOR. REPAIR OF DAMAGED CABLE MUST BE STARTED IMMEDIATELY AND CONTINUED UNTIL COMPLETED. ALL SUCH REPAIRS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS, OR AS DIRECTED BY THE OWNER OF THE CABLE, AND SHALL BE AT THE CONTRACTOR'S EXPENSE. IF FAA CABLES ARE DAMAGED, REPAIRS SHALL BE DONE FROM POINT TO POINT IN ACCORDANCE WITH FAA REQUIREMENTS AND IN THE PRESENCE OF A FAA REPRESENTATIVE. THE OWNER MAY ELECT TO HAVE THE REPAIR PERFORMED BY OTHERS IN WHICH CASE THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING THE INCURRED COSTS OF REPAIRS.
- COORDINATION MEETINGS - THE CONTRACTOR SHALL CONDUCT WEEKLY COORDINATION MEETINGS TO DISCUSS WORK AREAS AND SCHEDULING, ETC. WITH THE ENGINEER, AIRPORT OPERATIONS, FAA, AND OTHER APPROPRIATE OFFICIALS. MINUTES FROM THE WEEKLY MEETINGS SHALL BE PREPARED BY THE CONTRACTOR, FURNISHED TO ALL ATTENDEES PRIOR TO THE SUBSEQUENT MEETING, AND KEPT ON FILE AT THE FIELD OFFICE. THE COORDINATION MEETING COSTS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- THE CONTRACTOR SHALL PROVIDE THE PHONE NUMBERS OF THREE PERSONNEL, INCLUDING THE PROJECT SUPERINTENDENT, WHO MAY BE CONTACTED IN AN EMERGENCY. PERSONNEL SHALL BE ON CALL 24 HOURS PER DAY FOR MAINTAINING AIRPORT HAZARD LIGHTING AND BARRICADES.
- DRAINAGE MODIFICATIONS SHALL BE SEQUENCED TO PROVIDE POSITIVE DRAINAGE AT ALL TIMES AT NO ADDITIONAL COST TO THE CONTRACT. EXISTING LANSING DRAINAGE FLOWS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
- VEHICLES AND EQUIPMENT SHALL NOT BE ALLOWED WITHIN 65' FROM ACTIVE TAXIWAYS AND 125' FROM ACTIVE RUNWAYS UNLESS OTHERWISE APPROVED BY THE AIRPORT MANAGER.
- CONTRACTOR SHALL STORE EQUIPMENT AND MATERIALS IN SUCH A MANNER AS NOT TO VIOLATE FEDERAL AVIATION ADMINISTRATION PART 77 SURFACES OR RUNWAY AND TAXIWAY SAFETY AREAS.
- ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER ELECTRICAL CABLES SHALL REMAIN IN SERVICE AT ALL TIMES. ALL EXISTING LIGHTING AND VAULT EQUIPMENT SHALL REMAIN IN SERVICE UNTIL PROPOSED IMPROVEMENTS ARE INSTALLED AND OPERATIONAL, UNLESS OTHERWISE APPROVED BY THE ENGINEER. ANY CABLES DAMAGED BY THE CONTRACTOR SHALL BE IMMEDIATELY REPAIRED AT HIS EXPENSE.
- COORDINATION BY THE CONTRACTOR WITH THE EXISTING UTILITIES SHALL BE COMPLETED BEFORE CONSTRUCTION IS STARTED. CONTRACTOR IS REFERRED TO SECTION 50-17 OF THE SPECIAL PROVISIONS FOR SPECIFIC REQUIREMENTS. THE LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON THE PLANS HAS BEEN OBTAINED FROM EXISTING RECORDS. NEITHER THE OWNER NOR THE DESIGN ENGINEER ASSUME 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 MATERIAL OF EXISTING UNDERGROUND UTILITIES AS INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED DURING 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 COMPANY OF HIS OPERATIONAL PLANS. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR DETAILED INFORMATION AND ASSISTANCE IN LOCATING UTILITIES. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY, THE RESIDENT ENGINEER AND THE AIRPORT DIRECTOR. ANY SUCH MAINS AND/OR SERVICES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED IMMEDIATELY AT HIS EXPENSE TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT MANAGER.
- ALL AIRFIELD LIGHTING AND LIGHTING GUIDANCE SYSTEMS (NAVAIDS) LOCATED WITHIN AND IMMEDIATELY ADJACENT TO THE CONTRACTORS WORK ZONE SHALL BE CHECKED FOR OPERATIONAL CONDITION PRIOR TO THE DEPARTURE FROM THE AIRPORT WITH THE AIRPORT MAINTENANCE. ANY DEFICIENCIES IN THESE SYSTEMS DUE TO THE ACTS OF CONTRACTOR OR HIS SUBCONTRACTORS, SUPPLIERS OR CONSULTANTS SHALL BE REPAIRED IMMEDIATELY.

**CONTRACTOR CROSSING RUNWAY AND TAXIWAY AIR OPERATIONS AREA (A.O.A.)**

- ANYTIME THE CONTRACTOR IS REQUIRED TO UTILIZE OR CROSS ACTIVE AIRFIELD PAVEMENTS FOR ACCESS TO AND FROM THE WORK ZONE, A FULL TIME CROSSING GUARD IN RADIO CONTACT WITH THE AIR TRAFFIC SHALL BE FURNISHED BY THE CONTRACTOR FOR MOVEMENTS OF VEHICLES OR EQUIPMENT TO AND FROM THE WORK ZONE. THE RADIO OPERATOR SHALL BE FAMILIAR WITH AIRPORT GROUND CONTROL PROCEDURES AND DEMONSTRATE KNOWLEDGE OF SAME TO THE AIRPORT. THE AIRPORT RESERVES THE RIGHT TO APPROVE THE CROSSING GUARDS. THE CONTRACTOR SHALL PROVIDE THEIR OWN RADIOS. THIS COST SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF MUNICIPAL FINES (\$500 PER OCCURENCE) DUE TO AIRFIELD INCURSIONS BY HIS EMPLOYEES, SUBCONTRACTORS, SUPPLIERS, CONSULTANTS AND/OR AGENTS.
- ANY PAVEMENT DAMAGED BY CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY BY HIM TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT MANAGER AT NO ADDITIONAL COST TO THE OWNER. PAVEMENT SHALL BE CONTINUALLY SWEEPED TO PROVIDE DEBRIS FREE SURFACE DURING ALL HAUL ROAD OPERATIONS. THIS COST SHALL NOT BE PAID SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- WORK WITHIN THE A.O.A. SHALL BE EXPEDITED. ANY DROP OFF SHALL BE ADEQUATELY LIGHTED, SIGNED AND BARRICADED. NO MATERIAL SHALL BE STOCKPILED WITHIN THE A.O.A. SHOULD IT BE NECESSARY FOR THE CONTRACTOR TO TEMPORARILY RELOCATE EQUIPMENT TO ALLOW AIRCRAFT TO PASS, THEY SHALL DO SO AT NO EXTRA COST TO THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT MANAGER TWO (2) WORKING DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THESE LIMITS.

DESIGN AIRCRAFT APPROACH CATEGORY: B  
DESIGN AIRPORT GROUP: II

MAXIMUM ANTICIPATED HEIGHT OF CONSTRUCTION EQUIPMENT: 20'	
POINT "A"	
NEAREST POINT ON CONSTRUCTION SITE TO ACTIVE RUNWAY 18/36 OFFSET FROM CENTERLINE EXTENDED	
LATITUDE:	41°32'22.32"N (NAD 83)
LONGITUDE:	87°31'39.59"W (NAD 83)
EXISTING ELEVATION:	610.65
POINT "B"	
NEAREST POINT ON CONSTRUCTION SITE TO ACTIVE RUNWAY 18/36 OFFSET FROM CENTERLINE EXTENDED	
LATITUDE:	41°32'24.79"N (NAD 83)
LONGITUDE:	87°31'39.58"W (NAD 83)
EXISTING ELEVATION:	610.88
POINT "C"	
NEAREST POINT ON CONSTRUCTION SITE TO ACTIVE RUNWAY 9/27	
LATITUDE:	41°32'24.78"N (NAD 83)
LONGITUDE:	87°31'32.16"W (NAD 83)
EXISTING ELEVATION:	616.55
POINT "D"	
NEAREST POINT ON CONSTRUCTION SITE TO ACTIVE RUNWAY 9/27	
LATITUDE:	41°32'24.85"N (NAD 83)
LONGITUDE:	87°32'14.64"W (NAD 83)
EXISTING ELEVATION:	614.00

**LIMITATIONS ON CONSTRUCTION WITHIN AIRPORT OPERATIONS AREA (A.O.A.)**

**RUNWAYS:**  
ANY WORK WITHIN 125' OF THE CENTERLINE OF AN ACTIVE RUNWAY SHALL EITHER BE DONE ON WEEKENDS, OFF-PEAK DAYTIME OR NIGHTTIME HOURS, LOCAL TIME AS SHOWN ON THE SEQUENCE OF CONSTRUCTION PLAN SHEETS. ON ANY DAY WHEN CONSTRUCTION IS WITHIN 125' OF THE CENTERLINE OF THE RUNWAY, THE RUNWAY SHALL BE CLOSED. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT MANAGER TWO (2) WORKING DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THESE LIMITS.

STEEL PLATES IF NECESSARY SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR TO COVER ANY OPEN TRENCHES OR EXCAVATION WITHIN THE A.O.A. IF DURING RUNWAY CLOSURE AN EMERGENCY IS DECLARED, THE CONTRACTOR SHALL IMMEDIATELY CLEAR THE RUNWAY OF ALL VEHICLES, MEN AND EQUIPMENT.

**TAXIWAYS / TAXILANES / APRONS:**  
CONSTRUCTION WILL BE ALLOWED UP TO THE EDGE OF PAVEMENTS WITHOUT CLOSURE ON A LIMITED BASIS. WORK WITHIN THE A.O.A. SHALL BE EXPEDITED. ANY DROP OFF SHALL BE ADEQUATELY LIGHTED, SIGNED AND BARRICADED. NO MATERIAL SHALL BE STOCKPILED WITHIN THE A.O.A. SHOULD IT BE NECESSARY FOR THE CONTRACTOR TO TEMPORARILY RELOCATE EQUIPMENT TO ALLOW AIRCRAFT TO PASS, THEY SHALL DO SO AT NO EXTRA COST TO THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT MANAGER TWO (2) WORKING DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THESE LIMITS.

**NOTE - ALL PHASES**  
ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER AIRPORT ELECTRICAL CABLES SHALL REMAIN IN SERVICE UNTIL REPLACED AS ACCEPTABLE TO THE RESIDENT ENGINEER. ALL TEMPORARY CABLING AND SPLICING NECESSARY TO KEEP THE CIRCUITS IN OPERATION SHALL BE CONSIDERED INCIDENTAL TO CONTRACT.

IL CONTRACT: LA036  
IL LETTING ITEM: 2A  
IL PROJECT: IGG-3565  
A.I.P. PROJECT: 3-17-0121-B25

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE

0 1 2  
THIS BAR IS EQUAL TO 2"  
AT FULL SCALE (3/4"x22").

VILLAGE OF LANSING  
LANSING MUNICIPAL AIRPORT  
LANSING, ILLINOIS

REHABILITATE AIRFIELD LIGHTING SYSTEM  
SEQUENCE OF CONSTRUCTION  
GENERAL NOTES  
CRITICAL POINTS

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airport

DESIGN BY:	JWD
DRAWN BY:	JWD
CHECKED BY:	DKP
APPROVED BY:	---
DATE:	02 MARCH 2007
JOB No:	06297--02

**G-04**

SHEET 04 OF 21 SHEETS

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UPDATE BY: Jason Dove  
LAYOUT: SITE PLAN  
IMAGE FILES  
DWG: 0629702.dwg  
PLOT: 0629702.dwg









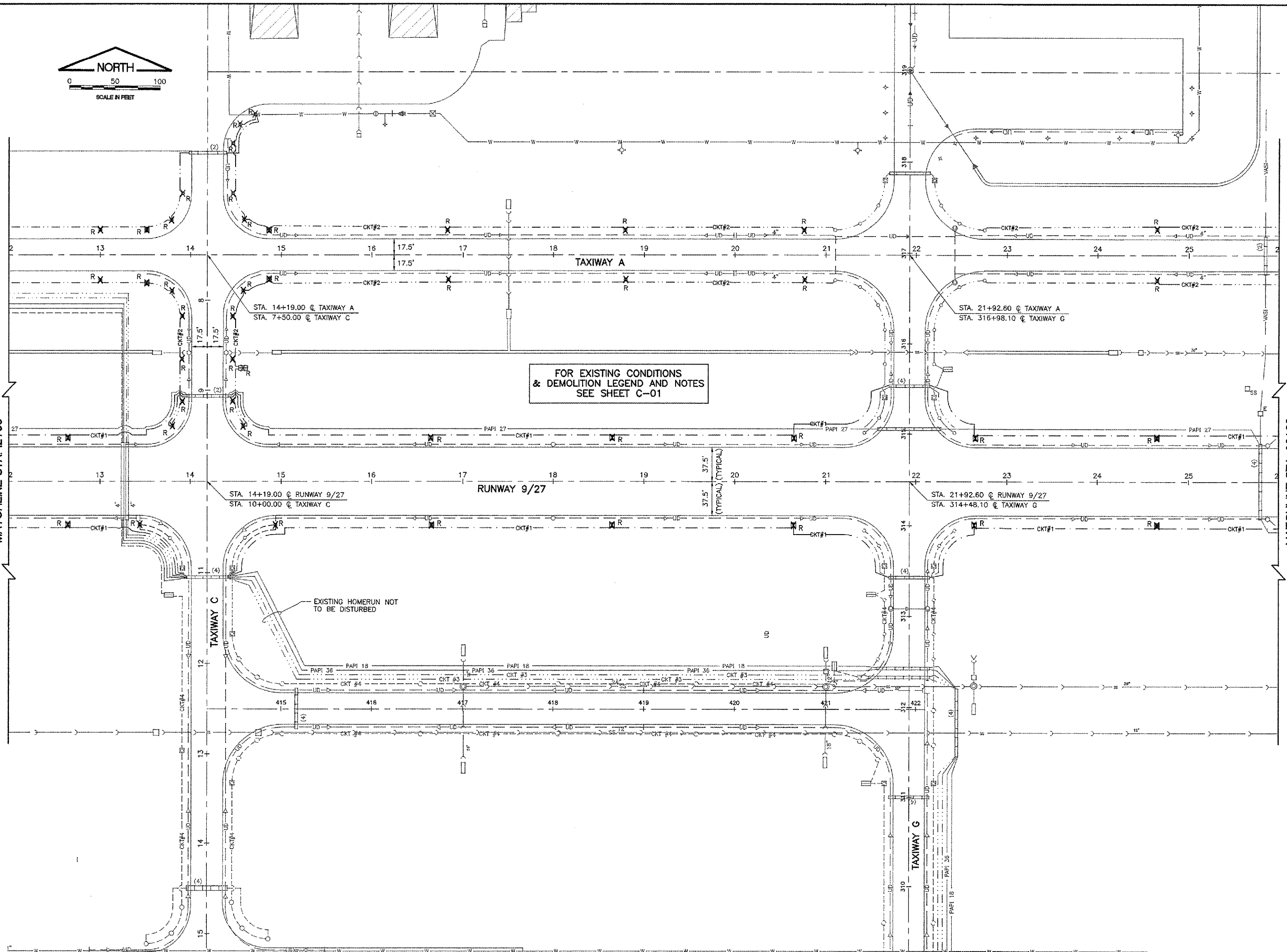
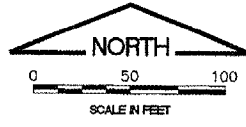




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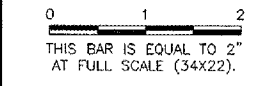
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IL CONTRACT: LA036  
 IL LETTING ITEM: 2A  
 IL PROJECT: IGQ-3565  
 A.I.P. PROJECT: 3-17-0121-B25

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE



VILLAGE OF LANSING  
 LANSING MUNICIPAL AIRPORT  
 LANSING, ILLINOIS

REHABILITATE AIRFIELD LIGHTING SYSTEM  
 EXISTING CONDITIONS & DEMOLITION  
 RUNWAY 9/27  
 STA. 12+00 TO STA. 26+00



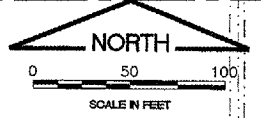
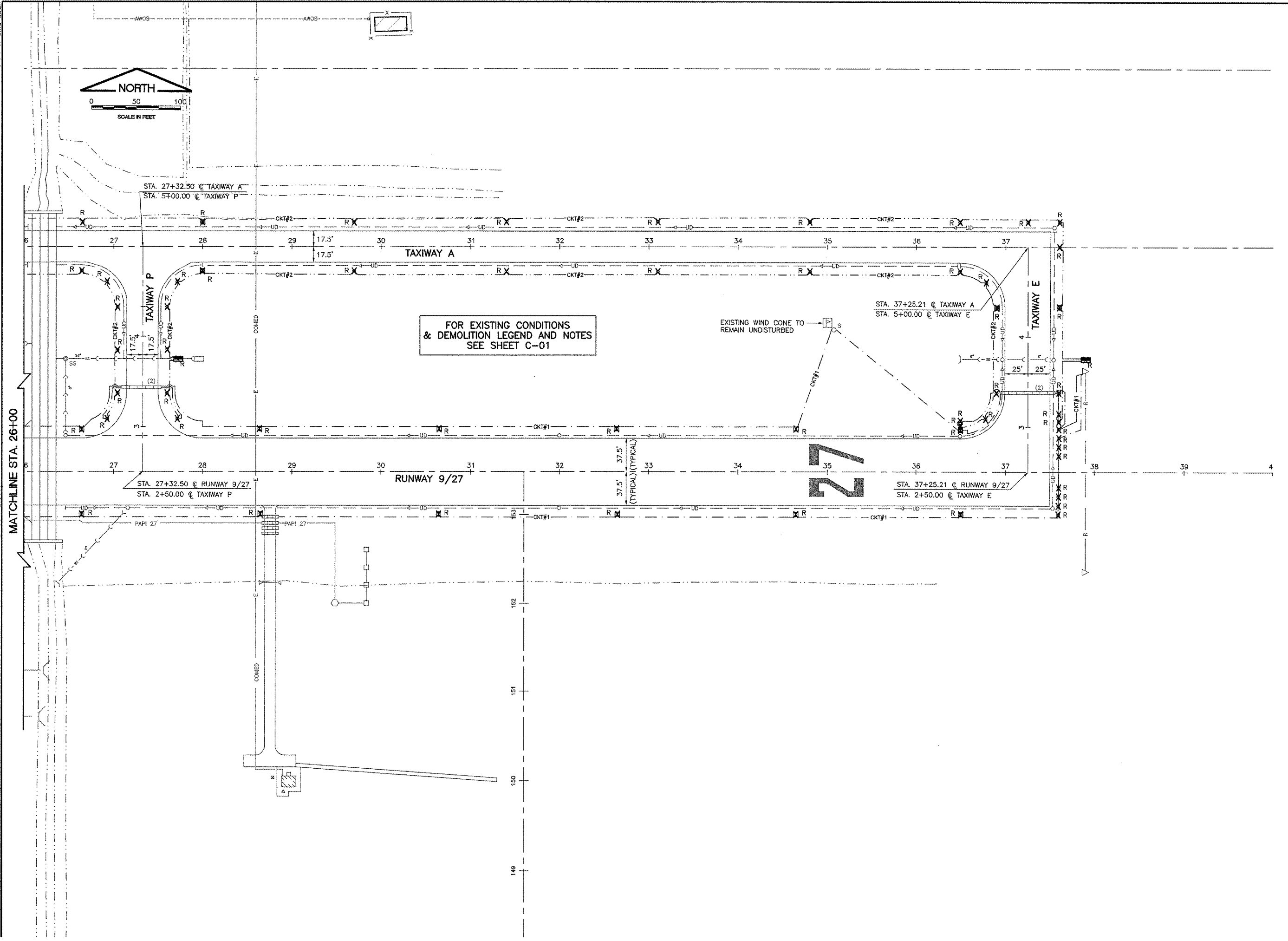
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 DRAWN BY: JRO  
 CHECKED BY: DKP  
 APPROVED BY: ---  
 DATE: 02 MARCH 2007  
 JOB No: 06297-02

**C-02**  
 SHEET 09 OF 21 SHEETS

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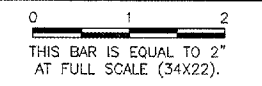
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IL. CONTRACT: LA036  
 IL. LETTING ITEM: 2A  
 IL. PROJECT: IGQ-3565  
 A.I.P. PROJECT: 3-17-0121-B25

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE



VILLAGE OF LANSING  
 LANSING MUNICIPAL AIRPORT  
 LANSING, ILLINOIS

REHABILITATE AIRFIELD LIGHTING SYSTEM  
 EXISTING CONDITIONS & DEMOLITION  
 RUNWAY 9/27  
 STA. 26+00 TO STA. 40+00



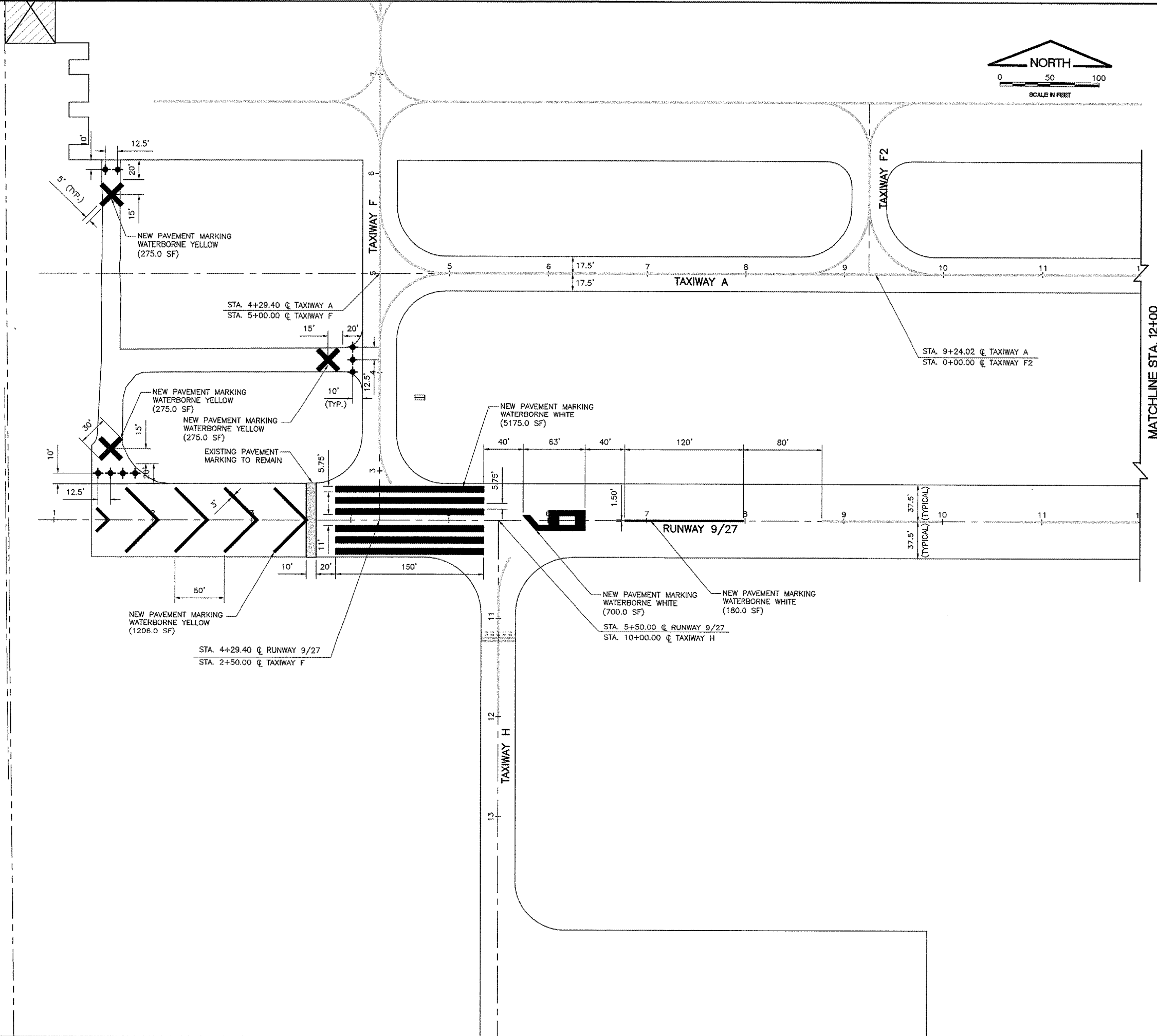
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C-03

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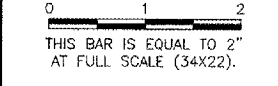
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IL. CONTRACT: LA036  
 IL. LETTING ITEM: 2A  
 IL. PROJECT: IGQ-3565  
 A.I.P. PROJECT: 3-17-0121-B25

SURVEY BOOK # BOOK #


REVISIONS		
NUMBER	BY	DATE




**VILLAGE OF LANSING**  
**LANSING MUNICIPAL AIRPORT**  
**LANSING, ILLINOIS**

**REHABILITATE AIRFIELD LIGHTING SYSTEM**  
**PAVEMENT MARKINGS**  
**RUNWAY 9/27**  
**STA. 1+00 TO STA. 12+00**

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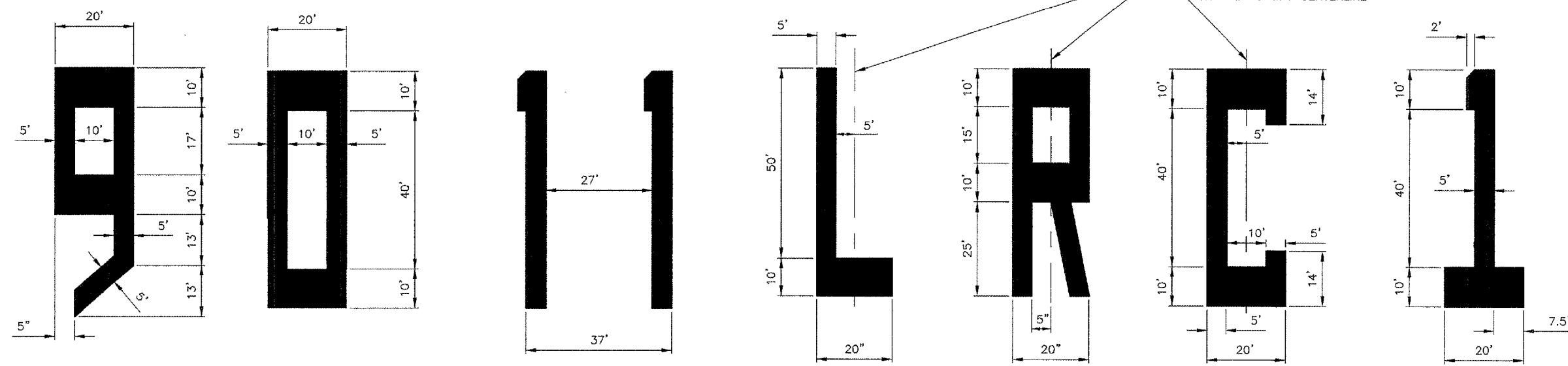
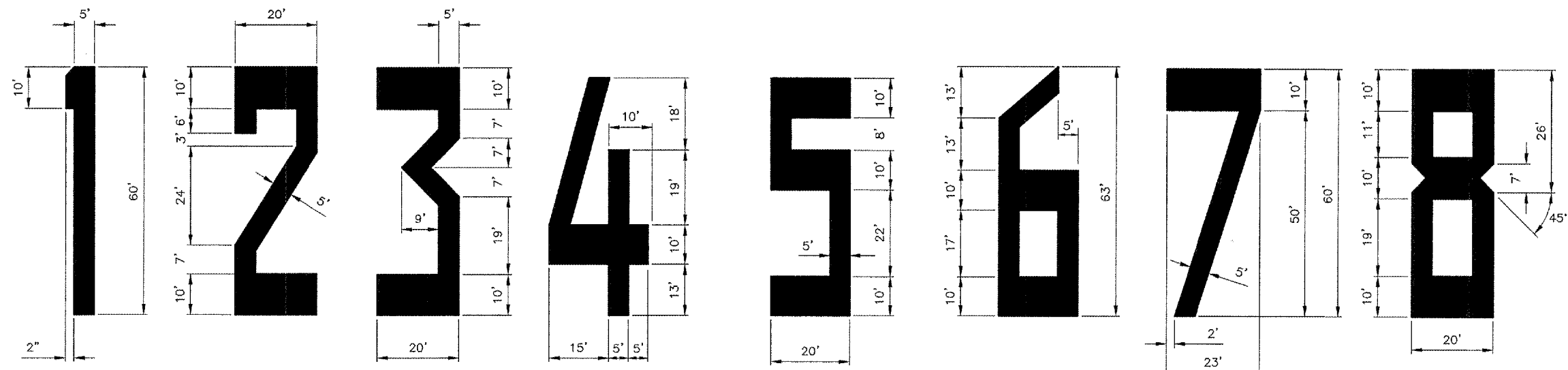
  
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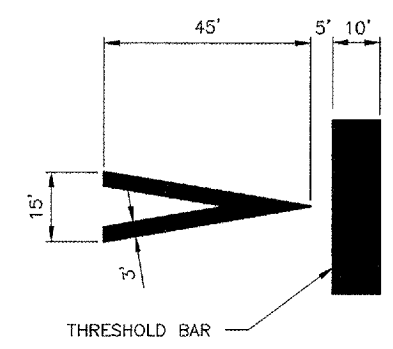
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DATE:	02 MARCH 2007
JOB No:	06297-02



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 UPDATE BY: Jason Dove  
 LAYOUT: Layout1  
 \$STL\$ \$SYM\$  
 \$PRE\$ \$DWG\$ \$PLOT\$ \$PRG\$



RUNWAY CENTERLINE --  
 SINGLE DESIGNATIONS ARE CENTERED  
 ON THE RUNWAY CENTERLINE



**ARROWHEAD AND THRESHOLD BAR DETAILS**  
N.T.S.

- NOTE:**
- ALL PROPOSED YELLOW AND WHITE MARKING SHALL HAVE REFLECTIVE BEADS.
  - ALL PROPOSED WHITE MARKINGS SHALL HAVE 6" BLACK BORDER.

**RUNWAY NUMERALS DETAIL**  
N.T.S.

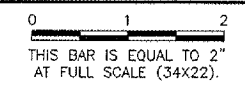
- NOTE:**
- ALL NUMERALS EXCEPT THE NUMBER ELEVEN (11) AS SHOWN ARE HORIZONTALLY SPACED FIFTEEN (15) FEET APART.
  - SINGLE DIGITS SHALL NOT BE PRECEDED BY A ZERO
  - DIMENSIONS ARE EXPRESSED IN FEET.
  - THE NUMERAL ONE (1), WHEN USED ALONE, CONTAINS A HORIZONTAL BAR TO DIFFERENTIATE IT FROM THE RUNWAY CENTERLINE MARKING.
  - SINGLE DESIGNATIONS ARE CENTERED ON THE RUNWAY PAVEMENT CENTERLINE. FOR DOUBLE DESIGNATIONS, THE CENTER OF THE OUTER EDGES OF THE TWO NUMERALS IS CENTERED ON THE RUNWAY PAVEMENT CENTERLINE.
  - WHERE THE RUNWAY DESIGNATION CONSISTS OF A NUMBER AND A LETTER, THE NUMBER AND LETTER ARE LOCATED ON THE RUNWAY CENTERLINE IN A STACKED ARRANGEMENT.

(SEE NOTE 4)

IL. CONTRACT: **LA036**  
 IL. LETTING ITEM: **2A**  
 IL. PROJECT: **IGQ-3565**  
 A.I.P. PROJECT: **3-17-0121-B25**

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE



**VILLAGE OF LANSING**  
**LANSING MUNICIPAL AIRPORT**  
**LANSING, ILLINOIS**

**REHABILITATE AIRFIELD LIGHTING SYSTEM**  
**PAVEMENT MARKING**  
**AIRFIELD PAVEMENT MARKING DETAILS**  
**LETTERS AND SYMBOLS**

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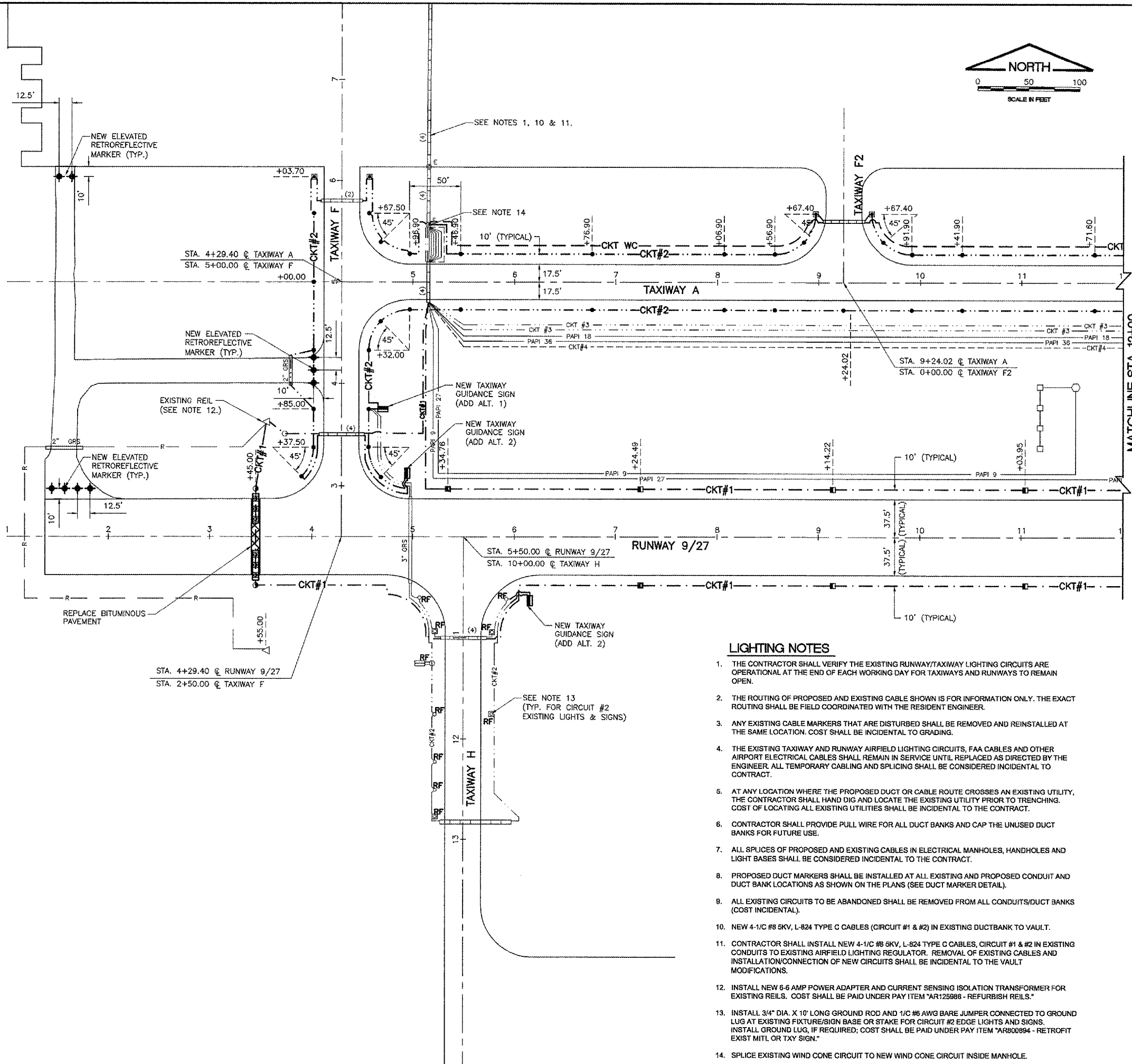
Lansing Municipal  
**airport**

DESIGN BY:	JWD
DRAWN BY:	JWD
CHECKED BY:	DKP
APPROVED BY:	----
DATE:	02 MARCH 2007
JOB No:	06297-02

**C-05**

**LEGEND**

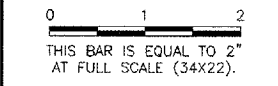
- EXISTING BASE MOUNTED MEDIUM INTENSITY TAXIWAY LIGHT
- EXISTING STAKE MOUNTED MEDIUM INTENSITY TAXIWAY LIGHT
- EXISTING STAKE MOUNTED MEDIUM INTENSITY RUNWAY LIGHT
- EXISTING BASE MOUNTED MEDIUM INTENSITY RUNWAY LIGHT
- EXISTING STAKE MOUNTED THRESHOLD LIGHT
- EXISTING BASE MOUNTED THRESHOLD LIGHT
- EXISTING CONCRETE ENCASED DUCT BANK (NUMBER OF WAYS)
- EXISTING GRS CONDUIT (CONDUIT SIZE NOTED)
- EXISTING ELECTRICAL HANDHOLE
- EXISTING ELECTRICAL SPLICE CAN
- EXISTING WIND CONE
- EXISTING AIRFIELD GUIDANCE SIGN
- EXISTING RUNWAY 9/27 CIRCUIT
- EXISTING TAXIWAY A CIRCUIT
- EXISTING RUNWAY 18/36 CIRCUIT
- EXISTING TAXIWAY B CIRCUIT
- EXISTING RUNWAY 18 PAPI CIRCUIT
- EXISTING RUNWAY 36 PAPI CIRCUIT
- EXISTING WIND CONE CIRCUIT
- EXISTING ELECTRICAL MANHOLE
- EXISTING PRECISION APPROACH PATH INDICATORS (PAPI) L-880 SYSTEM ALTERNATE A
- EXISTING PRECISION APPROACH PATH INDICATORS (PAPI) L-881 SYSTEM ALTERNATE B
- EXISTING RUNWAY END IDENTIFIER LIGHT (REIL)
- EXISTING AIRFIELD GUIDANCE SIGN
- EXISTING RUNWAY END IDENTIFIER LIGHT (REIL) CONTROL CABLES
- EXISTING RUNWAY 9 PAPI CIRCUIT
- EXISTING RUNWAY 27 PAPI CIRCUIT
- NEW CIRCUIT #1, 1/C #8 SKV L-824 TYPE C CABLE IN 3/4" UNIT DUCT
- NEW CIRCUIT #2, 1/C #8 SKV L-824 TYPE C CABLE IN 3/4" UNIT DUCT
- NEW STAKE MOUNTED THRESHOLD LIGHT
- NEW BASE MOUNTED THRESHOLD LIGHT
- NEW BASE MOUNTED RUNWAY LIGHT
- NEW STAKE MOUNTED RUNWAY LIGHT
- NEW STAKE MOUNTED MEDIUM INTENSITY TAXIWAY LIGHT
- NEW BASE MOUNTED MEDIUM INTENSITY TAXIWAY LIGHT
- NEW AIRFIELD GUIDANCE SIGN (ADD ALT. #1 & #2)
- NEW WINDCONE L-806
- NEW ELEVATED RETROREFLECTIVE MARKER
- RETROFIT EXISTING MITL OR GUIDANCE SIGN



IL. CONTRACT: LA036  
 IL. LETTING ITEM: 2A  
 IL. PROJECT: IGQ-3565  
 A.I.P. PROJECT: 3-17-0121-B25

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE



MATCHLINE STA. 12+00  
**VILLAGE OF LANSING**  
**LANSING MUNICIPAL AIRPORT**  
**LANSING, ILLINOIS**  
**REHABILITATE AIRFIELD LIGHTING SYSTEM**  
**AIRFIELD LIGHTING PLAN**  
**RUNWAY 9/27**  
**STA. 1+00 TO STA. 12+00**

**LIGHTING NOTES**

1. THE CONTRACTOR SHALL VERIFY THE EXISTING RUNWAY/TAXIWAY LIGHTING CIRCUITS ARE OPERATIONAL AT THE END OF EACH WORKING DAY FOR TAXIWAYS AND RUNWAYS TO REMAIN OPEN.
2. THE ROUTING OF PROPOSED AND EXISTING CABLE SHOWN IS FOR INFORMATION ONLY. THE EXACT ROUTING SHALL BE FIELD COORDINATED WITH THE RESIDENT ENGINEER.
3. ANY EXISTING CABLE MARKERS THAT ARE DISTURBED SHALL BE REMOVED AND REINSTALLED AT THE SAME LOCATION. COST SHALL BE INCIDENTAL TO GRADING.
4. THE EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER AIRPORT ELECTRICAL CABLES SHALL REMAIN IN SERVICE UNTIL REPLACED AS DIRECTED BY THE ENGINEER. ALL TEMPORARY CABLING AND SPLICING SHALL BE CONSIDERED INCIDENTAL TO CONTRACT.
5. AT ANY LOCATION WHERE THE PROPOSED DUCT OR CABLE ROUTE CROSSES AN EXISTING UTILITY, THE CONTRACTOR SHALL HAND DIG AND LOCATE THE EXISTING UTILITY PRIOR TO TRENCHING. COST OF LOCATING ALL EXISTING UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT.
6. CONTRACTOR SHALL PROVIDE PULL WIRE FOR ALL DUCT BANKS AND CAP THE UNUSED DUCT BANKS FOR FUTURE USE.
7. ALL SPLICES OF PROPOSED AND EXISTING CABLES IN ELECTRICAL MANHOLES, HANDHOLES AND LIGHT BASES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
8. PROPOSED DUCT MARKERS SHALL BE INSTALLED AT ALL EXISTING AND PROPOSED CONDUIT AND DUCT BANK LOCATIONS AS SHOWN ON THE PLANS (SEE DUCT MARKER DETAIL).
9. ALL EXISTING CIRCUITS TO BE ABANDONED SHALL BE REMOVED FROM ALL CONDUITS/DUCT BANKS (COST INCIDENTAL).
10. NEW 4-1/C #8 SKV, L-824 TYPE C CABLES (CIRCUIT #1 & #2) IN EXISTING DUCTBANK TO VAULT.
11. CONTRACTOR SHALL INSTALL NEW 4-1/C #8 SKV, L-824 TYPE C CABLES, CIRCUIT #1 & #2 IN EXISTING CONDUITS TO EXISTING AIRFIELD LIGHTING REGULATOR. REMOVAL OF EXISTING CABLES AND INSTALLATION/CONNECTION OF NEW CIRCUITS SHALL BE INCIDENTAL TO THE VAULT MODIFICATIONS.
12. INSTALL NEW 6-6 AMP POWER ADAPTER AND CURRENT SENSING ISOLATION TRANSFORMER FOR EXISTING REILS. COST SHALL BE PAID UNDER PAY ITEM "AR125986 - REFURBISH REILS."
13. INSTALL 3/4" DIA. X 10' LONG GROUND ROD AND 1/C #6 AWG BARE JUMPER CONNECTED TO GROUND LUG AT EXISTING FIXTURE/SIGN BASE OR STAKE FOR CIRCUIT #2 EDGE LIGHTS AND SIGNS. INSTALL GROUND LUG, IF REQUIRED; COST SHALL BE PAID UNDER PAY ITEM "AR800894 - RETROFIT EXIST MITL OR TXY SIGN."
14. SPLICE EXISTING WIND CONE CIRCUIT TO NEW WIND CONE CIRCUIT INSIDE MANHOLE.

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DESIGN BY:	JWD
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	-----
DATE:	02 MARCH 2007
JOB No:	06297-02

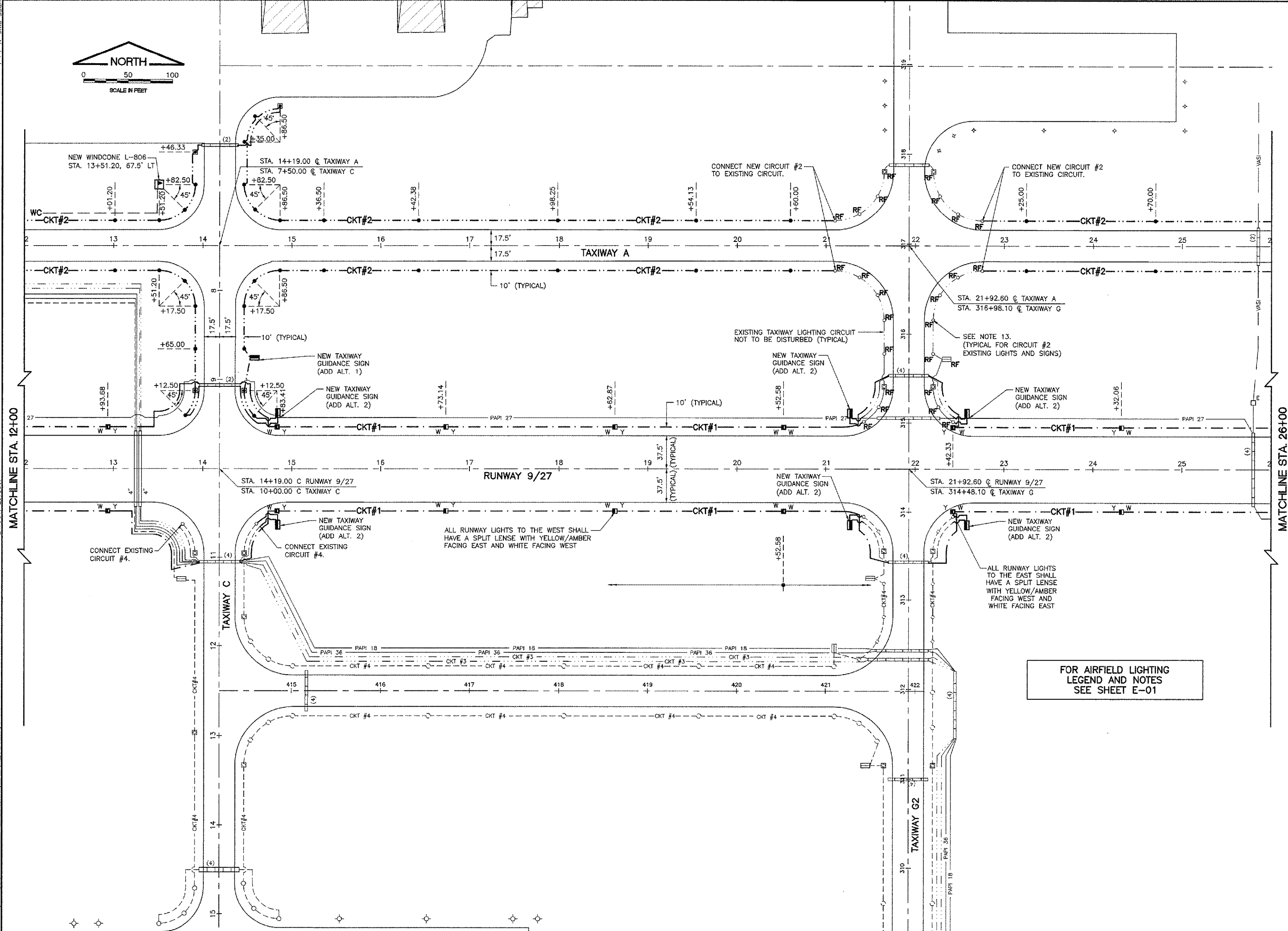
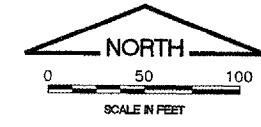
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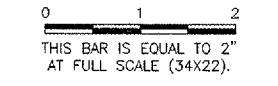


FOR AIRFIELD LIGHTING  
LEGEND AND NOTES  
SEE SHEET E-01

IL CONTRACT: LA036  
IL LETTING ITEM: 2A  
IL PROJECT: IGO-3565  
A.I.P. PROJECT: 3-17-0121-B25

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE



VILLAGE OF LANSING  
LANSING MUNICIPAL AIRPORT  
LANSING, ILLINOIS

REHABILITATE AIRFIELD LIGHTING SYSTEM  
AIRFIELD LIGHTING PLAN  
RUNWAY 9/27  
STA. 12+00 TO STA. 26+00

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airport

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DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	----
DATE:	02 MARCH 2007
JOB No:	06297-02

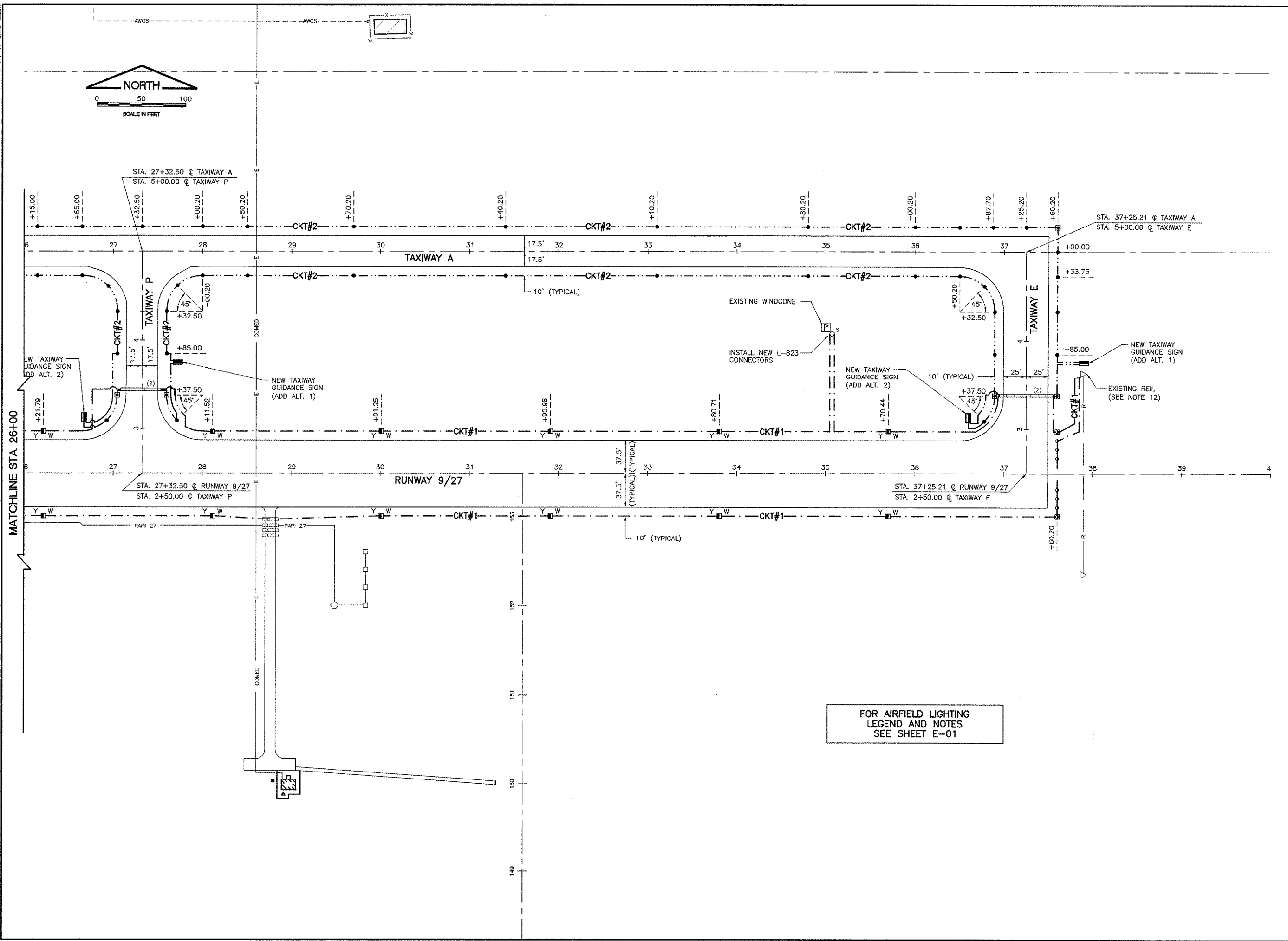
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FOR AIRFIELD LIGHTING  
 LEGEND AND NOTES  
 SEE SHEET E-01

IL CONTRACT: LA036  
 IL LETTING ITEM: 2A  
 IL PROJECT: IGQ-3565  
 A.I.P. PROJECT: 3-17-0121-B25

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE

0 1 2  
 THIS BAR IS EQUAL TO 2" AT FULL SCALE (34x22).

VILLAGE OF LANSING  
 LANSING MUNICIPAL AIRPORT  
 LANSING, ILLINOIS

REHABILITATE AIRFIELD LIGHTING SYSTEM  
 AIRFIELD LIGHTING PLAN  
 RUNWAY 9/27  
 STA. 26+00 TO STA. 40+00

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Lansing Municipal Airport

DESIGN BY: JWD  
 DRAWN BY: JRO  
 CHECKED BY: DKP  
 APPROVED BY: ---  
 DATE: 02 MARCH 2007  
 JOB No: 06297-02

**E-03**

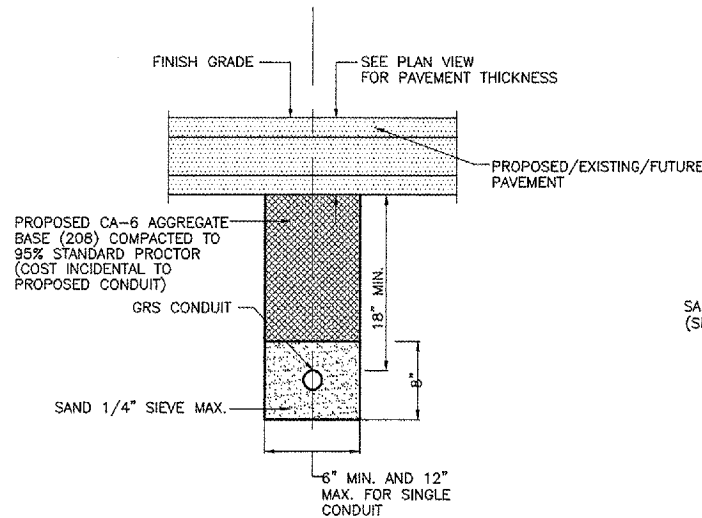
SHEET 15 OF 21 SHEETS





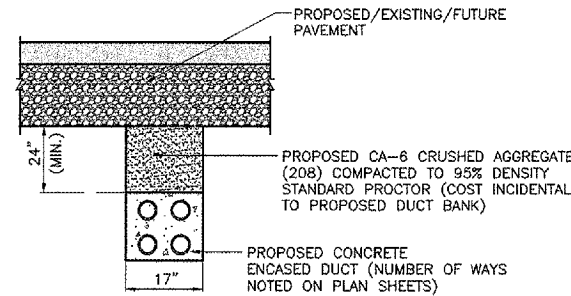


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 UPDATE BY: Jason Dove  
 LAYOUT: Layout1

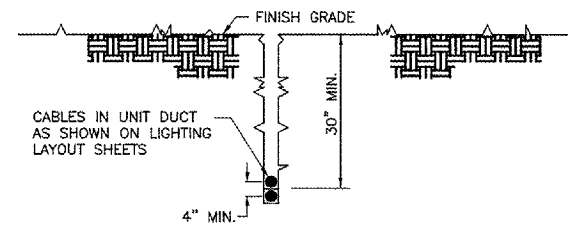


**PAVED AREA CABLE IN CONDUIT TRENCH DETAIL**  
N.T.S.

NOTE: CONDUIT SHALL BE INSTALLED AT AN ELEVATION THAT WILL NOT CONFLICT WITH THE OTHER UTILITIES SUCH AS SANITARY SEWER, STORM SEWER, WATERMAIN, UNDERDRAIN, AND ETC.

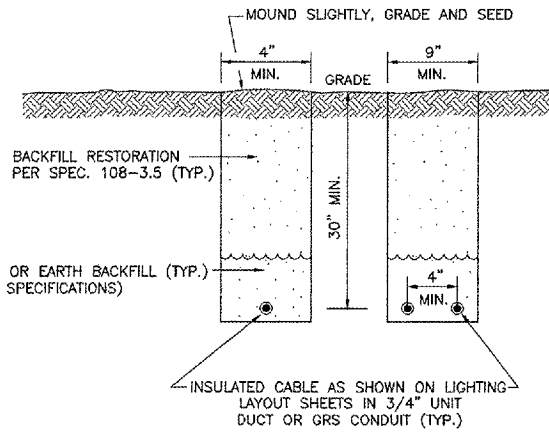


**CONCRETE ENCASED DUCT BACKFILL**  
NOT TO SCALE



**CABLE IN UNIT DUCT - PLOWED**  
NOT TO SCALE

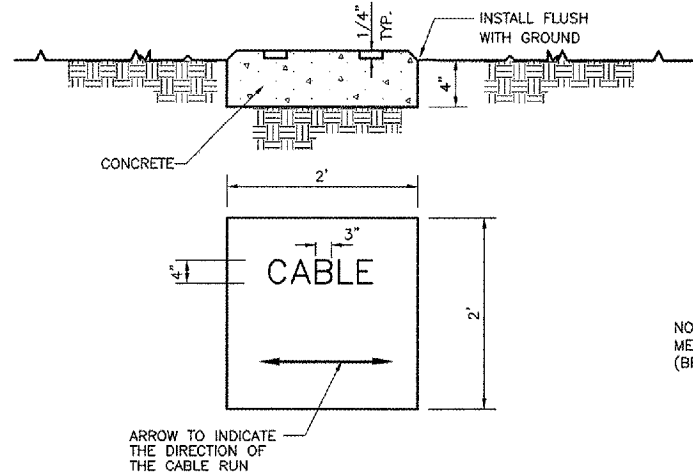
NOTE: CONTRACTOR SHALL HAVE THE OPTION TO TRENCH OR PLOW UNIT DUCT. NO ADDITIONAL PAYMENT SHALL BE MADE FOR TRENCHING.



**TURF AREA CABLE TRENCH DETAIL**  
NOT TO SCALE

**NOTES**

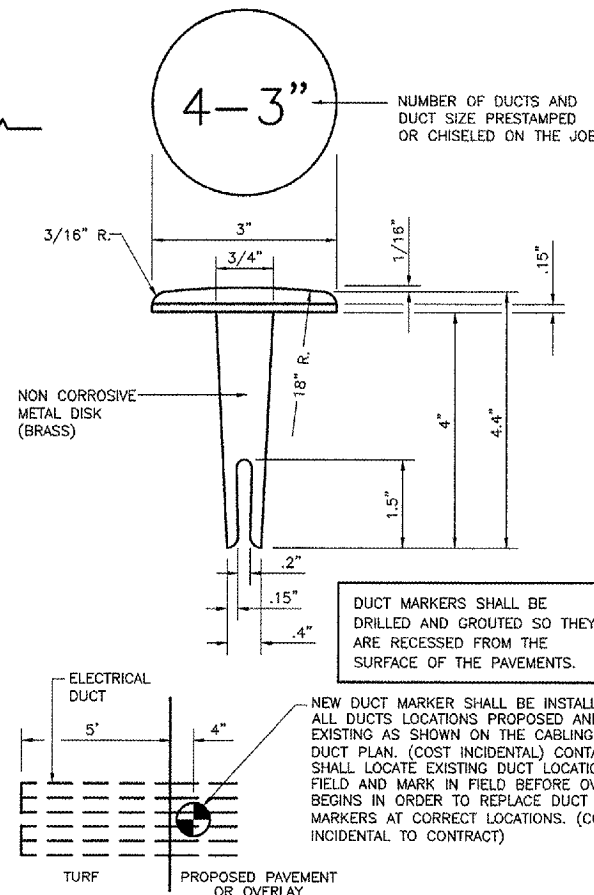
1. TRENCHES WITH MORE THAN 2 CABLES SHALL BE INCREASED 4" IN WIDTH FOR EACH ADDITIONAL CABLE. IF SPECIFIED ON PLANS, TWO PARALLEL TRENCHES MAY BE CONSTRUCTED.
2. DEPTH OF TRENCHES SHALL BE AS SHOWN UNLESS OTHERWISE SPECIFIED ON THE PLANS.
3. SAND BACKFILL SHALL BE USED IF THE EXISTING SOIL DOES NOT MEET THE BACKFILL REQUIREMENTS.
4. ALL DISTURBED SURFACES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. COST IS INCIDENTAL.



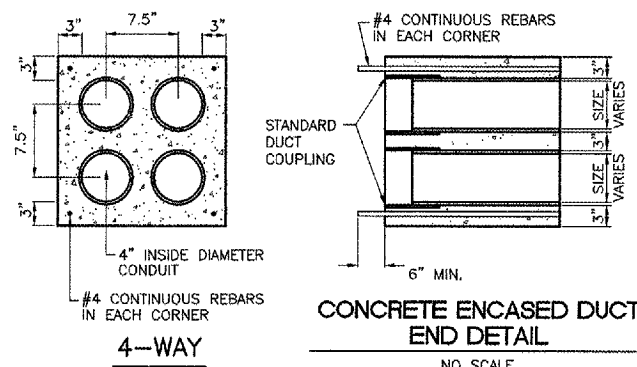
**TURF CABLE MARKER DETAIL**  
NO SCALE

**NOTES**

- 1.) CABLE MARKERS SHALL BE INSTALLED AT ALL BENDS AND EVERY 200' ALONG THE CABLE RUN.
- 2.) ITEM 610 CONCRETE SHALL BE USED.
- 3.) ALL EXPOSED EDGES SHALL BE EDGED WITH A 1/4" RADIUS TOOL.
- 4.) THE COST OF FURNISHING AND INSTALLING NEW MARKERS SHALL BE INCIDENTAL TO THE ASSOCIATED CABLE ITEMS.
- 5.) 0.049 CU. YD. CONCRETE PER MARKER.
- 6.) CONTACTOR SHALL LOCATE EXISTING CABLE MARKERS IN THE FIELD BEFORE SHOULDER ADJUSTMENT BEGINS IN ORDER TO REPLACE CABLE MARKERS AT CORRECT LOCATIONS (COST INCIDENTAL TO CONTRACT).



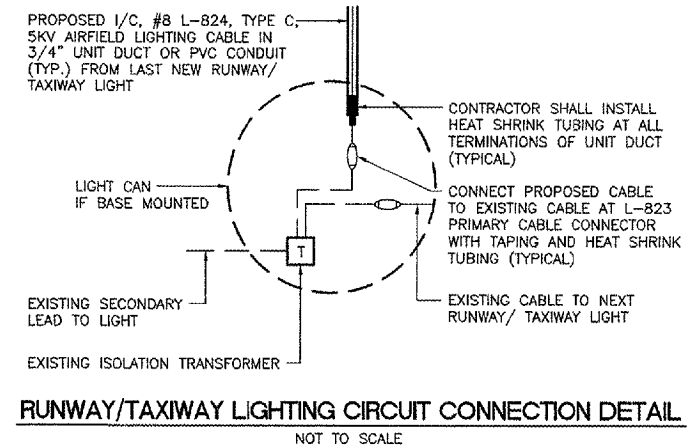
**DUCT MARKER DETAIL**  
NOT TO SCALE



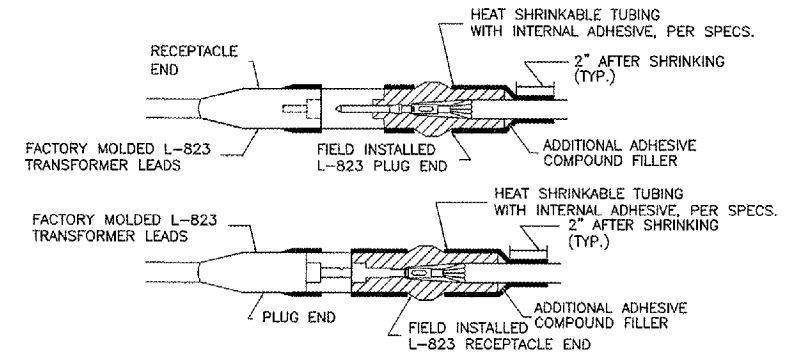
**CONCRETE ENCASED DUCT BANKS**  
NOT TO SCALE

**NOTES:**

1. DIMENSIONS ARE MINIMUM.
2. CONCRETE SHALL CONFORM TO ITEM 610.
3. ALL CONDUIT SHALL BE SCHEDULE 40 PVC.
4. TOP OF CONCRETE ENCASEMENT IN TURF AREAS SHALL NOT BE LESS THAN 24" BELOW FINISHED GRADE.
5. 4" SPLIT DUCT SHALL BE CONCRETE ENCASED WITH 3" MINIMUM CONCRETE SURROUNDING 4" CONDUIT. COST INCIDENTAL TO SPLIT DUCT.
6. PROVIDE PULL STRING AND CAPS FOR UNUSED DUCTS.



**RUNWAY/TAXIWAY LIGHTING CIRCUIT CONNECTION DETAIL**  
NOT TO SCALE



**TYPE C AND D - CABLE SPLICE**

FOR SPLICES AT RUNWAY/TAXIWAY LIGHTS AND SIGNS  
NOT TO SCALE

**CABLE SPLICE NOTES**

1. INSIDE DIAMETER OF CONNECTOR SHALL PROPERLY MATCH THE OUTSIDE DIAMETER OF CABLE.
2. WRAP 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 JOINT.
3. THE COST OF FURNISHING AND INSTALLING ALL SPLICE MATERIALS SHALL BE INCIDENTAL TO THE ASSOCIATED CABLE ITEMS.
4. THE CONTRACTOR SHALL HAVE A MINIMUM OF TWO (2) TYPE A SPLICE KITS ON THE JOB SITE AT ALL TIMES FOR EMERGENCY REPAIRS.

**GENERAL NOTES:**

1. THE CONCRETE BASE FOR BASE MTD. LIGHTS SHALL BE TROWEL FINISHED WITH A 45° BEVELED EDGE. SLOPE TO DRAIN (610).
2. TRANSFORMER HOLDER SHALL BE ANY COMMERCIALY AVAILABLE BRICK.
3. BREAKING GROOVE COUPLINGS SHALL NOT BE OVER 1" ABOVE GROUND LINE.
4. ISOLATION TRANSFORMERS COME WITH A FACTORY INSTALLED PLUG (TYPE 1, CLASS A, STYLE 2) AND RECEPTACLE (TYPE 1, CLASS A, STYLE 9). A TYPE 1, CLASS B, STYLE 3 PLUG AND TYPE 1, CLASS B, STYLE 10 RECEPTACLE SHALL BE INSTALLED ON THE 1/C, No. 8, 5000 V., L-824 TYPE C CABLES FOR CONNECTION TO EACH TRANSFORMER.
5. TO FURTHER REDUCE THE POSSIBILITY OF WATER/MOISTURE ENTRANCE INTO THE CONNECTOR BETWEEN THE CABLE AND THE FIELD ATTACHED CONNECTOR, IT IS REQUIRED THAT A HEAT SHRINKABLE TUBING WITH INTERNAL ADHESIVE BE APPLIED OVER THE ENTIRE CABLE CONNECTOR.
6. ALL SIGNS, LIGHTS, CABLES AND TRANSFORMERS TO BE REMOVED SHALL REMAIN THE PROPERTY OF THE AIRPORT. AT THE DISCRETION OF THE AIRPORT MANAGER, THE CONTRACTOR MAY BE REQUIRED TO DISPOSE OF THESE MATERIALS OFFSITE AT NO ADDITIONAL COST.
7. TAXIWAY LIGHTS SHALL HAVE A BLUE LENS, RUNWAY LIGHTS SHALL HAVE A CLEAR OR 180° AMBER/CLEAR LENS AS DESIGNATED ON PLANS.
8. DUCT MARKERS SHALL BE INSTALLED AT EVERY NEW DUCT AND AT EVERY EXISTING DUCT USED FOR THIS PROJECT.
9. CONTRACTOR SHALL HAVE THE OPTION TO TRENCH OR PLOW UNIT DUCT. NO ADDITIONAL PAYMENT SHALL BE MADE FOR TRENCHING.

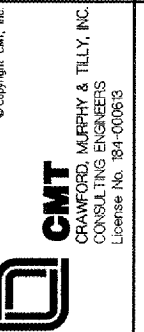
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 IL. LETTING ITEM: **2A**  
 IL. PROJECT: **IGQ-3565**  
 A.I.P. PROJECT: **3-17-0121-B25**

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE

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 THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

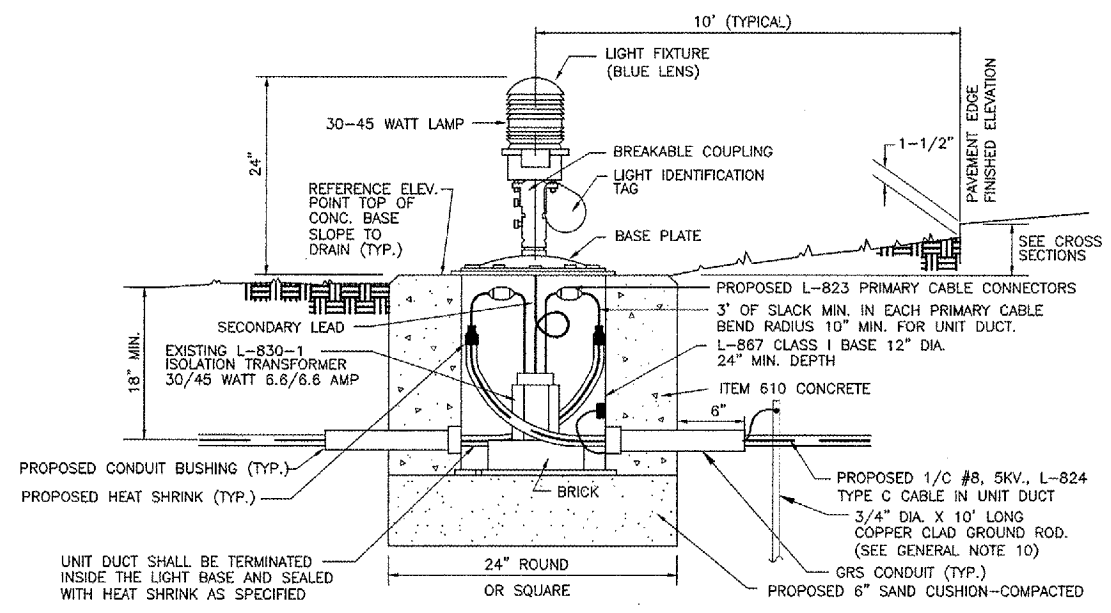
**VILLAGE OF LANSING  
 LANSING MUNICIPAL AIRPORT  
 LANSING, ILLINOIS**  
**REHABILITATE AIRFIELD LIGHTING SYSTEM  
 ELECTRICAL DETAILS  
 AIRFIELD LIGHTING DETAILS  
 GENERAL DETAILS**



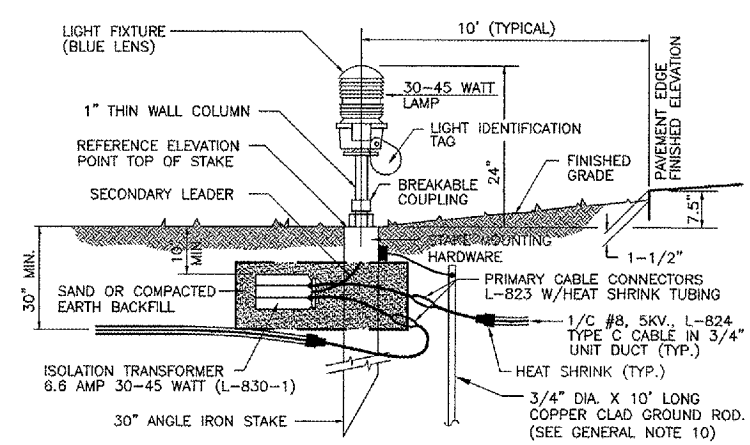
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 APPROVED BY: ---  
 DATE: 02 MARCH 2007  
 JOB No: 06297-02

**E-06**

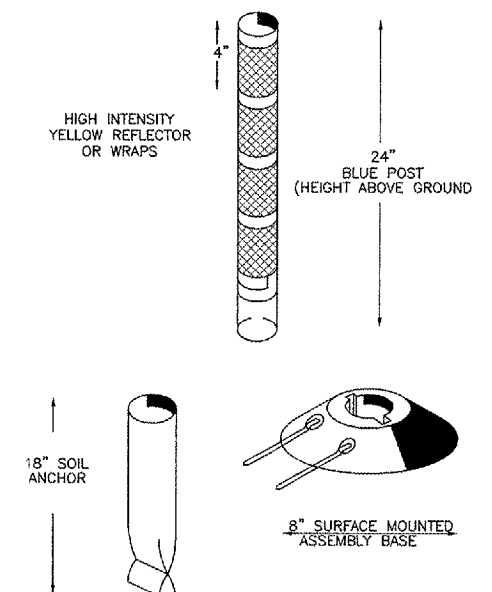
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 LAYOUT: Layout1  
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**PROPOSED/ADJUSTED/RELOCATED BASE MOUNTED  
MEDIUM INTENSITY TAXIWAY LIGHT**  
NOT TO SCALE



**PROPOSED/ADJUSTED/RELOCATED STAKE MOUNTED  
MEDIUM INTENSITY TAXIWAY LIGHT**  
NOT TO SCALE



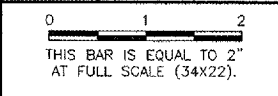
**ELEVATED RETROREFLECTIVE  
MARKER DETAIL**  
NOT TO SCALE

NOTE: RETROREFLECTIVE MARKER SHALL BE SAFE-HIT OR APPROVED EQUAL.


ILL. CONTRACT: LA036  
 ILL. LETTING ITEM: 2A  
 ILL. PROJECT: IGQ-3565  
 A.I.P. PROJECT: 3-17-0121-B25


SURVEY BOOK # BOOK #

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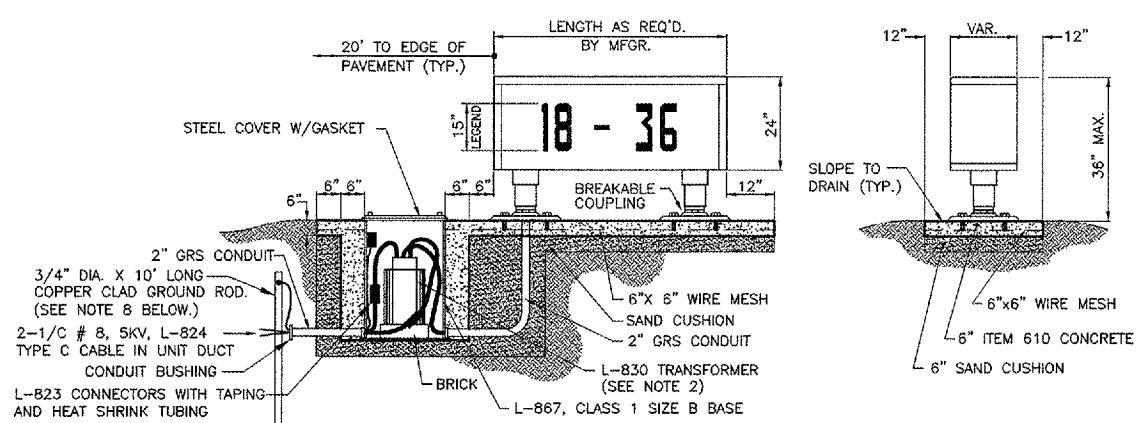


**VILLAGE OF LANSING  
LANSING MUNICIPAL AIRPORT  
LANSING, ILLINOIS**  
  
**REHABILITATE AIRFIELD LIGHTING SYSTEM  
ELECTRICAL DETAILS  
AIRFIELD LIGHTING DETAILS  
EDGE LIGHTING AND TAXIWAY SIGN**

  
**GMT**  
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 Lansing Municipal  
**airport**

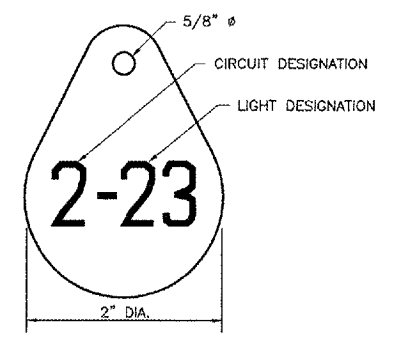
DESIGN BY:	ARM
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	----
DATE:	02 MARCH 2007
JOB No:	06297-02



**HOLD LINE / TAXIWAY GUIDANCE SIGN L-858, SIZE 2, STYLE 2, CLASS 2**  
NOT TO SCALE

**SIGNAGE NOTES**

- ALL SIGNS ARE LUMACURVE 2-SIDED SIGNS BY STANDARD SIGNS OR APPROVED EQUAL.
- TRANSFORMER WATTAGE AS RECOMMENDED BY MANUFACTURER.
- LIGHTED SIGNS SHALL BE BASE MOUNTED ONLY.
- UNIT DUCT SHALL BE TERMINATED IN THE CAN AND SEALED TO THE CABLE WITH HEAT SHRINK AS SPECIFIED.
- THE NUMBER OF MODULES PER SIGN SHALL BE AS RECOMMENDED BY THE MANUFACTURER.
- CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWING INCLUDING SIGN, COLOR, SIZE AND PROPOSED LEGEND, IN ENOUGH DETAIL AND DETERMINE PROPOSED SPACING AND OTHER INFORMATION REQUIRED BY SPECIAL PROVISIONS. CONTRACTOR TO VERIFY PROPOSED SIGN LOCATIONS AND ORIENTATIONS WITH RESIDENT ENGINEER PRIOR TO INSTALLATION.
- WHEN EXISTING SIGNS ARE PROPOSED TO BE RETROFITTED WITH NEW SIGN PANELS, THE SIGN PANELS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF ADVISORY CIRCULAR 150/5340-18 (LATEST EDITION). THE CONTRACTOR SHALL VERIFY THAT THE PROPOSED SIGN PANELS ARE COMPATIBLE WITH THE EXISTING SIGN ASSEMBLIES WHICH ARE LUMACURVE BY STANDARD SIGNS.
- INSTALL 1/C #6 AWG BARE COPPER GROUND JUMPER CONNECTED TO GROUND LUG INSIDE BASE CAN AND EXOTHERMICALLY WELDED TO GROUND ROD. INSTALL GROUND LUG FOR EXISTING CANS, IF REQUIRED.



**LIGHT IDENTIFICATION DETAIL**  
NOT TO SCALE

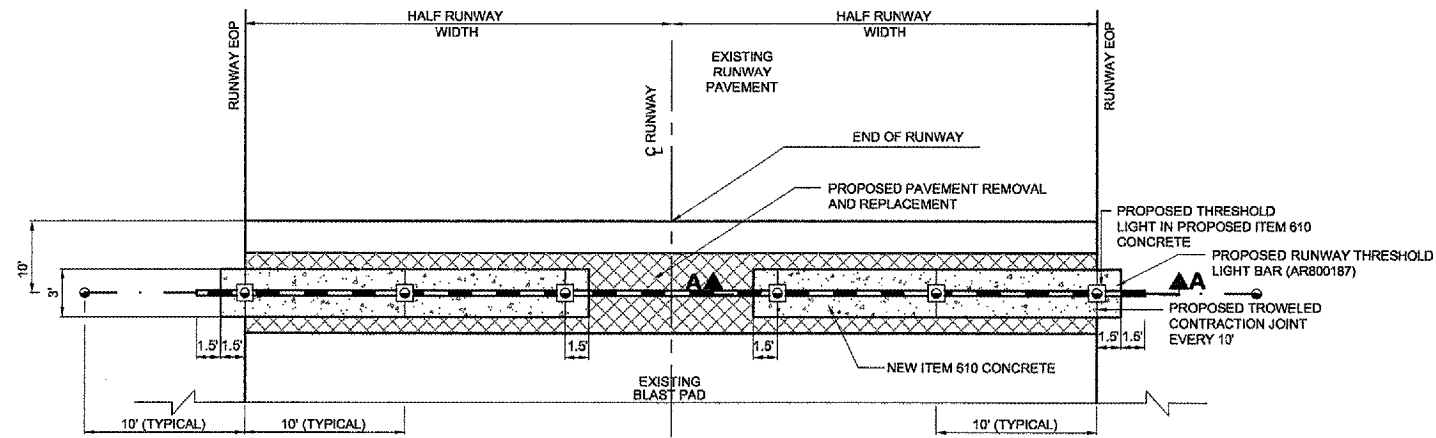
**NOTES:**

- INSTALL A NONCORROSIVE DISC OF 2" MINIMUM DIAMETER WITH THE NUMBER PERMANENTLY STAMPED, CUT OUT, OR ENGRAVED UNDER THE HEAD OF THE BASE PLATE BOLT OR ATTACHED TO LIGHT FLANGE WITH A SET SCREW.
- NUMERALS SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. ALL EXISTING AND PROPOSED TAXIWAY AND RUNWAY LIGHTS SHALL BE TAGGED AS DIRECTED BY THE RESIDENT ENGINEER. ALL LIGHTS ON EXISTING CIRCUITS THAT HAVE LIGHTING IMPROVEMENTS (PROPOSED OR RELOCATED LIGHTS) SHALL BE RETAGGED.
- COST OF TAGGING LIGHTS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

**GENERAL NOTES:**

- THE CONCRETE BASE FOR BASE MOUNTED LIGHTS SHALL BE TROWEL FINISHED WITH A 45° BEVELED EDGE. SLOPE TO DRAIN (610).
- TRANSFORMER HOLDER SHALL BE ANY COMMERCIALY AVAILABLE BRICK.
- BREAKING GROOVE COUPLINGS SHALL NOT BE OVER 1" ABOVE GROUND LINE.
- ISOLATION TRANSFORMERS COME WITH A FACTORY INSTALLED PLUG (TYPE 1, CLASS A, STYLE 2) AND RECEPTACLE (TYPE 1, CLASS A, STYLE 9). A TYPE 1, CLASS B, STYLE 3 PLUG AND TYPE 1, CLASS B, STYLE 10 RECEPTACLE SHALL BE INSTALLED ON THE 1/C, No. 8, 5000 V., L-824 TYPE C CABLES FOR CONNECTION TO EACH TRANSFORMER.
- TO FURTHER REDUCE THE POSSIBILITY OF WATER/MOISTURE ENTRANCE INTO THE CONNECTOR BETWEEN THE CABLE AND THE FIELD ATTACHED CONNECTOR, IT IS REQUIRED THAT A HEAT SHRINKABLE TUBING WITH INTERNAL ADHESIVE BE APPLIED OVER THE ENTIRE CABLE CONNECTOR.
- ALL SIGNS, LIGHTS, CABLES AND TRANSFORMERS TO BE REMOVED SHALL REMAIN THE PROPERTY OF THE AIRPORT. AT THE DISCRETION OF THE AIRPORT MANAGER, THE CONTRACTOR MAY BE REQUIRED TO DISPOSE OF THESE MATERIALS OFFSITE AT NO ADDITIONAL COST.
- TAXIWAY LIGHTS SHALL HAVE A BLUE LENS, RUNWAY LIGHTS SHALL HAVE A CLEAR OR 180° AMBER/CLEAR LENS AS DESIGNATED ON PLANS.
- DUCT MARKERS SHALL BE INSTALLED AT EVERY NEW DUCT AND AT EVERY EXISTING DUCT USED FOR THIS PROJECT.
- CONTRACTOR SHALL HAVE THE OPTION TO TRENCH OR PLOW UNIT DUCT. NO ADDITIONAL PAYMENT SHALL BE MADE FOR TRENCHING.
- INSTALL 1/C #6 AWG BARE COPPER GROUND JUMPER CONNECTED TO GROUND LUG INSIDE BASE CAN OR STAKE AND EXOTHERMICALLY WELDED TO GROUND ROD. INSTALL GROUND LUG FOR EXISTING CANS AND STAKES, IF REQUIRED. INSTALLING GROUND LUGS FOR EXISTING CANS AND STAKES SHALL BE AT NO ADDITIONAL COST.

DATE: Thursday, March 08, 2007 9:01:42 PM  
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 UPDATE BY: Jason Dove  
 LAYOUT: Layout1  
 REF: DWG: 0629702.dwg  
 IMAGE FILES:



**RUNWAY THRESHOLD LIGHTING PLAN**

NOT TO SCALE  
 ITEM AR800187 THRESHOLD LIGHT BAR SHALL INCLUDE CONDUIT, ITEM 610 CONCRETE, REINFORCEMENT, SAWCUTTING, BEDDING, AND ALL INCIDENTALS FOR A COMPLETE AND OPERATIONAL SYSTEM, PER EACH END.

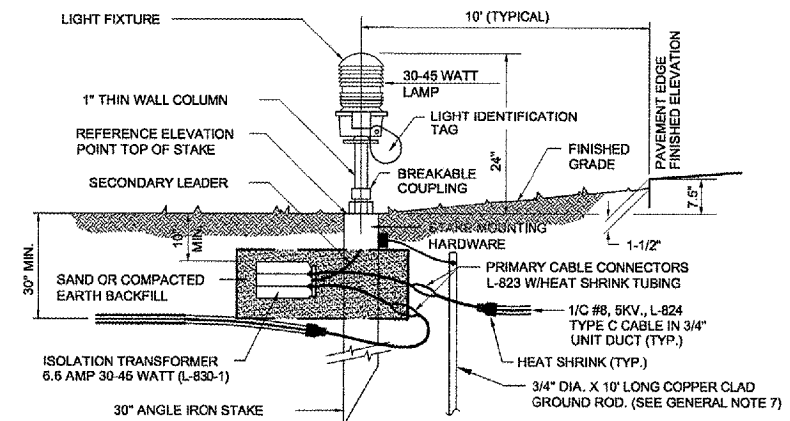
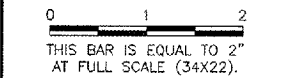
**GENERAL NOTES:**

1. THE CONCRETE BASE FOR BASE MTD. LIGHTS SHALL BE TROWEL FINISHED WITH A 45° BEVELED EDGE. SLOPE TO DRAIN (610).
2. TRANSFORMER HOLDER SHALL BE ANY COMMERCIALY AVAILABLE BRICK.
3. BREAKING GROOVE COUPLINGS SHALL NOT BE OVER 1" ABOVE GROUND LINE.
4. ISOLATION TRANSFORMERS COME WITH A FACTORY INSTALLED PLUG (TYPE 1, CLASS A, STYLE 2) AND RECEPTACLE (TYPE 1, CLASS A, STYLE 9). A TYPE 1, CLASS B, STYLE 3 PLUG AND TYPE 1, CLASS B, STYLE 10 RECEPTACLE SHALL BE INSTALLED ON THE 1/C, No. 8, 5000 V., L-824 TYPE C CABLES FOR CONNECTION TO EACH TRANSFORMER.
5. TO FURTHER REDUCE THE POSSIBILITY OF WATER/MOISTURE ENTRANCE INTO THE CONNECTOR BETWEEN THE CABLE AND THE FIELD ATTACHED CONNECTOR, IT IS REQUIRED THAT A HEAT SHRINKABLE TUBING WITH INTERNAL ADHESIVE BE APPLIED OVER THE ENTIRE CABLE CONNECTOR.
6. THRESHOLD LIGHTS SHALL HAVE A 180° GREEN/RED LENS.
7. INSTALL 1/C #6 AWG BARE COPPER GROUND JUMPER CONNECTED TO GROUND LUG INSIDE BASE CAN OR STAKE AND EXOTHERMICALLY WELDED TO GROUND ROD.

I.L. CONTRACT: LA036  
 I.L. LETTING ITEM: 2A  
 I.L. PROJECT: IGQ-3565  
 A.I.P. PROJECT: 3-17-0121-825

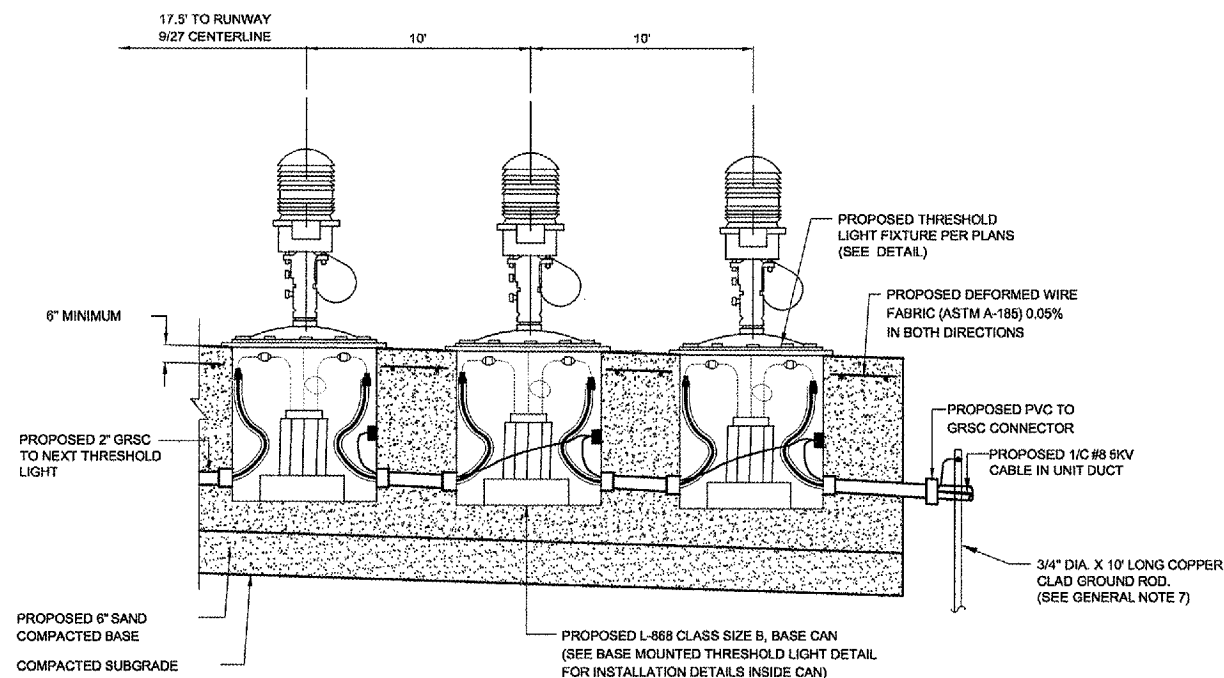
SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE



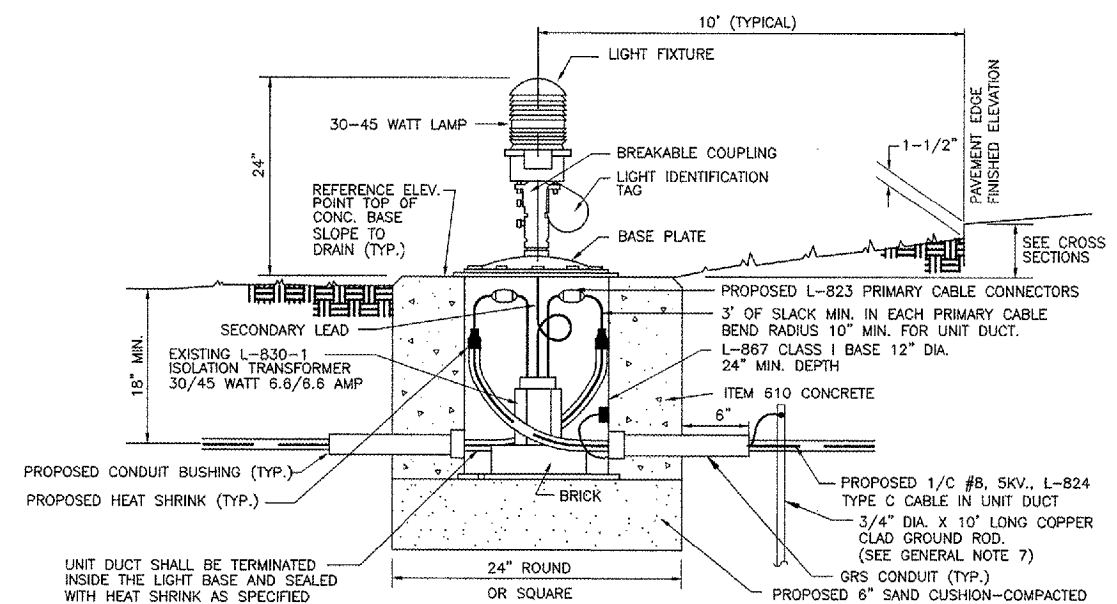
**STAKE MOUNTED RUNWAY EDGE/THRESHOLD LIGHT DETAIL**

NOT TO SCALE



**SECTION A-A THRESHOLD LIGHTS, BASE MOUNTED**

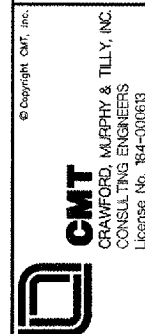
NOT TO SCALE



**BASE MOUNTED RUNWAY EDGE/THRESHOLD LIGHT DETAIL**

NOT TO SCALE

VILLAGE OF LANSING  
 LANSING MUNICIPAL AIRPORT  
 LANSING, ILLINOIS  
 REHABILITATE AIRFIELD LIGHTING SYSTEM  
 ELECTRICAL DETAILS  
 AIRFIELD LIGHTING DETAILS  
 THRESHOLD LIGHTS



DESIGN BY: AB  
 DRAWN BY: JWD  
 CHECKED BY: AB  
 APPROVED BY: ---  
 DATE: 02 MARCH 2007  
 JOB No: 06297-02

**E-08**

DATE: Thursday, March 08, 2007 9:01:46 PM  
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 LAYOUT: Layout1  
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I.L. CONTRACT: **LA036**  
 I.L. LETTING ITEM: **2A**  
 I.L. PROJECT: **IGQ-3565**  
 A.I.P. PROJECT: **3-17-0121-B25**

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0 1 2  
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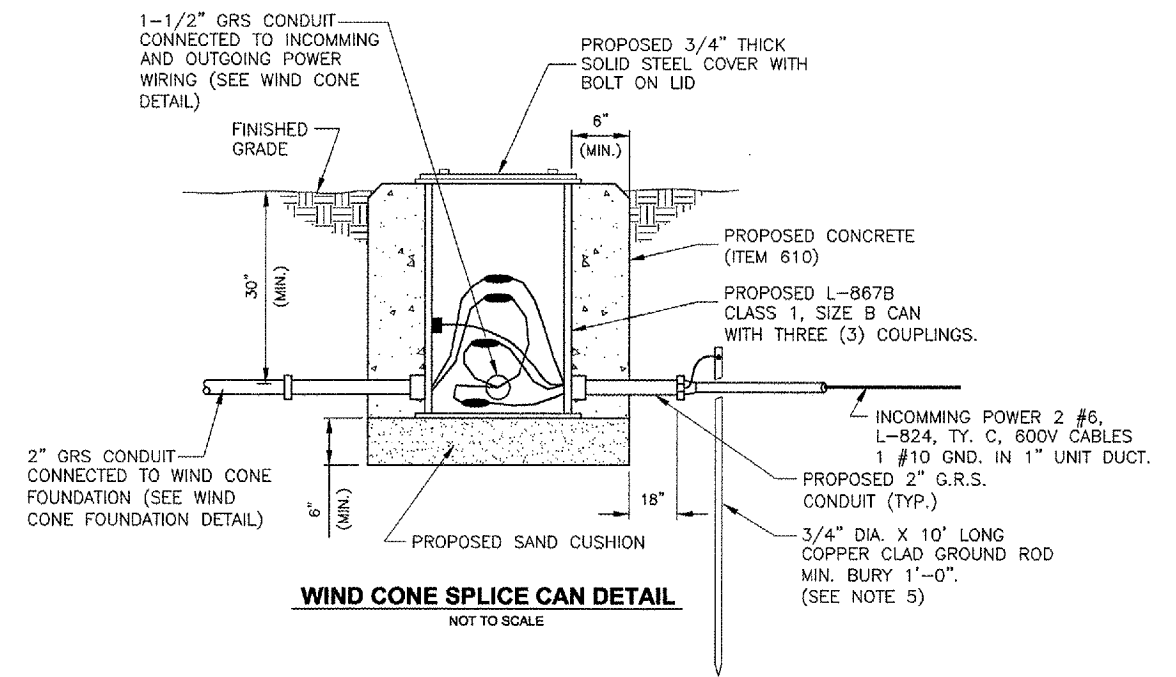
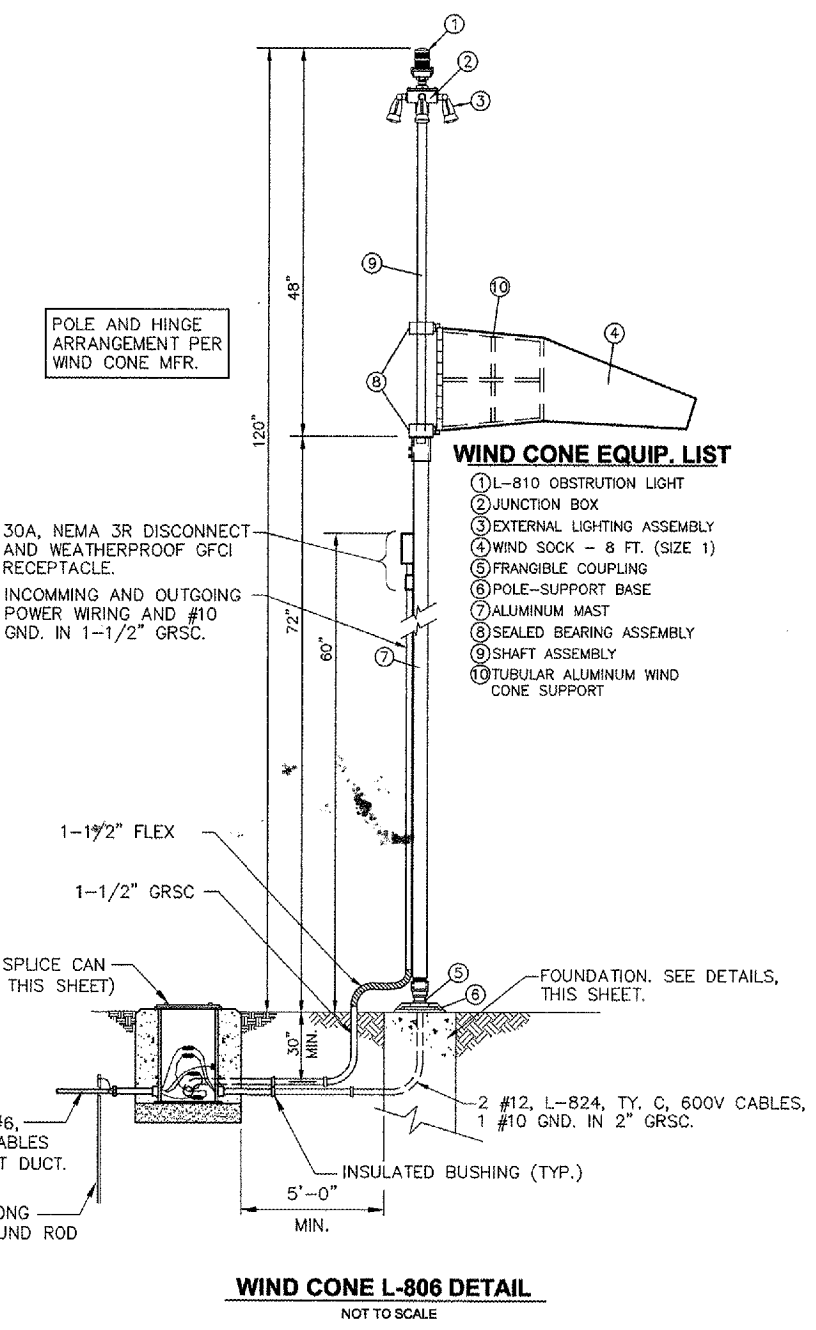
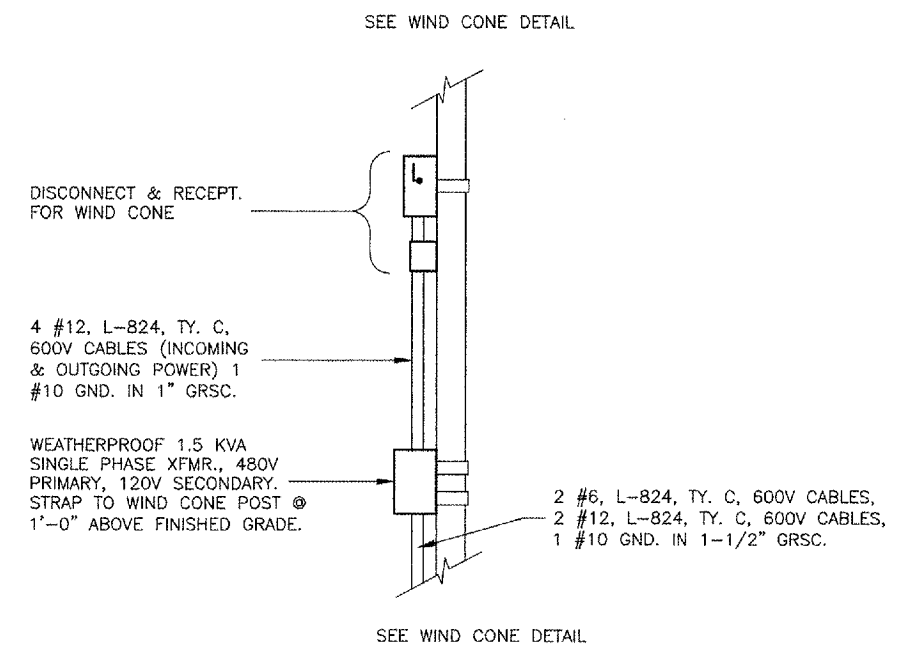
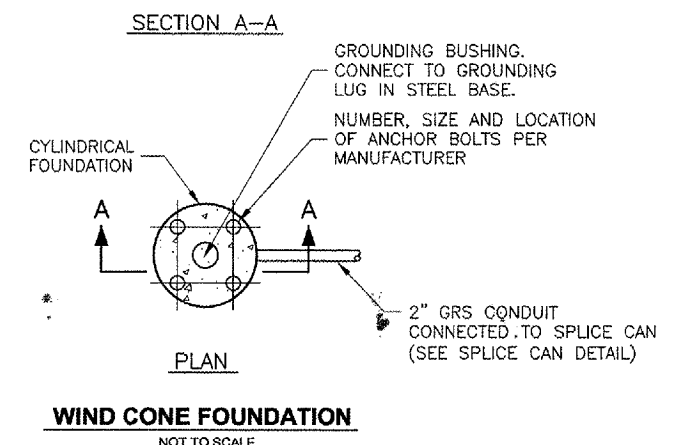
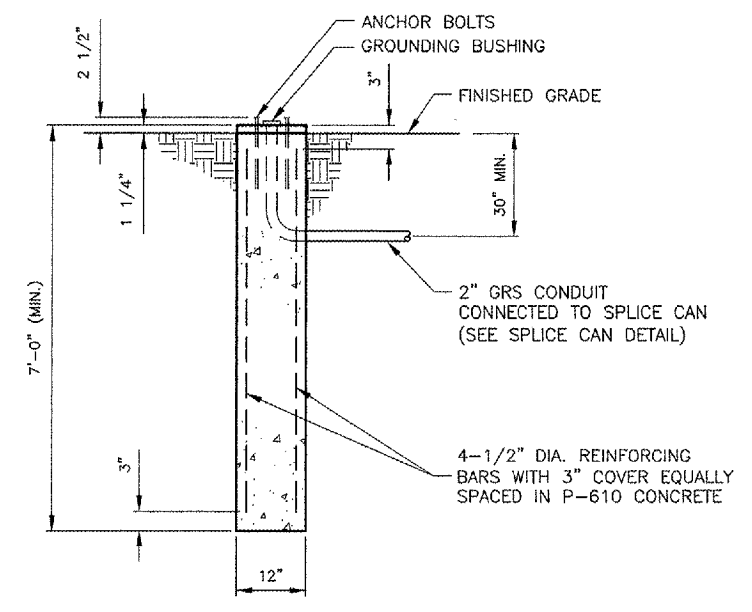
**VILLAGE OF LANSING  
 LANSING MUNICIPAL AIRPORT  
 LANSING, ILLINOIS**  
**REHABILITATE AIRFIELD LIGHTING SYSTEM  
 ELECTRICAL DETAILS  
 AIRFIELD LIGHTING DETAILS  
 L-806 WIND CONE LIGHTED**

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Lansing Municipal  
**airport**

DESIGN BY:	AB
DRAWN BY:	JWD
CHECKED BY:	AB
APPROVED BY:	----
DATE:	02 MARCH 2007
JOB No:	06297-02



- GENERAL NOTES:**
1. THE CONCRETE BASE FOR THE SPLICE CAN AND WIND CONE FOUNDATION SHALL BE TROWEL FINISHED WITH A 45° BEVELED EDGE. SLOPE TO DRAIN (610).
  2. ALL MATERIAL, EQUIPMENT AND LABOR ARE INCIDENTAL TO WIND CONE INSTALLATION.
  3. TO FURTHER REDUCE THE POSSIBILITY OF WATER/MOISTURE ENTRANCE INTO THE CONNECTOR BETWEEN THE CABLE AND THE FIELD ATTACHED CONNECTOR, IT IS REQUIRED THAT A HEAT SHRINKABLE TUBING WITH INTERNAL ADHESIVE BE APPLIED OVER THE ENTIRE CABLE CONNECTOR.
  4. THE WIND SOCK SHALL BE DAY-GLO BLAZE ORANGE NYLON FABRIC WIND CONE 8'-0" LONG OR SIMILAR.
  5. INSTALL 1/C #6 AWG BARE COPPER GROUND JUMPER CONNECTED TO POLE BASE AND THE GROUND LUG INSIDE THE SPLICE CAN AND EXOTHERMICALLY WELDED TO GROUND ROD.