



# **City of Grand Island**

**Tuesday, April 13, 2010**

**Council Session**

## **Item E7**

**Public Hearing on Acquisition of Utility Easement Located  
Between One R and Chapman Roads and Between North and  
Engleman Roads (Robert and Kay Fielding)**

**Staff Contact: Gary R. Mader**

# **Council Agenda Memo**

**From:** Gary R. Mader, Utilities Director  
Dale Shotkoski, City Attorney

**Meeting:** April 13, 2010

**Subject:** Acquisition of Utility Easement – Between One R Road and Chapman Road, and Engleman Road and North Road – Robert M. and Kay M. Fielding

**Item #'s:** E-7 & G-10

**Presenter(s):** Gary R. Mader, Utilities Director

## **Background**

The Electric Department has electric distribution substations connected at various distances along a 115 kV transmission loop. The loop generally runs along the outer edge of the urban area, providing power to the substations and providing power supply redundancy by use of the looped configuration. A map of the transmission system is attached for reference. Substations reduce voltage from the 115,000 volt level to 13,800 volts for distribution to individual customers across the City. Substations “E,” located north of Swift on the east side of the loop, and “F,” located north of Menards on the west side of the loop, are the newest substations. They were placed in initial service in 2001, and completed in 2007.

Power Generation and regional interconnections to NPPD are concentrated on the south and east side of the transmission system loop. The northern portion of the transmission loop has no interconnections. And while it can sustain a single line segment loss contingency, any additional failure could result in loss of several major substations, resulting in power loss to major portions of the City. With power plant and regional grid interconnections, the southern portion of the transmission loop has more redundancy.

Recognizing that the City is continuing to grow, that future transmission line construction will occur and that reliability improvement is always important, Substations “E” and “F” were constructed with provisions to accept additional 115 kV transmission interconnections. In the long range plan of the Electric Department, these substations are designed for new transmission interconnections as future load growth may require.

Advantage Engineering (AE) was contracted in 2006 to perform a Transmission and Substation System Study for the City of Grand Island Utilities Department (GIUD).

Various alternatives and solutions were analyzed for the logical and economic expansion of the GIUD's 115 kV transmission loop, power interconnections with Nebraska Public Power District (NPPD), substations, distribution, and communications. The system study period was ten (10) years (2006-2016) taking into account projected City expansion and load growth. When fully implemented, the major substation and transmission requirements should be satisfied through 2027.

The Transmission and Substation System Study was completed in 2007 and contained a detailed analysis of previous studies and reports; surrounding area power provider plans; state wide planned improvements; contractual obligations; the City's comprehensive development plans; system capabilities and capacities; land use issues; and schedule related items. The study resulted in recommendations to expand the GIUD's transmission system to serve load growth and assure reliability. The results of the Transmission and Substation System Study were presented to the Grand Island City Council on January 8, 2008. One of the system improvements identified in the Transmission and Substation System Study was the need for providing an additional 115 kV power supply to GIUD's Substation F.

## **Discussion**

As work progressed, several presentations were made to the City Council. At the City Council Study Session of April 21, 2009, the route of the proposed transmission line was presented by Advantage Engineering, the consulting engineers for the project. The new line would provide a fifth connection, to the regional grid and increased reliability to the northern portion of the City. On April 28, 2009, City Council authorized the Utilities Department to proceed with transmission line easement acquisitions. And, as required by State Law, a Public Hearing was held on December 15, 2009, thirty days prior to beginning negotiations with landowners.

Since Council authorization, easement acquisition is progressing. Nebraska State Law requires that acquisition of property must be approved by City Council. The Utilities Department needs to acquire an easement relative to the property of Robert M. Fielding and Kay M. Fielding, located between One R Road and Chapman Road and between Engleman Road and North Road, in Hall County, in order to have access to install, upgrade, maintain and repair the new 115 kV transmission line to the northwest of the City.

## **Alternatives**

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

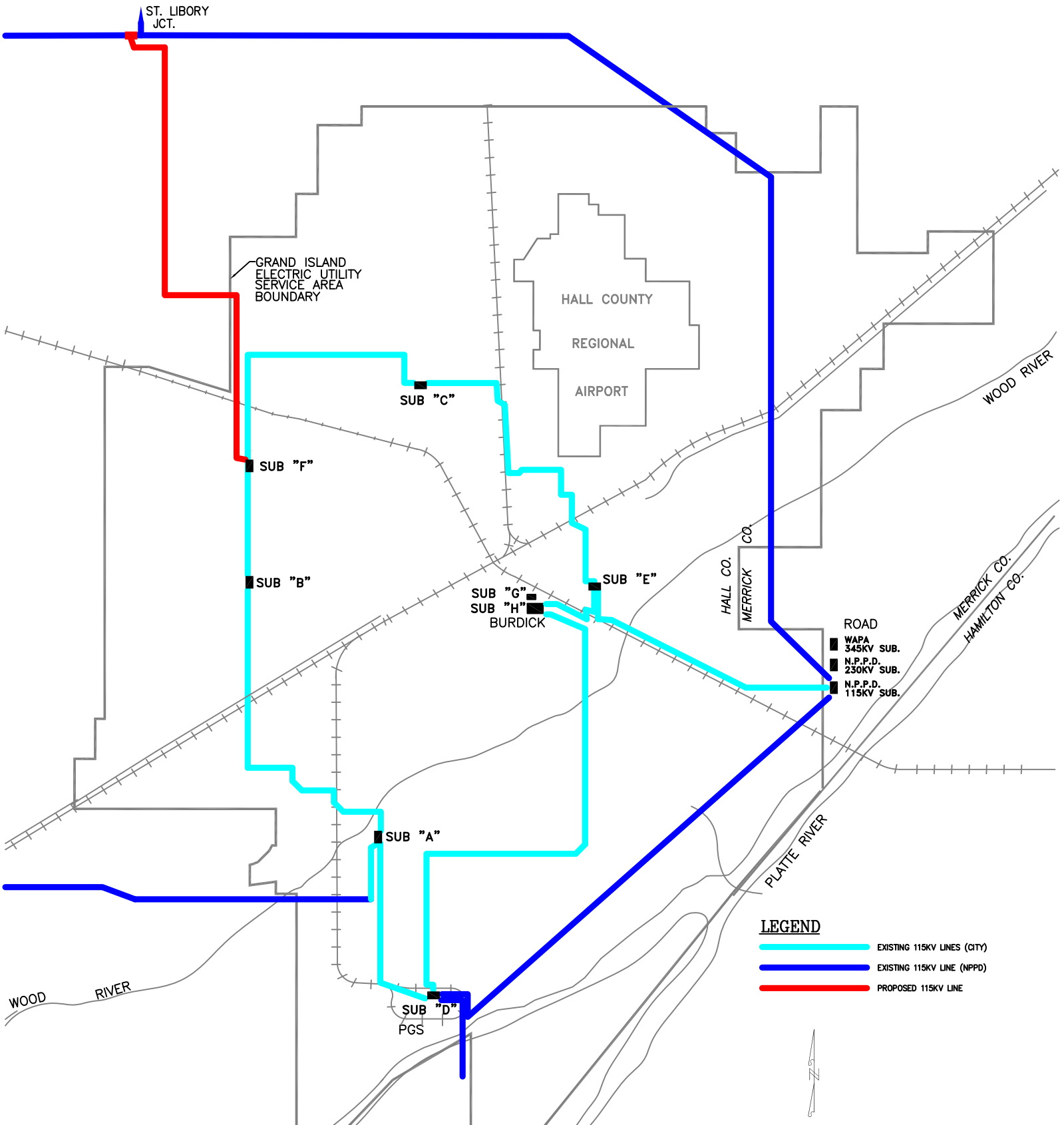
1. Make a motion to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

## **Recommendation**

City Administration recommends that the Council approve the resolution for the acquisition of the easement for Eighty and No/100 Dollars (\$80.00).

## **Sample Motion**

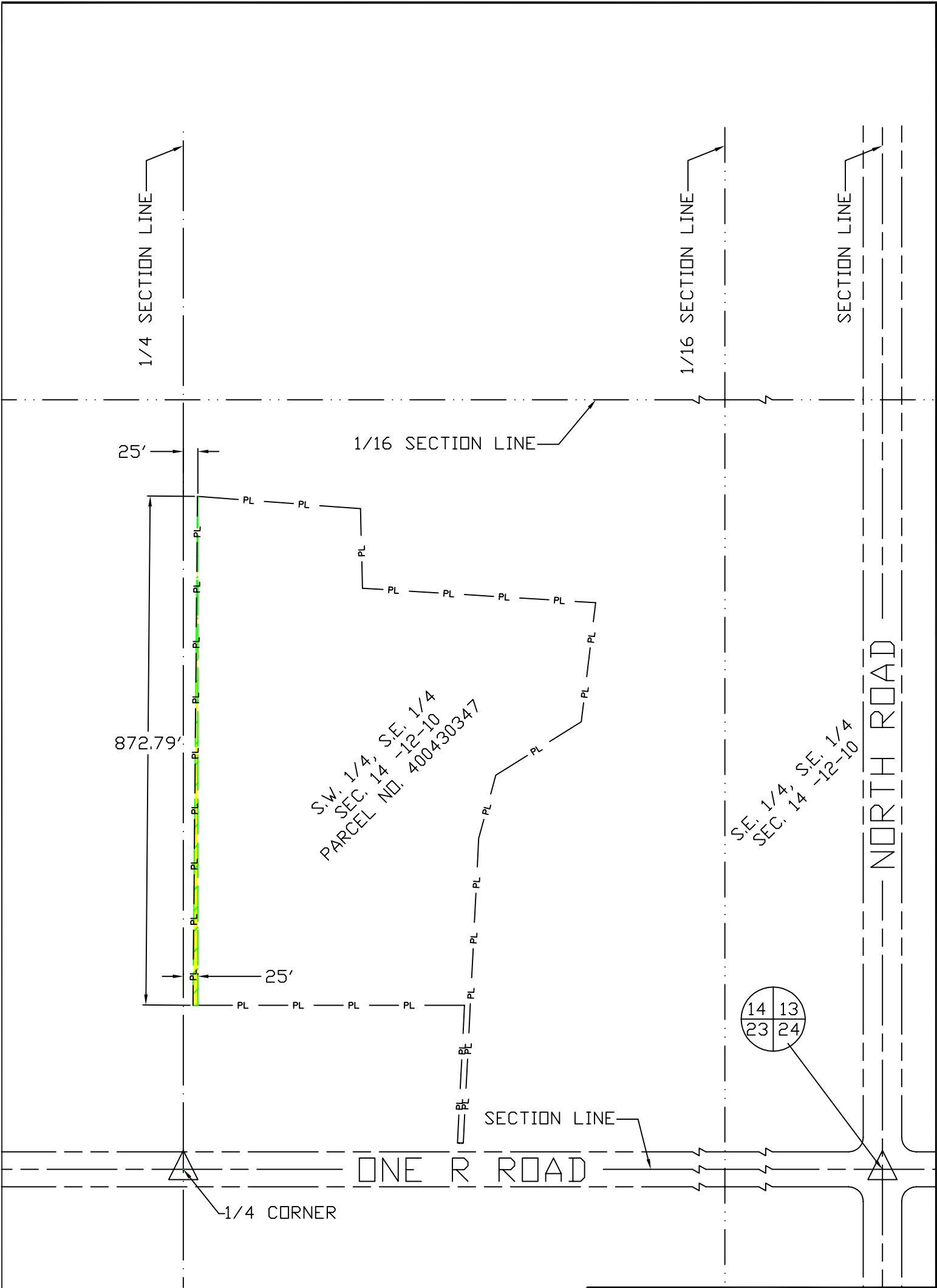
Move to approve acquisition of the Utility Easement.



**LEGEND**

- EXISTING 115KV LINES (CITY)
- EXISTING 115KV LINE (NPPD)
- PROPOSED 115KV LINE





**LEGEND**

- SECTION LINE
- 1/4 SEC. LINE
- 1/16 SEC. LINE
- ROAD
- PL — PROPERTY LINE
- EASEMENT

CITY OF  
**GRAND ISLAND**  
UTILITIES DEPARTMENT

EXHIBIT "A"

DRN BY: A.C.H.	SCALE: 1" = 200'
DATE: 11/09/2009	# FIELDING