

1A

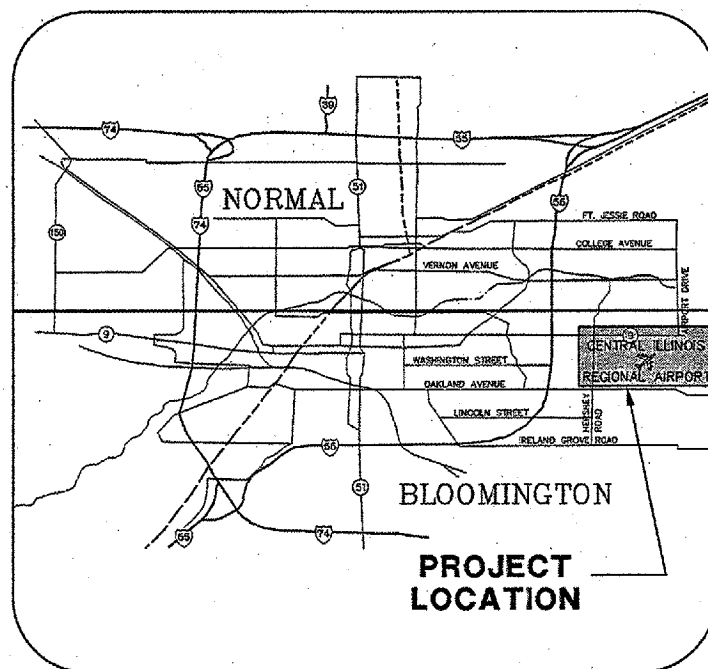
CONSTRUCTION PLANS FOR CENTRAL ILLINOIS REGIONAL AIRPORT

BLOOMINGTON-NORMAL AIRPORT AUTHORITY
BLOOMINGTON, ILLINOIS

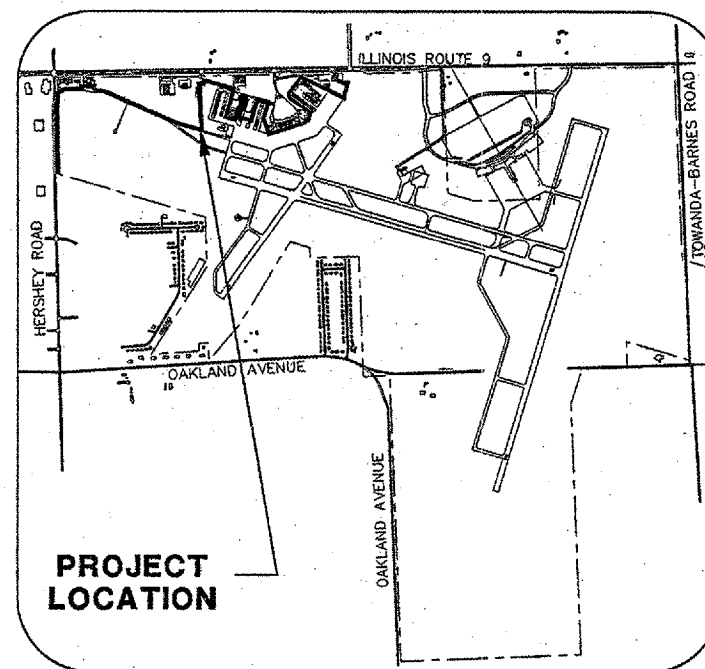
ILLINOIS PROJECT BMI - 3653
A. I. P. PROJECT 3-17-0006-47

UPGRADE PERIMETER FENCE
PHASE 1

JANUARY 12, 2007



LOCATION MAP



SITE PLAN

1/12/2007

 Exp. 11/30/2007

CALL J.U.L.I.E.
 BEFORE EXCAVATING
 1-800-892-0123

TOWNSHIP: 23 NORTH
 RANGE: 2 EAST OF THE 4TH P.M.
 SECTION 1
 COUNTY: McLEAN
 CIVIL TOWNSHIP: BLOOMINGTON CITY

BLOOMINGTON-NORMAL AIRPORT AUTHORITY
 CENTRAL ILLINOIS REGIONAL AIRPORT
 BLOOMINGTON, ILLINOIS

APPROVED:
 EXECUTIVE DIRECTOR OF AVIATION

DATE: 1/12/07

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 CONSULTING ENGINEERS
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SUBMITTED BY:
 DATE: 1/12/2007

CMT JOB NUMBER 06085-03-00

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 SURVEY BOOK #
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 XREF DWG: Cntinfo.dwg

IMAGE FILES:

REVISIONS

NUMBER	BY	DATE

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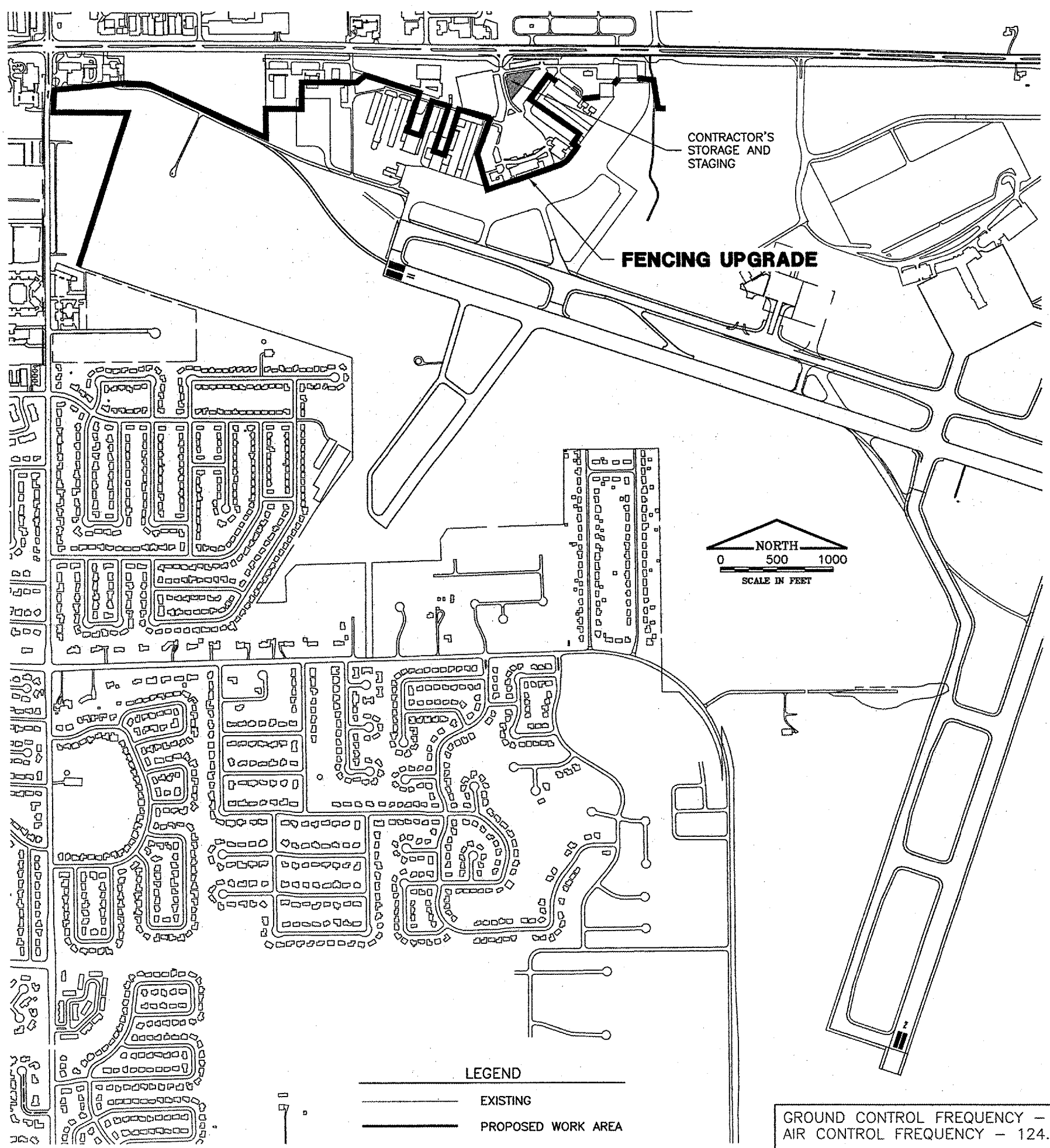
INDEX TO SHEETS	
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02	INDEX TO SHEETS SUMMARY OF QUANTITIES
03	AIRPORT SITE PLAN
04	CONSTRUCTION ACTIVITY PLAN PHASE 1 & 2
05	CONSTRUCTION ACTIVITY PLAN PHASE 3 & 4
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07	EXISTING FENCE PLAN 2
08	PROPOSED FENCE PLAN 1
09	PROPOSED FENCE PLAN 2
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11	JOINTING DETAILS 1
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14	FENCE DETAILS 1
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24	NEW ELECTRIC GATE DETAILS 2
25	NEW ELECTRIC GATE DETAILS 3
26	NEW ELECTRIC GATE DETAILS 4

SUMMARY OF QUANTITIES			
ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY
AR150510	ENGINEER'S FIELD OFFICE	LS	1
AR162508	CLASS E FENCE 8'	LF	7550
AR162510	CLASS E FENCE 10'	LF	2380
AR162612	CLASS E GATE - 12'	EA	2
AR162624	CLASS E GATE - 24'	EA	4
AR162714	ELECTRIC GATE - 14'	EA	3
AR162724	ELECTRICAL GATE - 24'	EA	1
AR162900	REMOVE FENCE	LF	9930
AR162905	REMOVE GATE	EA	11
AR162908	REMOVE ELECTRIC GATE	EA	4
AR401900	REMOVE BITUMINOUS PAVEMENT	SY	270
AR501506	6" PCC PAVEMENT	SY	230
AR501508	8" PCC PAVEMENT	SY	125
AR800243	PEDESTRIAN ACCESS	EA	2
AR800246	BARBED WIRE 3 STRANDS	LF	110
AR800247	SAND MIX LEVELING	CF	15
AR800274	DIRECTORY DISPLAY SIGN	EA	8

BLOOMINGTON-NORMAL AIRPORT AUTHORITY
CENTRAL ILLINOIS REGIONAL AIRPORT
BLOOMINGTON, ILLINOIS
UPGRADE PERIMETER FENCE PHASE 1
INDEX TO SHEETS
SUMMARY OF QUANTITIES

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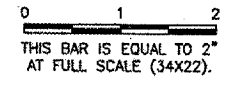


GENERAL NOTES

- ALL RUNWAYS, TAXIWAYS, AND APRONS SHALL BE KEPT OPEN TO AIRCRAFT TRAFFIC DURING CONSTRUCTION EXCEPT AS NOTED IN THE CONSTRUCTION ACTIVITY PLAN.
- THE CONTRACTOR SHALL REMAIN WITHIN 50' OF THE EXISTING FENCE LINE AT ALL TIMES DURING CONSTRUCTION. AT NO TIME SHOULD THE CONTRACTOR OR HIS PERSONNEL ACCESS ANY ACTIVE AIRFIELD PAVEMENTS. PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR'S SUPERINTENDENT SHALL BE REQUIRED TO ATTEND TRAINING COURSES AT THE AIRPORT TO BECOME AWARE OF POLICIES AND PROCEDURES ASSOCIATED WITH WORKING WITHIN THE AIRPORT SECURITY FENCE.
- WHEN CONFLICTS ARISE BETWEEN CONSTRUCTION ACTIVITIES AND AIRCRAFT OPERATIONS AND SAFETY, AIRCRAFT OPERATIONS AND SAFETY SHALL TAKE PRECEDENCE AND SHALL GOVERN. FINAL AUTHORITY IN THE APPROVAL OF CONSTRUCTION SEQUENCING LIES WITH THE AIRPORT DIRECTOR.
- THE CONTRACTOR WILL BE PERMITTED TO STORE EQUIPMENT AND MATERIALS AT THE LOCATIONS SHOWN.
- BROKEN CONCRETE SHALL BE DISPOSED OF BY THE CONTRACTOR OFF AIRPORT PROPERTY.
- VEHICLES AND EQUIPMENT SHALL NOT BE ALLOWED WITHIN AREAS 95' FROM THE CENTERLINE OF ACTIVE TAXIWAYS OR 250' FROM THE CENTERLINE OF ACTIVE RUNWAYS.
- ALL PAVEMENTS, DRIVES, OR ANY OTHER AREAS UTILIZED BY THE CONTRACTOR FOR HAUL ROADS OR STORAGE AREAS SHALL BE MAINTAINED AND REPAIRED IN KIND BY THE CONTRACTOR TO THE SATISFACTION OF THE AIRPORT. NO ADDITIONAL COMPENSATION SHALL BE MADE TO THE CONTRACTOR FOR THIS WORK.
- EXISTING TURF AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY HIM AT HIS EXPENSE TO THE SATISFACTION OF THE AIRPORT.
- THE CONTRACTOR SHALL CONTINUOUSLY CLEAN ALL CONSTRUCTION AREAS WHICH WILL BE OPENED TO AIR TRAFFIC.
- IT WILL BE NECESSARY FOR THE CONTRACTOR TO MAKE HIS OWN FIELD INVESTIGATION TO DETERMINE THE EXACT LOCATION OF THE UNDERGROUND UTILITIES AT CRITICAL POINTS SO AS TO AVOID ANY DAMAGE. ANY UTILITY, INCLUDING AIRFIELD ELECTRICAL CABLE AND LIGHTS, DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY HIM AT HIS OWN EXPENSE IN A MANNER WHICH IS SATISFACTORY TO THE ENGINEER, THE AIRPORT AND TO THE OWNER OF THE UTILITY. ANY REPAIRS THAT MUST BE MADE BY THE OWNER OF THE UTILITY SHALL HAVE THE COST REIMBURSED TO THE UTILITY BY THE CONTRACTOR. AIRFIELD LIGHTING CABLES DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY A QUALIFIED ELECTRICIAN WITH THE COSTS TO BE BORNE BY THE CONTRACTOR.
- THE CONTRACTOR SHALL MAINTAIN A SECURE AIRFIELD PERIMETER WITH EXISTING, TEMPORARY, RELOCATED OR PERMANENT 6' TALL FENCE THROUGHOUT THE DURATION OF THE PROJECT. COST OF ERECTION AND REMOVAL OF TEMPORARY FENCE WILL BE INCIDENTAL TO CONTRACT.
- CONTRACTOR'S ACCESS SHALL BE AS FOLLOWS:
 - THE CONTRACTOR SHALL COMPLETE A TEN YEAR CRIMINAL AND EMPLOYMENT BACKGROUND CHECK AND A SECURITY FORM FOR THE SUPERINTENDENTS AND SUPERVISING FOREMEN HE PROPOSES TO USE ON THE AIRPORT. THESE FORMS SHALL BE COMPLETED PRIOR TO THAT PERSON BEING ALLOWED ON THE AIRFIELD. A LIST OF PERSONNEL AUTHORIZED TO WORK ON THE AIRFIELD SHALL BE PROVIDED TO THE RESIDENT ENGINEER BY THE CONTRACTOR.
 - THE CONTRACTOR SHALL USE AN EXISTING GATE(S) FOR ACCESS TO THE AIRFIELD. THE CONTRACTOR SHALL INSTALL AND MAINTAIN A HEAVY-DUTY PADLOCK ON THE ACCESS GATE. HE SHALL PROVIDE KEYS FOR THIS PADLOCK TO THE RESIDENT ENGINEER AND BNA MAINTENANCE SUPERVISOR. NO ADDITIONAL KEYS ARE TO BE DISTRIBUTED UNLESS AUTHORIZED BY THE RESIDENT ENGINEER.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE ACCESS GATE(S) CLOSED DURING WORK HOURS. IF THE CONTRACTOR CHOOSES TO LEAVE THE GATE(S) OPEN, THEN HE SHALL POST A COMPETENT SECURITY GUARD TO PREVENT UNAUTHORIZED ENTRIES. THE CONTRACTOR SHALL REPLACE ANY UNSATISFACTORY SECURITY GUARDS IF SO DIRECTED.
 - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND TEMPORARY EASEMENTS FOR THE ACCESS ROAD(S) SHOWN AND SHALL COMPLY WITH ALL TRAFFIC CONTROL SIGNAGE REQUIRED BY THE CITY, COUNTY, TOWNSHIP, OR I.D.O.T..
 - DURING ADVERSE WEATHER THE CONTRACTOR SHALL MAINTAIN 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 SITE.
 - THE CONTRACTOR WILL CLOSE AND LOCK THE ACCESS GATE(S) UPON LEAVING THE SITE.
 - ALL COSTS RELATING TO CONTRACTOR'S ACCESS AND SECURITY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 - THE CONTRACTOR SHALL STORE EQUIPMENT AND MATERIALS IN SUCH A WAY AS NOT TO VIOLATE AIRSPACE SURFACES, OR RUNWAY AND TAXIWAY OBJECT FREE OR SAFETY AREAS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ACTIVE AIRFIELD PAVEMENTS WHICH ARE CROSSED BY HIS VEHICLES ACCESSING THE WORK OR DEPARTING THE WORK IMMEDIATELY FOLLOWING SAID VEHICLE.

REVISIONS

NUMBER	BY	DATE



BLOOMINGTON-NORMAL AIRPORT AUTHORITY
 CENTRAL ILLINOIS REGIONAL AIRPORT
 BLOOMINGTON, ILLINOIS
 UPGRADE PERIMETER FENCE PHASE 1
 AIRPORT SITE PLAN

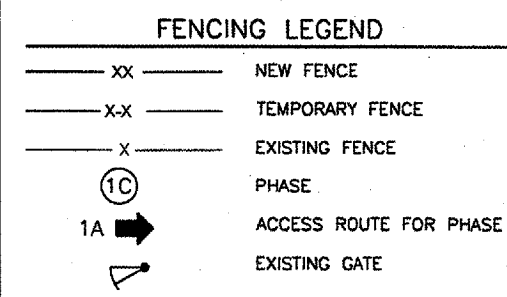
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A.I.P. PROJECT 3-17-0006-47	
SHEET 3 OF 26 SHEETS	

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 AIR CONTROL FREQUENCY - 124.60

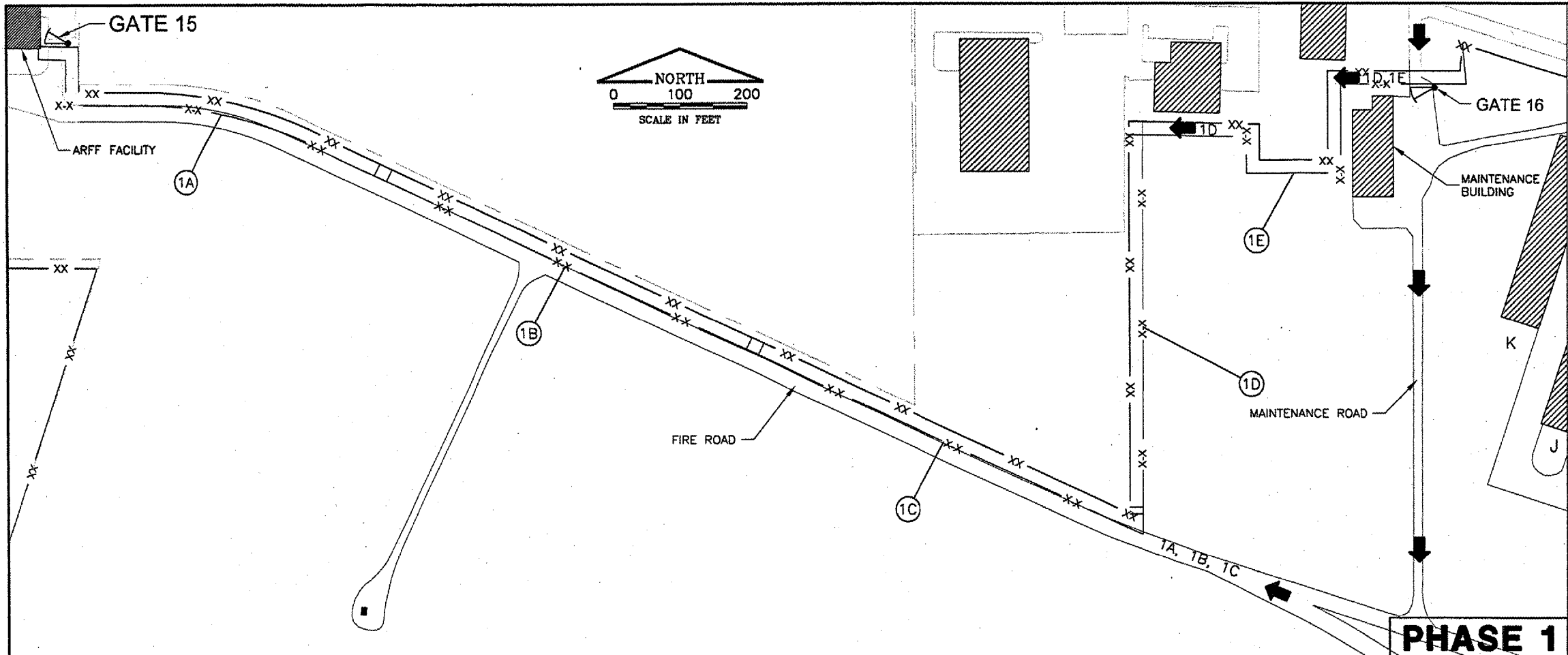
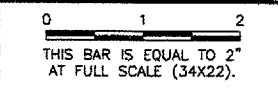
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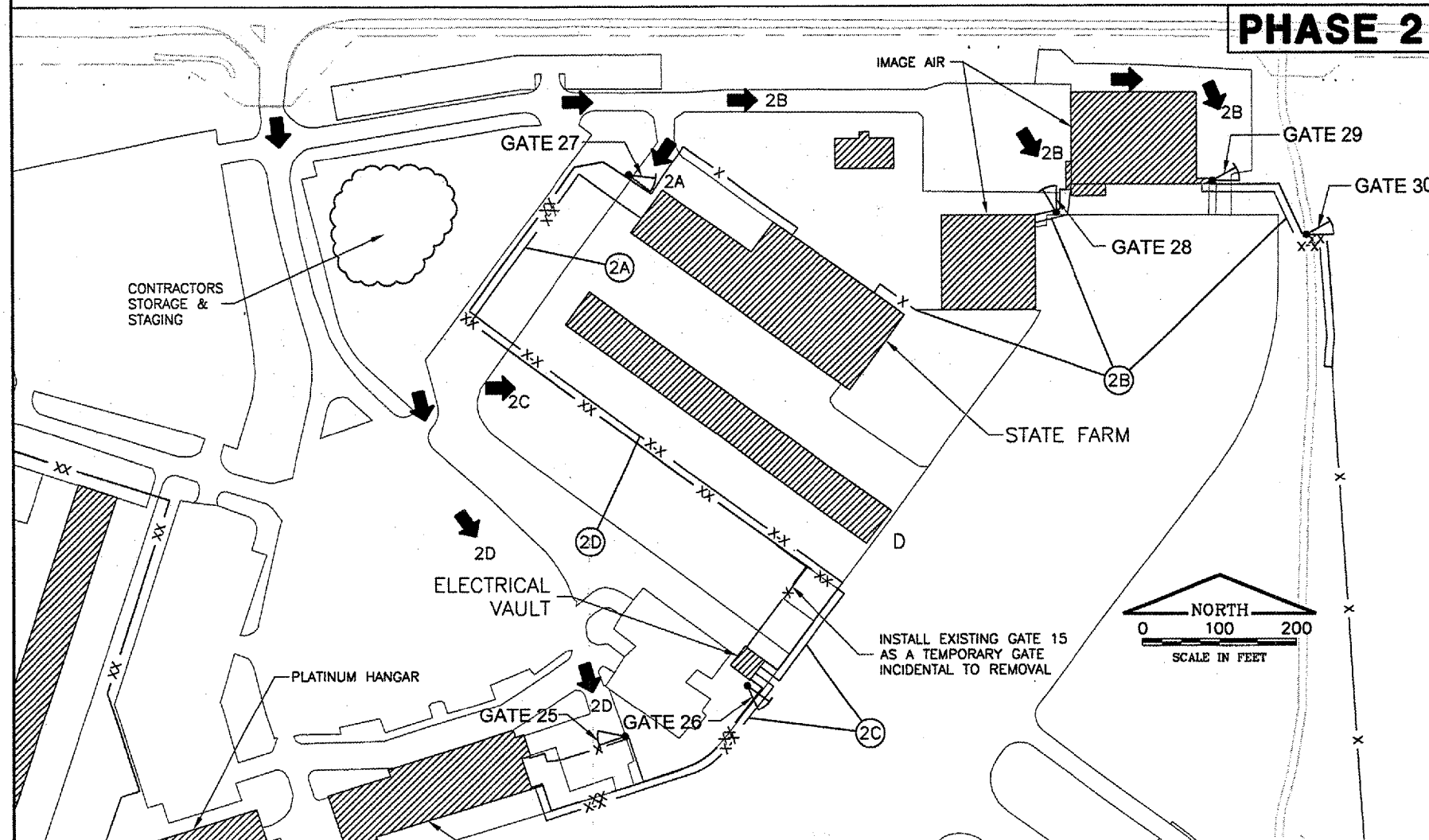


REVISIONS

NUMBER	BY	DATE



PHASE 1



PHASE 2

PHASING NOTES

PHASE 1

- 1. ACCESS WILL BE GAINED THROUGH GATE 16 FOR PHASE 1.
- 2. ACCESS TO PHASE 1A-1C WILL BE GAINED VIA MAINTENANCE AND FIRE ROADS.
- 3. ACCESS TO PHASE 1D & 1E WILL BE GAINED BETWEEN THE EXISTING FENCE AND TEMPORARY FENCE.
- 4. NO MORE THAN 2 CONSECUTIVE PHASES MAY BE CONSTRUCTED SIMULTANEOUSLY.
- 5. PRIOR TO THE START OF PHASE 1E, A 48 HOUR NOTICE MUST BE PROVIDED TO THE AIRPORT.

GATE CLOSURE

- 1A - GATE 15
- 1E - GATE 16

PHASE 2

- 1. REMOVED GATE 15 WILL BE INSTALLED AT THE LOCATION SHOWN TO PROVIDE HANGAR ACCESS DURING PHASE 2A.
- 2. PRIOR TO THE START OF PHASE 2A, 7 DAYS NOTICE MUST BE GIVEN TO THE AIRPORT.
- 3. ACCESS TO PHASE 2A WILL BE GAINED THROUGH GATE 27 AND FROM OUTSIDE THE FENCE.
- 4. PHASE 2A MUST BE COMPLETED AND GATE 27 PAVEMENT SHALL ATTAIN SUFFICIENT STRENGTH PRIOR TO START OF CONSTRUCTION ON PHASE 2D.
- 5. TEMPORARY FENCE FOR PHASE 2 SHALL BE PLACED TO ALLOW SUFFICIENT AIRCRAFT CLEARANCE AND BE DELINEATED WITH 20" x 20" ORANGE FLAGS.
- 6. PHASE 2B WILL INCLUDE WORK AT GATE 28, GATE 29, & BARBED WIRE INSTALLATION.
- 7. ACCESS TO PHASE 2B WILL BE GAINED THROUGH GATE 29.
- 8. ACCESS TO PHASE 2C WILL BE GAINED THROUGH GATE 25 AND FROM OUTSIDE THE FENCE.
- 9. ACCESS TO PHASE 2D WILL BE GAINED THROUGH GATE 27 AND FROM OUTSIDE THE FENCE.
- 10. NO MORE THAN 2 CONSECUTIVE PHASES MAY BE CONSTRUCTED SIMULTANEOUSLY.

GATE CLOSURE:

- 2A - GATE 27
- 2B - GATE 28, 29, & 30
- 2C - GATE 25 & 26

BLOOMINGTON-NORMAL AIRPORT AUTHORITY
CENTRAL ILLINOIS REGIONAL AIRPORT
BLOOMINGTON, ILLINOIS
UPGRADE PERIMETER FENCE PHASE 1
CONSTRUCTION ACTIVITY PLAN
PHASE 1 & 2

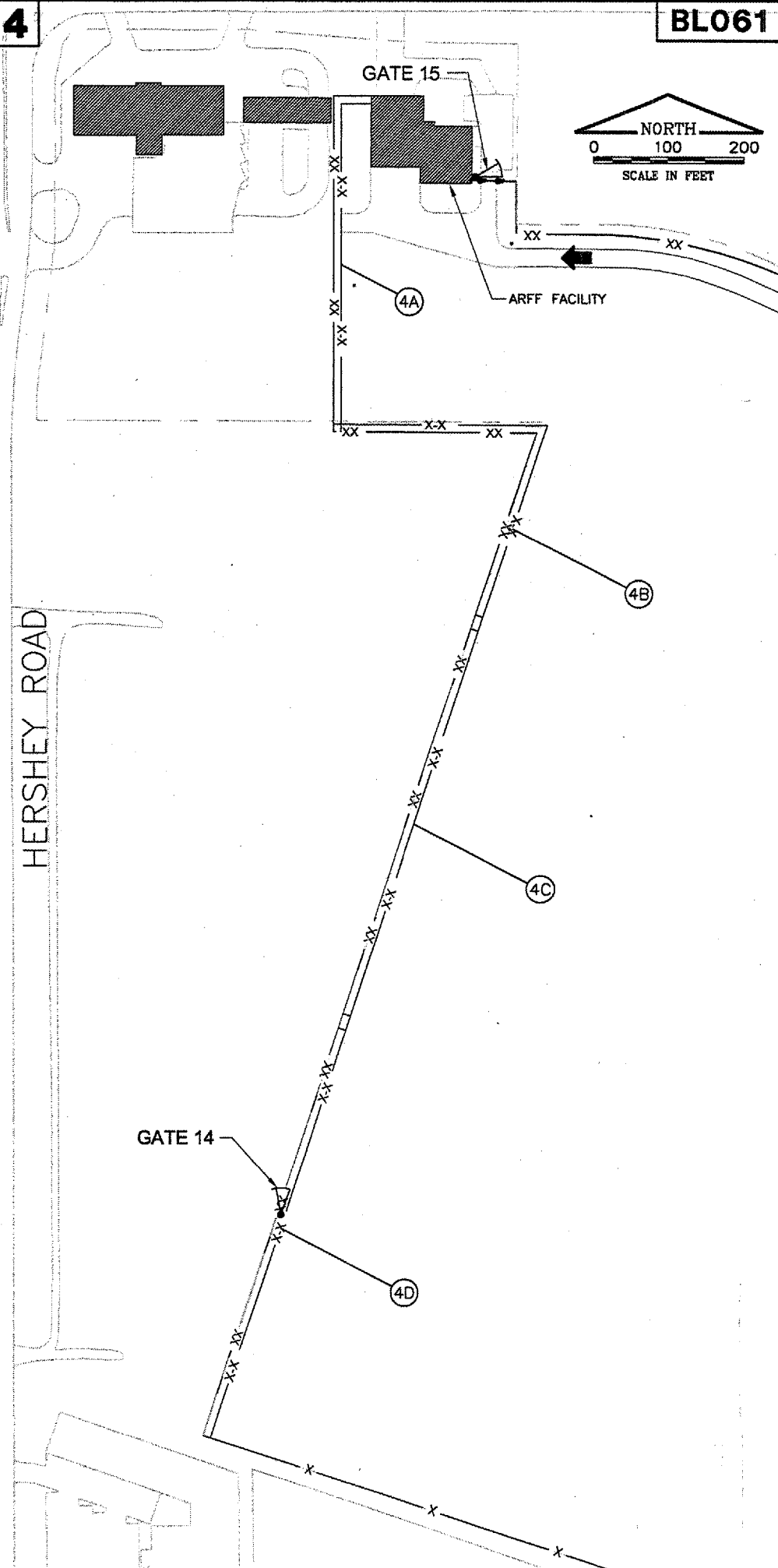
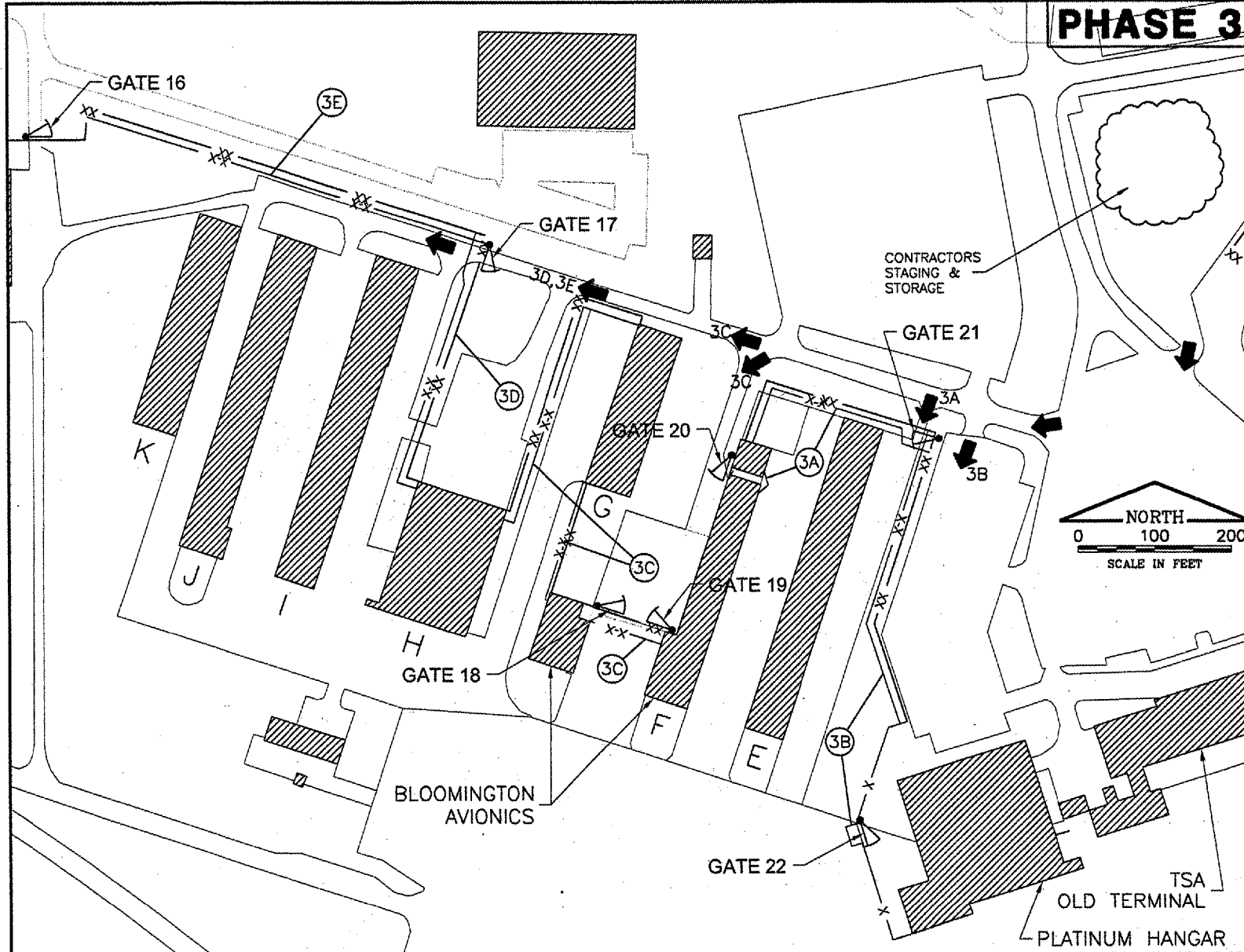
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ILLINOIS PROJECT	BMI-3653
A.I.P. PROJECT	3-17-0006-47
SHEET	4 OF 26 SHEETS

PHASE 3 PHASE 4

BL061



PHASING NOTES

PHASE 3

1. PHASE 3A MUST BE COMPLETED AND GATE 21 PAVEMENT SHALL ATTAIN SUFFICIENT STRENGTH PRIOR TO START OF CONSTRUCTION ON PHASE 3E.
2. PRIOR TO THE START OF PHASE 3A, A 48 HOUR NOTICE MUST BE GIVEN TO THE AIRPORT.
3. ACCESS TO PHASE 3A & 3B WILL BE GAINED THROUGH GATE 21 AND FROM OUTSIDE THE FENCE.
4. TEMPORARY FENCE SHALL BE PLACED TO ALLOW SUFFICIENT AIRCRAFT CLEARANCE AND BE DELINEATED WITH 20" X 20" ORANGE FLAGS.
5. PRIOR TO START OF PHASE 3C, 7 DAYS NOTICE MUST BE GIVEN TO THE AIRPORT.
6. ACCESS TO PHASE 3C WILL BE GAINED THROUGH GATE 18 & FROM OUTSIDE THE FENCE.
7. ACCESS TO PHASE 3D WILL BE GAINED THROUGH GATE 17 & FROM OUTSIDE THE FENCE.
8. ACCESS TO PHASE 3E WILL BE GAINED THROUGH GATE 17 & FROM BETWEEN EXISTING FENCE AND TEMPORARY FENCE.
9. NO MORE THAN 2 CONSECUTIVE PHASES MAY BE CONSTRUCTED SIMULTANEOUSLY.

GATE CLOSURE:
 3A - GATE 21 & 20 3C - GATE 18 & 19
 3B - GATE 22 3D - GATE 17

PHASE 4

1. ACCESS TO PHASE 4A-4D WILL BE GAINED THROUGH GATE 16 AND VIA MAINTENANCE AND FIRE ROAD.
2. NO MORE THAN 2 CONSECUTIVE PHASES MAY BE CONSTRUCTED SIMULTANEOUSLY.

GATE CLOSURE:
 4D - GATE 14

FENCING LEGEND

— xx —	NEW FENCE
— x-x —	TEMPORARY FENCE
— x —	EXISTING FENCE
⊙ 1C	PHASE
➔ A	ACCESS ROUTE FOR PHASE
⊙	EXISTING GATE

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**BLOOMINGTON-NORMAL AIRPORT AUTHORITY
 CENTRAL ILLINOIS REGIONAL AIRPORT
 BLOOMINGTON, ILLINOIS**

**UPGRADE PERIMETER FENCE PHASE 1
 CONSTRUCTION ACTIVITY PLAN
 PHASE 3 & 4**

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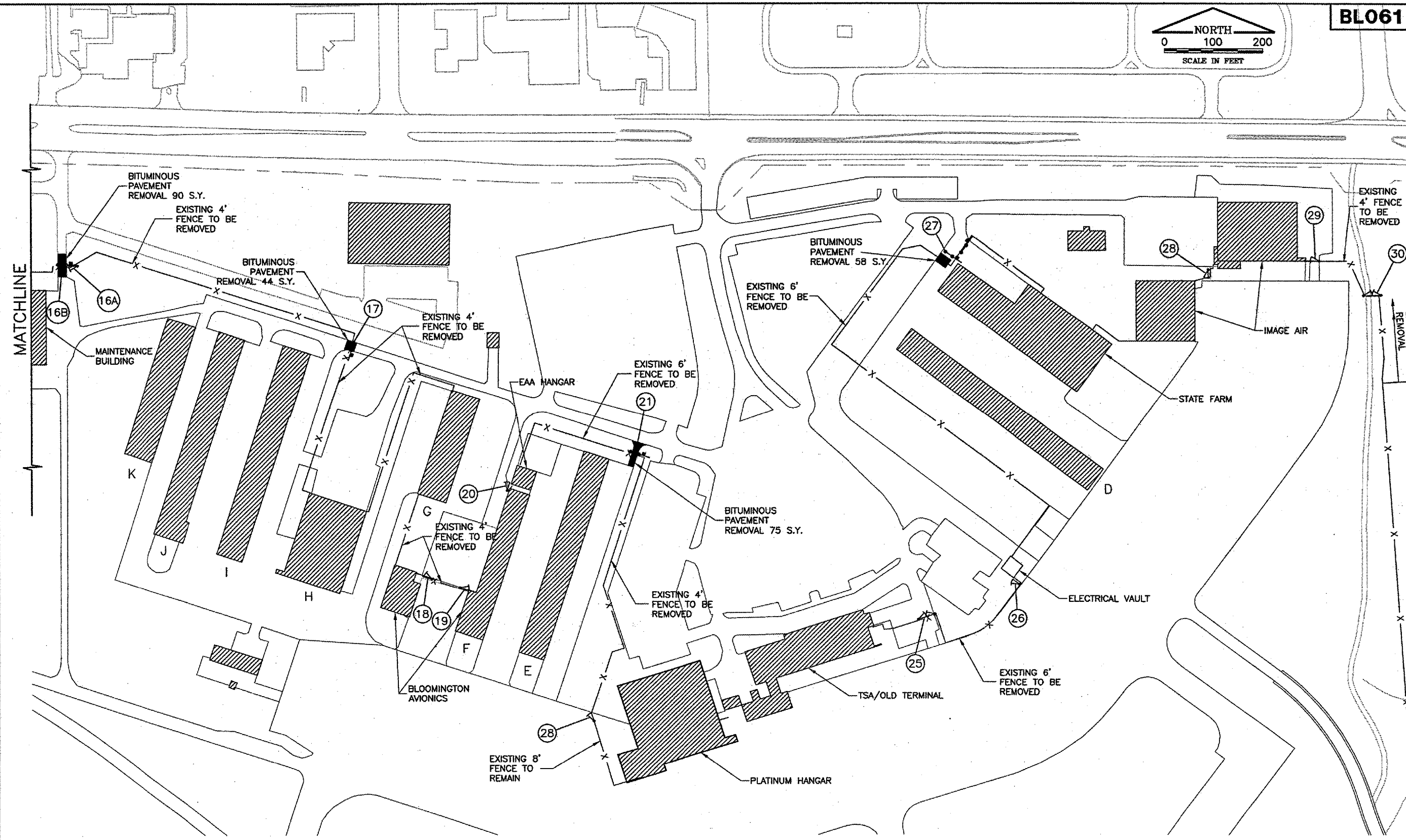
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SHEET	5 OF 26 SHEETS



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BLOOMINGTON-NORMAL AIRPORT AUTHORITY
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BLOOMINGTON, ILLINOIS
UPGRADE PERIMETER FENCE PHASE 1
EXISTING FENCE PLAN 1

NOTES:

- SEE GATE TABLE SHEET FOR EXISTING GATE TYPE AND PROPOSED IMPROVEMENTS.
- NEW FENCE WILL BE INSTALLED IN THE SAME LOCATION AS THE EXISTING FENCE UNLESS SHOWN OTHERWISE.
- SEE PROPOSED GATE PAVEMENT IMPROVEMENT SHEET FOR LIMITS OF PAVEMENT REMOVAL.

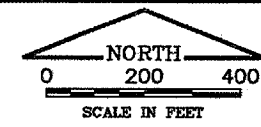
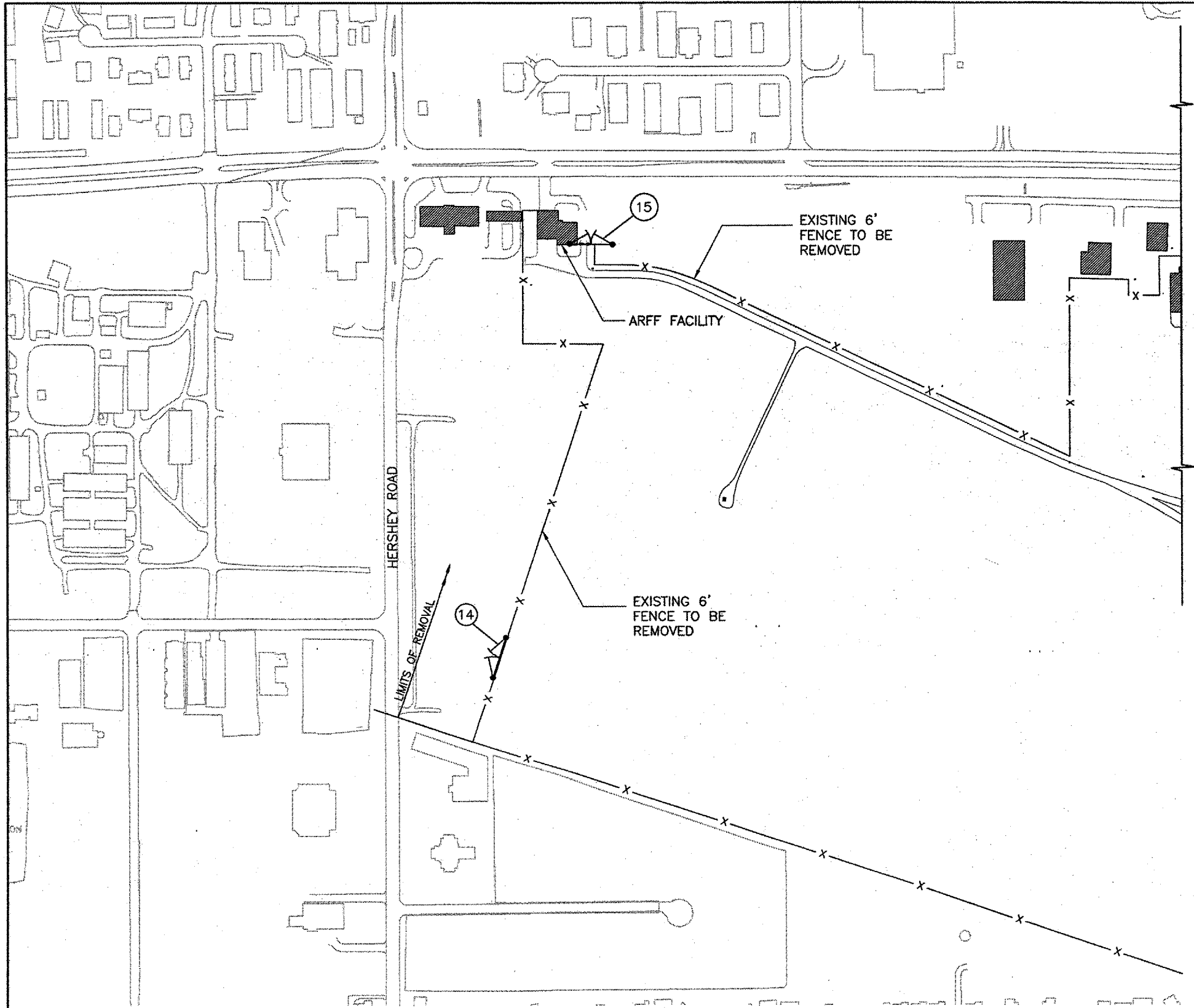
LEGEND

- EXISTING MANUAL VEHICLE GATE
- EXISTING MANUAL PEDESTRIAN GATE
- EXISTING ELECTRIC VEHICLE GATE
- EXISTING GATE LOCATION
- EXISTING FENCE
- BITUMINOUS PAVEMENT REMOVAL

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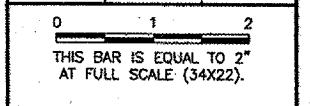
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 CENTRAL ILLINOIS REGIONAL AIRPORT
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
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 EXISTING FENCE PLAN 2**

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NOTES:

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2. NEW FENCE WILL BE INSTALLED IN THE SAME LOCATION AS THE EXISTING FENCE UNLESS SHOWN OTHERWISE.

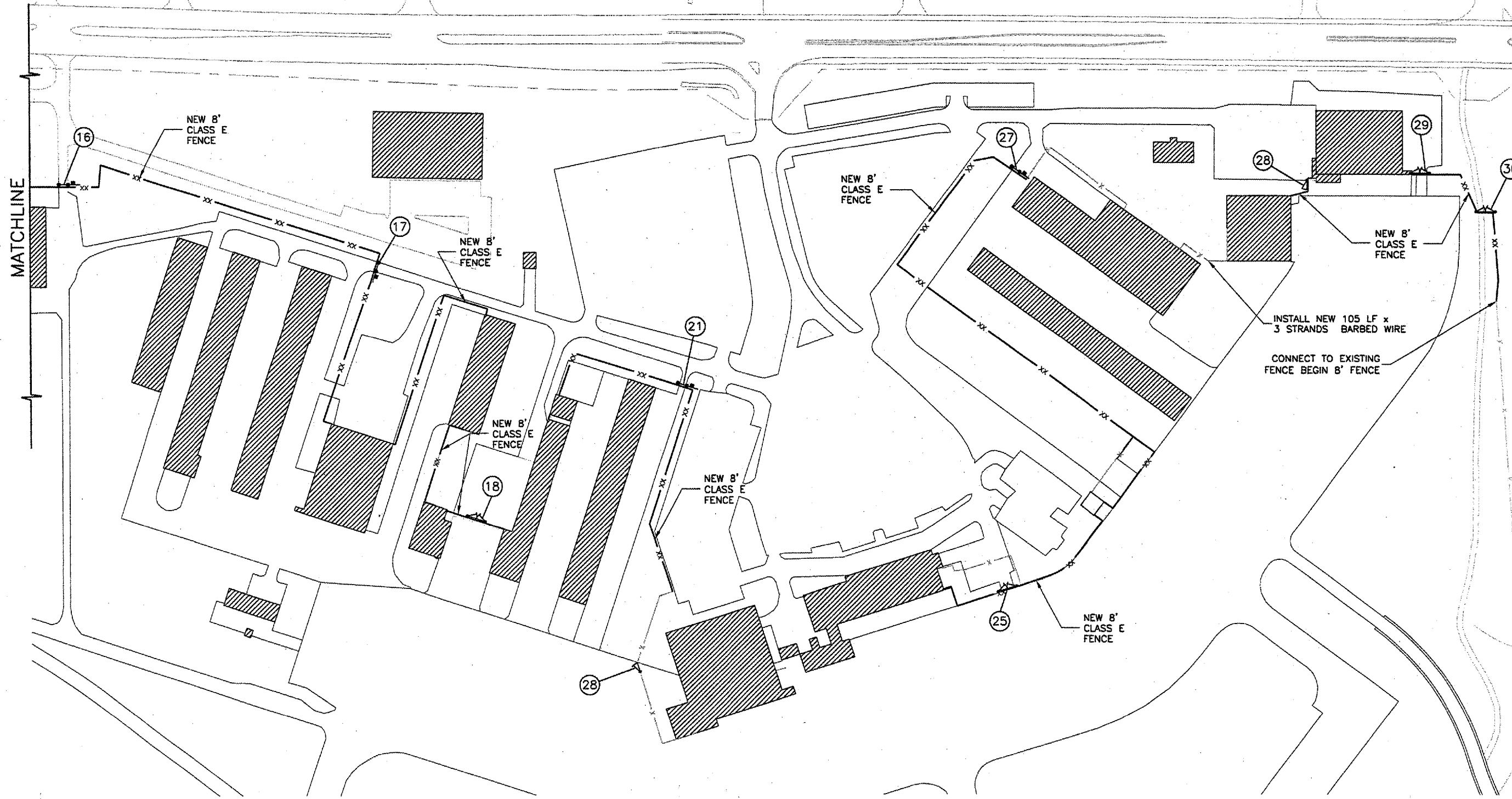
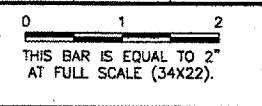
LEGEND

-  EXISTING MANUAL VEHICLE GATE
-  EXISTING MANUAL PEDESTRIAN GATE
-  EXISTING ELECTRIC VEHICLE GATE
-  EXISTING GATE LOCATION
-  EXISTING FENCE

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 APPROVED BY: RLW
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 A.I.P. PROJECT 3-17-0006-47
 SHEET 7 OF 26 SHEETS



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**BLOOMINGTON-NORMAL AIRPORT AUTHORITY
 CENTRAL ILLINOIS REGIONAL AIRPORT
 BLOOMINGTON, ILLINOIS**
**UPGRADE PERIMETER FENCE PHASE 1
 PROPOSED FENCE PLAN 1**

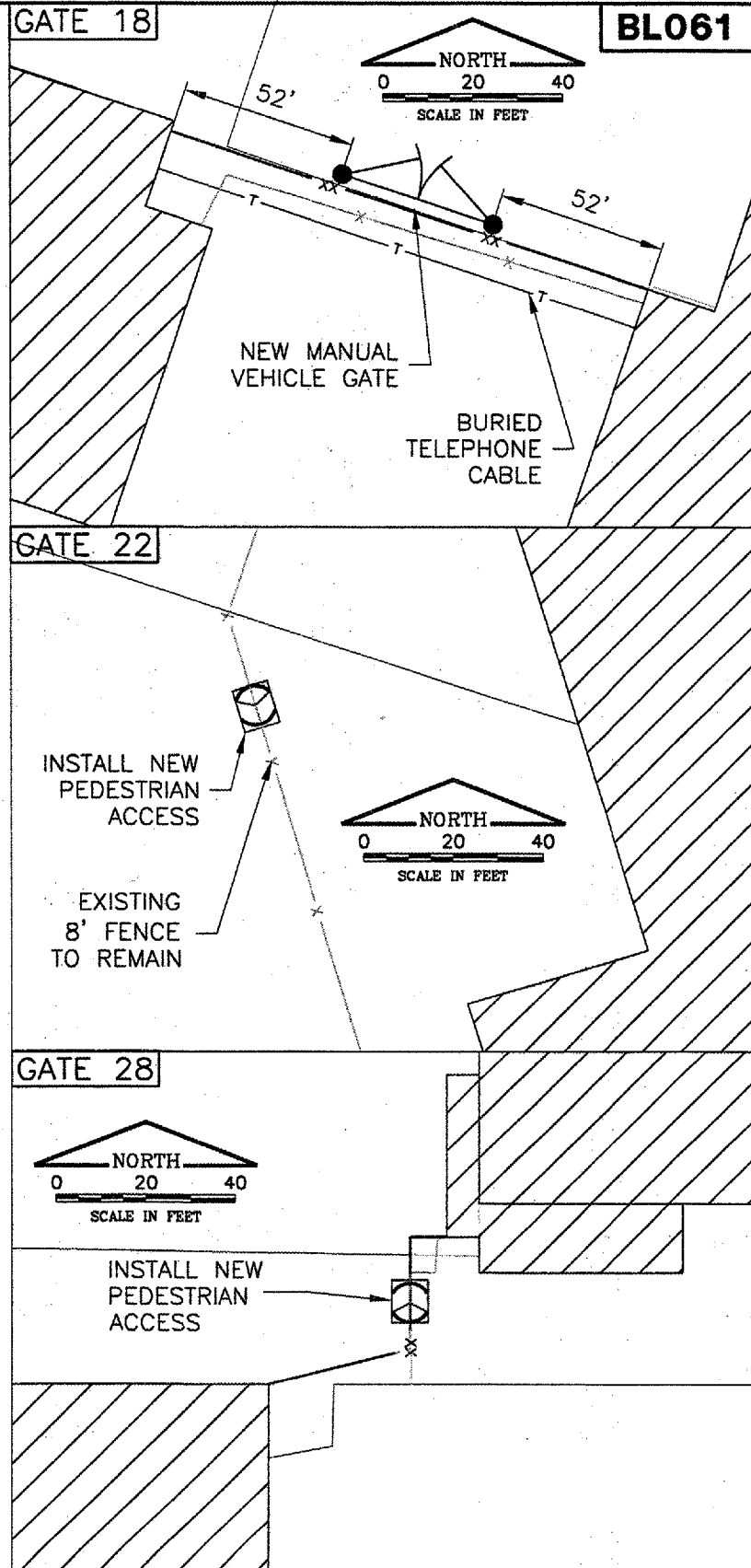
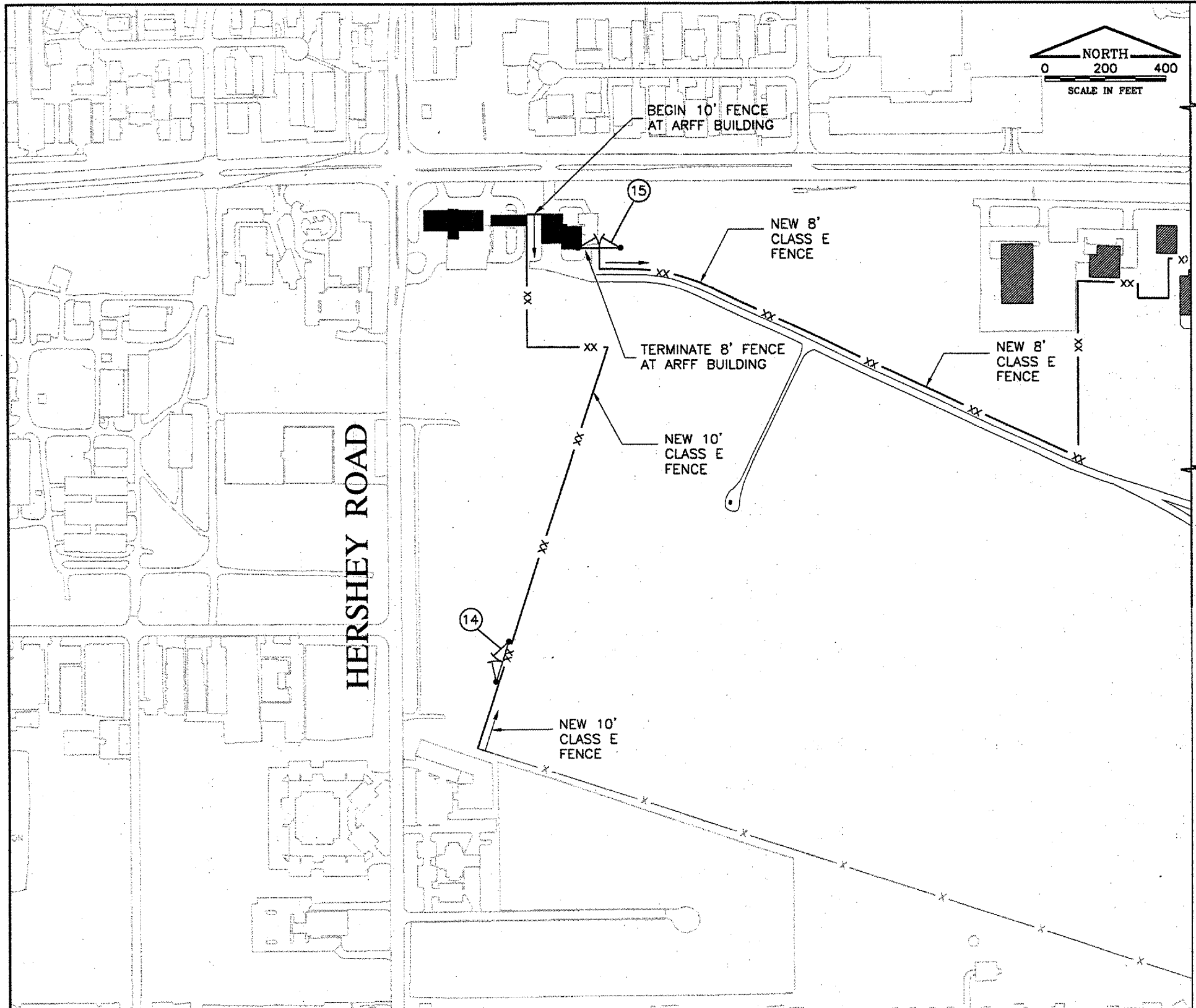
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- NOTES:**
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 2. NEW FENCE WILL BE INSTALLED IN THE SAME LOCATION AS THE EXISTING FENCE UNLESS SHOWN OTHERWISE.
 3. SEE PROPOSED FENCE PLAN 2 FOR GATE 18, 22 AND 28 LOCATIONS.

LEGEND

	NEW MANUAL VEHICLE GATE
	NEW MANUAL PEDESTRIAN GATE
	NEW ELECTRIC VEHICLE GATE
	NEW GATE LOCATION
	EXISTING FENCE
	NEW FENCE

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A.I.P. PROJECT	3-17-0006-47
SHEET 8 OF 26 SHEETS	



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



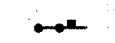

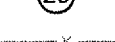
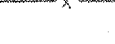
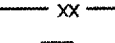
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CENTRAL ILLINOIS REGIONAL AIRPORT
BLOOMINGTON, ILLINOIS
UPGRADE PERIMETER FENCE PHASE 1
PROPOSED FENCE PLAN 2

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NOTES:

- SEE GATE TABLE SHEET FOR EXISTING GATE TYPE AND PROPOSED IMPROVEMENTS.
- FENCE AND BARBED WIRE SHALL BE CONTINUOUS OVER PEDESTRIAN ACCESS.
- NEW SIDEWALK AND REMOVALS ASSOCIATED WITH PEDESTRIAN ACCESS SHALL BE INCIDENTAL @ GATE 28. MAY REQUIRE UP TO 100 S.F. OF NEW 4" CONCRETE SIDEWALK AND 25 S.F. OF SIDEWALK REMOVAL AND 3 SHRUBS REMOVED.

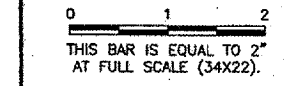
LEGEND

-  NEW MANUAL VEHICLE GATE
-  NEW MANUAL PEDESTRIAN GATE
-  NEW ELECTRIC VEHICLE GATE
-  EXISTING GATE LOCATION
-  EXISTING FENCE
-  NEW FENCE
-  NEW PEDESTRIAN ACCESS

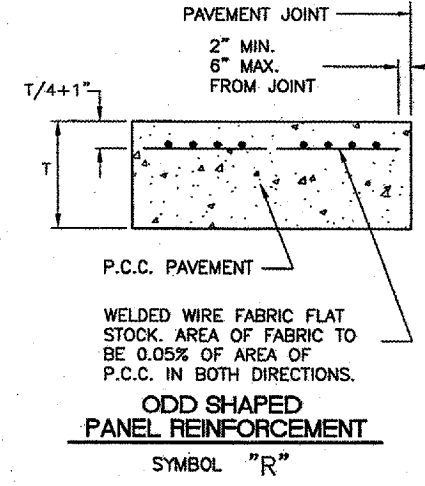
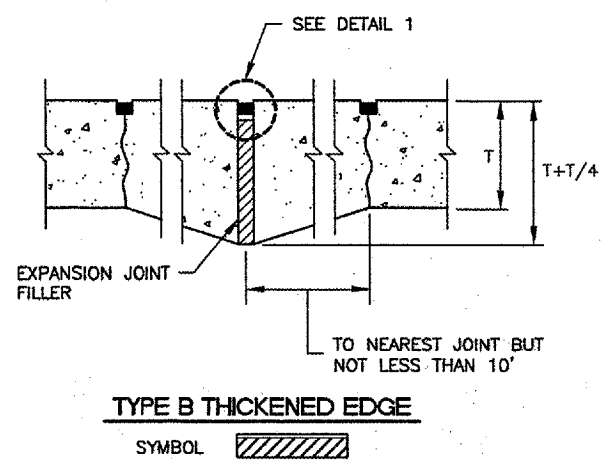
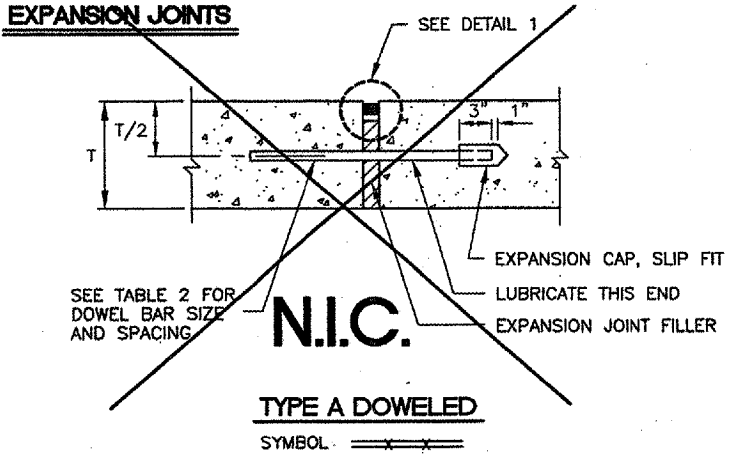
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CHECKED BY:	REW
APPROVED BY:	REW
DATE:	1/12/2007
JOB No:	06085-03-00
ILLINOIS PROJECT	BMI-3653
A.I.P. PROJECT	3-17-0006-47
SHEET 9 OF 26 SHEETS	

IMAGE FILES:

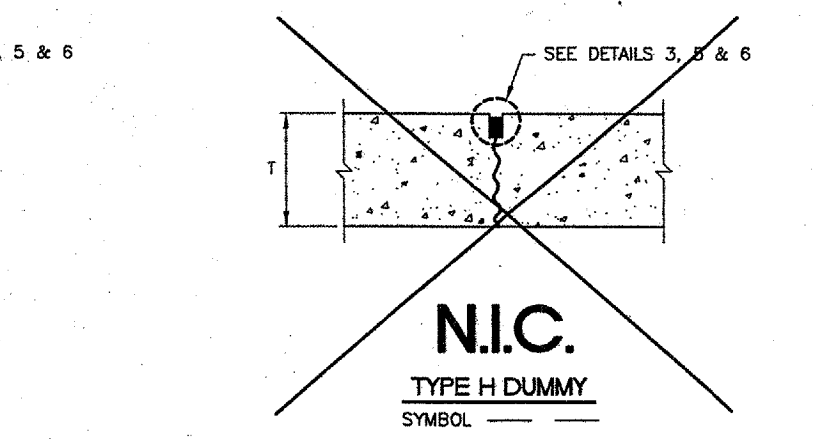
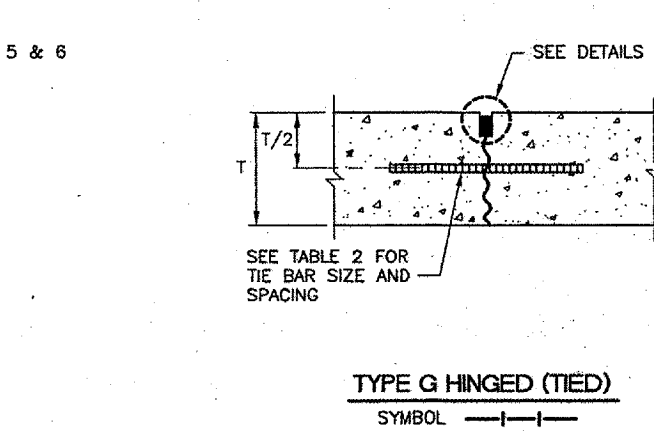
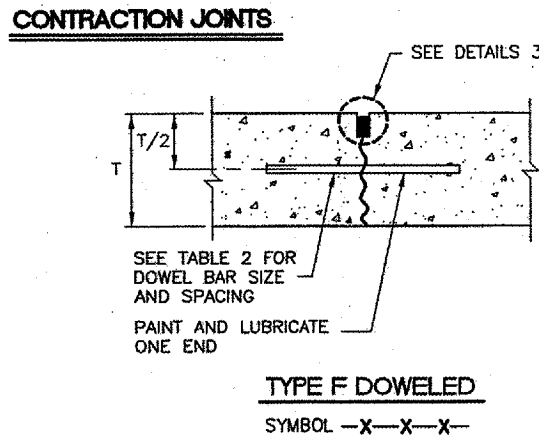
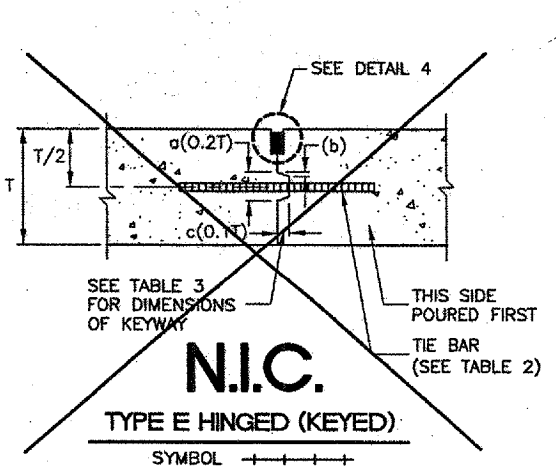
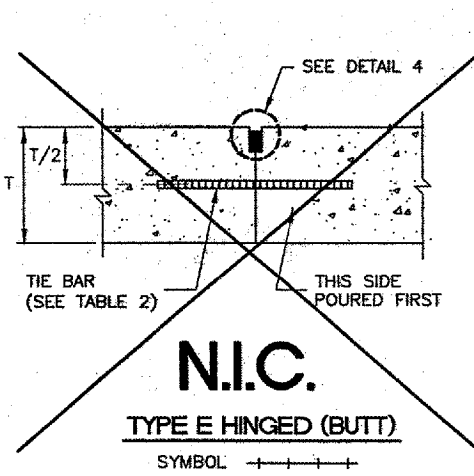
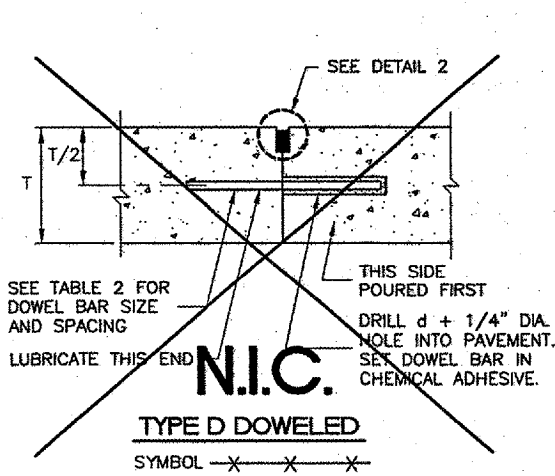
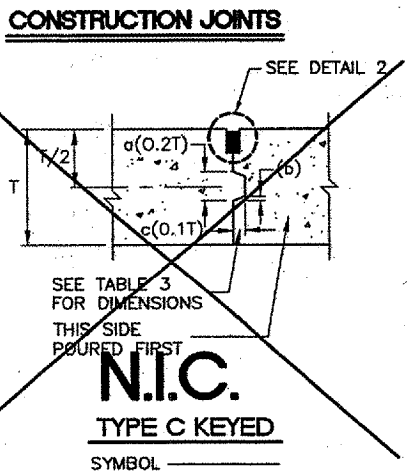
REVISIONS		
NUMBER	BY	DATE



PAVEMENT THICKNESS T - INCHES	DEPTH OF CONTRACTION JOINT INITIAL SAW CUT I, INCHES $I = (T/3) \pm 1/4"$
5	1.67"
6	2.00"
7	2.33"
8	2.67"
9	3.00"
10	3.33"
11	3.67"
12	4.00"
13	4.33"
14	4.67"
15	5.00"
16	5.33"
17	5.67"
18	6.00"



PAVEMENT THICKNESS T - INCHES	DOWEL BAR DETAILS			TIE BAR DETAILS		
	DIA.	LENGTH	SPACING	BAR SIZE	LENGTH	SPACING
5	5/8"	12"	12"	#4	24"	30"
6	3/4"	18"	12"	#5	30"	30"
7	3/4"	18"	12"	#5	30"	30"
8	1"	19"	12"	#5	30"	30"
9	1"	19"	12"	#5	30"	30"
10	1"	19"	12"	#5	30"	30"
11	1"	19"	12"	#5	30"	30"
12	1"	19"	12"	#5	30"	30"
13	1 - 1/4"	20"	15"	#5	30"	30"
14	1 - 1/4"	20"	15"	#5	30"	30"
15	1 - 1/4"	20"	15"	#5	30"	30"
16	1 - 1/4"	20"	15"	#5	30"	30"
17	1 - 1/2"	20"	18"	#5	30"	30"
18	1 - 1/2"	20"	18"	#5	30"	30"



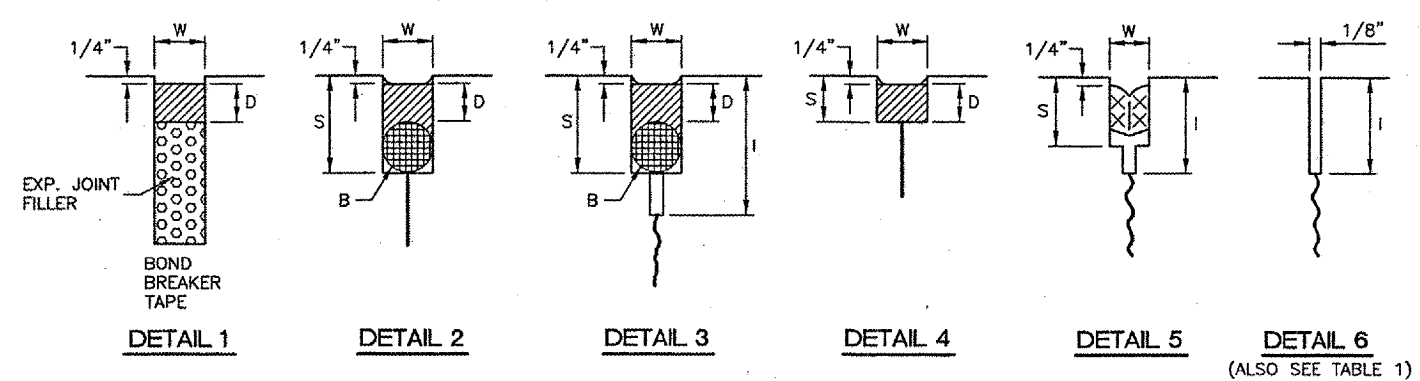
PAVEMENT THICKNESS T - INCHES	KEYED JOINT DIMENSIONS		
	a	b	c
6	—	—	—
7	—	—	—
8	0.133' (1-5/8" ±)	0.017' (3/16" ±)	0.067' (7/8" ±)
9	0.150' (1-13/16" ±)	0.019' (3/16" ±)	0.075' (7/8" ±)
10	0.167' (2" ±)	0.021' (1/4" ±)	0.083' (1" ±)
11	0.183' (2-13/16" ±)	0.023' (1/4" ±)	0.092' (1-1/8" ±)
12	0.200' (2-3/8" ±)	0.025' (5/16" ±)	0.100' (1-1/4" ±)
13	0.217' (2-5/8" ±)	0.027' (5/16" ±)	0.108' (1-5/16" ±)
14	0.233' (2-13/16" ±)	0.029' (3/8" ±)	0.117' (1-7/16" ±)
15	0.250' (3" ±)	0.031' (3/8" ±)	0.125' (1-1/2" ±)
16	0.267' (3-13/16" ±)	0.033' (7/16" ±)	0.133' (1-5/8" ±)

JOINT NOTES

- 1.) ALL EDGES OF NEW SLABS, FREE STANDING OR CLOSURE, SHALL BE EDGED WITH AN APPROVED TOOL HAVING A RADIUS OF 1/8" TO 1/4" TO FACILITATE SAWING OF THE SEALANT RESERVOIR. A RADIUS > 1/4" WILL NOT BE ACCEPTABLE.
- 2.) THE INITIAL SAWCUT FOR ALL LONGITUDINAL & TRANSVERSE CONTRACTION JOINTS SHALL BE SAWED AS SOON AS POSSIBLE AFTER PLACEMENT OF THE PAVEMENT.
- 3.) ALL TIE BARS & MESH SHALL BE SECURELY HELD IN PLACE BY SUPPORT PINS OR OTHER APPROVED METHODS TO PREVENT SHIFTING DURING & AFTER CONCRETE PLACEMENT.
- 4.) TIE BARS SHALL BE DEFORMED BARS IN CONFORMANCE WITH THE SPECIFICATIONS.
- 5.) THE INITIAL SAWCUT SHALL BE MADE TO THE 1/8" WIDTH INDICATED. INITIAL SAWING TO THE DIMENSIONS OF THE SECOND SAWCUT WILL NOT BE ALLOWED.

	DETAIL 1	DETAIL 2	DETAIL 3	DETAIL 4	DETAIL 5
HOT/COLD POUR	HOT/COLD POUR	HOT/COLD POUR	HOT/COLD POUR	HOT/COLD POUR	PRE-FORMED
W=WIDTH OF SEALANT RESERVOIR (IN.)	1	1/2	1/2	1/2	3/8 (COMPRESSED)
D=DEPTH OF SEALANT RESERVOIR (IN.)	1	1/2	1/2	1/2	N/A
B=BACKER ROD DIAMETER (IN.)	N/A	5/8	5/8	N/A	N/A
S=SECOND SAWCUT DEPTH (IN.) MINIMUM	N/A	1-3/8	1-3/8	3/4	1-1/2

JOINT SEALING DETAILS



N.I.C. - NOT IN THIS CONTRACT

BLOOMINGTON-NORMAL AIRPORT AUTHORITY
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BLOOMINGTON, ILLINOIS
UPGRADE PERIMETER FENCE PHASE 1
JOINTING DETAILS 1

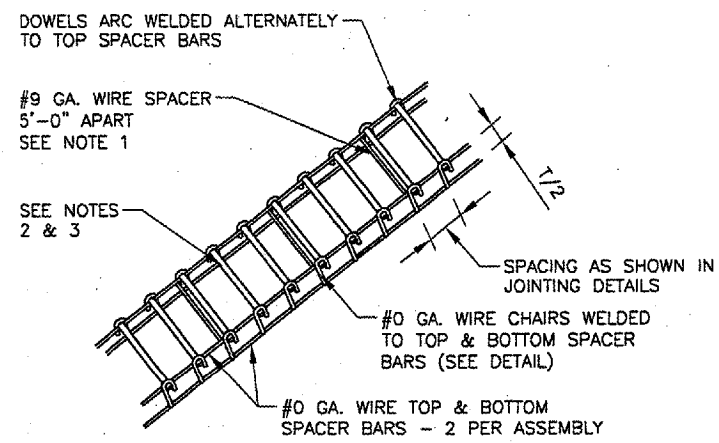
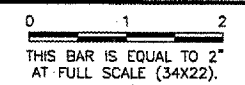
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JOB No:	06085-03-00
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A.I.P. PROJECT	3-17-0006-47
SHEET	11 OF 26 SHEETS

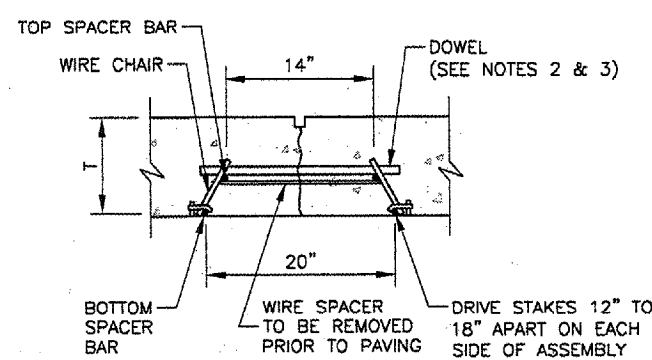
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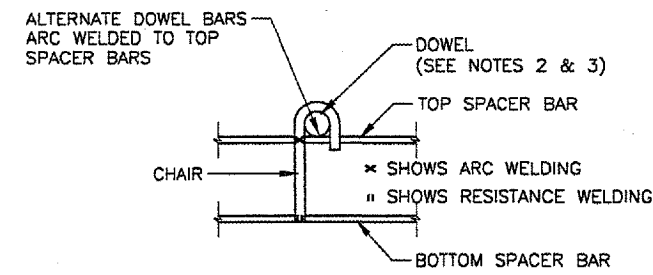
NUMBER	BY	DATE



DOWEL BASKET ASSEMBLY DETAILS AND NOTES
N.T.S.



DOWEL BAR INSTALLATION DETAIL
N.T.S.



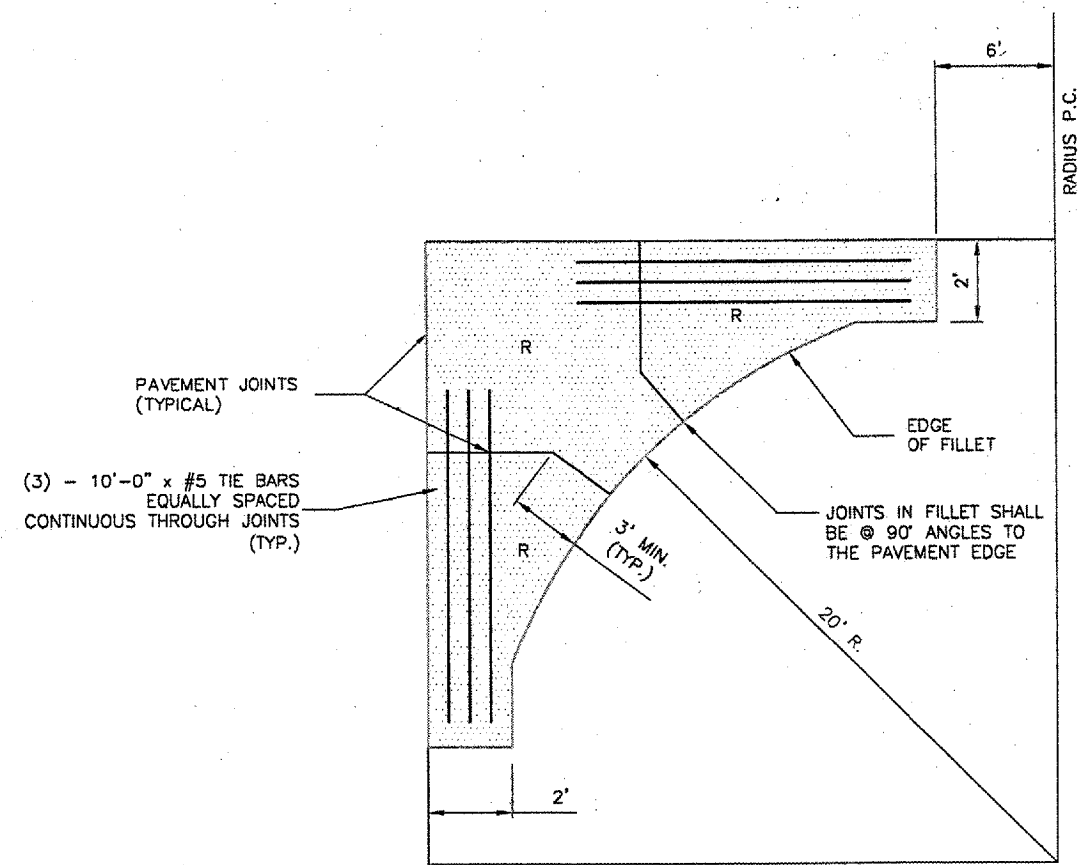
TYPICAL DOWEL BASKET ELEVATION DETAIL SHOWING CHAIR
N.T.S.

DOWEL BASKET NOTES

- 1.) #9 GA. WIRE SPACER BAR ARC WELDED TO THE BOTTOM OF TOP SPACER BAR. (MAY BE MECHANICALLY ATTACHED IN LIEU OF WELDING) 3 REQUIRED PER UNIT. THIS WIRE MUST BE CUT OR REMOVED PRIOR TO PAVING.
- 2.) DOWEL BAR DIAMETER, LENGTH & SPACING SHALL BE AS SHOWN IN TABLE 2 JOINTING DETAILS 1.
- 3.) DOWELS SHALL BE EPOXY COATED FULL LENGTH OF DOWEL. IMMEDIATELY PRIOR TO PAVING, THE FREE END OF EACH DOWEL SHALL BE LUBRICATED OR OILED, FOR HALF THE LENGTH OF THE DOWEL.

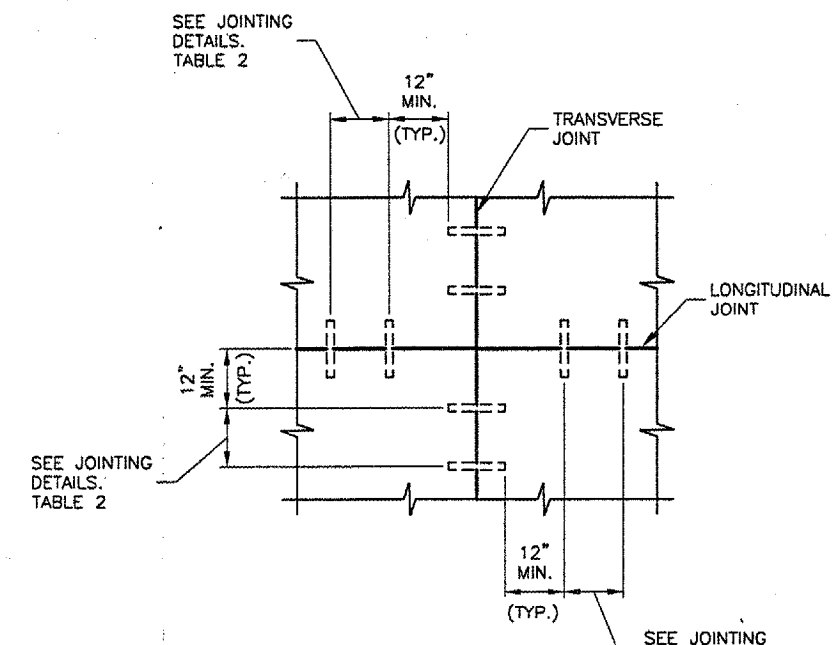
DOWEL BASKET DETAILS

N.T.S.



FILLET DETAIL AND FILLET REINFORCING LAYOUT
N.T.S.

R DENOTES ODD SHAPED REINFORCED PANELS TO BE REINFORCED WITH WELDED WIRE FABRIC AS SHOWN ON JOINTING DETAILS SHEET. ALL NON RECTANGULAR SHAPED PANELS SHALL BE REINFORCED. (REINFORCEMENT NOT SHOWN)



DOWEL PLACEMENT DETAIL
N.T.S.

BLOOMINGTON-NORMAL AIRPORT AUTHORITY
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BLOOMINGTON, ILLINOIS
UPGRADE PERIMETER FENCE PHASE 1
JOINTING DETAILS 2

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A.I.P. PROJECT	3-17-0006-47
SHEET	12 OF 26 SHEETS

BLO61

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 UPDATE BY: adraughan
 SURVEY BOOK #
 DATE: Tue 1/9/07 5:48pm
 XREF DWG: CIntinfo.dwg

IMAGE FILES:

REVISIONS

NUMBER	BY	DATE

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

GATE #	GATE DESCRIPTION AND LOCATION	EXISTING GATE TYPE	PROPOSED IMPROVEMENT	PAY ITEM	PHASE
14	DETENTION AREA ACCESS	24' x 6' VEHICLE SWING GATE	24' x 10' DOUBLE SWING VEHICLE GATE	AR162624	4D
15	ARFF FACILITY/RESCUE VEHICLE ACCESS	24' x 6' VEHICLE SWING GATE	24' x 8' DOUBLE SWING VEHICLE GATE	AR162624	1A
16A	BMI MAINTENANCE GARAGE	10' X 4' VEHICLE SWING GATE	CONSOLIDATE WITH GATE 16B	N/A	1E
16B	BMI MAINTENANCE GARAGE	16' x 4' ELECTRIC CANTILEVER	24' x 8' ELECTRIC CANTILEVER GATE	AR162724	1E
17	HANGAR ROW I, J & K ACCESS	12' x 4' ELECTRIC CANTILEVER	14' x 8' ELECTRIC CANTILEVER GATE	AR162714	3D
18	BLOOMINGTON AVIONICS	10' X 4' VEHICLE SWING GATE	CONSOLIDATE WITH GATE 19	N/A	3C
19	BLOOMINGTON AVIONICS	6' x 4' PEDESTRIAN SWING GATE	12' x 8' VEHICLE SWING GATE	AR162612	3C
20	BETWEEN EAA & HANGAR F	4' x 4' PEDESTRIAN SWING GATE	8' FENCE	AR162508	3A
21	HANGAR ROW E & F ACCESS	12' x 4' ELECTRIC CANTILEVER	14' x 8' ELECTRIC CANTILEVER GATE	AR162714	3A
22	PLATINUM HANGAR (NEW)	NO EXISTING GATE	PEDESTRIAN ACCESS GATE	AR800243	3B
25	EAST SIDE OF OLD TERMINAL BUILDING	24' x 6' VEHICLE SWING GATE	24' x 8' DOUBLE SWING VEHICLE GATE	AR162624	2C
26	ELECTRICAL VAULT PEDESTRIAN ACCESS	6' x 4' PEDESTRIAN SWING GATE	8' FENCE	AR162508	2C
27	HANGAR ROW D ACCESS	24' x 4' ELECTRIC CANTILEVER	14' x 8' ELECTRIC CANTILEVER GATE	AR162714	2A
28	BETWEEN IMAGE AIR HANGARS PEDESTRIAN ACCESS	6' x 4' PEDESTRIAN SWING GATE	PEDESTRIAN ACCESS GATE	AR800243	2B
29	EAST SIDE OF IMAGE AIR CARGO ACCESS	14' x 4' VEHICLE SWING GATE	12' x 8' VEHICLE SWING GATE	AR162612	2B
30	CONSTRUCTION GATE EAST OF IMAGE AIR	24' x 4' VEHICLE SWING GATE	24' x 8' DOUBLE SWING VEHICLE GATE	AR162624	2B

NOTES:

1. PAY ITEM AR162624--DESCRIPTION INCLUDES
 3 GATES @ 8' HIGH AND 1 GATE @ 10' HIGH.

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 UPGRADE PERIMETER FENCE PHASE 1
 GATE TABLE

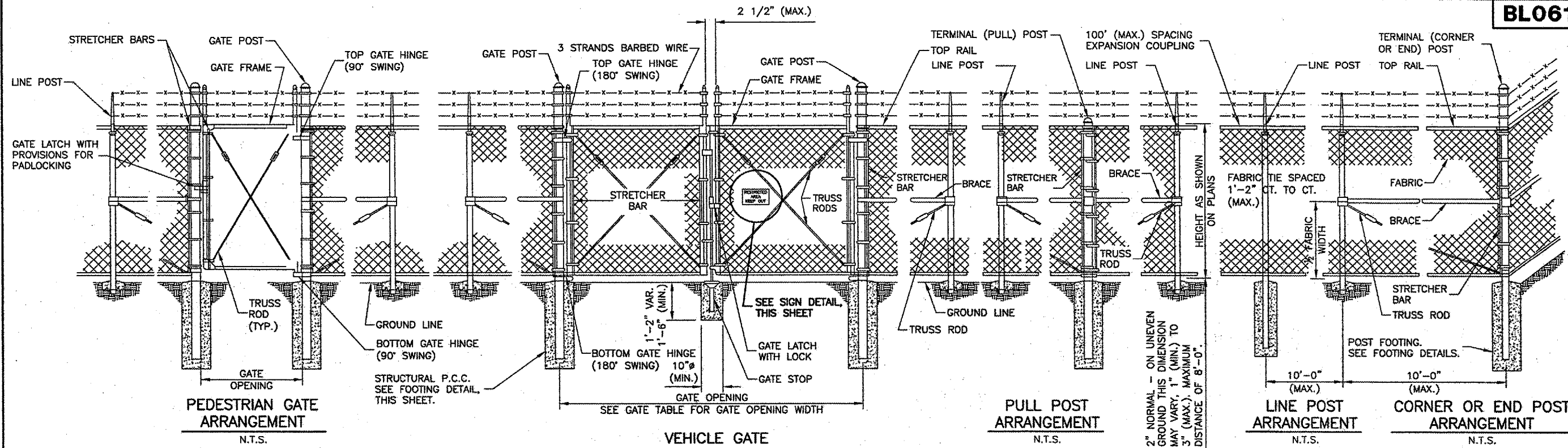
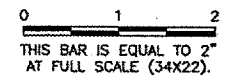
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 A.I.P. PROJECT 3--17--0006-47
 SHEET 13 OF 26 SHEETS

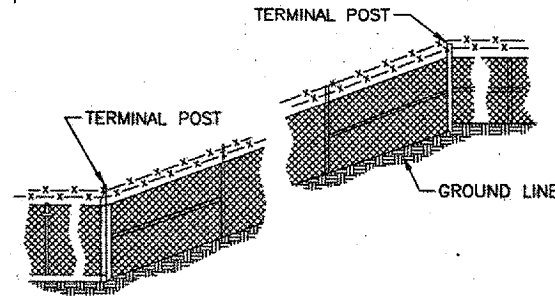
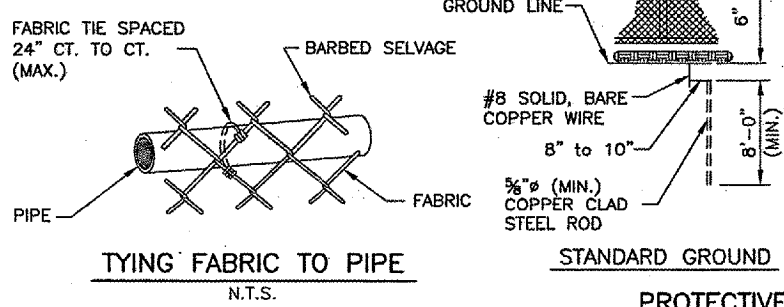
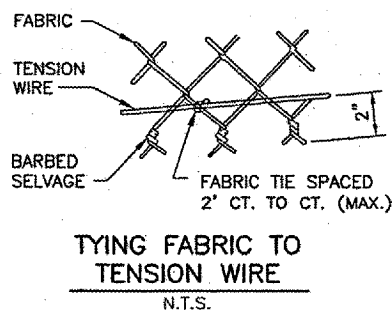
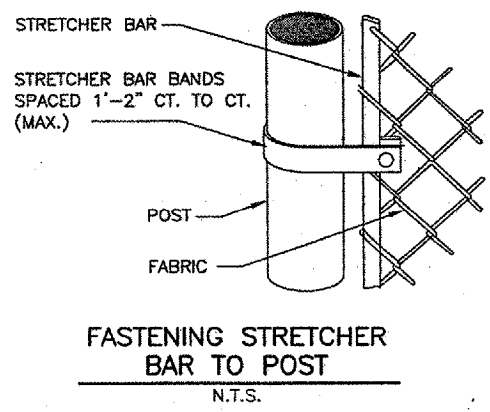
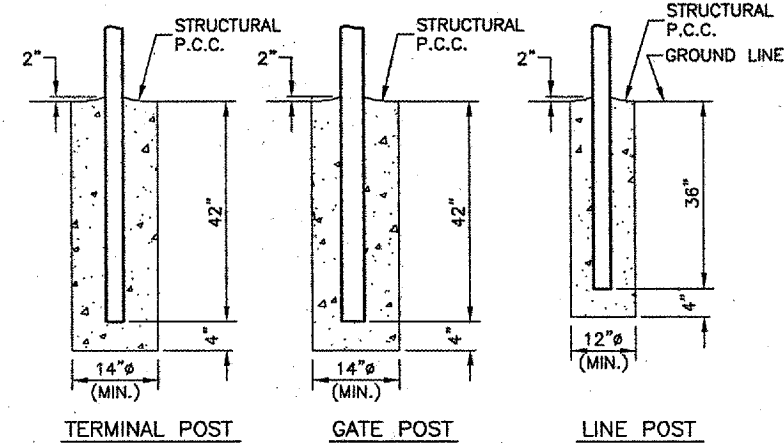
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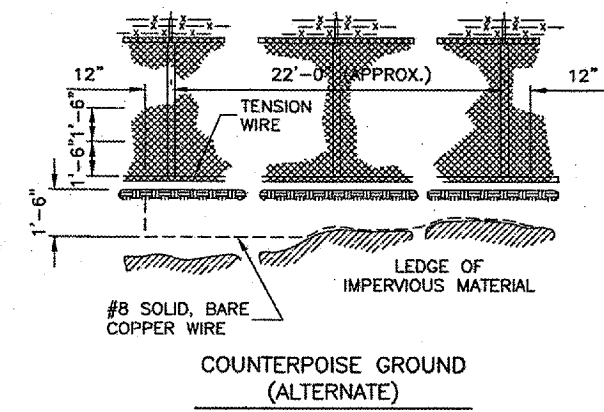
NUMBER	BY	DATE



PULL POSTS SHALL BE PLACED AT LOCATIONS DETERMINED BY THE ENGINEER. THEY SHALL BE PLACED AT 660 FT. INTERVALS BETWEEN POSTS TO WHICH THE ENDS OF THE FABRIC ARE CLAMPED OR MIDWAY BETWEEN SUCH POSTS WHEN THE DISTANCE IS LESS THAN 1320 FT. AND GREATER THAN 660 FT.



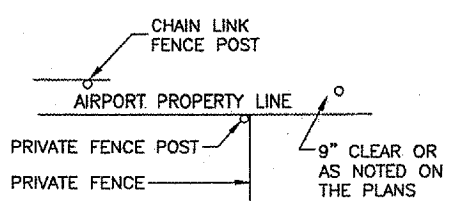
FENCE INSTALLATION ON SLOPES
N.T.S.



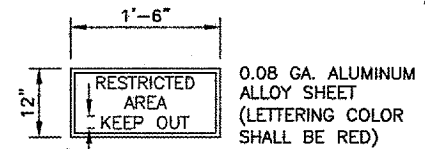
PROTECTIVE ELECTRICAL GROUND DETAILS
N.T.S.

WHERE FENCE LINE HAS A CHANGE IN DIRECTION OF 15° OR MORE, A TERMINAL POST SHALL BE PLACED AS SHOWN ABOVE. WHERE ANGLE IS LESS THAN 15° AND EXISTING CONDITIONS REQUIRE A TERMINAL POST, THEY SHALL BE PLACED AS DIRECTED BY THE ENGINEER.

INSTALLATION AT CORNERS
N.T.S.



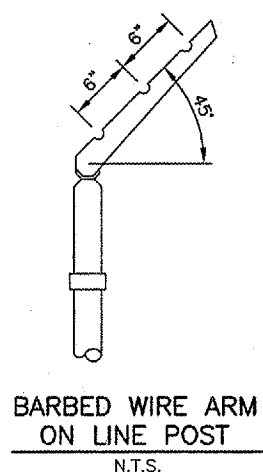
PRIVATE FENCE TERMINAL
N.T.S.



EACH GATE SHALL REQUIRE TWO SIGNS. EVERY 100' OF FENCE SHALL REQUIRE ONE SIGN. EVERY STRAIGHT SECTION OF FENCE SHALL REQUIRE MINIMUM ONE SIGN.

SIGN DETAIL
N.T.S.

- NOTES**
1. CONTINUOUS FENCE SHALL BE GROUNDED AT INTERVALS NOT EXCEEDING 1000 FT. EXCEPT THERE SHALL BE A GROUND NOT EXCEEDING 100 FT. FROM GATE IN EACH SECTION OF THE FENCE ADJACENT TO THE GATE.
 2. FENCE UNDER POWER LINES SHALL BE GROUNDED BY 3 GROUNDS, ONE DIRECTLY UNDER THE CROSSING AND ONE ON EACH SIDE 25 TO 50 FT. AWAY. A SINGLE GROUND SHALL BE LOCATED DIRECTLY UNDER EACH TELEPHONE WIRE OR CABLE CROSSINGS.
 3. THE COUNTERPOISE SHALL BE USED ONLY WHERE IT IS IMPOSSIBLE TO DRIVE A GROUND ROD BECAUSE OF IMPERVIOUS EARTH STRUCTURES.
 4. THE GROUND WIRE SHALL BE CONNECTED TO THE FABRIC AND THE GROUND ROD BY A MECHANICAL CLAMP OF CAST BRONZE BODY AND BRONZE OR STAINLESS STEEL BOLTS AND WASHERS. WHEN A TENSION WIRE IS REQUIRED, THE BOTTOM CONNECTION OF THE GROUND WIRE SHALL BE MADE TO THE TENSION WIRE.
 5. ALL PROPOSED CLASS E FENCE SHALL MEET THE REQUIREMENTS OF IDOT STANDARD 664001-01.



BARBED WIRE ARM ON LINE POST
N.T.S.

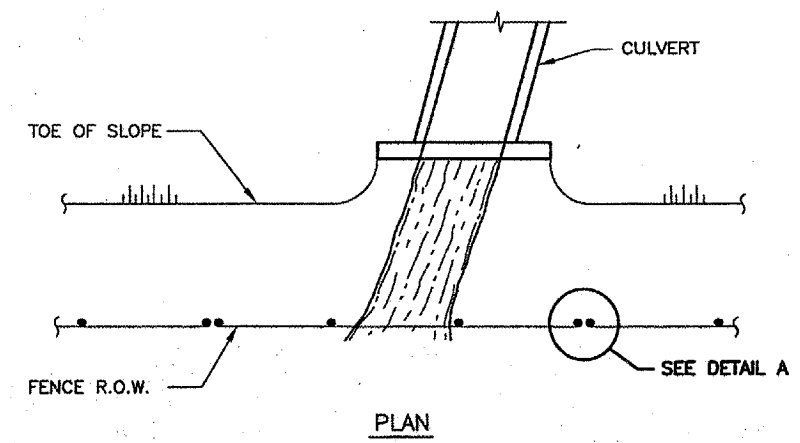
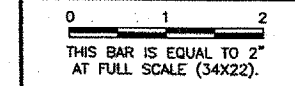
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 BLOOMINGTON, ILLINOIS
 UPGRADE PERIMETER FENCE PHASE 1
 FENCE DETAILS 1

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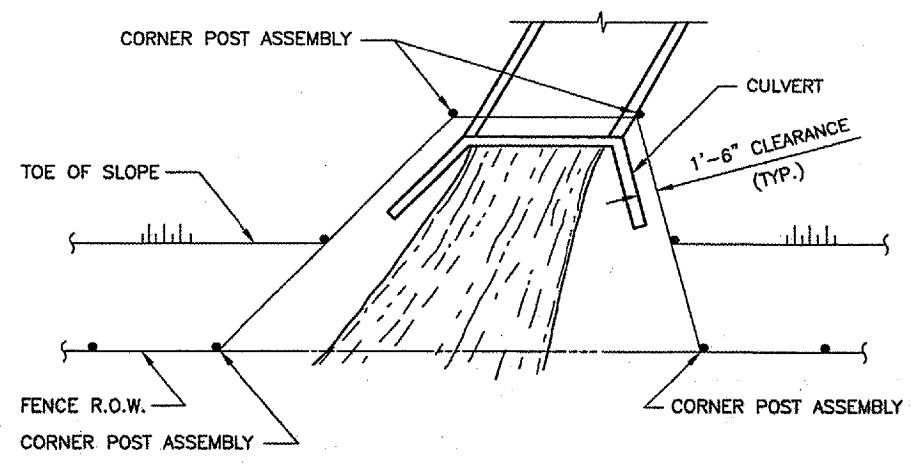
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 APPROVED BY: RLW
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 A.I.P. PROJECT 3-17-0006-47
 SHEET 14 OF 26 SHEETS

IMAGE FILES:

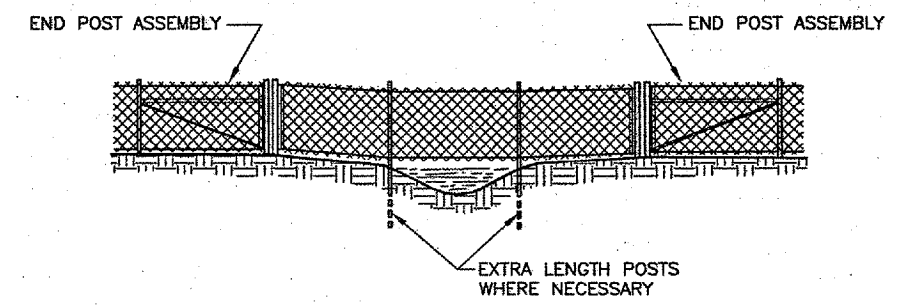
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PLAN

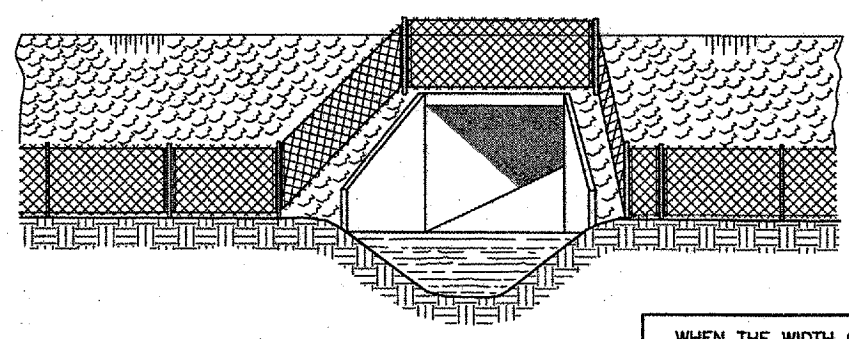


PLAN



ELEVATION

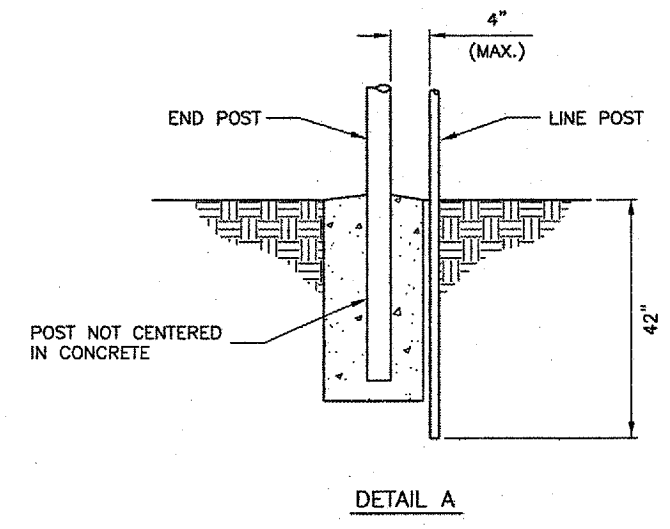
THE CHAIN LINK FABRIC SHALL BE REPLACED BY BARBED WIRE STRANDS AT 12" MAXIMUM CENTERS BETWEEN THE DOUBLE POSTS SHOWN ON DETAIL A WHEN SHOWN ON THE PLANS.



ELEVATION

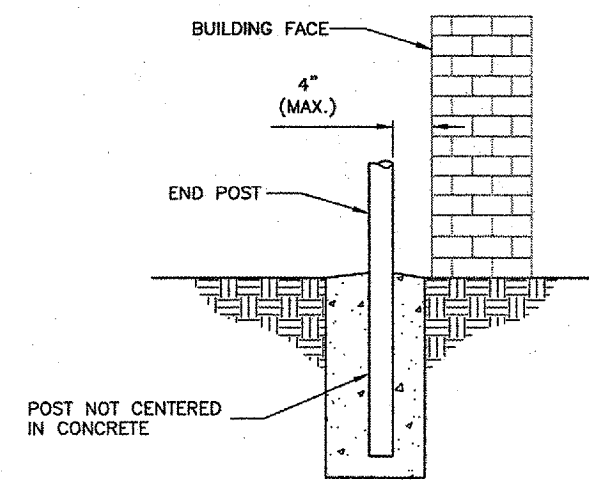
WHEN THE WIDTH OF THE CULVERT MAKES IT NECESSARY TO ANCHOR A POST TO THE TOP OF THE CULVERT, A CAST IRON SHOE OR OTHER DEVICE APPROVED BY THE ENGINEER SHALL BE USED.

FENCE INSTALLATION AROUND HEADWALL DETAILS
 N.T.S.



DETAIL A

FENCE INSTALLATION OVER STREAM DETAILS
 N.T.S.



FENCE INSTALLATION AT BUILDING FACE
 N.T.S.

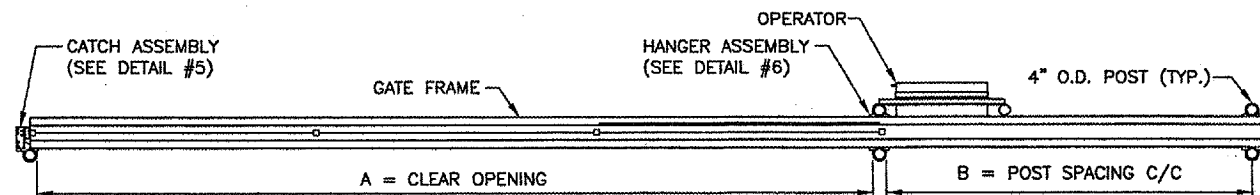
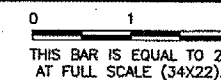
BLOOMINGTON-NORMAL AIRPORT AUTHORITY
CENTRAL ILLINOIS REGIONAL AIRPORT
BLOOMINGTON, ILLINOIS
UPGRADE PERIMETER FENCE PHASE 1
FENCE DETAILS 2

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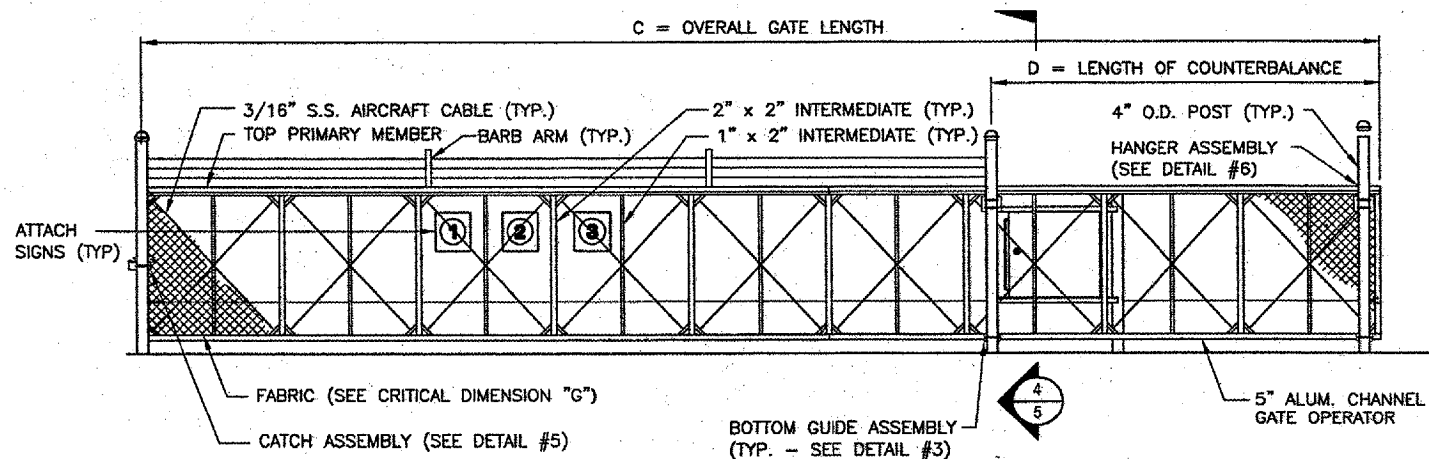
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DRAWN BY:	CMT
CHECKED BY:	RLV
APPROVED BY:	RLV
DATE:	1/12/2007
JOB No:	06085-03-00
ILLINOIS PROJECT	BMI-3653
A.I.P. PROJECT	3-17-0006-47
SHEET	15 OF 26 SHEETS

REVISIONS

NUMBER	BY	DATE



1 PLAN VIEW
 SCALE: N.T.S.



2 ELEVATION
 Scale: N.T.S.

		GATE #16	GATE #17	GATE #21	GATE #27
A	CLEAR OPENING	24'-0"	14'-0"	14'-0"	14'-0"
B	COUNTERBALANCE POST SPACING C/C	11'-1"	7'-1"	7'-1"	7'-1"
C	OVERALL GATE LENGTH	36'-0"	24'-0"	24'-0"	24'-0"
D	COUNTERBALANCE LENGTH	12'-0"	8'-0"	8'-0"	8'-0"
E	NOMINAL GATE HEIGHT	8'-0"	8'-0"	8'-0"	8'-0"
F	POST HEIGHT	9'-6"	9'-6"	9'-6"	9'-6"
G	FABRIC HEIGHT	7'-0"	7'-0"	7'-0"	7'-0"
H	NOMINAL WEIGHT	594 LBS	396 LBS	396 LBS	396 LBS

SIGN	DIMENSIONS	BACKGROUND	LETTERING		TEXT
		COLOR	COLOR	HEIGHT	
1	24" x 18"	WHITE	RED	1.5"	FAA REGULATIONS REQUIRE THAT AFTER ENTERING OR EXITING THROUGH THIS SECURITY GATE YOU ARE REQUIRED TO WAIT UNTIL THE GATE CLOSES BEFORE PROCEEDING. FINES OR PENALTIES WILL BE IMPOSED.
2	8" x 8"	WHITE	RED	4"	GATE (SEE NOTE #2)
3	SEE WARNING SIGN DETAIL.				

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BLOOMINGTON, ILLINOIS
UPGRADE PERIMETER FENCE PHASE 1
FENCE DETAILS 3

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 DATE: 1/12/2007
 JOB No: 06085-03-00
 ILLINOIS PROJECT BMI-3653
 A.I.P. PROJECT 3-17-0006-47
 SHEET 16 OF 26 SHEETS

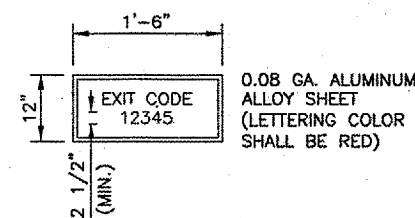
NOTES

- CANTILEVERED GATE SHALL BE SUFFICIENTLY RIGID TO WITHSTAND FLEXING OR BENDING DURING WINDY CONDITIONS. CONTRACTOR SHALL PROVIDE STIFFENERS, STRUCTURAL SHAPES IN EXCESS OF THE MINIMUM SPECIFIED DIMENSIONS OR ADDITIONAL ROLLERS AND POSTS SUFFICIENT TO PREVENT DISPLACEMENT OF THE GATE BY WIND OR BY UNAUTHORIZED PERSONNEL.
- CONTRACTOR SHALL PROVIDE AND INSTALL GATE AS COMPLETE WORKING UNIT. THE GATE WORK SHALL INCLUDE, BUT NOT BE LIMITED TO: GATE, OPERATOR, DIGITAL CODE CONTROL AND POWER CABLES, CONDUIT, TRENCHING, CIRCUIT BREAKERS, AND ALL CONNECTIONS, LABOR AND MATERIALS NECESSARY TO COMPLETE OPERATION.
- LOCATION OF THE GATE OPERATOR SHALL BE AS RECOMMENDED BY THE MANUFACTURER.
- PIPE BOLLARDS SHALL BE INSTALLED AT LOCATIONS SHOWN IN PLAN VIEW.
- THE FABRIC TYPE AND FINISH OF THE GATE, MATCH WITH PROPOSED FENCE OR AS DIRECTED BY THE ENGINEER.
- ALL SLIDING GATES SHALL HAVE ALL ROLLERS ENCLOSED IN STEEL OR PLASTIC SHROUDS TO PREVENT ACCIDENTAL INJURY.

UL 235 COMPLIANCE NOTES

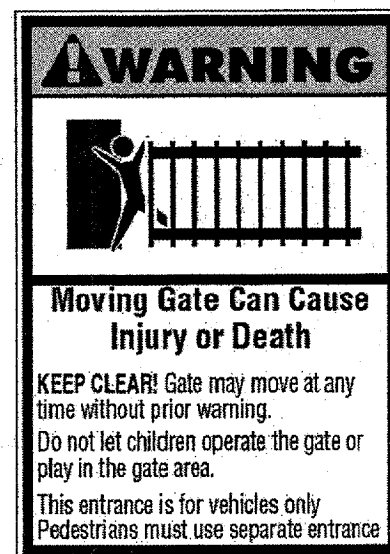
GATE INSTALLATION SHALL COMPLY WITH ALL REQUIREMENTS OF UL 235, INCLUDING, BUT NOT LIMITED TO:

- ALL OPENINGS OF THE SLIDE GATE ARE GUARDED OR SCREENED FROM THE BOTTOM OF THE GATE TO A MINIMUM OF 4 FEET ABOVE GROUND TO PREVENT A 2-1/4" DIAMETER SPHERE FROM PASSING THROUGH THE OPENINGS ANYWHERE IN THE GATE, AND IN THAT PORTION OF THE ADJACENT FENCE THAT THE GATE COVERS IN THE OPEN POSITION.
- ALL EXPOSED PINCH POINTS ARE ELIMINATED OR GUARDED AND GUARDING IS SUPPLIED FOR ALL EXPOSED ROLLERS.
- A WARNING SIGN (SEE DETAIL, THIS SHEET) MUST BE AFFIXED TO BOTH SIDES OF THE SLIDE GATE.
- FOR ADDITIONAL UL 235 REQUIREMENTS FOR THIS GATE INSTALLATION, SEE GATE OPERATOR DETAILS SHEET.



CONTRACTOR SHALL SUPPLY 5 SIGNS WITH DIFFERENT EXIT CODES, CAPABLE OF BEING PROGRAMED INTO MECHANICAL KEYPAD. INSTALL SIGN ON AIRSIDE OF SIWING GATE.

PEDESTRIAN ACCESS SIGN DETAIL
 N.T.S.



WARNING SIGN DETAIL

LOCATIONS, DETAILS AND CHARACTER OF EQUIPMENT SHOWN ON THIS SHEET IS GENERIC. EQUIPMENT LOCATIONS SHALL BE AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER.

BL061

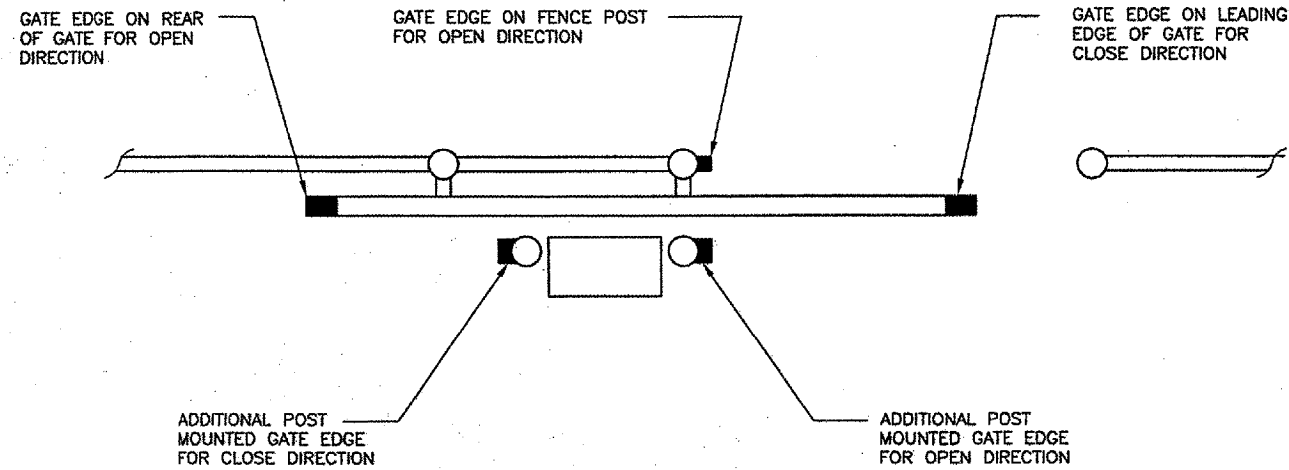
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IMAGE FILES: Contact Sensor.jpg

REVISIONS

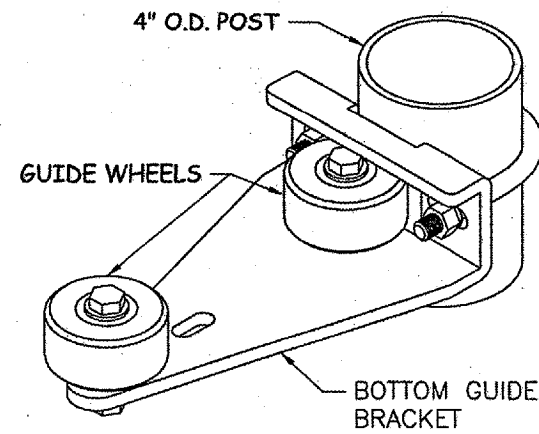
NUMBER	BY	DATE

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 AT FULL SCALE (3/4X22).

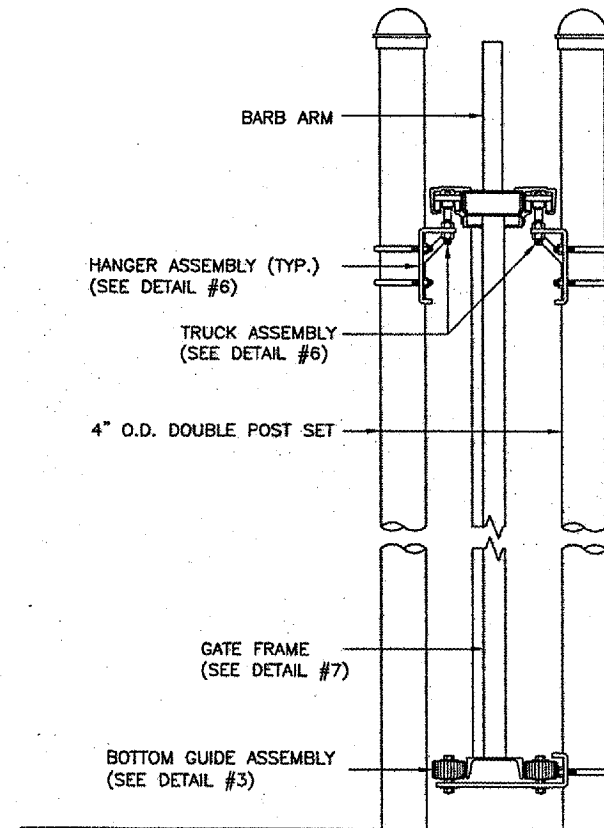


SECONDARY GATE OPERATOR ENTRAPMENT PROTECTION CONTACT SENSORS

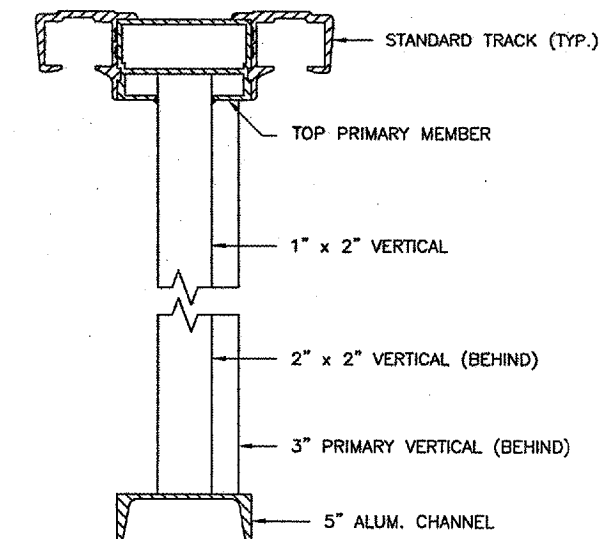
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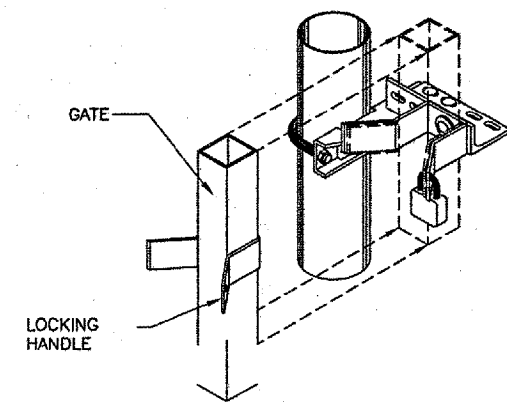
3
5 **BOTTOM GUIDE**
 N.T.S.



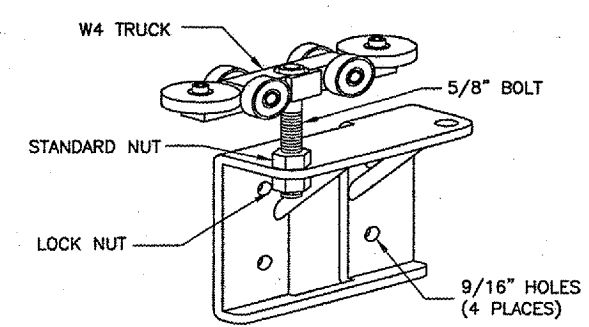
4
5 **ASSEMBLY SECTION**
 N.T.S.



7
5 **GATE FRAME SECTION**
 N.T.S.



5
5 **CATCH ASSEMBLY**
 N.T.S.



6
5 **GATE HANGER ASSEMBLY**
 N.T.S.

CANTILEVER SLIDE GATE DETAILS

**BLOOMINGTON-NORMAL AIRPORT AUTHORITY
 CENTRAL ILLINOIS REGIONAL AIRPORT
 BLOOMINGTON, ILLINOIS**

UPGRADE PERIMETER FENCE PHASE 1

FENCE DETAILS 4

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 DRAWN BY: CMT
 CHECKED BY: *RW*
 APPROVED BY: *RW*
 DATE: 1/12/2007
 JOB No: 06085-03-00
 ILLINOIS PROJECT BMI-3653
 A.I.P. PROJECT 3-17-0006-47
 SHEET 17 OF 26 SHEETS

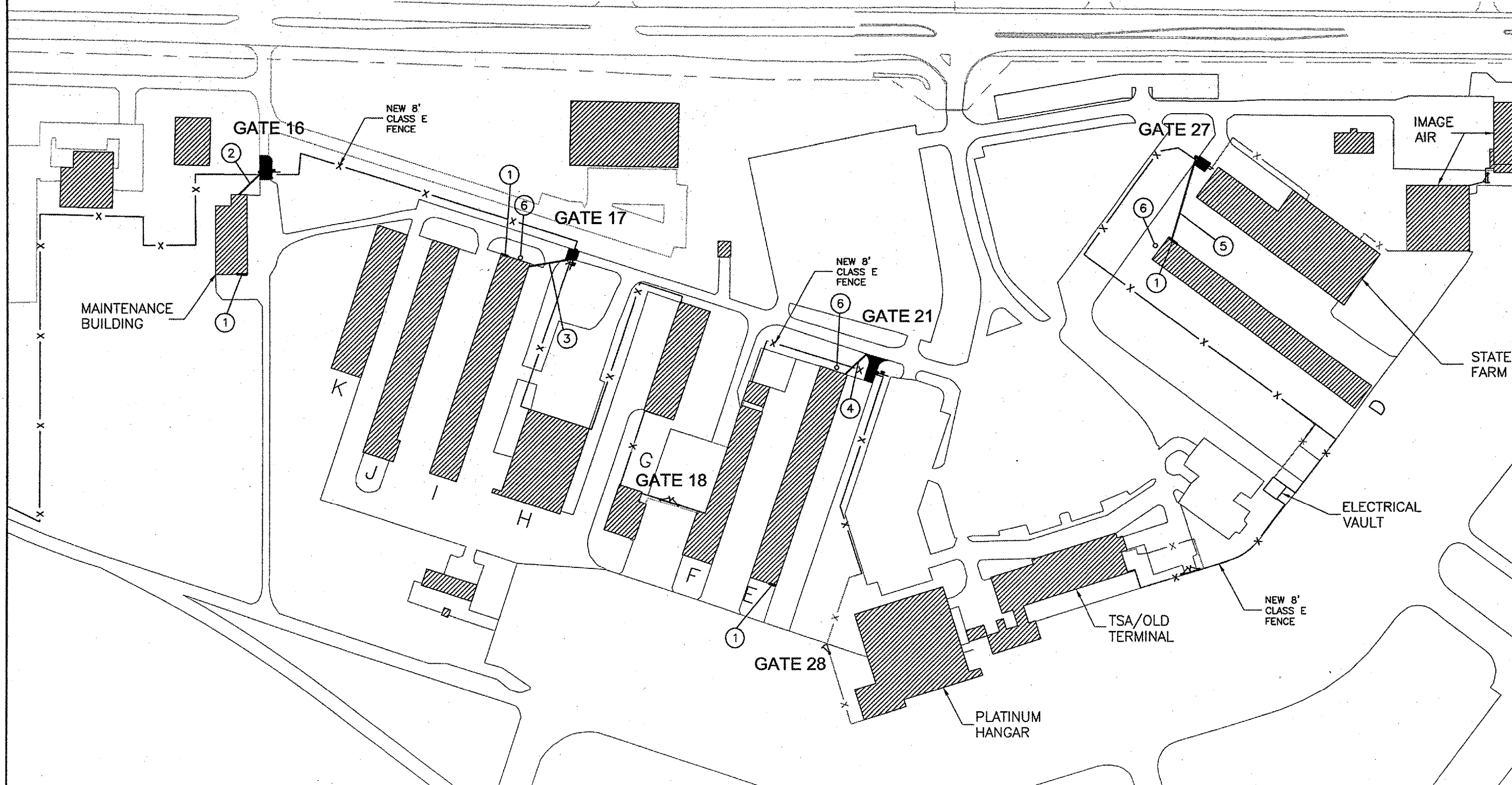
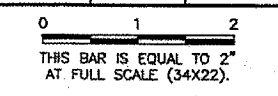


NOMENCLATURE

- ① EXISTING PANELBOARD WITH EXISTING GATE OPERATOR CIRCUIT BREAKER. TO BE REUSED TO FEED NEW GATE OPERATOR.
- ② TWO #8 THWN (120V), ONE #10 GROUND IN 3/4" CONDUIT TO EXISTING MAINTENANCE BUILDING. AT MAINTENANCE BUILDING, INSTALL NEW WIRING IN EXISTING CONDUIT TO EXISTING PANELBOARD AND CONNECT TO EXISTING GATE OPERATOR CIRCUIT BREAKER.
- ③ TWO #8 THWN (120V), ONE #10 GROUND IN 3/4" CONDUIT TO EXISTING T-HANGAR. AT T-HANGAR, INSTALL NEW WIRING IN EXISTING CONDUIT TO EXISTING PANELBOARD AND CONNECT TO EXISTING GATE OPERATOR CIRCUIT BREAKER.
- ④ TWO #6 THWN (120V), ONE #10 GROUND IN 3/4" CONDUIT TO EXISTING T-HANGAR. AT T-HANGAR, INSTALL NEW WIRING IN EXISTING CONDUIT TO EXISTING PANELBOARD AND CONNECT TO EXISTING GATE OPERATOR CIRCUIT BREAKER.
- ⑤ TWO #8 THWN (120V), ONE #10 GROUND IN 3/4" CONDUIT. DIRECTIONAL BORE UNDER EXISTING PAVEMENT AS REQUIRED. AT EXISTING T-HANGAR, INSTALL NEW WIRING IN EXISTING CONDUIT TO EXISTING PANELBOARD AND CONNECT TO EXISTING GATE OPERATOR CIRCUIT BREAKER.
- ⑥ WIRELESS CARD READER INTERFACE ANTENNA. SEE SHEET # 26.

FOR ADDITIONAL INFORMATION ON POWER AND CONTROL WIRING, SEE SHEETS #23 & #26.

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NUMBER	BY	DATE



BLOOMINGTON-NORMAL AIRPORT AUTHORITY
CENTRAL ILLINOIS REGIONAL AIRPORT
BLOOMINGTON, ILLINOIS
UPGRADE PERIMETER FENCE PHASE 1
ELECTRIC GATE SITE PLAN

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SHEET 18 OF 26 SHEETS	

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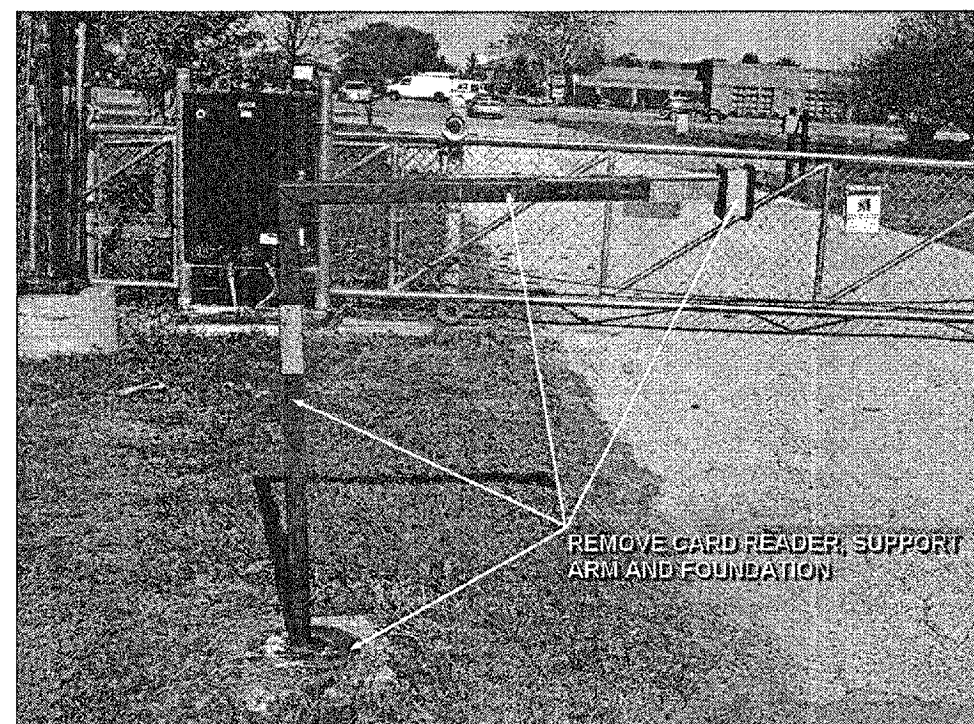
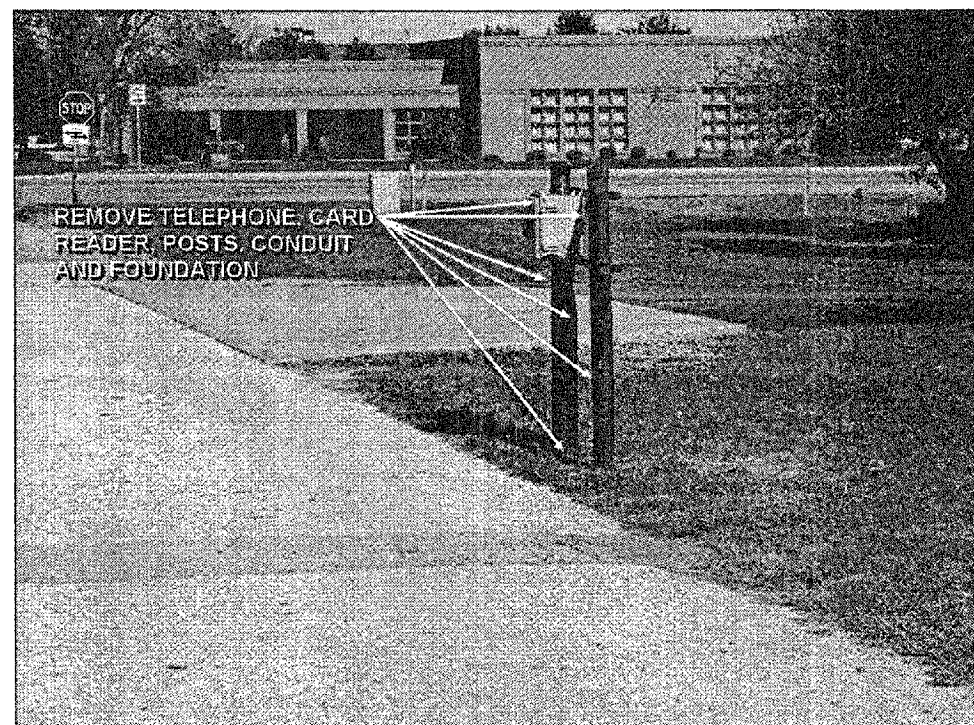
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SURVEY BOOK #
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IMAGE FILES: IMG_0484.JPG
IMG_0488.JPG
IMG_0494.JPG

REVISIONS

NUMBER	BY	DATE

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



GATE 16 REMOVAL NOTES

- 1) REMOVE GATE OPERATOR AND TURN OVER TO THE AIRPORT.
- 2) REMOVE GATE OPERATOR FOUNDATION AND DISPOSE OF OFFSITE.
- 3) REMOVE ALL CONDUIT TO 1 FOOT (1') MINIMUM BELOW GRADE.
- 4) DISCONNECT AND REMOVE BOTH PROXIMITY CARD READERS AND TURN OVER TO THE AIRPORT.
- 5) DISCONNECT AND REMOVE TELEPHONE AND TELEPHONE ENCLOSURE AND TURN OVER TO THE AIRPORT.
- 6) REMOVE CARD READER POSTS, SUPPORTS AND FOUNDATIONS AND DISPOSE OF OFFSITE.
- 7) RESTORE DISTURBED EARTH, LANDSCAPE, SEED, PROTECT AND FERTILIZE PER SPECIFICATIONS.

**BLOOMINGTON-NORMAL AIRPORT AUTHORITY
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BLOOMINGTON, ILLINOIS**

UPGRADE PERIMETER FENCE PHASE 1

EXISTING GATE 16 REMOVALS

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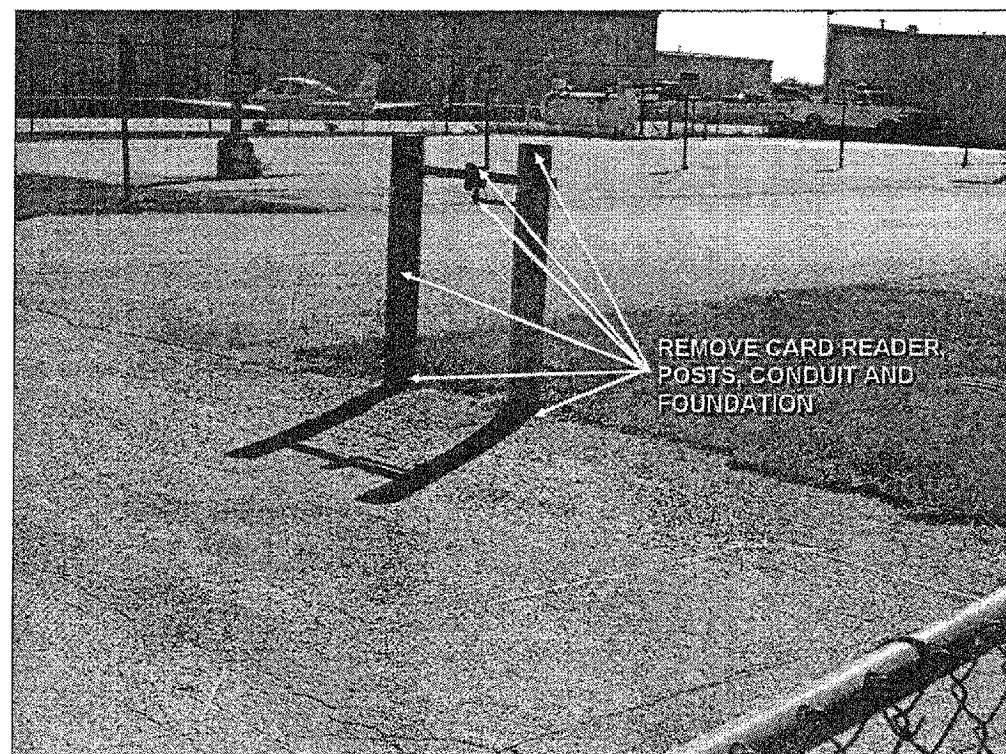
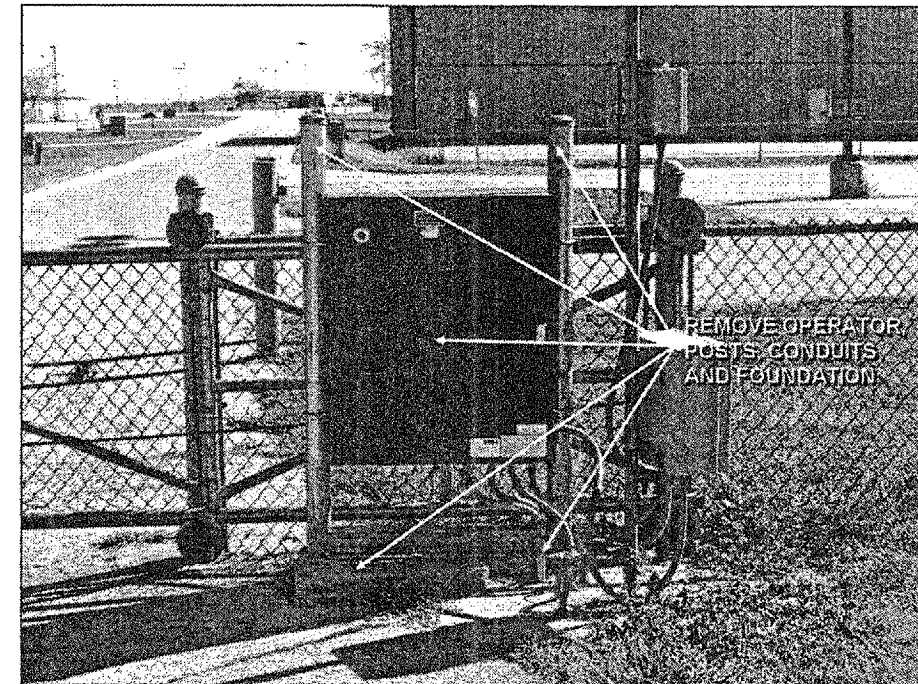
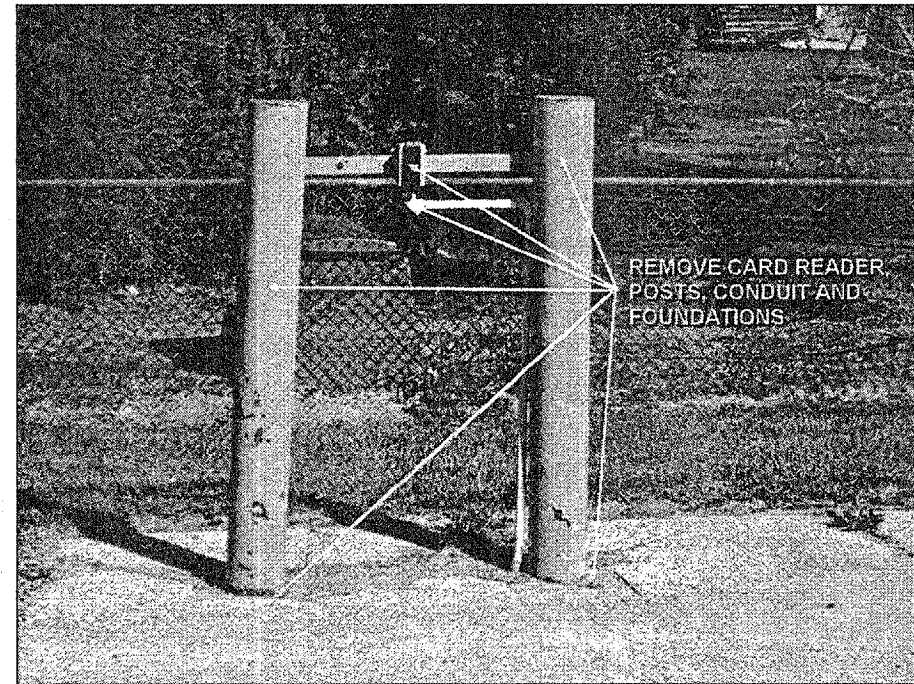
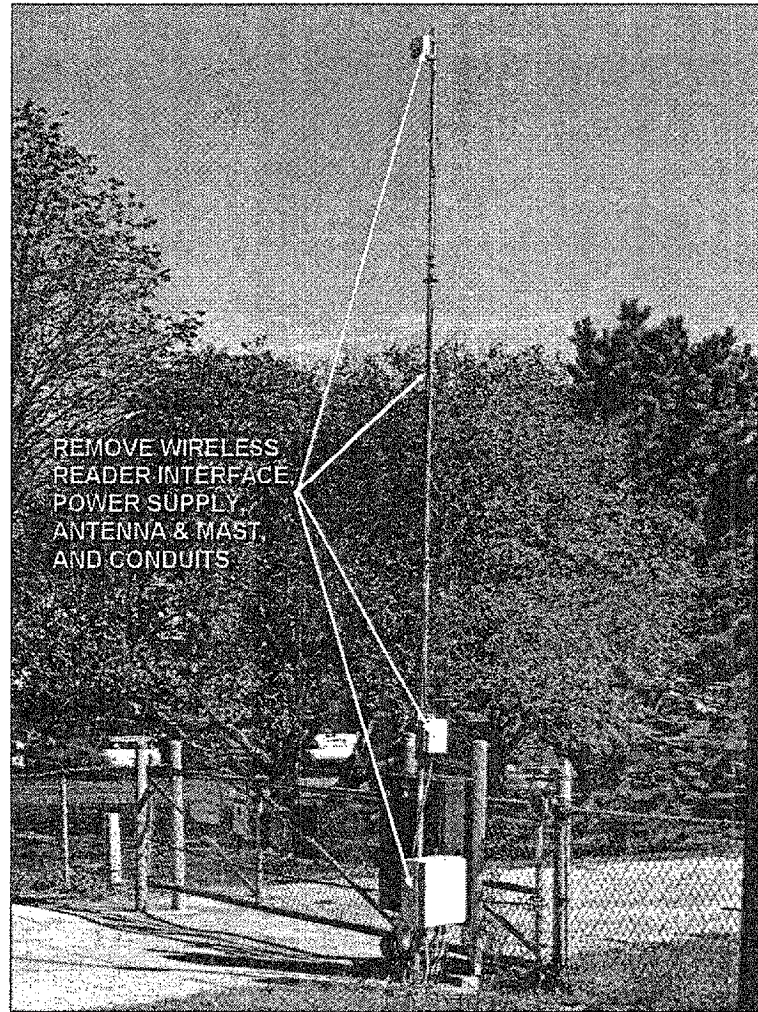
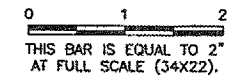


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ILLINOIS PROJECT BMI-3653
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REVISIONS

NUMBER	BY	DATE



GATE 17 REMOVAL NOTES

- 1) REMOVE GATE OPERATOR AND TURN OVER TO THE AIRPORT.
- 2) REMOVE GATE OPERATOR FOUNDATION AND DISPOSE OF OFFSITE.
- 3) REMOVE ALL CONDUIT TO 1 FOOT (1') MINIMUM BELOW GRADE.
- 4) DISCONNECT AND REMOVE BOTH PROXIMITY CARD READERS AND TURN OVER TO THE AIRPORT.
- 5) REMOVE CARD READER POSTS AND FOUNDATIONS AND DISPOSE OF OFFSITE.
- 6) DISCONNECT AND REMOVE WIRELESS READER INTERFACE, POWER SUPPLY AND ANTENNA AND TURN OVER TO THE AIRPORT.
- 7) REMOVE ANTENNA MAST AND FOUNDATION AND DISPOSE OF OFFSITE.
- 8) RESTORE DISTURBED EARTH, LANDSCAPE, SEED, PROTECT AND FERTILIZE PER SPECIFICATIONS.

BLOOMINGTON-NORMAL AIRPORT AUTHORITY
CENTRAL ILLINOIS REGIONAL AIRPORT
BLOOMINGTON, ILLINOIS
UPGRADE PERIMETER FENCE PHASE 1
EXISTING GATE 17 REMOVALS

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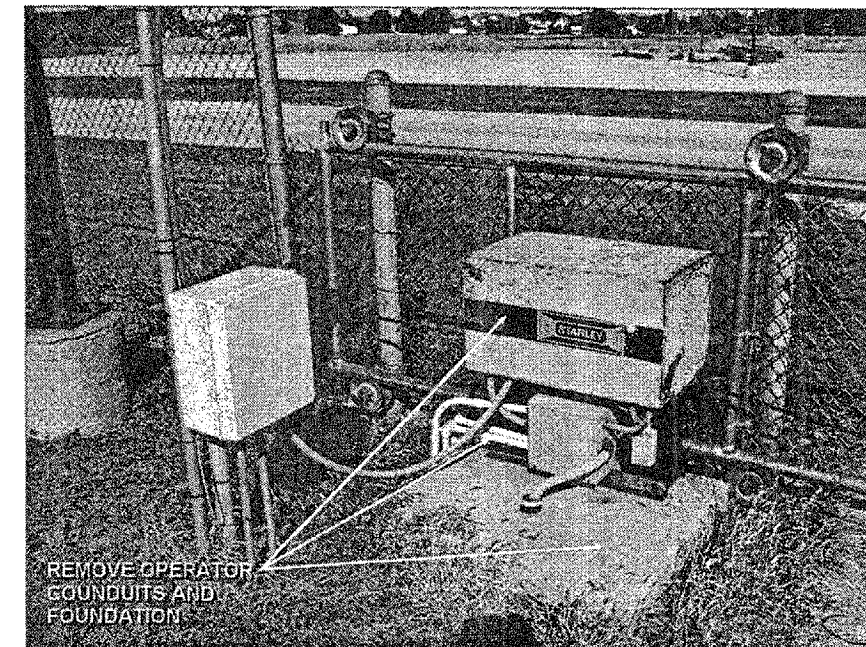
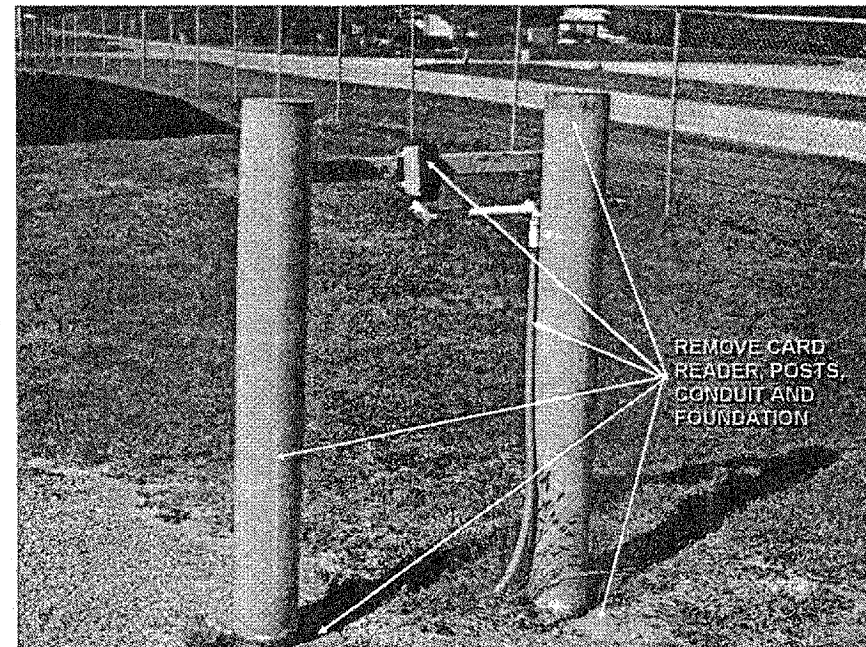
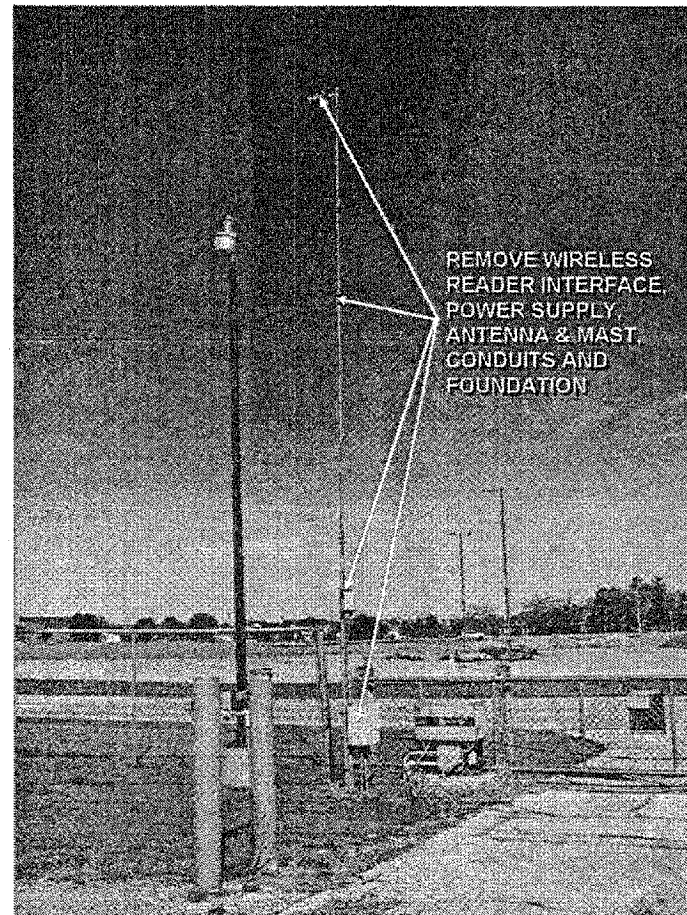
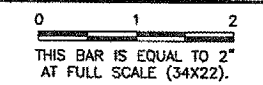


DESIGN BY:	CBG
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CHECKED BY:	<i>RW</i>
APPROVED BY:	<i>RW</i>
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ILLINOIS PROJECT BMI-3653
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REVISIONS

NUMBER	BY	DATE



GATE 21 REMOVAL NOTES

- 1) REMOVE GATE OPERATOR AND DISPOSE OF OFFSITE.
- 2) REMOVE GATE OPERATOR FOUNDATION AND DISPOSE OF OFFSITE.
- 3) REMOVE ALL CONDUIT TO 1 FOOT (1') MINIMUM BELOW GRADE.
- 4) DISCONNECT AND REMOVE BOTH PROXIMITY CARD READERS AND TURN OVER TO THE AIRPORT.
- 5) REMOVE CARD READER POSTS AND FOUNDATIONS AND DISPOSE OF OFFSITE.
- 6) DISCONNECT AND REMOVE WIRELESS READER INTERFACE, POWER SUPPLY AND ANTENNA AND TURN OVER TO THE AIRPORT.
- 7) REMOVE ANTENNA MAST AND FOUNDATION AND DISPOSE OF OFFSITE.
- 8) RESTORE DISTURBED EARTH, LANDSCAPE, SEED, PROTECT AND FERTILIZE PER SPECIFICATIONS.

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 CENTRAL ILLINOIS REGIONAL AIRPORT
 BLOOMINGTON, ILLINOIS**

**UPGRADE PERIMETER FENCE PHASE 1
 EXISTING GATE 21 REMOVALS**

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SHEET 21 OF 26 SHEETS	

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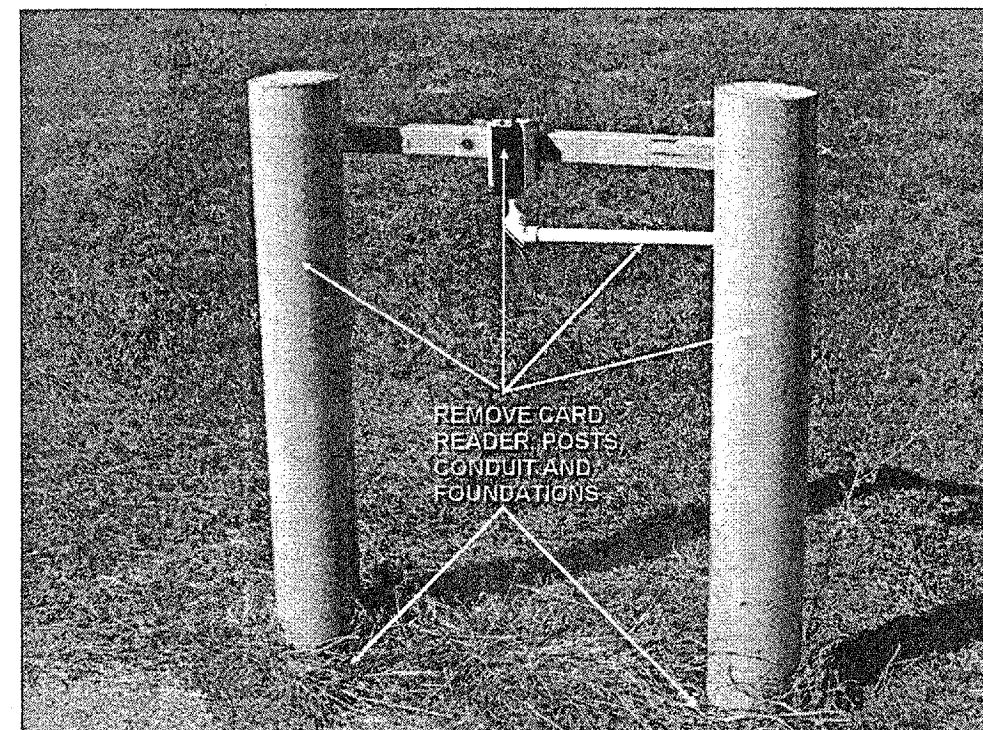
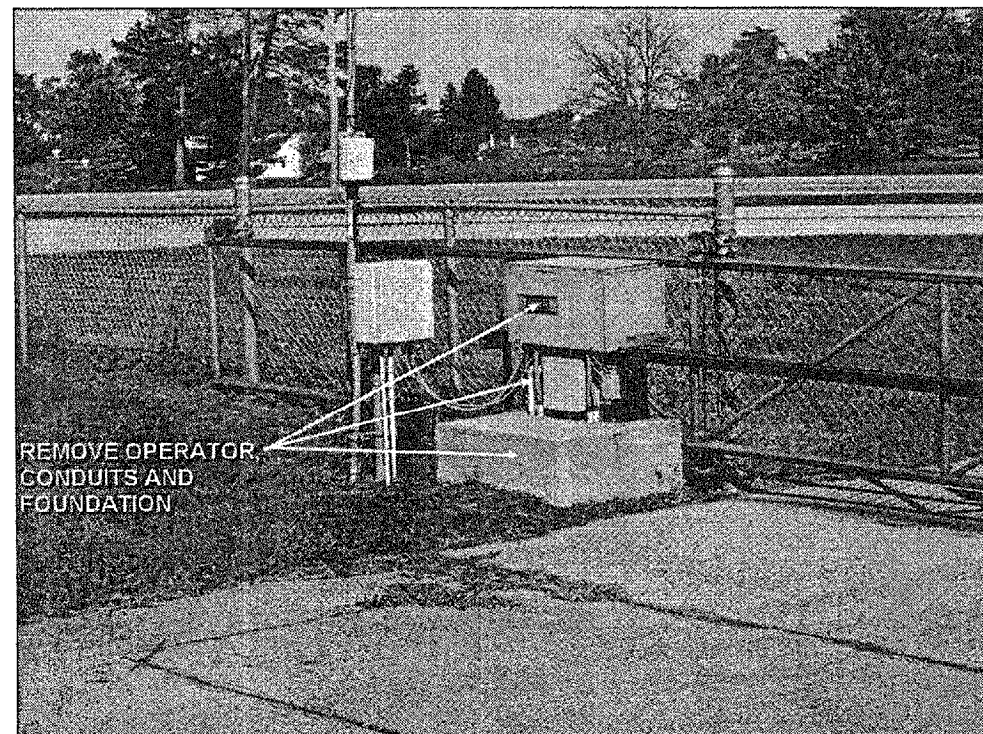
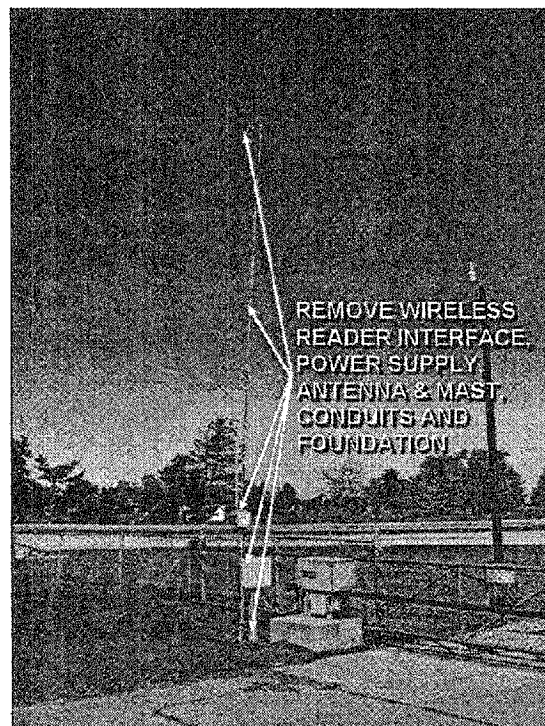
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IMG_0383.JPG
IMG_0392.JPG
IMG_0630.JPG

REVISIONS

NUMBER	BY	DATE

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



GATE 27 REMOVAL NOTES

- 1) REMOVE GATE OPERATOR AND DISPOSE OF OFFSITE.
- 2) REMOVE GATE OPERATOR FOUNDATION AND DISPOSE OF OFFSITE.
- 3) REMOVE ALL CONDUIT TO 1 FOOT (1') MINIMUM BELOW GRADE.
- 4) DISCONNECT AND REMOVE BOTH PROXIMITY CARD READERS AND TURN OVER TO THE AIRPORT.
- 5) REMOVE CARD READER POSTS AND FOUNDATIONS AND DISPOSE OF OFFSITE.
- 6) DISCONNECT AND REMOVE WIRELESS READER INTERFACE, POWER SUPPLY AND ANTENNA AND TURN OVER TO THE AIRPORT.
- 7) REMOVE ANTENNA MAST AND FOUNDATION AND DISPOSE OF OFFSITE.
- 8) RESTORE DISTURBED EARTH, LANDSCAPE, SEED, PROTECT AND FERTILIZE PER SPECIFICATIONS.

BLOOMINGTON-NORMAL AIRPORT AUTHORITY
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BLOOMINGTON, ILLINOIS

UPGRADE PERIMETER FENCE PHASE 1

EXISTING GATE 27 REMOVALS

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APPROVED BY:	<i>RW</i>
DATE:	1/12/2007
JOB No:	06085-03-00
ILLINOIS PROJECT BMI-3653 A.I.P. PROJECT 3-17-0006-47	
SHEET 22 OF 26 SHEETS	

NOMENCLATURE

- ① CANTILEVER GATE OPERATOR, CHAMBERLAIN LIFTMASTER MODEL SL575, 1/2 HP, 120V, SINGLE-PHASE, OR EQUIVALENT, SUITABLE FOR A MAXIMUM GATE WEIGHT OF 1200 LBS. SEE PLANS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- ② INDALA WEATHERPROOF LONG RANGE CARD READER, OR EQUIVALENT. SEE PLANS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- ③ DETECTOR LOOPS.
- ④ POLYMER CONCRETE HANDHOLE. HANDHOLE SHALL BE SOLID-BOTTOM DESIGN AND SHALL BE QUAZITE/HUBBELL #PG-2436-DA-42 WITH #PG-2436-HA-00-17 COVER, OR EQUIVALENT. HANDHOLES SHALL BE 24"W X 36"L X 42" DEEP. THE USE OF CHOPPED FIBERGLASS STRANDS, HIGH DENSITY POLYETHYLENE OR HIGH DENSITY POLYSTYRENE IS UNACCEPTABLE. PLASTIC AND/OR FIBERGLASS BOXES WILL NOT BE CONSIDERED AS ACCEPTABLE ALTERNATES FOR POLYMER CONCRETE HANDHOLES.
- ⑤ 6-CONDUCTOR #18 SHIELDED CABLE IN 1" CONDUIT. CONTRACTOR SHALL VERIFY WITH CARD READER SUPPLIER.
- ⑥ #10 GROUND FROM TELEPHONE LIGHTNING ARRESTOR. CONNECT TO GATE OPERATOR GROUND LUG.
- ⑦ TWO #12 THWN (120V), ONE #12 GROUND IN 3/4" CONDUIT TO EXISTING LIGHT FIXTURE. CONTRACTOR SHALL INTERCEPT AND CONNECT NEW CONDUIT TO EXISTING CONDUIT ENTERING LIGHT FIXTURE BASE. EXTEND NEW WIRING UP TO LIGHT FIXTURE OR TO FUSEHOLDER IF ONE IS PROVIDED IN POLE BASE.
- ⑧ WEATHERPROOF TELEPHONE, GAI-TRONICS 256-001, OR EQUIVALENT.
- ⑨ LOOP DETECTOR CABLES IN CONDUIT.
- ⑩ - TWO #12 THWN (120V), ONE #12 GROUND IN 3/4" CONDUIT. SPLICE TO FEEDERS FROM MAINTENANCE BUILDING OR HANGAR IN HANDHOLE.
 - 2/C #14 SHIELDED CABLE (GATE OPEN CONTROL FROM MAINTENANCE BUILDING OR HANGAR) IN 3/4" CONDUIT.
- ⑪ TELEPHONE CABLE IN CONDUIT. CONNECT TO SAME TELEPHONE LINE AS EXISTING TELEPHONE (TO BE REMOVED, SEE REMOVAL DETAILS).

GATE 16

- ⑫ - TWO #8 THWN (120V), ONE #10 GROUND IN 3/4" CONDUIT TO EXISTING MAINTENANCE BUILDING. AT MAINTENANCE BUILDING, INSTALL NEW WIRING IN EXISTING CONDUIT TO EXISTING PANELBOARD AND CONNECT TO EXISTING GATE OPERATOR CIRCUIT BREAKER.
 - TWO 6-CONDUCTOR #18 SHIELDED CABLES (CARD READERS), 2/C #14 SHIELDED CABLE (GATE OPERATOR CONTROL) IN 1-1/2" CONDUIT TO EXISTING MAINTENANCE BUILDING. AT MAINTENANCE BUILDING, INSTALL NEW CABLES IN EXISTING CONDUIT TO EXISTING ACCESS CONTROL SYSTEM.

GATE 17

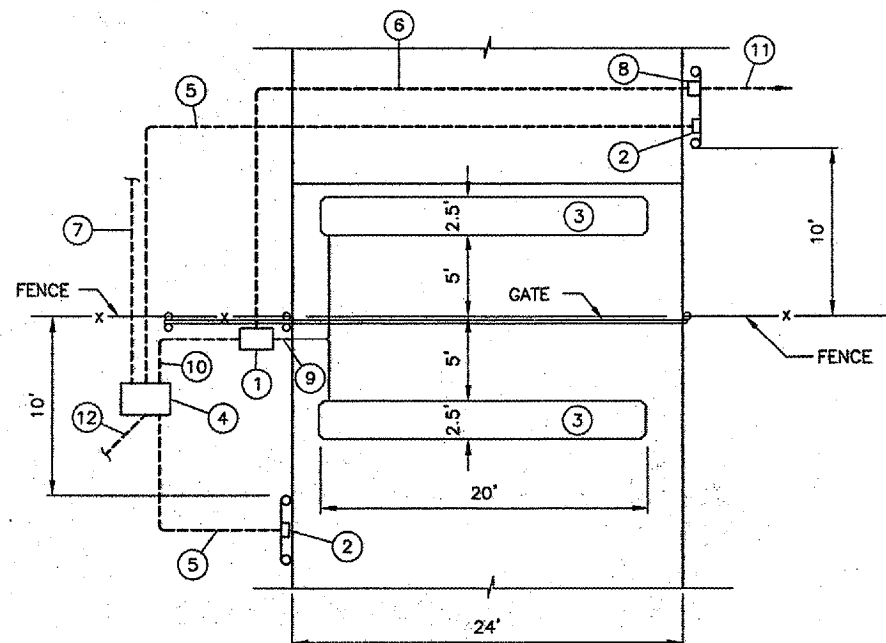
- ⑫ - TWO #8 THWN (120V), ONE #10 GROUND IN 3/4" CONDUIT TO EXISTING HANGAR. AT HANGAR, INSTALL NEW WIRING IN EXISTING CONDUIT TO EXISTING PANELBOARD AND CONNECT TO EXISTING GATE OPERATOR CIRCUIT BREAKER.
 - TWO 6-CONDUCTOR #18 SHIELDED CABLES (CARD READERS), 2/C #14 SHIELDED CABLE (GATE OPERATOR CONTROL) IN 1-1/2" CONDUIT TO NEW WIRELESS CARD READER INTERFACE PANEL IN EXISTING HANGAR.

GATE #21

- ⑫ - TWO #8 THWN (120V), ONE #10 GROUND IN 3/4" CONDUIT TO EXISTING T-HANGAR. AT T-HANGAR, INSTALL NEW WIRING IN EXISTING CONDUIT TO EXISTING PANELBOARD AND CONNECT TO EXISTING GATE OPERATOR CIRCUIT BREAKER.
 - TWO 6-CONDUCTOR #18 SHIELDED CABLES (CARD READERS), 2/C #14 SHIELDED CABLE (GATE OPERATOR CONTROL) IN 1-1/2" CONDUIT TO NEW WIRELESS CARD READER INTERFACE PANEL IN EXISTING HANGAR.

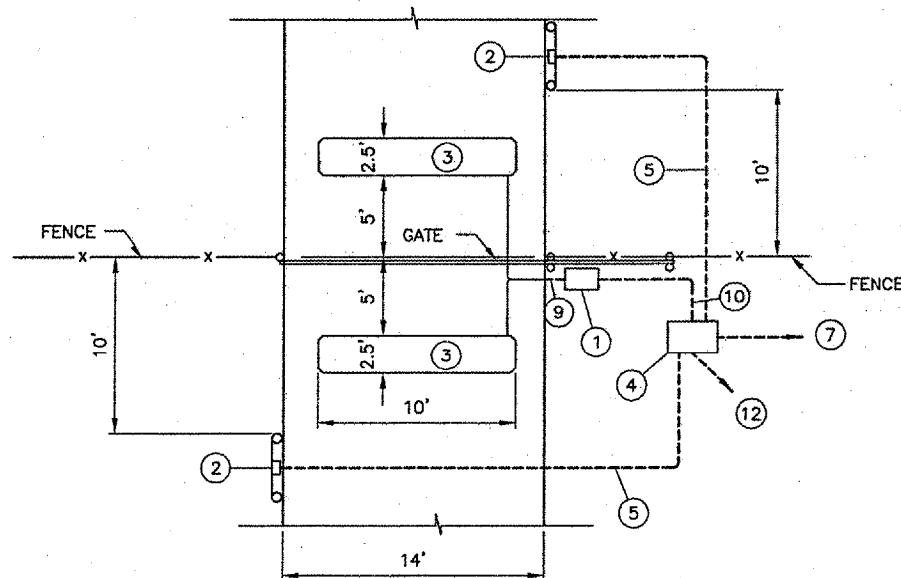
GATE #27

- ⑫ - TWO #8 THWN (120V), ONE #10 GROUND IN 3/4" CONDUIT. PUSH OR DIRECTIONAL BORE TO EXISTING T-HANGAR. AT T-HANGAR, INSTALL NEW WIRING IN EXISTING CONDUIT TO EXISTING PANELBOARD AND CONNECT TO EXISTING GATE OPERATOR CIRCUIT BREAKER.
 - TWO 6-CONDUCTOR #18 SHIELDED CABLES (CARD READERS), 2/C #14 SHIELDED CABLE (GATE OPERATOR CONTROL) IN 1-1/2" CONDUIT TO NEW WIRELESS CARD READER INTERFACE PANEL IN EXISTING HANGAR. PUSH OR DIRECTIONAL BORE UNDER EXISTING PAVEMENT.

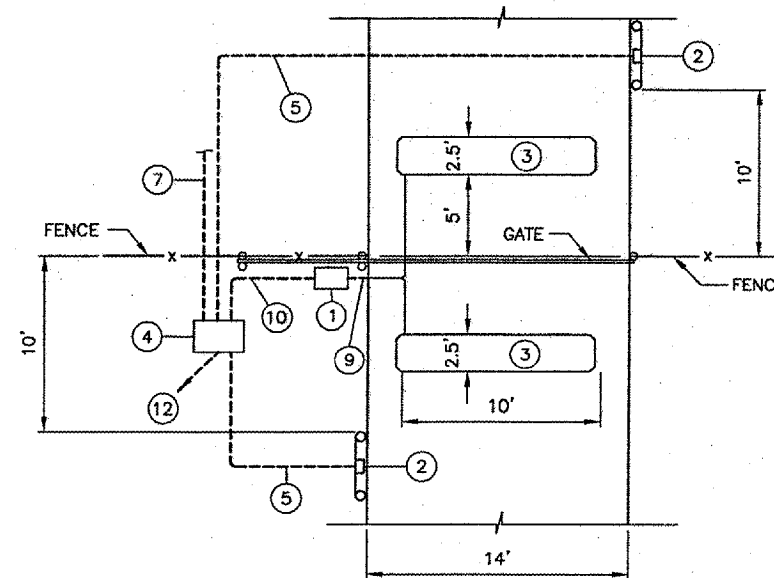


GATE NO. 16
N.T.S.

ALL SPLICES SHALL BE MADE USING TWIST-ON CONNECTORS PRE-FILLED WITH SILICONE-BASED SEALANT TO PROTECT AGAINST MOISTURE AND CORROSION.



GATE NO. 17
N.T.S.



GATE NO. 21 AND GATE NO. 27
N.T.S.

IMAGE FILES: avi-1661.tif
avi-1662.tif

REVISIONS

NUMBER	BY	DATE

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

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 BLOOMINGTON, ILLINOIS
 UPGRADE PERIMETER FENCE PHASE 1
 NEW ELECTRIC GATE DETAILS 1

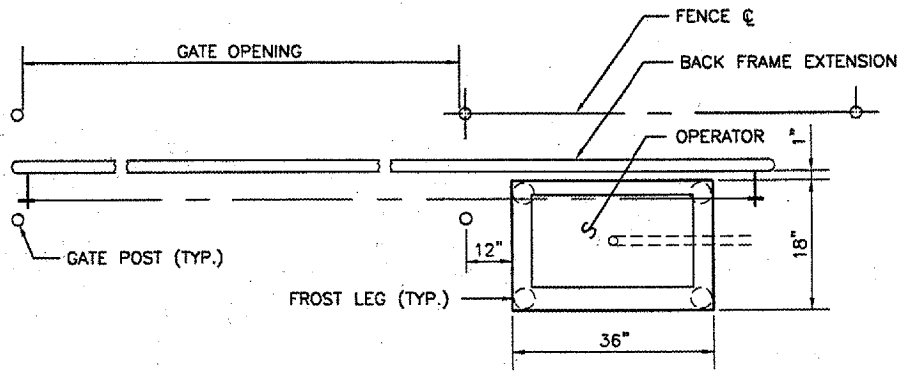
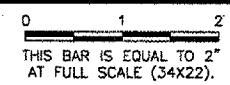
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 JOB No: 06085-03-00

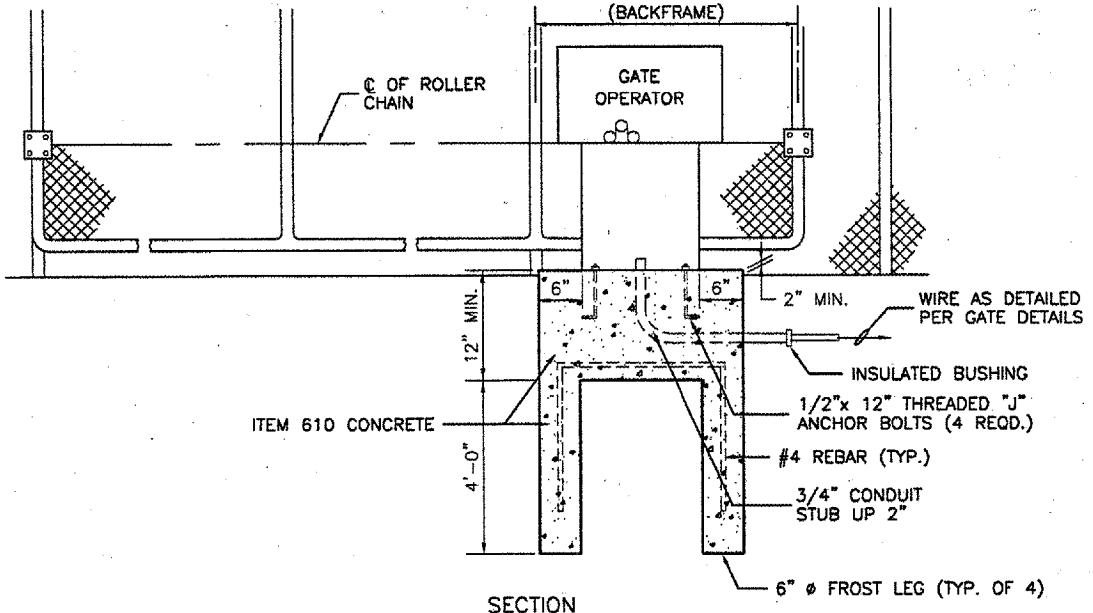
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IMAGE FILES:

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NUMBER	BY	DATE

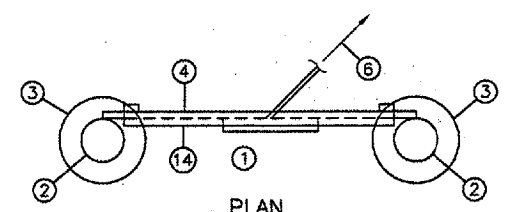


PLAN

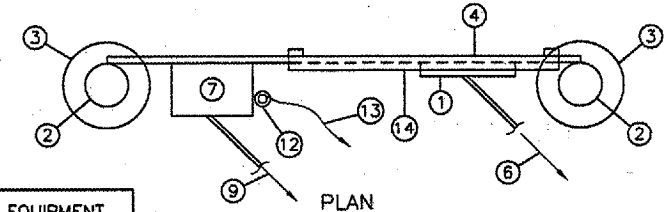


SECTION

GATE OPERATOR DETAILS
N.T.S.

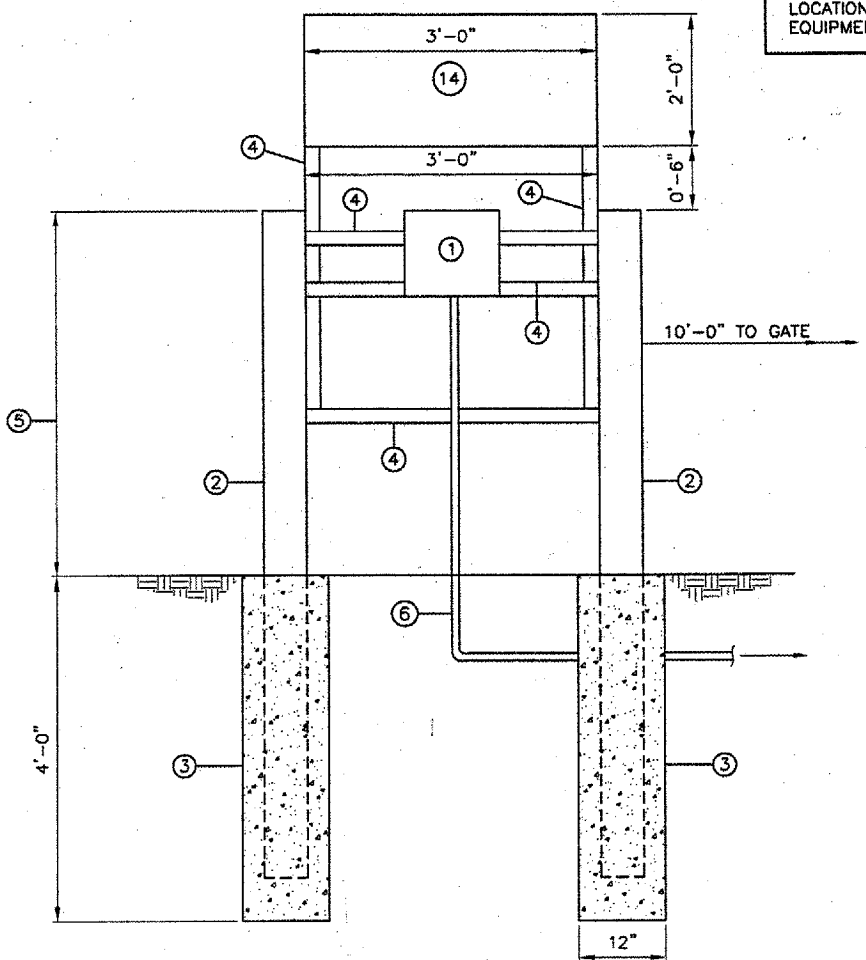


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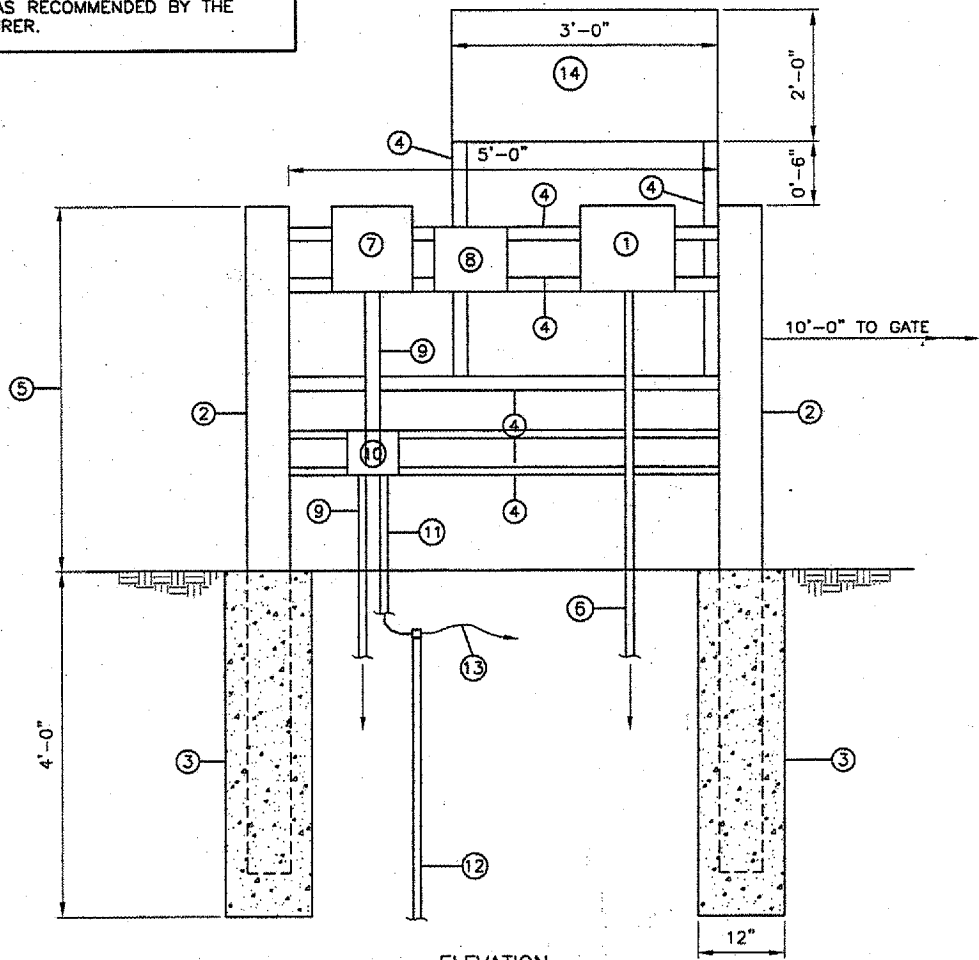


PLAN

LOCATIONS, DETAILS AND CHARACTER OF EQUIPMENT SHOWN ON THIS SHEET ARE GENERIC. EQUIPMENT LOCATIONS SHALL BE AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER.



CARD READER INSTALLATION
(TYPICAL 7 LOCATIONS)
N.T.S.



ELEVATION

CARD READER & TELEPHONE INSTALLATION
(GATE # 16 LAND SIDE)
N.T.S.

CARD READER & TELEPHONE NOMENCLATURE

- ① INDALA WEATHERPROOF LONG RANGE CARD READER, OR EQUIVALENT. SEE PLANS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- ② CONCRETE-FILLED 6" DIAMETER STEEL POST, PAINTED YELLOW.
- ③ CONCRETE FOUNDATION.
- ④ 2" WIDE x 1/4" THICK STEEL, WELDED TO 6" PIPE AND PAINTED YELLOW.
- ⑤ AS RECOMMENDED BY GATE OPERATOR INSTALLER, NOMINALLY 42".
- ⑥ 6-CONDUCTOR #18 SHIELDED CABLE IN 1" CONDUIT. CONTRACTOR SHALL VERIFY WITH CARD READER SUPPLIER.
- ⑦ WEATHERPROOF TELEPHONE, GAI-TRONICS 256-001, OR EQUIVALENT.
- ⑧ LAMINATED NON-METALLIC SIGN, 1" HIGH BLACK LETTERS ON WHITE BACKGROUND, THAT READS AS FOLLOWS:
 M1 MAINTENANCE OFFICE: 7662-3513
 M2 AIRPORT ADMIN. OFFICE: 7663-7384
 M3 AIRPORT SECURITY: 7663-7363
 M4 IMAGE AIR: 7663-2303
 M5 PLATINUM JET CTR.: 7662-7454
- ⑨ TELEPHONE LINE IN 1/2" CONDUIT.
- ⑩ NEMA 4X HINGED COVER JUNCTION BOX WITH TELEPHONE LINE SURGE ARRESTOR.
- ⑪ #10 GROUND IN 1/2" PVC CONDUIT.
- ⑫ 3/4" DIAMETER x 10' LONG COPPERCLAD GROUND ROD, MINIMUM BURY: 1'-0". CONNECTION OF GROUND WIRES TO GROUND ROD SHALL BE VIA EXOTHERMIC WELD, CADWELD, OR EQUIVALENT. BOLTED CONNECTIONS ARE NOT ACCEPTABLE.
- ⑬ #10 GROUND WIRE DIRECT BURIED TO GROUND LUG OF GATE OPERATOR.
- ⑭ DIRECTORY DISPLAY SIGN-BOLTED TO 2" WIDE x 1/4" THICK SHEET.

BLOOMINGTON-NORMAL AIRPORT AUTHORITY
CENTRAL ILLINOIS REGIONAL AIRPORT
BLOOMINGTON, ILLINOIS
UPGRADE PERIMETER FENCE PHASE 1
NEW ELECTRIC GATE DETAILS 2

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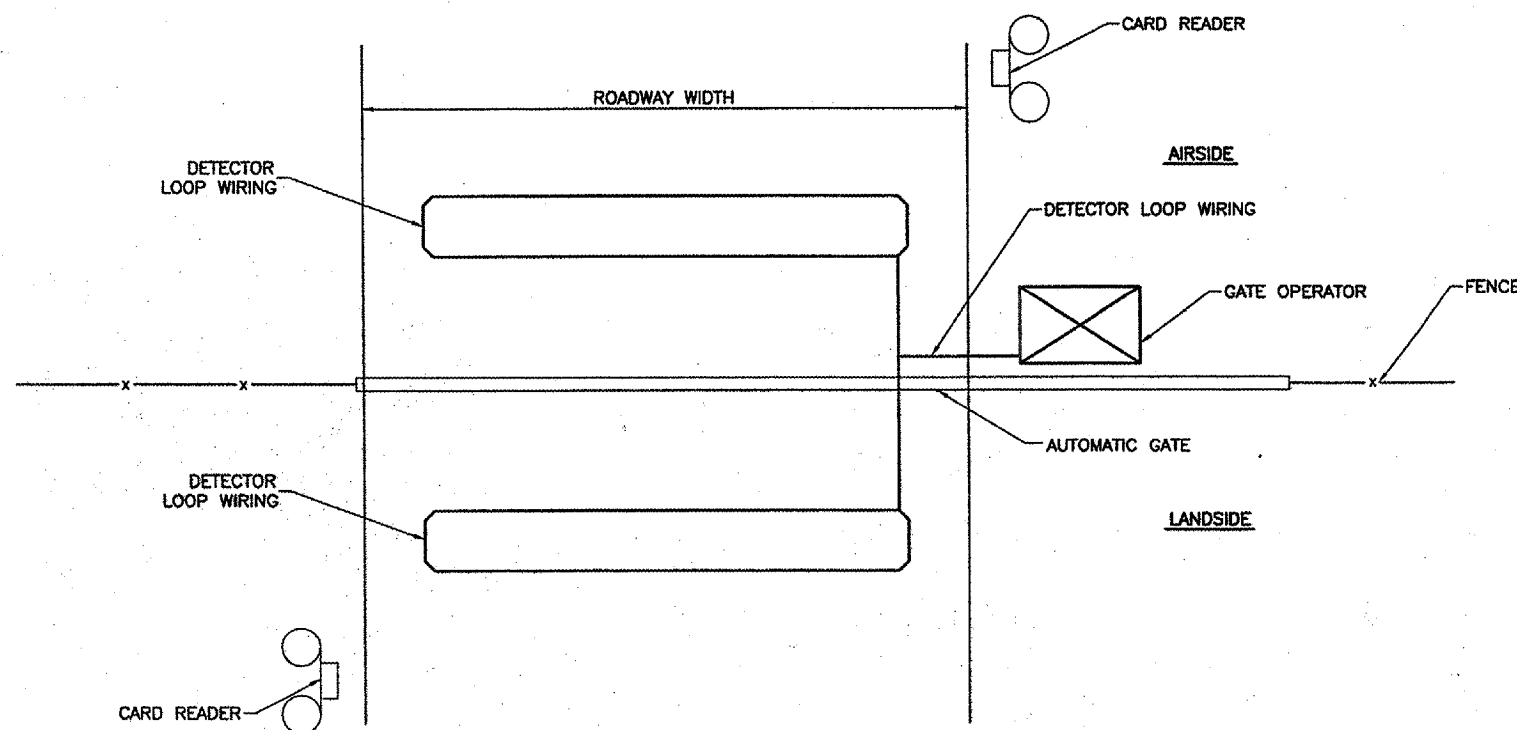
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SHEET	24 OF 26 SHEETS

IMAGE FILES:

REVISIONS

NUMBER	BY	DATE

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



TYP. GATE PLAN
 N.T.S.

NOTE: LOCATIONS, DETAILS AND CHARACTER OF EQUIPMENT SHOWN ON THIS SHEET ARE GENERIC. EQUIPMENT LOCATION SHALL BE AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER.

SUMMARY OF OPERATION

1. THE GATES SHALL HAVE AN AUTOMATIC GATE OPERATOR WITH TWO PROXIMITY CARD READERS AND REMOTE GATE OPEN CONTROL FROM ACCESS CONTROLLER IN MAINTENANCE BLDG. ONCE THE GATE IS OPENED IT WILL REMAIN OPEN FOR THE TIME SPECIFIED BY THE OWNER AFTER THE LOOP PICKUPS DETERMINE THAT THERE ARE NO VEHICLES OVER THE PICKUP LOOPS.
2. ACTUATING THE GATE OPENS VIA THE CARD READER REQUIRES THE VEHICLE TO APPROACH THE GATE ENTRANCE AND STOP. THE DRIVER ACTIVATES THE GATE OPERATOR BY SWEEPING HIS CARD. THE ACCESS CONTROL DEVICE TRANSMITS AN IMPULSE TO ACTIVATE THE GATE OPERATOR TO OPEN THE GATE. AFTER THE GATE IS FULLY OPENED AND STOPPED, THE VEHICLE PROCEEDS THROUGH THE OPENING, PASSING OVER THE LOOPS. WHILE THE VEHICLE IS IN THE LOOP SENSING RANGE, AN IMPULSE IS TRANSMITTED TO THE GATE OPERATOR TO HOLD THE GATE IN THE OPEN POSITION. WHEN THE LOOP HAS BEEN CLEARED, THE AUTOMATIC TIMER IS ACTIVATED AND, WHEN THE USER-DETERMINED TIME HAS ELAPSED, IT WILL ACTIVATE THE GATE OPERATOR TO CLOSE THE GATE.

NOTES

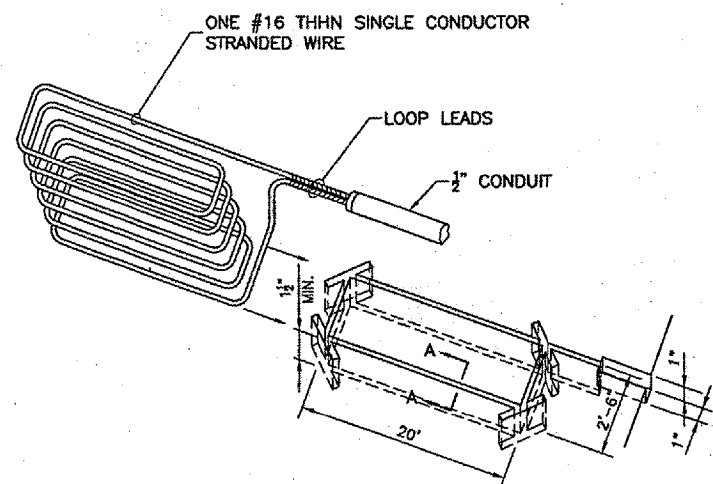
1. LOOP LEADS ARE LIMITED TO 100 FEET.
2. LOOP LEADS MUST HAVE FOUR (4) TWISTS PER FOOT.
3. LOOP AND LOOP LEADS MUST BE LOCATED, AT LEAST, 18" FROM ANY ELECTRICAL POWER SERVICE OR STEEL REINFORCEMENT.
4. LOOP LEADS MUST BE IN SEPARATE CONDUIT BETWEEN LOOP AND DETECTOR. THEY MUST NOT SHARE CONDUIT WITH OTHER WIRING OR LEADS FROM OTHER LOOPS.
5. WIRE SHALL BE #16 THHN SINGLE CONDUCTOR STRANDED WIRE.
6. ALL WIRE SHALL BE CONTINUOUS WITHOUT SPLICING.

CAUTION:

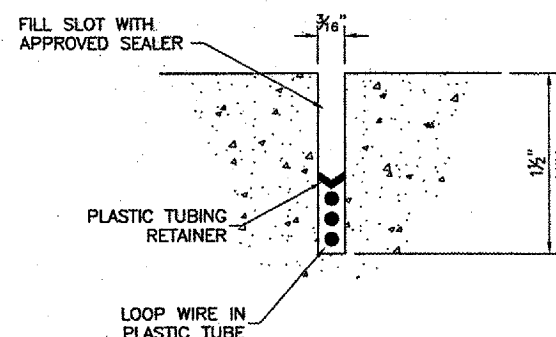
- DO NOT SPLICE WIRE.
- DO NOT FRACTURE WIRE INSULATION. LOOPS SHORTED TO GROUND WILL CAUSE DETECTOR MALFUNCTION. WHEN PLACING WIRE IN THE SLOT, DO NOT USE SCREWDRIVER OR OTHER SHARP TOOLS.

TYPICAL LAYOUT FOR LOOP:

- SAW SLOT 3/16" WIDE x 1-1/2" DEEP. MAKE RECTANGULAR SHAPE TO SPECIFIED LOOP DIMENSIONS PLUS SLOT FOR LEAD CONDUIT.
- GROUT WITH NO. 202 WEATHERBAN SEALANT (A PRODUCT OF 3M CO.) OR APPROVED EQUIVALENT ... (EXAMPLE: DE WITTS NO. 99 BLACK MASTIC CAULK).



PERSPECTIVE VIEW OF
 DETECTOR LOOP SAW SLOT



SECTION A-A

DETECTOR LOOP DETAILS
 N.T.S.

BLOOMINGTON-NORMAL AIRPORT AUTHORITY
 CENTRAL ILLINOIS REGIONAL AIRPORT
 BLOOMINGTON, ILLINOIS
 UPGRADE PERIMETER FENCE PHASE 1
 NEW ELECTRIC GATE DETAILS 3

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GATE POWER AND CONTROL BLOCK DIAGRAM NOMENCLATURE

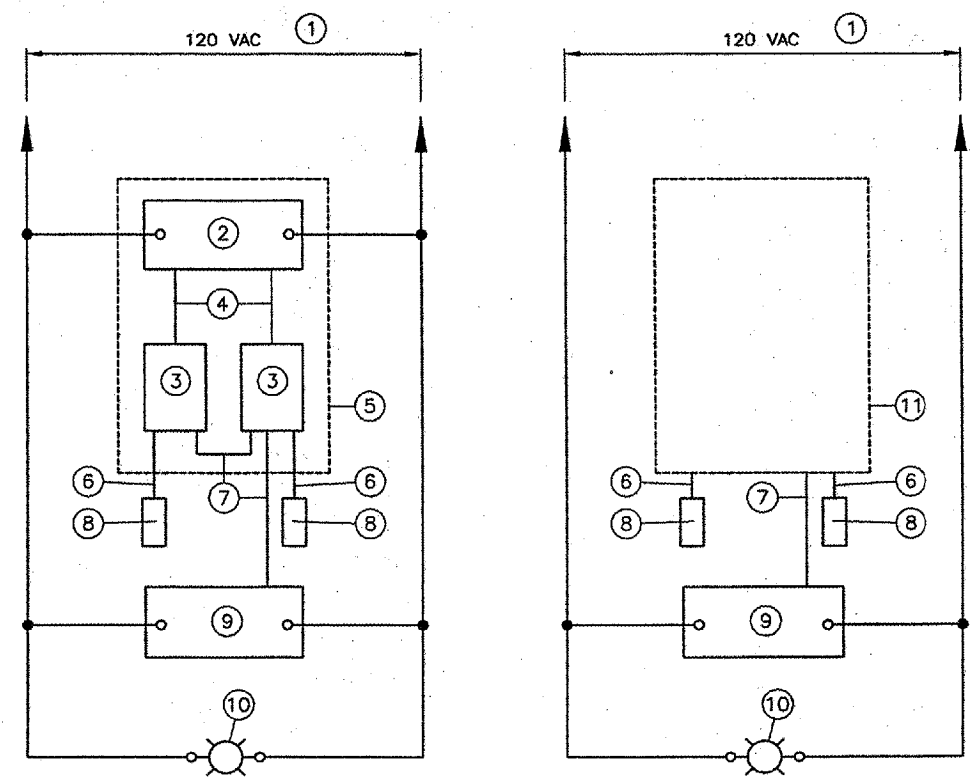
- ① 120V POWER WIRING FROM EXISTING PANELBOARD CIRCUIT BREAKER. SEE ELECTRICAL GATE SITE PLAN FOR WIRE AND CONDUIT SIZES.
- ② WIRELESS CARD READER INTERFACE POWER SUPPLY.
- ③ WIRELESS CARD READER INTERFACE.
- ④ 2/C #14 SHIELDED CABLE (12VDC POWER).
- ⑤ (INSIDE HANGAR) NEMA 4X STAINLESS STEEL, HINGED COVER ENCLOSURE, HOFFMAN, OR EQUIVALENT, SIZED AS REQUIRED TO HOUSE EQUIPMENT.
- ⑥ 6-CONDUCTOR #18 SHIELDED CABLE (CONTRACTOR SHALL VERIFY WITH CARD READER SUPPLIER).
- ⑦ 2/C #14 SHIELDED CABLE (GATE OPEN CONTROL).
- ⑧ CARD READER, LOCATED AT NEW GATE.
- ⑨ NEW GATE OPERATOR.
- ⑩ EXISTING AREA LIGHT.
- ⑪ ACCESS CONTROLLER IN MAINTENANCE BLDG.

WIRELESS INTERFACE DETAIL NOMENCLATURE

- ① ANTENNA, SUPPLIED BY THE WIRELESS CARD READER INTERFACE SUPPLIER AND INSTALLED PER THEIR INSTRUCTIONS (TYP. OF TWO).
- ② 5-FOOT GROUNDING CONNECTION CABLE, SUPPLIED BY THE WIRELESS CARD READER INTERFACE SUPPLIER (TYP. OF TWO).
- ③ GROUNDING BLOCK SUPPLIED BY THE WIRELESS CARD READER INTERFACE SUPPLIER (TYP. OF TWO).
- ④ 15-FOOT COAXIAL CABLE SUPPLIED BY THE WIRELESS CARD READER INTERFACE SUPPLIER (TYP. OF TWO). INSTALL WITH "DRIP LOOP" AS SHOWN.
- ⑤ GROUND WIRE, INSTALLED PER WIRELESS INTERFACE SUPPLIER REQUIREMENTS.
- ⑥ ANTENNA MAST IN FOUNDATION AND ANCHORED TO HANGAR WALL, INSTALLED PER WIRELESS INTERFACE SUPPLIER REQUIREMENTS.
- ⑦ ITEM 610 CONCRETE FOUNDATION, INSTALLED PER WIRELESS INTERFACE SUPPLIER REQUIREMENTS.
- ⑧ GROUND ROD(S), INSTALLED PER WIRELESS INTERFACE SUPPLIER REQUIREMENTS. CONNECTION TO GROUND ROD(S) SHALL BE VIA EXOTHERMIC WELD, CADWELD, OR EQUIVALENT. BOLTED CONNECTIONS ARE NOT ACCEPTABLE.
- ⑨ NEMA 4X STAINLESS STEEL JUNCTION BOX, SIZED AS REQUIRED. PROVIDE TWO SEALING GROMMETS IN OPENINGS IN BOTTOM OF JUNCTION BOX FOR COAXIAL CABLE ENTRY.
- ⑩ (INSIDE HANGAR) NEMA 4X STAINLESS STEEL, HINGED COVER ENCLOSURE, HOFFMAN, OR EQUIVALENT, SIZED AS REQUIRED TO HOUSE THE FOLLOWING EQUIPMENT:
 - TWO WIRELESS CARD READER INTERFACE UNITS, ONE FOR INCOMING (LANDSIDE) CARD READER, ONE FOR OUTGOING (AIRSIDE) CARD READER.
 - WIRELESS CARD READER INTERFACE POWER SUPPLY.
 INSTALL PER WIRELESS INTERFACE SUPPLIER REQUIREMENTS.
- ⑪ 120V POWER WIRING FROM EXISTING PANELBOARD CIRCUIT BREAKER. SEE ELECTRICAL GATE SITE PLAN FOR WIRE AND CONDUIT SIZES.
- ⑫ 120V POWER WIRING TO NEW HANDHOLE FOR NEW GATE OPERATOR AND EXISTING AREA LIGHT POWER. SEE ELECTRICAL GATE SITE PLAN AND NEW GATE DETAILS FOR WIRE AND CONDUIT SIZES.
- ⑬ TWO 6-CONDUCTOR #18 SHIELDED CABLES (CARD READERS, CONTRACTOR SHALL VERIFY WITH CARD READER SUPPLIER), 2/C #14 SHIELDED CABLE (GATE OPEN CONTROL) IN 1-1/2" CONDUIT TO NEW HANDHOLE. SEE NEW GATE DETAILS FOR ADDITIONAL INFORMATION.

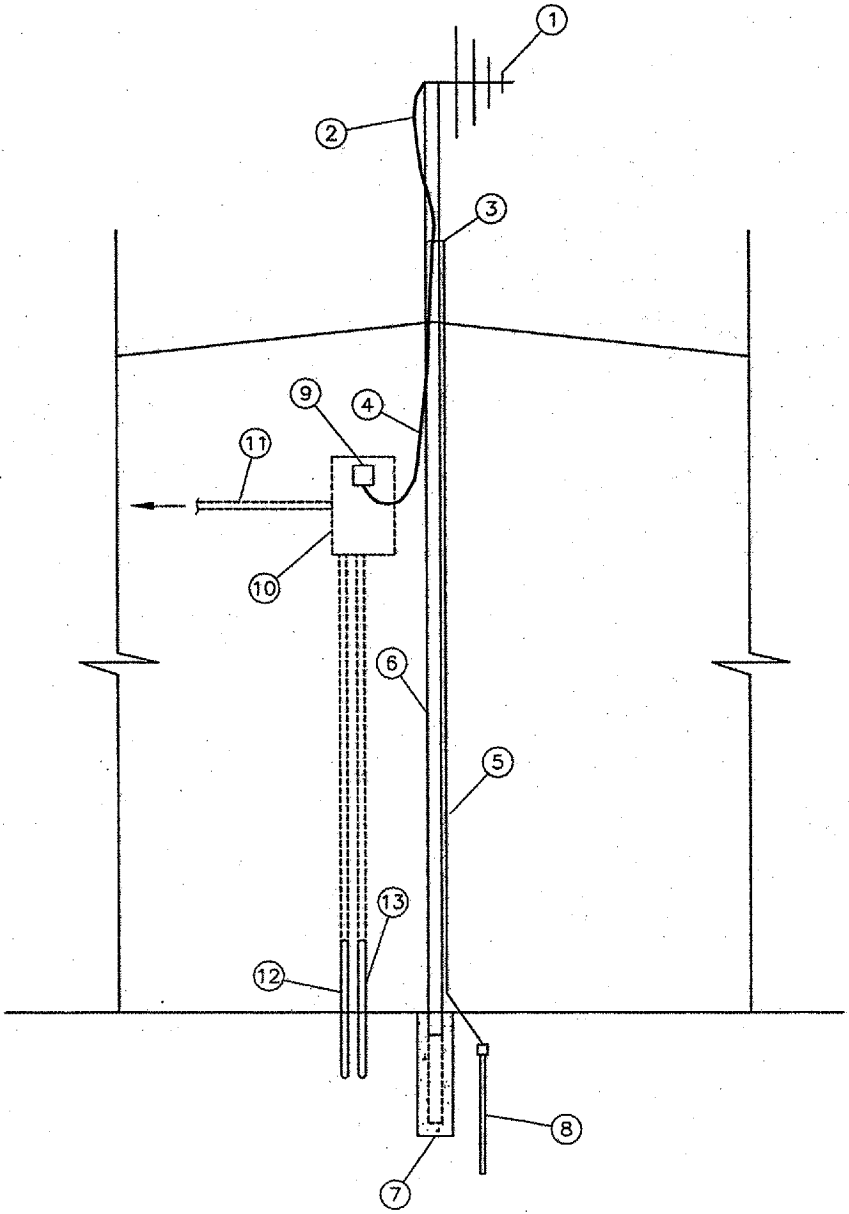
NOTES:

- 1) ONLY ONE ANTENNA IS SHOWN FOR CLARITY. HOWEVER, TWO ANTENNAS WILL BE INSTALLED ON THE ANTENNA MAST AS DIRECTED BY THE WIRELESS CARD READER INTERFACE SUPPLIER, INCLUDING TWO 5-FOOT GROUNDING CONNECTION CABLES, TWO GROUNDING BLOCKS AND TWO 15-FOOT COAXIAL CABLES.
- 2) LIGHTNING PROTECTION IS NOT SHOWN FOR CLARITY, BUT SHALL BE INSTALLED PER WIRELESS INTERFACE SUPPLIER REQUIREMENTS.
- 3) ADDITIONAL HARDWARE, EQUIPMENT AND LABOR SHALL BE SUPPLIED AS NECESSARY TO PROVIDE A COMPLETE WIRELESS CARD READER INTERFACE INSTALLATION.



**GATE #17, #21, #27
 NEW GATE OPERATOR POWER
 AND CONTROL BLOCK DIAGRAM**
 N.T.S.

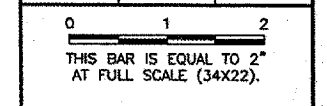
**GATE #16
 NEW GATE OPERATOR POWER
 AND CONTROL BLOCK DIAGRAM**
 N.T.S.



**GATE #17, #21, #27
 WIRELESS CARD READER
 INTERFACE DETAIL**
 N.T.S.

IMAGE FILES: avi-1757.tif
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 BLOOMINGTON, ILLINOIS**
**UPGRADE PERIMETER FENCE PHASE 1
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SHEET 26 OF 26 SHEETS	