


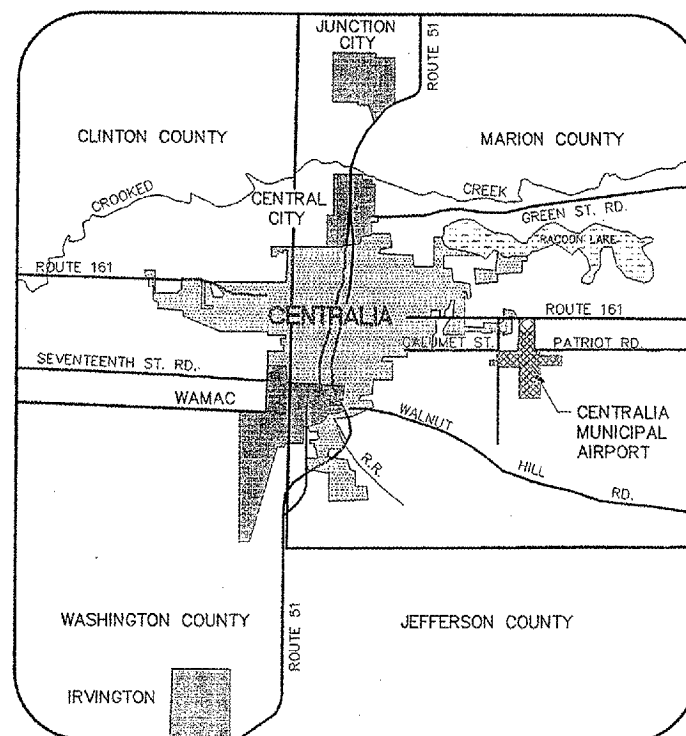
# CONSTRUCTION PLANS FOR CENTRALIA MUNICIPAL AIRPORT CENTRALIA, ILLINOIS

## REHABILITATE SOUTHWEST PORTION OF GA APRON

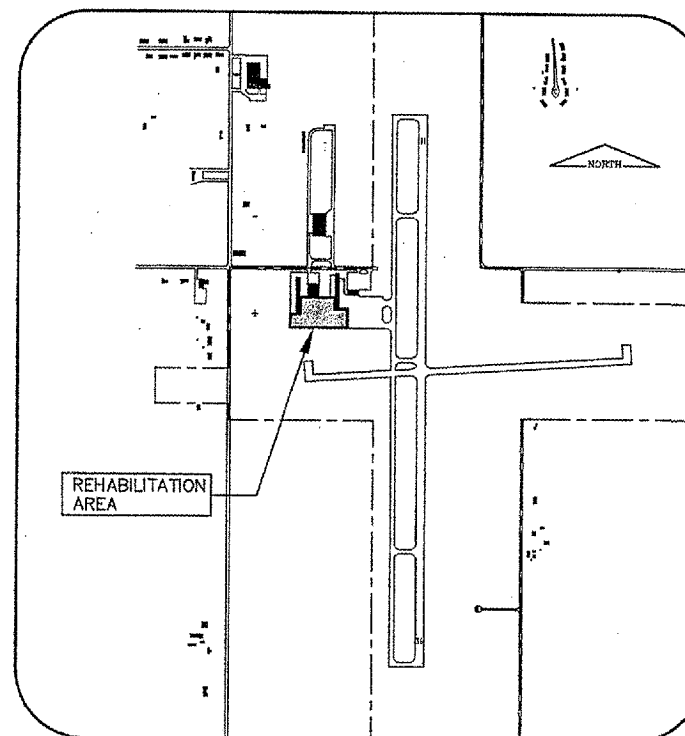
ILLINOIS PROJECT NO. ENL-3556  
AIP PROJECT NO. 3-17-0015-B9

APRIL 21, 2006

4/17/06  
  
*Jason E. Frank*  
Expires 11/30/07



LOCATION MAP




SITE MAP

DESIGN INFORMATION
APRON AIRCRAFT APPROACH CATEGORY B AIRCRAFT DESIGN GROUP II AIRCRAFT WEIGHT 30,000 LBS SINGLE WHEEL GEAR
CALL J.U.L.I.E. BEFORE EXCAVATING 1-800-892-0123
TOWNSHIP: T. 1 N. RANGE: R. 1 E. COUNTY: MARION TOWNSHIP: CENTRALIA SECTION: 16 & 21 LOCATION: CENTRALIA MUNICIPAL AIRPORT

MAX EQUIPMENT HEIGHT IS 25'  
CENTRALIA UNICOM FREQUENCY IS 122.8 MHZ

CENTRALIA MUNICIPAL AIRPORT  
CENTRALIA, ILLINOIS

APPROVED *Jason E. Frank*  
DATE *April 13* 2006

 **CMT**  
CRAWFORD MURPHY & TILLY, INC.  
CONSULTING ENGINEERS  
■ SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO  
■ ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

SUBMITTED BY *Jason E. Frank*  
DATE *April 17* 2006  
CM&T JOB NUMBER 05072-05

IMAGE FILES:

**REVISIONS**

NUMBER	BY	DATE

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

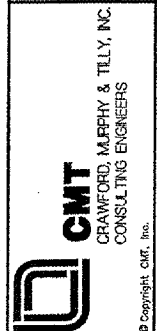
**INDEX TO SHEETS**

SHT. NO.	DESCRIPTION
1	COVER SHEET
2	INDEX TO SHEETS/SUMMARY OF QUANTITIES
3	SITE PLAN
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9	HAUL ROAD
10	DRAINAGE DETAILS
11	PAVEMENT MARKING
12	MISCELLANEOUS DETAILS
13	FENCING DETAILS 1
14	FENCING DETAILS 2
15	APRON CROSS SECTIONS 1 STA. 330+76.60 TO STA. 332+00
16	APRON CROSS SECTIONS 2 STA. 332+50 TO STA. 333+44.80

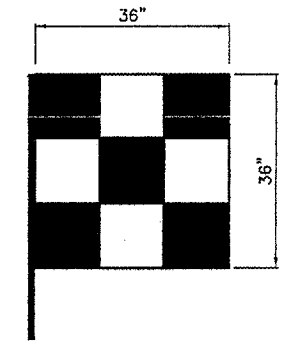
**SUMMARY OF QUANTITIES**

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	AS-BUILT QUANTITY
AR150510	ENGINEER'S FIELD OFFICE	L.S.	1	
AR150540	HAUL ROUTE	L.S.	1	
AR152410	UNCLASSIFIED EXCAVATION	C.Y.	300	
AR156510	SILT FENCE	L.F.	500	
AR156511	DITCH CHECK	EACH	4	
AR156540	RIPRAP	S.Y.	160	
AR161510	CLASS C FENCE	L.F.	450	
AR162504	CLASS E FENCE - 4'	L.F.	260	
AR201661	CLEAN & SEAL BITUMINOUS CRACKS	L.F.	2000	
AR201663	SAND MIX CRACK REPAIR	L.F.	1000	
AR201670	CRACK CONTROL FABRIC	S.Y.	11900	
AR401610	BITUMINOUS SURFACE COURSE	TON	1440	
AR401650	BITUMINOUS PAVEMENT MILLING	S.Y.	11900	
AR401665	BITUMINOUS PAVEMENT SAWING	L.F.	895	
AR603510	BITUMINOUS TACK COAT	GAL.	2500	
AR620520	PAVEMENT MARKING - WATERBORNE	S.F.	1000	
AR701512	12" RCP, CLASS IV	L.F.	48	
AR701536	36" RCP, CLASS IV	L.F.	24	
AR701900	REMOVE PIPE	L.F.	60	
AR752412	PRECAST REINFORCED CONC. FES 12"	EACH	4	
AR752436	PRECAST REINFORCED CONC. FES 36"	EACH	2	
AR752903	REMOVE HEADWALL	EACH	2	
AR901510	SEEDING	ACRE	0.2	
AR908510	MULCHING	ACRE	0.2	

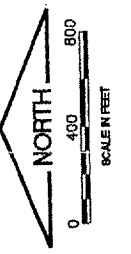
**CENTRALIA MUNICIPAL AIRPORT  
 CENTRALIA, ILLINOIS**  
**REHABILITATE SOUTHWEST PORTION OF GA APRON**  
**INDEX TO SHEETS/  
 SUMMARY OF QUANTITIES**



DESIGN BY: JEF  
 DRAWN BY: CMT  
 CHECKED BY: JEF  
 APPROVED BY: JEF  
 DATE: 04/21/2006  
 JOB No: 05072-05  
 ILL. PROJ. NO. ENL-3556  
 AIP PROJ. NO. 3-17-0015-B9  
 SHEET 2 OF 16 SHEET

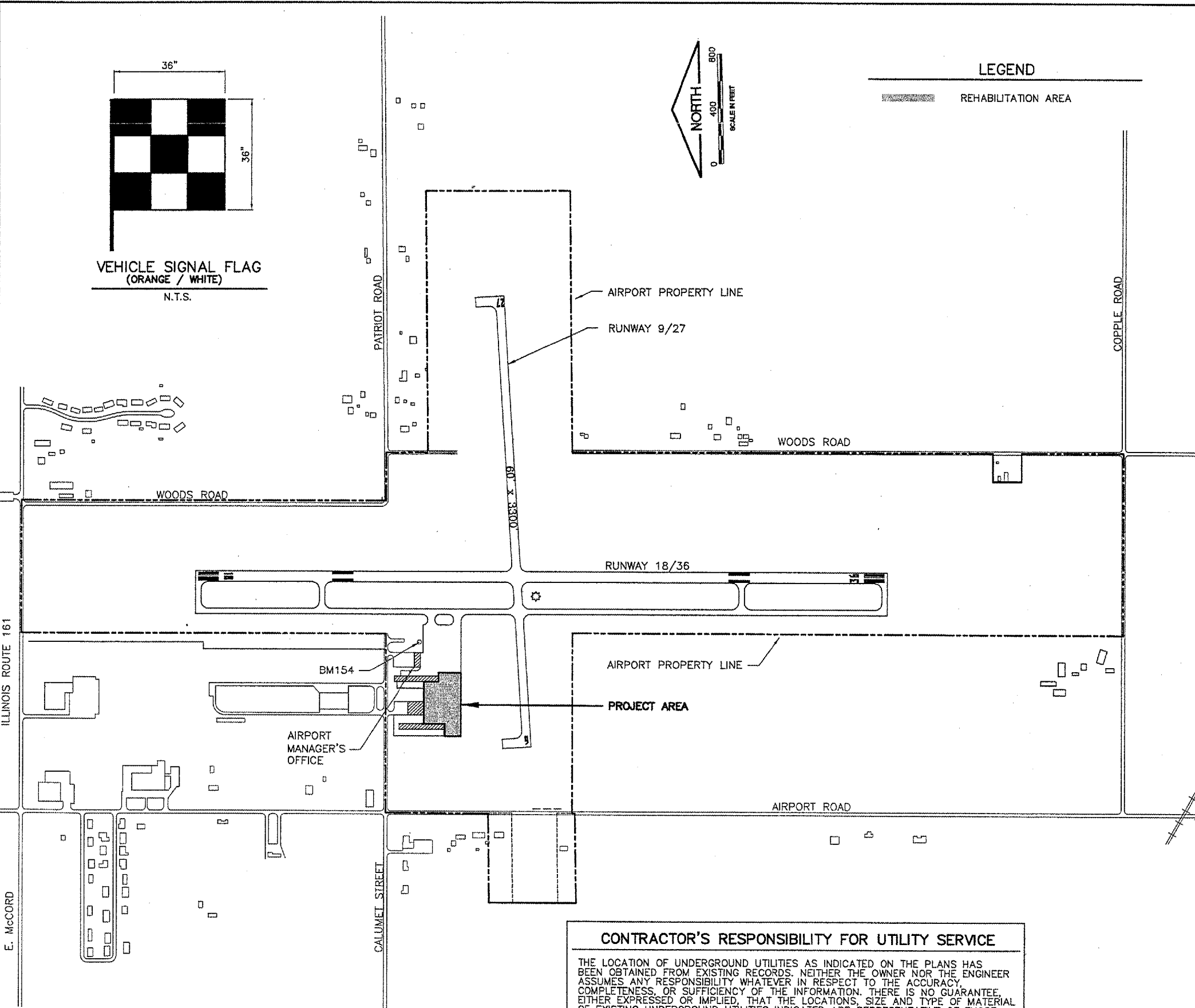


VEHICLE SIGNAL FLAG  
(ORANGE / WHITE)  
N.T.S.



LEGEND

REHABILITATION AREA



CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE

THE LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON THE PLANS HAS BEEN OBTAINED FROM EXISTING RECORDS. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY WHATEVER IN RESPECT TO THE ACCURACY, COMPLETENESS, OR SUFFICIENCY OF THE INFORMATION. THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED, THAT THE LOCATIONS, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED IN THE CONSTRUCTION.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY 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 OWNER AND THE ENGINEER. ANY SUCH MAINS AND/OR SERVICES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED IMMEDIATELY AT HIS EXPENSE TO THE SATISFACTION OF THE OWNER AND THE ENGINEER.

BENCHMARK DATA  
USGS BM P154 ELEV. 519.31  
BRASS DISC BETWEEN  
TAXIWAY AND FUEL FARM

GENERAL NOTES

- ALL RUNWAYS, TAXIWAYS, AND APRON AREAS SHALL BE KEPT OPEN TO AIRCRAFT TRAFFIC EXCEPT AS NOTED IN THE CONSTRUCTION PHASING PLAN.
- ALL CONSTRUCTION TRAFFIC OPERATING ON, OR CROSSING, ACTIVE AIRFIELD PAVEMENTS SHALL BE UNDER RADIO CONTROL.
- 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 MANAGER.
- IT WILL BE NECESSARY FOR THE CONTRACTOR TO MAKE HIS OWN FIELD INVESTIGATION TO DETERMINE THE EXACT LOCATION OF THE UTILITIES, INCLUDING UNDERGROUND UTILITIES, AT CRITICAL POINTS SO AS TO AVOID ANY DAMAGE. ANY UTILITY DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY HIM AT HIS EXPENSE IN A MANNER WHICH IS SATISFACTORY TO THE ENGINEER AND 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.
- THE CONTRACTOR SHALL PROVIDE LIGHTS AND FLAGGING ON ALL EQUIPMENT IN CONFORMANCE WITH FEDERAL AVIATION REGULATIONS, PART 77, OBJECTS MEETING NAVIGABLE AIRSPACE, JANUARY 1975 AND FAA ADVISORY CIRCULAR 5370-2E.
- WHEN ANY VEHICLE IS REQUIRED TO TRAVEL OVER ANY PORTION OF THE AIRCRAFT MOVEMENT AREA AND RUNWAY APPROACH AREA, THE VEHICLE SHALL BE PROPERLY IDENTIFIED TO OPERATE IN THE AREA.
  - DURING DAYLIGHT HOURS, MARK VEHICLES WITH A FLAG ON A STAFF ATTACHED TO THE VEHICLE SO THAT THE FLAG WILL BE READILY VISIBLE. THE FLAG SHOULD BE NOT LESS THAN 3- FEET SQUARE CONSISTING OF A CHECKERED PATTERN OF INTERNATIONAL ORANGE AND WHITE SQUARES OF NOT LESS THAN ONE FOOT ON EACH SIDE AND DISPLAYED IN FULL VIEW ABOVE THE VEHICLE.
  - DURING NIGHTTIME OR LOW-VISIBILITY OPERATIONS, MARK VEHICLES WITH FLASHING YELLOW BEACONS.
  - MARK CONSTRUCTION VEHICLES REQUIRING AN ESCORT WITH A FLAG ON A STAFF. THE FLAG SHALL BE AS DESCRIBED ABOVE.
  - MARK AND IDENTIFY VEHICLES IN ACCORDANCE WITH AC 150/5210-5, PAINTING, MARKING AND LIGHTING OF VEHICLES USED ON AN AIRPORT.
- VEHICLES AND EQUIPMENT SHALL NOT BE ALLOWED WITHIN AREAS 55' FROM THE CENTERLINE OF ACTIVE TAXIWAYS OR 200' FROM THE CENTERLINE OF ACTIVE RUNWAYS.
- CONTRACTOR SHALL PROVIDE HIS OWN RADIOS CAPABLE OF MONITORING UNICOM FREQUENCY 122.80 AT ALL TIMES.
- 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 ENGINEER AND AIRPORT MANAGER. NO ADDITIONAL COMPENSATION SHALL BE MADE TO THE CONTRACTOR FOR THIS WORK.
- THE CONTRACTOR SHALL CONTINUOUSLY CLEAN ALL RUNWAY, TAXIWAY, APRON PAVEMENTS OR ACCESS DRIVES USED BY HIS VEHICLES AND EQUIPMENT.
- EXISTING TURF AREAS DISTURBED BY THE CONTRACTORS OPERATIONS SHALL BE RESTORED BY HIM AT HIS EXPENSE TO THE SATISFACTION OF THE ENGINEER AND THE AIRPORT MANAGER.
- CONTRACTORS ACCESS SHALL BE AS SHOWN ON SHEET 4.
- THE CONTRACTOR SHALL STORE EQUIPMENT AND MATERIALS OUTSIDE THE RUNWAY SAFETY AREA (RSAs) AND OBSTACLE FREE ZONES (OFAs). EQUIPMENT AND MATERIALS SHALL NOT BE STORED ON CLOSED RUNWAY AND TAXIWAYS. THE CONTRACTOR WILL BE PERMITTED TO STORE EQUIPMENT AND MATERIALS AT THE LOCATIONS SHOWN ON THE CONSTRUCTION ACTIVITY PLAN. THE MAXIMUM HEIGHT OF EQUIPMENT, MATERIALS AND STOCKPILES SHALL BE 25'. THE CONTRACTOR SHALL STORE EQUIPMENT AND MATERIALS IN SUCH A MANNER AS NOT TO VIOLATE AIRPORT PART 77 SURFACES.
- THE CONTRACTOR SHALL PROVIDE BARRICADES AT THE LOCATIONS SHOWN IN THE PLANS. BARRICADES SHALL BE AT A 15-FOOT SPACING, WITH ONE BARRICADE ON THE CENTERLINE. BARRICADES SHALL HAVE FLAGS AND LIGHTS. THE BARRICADES SHALL BE LIGHTED WITH A FLASHING RED LIGHT AND BE MARKED WITH A 20"x20" ORANGE FLAG.

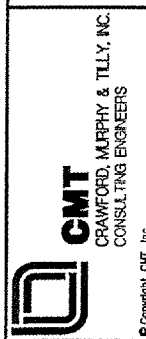
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EXISTING.dwg  
EXHIBIT11.dwg  
IMAGE FILES: TRK.dwg, FARM\_PLAT.DWG

REVISIONS

NUMBER	BY	DATE

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

CENTRALIA MUNICIPAL AIRPORT  
CENTRALIA, ILLINOIS  
REHABILITATE SOUTHWEST PORTION OF GA APRON  
SITE PLAN






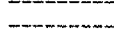

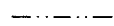
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DRAWN BY:	CMT
CHECKED BY:	JEF
APPROVED BY:	JEF
DATE:	04/21/2006
JOB No:	05072-05
ILL. PROJ. NO.	ENL-3556
AIP PROJ. NO.	3-17-0015-B9
SHEET	3 OF 16 SHEET

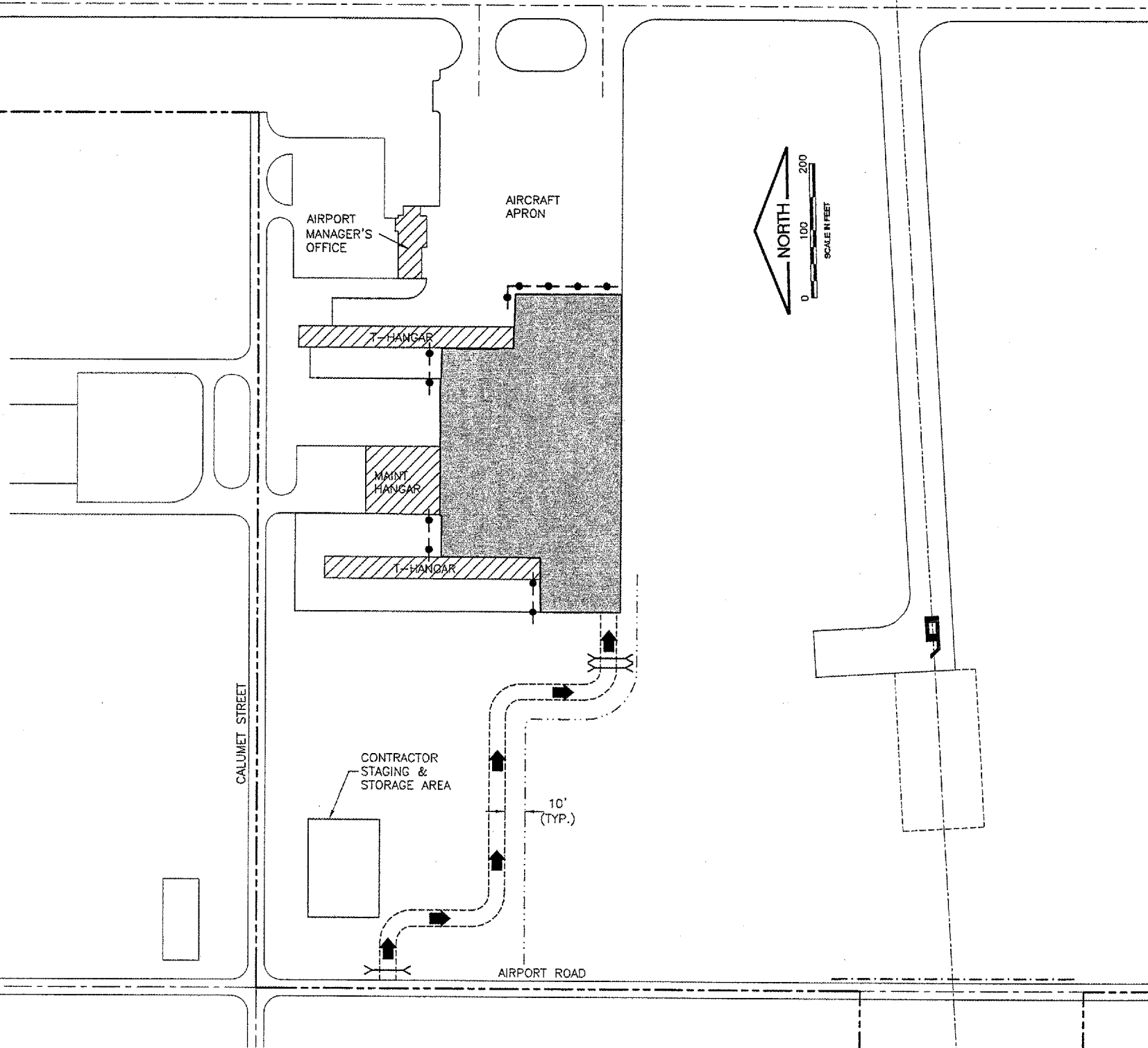
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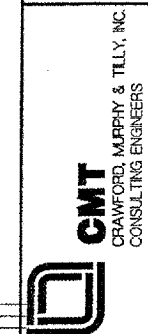
- NOTES**
1. CONTRACTOR WILL INFORM THE AIRPORT FOURTEEN (14) DAYS BEFORE CLOSING APRON WORK AREA.
  2. HAUL ROAD ALIGNMENT SHALL BE STAKED OUT BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO BEGINNING THE WORK.
  3. CONTRACTOR SHALL INSTALL THE DRAINAGE PIPE AND PLACE AGGREGATE BASE FOR HAUL ROAD BEFORE CLOSING APRON WORK AREA.
  4. CONTRACTOR WILL MAINTAIN HAUL ROUTE UNTIL FINAL ACCEPTANCE OF PROJECT. THE HAUL ROUTE WILL BE LEFT IN PLACE AFTER FINAL ACCEPTANCE.
  5. ANY DAMAGE TO EXISTING CROPS CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE PAID FOR BY THE CONTRACTOR.

**LEGEND**

	CONTRACTOR'S ACCESS ROUTE
	BARRICADE LINE
	PAVEMENT REHABILITATION AREA
	NEW HAUL ROAD
	NEW R.C.P.
	EXISTING CROP LINE



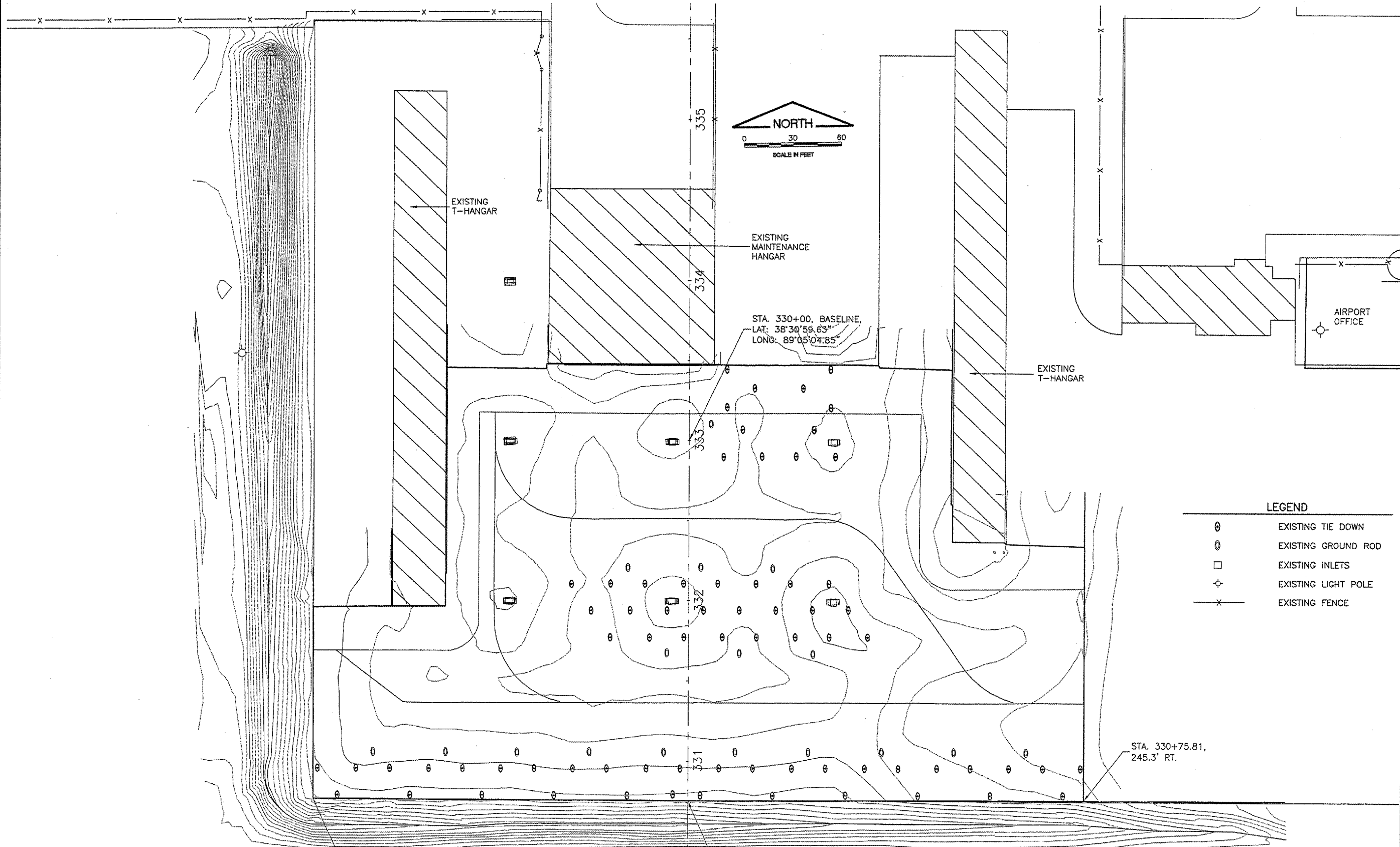
**CENTRALIA MUNICIPAL AIRPORT  
 CENTRALIA, ILLINOIS  
 REHABILITATE SOUTHWEST PORTION OF GA APRON  
 CONSTRUCTION PHASING PLAN**



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APPROVED BY:	JEF
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AIP PROJ. NO. 3-17-0015-B9	
SHEET 4 OF 16 SHEET	

REVISIONS		
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**CENTRALIA MUNICIPAL AIRPORT  
 CENTRALIA, ILLINOIS**  
**REHABILITATE SOUTHWEST PORTION OF GA APRON**  
**EXISTING CONDITIONS**

**LEGEND**

⊙	EXISTING TIE DOWN
○	EXISTING GROUND ROD
□	EXISTING INLETS
⊕	EXISTING LIGHT POLE
—x—	EXISTING FENCE

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AIP PROJ. NO. 3-17-0015-B9	
SHEET 5 OF 16 SHEET	

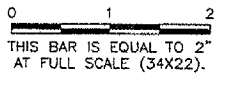
**NOTES:**  
 1. CONTRACTOR SHALL TAKE CARE TO MILL AROUND EXISTING INLETS, TIE DOWNS, & GROUND RODS. THESE ITEMS WILL REMAIN IN PLACE. DAMAGE TO THESE ITEMS CAUSED BY THE CONTRACTOR'S OPERATIONS WILL CALL FOR REPLACEMENT OF THE ITEM AT THE CONTRACTOR'S EXPENSE.

STA. 330+75.81,  
 232.4' LT.

STA. 330+75.81 BASELINE  
 LAT: 38°30'59.40"  
 LONG: 89°65'41.75"

STA. 330+75.81,  
 245.3' RT.

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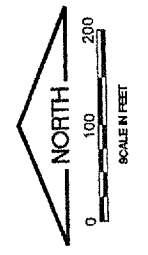
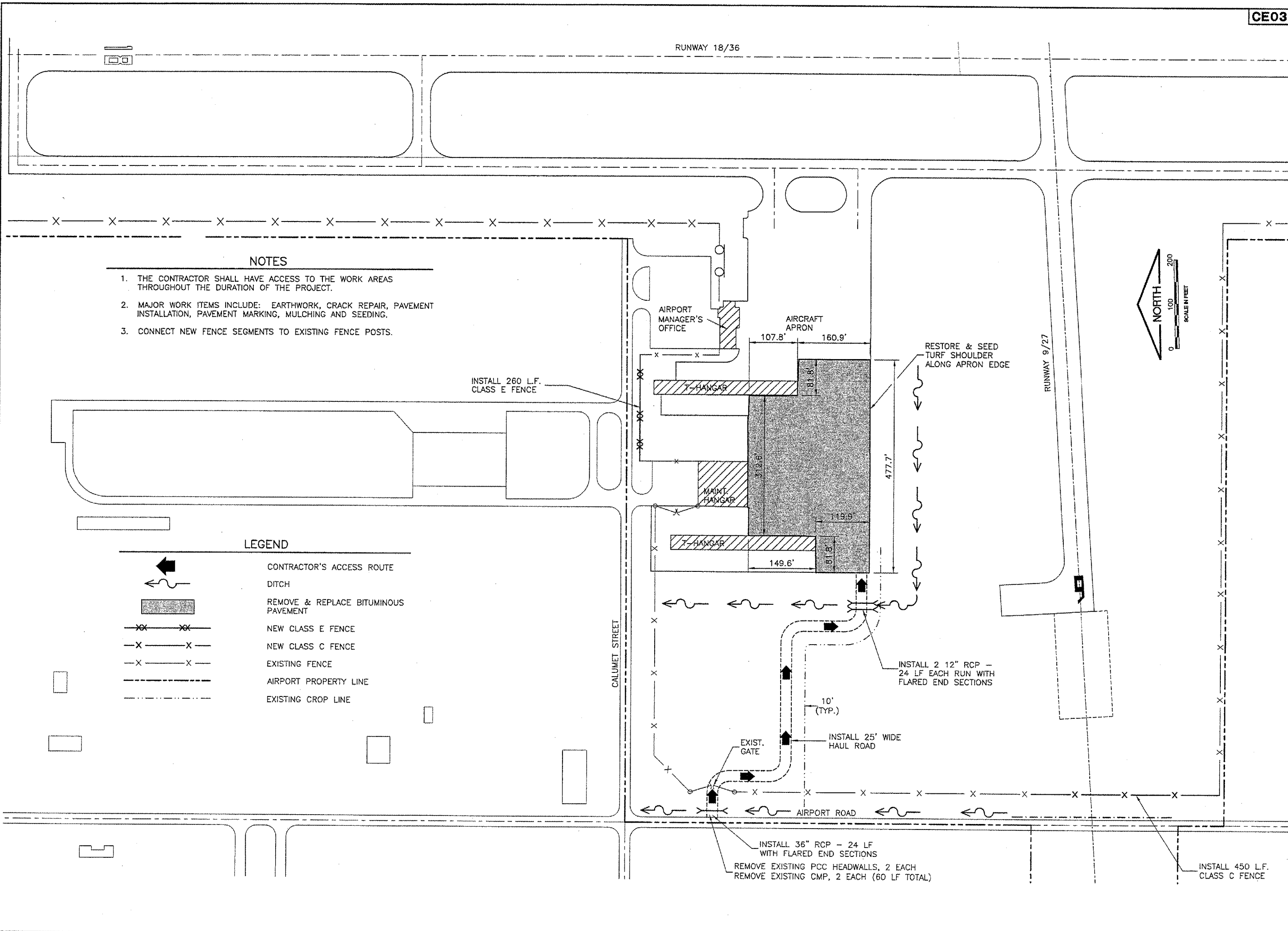


**NOTES**

1. THE CONTRACTOR SHALL HAVE ACCESS TO THE WORK AREAS THROUGHOUT THE DURATION OF THE PROJECT.
2. MAJOR WORK ITEMS INCLUDE: EARTHWORK, CRACK REPAIR, PAVEMENT INSTALLATION, PAVEMENT MARKING, MULCHING AND SEEDING.
3. CONNECT NEW FENCE SEGMENTS TO EXISTING FENCE POSTS.

**LEGEND**

- CONTRACTOR'S ACCESS ROUTE
- DITCH
- REMOVE & REPLACE BITUMINOUS PAVEMENT
- NEW CLASS E FENCE
- NEW CLASS C FENCE
- EXISTING FENCE
- AIRPORT PROPERTY LINE
- EXISTING CROP LINE



**CENTRALIA MUNICIPAL AIRPORT  
 CENTRALIA, ILLINOIS**

**REHABILITATE SOUTHWEST PORTION OF GA APRON**

**PROPOSED IMPROVEMENTS**



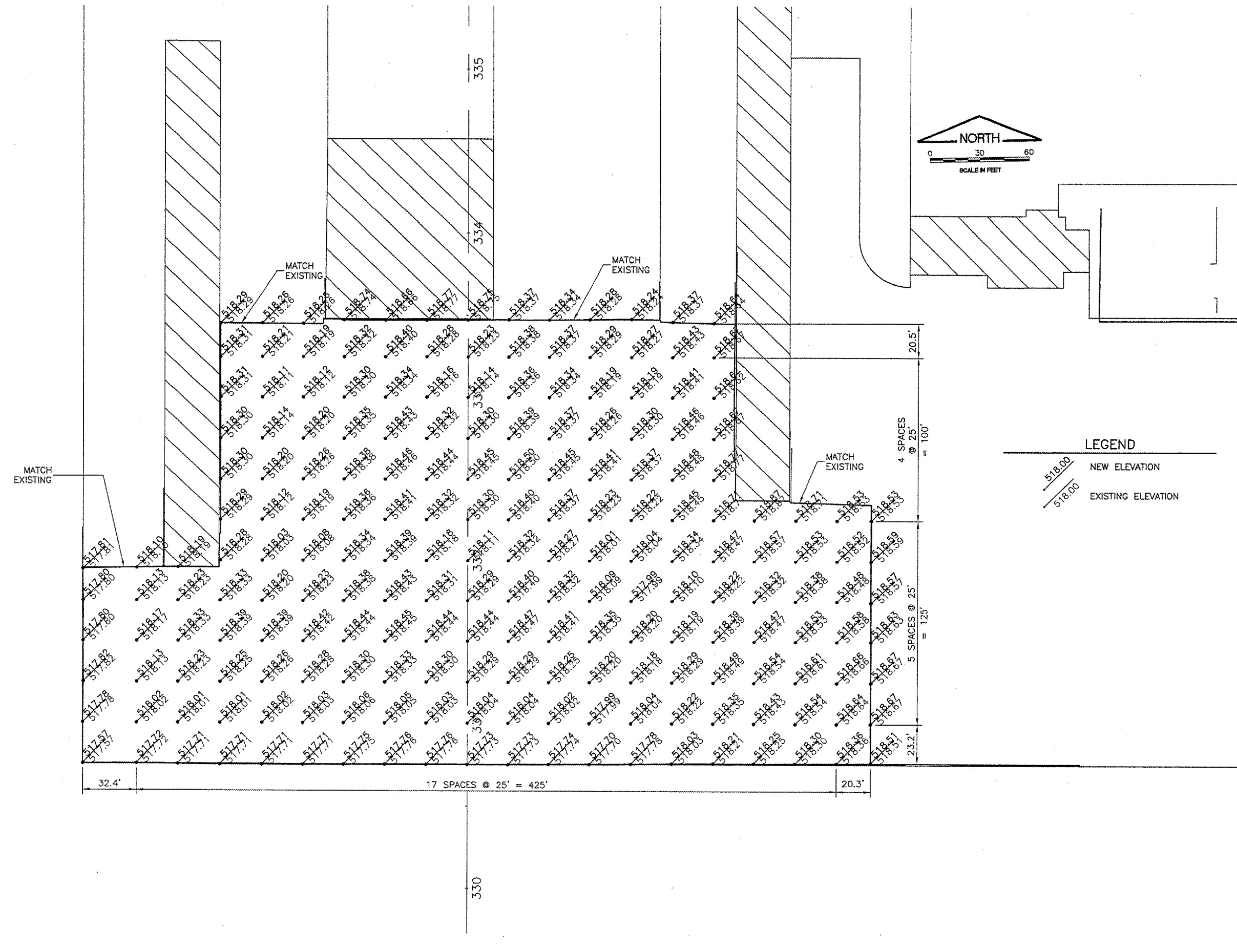
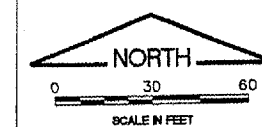
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IL PROJ. NO. ENL-3556	
AIP PROJ. NO. 3-17-0015-B9	
SHEET 6 OF 16 SHEET	

REVISIONS

NUMBER	BY	DATE



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



LEGEND

- $\frac{518.00}{518.00}$  NEW ELEVATION
- $\frac{518.00}{518.00}$  EXISTING ELEVATION

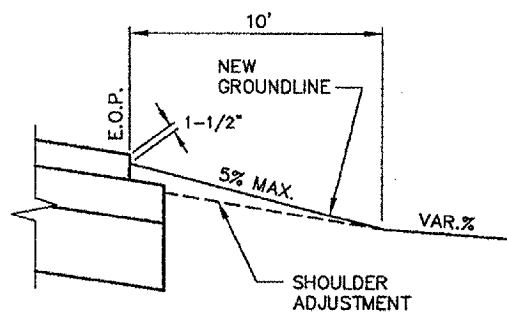
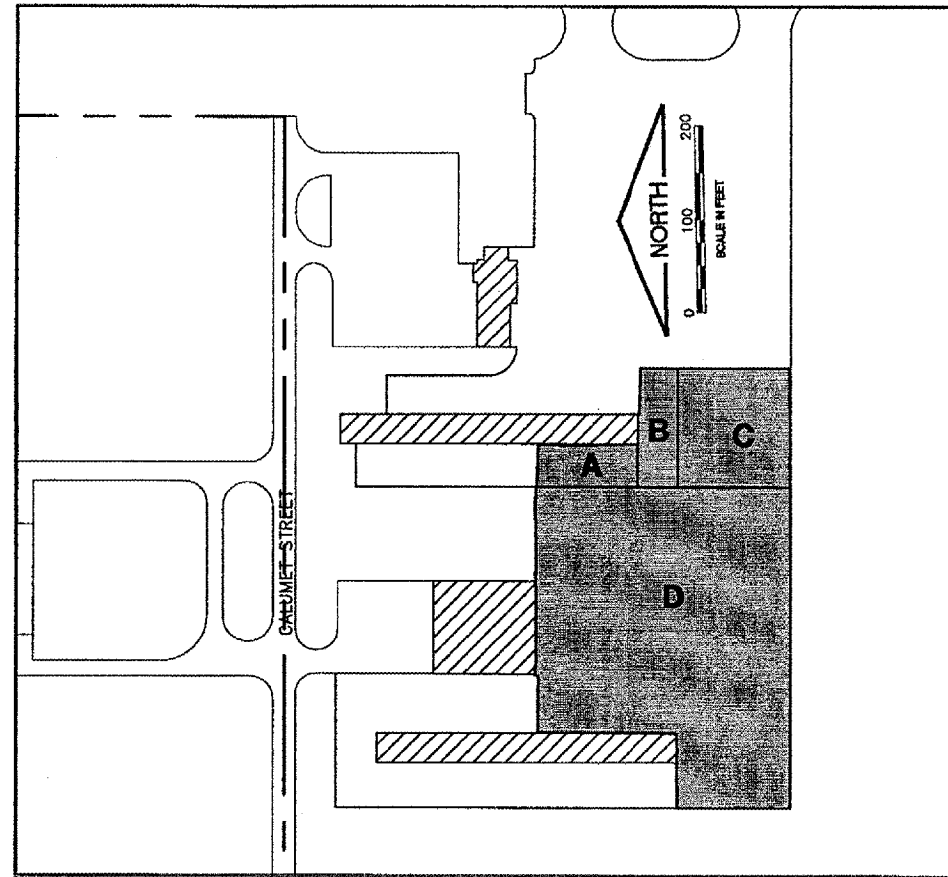
**CENTRALIA MUNICIPAL AIRPORT  
CENTRALIA, ILLINOIS**

**REHABILITATE SOUTHWEST PORTION OF GA APRON**

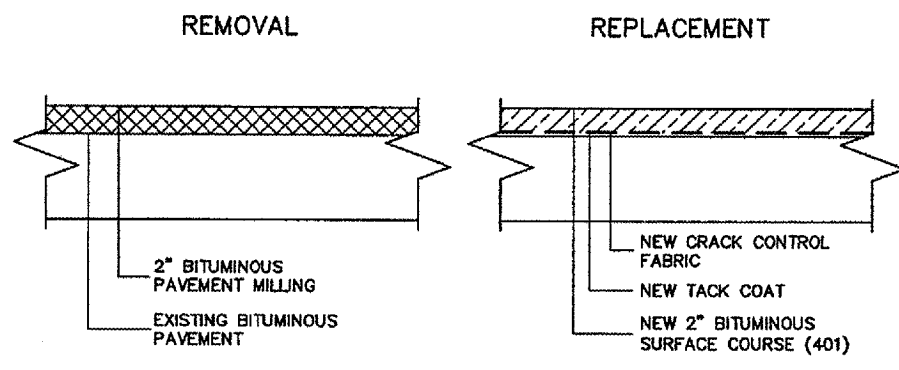
**APRON STAKING PLAN**

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SHEET 7 OF 16 SHEET	

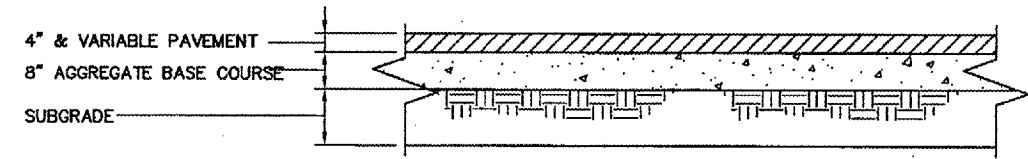
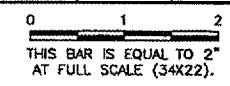


UNPAVED SHOULDER DETAIL "A"  
 NTS

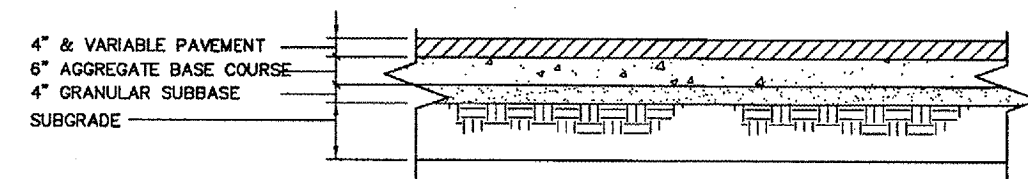


PAVEMENT REMOVAL & REPLACEMENT  
 TYPICAL SECTION  
 NTS

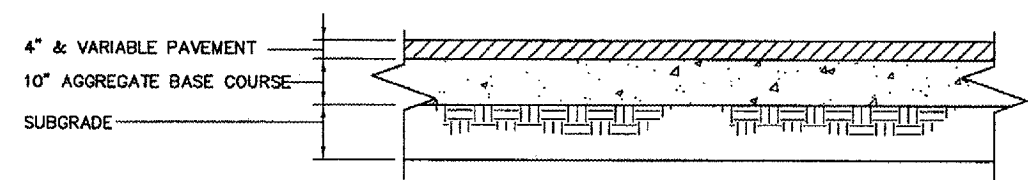
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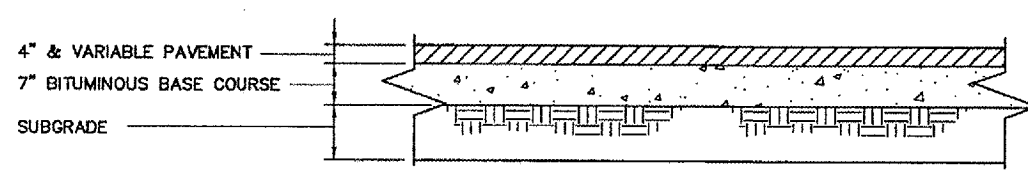
AREA A  
 EXISTING TYPICAL SECTION  
 NTS



AREA C  
 EXISTING TYPICAL SECTION  
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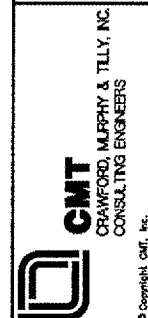


AREA B  
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AREA D  
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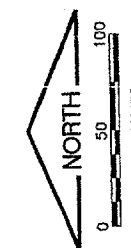
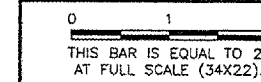
CENTRALIA MUNICIPAL AIRPORT  
 CENTRALIA, ILLINOIS  
 REHABILITATE SOUTHWEST PORTION OF GA APRON  
 TYPICAL SECTIONS



DESIGN BY:	JEF
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SHEET	8 OF 16 SHEET

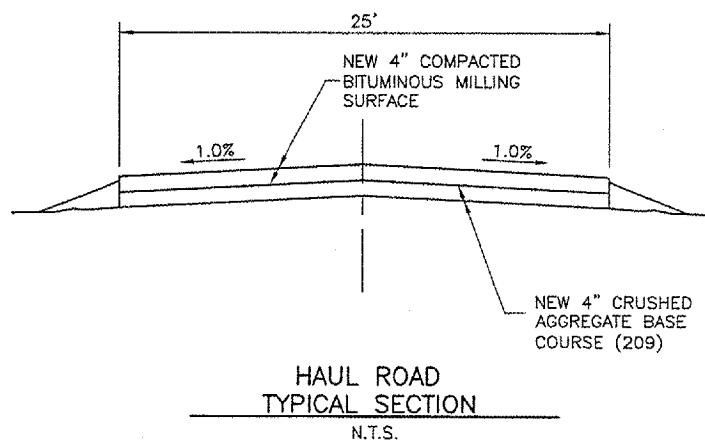


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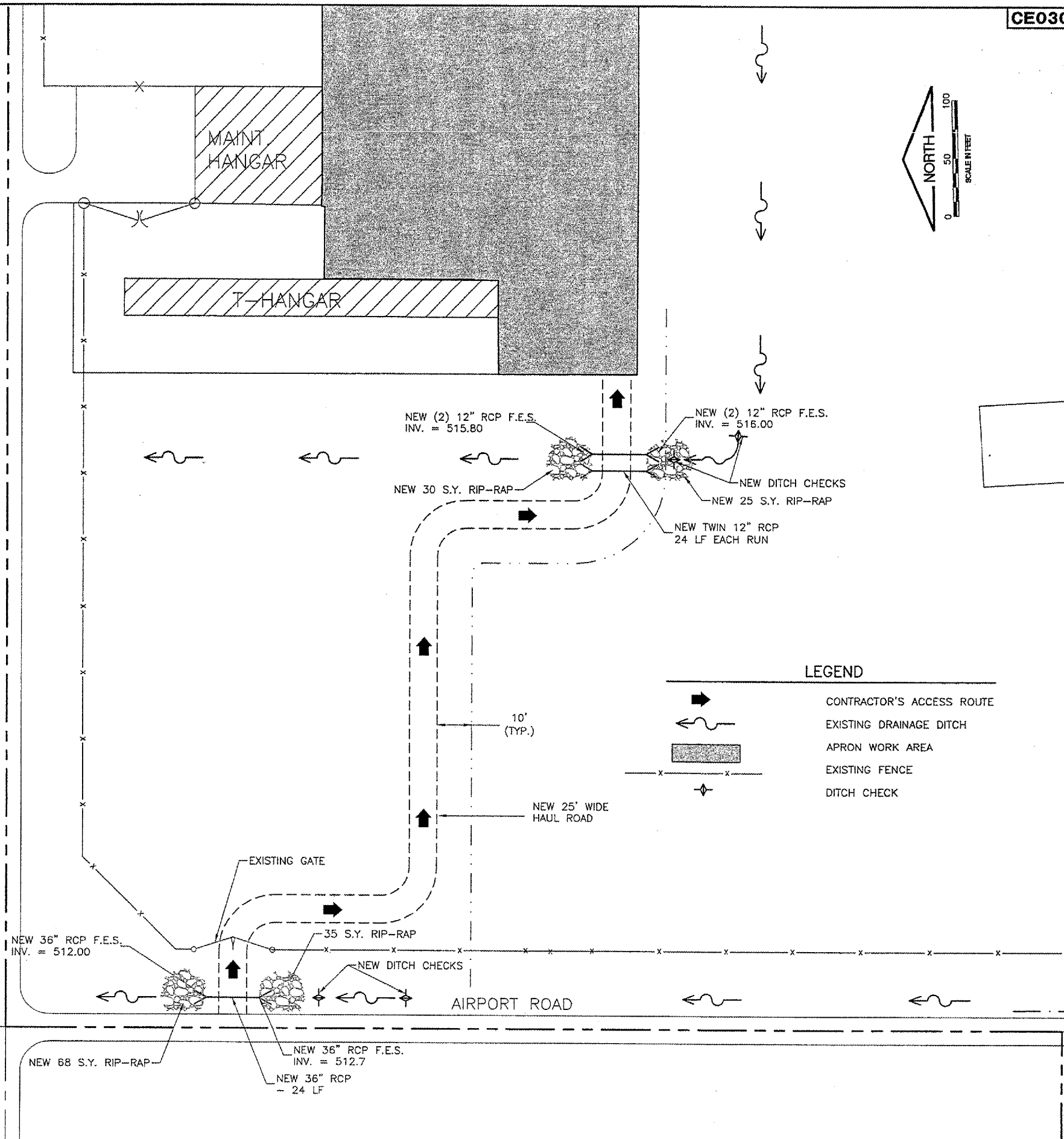


**NOTES**

1. THE CONTRACTOR SHALL STRIP 4" OF TOPSOIL FOR HAUL ROAD AND STOCKPILE FOR USE ALONG HAUL ROAD & APRON. COST WILL BE PAID FOR UNDER "UNCLASSIFIED EXCAVATION".
2. CONSTRUCTION OF HAUL ROAD AGGREGATE BASE SHALL BE COMPLETED BEFORE WORK ON APRON BEGINS.
3. PLACEMENT AND COMPACTION OF CRUSHED AGGREGATE BASE COURSE AND BITUMINOUS MILLINGS WILL BE PAID FOR UNDER "HAUL ROUTE".
4. CONTRACTOR SHALL MAINTAIN HAUL ROAD UNTIL FINAL ACCEPTANCE OF PROJECT. THE HAUL ROAD WILL REMAIN IN PLACE AFTER FINAL ACCEPTANCE.
5. HAUL ROAD SHALL BE GRADED AS SHOWN, FREE OF ALL RUTS, DEPRESSIONS AND SOFT AREAS BEFORE FINAL ACCEPTANCE. COST OF HAUL ROAD MAINTENANCE SHALL BE INCIDENTAL TO "HAUL ROUTE" PAY ITEM.
6. THE BITUMINOUS PAVEMENT MILLINGS REMAINING AFTER CONSTRUCTION AND MAINTENANCE OF HAUL ROAD SHALL BE DISPOSED OF OFF SITE BY THE CONTRACTOR. COST OF DISPOSAL SHALL BE INCIDENTAL TO "BITUMINOUS PAVEMENT MILLING".

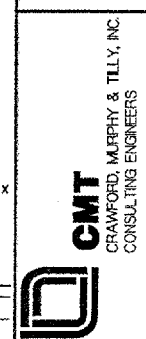


CALUMET STREET

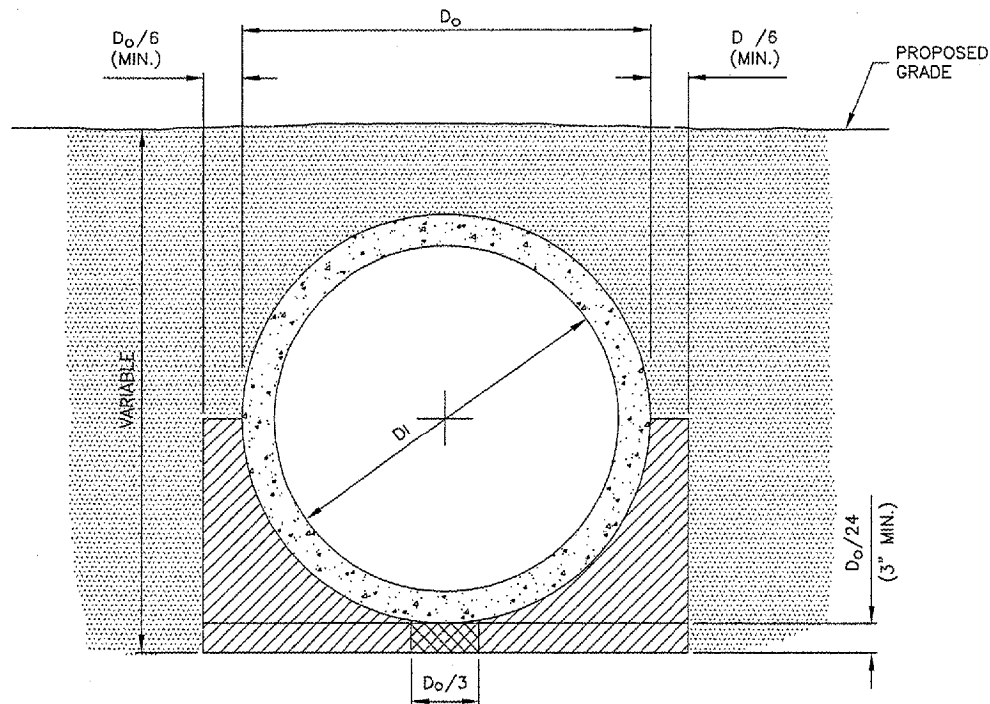


CENTRALIA MUNICIPAL AIRPORT  
CENTRALIA, ILLINOIS

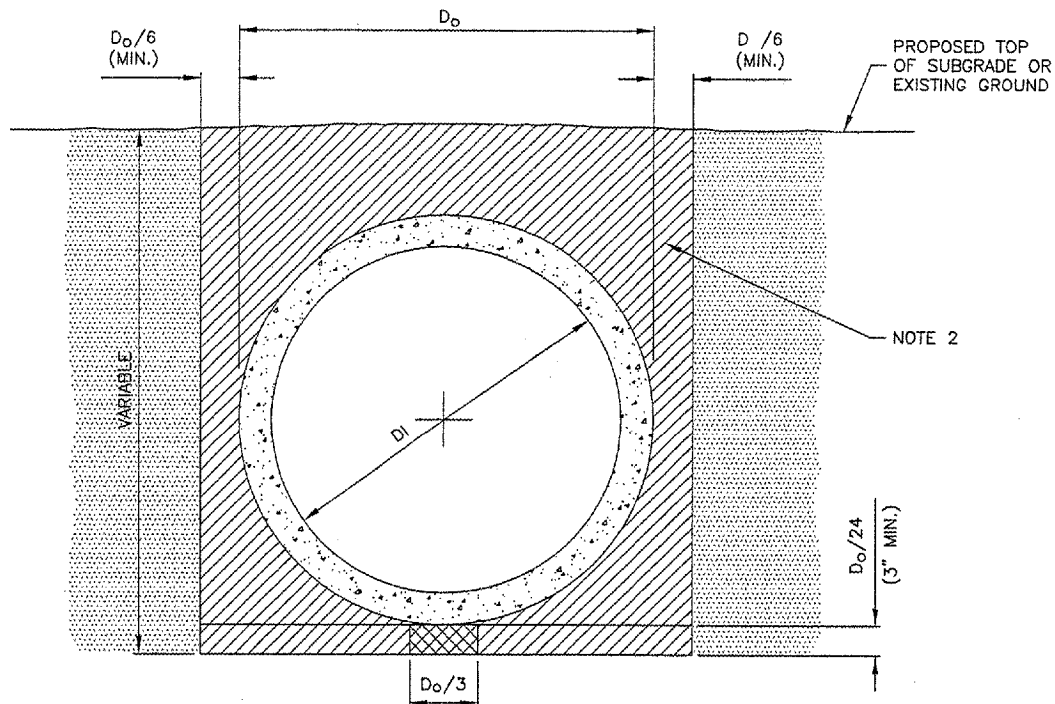
REHABILITATE SOUTHWEST PORTION OF GA APRON  
PROPOSED HAUL ROAD



DESIGN BY:	JEF
DRAWN BY:	CMT
CHECKED BY:	JEF
APPROVED BY:	JEF
DATE:	04/21/2006
JOB No:	05072-05
IL PROJ. NO. ENL-3556	
AIP PROJ. NO. 3-17-0015-B9	
SHEET	9 OF 16 SHEET



**STANDARD TRENCH INSTALLATION  
 NON-PAVED AREA**  
 N.T.S.



**STANDARD TRENCH INSTALLATION  
 PROPOSED PAVED AREAS**  
 N.T.S.

**LEGEND**

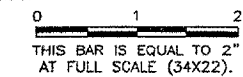
- DRAINAGE CONDUIT MATERIAL-CONCRETE
- MIDDLE BEDDING LOOSELY PLACED UNCOMPACTED BEDDING
- HAUNCH AND OUTER BEDDING COMPACTION- 95% STANDARD PROCTOR
- LOWER SIDE AND OVERFILL COMPACTION- SAME AS EMBANKMENT REQUIREMENTS

$D_o$  PIPE OUTSIDE DIAMETER  
 $D_i$  PIPE INSIDE DIAMETER

- NOTES**
- BEDDING SHOWN IS IN ACCORDANCE WITH "STANDARD EMBANKMENT INSTALLATIONS", STANDARD INSTALLATION & BEDDING FACTORS FOR THE INDIRECT DESIGN METHOD (DESIGN DATA 40), AMERICAN CONCRETE PIPE ASSOCIATION.
  - BACKFILL TO EXTEND 3' BEYOND EDGES OF PROPOSED PAVEMENT.

**REVISIONS**

NUMBER	BY	DATE

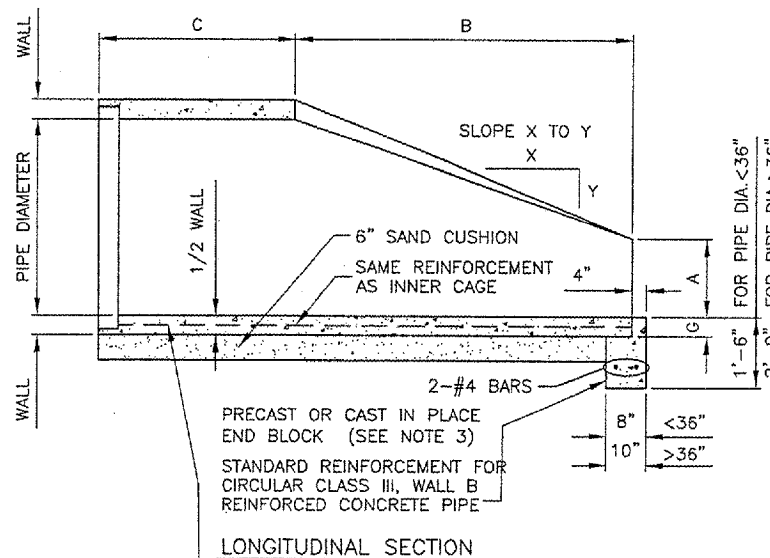
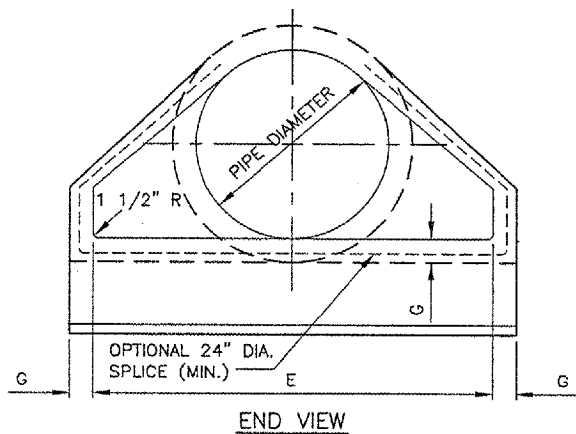


**DIMENSIONS - TABLE 1**

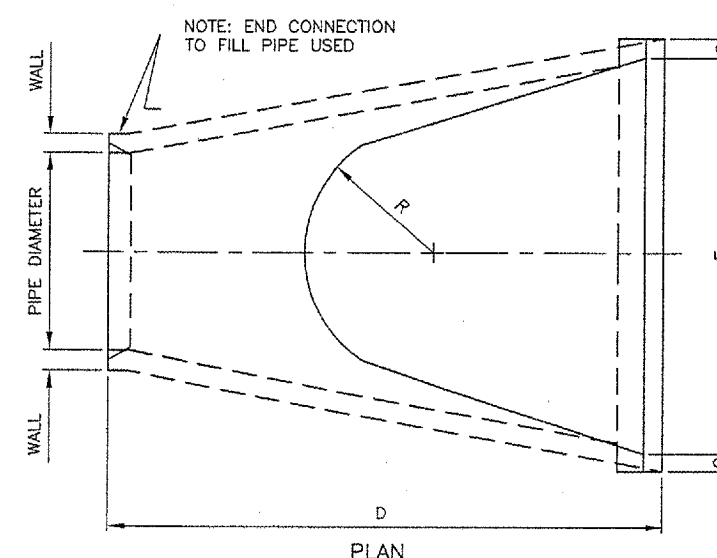
PIPE DIA.	APPROX WT. (lbs.)	WALL	A	B	C	D	E	G	R	SLOPE
12"	530	2"	4"	2'-0"	4'-0 7/8"	6'-0 7/8"	2'-0"	2"	9"	3:1
15"	740	2 1/4"	6"	2'-3"	3'-10"	6'-1"	2'-6"	2 1/4"	11"	3:1
18"	990	2 1/2"	9"	2'-3"	3'-10"	6'-1"	3'-0"	2 1/2"	12"	3:1
21"	1280	2 3/4"	9"	2'-11"	3'-2"	6'-1"	3'-6"	2 3/4"	13"	3:1
24"	1520	3"	9 1/2"	3'-7 1/2"	2'-6"	6'-1 1/2"	4'-0"	3"	14"	3:1
27"	1930	3 1/4"	10 1/2"	4'-0"	2'-1 1/2"	6'-1 1/2"	4'-6"	3 1/4"	14 1/2"	3:1
30"	2190	3 1/2"	1'-0"	4'-6"	1'-7 3/4"	6'-1 3/4"	5'-0"	3 1/2"	15"	3:1
33"	3200	3 3/4"	1-1 1/2"	4'-10 1/2"	3'-3 1/4"	8'-1 3/4"	5'-6"	3 3/4"	17 1/2"	3:1
36"	4100	4"	1'-3"	5'-3"	2'-10 3/4"	8'-1 3/4"	6'-0"	4"	20"	3:1
42"	5380	4 1/2"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	4 1/2"	22"	3:1
48"	6550	5"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	5"	22"	3:1
54"	8240	5 1/2"	2'-3"	5'-5"	2'-11"	8'-4"	7'-6"	5 1/2"	24"	2.4:1
60"	8730	6"	2'-11"	5'-0"	3'-3"	8'-3"	8'-0"	5"	*	2:1
66"	10710	6 1/2"	2'-6"	6'-0"	2'-3"	8'-3"	8'-6"	5 1/2"	*	2:1
72"	12520	7"	3'-0"	6'-6"	1'-9"	8'-3"	9'-0"	6"	*	1.86:1
78"	14770	7 1/2"	3'-0"	7'-6"	1'-9"	9'-3"	9'-6"	6 1/2"	*	1.82:1
84"	18160	8"	3'-0"	7'-6 1/2"	1'-9"	9'-3 1/2"	10'-0"	6 1/2"	*	1.5:1

\* RADIUS AS FURNISHED BY MANUFACTURER.

- NOTES**
- PRECAST CONCRETE FLARED END SECTIONS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-170 CLASS III, WALL B REINFORCED CONCRETE PIPE.
  - PRECAST CONCRETE FLARED END SECTION FOR PIPE DIAMETER REQUIRED SHALL BE AS INDICATED ON DETAIL PLAN FOR EACH INDIVIDUAL INSTALLATION.
  - THE END BLOCK SHALL BE PLACED PRIOR TO THE INSTALLATION OF THE FLARED END SECTION. THE END BLOCK SHALL BE BACKFILLED IN ACCORDANCE WITH ITEM 701.



**PRECAST REINFORCED CONCRETE FLARED END SECTION**  
 (I.D.O.T. STD. NO. 542301)  
 N.T.S.

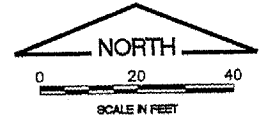
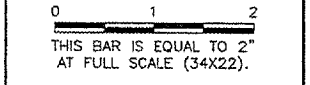


**CENTRALIA MUNICIPAL AIRPORT  
 CENTRALIA, ILLINOIS  
 REHABILITATE SOUTHWEST PORTION OF GA APRON  
 DRAINAGE DETAILS**

**CMT**  
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 CONSULTING ENGINEERS  
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DESIGN BY: JEF  
 DRAWN BY: CMT  
 CHECKED BY: JEF  
 APPROVED BY: JEF  
 DATE: 04/21/2006  
 JOB No: 05072-05  
 IL. PROJ. NO. ENL-3556  
 AIP PROJ. NO. 3-17-0015-B9  
 SHEET 10 OF 16 SHEET

REVISIONS		
NUMBER	BY	DATE



**LEGEND**

	EXISTING TIE DOWN
	EXISTING GROUND ROD
	EXISTING INLET

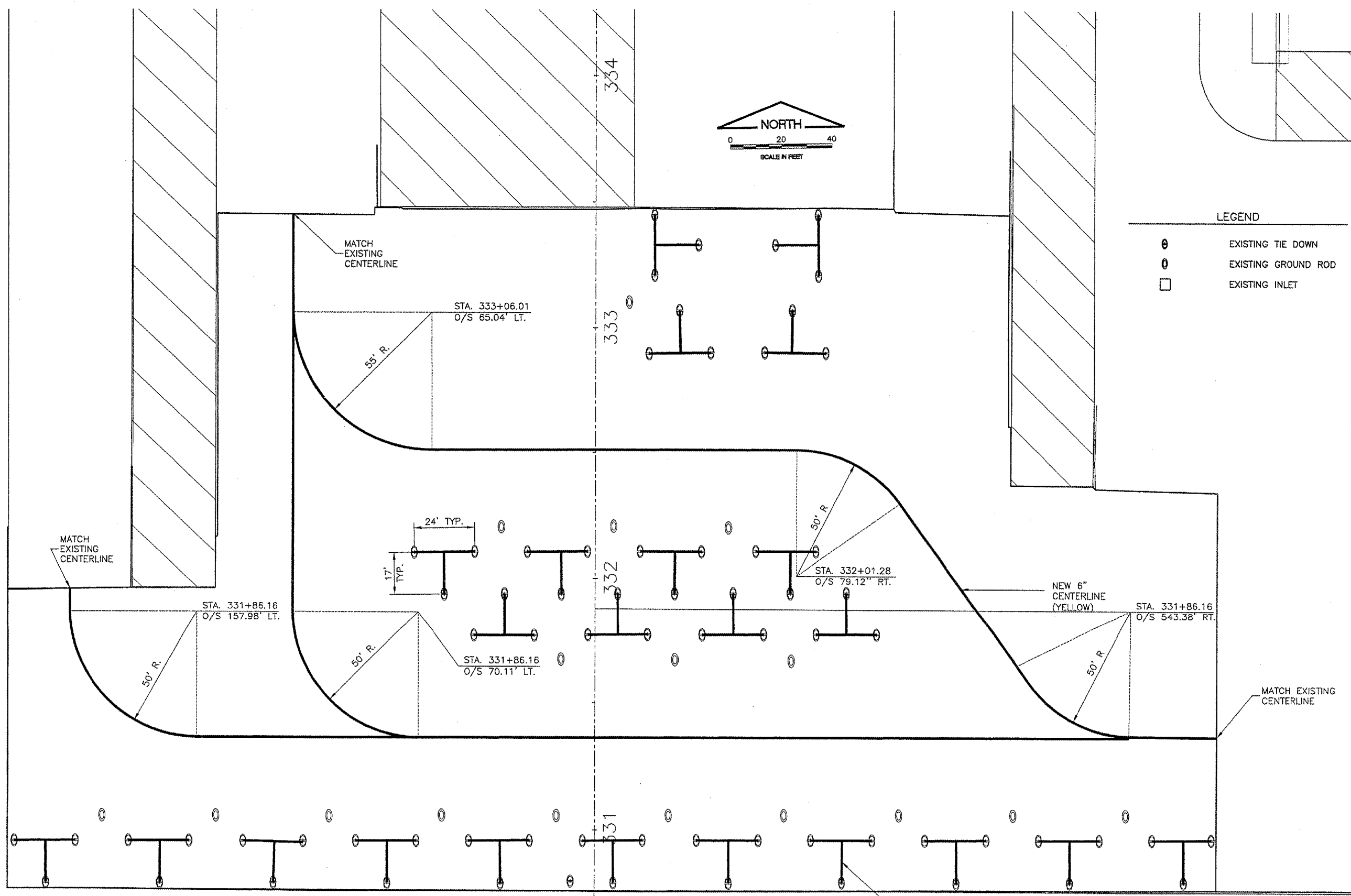
**CENTRALIA MUNICIPAL AIRPORT  
 CENTRALIA, ILLINOIS**

**REHABILITATE SOUTHWEST PORTION OF GA APRON**

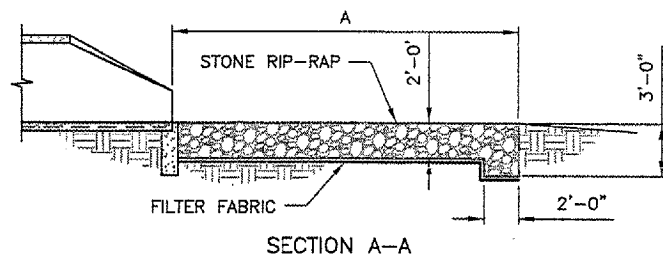
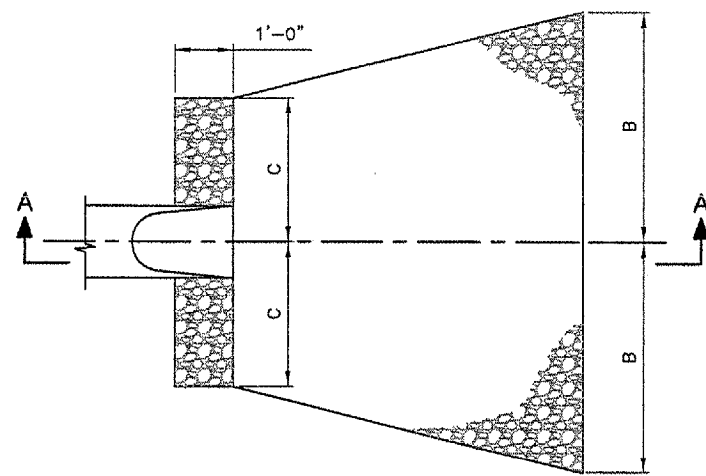
**PROPOSED PAVEMENT MARKING**

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SHEET	11 OF 16 SHEET



NEW 4" PARKING  
 POSITION MARKING  
 (YELLOW)



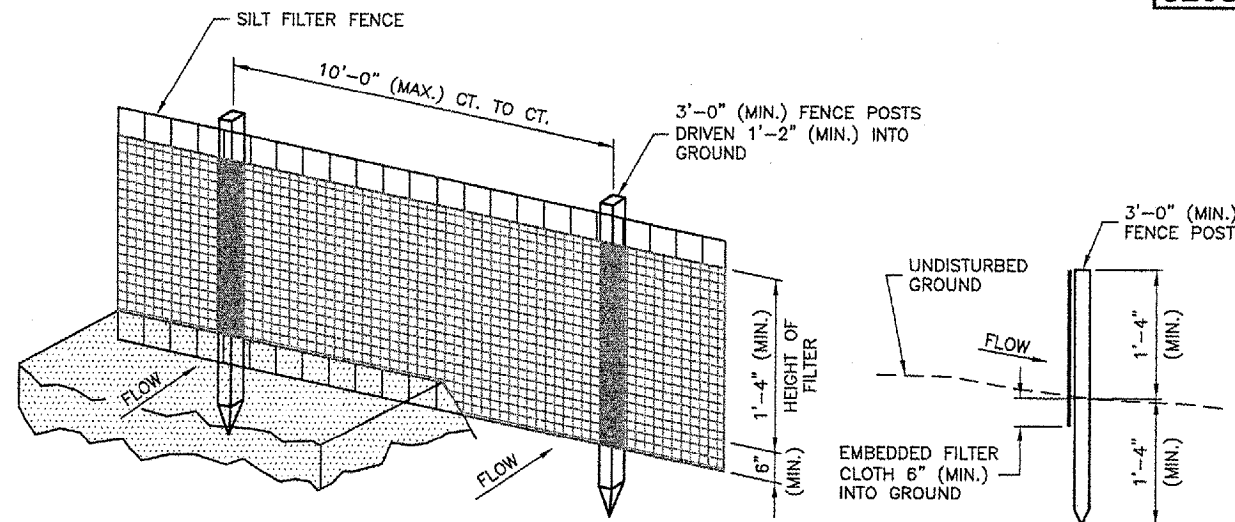
**DIMENSIONS - TABLE 1**

INSIDE DIAMETER STORM SEWER (IN.)	OUTLET DIMENSION (FT.)			INLET DIMENSION (FT.)		
	A	B	C	A	B	C
12" THRU 24"	20	11	3	14	8	3
27" AND 30"	22	12	4	16	9	4
36" AND 42"	28	16	5	20	12	5

THE ENGINEER SHALL DETERMINE THE FINAL RIP-RAP CONFIGURATION IN THE FIELD.

PLAN

**RIP-RAP DETAILS**  
N.T.S.



PERSPECTIVE VIEW

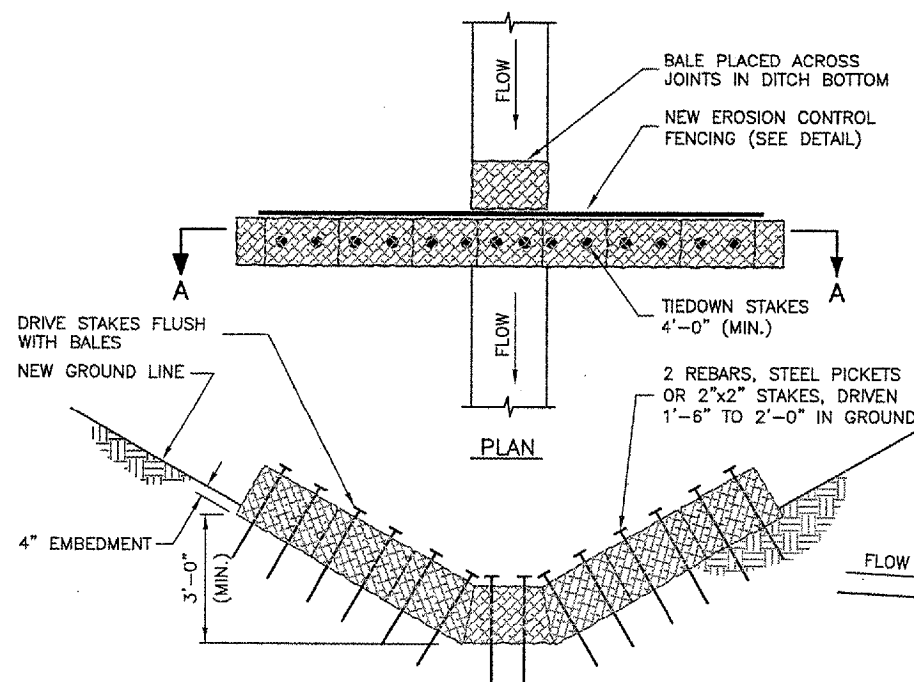
SECTION

**EROSION CONTROL FABRIC FENCE DETAIL**  
N.T.S.

REVISIONS

NUMBER	BY	DATE

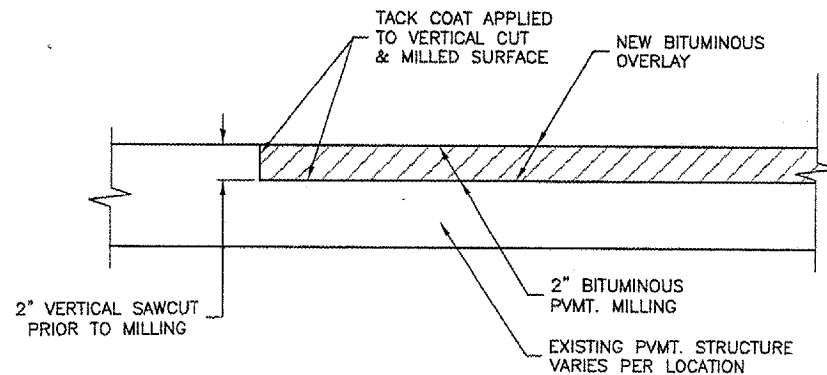
0 1 2  
 THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).



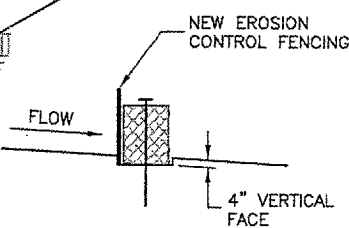
**HAY OR STRAW DITCH CHECK**  
N.T.S.

**NOTES**

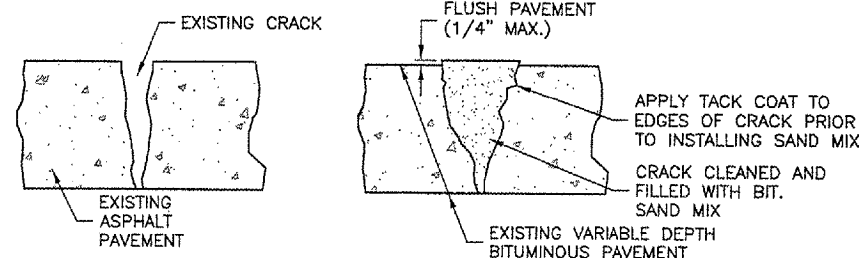
- BALES SHALL BE PLACED AT THE TOE OF SLOPE OR AS DIRECTED BY THE ENGINEER, AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
- EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4", AND PLACED SO THE BINDINGS ARE HORIZONTAL.
- BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR REBARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
- INSPECTION SHALL BE FREQUENT AND REPAIR / REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE. COST OF REMOVAL / REPLACEMENT TO BE INCLUDED IN UNIT PRICE FOR HAY BALES.



**BUTT JOINT DETAIL**  
N.T.S.



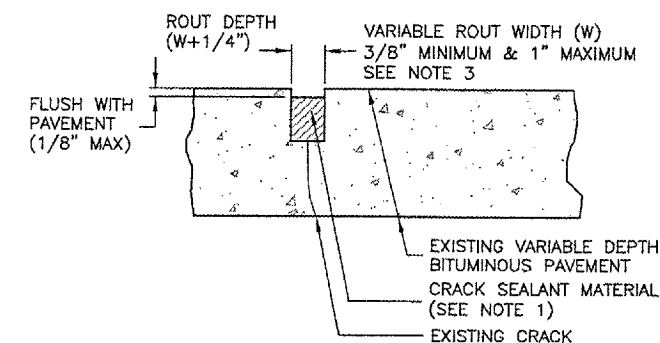
BEDDING DETAIL



**SAND MIX CRACK REPAIR (AR201663)**  
N.T.S.

**NOTES:**

- CRACKS TO BE FILLED WITH SAND MIX SHALL BE DESIGNATED BY THE RESIDENT ENGINEER.
- SAND MIX CRACK REPAIR SHALL BE USED ON ALL CRACKS GREATER THAN 1" WIDE.
- CONTRACTOR SHALL ROUTER, CRACK FLOW AND REMOVE LOOSE FILLER, LOOSE AGGREGATE AND LAITANCE WITH COMPRESSED AIR AS SPECIFIED PRIOR TO SEALING.



**CLEAN & SEAL BITUMINOUS CRACKS (AR201661)**  
N.T.S.

**NOTES:**

- THE CRACK ROUTING DIMENSIONS SHALL PROVIDE A WIDTH TO DEPTH RATIO OF 1:1 FOR SEALANT MATERIAL.
- CRACKS TO BE ROUTED, CLEANED AND SEALED AT LOCATIONS DESIGNATED BY THE RESIDENT ENGINEER.
- CRACKS OVER 1" WIDE SHALL BE FILLED WITH SAND MIX CRACK REPAIR TECHNIQUE.

**NOTES**

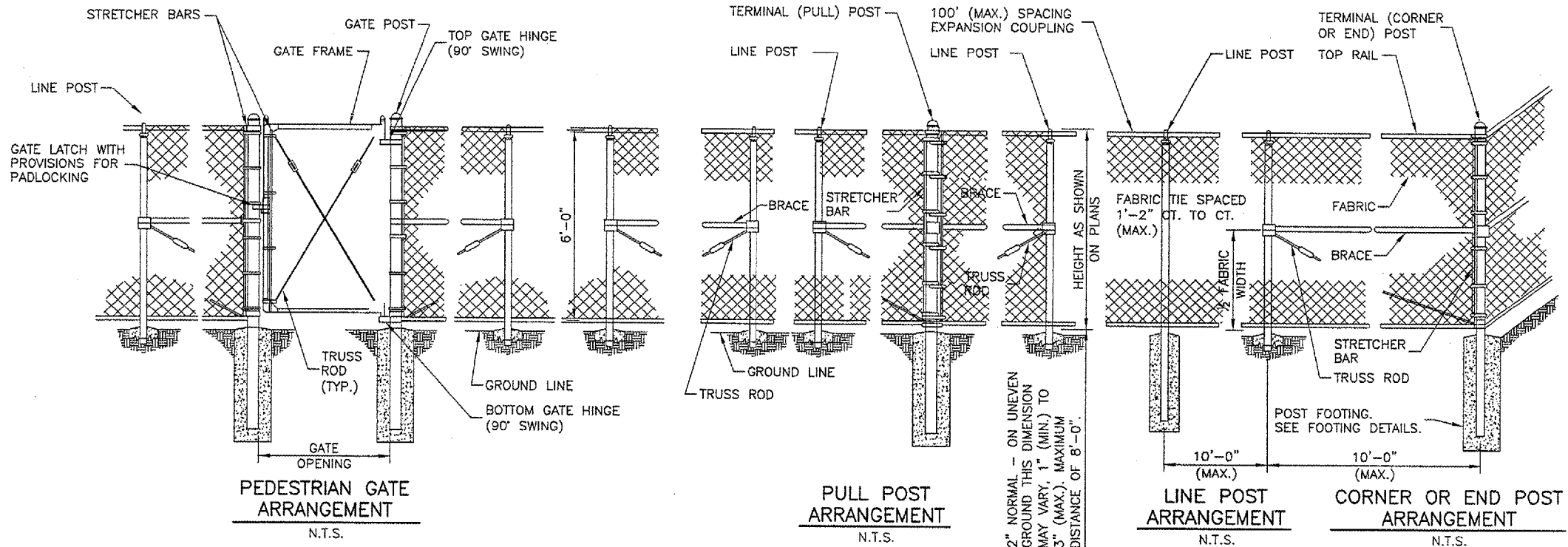
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 2'-0" AT TOP AND MID SECTION.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" MINIMUM AND FOLDED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE. MAINTENANCE, WHICH INCLUDES THE REPLACEMENT OF DAMAGED FENCE SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE EROSION CONTROL FENCE.

CENTRALIA MUNICIPAL AIRPORT  
CENTRALIA, ILLINOIS

REHABILITATE SOUTHWEST PORTION OF GA APRON  
MISCELLANEOUS DETAILS

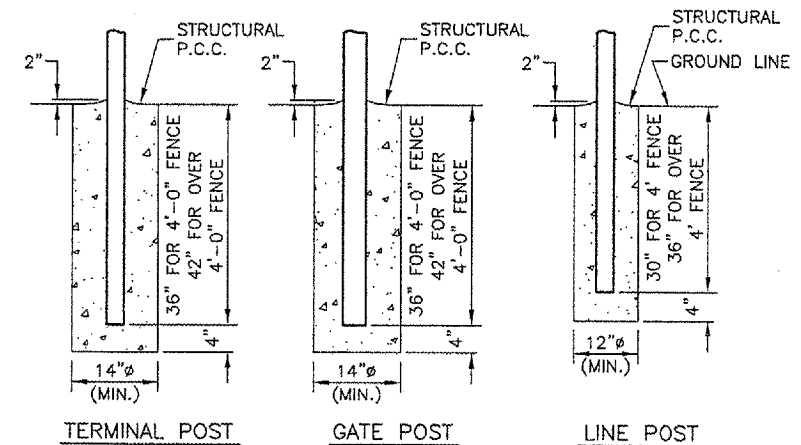
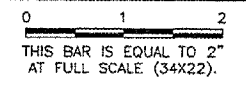


DESIGN BY:	JEF
DRAWN BY:	CMT
CHECKED BY:	JEF
APPROVED BY:	JEF
DATE:	04/21/2008
JOB No:	05072-05
IL PROJ. NO. ENL-3556	
AIP PROJ. NO. 3-17-0015-B9	
SHEET 12 OF 16 SHEET	

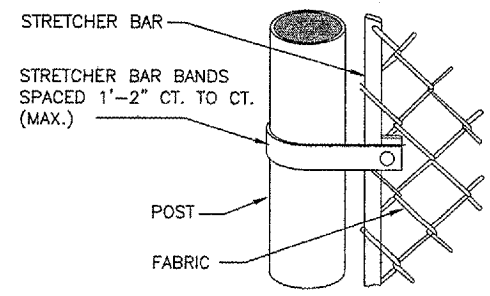


REVISIONS

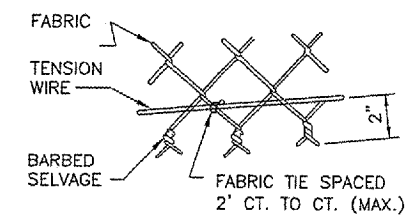
NUMBER	BY	DATE



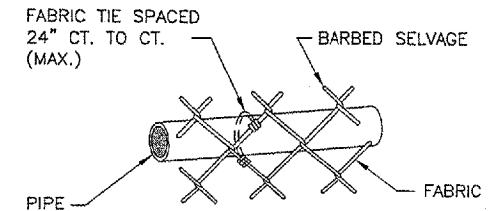
**FOOTING DETAILS**  
 N.T.S.



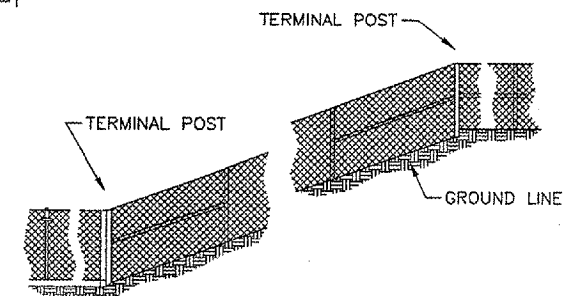
**FASTENING STRETCHER BAR TO POST**  
 N.T.S.



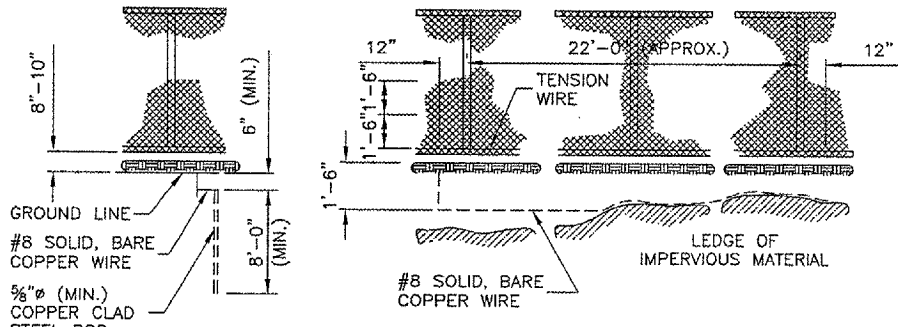
**TYING FABRIC TO TENSION WIRE**  
 N.T.S.



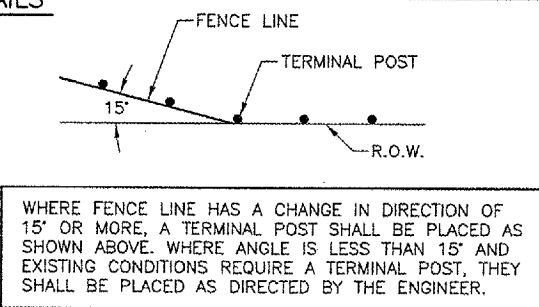
**TYING FABRIC TO PIPE**  
 N.T.S.



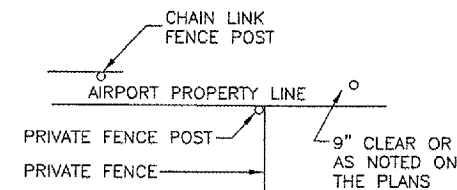
**FENCE INSTALLATION ON SLOPES**  
 N.T.S.



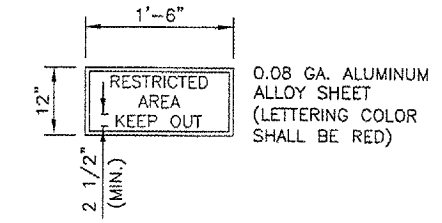
**PROTECTIVE ELECTRICAL GROUND DETAILS**  
 N.T.S.



**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.

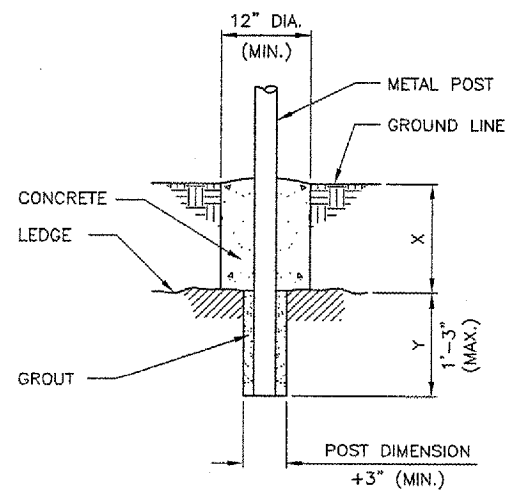
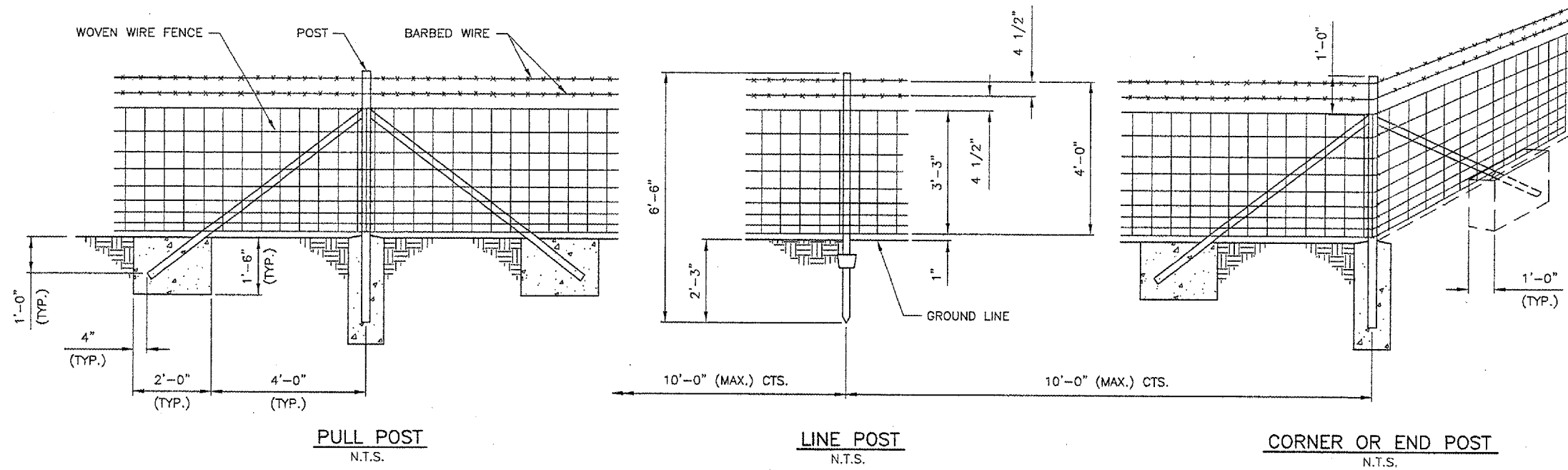
**SIGN DETAIL**  
 N.T.S.

- NOTES**
- 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.
  - 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.
  - THE COUNTERPOISE SHALL BE USED ONLY WHERE IT IS IMPOSSIBLE TO DRIVE A GROUND ROD BECAUSE OF IMPERVIOUS EARTH STRUCTURES.
  - 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.
  - ALL PROPOSED CLASS E FENCE SHALL MEET THE REQUIREMENTS OF IDOT STANDARD 2168-11.

CENTRALIA MUNICIPAL AIRPORT  
 CENTRALIA, ILLINOIS  
 REHABILITATE SOUTHWEST PORTION OF GA APRON  
**FENCING DETAILS 1**

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 DRAWN BY: CMT  
 CHECKED BY: JEF  
 APPROVED BY: JEF  
 DATE: 04/21/2006  
 JOB No: 05072-05  
 IL. PROJ. NO. ENL-3556  
 AIP PROJ. NO. 3-17-0015-B9  
 SHEET 13 OF 16 SHEET



X + Y SHALL NOT EXCEED 27", 33", OR 45" AS APPLICABLE. WHEN X IS 0" TO 12", 18", OR 30", Y=15", AND THE POST SHALL BE SHORTENED AS REQUIRED. WHEN X EXCEEDS 12", 18", OR 30", Y SHALL BE DECREASED CORRESPONDINGLY.

**POST FOOTING DETAIL**  
**(FOR ROCK LEDGE)**  
N.T.S.

METAL ITEMS									
GATE FRAMES		CORNER, END OR PULL POSTS		LINE POSTS		BRACES		GATE POSTS	
SECTION	LBS./FT.	SECTION	LBS./FT.	SECTION	LBS./FT.	SECTION	LBS./FT.	16' TO 24'	
SECTION	LBS./FT.	SECTION	LBS./FT.	SECTION	LBS./FT.	SECTION	LBS./FT.	SECTION	LBS./FT.
TYPE A: PIPE 1.66" O.D.	2.27	TYPE A: PIPE 2.375" O.D.	3.65	TYPE A: PIPE 1.315" O.D.	1.68	TYPE A: PIPE 1.66" O.D.	2.27	TYPE A: 3.50" O.D.	7.58
TYPE B: PIPE 1.66" O.D.	1.83	TYPE B: PIPE 2.375" O.D.	3.11	TYPE B: PIPE 1.315" O.D.	1.34	TYPE B: PIPE 1.66" O.D.	1.83	-----	---
TYPE C: PIPE 1.66" O.D.	1.82	TYPE C: PIPE 2.375" O.D.	3.09	TYPE C: PIPE 1.315" O.D.	1.33	TYPE C: PIPE 1.66" O.D.	1.82	-----	---
		TUBING 2.5" SQ.	4.32	TUBING 1" SQ.	1.41	ANGLE 2 1/2"x2 1/2"x1/4"	3.19	TUBING 3" SQ.	8.80
		ANGLE 2 1/2"x2 1/2"x1/4"	4.10	ANG.				ANGLE 3 1/2"x3 1/2" X 3/8"	8.50
		H, I, U, STRUCTURAL SHAPES	4.10 (MIN.)	L, C, T, U, Y OR OTHER APPROVED STRUCTURAL SHAPES	1.33 (MIN.)	OTHER APPROVED STRUCTURAL SHAPES	3.10 (MIN.)	STRUCTURAL SHAPES	8.50 (MIN.)

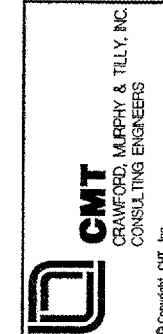
REVISIONS		
NUMBER	BY	DATE

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

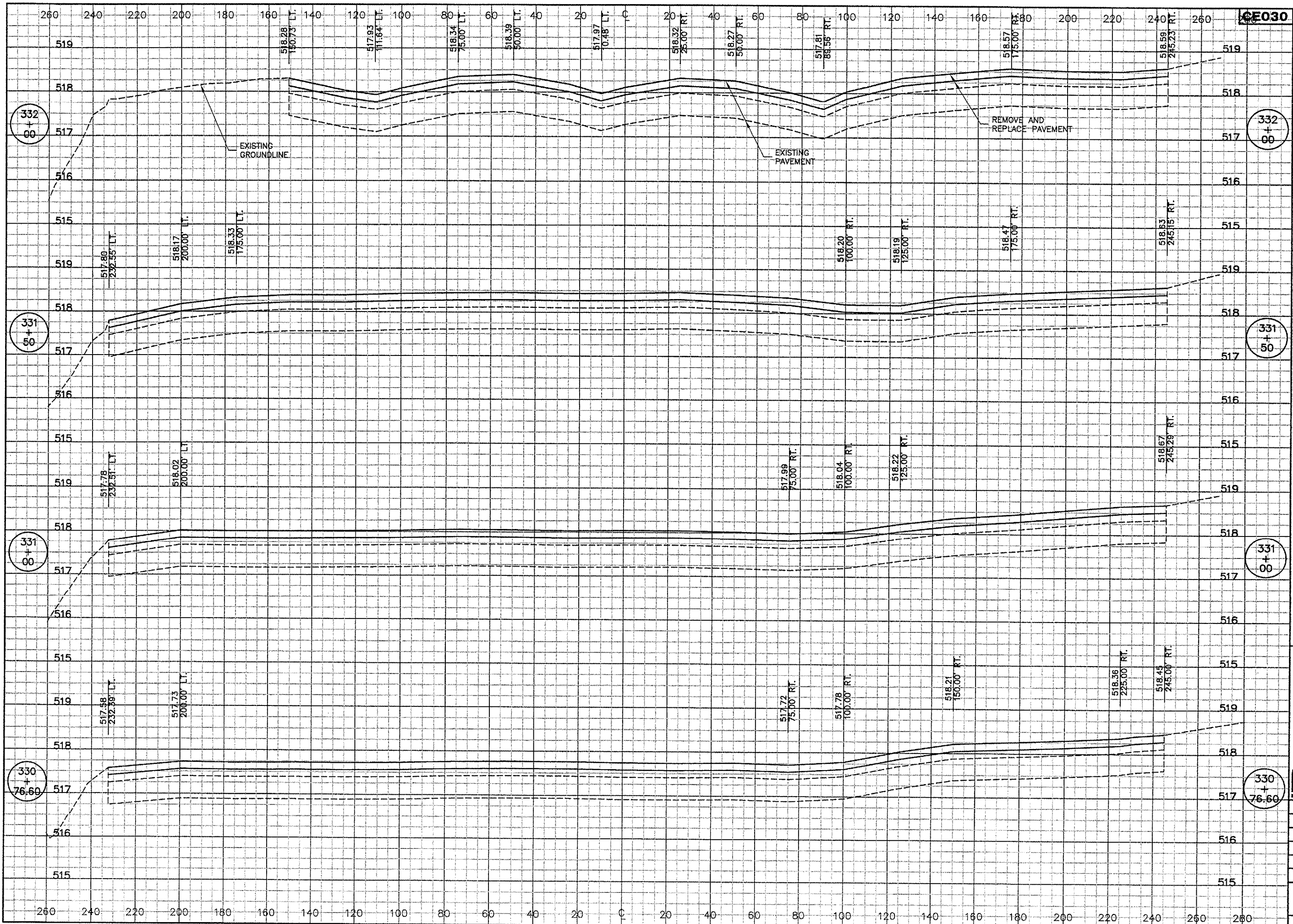
**CENTRALIA MUNICIPAL AIRPORT**  
**CENTRALIA, ILLINOIS**

**REHABILITATE SOUTHWEST PORTION OF GA APRON**

**FENCING DETAILS 2**

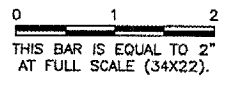


DESIGN BY: JEF  
 DRAWN BY: CMT  
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 IL PROJ. NO. ENL-3556  
 AIP PROJ. NO. 3--17--0015-B9  
 SHEET 14 OF 16 SHEET



ICE030  
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 LAYOUT: D-Size  
 UPDATE BY: dallen  
 SURVEY BOOK #  
 DATE: Mon 4/24/06 2:17pm  
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 TB.DWG

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NUMBER	BY	DATE



**CENTRALIA MUNICIPAL AIRPORT  
 CENTRALIA, ILLINOIS**

**REHABILITATE SOUTHWEST PORTION OF GA APRON  
 APRON CROSS SECTIONS 1  
 STA. 330+76.60 TO STA. 332+00**

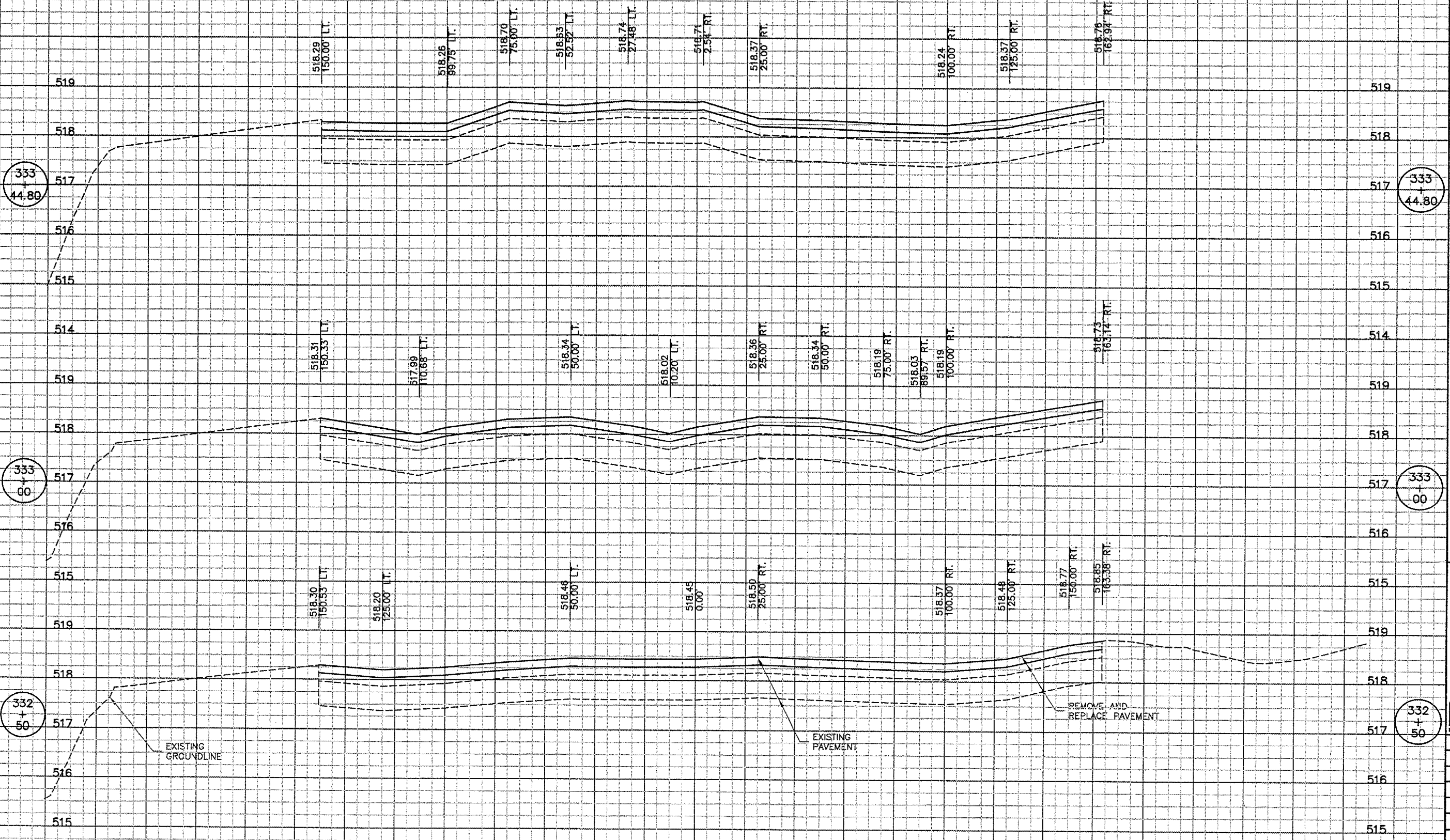
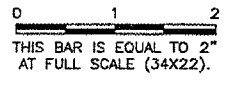
**CMT**  
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 CONSULTING ENGINEERS  
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DESIGN BY:	KLB
DRAWN BY:	CMT
CHECKED BY:	CBG
APPROVED BY:	JEF
DATE:	04/21/2006
JOB No:	05072-05
IL PROJ. NO.	ENL-3556
AIP PROJ. NO.	3-17-0015-89
SHEET	15 OF 16 SHEET

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 UPDATE BY: dallen  
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 DATE: Mon 4/24/06 2:39pm  
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**CENTRALIA MUNICIPAL AIRPORT**  
**CENTRALIA, ILLINOIS**

**REHABILITATE SOUTHWEST PORTION OF GA APRON**  
**APRON CROSS SECTIONS 2**  
**STA. 332+50 TO STA. 333+44.80**



DESIGN BY:  
 DRAWN BY:  
 CHECKED BY:  
 APPROVED BY:  
 DATE: 04/21/2006  
 JOB No: 05072-05  
 ILL. PROJ. NO. ENL-3556  
 AIP PROJ. NO. 3-17-0015-89  
 SHEET 16 OF 16 SHEET

260 240 220 200 180 160 140 120 100 80 60 40 20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280