
Targa Resources

New Town to Stanley Pipeline: Tree and Shrub Replacement Plan 2015

July 2015

Prepared for:
Targa Resources



1000 Louisiana Street
Suite 4300
Houston, TX 77002

Prepared by:



107 West Main Avenue, Suite 325
Bismarck, ND 58501

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1.0 Introduction and Regulatory Background

The New Town to Stanley Pipeline Project was completed in 2014 in Mountrail County, North Dakota, within portions of Township 152N, Range 92W, Township 153N, Range 91W, Township 154N, Range 91W, Township 155N, Range 91W, and Township 156N, Range 91W (Figure 1). The Project is operated by Targa Badlands LLC, and is comprised of two terminals with storage tanks and an underground pipeline for the transport and storage of crude petroleum. The length of the pipeline is 167,371 feet (31.70 miles). At the origin of the pipeline, near New Town, the facility has a 30,000-barrel-capacity tank. At the terminus, near Stanley, the facility has a 25,000-barrel-capacity tank. The Project is under the jurisdiction of the North Dakota Public Service Commission (PSC). Its construction required the removal of trees and shrubs within Project rights-of-way.

Projects under the jurisdiction of the PSC that require the removal of trees or shrubs in the course of Project construction must replace them, following PSC replacement requirements (**Appendix B, Findings of Fact, Conclusions of Law and Order** and attached *Tree and Shrub Mitigation Specifications*, Case No. PU-14-625). The PSC requires approval of a Tree and Shrub Mitigation Plan/Replacement Plan before trees or shrubs are planted. Paragraphs 10-15 of the Tree and Shrub Mitigation Specifications outline the specific requirements for replacement, as follows:

10. Prior to tree and shrub replacement, documentation identifying the number and variety of trees and shrubs removed, as well as the mitigation plan for the proposed number, variety, type, location and date of replacement plantings, must be filed with the Commission for approval.
11. Two 2-year-old saplings must be planted for every one tree removed. Two shrubs (stem cuttings) must be planted for every one shrub removed.
12. Except in the case of invasive or noxious species, trees and shrubs must be replaced by the same species or similar species, suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service. Invasive or noxious species must be replaced by similar non-invasive or non-noxious species suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service.
13. Tree and shrub replacement must not be conducted within a 20 to 30 foot wide path over the pipeline to facilitate visual inspections of the right-of-way in accordance with U.S. Department of Transportation safety regulations.
14. Landowners must be given the option of having replacement trees and shrubs

- planted on the landowner's property, either on or off the right-of-way. The landowner must also be given the opportunity to waive those options in writing in order to have replacement trees and shrubs planted off the landowner's property.
15. At the conclusion of the project, documentation identifying the actual number, variety, type, location and date of the replacement plantings must be filed with the Commission.
 16. Tree and shrub replacements must be inspected annually, in September, for three years. The first annual inspection must be at least one year from the anniversary date of the original plantings. A report of each annual inspection must be submitted to the Commission by October 1 of each year, documenting the condition of plantings and any woodlands work completed as of September of each year. If after the third annual report the survival rate is less than 75%, the Commission may order additional planting(s).

Targa Badlands LLC retained Lowham Walsh, LLC to assist in the preparation of a tree and shrub replacement plan for the New Town to Stanley Pipeline Project.

2.0 Inventory of Trees and Shrubs in Project Area

Lowham Walsh, LLC used geospatial analysis to approximate the number and location of trees and shrubs removed during construction of the Project (Table 1). Trees were removed from properties owned by eleven landowners (Figure 2). A total of 75 trees and shrubs were removed from within Project rights-of-way (Table 1). The required total number of trees/shrubs to be replaced based on this inventory is 150, assuming a 2:1 replacement ratio. Targa Resources LLC will replace trees at a ratio of 2.2:1 in anticipation of potential tree or shrub mortality during the 3 year monitoring period.

Table 1: Location and Number of Trees/Shrubs Removed

LOCATION	PROPERTY OWNER	NUMBER OF TREES/SHRUBS REMOVED
T152N R92W sec. 21	Targa Badlands	16
T152N R92W sec. 21	Ardell & Mavis Moe	17
T152N R92W sec. 21	Sherri Reynolds & Tara Salute	6
T152N R92W sec. 22	Gary & Sylvia Lahtinen	2
T152N R92W sec. 22	Gary & Sylvia Lahtinen	1
T152N R92W sec. 10	Jack & Karen Pennington	3
T153N R91W sec. 29	Michael & Steven Littlefield	4
T153N R91W sec. 16	State of North Dakota	2
T153N R91W sec. 10	Darryl & Pam Locken	12
T154N R91W sec. 21	Paul Ness	7
T154N R91W sec. 22	Mike & Julene Lahti	2
T154N R91W sec. 11	Douglas Kinnoin	3

3.0 Landowner Consultation

Each of the eleven affected landowners was contacted by a Targa representative. Landowners were asked whether they preferred trees to be replaced on their property off the Project right-of-way, or whether they preferred not to have trees replaced on their property and instead have them planted at an alternative location.

One of the eleven landowners, Kinnoin, preferred to waive tree replacement on their property (Table 2). Trees declined by Kinnoin will be donated to the Stanley City Cemetery as indicated in the Tree Donation letter present in Appendix C. A second landowner opted to have trees delivered, and perform the planting himself (Littlefield). Signed waivers are attached to this report (Appendix C).

The remaining landowners requested replacement on their property. Tree and shrub choices and planting locations were coordinated with TC Nursery in Burlington, North Dakota (Table 2).

The locations and types of trees or shrubs to be planted are listed in Table 2. The appropriateness of these requests was reviewed by Lowham Walsh and TC Nursery. Requested species were suitable to North Dakota growing conditions and are commonly recommended for tree plantings by the North Dakota Forest Service (<http://www.ndsu.edu/ndfs/>). Though the type of replacement trees were not a direct replacement of the type of tree removed, the replacement choices were considered appropriate because the purpose of the replacement plantings differed from the purpose of the original plantings where trees were removed.

Table 2: Number and Type of Tree/Shrub to be Replanted

LOCATION	LANDOWNER	# OF TREES/SHRUBS REMOVED	# OF TREES/SHRUBS ALLOTTED (2.2:1)	TYPE OF TREE/SHRUB
T152N R92W sec. 21	Targa Badlands	16	35	Hawthorn
T152N R92W sec. 21	Ardell & Mavis Moe	17	37	Hawthorn
T152N R92W sec. 21	Sherri Reynolds & Tara Salute	6	13	Hardwood
T152N R92W sec. 22	Gary & Sylvia Lahtinen	2	4	Hardwood
T152N R92W sec. 22	Gary & Sylvia Lahtinen	1	2	Schubert Chokecherry
T152N R92W sec. 10	Jack & Karen Pennington	3	7	Buffalo Berry
T153N R91W sec. 29	Michael & Steven Littlefield	4	9	Buffalo Berry
T153N R91W sec. 16	State of North Dakota	2	4	Buffalo Berry
T153N R91W sec. 10	Darryl & Pam Locken	12	26	Hardwood
T154N R91W sec. 21	Paul Ness	7	15	Buffalo Berry
T154N R91W sec. 22	Mike & Julene Lahti	2	4	Buffalo Berry
T154N R91W sec. 11	Douglas Kinnoin	3	7	Hawthorn
	TOTAL	75	165	

4.0 Planting Schedules

Summer 2015

The plantings for all landowners that requested tree replacement will be installed in July of 2015. These plantings will be in Sections 10, 21, and 22, Township 152N, Range 92W, Sections 10, 16, and 29, Township 153N, Range 91W and Sections 11, 21, and 22 Township 154N Range 91W. TC Nursery will prepare the soil for planting prior to planting the trees and shrubs. Landowners will be responsible watering the trees and shrubs after the initial planting.

TC Nursery will plant the replacement trees and shrubs. Trees will consist of 2-3 feet tall Downy Hawthorn and 3 to 4 feet tall Green Ash and shrubs will be consist of 3 foot tall Schubert Chokecherry and 18 to 24 inch tall Buffalo Berry, unless special arrangements were made with the landowner.

5.0 Follow-up Documentation and Monitoring

After tree plantings are installed, the number, species, location, and date of planting will be documented and filed with the PSC.

Replacement plantings will be inspected each year for three years (2016, 2017, and 2018) in September. The number and type of each surviving tree or shrub will be recorded. For those landowners that will receive additional trees and shrubs beyond the number required for Targa to replace, survival rates will be based only on the required number of trees, not the number of trees that were planted. A representative subset of the planted trees will be inspected annually for survival. Notes on the condition of the trees and shrubs will be recorded. Survival rates will be calculated and a report will be submitted to the PSC before October 1 of each year documenting this information. If the survival rate after three years is less than 75 percent, additional plantings may be ordered based on consideration by the PSC.

Appendix A: Maps of Project Area

Figure 1: Project Location Map

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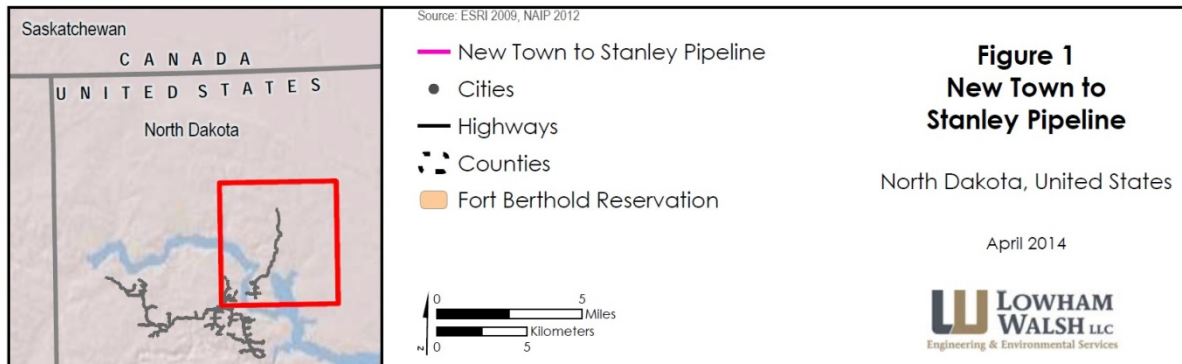
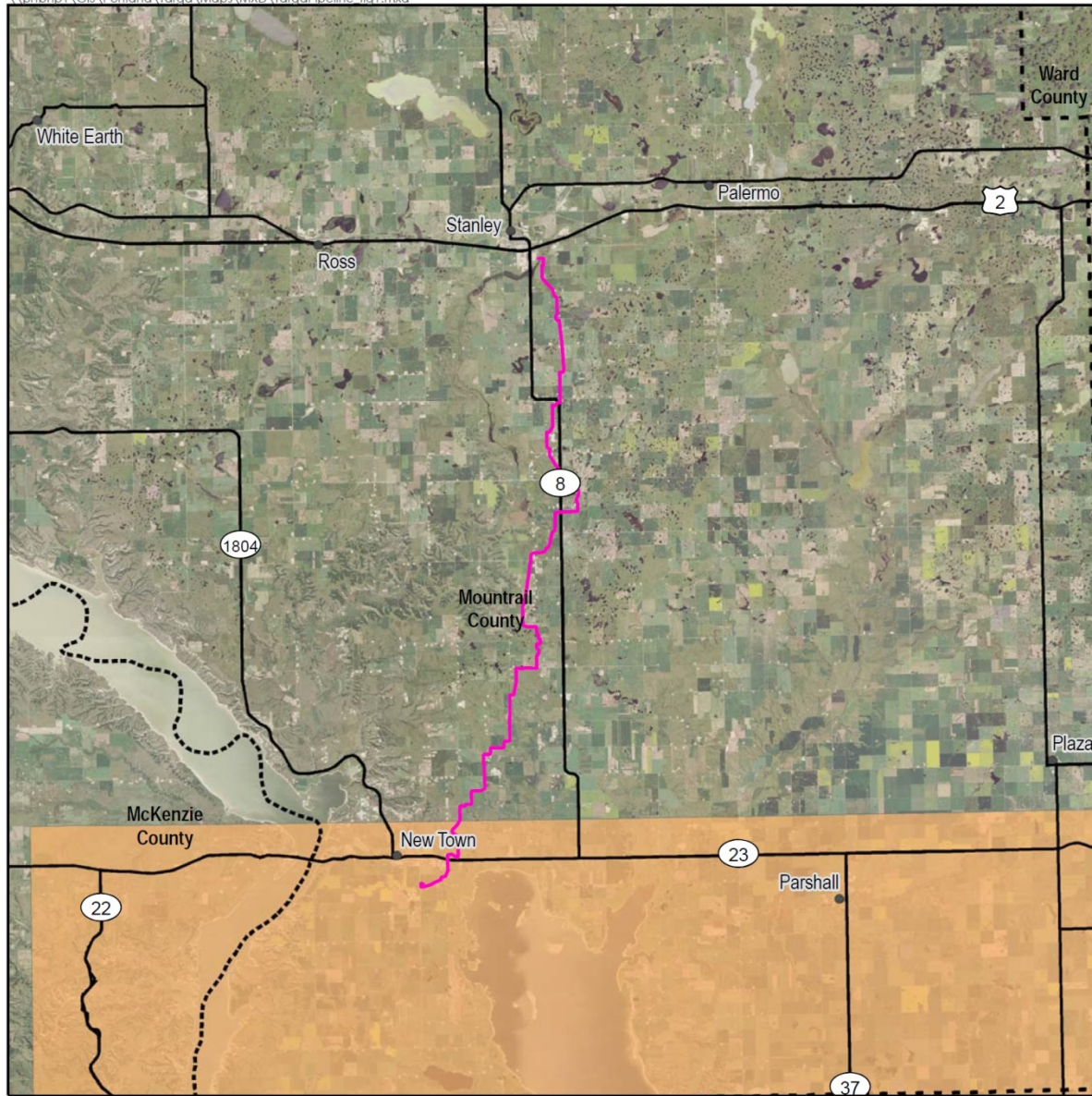
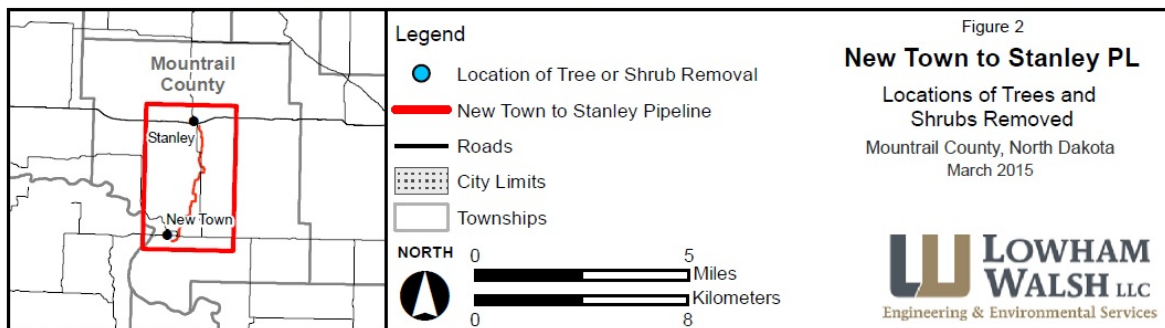
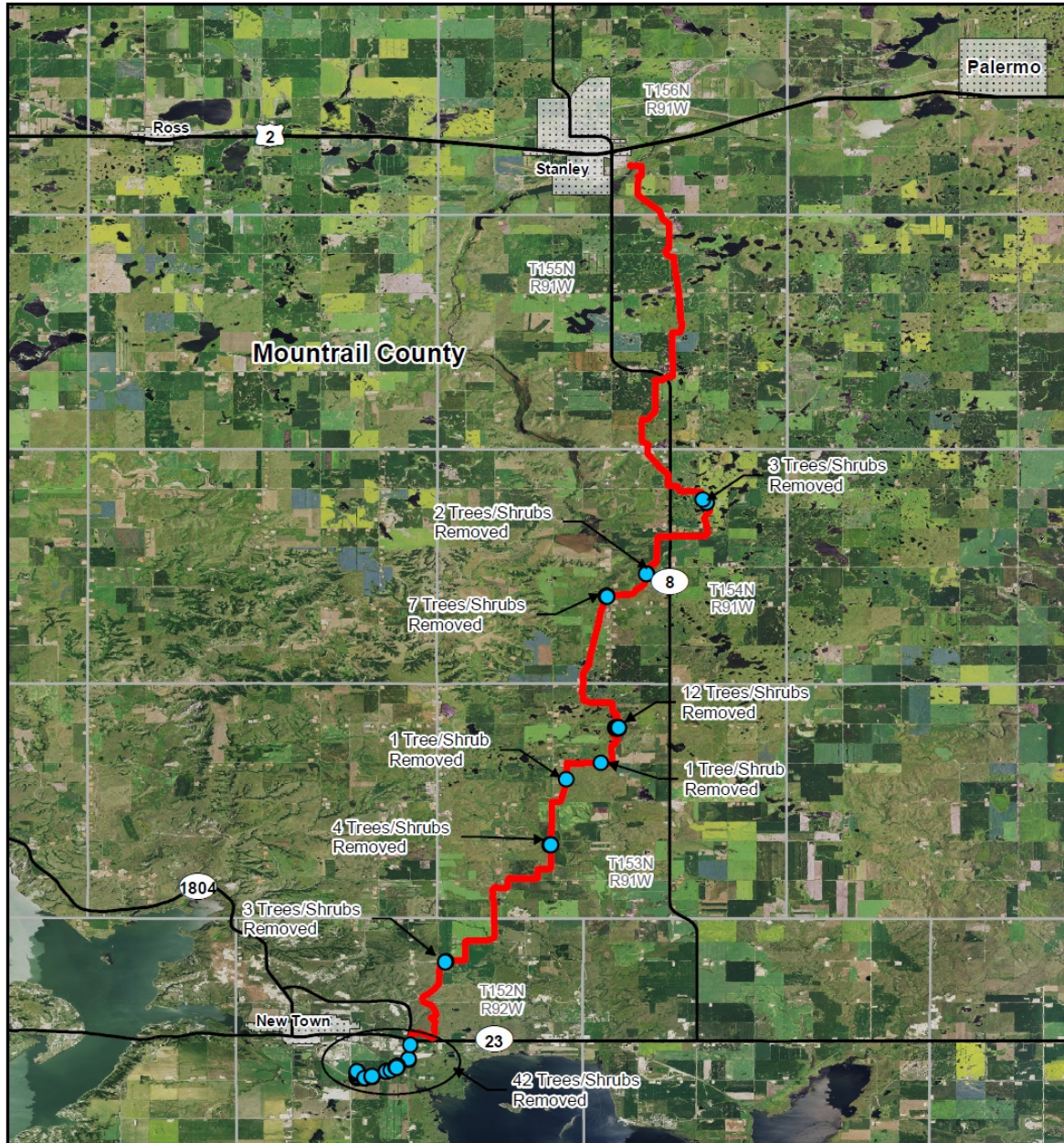


Figure 2: Locations of Tree and Shrub Removal



Source: USDA NAIP 2014

Appendix B: Tree & Shrub Mitigation Specifications (Case No. PU-14-625)

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Targa Badlands LLC
8-Inch Crude Pipeline Project – Mountrail County
Siting Application

Case No. PU-14-625

Tree and Shrub Mitigation Specifications

Inventory

1. Trees and shrubs anticipated to be cleared, including those that are considered invasive species or noxious weeds (*e.g.*, *Caragana arborescens*, *Elaeagnus angustifolia*, *Rhamnus cathartica*, *Tamarix chinensis*, *T. parviflora*, *T. ramosissima*, *Ulmus pumila*), must be inventoried before cutting. The inventory must record the location, number, and species of trees and shrubs.
2. In windbreaks, shelterbelts and other planted areas, trees or shrubs anticipated to be cleared, regardless of size, must be inventoried for replacement.
3. In native growth areas, trees anticipated to be cleared that are 1 inch diameter at breast height (dbh) or greater must be inventoried for replacement.
4. In native growth areas, shrubs anticipated to be cleared in the permanent right-of-way must be inventoried for replacement.
5. In native growth areas outside the permanent right-of-way, shrubs must be cut flush with the surface of the ground, taking care to leave the naturally occurring seed bank and root stock intact. If soil disturbance is necessary, the native topsoil must be preserved and replaced after construction. Shrubs must be allowed to regenerate naturally where native topsoil is preserved and replaced. Where native topsoil is not preserved and replaced, shrubs anticipated to be cleared must be inventoried for replacement.
6. In native growth areas, trees and shrubs may be inventoried by actual count or by a sampling method that will properly represent the woody vegetation

population. A sampling plan developed by the company, filed with the North Dakota Public Service Commission (Commission) and approved prior to the start of construction must define the sampling method to be used for trees, for tall shrubs and for low shrubs. The data from the sample plots must be extrapolated to the total acreage of the wooded area to be cleared to determine the species and quantity of trees and shrubs to be replaced.

Clearing for Construction

7. Trees and shrubs must be selectively cleared, leaving mature trees and shrubs intact where practical.
8. The maximum width of clear cuts through windbreaks, shelterbelts and all other wooded areas is 50 feet, unless otherwise approved by the Commission.
9. If the area of trees or shrubs actually cleared differs from the area inventoried, the difference in number of trees and shrubs to be replaced must be noted on the inventory.

Replacement

10. Prior to tree and shrub replacement, documentation identifying the number and variety of trees and shrubs removed, as well as the mitigation plan for the proposed number, variety, type, location and date of replacement plantings, must be filed with the Commission for approval.
11. Two 2-year-old saplings must be planted for every one tree removed. Two shrubs (stem cuttings) must be planted for every one shrub removed.
12. Except in the case of invasive or noxious species, trees and shrubs must be replaced by the same species or similar species, suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service. Invasive or noxious species must be replaced by similar non-invasive or non-

noxious species suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service.

13. Tree and shrub replacement must not be conducted within a 20 to 30 foot wide path over the pipeline to facilitate visual inspections of the right-of-way in accordance with U.S. Department of Transportation safety regulations.
14. Landowners must be given the option of having replacement trees and shrubs planted on the landowner's property, either on or off the right-of-way. The landowner must also be given the opportunity to waive those options in writing in order to have replacement trees and shrubs planted off the landowner's property.
15. At the conclusion of the project, documentation identifying the actual number, variety, type, location and date of the replacement plantings must be filed with the Commission.
16. Tree and shrub replacements must be inspected annually, in September, for three years. The first annual inspection must be at least one year from the anniversary date of the original plantings. A report of each annual inspection must be submitted to the Commission by October 1 of each year, documenting the condition of plantings and any woodlands work completed as of September of each year. If after the third annual report the survival rate is less than 75%, the Commission may order additional planting(s).

Appendix C: Landowner Tree Replacement Waiver and Donation Forms



Targa Badlands
1000 Louisiana Street
Suite 4300
Houston, TX 77002

May 28, 2015

Douglas Kinnion
5890 51st Street NW
Stanley, ND 58784

Re: New Town to Stanley Pipeline Tree & Shrub Replacement

Dear Mr. Kinnion,

In association with the construction of the New Town to Stanley Crude Oil Pipeline Project owned by Targa Badlands, LLC ("Targa"), trees and/or shrubs required removal from your property. According to the requirements set forth by the North Dakota Public Service Commission, Targa has a responsibility to replace any trees or shrubs removed for pipeline construction at a ratio of two for every one tree or shrub removed that meets the necessary criteria. Location of the replacement trees and shrubs on the landowner's property must be chosen in consultation with landowner preference.

According to the inventory prepared following removal of trees and shrubs for the New Town to Stanley Crude Oil Pipeline, Targa recorded that three (3) trees were removed from your land in Section 11 of Township 154 North, Range 91 West. In May of 2015, I contacted you on behalf of Targa regarding the replacement of the trees and shrubs on your property. You were notified that Targa intends to replace the three (3) previously removed trees with six (6) Hawthorn trees. However, you stated you would prefer not to replace the trees/shrubs that were removed during construction.

Waiver of the option to have Targa plant the replacement trees or shrubs on your property is required to be in writing by the Public Service Commission. If it continues to be your desire not to replace the trees on your property, please sign below to acknowledge this fact and return this form in the self-addressed, stamped envelope at your earliest convenience. A second copy of this letter is included for you to sign and retain for your records. The number of trees/shrubs you were allotted will be replaced elsewhere or put into a state tree planting program as approved by the Public Service Commission.

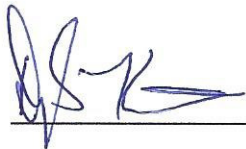
If you should have any further questions, please contact me at 903-343-3233 or by email at jcollier@targaresources.com.

Sincerely,

A handwritten signature in blue ink that reads "Jodi Collier".

Jodi Collier
Senior Right of Way Agent

I acknowledge that I am declining the option of having replacement trees or shrubs planted on my property following removal for construction of the New Town to Stanley Crude Oil Pipeline.

A handwritten signature in blue ink, appearing to be 'J.S.K.', written over a horizontal line.

Landowner

6-1-15

Date

55971585_1.docx



Targa Badlands
1000 Louisiana Street
Suite 4300
Houston, TX 77002

May 28, 2015

Michael Littlefield
4011 Highway 8
New Town, ND 58763

Re: New Town to Stanley Pipeline Tree & Shrub Replacement

Dear Mr. Littlefield,

In association with the construction of the New Town to Stanley Crude Oil Pipeline Project owned by Targa Badlands, LLC ("Targa"), trees and/or shrubs required removal from your property. According to the requirements set forth by the North Dakota Public Service Commission, Targa has a responsibility to replace any trees or shrubs removed for pipeline construction at a ratio of two for every one tree or shrub removed that meets the necessary criteria. Location of the replacement trees and shrubs on the landowner's property must be chosen in consultation with landowner preference.

According to the inventory prepared following removal of trees and shrubs for the New Town to Stanley Crude Oil Pipeline, Targa recorded that 4 trees were removed from your land in Section 29 of Township 153 North, Range 91 West. In May of 2015, I contacted you on behalf of Targa regarding the replacement of the trees and shrubs on your property. You were notified that Targa intends to replace the previously removed trees with 9 Buffalo Berry bushes. You stated you would prefer to plant the trees/shrubs yourself, and asked if we could merely deliver the trees/shrubs to your property. Targa is willing to allow you to plant your own replacement bushes if you so desire and if such preference is approved by the Public Service Commission.

Waiver of the option to have Targa plant the replacement trees or shrubs on your property is required to be in writing by the Public Service Commission. If it continues to be your desire to personally plant the replacement trees/shrubs on your property, please sign below to acknowledge this fact and return this form in the self-addressed, stamped envelope at your earliest convenience. The number of trees/shrubs you were allotted will be delivered to you as requested.

If you should have any further questions, please contact me at 903-343-3233 or by email at jcollier@targaresources.com.

Sincerely,

Jodi Collier
Senior Right of Way Agent

I acknowledge that I am electing to personally plant the trees or shrubs delivered to my property for replacement after construction of the New Town to Stanley Crude Oil Pipeline.



Landowner



Date

55974700_1.docx



Engineering & Environmental Services

107 West Main Avenue

Suite 325

Bismarck, ND 58501

July 10, 2015

Cassie Fjeldahl

Parks and Recreation Director

P.O. Box 901

Stanley, ND 58784

Re: New Town to Stanley Pipeline Tree & Shrub Replacement

Dear Ms. Fjeldahl,

During our recent conversation concerning donation of seven (7) Downy Hawthorn trees to the City of Stanley, you indicated that the City would be willing to accept such a donation and that your preferred location for planting of the trees would be the Stanley City Cemetery. Our client, Targa Badlands LLC, will provide the trees and also pay for planting of the trees at locations to be indicated by yourself, or a suitable agent representing the City of Stanley.

If you would be kind enough to indicate acceptance of this donation and simultaneously provide permission to plant the trees, please sign this document at the bottom of the page. The exact location of planting can be determined at a later date, but is dependent upon accessibility of the location by equipment and work crews.

Please contact me at any time with further questions at 701-258-5166 or by email at ppansegrau@lowhamwalsh.com.

Sincerely,

A handwritten signature in blue ink that reads 'Paul D. Pansegrau'. The signature is written in a cursive style with a large, sweeping 'P' and 'D'.

Paul D. Pansegrau

North Dakota Operations Manager

I acknowledge that accepting donation of seven (7) Downy Hawthorn trees, to be planted at the Stanley City Cemetery at locations to be determined.

A handwritten signature in black ink that reads 'Cassie Fjeldahl'. The signature is written in a cursive style with a large, sweeping 'C' and 'F'.

Cassie Fjeldahl

Director, Parks and Recreation

City of Stanley, North Dakota

A handwritten date in black ink that reads 'July 13, 15'. The date is written in a cursive style with a large, sweeping 'J' and '13'.

Date