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COMPREHENSIVE REUSE PLAN FOR THE CORNHUSKER ARMY AMMUNITION PLANT

December 30, 1997

**Prepared for the
Cornhusker Army Ammunition Plant
Reuse Committee
Hall County, Nebraska**

**Under a Contract with the
Defense Logistics Agency
Administrative Support Center
Fort Belvoir, Virginia
Contract Number: SP4700-97-C-0007**

**Prepared by
RKG Associates, Inc.
Durham, New Hampshire**

**In Association with
Black & Veatch Special Projects Corp.
Overland Park, Kansas**

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EXECUTIVE SUMMARY

INTRODUCTION

In 1942, the U.S. Government initiated construction of the Cornhusker Army Ammunition Plant (CAAP) in Hall County, Nebraska. During World War II the facility was used for the production of artillery shells, mines, bombs and rockets. CAAP was placed on standby status in September 1945, and reactivated for the Korean War in February 1950. In 1957, CAAP was once again placed on standby status and then reactivated in 1965 for the Vietnam War. The site was closed once again in 1973, and then declared excess property in 1989. CAAP contains 11,936 acres of land, the equivalent of 19 square miles. At one time CAAP functioned as a self contained community with 50 miles of electrical distribution lines, a water production and distribution system, 12 miles of sanitary sewer collection lines as well as 220,000 gallons per day of wastewater treatment capacity. There is also an extensive network of roadways and rail lines at CAAP.

In 1993, the Hall County Board of Supervisors established an eleven member Cornhusker Army Ammunition Plant Reuse Committee, that was assigned the responsibility for developing a reuse plan for CAAP. A twelve member advisory group was also organized to assist the Reuse Committee. In March 1995, the Reuse Committee completed a *Discussion Paper* that outlined a preliminary land use plan for the site as well as highlighting a number of key land use, environmental and financial issues associated with redeveloping the CAAP site. A key recommendation contained in the *Discussion Paper* was the desire to obtain professional consulting assistance in order to prepare a detailed reuse plan and implementation strategy for the entire CAAP site.

In July 1997, RKG Associates, Inc. and Black & Veatch were retained by the Department of Defense to assist the CAAP Reuse Committee in preparing a comprehensive reuse plan for the Cornhusker Army Ammunition Plant. This document represents the results of a six-month planning process undertaken by the Reuse Committee in order to identify a land use plan and development strategy for the CAAP site. Although the Comprehensive Reuse Plan represents a major first step in the transition of the site from military to civilian use, additional steps will be required to implement the plan and redevelop the Cornhusker Army Ammunition Plant. The Reuse Plan provides direction for taking these steps as well as suggestions for redevelopment actions that are reasonable and financially prudent.

LOCATION

The Cornhusker Army Ammunition Plant is located in Hall County, Nebraska approximately 90

miles west of Lincoln. The CAAP site is in the northwest corner of Hall County near the City of Grande Island, the county seat. The site has relatively good access to the regional transportation system. For example, access to Interstate 80 from the site can be obtained by traveling east for approximately 10 miles or approximately 7 miles to the south through Alda, Nebraska. CAAP is also connected to the rail lines of the Union Pacific (one mile south) and the Sante Fe Burlington Northern Railroad (3/4 miles north). In addition, CAAP is only 12 miles west of the Central Nebraska Regional Airport in Grande Island.

THE PLANNING PROCESS

In preparing the CAAP Comprehensive Reuse Plan, initial planning efforts involved an extensive analysis of existing buildings and site conditions. Research was also conducted concerning local economic factors, off-site infrastructure and regional development trends. Three different development alternatives for the site were then prepared and the various impacts of the alternatives were evaluated. After a careful review of the development options a preferred land use plan for the site was identified. Strategies for implementing the land use plan were also suggested.

A key element in the CAAP reuse planning process was public involvement. During the preparation of this Reuse Plan numerous public meetings were held by the consulting team and members of the CAAP Reuse Committee with Department of Defense personnel, CAAP tenants and the general public in order to discuss important issues associated with the redevelopment of the Cornhusker Army Ammunition Plant. The recommendations contained in this Reuse Plan are, to a major extent, based on the comments and suggestions made at these meetings.

EXISTING CONDITIONS

The CAAP site contains 645 buildings, including 11 housing units and 219 ammunition storage magazines. The CAAP site, however, is dominated by four large munitions production facilities referred to as load lines. Three of the load lines are essentially identical facilities. A fourth load line, constructed in 1945, is somewhat larger. Each load line is basically a collection of large buildings interconnected with a series of covered walkways. Raw materials for munitions production was stored in large warehouses at the south end of each load line. A fifth load line, substantially smaller than the other four and arranged in the shape of a "T", was used for the production of fuses and boosters during the Korean War and the manufacturing of microgravel mines for the Vietnam War. Other facilities at the CAAP site includes buildings used for administrative and residential purposes as well as structures for maintenance and storage.

Most of the facilities at CAAP are now more than fifty years old and the vast majority of structures on the site are in poor condition. Production at the site was shut down by the Army in 1973, and the maintenance and operations contract at the site was terminated in 1989. Given the lack of occupancy and heat in the winter, as well as minimal preventive maintenance since 1990, it is not surprising that there are numerous structural problems at the site. In many cases wooden doors and window frames have either rotted away or been damaged by animals, vandals or the elements. There are also instances where roofs have failed and portions of buildings have been exposed to the elements.

Comments about each of the buildings, however, should not be interpreted to mean that there is no reuse potential for existing structures at CAAP. In fact, a number of facilities are presently leased by businesses and individuals, primarily for storage and warehousing type uses. There is also one large user on the site, Cornhusker Railcar Services, Inc. that employs more than 60 people in the repair and rehabilitation of railcars. However, given the potentially high costs of renovating existing facilities at CAAP, it probably is more cost effective to build new facilities at CAAP or elsewhere in Hall County.

In order to provide support services to the various structures at CAAP, an extensive infrastructure system was developed. Major utilities included a water distribution system, with eight enclosed wells on the site, and several sanitary and industrial wastewater treatment systems. Most of the wastewater on the site, however, was disposed through the use of septic tanks and leach fields. Stormwater, electric, natural gas and telecommunications systems are also located on the CAAP site. In addition, 46 miles of asphalt roads and 48 miles of gravel roads are located on the site as well as 32 miles of rail lines.

Currently about 85 percent of the land at CAAP is used for farming (corn, alfalfa and soybeans) or hay and pasture. Even though the site is intensely used for agricultural purposes a survey, conducted for the U.S. Fish and Wildlife Service, indicated that there are no threatened or endangered species at the CAAP site. In addition, there are no sites at CAAP currently listed on the National Register of Historic Places. However, the Nebraska State Historic Office has determined that the entire CAAP site is historically important because of its association with World War II. Also, two archeological sites have been identified as potentially significant and may be eligible for the National Register of Historic Places.

In July 1987, the U.S. Environmental Protection Agency declared CAAP a "Superfund" site due to

the contamination of soil and groundwater by explosive materials, heavy metals and organic solvents. The groundwater contamination extends eastward beyond the boundaries of the CAAP site. Most of the soil contaminated with explosive materials have been excavated and incinerated. The incineration occurred on CAAP property and the "ash" residue was disposed of in burial trenches on-site. In addition, construction was initiated in 1997 on a groundwater treatment plant at CAAP. The plant will treat extracted groundwater and then discharge the treated water into drainage ditches on the site. It is anticipated that the groundwater treatment plant could be in operation for up to 30 years.

REDEVELOPMENT GOALS

During the process of preparing the Reuse Plan, eight goals were identified for the redevelopment of the Cornhusker Army Ammunition Plant. These goals, which are outlined below, provide the foundation for most of the recommendations contained in the Comprehensive Reuse Plan.

- Goal 1 - The property at the Cornhusker Army Ammunition Plant should be returned to the county tax rolls as quickly as possible.
- Goal 2 - The continuation of Husker Harvest Days, a major three day trade show that focuses on the business of farming and ranching, is a priority for any redevelopment efforts at the CAAP site.
- Goal 3 - The redevelopment of CAAP should be undertaken in a manner that ensures that the environmental cleanup of hazardous waste sites is effective, efficient and relates to the redevelopment needs identified in the reuse plan.
- Goals 4 - The acquisition and redevelopment of property at CAAP should be accomplished in a fiscally responsible manner.
- Goal 5 - Reuse efforts should focus on those portions of the CAAP site that offer the greatest potential for successful redevelopment.
- Goal 6 - The continued use of property at CAAP for agricultural purposes should be encouraged.
- Goal 7 - Where practical, redevelopment efforts should encourage the retention and creation of new private sector employment opportunities.
- Goal 8 - The organization responsible for implementing the reuse plan should work with federal, state and local agencies in establishing conservation and/or recreation areas at CAAP.

PREFERRED REUSE PLAN

The Comprehensive Reuse Plan for the Cornhusker Army Ammunition Plant represents specific strategies for the redevelopment of the CAAP site. The plan, which is a synthesis of three land use alternatives evaluated during the planning process, is based on identified goals and objectives for redevelopment, as well as existing site conditions and limitations. The land use portion of the Reuse Plan also incorporates features that were viewed as most critical in the reuse of CAAP.

Four key factors contributed to the layout of the land use plan. First, the importance of agriculture to the region, as well as the CAAP site, resulted in agriculture being identified as the most significant land use at the site. Second, strong public sentiment to maintain and possibly expand Husker Harvest Days, initiated in 1978, contributed to the designation of a portion of the site for this type of use. Third, the desire to expand conservation and recreational activities in the county resulted in a portion of the site being identified for these types of activities. It should be emphasized, however, that conservation and recreation land uses are considered supplemental to the primary use of the site for agricultural purposes. Finally, due to the extensive existence of on-site rail lines, as well as the presence of Cornhusker Railcar Services, a major portion of CAAP was designated for the possible expansion of rail/industrial related activities. A map of the Preferred Reuse Plan is located on the next page. The four general land use categories identified for CAAP are outlined below.

Agriculture/Recreation/Conservation - This type of land use involves the majority of the northern one-third of the site, as well as the southeast corner of the property. The southeast corner is expected to be developed as a shooting club, as proposed by residents and officials of Hall County. The northern-most area of the site is expected to include agricultural uses, combined with walking and riding trails.

Agriculture/Warehouse - The existing north and south storage magazines areas are expected to be used for a combination of agricultural activities and storage-type uses. Warehousing is included in this land use category primarily due to the difficulty, and cost, of removing the storage magazines.

Industrial/Agriculture - This land use designation seeks to capitalize on CAAP's largest private sector employer, Cornhusker Railcar Services, Inc. and on the availability of support facilities including extensive rail lines. The majority of existing buildings at CAAP, excluding the magazines, is included in this area, together with a substantial amount of land which could be developed for rail/industrial uses. If the land is not used for industrial purposes it would continue to be used for agricultural activities.

Husker Harvest Days/Agriculture/Special Events - These land use areas are expected to support the retention of the Husker Harvest Days program and provide the opportunity for additional support activities on adjacent sites. The Agriculture/Special Events sites could be used to expand Husker

STATE OF NE

STATE OF NE

**AGRICULTURE/
CONSERVATION/
RECREATION**

**AGRICULTURE/
WAREHOUSING**

**INDUSTRIAL/
AGRICULTURE**

**AGRICULTURE/
SPECIAL EVENTS**

**AGRICULTURE/
WAREHOUSING**

STATE OF NE

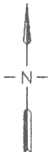
**HUSKER
HARVEST DAYS**

**AGRICULTURE/
SPECIAL EVENTS**

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CONSERV**

CORNHUSKER ARMY AMMUNITION PLANT

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BLACK & VEATCH

PREFERRED REUSE PLAN

DECEMBER 30, 1997

Harvest Days, to provide for other activities relating to the proposed shooting club, or similar special activities that would require a large land area. However, land not used for Husker Harvest Days or special events could still be used for agricultural purposes. The overall concept of the preferred land use plan recognizes the desirability of placing the property at CAAP on the county tax rolls as soon as possible, while minimizing the financial burden on county government for property maintenance during the proposed transition period from federal ownership to other users. Significant in this effort is the identification of large land use areas, the efficient transfer of parcels to the end users, the minimization of infrastructure which must be maintained and/or developed by county government in support of the end use, and the control, through zoning, of future development activities. The estimated total acreage, by land use category, of the preferred land use plan is as follows:

Agriculture/Conservation/Recreation	4,309 Acres
Industrial/Agricultural	3,072 Acres
Agriculture/Warehousing	2,107 Acres
Agriculture/Special Events	1,508 Acres
Husker Harvest Days	<u>940 Acres</u>
Total	11,936 Acres

Given the possible demand for industrial land at CAAP, specifically near existing rail lines at the site, an overlay district has also been identified. The industrial/agricultural overlay is designed to allow for expansion of rail related industrial activities, if certain requirements are met, onto portions of adjacent sites. This could be particularly useful if major rail users locate or expand at the site or seek to create large scale rail yards at CAAP.

OPERATIONS AND IMPLEMENTATION STRATEGY

In 1994 special legislation (Public Law 103-337) dealing with the disposal of property at CAAP was passed by the United State Congress. The legislation states that "...[T]he Secretary of the Army may convey to Hall County, Nebraska, Board of Supervisors ... or the designee of the Board, all rights, title, and interest of the United States in and to the real property, together with any improvements thereon, located in Hall County, Nebraska, that is the site of the Cornhusker Army Ammunition Plant". This legislation also states "That the Secretary may not carry out the conveyance authorized until the Secretary completes any environmental restoration required with respect to the property to be conveyed". It is also noted in the legislation that "The Board [of Supervisors] or its designee... shall utilize the real property conveyed... in a manner consistent with the Cornhusker Army Ammunition Plant Reuse Committee Comprehensive Reuse Plan". Finally, it is noted in the special legislation that "[T]he Board or its designee...shall pay to the United States an amount equal to the fair market value of the real property to be conveyed, as determined by the Secretary". It is assumed that if Hall County decides not to acquire some or all of the property, or does not designate another

entity to acquire it, the Army will dispose of property at CAAP through a public sale. However, if the property is sold by the Army it is anticipated that the land and buildings would have to be disposed of for uses outlined in the preferred land use plan.

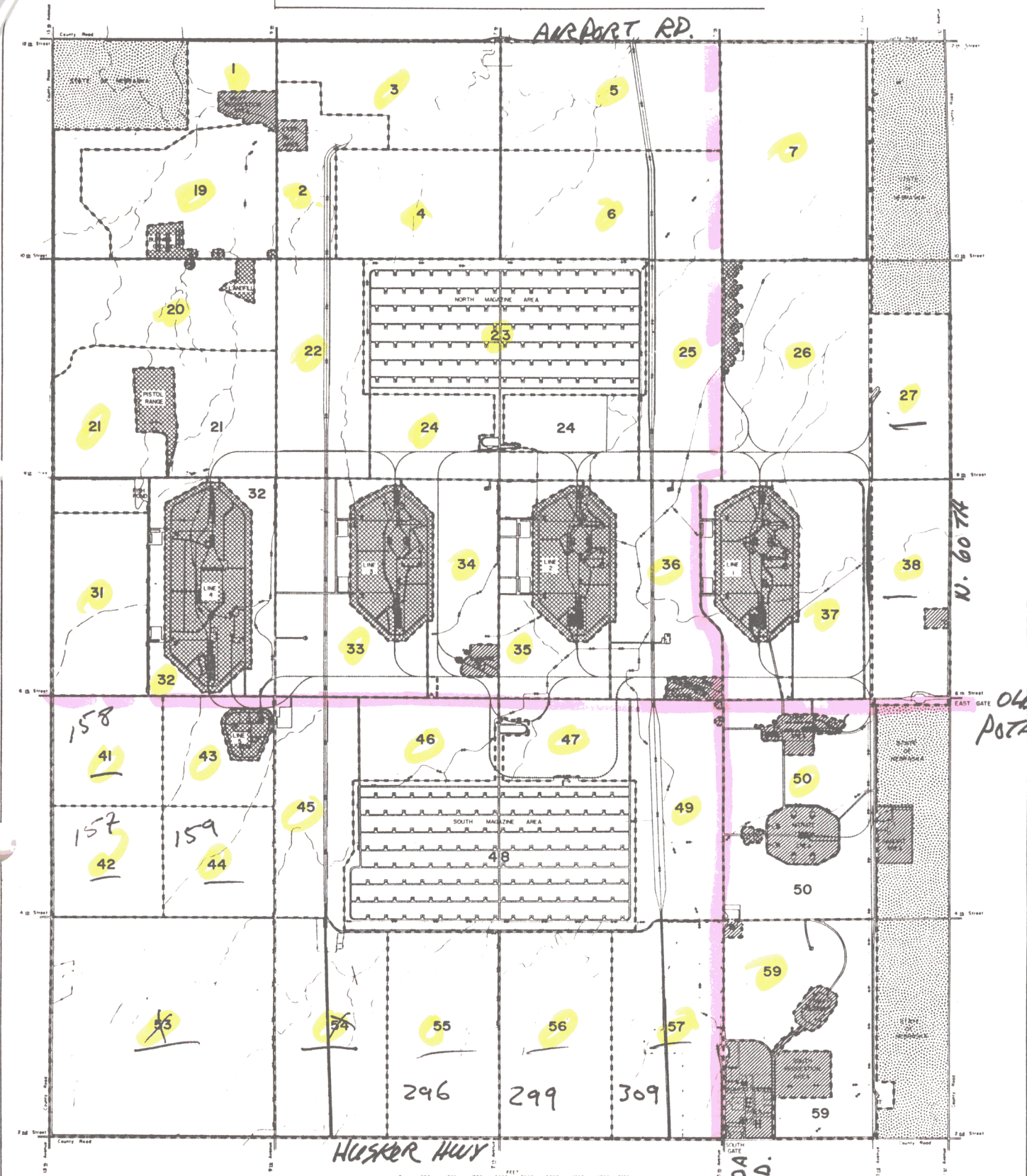
Currently, the Army generates approximately \$1 million in revenue annually through leasing activities at CAAP. The vast majority of this revenue is obtained from agricultural leases (\$763,000) at the site. However, this revenue is offset, to some extent, by the cost of operating and maintaining the site. In addition, it is anticipated that significant future capital investments could be required at the site to upgrade existing roadways, the rail line and other on-site infrastructure..

Due to high capital costs and liability concerns, it is recommended that Hall County avoid the direct acquisition of land parcels at CAAP, with the exception of specific recreation/conservation parcels or corridors as well as two specific roadway corridors that would be used to provide public access to the site. It is also recommended that Hall County pursue the least cost organizational structure possible for the redevelopment of the site. The organization established for the implementation of the Comprehensive Reuse Plan would primarily be responsible for identifying potential designees for acquiring the property directly from the Army. Either existing Hall County government staff or an outside contractor could be used to perform this function.

Finally it must be recognized that any redevelopment of CAAP will involve numerous restrictions on certain portions of the CAAP site. Possible restrictions include the retention of the "Burning Grounds" (used for the disposal of unexploded ordnance) portion of the site by the Army, as well as easements for a closed sanitary landfill, treated soil disposal trenches (used to bury ash obtained from burning contaminated soil), a groundwater pump and treatment plant, utility lines and drainage areas. Covenants will also be required to protect two identified archeological sites.

CORNHUSKER ARMY AMMUNITION PLANT

GRAND ISLAND, NEBRASKA



00 TRACT IDENTIFICATION NUMBER

----- TRACT BOUNDARY

RESTRICTED AREAS

PLANT MAINTENANCE AREAS

STATE OF NEBRASKA
NEBRASKA GAME AND PARKS COMMISSION

LEGEND

- ROAD
- INTERMITTENT STREAM
- DRAINAGE DITCHES
- RAILROAD TRACK
- FENCE - BARBED WIRE
- FENCE - CHAIN LINK
- BARRICADE
- BUILDINGS
- RICHMOND TYPE MAGAZINE

Mason & Hanger-Bliss Mason Co., Inc.
ENGINEERS OPERATORS OF CONTRACTORS
CORNHUSKER ARMY AMMUNITION PLANT
GRAND ISLAND, NEBRASKA

LAND MANAGEMENT
TRACT LOCATION MAP

SCALE: AS SHOWN DRAWN BY DATE: J.A. JANECEK 8-9-77 DRAWING NUMBER: LM-200-0-102