

SCOPE OF WORK

THE PROPOSED IMPROVEMENTS CONSISTS OF CONSTRUCTING AN ACCESS ROAD TO THE EXISTING T-HANGARS, INSTALLING AN 8" WATERLINE AND HYDRANTS, CONSTRUCTING TWO DETENTION PONDS, AND ALL ASSOCIATED WORK TO COMPLETE THIS PROJECT.

EROSION CONTROL

THIS PROJECT WILL DISTURB MORE THAN 1 ACRE OF LAND, THEREFORE A N.P.D.E.S. PERMIT WILL BE REQUIRED.

AIRPORT SECURITY NOTE

AIRPORT SECURITY WILL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR WILL CLOSE AND LOCK ANY EXISTING GATES TO THE CONSTRUCTION AREA AT THE END OF EACH WORKING DAY.

UTILITY NOTE

THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES, F.A.A. AND AGENCIES WHICH HAVE LINES OR CONDUITS IN THE PROPOSED WORK AREA. ALL LINES AND CONDUITS SHALL BE LOCATED AND IDENTIFIED FOR DEPTH BEFORE ANY EXCAVATION BEGINS. THE CONTRACTOR WILL CALL J.U.L.I.E. (1-800-892-0123) TO ACCOMPLISH THE ABOVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY ALL UNDERGROUND NON-JULIE UTILITIES LOCATED WITHIN THE PROPOSED CONSTRUCTION LIMITS. THESE UNDERGROUND UTILITIES WILL BE LOCATED AT THE CONTRACTOR'S OWN EXPENSE PRIOR TO THE START OF CONSTRUCTION.

HEIGHT OF CONSTRUCTION EQUIPMENT

THE EXPECTED MAXIMUM HEIGHT OF CONSTRUCTION EQUIPMENT IS 20 FEET. THE TALLEST EQUIPMENT IS EXPECTED TO BE A BACKHOE.

EQUIPMENT PARKING AND STORAGE AREA

THE CONTRACTOR WILL USE THE DESIGNATED EQUIPMENT PARKING AND STORAGE AREA AS SHOWN ON SHEET 4. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN THE PROPOSED EQUIPMENT PARKING AND STORAGE AREA THROUGHOUT THE COURSE OF THE PROJECT. ANY PROPERTY DAMAGED OUTSIDE OF THESE DESIGNATED AREAS WILL BE REPAIRED BY THE CONTRACTOR AND AT THE CONTRACTOR'S OWN EXPENSE. AT THE CONCLUSION OF THE PROJECT THE CONTRACTOR WILL RESTORE THE EQUIPMENT PARKING AND STORAGE AREA TO ITS ORIGINAL STATE. RESTORATION OF THE EQUIPMENT PARKING AND STORAGE AREA WILL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

CONTRACTOR RESPONSIBILITIES

THE CONTRACTOR'S EQUIPMENT PARKING AND STORAGE AREA WILL BE LOCATED AS SHOWN ON SHEET 4. THE CONTRACTOR'S EMPLOYEES WILL PARK THEIR PERSONAL VEHICLES IN THIS AREA. ONLY CONTRACTOR VEHICLES NEEDED FOR CONSTRUCTION WILL BE ALLOWED OUTSIDE OF THE EQUIPMENT PARKING AREA.

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

PROPOSED SAFETY PLAN

GENERAL - THE ST. LOUIS REGIONAL AIRPORT IS COMPRISED OF TWO RUNWAYS. THE PROPOSED CONSTRUCTION WILL NOT NECESSITATE CLOSING ANY RUNWAYS.

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

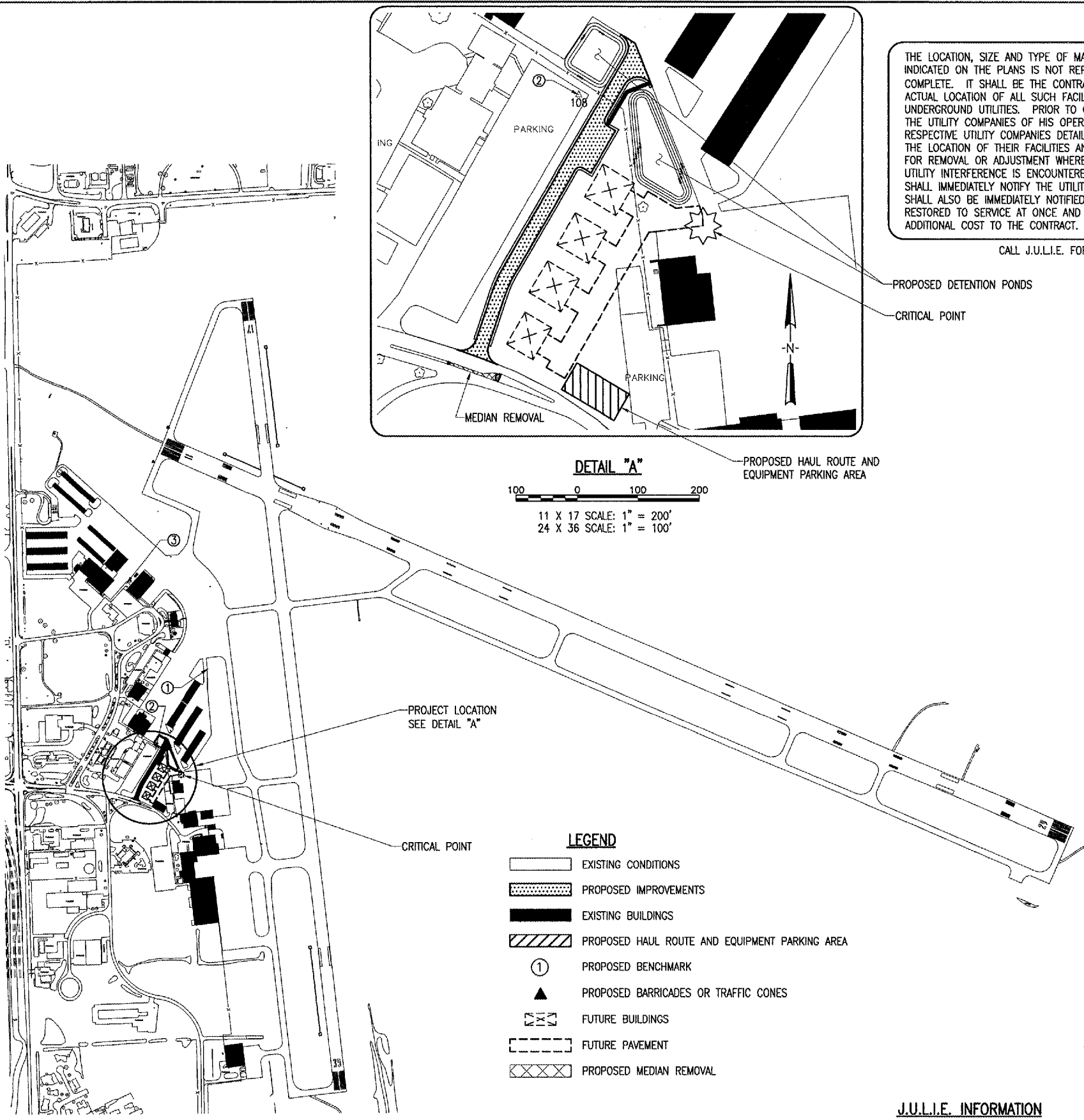
RADIO CONTROL - THE CONTRACTOR WILL BE REQUIRED TO BE IN TWO-WAY RADIO CONTACT (120.20 MHZ.) WITH THE AIRPORT TOWER. THIS WILL KEEP THE CONTRACTOR IN CONSTANT CONTACT WITH THE ST. LOUIS REGIONAL AIRPORT'S AIR TRAFFIC CONTROL (ATC) TOWER AND ENABLE THE ATC TOWER TO IMMEDIATELY CONTACT THE CONTRACTOR IN CASE OF AN AERONAUTICAL EMERGENCY THAT WOULD REQUIRE ACTION BY THE CONTRACTOR AND/OR HIS PERSONNEL.

BARRICADES AND TRAFFIC CONES

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

ENGINEER'S FIELD OFFICE

THE LOCATION OF THE ENGINEER'S FIELD OFFICE WILL BE DETERMINED AT THE PRECONSTRUCTION MEETING.



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 THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION. THE ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY SUCH MAINS AND 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 1-800-892-0123.

DETAIL "A"
 11 X 17 SCALE: 1" = 200'
 24 X 36 SCALE: 1" = 100'

- LEGEND**
- [Solid line] EXISTING CONDITIONS
 - [Dotted pattern] PROPOSED IMPROVEMENTS
 - [Solid black] EXISTING BUILDINGS
 - [Hatched pattern] PROPOSED HAUL ROUTE AND EQUIPMENT PARKING AREA
 - [Circle with 1] PROPOSED BENCHMARK
 - [Triangle] PROPOSED BARRICADES OR TRAFFIC CONES
 - [Dashed line] FUTURE BUILDINGS
 - [Dashed line] FUTURE PAVEMENT
 - [Cross-hatched pattern] PROPOSED MEDIAN REMOVAL

BENCHMARK DATA - 88 DATUM

NO.	DESCRIPTION	ELEV.
1	CHISLED 'X' FOUNDATION N.W. CORNER OF HANGAR #12	540.40
2	MAG NAIL IN ASPHALT	541.72
3	N.E. BOLT OF BEACON	539.88

CRITICAL POINT DATA
 LATITUDE - 38° 53' 16.25"
 LONGITUDE - 90° 03' 16.00"
 ELEVATION - 543.22'

J.U.L.I.E. INFORMATION
 COUNTY MADISON
 CITY BETHALTO
 TOWNSHIP ALTON - WOODRIVER
 SECTION NO. 13 AND 18
 ADDRESS ST. LOUIS REGIONAL AIRPORT
 8 TERMINAL DRIVE
 EAST ALTON, ILLINOIS 62024

DATE	REVISION

ST. LOUIS REGIONAL AIRPORT

EAST ALTON, ILLINOIS

PROJ.: ALN-3355

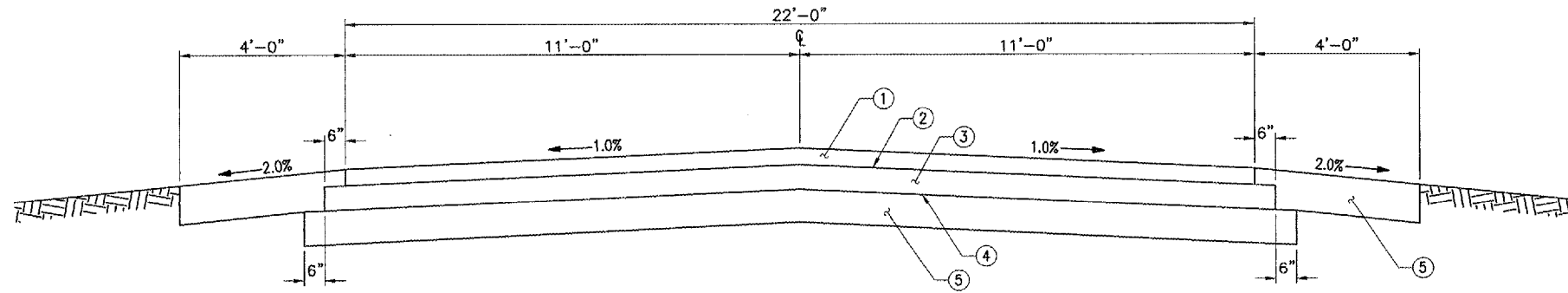
Proj. No. 837-04800	DATE 03/08/04
Drawn R-003SAF.DWG	DATE 03/08/04
Scale 1" = 500'	DATE 06/23/04
LAYOUT JAC	03/08/04
DRAWN JAC	03/08/04
REVIEWED WJM	06/23/04

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 1000 S. Main Street
 Springfield, Illinois 62703-2886
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CONSTRUCT T-HANGER ACCESS ROAD

PROPOSED SAFETY PLAN

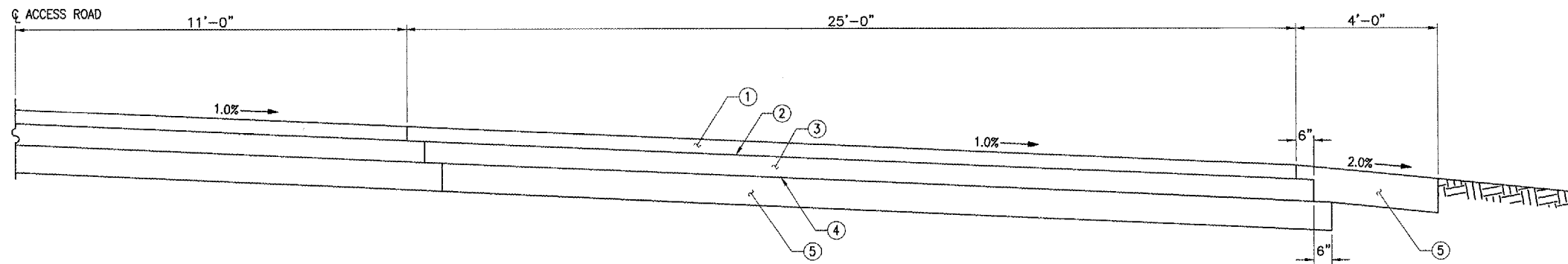
FEB 15, 2005 11:37 AM DPE
 I:\AIRPORTS\STLOUIS\837-04800_AIRPORT\SHEETS\R-003SAF.DWG - Safety Plan



TYPICAL SECTION - ACCESS ROAD
 STA. 0+97.84 TO STA. 6+63.19
 NOT TO SCALE

- LEGEND**
- * ① 401-BITUMINOUS SURFACE COURSE, 3" (2-1½" LIFTS)
 - ② 603-TACK COAT (0.05 TO 0.15 GAL/S.Y.)
 - ** ③ 201-BITUMINOUS BASE COURSE, 6" (2-3" LIFTS)
 - ④ 602-PRIME COAT (0.3 GAL/S.Y.)
 - ⑤ 209-CRUSHED AGGREGATE BASE COURSE (6" DEPTH)

* ITEM AR401001 BITUMINOUS SURFACE COURSE, METHOD I UNDER 2500 TONS
 ** ITEM AR201001 BITUMINOUS BASE COURSE, METHOD I UNDER 2500 TONS



TYPICAL SECTION - AUTO PARKING AREA
 STA. 4+50 TO STA. 5+30
 NOT TO SCALE

NOTES - AR209510 CRUSHED AGGREGATE BASE COURSE

1. THE AGGREGATE MATERIAL SHALL MEET THE GRADATION REQUIREMENTS OF GRADATION "B" PARAGRAPH 209-2.3 SUPPLEMENTAL SPECIFICATIONS.
2. DENSITY WILL BE DETERMINED ON THE BASIS OF STANDARD PROCTOR.
3. THE CONTRACTOR IS REQUIRED TO TEST THE AGGREGATE BASE COURSE MATERIAL AND PROVIDE THE RESIDENT ENGINEER WITH THE MAXIMUM DRY DENSITY AND OPTIMUM CURVES. ALL ASSOCIATED LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS ASSOCIATED WITH OBTAINING THE PROCTOR IS CONSIDERED INCIDENTAL TO ITEM AR209510.

DATE	REVISION	BY

ST. LOUIS REGIONAL AIRPORT

 EAST ALTON, ILLINOIS
 ILL. PROJ.: ALN-3355

FILE PROJECT NO. 837-04R00	DATE 04/16/04
DESIGNER R-52 LCON.DWG	SCALE
NO. SCALE	DATE 04/16/04
DATE 04/16/04	DATE 04/16/04
LAYOUT TLW	04/16/04
DRAWN TLW	04/16/04
REVIEWED WJM	06/23/04

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CONSTRUCT T-HANGER
 ACCESS ROAD
 PROPOSED TYPICAL SECTION

NOTE:

REMOVE AND REPLACE P.C.C. PAVEMENT. THE FOLLOWING WORK WILL BE PAID FOR UNDER ITEM AR501910:

PAVEMENT REMOVAL

MEDIAN REMOVAL: STA. 0+71.01 TO STA. 0+77.07, 45.64' RT. TO 34.67' LT.

CURB REMOVAL: STA. 0+98.84, 35.30' RT. TO 36.02' LT.

THE EXISTING CONCRETE CURB WAS CONSTRUCTED AS A PART OF THE ROADWAY. THE CURB WILL BE REMOVED BY SAWCUT FULL DEPTH THROUGH THE PAVEMENT (APPROXIMATELY 7") WITHIN 1' OF THE FACE OF THE CURB TO THE LIMITS OF CURB REMOVAL AND SAWCUT ACROSS THE CURB AT THE LIMITS. REMOVE THE CURB AND DISPOSE THE MATERIALS OFF SITE.

PAVEMENT REPLACEMENT

THE MEDIAN AREA WORK ITEM INCLUDES SHAPING THE GRADE AND PLACING A NEW PAVEMENT SECTION. THE PAVEMENT REPLACEMENT INCLUDES THE FULL PAVEMENT REMOVAL AREA. THE NEW PAVEMENT SECTION IS 8" P.C.C. AND 4" SUBBASE MATERIAL. THE 8" P.C.C. MATERIAL WILL COMPLY TO ITEM 610 STRUCTURAL CEMENT CONCRETE. THE 4" SUBBASE MATERIAL WILL COMPLY TO ITEM 209, CRUSHED AGGREGATE BASE COURSE. DOWEL JOINTS, JOINT SAWING AND SEALING, CURING, AND THE TRANSITION PAVEMENT SECTION IS ALL PART OF THIS WORK ITEM.

PAVEMENT REPLACEMENT FOR THE CURB REMOVAL AT STA. 0+98.84 IS NOT INCLUDED IN THIS WORK.

WHERE CONCRETE PAVEMENT REPLACES THE MEDIAN SECTION STEEL DOWELS WILL BE DRILLED AND EPOXIED INTO THE EXISTING PAVEMENT. THE BAR DIAMETER WILL BE 3/4", 18 INCHES IN LENGTH, AND SPACED ON 12 INCH CENTERS.

SAW JOINTING OF THE PROPOSED CONCRETE PAVEMENT WILL MATCH THE ROADWAY JOINTING. SAWING DEPTH WILL BE 7/2".




JOINT SEALANT SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS, ITEM 501-215.

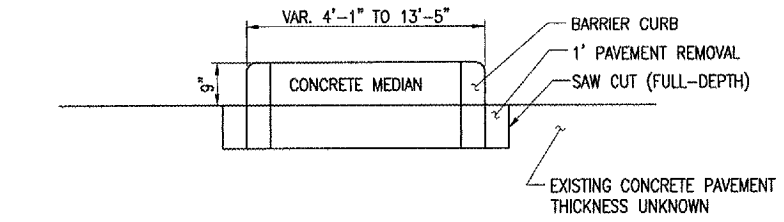
CURING COMPOUND WILL BE EMULSION WHITE CURRING COMPOUND, APPROVED BY ILLINOIS DEPARTMENT OF TRANSPORTATION.

WHERE THE PROPOSED CURB MEETS THE EXISTING CURB AT STA. 0+98.84, A 3/4" x 18" LONG DOWEL BAR SHALL BE GROUTED INTO PLACE.

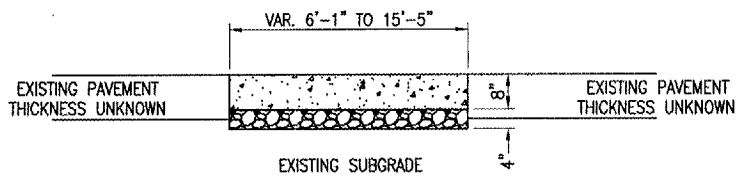
TAPER PROPOSED CURB HEIGHT FROM 0" AT STATION 1+24.41 AND STA. 1+22.45 TO 9" IN 5.0'.

LEGEND

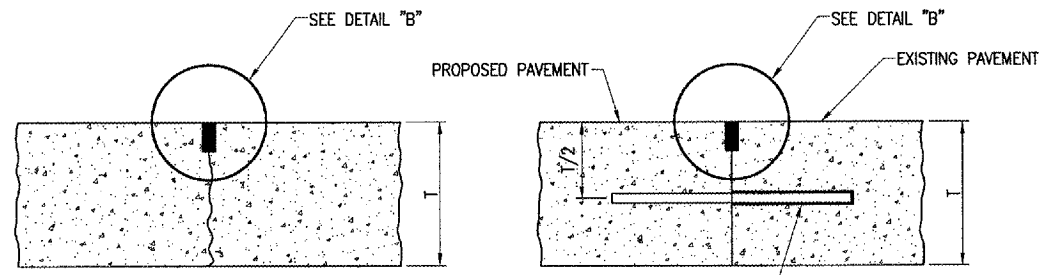
-  PROPOSED PCC MEDIAN TRANSITION
-  PROPOSED AGGREGATE BASE COURSE
-  PROPOSED PCC PAVEMENT



EXISTING MEDIAN REMOVAL

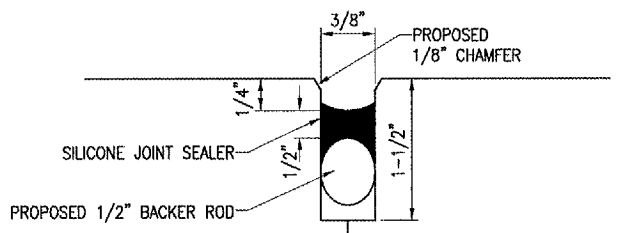


PROPOSED MEDIAN PAVEMENT SECTION A-A

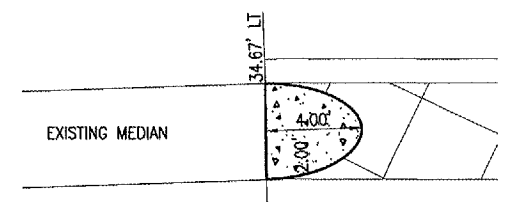


TYPE H DUMMY CONTRACTION JOINT

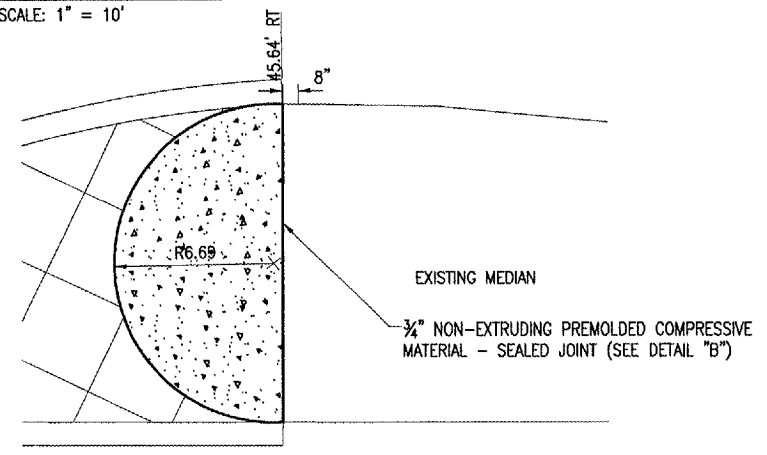
TYPE D - DOWELED CONSTRUCTION JOINT



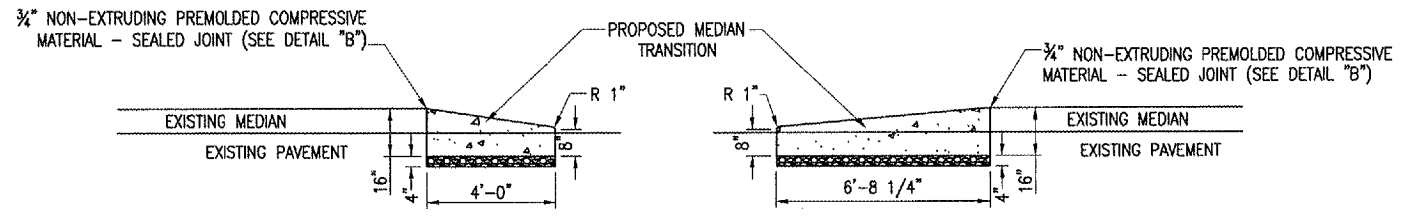
DETAIL "B" NOT TO SCALE



WEST MEDIAN DETAIL SCALE: 1" = 4'

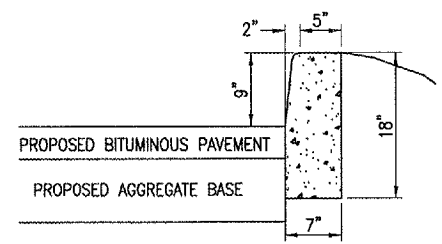


EAST MEDIAN DETAIL SCALE: 1" = 4'

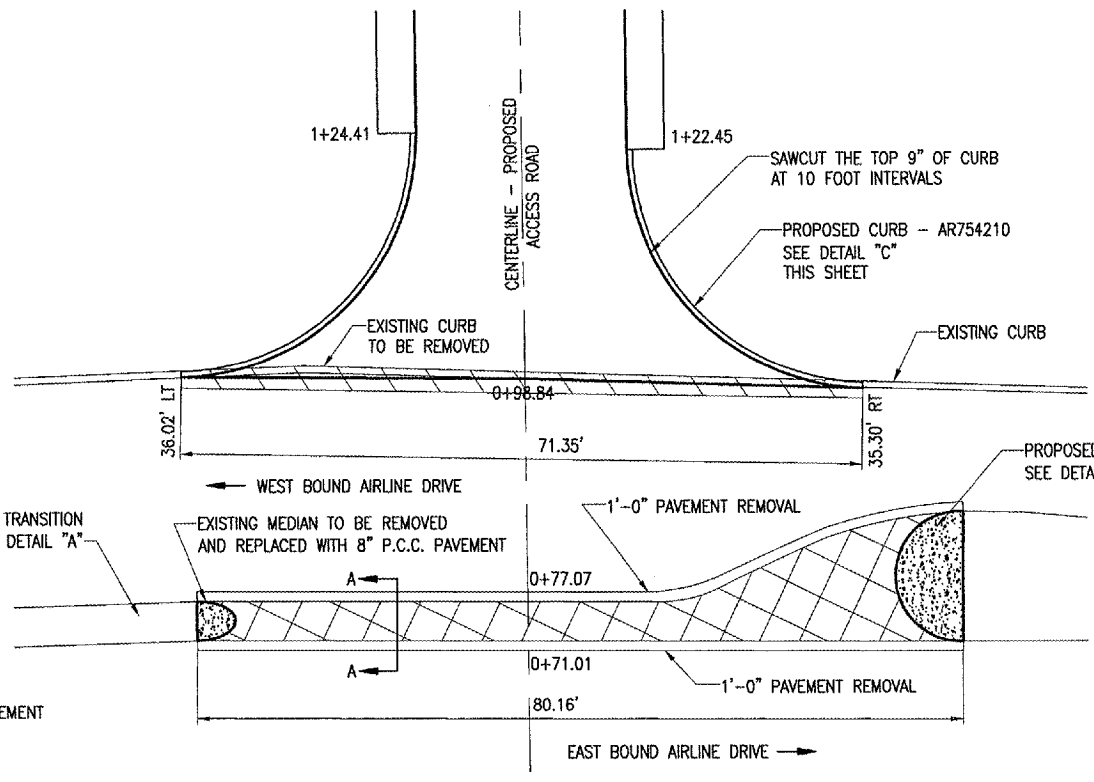


WEST MEDIAN TRANSITION DETAIL "A"

EAST MEDIAN TRANSITION DETAIL "B"



PROPOSED BARRIER CURB DETAIL "C"



PROPOSED INTERSECTION DETAIL SCALE: 1" = 10'

FEB 15, 2005 11:38 AM DPE I:\AIRPORTS\STLOUIS\837-04\RD\AIRPORT_SHEETS\AR-122REM.DWG - DETAILS

BY	
REVISION	
DATE	

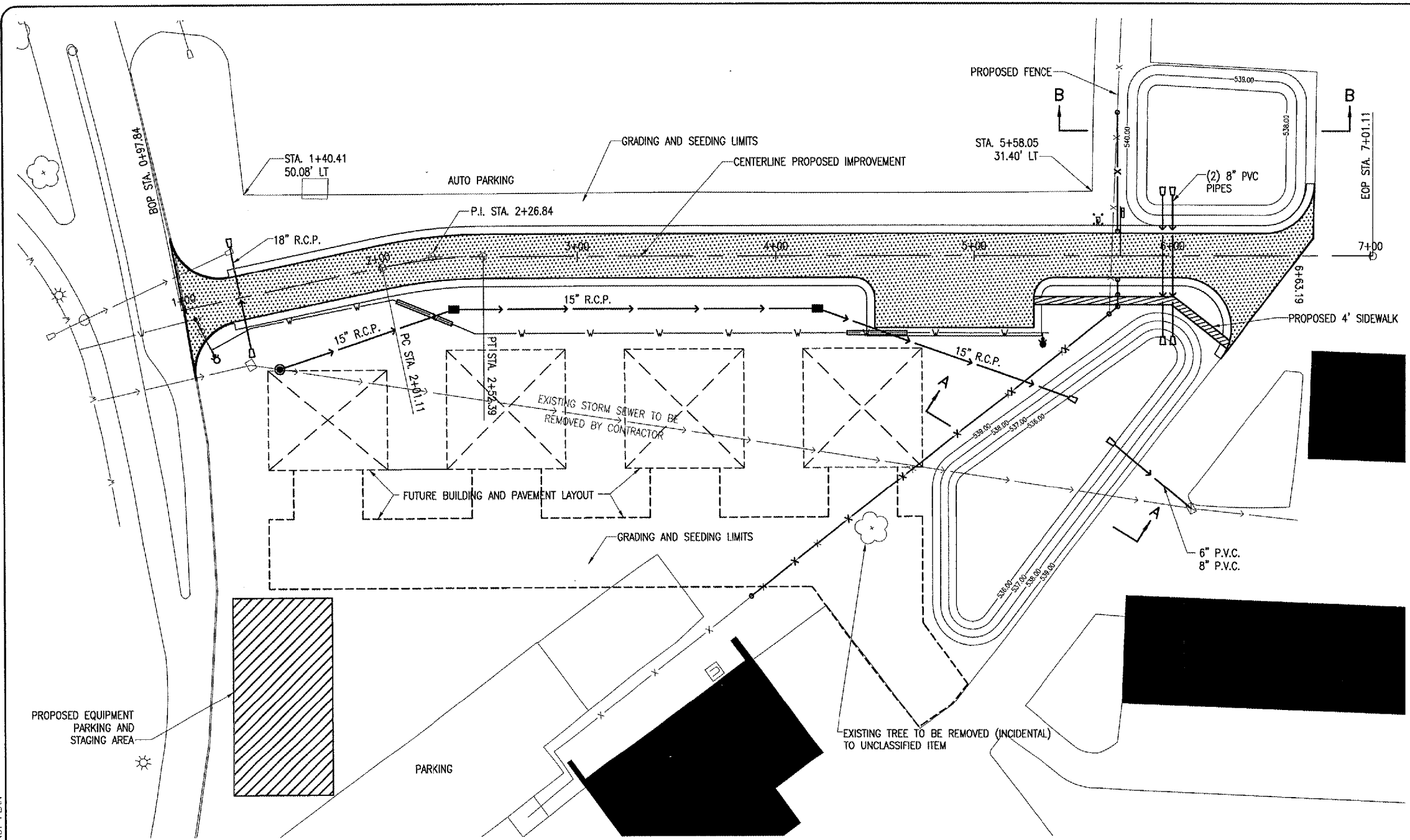
ST. LOUIS REGIONAL AIRPORT
 St. Louis Regional
 EAST ALTON, ILLINOIS
 ILL. PROJ.: ALN-3355

Project No.	837-04R00
Revision	R-122REM.DWG
Scale	NOT TO SCALE
Date	03/08/04
LAYOUT	JAC
DRAWN	JAC
REVIEWED	WJM
	03/08/04
	06/23/04

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CONSTRUCT T-HANGAR ACCESS ROAD
 PROPOSED PAVEMENT REMOVAL DETAILS

- LEGEND**
- PROPOSED PAVEMENT
 - PROPOSED VALVE/BOX
 - PROPOSED FIRE HYDRANT
 - RELOCATED FIRE HYDRANT
 - EXISTING INLET TO REMAIN
 - EXISTING INLET TO BE REPLACED
 - PROPOSED INLET
 - EXISTING MANHOLE
 - PROPOSED MANHOLE
 - PROPOSED STORM SEWER
 - EXISTING STORM SEWER
 - EXISTING END SECTION
 - PROPOSED END SECTION
 - PROPOSED WORK AREA



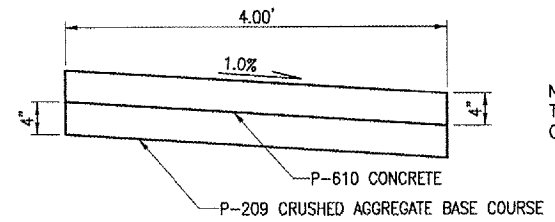
EARTHWORK DISTRIBUTION - AR152410

CUT - 2,675 C.Y.
 FILL - 1,902 C.Y.
 SHRINKAGE FACTOR - 1.41%

NOTE: THE ENTIRE AREA OF THE SITE WILL BE DISKED TO MULCH THE EXISTING TURF. PRIOR TO THE EARTH EXCAVATION, IT IS REQUIRED THAT THE MULCH DECOMPOSE. STRIPPING OF THE AREA IS NOT REQUIRED. SELECT GRADING PROCEDURES WILL BE USED TO PLACE THE TOP SOIL MATERIAL ON ALL AREAS TO BE SEEDED. DOUBLE HANDLING OF TOPSOIL MATERIAL WILL NOT BE REQUIRED. NO ADDITIONAL PAYMENT WILL BE MADE TO THE CONTRACT FOR SELECT GRADING.

EARTHWORK COMPACTION

COMPACTION METHODS TO USE WILL BE: STANDARD PROCTOR ASTM D698.

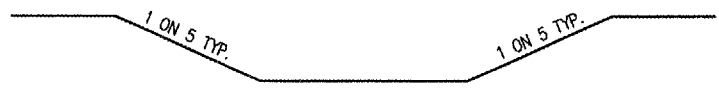


SIDEWALK DETAIL
 SCALE: 1" = 1'-0"
 PAYMENT - AR501604

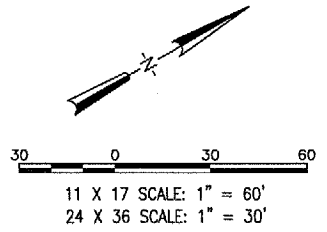
NOTE: THE SIDEWALK WILL BE JOINTED ON A 4 FOOT INTERVAL.



TYPICAL SECTION "A-A"
 "NOT TO SCALE"
 FINISHED GRADE



TYPICAL SECTION "B-B"
 "NOT TO SCALE"
 FINISHED GRADE



11 X 17 SCALE: 1" = 60'
 24 X 36 SCALE: 1" = 30'

FEB 15, 2005 11:39 AM DPCE I:\AIRPORTS\STLOUIS\837-04RD\AIRPORT SHEETS\837-04RD\CONSTR.DWG - CONST PLAN

DATE	REVISION	BY

ST. LOUIS REGIONAL AIRPORT

 EAST ALTON, ILLINOIS
 ILL. PROJ. NO.: ALN-3355

FILE PROJECT NO.	837-04RDD
EXENAME	R-121CONSTR.DWG
SCALE	1" = 30'
DATE	03/09/04
LAYOUT	JAC 03/08/04
DRAWN	TLW 03/08/04
REVIEWED	WJM 06/23/04

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CONSTRUCT T-HANGAR ACCESS ROAD
 PROPOSED CONSTRUCTION PLAN

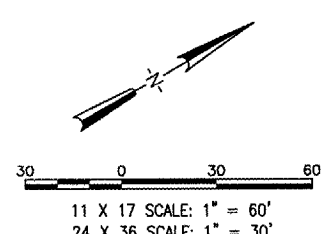
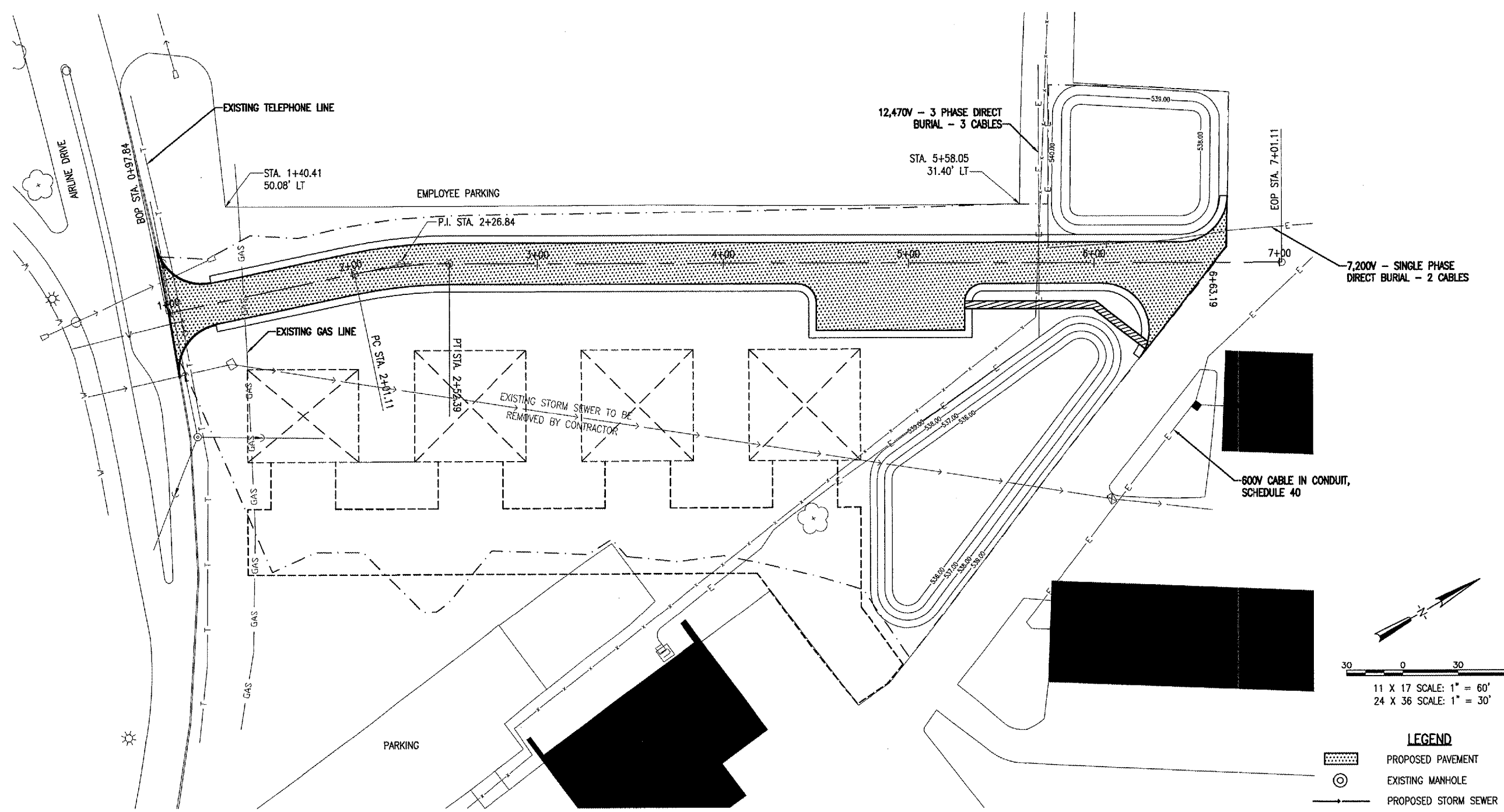
DATE	REVISION	BY

ST. LOUIS REGIONAL AIRPORT
St. Louis Regional
 AIRPORT
 EAST ALTON, ILLINOIS
 ILL. PROJ.: ALN-3355

I&L Project No. 837-04RDD Filename R-161UTIL.DWG Scale 1"=30' Date 03/08/04	LAYOUT JAC 03/08/04 DRAWN TLW 03/08/04 REVIEWED WJM 06/23/04
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 Springfield, MO 65802-2888
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CONSTRUCT T-HANGAR
 ACCESS ROAD
 EXISTING UTILITY PLAN



LEGEND

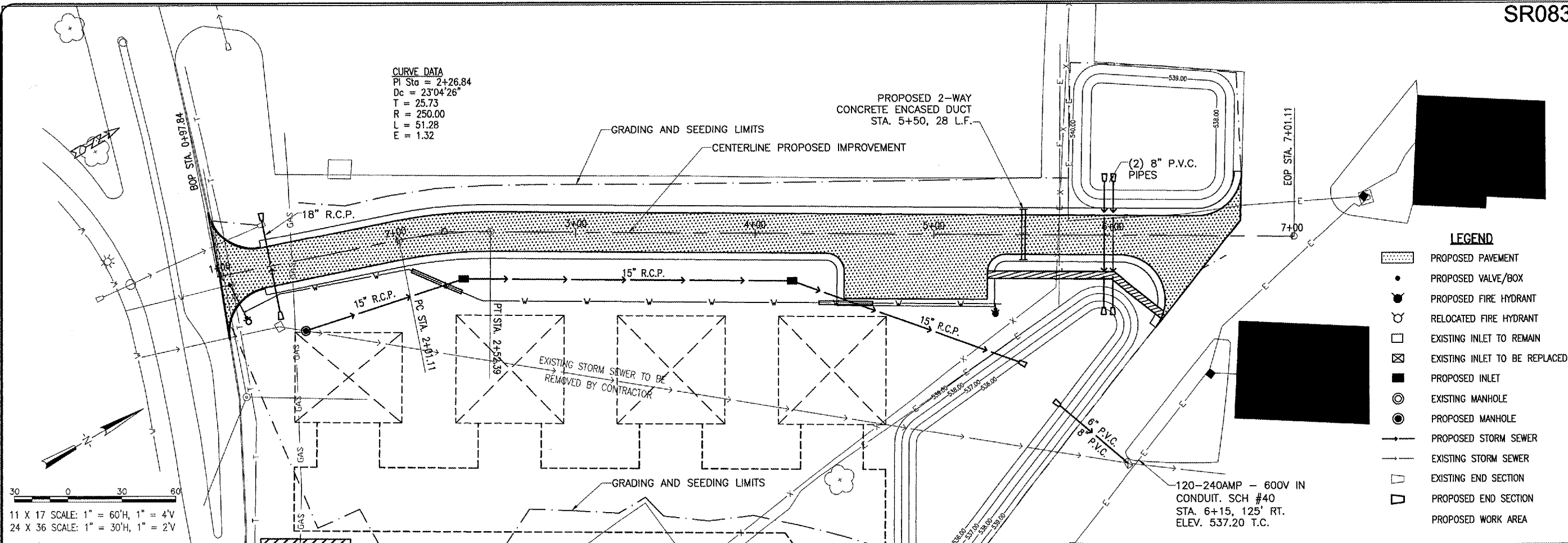
	PROPOSED PAVEMENT
	EXISTING MANHOLE
	PROPOSED STORM SEWER
	EXISTING STORM SEWER
	EXISTING END SECTION
	PROPOSED END SECTION
	PROPOSED WORK AREA
	EXISTING TELEPHONE CABLE
	EXISTING SANITARY SEWER
	EXISTING GAS LINE
	EXISTING ELECTRICAL LINE

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 THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION. THE ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY SUCH MAINS AND SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.

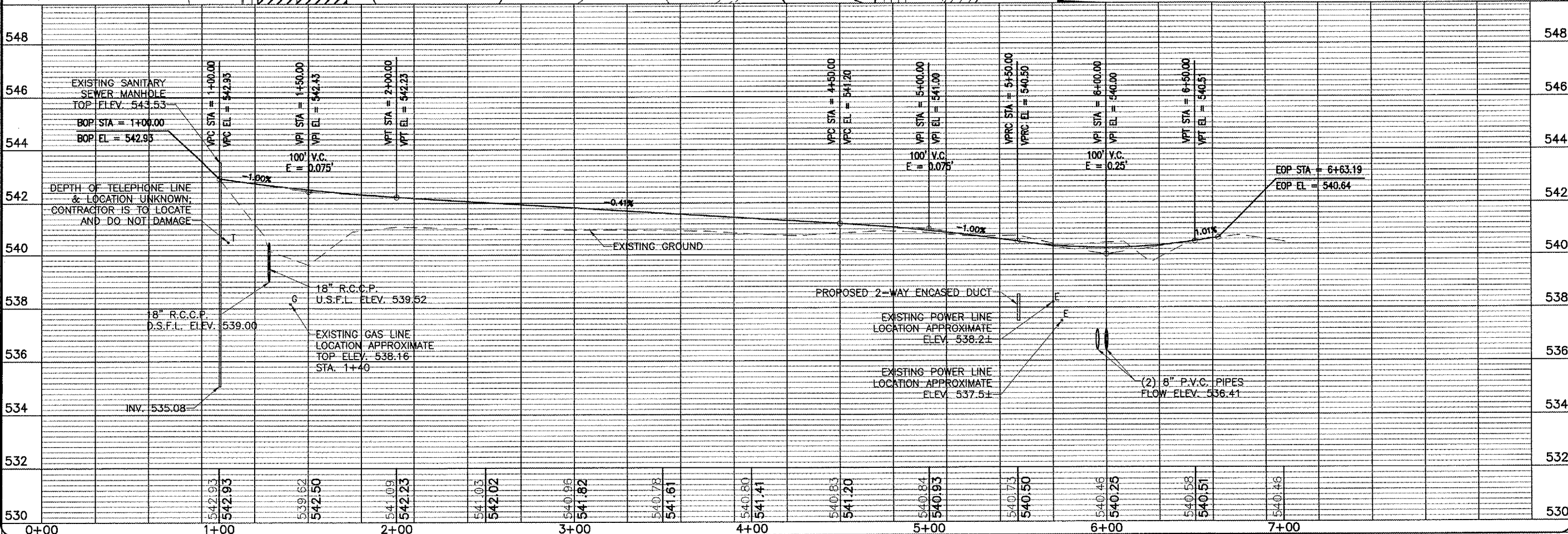
NOTE:
 THE CONTRACTOR IS REQUIRED TO EXPOSE THE BURIED TELEPHONE CABLE ALONG AIRLINE DRIVE TO DETERMINE IF THIS WORK CAN PROCEED WITHOUT AFFECTING THE TELEPHONE LINES. THE LINE IS BURIED APPROXIMATELY 24". PROVIDING THAT THE CONTRACTOR DETERMINES THAT THE LINE NEEDS TO BE LOWERED, THE ST. LOUIS REGIONAL AIRPORT REPRESENTATIVE WILL ORDER THE WORK COMPLETE. SBC ESTIMATES 2 TO 4 WEEKS TO RELOCATE THE LINE.
 THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND AGENCIES WHICH HAVE LINES OR CONDUITS IN THE PROPOSED WORK AREA. ALL LINES AND CONDUITS SHALL BE LOCATED AND IDENTIFIED FOR DEPTH BEFORE ANY WORK BEGINS. THE CONTRACTOR WILL CALL J.U.L.I.E. (1-800-892-0123) TO ACCOMPLISH THE ABOVE.

CALL J.U.L.I.E. FOR UTILITY INFORMATION AT 1-800-892-0123.

CURVE DATA
 PI Sta = 2+26.84
 Dc = 23'04"26"
 T = 25.73
 R = 250.00
 L = 51.28
 E = 1.32



11 X 17 SCALE: 1" = 60'H, 1" = 4'V
 24 X 36 SCALE: 1" = 30'H, 1" = 2'V



- LEGEND**
- PROPOSED PAVEMENT
 - PROPOSED VALVE/BOX
 - PROPOSED FIRE HYDRANT
 - RELOCATED FIRE HYDRANT
 - EXISTING INLET TO REMAIN
 - EXISTING INLET TO BE REPLACED
 - PROPOSED INLET
 - EXISTING MANHOLE
 - PROPOSED MANHOLE
 - PROPOSED STORM SEWER
 - EXISTING STORM SEWER
 - EXISTING END SECTION
 - PROPOSED END SECTION
 - PROPOSED WORK AREA

DATE	REVISION	BY

ST. LOUIS REGIONAL AIRPORT
 EAST ALTON, ILLINOIS
 I.L. PROJ.: ALN-3355

FILE PROJECT NO. 837-04RDD	LAYOUT	TLW	04/27/04
FILE NAME R-701PAP.DWG	DRAWN	TLW	04/27/04
SCALE 1"=30'H, 1"=2'V	REVIEWED	WJM	06/23/04
DATE 04/27/04			

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 Springfield, Illinois 62703-2886
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CONSTRUCT T-HANGER ACCESS ROAD
 PROPOSED PLAN AND PROFILE

FEB 15, 2005 11:40 AM DPE I:\AIRPORTS\STLOUIS\837-04RDD\AIRPORT\SHEETS\R-701PAP.DWG - P & P

EXISTING INLET							
INLET	STATION	OFFSET	NORTHING	EASTING	TYPE	TOP ELEV.	FLOWLINE
EI#1	1+26.22	33.95' RT	808611.59	2328197.55	-	539.93	536.18

PROPOSED INLETS							
INLET	STATION	OFFSET	NORTHING	EASTING	TYPE	TOP ELEV.	FLOWLINE
PI#1	2+36.02	25.96' RT	808890.45	2328330.02	A	539.98	535.97
PI#2	4+21.00	26.45' RT	808963.03	2328501.02	A	539.00	535.60
PI#3	6+09.11	126.86' RT	808713.76	2328226.02	A	538.81	534.93

PROPOSED MANHOLE							
INLET	STATION	OFFSET	NORTHING	EASTING	TYPE	TOP ELEV.	FLOWLINE
PMH#1	1+40.00	39.11' RT	808622.98	2328206.86	4'ø	540.60	536.17

NOTE:

THE POLYVINYL CHLORIDE (PVC) STORM SEWER PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M278 OR ASTM F629. SOLVENT WELDS AND FITTINGS SHALL MEET REQUIREMENTS OF ASTM D-3034. THE BACKFILL MATERIAL WILL BE TAKEN TO SUBGRADE ELEVATION. CONSTRUCTION METHODS, METHOD OF MEASUREMENT, AND BASIS OF PAYMENT SHALL COMPLY WITH THE STANDARD AND SUPPLEMENTAL SPECIFICATIONS FOR ITEM 705 PIPE UNDERDRAIN. PAYMENT WILL BE MADE UNDER:
 ITEM AR705546 - 6" NON PERFORATED UNDERDRAIN PER LINEAR FOOT
 ITEM AR705548 - 8" NON PERFORATED UNDERDRAIN PER LINEAR FOOT

NOTES:

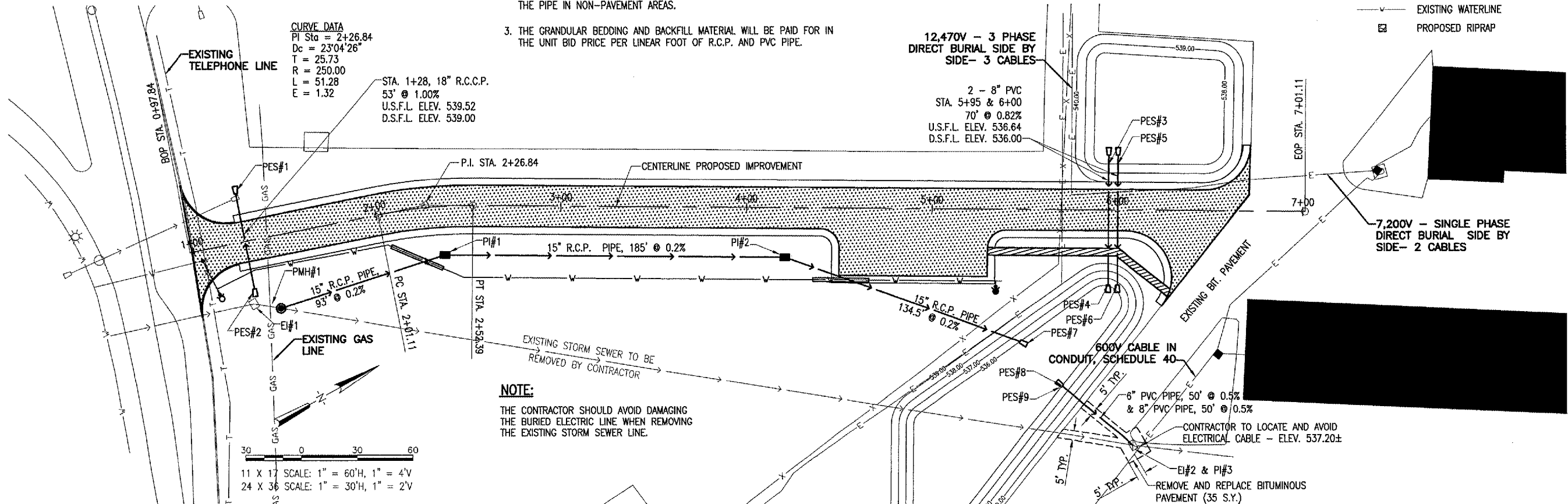
1. A 4" GRANULAR BEDDING SHALL BE PLACED FOR ALL PROPOSED PIPES FOR STORM SEWERS.
2. THE GRANULAR BACKFILL MATERIAL WILL EXTEND TO THE TOP OF SUBGRADE WHERE THE PIPE IS TO BE LOCATED BENEATH PAVEMENT AREAS. THE GRANULAR BACKFILL MATERIAL SHALL EXTEND 1' ABOVE THE TOP OF THE PIPE IN NON-PAVEMENT AREAS.
3. THE GRANULAR BEDDING AND BACKFILL MATERIAL WILL BE PAID FOR IN THE UNIT BID PRICE PER LINEAR FOOT OF R.C.P. AND PVC PIPE.

PROPOSED END SECTIONS							
END SECTION	SIZE	STATION	OFFSET	NORTHING	EASTING	ELEVATION	
PES#1	18"	1+28.00	26.00' LT	808632.52	2328141.34	539.00	
PES#2	18"	1+28.00	26.00' RT	808615.83	2328190.59	539.52	
*PES#3	8"	5+95.00	29.77' LT	809050.32	2328358.88	536.64	
*PES#4	8"	5+95.00	40.23' RT	809014.81	2328419.20	536.00	
*PES#5	8"	6+00.00	29.77' LT	809054.63	2328361.41	536.64	
*PES#6	8"	6+00.00	40.23' RT	809019.12	2328421.74	536.00	
PES#7	15"	5+47.96	70.78' RT	808958.78	2328421.67	535.35	
*PES#8	6"	5+70.78	94.75' RT	808966.28	2328453.91	535.18	
*PES#9	8"	5+70.78	94.75' RT	808966.28	2328453.91	536.75	

(* SEE SPECIFICATION FOR PAYMENT ITEM)

LEGEND

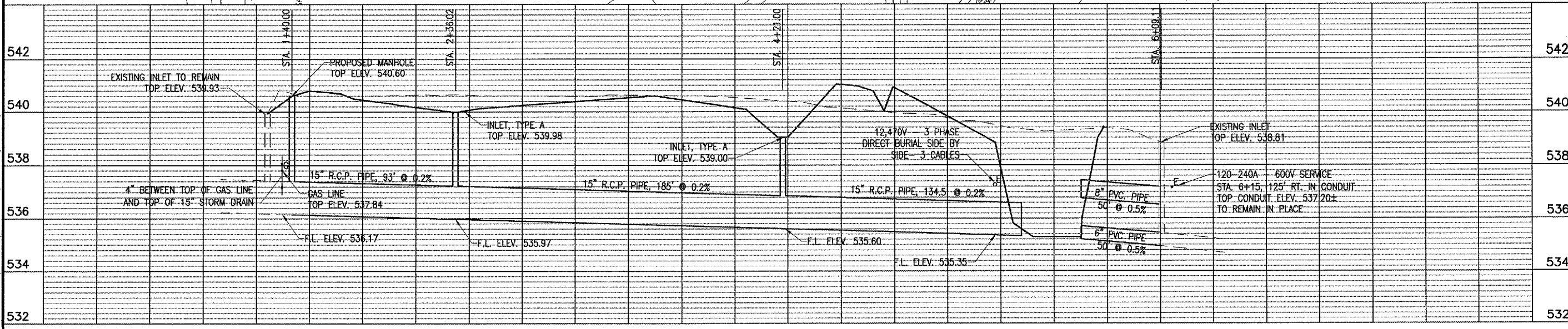
- PROPOSED PAVEMENT
- PROPOSED VALVE/BOX
- PROPOSED FIRE HYDRANT
- EXISTING INLET TO BE REPLACED
- PROPOSED INLET
- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- PROPOSED FLOW LINES
- EXISTING END SECTION
- PROPOSED END SECTION
- PROPOSED WATERLINE
- EXISTING WATERLINE
- PROPOSED RIPRAP



NOTE:

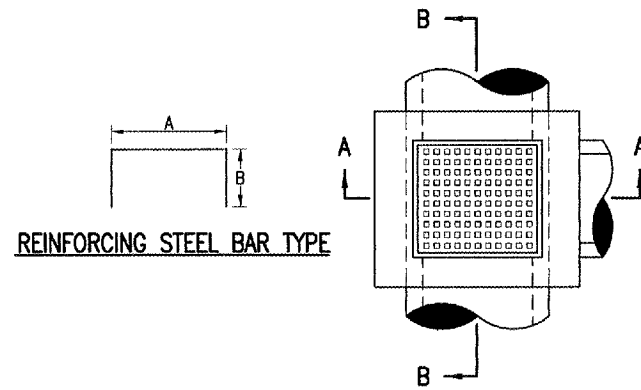
THE CONTRACTOR SHOULD AVOID DAMAGING THE BURIED ELECTRIC LINE WHEN REMOVING THE EXISTING STORM SEWER LINE.

11 X 17 SCALE: 1" = 60'H, 1" = 4'V
 24 X 36 SCALE: 1" = 30'H, 1" = 2'V



BY	
REVISION	
DATE	
ST. LOUIS REGIONAL AIRPORT EAST ALTON, ILLINOIS I.L. PROJ.: ALN-3355	
HB Project No. 837-04R00 File Name: R-131DRN.DWG Scale: 1"=30'H, 1"=2'V Date: 04/27/04	LAYOUT TLW 04/27/04 DRAWN TLW 04/27/04 REVIEWED WJM 06/23/04
 Hanson Professional Services Inc. 1025 South Illinois Springfield, Illinois 62703-2886 Offices Nationwide	
CONSTRUCT T-HANGER ACCESS ROAD PROPOSED DRAINAGE PLAN AND PROFILE	
10	
10 of 34 sheets	

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REINFORCING STEEL BAR TYPE

REINFORCING BARS SCHEDULE					
TYPE	QUANTITY PER INLET	DIMENSIONS		SIZE	APPROX. WT. OF BARS IN INLET
		A	B		
A	2	3'-4"	2'-4"	#5	16.7

INLET NOTES

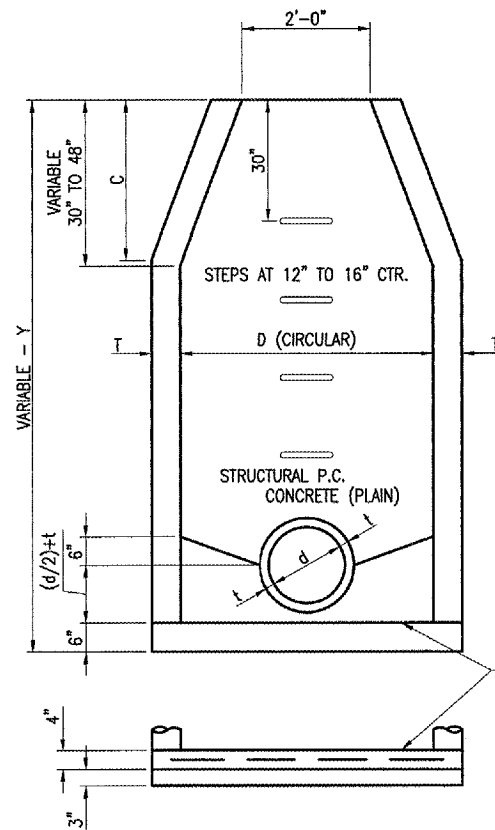
INLET TO BE CONSTRUCTED OF STRUCTURAL P.C. CONCRETE. THE CONTRACT UNIT PRICE PER INLET SHALL INCLUDE THE FRAME, GRATE AND STEPS IN PLACE AND COMPLETE PER UNIT.

1/2" CHAMFER TO BE USED ON ALL EXPOSED CORNERS OF INLETS. BARS TO BE INSTALLED 2" FROM FACE OF WALLS.

THE FRAME AND GRATE SHALL BE NEENAH R-3475-E, DEETER 2425-E.

"H" SHALL BE EQUAL TO THE PROPOSED PAVEMENT THICKNESS AND NOT LESS THAN THE ATTACHED MINIMUMS. TYPE A _____ 9" MINIMUM.

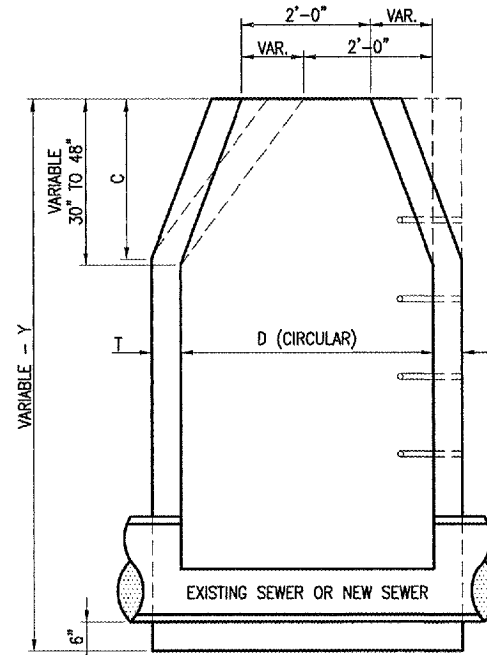
INLET STEPS SHALL BE NEENAH R-1980-1. 12" TO 15" C.C. STEPS TO BE INSTALLED WHEN Y IS GREATER THAN 5' COST. THE COST OF THE STEPS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR EACH INLET.



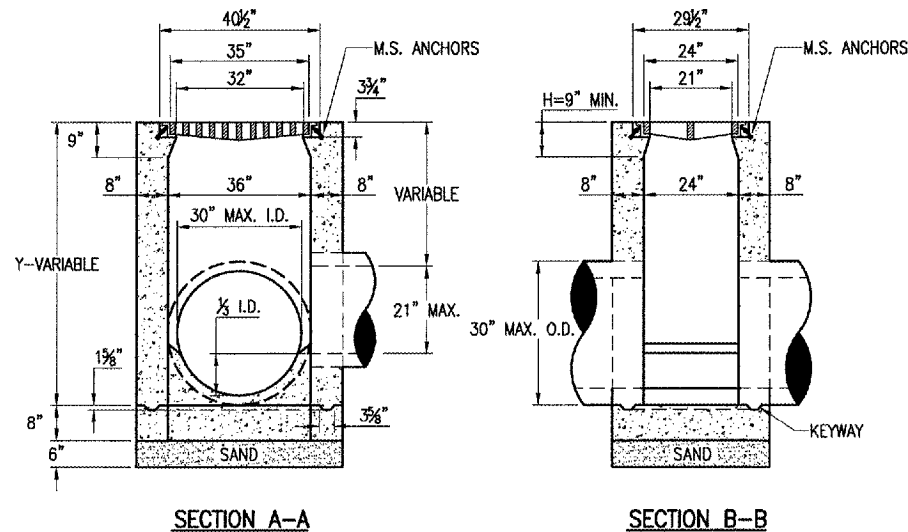
BOTTOM TO BE EITHER STRUCTURAL P.C. CONCRETE (PLAIN) OR PRECAST REINFORCED CONCRETE WITH SAND BEDDING

MANHOLE DETAILS

"NOT TO SCALE"



ALT. MATERIAL FOR WALLS	D	C	T	D	C	T
PRECAST REINFORCED CONC. RINGS	4'	2'-6"	5"	5'	4'-0"	6"
MONOLITHIC CONCRETE	4'	2'-6"	6"	5'	4'-0"	8"



SECTION A-A

SECTION B-B

INLET TYPE A

MANHOLE NOTES

1. MANHOLE TO BE CONSTRUCTED OF STRUCTURAL P.C. CONCRETE. THE CONTRACT UNIT PRICE PER MANHOLE SHALL INCLUDE THE FRAME, LID AND STEPS PER UNIT.
2. THE FRAME AND LID SHALL BE NEENAH R-3492 OR EQUAL, ANCHORED TO THE MANHOLE STRUCTURE.
3. MANHOLE STEPS SHALL BE NEENAH R-1980-1. 12" TO 15" C.C. STEPS TO BE INSTALLED WHEN Y IS GREATER THAN 5'. THE COST OF THE STEPS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR EACH MANHOLE.
4. THE PROPOSED MANHOLES WILL BE PAID FOR UNDER THE FOLLOWING:
ITEM AR751540 "MANHOLE 4' " - 1 EACH.

DATE	REVISION	BY

ST. LOUIS REGIONAL AIRPORT



EAST ALTON, ILLINOIS

IL PROJ.: ALN-3355

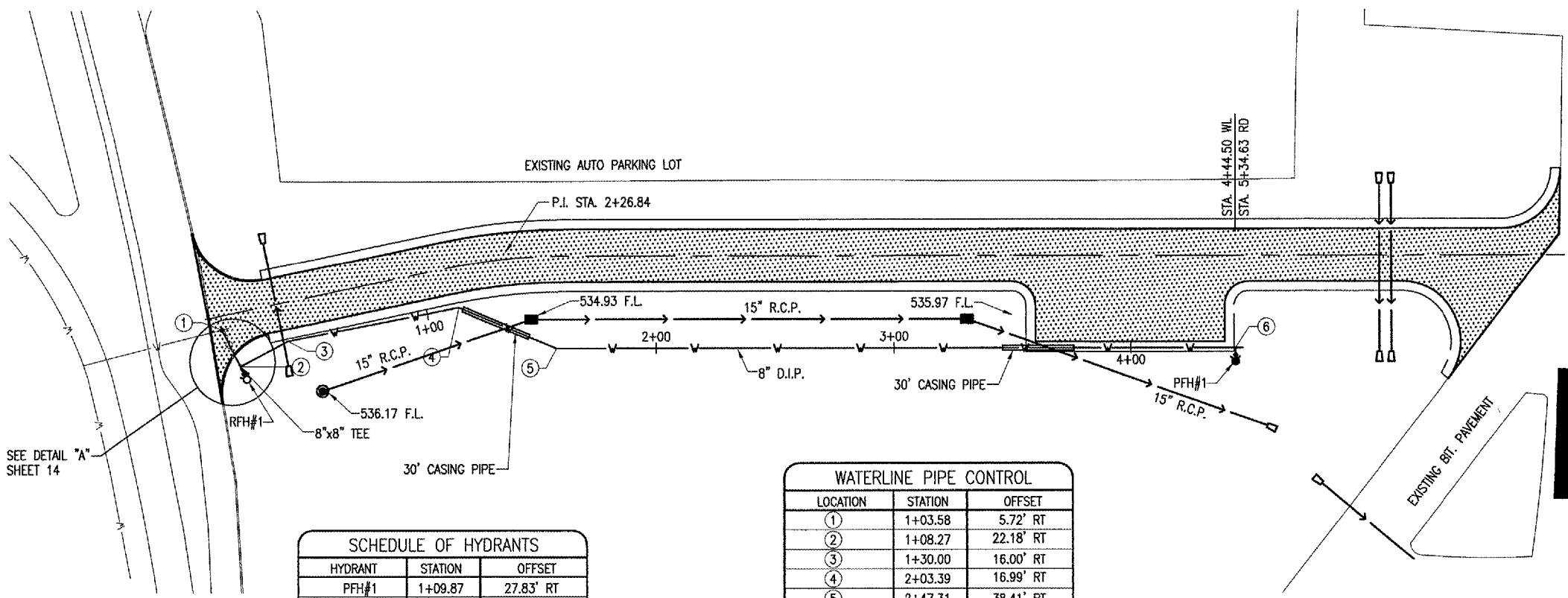
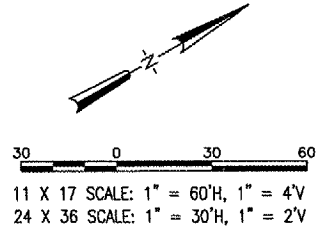
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Filename	R-531DRN.DWG	TLW	03/08/04
Scale	NOT TO SCALE	WJM	06/23/04
Date	03/08/04		
LAYOUT			
DRAWN			
REVIEWED			



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Springfield, IL 62703-2886
Offices Nationwide

CONSTRUCT T-HANGAR
ACCESS ROAD

PROPOSED
DRAINAGE DETAILS



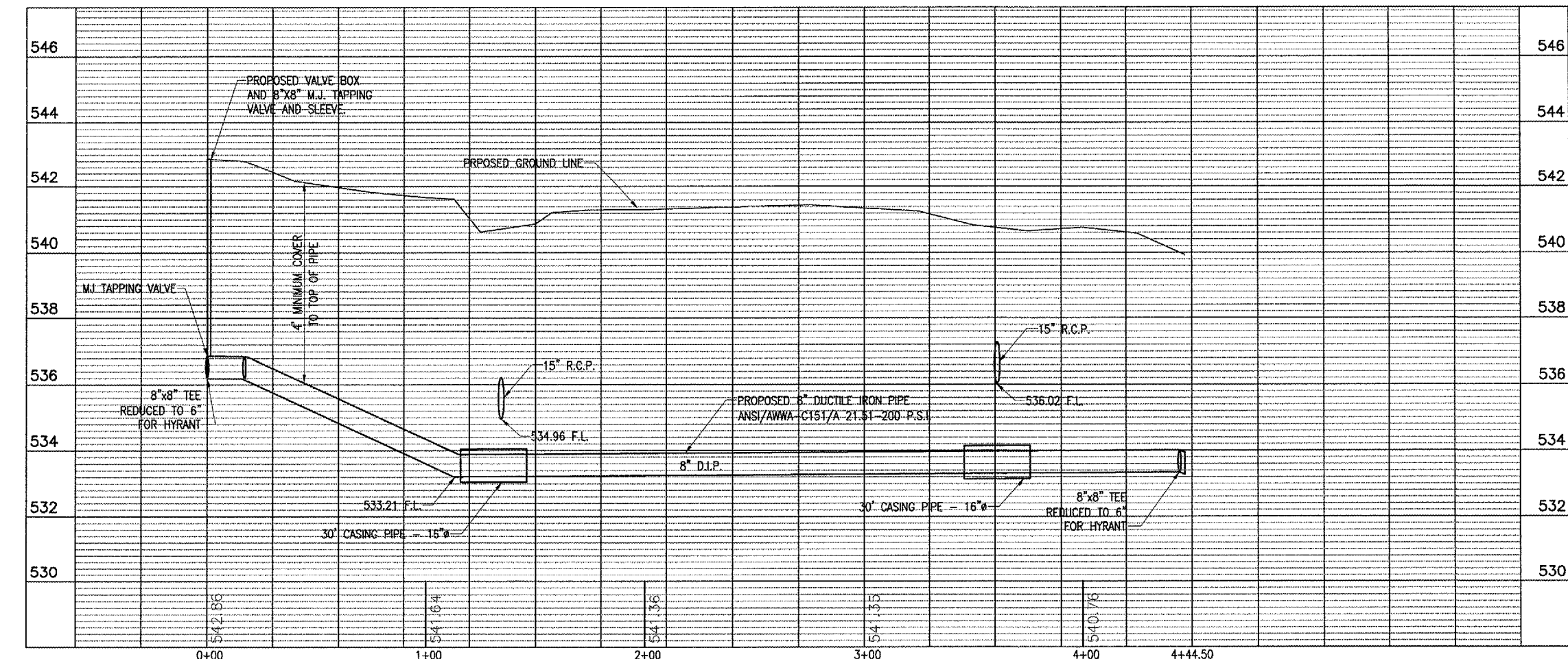
SCHEDULE OF HYDRANTS

HYDRANT	STATION	OFFSET
PFH#1	1+09.87	27.83' RT
PFH#2	5+34.63	40.00' RT

WATERLINE PIPE CONTROL

LOCATION	STATION	OFFSET
①	1+03.58	5.72' RT
②	1+08.27	22.18' RT
③	1+30.00	16.00' RT
④	2+03.39	16.99' RT
⑤	2+47.31	38.41' RT
⑥	5+34.63	38.45' RT

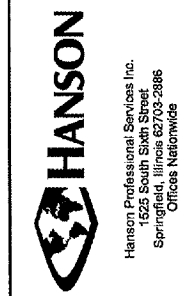
- LEGEND**
- PROPOSED PAVEMENT
 - PROPOSED VALVE/BOX
 - PROPOSED FIRE HYDRANT
 - RELOCATED FIRE HYDRANT
 - EXISTING INLET TO BE REPLACED
 - PROPOSED INLET
 - PROPOSED WATERLINE
 - EXISTING WATERLINE



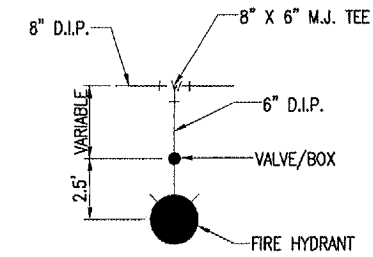
DATE	REVISION	BY

ST. LOUIS REGIONAL AIRPORT
 EAST ALTON, ILLINOIS
 IL. PROJ. ALN-3355

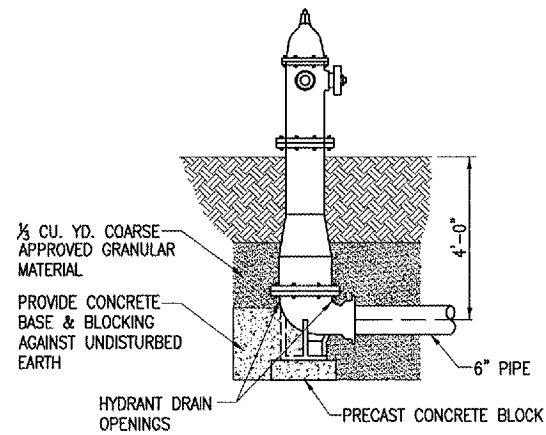
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Scale 1"=30'	LAYOUT TLW	03/08/04
DATE 03/08/04	DRAWN TLW	03/08/04
	REVIEWED WJM	06/23/04



CONSTRUCT T-HANGAR ACCESS ROAD
 PROPOSED WATERLINE PLAN AND PROFILE



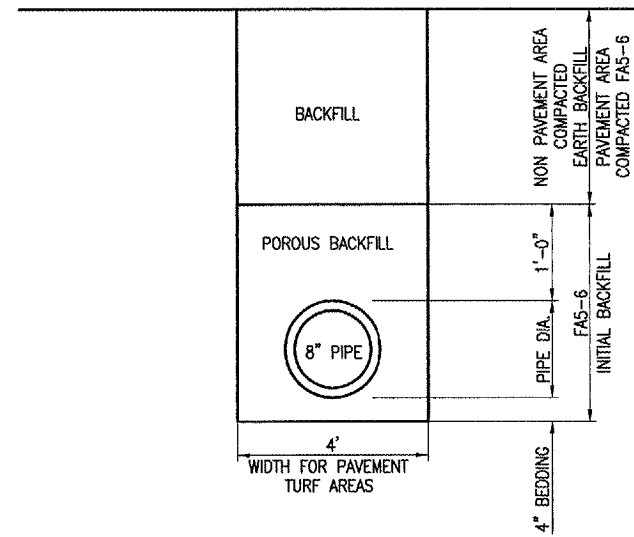
TYPICAL TO ALL FIRE HYDRANTS
NOT TO SCALE



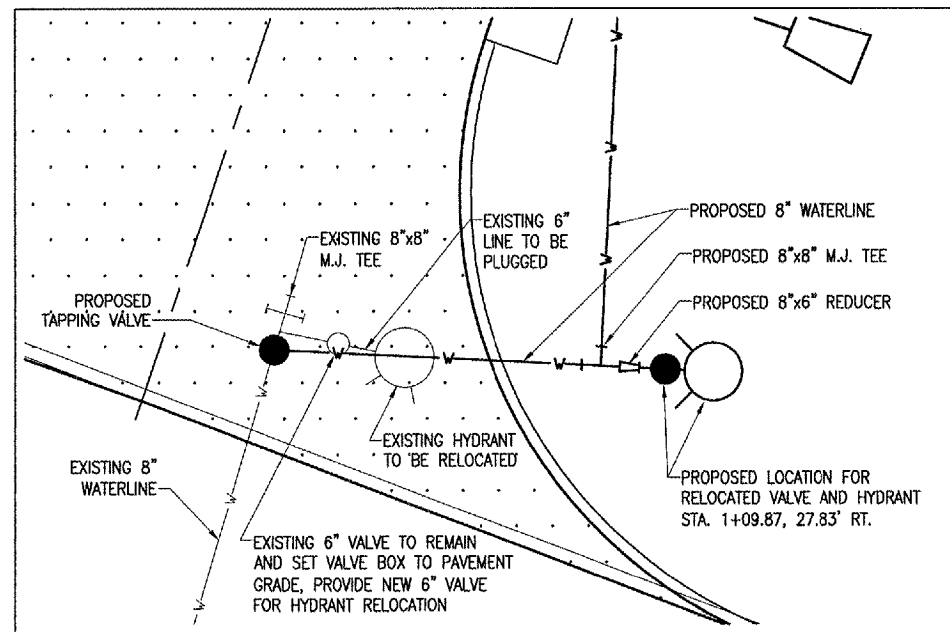
HYDRANT INSTALLATION

NOTE

SEE FIRE HYDRANT INSTALLATION DETAIL IN THE SPECIFICATIONS.



TRENCH BACKFILL DETAIL
"NOT TO SCALE"



DETAIL "A"
SCALE: 1" = 5'

SPECIFICATION - WATER MAIN CONSTRUCTION

THE WATER MAIN WITH APPURTENANCES SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", CURRENT EDITION, (HEREINAFTER REFERRED TO AS "STANDARD SPECIFICATIONS"); THE VILLAGE OF BATHALTO WATER UTILITY AND THE FOLLOWING SPECIAL PROVISIONS.

- NO WORK IS TO BEGIN UNTIL THE APPROVED ILLINOIS ENVIRONMENTAL PROTECTION AGENCY OPERATORS PERMIT IS RECEIVED BY THE VILLAGE OF BATHALTO WATER UTILITY.
- NO EXCAVATION FOR OR INSTALLATION OF WATER MAINS SHALL BEGIN UNTIL THE PROJECT IS "STAKED" IN THE FIELD BY THE CONTRACTOR OR HIS REPRESENTATIVE (STAKING INCLUDES PIPE LINE STAKES, PIPE GRADE STAKES, FINISHED GRADE STAKES, FITTING LOCATIONS, ETC.).
- THE CONTRACTOR SHALL GIVE THE WATER UTILITY 24 HOURS ADVANCE NOTICE OF THE DELIVERY OF WATER MAIN MATERIALS OR INSTALLATION OF WATER MAINS.
- ALL MATERIALS AND IT'S INSTALLATION ARE TO BE INSPECTED BY THE VILLAGE OF BATHALTO WATER UTILITY INSPECTOR.
- IF ALL REQUIREMENTS OF THE VILLAGE OF BATHALTO WATER UTILITY ARE NOT MET, A "SHUT-DOWN" OF THE PROJECT MAY RESULT UNTIL ALL CRITERIA ARE SATISFIED.
- WATER MAIN PIPE SHALL BE DUCTILE IRON AND CONFORM TO ANSI/AWWA-C151/A21.51, THICKNESS CLASS 52. PIPE SHALL BE CEMENT LINED AND CONFORM TO ANSI/AWWA-C111/A21.11.
- JOINTS FOR D.I.P. WATER MAIN SHALL BE PRESSURE SLIP JOINTED WITH ELASTOMERIC SEALS (GASKETS) CONFORMING TO ANSI/AWWA-C111/A21.11.
- WATER MAIN AND SERVICE PIPE SHALL BE INSTALLED WITH A 4 FT - 0 IN. MINIMUM DEPTH OF COVER.
- FITTINGS FOR WATER MAIN PIPE SHALL BE MECHANICAL JOINT CAST IRON OR DUCTILE IRON CONFORMING TO ANSI/AWWA-C110/A21.10.
- GATE VALVES FOR HYDRANTS SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH SECTION 42 OF THE STANDARD SPECIFICATIONS.
- HYDRANTS SHALL BE MUELLER CENTURION A-423, 5 1/4 THREE-WAY WITH A 6" GATE VALVE LOCATED WITHIN 3 FEET OF HYDRANT. HYDRANTS SHALL BE OF A MANUFACTURER AND PATTERN APPROVED BY THE VILLAGE OF BATHALTO WATER UTILITY. AS A MINIMUM, THE BRANCH TO A HYDRANT SHALL CONSIST OF (1) AN ANCHORING TEE, (2) MECHANICAL JOINT GATE VALVE AND (3) AN ANCHORING COUPLING OR AN ANCHORING PIPE.
- INSTALLATION OF HYDRANTS SHALL BE IN ACCORDANCE WITH SECTION 45 OF THE STANDARD SPECIFICATIONS EXCEPT POURED CONCRETE SHALL NOT BE USED AS A THRUST BLOCK.
- PRESSURE TESTING OF WATER MAINS SHALL BE IN ACCORDANCE WITH SECTION 41-2.13 OF THE STANDARD SPECIFICATIONS AND UNDER THE DIRECTION OF THE VILLAGE OF BATHALTO WATER UTILITY.
- DISINFECTATION OF WATER MAINS SHALL BE IN ACCORDANCE WITH SECTION 41-2.14 OF THE STANDARD SPECIFICATIONS AND UNDER THE DIRECTION OF THE VILLAGE OF BATHALTO WATER UTILITY.
- NO DEVIATION OF THE REQUIREMENT FOR THE SEPARATION OF WATER MAINS AND WATER SERVICES FROM STORM AND SANITARY SEWERS AS STATED IN SECTION 41 OF THE STANDARD SPECIFICATIONS WILL BE PERMITTED. SEE STANDARD DRAWING 18 THROUGH 24 FOR SPECIFIC DETAILS TO MEET THESE REQUIREMENTS AT VARIOUS LOCATIONS.
- MATERIALS AND INSTALLATION TO COMPLETE THIS PROJECT AS SHOWN IN THE PLAN AND SPECIFICATIONS SHALL BE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.
- SEE STANDARD SPECIFICATIONS FOR THRUST BLOCK LOCATIONS.

GENERAL NOTES

THE EXISTENCE AND LOCATION OF UNDERGROUND FACILITIES SHOWN ON THESE PLANS WERE OBTAINED BY FIELD INVESTIGATION AND SEARCH OF AVAILABLE RECORDS TO THE BEST OF OUR KNOWLEDGE. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING FACILITY SHOWN HEREON AND ANY OTHER WHICH IS NOT OF RECORD OR NOT SHOWN ON THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE UTILITY COMPANIES AND BY FIELD INSPECTION (J.U.L.I.E.).

DATE	REVISION	BY

ST. LOUIS REGIONAL AIRPORT



EAST ALTON, ILLINOIS

ILL. PROJ.: ALN-3355

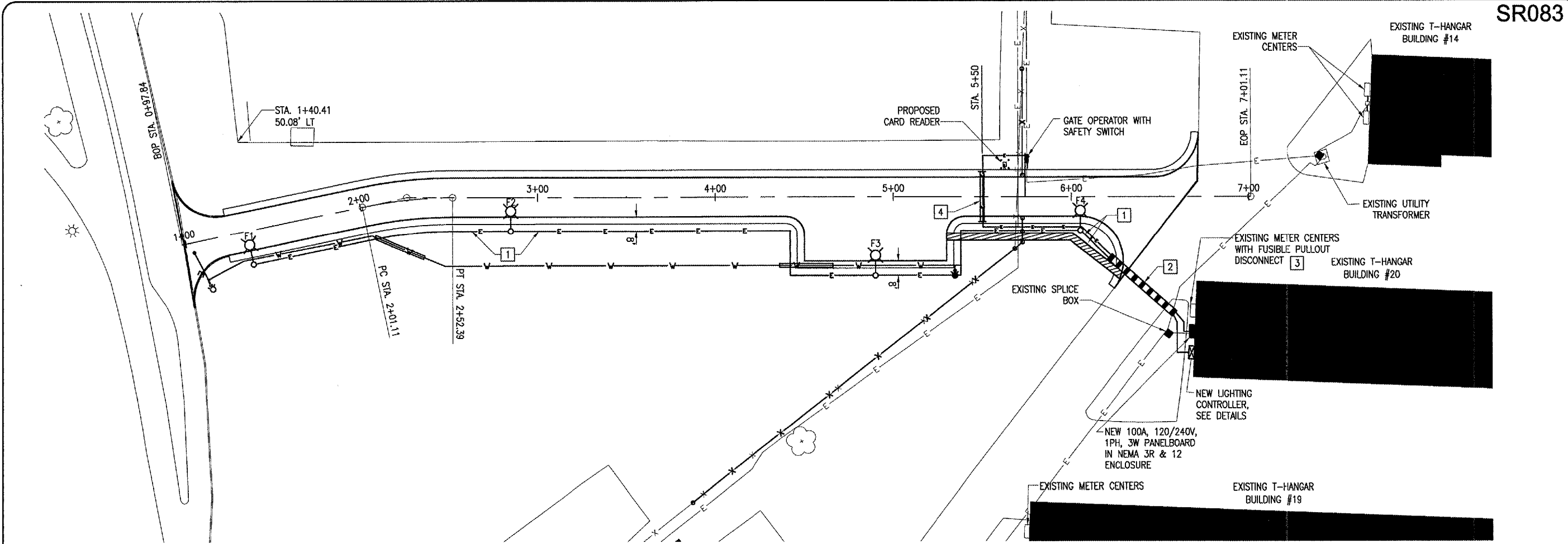
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File Name R-131WLDWG	TLW	03/08/04
Scale NO. TO SCALE	WJM	06/23/04
Date 03/08/04		
LAYOUT		
DRAWN		
REVIEWED		



Hanson Professional Services Inc.
1825 South Main Street
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CONSTRUCT T-HANGAR ACCESS ROAD

PROPOSED WATERLINE DETAILS



LIGHTING FIXTURE SCHEDULE

FIXT. TYPE	DESCRIPTION	MANUFACTURER & CATALOG NO.	LAMPS/ WATTS	VOLTS	MOUNTING	REMARKS
F1	HID ARCHITECTURAL AREA LIGHT, RUGGED ALUMINUM HOUSING, EXTRUDED WELDED DOOR FRAME, ANODIZED, SEGMENTED TYPE 2 ROADWAY OPTICS, QUAD VOLTAGE HPF CWA TYPE BALLAST, GASKETED AND VENTED TO IP-64 STANDARDS, UL LISTED FOR WET LOCATIONS, DOUBLE FUSE, DARK BRONZE CORROSION RESISTANT FINISH.	LITHONIA: AS2-250M-SR2-240-RPA-ASKMA2-DF-CR OR APPROVED EQUAL	1-250W MH ANSI CODE NO: M58, 295 TOTAL INPUT WATTS	240	MOUNT ON 30'-0" TAPERED ROUND STEEL POLE	POLE TO HAVE A MINIMUM 7 GAUGE WALL THICKNESS WITH AN EPA RATING OF 17.5 AT 100 MPH WIND SPEED WITH A 1.3 GUST FACTOR LITHONIA: RTS 30 8-0F OR EQUAL PROVIDE VIBRATION DAMPERS
F2						
F3						
F4						

ELECTRICAL KEYED NOTES:

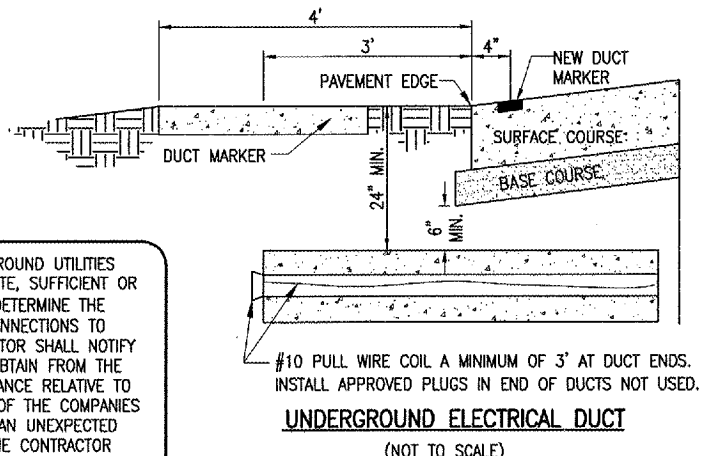
- 1 3/C #8 XLP-USE, 600V, UG CABLE IN UNIT DUCT, ITEM AR108658.
- 2 4" DUCT INSTALLED BY DIRECTIONAL BORING METHOD (48 L.F.), ITEM AR110014.
- 3 USE EXISTING SPARE METER BASE FOR NEW ELECTRIC SERVICE FOR PANELBOARD FEED. FURNISH AND INSTALL 60 AMP, 2P SERVICE BREAKER.
- 4 2-WAY CONCRETE ENCASED DUCT (28 L.F.), ITEM AR110502.

SCHEDULE OF LIGHTS

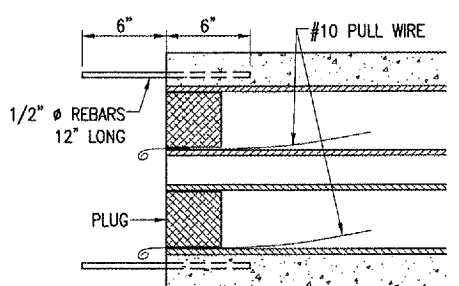
FIXTURE	STATION	OFFSET
F1	1+35	19' RT
F2	2+85	19' RT
F3	4+90	44' RT
F4	6+05	19' RT

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 THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION. THE ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY SUCH MAINS AND SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.

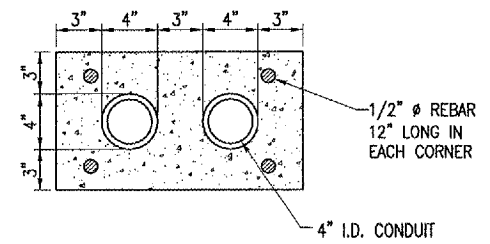
CALL J.U.L.I.E. FOR UTILITY INFORMATION AT 1-800-892-0123.



UNDERGROUND ELECTRICAL DUCT
(NOT TO SCALE)



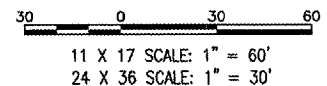
TYPICAL SECTION
(NOT TO SCALE)



2-DUCT BANK
(NOT TO SCALE)

LEGEND

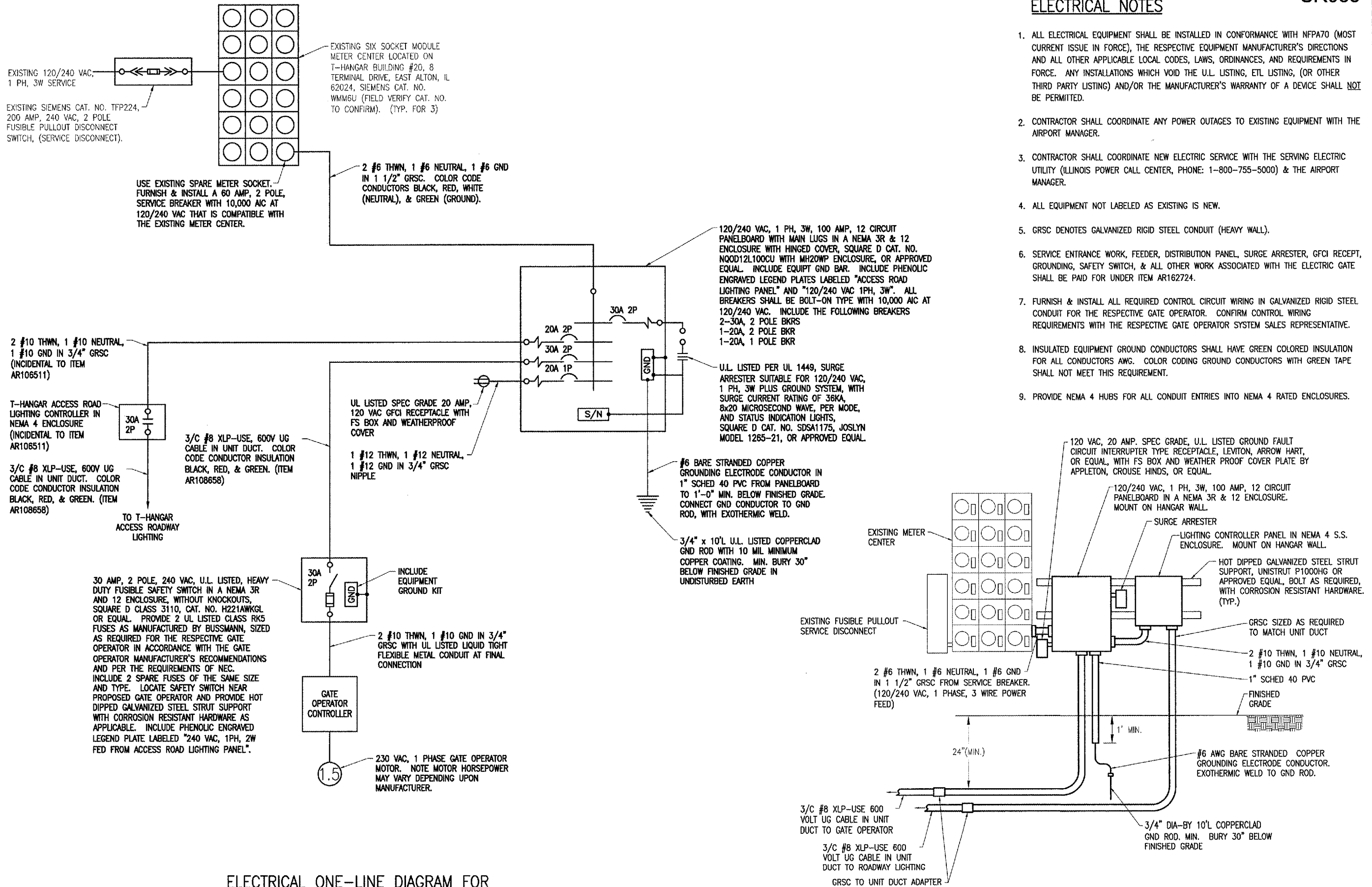
- PROPOSED LIGHT FIXTURE AND POLE, SEE LIGHTING FIXTURE SCHEDULE
- PROPOSED UNDERGROUND ELECTRICAL CABLE IN UNIT DUCT
- EXISTING UNDERGROUND ELECTRICAL CABLE IN UNIT DUCT
- PROPOSED LIGHTING CONTROLLER
- PROPOSED PANELBOARD
- PROPOSED 2-WAY CONCRETE ENCASED DUCT
- PROPOSED 4" DUCT, INSTALLED BY DIRECTIONAL BORE
- EXISTING WATER LINE



FEB 15, 2005 11:42 AM DPE I:\AIRPORTS\STLOUIS\837-04RD\AIRPORT\SHEETS\R-141ELE.DWG - Layout1	Project No. 837-04RDD File Name R-141ELE.DWG Scale 1"=30' Date 03/08/04	LAYOUT TLW 03/08/04 DRAWN TLW 03/08/04 REVIEWED WJM 06/23/04	ST. LOUIS REGIONAL AIRPORT EAST ALTON, ILLINOIS IL PROJ: ALN-3355
			Hanson Professional Services Inc. 1525 Schmale Springfield, Illinois 62703-2886 Offices Nationwide
CONSTRUCT T-HANGAR ACCESS ROAD PROPOSED ROADWAY LIGHTING PLAN AND ELECTRICAL DUCT DETAILS			15 15 of 34 sheets

ELECTRICAL NOTES

1. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN CONFORMANCE WITH NFPA70 (MOST CURRENT ISSUE IN FORCE), THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES, AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE U.L. LISTING, ETL LISTING, (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE SHALL NOT BE PERMITTED.
2. CONTRACTOR SHALL COORDINATE ANY POWER OUTAGES TO EXISTING EQUIPMENT WITH THE AIRPORT MANAGER.
3. CONTRACTOR SHALL COORDINATE NEW ELECTRIC SERVICE WITH THE SERVING ELECTRIC UTILITY (ILLINOIS POWER CALL CENTER, PHONE: 1-800-755-5000) & THE AIRPORT MANAGER.
4. ALL EQUIPMENT NOT LABELED AS EXISTING IS NEW.
5. GRSC DENOTES GALVANIZED RIGID STEEL CONDUIT (HEAVY WALL).
6. SERVICE ENTRANCE WORK, FEEDER, DISTRIBUTION PANEL, SURGE ARRESTER, GFCI RECEPT, GROUNDING, SAFETY SWITCH, & ALL OTHER WORK ASSOCIATED WITH THE ELECTRIC GATE SHALL BE PAID FOR UNDER ITEM AR162724.
7. FURNISH & INSTALL ALL REQUIRED CONTROL CIRCUIT WIRING IN GALVANIZED RIGID STEEL CONDUIT FOR THE RESPECTIVE GATE OPERATOR. CONFIRM CONTROL WIRING REQUIREMENTS WITH THE RESPECTIVE GATE OPERATOR SYSTEM SALES REPRESENTATIVE.
8. INSULATED EQUIPMENT GROUND CONDUCTORS SHALL HAVE GREEN COLORED INSULATION FOR ALL CONDUCTORS AWG. COLOR CODING GROUND CONDUCTORS WITH GREEN TAPE SHALL NOT MEET THIS REQUIREMENT.
9. PROVIDE NEMA 4 HUBS FOR ALL CONDUIT ENTRIES INTO NEMA 4 RATED ENCLOSURES.



ELECTRICAL ONE-LINE DIAGRAM FOR GATE OPERATOR & ACCESS ROAD LIGHTING

PANELBOARD & LIGHTING CONTROLLER ELEVATION

DATE	REVISION	BY

ST. LOUIS REGIONAL AIRPORT
 EAST ALTON, ILLINOIS
 IL PROJ: ALN-3355

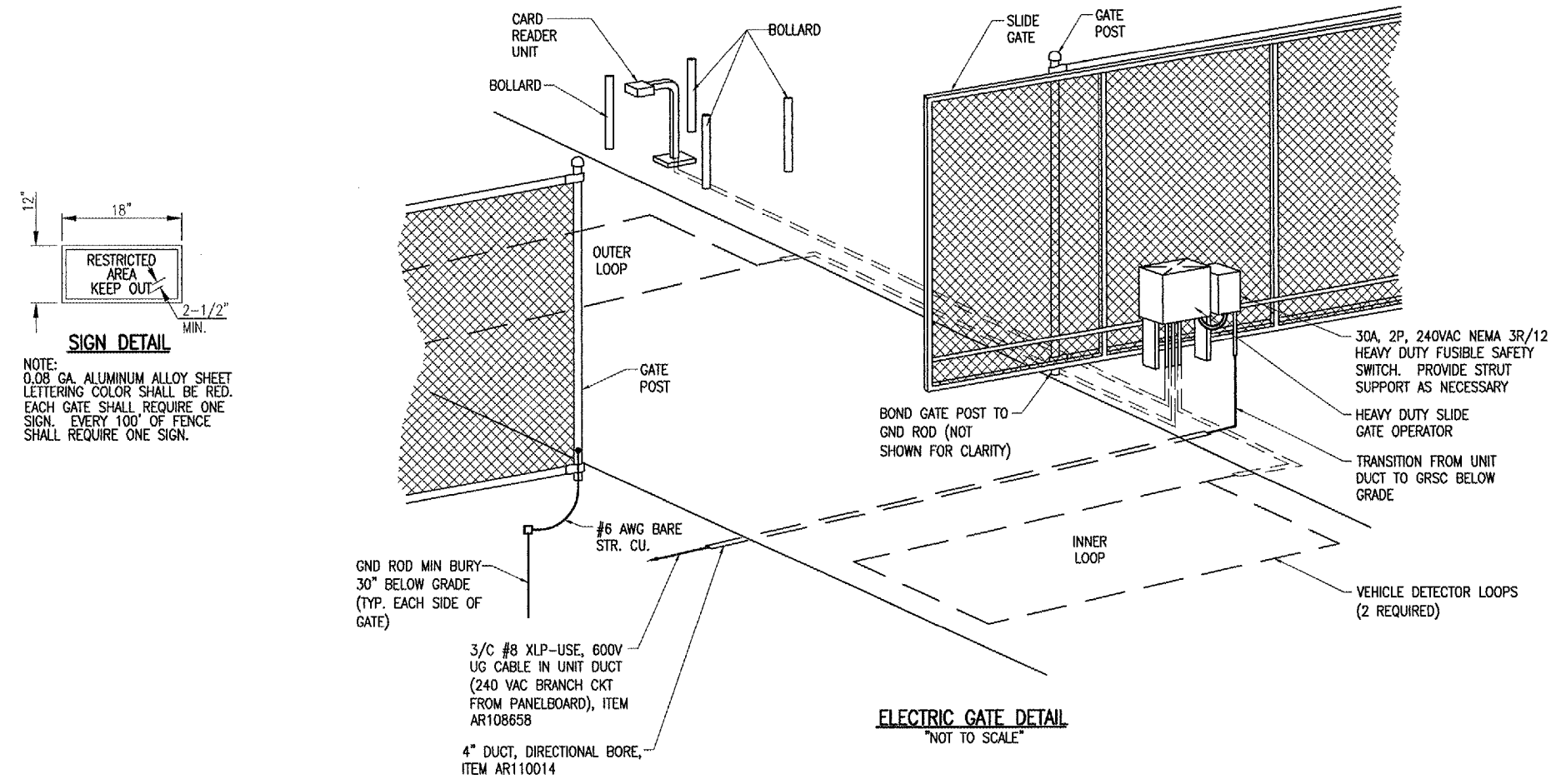
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837-04RDD	03/29/04	KNL	WJM
R-541ELE.DWG	05/29/04		
Scale: NONE			

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CONSTRUCT T-HANGAR ACCESS ROAD
 ONE-LINE FOR GATE OPERATOR AND ROADWAY

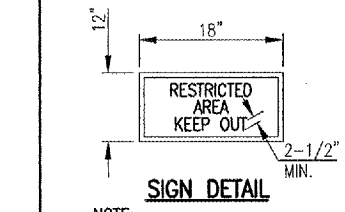
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VEHICLE DETECTOR LOOPS		
GATE SIZE	LOOP SIZE	NO. OF TURNS
8' TO 12'	4' X 6'	3 TURNS
12' TO 16'	4' X 10'	2 TURNS
16' TO 20'	4' X 14'	2 TURNS
20' TO 24'	4' X 18'	2 TURNS
24' TO 30'	6' X 22'	2 TURNS
30' TO 34'	6' X 26'	2 TURNS



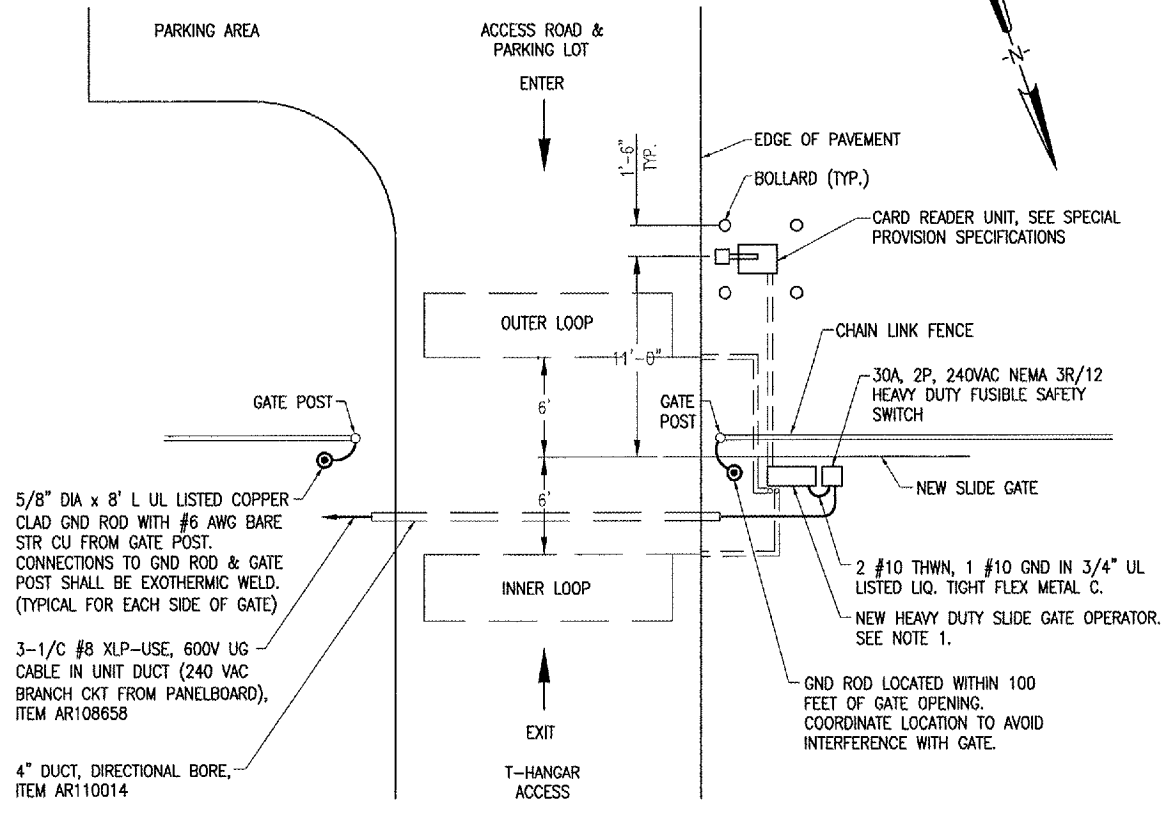
NOTES:

- THE OPERATOR SHALL BE A HYDRAULIC SLIDE GATE OPERATOR AS MANUFACTURED BY B&B ARMOR MODEL LXL-15VP (240 VAC, 1 PHASE), OR APPROVED EQUAL. SEE SPECIAL PROVISION SPECS.
- ALL DIMENSIONS AND LAYOUT INFORMATION SHOWN SHOULD BE ADJUSTED AS RECOMMENDED BY THE MANUFACTURER.
- CONCRETE FOOTINGS SHALL BE PROVIDED FOR THE SLIDE GATE OPERATOR AND THE CARD READER UNIT. THESE FOOTINGS SHALL BE 36" IN DEPTH AND OF THE SIZE RECOMMENDED BY THE MANUFACTURER.
- 1" GRSC CONDUIT WITH CONTROL WIRING WILL BE REQUIRED BETWEEN THE SLIDE GATE OPERATOR AND THE CARD READER UNIT AND BETWEEN THE SLIDE GATE OPERATOR AND THE DETECTOR LOOPS. CONFIRM CONTROL WIRING REQUIREMENTS WITH THE RESPECTIVE GATE OPERATOR SYSTEM MFR SALES REPRESENTATIVE. THE MINIMUM BURYING DEPTH IS 24".
- THE PIPE BOLLARDS SHALL BE 4" DIA. CONCRETE FILLED, STEEL PIPE AND SHALL EXTEND FROM THE TOP OF THE CARD CONTROL UNIT TO A DEPTH OF 48" BELOW THE GROUND LINE.
- THE PIPE BOLLARDS BELOW GROUND SHALL BE ENCASED IN 12" OF P-610 CONCRETE. THE PIPE SHALL BE PAINTED WITH A YELLOW ENAMEL PAINT FINISH.
- THE SLIDING GATE SHALL BE CANTILEVER TYPE OF THE SIZE CALLED FOR ON THE PLANS, SHALL HAVE AN ENCLOSED ROLLER ASSEMBLY WHICH IS PROTECTED FROM FREEZING RAIN AND SNOW, AND SHALL BE AS MANUFACTURED BY ANCHOR FENCE, TYMETAL CORPORATION OR APPROVED EQUAL.
- AS PART OF THIS ITEM 250 CARDS FOR THE GATE CARD READER SHALL BE PROVIDED BY THE CONTRACTOR. COORDINATE PROGRAMMING OF CARDS WITH THE AIRPORT MANAGER.
- THE GATE MANUFACTURER SHALL CONSTRUCT A GUARD FOR EACH ROLLER TO PREVENT THE INSERTION OF AN OBJECT BETWEEN THE ROLLER AND THE GATE. THIS GUARD WILL BE APPROVED BY THE AIRPORT MANAGER PRIOR TO INSTALLATION OF THE SLIDE GATE.
- PAYMENT FOR THE CARD OPERATED SLIDE GATE SHALL BE ON A LUMP SUM BASIS AND SHALL BE FULL COMPENSATION FOR ALL MATERIALS, EQUIPMENT, CABLE IN CONDUIT, DUCT, OR UNIT DUCT, GROUNDING, LABOR AND INCIDENTALS REQUIRED TO INSTALL THE GATE COMPLETE AND IN OPERATING CONDITION.
- THE SLIDE GATE OPERATOR IS TO BE MOUNTED ON A STEEL PLATFORM LOCATED APPROXIMATELY TWO FEET ABOVE THE GROUND. SHOP DRAWING APPROVAL IS REQUIRED.
- INCLUDE UL LISTED SECONDARY SURGE ARRESTER FOR EACH GATE OPERATOR SUITABLE FOR USE ON 240 VAC, 1 PHASE, 2 WIRE PLUS GROUND SYSTEM, WITH SURGE CURRENT RATING OF 100 KA PER MODE, LIFETIME PRODUCT REPLACEMENT WARRANTY, AND AS RECOMMENDED BY THE GATE OPERATOR MANUFACTURER'S REPRESENTATIVE. SEE SPECIFICATIONS.
- INCLUDE LOW VOLTAGE LINE PROTECTOR FOR CARD READER UNIT SUITABLE FOR USE ON THE RESPECTIVE CONTROL VOLTAGE SYSTEM, WITH SURGE CURRENT RATING OF 3000 AMPS, DITEK MODEL DTK-4LVLP-CR, OR APPROVED EQUAL.
- ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 (MOST CURRENT ISSUE IN FORCE), THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS ORDINANCES, AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE U.L. LISTINGS (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE SHALL NOT BE PERMITTED.
- CONTRACTOR SHALL COORDINATE ANY POWER OUTAGES TO EXISTING EQUIPMENT WITH THE RESPECTIVE OWNER & THE AIRPORT MANAGER.
- PROVIDE A WEATHERPROOF ENGRAVED PHENOLIC OR PLASTIC LEGEND PLATE FOR THE SAFETY SWITCH AT THE RESPECTIVE GATE OPERATOR NOTING THE RESPECTIVE POWER SOURCE CIRCUIT AND LOCATION.
- ALL CONCRETE USED FOR INSTALLING THE GATE OPERATOR, CARD READER & FENCE SHALL MEET THE REQUIREMENTS OF STRUCTURAL PORTLAND CEMENT CONCRETE ITEM AR610.



SIGN DETAIL
NOTE:
0.08 GA. ALUMINUM ALLOY SHEET
LETTERING COLOR SHALL BE RED.
EACH GATE SHALL REQUIRE ONE
SIGN. EVERY 100' OF FENCE
SHALL REQUIRE ONE SIGN.

3/C #8 XLP-USE, 600V
UG CABLE IN UNIT DUCT
(240 VAC BRANCH CKT
FROM PANELBOARD), ITEM
AR108658
4" DUCT, DIRECTIONAL BORE,
ITEM AR110014



5/8" DIA x 8' L UL LISTED COPPER
CLAD GND ROD WITH #6 AWG BARE
STR CU FROM GATE POST.
CONNECTIONS TO GND ROD & GATE
POST SHALL BE EXOTHERMIC WELD.
(TYPICAL FOR EACH SIDE OF GATE)
3-1/C #8 XLP-USE, 600V UG
CABLE IN UNIT DUCT (240 VAC
BRANCH CKT FROM PANELBOARD),
ITEM AR108658
4" DUCT, DIRECTIONAL BORE,
ITEM AR110014

ELECTRIC GATE PLAN
"NOT TO SCALE"

DATE	REVISION	BY

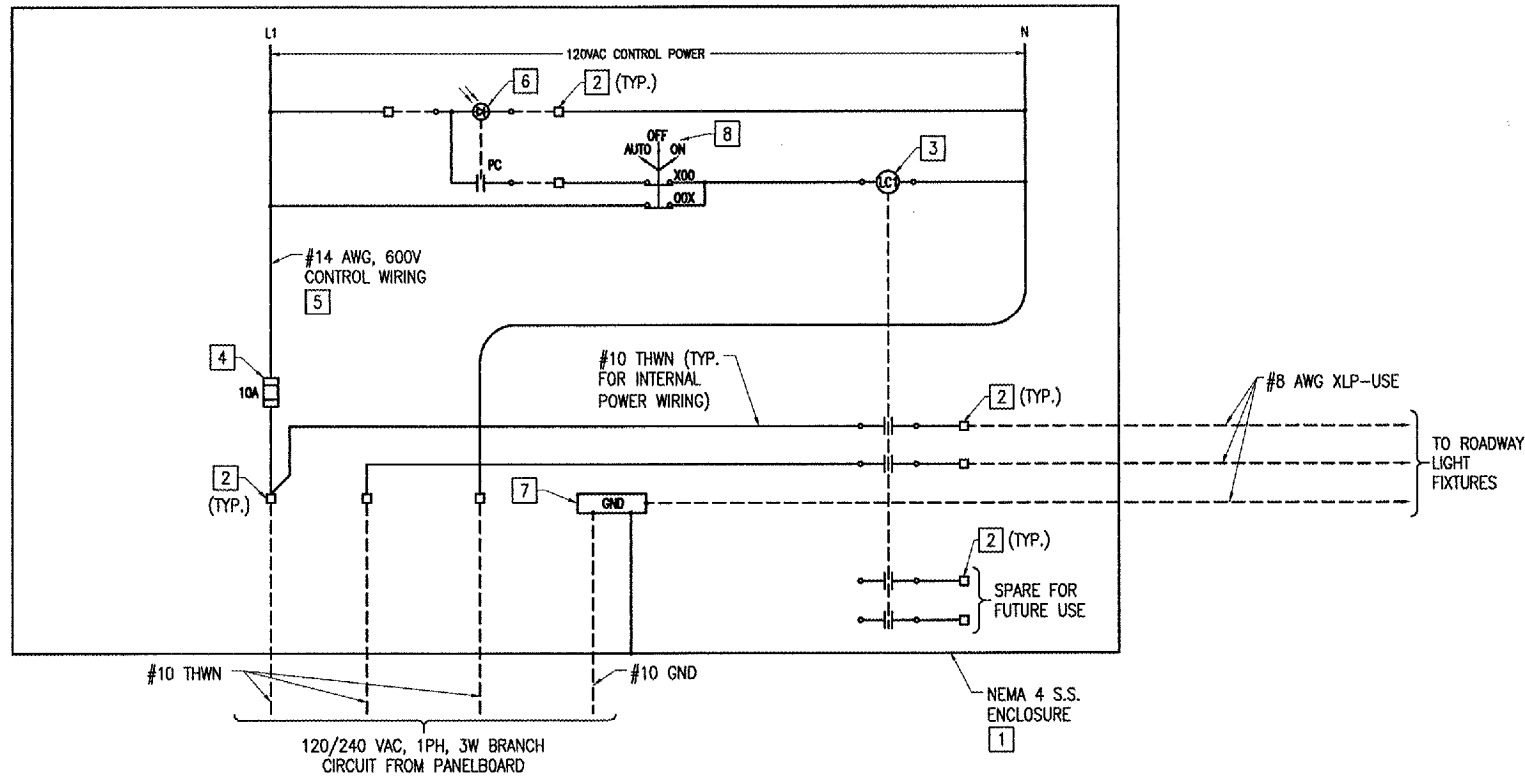
ST. LOUIS REGIONAL AIRPORT
St. Louis Regional Airport
EAST ALTON, ILLINOIS
IL PROJ.: ALN-3355

IEI Project No. 837-04RDD	Element R-542ELE.DWG	Scale NONE	Date 03/08/04
LAYOUT	KNL	03/29/04	
DRAWN	WV	03/29/04	
REVIEWED	WJM	06/23/04	

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CONSTRUCT T-HANGER
ACCESS ROAD
ELECTRIC GATE DETAILS

FEB 15, 2005 11:43 AM DPE
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T-HANGAR ACCESS ROAD LIGHTING CONTROLLER

NOTES:

- 1. LIGHTING CONTROLLER SHALL BE INCIDENTAL TO THE INSTALLATION OF ITEM AR106511, TYPE A AREA LIGHT POLE WITH 1 FIXTURE.

KEYED NOTES:

- 1. UL LISTED NEMA 4 STAINLESS STEEL CONTROL PANEL ENCLOSURE ADEQUATELY SIZED TO HOLD THE RESPECTIVE COMPONENTS AND EQUIPMENT. INCLUDE LEGEND PLATES LABELED "T-HANGAR ACCESS ROAD LIGHTING CONTROLLER", "120/240 VAC, 1 PHASE, 3 WIRE", AND "CAUTION DISCONNECT POWER BEFORE SERVICING". LEGEND PLATES SHALL BE WEATHERPROOF AND ABRASION RESISTANT PHENOLIC MATERIALS. LETTERING SHALL BE BLACK ON WHITE BACKGROUND, UNLESS OTHERWISE NOTED.
- 2. TERMINAL BLOCKS FOR POWER & CONTROL WIRING SHALL BE 600 VOLT, WITH AMPERAGE RATINGS IN CONFORMANCE WITH NEC TABLE 310-16 USING 75 DEGREE C WIRE FOR THE RESPECTIVE WIRE LUG RANGE, BOX LUG TYPE, SQUARE D CLASS 9080, TYPE G, OR APPROVED EQUAL.
- 3. LIGHTING CONTACTOR: LIGHTING CONTACTOR SHALL BE 30 AMP, 4-POLE, ELECTRICALLY HELD CONTACTOR SUITABLE OF FOR LIGHTING LOADS, WITH 120 VAC, 60 HZ COIL, SQUARE D CLASS 8903, TYPE SMO3VD2, OR APPROVED EQUAL.
- 4. FUSING FOR CONTROL WIRING SHALL BE 10 AMP, 600 VAC, BUSSMANN CATALOG FNQ-R-10, OR APPROVED EQUAL, WITH FUSE BLOCKS, WITH BOX LUG TERMINALS, SIZED AS REQUIRED FOR THE RESPECTIVE APPLICATION. INCLUDE HARDWARE FOR MOUNTING. PROVIDE ONE BOX (5 MINIMUM QUANTITY) OF EACH TYPE AND SIZE OF FUSE, UPON COMPLETION OF THE JOB FOR USE AS SPARES.
- 5. CONTROL WIRING SHALL BE SIZED AS REQUIRED PER NEC MINIMUM #14 AWG TYPE MTW, THW, OR THWN COPPER.
- 6. PHOTOCELL RATED 2000 WATTS AT 120 VAC, WITH OFF DELAY, AND -40 DEGREE C TO 60 DEGREE C OPERATING TEMPERATURE RANGE, TORK MODEL NO. 2101, INTERMATIC MODEL K4121M, OR APPROVED EQUAL. PROVIDE MOUNTING HARDWARE, JUNCTION BOX AND WATERTIGHT HUBS FOR INTERFACE TO THE LIGHTING CONTROLLER ENCLOSURE.
- 7. EQUIPMENT GROUNDING BAR: PROVIDE A GROUNDING BAR MOUNTED AND BONDED INSIDE THE PANEL ENCLOSURE, ADEQUATELY SIZED TO ACCOMMODATE ALL GROUND CONDUCTORS TO OR FROM THE LIGHTING CONTROLLER.
- 8. THREE-POSITION MAINTAINED "HAND-OFF-AUTO" SELECTOR SWITCH, HEAVY DUTY, WATERTIGHT/OIL TIGHT (NEMA 4/13), SQUARE D CLASS 9001, TYPE KS43FBH13 OR APPROVED EQUAL. INCLUDE LEGEND PLATE LABELED "AUTO-OFF-ON". MOUNT SELECTOR SWITCH ON PANEL INTERIOR WITH MOUNTING BRACKET.

REVISION	DATE	BY

ST. LOUIS REGIONAL AIRPORT

St. Louis Regional
AIRPORT

EAST ALTON, ILLINOIS

ILL. PROJ.: ALN-3355

I&L Project No. 837-04R00 Filename R-544ELE.DWG Scale NONE Date 03/08/04	LAYOUT KNL 03/31/04 DRAWN MV 04/02/04 REVIEWED WJM 06/23/04
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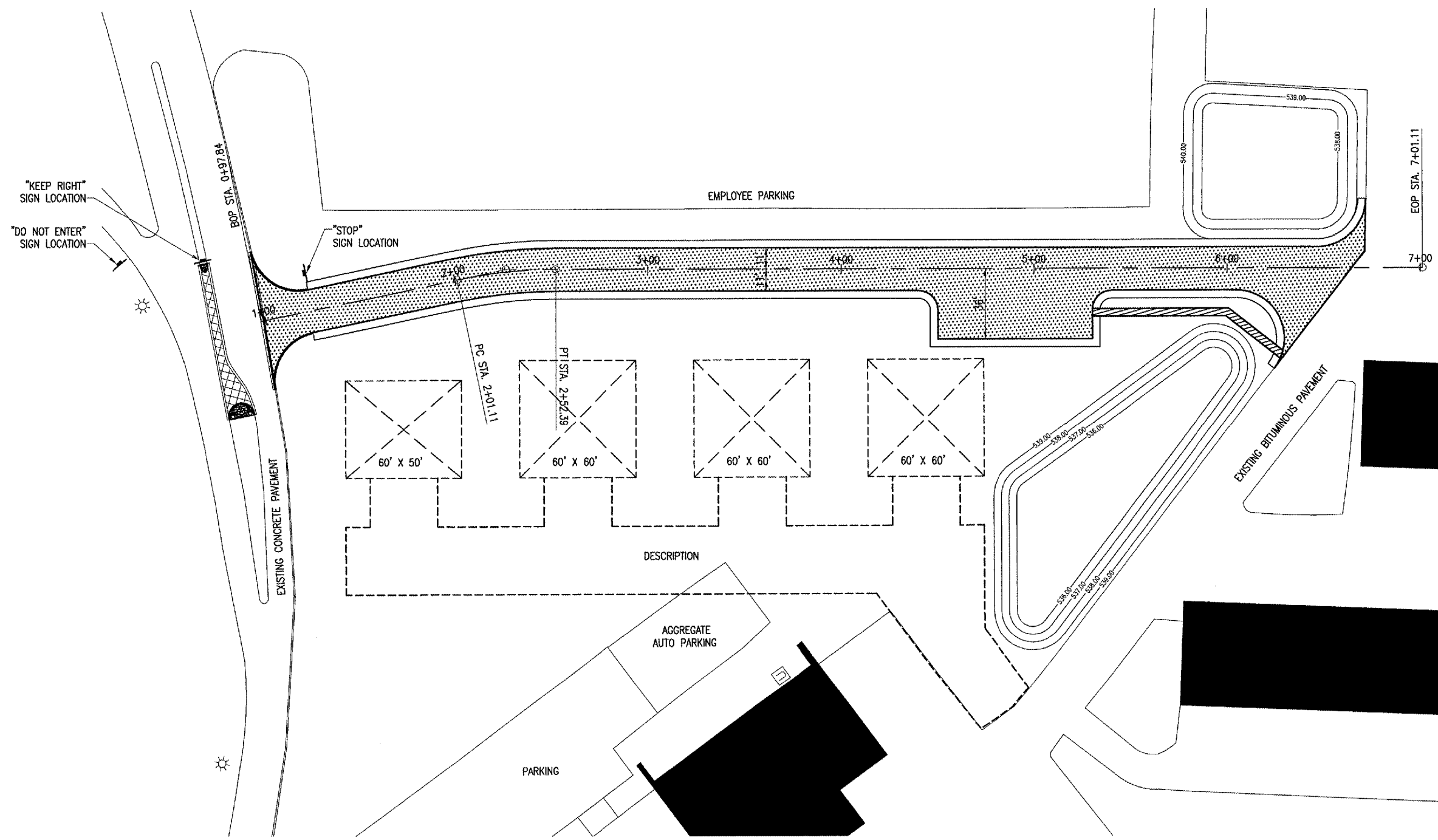
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CONSTRUCT T-HANGAR ACCESS ROAD

PROPOSED ACCESS ROAD LIGHTING CONTROLLER

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SIGNING NOTES:

ALL ROADWAY SIGNS WILL BE PLACED AT LOCATIONS APPROVED BY THE VILLAGE ENGINEER. PLACEMENT AND CONSTRUCTION OF THE SIGNS WILL BE DONE IN COMPLIANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AS WELL AS THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS. IN THE EVENT OF A CONFLICT IN CONSTRUCTION REQUIREMENTS OR PROCEDURE, THE MORE STRINGENT POLICY WILL GOVERN.

SIGN DESIGNATION NUMBERS ARE AS DEFINED BY THE FEDERAL HIGHWAY ADMINISTRATION - MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE SIGN LOCATIONS AS SHOWN ON THIS SHEET ARE A DESIGN ESTIMATION. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR WILL ENSURE, UNDER GUIDANCE OF THE VILLAGE OF BETHLETH, THAT ALL NECESSARY SIGNS ARE PLACED TO PROVIDE A SAFE ROADWAY SYSTEM. ADDITIONAL SIGNS REQUIRED WILL BE PAID FOR UNDER ITEM AR910200 - "ROADWAY SIGNAGE" PER EACH.

SIGN QUANTITIES					
DESCRIPTION	POST TYPE	POSTS	PANELS	UNIT	QUANTITY
STOP SIGN	WOOD	1	1	EACH	1
KEEP RIGHT	WOOD	1	1	EACH	1
DO NOT ENTER	WOOD	1	1	EACH	1
TOTAL					3

- LEGEND**
- EXISTING CONDITIONS
 - PROPOSED IMPROVEMENTS
 - EXISTING BUILDINGS
 - FUTURE BUILDINGS
 - FUTURE PAVEMENT
 - PROPOSED MEDIAN REMOVAL
 - PROPOSED 4' SIDEWALK
 - PROPOSED SIGN LOCATION

DATE	REVISION	BY

ST. LOUIS REGIONAL AIRPORT
St. Louis Regional
 EAST ALTON, ILLINOIS
 I.L. PROJ.: ALN-3355

Project No.	837-04RDD
Filename	R-101SIGN.DWG
Scale	1" = 30'
Date	03/08/04

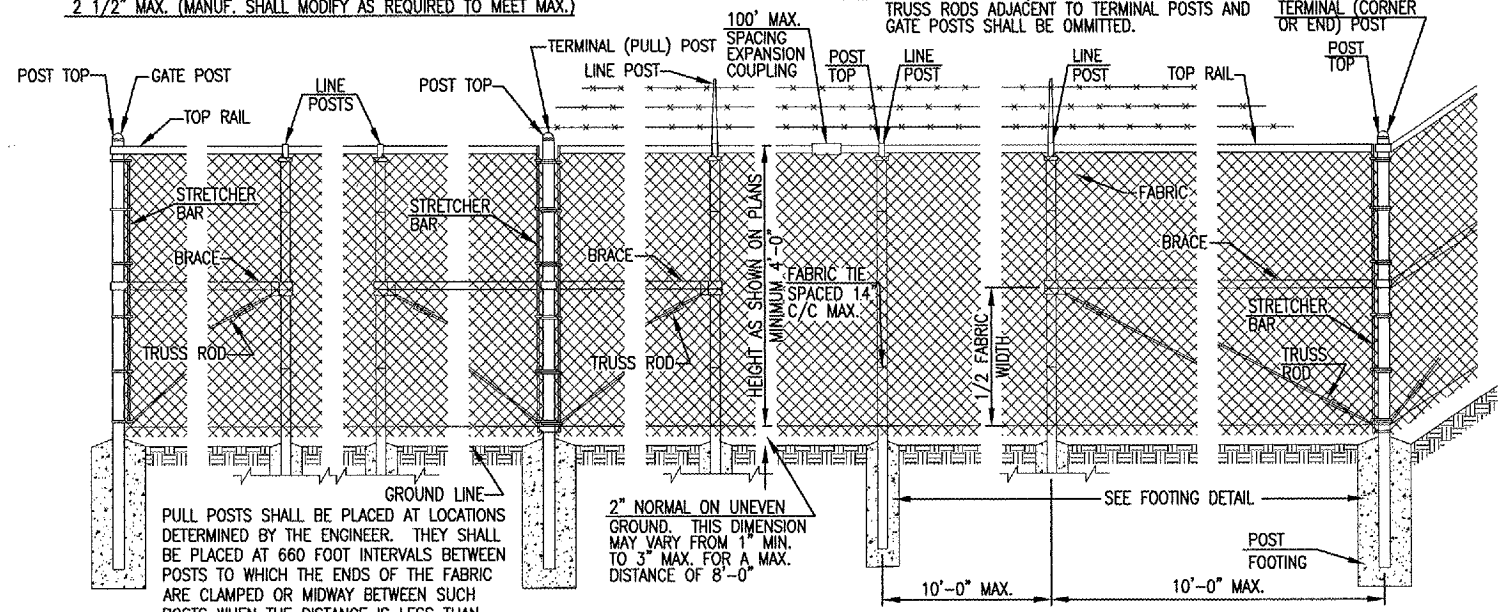
LAYOUT	JAC	03/08/04
DRAWN	TLW	03/08/04
REVIEWED	WJM	06/23/04

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CONSTRUCT T-HANGAR
 ACCESS ROAD
 SIGNAGE PLAN

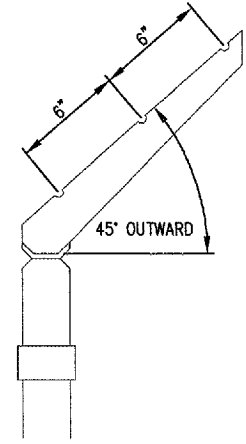
2 1/2" MAX. (MANUF. SHALL MODIFY AS REQUIRED TO MEET MAX.)

NOTE: FOR 4-FOOT FENCE, THE HORIZONTAL BRACES AND TRUSS RODS ADJACENT TO TERMINAL POSTS AND GATE POSTS SHALL BE OMITTED.

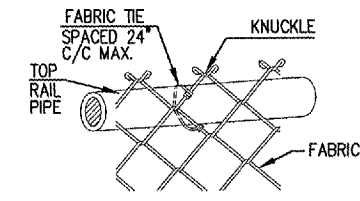


PULL POSTS SHALL BE PLACED AT LOCATIONS DETERMINED BY THE ENGINEER. THEY SHALL BE PLACED AT 660 FOOT INTERVALS BETWEEN POSTS TO WHICH THE ENDS OF THE FABRIC ARE CLAMPED OR MIDWAY BETWEEN SUCH POSTS WHEN THE DISTANCE IS LESS THAN 1320' AND GREATER THAN 660'.

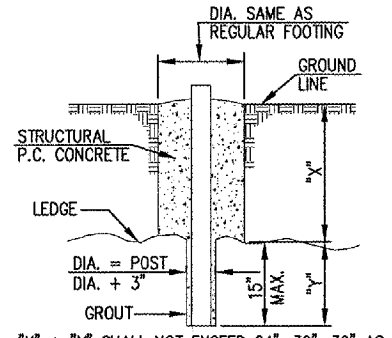
2" NORMAL ON UNEVEN GROUND. THIS DIMENSION MAY VARY FROM 1" MIN. TO 3" MAX. FOR A MAX. DISTANCE OF 8'-0"



DETAIL - BARBED WIRE ARM OF LINE POST (ONLY FOR OVER 48" FENCE)

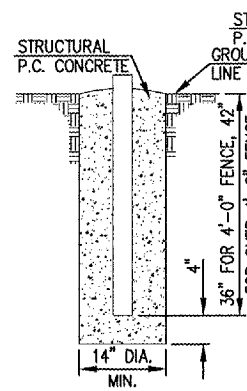


METHOD OF TYING FABRIC TO PIPE

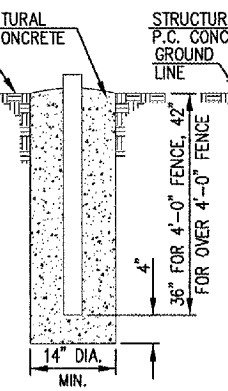


"X" + "Y" SHALL NOT EXCEED 24", 30", 36" AS APPLICABLE. WHEN "X" IS 0" TO 9", 15", OR 21" "Y" = 15", AND THE POST SHALL BE SHORTENED AS REQUIRED WHEN "X" EXCEEDS 9", 15", OR 21", "Y" SHALL BE DECREASED CORRESPONDINGLY.

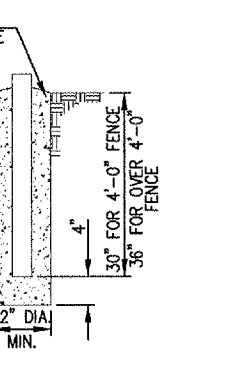
FOOTING FOR POST WHEN ROCK LEDGE IS ENCOUNTERED



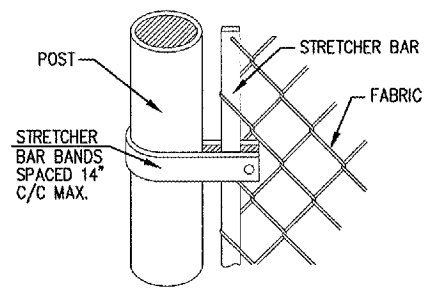
FOOTING FOR TERMINAL POST



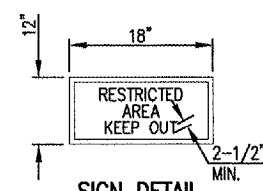
FOOTING FOR GATE POST



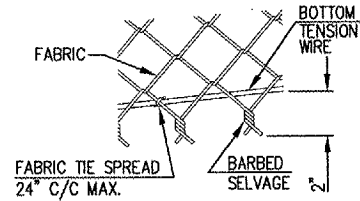
FOOTING FOR LINE POST



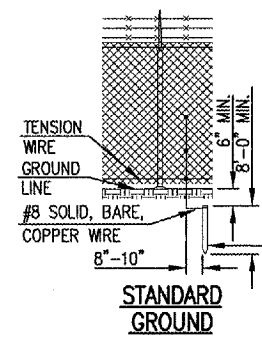
METHOD OF FASTENING STRETCHER BAR TO POST



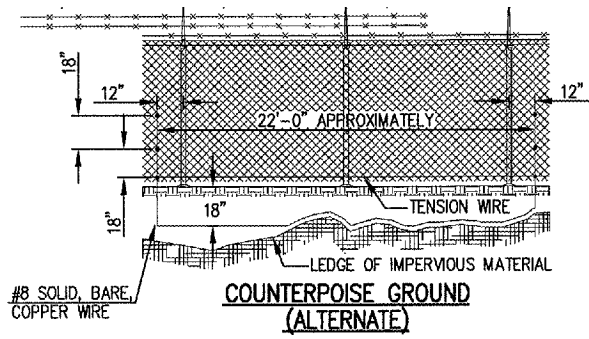
NOTE: 0.08 GA. ALUMINUM ALLOY SHEET LETTERING COLOR SHALL BE RED. EACH GATE SHALL REQUIRE ONE SIGN. EVERY 100' OF FENCE SHALL REQUIRE ONE SIGN.



METHOD OF TYING FABRIC TO TENSION WIRE



STANDARD GROUND

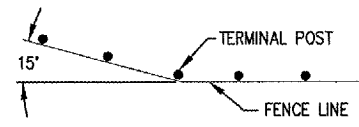


COUNTERPOISE GROUND (ALTERNATE)

PROTECTIVE ELECTRICAL GROUND

GENERAL NOTE:

CONTINUOUS FENCE SHALL BE GROUNDED AT INTERVALS NOT EXCEEDING 1000', EXCEPT THERE SHALL BE A GROUND NOT EXCEEDING 100 FT. FROM A GATE IN EACH SECTION OF THE FENCE ADJACENT TO THE GATE. FENCE UNDER A POWER LINE SHALL BE GROUNDED BY THREE GROUNDS, ONE DIRECTLY UNDER THE CROSSING AND ONE ON EACH SIDE, 25 TO 50 FT. AWAY. A SINGLE GROUND SHALL BE LOCATED DIRECTLY UNDER EACH TELEPHONE WIRE OR CABLE CROSSING. THE COUNTERPOISE SHALL BE USED ONLY WHERE IT IS IMPOSSIBLE TO DRIVE A GROUND ROD BECAUSE OF AN IMPERVIOUS EARTH STRUCTURES. THE GOUND WIRE SHALL BE CONNECTED TO THE FABRIC AND THE GROUND ROD BY A MECHANICAL CLAMP OF CAST BRONZE BODY AND BRONZE OR STAINLESS STEEL BOLTS AND WASHERS. WHEN A TENSION WIRE IS REQUIRED, THE BOTTOM CONNECTION OF THE GROUND WIRE SHALL BE MADE TO THE TENSION WIRE.



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

POST & BRACE TABLE		
DECRPTION	DIA. - INCH	WT. LBS./FT.
LINE POST	2.375	3.65
TERMINAL POST	2.875	5.79
END POST	2.875	5.79
CORNER PPST	2.875	5.79
PULL POST	2.875	5.79
GATE FRAMES	1.900	2.72
GATE POST	4.0	9.11

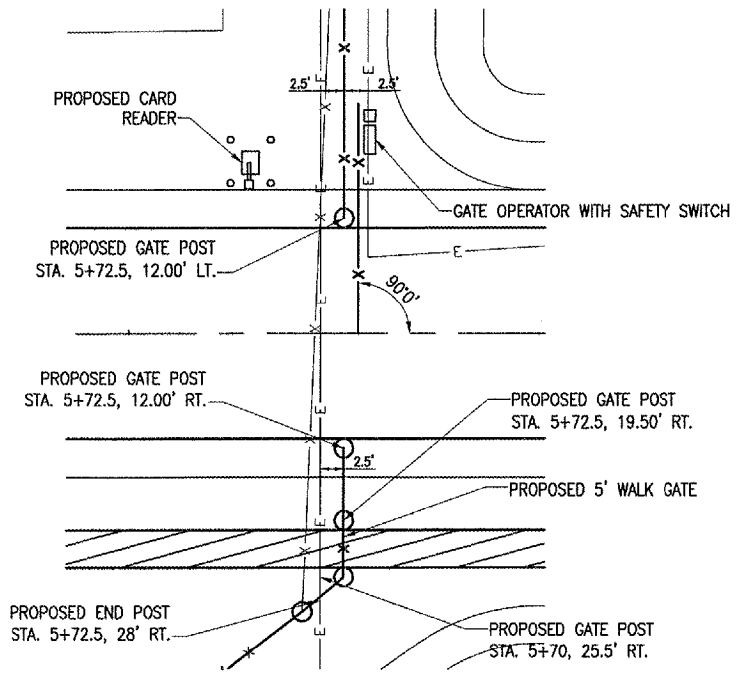
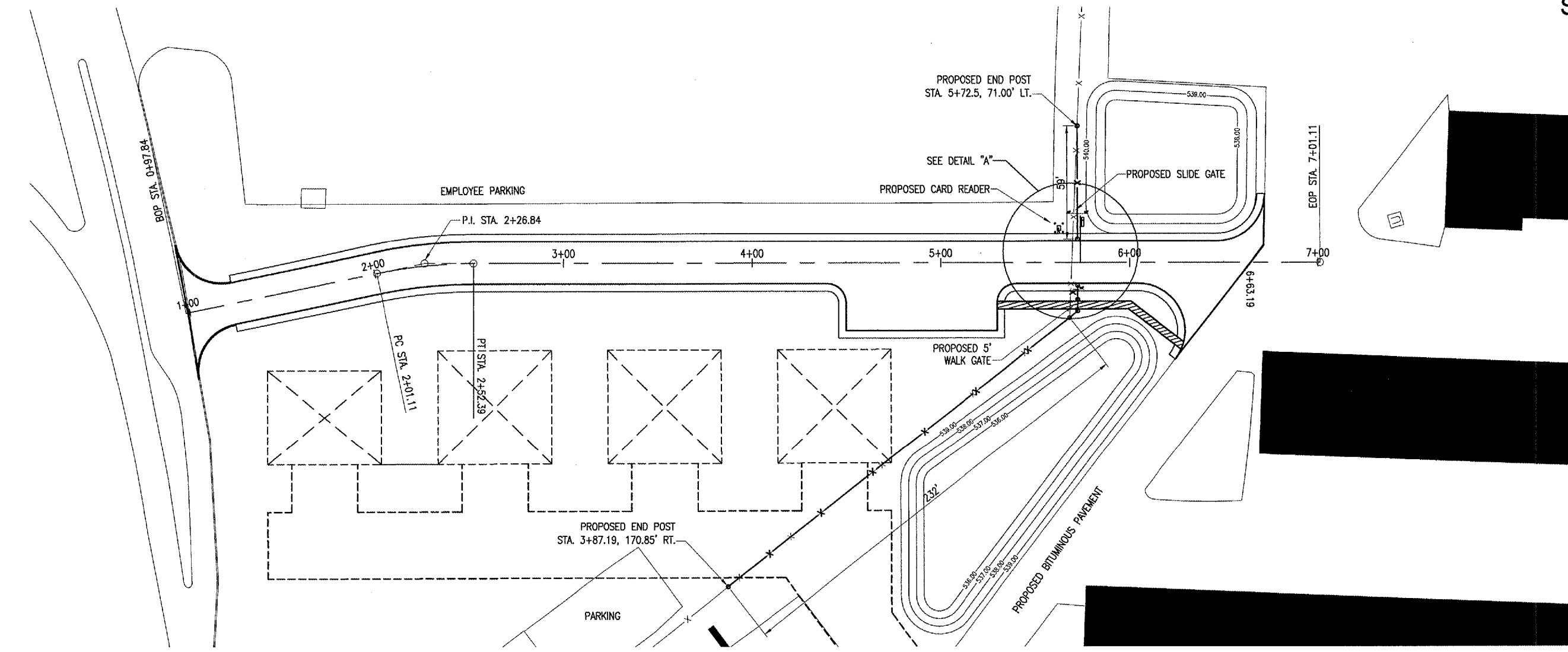
BY	
REVISION	
DATE	

ST. LOUIS REGIONAL AIRPORT
 EAST ALTON, ILLINOIS
 ILL. PROJ.: ALN-3355

HEL Project No. 837-04RDD	Scale	05/27/04
File Name R-551FEN.DWG	Scale	05/27/04
Scale	Scale	05/27/04
Date	Date	05/27/04
LAYOUT	TLW	05/27/04
DRAWN	TLW	05/27/04
REVIEWED	WJM	06/23/04

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CONSTRUCT T-HANGER ACCESS ROAD
 FENCING STANDARDS



DETAIL "A"
SCALE: 1" = 10'

FENCE REMOVAL NOTES:

THE EXISTING FENCE WILL BE REMOVED ALONG THE LIMITS OF THE PROPOSED FENCE. THE POST, FABRIC, BARBED WIRE WILL BE REMOVED. THE SALVAGED MATERIALS WILL BE TURNED OVER TO THE AIRPORT MANAGER AND STORED AT A LOCATION HE SELECTS. PROVIDING THAT THE AIRPORT MANAGER DOES NOT WANT THE SALVAGED MATERIALS, THE CONTRACTOR WILL DISPOSED OF THE MATERIALS OFF SITE.

THE REMOVAL OF THE CLASS "E" FENCE WILL BE PAID FOR BY ITEM:
AR162900 "REMOVE CLASS E FENCE" - 360 L.F.

FENCING NOTES:

THE PROPOSED CLASS "E" FENCE (8' HIGH) WITH 3 STRANDS OF BARBED WIRE WILL BE INSTALLED AT THE LOCATIONS SHOWN ON THIS SHEET AND IN ACCORDING WITH THE DETAILS SHOWN ON THIS SHEET AND IN THE SPECIAL PROVISIONS.

THE PROPOSED CLASS "E" FENCE WILL BE PAID FOR BY ITEM:
AR162508 "CLASS E FENCE 8'" - 303 L.F.

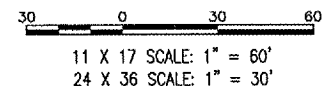
THE 5' CLASS "E" GATE WILL BE PAID FOR BY ITEM:
AR162605 "CLASS E GATE-5'" - 1 EACH

THE 24' ELECTRIC GATE WILL BE PAID FOR BY ITEM:
AR162724 "ELECTRIC GATE-24'" - 1 EACH

THE EXISTING FENCE WILL BE CONNECTED TO THE PROPOSED END POST.

AIRPORT SECURITY NOTES:

AIRPORT SECURITY IS TO BE MAINTAINED DURING THE FENCE REMOVAL CONSTRUCTION STAGE. THE CONTRACTOR WILL REMOVE ONLY THAT LENGTH OF FENCE EACH DAY THAT WILL BE REPLACED BY NEW FENCE OR SECURED WITH TEMPORARY FENCING PROVIDING SECURITY. THE AIRPORT MANAGER WILL DETERMINE THE ACCEPTABILITY OF TEMPORARY FENCING.



LEGEND

	PROPOSED PAVEMENT
	PROPOSED 4' SIDEWALK
	EXISTING FENCE
	PROPOSED FENCE REMOVAL AND REPLACEMENT

DATE	REVISION	BY

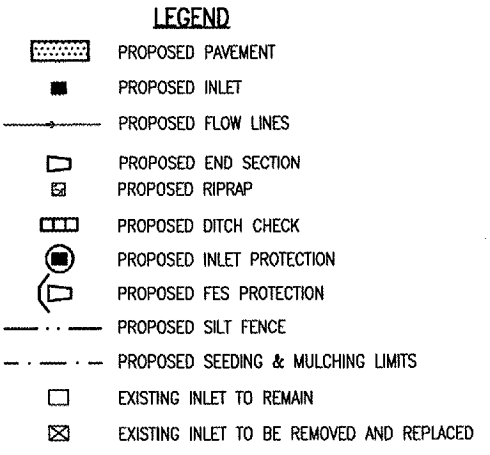
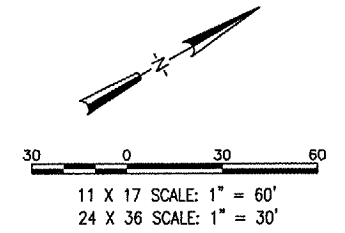
ST. LOUIS REGIONAL AIRPORT
St. Louis Regional AIRPORT
 EAST ALTON, ILLINOIS
 ILL. PROJ.: ALN-3355

HEL Project No. 837-04RDD	JAC	03/08/04
Filename R-171FEN.DWG	JAC	03/08/04
Scale 1"=30'	WJM	06/23/04
Date 03/08/04		
LAYOUT		
DRAWN		
REVIEWED		

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CONSTRUCT T-HANGAR ACCESS ROAD
 PROPOSED FENCING PLAN

SUMMARY OF QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
AR156510	SILT FENCE	L.F.	640
AR156511	DITCH CHECK	EACH	9
AR156520	INLET PROTECTION	EACH	3
AR156521	HEADWALL PROTECTION	EACH	6

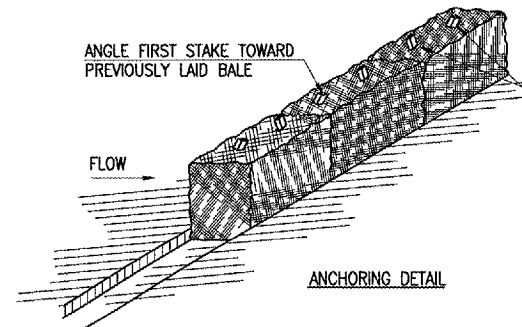
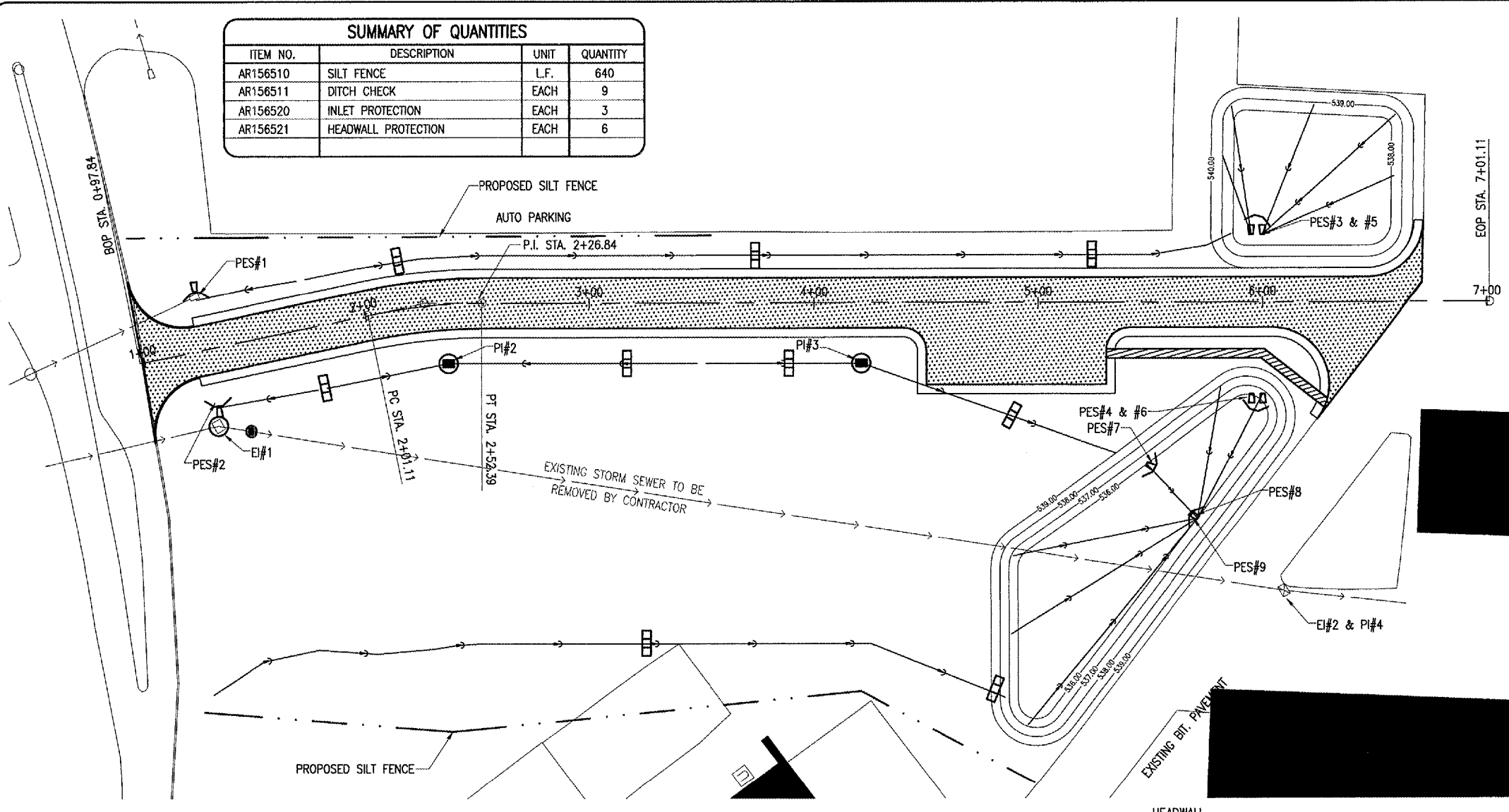


EROSION CONTROL NOTES

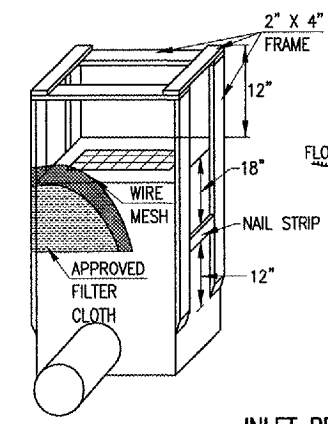
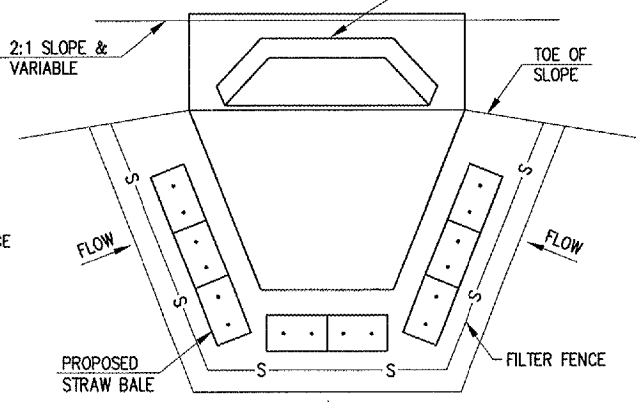
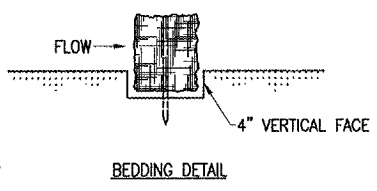
ALL PROPOSED EROSION CONTROL MEASURES SHALL BE COMPLETED AS SHOWN ON THIS SHEET.

EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH IEPA STANDARDS AND SPECIFICATIONS FOR SOIL EROSIONS AND SEDIMENT CONTROL.

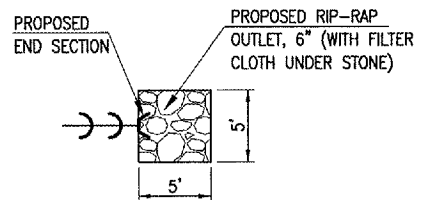
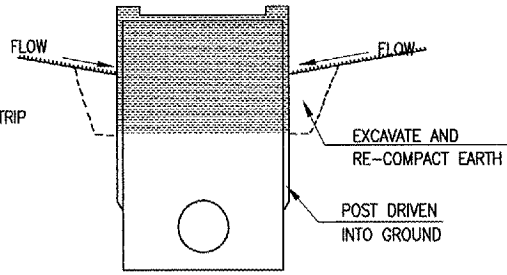
1. THE SILT FENCE WILL BE PAID FOR UNDER ITEM: AR156510 "SILT FENCE" PER LINEAR FEET.
2. THE DITCH CHECK WILL BE PAID FOR UNDER ITEM: AR156511 "DITCH CHECK" PER EACH.
3. THE INLET PROTECTION WILL BE PAID FOR UNDER ITEM: AR156520 "INLET PROTECTION" PER EACH.
4. THE HEADWALL PROTECTION WILL BE PAID FOR UNDER ITEM: AR156521 "HEADWALL PROTECTION" PER EACH.



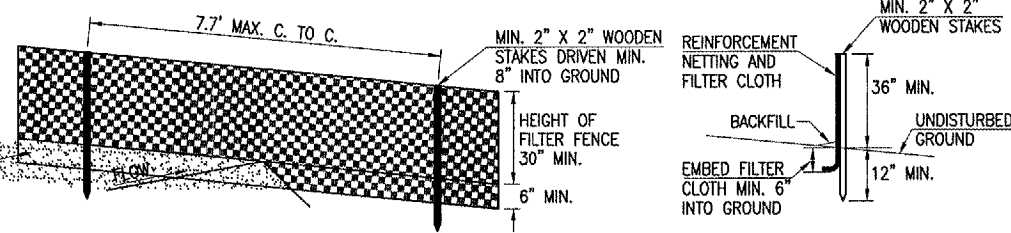
DITCH CHECK DETAIL
"NOT TO SCALE"



INLET PROTECTION DETAIL
"NOT TO SCALE"



RIP-RAP DETAIL
"NOT TO SCALE"



FILTER FENCE DETAIL
"NOT TO SCALE"

REVISION	DATE	BY

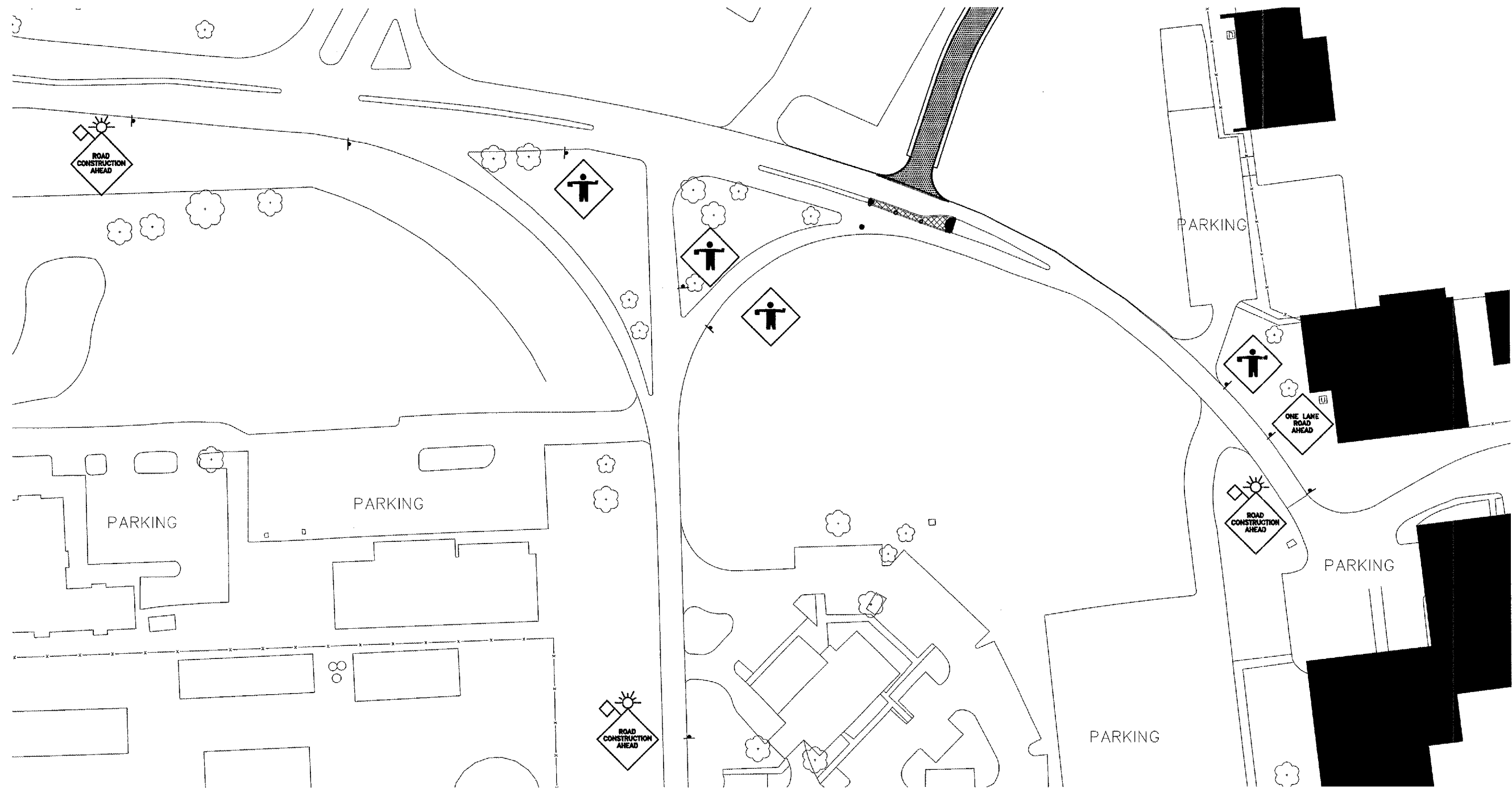
ST. LOUIS REGIONAL AIRPORT
 St. Louis Regional Airport
 EAST ALTON, ILLINOIS
 IL PROJ.: ALN-3355

DATE	BY	REVIEWED
03/08/04	JAC	JAC
06/23/04	WJM	WJM

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 1001 S. State St. Ste. 200
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CONSTRUCT T-HANGAR ACCESS ROAD
 PROPOSED STORM WATER POLLUTION PREVENTION PLAN & DETAILS

FEB 15, 2005 11:48 AM DPE
 I:\AIRPORT\STLOUIS\837-04RD\AIRPORT\SHETS\R-18\SWP.DWG - EROSION



DATE	REVISION	BY

ST. LOUIS REGIONAL AIRPORT
St. Louis Regional Airport
 EAST ALTON, ILLINOIS
 ILL. PROJ.: ALN-3355

HEL Project No. 837-04RDD	TLW	04/16/04
Elevation R-901TRAF.DWG	TLW	04/16/04
Scale 1"=50'	WJM	06/23/04
Date 04/16/04		
LAYOUT		
DRAWN		
REVIEWED		

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CONSTRUCT T-HANGER
 ACCESS ROAD
 PROPOSED TRAFFIC
 CONTROL PLAN

LEGEND

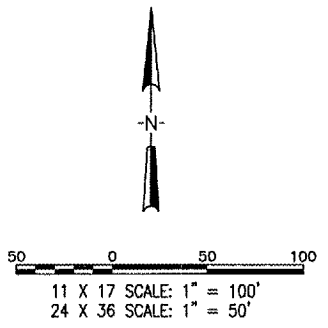
- PROPOSED PAVEMENT
- PROPOSED FLAGGER
- PROPOSED TRAFFIC CONTROL SIGN
- PROPOSED CONE
- PROPOSED BARRICADE

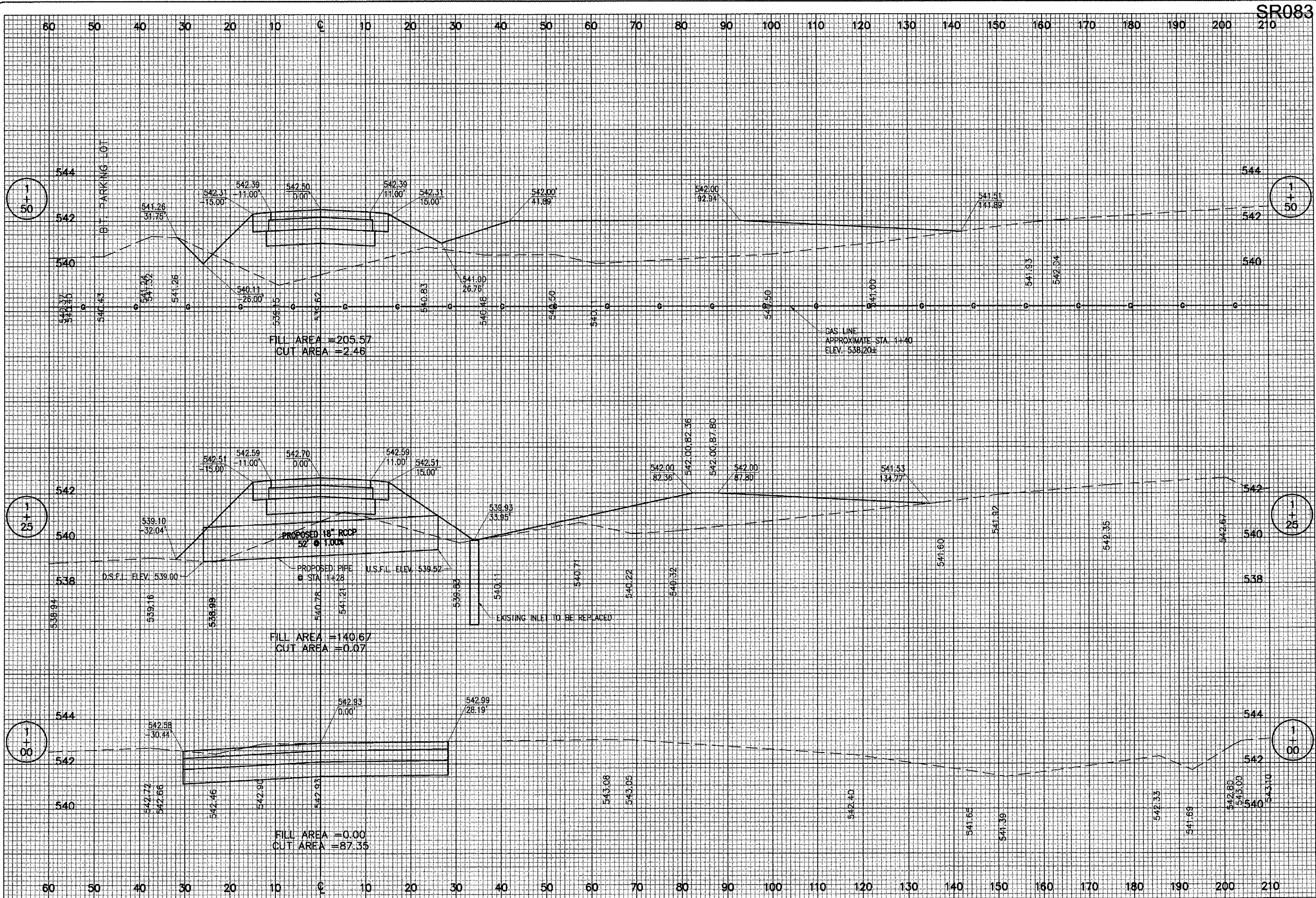
W20-1 (0) - 48

W20-7a (0) - 48

NOTE: SEE STANDARD 701501-01 FOR MORE INFORMATION.

FEB 15, 2005 11:48 AM DPE
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SR083

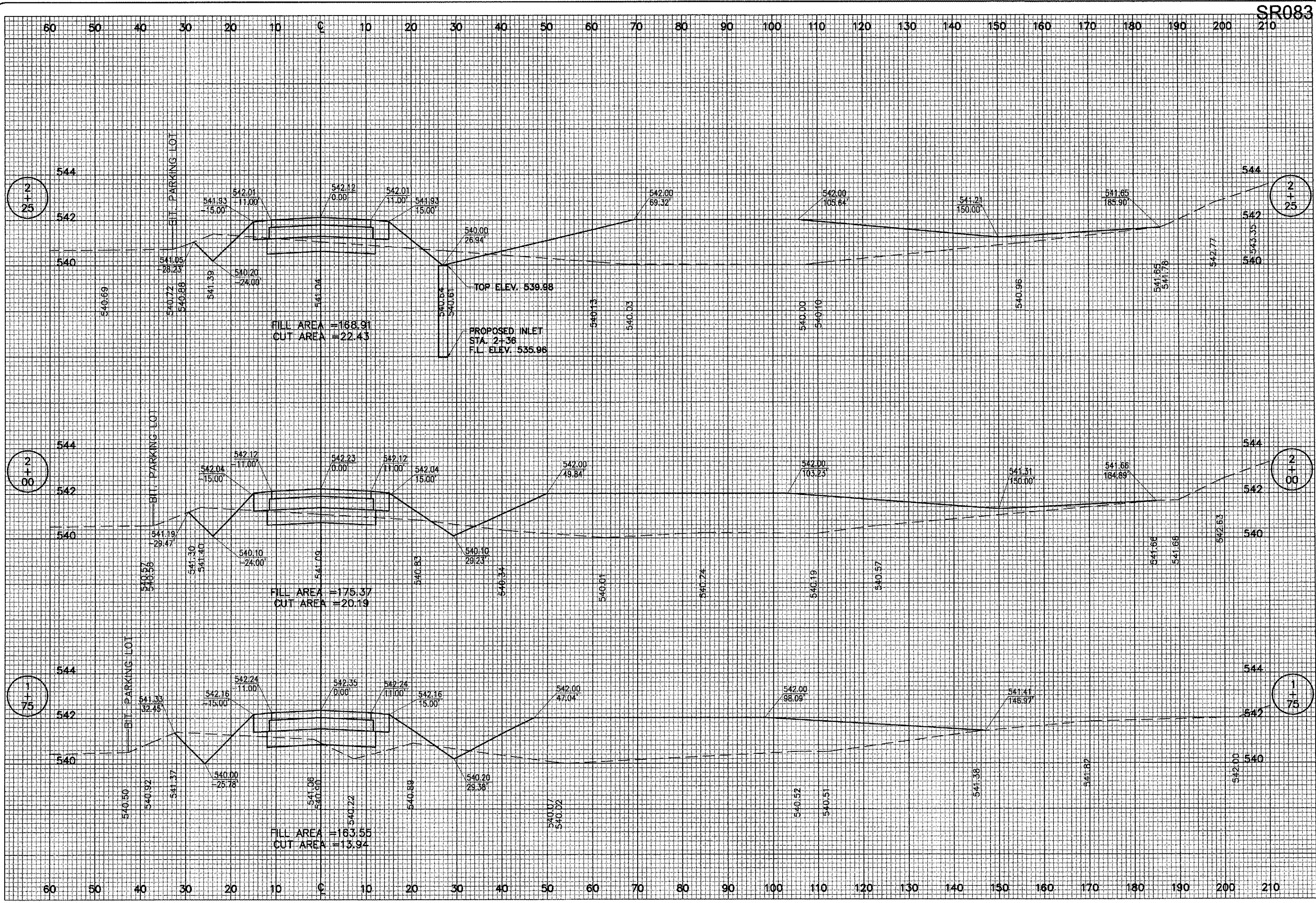
DATE	REVISION

ST. LOUIS REGIONAL AIRPORT
 EAST ALTON, ILLINOIS
 IL. PROJ.: ALN-3355

H&E Project No. 837-04RDD Filename R-301XS.DWG Scale 1"=10'H, 1"=2'V Date 6/23/04	LAYOUT TLW 04/27/04 DRAWN TLW 04/27/04 REVIEWED WJM 6/23/04
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CONSTRUCT T-HANGER ACCESS ROAD
 PROPOSED CROSS-SECTIONS
 STA. 1+00 TO STA. 1+50



SR083

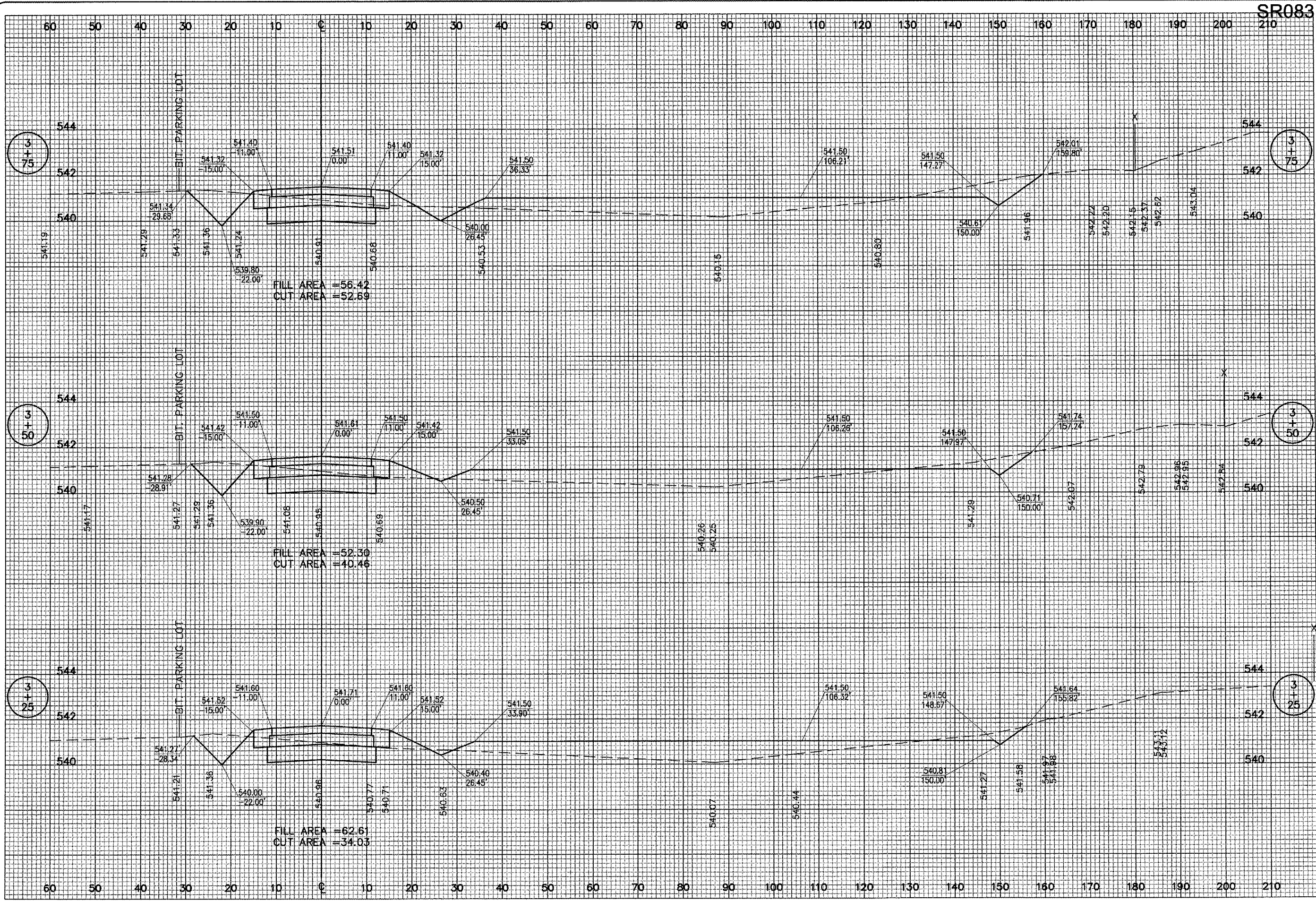
DATE	REVISION	BY

ST. LOUIS REGIONAL AIRPORT
 St. Louis Regional
 EAST ALTON, ILLINOIS
 IL. PROJ.: ALN-3355

HEI Project No. 837-04RFD	DATE	6/23/04
Drawings R-302XS.DWG	TITLE	LAYOUT
Scale 1"=10'H, 1"=2'Y	DRAWN	TJW
	REVIEWED	WJM

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CONSTRUCT T-HANGER
 ACCESS ROAD
 PROPOSED
 CROSS-SECTIONS
 STA. 1+75 TO STA. 2+25



SR083

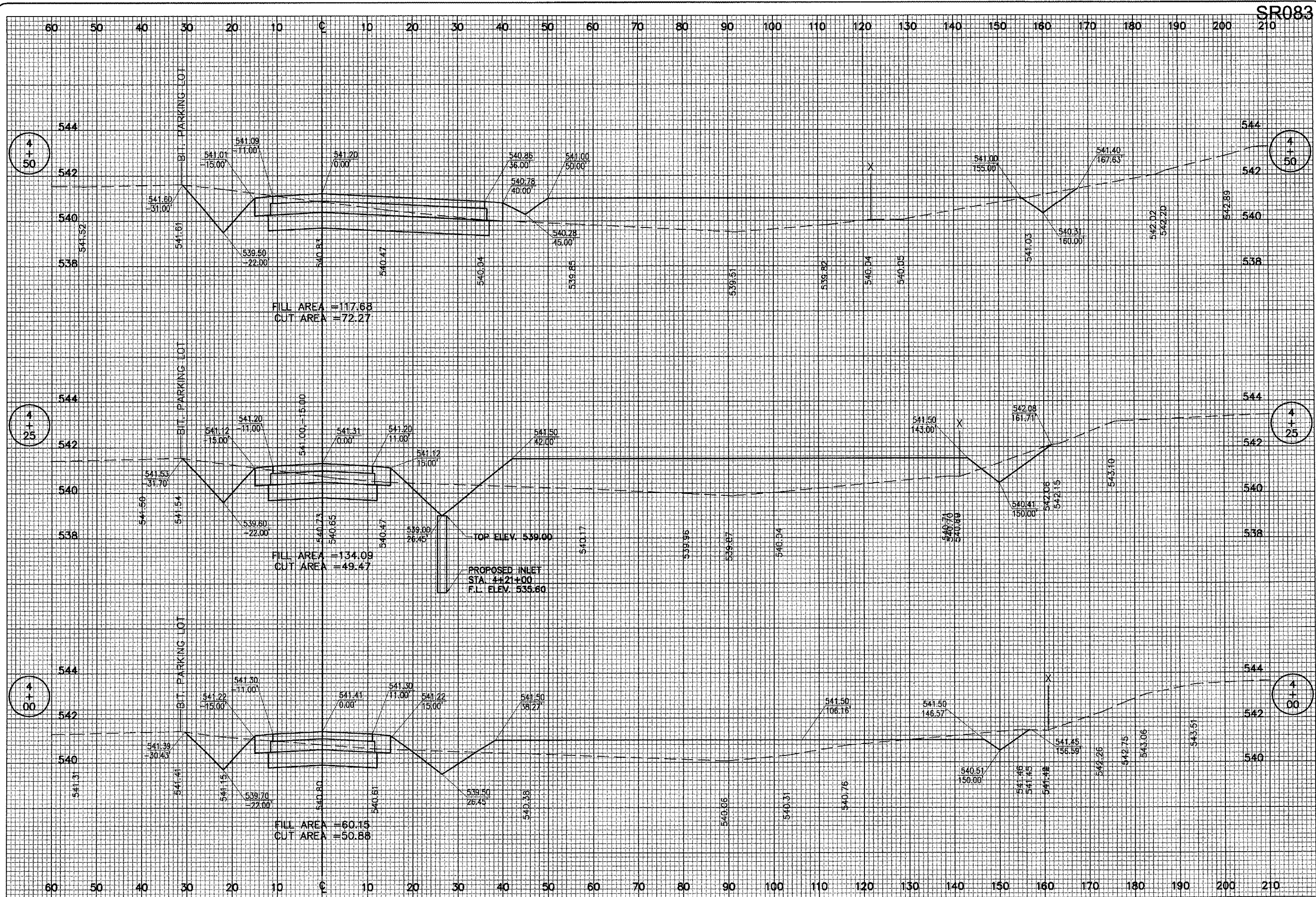
DATE	REVISION

ST. LOUIS REGIONAL AIRPORT
 EAST ALTON, ILLINOIS
 ILL. PROJ.: ALN-3355

HE Project No. 837-04R00	FILENAME R-304XS.DWG	Scale 1"=10'H, 1"=2'V	Date 6/23/04
LAYOUT	TLW	04/27/04	
DRAWN	TLW	04/27/04	
REVIEWED	WJM	6/23/04	



CONSTRUCT T-HANGER
 ACCESS ROAD
 PROPOSED
 CROSS-SECTIONS
 STA. 3+25 TO STA. 3+75



DATE	REVISION	BY

ST. LOUIS REGIONAL AIRPORT
 EAST ALTON, ILLINOIS
 St. Louis Regional
 PROJECT: ALN-3355

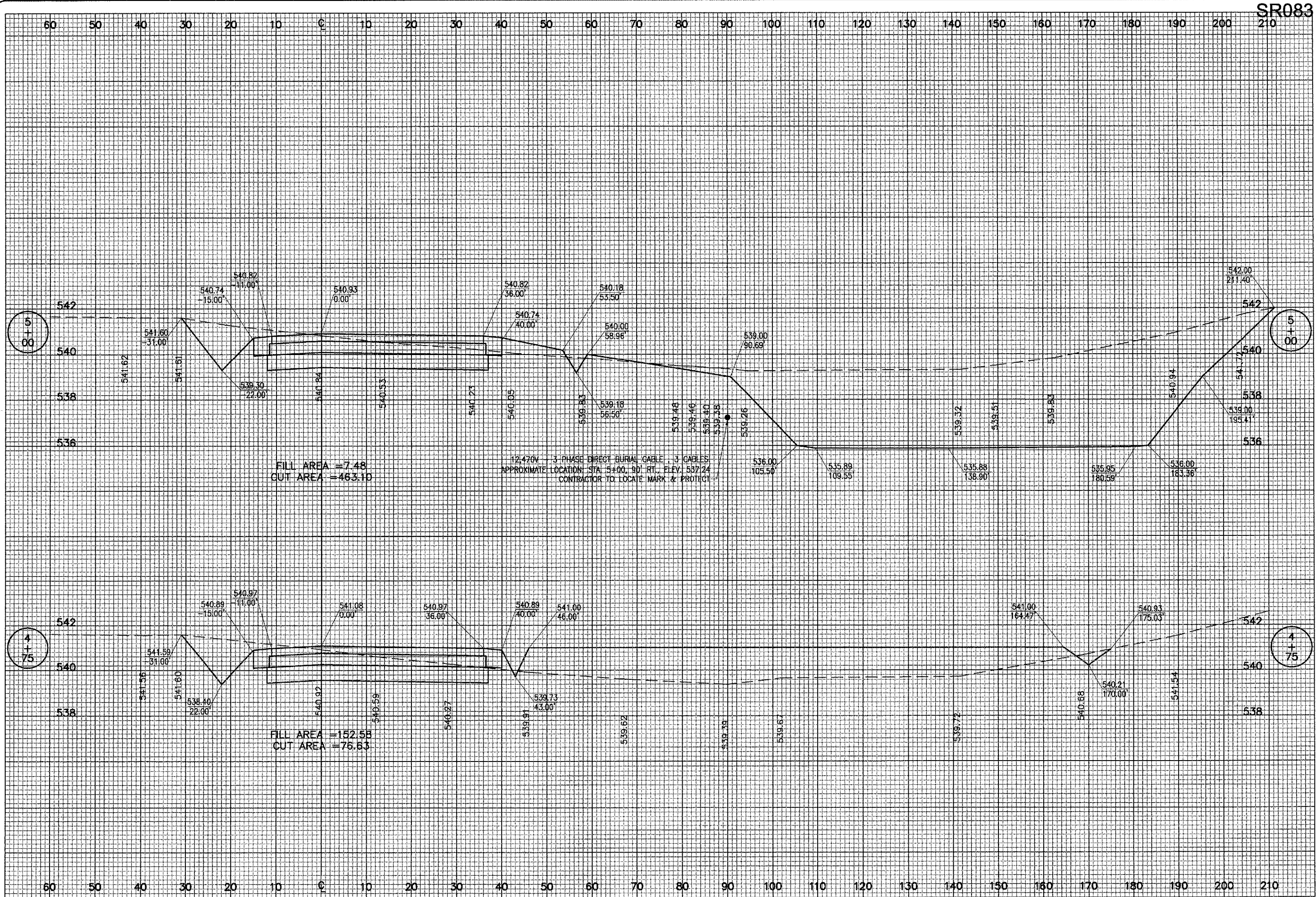
Project No. 837-04RD00	DATE 04/27/04
File Name R-305XS.DWG	TLW
Scale 1"=10'H, 1"=2'V	TLW
Date 6/23/04	WJM
LAYOUT	REVIEWED
DRAWN	DATE 6/23/04



CONSTRUCT T-HANGER
 ACCESS ROAD
 PROPOSED
 CROSS-SECTIONS
 STA. 4+00 TO STA. 4+50

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 I:\AIRPORT\STLOUIS\837-D4RDVAIRPORT\SHEETS\R-306XS.DWG - STA. 4+75 TO STA. 5+00

SR083



FILL AREA = 7.48
 CUT AREA = 463.10

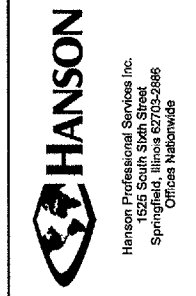
12.47KV 3-PHASE DIRECT BURIAL CABLE - 3 CABLES
 APPROXIMATE LOCATION: STA. 5+00, 90' RT., ELEV. 537.24
 CONTRACTOR TO LOCATE MARK & PROTECT

FILL AREA = 152.58
 CUT AREA = 76.63

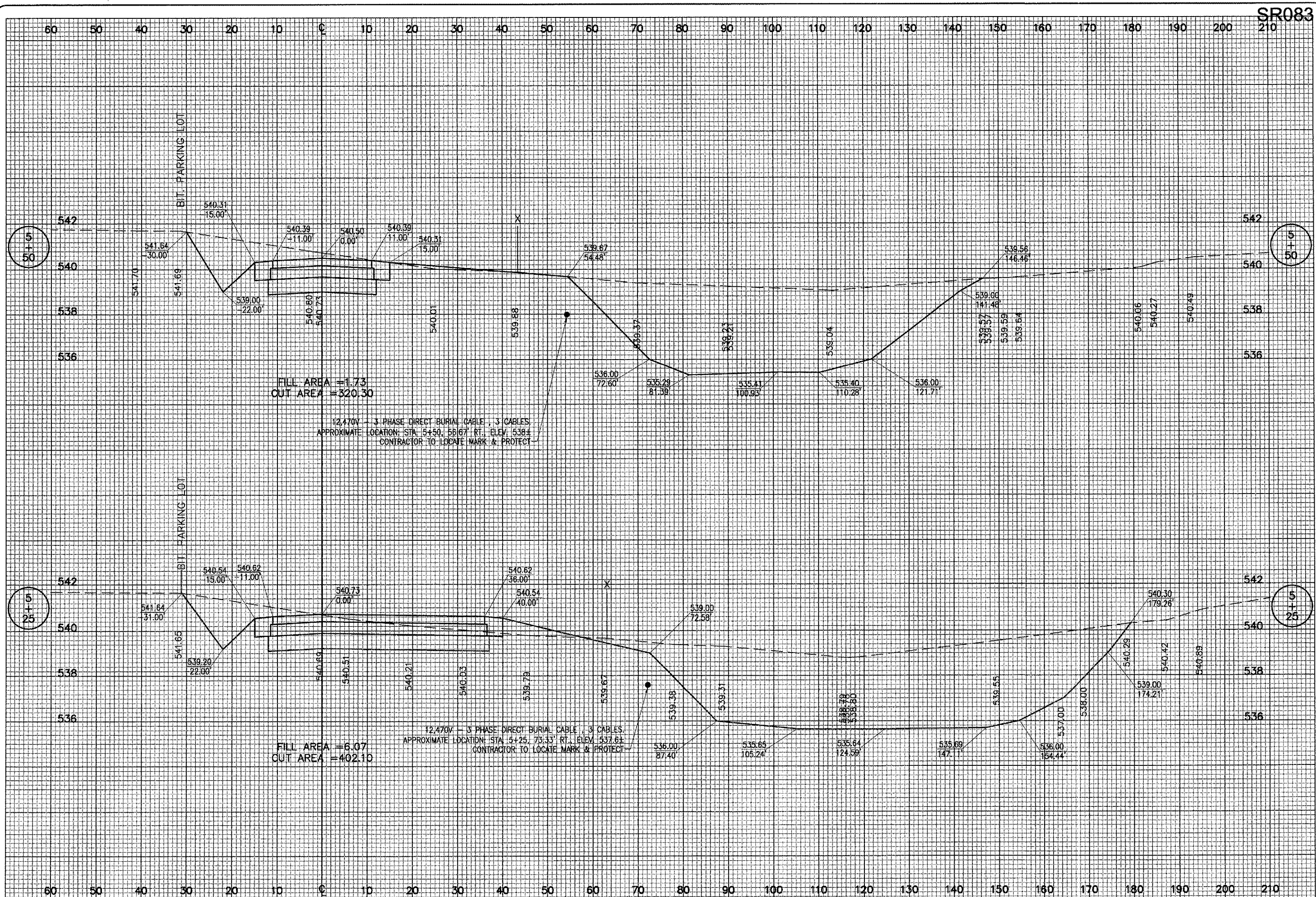
DATE	REVISION	BY

ST. LOUIS REGIONAL AIRPORT
St. Louis Regional
 EAST ALTON, ILLINOIS
 IL PROJ.: ALN-3355

HE Project No. 837-04R00	FLANSBURG R-306XS.DWG	Scale 1"=10'H, 1"=2'V	Date 6/23/04
LAYOUT	TLW	04/27/04	
DRAWN	TLW	04/27/04	
REVIEWED	WJM	6/23/04	



CONSTRUCT T-HANGER
 ACCESS ROAD
 PROPOSED
 CROSS-SECTIONS
 STA. 4+75 TO STA. 5+00



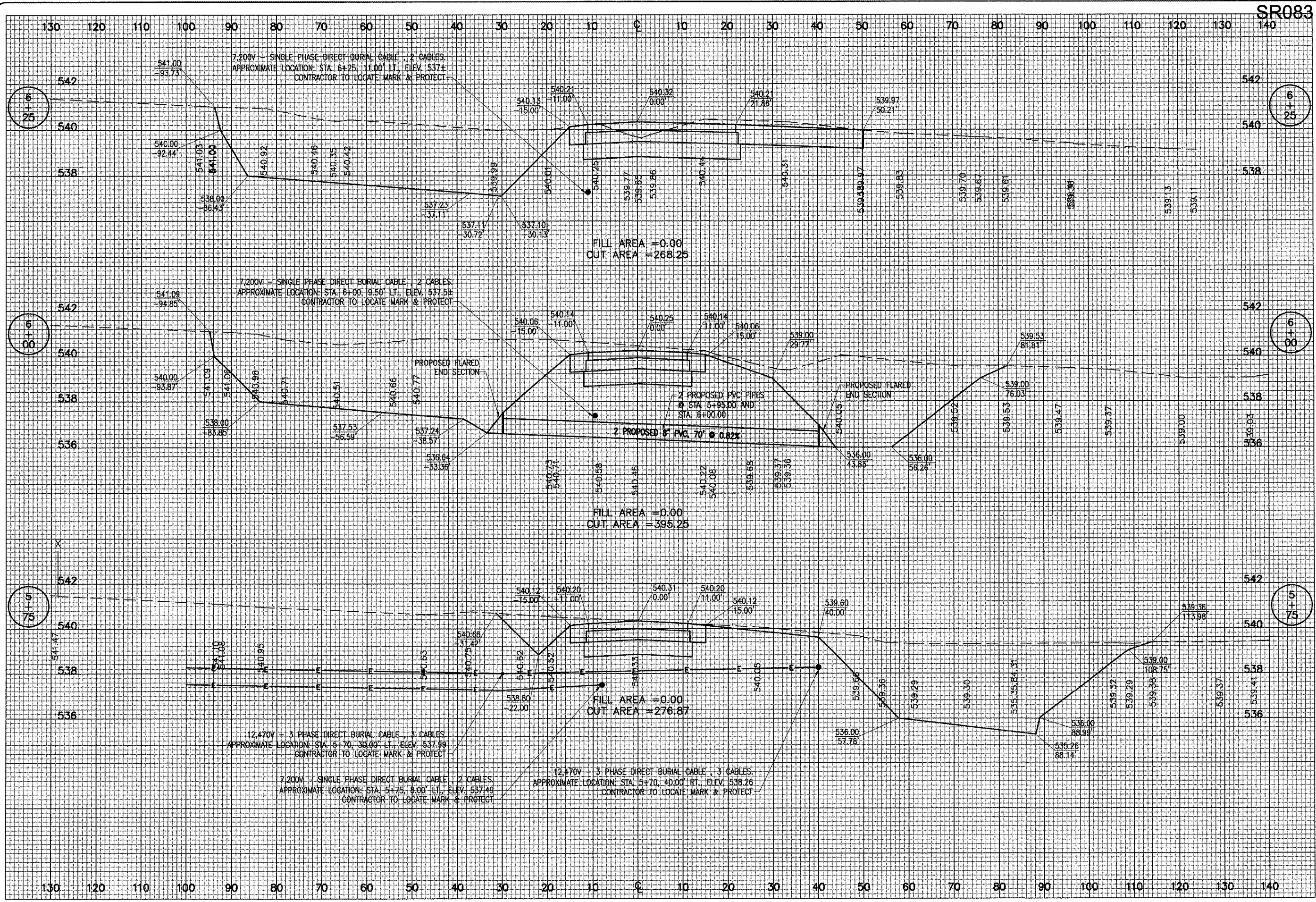
BY	
REVISION	
DATE	

ST. LOUIS REGIONAL AIRPORT
 St. Louis regional
 EAST ALTON, ILLINOIS
 ILL. PROJ.: ALN-3355

HEI Project No. 837-04RDD	
Excavate R-307XS.DWG	
Scale 1"=10'H, 1"=2'V	
Date 6/23/04	
LAYOUT	TLW 04/27/04
DRAWN	TLW 04/27/04
REVIEWED	WJM 6/23/04

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 STA. 5+25 TO STA. 5+50



SR083

DATE	REVISION

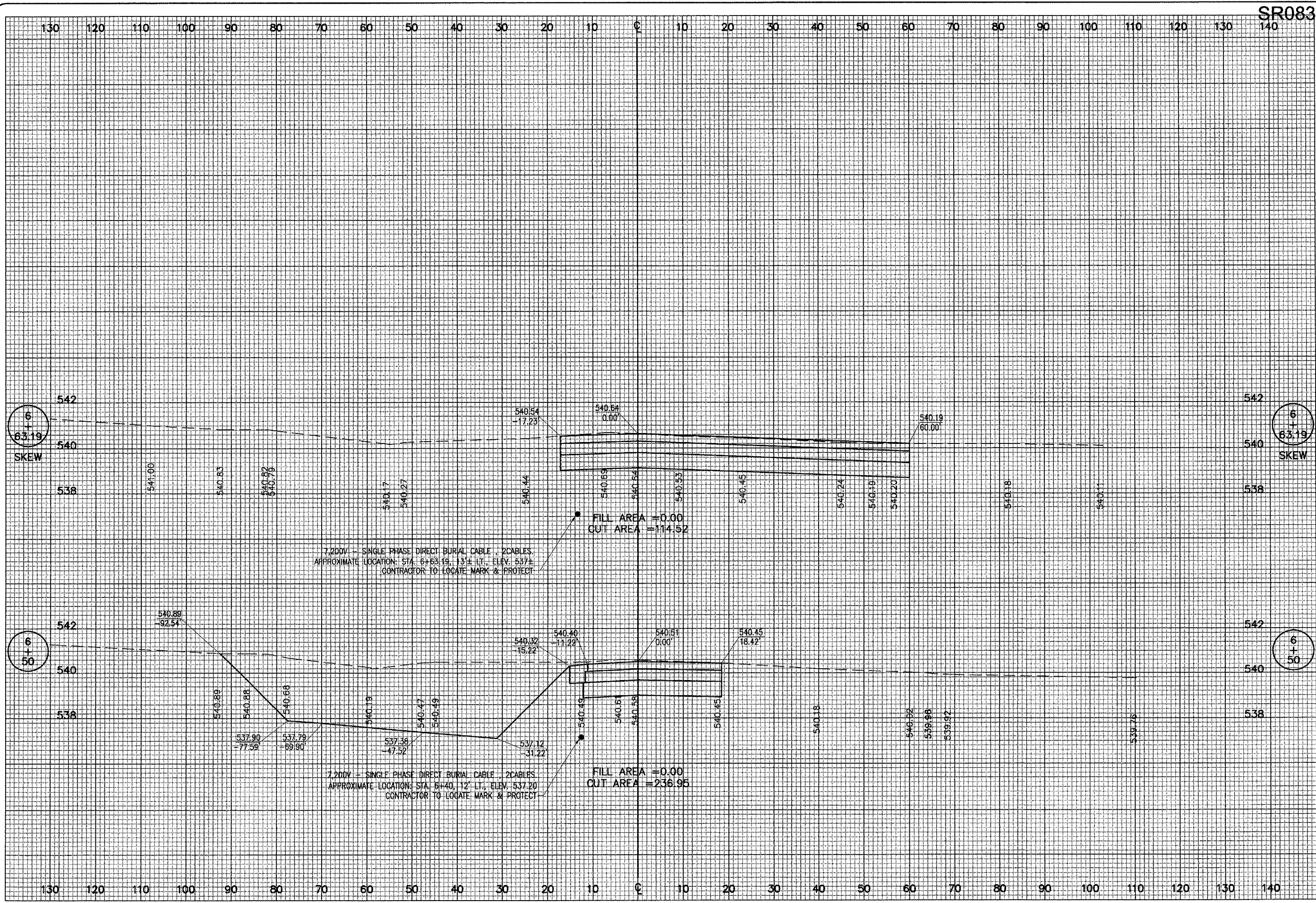
ST. LOUIS REGIONAL AIRPORT
 EAST ALTON, ILLINOIS
 L. PROJ.: ALN-3355

Project No. 837-04RDD	
Filename R-308XS.DWG	
Scale 1"=10'H, 1"=2'V	
Date 6/23/04	
LAYOUT TLW 04/27/04	
DRAWN TLW 04/27/04	
REVIEWED WJM 6/23/04	

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 PROPOSED
 CROSS-SECTIONS
 STA. 5+75 TO STA. 6+25

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SR083

DATE	REVISION	BY

ST. LOUIS REGIONAL AIRPORT
St. Louis Regional
 AIRPORT
 EAST ALTON, ILLINOIS
 IL PROJ.: AIN-3355

HEI Project No. 837-04R00	FILENAME R-309XS.DWG	DATE 6/23/04
Scale 1"=10'H, 1"=2'V	LAYOUT TLW 04/27/04	REVIEWED WJM 6/23/04
	DRAWN TLW 04/27/04	

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CONSTRUCT T-HANGER
 ACCESS ROAD
 PROPOSED
 CROSS-SECTIONS
 STA. 6+50 TO STA. 6+63.19