



**US Army Corps
of Engineers**
Fort Worth District

Public Notice

Applicant: Collin County Regional Airport

Permit Application No.: SWF-2009-00312

Date: January 20, 2010

The purpose of this public notice is to inform you of a proposal for work in which you might be interested. It is also to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest. We hope you will participate in this process.

Regulatory Program

Since its early history, the U.S. Army Corps of Engineers has played an important role in the development of the nation's water resources. Originally, this involved construction of harbor fortifications and coastal defenses. Later duties included the improvement of waterways to provide avenues of commerce. An important part of our mission today is the protection of the nation's waterways through the administration of the U.S. Army Corps of Engineers Regulatory Program.

Section 10

The U.S. Army Corps of Engineers is directed by Congress under Section 10 of the Rivers and Harbors of 1899 (33 USC 403) to regulate *all work or structures in or affecting the course, condition or capacity of navigable waters of the United States*. The intent of this law is to protect the navigable capacity of waters important to interstate commerce.

Section 404

The U.S. Army Corps of Engineers is directed by Congress under Section 404 of the Clean Water Act (33 USC 1344) to regulate the *discharge of dredged and fill material into all waters of the United States, including wetlands*. The intent of the law is to protect the nation's waters from the indiscriminate discharge of material capable of causing pollution and to restore and maintain their chemical, physical and biological integrity.

Contact

Name: Eric Jon Dephouse

Phone Number: (817) 886-1820

JOINT PUBLIC NOTICE

U.S. ARMY CORPS OF ENGINEERS, FORT WORTH DISTRICT

AND

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUBJECT: Application for a Department of the Army Permit under Section 404 of the Clean Water Act (CWA) and for water quality certification under Section 401 of the CWA to discharge dredged and fill material into waters of the United States associated with the construction of a replacement runway and relocation of the associated runway lighting system at Collin County Regional Airport located approximately 1.3 miles east of the intersection of North McDonald Street and Industrial Boulevard (FM 546) in McKinney, Collin County, Texas.

APPLICANT: Collin County Regional Airport
Kenneth Wiegand, Executive Director
P.O. Box 517
McKinney, Texas, 75070

APPLICATION NUMBER: SWF-2009-00312

DATE ISSUED: January 20, 2010

LOCATION: Collin County Regional Airport is located at 1500 Industrial Boulevard in McKinney, Collin County, Texas and is approximately 661 acres in size. The project site is bounded by the East Fork of the Trinity River and undeveloped land to the north; undeveloped land, County Road 722 (Enloe Road), and County Road 317 to the east; undeveloped land and a few single-family residences to the south; and a commercial development, Farm-to-Market Road 546 (FM 546), and a few single-family residences to the west (Sheet 1 of 26). The proposed project would be located approximately at latitude 33.1798 and longitude -96.5895. The site is mapped on the Collin County 7.5-minute USGS quadrangle map (Sheet 2 of 26). The site is in USGS Hydrologic Unit 1203.

OTHER AGENCY AUTHORIZATIONS: Section 401 State Water Quality Certification

PROJECT DESCRIPTION: The applicant is proposing to construct a replacement runway within the existing property boundaries of Collin County Regional Airport in McKinney, Texas. The replacement runway would have multiple interrelated actions associated with its construction, such as the relocation of the runway approach lighting system (known as a Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights [MALSR]), construction of an access road associated with the MALSR system, and the construction of multiple storm water detention basins. Site characteristics are shown on Sheets 1 through 9 of 26. Engineering and design specifications are shown on Sheets 10 through 26 of 26.

The purpose of the proposed project is to meet the current Federal Aviation Administration (FAA) runway/taxiway separation distance standard for airport reference code (ARC) D-III aircraft. Current FAA design standards state that 400 feet is the minimum separation distance for the larger business jet aircraft in the ARC D-III classification. The existing runway and parallel taxiway are currently separated by 300 feet. By constructing a replacement runway, Collin County Regional Airport would not only provide an aviation facility that meets the FAA safety design standards, but would also allow the airport to better fulfill its role within the National Plan of Integrated Airport Systems 2005 – 2009 (NPIAS) as a reliever airport. Furthermore, construction of a replacement runway would utilize grants given to Collin County Regional Airport by the FAA for improvements and projects such as this.

A Delineation of Waters of the U.S. report was prepared for the project dated June 2009. The East Fork of the Trinity River runs along the northern property boundary, with a total of three intermittent streams, two ephemeral streams, three stock ponds, a forested wetland, and an emergent wetland located within the property boundary (Sheets 6 through 9 of 26). A total of 4,981 linear feet (LF) of jurisdictional intermittent stream, 667 LF of jurisdictional ephemeral stream, 6.4 acres of emergent wetland, and 1.8 acres of forested wetland are located within the property boundaries of Collin County Regional Airport. None of the three stock ponds located onsite are considered to be jurisdictional because they do not hydrologically connect to any other waters of the U.S. under normal circumstances.

Work within waters of the U.S. associated with the proposed project includes the realignment and straightening of approximately 800 LF (0.1 acres) of an unnamed intermittent stream (Stream A), the fill of approximately 2,177 LF (0.4 acres) of an additional unnamed intermittent stream (Stream C), the fill of approximately 1.8 acres of forested wetland, and the fill of 6.4 acres of emergent wetland. Three jurisdictional streams would not be affected by the proposed project; Stream B, Stream D, and Stream E.

Currently, Stream A originates offsite and enters the northern portion of the property through the western property boundary, and flows south-southeast before turning north and flowing beneath Enloe Road. Stream A emerges from beneath Enloe Road and continues to flow north-northeast before exiting the property through the eastern property boundary. While south of Enloe Road Stream A flows through open, rolling prairie consisting mainly of upland vegetation such as field brome (*Bromus arvensis*), Johnsongrass (*Sorghum halepense*), perennial ryegrass (*Lolium perenne*), giant ragweed (*Ambrosia trifida*), southern dewberry (*Rubus trivialis*), and common hedge parsley (*Torilis arvensis*). Little to no instream cover is present along the portion of Stream A located south of Enloe Road. North of Enloe Road, Stream A flows through a thickly wooded area containing a thick understory of vines, saplings, and herbaceous cover. Vegetation located within this area includes black willow (*Salix nigra*), sugarberry (*Celtis laevigata*), honeylocust (*Gleditsia triacanthos*), field brome (*Bromus arvensis*), Johnsongrass (*Sorghum halepense*), and giant ragweed (*Ambrosia trifida*) (Sheet 7 of 26).

Currently, Stream C originates offsite and enters the central portion of the property through the western property boundary, and flows east beneath the western half of the airport before emerging from a box culvert just east of the existing runway. From here, the stream flows northeast before exiting the property to the east beneath Enloe Road. While onsite, Stream C flows through an open,

rolling prairie consisting mainly of upland vegetation such as field brome (*Bromus arvensis*), Johnsongrass (*Sorghum halepense*), Illinois bundleflower (*Desmanthus illinoensis*), and caley pea (*Lathyrus hirsutus*). Little to no instream cover is present along the entire onsite length of Stream C because of the open prairie habitat through which it flows (Sheet 8 of 26).

The proposed project involves the straightening and realignment of approximately 800 LF of Stream A. The realigned portion of Stream A would pass beneath the proposed runway through four (4) 9-foot by 5-foot box culverts, and would be lined with rock rip rap along the channel bottom to slow velocity and prevent erosion and sedimentation in the downstream areas of Stream A. Additionally, headwall structures would be constructed for stability of both the stream channel and the proposed runway. Any onsite portion of Stream A outside of the aforementioned 800 LF would not be affected by the proposed project. The straightening of Stream A would result in a net loss of roughly 200 LF of intermittent stream.

Two instream stormwater detention basins would be constructed along the current path of Stream C. Stream C would emerge from beneath the western half of the airport through the existing box culvert and would flow into a stormwater detention basin (Pond 2) located between the existing and proposed runway. An outfall located in the northeast corner of Pond 2 would allow water to flow beneath the proposed runway and into a second detention basin (East Pond). Water would exit the East Pond to the east through an outfall structure and flow into the existing channel of Stream C. Stream C would flow for approximately 190 LF before exiting the property through the eastern property boundary. This 190 LF of Stream C, located between the East Pond and the eastern property boundary, would be unaffected by the proposed project. Three additional stormwater detention basins (Pond 1, Pond 3, and Pond 4) would be constructed between the existing and proposed runways. These basins would not be located instream, but instead would be connected to Pond 2 and the East Pond through various outfall structures in order to ensure adequate retention of stormwater during instances of heavy rainfall (Sheets 12 and 17 of 26).

The existing MALSR system and associated access road would be relocated to the east of their current locations. The area where these features would be relocated was determined to be an emergent wetland approximately 6.4 acres in size, and a forested wetland approximately 1.8 acres in size (Sheets 10 and 19 of 26). The relocation of the MALSR system and associated access road would result in the permanent fill of approximately 0.3 acres of emergent wetland; however, the applicant wishes to fill the entirety of these wetland areas considering that these areas would be located directly beneath the flight path of all aircrafts utilizing the proposed runway. The presence of these wetlands directly beneath the flight path drastically increases the potential for hazardous bird strikes and is considered to be a major safety hazard to all aircrafts utilizing the proposed runway.

The proposed project would create permanent impacts to waters of the U.S. within the project area. Permanent impacts resulting from the proposed alternative would equal approximately 2,977 LF (0.5 acres) of intermittent stream, 6.4 acres of emergent wetland, and 1.8 acres of forested wetland. A summary of impacts is provided below in Table 1.

Table 1: Summary of Impact to Waters of the U.S. for the Collin County Regional Airport, McKinney, Collin County, Texas

Name of Impacted Jurisdictional Water	Type of Jurisdictional Water	Type of Impact	Length (linear feet)	Area (acres)
Stream Impacts				
Unnamed Stream (Stream A)	Intermittent Stream	Permanent; Stream straightening and realignment	800	0.1
Unnamed Stream (Stream C)	Intermittent Stream	Permanent; Stream realignment including construction of replacement runway and two instream stormwater detention basins	2,177	0.4
Wetland Impacts				
Unnamed	Forested Wetland	Permanent; located directly beneath the flight path and poses a significant safety hazard	---	1.8
Unnamed	Emergent Wetland	Permanent; construction of MALSRS system and associated access road; located directly beneath the flight path and poses a significant safety hazard.	---	6.4
Total impact to intermittent stream			2,977	0.5
Total permanent impact to forested wetland			---	1.8
Total permanent impact to emergent wetland			---	6.4
Total impacts to waters of the U.S.			--	8.7

ALTERNATIVE SITE LOCATIONS AND ALTERNATIVE LAYOUTS: The applicant considered various reconfigured design alternatives during the project planning process. Below is an analysis of the alternatives considered for the proposed project.

Alternative 1-Proposed Alternative: The proposed alternative is to construct the project as described previously in the *Project Description* and mitigate offsite for the unavoidable impacts to waters of the U.S. The applicant would purchase 48.5 credits from the Trinity River Mitigation Bank (TRMB) in order to offset unavoidable adverse impacts to 8.7 acres of waters of the U.S. TRMB primary service area includes the area of the proposed project and would replace aquatic functions lost due to the project within the Trinity River Hydrologic Unit. In this alternative, the jurisdictional intermittent streams and wetland areas on the project site would be permanently impacted, but would be replaced by higher quality aquatic habitat that would be maintained in perpetuity.

Alternative 2 - No Loss of Waters of the U.S. (“No Action”): This project could not be constructed and the needs of this project could not be met without affecting waters of the U.S. This alternative could be considered as the “No Action” alternative as it would not be possible to proceed with the proposed project without impacting waters of the U.S. Additionally, this alternative was not selected because all investments in planning and engineering would be lost while the purpose and needs of this project would not be met.

Alternative 3 - Mitigate Onsite: For an onsite mitigation stream to function properly, trees and shrubs would be required in an adjacent riparian area to moderate water temperature and provide habitat. This alternative was not selected because such a mitigation area near an active runway would present a significant safety hazard to the aircraft from the birds and mammals attracted to the mitigation area. Aircraft collisions with birds and other wildlife are a serious economic and public safety problem. The FAA recommends, in its Advisory Circular 150/5200-33B, that a separation distance of 5 statute miles between the farthest edge of the airport's air operations area and a hazardous wildlife attractant. Furthermore, the FAA recommends that wetland mitigation projects that may attract hazardous wildlife be sited outside the aforementioned separation distance, unless the wetlands provide unique functions that must remain onsite.

Alternative 4 - Relocate Existing Runway 100 Feet East of the Current Location: Currently, the existing runway is 100 feet less than the minimum FAA runway/taxiway separation distance standard for ARC D-III aircraft. Originally, consideration was given to move the existing runway roughly 100 feet to the east; however, this alternative would require construction activities to occur within the existing runway safety area (RSA). FAA construction guidelines would require a prolonged closure of the airport while construction activities are taking place within the RSA, which would cause significant operational and economical impacts to both the airport and the airport's fixed base operators. Many of the environmental impacts in the proposed alternative would also occur in this alternative.

Alternative 5 – Relocate Existing Taxiway Roughly 100 Feet West of the Current Location: Consideration was given to moving the existing parallel taxiway roughly 100 feet to the west; however, this alternative would cause approximately 12 acres of the existing apron to become unusable due to the taxiway safety area and object free area requirements. The airport's existing apron is undersized, and this would cause six T-hangars and the entire fixed base operator terminal and administrative buildings to become obstructions to the airports Part 77 surface.

The applicant believes they have taken all practicable measures to avoid and minimize impacts to waters of the U.S. The proposed project seeks to avoid and minimize impacts to onsite and offsite ecological receptors to the maximum extent possible. Onsite impacts would be minimized by limiting the disturbance to only the areas necessary to ensure a safe and efficient project, and by completing construction as quickly and efficiently as possible. Construction activities associated with this project would be performed under the Texas Commission on Environmental Quality (TCEQ) TXR 150000 Storm Water General Permit for Construction Activities and a Storm Water Pollution Prevention Plan in order to minimize offsite impacts. As directed by that Plan, best management practices (BMPs) would be employed to prevent the introduction of contaminants, including particulates, into the streams.

As discussed above, the applicant proposes to purchase credits from the TRMB. The mitigation bank provides opportunities to enhance streams, wetlands, and open water within the Trinity River watershed through the purchase of credits for temporary or permanent adverse impacts in waters of the U.S. Specifically, the TRMB enhances and preserves 1,380 acres of bottomland forested wetlands and other floodplain buffer areas and streams along the West Fork of the Trinity River in

east Tarrant County. The applicant has discussed the requirements with the mitigation bank, and based on the requirements of the bank pursuant to their Banking Instrument, the applicant proposes to purchase a total of 23.9 intermittent stream credits and 24.6 medium quality wetland credits from the bank. That purchase is based on permanent impacts on 2,977 LF of intermittent stream, 1.8 acres of forested wetland, and 6.4 acres of emergent wetland. A ratio of 0.008 is used for the intermittent stream, and a ratio of 3 is used for the forested and emergent wetlands to accomplish the required buffer ($2,977 \times 0.008 = 23.9$ intermittent stream credits; $8.2 \times 3 = 24.6$ wetland credits). The jurisdictional areas on the project site would be permanently impacted but would be replaced by higher quality habitat that would be maintained in perpetuity. The applicant would provide proof of purchase from the mitigation bank prior to any impacts on jurisdictional waters or so otherwise required by the Individual Permit authorization from the USACE.

PUBLIC INTEREST REVIEW FACTORS: This application will be reviewed in accordance with 33 CFR 320-331, the Regulatory Program of the U. S. Army Corps of Engineers (USACE), and other pertinent laws, regulations, and executive orders. Our evaluation will also follow the guidelines published by the U. S. Environmental Protection Agency pursuant to Section 404(b)(1) of the CWA. The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impact, of the proposed activity on the public interest. That decision will reflect the national concerns for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including its cumulative effects. Among the factors addressed are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

The USACE is soliciting comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the USACE in determining whether to issue; issue with modifications or conditions; or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

STATE WATER QUALITY CERTIFICATION: This project would result in a direct impact of greater than three acres of waters of the state or 1,500 linear feet of streams (or a combination of the two is above the threshold), and as such would not fulfill Tier I criteria for the project. Therefore, Texas Commission on Environmental Quality (TCEQ) certification is required. Concurrent with USACE processing of this Department of the Army application, the TCEQ is reviewing this application under Section 401 of the Clean Water Act, and Title 30, Texas Administrative Code Section 279.1-13 to determine if the work would comply with State water quality standards. By

virtue of an agreement between the USACE and the TCEQ, this public notice is also issued for the purpose of advising all known interested persons that there is pending before the TCEQ a decision on water quality certification under such act. Any comments concerning this application may be submitted to the Texas Commission on Environmental Quality, 401 Coordinator, MSC-150, P.O. Box 13087, Austin, Texas 78711-3087. The public comment period extends 30 days from the date of publication of this notice. A copy of the public notice with a description of the work is made available for review in the TCEQ's Austin Office. The complete application may be reviewed in the USACE's office. The TCEQ may conduct a public meeting to consider all comments concerning water quality if requested in writing. A request for a public meeting must contain the following information: the name, mailing address, application number, or other recognizable reference to the application; a brief description of the interest of the requestor, or of persons represented by the requestor; and a brief description of how the application, if granted, would adversely affect such interest.

ENDANGERED AND THREATENED SPECIES: The USACE has reviewed the U.S. Fish and Wildlife Service's latest published version of endangered and threatened species to determine if any may occur in the project area. The proposed project would be located in Collin County, where the bald eagle (*Haliaeetus leucocephalus*) and whooping crane (*Grus americana*) are known to occur or may occur as migrants. The bald eagle has been delisted and is being monitored for five years and the whooping crane is listed as an endangered species. Our initial review indicates that the proposed work would have no effect on federally listed endangered or threatened species.

NATIONAL REGISTER OF HISTORIC PLACES: The USACE has reviewed the latest complete published version of the National Register of Historic Places (NRHP) and found no listed properties to be in the project area. However, the applicant conducted a cultural resources evaluation for the project area and concluded that two archeological sites (41COL175 and 41COL176) were identified within the property boundaries of Collin County Regional Airport. Site 41COL176 is a historic period site dating from the early nineteenth century to the late twentieth century. The review of historic aerial photographs and examination of the archeological context of the site indicates that the contextual integrity of the site has been destroyed. Therefore, site 41COL176 is ineligible for inclusion in the NRHP. Site 41COL175 is a prehistoric occupation, possibly dating back to the Late Archaic period. Although this site has been impacted by plowing, the potential for features such as hearths, storage pits, or post molds below the plow zone is presently unknown. Therefore, the eligibility of the site for inclusion in the NRHP or for designation as a State Archaeological Landmark is unknown. Site 41COL175 would not be affected by the proposed project, and the area would be avoided to the maximum extent possible until further study can be performed (Sheet 5 of 26).

FLOODPLAIN MANAGEMENT: The USACE is sending a copy of this public notice to the local floodplain administrator. In accordance with 44 CFR part 60 (Flood Plain Management Regulations Criteria for Land Management and Use), the floodplain administrators of participating communities are required to review all proposed development to determine if a floodplain development permit is required and maintain records of such review.

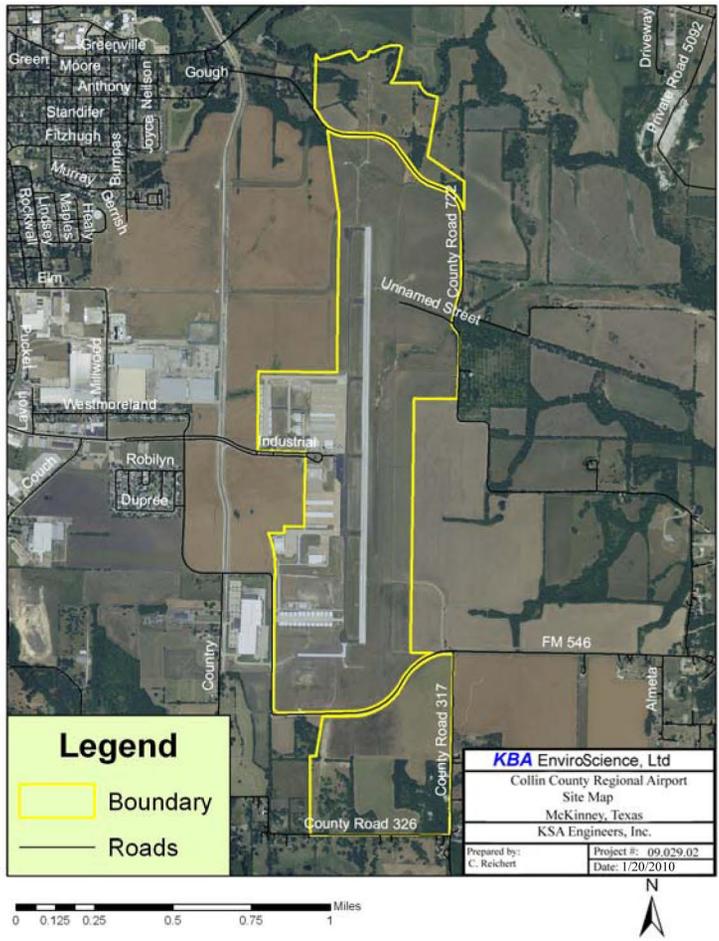
SOLICITATION OF COMMENTS: The public notice is being distributed to all known interested persons in order to assist in developing facts upon which a decision by the USACE may be based.

For accuracy and completeness of the record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition.

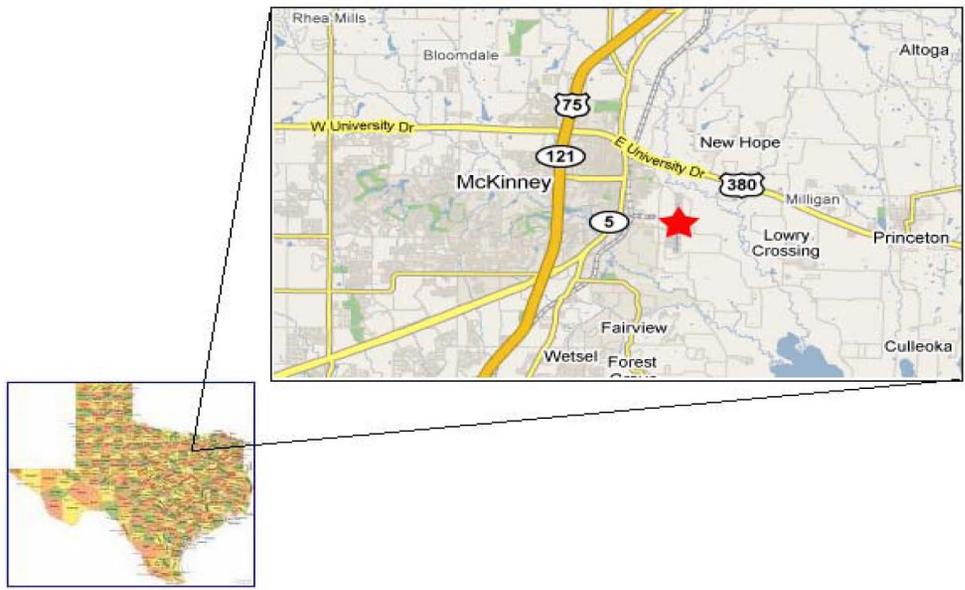
PUBLIC HEARING: Prior to the close of the comment period any person may make a written request for a public hearing setting forth the particular reasons for the request. The District Engineer would determine whether the issues raised are substantial and should be considered in his permit decision. If a public hearing is warranted, all known interested persons would be notified of the time, date, and location.

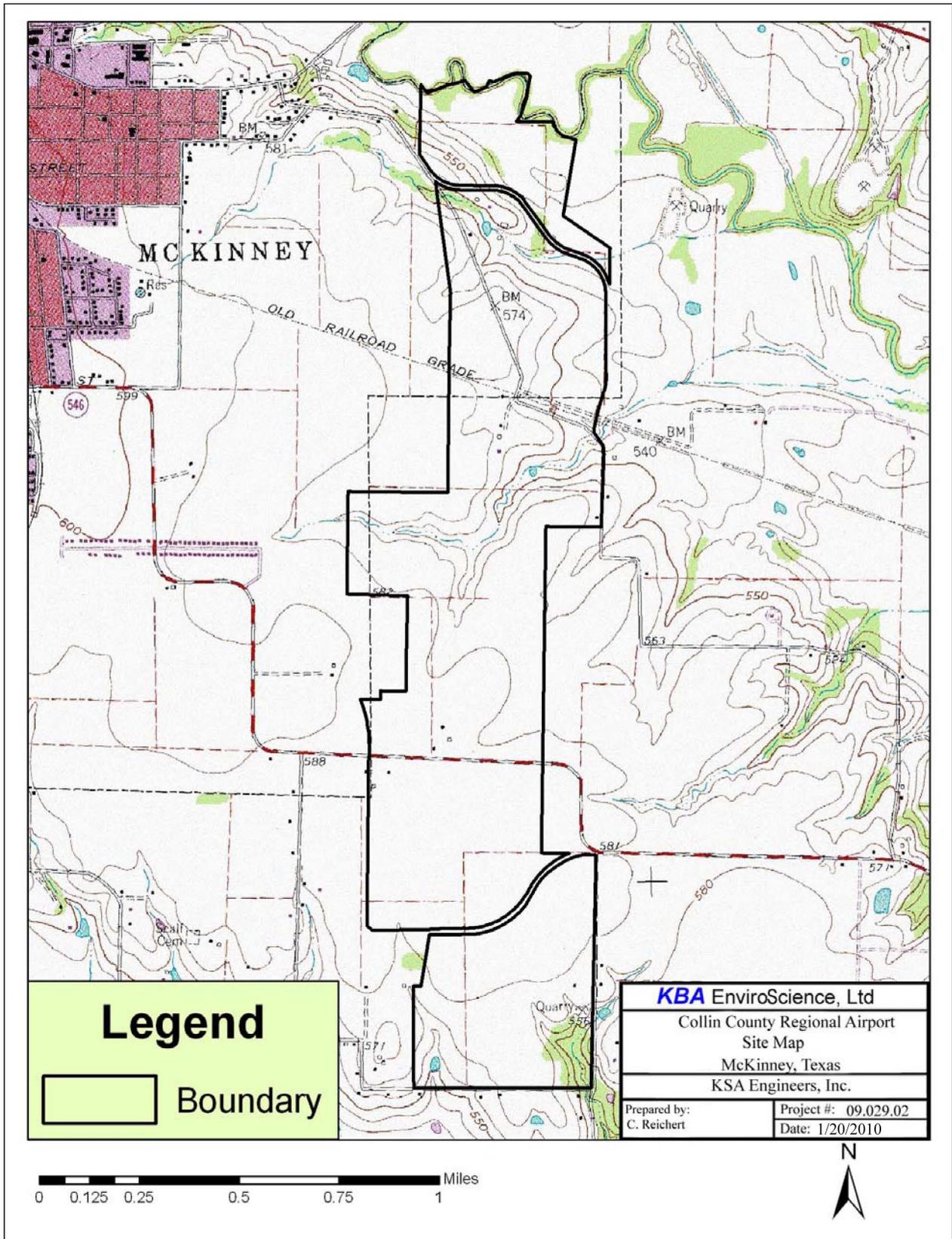
CLOSE OF COMMENT PERIOD: All comments pertaining to this Public Notice must reach this office on or before February 19, 2010, which is the close of the comment period. Extensions of the comment period may be granted for valid reasons provided a written request is received by the limiting date. If no comments are received by that date, it will be considered that there are no objections. Comments and requests for additional information should be submitted to Mr. Eric Dephouse; Regulatory Branch, CESWF-PER-R; U. S. Army Corps of Engineers; Post Office Box 17300; Fort Worth, Texas 76102-0300. You may visit the Regulatory Branch in Room 3A37 of the Federal Building at 819 Taylor Street in Fort Worth between 8:00 A.M. and 3:30 P.M., Monday through Friday. Telephone inquiries should be directed to (817) 886-1820. Please note that names and addresses of those who submit comments in response to this public notice may be made publicly available.

DISTRICT ENGINEER
FORT WORTH DISTRICT
CORPS OF ENGINEERS

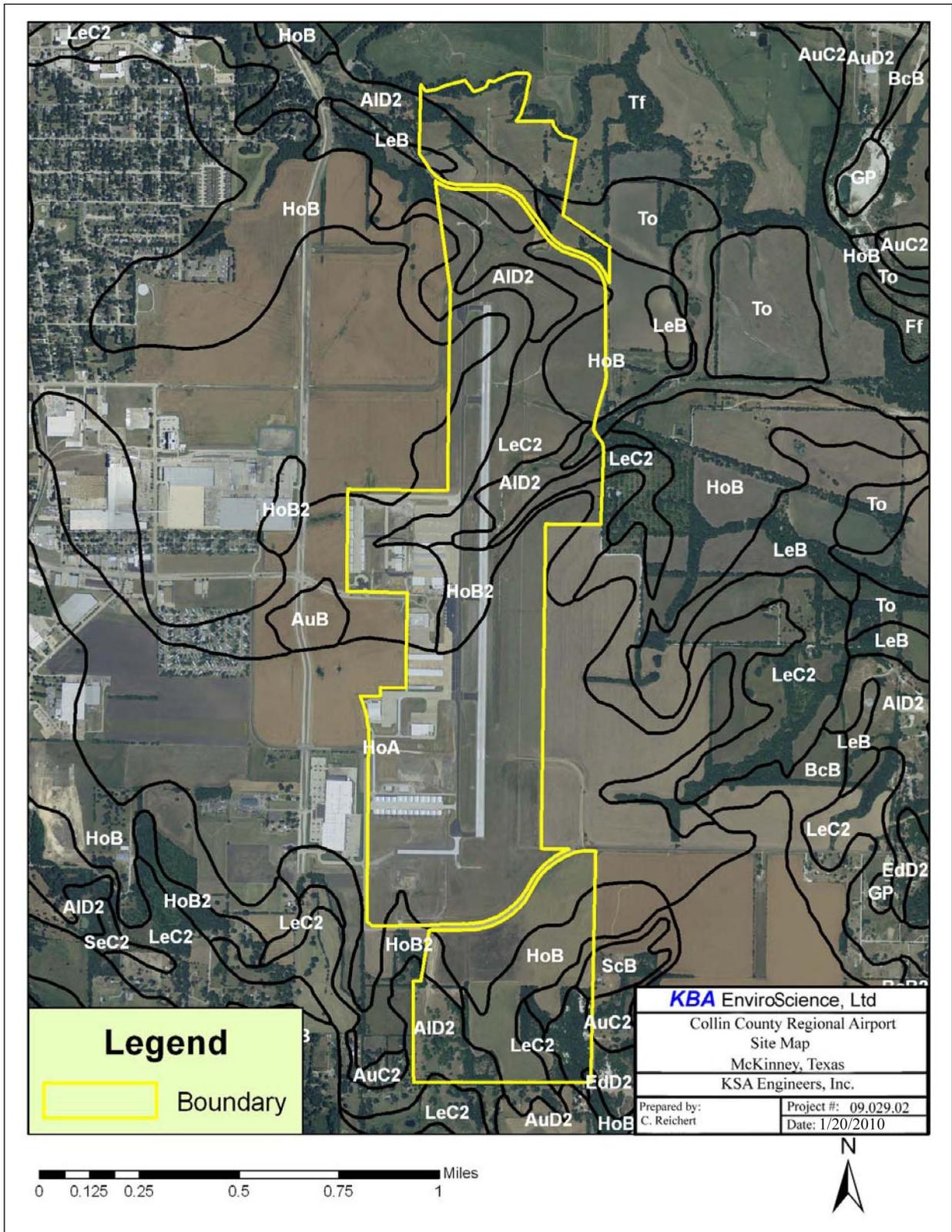


Sheet 1: Site Location Map for the Collin County Regional Airport in McKinney, Collin County, Texas.

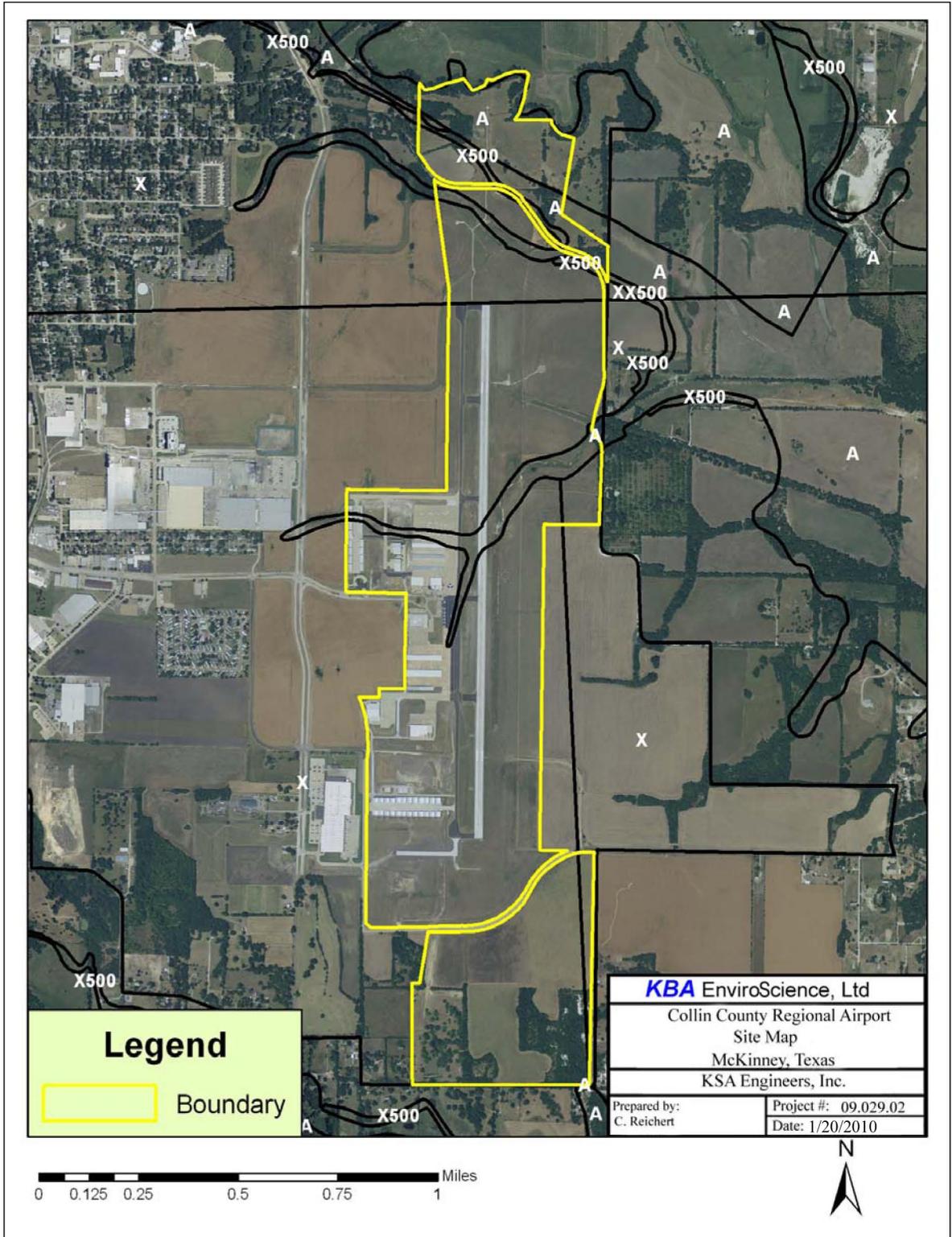




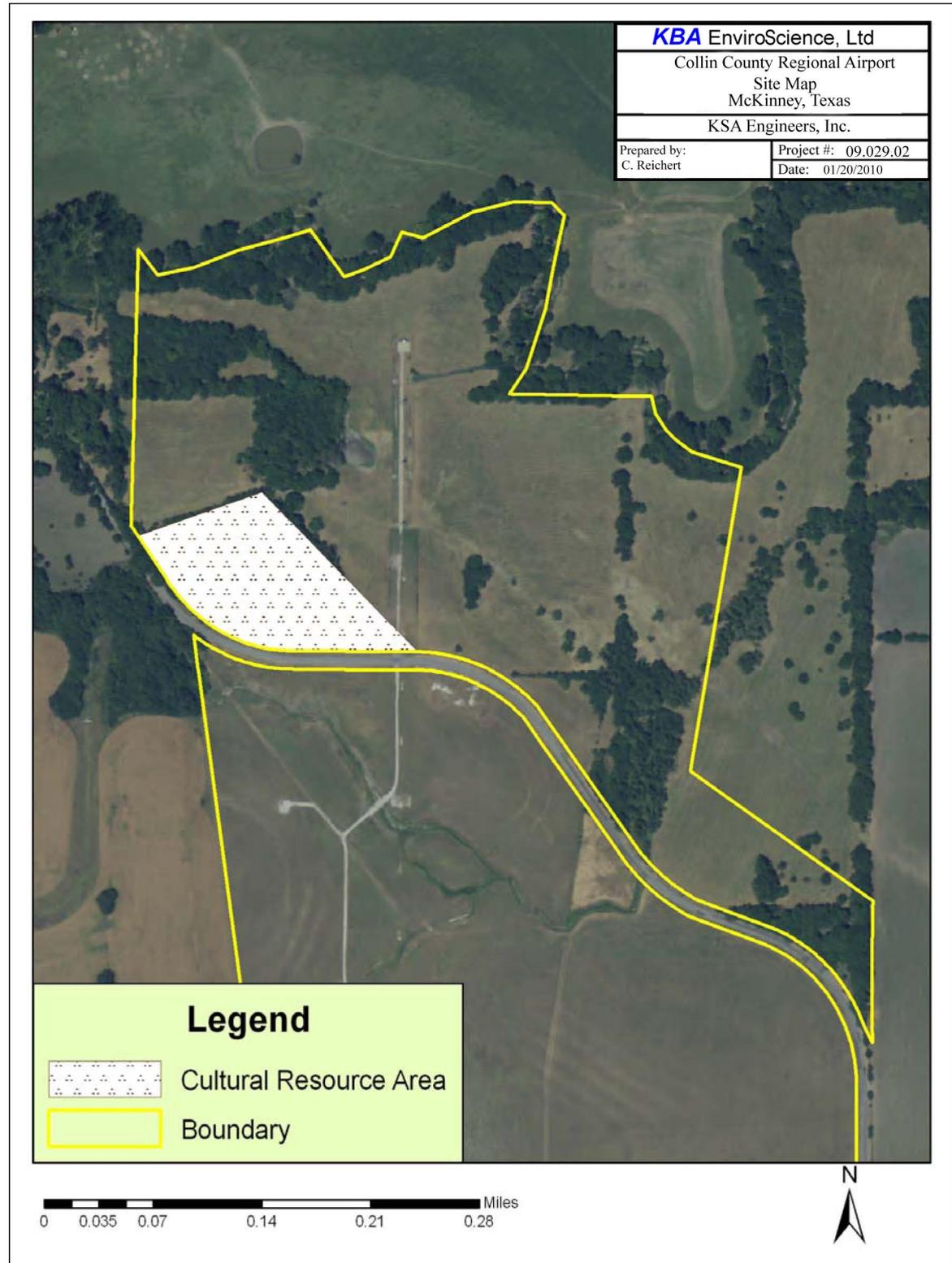
Sheet 2: USGS Topographic Map (Collin County Mosaic, Texas, NRCS 2009) for the Collin County Regional Airport in McKinney, Collin County, Texas.



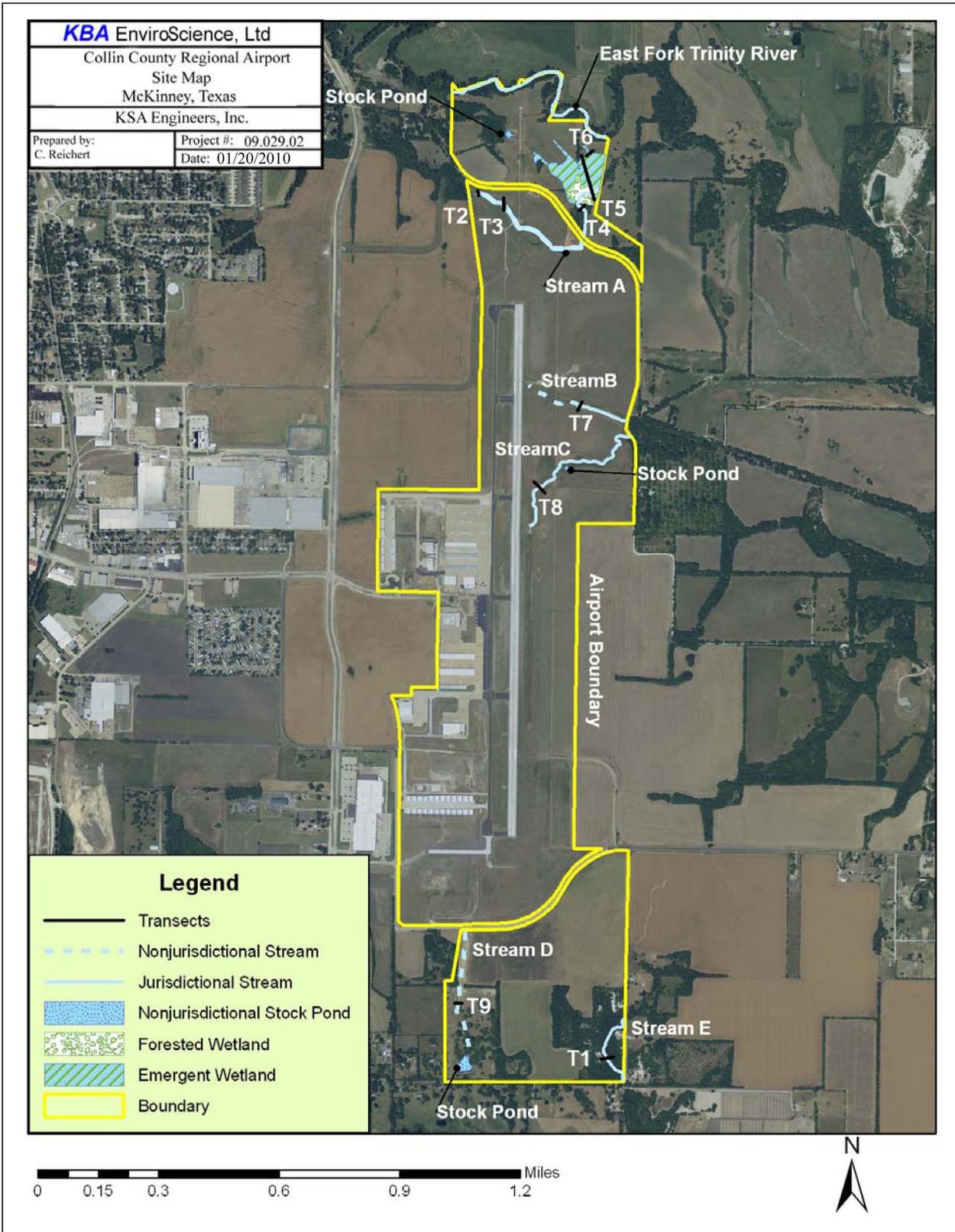
Sheet 3: USDA Soils Map (Collin County, Texas, NRCS 2009) for the Collin County Regional Airport in McKinney, Collin County, Texas.



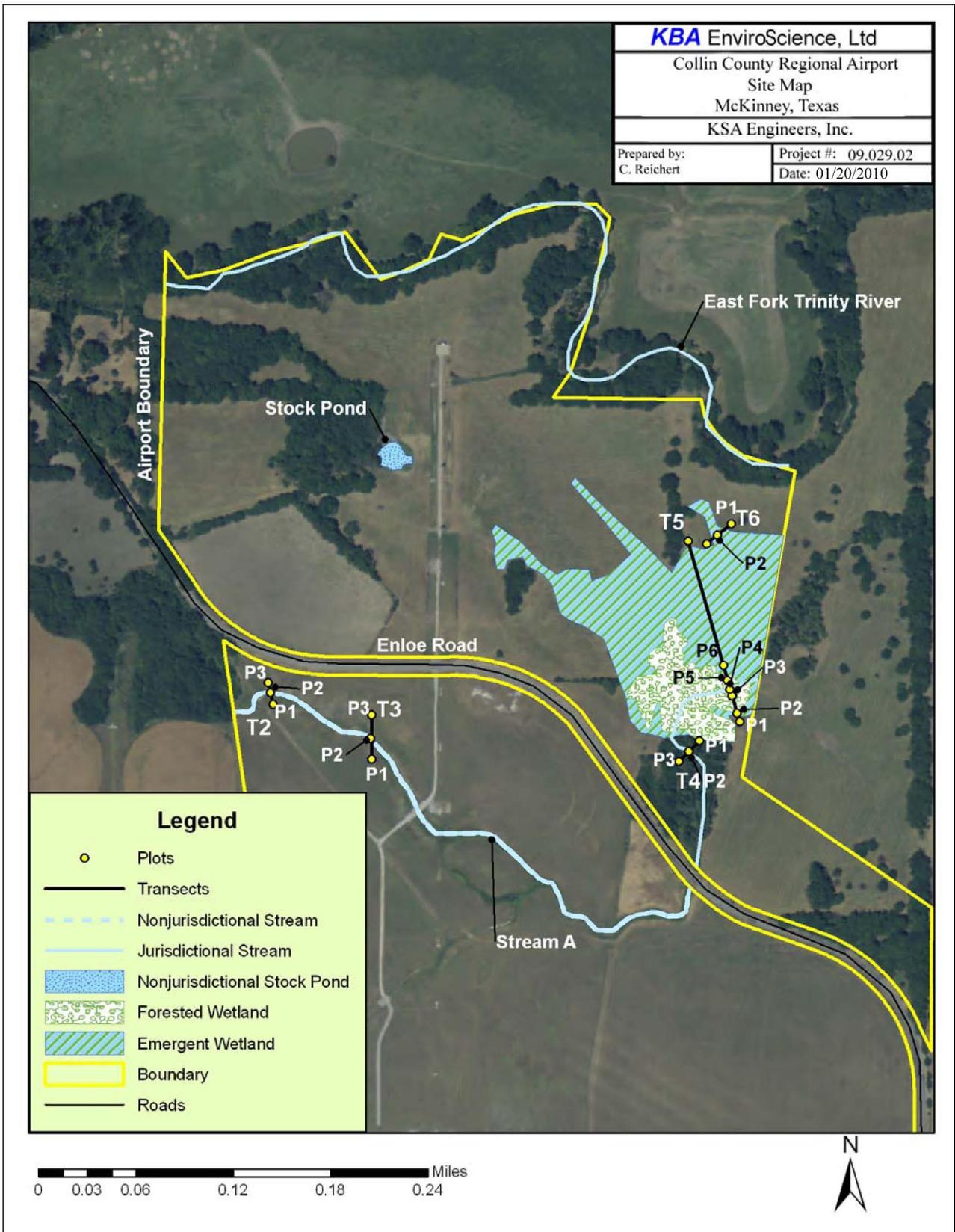
Sheet 4: Federal Emergency Management Agency (FEMA) Q3 Flood Insurance Rate Map for the Collin County Regional Airport in McKinney, Collin County, Texas.



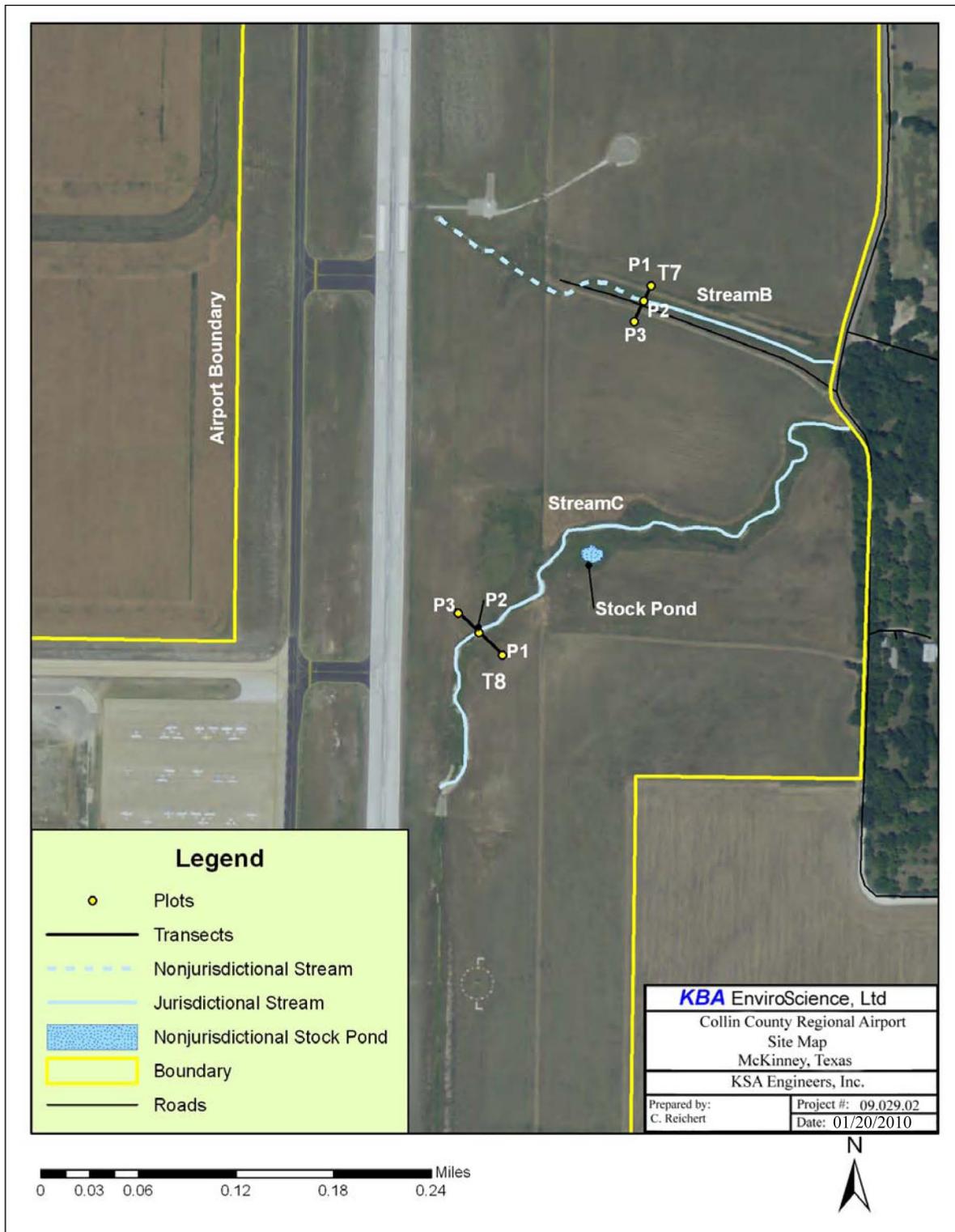
Sheet 5: Cultural Resource Area Potentially Eligible for Listing on the National Register of Historical Places at Collin County Regional Airport in McKinney, Collin County, Texas



Sheet 6: Waters of the U.S. and Delineation Transects for the Collin County Regional Airport in McKinney, Collin County, Texas.



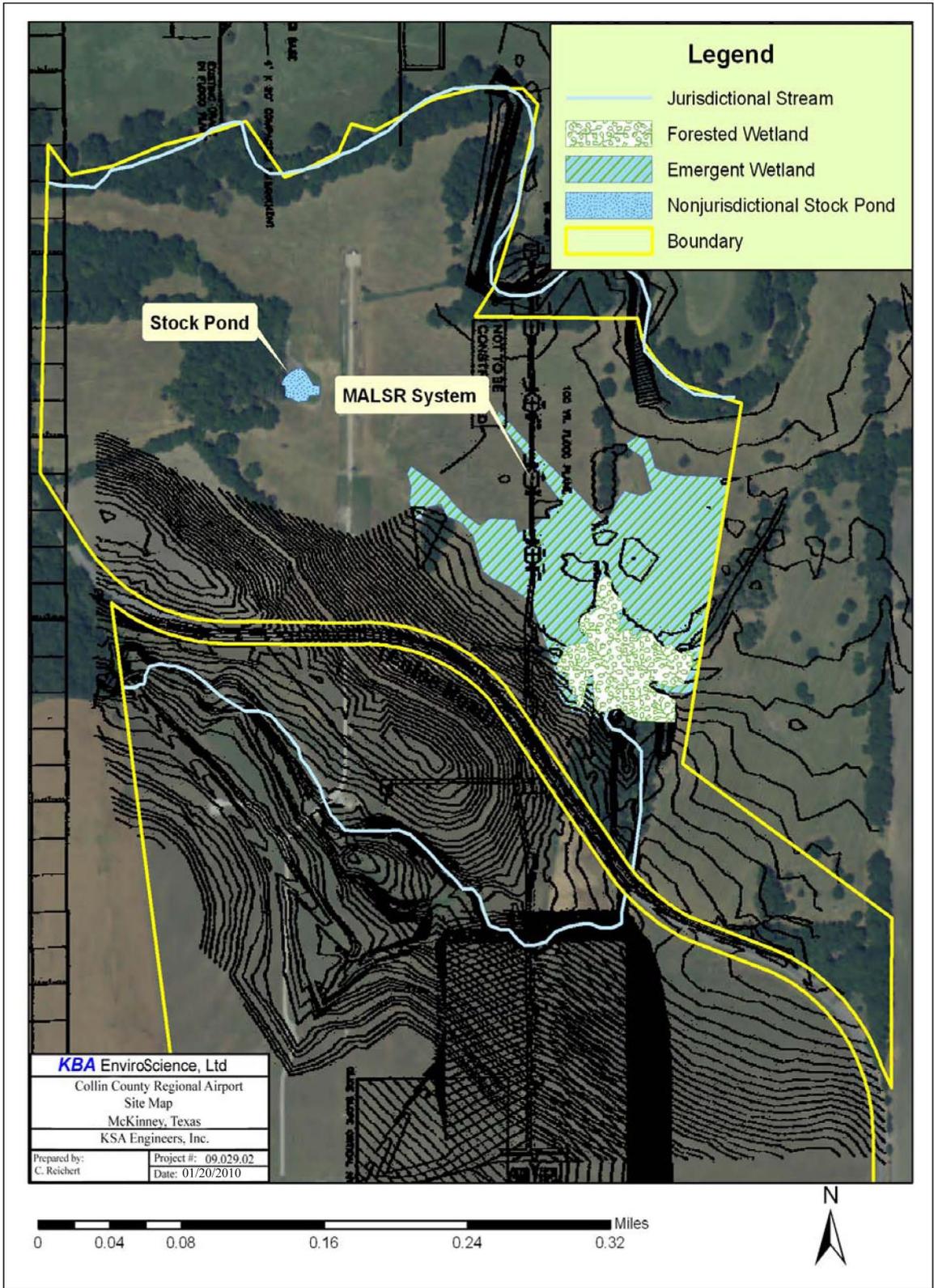
Sheet 7: Waters of the U.S. and Delineation Transects Located in the Northern Portion of the Collin County Regional Airport in McKinney, Collin County, Texas.



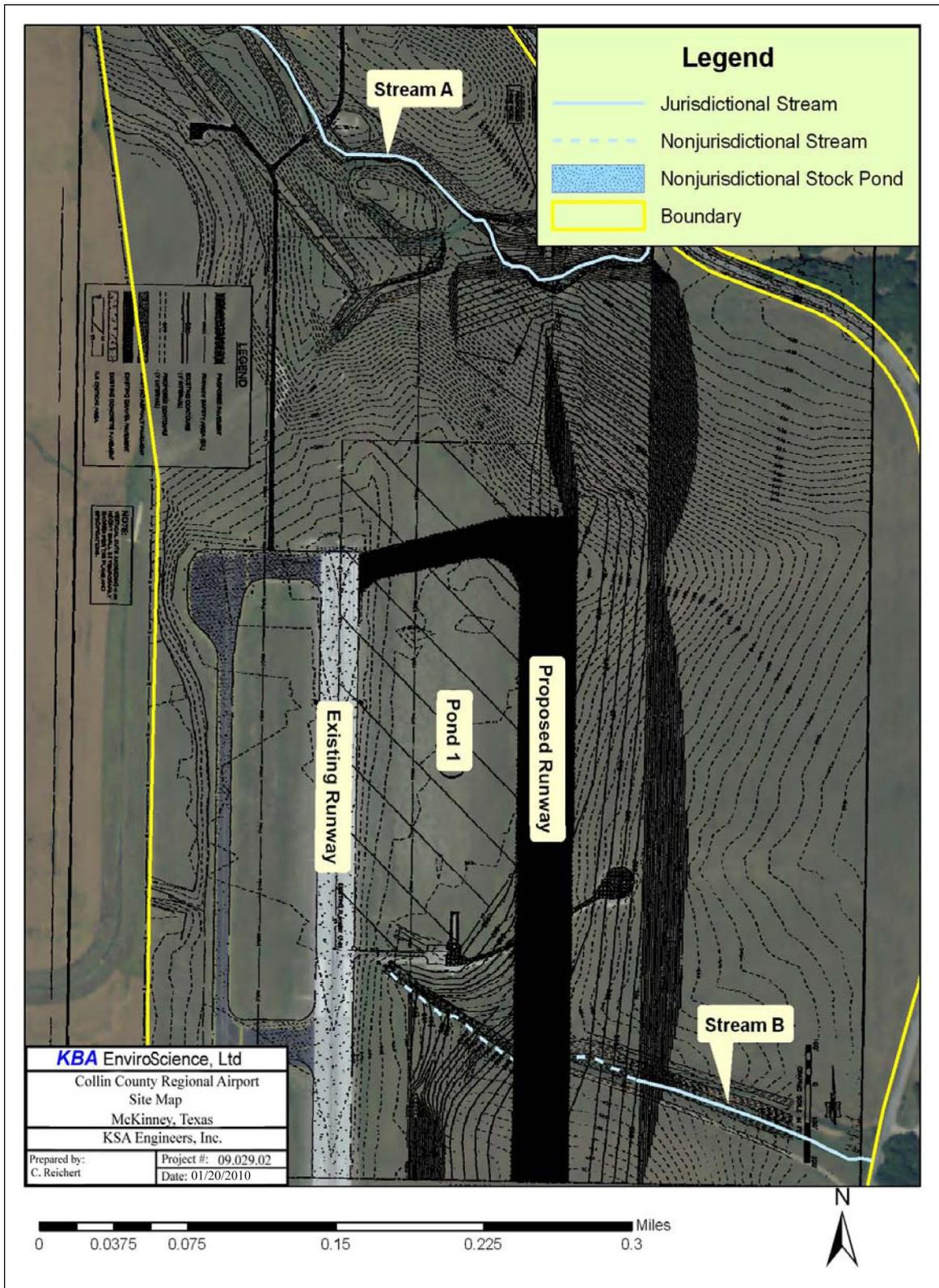
Sheet 8: Waters of the U.S. and Delineation Transects Located in the Central Portion of the Collin County Regional Airport in McKinney, Collin County, Texas.



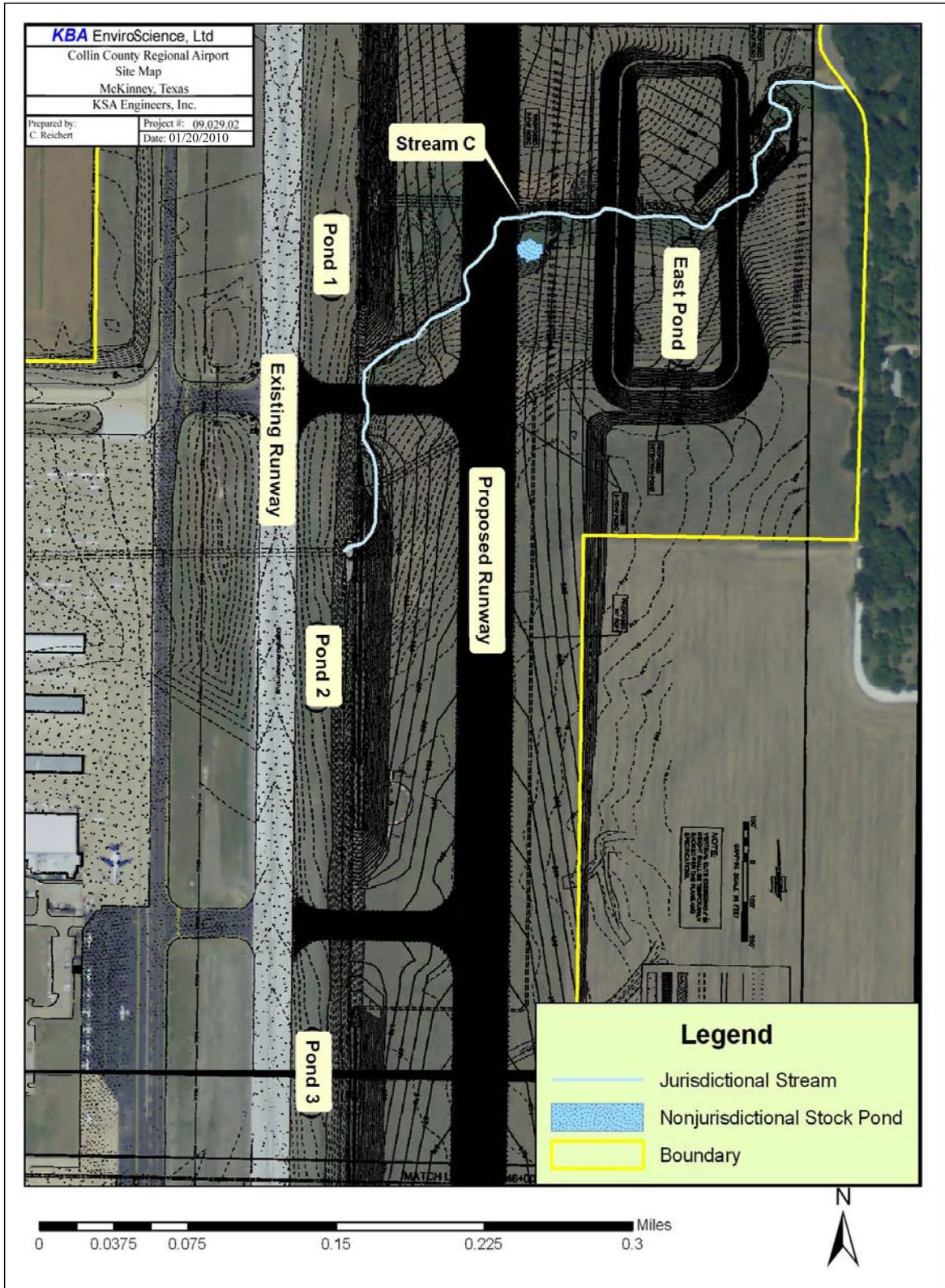
Sheet 9: Waters of the U.S. and Delineation Transects Located in the Southern Portion of the Collin County Regional Airport in McKinney, Collin County, Texas.



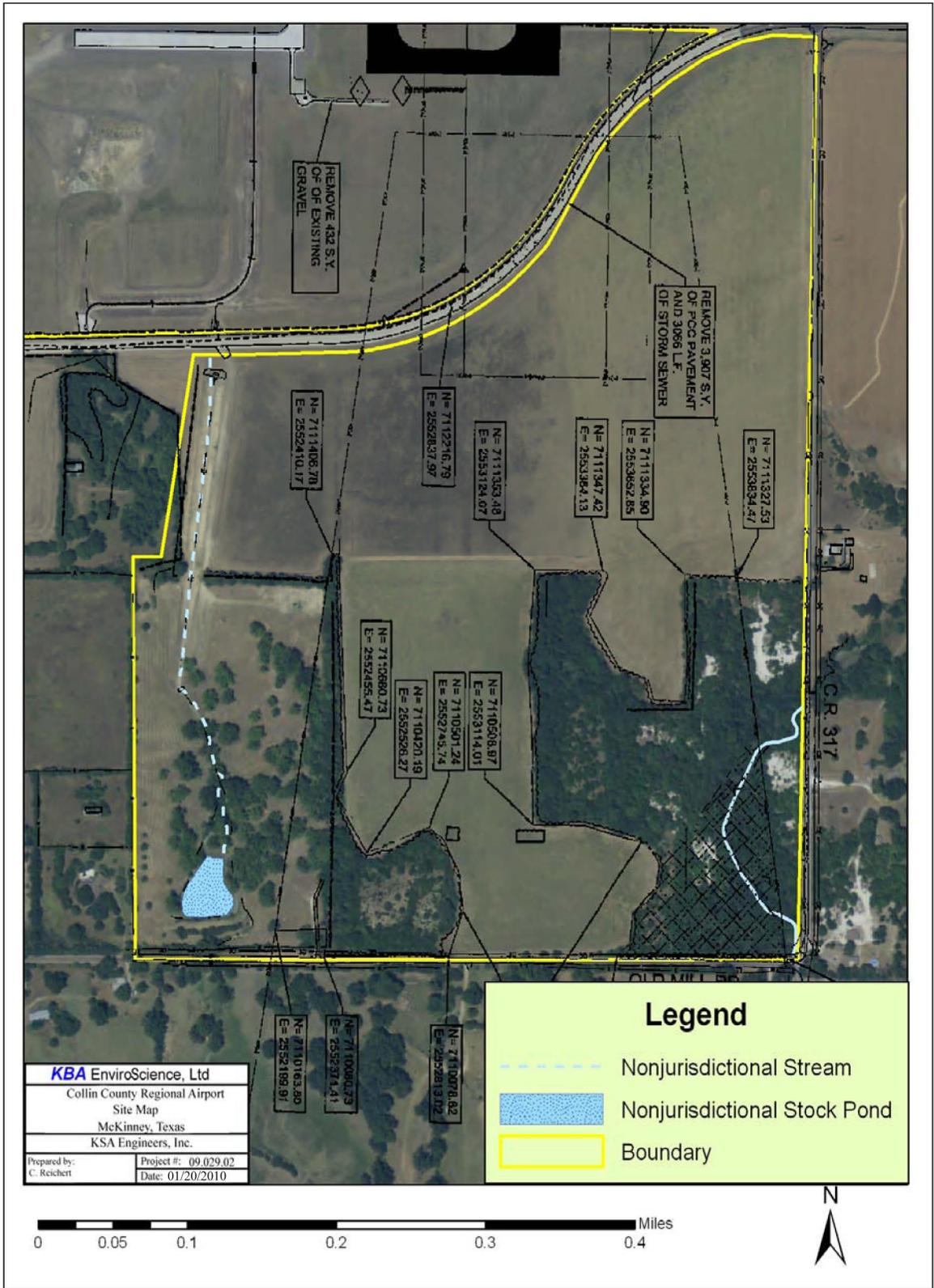
Sheet 10: Waters of the U.S. and Grading Plan for the Northern Portion of the Collin County Regional Airport in McKinney, Collin County, Texas.



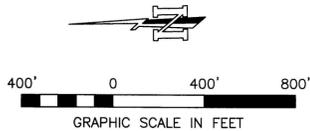
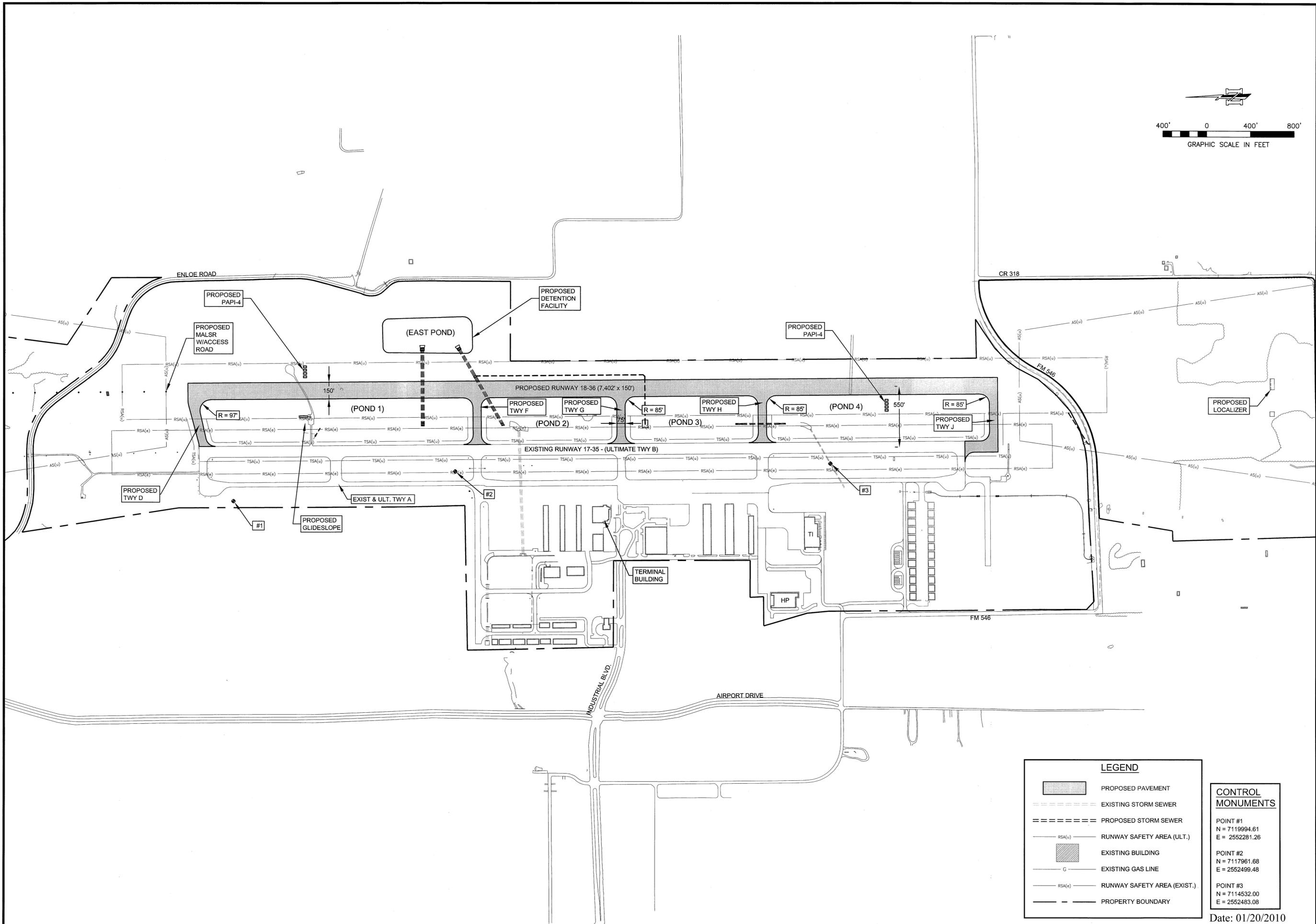
Sheet 11: Waters of the U.S. and Grading Plan for the North-Central Portion of the Collin County Regional Airport in McKinney, Collin County, Texas.



Sheet 12: Waters of the U.S. and Grading Plan for the Central Portion of the Collin County Regional Airport in McKinney, Collin County, Texas.



Sheet 14: Waters of the U.S. and Grading Plan for the Southern Portion of the Collin County Regional Airport in McKinney, Collin County, Texas.



VERY SCALE	N/A
HORIZ. SCALE	1"=200'
PLOT SCALE	1:1
DRAWING NAME	PLAN-PROJ.LAY
MARK	
REVISION	
DATE	

**PROJECT LAYOUT AND
DIMENSION CONTROL**

**COLLIN COUNTY
REGIONAL AIRPORT
REPLACEMENT RUNWAY
TXDOT CSJ No. 0818MCKNY**

DRAWN BY:	J.D.B.
DESIGNED BY:	K.A.S.
LATEST REVISION:	12/23/2008
KSA JOB NO.:	MC-012

8875 Synergy Dr.
McKinney, Texas 75070
P. 972.548.4250
www.ksaeng.com

Austin Longview Lufkin McKinney Sugar Land Tyler

This document is released for the purpose of interim review under the authority of Steve M. Creamer, P.E., 90382, on December 23, 2008. It is not to be used for construction, bidding, or permit purposes.

SEAL:	
SHEET NO.	15
OF	26

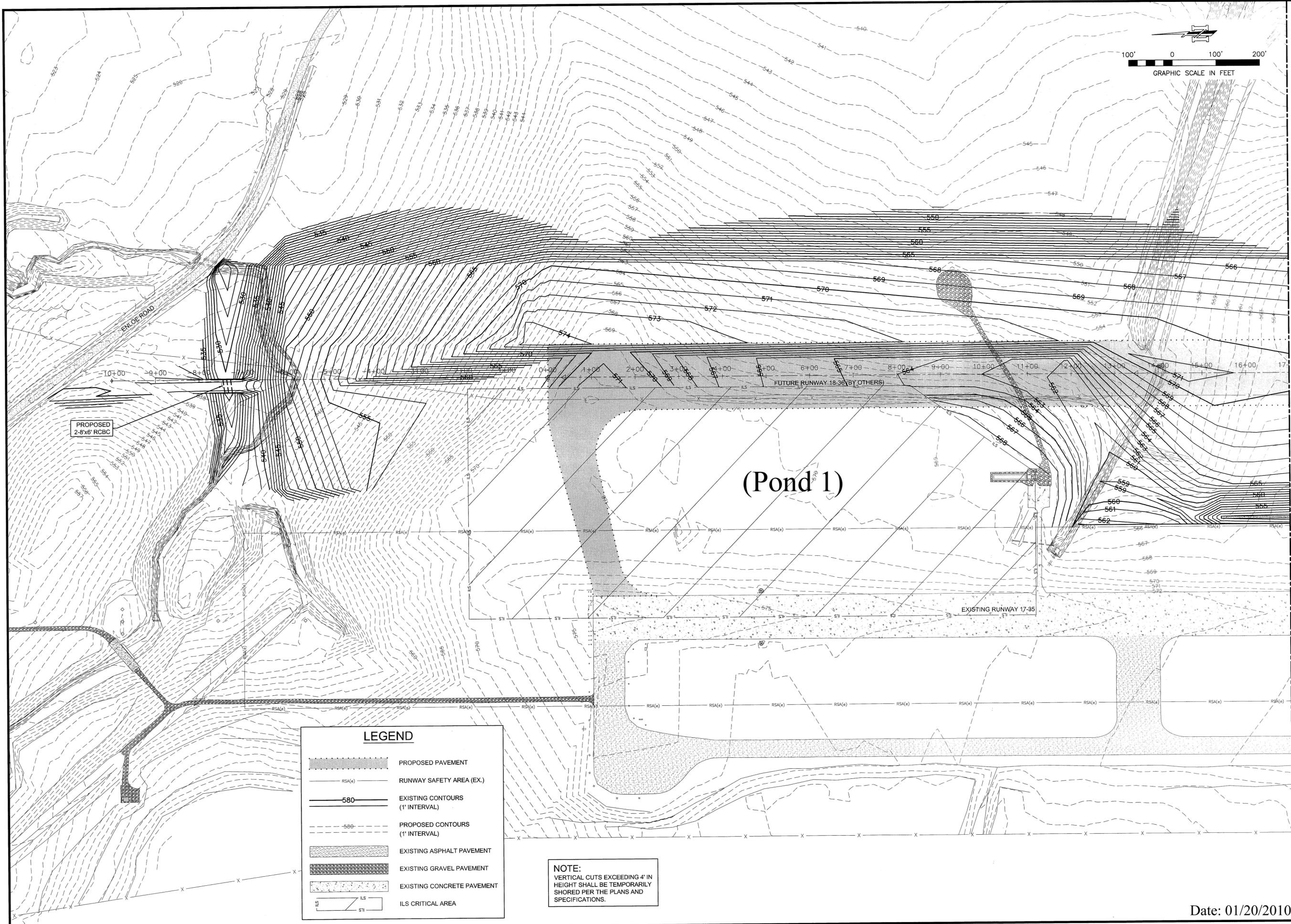
LEGEND

	PROPOSED PAVEMENT
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
	RUNWAY SAFETY AREA (ULT.)
	EXISTING BUILDING
	EXISTING GAS LINE
	RUNWAY SAFETY AREA (EXIST.)
	PROPERTY BOUNDARY

CONTROL MONUMENTS

POINT #1	N = 7119994.61 E = 2552281.26
POINT #2	N = 7117961.68 E = 2552499.48
POINT #3	N = 7114532.00 E = 2552483.08

Date: 01/20/2010



MATCH LINE ~ STA. 17+00

LEGEND	
	PROPOSED PAVEMENT
	RSA(e) RUNWAY SAFETY AREA (EX.)
	EXISTING CONTOURS (1' INTERVAL)
	PROPOSED CONTOURS (1' INTERVAL)
	EXISTING ASPHALT PAVEMENT
	EXISTING GRAVEL PAVEMENT
	EXISTING CONCRETE PAVEMENT
	ILS CRITICAL AREA

NOTE:
VERTICAL CUTS EXCEEDING 4' IN HEIGHT SHALL BE TEMPORARILY SHORED PER THE PLANS AND SPECIFICATIONS.

VERT. SCALE	N/A
HORIZ. SCALE	1" = 100'
PLOT SCALE	1:1
DRAWING NAME	PLAN-GRDS
MARK	
REVISION	
DATE	

**COLLIN COUNTY
REGIONAL AIRPORT
REPLACEMENT RUNWAY
GRADING AND DRAINAGE**

GRADING PLAN I
STA. -10+00 TO STA. 17+00

PROJECT NAME
MK-012

DRAWN BY:	JDB
DESIGNED BY:	KAS
LATEST REVISION:	6/7/2009
KSA JOB NO.:	11-012

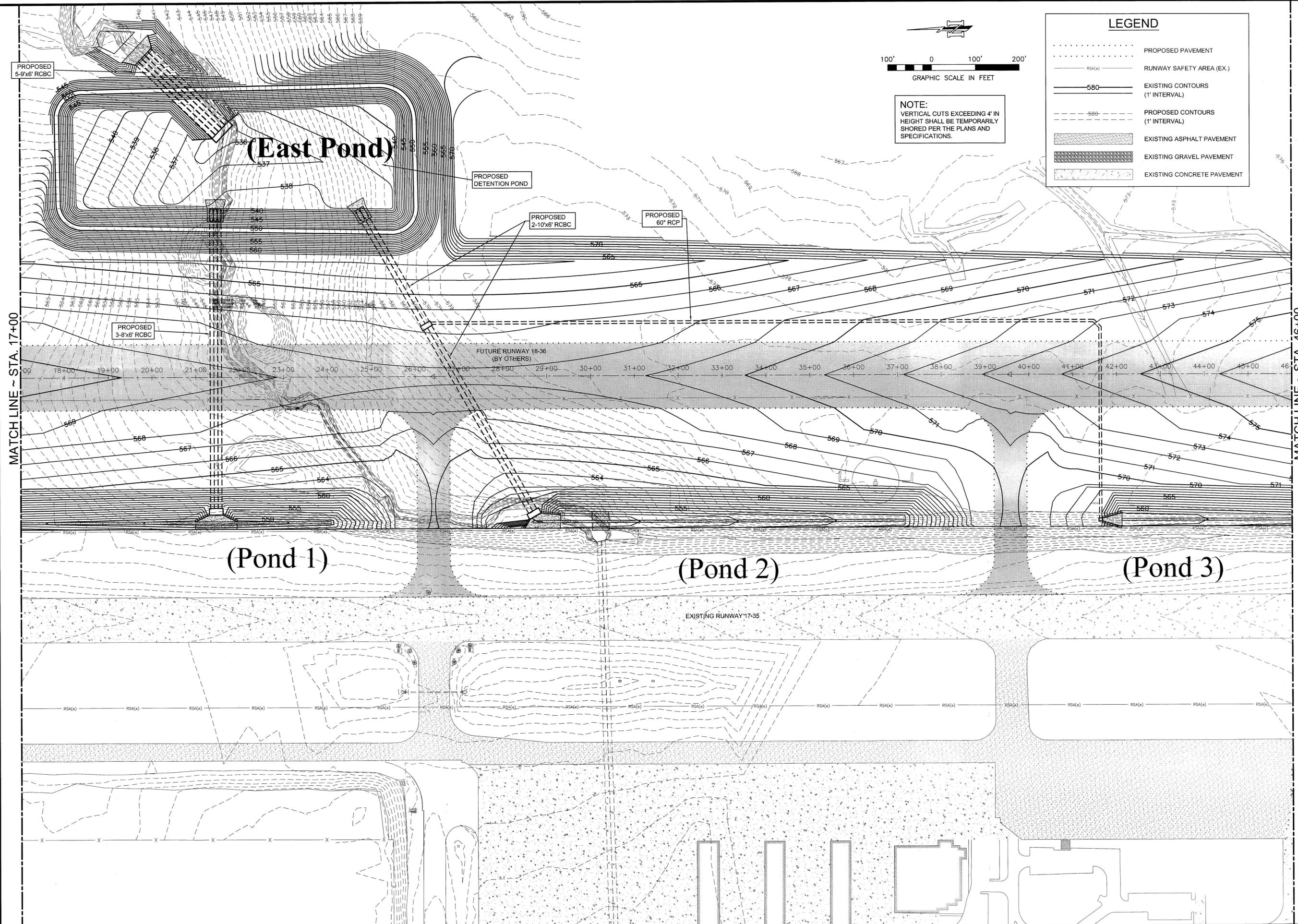
8875 Sycamore Dr.
McKinney, Texas 75070
T: 972-542-2995
F: 972-542-6790
www.ksaeng.com

KSA
ENGINEERS

Austin | Longview | Dallas | McKinney | Sugar Land | Tyler

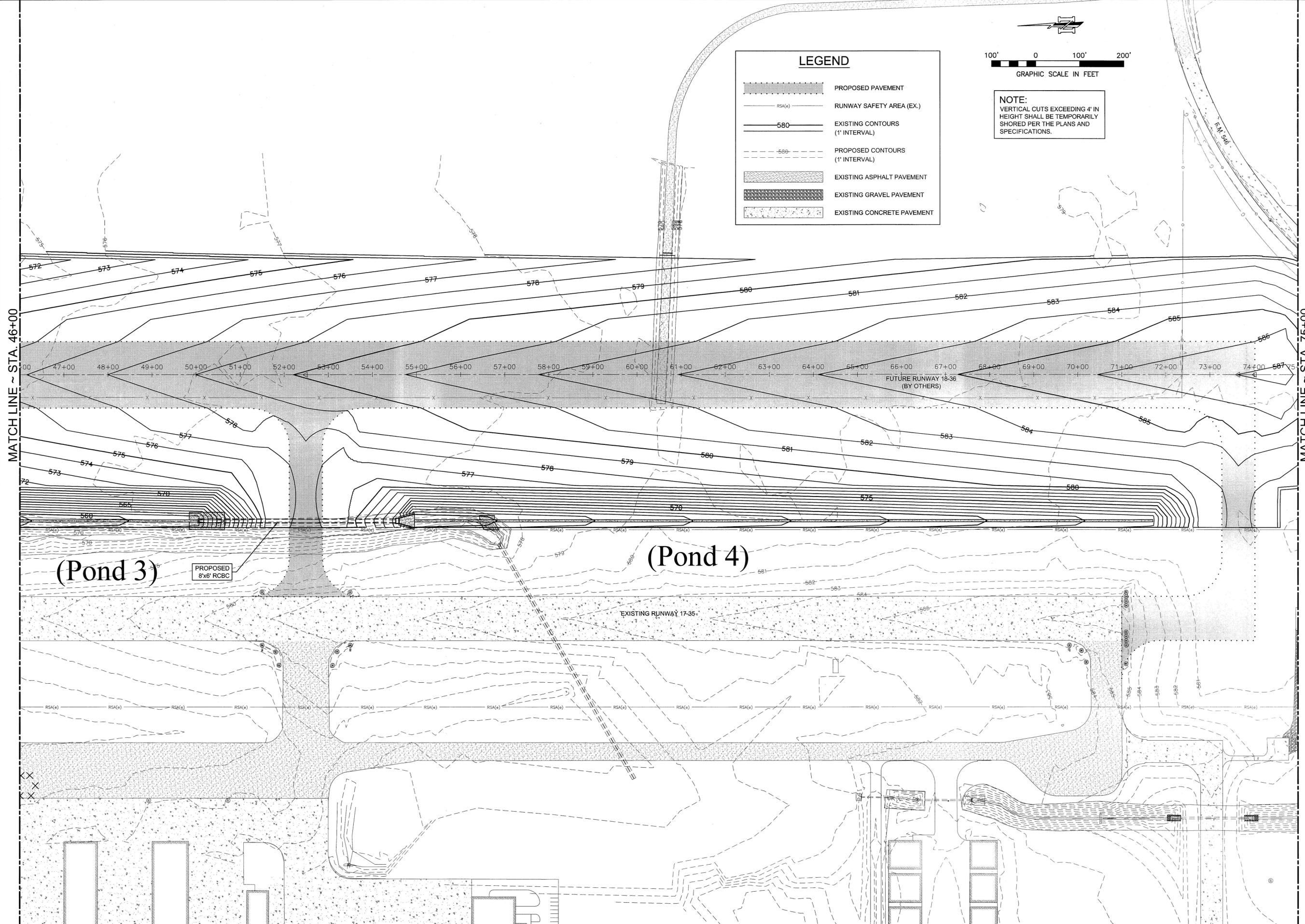
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SEAL:	TSPE Firm Registration No. 1356
SHEET NO.	16 26
SHEET	OF



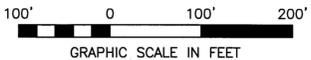
LEGEND	
.....	PROPOSED PAVEMENT
----- RSA(a) -----	RUNWAY SAFETY AREA (EX.)
----- 580 -----	EXISTING CONTOURS (1' INTERVAL)
----- 560 -----	PROPOSED CONTOURS (1' INTERVAL)
[Hatched Pattern]	EXISTING ASPHALT PAVEMENT
[Hatched Pattern]	EXISTING GRAVEL PAVEMENT
[Hatched Pattern]	EXISTING CONCRETE PAVEMENT

VERT. SCALE	N/A	HORIZ. SCALE	1" = 100'	PLOT SCALE	1:1	DRAWING NAME	PLAN-GRDG	MARK	REVISION	DATE
<p align="center">COLLIN COUNTY REGIONAL AIRPORT REPLACEMENT RUNWAY GRADING AND DRAINAGE</p> <p align="center">GRADING PLAN II</p> <p align="center">STA. 17+00 TO STA. 46+00</p>										
<p>8875 Synergy Dr. McKinney, Texas 75070 T 972-542-2955 www.kaseng.com</p> <p>KSA ENGINEERS</p> <p>Auth: L:\eng\view\lufkin\mckinney-sugar\lufkin\tyler</p>										
DRAWN BY:	JDB	DESIGNED BY:	KAS	LATEST REVISION:	6/7/2009	KSA JOB NO.:	MIK-012			
<p>This document is released for the purpose of interim review under the authority of Steve M. Creamer, P.E., 90382, on June 15, 2009. It is not to be used for construction, bidding, or permit purposes.</p>										
SEAL:	TBPE Firm Registration No. 1356									
SHEET NO.	17 26									
SHEET	OF									



LEGEND

- PROPOSED PAVEMENT
- RUNWAY SAFETY AREA (EX.)
- EXISTING CONTOURS (1' INTERVAL)
- PROPOSED CONTOURS (1' INTERVAL)
- EXISTING ASPHALT PAVEMENT
- EXISTING GRAVEL PAVEMENT
- EXISTING CONCRETE PAVEMENT



NOTE:
VERTICAL CUTS EXCEEDING 4' IN HEIGHT SHALL BE TEMPORARILY SHORED PER THE PLANS AND SPECIFICATIONS.

MATCH LINE ~ STA. 46+00

MATCH LINE ~ STA. 75+00

VERT. SCALE	N/A
HORIZ. SCALE	1" = 100'
PLOT SCALE	1:1
DRAWING NAME	PLAN-GRDG
MARK	
REVISION	
DATE	

**COLLIN COUNTY
REGIONAL AIRPORT
REPLACE RUNWAY
GRADING AND DRAINAGE**

GRADING PLAN III
STA. 46+00 TO STA. 75+00

PROJECT NAME

DRAWN BY:	JDB
DESIGNED BY:	KAS
LATEST REVISION:	6/7/2009
KSA JOB NO.:	MK-012

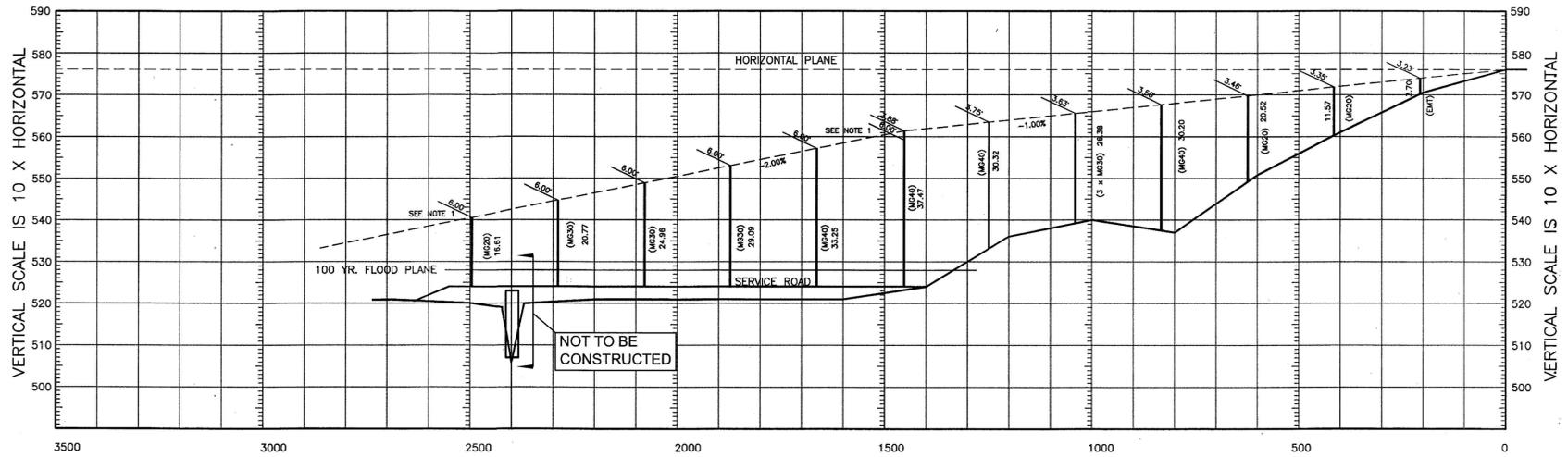
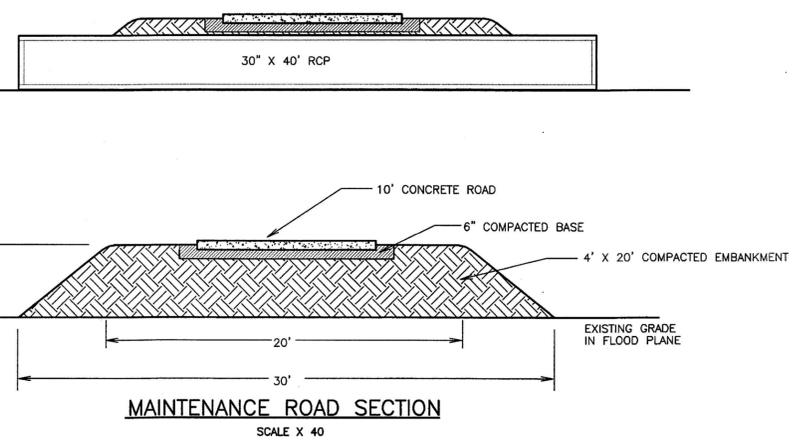
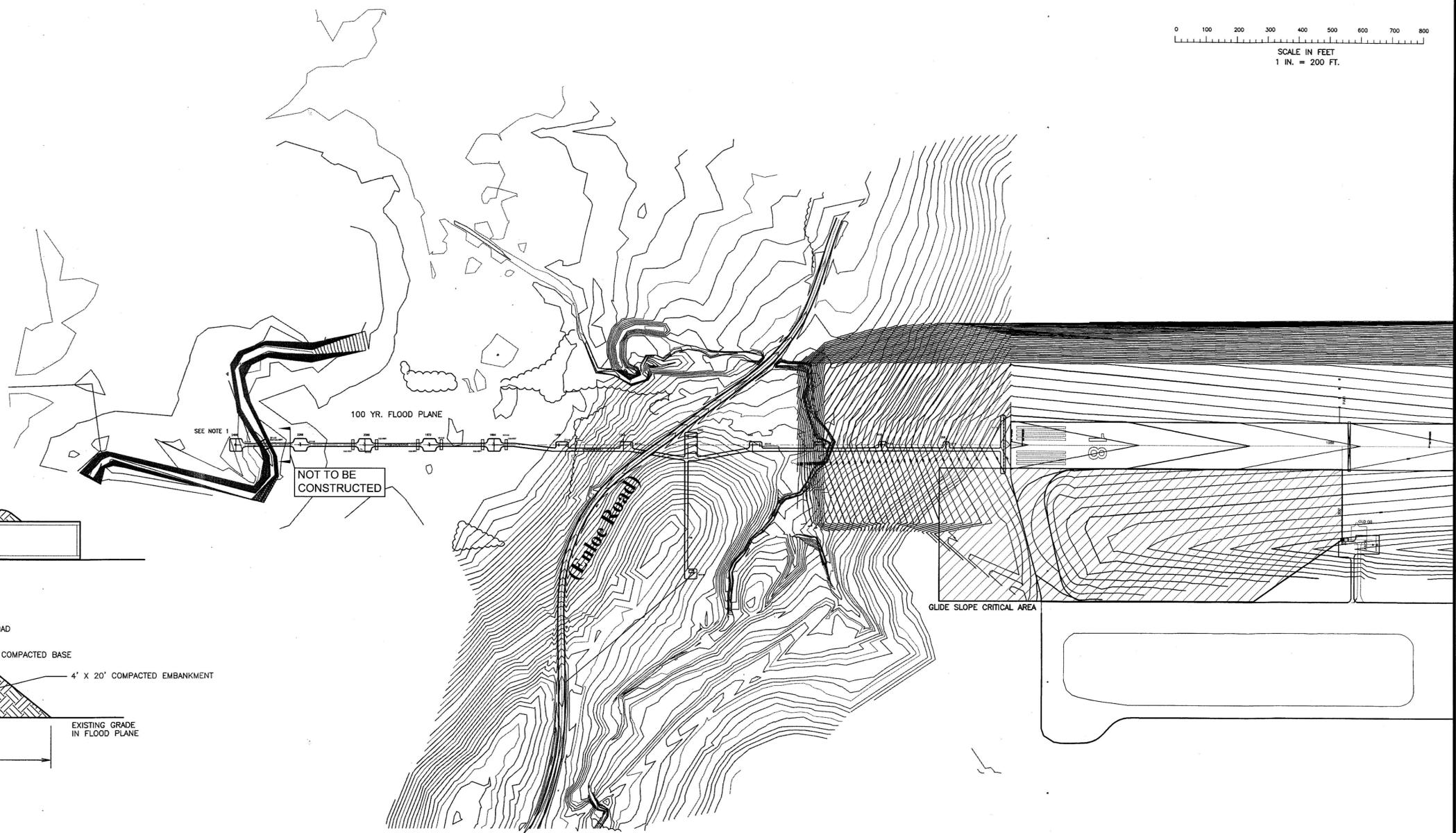
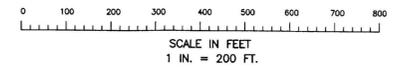
8875 Synergy Dr.
McKinney, Texas 75070
P. 972-542-6750
www.kaseng.com

KSA
ENGINEERS

Austin, Houston, Dallas, Fort Worth, San Antonio, Sugar Land, Tyler

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SEAL:	SEAL
TBPE Firm Registration No. 1356	
SHEET NO.	18
OF	26



NOTE 1:
ALTERNATIVE MALSR DESIGN PENDING FAA APPROVAL
OMIT STATION 2496 AND ADD FLASHER TO STATION 1456

MALSR APPROACH LIGHT PLANE

PRELIMINARY

VERY SCALE	HORIZ. SCALE	PILOT SCALE	DRAWING NAME	MARK	REVISION	DATE
N/A	N/A	200				

PROPOSED ALS PLANE

COLLIN COUNTY REGIONAL AIRPORT
MCKINNEY, TEXAS
REPLACEMENT RUNWAY PROJECT
TXDOT CSJ 0818MCKNY

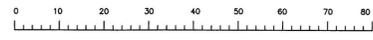
DRAWN BY: LT
DESIGNED BY: CPC
LATEST REVISION: 12/19/2008
KSA JOB NO.: MK-012



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SEAL: SHEET NO. 19 | 26 SHEET OF

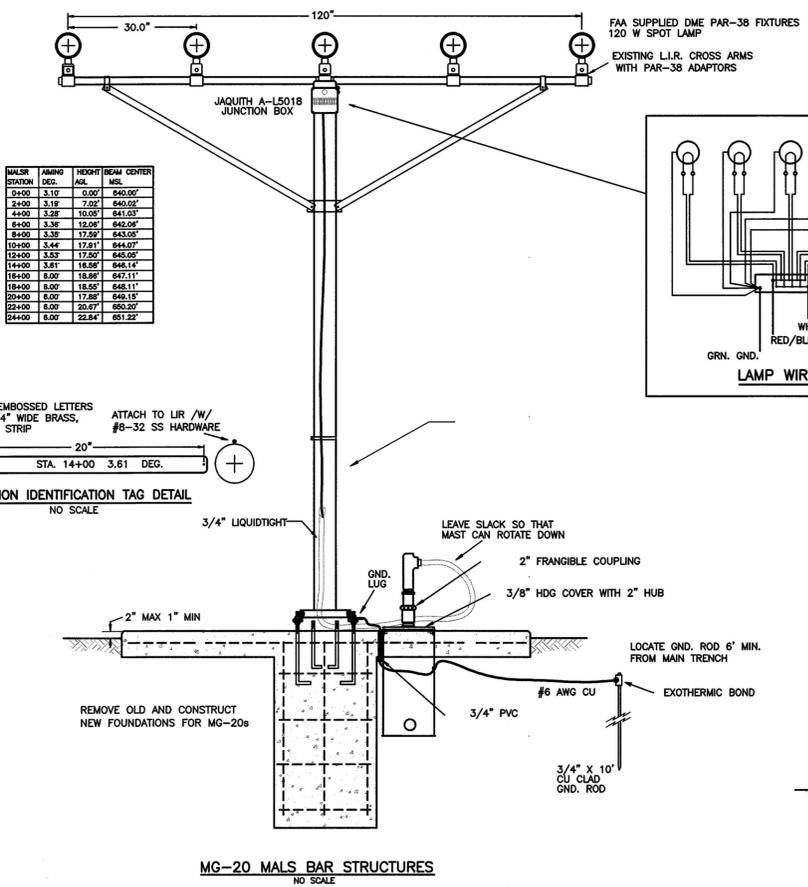
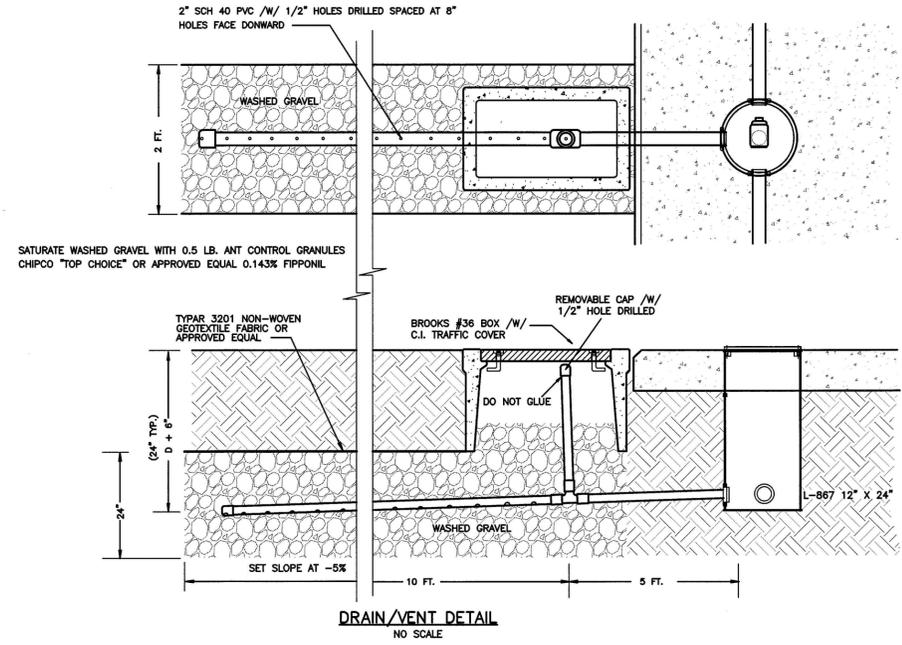
IN ASSOCIATION WITH
C.P. CROSSNO & ASSOCIATES
CONSULTING ENGINEERS



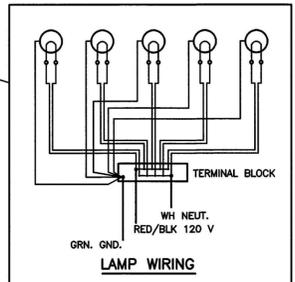
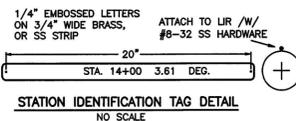
NOTES

1. ALL CONCRETE SHALL DEVELOP 3000 PSI IN 28 DAYS, ITEM P-61
2. FOUNDATIONS SHALL BE ACCURATELY PLACED USING HORIZONTAL CONTROL POINTS SET BY OTHERS.
3. CONTRACTOR SHALL USE CORRECT MOUNTING BOLT TEMPLATES
4. ANCHOR BOLTS SHALL BE SET VERTICAL
5. ANCHOR BOLTS SHALL BE HOT DIP GALV STEEL PER ASTM-A153 & ASTM-A354. NUTS SHALL BE HOT DIP GALV STEEL PER ASTM-A153 & ASTM-A325.
6. EXISTING FOUNDATIONS SHALL NOT BE REUSED.

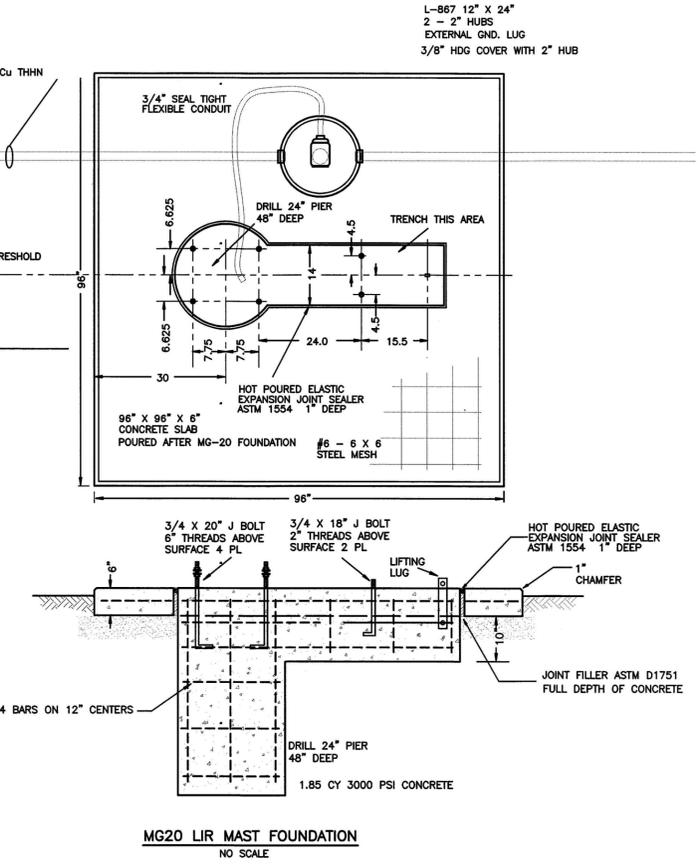
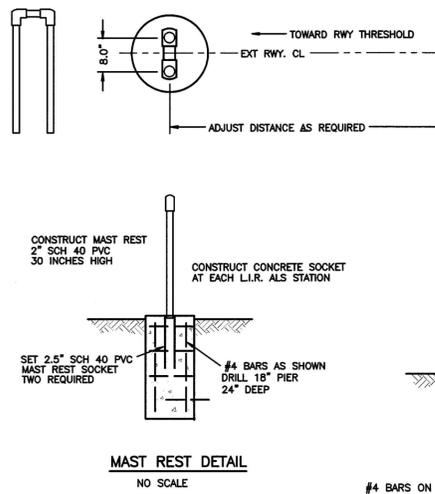
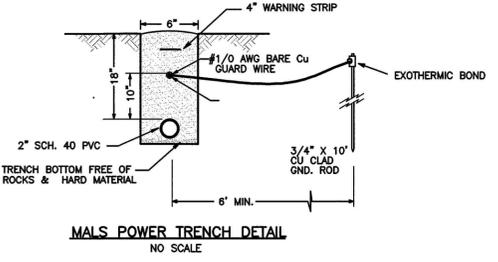
LIR MAST SPlicing SHOULD NOT BE NECESSARY
 IF REQUIRED:
 CUT TOP 6" BELOW EXISTING BAR CAP AND
 SPLICE NEW SECTION OF CORRECT LENGTH
 USE LORD 304-1 & 304-2 EPOXY CEMENT
 BONDING & CURING AMBIENT MUST BE ABOVE 62° F
 USE JAQUITH MG30 SPLICE KIT
 L.I.R. L-9149 (315)478-5700



STATION	AVG. DEG.	HEIGHT	BEAM CENTER
DEG.	IN.	FT.	IN.
0+00	3.12	0.00	640.00
2+00	3.19	7.20	640.00
4+00	3.28	10.05	640.00
6+00	3.38	12.00	640.00
8+00	3.38	17.20	640.00
10+00	3.46	17.21	640.00
12+00	3.52	17.50	640.00
14+00	3.61	18.20	640.00
16+00	3.67	18.98	640.00
18+00	3.67	18.85	640.11
20+00	3.67	17.20	640.15
22+00	3.67	20.07	650.20
24+00	3.67	22.84	651.22



THESE NOTES DO NOT APPLY WHEN USING NEW LIR MASTS
 USE COMPONENTS FROM OTHER UNUSED MG-20 OR MG-30/40 MAST AS NECESSARY
 CLEAN & PAINT REUSED MASTS
 USE JAQUITH L.I.R. PAINT KIT PSX 700 COLOR 12197 FED STD. 595
 USE PREP @ 88 WATER BASED CLEANER



DATE	REVISION	MARK

MG-20 MALS BAR

COLLIN COUNTY REGIONAL AIRPORT MCKINNEY, TEXAS REPLACEMENT RUNWAY PROJECT TXDOT CSJ 0818MCKNY

DRAWN BY: LT	DESIGNED BY: CPC	LATEST REVISION: 12/15/2008	KSA JOB NO.: MK-012
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8875 Synergy Drive
 T. 972-542-2995
 www.ksaeng.com

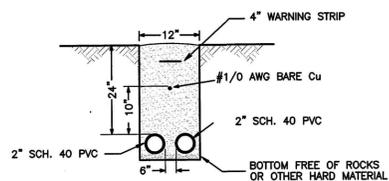
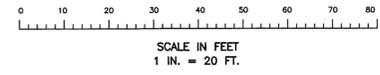
KSA ENGINEERS
 Austin-Longview-Lubbock-McKinney-Sugar Land-Tyler

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SEAL:	SHEET NO.
	20 26
	SHEET OF

PRELIMINARY

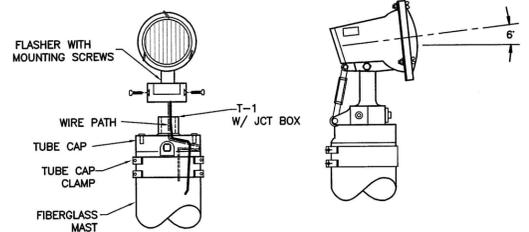
IN ASSOCIATION WITH
C.P. CROSSNO & ASSOCIATES CONSULTING ENGINEERS



RAIL PWR & CTL TRENCH DETAIL
NO SCALE

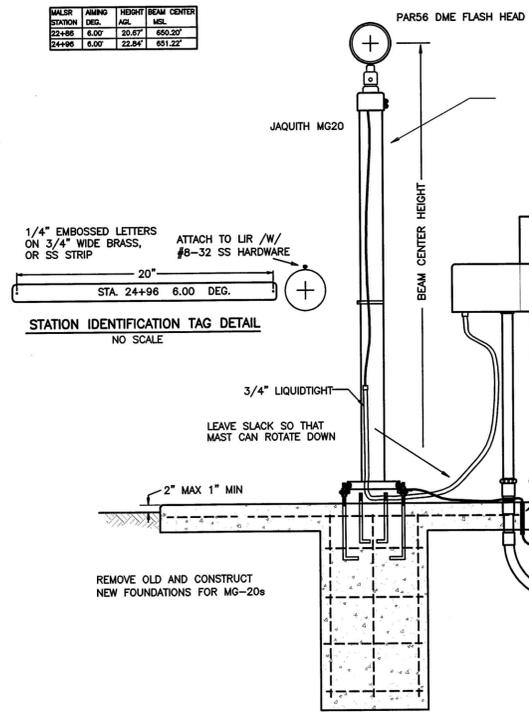
LIR MAST SPlicing SHOULD NOT BE NECESSARY
IF REQUIRED:
CUT TOP 6" BELOW EXISTING BAR CAP AND
SPlice NEW SECTION OF CORRECT LENGTH
USE LORD 504-1 & 304-2 EPOXY CEMENT
BONDING & CURING AMBIENT MUST BE ABOVE 62° F
USE JAQUITH MG20 SPLICE KIT
L.I.R. L-9149 (315)478-5700

THESE NOTES DO NOT APPLY WHEN USING NEW LIR MASTS
USE COMPONENTS FROM OTHER UNUSED
MG-20 OR MG-30/40 MAST AS NECESSARY
CLEAN & PAINT REUSED MASTS
USE JAQUITH L.I.R. PAINT KIT
PSX 700 COLOR 12197 FED STD. 595
USE PREP @ 88 WATER BASED CLEANER

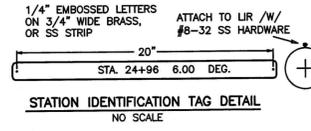


MALSr FLASHER HEAD
NO SCALE

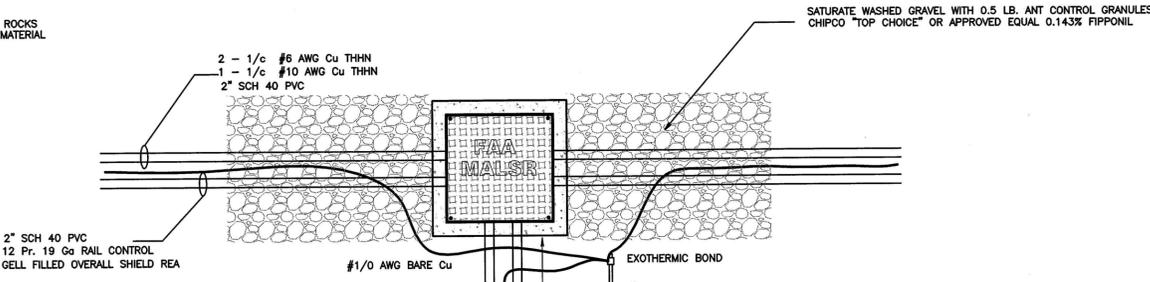
MALSr	ANNO	HEIGHT	BEAM CENTER
STATION	DEG.	ASL	MSL
24+98	6.00	20.27'	650.22'
24+98	6.00	22.24'	651.22'



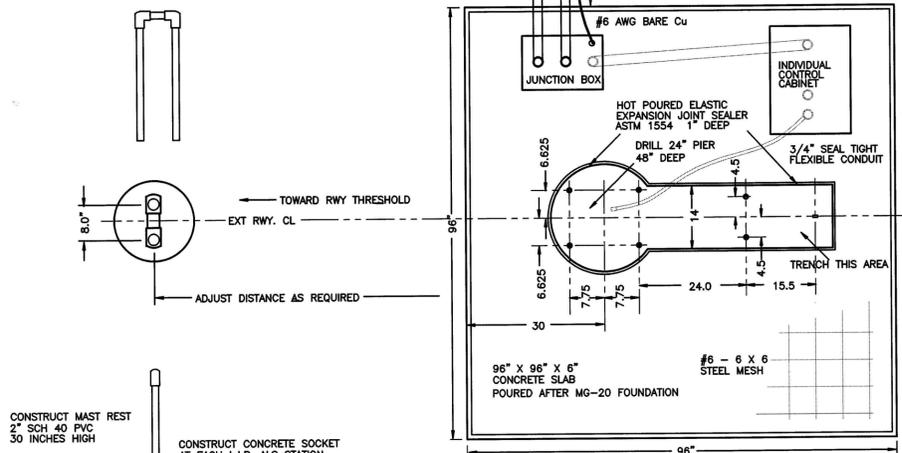
MG-20 L.I.R. RAIL STRUCTURES
NO SCALE



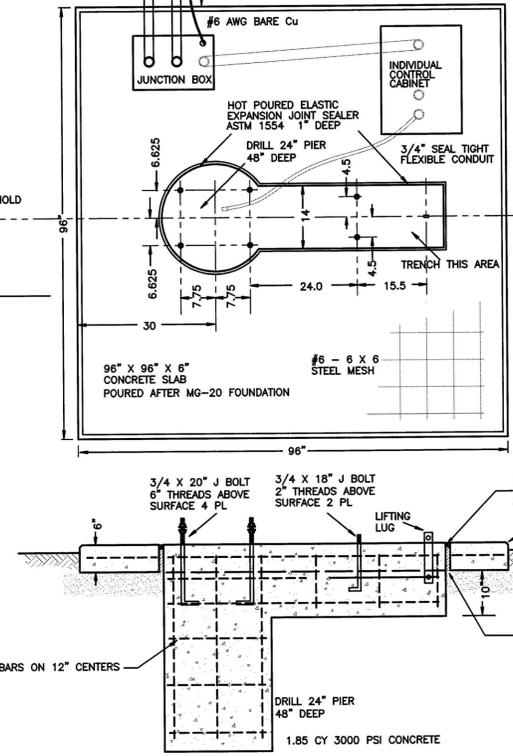
STATION IDENTIFICATION TAG DETAIL
NO SCALE



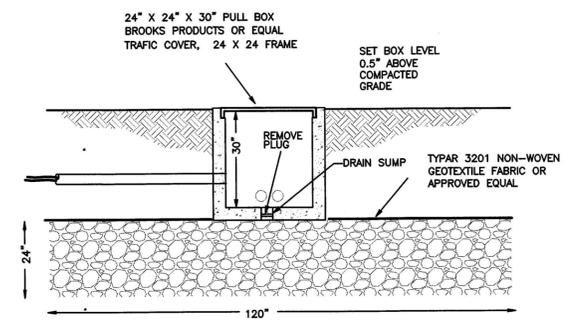
MG20 LIR MAST FOUNDATION
NO SCALE



MAST REST DETAIL
NO SCALE



MG20 LIR MAST FOUNDATION
NO SCALE



PULL BOX DETAIL
NO SCALE

NOTES

1. ALL CONCRETE SHALL DEVELOP 3000 PSI IN 28 DAYS, ITEM P-610
2. FOUNDATIONS SHALL BE ACCURATELY PLACED USING HORIZONTAL CONTROL POINTS SET BY OTHERS.
3. CONTRACTOR SHALL USE CORRECT MOUNTING BOLT TEMPLATES
4. ANCHOR BOLTS SHALL BE SET VERTICAL
5. ANCHOR BOLTS SHALL BE HOT DIP GALV STEEL PER ASTM-A153 & ASTM-A354. NUTS SHALL BE HOT DIP GALV STEEL PER ASTM-A153 & ASTM-A325.

DATE	REVISION	MARK

VERT. SCALE	HORIZ. SCALE	PLOT SCALE	DRAWING NAME	PROJECT NAME
N/A	N/A	20	TKC-Brds-2	MG-20 RAIL STATION

COLLIN COUNTY REGIONAL AIRPORT
MCKINNEY, TEXAS
REPLACEMENT RUNWAY PROJECT
TXDOT CSJ 0818MCKNY

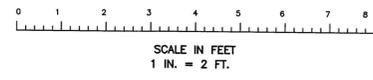
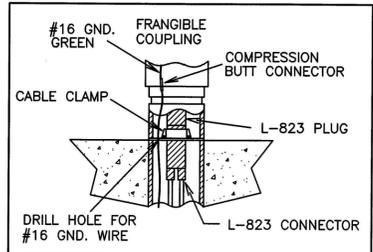
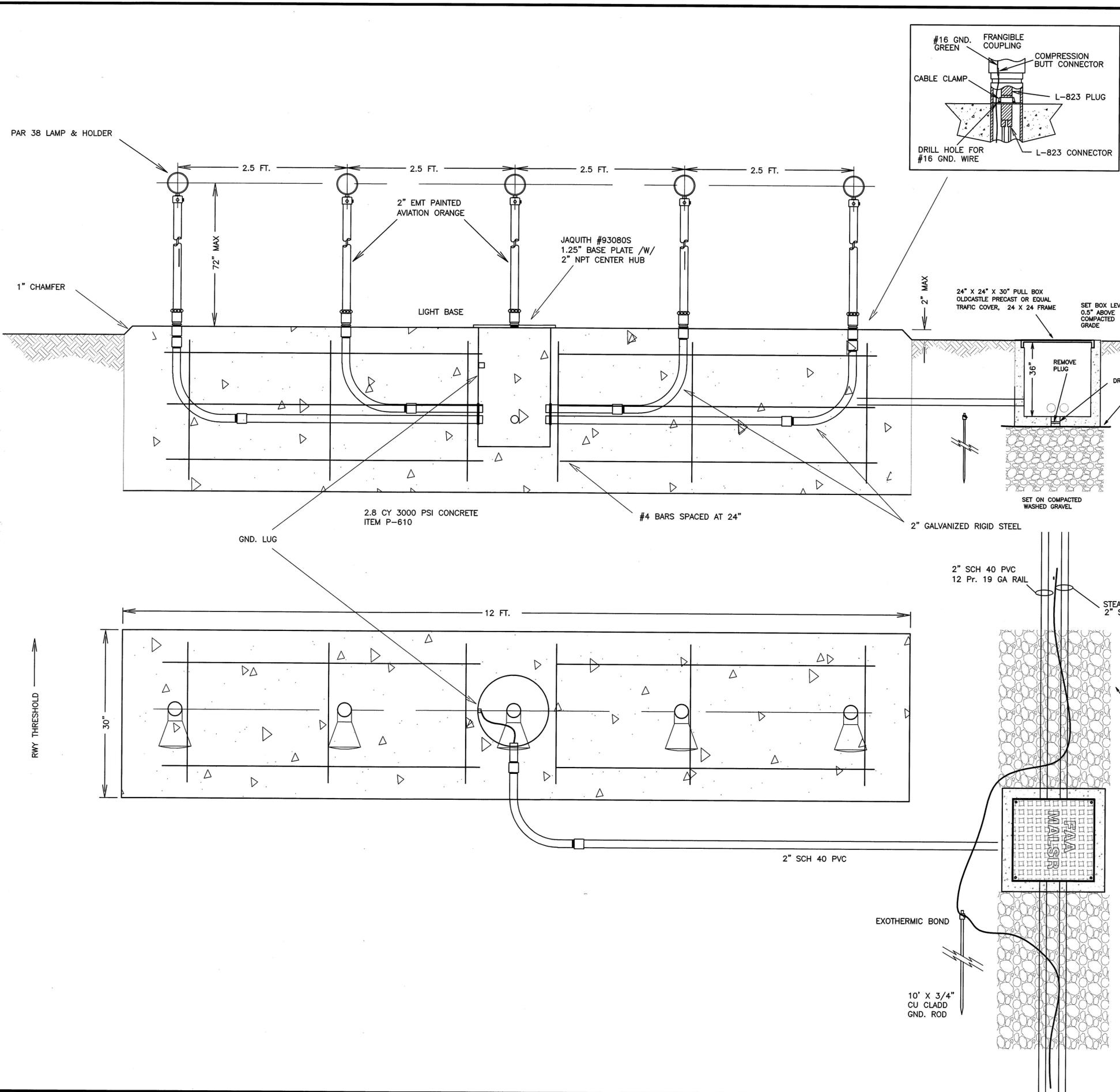
DRAWN BY:	LT	DESIGNED BY:	CPC	LATEST REVISION:	12/15/2008	ISSA JOB NO.:	MK-012

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IN ASSOCIATION WITH
C.P. CROSSNO & ASSOCIATES
CONSULTING ENGINEERS

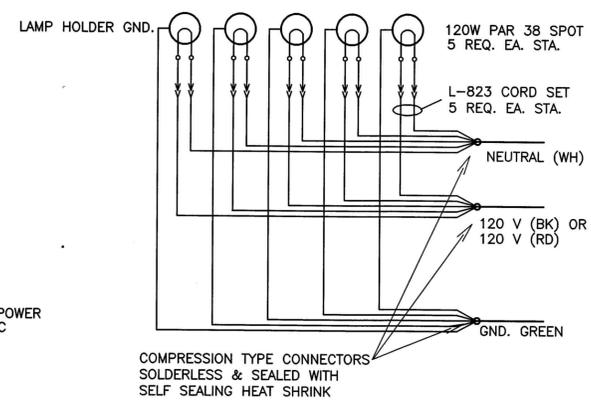
PRELIMINARY

SEAL:
SHEET NO. **21** OF **26**



NOTES
1. ALL CONCRETE SHALL DEVELOP 3000 PSI IN 28 DAYS, ITEM P-610

MALS STATION WIRING



DATE	
REVISION	
MARK	
DRAWING NAME	
EMT BAR	
VERT. SCALE	N/A
HORIZ. SCALE	N/A
PLOT SCALE	N/A
2D	

EMT MALS STATION

COLLIN COUNTY REGIONAL
AIRPORT
MCKINNEY, TEXAS
REPLACEMENT RUNWAY PROJECT
TXDOT CSJ 0818MCKNY

PROJECT NAME	
DESIGNED BY	LT
DESIGNED BY	CPC
LATEST REVISION	12/22/2008
KSA JOB NO.	MK-012

8075 Sonoma Drive
McKinney, Texas 75070
T: 972-542-2995
F: 972-542-6790
www.ksaeng.com

KSA
ENGINEERS

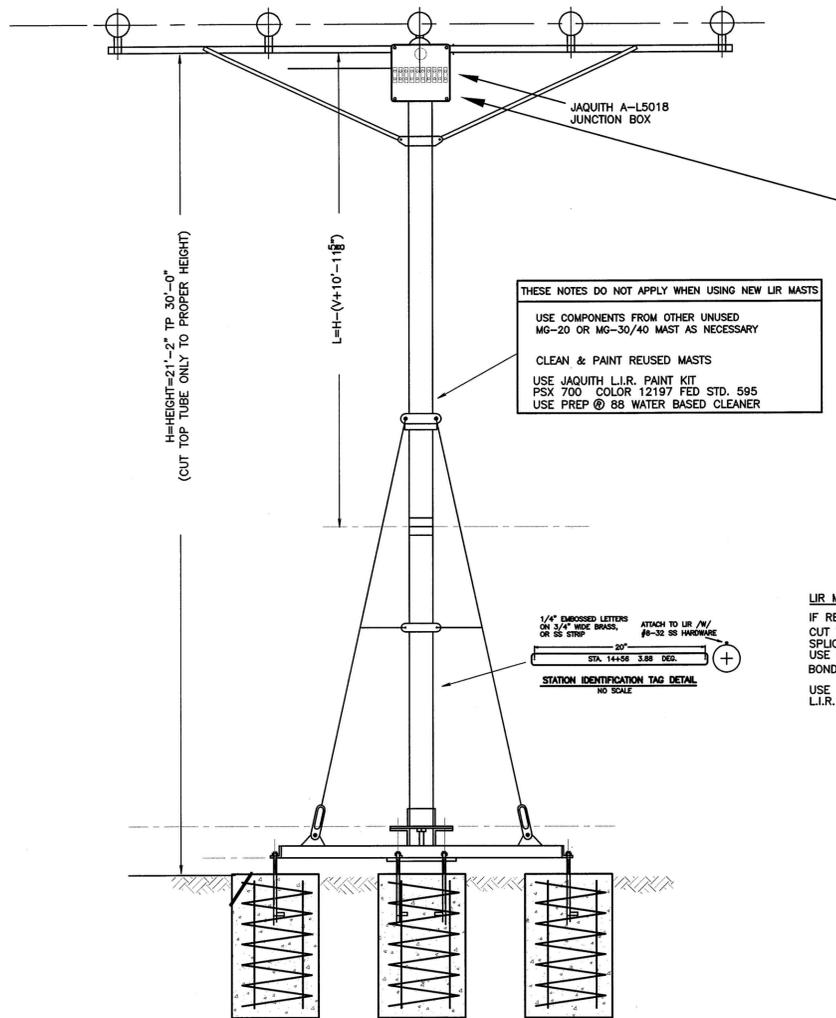
Austin Longview-Lufkin-McKinney-Sugar Land-Tyler

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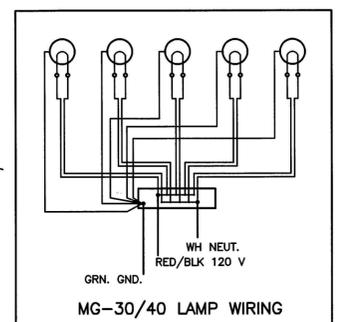
SEAL	
SHEET NO.	22
OF	26

PRELIMINARY
Date: 01/20/2010

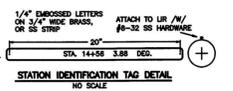
IN ASSOCIATION WITH
C.P. CROSSNO & ASSOCIATES
CONSULTING ENGINEERS



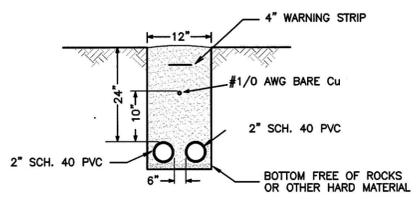
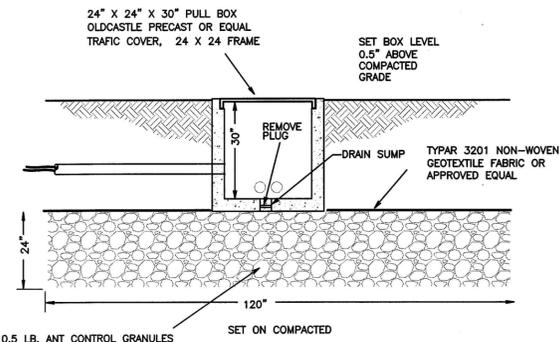
THESE NOTES DO NOT APPLY WHEN USING NEW LIR MASTS
 USE COMPONENTS FROM OTHER UNUSED MG-20 OR MG-30/40 MAST AS NECESSARY
 CLEAN & PAINT REUSED MASTS
 USE JAQUITH L.I.R. PAINT KIT
 PSX 700 COLOR 12197 FED STD. 595
 USE PREP @ 68 WATER BASED CLEANER



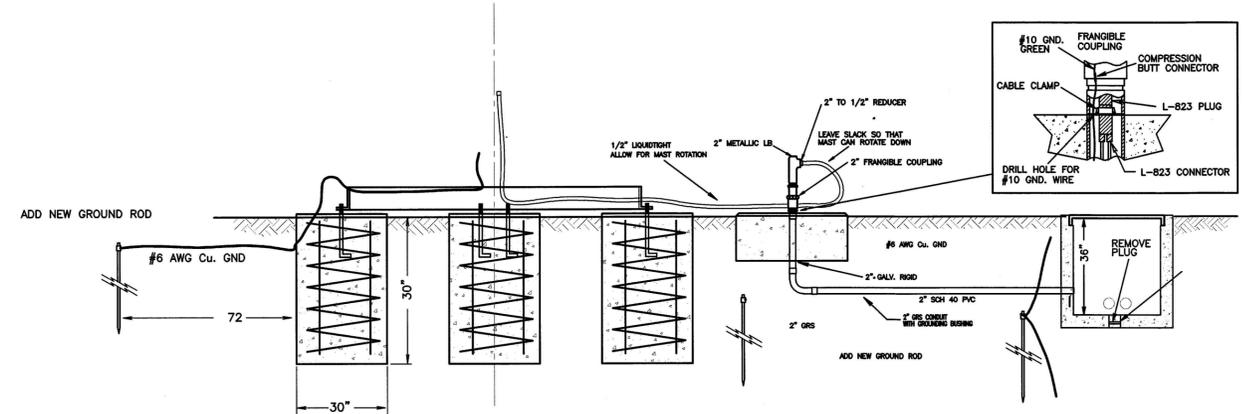
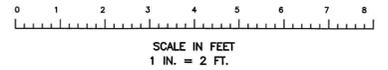
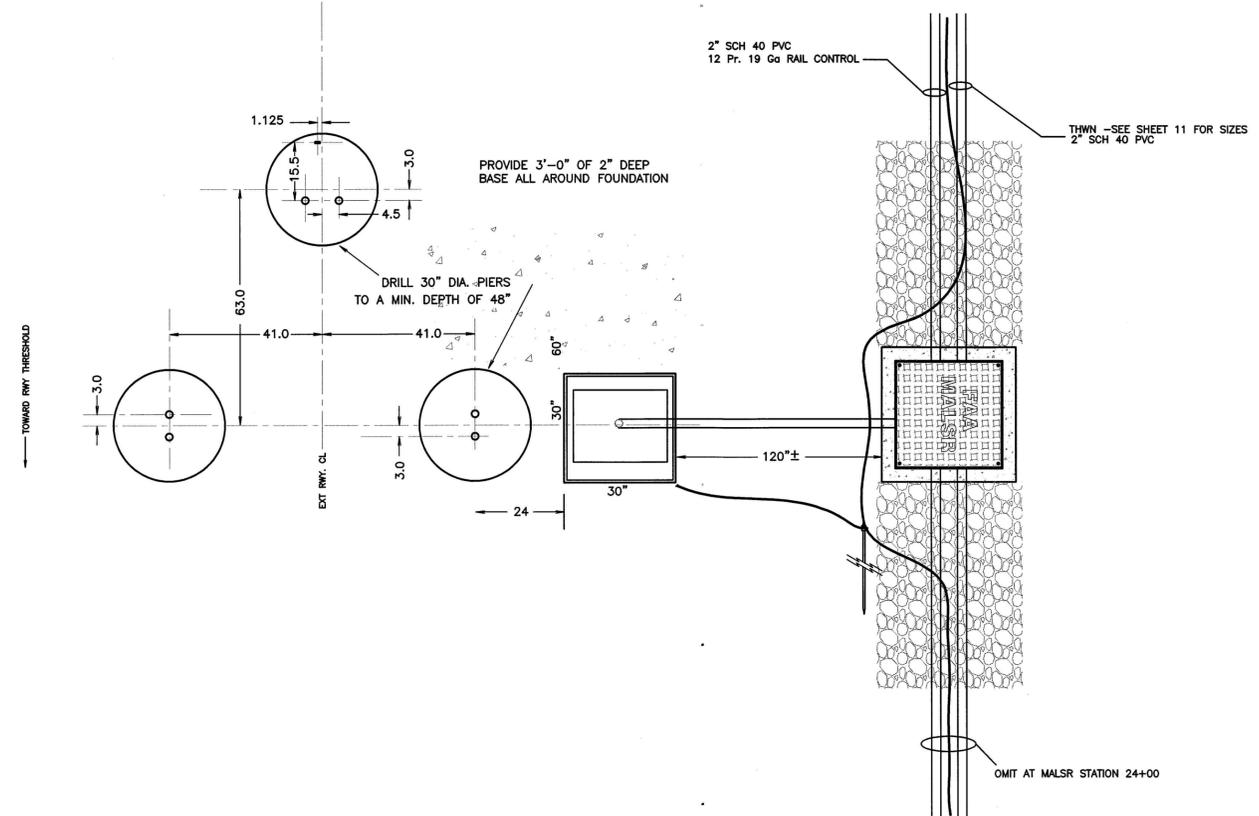
LIR MAST SPLICING SHOULD NOT BE NECESSARY
 IF REQUIRED:
 CUT TOP 6" BELOW EXISTING BAR CAP AND SPLICE NEW SECTION OF CORRECT LENGTH
 USE LORD 304-1 & 304-2 EPOXY CEMENT
 BONDING & CURING AMBIENT MUST BE ABOVE 62° F
 USE JAQUITH MG30 SPLICE KIT
 L.I.R. L-9149 (315)478-5700



MG-30/40 LIR MAST DETAIL
 NO SCALE



MALS R PWR & CTL TRENCH DETAIL



MG-30/40 FOUNDATION DETAIL
 NO SCALE

- NOTES
1. ALL CONCRETE SHALL DEVELOP 3000 PSI IN 28 DAYS, ITEM P-610
 2. MG-30/40 FOUNDATIONS SHALL BE REUSED
 3. CONTRACTOR SHALL REMOVE EXISTING FLASHER HARDWARE

DATE	
REVISION	
MARK	
DRAWING NAME	TK6B066420
VERT. SCALE	N/A
HORIZ. SCALE	N/A
PLOT SCALE	20

MG-30/40 MALS STATION

COLLIN COUNTY REGIONAL AIRPORT
 MCKINNEY, TEXAS
 REPLACEMENT RUNWAY PROJECT
 TXDOT CSJ 0818MCKNY

DRAWN BY:	LT
DESIGNED BY:	CPC
LATEST REVISION:	12/15/2008
KSA JOB NO.:	MK-012

8875 Synergy Drive
 McKinney, Texas 75070
 F: 972-542-6750
 www.ksaeng.com

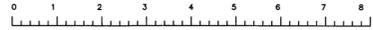
KSA
 ENGINEERS

Austin-Longview-Lubbock-McKinney-Sugar Land-Tyler

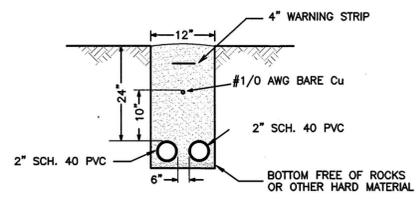
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IN ASSOCIATION WITH
 C.P. CROSSNO & ASSOCIATES
 CONSULTING ENGINEERS

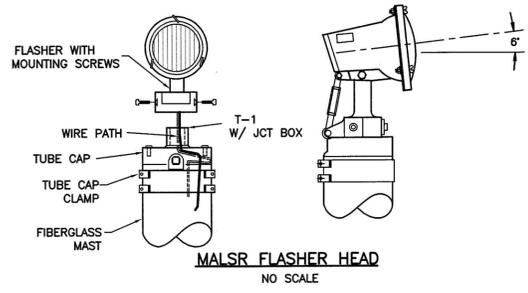
PRELIMINARY



SCALE IN FEET
1 IN. = 2 FT.



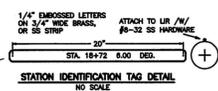
RAIL PWR & CTL TRENCH DETAIL



MALSR FLASHER HEAD
NO SCALE

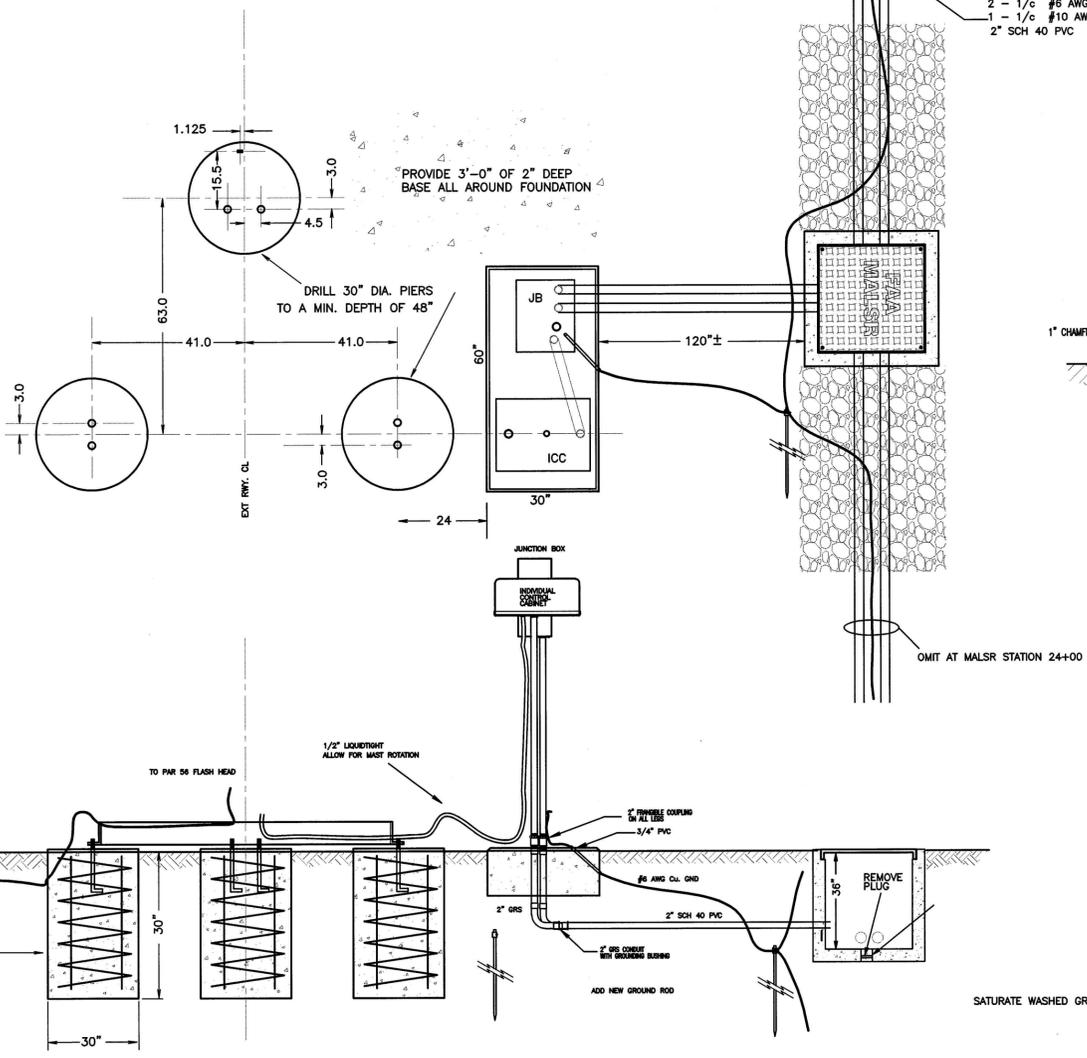
THESE NOTES DO NOT APPLY WHEN USING NEW LIR MASTS
USE COMPONENTS FROM OTHER UNUSED MG-20 OR MG-30/40 MAST AS NECESSARY
CLEAN & PAINT REUSED MASTS
USE JAQUITH L.I.R. PAINT KIT
FSX 700 COLOR 12197 FED STD. 595
USE PREP @ 88 WATER BASED CLEANER

MALSR STATION	AMING DEG.	HEIGHT ABL.	HEIGHT BEAM CENTER
18+44	8.00	18.88	842.11'
18+72	8.00	18.88	848.11'
19+00	8.00	17.88	848.12'

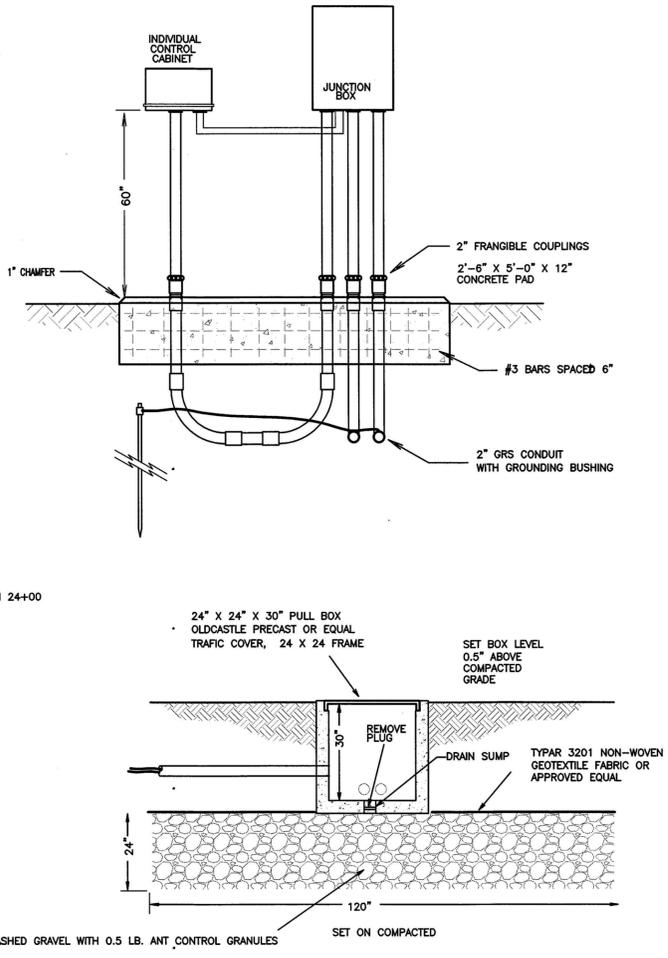


MG-30/40 LIR MAST DETAIL
NO SCALE

LIR MAST SPLICING SHOULD NOT BE NECESSARY
IF REQUIRED:
CUT TOP 6" BELOW EXISTING BAR CAP AND SPLICE NEW SECTION OF CORRECT LENGTH
USE LORD 304-1 & 304-2 EPOXY CEMENT
BONDING & CURING AMBIENT MUST BE ABOVE 62° F
USE JAQUITH MG30 SPLICE KIT
L.I.R. L-9149 (315)478-5700



MG-30/40 FOUNDATION DETAIL
NO SCALE



- NOTES
- ALL CONCRETE SHALL DEVELOP 3000 PSI IN 28 DAYS, ITEM P-610
 - MG-30/40 FOUNDATIONS SHALL BE REUSED
 - CONTRACTOR SHALL REMOVE EXISTING FLASHER HARDWARE

PRELIMINARY

DATE	REVISION	MARK

VERT. SCALE
N/A
HORIZ. SCALE
N/A
PLOT SCALE
20
DRAWING NAME
TKL-Boxer-20

MG-30/40 RAIL STATION
COLLIN COUNTY REGIONAL AIRPORT
MCKINNEY, TEXAS
REPLACEMENT RUNWAY PROJECT
TXDOT CSJ 0818MCKNY

PROJECT NAME
MCK-012

DESIGNED BY: CFC
LATEST REVISION: 12/15/2008
KSA JOB NO.:
KSA-012

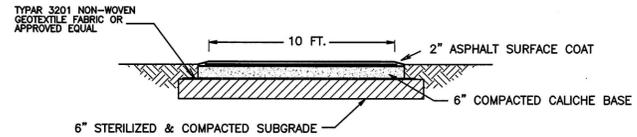
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SEAL: SHEET NO. 24 OF 26

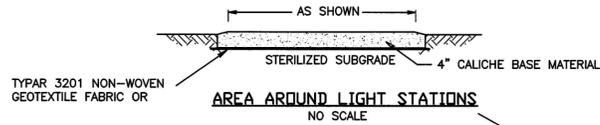
IN ASSOCIATION WITH
C.P. CROSSNO & ASSOCIATES
CONSULTING ENGINEERS



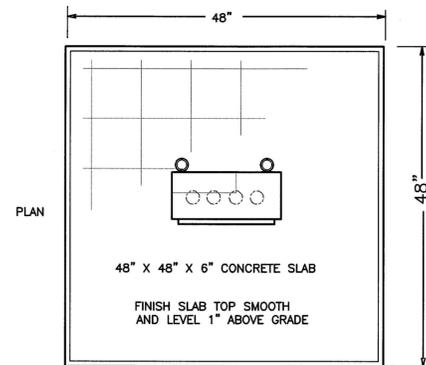
SCALE IN FEET
1 IN. = 100 FT.



SERVICE ROAD & TURN AROUND
NO SCALE

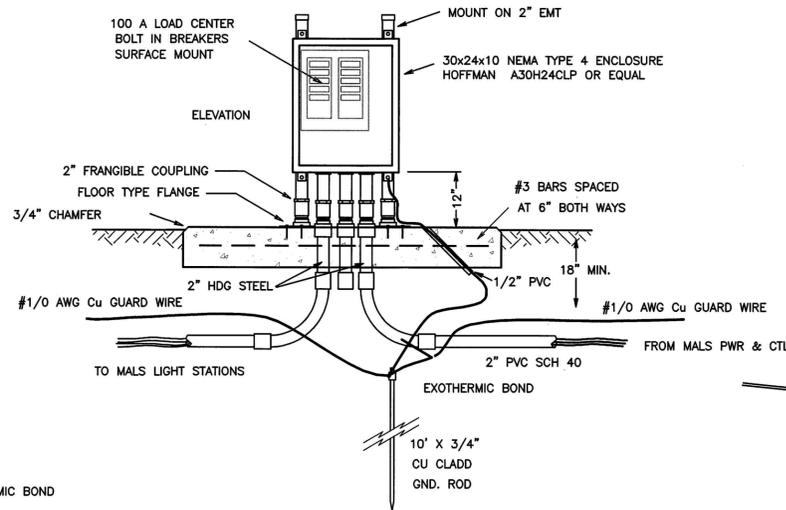


AREA AROUND LIGHT STATIONS
NO SCALE

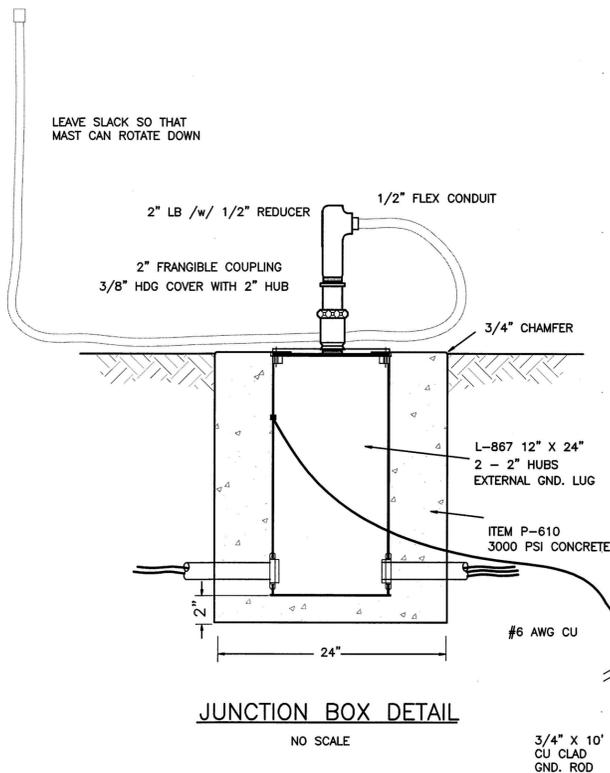


PLAN

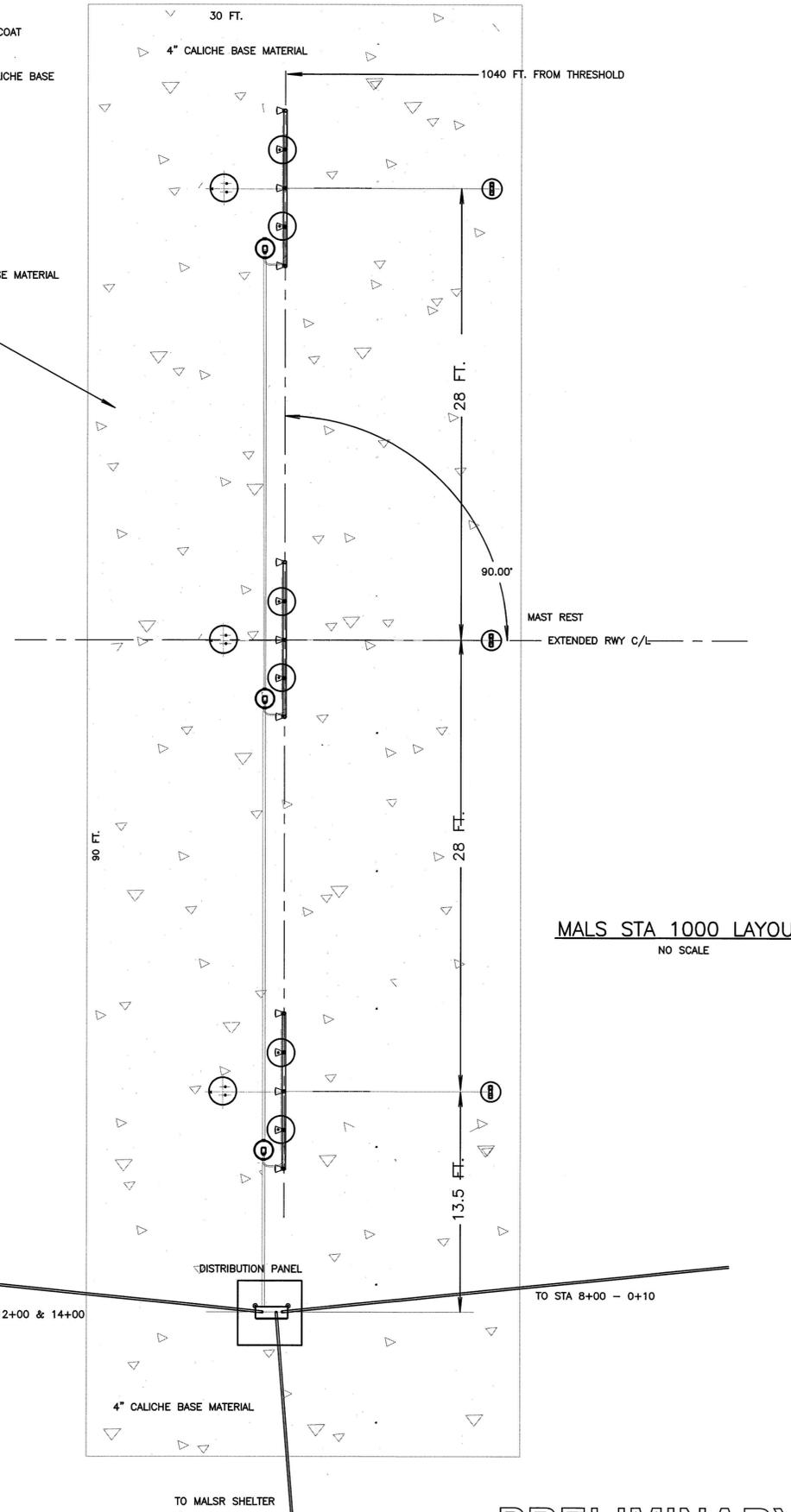
48" X 48" X 6" CONCRETE SLAB
FINISH SLAB TOP SMOOTH
AND LEVEL 1" ABOVE GRADE



MALS DISTRIBUTION PANEL
NO SCALE



JUNCTION BOX DETAIL
NO SCALE



MALS STA 1000 LAYOUT
NO SCALE

MALS STATION 1000

COLLIN COUNTY REGIONAL AIRPORT
MCKINNEY, TEXAS
REPLACEMENT RUNWAY PROJECT
TXDOT CSJ 0818MCKNY

DRAWN BY: LT
DESIGNED BY: CPC
LATEST REVISION: 12/15/2008
KSA JOB NO.: MK-012



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SEAL: SHEET NO.

25 | 26

SHEET OF

IN ASSOCIATION WITH
C.P. CROSSNO & ASSOCIATES
CONSULTING ENGINEERS

PRELIMINARY

