

Number: GO-07/002		Page 1 of 7
Owner Ministry of Justice - Controller of Surveys	Manual Surveys	Last Revision Sept. 4, 2007 May 15, 2015
Policy Name Witness Monuments	Effective Date June 29, 2007	Revised Date Nov. 24, 2020
<p>Policy Statement:</p> <p>Prior to 2007, there were various methods used by Saskatchewan Land Surveyors ("surveyor") for establishing section and quarter section corner monuments from witness monuments, and for the re-establishment of witness monuments themselves. This policy now sets out the methods which are acceptable. These are outlined below.</p>		
<p>Purpose:</p> <p>This policy provides instructions for surveyors when both establishing and re-establishing primary monuments that involve witness monuments. Prior to 2007, the application of these requirements has not been consistent. This policy is intended to provide consistency in the procedures used for both the establishment and re-establishment involving witness monuments.</p> <p>The requirements are firstly that the witness monument or position is re-established, and then secondly, the witnessed corner position is established from the witness monument or position.</p>		
<p>Scope:</p> <p>1. <u>Witness Monument Found</u></p> <ul style="list-style-type: none"> a) Where the witness monument is found, the witnessed corner monument must be established when field conditions allow. b) The witness monument must not be removed. c) The witness monument governs and the witnessed corner monument also governs when its position is within tolerance. <p>2. <u>Witness Monument Lost</u></p> <ul style="list-style-type: none"> a) Where the witness monument is lost, the witnessed corner monument must be established when field conditions allow. b) When the witnessed corner monument has been established, the witness monument is not required to be re-established, but its position must be shown on the plan of survey. c) The witness monument is required to be re-established when the witnessed corner monument is not able to be established. d) When the witness monument is not able to be re-established, its position must be shown on the plan of survey and a new witness monument is to be established at a suitable location. 		

- e) For clarification, witness monuments are to witness primary monuments only, and reference monuments are to reference secondary monuments only.

3. Plans Approved Prior to June 29, 2007, pre-dating this policy

- a) It is required to use a primary monument that has been correctly re-established, without taking into consideration a witness monument shown on the most recent township plat;
 - i) In the above situation where the re-establishment is in error, beyond the standard of accuracy of the year of the survey, the re-establishment correction must use the witness monument position.
- b) It is required to use a primary monument position that has been correctly re-established within a road widening, without taking into consideration a witness monument shown on the most recent township plat;
 - i) In the above situation where the re-established position is in error, beyond the standard of accuracy of the year of the survey, the re-establishment correction must use the witness monument position, and
 - ii) In the above situation where the road survey is required to be re-established due to lost monumentation or other, and that the same re-establishment includes a witness monument not previously considered, the following re-establishment must use the witness monument position.
 - (1) An example of this situation, but not limited to, would be a north-south road widening plan, that did not survey tie line i.e. road stations established at 90 degrees. It would not be acceptable under this policy to ignore the position of the lost witness monument to re-establish the lost road station positions.
 - iii) In the above situation where a new road widening of an existing road survey that a witness monument not previously considered, the following re-establishment must consider the witness monument position.
 - (1) An example of this situation, but not limited to, the initial north-south road widening plan did survey tie line. It would not be acceptable under this policy to ignore the position of the lost witness monument to establish the new road widening station positions.

4. Crossing Township and Range ("township") Lines

- a) When a witness monument is not located in the township that the witnessed corner monument is in, a review of the original fieldbook is required to determine if:
 - i) the surveyor is the same for both townships or
 - ii) two different surveyors were involved, and whether they surveyed across the township line to the witness monument in the other township.
- b) Depending on how the townships were originally surveyed, this policy may or may not apply. A surveyor's report must be submitted in this situation and explain their rationale.

5. Multiple Witness Monuments Referencing Same Primary Corner

- a) Where a primary corner has been witnessed by two or more witness monuments, the surveyor must complete adequate research and fieldwork
 - i) the surveyor must submit in their surveyor's report comments on each witness monument and explaining their decision that is reflected on the new plan submission.

Sample Scenarios:

The following are provided to clarify how the establishments and re-establishments are required to be done.

Scenario #1**Witness monument is found and used to establish the witnessed corner monument**

Generally, witnessed corner monuments are re-established using one of the two following methods:

1. By producing a straight line along the section line through the witness monument holding the witnessed distance to the witnessed corner. (See Figure 1)
2. By following Section 186 from the 9th Edition of the Manual of Instructions for the Survey of Dominion Lands that states:

“When the line through a witness monument and the witnessed corner to the adjacent corners on both sides of the witnessed corner is represented on the official plan as a straight line and the line is found not to be straight on the ground, the deflection is to be left at the witness monument.” (See Figure 2)

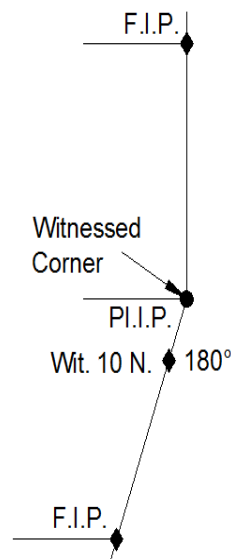


Figure 1

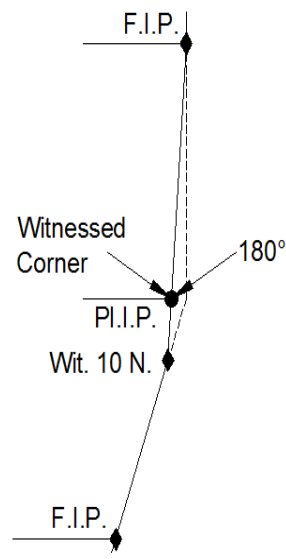
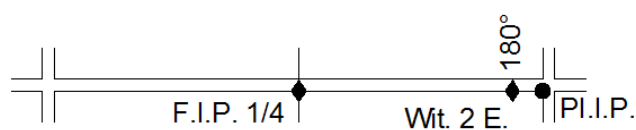


Figure 2

After the original placement of the witness monument on the township survey, the next surveyor generally has been allowed to use either of the above methods for establishing the witnessed corner. However, consideration should be given to the bearings shown on the township plan to determine which procedure to select. Once a method is used, all subsequent surveys must use the same method unless the surveyor has a valid reason not to do so. In that case, a detailed report must accompany the plan when it is submitted for examination and approval.

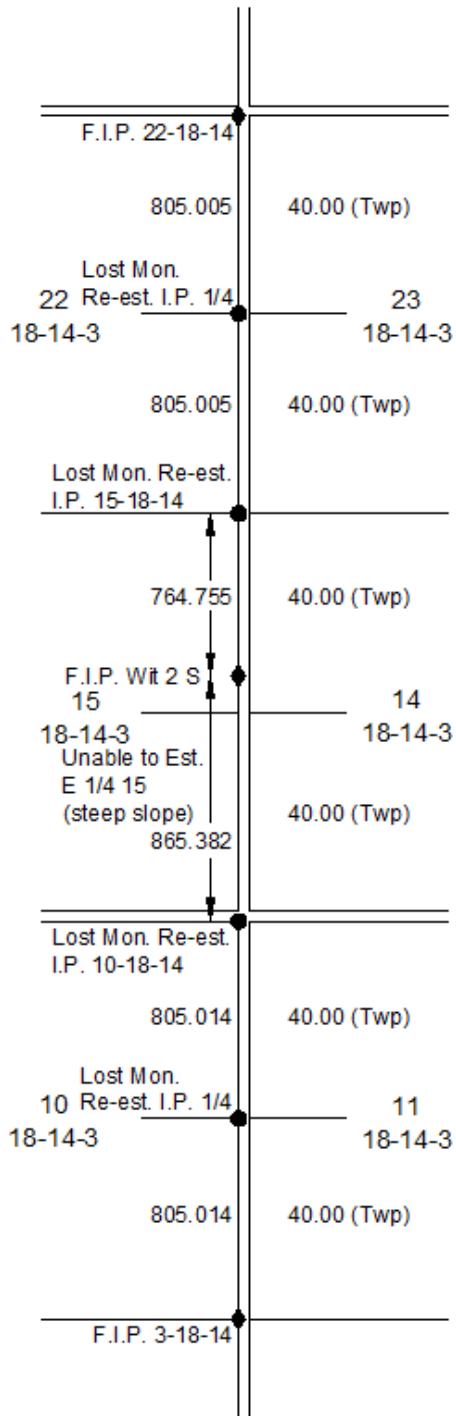
Scenario #2**Witness Monument for a section corner on an east west line in the interior of a township**

The witnessed corner monument is to be established by producing the line through the witness monument to the corner.



Scenario #3**Witness monument is found and used to re-establish other primary corners**

When proportioning in the re-establishment of lost monuments at primary corners where a witness monument is involved, the witness distance from the witness monument to the witnessed corner monument must be taken into account in the overall proportioning. The witness distance must be subtracted from, or retained in the overall measurement while the width of the road allowance is to be subtracted and not used in determining the proportionate lengths of the quarter sections.



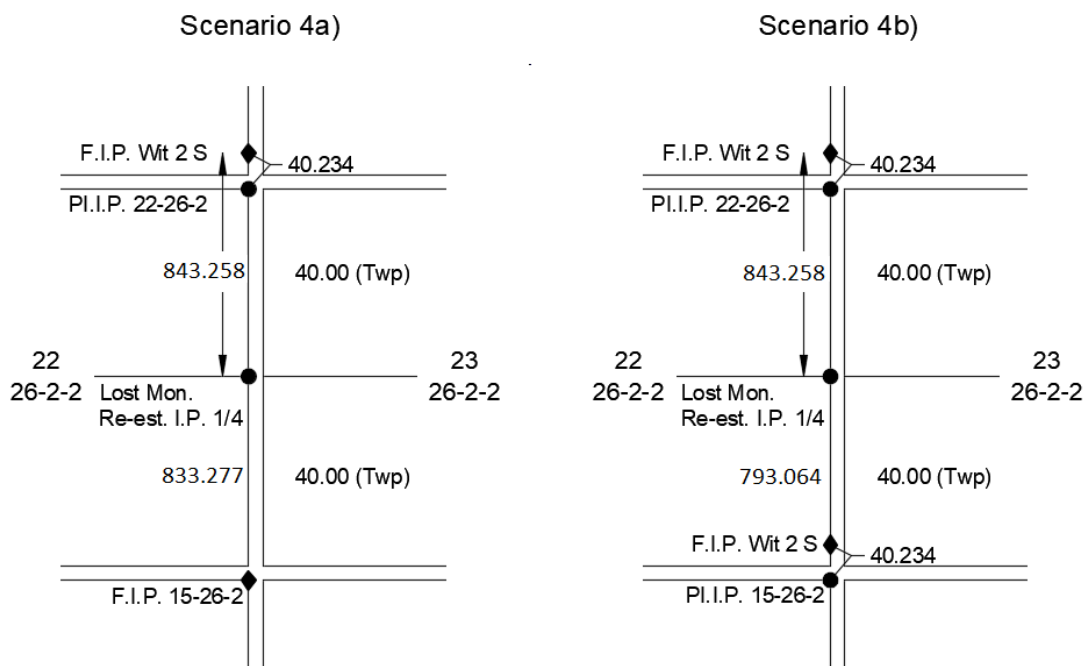
The NE15 and E ¼ 22 are to be re-established by proportioning between the two found monuments according to the township plan. The witness distance of 2 chains is not to be used in the proportioning calculation. The total distance used in the calculation will be $40 + 40 + 38 = 118$ (twp). The total measured distance between NE22 and witness monument = 2374.766. The resulting proportionate distances are 805.005, 805.005 and 764.755.

The E ¼ 15 is not proportioned in and must be established 2 chains south of the found witness monument

The NE10 and E ¼ 10 are re-established by proportioning between the two found monuments according to the township plan. The witness distance of 2 chains is to be used in the proportioning calculation. The total distance used in the calculation will be $40 + 40 + 42 = 122$ (twp). The total measured distance between NE3 and witness monument = 2475.410. The total measured distance used in the calculation will be $2475.410 - 20.117 = 2455.293$. The resulting proportionate distances are 805.014, 805.014 and 845.265. $845.265 + 20.117 = 865.382$.

Scenario #4a & 4b**Witness monument is used to re-establish other primary corners concerning Road Allowances**

When proportioning in the re-establishment of lost monuments at primary corners where a witness monument is involved, both the witness distance and the location of the witness monument with respect to the road allowance must be taken into consideration in the overall proportioning.



The E ¼ 22 is re-established by proportioning between the two found monuments according to the township plan. The witness distance of 2 chains is added in the proportioning calculation.

The total distance used in the calculation will be $40 + 42 = 82$ (twp).

The total measured distance between NE15 and witness monument = 1676.535.

The total measured distance used in the calculation will be $1676.535 - 30.175 = 1646.360$.

The resulting proportionate distances are 803.102 and 843.258.

$803.102 + 30.175 = 833.277$.

The E ¼ 22 is re-established by proportioning between the two found witness monuments according to the township plan. In this case, the witness distance of 2 chains is added for the ENE22 and 2 chains is subtracted for the ESE22 ($40 + 1.5 - 2 = 39.5$).

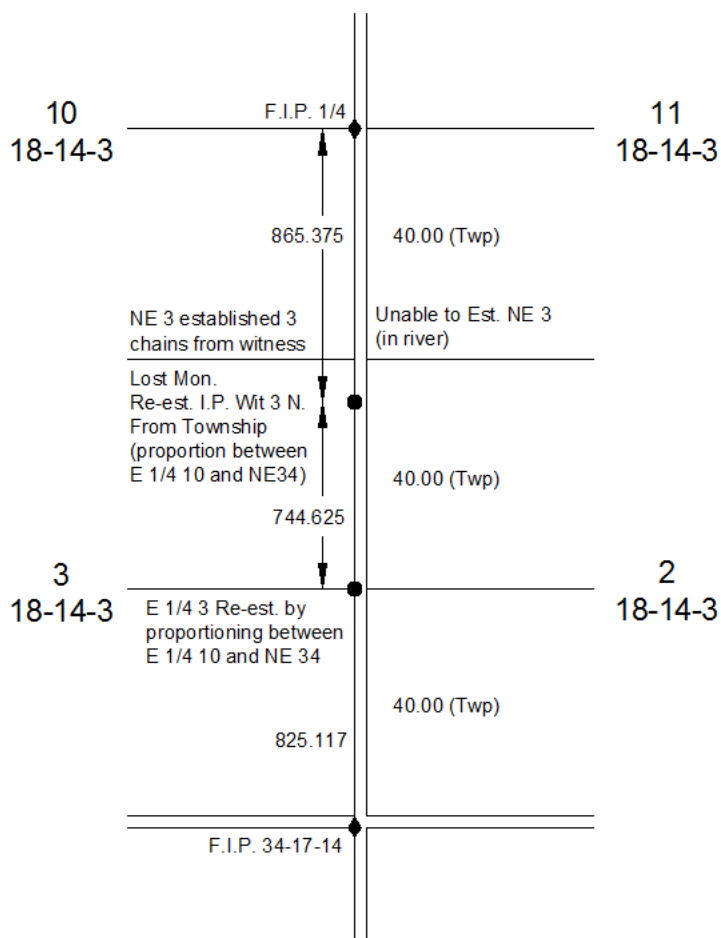
The total distance used in the calculation will be $42 + 39.5 = 81.5$ (twp).

The total measured distance between the two witness monuments = 1636.322.

The resulting proportionate distances are 793.064 and 843.258.

Scenario #5**Witness Monument is lost**

If a witness monument is lost, it must be re-established using the same procedures as for other primary monuments described in *The Land Surveys Regulations, 2000*. In many cases, this will involve re-establishment by proportioning according to the township plan. The witness distance is then used from the re-established witness monument to establish the witnessed corner monument. It is not acceptable to ignore the position of the lost witness monument and simply establish the witnessed corner monument using proportionate distances from the township plan.

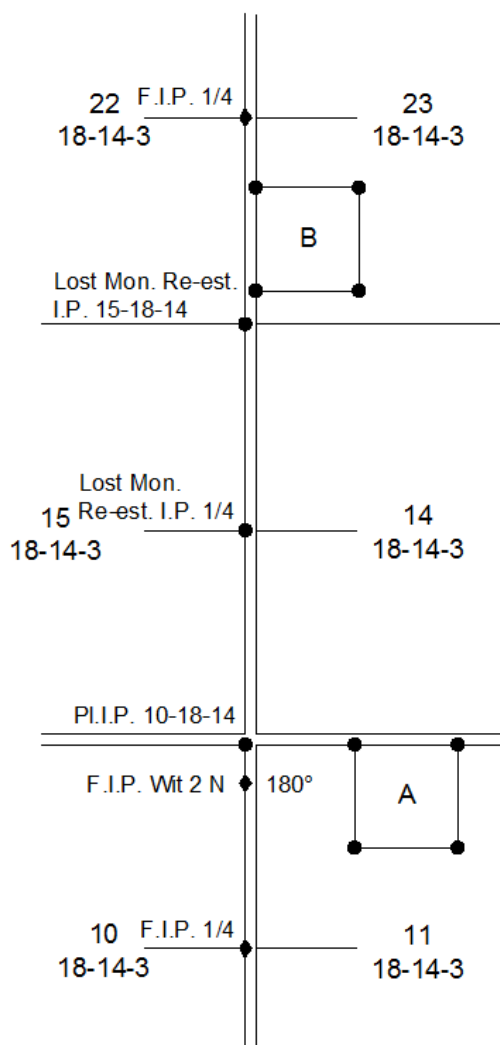


The lost witness monument is to be re-established by proportioning between the two found monuments according to the township plan. The witness distance of 3 chains must be added to the ESE10 and subtracted from the ENE3 in the proportioning calculation. The total township distance used in the calculation will be $43 + 37 + 40 = 120$ (twp). The total measured distance between NE34 and the E $\frac{1}{4}$ 10 = $2435.117 - 20.117 = 2415.000$. The resulting proportionate distances are 865.375, 744.625 and $805.000 + 20.117 = 825.117$. The NE3 is established on the witness distance of 3 chains from the re-established witness monument.

Scenario #6

Witness monument is used in the order of, first for all re-establishments and second to establish the witnessed corner monument.

The found or re-established witness monument or position and not the established witnessed corner monument or position is required to be used for all subsequent re-establishments. This would also apply when the witness monument was established on the other side of the road allowance – for example, in the below diagram at the SE corner of 15 – i.e. Wit 1 S.



For example - Parcel A being surveyed first, the surveyor decides that the witnessed corner monument is to be established on production through the found witness monument and did not survey to the north.

Parcel B being surveyed second on the same plan, or on a separate plan, the re-establishments are required to be completed between the found witness monument and the E $\frac{1}{4}$ 22 and not between the established witnessed corner monument and the E $\frac{1}{4}$ 22.

Approved By: Controller of Surveys

Date: Nov. 24, 2020