WICHITA — SEDGWICK COUNTY

W-SC

METROPOLITAN AREA PLANNING DEPARTMENT

CITY HALL — TENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1688
(316) 268-4421
FAX (316) 268-4390

August 1, 1997

Argonne National Laboratory
9700 S. Cass Ave.
Argonne, IL 60439

RE: CU-443 - Conditional use to allow installation of a weather station on less than 2 acres zoned "RR" Rural Residential and generally located on the northeast corner of 85th Street North and 127th Street West

Dear Sirs:

At its regular meeting on July 17, 1997, the Metropolitan Area Planning Commission considered the above-captioned request. The action of the MAPC was to APPROVE the request, subject to conditions stated in the letter dated July 21, 1997.

This action was not accompanied by valid appeals or protest petitions, therefore, the action of the Planning Commission is FINAL. If you have any questions concerning this case, please contact our office at 268-4421.

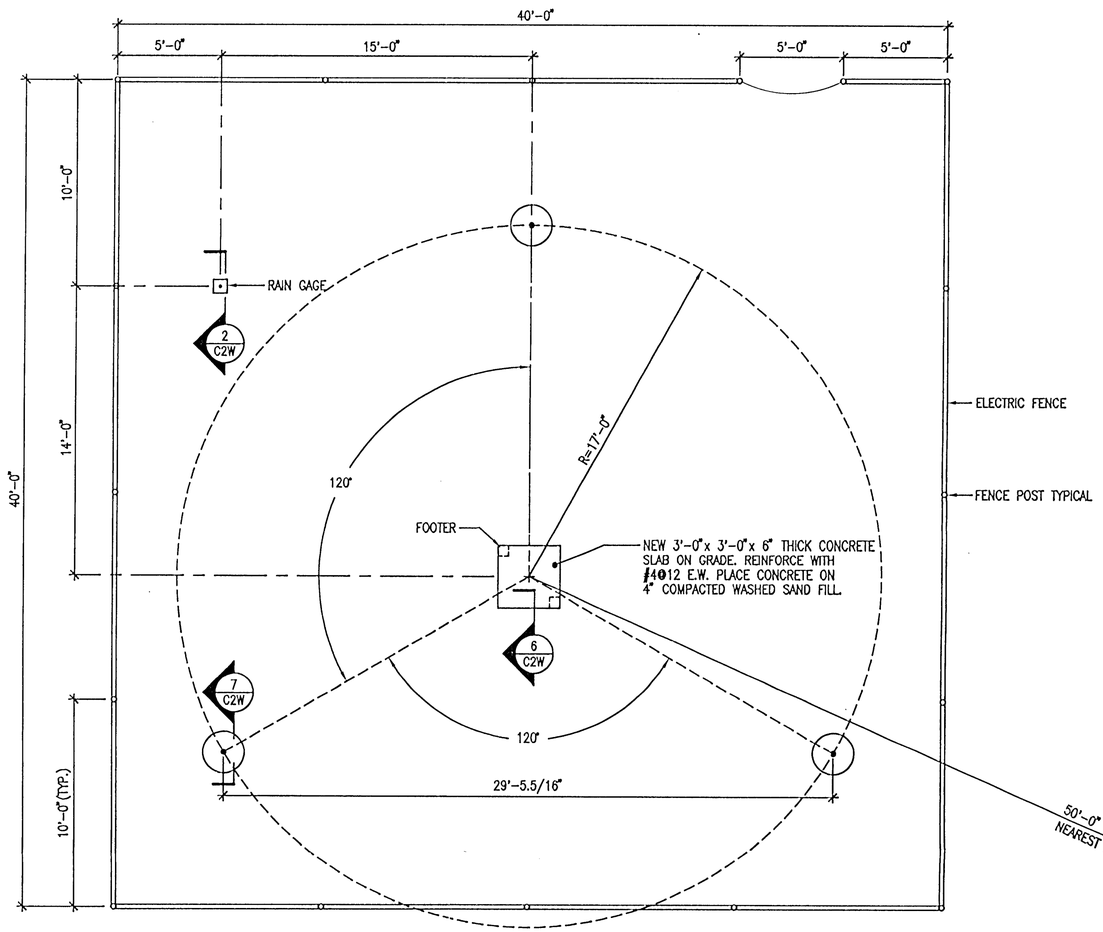
Sincerely,

Lawrence P. Mitchell

Lawrence P. Mitchell
Senior Planner

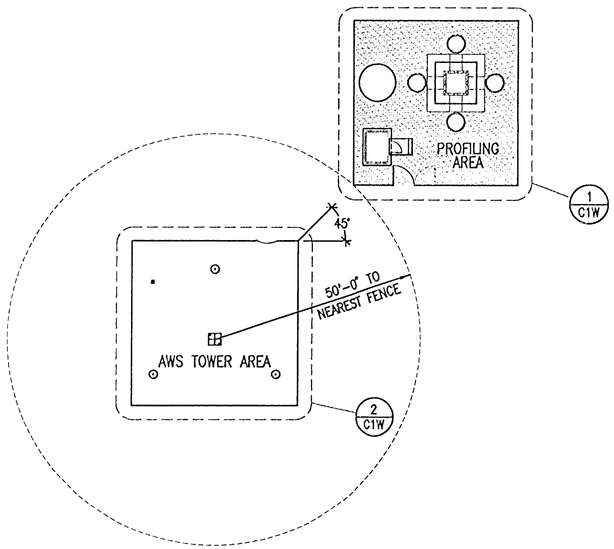
LPM/sh

cc: Glen Wiltse, Sedgwick County Code Enforcement



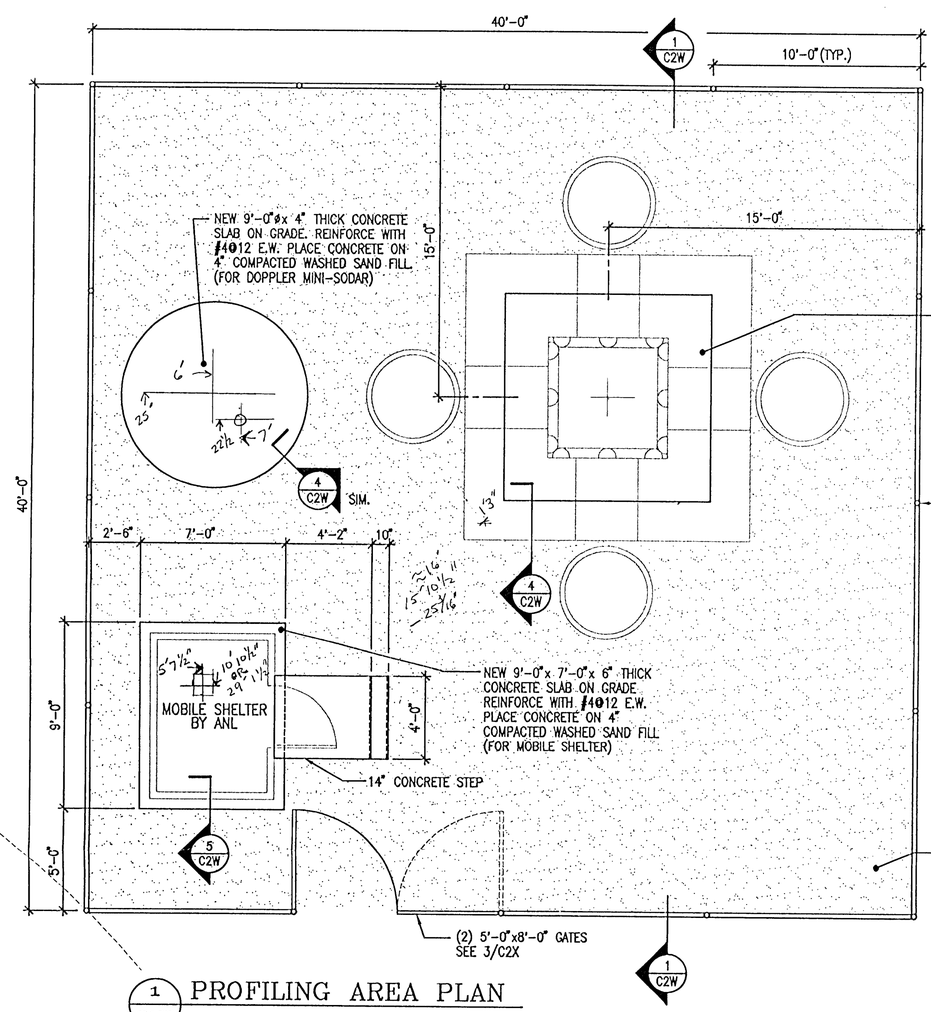
2 C1W AWS TOWER AREA PLAN

SCALE: 1/4" = 1'-0"



3 C1W SITE PLAN

SCALE: 1" = 20'-0"

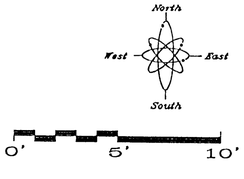


1 C1W PROFILING AREA PLAN

SCALE: 1/4" = 1'-0"

GENERAL CONSTRUCTION NOTES

1. CONCRETE FENCE POSTS SHALL BE NORMAL WEIGHT CONCRETE (145 PCF) WITH AN ULTIMATE COMPRESSION STRENGTH OF 3000 PSI @ 28 DAYS.
2. CONCRETE FOR SLABS ON GRADE SHALL BE NORMAL WEIGHT AIR ENTRAINED (145 PCF) WITH AN ULTIMATE COMPRESSION STRENGTH OF 4000 PSI @ 28 DAYS.



REV. NO.	DESCRIPTION	BY	APVD	DATE
	ISSUED FOR BIDDING	C.Q.	D.L.S.	12/05/96

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ARGONNE NATIONAL LABORATORY

PROJECT TITLE
ARGONNE BOUNDARY LAYER EXPERIMENTS
WHITEWATER, KANSAS

PROJECT NO. –

DOCUMENT TITLE
REMOTE SENSING SITE AND AREA PLANS

DESIGNED(A/E) J.F.	MSTR DISK ID	FACILITY NO(S)
DRAWN (A/E) R.M., C.Q.	VOL NO	
CHECKED (A/E) J.F.	FILE NAME	
PROJECT MANAGER (A/E) J.L.F. ANL- D.L.S. DATE- 11/26/96	FILE STATE	
	BIND ORDER	REV. NO.
FACILITY DOCUMENT NUMBER ABLE-03260-00-149		SHT. NO. C1W

WICHITA–SEDGWICK COUNTY
W-SC
METROPOLITAN AREA PLANNING COMMISSION

AGENDA ITEM NO. 5

STAFF REPORT

July 17, 1997

CASE NUMBER: CU-443

APPLICANT/AGENT: Argonne National Laboratory (applicant); Jerry Klazura (agent)

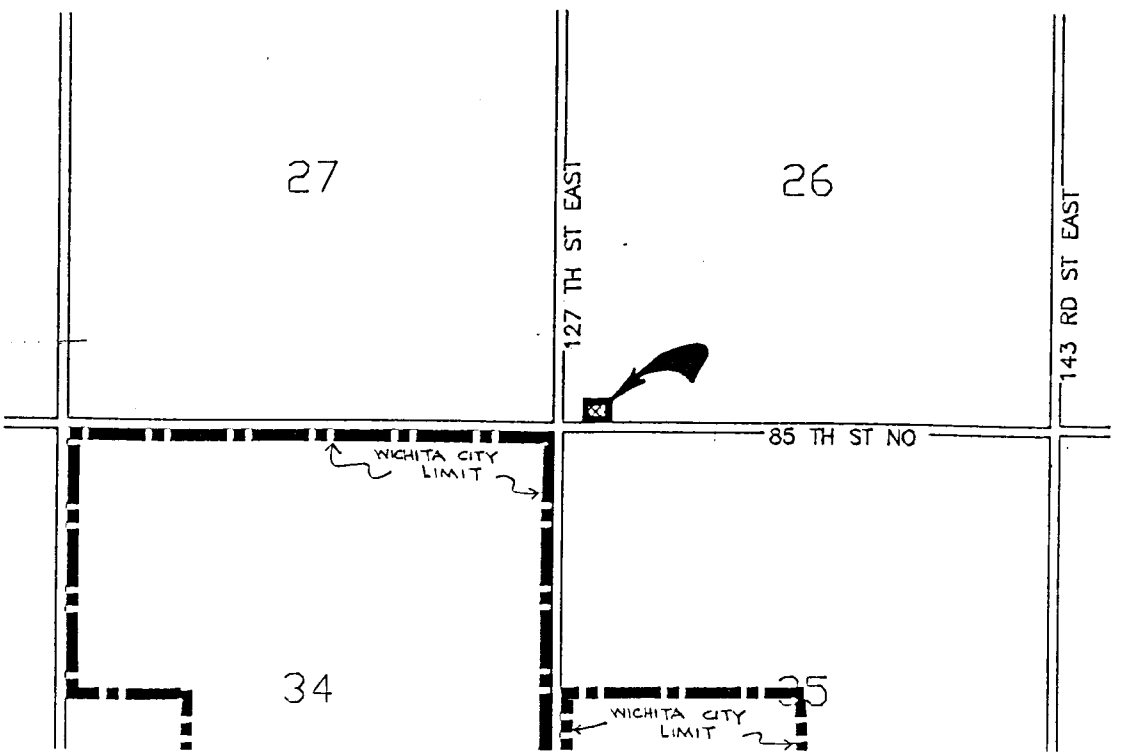
REQUEST: Conditional use to allow a major utility

CURRENT ZONING: "RR" Rural Residential

SITE SIZE: 0.92 acres

LOCATION: North of 85th Street North, 167 feet east of 127th Street East

PROPOSED USE: Weather Station



BACKGROUND: The applicant requests a conditional use to permit a utility facility (weather station) on a 75,625 square-foot site location 167 feet east of 127th Street East and north of 85th Street North. The application area is a portion of a Chemical Waste Management of Kansas site (320 acre) which the applicant has leased to located the weather station equipment. The lease and surrounding area is zoned "RR" Rural Residential. The Unified Zoning Code permits "utility, major" as a conditional use in the "RR" District. The applicant requested and received a conditional use, CU-429, on April 10, 1997, to permit the weather station to be located approximately 930 feet east of the current application area. The location of the weather station permitted by CU-429 was determined by the applicant to not be acceptable due to the locaiton of an off-site structure and it's impact on the sensitive weather equipment.

The Argonne National Laboratory is establishing a new weather observation network, with sites in Butler, Sedgwick and Cowley Counties in the lower Walnut River Watershed. It will operate for ten to fifteen years in support of long-term atmospheric research designed to improve weather forecasting, understanding of hydrological processes, and climate modeling. Automated Weather Stations, upward-pointing Doppler radars and acoustic echo sounders will continuously measure temperature, humidity, and winds in the lowest 5,000 to 10,000 feet at three "Profiler" sites near Beaumont, Oxford and Whitewater, Kansas. These sites were selected because of their proximity to the eastern, southern, and western edges of the watershed, respectively. The Beaumont and Oxford sites are already operating. Equipment will be installed at the Whitewater site, located just to the east of the intersection of 85th North and 127th East, by August 1997.

Five "surface characterization" sites are also planned to be located within this triangle of "Profiler" sites on different land surfaces (e.g., grass, wheat, etc.). These sites will be equipped with Automated Weather Stations and eddy correlation instruments. Automated Weather Stations comprised of computers and instruments will continuously measure wind direction, wind speed, temperature, pressure, humidity, and rain rate. Eddy correlation instruments will measure the flow of heat and moisture. The first surface characterization site is located near Smileyberg, Kansas, and became operational in April 1997. The other four sites will be operational by June, 1998.

Data from all of these weather observations sites will be transmitted to the project office which will be centrally located within the "Profiler" triangle six miles southeast of Augusta, Kansas. The data will be quality checked, archived and then made available to research scientist, operational meteorologists (including the Wichita National Weather Service Office) and the public via the Internet in near-real time.

One of the instruments planned to be located on the applicant's site, the Radio Acoustic Sounding System (RASS), does emit an audible sound in the 65-75 dB level adjacent to the baffled source. This sound has been described by the applicant as

crickets chirping and this sound is produced continuously for 10 minutes every hour, 24 hours per day, 365 days per year. The sound is also described as not disturbing individuals sleeping at night with a window open in a rural area at 1/2 mile distance from the source. This instrument has been operated for almost 4 years at a site near Lamont, Oklahoma, in a pasture where cattle come within about 100 feet of the instrument, and are apparently not bothered. The applicant's site is 3/4 mile away from the nearest residence in the area and is located within the property controlled by the waste management company and is at least 1/4 mile from their nearest property line

The applicant has developed and distributed a newsletter which describes the project and answers questions about the program. This newsletter was provided to residence near the application area and is attached for MAPC review.

CASE HISTORY: CU-429 granted a weather station site approximately 930 feet east of the application area.

ADJACENT ZONING AND LAND USE:

NORTH:	"RR" Chemical Waste Storage Facility
SOUTH:	"RR" Agricultural Use
EAST:	"RR" Grass Land
WEST:	"RR" Grass Land

PUBLIC SERVICES: This site is not served by public services. The intended use does not require municipal sewer or water services.

CONFORMANCE TO PLANS/POLICIES: The Land Use Guide of the Comprehensive Plan identifies this area as "agricultural". This category has the intent of protecting agricultural resources and is meant to accommodate agricultural operations on substantial acreage.

RECOMMENDATION: Based upon information available prior to the public hearings, planning staff recommends that the request be APPROVED, subject to the following conditions:

1. The applicant shall obtain all applicable permits and comply with all zoning code requirements.

2. Noise emitted by the equipment installed on this site shall be limited to 80dB or less as measured at the boundaries of the site.

4. Development of the property shall be in accordance with the approved site plan.

station shall be fenced with a minimum 8-foot high cyclone security fence.

6. The color of the 10 meter automated weather station tower shall be silver or gray or a similar unobtrusive color and shall not have any nighttime lighting.

7. This conditional use may be declared null and void upon a finding by the Board of County Commission that the applicant has failed to comply with any of the foregoing conditions.

This recommendation is based on the following findings:

1. The zoning, uses and character of the neighborhood: All of the land adjacent to the application area is zoned "RR" Rural Residential, and is used for agriculture or a waste storage facility. The closest residence is 3/4 of a mile from the application area. The overall character of the area is rural agricultural.

2. The suitability of the subject property for the uses to which it has been restricted: The property is zoned "RR" Rural Residential, which permits "major utilities" as a conditional use. Given the existence of the mix of agricultural uses and waste storage, the proposed weather station is a suitable use at this location provided it complies with code requirements and conditions.

3. Extent to which removal of the restrictions will detrimentally affect nearby property: Given the rural nature of the application area, the separation of the site from residential dwellings, there should not be any detrimental affects on nearby property.

4. Conformance of the requested change to adopted on recognized Plans/Policies: The plan does not speak specifically to weather stations, but the information collected by these facilities serve a public purpose in providing improved weather forecasting and climate modeling.

5. Impact of the proposed development on community facilities: None identified.