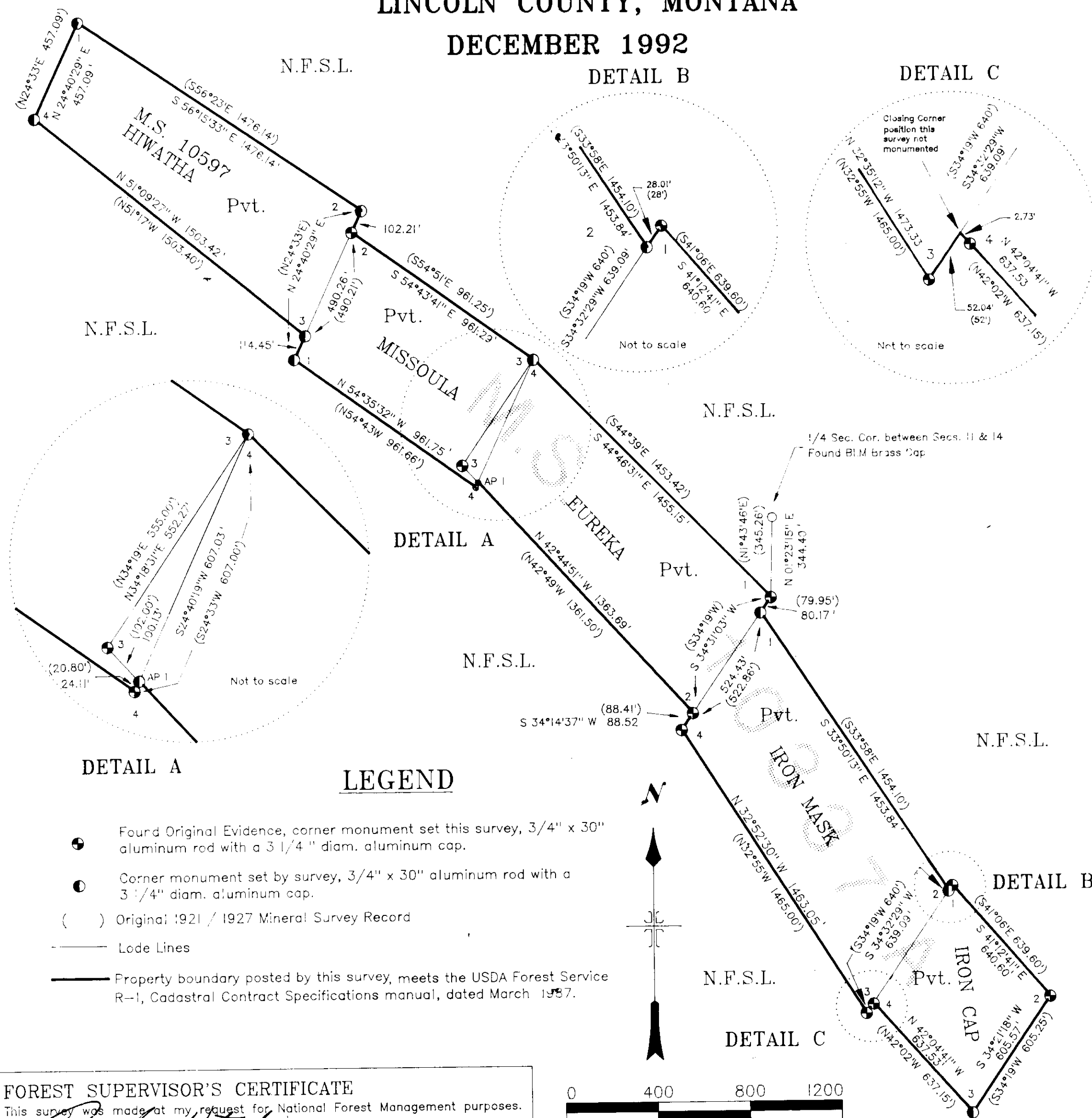


# CERTIFICATE OF SURVEY DEPENDENT RESURVEY OF MINERAL SURVEY No. 10337A & 10597 IN SECTIONS 10, 11 & 14 T.30N., R.34W., P.M.MT.

KOOTENAI NATIONAL FOREST  
LINCOLN COUNTY, MONTANA

DECEMBER 1992



**FOREST SUPERVISOR'S CERTIFICATE**  
This survey was made at my request for National Forest Management purposes.  
*Robert L. Schrenk*  
Robert L. Schrenk, Forest Supervisor

## PURPOSE OF SURVEY

The purpose of this survey is to locate upon the ground the title lines of record between private lands and National Forest System Lands. No division of land is hereby created.  
Project name: SILVER GROUSE MINERAL SURVEY, date of survey: May 1992

## HISTORY OF SURVEY

July 1921 Mineral Survey 10337A (Missoula, Eureka, Iron Mask and Iron Cap lodes) by James L. Sinclair.  
November 1927 Mineral Survey 10597 (Hiwatha Lode) by James L. Sinclair.

## METHOD OF SURVEY

G.P.S. Geodetic Receivers were used for the control survey and a one second Total Station and Electronic Data Collector was used with conventional closed traverse procedures to tie original controlling corners. The location of the monuments set this survey meets the positional tolerance standard referenced in the USDA, Forest Service, Region One, Cadastral Contract Specifications manual, dated March 1987.

## SURVEYOR'S NOTES

A control survey was conducted and all found controlling corners were tied. All corners were searched using a variety of adjustments and original physical feature ties. Thus the methods selected to re-establish the lost corner positions were compared. The positions of the lost corners were re-established by the method that gave the best results, compared to the original record, and the original intent of the Mineral Survey.

## Mineral Survey 10337A date 1921

Missoula Lode: Corner No. 1 re-established by Grant Boundary Adjustment between corner No. 2 and No. 4.  
Corner No. 3 (common with corner No. 4 of Eureka lode) re-established by Grant Boundary Adjustment between corner No. 2 and No. 4.  
Eureka Lode: Corner No. 4 (common with corner 3 of Missoula lode).  
Iron Mask Lode: Corner No. 1 re-established by single proportion between corner No. 1 and No. 2 of Eureka lode.  
Corner No. 2 re-established by single proportion between corner No. 1 of Iron Cap lode and corner No. 3 of Iron Mask lode.  
Iron Cap Lode: Corner No. 3 re-established by Broken Boundary Adjustment between corner No. 2 and No. 4

## Mineral Survey 10597 date 1927

Hiwatha Lode: Corner No. 1 re-established by record bearing and distance from corner No. 2.  
Corner No. 2 re-established by record distance from corner No. 2 of Missoula lode and bearing from corner No. 1 to corner No. 2 of Missoula lode.  
Corner No. 3 re-established by single proportion between corner No. 1 and corner No. 2 of Missoula lode.  
Corner No. 4 re-established by record bearing and distance from corner No. 3.

Refer to Certified Corner Recordations for each corner set or maintained, filed with the Clerk and Recorder, Lincoln County Courthouse, Libby, Montana.

While this survey was accomplished utilizing the Montana State Plane Coordinate System based on NAD 83 datum, values shown on this Certificate have been scaled to the 3,400 foot elevation by combined sea level and scale factor of 0.99967314. Montana State Plane Coordinate System (NAD 83) computed value for corner No. 1 of the Iron Cap Lode Y=476,824 M, X=125,664 M, Lat=48°21'58" N, Long=115°54'39" W.

## BASIS OF BEARING

Computed from record state plane coordinate (NAD 83) values for station Freeman and Freeman Az' (N.G.S. established 1986, first order station) then rotated to true meridian (-4°41'22") about corner No. 1 Iron Cap lode.

## SURVEYOR'S CERTIFICATE:

I hereby certify that I am a registered land surveyor in the State of Montana, that the survey shown on this Certificate of Survey has been prepared in accordance with Montana Code Annotated (Sections 76-3-101 through 76-3-614) and the Lincoln County regulations adopted pursuant thereto.

Ronald A. Pearson Montana Registration No. 9008LS

## CERTIFICATE OF EXAMINING OFFICIAL:

Approved this 7th day of January 1993, A.D.

Examining Official: *David Buckhoff*

Approved: *David Wickham*  
Chairman, Lincoln County Commissioners

## CERTIFICATE OF CLERK AND RECORDER:

State of Montana, County of Lincoln, filed this 7th day

of January 1993, A.D. at 10:25 o'clock A.M.

*Coral D. Cummings* by *Jeannie Alenier*  
County Clerk Recorder Deputy

CERTIFICATE OF SURVEY NO. 2018

