



CRAWFORD, MURPHY & TILLY, Inc.  
CONSULTING ENGINEERS  
Gateway Tower  
One Memorial Drive, Suite 500  
St. Louis, Mo 63102  
314-436-5500 • 314-436-0723 Fax

## LETTER OF TRANSMITTAL

To Mr. David E. Burle, P.E.

MoDOT Aviation Section

830 MoDOT Drive, PO Box 270

Jefferson City, MO 65102

Date: 7/9/12	Job No.: 11401-05-00
Attention: Mr. David Burle	
Re: Perryville Municipal Airport Project No. 11-063A-1	
<b>RECEIVED</b>  JUL 10 2012 <b>MULTIMODAL OPERATIONS</b>	

WE ARE SENDING YOU ☒ Attached ☐ Under separate cover via \_\_\_\_\_ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications  
☐ Copy of letter ☐ Change order ☐ \_\_\_\_\_

COPIES	DATE	NO.	DESCRIPTION
2	7/9/12		Addendum #1

THESE ARE TRANSMITTED as checked below:

- |  |   |                                   |                         |
|--|---|-----------------------------------|-------------------------|
| <input type="checkbox"/> For approval            | <input type="checkbox"/> Approved as submitted    | <input type="checkbox"/> Resubmit | copies for approval     |
| <input checked="" type="checkbox"/> For your use | <input type="checkbox"/> Approved as noted        | <input type="checkbox"/> Submit   | copies for distribution |
| <input type="checkbox"/> As requested            | <input type="checkbox"/> Returned for corrections | <input type="checkbox"/> Return   | corrected prints        |
| <input type="checkbox"/> For review and comment  | <input type="checkbox"/> _____                    |                                   |                         |
- ☐ FOR BIDS DUE \_\_\_\_\_ ☐ PRINTS RETURNED AFTER LOAN TO US

### REMARKS

Attached are two copies of Addendum #1 for your use.

Thanks,  
Tom Morris

COPY TO \_\_\_\_\_

SIGNED Tom Morris

If enclosures are not as noted, kindly notify us at once.

**PERRYVILLE MUNICIPAL AIRPORT  
CITY OF PERRYVILLE, MISSOURI**

**ADDENDUM NO. 1**

for

**State Project No. AIR-11-063A-1**

**RECEIVED**

**JUL 10 2012**

**MULTIMODAL  
OPERATIONS**

*MB*

**BASE BID  
AIRFIELD ELECTRICAL REHABILITATION,  
SHOULDER REMOVAL AND GRADING  
ADDITIVE ALTERNATE 1:  
RUNWAY SAFETY AREA GRADING**

**July 6, 2012**

**Prepared By:**



**ADDENDUM NO. 1**  
**AIRFIELD ELECTRICAL REHABILITATION, SHOULDER REMOVAL AND GRADING**  
**ADDITIVE ALTERNATE 1: RUNWAY SAFETY AREA GRADING**

This addendum is herewith a part of the Contract Documents of the above issued project, and is issued to amend and supplement the June 28, 2012 construction plan drawings and proposal, contract documents, and specifications.

The **CONTRACT DOCUMENTS** are revised as follows:

**TABLE OF CONTENTS**

ADD: The following item:

**ITEM M0-701 PIPE FOR STORM DRAINS AND CULVERTS.....MO-701-1**

**SECTION 1 – NOTICE TO BIDDERS**

**Contract Work Items, Additive Alternate (page 2)**

REVISE: The following items:

1. Class A Excavation 32,756 C.Y.

**SECTION 1 – NOTICE TO BIDDERS**

**Contract Work Items, Additive Alternate (page 2)**

ADD: The following items:

5. Remove 8" Cast Iron Pipe 104 L.F.  
6. Remove 15" Reinforced Concrete Pipe 198 L.F.  
7. Remove PVC Pipe 42 L.F.

**ITEM MO-701 PIPE FOR STORM DRAINS AND CULVERTS**

ADD: This specification (attached to this Addendum No. 1).

**PROPOSAL FORM**

DELETE: Sheets 103-113

ADD: New revised sheets 103-113 attached to this Addendum

CLARIFICATION: The following item has been revised:

1 MO-152-4.2 CLASS A EXCAVATION 32,756 C.Y.

The following items have been added:

5	MO-701-5.1	REMOVE 8" CAST IRON PIPE	104 LF
6	MO-701-5.2	REMOVE 15" REINFORCED CONCRETE PIPE	198 LF
7	MO-701-5.3	REMOVE PVC PIPE	42 LF

**When submitting a bid for this work the contractor shall turn in the original As-Bid Project Manual and Complete Addendum #1. The Proposal Form in t Addendum #1 shall be completed and executed as the bid.**

**APPENDIX D – STORM WATER POLLUTION PREVENTION PLAN (SWPPP)**

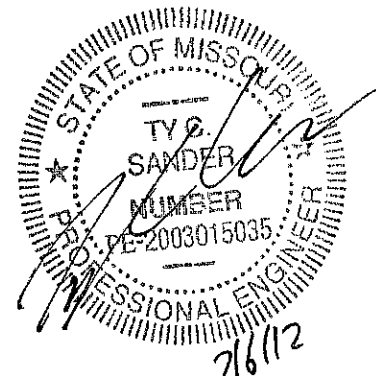
ADD: The following Appendix (attached to this Addendum No. 1):

Appendix B U.S. Fish and Wildlife Service Review

The **CONSTRUCTION PLANS** are revised as follows:

**SHEET 2 OF 74**

DELETE: This sheet.



ADD: Attached sheet.

**SHEET 5 OF 74**

DELETE: This sheet.  
ADD: Attached sheet.

**SHEET 26 OF 74**

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**SHEET 27 OF 74**

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**SHEET 28 OF 74**

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**SHEET 29 OF 74**

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**SHEET 30 OF 74**

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**SHEET 31 OF 74**

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**SHEET 32 OF 74**

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**SHEET 33 OF 74**

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**SHEET 34 OF 74**

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**SHEET 45 OF 74**

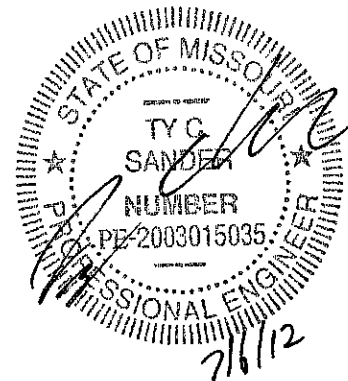
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**SHEET 46 OF 74**

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**SHEET 47 OF 74**

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ADD: Attached sheet.



**SHEET 48 OF 74**

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ADD: Attached sheet.

**SHEET 49 OF 74**

DELETE: This sheet.

ADD: Attached sheet.



**ITEM MO-701 PIPE FOR STORM DRAINS AND CULVERTS**

## **ITEM MO-701 PIPE FOR STORM DRAINS AND CULVERTS**

### **DESCRIPTION**

**701-1.1** This item shall consist of the construction of pipe culverts and storm drains in accordance with these specifications and in reasonably close conformity with the lines and grades shown on the plans. The pipe materials shall conform to the requirements of the 2004 Missouri Standard Specification for Highway Construction (MSSHC), Section 725 - Metal Pipe and Pipe-Arch Culverts, Section 726 - Rigid Pipe Culverts, Storm Drains and Sewers, and Section 732 - Flared End Sections.

This item shall also consist of the removal of existing pipe and culverts in the locations as shown on the plans.

**All construction methods, testing, and acceptance criteria shall be in accordance with the standards included within this Item MO-701.**

### **MATERIALS**

**701-2.1 PIPE MATERIALS.** Pipe materials shall conform to the requirements of the 2004 MSSHC, as follows:

Corrugated Metallic-Coated Steel Pipe	Section 725
Reinforced Concrete Pipe - Class 15"	Section 726
Flared End Sections	Section 732

Prior to the use of materials, the contractor shall furnish manufacturer's certified test reports to the Engineer for those materials proposed for use during construction. The certified test reports shall include a statement that the materials meet the specification requirements.

**701-2.2 CONCRETE.** Concrete for pipe cradles shall have a minimum compressive strength of 2000 psi at 28 days and conform to the requirements of ASTM C 94.

### **CONSTRUCTION METHODS**

**701-3.1 EXCAVATION.** The width of the pipe trench shall be sufficient to permit satisfactory jointing of the pipe and thorough tamping of the bedding material under and around the pipe, but it shall not be less than the external diameter of the pipe plus 6 inches on each side. The trench walls shall be approximately vertical.

Where rock, hardpan, or other unyielding material is encountered, the Contractor shall remove it from below the foundation grade for a depth of at least 12 inches or one-half inch for each foot of fill over the top of the pipe (whichever is greater) but for no more than three-quarters of the nominal diameter of the pipe. The width of the excavation shall be at least 1 foot greater than the horizontal outside diameter of the pipe. The excavation below grade shall be backfilled with selected fine compressible material, such as silty clay or loam, and lightly compacted in layers not over 6 inches in uncompacted depth to form a uniform but yielding foundation.

Where a firm foundation is not encountered at the grade established, due to soft, spongy, or other unstable soil, the unstable soil shall be removed and replaced with approved granular material for the full

trench width. The Engineer shall determine the depth of removal necessary. The granular material shall be compacted to provide adequate support for the pipe.

The excavation for pipes that are placed in embankment fill shall not be made until the embankment has been completed to a height above the top of the pipe as shown on the plans.

**701-3.2 BEDDING.** Bedding for reinforced concrete pipe will be classified as Class A, Class B, or Class C. When no bedding class is specified or detailed on the plans, the requirements for Class C bedding shall apply.

#### **A. Reinforced Concrete Pipe.**

Class A bedding shall be used if, in the judgment of the engineer, soil conditions are such that a firm bed cannot be otherwise secured. The pipe shall be laid in the center of a concrete cradle having a minimum width of 6 inches greater than the outside diameter of the pipe. The minimum thickness of the cradle under the bottom of the pipe shall be 1/4 of the internal diameter of the pipe, and the cradle shall extend up the sides of the pipe for a height equal to 1/4 its outside diameter. The concrete shall meet the requirements of item MO-610.

Class B bedding shall consist of a bed of granular material having a thickness of at least 6 inches below the bottom of the pipe and extending up around the pipe for a depth of not less than 30 percent of the pipe's vertical outside diameter. The layer of bedding material shall be shaped to fit the pipe for at least 10 percent of the pipe's vertical diameter and shall have recesses shaped to receive the bell of bell and spigot pipe. The bedding material shall be sand or selected sandy soil, all of which passes a 3/8 inch (9mm) sieve and not more than 10 percent of which passes a No. 200 (0.075 mm) sieve.

Class C bedding shall consist of a soil foundation shaped to fit the lower part of the pipe exterior for at least 10 percent of its overall height, and shall afford a uniformly firm bed throughout its entire length. In lieu of Class C bedding, Class B bedding may be used at no additional cost to the Sponsor.

#### **B. Corrugated Metal Pipe.**

For corrugated metal pipe, the bed shall be roughly shaped to fit the pipe, and a bedding blanket of sand or fine granular material shall be provided as follows:

Pipe Corrugation Depth (in.)	Minimum Bedding Depth (in.)
1/2	1
1	2
2	3
2 1/2	3 1/2

**701-3.3 LAYING PIPE.** The pipe laying shall begin at the lowest point of the trench and proceed upgrade. The lower segment of the pipe shall be in contact with the bedding throughout its full length. Bell or groove ends of rigid pipes and outside circumferential laps of flexible pipes shall be placed facing upgrade.

Paved or partially lined pipe shall be placed so that the longitudinal center line of the paved segment coincides with the flow line.



Elliptical and elliptically reinforced pipes shall be placed with the manufacturer's top of pipe mark within five degrees of a vertical plane through the longitudinal axis of the pipe.

**701-3.4 JOINING PIPE.** All joints shall be sealed with an approved plastic compound, cement mortar or tubular joint seal. Rubber gasketed joints may be used at no additional cost to the sponsor. Where permissible lift holes have been used, the holes shall be carefully filled with expansive mortar to provide a watertight section. The mortar shall be finished flush on the inside of the pipe and shall be properly cured on the outside. Lifting devices shall have sufficient bearing on the inside of the pipe to avoid damage resulting from a concentration of stresses around the lift holes.

If rubber gasket type pipe is specified or used, the joints shall be installed in accordance with the manufacturer's recommendations to ensure that joint devices are properly installed and that rubber gaskets are not displaced.

In sealing rigid pipe with mortar, the mortar contact areas of all pipe ends shall be damp when mortar is applied. After applying mortar to the entire interior surface of the bell or groove, the spigot or tongue end shall be forced into position. Any remaining void in the bell or groove shall be filled with a hub of mortar built up adjacent to the bell, or a bead of mortar built up around a groove-type joint. The interior joints of either type of pipe shall be finished flush with the surface of the pipe. Outside surface of mortar joints shall be cured with membrane curing compound.

In sealing rigid pipe with plastic joint compound, trowel grade compound shall be applied to the mating surfaces of both the tongue and groove, or to the entire interior surface of the bell and the upper portion of the spigot. Rope or tape type plastic compound shall be applied in accordance with the manufacturer's recommendations. The joints shall be forced together with excess compound extruding both inside and outside the joint. Excess compound shall be removed from the interior surface where accessible. Tubular joint seals shall be installed in a manner as recommended by the manufacturer. The joint between the bell and spigot shall be uniform for the full circumference and care shall be taken to prevent the bell from supporting the spigot.

In joining corrugated metal pipe, the ends shall be butted as closely as the corrugations will permit and shall be joined with a firmly bolted coupling band of the same material as the pipe.

**701-3.5 BACKFILLING.** Pipes shall be inspected before any backfill is placed; any pipes found to be out of alignment, unduly settled, or damaged shall be removed and relaid or replaced at the Contractor's expense.

Material for backfill shall be fine, readily compatible soil, or granular material selected from the excavation or a source of the Contractor's choosing. It shall not contain frozen lumps, stones that would be retained on a 2-inch sieve, chunks of highly plastic clay, or other objectionable material. No less than 95 percent of a granular backfill material shall pass through a 1/2 inch sieve, and no less than 95 percent of it shall be retained on a No. 4 sieve.

When the top of the pipe is even with or below the top of the trench, the backfill shall be compacted in layers not exceeding 6 inches on both sides of the pipe and shall be brought up one foot above the top of the pipe or to natural ground level, whichever is greater. Care shall be exercised to thoroughly compact the backfill material under the haunches of the pipe. Material shall be brought up evenly on both sides of the pipe.

When the top of the pipe is above the top of the trench, the backfill shall be compacted in layers not exceeding 6 inches and shall be brought up evenly on both sides of the pipe to 1 foot above the top of the pipe. The width of backfill on each side of the pipe for the portion above the top of the trench shall be equal to twice the pipe's diameter of 12 feet, whichever is less.

All backfill shall be compacted to the density required under Item MO-152.

### **METHOD OF MEASUREMENT**

**701-4.1** The length of pipe shall be measured in linear feet of pipe in place, completed, and approved. It shall be measured along the centerline of the pipe from end or inside face of structure to the end or inside face of structure, whichever is applicable. The several classes, types and size shall be measured separately.

The length of pipe to be removed shall be measured in linear feet. It shall be measured along the centerline of the pipe from end or inside face of structure to the end or inside face of structure, whichever is applicable. The several classes, types and size shall be measured separately.

**701-4.2** The number of concrete and/or corrugated metal pipe flared end sections of each class, type, and size shall not be measured for payment but shall be considered incidental to the pipe removal pay item. The length of the flared end section shall be measured for payment as pipe if applicable.

### **BASIS OF PAYMENT**

**701-5.1** Payment for pipe removal will be made at the contract unit price per linear foot for each kind of pipe of the type and size designated.

These prices shall fully compensate the Contractor for furnishing all materials, excavation, bedding, installation of these materials, backfilling, and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item MO-701-5.1	Remove 8" Cast Iron Pipe--per linear foot
Item MO-701-5.2	Remove 15" Reinforced Concrete Pipe--per linear foot
Item MO-701-5.3	Remove PVC Pipe--per linear foot

### **END OF ITEM MO-701**

**PROPOSAL FORM**

**PROPOSAL FORM**  
**CITY OF PERRYVILLE, MISSOURI**  
State Project No. 11-063A-1

TO: City of Perryville, Missouri

The undersigned, in compliance with the request for bids for construction of the following Project:

**AIRFIELD ELECTRICAL REHABILITATION, SHOULDER REMOVAL AND GRADING**  
**ADDITIVE ALTERNATE 1: RUNWAY SAFETY AREA GRADING**

hereby proposes to furnish all labor, permits, material, machinery, tools, supplies and equipment to faithfully perform all work required for construction of the Project in accordance with the project manual, project drawings and issued Addenda within the specified time of performance for the following prices:

BASE BID							
BID ITEM	FAA or MoDOT SPEC.	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		EXTENSION	
				DOLLARS	CTS	DOLLARS	CTS
1	MO-101-5.1	AIRPORT ROTATING BEACON (IN PLACE)	1 EA				
2	MO-107-5.1	AIRPORT L-807 WIND CONE, INTERNALLY LIGHTED, 12-FEET (IN-PLACE)	1 EA				
3	MO-107-5.2	AIRPORT L-807 WIND CONE, INTERNALLY LIGHTED, 8-FEET (IN-PLACE)	1 EA				
4	MO-108-5.1.1	AIRPORT UNDERGROUND CABLE (1-1/C, #8 AWG, 5KV) IN UNIT DUCT	24,319 LF				
5	MO-108-5.1.2	AIRPORT UNDERGROUND CABLE (2-1/C, #8 AWG, 5KV) IN UNIT DUCT	1,253 LF				
6	MO-108-5.1.3	BEACON CIRCUIT, 2-#10 USE, 1-#10 GND., IN UNIT DUCT	185 LF				
7	MO-108-5.1.4	COUNTERPOISE, COPPER GUARD WIRE	15,555 LF				
8	MO-108-5.1.5	GROUND ROD - COUNTERPOISE	35 EA				

9	MO-108-5.1.6	WIND CONE CIRCUIT, 2-#10 TYPE USE, 1-#10 GND., IN UNIT DUCT	415 LF				
10	MO-108-5.1.7	PAPI 02 CIRCUIT, 2-#6 TYPE USE, 1-#6 GND., IN UNIT DUCT	2,471 LF				
11	MO-108-5.1.8	PAPI 20 CIRCUIT, 2-#1 TYPE USE, 1-#6 GND., IN 1-1/4" UNIT DUCT	6,896 LF				
12	MO-109-6.1	CONSTRUCT ELECTRICAL VAULT	1 LS				
13	MO-109-6.2	INSTALL ELECTRICAL EQUIPMENT	1 LS				
14	MO-109-6.3	L-828, 15 KW FERRORESONANT REGULATOR	1 EA				
15	MO-110-5.1.1	4" HDPE CONDUIT - DIRECTIONAL BORE	502 LF				
16	MO-120-5.1	AIRPORT PAPI, 4 BOX SYSTEM	2 EA				
17	MO-125-5.1	REMOVE EXISTING ELECTRICAL EQUIPMENT	1 LS				
18	MO-125-5.2	TAXIWAY EDGE LIGHTS, MEDIUM INTENSITY, BASE MOUNTED (BLUE)	26 EA				
19	MO-125-5.3	INSTALL TAXIWAY REFLECTORS	141 EA				
20	MO-125-5.4	AIRPORT RUNWAY LIGHTS, MEDIUM INTENSITY, BASE MOUNTED (WHITE)	6 EA				
21	MO-125-5.5	AIRPORT RUNWAY LIGHTS, MEDIUM INTENSITY, STAKE MOUNTED (WHITE)	18 EA				
22	MO-125-5.6	AIRPORT RUNWAY LIGHTS, MEDIUM INTENSITY, BASE MOUNTED (WHITE/YELLOW)	10 EA				
23	MO-125-5.7	AIRPORT RUNWAY LIGHTS, MEDIUM INTENSITY, STAKE MOUNTED (WHITE/YELLOW)	28 EA				
24	MO-125-5.8	AIRPORT RUNWAY LIGHTS, MEDIUM INTENSITY, BASE MOUNTED (RED/YELLOW)	2 EA				

25	MO-125-5.9	AIRPORT RUNWAY LIGHTS, MEDIUM INTENSITY, STAKE MOUNTED (RED/YELLOW)	2 EA				
26	MO-125-5.10	RUNWAY THRESHOLD LIGHTS, MEDIUM INTENSITY, STAKE MOUNTED (UNI-DIRECTIONAL GREEN)	6 EA				
27	MO-125-5.11	RUNWAY THRESHOLD LIGHTS, MEDIUM INTENSITY, STAKE MOUNTED (GREEN/YELLOW)	2 EA				
28	MO-125-5.12	RUNWAY THRESHOLD LIGHTS, MEDIUM INTENSITY, STAKE MOUNTED (RED)	8 EA				
29	MO-125-5.13	RUNWAY THRESHOLD LIGHTS, MEDIUM INTENSITY, STAKE MOUNTED (GREEN/RED)	8 EA				
30	MO-125-5.14	AIRPORT RUNWAY AND TAXIWAY SIGN, UNLIGHTED (SIZE 1, STYLE 4)	5 EA				
31	MO-125-5.15	INSTALL REILS	2 EA				
32	MO-152-4.1	SHOULDER ADJUSTMENT	37,553 SY				
33	MO-601-5.1	REMOVAL OF EXISTING BITUMINOUS PAVEMENT SHOULDER - 25' WIDE	37,553 SY				
34	MO-901-5.1	AIRPORT SEEDING	12.0 AC				
35	MO-908-5.1	AIRPORT MULCHING	12.0 AC				
36	SP-1-5.1	REMOVE ARRESTOR CABLE FOUNDATIONS	1 LS				
37	SP-2-5.1	DEMOLITION OF EXISTING VAULT BUILDING	1 LS				
<b>TOTAL BID (Base Bid)</b>							

ADDITIVE ALTERNATE							
BID ITEM	FAA or MoDOT SPEC.	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		EXTENSION	
				DOLLARS	CTS	DOLLARS	CTS
1	MO-152-4.2	CLASS A EXCAVATION	32,756 CY				
2	MO-156-4.5.1	SILT FENCE	10,636 LF				
3	MO-901-5.1	AIRPORT SEEDING	40.5 AC				
4	MO-908-5.1	AIRPORT MULCHING	40.5 AC				
5	MO-701-5.1	REMOVE 8" CAST IRON PIPE	104 LF				
6	MO-701-5.2	REMOVE 15" REINFORCED CONCRETE PIPE	198 LF				
7	MO-701-5.3	REMOVE PVC PIPE	42 LF				
TOTAL BID (Additive Alternate)							

	DOLLARS	CENTS
<b>GRAND TOTAL:</b>		

#### ACKNOWLEDGEMENTS BY BIDDER

- a. By submittal of a proposal, the BIDDER acknowledges and accepts that the quantities established by the OWNER are an approximate estimate of the quantities required to fully complete the Project and that the estimated quantities are principally intended to serve as a basis for evaluation of bids. The BIDDER further acknowledges and accepts that payment under this contract will be made only for actual quantities and that quantities will vary in accordance with the General Provisions subsection entitled "Alteration of Work and Quantities".
- b. The BIDDER acknowledges and accepts that the Bid Documents are comprised of the documents identified within the General Provisions. The BIDDER further acknowledges that each the individual documents that comprise the Bid Documents are complementary to one another and together establishes the complete terms, conditions and obligations of the successful BIDDER.
- c. As evidence of good faith in submitting this proposal, the undersigned encloses a bid guaranty in the form of a certified check, cashier's check or bid bond in the amount of 5% of the bid price. The BIDDER acknowledges and accepts that refusal or failure to accept award and execute a contract within the terms and conditions established herein will result in forfeiture of the bid guaranty to the owner as a liquidated damage.
- d. The BIDDER acknowledges and accepts the OWNER'S right to reject any or all bids.
- e. The BIDDER acknowledges and accepts the OWNER'S right to hold all Proposals for purposes of review and evaluation and not issue a notice-of-award for a period not to exceed **ninety (90)** calendar days from the stated date for receipt of bids.
- f. The undersigned agrees that upon written notice of award of contract, he or she will execute the contract within thirty (30) days of the notice-of-award, and furthermore, and provide executed payment and performance bonds within fifteen (15) days from the date of contract execution. The undersigned accepts

that failure to execute the contract and provide the required bonds within the stated timeframe shall result in forfeiture of the bid guaranty to the owner as a liquidated damage.

- g. Time of Performance: By submittal of this proposal, the undersigned acknowledges and agrees to commence work within ten (10) calendar days of the date specified in the written "Notice-to-Proceed" as issued by the OWNER. The undersigned further agrees to complete the Project within **one hundred and forty (140)** Calendar days from the commencement date specified in the Notice-to-Proceed.
- h. The undersigned acknowledges and accepts that for each and every Calendar day the project remains incomplete beyond the contract time of performance, the Contractor shall pay the non-penal amount of **\$750.00** per Calendar day as a liquidated damage to the OWNER. The CONTRACTOR also expressly agrees to pay the OWNER as liquidated damages the non-penal sum of \$750.00 per day for failure to open the runway per the phasing requirements.
- i. The undersigned prime contractor, if not a MoDOT certified DBE, hereby assures that they will subcontract 6% percent of the dollar value of the prime contract to DBE firms or make good faith efforts to meet the DBE contract goal. In addition, the prime contractor will include the DBE clauses (see Supplementary Provision No. 6 of the Federal and State Provisions) required by the DBE Program adopted by MoDOT and the city in all contracts and subcontracts relating to this project. The undersigned will complete the DBE Participation information included herein, when a DBE goal has been established, including a demonstration of good faith efforts if the DBE goal is not met. If the undersigned prime contractor is a MoDOT certified DBE firm, then the prime contractor must perform at least thirty percent (30%) of the total contract value work with its own forces, and will receive DBE credit for all work which the prime contractor and any other MoDOT certified DBE firm performs directly.
- j. The BIDDER, by submission of a proposal, acknowledges that award of this contract is subject to the provisions of the David Bacon Act and the Missouri Prevailing Wage Law. The BIDDER accepts the requirement to pay prevailing wages for each classification and type of worker as established in the attached wage rate determinations as issued by the United States Department of Labor and the Missouri Division of Labor Standards. The BIDDER further acknowledges and accepts their requirement to incorporate the provision to pay the established prevailing wages in every subcontract agreement entered into by the Bidder under this project. The highest rate between the two (Federal and State) for each job classification shall be considered the prevailing wage.
- k. Compliance Reports (41 CFR Part 60-1.7): Within 30 days after award of this contract, the Contractor/Subcontractor shall file a compliance report (Standard Form 100) if s/he has not submitted a complete compliance report within 12 months proceeding the date of award. This report is required if the Contractor/Subcontractor meets all of the following conditions:
1. Contractors/Subcontractors are not exempt based on 41 CFR 60-1.5.
  2. Has 50 or more employees.
  3. Is a prime contractor or first tier subcontractor.
  4. There is a contract, subcontract, or purchase order amounting to \$50,000 or more
- l. The undersigned acknowledges receipt of the following addenda:

Addendum No. _____, dated _____	Date Received _____
Addendum No. _____, dated _____	Date Received _____
Addendum No. _____, dated _____	Date Received _____
Addendum No. _____, dated _____	Date Received _____
Addendum No. _____, dated _____	Date Received _____

#### **REPRESENTATIONS BY BIDDER**



By submittal of a proposal (bid), the BIDDER represents the following:

- a. The BIDDER has read and thoroughly examined the bid documents including all authorized addenda.
- b. The BIDDER has a complete understanding of the terms and conditions required for the satisfactory performance of project work.
- c. The BIDDER has fully informed themselves of the project site, the project site conditions and the surrounding area.
- d. The BIDDER has familiarized themselves of the requirements of working on an operating airport and understands the conditions that may in any manner affect cost, progress or performance of the work
- e. The BIDDER has correlated their observations with that of the project documents.
- f. The BIDDER has found no errors, conflicts, ambiguities or omissions in the project documents, except as previously submitted in writing to the owner that would affect cost, progress or performance of the work.
- g. The BIDDER is familiar with all applicable Federal, State and local laws, rules and regulations pertaining to execution of the contract and the project work.
- h. The BIDDER has complied with all requirements of these instructions and the associated project documents.

#### **CERTIFICATIONS BY BIDDER**

- a. The undersigned hereby declares and certifies that the only parties interested in this proposal are named herein and that this proposal is made without collusion with any other person, firm or corporation. The undersigned further certifies that no member, officer or agent of OWNER'S has direct or indirect financial interest in this proposal.
- b. **Certification of Non-Segregated Facilities (41 CFR Part 60-1.8)**  
The BIDDER, as a potential federally-assisted construction contractor, certifies that it does not maintain or provide, for its employees, any segregated facilities at any of its establishments and that it does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The BIDDER certifies that it will not maintain or provide, for its employees, segregated facilities at any of its establishments and that it will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Bidder agrees that a breach of this certification is a violation of the Equal Opportunity Clause, which is to be incorporated in the contract.

As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms, and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated on the basis of race, color, religion, or national origin because of habit, local custom, or any other reason. The Bidder agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause and that it will retain such certifications in its files.

- c. **Trade Restriction Certification (49 CFR Part 30)**

The Bidder, by submission of an offer certifies that it:

1. is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR);
2. has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;

3. has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

d. **Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion (49 CFR Part 29)**  
The Bidder certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this proposal that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the Bidder or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this solicitation/proposal.

e. **Buy American Certification: (Title 49 U.S.C. Chapter 501)**

As a condition of bid responsiveness, the bidder must certify its compliance with the Buy American preferences established under Title 49 U.S.C. Section 50101. Bidders must complete the Buy American certification as follows:

### **Buy American Certification**

(Title 49 U.S.C. Section 50101)

#### **U.S.C. Section 50101 - Buying goods produced in the United States**

- (a) **Preference.** - The Secretary of Transportation may obligate an amount that may be appropriated to carry out section 106(k), 44502(a)(2), or 44509, subchapter I of chapter 471 (except section 47127), or chapter 481 (except sections 48102(e), 48106, 48107, and 48110) of this title for a project only if steel and manufactured goods used in the project are produced in the United States.
- (b) **Waiver.** - The Secretary may waive subsection (a) of this section if the Secretary finds that -
- (1) Applying subsection (a) would be inconsistent with the public interest;
  - (2) The steel and goods produced in the United States are not produced in a sufficient and reasonably available amount or are not of a satisfactory quality;
  - (3) When procuring a facility or equipment under section 44502(a)(2) or 44509, subchapter I of chapter 471 (except section 47127), or chapter 481 (except sections 48102(e), 48106, 48107, and 48110) of this title -
    - (A) The cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components of the facility or equipment; and
    - (B) Final assembly of the facility or equipment has occurred in the United States; or
  - (4) Including domestic material will increase the cost of the overall project by more than 25 percent.
- (c) **Labor Costs.** - In this section, labor costs involved in final assembly are not included in calculating the cost of components.

\* \* \* \* \*

The Bidder must select the appropriate certification for its proposal from one of the following statements:

☐

The bidder hereby certifies that they will comply with Title 49 U.S.C Section 50101 by only installing steel and manufactured products produced in the United States of America.



The bidder hereby certifies that they cannot fully comply with the Buy American preferences of Title 49 U.S.C Section 50101(a) and therefore requests a waiver per Title 49 U.S.C Section 50101(b) for the items listed below.

Component/ Item	Country of Origin	Total Component Cost in Project	Total All Components in Project

**NOTES:**

- 1) All requested information must be submitted for each individual product/item waiver request.
- 2) All steel used in this project must be produced in the USA. Regional waivers will not be issued for steel not produced in the USA.
- 3) All products, equipment, things requiring assembly must be assembled in the USA. Regional waivers will not be issued for products, equipment, etc. not final assembled in the USA.
- 4) The Owner will submit any requested waiver by the apparent low bidder to the FAA for a determination of AIP eligibility. Bidders are hereby advised there is no implied or expressed guarantee that a requested waiver will be approved by the Owner or the Federal Aviation Administration.

**a. Compliance with the Work Authorization Law (as required by Section 285.530, Revised Statutes of Missouri)**

For all contracts where the total bid amount is in excess of \$100,000 (local match in excess of \$5,000), the Bidder, by submission of an offer and by signing the Worker Eligibility Verification Affidavit for All Contract Agreements in Excess of \$100,000, certifies that it:

1. does not knowingly employ any person who is an unauthorized alien in connection with the contracted services;
2. has enrolled and actively participates in a federal work authorization program;

A general contractor or subcontractor of any tier shall not be liable under sections 285.525 to 285.550 when such general contractor or subcontractor contracts with its direct subcontractor who violates subsection 1 of this section, if the contract binding the contractor and subcontractor affirmatively states that the direct subcontractor is not knowingly in violation of subsection 1 of this section and shall not henceforth be in such violation and the contractor or subcontractor receives a sworn affidavit under the penalty of perjury attesting to the fact that the direct subcontractor's employees are lawfully present in the United States.

(for joint ventures, a separate affidavit is required for each business entity)

STATE OF \_\_\_\_\_ )  
 ) ss  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me appeared \_\_\_\_\_, personally known to me or proved to me on the basis of satisfactory evidence to be a person whose name is subscribed to this affidavit, who being by me duly sworn, deposed as follows:

My name is \_\_\_\_\_, and I am of sound mind, capable of making this affidavit, and personally certify the facts herein stated, as required by Section 285.530, RSMo, to enter into any contract agreement with the state or any of its political subdivisions to perform any job, task, employment, labor, personal services, or any other activity for which compensation is provided, expected, or due, including but not limited to all activities conducted by business entities:

I am the \_\_\_\_\_ of \_\_\_\_\_, and I am duly authorized, directed,  
(title) (business name)  
and/or empowered to act officially and properly on behalf of this business entity.

I hereby affirm and warrant that the aforementioned business entity is enrolled in a federal work authorization program operated by the United States Department of Homeland Security, and the aforementioned business entity shall participate in said program to verify information (employment eligibility) of newly hired employees working in connection to work under the within contract agreement. I have attached documentation to this affidavit to evidence enrollment/participation by the aforementioned business entity in a federal work authorization program, as required by Section 285.530, RSMo.

In addition, I hereby affirm and warrant that the aforementioned business entity does not and shall not knowingly employ, in connection to work under the within contract agreement, any alien who does not have the legal right or authorization under federal law to work in the United States, as defined in 8 U.S.C. § 1324a(h)(3).

I am aware and recognize that, unless certain contract and affidavit conditions are satisfied pursuant to Section 285.530, RSMo, the aforementioned business entity may be held liable under Sections 285.525 through 285.550, RSMo, for subcontractors that knowingly employ or continue to employ any unauthorized alien to work within the state of Missouri.

I acknowledge that I am signing this affidavit as a free act and deed of the aforementioned business entity and not under duress.

(Affiant Signature)

Subscribed and sworn to before me this            day of \_\_\_\_\_, 20\_\_\_\_.

(Notary Public)

My commission expires:

### DISADVANTAGED BUSINESS ENTERPRISE (DBE) PARTICIPATION

The information shown in this section must be completed when a DBE contract goal has been established. The percentage must equal or exceed the DBE contract goal. If the percentage is below the contract goal, then the bidder must submit complete written documentation of good faith efforts taken to meet the DBE contract goal.

- a. The undersigned submits the following list of DBE's to be used in accomplishing the work of this contract. The work, supplies or services, applicable value and percent of total federal contract each DBE is to perform or furnish is as follows:
- b. Joint venture with a DBE. The undersigned submits the following list of bid items the DBE prime is responsible for and any items that will be subcontracted out are noted with an asterisk or a similar notation. The work, applicable value and percentage of total federal contract the DBE prime is responsible for are as follows:

DBE Name and Address	Bid Item Number(s) Or Work Performed	\$ Value of DBE Work	% of **\$Value Applicable to DBE Goal	\$ Amount Applicable to DBE Goal	% of Total Federal Contract
TOTAL DBE PARTICIPATION				\$	%

\*\*Cannot exceed contract amount for given item of work.

(Please reproduce the above sheet if additional space is needed.)

**THIS EXECUTED PROPOSAL FORM MUST BE SUBMITTED  
IN THE ORIGINAL BOUND ADDENDUM #1 PACKET.**

**SIGNATURE OF BIDDER**

The undersigned states that the correct LEGAL NAME AND ADDRESS of (1) the individual bidder, (2) each partner or joint venturer (whether individuals or corporations, and whether doing business under a fictitious name), or (3) the corporation (with the state in which it is incorporated) are shown below; that (if not signing with the intention to bind themselves to become responsible and sole bidder) they are the agent of, and they are signing and executing this (as indicated in the proper spaces below) as the bid of a

( ) sole individual                      ( ) partnership                      ( ) joint venture  
( ) corporation, incorporated under the laws of state of \_\_\_\_\_.

Executed by bidder this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_.

Name of individual,  
all partners  
or joint venturers:

Address of each:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

doing business under the name of:

Address of principal place of business in  
Missouri:

\_\_\_\_\_  
(If using a fictitious name, show this name  
above in addition to legal names)

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
(If a corporation, show its name above)

\_\_\_\_\_  
\_\_\_\_\_

ATTEST: (SEAL)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
Please print name

\_\_\_\_\_  
Please print name

NOTE: If bidder is doing business under a fictitious name, the bid shall be executed in the legal name of the individual partners, joint ventures, or corporation, with the legal address shown, and registration of fictitious name filed with the secretary of state, as required by sections 417.200 to 417.230 RSMo. If the bidder is a corporation not organized under the laws of Missouri, it shall procure a certificate of authority to do business in Missouri, as required by section 351.572 et seq RSMo.

**SWPPP – APPENDIX B**

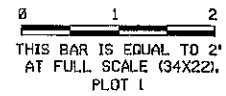
**REVISED PLAN SHEETS**



BASE BID		UNIT	QUANTITY
ITEM	DESCRIPTION		
MO-101-5.1	AIRPORT ROTATING BEACON (IN PLACE)	EA	1
MO-107-5.1	AIRPORT L-807 WIND CONE, INTERNALLY LIGHTED, 12-FEET (IN-PLACE)	EA	1
MO-107-5.2	AIRPORT L-807 WIND CONE, INTERNALLY LIGHTED, 8-FEET (IN-PLACE)	EA	1
MO-108-5.1.1	AIRPORT UNDERGROUND CABLE (1-1/2", #8 AWG, 5KV) IN UNIT DUCT	LF	24,319
MO-108-5.1.2	AIRPORT UNDERGROUND CABLE (2-1/2", #8 AWG, 5KV) IN UNIT DUCT	LF	1,253
MO-108-5.1.3	BEACON CIRCUIT, 2-#10 USE, 1-#10 GND., IN UNIT DUCT	LF	185
MO-108-5.1.4	COUNTERPOISE, COPPER GUARD WIRE	LF	15,555
MO-108-5.1.5	GROUND ROD - COUNTERPOISE	EA	35
MO-108-5.1.6	WIND CONE CIRCUIT, 2-#10 TYPE USE, 1-#10 GND., IN UNIT DUCT	LF	415
MO-108-5.1.7	PAPI 02 CIRCUIT, 2-#6 TYPE USE, 1-#6 GND., IN UNIT DUCT	LF	2,471
MO-108-5.1.8	PAPI 20 CIRCUIT, 2-#1 TYPE USE, 1-#6 GND., IN 1-1/4" UNIT DUCT	LF	6,886
MO-109-5.1	CONSTRUCT ELECTRICAL VAULT	LS	1
MO-109-5.2	INSTALL ELECTRICAL EQUIPMENT	LS	1
MO-109-5.3	L-828, 15 KW FERRORESONANT REGULATOR	EA	1
MO-110-5.1.1	4" HDPE CONDUIT - DIRECTIONAL BORE	LF	502
MO-120-5.1	AIRPORT PAPI, 4 BOX SYSTEM	EA	2
MO-125-5.1	REMOVE EXISTING ELECTRICAL EQUIPMENT	LS	1
MO-125-5.2	TAXWAY EDGE LIGHTS, MEDIUM INTENSITY, BASE MOUNTED (BLUE)	EA	28
MO-125-5.3	INSTALL TAXWAY REFLECTORS	EA	141
MO-125-5.4	AIRPORT RUNWAY LIGHTS, MEDIUM INTENSITY, BASE MOUNTED (WHITE)	EA	6
MO-125-5.5	AIRPORT RUNWAY LIGHTS, MEDIUM INTENSITY, STAKE MOUNTED (WHITE)	EA	18
MO-125-5.6	AIRPORT RUNWAY LIGHTS, MEDIUM INTENSITY, BASE MOUNTED (WHITE/YELLOW)	EA	10
MO-125-5.7	AIRPORT RUNWAY LIGHTS, MEDIUM INTENSITY, STAKE MOUNTED (WHITE/YELLOW)	EA	28
MO-125-5.8	AIRPORT RUNWAY LIGHTS, MEDIUM INTENSITY, BASE MOUNTED (RED/YELLOW)	EA	2
MO-125-5.9	AIRPORT RUNWAY LIGHTS, MEDIUM INTENSITY, STAKE MOUNTED (RED/YELLOW)	EA	2
MO-125-5.10	RUNWAY THRESHOLD LIGHTS, MEDIUM INTENSITY, STAKE MOUNTED (UNI-DIRECTIONAL GREEN)	EA	6
MO-125-5.11	RUNWAY THRESHOLD LIGHTS, MEDIUM INTENSITY, STAKE MOUNTED (GREEN/YELLOW)	EA	2
MO-125-5.12	RUNWAY THRESHOLD LIGHTS, MEDIUM INTENSITY, STAKE MOUNTED (RED)	EA	8
MO-125-5.13	RUNWAY THRESHOLD LIGHTS, MEDIUM INTENSITY, STAKE MOUNTED (GREEN/RED)	EA	8
MO-125-5.14	AIRPORT RUNWAY AND TAXWAY SIGN, UNLIGHTED (SIZE 1, STYLE 4)	EA	5
MO-125-5.15	AIRPORT RUNWAY END IDENTIFICATION LIGHT (REL.) SYSTEM	EA	2
MO-152-4.1	SHOULDER ADJUSTMENT	SY	37,553
MO-901-5.1	REMOVAL OF EXISTING BITUMINOUS PAVEMENT SHOULDER - 25' WIDE	SY	37,553
MO-901-5.1	AIRPORT SEEDING	AC	12.0
MO-908-5.1	AIRPORT MULCHING	AC	12.0
SP-1-5.1	REMOVE ARRESTOR CABLE FOUNDATIONS	LS	1.0
SP-2-5.1	DEMOLITION OF EXISTING VAULT BUILDING	LS	1

ADDITIVE ALTERNATE #1			
ITEM	DESCRIPTION	UNIT	QUANTITY
MO-152-4.2	CLASS A EXCAVATION	CY	32.758
MO-156-4.5.1	SILT FENCE	LF	10,636
MO-901-5.1	AIRPORT SEEDING	AC	40.5
MO-908-5.1	AIRPORT MULCHING	AC	40.5
MO-701-5.1	REMOVE 8" CAST IRON PIPE	LF	104
MO-701-5.2	REMOVE 18" REINFORCED CONCRETE PIPE	LF	189
MO-701-5.3	REMOVE PVC PIPE	LF	42

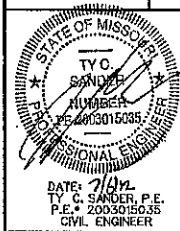
REVISIONS		
NUMBER	BY	DATE



# PERRYVILLE MUNICIPAL AIRPORT

PERRYVILLE, MISSOURI

AIRFIELD ELECTRICAL REHABILITATION,  
SHOULDER REMOVAL AND GRADING  
ADDITIVE ALTERNATE 1:  
RUNWAY SAFETY AREA GRADING



ONE MEMORIAL DRIVE, SUITE 500  
ST. LOUIS, MO 63102  
(314) 436-5500



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CONSULTING ENGINEERS

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STATE PROJECT NO. AIR 11-063A-1

FILE: 02\_Sum\_of\_Quantities.dgn

DESIGN BY: TWM

DRAWN BY: TWMM

CHECKED BY: TCS

APPROVED BY: TCS

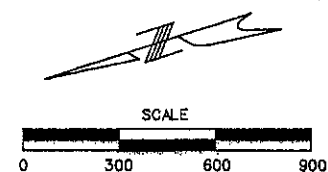
DATE: JULY 5, 2012

JOB No: 1140105-00

## SUMMARY OF QUANTITIES

SHEET 2 OF 74 SHEETS

1. SEE TYPICAL SECTIONS FOR EDGE REMOVAL/SURFACE PREPARATION DIMENSIONS
2. CONTRACTOR SHALL REMOVE ALL AGGREGATE AND PAVEMENT DEBRIS CREATED DURING THE MILLING OPERATION
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ADDING ADDITIONAL SOIL BACKFILL TO AREAS SHOULD SETTLEMENT OCCUR



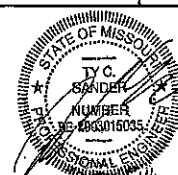
REVISIONS		
NUMBER	BY	DATE

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THIS BAR IS EQUAL TO 2'  
AT FULL SCALE (34X22),  
PLOT 1

## PERRYVILLE MUNICIPAL AIRPORT

PERRYVILLE, MISSOURI

**AIRFIELD ELECTRICAL REHABILITATION,  
SHOULDER REMOVAL AND GRADING  
ADDITIVE ALTERNATE 1:  
RUNWAY SAFETY AREA GRADING**



ONE MEMORIAL DRIVE, SUITE 500  
ST. LOUIS, MO 63102  
(314) 436-5500

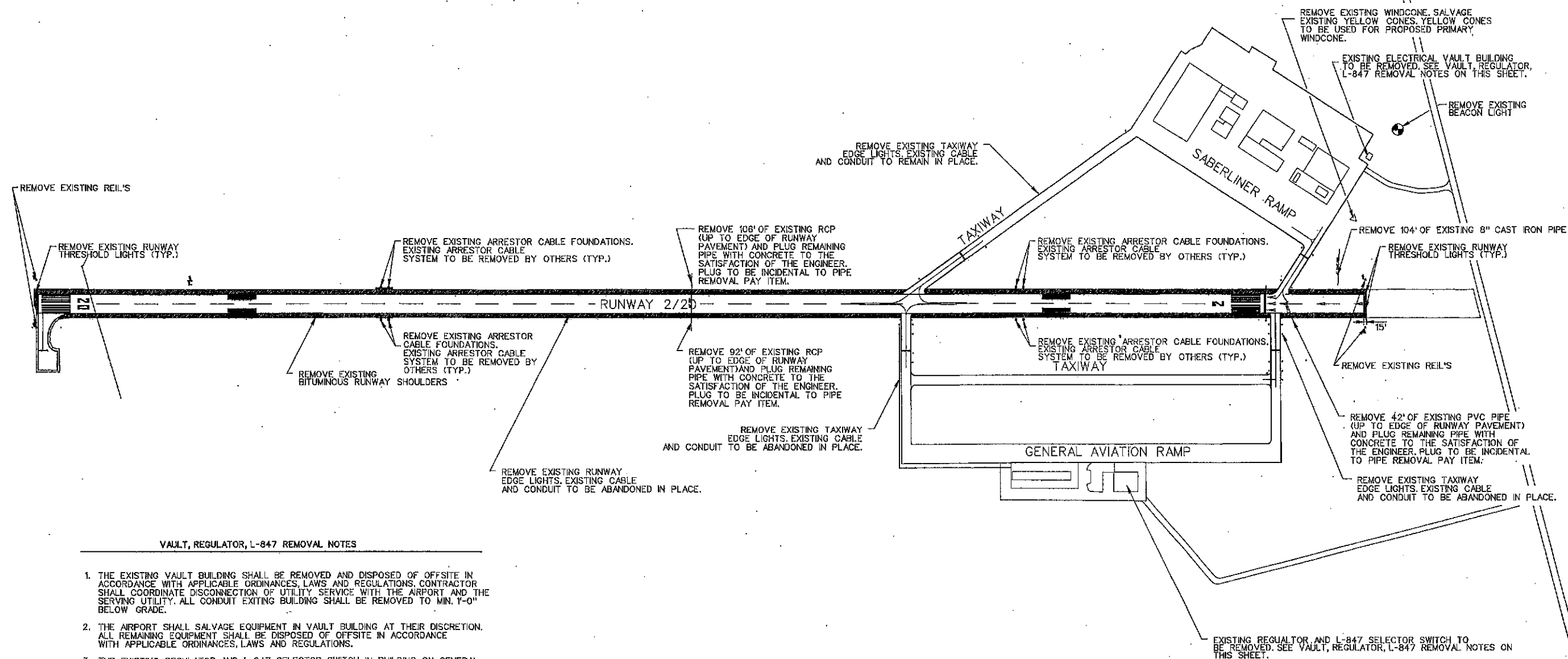


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STATE PROJECT NO. AIR 11-063A-1



1. THE EXISTING VAULT BUILDING SHALL BE REMOVED AND DISPOSED OF OFFSITE IN ACCORDANCE WITH APPLICABLE ORDINANCES, LAWS AND REGULATIONS. CONTRACTOR SHALL COORDINATE DISCONNECTION OF UTILITY SERVICE WITH THE AIRPORT AND THE SERVING UTILITY. ALL CONDUIT EXITING BUILDING SHALL BE REMOVED TO MIN. 1'-0" BELOW GRADE.
2. THE AIRPORT SHALL SALVAGE EQUIPMENT IN VAULT BUILDING AT THEIR DISCRETION. ALL REMAINING EQUIPMENT SHALL BE DISPOSED OF OFFSITE IN ACCORDANCE WITH APPLICABLE ORDINANCES, LAWS AND REGULATIONS.
3. THE EXISTING REGULATOR AND L-847 SELECTOR SWITCH IN BUILDING ON GENERAL AVIATION RAMP SHALL BE DISCONNECTED AND DISPOSED OF OFFSITE IN ACCORDANCE WITH APPLICABLE ORDINANCES, LAWS AND REGULATIONS. REMOVE CONDUIT AND WIRE FROM LOAD CENTER TO REGULATOR. REMOVE SERIES CIRCUIT WIRING AND CONDUIT WITHIN THE BUILDING LIMITS. CONDUIT EXITING BUILDING SHALL BE REMOVED TO EXTERIOR GRADE LEVEL AND SEALED. SEAL ANY REMAINING WALL PENETRATIONS AFTER REMOVAL.

FILE: 05\_demo\_plan\_1.dgn

DESIGN BY: TWM

DRAWN BY: TWM

CHECKED BY: TCS

APPROVED BY: TCS

DATE: JULY 5, 2012

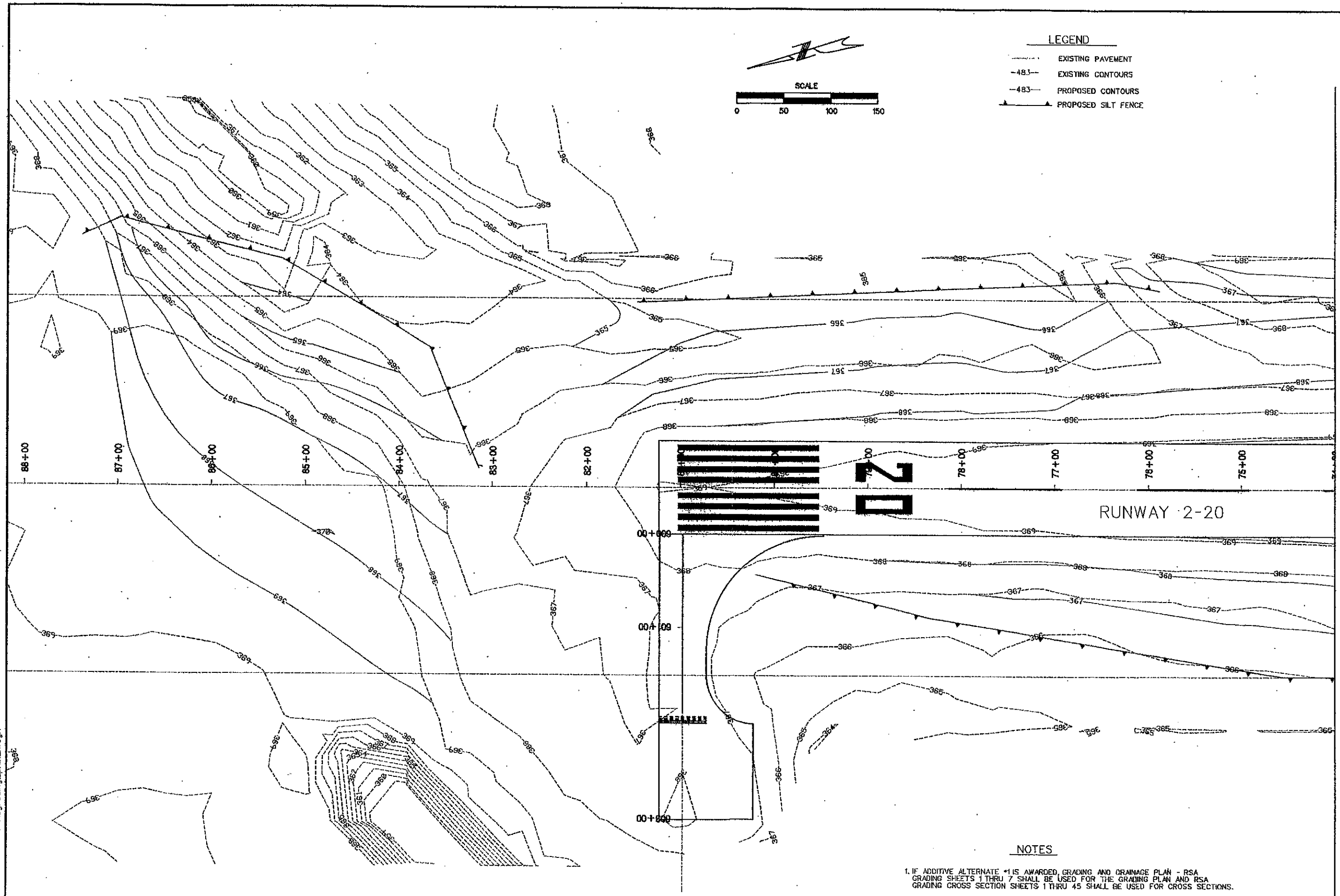
JOE No: 1140105-00

DEMOLITION PLAN

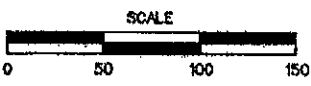
SHEET 5 OF 74 SHEETS

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7/5/2012  
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- LEGEND
- EXISTING PAVEMENT
  - EXISTING CONTOURS
  - PROPOSED CONTOURS
  - PROPOSED SILT FENCE



NOTES

- IF ADDITIVE ALTERNATE #1 IS AWARDED, GRADING AND DRAINAGE PLAN - RSA GRADING SHEETS 1 THRU 7 SHALL BE USED FOR THE GRADING PLAN AND RSA GRADING CROSS SECTION SHEETS 1 THRU 45 SHALL BE USED FOR CROSS SECTIONS.
- SEE GRADING AND DRAINAGE PLAN SHEET 7 OF 7 FOR SILT FENCE DETAILS.
- ENGINEER SHALL DESIGNATE LOCATIONS OF SILT FENCE AT THE TIME OF CONSTRUCTION. LOCATIONS SHOWN IN THE PLANS ARE APPROXIMATE.

MATCHLINE STA. 74+00

REVISIONS		
NUMBER	BY	DATE

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AT FULL SCALE (34X22).  
PLOT 1

**PERRYVILLE MUNICIPAL AIRPORT**  
**PERRYVILLE, MISSOURI**  
**AIRFIELD ELECTRICAL REHABILITATION,  
SHOULDER REMOVAL AND GRADING  
ADDITIVE ALTERNATE #1:  
RUNWAY SAFETY AREA GRADING**

DATE: 7/5/2012  
BY: SANDER P. P.  
P.E. # 2003000005  
CIVIL ENGINEER

ONE MEMORIAL DRIVE SUITE 200  
ST. LOUIS, MO 63103  
TEL: 314.351.3300  
FAX: 314.351.3300

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STATE PROJECT NO. AIR 11-063A-1

FILE: 23\_grading\_plan\_1.dgn

DESIGN BY: TWM

DRAWN BY: TWM

CHECKED BY: TCS

APPROVED BY: TCS

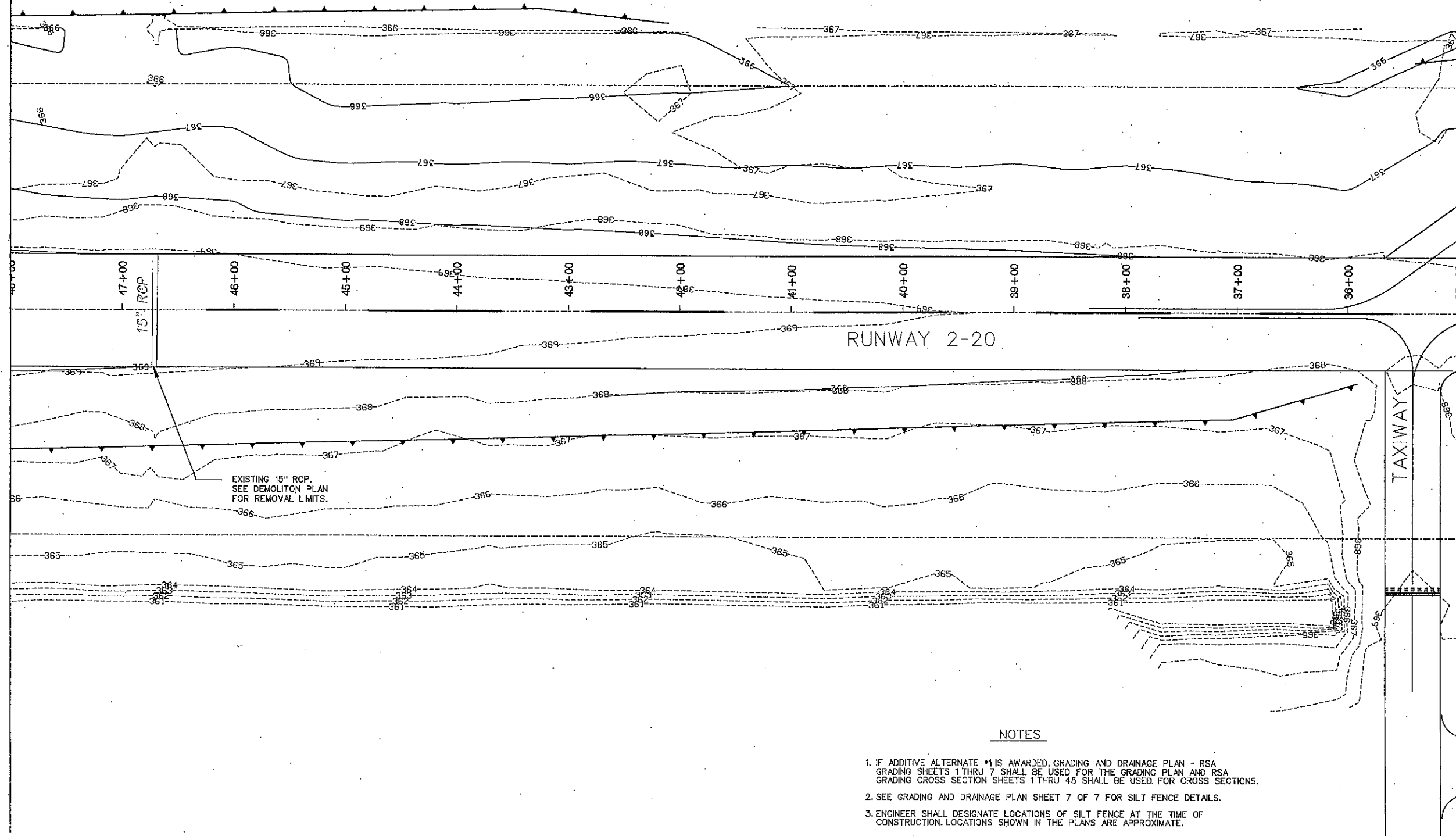
DATE: JULY 5, 2012

JOB No: 1140105-00

GRADING AND DRAINAGE  
PLAN - RSA GRADING  
SHEET 1 OF 7

SHEET 23 OF 74 SHEETS

MATCHLINE STA. 48+00



#### NOTES

- IF ADDITIVE ALTERNATE #1 IS AWARDED, GRADING AND DRAINAGE PLAN - RSA GRADING SHEETS 1 THRU 7 SHALL BE USED FOR THE GRADING PLAN AND RSA GRADING CROSS SECTION SHEETS 1 THRU 45 SHALL BE USED FOR CROSS SECTIONS.
- SEE GRADING AND DRAINAGE PLAN SHEET 7 OF 7 FOR SILT FENCE DETAILS.
- ENGINEER SHALL DESIGNATE LOCATIONS OF SILT FENCE AT THE TIME OF CONSTRUCTION. LOCATIONS SHOWN IN THE PLANS ARE APPROXIMATE.

REVISIONS		
NUMBER	BY	DATE

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AT FULL SCALE (34X22).  
PLOT 1

**PERRYVILLE MUNICIPAL AIRPORT**  
**PERRYVILLE, MISSOURI**

**AIRFIELD ELECTRICAL REHABILITATION,  
SHOULDER REMOVAL AND GRADING  
ADDITIVE ALTERNATE 1:  
RUNWAY SAFETY AREA GRADING**

STATE OF MISSOURI  
J. C. SANDER  
PE # 2003015036  
CIVIL ENGINEER  
DATE: 7/1/12

ONE MEMORIAL DRIVE SUITE 500  
ST. LOUIS, MO 63102  
CMT 438-5500

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STATE PROJECT NO. AIR 11-063A-1

FILE: 26\_grading-plan\_4.dgn

DESIGN BY: TWM

DRAWN BY: TWM

CHECKED BY: TCS

APPROVED BY: TCS

DATE: JULY 5, 2012

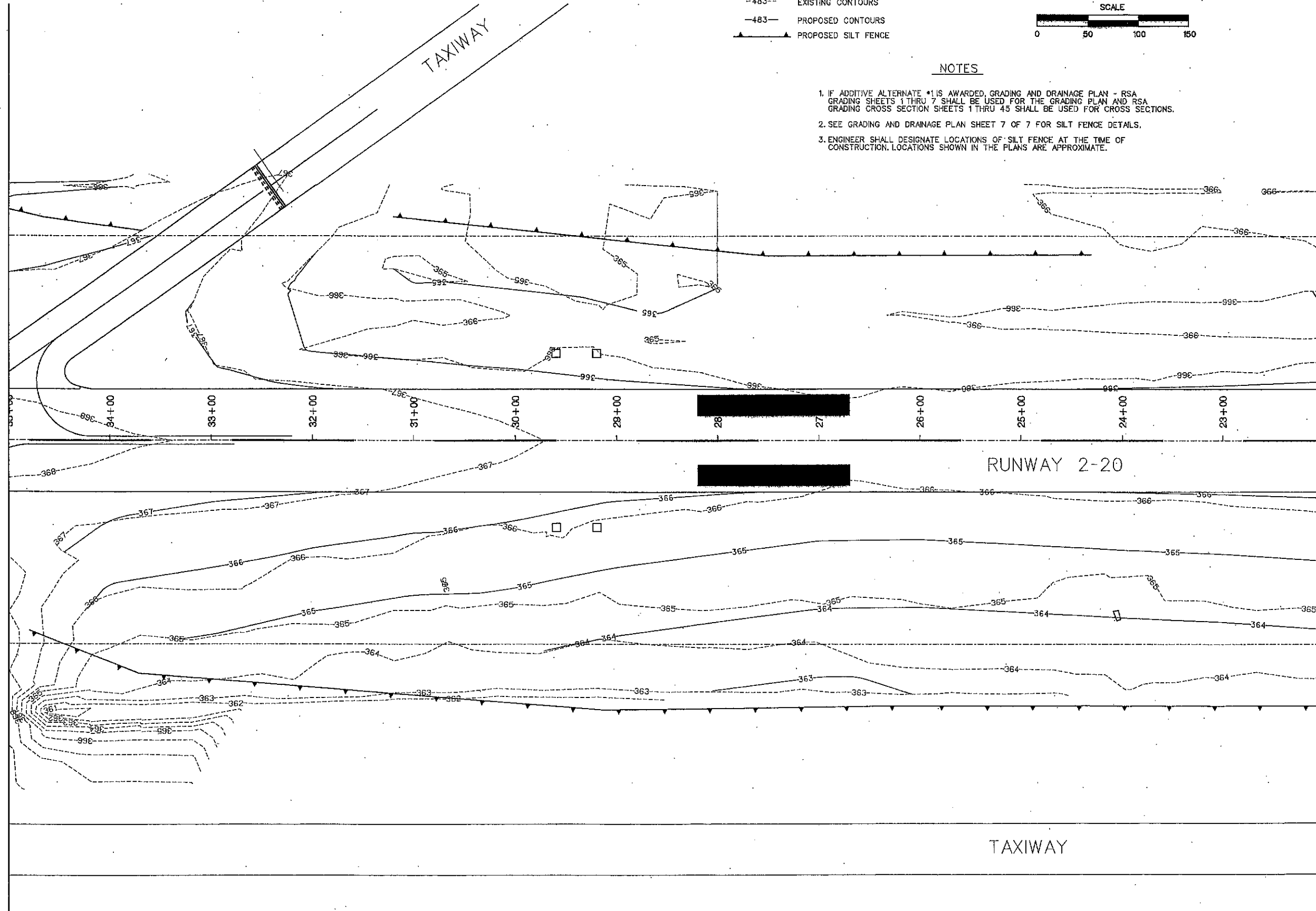
JOB No: 1140105-00

GRADING AND DRAINAGE  
PLAN - RSA GRADING  
SHEET 4 OF 7

SHEET 26 OF 74 SHEETS

7/6/2012  
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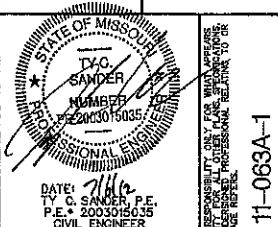
MATCHLINE STA. 35+00



REVISIONS		
NUMBER	BY	DATE

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PERRYVILLE MUNICIPAL AIRPORT  
PERRYVILLE, MISSOURI  
AIRFIELD ELECTRICAL REHABILITATION,  
SHOULDER REMOVAL AND GRADING  
ADDITIVE ALTERNATE 1:  
RUNWAY SAFETY AREA GRADING

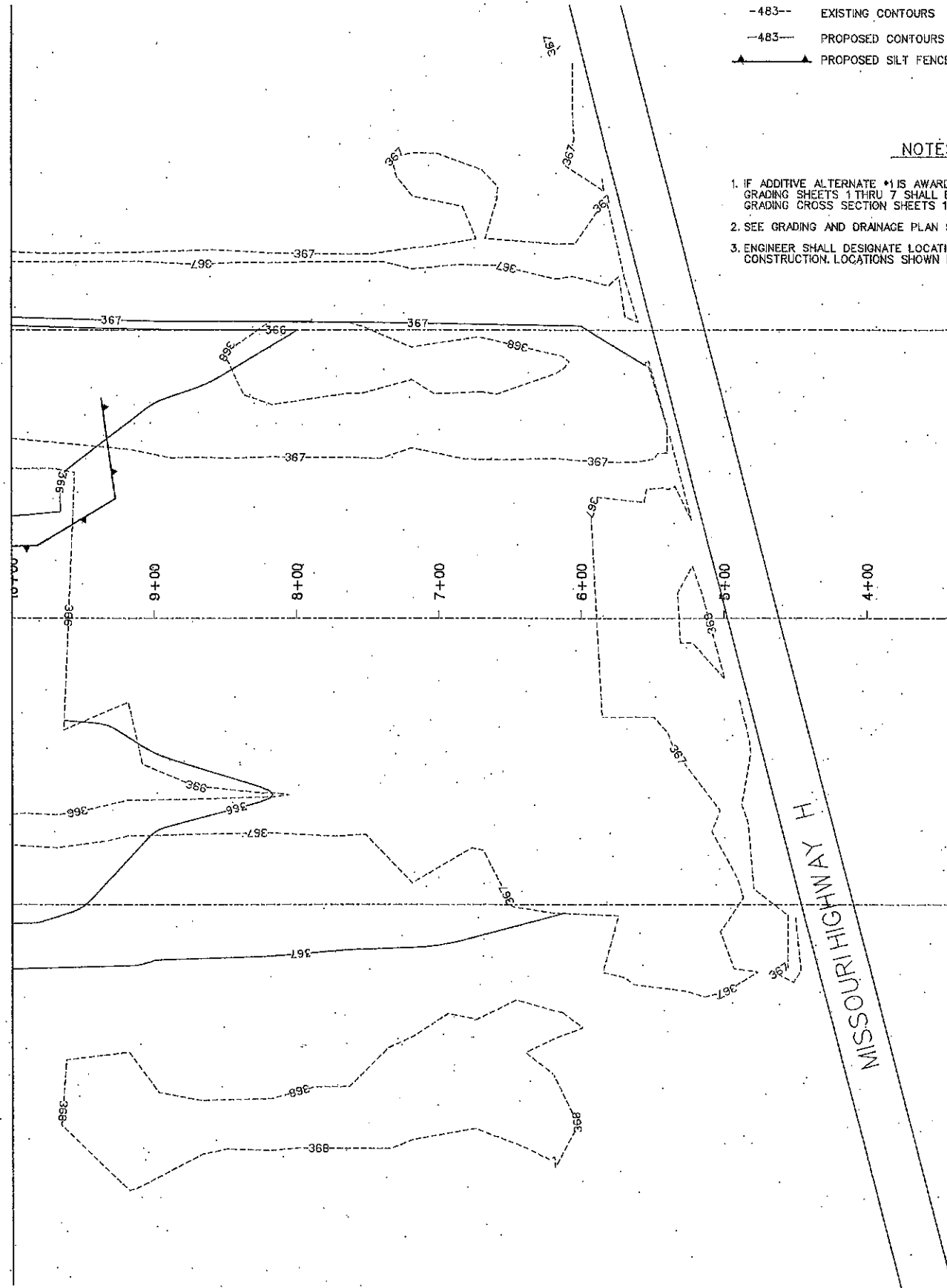


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STATE PROJECT NO. AIR 11-063A-1  
FILE: 27\_grading\_plan\_5.dgn  
DESIGN BY: TWM  
DRAWN BY: TWM  
CHECKED BY: TCS  
APPROVED BY: TCS  
DATE: JULY 5, 2012  
JOB No: 1140105-00  
GRADING AND DRAINAGE  
PLAN - RSA GRADING  
SHEET 5 OF 7  
SHEET 27 OF 74 SHEETS



MATCHLINE STA. 10+00

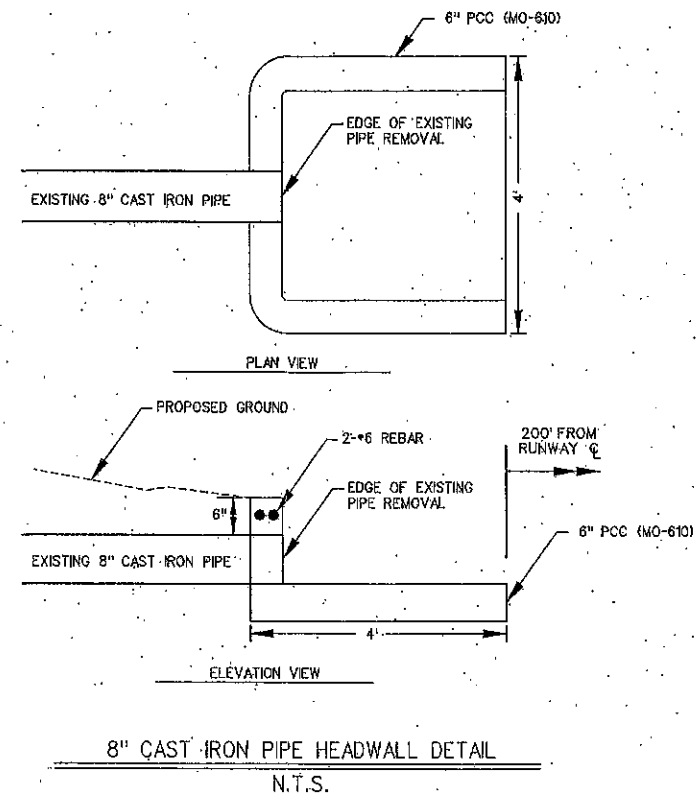
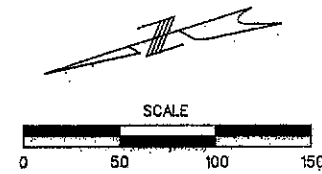


#### LEGEND

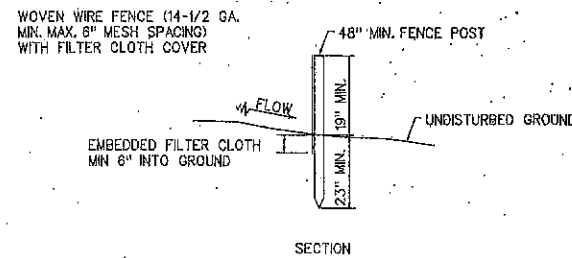
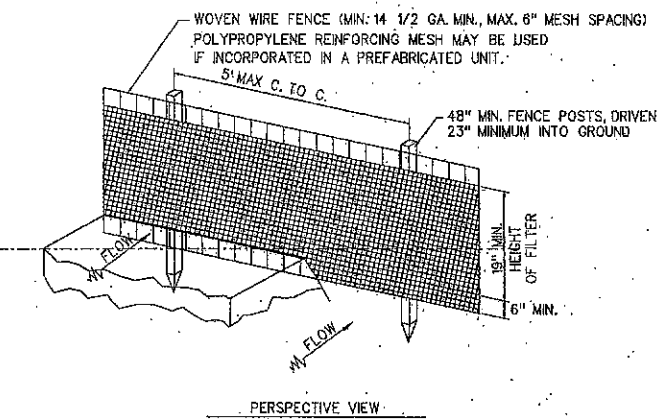
- EXISTING PAVEMENT
- 483- EXISTING CONTOURS
- 483- PROPOSED CONTOURS
- ▲ PROPOSED SILT FENCE

#### NOTES

- IF ADDITIVE ALTERNATE #1 IS AWARDED, GRADING AND DRAINAGE PLAN - RSA GRADING SHEETS 1 THRU 7 SHALL BE USED FOR THE GRADING PLAN AND RSA GRADING CROSS SECTION SHEETS 1 THRU 45 SHALL BE USED FOR CROSS SECTIONS.
- SEE GRADING AND DRAINAGE PLAN SHEET 7 OF 7 FOR SILT FENCE DETAILS.
- ENGINEER SHALL DESIGNATE LOCATIONS OF SILT FENCE AT THE TIME OF CONSTRUCTION. LOCATIONS SHOWN IN THE PLANS ARE APPROXIMATE.



NOTE: PAYMENT FOR HEADWALL SHALL BE INCIDENTAL TO REMOVE 8\"/>



EROSION CONTROL FABRIC FENCE DETAIL  
N.T.S.

#### NOTES

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24\"/>
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6\"/>
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN \"BULGES\" DEVELOP IN THE SILT FENCE. MAINTENANCE, WHICH INCLUDES THE REPLACEMENT OF DAMAGED FENCE SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE EROSION CONTROL FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2\"/>

FENCE: WOVEN WIRE, 14-1/2 GA. 6\"/>

FILTER CLOTH: FILTER X, MIRAFIBROX, STABILINKA TH40N OR EQUAL

PREFABRICATED UNIT: GEOFAB ENVIROFENCE, GS SILT FENCE WITH REINFORCING MESH OR EQUAL

REVISIONS		
NUMBER	BY	DATE

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

**PERRYVILLE MUNICIPAL AIRPORT**  
**PERRYVILLE, MISSOURI**

**AIRFIELD ELECTRICAL REHABILITATION, SHOULDER REMOVAL AND GRADING ADDITIVE ALTERNATE 1.**  
**RUNWAY SAFETY AREA GRADING**

STATE OF MISSOURI  
TWO  
SANDER  
NUMBER  
22003016035  
DATE  
T.C. SANDER P.E.  
P.E. # 2003080535  
CIVIL ENGINEER

ONE MEMORIAL DRIVE, SUITE 200  
ST. LOUIS, MO 63102  
ST. LOUIS, MO 63102  
ST. LOUIS, MO 63102

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STATE PROJECT NO. AIR 11-063A-1

FILE: 29\_grading\_plan\_7.dgn

DESIGN BY: TWM

DRAWN BY: TWM

CHECKED BY: TCS

APPROVED BY: TCS

DATE: JULY 5, 2012

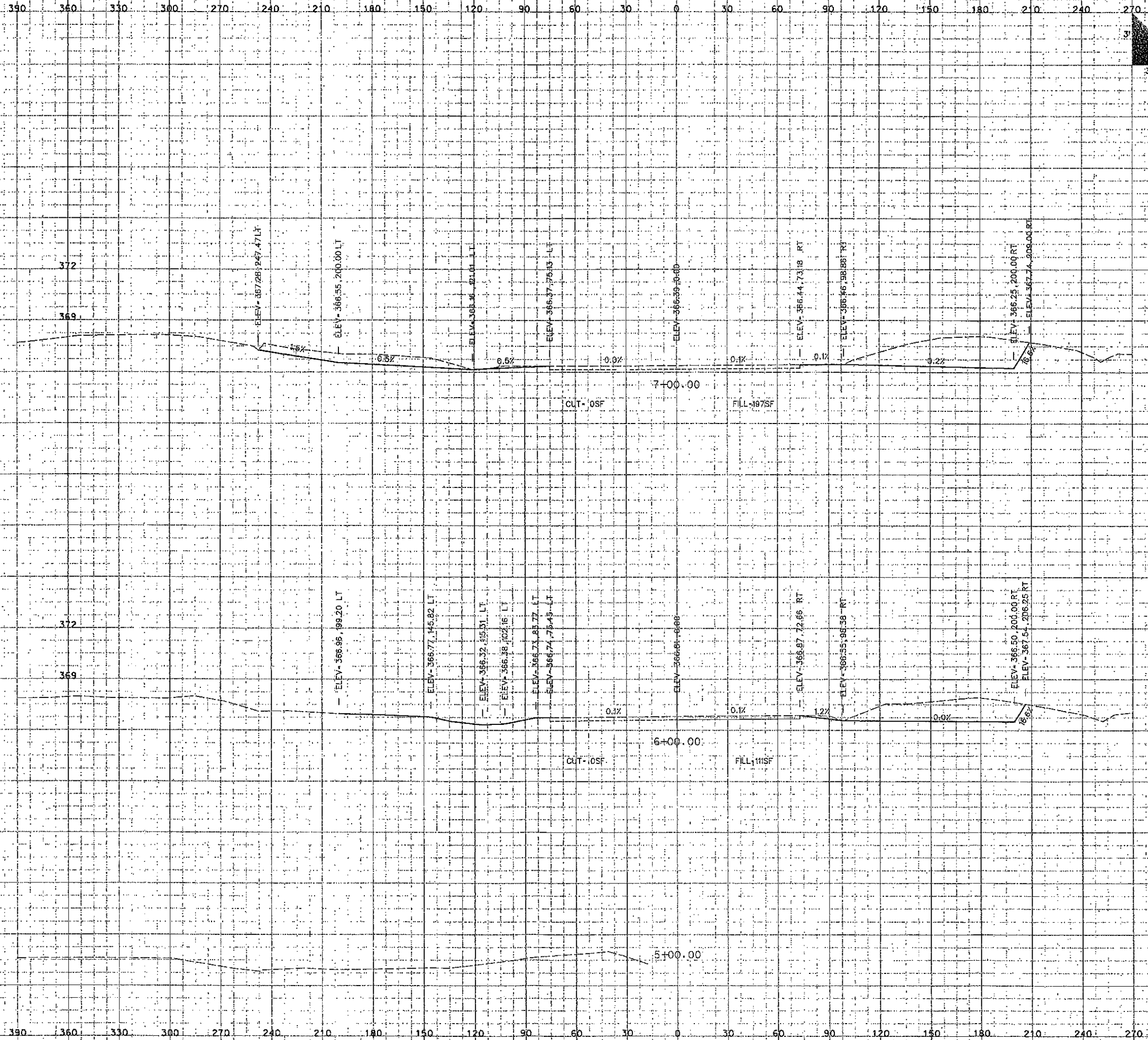
JOB: No: 1140105-00

GRADING AND DRAINAGE  
PLAN - RSA GRADING  
SHEET 7 OF 7

SHEET 29 OF 74 SHEETS



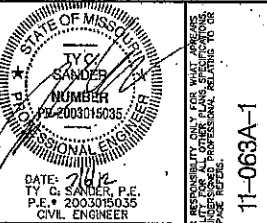
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0 1 2  
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AT FULL SCALE (34X22).  
PLOT 1

PERRYVILLE MUNICIPAL AIRPORT  
PERRYVILLE, MISSOURI  
AIRFIELD ELECTRICAL REHABILITATION,  
SHOULDER REMOVAL AND GRADING  
ADDITIVE ALTERNATE 1:  
RUNWAY SAFETY AREA GRADING

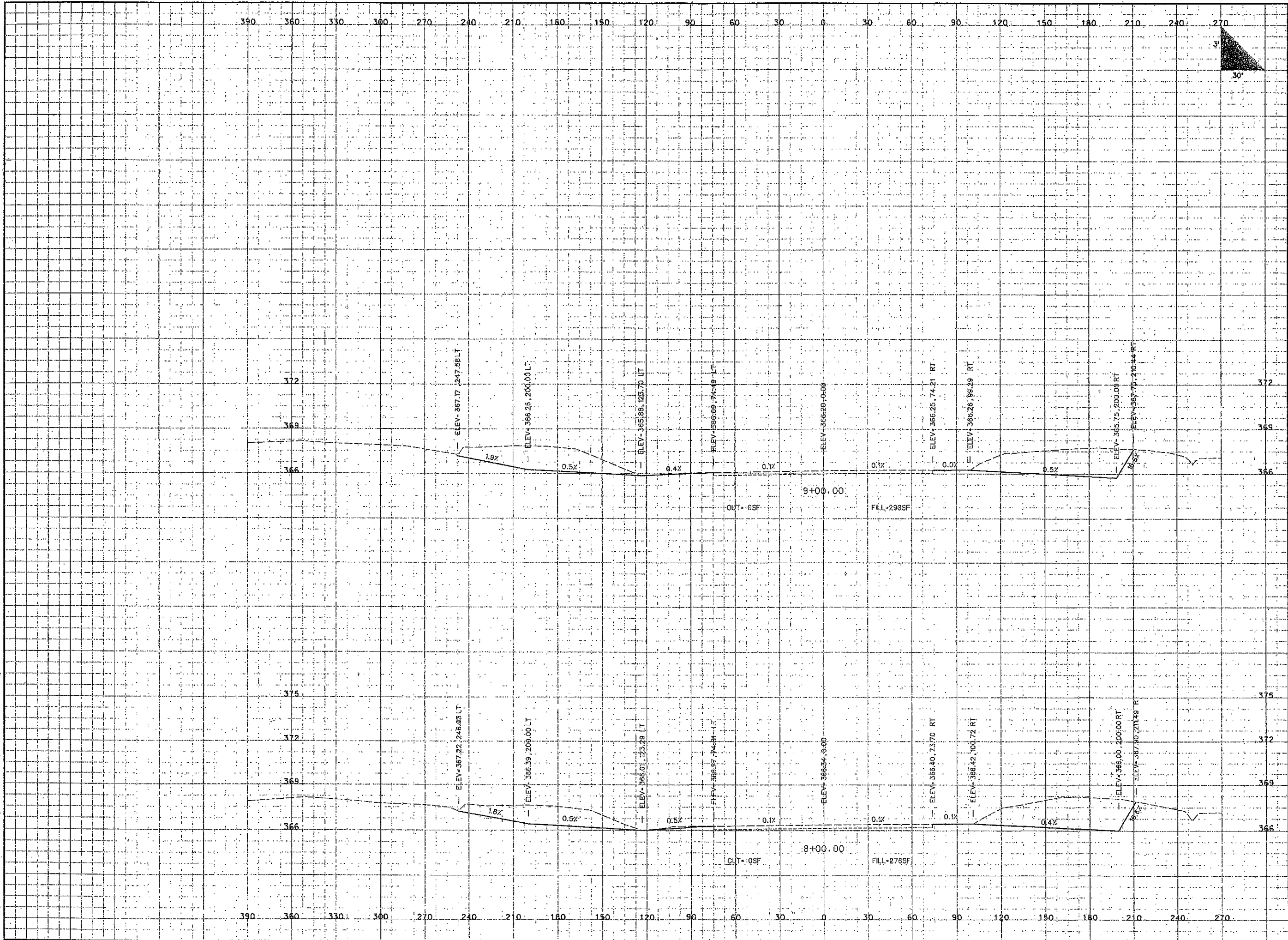


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FILE: 30-76\_Cross\_Sections.dgn  
DESIGN BY: LEW  
DRAWN BY: LEW  
CHECKED BY: TCS  
APPROVED BY: TCS  
DATE: JULY 5, 2012  
JOB No: 1140105-00  
RSA GRADING  
CROSS-SECTION  
SHEET 1 OF 45  
SHEET 30 OF 74 SHEETS



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REVISIONS		
NUMBER	BY	DATE

0 1 2  
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AT FULL SCALE (34X22).  
PLOT 1

**PERRYVILLE MUNICIPAL AIRPORT**  
**PERRYVILLE, MISSOURI**

**AIRFIELD ELECTRICAL REHABILITATION,  
SHOULDER REMOVAL AND GRADING  
ADDITIVE ALTERNATE 1:  
RUNWAY SAFETY AREA GRADING**

DATE: 7/12  
T. C. SANDER, P.E.  
P.E. # 2003015035  
CIVIL ENGINEER

ONE MEMORIAL DRIVE, SUITE 400  
ST. LOUIS, MISSOURI 63103  
(314) 438-5566

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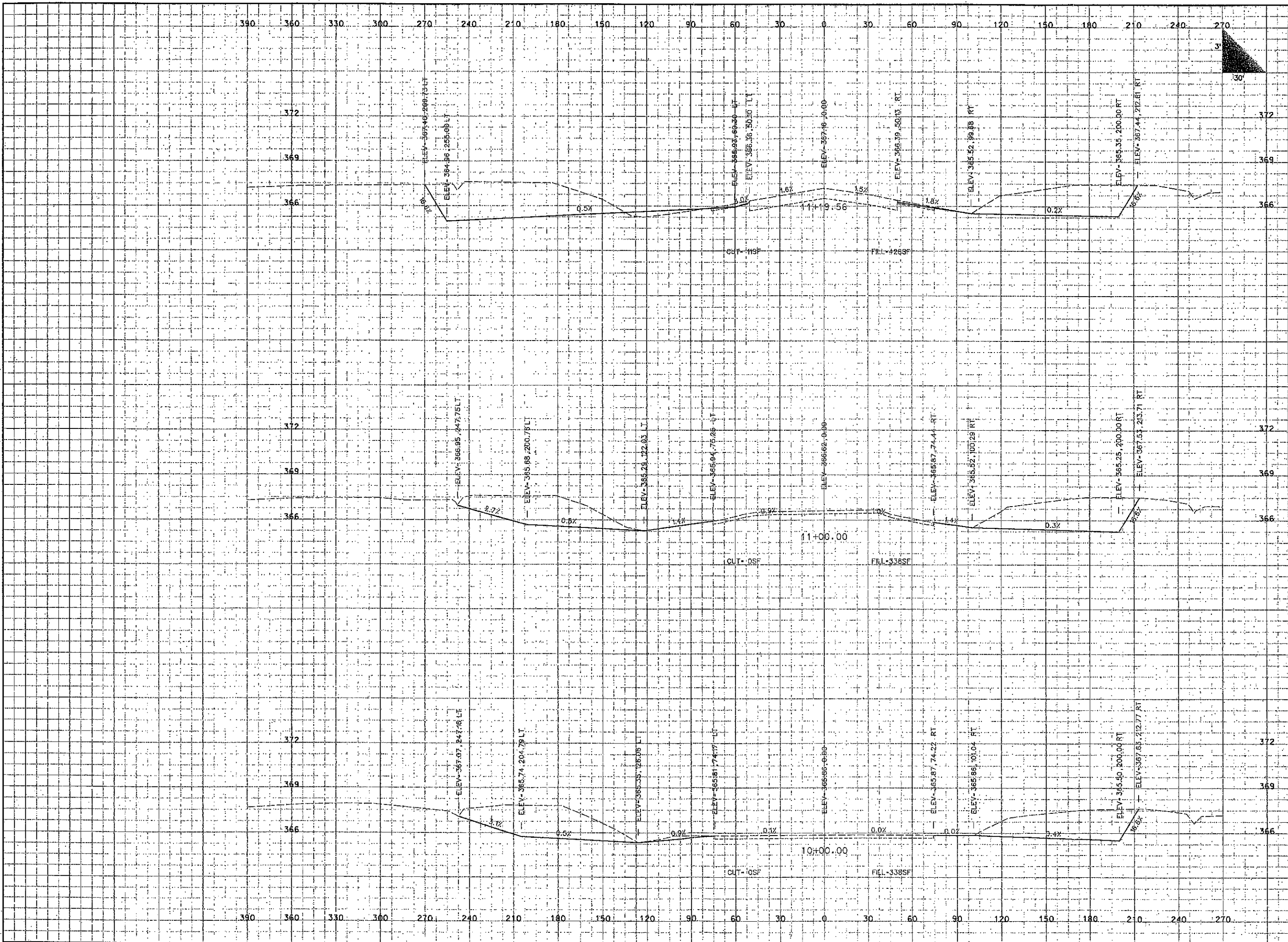
STATE PROJECT NO. AIR 11-063A-1

FILE: 30-76\_Cross\_Sections.dgn  
DESIGN BY: LEW  
DRAWN BY: LEW  
CHECKED BY: TCS  
APPROVED BY: TCS  
DATE: JULY 5, 2012  
JOB No: 1140105-00

**RSA GRADING  
CROSS-SECTION  
SHEET 2 OF 45**

SHEET 31 OF 74 SHEETS

7/8/2012  
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REVISIONS		
NUMBER	BY	DATE

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

**PERRYVILLE MUNICIPAL AIRPORT**  
**PERRYVILLE, MISSOURI**

**AIRFIELD ELECTRICAL REHABILITATION,  
SHOULDER REMOVAL AND GRADING  
ADDITIVE ALTERNATE 1:  
RUNWAY SAFETY AREA GRADING**

STATE OF MISSOURI  
T.C. SANDER  
Professional Engineer  
No. 300015035  
DATE: 7/8/12  
P.E. 2003018035  
CIVIL ENGINEER

ONE MEMORIAL DRIVE, SUITE 500  
ST. LOUIS, MO 63102  
(314) 436-5500

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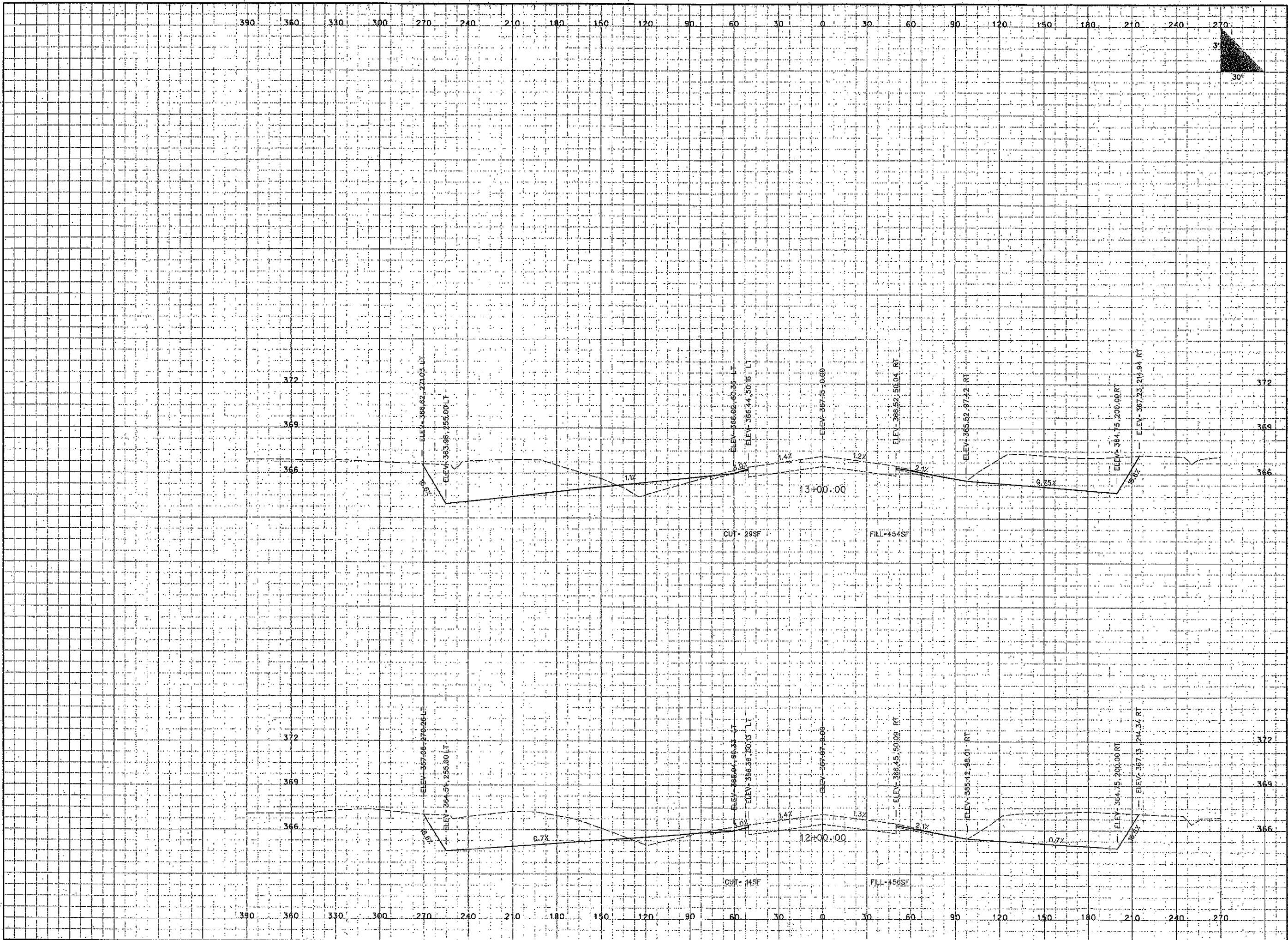
STATE PROJECT NO. AIR 11-063A-1

FILE: 30-76\_Cross\_Sections.dgn  
DESIGN BY: LEW  
DRAWN BY: LEW  
CHECKED BY: TCS  
APPROVED BY: TCS  
DATE: JULY 5, 2012  
JOB No: 1140105-00

**RSA GRADING  
CROSS-SECTION  
SHEET 3 OF 45**

SHEET 32 OF 74 SHEETS

7/6/2012  
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REVISIONS		
NUMBER	BY	DATE

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

**PERRYVILLE MUNICIPAL AIRPORT**  
**PERRYVILLE, MISSOURI**

**AIRFIELD ELECTRICAL REHABILITATION,  
SHOULDER REMOVAL AND GRADING,  
ADDITIVE ALTERNATE 1:  
RUNWAY SAFETY AREA GRADING**

**STATE OF MISSOURI**  
**T.C. SANDER**  
**REGISTERED PROFESSIONAL ENGINEER**  
**NO. 22003016003**  
**DATE: 7/5/2012**  
**P.E. # 2003016003**  
**CIVIL ENGINEER**

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STATE PROJECT NO. AIR 11-063A-1

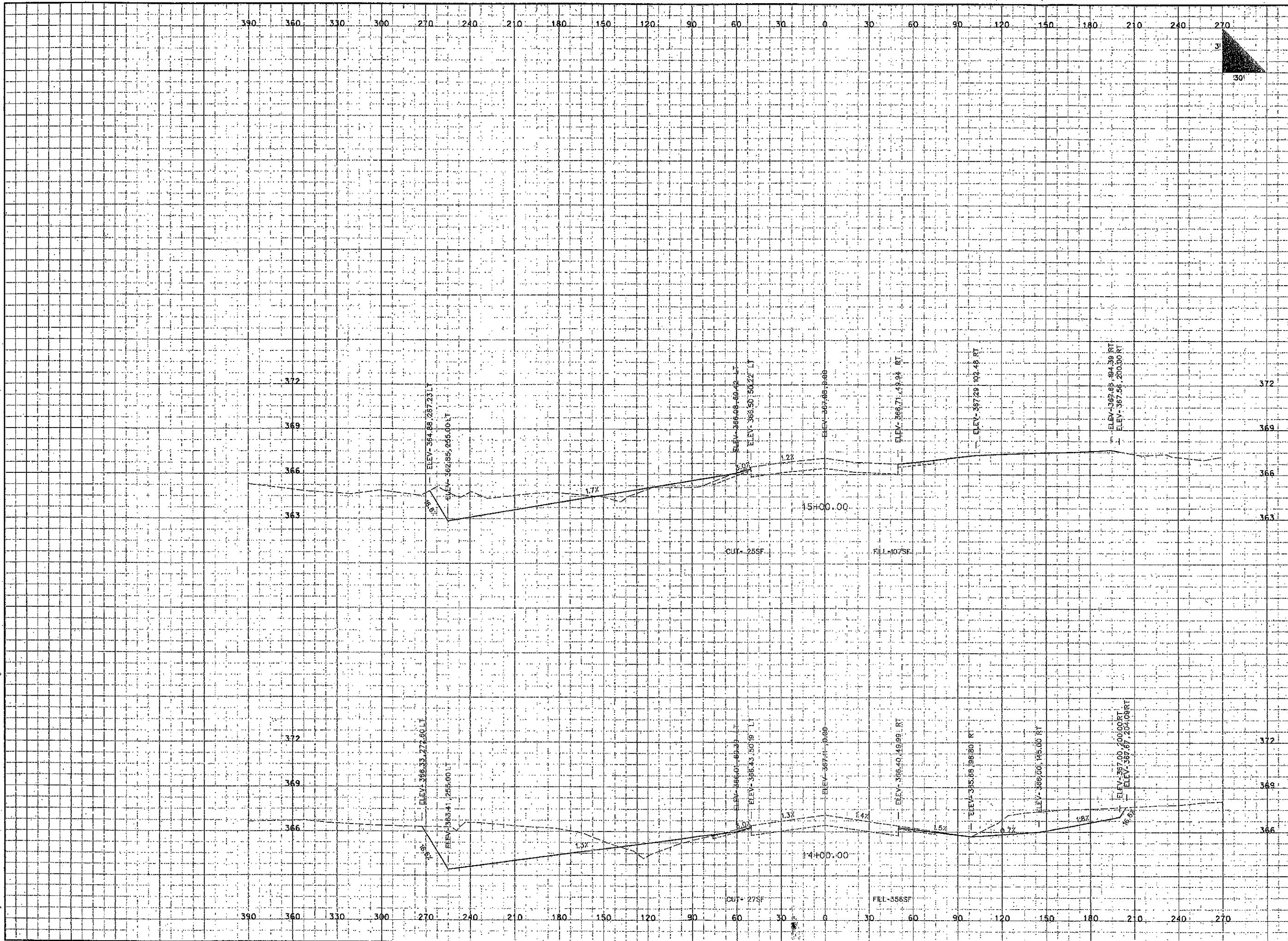
FILE: 30-76\_Cross\_Sections.dgn  
DESIGN BY: LEW  
DRAWN BY: LEW  
CHECKED BY: TCS  
APPROVED BY: TCS  
DATE: JULY 5, 2012  
JOB No: 1140105-00

**RSA GRADING  
CROSS-SECTION  
SHEET 4 OF 45**

SHEET 33 OF 74 SHEETS



7/6/2012  
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REVISIONS		
NUMBER	BY	DATE

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

**PERRYVILLE MUNICIPAL AIRPORT**  
**PERRYVILLE, MISSOURI**  
**AIRFIELD ELECTRICAL REHABILITATION,**  
**SHOULDER REMOVAL AND GRADING**  
**ADDITIVE ALTERNATE 1:**  
**RUNWAY SAFETY AREA GRADING**

DATE: 7/5/12  
T.C. SANDER, P.E.  
No. 2003015035  
CIVIL ENGINEER

ONE MEMORIAL DRIVE, SUITE 500  
ST. LOUIS, MO 63102  
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STATE PROJECT NO. AIR 11-063A-1

FILE: 30-76\_Cross\_Sections.dgn  
DESIGN BY: LEW  
DRAWN BY: LEW  
CHECKED BY: TCS  
APPROVED BY: TCS  
DATE: JULY 5, 2012  
JOB No: 1140105-00

**RSA GRADING**  
**CROSS-SECTION**  
**SHEET 5 OF 45**  
SHEET 34 OF 74 SHEETS

The drawing is a technical cross-section of a road, plotted on a grid with horizontal and vertical axes. The horizontal axis represents stationing, with labels from 390 to 270 on both the top and bottom. The vertical axis represents elevation, with labels 366, 369, 372, and 375 on both the left and right. The drawing shows two cross-sections, one at station 35+00.00 and another at station 36+00.00. Each cross-section includes a centerline, a 10% slope on the left side, and a 1.0% slope on the right side. The drawing also shows a 1.2% slope on the right side of the 36+00.00 cross-section. The drawing includes various labels for elevations, stationing, and slopes. A north arrow is located in the top right corner.

**Station 35+00.00:**

- Left side: ELEV. 367.78, 100.00 LT
- Centerline: ELEV. 367.85, 50.45 LT
- Right side: ELEV. 367.91, 49.59 RT; ELEV. 367.90, 70.83 RT
- Slopes: 10% (left), 1.0% (right)
- Labels: CUT. 0SF, FILL. 4SF

**Station 36+00.00:**

- Left side: ELEV. 367.52, 100.00 LT
- Centerline: ELEV. 367.61, 68.04 LT
- Right side: ELEV. 367.98, 50.44 LT; ELEV. 368.01, 49.59 RT; ELEV. 367.58, 95.79 RT
- Slopes: 1.1% (left), 1.2% (right)
- Labels: CUT. 0SF, FILL. 136SF

**Station 36+00.00 (continued):**

- Right side: ELEV. 365.90, 200.00 RT
- Slope: 1.3%
- Label: FILL. 136SF

**Station 36+00.00 (continued):**

- Right side: ELEV. 366.52, 247.66 RT
- Slope: 1.3%
- Label: FILL. 136SF

**Station 36+00.00 (continued):**

- Right side: ELEV. 366.97, 247.15 RT; ELEV. 365.70, 248.81 RT; ELEV. 366.78, 254.45 RT
- Slope: 1.3%
- Label: FILL. 136SF

FILE: 30-76_Cross_Sections.dgn
DESIGN BY: LEW
DRAWN BY: LEW
CHECKED BY: TCS
APPROVED BY: TCS
DATE: JULY 5, 2012
JOB No: 1140105:00
<p style="text-align: center;"> <b>RSA GRADING CROSS-SECTION SHEET 16 OF 45</b> </p>
SHEET 45 OF 74 SHEETS

The image displays two cross-section diagrams of a road project, labeled '37+00.00' and '38+00.00'. Each diagram shows a road profile with elevations, stationing, and cross-slopes. The diagrams are plotted on a grid with a horizontal axis from 390 to 270 and a vertical axis from 363 to 375. The road profile is shown as a solid line, and the existing ground is shown as a dashed line. The diagrams include labels for 'CUT - OSF' and 'FILL - 124SF'.

**Diagram 37+00.00:**

- Stationing: 37+00.00
- Elevations: 375, 372, 369, 366, 363
- Labels: CUT - OSF, FILL - 124SF
- Grades: 2.0%, 1.3%, 1.3%, 1.0%, 1.6%

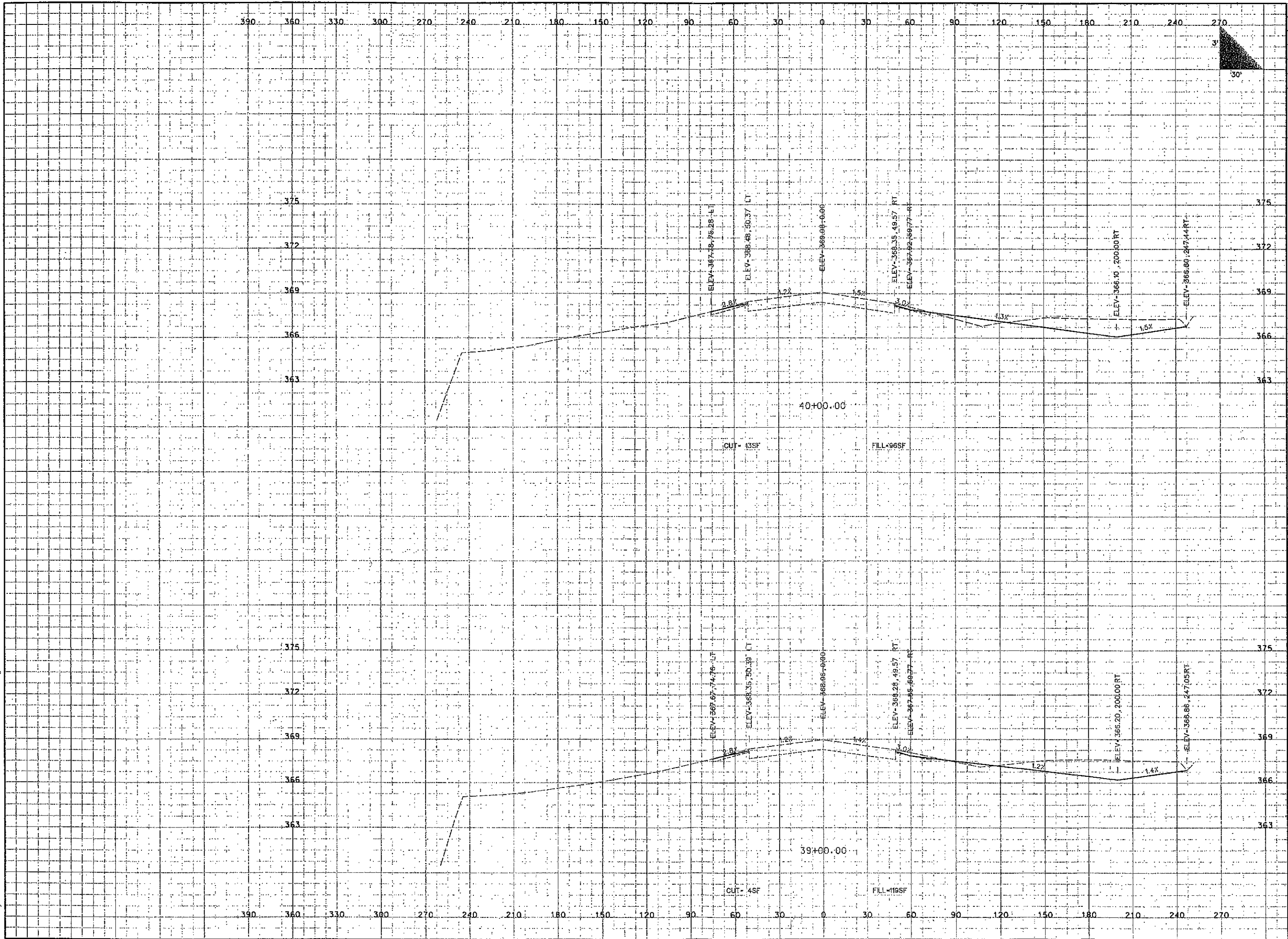
**Diagram 38+00.00:**

- Stationing: 38+00.00
- Elevations: 375, 372, 369, 366, 363
- Labels: CUT - OSF, FILL - 124SF
- Grades: 2.4%, 1.2%, 1.4%, 1.0%, 3.7%

[illegible]



7/6/2012  
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REVISIONS		
NUMBER	BY	DATE

0 1 2  
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PLOT 1

**PERRYVILLE MUNICIPAL AIRPORT**  
**PERRYVILLE, MISSOURI**  
**AIRFIELD ELECTRICAL REHABILITATION,**  
**SHOULDER REMOVAL AND GRADING**  
**ADDITIVE ALTERNATE 1:**  
**RUNWAY SAFETY AREA GRADING**

DATE: 7/5/12  
T.C. SANDER, P.E.  
CIVIL ENGINEER

ONE MEMORIAL DRIVE, SUITE 500  
ST. LOUIS, MISSOURI 63102  
ST. LOUIS 435-5500

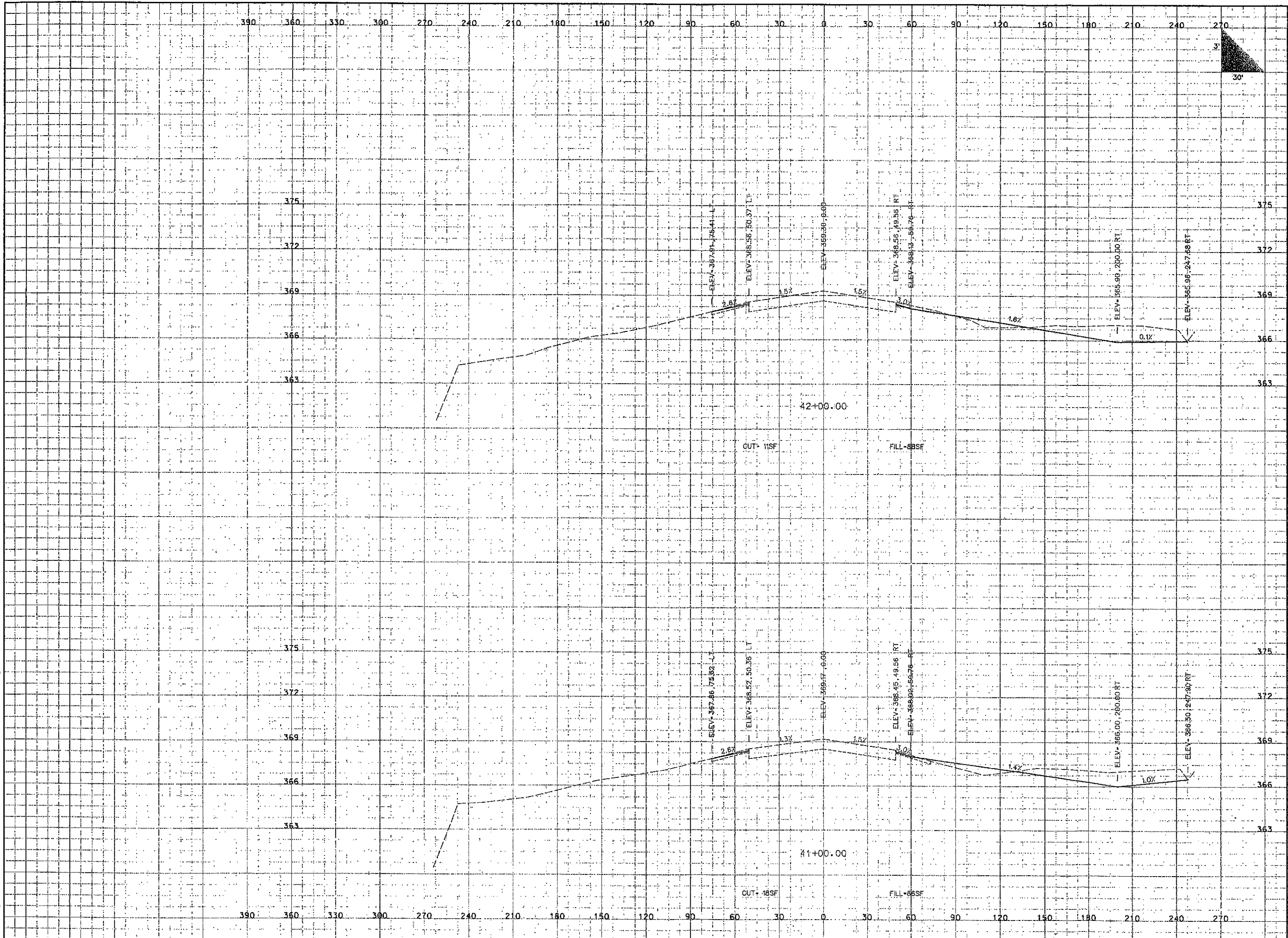
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STATE PROJECT NO. AIR 11-063A-1

FILE: 30-76\_Cross\_Sections.dgn  
DESIGN BY: LEW  
DRAWN BY: LEW  
CHECKED BY: TCS  
APPROVED BY: TCS  
DATE: JULY 5, 2012  
JOB No: 1140105-00  
RSA GRADING  
CROSS-SECTION  
SHEET 18 OF 45  
SHEET 47 OF 74 SHEETS

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REVISIONS		
NUMBER	BY	DATE

0 1 2  
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AT FULL SCALE (34X22),  
PLOT 1

**PERRYVILLE MUNICIPAL AIRPORT**  
**PERRYVILLE, MISSOURI**  
**AIRFIELD ELECTRICAL REHABILITATION,  
SHOULDER REMOVAL AND GRADING,  
ADDITIVE ALTERNATE 1:  
RUNWAY SAFETY AREA GRADING**

DATE: 7/5/2012  
T. C. SANDER, P.E.  
P.E. # 2003015035  
CIVIL ENGINEER

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STATE PROJECT NO. AIR 11-063A-1

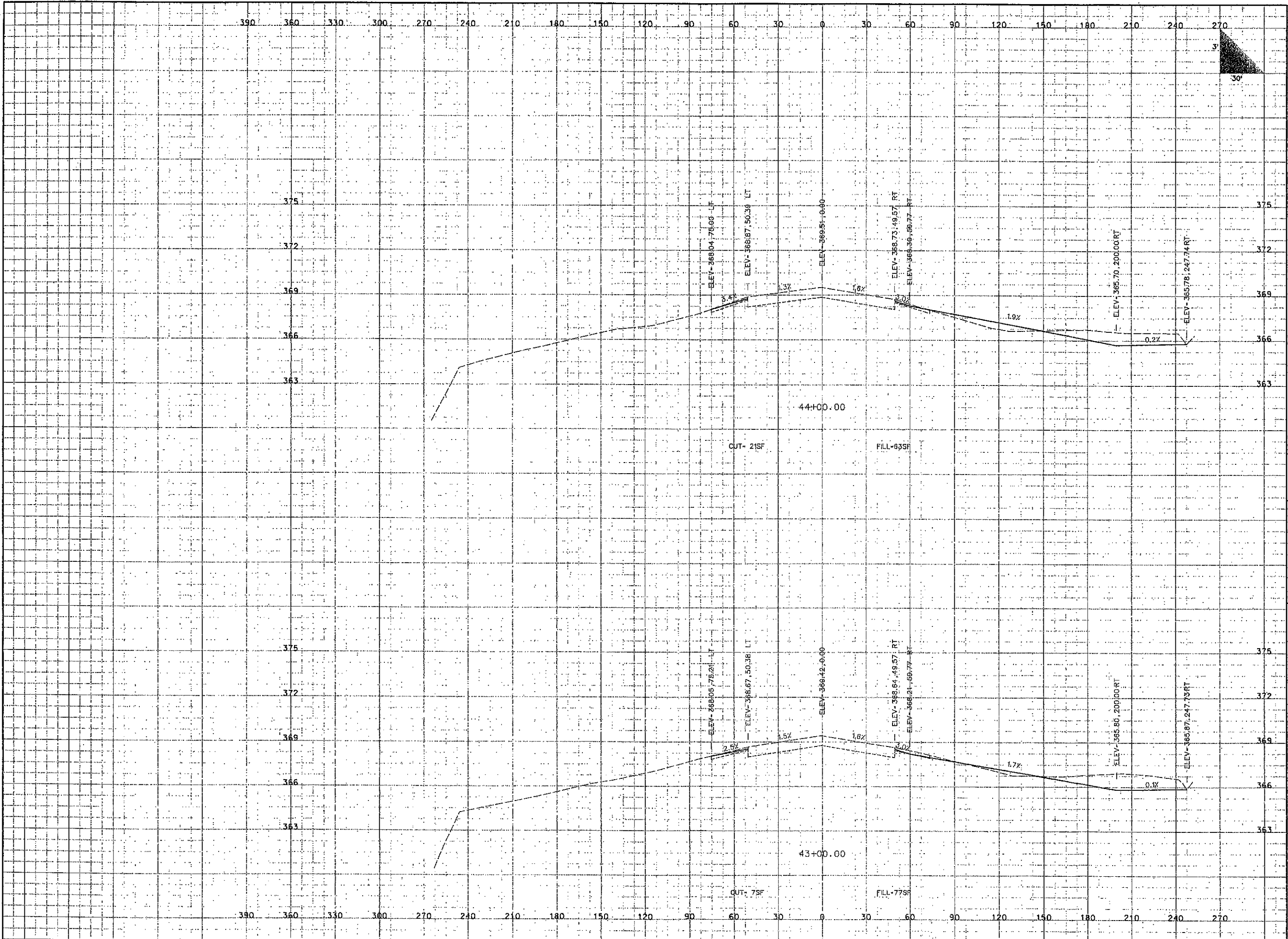
FILE: 30-76\_Cross\_Sections.dgn  
DESIGN BY: LEW  
DRAWN BY: LEW  
CHECKED BY: TCS  
APPROVED BY: TCS  
DATE: JULY 5, 2012  
JOB No: 1140105-00

**RSA GRADING  
CROSS-SECTION  
SHEET 19 OF 45**

SHEET 48 OF 74 SHEETS



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REVISIONS		
NUMBER	BY	DATE

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

**PERRYVILLE MUNICIPAL AIRPORT**  
**PERRYVILLE, MISSOURI**

**AIRFIELD ELECTRICAL REHABILITATION,  
SHOULDER REMOVAL AND GRADING  
ADDITIVE ALTERNATE 1:  
RUNWAY SAFETY AREA GRADING**

T.C. SANDER  
NO. 2003015035  
STATE OF MISSOURI  
PROFESSIONAL ENGINEER  
DATE: 7/5/2012  
P.E. # 2003015035  
CIVIL ENGINEER

ONE MEMORIAL DRIVE, SUITE 400  
ST. LOUIS, MO. 63102  
(314) 438-5500

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STATE PROJECT NO. AIR 11-063A-1

FILE: 30-76\_Cross\_Sections.dgn  
DESIGN BY: LEW  
DRAWN BY: LEW  
CHECKED BY: TCS  
APPROVED BY: TCS  
DATE: JULY 5, 2012  
JOB No: 1140105-00

**RSA GRADING  
CROSS-SECTION  
SHEET 20 OF 45**

SHEET 49 OF 74 SHEETS

## **ACKNOWLEDGEMENT**

Each bidder shall acknowledge receipt of this **Addendum No. 1** of **AIRFIELD ELECTRICAL REHABILITATION, SHOULDER REMOVAL AND GRADING ADDITIVE ALTERNATE 1: RUNWAY SAFETY AREA GRADING**, by his/her signature affixed hereto, and shall attach this Addendum to the original bid.

CERTIFICATION BY BIDDER

SIGNATURE \_\_\_\_\_

TITLE \_\_\_\_\_

COMPANY \_\_\_\_\_

DATE \_\_\_\_\_

## FAX TRANSMITTAL

To: Crawford, Murphy & Tilly, Inc

Attention: Ty Sander

Re: Addendum #1

Fax 314.436.0723

From:

(name) \_\_\_\_\_

(company) \_\_\_\_\_

Date:

\_\_\_\_\_

To verify that all contractors are in receipt of this addendum, Contractors are asked to sign and date this acknowledgement sheet. The Contractor should fax or mail to Crawford, Murphy, & Tilly, Inc. at the number listed below by **August 2, 2012**.

Crawford, Murphy, & Tilly, Inc.  
One Memorial Drive, Suite 500  
Saint Louis, Missouri 63102

Fax: (314) 436-0723

Phone: (314) 436-5500

BY: CRAWFORD, MURPHY, & TILLY, INC.