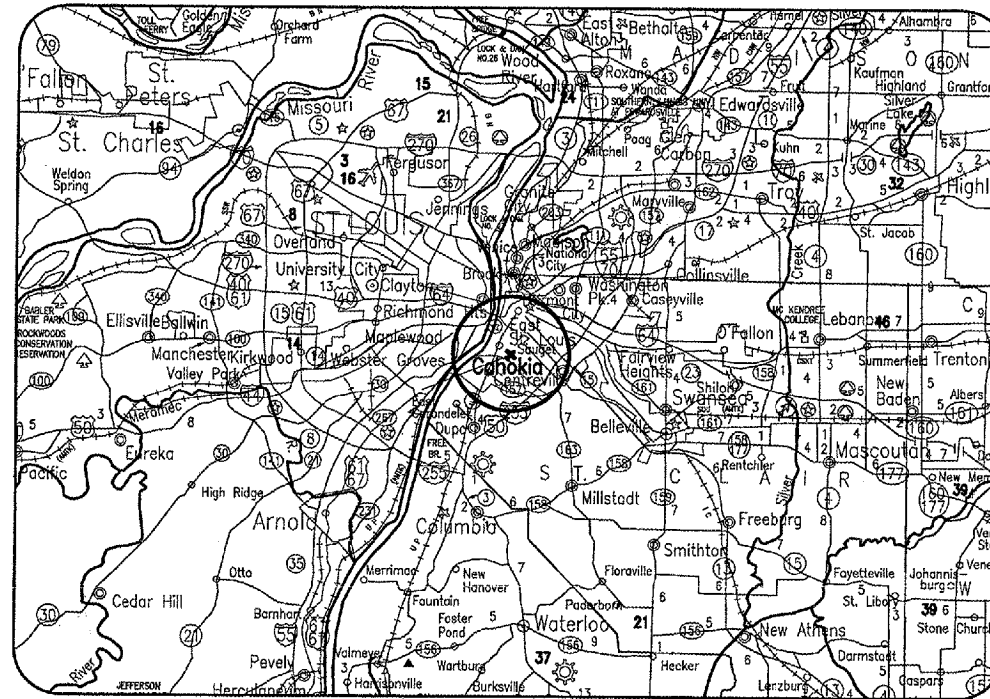


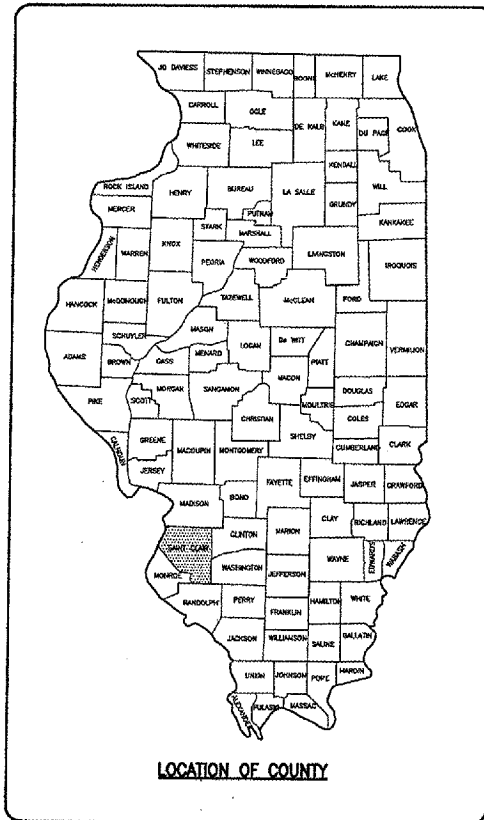
CONSTRUCTION PLANS FOR ST. LOUIS DOWNTOWN AIRPORT CAHOKIA, ST. CLAIR COUNTY, ILLINOIS CONSTRUCT TAXIWAY "A4"

SCOPE OF WORK

THIS PROJECT WILL CONSIST OF CONSTRUCTING TAXIWAY "A4" FROM RUNWAY 12L-30R TO TAXIWAY "A". ASSOCIATED WORK WILL BE PAVEMENT REMOVAL, 6", 10" & 12" P.C.C. PAVEMENT, MARKING, LIGHTING, GRADING, DRAINAGE, SEEDING AND MULCHING.

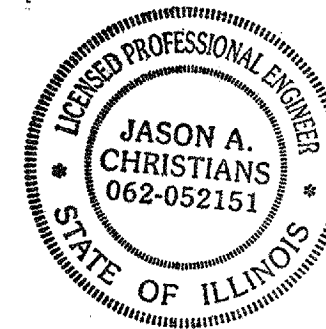


LOCATION



ILL. PROJ. CPS-3364
A.I.P. PROJ. 3-17-0039-B17

LATITUDE: 38° 34' 14"
LONGITUDE: 90° 09' 22"
ELEVATION: 413.0' M.S.L.
DATE: 03/02/07



HANSON
Hanson Professional Services Inc.

Submitted by: Jason Christians ENG'R
Date Submitted: 4/16/07
Lic. Exp. Date: NOVEMBER 30, 2007

BI-STATE DEVELOPMENT AGENCY

Approved: Robert M. Daniel DIRECTOR OF THE AIRPORT
Date: 4/17/07

REVISION	DATE	BY

SAINT LOUIS DOWNTOWN AIRPORT
A Division of Bi-State Development Agency
I.L. PROJ.: CPS-3864

FILE # 04507TXD_0800
R-001CVR.DWG
NOT TO SCALE
12/20/06

LAYOUT	JAC	12/20/06
DRAWN	MDR	12/20/06
REVIEWED	CAH	01/26/07

HANSON
Hanson Professional Services Inc.
4227 Earth City Expressway, Suite 130
St. Louis, MO 63045-4308
Offices Nationwide

CONSTRUCT TAXIWAY "A4"
COVER SHEET

1
1 of 32 sheets

APR 16, 2007 8:49 AM BAK
E:\AIRPORTS\ST. LOUIS DOWNTOWN\04507TXD\AIRPORT SHEETS\0-001CVR.DWG - COVER

SCOPE OF WORK

THIS PROJECT WILL CONSIST OF CONSTRUCTING TAXIWAY "A4" FROM RUNWAY 12L-30R TO TAXIWAY "A". ASSOCIATED WORK WILL BE PAVEMENT REMOVAL, 6", 10" AND 12" P.C.C. PAVEMENT, MARKING, LIGHTING, GRADING, DRAINAGE, SEEDING AND MULCHING.

AIRPORT SECURITY NOTE

AIRPORT SECURITY WILL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR WILL VERIFY THE EXISTING GATE IN THE HAUL ROUTE IS CLOSED AND LOCKED AT THE END OF EACH WORKING DAY. THE CONTRACTOR WILL HAVE A SECURITY GUARD AT THE GATE DURING CONTINUOUS HAULING OPERATIONS.

UTILITY NOTE

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 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 IMPROVEMENTS WILL BE LOCATED AT THE CONTRACTOR'S OWN EXPENSE PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.

HEIGHT OF CONSTRUCTION EQUIPMENT

THE MAXIMUM ANTICIPATED HEIGHT OF THE CONSTRUCTION EQUIPMENT WILL BE 25 FEET. THE TALLEST EQUIPMENT IS EXPECTED TO BE A SEMI TRUCK WITH TRAILER IN THE UP POSITION.

HAUL ROUTE AND VEHICLE PARKING

THE CONTRACTOR WILL USE THE DESIGNATED HAUL ROUTE AND PARKING AREA AS SHOWN ON THIS SHEET. THE PROPOSED PARKING AREA WILL BE 150' X 150'. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN THE PROPOSED HAUL ROUTE AND PARKING AREA THROUGHOUT THE COURSE OF THE PROJECT. ANY AREAS DAMAGED OUTSIDE OF THESE AREAS WILL BE REPAIRED BY THE CONTRACTOR AND AT THE CONTRACTOR'S OWN EXPENSE. AT THE CONCLUSION OF THE PROJECT THE CONTRACTOR WILL GRADE, FERTILIZE, SEED AND MULCH THE HAUL ROUTE AND PARKING AREA AS NEEDED TO RESTORE IT TO ITS ORIGINAL STATE. RESTORATION OF THE HAUL ROUTE AND PARKING AREA WILL BE PAID FOR UNDER AR150540 HAUL ROUTE.

CONTRACTOR RESPONSIBILITIES

THE CONTRACTOR'S EQUIPMENT PARKING AND STORAGE AREA WILL BE AS SHOWN ON THIS SHEET. THE CONTRACTOR'S EMPLOYEES WILL PARK THEIR VEHICLES IN THIS AREA. ONLY CONTRACTOR VEHICLES WILL BE ALLOWED OUTSIDE THIS AREA.

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

THE CONTRACTOR SHALL KEEP RUNWAYS 5/23 AND 12R/30L OPEN AT ALL TIMES AND MAINTAIN CONTINUOUS TAXIWAY ACCESS TO ALL HANGARS AND ADMINISTRATIVE AREAS.

ALL WORK PERFORMED SHALL BE DONE IN A ORDERLY AND EFFECTIVE MANNER TO MINIMIZE RUNWAY CLOSURE.







NO TRENCHES OR HOLES WILL REMAIN OPEN OVERNIGHT.

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 RED STEADY-BURN LIGHTS AND 20" SQUARE ORANGE FLAGS. THE BARRICADES, THEIR MAINTENANCE, PLACEMENT AND REMOVAL WILL BE PAID FOR UNDER ITEM:

THE CONTRACTOR WILL BE ALLOWED TO HAUL CONCRETE AND BITUMINOUS TRUCKS ACROSS THE EXISTING APRON AT THE LOCATION SHOWN ON THIS SHEET. HOWEVER, A SWEEPER MUST BE ON SITE.

LEGEND

-  EXISTING IMPROVEMENTS
-  PROPOSED IMPROVEMENTS
-  EXISTING BUILDINGS
-  PROPOSED HAUL ROUTE AND EQUIPMENT PARKING AREA
-  PROPOSED BENCHMARK
-  PROPOSED BARRICADES

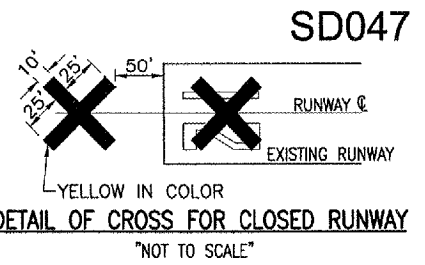
LIGHTED RUNWAY CLOSURE MARKER

ALTERNATE 1 INCLUDES A LIGHTED RUNWAY CLOSURE MARKER. IF ALTERNATE 1 IS AWARDED, THIS WILL RESULT IN THE DELETION OF ITEM "AR150535-RUNWAY CLOSURE MARKING" UNDER THE BASE BID. THE LIGHTED RUNWAY CLOSURE MARKER WILL MEET ALL SPECIFICATIONS IN ADVISORY CIRCULAR 150/5345-55, LATEST EDITION.

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.

BENCHMARK DATA		
NO.	DESCRIPTION	ELEV.
1	CONCRETE MONUMENT N=2297776.523 E=695618.551	409.38
2	CONCRETE MONUMENT N=2298934.635 E=694968.5395	405.14



NOTE:

COST OF CONSTRUCTING, PLACING, MAINTAINING AND REMOVING CROSSES WILL BE PAID FOR UNDER AR150535 RUNWAY CLOSURE MARKING. THE CROSSES WILL BE YELLOW IN COLOR AND SHALL BE MADE OF A SUITABLE MATERIAL AS APPROVED BY THE AIRPORT DIRECTOR. THE CROSSES WILL BE PLACED OVER THE NUMERALS AND SECURED IN A MANNER APPROVED BY THE DIRECTOR. THE PROPOSED CROSSES WILL BE PLACED EACH DAY THE RUNWAY IS CLOSED AND REMOVED WHEN THE RUNWAY IS RE-OPENED. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PLACEMENT AND REMOVAL OF THE CROSSES.

CRITICAL POINT DATA

CENTERLINE OF TAXIWAY "B4"
 LATITUDE: 38° 34' 21.78922"
 LONGITUDE: 90° 09' 23.30255"
 ELEVATION: 409.20 M.S.L.

J.U.L.I.E. INFORMATION

COUNTY ST. CLAIR
 CITY CAHOKIA
 TOWNSHIP CENTERVILLE
 SECTION NO. T.1N. - R.10W.
 ADDRESS ST. LOUIS DOWNTOWN AIRPORT
 1680 SAUGET INDUSTRIAL PARKWAY
 SAUGET, IL 62206

PROPOSED SAFETY PLAN

GENERAL - THE ST. LOUIS DOWNTOWN AIRPORT IS COMPRISED OF THREE RUNWAYS. THE PROPOSED CONSTRUCTION WILL NECESSITATE CLOSING RUNWAY 12L-30R. ANY TIME THE CONTRACTOR IS WORKING WITHIN 200' OF THE RUNWAY CENTERLINE THE RUNWAY WILL BE CLOSED. ALL WORK INCLUDED IN OPENING AND CLOSING THE RUNWAY WILL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

IDENTIFICATION - WHEN THE CONTRACTORS VEHICLES AND EQUIPMENT ARE ON THE AIRPORT 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 THE PERSON AS BEING PART OF THE CONSTRUCTION CREW.

RADIO CONTROL - THE CONTRACTOR WILL BE REQUIRED TO BE IN TWO-WAY RADIO CONTACT (121.80 MHz.) WITH THE TOWER GROUND CONTROL. THIS WILL KEEP THE CONTRACTOR IN CONSTANT CONTACT WITH THE ST. LOUIS DOWNTOWN AIRPORT AND ENABLE THE CONTROL TOWER TO IMMEDIATELY CONTACT THE CONTRACTOR IN CASE OF AN AERONAUTIC EMERGENCY THAT WOULD REQUIRE ACTION BY THE CONTRACTOR AND/OR HIS PERSONNEL.

150-ENGINEER'S FIELD OFFICE NOTES

THE PROPOSED ENGINEER'S FIELD OFFICE WILL BE FURNISHED, MAINTAINED, AND REMOVED IN ACCORDANCE WITH ITEM AR150510 "ENGINEER'S FIELD OFFICE" AS STATED ON PAGE 168 OF THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JULY 1, 2004.

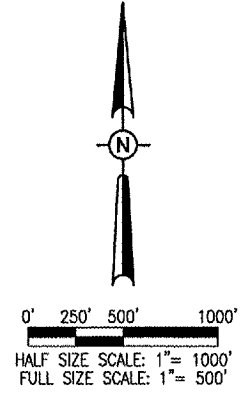
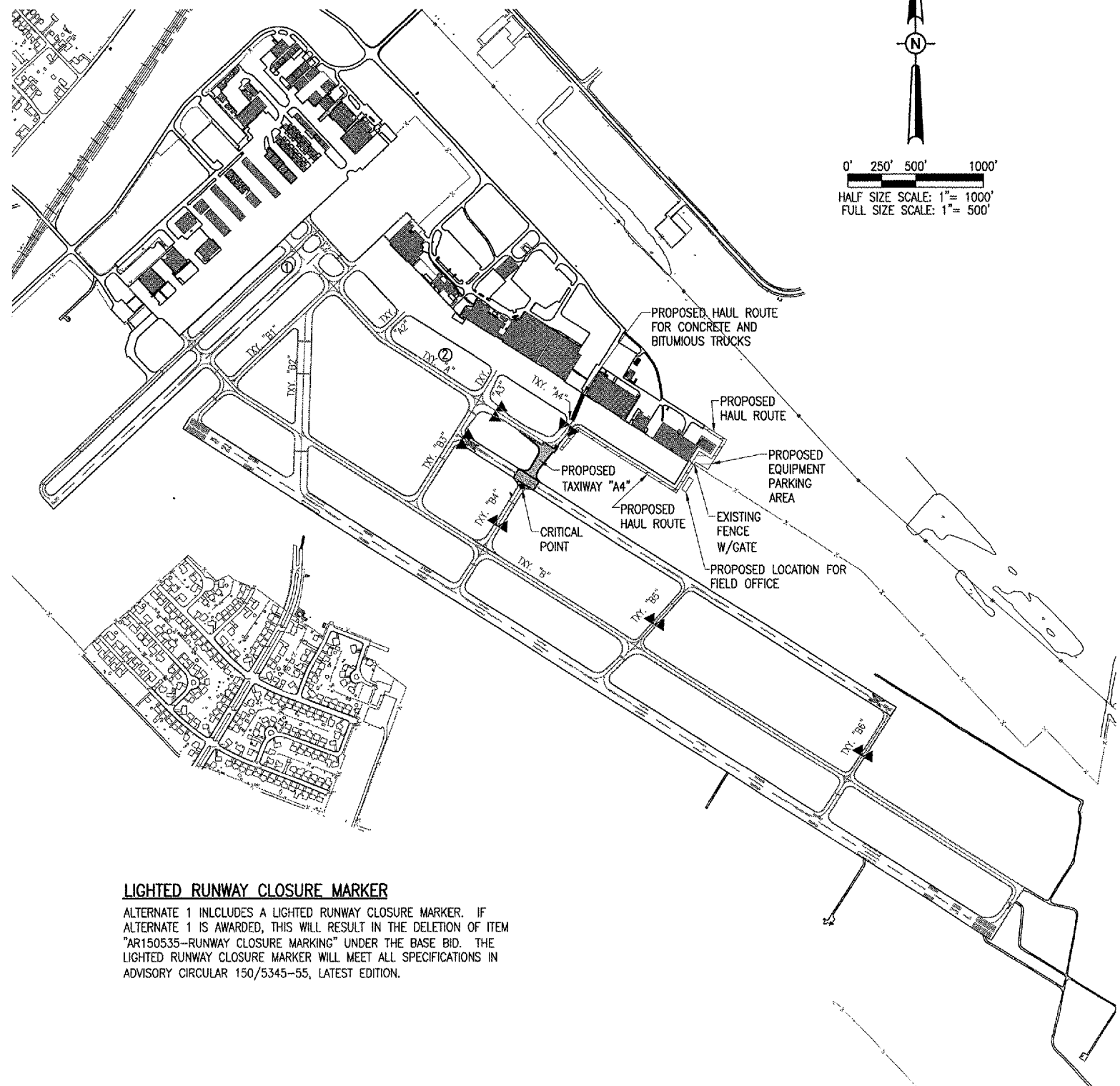
THE GENERAL LOCATION OF THE PROPOSED ENGINEER'S FIELD OFFICE IS SHOWN ON THIS SHEET.

THE ENGINEERING FIRM WILL MAKE PAYMENT FOR ALL LONG DISTANCE TELEPHONE CALLS IN EXCESS OF ONE HUNDRED DOLLARS (\$100.00) PER MONTH.

THE PROPOSED ENGINEER'S FIELD OFFICE WILL BE PAID FOR UNDER ITEMS: AR150510 ENGINEER'S FIELD OFFICE ____ 1 L.S.

EROSION CONTROL

THIS PROJECT WILL DISTURB LESS THAN 1 ACRE OF LAND, THEREFORE NO N.P.D.E.S. PERMIT WILL BE REQUIRED.



DATE	REVISION	BY

SD047

SAINT LOUIS DOWNTOWN AIRPORT
 A Division of Ill. State Development Agency
 ILL. PROJ. NO.: 3-17-0039-B17

CONSTRUCT TAXIWAY "A4"

PROPOSED SAFETY PLAN

3

3 of 32 sheets

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LEGEND

[Pattern]	EXISTING PAVEMENT
[Pattern]	PROPOSED BITUMINOUS TAPER
[Pattern]	PROPOSED 6" PCC PAVEMENT
[Pattern]	PROPOSED 10" PCC PAVEMENT
[Pattern]	PROPOSED 12" PCC PAVEMENT

PROPOSED BITUMINOUS TAPER

THE EXISTING MILLED AREA WILL BE TACKED PRIOR TO THE PLACEMENT OF THE BITUMINOUS TAPER.

THIS ITEM OF WORK SHALL BE PAID FOR UNDER ITEM:
AR401611 "BIT. SURFACE COURSE METHOD 1" - PER TON.

155-LIME-MODIFIED SUBGRADE NOTES:

THE PROPOSED LIME-MODIFIED SUBGRADE SHALL BE COMPLETED IN ACCORDANCE WITH ITEM 155 "LIME TREATED SUBGRADE" AS STATED ON PAGE 32 OF THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JULY 1, 2004.

THIS ITEM OF WORK SHALL CONSIST OF CONSTRUCTING A 12" DEEP COURSE OF A MIXTURE OF SOIL, LIME AND WATER IN ACCORDANCE WITH THE RATES AND METHODS DESIGNED IN THE SPECIFICATIONS (EITHER THE WET OR DRY METHODS IS ACCEPTABLE).

THE SUBGRADE WILL BE CUT PRIOR TO LIME-MODIFICATION.

ANY SWELL WILL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF ON THE AIRPORT SITE AS DIRECTED BY THE RESIDENT ENGINEER. NO ADDITIONAL PAYMENT WILL BE MADE FOR REMOVAL OF SWELL.

THE LIME-MODIFIED SUBGRADE SHALL BE CUT TO FINISHED ELEVATION UPON COMPLETION (0.05+) IN ACCORDANCE TO SECTION 152-2.11 OF THE SPECIFICATIONS. THE LIME-MODIFIED SUBGRADE WILL BE WET CURED FOR 2 DAYS.

THE CONTRACTOR WILL LIME-MODIFY THE SUBGRADE FROM THE CENTERLINE TO 1' OUTSIDE OF THE PROPOSED PAVEMENT SURFACE ON BOTH SIDES.

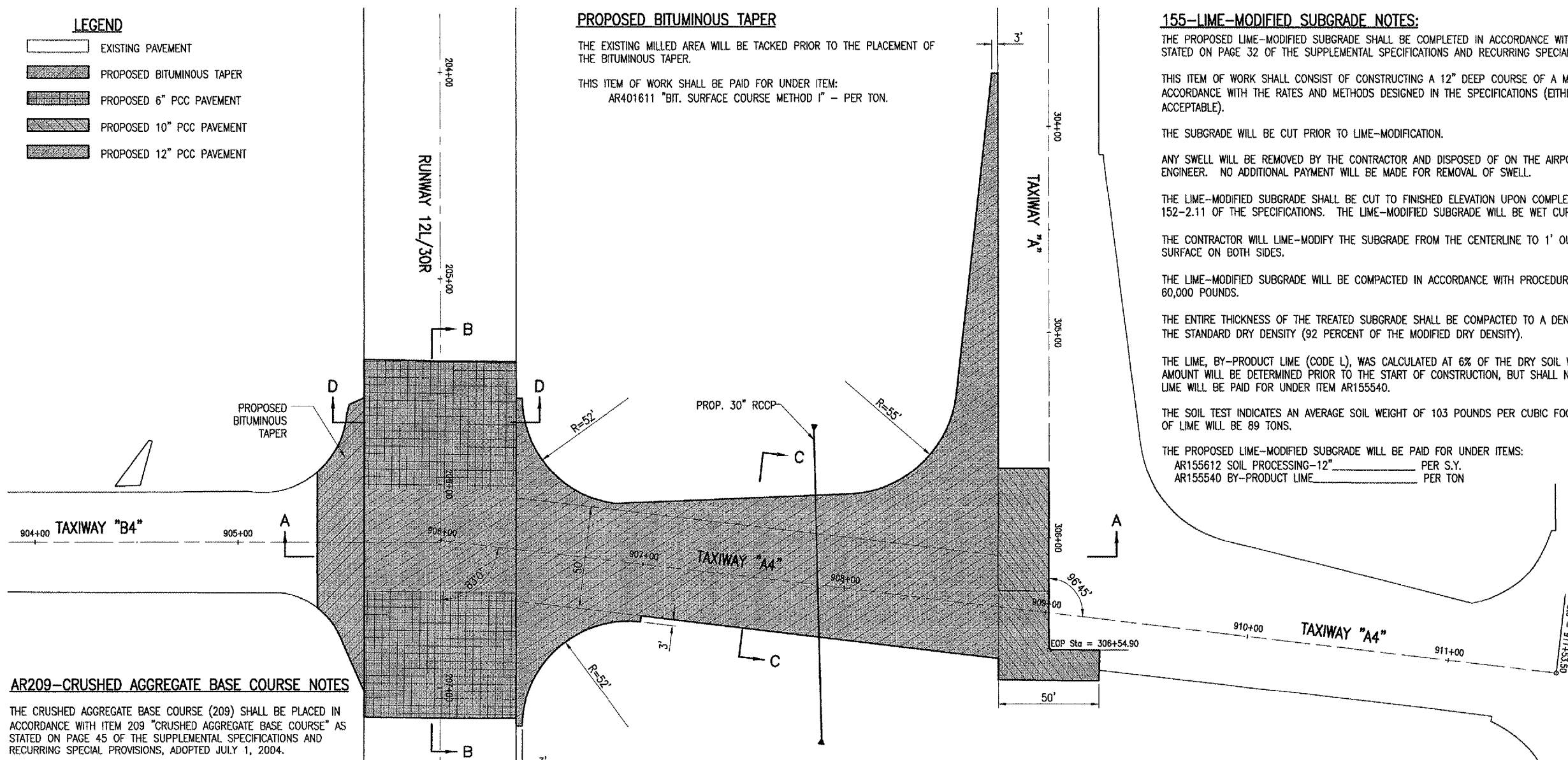
THE LIME-MODIFIED SUBGRADE WILL BE COMPACTED IN ACCORDANCE WITH PROCEDURES FOR AIRCRAFT WEIGHING (MORE) THAN 60,000 POUNDS.

THE ENTIRE THICKNESS OF THE TREATED SUBGRADE SHALL BE COMPACTED TO A DENSITY OF NOT LESS THAN (95 PERCENT OF THE STANDARD DRY DENSITY (92 PERCENT OF THE MODIFIED DRY DENSITY)).

THE LIME, BY-PRODUCT LIME (CODE L), WAS CALCULATED AT 6% OF THE DRY SOIL WEIGHT AT MAXIMUM DENSITY. THE ACTUAL AMOUNT WILL BE DETERMINED PRIOR TO THE START OF CONSTRUCTION, BUT SHALL NOT EXCEED 6% BY WEIGHT. THE COST OF LIME WILL BE PAID FOR UNDER ITEM AR155540.

THE SOIL TEST INDICATES AN AVERAGE SOIL WEIGHT OF 103 POUNDS PER CUBIC FOOT. THEREFORE, THE MAXIMUM TONNAGE OF LIME WILL BE 89 TONS.

THE PROPOSED LIME-MODIFIED SUBGRADE WILL BE PAID FOR UNDER ITEMS:
AR155612 SOIL PROCESSING-12" _____ PER S.Y.
AR155540 BY-PRODUCT LIME _____ PER TON



AR209-CRUSHED AGGREGATE BASE COURSE NOTES

THE CRUSHED AGGREGATE BASE COURSE (209) SHALL BE PLACED IN ACCORDANCE WITH ITEM 209 "CRUSHED AGGREGATE BASE COURSE" AS STATED ON PAGE 45 OF THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JULY 1, 2004.

THE CRUSHED AGGREGATE BASE COURSE MATERIAL (CA-6) WILL BE USED TO CONSTRUCT A BASE COURSE FOR THE PROPOSED PAVEMENT. THE CRUSHED AGGREGATE BASE COURSE MATERIAL WILL BE 4" IN DEPTH AND COMPACTED TO NOT LESS THAN 95 PERCENT DENSITY OF THE MODIFIED PROCTOR.

THE PROPOSED AGGREGATE FOR THE BASE COURSE MATERIAL SHALL MEET THE REQUIREMENTS OF GRADATION "B" IN TABLE 1 OF THE SUPPLEMENTAL SPECIFICATIONS.

209-3.2 EQUIPMENT. ADD THE FOLLOWING PARAGRAPHS TO THIS SECTION:

"PROVISIONS SHALL BE MADE BY THE CONTRACTOR FOR FURNISHING WATER AT THE PLANT AND AT THE SITE OF THE WORK BY EQUIPMENT OF AMPLE CAPACITY AND OF SUCH DESIGN AS TO ASSURE UNIFORM MIXING AND APPLICATION."

THE CONTRACTOR WILL PROVIDE THE RESIDENT ENGINEER A MODIFIED PROCTOR CURVE SHOWING OPTIMUM DENSITY AND MOISTURE FOR THE SUPPLIED BASE COURSE MATERIAL.

THE COMPACTION CONTROL TEST TO BE USED SHALL BE FAA COMPACTION CONTROL TEST T-611 FOR AIRCRAFT WEIGHING MORE THAN 60,000 LBS.

209-4.1. DELETE THE FIFTH SENTENCE AND REPLACE IT WITH THE FOLLOWING:

"IF AT THE TIME THE AGGREGATES ARE WEIGHED THEY CONTAIN MORE THAN SIX (6) PERCENT OF ABSORBED AND FREE MOISTURE BY WEIGHT, A DEDUCTION FOR THE MOISTURE IN EXCESS OF THIS AMOUNT SHALL BE MADE IN DETERMINING THE PAY QUANTITY."

AR401611 BITUMINOUS SURFACE COURSE - METHOD 1

THE BITUMINOUS SURFACE COURSE (401) SHALL BE PLACED IN ACCORDANCE WITH ITEM AR401001 "BITUMINOUS SURFACE COURSE-METHOD 1" AS STATED ON PAGE 245 OF THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JULY 1, 2004.

THIS ITEM OF WORK SHALL CONSIST OF CONSTRUCTING 1 LIFT OF BITUMINOUS SURFACE COURSE (2 INCH DEPTH EACH) ON THE EXISTING BITUMINOUS PAVEMENT & REPLACEMENT OF PAVEMENT REMOVAL ALSO.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE QUALITY CONTROL IN THE PRODUCTION AND CONSTRUCTION OF THE BITUMINOUS SURFACE COURSE.

THE PROPOSED BITUMINOUS SURFACE COURSE WILL BE DESIGNED TO A MARSHALL DESIGN OF (MORE) THAN 60,000 POUNDS.

401-4.9 ADD THE FOLLOWING TO THIS SECTION:

WHEN HAND SPREADING IS PERMITTED, THE MIXTURE WILL BE DISTRIBUTED AND SPREAD USING HAND TOOLS. WHEN THE WORK IS COMPLETED, THE LAYER WILL HAVE THE REQUIRED THICKNESS AND CONFORM TO THE GRADE AND SURFACE CONTOUR SHOWN ON THE PLANS.

603-BITUMINOUS TACK COAT NOTES:

THE BITUMINOUS TACK COAT (603) SHALL BE PLACED IN ACCORDANCE WITH ITEM AR603 "BITUMINOUS TACK COAT" AS STATED ON PAGE 62 OF THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JULY 1, 2004.

THE PROPOSED BITUMINOUS TACK COAT SHALL BE PLACED ON THE PROPOSED BITUMINOUS PAVEMENT PRIOR TO THE PLACEMENT OF THE NEXT LIFT OF PROPOSED BITUMINOUS SURFACE COURSE. THE PROPOSED BITUMINOUS PAVEMENT SHALL HAVE A TACK COAT OF BITUMINOUS MATERIAL APPLIED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS.

THE PROPOSED BITUMINOUS TACK COAT WILL BE PAID FOR UNDER ITEM:
AR603510 BITUMINOUS TACK COAT _____ PER GAL.

DATE	REVISION

SAINT LOUIS DOWNTOWN AIRPORT
A Division of Missouri State Development Agency
A.I.P. PROJ.: 3-17-0039-B17

REV. SHEET NO. 84507TXD 0800	LAYOUT	JAC	1/12/07
DESIGNED BY R-12 LCON.DWG	DRAWN	CCC	1/12/07
SCALE 1"=30'	REVIEWED	CAH	01/26/07
DATE 1/12/07			

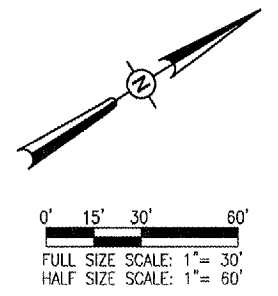
HANSON
Hanson Professional Services Inc.
4227 Earth City Expressway, Suite 130
St. Louis, MO 63045-1308
Offices Nationwide

CONSTRUCT TAXIWAY "A4"
PROPOSED CONSTRUCTION PLAN

5

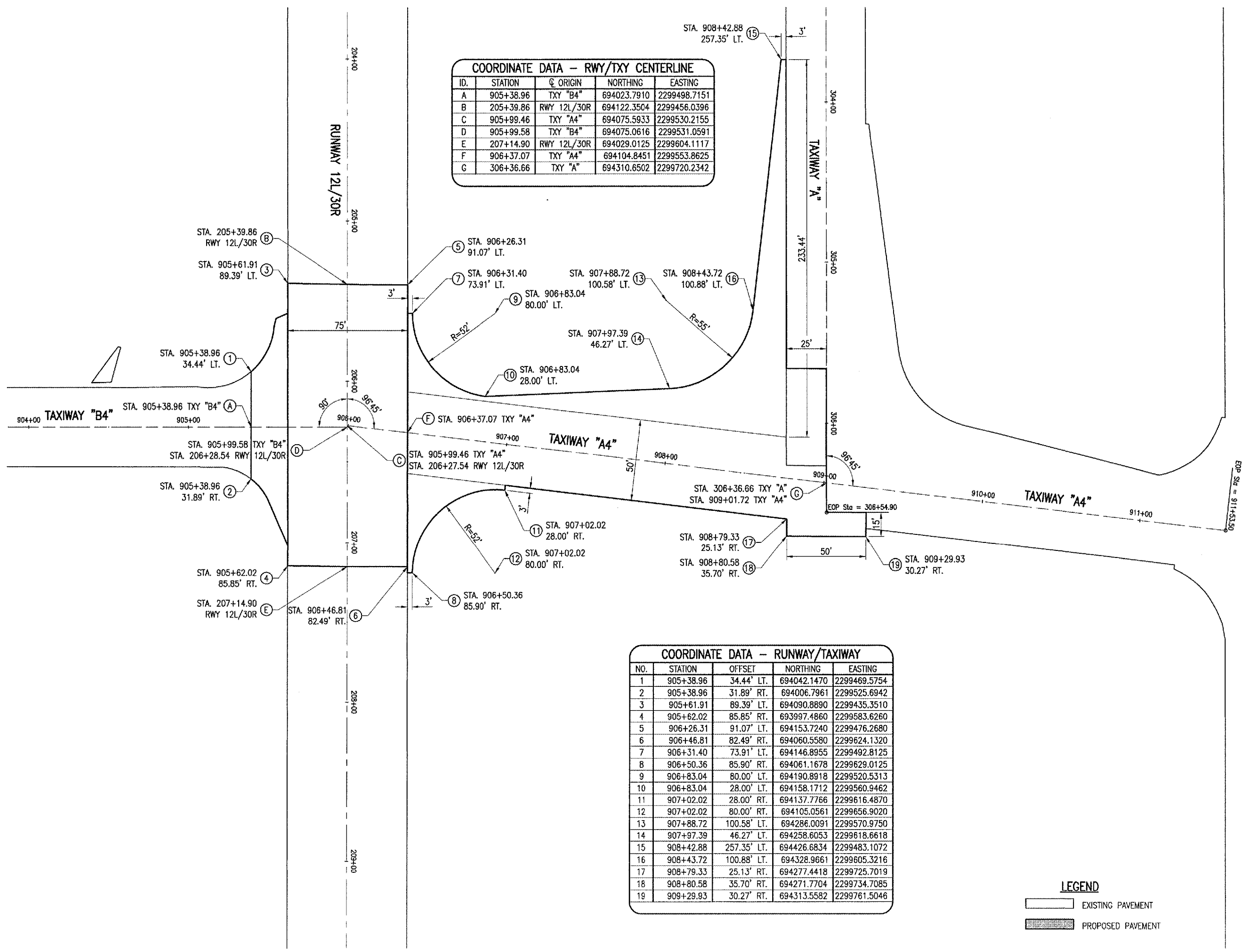
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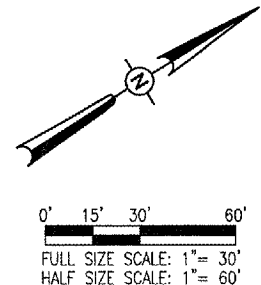


ID.	STATION	Q ORIGIN	NORTHING	EASTING
A	905+38.96	TXY "B4"	694023.7910	2299498.7151
B	205+39.86	RWY 12L/30R	694122.3504	2299456.0396
C	905+99.46	TXY "A4"	694075.5933	2299530.2155
D	905+99.58	TXY "B4"	694075.0616	2299531.0591
E	207+14.90	RWY 12L/30R	694029.0125	2299604.1117
F	906+37.07	TXY "A4"	694104.8451	2299553.8625
G	306+36.66	TXY "A"	694310.6502	2299720.2342

NO.	STATION	OFFSET	NORTHING	EASTING
1	905+38.96	34.44' LT.	694042.1470	2299469.5754
2	905+38.96	31.89' RT.	694006.7961	2299525.6942
3	905+61.91	89.39' LT.	694090.8890	2299435.3510
4	905+62.02	85.85' RT.	693997.4860	2299583.6260
5	906+26.31	91.07' LT.	694153.7240	2299476.2680
6	906+46.81	82.49' RT.	694060.5580	2299624.1320
7	906+31.40	73.91' LT.	694146.8955	2299492.8125
8	906+50.36	85.90' RT.	694061.1678	2299629.0125
9	906+83.04	80.00' LT.	694190.8918	2299520.5313
10	906+83.04	28.00' LT.	694158.1712	2299560.9462
11	907+02.02	28.00' RT.	694137.7766	2299616.4870
12	907+02.02	80.00' RT.	694105.0561	2299656.9020
13	907+88.72	100.58' LT.	694286.0091	2299570.9750
14	907+97.39	46.27' LT.	694258.6053	2299618.6618
15	908+42.88	257.35' LT.	694426.6834	2299483.1072
16	908+43.72	100.88' LT.	694328.9661	2299605.3216
17	908+79.33	25.13' RT.	694277.4418	2299725.7019
18	908+80.58	35.70' RT.	694271.7704	2299734.7085
19	909+29.93	30.27' RT.	694313.5582	2299761.5046



MIDCOAST APRON



LEGEND
 [Dashed Line] EXISTING PAVEMENT
 [Solid Line] PROPOSED PAVEMENT

DATE	REVISION	BY

SAINT LOUIS DOWNTOWN AIRPORT
 A Division of Bi-State Development Agency
 A.I.P. PROJ.: 3-17-0039-B17

FILE Project No. 84507TXID 0800	DATE 1/12/07
Revision R-121GEO.DWG	JAC 1/12/07
Scale 1"=30'	CCC 1/12/07
Date 1/12/07	CAH 01/26/07
LAYOUT	
DRAWN	
REVIEWED	

HANSON
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 4227 Earth City Expressway, Suite 130
 St. Louis, MO 63045-1308
 Offices Nationwide

CONSTRUCT TAXIWAY "A4"
PROPOSED GEOMETRICS PLAN

7

7 of 32 sheets

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901 SEEDING NOTES

THE PROPOSED SEEDING SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ITEM 901 "SEEDING" AS STATED ON PAGE 120 OF THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JULY 1, 2004.

ALL DISTURBED AREAS LOCATED WITHIN THE PROPOSED GRADING AND SEEDING LIMITS WILL BE SEEDDED IN ACCORDANCE WITH THE ABOVE NOTED SPECIFICATION. ALL AREAS DISTURBED OUTSIDE THE DESIGNATED GRADING AND SEEDING LIMITS WILL ALSO BE SEEDDED BUT AT THE CONTRACTOR'S OWN EXPENSE.

ALL MATERIALS AND/OR DEBRIS RESULTING FROM THE SEEDING OPERATIONS WILL BE REMOVED FROM THE PAVEMENTS AND MISCELLANEOUS STRUCTURES PRIOR TO OPENING THE RUNWAY AND TAXIWAY.

901-3.4 MAINTENANCE OF SEEDED AREAS. DELETE THE SECOND PARAGRAPH OF THIS SECTION AND ADD THE FOLLOWING:

"THE CONTRACTOR WILL BE REQUIRED TO ESTABLISH A GOOD STAND OF GRASS OF UNIFORM COLOR AND DENSITY TO THE SATISFACTION OF THE RESIDENT ENGINEER. IF AT THE TIME WHEN THE CONTRACT HAS BEEN OTHERWISE COMPLETED, IT IS NOT POSSIBLE TO MAKE AN ADEQUATE DETERMINATION OF COLOR, DENSITY, AND UNIFORMITY OF SUCH STAND OF GRASS, THE ITEM OF WORK WILL BE REVIEWED AT A LATER DATE DETERMINED BY THE ILLINOIS DIVISION OF AERONAUTICS."

DATE SEEDING COMPLETED _____

THE PROPOSED SEEDING WILL BE PAID FOR UNDER ITEMS: AR901510 SEEDING _____ PER ACRES

908 MULCHING NOTES

THE PROPOSED MULCHING SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ITEM 908 "MULCHING" AS STATED ON PAGE 127 OF THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JULY 1, 2004.

THIS ITEM SHALL CONSIST OF THE FURNISHING, TRANSPORTING, AND PLACING MULCH OVER THE SEEDED AREA. DISTURBED AREAS OUTSIDE THE GRADING LIMITS SHALL ALSO BE MULCHED AND PARTICIPATION WILL BE THE SAME AS FOR SEEDED AREAS.

908-2.1 MULCH MATERIAL: THE CONTRACTOR MAY EITHER FURNISH STRAW OR HYDROMULCH AS THE TYPE OF MULCH MATERIAL TO BE USED ON THIS PROJECT.

908-3.1 MULCHING: THE HYDRAULIC MULCH SHALL BE APPLIED AS A SLURRY OF 2,500 POUNDS OF MULCH AND NOT LESS THAN 2,500 GALLONS OF WATER PER ACRE.

908-3.4 STRUCTURE CLEANING: AFTER THE PROPOSED MULCH HAS BEEN APPLIED, THE CONTRACTOR WILL CLEAN THE MULCH OFF ALL STRUCTURES (DRAINAGE, ELECTRICAL, LIGHTS, ETC.).

DATE MULCHING COMPLETED _____

THE PROPOSED MULCHING WILL BE PAID FOR UNDER ITEMS: AR908510 MULCHING _____ PER ACRES

SHOULDER ADJUSTMENT NOTE

ANY MATERIAL NEEDED TO ADJUST THE SHOULDERS WILL BE BROUGHT IN FROM OFF-SITE. THE PROPOSED SHOULDER ADJUSTMENT WILL BE CONSTRUCTED IN THE AREAS SHOWN ON THIS SHEET.

THE EARTH SHOULDERS WILL NOT REQUIRE COMPACTING, OTHER THAN LIGHT ROLLING AND SHAPING.

THE AREA REQUIRING SHOULDER ADJUSTMENT WILL BE GRADED SO THAT THERE IS A MAXIMUM OF 1 1/2" DROP FROM THE PROPOSED EDGE OF PAVEMENT AND GRADED AT A 5% SLOPE UNTIL IT MATCHES THE EXISTING SHOULDER.

THE MATERIAL, EQUIPMENT, LABOR AND INCIDENTALS FOR THE PROPOSED SHOULDERS WILL BE PAID FOR UNDER ITEM: AR152480 SHOULDER ADJUSTMENT _____ 59 S.Y.

LEGEND

- EXISTING PAVEMENT
- PROPOSED PAVEMENT
- EXISTING GRADE
- PROPOSED GRADE
- PROPOSED GRADING, SEEDING AND MULCHING LIMITS

BORROW EXCAVATION NOTES

THE GRADING WILL BE FLUSH WITH THE PAVEMENT EDGE AND TAPERING TO THE EXISTING GROUND IN THE DISTANCE SHOWN ON THE CROSS-SECTIONS AND THE STAKING PLAN SHEETS. THE MATERIAL FOR THE PROPOSED FILL WILL BE OBTAINED FROM OFF-SITE.

THE FILL AREAS WILL BE COMPACTED IN ACCORDANCE WITH PROCEDURES FOR AIRCRAFT WEIGHING MORE THAN 60,000 POUNDS. A MODIFIED PROCTOR WILL BE USED.

THE MATERIAL FOR THE PROPOSED FILL WILL BE PAID FOR UNDER ITEM: AR152440 BORROW EXCAVATION PER CUBIC YARDS.

QUANTITY OF BORROW EXCAVATION _____ PER C.Y.

152410-UNCLASSIFIED EXCAVATION NOTES:

THE PROPOSED UNCLASSIFIED EXCAVATION SHALL BE PLACED IN ACCORDANCE WITH ITEM 152 "EXCAVATION AND EMBANKMENT" AS STATED ON PAGE 25 OF THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JULY 1, 2004.

THE EARTH SUBGRADE WILL BE FIRST ROUGH CUT TO THE SPECIFIED ELEVATIONS, THE ELEVATIONS SHOWN ON THE STAKING PLAN ARE FOR FINISHED PAVEMENT. SUBGRADE ELEVATIONS WILL BE THE GRADE SHOWN MINUS THE PAVEMENT THICKNESS (INCLUDING BASE).

MATERIAL TO BE USED FOR SHOULDERING WILL BE STORED OUTSIDE OF THE PROPOSED PAVEMENT AREA AND WITHIN THE GRADING LIMITS.

THE MATERIAL TO BE USED FOR THE SHOULDERING WILL BE TOPSOIL OBTAINED FROM THE ON SITE UNCLASSIFIED EXCAVATION.

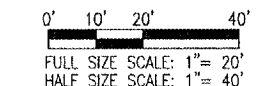
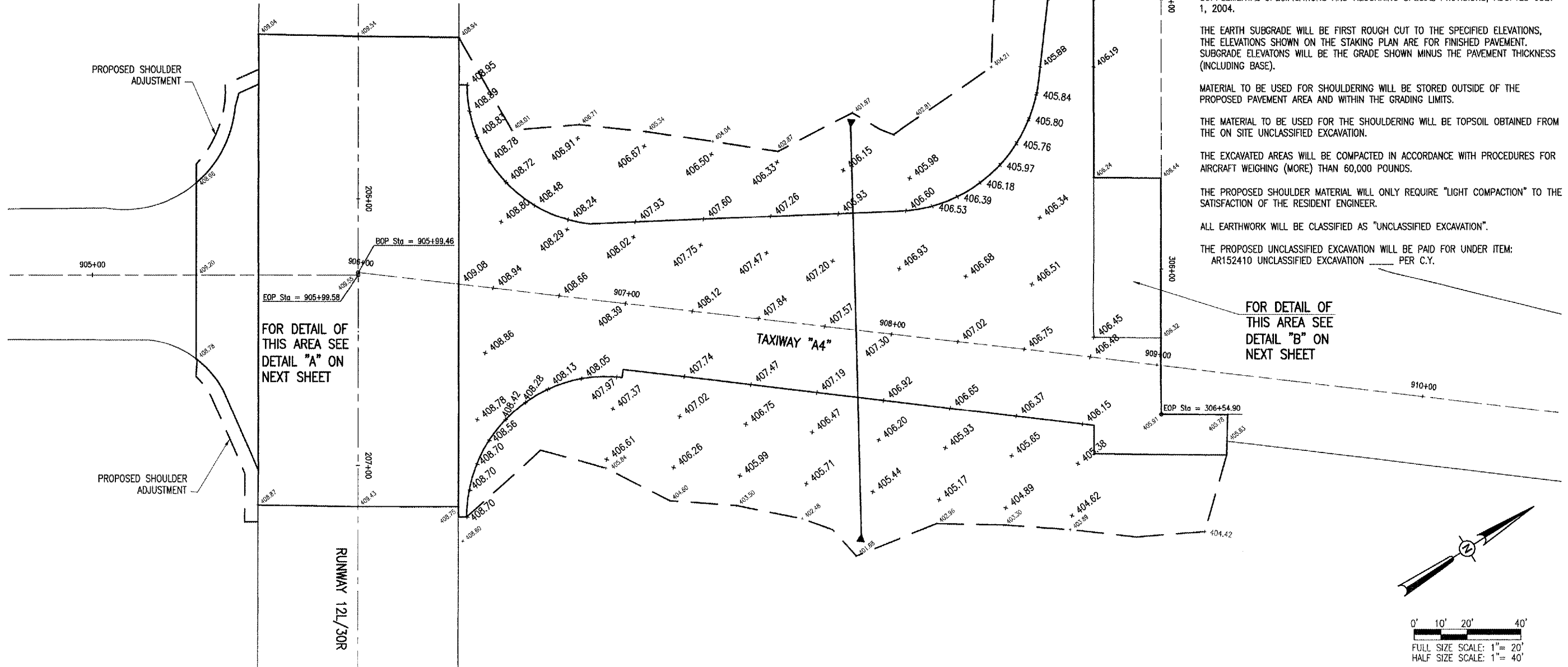
THE EXCAVATED AREAS WILL BE COMPACTED IN ACCORDANCE WITH PROCEDURES FOR AIRCRAFT WEIGHING (MORE) THAN 60,000 POUNDS.

THE PROPOSED SHOULDER MATERIAL WILL ONLY REQUIRE "LIGHT COMPACTION" TO THE SATISFACTION OF THE RESIDENT ENGINEER.

ALL EARTHWORK WILL BE CLASSIFIED AS "UNCLASSIFIED EXCAVATION".

THE PROPOSED UNCLASSIFIED EXCAVATION WILL BE PAID FOR UNDER ITEM: AR152410 UNCLASSIFIED EXCAVATION _____ PER C.Y.

FOR DETAIL OF THIS AREA SEE DETAIL "B" ON NEXT SHEET



SD047

DATE	REVISION

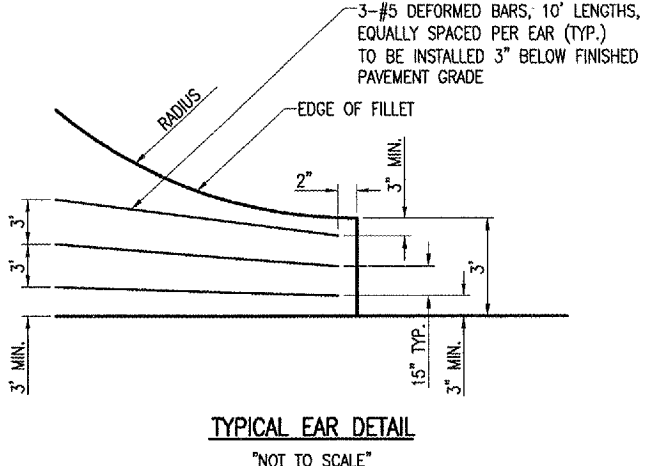
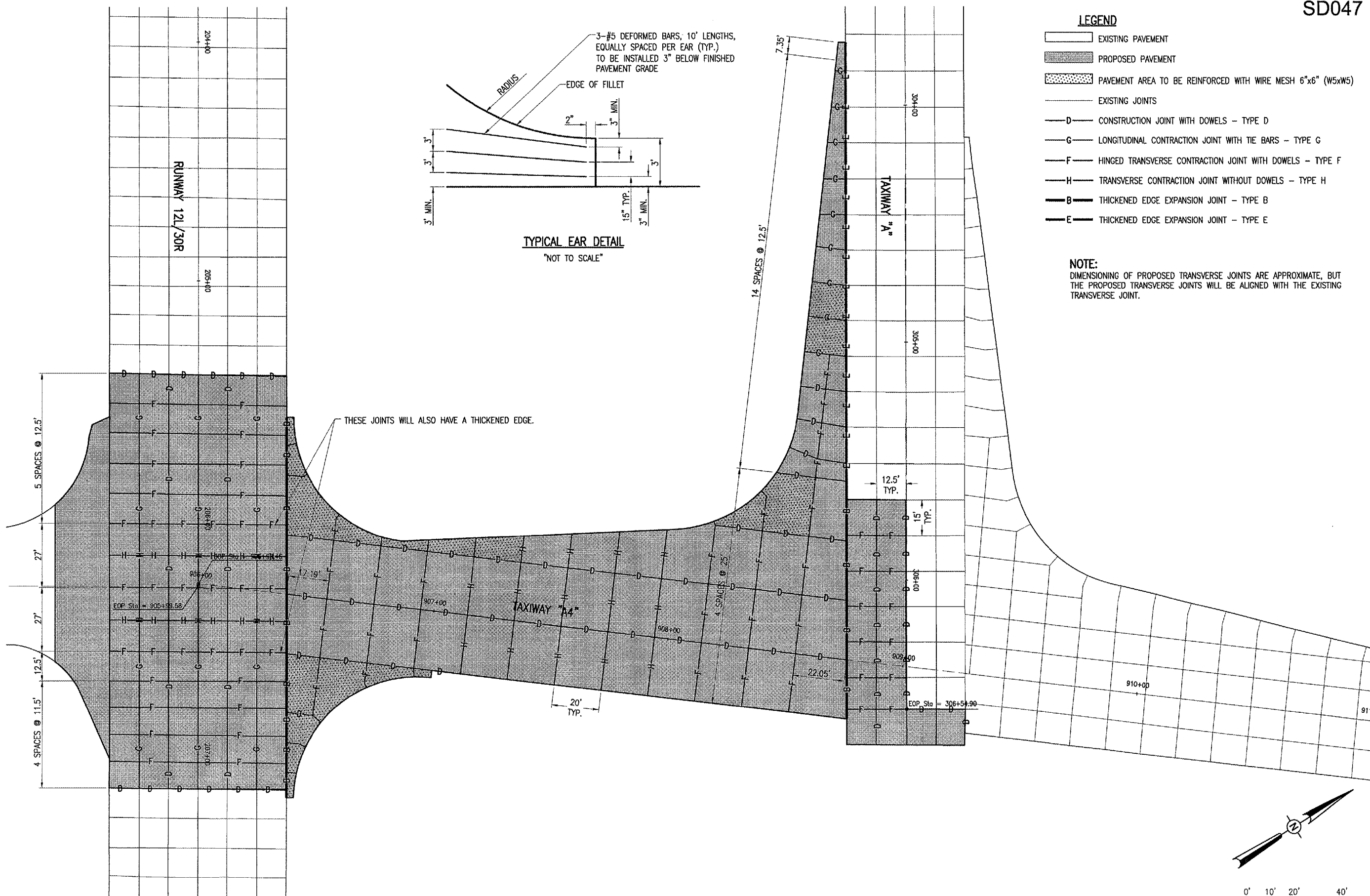
SAINT LOUIS DOWNTOWN AIRPORT
A Division of Bi-State Development Agency
A.I.P. PROJ.: 3-17-0039-817

Project No. 84507TXD-0800	1/12/07
Revision R-181STK.DWG	1/12/07
Scale 1"=20'	01/26/07
Date 1/12/07	
LAYOUT JAC	
DRAWN CCC	
REVIEWED CAH	

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CONSTRUCT TAXIWAY "A4"
PROPOSED STAKING PLAN

APR 18, 2007 1:16 PM BAK
E:\AIRPORT\ST. LOUIS DOWNTOWN\84507TXD\AIRPORT\SHEETS\18-191STK.DWG - STAKING



- LEGEND**
- EXISTING PAVEMENT
 - PROPOSED PAVEMENT
 - PAVEMENT AREA TO BE REINFORCED WITH WIRE MESH 6"x6" (W5xW5)
 - EXISTING JOINTS
 - CONSTRUCTION JOINT WITH DOWELS - TYPE D
 - LONGITUDINAL CONTRACTION JOINT WITH TIE BARS - TYPE G
 - HINGED TRANSVERSE CONTRACTION JOINT WITH DOWELS - TYPE F
 - TRANSVERSE CONTRACTION JOINT WITHOUT DOWELS - TYPE H
 - THICKENED EDGE EXPANSION JOINT - TYPE B
 - THICKENED EDGE EXPANSION JOINT - TYPE E

NOTE:
 DIMENSIONING OF PROPOSED TRANSVERSE JOINTS ARE APPROXIMATE, BUT THE PROPOSED TRANSVERSE JOINTS WILL BE ALIGNED WITH THE EXISTING TRANSVERSE JOINT.

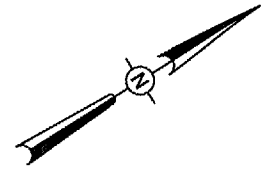
DATE	REVISION	BY

SAINT LOUIS DOWNTOWN AIRPORT
 A Division of Missouri State Development Agency
 A.I.P. PROJ.: 3-17-0039-817

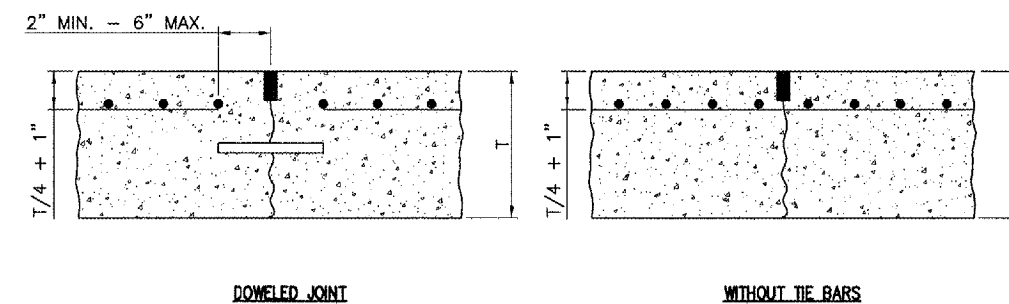
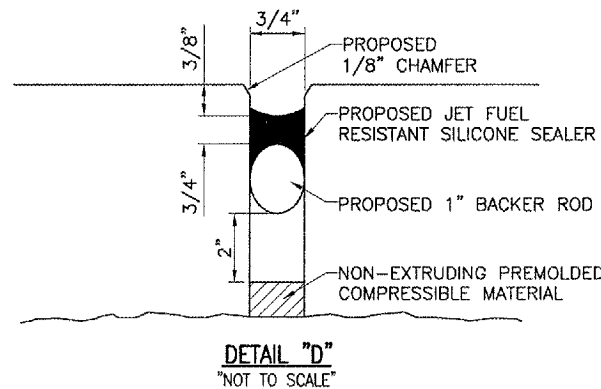
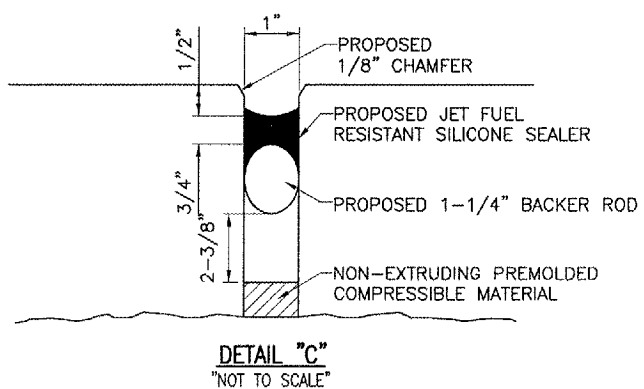
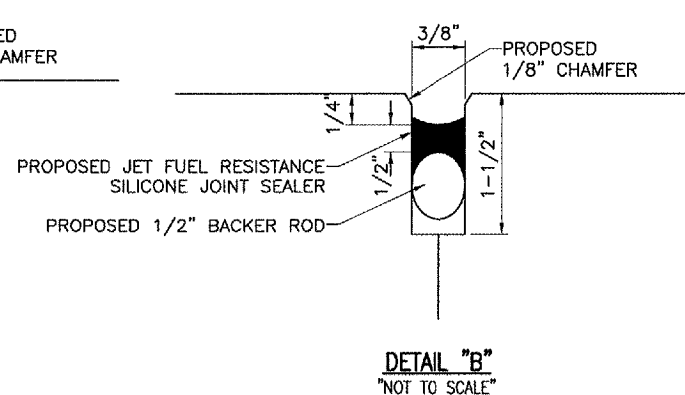
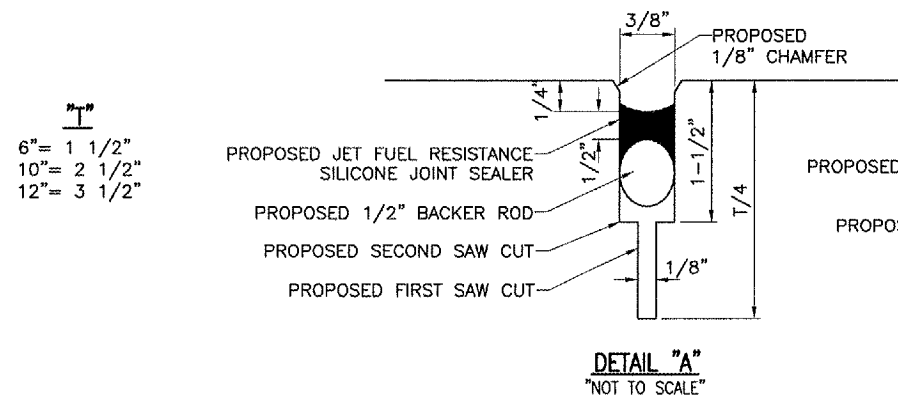
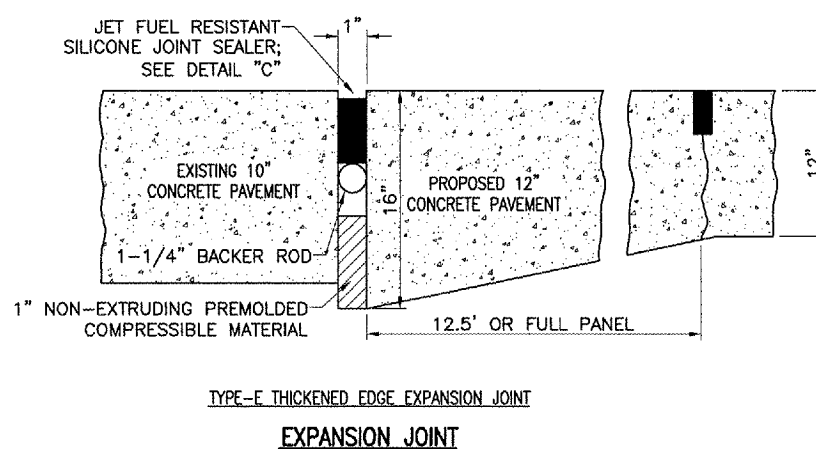
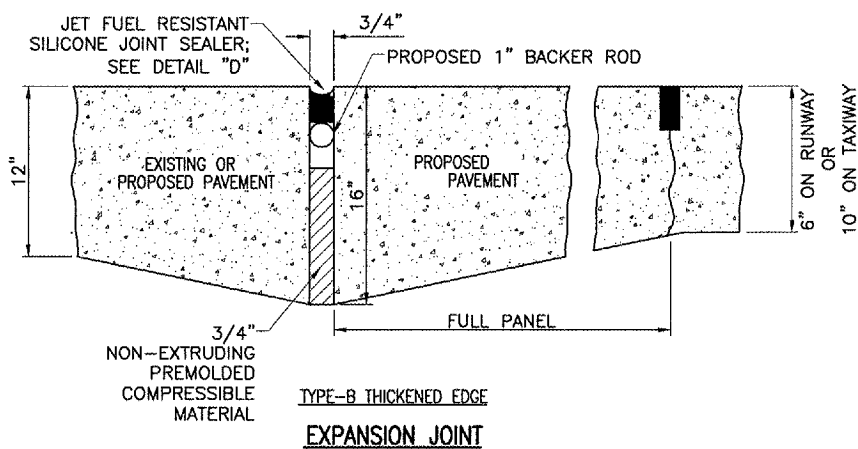
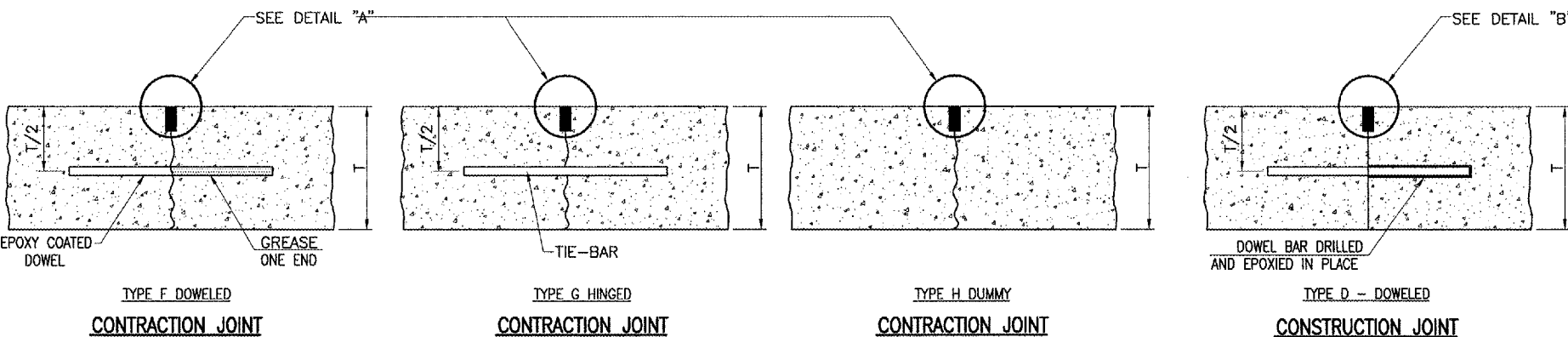
Proj. No. 84507TXD 0800	JAC	1/12/07
Rev. R-16 INT.DWG	CCC	1/12/07
Scale 1"=20'	CAH	01/30/07
Date 1/12/07		
LAYOUT		
DRAWN		
REVIEWED		

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CONSTRUCT TAXIWAY "A4"
 PROPOSED JOINTING PLAN



0' 10' 20' 40'
 FULL SIZE SCALE: 1" = 20'
 HALF SIZE SCALE: 1" = 40'



CONSTRUCTION OR CONTRACTION JOINTS WITH STEEL REINFORCEMENT

JOINTING NOTES

ALL EXPOSED JOINT EDGES SHALL BE CHAMFERED ACCORDING TO THE JOINT DETAILS ON THIS SHEET.

ALL LONGITUDINAL AND TRANSVERSE CONTRACTION AND CONSTRUCTION JOINTS SHALL BE SAWS.

ALL DOWEL BARS SHALL BE SECURELY HELD IN PLACE BY MEANS OF A DOWEL BAR ASSEMBLY WHICH WILL INSURE THAT THEY WILL REMAIN PARALLEL TO THE SURFACE OF THE PAVEMENT AND TO THE CENTERLINES OF THE PAVEMENT LANES. THE DOWEL BAR ASSEMBLIES SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. FOR 6" CONCRETE DOWELS SHALL BE 3/4" DIA., 18" LENGTH AND 15" SPACING, FOR 10" CONCRETE DOWELS SHALL BE 1" DIA., 19" LENGTH AND 24" SPACING, FOR 12" CONCRETE DOWELS SHALL BE 1-1/4" DIA., 20" LENGTH AND 24" SPACING

ALL DOWELS ARE TO BE PLACED AT A POINT NOT CLOSER THAN 6 INCHES FROM A LONGITUDINAL OR TRANSVERSE JOINT.

ALL TIE-BARS SHALL BE SECURELY HELD IN PLACE BY SUPPORT PINS OR OTHER METHODS TO PREVENT SHIFTING DURING AND AFTER CONCRETE PLACEMENT. SUPPORT PINS SHALL BE OF SUFFICIENT LENGTH TO PENETRATE AT LEAST 6" INTO THE SUBGRADE.

ALL TIE-BARS SHALL BE PLACED AT A POINT NOT EXCEEDING 15" OR CLOSER THAN 6" FROM A TRANSVERSE, CONTRACTION, OR CONSTRUCTION JOINT AND SPACED 30" ON CENTERS AND SHALL BE NO. 5 DEFORMED BARS, 30" IN LENGTH FOR 10" & 12" PAVEMENT, NO. 4 DEFORMED BARS SHALL BE USED FOR 6" PAVEMENT.

DOWELS IN TRANSVERSE, CONTRACTION, AND CONSTRUCTION JOINTS SHALL BE EPOXY COATED AND HALF THE LENGTH GREASED WITH A HEAVY GREASE.

DOWELS LOCATED IN THE CONSTRUCTION JOINTS WILL BE DRILLED AND EPOXIED IN PLACE. THE EPOXY MATERIAL MUST BE APPROVED BY THE ILLINOIS DIVISION OF AERONAUTICS.

ALLOWABLE TOLERANCES FOR GROOVE DEPTH WILL BE +1/8" FOR CONSTRUCTION JOINTS AND +1/4" FOR CONTRACTION JOINTS.

THE COST OF ALL DOWEL BARS, TIE-BARS, PAVING MESH, SAWING, NEOPRENES AND SEALING SHALL BE INCLUDED IN THE COST OF THE P.C.C. PAVEMENT.

PRIOR TO PLACING ADJACENT PAVEMENT SECTIONS, THE VERTICAL EDGE SHALL BE CHECKED FOR TRUENESS, IF THE FACE IS BURRED OR IRREGULAR, THE CONTRACTOR SHALL GRIND, STONE OR SAW THE FACE TO PRODUCE A SMOOTH AND STRAIGHT EDGE.

WHEN CONSTRUCTING "FILL-IN" PAVEMENT LANES THE CONTRACTOR SHALL USE BELTING OR OTHER PROTECTIVE MATERIAL FOR THE PAVING MACHINE TO TRAVEL ON AND WILL ROPE THE TRANSVERSE JOINTS.

JOINT SEALANT SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS ITEM 501-2.5.

CURING COMPOUND WILL BE AS SPECIFIED IN THE SPECIFICATIONS, ITEM 501-3.17 AND SHALL BE APPROVED PRIOR TO THE PAVING OPERATION BY THE ENGINEER.

ALL NON-ALIGNED EDGES WILL BE SAWS FULL DEPTH.

WIRE MESH IS TO BE SECURELY HELD IN PLACE BY MEANS OF SUPPORT PINS OR OTHER METHODS TO PREVENT SHIFTING OR SAGGING DURING AND AFTER THE CONCRETE PLACEMENT. SUPPORT PINS ARE TO BE OF SUFFICIENT LENGTH TO PENETRATE AT LEAST 6 INCHES INTO THE SUBGRADE.

PRIOR TO PLACING MATERIAL HAULING CONSTRUCTION EQUIPMENT ON THE NEW PAVEMENT, THE PSI OF THE PAVEMENT IS TO REACH 3000 POUNDS STRENGTH.

DATE	REVISION	BY

SAINT LOUIS DOWNTOWN AIRPORT
A Division of Missouri State Development Agency
A.I.P. PROJ.: 3-17-0639-B17
IL PROJ.: CPS-3664

FILE NO. 845071XJD_0800	DATE 01/15/07
PROJECT R-561 JNT.DWG	DRAWN BAK
SCALE NOT TO SCALE	REVIEWED CAH
DATE 01/15/07	

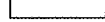

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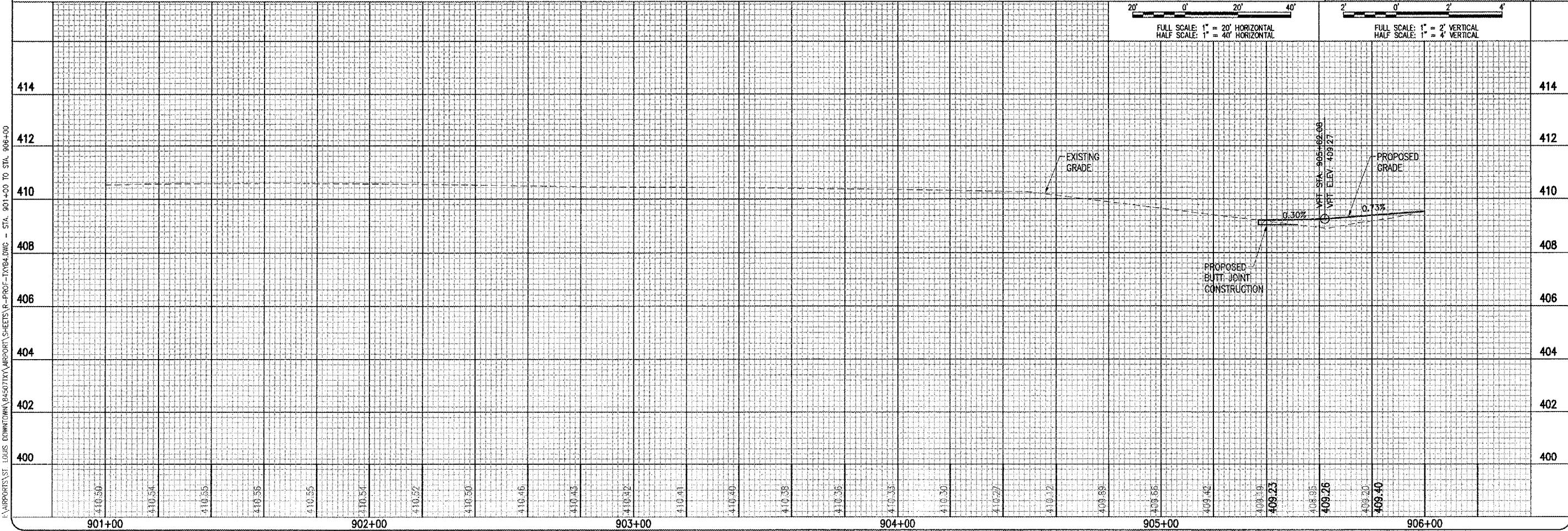
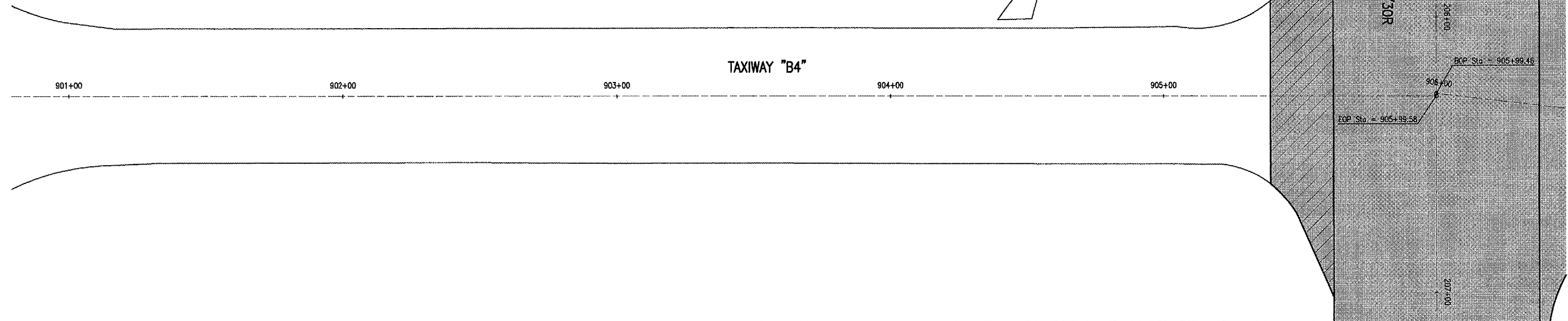
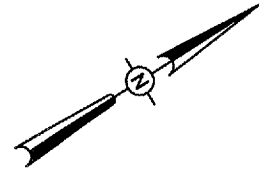
CONSTRUCT TAXIWAY "A4"
PROPOSED JOINTING DETAILS

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I:\WORK\ST. LOUIS DOWNTOWN\845071XJD\AIRPORT\SHEETS\3-561 JNT.DWG - JOINTING DETAILS

SD047

LEGEND

-  EXISTING PAVEMENT
-  PROPOSED BITUMINOUS PAVEMENT



DATE	REVISION	BY

SAINT LOUIS DOWNTOWN AIRPORT
 A Division of St. Louis Development Agency
 L. PROJ.: CPS-3664

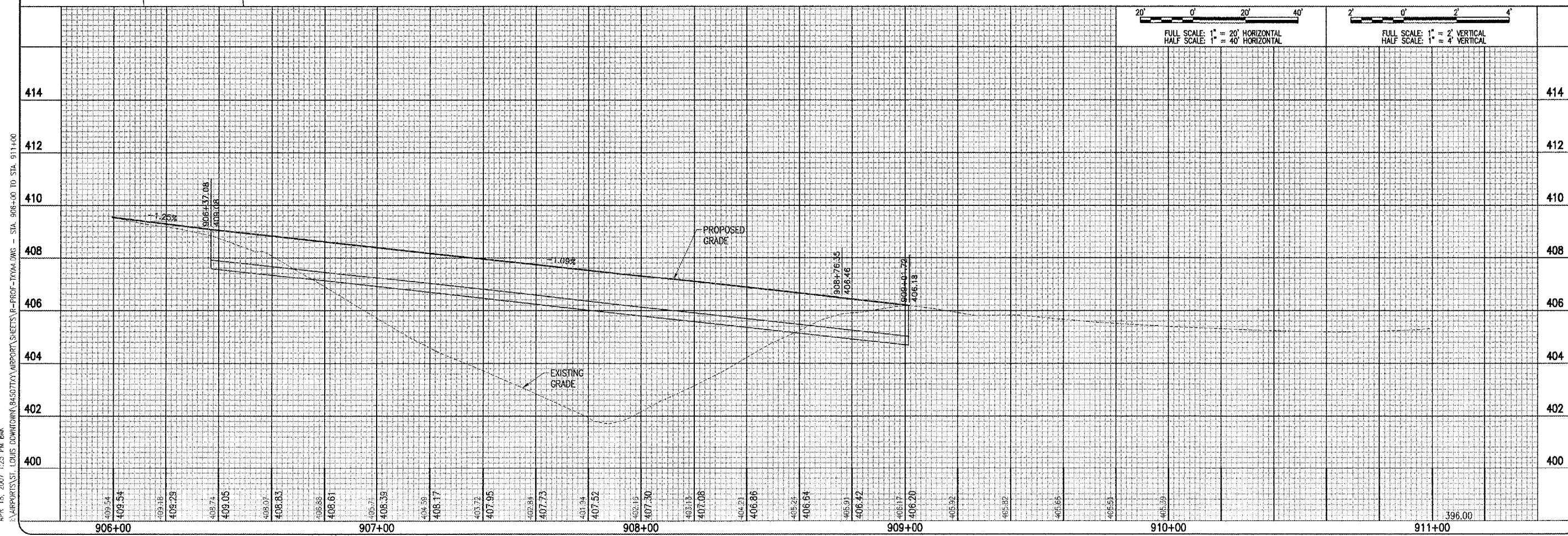
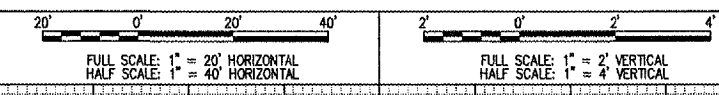
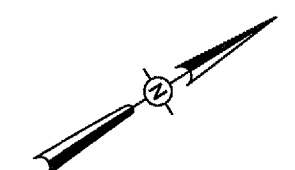
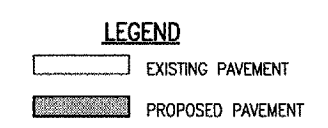
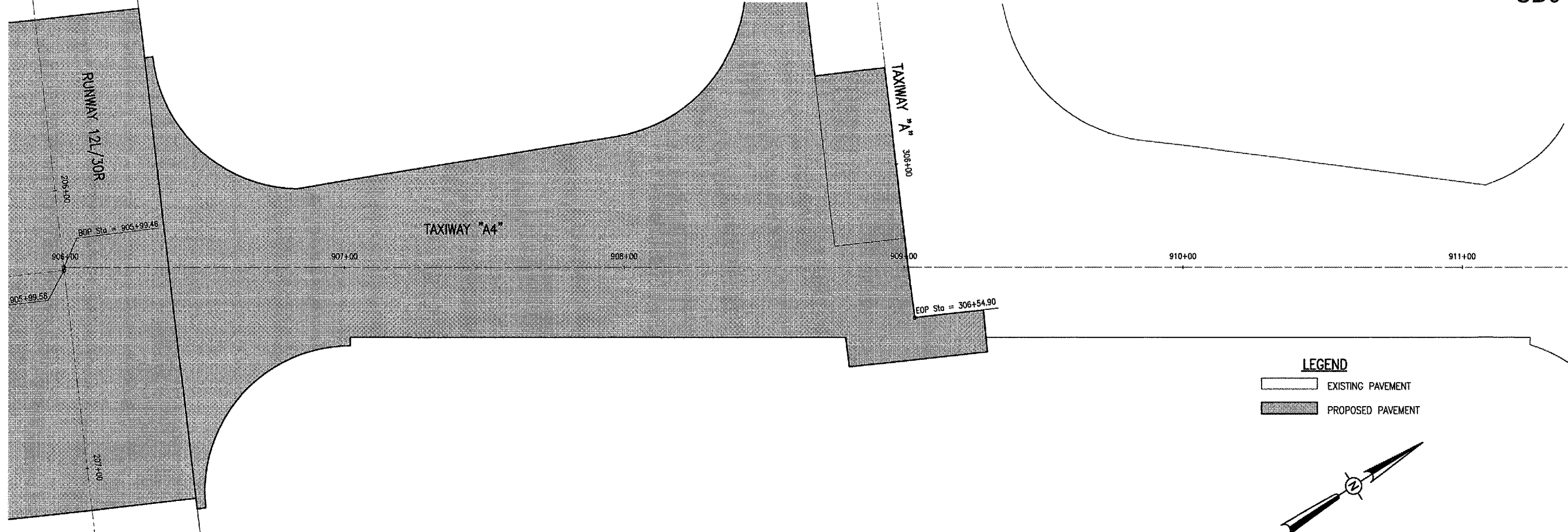
ISS. No. 84507TYXD_0800	JAC	1/23/07
DESIGN R-PROF-TXB4.DWG	JEO	1/23/07
Scale H. 1"=20' V. 1"=2'	CAH	01/26/07
Date 1/23/07		

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CONSTRUCT TAXIWAY "A4"
 PROPOSED TAXIWAY "B4"
 PLAN AND PROFILE
 STA. 901+00 TO STA. 906+00

APR 18, 2007 1:25 PM BAK
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SD047



DATE	REVISION	BY

SAINT LOUIS DOWNTOWN AIRPORT
 A Division of BLS State Development Agency
 A.I.P. PROJ.: 3-17-0339-617

BBK Project No. 84507TXVD.0800	JAC	1/23/07
Drawn R-PROF-TXVA4.DWG	JEO	1/23/07
Scale H. 1"=20' V. 1"=2'	CAH	01/26/07
Date 1/23/07		

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 PROPOSED TAXIWAY "A4"
 PLAN AND PROFILE
 STA. 906+00 TO STA. 911+00

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INSPECTION HOLE NOTES

DIAMETER OF PIPE AS SPECIFIED.

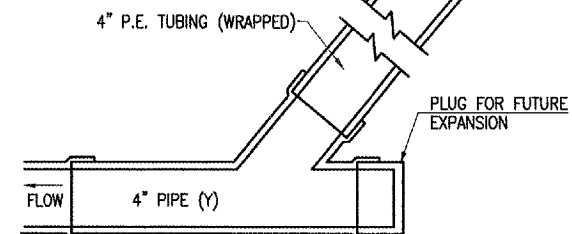
TOP OF INSPECTION HOLES SHALL BE 0.15' LESS THAN THE ADJACENT PAVEMENT.

1/2" CHAMFER TO BE USED ON ALL EXPOSED EDGES OF INSPECTION HOLES.

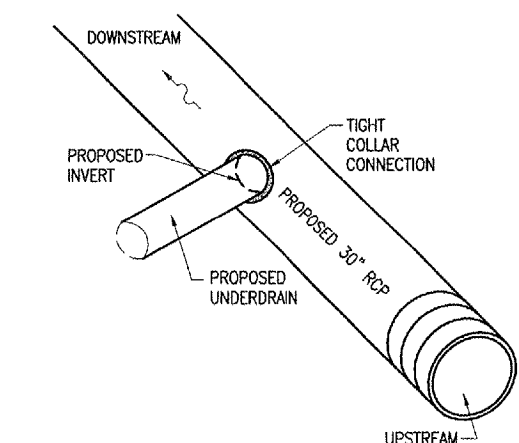
THE CONCRETE SHALL BE STRUCTURAL PORTLAND CEMENT CONCRETE (NON- REINFORCED)

CAST IRON FRAME AND COVER

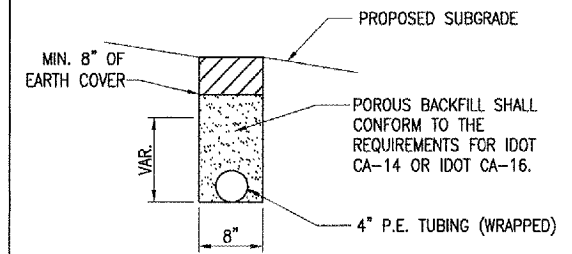
NEENAH R-6013, DEETER 1810, EAST JORDAN 2790-6 OR APPROVED EQUAL



CLEANOUT HOLE-TYPE B



UNDERDRAIN CONNECTION DETAIL
"NOT TO SCALE"



UNDERDRAIN DETAIL
NOT TO SCALE

UNDERDRAIN NOTES

THE CONTRACTOR SHALL INSTALL THE PROPOSED 4" P.E. TUBING UNDERDRAINS TO THE DEPTH AND GRADES SHOWN ON THIS SHEET. THE UNDERDRAINS SHALL BE INSTALLED AFTER THE LIME SUBGRADE PROCESSING HAS BEEN COMPLETED.

THE 4" P.E. TUBING SHALL BE CAPPED AT THE ENDS WHICH DO NOT CONNECT INTO STRUCTURES.

THE TRENCH SHALL BE BACKFILLED AND COMPACTED WITH POROUS BACKFILL NO. 1 MATERIAL. THE TRENCH LOCATED IN THE PROPOSED PAVEMENT AREAS WILL BE BACKFILLED AS SHOWN IN THE DETAIL ON THIS SHEET. THE TRENCH LOCATED IN TURF AREAS SHALL BE BACKFILLED UP TO WITHIN 8 INCHES. OF THE EXISTING GROUND ELEVATION. THE REMAINING 8 INCHES. OF TRENCH WILL BE BACKFILLED AND COMPACTED WITH EARTH MATERIAL.

THE POROUS BACKFILL SHALL COMFORM TO THE REQUIREMENTS FOR IDOT CA-14 OR IDOT CA-16.

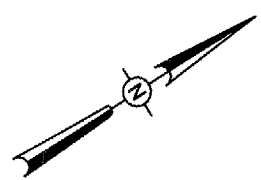
THE CONNECTION TO THE PROPOSED 30" RCP WILL BE CONSIDERED INCIDENTAL TO THE "4" PERFORATED UNDERDRAIN W/SOCK" ITEM AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

THE PROPOSED UNDERDRAINS AND BACKFILLED MATERIAL WILL BE PAID FOR UNDER THE FOLLOWING ITEMS:

- AR705411 "POROUS BACKFILL NO. 1" _____ PER C.Y.
- AR705524 "4" PERFORATED UNDERDRAIN W/SOCK" _____ PER L.F.

LEGEND

- EXISTING PAVEMENT
- PROPOSED PAVEMENT
- PROPOSED 4" PERFORATED UNDERDRAIN W/SOCK
- PROPOSED 30" RCP
- PROPOSED UNDERDRAIN INSPECTION HOLE
- PROPOSED FLARED END SECTION



0' 15' 30' 60'
FULL SIZE SCALE: 1" = 30'
HALF SIZE SCALE: 1" = 60'

APR 18, 2007 1:28 PM BAK
L:\AIRPORTS\ST. LOUIS DOWNTOWN\84507TX\REPORT SHEETS\8-131DRN.DWG - DRAINAGE PLAN

DATE	REVISION	BY

SAINT LOUIS DOWNTOWN AIRPORT
A Division of St. Louis Development Agency



DES. PROJECT NO. 84507TX.D 0800	LAYOUT	JAC	01/19/07
PLAN NO. R-131DRN.DWG	DRAWN	BAK	01/19/07
SCALE 1" = 30'	REVIEWED	CAH	01/26/07
DATE 01/19/07			

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CONSTRUCT TAXIWAY "A4"
PROPOSED DRAINAGE PLAN

TAXI GUIDANCE SIGN RELOCATION

EXISTING TAXI GUIDANCE SIGN R2 WILL BE REMOVED FROM IT'S EXISTING BASE ALONG WITH IT'S ISOLATION TRANSFORMER. THE CONTRACTOR WILL REMOVE THE EXISTING CONCRETE SIGN BASE AND DISPOSE OF IT OFF THE AIRPORT SITE.

EXISTING TAXI GUIDANCE SIGN R4 WILL BE RELOCATED TO EXISTING TAXI GUIDANCE SIGN R4.

SEE SHEET 18 FOR RELOCATION DETAILS.

LIGHT REMOVAL NOTES

ALL EXISTING RUNWAY, TAXIWAY LIGHTS AND TAXI GUIDANCE SIGNS THAT ARE DESIGNATED FOR REMOVAL WILL BE REMOVED. THE LIGHTS AND THEIR ISOLATING TRANSFORMER WILL BE TURNED OVER TO THE AIRPORT MANAGER. THE LIGHT STAKES/BASES WILL BE REMOVED AND DISPOSED OF OFF THE AIRPORT SITE.

THE HOLE LEFT FROM THE LIGHT REMOVAL WILL BE FILLED IN WITH EARTH AND COMPACTED TO PREVENT FUTURE SETTLEMENT. THE DISTURBED AREAS WILL BE FERTILIZED AND SEEDING IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

THE EXISTING RUNWAY CABLES WILL BE ABANDONED IN PLACE UNLESS IT CONFLICTS WITH THE INSTALLATION OF A PROPOSED LIGHT OR CABLE, THEN IT WILL BE REMOVED AT NO ADDITIONAL COST TO THE CONTRACT.

DURING CONSTRUCTION, THE LIGHTS ON TAXIWAYS A4, B4, B5, B6 AND ALPHA-EAST OF A3 WILL BE REMOVED FROM SERVICE. THE CONTRACTOR WILL EITHER FURNISH THE NECESSARY JUMPER CABLES AND SPLICE KITS, OR PLACE BLACK PLASTIC BAGS OVER THE FIXTURE LENSES IN ORDER TO KEEP THE REMAINING TAXIWAY LIGHTING CIRCUITS OPERATIONAL WHILE THE LISTED TAXIWAYS ARE REMOVED FROM SERVICE.

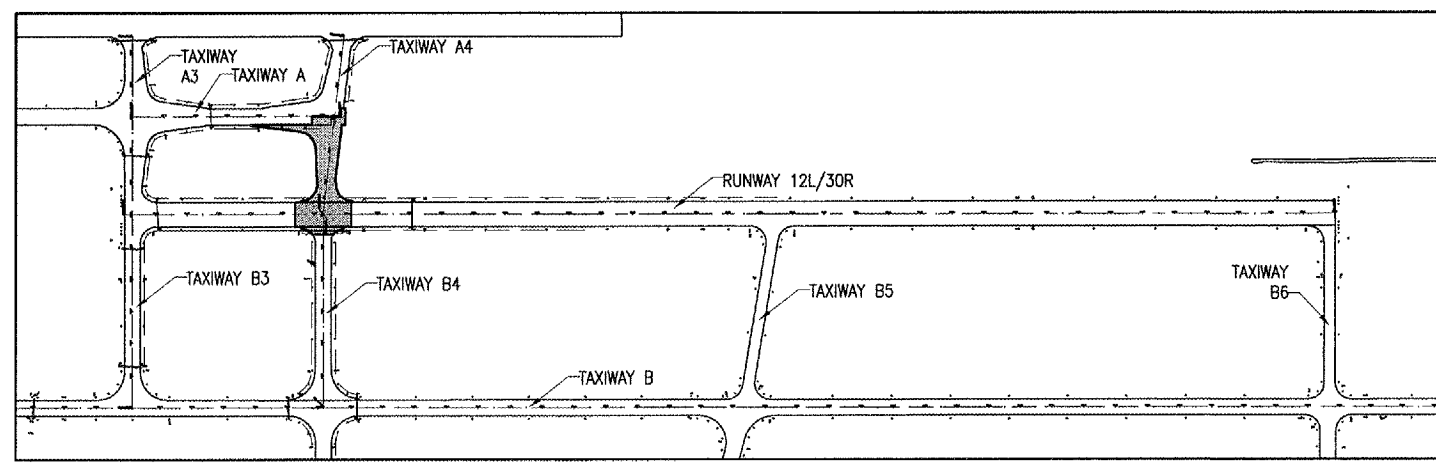
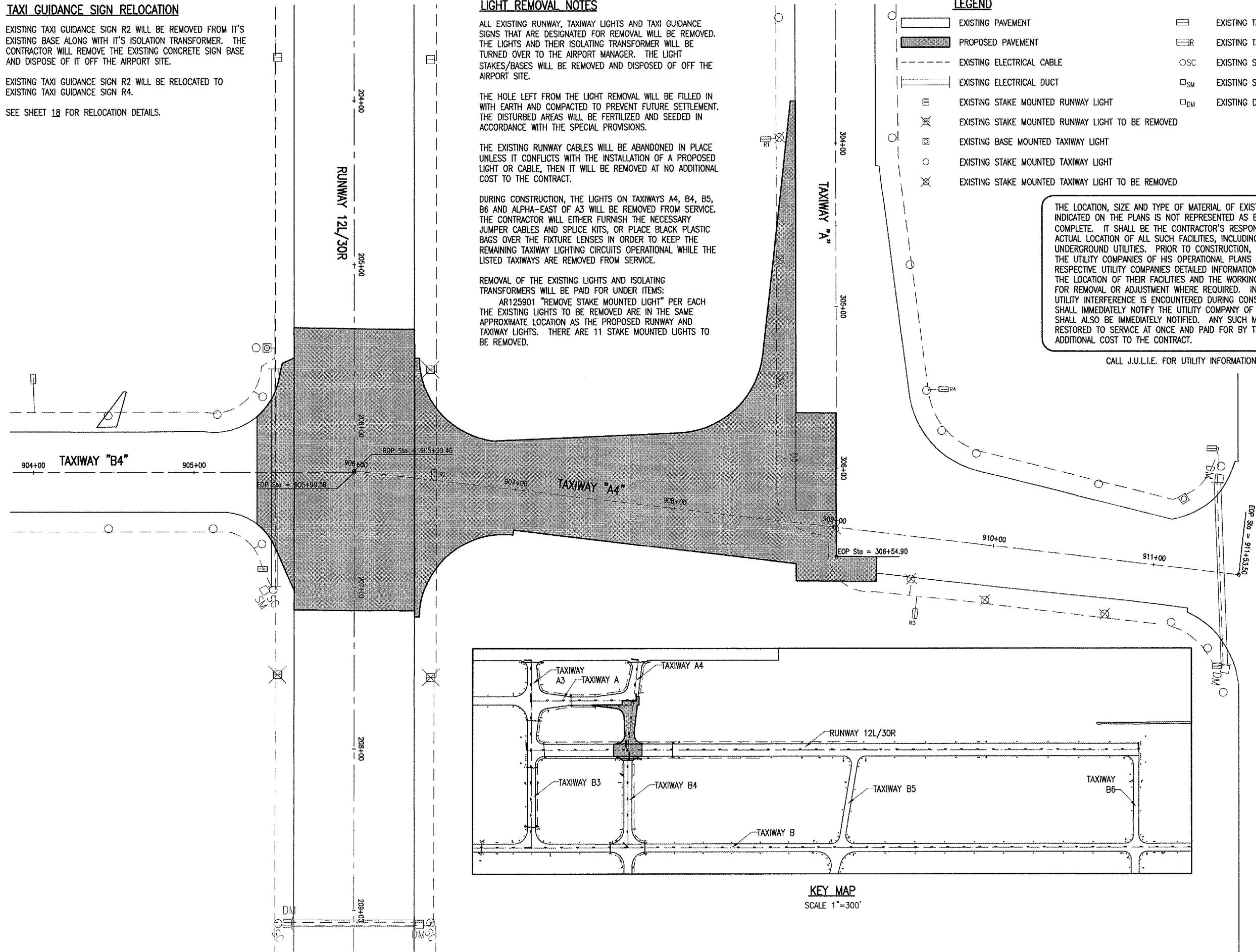
REMOVAL OF THE EXISTING LIGHTS AND ISOLATING TRANSFORMERS WILL BE PAID FOR UNDER ITEMS:
AR125901 "REMOVE STAKE MOUNTED LIGHT" PER EACH THE EXISTING LIGHTS TO BE REMOVED ARE IN THE SAME APPROXIMATE LOCATION AS THE PROPOSED RUNWAY AND TAXIWAY LIGHTS. THERE ARE 11 STAKE MOUNTED LIGHTS TO BE REMOVED.

LEGEND

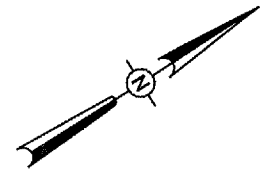
- EXISTING PAVEMENT
- PROPOSED PAVEMENT
- EXISTING ELECTRICAL CABLE
- EXISTING ELECTRICAL DUCT
- EXISTING STAKE MOUNTED RUNWAY LIGHT
- EXISTING STAKE MOUNTED RUNWAY LIGHT TO BE REMOVED
- EXISTING BASE MOUNTED TAXIWAY LIGHT
- EXISTING STAKE MOUNTED TAXIWAY LIGHT
- EXISTING STAKE MOUNTED TAXIWAY LIGHT TO BE REMOVED
- EXISTING TAXIWAY GUIDANCE SIGN
- EXISTING TAXIWAY GUIDANCE SIGN TO BE RELOCATED
- EXISTING SPLICE CAN
- EXISTING SPLICE MARKER
- EXISTING DUCT MARKER

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.



KEY MAP
SCALE 1"=300'



0' 15' 30' 60'
FULL SIZE SCALE: 1"= 30'
HALF SIZE SCALE: 1"= 60'

SD047

DATE	REVISION	BY

SAINT LOUIS DOWNTOWN AIRPORT
A Division of Missouri State Development Agency
A.I.P. PROJ.: 3-17-0039-B17
IL PROJ.: CPS-3664

Proj. No. 84507TXD_0800	JAC	01/15/07
Revision R-141ELE.DWG	MDR	01/15/07
Scale 1"=30'	CAH	01/26/07
Date 01/15/07		
LAYOUT		
DRAWN		
REVIEWED		

HANSON
Hanson Professional Services Inc.
4227 Earth City Expressway, Suite 130
St. Louis, MO 63045-1309
Offices Nationwide

CONSTRUCT TAXIWAY "A4"
EXISTING ELECTRICAL PLAN

APR 18, 2007 1:30 PM BAK
I:\AIRPORT\ST. LOUIS DOWNTOWN\84507TXD\AIRPORT\SHEETS\R-141ELE.DWG - EXISTING ELECTRICAL

DATE	
REVISION	
BY	

SAINT LOUIS DOWNTOWN AIRPORT
 A Division of Bi-State Development Agency
 I.L. PROJ.: 3-17-0039-B17

FILE PROJECT No.	84507TXD_0800
PLANS	R-142ELE.DWG
DATE	01/15/07
LAYOUT	MDR 01/15/07
DRAWN	MDR 01/15/07
REVIEWED	CAH 01/26/07

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 Hanson Professional Services, Inc.
 4227 East City Expressway, Suite 130
 St. Louis, MO 63045-1008
 Offices Nationwide

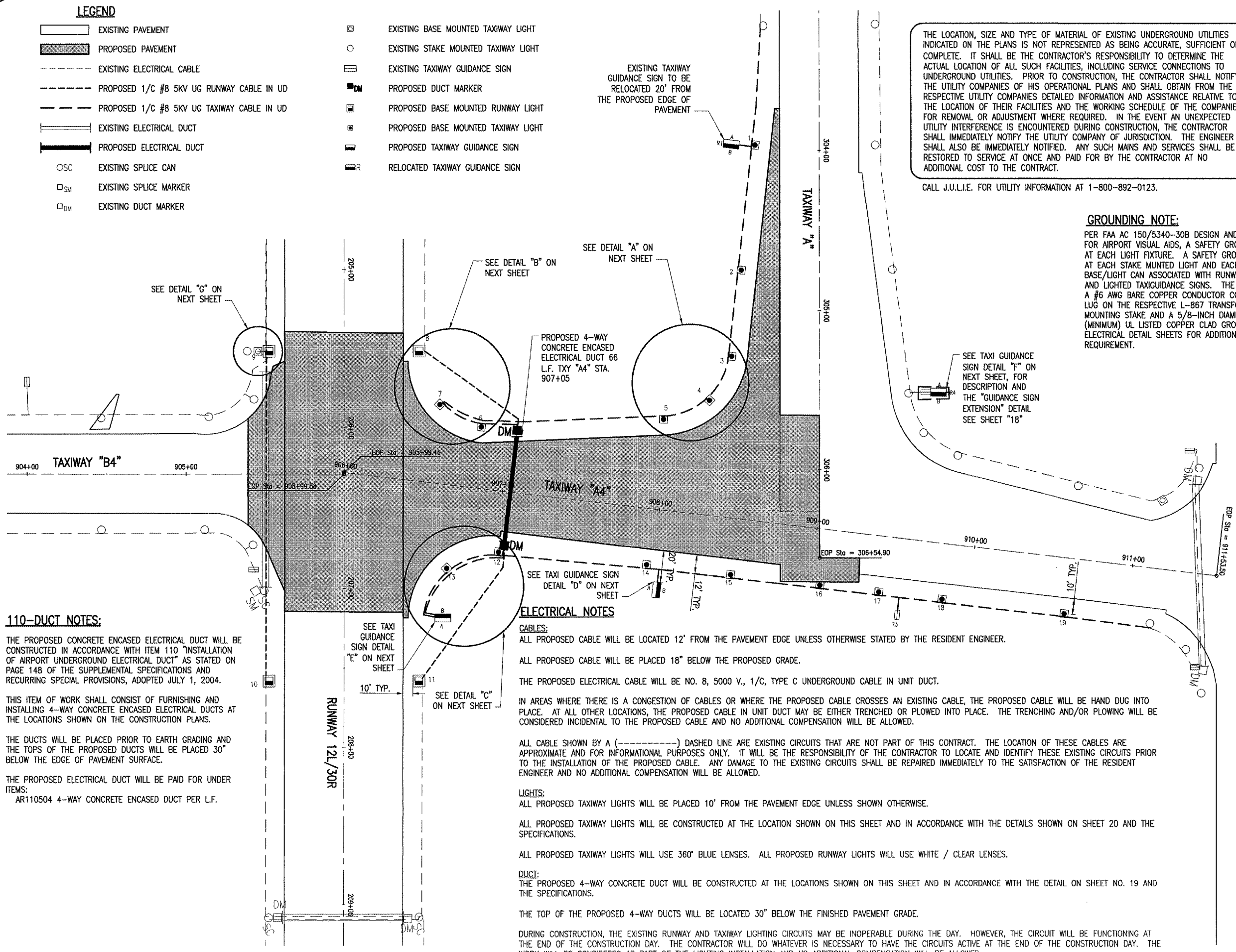
CONSTRUCT TAXIWAY "A4"
PROPOSED ELECTRICAL PLAN

- LEGEND**
- EXISTING PAVEMENT
 - PROPOSED PAVEMENT
 - EXISTING ELECTRICAL CABLE
 - PROPOSED 1/C #8 5KV UG RUNWAY CABLE IN UG
 - PROPOSED 1/C #8 5KV UG TAXIWAY CABLE IN UG
 - EXISTING ELECTRICAL DUCT
 - PROPOSED ELECTRICAL DUCT
 - OSC EXISTING SPLICE CAN
 - SM EXISTING SPLICE MARKER
 - DM EXISTING DUCT MARKER
 - EXISTING BASE MOUNTED TAXIWAY LIGHT
 - EXISTING STAKE MOUNTED TAXIWAY LIGHT
 - EXISTING TAXIWAY GUIDANCE SIGN
 - PROPOSED DUCT MARKER
 - PROPOSED BASE MOUNTED RUNWAY LIGHT
 - PROPOSED BASE MOUNTED TAXIWAY LIGHT
 - PROPOSED TAXIWAY GUIDANCE SIGN
 - RELOCATED TAXIWAY GUIDANCE SIGN

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.

GROUNDING NOTE:
 PER FAA AC 150/53340-30B DESIGN AND INSTALLATION DETAILS FOR AIRPORT VISUAL AIDS, A SAFETY GROUND MUST BE INSTALLED AT EACH LIGHT FIXTURE. A SAFETY GROUND SHALL BE INSTALLED AT EACH STAKE MOUNTED LIGHT AND EACH TRANSFORMER BASE/LIGHT CAN ASSOCIATED WITH RUNWAY LIGHTS, TAXIWAY LIGHTS, AND LIGHTED TAXIWAY GUIDANCE SIGNS. THE SAFETY GROUND SHALL BE A #6 AWG BARE COPPER CONDUCTOR CONNECTED TO THE GROUND LUG ON THE RESPECTIVE L-867 TRANSFORMER BAE/LIGHT CAN OR MOUNTING STAKE AND A 5/8-INCH DIAMETER BY 8-FOOT LONG (MINIMUM) UL LISTED COPPER CLAD GROUND ROD. SEE ELECTRICAL DETAIL SHEETS FOR ADDITIONAL INFORMATION ON THIS REQUIREMENT.



110-DUCT NOTES:
 THE PROPOSED CONCRETE ENCASED ELECTRICAL DUCT WILL BE CONSTRUCTED IN ACCORDANCE WITH ITEM 110 "INSTALLATION OF AIRPORT UNDERGROUND ELECTRICAL DUCT" AS STATED ON PAGE 148 OF THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JULY 1, 2004.
 THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING 4-WAY CONCRETE ENCASED ELECTRICAL DUCTS AT THE LOCATIONS SHOWN ON THE CONSTRUCTION PLANS.
 THE DUCTS WILL BE PLACED PRIOR TO EARTH GRADING AND THE TOPS OF THE PROPOSED DUCTS WILL BE PLACED 30" BELOW THE EDGE OF PAVEMENT SURFACE.
 THE PROPOSED ELECTRICAL DUCT WILL BE PAID FOR UNDER ITEMS:
 AR110504 4-WAY CONCRETE ENCASED DUCT PER L.F.

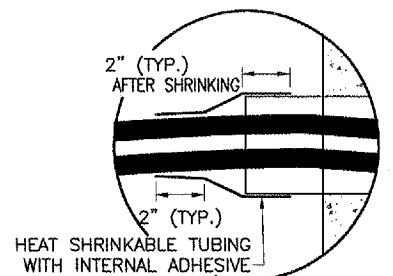
ELECTRICAL NOTES

CABLES:
 ALL PROPOSED CABLE WILL BE LOCATED 12' FROM THE PAVEMENT EDGE UNLESS OTHERWISE STATED BY THE RESIDENT ENGINEER.
 ALL PROPOSED CABLE WILL BE PLACED 18" BELOW THE PROPOSED GRADE.
 THE PROPOSED ELECTRICAL CABLE WILL BE NO. 8, 5000 V., 1/C, TYPE C UNDERGROUND CABLE IN UNIT DUCT.
 IN AREAS WHERE THERE IS A CONGESTION OF CABLES OR WHERE THE PROPOSED CABLE CROSSES AN EXISTING CABLE, THE PROPOSED CABLE WILL BE HAND DUG INTO PLACE. AT ALL OTHER LOCATIONS, THE PROPOSED CABLE IN UNIT DUCT MAY BE EITHER TRENCHED OR PLOWED INTO PLACE. THE TRENCHING AND/OR PLOWING WILL BE CONSIDERED INCIDENTAL TO THE PROPOSED CABLE AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
 ALL CABLE SHOWN BY A (---) DASHED LINE ARE EXISTING CIRCUITS THAT ARE NOT PART OF THIS CONTRACT. THE LOCATION OF THESE CABLES ARE APPROXIMATE AND FOR INFORMATIONAL PURPOSES ONLY. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND IDENTIFY THESE EXISTING CIRCUITS PRIOR TO THE INSTALLATION OF THE PROPOSED CABLE. ANY DAMAGE TO THE EXISTING CIRCUITS SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE RESIDENT ENGINEER AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

LIGHTS:
 ALL PROPOSED TAXIWAY LIGHTS WILL BE PLACED 10' FROM THE PAVEMENT EDGE UNLESS SHOWN OTHERWISE.
 ALL PROPOSED TAXIWAY LIGHTS WILL BE CONSTRUCTED AT THE LOCATION SHOWN ON THIS SHEET AND IN ACCORDANCE WITH THE DETAILS SHOWN ON SHEET 20 AND THE SPECIFICATIONS.
 ALL PROPOSED TAXIWAY LIGHTS WILL USE 360° BLUE LENSES. ALL PROPOSED RUNWAY LIGHTS WILL USE WHITE / CLEAR LENSES.

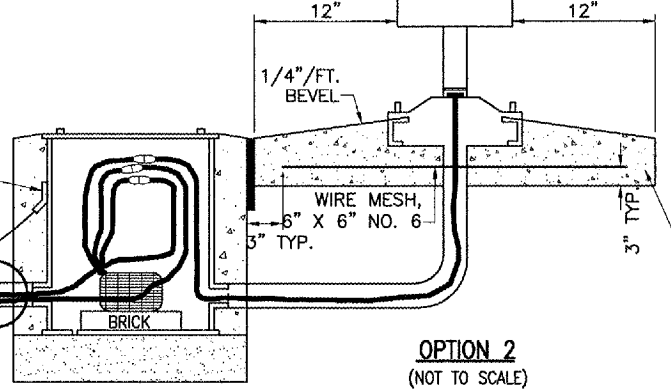
DUCT:
 THE PROPOSED 4-WAY CONCRETE DUCT WILL BE CONSTRUCTED AT THE LOCATIONS SHOWN ON THIS SHEET AND IN ACCORDANCE WITH THE DETAIL ON SHEET NO. 19 AND THE SPECIFICATIONS.
 THE TOP OF THE PROPOSED 4-WAY DUCTS WILL BE LOCATED 30" BELOW THE FINISHED PAVEMENT GRADE.
 DURING CONSTRUCTION, THE EXISTING RUNWAY AND TAXIWAY LIGHTING CIRCUITS MAY BE INOPERABLE DURING THE DAY. HOWEVER, THE CIRCUIT WILL BE FUNCTIONING AT THE END OF THE CONSTRUCTION DAY. THE CONTRACTOR WILL DO WHATEVER IS NECESSARY TO HAVE THE CIRCUITS ACTIVE AT THE END OF THE CONSTRUCTION DAY. THE WORK WILL BE CONSIDERED AS PART OF THE LIGHTING INSTALLATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

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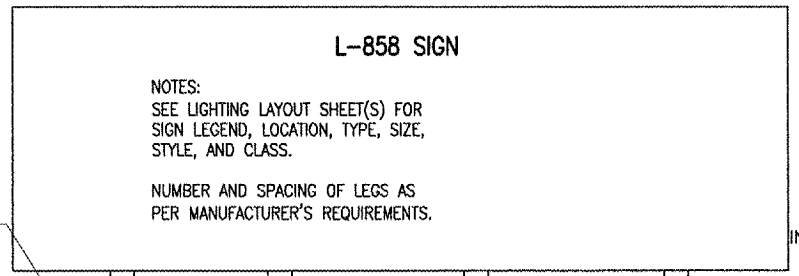


DETAIL "B"
(NOT TO SCALE)

#6 AWG CU
UL LISTED COPPERCLAD GROUND ROD 5/8" DIA. x 8'L (MIN.)



OPTION 2
(NOT TO SCALE)

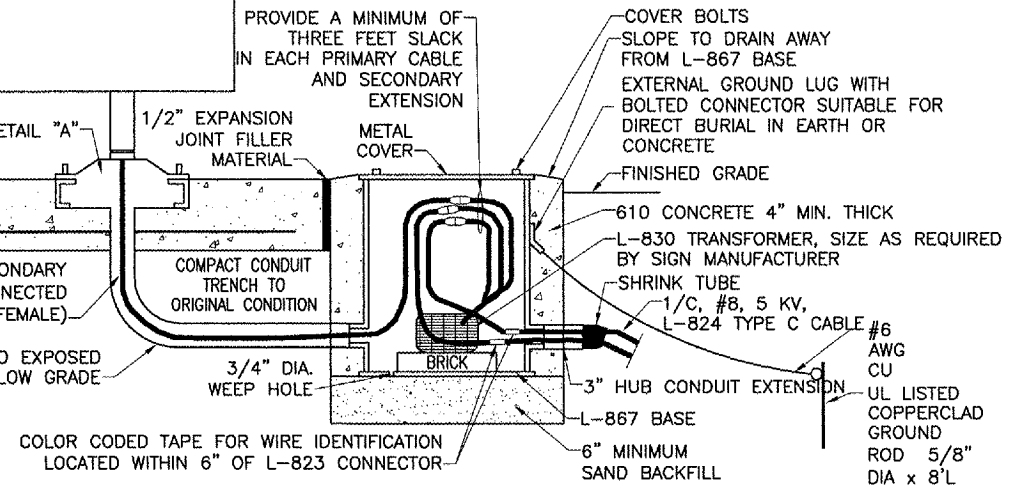


L-858 SIGN

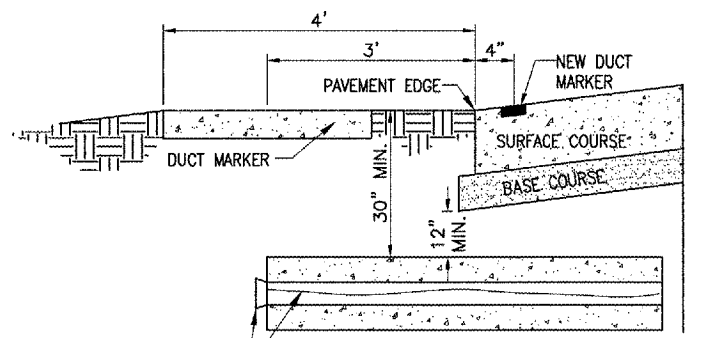
NOTES:
SEE LIGHTING LAYOUT SHEET(S) FOR SIGN LEGEND, LOCATION, TYPE, SIZE, STYLE, AND CLASS.

NUMBER AND SPACING OF LEGS AS PER MANUFACTURER'S REQUIREMENTS.

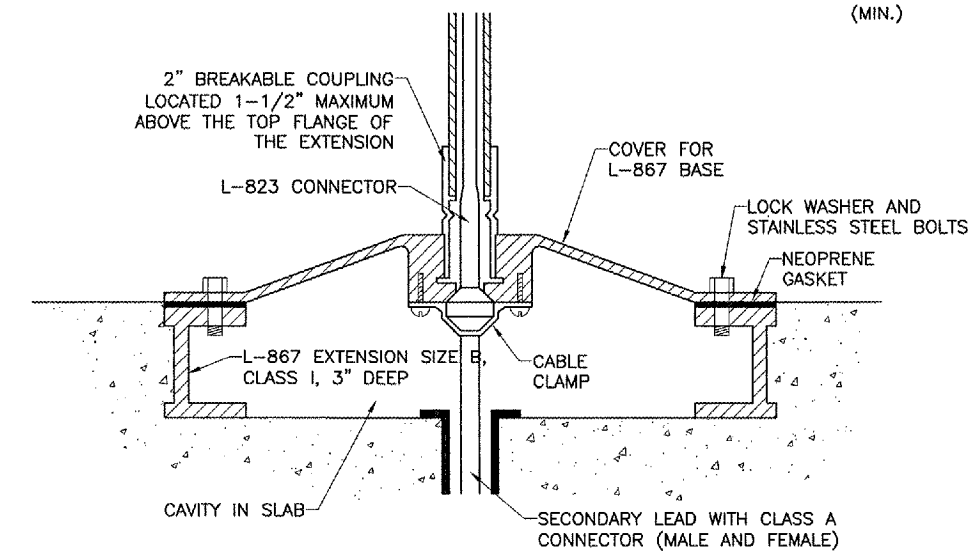
THE LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON THE PLANS HAS BEEN OBTAINED FROM EXISTING RECORDS. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY WHATSOEVER, IN RESPECT TO THE ACCURACY OR SUFFICIENCY OF THE INFORMATION AND THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED, THAT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



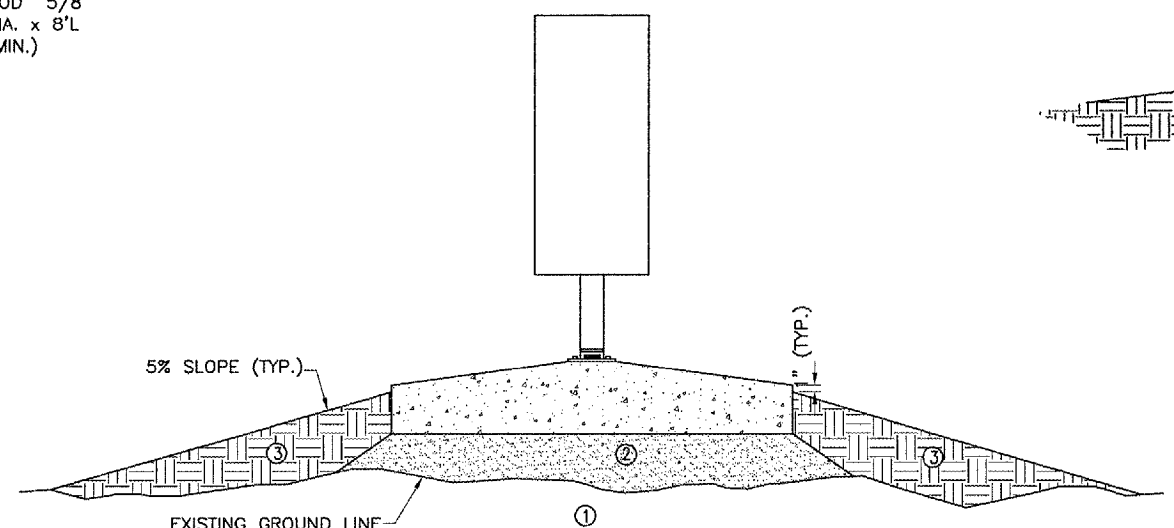
OPTION 1
(NOT TO SCALE)



UNDERGROUND ELECTRICAL DUCT
(NOT TO SCALE)



DETAIL "A"
(NOT TO SCALE)



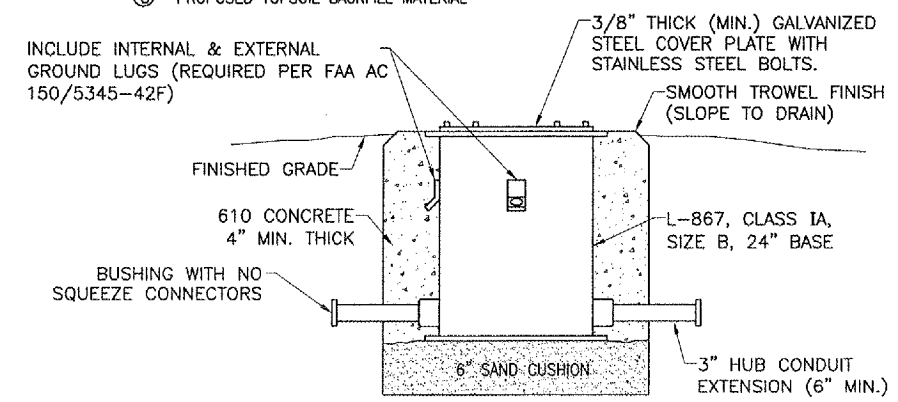
SIGN DETAIL
(NOT TO SCALE)

- ① EXISTING SOD TO BE STRIPPED AND REMOVED
- ② SAND BACKFILL, VARIABLE DEPTH
- ③ PROPOSED TOPSOIL BACKFILL MATERIAL

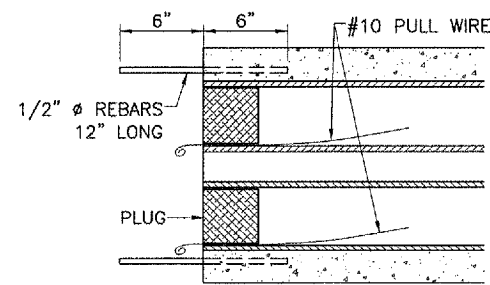
GENERAL NOTES

SEE LIGHTING LAYOUT SHEET FOR SIGN LEGEND, LOCATION, TYPE, SIZE, STYLE, AND CLASS.

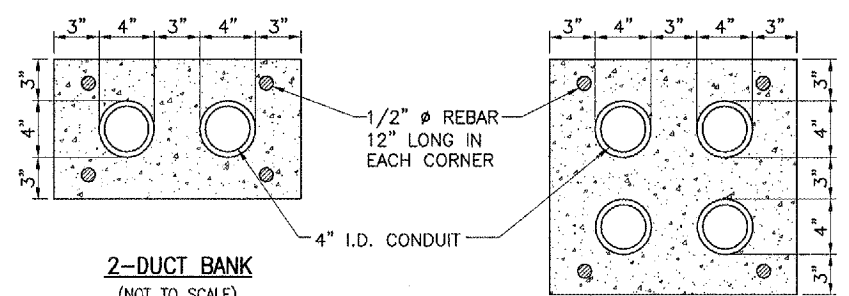
SEE SHEETS 21 THROUGH 22 FOR ELECTRICAL NOTES.



TRANSFORMER BASE/SPLICE CAN DETAIL
(NOT TO SCALE)



TYPICAL SECTION
(NOT TO SCALE)

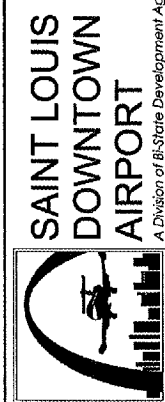


2-DUCT BANK
(NOT TO SCALE)

4-DUCT BANK
(NOT TO SCALE)

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DATE	REVISION	BY

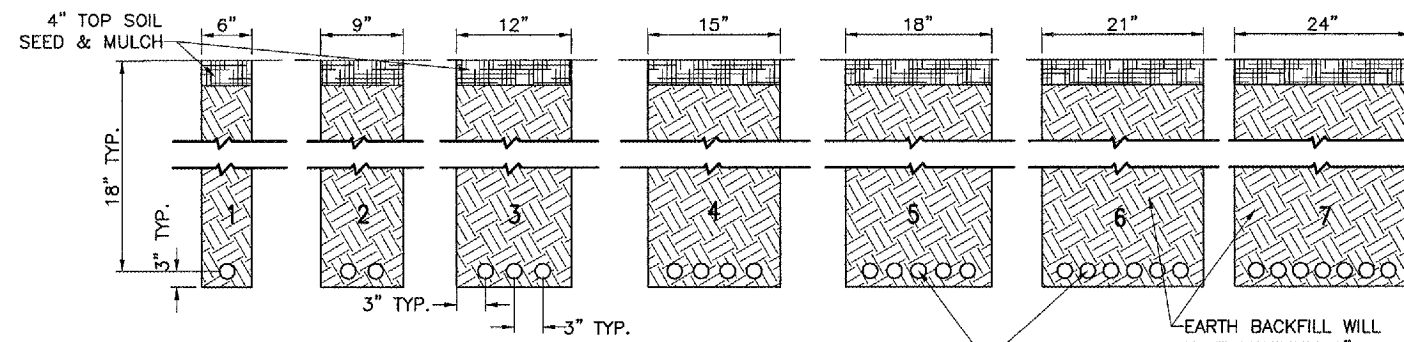


Project No.	84507TXD_0800
Revision	R-541ELE.DWG
Author	N/A
Date	01/06/07
LAYOUT	JAC 01/16/07
DRAWN	MDR 01/16/07
REVIEWED	CAH 01/26/07

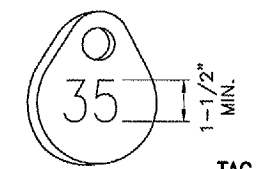
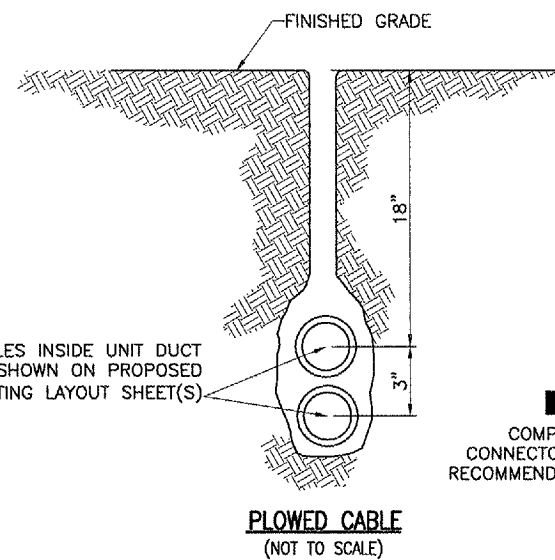


CONSTRUCT TAXIWAY "A4"

PROPOSED ELECTRICAL DETAILS

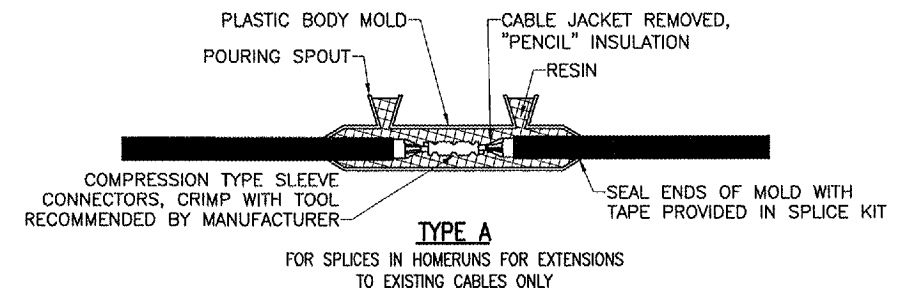


NOTES:
 DETAIL NUMBERS INDICATE NO. OF CABLES.
 TRENCHES WITH MORE THAN SEVEN CABLES SHALL BE INCREASED 3" IN WIDTH FOR EACH ADDITIONAL CABLE; IF SPECIFIED ON PLANS TWO PARALLEL TRENCHES MAY BE CONSTRUCTED.
 DEPTH OF TRENCHES SHALL BE AS SHOWN ABOVE UNLESS OTHERWISE SPECIFIED ON THE PLANS.
 ALL DISTURBED SURFACES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. COST IS INCIDENTAL TO TRENCH.

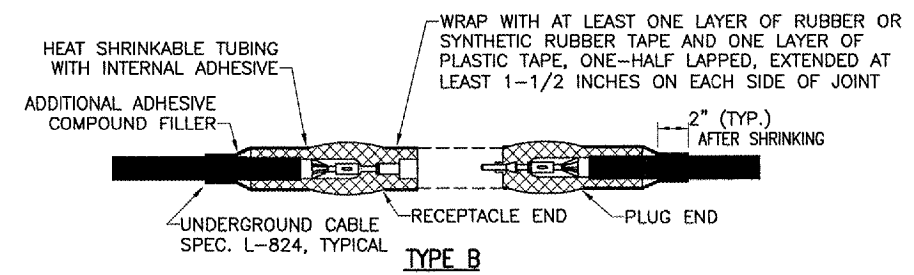


TAG DETAIL
(NOT TO SCALE)

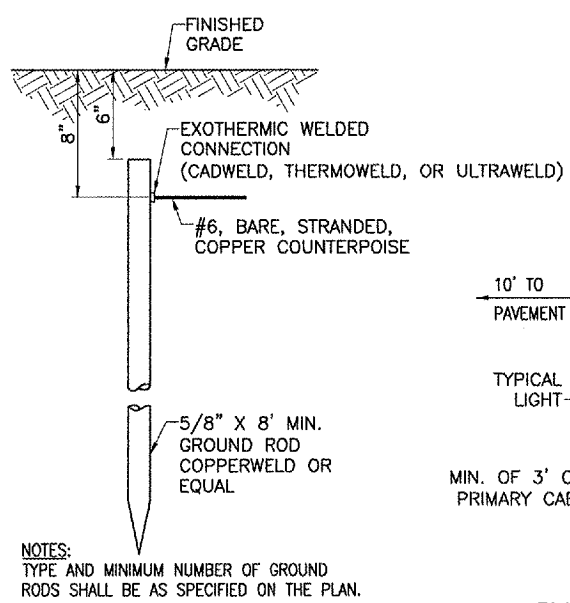
NOTE:
 AFFIX NON-CORROSIVE TAG TO FIXTURE FACING RUNWAY WITH SET SCREW, WIRE TIE, OR METAL BAND. NUMERALS SHALL BE ENGRAVED FOR PERMANENT READABILITY.



TYPE A
FOR SPLICES IN HOMERUNS FOR EXTENSIONS TO EXISTING CABLES ONLY

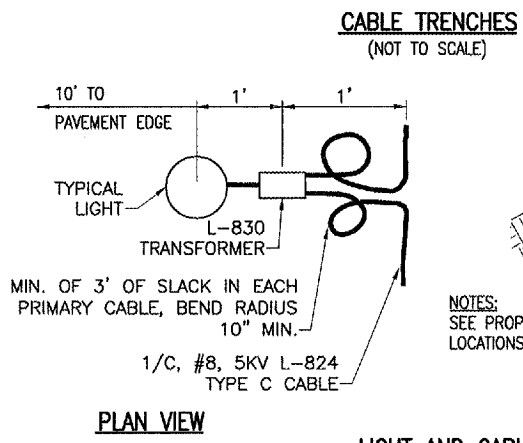


TYPE B
FOR SPLICES AT JUNCTION OF HOMERUN WITH LOOP CIRCUIT

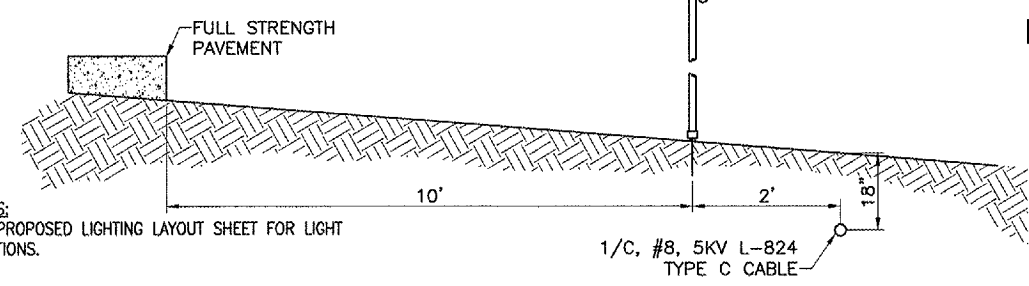


NOTES:
 TYPE AND MINIMUM NUMBER OF GROUND RODS SHALL BE AS SPECIFIED ON THE PLAN.
 THE RESISTANCE TO GROUND OF THE COUNTERPOISE GROUNDING SYSTEM SHALL NOT EXCEED 25 OHMS.

COST OF GROUND RODS IS INCIDENTAL TO THE ASSOCIATED ITEMS REQUIRING GROUNDING UNLESS OTHERWISE SPECIFIED.



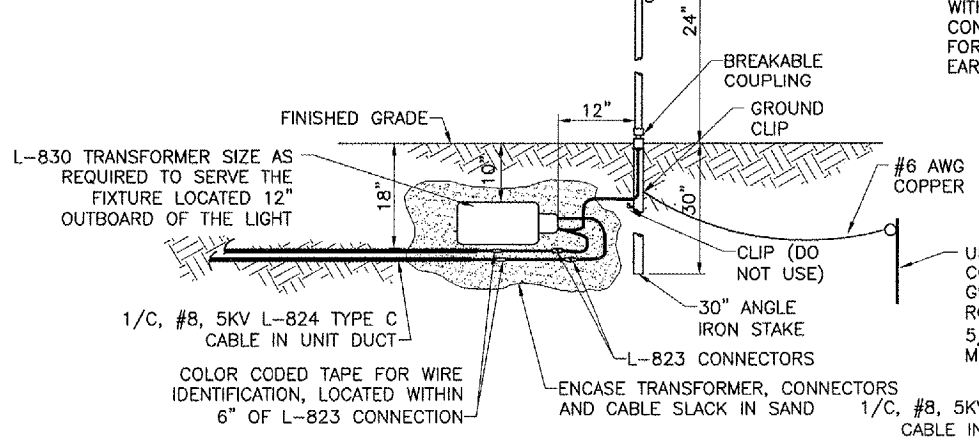
PLAN VIEW



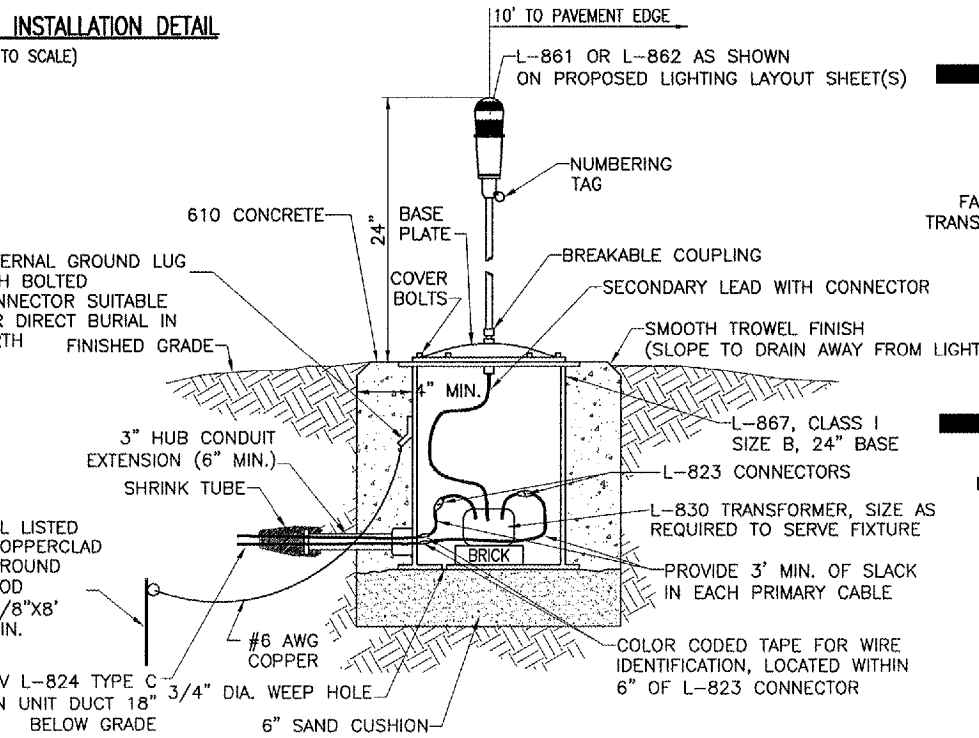
PROFILE VIEW

LIGHT AND CABLE INSTALLATION DETAIL
(NOT TO SCALE)

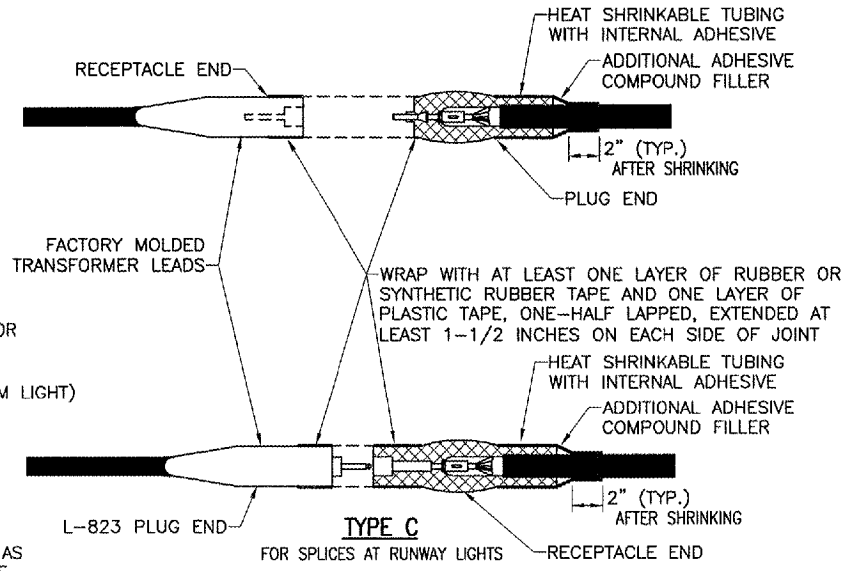
GROUND ROD
(NOT TO SCALE)



MEDIUM INTENSITY LIGHT - STAKE MOUNTED
(NOT TO SCALE)



MEDIUM/HIGH INTENSITY LIGHT - BASE MOUNTED
(NOT TO SCALE)



TYPE C
FOR SPLICES AT RUNWAY LIGHTS

NOTES:
 SEE PROPOSED LIGHTING LAYOUT SHEET(S) FOR SPLICE TYPE.
 INSIDE DIAMETER OF CONNECTOR SHALL PROPERLY MATCH THE OUTSIDE DIAMETER OF CABLE.

CABLE SPLICES
(NOT TO SCALE)

DATE	REVISION	BY

SAINT LOUIS DOWNTOWN AIRPORT
 A Division of St. Louis Development Agency
 I.L. PROJ.: 3-17-0639-B17
 I.L. PROJ.: 055-3664

Project No.	84507TXD_0800
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Scale	N/A
Date	01/16/07
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REVIEWED	CAH 01/26/07

HANSON
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 Offices Nationwide

CONSTRUCT TAXIWAY "A4"
PROPOSED ELECTRICAL DETAILS

APR 18, 2007 1:44 PM BAK
 L:\AIRPORTS\ST. LOUIS DOWNTOWN\84507TXD\AIRPORT SHEETS\R-542ELLE.DWG - ELECTRICAL DETAILS

GENERAL NOTES

1. THE ELECTRICAL INSTALLATION, AS A MINIMUM, SHALL MEET THE NATIONAL ELECTRICAL CODE AND LOCAL REGULATIONS.
2. THE CONTRACTOR SHALL ASCERTAIN THAT ALL LIGHTING SYSTEM COMPONENTS FURNISHED BY HIM, INCLUDING FAA APPROVED EQUIPMENT, ARE COMPATIBLE IN ALL RESPECTS WITH EACH OTHER AND THE REMAINDER OF THE NEW/EXISTING SYSTEM. ANY NONCOMPATIBLE COMPONENTS FURNISHED BY THIS CONTRACTOR SHALL BE REPLACED BY HIM AT NO ADDITIONAL COST TO THE AIRPORT SPONSOR WITH A SIMILAR UNIT, APPROVED BY THE ENGINEER (DIFFERENT MODEL OR DIFFERENT MANUFACTURE) THAT IS COMPATIBLE WITH THE REMAINDER OF THE AIRPORT LIGHTING SYSTEM.
3. IN CASE THE CONTRACTOR ELECTS TO FURNISH AND INSTALL AIRPORT LIGHTING EQUIPMENT REQUIRING ADDITIONAL WIRING, TRANSFORMERS, ADAPTERS, MOUNTINGS, ETC., TO THOSE SHOWN ON THE DRAWINGS AND/OR LISTED IN THE SPECIFICATION, ANY COST FOR THESE ITEMS SHALL BE INCIDENTAL TO THE EQUIPMENT COST.
4. THE CONTRACTOR INSTALLED EQUIPMENT (INCLUDING FAA APPROVED) SHALL NOT GENERATE ANY ELECTROMAGNETIC INTERFERENCE IN THE EXISTING AND/OR NEW COMMUNICATIONS, WEATHER, AIR NAVIGATION, AND AIR TRAFFIC CONTROL EQUIPMENT. ANY EQUIPMENT GENERATING SUCH INTERFERENCE SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST WITH THE EQUIPMENT MEETING THE APPLICABLE SPECIFICATIONS AND NOT GENERATING ANY INTERFERENCE.
5. WHEN A SPECIFIC TYPE, STYLE, CLASS, ETC. OF FAA APPROVED EQUIPMENT IS SPECIFIED ONLY THAT TYPE, STYLE, CLASS, WILL BE ACCEPTABLE, EVEN THOUGH EQUIPMENT OF OTHER TYPES STYLES, CLASSES, ETC. MAY BE APPROVED.
6. ANY AND ALL INSTRUCTIONS FROM THE ENGINEER TO THE CONTRACTOR REGARDING CHANGES IN OR DEVIATIONS FROM THE PLANS AND SPECIFICATIONS SHALL BE IN WRITING WITH COPIES SENT TO THE AIRPORT SPONSOR AND THE FAA FIELD OFFICE (ADO/AFO). THE CONTRACTOR SHALL NOT ACCEPT ANY VERBAL INSTRUCTIONS FROM THE RESIDENT ENGINEER REGARDING ANY CHANGES FROM THE PLANS AND SPECIFICATIONS.
7. A MINIMUM OF THREE COPIES OF THE INSTRUCTION BOOK SHALL BE SUPPLIED WITH EACH DIFFERENT TYPE OF EQUIPMENT. THE BOOKS DESCRIBING A MORE SOPHISTICATED TYPE OF EQUIPMENT, SUCH AS REGULATORS, PAPI, REIL, ETC. AS A MINIMUM SHALL CONTAIN THE FOLLOWING:
 - A. A DETAILED DESCRIPTION OF THE OVERALL EQUIPMENT AND ITS INDIVIDUAL COMPONENTS.
 - B. THEORY OF OPERATION INCLUDING THE FUNCTION OF EACH COMPONENT.
 - C. INSTALLATION INSTRUCTIONS.
 - D. START-UP INSTRUCTIONS.
 - E. PREVENTATIVE MAINTENANCE REQUIREMENTS.
 - F. CHART FOR TROUBLE--SHOOTING.
 - G. COMPLETE POWER AND CONTROL DETAILED WIRING DIAGRAM(S), SHOWING EACH CONDUCTOR/ CONNECTION/COMPONENT -- "BLACK" BOXES ARE NOT ACCEPTABLE. THE DIAGRAM OF THE NARRATIVE SHALL SHOW VOLTAGE/CURRENTS/WAVE SHAPES AT STRATEGIC LOCATIONS TO BE USED WHEN CHECKING AND/OR TROUBLE--SHOOTING THE EQUIPMENT. WHEN THE EQUIPMENT HAS SEVERAL MODES OF OPERATION, SUCH AS SEVERAL BRIGHTNESS STEPS, THESE PARAMETERS SHALL BE INDICATED FOR ALL DIFFERENT MODES.
 - H. PARTS LIST WHICH WILL INCLUDE ALL MAJOR AND MINOR COMPONENTS SUCH AS RESISTORS, DIODES, ETC. IT SHALL INCLUDE A COMPLETE NOMENCLATURE OF EACH COMPONENT AND, IF APPLICABLE, THE NAME OF ITS MANUFACTURE AND THE CATALOG NUMBER.
 - I. SAFETY INSTRUCTIONS.

POWER AND CONTROL NOTES

1. STENCIL ALL ELECTRICAL EQUIPMENT TO IDENTIFY FUNCTION, CIRCUIT VOLTAGE AND PHASE. WHERE THE EQUIPMENT CONTAINS FUSES, ALSO STENCIL THE FUSE OR FUSE LINK AMPERE RATING. WHERE THE EQUIPMENT DOES NOT HAVE SUFFICIENT STENCILING AREA, THE STENCILING SHALL BE DONE ON THE WALL NEXT TO THE UNIT. THE LETTERS SHALL BE ONE INCH HIGH AND PAINTED IN WHITE OR BLACK TO PROVIDE THE HIGHEST CONTRAST WITH THE BACKGROUND.
2. COLOR CODE ALL PHASE WIRING BY THE USE OF COLORED WIRE INSULATION AND/OR COLORED TAPE. WHERE TAPE IS USED, THE WIRE INSULATION SHALL BE BLACK, BLACK AND RED SHALL BE USED FOR SINGLE-PHASE, THREE WIRE SYSTEMS AND BLACK, RED AND BLUE SHALL BE USED FOR THREE-PHASE SYSTEMS. NEUTRAL CONDUCTORS, SIZE NO. 6 AWG OR SMALLER, SHALL BE IDENTIFIED BY A CONTINUOUS WHITE OR NATURAL GRAY OUTER FINISH ALONG ITS ENTIRE LENGTH. NEUTRAL CONDUCTORS LARGER THAN NO. 6 AWG SHALL BE IDENTIFIED EITHER BY A CONTINUOUS WHITE OR NATURAL GRAY OUTER FINISH ALONG ITS ENTIRE LENGTH OR BY THE USE OF WHITE TAPE AT ITS TERMINATIONS AND INSIDE ACCESSIBLE WIREWAYS.
3. ALL BRANCH CIRCUIT CONDUCTORS CONNECTED TO A PARTICULAR PHASE SHALL BE IDENTIFIED WITH THE SAME COLOR. THE COLOR CODING SHALL BE EXTENDED TO THE POINT OF UTILIZATION.
4. IN CONTROL WIRING THE SAME COLOR SHALL BE USED THROUGHOUT THE SYSTEM FOR THE SAME FUNCTION, SUCH AS 10%, 30%, 100% BRIGHTNESS CONTROL, ETC.
5. LOW VOLTAGE (600 V.) AND HIGH VOLTAGE (5000 V.) CONDUCTORS SHALL BE INSTALLED IN SEPARATE WIREWAYS.
6. NEATLY LACE WIRING IN DISTRIBUTION PANELS, WIREWAYS, SWITCHES AND JUNCTION/PULL BOXES.
7. THE MINIMUM SIZE OF PULL/JUNCTION BOXES, REGARDLESS OF THE QUANTITY AND SIZE OF THE CONDUCTORS SHOWN, SHALL BE AS FOLLOWS:
 - A. IN STRAIGHT PULLS THE LENGTH OF THE BOX SHALL NOT BE LESS THAN EIGHT TIMES THE TRADE DIAMETER OF THE LARGER CONDUIT. THE TOTAL AREA (INCLUDING THE CONDUIT CROSS-SECTIONAL AREA) OF A BOX END SHALL BE AT LEAST 3 TIMES GREATER THAN THE TOTAL TRADE CROSS-SECTIONAL AREA OF THE CONDUITS TERMINATING AT THE END.
 - B. IN ANGLE PULLS OR 'U' PULLS THE DISTANCE BETWEEN EACH CONDUIT ENTRY INSIDE THE BOX AND THE OPPOSITE WALL OF THE BOX SHALL NOT BE LESS THAN SIX (6) TIMES THE TRADE DIAMETER DIAMETER OF THE LARGEST CONDUIT. THIS DISTANCE SHALL BE INCREASED FOR ADDITIONAL ENTRIES BY THE AMOUNT OF THE SUM OF THE DIAMETERS OF ALL OTHER CONDUIT ENTRIES ON THE SAME WALL AS THE BOX. THE DISTANCE BETWEEN CONDUIT ENTRIES ENCLOSING THE SAME CONDUCTOR SHALL NOT BE LESS THAN SIX TIMES THE TRADE DIAMETER OF THE LARGEST CONDUIT.
8. A RUN OF CONDUIT BETWEEN TERMINATIONS AT EQUIPMENT ENCLOSURES, SQUARE DUCTS AND PULL/JUNCTION BOXES, SHALL NOT CONTAIN MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (360 DEGREES TOTAL), INCLUDING THOSE BENDS LOCATED IMMEDIATELY AT THE TERMINATIONS, CAST, CONDUIT TYPE OUTLETS SHALL NOT BE TREATED AS PULL/JUNCTION BOXES.
9. EQUIPMENT CABINETS SHALL NOT BE USED AS PULL/JUNCTION BOXES. ONLY WIRING TERMINATING AT THE EQUIPMENT SHALL BE BROUGHT INTO THESE ENCLOSURES.
10. SPLICES AND JUNCTION POINTS SHALL BE PERMITTED ONLY IN JUNCTION BOXES, DUCTS EQUIPPED WITH REMOVABLE COVERS, AND AT EASILY ACCESSIBLE LOCATIONS.
11. CIRCUIT BREAKERS IN POWER DISTRIBUTION PANEL(S) SHALL BE THERMAL-MAGNETIC MOLDED CASE, PERMANENT TRIP WITH 100 AMPERE, MINIMUM FRAME.
12. DUAL LUGS SHALL BE USED WHERE TWO (2) WIRES, SIZE NO. 6 OR LARGER, ARE TO BE CONNECTED TO THE SAME TERMINAL.
13. ALL WALL MOUNTED EQUIPMENT ENCLOSURES SHALL BE MOUNTED ON WOODEN MOUNTING BOARDS, AND/OR GALVANIZED STEEL STRUT SUPPORT.
14. WOODEN EQUIPMENT MOUNTING BOARDS SHALL BE PLYWOOD, EXTERIOR TYPE, 3/4 INCH, MINIMUM, THICKNESS, BOTH SIDES PAINTED WITH ONE COAT OF PRIMER AND TWO COATS OF GRAY OIL-BASED PAINT.
15. RIGID STEEL CONDUIT SHALL BE USED THROUGHOUT THE INSTALLATION UNLESS OTHERWISE SPECIFIED. THE MINIMUM TRADE SIZE SHALL BE 3/4 INCH.
16. ALL RIGID CONDUIT SHALL BE TERMINATED AT CONSTANT CURRENT REGULATORS WITH A SECTION (10" MINIMUM) OF FLEXIBLE CONDUIT.
17. UNLESS OTHERWISE SHOWN, ALL EXPOSED CONDUITS SHALL BE RUN PARALLEL TO OR AT RIGHT ANGLES WITH THE LINES OF THE STRUCTURE.
18. ALL STEEL CONDUITS, FITTINGS, NUTS, BOLTS, ETC. SHALL BE GALVANIZED.
19. USE CONDUIT BUSHINGS AT EACH CONDUIT TERMINATION. WHERE NO. 4 AWG OR LARGER UNDERGROUND WIRE IS INSTALLED, USE INSULATED BUSHINGS.
20. USE DOUBLE LOCK NUTS AT EACH CONDUIT TERMINATION.
21. WRAP ALL PRIMARY AND SECONDARY POWER TRANSFORMER CONNECTIONS WITH SUFFICIENT LAYERS OF INSULATING TAPE AND COVER WITH INSULATING VARNISH FOR FULL VALUE OF CABLE INSULATION VOLTAGE.
22. UNLESS OTHERWISE NOTED, ALL INDOOR SINGLE CONDUCTOR CONTROL WIRING SHALL BE NO. 12 AWG.
23. THE FOLLOWING SHALL APPLY TO RELAY/CONTACTOR PANELS/ENCLOSURES:
 - A. ALL COMPONENTS SHALL BE MOUNTED IN DUST PROOF ENCLOSURE(S) WITH VERTICALLY HINGED COVERS.
 - B. THE ENCLOSURE(S) SHALL HAVE AMPLE SPACE FOR THE CIRCUIT COMPONENTS, TERMINAL BLOCKS AND INCOMING AND INTERNAL WIRING.
 - C. ALL CONTROL CONDUCTOR TERMINATIONS SHALL BE OF THE OPEN-EYE CONNECTOR/SCREW TYPE. SOLDERED CLOSED-EYE TERMINATIONS, OR TERMINATIONS WITHOUT CONNECTORS ARE NOT ACCEPTABLE.
 - D. WHEN THE ENCLOSURE COVER IS OPENED, ALL CIRCUIT COMPONENTS, WIRING AND TERMINALS SHALL BE EXPOSED AND ACCESSIBLE WITHOUT REMOVAL OF ANY PANELS, COVERS, ETC., EXCEPT THOSE COVERING HIGH VOLTAGE COMPONENTS.
 - E. ACCESS TO, OR REMOVAL OF A CIRCUIT COMPONENT OR TERMINAL BLOCK WILL NOT REQUIRE THE REMOVAL OF ANY OTHER CIRCUIT COMPONENT OR TERMINAL BLOCK.
 - F. EACH CIRCUIT COMPONENT SHALL BE CLEARLY IDENTIFIED INDICATING ITS CORRESPONDING NUMBER SHOWN ON THE DRAWINGS AND ITS FUNCTION.
 - G. A COMPLETE WIRING DIAGRAM (SCHEMATIC DIAGRAM) SHALL BE MOUNTED ON THE INSIDE OF THE COVER. THE DIAGRAM SHALL REPRESENT EACH CONDUCTOR BY A SEPARATE LINE.
 - H. THE DIAGRAM SHALL IDENTIFY EACH CIRCUIT COMPONENT AN NUMBERING AND COLOR OF EACH TERMINAL CONDUCTOR AND TERMINAL.
 - I. ALL WIRING SHALL BE NEATLY TRAINED AND LACED.
 - J. MINIMUM WIRE SIZE SHALL BE NO. 12 AWG.

APR 18, 2007 1:47 PM BAK
P:\AIRPORT\ST. LOUIS DOWNTOWN\84507TXD\AIRPORT SHEETS\R-54-SELE.DWG - ELECTRICAL NOTES

DATE	REVISION	BY

**SAINT LOUIS
DOWNTOWN
AIRPORT**

A Division of St. Louis Development Agency
A.I.P. PROJ.: 3-17-0039-817
IL PROJ.: CPS-3864



Proj. No. 84507TXD_0800	01/16/07
Drawn: R-54-SELE.DWG	JAC 01/16/07
Scale: N/A	MDR 01/16/07
Date: 01/16/07	CAH 01/26/07
LAYOUT	
DRAWN	
REVIEWED	

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**CONSTRUCT
TAXIWAY "A4"**

**PROPOSED
ELECTRICAL
NOTES**

FIELD LIGHTING NOTES

1. UNLESS OTHERWISE NOTED, ALL UNDERGROUND FIELD POWER MULTIPLE AND SERIES CIRCUIT CONDUCTORS WHETHER DEB OR IN DUCT/CONDUIT SHALL BE FAA APPROVED L-824 TYPE. INSULATION VOLTAGE AND SIZE SHALL BE AS SPECIFIED.
2. NO COMPONENTS OF PRIMARY CIRCUIT SUCH AS CABLE, CONNECTORS AND TRANSFORMERS SHALL BE BROUGHT ABOVE GROUND AT EDGE LIGHTS, SIGNS, REIL, PAPI, ETC.
3. THERE SHALL BE NO EXPOSED POWER/CONTROL CABLES BETWEEN THE POINT WHERE THEY LEAVE THE UNDERGROUND (DEB OR L-867 BASES) AND WHERE THEY ENTER THE EQUIPMENT (SUCH AS TAXIWAY SIGNS, PAPI, REIL, ETC.) ENCLOSURES. THESE CABLES SHALL BE ENCLOSED IN RIGID CONDUIT OR IN FLEXIBLE, WATERTIGHT CONDUIT WITH BREAKABLE COUPLING(S) AT THE GRADE OR THE HOUSING COVER, AS SHOWN IN APPLICABLE DETAILS.
4. THE JOINTS OF THE L-823 PRIMARY CONNECTORS SHALL BE WRAPPED WITH AT LEAST ONE LAYER OF RUBBER OR SYNTHETIC RUBBER TAPE AND ONE LAYER OF PLASTIC TAPE, ONE-HALF LAPPED, EXTENDING AT LEAST 1-1/2 INCHES ON EACH SIDE OF THE JOINT, AS SHOWN ON SHEET NO. 20.
5. THE CABLE ENTRANCE INTO THE FIELD-ATTACHED L-823 CONNECTORS SHALL BE ENCLOSED BY A HEAT-SHRINKABLE TUBING WITH CONTINUOUS INTERNAL ADHESIVE, AS SHOWN ON SHEET NO. 20.
6. L-823 TYPE II, TWO-CONDUCTOR SECONDARY CONNECTORS SHALL BE CLASS 'A' (FACTORY MOLDED).
7. THERE SHALL BE NO SPLICES IN THE SECONDARY CABLE(S) WITHIN THE STEMS OF A RUNWAY/TAXIWAY EDGE/THRESHOLD LIGHTING FIXTURE AND THE WIREWAYS LEADING TO TAXIWAY SIGNS AND PAPI/REIL EQUIPMENT.
8. ELECTRICAL INSULATING GREASE SHALL BE APPLIED WITHIN THE L-823, SECONDARY, TWO CONDUCTOR CONNECTORS TO PREVENT WATER ENTRANCE. THESE CONNECTORS SHALL NOT BE TAPED.
9. DEB ISOLATION TRANSFORMERS SHALL BE BURIED AT A DEPTH OF TEN (10") INCHES ON A LINE CROSSING THE LIGHT AND PERPENDICULAR TO THE RUNWAY/TAXIWAY CENTERLINE AT A LOCATION TWELVE (12") INCHES FROM THE LIGHT OPPOSITE FROM THE RUNWAY/TAXIWAY.
10. A SLACK OF THREE (3') FEET, MINIMUM, SHALL BE PROVIDED IN THE PRIMARY CABLE AT EACH TRANSFORMER/CONNECTOR TERMINATION. AT STAKE-MOUNTED LIGHTS, THE SLACK SHALL BE LOOSELY COILED IMMEDIATELY BELOW THE ISOLATION TRANSFORMER.
11. DIRECTION OF PRIMARY CABLES SHALL BE IDENTIFIED BY COLOR CODING AS FOLLOWS: WHEN FACING LIGHT WITH BACK TO PAVEMENT, CABLE TO THE LEFT IS CODED RED AND CABLE TO RIGHT IS CODED BLUE. THIS APPLIES TO STAKE MOUNTED LIGHTS AND BASE MOUNTED LIGHTS WHERE THE BASE HAS ONLY ONE ENTRANCE.
12. L-867 BASES SHALL BE SIZE B, 24" DEEP, CLASS I, UNLESS OTHERWISE NOTED.
13. BASE MOUNTED BREAKABLE COUPLINGS SHALL NOT HAVE WEEP HOLES TO THE OUTSIDE. PLUGGED UP HOLES SHALL NOT BE ACCEPTABLE. IT SHALL BE A 1/4" DIAMETER, MINIMUM, OR EQUIVALENT OPENING FOR DRAINAGE FROM THE SPACE AROUND THE SECONDARY CONNECTOR INTO THE L-867 BASE.
14. THE ELEVATION OF THE BREAKABLE COUPLING GROOVE SHALL NOT EXCEED 1-1/2" ABOVE THE EDGE OF THE COVER IN CASE OF BASE MOUNTED COUPLINGS, OR THE TOP OF THE STAKE IN CASE OF STAKE MOUNTED COUPLINGS.

15. WHERE THE BREAKABLE COUPLING IS NOT AN INTEGRAL PART OF THE LIGHT FIXTURE STEM OR MOUNTING LEG, A BEAD OF SILICON SEAL SHALL BE APPLIED COMPLETELY AROUND LIGHT STEM OR WIREWAY AT BREAKABLE COUPLING TO PROVIDE A WATERTIGHT SEAL.
16. TOPS OF THE STAKES SUPPORTING LIGHT FIXTURES SHALL BE FLUSH WITH THE SURROUNDING GRADE.
17. PLASTIC LIGHTING FIXTURE COMPONENTS, SUCH AS LAMP HEADS, STEMS, BREAKABLE COUPLINGS, BASE COVERS, BRACKETS, STAKES, SHALL NOT BE ACCEPTABLE.
18. THE TOLERANCE FOR THE HEIGHT OF RUNWAY/TAXIWAY EDGE LIGHTS SHALL BE: ONE (1) INCH. IN CASE OF STAKE MOUNTED LIGHTS, THE SPECIFIED LIGHTING FIXTURE HEIGHT SHALL BE MEASURED BETWEEN THE TOP OF THE STAKE AND THE TOP OF THE LENS. IN CASE OF BASE MOUNTED LIGHTS, THE SPECIFIED LIGHTING FIXTURE HEIGHT SHALL BE MEASURED BETWEEN THE TOP OF THE BASE FLANGE AND THE TOP OF THE LENS, THUS INCLUDING THE BASE COVER, THE FRANGIBLE COUPLING, THE STEM, THE LAMP HOUSING AND THE LENS.
19. THE TOLERANCE FOR THE LATERAL SPACING (LIGHT LANE TO RUNWAY/TAXIWAY CENTERLINE) OF RUNWAY/TAXIWAY EDGE LIGHTS SHALL BE ONE (1) INCH. THIS ALSO APPLIES AT INTERSECTIONS TO LATERAL SPACING BETWEEN LIGHTS OF A RUNWAY/TAXIWAY AND THE INTERSECTING RUNWAY/TAXIWAY.
20. ENTRANCES INTO L-867 BASES SHALL BE SEALED WITH HEAT SHRINK AS SHOWN IN DETAIL "B" ON SHEET NO. 19.
21. GALVANIZED/PAINTED EQUIPMENT/COMPONENT SURFACES SHALL NOT BE DAMAGED BY DRILLING, FILING, ETC. DRAIN HOLES IN METAL TRANSFORMER HOUSINGS SHALL BE MADE BEFORE GALVANIZING.
22. EDGE LIGHT NUMBERING TAGS SHALL BE FACING THE PAVEMENT.
23. CABLE/SPLICE/DUCT MARKERS SHALL BE PRECAST CONCRETE OF THE SIZE SHOWN. LETTERS/NUMBERS/ARROWS FOR THE LEGEND TO BE IMPRESSED INTO THE TOPS OF THE MARKERS SHALL BE PRE-ASSEMBLED AND SECURED IN THE MOLD BEFORE THE CONCRETE IS POURED. LEGEND INSCRIBED BY HAND IN WET CONCRETE SHALL NOT BE ACCEPTABLE.
24. ALL UNDERGROUND CABLE RUNS SHALL BE IDENTIFIED BY CABLE MARKERS AT 200 FEET MAXIMUM SPACING, WITH AN ADDITIONAL MARKER AT EACH CHANGE OF DIRECTION OF THE CABLE RUN. CABLE MARKERS SHALL BE INSTALLED IMMEDIATELY ABOVE THE CABLES.
25. THERE SHALL BE NO SPLICES BETWEEN THE ISOLATION TRANSFORMERS. L-823 CONNECTORS ARE ALLOWED AT TRANSFORMER CONNECTIONS ONLY, UNLESS OTHERWISE SHOWN.
26. APPLY AN OXIDE INHIBITING, ANTI-SEIZING COMPOUND TO ALL SCREWS, NUTS AND BREAKAGE COUPLING THREADS.
27. LOCATIONS OF ENDS OF ALL UNDERGROUND DUCTS SHALL BE IDENTIFIED BY DUCT MARKERS.
28. WHERE A PARALLEL, CONSTANT VOLTAGE PAPI SYSTEM IS PROVIDED, THE "T" SPLICES SHALL BE OF THE CAST TYPE.
29. CONCRETE USED FOR SLABS, FOOTINGS, BACKFILL AROUND TRANSFORMER HOUSINGS, MARKINGS, ETC. SHALL BE 3000 PSI, AIR-ENTRAINED.
30. ALL POWER AND CONTROL CABLES IN MAN/HAND HOLES SHALL BE TAGGED. USE EMBOSSED COPPER STRIPS TO BE ATTACHED AT BOTH ENDS TO THE CABLE BY THE USE OF PLASTIC STRAPS. MINIMUM OF TWO TAGS SHALL BE PROVIDED ON EACH CABLE IN A MAN/HAND HOLE--ONE AT THE CABLE ENTRANCE AND ONE AT THE CABLE EXIT.

GROUNDING NOTES

1. ALL GROUND CONNECTIONS TO GROUND RODS, BUSES, PANELS, ETC. SHALL BE MADE WITH PRESSURE TYPE SOLDERLESS LUGS AND GROUND CLAMPS SOLDERED OR BOLT AND WASHER TYPE CONNECTIONS ARE NOT ACCEPTABLE. CLEAN ALL METAL SURFACES BEFORE MAKING GROUND CONNECTIONS. CONNECTIONS TO GROUND RODS SHALL BE EXOTHERMIC WELD WHERE SPECIFIED HEREIN.
2. TOP OF GROUND RODS SHALL BE TEN (10) INCHES BELOW GRADE, UNLESS SPECIFIED OTHERWISE HEREIN, FOR RESPECTIVE APPLICATIONS.
3. THE RESISTANCE TO GROUND OF THE VAULT GROUNDING SYSTEM WITH THE COMMERCIAL POWER LINE NEUTRAL DISCONNECTED SHALL NOT EXCEED 10 OHMS.

APR 18, 2007 1:51 PM BKX
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DATE	REVISION	BY

**SAINT LOUIS
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AIRPORT**

A Division of Missouri State Development Agency
A.I.P. PROJ.: 3-17-0639-817
IL PROJ.: CPS-3664

Proj. No. 84507TXD_0800	Rev. R-544ELE.DWG	01/16/07
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**CONSTRUCT
TAXIWAY "A4"**

**PROPOSED
ELECTRICAL
NOTES**

620900--PAVEMENT MARKING REMOVAL NOTES

THE EXISTING PAVEMENT MARKING SHALL BE REMOVED IN ACCORDANCE WITH ITEM 620 "PAVEMENT MARKING" AS STATED ON PAGE 77 OF THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JULY 1, 2004.

THE AREAS THAT ARE DESIGNATED FOR REMOVAL ARE SHOWN ON THE CONSTRUCTION PLANS.

ALL AREAS TO BE REMOVED ARE CALCULATED AREAS. ANY ADDITIONAL AREAS, DUE TO OVER SPRAY, SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

THE PROPOSED MARKING REMOVAL WILL BE PAID FOR UNDER ITEM: AR620900 PAVEMENT MARKING REMOVAL _____ PER S.F.

620--PAVEMENT MARKING--WATERBORNE NOTES

THE PAVEMENT MARKING--WATERBORNE (620) SHALL BE PLACED IN ACCORDANCE WITH ITEM 620 "PAVEMENT MARKING" AS STATED ON PAGE 77 OF THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JULY 1, 2004.

THIS ITEM SHALL CONSIST OF RUNWAY AND TAXIWAY MARKING IN ACCORDANCE WITH THESE SPECIFICATIONS AND AT THE LOCATIONS SHOWN ON THE CONSTRUCTION PLANS. ALL RUNWAY MARKING WILL BE WHITE IN COLOR WITH A BLACK OUTLINE AND THE TAXIWAY MARKING WILL BE YELLOW IN COLOR WITH A BLACK OUTLINE. THE PROPOSED PAVEMENT MARKING WILL BE APPLIED IN TWO APPLICATIONS.

ANY MATERIAL DELIVERED THAT FAILS TO MEET THE SPECIFICATIONS SHALL BE DISPOSED OF BY THE VENDOR AND IMMEDIATELY REPLACED WITH ACCEPTABLE MATERIAL ENTIRELY AT THE VENDOR'S EXPENSE, INCLUDING HANDLING AND TRANSPORTATION CHARGES.

ALL PROPOSED MARKING WILL BE COMPLETED IN ACCORDANCE WITH THE DETAILS SHOWN ON THE CONSTRUCTION PLANS.

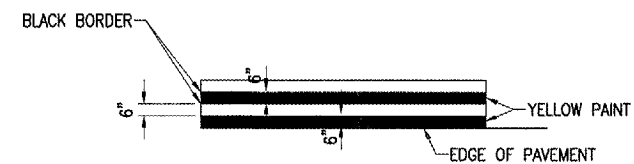
GLASS BEADS SHALL BE REQUIRED ONLY ON THE SECOND APPLICATION.

CUT-OFF SHEETS WILL BE REQUIRED TO INSURE STRAIGHT EDGES.

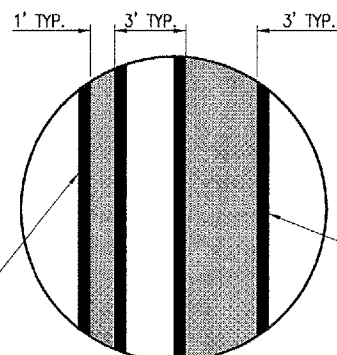
THE PROPOSED MARKING WILL BE PAID FOR UNDER ITEM: AR620520 PAVEMENT MARKING--WATERBORNE _____ PER S.F.

LEGEND

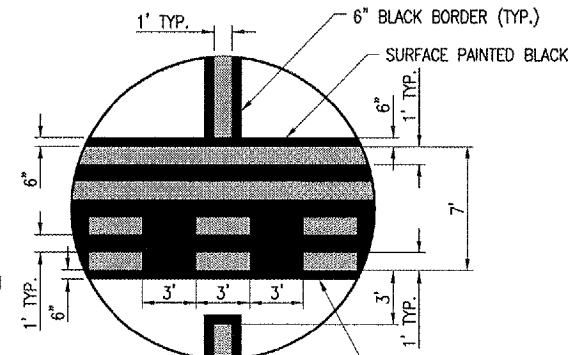
- EXISTING PAVEMENT
- PROPOSED PAVEMENT
- EXISTING MARKING
- EXISTING MARKING (TO BE REMOVED)
- PROPOSED MARKING w/BLACK BORDER



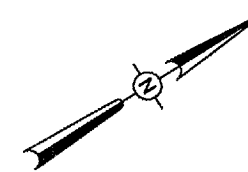
TAXIWAY EDGE STRIPE DETAIL
"NOT TO SCALE"



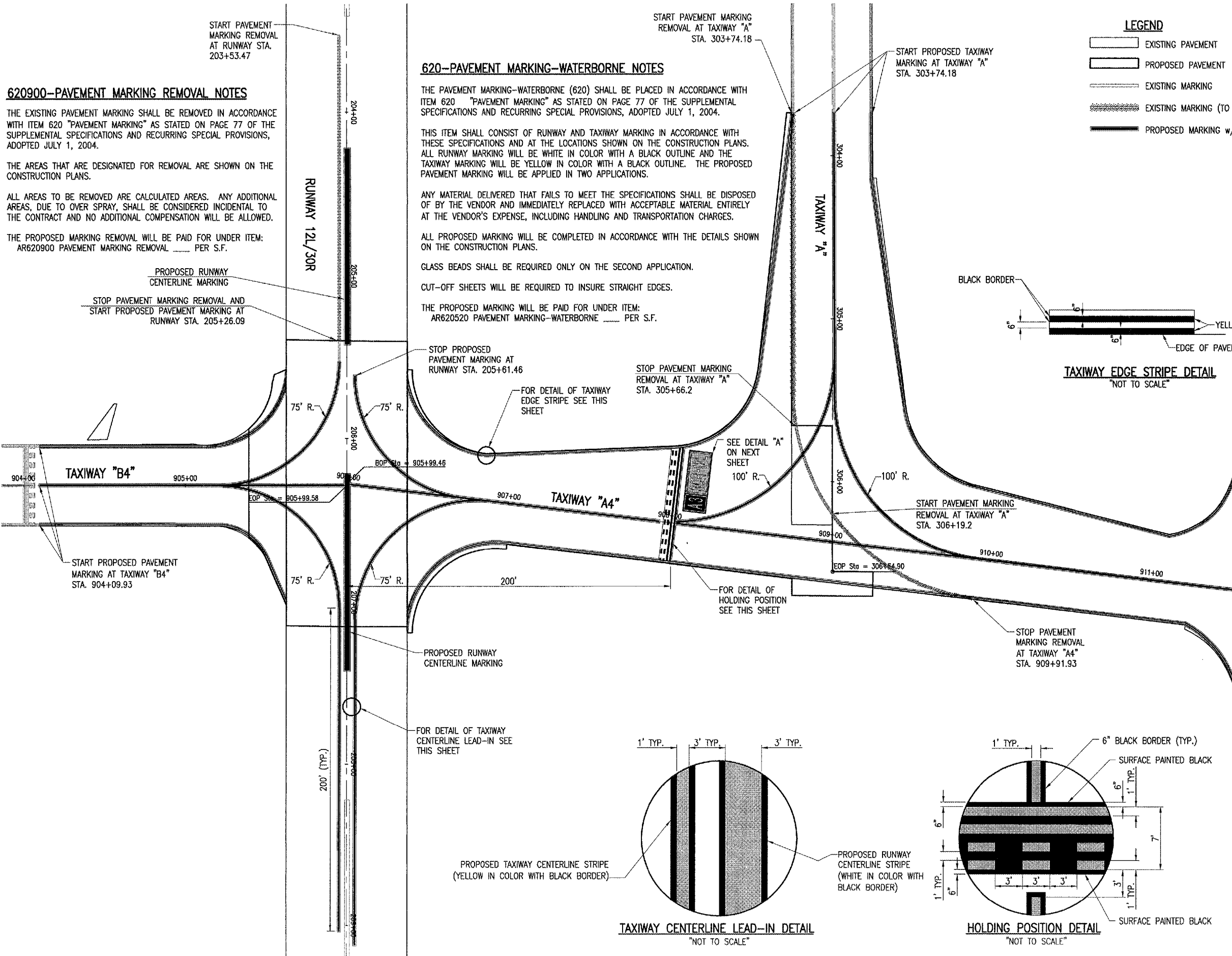
TAXIWAY CENTERLINE LEAD-IN DETAIL
"NOT TO SCALE"



HOLDING POSITION DETAIL
"NOT TO SCALE"



0' 15' 30' 60'
 FULL SIZE SCALE: 1" = 30'
 HALF SIZE SCALE: 1" = 60'



DATE	REVISION	BY

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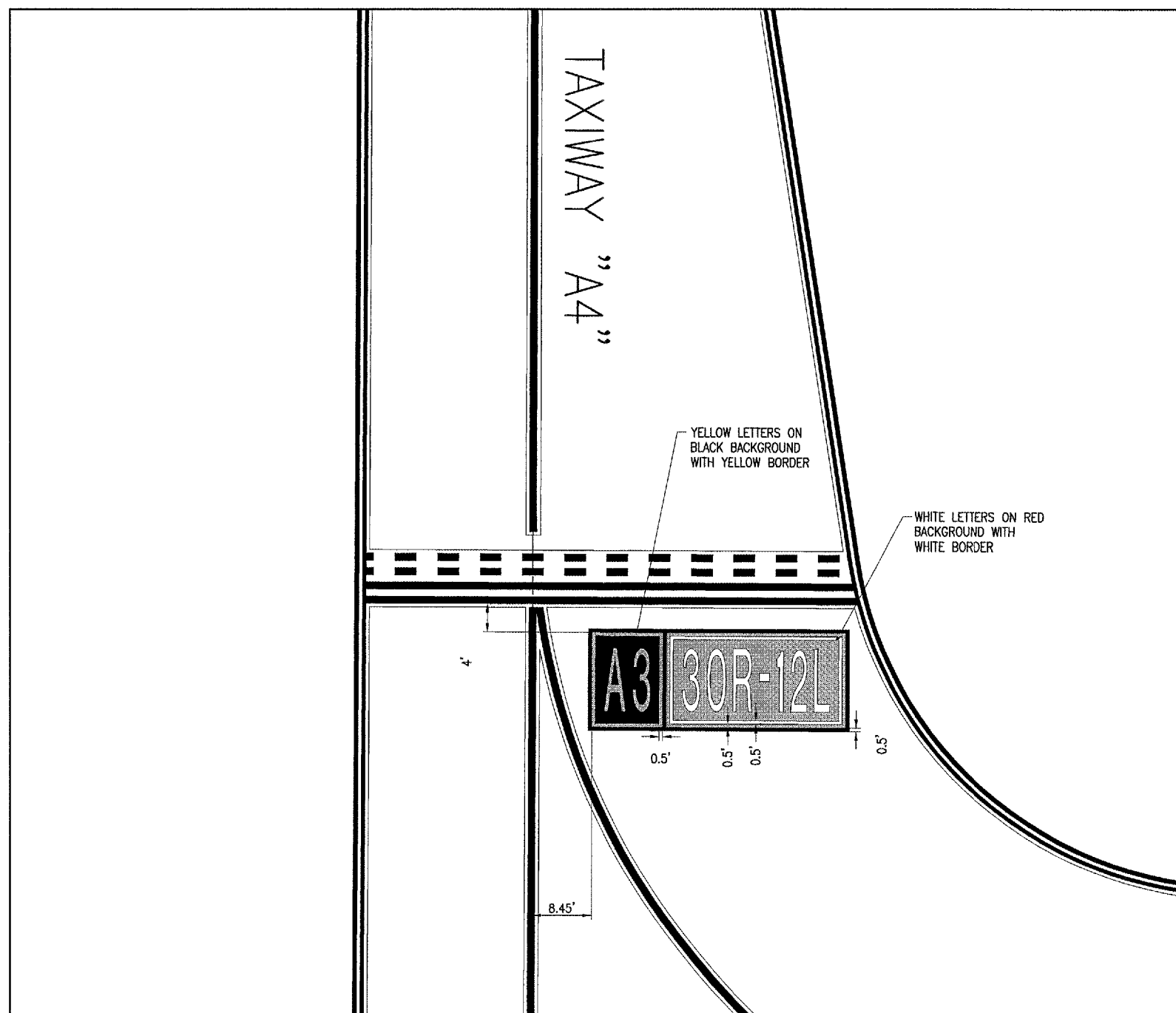


ISS. Project No. 84-507TXD 0800	DATE	BY
Revision R-151MRK.DWG	1/12/07	JAC
Scale 1"=30'	1/12/07	BAK
Date 1/12/07	01/26/07	CAH

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CONSTRUCT TAXIWAY "A4"
 PROPOSED MARKING PLAN

APR 18, 2007 2:08 PM BAK
 I:\AIRPORTS\ST. LOUIS DOWNTOWN\84507TXD\AIRPORT\SHEETS\6-151MRK.DWG - MARKING



DETAIL "A"
1"=10'

PAVEMENT MARKING-WATERBORNE - AR620520			
DESCRIPTION	MARKING COLOR	TOTAL AREA (S.F.)	AS-BUILT QUANTITY
RUNWAY 12L/30R CENTERLINE MARKING	WHITE	720	.
HOLD SIGN WHITE BORDER	WHITE	36.52	.
HOLD SIGN #3	WHITE	8.7	.
HOLD SIGN #0	WHITE	10.06	.
HOLD SIGN LETTER "R"	WHITE	11.95	.
HOLD SIGN DASH	WHITE	1.76	.
HOLD SIGN #1	WHITE	5.85	.
HOLD SIGN #2	WHITE	8.84	.
HOLD SIGN LETTER "L"	WHITE	6.60	.
TOTAL WHITE		810.28	.
RUNWAY 12L/30R HOLDLINE MARKING	YELLOW	207	.
TAXIWAY "A4" EDGE STRIPE MARKING (INCLUDING TXY "A")	YELLOW	1,430	.
TAXIWAY "B4" EDGE STRIPE MARKING	YELLOW	351	.
TAXIWAY "A4" CENTERLINE MARKING (INCLUDING TXY "A")	YELLOW	1,450	.
TAXIWAY "B4" CENTERLINE MARKING	YELLOW	624	.
HOLD SIGN BORDER	YELLOW	22.6	.
HOLD SIGN LETTER "A"	YELLOW	9.91	.
HOLD SIGN #3	YELLOW	8.70	.
TOTAL YELLOW		4,103.21	.
RUNWAY 12L/30R CENTERLINE BORDER	BLACK	248	.
RUNWAY 12L/30R HOLDLINE BORDER	BLACK	345	.
TAXIWAY "A4" EDGE STRIPE BORDER (INCLUDING TXY "A")	BLACK	1,574	.
TAXIWAY "B4" EDGE STRIPE BORDER	BLACK	407	.
TAXIWAY "A4" CENTERLINE BORDER (INCLUDING TXY "A")	BLACK	1,477	.
TAXIWAY "B4" CENTERLINE BORDER	BLACK	597	.
HOLD SIGN BORDER	BLACK	58	.
TOTAL BLACK OUTLINE		4,706	.
HOLD SIGN BACKGROUND	BLACK	95	.
TOTAL BLACK		95	.
HOLD SIGN BORDER	RED	37.4	.
HOLD SIGN BACKGROUND	RED	216.32	.
TOTAL RED		253.72	.
TOTAL MARKING		9,968.21	.

HOLD SIGN MARKING NOTE

THE PROPOSED HOLD SIGN PAVEMENT MARKING HAS THE FOLLOWING DIMENSIONS. THERE IS A 1' SPACE BETWEEN EACH CHARACTER. THE BLACK AND RED BACKGROUNDS EXTEND 1.25' FROM THE EDGE OF THE LETTERING TO THE CORRESPONDING YELLOW OR WHITE BORDER. THE YELLOW AND WHITE BORDERS ARE 0.5' WIDE. THERE IS A 0.5' BLACK OUTLINE AROUND THE ENTIRE PROPOSED HOLDLINE MARKING.

DATE	REVISION	BY

SAINT LOUIS DOWNTOWN AIRPORT
A Division of Bi-State Development Agency



A.L.P. PROJ.: 3-17-0039-817

IL PROJ.: CFS-3664

FILE Project No. 84507TXVD 0800

PLAN R-151MRK.DWG

Scale 1"=10'

Date 02/22/07

LAYOUT	MDR	02/22/07
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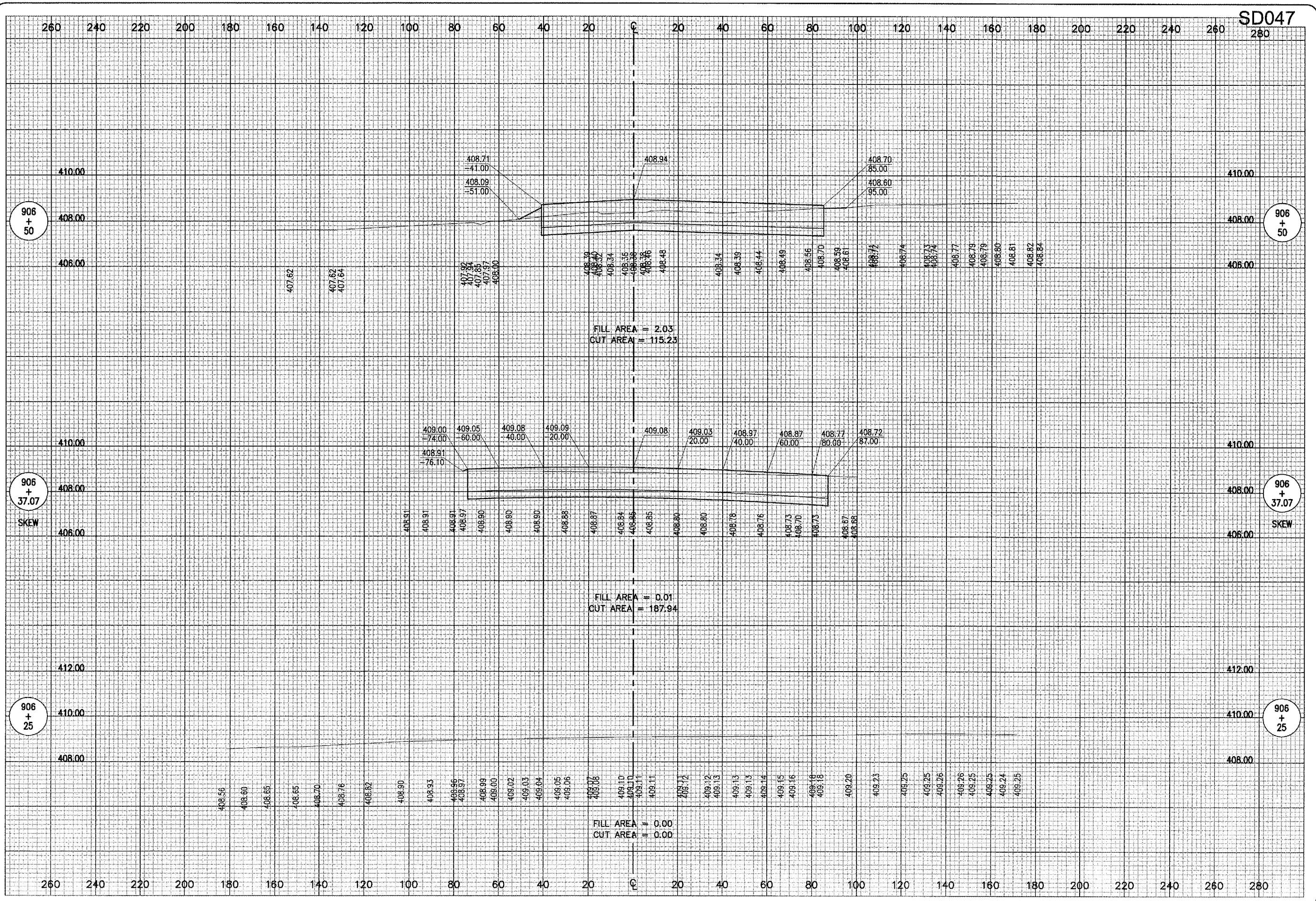


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CONSTRUCT TAXIWAY "A4"

PROPOSED MARKING PLAN

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 I:\AIRPORTS\ST. LOUIS DOWNTOWN AIRPORT\PROJECTS\906+25 TO STA. 906+50



SD047
280

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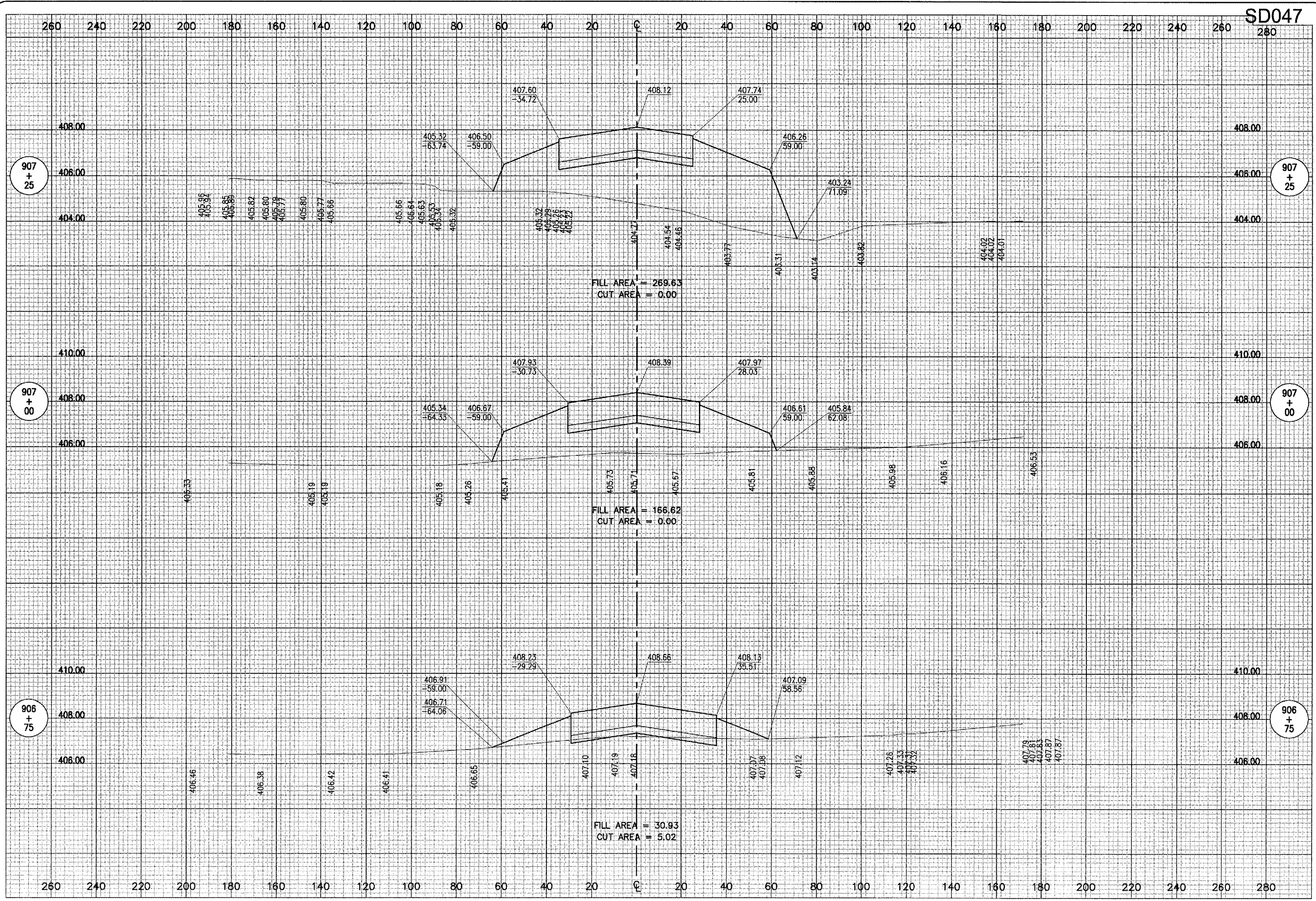
IL PROJ.: CPS-3864

Project No. 84507TXD_0800	
Revision R-501-XS.DWG	
Scale 1"=20'H./1"=2'V.	
Date 01/23/07	
LAYOUT JAC 01/23/07	
DRAWN CCC 01/23/07	
REVIEWED CAH 01/26/07	

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CONSTRUCT TAXIWAY "A4"
PROPOSED CROSS-SECTIONS FOR TAXIWAY "A4"
 STA. 906+25 TO STA. 906+50

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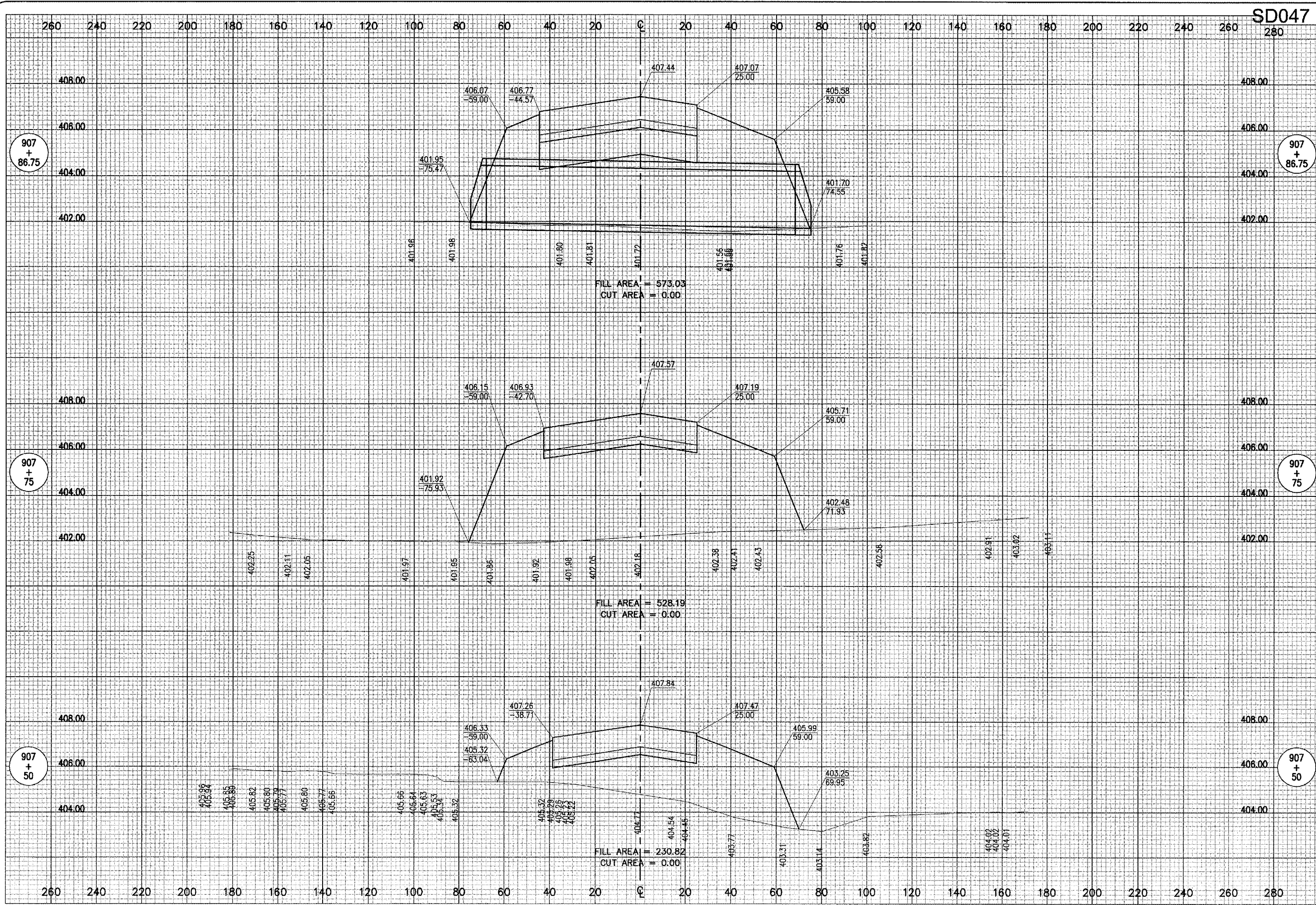
 I.L. PROJ.: CPS-3664

Project No.	84507TXYD_0800
Revision	R-302-XS.DWG
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REVIEWED	CAH 01/26/07

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CONSTRUCT TAXIWAY "A4"
PROPOSED CROSS-SECTIONS FOR TAXIWAY "A4"
 STA. 906+75 TO STA. 907+25

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SD047
280

907
+
86.75

907
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907
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907
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BY	
REVISION	
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 I.L. PROJ.: 3-17-0039-B17
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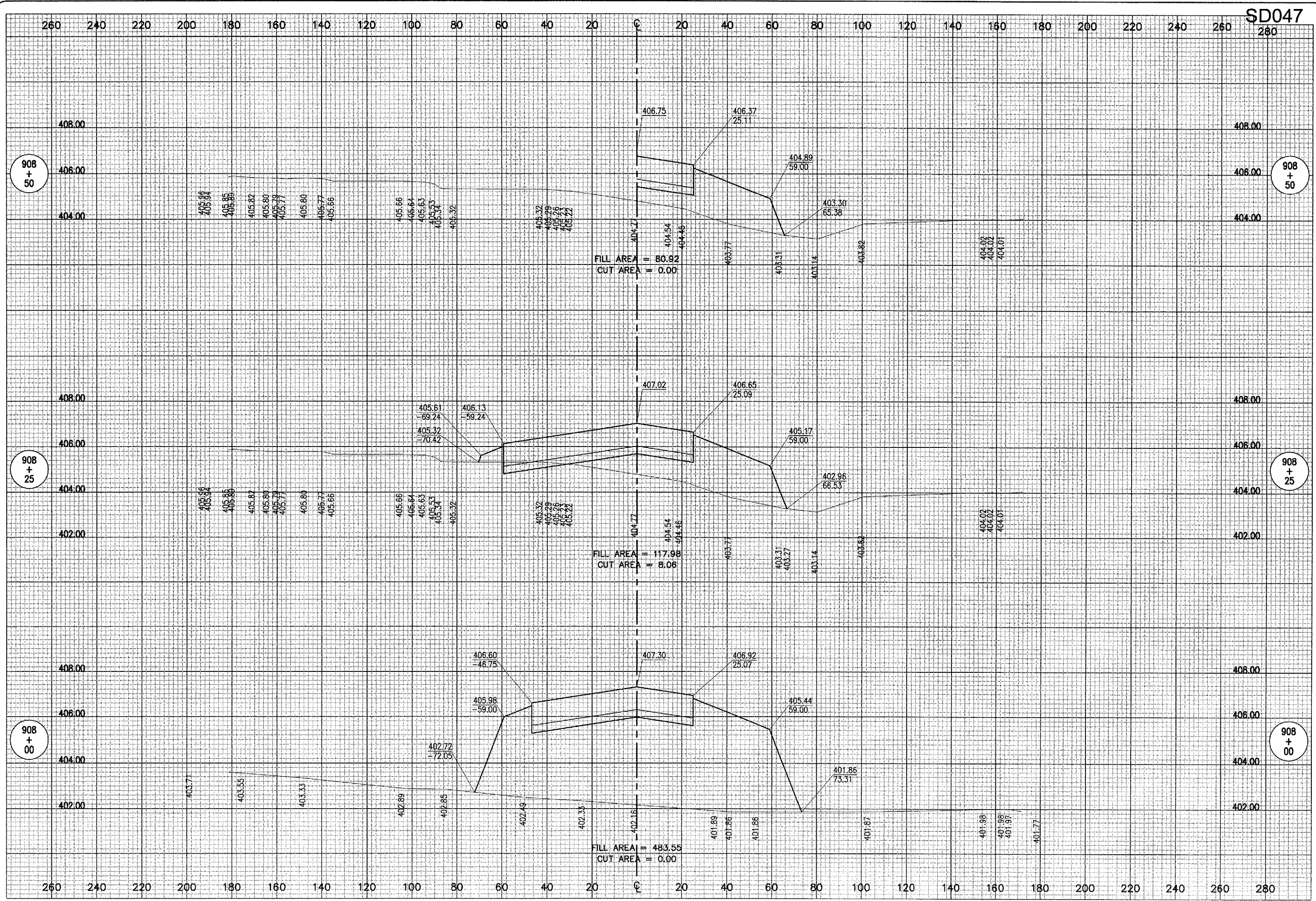
FILE: P-303-XS.DWG
 R-303-XS.DWG
 1"=20'H, 1"=2'V
 01/23/07

LAYOUT	JAC	01/23/07
DRAWN	CCC	01/23/07
REVIEWED	CAH	01/25/07

HANSON
 Hanson Professional Services Inc.
 4227 Earth City Expressway, Suite 130
 St. Louis, MO 63045-1306
 Offices Nationwide

CONSTRUCT TAXIWAY "A4"
 PROPOSED CROSS-SECTIONS FOR TAXIWAY "A4"
 STA. 907+50 TO STA. 907+86.75

APR 18, 2007 2:17 PM BAK
 F:\AIRPORT\ST. LOUIS DOWNTOWN\84507TXD\AIRPORT_SHEETS\R-304-XS.DWG - STA. 908+00 TO STA. 908+50



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DATE	REVISION

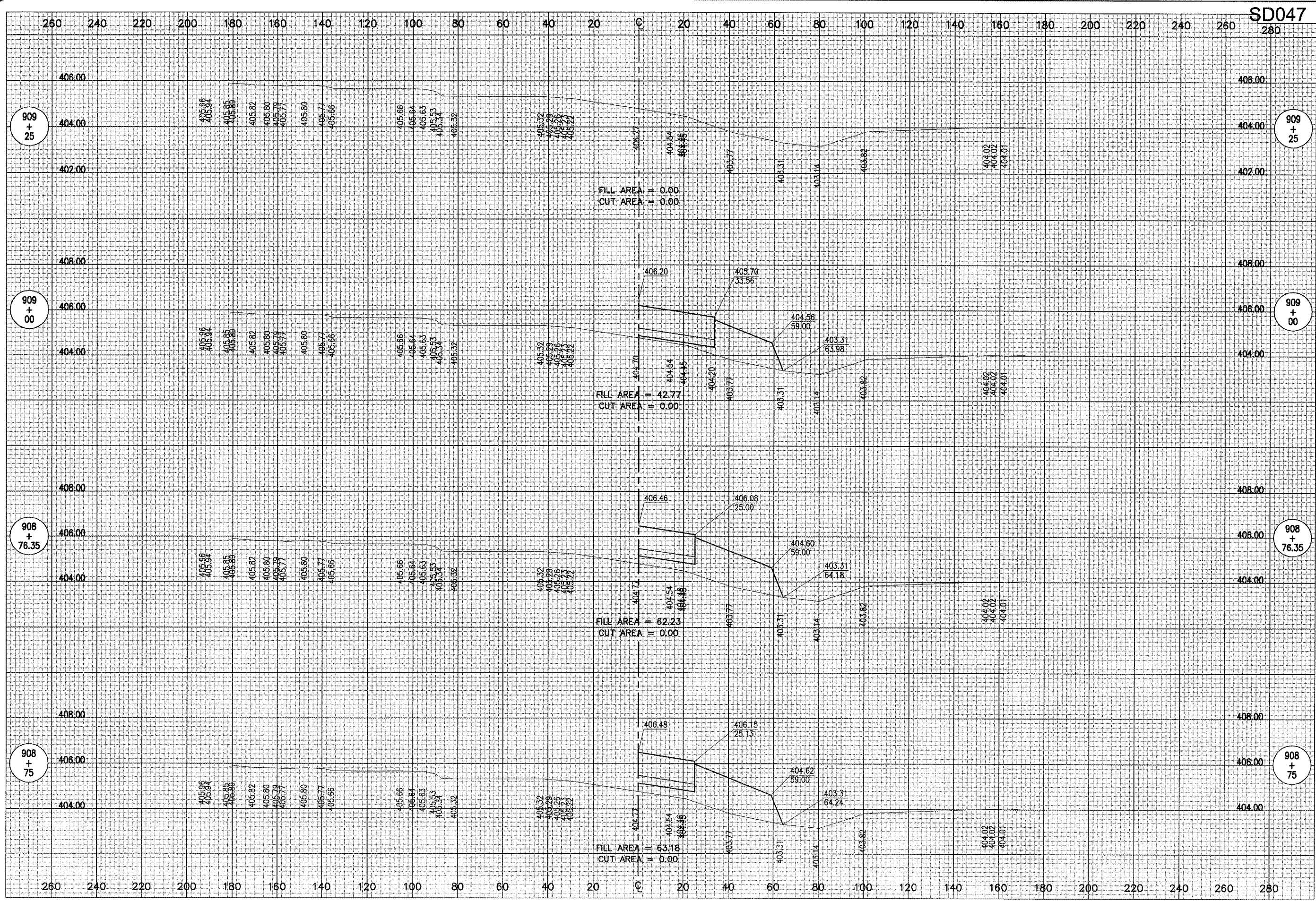
SAINT LOUIS DOWNTOWN AIRPORT
 A Division of BStale Development Agency
 A.I.P. PROJ.: 3-17-0039-B17
 I.L. PROJ.: CFS-3864

Project No. 84507TXD 0800	JAC	01/23/07
Revision R-304-XS.DWG	CCC	01/23/07
Scale 1"=20H./1"=2V.	CAH	01/26/07
Date 01/23/07		
LAYOUT		
DRAWN		
REVIEWED		

HANSON
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 St. Louis, MO 63046-1309
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CONSTRUCT TAXIWAY "A4"
PROPOSED CROSS-SECTION FOR TAXIWAY "A4"
 STA. 908+00 TO STA. 908+50

APR 18, 2007 2:18 PM BAK
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DATE	REVISION	BY

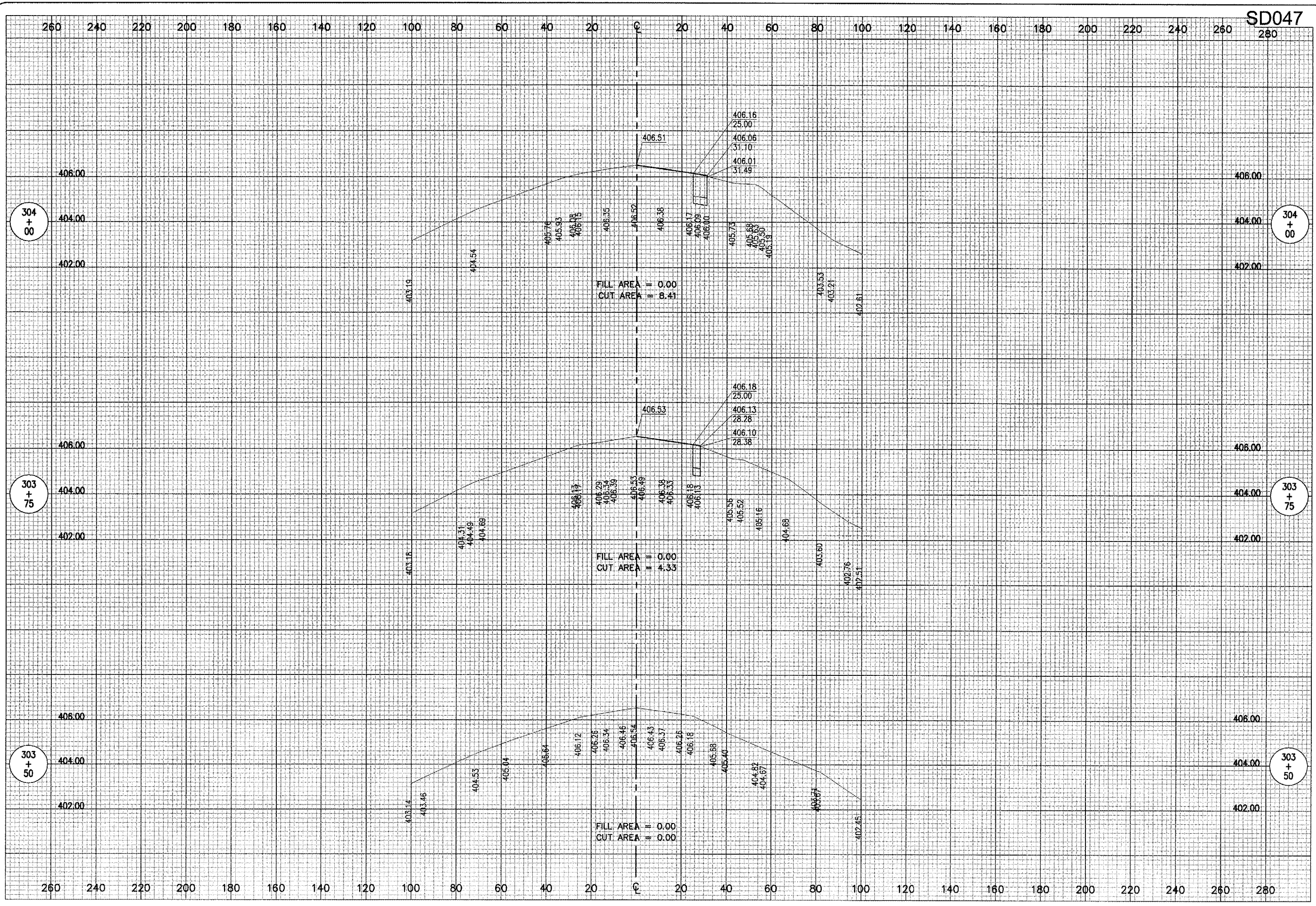
SAINT LOUIS DOWNTOWN AIRPORT
 A Division of BiState Development Agency
 I.L. PROJ.: CPS-3664

Proj. No. 84507TXD 0800	Scale 1"=20'H / 1"=2'V	Date 01/23/07
Plan No. R-305-XS.DWG		

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CONSTRUCT TAXIWAY "A4"
PROPOSED CROSS-SECTIONS FOR TAXIWAY "A4"
 STA. 908+75 TO STA. 909+25

APR 18, 2007 2:18 PM BAK
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DATE	REVISION	BY

SAINT LOUIS DOWNTOWN AIRPORT
 A Division of Missouri State Development Agency
 A.J.P. PROJ.: 3-17-0038-817
 I.L. PROJ.: CPS-3864

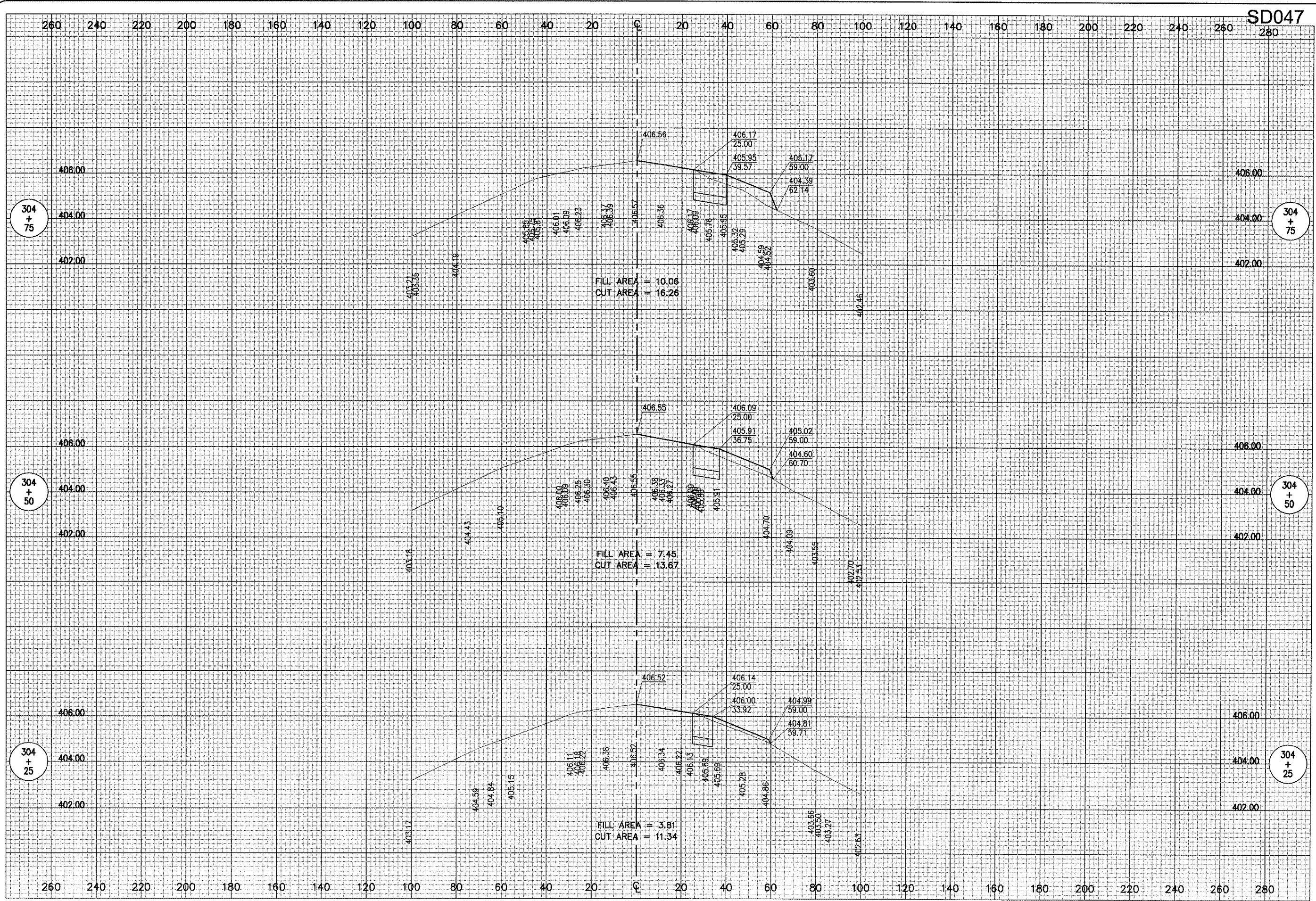
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1"=20'H / 1"=2'V <td> <td>01/23/07 </td></td>	<td>01/23/07 </td>	01/23/07

LAYOUT	JAC	01/23/07
DRAWN	CCC	01/23/07
REVIEWED	CAH	01/26/07

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CONSTRUCT TAXIWAY "A4"
PROPOSED CROSS-SECTIONS FOR TAXIWAY "A"
 STA. 303+50 TO STA. 304+00

APR 18, 2007 2:18 PM BAK
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DATE	REVISION

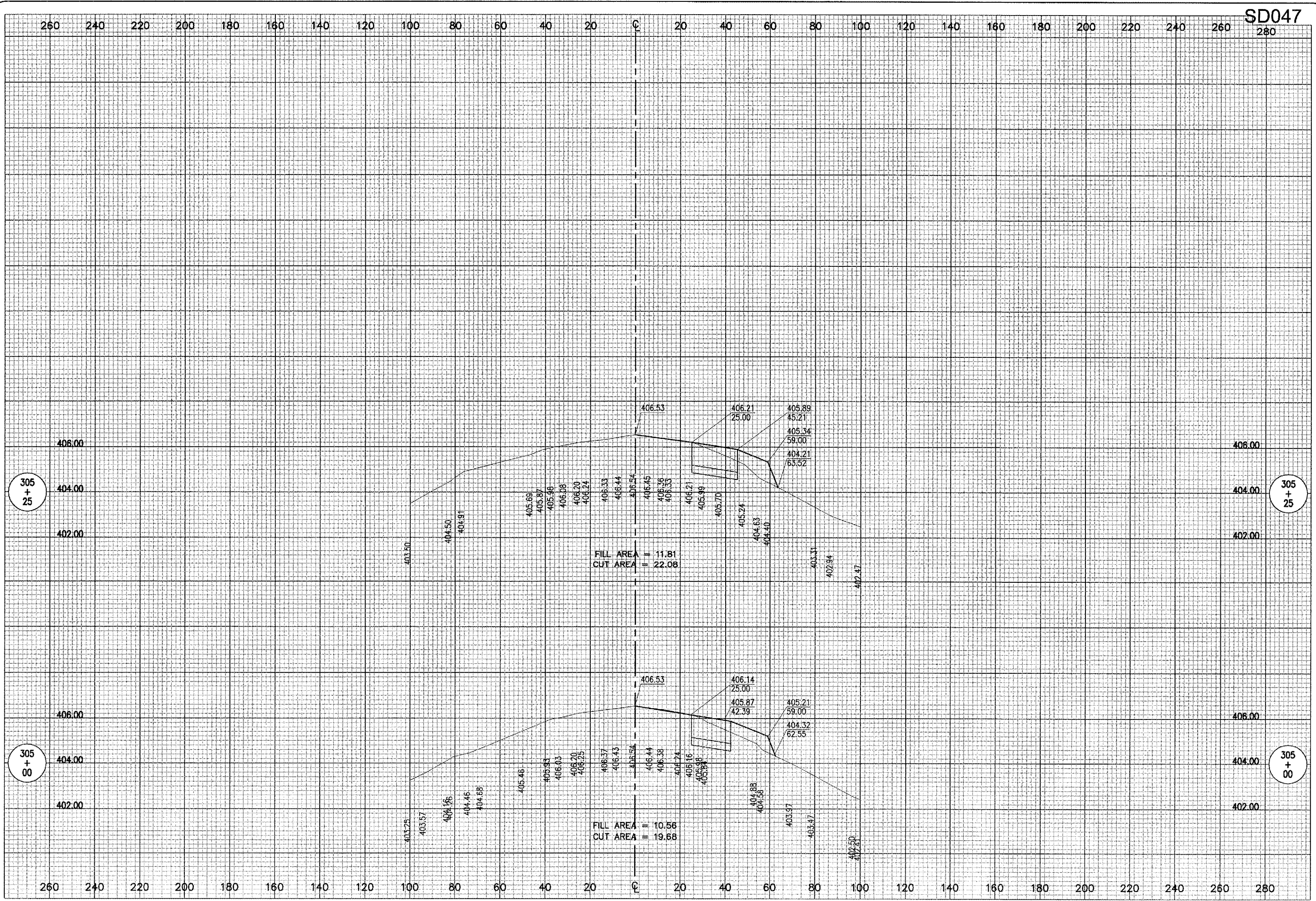
SAINT LOUIS DOWNTOWN AIRPORT
 A Division of Bi-State Development Agency
 IL PROJ: CFS-3684

ISS: Project No. 845071XVD_0800	DATE: 01/23/07
Revision: R-307-XS.DWG	DRAWN: JAC
Scale: 1"=20'H, 1/1"=2'V	CCC: CCC
Date: 01/23/07	REVIEWED: CAH

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CONSTRUCT TAXIWAY "A4"
PROPOSED CROSS-SECTIONS FOR TAXIWAY "A"
 STA. 304+25 TO STA. 304+75

APR 18, 2007 2:18 PM BAK
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DATE	REVISION	BY

SAINT LOUIS DOWNTOWN AIRPORT
 A Division of Missouri Department of Transportation
 A.I.P. PROJ.: 3-17-0039-B17
 I.L. PROJ.: CFS-3664

Proj. No. 84507XYD_0800	
Revision R-308-XS.DWG	
Scale 1"=20'H, 1/1"=2'V	
Date 01/23/07	
LAYOUT JAC 01/23/07	
DRAWN CCC 01/23/07	
REVIEWED CAH 01/26/07	

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CONSTRUCT TAXIWAY "A4"
PROPOSED CROSS-SECTIONS FOR TAXIWAY "A"
 STA. 305+00 TO STA. 305+25