

# BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY, KANSAS

## WEDNESDAY, NOVEMBER 11, 2009

4:00 p.m. – County Commission Meeting

-Convene

-Consider approval of the minutes of October 14 and October 21, 2009.

## CONSENT AGENDA

- (1)(a) Consider approval of Commission Orders;
- (b) Consider approval of resolutions granting Cereal Malt Beverage licenses for Clinton Marina and Clinton Submarina (Clerk's Office);
- (c) Consider approval of Notice to the Township Board for Cereal Malt Beverage Licenses for First Stop, L.L.C. (Clerk's Office);
- (d) Consider approval of CUP-02-03-07, a Conditional Use Permit for Clinton Cove mini-storage for consideration of revised landscape implementation plan. (Sandra Day is the Planner); and
- (e) Consider approval of low bid for purchase of spreader and plow for public works (Jackie Waggoner)

## REGULAR AGENDA

- (2) Consider approval of Food Policy Council Membership and discussion of council structure (Emily Jackson)
- (3) Consider request to create road right-of-way to extend N 800 Road to approximately 500 feet west of E 1050 Road (Keith Browning)

## **RECESS UNTIL 6:35 P.M.**

- (4) Consider the appropriate range of variation for Mid-States Material's detailed reclamation plans for Phases 1A, 2, 3 and 4 of the Big Springs Quarry; 2 North 1700 Road. Submitted by Professional Engineering Consultants for Mid-States Ventures, L.L.C., property owner of record. (Mary Miller is the Planner)
- (5) Consider request from Lawrence-Douglas County Bio-Science Authority to have the City and County cooperate in the acquisition of the West Lawrence Laboratories Building and approve conflict waiver with Gilmore and Bell, City and Douglas County Bond council. (Craig Weinaug)
- (6) Other Business
  - (a) Consider approval of Accounts Payable (if necessary)
  - (b) Appointments
  - (c) Miscellaneous
  - (d) Public Comment

- (7) Adjourn

## THURSDAY, NOVEMBER 12, 2009

6:00 p.m. – Annual Joint Township Officials meeting at the Douglas County Fairgrounds (Building 1 & 2)

## MONDAY, NOVEMBER 16, 2009

-34<sup>TH</sup> Annual KAC Conference in Overland Park. (2 or more Commissioners may attend)

**WEDNESDAY, NOVEMBER 18, 2009**

- Notice to Township for Cereal Malt Beverage Licenses
- Executive Session on (2) two items for the purpose of consultation with County Counselor on matters which would be deemed, privileged under the attorney-client relationship. The justification is to maintain attorney client privilege on a matter involving Douglas County.
- Lawrence/Douglas County Census Complete Count Committee activities (Ken Grotewiel/Emily Jackson)
- Recognize volunteers for Emergency Management (Jillian Blair) (At approx. 7:00 p.m.)

**WEDNESDAY, NOVEMBER 25, 2009**

- No Commission Meeting

**WEDNESDAY, DECEMBER 2, 2009**

- Consider approval resolution for Cereal Malt Beverage Licenses for First Stop, L.L.C. (Clerk's Office)
- Approve Cereal Malt Beverage Licenses

**WEDNESDAY, DECEMBER 23, 2009**

- No Commission meeting

*Note: The Douglas County Commission meets regularly on Wednesdays at 4:00 P.M. for administrative items and 6:35 P.M. for public items at the Douglas County Courthouse. Specific regular meeting dates that are not listed above have not been cancelled unless specifically noted on this schedule.*

1(b)

**RESOLUTION \_\_\_\_\_**

**WHEREAS**, on the 11<sup>th</sup> day of February, 2009, the same being a regular session of the Board of County Commissioners of the County of Douglas, the application of **Clinton Marina** for a cereal malt beverage license came up for considerations by the above board and

**WHEREAS**, the Board does find that said **Clinton Marina** is qualified under the law to sell cereal malt beverages not for consumption on the premises located **1329 E 800 Rd, Lawrence, Kansas**

**WHEREAS**, the Board further finds that due and legal notice has been given the Clinton Township Board and that ten days has expired from the giving of said notice and that no written objection has been filed by the Clinton Township Board protesting the granting of a cereal malt beverage license.

**NOW THEREFORE, BE IT RESOLVED** that the applicant, **Clinton Marina** granted a license to sell cereal malt beverage not for consumption on the premises located at **1329 E 800 Rd, Lawrence, Kansas**

**BE IT FURTHER RESOLVED**, that Jameson Shew, County Clerk of Douglas County, Kansas be directed to issue said license.

\_\_\_\_\_  
Chairman

\_\_\_\_\_  
Member

\_\_\_\_\_  
Member

**ATTEST:**

\_\_\_\_\_  
Jameson Shew, Douglas County Clerk

KEEP THIS LICENSE POSTED CONSPICUOUSLY AT ALL TIME

RETAIL

Fee \$75.00

NO.

DEALER'S 2010 LICENSE

TO ALL WHOM IT MAY CONCERN:

License is hereby granted to: **CLINTON MARINA**

**TO SELL CEREAL MALT BEVERAGES AT RETAIL IN ORIGINAL AND UNOPENED  
CONTAINERS AND NOT FOR CONSUMPTION ON PREMISES**

(State if for consumption on the premises, or for sale in original and unopened containers and not for consumption on premises)  
1329 E. 800 Road, LAWRENCE, KS. Application therefore on file in the office of the County Clerk of Douglas County,  
having been approved by the governing body of said County, as provided by Laws of Kansas and the regulations of the  
board of County Commissioners.

This License will expire 12:00 midnight December 31, 2010 unless sooner revoked, is not transferable, nor will any  
refund be allowed thereon.

Done by the Board of County Commissioners of Douglas County, Kansas

This 11<sup>th</sup> Day of February 2009

Attest:

County Clerk

Chairman

**RESOLUTION \_\_\_\_\_**

**WHEREAS**, on the **11<sup>th</sup>** day of **November 2009**, the same being a regular session of the Board of County Commissioners of the County of Douglas, the application of **Clinton Submarina** for a cereal malt beverage license came up for considerations by the above board and

**WHEREAS**, the Board does find that said **Clinton Submarina** is qualified under the law to sell cereal malt beverages not for consumption on the premises located **1329 E 800 Rd, Lawrence, Kansas**

**WHEREAS**, the Board further finds that due and legal notice has been given the Clinton Township Board and that ten days has expired from the giving of said notice and that no written objection has been filed by the Clinton Township Board protesting the granting of a cereal malt beverage license.

**NOW THEREFORE, BE IT RESOLVED** that the applicant, **Clinton Submarina** granted a license to sell cereal malt beverage for consumption on the premises located at **1329 E 800 Rd, Lawrence, Kansas**

**BE IT FURTHER RESOLVED**, that Jameson Shew, County Clerk of Douglas County, Kansas be directed to issue said license.

\_\_\_\_\_  
Chairman

\_\_\_\_\_  
Member

\_\_\_\_\_  
Member

**ATTEST:**

\_\_\_\_\_  
Jameson Shew, Douglas County Clerk

KEEP THIS LICENSE POSTED CONSPICUOUSLY AT ALL TIME

RETAIL

Fee \$125.00

NO:

DEALER'S 2010 LICENSE

TO ALL WHOM IT MAY CONCERN:

License is hereby granted to: **CLINTON SUBMARINA**

**TO SELL CEREAL MALT BEVERAGES AT RETAIL IN ORIGINAL AND UNOPENED  
CONTAINERS AND FOR CONSUMPTION ON PREMISES**

(State if for consumption on the premises, or for sale in original and unopened containers and not for consumption on premises)  
1329 E 800 Road, LAWRENCE, KS. Application therefore on file in the office of the County Clerk of Douglas County,  
having been approved by the governing body of said County, as provided by Laws of Kansas and the regulations of the  
board of County Commissioners.

This License will expire 12:00 midnight December 31, 2010 unless sooner revoked, is not transferable, nor will any  
refund be allowed thereon.

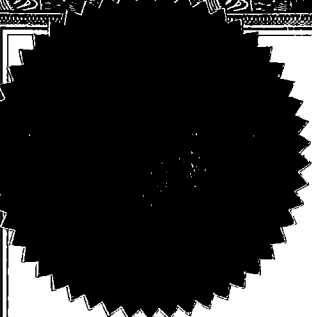
Done by the Board of County Commissioners of Douglas County, Kansas

This 11<sup>th</sup> Day of November 2009

Attest:

County Clerk

Chairman



1(c)

**NOTICE TO THE TOWNSHIP BOARD**

STATE OF KANSAS DOUGLAS COUNTY, ss

TO THE TOWNSHIP CLERK, KANWAKA TOWNSHIP

This is to notify the members of your Township Board that application has been filed with the Douglas County Commission **for First Stop, LLC.** to sell Cereal Malt Beverages at retail for consumption off the premises: **1423 East 900 Road.**

The Township Board may within (10) days file an advisory recommendation as to the granting of such a license and such advisory recommendation shall be considered by the Board of County Commissioners before such license is issued KSA 41-2702.

Done by the Board of County Commissioners this 18<sup>th</sup> day of November, 2009.

\_\_\_\_\_  
CHAIRMAN

\_\_\_\_\_  
COUNTY CLERK

(SEAL)

The board of county commissions in any county shall not issue a license without giving the clerk of the township board in the township where the applicant desires to locate, written notice by registered mail, of the filing of the application.

Sales Tax Number: 26-1787474

Renewal: Valid from \_\_\_\_\_ to \_\_\_\_\_

RECEIVED  
DEPARTMENT OF REVENUE

OCT 16 2009

ALCOHOLIC BEVERAGE CONTROL DIV

(This form prepared by the Attorney General's Office)  
(Firm, Partnership, or Association application form)

**APPLICATION FOR LICENSE TO RETAIL CEREAL MALT BEVERAGES**

\_\_\_\_\_, Douglas COUNTY, KANSAS \_\_\_\_\_

TO THE GOVERNING BODY OF THE CITY OF \_\_\_\_\_, KANSAS

or

THE BOARD OF COUNTY COMMISSIONERS OF Douglas COUNTY, KANSAS

I Chris Nichols / Nathan S. Wedermyer, on behalf of a firm,

partnership, of association (circle the proper one) known as First Stop, LLC

hereby apply for a license to retail cereal malt beverages in conformity with the laws of the State of Kansas, and the rules and regulations prescribed, and hereafter to be prescribed to you, relating to the sale or distribution of cereal malt beverage; and for the purpose of securing such license, I make the following statements under oath:

1. The firm, copartnership, or association is made up of the following persons whose names, residences, ages, dates of birth, places of birth, methods of obtaining United States citizenship with date and place of naturalization, if that is the basis of citizenship, together with the length of each person's residence within the State of Kansas and the city or county to which this application is being made, are set forth below:

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

2. I hereby certify that with regard to each of the above-named persons the following statements are true:

None of them has within the last two years from this date been convicted of:

- (a) A felony
- (b) A crime involving moral turpitude
- (c) Drunkenness
- (d) Driving a motor vehicle while under the influence of intoxicating liquors
- (e) Violation of any state or federal intoxicating liquor law

If any of the above have been convicted of any of the above-specified offenses, the details are set out hereinafter.

3. (a) The premises for which the license is desired are located at 1423 E 900 Rd

(b) The legal description of the premises is \_\_\_\_\_

(c) The street number is 1423 E 900 Rd

(d) The building is described as Convienance Store

(e) The business will be conducted under the name of First Stop, LLC



RECEIVED  
DEPARTMENT OF REVENUE

OCT 16 2009

ALCOHOLIC BEVERAGE CONTROL DIV

(f) The place of business will be conducted by the following manager, if not by one of the firm, partnership, or association members Nathan S. Wedermyer

(g) Said manager's place and date of birth 01/19/1981 - Lawrence, KS

(h) Said manager's residence in the State of Kansas in Douglas County and in the City of Baldwin City are as follows:  
904 High St

(i) Said manager is a citizen of the United States by birth (  ), naturalization (  ), is not a citizen (  ). If a naturalized citizen, the place and date of naturalization are \_\_\_\_\_

(j) Said manager has not been convicted of any of the crimes specified in number 2 above (  ). If he has, the details are as follows: \_\_\_\_\_

4. The name(s) and address(es) of the owner or owners of the premises upon which the proposed business will be conducted is/are Nathan Wedermyer - 904 High St - Baldwin City, KS 66006  
Chris Nichols - 1019 Firetree Ave - Baldwin City - 66006

5. This application is for a license to retail cereal malt beverages for consumption on the premises (  ). For a license to retail cereal malt beverages in original and unopened containers and not for consumption on the premises (  ).

A license fee of \$ 75 is enclosed herewith.

I, Chris Nichols, one of the partners ( X ), association ( ), or firm members ( ), applying for the above-named license to retail cereal malt beverages hereby agree to comply with all the laws of the State of Kansas, and all rules and regulations prescribed, and hereafter to be prescribed by you, relating to the sale or distribution of cereal malt beverages, and do hereby agree to purchase all cereal malt beverages from a wholesaler, licensed and bonded under the laws of the State of Kansas, and do hereby further consent to the immediate revocation of the cereal malt beverage retail license, if any, issued pursuant to this application by the proper officials, for the violations of any such laws, rules or regulations.



(Signature and official position of individual making application)

STATE OF KANSAS, COUNTY OF Douglas, ss.

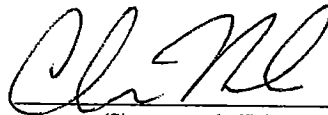
I, Chris Nichols - Co-owner, of the

(Signature and official position)

First Stop, LLC, do

(Name of firm, copartnership, or association)

solemnly swear that I have read the contents of this application, and that all information and answers herein contained are complete and true. So help me God.



(Signature and official position)

SUBSCRIBED AND SWORN TO before me this \_\_\_\_\_ day of \_\_\_\_\_,

(Character of official administering oath)

My commission expires on the \_\_\_\_\_ day of \_\_\_\_\_,

APPLICATION APPROVED this \_\_\_\_\_ day of \_\_\_\_\_,

By \_\_\_\_\_,

(Official position)

of \_\_\_\_\_, Kansas  
(City or county)

Recorded in Volume \_\_\_\_\_, at page \_\_\_\_\_

NOTE: A PHOTOCOPY OF THE COMPLETED FORM, TOGETHER WITH THE APPLICATION FEE REQUIRED BY K.S.A. 2001 SUPP. 41-2702(e), MUST BE SUBMITTED TO THE DIVISION OF ALCOHOLIC BEVERAGE CONTROL BUREAU, KANSAS DEPARTMENT OF REVENUE.

1(d)

# Memorandum City of Lawrence / Douglas County Planning & Development Services

**TO: Craig Weinaug, County Administrator**

**FROM: Planning Staff**

**CC: Andy Cope**

**Date: November 11, 2209**

**RE: CUP-2-3-07; Clinton Cove Storage**

The following language is proposed to be added to the revised landscape plan to address requirements for installation of landscape material along the west property line.

Staff recommends the landscape plan be revised to include the following notes and changes:

1. Include the following note: "The property owner is responsible for installation of landscape material along the west property line as shown on the site plan. The Douglas County Board of County Commissioners, on 10/28/09, approved a request from the property owner to defer the installation of landscape material along the west property line until a future date. Planting along the west property line, as shown on the approved landscape plan dated 10/20/07, shall be installed at a future date if the County Commission determines that such landscaping is needed to buffer adjacent development. Planting shall be made at the property owner's expense."
2. The applicant shall provide a revised landscape plan to show plantings on the west property line, planting on the park property to the south and the above note, and a landscape planting schedule.



**DOUGLAS COUNTY ADMINISTRATIVE SERVICES**

**Division of Purchasing**

1100 Massachusetts Street  
Lawrence, KS 66044-3064  
(785) 832-5286 Fax (785) 838-2480  
www.douglas-county.com

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MEMO TO: The Board of County Commissioners  
Craig Weinaug, County Administrator

FROM: Jackie Waggoner, Purchasing Director *JW*  
Division of Purchasing

SUBJECT: Consider Purchase of a Spreader and Plow for Public Works

DATE: November 5, 2009

On October 21, 2009 we received administrative approval to purchase a 2004 F-650 dump truck online through Purple Wave Auction.

This truck is used to maintain lake and parks, and subdivision/frontage roads snow and ice removal. This will replace an existing 2000 1-ton flat bed that will be sold in our auction.

The dump truck came equipped with cab & chassis, bed, hoist, and PTO. A new spreader and plow will need to be purchased to allow for its intended function. Since there are only two resources for purchasing and installing this equipment in our area, we solicited informal bids. The two bids are summarized in the table below:

DESCRIPTION	QTY	AMERICAN EQUIPMENT	KNAPHEIDE TRUCK EQUIPMENT
10' Salt & Sand Spreader Installed	1	\$26,272	\$27,762
10' HD Reversible Snow Plow Installed	1		
Hydraulic System Installed	1		
Warranty		1 Year	1 Year

The truck and accessories were scheduled to be replaced. Funds have been allocated in the budget for this expenditure. Mike Perkins and I will be available at the meeting to answer any questions you may have.

**SUGGESTED MOTION:** The Board of County Commissioners waives the formal bidding process, and accepts the low bid of \$26,272 from American Equipment.

# Memorandum

TO: Douglas County Board of County Commissioners  
 CC: Craig Weinaug, Douglas County Administrator  
 FROM: Emily Jackson, Management Intern  
 DATE: November 11, 2009  
 RE: Douglas County Food Policy Council Membership and

Attached to this memo, you will find the proposed membership roster for the County's newly-created Local Food Policy Council, which was approved by County Commissioners on September 9, 2009. Since your approval of the Council's creation, we have held an informal meeting with prospective members and several prospective members were also able to attend the Community Food Security Coalition's Annual Food Policy Council Gathering in Des Moines. A set meeting schedule has not been set, but it is likely that the Council will meet on the first and third Monday evenings of each month for the next few months. Once the Council is more established and has a clear direction, it is likely that the Council will meet only once a month to allow time to work to be done. Before the work of this Council progresses, we are asking that the Commission discuss and consider approval of the proposed Council membership. We are also seeking direction on other issues (listed below) which will help to guide the structure and function of the Council.

### Membership

The proposed Food Policy Council Membership was developed by determining which sectors of the community would be most impacted by a local food system, and also which sectors of the community would have the expertise necessary to create and maintain a successful food system. In addition, we have attempted to assemble a balanced membership that represents both conventional and progressive lines of thought. Once we had determined which sectors should be represented on the Council, we identified individuals at various organizations and businesses to sit on the Council as representatives. In the interest of maintaining order so that the Council can be as productive as possible, we are proposing that the Council be limited to a total of 25 members. At this point, we are only seeking approval for the 24 sectors and 20 individuals listed on the attached roster, with the remaining slots to be reserved until the Council has a more comprehensive understanding of the particulars of the local food system and can recommend specific entities to most productively fill those slots. Once those entities or individuals have been determined, the Council will seek discussion and approval by the County Commission.

### Terms and Term Limits

It is proposed that the terms of service for Food Policy Council members ultimately be two years long, with a maximum of five consecutive terms. It is recommended that terms be staggered into three 'waves', in order to avoid wholesale turnover and disruption of Council membership and activities.

### Communication Between Food Policy Council and County Commission

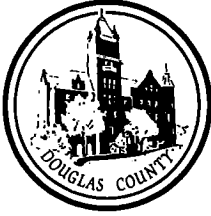
Because the Food Policy Council has been established as an advisory body to the County Commission, it is important that the Commission is kept abreast of Food Policy Council activities in a way that enables the Commission to provide the Council with meaningful direction. The County's staff person assigned as a liaison to this Council will take notes at meetings for distribution to the Council. If the Commission wishes, those notes can be sent to Commissioners as well. If there is an interest, a Food Policy Council representative or the County's staff liaison could provide periodic reports to Commissioners.

#### Charge of Food Policy Council

Once membership has been approved, one of the Council's first initiatives will be to determine its internal governance, structure and operations. To ensure that Council initiatives are in line with the County Commission's initiatives, it is proposed that Commissioners establish a very general charge to guide the Food Policy Council. The following charge has been extracted from the initial memo to Commissioners when the Food Policy Council was established, and we feel that it is both directed, but general enough to effectively guide the Council in its work: "To connect all stakeholders in a local food system to bring together expertise from various areas and establish a common vision with the ultimate goal of creating and maintaining a healthy local food system.

#### Recommendation

That the County Commission consider approval of proposed Food Policy Council membership and provide staff with direction regarding the terms and term limits of Council members, the method and frequency of communication between the Food Policy Council and the County Commission, and establish a general charge to guide the work of the Food Policy Council.



## DOUGLAS COUNTY PUBLIC WORKS

1242 Massachusetts Street  
Lawrence, KS 66044-3350  
(785) 832-5293 Fax (785) 841-0943  
dgcopubw@douglas-county.com  
www.douglas-county.com

**Keith A. Browning, P.E.**  
Director of Public Works/County Engineer

### MEMORANDUM

To : Board of County Commissioners  
From : Keith A. Browning, P.E., Director of Public Works/County Engineer *KAB*  
Date : November 5, 2009  
Re : Consider request to create road right-of-way in Willow Springs Township  
N 800 Road west of E 1050 Road

Larry Wedman, on behalf of property owners Robert and Julie DeYoung, is requesting the BOCC create additional road right-of-way in Willow Springs Township. The proposed road would be N 800 Road, and would extend west from E 1050 Road. They are interested in creating this right-of-way to allow another buildable lot for the 160-acre parcel southwest of the existing intersection of N 800 Road with E 1050 Road. There is an existing house on the parcel. The northeast corner of the existing parcel touches N 800/E 1050 road right-of-way, but otherwise has no current public road frontage. Under current regulations, the property owners could not obtain a building permit for even the existing home site due to lack of public road frontage. In order to allow another buildable lot, at least 500 feet of right-of-way must be created. We would require them to construct a road to the proposed entrance of the second buildable lot, so the full 500-foot length may not need to be constructed.

Mr. Wedman requests new road right-of-way situated on the south side of the section line so no acquisition will be required from the property owner to the north. This may or may not be possible, as N 800 Road east of E 1050 Road is centered on the section line. It may not be possible to join the new roadway west of E 1050 Road to the existing N 800 Road east of E 1050 Road without obtaining some additional right-of-way from the property to the north. Preliminary design work is required to determine the required right-of-way configuration.

Mr. Wedman's memo dated October 21, 2009 (attached) provides economic information required by Home Rule Resolution No. 08-5-2 (also attached). The resolution stipulates evaluation and review criteria when extending or creating a public road. In addition to Economic considerations, the home rule resolution lists certain Road Network considerations and Safety and Environmental considerations.

HRR No. 08-5-2 asks the County Engineer and Township Board to stipulate the proposed road will be an improvement to the current road network. N 800 Road used to exist west of E 1050 Road. It was created in 1881, and extended ½ mile west of E 1050 Road. This ½-mile segment was subsequently vacated in 1964. The fact the road existed in the past is significant, in my opinion. This road has gone through a cycle of being needed, then not being needed, and now being needed again. The proposed road extension will not provide road connectivity or improve traffic circulation in the vicinity. However, it will improve the road network by restoring a road originally intended to provide access to local properties.

MEMORANDUM  
November 5, 2009  
Page Two

HRR No. 08-5-2 also lists several Safety & Environmental considerations that may support the road request. The requested road extension provides no known safety and/or environmental advantages.

Willow Spring Township estimates the annual maintenance cost at \$1,000 for the requested road. This amount seems high, but I have not discussed with the township.

Charter Resolution No. 07-4-1 (attached) outlines two alternate processes for creating, or "laying out", road right-of-way. Required notice to the public and neighboring property owners is somewhat different depending on by which process the BOCC is creating road right-of-way. If the BOCC desires to pursue creating the requested road right-of-way, the BOCC needs to determine the appropriate process under Charter Resolution No. 07-4-1. We will then ensure appropriate public notice, and schedule a public hearing. A resolution creating the requested road right-of-way will be prepared for BOCC consideration following the public hearing.

Action Required: Consider the request to create road right-of-way for N 800 Road, to extend 500' west from E 1050 Road along the north line of the northwest quarter of Section 9-14-19, and provide direction to staff as appropriate.





**WEDMAN  
CONSTRUCTION**

General Contractor • Custom Home Builder

Date: October 21, 2009

From: Larry L. Wedman  
Wedman Construction, Inc.

To: The Douglas County Commission

Re: Request for road extension.

Location: Robert and Julie DeYoung  
1049 N. 800 Road  
Baldwin City, Kansas 66006

Wedman Construction, Inc. and the DeYongs are requesting the dedication of an additional 500 feet of road frontage on North 800 Road, extending the road to the west of East 1050 Road. The road will be engineered and we're asking that it be constructed with a length of 270 feet, with a turn-around for road graders, buses, emergency vehicles, etc. This road will serve only two houses—an existing house and a new house to be constructed, both on land owned by the DeYongs. We're requesting an 18 foot rock width for the road. The 70 foot right of way would be entirely on the DeYoung's land, to the south of the north property border.

Douglas County Public Works has requested the following information:

1. Willow Springs Township quote for maintenance on an annual basis for the new road is \$1,000.00.
2. Appraised value of the existing house is \$284,580.00.
3. Estimated value of the house to be constructed is \$505,000.00
4. Engineering and construction costs of the new road are \$31,000.00.

Willow Springs Township, Douglas County Public Works, and Douglas County Zoning are all receptive to this project.

HOME RULE RESOLUTION NO. HR 08-5-2

A HOME RULE RESOLUTION PROVIDING POLICY CONSIDERATIONS WHEN ESTABLISHING OR EXTENDING PUBLIC ROADS BASED UPON LANDOWNER-INITIATED REQUESTS AND REPEALING RESOLUTION HR-07-12-6

WHEREAS, K.S.A. 19-101a, and amendments thereto, authorizes the Board of County Commissioners (hereinafter after the "Board") to transact all County business and perform all powers of local legislation and administration it deems appropriate.

WHEREAS, K.S.A. 68-101 et seq. and Douglas County Charter Resolution 07-4-1 provide for the establishment of new and extension of existing public roads in the unincorporated areas of Douglas County if the Board determines the road will be appropriate and in the public interest or will be of public utility.

WHEREAS, by Resolution HR-07-12-6 the Board imposed a moratorium on establishing or extending public roads based upon the petition or request of one or more landowners, so that the Board could study and develop a policy to guide the Board in determining when the establishment or extension of such roads will be appropriate and in the public interest or of public utility.

WHEREAS, the Board adopts such a policy as set forth in this Resolution.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY, KANSAS, SITTING IN REGULAR SESSION THIS 21<sup>st</sup> DAY OF May, 2008, AND INTENDING TO EXERCISE THE POWERS OF HOME RULE LEGISLATION PURSUANT TO K.S.A. 19-101a, DOES HEREBY RESOLVE AS FOLLOWS:

**SECTION 1. Policy on Establishing or Extending Public Roads.** The Board hereby adopts the following policy evaluation & review criteria to use in the deliberation to of a petition from one or more landowners to establish a new public road, or to extend an existing public road right-of-way, and in determining whether the new road is appropriate and in the public's interest, or that it will be of public utility.

The criteria for evaluation of such petitions are provided in the following tables. A petition must be accompanied by written responses to the following criteria before it will be placed on a Commission's agenda for public discussion.

CATEGORY	EVALUATION & REVIEW CRITERIA
I. Economic Considerations	Cost benefit analysis prepared by the petitioner that provides the County Commission with the following information for review: <ol style="list-style-type: none"><li>1. an estimate of the cost of road construction;</li><li>2. an estimate of the total maintenance cost to the Township [based on cost figures provided by the County Engineer to the petitioner]; and,</li><li>3. a realistic estimate of the tax appraisal value and the number of additional homes to be built with access from the proposed road over a period of no more than 10 years.</li></ol>

CATEGORY	EVALUATION & REVIEW CRITERIA
II. Road Network Considerations	The proposed road will be an improvement to the current road network in the Township it is located in and the appropriate Township Board and the County Engineer have reviewed and recommended approval.

The County Commission may also consider safety and environmental issues when deliberating on a petition for a new road. The landowners petitioning for a new road may also request review under the safety and/or environmental criteria to lend additional support to and/or justification for the request for a new public road. The safety and environmental criteria are in the following table:

CATEGORY	EVALUATION & REVIEW CRITERIA
III. Safety & Environmental Considerations	<ol style="list-style-type: none"> <li>1. The proposed road will provide a safer way to access existing residential properties than currently exists;</li> <li>2. The proposed road will improve connectivity across a one-mile square grid by the addition of a through road that would improve emergency and/or safety vehicle response time to residences within the one-mile square grid;</li> <li>3. The proposed road would eliminate: a steep slope approach, a low water crossing, a railroad crossing, or other similar safety concern; or,</li> <li>4. The proposed road will create an alternative access to an otherwise developable parcel, which reduces the development impact on environmental features such as FEMA floodplain; jurisdictional wetland; or significant stands of mature trees.</li> </ol>

The foregoing evaluation and review criteria are not exclusive and the Board may consider other factors that it deems important to any individual case. The foregoing policy considerations need not necessarily apply to (1) widening existing public roads, (2) accepting the dedication of roads in platted subdivisions, or (3) establishing new or extending existing public roads at the Board's initiative.

**SECTION 2. *Revocation of Resolution HR-07-6.*** Resolution HR-07-12-6, by which the Board imposed a moratorium on establishing or extending public roads based upon the petition or request of one or more landowners, is revoked.

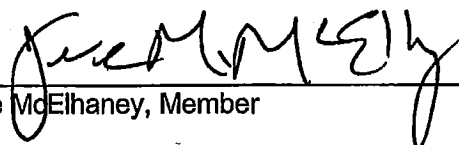
**SECTION 3. *Severability.*** If any section, clause, sentence, or phrase of this Resolution is found to be unconstitutional or is otherwise held invalid by any court of competent jurisdiction, it shall not affect the validity of any remaining parts of this Resolution.

**SECTION 4. *Publication.*** This is a home rule resolution and shall be effective after publication one time in the Official County newspaper.

ADOPTED this 21<sup>st</sup> day of May, 2008.

**BOARD OF COUNTY COMMISSIONERS OF  
DOUGLAS COUNTY, KANSAS:**

  
\_\_\_\_\_  
Bob Johnson, Chair

  
\_\_\_\_\_  
Jere McElhaney, Member

  
\_\_\_\_\_  
Charles Jones, Member

ATTEST:

  
\_\_\_\_\_  
Jameson D. Shew, County Clerk

CHARTER RESOLUTION NO. 07-4-1

**A Charter Resolution Exempting Douglas County, Kansas From The Provisions of K.S.A. 68-102 Relating to the Laying Out, Altering or Vacating Roads, and Providing Substitute and Additional Provisions Relating Thereto**

**WHEREAS**, K.S.A. 19-101 *et seq.* provides that counties may exercise home rule powers, including adopting charter resolutions which exempt such counties from the acts of the Kansas Legislature.

**WHEREAS**, the County of Douglas, Kansas ("County") is a county, duly created and organized, under the laws of the State of Kansas.

**WHEREAS**, K.S.A. 68-101 *et seq.* is an enactment of the Kansas Legislature relating to the opening and laying out of roads, which enactment is applicable to the County, but is not uniformly applicable to all counties within the State of Kansas.

**WHEREAS**, the Board of County Commissioners (the "Board") desires, by charter resolution, to exempt the County from the provisions of K.S.A. 68-102, and to provide substitute and additional provision thereof.

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY, KANSAS, MEETING IN REGULAR SESSION AND INTENDING TO EXERCISE ITS POWERS OF CHARTER HOME RULE PURSUANT TO K.S.A. 19-101b, DOES HEREBY RESOLVE AS FOLLOWS:**

**Section 1. Exemption.** The County, by the power vested in it by K.S.A. 19-101b, hereby elects to exempt itself from and make inapplicable to it, the provisions of K.S.A. 68-102.

**Section 2. Substitute Provisions and Additional Provisions.** The County, by the power vested in it by K.S.A. 19-101b, hereby provides substitute and alternate provisions for K.S.A. 68-102 as follows:

**Laying out, altering or vacating roads.** (a) Upon petition of any adjacent landowner, the board of county commissioners may lay out, alter, or vacate a road. The board of county commissioners also may lay out or alter any road when deemed necessary by the board.

(b) The board of county commissioners may vacate any road in the county whenever the board determines such road is not a public utility by reason of neglect, nonuse, or inconvenience or from other cause or causes such road has become practically impassable and the necessity for such road as a public utility does not justify the expenditure of the necessary funds to repair such road or put the same in condition for public travel.

(c) Notice of the laying out, altering or vacating any road shall be given in the manner provided by K.S.A. 68-102a, and amendments thereto.

(d) As a complete alternative to the procedures set forth in subparagraph (a), (b) and (c) of this section and the procedures set in K.S.A. 68-101, *et seq.* and any other applicable law pertaining to laying out, altering, relocating, widening, or vacating any road, the board of county commissioners may, by resolution and without formal viewing, lay out, alter, relocate, widen, extend, or vacate any road or roads, with or without the presentation of a petition, as the board determines appropriate and in the public interest; provided, however, that the simple widening of road right-of-way shall not require a formal resolution of the board of county commissioners. Any resolution vacating a road pursuant to this subsection shall reserve to the county and utilities such rights-of-way and easements as, in the judgment of the board of county commissioners, are necessary or desirable for public service. All land or right-of-way required for the laying out, altering, relocating, widening, or extending of a road shall be acquired by the board of county commissioners by purchase, donation, dedication or, if the owner or owners of the land shall refuse to sell for an amount acceptable to the board of county commissioners, donate, or dedicate said land, by exercise of the right of eminent domain pursuant to article 5 of chapter 26 of Kansas Statutes Annotated, and amendments thereto. The county surveyor shall prepare a plat of survey or similar document for any road laid out, altered, relocated, widened, or vacated pursuant to this subparagraph, and the county engineer shall record in the public road records the location, relocation, extension, change, or vacation of any such road. Notice of the laying out, altering, relocating, widening, or vacating any public road pursuant to this subparagraph, containing a reasonable description of the proposed changes, shall be given to each owner of property adjoining the road, sent by first class mail to the at the address where the owner's property tax statements are sent; provided that such notice need not be given if the owner has previously granted additional right-of-way or signed any other agreement conveying land or right-of-way with respect to the road project.

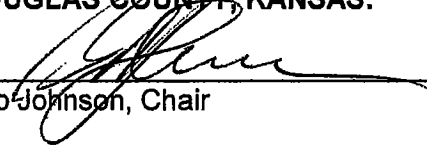
**Section 3. Severability.** In the event that any provision or section of this Charter Resolution is deemed or ruled unconstitutional or otherwise illegal or invalid by a court of competent jurisdiction, such illegality or invalidity shall not affect any other provision of this Charter Resolution. In such instance, this Charter Resolution shall be construed and enforced as if such illegal or invalid provision had not been contained herein.

**Section 4. Revocation.** Charter Resolution 94-2-1 is hereby revoked.

**Section 5. Effective Date.** The county clerk is directed to cause this Charter Resolution to be published once each week for two consecutive weeks in the official County newspaper. This Charter Resolution shall become effective 60 days after the final publication, unless a petition signed by a number of electors of the Douglas County equal to not less than 2% of the number of electors who voted at the last preceding November general election or 100 electors, whichever is the greater, shall be filed in the office of the county election officer demanding that this Charter Resolution be submitted to a vote of the electors. If such a valid petition is filed, this Charter Resolution shall not take effect until submitted to a referendum and approved by the electors of Douglas County, to be called and held in accordance with K.S.A. 19-101b.

Passed and Approved this 30<sup>th</sup> day of April, 2007, by the Board of County Commissioners of Douglas County, Kansas.

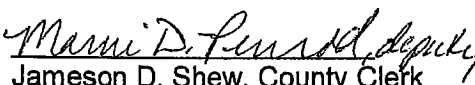
**BOARD OF COUNTY COMMISSIONERS OF  
DOUGLAS COUNTY, KANSAS:**

  
\_\_\_\_\_  
Bob Johnson, Chair

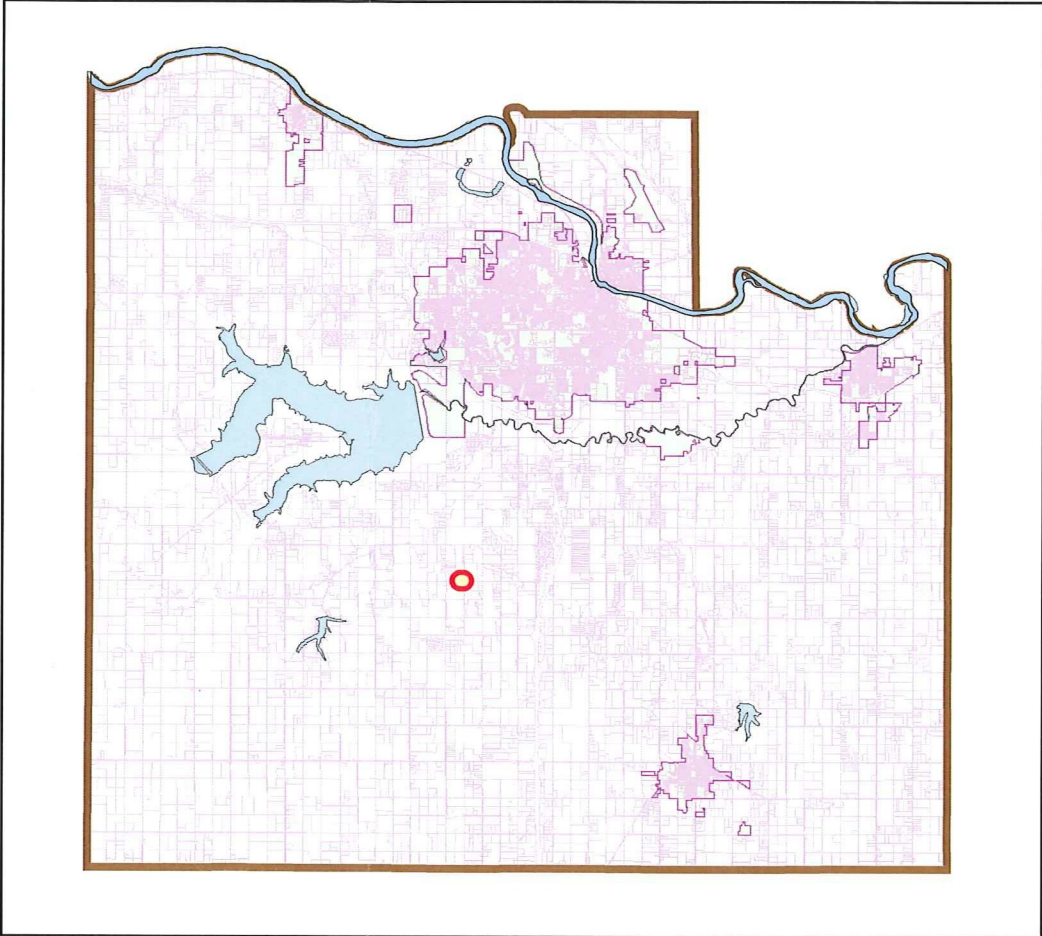
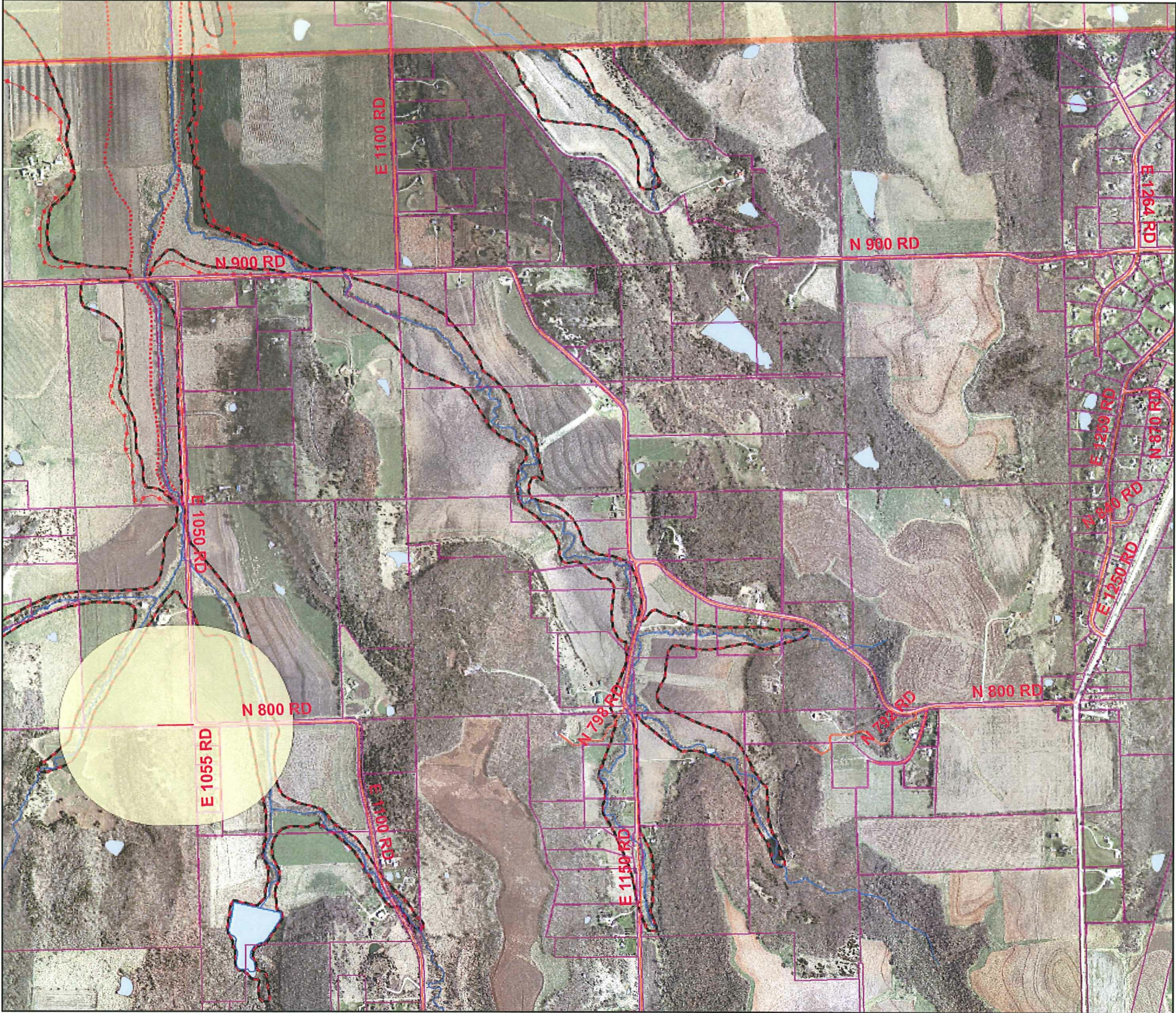
  
\_\_\_\_\_  
Jere McElhaney, Member

\_\_\_\_\_  
Charles Jones, Member

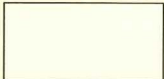


ATTEST:

  
Jameson D. Shew, County Clerk

# N 800 RD

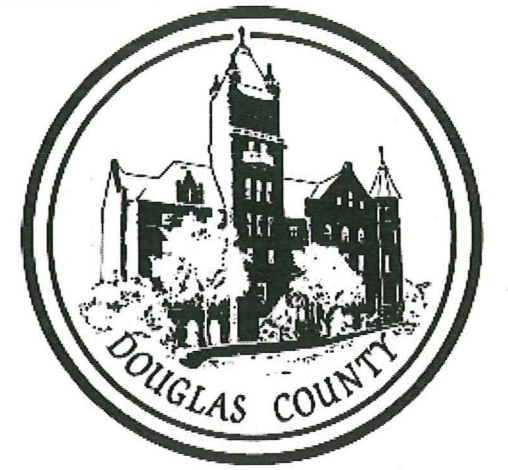


**N 800 RD**

-  N\_800\_RD\_West
-  uga
-  city\_limits09

This map was produced by Douglas County GIS.  
It is for reference only and is not intended for conveyances, nor is it a legal survey.





## Wedman/DeYoung Road Request

**DOUGLAS COUNTY, KS  
PUBLIC WORKS**

1242 Massachusetts Street  
Lawrence, KS 66044-3350  
(785) 832-5293 Fax (785) 841-0943  
[www.douglas-county.com](http://www.douglas-county.com)



**1 inch = 400 feet**

Date: photo April 2006  
Produced By: M. Kelly

**MAP DISCLAIMER:** All data, information, and maps are provided "as is" without warranty or any representation of accuracy, timeliness of completeness. The burden for determining accuracy, completeness, timeliness, merchantability and fitness for or the appropriateness for use rests solely on the requester. Douglas County makes no warranties, express or implied, as to the use of the information obtained here. There are no implied warranties of merchantability or fitness for a particular purpose.





## DOUGLAS COUNTY PUBLIC WORKS

1242 Massachusetts Street  
Lawrence, KS 66044-3350  
(785) 832-5293 Fax (785) 841-0943  
dgcopubw@douglas-county.com  
www.douglas-county.com

**Keith A. Browning, P.E.**  
Director of Public Works/County Engineer

### MEMORANDUM

To : Board of County Commissioners

From : Keith A. Browning, P.E., Director of Public Works/County Engineer *KAB*

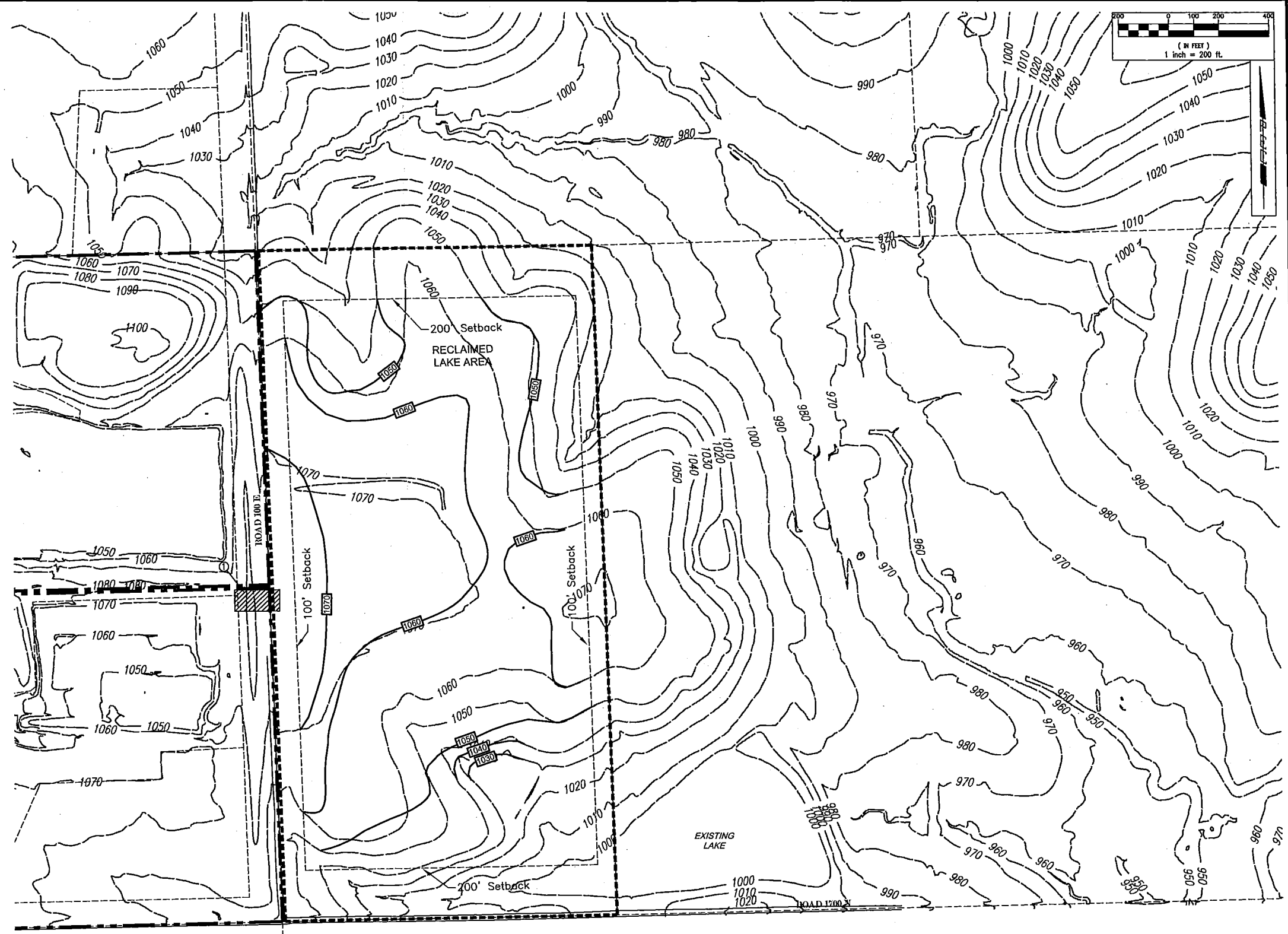
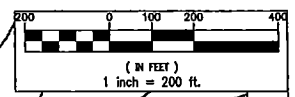
Date : November 5, 2009

Re : Big Springs Quarry reclamation plan  
Revised Phase 4 reclamation plan

Quarry owner Mid-States Materials proposes to revise the Phase 4 reclamation plan to remove the permanent pond in the southern drainage basin in Phase 4. Mid-States has indicated they can alter their quarrying operations so that the permanent water feature is in the northern portion of Phase 4 rather than the southern portion.

This revision will result in less impact to the existing large pond on Lone Oak property immediately east of the southeast portion of Phase 4. Lone Oak has expressed concern over the permanent ponds in Phases 2, 3 & 4 controlling surface runoff that currently drains into Lone Oak's large pond. This Phase 4 revision will remove one of the permanent water features in the drainage basins above Lone Oak's large pond.

Action Required: As part of considering the appropriate range of final elevations and water feature sizes for the Big Springs Quarry, consider the revised Phase 4 reclamation plan, which moves the permanent water feature from the southern portion of Phase 4 to the northern portion of Phase 4.



**LEGEND**

- — — — — PHASE 1A BOUNDARY
- - - - - PHASE 2 BOUNDARY
- · · · · PHASE 4 BOUNDARY

NOTE THAT ALL DIMENSIONS ARE TO PROPERTY LINE

- ① PROPOSED HAUL ROAD CROSSING TO STANDARD APPROVED BY COUNTY ENGINEER.

Scale: 08-24-2008 3:07:24 PM by DLS  
 P:\0300\0303\0303\Phase 4\0303-000-SIT 6-Phase IV Site Plan-REV  
 P:\0300\0303\0303\Phase 4\0303-000-SIT 6-Phase IV Site Plan-REV

No.		Revision		By		Date	
<b>BIG SPRINGS QUARRY</b> DOUGLAS COUNTY, KANSAS <b>PHASE 4 DETAILED RECLAMATION PLAN</b>							
<b>Professional Engineering Consultants, P.A.</b> 1263 SW TOPEKA BLVD. • TOPEKA, KANSAS 66612 785-233-8300 • FAX 785-233-8855							
Designed by		MWB		Job No.		08A39	
Drawn by		DMS		Date		APRIL 2009	
						SM. 6 of 11	



# Memorandum

## Lawrence-Douglas County Metropolitan Planning Office

**TO:** Board of County Commissioners  
**FROM:** Mary Miller, Planning Staff  
**CC:** Craig Weinaug, County Administrator  
Scott McCullough, Director of Planning and Development Services  
**Date:** For October 21, 2009 County Commission Agenda  
**RE:** Appropriate range of variation for Mid-States Material's detailed reclamation plans for Phases 1A, 2, 3 and 4 of the Big Springs Quarry

The revised reclamation plans and a request to modify the Consent Decree were considered by the County Commission at their September 16, 2009 meeting. The Commission voted to approve the modification from the Consent Decree to permit the natural strata along the north edge of the water feature in Phase 1A to remain. The Commission indicated that the plans of Mid-States Material for reclamation of the quarry were generally acceptable, but did not approve the reclamation plans due to concerns with the amount of variation permitted in General Note 4 on the Cover Sheet. The Commission directed staff to determine an appropriate range of variation for the size of the water features and the finished elevation of the reclaimed land and stated that changes beyond this range would require submittal of revised reclamation plans for staff review and Commission approval.

### **SIZE OF WATER FEATURES**

The goal for the appropriate range of variation for size of water features is to insure that the flow to the adjacent stream is not impacted significantly, and that anticipated evaporation from the water bodies would not exceed average annual runoff from the drainage areas.

The first step in the determination of an appropriate range of variation was an analysis of the drainage area of the stream, a tributary to Deer Creek, which lies east of the quarry to determine the impact of the quarry run-off on the stream-flow. (Attachment A) This graphic compares the drainage area which lies within the areas permitted for the quarry to the total drainage area. Approximately 10% of the stream's drainage area lies within the quarry area; therefore, the impact of the water features on the quarry are limited to 10% of the stream's total flow. A maximum range of 40% of the disturbed area in the drainage area for the water feature(s) in that drainage area provides operational flexibility for the quarry, while insuring that flow reduction in the Deer Creek

tributary is minimal. The maximum size of 40% of the disturbed area also ensures, on average, mean annual runoff from the quarry will exceed evaporation from the water bodies. The County Engineer prepared a graphic showing the drainage areas and the quarry phases to assist in the determination of the size of the water features. (Attachment B)

#### **SHAPE AND LOCATION OF WATER FEATURE**

The shape of the water feature will be determined through the quarrying operations. General Note 4 includes a provision that natural strata with a slope greater than 3:1, where approved, may be retained to stabilize the slopes. Language restricting the height of any approved natural strata to 8 ft above the established water elevation was added.

The water features will be located at the terminus of the mining activity. Market conditions determine the limits of mining; therefore the anticipated location is marked on the plan rather than showing the 'exact' location. The plans notes that the water feature will not be located within 300 ft of the quarries exterior property lines.

#### **DRAINAGE FROM WATER FEATURES**

The County Engineer requested details for the configuration of the outlet for the water features. The quarry operator provided a typical design and additional details on the pond outlets which the County Engineer will review. The County Engineer will discuss this additional information at the October 21<sup>st</sup> County Commission meeting.

The quarry operator indicated that they would be willing to work with downstream property owners regarding the impact of the water features on the downstream water sources and has added the following note to the Title Sheet:

*"General Note 5: The operator shall, in good faith, work with downstream landowners to effectively manage surface water flows for the benefit of said landowners and the quarry at large."*

#### **FINISHED ELEVATION**

General Note 4 states that the landforms are general in nature and final elevations are subject to change. Staff originally suggested a range of plus or minus 5 feet; however, the quarry operator explained that if they extracted more limestone than they anticipate a minimum range of 5 ft may require them to import materials to reach that elevation. The County Engineer pointed out that the maximum slope of 3:1 would need to be maintained and the contours within the setbacks would not change; therefore, he felt the minimum range of 10 ft would be acceptable and would have no adverse impact on the surrounding properties.

#### **REVISIONS TO THE PLANS**

The Commission indicated the plans should be revised to address the conditions noted in the September 16<sup>th</sup> Staff Report. The applicant made the revisions as noted below:

1. Provision of a detail sheet for the County Engineer's approval, showing the erosion control method which will be used for the removal of the overburden pile in Phase 1A. The detail should show the erosion control method to be used, the location, and which phase of the reclamation they will be installed in. *The applicant provided a*

***copy of their SWP3 (Stormwater Pollution Prevention Plan) to meet this condition.***

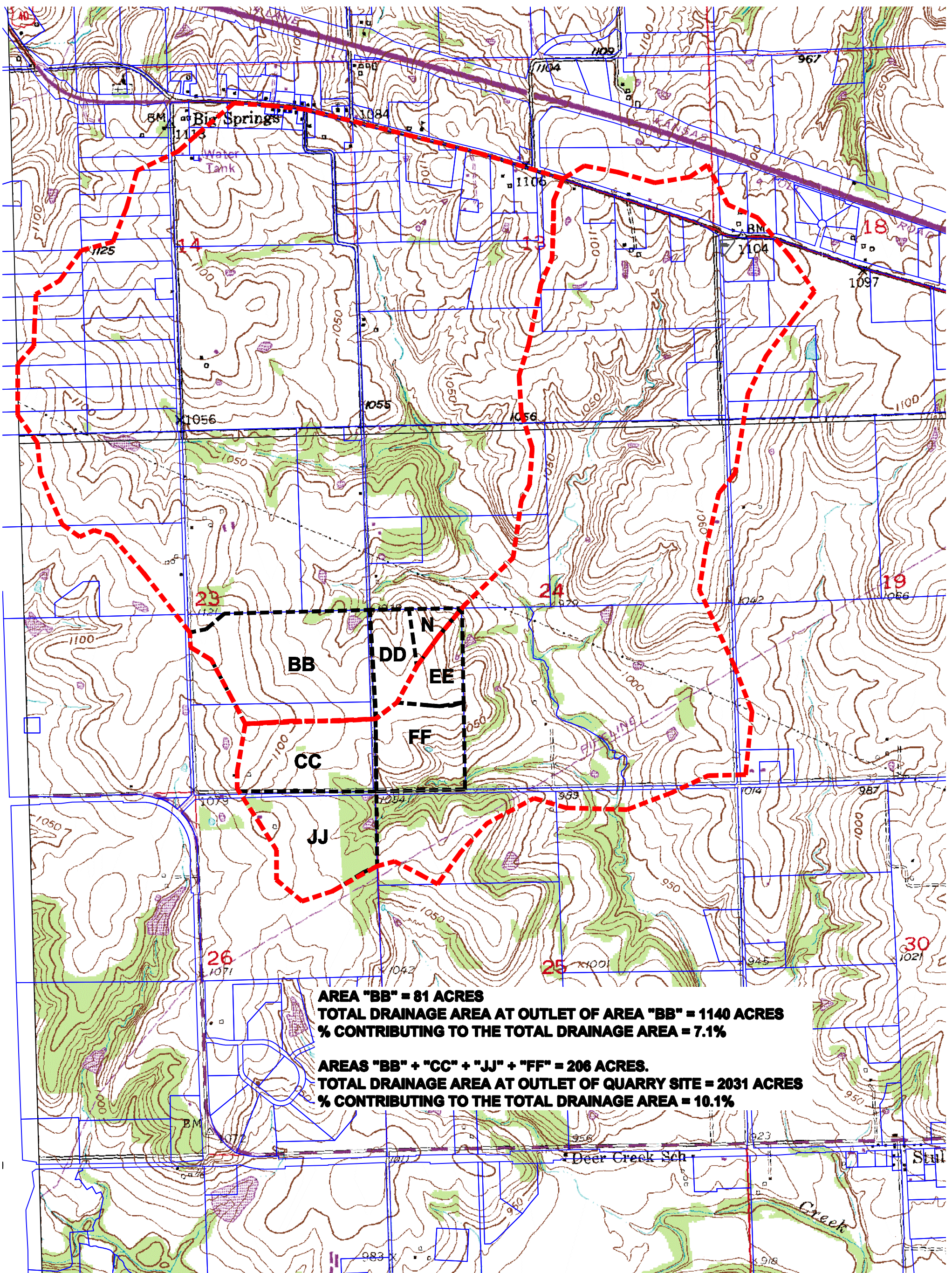
2. A modification from the Consent Decree has been requested by the operator to permit the natural strata along the north edge of the water feature in Phase 1A to remain. If the modification is not approved, the north slope of the water feature in Phase 1A shall be revised on the reclamation plan to a 3:1 slope or less. ***A note indicating that the Board of County Commissioners approved the modification to permit the natural strata to remain on the north shore of the Phase 1A water feature has been added to Sheet 7.***
3. The applicant shall make the following revisions to the reclamation plans:
  - a. General Note 3 on the Title Page should be revised to clarify that reclamation in these phases will be conducted per requirements of the Consent Decree and will not be concurrent with mining activity in those phases. ***This clarification was added to the sequencing note on Sheet 7.***
  - b. General Note 4 on the Title Page shall be revised to reflect the appropriate range of variations as determined by the County Engineer. The water features shall be shown to reflect the anticipated size on the plan and the anticipated surface area of the water features shall be noted on the plan. The Note shall also indicate that any variation beyond the approved range would require administrative review by the Planning Staff and approval by the County Engineer. ***This note has been revised on the plan to include the range of variations as approved by the County Engineer. The note retained the language that any variations beyond this range will require the submittal of revised reclamation plans and clarified that the reclamation plans shall be reviewed by staff and approved by the County Commission.***
  - c. Note 3 on the General Sequencing Plan shall be revised to indicate that the utilization of natural strata rather than the 3:1 or less slope above the established water surface elevation shall require notification to the Planning Office and approval by the County Engineer. ***Note 3 refers to natural strata which is at a 3:1 slope so the revision was not necessary.***
  - d. Sequencing Note 1 on Plan Sheet 7 shall also state that the erosion control measures will be 'maintained' as required in the Stormwater Pollution Protection Plan. ***This change has been made.***
  - e. The sentence in the first paragraph under the heading 'Sequencing Plan' on Plan Sheet 7 shall be revised: "Reclamation of each quarried area within a phase is planned to occur concurrently with mining operations and will be completed as soon as practical after quarrying is complete; however Phase 1-A is an exception as quarrying is complete but reclamation is occurring to resolve a pre-existing condition and portions of Phase 1-A and Phase 2 will be disturbed to facilitate this reclamation." ***Wording has been added to this note to clarify that reclamation in Phases 1A and 2 are not occurring concurrently with mining.***

- f. Revise the reclamation plan shown on Plan Sheet 5 to remove the grading change over the Mid-American Pipeline. **Sheet 5 has been revised to remove the contour over the setback.**
- g. Sheet 5 shall be revised to show accurately the 160 ft setback along the western property line. **Sheet 5 has been revised to show the 160 ft setback accurately.**
- h. The plan should note that each pond will have an 'outflow' and indicate the approximate location. **The plan notes that each pond will have an outflow spillway that matches the elevation of the existing waterway to allow the existing drainage pattern to be maintained (General Note 4)**

**Staff Recommendation:**

Staff recommends approval of the revised reclamation plans with the following range of variations as noted in General Note 4:

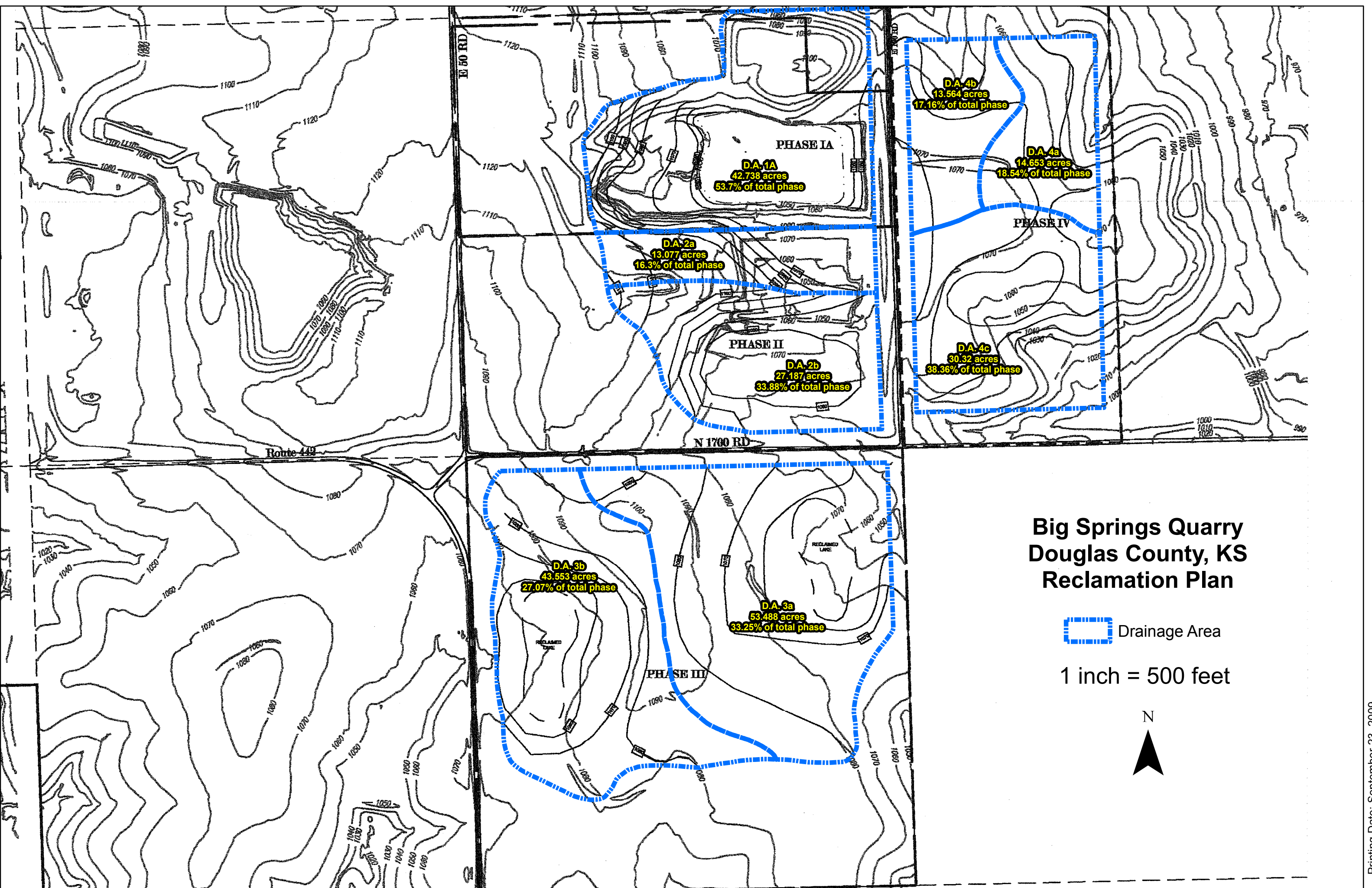
- 1) Finished elevation may vary + 5 feet or – 10 feet
- 2) Size of water feature(s) may vary up to 40% of the disturbed area within the drainage area for the water feature(s); as shown on Attachment B
- 3) Location of water features are restricted to a 300 ft separation from perimeter
- 4) Shape of water features are restricted to an 8 ft maximum height noted for any natural strata with a slope greater than 3:1 which is approved to be retained for stabilization of the bank



**AREA "BB" = 81 ACRES  
TOTAL DRAINAGE AREA AT OUTLET OF AREA "BB" = 1140 ACRES  
% CONTRIBUTING TO THE TOTAL DRAINAGE AREA = 7.1%**

**AREAS "BB" + "CC" + "JJ" + "FF" = 206 ACRES.  
TOTAL DRAINAGE AREA AT OUTLET OF QUARRY SITE = 2031 ACRES  
% CONTRIBUTING TO THE TOTAL DRAINAGE AREA = 10.1%**





# Big Springs Quarry Douglas County, KS Reclamation Plan

 Drainage Area

1 inch = 500 feet



# BIG SPRINGS QUARRY

## DETAILED RECLAMATION PLAN

### PHASE 1A, 2, 3, AND 4

## DOUGLAS COUNTY, KANSAS

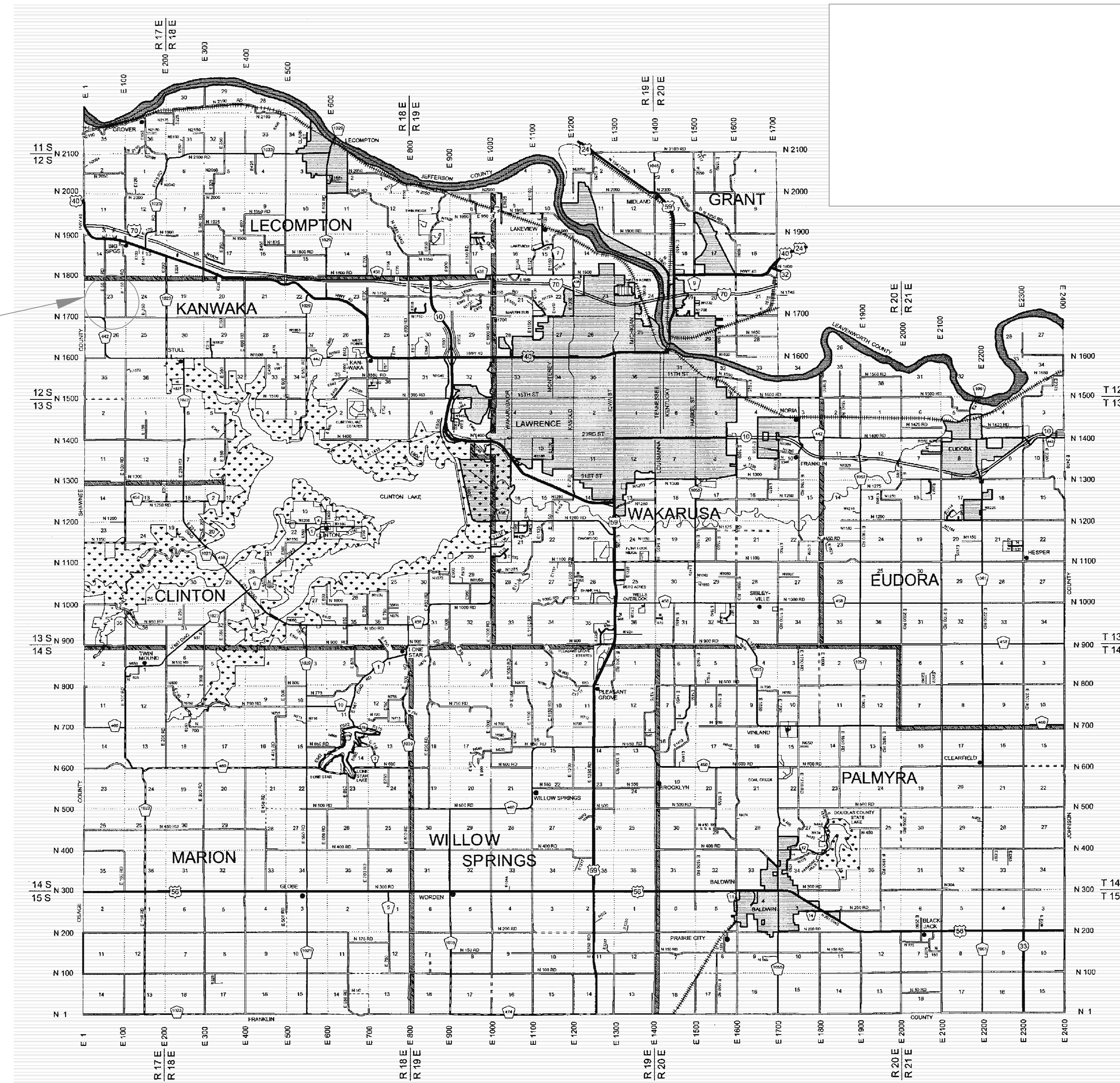
#### INDEX OF DRAWINGS

- 1 TITLE SHEET
- 2 OVERALL GEOLOGY MAP
- 3 COMPOSITE DETAILED RECLAMATION PLAN
- 4-6 DETAILED RECLAMATION PLANS
- 7 PHASE 1A RECLAMATION PLAN FOR OVERBURDEN PILE
- 8-9 PHASE 1A OVERBURDEN PILE CROSS SECTIONS
- 10 DRAINAGE PLAN FOR PHASE 1A, 2, 3, AND 4
- 11 GENERALIZED QUARRY CROSS SECTION

QUARRY LOCATION

#### LEGAL DESCRIPTION

All of Section 23, Township 12 South, Range 17 East of the Sixth Principal Meridian, in Douglas County, Kansas except the North 12 rods of East 16 rods of the Northeast Quarter of said Section 23;  
 TOGETHER WITH:  
 The Northwest Quarter and the Northeast Quarter of Section 26, Township 12 South, Range 17 East of the Sixth Principal Meridian, in Douglas County, Kansas  
 AND TOGETHER WITH:  
 The West Half of the Southwest Quarter of Section 24, Township 12 South, Range 17 East of the Sixth Principal Meridian, in Douglas County, Kansas.



#### GENERAL NOTES

1. All quarry operations will be performed in accordance with the Storm Water Pollution Prevention Plan (SWPPP) on file with the Kansas Department of Health And Environment, as it may be amended from time to time.
2. Materials used to complete the reclamation of Phase 2 may be excavated and obtained from the mining operations in the area of Phase 3. In a likewise manner, materials used to complete the reclamation of the land in each phase may be taken from the mining operations in the subsequent phase. The area which may be disturbed in the subsequent phase prior to completion of reclamation in a previous phase is limited to the acreage specified in the CUP.
3. Reclamation of each quarried area within a phase is planned to occur concurrently with mining operations and will be completed as soon as practical after quarrying is complete. Material will be borrowed from the subsequent phase to finish reclamation in a completed phase where necessary. Reclamation activities, for the purpose of determining when quarrying in the subsequent phase may proceed beyond the acreage restriction in the CUP are considered complete when final grading, seeding, and mulching operations are completed.
4. The detailed reclamation plans presented herein are subject to change based on variable field conditions relative to soil and rock volumes, soil and rock characteristics and field conditions which may be encountered during the mining and reclamation processes. Landforms indicated are general in nature and final elevations may vary as much as 5 ft higher or 10 ft lower than shown on the plan. Water bodies may change relative to size, location, shape and elevation as field conditions dictate. The surface area of any water body or bodies will not exceed 40% of the disturbed area in the watershed contributing to that water body or bodies. There is no minimum range for the surface area of the water body. Each water body shall have an outflow spillway that matches the elevation of the existing waterway to allow the existing drainage pattern to be maintained. The surface area of the water body is measured at spillway elevation. No water body shall extend to a depth below elevation 1042. No water body shall be located within 300 feet of an exterior property line. Depth and surface area of water bodies will vary based on climatic conditions. Any other variations or variations beyond the ranges specified in this note will require a revision to the reclamation plan. The revised reclamation plan shall be submitted to the Planning Office for review and the Board of County Commissioners for approval. Provided however, no man-made earth slope, with the exception of the slope of the water feature below the established water level, shall exceed 3:1, and provided that where approved, natural strata with a stable slope steeper than 3:1, and 8' feet high or less in height above the established water surface elevation, may be retained for any water feature and provided that the overburden pile located in Phase 1 A will not exceed elevation 1070 after reclamation is complete.
5. The operator shall, in good faith, work with downstream landowners to effectively manage surface water flows for the benefit of said landowners and the quarry at large.

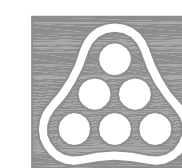
#### GENERAL SEQUENCING PLAN

The intent of reclamation is to return the land to be suitable for use for agriculture (haying and ranching activities), recreation, wildlife habitat, or other uses. Water features will be incorporated into the reclaimed land to support ranching and fishing, as well as to support wildlife. Reclamation of each quarried area within a phase is planned to occur concurrently with mining operations and will be completed as soon as practical after quarrying is complete. Material will be borrowed from the subsequent phase to finish reclamation in a completed phase where necessary. Reclamation activities, for the purpose of determining when quarrying in the subsequent phase may proceed beyond the acreage restriction in the CUP are considered complete when final grading, seeding, and mulching operations are completed.

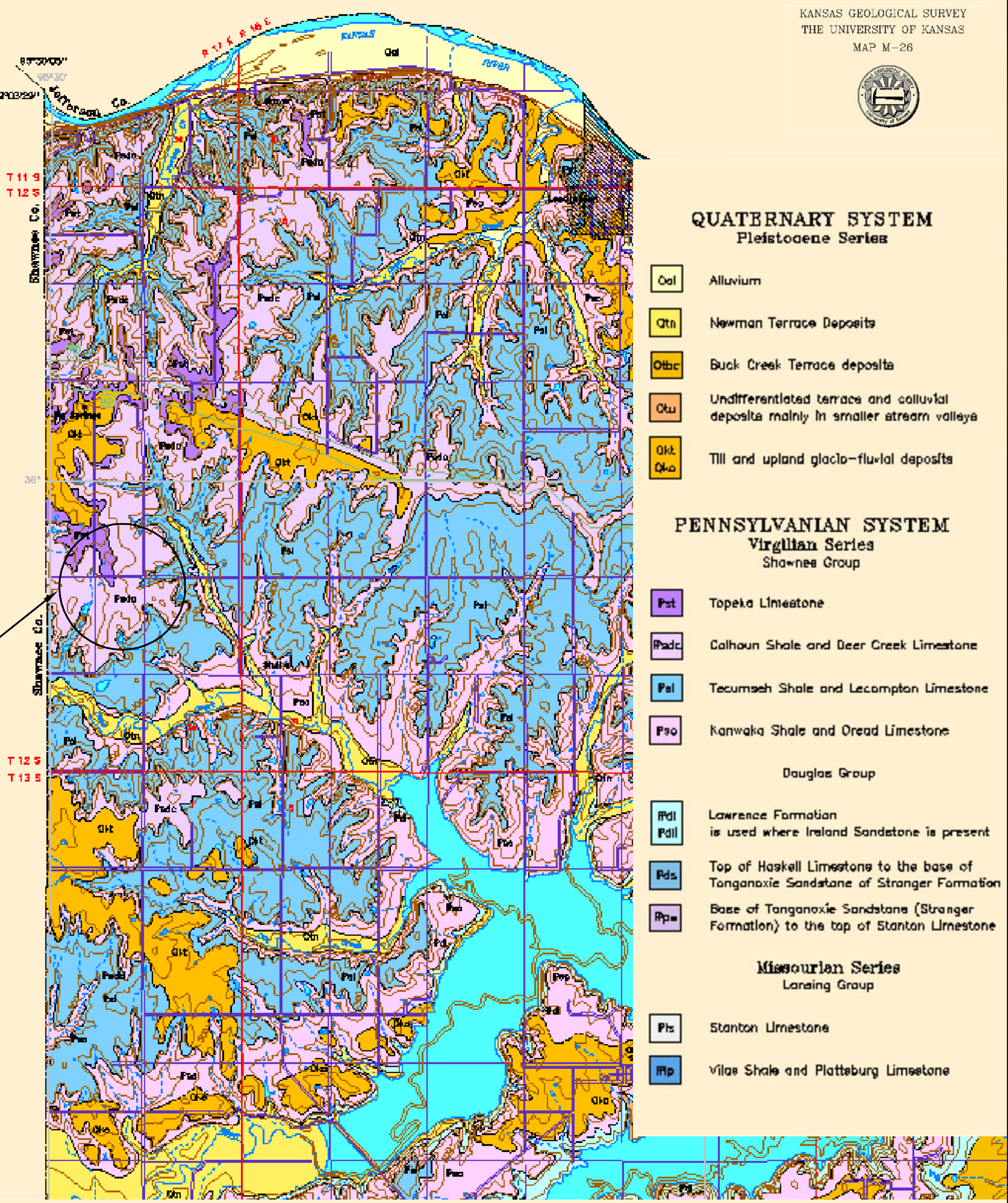
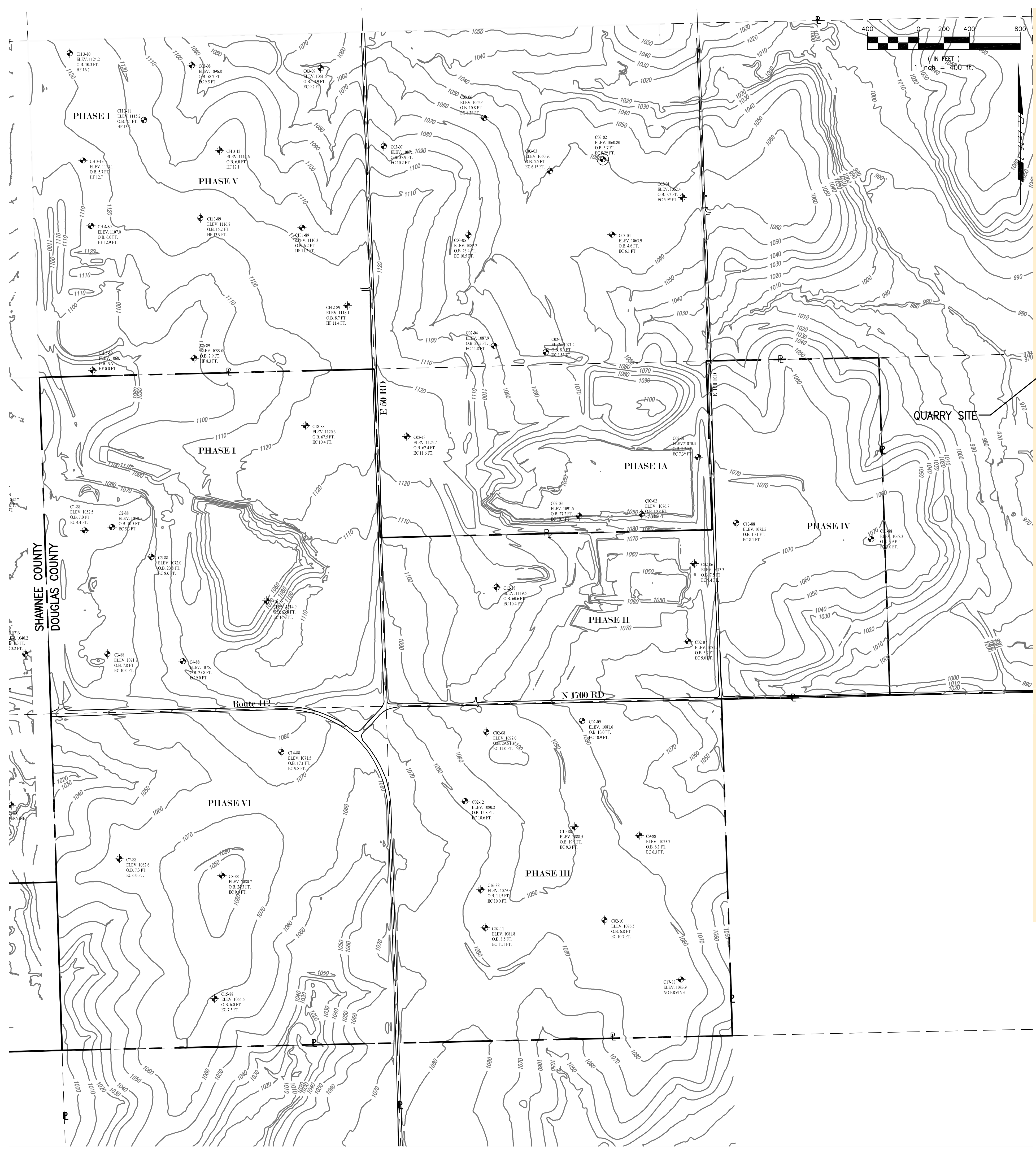
Reclamation will occur in the following sequence:

1. Place erosion control sediment barriers on down gradient side of earthmoving operations.
2. Fill excavated area with overburden material taken from active mining processes or available stockpiles.
3. Where water bodies are to be created, the slope above the planned water's edge will be shaped to a gradient of 3:1 or flatter. Natural strata along the water body may be retained in place for bank stabilization, or stone may be placed at the planned water's edge to stabilize the bank.
4. All man-made slopes will be graded to have slopes 3:1 or flatter, with the exception of the slope of the water feature below the planned water level, and provided that where approved, natural strata with a slope steeper than 3:1 may be retained for stabilization of the bank of any water feature. Where appropriate, terraces will be installed to minimize erosion.
5. After finish grading, the surface shall be disked to a depth of six inches. A thickness of four inches of topsoil shall be placed on all areas to be vegetated. Topsoil material to be taken from topsoil stockpile(s) on site.
6. All disturbed non-water body areas shall be seeded and mulched. Seeding shall be prairie grass/wildflower mix for the District 1 area in accordance with the standards of the Kansas Department of Transportation, or wildlife habitat mix in accordance with the standards of Quail Unlimited. Prairie hay or wheat straw mulch shall be applied at a rate of two tons per acre and tacked down. In areas seeded for erosion control, mowed lawns, and berms, seeding shall be K-31 fescue at 300 pounds per acre and annual rye at 50 pounds per acre.

SEPTEMBER 2009  
 PEC PROJECT No. 08A39-000



Professional Engineering Consultants, P.A.  
 1263 S.W. TOPEKA BLVD. • TOPEKA, KANSAS 66612  
 785-233-8300 • FAX 785-233-8855



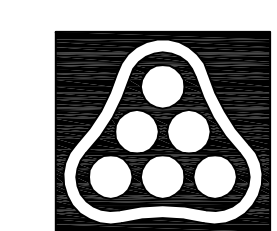
Generalized east-west geologic cross section across central Douglas County showing major rock units



**LEGEND**

OB OVERBURDEN  
EC ERVINE CREEK LIMESTONE MEMBER  
HF HARTFORD LIMESTONE MEMBER

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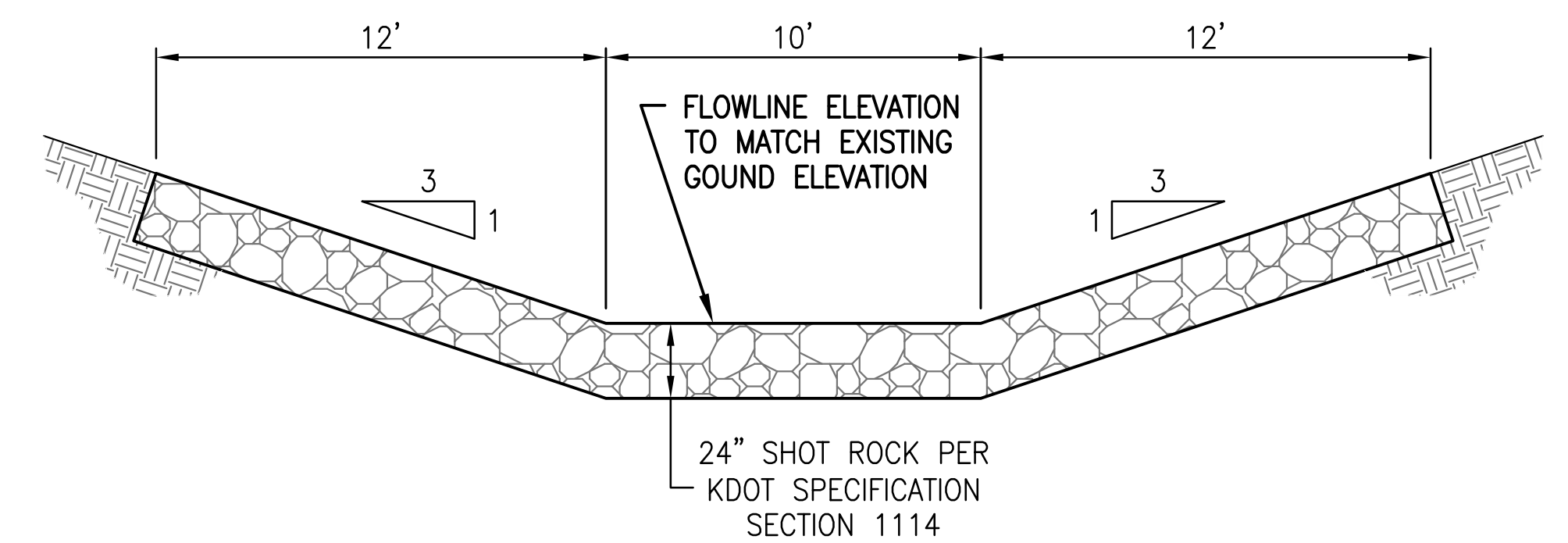
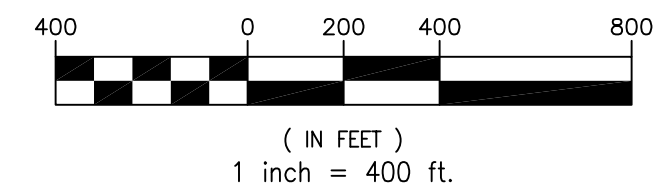
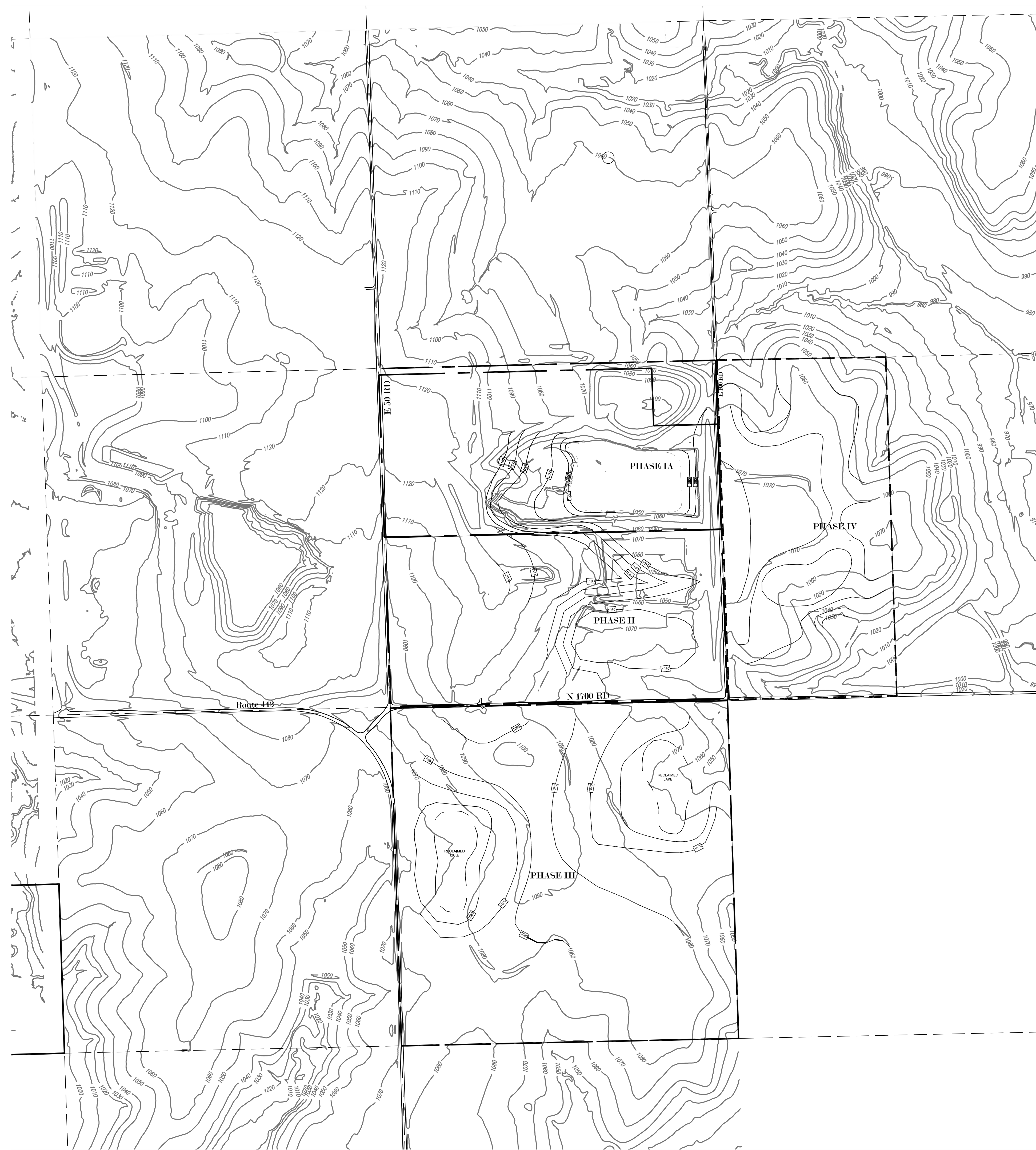
No.	Revision	By	Date

**BIG SPRINGS QUARRY**  
DOUGLAS COUNTY, KANSAS  
**OVERALL GEOLOGY MAP**

**Professional Engineering Consultants, P.A.**  
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Designed by TC/MWB Job No. 08A39  
Drawn by TCC Date JUNE 2009 Sht. 2 of 11

Saved 10-15-2009 11:09:18 AM by D.L.  
 C:\2009\08\93\DWG\PHASE RECLAMATION SITE (06-15-09)\08-93-000-SHT 3-Composite Reclined Reclamation Plan-NEW



**OVERFLOW SPILLWAY DETAIL**

**LEGEND**

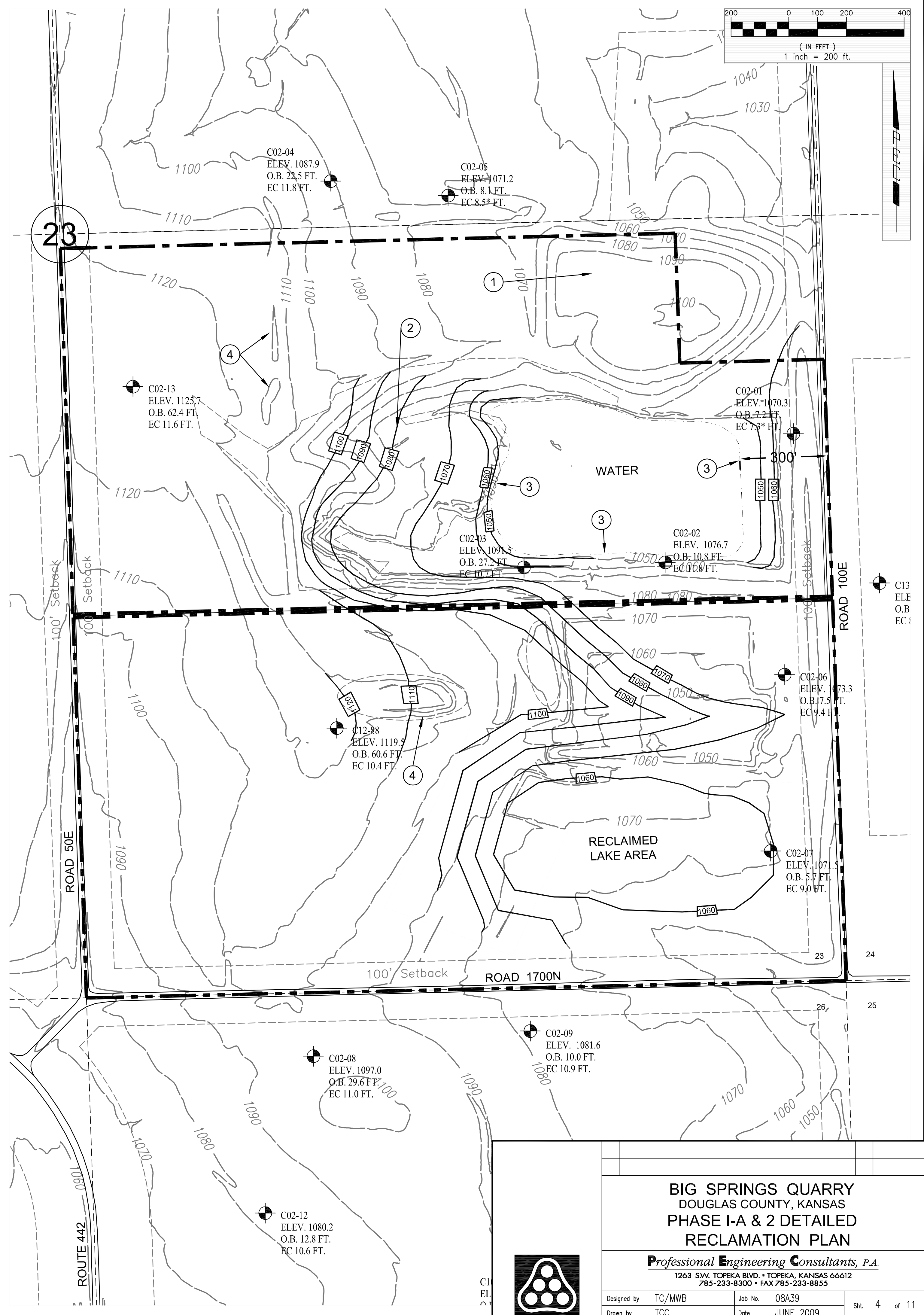
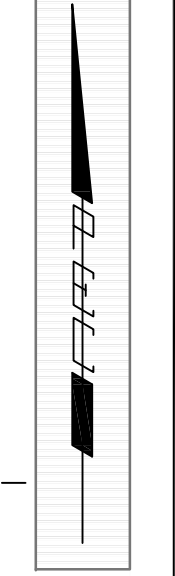
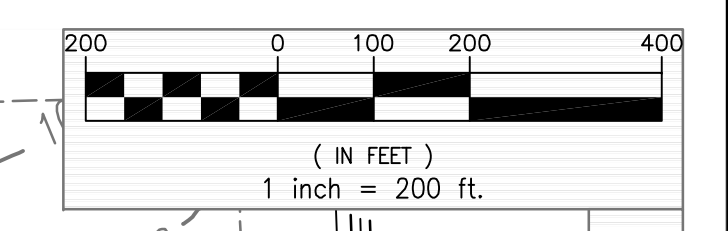
- PHASE 1A BOUNDARY
- PHASE 2 BOUNDARY
- PHASE 3 BOUNDARY
- PHASE 4 BOUNDARY

No.	Revision	By	Date

**BIG SPRINGS QUARRY**  
 DOUGLAS COUNTY, KANSAS  
**COMPOSITE DETAILED RECLAMATION PLAN**

**Professional Engineering Consultants, P.A.**  
 1263 SW TOPEKA BLVD • TOPEKA, KANSAS 66612  
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Designed by	TC/MWB	Job No.	08A39	Sht. 3 of 11
Drawn by	TCC	Date	JUNE 2009	



**LEGEND**

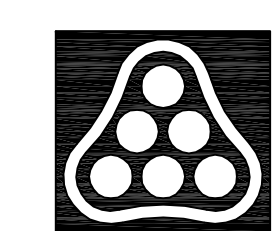
- PHASE 1A BOUNDARY
- PHASE 2 BOUNDARY

NOTE THAT ALL DIMENSIONS ARE TO PROPERTY LINE

**PHASE IA & II**

- ① Remove and reconstruct overburden pile to elevation 1070 or lower. See Sheet No.7.
- ② Place overburden material to provide terraced slope toward water body.
- ③ Reconstruct bank to 3:1 or flatter gradient.
- ④ Topsoil material to be used for topsoil operations in Phase I-A.

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 TCC

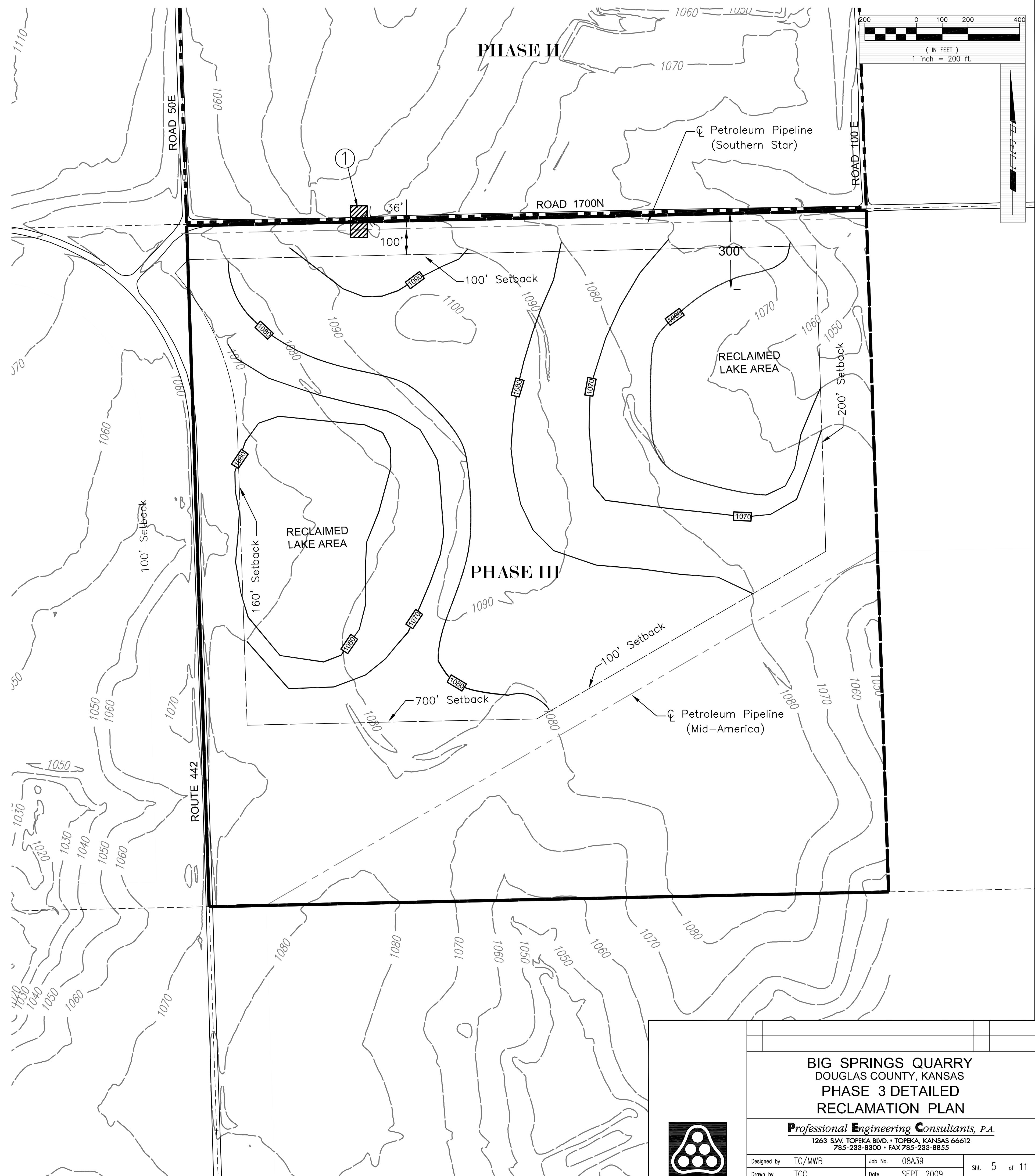


**BIG SPRINGS QUARRY**  
 DOUGLAS COUNTY, KANSAS  
**PHASE I-A & 2 DETAILED**  
**RECLAMATION PLAN**

**Professional Engineering Consultants, P.A.**  
 1263 SW. TOPEKA BLVD. • TOPEKA, KANSAS 66612  
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Designed by TC/MWB	Job No. 08A39	Sht. 4 of 11
Drawn by TCC	Date JUNE 2009	

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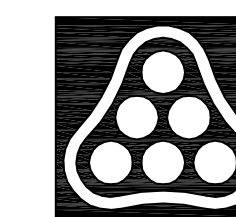
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--- PHASE 2 BOUNDARY

--- PHASE 3 BOUNDARY

NOTE THAT ALL DIMENSIONS ARE TO PROPERTY LINE

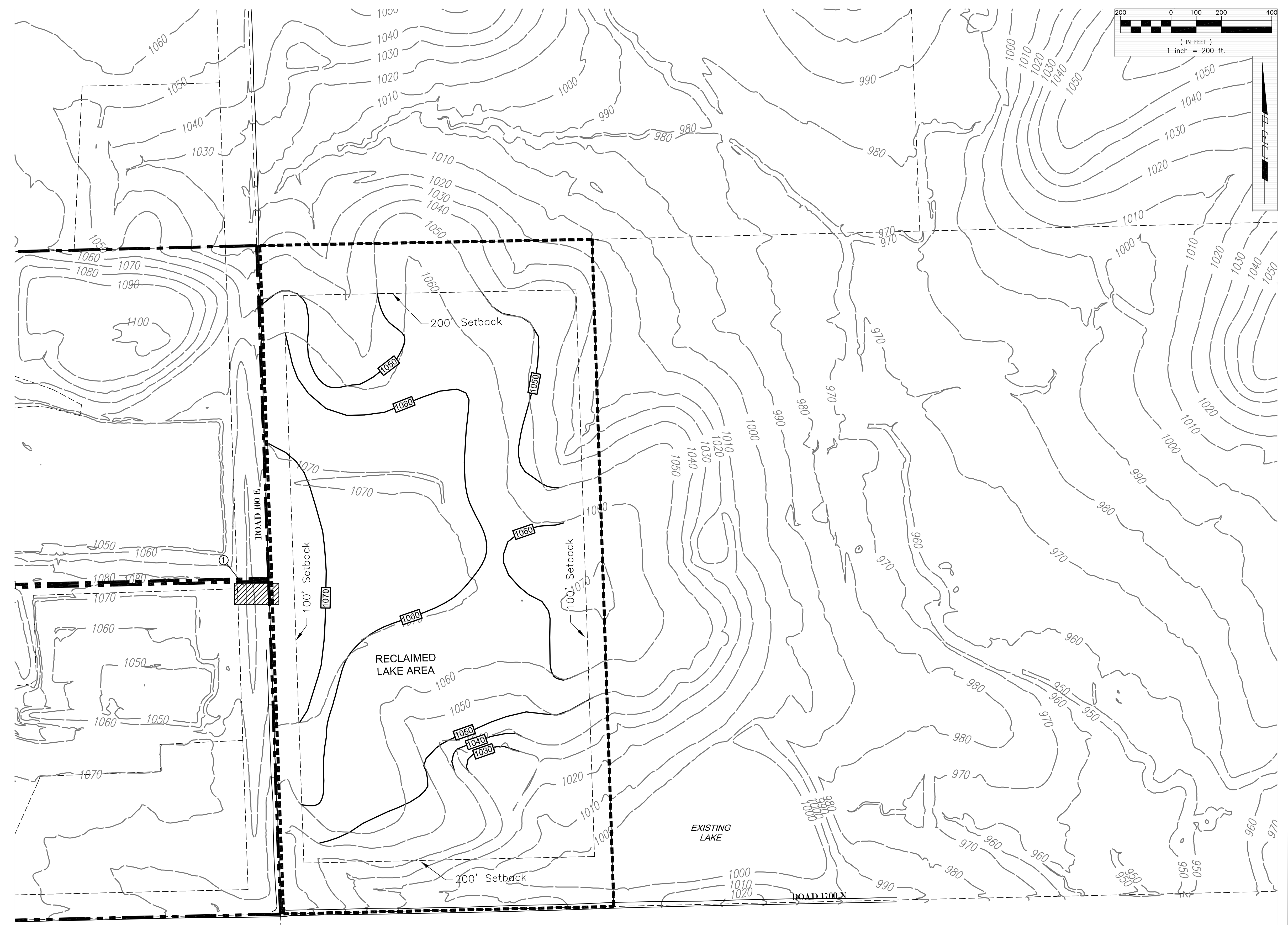
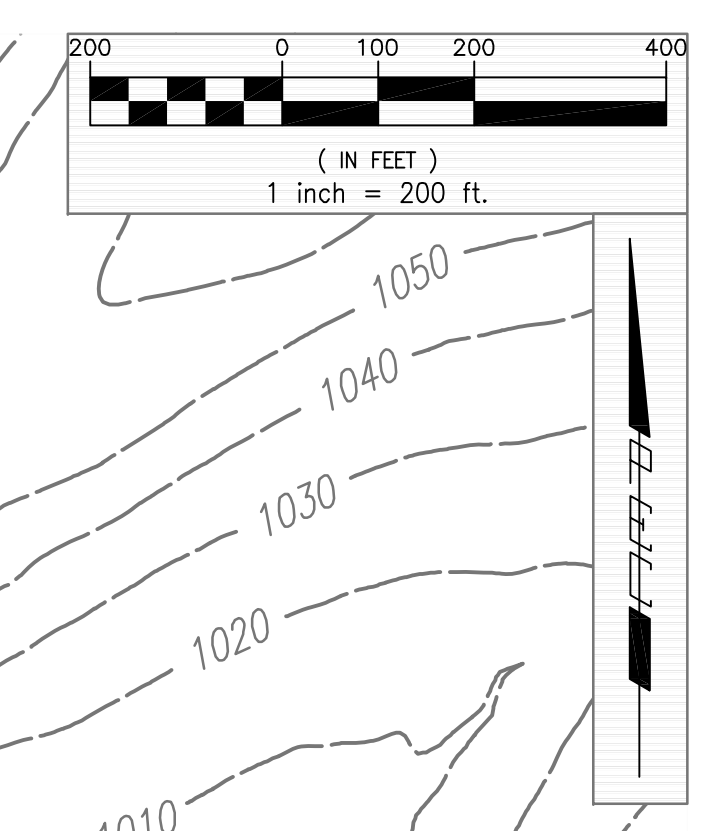
① HAUL ROAD CROSSING, APPROVED BY COUNTY ENGINEER, JUNE, 2009.



**BIG SPRINGS QUARRY  
DOUGLAS COUNTY, KANSAS  
PHASE 3 DETAILED  
RECLAMATION PLAN**

**Professional Engineering Consultants, P.A.**  
1263 SW TOPEKA BLVD • TOPEKA, KANSAS 66612  
785-233-8300 • FAX 785-233-8855

Designed by	TC/MWB	Job No.	08A39	Sht. 5 of 11
Drawn by	TCC	Date	SEPT. 2009	



**LEGEND**

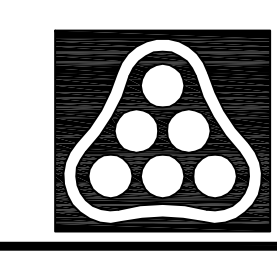
- PHASE 1A BOUNDARY
- PHASE 2 BOUNDARY
- PHASE 4 BOUNDARY

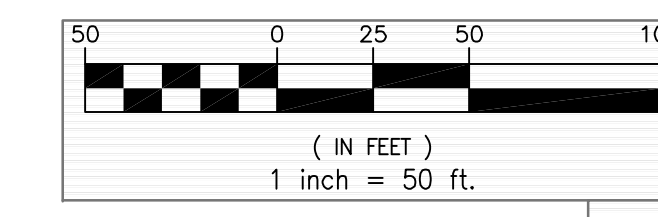
NOTE THAT ALL DIMENSIONS ARE TO PROPERTY LINE

① PROPOSED HAUL ROAD CROSSING TO STANDARD APPROVED BY COUNTY ENGINEER.

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 P:\2009\08A39\08A39\Phase4\Reclamation\_Site\_08-15-09\08A39-000-SHT 6-Phase IV Site Plan-NEW

No.	Revision	By	Date	
<b>BIG SPRINGS QUARRY</b> DOUGLAS COUNTY, KANSAS <b>PHASE 4 DETAILED RECLAMATION PLAN</b>				
<b>Professional Engineering Consultants, P.A.</b> 1263 S.W. TOPEKA BLVD. • TOPEKA, KANSAS 66612 785-233-8300 • FAX 785-233-8855				
Designed by	MWB	Job No.	08A39	Sht. 6 of 11
Drawn by	DMS	Date	APRIL 2009	





**RECLAMATION DRAINAGE PLAN NOTES**

- ① CONSTRUCT DITCH PLUG AT ELEV. 1068
- ② REMOVE OVERBURDEN TO ELEVATION 1070. GRADE TOP TO DRAIN TO SOUTH.
- ③ GRADE 10' EARTHEN CHANNEL TO DRAIN SOUTH.
- ④ CONSTRUCT RIPRAP DITCH LINING TO WATERS EDGE.

**SEQUENCING PLAN- PHASE 1A**

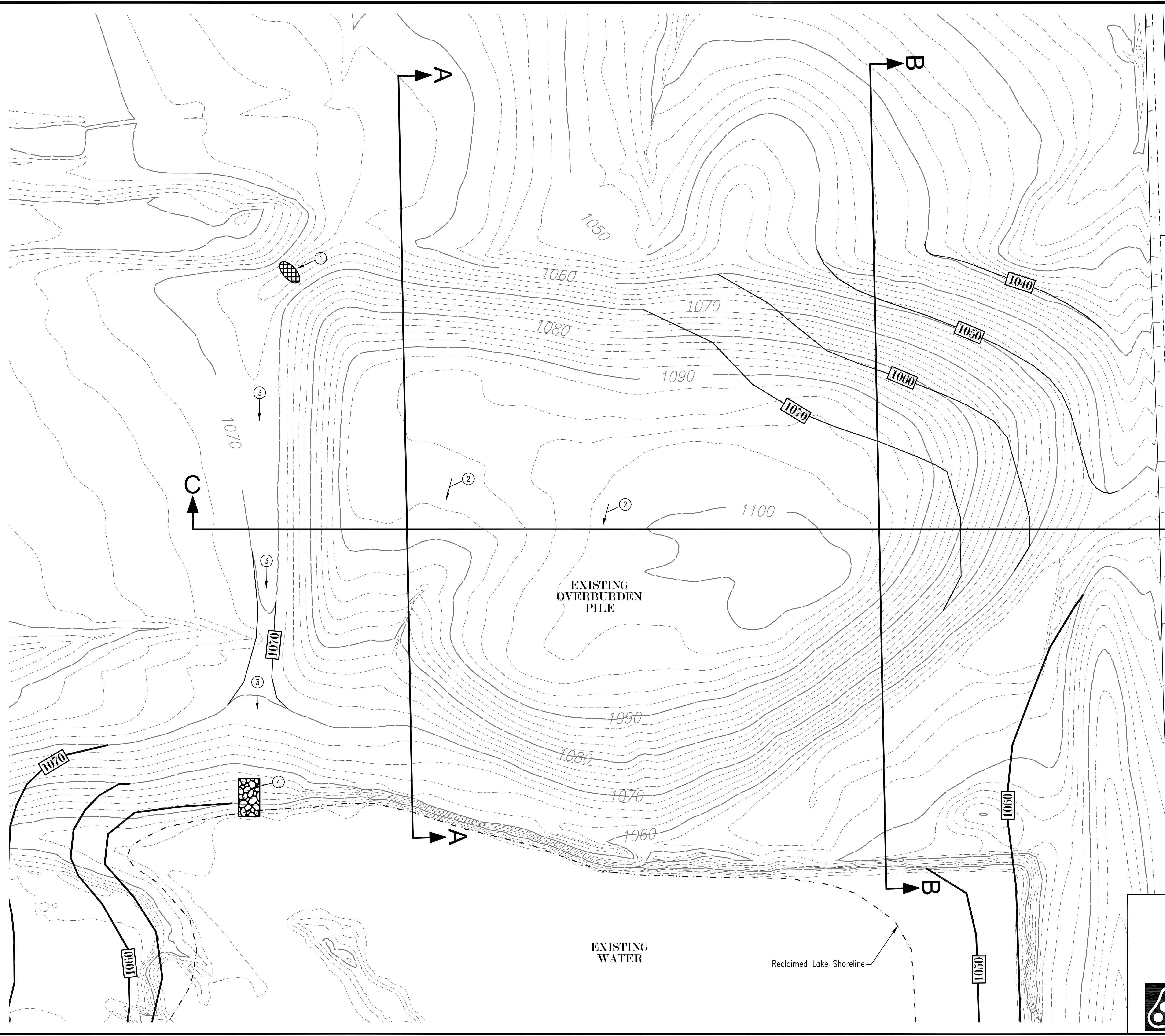
The intent of reclamation is to return the land to be suitable for use for agriculture (hay and ranching activities), recreation, wildlife habitat, or other uses. Water features will be incorporated into the reclaimed land to support ranching and fishing, as well as to support wildlife. Reclamation of each quarried area within a phase is planned to occur concurrently with mining operations and will be completed as soon as practical after quarrying is complete. Material will be borrowed from the subsequent phase to finish reclamation in a completed phase where necessary. Reclamation activities, for the purpose of determining when quarrying in the subsequent phase may proceed beyond the acreage restriction in the CUP are considered complete when final grading, seeding, and mulching operations are completed.

Reclamation of the area designated Phases 1A and 2 will be performed in accordance with the schedule set forth in Section 2 of the Consent Decree executed by the Board of County Commissioners, Douglas County, Kansas and Mid-States Materials, LLC on May 27, 2009.

The Board of County Commissioners approved a modification to the Consent Decree at their September 16, 2009 meeting to allow the rock strata along the north shore of the water feature in Phase 1A to remain. A slope of 3:1 is not necessary in this area.

**Reclamation will occur in the following sequence:**

1. In accordance with Best Management Practices, place and maintain erosion control sediment barriers on down gradient side of earthmoving operations. Refer to the Storm Water Pollution Prevention Plan Dated June 2009.
2. Perform test excavation on overburden pile to determine the limits and extent of topsoil that may be encountered in the pile.
3. If topsoil is present in volumes practical for salvage with conventional powered earthmoving equipment, remove and temporarily stockpile topsoil materials from the overburden pile for later reuse. Temporary stockpiles shall not exceed twelve feet in height and will be seeded in annual rye to prevent wind or water erosion. During these operations, retain existing vegetation on north and east sides of overburden pile as long as practical.
4. Utilizing overburden materials, re-established grades above the water line along the east, south and west sides of the existing water body to a gradient of 3:1 or flatter. Natural strata on the north side of the water body will be retained in place for bank stabilization. Stone may be placed at the planned water's edge to stabilize the bank. Create a terraced slope west of the water body utilizing material from the overburden pile. The remainder of the overburden pile will be graded to have slopes 3:1 or flatter and shall not exceed elevation 1070. During these operations, retain existing vegetation on north and east sides of overburden pile as long as practical.
5. If necessary to facilitate earthmoving operations, existing water levels may be modified. Any waters discharged from modification of water levels shall be disposed of in water bodies located in Phase 1 and/or Phase 2.
6. After finish grading, the surface shall be disked to a depth of six inches. A thickness of four inches of topsoil shall be placed on all areas to be vegetated. Topsoil material to be taken from topsoil stockpile(s) on site.
7. All non-water body areas shall be seeded and mulched. Seeding shall be prairie grass/wildflower mix for the District 1 area in accordance with the standards of the Kansas Department of Transportation, or wildlife habitat mix in accordance with the standards of Quail Unlimited. Prairie hay or wheat straw mulch shall be applied at a rate of two tons per acre and tacked down. In areas seeded for erosion control, mowed lawns, and berms, seeding shall be K-31 fescue at 300 pounds per acre and annual rye at 50 pounds per acre.
8. Install and maintain temporary sediment barriers in accordance with best management practices until vegetation is established.



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No.	Revision	By	Date

**BIG SPRINGS QUARRY**  
 DOUGLAS COUNTY, KANSAS  
**PHASE 1A RECLAMATION PLAN FOR OVERBURDEN PILE**

**Professional Engineering Consultants, P.A.**  
 1263 SW TOPEKA BLVD • TOPEKA, KANSAS 66612  
 785-233-8300 • FAX 785-233-8855

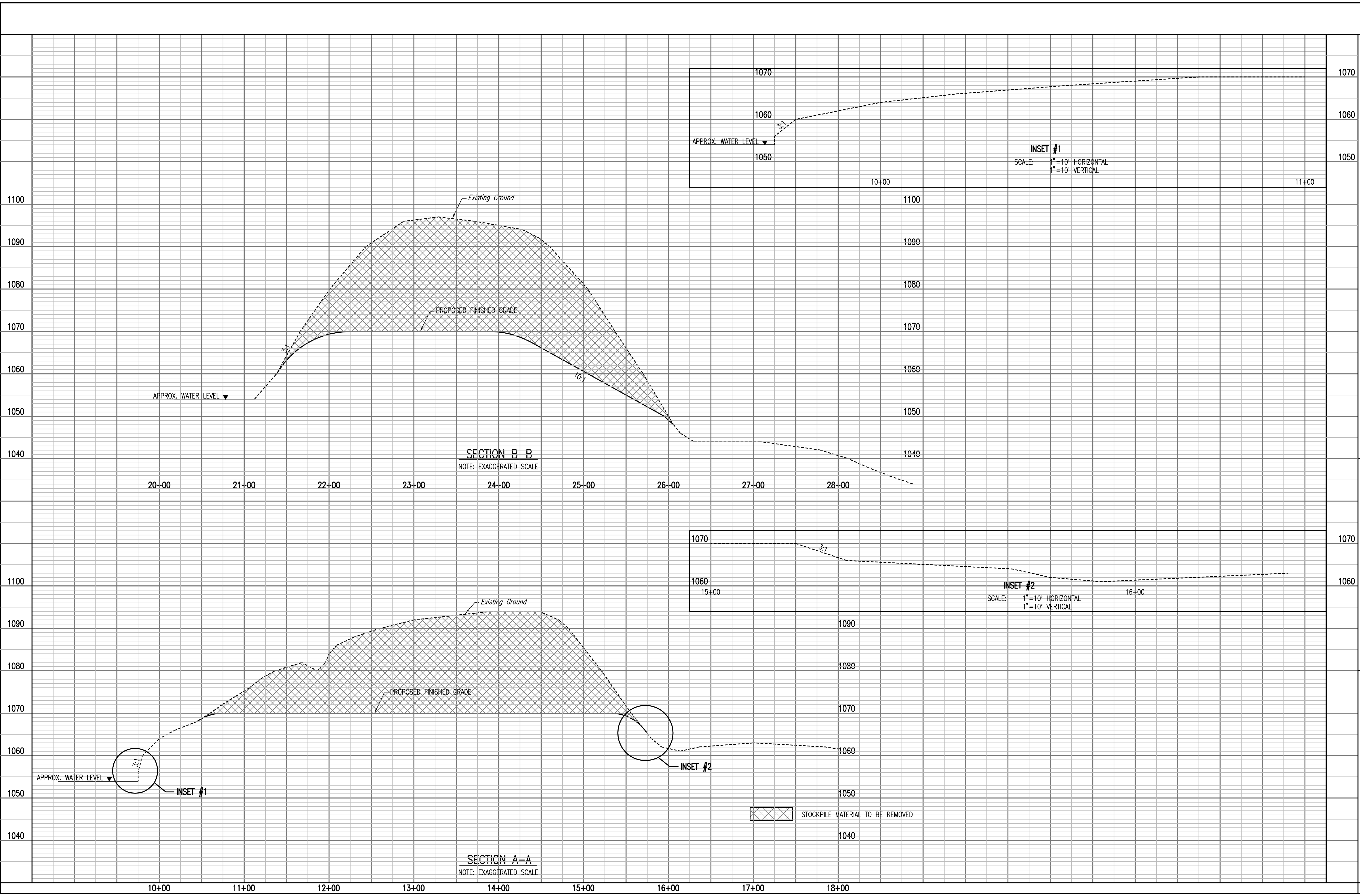
Designed by	MWB	Job No.	08A39	Sht. 7 of 11
Drawn by	DMS	Date	SEPT. 2009	



DATE	
BY	
CHECKED	
CHECKED	
PLAN	

DATE	
BY	
CHECKED	
CHECKED	
PROFILE	

Sheet 08-11-2009 8:43:50 AM by JCC  
 PROJECT: RECLAMATION SITE 06-15-09 (06A39) Plans  
 DRAWING: 8-PRE-POST CROSS SECTIONS-NEW  
 Job No. 06A39  
 Date JULY 2008



**BIG SPRINGS QUARRY**  
DOUGLAS COUNTY, KANSAS  
CROSS SECTIONS  
PHASE 1A OVERBURDEN PILE

Professional Engineering Consultants, P.A.  
 1263 SW TOPEKA BLVD. • TOPEKA, KANSAS 66612  
 785-233-8300 • FAX 785-233-8655

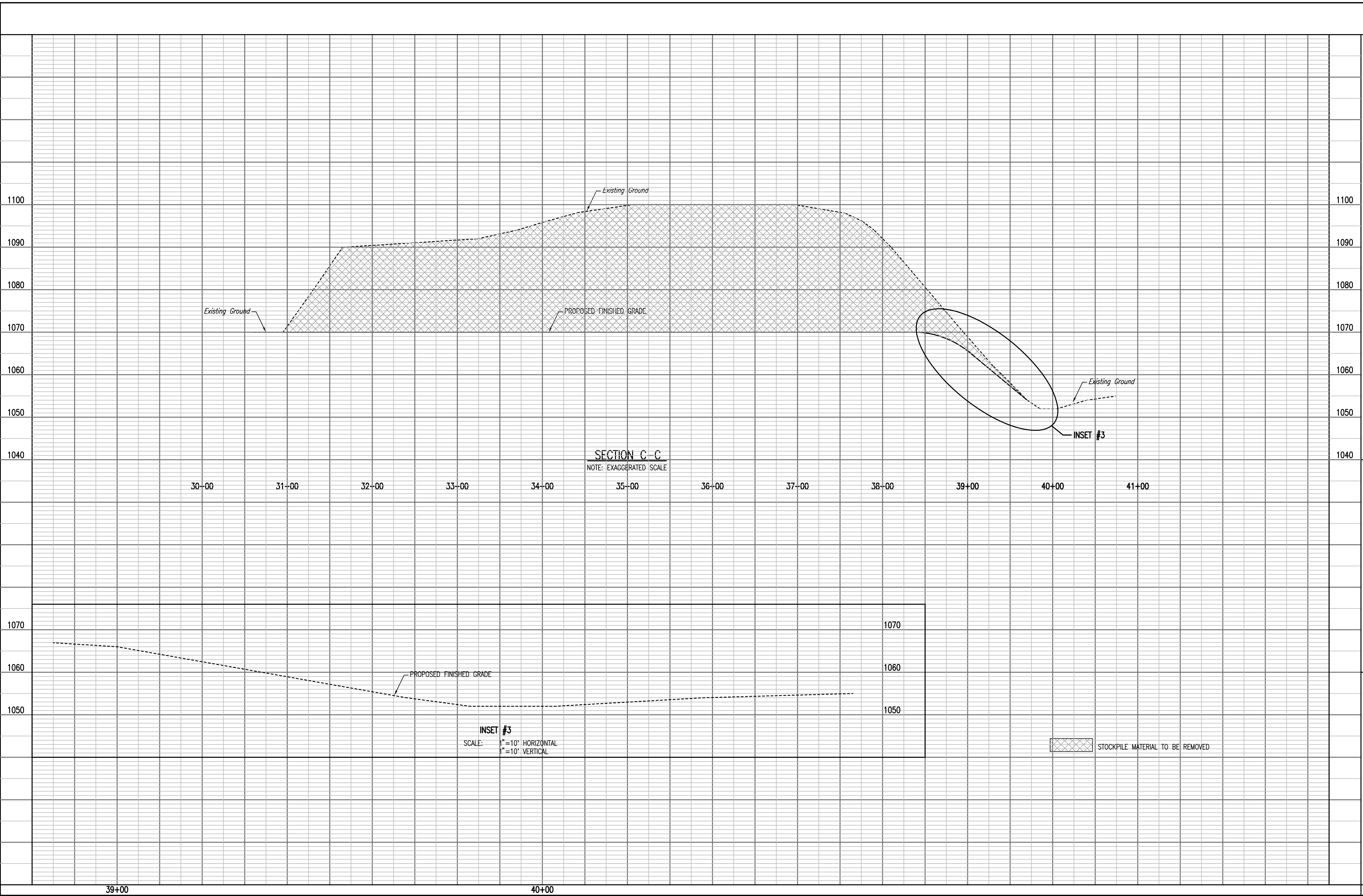
Designed By: MMB  
 Drawn By: DMS

Job No. 06A39  
 Date JULY 2008

PLAN	CHECKED	DATE
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BY		


PROFILE	CHECKED	DATE
	CHECKED	
BY		

Sheet 08-17-2009 8:59:28 AM by JCC  
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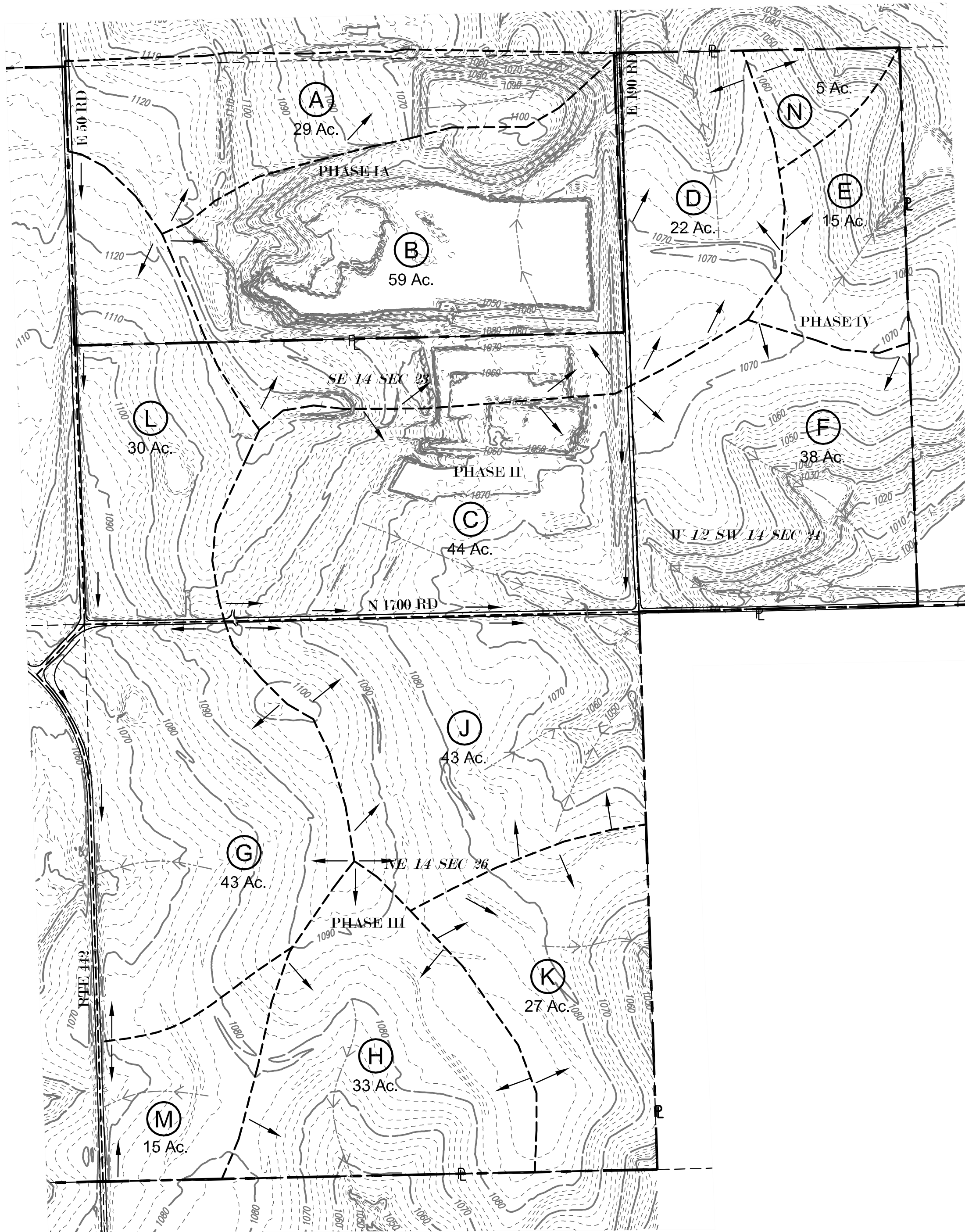
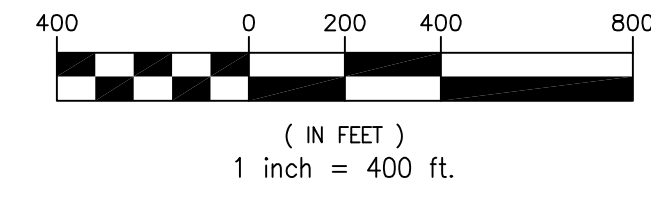
**SECTION C-C**  
 NOTE: EXAGGERATED SCALE

**INSET #3**  
 SCALE: 1" = 10' HORIZONTAL  
 1" = 10' VERTICAL

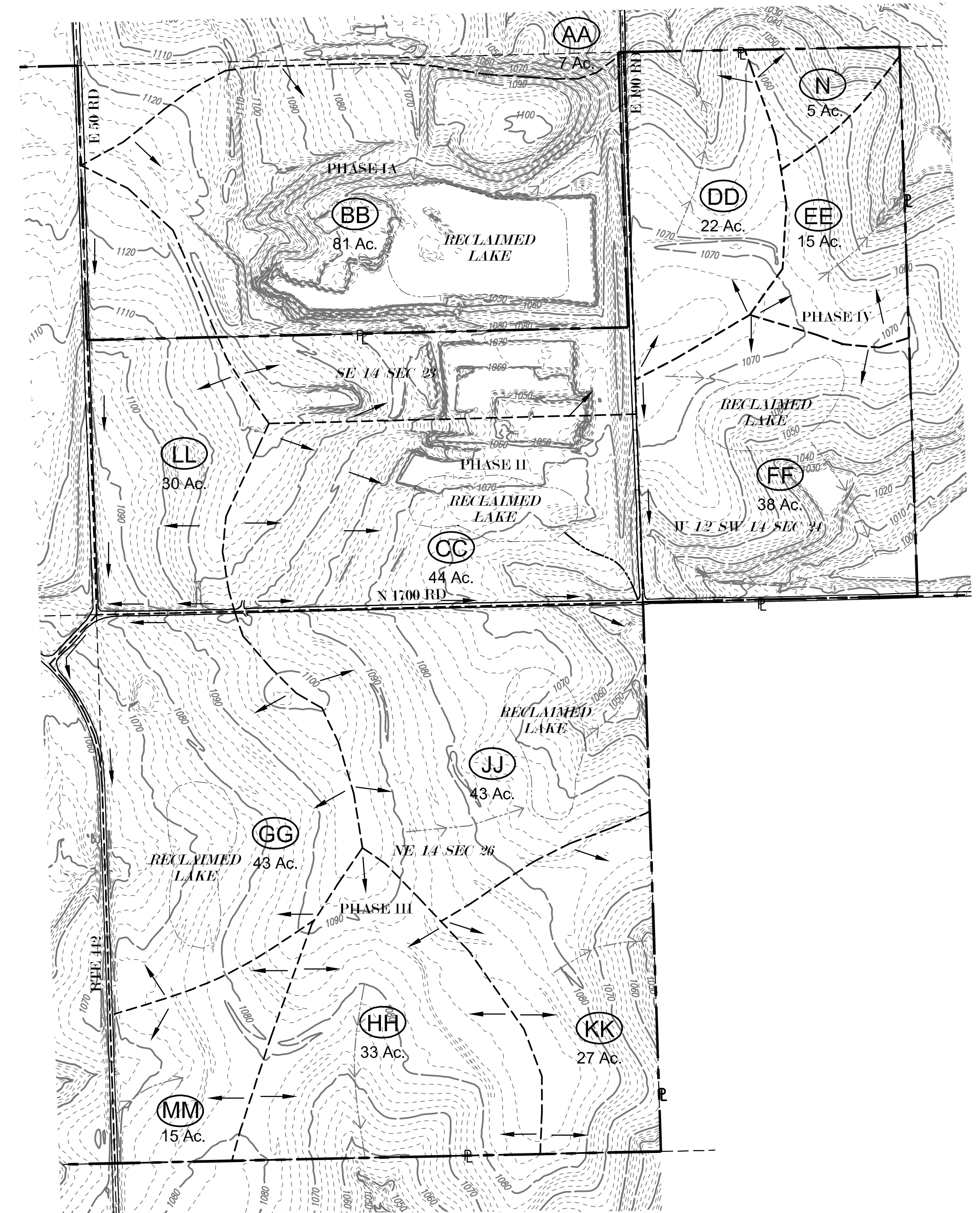
 STOCKPILE MATERIAL TO BE REMOVED

**BIG SPRINGS QUARRY**  
 DOUGLAS COUNTY, KANSAS  
**CROSS SECTIONS**  
 PHASE 1A OVERBURDEN PILE

**Professional Engineering Consultants, P.A.**  
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 785-233-8300 • FAX 785-233-8855  
 Job No. 08A39 Date JULY 2008  
 Designed By MMB Drawn By DMS



DRAINAGE MAP - PRE-MINING

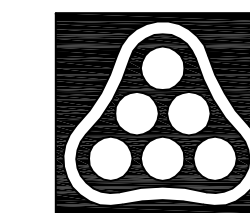


DRAINAGE MAP - POST RECLAMATION

**LEGEND**

- Watershed Crest
- >->-> Watercourse / Waterbody
- Flow Direction

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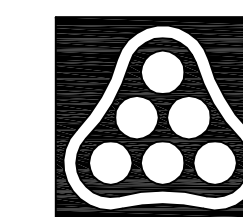
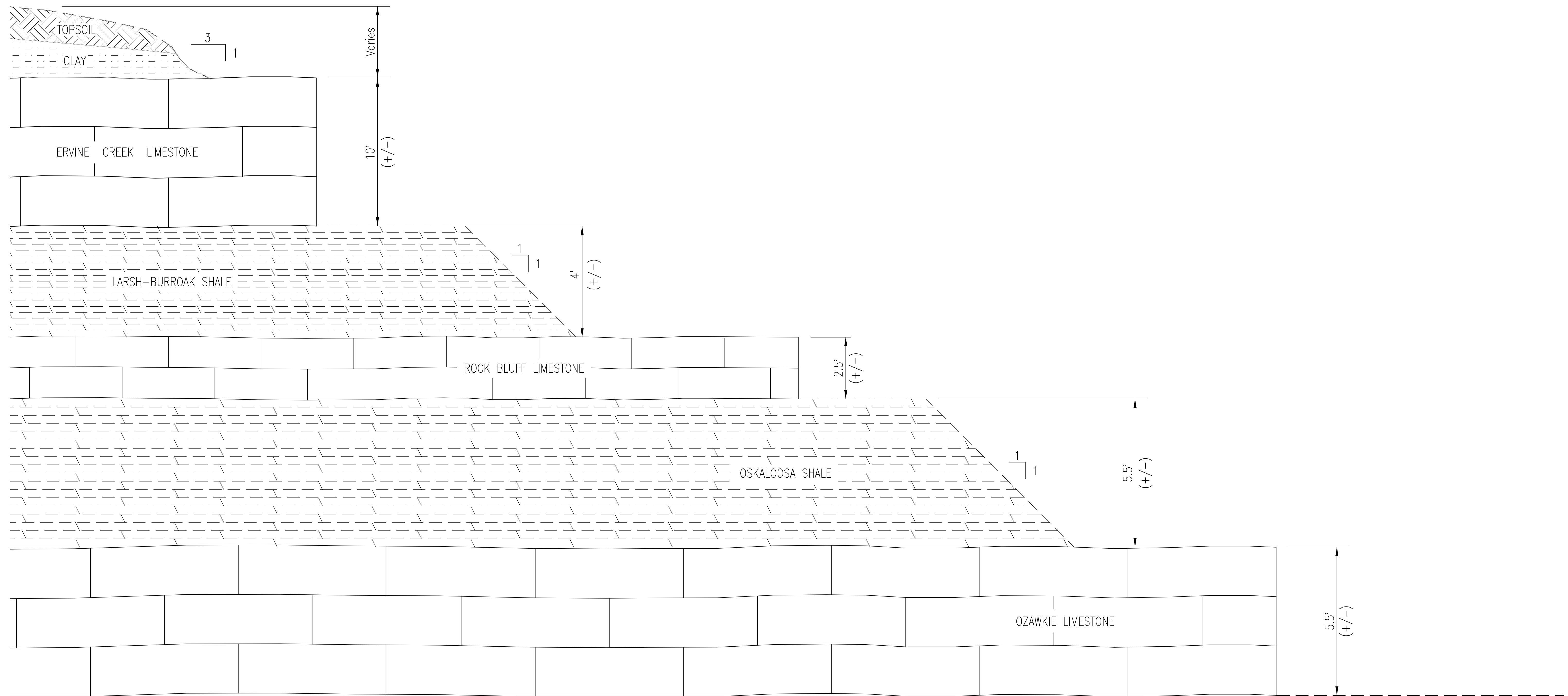
No.	Revision	By	Date

**BIG SPRINGS QUARRY**  
 DOUGLAS COUNTY, KANSAS  
 DRAINAGE PLAN FOR  
 PHASE 1A, 2, 3, AND 4

**Professional Engineering Consultants, P.A.**  
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Designed by	MWB	Job No.	08A39	Sht. 10 of 11
Drawn by	DMS/TCC	Date	JUNE 2009	

Saved 09-24-2009 10:05: PM by TCC  
 F:\2009\08A39\Drawings\REGULATION SITE 08-15-09\08A39-000-SHT11-Generalized Quarry Cross Section-NEW

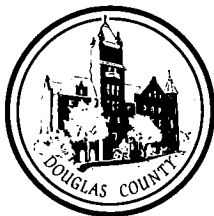


No.	Revision	By	Date

**BIG SPRINGS QUARRY**  
 DOUGLAS COUNTY, KANSAS  
 GENERALIZED QUARRY CROSS SECTION

**Professional Engineering Consultants, P.A.**  
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 785-233-8300 • FAX 785-233-8855

Designed by	TC/MWB	Job No.	08A39	Sht. 11 of 11
Drawn by	TCC	Date	JUNE 2009	



## DOUGLAS COUNTY PUBLIC WORKS

1242 Massachusetts Street  
Lawrence, KS 66044-3350  
(785) 832-5293 Fax (785) 841-0943  
dgcopubw@douglas-county.com  
www.douglas-county.com

**Keith A. Browning, P.E.**  
Director of Public Works/County Engineer

### MEMORANDUM

To : Board of County Commissioners

From : Keith A. Browning, P.E., Director of Public Works/County Engineer *KAB*

Date : October 16, 2009

Re : Big Springs quarry mitigation  
Supplemental information concerning outlets for water features

This memo is to supplement the memo from Mary Miller concerning range of variation for Mid-States Materials quarry reclamation plans.

In addition to the range of variation for sizes of water features and final elevations, the consulting engineer for Lone Oak raised questions on the proposed outlet configurations for the water features. The reclamation plans did not detail the outlet configurations. With no details in the reclamation plans, the concern was that an overly wide spillway may result in more frequent, larger flows of shorter duration (i.e. flooding). In addition, a spillway that is too narrow may result in high discharge rates over a longer duration compared to pre-mining conditions. This may result in downstream erosion.

I asked Mid-States' engineer (PEC) to model and develop a spillway configuration to address these concerns. While the exact, final pond configuration and size will not be known until quarrying activities occur, I asked him to consider generic ponds over a reasonable size-range, and develop at least a guide for the size and configuration of the spillway.

PEC modeled pond sizes ranging from a minimum 2-acre pond to the proposed maximum size allowed (40% of the disturbed area within the ponds drainage area). The model considered broad-crested (10' breadth) weir outlets ranging from 2' wide to 20' wide. The modeling indicated that a 10' wide spillway seems to work well for various pond sizes.

The attached table shows the modeling results for two pond sizes, a 2-acre pond and a pond size up to 40% of the disturbed area. For storm return interval periods varying from 1-year to 100-years, the table shows flow in (Q in) to the pond and flow out (Q out) of the pond. It also shows the depth of water in the pond above the spillway elevation.

MEMORANDUM  
October 16, 2009  
Page Two

The table shows that during a storm event the peak flow rate out of the pond is significantly reduced by the pond and broad crested weir outlet. For example, for a 10-acre pond in Phase 2, the 100-year peak flow into the pond is 247 cfs, and the peak flow out of the pond is 35 cfs. The peak outflow of 35 cfs is less than the peak flow generated by a 1-year return interval storm without the pond (59 cfs). For a 2-acre pond, the peak outflow from the pond during a 100-year event would be about equal to the peak runoff rate from a 10-year storm event if the pond did not exist.

Please understand the same total runoff volume would flow out of the pond (assuming the pond is full) as would flow downstream if the pond did not exist. However, the peak runoff rate is significantly reduced as the runoff event is extended over a much longer time period.

The entire range of flows and pond sizes modeled resulted in flow depths at the outlet of three feet or less. The ten-foot wide broad crested weir seems to be a reasonable outlet for the proposed ponds. A typical section detail of the outlet will be added to the reclamation plans.

Also attached is a memo from PEC discussing modeling parameters.

BIG SPRINGS QUARRY											
08A39-6500 M. W. BERRY, P.E.											
15-Oct-09											
LOCATION	POND SIZE	WEIR SIZE	RETURN PERIOD	Q IN	Q OUT	DEPTH	COMMENTS				
PHASE 2	2-AC	10 FT	1 YR	49.00	18.00	0.67					
PHASE 2	2-AC	10 FT	2 YR	74.00	28.00	1.03					
PHASE 2	2-AC	10 FT	5 YR	109.00	49.00	1.46					
PHASE 2	2-AC	10 FT	10 YR	135.00	64.00	1.79					
PHASE 2	2-AC	10 FT	25 YR	171.00	88.00	2.22					
PHASE 2	2-AC	10 FT	100 YR	235.00	133.00	2.93					
PHASE 2	10-AC	10 FT	1 YR	59.00	7.00	0.25					
PHASE 2	10-AC	10 FT	2 YR	84.00	10.00	0.37					
PHASE 2	10-AC	10 FT	5 YR	120.00	15.00	0.54					
PHASE 2	10-AC	10 FT	10 YR	147.00	18.00	0.68					
PHASE 2	10-AC	10 FT	25 YR	184.00	23.00	0.86					
PHASE 2	10-AC	10 FT	100 YR	247.00	35.00	1.17					
PHASE 3 (E)	2-AC	10 FT	1 YR	45.00	17.00	0.64					
PHASE 3 (E)	2-AC	10 FT	2 YR	67.00	26.00	0.98					
PHASE 3 (E)	2-AC	10 FT	5 YR	97.00	46.00	1.39					
PHASE 3 (E)	2-AC	10 FT	10 YR	121.00	61.00	1.71					
PHASE 3 (E)	2-AC	10 FT	25 YR	154.00	82.00	2.12					
PHASE 3 (E)	2-AC	10 FT	100 YR	213.00	123.00	2.78					
PHASE 3 (E)	18-AC	10 FT	1 YR	64.00	5.00	0.20					
PHASE 3 (E)	18-AC	10 FT	2 YR	89.00	7.00	0.27					
PHASE 3 (E)	18-AC	10 FT	5 YR	122.00	10.00	0.38					
PHASE 3 (E)	18-AC	10 FT	10 YR	148.00	13.00	0.47					
PHASE 3 (E)	18-AC	10 FT	25 YR	182.00	16.00	0.58					
PHASE 3 (E)	18-AC	10 FT	100 YR	241.00	21.00	0.78					

BIG SPRINGS QUARRY									
08A39-6500 M. W. BERRY, P.E.									
15-Oct-09									
PHASE 4	2-AC	10 FT	1 YR	35.00	15.00	0.55			
PHASE 4	2-AC	10 FT	2 YR	53.00	22.00	0.84			
PHASE 4	2-AC	10 FT	5 YR	78.00	37.00	1.22			
PHASE 4	2-AC	10 FT	10 YR	98.00	50.00	1.48			
PHASE 4	2-AC	10 FT	25 YR	125.00	67.00	1.83			
PHASE 4	2-AC	10 FT	100 YR	173.00	101.00	2.41			
PHASE 4	12-AC	10 FT	1 YR	47.00	6.00	0.21			
PHASE 4	12-AC	10 FT	2 YR	66.00	8.00	0.31			
PHASE 4	12-AC	10 FT	5 YR	93.00	12.00	0.44			
PHASE 4	12-AC	10 FT	10 YR	114.00	14.00	0.54			
PHASE 4	12-AC	10 FT	25 YR	141.00	18.00	0.67			
PHASE 4	12-AC	10 FT	100 YR	190.00	25.00	0.92			
PHASE 3 (W)	2-AC	10 FT	1 YR	45.00	17.00	0.64			
PHASE 3 (W)	2-AC	10 FT	2 YR	67.00	26.00	0.98			
PHASE 3 (W)	2-AC	10 FT	5 YR	97.00	46.00	1.39			
PHASE 3 (W)	2-AC	10 FT	10 YR	121.00	61.00	1.71			
PHASE 3 (W)	2-AC	10 FT	25 YR	154.00	82.00	2.12			
PHASE 3 (W)	2-AC	10 FT	100 YR	213.00	123.00	2.78			
PHASE 3 (W)	18-AC	10 FT	1 YR	64.00	5.00	0.20			
PHASE 3 (W)	18-AC	10 FT	2 YR	89.00	7.00	0.27			
PHASE 3 (W)	18-AC	10 FT	5 YR	122.00	10.00	0.38			
PHASE 3 (W)	18-AC	10 FT	10 YR	148.00	13.00	0.47			
PHASE 3 (W)	18-AC	10 FT	25 YR	182.00	16.00	0.58			
PHASE 3 (W)	18-AC	10 FT	100 YR	241.00	21.00	0.78			





## MEMO

TO: Keith Browning, P.E.  
County Engineer  
1242 Massachusetts  
Lawrence, KS 66044

FROM: Michael W, Berry, P.E.

PROJECT: Big Springs Quarry Reclamation Plan

REFERENCE: Pond Spillway Analysis

PROJECT NO.: 08A39-000-6500

COPIES TO: Eric Bettis; John Hutton

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PLEASE ADVISE IMMEDIATELY OF ANY MISCONCEPTIONS OR OMISSIONS YOU BELIEVE TO BE CONTAINED HEREIN.

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This memorandum for the Big Springs Quarry is written to evaluate the potential outfall spillway characteristics of lakes that may be reclaimed during the reclamation process.

### POND CHARACTERISTICS

A reclaimed pond has been proposed in several locations on the quarry. Each of these ponds is variable in size, depending upon the nature of the geologic strata that will be excavated. The ponds may range in size up to 40% of the disturbed area in a given watershed.

For this analysis, a series of stage-storage tables were generated for ponds from 2 acres to 20 acres in size, in increments of 2 acres. Each pond was assumed to be square and having 3:1 side slopes. Elevation, surface area and volumes calculations were tabulated.

### WEIR CHARACTERISTICS

A trapezoidal overflow spillway having 3:1 side slopes is proposed for each pond. The spillway will be lined with 24-inch thickness of shot rock, with a minimum of ten feet of channel protection in the direction of flow. Weir capacity was calculated using the weir equation  $Q=CLH^{1.5}$ . Weir coefficients were taken from King's handbook of Hydraulics for a broad crested weir. For this analysis, a series of stage-discharge tables were generated for weirs from 2 feet to 20 feet in length, in increments of 2 feet. Elevation and discharge were tabulated.

### HYDROLOGIC METHOD

The Soil Conservation Service TR-55 Manual (first edition) is being used in this analysis. In recognition of the predominance of Type D soils, a runoff curve number of 80 is used for reclaimed pasture land, and a curve number of 98 for the area encompassed by the pond. A composite curve number is computed for each watershed.

Rainfall depths for 24-hour duration are taken from Table A-1 in the City of Lawrence Stormwater Management Criteria Manual. Return periods of 1, 2, 5, 10, 25, and 100 years have been analyzed. Rainfall is distributed by the Type 2 storm distribution. The computation increment is 5 minutes.

Time of concentration has been computed as the sum of sheet flow, shallow concentrated flow, and system (unimproved channel) flow in accordance with the Lawrence manual. These calculations were previously presented in a report dated July 27, 2009.

The resulting discharge flow rates were used in pond and weir analysis. Please note that no attempt has been made to calibrate this TR-55 model generated by HEC-1 with the discharge values computed by the Rational Method and published in the previous report.

## HYDRAULIC ANALYSIS

To determine the affect of each pond on the storm hydrograph, the US Army Corps of Engineers HEC-1 digital watershed simulation model was used. Stage, storage, discharge relationships for each pond were entered. Runoff hydrographs were generated and then routed through the ponds.

## EVALUATION OF WEIR SIZE

The proposed weir size was evaluated through a series of scenarios. Discharge values for the watersheds vary widely from watershed to watershed and based on return period. However, all flow values fall within the range of 0 to 300 cfs. Within this range, weir sizes of 2 to 20 feet were evaluated. As a result of several trials, a weir length of ten feet was selected. The entire range of flows evaluated resulted in a flow depth of three feet or less, which was considered to be reasonable in a rural agricultural setting.

## EVALUATION OF POND SIZE

The ultimate size of each pond is unknown at this time. A series of scenarios were run for each watershed. Two scenarios were studied in detail: one with the largest permitted pond size in each watershed (40% of disturbed area in watershed), and one with a minimal pond size of two acres, which nearly corresponds to a 5% pond/watershed ratio in each watershed. The results of these analyses is tabulated in Table A attached.

# City of Lawrence City Manager's Office

**TO: David L. Corliss, City Manager**

**FROM: Diane Stoddard, Assistant City Manager**

**CC: Cynthia Boecker, Assistant City Manager  
Roger Zalneraitis, Economic Development  
Coordinator/Planner**

**Date: November 5, 2009**

**RE: Lawrence-Douglas County Bioscience Authority Request for  
the City and County to Acquire West Lawrence Labs Building**

---

## **Background:**

Attached is a request from the Lawrence-Douglas County Bioscience Authority (LDCBA) for the City and County to purchase a lab facility located at 4950 Research Parkway. The facility is approximately 17,460 square feet and offers extensive, well-maintained lab space which includes Good Manufacturing Practice (GMP) capabilities. The facility is seen as a potential graduation facility for companies emerging from the incubator, or other small bioscience companies, so that they can be retained and grow in Lawrence. The availability of community bioscience expansion capabilities has been a discussion item since the City and County agreed to participate with LDCBA and the University of Kansas in the Bioscience and Technology Business Center, now under construction on the KU campus.

A portion of the building is currently leased to Critech, a Lawrence-based research and development pharmaceutical company involved with the production and application of fine-particle compounds ([www.Critech.com](http://www.Critech.com)) and the building acquisition would keep Critech's main office and activities in Lawrence for a minimum of five (5) years.

The LDCBA's request envisions that the City and County would assist with issuing bonds to purchase the facility and the LDCBA would retire the debt with lease revenue from the building and the City and County would retain a building asset in the transaction.

## **Proposed Structure:**

Should the City Commission wish to approve the request, the following is staff's recommendation regarding a possible structure to accommodate the transaction in cooperation with Douglas County and the LDCBA:

- The City would issue taxable general obligation-backed bonds of approximately \$2.9 million to purchase the West Lawrence Labs Building. This financing would enable the purchase of the building, as well as the needed upgrade to HVAC systems in order to increase energy efficiency, reduce building operating costs, and appropriately segregate lease areas.
- The City and Douglas County would enter into a cooperation agreement whereby the County agrees to guarantee half of the bond issue in the event that future lease revenue does not cover debt service.
- The City and County would hold joint title to the building so that the City/County would have an asset to secure the investment.
- The LDCBA would lease the building from the City/County. The City and County would require approval of the building management structure, and approval of the terms of future lease arrangements made between LDCBA and tenants. LDCBA would be responsible for the maintenance and operation of the building. LDCBA would provide the City/County with semi-annual reports regarding the income stream on the building and updates on maintenance of the building to ensure adequate reinvestment into the asset. The report would show annual net cash flow on building. LDCBA would manage the building and repay the City from lease payments on the building over a 25 year period. For the first five years, principal payments would be deferred and LDCBA would pay \$25,000 per year to the City to be applied to meet the interest payment. Beginning in the sixth year, LDCBA would pay principal plus interest calculated at approximately 50 basis points over the City's average annual investment rate for the City's idle funds for the previous year, to a maximum of 4% (at rates earned from January to August of 2009, this would be approximately 2.3%). LDCBA would pay the first five years' principal over the remaining 20 years of payments. Based upon an anticipated bond interest rate of 5.5%, the City and County would share in the subsidization of interest costs annually, though for each entity this amount is anticipated to be less than \$20,000 annually, with the exception of a slightly higher annual subsidy in the early years. The City and County annual expenses are shown in the attached Sample Bond Amortization Schedule. It is important to note that if the 5.5% interest rate assumption on the bonds varies up or down once the bonds are actually sold, the City and County annual contribution would vary accordingly.
- Any net proceeds over the amount necessary to pay the City/County annually would be placed into a building fund to equalize any annual net cash flow losses experienced by LDCBA, to retire the debt earlier, reinvest in the asset, provide resources for marketing and attraction of new bioscience companies, or make up the interest subsidy. The expenditure or assignment of funds in the building fund will be made annually upon consultation with the three entities- the City, the County and the LDCBA.
- The West Lawrence Labs building would remain on the property tax rolls.
- The City-County-LDCBA agreement would require that LDCBA enter into an agreement with CritiTech whereby CritiTech agrees to commit to staying in

Lawrence at its current employment levels or greater for a minimum of five (5) years and maintain its main office in Lawrence, unless the building is unable to accommodate their growth after the first three (3) years, or the company is sold, in the event of which CritiTech will pay an exit fee for LDCBA.

- LDCBA has preliminary agreement with the University of Kansas to option some portion of the building for possible use.

**Staff Recommendation:**

As suggested earlier, this facility would be a complimentary facility to the Bioscience and Technology Business Center facility and provide an option for companies to help meet the goal of retaining and growing bioscience companies in Lawrence. The suggested structure accomplishes the acquisition of the building, while minimizing the risk to the governmental entities by enabling the entities to retain a capital asset. Additionally, the structure accomplishes the goal of retaining CritiTech in the Lawrence community and enabling the future growth and development of biosciences in Lawrence and Douglas County.

**Requested Action:**

The City Commission should provide comment regarding the request submitted and the proposed transaction structure. Should the City Commission wish to proceed, the LDCBA would request a motion that the City Commission approves of the transaction in concept and it is suggested that the City Commission direct staff to prepare the necessary agreements and documents to facilitate the request. Should the City Commission so direct, it is anticipated that agreements and documents would be ready in December in order to facilitate a January bond issue. Staff also recommends that the City's Public Incentive Review (PIRC) review the proposed structure for a recommendation to come before the City Commission in December, in accordance with the City's overarching economic development policy. Additionally, the City Commission should approve a conflict waiver for Gilmore & Bell to work on the agreements, as outlined, given that the firm serves as bond counsel for both the City and Douglas County.



## For Sale or Lease

4950 RESEARCH PARKWAY  
Lawrence, Kansas

For more information, please contact:

**Marilyn Bittenbender, SIOR, CCIM**  
*Senior Vice President/Principal*  
785.865.5100  
mbittenbender@winbury.com



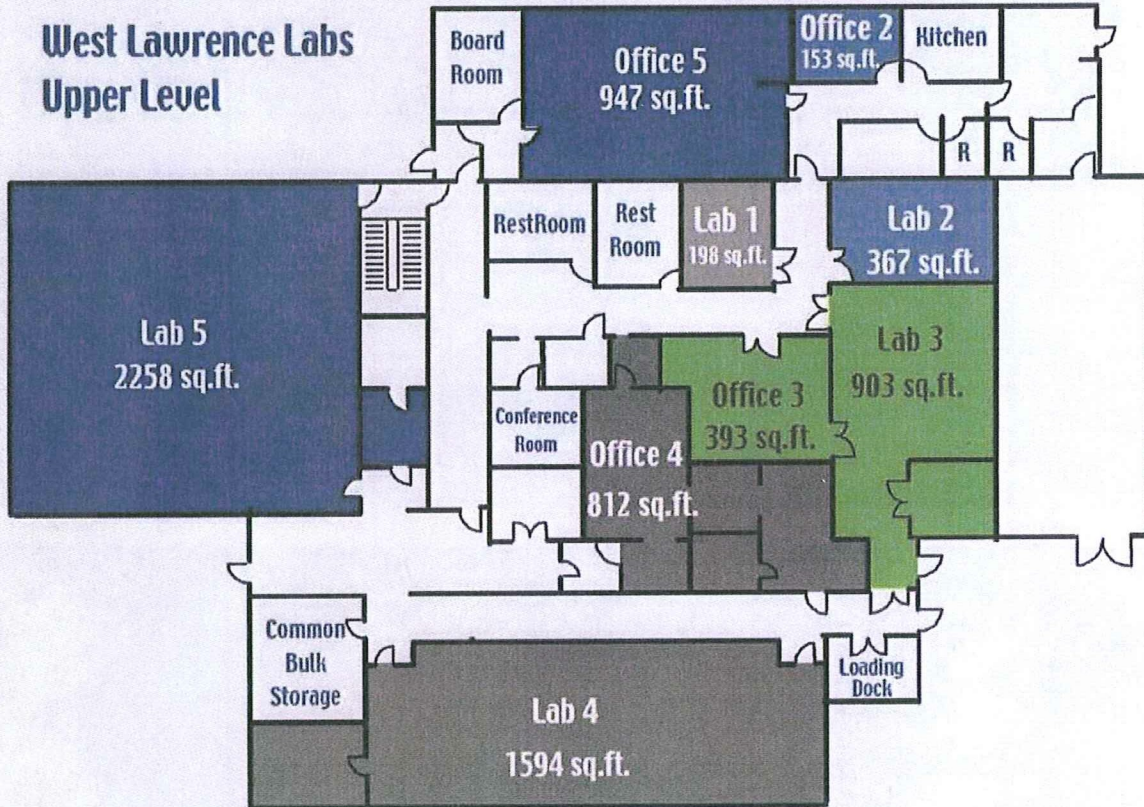
**Grubb & Ellis**  
Property Solutions Worldwide

The  
Winbury  
Group

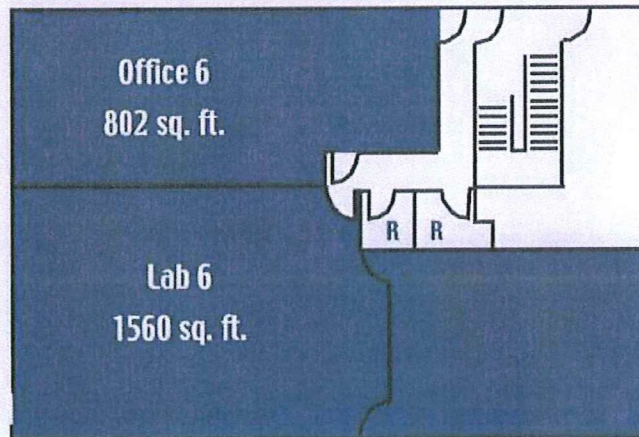
4950 research parkway

# WEST LAWRENCE LABS

## West Lawrence Labs Upper Level

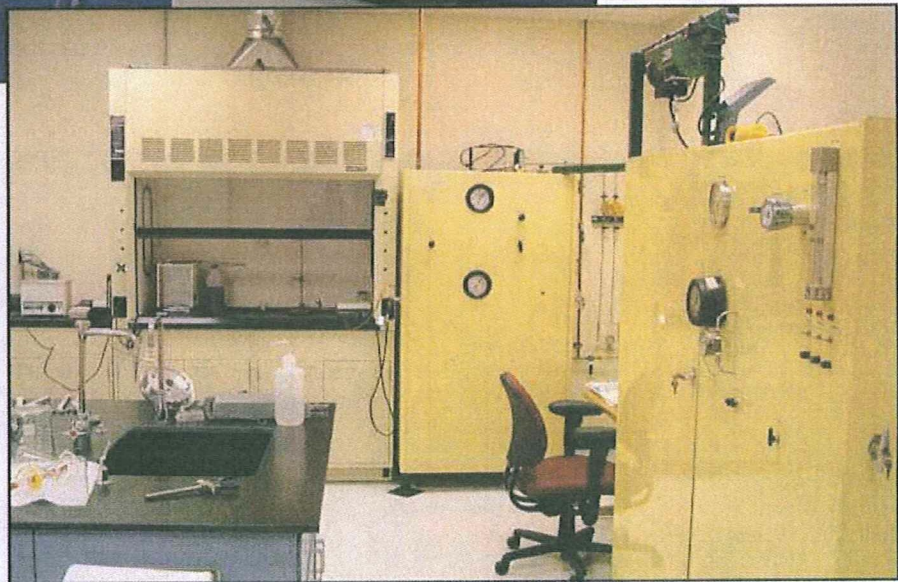


## Lower Level





**Lab 6**

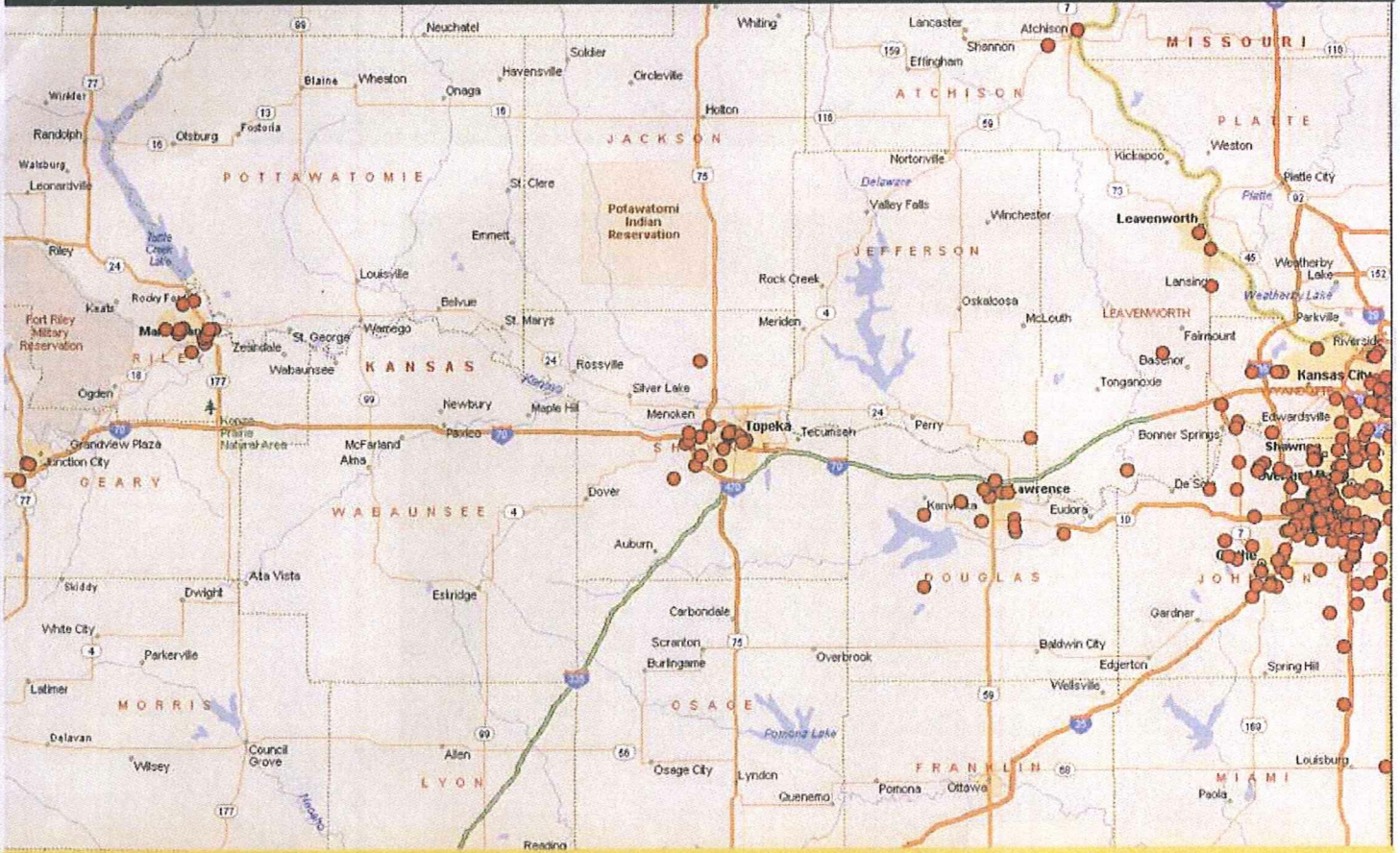


**Lab 2**

- Single pass HVAC system to labs with 3 stage filtration (including hepa filters)
- Minimum of 6 air exchanges per hour
- Each lab has a dedicated rooftop exhaust that balances the lab against air handlers on VFDs
- Direct Digital Control (DDC) Technology used for building mechanicals
- Each lab has a dedicated 120/208 v 3-phase wye connected panelboard with minimum of 20 watts/SF capacity
- Central compressed air system, as well as a back up system provides 100+ psi continuously to labs
- 30 psi boiler is available to provide steam for limited production/process loads as well as humidification
- 10+ fumehoods in place including three 12 ft. hoods
- Approximately 100 linear feet of epoxy benchtop space with sinks and power outlets
- Bulk chemical storage room near loading dock
- Office 3 and Office 4 were labs and could be converted back into lab space
- GMP capabilities



## Regional Life Science Companies Location Map



Lawrence, Kansas is the sixth best educated community in the nation. Forty-three percent of the work force over the age of 25 has earned a bachelor's degree. For companies that require skills ranging from the biosciences to information technology to manufacturing, Lawrence serves as a rich recruiting source.

The flagship institution of the State, the University of Kansas, is a major research university that serves as home to 12 professional schools plus the College of Liberal Arts & Sciences. Research, at the University of Kansas has experienced unprecedented growth in recent years, with sponsored projects approaching \$200 million. The KU School of Pharmacy is one of the top rated schools in the nation, and consistently secures National Institutes of Health and other research grants that rank among the highest in the country.

### **Kansas Bioscience Authority**

The Kansas Economic Growth Act created the Kansas Bioscience Authority (Bio Authority) - a completely independent body composed of prominent local and national leaders in the areas of technology, science and business. This group will guide the State in the investment of over \$580 million generated by the Kansas Economic Growth Act. The State will look to the Bio Authority to develop an infrastructure that makes Kansas a center for bioscience research, innovation and commercialization.

### **Mission of the Kansas Bioscience Authority**

Make Kansas the most desirable state in which to conduct, facilitate, support, fund and perform plant, animal and human bioscience research, development and commercialization, to make Kansas a national leader in bioscience, to create new jobs, foster economic growth, advance scientific knowledge and improve the quality of life for citizens of the State of Kansas.

*The information contained herein was obtained from sources believed reliable; however, Winbury Realty of K.C., Inc. makes no guarantees, warranties or representations as to the completeness or accuracy thereof. The presentation of this property is submitted subject to errors, omissions, change of price or conditions prior to sale or lease, or withdrawal without notice.*

*Independently Owned and Operated*

## West Lawrence Labs

4950 Research Park Way Lawrence, KS 66047

[Offering](#) [Description](#) [Location](#) [Contact](#)




### Offering

Industrial For Sale  
\$2,950,000  
17,460 SF  
Built: 1998

### Highlights

- Industrial Dock High: 1
- Office SF: 6000

Powered By  LoopNet®

[Learn more about this property](#)

## 25 Year Forecasted Cash Flow, West Lawrence Labs

	Year 1	Year 2	Year 3	Year 4	Year 5
Occupancy Rate	22%	38%	55%	72%	89%

### Cash In

#### Rent:

Anchor Tenant	\$131,232	\$131,232	\$131,232	\$131,232	\$131,232
KU Option on Space	\$25,000	\$25,000	\$0	\$0	\$0
Tenant A		\$80,176	\$81,055	\$81,957	\$82,880
Tenant B			\$81,055	\$81,957	\$82,880
Tenant C				\$81,957	\$82,880
Tenand D					\$82,880
<b>Total Cash In:</b>	<b>\$156,232</b>	<b>\$236,408</b>	<b>\$293,342</b>	<b>\$377,102</b>	<b>\$462,754</b>

<b>Weighted Average Lease Rate</b>	<b>\$41.01</b>	<b>\$37.09</b>	<b>\$35.77</b>	<b>\$35.24</b>	<b>\$35.06</b>
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### Cash Out

Lease Payment	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
<b>Net Charges</b>					
<b>Utilities:</b>					
Anchor Tenant	\$35,625	\$36,516	\$37,429	\$38,364	\$39,323
LDCBA	\$3,272	\$3,354	\$3,438	\$3,524	\$3,612
Tenant A		\$16,250	\$16,656	\$17,073	\$17,499
Tenant B			\$16,656	\$17,073	\$17,499
Tenant C				\$17,073	\$17,499
Tenant D					\$17,499
Mothball Expense	\$2,632	\$2,188	\$1,745	\$1,301	
Maintenance	\$61,478	\$63,015	\$64,590	\$66,205	\$67,860
Insurance	\$11,006	\$11,282	\$11,564	\$11,853	\$12,149
Taxes	\$53,939	\$55,288	\$56,670	\$58,087	\$59,539
<b>Total Cash Out:</b>	<b>\$192,952</b>	<b>\$212,892</b>	<b>\$233,747</b>	<b>\$255,551</b>	<b>\$277,481</b>
<b>Net Cash Flow:</b>	<b>(\$36,720)</b>	<b>\$23,516</b>	<b>\$59,595</b>	<b>\$121,550</b>	<b>\$185,273</b>
<b>Ending Cash Balance:</b>	<b>(\$36,720)</b>	<b>(\$13,204)</b>	<b>\$46,391</b>	<b>\$167,941</b>	<b>\$353,215</b>

Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
89%	89%	89%	89%	89%	89%	89%	89%
\$131,232	\$130,080	\$130,080	\$117,100	\$120,028	\$123,028	\$126,104	\$129,257
\$0							
\$84,952	\$87,076	\$89,253	\$91,485	\$93,772	\$96,116	\$98,519	\$100,982
\$84,952	\$87,076	\$89,253	\$91,485	\$93,772	\$96,116	\$98,519	\$100,982
\$84,952	\$87,076	\$89,253	\$91,485	\$93,772	\$96,116	\$98,519	\$100,982
\$84,952	\$87,076	\$89,253	\$91,485	\$93,772	\$96,116	\$98,519	\$100,982
\$471,042	\$478,385	\$487,093	\$483,038	\$495,114	\$507,492	\$520,179	\$533,184
\$35.68	\$36.24	\$36.90	\$36.59	\$37.51	\$38.45	\$39.41	\$40.39
\$207,254	\$204,494	\$201,876	\$200,010	\$200,449	\$200,451	\$200,922	\$201,703
\$40,306	\$41,314	\$42,347	\$43,406	\$44,491	\$45,603	\$46,743	\$47,912
\$3,702	\$3,795	\$3,889	\$3,987	\$4,086	\$4,188	\$4,293	\$4,400
\$17,937	\$18,385	\$18,845	\$19,316	\$19,799	\$20,294	\$20,801	\$21,321
\$17,937	\$18,385	\$18,845	\$19,316	\$19,799	\$20,294	\$20,801	\$21,321
\$17,937	\$18,385	\$18,845	\$19,316	\$19,799	\$20,294	\$20,801	\$21,321
\$17,937	\$18,385	\$18,845	\$19,316	\$19,799	\$20,294	\$20,801	\$21,321
\$0							
\$69,556	\$71,295	\$73,078	\$74,905	\$76,777	\$78,697	\$80,664	\$82,681
\$12,453	\$12,764	\$13,083	\$13,410	\$13,745	\$14,089	\$14,441	\$14,802
\$61,027	\$62,553	\$64,117	\$65,720	\$67,363	\$69,047	\$70,773	\$72,542
\$466,046	\$469,757	\$473,770	\$478,701	\$486,108	\$493,251	\$501,042	\$509,326
\$4,995	\$8,628	\$13,323	\$4,337	\$9,006	\$14,241	\$19,137	\$23,858
\$358,210	\$366,838	\$380,162	\$384,499	\$393,505	\$407,746	\$426,883	\$450,741

Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21
89%	89%	89%	89%	89%	89%	89%	89%
\$132,488	\$135,800	\$139,195	\$142,675	\$146,242	\$149,898	\$153,646	\$157,487
\$103,506	\$106,094	\$108,746	\$111,465	\$114,252	\$117,108	\$120,036	\$123,036
\$103,506	\$106,094	\$108,746	\$111,465	\$114,252	\$117,108	\$120,036	\$123,036
\$103,506	\$106,094	\$108,746	\$111,465	\$114,252	\$117,108	\$120,036	\$123,036
\$103,506	\$106,094	\$108,746	\$111,465	\$114,252	\$117,108	\$120,036	\$123,036
\$546,513	\$560,176	\$574,181	\$588,535	\$603,249	\$618,330	\$633,788	\$649,633
\$41.40	\$42.44	\$43.50	\$44.59	\$45.70	\$46.84	\$48.01	\$49.21
\$203,209	\$205,386	\$207,795	\$210,139	\$212,868	\$216,024	\$219,890	\$224,154
\$49,109	\$50,337	\$51,596	\$52,886	\$54,208	\$55,563	\$56,952	\$58,376
\$4,510	\$4,623	\$4,739	\$4,857	\$4,979	\$5,103	\$5,231	\$5,362
\$21,854	\$22,401	\$22,961	\$23,535	\$24,123	\$24,726	\$25,344	\$25,978
\$21,854	\$22,401	\$22,961	\$23,535	\$24,123	\$24,726	\$25,344	\$25,978
\$21,854	\$22,401	\$22,961	\$23,535	\$24,123	\$24,726	\$25,344	\$25,978
\$21,854	\$22,401	\$22,961	\$23,535	\$24,123	\$24,726	\$25,344	\$25,978
\$84,748	\$86,866	\$89,038	\$91,264	\$93,546	\$95,884	\$98,281	\$100,738
\$15,172	\$15,552	\$15,940	\$16,339	\$16,747	\$17,166	\$17,595	\$18,035
\$74,356	\$76,215	\$78,120	\$80,073	\$82,075	\$84,127	\$86,230	\$88,386
\$518,523	\$528,583	\$539,071	\$549,697	\$560,916	\$572,772	\$585,557	\$598,962
\$27,991	\$31,594	\$35,109	\$38,838	\$42,333	\$45,557	\$48,231	\$50,670
\$478,732	\$510,325	\$545,435	\$584,272	\$626,605	\$672,163	\$720,394	\$771,064

Year 22	Year 23	Year 24	Year 25
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89%                      89%                      89%                      89%

\$161,424    \$165,459    \$169,596    \$173,836

\$126,112    \$129,265    \$132,497    \$135,809

\$126,112    \$129,265    \$132,497    \$135,809

\$126,112    \$129,265    \$132,497    \$135,809

\$126,112    \$129,265    \$132,497    \$135,809

\$665,874    \$682,520    \$699,583    \$717,073

\$50.44            \$51.71            \$53.00            \$54.32

\$228,854    \$233,921    \$239,795    \$246,076

\$59,835        \$61,331        \$62,864        \$64,436

\$5,496            \$5,633            \$5,774            \$5,918

\$26,628        \$27,293        \$27,976        \$28,675

\$26,628        \$27,293        \$27,976        \$28,675

\$26,628        \$27,293        \$27,976        \$28,675

\$26,628        \$27,293        \$27,976        \$28,675

\$103,257    \$105,838    \$108,484    \$111,196

\$18,486        \$18,948        \$19,422        \$19,907

\$90,595        \$92,860        \$95,182        \$97,561

\$613,033    \$627,704    \$643,423    \$659,794

\$52,841        \$54,816        \$56,160        \$57,279

\$823,905    \$878,721    \$934,881    \$992,160

# Memorandum

## City of Lawrence

### City Manager's Office

TO: Diane Stoddard, Assistant City Manager  
CC: David Corliss, City Manager  
FROM: Roger Zalneraitis, Economic Development Coordinator/Planner  
DATE: November 5, 2009  
RE: Cost-Benefit Analysis of West Lawrence Labs Acquisition

The West Lawrence Labs deal as outlined would result in an interest subsidy from the City and the County. This subsidy would be the difference between the interest payments on the General Obligation Bond ("GO Bond") and the interest payments made by LDCBA. The LDCBA payments would be the rate of return on Idle Funds from the previous year plus 50 basis points.

Although an estimate, we believe that the 25 year interest rate on the GO Bond will be about 5.5% and the 25 year return rate on Idle Funds will be about 3.35%. This return rate is based on the return on Idle funds from late 2002 to mid-2008 (we excluded the data after September 2008 because the rate of return in this time period has been unusually low). By adding 50 basis points to this return rate, we estimate an interest payment from LDCBA averaging about 3.85% over 25 years. However, LDCBA will pay a fixed rate of only \$25,000 for the first five years. This results in the subsidy from the City and County being larger in this time period.

Over the 25 years of the bond, staff estimates the interest rate subsidy to be about \$928,000. This means that the City and the County will each pay about \$464,000 of the outstanding interest on the GO Bond, or about \$18,500 per year. There is an additional opportunity cost of about \$26,000, or \$13,000 to the City and County each. This opportunity cost is the interest that could have been earned each year if the local governing bodies had been able to invest their idle funds instead of applying them toward the subsidy. Since idle funds are expended by the end of the year, we assume that the subsidy is a one-time impact to the budget and not cumulative. In discounted—or current—dollars, this subsidy and opportunity cost is equal to about \$563,000, or \$281,000 each for the City and County.

Staff also estimates that, once fully leased, the West Lawrence Labs could employ as many as 40 additional employees earning, on average, \$57,000 per year. This is based on current wages and space needs for people engaged in bioscience research in Douglas County (NAICS Code 5417- Scientific Research and Development Services). These employees would likely be added over a 4-5 year period. If West Lawrence Labs maintains an average wage and employment level similar to this over the remaining 20 years, the City will receive about \$900,000 of net benefits and the County will receive a little over \$640,000 of net benefits. In current dollars, this is equal to \$425,000 for the City and \$300,000 for the County. It should be noted that these benefits do not include the value of retaining Crititech employees in the community.

Including the subsidy reduces the City discounted net benefit to \$145,000, and the County's to \$25,000. The discounted net cash flow the City and County together becomes positive in about 13 years.

The three biggest factors that can affect the benefits to the community are as follows:

- 1) The return on the idle funds is lower than projected. While the GO Bond payments are set, the interest payment from LDCBA can vary from year to year and cannot exceed 4.0%. If idle funds earnings are lower than anticipated, the subsidy payment will increase.
- 2) The number of new employees at the West Lawrence Labs differs from that projected. Quicker lease-up of vacant space or faster growth of occupants could increase employment, while the reverse could slow down employment.
- 3) The wages of the new employees at the West Lawrence Labs differs from that projected. The industries likely to use the space have seen rapid wage growth over the last several years, at about 5-6% annually. In the analysis, staff assumes that wage growth will slow. If wage growth continues at the same trend that it has over the last several years, benefits could be substantially higher.



## Sample Bond Amortization Schedule

Investment  
Deal terms:

\$2,900,000  
 LDCBA to pay \$25,000 per year for the first five years  
 LDCBA to pay subsidized interest rate, for remaining 20 years  
 LDCBA to pay \$2,900,000 of principal over the last 20 years of the bond

Year	Interest Rate	Subsidized Interest Rate	Principal Payment	Interest Payment	Total Payment	City Share	County Share	LDCBA Share
2010	2.05	2.30	0	\$59,406	\$59,406	\$17,203	\$17,203	\$25,000
2011	2.33	2.90	0	\$67,438	\$67,438	\$21,219	\$21,219	\$25,000
2012	2.88	3.30	0	\$83,503	\$83,503	\$29,251	\$29,251	\$25,000
2013	3.54	3.70	0	\$102,780	\$102,780	\$38,890	\$38,890	\$25,000
2014	4.15	4.00	0	\$120,451	\$120,451	\$47,725	\$47,725	\$25,000
2015	4.43	4.00	\$93,116	\$126,420	\$219,536	\$6,141	\$6,141	\$207,254
2016	4.76	4.00	\$94,101	\$131,446	\$225,547	\$10,526	\$10,526	\$204,494
2017	5.13	4.00	\$95,270	\$136,709	\$231,979	\$15,052	\$15,052	\$201,876
2018	5.47	4.00	\$97,255	\$140,395	\$237,650	\$18,820	\$18,820	\$200,010
2019	5.57	4.00	\$101,672	\$137,613	\$239,285	\$19,418	\$19,418	\$200,449
2020	5.76	4.00	\$105,824	\$136,261	\$242,085	\$20,817	\$20,817	\$200,451
2021	5.93	4.00	\$110,624	\$133,779	\$244,403	\$21,740	\$21,740	\$200,922
2022	6.09	4.00	\$115,936	\$130,629	\$246,565	\$22,431	\$22,431	\$201,703
2023	6.20	4.00	\$122,205	\$125,618	\$247,823	\$22,307	\$22,307	\$203,209
2024	6.26	4.00	\$129,415	\$118,845	\$248,260	\$21,437	\$21,437	\$205,386
2025	6.31	4.00	\$137,155	\$111,483	\$248,638	\$20,422	\$20,422	\$207,795
2026	6.42	4.00	\$145,145	\$104,373	\$249,518	\$19,689	\$19,689	\$210,139
2027	6.53	4.00	\$153,854	\$96,404	\$250,259	\$18,695	\$18,695	\$212,868
2028	6.65	4.00	\$163,354	\$87,500	\$250,854	\$17,415	\$17,415	\$216,024
2029	6.70	4.00	\$173,966	\$76,928	\$250,894	\$15,502	\$15,502	\$219,890
2030	6.76	4.00	\$185,418	\$65,424	\$250,842	\$13,344	\$13,344	\$224,154
2031	6.81	4.00	\$197,782	\$52,910	\$250,692	\$10,919	\$10,919	\$228,854
2032	6.92	4.00	\$211,025	\$39,622	\$250,647	\$8,363	\$8,363	\$233,921
2033	6.92	4.00	\$225,632	\$24,509	\$250,141	\$5,173	\$5,173	\$239,795
2034	6.92	4.00	\$241,251	\$8,350	\$249,600	\$1,762	\$1,762	\$246,076

<b>Totals</b>			<b>\$2,418,795</b>		<b>\$464,262</b>	<b>\$464,262</b>	<b>\$4,390,270</b>
<b>Average</b>	<b>5.50</b>	<b>3.85</b>	<b>\$96,752</b>		<b>\$18,570</b>	<b>\$18,570</b>	<b>\$175,611</b>



subsidized interest rate equals long term average rate of return on idle funds (3.35%) plus 50 basis points





November 5, 2009

Lawrence City Commission  
Board of Douglas County Commissioners

Dear Commissioners:

On behalf of the Lawrence Douglas County Bioscience Authority (LDCBA) I am pleased to present this request for support for and assistance with the acquisition and long term lease of the West Lawrence Labs, 4950 Research Parkway, Lawrence (West Labs). During the past several months LDCBA has been in communication with the ownership group of West Labs, also with management of CritiTech, Inc, the anchor tenant in the West Labs building. We have conducted due diligence relative to the mechanical engineering of the building, the market and financial viability of owning and operating this facility by a public entity, and the importance of retaining CritiTech as a Lawrence premier life science company. Based on this diligence LDCBA believes it is in the best interest of Lawrence and Douglas County, also Kansas University and the Lawrence Chamber of Commerce, all LDCBA stakeholders, that West Labs be acquired and operated as part of the emerging bioscience infrastructure that is being developed in this community.

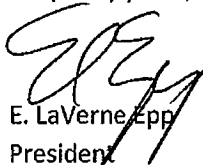
There are three primary reasons for this investment, as follows:

1. Acquiring and leasing West Labs provides an immediate opportunity for LDCBA to expand its footprint of life science laboratory and office space to include second phase graduation facilities for startup and emerging companies. It is an ideal complement to LDCBA's Bioscience and Technology Business Center currently under construction on the Kansas University west research campus. West Labs will offer space to Kansas University companies that have been fully incubated and are in growth stages adding jobs and attracting capital. (The fact that the building is contiguous to research labs already owned by KU provides natural incentive for KU technology entrepreneurs and start-up companies to consider commercialization). West Labs will also be attractive to companies considering Lawrence and Douglas County as a destination where those enterprises can locate to grow their businesses in a vibrant research and commercialization environment. Please note, as part of LDCBA's request, it recommends that West Labs remain a property tax paying asset.

2. Acquiring and leasing West Labs assures the retention of CritiTech, Inc. as one of Lawrence's own life science companies and a model enterprise for future commercialization. CritiTech, Inc. is a spin-out company from the University of Kansas and the Higuchi Bioscience Center. Its home is Lawrence. CritiTech has agreed to a long term lease agreement with LDCBA that will allow it to continue to be an integral part of our emerging life science infrastructure. CritiTech's expansion plans will provide additional jobs in the bioscience sector which is LDCBA's primary goal. CritiTech will also support the operations of the West Labs building by paying market rate rents. A profile of CritiTech, Inc. is attached which narrates the current and future success of this company.
3. Acquiring and leasing West Labs strengthens the partnership among LDCBA stakeholders, a consortium constituting government, business, and university, all collaborating to build an economic development engine. Adding this facility to our pool of assets establishes this region as a viable bioscience center of growth and development. LDCBA has already seen early stage commercialization potential relative to the development and construction of the Bioscience & Technology Business Center. We expect this to grow with additional capacity, both at KU as well as non-university companies. This unique partnership provides important leverage for Lawrence, Douglas County, and Kansas University in attracting research resources (scholars and technology entrepreneurs), commercial enterprises, and investment capital. Having expanded facilities enhances this leverage and gives the community an immediate competitive advantage in attracting commerce.

After full review and discussion, the LDCBA board took action earlier today to proceed with this initiative and to offer this request. LDCBA is committed to its primary goal of marshalling community bioscience assets and working collaboratively with its partners to produce an economic development infrastructure that will expand the economy and our community's tax base. This can be accomplished through the attraction of capital, creation of new jobs and training the young graduates out of our areas colleges and universities, also area working professionals, as the talent to fill those jobs. This fulfills LDCBA's greater purpose which is to transform ideas into commerce.

Very truly yours,

  
E. LaVerne Epp  
President

Critech, Inc. Background, History and Project Description  
Fall 2009

Critech, Inc. is a spin-out company from the University of Kansas and the Higuchi Biosciences Center. The Company has proprietary technology that enables it to improve the delivery and efficacy of many existing drugs or drugs in development. It also has proprietary coating and drug manufacturing technology that is of interest to the pharmaceutical industry. Using its proprietary technology, the Company has developed and produced, under GMP (Good Manufacturing Practices) conditions, its first oncology drug, Nanotax®, primarily for the treatment of ovarian cancer which has been approved for phase I human trials by the FDA. The trial is currently being conducted at the Cancer Center at the University of Kansas Medical Center. Critech and the KU Cancer Center have established a second Nanotax® trial site through the Kansas Cancer Center located in Wichita, Kansas.

The Company has completed the preclinical work on its second oncology drug, Nanotechin™ primarily for the treatment of colorectal cancer and is preparing to submit the results to the FDA within the next 60 days at a pre-IND meeting at the FDA. The Company will then submit an IND (Investigational New Drug) application to the FDA and plans to begin phase I human trials on its second drug in 2010. Critech expects to continue the development of promising new drugs and has under consideration additional drug candidates.

In order to take advantage of the “animal health corridor” that exists in our region, Critech is involved in a research project that will test our drugs for efficacy in companion animals. If our drugs appear to be efficacious in dogs the company intends to license our drugs to an established animal health company for veterinary applications. Critech would use this relationship to expand its production capabilities and to support the expansion of the company in the human market.

Critech, Inc., with an exclusive license from the University of Kansas on the proprietary technology used to make small particles, has been able to improve and increase the production of unique small particle drugs using its technology. The Company has established its own Good Manufacturing Practices (GMP) production capabilities and intends to expand its production capacity in early 2010. The Company currently has in development and is in the early stages of manufacturing a new production unit that is expected to provide ten times the production capacity of its existing GMP production unit. Critech, Inc. intends to manufacture clinical materials for itself and for clients using this equipment. In addition, the Company will continue to develop the coating and other proprietary manufacturing process, but will be seeking a development partners.

The Company has grown from a university research effort to 14 either full or part time employees or consultants. It has attracted millions of dollars in equity investments from primarily Kansas qualified investors and strategic partners. Critech has designed,

manufactured, installed and qualified its proprietary small particle manufacturing equipment according to Good Manufacturing Practices (GMP) standards. This has enabled the Company to produce its drug Nanotax® for its phase I clinical trial. CritiTech is currently involved in scaling up its production capacity and is building the next version of its small particle manufacturing equipment with Mechanical Systems, Inc. in Wichita. In addition to producing its own proprietary drugs CritiTech intends to offer this unique drug development and production capability to pharmaceutical clients. Part of CritiTech's strategic plan is to produce drugs for pre-clinical and clinical trials and eventually enter into a joint venture relationship with an established drug manufacturer for the production of commercial quantities of drug product. It is CritiTech's plan and desire to expand this drug production in Lawrence.

CritiTech is poised to grow in the drug development and production arena. If we experience the growth we hope to achieve, we will be adding a number of well paying technical, research and administrative jobs in our community. We anticipate that in addition to job creation, we will attract increasing investments of venture capital and other funding. It has always been the desire of the company to grow and expand locally because of the important support provided by the inventors, investors, the university, and many other strategic partners.