

April 5, 2017

Darrell Nitschke
Executive Director
North Dakota Public Service Commission
600 East Boulevard; Dept. 408
Bismarck, ND 58505-0480

Re: Case No. PU-11-696
Basin Electric Power Cooperative - AVS-Neset 345-kV Transmission Project
Partial Tree/Shrub Mitigation Plan

Dear Mr. Nitschke:

As per conditions of the Tree and Shrub Mitigation Specifications in the North Dakota Public Service Commission (ND PSC) Findings of Fact, Conclusions of Law and Order for the AVS to Neset 345-kV Transmission Project (Project) in Case No. PU-11-696, you will find Basin Electric Power Cooperative's (Basin Electric) initial Tree/Shrub Mitigation Plan (Plan). Because the Project is ongoing, this submittal represents the initial portion of the Project's overall tree/shrub. This Partial Tree/Shrub Mitigation Plan has been filed electronically to the PU-11-696 Docket.

The Project is being constructed in two segments. The first segment was approximately 133 miles in length and is located between the Antelope Valley Station near Beulah to the Judson Substation located immediately west of the City of Williston. This segment was placed into service in December 2015. The majority of the reclamation activity has been completed with a few pockets of re-vegetation efforts remaining in 2017. The vast majority of the tree and shrubs removed for the Project came from this project segment.

The second segment is approximately 62 miles in length and lies between the Judson Substation near Williston and terminates at the Neset Substation east of the City of Tioga. This segment is under construction with an anticipated in-service date of fall of 2017.

Due to ongoing construction activity on the second segment of the Project, the complete tree/shrub replacement requirements will not be fully defined until late 2017.

The following describes our partial Tree/Shrub Mitigation Plan for the AVS to Neset 345-kV Transmission Project in specific terms when known and in general planning terms:

Tree/Shrub Replacement Plan

- **Pre-Planting Efforts**
 - Perform pre-project and post-project tree/shrub surveys that identifying species present and the quantification of tree/shrubs.
 - Continue to identify landowners who request replacement tree/shrubs on their property on a 2:1 replacement basis.

- **Landowner Tree/Shrub Planting Effort**
 - Communicated the landowner listings and the number of tree/shrub replacements required to the local County Soil Conservation Service (SCS) staff.
 - Basin Electric committed to be the funding source to the County SCS to support the planting.
 - SCS staff coordinates with landowner to identify suitable lands for tree/shrub plantings and make recommendations for the specific tree/shrub varieties to enhance survivability.
 - Basin Electric has committed to the additional cost of incorporating ground fabric in all tree/shrub planting projects. The placement of ground fabric is a strongly recommended by the SCS as it increases the survivability of the trees/shrubs.
 - A portion of the landowner tree/shrub planting efforts will occur in the spring of 2017 as coordinated thru the various County SCS Agencies. The remainder of the landowner plantings will be completed in the spring of 2018.

- **Non-Landowner Tree/Shrub Planting Efforts -(Est. > 19,000 Tree/shrubs Required)**
 - Basin Electric will continue to identify tree/shrub replacement opportunities that create a public benefit by formal and informal communication with local, county and state agencies.
 - Preference given for planting projects in the affected five counties: (Mercer, Dunn, McKenzie, Williams and Mountrail)
 - Formal communication to City, County and State Agencies informing them of potential tree/shrub planting opportunities sent out March 2, 2017.
 - Two Tree/shrub planting opportunities identified to date include:
 - NDGF Hoffland Bay Project
 - City of Stanley Park District

The Hoffland Bay Project is being coordinated with the Williams County SCS on the North Dakota Game and Fish Department's (NDGF) Hoffland Bay Wildlife Management Area. The project's 3,570 trees/shrubs were selected by NDGF and SCS staff for survivability and beneficial needs of the area. The planting details and accompanying maps are attached.

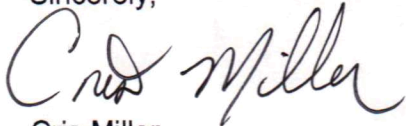
The Stanley Park Board Project is being coordinated by the Mountrail County SCS. The Project is estimated to plant 622 tree/shrub at a new baseball sport complex as selected by the Mountrail County SCS. The planting details and accompanying maps are attached.

Upon approval from ND PSC, Basin Electric will move forward with the Williams County and Mountrail County SCS offices to make final arrangements for the two planting projects. Both Projects planting efforts will be scheduled for the spring of 2017.

With the recent outreach effort to the various state, county and city agencies, numerous tree/shrub planting opportunities continue to be identified. When specific tree/shrub planting opportunities are identified and detailed planting plans developed, they will be submitted to the ND PSC for approval.

For inquiries regarding this initial Tree/Shrub Mitigation Plan, please contact me directly at (701) 557-5635 or cmiller@bepc.com.

Sincerely,



Cris Miller
Senior Environmental Project Specialist

/ser
Enclosures

cc: Casey Jacobson
Amanda Wangler
Mike Murray

E3001F

E3001F

E3203B

S 13
T 154
R 96

S 18
T 154
R 95

Site 2 all rows 3100'
R 1 R Juniper
R 2 B Juniper
R 3 P Pine
R 4 Sea-Buckthorn
R 5 Seaberry

Site 2B rows 800'
R 1-3 R Juniper
R 4 & 5 P Pine

2C all rows 800'
R 1 & 2 Sea-Buckthorn
R 3-5 Seaberry

E4039A

EW

S 24
T 154
R 96

S 19
T 154
R 95

WEST - TREE AND SHRUB PLANTING WORKSHEET

Name Game & Fish Site 2 Address _____ Phone # 701 774 4320 Date: 11 1 2016

Plan Sketch Map



Quarter SW 1/4 Section 13 Twshp 154 Range 96

Planned by: nt Plan approved by _____

Planned Soil Mapunit / name component(s): _____ Cherry

Conservation Tree & Shrub Group 8K Select MLRA 53A

Type of Planting New

Landuse Other Cost share Program None

Site Preparation Fallow Site protected from livestock? Yes

Condition of site at planting time: _____

Spacing between rows: 12 feet

Distance from Windward row to roads or bldgs: _____ feet

(Minimum 200' on N & W, and 100' on S & E) Planted by: _____

Remarks / Management (Weed Control) Date: _____

Bill to Basin Electric Mitigation FABRIC ON ALL ROWS

This practice installation MEETS / DOES NOT MEET the ND FOTG standards and specificatio

Certified By: _____

Date: _____

Field No.	Planned Length	Planted Length	Planted Width	Acres	Row #	Primary Species of Tree or Shrub	Type or Variety	Alternating Specie	Average Spacing in row	Number Planted (est)	Number Planted (actual)	Primary Specie Suitability	Alternating Specie Suitability
	3100		16	1.14	1	Juniper, Rocky Mtn.			10	310	0	suitable	0
	3100		12	0.85	2	Juniper, Rocky Mtn.			10	310	0	suitable	0
	3100		12	0.85	3	Pine, Ponderosa			10	310	0	suitable	0
	3100		12	0.85	4	Sea-buckthorn			4	775	0	suitable	0
	3100		16	1.14	5	Silverberry			4	775	0	suitable	0
			0	0.00	6					0	0	0	0
			0	0.00	7					0	0	0	0
			0	0.00	8					0	0	0	0
			0	0.00	9					0	0	0	0
			0	0.00	10					0	0	0	0
			0	0.00	11					0	0	0	0
			0	0.00	12					0	0	0	0
			0	0.00	13					0	0	0	0
			0	0.00	14					0	0	0	0
			0	0.00	15					0	0	0	0
			0	0.00	16					0	0	0	0

15500 0 68 4.84

Totals

2480 0

WEST - TREEPLAN

WEST - TREE AND SHRUB PLANTING WORKSHEET

Name Game & Fish site2B Address _____ Phone # 701 774 4320 Date: 11 1 2016

Plan Sketch Map



Quarter SW 1/4 Section 13 Twshp 154 Range 96

Planned by: nt Plan approved by _____

Planned Soil Mapunit / name component(s): Cherry

Conservation Tree & Shrub Group 8K Select MLRA 53A

Type of Planting New

Landuse Other Cost share Program None

Site Preparation Fallow Site protected from livestock? Yes

Condition of site at planting time: _____

Spacing between rows: 12 feet

Distance from Windward row to roads or bldgs: _____ feet

(Minimum 200' on N & W, and 100' on S & E)

Planted by: _____

Remarks / Management (Weed Control) _____ Date: _____

Basin Electric Mitigation FABRIC ON ALL ROWS

This practice installation **MEETS / DOES NOT MEET** the ND FOTG standards and specificatio

Certified By: _____

Date: _____

Field No.	Planned Length	Planted Length	Planted Width	Acres	Row #	Primary Species of Tree or Shrub	Type or Variety	Alternating Specie	Average Spacing in row	Number Planted (est)	Number Planted (actual)	Primary Specie Suitability	Alternating Specie Suitability
	800		16	0.29	1	Juniper, Rocky Mtn.			10	80	0	suitable	0
	800		12	0.22	2	Juniper, Rocky Mtn.			10	80	0	suitable	0
	800		12	0.22	3	Juniper, Rocky Mtn.			10	80	0	suitable	0
	800		12	0.22	4	Pine, Ponderosa			10	80	0	suitable	0
	800		16	0.29	5	Pine, Ponderosa			10	80	0	suitable	0
			0	0.00	6					0	0	0	0
			0	0.00	7					0	0	0	0
			0	0.00	8					0	0	0	0
			0	0.00	9					0	0	0	0
			0	0.00	10					0	0	0	0
			0	0.00	11					0	0	0	0
			0	0.00	12					0	0	0	0
			0	0.00	13					0	0	0	0
			0	0.00	14					0	0	0	0
			0	0.00	15					0	0	0	0
			0	0.00	16					0	0	0	0

4000	0	68	1.25	Totals									
										400	0		

WEST - TREE AND SHRUB PLANTING WORKSHEET

Name Game & Fish Site 2C Address _____ Phone # 701 774 4320 Date: 11 1 2016

Plan Sketch Map



Quarter SW 1/4 Section 13 Twshp 154 Range 96

Planned by: nt Plan approved by _____

Planned Soil Mapunit / name component(s): Cherry

Conservation Tree & Shrub Group 8k Select MLRA 53A

Type of Planting New

Landuse Other Cost share Program None

Site Preparation Fallow Site protected from livestock? Yes

Condition of site at planting time: _____

Spacing between rows: 12 feet

Distance from Windward row to roads or bldgs: _____ feet

(Minimum 200' on N & W, and 100' on S & E) Planted by: _____

Remarks / Management (Weed Control) _____ Date: _____

Basin Electric Mitigation FABRIC ON ALL ROWS

This practice installation MEETS / DOES NOT MEET the ND FOTG standards and specificatio

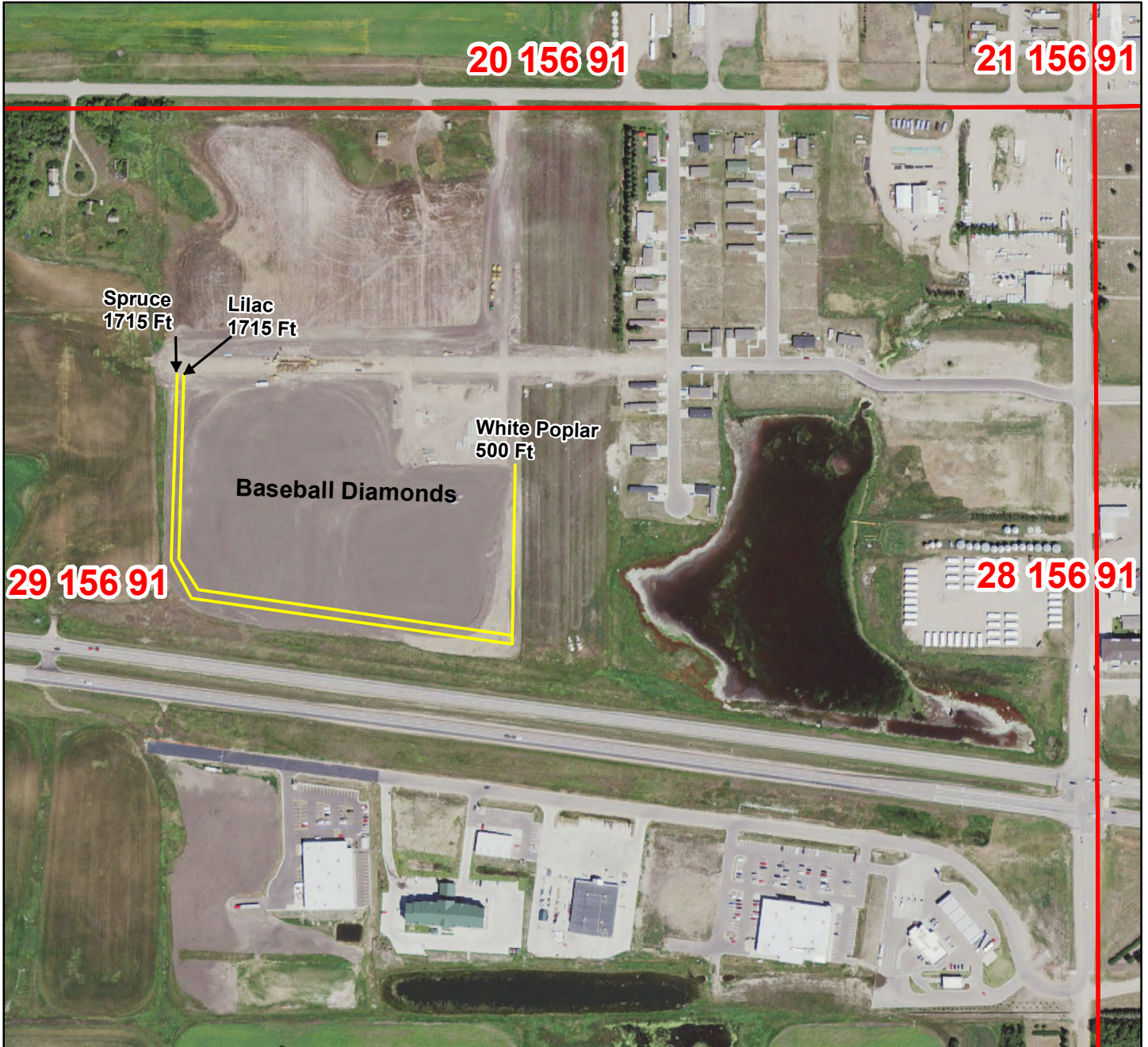
Certified By: _____

Date: _____

Field No.	Planned Length	Planted Length	Planted Width	Acres	Row #	Primary Species of Tree or Shrub	Type or Variety	Alternating Specie	Average Spacing in row	Number Planted (est)	Number Planted (actual)	Primary Specie Suitability	Alternating Specie Suitability				
	800		16	0.29	1	Sea-buckthorn			4	200	0	suitable	0				
	800		12	0.22	2	Sea-buckthorn			4	200	0	suitable	0				
	800		12	0.22	3	Silverberry			4	200	0	suitable	0				
	800		12	0.22	4	Silverberry			4	200	0	suitable	0				
	800		16	0.29	5	Silverberry			4	200	0	suitable	0				
			0	0.00	6					0	0	0	0				
			0	0.00	7					0	0	0	0				
			0	0.00	8					0	0	0	0				
			0	0.00	9					0	0	0	0				
			0	0.00	10					0	0	0	0				
			0	0.00	11					0	0	0	0				
			0	0.00	12					0	0	0	0				
			0	0.00	13					0	0	0	0				
			0	0.00	14					0	0	0	0				
			0	0.00	15					0	0	0	0				
			0	0.00	16					0	0	0	0				
Totals										4000	0	68	1.25	1000	0		

Plan Map


Field Office: STANLEY SERVICE CENTER
NE 1/4 29-156-91
Park Board



Prepared with assistance from USDA-Natural Resources Conservation Service



Legend

 plss_a_nd061



TREE AND SHRUB PLANTING WORKSHEET

MLRA 53A, 53B, 54, 58C, 58D, 60B, 63A

Name **Park Board** Address **Stanley Park District PO Box 901 Stanley ND 58784** Phone # **629-8990** Plan by **TU** 05-Apr-17

Plan Sketch Map

Quarter **NW 1/4**
 Twntp. **156**

Section **29** Plan approved by:
 Range **91** Date:



Farmstead **▼** <--Type of Planting--> **New** **▼** **NA**
 Fallow **▼** <--Site Preparation > **None** **▼** <--Cost share Program >
 Yes **▼** <--Site protected from livestock? >
 Good **▼** <--Condition of site at planting time >

Windward row to roads or bldgs.-> **200** feet (200'on N & W, and 100' on S & E)

Spacing between rows **15** feet

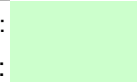
Soil Component

Williams **▼**

Conservation Tree & Shrub Group

3

Planted by:



Remarks / Management (Weed Control)

Date:

Fabric will be installed.

Field No.	Planned Length	Planted Length	Planted Width	Acres	Row #	Primary Species of Tree or Shrub	Type or Variety	Alternating Specie	Average Spacing in row	Number Planted (est)	Number Planted (actual)	Primary Specie Suitability	Alternating Specie Suitability	Compatability
	1715		17.5	0.69	1	Spruce, Blue	▼	▼	12	143	0	suitable	0	compatible
	1715		15	0.59	2	Lilac, Common	▼	▼	4	429	0	suitable	0	compatible
	500		17.5	0.20	3	Poplar, White	▼	▼	10	50	0	suitable	0	compatible
			0	0.00	4		▼	▼		0	0	0	0	compatible
			0	0.00	5		▼	▼		0	0	0	0	compatible
			0	0.00	6		▼	▼		0	0	0	0	compatible
			0	0.00	7		▼	▼		0	0	0	0	compatible
			0	0.00	8		▼	▼		0	0	0	0	compatible
			0	0.00	9		▼	▼		0	0	0	0	compatible
			0	0.00	10		▼	▼		0	0	0	0	compatible
			0	0.00	11		▼	▼		0	0	0	0	compatible
			0	0.00	12		▼	▼		0	0	0	0	compatible
			0	0.00	13		▼	▼		0	0	0	0	compatible
			0	0.00	14		▼	▼		0	0	0	0	compatible
			0	0.00	15		▼	▼		0	0	0	0	compatible
			0	0.00	16		▼	▼		0	0	0	0	compatible
	3930	0	50	1.48					<Totals>	622	0			