

SUBDIVISION COMMITTEE
METROPOLITAN AREA PLANNING COMMISSION

AGENDA ITEM NO. 6

October 24, 1996

STAFF REPORT
(Final Plat, Preliminary Plat Approved 8/22/96)

CASE NUMBER: S/D 96-55 GREENWICH BUSINESS PARK

OWNER/APPLICANT: Ritchie Development Corp., 8100 E. 22nd, Wichita, KS 67226

SURVEYOR/ENGINEER: Mid Kansas Engineering Consultants, Inc., 411 North Webb Road, Wichita, KS 67206

LOCATION: Northwest corner of 21st Street North and Greenwich Road

SITE SIZE: 84.0 Acres

NUMBER OF LOTS

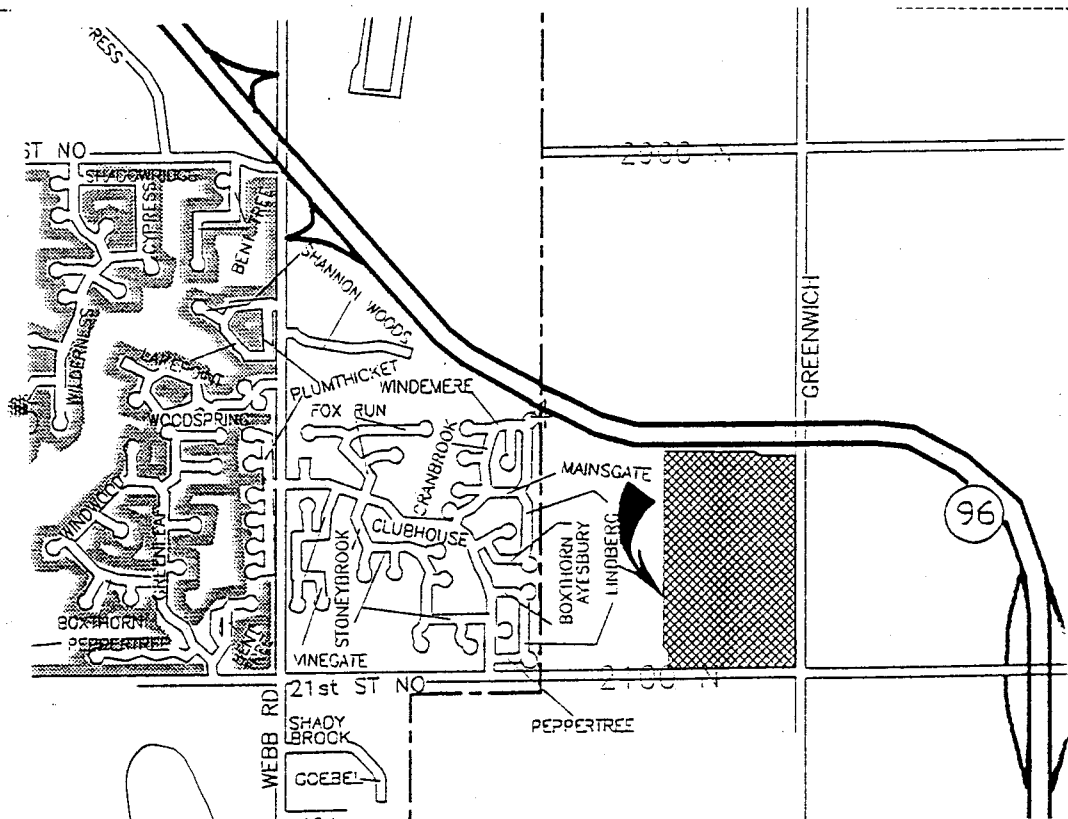
Residential:	
Office:	
Commercial:	5
Industrial:	<u>15</u>
Total:	23 (3 additional lots have split zoning)

MINIMUM LOT AREA: 42,000 sq. ft.

CURRENT ZONING: "LC" and "SF-20"

PROPOSED ZONING: "LC" and "LI" (SCZ-0700)

VICINITY MAP:



NOTE: This site has been approved for a zone change (SCZ-0700) for "LI" and "LC" zoning. The zoning case not only required platting but also provision of a Development Plan or what would be the equivalent of a CUP for sites within the City of Wichita. While the zone change is a County case, the site has subsequently been annexed to the City of Wichita.

STAFF COMMENTS:

- A. As was offered by the applicant during consideration of the zone change, a Development Plan, appropriate for recording, shall be submitted to Planning for review. If found adequate by Planning, this plan will be recorded as part of the platting process. As a County zone case and site, the Development Plan is being provided in lieu of a Community Unit Plan that was a requirement, only within the City, for commercial zoned sites of 6 acres or larger (this site's zone change and conditions were approved prior to the effective date of the Unified Zoning Code).

It should be noted that based upon the zone case and Development Plan, several of the lots now being platted will be split in terms both of the zoning and conditions associated with the parcels indicated by the Development Plan. Specifically, Lots 1, 7, and 9 will be effected by such a division. Such splitting of lots by zoning and/or parcel boundaries is not recommended due to difficulties in interpreting applicable use restrictions and requirements.

- B. It should be noted that this plat is indicating the dedication of Reserve A to the public. This area is apparently being dedicated for a potential exit ramp from K-96 to Greenwich. However, within this area is a bike and hike path which will require relocation. Consequently, the applicant shall provide a guarantee for such a relocation.
- C. The applicant shall guarantee the extension of sanitary sewer, including pump stations, off-site improvements, etc., to serve the lots being platted.
- D. The applicant shall guarantee the extension of City water to serve the lots being platted. The applicant shall provide a 20' utility easement along the south property line of Lots 1, 2, 3, 4, and 5, Block 1. The applicant shall guarantee the installation of an 8" water main to service Lots 1, 2, 3, 4, and 5, Block 1.
- E. The applicant shall guarantee any drainage improvements required by the platting of this property. Minimum pad elevations, if required, will be shown on the final drainage plan.
- F. The applicant shall guarantee construction of the storm sewers required by this plat.
- G. The applicant shall guarantee the paving of the proposed interior streets.
- H. During review of the preliminary plat, the City Traffic Engineer asked the applicant or his agent to provide information regarding the size of vehicles which will be using the culs-de-sac. Also, Engineering requested additional information concerning the location of the accel/decel lanes. Engineering needs to verify if the indicated culs-de-sac, with a turnaround radius of 65 feet are adequate or if a greater radius is required. Also requirements for accel/decel lanes need to be stated.

As required by the sidewalk ordinance based on the likely commercial and business uses to be developed for this site (Greenwich Business Park) sidewalks shall be included in the paving petition, along both sides of the interior streets.

The applicant is also reminded that prior to issuance of building permits, the Development Plan requires that a sidewalk plan for additional facilities needs to be submitted to and approved by the Director of Planning.

- H. County Engineering requested that as part of the final plat, the applicant dedicate right-of-way for 21st Street North by separate instrument. Other paving requirements/guarantees involving the adjacent arterial of Greenwich Road were to be discussed by the applicant and City and/or County Engineering. Engineering needs to indicate what guarantees are required for paving of Greenwich and/or 21st Street North.
- I. A requirement of the Development Plan was also that at the time of platting, a traffic study would be provided in order to determine the need for traffic improvements. County Engineering, and/or City Traffic Engineering need to indicate if such a study has been provided and consequently what traffic improvements, in addition to any noted previously, that need to be guaranteed.
- J. If improvements are guaranteed by petition, a notarized certificate listing the petitions shall be submitted to the Planning Department for recording.
- K. Traffic Engineering and/or County Engineering indicated during review of the Preliminary plat that they were still discussing the number, location, and size (60 ft. 72 ft., etc.) of access openings to 21st Street North and Greenwich shown on this plat. Engineering needs to indicate if this final plat has adequately depicted access controls as requested by Engineering.
- L. Since Lot 9 has no direct access to a public street, it shall be clearly indicated on the plat (plattor's text) that the 40' private access easement to the west of this lot is to the benefit of that lot. Further, it shall also be specifically indicated that this easement will remain unobstructed by any impediments (trees, parked vehicles). However, as a private easement and because of issues of maintenance, the right to alter the easement, etc., it is suggested that a separate document be used to create the easement and that the applicant record this document showing the recording information on the plat and submit a recorded copy to Planning.
- Further, as required by the Development Plan, a cross-lot circulation agreement is to be created for the entire site. For Lot 9 access to 21st Street North and Greenwich Road across the adjacent lots should be assured by this agreement. This agreement shall be submitted for recording with the final plat tracing.
- M. The applicant's agent needs to explain if a pipeline easement or setback in any way impacts this site. Based on the platting binder, a KANEB pipeline is located somewhere in or near the area of this plat. If this pipeline effects this site, this plat will be subject to the standard requirements for pipelines.

- N. At this time, the plat binder is indicating that this site's ownership is in a party different than is shown on the plat. Before the plat will be released for recording, the applicant shall provide proof as to the site being in the ownership of the indicated platlor (Ritchie Associates Inc.).
- O. The applicant shall submit an avigational easement covering all of subject plat and a restrictive covenant assuring that adequate construction methods will be used to minimize the effects of noise pollution in the habitable structures constructed on subject property.
- P. On the final plat tracing, the MAPC signature block shall indicate John C. Frye as chairman.
- Q. The final plat tracing shall indicate the required minimum building pad elevations in the table provided on the plat tracing.
- R. For the areas indicated as having access controls but allowing for openings, the word "complete" or in the abbreviations, the letter "C" shall be deleted. Indicating both complete access control and then showing openings being allowed is contradictory.
- S. The final plat tracing shall indicate the recording information for each indicated private access easement. Copies of these easements shall also be provided for the plat file.
- T. The applicant shall install or guarantee the installation of all utilities and facilities which are applicable and described in Article 8 of the MAPC Subdivision Regulations. (Water service and fire hydrants required by Article 8 for fire protection shall be as per the direction and approval of the Chief of the Fire Department.)
- U. The applicant's engineer is advised that the Register of Deeds is requiring the name(s) of the notary public, who acknowledges the signatures on this plat, to be printed beneath the notary's signature.
- V. The applicant is advised that various State and Federal requirements [specifically but not limited to the Army Corps of Engineers, Kanopolis Project Office, Rt. 1, Box 30, Marquette, KS 67464 (913-546-2294) or Kansas Department of Wildlife and Parks, P. O. Box 317, Valley Center, KS 67147] for the control of soil and wind erosion and the protection of wetlands may impact how this site can be developed. It is the applicant's responsibility to contact all appropriate agencies to determine any such requirements.
- W. Perimeter closure computations shall be submitted with the final plat tracing. Section 5-101(c).
- X. Recording of the plat within 30 days after approval by the City Council and/or County Commission.
- Y. The representatives from City Engineering should be prepared to comment on the status of the applicant's drainage plan.



MID-KANSAS ENGINEERING CONSULTANTS, INC.
411 North Webb Road
Wichita, KS 67206
316-684-9600 FAX 316-684-5100

TO:

PROJECT NAME: 21st & Greenwich Business Park

PROJECT NUMBER: 96066

DATE: October 24, 1996

Storm Analysis and its Impact on Upstream and Downstream Properties

Objective of Meeting:

- ▶ To establish a methodology to arrive at a mutually acceptable peak runoff for storm events affecting the box culvert lying approximately 750 feet west of Greenwich Road on 21st Street North.
- ▶ To establish retention criteria for land within the basin on an equitable basis.

Existing Conditions:

- ▶ K-96 has been built. What criteria was used to establish the drainage structure under the highway?
- ▶ Detention system for the Kansas Surgery and Recovery Center - what methodology was used to establish it?
- ▶ TR55 computer modeling - can we disregard and start fresh?

KHB/dm

August 22, 1996

STAFF REPORT
(Preliminary Plat)

CASE NUMBER: S/D 96-55 GREENWICH BUSINESS PARK

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LOCATION: Northwest corner of 21st Street North and Greenwich Road

SITE SIZE: 84.0 Acres

NUMBER OF LOTS

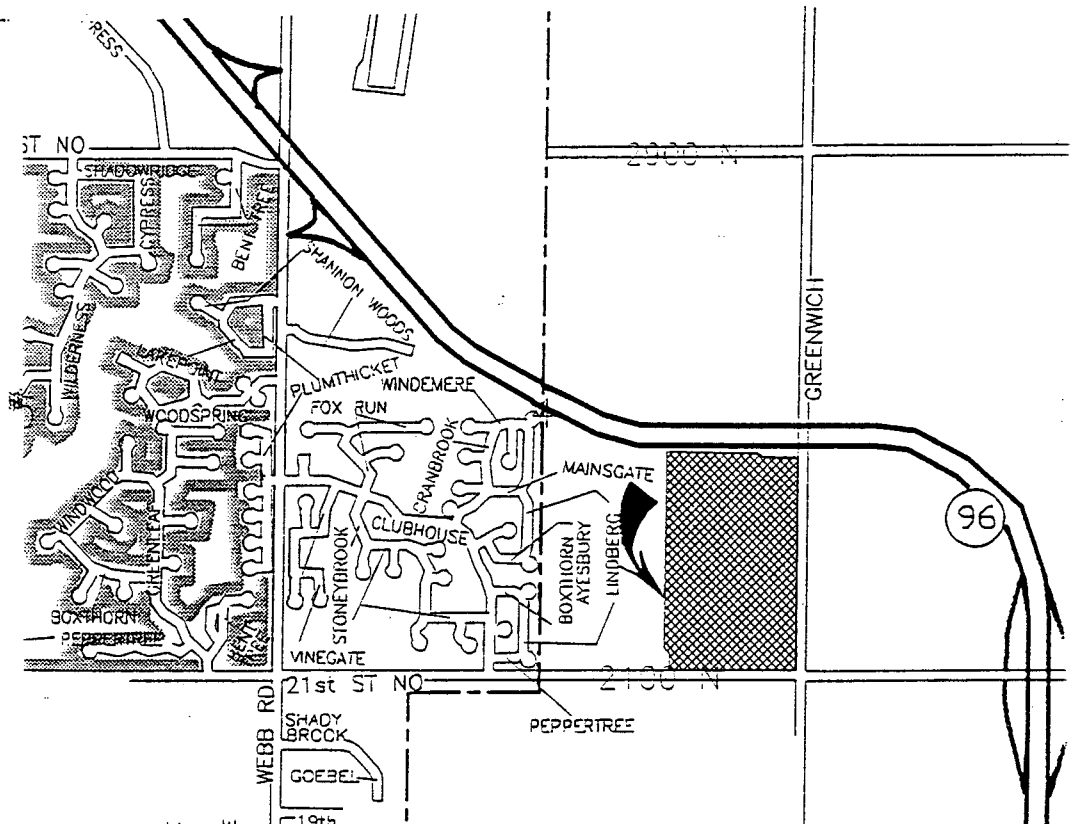
Residential:	
Office:	
Commercial:	5
Industrial:	15
Total:	23 (3 additional lots have split zoning)

MINIMUM LOT AREA: 42,000 sq. ft.

CURRENT ZONING: "LC" and "SF-20"

PROPOSED ZONING: "LC" and "LI" (SCZ-0700)

VICINITY MAP:



NOTE: This site has been approved for a zone change (SCZ-0700) for "LI" and "LC" zoning. The zoning case not only required platting but also provision of a Development Plan or what would be the equivalent of a CUP for sites within the City of Wichita. While the zone change is a County case, the site will be adjacent to the City of Wichita due to the recent platting of property to the west of this site and that property's pending annexation. Consequently, annexation of this site will be a condition of platting.

STAFF COMMENTS:

- A. The applicant shall submit a request for annexation of this property to Wichita. If the applicant pursues completion of this plat prior to the site being annexed to Wichita, approval of the plat by both the City and County will be required.
- B. As was offered by the applicant during consideration of the zone change, a Development Plan, appropriate for recording, shall be submitted to Planning for review. If found adequate by Planning, this plan will be recorded as part of the platting process. As a County zone case and site, the Development Plan is being provided in lieu of a Community Unit Plan that was a requirement, only within the City, for commercial zoned sites of 6 acres or larger (this site's zone change and conditions were approved prior to the effective date of the Unified Zoning Code).

It should be noted that based upon the zone case and Development Plan, several of the lots now being platted will be split in terms both of the zoning and conditions associated with the parcels indicated by the Development Plan. Specifically, Lots 1, 7, and 9 will be effected by such a division. Such splitting of lots by zoning and/or parcel boundaries is not recommended due to difficulties in interpreting applicable use restrictions and requirements.
- C. It should be noted that this plat is indicating the dedication of Reserve A to the public. This area is apparently being dedicated for a potential exit ramp from K-96 to Greenwich. County Engineering and/or City Engineering need to indicate if this dedication and potential K-96 exit are appropriate.
- D. The applicant shall guarantee the extension of sanitary sewer to serve the lots being platted. As indicated during the zoning case, sewer service in this area is near if not beyond capacity. City Engineering needs to therefore also indicate if service is actually available for this development and/or any special requirements for providing sewer service (e.g., pump stations, off-site improvements, etc.)
- E. The applicant shall guarantee the extension of City water to serve the lots being platted.
- F. The applicant shall guarantee any drainage improvements required by the platting of this property.
- G. The applicant shall guarantee construction of the storm sewers required by this plat.
- H. The applicant shall guarantee the paving of the proposed interior streets. City Engineering needs to verify if the indicated culs-de-sac, with a turnaround radius of 65 feet are adequate or

if a greater radius is required.

As required by the sidewalk ordinance based on the likely commercial and business uses to be developed for this site (Greenwich Business Park) sidewalks shall be included in the paving petition, along both sides of the interior streets.

The applicant is also reminded that prior to issuance of building permits, the Development Plan requires that a sidewalk plan for additional facilities needs to be submitted to and approved by the Director of Planning.

- I. County Engineering needs to indicate if any paving requirements/guarantees are involved for the adjacent arterials of 21st Street North and Greenwich.
- J. A requirement of the Development Plan was also that at the time of platting, a traffic study would be provided in order to determine the need for traffic improvements. County Engineering, and/or City Traffic Engineering need to indicate if such a study has been provided and consequently what traffic improvements need to be guaranteed.
- K. If improvements are guaranteed by petition, a notarized certificate listing the petitions shall be submitted to the Planning Department for recording.
- L. Traffic Engineering and/or County Engineering needs to comment on the number, location, and size (60 ft. 72 ft., etc.) of access openings to 21st Street North and Greenwich shown on this plat.

In regard to the 40 ft. access easement along the east line of Lot 1, which is also intended to serve as a secondary means of access to/from this plat's extended cul-de-sac street (22nd and 107th), one of the two openings for Lot 1 to 21st Street North shall be shown as located specifically at this easement's location. The other opening may then be shown as anywhere along this lot's remaining frontage.

- M. While the new zoning ordinance indicates 20-foot front yard setbacks for zoning as involved at this site, both the Subdivision Regulations and the Development Plan for this site indicate greater setbacks. At the least, 35-foot setbacks are required for front yards under the Subdivision Regulations. Under the Development Plan, not only are 35-foot setbacks required for commercial uses, but 50-foot setbacks, to both front streets and side streets, are required for industrial uses.

Because of the way setbacks are describe by the Development Plan, the final plat should delete the platting of setbacks and place a note on the face of the plat indicating that Building Setbacks are per the Development Plan as on file with the Planning Department. However, if the Development Plan submitted for approval, results in 35-foot setbacks in all cases, then such setbacks shall be platted, with a note on the plat still indicating that additional setback requirements (side yard, back yard, etc.) are per the Development Plan.

If building setbacks are platted, a more distinct symbol shall also be employed. As now shown, setback lines are too solid and appear at most locations to possibly be lot lines.

- N. Since Lot 9 has no direct access to a public street, it shall be clearly indicated on the plat (plattor's text) that the 40' private access easement to the west of this lot is to the benefit of that lot. Further, it shall also be specifically indicated that this easement will remain unobstructed by any impediments (trees, parked vehicles). However, as a private easement and because of issues of maintenance, the right to alter the easement, etc., it is suggested that a separate document be used to create the easement and that the applicant record this document showing the recording information on the plat and submit a recorded copy to Planning.

Further, as required by the Development Plan, a cross-lot circulation agreement is to be created for the entire site. For Lot 9 access to 21st Street North and Greenwich Road across the adjacent lots should be assured by this agreement. This agreement shall be submitted for recording with the final plat tracing.

- O. The Fire Department needs to indicate the acceptability of the street name changes shown for the 22nd/107th Street cul-de-sac. That is, is such a change in this street's name necessary and/or should another street name(s) be used.
- P. The applicant's agent needs to explain if a pipeline easement or setback in any way impacts this site. Based on the platting binder, a KANEB pipeline is located somewhere in or near the area of this plat. If this pipeline effects this site, this plat will be subject to the standard requirements for pipelines.
- Q. At this time, the plat binder is indicating that this site's ownership is in a party different than is shown on the plat. Before the plat will be released for recording, the applicant shall provide proof as to the site being in the ownership of the indicated plattor (Ritchie Associates Inc.).
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- T. Requirements for a final plat (see pages 5-5 through 5-10, Part 4, Article 5 of the MAPC Subdivision Regulations).
- U. Prior to or at the time of submitting the final plat, the applicant shall submit a drainage plan to City Engineering for review and approval.
- V. The applicant's engineer is advised that the Register of Deeds is requiring the name(s) of the notary public, who acknowledges the signatures on this plat, to be printed beneath the notary's signature.
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to the Army Corps of Engineers, Kanopolis Project Office, Rt. 1, Box 30, Marquette, KS 67464 (913-546-2294) or Kansas Department of Wildlife and Parks, P. O. Box 317, Valley Center, KS 67147] for the control of soil and wind erosion and the protection of wetlands may impact how this site can be developed. It is the applicant's responsibility to contact all appropriate agencies to determine any such requirements.

- X. The representatives from the utility companies should be prepared to comment on the need for utility easements to be platted on this property.
- Y. The representatives from City Engineering should be prepared to comment on the status of the applicant's drainage concept.

November 21, 1996

STAFF REPORT

(Final Plat Deferred 10/24/96, Preliminary Plat Approved 8/22/96)
(Plat provided to the Subdivision Committee on 10/24/96)

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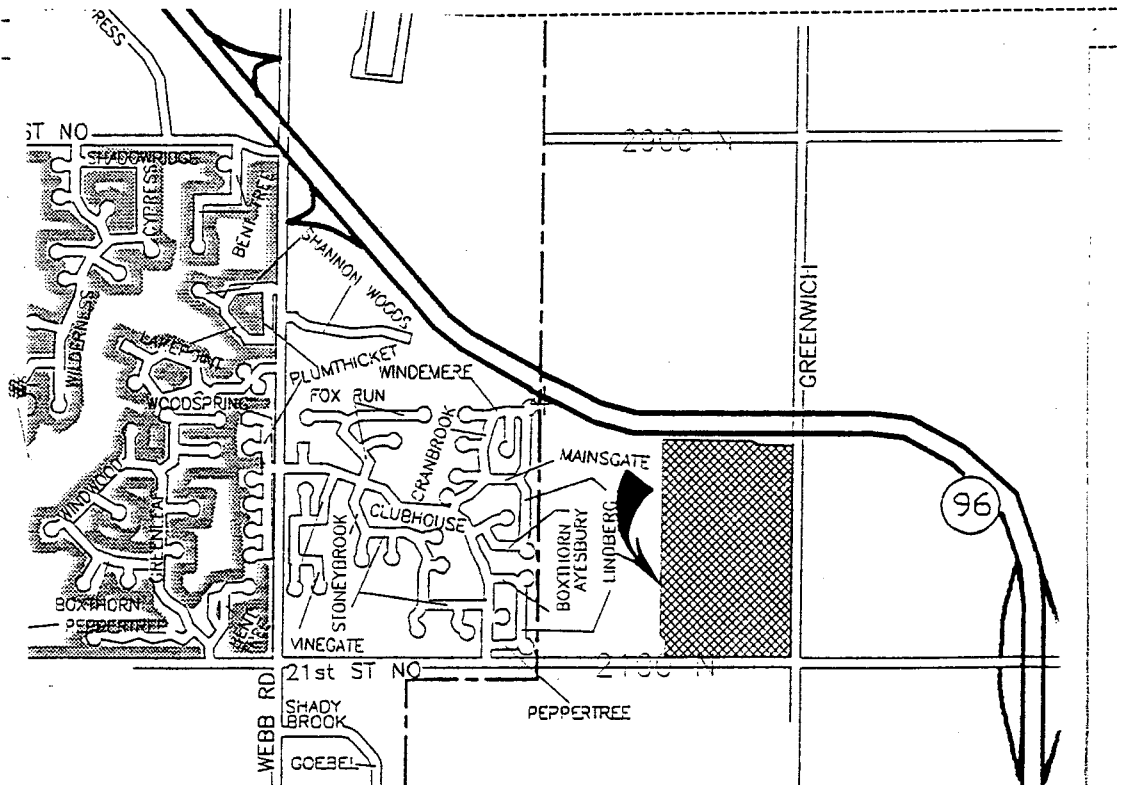
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- X. Perimeter closure computations shall be submitted with the final plat tracing. Section 5-101(c).
- Y. Recording of the plat within 30 days after approval by the City Council and/or County Commission.
- Z. The representatives from City Engineering should be prepared to comment on the status of the applicant's drainage plan.

Watershed Evaluation

West Fork Fourmile Creek at 21st Street

Prepared by Mid-Kansas Engineering Consultants

November 19, 1996

Watershed Evaluation

West Fork Fourmile Creek at 21st Street

Purpose

This evaluation of the West Fork Fourmile Creek was undertaken to provide a more detailed assessment of the watershed than has been previously completed. Previous analyses used a variety of analysis methods, and either evaluated the watershed as a gross area (~800 ac) or were limited to smaller portions of the watershed, such as parcels for residential and commercial development and watersheds for specific culverts under K-96.

A meeting was held on October 24 to discuss the evaluation with all concerned parties. Those attending included representatives from Sedgwick County, the City of Wichita, Professional Engineering Consultants, P.A., Baughman Company, Ritchie Development, and Mid-Kansas Engineering Consultants.

At that meeting the following purposes were established:

- To provide a planning level analysis of the entire watershed using a single method
- To assess the overall effects of K-96 on detention within the watershed.
- To establish a logical approach for protecting downstream property through planned detention in upstream areas.
- To attempt to distribute detention responsibility among watershed properties.

In addition, the following baseline conditions were established:

- As there is no record of roadway overtopping at 21st St. the 100-year peak flow through the culvert under existing conditions is to be 1080 cfs, or the approximate capacity of the existing culvert.
- Culverts under K-96 are to be fully functional during the 100-year event at their approximate design flows.
- The culvert under 21st St. will be lengthened to accommodate road widening, but otherwise will not be changed.

A second meeting was held on November 12 to present preliminary results of the evaluation, solicit comments, and discuss appropriate recommendations. Comments received from that meeting have been incorporated into the watershed model, and additional calibration and analyses completed. The results are presented in this report.

Approach

Watersheds used for analysis are shown on the attached Figure. These correspond in general with those established by Professional Engineering Consultants, P.A. (PEC) for drainage designs of K-96 construction and 21st Street improvements. Capacities of culverts under K-96 and 21st Street were roughly verified using standard FHWA analysis procedures.

The analysis was completed using the Penn State Runoff Model. A list of sources of information for model parameters is included in the appendix.

The model was calibrated using the overland flow Manning's "n" value, which affects the shape, peak value, and time to peak of the runoff hydrograph. As basins 1 and 2 are already developed as Tallgrass East (residential) and the Kansas Surgery and Recovery Center, Manning's "n" was established on the basis of reasonable values that produce peak flowrates approximately equal to those shown in the drainage report for the detention basin that serves both areas (Storm Drain # 106). Manning's "n" for the other undeveloped watersheds was modified within a reasonable

range to achieve the desired peak flowrate through the 21st St. culvert. Pertinent results are shown in the accompanying table.

Evaluation of Results

The Penn State Runoff Model procedure calculates peak flow rates at the K-96 culverts somewhat higher than the values calculated by other methods. To ensure that the culvert capacities are not exceeded, conceptual detention basins were incorporated into each basin that discharges directly to a K-96 culvert. The approximate storage volumes required to reduce flood peaks to culvert design flowrates are shown on the table. The affected watersheds include 161 acres in the south portion of Jabara Airport (#6), a 110 acre watershed for which soccer fields are planned (#10), and a 212 acre watershed currently in agricultural use (#11). At this time, each of these watersheds offers opportunity to develop the indicated detention facilities. Analysis indicates that the 100-year flood will flow over a series of ditch plugs and get to the Greenwich Road underpass.

Evaluation of the hydrographs from the different basins indicates that peak flows from north of K-96 would be delayed by the detention facilities. Undeveloped basins peak more quickly, and peaks from basins in the lower portion of the watershed pass through the discharge point before peak flows from the upper basins arrive. As a result, using detention in subsequent development should be done carefully. If 100-year discharges from detention basins are delayed yet allowed at pre-development rates, the delay may increase the peak flow to the 21st St. culvert.

Recommendations

The following recommendations are offered to the City of Wichita and Sedgwick County:

1. Detention facilities should be constructed as soon as possible in drainage area 6 (the south portion of Jabara Airport) to limit the 100-year discharge to less than 122 cfs.
2. Detention facilities should be constructed in conjunction with soccer field development in Basin 10 (near the northeast quarter of Section 4, north of K-96 and west of Greenwich Road), to limit the 100-year discharge to less than 87 cfs.
3. Detention facilities should be required as a platting condition for land in Watershed 11. The watershed drainage system should be planned so that one of two criteria are met. First, the entire watershed could be served by a single detention facility. If a single facility is not feasible due to partial development, individual developments should be required to provide detention that limits the individual peak discharge to one half of the pre-development flowrate.

APPENDIX

INFORMATION SOURCES FOR MODEL PARAMETERS

- USGS 7.5' Topographic Map - Andover Quadrangle
- K-96 Construction Plans - PEC
- Preliminary Construction Plans: 21st Street E. of Rock Rd- PEC
- Drainage Plan and Supporting Calculations for Kansas Surgery and Recovery Center - PEC
- Stormwater Drain No 106 Design Computations - PEC
- Drainage Plan and Supporting Calculations for Tallgrass East 3rd Addition - PEC
- Drainage Plan and Supporting Calculations for The Manhattan Addition - PEC
- Preliminary Development Plans: Regency Lakes - Baughman Co.
- Preliminary Development Plans: Greenwich Business Park - MKEC
- Preliminary Development Plans: Warren Theaters
- Soil Survey for Sedgwick County, Kansas - SCS



March 13, 1997

Vicky Huang, P.E.
City of Wichita, Engineering Department
455 N. Main, 7th Floor
Wichita, KS 67202

Reference: Greenwich Business Park
 Final Plat - Petitions

Dear Vicky:

Enclosed is a portion of the petitions, and a \$900.00 processing fee required for platting the referenced project.

- ▶ 16 inch Water Supply Line (\$75.00)
- ▶ Sanitary Sewer for Greenwich Business Park (\$75.00)
- ▶ Sanitary Sewer for Greenwich Business Park, Regency Lakes and Regency Lakes 2nd (\$75.00)
- ▶ Water Line Phases I, II, and III (\$225.00)
- ▶ Asphaltic Concrete Paving Phases I, II, and III (\$225.00)
- ▶ Asphaltic Concrete Paving Greenwich Road (\$75.00)
- ▶ Acel/Decel Lane on 21st Street (\$75.00)
- ▶ Storm Water Sewer for Greenwich Business Park (\$75.00)

Included are copies of additional petitions. These petitions lack one signature which should be obtained shortly. Those petitions are:

- ▶ Pump Station and Force Main for

3/25/99
Done 100%

Greenwich Business Park
The Manhattan Addition
Regency Lakes
Regency Lakes 2nd
Kensington Gardens
Unplatted Tract
- ▶ Sanitary Sewer for

Greenwich Business Park
The Manhattan Addition
Kensington Gardens
Unplatted Tract

Vicky Huang, P.E.
March 13, 1997

Page 2

▶ Water Supply Line for

Greenwich Business Park
The Manhattan Addition

Please call if you have any questions.

Sincerely,

MID-KANSAS ENGINEERING CONSULTANTS, INC.


Greg Allison, P.E.

GA/dm

Enclosures, as noted



May 30, 1997

Scott Shields, Environmental Technician
Kansas Department of Health and Environment
Industrial Program Section, Bureau of Water
Forbes Field, Building 283
Topeka, KS 66620-0001

Reference: Greenwich Business Park
Wichita, Sedgwick County, Kansas
Stormwater Application

Dear Mr. Shields:

Please find enclosed four copies of our Stormwater Pollution Prevention Plan for Construction Activity and Stormwater Construction Permit Application for Greenwich Business Park, Wichita, Sedgwick County, Kansas. Items included are as follows:

- ▶ EPA Form 1 (4 copies)
- ▶ Location Map (4 copies)

Thank you for your review and consideration of our application.

Sincerely,

MID-KANSAS ENGINEERING CONSULTANTS, INC.

Jeff Cartwright, P.E.

JC/dm

Enclosures, as noted

c: Vicky Huang, P.E.

FORM 1	EPA	U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION Consolidated Permits Program (Read the "General Instructions" before starting.)	I. EPA I.D. NUMBER F NOT REQUIRED
LABEL ITEMS I. EPA I.D. NUMBER III. FACILITY NAME V. FACILITY MAILING ADDRESS VI. FACILITY LOCATION		PLEASE PLACE LABEL IN THIS SPACE	GENERAL INSTRUCTIONS If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.
II. POLLUTANT CHARACTERISTICS INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.			
SPECIFIC QUESTIONS		MARK 'X' YES NO FORM ATTACHED	SPECIFIC QUESTIONS
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		X	B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)		X	D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)		X	F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X	H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)
III. NAME OF FACILITY 1 SKIP GREENWICH BUSINESS PARK			
IV. FACILITY CONTACT A. NAME & TITLE (last, first, & title)		B. PHONE (area code & no.)	
2 REGENCY LAKES LLC *		3 1 6 6 8 4 7 3 0 0	
V. FACILITY MAILING ADDRESS A. STREET OR P.O. BOX			
3 8,100 E. 22nd		* Kansas Limited Liability Co. By Ritchie Associates, Inc. a Kansas Corporation, Manager	
B. CITY OR TOWN			
4 WICHITA		C. STATE D. ZIP CODE KS 67226	
VI. FACILITY LOCATION A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER			
5 21ST STREET NORTH & GREENWICH			
B. COUNTY NAME SEDGWICK			
C. CITY OR TOWN		D. STATE E. ZIP CODE F. COUNTY CODE (if known)	
6 WICHITA		KS 67206 SG	

GREENWICH BUSINESS PARK ADDITION
(CONSTRUCTION POLLUTION PREVENTION PLAN)

5/29/97

SITE DESCRIPTION

Project Name and Location: (Latitude, Longitude, or Address)	Greenwich Business Park 21 st Street and Greenwich Rd. Wichita, Sedgwick County, KS	Owner Name and Address:	Regency Lakes L.L.C., a Kansas Limited Liability Co. Ritchie Associates, Inc., a Kansas Corporation Wichita, Kansas 67226
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Description: (Purpose and Types of Soil Disturbing Activities)

This project is a residential development. Soil disturbing activities will include: Clearing and grubbing; installation of sanitary sewer, storm water sewer, water lines; paving, lake construction; lot grading; and landscape planting and seeding.

Runoff Coefficient: The final coefficient of runoff for the site will be $c = 0.8$.

Site Area: The site is approximately 71 acres of which 71 acres will be disturbed by construction activities.

Sequence of Major Activities

1. Sanitary Sewer
2. Water Line
3. Storm Water Sewer
4. Paving
5. Light Commercial and Limited Industrial
6. Seed and mulch graded areas within 14 days of project completion

Names of Receiving Waters: All drainage will flow into proposed lakes on the property and outlet into the natural drainageways.

CONTROLS

Erosion and Sediment Control

Stabilization Practices

Temporary Stabilization - Topsoil stock piles and disturbed portions of the site where construction activity temporarily ceases for at least 28 days will be stabilized with temporary seed and mulch no later than 14 days from the last construction activity in that area. The temporary seed shall be Rye (grain) applied at the rate of 160 pounds per acre. After seeding, each area shall be mulched with of straw. The straw mulch is to be tacked into place by a disk with blades set nearly straight.

Permanent Stabilization - Disturbed portions of the site where construction activities permanently ceases shall be stabilized no later than 14 days after the last construction activity.

CONTROLS cont.

Structural Practices

Proposed Inlets - A stormwater piping system and related inlets will be constructed at various locations throughout site. After construction of inlets, the depressions around the inlets will be protected with straw bales or gravel filter system and used as sediment basins. Sediment will be removed, as needed, from area of sump around the inlet/sediment basin and placed elsewhere on the site.

Stormwater Management

Storm water drainage will be provided by overland drainageways, a storm sewer and system and inlets. The initial and final runoff from the entire improved site will drain to an existing lakes through an underground storm system. If excess silt accumulates in the lake, it will be removed.

OTHER CONTROLS

Waste Disposal:

Waste Materials

All waste materials will be collected and stored in a lidded dumpster rented from a local waste management company, which will be a licensed solid waste management company. The dumpster will meet all local City and any State solid waste management regulations. All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied as often as necessary, and the trash will be hauled to the local solid waste disposal site. No construction waste materials will be buried onsite. All personnel will be instructed regarding the correct procedure for waste disposal. Notices stating these practices will be posted in the office trailer, and the individual who manages the day-to-day site operations, will be responsible for seeing that these procedures are followed.

Hazardous Waste

All hazardous waste materials will be disposed of in the manner specified by local or State regulation or by the manufacturer. Site personnel will be instructed in these practices and individual who manages day-to-day site operations will be responsible for seeing that these practices are followed.

Sanitary Waste

All sanitary waste will be collected from the portable units as often as necessary and in accordance with local regulations by a local licensed City sanitary waste management contractor.

Offsite Vehicle Tracking:

A stabilized construction entrance will be provided to help reduce vehicle tracking of sediments. Dump trucks hauling material from the construction site will be covered with a tarpaulin.

TIMING OF CONTROLS/MEASURES

An existing lake will control sediment for the entire site. Areas where construction activity temporarily ceases for more than 28 days will be stabilized with a temporary seed and mulch within 14 days of the last disturbance. Once construction activity ceases permanently in an area, that area will be stabilized with permanent seed sod and/or mulch. After the entire site is stabilized, excess sediment will be removed from the existing lake.

MAINTENANCE/INSPECTION PROCEDURES

Erosion and Sediment Control Inspection and Maintenance Practices

These are the inspection and maintenance practices that will be used to maintain erosion and sediment controls.

- All control measures will be inspected following any storm event of 0.5 inches or greater and at least once each week.
- All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of report.
- Sediment barriers will be inspected for effectiveness.
- Built up sediment will be removed from around each storm drain/inlet sediment basin's straw bale barriers to retain their effectiveness.
- The lake will be inspected for depth of sediment, and excess sediment will be removed at the end of the job.
- Temporary and permanent seeding and planting will be inspected for bare spots, washouts and healthy growth and replanted as necessary.
- A maintenance inspection report will be made after each inspection. A copy of the report form to be completed by the inspector is attached.
- The property owner or general contractor will be responsible for inspections, maintenance and repair activities, and filling out the inspection and maintenance report.
- If other personnel are selected for inspection and maintenance responsibilities they will receive training from site superintendent. They will be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order.

Non-Storm Water Discharges

It is expected that the following non-stormwater discharges will occur from the site during the construction period:

- Water from any water line flushings
- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).

All non-storm water discharges will flow through the existing lake just prior to exiting the property.

INVENTORY FOR POLLUTION PREVENTION PLAN

The material or substances listed below are expected to be present onsite during construction:

- Concrete
- Petroleum Based Products
- Paints (enamel and latex)
- Concrete
- Roofing Materials
- Fertilizers
- Wood
- Masonry Blocks

SPILL PREVENTION

Material Management Practices

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff.

Good Housekeeping:

The following good housekeeping practices will be followed onsite during the construction.

- An effort will be made to store only enough product required to do the job
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure
- Products will be kept in their original containers with the original manufacturer's label
- Substances will not be mixed with one another unless recommended by the manufacturer
- Whenever possible, all of a product will be used up before disposing of the container
- Manufacturers' recommendation for proper use and disposal will be followed
- The property owner or general contractor will inspect daily to ensure proper use and disposal of materials onsite.

Hazardous Products:

These practices are used to reduce the risks associated with hazardous materials.

- Products will be kept in original containers unless they are not resealable
- Original labels and material safety data will be retained; they contain important product information
- If surplus product must be disposed of, manufacturers' or local and State recommended methods for proper disposal will be followed.

Product Specific Practices

The following product specific practices will be followed onsite:

Petroleum Products:

All onsite vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled. Any asphalt substances used onsite will be applied according to the manufacturer's recommendations.

SPILL PREVENTION, cont.

Fertilizers:

Fertilizers used will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to stormwater. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

Paints:

All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be properly disposed of according to manufacturers' instructions of State and local regulations.

Concrete Trucks:

Concrete trucks will not be allowed to wash out or discharge surplus concrete or drum wash water on the site.

Spill Control Practices

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

- Manufacturers' recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite. Equipment and materials may include but not be limited to brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills of toxic or hazardous material will be reported to the appropriate State or local government agency, regardless of the size.
- The spill prevention plan will be adjusted to include measures to prevent this type of spill from re-occurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the clean up measures will also be included.
- The property owner or general contractor responsible for the day-to-day site operations will be the spill prevention and clean up coordinator. If he designates other site personnel to act in his absence they will receive spill prevention and clean up training.

POLLUTION PREVENTION PLAN CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction of supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Regency Lakes L.L.C.
A Kansas Limited Liability Company
By Ritchie Associates, Inc.,
a Kansas Corporation, Manager
8100 E. 22nd Street
Wichita, KS 67226

Signed: _____

Printed Name: _____

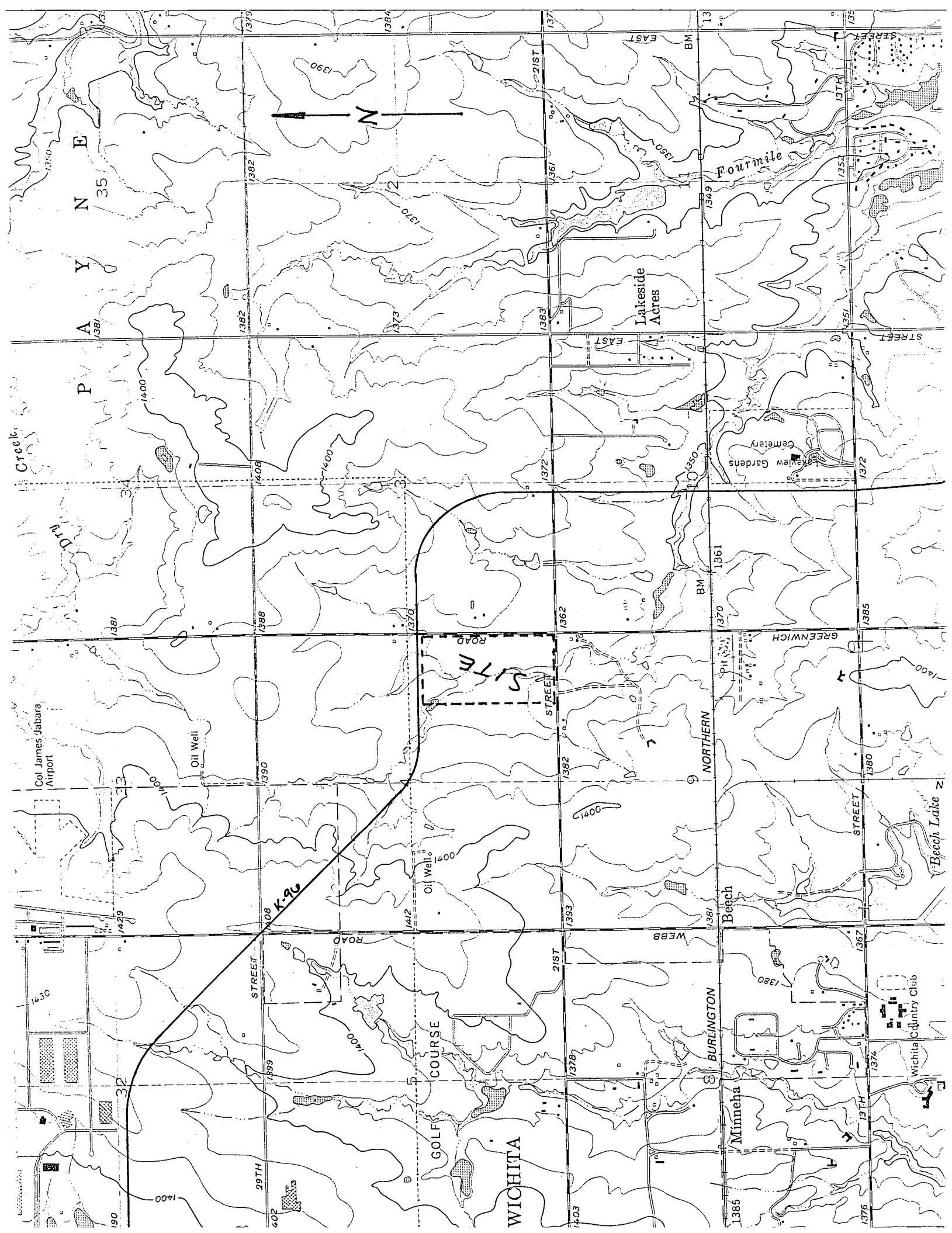
Title: _____

Phone: 316-684-7300

CONTRACTOR'S CERTIFICATION

I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

Signature	For	Responsible for
_____ Date: _____		
_____ Date: _____		





KANSAS
DEPARTMENT OF HEALTH & ENVIRONMENT
BILL GRAVES, GOVERNOR
Gary R. Mitchell, Secretary

December 29, 1997

Jeff Cartwright
Mid-Kansas Engineering Consultants
411 N. Webb Rd.
Wichita, KS 67206

RE: NPDES general permit for Stormwater Runoff from Construction Activity
Greenwich Business Park

Dear Mr. Cartwright;

Enclosed you will find an application which you submitted, on behalf of Regency Lake, L.L.C., to the Kansas Department of Health and Environment (KDHE) for the subject National Pollutant Discharge Elimination System (NPDES) permit and project. The application is being returned as it is deficient in the areas noted below. These deficiencies were discussed with you on various occasions.

The Notice of Intent did not include a detailed site map(s) indicating the anticipated significant changes in topography (see NOI instructions, page 2, E. Maps).

The "Sequence of Major Activities" does not mention erosion and sediment control measures other than final stabilization of the site. To successfully control erosion and sediment and to protect the water quality of Kansas' Surface Waters erosion and sediment control measures must be employed early and throughout the project development activities. The Sequence of Major Activities should reflect the project owners understanding of this basic erosion and sediment control practice.

Since a valid application was not received, KDHE presumes the project was never constructed.

Construction activities which disturb five or more acres are required to be covered under the subject NPDES permit. Failure to obtain a permit, prior to the initiation of construction, is a violation of Federal and State statutes and regulations. Should it be brought to the attention of KDHE that the subject project is underway or has been completed, KDHE can take enforcement action.

Sincerely,

David G. Freise, P.E.
Industrial Stormwater Coordinator
Bureau of Water

CC: City of Wichita
South Central District Office
Stormwater File
Rob Ramseyer

RECEIVED
DEC 31 1997
CITY - ENGINEERING