

DRAINAGE PLAN
PRAIRIE VILLA AT
BEACON HILL
TO
WICHITA, SEDGWICK COUNTY, KANSAS

Prepared By



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INTRODUCTION

This report provides information and supporting documentation to support the "Drainage Plan" for the proposed "Prairie Villa at Beacon Hill" plat, located in the NE ¼, of the SE ¼, of the SW ¼ Section 1, T-27-S, R-1-E in Wichita, Sedgwick County, Kansas.

The "Drainage Plan" being submitted herein is intended to serve as a guide for the design of detention facilities and storm water sewer improvements to the proposed developments. Modifications to structures, pipes, etc. may be made as necessary during the final design in order to obtain the most economical design and construction possible.

OFFSITE DRAINAGE FLOW

The property is subject to offsite drainage from the south. The apartment complex has extensive stormwater sewers that collect the majority of the 10 acre site. Approximately 2.7 acres of the apartment site discharges onto the subject property, and generally flows north via a channel located along the east line of the proposed Prairie Villa development.

GENERAL DRAINAGE PATTERN

The subject property slopes generally from the southwest to the northeast. An existing stormwater sewer is located near the northeast corner of the proposed development. This storm sewer is a 24" RCP that conveys runoff to the north within the Beacon Hill right-of-way.

SUMMARY

The maximum discharge from this property will ultimately be controlled by this 24" RCP. A detention facility is recommended in the northeastern part of the project. The assumed detention facility incorporates one-half acre in area with a volume of 2.3 acre-feet. This is sufficient to limit the peak discharge to the capacity of the controlling storm water sewer. This analysis assumes that the 24" RCP is not controlled by substantially high tailwater conditions.

STAFF REPORT
(One-Step Final Plat)

CASE NUMBER: SUB 2004-11 -- PRAIRIE VILLA AT BEACON HILL ADDITION

OWNER/APPLICANT: Aladdin Petroleum Corp., c/o Affordable Housing Dev., L.C., Attn: A. Joseph, 7701 E. Kellogg, Ste. 820, Wichita, KS 67207

SURVEYOR/ENGINEER: Baughman Company, P.A., 315 Ellis, Wichita, KS 67211

LOCATION: East of Oliver, North of 21st St. North

SITE SIZE: 10.11 Acres

NUMBER OF LOTS

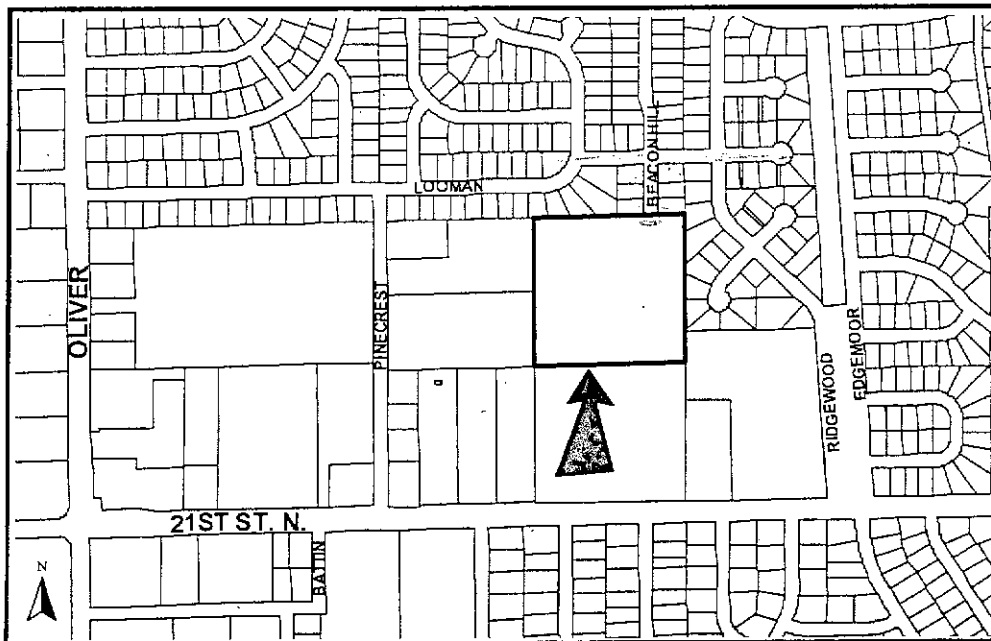
Residential:	1
Office:	
Commercial:	
Industrial:	
Total:	<u>1</u>

MINIMUM LOT AREA: 10.11 Acres

CURRENT ZONING: SF-5, Single-Family Residential

PROPOSED ZONING: TF-3, Two-Family Residential

VICINITY MAP



NOTE: This is an unplatted site located within the City. The site has been approved for a zone change (ZON 2003-57) from SF-5, Single-Family Residential to TF-3, Two-Family Residential.

STAFF COMMENTS:

- A. Municipal services appear to be available to serve the site. City Engineering needs to comment on the need for guarantees or easements.
- B. If improvements are guaranteed by petition, a notarized certificate listing the petitions shall be submitted to the Planning Department for recording.
- C. City Engineering needs to comment on the status of the applicant's drainage plan.
- D. City Fire Department needs to comment on the need for a turnaround.
- E. A restrictive covenant shall be provided permitting cross-lot access for the benefit of the abutting property to the west, if and when said property is redeveloped.
- F. The Applicant is reminded that a platting binder is required with the final plat. Approval of this plat will be subject to submittal of this binder and any relevant conditions found by such a review.
- G. The platting text shall include language that a drainage plan has been developed for the plat and that all drainage easements, rights-of-way, or reserves shall remain at established grades or as modified with the approval of the applicable City or County Engineer, and unobstructed to allow for the conveyance of stormwater.
- H. 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.)
- I. 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.
- J. To receive mail delivery without delay, and to avoid unnecessary expense, the applicant is advised of the necessity to meet with the U.S. Postal Service Growth Management Coordinator (Phone 316-946-4556) prior to development of the plat so that the type of delivery, and the tentative mailbox locations can be determined.
- K. 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 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.
- L. The owner of the subdivision should note that any construction that results in earthwork activities that will disturb one (1) acre or more of ground cover requires a Federal/State NPDES Storm Water Discharge Permit from the Kansas Department of Health and Environment in Topeka. Also, for projects located within the City of Wichita, erosion and sediment control

devices must be used on ALL projects. For projects outside of the City of Wichita, but within the Wichita Metropolitan area, the owner should contact the appropriate governmental jurisdiction concerning erosion and sediment control device requirements.

- M. Perimeter closure computations shall be submitted with the final plat tracing.
- N. Recording of the plat within thirty (30) days after approval by the City Council and/or County Commission.
- O. The representatives from the utility companies should be prepared to comment on the need for any additional utility easements to be platted on this property.
- P. The applicant is reminded that a compact disc (CD) shall be submitted with the final plat tracing to the Planning Department detailing this plat in digital format in AutoCAD, or sent via e-mail to MAPD (cholloway@wichita.gov) . This will be used by the City and County GIS Department.

CLOSURE

CLOSURE: PRAIRIE VILLA AT BEACON HILL

PT 1	North: 8866.3044	East : 8245.3890
Line	Course: N 89-29-34 E	Length: 663.65
PT 2	North: 8872.1794	East : 8909.0130
Line	Course: S 00-01-31 E	Length: 664.61
PT 3	North: 8207.5695	East : 8909.3062
Line	Course: S 89-33-55 W	Length: 663.86
PT 4	North: 8202.5326	East : 8245.4653
Line	Course: N 00-00-22 W	Length: 663.77
PT 1	North: 8866.3026	East : 8245.3945