

**Proposed Project for Application to the Kansas Department of Health and Environment
for the Kansas Water Pollution Control Revolving Loan Fund.**

Applicant: City of Andale
Wastewater Treatment Facilities Improvements
Larkin Project No. KC99-0183.0000
KWPCRF Project No. C20 1644 01

Contact Person: John R. Roth, P.E.
Address: EBH & Associates
1105 Williams
Great Bend, KS 67530-4487

Sent to the Kansas Geological Survey for environmental review.

Agency Review Comments:

The proposed installation of a new lagoon will be constructed according to KDHE regulations, be out of the 100-year floodplain, and will be constructed with approval of DWR requirements. Any short-term adverse impacts during construction and long-term effects from leachate through the bottom of the lagoon should be offset by the long-term benefits to maintaining and improving the water quality of Cowskin Creek and the Arkansas River resulting from the improvements to the treatment of the municipal wastewater.

Recommended Action:

- ☒ Clearance of project should be granted
☐ Clearance of project should not be granted
☐ Clearance of project should be delayed until the issues or questions have been clarified
☐ Clearance of project should not be delayed, but the applicant (in the application) should address or clarify the questions or concerns indicated above

Donald O. Whittemore
Reviewer's Name

Geohydrology Section, Kansas Geological Survey
Division/Agency

4/28/03
Date


Reviewer's Signature



KANSAS

DEPARTMENT OF HEALTH & ENVIRONMENT

DIVISION OF ENVIRONMENT

Bureau of Water

APPLICATION FOR LOAN ASSISTANCE

1. LEGAL APPLICANT/RECIPIENT

a. Applicant Name - City of Andale
b. Organization Unit -
c. Street/P.O. Box - 304 N. Main, PO Box 338
d. City - Andale e. County - Sedgwick
f. State - Kansas g. ZIP Code - 67001-0338
h. Contact Person (Name Virginia Edwards, City Clerk
& Telephone No.) - 316-444-2351

2. TYPE OF APPLICANT/RECIPIENT

A. City
B. County
C. Other (Specify)

Enter appropriate letter ☒ A

3. TITLE OF APPLICANT'S PROJECT (Provide a summary description of the project). WWTF Improvements; add 4th cell to lagoon system & re-pipe entire complex

4. ESTIMATED NUMBER OF PERSONS BENEFITING 782

5. EMPLOYER IDENTIFICATION NUMBER 48-6084036

6. AREA OF PROJECT IMPACT (Names of cities, counties, etc.)

7. CONGRESSIONAL DISTRICTS OF:

a. APPLICANT 4 b. PROJECT 4

8. TYPE OF APPLICATION

A-New B-Revision C-Augmentation
Enter appropriate letter ☒ A

9. TYPE OF CHANGE (For 8B or 8C)

A-Increase Dollars
B-Decrease Dollars
C-Increase Duration
D-Decrease Duration
E-Cancellation
F-Other (Specify)

Enter Appropriate Letter(s) ☐ ☐ ☐

11. PROJECT START DATE
Year month day

2003 06 01

12. PROJECT DURATION

18 months

13. DATE SUBMITTED
Year month day

2003 04 01

10. PROPOSED FUNDING

a. STATE \$ 610,500.00
b. APPLICANT \$ 26,700.00
c. LOCAL \$.00
d. OTHER \$.00
e. TOTAL \$ 637,200.00

14. AGENCY TO RECEIVE REQUEST - Kansas Department of Health & Environment

a. ORGANIZATIONAL UNIT

b. ADMINISTRATIVE CONTACT (IF KNOWN)

BUREAU OF WATER
MUNICIPAL PROGRAMS SECTION

c. ADDRESS

15. IDENTIFICATION NUMBER
C20 644 01

16. REMARKS ADDED
☐ Yes ☒ No

17. THE APPLICANT CERTIFIES THAT:

To the best of my knowledge and belief, data in this preapplication/application are true and correct, the document has been duly authorized by the governing body of the applicant and the applicant will comply with the attached assurances if the assistance is approved.

THIS NOTICE OF INTENT/PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON: DATE: 03/28/03

18. CERTIFYING REPRESENTATIVE

a. TYPED NAME AND TITLE

Virginia Edwards
City Clerk

b. SIGNATURE

PROJECT DESCRIPTION

The City's current wastewater treatment facilities (WWTF) consist of a 3-cell, continuously discharging, facultative lagoon system constructed around 1972. Effluent is discharged into Cowskin Creek, which flows into the Arkansas River in the Lower Arkansas River Basin. The City is experiencing growing pains, and the WWTF must be expanded to prevent wastewater treatment from becoming a bottleneck or impediment to such welcomed growth & development.

The only sensible solution to the capacity problem is to add a new 4th cell to the lagoon system. The entire lagoon complex will also be re-piped to maximize detention time and minimize short-circuiting potential. The City is pursuing a low interest loan through the KWPCRF program administered by KDHE for financing the project.

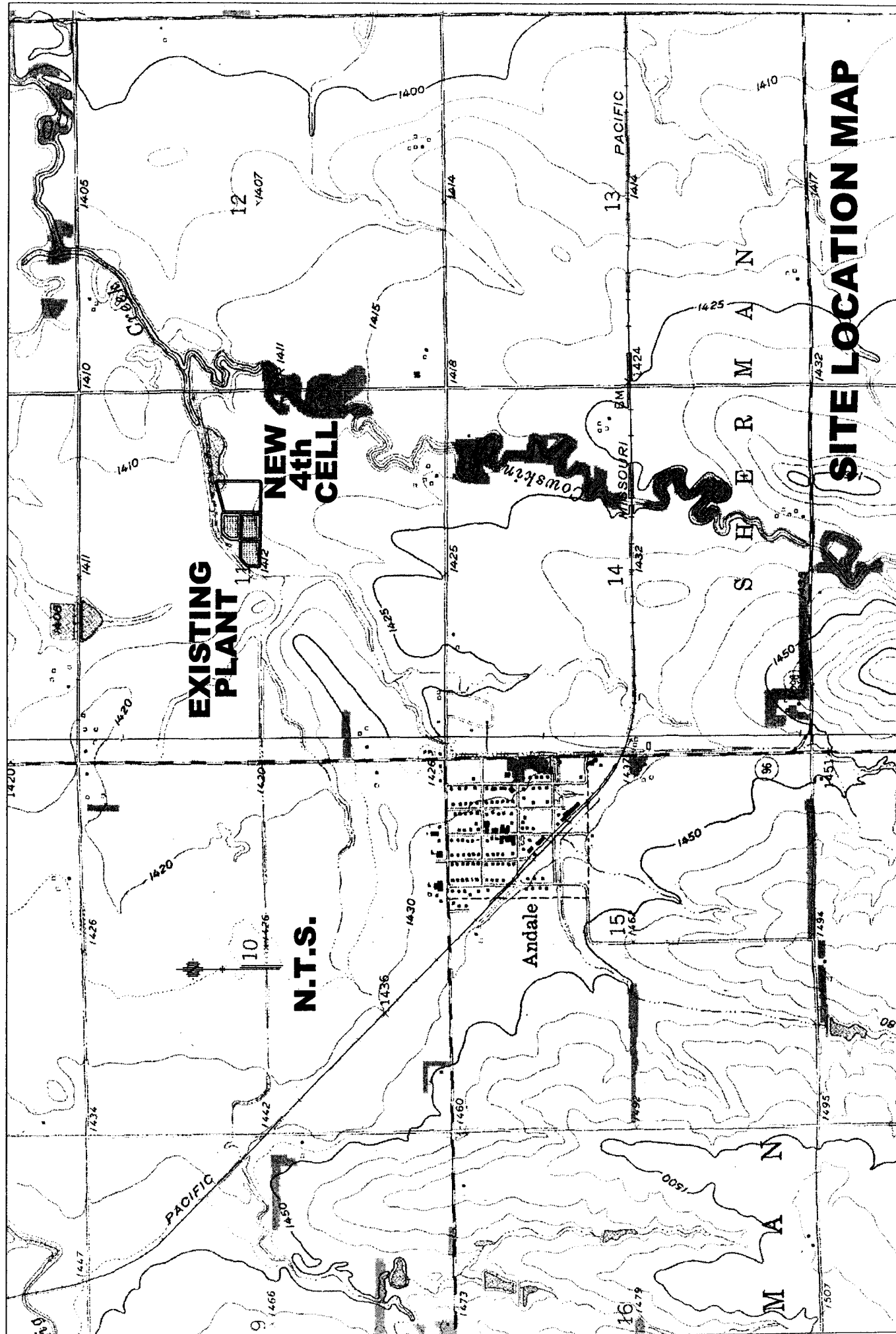
Andale is located in the northwest corner of Sedgwick County in south central Kansas - see attached General Location Map. The existing WWTF are located half a mile northeast of town (SW $\frac{1}{4}$, SW $\frac{1}{4}$, NE $\frac{1}{4}$, Sec. 11, T26S, R3W) - see attached Site Location Map.

The new 4th cell will be located immediately east of the existing system, and will be situated to balance cut & fill and to take maximum advantage of existing berms (see attached General Plan). Normal operating depth will be 5 feet, and berms will provide 3 feet of freeboard. The water side of berms will be protected with concrete aprons, while the outsides & other disturbed areas will be seeded to match existing cover.

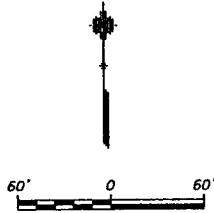
Groundwater and soils investigations will be performed, and the new cell will be sealed to KDHE standards. The new cell will require the acquisition of about 7.6 acres of adjacent dryland farm ground (see attached Aerial Photo), however no households or businesses would be displaced. Nor are there any known sensitive fish or wildlife habitats proximate to the proposed project area. The small depression at the northeast corner of the new cell has been determined as an artificial wetland by the USDA Natural Resources Conservation Service, and a copy of their finding is enclosed for informational purposes.

The attached FIRM map (actually just a portion of the entire map) shows that the Project will be well removed from the 100-year floodplain of Cowskin Creek, and flooding from that source should not be a concern. There is no information available for the small waterway which wraps around the west & north sides of the existing lagoon complex, but again, it is not believed that flooding is of much concern. However, if determined otherwise, applicable construction approvals and permits will be acquired from the Division of Water Resources in accordance with their regulations and requirements.

The improved lagoon system would continue to discharge effluent into Cowskin Creek, Lower Arkansas River Basin, Middle Arkansas-Slate Subbasin (HUC 11030013), Segment No. 14 as designated by KDHE's Surface Water Quality Standards (SWQS). Under the SWQS, this Segment is currently classified as "expected aquatic life use water", and is designated for all the beneficial uses currently classified.



1/4 SEC LINE



BM: CHSLD SQUARE ON NORTH CORNER
OF CONTROL MANHOLE - EL. 1420.00

PROPERTY LINE (TYP)

CHLORINATION
CHAMBER

POND #3

6.5' OPERATING DEPTH
BOTTOM EL. 1408.0
TOP-OF-BERM EL. 1419.0

DIVISION BOX

6" FORCE MAIN

CONTROL
MANHOLE *

TRANSFER
VALVE *

TRANSFER
VALVE *

POND #2

5' OPERATING DEPTH
BOTTOM EL. 1411.0
TOP-OF-BERM EL. 1419.0

CONTROL
MANHOLE *

POND #1

5' OPERATING DEPTH
BOTTOM EL. 1411.0
TOP-OF-BERM EL. 1419.0

NEW TRANSFER BOX
(SEE SHT. 7)

NEW DISTRIBUTION PIPING, VALVES,
& CLEANOUTS (TYP) (SEE SHT. 5)

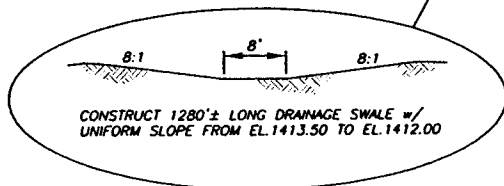
PROPERTY LINE (TYP)

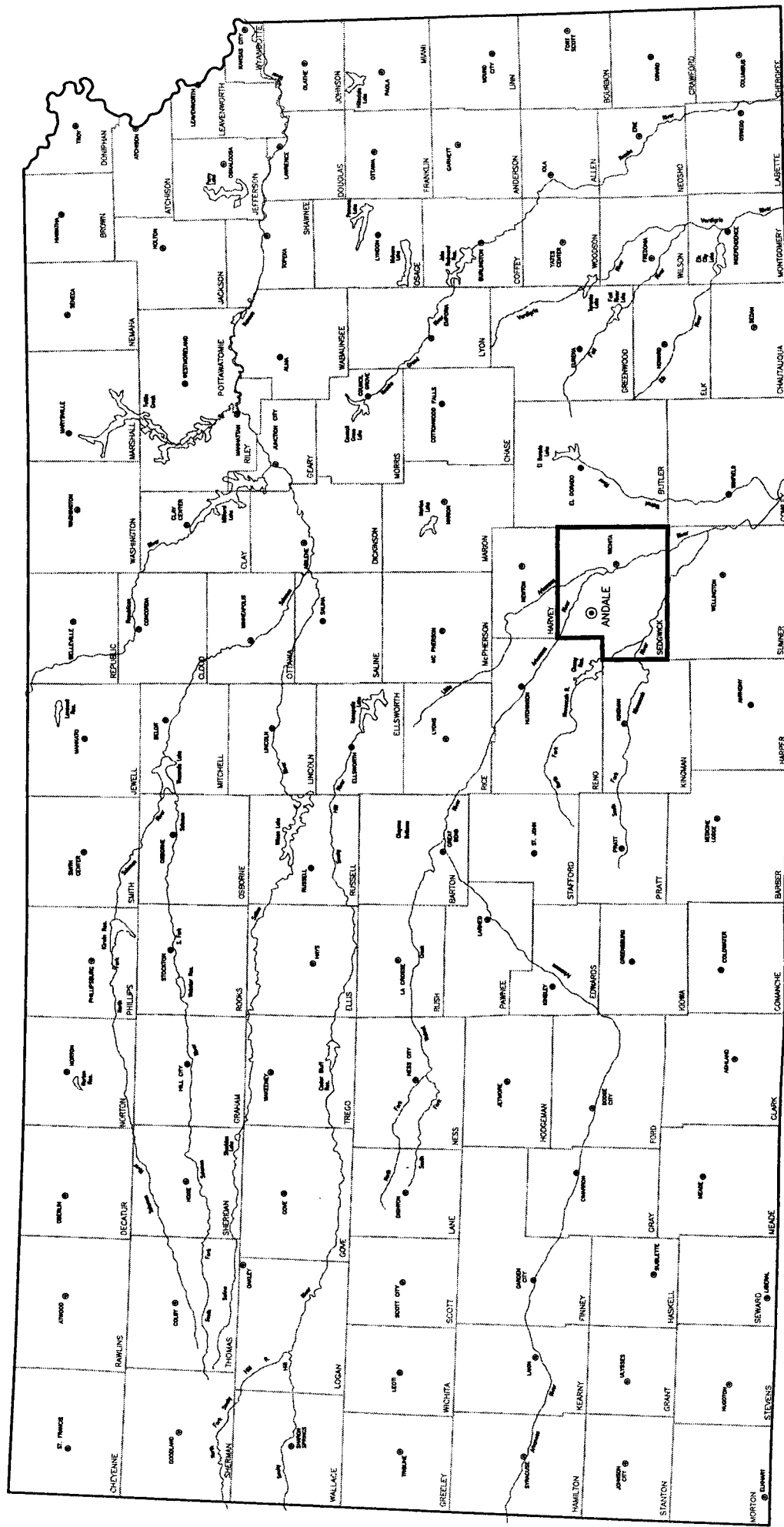
CNTR SEC. 11,
T26S, R3W

CONNECT NEW FENCE w/ C/O
POST & BRACE PANELS AS

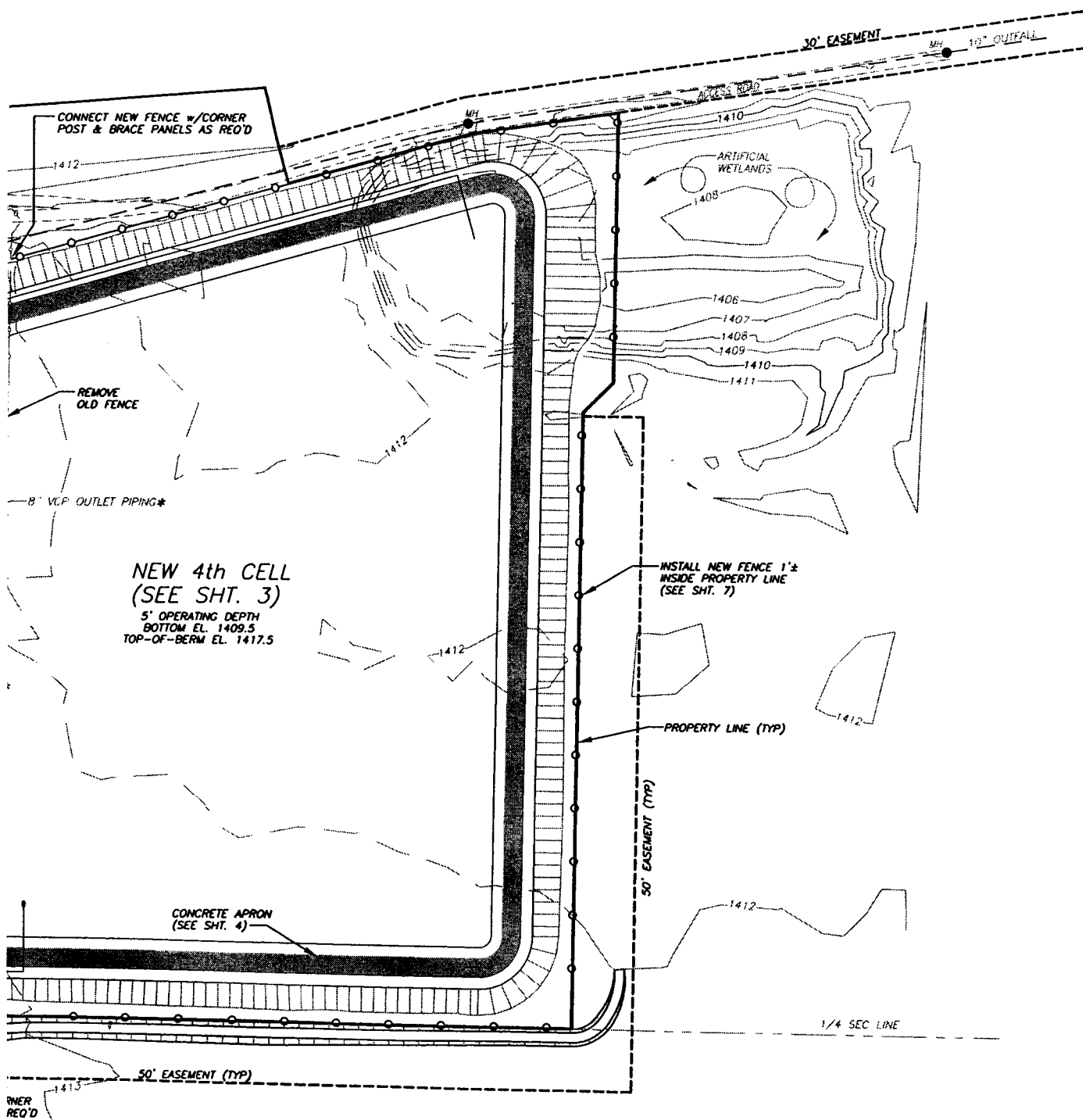
PLAN

*STRUCTURES & PIPING TO BE ABANDONED





GENERAL LOCATION MAP



DESIGN DATA

DESIGN FLOW = 130,000 gpd (1,300 P.E. @ 100 gpcd)
 DESIGN BOD LOADING = 271 ppd (250 mg/L)

	POND #1	POND #2	POND #3	POND #4
DESIGN OPERATING DEPTH	5 ft	5 ft	6.5 ft	5 ft
SURFACE AREA, acres	1.98	2.17	1.71	5.87
BOD LOADING, lbs/oc/d	27.0	27.0	---	27.0
VOLUME, gal	2,913,786	3,203,524	3,141,135	9,002,931
DETENTION TIME, days	22.4	24.6	24.2	69.3

NOTES

EXISTING FACILITIES ARE SHOWN BASED ON LOCATIONS OF RECORD & BEST AVAILABLE INFORMATION, AND ARE NOT GUARANTEED FOR COMPLETENESS OR ACCURACY. CONTRACTOR SHALL FIELD VERIFY LOCATIONS, DIMENSIONS, ELEVATIONS, & OTHER PERTINENT DATA PRIOR TO CONSTRUCTION AFFECTING OR MODIFICATION OF THE RESPECTIVE FACILITY.

REVISION	CITY OF ANDALE, KANSAS			
	WASTEWATER TREATMENT FACILITIES IMPROVEMENTS			
	GENERAL PLAN			
	DATE MAR 2003	E.B.H. ENGINEERS & ASSOCIATES SURVEYORS		DRAWING NO.
	JOB NO. 1202210	Evans-Berry-Mulholland & Associates, P.A. GREAT BEND, KS LAWRENCE, KS CHAMAROW, KS GOODLAND, KS NEOSHO, KS PRATT, KS		1

N.T.S.



NEW
4th
CELL

#3

#2

#1



ARTIFICIAL WETLANDS

NEW AREA~7.623ac

COMSKIN CREEK

AERIAL
PHOTO



United States Department of Agriculture
Natural Resources Conservation Service

11832 W. Central Suite 100
Wichita, KS 67212-5129

Phone: 316-721-6127
FAX: 316-721-8513
www.ks.nrcs.usda.gov

January 13, 2003

JOHN GORGES
6735 N 231ST ST W
ANDALE KS 67001-9536

Dear Mr. Gorges:

Enclosed is the Highly Erodible Land and Wetland Conservation Determination Form NRCS-CPA-026E and map for **Tract 97**. This determination is part of the conservation provisions of the Farm Bill of 1985, 1990 and 1996. The determination was made in response to your application for USDA program benefits. The evaluation indicates that some of your farmland falls into the following marked categories:

✓	Non-Wetlands (NW) have been identified; no wetland restrictions apply in these areas.
	A Converted Wetland (CW) has been identified. (see CPA-NRCS-026 for more information)
✓	An Artificial Wetland (AW) has been identified. (see CPA-NRCS-026 for more information)
	A wetland (W) has been identified. Draining, dredging, filling, or removal of woody vegetation within the defined wetland area(s) will result in loss of USDA benefits.
✓	A wetland inventory has not been completed for the area(s) designated " NI " or any other non-cropland areas. If you plan to manipulate any wet areas by draining, dredging, filling, or removal of woody vegetation, please complete form AD-1026 with FSA in advance of the manipulation, so a wetland determination can be made.

The United States Department of Agriculture revised the Department's appeal process effective January 16, 1996. The revised appeal process changed agency appeal authorities

The Natural Resources Conservation Service provides leadership in a partnership effort to help people conserve, maintain, and improve our natural resources and environment.

An Equal Opportunity Provider and Employer

as set forth in the Federal Crop Insurance Reform and Department of Agriculture Reorganization Act of 1994.

Under the new appeal and mediation process, your preliminary technical determination will become final 30 days after the date you receive this notice, unless you exercise either or both of the following options:

- 1) You may request a field visit by my office within 30 days after the date you receive this notice. Your request should be in letter form and addressed to me at the above address. Your letter should explain specific reasons why you think the NRCS technical decision is wrong. A field visit will be conducted with you to review the basis for the preliminary technical determination, address your concerns about the determination, and allow you a chance to provide additional information to help the NRCS better understand the issues involved.
- 2) You also have the option of requesting mediation within 30 days after the date you receive this notice. If you choose mediation, you are responsible for notifying the Kansas Agriculture Mediation Service directly by contacting:

Char Henton
Kansas Agricultural Mediation Service
2A Edwards Hall, Kansas State University
Manhattan, KS 66506-4806
Telephone: 1-800-321-3276

Please notify NRCS if you choose mediation so the 30 day field visit request deadline can be stopped during the mediation process.

Mediation is a process in which a trained, impartial third party helps look at the issues, identify and consider options, and determine if we can agree on a solution. Mediation is private, confidential, and informal. The mediator has no decision making authority, and cannot decide what is right, or make the involved parties do anything. If mediation is successful, the mediator will help us reach an agreement and document that solution in writing.

If you choose mediation, you can request that the NRCS pay any appropriate and reasonable costs associated with securing the services of a mediator. The NRCS has final discretion over what is considered appropriate and reasonable.

In summary, your preliminary technical determination becomes final:

- 1) after 30 days, if you take no action, or

- 2) after you receive a final determination letter, if a field visit and/or mediation is requested.

If you do not agree with the final technical determination, you have 30 days after the date of the determination becomes final to appeal to the Farm Service Agency county committee at the address below.

Farm Service Agency
1832 W. Central Ave Suite 100
Wichita, KS 67212-5129

You must file your appeal request within 30 days for it to be considered timely. The Farm Service Agency county committee will advise you of the scheduled date for the *appeal* hearing.

In the event that you pursue an appeal with the Farm Service Agency county committee, I will provide them a copy of your administrative record. The administrative record contains all the materials and information maintained by the NRCS relating to your appeal, as well as the NRCS technical determination reached in your case.

Artificial Wetlands (**AW**) and Prior Converted Wetlands (**PC**) are not subject to USDA Farm Program provisions; however, the U.S. Army Corps of Engineers (USACE) has jurisdictional responsibilities for all Waters of the United States, Wetlands, and the Clean Water Act. It is the landowner's responsibility to notify the USACE of any dredge/fill, drainage manipulations, or maintenance to existing drainage systems on wetlands or other waters on this or any other tract. The USACE contact is:

Stephen Penaluna
U.S. Army Corps of Engineers, Kansas State Regulatory Office
2710 NE Shadycreek Access Road
Eldorado, KS 67042
Phone: (316) 322-8247 Fax: (316) 322-8259

If you have any questions please contact this office.

Sincerely,



Robert K. Stutzman
District Conservationist

Wetland Label Summary and Advisory Statements

This summary provides information about allowable activities under the wetland conservation provisions of the farm bill and Section 404 of the Clean Water Act.

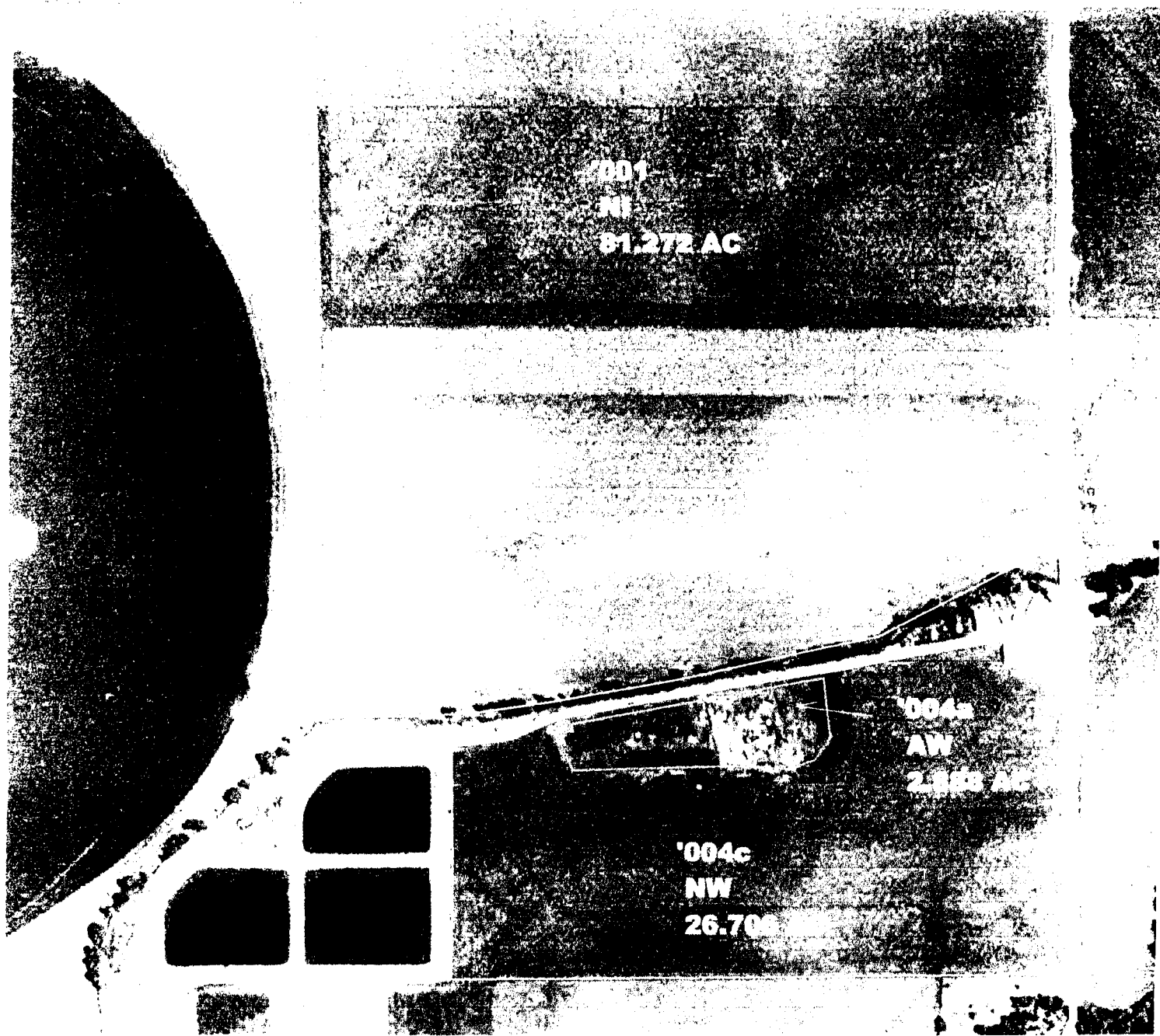
Label	Description	Acres
AW	Artificial or Irrigation Induced Wetland Man-made wetlands on areas previously non-wetland.	2.888
NI	Not Inventoried No wetland determination has been completed.	81.272
NW	Non-Wetland An area that does not meet wetland criteria under natural conditions.	26.706
	Total Acres Determined	29.594
	Total Acres Not Inventoried	81.272

SITE	WETLABCX	SITE_ACRES	Total_type	TOT_ACRES
'001	NI	81.272	81.272	81.272
'004c	NW	26.706	26.706	
'004a	AW	2.888	2.888	29.594
Total		110.866	110.866	110.866

Certified Wetlands Determination - 01/08/03

John Georges
NE 11-26-3W (Sedgwick Co., KS>)
Tract: 97
Termination Acres: 110.866 ac total
Certified: 01/08/2003

NRCS
Certified by: RMM
Scale = 1:4800



Legend

wettable
97 Wet Determ Labels
Points
97 Wet Determ
AW
NI
NW



USDA
Natural Resources
Conservation Service

600 0 600 1200 Feet

U.S.D.A. Natural Resources Conservation Service	NRCS-CPA-026 (June 91)	1. Name and Address of Person JOHN GORGES 6735 N 231ST ST W ANDALE KS 67001-9536	2. Date of Request 12/19/02
HIGHLY ERODIBLE LAND AND WETLAND CONSERVATION DETERMINATION		3. County SEDGWICK	
4. Name of USDA Agency or Person Requesting Determination FARM SERVICE AGENCY		5. Farm No. and Tract No. 9080-T-97	

SECTION I - HIGHLY ERODIBLE LAND

	FIELD NO.(s)	TOTAL ACRES
6. Is soil survey now available for making a highly erodible land determination? Yes ☐ No ☐		
7. Are there highly erodible soil map units on this farm? Yes ☐ No ☐		
8. List highly erodible fields that, according to ASCS records, were used to produce an agricultural commodity in any crop year during 1981 - 1985.		
9. List highly erodible fields that have been or will be converted for the production of agricultural commodities and, according to ASCS records, were not used for this purpose in any crop year during 1981 - 1985; and were not enrolled in a USDA set-aside or diversion program.		
10. This Highly Erodible Land determination was completed in the: Office ☐ Field ☐		

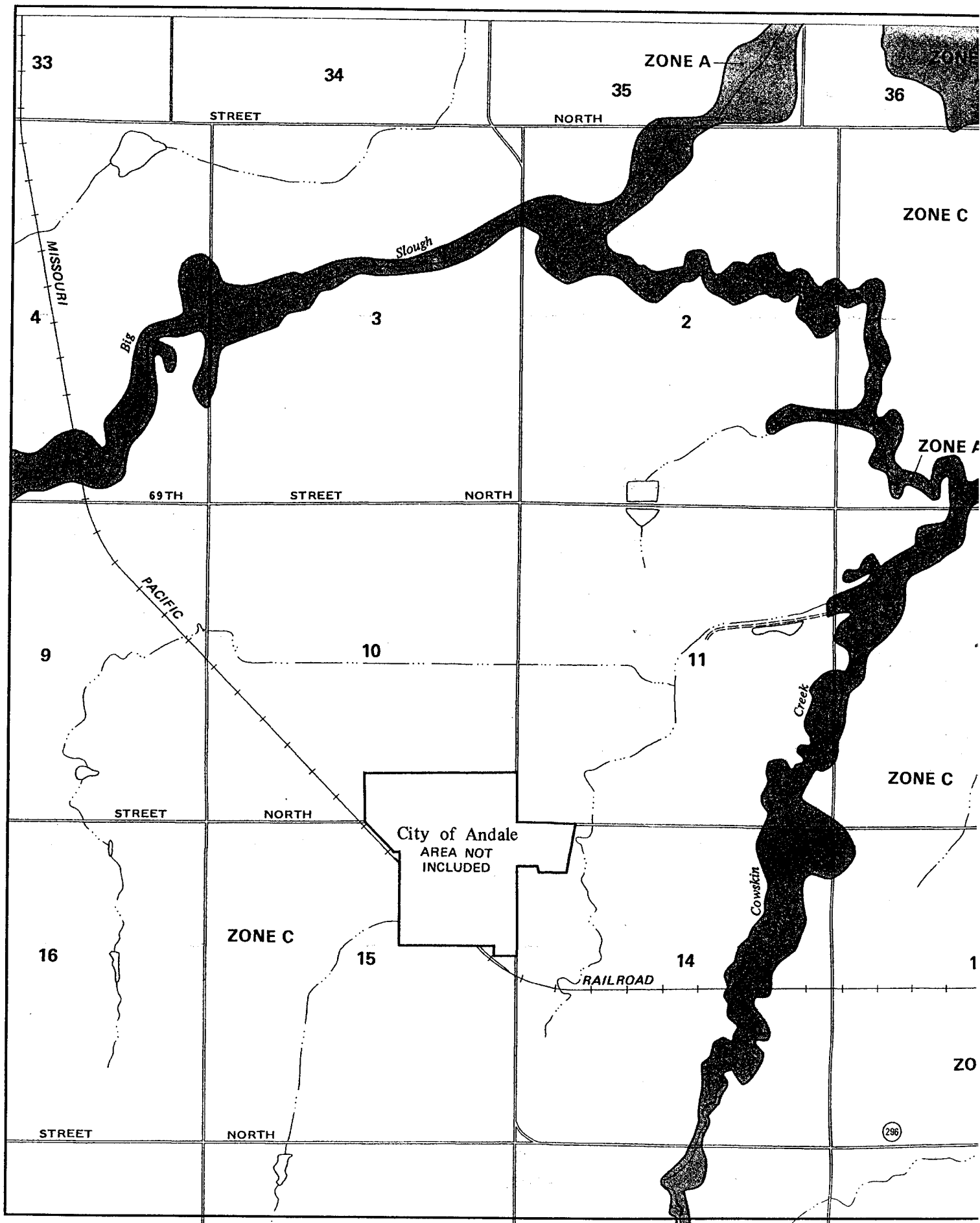
SECTION II - WETLAND

	FIELD NO.(s)	TOTAL ACRES
11. Are there hydric soils on this farm? Yes ☒ No ☐		
12. Wetlands (W), including abandoned wetlands, or Farmed Wetlands (FW) or Farmed Wetlands Pasture (FWP). Wetlands may be farmed under natural conditions. Farmed Wetlands and Farmed Wetlands Pasture may be farmed and maintained in the same manner as they were prior to December 23, 1985, as long as they are not abandoned.		
13. Prior Converted Cropland (PC). Wetlands that were converted prior to December 23, 1985. The use, management, drainage, and alteration of prior converted cropland (PC) are not subject to wetland conservation provisions unless that area reverts to wetland as a result of abandonment.		
14. Artificial Wetlands (AW). Artificial wetlands includes irrigation-induced wetlands. These wetlands are not subject to the wetland conservation provisions.	2	2.888
15. Minimal Effect Wetlands (MW). These wetlands are to be farmed according to the minimal-effect agreement signed at the time the minimal-effect determination was made.		
16. Mitigation Wetlands (MIW). Wetlands on which a person is actively mitigating a frequently cropped area or a wetland converted between December 23, 1985 and November 28, 1990.		
17. Restoration with Violation (RVW+year). A restored wetland that was in violation as a result of conversion after November 28, 1990, or the planting of an agricultural commodity or forage crop.		
18. Restoration without Violation (RSW). A restored wetland converted between December 23, 1985 and November 28, 1990, on which an agricultural commodity has not been planted.		
19. Replacement Wetlands (RPW). Wetlands which are converted for purposes other than to increase production, where the wetland values are being replaced at a second site.		
20. Good Faith Wetlands (GFW+year). Wetlands on which ASCS has determined a violation to be in good faith and the wetland has been restored.		
21. Converted Wetlands (CW). Wetland converted after December 23, 1985 and prior to November 28, 1990. In any year that an agricultural commodity is planted on these Converted Wetlands, you will be ineligible for USDA benefits.		
22. Converted Wetland (CW+year). Wetlands converted after November 28, 1990. You will be ineligible for USDA program benefits until this wetland is restored.		
23. Converted Wetland Non-Agricultural use (CWNA). Wetlands that are converted for trees, fish production, shrubs, cranberries, vineyards or building and road construction.		
24. Converted Wetland - Technical Error (CWTE). Wetlands that were converted as a result of incorrect determination by NRCS.		
25. The planned alteration measures on wetlands in fields _____ are considered maintenance and are in compliance with FSA.		
26. The planned alteration measures on wetlands in fields _____ are not considered maintenance and if installed will cause the area to become a Converted Wetland (CW). See item 22 for information on CW+year.		
27. The wetland determination was completed in the office ☐ field ☒ and was delivered ☐ mailed ☒ to the person on 1-13-03		
28. Remarks.		

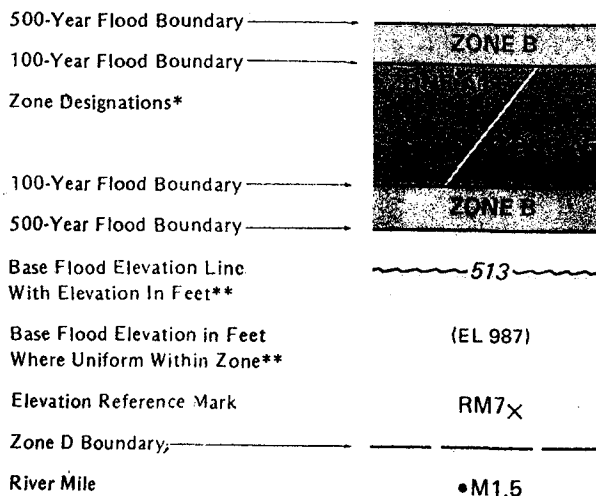
29. I certify that the above determination is correct and adequate for use in determining eligibility for USDA program benefits, and that wetland hydrology, hydric soils, and hydrophytic vegetation under normal circumstances exists on all areas outlined as Wetlands, Farmed Wetlands, and Farmed Wetlands Pasture.

30. Signature of NRCS District Conservationist

31. Date



KEY TO MAP



**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

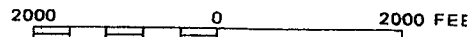
This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Map Index.

INITIAL IDENTIFICATION:



APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

FIRM FLOOD INSURANCE RATE MAP

SEDGWICK
COUNTY,
KANSAS
(UNINCORPORATED AREAS)

PANEL 100 OF 300

COMMUNITY-PANEL NUMBER
200321 0100 A

EFFECTIVE DATE:

JUNE 3, 1986



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

EBH & Associates

Evans - Bierly - Hutchison & Associates, P.A.

1105 Williams

Great Bend, Kansas 67530-4487

(620) 793-8411

FAX (620) 793-8413

ENGINEERS - SURVEYORS

March 28, 2003

Kansas Geological Survey
University of Kansas
1930 Constant Ave., Campus West
Lawrence, KS 66047-3726

Re: Intergovernmental Review for Environmental Clearance/Comment
Kansas Water Pollution Control Revolving Fund (KWPCRF) Program
Wastewater Treatment Facilities (WWTF) Improvements
City of Andale, KS

The City of Andale, KS is applying for a loan through the KWPCRF program administered by the Kansas Department of Health & Environment (KDHE) for the financing of a major WWTF Improvements project. As a part of the process, KDHE must prepare an environmental clearance document for the project based on clearances/comments received from an intergovernmental review.

The purpose of this letter is to request such a review from your agency. Enclosed are data and information regarding the project, hopefully sufficient for your needs. However, if further information or assistance is needed, please contact me at (620) 793-8411.

Please return clearances/comments to me at the address above by April 30, 2003 for forwarding to KDHE as a part of the City's loan application. Thank you for your help and cooperation with these matters.

At your service,



John R. Roth, P.E.

enc