

MONTANA-DAKOTA UTILITIES CO.

Before the North Dakota Public Service Commission

Case No. PU-20-____

Direct Testimony
of
Patrick C. Darras

1 **Q. Please state your name and business address.**

2 A. My name is Patrick C. Darras, and my business address is 400
3 North Fourth Street, Bismarck, North Dakota 58501.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am the Vice President – Engineering & Operations Services for
6 Montana-Dakota Utilities Co. (“Montana-Dakota” or “Company”), Great
7 Plains Natural Gas Co. (“Great Plains”), Cascade Natural Gas Corporation
8 (“Cascade”), and Intermountain Gas Company (“Intermountain”).

9 **Q. Please describe your duties and responsibilities with Montana-**
10 **Dakota.**

11 A. I have executive responsibility for the development, coordination,
12 and implementation of Company strategies and policies relative to all
13 areas of engineering and operations including design, construction,
14 compliance, and pipeline integrity and safety.

15 **Q. Please outline your educational and professional background.**

16 A. I am a graduate of North Dakota State University with a Bachelor of
17 Science Degree in Construction Engineering. I also hold an MBA along

1 with a Master's Degree in Management both from the University of Mary.
2 In June of 2014 I attended the Utility Executive Course at the University of
3 Idaho.

4 I began my career in 2002 as a gas engineer with Montana-Dakota
5 in Bismarck. I held that position for four years primarily working with the
6 construction and service group in day to day operations. In 2006 I was
7 promoted into the role of Region Gas Superintendent where I was
8 responsible for the overall gas engineering, construction, and service of
9 the Dakota Heartland Region of Montana-Dakota. I worked in that
10 capacity for two years and was then promoted to Region Director for
11 Montana-Dakota's Dakota Heartland Region and Great Plains. My
12 responsibility in this role was oversight of all gas and electric operations
13 for the Region. In January 2015, I accepted the promotion to Vice
14 President of Operations for Montana-Dakota and Great Plains. My
15 responsibilities in this role included gas and electric distribution operations
16 and engineering across the five states of Montana, North Dakota, South
17 Dakota, Wyoming, and Minnesota. In June of 2018, I accepted my current
18 role of Vice President – Engineering and Operations Services.

19 Prior to joining Montana-Dakota, I worked for a local industrial
20 contractor specializing in refinery and power plant maintenance along with
21 turn-key construction of industrial facilities such as refineries and food
22 processing plants. I spent seven years with this group in various
23 capacities in engineering, construction, and project management.

1 **Q. What is the purpose of your testimony?**

2 A. The purpose of my testimony is to: (1) provide an overview of the
3 Company's project selection and budgeting process; and (2) provide an
4 overview of the Company's major capital projects that have been
5 completed since the last rate case and those currently in progress.

6 **OVERVIEW OF PROJECT SELECTION AND BUDGETING PROCESS**

7 **Q. What type of major capital projects does the Company typically**
8 **perform?**

9 A. The bulk of Montana-Dakota's major capital projects are pipeline
10 replacement projects that have been identified for safety reasons and to
11 reduce risk on Montana-Dakota's system, and system reinforcements or
12 system expansions that have been identified as needed to ensure system
13 reliability and to accommodate growth on the Company's system. A
14 reinforcement is an upgrade to existing infrastructure or new system
15 additions, which increases system capacity, reliability, and safety. An
16 expansion is a new system addition to accommodate an increase in
17 demand. Collectively, these are known as distribution system
18 enhancements. Distribution system enhancements do not reduce
19 demand, nor do they create additional supply. Instead, enhancements
20 can increase the overall capacity of a distribution pipeline system while
21 utilizing existing gate station supply points. The two broad categories of
22 distribution enhancement solutions are pipelines and regulators.

23 **Q. How does the Company identify safety-related projects?**

1 A. The Company uses the Distribution Integrity Management Program
2 (“DIMP”) and the expertise of its own engineers and field management to
3 identify areas of risk on its system and to develop the safety projects
4 required to remediate risk. The DIMP supports Montana-Dakota’s
5 understanding of the system and material characteristics and is used to
6 identify, assess, and prioritize integrity risks to Company-owned and
7 operated infrastructure. The Company reviews and analyzes the DIMP
8 risk model outputs after each model run to identify areas of highest risk
9 and those areas where risk increased from the last model run.

10 Additionally, because the DIMP model does not perfectly capture all
11 risk factors, the Company also considers input from its system engineers,
12 local field management, and other subject matter experts (“SMEs”) who
13 have detailed knowledge of specific portions of Montana-Dakota’s system
14 to identify other areas of potential concern.

15 The Company then considers and analyzes existing and proposed
16 measures to address the threats to Montana-Dakota’s pipeline system.
17 The prioritization and selection of the appropriate remediation actions
18 depends on the type of threat being addressed, whether the threat is
19 current or potential, and the viability of the remedial action in managing
20 the relevant risk factors.

21 **Q. Has the Company done studies outside of the DIMP process**
22 **regarding pipeline safety-related projects?**

1 A. Yes, Montana-Dakota contracted with GTI to assist in evaluating
2 the remaining useful life expectancy and the corresponding pressure-
3 carrying capacity of various vintages of Aldyl-A pipe material installed in
4 several gas distribution systems operated by Montana-Dakota. While the
5 study is still ongoing, initial results indicate that the samples taken to date
6 show that the pipe looks very good for the decades it has been in service.
7 The current results; however, do not imply that the pipe is perfect and
8 laboratory testing has concluded that the pipe is trending downward in
9 performance. At this time, the System Integrity Department does not see
10 the need to make adjustments to the DIMP model or base replacement
11 projects solely on Aldyl-A presence. The System Safety and Integrity
12 Program (SSIP) continues to prioritize replacement and elimination of
13 early vintage plastic pipelines prone to poor manufacturing, industry
14 documented Aldyl-A plastic defects, unknown attributes, missing data,
15 mechanical fittings, inside gas meters, and non-reported third party
16 damages.

17 **Q. What types of projects are typically performed to address safety-
18 related concerns?**

19 A. Pipeline replacement is typically the most viable option to
20 remediate risks associated with material, joint, weld, corrosion, natural
21 forces, and/or equipment. If Montana-Dakota determines that
22 replacement is an appropriate action to reduce the risk, the Company
23 establishes a replacement project.

1 **Q. How does the Company prioritize and select safety-related projects?**

2 A. Once pipe segments requiring replacements have been identified,
3 the Company plans and prioritizes specific projects within these segments.
4 This process ensures that higher risk threats are mitigated in a timely
5 manner.

6 **Q. Please provide an overview of Montana-Dakota's capital budgeting
7 process.**

8 A. Capital additions and changes are planned through the annual
9 budget process using PowerPlan (PP). The budget process begins with an
10 individual (originator) creating specific funding projects in PP for all new
11 projects to be included in the five-year capital budget. Originators are
12 generally managers at the district level or engineering staff at the
13 corporate level. Sources of information for capital projects include the
14 DIMP, state and local government agencies, and internal Montana-Dakota
15 personnel. Funding projects are used to hold the capital budget estimates
16 and will be linked to the work orders to be created when actual costs
17 commence. A Fixed Asset Financial Analyst reviews the funding projects
18 for proper setup. If the project is not considered a capital expenditure as it
19 was submitted, it is rejected and sent back to the originator for revision,
20 cancelation, or it is moved to Operations and Maintenance (O&M)
21 Expense. After the review has been completed, the Fixed Asset Financial
22 Analyst will add appropriate overheads and approve the funding project.

1 Blanket funding projects are used year after year to budget for high
2 volume mass property work orders typically under \$100,000 each.

3 Once all the funding projects have been updated with expenditures,
4 various Company operating managers generate reports to show estimated
5 expenditures and justification for each project. The managers perform the
6 review of the funding projects and see if any necessary changes made to
7 the estimate support the project. Reports are then generated by the
8 budgeting personnel for review and approval by the Directors and Vice
9 Presidents of the Utility Group. Any final budget changes are made, and
10 the budgets are then presented to the Utility Group's President for review
11 and approval. The final Utility Group budget is then presented to the MDU
12 Resources CEO for review and approval. If the budget is approved by the
13 MDU Resources CEO, the final review and approval occurs with the Board
14 of Directors. At each stage of the review and approval process a project
15 (or projects) can be challenged for appropriateness and can be removed
16 from the capital budget or moved to another year within the five-year
17 budget. The addition or removal of projects can also be impacted by other
18 factors such as available capital and/or borrowing capacity.

19 After final approval, an approved budget version is created in PP
20 and locked and the funding projects and estimated amounts in the
21 approved budget version are copied back to the working budget version.
22 Project managers are notified that the budget has been approved and
23 than can create work orders from the funding projects. Projects are

1 monitored and updated throughout the year as part of the review process
2 and to insure, as best as possible, that projects are completed on time and
3 within the approved budget.

4 **Q. Have there been any changes to these processes since the**
5 **Company's last rate case?**

6 A. Yes. Beginning in January 2019, MDU Utilities Group moved
7 toward a "one utility" model. As a result, the engineering department was
8 reorganized, and more consistent tasks and processes were defined. The
9 engineering managers and directors collaboratively review all projects and
10 determine which are the most important from a risk standpoint and what
11 the timing of the projects should be to best mitigate risks. Within this
12 effort, there is also a new internal requirement to develop a more robust
13 analysis for any project with a cost estimate over \$1 million. As part of the
14 analysis, the Company develops documentation supporting the project,
15 including a substantial executive summary, Synergi model snapshots,
16 alternative considerations, and timing and justifications.

17 **Q. For work that will be performed in 2020, does the Company**
18 **anticipate that its actual investment may vary from the budgeted**
19 **amounts?**

20 A. The Company's capital budgets were developed in November 2019
21 and the Company expects that its actual investment will not differ
22 materially from the budgeted amounts for the projects that are not yet
23 complete. Ongoing construction work is still being performed during the

1 COVID-19 pandemic and Montana-Dakota is not aware of any immediate
2 impacts to the construction schedules for its capital projects.

3 **MAJOR CAPITAL PROJECTS**

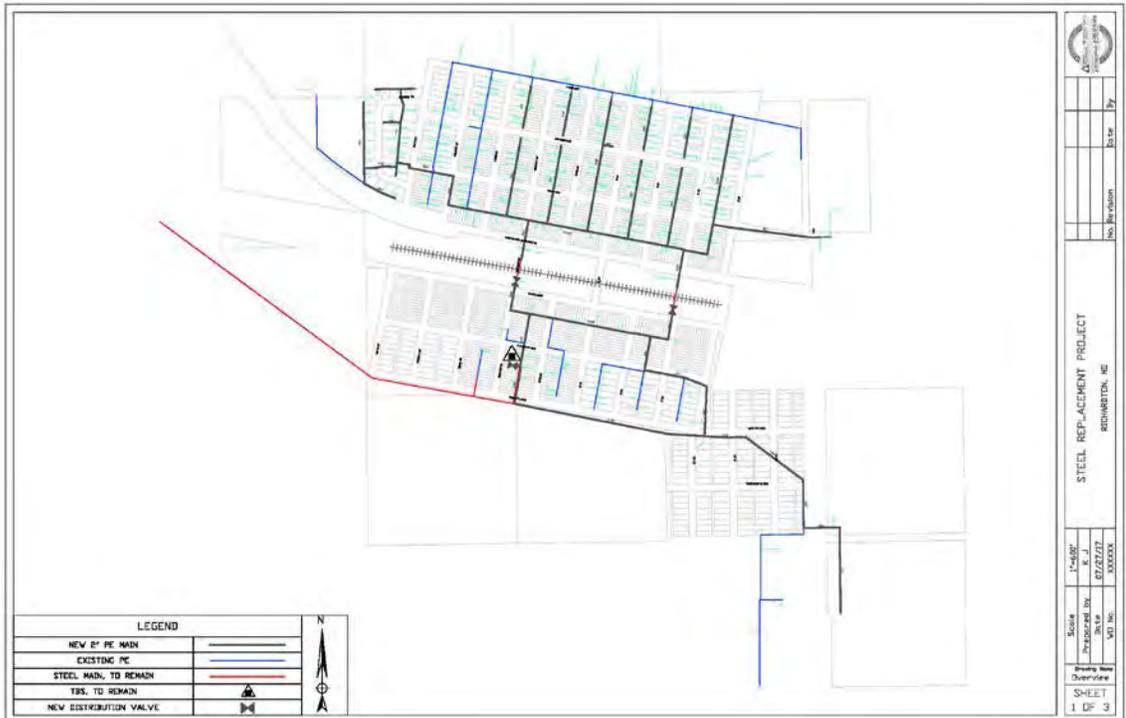
4 **Q. Would you please describe the major capital projects that have been**
5 **completed since the last rate case and the projects that are currently**
6 **underway?**

7 A. Yes. I will provide a description of each project including the need
8 for each project.

9 **Richardton, ND Replacement**

10 **Q1. Please describe the Richardton Replacement project.**

11 A. The Richardton, ND SSIP project replaced Early Vintage Plastic
12 Pipe (EVPP) and Early Vintage Steel Pipe (EVSP) natural gas mains and
13 services. The project consisted of approximately 19,600 feet of 2" PE main
14 and 121 service lines.



1

2 *Figure 1 - Richardton, ND*

3 **Q2. Why did the Company undertake the Richardton Replacement?**

4 A. Richardton was identified as a high risk EVSP natural gas system
 5 by the Company's SSIP. The SSIP employs structured replacement criteria
 6 for EVSP and EVPP. Beginning in 2019, project selection has evolved
 7 from utilizing independent high score categories to an integrated, system-
 8 based approach which ranks EVSP and EVPP jointly.

9 **Q3. What is the project timeline?**

10 A. This Richardton SSIP project was started and completed in 2017.

11 **Q4. How will the Company's customers benefit from the project?**

12 A. The Company replaces and eliminates early vintage steel and plastic
 13 pipelines prone to bare or poor coating, industry documented Aldyl-a plastic
 14 defects, unknown attributes, missing data, mechanical fittings, inside gas

1 meters, and non-reported third party damages under its SSIP. The
2 replacement of these facilities ultimately increases overall system safety for
3 the public and increases system reliability for MDU customers.

4 **Q5. Did the Company consider alternative ways to meet the need for this**
5 **project?**

6 A. No alternative for the project was identified. The system was
7 targeted based on high scores within the EVSP category.

8 **Q6. What are the costs of the project?**

9 A. The costs of the project are as follows:

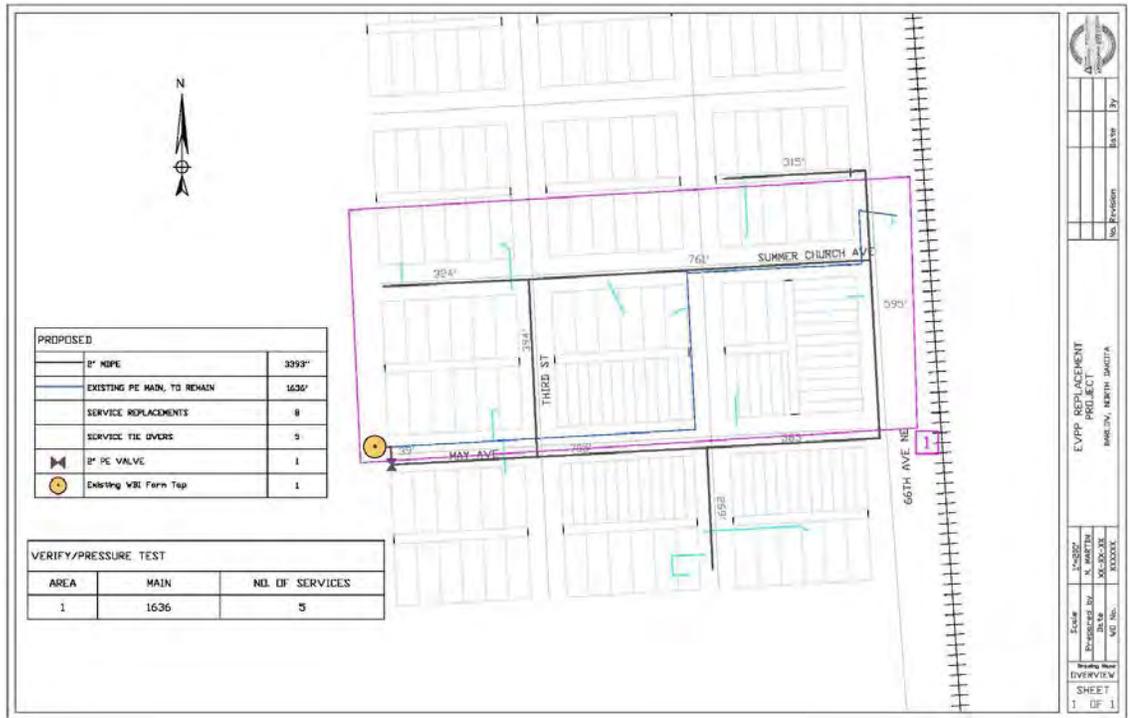
10 Main Replacements - \$456,894

11 Service Replacements - \$317,020

12 **Barlow, ND SSIP Replacement**

13 **Q1. Please describe the Barlow SSIP Replacement project.**

14 A. The Barlow, ND SSIP project replaced EVPP and EVSP natural gas
15 mains and services. The project consisted of approximately 3,000 feet of
16 2" PE main and 8 service lines.



1

2 *Figure 2 - Barlow, ND*

3 **Q2. Why did the Company undertake the Barlow SSIP Replacement?**

4 A. Barlow was identified as a high risk EVPP natural gas system by
 5 the Company's SSIP. The SSIP employs structured replacement criteria
 6 for EVSP and EVPP. Beginning in 2019, project selection has evolved
 7 from utilizing independent high score categories to an integrated, system-
 8 based approach which ranks EVSP and EVPP jointly.

9 **Q3. What is the project timeline?**

10 A. This Barlow SSIP project was started and completed in 2018.

11 **Q4. How will the Company's customers benefit from this SSIP project?**

12 A. The Company replaces and eliminates early vintage steel and
 13 plastic pipelines prone to bare or poor coating, industry documented Aldyl-
 14 a plastic defects, unknown attributes, missing data, mechanical fittings,

1 inside gas meters, and non-reported third party damages. The
2 replacement of these facilities ultimately increases overall system safety
3 for the public and increases system reliability for MDU customers.

4 **Q5. Did the Company consider alternative ways to meet the need for this**
5 **project?**

6 A. No alternative for the project was identified. The system was
7 targeted based on high scores within the EVPP category.

8 **Q6. What are the costs of the project?**

9 A. The costs of the project are as follows:

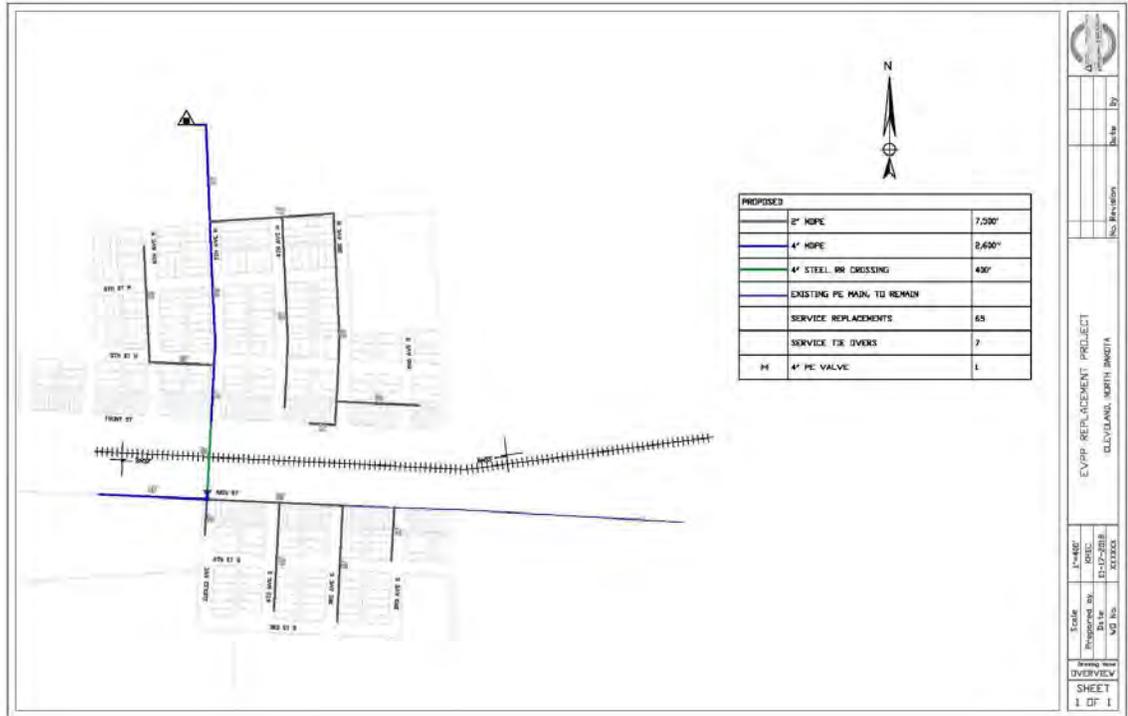
10 Main Replacements - \$80,433

11 Service Replacements - \$31,947

12 **Cleveland, ND SSIP Replacement**

13 **Q1. Please describe the Cleveland SSIP Replacement.**

14 A. The Cleveland, ND SSIP project replaced EVPP and EVSP natural
15 gas mains and services. The project consisted of approximately 210 feet
16 of 2" PE, 330 feet of 4" PE, 420 feet of 4" steel main, and 2 service lines.



1

2 *Figure 3 - Cleveland, ND*

3 **Q2. Why did the Company undertake the Cleveland SSIP Replacement?**

4 A. Cleveland was identified as a high risk EVPP natural gas system by
 5 the Company's SSIP. The SSIP employs structured replacement criteria
 6 for EVSP and EVPP. Beginning in 2019, project selection has evolved
 7 from utilizing independent high score categories to an integrated, system-
 8 based approach which ranks EVSP and EVPP jointly.

9 **Q3. What is the project timeline?**

10 A. The Cleveland SSIP project was started and completed in 2018.

11 **Q4. How will the Company's customers benefit from this SSIP project?**

12 A. The Company replaces and eliminates early vintage steel and
 13 plastic pipelines prone to bare or poor coating, industry documented Aldyl-
 14 a plastic defects, unknown attributes, missing data, mechanical fittings,

1 inside gas meters, and non-reported third party damages. The
2 replacement of these facilities ultimately increases overall system safety
3 for the public and increases system reliability for MDU customers.

4 **Q5. Did the Company consider alternative ways to meet the need for this**
5 **project?**

6 A. No alternative for the project was identified. The system was
7 targeted based on high scores within the EVPP category.

8 **Q6. What are the costs of the project?**

9 A. The costs of the project are as follows:

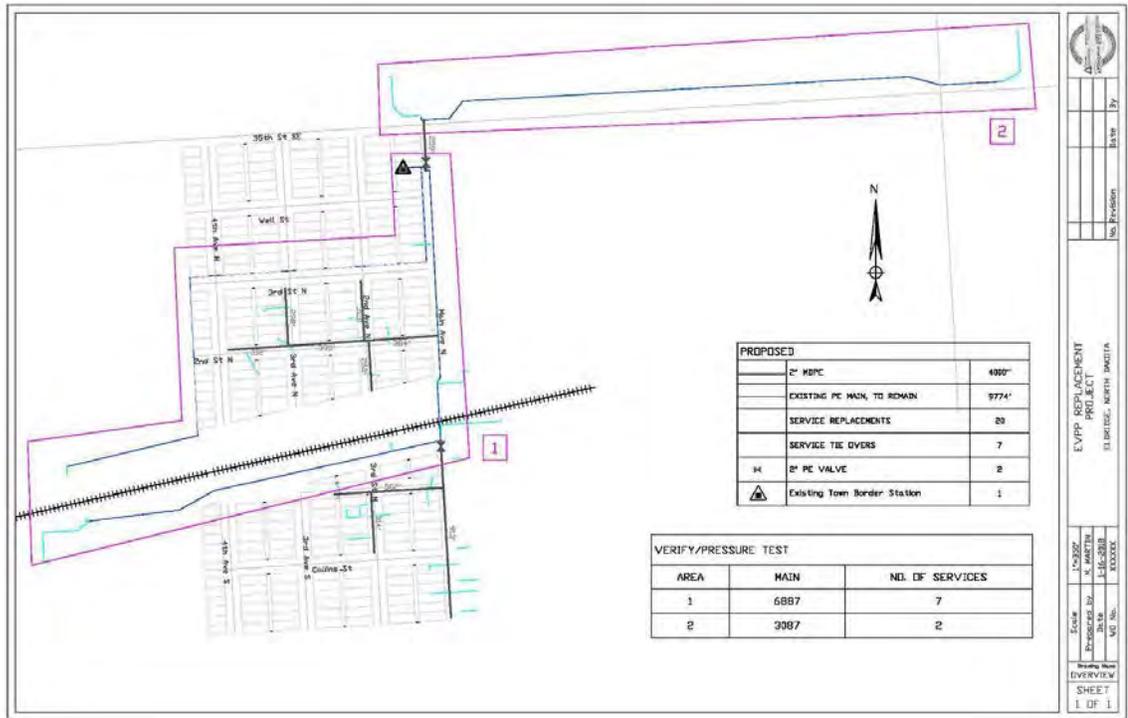
10 Main Replacements - \$54,307

11 Service Replacements - \$9,200

12 **Eldridge, ND SSIP Replacement Project**

13 **Q1. Please describe the Eldridge SSIP Replacement.**

14 A. The Eldridge, ND SSIP project replaced EVPP and EVSP natural
15 gas mains and services. The project consisted of approximately 3,000 feet
16 of 2" PE main and 19 service lines.



1

2 *Figure 4- Eldridge, ND*

3 **Q2. Why did the Company undertake the Eldridge SSIP Replacement?**

4 A. Eldridge was identified as a high risk EVPP natural gas system by
 5 the Company's SSIP. The SSIP employs structured replacement criteria
 6 for EVSP and EVPP. Beginning in 2019, project selection has evolved
 7 from utilizing independent high score categories to an integrated, system-
 8 based approach which ranks EVSP and EVPP jointly.

9 **Q3. What is the project timeline?**

10 A. The Eldridge SSIP project was started and completed in 2018.

11 **Q4. How will the Company's customers benefit from this SSIP project?**

12 A. The Company replaces and eliminates early vintage steel and
 13 plastic pipelines prone to bare or poor coating, industry documented Aldyl-
 14 a plastic defects, unknown attributes, missing data, mechanical fittings,

1 inside gas meters, and non-reported third party damages. The
2 replacement of these facilities ultimately increases overall system safety
3 for the public and increases system reliability for MDU customers.

4 **Q5. Did the Company consider alternative ways to meet the need for this**
5 **project?**

6 A. No alternative for the project was identified. The system was
7 targeted based on high scores within the EVPP category.

8 **Q6. What are the costs of the project?**

9 A. The costs of the project are as follows:

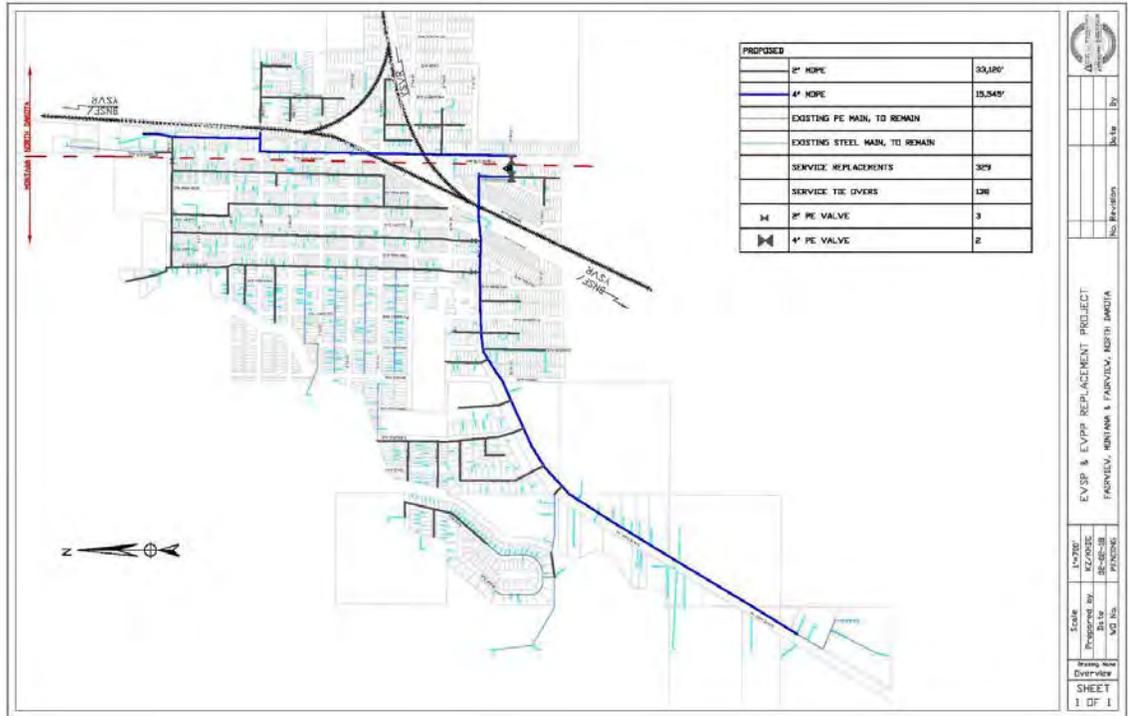
10 Main Replacements - \$103,367

11 Service Replacements - \$62,912

12 **Fairview, ND SSIP Replacement Project**

13 **Q1. Please describe the Fairview, ND SSIP Replacement.**

14 A. The Fairview, ND SSIP project replaced EVPP and EVSP natural
15 gas mains and services. The project consisted of approximately 16,500
16 feet of 2-inch PE, 1,250 feet of 4-inch PE, 595 feet of 4-inch steel main,
17 and 53 service lines. The Fairview, ND SSIP was a multi-year project that
18 coincided with the Fairview, MT state replacement plan.



1

2 *Figure 5 - Fairview, ND*

3 **Q2. Why did the Company undertake the Fairview SSIP Replacement?**

4 A. Fairview was identified as a high risk EVSP natural gas system by
 5 the Company's SSIP. The SSIP employs structured replacement criteria
 6 for EVSP and EVPP. Beginning in 2019, project selection has evolved
 7 from utilizing independent high score categories to an integrated, system-
 8 based approach which ranks EVSP and EVPP jointly.

9 **Q3. What is the project timeline?**

10 A. The Fairview SSIP project started in 2018 and completed in 2020.

11 **Q4. How will the Company's customers benefit from this SSIP project?**

12 A. The Company replaces and eliminates early vintage steel and
 13 plastic pipelines prone to bare or poor coating, industry documented Aldyl-
 14 a plastic defects, unknown attributes, missing data, mechanical fittings,

1 inside gas meters, and non-reported third party damages. The
2 replacement of these facilities ultimately increases overall system safety
3 for the public and increases system reliability for MDU customers.

4 **Q5. Did the Company consider alternative ways to meet the need for this**
5 **project?**

6 A. No alternative for the project was identified. The system was
7 targeted based on high scores within the EVSP category.

8 **Q6. What are the costs of the project?**

9 A. The cost of the project to date are as follows:

10 2018 Main Replacements - \$92,890

11 2018 Service Replacements - \$22,031

12 2019 Main Replacements - \$298,986

13 2019 Service Replacements - \$164,594

14 The estimated costs for 2020 are as follows:

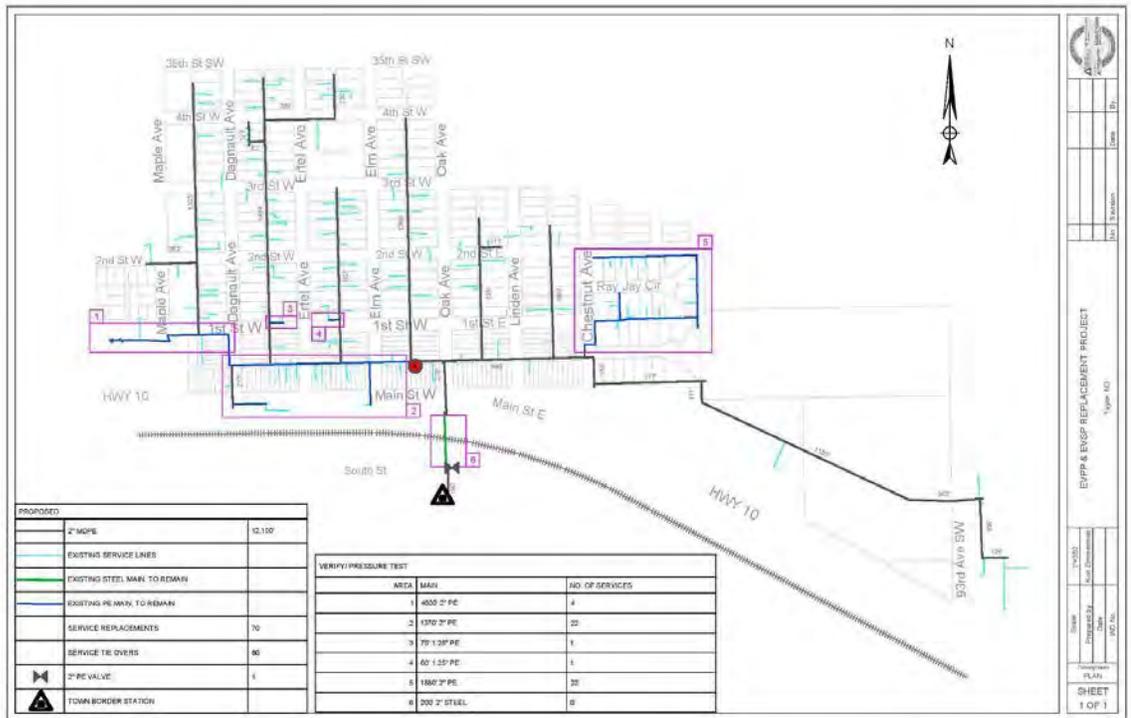
15 2020 Main Replacements - < \$15,000

16 2020 Service Replacements - < \$15,000

17 **Taylor, ND SSIP Replacement**

18 **Q1. Please describe the Taylor SSIP Replacement project.**

19 A. The Taylor, ND SSIP project replaced EVPP and EVSP natural gas
20 mains and services. The project consisted of approximately 12,700 feet of
21 2-inch PE main and 61 service lines.



1

2 *Figure 6 - Taylor, ND*

3 **Q2. Why did the Company undertake the Taylor SSIP Replacement?**

4 A. Taylor was identified as a high risk EVSP natural gas system by the
 5 Company's SSIP. The SSIP employs structured replacement criteria for
 6 EVSP and EVPP. Beginning in 2019, project selection has evolved from
 7 utilizing independent high score categories to an integrated, system-based
 8 approach which ranks EVSP and EVPP jointly.

9 **Q3. What is the project timeline?**

10 A. The Taylor SSIP project was started and completed in 2018.

11 **Q4. How will the Company's customers benefit from the project?**

12 A. The Company replaces and eliminates early vintage steel and
 13 plastic pipelines prone to bare or poor coating, industry documented Aldyl-
 14 a plastic defects, unknown attributes, missing data, mechanical fittings,

1 inside gas meters, and non-reported third party damages. The
2 replacement of these facilities ultimately increases overall system safety
3 for the public and increases system reliability for MDU customers.

4 **Q5. Did the Company consider alternative ways to meet the need for this**
5 **project?**

6 A. No alternative for the project was identified. The system was
7 targeted based on high scores within the EVSP category.

8 **Q6. What are the costs of the project?**

9 A. The costs of the project are as follows:

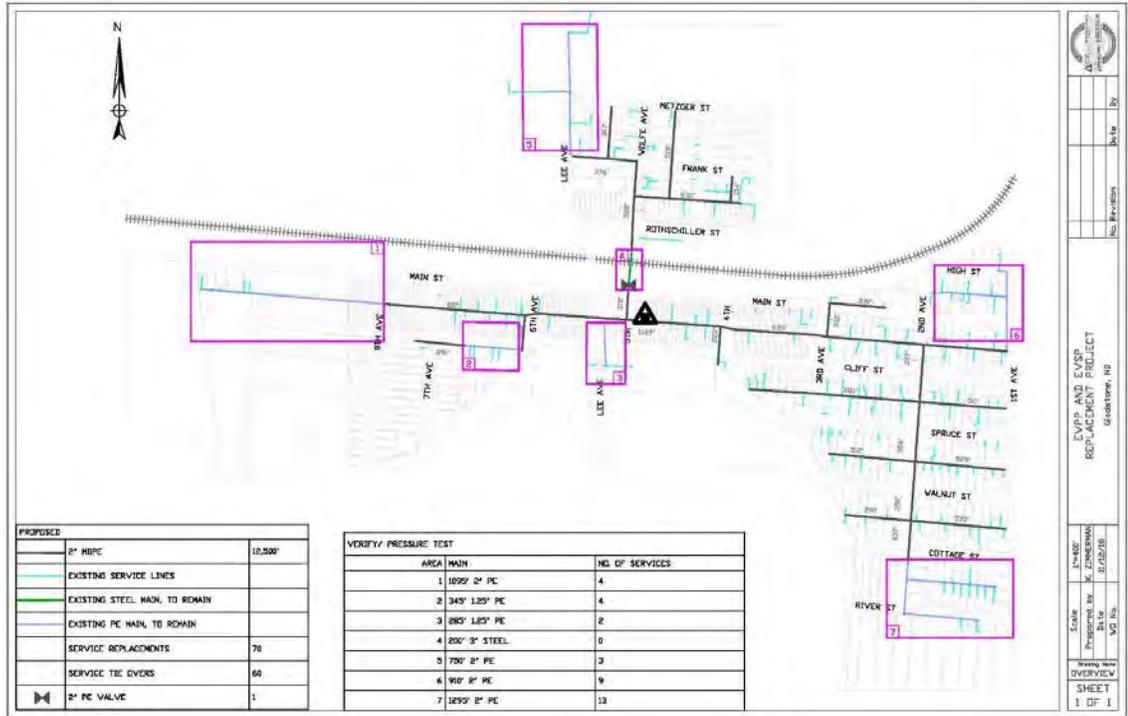
10 Main Replacements - \$274,088

11 Service Replacements - \$174,329

12 **Gladstone, ND SSIP Replacement**

13 **Q1. Please describe the Gladstone SSIP Replacement project.**

14 A. The Gladstone, ND SSIP project replaced EVPP and EVSP natural
15 gas mains and services. The project consisted of approximately 9,000 feet
16 of 2-inch PE main and 56 service lines.



1

2 *Figure 7 - Gladstone, ND*

3 **Q2. Why did the Company undertake the Gladstone SSIP Replacement?**

4 A. Gladstone was identified as a high risk EVSP natural gas system by
 5 the Company's SSIP. The SSIP employs structured replacement criteria
 6 for EVSP and EVPP. Beginning in 2019, project selection has evolved
 7 from utilizing independent high score categories to an integrated, system-
 8 based approach which ranks EVSP and EVPP jointly.

9 **Q3. What is the project timeline?**

10 A. The Gladstone SSIP project was started and completed in 2018.

11 **Q4. How will the Company's customers benefit from the project?**

12 A. The Company replaces and eliminates early vintage steel and
 13 plastic pipelines prone to bare or poor coating, industry documented Aldyl-
 14 a plastic defects, unknown attributes, missing data, mechanical fittings,

1 inside gas meters, and non-reported third party damages. The
2 replacement of these facilities ultimately increases overall system safety
3 for the public and increases system reliability for MDU customers.

4 **Q5. Did the Company consider alternative ways to meet the need for this**
5 **project?**

6 A. No alternative for the project was identified. The system was
7 targeted based on high scores within the EVSP category.

8 **Q6. What are the costs of the project?**

9 A. The costs of the project are as follows:

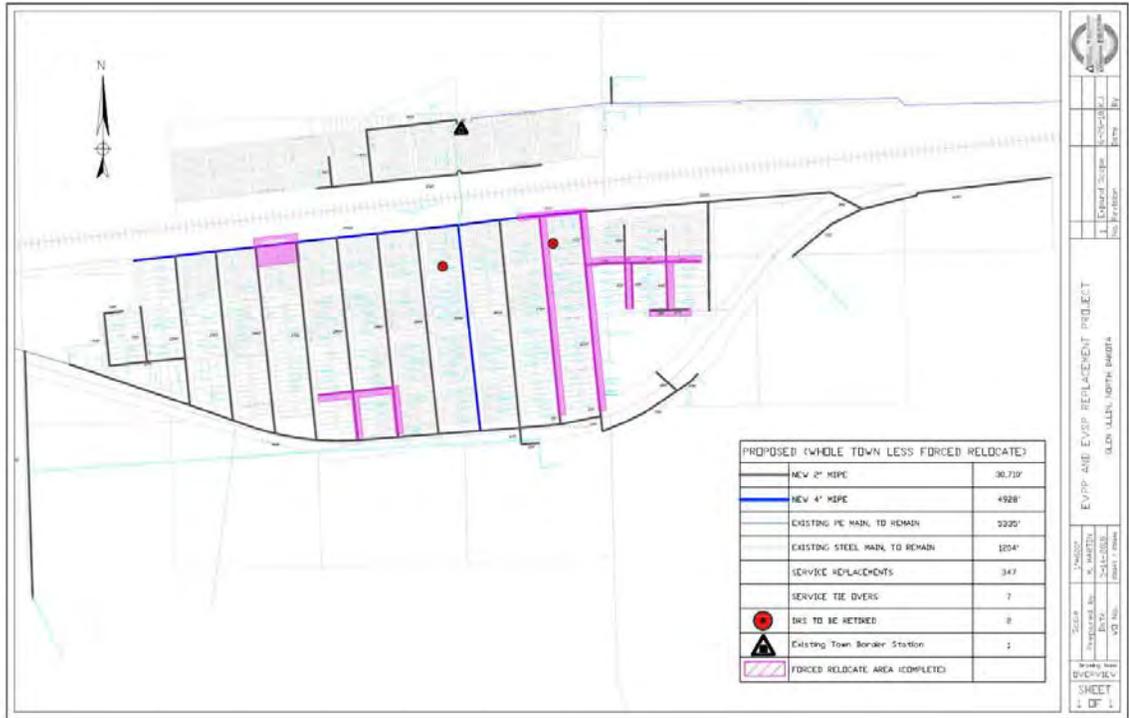
10 Main Replacements - \$305,870

11 Service Replacements - \$202,603

12 **Glen Ullin, ND SSIP Replacement Project**

13 **Q1. Please describe the Glen Ullin, ND SSIP Replacement.**

14 A. The Glen Ullin, ND SSIP project replaced EVPP and EVSP natural
15 gas mains and services. The project consisted of approximately 28,000
16 feet of 2-inch PE, over 6,000 feet of 4-inch PE main, 409 service lines.



1

2 *Figure 8 - Glen Ullin, ND*

3 **Q2. Why did the Company undertake the Glen Ullin SSIP Replacement?**

4 A. Glen Ullin was identified as a high risk EVSP natural gas system by
 5 the Company's SSIP. The SSIP employs structured replacement criteria
 6 for EVSP and EVPP. Beginning in 2019, project selection has evolved
 7 from utilizing independent high score categories to an integrated, system-
 8 based approach which ranks EVSP and EVPP jointly.

9 **Q3. What is the project timeline?**

10 A. The Glen Ullin SSIP project was started in 2018 will be completed
 11 in 2020.

12 **Q4. How will the Company's customers benefit from this SSIP project?**

13 A. The Company replaces and eliminates early vintage steel and plastic
 14 pipelines prone to bare or poor coating, industry documented Aldyl-a

1 plastic defects, unknown attributes, missing data, mechanical fittings,
2 inside gas meters, and non-reported third party damages. The
3 replacement of these facilities ultimately increases overall system safety
4 for the public and increases system reliability for MDU customers.

5 **Q5. Did the Company consider alternative ways to meet the need for this**
6 **project?**

7 A. No alternative for the project was identified. The system was
8 targeted based on high scores within the EVSP category. In addition to
9 the elevated SSIP score, MDU replaced facilities in direct conflict with the
10 City's water, sewer, and storm sewer replacement project

11 **Q6. What are the costs of the project?**

12 A. The cost of the project to date are as follows:

13 2018 Main Replacements - \$916,033

14 2018 Service Replacements - \$697,558

15 2019 Main Replacements - \$156,931

16 2019 Service Replacements - \$134,064

17 Estimated costs for 2020 are as follows:

18 2020 Main Replacements - \$10,000

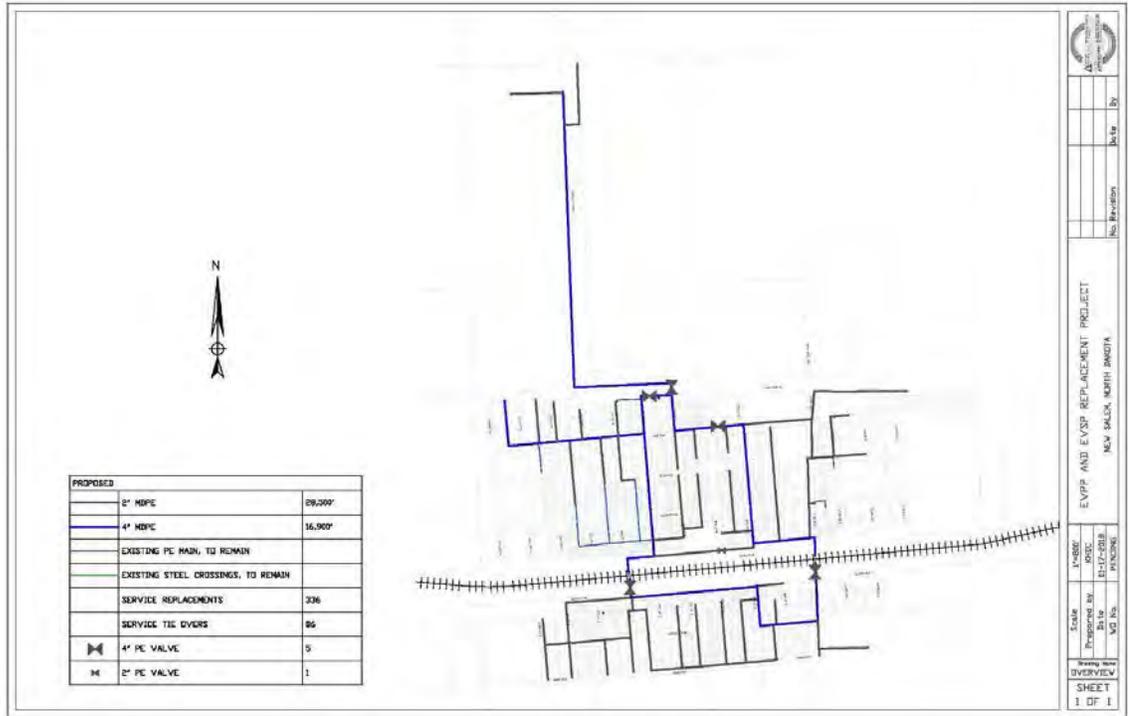
19 2020 Service Replacements - \$10,000

20 **New Salem, ND SSIP Replacement Project**

21 **Q1. Please describe the New Salem, ND SSIP Replacement.**

22 A. The New Salem, ND SSIP project replaced EVPP and EVSP
23 natural gas mains and services. The project consisted of approximately

- 1 29,000 feet of 2-inch PE, 17,000 feet of 4-inch PE, 510 feet of 4" steel
- 2 main, and 386 service lines.



3

4 *Figure 9 - New Salem, ND*

5 **Q2. Why did the Company undertake the New Salem SSIP Replacement?**

6 A. New Salem was identified as a high risk EVSP natural gas system

7 by the Company's SSIP. The SSIP employs structured replacement criteria

8 for EVSP and EVPP. Beginning in 2019, project selection has evolved

9 from utilizing independent high score categories to an integrated, system-

10 based approach which ranks EVSP and EVPP jointly.

11 **Q3. What is the project timeline?**

12 A. The New Salem SSIP project was started in 2018 and will be

13 completed in 2020.

1 **Q4. How will the Company's customers benefit from this SSIP project?**

2 A. The Company replaces and eliminates early vintage steel and
3 plastic pipelines prone to bare or poor coating, industry documented Aldyl-
4 a plastic defects, unknown attributes, missing data, mechanical fittings,
5 inside gas meters, and non-reported third party damages. The
6 replacement of these facilities ultimately increases overall system safety
7 for the public and increases system reliability for MDU customers.

8 **Q5. Did the Company consider alternative ways to meet the need for this**
9 **project?**

10 A. No alternative for the project was identified. The system was
11 targeted based on high scores within the EVSP category.

12 **Q6. What are the costs of the project?**

13 A. The cost of the project to date are as follows:

14 2018 Main Replacements - \$1,398,650

15 2018 Service Replacements - \$708,109

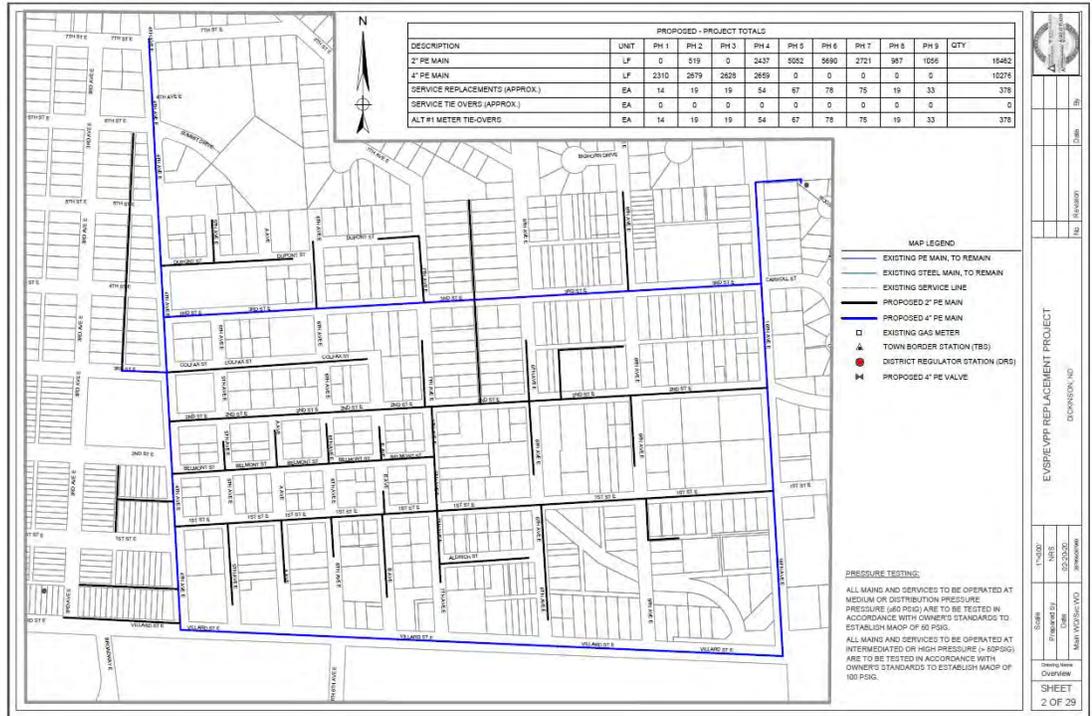
16 2019 Main Replacements - \$191,481

17 2019 Service Replacements - \$218,772

18 Estimated costs for 2020 are as follows:

19 2020 Main Replacements - \$20,000

20 2020 Service Replacements - \$20,000



1

2 *Figure 11 - Dickinson, ND (2020)*

3 **Q2. Why did the Company undertake the Dickinson SSIP Replacement?**

4 A. In 2019, Dickinson was identified as a high risk EVSP natural gas
 5 system by the Company's SSIP. The SSIP employs structured
 6 replacement criteria for EVSP and EVPP. Beginning in 2019, project
 7 selection has evolved from utilizing independent high score categories to
 8 an integrated, system-based approach which ranks EVSP and EVPP
 9 jointly.

10 **Q3. What is the project timeline?**

11 A. The Dickinson SSIP is a multi-year project which started in 2019
 12 and is expected to continue until the system's EVSP and EVPP are
 13 replaced or an SSIP plan re-evaluation occurs. To-date annual project

1 scopes have been of similar size to accommodate budgetary limits and
2 contractor availability.

3 **Q4. How will the Company's customers benefit from this SSIP project?**

4 A. The Company replaces and eliminates early vintage steel and
5 plastic pipelines prone to bare or poor coating, industry documented Aldyl-
6 a plastic defects, unknown attributes, missing data, mechanical fittings,
7 inside gas meters, and non-reported third party damages. The
8 replacement of these facilities ultimately increases overall system safety
9 for the public and increases system reliability for MDU customers.

10 **Q5. Did the Company consider alternative ways to meet the need for this
11 project?**

12 A. No alternative for the project was identified. The system was
13 targeted based on high scores within the EVSP category.

14 **Q6. What are the costs of the project?**

15 A. The cost of the project to date are as follows:

16 2019 Main Replacements - \$2,673,232

17 2019 Service Replacements - \$1,296,415

18 The approved 2020 budget are as follows:

19 2020 Main Replacements - \$3,885,424

20 2020 Service Replacements - \$3,453,876

21 **Q. Does this complete your direct testimony?**

22 A. Yes, it does.