

Saxton, John

From: Mary Kenner [Mary.Kenner@respec.com]
Sent: Wednesday, July 25, 2012 1:22 PM
To: dianne.d@swo-nsn.gov; jmswhitted@yahoo.com
Cc: Moore, Johari; Waldron, Ashley; Cheryl A. Chapman; Doris Minor
Subject: Background information on Ross Project Area, Crook County, Wyoming
Attachments: Ross Project ER Figure 1.2-3 - Ross Project Area.pdf; Ross Project ER Figure 3.1-2 - Land Use within the Proposed Project Area.pdf; Ross Project ER Figure 3.4-6 - Surface Water Features.pdf

Dear Dianne and Jim:

Per your request, the following information is provided to assist you in developing a Statement of Work for the Ross Project Area, Crook County, Wyoming. This information is taken from the Applicant's license application to the Nuclear Regulatory Commission (This is public information and can be accessed at <http://www.nrc.gov/materials/uranium-recovery/license-apps/ross/ross-app-docs.html>). If you have any questions regarding the information, or need additional information, please don't hesitate to contact Cheryl Chapman or me.

Ross Project Area – General Description

The Ross Project would be located in Crook County, Wyoming, 35 km [22 mi] north of the town of Moorcroft and Interstate-90. Other nearby towns and approximate direct distances to the Ross Project area include Pine Haven (27 km [17 mi] southeast), Gillette (53 km [33 mi] southwest), and Sundance (48 km [30 mi] southeast). The Ross Project area is adjacent to the unincorporated ranching community of Oshoto. The Oshoto community includes 11 residences within 3.2 km [2 mi] of the Ross Site boundary. Access to the Ross Project area is by either CR 68 (D Road) or CR 164 (New Haven Road).

The Ross Site comprises portions of Sections 7, 18, and 19, Township 53N, Range 67 West, and portions of Sections 12, 13, and 24, Township 53N, Range 68 West. **See attached figure: Ross Project Figure 1.2-3.** Surface ownership within the Ross Project area is primarily private, with small tracts of land owned by the State of Wyoming and the BLM. Approximately 16 ha [40 ac] are BLM land. The Wyoming OSLI administers 127 ha [314 ac]. In addition to the surface ownership, the BLM manages the subsurface mineral rights under 65 ha [160 ac] of privately owned land.

The Ross Project area is located in the upper reaches of the Little Missouri River, which flows northeasterly into southeastern Montana, through northwest South Dakota, and into North Dakota where it empties into the Missouri River at Lake Sakakawea.

Project Acreage – Disturbance

The Ross Project would occupy 697 ha [1,721 ac] in the north half of the approximately 90-km² [56-mi²] Lance District. Construction activities during the Ross Project would disturb a total of 113 ha [280 ac] of land, which represents 16 percent of the Ross Project area.

Land Use

Existing land uses include livestock grazing, oil production, crop agriculture, communication and power transmission infrastructure, transportation infrastructure, stock and other reservoirs, and wildlife habitat (see attached figure: **Ross Project ER Figure 3.1-2 Land Use within the Proposed Project Area**). Approximately 95 percent of the Ross Project area is used for rangeland, cropland, or pastureland. The largest portion, over 80 percent, is rangeland, while 14 percent is used for agriculture.

Surface-Water Features

There are 12 existing reservoirs within or just outside the Ross Project area (see attached figure: **Ross Project ER Figure 3.4-6 Surface Water Features**). Other than the Oshoto Reservoir, which has a maximum capacity of 21 ha-m [173 ac-ft] and an area of 11.3 ha [28 ac], all the identified reservoirs have a capacity of less than 1.2 ha-m [10 ac-ft] and a surface area of less than 1 ha [2.5 ac].

The 13 wetland areas that have been identified by records searches for the Ross Project area were investigated during 2010 field surveys. Potential wetlands identified during the initial June survey were later visited during another survey in July to verify that wetland characteristics were present. All but two of the areas were included in the baseline field-delineated wetlands. The two sites not included did not have the three required characteristics for a wetland. The three criteria are: 1) hydrophytic vegetation (i.e., plants that grow in hydric soils), 2) hydric soil (i.e., soils that are commonly flooded or saturated), and 3) wetland hydrology (USACE, 2008).

Many of the potential wetland areas delineated during the 2010 field surveys were small depressions (< 0.04 ha [0.1 ac]) that were in close proximity to each other but were distinct depressions separated by upland vegetation. A significant number of these small-depression areas appeared to be influenced by ground water, receiving seepage from the Lance Formation, which outcrops in the vicinity. These potential wetlands were classified according to Cowardin et al. (1979) to more accurately describe the types of potential wetlands present within the Ross Project area. Most (approximately 93 percent) of the potential wetlands were man-made (either diked or excavated). The vast majority of these were preliminarily classified as Palustrine, Aquatic Bed, Seasonally Flooded (PABFh) or Diked. Of the areas designated as PABFh, approximately half were areas of open water. In addition, there were approximately 2.1 ha [5.1 ac] (6,750 linear m [22,130 linear ft] x an average 3-m- [10-ft]-wide channel) of "Other Waters of the U.S." identified within the Ross Project area.

Sincerely,

Mary Kenner
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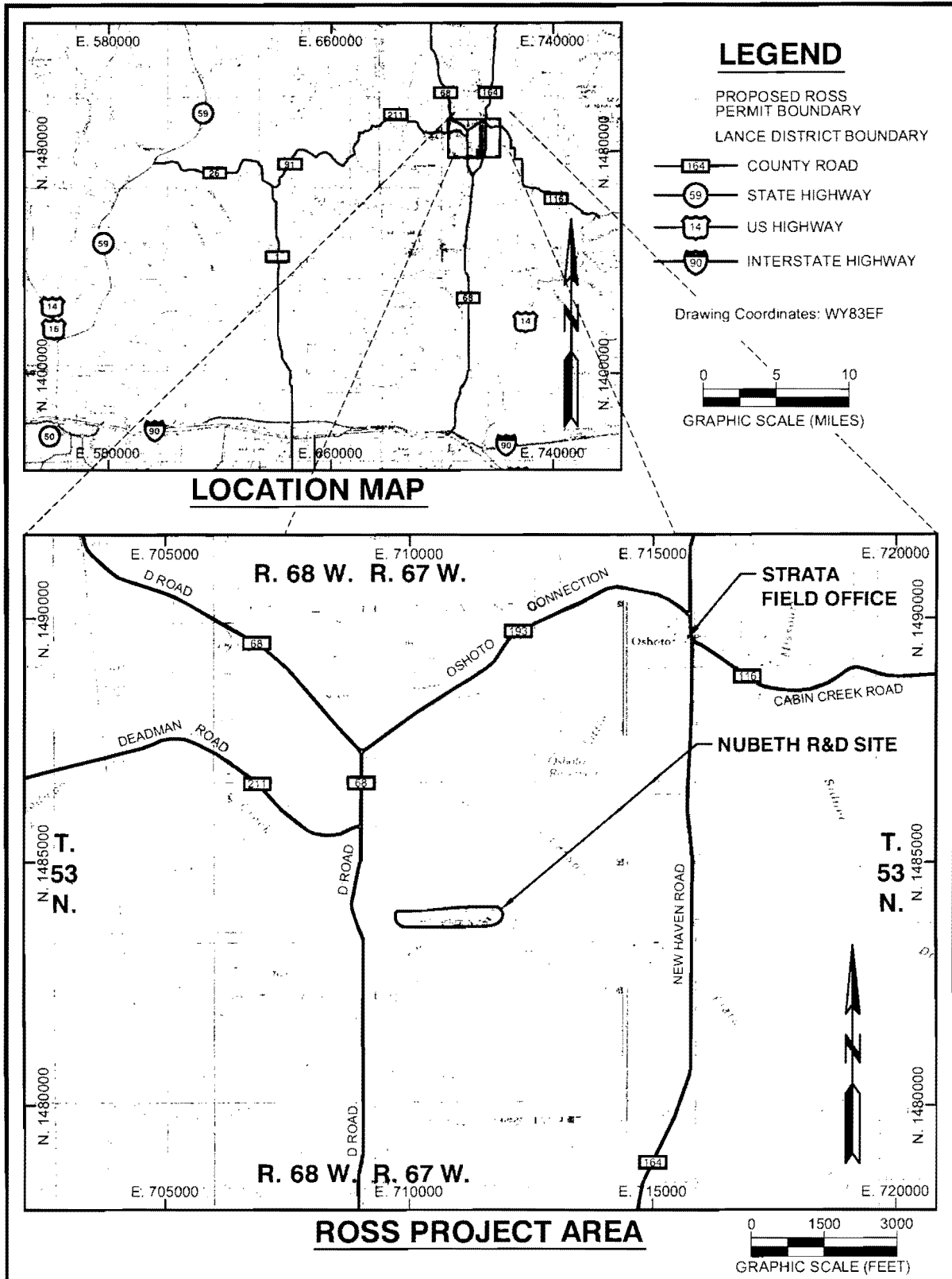


Figure 1.2-3. Proposed Project Area

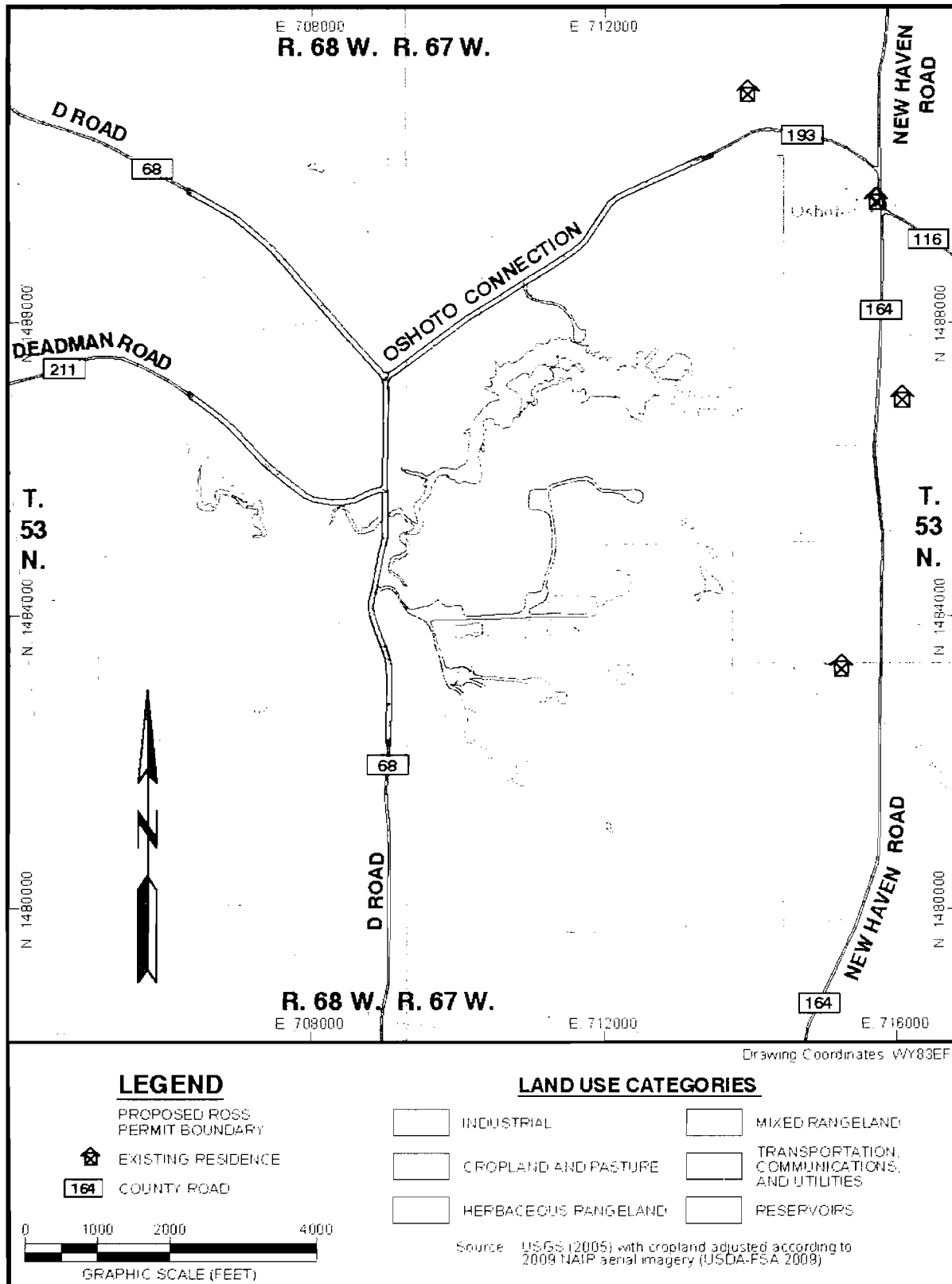


Figure 3.1-2. Land Use within the Proposed Project Area

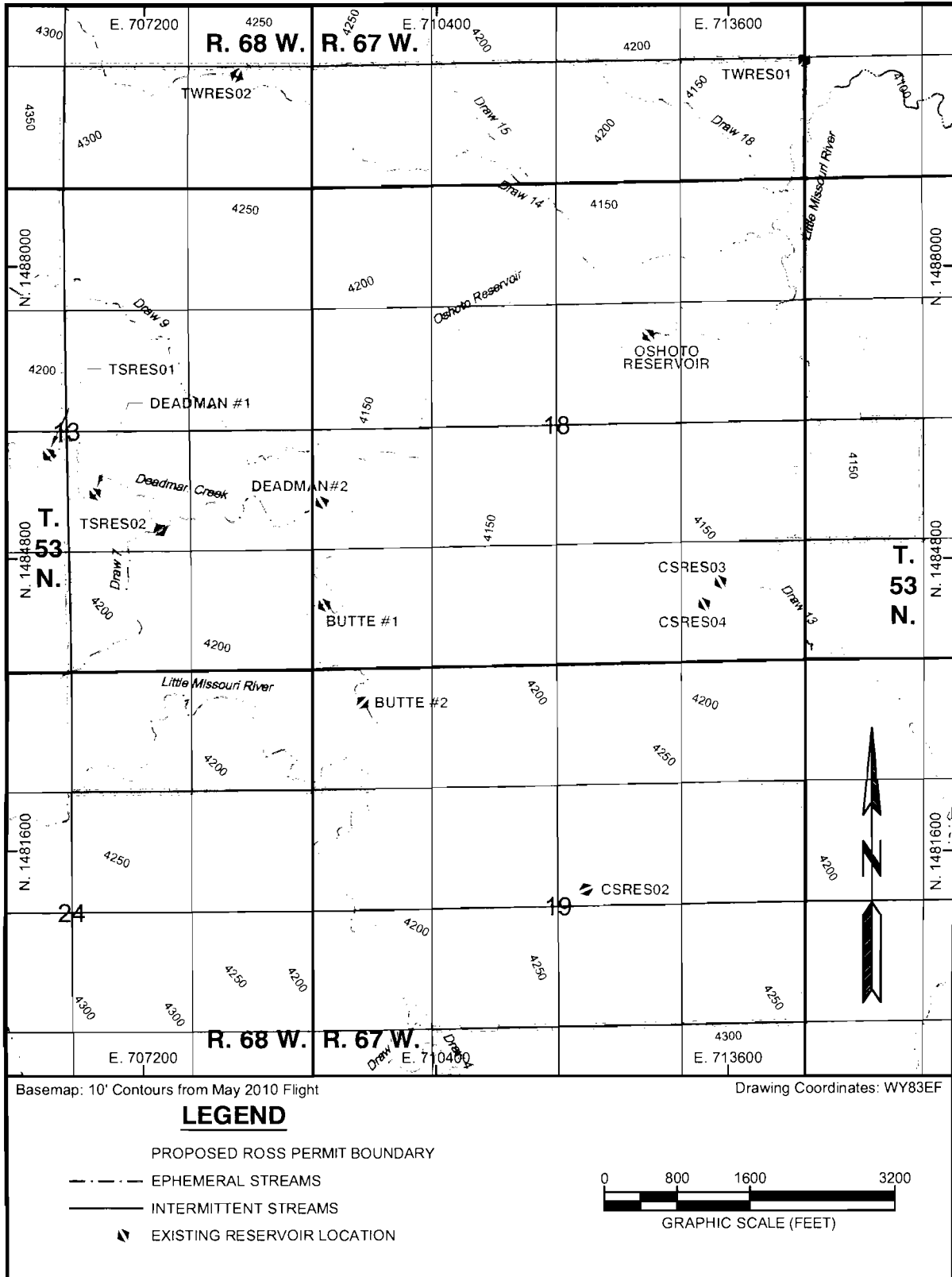


Figure 3.4-6. Surface Water Features