

ITEM 17A  
03-06-09 LETTING

TOTAL SHEETS: 40  
CA008

# CONSTRUCTION PLANS FOR ABRAHAM LINCOLN CAPITAL AIRPORT

SPRINGFIELD AIRPORT AUTHORITY  
SPRINGFIELD, ILLINOIS

IL. PROJ. NO. SPI-3885  
AIP PROJ. NO. 3-17-0096-XX

## RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP

JANUARY 27, 2009



*Handwritten signature*  
EXP. 11/30/09

**811** Know what's below. Call before you dig.  
J.U.L.I.E. JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS  
www.illinoiscall.com

THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ACTUAL LOCATIONS OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES OF HIS OPERATIONAL PLANS, OBTAIN FROM RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION AND THE ONE-CALL NOTICE SYSTEM. THE ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY SUCH UTILITY OR SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.

CALL J.U.L.I.E. FOR UTILITY INFORMATION AT 811.

### DESIGN INFORMATION

#### GEOMETRIC CRITERIA

AIRPLANE DESIGN GROUP III  
AIRCRAFT APPROACH CATEGORY C

#### PAVEMENT DESIGN CRITERIA

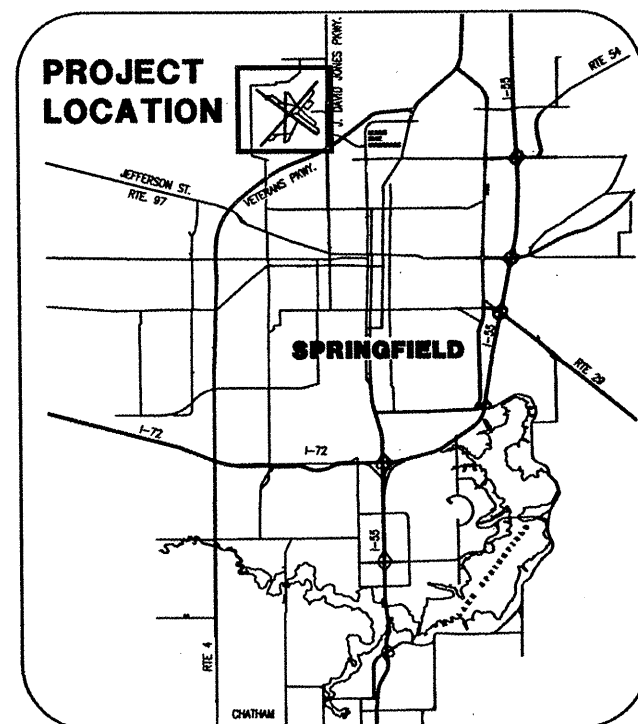
AIRCRAFT DUAL WHEEL GEAR  
DEPARTURE WEIGHT = 75,000 LBS.  
1100 EQUIV. ANNUAL DEPARTURES

#### PAVEMENT DESIGN CRITERIA

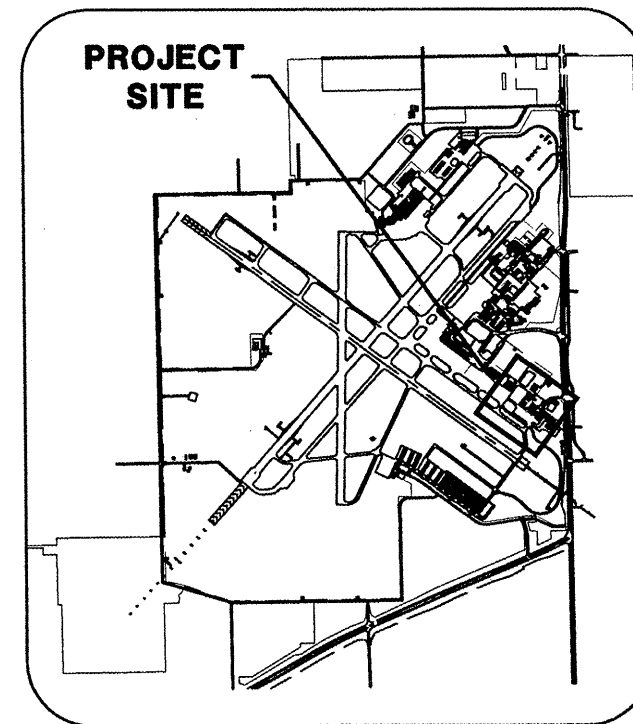
AIRCRAFT DUAL WHEEL GEAR B737-400  
DEPARTURE WEIGHT = 140,000 LBS.  
26 EQUIV. ANNUAL DEPARTURES

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

TOWNSHIP: 16 NORTH  
RANGE: 5 WEST OF THE 4TH P.M.  
SECTION: 9  
COUNTY: SANGAMON  
CIVIL TOWNSHIP: CAPITAL



LOCATION MAP



SITE PLAN

SPRINGFIELD AIRPORT AUTHORITY  
ABRAHAM LINCOLN CAPITAL AIRPORT  
SPRINGFIELD, ILLINOIS

APPROVED *Mark Spurgeon*  
EXECUTIVE DIRECTOR OF AVIATION  
DATE *Jan 21 2009*

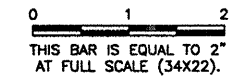
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CRAWFORD MURPHY & TILLY, INC.  
CONSULTING ENGINEERS  
■ SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO

SUBMITTED BY *Handwritten signature*  
DATE *1/21/09*

CMT JOB NUMBER: 08035-08

CA008

REVISIONS		
NUMBER	BY	DATE



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SHEET NUMBER	SHEET TITLE
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02	INDEX TO SHEETS & SUMMARY OF QUANTITIES
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08	CONSTRUCTION ACTIVITY PLAN DETAILS
09	EXISTING CONDITIONS & REMOVALS
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30	ELECTRICAL DETAILS 1
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32	DUCT BANK DETAIL
33	AIRFIELD SIGNAGE DETAIL
34	INDEX TO CROSS SECTIONS - TURFING PLAN
35	EROSION CONTROL DETAILS
36	RAMP CROSS SECTIONS 1 STA. 75+20 TO STA. 76+50
37	RAMP CROSS SECTIONS 2 STA. 76+76.25 TO STA. 77+51.25
38	RAMP CROSS SECTIONS 3 STA. 78+00 TO STA. 79+00
39	RAMP CROSS SECTIONS 4 STA. 79+51.25 TO STA. 80+76.50
40	TAXWAY B2 CROSS SECTIONS STA. 0+25 TO STA. 1+75

Summary Of Quantities			
ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY
AR108158	1/C #8 5 KV UG CABLE IN UD	L.F.	1280
AR110554	EXTEND 4-WAY DUCT	L.F.	25
AR800293	DUCT MARKER - IN PAVEMENT	EACH	4
AR125415	MITL-BASE MOUNTED	EACH	17
AR125444	TAXI GUIDANCE SIGN, 4 CHARACTER	EACH	2
AR125445	TAXI GUIDANCE SIGN, 5 CHARACTER	EACH	1
AR125902	REMOVE BASE MOUNTED LIGHT	EACH	13
AR125904	REMOVE TAXI GUIDANCE SIGN	EACH	4
AR150510	ENGINEER'S FIELD OFFICE	L.S.	1
AR152410	UNCLASSIFIED EXCAVATION	C.Y.	3860
AR152515	SUBGRADE UNDERCUT	C.Y.	2565
AR800395	STEEL MAT REMOVAL	S.Y.	3910
AR152540	SOIL STABILIZATION FABRIC	S.Y.	7700
AR156510	SILT FENCE	L.F.	275
AR156520	INLET PROTECTION	EACH	9
AR201512	BITUMINOUS BASE COURSE - 12"	S.Y.	695
AR209606	CRUSHED AGG. BASE COURSE - 6"	S.Y.	16215
AR401610	BITUMINOUS SURFACE COURSE	TON	335
AR401651	BITUMINOUS PAVEMENT MILLING	C.Y.	460
AR401655	BUTT JOINT CONSTRUCTION	S.Y.	635
AR401900	REMOVE BITUMINOUS PAVEMENT	S.Y.	85
AR501511	11" PCC PAVEMENT	S.Y.	15385
AR501530	PCC TEST BATCH	EACH	1
AR501900	REMOVE PCC PAVEMENT	S.Y.	11860
AR510510	TIE DOWN	EACH	39
AR510515	GROUND ROD	EACH	8
AR602510	BITUMINOUS PRIME COAT	GAL.	245
AR603510	BITUMINOUS TACK COAT	GAL.	190
AR620510	PAVEMENT MARKING	S.F.	3160
AR620900	PAVEMENT MARKING REMOVAL	S.F.	250
AR701512	12" RCP, CLASS IV	L.F.	350
AR701518	18" RCP, CLASS IV	L.F.	180
AR701900	REMOVE PIPE	L.F.	190
AR705524	4" PERFORATED UNDERDRAIN W/SOCK	L.F.	3330
AR705544	4" NON PERFORATED UNDERDRAIN	L.F.	215
AR705635	UNDERDRAIN COLLECTION STRUCTURE	EACH	3
AR705640	UNDERDRAIN CLEANOUT	EACH	3
AR705900	REMOVE UNDERDRAIN	L.F.	330
AR705904	REMOVE UNDERDRAIN CLEANOUT	EACH	1
AR705905	REMOVE COLLECTION STRUCTURE	EACH	1
AR751410	INLET	EACH	2
AR751415	INLET - SPECIAL	EACH	3
AR751900	REMOVE INLET	EACH	3
AR901510	SEEDING	ACRE	3
AR904510	SODDING	S.Y.	850
AR908510	MULCHING	ACRE	3
AR908520	EXCELSIOR BLANKET	S.Y.	1200
AR910200	ROADWAY SIGN	EACH	2
AR910915	REMOVE ROADWAY SIGN	EACH	1



SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS

RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 INDEX TO SHEETS & SUMMARY OF QUANTITIES

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APPROVED BY: *REN*

DATE: JANUARY 27, 2009

JOB No: 08035-08

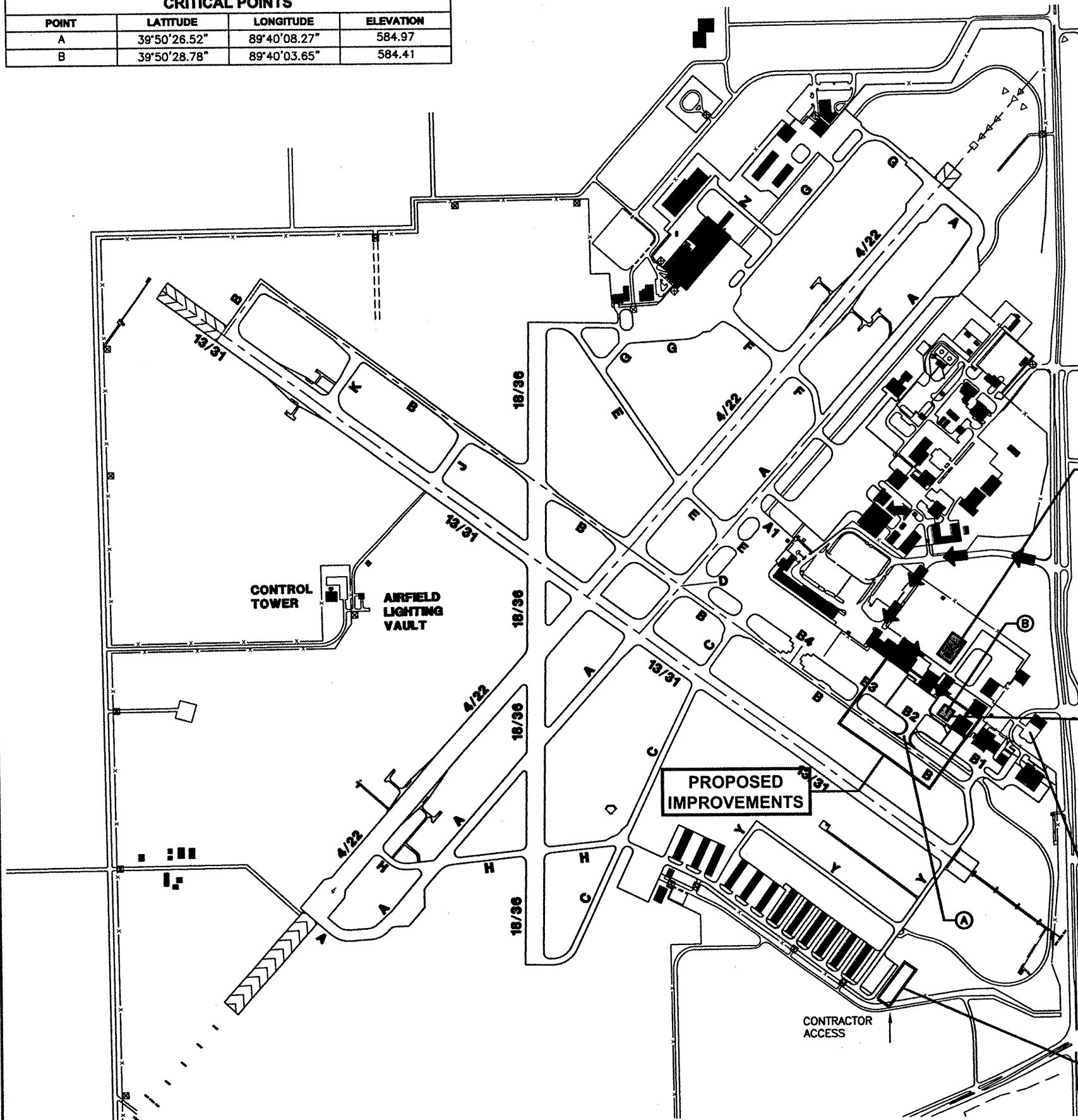
IL PROJ. NO. SPI-3885  
 AIP PROJ. NO. 3-17-0096-XX

SHEET 02 OF 40 SHEETS

GROUND CONTROL FREQUENCY - 121.90  
 AIR CONTROL FREQUENCY - 124.30  
 MAXIMUM HEIGHT OF EQUIPMENT - 25'

**CRITICAL POINTS**

POINT	LATITUDE	LONGITUDE	ELEVATION
A	39°50'26.52"	89°40'08.27"	584.97
B	39°50'28.78"	89°40'03.65"	584.41



**GENERAL NOTES**

- ALL RUNWAYS, TAXIWAYS, AND APRONS SHALL BE KEPT OPEN TO AIRPORT TRAFFIC DURING CONSTRUCTION EXCEPT AS NOTED IN THE CONSTRUCTION ACTIVITY PLAN.
- ALL CONSTRUCTION TRAFFIC OPERATING ON OR CROSSING RUNWAYS, TAXIWAYS, AND APRONS OPEN TO AIRCRAFT TRAFFIC SHALL BE UNDER CONTROL OF A FLAGMAN IN RADIO CONTACT WITH FAA AIR TRAFFIC CONTROL TOWER PERSONNEL AT ALL TIMES. THE CONTRACTOR SHALL PROVIDE HIS OWN RADIOS AND ONLY HIS PERSONNEL WHO HAVE SUCCESSFULLY COMPLETED THE APPROVED SAA/FAA SAFETY COURSE MAY OPERATE THESE RADIOS.
- 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 ON THE CONSTRUCTION ACTIVITY PLAN. THE MAXIMUM HEIGHT OF EQUIPMENT, MATERIALS AND STOCKPILES SHALL BE 25' ABOVE GROUND ELEVATION.
- BROKEN ASPHALT SHALL BE DISPOSED OF BY THE CONTRACTOR OFF OF AIRPORT PROPERTY UNLESS OTHERWISE DIRECTED BY THE AIRPORT.
- VEHICLES AND EQUIPMENT SHALL NOT BE ALLOWED WITHIN 95' FROM THE CENTERLINE OF ACTIVE TAXIWAYS OR 250' FROM THE CENTERLINE OF ACTIVE RUNWAYS.
- ROADS OR STORAGE AREAS SHALL BE MAINTAINED AND REPAIRED IN KIND BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER AND 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 ENGINEER AND THE AIRPORT.
- THE CONTRACTOR SHALL CONTINUOUSLY CLEAN 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 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.

- CONTRACTOR'S ACCESS SHALL BE AS FOLLOWS:
  - THE CONTRACTOR'S ACCESS TO WORK SHALL BE AS SHOWN IN THE PLANS.
  - THE CONTRACTOR SHALL COMPLETE A SECURITY FORM FOR ALL PERSONNEL 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 HIS PADLOCK TO THE RESIDENT ENGINEER, S.A.A. MAINTENANCE SUPERVISOR, AND S.A.A. SECURITY CHIEF. NO ADDITIONAL KEYS ARE TO BE DISTRIBUTED UNLESS AUTHORIZED BY THE RESIDENT ENGINEER.
  - CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND TEMPORARY EASEMENTS FOR THE PUBLIC ACCESS ROAD(S) SHOWN AND SHALL COMPLY WITH ALL REQUIREMENTS, LOAD RESTRICTIONS, & 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 THE CONTRACT TIME WILL BE CONSIDERED FOR DELAYS DUE TO LACK OF ADEQUATE ACCESS TO THE WORK SITE.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE ACCESS GATE(S) CLOSED DURING WORK HOURS. THE CONTRACTOR SHALL POST A COMPETENT SECURITY GUARD TO CONTROL ACCESS AT THE GATE. THE CONTRACTOR SHALL REPLACE ANY UNSATISFACTORY SECURITY GUARDS AS DIRECTED.
  - THE CONTRACTOR SHALL 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 AIRPORT PART 77 SURFACES, OR RUNWAY AND TAXIWAY SAFETY AREAS.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ACTIVE AIRFIELD PAVEMENTS WHICH ARE CROSSED BY HIS VEHICLES ACCESSING
- EXCESS EARTHWORK DISPOSAL SHALL BE AS FOLLOWS:
  - EXCESS EARTHWORK SHALL BE DISPOSED AT THE LOCATION SHOWN, AS DIRECTED BY THE AIRPORT.
  - EXCESS EARTHWORK SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH ITEM 152.
  - THE CONTRACTOR SHALL INSTALL A TEMPORARY ACCESS GATE AT A LOCATION APPROVED BY THE AIRPORT FOR ACCESS TO THE DISPOSAL AREA.

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 PLOT DATE: 1/29/2009 12:18 PM  
 SPI-BASE-1  
 BASE\_PROPGEO  
 SPIBASE\_EXISTGEO

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



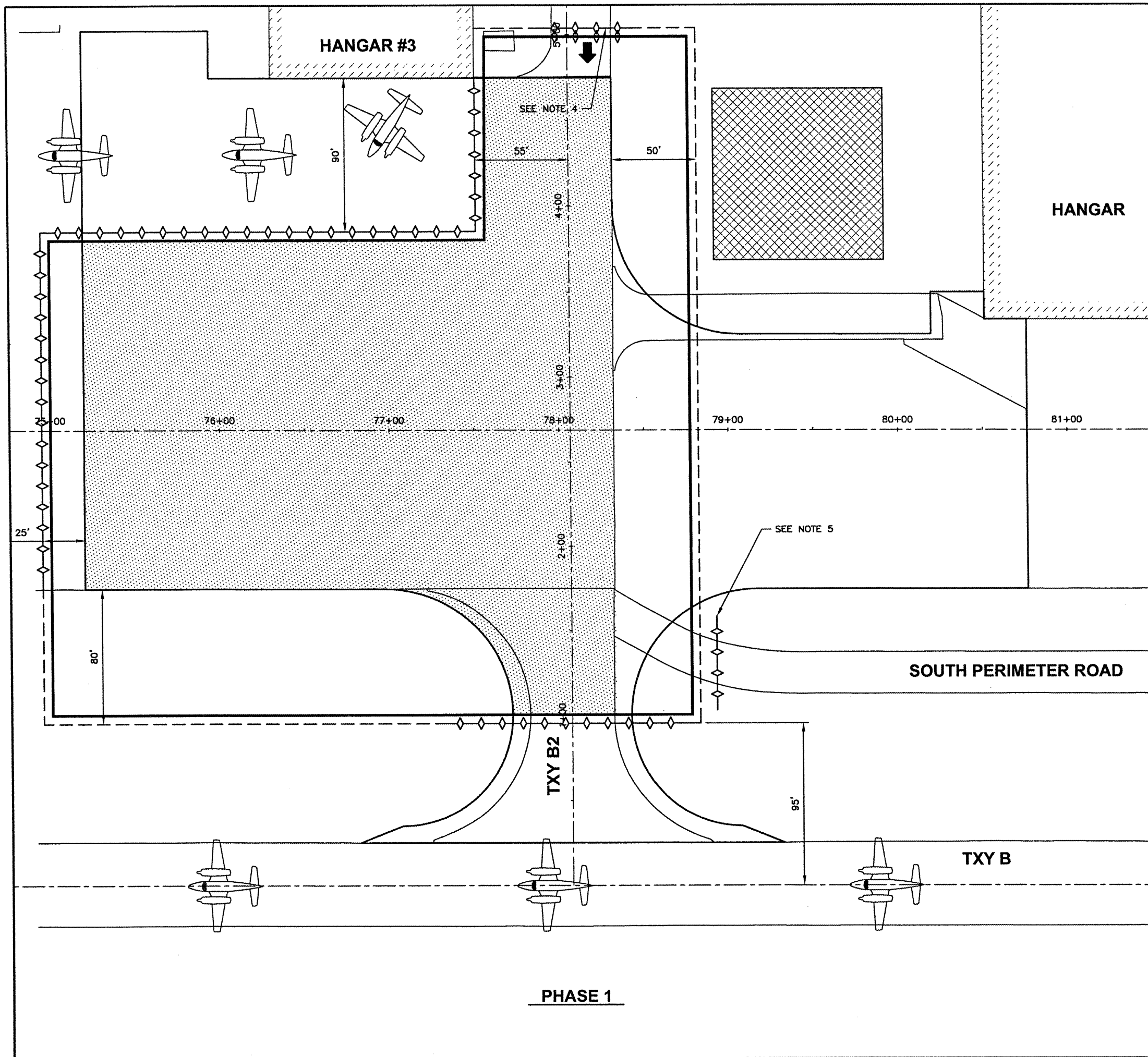
SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS

RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 AIRPORT SITE PLAN

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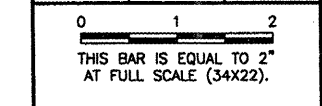
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SHEET 03 OF 40 SHEETS	



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 SPI-BASE-1  
 SpiAlign  
 BASE\_PROPGEO

**CA008**

REVISIONS		
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- LEGEND**
- WORK LIMITS
  - WORK AREA
  - CONSTRUCTION SET BACK LINE
  - BARRICADES IDOT TYPE 1 WITH RED LIGHTS AND 20"x 20" ORANGE FLAGS AT 20' SPACING
  - CONTRACTOR'S STAGING AND STORAGE
  - EXISTING BUILDING
  - CONTRACTOR ACCESS
  - AIR TRAFFIC ACCESS

- CONSTRUCTION ACTIVITY PLAN  
 PHASING NOTES - PHASE 1**
1. THE CONTRACTOR SHALL PLACE ALL BARRICADES AS SHOWN PRIOR TO STARTING WORK ON THIS PHASE.
  2. THE AIRPORT WILL REQUIRE 7 CALENDAR DAYS NOTICE FROM THE CONTRACTOR PRIOR TO INITIATING THIS PHASE TO COORDINATE WITH THE TENANTS.
  3. ACCESS TO HANGAR #3 SHALL BE CONTINUOUS THROUGH PHASE 1.
  4. CONTRACTOR SHALL PLACE BARRICADES AT BOTH ENDS OF THIS TAXIWAY.
  5. CONTRACTOR SHALL PLACES BARRICADES AT BOTH ENDS OF PERIMETER ROAD.

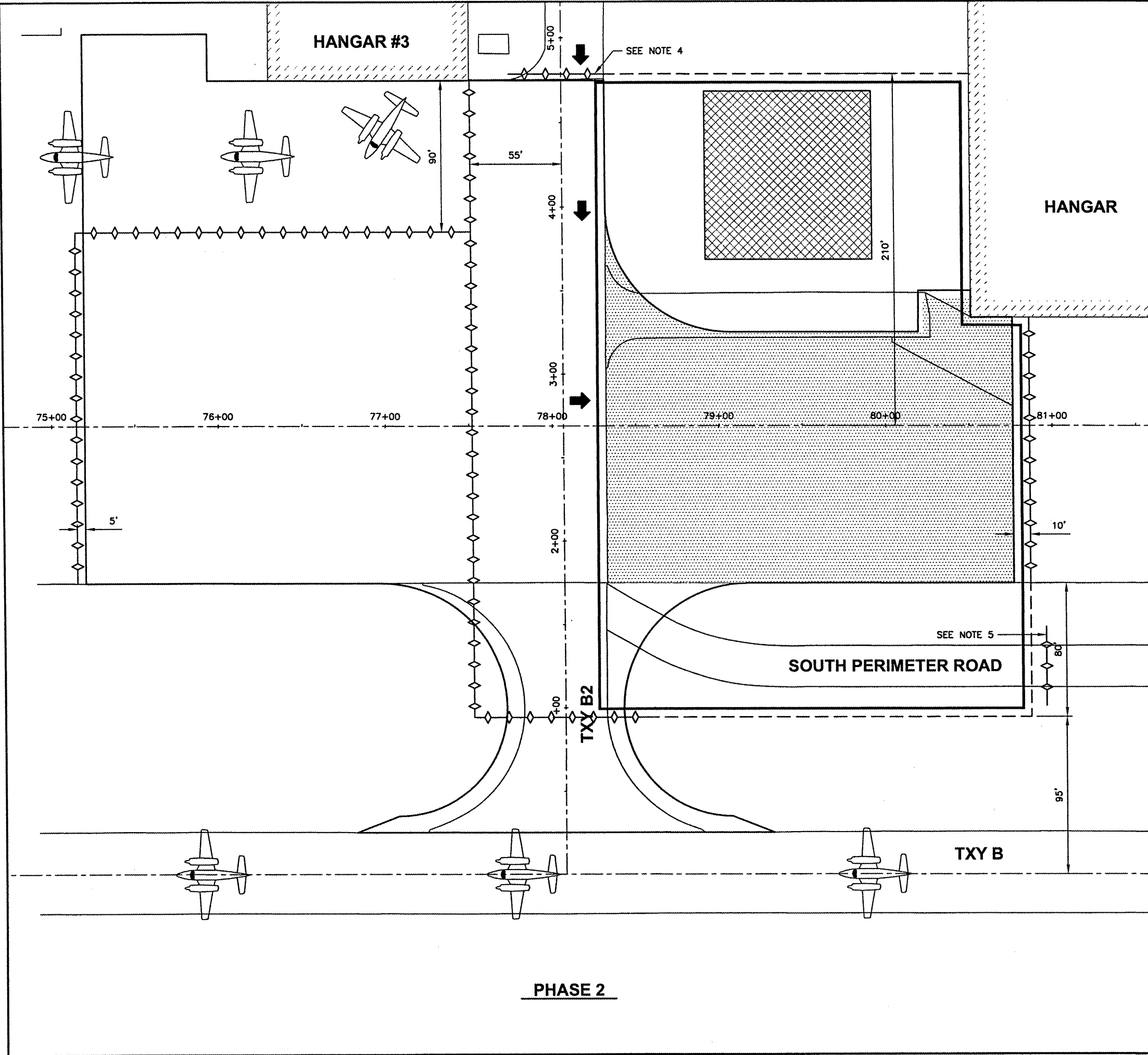
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 SPRINGFIELD, ILLINOIS**

**RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 CONSTRUCTION ACTIVITY PLAN 1**

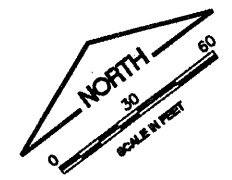
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SHEET 04 OF 40 SHEETS	



**PHASE 2**



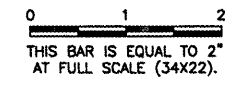
- LEGEND**
- WORK LIMITS
  - WORK AREA
  - CONSTRUCTION SET BACK LINE
  - BARRICADES IDOT TYPE 1 WITH RED LIGHTS AND 20"x 20" ORANGE FLAGS AT 20' SPACING
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  - EXISTING BUILDING
  - CONTRACTOR ACCESS
  - AIR TRAFFIC ACCESS

- CONSTRUCTION ACTIVITY PLAN  
PHASING NOTES - PHASE 2**
1. THE CONTRACTOR SHALL PLACE ALL BARRICADES AS SHOWN PRIOR TO STARTING WORK ON THIS PHASE.
  2. THE AIRPORT WILL REQUIRE 7 CALENDAR DAYS NOTICE FROM THE CONTRACTOR PRIOR TO INITIATING THIS PHASE TO COORDINATE WITH THE TENANTS.
  3. ACCESS TO HANGAR #3 SHALL BE CONTINUOUS THROUGH PHASE 2.
  4. CONTRACTOR SHALL PLACE BARRICADES AT BOTH ENDS OF THIS TAXIWAY.
  5. CONTRACTOR SHALL PLACES BARRICADES AT BOTH ENDS OF PERIMETER ROAD.
  6. PHASE 2 MAY BE CONCURRENT WITH PHASE 1.

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 PLOT DATE: 1/29/2009 12:18 PM  
 Spittop  
 SPI-BASE-1  
 BASE\_PROPGEO  
 SpiAlign

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SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS

RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 CONSTRUCTION ACTIVITY PLAN 2

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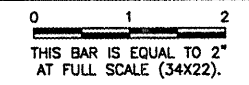


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SHEET	05 OF 40 SHEETS

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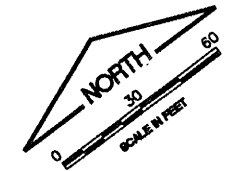


SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS

RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 CONSTRUCTION ACTIVITY PLAN 3

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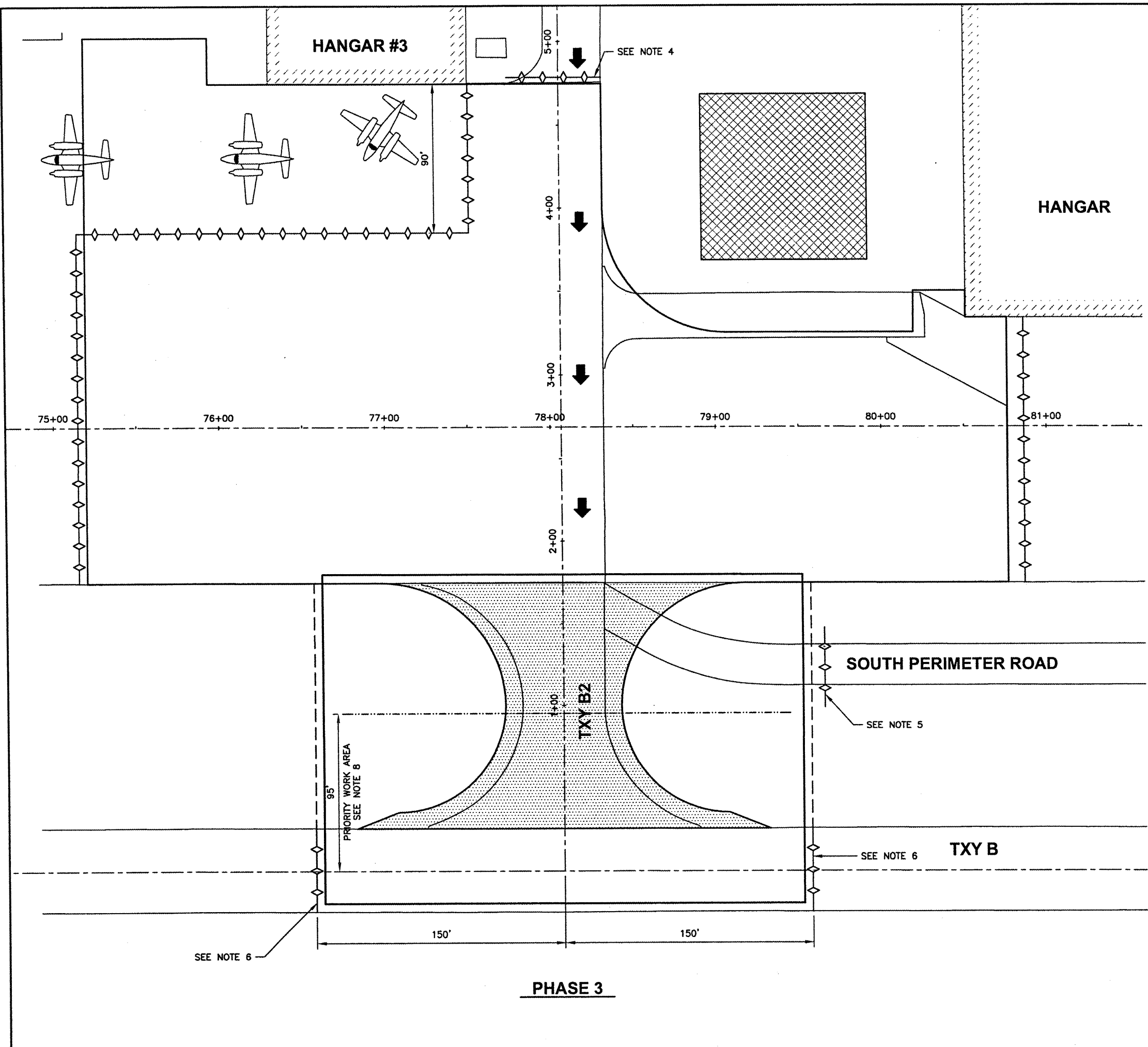
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APPROVED BY:	<i>REW</i>
DATE:	JANUARY 27, 2009
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SHEET	06 OF 40 SHEETS



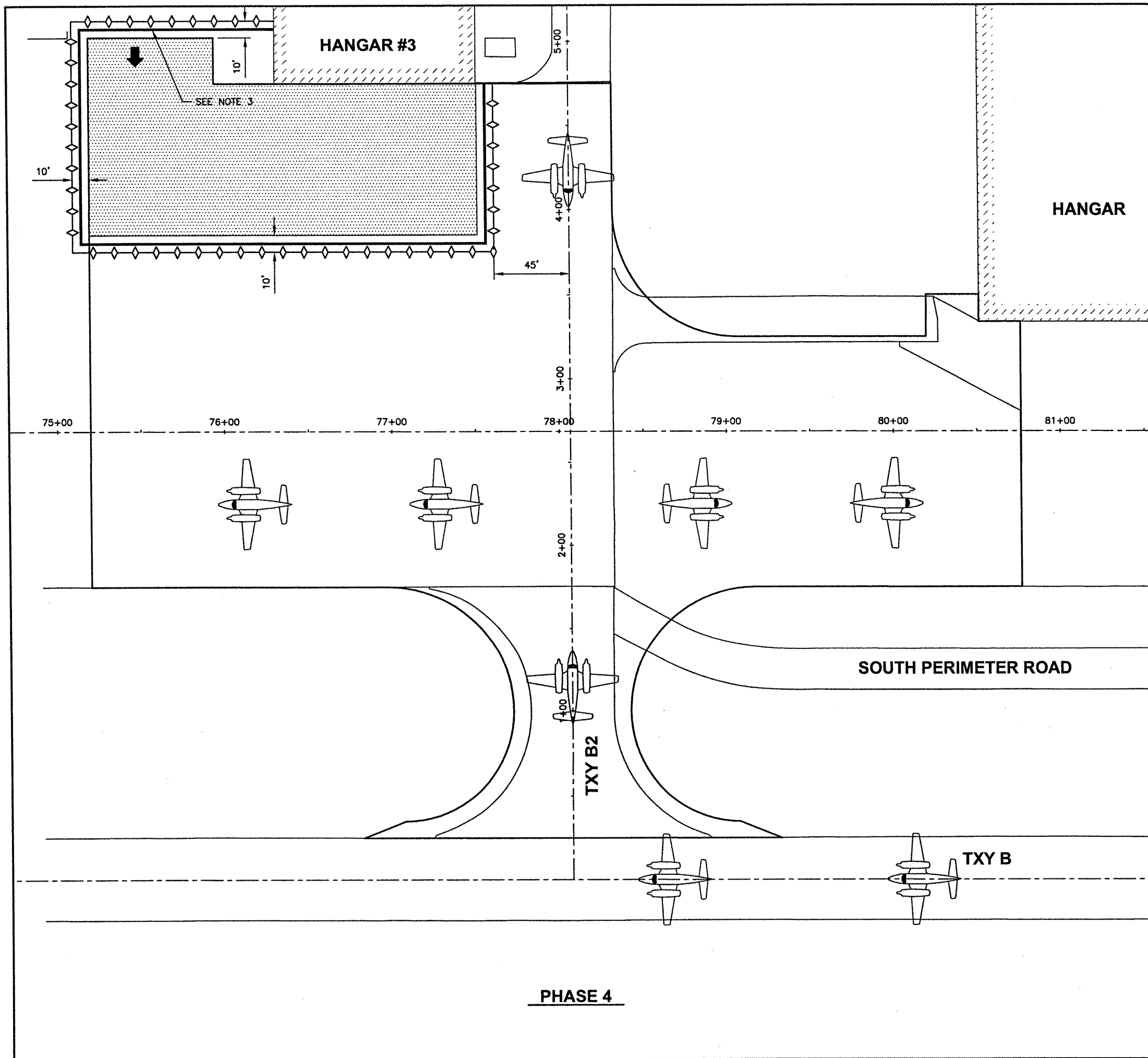
- LEGEND**
- WORK LIMITS
  - WORK AREA
  - CONSTRUCTION SET BACK LINE
  - BARRICADES IDOT TYPE 1 WITH RED LIGHTS AND 20"x 20" ORANGE FLAGS AT 20' SPACING
  - CONTRACTOR'S STAGING AND STORAGE
  - EXISTING BUILDING
  - CONTRACTOR ACCESS
  - AIR TRAFFIC ACCESS

**CONSTRUCTION ACTIVITY PLAN  
 PHASING NOTES - PHASE 3**

1. THE CONTRACTOR SHALL PLACE ALL BARRICADES AS SHOWN PRIOR TO STARTING WORK ON THIS PHASE.
2. THE AIRPORT WILL REQUIRE 7 CALENDAR DAYS NOTICE FROM THE CONTRACTOR PRIOR TO INITIATING THIS PHASE TO COORDINATE WITH THE TENANTS.
3. ACCESS TO HANGAR #3 SHALL BE CONTINUOUS THROUGH PHASE 3.
4. CONTRACTOR SHALL PLACE BARRICADES AT BOTH ENDS OF THIS TAXIWAY.
5. CONTRACTOR SHALL PLACES BARRICADES AT BOTH ENDS OF PERIMETER ROAD.
6. CONTRACTOR SHALL ALSO PLACE BARRICADES NEAR TXY B-1 & TXY B-3 AS DIRECTED BY THE AIRPORT TO CLOSE THIS PORTION OF TXY B.
7. PHASE 3 SHALL BE CONCURRENT WITH PHASE 1 OR 2.
8. THE CONTRACTOR WILL HAVE 14 CALENDAR DAYS TO COMPLETE THE WORK WITHIN 95' OF THE TXY B CENTERLINE.



**PHASE 3**

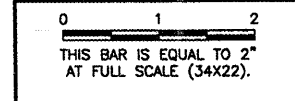


**PHASE 4**

K:\Springfield\0803508\Draw\Sheets  
 FILE: CONACT04.dwg  
 UPDATE BY: Kristy Brod  
 PLOT DATE: 1/29/2009 12:18 PM  
 Spi topo  
 SPI-BASE-1  
 BASE\_PROPGEO  
 SpiAlign

**CA008**

REVISIONS		
NUMBER	BY	DATE



- LEGEND**
- WORK LIMITS
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  - EXISTING BUILDING
  - CONTRACTOR ACCESS
  - AIR TRAFFIC ACCESS

- CONSTRUCTION ACTIVITY PLAN PHASING NOTES - PHASE 4**
1. THE CONTRACTOR SHALL PLACE ALL BARRICADES AS SHOWN PRIOR TO STARTING WORK ON THIS PHASE.
  2. THE AIRPORT WILL REQUIRE 7 CALENDAR DAYS NOTICE FROM THE CONTRACTOR PRIOR TO INITIATING THIS PHASE TO COORDINATE WITH THE TENANTS.
  3. CONTRACTOR SHALL PLACE BARRICADES AT BOTH ENDS OF THIS TAXIWAY.
  4. PHASES 1, 2, & 3 SHALL BE COMPLETED PRIOR TO STARTING PHASE 4.
  5. CONTRACTOR WILL HAVE 14 CALENDAR DAYS TO COMPLETE PHASE 4.

SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS

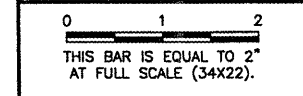
RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 CONSTRUCTION ACTIVITY PLAN 4

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APPROVED BY:	<i>RLV</i>
DATE:	JANUARY 27, 2009
JOB No:	08035-08
IL PROJ. NO.	SPI-3885
AIP PROJ. NO.	3-17-0096-XX
SHEET	07 OF 40 SHEETS

**CA008**

REVISIONS		
NUMBER	BY	DATE



**SPRINGFIELD AIRPORT AUTHORITY**  
**ABRAHAM LINCOLN CAPITAL AIRPORT**  
**SPRINGFIELD, ILLINOIS**

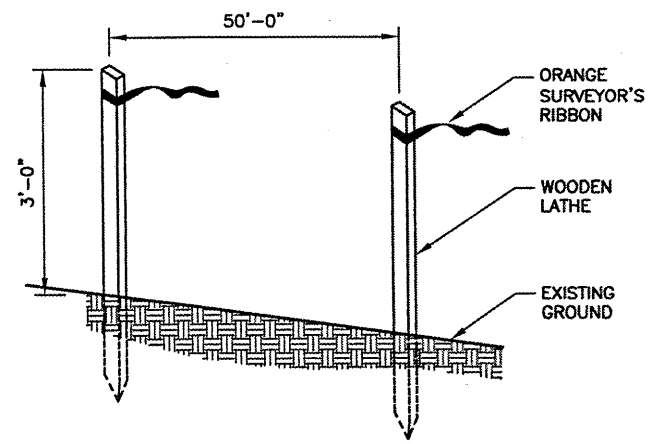
**RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP**  
**CONSTRUCTION ACTIVITY PLAN DETAILS**

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JOB No:	08035-08
IL PROJ. NO.	SPI-3885
AIP PROJ. NO.	3-17-0096-XX
SHEET	08 OF 40 SHEETS

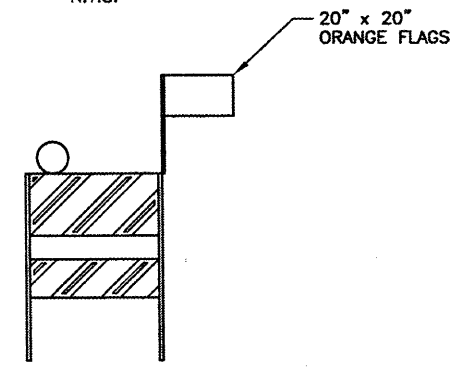
**CONSTRUCTION ACTIVITY PLAN NOTES**

1. THE CONTRACTOR SHALL PLACE ALL BARRICADES AS SHOWN PRIOR TO STARTING WORK ON THIS PHASE.
2. THE CONTRACTOR SHALL CONTINUOUSLY CLEAN THIS AREA FOR AIRCRAFT ACCESS.
3. THE CONTRACTOR SHALL CLEAN PAVEMENT AT THE END OF EACH WORK DAY.



**CONSTRUCTION SETBACK LINE DETAIL**

N.T.S.

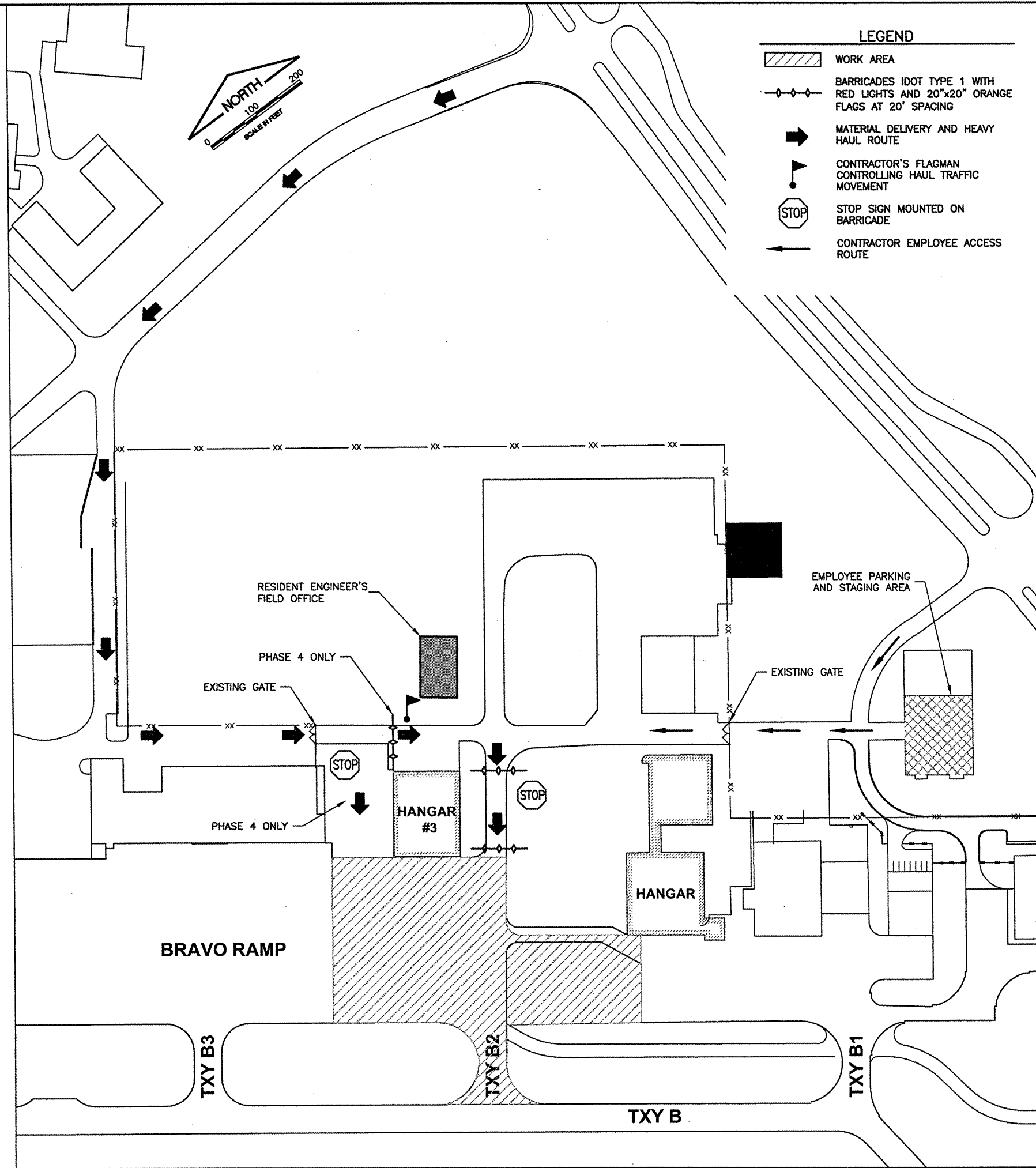


**FLASHER BARRICADE DETAIL**

N.T.S.

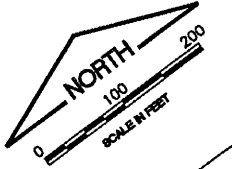
**FLASHER BARRICADE NOTES**

1. FLASHERS TO BE BATTERY OPERATED. LENS TO BE RED AND BE ABLE TO ROTATE 90 DEGREES.
2. SANDBAGS TO BE PLACED ON EACH SUPPORT BRACE AS REQUIRED TO PREVENT DISPLACEMENT BY WIND, JET OR PROP BLAST.
3. NO SEPARATE PAYMENT WILL BE MADE FOR THIS ITEM. COSTS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
4. PLACE AT 20' INTERVALS.

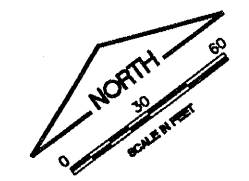
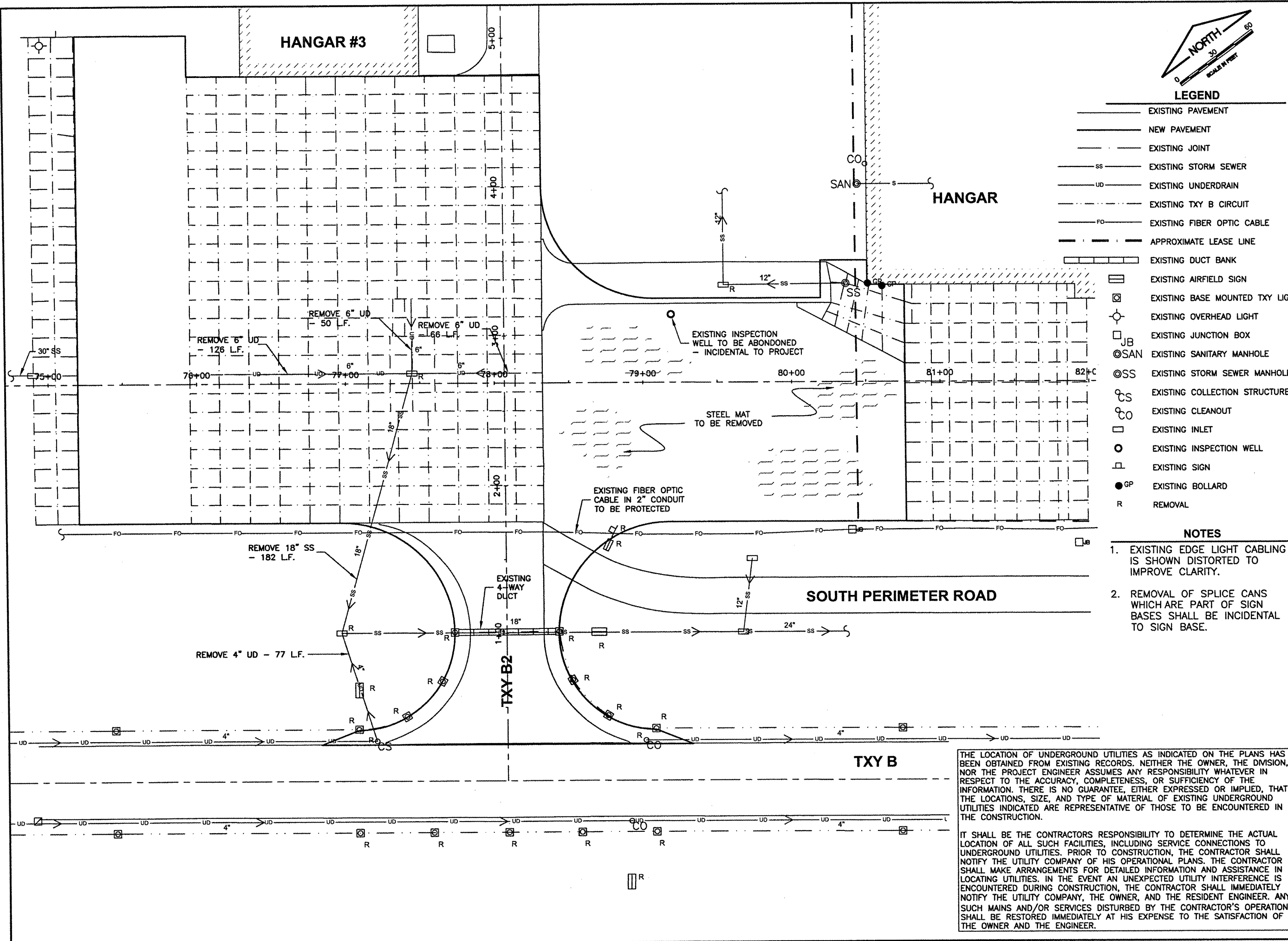


**LEGEND**

- WORK AREA
- BARRICADES IDOT TYPE 1 WITH RED LIGHTS AND 20"x20" ORANGE FLAGS AT 20' SPACING
- MATERIAL DELIVERY AND HEAVY HAUL ROUTE
- CONTRACTOR'S FLAGMAN CONTROLLING HAUL TRAFFIC MOVEMENT
- STOP SIGN MOUNTED ON BARRICADE
- CONTRACTOR EMPLOYEE ACCESS ROUTE







**LEGEND**

- EXISTING PAVEMENT
- NEW PAVEMENT
- - - EXISTING JOINT
- SS — EXISTING STORM SEWER
- UD — EXISTING UNDERDRAIN
- - - EXISTING TXY B CIRCUIT
- FO — EXISTING FIBER OPTIC CABLE
- - - APPROXIMATE LEASE LINE
- ▭ EXISTING DUCT BANK
- ▭ EXISTING AIRFIELD SIGN
- ⊠ EXISTING BASE MOUNTED TXY LIGHT
- ⊙ EXISTING OVERHEAD LIGHT
- JB EXISTING JUNCTION BOX
- ⊙ SAN EXISTING SANITARY MANHOLE
- ⊙ SS EXISTING STORM SEWER MANHOLE
- ⊙ CS EXISTING COLLECTION STRUCTURE
- ⊙ CO EXISTING CLEANOUT
- EXISTING INLET
- EXISTING INSPECTION WELL
- ▭ EXISTING SIGN
- GP EXISTING BOLLARD
- R REMOVAL

**NOTES**

1. EXISTING EDGE LIGHT CABLING IS SHOWN DISTORTED TO IMPROVE CLARITY.
2. REMOVAL OF SPLICE CANS WHICH ARE PART OF SIGN BASES SHALL BE INCIDENTAL TO SIGN BASE.

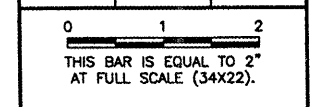
THE LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON THE PLANS HAS BEEN OBTAINED FROM EXISTING RECORDS. NEITHER THE OWNER, THE DIVISION, NOR THE PROJECT ENGINEER ASSUMES ANY RESPONSIBILITY WHATEVER IN RESPECT TO THE ACCURACY, COMPLETENESS, OR SUFFICIENCY OF THE INFORMATION. THERE IS NO GUARANTEE, EITHER 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 CONTRACTORS 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 RESIDENT 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.

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 UPDATE BY: Kristy Brod  
 PLOT DATE: 1/29/2009 12:18 PM  
 SpAlign  
 BASE\_PROPGEO  
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**CA008**

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NUMBER	BY	DATE



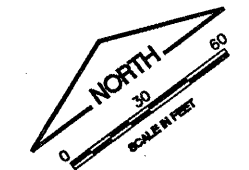
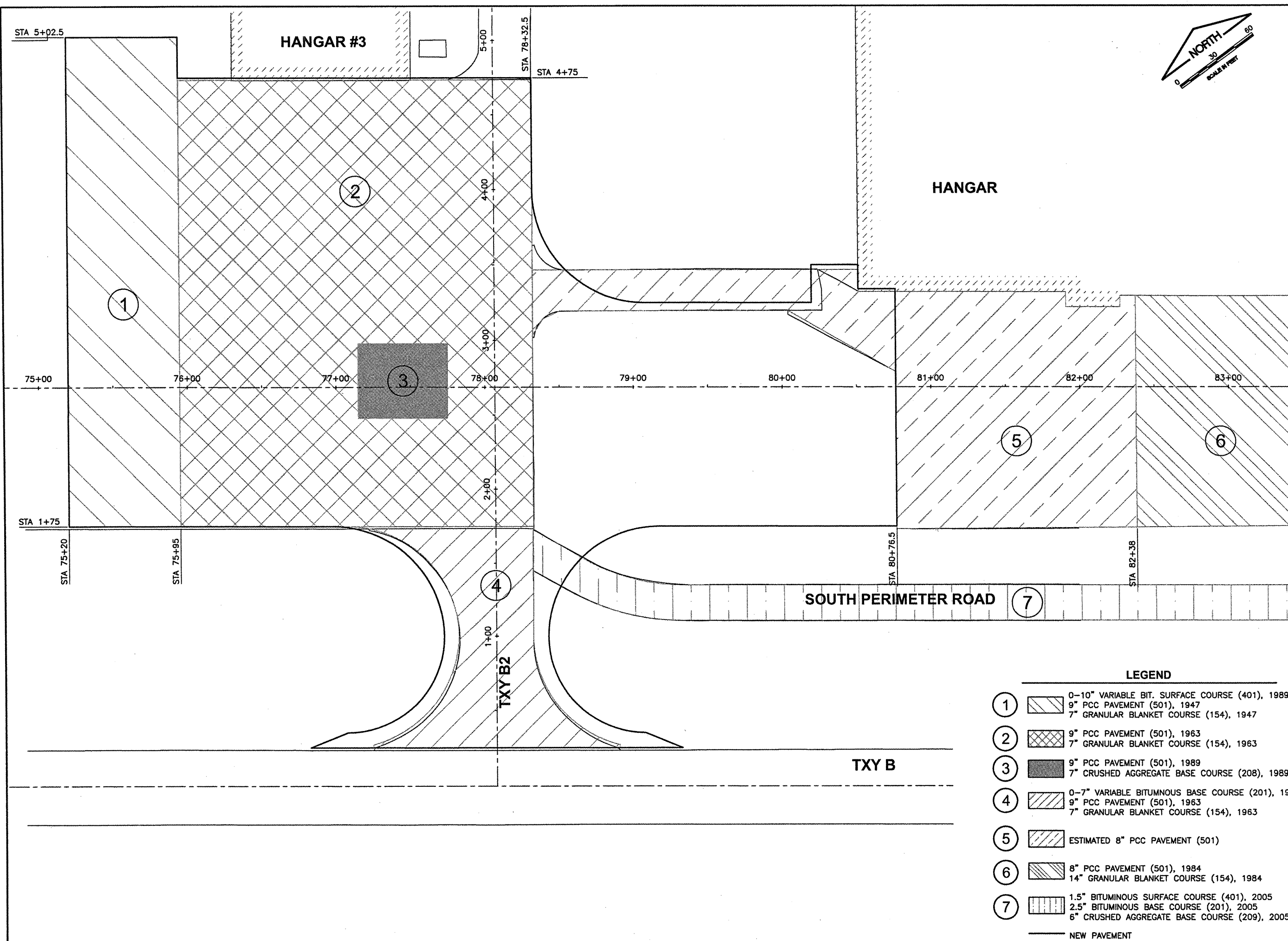
**SPRINGFIELD AIRPORT AUTHORITY**  
**ABRAHAM LINCOLN CAPITAL AIRPORT**  
**SPRINGFIELD, ILLINOIS**

**RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP**  
**EXISTING CONDITIONS & REMOVALS**

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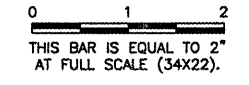
DESIGN BY:	RLV/KLB
DRAWN BY:	CMT
CHECKED BY:	RLV
APPROVED BY:	RLV
DATE:	JANUARY 27, 2009
JOB No:	08035-08
IL PROJ. NO. SPI-3885	AIP PROJ. NO. 3-17-0096-XX
SHEET 09 OF 40 SHEETS	



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 PLOT DATE: 1/29/2009 12:18 PM  
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 BASE\_PROPGEO  
 SpiAlign  
 SPL\_Base

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SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS

RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 EXISTING PAVEMENT STRUCTURE

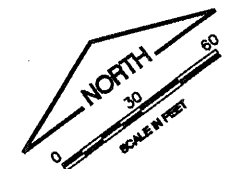
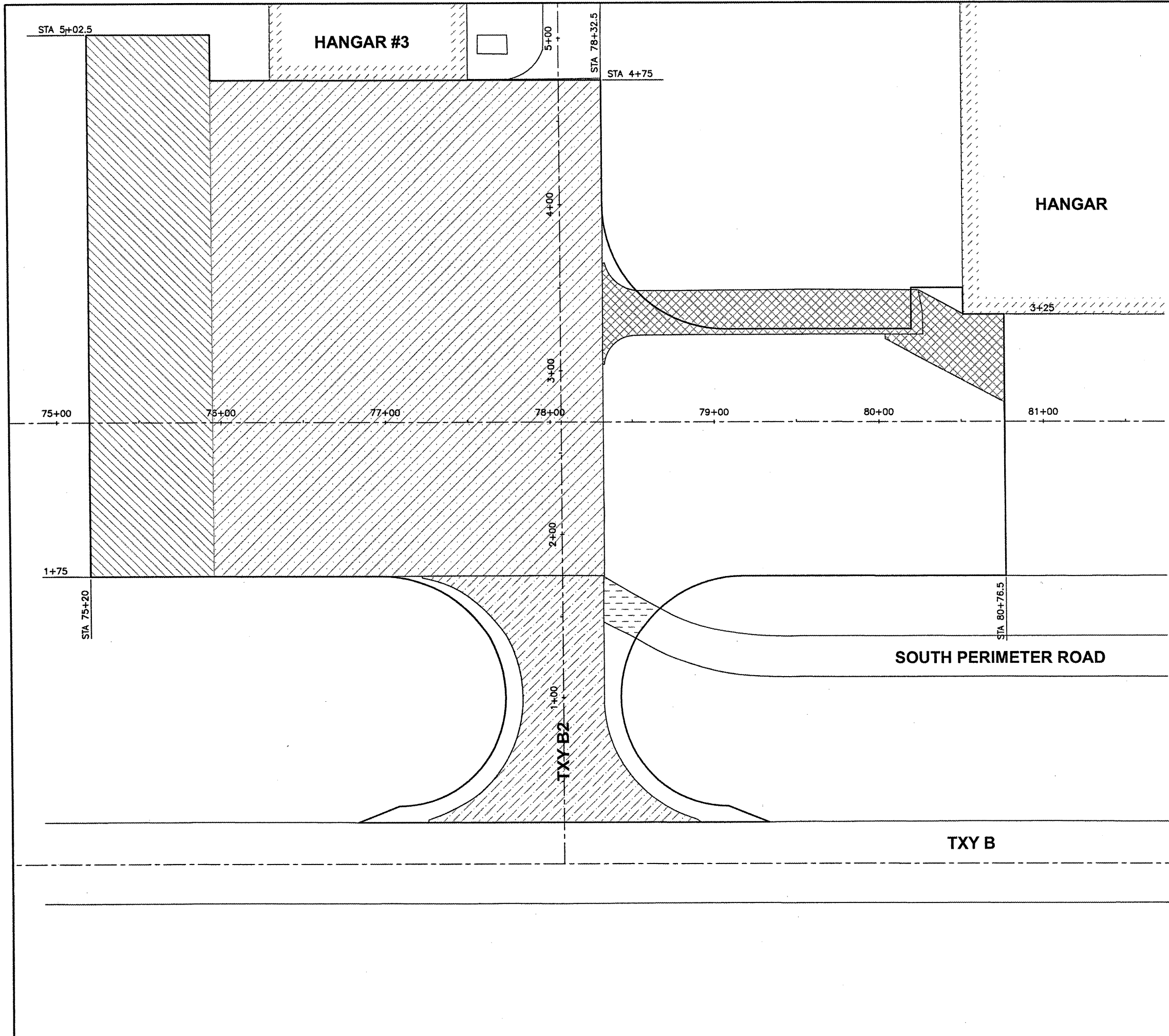
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APPROVED BY:	REN
DATE:	JANUARY 27, 2009
JOB No:	08035-08
IL PROJ. NO.	SPI-3885
AIP PROJ. NO.	3-17-0096-XX
SHEET	10 OF 40 SHEETS

**LEGEND**

- ① 0-10" VARIABLE BIT. SURFACE COURSE (401), 1989  
 9" PCC PAVEMENT (501), 1947  
 7" GRANULAR BLANKET COURSE (154), 1947
  - ② 9" PCC PAVEMENT (501), 1963  
 7" GRANULAR BLANKET COURSE (154), 1963
  - ③ 9" PCC PAVEMENT (501), 1989  
 7" CRUSHED AGGREGATE BASE COURSE (208), 1989
  - ④ 0-7" VARIABLE BITUMINOUS BASE COURSE (201), 1998  
 9" PCC PAVEMENT (501), 1963  
 7" GRANULAR BLANKET COURSE (154), 1963
  - ⑤ ESTIMATED 8" PCC PAVEMENT (501)
  - ⑥ 8" PCC PAVEMENT (501), 1984  
 14" GRANULAR BLANKET COURSE (154), 1984
  - ⑦ 1.5" BITUMINOUS SURFACE COURSE (401), 2005  
 2.5" BITUMINOUS BASE COURSE (201), 2005  
 6" CRUSHED AGGREGATE BASE COURSE (209), 2005
- NEW PAVEMENT



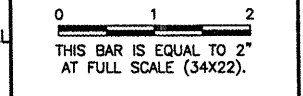
**LEGEND**

- 0-10" BITUMINOUS PAVEMENT MILLING  
9" PCC PAVEMENT REMOVAL
- 9" PCC PAVEMENT REMOVAL
- ESTIMATED 8" PCC PAVEMENT REMOVAL
- 2" BITUMINOUS PAVEMENT MILLING
- 4" BITUMINOUS REMOVAL
- NEW PAVEMENT

K:\Springfield\0803508\Draw\Sheets  
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 UPDATE BY: Kristy Brod  
 PLOT DATE: 1/29/2009 12:18 PM  
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 SpiAlign  
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**CA008**

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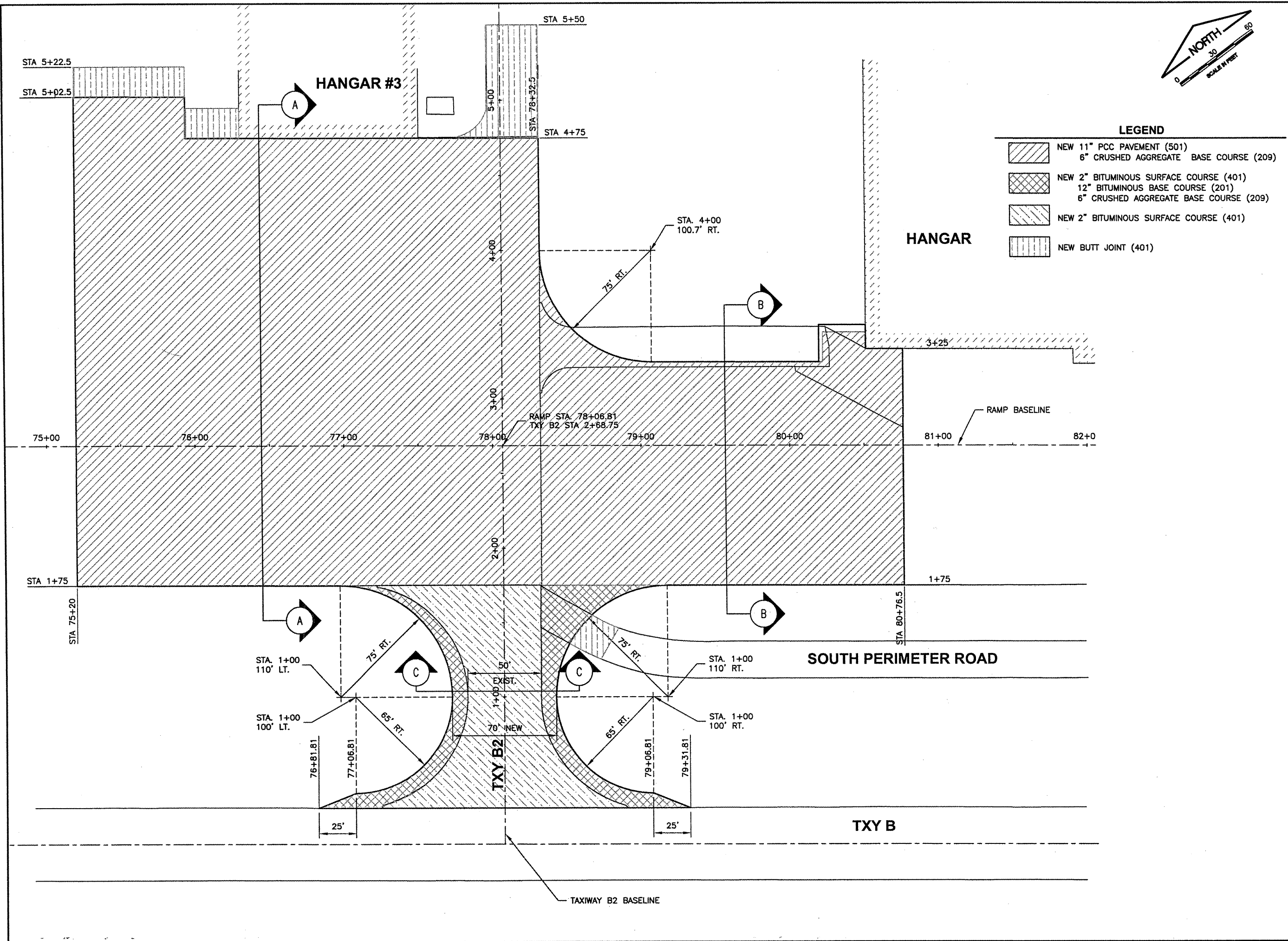
SPRINGFIELD AIRPORT AUTHORITY  
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 SPRINGFIELD, ILLINOIS

**RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 PAVEMENT REMOVAL PLAN**

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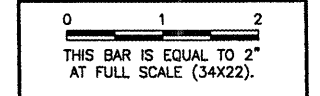
DESIGN BY:	RLV/KLB
DRAWN BY:	CMT
CHECKED BY:	<i>RLV</i>
APPROVED BY:	<i>RLV</i>
DATE:	JANUARY 27, 2009
JOB No:	08035-08
IL. PROJ. NO. SPI-3885 AIP PROJ. NO. 3-17-0096-XX	
SHEET 11 OF 40 SHEETS	



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 UPDATE BY: Kristy Brod  
 PLOT DATE: 1/29/2009 12:19 PM  
 Spilopo  
 BASE\_PROPGEO  
 SPI\_Base  
 SpiAlign

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**LEGEND**

	NEW 11" PCC PAVEMENT (501) 6" CRUSHED AGGREGATE BASE COURSE (209)
	NEW 2" BITUMINOUS SURFACE COURSE (401) 12" BITUMINOUS BASE COURSE (201) 6" CRUSHED AGGREGATE BASE COURSE (209)
	NEW 2" BITUMINOUS SURFACE COURSE (401)
	NEW BUTT JOINT (401)

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**RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 PROPOSED IMPROVEMENTS**

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IL PROJ. NO.	SPI-3885
AIP PROJ. NO.	3-17-0096-XX
SHEET	12 OF 40 SHEETS

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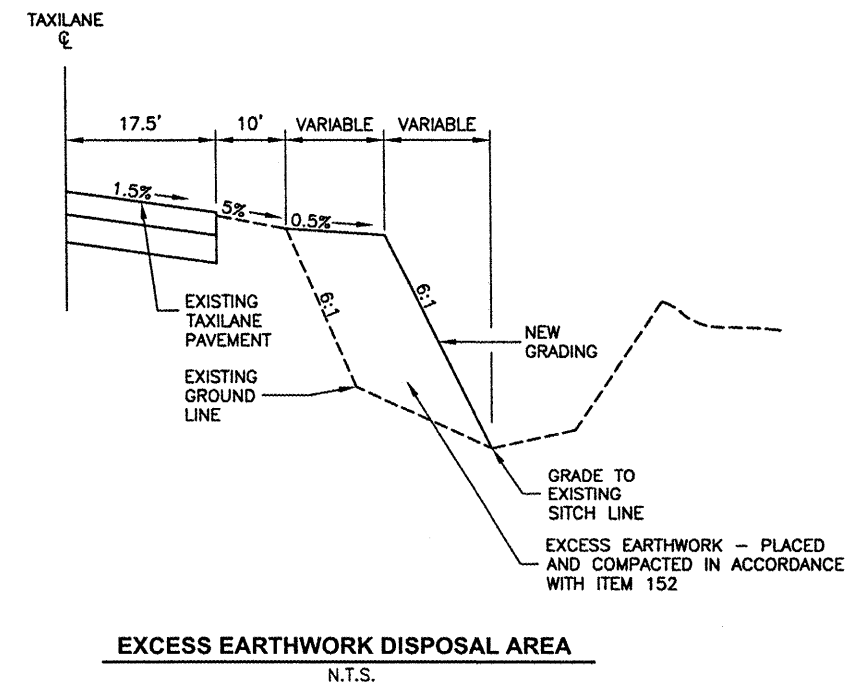
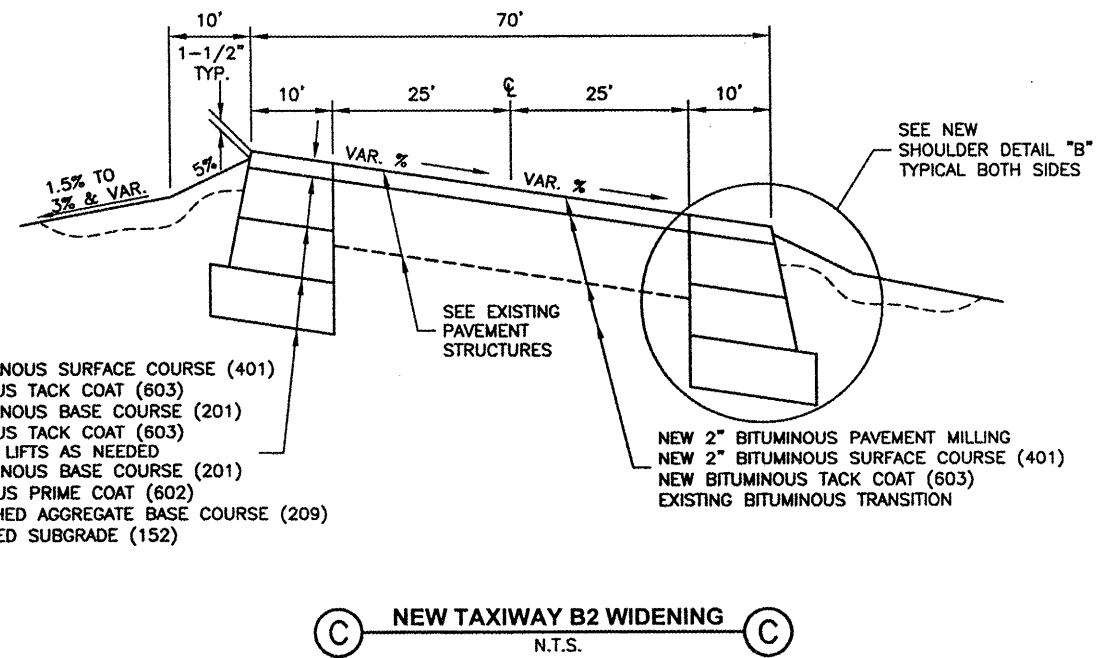
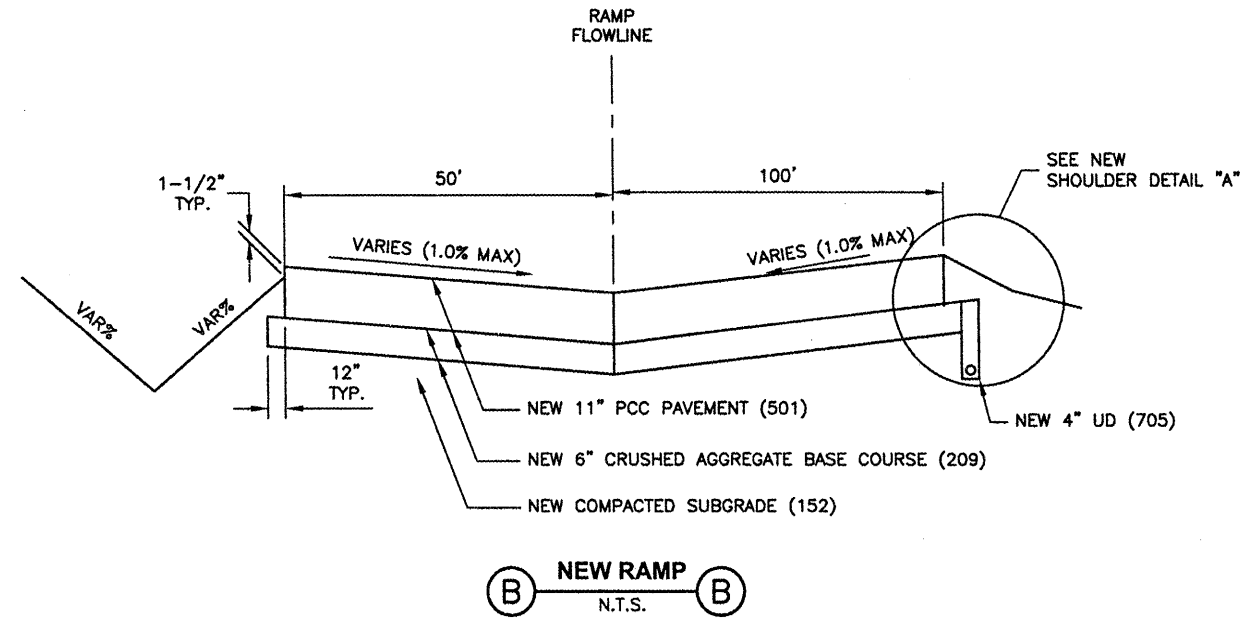
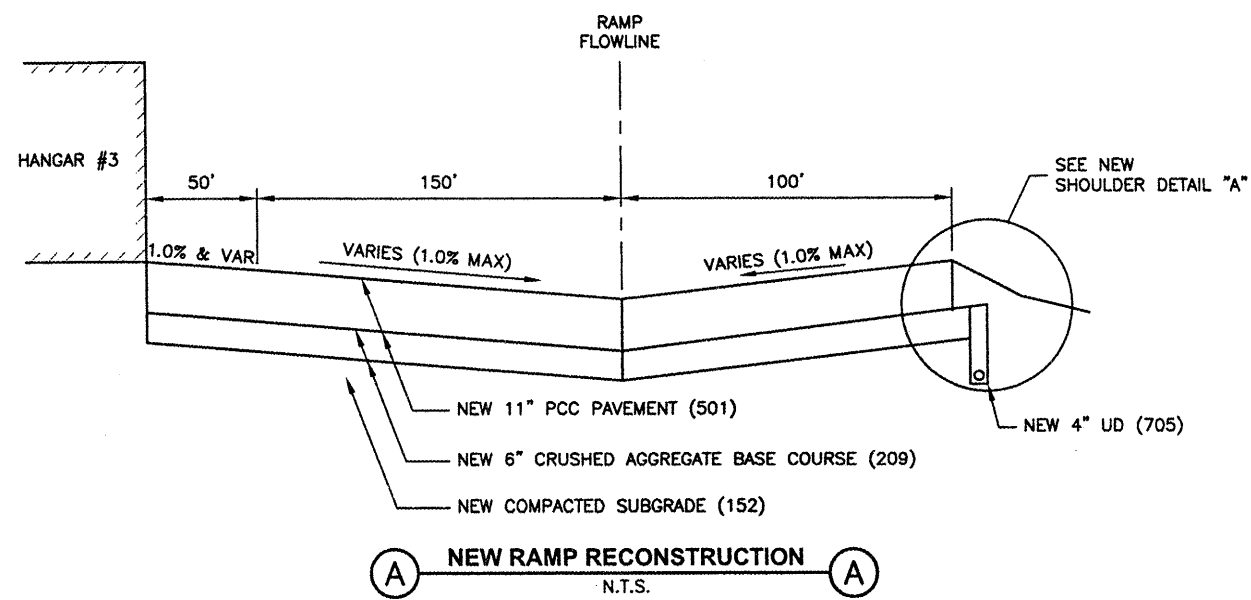
0 1 2  
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 AT FULL SCALE (34X22).

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 SPRINGFIELD, ILLINOIS

RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 TYPICAL SECTIONS 1

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JOB No:	08035-08
IL PROJ. NO.	SPI-3885
AIP PROJ. NO.	3-17-0096-XX
SHEET 13 OF 40 SHEETS	

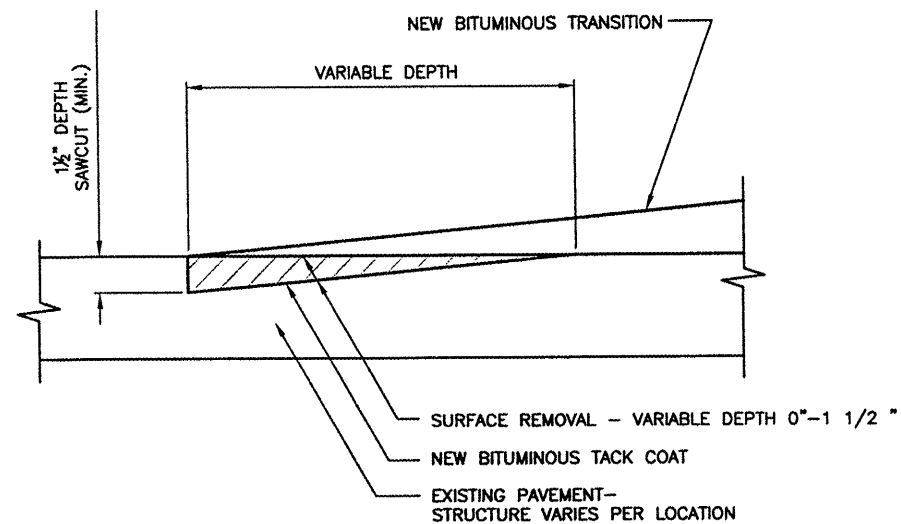


- NOTES:**
- SEE "PROPOSED IMPROVEMENTS" SHEETS FOR SECTION LOCATIONS.
  - SEE "JOINTING PLANS" FOR JOINT TYPES & LAYOUTS

CA008

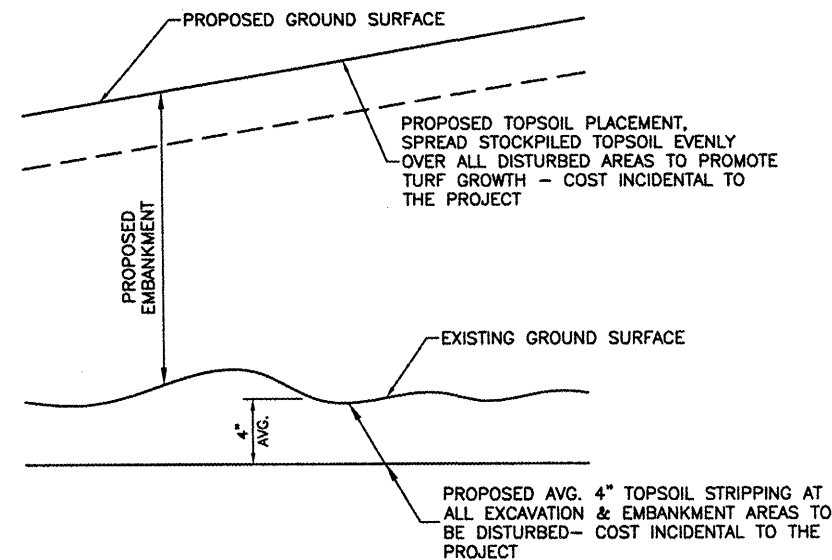
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NUMBER	BY	DATE

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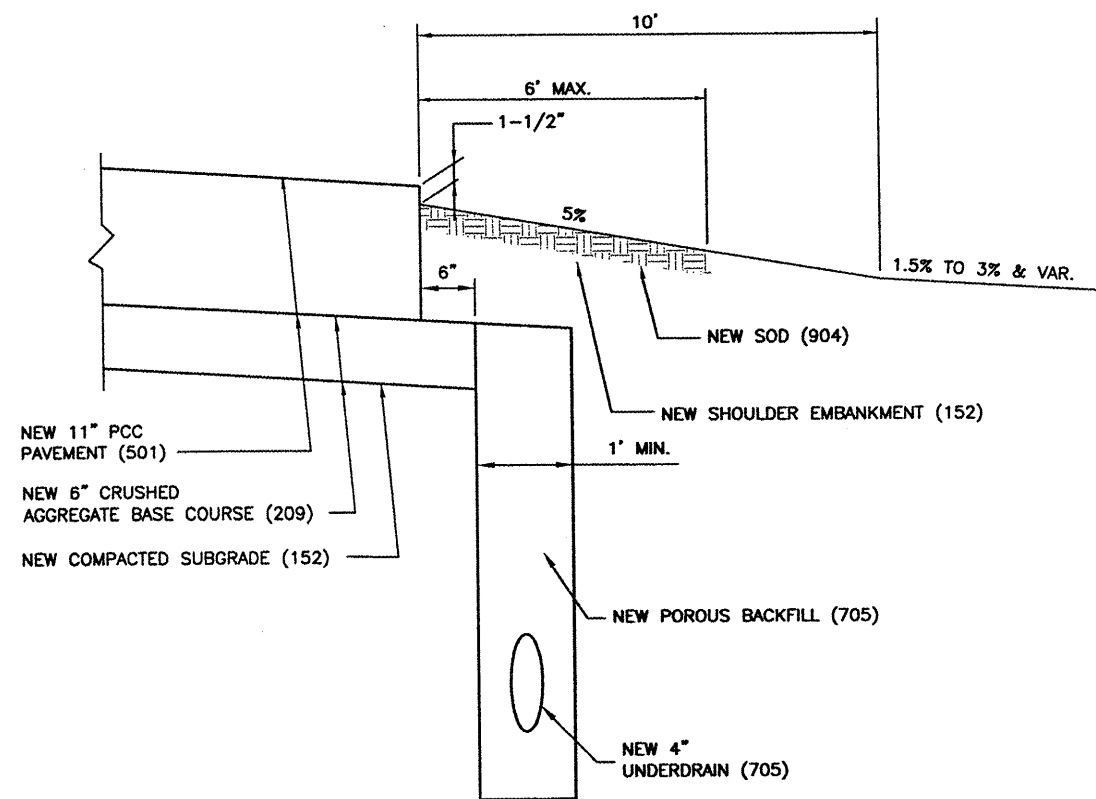
**BUTT JOINT DETAIL**

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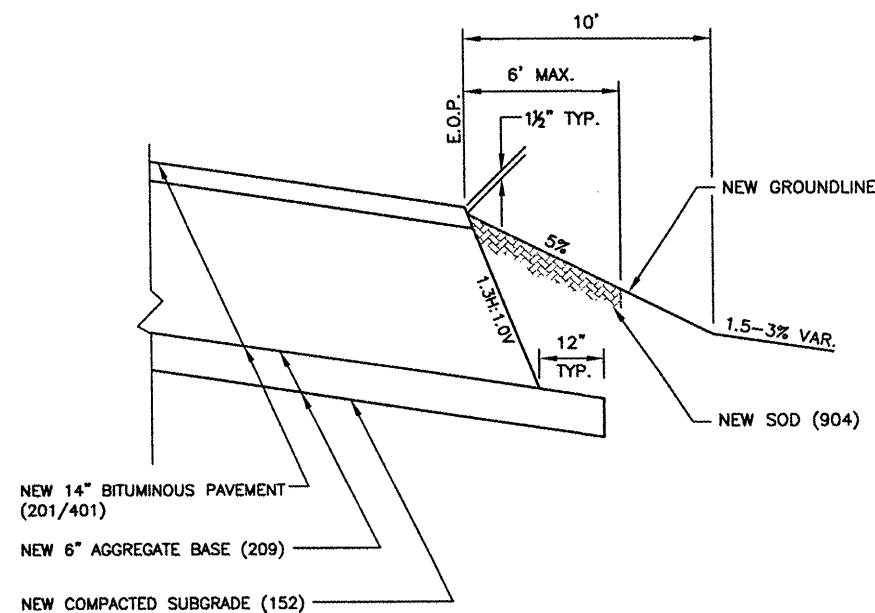
**TOPSOIL STRIPPING DETAIL**

N.T.S.



**NEW SHOULDER DETAIL "A"**

N.T.S.



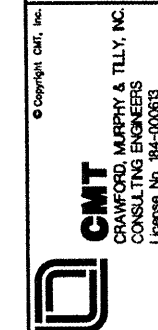
**NEW SHOULDER DETAIL "B"**

N.T.S.



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RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 TYPICAL SECTIONS 2



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CHECKED BY: *REN*

APPROVED BY: *REN*

DATE: JANUARY 27, 2009

JOB No: 08035-08

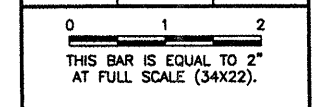
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 AIP PROJ. NO. 3-17-0096-XX


SHEET 14 OF 40 SHEETS

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 BASE\_PROPGED  
 SpiAlign  
 BASE\_EXISTOPO  
 BASE\_PROPDRAIN

**CA008**

REVISIONS		
NUMBER	BY	DATE






**SPRINGFIELD AIRPORT AUTHORITY**  
**ABRAHAM LINCOLN CAPITAL AIRPORT**  
**SPRINGFIELD, ILLINOIS**

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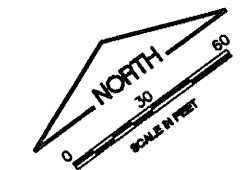
**RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP**

**STAKING PLAN**



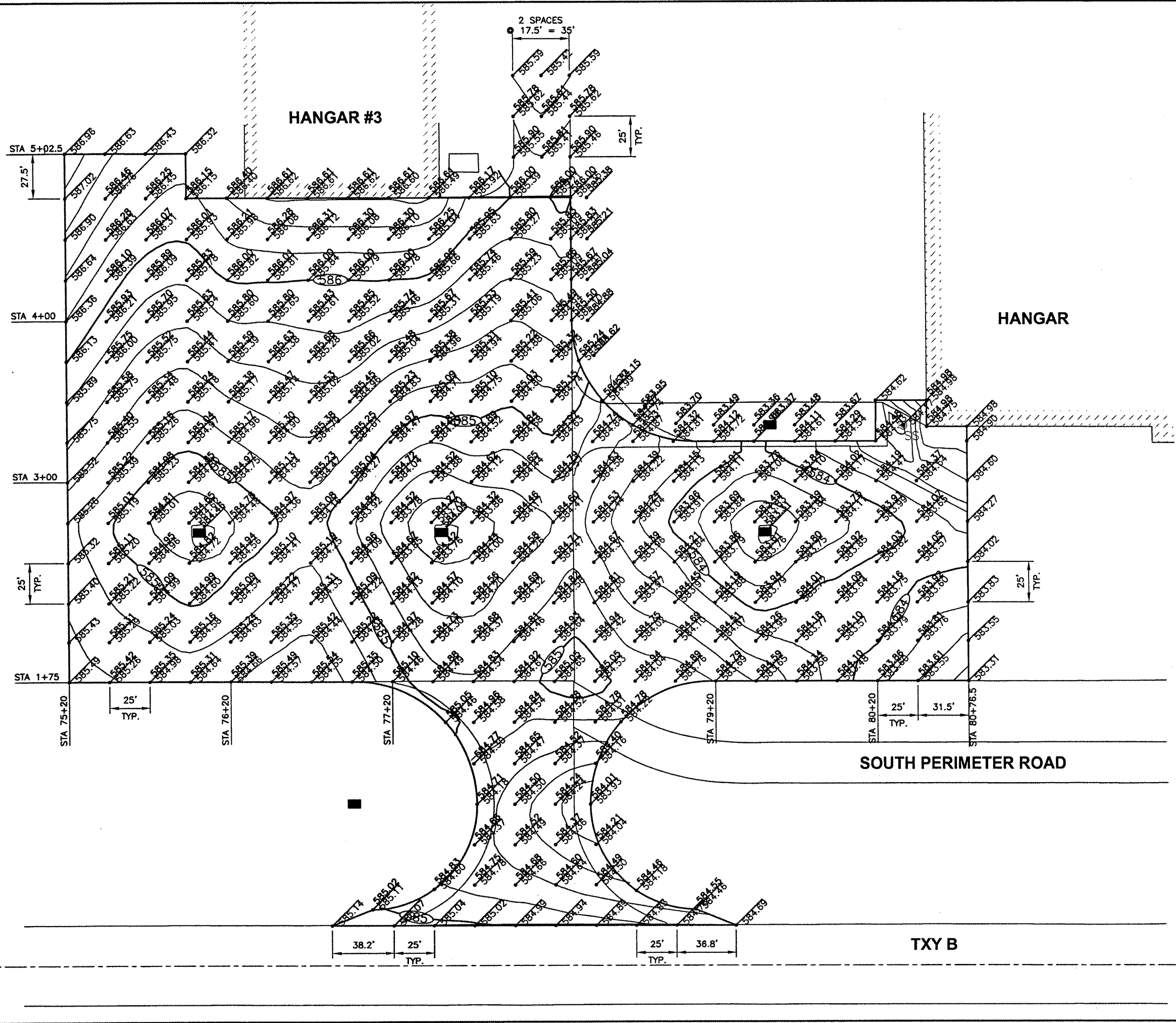
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APPROVED BY:	<i>RLV</i>
DATE:	JANUARY 27, 2009
JOB No:	08035-08
IL PROJ. NO. SPI-3885 AIP PROJ. NO. 3-17-0096-XX	
SHEET 15 OF 40 SHEETS	



**LEGEND**

- NEW ELEVATION
- EXISTING ELEVATION
- NEW CONTOUR
- NEW INLET
- EXISTING MANHOLE



K:\Springfield\0803508\Drawn\Sheets  
 FILE: JOINT01.dwg  
 UPDATE BY: Kristy Brod  
 PLOT DATE: 1/29/2009 12:19 PM  
 SPI-BASE-1  
 BASE\_PROPGEO  
 BASE\_EXISTOPO  
 BASE\_PROPJPOINT  
 BASE\_PROPDRAIN

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REVISIONS		
NUMBER	BY	DATE

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



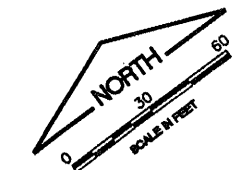
SPRINGFIELD AIRPORT AUTHORITY  
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 SPRINGFIELD, ILLINOIS

RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 JOINTING PLAN

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CHECKED BY:	REN
APPROVED BY:	REN
DATE:	JANUARY 27, 2009
JOB No:	08035-08
IL PROJ. NO. SPI-3885	
AIP PROJ. NO. 3-17-0096-XX	
SHEET 16 OF 40 SHEETS	

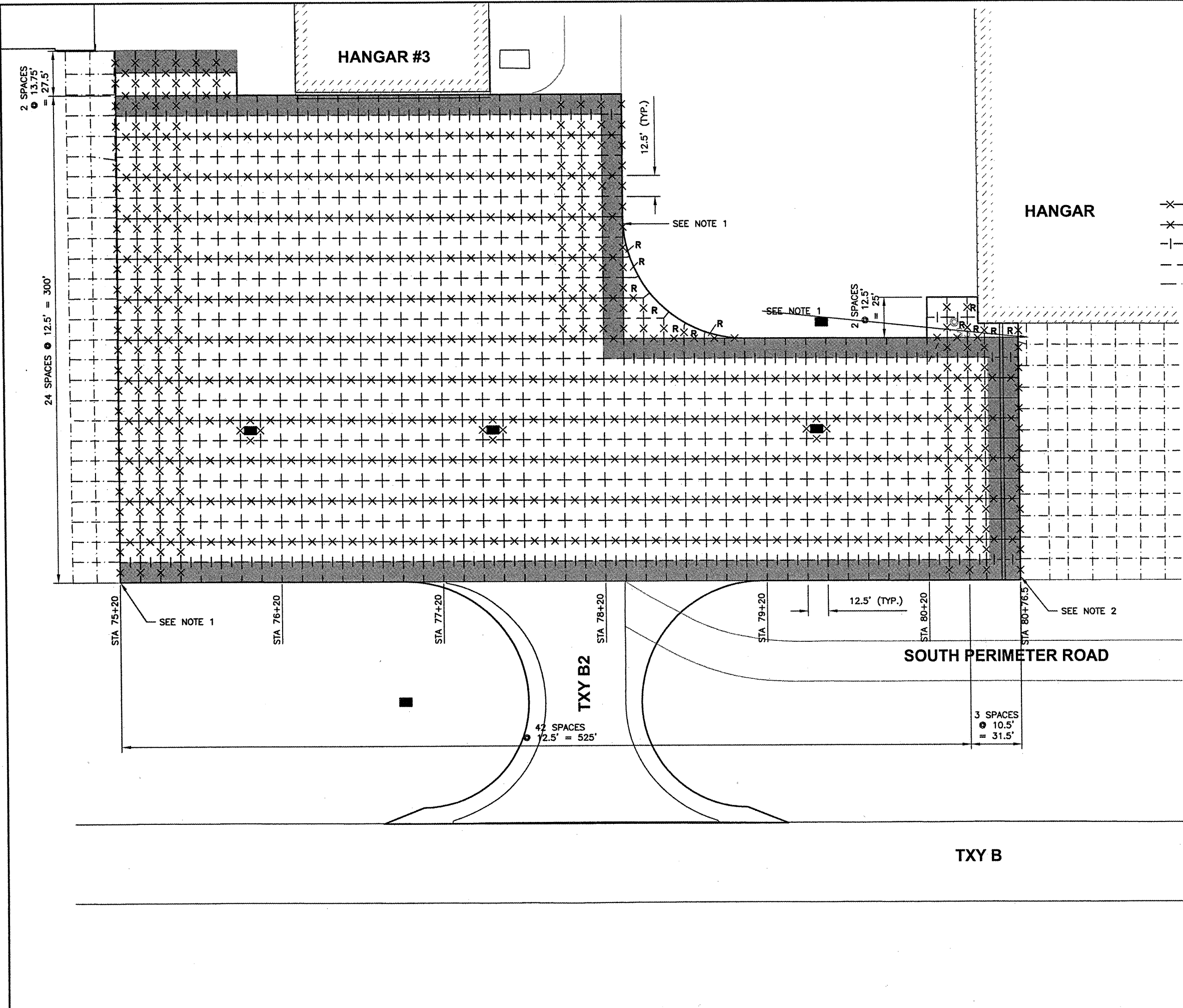


**LEGEND**

- TYPE B EXPANSION JOINT
- THICKENED EDGE
- TYPE D (DOWELED)
- TYPE F (DOWELED)
- TYPE G HINGED (TIED)
- TYPE H (DUMMY)
- EXISTING JOINT
- REINFORCED PANEL
- NEW INLET
- EXISTING MANHOLE

**NOTES**

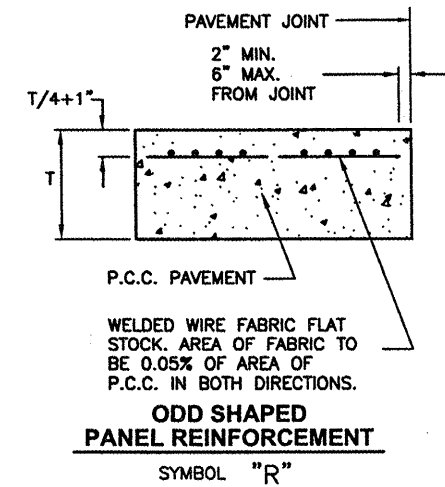
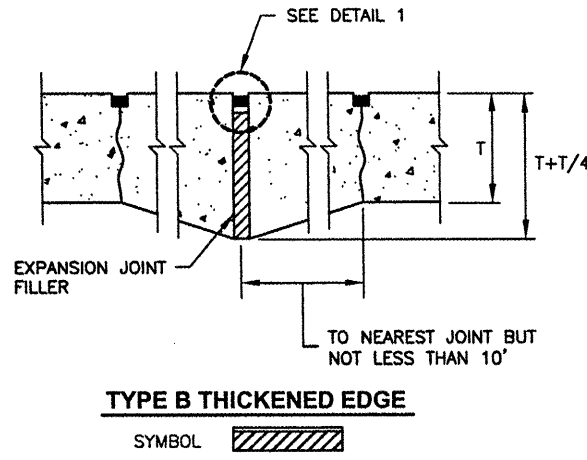
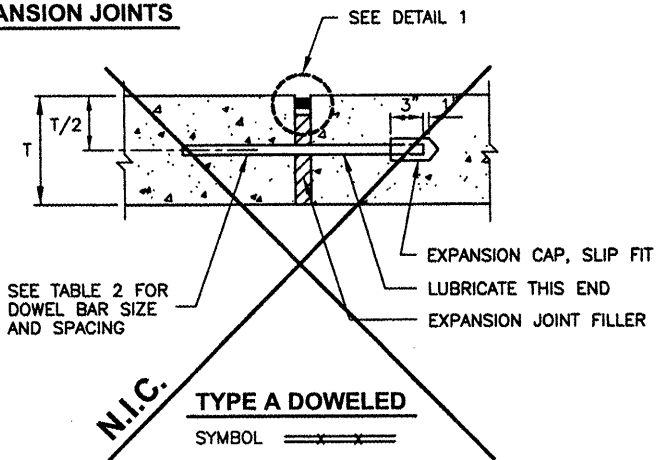
1. SEE FILLET DETAILS ON "PAVING & MISCELLANEOUS" DETAILS SHEET.
2. USE 3/4" DIAMETER x 18" LONG AT 12" SPACING FOR THIS TYPE D DOWELED CONSTRUCTION JOINT.





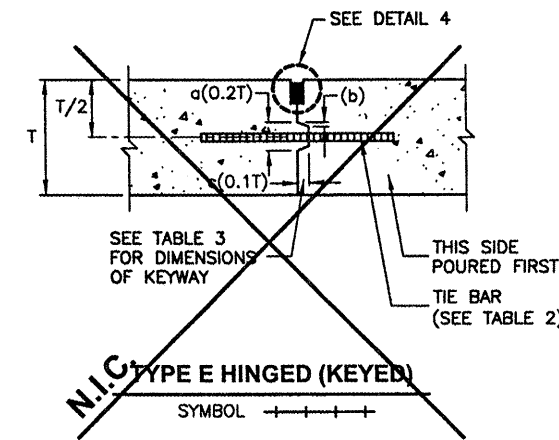
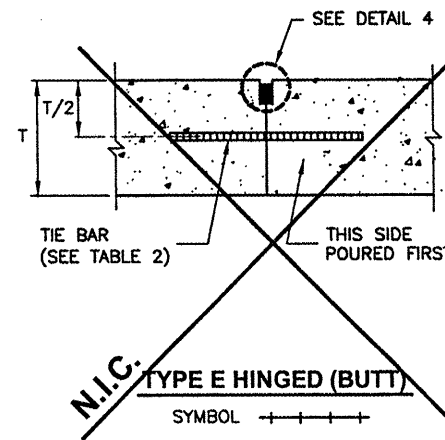
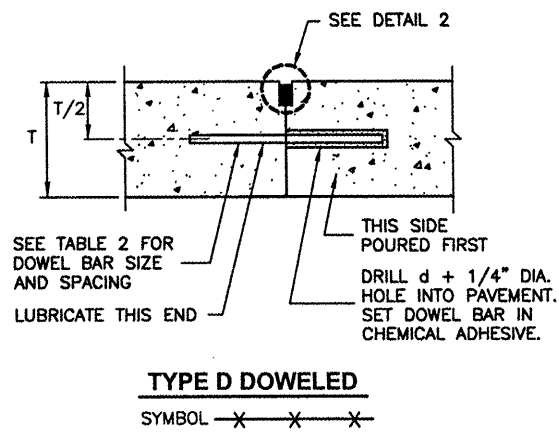
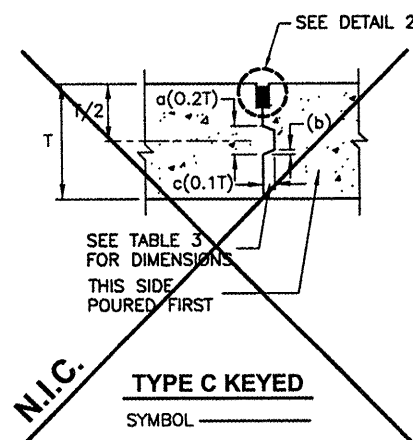
PAVEMENT THICKNESS T - INCHES	DEPTH OF CONTRACTION JOINT INITIAL SAW CUT I, INCHES $I=(T/3) \pm 1/4"$
5	1.67"
6	2.00"
7	2.33"
8	2.67"
9	3.00"
10	3.33"
11	3.67"
12	4.00"
13	4.33"
14	4.67"
15	5.00"
16	5.33"
17	5.67"
18	6.00"

**EXPANSION JOINTS**

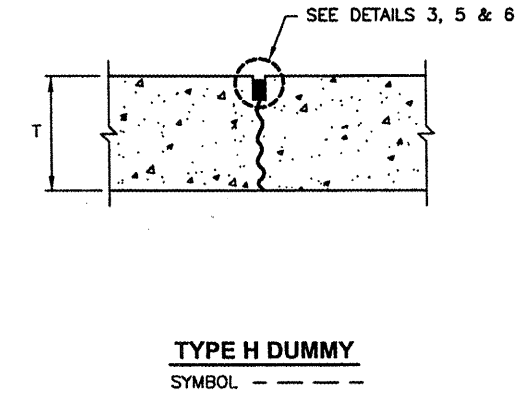
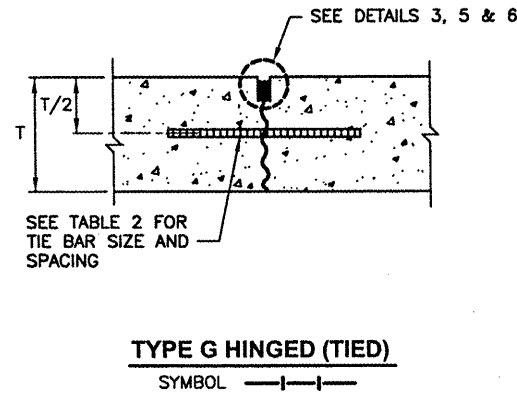
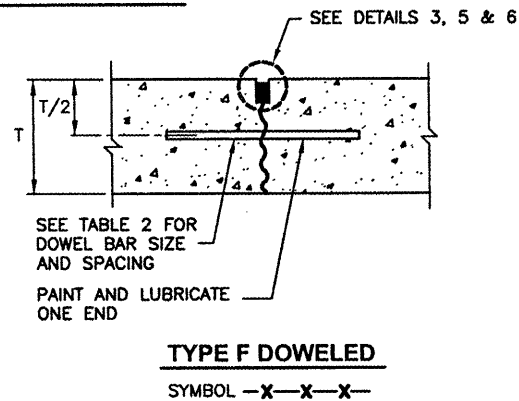


PAVEMENT THICKNESS T - INCHES	DOWEL BAR DETAILS			TIE BAR DETAILS		
	DIA.	LENGTH	SPACING	BAR SIZE	LENGTH	SPACING
5	5/8"	12"	12"	#4	24"	30"
6	3/4"	18"	12"	#5	30"	30"
7	3/4"	18"	12"	#5	30"	30"
8	1"	19"	12"	#5	30"	30"
9	1"	19"	12"	#5	30"	30"
10	1"	19"	12"	#5	30"	30"
11	1"	19"	12"	#5	30"	30"
12	1"	19"	12"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

**CONSTRUCTION JOINTS**



**CONTRACTION JOINTS**



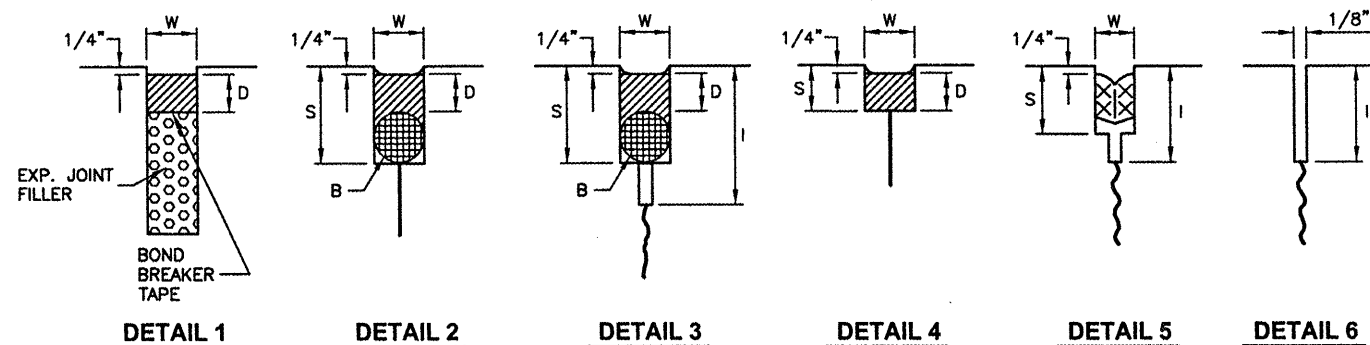
PAVEMENT THICKNESS T - INCHES	KEYED JOINT DIMENSIONS		
	a	b	c
6	—	—	—
7	—	—	—
8	0.133' (1-5/8" ±)	0.017' (3/16" ±)	0.067' (7/8" ±)
9	0.150' (1-13/16" ±)	0.019' (3/16" ±)	0.075' (7/8" ±)
10	0.167' (2" ±)	0.021' (1/4" ±)	0.083' (1" ±)
11	0.183' (2-13/16" ±)	0.023' (1/4" ±)	0.092' (1-1/8" ±)
12	0.200' (2-3/8" ±)	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**

- 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.
- THE INITIAL SAWCUT FOR ALL LONGITUDINAL & TRANSVERSE CONTRACTION JOINTS SHALL BE SAWS AS SOON AS POSSIBLE AFTER PLACEMENT OF THE PAVEMENT.
- ALL TIE BARS & MESH SHALL BE SECURELY HELD IN PLACE BY SUPPORT PINS OR OTHER APPROVED METHODS TO PREVENT SHIFTING DURING & AFTER CONCRETE PLACEMENT.
- TIE BARS SHALL BE DEFORMED BARS IN CONFORMANCE WITH THE SPECIFICATIONS.
- 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	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**

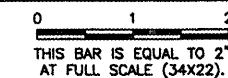


N.I.C. = NOT IN CONTRACT

K:\Springfield\0803508\Draw\Sheets  
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UPDATE BY: Kristy Brod  
PLOT DATE: 1/29/2009 12:19 PM

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ABRAHAM LINCOLN CAPITAL AIRPORT  
SPRINGFIELD, ILLINOIS

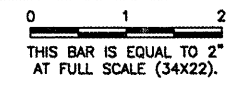
RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
JOINTING DETAILS

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APPROVED BY:	RW
DATE:	JANUARY 27, 2009
JOB No:	08035-08
IL PROJ. NO.	SPI-3885
AIP PROJ. NO.	3-17-0096-XX
SHEET	17 OF 40 SHEETS

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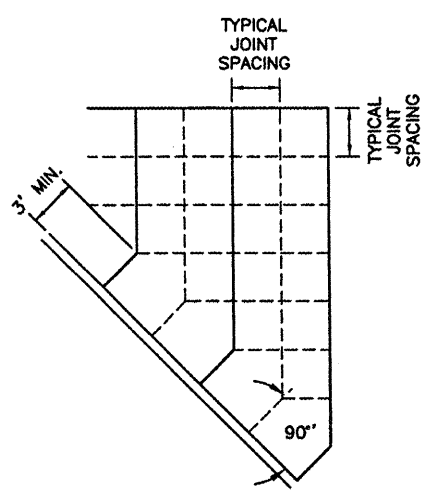
SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS

RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 PAVING & MISCELLANEOUS DETAILS

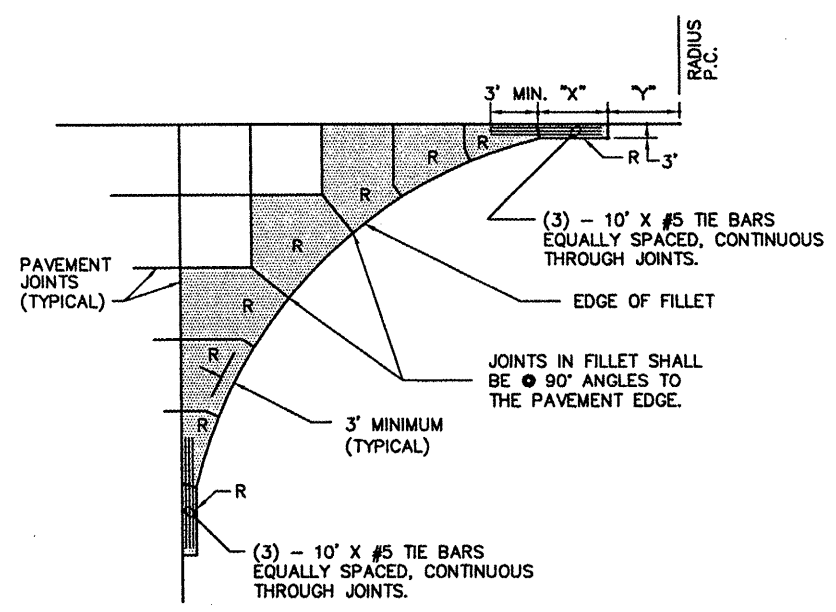
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AIP PROJ. NO.	3-17-0096-XX
SHEET 18 OF 40 SHEETS	



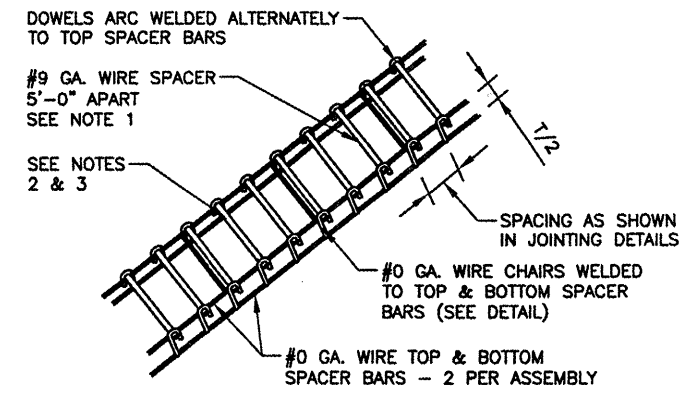
**JOINTING AT SKEWED EDGE**  
 N.T.S.



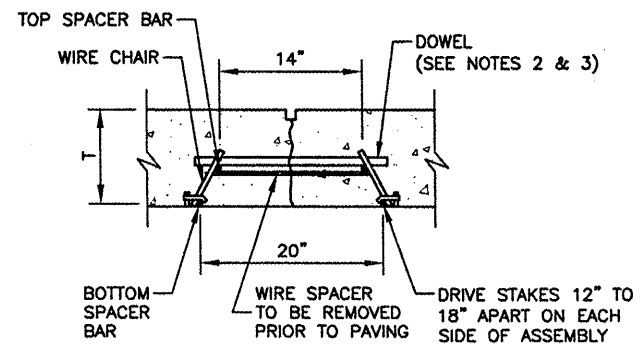
⊙ DENOTES ODD SHAPED REINFORCED PANELS TO BE REINFORCED WITH WELDED WIRE FABRIC AS SHOWN ON JOINTING DETAILS SHEET. ALL NON RECTANGULAR SHAPED PANELS SHALL BE REINFORCED. (REINFORCEMENT NOT SHOWN)

FILLET RADIUS	"X" (IN FEET)	"Y" (IN FEET)
20	4.30	6.24
25	4.88	7.00
30	5.40	7.68
50	7.11	9.95
75	8.79	12.21
85	9.38	13.00
100	10.21	14.11
125	11.44	15.78
150	12.56	17.29
175	13.58	18.68
200	14.53	19.98

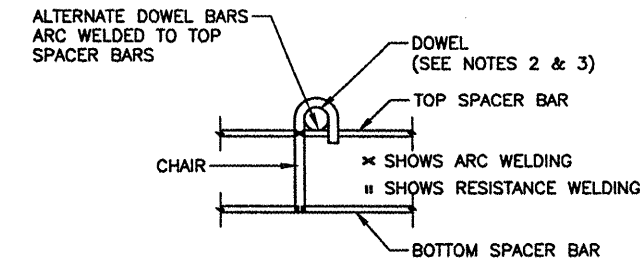
**FILLET DETAIL & FILLET REINFORCING LAYOUT**  
 N.T.S.



**DOWEL BASKET ASSEMBLY DETAIL**



**DOWEL BAR INSTALLATION DETAIL**

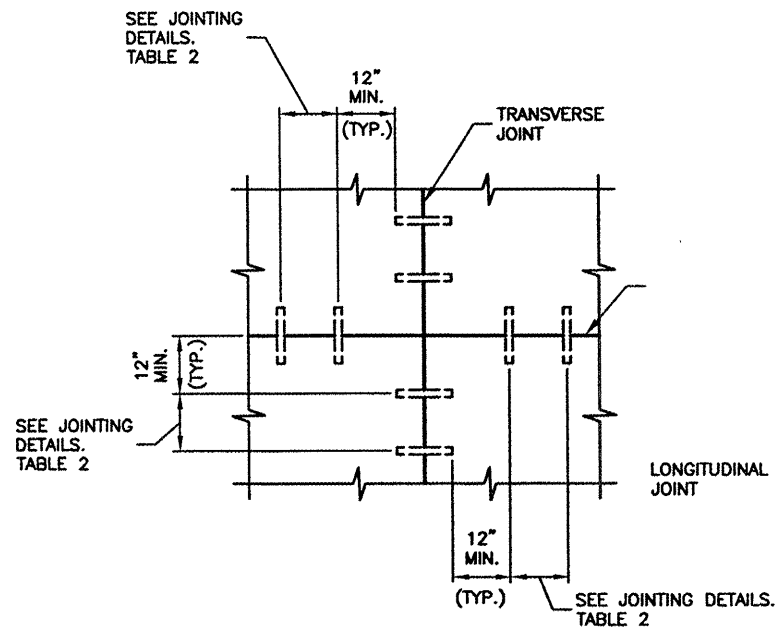


**TYPICAL DOWEL BASKET ELEVATION**  
**DETAIL SHOWING CHAIR**

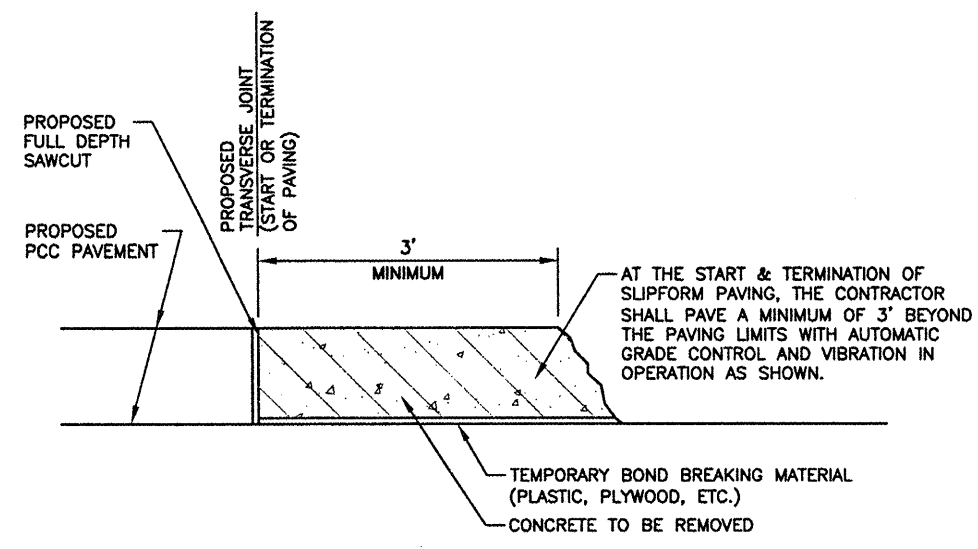
**DOWEL BASKET DETAILS**  
 N.T.S.

**DOWEL BASKET NOTES**

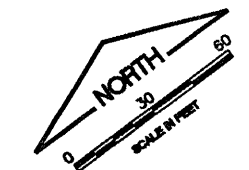
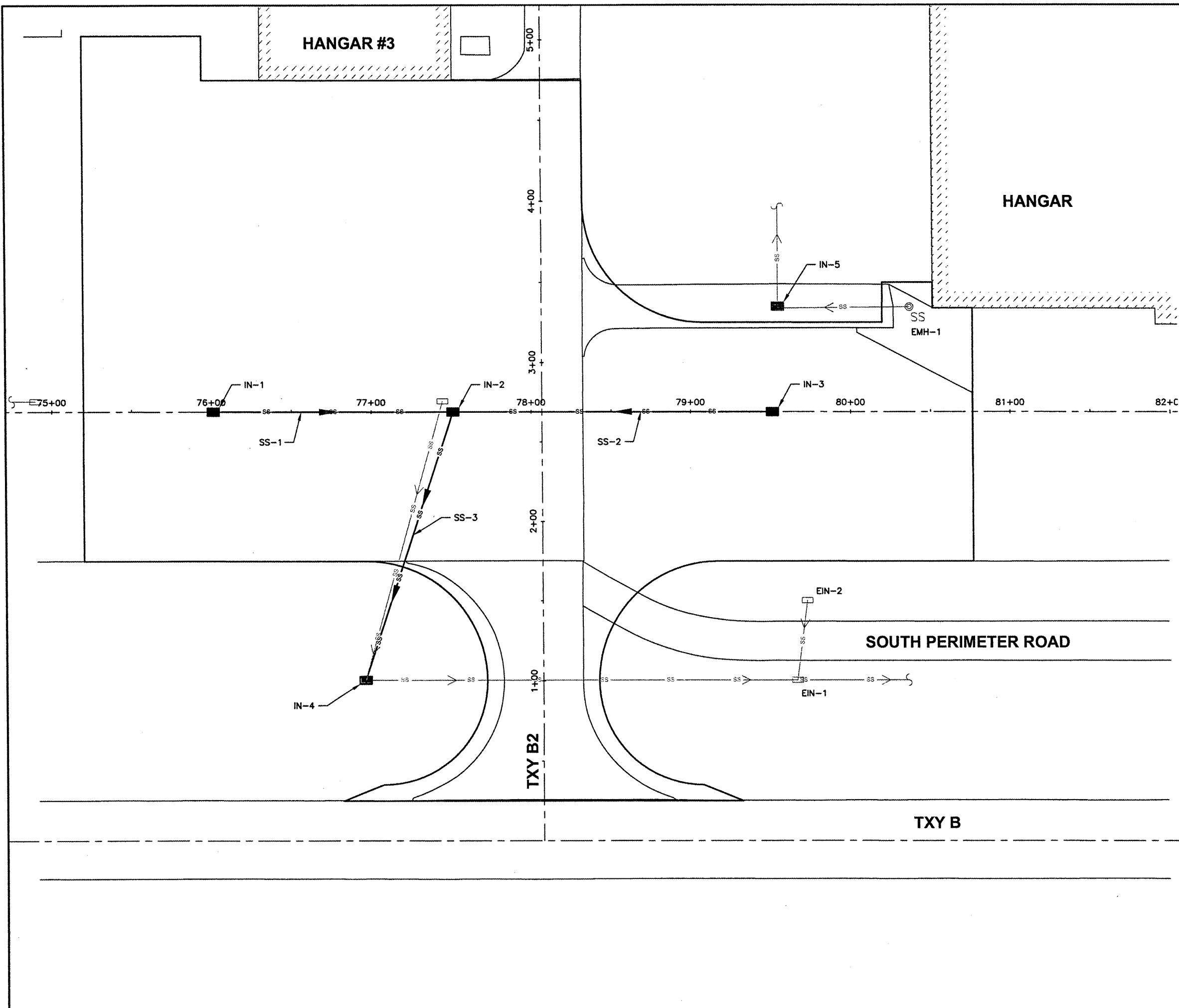
- #9 GA. WIRE SPACER BAR ARC WELDED TO THE BOTTOM OF TOP SPACER BAR. (MAY BE MECHANICALLY ATTACHED IN LIEU OF WELDING) 3 REQUIRED PER UNIT. THIS WIRE MUST BE CUT OR REMOVED PRIOR TO PAVING.
- DOWEL BAR DIAMETER, LENGTH & SPACING SHALL BE AS SHOWN IN TABLE 2.
- DOWELS SHALL BE EPOXY COATED FULL LENGTH 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 PLACEMENT DETAIL**  
 N.T.S.



**REQUIREMENTS AT START & TERMINATION OF SLIPFORM PAVING**  
 N.T.S.



**LEGEND**

- SS— NEW STORM SEWER
- SS- EXISTING STORM SEWER
- NEW INLET
- EXISTING INLET
- ⊙SS EXISTING MANHOLE

**NOTES**

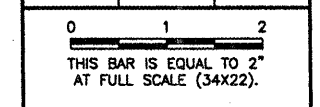
- SEE DRAINAGE SCHEDULE FOR LOCATIONS, INVERTS, AND RIM ELEVATIONS.


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 UPDATE BY: Kristy Brod  
 PLOT DATE: 1/29/2009 12:19 PM  
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 BASE\_PROPGEO  
 BASE\_PROPDRAIN  
 BASE\_EXISTPO  
 SplAlign

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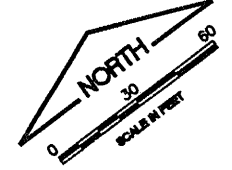
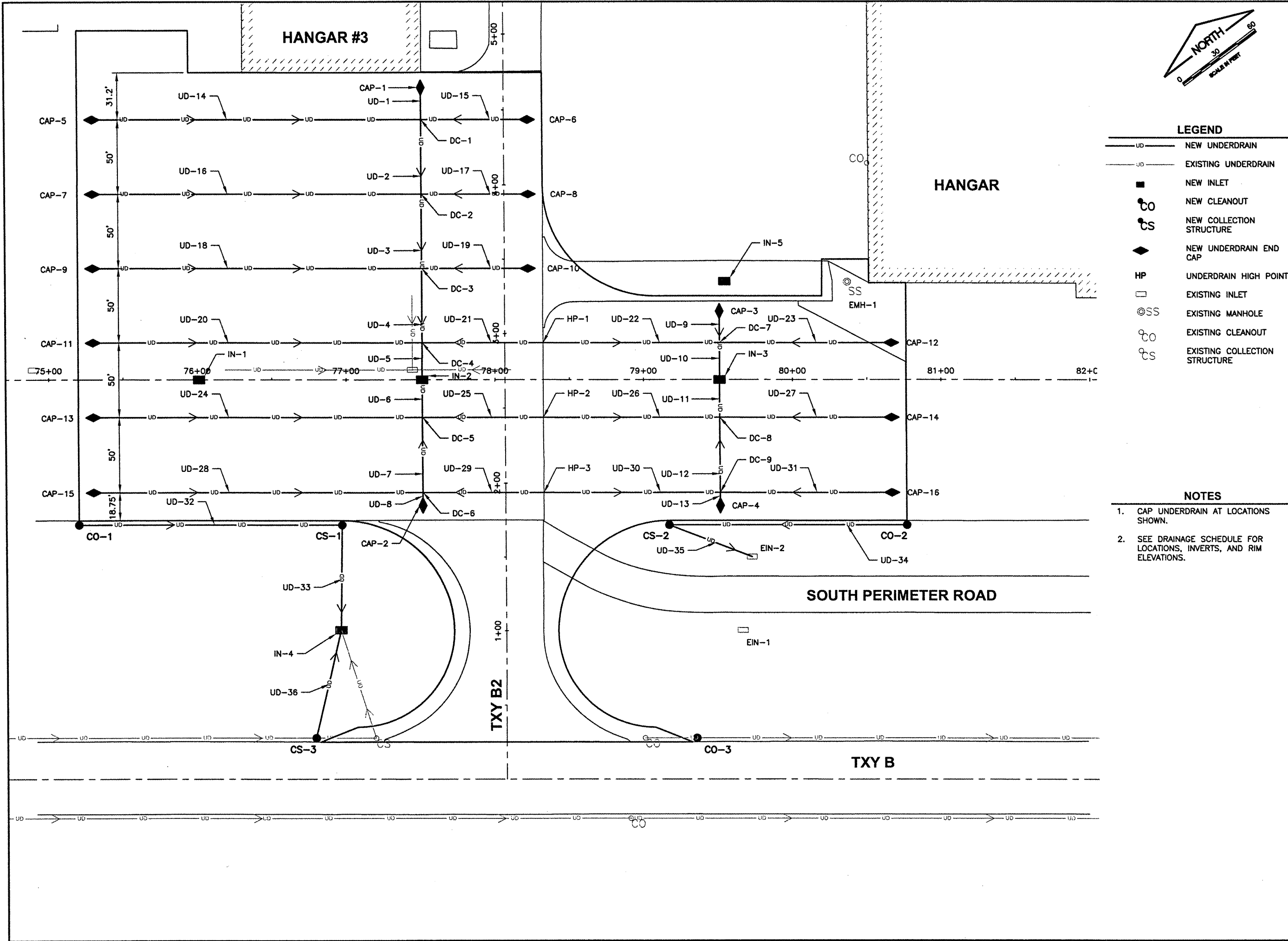
  
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**RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 DRAINAGE PLAN**

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CHECKED BY:	<i>RLV</i>
APPROVED BY:	<i>RLV</i>
DATE:	JANUARY 27, 2009
JOB No:	08035-08
IL PROJ. NO.	SPI-3885
AIP PROJ. NO.	3-17-0096-XX
SHEET 19 OF 40 SHEETS	



**LEGEND**

- UD — NEW UNDERDRAIN
- UD — EXISTING UNDERDRAIN
- NEW INLET
- ⊙ NEW CLEANOUT
- ⊙ NEW COLLECTION STRUCTURE
- ◆ NEW UNDERDRAIN END CAP
- HP UNDERDRAIN HIGH POINT
- EXISTING INLET
- ⊙ SS EXISTING MANHOLE
- ⊙ CS EXISTING CLEANOUT
- ⊙ CS EXISTING COLLECTION STRUCTURE

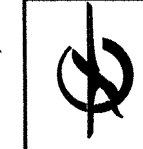
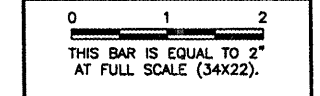
**NOTES**

1. CAP UNDERDRAIN AT LOCATIONS SHOWN.
2. SEE DRAINAGE SCHEDULE FOR LOCATIONS, INVERTS, AND RIM ELEVATIONS.

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 UPDATE BY: Kristy Brod  
 PLOT DATE: 1/29/2009 12:19 PM  
 SPI-BASE-1  
 BASE\_PROPOSED  
 BASE\_PROPDRAIN  
 SpAlign  
 Spitopo

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SPRINGFIELD AIRPORT AUTHORITY  
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 SPRINGFIELD, ILLINOIS

RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
**UNDERDRAIN PLAN**

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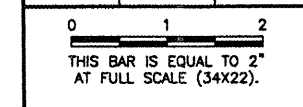
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JOB No:	08035-08
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AIP PROJ. NO. 3-17-0096-XX	
SHEET 20 OF 40 SHEETS	

STORM SEWER PIPE SCHEDULE							
LINE	UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	SIZE	UPSTREAM INVERT	DOWNSTREAM INVERT	LENGTH (FT)	SLOPE
SS-1	IN-1	IN-2	12"	580.40	579.65	150.0	0.50%
SS-2	IN-3	IN-2	12"	580.65	579.65	200.0	0.50%
SS-3	IN-2	IN-4	18"	579.65	578.76	177.1	0.50%

STORM SEWER STRUCTURE SCHEDULE										
STRUCTURE	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	RIM	INVERT	STRUCTURE TYPE	FRAME & LD	NOTES
IN-1	RAMP	76+01.25	CL	1156540.53	2436315.68	584.46	580.40	SPECIAL INLET	NEENAH R-3475-A	NEW INLET
IN-2	RAMP	77+51.25	CL	1156451.73	2436436.57	584.09	579.65	SPECIAL INLET	NEENAH R-3475-A	NEW INLET
IN-3	RAMP	79+51.25	CL	1156333.34	2436597.77	583.31	580.65	SPECIAL INLET	NEENAH R-3475-A	NEW INLET
IN-4	TXY B2	1+00.00	111' LT	1156348.98	2436292.28	583.38	578.76	INLET	NEENAH R-3807	REMOVE & REPLACE INLET
IN-5	RAMP	79+54.50	66.25' LT	1156384.64	2436639.84	583.37	580.44	INLET	NEENAH R-3807	REMOVE & REPLACE INLET
EIN-1	TXY B2	1+00.00	159.1' RT	1156197.47	2436509.39	582.64	577.24	INLET	---	REMAIN IN PLACE
EMH-1	RAMP	80+36.97	66.25' LT	1156344.19	2436705.29	584.18	581.33	MANHOLE	---	REMAIN IN PLACE

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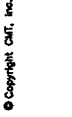


UNDERDRAIN PIPE SCHEDULE							
LINE	UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	UPSTREAM INVERT	DOWNSTREAM INVERT	LENGTH (FT)	SLOPE	PIPE
UD-1	CAP-1	DC-1	581.63	581.56	21.25	0.30%	PERFORATED
UD-2	DC-1	DC-2	581.56	581.41	50.00	0.30%	PERFORATED
UD-3	DC-2	DC-3	581.41	581.26	50.00	0.30%	PERFORATED
UD-4	DC-3	DC-4	581.26	581.11	50.00	0.30%	PERFORATED
UD-5	DC-4	IN-2	581.11	581.04	25.00	0.30%	PERFORATED
UD-6	DC-5	IN-2	581.20	581.17	25.00	0.15%	PERFORATED
UD-7	DC-6	DC-5	581.35	581.20	50.00	0.30%	PERFORATED
UD-8	CAP-2	DC-6	581.38	581.35	8.75	0.30%	PERFORATED
UD-9	CAP-3	DC-7	580.93	580.86	21.25	0.30%	PERFORATED
UD-10	DC-7	IN-3	580.86	580.79	25.00	0.30%	PERFORATED
UD-11	DC-8	IN-3	580.95	580.92	25.00	0.15%	PERFORATED
UD-12	DC-9	DC-8	581.10	580.95	50.00	0.30%	PERFORATED
UD-13	CAP-4	DC-9	581.13	581.10	8.75	0.30%	PERFORATED
UD-14	CAP-5	DC-1	581.90	581.56	221.25	0.15%	PERFORATED
UD-15	CAP-6	DC-1	581.67	581.56	71.25	0.15%	PERFORATED
UD-16	CAP-7	DC-2	581.75	581.41	221.25	0.15%	PERFORATED
UD-17	CAP-8	DC-2	581.52	581.41	71.25	0.15%	PERFORATED
UD-18	CAP-9	DC-3	581.60	581.26	221.25	0.15%	PERFORATED
UD-19	CAP-10	DC-3	581.37	581.26	71.25	0.15%	PERFORATED
UD-20	CAP-11	DC-4	581.45	581.11	221.25	0.15%	PERFORATED
UD-21	HP-1	DC-4	581.22	581.11	71.25	0.15%	PERFORATED
UD-22	HP-1	DC-7	581.22	580.86	118.75	0.30%	PERFORATED
UD-23	CAP-12	DC-7	581.04	580.86	115.25	0.15%	PERFORATED
UD-24	CAP-13	DC-5	581.54	581.20	221.25	0.15%	PERFORATED
UD-25	HP-2	DC-5	581.31	581.20	71.25	0.15%	PERFORATED
UD-26	HP-2	DC-8	581.31	580.95	118.75	0.30%	PERFORATED
UD-27	CAP-14	DC-8	581.13	580.95	115.25	0.15%	PERFORATED
UD-28	CAP-15	DC-6	581.69	581.35	221.25	0.15%	PERFORATED
UD-29	HP-3	DC-6	581.59	581.35	71.25	0.33%	PERFORATED
UD-30	HP-3	DC-9	581.59	581.10	118.75	0.41%	PERFORATED
UD-31	CAP-16	DC-9	581.28	581.10	115.25	0.15%	PERFORATED
UD-32	CO-1	CS-1	581.80	580.92	176.81	0.50%	PERFORATED
UD-33	CS-1	IN-4	580.92	580.56	71.49	0.50%	NON-PERFORATED
UD-34	CO-2	CS-2	580.62	579.82	159.69	0.50%	PERFORATED
UD-35	CS-2	EIN-2	579.82	579.52	59.58	0.50%	NON-PERFORATED
UD-36	CS-3	IN-4	582.40	582.03	74.80	0.50%	NON-PERFORATED

UNDERDRAIN STRUCTURE SCHEDULE									
STRUCTURE	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	RIM	INVERT	NOTES	
IN-2	RAMP	77+51.25	CL	1156451.73	2436436.57	584.09	581.04	UD-5	NEW INLET
IN-3	RAMP	79+51.25	CL	1156333.34	2436597.77	583.31	581.17	UD-6	NEW INLET
IN-4	TXY B2	1+00.00	111' LT	1156348.98	2436292.28	583.38	580.79	UD-10	NEW INLET
EIN-2	TXY B2	1+50.00	165.5' RT	1156233.85	2436543.99	582.59	580.92	UD-11	EXISTING INLET
CAP-1	RAMP	77+51.25	196.25' LT	1156618.37	2436552.16	586.40	580.56	UD-33	UNDERDRAIN CAP
CAP-2	RAMP	77+51.25	83.75' RT	1156392.70	2436386.42	584.74	582.03	UD-36	UNDERDRAIN CAP
CAP-3	RAMP	79+51.25	46.25' LT	1156379.09	2436624.56	583.89	581.90		UNDERDRAIN CAP
CAP-4	RAMP	79+51.25	83.75' RT	1156274.31	2436547.61	584.42	581.13		UNDERDRAIN CAP
CAP-5	RAMP	75+30.00	175' LT	1156732.22	2436361.26	586.41	581.69		UNDERDRAIN CAP
CAP-6	RAMP	78+22.5	175' LT	1156559.07	2436597.01	585.79	581.67		UNDERDRAIN CAP
CAP-7	RAMP	75+30.00	125' LT	1156691.92	2436331.67	586.04	581.75		UNDERDRAIN CAP
CAP-8	RAMP	78+22.50	125' LT	1156518.62	2436567.62	585.45	581.52		UNDERDRAIN CAP
CAP-9	RAMP	75+30.00	75' LT	1156651.62	2436302.07	585.68	581.60		UNDERDRAIN CAP
CAP-10	RAMP	78+22.50	75' LT	1156478.47	2436537.81	585.08	581.37		UNDERDRAIN CAP
CAP-11	RAMP	75+30.00	25' LT	1156611.32	2436272.47	585.30	581.45		UNDERDRAIN CAP
CAP-12	RAMP	80+66.50	25' LT	1156293.74	2436704.87	584.44	581.04		UNDERDRAIN CAP
CAP-13	RAMP	75+30.00	25' RT	1156571.02	2436242.87	585.25	581.54		UNDERDRAIN CAP
CAP-14	RAMP	80+66.50	25' RT	1156253.44	2436675.27	583.98	581.13		UNDERDRAIN CAP
CAP-15	RAMP	75+30.00	75' RT	1156530.73	2436213.27	585.40	581.69		UNDERDRAIN CAP
CAP-16	RAMP	80+66.50	75' RT	1156213.14	2436645.68	583.57	581.28		UNDERDRAIN CAP
DC-1	RAMP	77+51.25	175' LT	1156601.25	2436539.58	586.12	581.56		DIRECT CONNECT
DC-2	RAMP	77+51.25	125' LT	1156560.95	2436509.99	585.57	581.41		DIRECT CONNECT
DC-3	RAMP	77+51.25	75' LT	1156520.65	2436480.39	585.03	581.26		DIRECT CONNECT
DC-4	RAMP	77+51.25	25' LT	1156480.35	2436450.79	584.45	581.11		DIRECT CONNECT
DC-5	RAMP	77+51.25	25' RT	1156440.05	2436421.19	584.44	581.20		DIRECT CONNECT
DC-6	RAMP	77+51.25	75' RT	1156399.75	2436391.59	584.74	581.35		DIRECT CONNECT
DC-7	RAMP	79+51.25	25' LT	1156361.96	2436611.98	583.67	580.86		DIRECT CONNECT
DC-8	RAMP	79+51.25	25' RT	1156321.66	2436582.39	583.67	580.95		DIRECT CONNECT
DC-9	RAMP	79+51.25	75' RT	1156281.36	2436552.79	584.30	581.10		DIRECT CONNECT
HP-1	RAMP	78+32.50	25' LT	1156432.26	2436516.28	584.72	581.22		HIGH POINT
HP-2	RAMP	78+32.50	25' RT	1156391.96	2436486.68	584.81	581.31		HIGH POINT
HP-3	RAMP	78+32.50	75' RT	1156351.66	2436457.08	585.04	581.59		HIGH POINT
CO-1	RAMP	75+20.00	96.75' RT	1156519.12	2436192.34	585.30	581.80		TYPE 1
CO-2	RAMP	80+76.50	96.75' RT	1156192.58	2436621.00	583.12	580.62		TYPE 1
CO-3	TXY B2	0+27.5	128' RT	1156157.24	2436441.23	584.64	581.84		TYPE 1
CS-1	RAMP	76+96.81	96.75' RT	1156414.45	2436334.84	585.20	580.92		---
CS-2	RAMP	79+16.81	96.75' RT	1156287.11	2436492.29	583.63	579.82		---
CS-3	TXY B2	0+27.5	128' LT	1156308.78	2436234.90	585.06	582.40		---

**RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
DRAINAGE SCHEDULE**

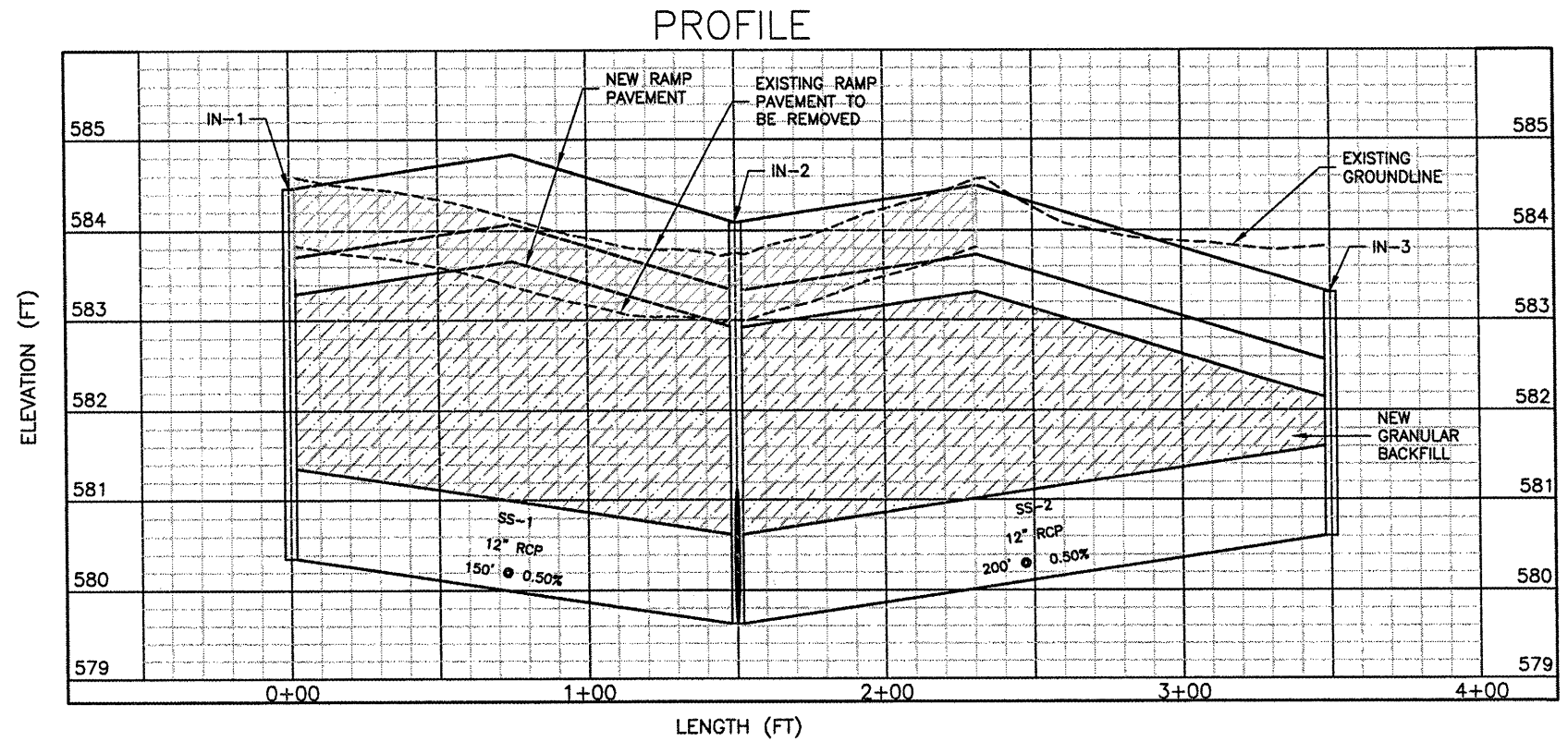
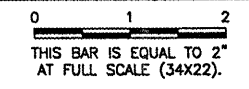
  
 SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS

  
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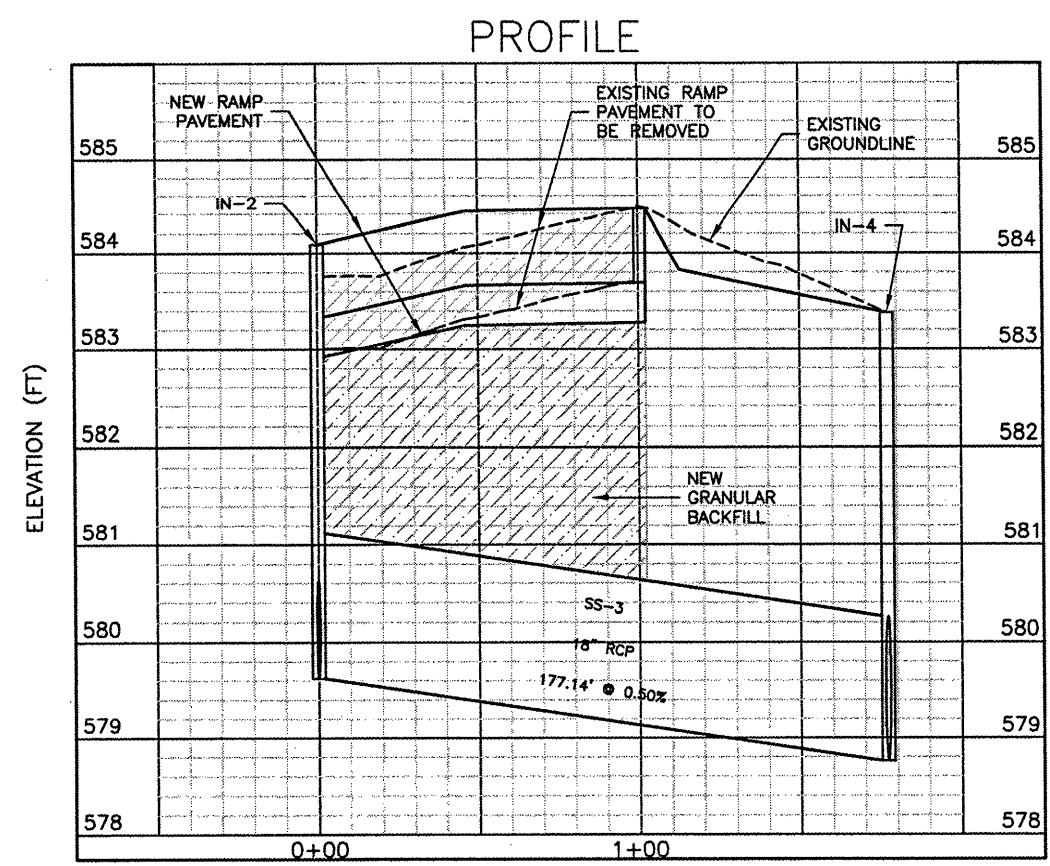
DESIGN BY:	RLV/KLB
DRAWN BY:	CMT
CHECKED BY:	RW
APPROVED BY:	RW
DATE:	JANUARY 27, 2009
JOB No:	08035-08
IL PROJ. NO.	SPI-3885
AIP PROJ. NO.	3-17-0096-XX
SHEET	21 OF 40 SHEETS

**CA008**

REVISIONS		
NUMBER	BY	DATE



**STORM SEWER PROFILE LINE 1 AND 2**  
**IN-1 TO IN-2 AND IN-2 TO IN-3**



**STORM SEWER PROFILE LINE 3**  
**IN-2 TO IN-4**



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RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 STORM SEWER PROFILES

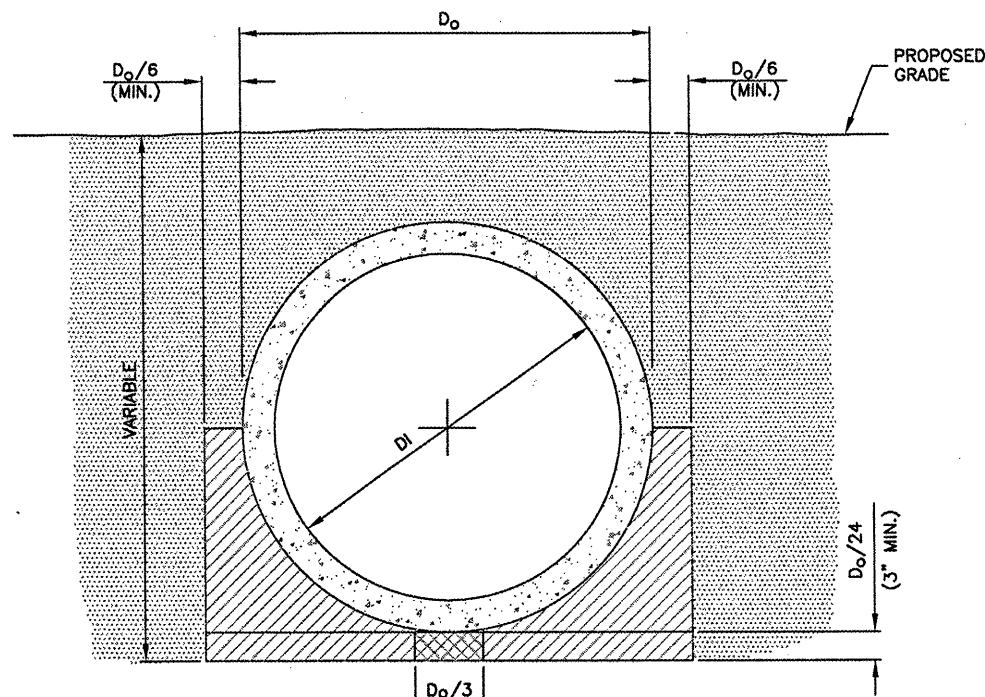
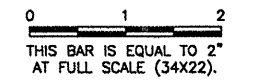
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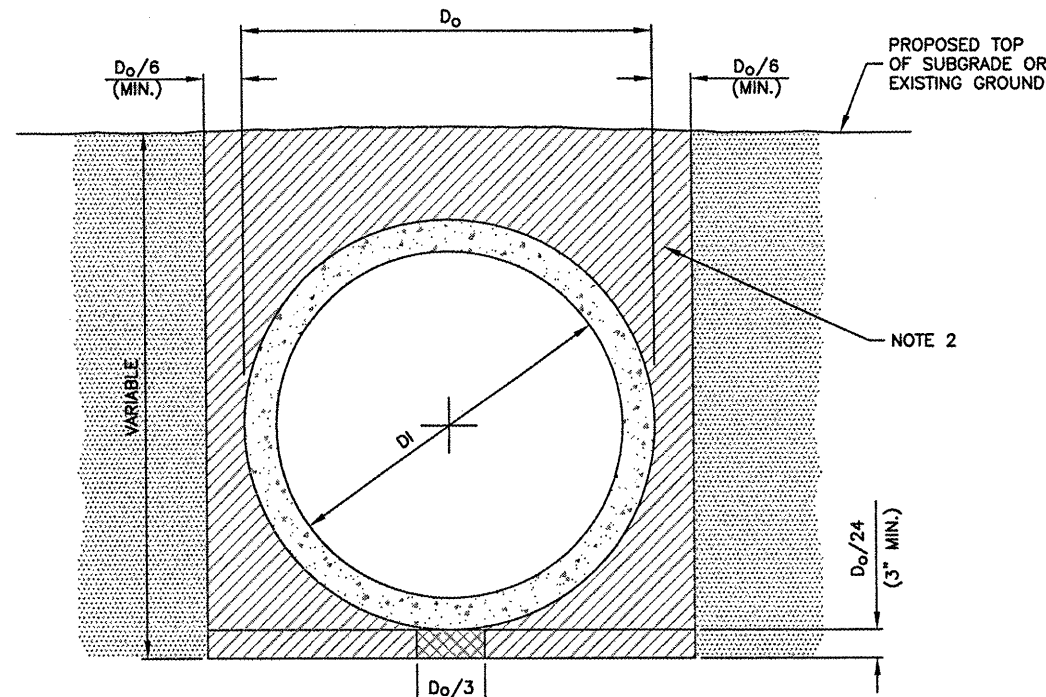
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DRAWN BY:	CMT
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APPROVED BY:	<i>RLV</i>
DATE:	JANUARY 27, 2009
JOB No:	08035-08
IL PROJ. NO. SPI-3885	
AIP PROJ. NO. 3-17-0096-XX	
SHEET 22 OF 40 SHEETS	

CA008

REVISIONS		
NUMBER	BY	DATE



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



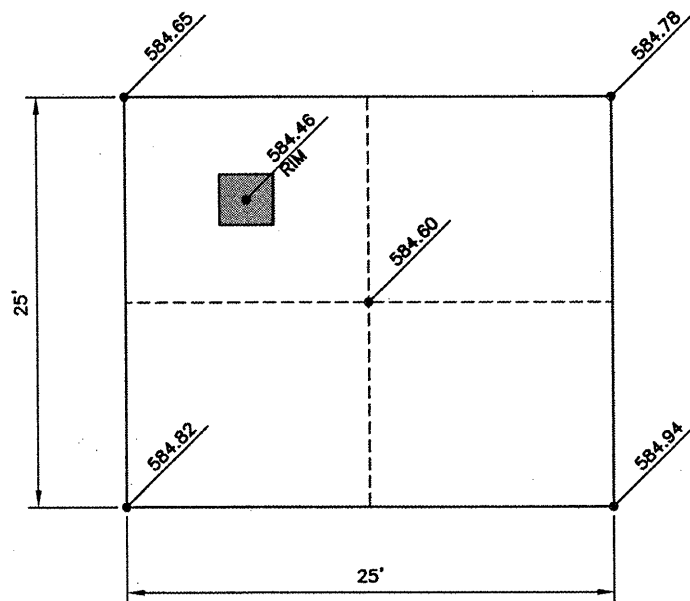
**STANDARD TRENCH INSTALLATION  
 PROPOSED PAVED AREA**  
 N.T.S.

**TRENCH INSTALLATION LEGEND**

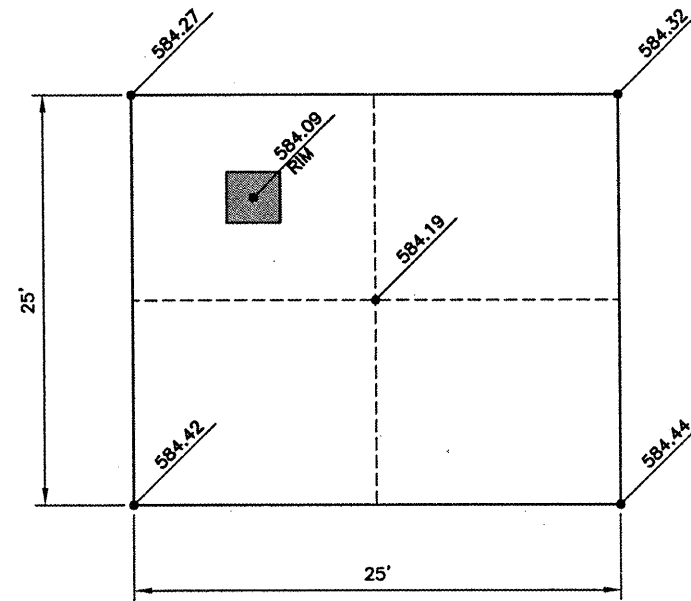
- DRAINAGE CONDUIT MATERIAL—CONCRETE
- MIDDLE BEDDING LOOSELY PLACED UNCOMPACTED BEDDING
- HAUNCH AND OUTER BEDDING COMPACTION— TO ENGINEER'S SATISFACTION OR 95% STANDARD PROCTOR
- LOWER SIDE AND OVERFILL COMPACTION— SAME AS EMBANKMENT REQUIREMENTS
- $D_o$  PIPE OUTSIDE DIAMETER
- $D_1$  PIPE INSIDE DIAMETER

**TRENCH INSTALLATION NOTES**

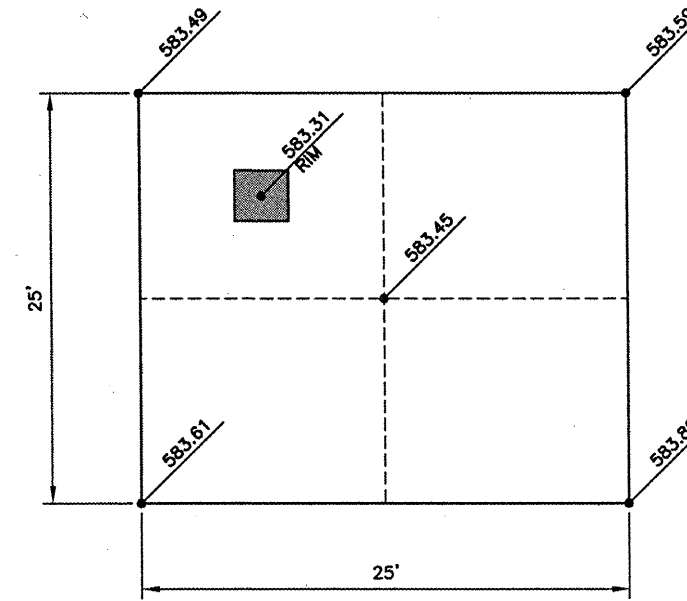
1. BEDDING SHOWN IS IN ACCORDANCE WITH "STANDARD EMBANKMENT INSTALLATIONS", STANDARD INSTALLATION & BEDDING FACTORS FOR THE INDIRECT DESIGN METHOD (DESIGN DATA 40), AMERICAN CONCRETE PIPE ASSOCIATION.
2. BACKFILL TO EXTEND 3' BEYOND EDGES OF PROPOSED PAVEMENT.



**(IN-1)**  
**INLET STAKING PLAN**  
 N.T.S.



**(IN-2)**  
**INLET STAKING PLAN**  
 N.T.S.



**(IN-3)**  
**INLET STAKING PLAN**  
 N.T.S.

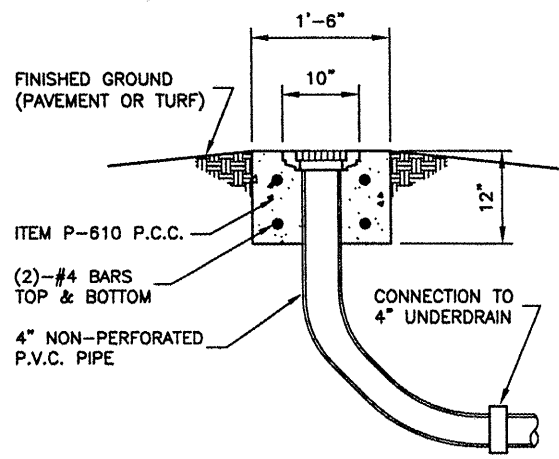


SPRINGFIELD AIRPORT AUTHORITY  
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 SPRINGFIELD, ILLINOIS

RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 DRAINAGE DETAILS

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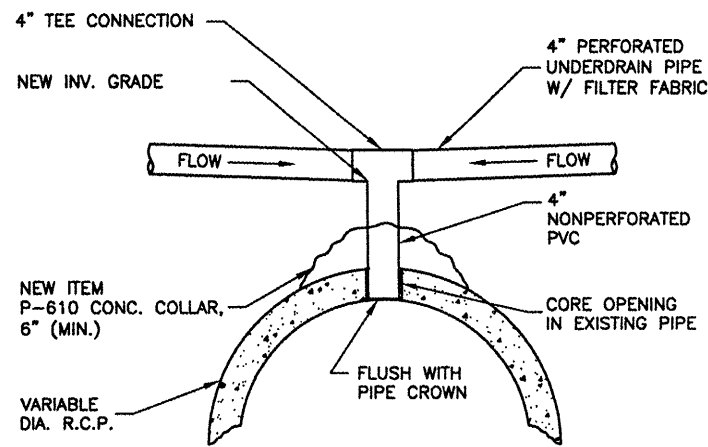
DESIGN BY:	RLV/KLB
DRAWN BY:	CMT
CHECKED BY:	REN
APPROVED BY:	REN
DATE:	JANUARY 27, 2009
JOB No:	08035-08
IL PROJ. NO.	SPI-3885
AIP PROJ. NO.	3-17-0096-XX
SHEET	23 OF 40 SHEETS



**SIDE VIEW**

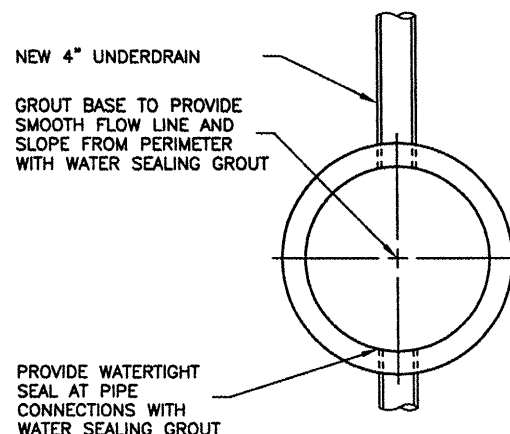
**UNDERDRAIN CLEAN-OUT DETAIL (TYPE 1)**

N.T.S.



**UNDERDRAIN DIRECT TOP CONNECTION DETAIL**

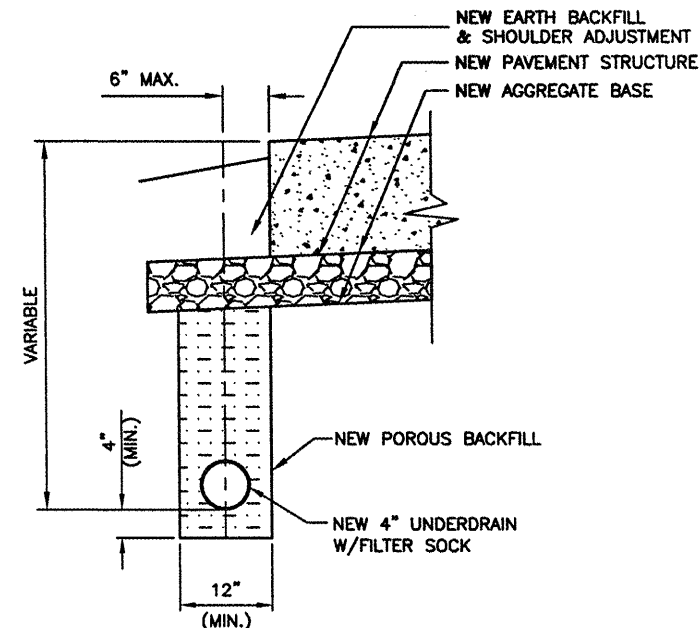
N.T.S.



**PLAN**

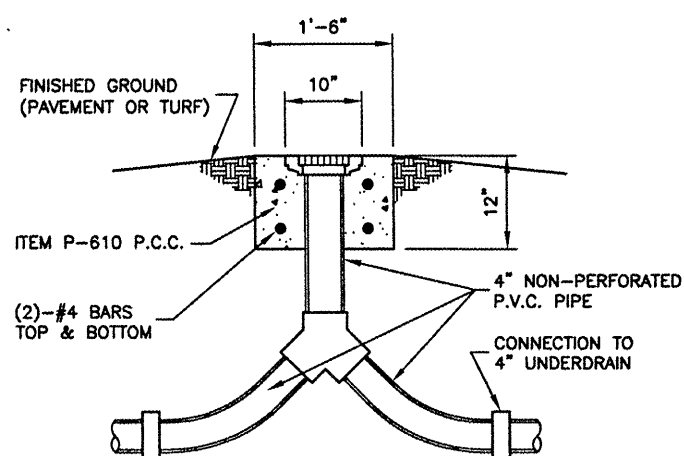
**UNDERDRAIN CLEAN-OUT DETAIL**

N.T.S.



**TYPICAL UNDERDRAIN DETAIL  
PAVEMENT EDGE**

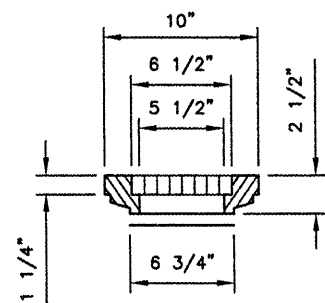
N.T.S.



**SIDE VIEW**

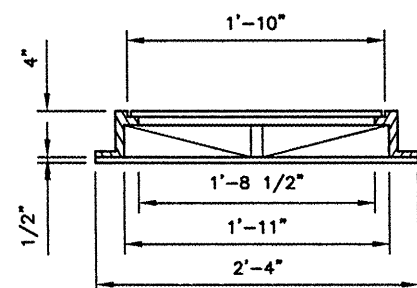
**UNDERDRAIN CLEAN-OUT DETAIL (TYPE 2)**

N.T.S.



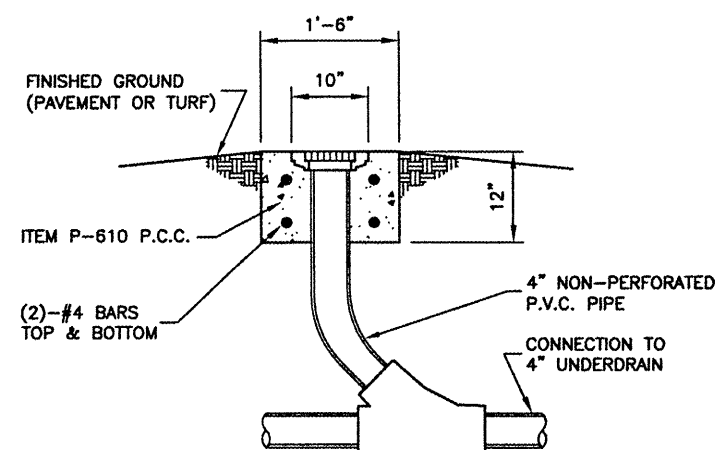
**CAST IRON FRAME & COVER  
(SIMILAR TO NEENAH R-6013  
OR APPROVED EQUAL)**

**FRAME & COVER**



**CAST IRON FRAME & LID (SIMILAR  
TO NEENAH R-1690-A HEAVY DUTY  
OR APPROVED EQUAL)**

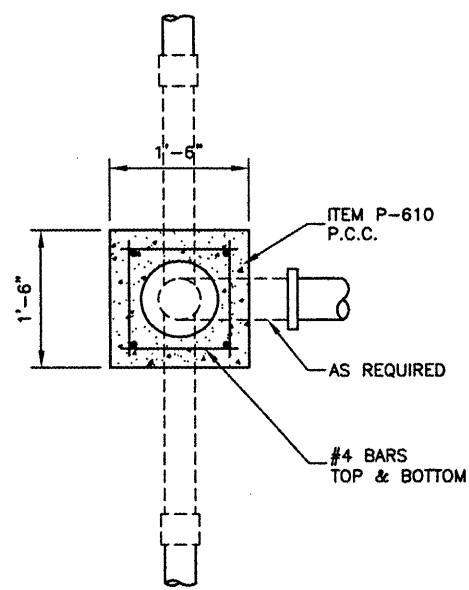
**FRAME & LID**



**SIDE VIEW**

**UNDERDRAIN CLEAN-OUT DETAIL (TYPE 3)**

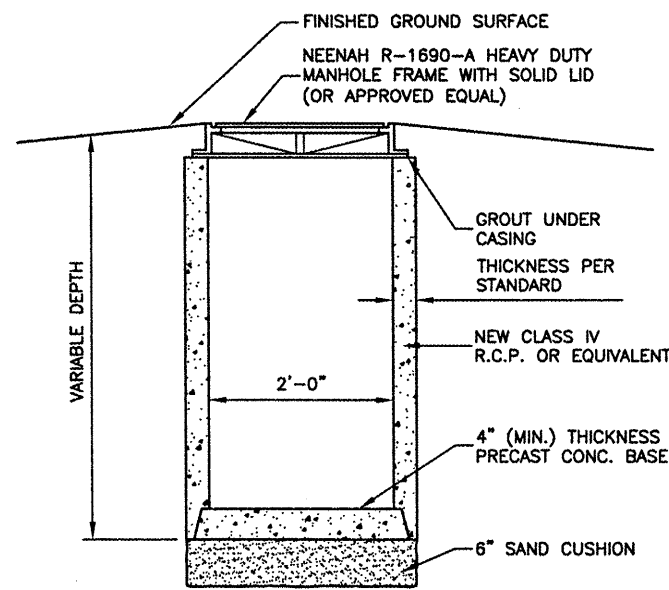
N.T.S.



**PLAN**

**UNDERDRAIN CLEAN-OUT DETAIL**

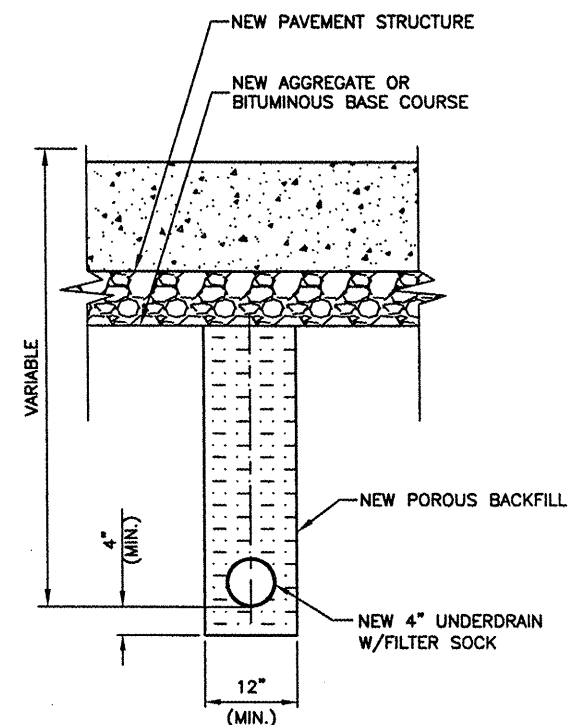
N.T.S.



**SIDE VIEW**

**UNDERDRAIN COLLECTION STRUCTURE DETAIL**

N.T.S.



**TYPICAL UNDERDRAIN DETAIL  
BELOW PAVEMENT**

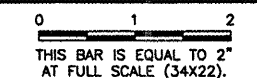
N.T.S.

**UNDERDRAIN NOTE**

DURING UNDERDRAIN CONSTRUCTION, CARE SHALL BE TAKEN TO ENSURE GOOD DRAINAGE BETWEEN THE SUB-BASE AND THE POROUS BACKFILL MATERIAL WHICH WILL AFFECT DRAINAGE TO THE UNDERDRAIN SHALL BE REMOVED PRIOR TO THE PLACEMENT OF PROPOSED POROUS BACKFILL. ALL COST FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL.

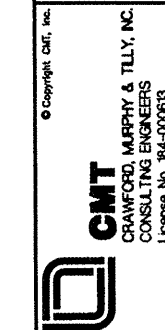
**CA008**

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NUMBER	BY	DATE



**SPRINGFIELD AIRPORT AUTHORITY  
ABRAHAM LINCOLN CAPITAL AIRPORT  
SPRINGFIELD, ILLINOIS**

**RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
UNDERDRAIN DETAILS**




DESIGN BY:	RLV/KLB
DRAWN BY:	CMT
CHECKED BY:	RLV
APPROVED BY:	RLV
DATE:	JANUARY 27, 2009
JOB No:	08035-08
IL PROJ. NO.	SPI-3885
AIP PROJ. NO.	3-17-0096-XX
SHEET 24 OF 40 SHEETS	



**CA008**

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NUMBER	BY	DATE

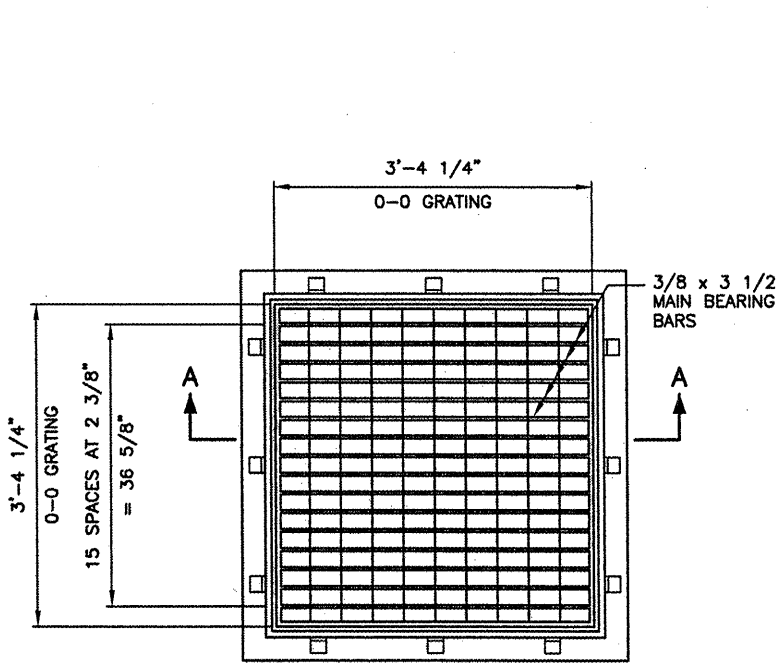
0 1 2  
 THIS BAR IS EQUAL TO 2"  
 AT FULL SCALE (34X22).

  
 SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS

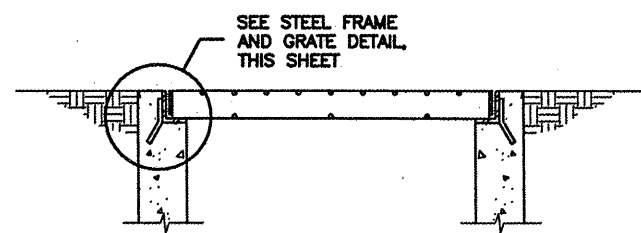
RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 INLET DETAIL

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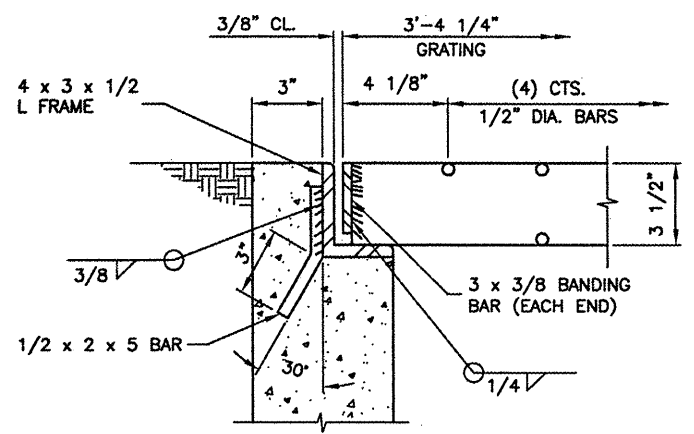
DESIGN BY:	RLV/KLB
DRAWN BY:	CMT
CHECKED BY:	RLV
APPROVED BY:	RLV
DATE:	JANUARY 27, 2009
JOB No:	08035-08
IL PROJ. NO.	SPI-3885
AIP PROJ. NO.	3-17-0096-XX
SHEET 25 OF 40 SHEETS	



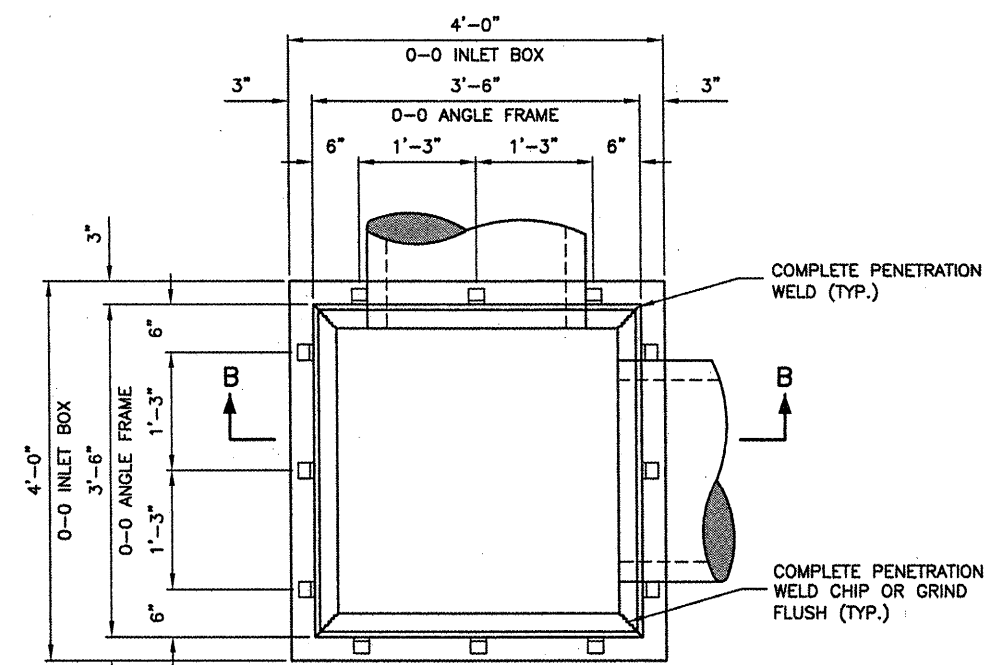
**PLAN**  
N.T.S.



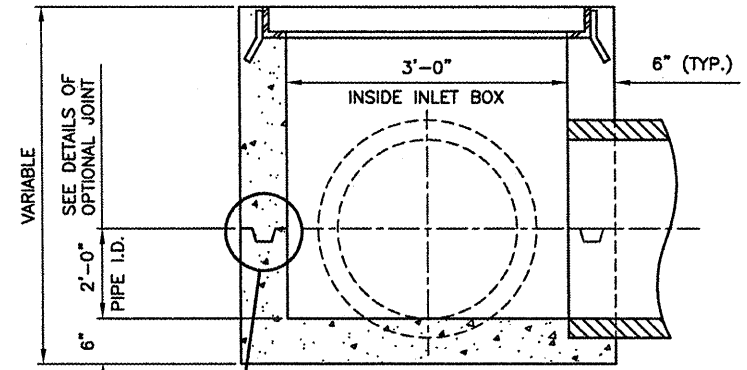
**SECTION A-A**  
N.T.S.



**STEEL FRAME & GRATE DETAIL**  
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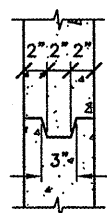


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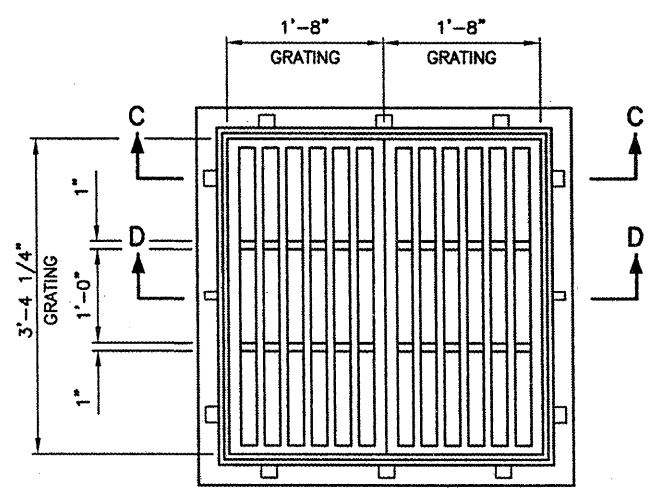
**SECTION B-B**  
N.T.S.

SEE OPTIONAL JOINT DETAIL, THIS SHEET

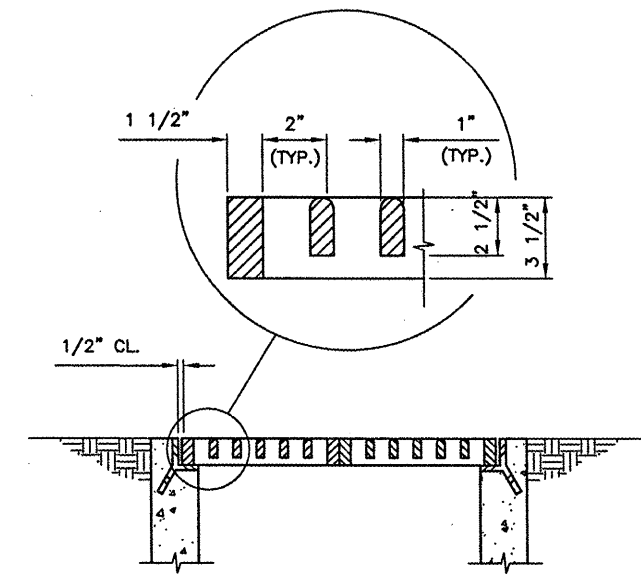


**OPTIONAL JOINT DETAIL**  
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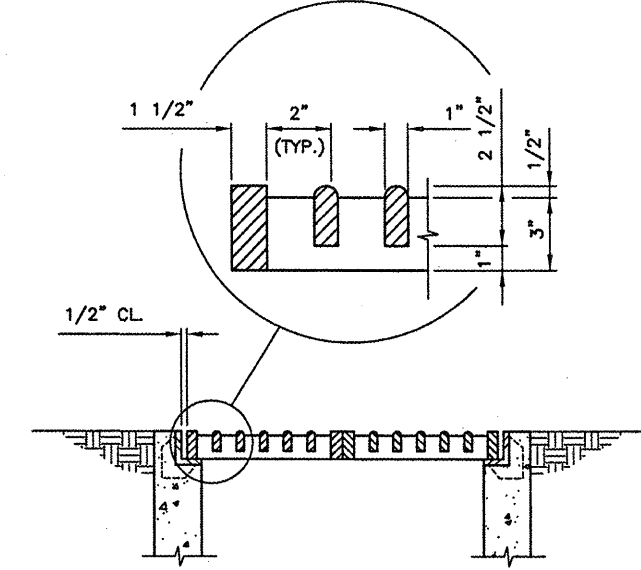
**INLET NOTE**  
 INLET IS AN IDOT STD. 542546, FLUSH INLET BOX FOR MEDIAN. FRAME & GRATES ARE NEEHAH R-3807 OR APPROVED EQUAL.



**PLAN**  
N.T.S.



**SECTION C-C**  
N.T.S.



**SECTION D-D**

**CAST FRAME & GRATE DETAILS**  
N.T.S.

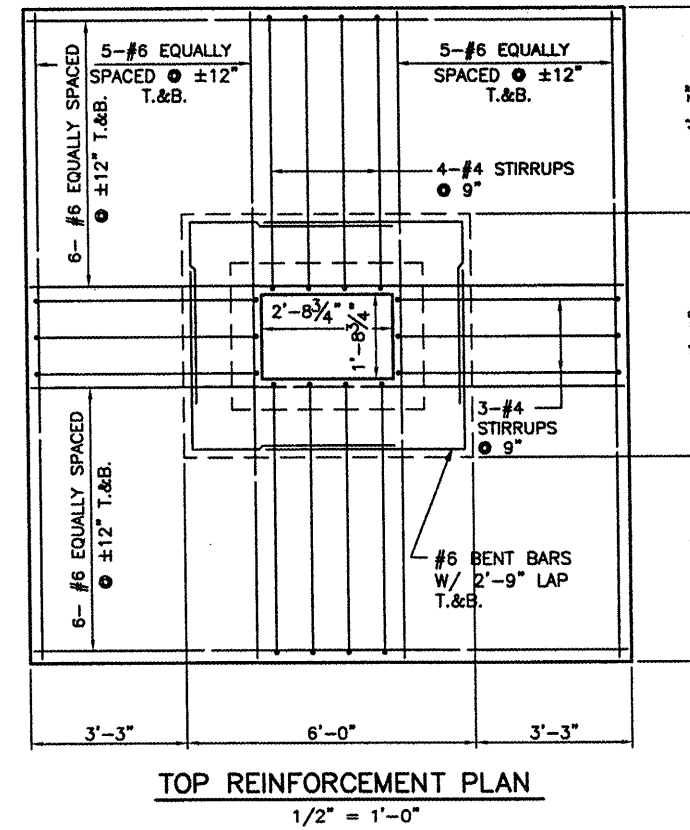
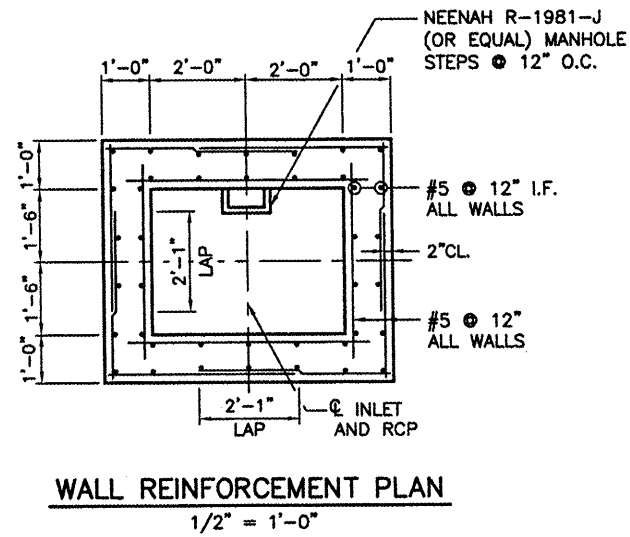
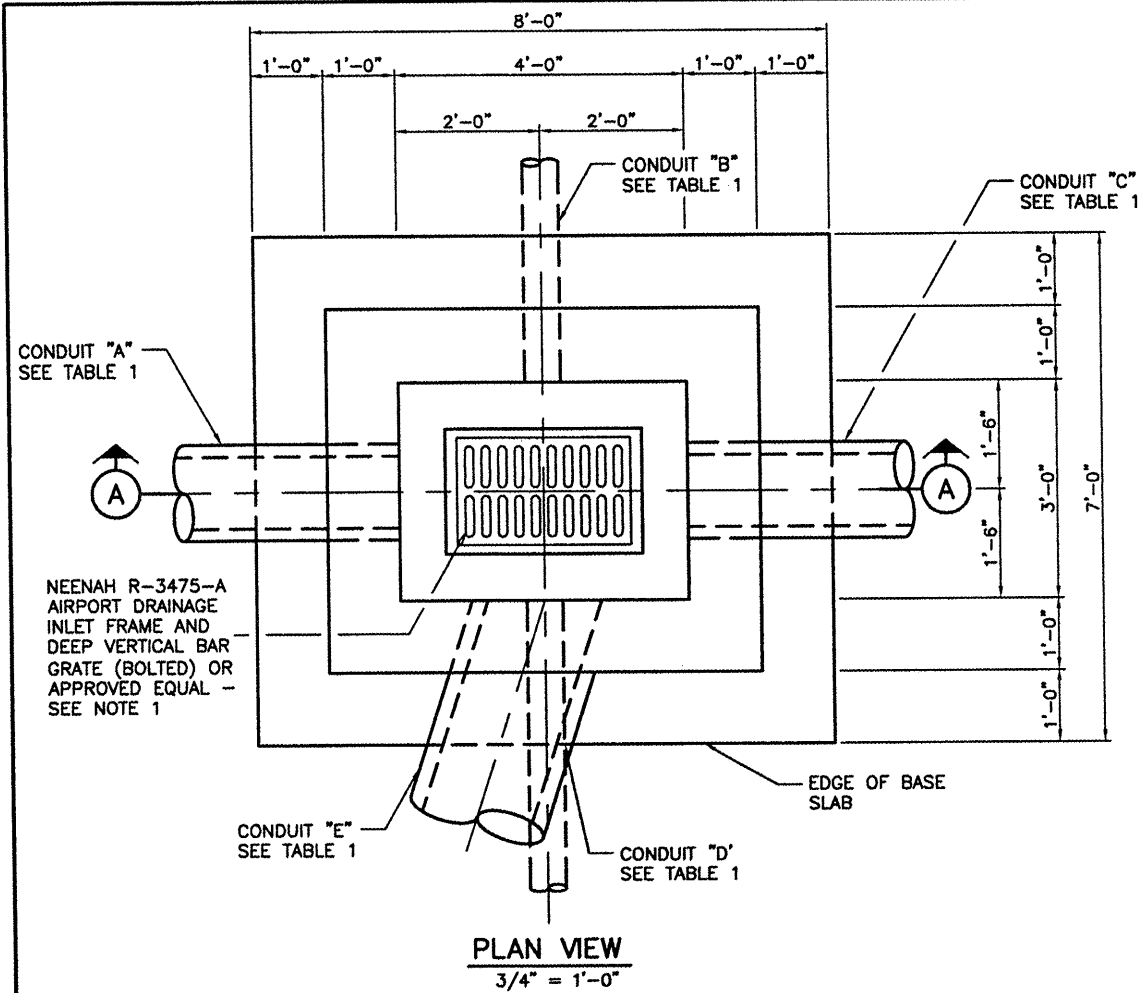
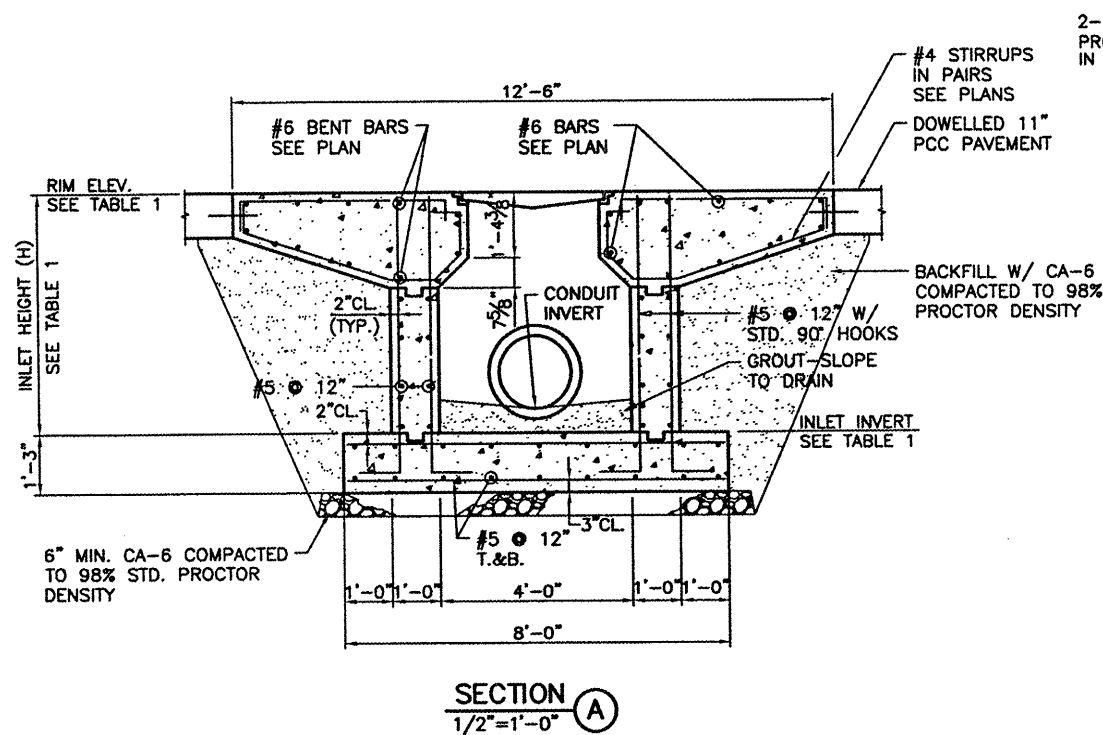
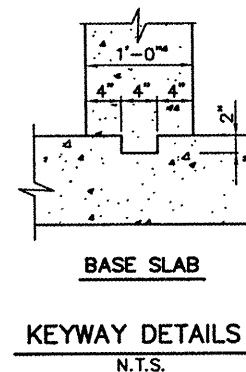
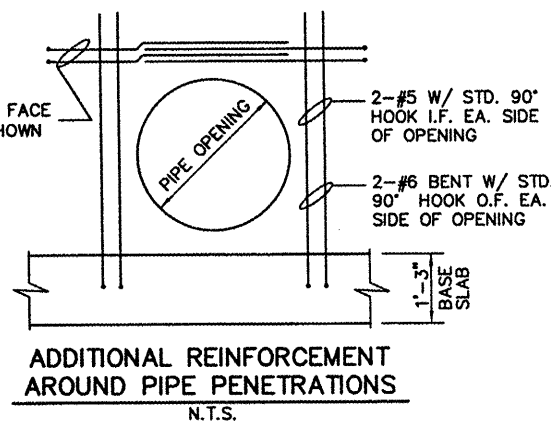


TABLE 1

INLET	IN-1	IN-2	IN-3
REFERENCE POINT	76+01.25	77+51.25	79+51.25
OFFSET	CL	CL	CL
RIM ELEVATION	584.46	584.09	583.31
DIAMETER (SKEW)	---	---	---
"A"	---	12" SS	12" SS
"B"	---	4" UD	4" UD
"C"	12" SS	12" SS	---
"D"	---	4" UD	4" UD
"E"	---	18" SS (108")	---
INVERT	---	---	---
"A"	---	579.65	580.65
"B"	---	580.92	580.67
"C"	580.40	579.65	---
"D"	---	580.91	580.66
"E"	---	579.65	---
INLET INVERT	579.90	579.15	580.15
INLET HEIGHT (H)	4'-7"	4'-11"	3'-2"



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REVISIONS

NUMBER	BY	DATE

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

SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS

RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 INLET - SPECIAL DETAIL

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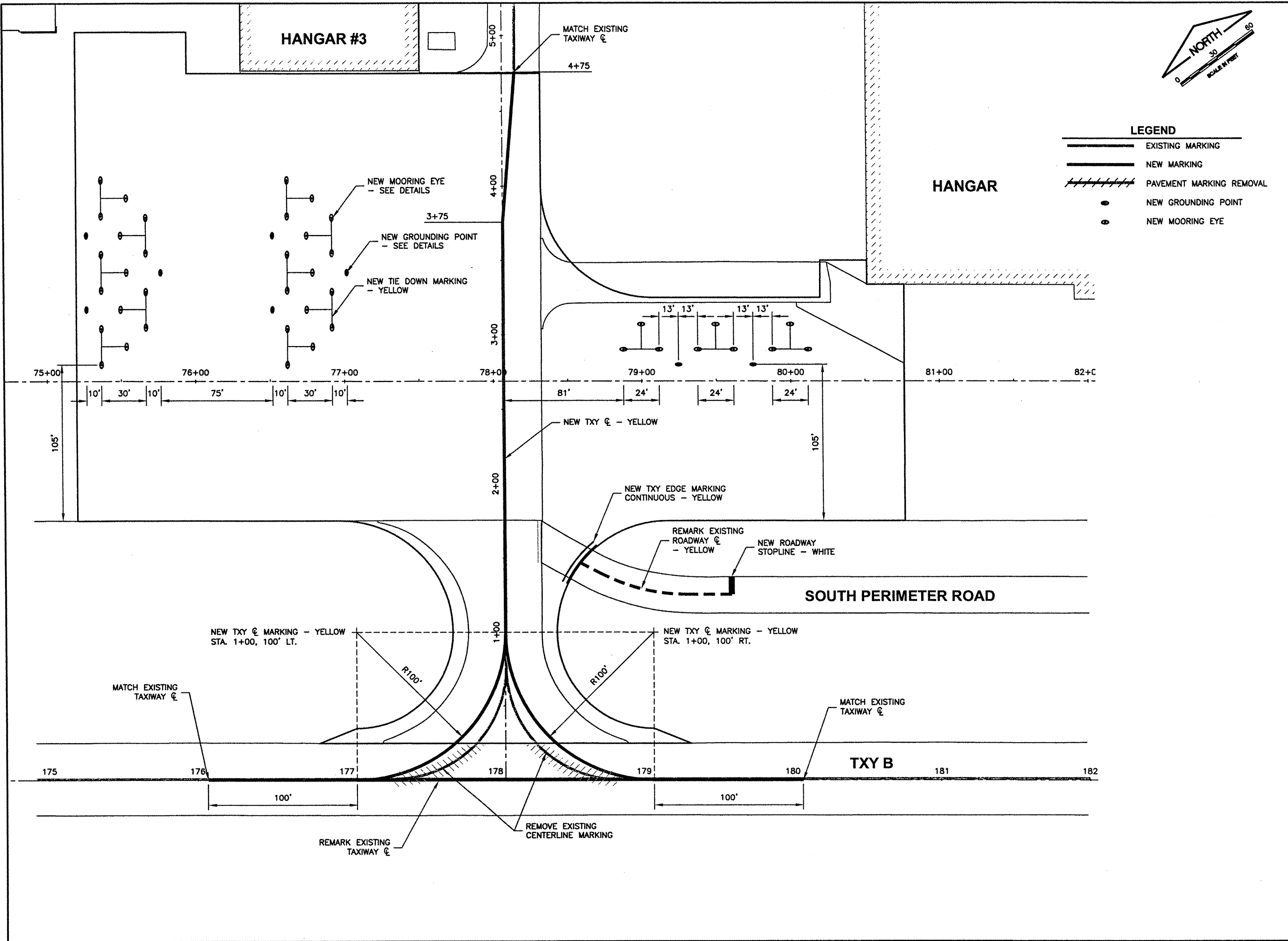
DESIGN BY:	WLB
DRAWN BY:	DJW
CHECKED BY:	RLV
APPROVED BY:	<i>RLV</i>
DATE:	JANUARY 27, 2009
JOB No:	08035-08
IL PROJ. NO. SPI-3885	
AIP PROJ. NO. 3-17-0096-XX	
SHEET 26 OF 40 SHEETS	

**DESIGN CRITERIA**

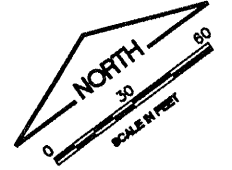
L.L. = BOEING AIRCRAFT 727-ADV200  
 WATER TABLE AT TOP OF INLET  
 NET ALLOWABLE SOIL BEARING PRESSURE = 2500 PSF

**GENERAL NOTES**

1. THE INLET GRATE SHALL BE SUPPORTED ON ALL FOUR SIDES.
2. ALL REINFORCEMENT BARS SHALL CONFORM TO ASTM A615 GRADE 60 AND SHALL BE CLEAN AND FREE OF GREASE, SCALING RUST AND OTHER FOREIGN MATERIALS.
3. INLET MAY BE CONSTRUCTED BY CAST-IN-PLACE CONCRETE OR PRECAST CONCRETE. PRECAST CONCRETE INLETS SHALL BE CONSTRUCTED TO THE LINES, DIMENSIONS AND DETAILS SHOWN ON THIS SHEET.
4. CAST-IN-PLACE CONCRETE AND PRECAST CONCRETE FOR THE INLETS SHALL HAVE A MINIMUM 14 DAYS COMPRESSIVE STRENGTH OF 3500 PSI.
5. THE CONTRACTOR SHALL VERIFY THE LOCATION AND SIZE OF PIPE OPENINGS WITH TABLE 1, THIS SHEET.
6. ALL FOOTING EXCAVATIONS SHALL BE CLEAN FREE OF DEBRIS, STANDING WATER AND LOOSE SOIL AND SHALL BE INSPECTED BY THE ENGINEER PRIOR TO THE PLACEMENT OF CONCRETE OR SUBBASE.
7. CONCRETE SHALL NOT BE PLACED OVER FROZEN OR MUDDY SOIL.
8. ADDITIONAL REINFORCEMENT FOR PIPE PENETRATIONS NOT REQUIRED FOR 4" DIA. PIPES OR LESS.



K:\Springfield\0803508\Draw\Sheets  
 FILE: MARK01.dwg  
 UPDATE BY: Kristy Brod  
 PLOT DATE: 1/29/2009 12:20 PM  
 SPI-BASE-1  
 Spitopo  
 SpiAlign  
 BASE\_PROPMARK  
 BASE\_PROGEO



**CA008**

REVISIONS		
NUMBER	BY	DATE

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

**LEGEND**

- EXISTING MARKING
- NEW MARKING
- PAVEMENT MARKING REMOVAL
- NEW GROUNDING POINT
- NEW MOORING EYE



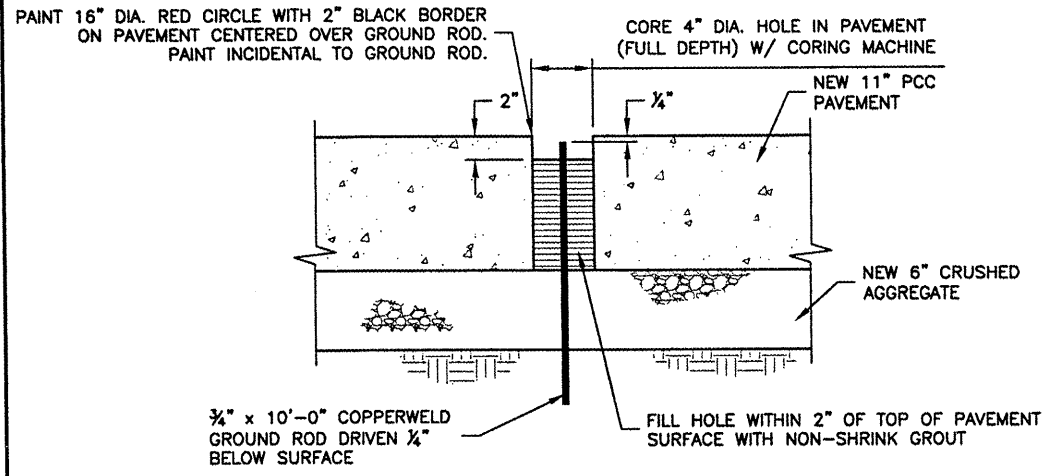
SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS

RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 MARKING PLAN

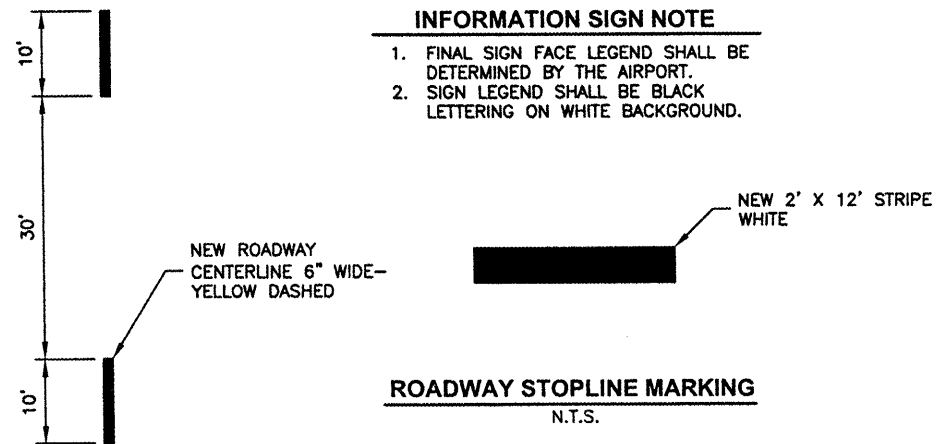
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AIP PROJ. NO.	3-17-0096-XX
SHEET	27 OF 40 SHEETS



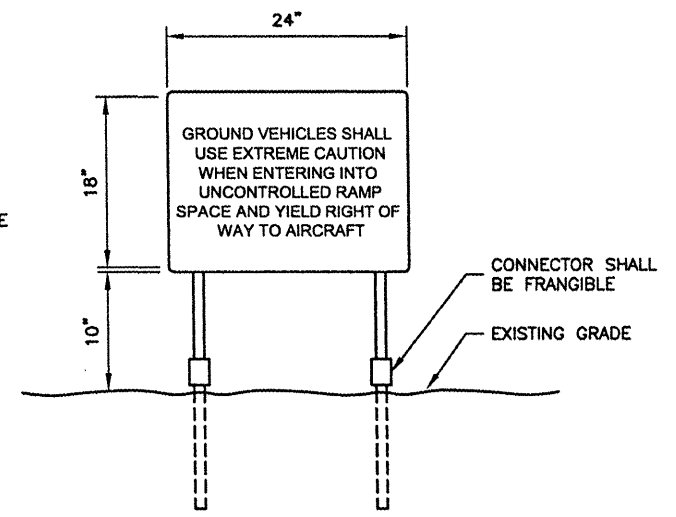
**GROUNDING POINT DETAIL**  
N.T.S.



**INFORMATION SIGN NOTE**

1. FINAL SIGN FACE LEGEND SHALL BE DETERMINED BY THE AIRPORT.
2. SIGN LEGEND SHALL BE BLACK LETTERING ON WHITE BACKGROUND.

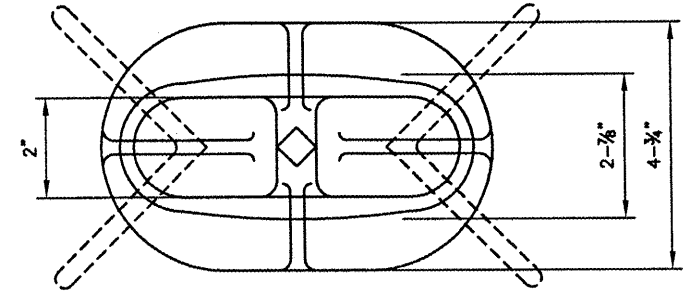
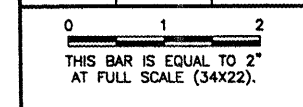
**ROADWAY STOPLINE MARKING**  
N.T.S.



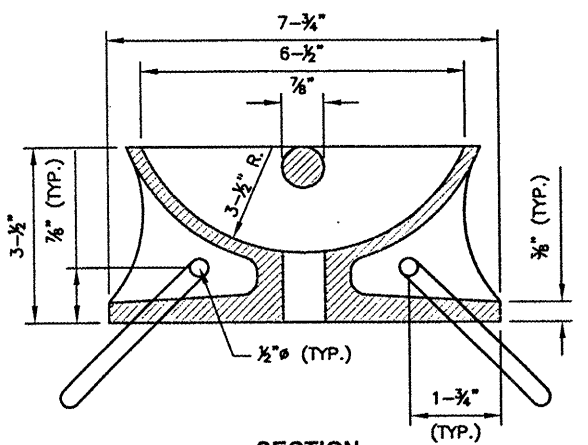
**INFORMATION SIGN LEGEND**  
N.T.S.

**CA008**

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**PLAN**



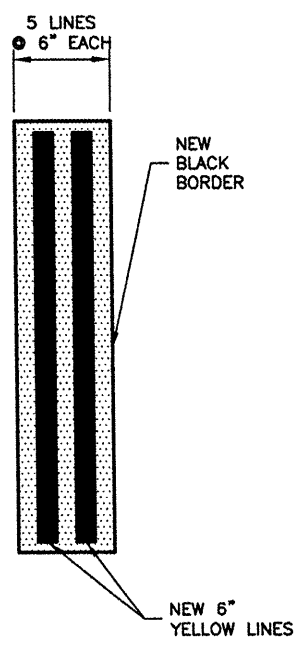
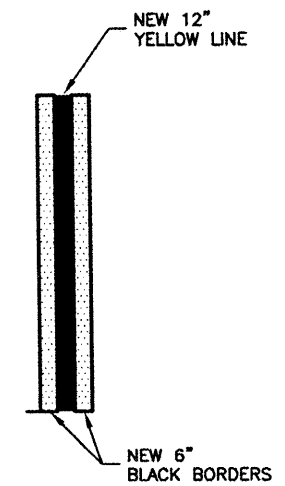
**SECTION**

**NOTES:**

1. MOORING CASTINGS SHALL BE NEENAH SEMI-STEEL AIRPORT MOORING EYE CATALOG NO. R3490 OR APPROVED EQUIVALENT.
2. ANCHOR RODS SHALL BE #3 DEFORMED REBAR, 15" LONG AND SHALL BE BENT DOWNWARD AT 45°. TWO ANCHOR BARS PER MOORING EYE ARE REQUIRED.
3. MOORING EYES SHALL BE INSTALLED AFTER THE PAVEMENT IS PLACED BY CORING THROUGH NEW PAVEMENT.

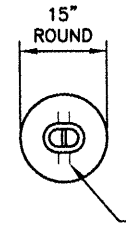
**MOORING EYE DETAIL**  
N.T.S.

**ROADWAY CENTERLINE - DASHED**  
N.T.S.

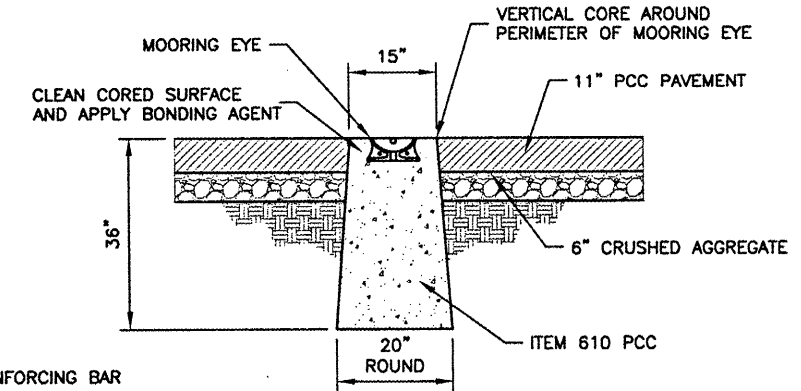


**TAXIWAY CENTERLINE CONTINUOUS**  
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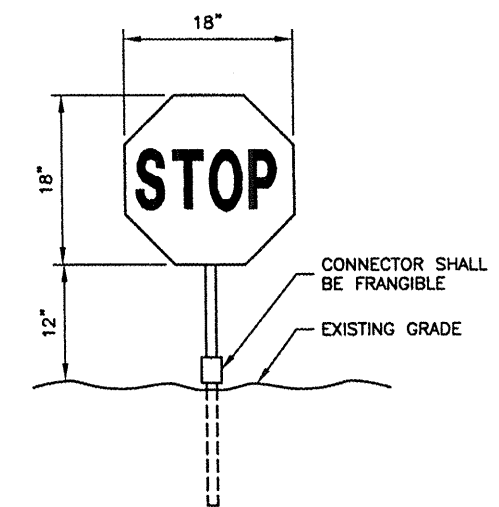
**TAXIWAY EDGE MARKING CONTINUOUS**  
N.T.S.



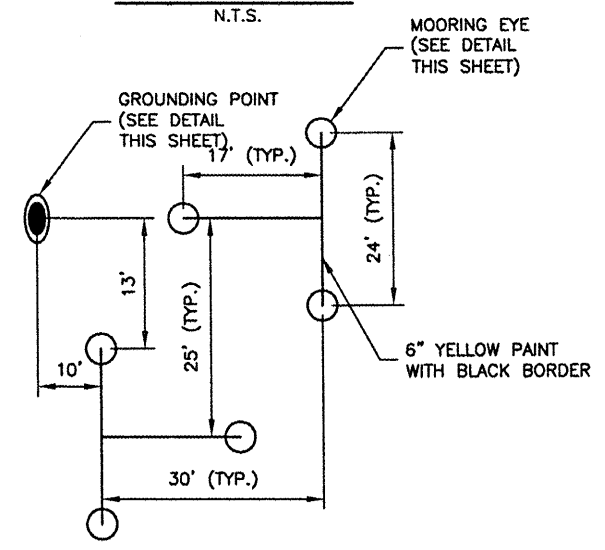
**PLAN**



**MOORING EYE IN PAVEMENT DETAIL**  
N.T.S.



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

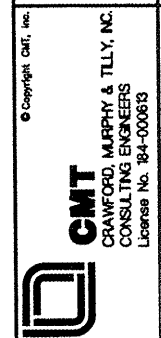


**TIEDOWN DETAIL**  
N.T.S.



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RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 MARKING & MISCELLANEOUS DETAILS



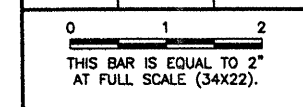
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AIP PROJ. NO.	3-17-0096-XX
SHEET	28 OF 40 SHEETS

NOTE: THE MOORING EYE SHALL BE INSTALLED AFTER PAVING OPERATIONS ARE COMPLETE.

K:\Springfield\0803508\Draw\Sheets  
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 PLOT DATE: 1/29/2009 12:20 PM  
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 BASE\_EXISTPO0

**CA008**

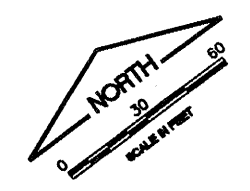
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NUMBER	BY	DATE



**RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 ELECTRICAL & LIGHTING PLAN**

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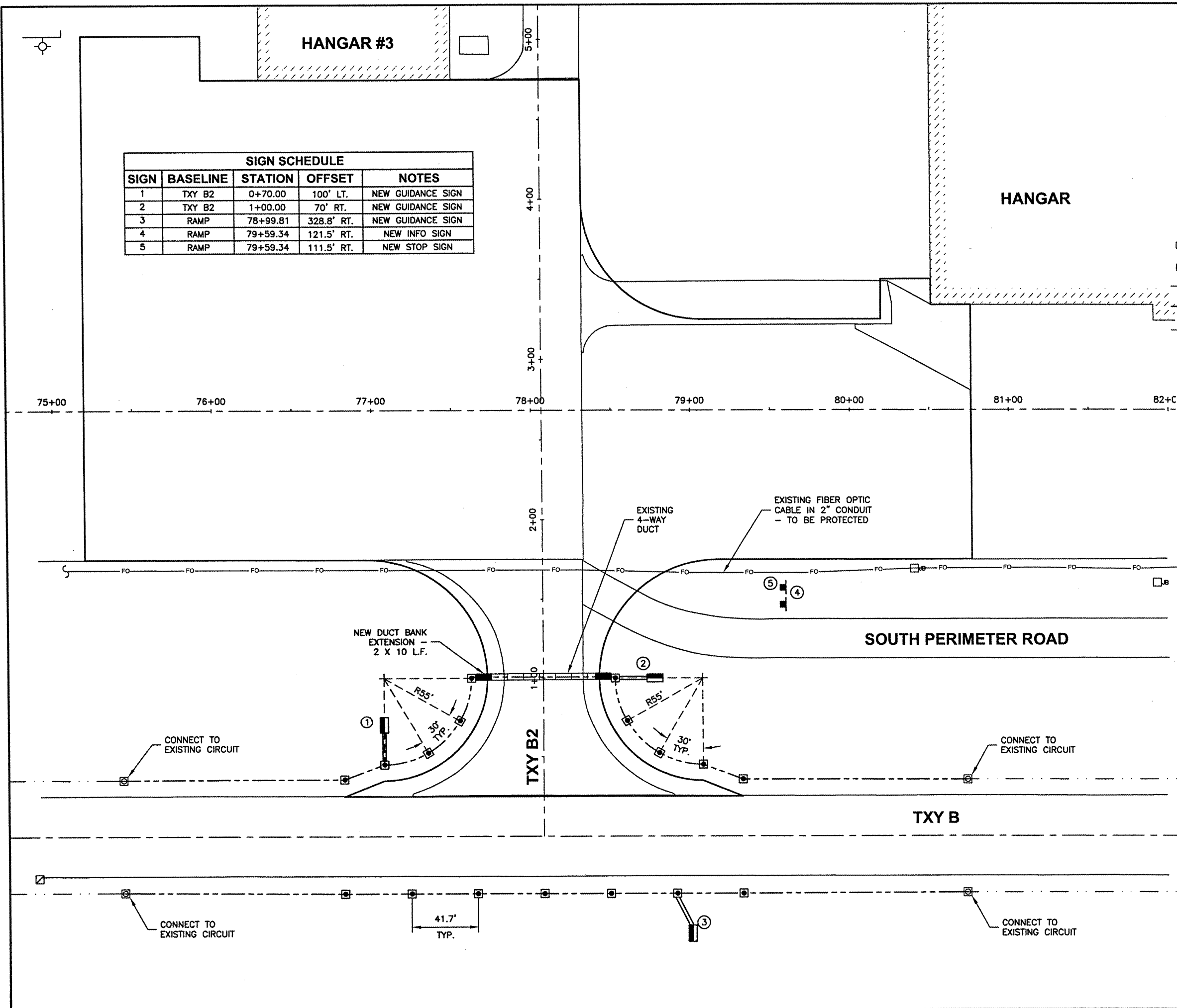
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AIP PROJ. NO.	3-17-0096-XX
SHEET 29 OF 40 SHEETS	

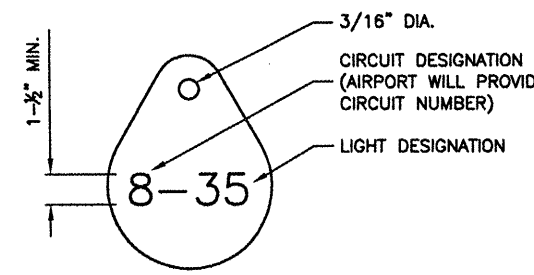


- LEGEND**
- EXISTING BASE MOUNTED - TAXIWAY LIGHT
  - NEW BASE MOUNTED - TAXIWAY LIGHT
  - NEW AIRFIELD SIGN & NUMBER
  - EXISTING DUCT BANK
  - EXTEND DUCT BANK
  - EXISTING TXY B CIRCUIT
  - NEW TXY B CIRCUIT
  - EXISTING FIBER OPTIC CABLE
  - NEW ROADWAY SIGN

- NOTES**
- NEW TAXIWAY EDGE LIGHTS SHALL BE LOCATED AT 10' OFF THE EDGE OF PAVEMENT.
  - NEW EDGE LIGHT CABLE SHALL BE LOCATED 12' OFF THE EDGE OF PAVEMENT.

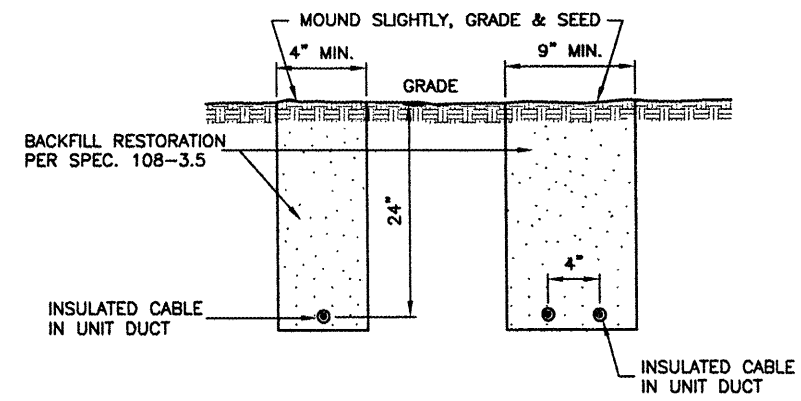
SIGN SCHEDULE				
SIGN	BASELINE	STATION	OFFSET	NOTES
1	TXY B2	0+70.00	100' LT.	NEW GUIDANCE SIGN
2	TXY B2	1+00.00	70' RT.	NEW GUIDANCE SIGN
3	RAMP	78+99.81	328.8' RT.	NEW GUIDANCE SIGN
4	RAMP	79+59.34	121.5' RT.	NEW INFO SIGN
5	RAMP	79+59.34	111.5' RT.	NEW STOP SIGN





1. INSTALL A NONCORROSIVE DISC OF 2" MINIMUM DIAMETER WITH THE NUMBER PERMANENTLY STAMPED, CUT OUT, OR ENGRAVED UNDER THE HEAD OF THE BASE PLATE BOLT OR ATTACHED TO LIGHT FLANGE WITH SET SCREW.
2. LEGENDS SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. CONTRACTOR TO COORDINATE LEGEND WITH AIRPORT.
3. THE CONTRACTOR SHALL NUMBER THE EXISTING/PROPOSED LIGHTS AND SIGNS IN EACH CIRCUIT STARTING AT THE HOMERUN CONTINUING AROUND THE ENTIRE CIRCUIT BACK TO THE HOMERUN.
4. AIRFIELD SIGNS SHALL BE TAGGED & NUMBERED.

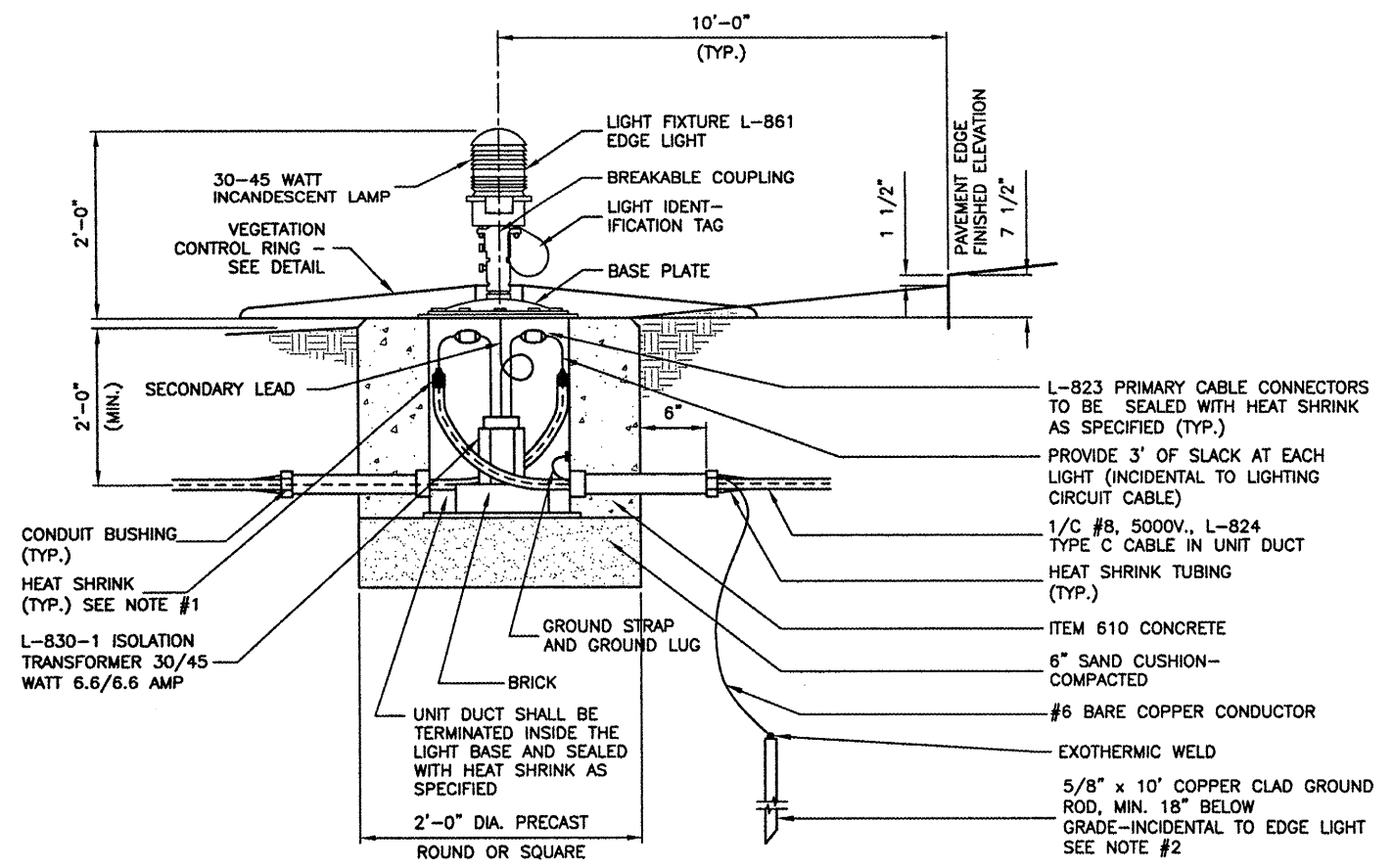
**LIGHT IDENTIFICATION DETAIL**  
 N.T.S.



1. TRENCHES WITH MORE THAN 2 CABLES SHALL BE INCREASED 3" IN WIDTH FOR EACH ADDITIONAL CABLE. IF SPECIFIED ON PLANS, TWO PARALLEL TRENCHES MAY BE CONSTRUCTED.
2. DEPTH OF TRENCHES SHALL BE AS SHOWN ABOVE UNLESS OTHERWISE SPECIFIED ON THE PLANS.
3. SAND BACKFILL SHALL BE USED IF THE EXISTING SOIL DOES NOT MEET THE BACKFILL REQUIREMENTS.
4. ALL DISTURBED SURFACES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. COST IS INCIDENTAL TO ITEM 108.

**TRENCH DETAIL**  
 N.T.S.

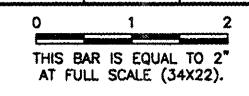
- NOTES:**
- 1.) SEE SPECIFICATIONS, ITEM 125 - INSTALLATION OF AIRPORT LIGHTING SYSTEMS, FOR ALTERNATE METHOD OF SEALING ENDS OF UNIT DUCTS INSIDE LIGHT BASES.
  - 2.) GROUND ROD/EXOTHERMIC WELD/#6 BARE COPPER CONDUCTOR ASSEMBLY SHALL BE DELIVERED TO THE JOBSITE PRE-ASSEMBLED. SEE SPECIFICATIONS, ITEM 125 - INSTALLATION OF AIRPORT LIGHTING SYSTEMS, FOR ADDITIONAL INFORMATION ON ASSEMBLY AND INSTALLATION IN THE FIELD.



**BASE MOUNTED EDGE LIGHTS**  
 N.T.S.

**CA008**

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RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 ELECTRICAL DETAILS 1

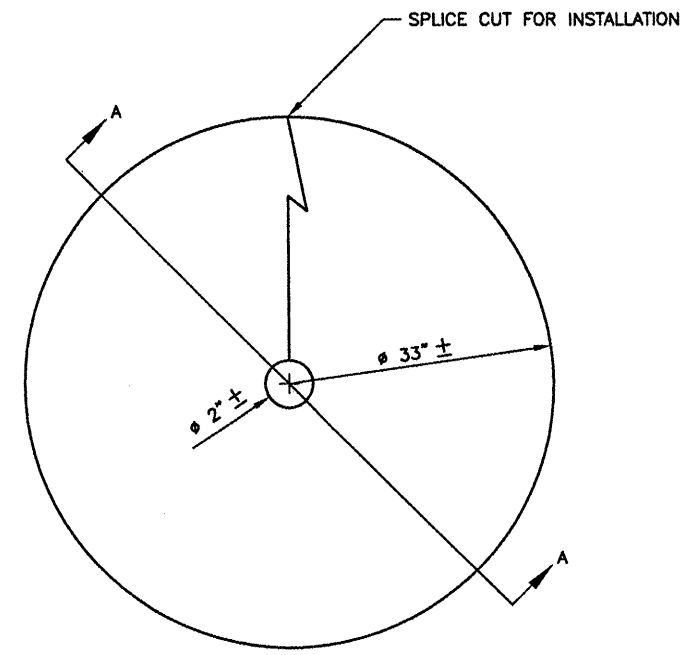
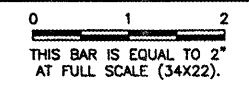
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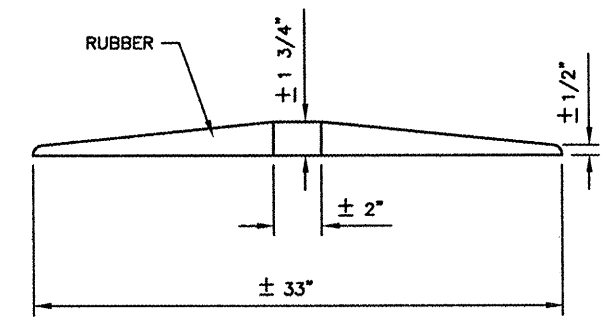
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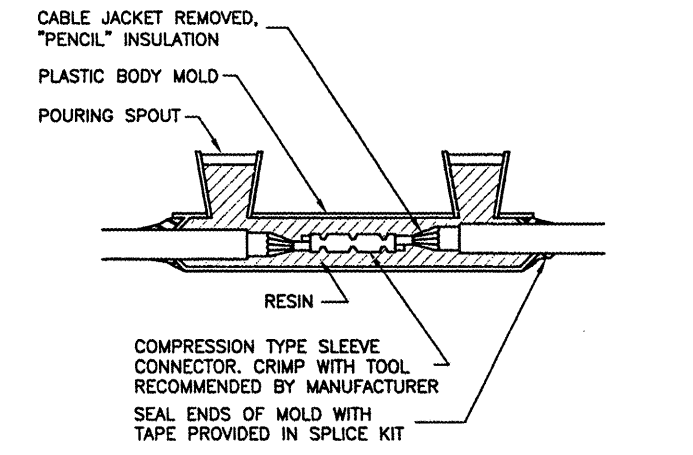


**PLAN VIEW**  
N.T.S.



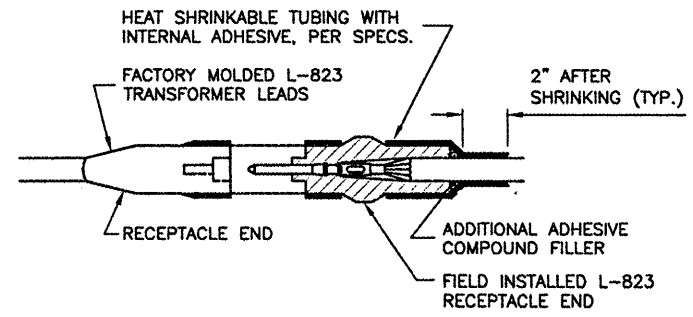
**SECTION A-A**  
N.T.S.

**VEGETATION CONTROL RING DETAIL**  
N.T.S.



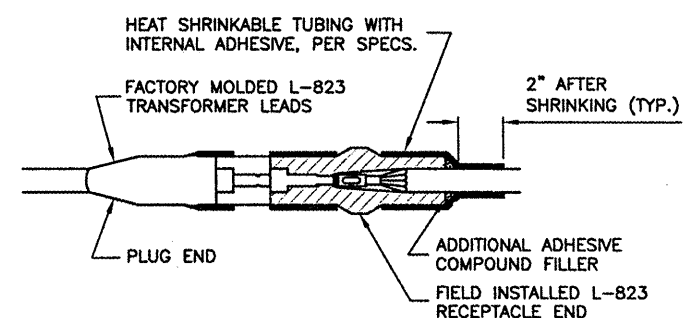
FOR IN-LINE CONNECTIONS OF EXISTING CABLES CUT DURING CONSTRUCTION.

**TYPE A**



FOR SPLICES AT TAXIWAY LIGHTS AND SIGNS.

**TYPE C**



FOR SPLICES AT TAXIWAY LIGHTS AND SIGNS.

**TYPE D**

**CABLE SPLICES**  
N.T.S.

**CABLE SPLICE NOTES**

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



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 SPRINGFIELD, ILLINOIS

RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 ELECTRICAL DETAILS 2

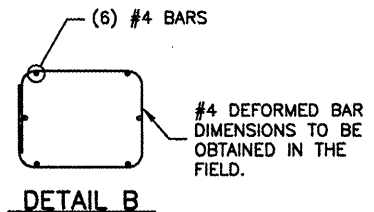
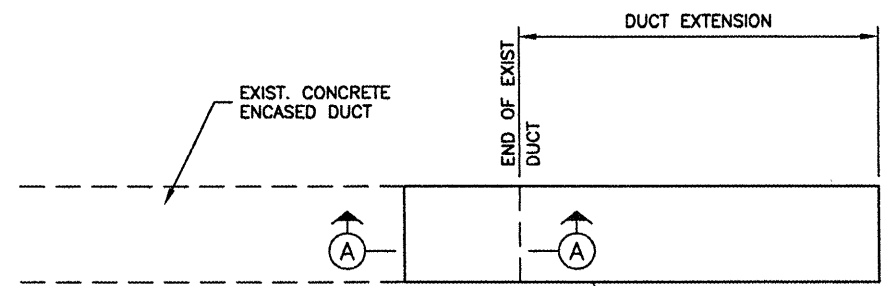
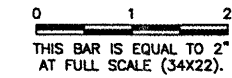
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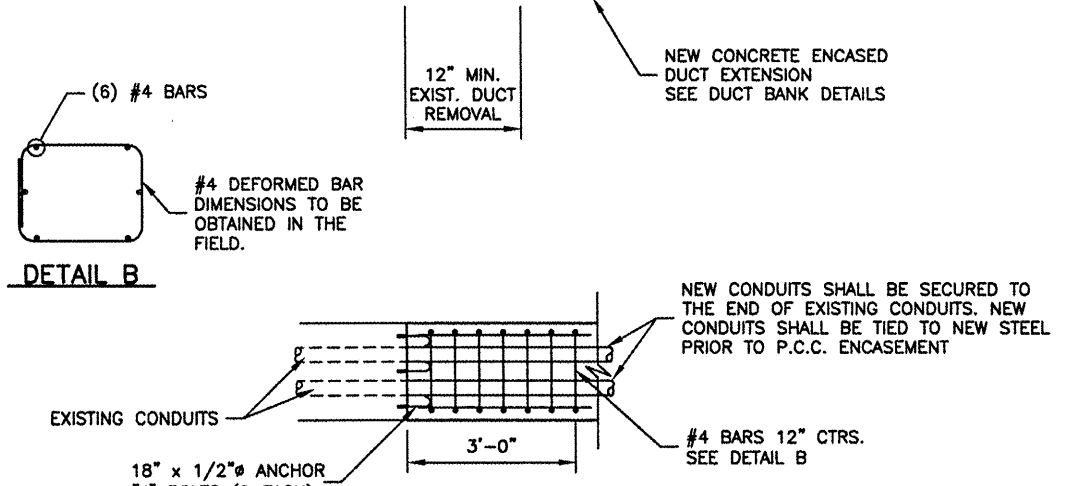
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SHEET 31 OF 40 SHEETS	

**CA008**

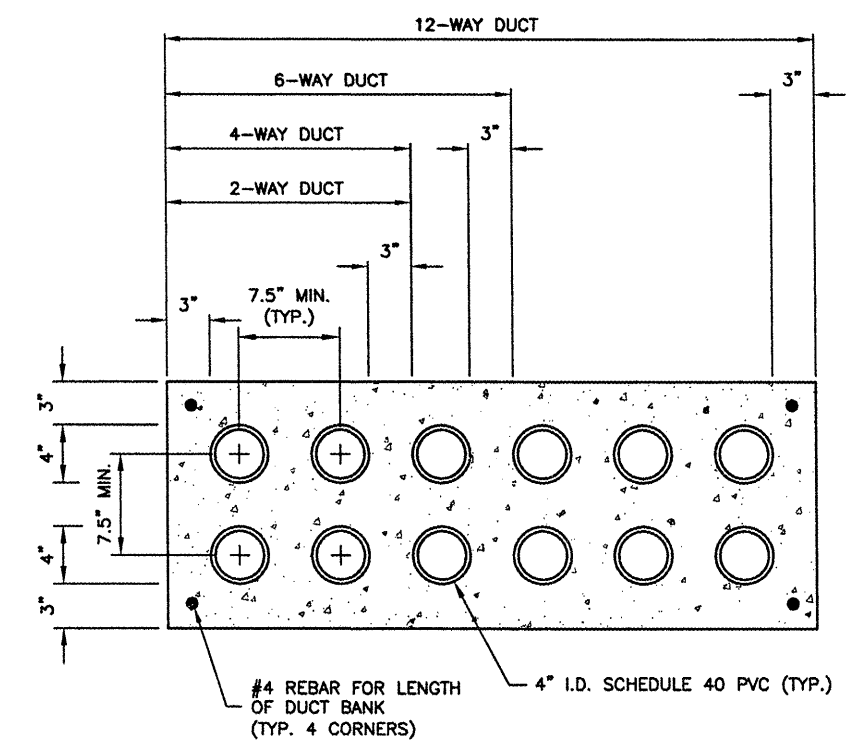
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**DETAIL B**



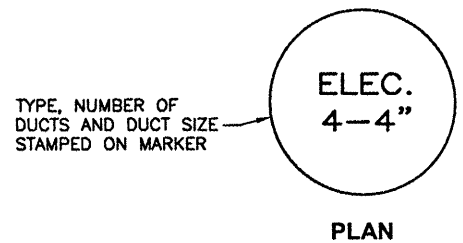
**SECTION A**  
**DUCT EXTENSION DETAIL**  
 N.T.S.



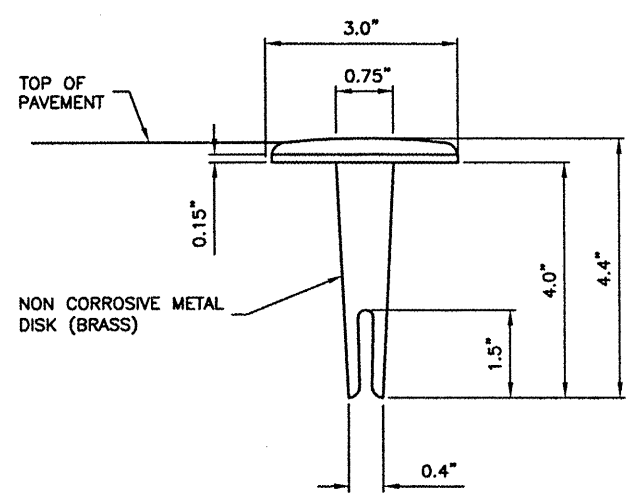
**DUCT BANK DETAIL**  
 N.T.S.

**DUCT BANK NOTES**

1. DIMENSIONS SHOWN ARE MINIMUM.
2. TOP OF CONCRETE ENCASEMENT TO BE NOT LESS THAN 18" BELOW FINISHED SUBGRADE.
3. DUCT CONCRETE SHALL BE ITEM 610 STRUCTURAL P.C.C. CONCRETE.
4. ALL DUCT SHALL BE 4" INSIDE DIAMETER.
5. LOCATIONS SHOWN ARE APPROXIMATE. DUCT BANKS SHALL BE INSTALLED AT LOCATIONS DESIGNATED BY THE ENGINEER.
6. CONTRACTOR SHALL INSTALL DUCT BANKS AT A DEPTH WHICH WILL NOT CONFLICT WITH ELEVATION SENSITIVE UTILITIES.
7. A PULL WIRE SHALL BE PROVIDED IN EACH UNUSED CONDUIT. UNUSED DUCT SHALL BE SEALED WITH PVC PLUGS/CAPS TO THE SATISFACTION OF THE ENGINEER.
8. DUCT BANKS SHALL EXTEND A MINIMUM OF 5' BEYOND THE NEW EDGE OF PAVEMENT.

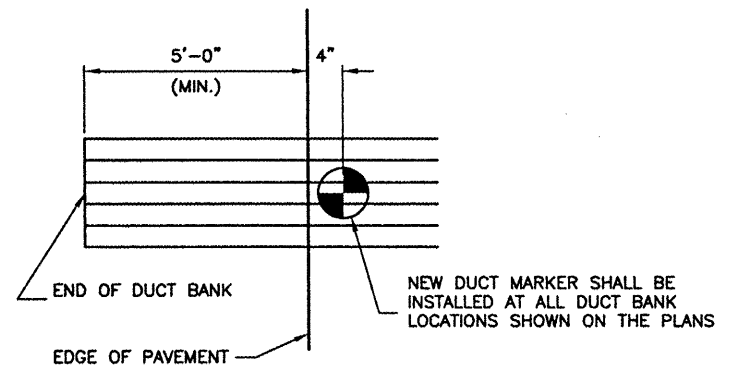


**PLAN**



**SECTION**

**DUCT MARKER DETAILS**  
 N.T.S.



**MARKER PLACEMENT**

DUCT MARKERS SHALL BE RECESSED AND GROUTED INTO THE PAVEMENTS.



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 SPRINGFIELD, ILLINOIS

RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 DUCT BANK DETAIL

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IL PROJ. NO.	SPI-3885
AIP PROJ. NO.	3-17-0096-XX
SHEET	32 OF 40 SHEETS

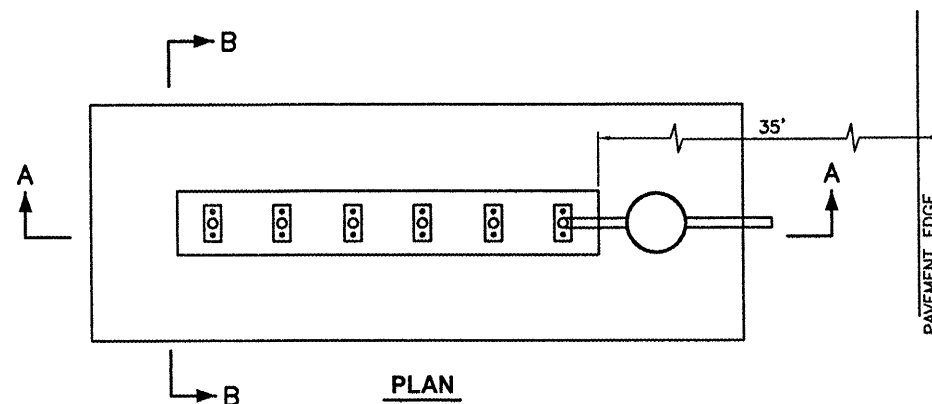


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0 1 2  
 THIS BAR IS EQUAL TO 2"  
 AT FULL SCALE (34X22).

SIGN #	SIDE	NEW SIGN LEGEND	WHITE WITH BLACK OUTLINE ON RED BACKGROUND	BLACK LEGEND ON YELLOW BACKGROUND	YELLOW LEGEND ON BLACK BACKGROUND	NUMBER OF CHARACTERS	NEW POWER CIRCUIT	NOTES
1	NW	←B2 B		←B2	B	4	TXYB	NEW SIGN
2	NE	B2 ←B→		←B→	B2	5	TXYB	NEW SIGN
3	NW	B 31↑		31↑	B	4	TXYB	NEW SIGN
	SE	B B2→		B2→	B			



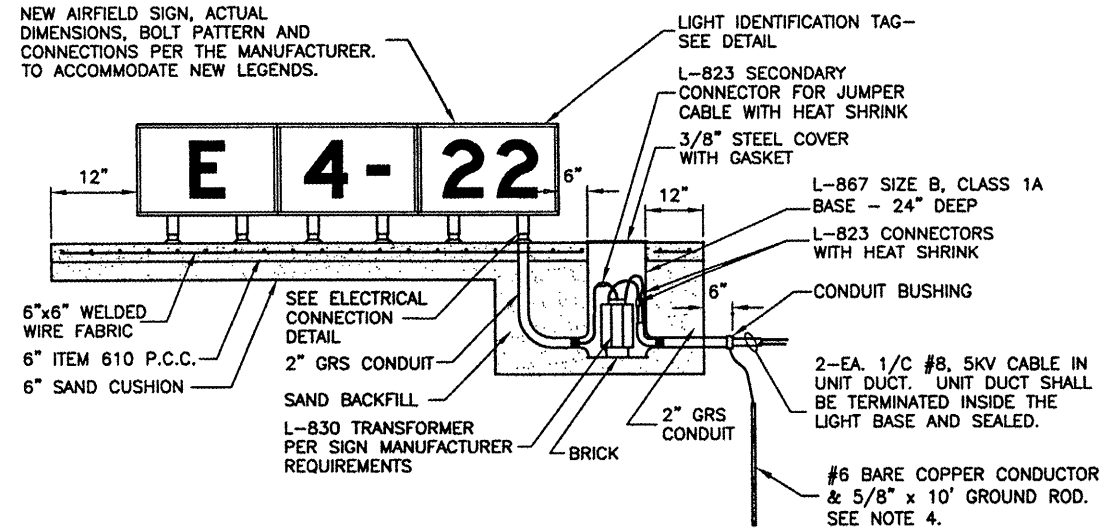
**AIRFIELD SIGN NOTES**

1. TRANSFORMER WATTAGE SHALL BE AS REQUIRED BY SIGN MANUFACTURER.
2. SIGN LEGEND SHALL BE AS SHOWN IN THE PLANS.
3. SIGNS SHALL BE SIZE 2, STYLE 2 OR 3, CLASS 2.
4. SEE "NEW BASE MOUNTED EDGE LIGHT" DETAIL FOR GROUNDING DETAILS.

**NOTES**

1. SIGN SCHEDULE IS SUBJECT TO FAA APPROVAL OF THE SIGNAGE PLAN.
2. CHANGES TO NEW LEGENDS MAY OCCUR SUBJECT TO 1 ABOVE.
3. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH NEW LEGENDS FOR APPROVAL PRIOR TO STARTING MANUFACTURE.
4. EXISTING SIGNS ARE LUMACURVE.

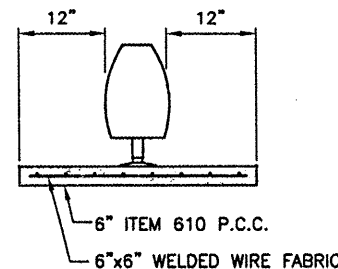
NEW AIRFIELD SIGN, ACTUAL DIMENSIONS, BOLT PATTERN AND CONNECTIONS PER THE MANUFACTURER. TO ACCOMMODATE NEW LEGENDS.



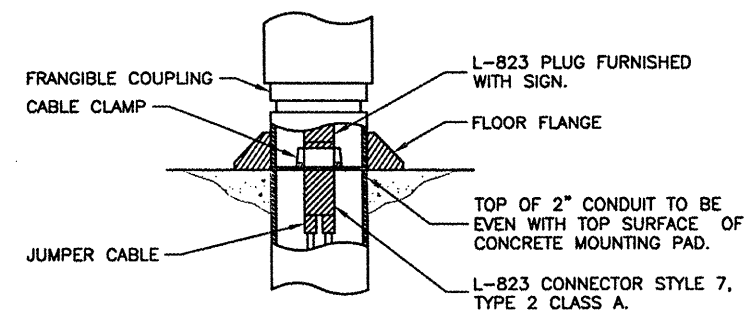
**SECTION A-A**

**L-858 AIRFIELD SIGN DETAILS**

N.T.S.



**SECTION B-B**



**ELECTRICAL CONNECTION DETAIL**

N.T.S.

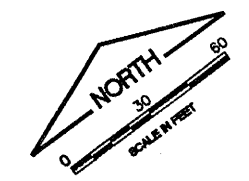
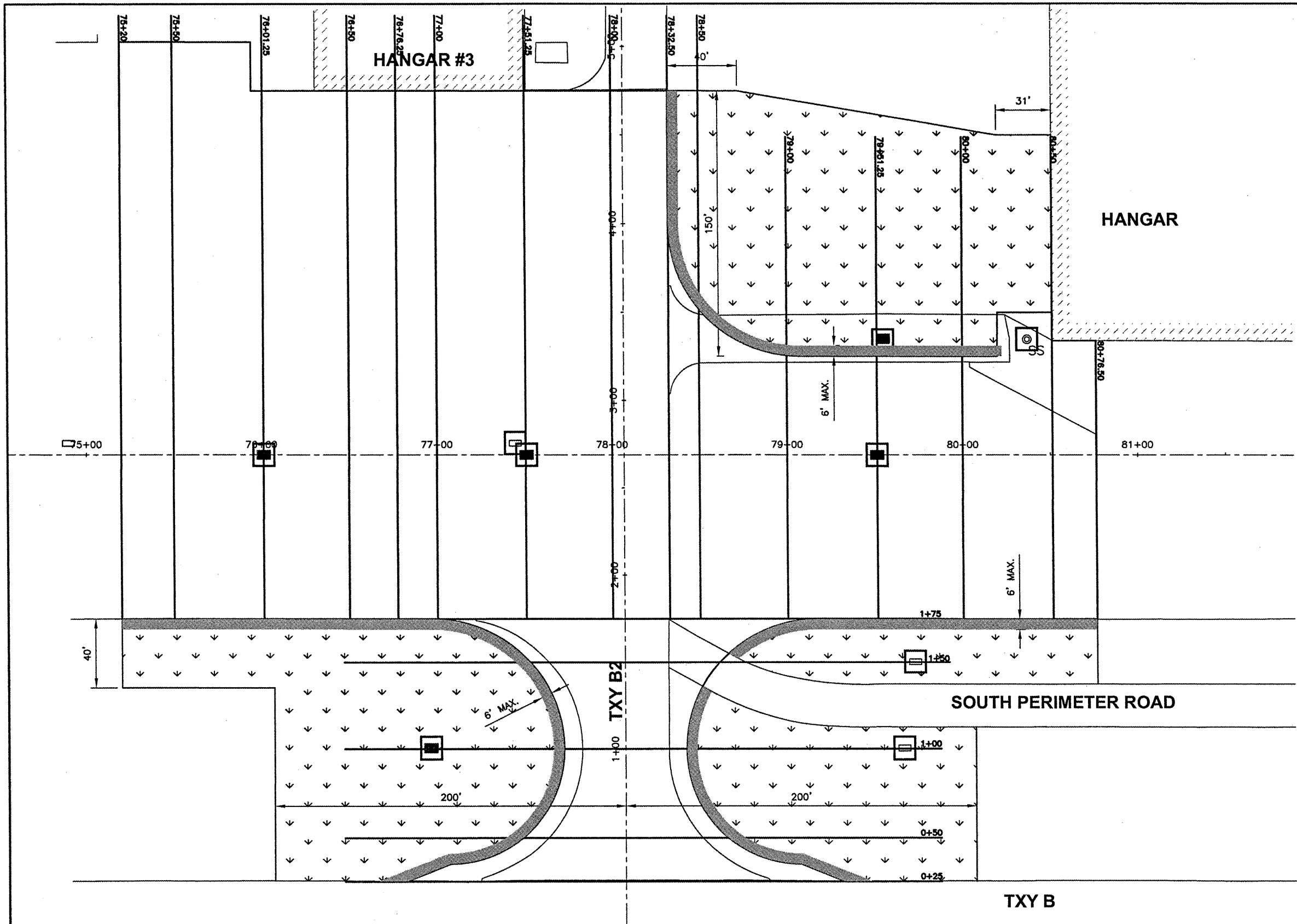


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RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 AIRFIELD SIGNAGE DETAIL

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SHEET	33 OF 40 SHEETS



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 SpAlign  
 BASE\_PROPDO  
 BASE\_PROPDRAIN  
 BASE\_EXISTOPO

**CA008**

REVISIONS		
NUMBER	BY	DATE

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

**LEGEND**

1178+50 ——— CROSS SECTION

————— NEW SOD LIMITS

↓ ↓ SEEDING & MULCHING

□ INLET PROTECTION

- NOTES**
1. TURFING LIMITS SHOWN ARE APPROXIMATE. ACTUAL TURFING LIMITS SHALL BE DETERMINED BY THE ENGINEER.
  2. AN ADDITIONAL 275 LF OF SILT FENCE AND 1.2 AC OF SEEDING AND MULCHING HAVE BEEN INCLUDED IN THE QUANTITIES FOR THE EXCESS EARTHWORK DISPOSAL AREA.
  3. AN ADDITIONAL 1000 SY OF EXCELSIOR BLANKET AND 50 SY OF SODDING HAVE BEEN INCLUDED IN THE QUANTITIES FOR ADDITIONAL DISTURBED AREAS AS REQUIRED BY THE ENGINEER.
  4. RESTORATION AND TURFING OF DISTURBED AREAS BEYOND THE LIMITS SHOWN (SUCH AS EDGE LIGHTING, CABLING, SIGNAGE, ACCESS, STAGING, ETC.) SHALL BE INCIDENTAL TO THE PROJECT.

**EARTHWORK SUMMARY**

STATION	EXCAVATE END AREA (S.F.)	EMBANK END AREA (S.F.)
---------	--------------------------------	------------------------------

RAMP RECONSTRUCTION & EXPANSION		
75+20.00	259.44	0.00
75+50.00	271.38	0.19
76+01.25	146.12	3.92
76+50.00	67.30	14.16
76+76.25	52.42	58.42
77+00.00	49.48	23.30
77+51.25	90.20	0.00
78+00.00	89.93	0.00
78+32.50	100.46	0.00
78+50.00	259.21	0.00
79+00.00	191.83	0.00
79+51.25	247.89	7.39
80+00.00	231.84	3.18
80+50.00	215.62	0.00
80+76.50	235.17	0.00

**EARTHWORK SUMMARY**

STATION	EXCAVATE END AREA (S.F.)	EMBANK END AREA (S.F.)
---------	--------------------------------	------------------------------

TAXIWAY B2 WIDENING		
0+25.00	141.17	0.00
0+50.00	44.48	3.91
1+00.00	58.62	2.50
1+50.00	37.79	2.75
1+75.00	89.72	0.00



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RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 INDEX TO CROSS SECTIONS - TURFING PLAN

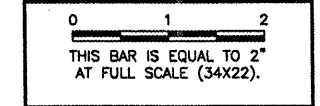
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 JOB No: 08035-08  
 IL PROJ. NO. SPI-3885  
 AIP PROJ. NO. 3-17-0096-XX  
 SHEET 34 OF 40 SHEETS

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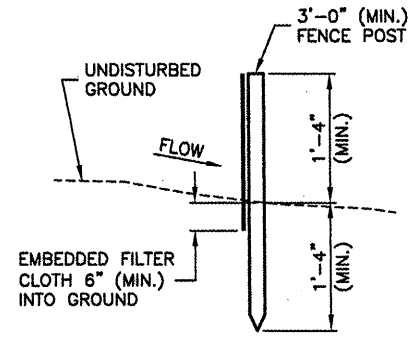
**EROSION CONTROL DETAILS**

RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP

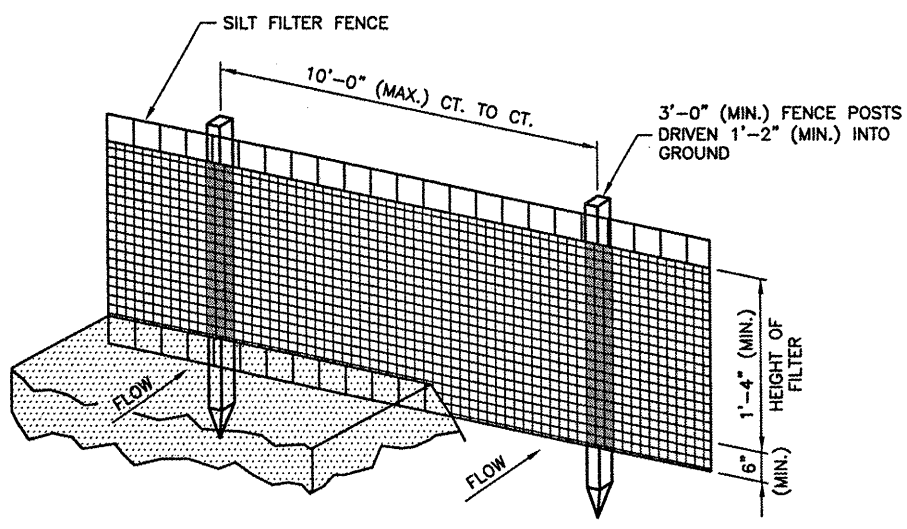
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JOB No:	08035-08
IL PROJ. NO.	SPI-3885
AIP PROJ. NO.	3-17-0096-XX
SHEET 35 OF 40 SHEETS	



**SECTION**

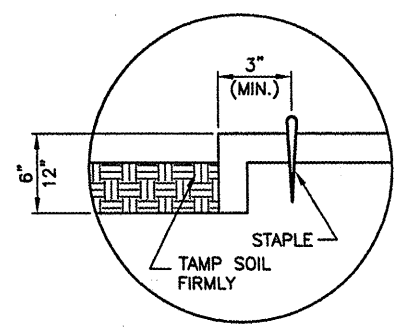


**PERSPECTIVE VIEW**

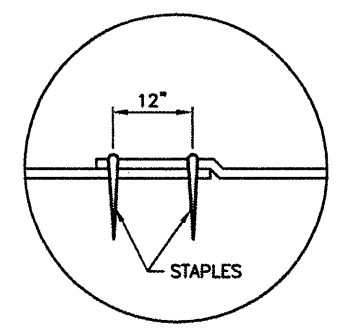
**EROSION CONTROL FABRIC FENCE DETAILS**  
 N.T.S.

**EROSION CONTROL FABRIC FENCE NOTES**

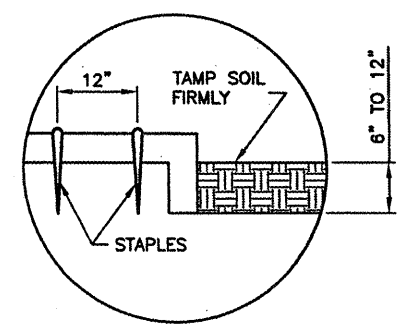
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 2'-0" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" MINIMUM AND FOLDED.
4. 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.



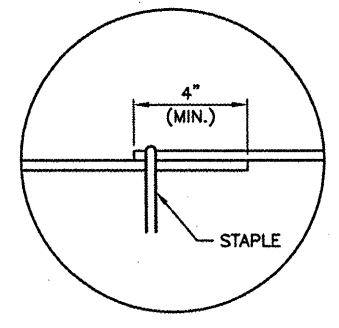
**DETAIL 1 - TERMINAL FOLD**



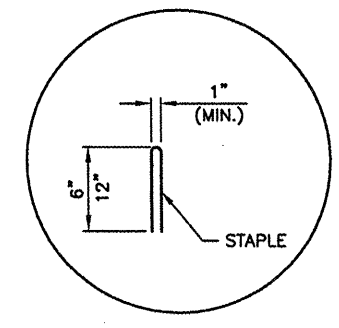
**DETAIL 2 - JUNCTION SLOT**



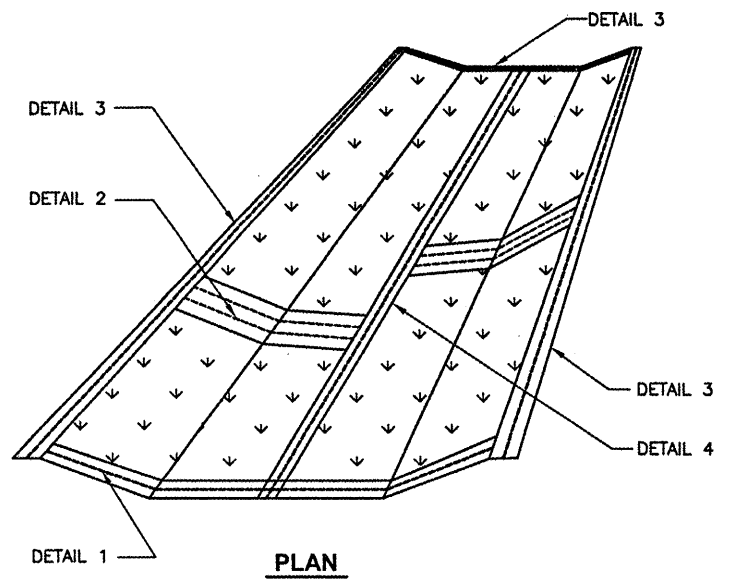
**DETAIL 3 - ANCHOR SLOT**



**DETAIL 4 - LAP JOINT**



**DETAIL 5 - STAPLE DETAIL**

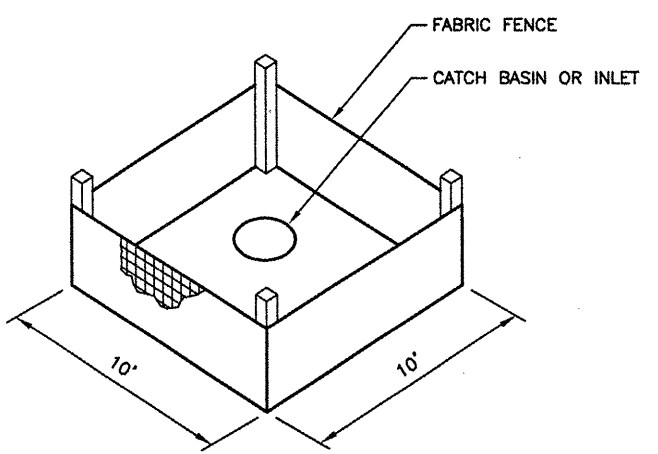


**PLAN**

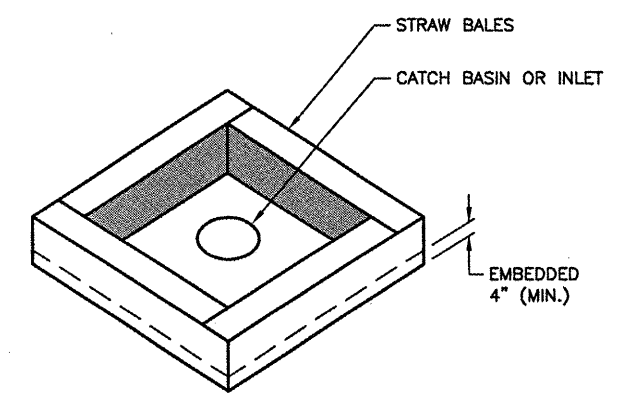
**EXCELSIOR BLANKET DETAILS**  
 N.T.S.

**EXCELSIOR BLANKET NOTES**

1. STAPLES TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART.
2. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
3. ALL TERMINALS ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.



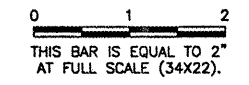
**INLET PROTECTION WITH FABRIC**  
 N.T.S.



**INLET PROTECTION WITH STRAW BALES**  
 N.T.S.

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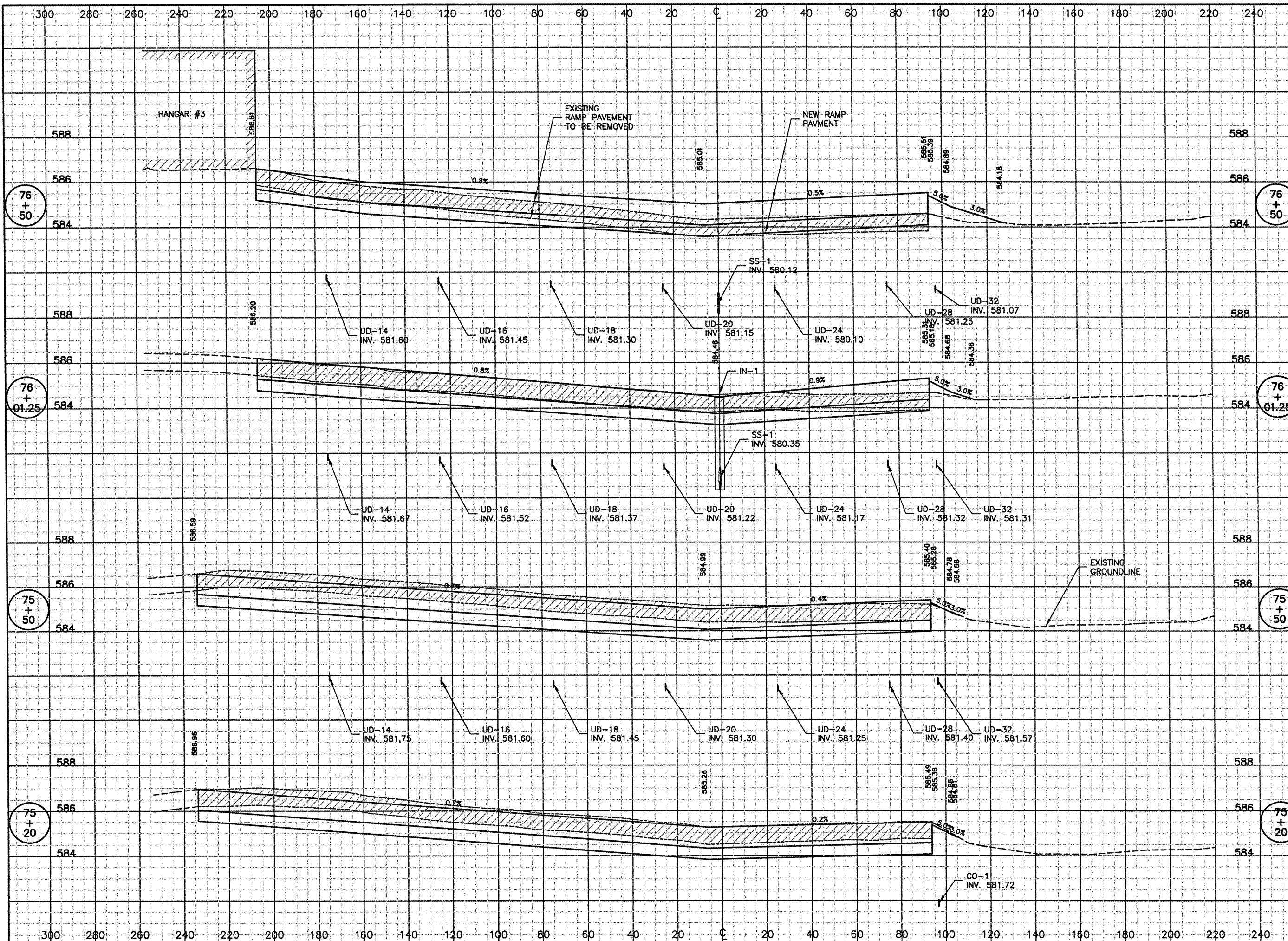
RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 RAMP CROSS SECTIONS 1  
 STA. 75+20 TO STA. 76+50

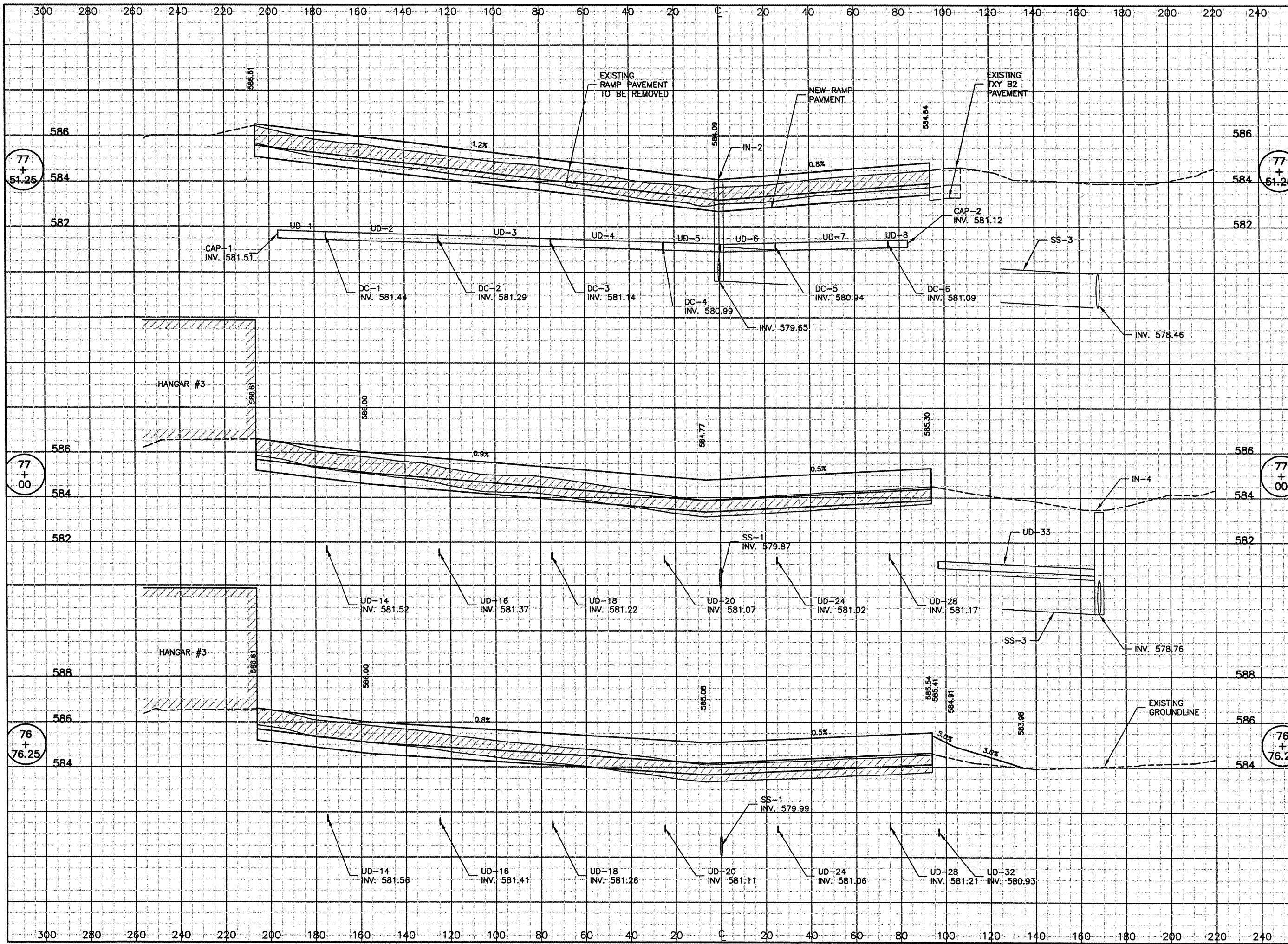
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JOB No:	08035-08

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 SHEET 36 OF 40 SHEETS

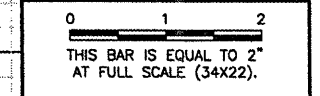





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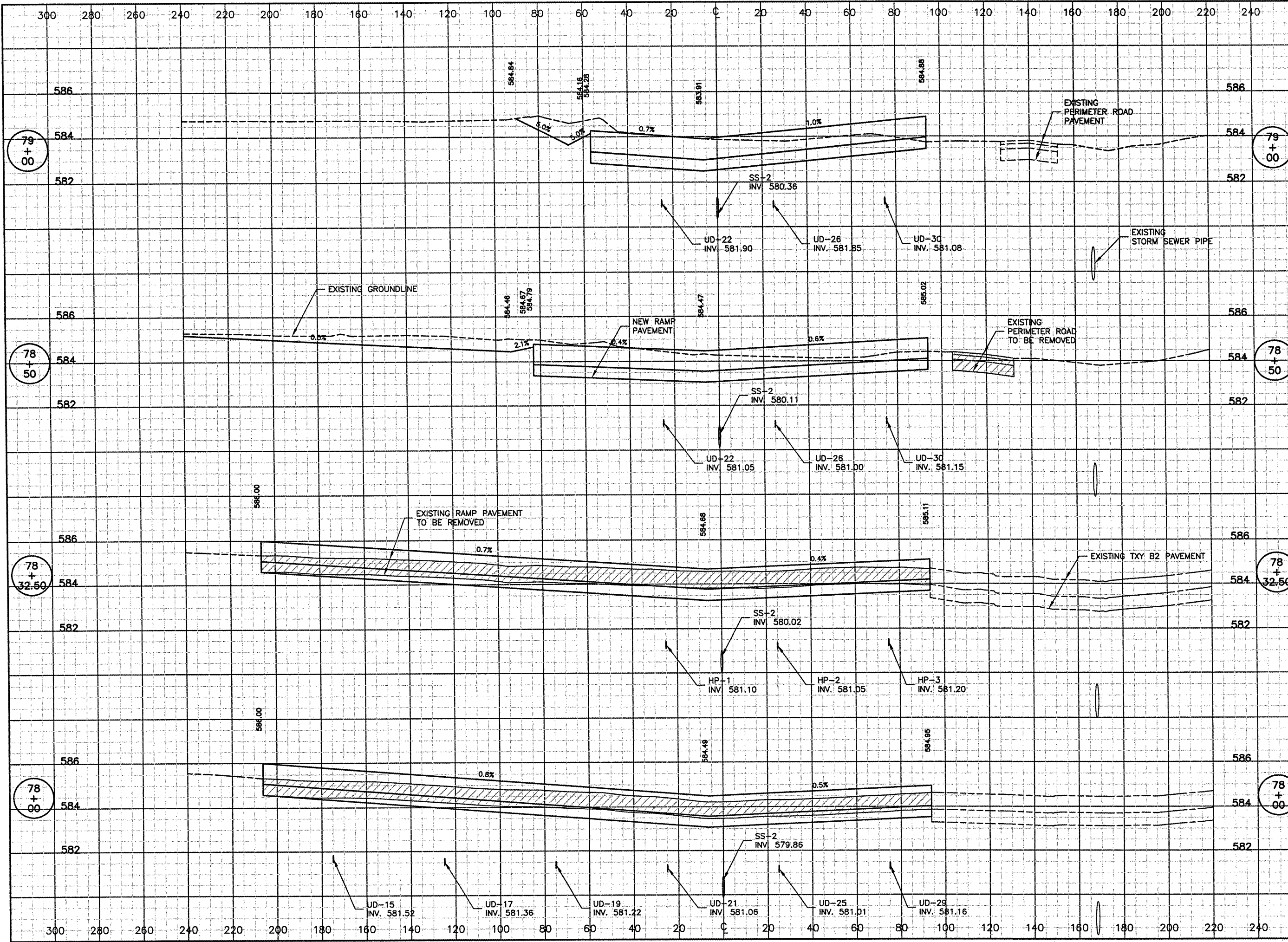


  
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**RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 RAMP CROSS SECTIONS 2  
 STA. 76+76.25 TO STA. 77+51.25**

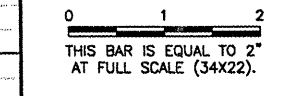
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JOB No:	08035-08
IL PROJ. NO. SPI-3885 AIP PROJ. NO. 3-17-0096-XX	
SHEET 37 OF 40 SHEETS	



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RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 RAMP CROSS SECTIONS 3  
 STA. 78+00 TO STA. 79+00

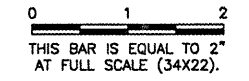
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AIP PROJ. NO.	3-17-0096-XX
SHEET 38 OF 40 SHEETS	

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NUMBER	BY	DATE



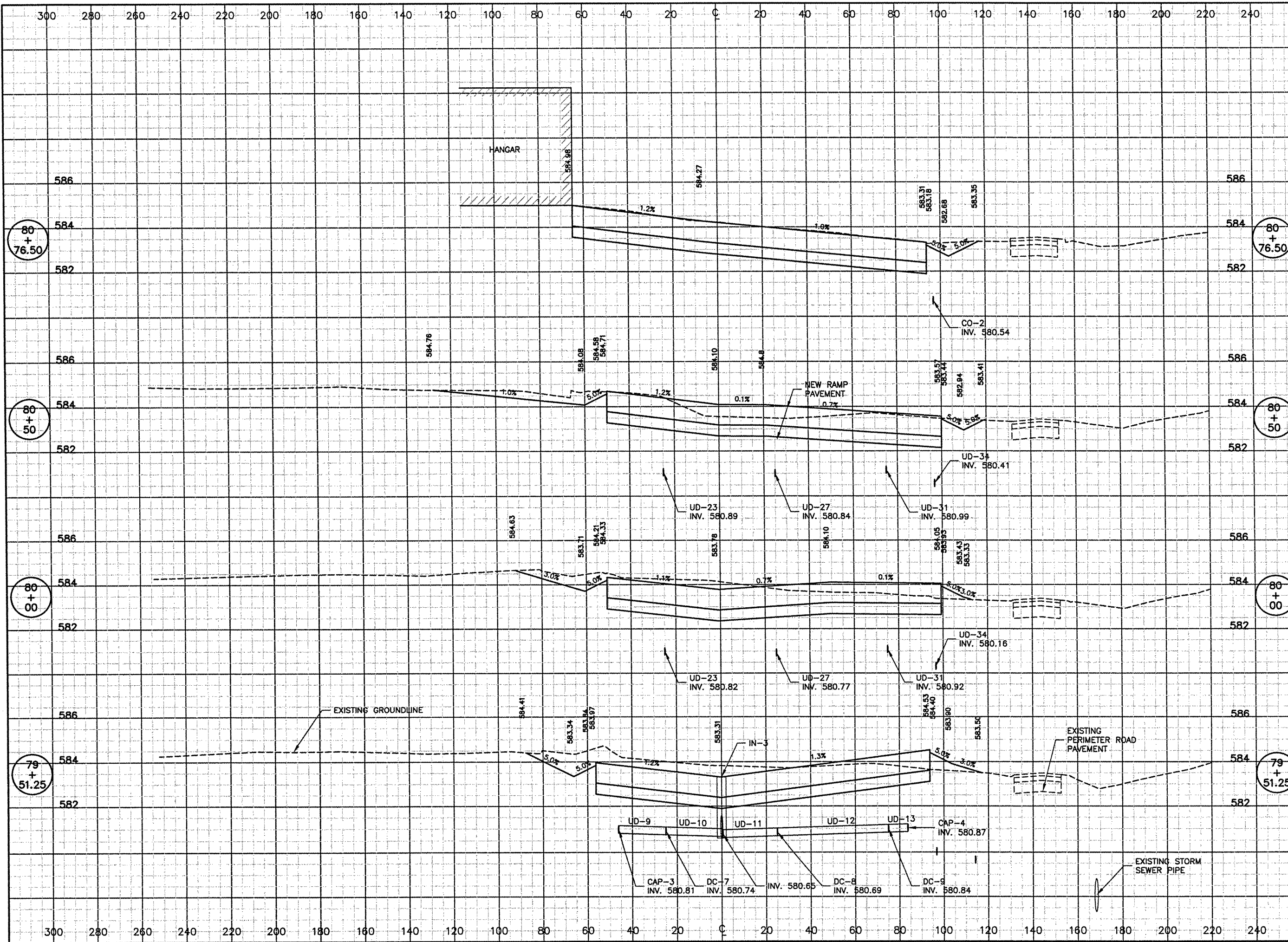
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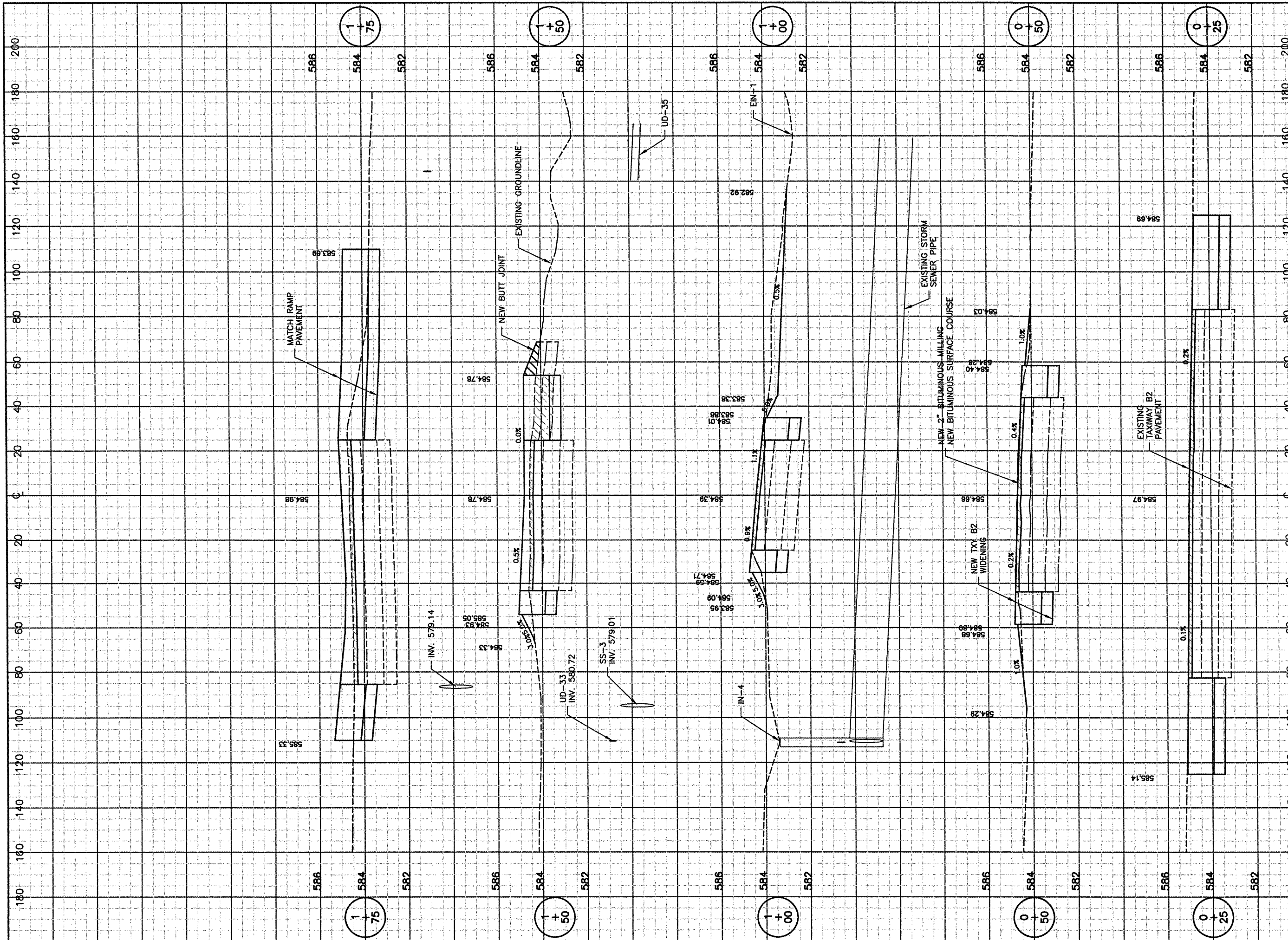
RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 RAMP CROSS SECTIONS 4  
 STA. 79+51.25 TO STA. 80+76.50

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SHEET 39 OF 40 SHEETS	





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 PLOT DATE: 1/29/2009 12:21 PM  
 rc001001

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

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**RECONSTRUCT AND EXPAND THE SOUTHEAST RAMP  
 TAXIWAY B2 CROSS SECTIONS  
 STA. 0+25 TO STA. 1+75**

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 AIP PROJ. NO. 3-17-0096-XX  
 SHEET 40 OF 40 SHEETS