

BIDDING AND CONTRACT DOCUMENTS
ADDENDUM NUMBER THREE
STATE PROJECT NO. 18-064A-2

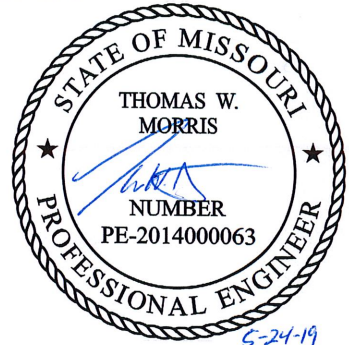
DATE: May 24, 2019

FLOYD W JONES LEBANON AIRPORT

CRAWFORD, MURPHY, TILLY, INC.
ONE MEMORIAL DRIVE, SUITE 500
SAINT LOUIS, MISSOURI 63102

TO: ALL PLANHOLDERS AND POTENTIAL BIDDERS

SUBJECT: ADDENDUM NUMBER THREE TO THE BIDDING DOCUMENTS FOR:
RUNWAY 18-36 MILL AND OVERLAY



This addendum forms a part of the bidding and contract documents and modifies the original bidding documents dated April 23, 2019, Addendum No. 1 dated May 6, 2019 and Addendum No. 2 dated May 15, 2019. This addendum must be signed on the last page and included with the submitted Bid Package. An acknowledgement sheet is also attached. This must be signed and returned to Crawford, Murphy, & Tilly, Inc via fax or e-mail by June 5, 2019. FAILURE TO NOT RECOGNIZE THE ADDENDUM ON THE BID FORM MAY SUBJECT THE BIDDER TO DISQUALIFICATION.

The Contract Documents are revised as follows:

CONTRACT PROPOSAL

PROPOSAL FORM

DELETE: Existing Sheets 167 and 168
ADD: Attached Replacement Pages 167A of 168A

ADD Specification P-152 (see attached)

PLANS:

Sheet 2 of 27 Summary of Quantities

DELETE: Existing Sheet
ADD: Attached Replacement Sheet 2 of 27

Sheet 3 of 27 Site Plan

DELETE: Existing Sheet
ADD: Attached Replacement Sheet 3 of 27

Sheet 4 of 27 Site Plan

DELETE: Existing Sheet
ADD: Attached Replacement Sheet 4 of 27

Sheet 7 of 27 Site Plan

DELETE: Existing Sheet
ADD: Attached Replacement Sheet 7 of 27

Sheet 8 of 27 Site Plan

DELETE: Existing Sheet
ADD: Attached Replacement Sheet 8 of 27

Sheet 9 of 27 Site Plan

DELETE: Existing Sheet
ADD: Attached Replacement Sheet 9 of 27

Sheet 10 of 27 Site Plan

DELETE: Existing Sheet
ADD: Attached Replacement Sheet 10 of 27

Sheet 11 of 27 Site Plan

DELETE: Existing Sheet
ADD: Attached Replacement Sheet 11 of 27

Sheet 12 of 27 Site Plan

DELETE: Existing Sheet
ADD: Attached Replacement Sheet 12 of 27

Sheet 13 of 27 Site Plan

DELETE: Existing Sheet
ADD: Attached Replacement Sheet 13 of 27

Sheet 14 of 27 Site Plan

DELETE: Existing Sheet
ADD: Attached Replacement Sheet 14 of 27

Sheet 15 of 27 Site Plan

DELETE: Existing Sheet
ADD: Attached Replacement Sheet 15 of 27

Sheet 16 of 27 Site Plan

DELETE: Existing Sheet
ADD: Attached Replacement Sheet 16 of 27

CLARIFICATION:

Milling will take place over concrete and bituminous surfaces. Milling will be paid for under the same pay item.

All milling will be 1.75" in depth.

P-152 specification was added for the Shoulder Adjustment pay item. Note: The top 4-inches of material will not need to be compacted.

Bidders shall submit full Project Manual. Only the Proposal Form, sheets 167 & 168, shall be replaced. The revised Proposal Form may be inserted into the comb binding in front of the existing form or stapled/paper clipped to the existing form.

CRAWFORD, MURPHY & TILLY, INC.

This Addendum consists of 2 pages plus 13 revised plan sheets, Specifications P-152 (7 pages) and a fax transmittal sheet.

Signed
(Contractor)

Date

Contractor to sign and date this Addendum #3 to acknowledge receipt. This signed Addendum must be included with the submitted Bid Package.

FAX TRANSMITTAL

To: Crawford, Murphy & Tilly, Inc

Attention: **Tom Morris**

Re: Addendum #3

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 email to Crawford, Murphy, & Tilly, Inc. at the number listed below by **June 5, 2019**.

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

Fax: (314) 436-0723
Phone: (314) 436-5500
Email : tmorris@cmtengr.com

BY: CRAWFORD, MURPHY, & TILLY, INC.

BASE BID						
BID ITEM	SPEC. NO.	ITEM DESCRIPTION	APPROX. QTY AND UNITS		UNIT PRICE	EXTENSION
X	XXXXX	Sample	109 Each	Words	<i>Twenty one and 55/100</i>	<i>Two thousand three hundred forty eight and 95/100</i>
				Numerals	<i>21.55</i>	<i>2,348.95</i>
1	C-100- 14.1	Contractor Quality Control Program (CQCP)	1 Lump Sum	Words		
				Numerals		
2	C-105-6.1	Mobilization	1 Lump Sum	Words		
				Numerals		
3	P-101-5.1	Pavement Removal – 1.75” Milling	42,846 S.Y.	Words		
				Numerals		
4	P-151-4.1	Clearing and Grubbing	0.60 AC	Words		
				Numerals		
5	P-401-8.1	Asphalt Surface Course	8,084 Tons	Words		
				Numerals		

Proposal Form

6	P-152-4.1	Shoulder Adjustment	9,250 L.F.	Words		
				Numerals		
7	P-603-5.1	Bituminous Tack Coat	6,500 Gal.	Words		
				Numerals		
8	P-620-5.1	Waterborne Paint, White, with Reflective Media	26,000 S.F.	Words		
				Numerals		
9	P-620-5.3	Waterborne Paint, Yellow, with Reflective Media	2,155 S.F.	Words		
				Numerals		
10	P-620-5.3	Waterborne Paint, Black, without Reflective Media	10,000 S.F.	Words		
				Numerals		
11	P-620-5.4	Pavement Marking Removal	1,500 S.F.	Words		
				Numerals		
TOTAL BASE BID				Words		
				Numerals		

Item P-152 Excavation, Subgrade, and Embankment

DESCRIPTION

152-1.1 This item covers excavation, disposal, placement, and compaction of all materials within the limits of the work required to construct safety areas, runways, taxiways, aprons, and intermediate areas as well as other areas for drainage, building construction, parking, or other purposes in accordance with these specifications and in conformity to the dimensions and typical sections shown on the plans.

152-1.2 Classification. All material excavated shall be classified as defined below:

a. Unclassified excavation. Unclassified excavation shall consist of the excavation and disposal of all material, regardless of its nature which is not otherwise classified and paid for under one of the following items.

b. Borrow excavation. Borrow excavation shall consist of approved material required for the construction of embankments or for other portions of the work in excess of the quantity of usable material available from required excavations. Borrow material shall be obtained from areas designated by the Resident Project Representative (RPR) within the limits of the airport property but outside the normal limits of necessary grading, or from areas outside the airport boundaries.

152-1.3 Unsuitable excavation. Unsuitable material shall be disposed in designated waste areas as shown on the plans. Materials containing vegetable or organic matter, such as muck, peat, organic silt, or sod shall be considered unsuitable for use in embankment construction. Material suitable for topsoil may be used on the embankment slope when approved by the RPR.

CONSTRUCTION METHODS

152-2.1 General. Before beginning excavation, grading, and embankment operations in any area, the area shall be cleared or cleared and grubbed in accordance with Item P-151.

The suitability of material to be placed in embankments shall be subject to approval by the RPR. All unsuitable material shall be disposed of in waste areas as shown on the plans. All waste areas shall be graded to allow positive drainage of the area and adjacent areas. The surface elevation of waste areas shall be specified on the plans or approved by the RPR.

When the Contractor's excavating operations encounter artifacts of historical or archaeological significance, the operations shall be temporarily discontinued and the RPR notified per Section 70, paragraph 70-20. At the direction of the RPR, the Contractor shall excavate the site in such a manner as to preserve the artifacts encountered and allow for their removal. Such excavation will be paid for as extra work.

Areas outside the limits of the pavement areas where the top layer of soil has become compacted by hauling or other Contractor activities shall be scarified and disked to a depth of 4 inches (100 mm), to loosen and pulverize the soil. Stones or rock fragments larger than 4 inches (100 mm) in their greatest dimension will not be permitted in the top 6 inches (150 mm) of the subgrade.

If it is necessary to interrupt existing surface drainage, sewers or under-drainage, conduits, utilities, or similar underground structures, the Contractor shall be responsible for and shall take all necessary precautions to preserve them or provide temporary services. When such facilities are encountered, the

Technical Specifications

Contractor shall notify the RPR, who shall arrange for their removal if necessary. The Contractor, at their own expense, shall satisfactorily repair or pay the cost of all damage to such facilities or structures that may result from any of the Contractor's operations during the period of the contract.

a. Blasting. Blasting shall not be allowed.

152-2.2 Excavation. No excavation shall be started until the work has been staked out by the Contractor and the RPR has obtained from the Contractor, the survey notes of the elevations and measurements of the ground surface. The Contractor and RPR shall agree that the original ground lines shown on the original topographic mapping are accurate, or agree to any adjustments made to the original ground lines.

All areas to be excavated shall be stripped of vegetation and topsoil. Topsoil shall be stockpiled for future use in areas designated on the plans or by the RPR. All suitable excavated material shall be used in the formation of embankment, subgrade, or other purposes as shown on the plans. All unsuitable material shall be disposed of as shown on the plans.

The grade shall be maintained so that the surface is well drained at all times.

When the volume of the excavation exceeds that required to construct the embankments to the grades as indicated on the plans, the excess shall be used to grade the areas of ultimate development or disposed as directed by the RPR. When the volume of excavation is not sufficient for constructing the embankments to the grades indicated, the deficiency shall be obtained from borrow areas.

a. Selective grading. When selective grading is indicated on the plans, the more suitable material designated by the RPR shall be used in constructing the embankment or in capping the pavement subgrade. If, at the time of excavation, it is not possible to place this material in its final location, it shall be stockpiled in approved areas until it can be placed. The more suitable material shall then be placed and compacted as specified. Selective grading shall be considered incidental to the work involved. The cost of stockpiling and placing the material shall be included in the various pay items of work involved.

b. Undercutting. Rock, shale, hardpan, loose rock, boulders, or other material unsatisfactory for safety areas, subgrades, roads, shoulders, or any areas intended for turf shall be excavated to a minimum depth of 12 inches (300 mm) below the subgrade or to the depth specified by the RPR. Muck, peat, matted roots, or other yielding material, unsatisfactory for subgrade foundation, shall be removed to the depth specified. Unsuitable materials shall be disposed off the airport. The cost is incidental to this item. This excavated material shall be paid for at the contract unit price per cubic yard (per cubic meter) for **Unclassified Excavation**. The excavated area shall be backfilled with suitable material obtained from the grading operations or borrow areas and compacted to specified densities. The necessary backfill will constitute a part of the embankment. Where rock cuts are made, backfill with select material. Any pockets created in the rock surface shall be drained in accordance with the details shown on the plans. Undercutting will be paid as unclassified excavation.

c. Over-break. Over-break, including slides, is that portion of any material displaced or loosened beyond the finished work as planned or authorized by the RPR. All over-break shall be graded or removed by the Contractor and disposed of as directed by the RPR. The RPR shall determine if the displacement of such material was unavoidable and their own decision shall be final. Payment will not be made for the removal and disposal of over-break that the RPR determines as avoidable. Unavoidable over-break will be classified as "Unclassified Excavation."

d. Removal of utilities. The removal of existing structures and utilities required to permit the orderly progress of work will be accomplished by the Contractor. All existing foundations shall be excavated at least 2 feet (60 cm) below the top of subgrade or as indicated on the plans, and the material disposed of as directed by the RPR. All foundations thus excavated shall be backfilled with suitable material and compacted as specified for embankment or as shown on the plans.

Technical Specifications

152-2.3 Borrow excavation. Borrow areas within the airport property are indicated on the plans. Borrow excavation shall be made only at these designated locations and within the horizontal and vertical limits as staked or as directed by the RPR. All unsuitable material shall be disposed of by the Contractor as shown on the plans. All borrow pits shall be opened to expose the various strata of acceptable material to allow obtaining a uniform product. Borrow areas shall be drained and left in a neat, presentable condition with all slopes dressed uniformly. Borrow areas shall not create a hazardous wildlife attractant.

152-2.4 Drainage excavation. Drainage excavation shall consist of excavating drainage ditches including intercepting, inlet, or outlet ditches; or other types as shown on the plans. The work shall be performed in sequence with the other construction. Ditches shall be constructed prior to starting adjacent excavation operations. All satisfactory material shall be placed in embankment fills; unsuitable material shall be placed in designated waste areas or as directed by the RPR. All necessary work shall be performed true to final line, elevation, and cross-section. The Contractor shall maintain ditches constructed on the project to the required cross-section and shall keep them free of debris or obstructions until the project is accepted.

152-2.5 Preparation of cut areas or areas where existing pavement has been removed. In those areas on which a subbase or base course is to be placed, the top 12 inches (300 mm) of subgrade shall be compacted to not less than 100 % of maximum density for non-cohesive soils, and 95% of maximum density for cohesive soils as determined by ASTM **D698**. As used in this specification, "non-cohesive" shall mean those soils having a plasticity index (PI) of less than 3 as determined by ASTM D4318.

152-2.6 Preparation of embankment area. All sod and vegetative matter shall be removed from the surface upon which the embankment is to be placed. The cleared surface shall be broken up by plowing or scarifying to a minimum depth of 6 inches (150 mm) and shall then be compacted per paragraph 152-2.10.

Sloped surfaces steeper than one (1) vertical to four (4) horizontal shall be plowed, stepped, benched, or broken up so that the fill material will bond with the existing material. When the subgrade is part fill and part excavation or natural ground, the excavated or natural ground portion shall be scarified to a depth of 12 inches (300 mm) and compacted as specified for the adjacent fill.

No direct payment shall be made for the work performed under this section. The necessary clearing and grubbing and the quantity of excavation removed will be paid for under the respective items of work.

152-2.7 Control Strip. NOT USED.

152-2.8 Formation of embankments. The material shall be constructed in lifts as established in the control strip, but not less than 6 inches (150 mm) nor more than 12 inches (300 mm) of compacted thickness.

When more than one lift is required to establish the layer thickness shown on the plans, the construction procedure described here shall apply to each lift. No lift shall be covered by subsequent lifts until tests verify that compaction requirements have been met. The Contractor shall rework, re-compact and retest any material placed which does not meet the specifications.

The lifts shall be placed, to produce a soil structure as shown on the typical cross-section or as directed by the RPR. Materials such as brush, hedge, roots, stumps, grass and other organic matter, shall not be incorporated or buried in the embankment.

Earthwork operations shall be suspended at any time when satisfactory results cannot be obtained due to rain, freezing, or other unsatisfactory weather conditions in the field. Frozen material shall not be placed in the embankment nor shall embankment be placed upon frozen material. Material shall not be placed on surfaces that are muddy, frozen, or contain frost. The Contractor shall drag, blade, or slope the embankment to provide surface drainage at all times.

Technical Specifications

The material in each lift shall be within $\pm 2\%$ of optimum moisture content before rolling to obtain the prescribed compaction. The material shall be moistened or aerated as necessary to achieve a uniform moisture content throughout the lift. Natural drying may be accelerated by blending in dry material or manipulation alone to increase the rate of evaporation.

The Contractor shall make the necessary corrections and adjustments in methods, materials or moisture content to achieve the specified embankment density.

The RPR will take samples of excavated materials which will be used in embankment for testing to obtain a Moisture-Density Relations of Soils Report (Proctor) in accordance with ASTM D698. A new Proctor shall be obtained for each soil type based on visual classification.

Density tests will be taken by the RPR for every 500 feet of compacted embankment along the shoulder adjustment for each lift which is required to be compacted, or other appropriate frequencies as determined by the RPR.

If the material has greater than 30% retained on the 3/4-inch (19.0 mm) sieve, follow AASHTO T-180 Annex Correction of maximum dry density and optimum moisture for oversized particles.

Rolling operations shall be continued until the embankment is compacted to not less than **95%** of maximum density for cohesive soils as determined by ASTM **D698**.

On all areas outside of the pavement areas, no compaction will be required on the top 4 inches (100 mm) which shall be prepared for a seedbed in accordance with Item T-901.

The in-place field density shall be determined in accordance with ASTM 6938 using Procedure A, the direct transmission method, and ASTM D6938 shall be used to determine the moisture content of the material. The machine shall be calibrated in accordance with ASTM D6938. The Contractor's laboratory shall perform all density tests in the RPR's presence and provide the test results upon completion to the RPR for acceptance. If the specified density is not attained, the area represented by the test or as designated by the RPR shall be reworked and/or re-compacted and additional random tests made. This procedure shall be followed until the specified density is reached.

Compaction areas shall be kept separate, and no lift shall be covered by another lift until the proper density is obtained.

During construction of the embankment, the Contractor shall route all construction equipment evenly over the entire width of the embankment as each lift is placed. Lift placement shall begin in the deepest portion of the embankment fill. As placement progresses, the lifts shall be constructed approximately parallel to the finished pavement grade line.

When rock, concrete pavement, asphalt pavement, and other embankment material are excavated at approximately the same time as the subgrade, the material shall be incorporated into the outer portion of the embankment and the subgrade material shall be incorporated under the future paved areas. Stones, fragmentary rock, and recycled pavement larger than 4 inches (100 mm) in their greatest dimensions will not be allowed in the top 12 inches (300 mm) of the subgrade. Rockfill shall be brought up in lifts as specified or as directed by the RPR and the finer material shall be used to fill the voids forming a dense, compact mass. Rock, cement concrete pavement, asphalt pavement, and other embankment material shall not be disposed of except at places and in the manner designated on the plans or by the RPR.

When the excavated material consists predominantly of rock fragments of such size that the material cannot be placed in lifts of the prescribed thickness without crushing, pulverizing or further breaking down the pieces, such material may be placed in the embankment as directed in lifts not exceeding 2 feet (60 cm) in thickness. Each lift shall be leveled and smoothed with suitable equipment by distribution of spalls and finer fragments of rock. The lift shall not be constructed above an elevation 4 feet (1.2 m) below the finished subgrade.

Technical Specifications

152-2.9 Proof rolling. The purpose of proof rolling the subgrade is to identify any weak areas in the subgrade and not for compaction of the subgrade. After compaction is completed, the subgrade area shall be proof rolled with a 20 ton (18.1 metric ton) Tandem axle Dual Wheel Dump Truck loaded to the legal limit with tires inflated to 80 psi in the presence of the RPR. Apply a minimum of **one** coverage, or as specified by the RPR, under pavement areas. A coverage is defined as the application of one tire print over the designated area. Soft areas of subgrade that deflect more than 1 inch (25 mm) or show permanent deformation greater than 1 inch (25 mm) shall be removed and replaced with suitable material or reworked to conform to the moisture content and compaction requirements in accordance with these specifications. Removal and replacement of soft areas is incidental to this item.

152-2.10 Compaction requirements. The subgrade under areas to be paved shall be compacted to a depth of 12 inches and to a density of not less than 100 percent of the maximum dry density as determined by ASTM D698. The subgrade in areas outside the limits of the pavement areas shall be compacted to a depth of 12 inches (300 mm) and to a density of not less than 95 percent of the maximum density as determined by ASTM D698.

The material to be compacted shall be within $\pm 2\%$ of optimum moisture content before being rolled to obtain the prescribed compaction (except for expansive soils). When the material has greater than 30 percent retained on the $\frac{3}{4}$ inch (19.0 mm) sieve, follow the methods in ASTM D698. Tests for moisture content and compaction will be taken at a minimum of **500** S.Y. of subgrade. All quality assurance testing shall be done by the Contractor's laboratory in the presence of the RPR, and density test results shall be furnished upon completion to the RPR for acceptance determination.

The in-place field density shall be determined in accordance with ASTM D6938 using Procedure A, the direct transmission method, and ASTM D6938 shall be used to determine the moisture content of the material. The machine shall be calibrated in accordance with ASTM D6938 within 12 months prior to its use on this contract. The gage shall be field standardized daily.

If a nuclear gage is used for density determination, two random readings shall be made for each **500** square yards (meters).

Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

If the specified density is not attained, the entire lot shall be reworked and/or re-compacted and additional random tests made. This procedure shall be followed until the specified density is reached.

All cut-and-fill slopes shall be uniformly dressed to the slope, cross-section, and alignment shown on the plans or as directed by the RPR and the finished subgrade shall be maintained.

152-2.11 Finishing and protection of subgrade. Finishing and protection of the subgrade is incidental to this item. Grading and compacting of the subgrade shall be performed so that it will drain readily. All low areas, holes or depressions in the subgrade shall be brought to grade. Scarifying, blading, rolling and other methods shall be performed to provide a thoroughly compacted subgrade shaped to the lines and grades shown on the plans. All ruts or rough places that develop in the completed subgrade shall be graded, re-compacted, and retested. The Contractor shall protect the subgrade from damage and limit hauling over the finished subgrade to only traffic essential for construction purposes.

The Contractor shall maintain the completed course in satisfactory condition throughout placement of subsequent layers. No subbase, base, or surface course shall be placed on the subgrade until the subgrade has been accepted by the RPR.

152-2.12 Haul. All hauling will be considered a necessary and incidental part of the work. The Contractor shall include the cost in the contract unit price for the pay of items of work involved. No payment will be made separately or directly for hauling on any part of the work.

Technical Specifications

The Contractor's equipment shall not cause damage to any excavated surface, compacted lift or to the subgrade as a result of hauling operations. Any damage caused as a result of the Contractor's hauling operations shall be repaired at the Contractor's expense.

The Contractor shall be responsible for providing, maintaining and removing any haul roads or routes within or outside of the work area, and shall return the affected areas to their former condition, unless otherwise authorized in writing by the Owner. No separate payment will be made for any work or materials associated with providing, maintaining and removing haul roads or routes.

152-2.13 Surface Tolerances. In those areas on which a subbase or base course is to be placed, the surface shall be tested for smoothness and accuracy of grade and crown. Any portion lacking the required smoothness or failing in accuracy of grade or crown shall be scarified to a depth of at least 3 inches (75 mm), reshaped and re-compacted to grade until the required smoothness and accuracy are obtained and approved by the RPR. The Contractor shall perform all final smoothness and grade checks in the presence of the RPR. Any deviation in surface tolerances shall be corrected by the Contractor at the Contractor's expense.

- a. **Smoothness.** The finished surface shall not vary more than $\pm \frac{1}{2}$ inch (12 mm) when tested with a 12-foot (3.7-m) straightedge applied parallel with and at right angles to the centerline. The straightedge shall be moved continuously forward at half the length of the 12-foot (3.7-m) straightedge for the full length of each line on a 50-foot (15-m) grid.
- b. **Grade.** The grade and crown shall be measured on a 50-foot (15-m) grid and shall be within \pm 0.05 feet (15 mm) of the specified grade.

On safety areas, turfed areas and other designated areas within the grading limits where no subbase or base is to be placed, grade shall not vary more than 0.10 feet (30 mm) from specified grade. Any deviation in excess of this amount shall be corrected by loosening, adding or removing materials, and reshaping.

152-2.14 Topsoil. When topsoil is specified or required as shown on the plans or under Item T-905, it shall be salvaged from stripping or other grading operations. The topsoil shall meet the requirements of Item T-905. If, at the time of excavation or stripping, the topsoil cannot be placed in its final section of finished construction, the material shall be stockpiled at approved locations. Stockpiles shall be located as shown on the plans and the approved CSPP, and shall not be placed on areas that subsequently will require any excavation or embankment fill. If, in the judgment of the RPR, it is practical to place the salvaged topsoil at the time of excavation or stripping, the material shall be placed in its final position without stockpiling or further re-handling.

Upon completion of grading operations, stockpiled topsoil shall be handled and placed as shown on the plans and as required in Item T-905. Topsoil shall be paid for as provided in Item T-905. No direct payment will be made for topsoil under Item P-152.

METHOD OF MEASUREMENT

152-3.1 Measurement for payment specified by the linear foot shall be computed by the **RPR in the field**. The end area is that bound by the original ground line established by field cross-sections and the final theoretical pay line established by cross-sections shown on the plans, subject to verification by the RPR.

152-3.1 The quantity of **Shoulder Adjustment** to be paid for shall be the number of linear feet measured in its original position. Measurement shall not include the quantity of materials excavated or placed without authorization beyond normal slope lines, or the quantity of material used for purposes other than those directed.

BASIS OF PAYMENT

152-4.1 Shoulder Adjustment payment shall be made at the contract unit price per linear foot. This price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item P-152-4.1 **Shoulder Adjustment**

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

American Association of State Highway and Transportation Officials (AASHTO)

AASHTO T-180 Standard Method of Test for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop

ASTM International (ASTM)

ASTM D698 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³))

ASTM D1556 Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method

ASTM D1557 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³ (2700 kN-m/m³))

ASTM D6938 Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)

Advisory Circulars (AC)

AC 150/5370-2 Operational Safety on Airports During Construction Software

Software

FAARFIELD – FAA Rigid and Flexible Iterative Elastic Layered Design

U.S. Department of Transportation

FAA RD-76-66 Design and Construction of Airport Pavements on Expansive Soils

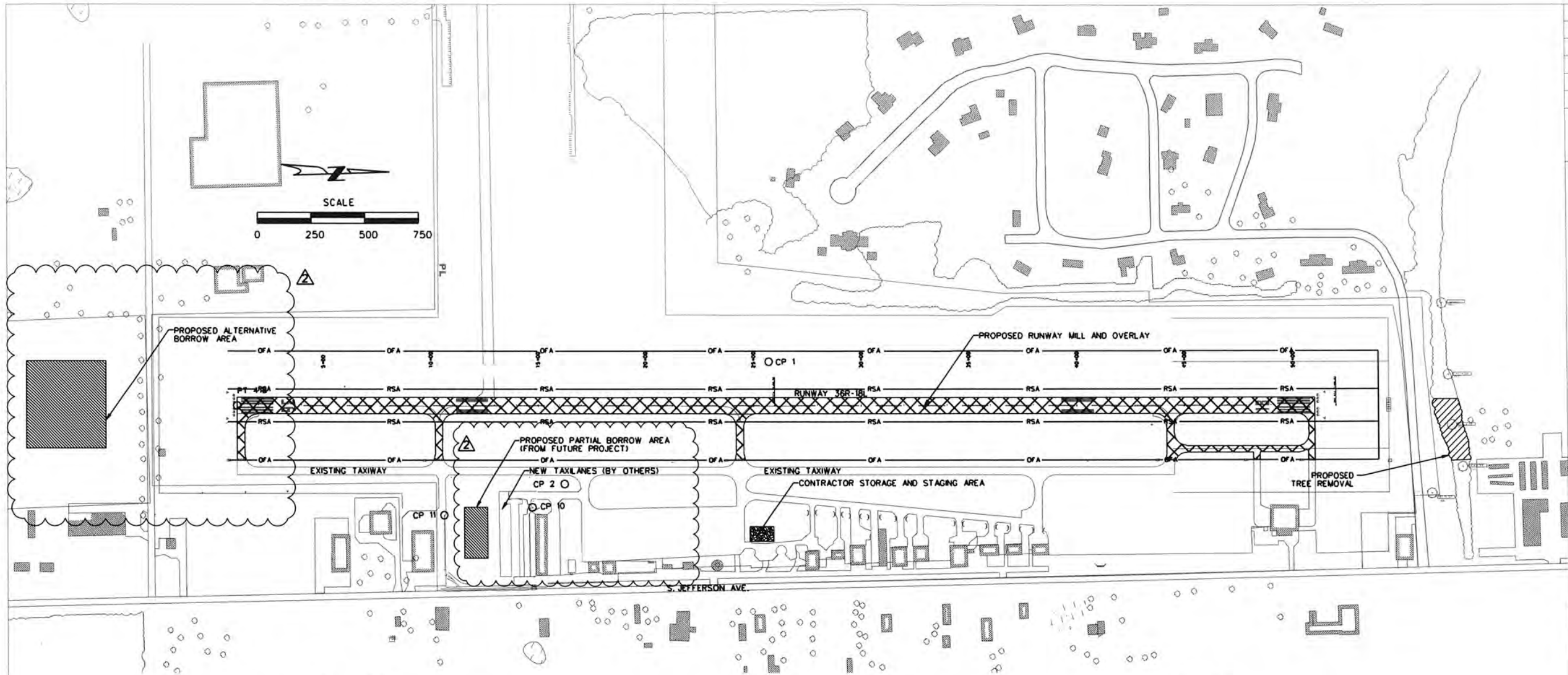
END OF ITEM P-152

5/24/2019
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SUMMARY OF QUANTITIES

		UNIT	TOTAL QUANTITY
ITEM #	DESCRIPTION		
C-100-14.1	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)	LS	1
C-105-6.1	MOBILIZATION	LS	1
P-101-5.1	PAVEMENT REMOVAL - 1.75" MILLING	SY	42,846
P-151-4.1	CLEARING AND GRUBBING	AC	0.60
P-152-4.1	SHOULDER ADJUSTMENT	LF	9,250
P-401-8.1	ASPHALT SURFACE COURSE	TON	8,084
P-603-5.1	BITUMINOUS TACK COAT	GAL	6,500
P-620-5.1	WATERBORNE PAINT, WHITE, WITH REFLECTIVE MEDIA	SF	26,000
P-620-5.2	WATERBORNE PAINT, YELLOW, WITH REFLECTIVE MEDIA	SF	2,155
P-620-5.3	WATERBORNE PAINT, BLACK, WITHOUT REFLECTIVE MEDIA	SF	10,000
P-620-5.4	PAVEMENT MARKING REMOVAL	SF	1,500

REVISIONS		
NUMBER	BY	DATE
2	TWM	5/24/19
<div><div></div><div>012</div></div> <div>THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22). PLOT 1</div>		
FLOYD W. JONES LEBANON AIRPORT 2415 SOUTH JEFFERSON AVENUE LEBANON, MO 65536		RUNWAY18/36 MILL AND OVERLAY
<div><div><div>STATE OF MISSOURI</div><div>THOMAS W. MORRIS</div><div>NUMBER</div><div>PE-2014000063</div><div>PROFESSIONAL ENGINEER</div></div><div>5-24-19</div><div>THOMAS W. MORRIS, P.E. P.E. #0000000000 CIVIL ENGINEER</div></div>		STATE PROJECT NO. 18-064A-2
<div><div><div>CMT</div><div>ONE MEMORIAL DRIVE, SUITE 500 ST. LOUIS, MO 63102 (314) 438-5500</div><div>PROFESSIONAL ENGINEERING - 000631</div></div><div>THE PROFESSIONAL ENGINEER'S SEAL, SIGNATURE, AND PERSONAL SEAL APPEAR HEREON. ASSUMES RESPONSIBILITY FOR THE DESIGN AND CONSTRUCTION OF THE PROJECT. THIS SEAL IS NOT TO BE USED FOR ANY PART OF THE PROJECT TO WHICH THIS SEAL DOES NOT RELATE.</div></div>		FILE: 02_Summary_of_Quantities.dgn
DESIGN BY: CAG		
DRAWN BY: CAG		
CHECKED BY: TWM		
APPROVED BY: TWM		
DATE: APRIL 23, 2019		
JOB No: 19041101		
SUMMARY OF QUANTITIES		
SHEET 2 OF 27 SHEETS		



GENERAL NOTES

1. ALL CONSTRUCTION TRAFFIC OPERATING ON OR CROSSING TAXIWAYS AND APRONS OPEN TO AIRCRAFT TRAFFIC SHALL BE IN RADIO CONTACT WITH AIR TRAFFIC AT ALL TIMES (FREQUENCY 122.8). UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR CROSS AN OPEN RUNWAY. FREQUENCY SHALL BE MONITORED BY THE CONTRACTOR DURING ALL CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL PROVIDE HIS OWN RADIOS. CONTRACTOR'S PERSONNEL SHALL FAMILIARIZE THEMSELVES WITH FAA AC 150/5210-20A GROUND VEHICLE OPERATIONS ON AIRPORTS PRIOR TO OPERATING A VEHICLE ON THE AIRPORT.
2. REFER TO THE CONSTRUCTION ACTIVITY PLAN, CSPP AND THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS CONCERNING COORDINATION OF CONSTRUCTION ACTIVITIES.
3. WHEN CONFLICTS ARISE BETWEEN CONSTRUCTION ACTIVITIES AND AIRCRAFT OPERATIONS AND SAFETY, AIRCRAFT OPERATIONS AND SAFETY SHALL TAKE PRECEDENCE AND SHALL GOVERN. FINAL AUTHORITY IN THE APPROVAL OF CONSTRUCTION SEQUENCING LIES WITH THE AIRPORT MANAGER AND CITY.
4. THE CONTRACTOR SHALL BE PERMITTED TO STORE EQUIPMENT AND MATERIALS ONLY AT THE LOCATIONS SHOWN ON THE CONSTRUCTION ACTIVITY PLANS.
5. ASPHALT MILLINGS SHALL BE DISPOSED OF BY THE CONTRACTOR OFF OF AIRPORT PROPERTY.
6. VEHICLES AND EQUIPMENT SHALL NOT BE ALLOWED WITHIN 65.5' OF AN ACTIVE TAXIWAY CENTERLINE.
7. ALL PAVEMENTS, DRIVES AND ANY OTHER AREAS UTILIZED BY THE CONTRACTOR FOR HAUL ROADS OR STORAGE AREAS SHALL BE MAINTAINED AND REPAIRED IN KIND BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER AND THE AIRPORT. NO ADDITIONAL COMPENSATION SHALL BE MADE TO THE CONTRACTOR FOR THIS WORK.
8. USE OF PUBLIC ROADS FOR HAUL ROUTES SHALL REQUIRE THE FOLLOWING:
 - ONLY EQUIPMENT LICENSED FOR USE ON PUBLIC ROADS MAY BE USED ON THE ROAD.
 - WEIGHT LIMITS SHALL NOT BE EXCEEDED.
 - ANY DAMAGE TO THE ROAD CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL REQUIRED PERMITS AND FEES.
 - THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS.
 - THE CONTRACTOR SHALL KEEP ALL PUBLIC ROADS CLEAN TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT.

9. EXISTING TURF AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY HIM AT HIS EXPENSE TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF LEBANON. ANY DISTURBED AREA INSIDE A RUNWAY OR TAXIWAY SAFETY AREA SHALL BE RESTORED IMMEDIATELY. ANY AREAS DISTURBED ADJACENT TO ACTIVE AIRFIELD PAVEMENTS SHALL BE REPAIRED BY THE CONTRACTOR THE SAME DAY THAT THEY ARE DISTURBED. THIS SHALL INCLUDE THE REPAIR OF ANY RUTTING OR OTHER DISTURBANCE MADE BY THE CONTRACTOR'S VEHICLES OR EQUIPMENT.
10. ANY ACTIVE PAVEMENTS UTILIZED BY THE CONTRACTOR FOR ACCESS SHALL BE KEPT CLEAN AT ALL TIMES. THE CONTRACTOR SHALL PROVIDE A POWER BROOM TO MAINTAIN ACTIVE PAVEMENTS IN CLEAN CONDITION.
11. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH UTILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES AND F.A.A. UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANY AND F.A.A. OF HIS/HER OPERATIONAL PLANS. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR DETAILED INFORMATION AND ASSISTANCE IN LOCATING UTILITIES. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY, F.A.A., THE OWNER AND THE ENGINEER. ANY SUCH MANS AND/OR SERVICES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED IMMEDIATELY AT HIS EXPENSE TO THE SATISFACTION OF THE OWNER AND THE ENGINEER.
12. THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN MARKINGS AND ASSOCIATED LIGHTING OF OPEN TRENCHES, EXCAVATIONS, TEMPORARY STOCKPILES, MILLED PAVEMENT AREAS AND HIS/HER CONSTRUCTION EQUIPMENT IN CONFORMANCE WITH AC 150/5370-2G OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION ACTIVITY.
13. WHEN ANY VEHICLE IS REQUIRED TO TRAVEL OVER ANY PORTION OF THE ACTIVE AIRFIELD PAVEMENT (AIRCRAFT MOVEMENT AREA AND RUNWAY APPROACH AREA), THE VEHICLE SHALL BE PROPERLY IDENTIFIED IN ACCORDANCE WITH AC 150/5210-50, PAINTING, MARKING AND LIGHTING OF VEHICLES USED ON AN AIRPORT. ALL VEHICLES SHALL BE IDENTIFIED AS FOLLOWS:
 - A. DURING DAYLIGHT HOURS, MARK VEHICLES AND EQUIPMENT WITH AN AVIATION FLAG ON A STAFF ATTACHED TO THE VEHICLE SO THAT THE FLAG WILL BE READILY VISIBLE. THE FLAG SHOULD NOT BE LESS THAN 3-FOOT SQUARE CONSISTING OF A CHECKERED PATTERN OF INTERNATIONAL ORANGE AND WHITE SQUARES OF NOT LESS THAN ONE FOOT ON EACH SIDE AND DISPLAYED IN FULL VIEW ABOVE THE VEHICLE.
 - B. DURING NIGHTTIME OR LOW-VISIBILITY OPERATIONS, MARK VEHICLES AND EQUIPMENT WITH FLASHING AMBER BEACONS. LOW-VISIBILITY IS CONSIDERED TO BE VISIBILITY UNDER 3 MILES AND WILL BE DETERMINED BY THE ENGINEER. FLASHING AMBER BEACONS SHALL ALSO BE ACCEPTABLE FOR DAYTIME OPERATIONS.
14. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO MINIMIZE DUST TO THE SATISFACTION OF THE RESIDENT ENGINEER. IF DUST BECOMES A PROBLEM, AS DETERMINED BY THE ENGINEER, A WATER TRUCK SHALL BE MADE AVAILABLE. ALL COSTS ASSOCIATED WITH DUST CONTROL SHALL BE INCIDENTAL TO THE CONTRACT AT ALL TIMES.

LEGEND

- PROPOSED WORK AREA
- CONTRACTOR STAGING/STORAGE AREA
- PROPOSED OBSTRUCTION REMOVAL
- CP 1 O CONTROL POINT

SURVEY CONTROL POINTS				
CONTROL POINT	LABEL	NORTHING	EASTING	ELEV.
CP1	LEBAPORT	660778.3963	1596083.9207	1313.7441
CP2	BASE	659809.6935	1596613.2279	1319.4145
CP10	CP10	659656.1608	1596715.6723	1317.6220
CP11	CP11	659244.4753	1596738.3303	1319.3703
PT418	PT418	658300.5986	1596207.3122	1319.4026

DESIGN CRITERIA	
RUNWAY WIDTH	75 FT.
RUNWAY LENGTH	5,000 FT.
RUNWAY SAFETY AREA WIDTH	150 FT.
RUNWAY SAFETY AREA WIDTH BEYOND RUNWAY END	300 FT.
RUNWAY OBJECT FREE AREA WIDTH	500 FT.
TAXIWAY WIDTH	35 FT.
TAXIWAY SAFETY AREA WIDTH	79 FT.
TAXIWAY OBJECT FREE AREA WIDTH	131 FT.

REVISIONS

NUMBER	BY	DATE
1	TWM	5/24/19

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

FLOYD W. JONES LEBANON AIRPORT
2415 SOUTH JEFFERSON AVENUE
LEBANON, MO 65536

RUNWAY18/36 MILL AND OVERLAY

STATE OF MISSOURI
THOMAS W. MORRIS
NUMBER
PE-2014000663
PROFESSIONAL ENGINEER
DATE: 5-24-19
PE EXPIRATION: 01-01-2024
CIVIL ENGINEER

CMT

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
13141 438-5500
PROFESSIONAL ENGINEERING - 000831
I AM NOT PROVIDING ANY GUARANTEE OR WARRANTY FOR ANY WORK DONE BY ME OR MY FIRM. I AM PROVIDING MY SERVICES AS AN INDEPENDENT CONTRACTOR AND NOT AN EMPLOYEE OF ANY OTHER ENTITY. I AM NOT PROVIDING ANY GUARANTEE OR WARRANTY FOR ANY WORK DONE BY ME OR MY FIRM. I AM PROVIDING MY SERVICES AS AN INDEPENDENT CONTRACTOR AND NOT AN EMPLOYEE OF ANY OTHER ENTITY.

FILE: 03_Site Plan.dgn
DESIGN BY: CAG
DRAWN BY: CAG
CHECKED BY: TWM
APPROVED BY: TWM
DATE: APRIL 23, 2019
JOB No: 19041101
SHEET 3 OF 27 SHEETS

SITE PLAN

STATE PROJECT NO. 18-064A-2

GENERAL

1. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL FOLLOW THE REQUIREMENTS OF THE AIRPORT'S APPROVED CONSTRUCTION SAFETY AND PHASING PLAN (CSPP), FAA AC 150/5370-2G, AND ALL AIRPORT SAFETY AND SECURITY REQUIREMENTS. FOR THE PURPOSE OF THE PROJECT THE SITE PLAN, CSPP NOTES AND THE CONSTRUCTION ACTIVITY PLAN SHALL BE CONSIDERED THE CSPP.
2. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL SUBMIT FOR APPROVAL A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) IN ACCORDANCE WITH FAA AC 150/5370-2G. NO CONSTRUCTION ACTIVITY SHALL BEGIN UNTIL THE SPCD HAS BEEN APPROVED.
3. THE CSPP COVERS OPERATIONAL SAFETY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INDIVIDUAL SAFETY OF HIS/HER PERSONNEL AND MEETING OSHA REQUIREMENTS.
4. A MINIMUM OF 10 DAYS PRIOR TO THE PRECONSTRUCTION MEETING THE CONTRACTOR SHALL PROVIDE A LIST OF SUBCONTRACTORS AND MATERIAL SUPPLIERS. ALL MATERIAL SUPPLIERS WILL BE EXPECTED TO COMPLY WITH THE PROJECT BUY AMERICAN PROVISIONS - SEE PROJECT MANUAL.
5. ALL CONTRACTOR COSTS ASSOCIATED WITH THE REQUIREMENTS LISTED ON THIS SHEET SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNLESS A SPECIFIC PAY ITEM IS PROVIDED.
6. THE EXISTING FEATURES SHOWN ON THESE PLANS ARE THOSE NOTED IN THE FIELD AND THOSE TAKEN FROM RECORD DRAWINGS. THIS DOES NOT GUARANTEE THAT ALL FEATURES ARE SHOWN ON THE PLANS. THERE WILL BE NO ADDITIONAL PAYMENT TO THE CONTRACTOR DUE TO VARIATIONS IN SIZE, QUANTITY, OR LOCATION OF EXISTING FEATURES.
7. CRAWLER TYPE EQUIPMENT WILL NOT BE ALLOWED ON ANY PAVED SURFACE ON THE AIRPORT. ONLY RUBBER-TIRED VEHICLES, WHICH WILL NOT CAUSE DAMAGE TO THE PAVEMENTS, WILL BE ALLOWED WITHOUT PROVIDING SOME TYPE OF PROTECTION.
8. NO EDGE DROP GREATER THAN 3" WILL BE ALLOWED AT ANY ACTIVE RUNWAY OR TAXIWAY PAVEMENT EDGE. IF NECESSARY, THE CONTRACTOR WILL PLACE TEMPORARY MATERIAL TO ELIMINATE EDGE DROP GREATER THAN 3". THIS WORK SHALL BE SUBSIDIARY TO OTHER ITEMS IN THE PROJECT.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DUST CONTROL MEASURES REQUIRED DURING THE DURATION OF THE PROJECT. NO DIRECT PAYMENT WILL BE MADE FOR THIS ITEM AND SHALL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS IN THIS CONTRACT.
10. SEEDING AND MULCHING FOR SHOULDER ADJUSTMENTS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

1. COORDINATION

1. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL ATTEND A PRECONSTRUCTION CONFERENCE WITH THE AIRPORT, ENGINEER, AND THE MODOT AVIATION SECTION. THE COST OF PREPARING FOR AND ATTENDING THE PRECONSTRUCTION CONFERENCE SHALL BE INCIDENTAL TO THE CONTRACT.
2. ON OR BEFORE THE PRECONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL SUBMIT A PROPOSED SCHEDULE FOR THE PROJECT. THE SCHEDULE SHALL INCLUDE A START AND COMPLETION DATE FOR EACH ITEM OF WORK. THE SCHEDULE SHALL BE UPDATED ON A WEEKLY BASIS. ALL COSTS ASSOCIATED WITH THE SCHEDULE SHALL BE INCIDENTAL TO THE CONTRACT.
3. DURING CONSTRUCTION THE CONTRACTOR SHALL ATTEND A WEEKLY COORDINATION MEETING WITH THE RESIDENT ENGINEER/INSPECTOR AND THE AIRPORT SITE MANAGER. ALL COSTS ASSOCIATED WITH ATTENDING THE WEEKLY MEETING SHALL BE INCIDENTAL TO THE CONTRACT.
4. IF THE SCOPE OR SCHEDULE OF THE PROJECT CHANGE A COORDINATION CONFERENCE WILL BE HELD. THE OWNER OR ENGINEER MAY CALL SUCH MEETINGS AS MAY SEEM EXPEDIENT FOR THE PURPOSE OF ASSURING AIRPORT SAFETY AND COORDINATION OF THE WORK COVERED BY THIS SCOPE OR SCHEDULE CHANGES. THE CSPP AND SPCD MAY NEED TO BE UPDATED TO REFLECT THE CHANGES IN SCOPE OR SCHEDULE TO ASSURE AIRPORT OPERATIONAL SAFETY. THE CONTRACTOR SHALL ATTEND ALL SUCH COORDINATION MEETINGS AND UPDATE THE SPCD AS NEEDED. APPROVAL OF CONTRACTOR PROPOSED CHANGES TO THE SCOPE/SCHEDULE THAT AFFECT THE CSPP AND SPCD IS NOT ASSURED.

2. PHASING

1. TOTAL CONTRACT TIME SHALL BE 21 CALENDAR DAYS.
2. PHASING SHALL BE AS NOTED BELOW AND AS SHOWN ON THE CONSTRUCTION ACTIVITY PLAN (CAP) SHEET.

PHASE 1 NOTES

1. WORK IN PHASE 1 SHALL BE COMPLETED WITHIN 19 PROJECT CALENDAR DAYS, INCLUDING THE FINAL INSPECTION AND PUNCH LIST COMPLETION.
2. PHASE 1 ALSO INCLUDES RE-CLOSING RUNWAY 18-36 AFTER 30 DAYS FOR THE FINAL PAVEMENT MARKING APPLICATION.
3. THE CONTRACTOR SHALL PROVIDE LIGHTED BARRICADES AT ALL CLOSURE LOCATIONS ADJACENT TO THE PAVEMENTS THAT ARE OPEN TO AIRCRAFT OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE BARRICADES IN AN OPERABLE CONDITION FOR THE DURATION OF THE PROJECT.
4. THE CONTRACTOR WILL NOT BE ABLE TO BEGIN ANY CONSTRUCTION WORK IN PHASE 1 UNTIL THE BARRICADES AND RUNWAY CLOSURE MARKERS ARE IN PLACE.

PHASE 2 NOTES

1. RUNWAY 18-36 WILL BE CLOSED FOR THE DURATION OF PHASE 1.
2. LIQUIDATED DAMAGES IN THE AMOUNT OF \$1,500.00 PER DAY WILL BE ASSESSED FOR EVERY DAY OVER THE ALLOTTED PROJECT CALENDAR DAYS.
1. WORK IN PHASE 2 SHALL BE COMPLETED WITHIN 2 PROJECT CALENDAR DAYS, INCLUDING THE FINAL INSPECTION AND PUNCH LIST COMPLETION.
2. THE CONTRACTOR SHALL PROVIDE LIGHTED BARRICADES AT ALL CLOSURE LOCATIONS ADJACENT TO THE PAVEMENTS THAT ARE OPEN TO AIRCRAFT OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE BARRICADES IN AN OPERABLE CONDITION FOR THE DURATION OF THE PROJECT.
3. THE CONTRACTOR WILL NOT BE ABLE TO BEGIN ANY CONSTRUCTION WORK IN PHASE 2 UNTIL THE BARRICADES AND RUNWAY CLOSURE MARKERS ARE IN PLACE.
4. THE CONTRACTOR MAY WORK ON PHASES 1 AND 2 CONCURRENTLY.
5. RUNWAY 18-36 WILL BE CLOSED FOR THE DURATION OF PHASE 2.

PHASE 2 NOTES (CONT.)

6. LIQUIDATED DAMAGES IN THE AMOUNT OF \$1,500.00 PER DAY WILL BE ASSESSED FOR EVERY DAY OVER THE ALLOTTED PROJECT CALENDAR DAYS.
7. BECAUSE OF THE POTENTIAL PRESENCE OF THE INDIANA BAT, GRAY BATS AND NORTHERN LONG-EARED BATS, ALL TREES AFFECTED BY THE PROJECT MUST BE FELLED BETWEEN NOVEMBER 1, 2018 AND MARCH 31, 2019 TO AVOID IMPACTING THE BATS' NESTING SEASON.

3. AREAS AND OPERATIONS AFFECTED BY THE CONSTRUCTION ACTIVITY

1. ALL RUNWAYS, TAXIWAYS AND APRONS SHALL BE KEPT OPEN TO AIRCRAFT TRAFFIC DURING CONSTRUCTION EXCEPT AS NOTED ON THE PHASING PLAN.
2. CONTRACTOR PERSONNEL AND OPERATIONS SHALL NOT BE PERMITTED ON ANY ACTIVE PAVEMENTS. ALL HAUL ROUTES OR ACCESS ROUTES TO BE LOCATED OUTSIDE ANY ACTIVE PAVEMENT OBJECT FREE AREA.
3. WHEN CONFLICTS ARISE BETWEEN CONSTRUCTION ACTIVITIES AND AIRCRAFT OPERATIONS AND SAFETY, AIRCRAFT OPERATIONS AND SAFETY SHALL TAKE PRECEDENCE AND SHALL GOVERN. FINAL AUTHORITY IN THE APPROVAL OF CONSTRUCTION SEQUENCING LIES WITH THE CITY.
4. ALL CONSTRUCTION TRAFFIC SHALL IMMEDIATELY YIELD TO ONCOMING AIRCRAFT AT ALL TIMES.

4. PROTECTION OF NAVIGATION AIDS (NAVAIDS)

1. THE CONTRACTOR SHALL REMAIN CLEAR OF THE VOR, LOCALIZER, ILS/DME, MALSR, PAPI/SYSTEMS, WIND CONE, BEACON AND OTHER NAVAIDS FACILITIES AT ALL TIMES.

5. CONTRACTOR ACCESS

1. CONTRACTOR ACCESS SHALL BE AS NOTED BELOW AND AS SHOWN ON THE SITE PLAN AND CONSTRUCTION ACTIVITY PLAN SHEETS.
2. THE CONTRACTOR SHALL DESIGNATE AT LEAST ONE PERSON TO MONITOR THE AIRPORT UNIFORM FREQUENCY OF 122.80. THE PERSON DESIGNATED SHALL HAVE THE ABILITY TO EASILY COMMUNICATE WITH OTHER CONTRACTOR PERSONNEL WORKING ON THE JOBSITE. THE CONTRACTOR SHALL PROVIDE HIS/HER OWN AIRPORT RADIO(S).
3. THE STORAGE AND STAGING AREA WILL BE AS SHOWN ON THE SITE PLAN AND CONSTRUCTION ACTIVITY PLAN SHEETS.
4. THE CONTRACTOR SHALL KEEP A RECORD OF THE NAMES OF ALL EMPLOYEES ENTERING THE JOB SITE ON A DAILY BASIS. A RECORD OF EACH SUBCONTRACTOR ENTERING THE JOB SITE SHALL ALSO BE KEPT BY THE CONTRACTOR.
5. CONSTRUCTION SITE PARKING FOR THE CONTRACTOR PERSONNEL SHALL BE AT THE STAGING AREAS SHOWN ON THE SITE PLAN AND CONSTRUCTION ACTIVITY PLAN SHEETS.
6. WHEN THE CONTRACTOR IS NOT WORKING, EQUIPMENT SHALL BE STORED AT THE STAGING AREA OR WITHIN THE WORK AREA LIMITS (SEE NOTE 7).
7. THE CONTRACTOR WILL BE PERMITTED TO STORE EQUIPMENT AND MATERIALS ONLY AT THE LOCATIONS SHOWN. PARKED EQUIPMENT AND MATERIAL STOCKPILES SHALL NOT PENETRATE SURFACES DEFINED BY F.A.R. TITLE 14 PART 77 - OBJECTS AFFECTING NAVIGABLE AIRSPACE.
8. THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL CONSTRUCTION AREAS AND HAUL ROUTES WHICH WILL BE OPENED TO AIR TRAFFIC TO THE SATISFACTION OF THE ENGINEER. A POWER BROOM AND OPERATOR ON SITE AT ALL TIMES WHEN ACTIVE PAVEMENTS ARE UTILIZED FOR CONSTRUCTION TRAFFIC.
9. ALL PAVEMENTS, DRIVES OR ANY OTHER AREAS UTILIZED BY THE CONTRACTOR FOR HAUL ROADS OR STORAGE AREAS SHALL BE MAINTAINED AND REPAIRED TO THE SAME CONDITION OR BETTER THAN THEY WERE PRIOR TO BEGINNING CONSTRUCTION. NO ADDITIONAL COMPENSATION WILL BE MADE TO THE CONTRACTOR FOR THIS WORK.
10. ALL VEHICLE AND EQUIPMENT OPERATORS USED BY THE CONTRACTOR SHALL BE PROPERLY TRAINED BY THE CONTRACTOR.

6. WILDLIFE MANAGEMENT

THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR AIRPORT SITE MANAGER IF ANY WILDLIFE IS SEEN ENTERING THE AIRPORT.

1. THE CONTRACTOR SHALL DISPOSE OF ALL TRASH INCLUDING FOOD SCRAPS IN APPROVED CONTRACTOR PROVIDED CONTAINERS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO MITIGATE ANY STANDING WATER CAUSED BY ANY CONSTRUCTION OR CONTRACTOR ACTIVITIES WITHIN 24 HOURS OF AN EVENT.
3. ANY AREAS UNDER CONSTRUCTION BY THE CONTRACTOR WILL BE MAINTAINED BY THE CONTRACTOR. IT WILL BE THE CONTRACTOR'S JOB TO MOW THESE AREAS TO THE AIRPORTS REQUIREMENTS.
4. DURING THE CONTRACTORS OPERATIONS IF THE CONTRACTOR DISTURBS OR SEES ANY WILDLIFE THE CONTRACTOR SHALL NOTIFY THE AIRPORT SITE MANAGER OR ENGINEER IMMEDIATELY.
5. BECAUSE OF THE POTENTIAL PRESENCE OF THE INDIANA BAT, GRAY BATS AND NORTHERN LONG-EARED BATS, ALL TREES AFFECTED BY THE PROJECT MUST BE FELLED BETWEEN NOVEMBER 1, 2018 AND MARCH 31, 2019 TO AVOID IMPACTING THE BATS' NESTING SEASON.

7. FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT

THE CONTRACTOR SHALL PICK UP ANY FOREIGN OBJECT DEBRIS (FOD) SEEN ON THE AIRFIELD PAVEMENTS.

1. THE CONTRACTOR SHALL SECURE ALL LOOSE ITEMS FROM VEHICLES PRIOR TO DRIVING ON AIRFIELD PAVEMENTS.
2. IF THE CONTRACTOR DUE TO HIS/HER OPERATIONS CAUSES ANY FOD ON ANY ACTIVE PAVEMENTS THE CONTRACTOR SHALL DISCONTINUE OPERATIONS AND CLEAN THESE PAVEMENTS IMMEDIATELY.

8. HAZARDOUS MATERIALS (HAZMAT) MANAGEMENT

1. THE CONTRACTOR SHALL DEVELOP A HAZMAT MANAGEMENT PLAN AND KEEP COPIES ON THE JOBSITE OF MATERIAL SAFETY DATA SHEETS (MSDS) FOR ALL MATERIALS HANDLED ON THE JOBSITE.
2. THE CONTRACTOR SHALL MAINTAIN ON HAND A SPILL RESPONSE KIT TO EXPEDITIOUSLY CONTAIN AND CLEAN-UP SPILLS RESULTING FROM FUEL OR HYDRAULIC FLUID LEAKS.
3. THE CONTRACTOR SHALL NOTIFY THE CITY IMMEDIATELY IN THE EVENT A RELEASE OF HAZARDOUS MATERIAL OCCURS.

9. NOTIFICATION OF CONSTRUCTION ACTIVITIES

1. THE CONTRACTOR SHALL PROVIDE A 24 HOUR EMERGENCY CONTACT PERSON AND PHONE NUMBER.
2. THE CONTRACTOR SHALL GIVE A MINIMUM OF 72 HOURS NOTICE TO THE CITY PRIOR TO CLOSING ANY PAVEMENTS SO THAT PROPER NOTAMS MAY BE ISSUED BY THE CITY AND TO ALLOW FOR COORDINATION WITH THE AIRPORT TENANTS BY THE CITY.
3. FOR ANY EQUIPMENT USED BY THE CONTRACTOR WITH A HEIGHT GREATER THAN 25', THE CONTRACTOR SHALL SUBMIT FAA FORM 7460-1 TO THE FAA FOR AN AIRSPACE STUDY. NO EQUIPMENT WITH A HEIGHT GREATER THAN 25' SHALL BE USED UNTIL A DETERMINATION FROM FAA IS RECEIVED.
4. THE CONTRACTOR SHALL NOTIFY THE LOCAL FIRE DEPARTMENT IF CONSTRUCTION ACTIVITY WILL REQUIRE THE BLOCKAGE OF EMERGENCY ACCESS TO THE AIRPORT.
5. IN THE EVENT OF AN EMERGENCY, THE CONTRACTOR SHALL CALL 911.
6. CONTACTS FOR THIS PROJECT ARE AS LISTED BELOW.

ENGINEER
CRAWFORD, MURPHY & TILLY, INC.
TOM MORRIS, P.E. - PROJECT ENGINEER - (314) 571-9080

EMERGENCY - 911
AIRPORT FACILITIES MANAGEMENT - (417) 532-4642
LEBANON POLICE DEPARTMENT - (417) 532-3131
LEBANON FIRE DEPARTMENT - (417) 532-2104
MERCY HOSPITAL OF LEBANON - (417) 533-6100
NATIONAL POISON CONTROL CENTER - (800) 222-1222

10. INSPECTION REQUIREMENTS

1. THE CONTRACTOR SHALL INSPECT THE JOBSITE DAILY TO ENSURE COMPLIANCE WITH THE CSPP. THE CHECKLIST FOUND IN APPENDIX 3 OF FAA AC 150/5370-2F MAY BE USED TO AID IN THE INSPECTIONS.
2. THE CONTRACTOR SHALL ATTEND A FINAL INSPECTION PRIOR TO OPENING THE WORK AREA TO AIRPORT OPERATIONS.

11. UNDERGROUND UTILITIES

1. IT WILL BE NECESSARY FOR THE CONTRACTOR TO MAKE HIS OWN FIELD INVESTIGATION TO DETERMINE THE EXACT LOCATION OF THE UNDERGROUND UTILITIES AT CRITICAL POINTS. 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 IN RESPECT TO THE ACCURACY, COMPLETENESS OR SUFFICIENCY OF THE INFORMATION.
2. BEFORE INITIATING ANY DIGGING, DRILLING OR EXCAVATING ON THE AIRPORT PROPERTY, THE CONTRACTOR SHALL CALL 1-800-DIG-RITE TO ARRANGE FOR UTILITY LOCATES.

12. PENALTIES

1. NONCOMPLIANCE BY THE CONTRACTOR WITH AIRPORT RULES AND REGULATIONS OR FAILURE TO COMPLY WITH THE AIRPORT'S APPROVED CSPP AND THE CONTRACTOR'S APPROVED SPCD MAY RESULT IN FINES AS ALLOWED BY LAW.

13. SPECIAL CONDITIONS

1. CONTRACTOR SHALL PROTECT EXISTING PAVEMENTS FROM DAMAGE. IF THE PAVEMENTS ARE DAMAGED FROM ANY OF THE CONTRACTOR'S OPERATIONS, INCLUDING REMOVAL OF ADJACENT PAVEMENTS, THEY SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

14. RUNWAY AND TAXIWAY VISUAL AIDS

1. IF THE AIRPORT WILL BE CLOSED DURING ANY PORTION OF THIS PROJECT, THE CONTRACTOR SHALL USE MARKING, LIGHTING AND SIGNS THAT FOLLOW THE REQUIREMENTS OF FAA AC 150/5370-2G.
2. BARRICADES SHALL BE USED AS SHOWN ON THE CONSTRUCTION ACTIVITY PLAN SHEET.

15. MARKING AND SIGNS FOR ACCESS ROUTES

1. BARRICADES AND SIGNS SHALL BE USED ALONG THE CONTRACTOR'S ACCESS ROUTE AS DETAILED ON THIS SHEET AND THE CONSTRUCTION ACTIVITY PLAN SHEET.

16. HAZARD MARKING AND LIGHTING

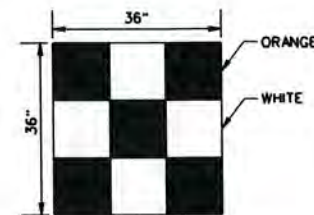
1. THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN MARKINGS AND ASSOCIATED LIGHTING OF OPEN TRENCHES, EXCAVATIONS, TEMPORARY STOCKPILES, AND HIS/HER CONSTRUCTION EQUIPMENT.
2. ALL CONSTRUCTION EQUIPMENT SHALL BE FLAGGED AND/OR LIGHTED IN ACCORDANCE WITH FAA ADVISORY CIRCULAR 150/5370-2F AND 150/5210-50 AT ALL TIMES WHILE OPERATING ON AIRPORT PROPERTY. THE MAXIMUM EQUIPMENT HEIGHT IS 25'.
3. BARRICADES SHALL BE PLACED AT THE LOCATIONS SHOWN ON THE CONSTRUCTION ACTIVITY PLAN SHEET OR AS DIRECTED BY THE ENGINEER.
4. THE CONTRACTOR SHALL INSPECT THE BARRICADES ONCE DURING EACH WORK DAY TO INSURE PROPER PLACEMENT AND PROPER OPERATION OF THE RED LIGHTS.

17. PROTECTION

1. THE CONTRACTOR SHALL NOT OPERATE ON ANY ACTIVE AIRFIELD PAVEMENTS.
2. IF THE CONTRACTOR DAMAGES OR DIRTIES ANY ACTIVE PAVEMENTS THEY SHALL BE FIXED/CLEANED IMMEDIATELY.
3. THE CONTRACTOR SHALL STAY CLEAR OF ANY ACTIVE TAXIWAY OR RUNWAY SAFETY AREA, OBJECT FREE AREA OR OBSTACLE FREE ZONE. THESE LIMITS CAN BE FOUND ON SHEET 3.
4. THE RUNWAY APPROACH/DEPARTURE SURFACE IS AN IMAGINARY SURFACE BEGINNING 200 FEET BEYOND ALL RUNWAY ENDS AND EXTENDS OUTWARD FROM THE RUNWAY AT A SLOPE OF 34:1 FOR 1,000 FEET. ALL CONSTRUCTION EQUIPMENT AND PERSONNEL SHALL NOT BE PERMITTED TO PENETRATE THIS SURFACE.

18. OTHER LIMITATIONS ON CONSTRUCTION

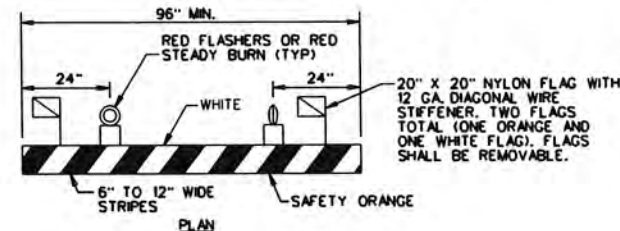
1. IF, DURING CONSTRUCTION, AN EMERGENCY IS DECLARED BY THE CITY, THE CONTRACTOR SHALL IMMEDIATELY CLEAR THE PAVEMENT OF ALL VEHICLES, PERSONNEL AND EQUIPMENT.
2. BROKEN CONCRETE, BROKEN ASPHALT, UNUSED PAINT, UNUSED SEALER AND OTHER MISCELLANEOUS DEBRIS SHALL BE DISPOSED OF OFF AIRPORT PROPERTY, UNLESS OTHERWISE SPECIFIED.



CONSTRUCTION EQUIPMENT
AND TRUCK SIGNAL FLAG
N.T.S.



MULTI-BARRIER AR10x96, RRM
AIRPORT BARRIER 4202-25,
WATERCADE WCD1-10, NEUBERT
AERO CORP. NAC-PC9642, OR
APPROVED EQUAL (SEE NOTE 6)



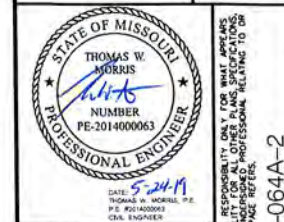
BARRICADE NOTES:

1. FLASHER OR STEADY BURN LIGHTS SHALL BE BATTERY OR SOLAR POWER OPERATED. LENS SHALL BE RED AND BE ABLE TO ROTATE 90°.
2. FACING OF BARRICADE SHALL BE COVERED WITH REFLECTIVE TAPE OR PAINT.
3. BARRICADES TO BE PLACED WITH A MAXIMUM OF 20' SPACING CENTER TO CENTER ALONG OPERATIONAL PAVEMENT ADJACENT TO CONSTRUCTION AS DIRECTED BY THE RESIDENT ENGINEER. ALTERNATE FLASHER OR STEADY BURN LENSES SO THAT EVERY OTHER LENS IS ROTATED 90°.
4. FLASHER OR STEADY BURN LIGHTS SHALL BE SECURED TO THE BARRICADES, AS APPROVED BY THE RESIDENT ENGINEER.
5. BARRICADES SHALL BE OF LOW MASS, EASILY COLLAPSIBLE UPON CONTACT WITH AN AIRCRAFT OR ANY OF IT COMPONENTS, AND WEIGHTED TO AVOID BEING BLOWN OVER.
6. BARRICADES SHALL BE OF A COMMERCIAL DESIGN AND SHALL MEET CURRENT FAA REQUIREMENTS.

LOW PROFILE LIGHTED BARRICADE N.T.S.

REVISIONS		
NUMBER	BY	DATE
1	TWM	5/3/19
2	TWM	5/24/19

FLOYD W. JONES LEBANON AIRPORT
2415 SOUTH JEFFERSON AVENUE
LEBANON, MO 65536
RUNWAY 18/36 MILL AND OVERLAY



FILE: D4_CAP_Notes.dgn
DESIGN BY: CAG
DRAWN BY: CAG
CHECKED BY: TWM
APPROVED BY: TWM
DATE: APRIL 23, 2019
JOB No: 19041101
CONSTRUCTION ACTIVITY PLAN NOTES
SHEET 4 OF 27 SHEETS



TAXIWAY A1

TAXIWAY A

MATCHLINE STA. 6+00.00

EL OYD W. JONES LEBANON AIRPORT

2415 SOUTH JEFFERSON AVENUE
LEBANON, MO 65536

RUNWAY18/36 MILL AND OVERLAY

OR ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
STATE PROJECT NO. 18-064A-2

FILE: 07_LAYOUT_STAKING_PLAN_1.dgn

DESIGN BY: CAG

DRAWN BY: CAG

CHECKED BY: TWN

APPROVED BY: TWM

DATE: APRIL 23, 2019

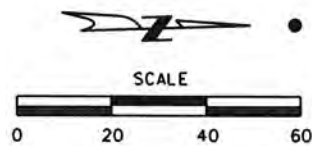
JOB No: 19041101

LAYOUT/STAKING
PLAN SHEET 1 OF 10

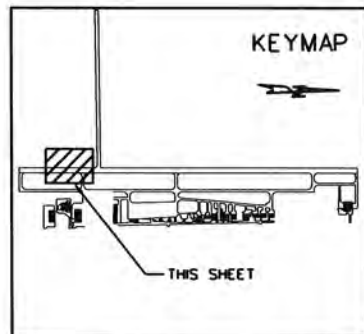
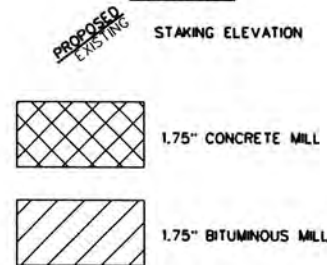
SHEET 7 OF 27 SHEETS

MATCHLINE STA. 6+00.00

MATCHLINE STA. 11+00.00



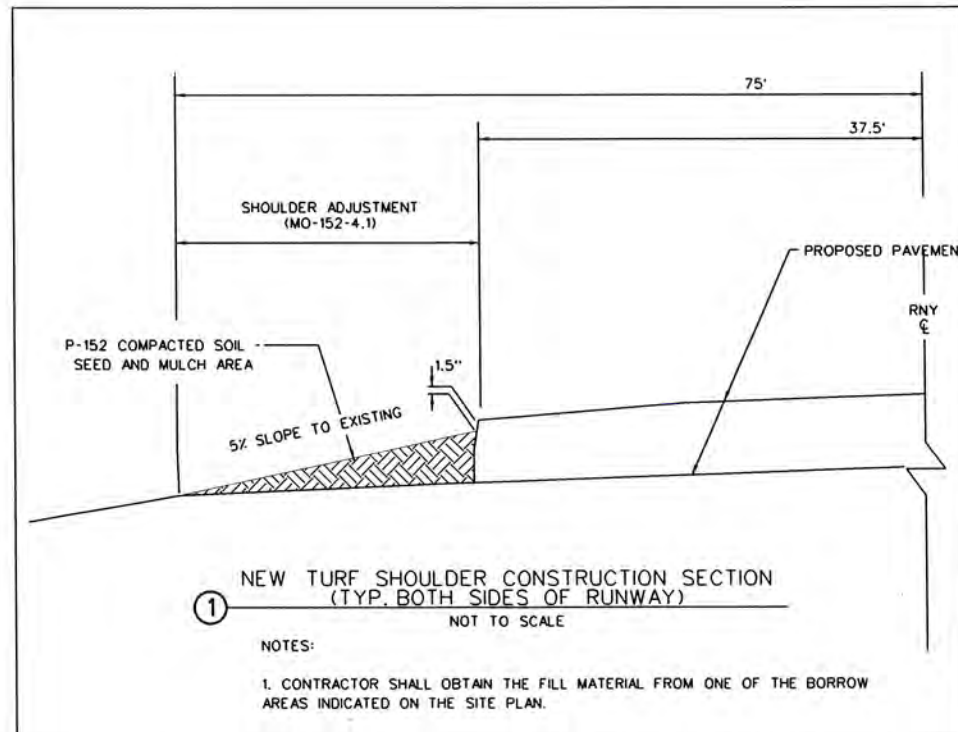
LEGEND



NOTES:

- ANY TURF DAMAGED BY THE CONTRACTOR SHALL BE RESTORED TO THE SATISFACTION OF THE ENGINEER. MATERIALS AND EFFORT FOR RESTORING TURF SHALL BE INCIDENTAL TO THE PROJECT.
- RUNWAY MILLING DEPTH SHALL BE 1.75". IF EXISTING JOINT FABRIC IS ENCOUNTERED, THE MILLING MACHINE SHALL BE RAISED UNTIL IT IS OUT OF THE FABRIC DEPTH. MILLING SHALL THEN RESUME AT A 1.75" DEPTH.
- VERTICAL EDGE IS REQUIRED AT THE EDGE OF MILLING LIMITS WHERE CONNECTING INTO EXISTING GRADES. IF MILLING MACHINE DOESN'T PRODUCE A VERTICAL EDGE, A SAWCUT WILL BE REQUIRED.

TAXIWAY A



NOTES:

- CONTRACTOR SHALL OBTAIN THE FILL MATERIAL FROM ONE OF THE BORROW AREAS INDICATED ON THE SITE PLAN.

REVISIONS		
NUMBER	BY	DATE
1	TWM	5/24/19

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

FLOYD W. JONES LEBANON AIRPORT
2415 SOUTH JEFFERSON AVENUE
LEBANON, MO 65536

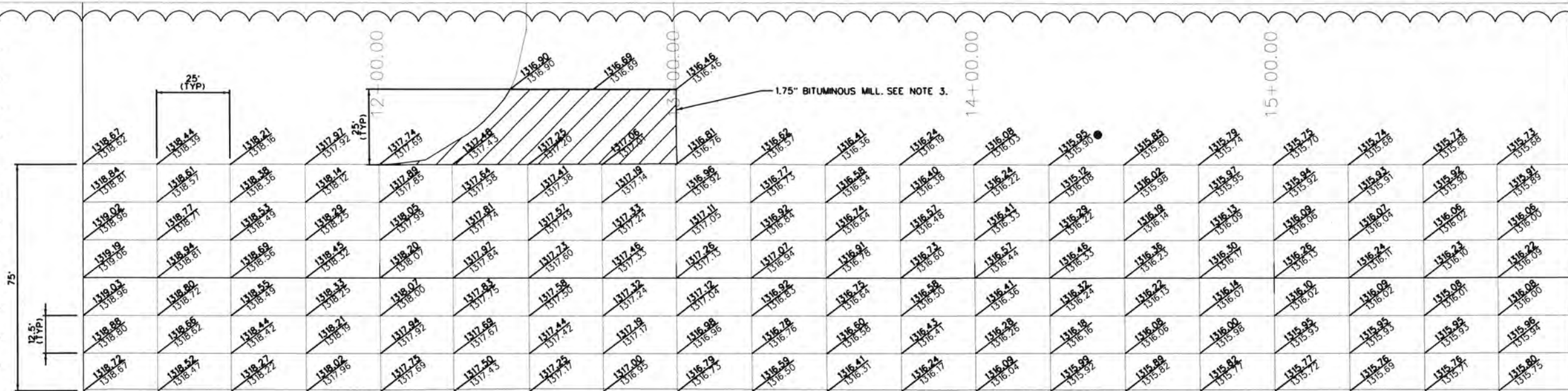
RUNWAY18/36 MILL AND OVERLAY

STATE OF MISSOURI
THOMAS W. MORRIS
REGISTERED PROFESSIONAL ENGINEER
NUMBER PE-2014000063
DATE 5-24-19
P.E. THOMAS W. MORRIS, P.E.
CIVIL ENGINEER

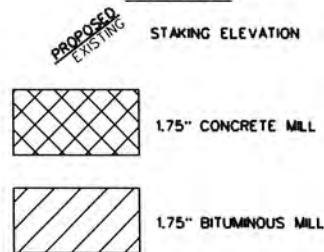
CMT
ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
(314) 435-5500
PROFESSIONAL ENGINEERING - D00631

STATE PROJECT NO. 18-064A-2

FILE: 08_LAYOUT_STAKING_PLAN_2.dgn
DESIGN BY: CAG
DRAWN BY: CAG
CHECKED BY: TWM
APPROVED BY: TWM
DATE: APRIL 23, 2019
JOB No: 19041101
LAYOUT/STAKING
PLAN SHEET 2 OF 10
SHEET 8 OF 27 SHEETS

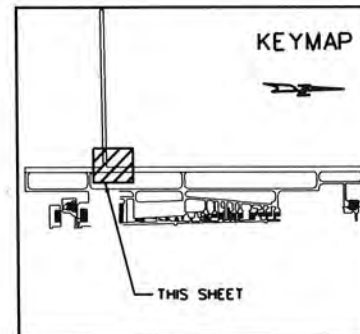


LEGEND



NOTES:

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MATCHLINE STA. 16+00.00

REVISIONS		
NUMBER	BY	DATE
1	TWM	5/24/19

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

FLOYD W. JONES LEBANON AIRPORT
2415 SOUTH JEFFERSON AVENUE
LEBANON, MO 65536

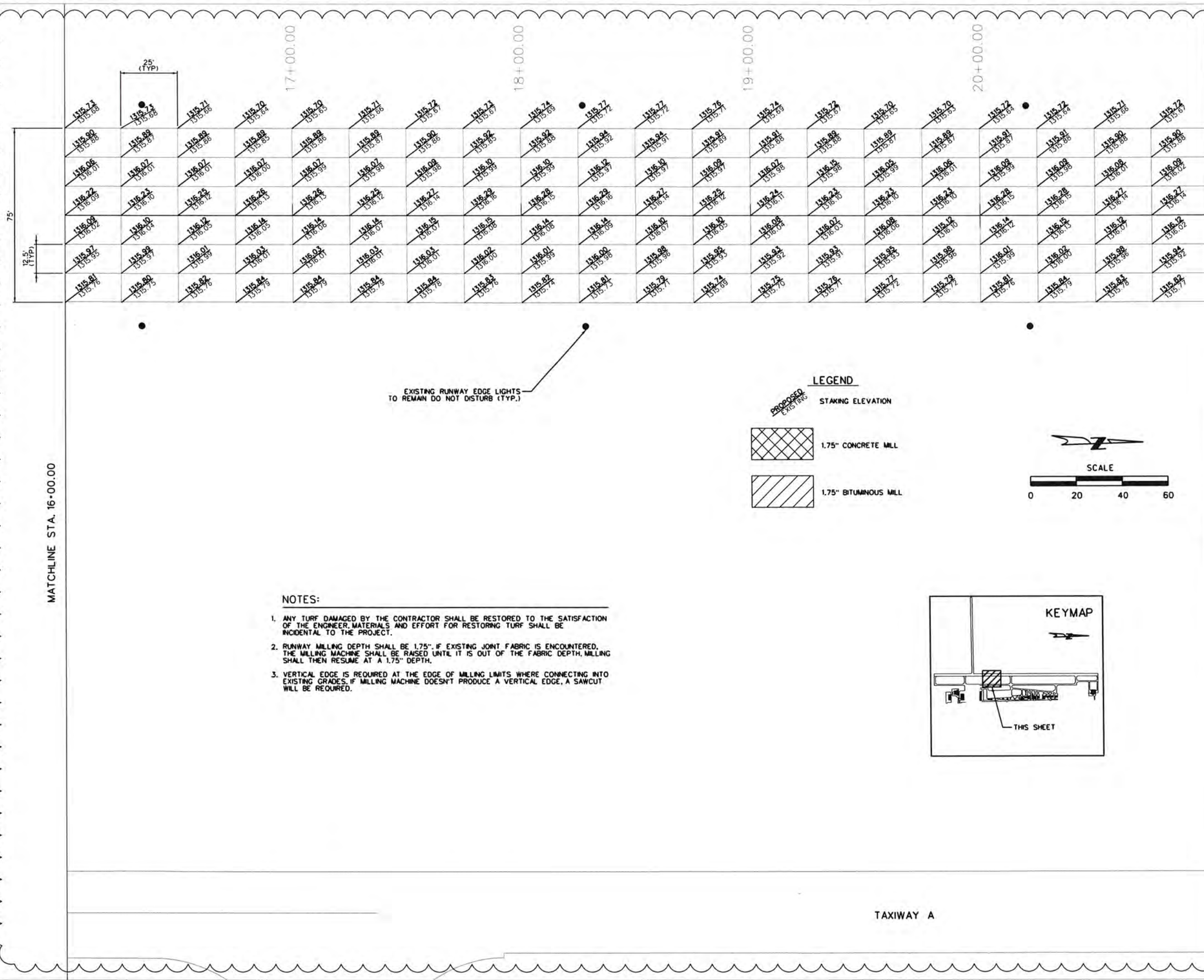
RUNWAY 18/36 MILL AND OVERLAY

STATE OF MISSOURI
THOMAS W. MORRIS
NUMBER
PE-2014000063
DATE
5-24-19
THOMAS W. MORRIS, P.E.
CIVIL ENGINEER

CMT
ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
PROFESSIONAL ENGINEERING - 000651

STATE PROJECT NO. 18-064A-2

FILE: 09_LAYOUT_STAKING_PLAN_3.dgn
DESIGN BY: CAG
DRAWN BY: CAG
CHECKED BY: TWM
APPROVED BY: TWM
DATE: APRIL 23, 2019
JOB No: 19041101
LAYOUT/STAKING
PLAN SHEET 3 OF 10
SHEET 9 OF 27 SHEETS

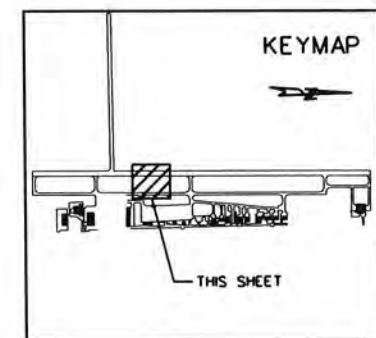
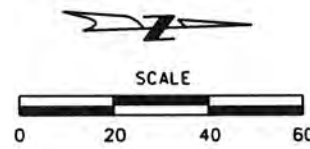


NOTES:

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LEGEND

- PROPOSED
EXISTING
- STAKING ELEVATION
- 1.75" CONCRETE MILL
- 1.75" BITUMINOUS MILL



MATCHLINE STA. 21+00.00

REVISIONS		
NUMBER	BY	DATE
1	TWM	5/24/19

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

FLOYD W. JONES LEBANON AIRPORT
2415 SOUTH JEFFERSON AVENUE
LEBANON, MO 65536

RUNWAY 18/36 MILL AND OVERLAY

STATE OF MISSOURI
THOMAS W. MORRIS
NUMBER
FE-2014000063
PROFESSIONAL ENGINEER
DATE: 5-24-19
PE: THOMAS W. MORRIS, P.E.
CIVIL ENGINEER

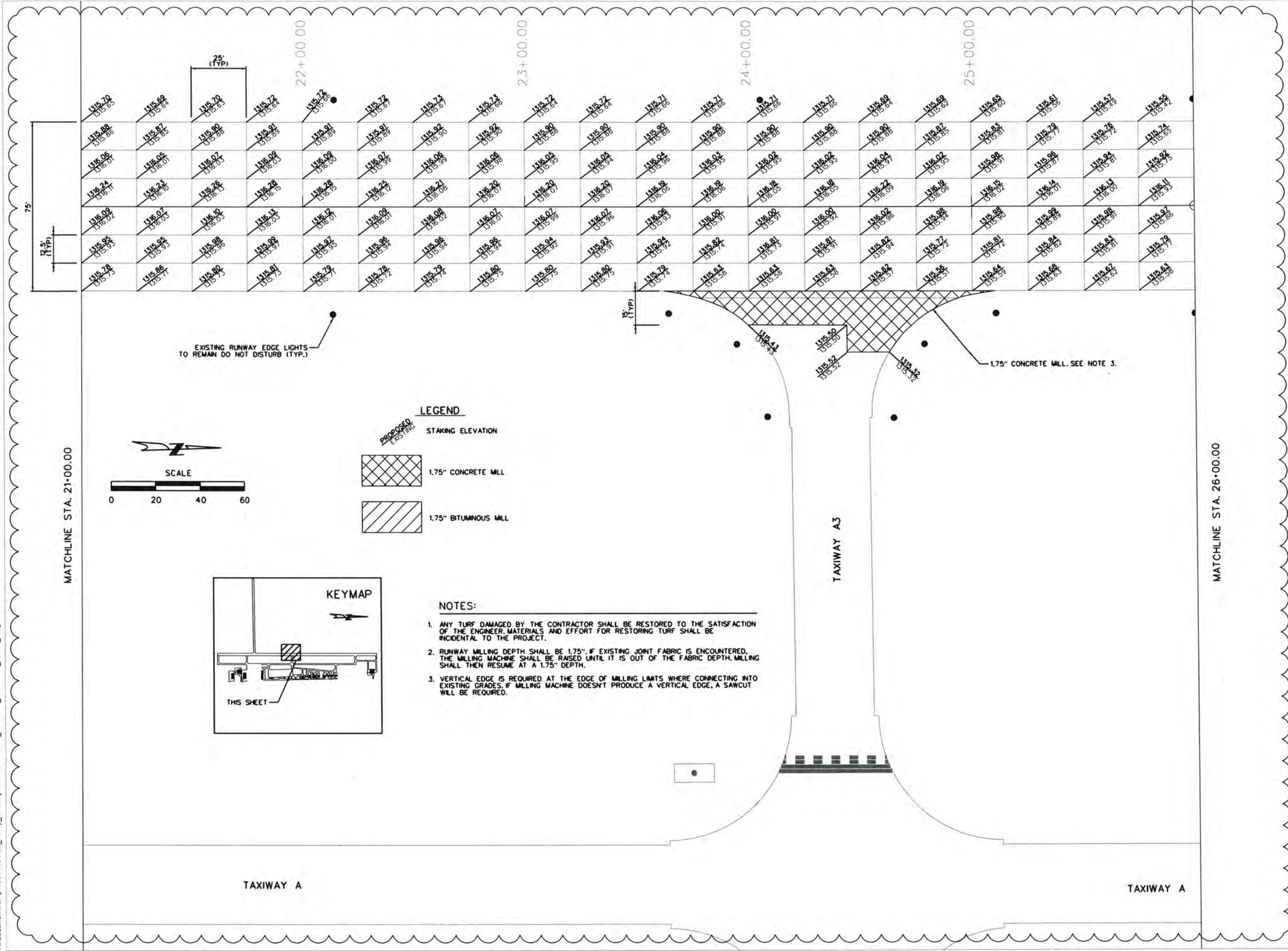
CMT
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ST. LOUIS, MO 63102
(314) 438-5500
PROFESSIONAL ENGINEERING - 000631

STATE PROJECT NO. 18-064A-2

FILE: 10_LAYOUT_STAKING_PLAN_4.dgn
DESIGN BY: CAG
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APPROVED BY: TWM
DATE: APRIL 23, 2019
JOB No: 19041101

LAYOUT/STAKING
PLAN SHEET 4 OF 10

SHEET 10 OF 27 SHEETS



REVISIONS		
NUMBER	BY	DATE
1	TWM	5/24/19

01'2'3'

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

PLOT 1

FLOYD W. JONES LEBANON AIRPORT

2415 SOUTH JEFFERSON AVENUE

LEBANON, MO 65536

RUNWAY18/36 MILL AND OVERLAY

STATE OF MISSOURI

THOMAS W. JONES

PROFESSIONAL ENGINEER

NUMBER PE-2014000063

DATE 5-24-19

PE EX-000000

CIVIL ENGINEER

CMT

ONE MEMORIAL DRIVE, SUITE 500

ST. LOUIS, MO 63102

(314) 438-5500

PROFESSIONAL ENGINEERING: 000631

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STATE PROJECT NO. 18-064A-2

FILE: 11_LAYOUT_STAKING_PLAN_5.dgn

DESIGN BY: CAG

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CHECKED BY: TWM

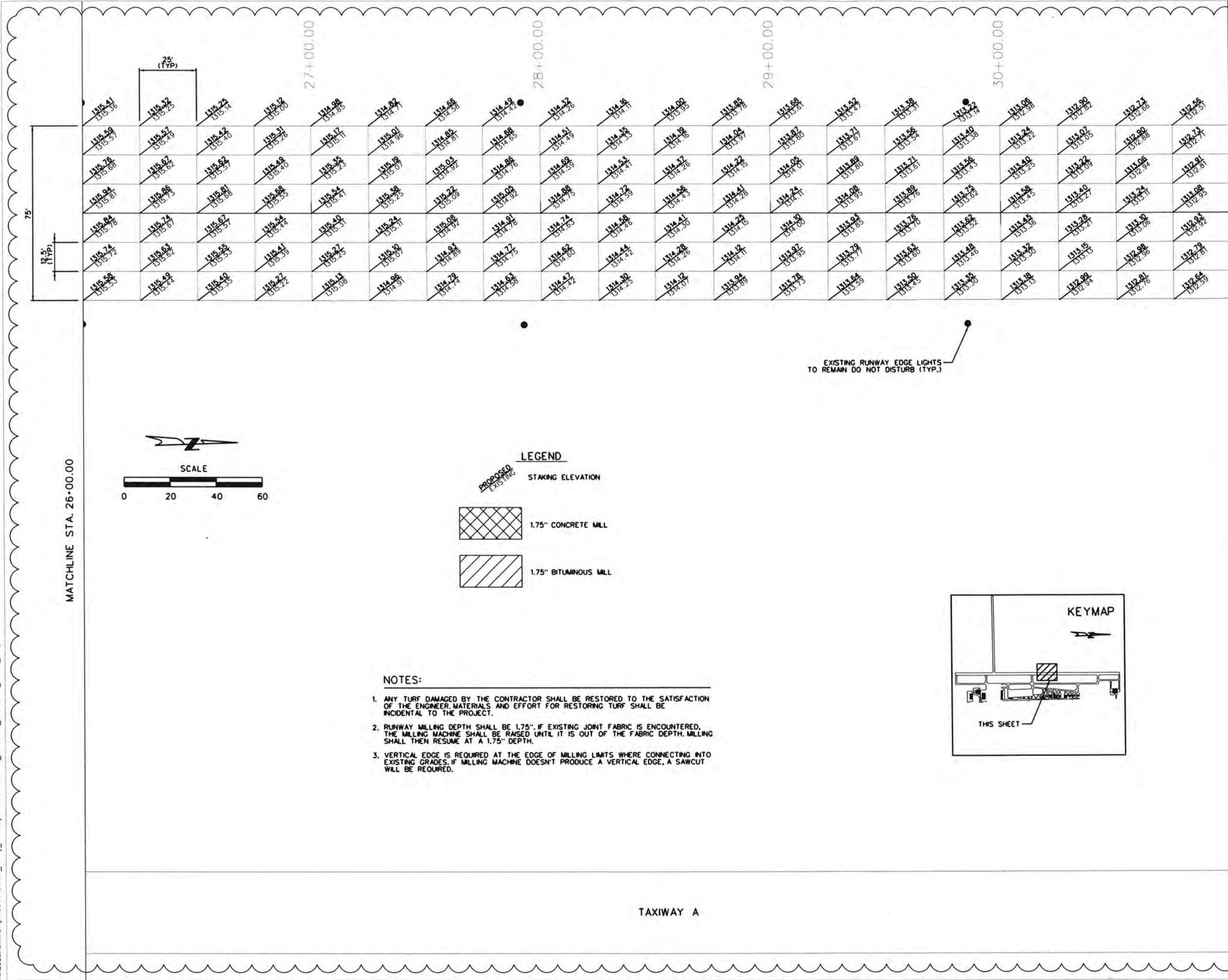
APPROVED BY: TWM

DATE: APRIL 23, 2019

JOB No: 19041101

LAYOUT/STAKING PLAN SHEET 5 OF 10

SHEET 11 OF 27 SHEETS



REVISIONS		
NUMBER	BY	DATE
A	TWM	5/24/19

0 1 2

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

FLOYD W. JONES LEBANON AIRPORT
2415 SOUTH JEFFERSON AVENUE
LEBANON, MO 65536

RUNWAY18/36 MILL AND OVERLAY

STATE OF MISSOURI
THOMAS W. MORRIS
NUMBER
PE-2014000063
PROFESSIONAL ENGINEER
DATE: 5-24-19
THOMAS W. MORRIS, P.E.
REGISTERED CIVIL ENGINEER

CMT
ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
(314) 438-5500
PROFESSIONAL ENGINEERING 000631

STATE PROJECT NO. 18-064A-2

FILE: 12_LAYOUT_STAKING_PLAN_6.dgn

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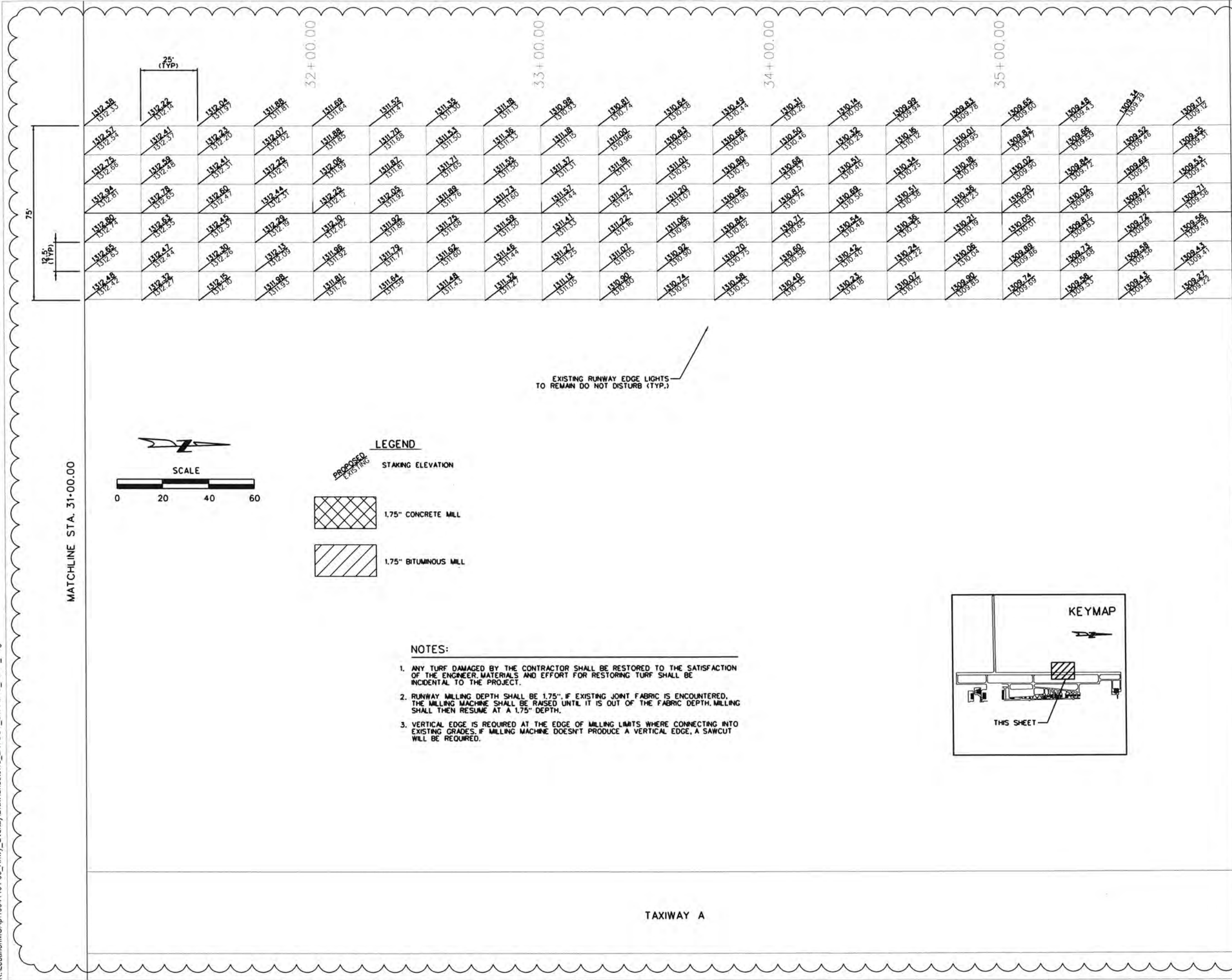
APPROVED BY: TWM

DATE: APRIL 23, 2019

JOB No: 19041101

LAYOUT/STAKING
PLAN SHEET 6 OF 10

SHEET 12 OF 27 SHEETS



REVISIONS		
NUMBER	BY	DATE
1	TWM	5/24/19

0 1 2

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

FLOYD W. JONES LEBANON AIRPORT
2415 SOUTH JEFFERSON AVENUE
LEBANON, MO 65536

RUNWAY18/36 MILL AND OVERLAY

STATE OF MISSOURI
THOMAS W. MORRIS
NUMBER
PE-2014000063
PROFESSIONAL ENGINEER

CMT
ONE VERNON DRIVE, SUITE 500
ST. LOUIS, MO 63102
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STATE PROJECT NO. 18-064A-2

FILE: 13_LAYOUT_STAKING_PLAN_7.dgn

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CHECKED BY: TWM

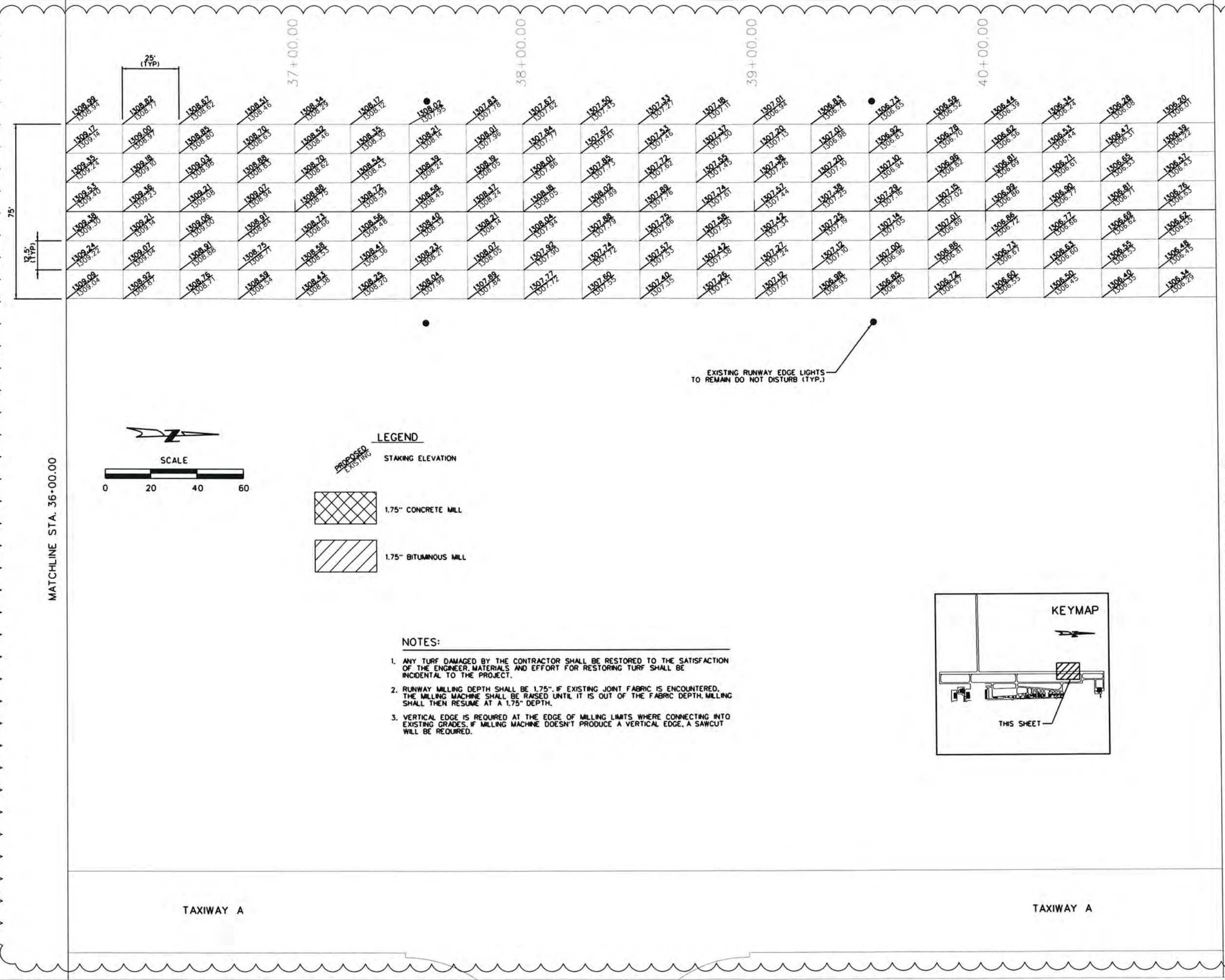
APPROVED BY: TWM

DATE: APRIL 23, 2019

JOB No: 19041101

LAYOUT/STAKING
PLAN SHEET 7 OF 10

SHEET 13 OF 27 SHEETS

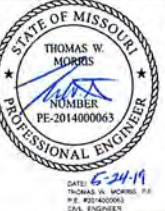


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NUMBER	BY	DATE
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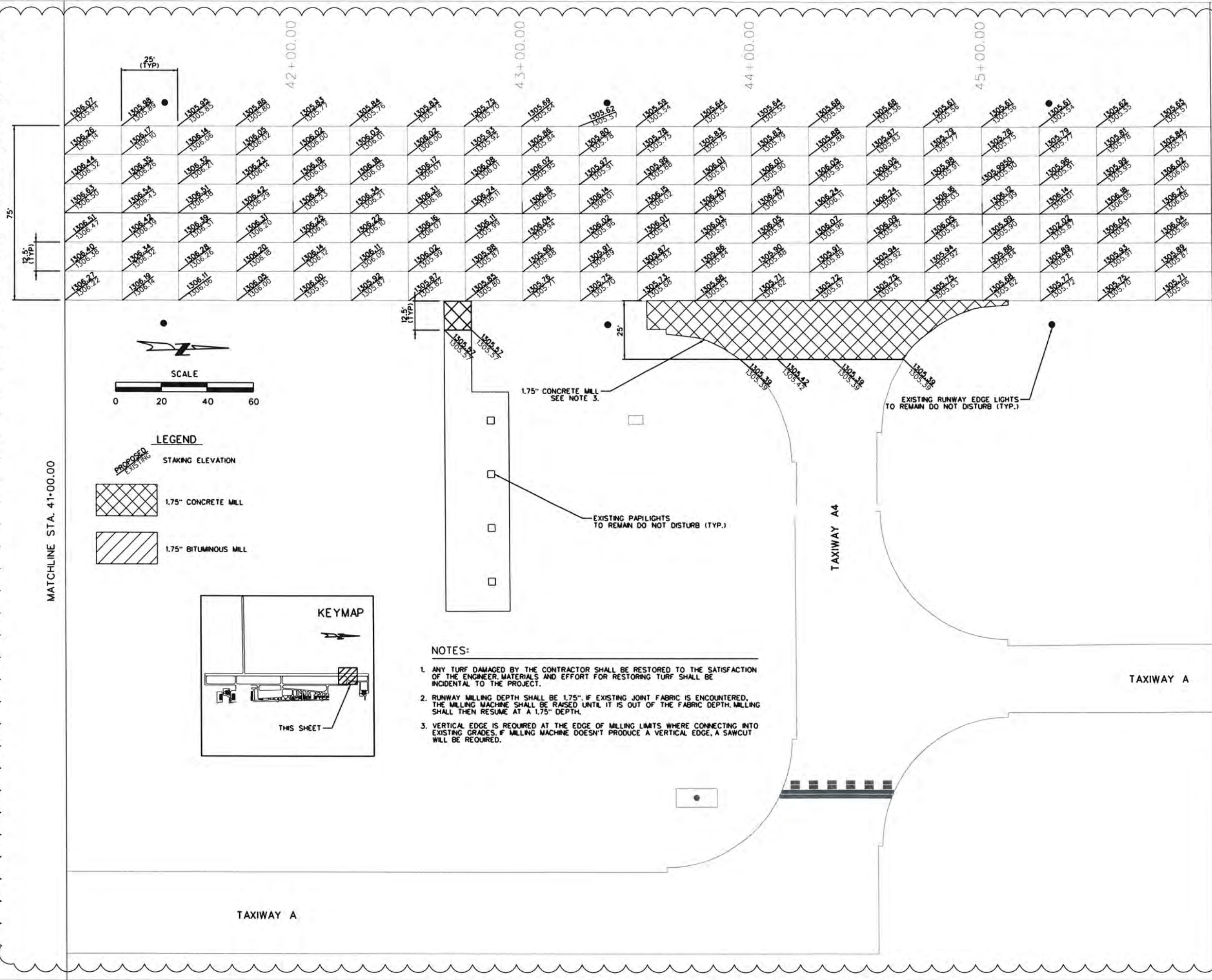
0 1 2
THIS BAR IS EQUAL TO 2'
AT FULL SCALE (34\"/>

FLOYD W. JONES LEBANON AIRPORT
2415 SOUTH JEFFERSON AVENUE
LEBANON, MO 65536
RUNWAY18/36 MILL AND OVERLAY



STATE PROJECT NO. 18-064A-2

FILE:	14_LAYOUT_STAKING_PLAN_8.dgn
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DRAWN BY:	CAG
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APPROVED BY:	TWM
DATE:	APRIL 23, 2019
JOB No:	19041101
LAYOUT/STAKING PLAN SHEET 8 OF 10	
SHEET 14 OF 27 SHEETS	



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REVISIONS		
NUMBER	BY	DATE
1	TWM	5/24/19

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

FLOYD W. JONES LEBANON AIRPORT
2415 SOUTH JEFFERSON AVENUE
LEBANON, MO 65536

RUNWAY 18/36 MILL AND OVERLAY

STATE OF MISSOURI
THOMAS W. MORRIS
REGISTERED PROFESSIONAL ENGINEER
PE-2014000063
DATE: 5-24-19
P.E. MORRIS
CIVIL ENGINEER

CMT
ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
(314) 436-5500
PROFESSIONAL ENGINEERING: 000613

STATE PROJECT NO. 18-064A-2

FILE: 15_LAYOUT_STAKING_PLAN_9.dgn

DESIGN BY: CAG

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CHECKED BY: TWM

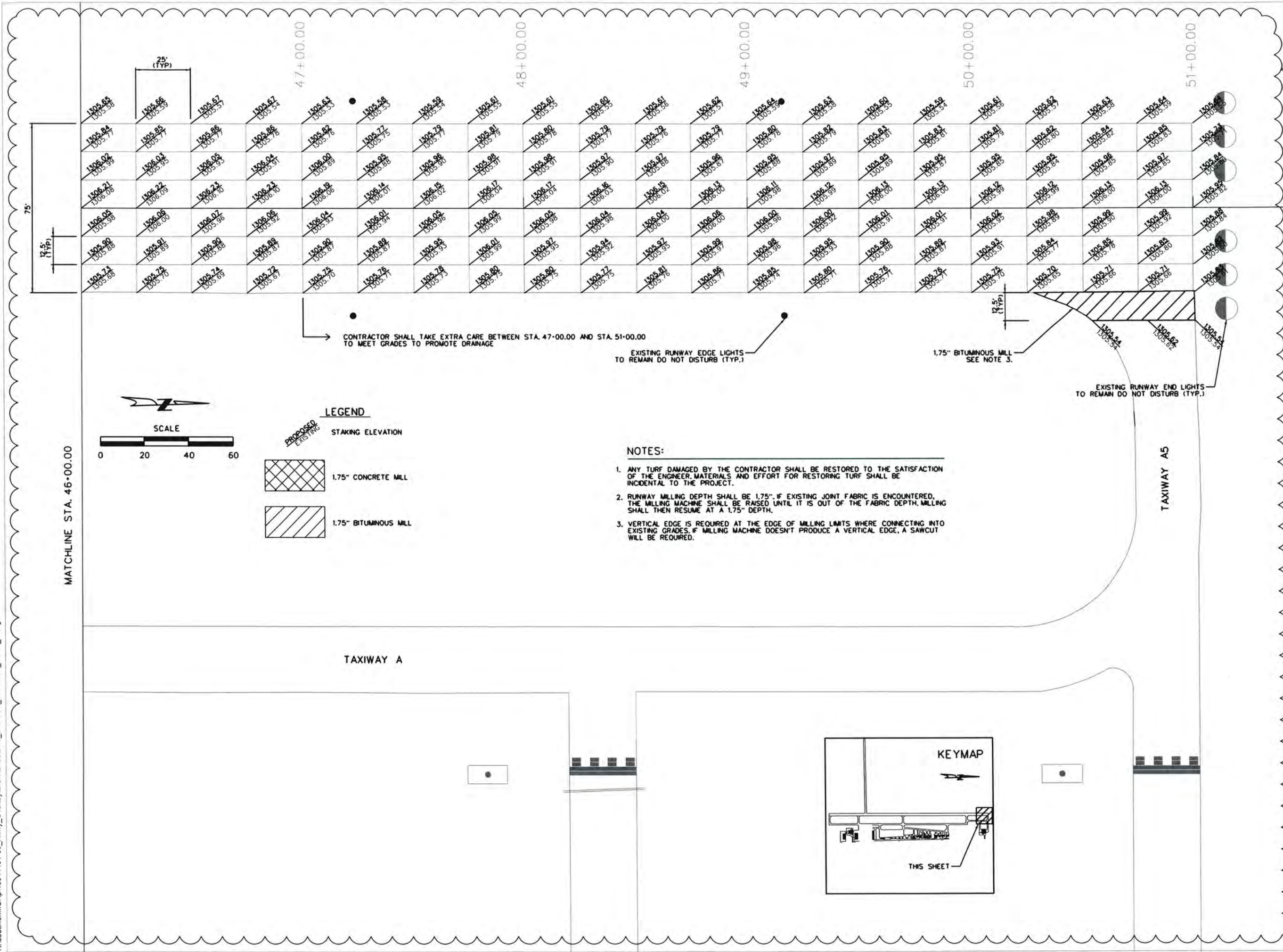
APPROVED BY: TWM

DATE: APRIL 23, 2019

JOB No: 19041101

LAYOUT/STAKING
PLAN SHEET 9 OF 10

SHEET 15 OF 27 SHEETS



REVISIONS		
NUMBER	BY	DATE
1	TWM	5/24/19

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

FLOYD W. JONES LEBANON AIRPORT
2415 SOUTH JEFFERSON AVENUE
LEBANON, MO 65536

RUNWAY 18/36 MILL AND OVERLAY

STATE OF MISSOURI
THOMAS W. MORRIS
NUMBER PE-2014000063
DATE 5-24-19
P.E. REGISTRATION CIVIL ENGINEER

CMT
ONE MEMORIAL DRIVE, SUITE 500
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PROFESSIONAL ENGINEERING 000531

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DATE: APRIL 23, 2019

JOB No: 19041101

LAYOUT/STAKING
PLAN SHEET 10 OF 10

SHEET 16 OF 27 SHEETS