

The Minnesota Board of Water and Soil Resources (BWSR) will be securing a permanent Reinvest in Minnesota (RIM) conservation easement (Easement) for which a comprehensive legal boundary survey (Survey) is required. The local Soil and Water Conservation District (SWCD) is responsible for securing the services of a professional land surveyor licensed and registered in the State of Minnesota (Surveyor) to complete the Survey in accordance with the requirements described herein. The SWCD will assist the Surveyor in coordinating with BWSR and the owner of the property (Landowner) as needed.

The survey field work should not be completed until after the SWCD has given the Surveyor notice to proceed. The site-specific information will be provided separately in a supplemental **Cost Estimate Request for RIM Easement Boundary Survey**, including a map and GIS shapefile of the proposed preliminary boundary.

Questions on survey and signage requirements should be directed toward the SWCD or the BWSR Easement Acquisition Specialist assigned to the easement.

1. Summary of Survey Requirements

The Surveyor shall:

- A. Conduct a boundary survey of the Easement parcel(s)
- B. Prepare a draft and final Certificate of Survey (Survey) and legal description
- C. Provide the State with a GIS shapefile or CAD file of the surveyed Easement boundary
- D. Monument and post the Easement boundary

The work and work product of the Surveyor must be in accordance with accepted professional land surveying standards of practice, relevant state statutes and administrative rules, and any applicable local ordinances. When required, and in consultation with the SWCD, the Surveyor may need to establish an ingress/egress easement route to be included on the Certificate of Survey and legal description for the Easement.

2. Pre-Survey Communication

The SWCD will provide the Surveyor with a map of the proposed Easement boundary, a draft GIS shapefile, location of ingress/egress easement route(s) (where required), a deed for the intended Easement parcel(s), and other such information as may be necessary and available to complete the work requirements set forth herein and specified in the RIM Easement Survey Request specific to this project.

Prior to starting field work, a meeting or other suitable form of communication shall occur between the SWCD, Landowner, and Surveyor. The following items shall be reviewed and/or discussed:

- A. Proposed Easement boundary
- B. Proposed ingress/egress route, if needed
- C. Timing of and notification for planned field work to complete the identified work items.
- D. Process for placement of temporary markers vs. permanent posts and signs.

3. Identifying the Ingress/Egress Route

The Survey must identify how the Easement parcel(s) will be accessed from a public road right-of-way. If the Easement boundary abuts a public road and there is direct vehicular access between the Easement and the public road, then no separate ingress/egress route is needed. The Survey needs only to identify the area of abutment.

If the Easement does not have direct vehicular access to a public road, an Ingress/ Egress Easement between the Easement boundary and a public road must be identified and shown on the Survey. The ingress/egress easement shall be no less than 20 feet in width unless otherwise specified by the State.

If ingress/egress is by an existing recorded access easement, the Survey shall identify such existing easement by its recording information, shall show its location on the map, and include it in the Legal Description. The State must review the language of the existing recorded access easement to confirm that it will allow for perpetual non-exclusive use by BWSR and other applicable regulatory agencies.

In the case of a project that involves multiple adjacent Easements being established concurrently, access may be established jointly between and among the different Easement parcels.

4. Easement Boundary Survey Field Work

The Surveyor must locate the easement boundary angle points and record the description using bearings and distances as referenced to the National Spatial Reference System. The Easement boundary survey must be a complete traverse of the area and must be tied to a corner of a Public Land Survey (PLS) or a corner of a recorded property.

During field work, the Surveyor shall communicate with the SWCD and Landowner in the event of ownership or boundary issues or conflicts associated with the planned Easement, whether created by evidence of occupation, a recorded document, or otherwise. Additionally, the Surveyor shall:

- A. Perform the Easement boundary survey in the appropriate county coordinate system.
- B. Identify potential encroachments or overlaps and report them with detailed measurements and descriptions. See [Section 9](#) for potential methods to address common boundary issues.
- C. Delineate the edge of lakes or streams when used as a boundary of the Easement.
- D. Install temporary markers (lathe, flags, etc.) on all corners and roughly every 500 feet along straight lines, as needed to adequately mark boundary in field. Do not set markers along a public road right-of-way (corners only) or along easement boundaries that follow a meandering stream or lake edge.

Review of Temporary Signage

After the initial field work is complete, the SWCD and Landowner will meet to review the locations of the temporary Conservation Easement boundary markers and Ingress/Egress Easement markers (if required). Only after being notified of their acceptance shall the Surveyor replace the temporary markers with permanent monuments and signposts, according to the following specifications:

- **Monuments:** Install permanent monuments at every corner of the Easement boundary, unless otherwise approved by BWSR. Monuments may be placed during the initial site visit or later depending on the current and planned land use. See [Section 7](#) for additional survey monument specifications and requirements.
- **Signposts:** Install signposts at every corner/monument and every 500 feet along a straight Easement boundary line, unless otherwise approved by BWSR. See [Section 8](#) for additional posting requirements.
- **Signs:** The easement boundary signs will be provided by BWSR installed by the SWCD after the easement has been recorded, unless otherwise specified and requested by BWSR.

5. Draft Certificate of Survey & Boundary

The Surveyor shall prepare and submit a draft Certificate of Survey to the SWCD in accordance with the below specifications. BWSR will review the draft, provide comments as appropriate, and a final signed version will be requested upon approval.

The Surveyor shall also provide a GIS shapefile or CAD file of the surveyed boundary at this time. GIS shapefiles must be projected in the UTM Zone 15 North (NAD83 meters) coordinate system. If unable to provide a shapefile in this coordinate system, please provide a CAD file of the easement boundary to be converted as needed.

The following items must be shown on the Certificate:

1. Easement ID Number must be shown on the top right corner of all pages of the Certificate (to be provided by the SWCD).
2. Clearly label the extent of the conservation easement area as "Easement Parcel". If Conservation Easement consists of more than one distinct parcel, label as "Easement Parcel A", "Easement Parcel B", etc. on the Certificate and reference as such in the Legal Description.
3. Include surveyed size of Easement Parcel(s) to the nearest tenth (0.1) of an acre or more.
4. Locations of monuments found, set, or to be set.
5. Road right-of-way lines and names of all adjacent roadways.
6. Label all Public Waters that are within or adjacent to the Conservation Easement.
7. Label Ingress/Egress Easement (if required) on certificate, show in legal description, and include document recording information.
8. Show and label other features as requested on the RIM Easement Survey Request form (if any)
9. The Surveyor shall determine the appropriate size and format of the Certificate of Survey. It does not need to be a size that is suitable for attaching to and recording with the Easement.

6. Final Certificate of Survey

Upon BWSR approval of the Draft, the Surveyor shall provide the following items:

1. Full size printed copy of the final signed Certificate of Survey (one copy is adequate)
2. High quality pdf of final signed Certificate of Survey
3. Word processing file (i.e. Word document) of written surveyed Legal Description

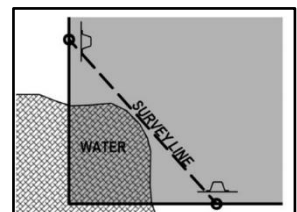
The surveyed legal description will be attached to the recorded easement, but the actual Certificate of Survey will not be recorded unless required by a specific County.

7. Permanent Easement Boundary Monuments

The Surveyor shall set permanent monuments at every corner of the Easement boundary. Monuments must be a 5/8-inch outside diameter steel pipe or rod with a minimum length of 24 inches.

The pipe or rod shall be set flush with ground and capped as per requirements of state law.

If a boundary corner is submerged, the monuments shall be placed on the boundary according to the figure on the right. The location of the corner shall be mathematically offset and shown on the Certificate of survey as such.



The timing for setting permanent monuments may depend on the current land use and restoration activities with which permanent monuments may interfere, as follows:

- A. If farming practices, restoration activities, or other land uses are not an issue and will be unaffected by the Easement monuments, then the Surveyor may set the permanent monuments during the initial field survey of the easement boundary, as site conditions warrant.
- B. If farming practices, restoration activities, or other land use activities will continue within the Easement boundary for an extended period and the Easement monuments will affect those activities, then all or portions of the Easement boundary shall be marked with temporary markers until the relevant land use activities have ceased. Such temporary markers shall be of a kind that do not cause damage to farm equipment, livestock, construction equipment, etc. Upon termination or completion of these activities, the Surveyor must return to the site to set any remaining permanent monuments.

8. Permanent Easement Boundary Posts

In addition to setting monuments, the Surveyor shall set signposts at every monument/corner **and** every 500 feet along a straight Easement boundary, with the following exceptions:

- Where the boundary follows a road or railroad right-of-way, signposts are only required at corners
- Signposts are not to be set along easement boundaries that follow a meandering stream or lake edge
- Signposts are not to be set along ingress/egress routes

Posts shall be steel, “U” channel posts, painted green (ideally), with a minimum length of seventy-two (72) inches and a minimum weight of 1.12 lbs. per foot, embedded a minimum of 24” in the ground, and oriented such that a sign affixed to the post will be displayed perpendicular to the Easement boundary.

The SWCD is generally responsible for attaching the Easement boundary signs (to be provided by BWSR) to the top of each signpost after the Easement has been recorded. The signs may be installed earlier upon request of the SWCD or Landowner.

9. Addressing Common Boundary Issues

9.1. Property Line Conflicts/Encroachments

Evidence of possible encroachments of the property being surveyed for an Easement may indicate a disputed or uncertain boundary or potential property ownership conflict. Indications of encroachments include but are not limited to:

- Fence lines, fence posts, signposts, or other physical indications of occupation that conflict with the deeded property’s surveyed boundary.
- Evidence of certain land uses, such as cropping that encroach onto or off of the deeded property’s surveyed boundary.

In the course of establishing the Easement boundary ([Section 4](#)), if the Surveyor finds any evidence of encroachments onto or off of the property being surveyed, such evidence must be brought to the attention of the Landowner and BWSR. The Surveyor must provide sufficient detail regarding such encroachments so that the Landowner may appropriately evaluate the issue and decide whether to pursue possible remedies.

Under no circumstances shall the proposed easement area be located on land that is either (a) not owned by the party granting the Easement or (b) for which there is field evidence that the land may be subject to a conflict regarding its ownership.

9.2. Road Rights-of-Way

Neither the Easement, nor any ingress/egress easement area, shall include any land lying within the right-of-way of any public road. In some cases, existing and/or proposed private roads, drives, access lanes, etc. and their associated rights-of-way will also need to be excluded from the Easement. Questionable situations should be

brought to the attention of the Landowner and BWSR for a decision on potential exclusions. When required exclusions for rights-of-way are not already legally established, the Surveyor must consult with the Landowner and determine a suitable right-of-way for said access feature. The survey map and written legal description must clearly reflect that any such road right-of-way area is outside both the Easement area and any ingress/egress easement area.

9.3. Riparian Barriers/Boundaries

Natural or manmade barriers, including but not limited to; ditches, streams, creeks, rivers, or other natural water bodies, will occasionally be used as boundary lines in the Easement's description. When riparian features are being used as a boundary line for the Easement, the following general guidance must be followed when establishing the Easement boundary:

Streams, creeks, rivers, or other natural water bodies - for purposes of defining the Easement boundary, the Surveyor must create a survey line by traversing along the top bank of such stream, creek, river, or other water body. In the absence of a top bank, the Surveyor must traverse along a mark left by wave action at the preceding high water elevation, as determined by simple observation or at the ordinary high water mark established by the Minnesota Department of Natural Resources. In cases where the Surveyor is unable to determine the Easement boundary line, BWSR will be contacted for assistance.

In some instances, corner points for the Easement survey may be submerged. In this event, a mark left on the bank by wave action at the preceding high water, as determined by simple observation, shall be surveyed and the location for the Easement corners shall be mathematically offset from that line.

Drainage ditches - for purposes of defining the Easement boundary, the Surveyor shall first determine, in consultation with the Landowner and BWSR, if any drainage ditches that border or traverse thru the property are intended to be excluded from the Easement. In many cases, drainage ditches along or thru a planned Easement will be left as is and will continue to function and benefit surrounding properties. In such situations, there may be a desire to not include the drainage ditch or its right-of-way for access and maintenance within the Easement due to a conflict of easement rights.

In such situations, the Surveyor must determine the legally established right-of-way for the ditch and use said right-of-way line for the purposes of describing and establishing the Easement boundary. Where no legally established right-of-way exists, the Surveyor must determine a right-of-way using the guidance in the following diagram.

