An Inventory of the Public Land Survey Records for Minnesota: The Special Instructions
This research report makes a preliminary inventory of these records, particularly those housed in the voluminous correspondence files kept by the following individuals: the Surveyors General of Wisconsin and Iowa, which are now housed in the Iowa State Archives in Dubuque, Iowa; the Surveyors General of Minnesota, which are now housed in the Minnesota State Archives in the Minnesota History Center in St Paul; and the Commissioners of the General Land Office, which are now housed in the National Archives, Washington D.C. The research also makes recommendations regarding future efforts to make such records widely available in an electronic format.
AN INVENTORY OF THE
PUBLIC LAND SURVEY RECORDS FOR MINNESOTA:
THE SPECIAL INSTRUCTIONS

FINAL REPORT

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**EXECUTIVE SUMMARY**

The rectangular public land surveys in Minnesota were carried out by a cadre of deputy surveyors under contract with the Surveyor Generals of Wisconsin and Iowa (1847-1857) and the Surveyors General of Minnesota (1857-1908). In their work, the deputies were guided by the General Instructions issued to all deputies by the Surveyors General and under the Special Instructions each received along with his contract. At the same time the Surveyors General received a variety of instructions from their superior, the Commissioners of the General Land Office. The Special Instructions and the Instructions from the Commissioners are not widely used by the modern land surveyors in their work reconstructing what the deputies did, in part because they are scattered through a variety of collections housed in several locations. This research makes a preliminary inventory of these records, particularly those housed in the voluminous correspondence files kept by the following individuals; the Surveyors General of Wisconsin and Iowa, which are now housed in the Iowa State Archives in Dubuque, Iowa; the Surveyors General of Minnesota, which are now housed in the Minnesota State Archives in the Minnesota History Center in St Paul; and the Commissioners of the General Land Office, which are now housed in the National Archives, Washington D.C. The research also makes recommendations regarding future efforts to make such records widely available in an electronic format.

The Instructions, along with the Township Plats and the Field Notes, comprise the public land survey records having the most important value to the modern land surveyor.
“Our country, unlike many others, was founded in a relatively literate era, and the records are there for all those who are willing to avail themselves of the written word.”

Barber Conable Jr. in Swartz, Seymour I This Land is Your Land. The Geographic Evolution Of the United States (Henry N. Adams Inc. New York, 2000) p.7
CHAPTER 1. INTRODUCTION

The research project was formulated in response to a Problem Statement (PS129) drafted by Jay Krafthefer of the Office of Land Management, Minnesota Department of Transportation (Mn/DOT), “Bringing United States Public Land Survey Records into the Twenty-first Century.”

1.1. Objectives of the Research

The research had two objectives. The first was to find and categorize the instructions given the deputy surveyors who ran the lines and established the corner monuments that characterize the rectangular public land survey net in Minnesota. (Figure 1.1) These instructions are vital to anyone interested in the public land surveys, to the historical scholar wanting to describe the evolution of the survey net and to the modern land surveyor involved in remonumenting or restoring lost corners, conducting boundary surveys, or merely trying to understand the origins of a particular corner or line. Part of their importance is the light they shed on other records. Indeed, without these instructions, the field notes, on which the plats are based, may make no sense. The instructions are particularly valuable for understanding the surveying process and its outcomes, the physical evidence of its existence on the land surface – the lines and the corner monuments – and the documentary evidence of its existence – the township plats – comprising the first legal descriptions. The instructions, in fact, provide the basis for modern legal descriptions, and so have irreplaceable value for present surveyors “following in the footsteps” of the original surveyors, including those working at Mn/DOT. In the Preface to their book on special instructions in Iowa, Dodds et al stated, “The well-qualified land surveyor …needs to know as much as possible of the instructions under which the earlier work was done so that he can correctly retrace and interpret the meaning of the original notes and plats.” [1]

A second objective was to look at the impediments to creating electronic versions of these records, now over 100 years old. This objective continues the recent attempts to “modernize” such records in Minnesota that will both diminish the need for handling any of the original material and allow more modern technology to be employed in their analysis.[2] This project, then, was designed as a first step in making such technological conversions practical and cost-effective, by locating the most relevant public land survey records.

The object of the project was not to find and catalog every piece of paper containing information about the public land surveys in Minnesota. [3] The focus, rather, was on a subset of the large volume of records kept by the General Land Office, the federal real estate agency, established in 1812, “to superintend, execute, and perform all such acts and things touching or respecting the lands of the United States.” [4] The subset, describing how the public land surveys were carried out, form the basis for all legal descriptions in Minnesota. Such records are critical not only to Mn/DOT’s work in acquiring land for Minnesota’s transportation needs but for any land surveyor concerned with the location of the original corner monuments.

Most of the surveying records, including those containing instructions are inaccessible, in part because they have never been inventoried in detail and in part because they are scattered in
various places. This research was designed (a) to compile an inventory of the records and acquire illustrative samples of the instructions, and (b) to assess their suitability for digital

Figure 1.1. The Rectangular Public Land Survey Net in Minnesota
imaging. The inventory is necessary for greater access to, and greater use of, these records while at the same time preserving them.

These records are little used at present for a variety of reasons. They are all paper and are scattered in repositories across the country. They do not readily meet the demands of modern researchers interested in legal descriptions, such as surveyors, real estate or other land management professionals, and historians.

Increasingly some states are placing certain records – the plats and field notes, for example – online. There are a variety of digital resources depicting the surveying records described here, in particular the plats for Minnesota and other states, such as Michigan, Wisconsin, and Florida (the last two named also include the deputies’ field notes). There are also digital resources concerning the original corner monuments maintained by the county surveyors in Minnesota, see Dakota County Surveyor’s Office and Carver County Surveyor. [5]

1.2. The Relevance of the Research

All of the paper records produced during the federal government’s land surveying efforts in Minnesota in the second half of the nineteenth century have lasting value. As a collection they describe the actual surveying process. Singly, they describe particular facets of that process.

The records examined have great historical value. They are critical for anyone wishing to understand the public land surveys in Minnesota since they reveal how each deputy surveyor was supposed to carry out the duties specified in his contract. They are also critical for anyone examining more familiar surveying records. They provide a basis for examining both the field notes, in which the deputy described what he did and what he saw, and the township plats that were subsequently drafted from that description. Using the records described here, we can accurately reconstruct what happened over 100 years ago.

Because of their historical value, the records have great modern value.

The importance of a knowledge of special or other instructions which may have been given by the surveyor general to his deputies prior to the original survey cannot be emphasized too strongly. No surveyor should attempt to make a resurvey of a section without full government notes and be in possession of such instructions. [6]

They are relevant for the modern land surveyor, particularly those charged with preserving, restoring, or marking corners established by the deputies to mark section, quarter section, and meander corners, “prima facie evidence of the original United States public land survey corners.” [7]

The surveyor shall make full and accurate notes and records from which the entire survey can be relocated, and shall, no later than one year after preserving, restoring, and marking the corners, file a certified copy of the same, with a filed plat, in the office of the county surveyor if an office is maintained in a building maintained by the
county for county purposes on a full-time basis, and if not, shall record it in the office of the county recorder. [8]

To accurately relocate a corner the land surveyor must consider all available evidence concerning how they were originally established by the deputy. This information includes the instructions given to the deputy as he was awarded a contract to carry out a survey as well as the information provided by the field notes that record what he actually did.

The letters containing these instructions are housed in the voluminous correspondence files kept by the Surveyors General who contracted with the deputies and the Commissioners of the General Land Office who were responsible for managing all the Surveyors General. The instructions are inaccessible, in part because they have never been inventoried in sufficient detail and in part because they are scattered, in various collections in various places. Because there is no comprehensive catalog of such letters and because they are scattered in various places there has been little opportunity for the modern land surveyor to use them to inform his work. As a result, many surveyors are forced to rely solely on the fieldnotes and township plats for their historical reconstructions. Today’s technologies can provide digital images of these records and make them widely available. Such a collection of digital images would also enhance the utility of the instructions by making them amenable to modern analyses. At the same time they would diminish the need to handle the originals, many of which are fragile.

The purpose of this research was (a) to compile an inventory of the instructions contained in the letters and to acquire illustrative samples and (b) to assess their suitability to be digitally imaged. The inventory is necessary for preserving these vital records, by restricting public access while, at the same time, permitting more widespread use.

1.3. Outline of Report

The project was divided into several tasks;

- Providing a report and an index to the relevant records located in the Iowa State Archives at Des Moines, Iowa. An evaluation of these materials for imaging. (Chapter 3)

- Providing a report and an index containing an index to the relevant records located at the Minnesota History Center, St. Paul, and an evaluation of these materials for imaging. (Chapter 4)

- Providing a report and an index of the relevant records located at the National Archives, Washington D.C. and an evaluation of these materials for imaging. (Chapter 5)

- Producing an article for the Minnesota Surveyor, the magazine of the Minnesota Society of Professional Surveyors. (Appendix A)

- Providing a reports and an index to relevant National Archive microfilm collection M27 owned by the Principal Investigator. An evaluation of these materials for imaging. (Appendix E)
1.4. Deliverables Not Contained in This Report

The research proposal called for several other deliverables that are not reported here.

1. Promotional materials.
2. Finding aids for the relevant letters contained in the following National Archives Microfilms;

- M25 Miscellaneous letters sent by the General Land Office, 1796-1889.
- M477 Letters sent by the Surveyor General to the Territory Northwest of the Ohio River, 1797-1901.
- M478 Letters received by the Secretary of the Treasury and the Commissioner of the General Land Office from the Surveyors General of the Territory Northwest of the Ohio River, 1797-1849.
- M479 Letters received by the Surveyor General of the Territory Northwest of the Ohio River, 1797-1856.


The promotional materials and the Powerpoint presentations are available from the Principal Investigator, Rod Squires, and from the Technical Liaison, Jay Krafthefer.

After a preliminary examination, all of the National Archives microfilm collections noted above were deemed less relevant for the purposes of the project than at first thought. They probably contain letters that would dramatically extend the historical and geographical scope of research into the public land surveys but probably do not contain the Special Instructions that would help explain how the deputy surveyors carried out their work in Minnesota.
CHAPTER 2. THE PUBLIC LAND SURVEYS

From the earliest days of the nation, the United States government adopted a policy of conveying title to the land it acquired from the original states, foreign nations, and Native American tribes. Under the provisions of numerous statutes enacted between 1785 and 1935 the federal government conveyed title to 1½ billion acres of land to individuals, state, and corporations. Before title could be conveyed however, legal descriptions had to be created, establishing the boundaries of the tracts of land that were to be conveyed and their location in the United States. The public land surveys provided the necessary legal descriptions. (Figure 2.1)

Figure 2.1. The Place of the Public Land Surveys in the History of Land in the United States.

Across the land surface of Minnesota, then, lies a rectangular net comprising east-west and north-south lines along which every half mile is a monument. Largely invisible, except where
roads and local government boundaries coincide with the lines, this net formed the legal description for every parcel of land the federal government offered for sale in Minnesota. The net, created by a cadre of deputy surveyors working as contractual employees of the federal government under the guidance of the Surveyor General of Wisconsin and Iowa, between 1847 and 1857, and then under the guidance of the Surveyors General of Minnesota, from 1857 until 1908, created the first ownership boundaries throughout the state. The public land surveys, which created the net, were the first major systematic impact of European Americans on the land surface of the United States. They have proven to be among the most enduring cultural impacts.\(^{[10]}\)

2.1. The Process of Surveying \(^{11}\)

Surveying records are produced during the surveying process so it seems appropriate to outline the process. What follows is necessarily general. Details of specific township surveys how they were established and subdivided, can only be discovered through the investigation of some of the sources described later in the report.

The process of surveying changed during the sixty years that Minnesota was being surveyed. There were technical changes; the solar compass was introduced as were new ways of avoiding, or at least containing, the errors associated with the earth’s curvature. Most importantly, however, standardized way of carrying out the surveys were introduced.

Having received Congressional appropriations to survey the public lands, the Commissioner of the General Land Office wrote to the Surveyor General of a surveying district advising him of the amount of money available to his district, sometimes with suggestions regarding which lands to survey with the available money.\(^{[12]}\) The Surveyor General awarded deputies contracts to establish townships in a particular part of the surveying district, usually on the north and west margins of the area that had already been surveyed. He then awarded deputies contracts to subdivide those townships in which there was a demand for land and therefore a likelihood that it would readily be purchased at a subsequent government land auction.\(^{[13]}\)

Before any deputy started on his contract he was required to sign an oath that he would faithfully execute the work set out in the contract and obtain two sureties who would guarantee the work. Most importantly, for this project, each was given two sets of instructions. The first, called “General Instructions,” were given to all deputies who received contracts from a particular Surveyor General prior to the start of the work specified in the contract. The second set, given to particular deputies who received a contract, either prior to the start of the work specified in the contract or during the work, were called “Special Instructions,” the focus of this research. (Figure 2.2)

Each deputy carrying out the duties specified in his contract and in his instructions was required to keep a field notebook in which he recorded what he did and what he saw. Following the fieldwork each deputy returned his notes to the Surveyor General’s office where they were transcribed. The deputy awarded a contract to establish township exteriors was also required to make a diagram showing what he did and saw.\(^{[14]}\) The diagram he compiled was given to the
Figure 2.2. An Example of Special Instructions.
subdividing deputy, who was instructed to show on it what he did and the various topographic features. \[15\] Such requirements were described in the “General Instructions.”

After the fieldwork, in which a township was established and subdivided a township plat, depicting the information contained in the transcribed field notebook, was drawn. Then several copies of the plat were made. One, called the Commissioner’s Plat was sent, along with copies of the field notebook and the deputy’s financial account stating what was owed the deputy, to the Commissioner of the General Land Office. \[16\] A second plat, called the Register’s Plat was sent, along with a descriptive list, to the appropriate land district office where the land in a particular township would be offered for sale at public auction. \[17\]

2.2. The Paper Stream

All the paperwork generated during the surveying process just described, the contracts, oaths, bonds, instructions, field notes and sketches or diagrams of various kinds formed part of a paper stream, largely although not solely generated by the Surveyor General, connected the Surveyor General to each deputy. A similar stream of paperwork, increased with additional materials, such as township plats and a variety of administrative records, which he was required to send to the Washington DC headquarters of the General Land Office, connected the Surveyor General with his superior, the Commissioner of the General Land Office. \[18\] Each Surveyor General was further connected to the Commissioner of the General Land Office by letters he received from the Commissioner containing a variety of information directing virtually all of his activities. \[19\] (Figure 2.2) The letters sent by the Surveyor General to the deputy contain the instructions under which the deputy was to operate.\[20\] A second set of letters, from the Commissioner of the General Land Office to the Surveyor General, provided additional instructions. \[21\]

![Figure 2.3. The Paper Stream between the Important Actors](image-url)
The point of this short description of the paper stream between the various actors is to note that the information relevant for this project, the “special instructions” to the deputy surveyor, contained in a particular portion of this paper stream, can only be fully appreciated in the context of the entire paper stream. All instructions are important, not just because of what they say, but how they relate to other instructions. So, for example, a particular set of “General Instructions” may have been silent on a problem that was faced by a deputy in the field. He may have sent a query to the Surveyor General who responded with “Special Instructions.” To compile those instructions the Surveyor General may have sought the opinion of the Commissioner of the GLO, who may have given an answer that ultimately found its way to the deputy.

These instructions are included in the letters in the tremendous volume of correspondence between the Surveyor General and the individual deputies, and between the Surveyor General and the Commissioner of the General Land Office.^[22]^[22]

2.3. Instructions

Each deputy who was awarded a contract to survey was given instructions on how to carry out his work by the Surveyor General.

These instructions were of two types; General Instructions issued to all deputies who worked in Iowa, Wisconsin, and Minnesota when they were awarded their contracts, and Special Instructions issued to particular deputies carrying out particular surveys, such as state or Indian reservation boundaries, or working in particular areas. The instructions were issued either when the deputies were awarded contracts or subsequently when they were in the field.

2.3.1. General Instructions

The General Instructions, issued by the federal government, have been widely reprinted and are easily accessible.^[23][23]

Until 1851, individual deputy surveyors carried out their contracts to survey townships under instructions issued by George W. Jones, the Surveyor General of Wisconsin and Iowa, on May 28, 1846.^[24][24]

Sometime in 1851 the new Surveyor General, George B. Sargent, issued new instructions. Just how many deputies carried out surveys under those instructions is not clear. On April 23rd 1851 the Commissioner of the General Land Office sent Sargent a set of instructions that had been issued as a Manual of Instructions to govern the surveys in Oregon Territory, and directed him to use it in establishing closing corners on correction lines.^[25][25] The following year, on July 10, 1852, the Commissioner directed him to adopt the Manual for all surveys in Minnesota and the next year Sargent’s successor as Surveyor General, Warner Lewis, was given the same directive.

On February 22nd 1855 the General Land Office issued a revised version of the 1851 Oregon Manual. This revised and expanded Manual became the standard set of instructions for deputies
throughout the United States. In 1862, Congress enacted legislation that made the Manual part of every contract made between the Surveyors General and the deputies.

2.3.2. Special Instructions

Less well known are the special instruction that each deputy was given, directives from the Surveyor General to every deputy with whom he had made a contract, usually before the fieldwork began. [26] Special instructions, then, relate to a particular contract awarded to a particular deputy at a particular time to carry out a particular surveying task. A working definition of “Special Instructions” was adopted; “Any letter sent by the Surveyor General to a deputy while the deputy was engaged in fulfilling a contract.” [27] A distinct type of Special Instructions are those labeled as “special instructions” issued by the Commissioner of the General Land Office to the Surveyor General. [28]

Special Instructions are clearly identified with a particular contract and a particular deputy and a particular area. They would necessarily be issued during the time a deputy was engaged in that contract. [29]

The special instructions were each in the form of a letter to the deputy surveyor and contained: a list of the township and ranges included in the contract; whether township or subdivision; places of beginning and places of ending; instructions as to connections with adjacent surveys; diagram showing pertinent data for the areas already surveyed; copies of general instructions …. [30]

The instructions included the date the fieldwork was to be completed and the rate of compensation for the work. Most relevant, from the point of view of the modern land surveyor, they could include directives that complemented and supplemented other directives contained in the General Instructions that the Surveyor General gave all deputies to whom he awarded contracts. They may contain information that he received from the Commissioner of the General Land Office.

The special instructions are very elusive. They are contained in the correspondence files of the various individuals involved in carrying out the surveys, namely the Commissioners of the General Land Office, the Surveyors General, and the deputies who actually established the monuments in the ground and connected them with lines.

These instructions are contained in the voluminous correspondence files kept by the Surveyors General of Wisconsin and Iowa and the Surveyors General of Minnesota and correspondence files kept by the Commissioners of the General Land Office. The “Letters Received”, as the name suggests, contains original letters received by the respective officers. The “Letters Sent” contains transcribed copies of the letters that were sent. For every letter in “Letters Received” in the files of the Commissioner of the General Land Office from the Surveyor General there should be a transcribed copy in the “Letters Sent” in the files of the Surveyor General. (Figure 2.3.) The corollary is also true. Most importantly, the original letters often contain enclosures and are therefore much preferred in documenting instructions. [31]
There is another set of instructions that need to be mentioned. The Surveyors General were in constant communication with the Commissioners of the General Land Office. Much of the correspondence between them dealt with routine administrative matters but there were letters containing important instructions concerning how the deputies under the supervision of the Surveyors General should carry out their surveying duties. Some of the instructions were sent to all Surveyors General. Some were limited to one particular Surveyor General.

The Act of 1862 clearly spelled out the role of these Commissioner’s instruction, called additional instructions in Figure 2.4.

(T)he printed manual of instructions relating to the public surveys, prepared at the General Land Office, and bearing date February twenty-second, eighteen hundred and fifty-five, the instructions of the Commissioner of the General Land Office, and the
special instructions of the surveyor general, when not in conflict with said printed manual, or the instructions of the said Commissioner, shall be taken and deemed part of every contract for surveying the public lands of the United States.[32]

The “Instructions Circular,” which supplemented the 1855 Manual of Surveying Instructions used exactly the same words as the statute. [33]

Clearly, then, there would seem to be a hierarchy of instructions; the Manual or general instructions, followed by the Commissioners instructions, and the special instructions. The difficulty is trying to ascertain whether particular special instructions derive from the Commissioner instructions.

2.4. Record Locations

The records relating to the public land surveys in Minnesota are physically housed in the National Archives in Washington D.C., in the Iowa State Archives at the State of Iowa Historical Library in Des Moines, Iowa, and in the Minnesota State Archives at the Minnesota History
Center in St. Paul.\textsuperscript{[34]} In each repository, there exists a large variety of records that might contain instructions so the project necessarily involved making an inventory of relevant records to provide greater specificity in terms of what record collections might contain relevant instructions.\textsuperscript{[35]}

These records have been preserved and made accessible, through finding aids, catalogs or indexes, describing where they are stored in three locations.

The records were sampled and their condition and status for digital reproduction, such as quantity, quality, and accessibility, assessed.
CHAPTER 3. THE RECORDS AT THE STATE OF IOWA HISTORICAL LIBRARY
The relevant public land surveying records are those associated with the earliest public land surveys in Minnesota, those carried out from late 1847, when the deputies first crossed the St. Croix River under the supervision of the Surveyor General of Wisconsin and Iowa, until early 1858, after Congress established a surveying district that coincided with the future state of Minnesota. These records have previously been described. [36]

Since then the records have been reorganized and now comprise part of the Secretary of State Land Records, Record Group 81, which includes all the records of the General Land Office for Iowa, including those concerning the Surveyors General of Wisconsin and Iowa. There is no electronic index to these material. The only written guide is a looseleaf binder Preliminary Guide to State Government Records (Iowa) Secretary of State Land Records. What follows has been extracted from that guide. The location information reflects the current arrangement of the records. The arrangement could be changed, particularly if they are used extensively.[37]

The bulk of the relevant records comprise the correspondence between the Commissioners of the General Land Office and the Surveyors General and between the Surveyors General and the deputies employed to carry out the surveys. There are also letters to and from other individuals interested in various aspects of the surveys.[38]

3.1. Correspondence Files. Letters Received by the Surveyors General

The letters received by the Surveyors General consist of letters, usually 1-3 pages, folded into three. (Figure 3.1) On the back of the folded material is a note describing the sender, the date, and the subject of the letter. (Figure 3.2) These are stored in eight file boxes, partly by date, partly by subject and partly by geographic area. The letters are legible but ease of understanding them depends on the handwriting of individuals.

The letters deal with a variety of subjects. Particularly relevant are those that concern the surveys in Minnesota. A few of these letters from deputies contain diagrams showing specific features of the surveys. (Figure 3.3, 3.4,) Some, obviously in response to a communication from the Surveyor General, make changes to the field notes that had already been submitted. The utility of these letters may depend upon finding the original field notes submitted by the deputy and comparing those with the changes made in the letters.

Current Arrangement.

| From deputy surveyors 1841-1850 | Box 06 Location 35/49 |
| From deputy surveyors 1851-1852 | Box 04 Location 35/49 |
| From deputy surveyors 1853-1880 | Box 05 Location 35/49 |
| From deputy surveyors 1839-1881 | Box 53 Location 35/37 |
| From the Commissioner of the General Land Office 1843-1849 | Box 52 Location 35/56 |
| From the Commissioner of the General Land Office 1850-1853 | Box 63 Location 35/58 |
| From the Commissioner of the General Land Office 1852-1856 | Box 60 Location 35/58 |
| From the Commissioner of the General Land Office 1857-1863 | Box 61 Location 35/58 |
Figure 3.1. The Form of the Letters Received in the Iowa State Archives.
CIRCUIT.

GENERAL LAND OFFICE,

APRIL 8th, 1847.

Sirs:

All official returns, communications, and letters on business of every kind, sent to the General Land Office, will be folded in the form of this circular, and endorsed in a plain, neat handwriting, with the name of the office; the place from whence sent; the date of transmission; a brief statement of the contents; and signed by the writer with his official title; as near as may be, in the manner indicated by the form endorsed hereon; and then enclosed in a separate wrapper, carefully sealed up, and addressed to the Commissioner of the General Land Office, at Washington City.

When there are more papers than one enclosed in the same wrapper, each paper should be separately endorsed, as to the nature of its contents, and numbered.

A strict observance of this rule will be expected in future, as it greatly promotes the convenience of the Department, and insures more prompt attention to the communications thus folded and endorsed.

Very respectfully, your obedient servant,

Richard M. Young
Commissioner.

Figure 3.2. The Form of the Letters Received in the Iowa State Archives.
Figure 3.3. Maps in Letters Received in Iowa State Archives.
Figure 3.4. Letters Received in the Iowa State Archives Showing the First Surveyor General’s Office in St. Paul.
Example. Box 05 Correspondence Files letters received from deputy surveyors 1853-1880.[39]

<table>
<thead>
<tr>
<th>Date</th>
<th>Name/Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 5 1853</td>
<td>County surveyor WI</td>
</tr>
<tr>
<td>Aug 17 1853</td>
<td>Neely*</td>
</tr>
<tr>
<td>Sept 22 1853</td>
<td>Neely examinations of Norris</td>
</tr>
<tr>
<td>Sept 23 1853</td>
<td>Ball returns</td>
</tr>
<tr>
<td>Nov 28 1853</td>
<td>E S Norris returns</td>
</tr>
<tr>
<td>April 1 1854</td>
<td>Neely report tsp exteriors</td>
</tr>
<tr>
<td>May 16 1854</td>
<td>Yerby</td>
</tr>
<tr>
<td>June 27 1854</td>
<td>Neely report township exteriors</td>
</tr>
<tr>
<td>July 10 1854</td>
<td>William H. Howard Marshall County IA</td>
</tr>
<tr>
<td>July 29 1854</td>
<td>G K Warren transcontinental railroad wants measures</td>
</tr>
<tr>
<td>Nov 15 1854</td>
<td>G K Warren wants measurements</td>
</tr>
<tr>
<td>Nov 28 1854</td>
<td>Stuntz opinion of surveys</td>
</tr>
<tr>
<td>Dec 7 1854</td>
<td>Neely report tsp exteriors</td>
</tr>
<tr>
<td>Aug 10 1855</td>
<td>Yerby problems</td>
</tr>
<tr>
<td>Feb 5 1855</td>
<td>Location of ¼ posts on township lines, IA</td>
</tr>
<tr>
<td>July 23 1855</td>
<td>Islands determined as swamps</td>
</tr>
<tr>
<td>June 9 1856</td>
<td>Burt regarding MN reservation boundary surveys</td>
</tr>
<tr>
<td>Sept 27 1856</td>
<td>Burt contract</td>
</tr>
<tr>
<td>Oct 10 1856</td>
<td>Burt surveying with solar compass</td>
</tr>
</tbody>
</table>

*Names refer to deputies who also worked in Minnesota.

3.1.1. Future Work

There is no impediment to scanning any of these materials except the need to handle them with care. These letters consist of sheets of paper and can be copied by photocopier and scanner.[40] They can also be photographed with a digital camera. All should be photographed in color.

3.2. Correspondence Files. Letters Sent by the Surveyors General

The letters sent by the Surveyors General consist of leather-bound letterbooks into which were transcribed copies of the letters sent. (Figure 3.5) These letterbooks, measuring approximately 20 x 12 inches and containing 300 pages, are quite fragile although the individual letters are legible.

Most attention was focused on the letters sent to individual deputies that received contracts to work in Minnesota Territory.[41] This material was extensively used by J. S. Dodds and other to detail the special instructions given to the deputies who worked in Iowa.[42] There are numerous letters relating to the surveys in Minnesota Territory in these materials. Taking Dodds inclusive approach virtually all such letters could be called special instructions.[43]
Figure 3.5. Letters Sent Letterbooks in the Iowa State Archives.
Figure 3.6. Letters Sent in the Iowa State Archives. (The digital image is easily read)
In addition, there are other letters that may concern the surveys in Minnesota. (Figure 3.6) For example, there are several in which the Surveyor General provides instructions to individuals not in Minnesota on how to subdivide sections and find missing corners. There are also letters that concern islands surveys in general that may well apply to Minnesota. There are a large volume of letters through which the various parties communicated. Such parties include those involved in the actual surveys, such as the Commissioners of the General Land Office, the Surveyors General, and the deputy surveyors, and other interested parties, such as county surveyors, land district officers, and members of Congress seeking information about the surveys.

Some of the letters contain reference to enclosed information and diagrams, which were usually not found.

Arrangement. [44]

<table>
<thead>
<tr>
<th>Volume</th>
<th>Date Range</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume C</td>
<td>June 4, 1846 – November 2, 1848</td>
<td>Location 24/12</td>
</tr>
<tr>
<td>Volume D</td>
<td>October 18, 1848 – October 16, 1851</td>
<td>Location 24/12</td>
</tr>
<tr>
<td>Volume E</td>
<td>(missing) 1851 – May 9 1853</td>
<td>Location 24/12</td>
</tr>
<tr>
<td>Volume F</td>
<td>December 5, 1853 – April 25, 1857</td>
<td>Location 24/12</td>
</tr>
<tr>
<td>Volume G</td>
<td>April 9, 1857 – July 16, 1864</td>
<td>Location 24/12</td>
</tr>
</tbody>
</table>

Example. Letters Sent Vol. D.

<table>
<thead>
<tr>
<th>Page No</th>
<th>Date</th>
<th>Recipient</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>117</td>
<td>July 20 1849</td>
<td>Butterfield (GLO)</td>
<td>Separate records MN/WI</td>
</tr>
<tr>
<td>140</td>
<td>August 17</td>
<td>Ansell Briggs</td>
<td>Attack on Marsh also see p.146</td>
</tr>
<tr>
<td>178</td>
<td>Oct 4</td>
<td>GLO**</td>
<td>List of office workers.</td>
</tr>
<tr>
<td>179</td>
<td>Oct 5</td>
<td>GLO</td>
<td>Solar compass</td>
</tr>
<tr>
<td>184</td>
<td>Oct 15</td>
<td>GLO</td>
<td>Annual report</td>
</tr>
<tr>
<td>217</td>
<td>Nov 5 1849</td>
<td>John Smith*</td>
<td>Fort Gaines</td>
</tr>
<tr>
<td>226</td>
<td>Feb 5 1850</td>
<td>Whittlesey</td>
<td>Northern boundary IA also p.379 387 580</td>
</tr>
<tr>
<td>247</td>
<td>April 6</td>
<td></td>
<td>“Right and wrong”</td>
</tr>
<tr>
<td>250</td>
<td>April 9</td>
<td>GLO</td>
<td>Charges against Booth also p.255</td>
</tr>
<tr>
<td>261</td>
<td>April 31</td>
<td>Conkey</td>
<td>Problems</td>
</tr>
<tr>
<td>268</td>
<td>May 17</td>
<td>GLO</td>
<td>Standard chain</td>
</tr>
<tr>
<td>294</td>
<td>Aug 22</td>
<td>John Ryan</td>
<td>Falls of St Anthony</td>
</tr>
<tr>
<td>307</td>
<td>Nov 11</td>
<td>GLO</td>
<td>Annual report</td>
</tr>
<tr>
<td>335</td>
<td>Dec 2</td>
<td>GLO</td>
<td>Islands missed in original survey</td>
</tr>
<tr>
<td>345</td>
<td>Jan 13 1851</td>
<td>Owen</td>
<td>Geological surveys</td>
</tr>
<tr>
<td>361</td>
<td>March 20</td>
<td>Marshall</td>
<td>Special instructions island sec 23 T29NR24W (Falls of St Anthony) also p.362</td>
</tr>
<tr>
<td>368</td>
<td>April 17</td>
<td>GLO</td>
<td>Inventory of staff in office</td>
</tr>
<tr>
<td>382</td>
<td>April 28</td>
<td>GLO</td>
<td>Fire proofing</td>
</tr>
<tr>
<td>387</td>
<td>May 17</td>
<td>GLO</td>
<td>Commenting on where surveys should go</td>
</tr>
<tr>
<td>397</td>
<td>May 13 1851</td>
<td>Marshall</td>
<td>St Anthony</td>
</tr>
<tr>
<td>529</td>
<td>May 24</td>
<td>Wiltse</td>
<td>Examinations, see also p. 549 (instructions)</td>
</tr>
<tr>
<td>543</td>
<td>June 11</td>
<td>Marshall</td>
<td>Ditto</td>
</tr>
<tr>
<td>Date</td>
<td>Name</td>
<td>Entry</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>---------------</td>
<td>----------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>June 23</td>
<td>GLO Marshall</td>
<td>Deputies abandoning work also p.573</td>
<td></td>
</tr>
<tr>
<td>July 10</td>
<td>GLO John M Gay</td>
<td>Insufficient appropriations</td>
<td></td>
</tr>
<tr>
<td>July 19</td>
<td>Marshall</td>
<td>Ditto</td>
<td></td>
</tr>
<tr>
<td>July 28</td>
<td>John M Gay</td>
<td>Taylors Falls</td>
<td></td>
</tr>
<tr>
<td>July 28</td>
<td>Jarrett</td>
<td>Surveying lands overflowed by artificial means</td>
<td></td>
</tr>
<tr>
<td>Aug 11</td>
<td>GLO</td>
<td>More money</td>
<td></td>
</tr>
<tr>
<td>Aug 13</td>
<td>GLO John M Gay</td>
<td>Surveying problem</td>
<td></td>
</tr>
<tr>
<td>Aug 13</td>
<td>McKean</td>
<td>Special instructions examiner</td>
<td></td>
</tr>
<tr>
<td>Aug 28</td>
<td>Dunn</td>
<td>Special and general instructions</td>
<td></td>
</tr>
</tbody>
</table>

* Names refer to deputies who also worked in Minnesota.
** GLO Commissioner of the General Land Office.

### 3.2.1. Future Work

There is no impediment to scanning any of these materials except the need to handle them with care. The volumes of the fragile letterbooks in which copies of the letters sent have been recorded cannot be photocopied without an overhead copy machine and therefore scanning may be a problem without an overhead scanner. The books were easily photographed with a digital camera and this might be a viable alternative. The few maps will require high resolution. All images should be made in color.

### 3.3. Other Records That May Have Relevance to the Early Surveys in Minnesota

<table>
<thead>
<tr>
<th>Record Type</th>
<th>Date</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surveyor General Account Books (5 volumes)</td>
<td>1838-1866</td>
<td>Location 24/12</td>
</tr>
<tr>
<td>Reports of Examining Deputy</td>
<td>1852</td>
<td>Box 69 Location 35/59</td>
</tr>
<tr>
<td>Estimates of Surveys, Recommendations &amp; applications for positions</td>
<td>1832-1852</td>
<td>Box 21 Location 35/53</td>
</tr>
<tr>
<td>Estimates of Surveys, Recommendations &amp; applications for positions</td>
<td>1831-1864</td>
<td>Box 21 Location 35/52</td>
</tr>
<tr>
<td>Recommendations (2 boxes)</td>
<td>1850-1935</td>
<td>Box 8,9 Location 22/2/7</td>
</tr>
<tr>
<td>Surveys, appraisals, and sales of abandoned river channels</td>
<td>1850-1935</td>
<td>Location 8/44</td>
</tr>
<tr>
<td>Contracts &amp; Bonds (4 boxes)</td>
<td>1831-1864</td>
<td>Location not noted</td>
</tr>
<tr>
<td>Oaths, clerks</td>
<td>1840-1865</td>
<td>Box 7 Location 22/2/7</td>
</tr>
<tr>
<td>Oaths, deputies and assistants (6 boxes)</td>
<td>1833-1863</td>
<td>Box 1-6 Location 22/2/9</td>
</tr>
<tr>
<td>Instructions to Surveyors, IA/MN boundary</td>
<td>1850-1853</td>
<td>Box 63 Location 35/58</td>
</tr>
</tbody>
</table>
CHAPTER 4. THE RECORDS AT THE MINNESOTA HISTORY CENTER
The office of the Surveyor General of Minnesota was established in 1857. It was closed in December 1908 and the records transferred to the custody of the state. Today, the records comprise part of the Minnesota State Archives kept by the Minnesota Historical Society in the Minnesota History Center in St. Paul. These records are described in A Guide to the Records of Minnesota’s Public Lands issued by the Minnesota Historical Society in 1985, the relevant pages of which are attached to this report as Appendix D. The records are catalogued under the heading “U.S. Surveyor General,” in the State Archives Notebooks – the principal finding aid for virtually all archive material in the History Center. (Figure 4.1) The following report draws heavily on this finding aid.

![The Minnesota State Archives](image)

**Figure 4.1. The Minnesota State Archives.**

The majority of the records are stored in file boxes 14x10x12 inches. Additional filing is provided by labeled, legal-sized folders. Plats and other maps are stored in flat boxes, sometimes in folder.

The Surveyors General of Minnesota, like other Surveyors General around the nation were in constant contact with the deputy surveyors, who carried out the fieldwork, and the Commissioner of the General Land Office, who supervised the activities of all Surveyors General.

**4.1. Correspondence Files 1854-1908 (11 boxes and 9 folders in partial box)** These records comprise the correspondence between the Surveyors General and the Commissioners of the General Land Office and between the Surveyors General and the deputies. There are also letters to and from other individuals interested in the process of surveying public lands.
4.1.1. Letters Received, 1857-1907. (50 v. in 7 boxes and 9 folders) Letters received by the Surveyors General in St. Paul. The letters were sent by three main groups, the General Land Office personnel – particularly the Commissioner – deputy surveyors, and private citizens and
corporations. The letters concern all aspects of the public land surveys. Most of them have been bound into letterbooks.

Letters from the General Land Office deal with such issues as; the annual appropriations for surveying in Minnesota, instructions to the Surveyor General and deputy surveyors, requests and authorizations to survey particular parcels, surveying Indian reservations and railroad lands, hiring and paying deputy surveyors and office staff; approving or rejecting completed surveys, timber harvesting on public lands, contested surveys, and a large volume of routine administrative correspondence – acknowledging letters and reports received and accounts paid. There are letters from the registers and receivers of land district offices.

Deputy surveyors' letters, often from field camps, include; reports on their progress, requests for instructions, or an extension of time, or advance payment, and inquiries about employment. Some letters from deputies contain diagrams showing features of a particular survey. Some, obviously in response to a letter from the Surveyor General, make changes to the field notes that had already been submitted.

Letters from others, individuals and corporations, consist of petitions to have particular parcels surveyed, allegations of inaccurate surveys, inquiries about the progress of the surveys, preemption rights, and the availability of land, and applications for employment. Letters also include inquiries from county surveyors, private surveyors, and land agents.

Several letters were photographed as examples of the materials.

111.E.8.10F Box 1. Vols. 44-51, 1857-1864. Letterbooks, 11 X 8 inches, cloth with leather corners and spine, comprising original handwritten letters stitched together as a book. One volume per year, no index. Very fragile and cannot be laid flat.

111.E.9.1B Box 2. Vols. 52-59, 1865-1872 Letterbooks, 11 x 8 inches, cloth with leather corners and spine, comprising original handwritten letters stitched together as a book. One volume per year, all indexed. Vol. 52 also contains an additional index of letters received from the Commissioner of the General Land Office. The binding obscures part of the text and will prevent the book from being laid flat The letters are written on a variety of paper types, white and blue, lined and unlined. The book includes a bound telegram.

111. E.9.2F Box 3. Vols.60-68, 1873-1881


111.E.9.4F Box 4. Vols.76-80, 1889-1893

111.E.9.5B Box 5. Vols. 81-96, 1894-1899

111.E.9.6F Box 7. Vols. 87-93, 1900-1906
4.1.2. Future Work

There is no impediment to scanning any of these materials except the need to preserve them. Many of the books will not lie flat and the binding obscures some detail. The letters can be photographed with a digital camera. Many of the letter from the Commissioner of the General Land Office to the Surveyors General can also be found in the microfilm M27 and in the National Archives collections.

4.1.3. Letters Sent, 1854-1908 (4 boxes) Handwritten and letterpress copies of letters, all in bound volumes sent by the Surveyors General in Detroit (1854-1857) and St. Paul (1857-1908) relating to surveys in Michigan and Minnesota. (Figure 4.3, 4.4) Like the “Letters Received” the correspondence falls into three major categories; General Land Office personnel, deputy surveyors, and the general public.

Letters to the Commissioner of the General Land Office form the largest part of the material and cover the same topics as the letters received listed above. Some are reports on the progress of the surveys – including those involving Indian reservations and railroad lands; some accompany the quarterly and annual accounts. A large volume of the letters accompanied material which needed to be approved by the Commissioner, for example the field notes, plats and pay vouchers. Some contain requests to survey particular parcels in response to petitions from individuals. Some clearly respond to inquiries from the Commissioner concerning allegations of inaccurate surveys and illegal timber cutting. Other letters respond to the inquiries of the registers and receivers of district land offices. There is a great deal of routine office correspondence.

Letters to the deputy surveyors concern contracts, instructions on how to survey, payment for work completed, responses to request for an extension of time, and allegations of inaccurate or improperly conducted surveys.

Letters to individuals, such as county surveyors, private surveyors, and land agents, respond to requests; to survey particular land, especially islands, to inquiries about the progress of the survey, preemption rights, and the availability of land, to allegations of inaccurate surveys, and to requests for employment.

Vols. J-Q, 1854-1889 are leather-bound books, approximately 20 x 12 inches, containing 500 pages. They are heavy and the binding quite fragile. The letters in these volumes are handwritten on heavy paper and legible. Most volumes are indexed by recipient.

Vols. 1-19, 1884-1908 are cloth bound books with leather reinforced corners and spine. These books contain both handwritten and typewritten letters. The letters are written on onion-skin copy-paper. Some of the handwritten letters are legible, some are not. The typewritten letters are easily legible. Most volumes are indexed by recipient.
Figure 4.3. File Boxes of Letters Sent in the Minnesota State Archives.
St. Paul, Minn. August 14, 1853

Charles E. Davis Esq.
Deputy Surveyor

Sir: In executing surveys under your Contract No. 36 with this Office the following special instructions must in all cases be strictly complied with:

The work contracted in your contract must be executed by you in person or under your immediate personal supervision in the field.

You will in all respects strictly adhere to the established system of public survey and fully comply with the requirements contained in the Instructions to Surveyors General" dated May 3, 1851, a Copy of which has been furnished you.

By direction of the Commissioner of the General Land Office, you are hereby advised of the following modifications in said Instructions, viz. "The specimen field notes of subdivisional survey contained in the Instructions to Surveyors General dated May 3, 1851, ..."

Vol. J 1854-1858. June 7, 1854 – April 13 1854 contain copies of letters from Leander Chapman, Surveyor General of Territory NW of the Ohio River, followed by copies of letters from Surveyor General Charles L. Emerson in Detroit (see pp.318-339) First letter from Emerson from St Paul, dated May 26, 1857. Some 80 pages in this volume were photocopied and given to the Technical Liaison.


111.E.8.8F. Box 3. Vols. 1-12 July 1884 –December 1900. 12 x 8 inches cloth letterbooks approximately 500 pages, onion-skin very fragile.

Vols. 1-10 Handwritten,

Vol. 1 Index, alphabetical by recipients,
Vols. 2, 3, 4 No index,
Vols. 5, 6, 7, 8 Index, alphabetical and chronological,
Vol. 9 Index, alphabetical,
Vol. 10 Index, alphabetical and chronological.

Vols. 11-12 Typewritten Index, alphabetical and chronological.

Also in the box is an untitled volume, described in finding aids as “Chief Clerk’s Book” Leather-bound volume, slightly smaller than the other books. Includes handwritten and typed letters on onion-skin from the chief clerk and the Surveyor General.

111.E.8.9B. Box 4. Vols. 12-20. March 1899 – November 1908 12 x 8 inch cloth letterbooks approximately 500 pages, onion-skin, very fragile. All typewritten.


Vols. 13, 14 No index.

Vols. 15 – 20 No index. Some handwritten letters included.

The last letter was sent by Surveyor General Eli S. Warner on December 30, 1907. Subsequently, correspondence was handled by A. W. Barber, detailed Clerk General Land Office in charge, until February 11, 1908. Finally, name illegible, Clerk of Public Surveys, State Capitol answered letters until November 28, 1908.
The following examples of Letters Sent, all of which must be considered “special instructions”, would seem to cover the range of possibilities that the deputy received further instructions about how to carry out his contract from the Surveyor General.

At one end of the range is a letter suggesting that there were no additional instructions.

Surveyor General Charles L. Emerson to H. P. Van Cleve, June 26 1857,

   As this is regular and plain work, you will require no instructions for your guidance, than the copy of printed General Instructions handed to you herewith, which you will carefully examine that you be able to fully comply with all of its requirements.

At the other end of the range is a letter stating that there are additional instructions. In this particular case, the instructions are attached to the letter.

Surveyor General Eli S. Warner to Albert T. Armstrong

   In addition to printed instruction in Manual of Instructions to Surveyors General, dated January 1st 1902, furnished you, the following special instructions are issued for your guidance in the execution of surveys under your contract No. 124 of this date.

More ambiguous is a letter that suggests a situation in which the deputy might have received additional instructions but whether he did or not is not certain. Thus, Surveyor General Charles L. Emerson to Silas Barnard, June 22, 1857

   This office not being in possession of the original field notes of the surveys that have been executed in the Territory, I am not able to hand to you with your contract of this date, notes of the section and quarter section corners on the township lines surrounding the several townships embraced in your (contract) for subdivision, but it is not supposed that you will suffer any consequence by not having such notes.

4.1.4. Future Work

There is no impediment to scanning any of these materials except the need to handle them with care. The binding of every book is quite fragile and the paper in many of them is also fragile. Digital images will require an overhead scanner. The books were easily photographed with a digital camera and this might be a viable alternative.

4.2. Other Surveying Records in the State Archives

The Letter Sent by the Surveyors General to the deputies are the most relevant records because they contain the Special Instructions. However, there are other records that give reference to the existence of instructions. These could be usefully imaged. No estimation can be given to the
number of records that might provide such a reference. The following introduces collections of these records.

Figure 4.5. Notation regarding Special Instructions on Township Plat.

111.E.10.1B Contracts for Surveys, 1857-1907 contains a bound volume and 10 folders. The bound volume, apparently an index to the contracts awarded and special instructions issued, 1857-1907.[20] The 12 x 6 book contains blue-lined pages and is titled “Record of Contracts & Instructions for Surveys in Minnesota from June 1857 showing the Field Office Work” is clearly a workbook record, and only contains information 1858-1865.

The volume contains several tables.

- First table “Contracts for surveys in Minnesota under the appropriations for the fiscal year ending 30th June 1858.”
- Last table concerning the contracts under the appropriations for the fiscal year ending June 30, 1865.

Each table includes the following columns,

- Name of deputy,
- Date of contract or instruction,
- Description of work to be done,
- Date notes returned,
- Date Commissioner’s plats and transcripts of notes transmitted,
- Date Register’s plats and descriptive notes transmitted.

There are several other columns which rarely contained information, labeled “record notes”, “record descriptive sheets” and “remarks”. Although there are references, by date, to special instructions, the instructions themselves are not contained in the volume.
Contracts for Surveys, 1881-1907 (10 folders) Contracts between the Surveyor General and deputies for surveying specified tracts of public land (1881-1907), and arranged in chronological order, some in numbered folders, approximately 14 x 10. The folders do not include reference to all the contracts awarded. The number reflects the number appearing on the contract itself.

Some folders contain instructions with contracts and bonds.

Information contained in the contracts includes,

- Name of deputy,
- Date of contract,
- Date work was to be completed,
- Description of the work to be done,
- Rate of pay,
- Estimated cost of the survey.

These records include contracts awarded and Special Instructions from the Commissioner of the General Land Office to the Surveyor General and the Surveyor General to deputy surveyors to survey islands or other designated parcels. Some contracts are accompanied by additional documents relating to the survey. These documents include petitions from settlers to the Surveyor General requesting that a particular tract be surveyed, correspondence between deputy surveyors and the Surveyor General, supplemental instructions – that could be termed Special Instructions, the oaths of the deputy surveyor, and diagrams of the area to be surveyed.

The contents of the folders vary. All contain contracts; many contain other information including Special Instructions. Not all Special Instructions are written on paper with the Surveyor General’s letterhead. As examples;

1. Contract No. 1 June 30, 1881 George F Hamilton contains the contract only.
2. Contracts, No. 38, October 3, 1883 George F. Hamilton; No. 40, June 13, 1884 Day F Stacy; No. 43 September 15 1884 George A Klein, and No. 45 February 25 1885 contain contracts and special instructions. In addition contract No. 40 contains a General Land Office circular.
3. Contract No. 41 June 16 1884 contains letters but no special instructions.
4. Special instructions June 17, 1884 to N. G. Highstrom to survey an island.
5. Folder “Special Instructions April 30, 1884” concerns an island survey.

There are other letters concerning island surveys.

112.D.2.8F (ov) Record of Contracts and Instructions for Surveys, 1874-1907 (1 v.) Letterbook approximately 181/2 x 11 inches, leather-bound. Titled “Record of Contracts for Surveys in Minnesota showing progress of same and condition of office work pertaining thereto,” it is apparently a complete, detailed listing all contracts awarded in Minnesota, July 13, 1874 to July 17, 1907. Notation of special instructions usually, but not always refers to island surveys.

Pages 1-14 lists contracts in the same form as 111.E.10.1B,
- Deputy,
- Date (of) contract or instructions,
- Description (of work),
- Date notes returned,
- Date transcripts and plats transmitted to GLO,
- Date of examination of register’s plat and descriptive notes.

There are three sequences of numbered contracts.

A. No. 1 January 3, 1881 to George F. Hamilton – No. 47 April 30, 1881 John W. Young
No contracts awarded April 1885-April 1887.

B. No.1 April 6, 1887 George A. Ralph – No. 28 May 20, 1891 A D F Gardner
(One contract to J B Salisbury March 21, 1889 to survey part of the 15th standard parallel, not numbered but clearly should be No. 5, contains a note “for substitution see special instructions July 5, 1889”).

C. No. 1 July 31, 1891 Lyman Arm – No. 124 March 19, 1907 Albert T. Armstrong.

Also included are notations referring to special instructions to complete surveys that had been awarded previously e.g. John E. Mulligan and W. M. Everts were given Special Instructions November 24, 1903 to correct and complete contract No. 89 awarded to B. Keegan.

While these other records do not describe the actual Special Instructions they might provide a check on whether there are instructions or not. When combined with the published annual reports, which include tabular information regarding awarded contracts, a comprehensive list of awarded contracts by date and by deputy could easily be made.

Our “knowledge” of the public surveys comes from the records that have been preserved/stored and are accessible. If the records have not been preserved/stored or are not accessible then our knowledge cannot be complete. [54] Ideally, records are preserved/stored mimicking the organization that created them. In such cases, the catalog or finding aid also reflects the organization. Sometimes this is not possible to preserve/store the records that way because archivists cannot be specialists in every topic and because every archive faces practical problems, especially concerning storage. Sometimes a portion of the record collection is housed in different places because of the jurisdiction over the records.

As this report describes, the Minnesota History Center houses a portion of the public land survey records for the state. Another portion is housed at the Iowa State Archives and a third portion housed at the National Archives. Some of the public land surveys records now at the Minnesota History Center were housed in the Secretary of State’s office for many years and only recently, in late 2006, transferred to the History Center. Some of the records were housed in the Minnesota Department of Natural Resources vaults and transferred to the History Center when the DNR moved from the Armory to new offices on Lafayette Road. [55]
CHAPTER 5. The Records at the National Archives
The records of the General Land Office, the federal real estate agency which administered the public land surveys, comprise part of the Record Group 49, Records of the Bureau of Land Management, the agency that succeeded the General Land Office in 1946. Here I am concerned with a subset of that Record Group, those records concerning the public land surveys.

As in the previous two chapters, this chapter focuses only on a portion of those records, namely the correspondence files contained in Record Group 49. These records, comprising the “Letters Sent” from Division “E”, the Surveying Division of the General Land Office, and “Letters Received” by Division “D”, the Mail and Files Division, and Division “E”, the Surveying Division, were identified as the most likely to contain the instructions relevant to the Surveyors General and their deputies.

The relevant records comprise four collections

- **Letters Sent by the Commissioners of the General Land Office.** Copies of letters sent to individuals, including the Surveyors General of Wisconsin and Iowa 1846-1857, and the Surveyors General of Minnesota 1857-1908. These documents are titled “Letters Sent by the General Land Office to Surveyors General, 1796-1901.” They have been photocopied as Microfilm Publication M27. [56] Appendix E contains an Index to the relevant reels containing information about Minnesota surveys along with a sample of the contents of one reel.[57]

- **Letters Received by the Commissioners of the General Land Office from individuals, including the Surveyors General of Wisconsin and Iowa 1846-1857, and the Surveyors General of Minnesota 1857-1908.[58]**

- **Letters Received by the Commissioners of the General Land Office from individuals, including the Surveyors General of Minnesota, 1879-1908.[59]**

- **Other material.** Records generated by the General Land Office personnel, either sent to various individuals or stored in the General Land Office and records received by the General Land Office from individuals.

These collections concern the various operating divisions of the General Land Office and have been catalogued and indexed in a loose leaf binder to be found in the Reference Room on the ground floor of the National Archives, see Appendix F. The catalog, which identifies the location of each record collection, contains a variety of handwritten notes and the researcher is strongly advised to check the meaning of these notes with an Archivist in the Reference Room. The numbers in this book may not be correct. As a consequence, anyone looking at this finding aid should check for the current locations in other looseleaf volumes and with the Archivists. The operating divisions intimately concerned with the public land surveys are,

- **Division "A",** also known as the Chief Clerk's Office, exercised general supervision over the activities of the General Land Office and its personnel, equipment, expenditures, and requisitions. The Chief Clerk also supervised appointments and promotions, leaves of absence, and officers' bonds and conducted correspondence
with local land officers and the Surveyors General. He also inspected the offices of Surveyors General. (Appendix F pp. 6-7)

- **Division “D”, the Mail and Files Division.**[^60]

- **Division “E”, the Surveying Division**, headed by a Principal Clerk of the Surveys who exercised general supervision over all public surveys and resurveys, including those made of Indian reservations, national forests, national parks, reclamation projects, railroad land grants, private land claims, town sites, and military reservations. (Appendix F pp. 34-38)

Only the items circled in Appendix F were examined. Many of the other items in the Appendix concerned states other than Minnesota, or were created before 1840 or after 1908, therefore may have little relevance to the surveys in Minnesota.

**5.1. Division A. Chief Clerk’s Division** (Appendix F pp.6-7)

Only one record was examined.


Absent any real information that could identify particular sets of documents being useful there seems to be no reason why the records of this division would be important.

**5.2. Division D. Mail and File Division** These records were discovered late in the research project and the description that follows must be considered a very preliminary statement.[^61]

Index books organized by state. Each volume reviewed has a section for Minnesota. Pages are column-formatted with the following column titles: When received; Division; Address; No.; Date of Letter; Subject. Letters received were apparently directed to the appropriate division of the General Land Office. Each letter was given a document number.

**Entry 175. Registers of Letters Received from Surveyors General of the Public Land States**

- Minnesota entry date range: Sept. 3, 1879 to Jan. 12, 1880. There were entries for 110 letters received from the Surveyor General in St. Paul. Of those 25 letters were directed to Division E.

- Minnesota entry date range: Feb. 5, 1881 to Nov. 12, 1881.

- Minnesota entry date range: Dec. 17, 1881 to Oct. 31, 1882.
Entry 180-A. Letters Received, Arranged by last name of Sender 1801-45 Segment (Miscellaneous Letters Received from Private persons, Land Entrymen, Attorneys, and Other Persons, 1801-1909).

Entry 180-B Letters Received, arranged numerically by Year 1845-53 Segment (Miscellaneous Letters Received from Private persons, Land Entrymen Attorneys, and Other Persons, 1801-1909).

Entry 180-C Miscellaneous Letters Received from Private persons, Land Entrymen Attorneys, and Other Persons, 1853-56 Segment (Miscellaneous. Letters Received from Private persons, Land Entrymen, Attorneys, etc. 1801-1909).

Examples

<table>
<thead>
<tr>
<th>Box</th>
<th>Year(s)</th>
<th>Document Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>215</td>
<td>1855</td>
<td>20500-21297</td>
</tr>
<tr>
<td>216</td>
<td>1855</td>
<td>21300-22299</td>
</tr>
<tr>
<td>217</td>
<td>1855</td>
<td>22300-23199</td>
</tr>
<tr>
<td>218</td>
<td>1855</td>
<td>23200-24199</td>
</tr>
<tr>
<td>219</td>
<td>1855-1856</td>
<td>24200-25199</td>
</tr>
<tr>
<td>220</td>
<td>1856</td>
<td>25200-26199</td>
</tr>
<tr>
<td>243-247</td>
<td>1856</td>
<td>47900-52698</td>
</tr>
</tbody>
</table>

Most of the correspondence in these boxes appears to be from District Land Offices and concerned issues dealing with selling surveyed land and issuing patents, etc.[62]

5.3. Division E. Surveying Division (Appendix F6-F10)

473 Indexes to Letters Sent by Division “E”, 1830-1850 (3 vols.)

Chronological list of letters sent to Registers & Receivers, Surveyors General, and others.

M27 Letters Sent to Surveyors General of Public Land States, 1796-1901 (44 vols.)

Chronological Copies of letters sent. These records have been microfilmed (M27). For detailed indexes to the relevant volumes, see Appendix E.

475 Register of Letters received from Surveyors General, 1816-1907

List of letters received.

477 Press Copies of Miscellaneous Letters, 1883-1908 (123 vols.) [63]

Copies of letters sent to various individuals.
Departmental Letters Sent, 1864-1903 (23 vols.)


Letters Sent to Examiners and Special Agents, 1882-1887 (1 vol.) Letterbook 11x15 containing approximately 500 pages. Letters sent to examiners and special agents 1882-1887. Alphabetical Index.

Special Letters Sent, 1876-1887 (2 vols.) Two volumes 11x16 leatherlike, each approximately 520 pages. Labeled on spine “Special Record Surveying Clerk” “Acts of 1840 & 1853” “GLO.”

Volume 1 Feb 12 1853 – Sept 2 1876. Alphabetical Index, additional indexes noted by state and by subject. Apparently an additional letterbook of letters sent by the Division, mostly to Surveyors General. None of the letters are relevant to Minnesota though letters to Surveyors General in MI, IL, FL, WI. Special instructions to deputies working west of the Fox River June 5, 1868 pp 275-278.

Volume 2 1876-1887.


“Dallas’s Index and Record of Special Files (1 vol.) Book containing Tabular Statement of and surveys and appropriated. Estimate for surveying FY 1860 by Stephen J Dallas, Clerk of Surveys.

Inventory of Property Charged to each Surveyor Generals Office and United States Land Office (1 vol.) Inventory. Mostly material concerning land district offices. Nothing noted for Minnesota.


Letters Received from the Surveyor General of Public Land States, 1826-1883 (117 boxes). Minnesota 1857-1879. (4 boxes) Bundles of letters filed chronologically. Various numbers inscribed on each of them, presumably referring to the numerical order in some sequence. Usually noted whether and when answered. Folded with the usual notation on the face. (Figure 5.1)
Figure 5.1. The Cover of Letters Received.

The letters contain information on a variety of subjects. Some merely accompany accounts or examinations, some contain references to diagrams and sketches, some contain such material, some do not. Also includes; requests for sketch of surveys, acknowledges receiving letters and instructions from General Land Office, estimate of appropriations, establishes salaries, and requests for contracts. In one letter, dated August 11, 1862 the Surveyor General of Minnesota asks whether the clerks in his office were liable to be drafted to serve in the Civil War. Some contain diagrams, sketches and other graphic information on separate pieces of paper folded in the letters, see Appendix C. Several of the letters were bundled together and labeled “Territorial Papers of Minnesota.”[65] Some of these materials may be duplicated elsewhere. The four boxes
are labeled; Minnesota 1857-1860; Minnesota 1861-1868; Minnesota 1869-1872; and Minnesota
1873-1879.

Field Notes of Examination of Surveys ca. 1870-1920. Minnesota (7 boxes) Box
12x13x6. The one examined contained approximately 40 reports of deputies awarded contracts
to examine fieldwork. 8½ x 14 books containing approximately 24 pages. Time period covered
late 1880s to 1893.

Omitted for this project were several records that might eventually prove useful. They were not
examined for the reasons stated.

Press Copies of Letters Sent to Surveyors General, 1872-1908. (242 vols.) The
relationship between these records and the records microfilmed as M27 is unknown.

Contracts and Bonds for United States Deputy Surveyors in Public Land States, 1850-
1910 (109 boxes). All original material relating to the Wisconsin and Iowa surveying district and
the Minnesota surveying district should be found in collections in the Iowa and Minnesota State
Archives.

Letters Received from the Surveyor General of Public Land States, 1826-1883 (117
boxes). Iowa 1834-1868. The letters covering the period 1846-1860 or so should be useful to
describe the Minnesota surveys. Copies of these materials relating to the Wisconsin and Iowa
surveying district should be found in the Iowa State Archives.

Island files (67 boxes) Relevant boxes are not known.[66]

5.3.1. Letters Received from the Surveyors General of Public Land States, 1826-1883 (509
above)

These letters appear to be key to understanding what the deputies did in Minnesota. From 1847
until 1908, the Surveyors General in St. Paul communicated with the Commissioners of the
General Land Office in Washington D.C. through the mail and occasionally a telegram. Some of
the letters were obligatory, such as those that acknowledged or answered a letter that the
Surveyor General had received from the Commissioner or those that accompanied the oaths,
contracts, bonds, field notes, plats, and the deputies’ accounts sent by the Surveyor General to
the Commissioner. Some letters were obviously discretionary, however. In these the Surveyors
General provided the Commissioner with information regarding the surveys or asked him for
some information.

Not surprisingly there is a relationship between these two groups and the records of
correspondence housed in the Iowa and Minnesota State Archives, described above and depicted
in Figure 2.2.

A considerable amount of time was spent examining and making copies of the letters in the four
boxes containing letters from the Surveyors General of Minnesota 1857-1879. These have been
given to the Technical Liaison. Copies of each of them should be found in the records catalogued as U.S. Surveyor General Letters Sent housed in the Iowa and Minnesota State Archives.

The letters are consistent in form and the reverse of each contained several pieces of information. (Figure 5.1) Most contain:

- The name of the sender, the date the letter was written, along with a summary of the letter’s contents. This information was provided by the sender.
- The date the letter was received in Washington along with one, and sometimes several, numbers that relate to the letter’s place in some, as yet unknown, sequence.
- A note whether the letter was acknowledged and/or answered and when.
- Additional miscellaneous notes, presumably thought appropriate by the filing clerk. Such a note might indicate the fact that a sketch was included in the letter.

Many of the “Letters Received” were responses to, “Letters Sent”, from the Commissioner of the General Land Office, or most likely the Principal Clerk of Surveys. Each letter refers to the letter to which it is responding. (Similarly, an answering letter, “Letters Sent” would identify the letter to which it was responding, “Letters Received”, and any other “Letters Received” or “Letters Sent” that were relevant.) Thus chains of letters can be constructed. (Figure 5.2)

![Figure 5.2. An Example of a Paper Chain.](image)

The contents of the letters are quite varied. Some letters were purely administrative. Many of these kinds of letter obviously accompanied the field notes, plats, and accounts that the Surveyors General was obligated to send to Washington. In every case the actual field notes, plats, and accounts are not in these records. Some letters request supplies. A considerable number contain information that would add detail to our knowledge of the actual surveys in Minnesota. Some even enclose corrections to field notes and original diagrams that amend township plats.
Several “Letters Received” have special significance, for example,

- The annual report sent by the Surveyors General \(^{67}\)
- The inventory of the Surveyor General’s office when a new Surveyor General was appointed.

5.3.2. Letters Sent to Surveyors General of Public Land States, 1796-1901 (M27, see Appendix E)

These are copies of the letters that were sent by the Principal Clerk, under the signature of the Commissioner of the General Land Office, to a variety of individuals.\(^{68}\) A majority were sent to particular Surveyors General and often concerned the myriad administrative details involved in surveying the public lands. Some concern the manner of carrying out surveys in a surveying district. Letters were also sent to a variety of others, to members of Congress and the Executive branch, including other General Land Office personnel, such as the register and the receiver of land district offices, to deputies and other individuals, including county surveyors, all with interests in surveying. The subject of these letters varies widely. Usually, these letters were in response to communications received from many of the same individuals. (Figure 5.3)
Specific instructions to surveyors general to do something or to order his deputies to do something.

Annual Instructions, issued by the Commissioner to the Surveyors General after the appropriations were made by Congress. In it the Commissioner described what funds were available and what should be surveyed in the following year.

Circulars were sent by the Commissioner of the GLO to all Surveyors General instructing them to do something. These circulars could concern any subject pertinent to surveying the public lands. There is no comprehensive listing of such circulars although there is an index to them for particular years, see Appendix E. vols. 41-43. Often circulars arose out of a letter to a particular Surveyor General or deputy. The relationship of these circulars to the actual instructions given the deputies needs exploring. Clearly circulars were important but whether, as a result of receiving them, the Surveyor General issued special instructions to include the information they contained is not known. C. Albert White has published a number of circulars some of which probably have relevance to surveys in Minnesota. Interestingly he described the Circular of June 1, 1864, directing that the 1855 Manual should be part of every contract and providing instructions supplementing the Manual, as “Instructions Circular.” Other circulars printed in White and also found in M27 are,

- July 28, 1866. Numbering of fractional lots.
- June 10, 1868. Island surveys when the Surveyor General’s office has been closed.
- May 6, 1871. Deposit surveys.
- July 13, 1874. Survey of meandered lakes when the Surveyor General’s office has been closed.
- April 17, 1879. When the plats are to be filed in the land district office.
- November 1, 1879. The method of subdividing sections.
- March 13, 1883. Restoration of lost and obliterated corners.
- November 1, 1879. How to subdivide sections.
- June 2 1887 How to subdivide sections.
- October 16 1896 Restoration of lost or obliterated corners and subdivisions of sections.

5.4. Letters to Individuals

Letters to and from individuals, other than the Surveyor Generals, are fairly numerous. Included are the deputies employed in Minnesota, for example George B. Wright, Ehud N. Darling, the Burts, and George Stuntz to name a few.

Letters to individuals not in Minnesota may have a bearing on Minnesota surveys. For example, on July 6, 1866, the Commissioner of the General Land Office J. M. Edmunds wrote to H. S. Hoover, Esq. of Waverly, Bremer Co. Iowa.

In your letter of the 16th ultimo you inquire how sections of the public lands should be subdivided. As you do not refer to any particular section, I assume that your
inquiry does not relate to peculiar or anomalous sections but to the regular sections containing 640 acres. The law prescribes the following rules for subdividing sections:

The section and quarter section corners established by the U.S. Deputy must stand as the true corners. To divide the sections into halves or quarters straight lines must be run from the established corners to opposite corresponding corners, the intersection of the lines so run will be the legal center of the section. The quarters may be again divided into half quarters or quarter quarters by straight lines run from points equidistant from the center of the section and the quarter section post to their corresponding opposite points equidistant between the section corners, and intersection of lines thus run will be the legal center point of the quarter section.[81]

Just why there are a large number of letters to individuals who are not deputies, is perhaps explained in a passage from the Manual of 1894, describing the relationship between the General Land Office and county surveyors,

The General Land Office assumes no control or direction over the acts of local and county surveyors in the reestablishment of extinct corners of original surveys. It follows the general rule that disputes arising from uncertain or erroneous location of original corners are to be settled by the proper local authorities or by amicable adjustment and to aid in this result it furnishes a circular pamphlet which is merely advisory and explanatory of the principles which should prevail in performing such duties.

Surveyors who have been United States deputies should bear in mind that in their private capacity they must act under somewhat different rules of law from those governing original surveys and should carefully distinguish between the provisions of the statute which guide a Government deputy and those which apply to retracement of lines once surveyed. The failure to observe this distinction has been prolific of erroneous work and injustice to land owners.

The circular on “Restoration of lost and obliterated corners” dated March 13, 1883 and the circular on subdividing a section dated June 2, 1887 are furnished to applicants.[82]

5.5. Carrying Out Research in the National Archives

Research in the National Archives is easy and convenient. While getting in and leaving through security and registering as a researcher is a little time-consuming, getting the original materials – retrieved at specific times throughout the day – and copying them is entirely DIY (Do It Yourself).

5.6. Future Work

There is no impediment to making digital images of any of these materials. The letterbooks that have been microfilmed are available for scanning with an overhead scanner. They can be
photographed with a digital camera and this might be a viable alternative. Some of the original letters should be found in the Letters Received in the Iowa State Archives of the Minnesota State Archives. The individual letters and the letterbooks can be scanned or photographed as necessary.
CHAPTER 6. RECOMMENDATIONS

The recommendations are divided into two groups; those that will require a large commitment of time and money and those that will require less time and money. The latter should be completed before the former.

First a caveat. There are two problems that must be overcome to produce a comprehensive digital collection of the Special Instructions relating to the public land surveys in Minnesota, which is the long range objective, one intellectual and one technical. Clearly not all letters between the Surveyors General and the deputies, should be considered Special Instructions and not all letters between the Commissioner of the General Land Office and the Surveyors General should be considered “additional instructions,” even with the most generous of definitions. All “Letters Sent” from the Surveyor General to Deputies are not Special Instructions and all “Letters Received” by the Commissioner of the GLO the from Surveyor General are not “additional instructions.”[83]. However to identify the relevant letters or the relevant pages in a particular letterbook would greatly expand the time necessary to copy the materials. Therefore an important recommendation is that all correspondence between the Commissioners of the General Land Office, the Surveyors General, and the deputies be imaged.

Digital cameras are allowed in each of the Archives and should be used to provide images of the records. For the most part, there are no impediments to taking photographs.[84] Digital photography is preferred over scanning because of the variety of the records – single page separate, single page bound in a book, multiple pages bound together with tape etc. Digital photography would avoid most questions of the preservation of the records.[85] High quality color images of the letters and letterbooks are easily readable.

6.1. Long Term

The following collections, from those described above, are considered most likely to contain the instructions controlling the operations of the deputies who surveyed the public lands in Minnesota between 1847 and 1908 and all relevant material – dealing with deputies carrying out work in Minnesota, should be photographed. The collections include Special Instructions sent by the Surveyor General to a deputy as well as “additional instructions” sent by the Commissioner of the General Land Office to the Surveyors General.

In the National Archives;

1. Four collections in the Administrative Records of the General Land Office, 1785-1955, comprising the records of Division “E”, the Surveying Division. [86]

   A. Letters Received from the Surveyor General of Public Land States, 1826-1883 (117 boxes). Original letters, usually 1-3 pages, folded into three, and filed in boxes.
• Iowa, 1834-1868. Letters dated between 1846 and approximately 1860 would be relevant
• Minnesota 1857-1879. (4 boxes)

Transcribed copies of these letters should be found in letterbooks as Letters Sent in the Iowa State Archives or the Minnesota State Archives.

B. Letters Sent to Surveyors General of Public Land States, 1796-1901 (44 vols.) M27, the relevant volumes of these transcribe copies of letters have been indexed, see Appendix E. The originals should be found as Letters Received in the Iowa States Archives or the Minnesota State Archives.

C. Press Copies of Letters Sent to Surveyors General, 1872-1908. (242 vols.) The relationship between these records and the above collection is not known.

D. Island Files (67 boxes) No description is currently available and relevant boxes are not known. These probably have little applicability to large parts of Minnesota.

2. One collection of letters in the files of Division “D”, the Mail and File Division of the General Land Office, has been discovered. Recent information, from Richard Fusick at the National Archives, indicates that the correspondence from Minnesota Surveyors General after 1880 are filed as miscellaneous letters sent to General Land Office Division “D”. Little information is currently available about this collection but the volume of material is likely very large and the information relevant to Minnesota surveys scattered throughout. [87]

In the Iowa State Archives three collections are important,

1. Correspondence Files. Letters Received by the Surveyors General. Original letters, usually 1-3 pages, folded into three, filed in boxes.

• From deputy surveyors 1841-1850
• From deputy surveyors 1851-1852
• From deputy surveyors 1853-1880
• From deputy surveyors 1839-1881
• From the Commissioner of the General Land Office 1843-1849
• From the Commissioner of the General Land Office 1850-1853
• From the Commissioner of the General Land Office 1852-1856
• From the Commissioner of the General Land Office 1857-1863

Transcribed copies of these letters sent by the Commissioner of the General Land Office should be found in letterbooks as “Letters Sent” in the National Archives. Transcribed copies of the letters sent by the deputies to the Surveyor General should be found in letterbooks as “Letters Sent”. [88]
2. **Correspondence Files, Letters Sent by the Surveyors General.** Indexed letterbooks containing transcribed copies of the letters sent.

- Volume C June 4, 1846 – November 2, 1848
- Volume D October 18, 1848 – October 16, 1851
- Volume E (Missing date) 1851 – May 9, 1853
- Volume F December 5, 1853 – April 25, 1857 \(^{[89]}\)
- Volume G April 9, 1857 – July 16, 1864

Original letters sent to the Surveyor General of Minnesota or the Commissioner of the General Land should be found as “Letters Received” in the National Archives or the Minnesota State Archives. \(^{[90]}\) Original letters sent to the deputy surveyors may not exist.

3. **Contracts & Bonds** (4 boxes) 1831-1864. Copies should be found in the National Archives.

In the Minnesota State Archives, there are four collections. These are filed under the Minnesota History Center catalog heading “United States Surveyor General.” See Appendix D.

1. **Letters Received, 1857-1907** (7 boxes and 9 folders)

   - Vols. 44-51, 1857-1864 \(^{[91]}\)
   - Vols. 52-59, 1865-1872
   - Vols. 60-68, 1873-1881
   - Vols. 69-75, 1882-1888
   - Vols. 76-80, 1889-1893
   - Vols. 81-96, 1894-1899
   - Vols. 87-93, 1900-1906
   - Folders 1857-1907

   Transcribed copies of the letters received from the Commissioner of the General Land Office will be found in National Archives and those from the Surveyor General of Wisconsin and Iowa in the Iowa State Archives. \(^{[92]}\)

2. **Letters Sent, 1854-1908.** (4 boxes) Transcribed copies of letters. Some, or most, of the originals will be found at the National Archives and the Iowa State Archives. The location of most of the original letters sent to the individual deputies is unknown therefore this record collection has considerable importance.

   - Vols. N-Q January 1872 – November 1888/1889
   - Vols. 1- 12 July 1884 –December 1900
   - Vols. 12-20. March 1899 – November 1908

3. **Contracts for Surveys, 1857-1907** (one volume and 10 folders) The bound volume record the contracts awarded and special instructions issued, 1857-1907. There are numerous notations that
“special instruction” accompanied the contracts. Some folders, after 1881, contain the actual copies of instructions from the Commissioner of the General Land Office and the Surveyor General to deputy surveyors along with the contracts and bonds. A number of these concern islands or other designated parcels. Duplicates of the actual contracts should be found in the National Archives.

4. Record of Contracts and Instructions for Surveys, 1874-1907 (1 volume) Apparently a complete, detailed listing all contracts awarded in Minnesota, July 13, 1874 to July 17, 1907. Notation of special instructions usually, but not always, refers to island surveys. Duplicates of the actual contracts should be found in the National Archives.

The biggest problem is not photographing the material but documenting the source of each image, cataloging it, and providing an index for the collection of images. This task is more onerous than the actual photographing. The records could be photographed in stages, whenever money was available, as long as adequate documentation of the source and location of the images was made. Indexes could be made later as funds became available.

I also suggest that some short term efforts take place to prepare for the long term process.

6.2. Short Term

Before starting what will be a time-consuming and expensive undertaking the following actions should take place. [93]

1. Compile a list of deputies employed in carrying out the surveys along with dates of contracts and maps to show where the contracts were carried out.

2. Compile inventories of letters associated with particular contracts from Letters Received wherever possible.[94]

3. Compile an index of circulars, letters sent by the Commissioner of the GLO to all Surveyors General.

4. Show the way in which the records associated with the public land surveys can be linked together.

5. Establish a paper trail for particular deputies.

6. Create an inventory of all the records relating to the surveys in a particular area.

6.3. Conclusion

The volume of material needed to adequately describe the work of the deputies in Minnesota is large although there may be ways to limit the volume described here. Knowing where the relevant records are housed and how they are cataloged is a first step in producing an electronic version of the material commonly referred to as special instructions. Clearly, the general
instructions and special instructions given to the deputies by Surveyors General are not sufficient. The instructions given the Surveyors General by the Commissioner of the General Land Office are important but how those instructions found their way to the deputies is not always clear although, in some instances, the instructions were embedded in the letters sent by the Surveyor General to a particular deputy. Clearly each contract must be considered idiosyncratic in information while following certain rules about the form the information took.

A glaring absence in all of these materials is, of course, the actual letters the deputies received. (see Figure 5.3) Some of these can be found in the personal papers of the more notable deputies in Minnesota, Thomas Walker, George Wright, William Marshall, George Stutz. As a surrogate for those letters, containing any instruction from the Surveyor General to the deputy, the Letters Sent by the Surveyors General will have to be used.
Endnotes

1 Dodds et al Original Instructions Governing Public Land Surveys of Iowa (Ames, IA. Iowa Engineering Society, 1943), p. v

2 Other survey records have been made electronically accessible, for example the recently completed digitization of the township plats, online at http://www.lmic.state.mn.us/chouse/GLO/, and the ongoing efforts to digitize the field notes of the deputies will allow surveyors to use various new analytical methods to investigate the spatial patterns in the records. Also see Krafthefer, Jay “The time will come” Minnesota Surveyor vol.13 (Autumn, 2006) pp.20-21. These projects, focusing on the survey records, complements other land records modernization efforts in Minnesota, see Land Records Modernization Committee Report, June 1999 online at www.gis.state.mn.us/committe/land/lrm2000/

3 Neither was the project concerned with the many geographical and historical characteristic of the public land surveys in Minnesota about which the PI has written extensively. There is an assumption in this report that the reader is familiar with many aspects of the public land surveys. Terms that possess commonly accepted definitions are not defined here.

4 2 Stat. 716

5 Dakota County Surveyor’s Office online at http://www.co.dakota.mn.us/Departments/SurveyorOffice/default.htm. Carver County Surveyor online at http://www.co.carver.mn.us/departments/PW/surveyor.asp


7 Minnesota Statutes (2006) 381.12

8 Id. There are rules for ensuring obliterated and lost corner monuments are replaced where they were originally established see Chapter 5 of the U.S. Department of the Interior, Bureau of Land Management, Manual of Surveying Instructions (Washington D.C. Government Printing Office, 1973) online at http://www.cadastral.com/73manlc5.htm. In Minnesota, the county is responsible for maintaining the corner monuments. A common activity by many county surveyors is marking corners with sturdy, modern monuments, a process called remonumentation. In a number of counties, this work has been completed. In rapidly urbanizing Carver County, for example, there are approximately 1360 public land survey corner monuments. These corners, set by deputies between 1853 and 1858 and perpetuated by cast iron monuments, control the boundaries of every parcel of land in the county. Efforts to remonument Minneapolis in Hennepin County are currently underway, see Brown, William “An open letter to surveyors in Twin Cities Metro Area” Minnesota Surveyor vol. 15 (Summer 2007) p.9, 11

9 There are several processes involved in here. Some of the original states relinquished their claims to an area beyond their boundaries based on their colonial charters. The federal
government acquired jurisdictions over large areas from foreign nations. Then the federal
government acquired title to the land in these ceded areas from Native American tribes who
possessed occupancy and use rights.

10 The public land survey net still forms the basis for legal descriptions in Minnesota.

11 An assumption is that many people reading the report will be familiar with some of the
processes if surveying important to recount the basic surveying process because it is the process
that leads to the records.

12 Somewhat confusingly, these directions are often called Annual Instructions.

13 Sometimes the deputy would appear in person at the Surveyor General’s office to receive his
contract and instructions and to deliver his notes. Sometimes he would correspond with the
Surveyor General by mail.

14 This varied slightly between 1846, 1851, 1851, and 1855. In 1855 such diagrams were called
plats.

15 Again, this varied slightly between 1846, 1851, 1851, and 1855.

16 There were in fact two types of transcribed field notebook. The first type are the notebooks
containing the notes of either the deputy who created the township exteriors or the notes of the
deputy who subdivided the township. The second type is the one sent, with a copy of the plat, to
the Commissioner which contained both exterior and subdivision information. The University of
Minnesota has a microfilmed copy of this second type.

17 The descriptive list comprised tables containing information on the topography, land quality
and plant cover at every corner and along every line in a particular township. They were, in fact,
abstracted from the deputies field notebooks.

18 Additional materials included quarterly accounts and annual reports.

19 Some of these letters are termed “additional instructions,” “annual instructions,” “special
instructions,” or “supplemental instructions.” Some letters were sent to all surveyors general, in
which case they were called “circulars,” and some were sent only to particular surveyors
general. The Commissioners of the General Land Office sent “annual instructions” to each
Surveyor General informing him of the appropriations made to his surveying district and thus
available to him to carry out the surveys and directing him where to concentrate the fieldwork.
The other instructions defy any such categorization. After 1851, however, each deputy was
connected to the Commissioner of the General Land Office through the General Instructions,
which although given to him by the Surveyor General were issued by the Commissioner of the
GLO although probably written by the Clerk of Surveys.

20 The major problem is how to isolate those letters containing instructions and those that do not.
In general, it is unclear whether the instructions from the Commissioner of the General Land Office to the Surveyor General were actually forwarded to the deputy.

The relationship between these individuals is key to understanding the records. The Commissioner of the General Land Office was in charge of the surveyors general across the nation, but his supervision was quite variable and perhaps not really entirely effective until a standard set of General Instructions, describing how all surveys would be prosecuted, was issued first in 1851 and then amplified in 1855. The surveyors general who administered the earliest surveys in Minnesota, were relatively independently minded. They were, however, dependent on Congress for funds that were appropriated each year and the surveys that were carried out in their surveying district in a particular year were authorized by the Commissioner of the General Land Office.

For republications of the General Instructions see White, C Albert A History of the Rectangular Survey (Washington D.C. Government Printing Office, 1982); Dodds et al supra note 1. I have seen the General Instruction published in various books but I have yet to see an original copy that was issued by the government.

See White supra note 23 pp 340-355

See White Id.116. For a brief discussion of the Oregon Manual see Id. p.115

Each deputy received some “special instructions,” along with his contract before he started his fieldwork. Occasionally he received “special instructions” during the fieldwork, usually in response to a question posed to the Surveyor General.

This seems to be the definition used by Dodds et al supra note 1

How such Special Instructions fit into the classification proposed is not clear at present.

What are not regarded as “special instructions” are letters from the Surveyor General to deputies regarding the status of their contracts and when they might expect to receive payment. But there is still a problem if separating those letters that contain special instruction and those that do not. Some letters are clearly labeled special instructions some are not. Some letters, two or three pages long, contain one or two sentences that could be interpreted as special instruction.

Dodds et al supra note 1 p.197

Using the original letter also avoids the possibility of a copying error.

May 30 1862 12 Stat. 409

See White supra note 23 p.502

From the earliest surveys in that part of Wisconsin Territory that would become Minnesota Territory in 1847 until 1857 the surveys were administered by the Surveyor General of
Wisconsin and Iowa with an office in Dubuque Iowa. Those records that were not transferred to Minnesota when the new surveying district was established are housed in the Iowa State Archives.

Archival records are preserved/stored as they were created and so finding aids usually reflect the organization of the legal entity that created them. The physical arrangement of the records and the finding aids were created by archivists, knowledgeable about preservation of, and access to, records but without any particular knowledge of the General Land Office that supervised the surveys. At a particular time an archival collection may be divided among several locations, because of storage or jurisdictional (ownership) problems, and finding aids may be incomplete, because archivists cannot be specialists in every topic. From time to time, the physical arrangement of records will change as will finding aids. Records can be found and/or made accessible at any time but records that have not been preserved or are not accessible leave gaps in our knowledge.

Squires, Rod. “A Preliminary Inventory of Documents Relating to the Public Land Survey of Minnesota Territory, located at the Historical Building, Des Moines, Iowa 50319” Dis-Closures (Fall, 1993)

Finding aids are often created for those records that are extensively used. These finding aids necessarily crystallizes the current arrangement of the records.

There are other records in Record Group 81 that may be relevant to understanding the surveys but are not the focus of this project.

The letters concerning the boundary between Iowa and Minnesota were not noted or copied.

The folds, which prevent an individual letter from laying flat on a horizontal surface, may cause a problem.

Those individuals working in Iowa, Wisconsin, and Minnesota Territory are noted from the annual reports of the Surveyor General of Wisconsin and Iowa.

J. S. Dodds et al. supra note 1

The letters described as “special instructions” are, in fact, very varied. There are only a few that provide additional instructions on how the deputy was to proceed, in essence modifying the general instructions a little to take care of special circumstances. A large number of them concern when the surveys were to be completed. It is surmised, without evidence to the contrary, that the surveys were all carried out under the General Instructions of 1846, 1851 and 1855.

Note the gap between the end of Vol. E and the start of Vol. F. There appears to be some 160 pages missing from Vol. F

After this date, questions relating to the surveys were answered by the Commissioner of the General Land Office.
Until, recently, the original survey field notebooks and township plats were kept by the Minnesota Secretary of State. They have now been transferred to the History Center although finding aids have not yet been prepared for them.

A caveat is in order. There may have been some materials added to some of the records since the publication of the Guide – see 111.E.6.3.B below.

Partial boxes means that the material is contained in a box that includes other material with a different catalog identifier e.g. 111.E.9.9B contains Accounting Records, 1850-1907 and Timber Agent Accounts and Correspondence, 1861-1877.

This box also contains Miscellaneous Records and thus is catalogued under that heading. The books in the box are part of those records rather than part of the Letters Received.

There are no special instructions here, merely a notation of the fact that there were some.

The origins of these folders is unknown.

Confusingly, some letters from the Commissioner of the General Land Office to the Surveyors General are labeled “Special Instructions.”

Islands were apparently always surveyed under special instructions. Surveyed under agreements rather than contracts. Although the surveys are listed in the various indexes showing contracts, they are never numbered.

Of course, records can be found or made accessible at some future time.

Valuable material should be found in the Manuscript Collections in the Minnesota Historical Society Archives of particular deputies.

The originals of these copies, sent to the Surveyors General of Wisconsin and Iowa and the Surveyors General of Minnesota, should be found as “Letters Received” in the Iowa or Minnesota State Archives respectively.

M27 provided the bulk of the information in C. Albert White’s encyclopedic book A History of the Rectangular Survey System supra note 23.

Copies of these original letters should be found in “Letters Sent” in the Minnesota State Archives.

In an answer to a recent query, the National Archives staff indicated there are other indexes for the correspondence after 1880 but attempts to track them down were not successful. Recent work by John Freemyer, however, produced the records grouped under Division D.
There is conflicting information about the functions of the Division, which at one time supervised Private Land Claims. The Division seems to have acquired responsibility to look after correspondence in the latter part of the nineteenth century, taking over from Division A, the Chief Clerk’s Office.

Turnover in the Archives staff was one contributing factor in the omission of these records until the last few months of the project.

The title for the “Entry 180” series is very confusing. It indicates that miscellaneous correspondence ranges from year 1801 to 1909, but the last box in the series is dated 1856. I assume that the correspondence for later years may not be organized into archive box sets at this time. I asked the archivist for further information. He seemed uncertain and simply stated this record set is not organized by year. From the boxes I examined that seems to be an incorrect statement.

“Press” refers to the way in which the copies were made.

Supra note 57.

The Territorial Papers of the United States, edited first by Clarence Carter and then John Bloom, consist of 28 volumes, published between 1934 and 1969, containing a selection of papers concerning the history of the territories. The papers include petitions and documents relating to land titles along with other documents and letters relating to the territories, including correspondence from the President of the United States, Secretaries of State, Treasury, and War, the Attorney Generals, and the Postmaster Generals, military leaders in the territories, also of lesser officials such as judges, and receivers and registers of land offices.

Almost certainly, there will be special instructions among this material since, as mentioned above, most island surveys were carried out under special instructions.


Not unusually, the initials of the clerk who wrote the letter can be seen in the margins.


Id. pp.501-506.

Id. p.506.

Id. p. 507.

Id.

Id. p.508.
As noted, there is a large volume of records that are purely administrative, for example, letters accompanying the transfer of contracts, bonds, field notebooks, and plats between the Surveyor General and the Commissioner of the General Land Office.

The Minnesota History Center frowns on flash devices.

Using a camera to make a digital image of the letters would seem to be a better option than using a scanner – cheaper, quicker, and less harm to the actual letters. There are no impediments to photographing the record collections described above except the need for preserving them. In the National Archives and the Iowa State Archives the actual letters can be flattened. The letterbooks in the Minnesota Historical Society will need special care.

see Conover, Milton The General Land Office: its History, Activities and Organization (Baltimore, Md. The Johns Hopkins Press, 1923).

Infra note 59 and 60

Only the first few volumes of the Minnesota State Archives will contain letters to the Surveyor General of Wisconsin and Iowa.

Note gap in date between volumes E and F.

Copies of letters relevant to the surveys in Minnesota were not sent to the Surveyor General of Minnesota when Minnesota became a separate surveying district.

Earlier volumes of Letters Received are probably in the Michigan State Archives because the first Surveyor General of Minnesota closed the Office of the Surveyor General in Detroit before opening his office in St. Paul. For several years he responded to questions about the surveys in Michigan.
Only the first few volumes will contain letters from the Surveyor General of Wisconsin and Iowa.

Some letterbooks have as many as 600 pages and some have as few as 250 pages. Some single letters are on two or more pages but in some cases there are two letters per page. Let’s assume the average book size is 350 pages and this is one letter per page, the total number of letters both sent and received by the surveyors general between 1847 and 1908 is 350 x 2 x 60 = 42,000 letters. Someone systemically going through the books/boxes and review each letter for the purpose of copying letters dealing with requests, instructions, problems, and dealing with merely administrative matters would necessarily read 42,000 letters. If we assume that an individual could review and take a digital image of one book/box a day it would take 120 days, 24 working weeks, to make digital copies. Transferring the images and indexing them along with any required transcriptions would be far more time consuming.

Most importantly, the original letters often contain enclosures and are therefore much preferred in documenting instructions. Obviously, Letters Sent by the surveyors general will have to be used in the case of the letters sent to a deputy.
APPENDIX A.

SOME PRELIMINARY THOUGHTS ON INSTRUCTIONS FOR SURVEYING THE PUBLIC LANDS IN MINNESOTA

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Prolog

In May, 2006, I received a grant from the Minnesota Department of Transportation to make an inventory of the public land survey records relevant to Minnesota, particularly those materials usually referred to as “special instructions”.¹ This article summarizes my thoughts after a three-day visit to examine the records of the surveyors general of Wisconsin and Iowa in the Iowa State Archives in Des Moines, a brief visit to look at the records of the surveyors general of Minnesota in the Minnesota State Archives at St. Paul, and countless hours reading microfilm from the National Archives. They will almost certainly change as I spend more time at the Minnesota History Center and visit the National Archives in Washington D.C. My purpose here is to tentatively advance the idea that we need to expand our view about which instructions are relevant for surveyors wishing to “follow in the footsteps” of the original deputies.

Introduction

Approximately 250 individuals, working on their own or in partnership with others, contracted to carry out surveys in Minnesota. Some ran the correction parallels, the standard parallels, and the guide meridians, some ran the township exteriors, and some subdivided the townships into sections.² With each contract the deputies received instructions for their work, from the Surveyor General of Wisconsin and Iowa, 1847-1857, and the Surveyor General of Minnesota, 1857-1908.³

These instructions have been conveniently divided into two sets, those given to all deputies operating in the surveying district, usually termed “general instructions”, and those given to particular deputies, termed “special instructions.”⁴ Rarely mentioned, because their relationship to the actual instructions given to the deputies is unclear, is a third set of instructions sent by the Commissioners of the General Land Office (GLO) to the surveyors general.⁵

On May 30, 1862 President Abraham Lincoln signed into law, “An Act to reduce the expenses and sale of the public lands in the United States.”⁶ Section two of the act stated,

(T)he printed Manual of Instructions relating to the public surveys, prepared at the General Land Office, and bearing date February twenty-second, eighteen hundred and fifty-five, the instructions of the Commissioner of the General Land Office, and the special instructions of the surveyor general, when not in conflict with said printed Manual or the instructions of said Commissioner, shall be taken and deemed a part of every contract for surveying the public lands of the United States.⁷

The legislation mentioned three sets of instructions, not two; the printed Manual of Instructions, also termed general instructions, the special instructions of the surveyors general, and the instructions of the Commissioner of the GLO. Importantly, the language seems to imply the special instructions from the surveyors general are subservient to the instructions from the Commissioner of the GLO.
General Instructions

General instructions consist of a series of directives concerning the way in which the surveys were to be carried out and were given to each deputy at the start of a contract. Two surveyors general issued general instructions that governed the earliest surveys in Minnesota Territory. In 1846, Surveyor General George W. Jones, issued one set and in 1851, his successor, George B. Sargent who had been a deputy in southwestern Iowa, issued another set. This latter set could only have been used for a short period of time in Minnesota. On July 10, 1852, Sargent was instructed to adopt the “Manual of Field Operation”, issued by the General Land Office in 1851 to govern the surveys in Oregon, for surveying in Minnesota Territory. In 1855 the General Land Office issued a set of general instructions that was to govern all future surveys in the United States. These instructions titled “Instructions to the Surveyors General of Public Lands of the United States …” was adopted several years later, in 1862, as part of the contract of every deputy surveyor.

Not surprisingly, these general instructions changed over time, as a result of changed practices. So, for example, on July 28, 1866 the Commissioner of the General Land Office sent a Circular to the Surveyor General of Minnesota, Levi Nutting,

The experience of this office having demonstrated the desirability of a change in the system adopted for the numbering of fractional lots of the public lands illustrated on “Diagram B” accompanying the printed Manual of Surveying Instructions issued February 22 1855, it has been decided to substitute thereof a more simple and less inconvenient scheme.

It is now proposed to employ but one continuous series of number in each section containing fractional lots, to embrace all lots made fractional by any cause, and not containing the recognized legal quantity of some legal subdivisions; but those subdivisions in the exterior halves of sections in the north and west tiers of sections in a township, which contain eighty or forty acres, will not be numbered in the future preparation of plats. The printed instructions on pages 25 & 26 of the aforesaid Manual are hereby modified to that extent.

Accompanying this letter is a “diagram B” illustrating the proposed change in numbering and which is designed in red ink on the same. When island are situated in two or more sections the lots should be embraced in a series of number of the respective sections in which they are located. Islands situated with a section may be numbered as one lot unless the area exceeds 160 acre in which case they should be divided by extending the subdivisional lines across them and then numbered.

An interesting research problem is to trace the source of such changes in the general instructions through the written record.
Special Instructions

Special instructions are instructions given a particular deputy by the surveyor general, at the start of his contract or during his surveys. They are extraordinarily varied in content and should be viewed through two lenses. In one way, they supplement the general instructions as the surveyor general gave the deputy more directives on how to carry out the surveys. At the same time, they complement the general instructions as the surveyor general gave the deputy necessary administrative details about his contract. Dodds et al, in a book containing all the special instructions relating the surveys in Iowa, noted

The special instructions were in the form of a letter to the deputy surveyor and contained: a list of the townships and ranges included in the contract; whether township or subdivision; places of beginning and places of ending; instructions as to connections with adjacent surveys; diagrams showing pertinent data for areas already surveyed; copies of general instructions; innumerable special references; and others.

…these special instructions contained many items that were similar. In fact they contained identical paragraphs.$^{12}$

An expanded definition of special instructions would include letters from the surveyors general informing deputies how to proceed, letters in response to queries from deputies in the field, and also letters informing deputies of errors in the work. Perhaps, as a general rule, virtually any letter issued by the surveyors general to a deputy under contract should be considered special instructions.$^{13}$ These instructions are contained in the voluminous correspondence files of the surveyors general. They can be found in the Iowa State Archives in Des Moines and the Minnesota State Archives, at the Minnesota History Center in St. Paul.$^{14}$ Those for Iowa, Illinois and Michigan have been reproduced.$^{15}$

The surveys in Minnesota, like the surveys in Iowa, “were made under the general instructions current at the time of the survey and special instructions issued to the deputy surveyor holding the contract.”$^{16}$ The earliest surveys in Minnesota Territory were governed by the procedures described in the General Instructions of 1846, 1851, and 1855 and the special instructions contained in letters sent by the surveyors general of Wisconsin and Iowa to the various deputies contracted to carry out surveys in Minnesota Territory from 1847 until 1857.$^{17}$

The Relationship between General and Special Instructions

In a letter preceding his General Instructions of 1846, George W Jones wrote to the deputy,

You are to survey in person, or by the assistance of some duly authorized Deputy Surveyor acting under your immediate direction and supervision, the district assigned you under contract of _________ 18__, conformably to such
parts of the following instructions as apply to the character of the work for which you have contracted, except so much thereof as is modified or countermanded by manuscript special instructions, hereinafter written.\(^{18}\)

The same letter preceded the general instructions of the Surveyor General of Ohio, Indian, and Michigan of 1850 and the 1851 general instructions of George B. Sargent.\(^ {19}\) Clearly general and special instructions were complementary.

The early general instructions relevant to the surveys in Minnesota Territory contain several references to special instructions. In the 1846 instructions the Surveyor General Jones wrote, under the heading “How and What to Meander”, noted,

> Whenever required by special instructions, to meander any stream or body of water, passing through or lying within your district, you are also to meander all islands situated therein, which are valuable for their soil or timber.\(^ {20}\)

In the general instructions of 1850 were several references to special instructions. Under the heading “Of Exterior Township Lines,”

> “5. Variations from this order and mode of running township lines, will sometimes be necessary, to accommodate them to the situation and boundaries of the tract of country to be surveyed, or to connect with prior surveys. Such cases, as they occur, will be provided for in Special Instructions.”\(^ {21}\)

In the same instructions, under the heading “Of Subdividing Townships

> “13. An act of Congress of the 24th of May, 1824, authorizes a departure from the ordinary mode of surveying the public land on any river, lake, or bayou, whenever, in the opinion of the President of the United States, the public interest would be promoted thereby; so as to survey such lands in tracts of two acres in width, fronting on such river, lake, or bayou, and running back to the depth of forty acres. But as no general rules could be framed to govern all such surveys, this branch of the service is left to be provided for in Special Instructions, as cases thereof may occur.”\(^ {22}\)

Interestingly, neither the Oregon Manual of 1851 or the Manual of 1855 included the letter preceding the 1846, 1850, and 1851 instruction. White included a footnote in the Oregon Manual regarding special instructions.\(^ {23}\) In the Manual the surveyor general is allowed to alter the mode of surveying “whenever, in the opinion of the President of the United States, a departure from the ordinary mode of surveying … would promote the public interest.”\(^ {24}\) The only mention of special instructions in the 1855 Manual was with reference to settlers claims in Oregon, Washington, and New Mexico.\(^ {25}\)

The 1864 general instructions, however made reference to special instructions as did all subsequent Manuals, issued in 1881, 1890, 1894, and 1902.\(^ {26}\) They made reference to the Act of 1862 and recognized three sets of instructions; those contained in the printed
Manual, those from the Commissioner of the GLO, and those from the surveyors general. The last named would only seem to control “when not in conflict” with the other instructions. The 1890 Manual also contained the following, under a separate part headed “Special Instructions Issued by the United States Surveyors-General to United States Deputy Surveyors”.

One of the most important duties to be performed by the surveyor general is to provide the deputy surveyor with Special Instructions, in connection with the contract, prepared in accordance with the law, which instructions will draw attention to certain paragraphs in this Manual, reiteration of its requirements, and printed directions of a general nature; but they will be in all cases specific in character, with all necessary detailed statements in setting forth what the deputy is to do and how the work is to be performed.

This rather neat picture, of general instructions and special instructions, does not give the whole picture of all the instructions that might be relevant to the modern surveyor.

Instructions issued by the Commissioner of the General Land Office

These instructions comprise two groups, those issued to the various surveyors general and those issued to other individuals. Letters from the Commissioner of the GLO to the surveyors general contain an extraordinary volume of material addressing various surveying problems. It is not clear how, or even whether, the surveyors general passed the information on to the deputies.

The most important of the first group were those described as “Circulars”, sent to every surveyor general directing them to change their method of operation in some way or instructing them in the proper way of proceeding. Circulars sometimes modified general instructions, for example, the 1864 general instructions regarding meanders were modified by a Circular issued in 1876.

On July 9, 1852, the Surveyor General George B. Sargent received a letter from John Wilson, Acting Commissioner of the General Land Office. The Acting Commissioner wrote,

The condition of the corner boundaries of the public surveys in many parts of the country admonishes that it is the duty of the Surveyor General to make it their special care in all future surveys to have such boundaries perpetuated in the most effectual and enduring manner. Evidences from time to time are continually being presented to the Department of the entire absence or disappearance of mound corners in prairie regions where none others could be employed to designate the surveys. The ground may be faithfully chained and the contracting deputy may make the oath as required by law, and yet, in a few years the practical evidence of the surveys may become utterly obliterated in a prairie country for the want of establishing the mound corners after a judicious method.
The mound falls down, the stake is destroyed and nothing then remains to
direct the eye of the enquirer to the place where it originally stood. Hence the
ultimate object of the survey is lost when the boundary is gone, and there is no
provision in the surveying laws for remedying the evil by restoring the
evidence, and thus results a public calamity to the whole community
concerned.

In the surveying operations instituted in Oregon and California the mound
corners are required to be perpetuated after the method prescribed in the
accompanying manual of Instructions to Deputy Surveyors, and which is
illustrated by the accompanying diagrams. The mound is required to be conical in its formation, and to be enclosed with “a quadrangular trench”,
conforming to the cardinal points (not a ditch) formed by spading up the earth
while facing the line of the quadrangle and throwing up the clods in regular
order so as to form an elevated margin along the lines of the quadrangular,
which, when covered with grass, will indicated a work of art, and arrest the
attention in future time in the event of the destruction of the mound itself by
time or accident.

This mode of perpetuating mound corners makes the quadrangular trench an
essential part of the work and you are requested to require your Deputy
Surveyors to adopt the same, and also the conical form in all future cases
where mound corners are established. This course of proceeding has been
required and adopted in Louisiana, Florida, and Arkansas. 32

Included in this group of instructions are those often labeled “Annual Instructions” issued
by the Commissioner which directed the surveyors general about what to survey. 33 Also
included are the letters concerning the myriad details of surveying at the time, including
noting errors in the field notes and on the plats.

Another type of instructions involves explaining to surveyors general on how sections
should be divided and how lost corners should be restored. 34 One, issued November 1,
1879 contained the following justification,

This Office being in receipt of many letters making inquiry in regard to the
proper method of subdividing sections of the public lands and restoring lost
corners of the public surveys, the following general rules have been prepared
as a reply to such enquiries. 35

Another, issued on March 13 1883, was justified by,

The increasing number of letters from county and local surveyors at this
office, making enquiry as to the proper method of restoring to their original
position lost or obliterated corners marking the survey of the public lands of
the United States, or such as have been willfully moved from their original
position, have rendered the preparation of the following general rules necessary … 36

Surveys carried out entirely under special instructions

Some surveys were made entirely under special instructions, island surveys, state boundaries, and Indian reservation boundaries, for example. 37 Some surveys were initially carried out under special and then those special instructions were incorporated into the general instructions. 38

Conclusion

The sole conclusion is that the volume of material needed to adequately describe the work of the deputies in Minnesota is large. I suggest that the general instructions and special instructions given to the deputies by surveyors general may not be sufficient

Finding aids will allow access to these records, but such aids can only be developed if an inventory is made. This is what the current research project funded by the Minnesota Department of Transportation is attempting to accomplish.

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1 I have previously written about these instructions, see Squires, Rod “Comments on the Instructions to Deputy Surveyors in Minnesota, 1847-1860” Minnesota Surveyor vol. 2 (Winter 1995) pp.12-16. The project is one of three mentioned by Jay Krafthefer, “The day will come.” Minnesota Surveyor vol. 13 (Autumn. 2006) PP. 20-21

2 Some surveyed islands, the subject of future work.

3 “The contract system …. tended to encourage the deputies to use surveying methods that would produce results of the minimal acceptable precision.” J.S. Dodds et al Original Instructions Governing Public Land Surveys of Iowa (Ames. IA Iowa Engineering Society, 1943) p.1. Undoubtedly, the instructions contained in Dodd et al, dated 1846-1857, have some useful information regarding the way in which the surveys in Minnesota were carried out, if only because some of the letters published in the book are to deputies that also worked in Minnesota (see pp. 292-350). But we should be careful not to overemphasize that fact. There were difference between the surveys in Iowa and the surveys in Minnesota. For example deputies running Iowa township exterior lines seem to have been given contracts encompassing larger areas than those in Minnesota. (see p.198)

4 As Dodds Id. p.21 wryly noted “Any apparent discrepancies appearing in the original notes for the survey … will be found to comply with some requirement of the special instructions or with an earlier set of general instructions or will be an exception introduced by the deputy surveyor as his own idea.”

5 Copies of these instructions, contained in correspondence between the Commissioner of the General Land Office and various surveyors general around the nation, has been microfilmed by the National Archives. Letters Sent by the General Land Office to Surveyors General 1789-1901, Microfilm M27, was used extensively by C. Albert White for his monumental book A History of the Rectangular Survey System (Government Printing Office Washington D.C. 1982) see p.vii.
8 Dodds supra note 3 pp.80-101 included the 1850 General Instructions issued by the Surveyor General for Ohio, Indiana, and Michigan. I am not sure of the relevance of such instructions to the surveys in Minnesota Territory.

9 White supra note 5 p.116. In fact Sargent had been directed to use the 1851 Manual, “to run his range lines north to intersections with the correction lines and establish closing corners according to the Manual,” the previous year, on April 23, 1851 Id. p.115. Warner Lewis, who succeeded Sargent as surveyor general in 1853 was also directed to use the 1851 Manual. Id. p.116. These instructions were adopted at a time the surveys were crossing the Mississippi River. Strangely, Dodds et al supra note 3 do not include these instructions.

10 Supra note 6

11 Minnesota Historical Society, State Archives, U S Surveyor General Letters Received 1866 vol. LIII pp.133-134.

12 Dodds supra note 3 p.197 The standard paragraphs contained in the special instructions issued by the surveyors general of Wisconsin and Iowa, 1847-1857, are contained in Id. pp.356-364 Some of these paragraphs are found in special instructions to deputies who worked in Minnesota Territory.

13 The exceptions might include letters from the surveyor general to the deputy that had no bearing on what the deputy did in the field. Such letters would include those that inform the deputy of the status of his contract, and thus when he might expect to be paid. According to Dodds supra note 3, not all deputies received special instructions. They noted, “It is quite likely that a number of contracts were sent out without any advice other than in the contract itself.” Id. p.205.

14 The National Archives in Washington D.C., almost certainly, possesses copies of the special instructions but at this point in the research I do not know. According to White supra note 9 p.155, special instructions for any contract were to be sent to the Commissioner of the GLO along with the contract for his approval after 1876.

15 See Dodds supra note 3. See also Norman C. Caldwell ed. Special Instructions to Deputy Surveyors in Michigan 1808-1854 (Michigan Museum of Surveying, Lansing, MI. 1990) and Joe C. Weber, Early Public Land Surveys in the Northwest Territory and Procedures for the Retracement of Original Government Surveys in Illinois (privately published, 1981). How completely these books cover the instructions is unknown.

16 Dodds supra note 3 p.21

17 The letters containing special instructions to the deputies surveying in Iowa contained in Dodd et al probably have some useful information regarding the way in which the surveys in Minnesota were carried out. Some of the letters are addressed to deputies who also worked in Minnesota, see Dodds supra note 3 pp.292-350.
18 White supra note 5 p.340

19 White supra note 5 p.360, 384

20 Id. p.343

21 Id. p.364

22 Id. p.367

23 Id. p. 443. White gave no further information so I am unsure of what the footnote means.

24 Id. p. 437. Presumably by special instructions.

25 Id. p. 467 It is tempting to suggest that the new manual was intended to cover all contingencies of surveying and special instructions to deputies to overcome problems were a thing of the past.

26 Strangely, White called the 1864 instructions “Instructions Circular” Id. p.501. I do not know whether he invented the phrase or whether the National Archives staff so described them.


28 Id. p. 572.

29 Among the individuals to whom the Commissioner of the GLO wrote were such as county surveyors. Such letters contained information about how to re-establish lost corners, subdivide sections, and run meander lines, and how to survey omitted lands including islands

30 Id. p.506, 507, 509

31 Id. p.508

32 Letters supra note 5 vol. 15 pp.1-2

33 This instruction followed the annual Congressional appropriations for surveying

34 The General Instructions of the Surveyor General of Illinois and Missouri contain an interesting appendix, not found in other general instructions, regarding the proper way of resurveying, including “renewing missing corners formerly established, and subdividing Sections.” (White, supra note 5 pp. 421-431. Unfortunately, these instructions are not dated, although a letter preceding them bears a partial date 185*. (the asterisk denotes a missing number) The instruction appear in White’s book between two instructions dated 1851.

35 Id. p.509

36 Id. p.546
Until 1881, general instructions concerned the way in which township exteriors and township subdivision lines were run, there was no mention of Principal Meridians, Base lines, Standard Parallel or Auxiliary Meridians Id p.524. Such lines were run under special instructions.

Instructions to survey correction lines, standard lines and meanders, for example. The instructions issued by George W Jones in 1846 mentions special instructions regarding meanders. Id. p. 343. The same language was used by George B Sargent in his 1851 instructions. Id. p. 391 In the 1851 Oregon Manual and all subsequent Manuals, meandering is treated with general instructions. Id p.441 Another example, from Michigan is also described by White (1982 111, 356)
APPENDIX B.

EXAMPLES OF LETTERS SENT IN IOWA STATE ARCHIVES
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Transcribed examples

Page 373 Special Instructions
Surveyor General’s Office Dubuque May 24th 1852

To E. S. Norris

Sir, The district which you have this day contracted to survey is bounded on the East by the 4th Prin. Mer., on the West by & including the line dividing Ranges 8 & 9, on the South by & including the line dividing Townships 116 & 117 and North by Lake Superior.

Commencing at corner to Town 116 & 117 in the Fourth Prinl. Meridian you will extend the line dividing towns 46 & 47 (which is your base) due West to the corner to Ranges 8 & 9 observing to establish the qr. section, section & Township corners at the distances & in the manner prescribed by the accompanying printed instructions, & from said corner you will continue your surveys in the usual manner to completion.

After your survey of township lines is finished, you are hereby authorized to select therefrom & subdivide into sections such township or townships not to exceed in amount
three hundred & sixty miles as will be most “likely to command the attention of settlers” and meet with ready sale, and it is particularly designed to subdivide no other at present. As this office is in possession of but little information in regard to the character of this particular section of country, much will necessarily have to be left to your sound judgment & discretion and it is hoped that be such adherence to your instructions you will justify the opinion that selected you to perform this difficult & honorable service.

You will please bear in mind that another company will proceed to the ground almost immediately & as you will have to furnish them a starting point, you will use all the dispatch consistent with accuracy in your power.
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Page 376 Special Instructions
Surveyor General's Office Dubuque June 4th 1852
To Hon J Butterfield

B-3
I have this day transmitted to your address a package containing copies of the original plats of six townships situated West of the Fourth Prinl. Mer. In the Territory of Minnesota representing the surveys executed by Daniel Higbee Dep. Sur. Under his contract of Sept 24th 1851 and numbered as follows:

Township No. 37 & 38 of Range 25 and
    Ditto        37, 38, 39 & 40 of Range 26

Mr. Higbee requested that the amount of his account herewith enclosed may be forwarded in a draft on New York to his address Dubuque Iowa.

Great difficulty was experience by Mr. H. in the execution of this survey, not only from the nature of the country but form the defective manner in which the town lines were run. The lines between Town 37 & 38, 28 & 39 & part of the line between 36 & 37 of Range 25; lines between Towns 36 & 37 & 39 & 40 of Range 26; part of the line between Ranges 25 & 26 of Towns 37 & 38 and all the line between same Range of Town 39 were corrected by Mr. Higbee, as were the lines between Ranges 26 & 27 of Towns 38 & 39 & part of the lines between same Range of Town 39 by J Marshall Dep. Sur. Whose contract joined Mr. Higbee on the west.

As soon as the work of Mr. Marshall (which has lately been returned) shall have been platted &proved to be correct, an account will be made out against Mr. Conkey and forwarded for payment by him agreeable to your letter of instructions of the 22d of October last.
APPENDIX C.

SELECTED PAPERS PUBLISHED BY THE AUTHOR IN DIS-CLOSURES AND THE MINNESOTA SURVEYOR THAT USE SOME OF THE RECORDS DESCRIBED IN THE REPORT

DIS-CLOSURES AND THE MINNESOTA SURVEYOR ARE THE OFFICIAL PUBLICATIONS OF THE MINNESOTA SOCIETY OF PROFESSIONAL SURVEYORS

Comments on the Instructions to Deputy Surveyors in Minnesota, 1847-1860 (Winter, 1995 pp.12-16) C-16

George B. Wright, Deputy Surveyor, 1862-1865 (Dis-Closures Summer, 1995 pp.10-17) C-28

George B. Wright, Deputy Surveyor, 1862-1865 (Dis-Closures Spring, 1996 pp.16-19) C-44

The Public Land Survey in Minnesota 1875-1879 (Dis-Closure Fall, 1996 pp.12-19) C-52

The Public Land Survey 1875-1878 (continued) (Dis-Closures Winter, 1997 pp.12-29) C-64


Deposit Surveys in Minnesota 1881-1884 (Minnesota Surveyor Summer, 2000 pp.16-20) C-97
LETTERS SENT BY SURVEYOR GENERAL CHARLES L. EMERSON, 1857 (Dis-Closures Fall, 1994 pp.20-26)

Introduction

In previous papers the published annual reports of the surveyors general of Wisconsin and Iowa for the years 1847-1859, and those of the first surveyor general of Minnesota for the years 1857-1860, were used to show how the public land surveys spread in Minnesota.1 Each annual report comprised one of a number of letters sent by the surveyor general to his superior, the Commissioner of the General Land Office (Figure 1a), which in turn comprised a small proportion of the letters sent by the surveyor general in a particular year (Figure 1b), and an even smaller proportion of the letters that form the entire business correspondence of the surveyors general. This correspondence supplements and enriches the story of the public land survey described in the annual reports because in the various letters are descriptions of where and how the surveyor general expected the deputies to work and how the deputies actually fulfilled their contracts. The information contained in the letters clearly suggests that land surveying in Minnesota, probably throughout the nation, was a more complex affair than has generally been supposed and the problems faced by the surveyors general and their deputies more difficult than is illustrated by the maps that can be drawn at intervals of time. Most importantly, however, for the modern land surveyors, these letters contain the instructions that a particular surveyor general gave to his deputies when awarding a contract to survey a particular area. Such instructions are invaluable to anyone wishing to "follow in the footsteps" of their predecessors in survey as Dodds et al have shown for Iowa.2

As an example of this correspondence I report here on some of the letters sent by Charles L. Emerson, the first surveyor general of Minnesota, from May-December 1857, after he opened his office in St. Paul. This material is kept by the Minnesota Historical Society and was described by the editor of this magazine, John Freemeyer.3 (see Appendix).
When Emerson commenced his duties in St. Paul he was faced with several tasks. He was to continue the surveys in Minnesota, a task I reported on previously. He also had to respond to questions about the Michigan survey which he had closed prior to moving to St. Paul. Most importantly perhaps, he was to ensure that all of the plats and notes that had been produced by deputies employed by the surveyors general of Wisconsin and Iowa, who had been responsible for the public land survey in Minnesota from 1847-1857, were transferred from then-surveyor general Warner Lewis in Dubuque, Iowa to St. Paul.

These early letters, raise serious doubts about the notion that Emerson carried on the survey in Minnesota "without any particular troubles." A difficulty he faced in letting contracts initially, in fact throughout 1857 and early 1858, was that the plats and notes of townships adjacent to the areas in which he gave contracts, plats and notes that would control the work of his deputies, had not been completed by the deputies having contracts with Lewis or, if they had been completed, had not been transferred to St. Paul. As a consequence, some of the lines run in both of these years might contain an unusually large number of errors. Emerson was at pains to point out on several occasions that if the plats and notes he received from Lewis showed up errors in the lines run by the deputies that he, Emerson, employed they would be expected to rerun them. In a letter to deputy surveyor Moses K. Armstrong, dated November 3, Emerson warned that if the earlier surveys caused problems for his surveys then he would be obliged to redo the work at his expense.

The Data - Letters Sent

Each volume of Letters Sent, usually called a Letterpress Book, contain the transcribed copies of the letters sent by the surveyor general or perhaps his chief clerk. Each volume may span more than one year. Until 1889 the copies were handwritten but are easily read. Each contains an index of addressees, a useful research tool for anyone looking at the work of individual deputies. The letters in these books were written by a variety of individuals and cover a variety of topics. A descriptive list, prepared by a member of the Minnesota Historical Society staff, gives an overview. Volume J contains the letters sent by both Leander Chapman, surveyor general of the Territory Northwest of the Ohio River at Detroit, and Charles Emerson in 1857 and the early part of 1858. Two more volumes contain the letters sent by Emerson before he was replaced by William D. Washburn in March 1861.

The letters are best grouped according to addressee (Figure 1b).

A. Letters to the Commissioner of the General Land Office in Washington D. C. concerning the administration of Emerson's office in St. Paul, the payment of the deputies following fieldwork, and other miscellaneous surveying queries, for example. The annual report for 1857 is included in this group of letters.

B. Letters to individuals in charge of the various land district offices responding to questions about the availability of plats and descriptive lists for lands within a particular district. In the correspondence described here only a few plats were sent to the district land office to allow the land to be advertised for sale.
C. Letters to various businesses regarding supplies, such as paper.

D. Letters to Warner Lewis, the surveyor general at Dubuque, Iowa. Most concerned the speed with which the records of the Minnesota survey were being transferred to St Paul but, not surprisingly, some involved questions of survey methodology and requests for information.

E. Letters to individuals who had requested particular areas be surveyed at their expense, those who inquired about the availability of specific township plats, and those who questioned the accuracy of the surveys that had been completed.

F. Letters to individuals who requested work, both surveying and clerical duties. Some of these applicants were accepted, some rejected - because the individuals did not fill out the necessary forms correctly, and some accepted on condition either that they could prove their competency or that their previous surveys were deemed adequate.

G. Letters to deputies, probably the group of most interest to modern land surveyors. These comprise three categories; first, those in which individuals are awarded contracts and given instructions on how to carry out the contract, second, those in which Emerson either responded to a query from a deputy carrying out a particular contract or forwarded completed field notes to help the deputy, and third, those in which Emerson accepted the deputy's work. Some of these letters were obviously sent in response to a request from the deputy.

H. Letter to individuals regarding the Michigan survey. Even into December Emerson was answering queries about the Michigan survey.

What follows is a brief review of some individual letters, listed by date, omitting the details of the actual instructions.

A. Letters to the Commissioner of the General Land Office

On April 13 Emerson, then in Detroit, wrote that he was going to proceed to St. Paul on April 16 to procure a suitable building and then return to Detroit to close down that office. On May 8 he wrote saying that he had transferred the surveying records for Michigan to the state government and was moving to St. Paul. Some two weeks later, on May 26 he described his St. Paul office,

The building is a two story one: the first floor is to be used for the city post office, and the second one I have secured for the use of this office, at an annual rent of eight hundred dollars, commencing on the 15th instant. The rent is as reasonable as can be procured. I regard the selection as one of the best that can be made in this city, at this time, there being comparatively few brick tenements and none that are more secure from fire than the one selected.

On May 30 he sent an invoice for paying his salary, $2,075, the salaries of his clerks, $425, and incidental office expenses, $570 for the second quarter of 1857. He added a postscript, "A draft
on New York can be used here without loss, which will not be the case if drawn on many other depositories”.

On June 6 he acknowledged receiving the copies of the field notes and maps of the Gull and Rabbit Lake Reservations, created under the 1854 treaty, notes and maps that had been executed under the Superintendent of Indian Office. He wrote, "Your instructions relative to closing the lines of the public survey upon the boundaries of the Reservations will be strictly observed".

On June 18 he acknowledged the Commissioner's letter regarding the appropriations that were available for the survey. Of the area he wanted to survey, he wrote,

I have selected the districts of the country described, as being of most suitable for early surveying operations on information derived from settlers, and from gentlemen well acquainted with their wants, as regards the prosecution of surveys.

On June 29 he submitted his expenditures for the second quarter of the year, April 12-June 30, 1857. His desk had been much abused in the journey from Detroit and he'd refinished it!

On July 16 he wrote regarding inspections north of Lake Superior.

The difficulties attending an inspection of the survey in the Lake Superior region, rendering it beyond the power of one Inspector, to properly examine those surveys, as well as those West of the Mississippi river, I would respectfully suggest that authority be given me to employ a special Inspector for the Lake Superior surveys, to be paid a reasonable per diem (say $5) together with his actual and necessary expenses while engaged upon such examination.

For the surveys lying immediately East of the Mississippi river, and those west thereof, I propose employing one Inspector at an annual compensation of $1,400 together with his actual & necessary expenses while in the field. This is the rate of compensation which, I am informed was allowed by the Surveyor General of Wisconsin & Iowa to the Inspector whose field of operation embraced the surveys in this Territory whilst under his superintendence.

July 16 he wrote to the Superintendent of Indian Affairs asking that Josias King, then surveying on the Rum River, be reimbursed for Indian depredations and that he take steps to ensure that such action were not repeated. The same letter was also sent to Indian Agent Harriman. On August 11 Emerson wrote again to Harriman,

I enclose you herewith an account, sworn to and submitted by J. R. King D.S. setting forth the loss sustained by him whilst at work in the field by the depredations of a band of Chippewa Indians, under one Ka-buc-a-tee. Considering the distance to which Mr. King was at work from any point where he could obtain a supply of provisions to replace those stolen and destroyed, the difficulty attending the transportation of the same through swamp and woods and the inconvenience and delay to which he has been subjected, I do not think his estimate of loss sustained
other than reasonable, and towards his reimbursement, I will thank you, to use your best endeavors.

On July 23 he sent his third quarter requisitions in early because of the uncertain winter mail, a request that included money for two stoves and fuel. He argued that the price of goods was so much cheaper than they would be in the winter when navigation ceased. Once again, he asked that the money be remitted as a draft on New York.

On September 10 he responded to a letter instructing him to transmit plats and descriptive notes to the land offices at Buchanan and Ojibwa. He informed the Commissioner that he had not received the material from Warner Lewis in Dubuque and the contracts that he had let in the two districts had not been completed at this time. He noted that the surveys for which he had contracted were all in the Buchanan land district. He had contracted only for a correction line in the Ojibwa, or Northwestern, land district.

On October 5 he wrote regarding the death of one of his deputies, Saul W. Putnam, asking what should be done about his contract. Three days later he wrote to Perley P. Putnam asking for the notes that his brother had made before he died.

On September 23 he estimated his expenses for the fiscal year ending June 30 1859. His salary would be $8,300 and those for his clerks $10,000. He anticipated the surveys of the Northeastern (Buchanan) district at augmented rates costing $25,000, the surveys of the Northwestern district (Ojibwa) at augmented rates costing $45,000, and the surveys in Minnesota west of the Mississippi river and south of the Northeastern district costing $80,000. Incidental expenses of the office including the rent, stationery, fuel, printing binding, messengers, postage and other items he estimated would cost $35,000.

On October 6 he sent a list of the contracts he had let to date and on October 26 he sent his annual report. On November 2 he wrote asking for his expenses. As a postscript he argued,

As gold coin will be exceedingly scarce in this city by the time the draft for the above amount reaches here, it will be necessary for me to visit Dubuque, Iowa to have the draft cashed, in which event I would respectfully enquire whether the Dept will allow my actual expenses in traveling to and returning from that city. A draft on New York could be used to much more advantage in this city than one on Dubuque, hence my reason for asking in my letters of the 30th May & 23d July last, that the draft for the amounts of my requisitions of those dates might be remitted per draft on New York. Should it be necessary for me to visit Dubuque I would remark that as traveling is then done in stages it will require some 5 or six days to go and the same length of time to return.

The following day he sent his accounts for the deputies who had finished their contracts along with the plats and field notes. The same day, November 3, he wrote to his deputies saying that he had sent the material to Washington.
On December 30 he presented the account of Elias C. Martin. He made note that some of the lines were not run according to the printed instructions, for example the southern tier of section lines in T53NR15W were not long enough. He sent a letter to Martin talking about the discrepancies. In the letter to Washington he mentioned an independent meridian.6

In several letters he makes reference to other information to which he clearly had access but which is absent in the letterpress book. On July 17, for example, he wrote regarding the course of the survey in Minnesota in which he referred to a diagram showing his plans for the guides and standards. Again, on July 21 he mentioned an instruction circular of May 22.

B. Letters to land officers

On September 8 Emerson wrote to George B. Clitherall, the register of the Northwest land district, responding to Clitherall's letter asking whether there would be enough land surveyed in the district by June 1, 1858 so that a land office should be opened. He wrote that no surveys apart from a correction line had been run and he estimated that it would be fall 1858 before sufficient lands would be surveyed to make a land office practicable.

On September 17 he sent letters to both the Commissioner of the General Land Office and A. C. Smith, register of Minneapolis land district office, regarding the subdivision of a lot. On December 19 he sent the plats of an island in the St Croix to the Stillwater land office. The island had been surveyed at private expense by H. H. Newbury, and paid for by Ebenezer Colby (see below).

C. Letters requesting supplies


D. Letters to Warner Lewis in Dubuque

On May 27 Emerson commenced what would be a protracted effort, to transfer the surveying records relating to Minnesota from Dubuque to St. Paul. Almost a month later he wrote,

By instructions this day received from the Comm. of the Gen Land Office, I am directed upon receipt from your office of "evidence of the surveys yet to be executed by Mr. Burt Deputy Surveyor situated in Townships 48, 49 & 50 N. R 51 W and in Townships 49 & 59 N. R 14 W" to contract for the necessary additional surveys on Lake Superior and on the left bank of St Louis river.

The Comm. also states as follows to wit "In Minnesota surveys west of the Mississippi under the instructions of 23d April 1856 some progress has been made – leaving for your action under those instructions the following yet to be executed in advance of the other field work to wit 1st to contract for the exterior lines and subdivisions of the Townships E of the 4th Guide Meridian, to the Mississippi river, and North of the 6th Standard parallel, and South of the 8th Standard parallel so soon as the field notes of the survey and diagrams of the Guide Meridian and the Standard parallels are furnished by the Surveyor General at Dubuque."
From the foregoing extracts it will be seen that I shall be unable to contract for further surveys in Lake Superior until I am advised of the completion of Mr. Burt's work and that I cannot contract for the survey of the Township lines and the subdivisions between the 4th Guide Meridian and the Mississippi and the 6th and 8th Parallels until I have received from your office, notes and diagrams of the survey of the 4th Guide Meridian from the 6th to the 8th Parallel, and of the 6th and 8th parallels, from the 4th Guide to the Mississippi.

The corrected diagram furnished by your office represents the 4th Guide Meridian to be in an unfinished state from the 6th to the 7th Parallels and the 7th Parallel, from the 4th Guide to the river, as also unfinished. From said diagram it does not appear that the 4th Guide Meridian has been extended North to the 8th Parallel or that the 9th Parallel has been run, or that either has been placed under contract.

The surveying season being already far advanced, I feel very anxious to commence field operations with the least possible delay.

Not all communications with Lewis concerned the transfer of records, some were of a more technical nature, one surveyor to another. On June 15 he wrote,

Will you please advise me upon what plan the township lines North of the St Louis River and Lake Superior have been laid out?

The diagram received from your office does not show that a Correction line North of the 4th has been run; If a 5th Correction line has been run, I will thank you to designate its locality.

If you have instructions from the Department relative to laying out townships on the North shore of Lake Superior, a copy of them would be of use to me.

On June 18 he wrote, "Will you oblige me with a copy of the Comms. instructions to you of April 30th and September 27th 1856 concerning the survey of Indian Reservations under treaties with the Chippewas of Lake Superior and of the Mississippi?"

By October 1 Emerson was clearly losing patience over the speed with which Lewis was sending him the plats and notes of Minnesota. Quoting a letter from the General Land Office dated April 1, he wrote,

As constant calls are made upon this office for information touching on the surveys already completed in this Territory, to enable me not only to answer such calls but to carry on successfully and with as little delay as practicable the surveys for which I have contracted, it is necessary that I should have in my possession as much information concerning the same as possible, which information I cannot obtain from any other source than from the returns of the surveys which have already been completed.
The "official organization" spoken of by the Dept is not complete, nor can it be, until I have recd. from you all the documents which you have in you possession relating to surveys in this Territory, the major part of which I presume must be in a condition to be turned over to this office.

Clearly Lewis was sending plats and field notes as his deputies completed their contracts, Emerson received the notes of the Iowa/Minnesota boundary survey on August 27, for example. But Emerson also asked specifically for certain township plats when his deputies could not find the corners to allow them to subdivide a township.

E. Miscellaneous Letters.

On July 31 Emerson responded to the complaint of a number of citizens from Olmstead county regarding the corners in the county, asking that the county surveyor be authorized to move them. Emerson forwarded a copy of the citizen's letter to the Commissioner of the General Land Office on the same day and in the accompanying letter wrote,

The removal of said corners would render necessary a resurvey of the Township in question, and being fully aware of the objections on the part of the government to the ordering of Resurveys, I have deemed it proper to lay the case before your office, for such action as you may think the merits of the case deserves.

Throughout the correspondence are letters regarding private surveys, surveys of a particular area undertaken by deputies under contract but paid for by those individuals requesting the survey. Many of the requests concerned islands in the Mississippi and St. Croix rivers. On August 1 he responded to his first application for such a survey, of islands in the Mississippi. In the letter he appointed R. D. Lancaster of Sauk Rapids as a deputy and gave him special instructions. He also added, "It is to be distinctly understood that in no event is the government to incur any expense for the survey of the islands in question". On September 14 he responded to a request for a survey of an island by writing that the island was already surveyed. Some of the requests occasioned protracted correspondence. On September 19 he wrote to Levi N. Folsom of Taylors Falls regarding the survey of an island in the St Croix. This was followed by a letter September 29 to H. H. Newbury DS, interestingly care of Levi N. Folsom, Taylors Falls giving him instructions regarding the survey. The survey was also the subject of a letter written on November 5 and December 19 when Emerson forwarded the notes and plats to the Commissioner of the General Land Office in Washington D.C. The survey, in sections 33 and 34 T36NR20W was apparently paid for by one Ebenezer Colby.

On November 30 Emerson wrote to Thomas Straw at St Cloud.

In reply to your of 6th ins. complaining that the subdivisional survey of T121NR29W had been incorrectly executed, I have to state that before any action can be taken by this office it is necessary that you designate the particular lines which have been erroneously established. The assertion that "the survey of this Township is not done correctly" is not sufficiently explicit to enable me to act.
He said the same in a letter, also dated November 30, to E. D. Atwater, enclosing tracings of the plats of subdivision surveys in question, that had been executed earlier by Silas Barnard. Emerson asked Atwater to, "use every means in your power to detect any error in the subdivision thereof”.

F. Letters asking for work

The letters cover applications for work in the office as well as in the field. There are several letters addressed to individuals in Minnesota and elsewhere who obviously requested surveying contracts. When he first received such requests he was forced to refuse to give contracts. On May 29, for example, he wrote to H. P. Van Cleve of Long Prairie,

I am not yet in receipt of instructions from Washington authorizing me to enter into contracts for surveys. I expect to receive such instructions about the middle of June. Please inform me if you are practically acquainted with the use of the Solar Compass.

On the same day he wrote a similar letter to David W Myers from Michigan and added,

Should you apply here in person and be able to fully satisfy this office of your competency, I think that I shall be able to assign to you a district for survey.

From your letter, I suppose that you have had experience in Government surveys, and that you understand the use of the solar Compass.

He was clearly concerned that prospective deputies should use the latest technology, the solar compass. On June 13 he wrote to R. J. Mendenhall.

The surveys to be undertaken, require that a contractor should be practically acquainted with the use of Burt's improved Solar Compass; You will please advise me whether you are acquainted with the adjustment and use of the instrument; I shall then be able to give you a more definite answer, as to my being able to employ you in the public survey.

True to his predictions, by June he was ready to start employing deputies. On June 13 he sent letters to Richard Relf and E. C. Martin of Superior, H. P. Van Cleve of Long Prairie, Silas Barnard of Minneapolis, and S. W. Putnam of Little Falls, all of whom had asked for a contract. He asked them to appear in person as soon as possible.

George E. Adair, a deputy who had been employed in Michigan, seems to have been a special case. On June 15 Emerson wrote,

(Y)ou have been recommended to me as being a competent surveyor, practically acquainted with the use of the Solar Compass. I am induced to offer you employment. I desire to make during the present season, all possible progress in the public surveys in this Territory on the north shore of Lake Superior; If you are willing to undertake a contract that will probably embrace both town line and
subdivisions, I will assign you to as much work as you can do this season, and will, if your returns are satisfactory, give you work another season. The work that I propose to assign to you will be N.E. of Superior City, near, and coming out onto the Lake.

Rather than asking Adair to appear in person in St. Paul, Emerson wrote that if he agreed to the work he would send him instructions and a contract to Detroit. As compensation Adair would receive, "For township lines about $10 per mile will be paid and for subdivisions $6: with 8 per cent off from township lines and 7 per cent off from subdivisions for expenses of examination".

In some instances Emerson wanted to ensure that the individuals were competent surveyors. On June 17 he wrote to Josiah Knauer of Michigan that he would not be given a contract in Minnesota until his returns in Michigan had been examined. On June 29 he wrote to Mason B. Clark, "it will be necessary for you to furnish me, by satisfactory recommendations, evidence of your competency and ability to properly execute the surveys upon which you might be engaged". Even when individuals were recommended Emerson wanted to ensure competency. On June 29, for example, he wrote to J. H. McKenny, then a land officer in Chatfield, Minnesota who had recommended a Mr. Watson as a prospective deputy, "I would suggest that Mr. Watson apply here in person, and bring with him such recommendations, showing his integrity and qualifications as a surveyor, as he may be able to obtain".

G. Letters to deputies.

Emerson made contracts with eight deputies to run meridians, parallels, and township exteriors (Figure 2) and ten deputies to subdivide townships (Figure 3). All would be completed, and reported, in the annual report for 1858.

Some, but not all, of the letters in which contracts were given to various individuals contained special instructions. On June 22 he wrote to Josias R. King, for example,

> With your contract of this date you will receive a copy of the printed General Instructions under which the surveys in this Territory are to be executed.

> You will make yourself familiar with all the requirements of the instructions, and execute your work in strict accordance therewith. You are herewith furnished with a copy of the notes of bearing trees from the section and quarter section corners of the township lines of the towns embraced in your contract, so far as this office is in possession of said notes; It is not apprehended that you will be subjected to any serious annoyance by reason of not having all of said notes; the survey being of recent date, can readily be identified without notes. Rum river passes through several townships embraced in your contract; Not having in the office plats of surveys adjoining your district, I am unable to state whether this river should be meandered by you or not; Should you find upon examination, and you are requested to make such examination, that the river has been meandered below, and up to your district, you will meander it through your contract, if in your opinion, it is of sufficient size to admit of being navigated by Boats or Rafts, or if it can be used for running down logs; If the river is generally of a uniform size, and not over four or five chains in width,
meandering of the right bank will be sufficient. You will however establish meander posts on both sides wherever your section lines may intersect it, and frequently note its width as you proceed through each section with the meanders.

In contrast to the instructions he gave King, he wrote to Silas Barnard on June 22,

The district embraced in your contract being plain work, there does not seem to be any necessity for further special instructions. The copy of the general instructions furnished, will be your guide in the prosecution of your survey, and it is believed that if those instructions are strictly carried out by you, the office will find your returns satisfactory.

Some contracts necessitated only a single letter communicating the fact of the contract, the area to be surveyed, and the instructions for the survey. The letter to Horatio P. Van Cleve, dated August 26, similar to the one quoted above, and letters to Ehud N. Darling, dated July 18, John O. Brunius, dated August 24, and Jacob W. Myers, dated August 28, all of which contained special instruction, are the only ones that Emerson wrote to the respective deputies about their contracts.

Other contracts, contracts for work in areas in which the deputy experienced difficulties or unfamiliar circumstances, not surprisingly, were the subject of several letters. Clearly Josias R. King faced both in his contract. Indians obviously stole some of his supplies, see above. On July 28 Emerson wrote to him, then in the field at St. Francis, commenting on the his interpretation of the General Instructions. Finally, on September he released the deputy from his contract because of the difficulties he faced, particularly "the dense undergrowth of scrub oak, vines & c". Less controversial perhaps, on August 12 he wrote to Elias J. Martin, of Superior Wisconsin regarding how he should close the subdivision lines called for in his contract.

One contract provoked correspondence for special circumstances. On July 9, 1857 Emerson wrote to Saul M. Putnam giving him a contract to survey township lines west of the Mississippi River. Putnam died before he finished his contract prompting an exchange of letters between Emerson, Putnam's brother, and the Commissioner of the General Land Office, see above.

Not infrequently, while the deputies were carrying out their fieldwork, Emerson received notes and plats that would help them, from Lewis in Dubuque. These he passed on to the individuals concerned. On August 15 he wrote to H. P. Van Cleve sending him the field notes for the standard parallel and guide meridians to help him in his contract subdividing townships. He was unable to send the township exteriors because Lewis still possessed them. On August 26 he wrote to Silas Barnard at Neenah, Minnesota Territory.

Herewith I enclose you a memorandum giving the bearing trees at the qr. sec: sec: & Tp. corners, on the Exterior lines of the Townships which you are at present subdividing under your contract dated the 22d June last.

Other contracts are the subject of several letters because of some deficiencies in the work. On October 3 1857, for example, Emerson wrote to Silas Barnard saying that the deficiencies in his
<table>
<thead>
<tr>
<th>Deputy</th>
<th>Contract</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>William McMahan &amp; John Ball</td>
<td>July 03</td>
<td>&quot;J&quot; 372-373</td>
</tr>
<tr>
<td>Ehud N. Darling</td>
<td>July 15</td>
<td>&quot;J&quot; 384-385</td>
</tr>
<tr>
<td>Samuel M. Putnam</td>
<td>July 16</td>
<td>&quot;J&quot; 375-377</td>
</tr>
<tr>
<td>Milton Nye</td>
<td>July 21</td>
<td>&quot;J&quot; 366-367</td>
</tr>
<tr>
<td>George E. Adair</td>
<td>July 23</td>
<td>&quot;J&quot; 368-369</td>
</tr>
<tr>
<td>Oscar Taylor</td>
<td>Aug. 11</td>
<td>&quot;J&quot; 416</td>
</tr>
<tr>
<td>Jacob M. Myers</td>
<td>Aug. 18</td>
<td>&quot;J&quot; 425-427</td>
</tr>
<tr>
<td>E. D. Atwater</td>
<td>Oct. 31</td>
<td>&quot;J&quot; 484-487</td>
</tr>
<tr>
<td>Oscar Taylor</td>
<td>Dec. 24</td>
<td>&quot;J&quot; 526-527</td>
</tr>
</tbody>
</table>

**Figure 2.** Contracts awarded for exterior, guide and correction lines by Charles L. Emerson, 1857.

<table>
<thead>
<tr>
<th>Deputy</th>
<th>Contract</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silas Barnard</td>
<td>June 22</td>
<td>&quot;J&quot; 360-361</td>
</tr>
<tr>
<td>Josiah R. King</td>
<td>June 22</td>
<td>&quot;J&quot; 359-360</td>
</tr>
<tr>
<td>Horatio P. Van Cleve</td>
<td>June 26</td>
<td>&quot;J&quot; 363</td>
</tr>
<tr>
<td>John A. Brunius</td>
<td>July 15</td>
<td>&quot;J&quot; 420-421</td>
</tr>
<tr>
<td>Elias C. Martin</td>
<td>July 30</td>
<td>&quot;J&quot; 371</td>
</tr>
<tr>
<td>Milton Nye</td>
<td>Aug. 07</td>
<td>&quot;J&quot; 408</td>
</tr>
<tr>
<td>A. B. Darling</td>
<td>Oct. 17</td>
<td>&quot;J&quot; 464-465</td>
</tr>
<tr>
<td>E. P. Abbott</td>
<td>Nov. 04</td>
<td>&quot;J&quot; 487-493</td>
</tr>
<tr>
<td>Richard Relf</td>
<td>Dec. 01</td>
<td>&quot;J&quot; 502-503</td>
</tr>
<tr>
<td>Moses K. Armstrong</td>
<td>Dec. 30</td>
<td>&quot;J&quot; 488</td>
</tr>
</tbody>
</table>

**Figure 3.** Townships contracted for subdivision in Minnesota, 1857.
surveys had to be rectified before the work could be approved. Similarly, on December 30 he wrote to Elias C. Martin about deficiencies in his work. Clearly, many of these difficulties with the actual survey were not particularly serious and easily rectified.

Several letters to deputies deserve special mention because they illustrate the survey process and progress. On August 7 Emerson wrote to Milton Nye of Superior giving him a contract and instructions. He enclosed a copy of a letter he had received from Henry M. Rice urging the survey of a tract of country in the vicinity of the mouth of the Sioux Wood river. He wrote, "This point is the terminus of a Rail Road now in course of survey and in consequence thereof, a large number of settlers have already located their claims in the vicinity and urge the survey of the same". The following day Emerson wrote to Rice,

I fear that the Department will decline to authorize the desired surveys from the fact that since submitting a copy of your letter I have received instructions forbidding any further surveys West of the 5th Guide Meridian, now being established and which is some 56 miles East of the Sioux Wood river.

That same day he wrote to Richard Relph declining to award him a contract north of the fifth correction line, for which he had just awarded a contract to Milton Nye. He noted,

As there is an Indian Reservation just North of the correction line above alluded to and on the St. Louis river, the outlines of which have not been established, I do not desire to contract for surveys North of said correction line until the outlines of the Reservation shall have been established, as the public surveys will have to close on the same.

On September 19 Emerson first mentioned the Fort Ripley military reservation in a letter to Lewis. Two days later he wrote to George E. Brent awarding him a contract and giving him instructions for surveying the reservation boundaries. On October 2 he communicated his actions to Washington.

On October 31 he awarded a contract to Edward D. Atwater and included instructions. On November 23 when Atwater was in the field, he wrote to the deputy, care of G. W. Sweet, Sauk Rapids,

I have heard incidentally that you have found an error of half a mile in some one of Mr. Putnam's lines and that you were to wait for instructions from this office. I do not wish to have any delay in this work, and should you find any serious error in Mr. Putnam's lines, you will at once make a new survey of any or all lines that may be found incorrect reporting to this office, for Mr. Putnam only such lines as have been correctly run.

The following day he wrote to Atwater at Watab, Minnesota referring to Atwater's letter of 20 Nov about Putnam's survey. Clearly his letter of November 23 and Atwater's letter had crossed in the mail. In the letter Emerson repeated what he said in his letter of the previous day.
On December 1 he awarded a contract to Richard Relf of Superior City. In the letter Emerson presumed that the St. Louis River, which passed through the township, was sufficiently large to be meandered and required the deputy to keep notes of the township lines and the subdivision lines in separate books. In a P. S. he wrote, "I am very desirous that the surveys hereby assigned you should be executed during the present winter".

On December 31 Emerson again wrote to Relf, who was then at Twin Lake Wisconsin. Clearly Relf had accepted the assignment but had posed several questions. Emerson replied,

1st. That you are only required to use the "Solar Compass" in running Township lines. The subdivisional line may be run with a "common magnetic compass".

2d. You are expected to complete your survey and return full and complete notes thereof by the 15th day of March 1858.
3d. You are only required to take the bearing of a settler's house or barn if visible from the line which you may be running, from a point on your line, giving the settlers name.

4th. When your notes have been received at this office they will be subjected to a strict examination, and if found in every respect correct, your work will be platted and an account in your favor stated and forwarded to the Comr of the Genl Land Office at Washington DC for payment accompanied by plats of your work, and a transcript of your notes, and if approved by that officer, a U. S. Treasury draft for the amount which may be found to be due you will be sent to you from Washington at any point which you may designate.

Conclusion

The whole range of letters sent by Emerson adds richness to the story of the public land survey work in Minnesota illustrated by one such letter, the published annual report, because they provide details of the actual fieldwork that was carried out and the queries that the deputies posed while in the field. Many of the letters Emerson wrote were in response to the letters he received and thus the letters sent should be used in conjunction with the letters received.

Appendix – Introduction to Materials Described here in the Minnesota History Center

Letters Received
Minnesota State Archives
Record Group: U.S. Surveyor General
Series: Letters Received 1857-1907

Each volume of Letters Received contain the actual correspondence received by the surveyor general's office during a particular year. These are the actual letters, written by different individuals on paper of different size, bound together. As in the case of most handwritten letters
COMMENTS ON THE INSTRUCTIONS TO DEPUTY SURVEYORS IN MINNESOTA, 1847-1860
(Winter, 1995 pp.12-16)

Introduction

From 1785-1812 Congress enacted legislation that prescribed the lines to be run and the corners to be monumented, thus establishing the gross morphology of the public land survey system. The legislation prescribed no standards of accuracy and no methods to correct the effects of errors introduced by the surveyor or by the curvature of the earth, however, standards and methods that would evolve later, following the experiences that could only be gained by actually running lines and monumenting corners. Most importantly perhaps, certainly significant to the modern land surveyor, the legislation provided no instructions to the individual surveyor working in the field running the lines and marking the corners that were stipulated. From earliest times, then, surveyors were continually making judgments regarding sound surveying practices as they carried out the fieldwork required of them.

They were not completely without instructions, however, because Congress gave specific individuals the responsibility of supervising surveying practices. In 1785, for example, Thomas Hutchins, the Geographer of the United States, was given such responsibility when surveying the Seven Ranges in what is now Ohio with deputies from the original thirteen states. Since he was working in the field with his assistants his instructions regarding sound practices were probably verbal.

From 1796-1910 the responsibility for instructing surveyors working in the field was given to surveyors general appointed by the President to administer the surveys in a particular area. These individuals were authorized to make contracts with deputy surveyors for running specific lines and to supervise their work. In carrying out their responsibility these surveyors general, who possessed a great deal of autonomy, issued written instructions to each deputy. Some of this autonomy was diminished in 1836 when the office of Principal Clerk of Surveys was established in the General Land Office. Their autonomy was diminished further in 1855 when John Moore, then Principal Clerk, issued Instructions to the Surveyors General of Public Lands of the United States, for those Districts Established in and since the Year 1850; containing, also, a Manual of Instructions to Regulate the Field Operations of Deputy Surveyors, Illustrated by Diagrams, a publication which attempted to standardize the practice of surveying in the various surveying districts around the nation, an attempt that succeeded in 1862 when Congress made this manual part of the contract of every deputy. Even after 1862, however, the surveyors general continued issuing instructions to the deputies with whom they made contracts. They also checked the accuracy of the completed work, answered queries from deputies carrying out fieldwork and each another, and continued to report to Congress and ask for appropriations.

From 1796-1910 the various surveyors general issued numerous instructions and circulars to guide and control the work of the deputy surveyors they employed. The work of the deputies, running lines and marking corners, was based on these instructions and although individual deputies may not have adhered to high standards of surveying in following the surveyors general's instructions the modern land surveyor must be aware of them. Here, I concentrate on the instructions that affected the deputy surveyor in Minnesota during the period 1847-1860, the period about which I have written previously. My purpose is very limited, firstly, to suggest
2 Dodds, J. S. et al. Original Instructions governing Public Land Surveys of Iowa (Ames, Iowa, Iowa Engineering Society, 1943)
3 Squires, Rod. "The administration of the public land survey in the Old Northwest Territory", Disclosures (Fall, 1992 15-19
4 Squires, 1994 supra note 1
6 See Squires, 1994 supra note 1 p.18, a comment that will be investigated in a future paper
7 See Squires, 1992 supra note 1
COMMENTS ON THE INSTRUCTIONS TO DEPUTY SURVEYORS IN MINNESOTA, 1847-1860

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where the modern surveyor must look for necessary historical information to solve some of the problems they face, and secondly, to present two letters, best called special instructions, that John Freemyer and I found in the Iowa State Archives.

Most of the instructions to the deputies comprise part of the tremendous amount of correspondence that took place between the surveyors general of Wisconsin and Iowa and the Commissioner of the General Land Office in Washington DC during the period when surveys in Minnesota concerned the surveyors general in Dubuque, probably from 1846 to 1860; between Charles L. Emerson, the first Minnesota surveyor general and the Commissioner of the General Land Office, Emerson and Warner Lewis, the surveyor general of Wisconsin and Iowa, from 1857 to 1861, and between the individual deputies and Emerson. This material can be found in the National Archives and in the collections of the Iowa State Historical Society and the Minnesota Historical Society.

First, a caveat. Many of the instructions issued by a particular surveyor general are considered only pertinent to one part of the country, perhaps even to one specific set of townships, the area for which the instructions were written. However, the individual surveyors general and the Commissioner of the General Land Office corresponded with one another. In addition, in the case of those individuals supervising the survey in Wisconsin, Iowa, and Minnesota 1857-1860 at least, some surveyors general corresponded with each other. Because the problems faced by deputies in different parts of the country and the solutions proposed by the surveyors general in the various instructions were rarely unique, the evolution of a standardized manual attests to this, I would expect the correspondence files of one surveyor general to contain information of value to surveyors in other surveying districts. I would also expect that even the most detailed instructions that were issued by one surveyor general to a deputy would have parallels in the instructions of other surveyors general to other deputies. This aspect of the history of the public land survey, the degree to which surveyors general across the nation shared both problems and solutions, remains to be investigated.

General Instructions

Under the authority given him by Congress each surveyor general issued general instructions that were applicable to all deputies working in his surveying district. However, as Dodds et al argued, "It is not always clear which general set of instructions was to control but the resurveyor may assume that any survey made at a certain date was made under the latest preceding general." From 1847-1851 the deputies working in what is now Minnesota were governed by the general instructions that George W. Jones, surveyor general of Wisconsin and Iowa, issued May 28, 1846. For the next two years which instructions governed the surveys becomes less clear. George B. Sargent, surveyor general of Wisconsin and Iowa, issued general instructions in 1851. By that time, however, the General Land Office had also issued general instructions. On March 3 1851 the Commissioner of the General Land Office, Justin Butterfield, approved Instructions to the Surveyor general of Oregon; being a Manual for Field Operations issued in 1851 under the signature of John M Moore, Principal Clerk of Surveys in the General Land Office. In April 1851 George B. Sargent was instructed to use the manual, thus raising the
question about which general instructions governed the surveys at that point in time, those issued by Sargent or those issued by the General Land Office? When Warner Lewis replaced Sargent in April, 1853, he was also instructed to use the Oregon Manual so we can assume that the deputies running the survey lines both east and west of the Mississippi, 1853-1855, were controlled by that 1851 Oregon Manual.

In 1855, the 1851 Oregon Manual was republished and enlarged. With this publication, the General Land Office ended the practice of each surveyor general issuing his own general instructions and thus using his own judgment about sound surveying practices, although Congress did not make the 1855 Manual part of the contract of every deputy until 1862. The years between 1855 and 1862, when surveyors general throughout the country had been directed to use the standardized instructions, but before instructions became part of the standard contract, would be an appropriate subject for investigation. Despite such intriguing questions, when Charles L. Emerson opened the Minnesota surveying office in 1857 the 1855 Manual was clearly in use. There would still be changes in the field work of the surveyors but a basic set of general instructions was in place.

For the most part, general instructions, both before and after the 1855 Manual, concerned the way in which township exteriors and subdivisions were run. There is virtually no reference to how any of the meridians and parallels were to be run. As I described in the last paper, and as Dodds et al noted, such lines were run under special instructions.

Special Instructions

Each surveyor general supplemented the general instruction with special instructions. These special instructions were given either when he contracted with the deputy for the work or when the deputy was in the field and raised a question about completing the work. Clearly, such instructions varied considerably, depending on the particular demands of the contract. As pointed out in the last paper, the correspondence between the Commissioner of the General Land Office, the surveyor general of Wisconsin and Iowa, and the deputy surveyors working in Minnesota contains important information about where and how the surveyor general expected the deputies to work and how the deputies fulfilled their contracts. Letters that the surveyor general wrote to individual deputies contain instructions about what to survey and how to carry out their contracts and answered questions about a particular problem the deputy encountered in the field. Even after the 1855 Manual was adopted special instructions were still issued by individual surveyors general.

The following letters were found by the editor of this magazine. I was compiling an inventory of the materials relating to the Minnesota surveys that the Iowa State Historical Society possessed, John Freemyer was busy reading the materials! So, to him goes credit for "finding" these letters. Unfortunately he could not find the diagrams that were to accompany them.

General Land Office  
June 28th 1852  
July 19th  
George B. Sargent Esqr  
Surveyor General, Dubuque  
Iowa  

Sir,  

It is desirable and highly important to obviate the necessity, wherever practicable so to do, of having double corners established on township lines except where they close on a Standard Parallel. To effect such purpose demands that the Standard Parallels should be sufficiently near to each other. A distance of four townships or twenty-four miles between such Parallels North of the Baseline, has been prescribed for the public surveys in Oregon, and wherever New Standard-parallels have to be run elsewhere, there is no reason perceived why the same regulation may not, with equal advantage, be adopted, for the purpose of avoiding the perplexity of double corners to the utmost degree practicable, restricting the necessity to those parallels. Whenever the surveys shall be undertaken north of the northern boundary of the State of Iowa, standard parallels, at the distance of four townships apart will have to be adopted for all that region of Country. How far it will now be practicable to adopt such standards elsewhere in your surveying district, if at all, is a subject of inquiry to which I would invite your immediate and most serious attention, before instructions for new surveys shall have been received by you.

Herewith transmitted are sundry copies of the Manual of Instructions to Deputy Surveyors in Oregon with copies of the Illustrations connected therewith. Copies of the diagrams of the surveys made, in progress, and proposed, in Wisconsin, Iowa, and Minnesota, which accompanied your late annual Report, are also herewith transmitted, and on them are indicated by red lines the "Standard Parallels" proposed for future adoption in Minnesota, at intervals of twenty-four miles, and those elsewhere are proposed for your consideration, all with a view to dispense with double corners, everywhere, to the greatest degree practicable.

It is moreover proposed, in connection with the same general views, to project an adequate number of check meridians, on which the corners of future surveys, to start therefrom, will be duly established. Such meridians, to be established prior to running the Standard Parallels, will be made to operate as a check on the true geographical position of the same – and such meridians to great extent, may also be made to govern the surveys on both sides of them, for in surveying towards a check meridian, on which the corners are preestablished, whenever the closings can be made be course lines to the preestablished corners, without at all disfiguring the surveys, double corners can therefore be avoided – nevertheless in cases where the departure from the cardinal points would be too great so to admit, double corners will be unavoidable. By
these methods it is thought to restrict the absolute necessity for double corners within the smallest possible limits.

The check meridians suggested are illustrated on the accompanying diagrams. While the principle is commended to your most careful consideration, the detailed mode of applying the same may be subject to revision or amendment where you may find good reasons to suggest such.

By this programme (sic) of future operations the future surveys in your entire district, would be blocked out as to prepare for immediate operations, at any time, whatever portions of it the public necessities should first demand to be surveyed for market and enable you to pretermit (permit) whatever portions the surveying of which could best be dispensed with for the time being and all without any discomfiture whatever to the general plan as it will ultimately appear.

The public surveys when once made are, in the eye of the law, to endure for all time, but the evidences are constantly accumulating of the existence of defects in them of various kinds in different districts, but mainly as to the absence of monuments which should perpetuate them, evils for which the existing, general, prescriptions of law provide no remedy – and whatever remedies to be hereafter applied in such cases, must await further and special legislation of Congress on the subject. In view of this state of facts, it is obviously the duty of all having to do with the public land surveys strenuously and unceasingly to aim to make all future surveys fulfill their purpose for all time to come. The object is one in which the best interests of entire communities are involved – knowing as we do that uncertainty as to land marks is destructive to the peace of neighborhoods. To obviate such evils, which cast enduring odium on the authors of them, is an object worthy of assiduous care and pains needed to accomplish the same, and such as it is believed will ever receive your most conscious and hearty cooperation to accomplish. The perpetuation of corner boundaries by means of mound monuments formed the subject of a special communication dated 25th, 9th inst. That instruction is designed to be of universal application in your district wherever mounds have to be erected.

Before your deputy surveyors depart for the field of duty, it is deemed proper that you should require each of them to construct in your presence a monument of the character required in those instructions as a pattern to which, when the work is returned, their oath is to declare that the mounds they have created conform.

I am very respectfully
Your Obt Servant
John Wilson
Acting Commissioner

Unpublished Letter from the Commissioner of the General Land Offices to the Surveyor General of Wisconsin and Iowa, part of the collection (source: 35/058 Box 63. Letters, Commissioner of
the General Land Office instructions, 1850-1853, Iowa State Historical Society, Squires, 1993b). Filing clerk's note, "Instructions for surveys in Minnesota West of the River".

General Land Office
May 16, 1853
Warner Lewis Esq.
Surveyor General
Dubuque, Iowa

Sir,

The surveys in Minnesota, West of Mississippi River, (with the exception of those in the reduced Military reserve at Fort Snelling, concerning which you are specially instructed in my letters of the 6th & 13th inst.) will count from the Arkansas Base, and from the Fifth Principal Meridian in continuation of those in Iowa; - the townships, therefore, will all count, North of the Base Line, and the ranges West of the Fifth Principal Meridian.

The boundary parallel of 43° 30’ will be the great surveying base for Minnesota, and is understood to have been prepared accordingly to be such, by having the corners for townships, sections, and quarter sections planted thereon, in advance.

Those surveys will be affected according to the method prescribed for the public surveys in Oregon, as required by law.

First: The Standard parallels, or correction lines will be due East and West lines, run at every fourth township, twenty four miles apart.

Second: The township, section, and quarter sectional corners are to be planted on those correction lines at the time when surveyed.

Third: The corners for the townships, sections and quarter sections, which will close from below on the correction line, will constitute a double set of corners on such lines, and every where else double corners are inadmissible.

It seems to be advisable that a Guide Meridian (which we will call number One) should be run from the Northern boundary of Iowa to the Mississippi River, starting from the dividing line between ranges seventeen and eighteen West, so as to strike the Mississippi river somewhere in the neighborhood of Fort Snelling. Another guide meridian (number two) should start from the boundary line, where the same is intersected by the line between ranges twenty-four and twenty-five West.

It seems also advisable that another guide meridian (number three) should be started from the said boundary from a point that would certainly clear the Mississippi River when extended to the Crow Wing River and beyond.
The Hon. Mr. Sibley in his letter of 20th March last, (a copy of which is herewith furnished for your information), represents the tendency of the settlements to be, along the valleys of the Minnesota and other rivers, principally, so that the entire population up to the present period would be embraced East of a line drawn North and South to intersect the mouth of the Waraju river a tributary of the Minnesota, formerly St. Peters, river. The other lands which require to be surveyed and brought into market with the least practicable delay, are those lying along the West bank of the Mississippi from the line of Iowa to the Crow Wing river, and along the streams emptying into the former river. The valleys of the Root, Cannon, Minnesota, Crow and other rivers, are rapidly filling up with population, and require the first attention of the Land Office."

It is believed that the guide Meridian, number three starting from the Iowa boundary from the corner between ranges No. 31 & 32 would certainly be found to run to the West of the Mississippi river, (however imperfect our present maps may be found) and secure all the important points without the hazard of interfering with the Indian reservation at the Waraju.

Until you should be in possession of information which would lead to other conclusions, you will consider yourself instructed, first, to enter into contracts for running guide meridians 1 & 2, from the starting points suggested, the former to the Mississippi river, or terminating at the southern boundary of the special survey of the reduced military reservation in the neighborhood of Fort Snelling should it be found to strike the same before reaching the Mississippi, and the latter terminating at the Mississippi, to regulate the survey in the valley of Crow river, and distant forty two miles from the former.

On these guide Meridians, the township, section, and quarter section corners are to be established after the methods prescribed for the Oregon surveys; and such meridians to regulate the subsequent surveying operations, are to be run with the aid of the Burt's Solar Compass, and with the greatest possible care and precision chained with great accuracy, and the corner boundaries, whether mounds or posts, established and identified in the best and most enduring manner. The township surveys will start from the appropriate correction line as their practical base, and be closed on the one above it. The distance to which any one correction line is to be run out, at a single operation under a contract, is to be determined by circumstances. It may be run to the extent of one, two, three, four, five, six, or seven townships according to the locality of the body of land to be reached, and which it is desired to township and subdivide from it, as the practical base. Neither is it indispensably necessary to run the exteriors of all the four townships in width between any two correction lines at a single operation under any one contract. The township exteriors may be extended either one, two, or three townships north of a correction line leaving the residue for a future operation.
The law allows five dollars per mile for surveying in Minnesota, the sectioning will be procured to be done for less, but the average price of the whole must not exceed five dollars.

It is all important that the guide meridians 1 & 2 should be started as soon as possible.

The starting of the correction lines must be so managed as to provide for the townshipping and subdividing of the lands in those special localities where the settlements most abound, so as to accommodate as far as we can, the greatest number of settlers, at the earliest period, making the existing appropriation available to the greatest practicable extent.

Starting from any township corner on a standard parallel, or correction line previously established, the township, or townships on the north, and between it and the correction line, above, will be laid off, on the Oregon method, according to diagram A.

The contracts for township exteriors, should not exceed eight townships, and it is always desirable that the sectional surveys should be established by another Deputy than he who run the township exterior, to act as a check on the work, and such rule must be observed wherever practicable.

The sectional surveys are to be made according to diagram B and the contracts for sectional surveys should not embrace more than four townships. By such a subdivision of labor amongst your Deputies it is hoped you will be able to meet the public expectation in accomplishing the greatest amount of work within the earliest practicable time. The correction line may start from any fourth township corner station on the Meridian, and be run either to the East of it or to the West, according to circumstances so as to embrace the locality which it is particularly desired to have townshipped in advance of the great body of the surveys; and the facility thus afforded for so doing, will enable your Deputies to operate simultaneously on a number of township surveys, however detached from each other; and hence, by a conscientious observance by each deputy of all the principles prescribed, the whole work (detached as it may be in the first instance) ought and will ultimately be found to harmonize and fit together, with the entire connected surveys have been completed in the Territory.

In prairie regions where mounds have to be constructed to signalize the corner boundaries, it is all important that the surveys be made before the frost set in, otherwise the mounds will not endure.

On the map herewith transmitted will be found laid down, the lines between the ceded and unceded lands in Minnesota, and the reservations of lands allotted to certain Indian tribes, with explanatory notes on a separate paper. This map is a portion of Dr. Owen's geological chart of Wisconsin, Iowa and Minnesota reduced at
this office and revised by Nicollet's large chart of the Hydrologic basin of the Upper Mississippi, and, on this map, are laid down the guide Meridians No. 1, No. 2, and No. 3, as alluded to in the foregoing – but, it is to be remarked, that the foregoing instructions were prepared from a map which showed the guide Meridian No. 1. would strike the Mississippi somewhere in the vicinity of Fort Snelling, - the present map, however, is believed to be more accurate and shows that the striking point on the Mississippi will be much to the eastward of the Fort. Since the instructions were prepared, but before completion, the utility has suggested itself, of another guide Meridian, forty-two miles to the east of that marked No. 1. It had previously been designated to omit the same from consideration of economy only, but, for the purpose of ensuring greater accuracy, binding the surveys yet more effectually together, and limiting error, it has been concluded to propose another guide meridian, making four East of the Waraju, and which will be known respectively, as guide Meridians No. 1, 2, 3, & 4.

It is designed that these guide Meridians shall be double chained, one set of chainmen following the other, such operation is likely to increase the expense, but it is hoped that you will be able so to arrange your contracts, as to bring such expense within the legal maximum, and on this subject you are requested, as soon as possible, to advise this office.

By the same mail which will convey this communication, are forwarded, two packages containing each seven copies of the Manual of instructions prescribed for the government of the Oregon Surveys, and also a large roll containing a number of copies of three diagrams, which accompanied the same and by which yourself and deputies will be governed. The same roll contains the maps herein referred to, on which are laid down the four guide Meridians.

I am very respectfully
Your Obt Srvt.
John Wilson
Commissioner

Conclusion

The deputy surveyors who ran the lines and monumented the corners of the public land survey in Minnesota, 1847-1861, were guided by the general and special instructions issued by the Commissioners of the General Land Office, the surveyors general of Wisconsin and Iowa, and the surveyors general of Minnesota. The modern land surveyor needs to pay attention to these instructions which are to be found scattered through the correspondence files of the individuals concerned. The origins of these instructions will be found in the different surveying practices throughout the country.
Endnotes
1 Squires, Rod, “The annual reports of the surveyors general” Dis-Closures (Winter, 1992) 14-15; Squires, Rod, “The administration of the public land survey in the Old Northwest Territory”, Dis-Closures (Fall, 1992b) pp.15-20
4 Squires, 1994b supra note 3
5 Squires, 1993b supra note ; Dis-Closures, “Records of the Office of the Surveyors General of Minnesota” (Summer, 1991) p.20; Squires, 1994b supra note 3
6 Dodds et al supra note 2 p.21
7 Id pp.69-79
8 Id pp.102-115; White supra note 2 pp.386-399
9 White supra note 2 pp.434-456
10 Dodds et al supra note 2 pp.116-186; White supra note 2 pp.457-500
11 Id pp. 511 ff
12 Dodds supra note 2 pp.18-19
13 Squires 1994b supra note 3
14 Dodds et al supra note 2 pp.197-364
15 see also Squires 1993b supra note 3
GEORGE B. WRIGHT, DEPUTY SURVEYOR, 1862-1865 (Dis-Closures Summer, 1995 pp.10-17)

Introduction

In Minnesota at least 250 deputies, working individually and in partnership with others, set monuments and ran lines to create a public land survey net. All of them worked under contract with the federal government, contracts which specified what area they were to survey, how they should carry out their work (the general and special instructions), when they should complete it, and what compensation they would receive. Some of these contracts, and other information about the work of the deputies, can be found in a set of letterbooks titled “United States Surveyor General; Letters Sent” which contain copies of the letters sent by the surveyor general of Minnesota to various individuals involved in the public land surveys. Some of these letters, which are located in the State Archives at the Minnesota History Center, were the subject of a previous paper.1 A large portion of this correspondence consists of letters in which the surveyor general addressed issues raised in the letters he received from deputies in the field, letters that were filed in a set of letterbooks titled “United States Surveyor General; Letters Received.”2 Neither of these two letterbooks contain all of the correspondence that passed between the various individuals involved in the public land surveys but together they comprise an important source of information for anyone interested in the public land surveys. For the modern surveyor, seeking to reconstruct the monuments and lines that comprised the original survey net, they contain information about the contracts and problems faced by the deputies. For the historical geographer, seeking to document the progress of the public land survey, they contain information that helps describe and explain why the survey spread to one area or in a particular direction. For anyone interested in the surveying careers of individuals, genealogists or our esteemed editor for example, these letterbooks are invaluable. Here and in the next paper, I describe what these letterbooks record of the career of George B. Wright, who surveyed in west-central Minnesota during the period 1861-1872, and who was featured in a previous article.3

George Wright was merely one of many deputy surveyors who left a paper trail, in the form of contracts and other correspondence which we can read, and an actual surveying trail, in the form of the points and lines which the modern surveyor must follow. Both of these trails must be followed in order to understand how the public land surveys were carried out. Some of the difficulties faced by the modern surveyor following the surveying trail may, in fact, reflect the difficulties faced by the deputy surveyor during fieldwork and the manner in which the surveyor general directed him to overcome them. While the illustrious status that some of the surveyors achieved subsequent to their surveying career may be of vicarious interest to the modern surveyor those individuals whose career involved surveying under different circumstances, and hence under various instructions from the surveyor general, are possibly the most revealing in terms of the evolution of the public land survey. Those individuals who were involved in running parallels, guide meridians, township exteriors, state and Indian reservation boundaries, as well as subdividing townships for example, or those who worked in both the wooded and essentially treeless parts of the state, or those who were employed before and after new technologies, such as the solar compass, were introduced. In addition, there are individuals who were employed
FIGURE 1
Townships subdivisions involving Wright

FIGURE 2
Surveys involving Wright, Banker & Walker

FIGURE 3
Surveys involving Wright; Banker; Walker
as deputy surveyors, as examiners, and as timber agents, and who were thus subject to the spectrum of opportunities and problems faced by the public land surveyor.

Wright is noteworthy because he was a prolific surveyor being involved in surveying eighty-five full and fractional townships, subdividing almost two million acres, mostly in west-central Minnesota (Figure 1). He surveyed thirty-two townships on his own and the remainder in partnership with four other individuals who held surveying contracts before and after being associated with him. He also surveyed the exterior lines of several townships. His career working for the federal government can be divided into three periods. In three years, 1862-1865, Wright surveyed in partnership with two individuals, Isaac A. Banker and Thomas B. Walker (Figure 2); for the next three years, 1866-1869, he worked on his own; and for the following two years he worked first with George G. Beardsley and then with Beardsley and Olsen C. Miles. Here, I focus on the letters received by the surveyor general from Wright and his partners and the letters sent in return during the first of these periods, when he was working with Banker, who worked alone in eastern Minnesota both before and after his partnership with Wright, and Walker, who worked alone and with other partners after his association with Wright (Figure 3). Unfortunately, some of the letters received have not been kept so that we can only guess, by the surveyor general’s answer, what Wright was asking.

George B. Wright, the early years

George started his surveying career as a chainman on a railroad survey in Vermont. He moved permanently to Minnesota in 1857 and by 1861 was working in the central lakes region of the state. Although his first contract was not made until 1862 he was clearly a surveyor before then. In a letter dated January 30, 1858 Charles Emerson, the surveyor general of Minnesota, wrote to Wright, then in Minneapolis,

Yours of the 28th inst. calling my attention to an error in the establishment of the quarter post on line between secs 13 & 14 in T 116 N. R 23 W. and asking whether such error can be corrected has this day been received and in reply I have to state that the error in question can be corrected but it will be necessary for you to comply with the following requirements before any action can be taken by this office in the matter.

You will first obtain from the Register of the US Land Office at Minneapolis a certified list of the lands in secs 13 & 14 which have been sold. Should it be found that all or any part of the land in those sections has been sold then it will be necessary for you to obtain from the owners of such lands, a written consent, stating their entire willingness to have their quarter post changed from its present position and placed at a point equidistant from the corners to secs 11. 12. 13 & 14. and secs 13. 14. 23 & 24. Should any owner of land in either of the sections in question (13 &14) refuse to give his consent to the removal of the quarter post, said quarter post must remain at the present point (in the Lake) and those who have purchased land by the plat on file in the Land Office at Minneapolis must abide by said purchase.

Should no land have been sold in either of the sections, then upon application to this office, I will authorize a duly appointed Depy. Sury. of this office to execute a re-
survey of the line between sections 13 & 14, but it is to be distinctly understood that should a resurvey of the line in question be authorized all expense therefore will have to be paid by the parties applying for the same.

When you shall have obtained the properly certified list of sold lands in the sections in question from the land office at Minneapolis and obtained the written consent of parties owning those lands, to a change of the quarter post, you will forward them to this office, and I will take such steps in he matter as may be deemed proper.5

In a post script, Emerson noted, “The written consent of partied owning lands must be signed in the presence of a Justice of the Peace and Notary Public who must attach his certificate.”6 The letter would indicate that Wright was involved in surveying but his exact status is unknown. Another letter from Emerson to Wright, dated May 27, 1859 indicates that Wright had sent a “Memorandum of Meanders” to the surveyor general, perhaps on May 25, and the surveyor general returned it annotated with the information Wright had requested is equally ambiguous.7 No further information exists.

May 22, 1862 Washburn, newly appointed surveyor general of Minnesota wrote to Wright,

In the subdvisional survey executed in 1861 by Messrs Wellman & Smoot under a contract dated July 13, 1861, certain deficiencies have been found & reported by the Inspector in his examination of same which are required to be made good. The contractor declining to return to the field for the purpose of completing the work & having confidence in your ability and knowledge of the character of the work required in the public surveys, I have appointed you a Deputy of the Office & have to instruct you to proceed without delay to the Townships embraced in the above contract, diagrams of which are herewith furnished you for the purpose of thoroughly completing the work improperly and inefficiently performed by the contractors.

The Inspector reports that the posts are poorly set not properly charred, with no separate charred stake or charcoal trenches, the mounds poorly built narrow and & made with sods, not of proper length or depth, & pits small and irregular. These deficiencies you are expected to have made good, so that the corners shall be in accordance with the requirement of the printed General Instructions, and the special instructions respecting the building of mounds (with which you are acquainted and under which the surveys were required to be made.

You will keep and return to this Office full notes of all the work you find it necessary to do in carrying pout these instructions, as also a diary of the time you are engaged in this duty from the day you leave for the field.

Your compensation for this service will be $3 per day, with the actual and necessary expenses of yourself and assistants, & I would expressly urge upon you the closest economy in all the expenses connected with the work entrusted you, consistent with a due regard to the proper execution of the corrections required.
You will be furnished by this Office with the necessary camp equipment including tent & also a small compass to assist you in tracing the lines, all of which you will take due care of & return here on completion of the work.8

This letter is a little puzzling. Wellman and Smoot had received a contract July 13, 1861 to subdivide T 105 N R 39, 40, 41, and 42 W; and T 106 N R 39 and 40 W, and to run a small portion of several standard parallels, 1st-6th, from the 6th guide to Minnesota’s western boundary. Clearly, Emerson wanted Wright to correct part of their survey but I cannot find any record of him doing so.

**George B. Wright and Isaac A. Banker**

Wright received his first government contract with Isaac Banker on July 23, 1862. Under the instructions contained in the contract, although not present in the letterbook, the two were to survey twelve townships including any islands in the Mississippi River. In addition, they were to survey one township under special instructions. On August 11, 1862 Washburn wrote to Wright and Banker saying that the Commissioner of the General Land Office had approved their contract,

The contract requiring that the survey shall be made in strict accordance with the requirements of the “Manual of Surveying instructions” and your experience on the public surveys in the State renders any special instructions from this office as unnecessary except in the case of Tps 136 N Rs. 25 & 26 W. where the Mississ. River forms the Southern Bdy of the Tp and prevents the prescribed mode of subdividing being followed.

In these instances you will commence your survey by running a random line East from the corner of Secs 18 & 19 on the W. Boundary to the corner of 13 & 24 on the East Bdy. And correct the same back West setting your 1/4 and sec. posts at 40.0 & 80. chs. respectively. Then continue your survey running your line North and South from the center line commencing at the corner of sec. 13.14.23 & 24.

You are herewith furnished with diagrams of the Tps to be subdivided, showing the establishment of the section and meander corners & the fractional distances on the Tp boundaries & also the general topography as described in the notes of same.

You will observe that the Western tier of sections in Tp. 136 N R 25 W. is less than 20 chs instead of 80 chs or thereabouts: this is occasioned by an error having been made in the survey of the 1st Stand. Par. and continued North of the 8th Stand; upon the establishment of which the 3 Guide Mer. North of the Mississippi river by this office the error was corrected.

You are furnished with blank field books in which to return your notes in the form and with the (illegible) required in the “Manual” and you are also required to return with these all the original notes or memoranda actually taken by you in the field.
I would call your attention especially to the careful marking of your bearing trees, making the cuts deep & clear so that no difficulty may be found in establishing a corner after the loss of the post by rotting or otherwise.9

The two deputies would complete their work in April, 1864 almost two years after they were awarded the contract. Clearly Wright was the “senior” in this partnership. A letter from Banker, dated September 22, 1862, asked that any United States draft for their work be assigned to Wright.10

Their work was interrupted by the hostilities of 1862, a fact that the surveyor general noted in his annual report for that year.11 This interruption caused hardship to the partners, who led a surveying party of sixteen into the field, and they requested compensation for their financial losses and an extension of their contract. Their requests prompted an exchange of letters between them, the surveyor general, and the Commissioner of the General Land Office in Washington. On October 20 1862, the surveyor general, William Washburn, wrote to Wright and Banker telling them that the Department of the Interior would not consider their claims for damages sustained by them as they were proceeding to the field because of the Indian outbreak. He warned that, “a renewal or extension of your present contract can only be granted on the express understanding that all such claims are to be withdrawn” stating,

Should you therefore be desirous of having the time for the execution of your surveys extended until the spring of 1863, you will please inform me in writing of your relinquishment of all claim for loss and damages made by you under your report and account of Sept. 6th 1862, and that no claim will hereafter be preferred on account of same.12

As a result, on November 25, 1862, Wright wrote to Banker asking him to sign a relinquishment and forward it to Washburn in St. Paul. In a note on the rear of the letter is the comment “Forwards relinquishment of his claim with G. B. Wright for any damage sustained by them while proceeding to execute their contract in consequence of Indian troubles.”13

The contract did not progress without questions from Wright. On November 25, 1862 he complained,

I observe that the “General Instructions” give no direction in regard to planting of “closing” 1/4 Sec. corners on the standard parallels. They do not occur on any line run by the subdivision of the Tsp. south but a line previously run.

The Instructions direct the establishment of 1/4 Sec. Standard corners at the time of running the Std. Parallels and also of closing corners at the intersection of the lines run i.e. Sec. corners.

What is the law and ruling?14

On November 28, Washburn replied,
Your note requesting information as to the establishment of 1/4 sec. Corners on the North boundary of a Tp. when such a boundary is a “Standard Parallel” & the 1/4 corners established thereon are consequently not applicable to the sections south of such Standards is received, and in reply I would state, that I am not aware of any land law or instructions of the General Land Office that requires the establishment of 1/4 sec. Corners on Standard Parallels for the Northern tier of sections of the Tp. South of it. There can of course be no closing 1/4 corner as the quarter lines are not run in the Government surveys.15

On December 29, 1862 Wright, then in camp in section 27 T.136 R.26, with the nearest post office at Crow Wing, wrote

I find in surveying this tp that there is a small portion of T.135 R.26 between this and the River Mississippi, Shall I survey it? It will not be over 2 miles of line. Perhaps not over one.

I wish to know further, whether I can have my work examined speedily so as to get my pay without delay for what I survey this winter - say for a (word unknown) of tps.16

On January 20, 1863, the surveyor general wrote,

In reply to your letter of the 29th ult. respecting a small frac. Tp on the Mississippi River not embraced in your present contract being Tp 135 N R 26 W 5th P Mer. I have to say that insomuch as this frac. Tp would have been included in your contract had I been aware that such a Town was there situated, (the Township lines on file not showing it) you are hereby instructed to make a survey thereof with the exterior boundaries of same returning the notes and diagrams in the same form required for the surveys under your contract. All the surveys now being executed by you will be platted and passed upon by this office immediately on the return of the notes, and if approved, accounts for the same will be transmitted to Washington for payment under the terms of your contract.17

On April 22 Washburn responded to a letter sent by Wright April 20 asking for instructions to correct the western boundary of Township 136 N Range 26 W.

I have now to state that as your examination of the above boundary made subsequent to your completion of the subdivision of T 136 N R 36 W shows conclusively that there exists an error of 10 chs in the whole line but which error was no doubt made in obtaining the distance by offset from the South Bdy of T 136 N R 26 & 27 W at its intersection with the Mississippi river and not as first supposed by you at the north end of said Bdy it will be necessary for you to remeasure the whole line by commencing at the corner of Secs. 34 & 35 on S Bdy of Tp 136 N R 27 W then running north two miles then East 2 miles to the range line and establish corner to Secs 24 25 91 & 30. Then remeasuring said Range line South of the Mississippi river and North to the 9th Standard Parallel - Establish the proper Section, 1/4 section and meander corners.
thereon and carefully erase and destroy the erroneous corners previously established -
You will return separate notes of the remeasurement of this line. You will proceed to
the correction of the lines in Tp 136 N R 26 W between Sec. 30 & 31 - 19 & 30 - 18 &
19 - 7 & 18 and 6 & 7 by running same from the interior section corners West of the
new corners established by you on the Range line making the necessary corrections in
your subdivision and meander notes and being careful to obliterate the marks of the
1/4 section and meander corners previously established on those lines. Your
compensation for the remeasurement of the Range line will be at the same rate as your
subdivision surveys - viz. $5 per mile but in consideration of the circumstances and
the instructions under which the subdivisions were made and your inability to detect
the error subsequently found to exist in the Range line until you arrived at the
intersection of the North Bdy of the Township with the further difficulty of not having
the distance on the West side of Sec 6 by which you could have ascertained the
discrepancy between your line and the Township Bdy before reaching the western side
of the Township I shall include in your account of these subdivisions the remeasuring
of the lines of the western tier of Sections and also urge upon the Department the
justice of your being paid thereof.

I would however remark that in ascertaining the proper place for corners of Secs. 24-
25-19 & 30 on the Range line in accordance with the foregoing instructions there is
little or no additional work required as such lines form part of the subdivision of Tp
136 N R 27 W embraced in your contract.

The variation of the west side of Sec. 6 (T 186 N R 26 W) is returned at 11° 45’ the
length of line 80.10 chs found by the Deputy by offsetting from the meander corner
established at 43.70 chs North form corner of Secs 1-6 7 & 12 West 22 chs then North
36.40 chs to the 9th Standard Parallel no distance being given from such intersection
to any post on the Parallel, the true corner being in Lake.

I would call your attention to the following as a general guide in future in all
subdivisional surveys. The duty of a deputy in finding a discrepancy between his own
work and the Township line survey is first to re-trace and thoroughly re-examine his
own work then if no error is found to examine the Township line and if an error is
there found to exist after a careful retracing and remeasurement of the line, such
Township line may be resurveyed provided that the adjoining Townships has not been
previously subdivided and tat no change would thereby be necessarily required in a
Township corner.18

Apparently the partners were paid in at least two installments. On June 24, 1863 the
Commissioner of the GLO forwarded a draft for $441.42 to Washburn for the surveys they had
completed under the contract. The amount exceeded what Wright and Banker expected. The
Commissioner stated the difference was due to, “our allowing the deputies for the survey of the
lines connecting the closing with the standard corners, in Tps 135 & 136 N. R 26 W, amounting
to 1m. 01 ch. 41 l.; as authorized by the Manual of S. Instructions pp 22 & 25.”19
On September 30 Washburn wrote that he had received the field notes for T 133 N R 31 and 32 W. He also wrote,

I have purchased the markers as you request and will have them delivered to Mr. Morse to be forwarded.

As the contracts of Messrs. Johnston and Thornton and Mr. Cook will cover the sum apportioned for field work for the present fiscal year, I shall be unable to assign you any further surveys this season. I shall however be glad to receive any information you may obtain as to any Townships adjoining those embraced in your contract that might be desirable to subdivide in 1864 as containing valuable timber.

In his annual report for 1864, dated October 10, Washburn noted that Wright and Banker had completed their work. He had approved their field notes, the plats had been sent to Washington and the plats and descriptive lists had been forwarded to the land office at St. Cloud. Payment for their work was delayed, however. On February 11, 1864 the surveyor general wrote at length to Commissioner J. M. Edmunds in Washington regarding the objections Edmunds had raised a letter dated January 23rd, 1864, to paying Wright and Banker. The letter describes firstly, how the two deputies worked and secondly, the practice of meandering one side of a river only. Washburn wrote,

Referring to the first point of objection raised in you communication, to wit, that Messrs Wright and Banker with one party could not possibly have run the lines shown by their notes to have been established each day during the time they were in the field & c. I have to say that during all or nearly all the time said surveys were progressing they employed in prosecuting the same three separate parties directed and superintended by Mr. Wright in his own proper person.

Under your construction I hardly see how the Deputy could truly subscribe to the Oath without individually performing the entire work in detail. The fact that the compassman and other assistants employed in accordance with the instructions, in the execution of their work are required by the Department to make oath attached to the original field notes on file in this office, that they faithfully performed the work assigned them in accordance with the instructions & c., implies at least that the Department as well as the Deputies rely somewhat upon their affidavits in establishing the fact that the surveys were faithfully executed; and I apprehend if those affidavits were omitted the work would not be approved even though the Deputy should swear that the work was performed in accordance with the law and regulations, and having employed at the same time but one party and that under his constant supervision.

As I understand it the Deputies while having the general direction and supervision of the Surveys in the field, giving to the same their undivided attention and being responsible if the work is not properly done, must of necessity rely to a large extent upon the honesty of their assistants for the faithful performance of the details of the work; and their affidavits under such circumstances if the notes show and the Deputy
knows nothing to the contrary may properly be regarded by him as conclusion that
the work has been so performed and have heretofore apparently been regarded by the
Department. Whatever may be the construction of the Department now however,
Messrs Wright and Banker proceeded to execute the surveys under their contract in
the manner in which the same was done so far as relates to the employment of
different parties, with the knowledge and approval of this Office; and in justification
of myself I have to say that it is consistent with all former practice of the office since
its removal to this state and while in Michigan, of the office at Dubuque and I
presume of the other offices in the country. Such having been the unquestioned
practice for years I had reason to believe that it was sanctioned by the Department
and that its continuance would not be disapproved.

For explanation of the manner in which Mr. Wright prosecuted the surveys with
different parties, the average amount of actual lines established each day, the facility
with which he was enable to superintend the work & c. I refer you to the enclosed
copy of a communication from him. I would especially call your attention to the
statement of the average amount and the greatest amount run in one day and to his
explanation of the fact that he could superintend the work of two or more parties
operating in different towns at the same time. I would further say upon examination
of the original notes on file in this office it appears that he ran on the 28th day of
September last 8 miles, including randoms, on the 2nd day of October, on the 5th 11
miles, on the 6th 21 miles, on the 8th 24 miles, a portion of which Mr. Wright says
should be credited to the 9th, and on the two last days of his work 47 miles, a portion
of which he says properly belongs to the 12th of Oct.

Owing to a slight but perhaps unavoidable confusion of dates as explained by him
some days have more work credited them than was actually done on those days. If
then your examination of the transcripts is correct some of the dates in the original
notes on file in this office must have been left out of the transcripts.

With respect to the omission of the meanders of the left bank of the “Long Prairie”
river in Messrs Wright and Bankers and also the omission of the left bank of “Kettle”
river in Mr. Cooks notes, I would observe that I found it had been the practice of this
office both beforehand since its removal from Detroit, to instruct Deputies to
meander one bank only of rivers not strictly navigable streams but used for rafting
and of great importance in sections where lumbering operations would always be
carried on; although meander posts were always required to be set on both banks on
every section line. The instructions to meander but one bank were based I believe
upon the ascertained fact that Deputies had been in the habit of taking the courses and
distances of one bank only of such small streams (they being generally of a uniform
width) and constructing a set of meanders for the opposite shore and returning them
in their notes as if both had been actually run, and thus obtaining pay for work not
really performed. As the object of the meander notes was only to obtain the data on
which to ascertain the area of the lots made fractional by the river it was justly I
think, considered unnecessary to pay a deputy for running useless lines or pretending
to run them, when they could just as well be protracted in the office.
In both the contracts of Messrs Wright and Banker and Mr. Cook as also in that of Messrs Johnson & Thornton I knew that certain important streams for lumbering purposes passed through a portion of their subdivisional surveys and I so fully coincided with the views taken by my predecessor of the importance of keeping such open and unobstructed although could certainly not be termed navigable streams in the usual acceptance of the term, that I had no hesitation in directing their meander in the same manner that other streams of like character had been previously meandered both in this State and Michigan, and against which mode no objection had been heretofore made by the Department. The Deputies are usually instructed to take the courses and distances upon the same bank of the stream through the township but where obstructions or difficulties might be met with on that bank I could see no reasonable objection to their changing to the opposite bank, the course of the river being just as clearly ascertained and the necessary protraction made in the office.\[22\]

There is no letter stating that Wright and Banker were paid by the government but I assume that they were, after all they both carried on working as deputy surveyors.

**George B. Wright and Thomas B. Walker**

Wright was awarded a second contract for running township exteriors and subdividing thirteen townships with Thomas B. Walker April 12, 1865. The surveyor general wrote,

> Your contract dated April 12th having received the approval of the Commiss. of the General Land Office, you are hereby authorized and directed to proceed to the execution of the surveys therewith.

> Your surveys will be made in strict accordance with the printed “General Instructions” including also the supplemental instructions issued by the General Land Office June 1, 1864 (and to which your attention is specially directed) it is not therefore deemed necessary to give any special instructions therefor.

> You are herewith furnished with the diagrams of the Tps. embraced in your contract for subdivision showing the establishment of all the corners & fractional distances thereon, also with the necessary blank field books & c. The commission of Mr. Walker as a Deputy of this Office is enclosed.\[23\]

The exteriors and eleven of the townships were to be surveyed under the published instructions contained in the contract. Later instructions, issued May 27 and June 15 but unfortunately not included in the letterbook, were to govern their work in three townships. Again Wright seems to have been the senior partner. May 1, 1865 Walker wrote asking that the drafts for their work be sent to Wright.\[24\]

On May 27, 1865 Levi Nutting, the new surveyor general wrote to Wright and Walker at Crow Wing,
The result of the conversation had with Mr. Wright on the subject of undertaking certain subdivisional surveys within the Gull Lake Reservation before commencing the survey under your contract of 12th April last and the relinquishment of a portion the subdivisional surveys embraced in such contract in order to bring the whole within the estimated amount thereof, having been the consent of the part of Mr. Wright to make the surveys required and to such relinquishment. I have now to instruct you especially as to the survey above referred to. In the 1st Article of the Treaty of May 1864 with the Chippewa Indians the following reservations are made. One half section including the Mission buildings & grounds at Gull Lake to the Revd. John Johnson, Missionary & one section on the South East of Gull Lake to the chief Hole-in-the-Day. One section at Mille Lacs to the chief Shaw-bosh-King and one section at Sandy Lake to the chief Mis-qua-dau. As the first three grants above mentioned are situated within Tp lines already established it has been deemed essential to have the Tps within which such grants will be embraced subdivided as early as practicable and in order to ascertain what Tps will require subdividing you will at once place yourself in communication with Mr. E Clark the Indian Agent and also with the Revd Mr Johnson and Hole-in-the-Day (the grantees named in the Treaty) and consult with them for the purpose of identifying the localities of the grants. By reference to the map of the state it would appear that Tp 134 N R 29 W will embrace the section granted to Hole-in-the-Day and possibly the half section to the Revd. Mr. Johnson but as the mission buildings referred to in the grant may be North of the line between Tps 134 & 135 it may be necessary to subordinate Tp 135 N R 29 W also in order to locate the latter grant. Should any trace of the North Bdy. Of the Reserve which crosses Tp 135 be found you will be careful to note it & make the usual correction therewith as with all other Reserve lines. Having ascertained within what Tps said grant will be included you will at once proceed to subdivide them and return the notes and diagrams to this office without delay.

After making these surveys in the Gull Lake Reserve you can proceed with those embraced in your contract and at as early a day as practicable you will please inform me the number of those Tps appearing to have the least amount of pine timber in order that I may direct as to the Tps to be relinquished by you in accordance with the understanding had with Mr. Wright.

You will communicate with this office as soon as you have ascertained the extent of the surveys necessary to locate the grants in the Gull Lake Reserve, acknowledging the receipt of this letter and your consent to the change in the surveys as respects your contract indicated herein. I include herewith diagrams showing the establishment of the corners on the exterior boundaries of Tps 134 & 135 N R 29 W. Your compensation for these subdivisions will be at the rate of $6 per mile the same to be executed in strict accordance with the manual of surveying instructions and supplement thereto. In surveys under instructions it is necessary for the Deputy to execute a Bond to the Government after their completion and before payment can be made therefor that the same have been well and faithfully executed. I therefore inclose herewith blanks in triplicate to be executed by yourselves and sureties and

C-39
forwarded to this office with the notes of your survey. You will perceive by the wording of the Bond that it must be dated subsequent to the execution of the work.

With respect to the survey of the Tp embracing the grant to Shaw-bosh-King at Mille Lacs also required to be made this season. I propose to have the same executed if possible by a Deputy residing in that vicinity but should he be unable to undertake it and no other opportunity offers for survey before or near the close of the present season it is to be understood that on your return from the surveys embraced in your present contract you will undertake and execute the subdivision of the Tp referred to under instructions to be given by this Office, the balance of the surveying appropriation being sufficient to cover such survey and would not therefor require the relinquishment of any further portion of your contract.

On June 15, 1865 the Nutting wrote that he had received their letter of June 9 in which they acknowledged receiving the above letter. He wrote,

With respect to the additional survey (of T 134 N R 28 W) required as it would appear from your statement as also from a letter received from Mr. Clark the Indian Agent to embrace the land settled by Chief Hole-in-the-day you can proceed at once to subdivision of same and are furnished herewith with the usual diagrams showing the establishment of the corners fractional distances & c. It is of course to be understood that this additional survey will call for the relinquishment of a further portion of the surveys embraced in your contract in accordance with my letter of instructions of the 27th ulto the full amount of such relinquishment being ascertained at as early a day as practicable and the necessary instructions forwarded to you by way of Crow Wing. As the instructions from the Department to make the surveys in the Indian Reservations only requires the subdivision of the Tps in which the several grants are included I am not authorized to direct the survey of the boundaries of the legal subdivisions which these grants may embrace. In resurveying any of the Tps lines of the Tps to be subdivided you will bear in mind that your notes must distinctly show a full examination of the boundaries has been made and the precise locality of the error found. Should the error be less than 5 chs in amount it is not considered necessary to make a resurvey nor where any discrepancy may arise from a difference in chaining alone (Letters Sent vol. L pp.495).

On June 30, 1865 Nutting wrote,

I have to acknowledge the receipt of your letter of June 25th in which you state the probability of having to subdivide Town 135 N R 28 W to include all of Hole-in-the-day selection, and now inclose diagram of that Town. showing the corners established on the North and East boundaries, the South and West have already been furnished you on the other diagrams.

On July 18, 1865 Wright and Walker, then at Crow Wing, wrote to Nutting,
We return herewith Field Notes of Subdivs Tps 134 & 135 R 29 & Tp 134 of R 28. Also 1 book Correction Tp Lines to same Tps - covering the tracts to be reserved for Hole-in-the-Day and Rev. Mr. Johnson. At the time we completed the survey of T 134 R 28, the agent and chief were absent, but from the character of the land we judged that they would not wish to extend the Reservation into Tp 135 and therefore did not survey that Tp.

The survey returned amount to about $1530. We estimate at this time as follows,

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Tps returned</td>
<td>1530</td>
</tr>
<tr>
<td>Tp 137 R 29 subdivided 70 m</td>
<td>420</td>
</tr>
<tr>
<td>Tp 138 R 29 partly divided 62 m</td>
<td>312</td>
</tr>
<tr>
<td>Tp lines in this check will be 102m</td>
<td>714</td>
</tr>
<tr>
<td></td>
<td>$3036</td>
</tr>
</tbody>
</table>

Making an aggregate of $3036 for 5 Tps and for the Tp lines required to be done. It appears that there will be little meandering in the remaining Tps and probably 63 m for Tp (word illegible) over the subdivision. At that rate 6 Tps will amount to $2268 and with the above $3036 make $5304 for Tp lines and subdividing 11 Townships. As to the Tps which are left it seems probable that the Western ones have but little Pine upon them and are furthest from streams suitable for logging purposes. It will be difficult for us to ascertain any great distance in advance of the Subdivision as to the character of the country - the subdivisions following so closely upon the Tp line survey. We will however inform you as early as practicable as to the Tps which least require subdivision. The amt of meander in T 134 137 R 29 is increased to 10 miles made on account of Pine river which in the other Tps we do not deem necessary to subdivide meander as it divides into 2 nearly equal sized branches above T 137 R 29. We have executed the required bond - In the sum of $3100 and forward same to our sureties, Messrs Baldwin & Barber of Mpls for execution by them - then returned to you.

Please inform us as early as may be, of the probable amt which can be used out of the appropriations for the surveys here by use and also if you succeeded in letting the contract for the survey of the Tps at Mille Lac.

On August 20, 1865 Wright, still in camp, wrote again to Nutting,

Permit me to make a suggestion in regard to the expenditure of the future appropriations for survey in the State. The policy of your predecessor has been to push forward the survey of the timbered lands in the N part of the state as rapidly as possible to the comparative neglect of the agricultural districts.

This was perhaps well enough & in him (being closely identified with the lumbering interests) was natural but I cannot but believe that such policy has been pursued far enough at present, and that some of the choice farming lands in the Western and South western part of the State should be surveyed before any more of the Timber country is brought into market. The lands here are worthless except for the timber, and the surveyor who should be willing to take almost any township in this region of the country, as payment for surveying the same: would be - to say the least rash.
rapid emigration now setting in should be directed to the fresh fields of western Minnesota and the office I believe would do well to stimulate that movement rather than to survey the pine lands for the benefit of a few capitalists and timber speculators. The recommendation of the Surveyor general in his annual report generally, I believe influence the Comm in his “Annual Instruction” of the subsequent year as to the manner of disposing of the appropriations.

Trusting you will not consider my suggestion as too great presumption on my part & that you will confer with other deps who are familiar with the character of this upper country before you accept my estimates of its value.²⁸

Nutting answered on August 2 acknowledging that he had received their notes. In addition he wrote,

Previous to the receipts of your notes, the notes of 5 Tps had been rcvd. From Davis & Webb which will be worked off within a very few days and then yours will be taken up. - In regard to the amount which you can use out of the appropriation for surveys where you now are. I have to say that if the Tps do not average more than you estimated in your letter (63 miles each) you can, unless otherwise hereafter instructed - survey the number of Tps you mention viz. Eight Tps embraced in your contract - or eleven in all. But if the Tps should average - even by an inconsiderable amount - more than you estimate, you will survey but seven Tps as there is no margin left at your estimate. As to the Tps which should be left unsurveyed, I must leave to your good judgment with the simple injunction that the Tps which contain the least timber and the least attraction for settlers should be selected for (illegible word) Mr. O. E. Garrison will probably survey the Township on Mille Lac.²⁹

The surveyor general reported that Wright and Walker had completed the work directed by the contract of April 12, 1865 as well as the additional work at Gull Lake in his annual report for 1866.³⁰

Conclusion

This concluded the surveys that George B. Wright made during phase one of his career in Minnesota. He was clearly a busy and knowledgeable surveyor. In addition to his surveying duties he was appointed a timber agent making him responsible for reporting timber depredations in that area. In 1866 he would receive the first of several contracts to carry out surveys on his own, a story that will be continued in the next issue of Minnesota Surveyor.

Endnotes

2 Id. Appendix
4 Id.
5 Letters Sent vol. J p.551
6 Id.
8 Letters Sent vol. L pp.218-219
9 Letters Sent, vol. L pp.245-246
10 Letters Received, 1862 p.217
12 Letters Sent vol. L p.263
13 Letters Received 1862 p.242
14 Letter Received 1862 p.237
15 Letters Sent vol. L p.278
16 Letters Received, 1862 p.240
17 Letters Sent vol. L p.284
18 Letters Sent vol. L pp.315-316
19 Letters Received 1863 p.103
20 Letters Sent vol. L p.374
22 Letters Sent vol. L pp. 386-390
24 Letters Received, 1865 p.52
26 Letters Sent vol. M p.3
27 Letters Received, 1865 p.117
28 Letters Received, 1865 p.129
29 Letters Sent vol. M p.15
GEORGE B. WRIGHT, DEPUTY SURVEYOR, 1862-1865 (Dis-Closures Spring, 1996 pp.16-19)¹

Introduction

The principal focus of my research on the public land survey is essentially geographic, to describe and explain how and why the rectangular net, a pervasive influence on human behavior because of its controls on spatial organization, spread across Minnesota. As I have already noted, a number of variables influenced where the net expanded in any one year.² Two of the principal variables during the territorial period and the first decade of statehood were the demand of settlers illegally and legally occupying unsurveyed land and illegal timber harvesting, variables that influenced Congressional appropriations for surveying in a particular surveying district, appropriations which dictated how many contracts the surveyor general could make with deputies during a particular fiscal year. In short, my studies have shown that the direction of the survey and speed with which it occurred changed over time as did the instructions the surveyor general gave the deputies in his employ.

Because my focus is geographic I have not described the characteristics of the contractual agreements between individual deputies and the federal government in the form of the Commissioner of the General Land Office in Washington DC and the surveyor general of Minnesota in St Paul. Although such details may be regarded as pedantic they deserve careful study. The administrative process created by Congressional legislation and General Land Office regulations, what affidavits were needed, what bonds executed, what approvals obtained, and, perhaps most importantly, how the deputies were paid, imposed specific requirements on both the surveyor general and the deputies. In the final analysis the accuracy of the rectangular net was dependent upon the quality of the deputies employed by the surveyor general. The willingness and ability of good surveyors to work for the federal government may have depended as much on the requirements imposed on them by the way in which the survey was administered as it did on those requirements imposed by the specific contract - both were characteristics of a federal bureaucracy. Those individuals and partnerships that were good, and hence received multiple surveying contracts, were those who were temperamentally willing to fulfill officious requirements, work speedily, thus within the time specified in their contracts, and accurately.

George Wright “was merely one of the many deputy surveyors who left a paper trail, in the form of contracts and other correspondence that we can read, and an actual surveying trail, in the form of the points and lines which the modern surveyor must follow.”³ In association with others and on his own he surveyed a large number of townships in west central Minnesota (Figure 1). From 1862 to 1865 he teamed up, first with Isaac A. Banker and then with Thomas B. Walker, to survey townships around Gull and Pelican lakes, where the Mississippi River intersects the third guide meridian, and along the Northern Pacific Railroad line near the Crow Wing River. In the years 1866-1869 he was given four contracts to subdivide thirty-one townships on his own on the Pomme de Terre and Chippewa rivers by Surveyor General Levi Nutting (Figure 2). Subsequently, he joined with George C. Beardsley and Olsen C. Miles to survey along the north bank of the Minnesota River and the east bank of the Red River in the extreme western part of the
By this time and in this part of the state there appears to have been few problems with carrying out surveys. The Manual of 1855 had been in use for several years and thus there is very little factual information in the correspondence between Nutting and Wright about how Wright should carry out the survey. However, the correspondence illustrates the method of appointing individuals as deputies and how they got paid for their work. Apparently it was not unusual for
the federal government to pay individual surveyors in several installments, as particular portions of the work were completed, although it is not clear how the payment schedule was established. In addition, each deputy had to be bonded. In earlier years of the survey it appeared that these had to be executed before the deputy went into the field. However, letters between the surveyor general and the Commissioner of the General Land Office suggest that the bonds had to be executed before the deputies were actually paid rather than before they started the contract (Figure 3).

**Figure 3.** The Bureaucratic Framework of the Surveyor

<table>
<thead>
<tr>
<th>Contract Date</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 22, 1866</td>
<td>T127N R27W</td>
</tr>
<tr>
<td></td>
<td>T125, 126, 127N R39W</td>
</tr>
<tr>
<td></td>
<td>T125, 126, 127N R40W</td>
</tr>
<tr>
<td></td>
<td>T125, 126, 127N R41W</td>
</tr>
<tr>
<td>Sept. 22, 1866</td>
<td>T130N R38, 39W</td>
</tr>
<tr>
<td>April 6, 1867</td>
<td>T121, 122, 123, 124N R39,40W</td>
</tr>
<tr>
<td></td>
<td>T123, 124N R41W</td>
</tr>
<tr>
<td>Aug. 1, 1868</td>
<td>T123, 124, 125, 126N R42,43W</td>
</tr>
</tbody>
</table>

Contracts between Surveyor General Levi Nutting and Deputy Surveyor George B. Wright

1866

In May, Wright received the first of four contracts in western Minnesota. He was to subdivide firstly, a township that apparently had been omitted in earlier surveys and secondly, nine
townships on the Chippewa River. On May 23rd Surveyor general Levi Nutting wrote to Commissioner Edmunds of the General Land Office forwarding the contract that he had made with Wright. Asking that the commissioner approve the contract via telegraph, he wrote,

These townships already contain numerous settlers & more will undoubtedly locate there as soon as it known that they are to be surveyed as they are well watered & contain timber an prairie in desirable proportions for agricultural purposes.4

May 30th Edmunds wrote back to Nutting approving Wright’s contract of May 22, for the ten townships. Wright was to be paid $6.00/mile and the contract was estimated to be worth $4,500.5 On September 15th Nutting transmitted Wright’s account for the work that he had completed thus far to Edmunds.6 Before Wright finished all his work, however, Nutting, wrote to him at Alexandria on September 22nd, saying,

being informed by you in your letter of the 24th ultimo that you will be able to survey "two or three more townships" after completing the surveys embraced in your contract of May 22, 1866 - you are specially instructed to subdivide the following townships situated in the vicinity of those embraced in your present contract to wit: Township 130 N Ranges 38 & 39 W. of 5th Prin. Mer. In the survey of these tps. you will be governed in all respects by the printed General Instructions with which you are furnished.

Your compensation for these surveys will be at the rate of $6 per mile. You will be required to execute a Bond to the government after their completion and before payment can be made therefore, that the same have been well and faithfully executed. I inclose herewith diagrams showing the establishment of the corners on the exterior boundaries of the two Townships that your are instructed to survey. Please acknowledge the receipt of these instructions and state your willingness and ability to execute the surveys of the tps therein named.7

October 13th a new Commissioner, Josiah Wilson, wrote to Nutting informing him that he had forwarded Wright’s partial account for $1363.23 to the Treasury Department for payment.8 Finally, on December 22nd Nutting notified Wilson that he had mailed the plats and field notes in a separate letter.9

1867

January 2nd Wilson informed Nutting that another of Wright’s accounts, this one for $1341.75, had been sent to the Treasury Department for payment.10

May 7th Wilson approved Wright’s contract of April 6th.11 On May 10th Nutting to Wilson forwarding Wright’s account to Wilson.12

May 16th Nutting sent the account for the surveys Wright had completed under his instructions of September 22, 1866, along with Wright’s bond executed February 21, 1867 to the Comptroller of the Treasury.13
May 14th Nutting to Wright, then in Minneapolis,

your contract dated April 6 1867 for government surveys was approved by the
Commissioner on the 7th inst. You will be furnished with the necessary diagrams,
field books & c. when desired.14

May 16th Nutting to Wilson transmitting the bond of George B. Wright for the surveys executed
by him under his instructions of September 22, 1866.15

May 22nd Wilson to Nutting saying that he had received Nutting’s letter of May 16 in which
Nutting had sent Wright’s bond for the surveys made under contract dated September 22nd the
previous year. He wrote,

The approval of the bond is suspended until copy of the instructions are furnished
this office showing the price stipulated therein for the execution of the surveys
authorized by you and returned to your office prior to the approval of the same by
this office as the law directs.16

May 29th Nutting to Wilson,

You say “the approval of the Bond is suspended until a copy of the instructions are
furnished” etc - I herewith submit a copy of the instructions to Mr. Wright for the
survey of Tps. 130 Rs 38 & 39 W.

The survey of these townships was much needed. Settlers were crowding in that
direction in large numbers and Mr. Wright had ample time to survey them after
completing his contract - Your letter would seem to intimate (although the language is
not very clear) that the Bond should have been executed and approved prior to the
work being executed - This I do not understand to be the law, nor according to
instructions heretofore given to Surveyors General in cases of survey under special
instructions by the Surveyor General , as it has certainly not been the practice of this
office. The Bonds in these cases have always been executed after the completion of
the surveys.

Hoping the foregoing explanations will prove satisfactory and the Bond of Mr. Wright
be approved ....17

June 6th Nutting to Wilson forwarding Wright’s account for the contract dated September 22 the
previous year along with the required plats and transcribed field notes.18

June 12th Nutting to Wilson,

In regards to the time when contracts and Bonds or Instructions & Bonds are to be
executed, you refer to instructions to my predecessor under date of June 9th 1862 and
request their observance in future.
In reply I have to say that I am unable to find the instructions referred to on file in this office and in fact no communication from the Department bearing that date. If any instructions of that date and in relation to surveys under Special Instructions from Surveyors General were issued, I respectfully request that a copy of the same be furnished this office as soon as convenient.\(^{19}\)

June 14\(^{th}\) Wilson to Nutting acknowledging Nutting’s letter and approving Wright’s bond for his work.\(^{20}\)

August 30\(^{th}\) Nutting sent Wright’s account for surveys completed under the contract dated April 6\(^{th}\), 1867 to Wilson in Washington DC.\(^{21}\)

September 20\(^{th}\) Wilson to Nutting saying that he had received Wright’s account for $763.29 with Nutting’s letter of August 30\(^{th}\). He had sent the account to the Treasury Department requesting a draft be sent to Wright.\(^{22}\)

September 30\(^{th}\) Nutting to Wilson including a second account for the surveys Wright completed under the contract of April 6\(^{th}\) and another for the surveys Wright completed under the contract of April 17\(^{th}\).\(^{23}\)

October 14\(^{th}\) Wilson acknowledged Nutting’s letter of September 20\(^{th}\) forwarding Wright’s account for $759.72.\(^{24}\)

December 11\(^{th}\) Nutting to Wilson forwarding Wright’s account under the contract of April 6\(^{th}\).\(^{25}\)

December 23\(^{rd}\) Wilson to Nutting saying that he had received Nutting’s letter of December 11\(^{th}\) along with Wright’s account for $1137.47.\(^{26}\)

1868

January 9\(^{th}\) Nutting to Wilson sending Wright’s final account for the surveys carried out under the contract dated April 6\(^{th}\) 1866.\(^{27}\)

February 8\(^{th}\) Wilson to Nutting stating that his letter dated January 9\(^{th}\) had been received. Wright’s account for $1151.74 had been forwarded to the Treasury Department.\(^{28}\)

August 13\(^{th}\) Wilson to Nutting approving Wright’s contract of August 1\(^{st}\) for subdividing eight townships at an estimated cost of $3,200. The work would be financed out of the appropriations act passed July 20\(^{th}\), 1868.\(^{29}\)

October 10\(^{th}\) Nutting to Wilson forwarding Wright’s account under the contract dated August 1.\(^{30}\)

November 25\(^{th}\) Wilson to Nutting acknowledging Nutting’s letter of October 10\(^{th}\), accompanying Wright’s account of $766.72.\(^{31}\)
1869

January 22nd Nutting to Wilson containing Wright’s account under the contract dated August 1, 1868.32

March 2nd Wilson to Nutting saying he had received Wright’s account for $846.90 with Nutting’s letter dated January 22nd.33

March 3rd Nutting to Wilson sending Wright’s account under the contract dated August 1, 1868.34

March 17th Wilson to Nutting replying to Nutting’s letter of March 3rd along with Wright’s account for $941.54.35

March 25th Nutting to Wilson transmitting Wright’s final account under the contract dated August 1, 1868.36

May 4th Wilson to Nutting replying to Nutting’s letter of March 25th along with Wright’s account for $842.69.37

Conclusion

The administrative requirements imposed by the federal government on those individuals who created the rectangular public land survey net, as typified by those imposed on George B. Wright, appeared quite burdensome from a review of the correspondence between the principals involved. In all likelihood, however, they were probably no more severe than those requirements placed on modern surveyors. The role that such requirements have played in the historical geography of the public land survey is a tantalizing research question.

Appendix

In the correspondence files I found the following undated list

SCHEDULE OF ARTICLES RETURNED? ASIDE FROM THOSE FURNISHED BY THE OFFICE

2 heavy ames spades cost 2.50
1 grass hook .50
1 pocket compass 25 awls & handles .40 .65
1 seamless sack (23c) towels (22c) .45
1 coffee mill (45c) 1 waggon (sic) cover (2.16) 2.61
1 set guy ropes (20c) .20

6.91
Charcoal, sacks, drillings powder, leather, various provisions

Endnotes

1 All of the correspondence used come from two sets of letterbooks, Letters Sent and Letters Received, part of the United States Surveyor General collection stored in the State Archives, at the Minnesota History Center
3 Id. p.10
4 Letters Sent, v. M p.69
5 Letters Received, v. LIII p.97
6 Letters Sent, v. M p.94
7 Id. p.96
8 Letters Received, vol. LIII p. 179
9 Letters Sent, vol. M p.102
10 Letters Received vol. L IV p.1
11 Id. p.90
13 Id. p.128
14 Id. p.127
15 Id. p.129
16 Letters Received, vol. LIII p. 96
17 Id. p.130
18 Id. p.131
19 Id. p.132
20 Letters Received, vol. L IV p.108
22 Letters Received, vol. L IV p.209
24 Letters Received, vol. L IV p. 233
26 Letters Received, vol. L IV p.279
27 Letters Sent, vol. M p.182
28 Letters Received, v. LV p.10
29 Id. p.124
30 Letters Sent, v. M p.223
31 Letters Received, v. LV p.158
32 Letters Sent, v. M p.235
33 Letters Received, v. LVI p.87
34 Letters Sent, v. M p.239
35 Letters Received, v. LVI p.53
36 Letters Sent, v. M p.239
37 Letters Received, v. LVI p.61
Introduction

Although I write about the historical geography of the public land surveys, observant readers should have noticed that several related historical geographies document the development and spread (diffusion) of the public land surveys. One depicts how the nationwide process was administered by the federal government. A second portrays how the basic framework of intersecting lines that comprises the survey system evolved, a framework that includes the lines defining the rectangular townships, sections, and quarter-sections and the less rectangular fractional townships and government lots, the lines used for reference, prime meridians and baselines and the lines used to accurately place the rectangular grid on the curved surface of the United States, correction lines, standard parallels, and guide meridians. Yet a third shows how the survey spread across particular areas over a period of time, the subject of many of my earlier papers. A fourth shows how individual surveyors moved from one area to another as they contracted with the federal government to create the points and lines of the monumented survey net. There are more historical geographies, describing how various surveying techniques and practices evolved and where they were used for example, or where specific instructions were used. These historical geographies can all be explained in terms of the technical developments associated with surveying and the sociopolitical changes, both affecting the entire nation, and the idiosyncratic choices made by individual surveyors and non-surveyors working and living in particular areas, changes that form part of a complex behavioral system. Episodes in the survey’s historical geography occur as these changes create patterns on the land surface. Understanding these patterns, that also comprise episodes in the fragmentation of Minnesota, provides a key to understanding the modern Minnesota landscape.

Many aspects of the historical geography, including the speed with which the surveys spread across Minnesota was primarily determined by the amount of money Congress annually appropriated to the surveying district. As federal funds became available the surveyor general, who administered the survey in the surveying district of Minnesota, entered into contracts either with individual deputy surveyors, or with two or three individuals in partnership, to perform the necessary fieldwork. Where the deputies worked, hence the direction the survey net moved in any one year, depended largely on the opinions of the surveyor general who communicated with the deputies as they completed their contracts and carried out his own examination forays into frontier Minnesota. These opinions, both concerning the amount of money required and the direction that the surveys should proceed was transmitted to the Commissioner of the General Land Office, through him to the Secretary of the Interior and from him to the United States Congress.

The historical geography of the survey of Minnesota during the period 1875-1879 is primarily told in the annual reports of the surveyor general, James Heaton Baker, published as part of the Commissioner of the General Land Office’s annual report in the Congessional Documents (Serial Set). In his report Baker highlights the status of the surveys, problems associated with particular areas or particular contracts, and recommends which areas to survey in the immediate future. These reports are the basic material from which a description of the public land survey geography must start, providing a broad framework for the surveys and, since they explains who
surveyed where, are valuable for the modern surveyor. Individually these reports comprise only one letter in one letterbook, however, one item in the voluminous correspondence files kept by the surveyor general. Not surprisingly other letters, comprising the letters sent and the letters received by the surveyor general’s office in St. Paul, provide additional information regarding this geography. More importantly, the correspondence files provide the basic material for another geography, a geography that describes the work of individual deputies, the true pioneers of Minnesota. Letters outline in considerable detail the trials and tribulations of individuals who worked under difficult and dangerous conditions and upon whose skill and integrity depended the accuracy of the rectangular net. These letters, more than any other documents, give a human face to the geography of the surveys and, along with the field notes and personal papers of the individuals, add necessary complexity and richness to the broad framework described in the annual reports.

The geography of the surveys in a particular year is easily explained. The surveyor general makes contracts with deputies to survey those areas where the demand for land is greatest from existing and prospective settlers, in areas that appeared valuable for agriculture, timber, or mining for example, or that lie within the limits of a federal land grant to a railroad company, or within the boundaries of a federal Indian reservation. The geography of the work of individual deputies in a particular year is explicable in terms of the object of the surveyor general. However, the geography of the work of the individual deputy over time, is more difficult to explain, hence is more intriguing. There is, perhaps no need to ascribe any other motive than economic survival to individual deputies - the survey contracts were available only in certain places therefore there was little choice about where they would go. Without doubt, the pay was important in an era when other employment opportunities were scarce, but presumably as time went by, and other jobs became available, both the pay and the rigors of camp life became less attractive. Perhaps the idea of blazing a trail in the wilderness appealed to some, as did the idea of identifying and delimiting valuable timber stands and potential mineral areas as well as water power sites and town sites either for themselves or for others. The “idiosyncratic geography” of individual surveyors would repay serious study, some deputies were employed for long periods of time while others completed one contract only, some worked merely in one part of the state while others took contracts in various parts of the state (see Appendix).

In 1875 James Heaton Baker was commissioned surveyor general of Minnesota by republican President Ulysses S. Grant. Baker, born in Ohio in 1829 had already compiled a lengthy public service record culminating in his appointment as the Secretary of Pensions from 1871 to 1875 by President Grant. He had arrived in Minnesota in 1857 and had been elected Secretary of State (1860-1862) before joining the Tenth Minnesota Regiment and serving first in the Sioux campaign (1862-1863) and then in the Civil War reaching the rank of brigadier general. When he took over his duties from Dana E. King, who had been appointed when Charles T. Brown had resigned as surveyor general in February 1871, the surveys had reached the Red River valley in the northwest, the shores of Lake Superior in the northeast and had spread across the north central part of the state to the tenth standard parallel and the sixth correction line. During his four-year tenure the surveys continued in the northwestern part of the state, to the international boundary and east of the Red River Valley, along the international boundary in the northeast and in the central portion (Figure 1).
Figure 1. Surveys Completed 1875-1878

Figure 2. Surveys Started 1875

Figure 3. Other Surveys
Surveys in 1875

The bulk of the letters contained in the Letterbooks consist of correspondence between Baker and his superior, the Commissioner of the General Land Office (GLO). Shortly after assuming his duties on May 1, 1875 Baker received a letter in which the Commissioner described how much money Congress had appropriated for the following fiscal year for surveying operations in Minnesota, including the amount for salaries, for office expenses, and the rate per mile for lines. In the letter, dated May 8, Commissioner Burdett states,

> It is expressly declared in the seventh section of the Act of July 12, 1870, that no more money than that appropriated shall be spent and that the Government shall not be involved in any contract for the future payment of money in excess of such appropriations. In order therefore to avoid an excess of the appropriations and thus obviate the necessity for submitting deficiency estimates you will let contracts to the amount of $27,000 only, retaining the remainder of the appropriation $3,000 to meet any unforeseen excesses of contracts which may arise. If it should be ascertained before the close of the fiscal year that the contracts do not exceed the amounts estimated or that the amount retained is more than sufficient to meet the excess the balance may then be used.9

This letter describes more than the financial context for the following year’s surveys because in it the Commissioner gives some direction for the future surveys. Surprisingly, given the constant complaints of timber trespass by previous surveyors general, he admonishes Baker not to give priority to surveying timber lands but rather to the interests of actual settlers, however “the general selection of localities is left to your judgment.”10

Interestingly, he writes,

> You will during the ensuing season cause the corrections to be made on the Indian boundary in Township 148 North of Range 39 West 5th P.M. and calculate the fractional areas on both sides of the line and furnish authenticated plats to this office and to the local land office.11

He also advises on field procedures,

> In addition to the requirements of the Manual of Surveying Instructions and the Supplement of June 1, 1864, you will direct your deputies in all cases where stones are used for corners to dig pits in the same manner as for corners marked by posts and mounds.12

And,

> You are requested to exercise great care in examining returns of surveys with a view to guarding against imperfect or fraudulent surveys, and, when deemed necessary, an examination in the field may be made, but before preceding to the field upon such examination you will state the reasons therefore to this office whereupon an amount
sufficient to cover the expense will be assigned by the commissioner out of the appropriation of $10,000 “for occasional examinations.”

On May 17 Baker asks Burdett that the clerks of his office be paid monthly, as other government employees were, rather than quarterly. In replying, July 23, the Commissioner states,

(T)he system of rendering accounts quarterly was inaugurated in 1797 by instructions from Treasury Department under authority of law passed March 3, 1789 empowering the Secretary of the Treasury to prescribe the necessary rules for the ... financial concerns of the government.

As this rules has ever since that time been observed without any modification on the part of Congress or the proper Department I deem it inexpedient, at this late period in the surveying service in Minnesota, to recommend a deviation from the method which existed during the past seventy-eight years and being satisfied that the suggested innovation, if authorized, would unduly increase the labors of the employes (sic) in your office as well as in this and the Treasury Departments refrain from attempting making arrangements looking to the modification suggested.

Later in the year the Commissioner of the GLO asks for an estimate for the following fiscal year ending June 30th, 1877, writing,

In your explanation you will state the locality of the lands intended to be surveyed, their availability either for agriculture, timber, mineral or other purposes and whether the surveys would embrace settlements already made or likely to be demanded for early occupation.

In view of the fact that in former years surveys have been extended over distant localities sometimes undesirable for settlement on account of their arid, sterile, or alkaline character and as such unfit for cultivation, and as even the surveys of arable lands made in distant regions without any demands from settlers, have proved unavailable and the evidence of surveys in the field become obliterated by fires, lapse of time or other causes, this office deems it judicious to arrest in future, the continuance of a practice which has obtained in some surveying districts, and to this end I have to direct you to restrict your contemplated surveys to localities calculated to accommodate actual settlements and to furnish this office with the explanation of the estimate so that it may be enabled to lay the same before the Committee on Appropriations in support of the sum estimated.

In his first annual report dated August 26, 1875 for the fiscal year ending June 30, 1875, Baker, who had only assumed duties as the surveyor general of Minnesota two months earlier, on May 1, 1875, provides little information other than the required statistics; (a) a statement of the amount, character, and present condition of the field work - those that were uncompleted when the last annual report was compiled and those for which deputies had been contracted since then, either by him or by his predecessor; (b) a statement of the plats that had been made (original, Commissioner’s, and receiver’s), and when they had been sent to the Commissioner in
Washington DC. and to the local land-offices; (c) a statement of townships that had been surveyed from the last annual report, August 3, 1874, to the present time showing the area and the number of miles surveyed in each, including meander lines, the number of miles of township lines surveyed, and the total number of acres surveyed; d) an estimate of the appropriations required for continuing the public surveys in Minnesota for the fiscal year July 1, 1876 to June 30, 1877; and (e) a statement of the incidental expenses of the office for the current fiscal year.

[He also transmitted a map of Minnesota at a scale of twelve miles to one inch showing the progress of the survey at that time, a map I have yet to find]

He reports some twenty contracts let by his predecessor had been completed during the fiscal year 1874-5, that is from July 1, 1874 - June 30, 1875, contracts that had not been let or were in progress when the previous annual report had been submitted. These contracts span two calendar years, those that were completed after August 3, 1874, when his predecessor submitted the annual report for fiscal year 1873-4 but before the end of the calendar year, and those that were completed after the start of the calendar year but before August 26, 1875, when he wrote his report. Most of these surveys, all completed before the end of the fiscal year, were chargeable to the appropriations made by Congress in 1873 for the fiscal year 1874-5. The sole exception was the contract awarded to Benjamin C. Baldwin for subdividing the White Earth Indian Reservation, work that was paid out of Indian appropriation act of June 23, 1874.

Baker let six contracts under the appropriations for fiscal year 1875-6 none of which had been completed at the time of his report. One of them was to Benjamin C. Baldwin to survey part of the Leech Lake Indian Reservation, dated June 24, 1875, a contract that was the subject of an interesting exchange recounted below, the others were for both exterior lines and subdivisions of particular township. Thus, by this time the practice of awarding contracts for exteriors and subdivisions to different deputies, to provide checks on the accuracy of the fieldwork, had been abandoned. In the case of one particular contract, awarded to John Hinchilwood, one of the township lines was also the third guide meridian.

Not surprisingly, many of the letters from the surveyor general to the Commissioner of the General Land Office dealt with contracts with deputies. On September 17, he writes,

I have the honor to transmit herewith, contract with Edwin S. Hall, deputy surveyor, dated September 1, 1875, liability $2,800 payable out of appropriation named therein. Also statement and certificate of his qualification for the office. Mr. Cronk who certifies to Mr. Hall’s fitness, is an old deputy.16

There were several letters regarding island surveys. On December 21st. Baker writes to the Commissioner,

Where small islands are surveyed at the expense of private individuals, under the provisions of the 10th section of the Act of March 30th, 1862, as set forth in paragraph 7 on page 6 of the supplement to the manual of instructions; and said islands are within the district of lands heretofore offered at public sale, are said islands subject to private entry or sale, or must they be advertised and offered at public sale first.17
The Commissioner answers December 28\textsuperscript{th},

Lands of this class where surveyed become subject to the operation of the homestead and pre-emption laws, or, after due notice by the local land officers pursuant to instructions from the Commissioner as contemplated by Section 5 of the Act of August 3, 1846, may be sold for cash to the highest bidder, and if not disposed of in this way, will then become subject to private cash entry, warrant, or scrip location.\textsuperscript{18}

Many individuals write to the surveyor general. Typical of letters from deputies was one from William Mulliken, June 26 1875, three weeks after he was awarded a contract. Mulliken writes of his qualifications for the job,

I would respectfully certify that I have studied and am familiar with said Manual of Instructions; that I have been a Civil Engineers by profession since the year 1853, to the present time; and have been employed as Assistant and Resident Engineer in the location and construction of Railways in the States of Ohio and Indiana from 1853 to 1856; as Land Agent of the Illinois Central RR. Co. From 1856 to 1859; as Civil Engineer on Railways in Wisconsin from 1860 to 1863, and from 1863 to 1865 as Assistant Engineer under D.C. Shepard Esq. late Chief Engineer Milwaukee & St. Paul Railway in Minnesota. During the year 1865 I resurveyed and sub-divided lands in the Oil Region of Pennsylvania. I have, since the year 1866 been employed more or less on private surveys in tracing township and section lines and sub-dividing sections in Minnesota according to the requirements and instructions to Deputy Surveyors.

I have also been Chief Clerk of the U.S. Land Office at St. Cloud, Minn. from 1869 to 1873 and am perfectly familiar with all the details and instructions to U.S. Deputy Surveyors.\textsuperscript{19}

Mulliken was working in the extreme northwestern portion of the state, on the international boundary (Figure 2). When the surveyor general forwarded his work to Washington the Commissioner writes, asking for clarification,

Referring to the transcripts of field notes of surveys by Wm. Mulliken transmitted with your letter of 30th ult. I have to request that you inform this office of the meaning of the letters “c.c.” which frequently occur in said field notes, as I find no authority in the manual for such abbreviation. I have also to request that you furnish this office with more detail regarding the intersections made in the above surveys with the International Boundary, giving the number of the boundary post intersected, and a full description of the post if you have such information on file.\textsuperscript{20}

On November 20, two weeks after the Commissioner wrote, Baker answers,

The north boundary of Tp.164, had it been a full Tp. would have been a standard parallel and the letters “C.C.” would designate “closing corners” as directed on page
15 of the Manual: but it being the terminus of surveys in that direction, the letters were used to designate the closing corners on the International Boundary: but the intersections of the north and south lines were not marked as the iron monuments only occur at intervals of two miles: The deputy took notes of the intersection in running the north boundary line of Tp.164, but omitted them in the returns to this office. They are as follows ... 

After giving the intersections Baker notes how the international boundary is marked,

The monuments are not renumbered; are of cast iron, 8 inches square at base, graduated to 4 inches, and terminating at a point; stand 4 feet high above the ground; marked on the north side - “Convention of London”, on the south side “October 20th 1818”. All the posts set by the deputy on this line are three cornered; marked on the north side “C.C.” and on the other two sides the number of the section they face, and the Tp and range to which they belong. 

Perhaps the most interesting letters for present-day surveyors consists of those concerning Benjamin Baldwin’s contract (Figure 2). On September 14, he writes,

In prosecuting the work of subdividing the unsurveyed portion of Leech Lake Indian Reservation under my contract dated June 24th 1875, I have found the Township lines as heretofore run & established (so far as I have been able to find them at all) to be so badly run and so erroneous that I have found it impossible to close my work upon them with any degree of accuracy & I have been obliged to rerun the lines & to correct the work so that the subdivisions might be properly made. As for example, The South boundary of Township 143 Range 31, I found as follows, The South boundary of Sec. 31 is but 69.17 chains long instead of 83.28 as given in the plat furnished me. The south boundary of Sec.33 to the meander corner is 39.90 instead of 47.30 as represented, & the dist. across Leech Lake on this line I found by careful triangulation, to be 37.00 chains ...

The indications are that most of the Township lines throughout the reservation will be found equally as bad if not worse & I ask for definite instructions as to what I shall do in such cases, whether I shall rerun the lines & make the changes necessary for a proper subdivision of the Townships or not. If I rerun the lines will I be paid for the work so done. The irregularity of the Town lines is subjecting me to great delay & expense in prosecuting my work. I have already been employed over 15 days, with a crew of men, in hunting up and rerunning Township lines, & I cannot afford to do it without proper compensation.

Two days later, Baker transmits Baldwin’s letter to the Commissioner of the GLO asking for instructions, stating,

Mr. Baldwin is a man who ranks high in his profession and in character; and I place implicit confidence in his statement. It appears from his letter that the work of running the township lines on said reservation was very imperfectly done. I find by the
correspondence in this office that complaints were made against the work during its progress; and the inclosed (sic) letter, giving the result of personal investigation by a thoroughly competent surveyor, fully confirms said charges and shows some of the defects complained of were not remedied. As Mr. Baldwin’s contract is for the completion of the survey of the reservation, it would seem proper that such action be taken at this time, as shall insure perfect work and prevent trouble in the future. 24

Commissioner Burdett replied on September 27, writing,

I have to say that where the exterior lines of townships which Mr. B. has contracted to subdivide are found by him to be much out of proper position and such exterior lines do not constitute the boundaries of Tps or fractional Tps formerly subdivided, you will instruct the deputy to make the necessary corrections of the town lines in order to properly subdivide the Tps. But where the Tp. has been in part formerly subdivided or the corners on the town lines constitute the boundaries of sections already surveyed, the Deputy will not be allowed to disturb such corners but will close his lines upon them in order that the former adjoining subdivisions may be maintained. In cases where the Tp. Lines are corrected the Deputy must obliterate the old corners including the witnesses thereto and mention the same in his field notes. The deputy will be paid for such work out of the amount of $16,000 heretofore assigned provided that the whole work under contract does not exceed that sum. 25

As a result Baker writes to Baldwin, quoting the letter he received from the Commissioner, October 2. In addition he notes,

You will therefore make such corrections, and re-run such township lines, as in your best judgment shall seem to be absolutely necessary for a faithful performance of your duties and within the limits prescribed in the Commissioner’s letter quoted above, making full notes of such work, as therein directed, and in making up your accounts the same will be carried to your credit to the extent of the $16,000 assigned for the surveys comprised in your contract of June 24. 26

[These are important letters. As far as I am aware they created a precedent. In them the deputy is clearly given explicit instructions to move previously established corners and thus violate federal law and accepted practice. The intent was to ensure that any corners so moved would not affect a township already subdivided. A question can be raised: how did Baker and other surveyors act in subsequent cases where other measurements were “clearly” in error?]

He writes to Samuel E. Stebbins, who had been awarded a contract on September 15, dated September 27,

Since the date of your contract, Sept 15th, 1875, for surveying and establishing the Eighth Correction Line, the deputy who had the contract for surveying township 60 N. of ranges 26 & 27 W. 4th P.M. which closes on said correction line, has
completed his work in the field, leaving his closing corners open on said line. You will therefore plant on your line in ranges 26 & 27 the double set of corners, and mark the same, and make such measurements as may be necessary to connect the closing corners; in accordance with the instructions on page 15 of the manual. You will also obliterate any temporary section, or quarter section corners which may have been established on said line by the deputy who subdivided the townships. 27

The surveyor general corresponds with other individuals interested in the course and outcome of the survey. For example, he advises county surveyors on the proper course of procedure. On August 24, for example, replying to a letter dated August 15 from W.A. Fuller, the Scott County surveyor residing in Shakopee, he writes,

By Acts of Congress approved Feb. 11th, 1805, Feb 22d, 1817 and April 5, 1832 subdivisional section lines are required to be run straight from one half mile post to the opposite corresponding corner, in all cases and wherever the act of the legislature lays down a different rule, it conflicts with the acts of Congress; but this office cannot undertake to make the U.S. and State laws harmonize but must be governed by the former. The excess or deficiencies in the cases you mention should be divided proportionately. The quarter sec. post and meander post No.8 in Sec.33 Tp.115 R.21 are one and the same, and the east and west 1/4 line runs through the lake. There is no man employed in this office who could be sent to do the surveying that you mention. 28

He writes to Sven Arneson, an individual living in Vineland, Yellow Medicine County on August 24,

There is no law that will justify this office in authorizing the change of any 1/4 sec. post in sec.20 Tp.114 R.40 or elsewhere. After the field notes and plats have been returned by the deputy surveyors, and the surveys approved by the Comr. Of the Gen’l Land Office, and rights have accrued to individuals under such survey, no change can be made. 29

And on September 17, he writes to President of the Board of Regents of the University of Minnesota, John S. Pillsbury responding to Pillsbury’s request that he take steps “as will secure to the State University such sections of land (pine) as it may be entitled to by law.” He states,

By the Act of Congress of July 8th, 1870, the selections are to be made by the Governor of the State. I am not sure that this office will be in possession of such definite information as will enable the Governor to make good selection from our records. Our returns only show the general surface character of the country, without defining the timbered, or other value of particular subdivisions. If such information and knowledge as this office procures can be made available, and the matter meets the approval of the Commissioner of the General Land Office, I shall take great pleasure in cooperating with the Governor and the Board of Regents in securing to the University the very best results possible. 30
Curiously, he received only one letter asking for employment, and that in his capacity as timber agent. It is a strange letter!. On October 19, Samuel Estes writing from Brunswick, Canabec County, writes,

I don some work for James H. Spencer in April. there is a balance 21$ du me he has not paid me according to agreement will you be so kind as to keep that amount back for me if you will give me the job I will hunt up and scale and report the balance for i think he dose not report one half of the trespass he finds but sells out as he can find custimers (sic) send me the amount of trespass he has reported in the county I will let you no if he has reported all and i will go and do the balance for you if you request.31

At this time the surveyor general was still responsible for examining cases of timber trespass, individuals logging the trees from land still owned by the federal government. Baker, who signed himself surveyor general and timber agent, writes to George A. Brackett, the Surveyor General of Logs and Lumber for Minnesota, who was responsible for measuring (scaling) the amount of timber floating down the various rivers, in Minneapolis,

This office is in possession of information showing that about 476,000 feet of logs were cut upon lands belonging to the United States, and without any authority whatever. The mark on said logs is as follows: “J”(?). They were cut by W.N. Lawrence and are alleged to have been sold or consigned to W.B. Judd of Minneapolis. I desire that you will cause such logs to be surveyed and consigned to D. Morrison & Sons, as the property of the United States. I send through your office the same information to the Boom Master.32

The postscript reads “This course is adopted in this case as both the trespasser and the consignee are bankrupt.”33

The story of the surveys under surveyor general Baker in succeeding years will be continued in the next issue of the Minnesota Surveyor.

Appendix

The correspondence files of the surveyor general, letterbooks containing letters sent and letters received are the obvious source of information concerning individual contracts and problems associated with those. The files also contain a vast amount of material between surveyor general Baker and his superior, the Commissioner of the General Land Office, until June 1876 Samuel S. Burdett, and then James A. Williamson, relating to the contracts. All of these letters are indexed by name of the recipient or sender. To effectively use the letterbooks you must know the name of an individual and the year in which the correspondence was made.

Endnotes

1 All of the letters can be found in the Minnesota History Center, catalogued under United States, Surveyor General, Letters Received Vol. LXII and United States, Surveyor General, Letters Sent, Vol. N.
3 Squires, Rod. " Principal Meridians and Baselines in the Old Northwest Territory," *Dis-Closures* (Summer, 1992) pp.14-16
7 Squires, 1994 supra note 3
8 Squires, 1995, 1996 supra note 3
9 Letters Received, vol. LXII pp.81-82
10 Id. p.82
11 Id. p.83
12 Id.
13 Id
14 Id pp. 136-7
15 Id. pp.140-141
17 Letters Received supra note p.395
18 Id p.219.
19 Id. pp.112-113
20 Id. pp.195-6
21 Letters Sent supra note 15 p.387
22 Id
23 Letters Received supra note 8 pp.163-164
24 Letters Sent supra note 15 p.368
25 Letters Received supra note 8 pp.176-7
26 Letters Sent supra note 15 p.374
27 Id. p.380
28 Id. p.343
29 Id p.344
30 Id. p.369
31 Letters Received supra note 8 pp.188-189
32 Letters Sent supra note 15 p.327
33 Id
THE PUBLIC LAND SURVEY 1875-1878 (CONTINUED) (Dis-Closures Winter, 1997 pp.12-29)

Introduction

In the last paper I described some of the letters sent and received by the Minnesota Surveyor General James H. Baker in the first year of his appointment, 1875, as a way of understanding the several historical geographies of the public land surveys. Here I look at examples of the correspondence, in a broadly chronological fashion, for the remainder of Baker’s appointment, which lasted until April 3, 1879.1

The bulk of the correspondence consists of letters between the surveyor general and the Commissioner of the General Land Office and between the surveyor general and the deputy surveyors in the field, letters describing how the survey was administered and where and how the points and lines that defined the townships and sections spread in the northern portion the state. An increased number of letters, from deputies working in the field and from others, noted surveying errors.

1876

The surveyor general was relieved of the responsibility for investigating allegations and instances of timber trespass which he had been given in 1862. Several letters illustrate the problem of timber trespass, the source of continuing complaints, and the way in which James Baker discharged his obligations. On January 6 he appoints two timber agents.

I do hereby constitute and appoint Chas. E. Thurston and James H. Spencer, deputy timber agents to examine and report all timber trespass on lands belonging to the United States, east of the Mississippi River and west of the 4th Principal Meridian; and to report the names of all trespassers, the amount and location of such trespass, and if by second or third parties, for whose ultimate benefit the trespass was committed, and the names of any parties who may be used as witnesses in case of prosecution, and to warn all parties to stop such depredations on penalty of prosecution and forfeiture of the timber so cut and removed.2

A few months, on April 5, 1876 the Auditor of Wadena County writes to him,

One S. S. Gardner of Wadena, Wadena County Minnesota - has cut & hauled and has piled up near the track here some ... 200 cords of wood cut off Sec.32 T 135 R 35 West.

The greater portion of this wood is off from State Swamp lands on said sec. - to wit S2 of SE4 & SW4 of NW4. That cut from government is from SE4 & SW4 & NW4 & E2 of NW4 & some off from n2 of SE4. I am going to confiscate the whole pile as State agt and my idea is that the State and Government had better work together and then make an estimate & divide pro rata. As it is now the wood is all mixed up and owing to the depth of the snow it is impossible to get an estimate at this time.3
The above is merely one of several such letters from county officials and private individuals drawing attention to particular instances of timber trespass. Some of these letters allude to the fact that the Northern Pacific Railroad Company construction activities were creating a demand for railroad ties and thus prompting an increase in such illegal activities. There are also letters from attorneys representing clients accused of such trespass. On July 21, the surveyor general received welcome news from the Commissioner of the General Land Office.

This office has concluded, after consultation with the Hon. Secretary of the Interior, to relieve you of the care and preservation of the public timber in the State of Minnesota, which duty was imposed upon the then Surveyor General by letters from this office to him of the 6th February, 1862, and the (letter of) 6th November 1862, for reasons more particularly given in letter from this office to him of the 15th October of that year, as based on the circumstances of the state of civil war which then existed. The registers and receivers of the several district land offices in the State will hereafter discharge the duties of timber agents in their respective districts, under the circular of December 24, 1855, copy herewith. To them, you will accordingly report any case of timber trespass which may hereafter come to your knowledge. You will extend to them every facility in your power for the discharge of their duties in respect to the public timber. With this in view, you will furnish them with copies of any correspondence in you possession having a bearing on the subject which they desire.4

Not surprisingly, this letter prompted a flurry of correspondence between the surveyor general and the local land officers regarding what Baker should do with the evidence of trespass he already possessed, and between Baker and the Commissioner regarding compensation for timber agents Baker employed without the authority and knowledge of the GLO.5

There were many concerns regarding alleged surveying errors. On January 7 Baker writes to M.P. Noel of St. Cloud,

Your letter of Dec. 20th 1875, with diagrams attached, addressed to the Commissioner of the General Land Office at Washington, charging error in the location of meander post No. 24 between sections 32 & 33 in township 123 N of range 31 W. 5th P.M., has been referred to this office for such action as may be deemed proper.

This township was surveyed by Gen. H.P. Van Cleve in September and October 1857; and in December of the same year Mr. Edward D. Atwater, under an appointment from the Surveyor General to examine and report as to the correctness of said survey, proceeded to the field and made a personal examination of the work. Mr. Atwater confirmed the work done by Gen. Van Cleve, and did not deem it necessary to change any of the lines, posts, or monuments. I quote from his report: “The North and South lines are very well chained, but are rather crooked owing to sudden changes in the variation of the needle.”

Upon receiving Mr. Atwater’s report the Surveyor General approved the notes of Gen. Van Cleve, and the same have stood the test of eighteen years without being
questioned. Under these circumstances I deem it inexpedient and bad policy to authorize any changes in the line or location of the meander post complained of.  

Clearly Baker seems confident of his legal position regarding errors that were later found in the survey monumentation. This would not be the last such letter he would receive about errors, however. On September 13 Baker writes to James A. Williamson, the new Commissioner of the General Land Office, concerning a different survey problem, the absence of corners and bearing trees.

Several complaints have been made at this office, that township 41 north of range 24 west 4th Principal Meridian, Minnesota, surveyed by Isaac A. Banker, under contract dated Aug. 22d 1855, was very imperfectly surveyed.

The Land Commissioner of the Lake Superior and Mississippi Railroad informs me that it is impossible to locate the lines between the RR lands and those belonging to the government, or private individuals, owing to the absence of corners or bearing trees, or any indications that they were ever established. A few corners have been found in the eastern part of the township, but the west half is almost entirely destitute of any section corners or bearing trees.

The noticeable absence of corners and bearing trees in this township would seem to favor the presumption that they were never properly established. The Statutes at Large of Minnesota Chapter 11, provided for the relocation and re-establishment of section corners lost or destroyed, at the expense of the county in which the land is situated.

Under the circumstances I beg leave to ask whether this office is authorized to afford any relief in the premises (sic), and if so, in what way? Or should the whole matter be remedied by the County Officers under State Law?  

Unfortunately there is no letter in reply. But on October 6th, Baker is quite definite about his legal position regarding missing corners. He writes to Samuel Jolley in Kedron,

The town having been once surveyed and the notes approved, this office can take no further action in the matter. It is the duty of the County surveyor to reestablish missing corners in accordance with the government field notes, and any appeal from his acts must be made to the courts.

Baker’s assertion that the obligations of the federal governments regarding monuments and lines ended once the notes had been approved and the plats received at the local land office was not noticed by some. He continued to receive letters complaining of missing corners. On December 17th Geo. W. Cooley of Minneapolis writes,

I would like to receive a commission as U.S. Deputy Surveyor with authority and instructions to reestablish U.S. Corners that may be partially destroyed or are becoming obscure in this county or a greater territory if you deem it advisable. My
reasons for asking it are as follows - Within the thickly settled portion of this county there are perhaps not one fourth of the corners in a good state of preservation and perhaps one tenth that can only be properly established by a person of long experience and thorough practical acquaintance with the principles of Govt. Surveying. I have had an almost continuous experience for twelve years on U.S. lines, original and resurveys, and have during the past five years reestablished from original evidence over one hundred corners in this county. There would be no expense attached to it as I could collect from parties interested and would return to the S.G.O. yearly or oftener if required a Book of Reestablishment of Corners.

As I now have control of nearly all of the work in Hennepin and a large country business I could assist in the preservation of U.S. lines to an extent that would prove a great benefit to the department and to the people. My remuneration would come in through an increased business.

Of course I would be governed by the U.S. Laws which I thoroughly understand.9

Two days later Baker replies as he had to Samuel Jolley, that the county was responsible for replacing or reestablishing missing corners, adding,

The Legislature of Minnesota has provided for the re-establishment of lost corners under the direction of the County Commissioners, and in certain cases authorizes them to employ any competent surveyor of the County (See Bissell’s Stats. of Minn. Chap. XI Title XI Secs.130 &132). This office has no jurisdiction in the matter after the original survey has been completed and approved.10

The are instances in which obvious survey errors were corrected, however, especially errors on what might be called special lines, lines established by deputies but not part of the rectangular public land survey net. On January 11 Baker received the following letter from the Commissioner of the GLO.

I have to inform you that upon re-examination of the returns of survey of the boundary line of the Red Lake Indian Reserve by T. G. Merrill D.S. under contract dated Nov. 21 -1872, in connection with the eastern boundary by Nathan Butler D.S. under contract of march 26 - 1875, I am satisfied that said line by Deputy Merrill was not established in the proper place. You are therefore directed to cause to be noted upon the plats of Township 148 N. R. 33 W. that the portion of Section 4 within the reserve and sections 5,6,7 and 8, and that part of section 9 on the west side of the boundary line, is to be withheld from sale or disposal until the SE boundary is definitely established, also cause the fractional areas to be calculated upon both sides of the north eastern boundary line in this township, in section 4-8 and 9. Amend the original and triplicate accordingly and furnish this office with a diagram of the same, after which you will please file the triplicate plats of Township 148 N. Rgs. 32 and 33 in the proper local Land Office. You will be advised by this office when exigency will require a re-survey of the line erroneously surveyed by Deputy Merrill.11
Such corrections were rare and only attempted in relatively isolated cases when the correction would have little impact on the adjacent section and township lines. This particular case has an amusing twist. On January 18 Baker writes to the register at the St. Cloud Land District Office, “To enable us to comply with his instructions, will you please send your plat of the above Tp. to this office by return mail, that the line may be platted and the areas calculated on each side. We will make the corrections at once and return the plat to you.” On January 20 the register at St. Cloud replies saying that he could not return a plat for “amendment and correction” as there was no law that would allow him to do so.

On January 15 the surveyor general outlines the process of privately surveying an island, the subject of numerous letters. He writes to Abraham S. Dickinson, Lake Johanna in Pope County,

Your letter of Jan. 1st. with diagram attached setting forth your action on having an island surveyed in Lake Johanna and asking that such steps be taken as will give you a title to that land embraced therein is received. Your course hardly conforms to the laws of the United States and the regulations of the General Land Office. The proper mode of procedure is as follows: You must give at least thirty days to all owners of land on the shores of the lake opposite the island, that you intend to make application for the survey thereof. This office will then furnish you with blanks upon which to make application. At the same time you will be required to forward to this office an amount of money sufficient to pay all the expenses of such survey, platting etc. to be deposited in a U.S. Depository. A contract will then be entered into with some competent surveyor to do the work and the returns will be made to this office. After the survey is completed and the notes approved the land therein will become subject to homestead or preemption entry only, until after it shall be offered at public sale to the highest bidder, by direction of the Commissioner of the General Land Office, under the provisions of section 5 of the Act of Congress approved August 3d 1846. If you wish to take the necessary steps to have the island surveyed and brought into market, please advise me and I will send you the necessary blanks upon which to make the application, after the thirty days notice has been given.

On July 15, 1876 Baker sends in his estimates for the fiscal year starting July 1, 1877 and ending June 30, 1878. He writes,

The reports of proceedings in Congress upon the appropriation bills for the current year, seem to indicate beyond a doubt, that the appropriations for public surveys will be reduced far below the estimates and recommendations of your predecessor. I have therefore repeated some of my estimates made one year ago, with such additions as I think will best subserve the interests of the government and actual settlers in this State.

I consider it very important that all the Meridian and standard lines should be run, in order that we may have a definite starting point within a reasonable distance, for the surveys in any portion of the States, where the tide of immigration may warrant them; and at the same time avoid excessive fractional sections which are sure to occur where surveys are commenced at points remote from, or in advance of those lines. I also deem it for the best interests of the surveying service, that so far as practicable,
exterior township lines should be run one year in advance of subdivisions and by different deputies. Recognizing the necessity of strict economy and reduced expenditures in all departments of the government, I have made these estimates at the lowest figures compatible with the best interests of the government and the people of this State.\textsuperscript{15}

Baker was appraised of the Congressional appropriations for the following fiscal year by the Commissioner on August 23.

By an Act making appropriations for sundry civil expense of the government for the fiscal year ending June 30\textsuperscript{th} eighteen hundred and seventy seven and for other purposes, approved July 31\textsuperscript{st} 1876 there was appropriated 1\textsuperscript{st}. “For the survey of the public lands and private land claims, three hundred thousand dollars: Provided, that the sum hereby appropriated shall be expended in such surveys as the public interest may require, under the direction of the General Land Office, with the approval of the Secretary of the Interior, and as such rates as the Secretary of the Interior shall prescribe, not exceeding the rate herein authorized; Provided that no lands shall be surveyed under this appropriation, except, first those adapted to agriculture without artificial irrigation; second, irrigable lands or such as can be redeemed and for which there is sufficient accessible water for reclamation and cultivation of the same not otherwise utilized or claimed; third, timberlands bearing timber of commercial value; fourth, coal-lands containing coal of commercial value; fifth, exterior boundary of townships; sixth, private land claims.

The cost of such surveys shall not exceed ten dollars per mile, for standard lines, and the starting point for said surveys may be established by triangulation, seven dollars for townships, and six dollars for section lines, except that the Commissioner of the General Land Office may allow for the survey of standard lines in heavily timbered land a sum not exceeding thirteen dollars per mile.”

And Provided further, That before any land granted to any railroad company by the United States shall be conveyed to such company, or any persons entitled thereto under any of the Acts incorporating or relating to said company, unless such company is exempted by law from the payment of such costs, there shall first be paid into the Treasury of the United States the cost of surveying, selecting and conveying the same to the said company of persons in interest.

2nd. For rent of Office of Surveyor General of Minnesota, fuel, books, stationery, and other necessaries fifteen hundred dollars.” In conformity with law the Secretary of the Interior under date of the 22\textsuperscript{nd} instant, out of said three hundred thousand dollars appropriated the sum of thirteen thousand five hundred dollars for the surveys in your surveying district at the rates prescribed by law, which must not be exceeded in letting contracts for the field work specifically authorized under six heads herein-before enumerated, and you are hereby directed not to expend any portion of the apportionment in the survey of any other quality of lands than such as are prescribed by the foregoing provisions of the appropriation act.
In order to secure a strict compliance with the law, you are instructed to give priority of survey to lands already settled upon, and to require your deputies to execute their work in person of under their immediate personal supervision in the filed, and in accordance with the printed Manual of Surveying Instructions, and your special instructions which must not conflict with the Manual or the existing laws.

You will caution your deputies, who must be practical surveyors and familiar with the government surveys, not to commence their surveys before the approval of their contracts by the Commissioner of the General Land Office.

With the view of reaching distant settlements awaiting the extension of the lines of the public surveys, and to bring such localities within the range of the regular system of the public surveys, provision of law has been made for the determination of the starting point of surveys by triangulation, instead of starting from standard parallels or the auxiliary bases prolonged over sterile and unsurveyable lands. It will therefore be in your power to contract for the survey of such tracts, in case exigencies occur which seem to require it. The cost of such triangulating in such cases not being provided for by law will not constitute a proper charge in the accounts of your deputies against the government.

Where the country intervening between the public surveys and the unsurveyed settlements is of an arable or surveyable character, the proper base should be extended in the usual manner, for which the deputy would be paid at the legal rate.

In case of surveys under the deposit system you will estimate sufficient rates per mile, with adequate sums to cover the expense of the Office work, as the deposit system is not affected by the provision of law authorizing the surveys under the six different classes of land aforesaid.

In letting contracts for the subdivision of the public lands you are required to stipulate the conditions that the survey must include all the lands in the township contracted for subdivision, which are by law classed as surveyable; and except in case of triangulation, that the deputy shall start from the proper bases or standard parallels. If these last shall not have been established, that must first be done and then, if there are no exterior lines of the township surveyed, the deputy must first survey them, and finally subdivide the township into sections running, measuring and marking the lines from South to North, in the regular progress, avoiding the practice, in some surveying district, of surveying partly from north to south and partly from south to north, leaving the interior of the township partly unsectionalized, ostensibly for specious reasons assigned that the rough and mountainous features of the country precluded the possibility of extending the lines over the same. Subsequently the unsurveyed portion of such townships is frequently settled upon, and, under the deposit system the survey of the township without difficulty except that the last surveyor finds it impossible in such cases to connect his work with the corners of previous surveys by due north and south and east and west lines as the law requires.
In order to obviate similar irregularities in your district you must enjoin your deputies to strictly adhere to the system of public surveys and comply with the printed Manual of Surveying Instructions and the existing law, as illustrated on diagrams A, B, and C of the Manual, and the requirements of instructions from this office dated April 14 1875 in reference to the establishment of stone corners by witnessing them to pits.

The modification introduced in the supplemental printed instructions of June 1 1864, requiring navigable rivers to be meandered on one bank only is hereby rescinded, and you will therefore cause both banks of such streams to be meandered in future, conformably with the printed Manual of Surveying Instructions of February 22 1855 at page 15, legalized by Act of Congress approved May 30 1862.

In cases where townships have formerly been partly surveyed and it becomes necessary to complete the same, you are directed to instruct your deputies to fully describe the old corners identified by them in the field, and from which they will start in the completion of their surveys, and to state in their field notes, the kinds of corners, bearing trees or other witnesses to the same, so that there will be no doubt as to the proper corner from which additional surveys are initiated.

The particular localities in your surveying district requiring earliest surveys are left to your election, but you will exercise your best judgment in the selection thereof, so as to subserve the interests of actual and bona fide settlers on public lands who may apply to you for the extension of the lines of the public survey. At the same time you will not omit other meritorious claims and you will bear in mind that you must confine the surveying liabilities within the sum apportioned and appropriated for the present fiscal year.

The Error in Section 2403 of the revised Statutes in reference to the deposits for surveys, was corrected by an Act of Congress approved on the 27th of April last.

3d. By an Act making appropriations for the legislative, executive, and judicial expenses of the government for the year ending June thirtieth, eighteen hundred and twenty-seven and for other purposes approved August 15 1876 there was appropriated “For compensation of Surveyor General of Minnesota $2,000 and for the clerks in his office $3,000” which must not be exceeded under any circumstances.

For the information of this office you are required whenever special instructions are issued by you at the time of contracting for work, to forward a copy of the same with the contract; and when instructions are issued during the performance of the work in the field, a copy of the instructions must accompany the returns of survey.

As the form of contract now includes the preliminary oath of the deputy, it is necessary to repeat each oath at the commencement of the field notes of survey.
Where one final affidavit is made to cover the returns of several townships, you are required to have stitched together the notes of all of the townships included in such affidavit.\(^{16}\)

In his annual report for 1876 dated August 26 Baker reports, “All the surveys under contract at the date of the last report, and all surveys chargeable to the appropriations for the fiscal year ending June 30, 1876, have been completed.”\(^{17}\) He notes that the surveys of the reservations authorized by Congress on April 8, 1864 and provided for in the Appropriations Act of June 23, 1874 and March 5, 1875 had been let. He had awarded several contracts to subdivide townships after his annual report of 1875, thus he reported them in 1876. The contracts for all three included both township lines and subdivisions. In addition he had contracted with Samuel E. Stebbins (September 15, 1875) to run the eighth correction line, Nelson D. Miller (October 8, 1875) to resurvey the boundaries of the Fort Ripley military reservation west of the Mississippi as established by executive order of September 15, 1849, and John Ohlssen (October 21, 1875) to survey the meanders of an island.

Special instructions were still issued to the deputies but, for the most part, they were mere admonitions to the individuals on the field procedures as required in the above letter from the Commissioner. Baker writes to Henry S. Howe, on September 11,

> The work must be executed in person or under your immediate personal supervision in the field.

> You will not commence the survey until notified that your contract has been approved by the Commissioner of the General Land Office.

> You will include in your survey all the lands in the townships contracted for which are by law surveyable. You will commence your surveys from the 12th Standard Parallel, and in surveying each township, you will first survey all the exterior lines of such township before commencing the subdivision.

> In subdividing the townships, you will commence at the corner of Sections 35 & 36 on the township line, and run your lines from South to North in the regular progress. You will strictly adhere to the established system of public surveys, and comply with the printed Manual of Surveying Instructions, and the existing laws, as illustrated on diagrams A,B, & C of the Manual.

> You will meander both banks of all navigable streams in the township that you survey.\(^{18}\)

A similar letter was sent to the others who were given contracts at that time.

1877

There a few letter from individuals who wanted employment, presumably because there were few opportunities still remaining. One such letter, addressed to the surveyor general of Indiana,
Michigan and Minnesota, came from an individual who wished to resurvey a township in Michigan – a reminder of the administrative history of the Minnesota surveying district. In the same vein is a letter asking for a copy of a contract made by Lucius Lyon, surveyor general at Detroit in 1850, for surveying in the lower peninsular of Michigan when the Minnesota surveys were administered from Dubuque.

On February 9 Baker writes to the Commissioner, commenting on the reduction in the rate of pay for deputies,

(W)hile I fully recognize the necessity of practicing that most rigid economy in all departments of the public service, I respectfully submit that the government cannot expect surveys to be made for less than the actual cost of marking them. There is very little territory left in this State that can be surveyed at the prices named .... The unsurveyed portion of this State is far removed from the base of supplies and all materials have to be packed a long distance on the backs of men, necessarily involving a heavy expense. After a careful consideration of the subject in all its bearings, and consultation with experienced surveyors, I am convinced that the following scale of prices is as low as good and faithful work can be afforded.

Standard lines $12 for prairies and $15 for timber; Town lines $10 for prairie and $12 for timber; Section lines $6 for prairie and $8 for timber. 19

In a form letter dated March 10 the Commissioner acknowledges receiving a surveying account for Eli W. Griffin. His letter also points out some deficiencies in the returns.

I desire to call your attention to the defects in Deputy Griffin’s field notes:

The corners are not sufficiently described - It is not sufficient to say “Set post in mound as per instructions for cor. To secs 16, 17, 20 & 21” or 1/4 sec. as the case may be.

The corners must be accurately described - giving the dimensions of the posts, descriptions of notches, number of inches in the ground, height of mound and number and dimensions of posts as described by instructions of April 3, 1873. 20

Once again Baker answers the question of how to deal with surveying errors. On March 30 he writes to P.M. Quist of Wilmar regarding the line between section 9 and 10 in T 118 R 34 N,

The original notes ... read - “North true, at 40.00 chains true place for 1/4 sec. Corner, 47.00 leave cane marsh and set witness 1/4 sec. Post, made mound of earth with charred stake” & c. The true corner should be equidistant between the corner to sec’s 9, 10, 15 & 16 and the corner to Sec’s 3, 4, 9, & 10. Under the ruling of the department this office has no authority to make a re-survey or to correct errors after the original survey has been approved. The remedy must be obtained under the State laws, through the county officers; but if all the parties in interest are agreed there would seem to be no hindrance to the proper establishment of the 1/4 corner as
indicated by the field notes, equi-distant between the section corners above referred to.  

In a May 28 letter, sending his estimates to the Commissioner, Baker comments on the status of the surveys along the U.S./Canada boundary. He writes,

The interests of the public surveys in this District require that at least a tier of townships, or more, be surveyed on and along the International Line, as rapidly as the appropriations will warrant, continuing the work begun the past year which terminated with Tp.65 N. R.3 W. By reference to the maps furnished by your office by you, under date of May 24, 1876, of the official demarcation of the International Boundary, it will be noted that in the large lakes whose channels are intended to constitute the line, there are numerous islands, some of which are numbered. Observe, for instance, Lake Kasieganagah in about range six W. of the 4th. P.M.; there are islands numbered from 1 to 29 and the precise object of this numeration is not defined either on the map or in the treaty. The numeration may define the channel, or it may be that such islands are intended to be all included within the boundary of the United States, and all not so numbered excluded. Are there not copies of field notes of the International survey on file in your office or in the State Department?  

He received notice of the appropriations for his office June 29.

By act of Congress approved March 3, 1877, the sum of $300,000 was appropriated for the survey of the public lands and private land claims for the year ending June 30, 1878.

Of this amount $12,400 has been assigned for the survey of the public lands in your district. The classes of land authorized by law to be surveyed and the rates per mile to be paid are the same of those mentioned in the letter of instructions to you dated August 23, 1876, except that for the survey of heavily timbered and mountainous lands $16 per mile is allowed for standard lines, $14 for township and $10 for section lines.

By direction of the Secretary of the Interior I have to inform you that if you should let contracts for the survey of lands not authorized by the appropriation act, which enumerates the different classes of land to be surveyed you will be held to strict account for so doing; therefore to avoid a misapplication of the funds allotted to your district for the surveying service, you are required to be vigilant in selecting the lands to be surveyed, and to take only such as are known to you, either of your own knowledge or from that derived through actual settlers, to be of the classes specified.

You will impress upon the minds of your deputies the requirements of the law, and caution them to comply with the injunction on peril of losing the fruits of their labor.
In this connection, I have to inform you that the sum of $10,000 was set aside by the Department, out of the aforesaid $300,000, for the examination of surveys in the field in the different surveying districts.

It is not intended to assign any particular sum to any district for this service, but the fund will be applied by this office as exigencies may require.

In case any returns of surveys approved by you and transmitted here for payment, shall be found indicative of irregularities and noncompliance with contracts and the requirements of law and instructions, the necessary part of the funds thus set aside will be applied to cover the expense of the examination by such agents as this office shall deem proper to appoint for the purpose, and in the meantime the surveying account will not be paid unless the results of the examination shall be favorable to the deputy surveyor.

Such being the policy of the Department with the view of guarding, in future, against unlawful surveys, you are hereby required to instruct your deputies to whom you let contracts for public surveys, that unless their work shall be found executed in accordance with the terms of their contract, and with the law and instructions, not only in regard to the correctness of the survey but also with regard to the character of the lands authorized to be surveyed, no account of such deputies will be paid.

The instructions to you dated Aug. 23, 1876, must be regarded as still in force, except where they conflict with the foregoing.23

In his annual report for 1877, written on August 31, Baker justifies his office and expenditures, “The miscellaneous business of this office necessarily involves a large amount of work of which no detailed statement can be given.”24 He echoes a refrain not heard for some time, “Owing to the limited appropriation for clerk hire, but little work has been done during the last year toward bringing forward the arrears of this office.”25 He has some recommendations regarding the basic lines of the survey. “I desire to repeat the recommendations made in my estimated forwarded July 14, relative to the running of certain meridians and standard or correction lines. The proper connection of surveys in different parts of the State seems to demand the establishment of those lines.”26 He also comments on the progress of the survey and the problem of timber trespass.

The surveys in this district have now reached the headwaters of the Mississippi River, and most of the unsurveyed timber region is tributary to streams running north. I learn from parties residing along the northern border, that a large amount of wood and timber is annually taken from the public lands for the use of steamboats and for milling purposes across the line. I would therefore respectfully recommend that surveys be carried on along the international line as far west as the Little Fork River, with a view of bringing these lands into market. These lands are principally valuable for timber, and I would respectfully suggest that Congress be requested to so modify the law for the disposal of timber lands, that they may be subject to private sale or entry immediately after survey, at an appraised valuation, or under such regulations and restrictions as Congress and the Department may deem proper. The government
would thus receive the price of the lands, and be saved all expense of preventing waste or trespass; while the lands being in the hands of a large number of individuals, the burden of protection from theft or fire would be upon them, and by concert of action could be accomplished at small expense to each.27

He recommends the course of the following year’s survey.

The country north of Lake Superior is attracting much attention on account of its mineral resources, and I am confident the extension of the surveys in that direction would bring the government quick and ample returns.28

He warns, however, “In view of the character of the unsurveyed portion of Minnesota, and the distance which men and supplies have to be transported, involving a large expense of time and money, I deem the rates set forth in my estimate of July 14, to be as low as good and faithful work can be afforded.”29

In making a contract with Henry and Frank Howe, Baker had obviously allowed the enhanced rate that he had proposed in his letter of February 19 rather than the rates specified in the federal appropriations. He receives a letter of rebuke from the Commissioner.

You state that the lands embraced in this contract are “mixed timber and prairie” and have allowed augmented rates for the same. Under the law augmented rates can be paid only for the survey of heavily timbered and mountainous lands. You are therefore required to issue to the Deputies supplemental special instructions - which under the law will form a part of the contract - providing for the payment of the augmented rates named in the contract for the survey of such lines only as may be found to extend over heavily timbered land and for the payment of the usual rates of $10 for standard, $7 for township and $6 for sections lines where the lands are not heavily timbered. The contract when so modified may be considered approved - You will forward a copy of the supplemental instructions to this office.

In rendering the accounts the lines surveyed at the usual and augmented rates should be separately stated.30

As a consequence Baker writes to the two deputies,

I am directed by the Hon. Commissioner of the General Land Office to issue to you additional special instructions, which, under the law, will form part of your contract with this office, dated July 10th 1877.

By the law making appropriations for public surveys for the current year, the rates are established at $10.00 for standard, $7.00 for township, and $6.00 for section lines, per mile, except in heavily timbered and mountainous lands. You will therefore be required to designate fully in your field notes, the character of each mile you survey; whether prairie, sparsely or heavily timbered, and the kind and quality of the timber.
In making up your account for payment you will be allowed the augmented rates, named in your contract, for such lines as are shown to be heavily timbered and the minimum rates above mentioned for all other lines.\textsuperscript{31}

On September 5 he writes to the Commissioner, apparently after receiving a letter from the deputies Howes,

\begin{quote}
(U)pon examination of the townships embraced in their contract about one half will come under the heading of “heavily timbered”, and the balance, of the class covered by the minimum rates allowed by law. I therefore enclose additional special instructions, adding another township to their contract ... \textsuperscript{32}
\end{quote}

\textbf{1878}

On March 5 Baker received a letter from the Commissioner of the GLO in which the Commissioner states,

\begin{quote}
I am in receipt of your letter of the 26th ulto. In relation to the rate allowed for the survey of meander lines, and in reply have to say that this office has invariably ruled that meander lines shall be paid for at the same rate as section lines, being the lowest rate prescribed by law. Where provision has been made for augmented section rates in heavily timbered or mountainous land, it has been ruled that meander lines shall not be subject to the same augmentation except in cases where it is shown by the field notes that it was extremely difficult to meander streams and lakes because of the mountainous nature of the country, of dense timber and underbrush growing upon their banks at the meander line.\textsuperscript{33}
\end{quote}

Once again he answers the question of how to deal with an obvious survey error. He writes to James Jenks, Co. surveyor in Wright county June 27, 1878,

\begin{quote}
(T)he section posts cannot be changed in order to make a survey correct which was not originally so. The fact that the post marked “A” in your diagram does not lie in a direct north and south line, as it should, is not sufficient grounds for changing it to the point marked “B” after it has long stood and been known to be at “A”. And in as much as the bearings of the trees and their distances do not warrant the location of the corner at either point, but at some entirely new one measured for and ascertained, it follows that the field notes are not serviceable in the adjustment of the dispute. The post marked “A” in consequence of it being the place of the established section corner from the evidence on the ground (if such is the evidence) must remain unmoved.\textsuperscript{34}
\end{quote}

Baker received a letter regarding his appropriation for fiscal year ending June 30 1879 on July 15, 1878. In the letter the Commissioner reiterates the standard rates for the various lines and informs Baker that he has $15,000 out of the total appropriations of $300,000 for all surveys of the public lands. He also writes,
Said amount must not be exceeded by you in letting contracts for the survey of lands specifically authorized by law and enumerated in the circular dated July 15, 1878, herewith enclosed.

In this connection I have to inform you that the sum of $30,000 was set aside by the Department out of the aforesaid $300,000 for the examination of surveys in the field in the different surveying districts. The sum thus set aside will be applied by this office to the examination of work in the field as occasion may require in the several districts.\textsuperscript{35}

Appended to this letter is a circular describing what type of lands were to be surveyed and the procedures to be followed. This circular, very similar to the one appended to the letter informing Baker of his appropriations in the previous years, is best regarded as supplement to the Printed Manual of Instructions and is the source of the special instructions issued by the surveyor general to the deputies.

In what would be his last annual report, on August 31, Baker writes,

The tide of immigration flowing into the northern and western portion of our State during the last year is unprecedented. The immense yield of our cereals in 1877 (except the limited district ravaged by grasshoppers) attracted many thousands of the poor and industrious classes of the older and more populous States, and foreign countries, to our rich and productive soil. The reports of the several districts land offices in this State, will show the extent of the immigration in the vast increase in (and?) the amount of public lands disposed of, particularly under the homestead, pre-emption, and timber-culture laws.

The Saint Paul and Pacific Railroad Company is now extending its line down the Red River of the North, and will have it completed to Saint Vincent this fall, thus opening up a large and fertile section of our State heretofore deemed almost accessible for agriculture, owing to the great expense attending the transportation of the crops to market. Much attention is now directed to that section, and I predict a large immigration into the Red River Valley next season.

The Saint Paul and Duluth Railroad Company is constructing a branch line of their road from Thomson to the head of Knife Falls, on the St. Louis River, which will make available the large tracts of pine timber on that river and its tributaries. In this connection I desire to repeat the suggestion in my last annual report, that Congress be requested to modify the law for the disposal of timberlands. It is well known that pine lands are of no practical value except for the timber, and it is hardly possible that the requirements of the homestead or pre-emption laws can be complied with in the entry of them.

By restricting the sale of these lands for a number of years, upon the theory of holding them for “actual settlers,” when our whole experience shows that “settlements” are seldom, if ever, made thereon, the timber is taken and removed by those who would
willingly purchase and pay for the land if the law would permit them to do so, and when the lands are finally “offered” there are no purchasers, because all that made them valuable has been removed.  

On September 6, 1878 Baker writes about his trip to the north shore of Lake Superior to the Commissioner,

The Canadian Pacific RR is being rapidly extended this season from Fort William, at the western extremity of Thunder Bay, towards the Lake of the Woods and in a general line parallel with the International Line. The Dawson route, established by the Canadian government over the “water stretches” composed in part of the International Line, has not been abandoned. The work on the St. Francis canal, at this writing, is proceeding with vigor, two hundred and sixty-five men being now engaged in its prosecution. This will open up two hundred miles of navigation, which will bring into market the immense pine forests which skirt the shores of the streams flowing north, from the American side, into Rainy Lake and River. I find also, that the demand of the Canadian Pacific RR for lumber, will be immense. The contract now let, on section 15, near Rat Portage, (Canada side) a distance of 35 miles, the engineers estimate will require 11,500,000 feet of timber, besides ties. This can only be furnished from the American side, as there is in that vicinity, but little timber of value on the Canadian side. Section 16 of the same road, 70 miles long, to be let this fall, will require as much more. On section 15, the grade has to be raised nearly the whole distance, on solid rock, and it is proposed to do it all with timber. Most of it must come from the East Fork American river, and that vicinity. It is my purpose, the ensuing year, with your approval, to push the surveys in that direction, to cover this developing interest. In the meantime ties and timber will be sought there in great quantities. Capt. James Nichols of this State, a man of integrity and capacity will spend the winter near Fort Francis in the Canadian employment. I earnest recommend that he be employed by you to look after our timber interests, and that you give him full and explicit instructions for his guidance in the matter. He has just left for Fort Francis, but a letter sent to this office for him, will reach him. The matter deserves early attention. These facts give emphasis to the statement in my annual report..... These lands should be surveyed at the earliest possible moment, and Congress asked to release them from the operation of the pre-emption and homestead laws, and make them subject to private entry, or they will be lost to the government, as they are only valuable for the timber.

Clearly the cost of the surveys was a concern for the Secretary of the Interior, Carl Schurz, under whose authority the Commissioner of the General Land Office operated. In a circular dated October 11, 1878 he writes,

Owing to the limited appropriations for the contingent expenses of the Department, telegrams from subordinate officers of the Department to the Secretary of the Interior must be prepaid. In this connexion it is suggested that greater care should be taken to reduce the words of the telegram to the least possible number.

The inspection of surveys continues. On November 20, 1878 Baker writes
In accordance with the provisions of law (Sec. 2223 Par. 5, Revised Statutes) and by personal direction of the Hon. Commissioner of the General Land Office, I have personally made an inspection of certain surveys north of Lake Superior, and also of the surveying operations now in progress, (August) along the International Line, as hereinafter mentioned. The work inspected embraces part of the contract of Kindred & Thurston, dated Sept. 23d, 1876, and the work now being done under contract of Stuntz & Hamilton dated July 5th 1877. The difficulties to be encountered in reaching and traversing the area of these surveys, have been great, and necessarily made the work of inspection and examination longer than I anticipated. The land is rough and semi-mountainous, and embraces a lacustrine system of an extraordinary character, occupying fully one third of the area. The timber is chiefly pine, and generally excellent in quality. Some fine bodies of pine timber of the last years surveys have been taken by the State University, under the Act authorizing them to make selections. A few settlers had gone upon some of these lands in advance of the surveyors, and were waiting for them. The indications are that quite a number will follow the course of the surveys. The inducements are the timber and the minerals, the latter of which is chiefly comprised in quartz bearing silver veins, which traverse this whole trappean region. These have not yet been sufficiently examined to justify me in certifying to their actual value. But multitudes of quartz veins traverse the whole area of the surveys in that region of the years 1876-7. Should these veins prove as rich as settlers upon them anticipate, they will impart very considerable value to the timber of that region. There are also iron deposits of vast extent, and regarded as of great value, lying immediately south of the quartz veins above mentioned. These have already attracted much attention, and parties are awaiting the completion of the surveys to enter the lands. That this extraordinary country should have been so long overlooked, seems strange. But that probably results from the fact that it was deemed more inaccessible than it really is. I paid much attention to properly defining that portion of the International Line which is embraced in these surveys. Enclosed, marked “A” is a letter which I prepared for publication, which enters into a detailed description, both historical and topographical, of this portion of the International Line; which letter, I desire to make a part of this report.

A great destruction of timber in this region is constantly occurring by fires, since the advent of settlers and explorers. There is a carpet of deep moss over the mountains, through which, in the dry season, the fires creep in such an insidious way, that it seems impossible to prevent them. In some places fires have been set by parties desirous of uncovering the face of the rock, to find the mineral veins, and so a vast quantity of valuable timber has been destroyed. I used my utmost efforts to prevent the setting of fires, and am sure that much timber has been saved in this way, though many of these fires are unavoidable in the dry season. On one or two occasions our camp fires, creeping through the moss, were caught up by high winds, and we had to fly for our lives. One of the incidents of these fierce fires is the obliteration of corner posts and bearing trees. On more than one occasion we found that the abandoned camp fires of the surveying party whose work we were examining, was burning on the track of the surveyors, and almost destroyed the work done but a few days before. I gave
particular attention to the surveys along the International Line, noting all the meander posts from Mountain Lake in township 65 N. of range 1 E., to Saginaga Lake, in township 66 N. of range 5 W. where I left the work there in progress. I found good meander corners, well established. The map furnished by your office (being a copy of one on file in the State Department) which was intended to exhibit the course of a certain line described by the Commissioners for a proposed boundary line between the United States and Canada, does not exhibit said line through Saginaga Lake. This large lake has in it about one hundred islands. The line, it is stated, runs through the natural channel of said lake. The line not being noted through this lake on the map, I undertook in person, to define this natural channel and notified the deputies what course to follow. The natural channel is so obvious that the result will be admitted by all to be the only true lines. This work consumed much of my time, but it was necessary to be done. The same course will have to be pursued in Lac La Croix when the surveys reach that lake. I followed the town and section lines as here set forth, and found the lines well run and defined, and the courses properly established. 39

1879

The contract between the surveyor general and individual deputies as well as the appointment of surveyors general and the register and receivers of the land district offices was an important source of patronage. On April 16, 1879 the new surveyor general, James H. Stewart, writes to the Commissioner,

I have the honor respectfully to request that the contracts made by my predecessor, Genl. Baker, with H.S. & T.D. Howe, dated March 31, 1879 for the survey of certain Townships therein named and forwarded from this office Ap. 1st for your approval, may not be approved.

I make this request for the reason that said contract was not let until after my appointment as Surveyor General, a fact known to Genl. Baker, and as these surveys must necessarily be made under my direction, & will require my approval, I deem it my right and privilege to name the parties who shall do the work and to select the place where the surveys shall be made. 40

Conclusion

Thus ended the public land survey career of James H. Baker. His career was not marked by any particular event or crisis, not were vast areas of the state surveyed. He merely continued to administer the survey according to the dictates of his superior, the Commissioner of the General Land Office, and his own judgment, expending the appropriations granted by Congress to monument township and section lines in northern Minnesota.

Endnotes
All of the letters can be found in the Minnesota History Center, catalogued under United States, Surveyor General, Letters Received Vol. LXII (1876), Vol. LXIV (1877), Vol. LXV (1878) and United States, Surveyor General, Letters Sent, Vol. N (1876), Vol. O (1877-1879)

1 Letters Sent, vol. N p.400
2 Letters Received, vol. LXIII p.40
3 Id. p.113-115
4 Id. pp121-130; pp.177-184
5 Letters Sent supra note 1 p.401
6 Id. p.487
7 Id. p.493
8 Letters Received supra note 2 pp.191-192
9 Letters Sent supra note 1 p.509
10 Letters Received supra note 2 pp.7-8
11 Letter Sent supra note 1 p.405
12 Letters Received supra note 2 p.12
13 Letters Sent supra note 1 p.404
14 Id pp.451-452
15 Letters Received supra note 2 pp.134-142
17 Letter Sent supra note 1 p.485
19 Letters Received vol. LXIV p.24
20 Letters Sent supra note 18 p.22
21 Id. p.30
22 Letters Received supra note 19 pp.56-59
24 Id.
25 Id.
26 Id.
27 Id.
28 Id.
29 Id.
30 Letters Received supra note 19 pp.72-73
31 Letters Sent supra note 18 p.43
32 Id p.63
33 Letter Received vol. LXV pp.14-15
34 Letters Sent supra note 18 p.107
35 Letter Received supra note 32 pp.42-43
37 Letters Sent supra note 18 pp.63-64
38 Letter Received supra note 32 p.64
39 Letters Sent supra note 18 pp.76-78
40 Id p.167
THE PUBLIC LAND SURVEY UNDER MARTIN CHANDLER, 1883-1886 (PART 1: 1883-1884)  
(Minnesota Surveyor Spring, 1998 pp.14-20)

Introduction

On April 2, 1883 Martin S. Chandler replaced Jacob H. Stewart as Surveyor General of Minnesota. For the next four years he administered the public land survey, by now, restricted to the northern part of the state. (Figure 1) Supervising the fieldwork of individual deputies, he was faced with several difficulties, many of which had confronted his predecessors. Some were created by errors in the survey, and necessitated replacing lost or obliterated monuments and retracing misplaced lines. Some were created by lands, particularly islands, that had been not yet been surveyed for one reason or another. Some were created by the deposit survey system.

How he carried out his duties and overcame these difficulties is described in the correspondence between him and his boss, the Commissioner of the General Land Office, and between him and his employees, the individual deputies, correspondence contained in various letterbooks. Through these letters he received not only instructions on how to solve the difficulties he faced in Minnesota but also information about the difficulties confronting surveyors general throughout the country. The instructions he was given reflect both types of problems. In this mass of correspondence three letters are key to understanding where the surveys spread during this period. A letter from him to the Commissioner estimated the financial needs of the surveyor general's office in St. Paul for the following fiscal year and described the area still to be surveyed. A letter from the Commissioner to him informed him what money had been appropriated by Congress for the surveying district. This letter also gave what amounted to annual instructions. A letter from him to the Commissioner of the General Land Office, published as part of the Commissioner's annual report to the Secretary of the Interior, outlined what had happened in the surveying district in one particular year.
Surveys in 1883

Along with a letter dated May 9 the Commissioner sent Chandler maps created by the Boundary Commission surveying the northern boundary of Minnesota. On the same day Chandler writes to Thomas Ross of Duluth that his contract had been approved and he should proceed with the survey. He adds,

I enclose herewith copies of said Contracts for your acc. Also Diagrams giving notes of the exterior boundaries of the Townships you are to survey so far as said boundaries have been surveyed. I also send you in separate package blank books in which to write up your notes to be returned to this office. In making these surveys your attention is especially called to the instructions furnished you in the book of Instructions to Surveyors General, a copy of which I send you by the mail and a strict compliance with said instructions in every particular is required.

You must run your lines with great care and precision, carefully correct all random lines, see that your lines are plainly, and well marked, and your corners must be established and posts and bearing trees marked in strict accordance with instructions found on page 22 & 23 in the book heretofore referred to. Great care must be taken with the chaining and you must see that your Chainmen follow strictly the instructions given on pages 20 & 21 of the instructions. You must be careful to note all objects etc. as required on pages 43 & 44, and, especially must you note the precise point at which you enter and leave the swamps, and as the swamplands for the State are selected from the Survey Notes, you must as far as possible note the extent and location of all swamp that are "wet" unfit for cultivation. You must make out a diagram of each Township surveyed showing the Streams, Lakes, Ponds, Roads, trails, Swamps etc. and return with your field notes to this office. Your work must be done so that it will bear inspection and as Congress has made an appropriation for the examination of surveys it is probable that an inspection of your work will be made.

It is probable that you will find some irregularities in the boundaries of 160-20. The West boundary of the Township is given at 6 miles 2.50 cha. while the East boundary of 60-19 is only 5 miles 59.20 chs., a difference of over 23.00 chains. The east boundary of 60-20 therefore you may find considerably shorter that the West boundary. You may find it necessary to retrace the South boundary of 60-20 before you can properly subdivide the Township. Should you have to retrace the line you will be governed by Instruction on pages 40 & 41. The East boundary of this township should according to other surveys close on the 8th Cor. Line at about 4.00 chs. West of the Cor. to secs. 31 & 32 T61 R19.

On May 11 Eli Griffin, one of the deputies, requests additional time to complete his contract, writing,
During the past winter and spring the snow has been so deep in the region that it was almost impossible to do the work, and besides during the spring there has been almost continuous cloudy weather in that region, and owing to iron deposits it is necessary to use solar compass exclusively. I have ample supplies and crews in the field at work on said survey, but owing to the above reasons an the difficulty of the work in that region I am obliged to ask for an extension of time. I have heretofore filled several contracts from your office for surveying in this State, and have never before been obliged to ask for an extension of time.  

Griffin's request was granted by the Commissioner of the General Land Office in a letter dated May 17. On June 2 Chandler receives a letter from the Commissioner notifying him of the appropriations made by Congress March 3, 1883 for the next fiscal year July 1, 1883 – June 30, 1884. He writes a second time to Thomas Ross and includes the following direction from the Commissioner.

The specimen field notes of subdivisional Surveys contained in the "Instructions to Surveyors General" dated May 3, 1881 prescribes the noting of topography, etc. on random lines and omit any correction for same on the return or true line.

You will instruct your deputies that in the future such measurements will be omitted on the random line, but must be given on the return or true line. This is found necessary

In order that the topography and other data required to be shown may be more correctly located on the plats and afford other means of identifying and proving the position and location of corners, when at some future time it may become necessary to re-establish same. The printed instructions above referred to are modified accordingly.

Too great care cannot be exercised in noting all objects and data required on pages 43 & 44 of Instructions to Surveyors General of May 3 1881 and also the exact point at which you enter or leave any Swamp unfit for cultivation "giving" the general course of the margin of the Swamp at such points, you must also as far as possible (?) the extent and location of all Swamp that you may lay them down on the diagram to be returned to this office with your field notes.

On June 25 Chandler forwards his estimate for fiscal year ending June 30, 1885 to the Commissioner. Explaining his request, he writes,

The unsurveyed portion of the State of Minnesota embraces the region of the Country extending across the northern part of the State from the region of Lake Superior to the valley of the Red River and is chiefly valuable for the large quantities of timber existing therein. In some portions of the country valuable deposits of Iron are found. The timber throughout the entire region having very greatly increased in value in the last two or three years there has
been a corresponding increase in the demand for the same which will only be partially met by the estimate I have made.

In view of the great difficulty of protecting the timber in so large a region of country from the spoilation (sic) of trespasser as well as the great difficulty liability of much valuable timber being annually destroyed by fire. I am of the opinion that the best interests of the government will be subserved by a speedy survey of the timber lands in the State and their disposal at public sale as rapidly as surveyed.

The estimate for survey in the field is made at rates which were paid two years ago for the reason that I believe the present rates will not remunerate Deputies under ordinary circumstances for doing the work in the dense forests of this district in strict accordance with instructions.7

The Commissioner asks Chandler to send "a tabular statement showing ... the date at which all triplicate township plats were received at the local land offices in your surveying district and the names of the offices to which they were sent". In the letter, dated June 26, he directs,

You will in future transmit, on the first day of each month, a statement showing the date of receipt of triplicate plats at each local land office for the month preceding, as evidenced by the date of the register's receipt.8

The following month the Commissioner writes, "Surveyors General have been in the practice of receiving moneys from parties applying for the survey of agricultural and mineral lands and depositing them, instead of requiring the applicants to make the deposits". He orders the practice to stop and draws attention to the relevant paragraphs of the circulars dated March 5, 1880 and October 31, 1881 noting,

The language of the foregoing instructions is very plain and cannot be misunderstood. Settlers and claimants, applying for the survey of agricultural and mineral lands, must make the necessary deposit and forward to you the duplicate certificates thereof, which you will record in your office and transmit at once to this office. Under no circumstances will you receive the amount estimated by you as necessary to cover the cost of a survey and expenses incident thereto, but will insist upon the deposit being made by the applicant. In districts where there is no United States depository, the applicant must be instructed to deposit with the nearest assistant United States treasurer, or depository. You will also instruct him as to the necessity of forwarding the original certificate to the Secretary of the Treasury, the duplicate to you, and the retention by himself of the triplicate.9

On July 13 the Commissioner writes,

The printed "Instructions to Surveyors General" of May 3, 1881, under the heads of establishing standard township corners and standard section corners,
pages 22, 23, 25 and 26, provide for the witnessing of such corners by marking a tree south of the standard line with Township, Range and Section of the presumed townships south of said standard line. Inasmuch as such proceeding is in many instances impractical and liable to lead to complication, it is directed that the marking as required by the above named Instructions be omitted and the tree marked as a witness tree with the marks of Township, Range and Section for which it is a witness as “A ---, --ins. in diam. brs. S--- W. --- links dist. Marked B.T. T---N., R---W. S---” or, in other words, marked for the survey north instead of south of the standard line.

Chandler sends his report for 1883 to the Commissioner on July 28. Six contracts had been awarded to survey 68 miles of standard and 150 miles of township lines and to subdivide 24 townships. He notes that most of the surveys had been completed although,

The execution of these surveys has been greatly delayed by the depth of the snow during the last winter and bad weather during the spring, as well as by the great difficulty of getting supplies in the country, and the dense growth of underbrush existing throughout the entire region surveyed rendering it necessary to give the deputies more time in which to complete their work.

Concerning future surveys he writes, I would repeat the opinion expressed by me in my letter of June 25, 1883, ... that "the best interests of the Government will be subserved by the speedy survey of the timber lands in this State, and their disposal at public sale". As the value of these lands consists almost entirely in the timber upon them, it is believed that in very rare instances are they sought for actual settlement and cultivation, and in my judgment they should be exempted from the operations of the pre-emption and homestead laws, and immediate action should be taken by Congress for their disposal at an appraised valuation, under such regulations and restrictions as they may deem proper.

In view of the character of the unsurveyed portion of the States, and the distance which men and supplies have to be transported, involving a large expense of time and money, I deem the rates for surveys, stated in my estimate of June 15, to be as low as good and faithful work can be afforded.

In remarks accompanying Chandler's report, the Commissioner of the General Land Office notes,

It has been found necessary to check the depredations upon timber lands of the United States in Minnesota, near the northern international boundary line, committed by parties from the sparsely timbered sections of the Dominion of Canada. Special agents cannot be sent to these far-distant points without proper camping outfit, and the necessary equipment for survey and measuring; all of which requires greater expense than could be incurred continuously with the amount appropriated for the timber service.

On August 29 the surveyor general receives a copy of a letter sent to the Commissioner by
special agent E.W. Oyster regarding his examination of T.61 N. R.14 W. 4th PM. Oyster writes,

As will be seen by reference to the accompanying field-notes, the plats forwarded me with my instructions do not truly represent the character of the land. Forty acre tracts, in fact, whole quarter section, with scarcely an acre of swamp in them, are designated on the plat as all swamp. For example, the section line running eastward west between sections 14 and 23 and 15 and 22, is designated on the plat as nearly all swamp but I discovered that fully nine-tenths of the land on this line is high and dry, rolling and very rocky, with no swamp in sight on either side of the line. The N 1/2 of section 12 is another striking illustration of the fraud perpetrated by the surveyor in his description of the character of the land. The plat shows it nearly all dry land, but I found it to be at least two-thirds swamp. I examined this tract by walking through the center of it from east to west.

So far as the description of the character of the greater portion of the land examined is concerned, in my opinion, the survey is a fraud.

I found no persons on the land or in the vicinity thereof from whom I could ascertain "facts relative to its overflowed or swampy character". The pre-emptors cabins, with one exception, were deserted, and their were no supplies of any description in them. No part of the cleared land around them is under cultivation, and it is barely possible that any person would pre-empt land in this township for the purpose of cultivating the soil, which is very poor, and almost completely covered with rocks.13

Almost a month later, on September 24, the Commissioner writes to Chandler, "the report of E.W. Oyster ... throws great discredit upon the survey so far as related to the character of the land as returned by Deputy Stuntz", and asks Chandler to "call upon Deputy Geo. R. Stuntz for an explanation of the matter."14

Surveys in 1884

Early in the new year, on January 16, Chandler addresses the alleged problems with George Stuntz's survey of T61N R14W. He writes to the Commissioner,

I informed Mr. Stuntz of the report of Mr. Oyster, and called upon him for an explanation. As Mr. Stuntz (as he alleges) was unavoidably detained from being present in the field with his men when the survey was being made on account of severe sickness in his family he determined before making any report in the matter to make a thorough examination of the Township in person. This as his report shows he has done having gone over the larger part of the Township and remeasured over 40 miles of Section lines noting carefully the topography of each mile. The report which I have just received shows great errors in the topography and character of the land as given in his original returns which he has not attempted to explain and which probably cannot be explained except on the (grounds?) of gross carelessness on the part
of his employees.

I would say in regard to Mr. Stuntz that he is the oldest Deputy in this State and has always been an excellent reputation as a Dep. Sur. And I cannot believe that he has been guilty of intentional fraud. He has in this matter shown a desire to make all amends in his power and has been to great expense to correct whatever errors may exist in the description of the character of the land in said Township and has suffered severely for his failure to make a complete examination of the entire township in person before returning his original notes to this office.15

Chandler asks the Commissioner whether he should prepare amended plats of the township along with corrected selections of swampland. On January 28, the Commissioner comments on the survey of the Ninth correction line complaining,

(O)n examination of the Field Notes it appears that the Standard line was run by a compassman F.E. Simar and measured by a single set of chainmen. Page 35 and 36 of the Manual of Instructions to Surveyor Generals May 3rd 1881 require all Standard Lines to be measured by two sets of Chainmen acting independently of Each other. There is nothing in the field notes to show that the contracting Deputy was in the field when the work was being done. His final oath that the survey was made in his own proper person is construed at this office that were but one.16

On May 31, 1884 the Commissioner writes,

This office has received information that it is the practice of Deputy Surveyors to furnish for a compensation, copies of their plats and notes to settlers and others, who apply to them, in advance of their approval by the Surveyor General.17

Calling their activities objectionable, he directed Chandler to notify all deputies to cease such a practice.

Chandler submits his estimates for the fiscal year ending June 30, 1886 on June 28, noting,

I deem it of great importance to the interests of this State and of the United States Government that the surveys of public lands in Minnesota should be prosecuted with much greater rapidity than heretofore.

The greater proportion of the land remaining unsurveyed are timbered land the value of which is being rapidly depreciated every year by the ravages of extensive fires and I am confident that the best interests of the Government and the country would be sub-served by the speedy survey of the public lands in the State and their disposal at public sale at a fair valuation. The timber if held by individuals would be guarded against destruction by fires whereas while held by the United States Government no effort is made to prevent its
Another reason for prosecuting the surveys with more efficiency is that with larger appropriations the surveys in Minnesota could all be completed within the next six or eight years and the office of the Surveyor General of Minnesota abolished thus saving (the?) Govt. The costs of this office.\textsuperscript{18}

In asking for $49,800 for the work of deputies, he suggests that the rates of pay existing three years ago be restored.

Chandler submits his annual report on July 26. The report gives only bare statistics. Under the appropriations for 1883-4 he had awarded four contracts to survey 30 miles of standard lines, 220 miles of township lines, and to subdivide 20 townships. The survey of 13 townships had already been completed. 495,026 acres had been surveyed in Minnesota that year making a total of 42.3 million acres surveyed.\textsuperscript{19}

He receives a letter, dated July 30, from Eli W. Griffin.

My brother has just returned, and reports that he found the measurements to be correct, as first reported, he measured the whole length of the line. I can (?) you my brother measurement in full should you wish it. The difference is only a few links per mile. The greatest difference in any mile is 48 links which any two sets of chainmen will make through a brushy country like that. Should you wish a fuller list, I will make one out in full ....\textsuperscript{20}

On October 27 the Commissioner writes,

Your attention is invited to that part of the "Instructions to Surveyors General" dated May 3, 1881, pages 40 and 41, relating to the retracement of township lines.

You are hereby advised and instructed that retracements will only be allowed in the accounts of deputy surveyors where evidence is adduced as to the necessity of the same, and that new corners have been established in lieu of corners erroneously placed by prior survey under the conditions prescribed by the above named instructions, or where they have become obliterated or destroyed, thus necessitating their reestablishment. Corners will be reestablished in accordance with the general rules and spirit of the Circular of March 3, 1883, copy herewith.

You are further directed to instruct your deputy surveyors in accordance with the above, when issuing special instructions to accompany contracts which provide for "necessary retracements" in order that there may be no misunderstanding on their part as to the retracement of old lines embraced in the surveys contemplated in their contracts.\textsuperscript{21}

**Conclusion**
Martin Spencer Chandler was Surveyor General of Minnesota from April 2, 1883 to November 13, 1886. He was born in Jamestown, NY, February 14, 1824 and received his formal education at the Jamestown and Fredonia, NY, academies. In 1856, he moved to Minnesota where he preempted a farm in Pine Island Township of Goodhue County. After being elected County Sheriff, in 1857, he moved to Red Wing. He held that position for eleven consecutive terms until 1882, when he was elected to the State Senate. The following year he was appointed Surveyor General. He died February 24, 1893.

Endnotes

1 All of the correspondence used come from two sets of letterbooks, Letters Sent and Letters Received, part of the United States Surveyor General collection stored in the State Archives, at the Minnesota History Center.
2 Letters Received vol. LXX pp.76-7
3 Letters Sent vol. P pp.178-9
4 Letters Received supra note 1 pp.81-2
5 Id. pp.83-4
6 Letters Sent supra note 2 p.190
7 Id. p.197
8 Letter Received supra note 1 p.109
9 Id. pp.116-118
10 Id. pp.125-126
12 Id. p. 205
13 Letters Received supra note 1 pp.138-140
14 Id 152-153
15 Letters Sent supra note 2 p.252
16 Letters Received vol. LXXI p.32
17 Id. p.81
18 Letters Sent supra note 2 p.292
20 Letters Received supra note 15 p.134
21 Id. pp.187-188
THE PUBLIC LAND SURVEY UNDER MARTIN CHANDLER, 1883 – 1886 (Minnesota Surveyor Summer, 1998 pp.18-22)

Surveys in 1885

On February 11 Chandler responds to the Commissioner's letter of February 5,

Mr. Hamey’s contract only called for the subdivision of the township, the exterior boundaries having been previously run and established. The East exterior boundary referred to in your letter was surveyed in 1875 by Robert K Whiteley De. Sur. and the notes in pages 7, 8 and 9 of the transcript forwarded are a copy of his notes. Mr. Clark failed to make a note of that fact or to transcribe the affidavit of Mr. Whiteley thereto which lead to the inference that the line was run by Mr. Hamey. The survey of Mr. Whiteley embraced all of T.147 N. R.36 W. and consequently the line between Ranges 36 & 37 was extended North, upon the Reservation, to the corner of Tps. 137 & 138 Ranges 36 & 37. His notes do not show that he established a corner at his intersection with the Reservation boundary but he noted the exact distance to his point of intersection, which being only 144 links South of the Section corner, can be readily established by measuring from it. The Section corner having been established for the surveys in Tp.147 N. R.36 W. should not now be destroyed.

In giving special instructions to Mr. Hamey for the survey of T.147 N. R.37 W. it did not occur to me to be necessary to instruct him to establish a closing corner at the intersection of the East boundary of the township with the Reservation line and as he had no occasion to resurvey the East boundary of the Township he did not do so. It would now be a great hardship to require Mr. Hamey to go on the ground and establish a closing corner as he resides some 70 miles distant and his time and expenses in making the trip would probably amount to $30 or $40 and the omission is not his fault.

On June 25 he sends his estimate for fiscal year 1886-1887. He again asks for more money to complete the surveys in Minnesota. His annual report, dated July 23, notes that he had made only two contracts under the appropriations 1884-5, one for 288 miles of township lines and one for subdividing eight townships. One other contract, for subdividing six townships, had been disapproved by the Commissioner. 385,132 acres were surveyed between July 26, 1884, when his last report was written and July 23, 1885.

After Chandler had submitted a contract for the survey of an island in T.110 N. R.29 W. in Nicollet County, the Commissioner responded October 4, writing,

(Y)ou are informed that the expediency of surveying islands which were omitted at the time of the original survey of the township, or have formed since that date, has long been doubted by my predecessors, and their survey was suspended for several years following 1876, and was a only renewed after
repeated and fruitless efforts to secure legislation with reference thereto from Congress.

The survey and disposal, some years since, by the Government, of lake beds and lands uncovered by the recession of the waters of meandered lakes, notably in Illinois and Indiana, gave rise to litigation between the parties purchasing said lands from the Government and parties claiming said lands under alleged riparian rights as attaching to lands abutting on the lakes and patented by the Government. Said litigation is still in progress regarding the Wolf Lake lands in Illinois.

In view of these facts I am of the opinion that the public interests will be promoted by a suspension of all official action relating to unsurveyed islands situated in meandered rivers, lakes, or ponds.  

Surveys in 1886

On January 30 Higgins & Bro., publishers at St. Louis, write.

The Fifth Principal Meridian ends in Iowa at Township 91 North, but surveys run to British America. We wish to know what lines take the place of the Meridian in Minnesota from Iowa State line to 3rd. Guide Meridian West of Township 136 North.

Were the Surveys (Range lines) run from 1st. Standard Parallel south to Iowa State line, if so from what was it established. What will it cost us to get the information.

What we want is the location of first line surveyed across the State North and South.

On April 12, Chandler writes to a J.A. Bagg of Duluth,

Referring to your letter of Apr.2, relative to letter desiring to have a town surveyed I would say that the Commissr. of the General Land Office has just advised me of an apportionment from the appropriations for surveys of public lands for survey in Minnesota and instructs me to confine the expenditures of the present appropriation exclusively to agricultural land and to restrict township surveys to lands within the range of the progress of settlements. He further says "contracts will not be made for the survey of townships, remote from settlements nor for the survey of forests nor of heavily timbered lands. The present policy is to confine the surveys of public lands to agricultural lands embracing existing settlements or similar lands contiguous to such settlements, and within the regular progress of surveys. Existing settlements are defined as those made by bona fide residents actually residing on and cultivating the lands and who have erected substantial improvements thereon". If I can be furnished with satisfactory proof that the township to which you refer is agricultural land and is contiguous to existing settlements and is not
forest nor heavily timbered land, I will take the necessary step to let a contact for its survey payable from the regular appropriations for survey subject to the approval of the Commissioner. The proof must be clear and conclusive and must state all the facts tending to show the necessity of the town being surveyed.

I have further to state that the prices allowed for surveying cannot exceed the minimum rates, which is $5 per mile for section lines and it is very doubtful if a competent surveyor can be found who will take a contract at such rates for any township in Northeastern Minnesota. If the town cannot be surveyed on account of the foregoing instructions, it cannot be surveyed under the law authorizing settlers to make deposits for surveys.6

He repeats these admonitions to John McKinley of Duluth who requested "blanks for settlers applications for surveys" April 12.7 In his estimates for fiscal year 1887-1888, dated June 25, he tries to justify asking that more money be appropriated for the survey in Minnesota by suggesting that the unsurveyed timber land was, in fact, agricultural land. He writes,

The lands in Minnesota remaining unsurveyed are to a large extent forests or woodlands, and while considerable portions of these lands are valuable for the timber, yet I am informed that a very large proportion of them have very little timber of marketable value but are chiefly valuable for cultivation and settlement and I am of the opinion that it will be for the best interest of the Country to have them surveyed and opened for settlement. Valuable timber where it exists is being rapidly waster by fires, windfalls, and other causes.8

In a letter dated June 28, responding to a letter from the Commissioner, who disapproved of the contracts and bonds of two deputies William A. Kindred and George F. Hamilton, he states,

(T)he said contracts were made and signed by the parties thereto on the 12th day of June. My clerk in preparing the contracts left the date blanks and when they were returned to this office, after the execution of the bond, he by mistake filled in the date June 19th. I have corrected the dates and attached affidavits of Mr. Baldwin and Mr. Hamilton as to date of signing the Contracts.

In regard to the petitions of citizens in Marshall and Kittson counties asking for the survey I would state that I do not understand that the petitioners are settlers on the unsurveyed lands but it was intended to show the general desires of the citizens of these counties to have the lands surveyed that they might be settled and improved.

The apportionment for surveys in Minnesota was made so late in the fiscal year that I had not time to obtain all of the evidence I desired in regard to the character of the lands and the settlement thereon but from the information I did receive from reliable sources I was satisfied of the necessity of having the
surveys described in the contracts made as early as possible. 9

In his annual report, dated July 22, Chandler's makes the same comments as he did in his report 1885.10 He complains, on August 27,

It is now nearly two months since my clerks have received any compensation for their service and as they are dependent upon their salaries to meet their living expenses that are suffering great inconvenience from the delay.11

On September 3 he writes to D. Autrement and Cheeseman of Duluth saying that they must send him proof of the nature of T.60 N. R.19 W. before he can recommend the township be surveyed. He states, "(I)t is very difficult to find any Township in Minn. the survey of which he will approve."12

Chandler resigns his appointment for unknown reasons November 13. The letter of resignation is not in the letterbook. On January 19, 1887 the Secretary of the Interior acknowledges his action but states that the resignation will only become effective when his successor is appointed.13 John F. Norrish was appointed surveyor general of Minnesota in February, 1887.14 As a consequence, Chandler remained in office for several months after he had resigned.

**Surveys in 1887**

On February 7 Chandler writes to Thos. J. Leftwick of Minneapolis,

(Y)ou are informed as long ago as in 1877 the Commissioner of the Genl. Land Office discontinued the practice of surveying "beds of Lakes, sloughs and Ponds over which the lands of the public land survey were not extended at the date of the original survey, but which from the presence of water at the date of such survey, were meandered, but which have become dry land sufficiently for agricultural purposes by evaporation or from other causes."

The Comr. in his Annual Report for 1877, referring to circular of July 13, 1874, which prescribed regulations for the survey of such beds of Lakes (?) says, "After a careful consideration, the conclusion is reached that not only is there no specific enactment which authorizes the action set forth in the instructions above referred to, but there is grave doubt whether the United States has any claim to such islands or dried up Lake beds, and whether they do not come (within) under the sovereignty of the States respectively within the limits of which they are situated and it was therefore determined that such surveys should not further be authorized". Since then no surveys of Lake beds or lands from which the water has receded has been authorized.15

**Conclusion**

Chandler continued the public land surveys in the state without any insurmountable difficulties. Typically, he asked Congress for more money than was annually appropriated. His main concern was to finish the surveys in Minnesota in order to put the
public lands and the timber into private hands. Clearly, the difficulties, especially the rather obvious fraudulent surveys that were being made in other parts of the country, were having an impact on the directions he was being given by the Commissioner of the General Land Office.

Addendum

The correspondence, a small part of which is used in this paper is voluminous. The letterbooks used here are stored at the Minnesota History Center in two boxes, United States, Surveyor General, Letters Received, 1857-1907 (111.E.9.3.B Box 4) and United States, Surveyor General, Letters Sent 1872-1908 (111.E.8.7.B Box 2). See the note by our editor in Dis-Closures, Summer, 1991

Endnotes

2 Id p.375
4 Letters Received vol. LXXII pp.153-155
5 Letters Received vol. LXXIII p.4
6 Letter Sent supra note 1 p.426
7 Id p.429
8 Id p.439
9 Id p.440
10 Id. pp.446-447
11 Id. p. 449
13 Letters Received, vol. LXXXI p.23
15 Letters Sent supra note 1 p.467
DEPOSIT SURVEYS IN MINNESOTA 1881-1884 (Minnesota Surveyor Summer, 2000 pp.16-20)

Introduction

On June 14 I called John Freemyer, the editor of this magazine, and asked about the deadline for submitting a paper for the next issue of the magazine. He told me around July 14, so I relaxed; I had a month!! I already knew what my subject was – the deposit surveys in Minnesota, I knew what materials I needed to read before writing the paper – the United States Surveyor General of Minnesota letterbooks - and I knew where to find those materials – the Minnesota History Center. If truth be told, I even knew the conclusion to the paper – that the deposit surveys in Minnesota, involving deputies surveying townships along the Iron Range, were poorly executed, carried out by incompetent deputies, and fraudulent, carried out at the behest of individuals who were not settlers in the townships that were to be surveyed. In other words, I expected to find a similar picture that others had found in other parts of the country, a picture that I painted in my last paper.

On June 20, a Tuesday, which is when the History Center is open late, I visited the Center's Library. I was confident that the paper would be virtually written by evening's end. Four hours later, four frustrating hours, I left without my story. The visit was not a failure; never do I fail to get some information from the Library. But the information I got concerning the deposit surveys was not entirely satisfactory. The information was disappointingly incomplete. After reading the letters written by the deputies who carried out the surveys, the Surveyor General who supervised them, and the Commissioner of the General Land Office in Washington, I found nothing out of the ordinary about the surveys. None of the contracts awarded under the deposit system were suspended or found unacceptable by the Commissioner of the General Land Office, either because of incompetent surveyors or because of questionable affidavits made by the individuals.

I was a little depressed – and the deadline was approaching!! I started to do what all geographers should do, create maps of the townships that were involved in these surveys and tables of the bureaucratic details of the deputies' contracts (Tables 1, 2). I made two maps of the townships surveyed under the deposit system, one showing their location in Minnesota (Figure 1) and a more detailed one showing their location in relation to the Iron Ranges of northeastern Minnesota (Figure 2). As I made the maps and compiled the tables I thought about the patterns that emerged and why these townships were surveyed and not others - involving questions that I have been answering for the last half decade - how carefully they were surveyed, and what these surveys suggested of the relationships between the individuals who wanted the survey and the deputies – involving questions prompted by my research into the deposit system of surveying.

I have two conclusions, without investing a considerable amount of time and effort looking through the personal papers of the deputies listed in Table 1 and/or the personal papers of the individuals who applied for a survey and deposited the necessary funds with the Surveyor General listed in Table 2. The first conclusion is that the deposit surveys in Minnesota were probably no better and no worse than
Figure 1. Minnesota Deposit Surveys, 1881-1884

Figure 2. The Deposit Surveys and the Iron Ranges
Map based on the map facing page 50 in Wirth (1937)
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other surveys that were made in the northern part of the state. The second conclusion, about the motives of those applying for surveys, is less definitive. The surveys were made at the geographical limits of the public land survey at that time and thus there is a high probability that there were settlers in the townships surveyed who were claiming ownership under the preemption and homestead acts and who could have made deposits for surveying. There is also a high probability, however, that there were individuals, speculators in land or rather in minerals, who either paid individuals to claim they were settlers in order to make deposits for surveying the land or particular individuals to carry out the survey – a problem that emerged further west in which surveys were initiated by those who would benefit from the surveying contract rather than from bona fide settlers. It was not unusual in Minnesota for a deputy familiar with an area to suggest to the surveyor general what townships should be surveyed. On March 8, 1881 from Duluth, George Stuntz asked Stewart for a contract near Lake Vermilion, "As there seems to be a desire on the part of the people of this portion of the state to have a few Tsp's surveyed" and says that if the surveyor general gives him the contract, "I will examine the country & designate the Towns that it is desirable to have surveyed." This letter suggests that surveys financed by deposits were treated similarly as surveys financed by Congressional appropriations.

As usual, the letters from the surveyors, most notably Stuntz, reveal the obscure details about the practice of surveying. October 4, 1881 he writes to the surveyor general Jacob Stewart that he had sent the field notes and maps completing his contract for T62N R14W, the first of the deposit surveys to be completed. Unfortunately he had lost the notes regarding the bearing trees to the corners between sections 16, 17, 20, & 21 and would send them later. He also writes, "Rolled up with the map you will find the Boards upon which I platted the Meanders of Islands and Lakes in this tsp. These by being properly laid together will assist your draughtsmen should he meet with any difficulty in closing my lines". He complains about the difficulty of surveying in this part of Minnesota, grumbling, "The execution of this work as well as all surveys in this region is attend with great expense in excess of surveys in prairie or other timbered portion of the state."

In another letter, dated February 17, 1881, he writes asking the surveyor general's chief clerk, Baldwin, to send him the notes for the exterior lines of T57N and T58N which he is to subdivide soon, saying "I desire to execute these towns before winter breaks up, at least the field work." On the same day, he writes a second letter to Baldwin along with the notes for T63N R12W saying, "the original pencil notes taken in the field which I want you to protract & correct & write them in the book". He continues, "The descriptive notes of the meander are not very full but the shores are without exception rocky and thick brush & timber grows to the waters edge. Cedar, Spruce, Fir, Birch. Aspen & Alder." He adds, "Having run nearly all of the lines with the solar compass, I have omitted to put in my observations on Polaris. They did not differ from those taken in surveying the Town lines."

On February 25, Stuntz again writes to Baldwin, "it makes a great difference in the cost whether this work is executed in the winter or if delayed until .the summer. There can be no objection against a winter survey esp (sic) this winter for the snow is so deep that the ground is not frozen and posts can be set as permanently as in the summer. The work can
progress rapidly on snow shoes, chaining more accurate & transportation 1/2 the cost of summer."

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<td>63N1W</td>
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<td>George Cunningham</td>
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<td>Henry Quinn</td>
<td>6297-6300</td>
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<td>Henry Bender</td>
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<td>Hugh Chisholm</td>
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<td>Anton Ruzinski</td>
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<td>Henry Mason</td>
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<td>May 1, 1882</td>
<td>Charles Hutchinson</td>
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Table 2. Deposits and Depositors
Endnotes

1 Letters Received, 1881 p.42
2 Id p.108
3 Id. p.11
4 Id p.12
5 Id p.13
APPENDIX D.

AN EXCERPT FROM A GUIDE TO THE RECORDS OF MINNESOTA PUBLIC LANDS

A Guide to the Records of

Minnesota's Public Lands

by Gregory Kinney and Lydia Lucas

Minnesota Historical Society
Division of Archives and Manuscripts

1985
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U.S. SURVEYOR GENERAL OF MINNESOTA

The Office of Surveyor General of Minnesota was established in 1857 and was responsible for conducting the original government survey of the public domain in the territory and state of Minnesota. The surveyor general's primary duties were awarding contracts for the survey of specified tracts, supervising the field work of the deputy surveyors, preparing official plats and descriptive lists for each township from the field notes of the deputy surveyors, and managing the accounts of the office.

Congress created the position of surveyor general by an act of 1796 establishing the "Office of Surveyor General Northwest of the Ohio" and "Office of Surveyor General Southwest of the Ohio." The surveyors general originally served directly under the secretary of the treasury. In 1836 the supervision of the federal survey was placed under the jurisdiction of the General Land Office (GLO), then a bureau within the Treasury Department. The surveyors general became direct subordinates of the commissioner of the GLO although they continued to operate independently of the local GLO land offices.

As westward expansion proceeded and the survey of older areas was completed, Congress authorized the creation of new survey districts and the relocation of surveyor general's headquarters within the old districts. The Office of Surveyor General of Minnesota was a lineal descendant of the Office of Surveyor General Northwest of the Ohio. That office had been located successively at: Marietta, Ohio, 1797-1804; Vincennes, Indiana, 1804-1805; Cincinnati, Ohio, 1805-1814; Chillicothe, Ohio, 1814-1829; Cincinnati, 1829-1845; and Detroit, Michigan, 1845-1857.

An act of Congress of March 3, 1857, instructed the Secretary of the Interior "to cause the Office of Surveyor General Northwest of the Ohio to be removed [from Detroit] to St. Paul in the Territory of Minnesota." The Detroit office was closed May 11, 1857. In a letter of May 23, 1857, surveyor general C. L. Emerson reported that "notes, maps, papers, documents and furniture" had arrived in St. Paul from Detroit and that he "would soon be ready to conduct such field work as may be ordered."

The earliest surveys of land in Minnesota were conducted under the jurisdiction of the Surveyor General of Iowa and Wisconsin, headquartered at Dubuque, Iowa. These surveys, completed between 1848 and May, 1857, were primarily on land located between the St. Croix and Mississippi rivers or in the southeastern corner of Minnesota.

After the establishment of the Office of Surveyor General of Minnesota, copies of the field notes, plats, and other records relevant to these surveys were transferred from Dubuque to St. Paul.

The government survey, sometimes referred to as the "congressional," "federal," or "rectangular" survey, divided the state into a grid of townships, each six miles square. The federal survey was based on a series of north-south principal meridians and east-west base lines. Survey points were measured from these base lines and principal meridians, giving each township a unique location north of a base line and west or east of a principal meridian. Each township was subdivided into 36 sections of 640 acres, quarter sections of 160 acres, and quarter-quarter sections of 40 acres.

Because part of Minnesota had belonged to the Northwest Territory and part to the Louisiana Territory, land in the state was subject to two different surveys. Land east of the Mississippi was platted under a survey originating on the "Galena" base line (near the Wisconsin-Illinois border) and was controlled by the 4th principal meridian. The survey of land west of the Mississippi commenced on a base line running through Clarendon, Arkansas, and was controlled by the 5th principal meridian. Townships east of the river are numbered 22-70 north of the Galena base line. Townships west of the Mississippi are numbered 101-164 north of the Clarendon base line.

Congress annually appropriated money for survey work in Minnesota. The surveyor general and the commissioner of the GLO decided which tracts were to be surveyed in a given fiscal year. Contracts for survey work were awarded to deputy surveyors by competitive bid. The deputy surveyor, with a crew of chainmen, axemen, and a compassman, ran the survey lines in the field and was responsible for erecting survey monuments, blazing trees, and recording all measurements in his field notes. The surveyor general verified the accuracy and completeness of the deputy surveyor's work and then submitted copies of the field notes and plats to the commissioner of the GLO for approval.

The Office of Surveyor General of Minnesota continued in operation until December, 1907, when the survey of Minnesota was essentially complete. After 1907 the commissioner of the GLO served, ex officio, as Surveyor General of Minnesota, and questions relating to the survey were forwarded to the GLO. A congressional act of 1940 provided that the records of the Office of Surveyor General of Minnesota be turned over to the Minnesota secretary of state.

The records of the U.S. Surveyor General of Minnesota, most of which were transferred to the State Archives from the secretary of state's office in 1966, include deputy surveyors' field notes (copies) and related records, surveyor general's office correspondence and accounts, contracts for surveys, township survey plats, and miscellaneous related records. The original survey field notes and plats remain (1985) in the custody of the Minnesota secretary of state's office. The University of Minnesota holds a microfilm copy of the field notes and plats sent to the commissioner of the GLO.
List of Surveyors General of Minnesota:

Charles L. Emerson, March 24, 1857-April 13, 1861
William Drew Washburn, April 13, 1861-May 15, 1865
Levi Nutting, May 15, 1865-May 18, 1869
Chester E. Davis, May 18, 1869-Dec. 8, 1870 (died in office)
Dana E. King, Oct. 1873-April 30, 1875
James Heaton Baker, May 1, 1875-April 4, 1879
J. H. Stewart, April 14, 1879-May 2, 1883
Martin Chandler, May 2, 1883-April 2, 1887
John Freeman Norrish, April 2, 1887-April 22, 1891
James Compton, April 22, 1891-Nov. 27, 1895
Patrick H. Kirwan, Nov. 27, 1895-Feb. 6, 1900
Eli S. Warner, Feb. 7, 1900-Dec. 30, 1907
RECORDS OF THE U.S. SURVEYOR GENERAL

Accounting Records, 1830-1907. 0.8 c.f. (3 vols. and 10 folders)
Quarterly accounts of survey appropriations received and of expenditures for salaries, survey work, and incidental expenses by the St. Paul surveyor general's office, supplemented by vouchers that give additional details on expenses or that document work not itemized in the quarterly accounts. They include monthly or quarterly payrolls (incorporated into the accounts), expenses for surveying the Red Lake Indian Reservation, accounts for the surveyor general's office at Detroit, Michigan (1850-1857), and accounts of the surveyor general as federal timber agent.

Arrangement: By record type or format; roughly chronological thereafter.

Related Records: Surveyors' Accounts.

Contracts for Surveys, 1857-1907. 1.4 c.f. (10 folders and 2 vols.)
Contracts between the surveyor general and deputy surveyors for the survey of specified tracts of public land (1857-1907, 10 folders), and a record of contracts awarded and special instructions issued (1857-1907, 2 vols.). They include contracts awarded at bid and "special instructions" from the General Land Office (GLO) and surveyor general to deputy surveyors for the survey of islands or other designated parcels.

Information contained in the contracts includes name of the contracting surveyor; date the contract was issued; date the survey was to be completed; description of the survey work to be done, citing range and township and the type of lines to be run; rate of pay; and estimated cost of the survey. Beginning in 1896, the contract and surveyor's bond were combined on a single printed sheet. The bond lists the person or company acting as surety for the deputy surveyor. Some contracts are accompanied by additional documents relating to the execution of the survey, which may include petitions from settlers to the surveyor general requesting that a particular tract be surveyed, correspondence between deputy surveyors and the surveyor general, supplemental instructions, oath of the deputy surveyor, and diagrams of the area to be surveyed.

The record of contracts and special instructions cites the name of the deputy surveyor, date the contract or instructions were issued, tract to be surveyed, date the survey notes were returned to the surveyor general's office, and dates the plats and transcripts were transmitted to the GLO and the local land office.

Arrangement: Each subseries is chronological by date contract or special instructions issued.

Related Records: The type of supplementary material that accompanies some of the contracts also exists for most of the other contracts but is dispersed in several different series: Petitions for Surveys; Letters Sent; Letters Received; and Surveyors' Accounts.

Descriptive Lists of Survey Posts, 1849-1907. 6.0 c.f. (4 oversize boxes)
Compiled lists describing survey reference points and locations of section, quarter section, and meander posts for each township in Minnesota. They also include comments on the topography, soil quality,
and plant cover of each section. The lists were compiled by the surveyor general's office from information in the deputy surveyors' field notes and, in effect, are an abstract of the field notes. Some of the lists are dated and signed by the surveyor general. Lists for several townships are missing.

Arrangement: By county, thereafter by range and township. Records for a particular township may be filed under more than one county or, more often, under the county in which the largest part of the township is located.

Field Notes: Township Exterior and Subdivision Survey Lines, 1848-1907. 30.0 c.f. (30 boxes)
Handwritten copies of the notebooks kept by deputy surveyors as they laid out the exterior and subdivision lines of each township, recording survey reference points and the location of section, quarter section, and meander posts. They also include plat drawings and comments on the topography, soil quality, plant cover, and other natural features of each township. The field notes for each township also give the names of the deputy surveyor and his assistants, dates the survey was begun and completed, affidavits attesting to the accuracy of the survey, and the surveyor general's certification of the accuracy of the copied notes. These copies were made by the surveyor general's office. Some were made immediately after completion of the survey; others were done much later. Several are identified as copies of copies. The series includes both bound volumes containing field notes for several townships and interfiled folders of unbound notes for single townships.

This is not a complete set of survey field notes. Notes for some townships are missing from volumes. The original notebooks are (1985) in the custody of the Minnesota secretary of state's office.

Arrangement: By principal meridian, then range, then township. Bound volumes containing several ranges sometimes slightly disrupt this sequence.

Related Records: Descriptive Lists of Survey Posts; Township Survey Plats; Field Notes of Survey Examiners.

Field Notes of Survey Examiners, 1857-1897. 1.0 c.f. (1 box)
Field notes of deputy surveyors commissioned by the surveyor general to examine the accuracy and completeness of surveys of township and subdivision lines, guide meridians and standard parallels, and boundaries of Indian reservations.

The field notes consist of 33 "pocket diaries" (1854-1888) and twelve folders of folios (1889-1897). Field notes include the name of the examining surveyor, the survey to be examined, and the name of the original surveyor and date of his contract. They report on the accuracy of location and quality of construction of survey posts, condition of the blazed survey lines, accuracy of the original survey notes and plats, and any corrections the examiner made in the original survey. Some field notes are accompanied by, or incorporate, a daily journal which may include an account of the trip to and from the survey site, a record of expenses, comments on the weather, and daily notes on the progress of the examination.
Guide to the Records of Minnesota's Public Lands

Field notes for 1854-1857 are copies of originals obtained from the surveyor general's office at Dubuque, Iowa. These include several volumes of field notes of original surveys of township lines, guide meridians, and standard parallels.

Also included are a journal (log) of survey examinations by Edward Atwater (1857-1858) and an account of expenditures by examiner George B. Wright (1862).

Arrangement: Chronological, by date examination completed.

Related Records: Field Notes; Descriptive Lists of Survey Posts; Township Survey Plats.

Letters Received, 1857-1907. 7.3 c.f. (7 boxes and 9 folders)

Letters received by the surveyor general's office in St. Paul relating to all aspects of the survey of public lands in Minnesota. The letters are from three main types of correspondents: U.S. General Land Office (GLO) personnel, deputy surveyors, and private citizens and corporations.

GLO letters predominate. They deal with annual appropriations for survey work in Minnesota; instructions to the surveyor general and deputy surveyors; requests and authorizations for surveys of particular parcels; surveys of Indian reservations and railroad lands; hiring and payment of deputy surveyors and office staff; approval or rejection of completed surveys; illegal cutting of timber on public lands; contested surveys and land claims; and much routine office correspondence such as acknowledgments of reports transmitted and accounts paid.

Deputy surveyors' letters, often from field camps, report progress of survey work; ask the surveyor general for instructions, extensions of contractual deadlines, or payment on contracts; and request information on employment and the awarding of contracts.

Letters from the public and corporations consist of petitions to have particular parcels surveyed; allegations of inaccuracies in completed surveys; inquiries to the surveyor general on survey progress, preemption rights, and the availability of land; and applications for employment.

Other correspondents include registers and receivers of local land offices, county surveyors, private surveyors, and land agents.

Arrangement: Primarily chronological (50 vols.); also includes loose papers (3 folders) and subject files (6 folders and 1 vol.). There may be additional letters relating to the subject files in the bound volumes.

Related Records: Petitions for Surveys; Accounting Records. Also, U.S. General Land Office: Calendar of General Land Office Letters (page 64) includes citations to letters sent to and received from surveyors general.

Letters Sent, 1854-1908. 4.0 c.f. (4 boxes)

Handwritten and letterpress copies of outgoing letters of the surveyor general's offices in Detroit (1854-1857) and St. Paul (1857-1908) relating to the survey of public lands in Minnesota and parts of Michigan. Recipients fall into three major categories: U.S. General Land Office (GLO) personnel, deputy surveyors, and the general public.
Letters and reports to the GLO form the largest part of the series and include annual reports on the progress of the survey; quarterly and annual accounts; transmissions of deputy surveyors' field notes and plats to the GLO for approval; pay vouchers for surveyors and office staff; responses to inquiries from the GLO concerning allegations of inaccurate surveys, contested land claims, and illegal timber cutting; reports and inquiries on surveying of Indian reservations and railroad lands; requests for authorization to survey particular parcels in response to petitions from the public; and much routine office correspondence.

Letters to the deputy surveyors concern the awarding of contracts; instructions for conduct of surveys; payment on contracts; extension of contractual deadlines; and allegations of inaccurate or improperly conducted surveys.

Letters to the general public include responses to petitions for the survey of particular parcels; to inquiries about the progress of the survey, preemption rights, and the availability of land; to allegations of inaccurate surveys and contested land claims; and to requests for employment.

Other correspondents include registers and receivers of local land offices, county surveyors, private surveyors, and land agents.

**Arrangement:** Chronological within three subseries: Vols. J-Q, 1854-1889 (handwritten); Vols. 1-19, 1884-1908 (letterpress); and Chief Clerk, 1853-1869.

**Finding Aids:** Most volumes are indexed by recipient.

**Related Records:** U.S. General Land Office: Calendar of General Land Office Letters (page 64) includes citations to letters sent to and received from surveyors general.

**Miscellaneous Maps and Lists,** undated and 1850-1914. 0.4 c.f. (7 folders)

Plat maps and sketches showing progress of the Minnesota land survey, Indian reservation boundaries, part of the Fort Ripley and Red River Road, plats available from Jewett and Son, a list of townships surveyed, and hand-drawn or blueprint plats of various towns and cities. Although they were found with the records of the U.S. Surveyor General, the actual provenance of many of the plats is unknown.

**Miscellaneous Records,** 1853-1907. 0.7 c.f. (13 vols. and 7 folders)

Miscellaneous reports, inventories, and manuals produced or used by the surveyor general's office. They include annual reports to the General Land Office (1896-1906), office inventories, reports to GLO inspectors, survey instructions, almanacs, a list of original land entries for parts of St. Paul, various office work records, and miscellany.

**Arrangement:** By record type, thereunder chronological.

**Related Records:** Annual reports prior to 1896 are filed in Letters Sent.

**Petitions for Surveys,** undated and 1858-1907. 1.0 c.f. (1 box)

Petitions and letters received by the surveyor general's office requesting that particular townships or islands be surveyed.

The petitions for survey of townships list the township and range number, names of at least three settlers in the township (General Land Office policy required that there be at least three bona fide settlers
before a petition would be considered), and a statement by the settlers as to
the type and value of any improvements they had made and the length of
time they had resided in the township. Some petitions include other
descriptive information about the township and the extent of settlement.
Most are signed by the petitioners and witnesses. The petitions for surveys
of islands include descriptions of the island's location and approximate size,
and usually contain affidavits listing the owners of adjacent shore property
and stating the occupancy history of the island.
The petitions are in the form of personal letters, standardized forms, and
letters from lawyers and land agents. Many petitions from the earlier years
are included in the bound volumes of Letters Received.

Arrangement: Chronological.
Related Records: Letters Received; Contracts for Surveys.

Plats of Township Boundaries, 1857-1907. 0.75 c.f. (294 items)
Plats of various township boundaries drawn by the surveyor general's office
from deputy surveyors' field notes. The surveyor general's office sometimes
contracted for surveys of only the exterior lines of townships on designated
range and township lines. These townships were subdivided under later
contracts for survey. The boundary plats show survey reference points,
bearings, and distances, and indicate the type of plant cover along the
township boundaries.

Arrangement: A list of the township boundary plats in the order in
which they are filed accompanies the records.
Related Records: Township Survey Plats; Field Notes.

Surveyors' Accounts, 1880-1884, 1896-1906. 0.4 c.f. (8 folders)
Accounts of deputy surveyors for work done under contracts or special
instructions from the surveyor general. Accounts include the following
information: name of the deputy surveyor, date the contract or special
instructions were issued, description of the area surveyed, type of survey
(base lines, township lines, etc.), proportions to be paid at the high and low
rates depending on difficulty of the work, total cost of survey, surveyor
general's approval of the accounts, and date approved.

Arrangement: Chronological by date the contract or special instructions
were issued.
Related Records: Contracts for Surveys, Letters Sent, and Letters
Received contain correspondence relating to payment of deputy surveyors
and disputes over the cost of survey work.

Swamp Land Lists, 1863-1907. 9.0 c.f. (6 oversize boxes)
Lists of "swamp and overflowed" land compiled by the U.S. Surveyor
General from the field notes of the deputy surveyors. All public land
designated "swamp and overflowed" was granted to the state of Minnesota
by congressional acts of September 28, 1850, and March 12, 1860.

As the general survey of public land was completed, the surveyor
general determined which of the surveyed land fell within the definition of
the swamp land grant. Copies of the lists were forwarded to the local land
offices of the General Land Office (GLO) where the designated tracts were
checked against the GLO records for prior
claims or reservations. Copies were also sent to the State Land Office for
use in preparing swamp land selection lists. This series is a merged file of
records from the GLO, State Land Office, and U.S. Surveyor General.
There are duplicate copies of many lists but for some only one copy exists.
The swamp land lists are arranged by GLO land district and thereunder
by date filed by the surveyor general. They contain the following
information: land district in which the designated land was located; legal
description of the swamp and overflowed tracts, citing the range, township,
section, and fractional section; name of river, watercourse, or other cause
that rendered the tract "swamp and overflowed" within the meaning of the
grant; statement of the grounds for the surveyor general's designation of the
listed tracts as swamp and overflowed; and date the surveyor general
submitted the lists to the local land office. Some lists include annotations
made by the register and receiver of the local land office indicating
disposition of the land.

Related Records: State Land Office: Swamp Land Selection Lists
(page 24).

Timber Agent Accounts and Correspondence, 1861-1877. 0.2 c.f. (2 folders
and 1 vol.)
Records of the surveyor general acting as timber agent, charged with
protecting the federal government's interest in timber on public and reserved
lands.

Correspondence with the General Land Office, U.S. marshals, logging
companies, private parties, and log scalers relates to alleged illegal cutting
of government timber, issuing of logging permits, payment for logs cut on
government land, and the appointment of scalers. Accounts include
itemized records of expenditures by the timber agent and his deputies,
vouchers, and receipts for sale of stumpage. A stumpage sale record
(1874-1877, 1 vol.) cites the township on which timber was cut, the footage
cut, log mark, by whom cut, and to whom sold.

Related Records: Accounts of expenditures for 1862-1877 are located
in the volume titled "Quarterly Accounts" in the series Accounting
Records.

Township Survey Plats (Official Set), 1847-1976 (bulk 1847-1876). 2540
microfiche.
Microfiche reproductions of the plat drawings of Minnesota townships
made by the U.S. surveyor general's office in St. Paul from the field notes
of deputy surveyors.
Plats for each township show section and subdivision markers; acreage
of some subdivisions; rivers, lakes, swamps, major land elevations, and
other natural features; location and identification of any settlements or
settlers' claims established prior to the completion of the survey; and any
roads or railroads in existence at the time of the survey. Some plats include
names of streams and lakes, notes on topography and vegetation, meander
notes, and related data.
The plats also list the total acreage of the township; name of the
surveyor(s); date of contract or special instructions under which the
township was surveyed; date the survey was completed; and date the
plats were approved by the surveyor general. Some townships that are
divided by a major watercourse have two plats, one for each bank. There
are additional plats for some townships in which subsequent surveys were
made to correct or reestablish section or subdivision markers, or for surveys
of islands that were not included in the original government survey.

Filmed with each plat is a certificate of authenticity signed by the
Minnesota secretary of state.

Originals of the plats are (1985) in the Minnesota secretary of state's
office.

Arrangement: By principal meridian, then range, then township; one
township per microfiche. Each microfiche has an alphanumeric identifica-
tion symbol that reflects the initial filming order of the plats.

Finding Aids: A computer-generated index, although not needed to
locate the plat for a given township, contains summary data on each plat.

See Township Survey Plats: Index.

Township Survey Plats (Supplemental Set), ca.1857-ca.1907. 3.0 c.f. (2
oversize boxes)

Plat drawings of Minnesota townships made by the surveyor general's office
from deputy surveyors' field notes.

Plats for each township show section and subdivision markers; lakes,
rocks, streams, and other natural features; location and identification of any
settlers' claims established prior to completion of the survey; roads and
railroads in existence at the time of the survey; and boundaries of any
Indian reservations crossing the township.

The surveyor general's office produced several copies of each plat. This
set (some of which may in fact be the original drawings of the deputy
surveyors) is not complete. It includes only a few plats for townships
surveyed under the Dubuque surveyor general's office prior to 1857, and
plats for various other townships are missing. The most complete set of
plats is held by the Minnesota secretary of state. This official set is
available on microfiche, listed as Township Survey Plats (Official Set).

Arrangement: Primarily by range and township; one folder of
miscellaneous plats.

Related Records: Field Notes; Township Exterior and Subdivision
Survey Lines; Descriptive Lists of Survey Posts.

Township Survey Plats: Index, ca.1984. 2 microfiche.

Computer-generated index to the official set of Minnesota township plats
filed in the Minnesota secretary of state's office. Each entry gives township
and range, sections surveyed, month and year of survey, surveyor's code
number, lines surveyed, comments, plat type (original, resurvey, or copy),
and file reference (microfiche number). There may be several index entries
for a single township or range if portions were surveyed, resurveyed, or
annotated at different times.

The index was generated from a file residing at the University of
Minnesota Computer Center.

Arrangement: One fiche for the 4th prime meridian and one for the 5th.
Each is arranged by township number, then range number,
within groups of ranges: 4th P.M. ranges 12-21, 21-32; 5th P.M. ranges 3-28, 28-34, 35-41, 41-51.

Related Records: This series is an index to Township Survey Plats (Official Set).
APPENDIX E.

THE NATIONAL ARCHIVES MICROFILM COLLECTION M27
Of the various microfilm records, only M27 comprising Letters sent by the Commissioner of the General Land Office to the Surveyors General, 1796-1901, was relevant to the project.
## INDEX TO M27

Alphabetical may include recipient (surname), position, location, subject

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<td>Alphabetical; Dubuque (see also after “T”)</td>
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<td>March 27, 1868 – March 12, 1870</td>
<td>Alphabetical; Register &amp; Receiver</td>
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<td>March 12, 1870 – March 14, 1871</td>
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<td>March 14, 1871 – March 9, 1872</td>
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<td>March 9, 1872 – March 6, 1873</td>
<td>Alphabetical; Surveyor General of Minnesota</td>
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<td>March 6, 1873 – January 10, 1874</td>
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<td>January 10, 1874 – September 24, 1874</td>
<td>Alphabetical; Surveyor General of Minnesota</td>
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<td>September 24, 1874 – August 18, 1875</td>
<td>Alphabetical; Surveyor General of Minnesota</td>
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<td>30</td>
<td>March 28, 1875 – January 2, 1876</td>
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<td>December 29, 1875 – December 14, 1877</td>
<td>Alphabetical; Surveyor General St Paul</td>
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<td>32</td>
<td>December 14, 1877 – September 10, 1878</td>
<td>Alphabetical; Surveyor General St Paul</td>
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<td>33</td>
<td>September 10, 1878 – June 28, 1879</td>
<td>Alphabetical; Minnesota Surveyor General</td>
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<td>34</td>
<td>June 30, 1879 – April 24, 1880</td>
<td>Alphabetical; Minnesota Surveyor General</td>
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<td>35</td>
<td>April 24, 1880 – April 16, 1881</td>
<td>Alphabetical; Minnesota Surveyor General</td>
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<td>36</td>
<td>36</td>
<td>April 16, 1881 – February 2, 1882</td>
<td>Alphabetical; Surveyor General of Minnesota</td>
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<td>37</td>
<td>37</td>
<td>February 3, 1882 – August 23, 1882</td>
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<td>38</td>
<td>38</td>
<td>August 23, 1882 – March 31, 1883</td>
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<td>39</td>
<td>39</td>
<td>March 31, 1883 – August 25, 1885</td>
<td>Alphabetical; Chandler Martin S.</td>
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<td>40</td>
<td>40</td>
<td>August 24, 1885 – October 2, 1890</td>
<td>Alphabetical; Chandler Martin S.</td>
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<td>41</td>
<td>41</td>
<td>October 2, 1890 – April 28, 1893</td>
<td>Alphabetical; Surveyor General of Minnesota</td>
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<td>42</td>
<td>42</td>
<td>April 29, 1893 – July 26, 1895</td>
<td>Alphabetical; Surveyor General of Minnesota</td>
</tr>
<tr>
<td>43</td>
<td>43</td>
<td>July 29, 1895 – August 26, 1898</td>
<td>Alphabetical; Surveyor General of Minnesota</td>
</tr>
<tr>
<td>44</td>
<td>44</td>
<td>August 26, 1898 – April 2, 1901</td>
<td>Alphabetical;</td>
</tr>
</tbody>
</table>

* Extraordinarily detailed index, which includes page numbers for a variety of subject headings. The page numbers of circulars are noted.
** An 18 page letter to the Surveyor General dated August 26, 1898 is indexed under Annual Instructions.

The collections consists of transcripts of letters sent by individuals employed in the General Land Office (GLO), especially the Commissioner of the agency, to the various Surveyors General around the nation. Neither the reorganization of the GLO in 1836 nor the transfer of the agency for the Department of the Treasury to the Department of the Interior produced a significant change in record-keeping practices and no break in the
series of letterbooks. The letters are generally arranged in chronological order. There is an
index for all volumes, except vol. 12, arranged by the initial letter of the surname or title of
the individual to whom the letter is addressed showing the page on which a letter begins.
Accompanying many of the letters are marginal notes giving the subject of the letter, the
initials of the clerk who transcribed the copy, and the references to related records.

Relevant letters are those addressed to the Surveyor General of Wisconsin and Iowa and to
the deputies who worked in Wisconsin, Iowa, and Minnesota Territory. There are also
letters to other individuals, who are clearly not deputies and who do not reside in the
surveying district, but may deal with issues important in understanding the Minnesota
surveys.

Many of the letters involve the administrative details surrounding the work of the
surveyors general and their deputies. They are extremely valuable in providing details
about the surveying process, the dates of the start and end of the contracts, transmittal of
the contract, bonds and plat and field notes to the Washington headquarters they are not
very useful in explaining how the deputies carried out their contracts, the detail with which
the modern land surveyor is interested.

There are some exceptions, and this of course causes the problems. Some letters for
example talk about how a particular deputy should deal with meanders. Not really general
instruction and not special instructions, the message is embedded in other material.

Examples

Vol. 12 October 12, 1846 – June 30, 1848

p.37 Dec 18 1846 Surveys on St. Croix
p.38 Dec 18 Appropriations
p.38 Dec 23 Higbee contract, IA
p.43 Dec 20 Error in certification of plat
p.44 Jan 6, 1847 Finances
p.51 Feb 12 Ball's survey Iowa?

p.53 Feb 17 Finances
p.61 March 30 Conkey survey T21NR19W oath
p.61 March 30 Dunn's survey IA
p.62 March 30 Surveys on St. Croix
p.62 March 30 Lost books
p.76 April 22 Appropriations for fiscal year ending June 30 1848
p.80 April 22 ditto but includes directions for 4th pm and 3rd correction
p.87 April 29 Date of contracts
p.106 June 2, Conkey survey T32NR19W meander instructions WI
p.110 June 19 Salaries
p.117 July 3 Contracts & bonds to survey 4th pm and 3rd correction
p.121 July 8 Prices paid in Iowa
p.143 Aug. 5 Wiltse survey
p.151 Aug Pay
p.160 Sept. 6 Error in surveys
p.171 Sept. 30 Error in surveys
p.177  Oct. 7  Surveying St. Croix pinelands
p.182  Oct. 25  Payment for transcriptions see also Dec 8 p.197
p.198  Dec. 13  Corrections of survey T31NR24W
p.211  Feb 2 1848  Sales in mineral district wants plats
p.223  March. 3  Payment for exteriors and subdivisions
p.236  April 8  Instructions regarding correcting errors in IA
p.258  May 6  Higbee and Hewitt contracts also Fort Snelling reservation

Examples of a digital copies from M27
APPENDIX F.

FINDING AID FOR DIVISIONS OF GENERAL LAND OFFICE
THE GENERAL LAND OFFICE
(RECORD GROUP 49)

ADMINISTRATIVE RECORDS
OF
THE GENERAL LAND OFFICE, 1785-1955

THE NATIONAL ARCHIVES
WASHINGTON, D.C.
1973
TABLE OF CONTENTS

LIST OF TITLES OF VARIOUS DIVISIONS OF THE GENERAL LAND OFFICE
Page 1

SHORT DESCRIPTION OF WORK OF THE VARIOUS DIVISIONS OF THE
GENERAL LAND OFFICE, Pages 2-5

COMPREHENSIVE LISTING OF ALL RECORDS OF THE VARIOUS DIVISIONS
OF THE GENERAL LAND OFFICE NOW IN THE NATIONAL ARCHIVES
BUILDING (EXCLUSIVE OF LAND ENTRY PAPERS IN NG-SUITLAND)
Pages 6-66

COMPREHENSIVE LISTING OF ADDITIONAL RECORDS OF THE GENERAL LAND
OFFICE IN THE NATIONAL ARCHIVES BUILDING NOT YET SEQUESTERED
BY DIVISIONS BUT LISTED IN SHELF ORDER. Pages 67-115

RECORDS RELATING TO MILITARY BOUNTY LAND WARRANTS AND SCRIP
APPLICATIONS FOR SERVICE, 1785-1855, FORMERLY IN DIVISION "R" BUT NOW IN GENERAL ARCHIVES DIVISION, NG-SUITLAND.
Pages 117-122

RECORDS OF THE BUREAU OF LAND MANAGEMENT NOW IN THE REFERENCE
SERVICE BRANCH, NCDR, SUITLAND RECORDS CENTER. Pages 123-126
DIVISIONS OF THE GENERAL LAND OFFICE, (RECORD GROUP 49)

<table>
<thead>
<tr>
<th>DIVISION</th>
<th>TITLE OF DIVISION</th>
<th>PAGE RANGES</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>Chief Clerk's Division</td>
<td>6-7</td>
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<td>B</td>
<td>Recorder's Division</td>
<td>8-12</td>
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<tr>
<td>C</td>
<td>Public Lands Division</td>
<td>13-15</td>
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<td>D</td>
<td>Mail and Piles Division</td>
<td>16-18</td>
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<tr>
<td>E</td>
<td>Private Land Claims Division</td>
<td>19-33</td>
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<td>F</td>
<td>Surveying Division</td>
<td>34-36</td>
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<td>G</td>
<td>Railroad, Rights-of-Way, and Reclamation Division</td>
<td>39-42</td>
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<td>H</td>
<td>Pre-emption Division</td>
<td>43-46</td>
</tr>
<tr>
<td>I</td>
<td>Homestead Contest Division</td>
<td>47</td>
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<tr>
<td>J</td>
<td>Reclamation, Swampland and Special Entries Division</td>
<td>48-49</td>
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<tr>
<td>K</td>
<td>Drafting Division</td>
<td>50</td>
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<td>L</td>
<td>Accounting Division</td>
<td>51-56</td>
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<td>M</td>
<td>Mineral Contest Division</td>
<td>57-60</td>
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<td>N</td>
<td>Posting and Tract Book Division</td>
<td>61</td>
</tr>
<tr>
<td>O</td>
<td>Timber Depredations and Special Services Division</td>
<td>62-64</td>
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<tr>
<td>P</td>
<td>Forestry Division</td>
<td>65</td>
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<tr>
<td>Q</td>
<td>Field Services Division</td>
<td>66</td>
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<tr>
<td>R</td>
<td>Field Services Division</td>
<td>67</td>
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<tr>
<td>S</td>
<td>Field Services Division</td>
<td>68-72</td>
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Note: Columns A, H, and R are not fully visible.
DIVISION "A"
CHIEF CLERKS OFFICE

1. "SPECIAL RECORD" Letters Sent, 1836-1887 (9 vols.) 1/13: A
2. "SPECIAL RECORD" Letters Sent, 1866-1870 (1 vol.) 1/13: A
4. Departmental and Congressional Letters Sent, 1871-1888 (115 A) 1/13: B
5. Press copies of Departmental and Congressional letters sent, 1879-1903 (40 vols.) 1/36: B
7. Press copies of letters sent relating to Congressional Bills, 1881-1911 (33 vols.) 1/36: C
8. Letters Sent to the Civil Service Commission, 1896-1903 (8 vols.) 1/36: C
9. Letters sent to the Secretary of the Interior, 1878-1886 (4 vols.) 1/36: D
10. Press copies of letters sent to the Secretary of the Interior, 1879-1921 (32 vols.) 1/36: D
11. Letter sent to the Secretary of the Interior, December 24, 1906 (1 vol.) 1/36: E
13. Letters sent to Registers and Receivers of Local Land Offices, 1871-1887. (13 vols.)
14. Press copies of letters sent to Registers and Receivers of Local Land Offices, 1878-1903 (24 vols.)
15. Authorizations to Registers and Receivers, 1889-1890 (1 vol.)
16. Letters sent to Surveyors General, 1887-1903 (14 vols.)
17. Letters sent to Special Agents, 1880-1903 (37 vols.)
18. Letters sent to Inspectors, 1882-1887 (1 vol.)
19. Press copies of Letters sent to Inspectors, 1882-1903 (4 vols.)
DIVISION "A"
CHIEF CLERKS OFFICE

20. Miscellaneous letters sent, 1872-74 (1 vol.) 1:17:4
21. Miscellaneous letters sent, 1882-87 (6 vols.) 1:17:4
22. Press copies of miscellaneous letters sent, 1879-1910 (236 vols.) 1:17:4
Slides, Box 8, Shelf 36 with End 23
23. Press copies of "Personal" letters sent, 1891-92 (1 vol.) 1:19:0
24. Telegrams sent, 1873-1887 (2 vols.) 1:19:0
25. Press copies of telegrams sent, 1880-1909 (79 vols.) 1:19:0
26. Letters sent relating to Forestry, 1900-03 (7 vols.) 1:19:0
27. Letters sent relating to Reclamation Withdrawals, 1904-1:19:0
1907 (1 vol.) Box 8, Shelf 36 with End 36
28. Notices to Registers of Local Land Office Relating to
their Appointments, 1840-44 (1 vol.) Shelf Box 8, End 37, Draft 37
29. Notices to Receivers of Local Land Offices Relating to
their Appointments, 1840-44 (1 vol.) Shelf Box 8, End 37, Draft 37
30. Notices of Commissions of Registers and Receivers, 1847-
1869 (7 vols.)
31. Circulars sent to Receivers of Local Land Offices, 1850-
1854 (1 vol.) 1:19:0
32. Letters sent by the Receiving Clerk, 1871-1910 (6 vols.) 1:19:0
33. Special Orders, 1860-61 (1 vol.) 1:19:0
34. Receipts for Specimens, 1860-62 (2 vols.) 1:19:0
35. Statistical Reports 1904 (1 vol.) 1:19:0

END OF DIVISION "A"
DIVISION "E"
SURVEYING DIVISION

Letters received from the Surveyor General of the Territory Northwest of the River Ohio 1787-1831 (8 vols.)

Letters received from the Surveyor General of Alabama (Coffee) 1817-32 (3 vols.)

Letters received from the Surveyor General of Florida, 1824-32 (1 vol.)

Letters received from the Surveyor General of Mississippi, 1803-31 (9 vols.)

Letters received from the Surveyor General of Missouri, 1813-32, including Contracts for Surveying in Missouri, and Illinois. (7 vols.)

Letters received from Surveyors General of public land states, 1910-23 (61 boxes) (No. 532-593)

Miscellaneous correspondence relating to the Office of the Surveyors General 1924-26 (3 boxes)

Indexes to Letters Sent by Division "E", 1835-50 (3 vols.)

Register of letters sent to Surveyors General 1823-44 (1 vol.)

Letters sent to Surveyors General of public land states, 1796-1901 (44 vols.)

Miscellaneous letters sent by Division "E", 1863-87 (6 vols.)

Press copies of miscellaneous letters 1883-1908 (12 vols.)

Letters sent to Surveyors General of:
  Alaska, 1884-1900 (1 vol.)
  Arizona, 1863-1899 (3 vols.)
  California 1851-1896 (14 vols.)
  Colorado 1861-1899 (8 vols.)
  Dakota Territory 1861-1891 (4 vols.)
  Idaho 1866-1903 (4 vols.)
  Kansas and Nebraska 1854-75 (4 vols.)
  Nebraska 1867-1887 (2 vols.)
  Montana 1867-1903 (6 vols.)
  Nevada 1861-1903 (4 vols.)
  New Mexico 1854-1887 (4 vols.)
  Oregon 1851-1899 (8 vols.)
  Utah 1855-1905 (6 vols.)
  Washington 1854-1905 (10 vols.)
  Wyoming 1870-1892 (2 vols.)

Register of letters received from Surveyor General (1860-1897)

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DIVISION "E"
SURVEYING DIVISION

Press copies of letters sent to Surveyors General, 1872-1903 (25 vols.)

Departmental letters sent 1864-1903 (38 vols.)

Press copies of letters sent to other Divisions in the
General Land Office 1886-1916 (39 vols.)

Congressional letters sent 1883-87 (1 vol.)

Letters sent to Registers and Receivers of United States
Land Offices 1883-94 (2 vols.)

Letters sent to Examiners of Surveys and Special Agents,
1882-87 (1 vol.)

Special Letters Sent 1876-87 (2 vols.)

Record of Division "E" letters sent transmitting reports,
1870-73 (1 vol.)

Report of the operations of the Surveying Division and
estimate of appropriations 1857-63 (1 vol.)

"Dallas's Index" and record of Special Files (1 vol.)

Inventory of the Archives of the Office of the Surveyor
General of Arkansas, received by Edward Cross from J.E.
Conway, June 21, 1836 (1 vol.)

Abstracts of papers transferred to the Surveyor General for
Louisiana under the Act of March 3, 1831 (1 vol.)

Inventory of property charged to each Surveyor Generals
Office and United States Land Office (1 vol.)

Inventory of the Office of the Surveyor General for Louisi-
ana for 1886, received by Benjamin T. Ledbetter from James
Lewis, February 1, 1886 (2 vols.)

Record of Office Examinations of Surveys, 1899-1910
(Serials 966-2705) (1 vol.) (Volume Number 2)

Correspondence of Registers and Receivers relating to
surveys 1914-26 (3 boxes) (Nos. 605-607)

Special Files of Division "E" 1910-42 (See list)

Miscellaneous correspondence files of Division "E",
1927-38 (26 boxes) (Nos. 611-637)
DIVISION "E"
SURVEYING DIVISION

Batchelor's correspondence files 1915-27 (14 boxes) (Nos. 651-664)

Peine's Correspondence files 1913-18 (2 boxes) (Nos. 665-666)

Correspondence of D. K. Parrott, Assistant Commissioner of the General Land Office 1931 (1 box) (No. 667)

Special Files of Division "E", 1907-39, relating to Indian reservations, private land claims, boundary lines between states, ecological survey of Louisiana. (39 boxes) See list 240 12.5 FC 32 70 ROW 4 4.5 FC 3


Surveying Group Files, Alabama-Wyoming (Boxes 1-300) now in Archives Branch (NRS) (Salt Lake) NRS

Homestead Surveys in National Forests, ca. 1910-38. (43 boxes) (Nos. 349-390) ROW 5 3 FC 10-1

Field Notes for State Group Files, ca. 1910-40 (28 boxes) (Nos. 426-450) ROW 5 3 FC 2

Military correspondence, maps and field notes relating to the United States Military Reserve in Ohio (1 vol.)

"Book No. 2, Chillicothe District", field notes and plats of townships in the District. (1 vol.)

Index of Plats and Field Notes, Louisiana, including the names of Louisiana Surveyors General, 1783-1910 (1 vol.)

Township plats and field notes for Kansas, Missouri, Iowa, Ohio, Illinois, Indiana, are in Cartographic Archives Division (NRS) 2 W - 4 - NRS

Letters received from the Surveyors General of Public Land States, 1826-1863 (113 boxes) ROW 1/5 26.1 4 13 97 1/5 15/19
Alabama, 1826-50; Arizona, 1863-79; Arkansas, 1832-59; California, 1851-79; Colorado, 1861-79; Dakota, 1861-79; Florida, 1827-79; Idaho, 1866-79; Illinois and Missouri, 1832-63; Iowa Contracts, 1843-48 and Iowa, 1834-68;
DIVISION "B"
SURVEYING DIVISION

Iowa and Wisconsin, 1859-68; Kansas and Nebraska, 1854-76; Louisiana, 1831-79; Michigan, 1950-57; Minnesota, 1857-79; Mississippi, 1831-49; Montana, 1867-79; Nebraska, 1867-79; Nevada, 1863-75; New Mexico, 1854-79; Old Northwest (Ohio) 1832-49; Oregon, 1851-79; Utah, 1855-79; Washington, 1854-83; and Wyoming, 1870-79.

Alaska Surveys Numbered 0-4099 (1910-1964) (24 boxes)

Letters received from important persons including Members of Congress, 1836-1879 (55 boxes)

Rejected Surveys for public land surveys, rejected for errors, fraud, difficulties, 1870-1925 (States of Alaska-Wyoming) (36 steel drawers) See list. (24 boxes)

Field Notes State of Iowa, 5th PM. (1 vol.)

Statement of Tract of Land surveyed in Arkansas, claimed by Choctaw Nation of Indians under the 1st Article of the Treaty of January 20, 1825 (7 Stat. 234) 137,500.12 acres. (1 vol.)

List of land surveyed in the States of California, Florida, Michigan, Minnesota and Oregon since the Act of March 12, 1860, 1860-79 (1 vol.)

Statements of contracts, surveys of mines, lists of land surveyed, accounts of appropriations for Surveyor General of California for the fiscal year ending June 30, 1892. (1 vol.)

Field Notes of Surveys in Indian Territory (Triplicate copies) ca. 1889-1910 (55 vols.)

Field Notes of Examination of Surveys, ca. 1870-1920 (24 boxes)

Alaska, Nos. 2-25, Surveys 147-124 (3 boxes)

Arizona, Old Series Nos. 1-50, New Series Nos 1-163 (5 boxes)

California, Nos. 1-397 (6 boxes) - Box 14

Colorado, Nos. 375-873 (3 boxes) - Box 15-17

Florida, Nos. 1-61 (1 box) - Box 18

Idaho, Nos. 1-33 (7 boxes) - Boxes 19-25

Louisiana, Nos. 1-22 (1 box) - Box 26

Minnesota, Nos. 1-602 (7 boxes) - Boxes 27-34

Mississippi, Lists 37-54 (1 box) - Box 35

Montana, Nos. 1-599 (14 boxes) - Boxes 36-45

Nebraska (Miscellaneous) (1 box) - Box 46

Nevada, Nos. 1-270 (4 boxes) - Boxes 50-53

New Mexico Nos. 1-434 (7 boxes) - Boxes 54-60

North Dakota, Nos. 1-195 (6 boxes) - Boxes 61-66

Oklahoma, (not numbered) (4 boxes)

Oregon, Nos. 1-799 (8 boxes) - Boxes 71-78

37.
Division "E"  
SURVEYING DIVISION

South Dakota, Nos. 1-165 (4 boxes) 564-19-49
Utah, Nos. 1-314 (7 boxes) 564-19-50
Washington, Nos. 1-700 (11 boxes) 564-90-02
Wyoming, Nos. 229-350 (5 boxes) 564-100-10 5
Miscellaneous (7 boxes) 564-100-11

519. Alaska Surveys, Nos. 1-176 and 223-228 (1 vol) Index

520. Island Files (66 boxes) Nos. 465-531 Row 15, Section 4

521. Eastern District miscellaneous correspondence files, 1904-26 (16 boxes) Nos. 594-604 Row 15, Section 2

522. Eastern District Field Survey Reports in connection with contest docket. (14 boxes) Nos. 381-425 Row 15, Section 1

523. Eastern District Field Surveyors Reports (3 boxes) Nos. 451-454

524. Eastern District Field Assistants Reports (2 boxes) Nos. 454-456

525. Eastern District Work Reports (2 boxes)

526. Time report of operations of Agents in the field (1 vol.)

527. Bond Register of Deputy Surveyors Bonds (1 vol.)

528. Ledger of Accounts of Surveyors General 1844-56 (1 vol.) 5560

529. Accounts Docket by number of Reports on Surveying Accounts, 1896-1920 (1 vol.)

530. Surveyors General Monthly Accounts of bounty land warrants delivered to bookkeepers. (3 vols) Nos. 2-5

531. Surveyors Hand Book, District 7, Boise, Idaho. (1 vol.)

532. Alphabetical Index of letters sent by the Surveyors General, Ohio, Indiana and Michigan. 1849-54 (1 vol.)

END OF DIVISION "E"

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APPENDIX G.

SELECTED EXAMPLE OF LETTERS RECEIVED, NATIONAL ARCHIVES
Accompanying letter dated July 31, 1857
Accompanying letter dated July 7, 1862

Accompanying letter dated October 23, 1867

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