

SOUTHWEST GAS CORPORATION

BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA

In the Matter of the Application of
Southwest Gas Corporation for Authority to
Increase its Retail Natural Gas Utility
Service Rates in its Southern and Northern
Nevada Rate Jurisdictions.

Docket No.: 26-03 ____

VOLUME 6 of 13

Testimony

Index

Southwest Gas Corporation

Volume 6 of 13

Index
Page 1 of 1

Description	Page No.
Prepared Direct Testimony of Preston D. Weakland	1
Prepared Direct Testimony of Christopher R. Anderson	43
Prepared Direct Testimony of Matthew A. Helmers	62
Prepared Direct Testimony of Thomas W. Cardin	80

IN THE MATTER OF
SOUTHWEST GAS CORPORATION
DOCKET NO. 26-03____

PREPARED DIRECT TESTIMONY
OF
PRESTON D. WEAKLEND

ON BEHALF OF
SOUTHWEST GAS CORPORATION

March 17, 2026

Table of Contents
Prepared Direct Testimony
of
Preston D. Weaklend

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

<u>Description</u>	<u>Page No.</u>
I. INTRODUCTION	2
II. ANNUAL LEAK SURVEY	3
III. CAPITAL INVESTMENT PROJECTS.....	5
IV. SOUTHERN NEVADA LAS VEGAS RADIO COMMUNICATION EQUIPMENT	23
V. DETERMINATION OF PRUDENCY FOR THE MESQUITE EXPANSION PROJECT	23
Appendix A – Summary of Qualifications of Preston Weaklend	
Exhibit No.__(PDW-1)	
Exhibit No.__(PDW-2)	
Affirmation of Preston D. Weaklend	

BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA

Prepared Direct Testimony
of
Preston D. Weaklend

I. INTRODUCTION

Q. 1 Please state your name and business address.

A. 1 My name is Preston D. Weaklend. My business address is 6355 Shatz Street,
North Las Vegas, Nevada 89115.

Q. 2 By whom and in what capacity are you employed?

A. 2 I am employed by Southwest Gas Corporation (Southwest Gas or Company) in
the Southern Nevada Division. My title is Director of Gas Operations.

**Q. 3 Please summarize your educational background and relevant business
experience.**

A. 3 My educational background and relevant business experience are summarized
in Appendix A to this testimony.

Q. 4 Have you previously testified before any regulatory commission?

A. 4 Yes, I have previously provided written testimony before the Public Utilities
Commission of Nevada (Commission).

Q. 5 What is the purpose of your prepared direct testimony in this proceeding?

A. 5 The purpose of my prepared direct testimony is to provide an update on the
incremental costs incurred and recorded to Southern Nevada annual leak survey
regulatory asset and to support the reasonableness and prudence of the
Company's investments in capital projects for the Southern Nevada rate
jurisdiction (Southern Nevada) that are included in the revenue requirement.

1 **Q. 6 Please summarize your prepared direct testimony.**

2 A. 6 My prepared direct testimony consists of the following key topics:

- 3 • Discussion of the incremental costs associated with the Southern Nevada
4 annual leak survey regulatory asset to support the annual leak survey
5 requirements pursuant to Nevada Administrative Code (NAC) 703.915;
- 6 • Justification of prudence for capital investment projects and discussion on
7 capital investment projects equal to or exceeding \$1 million which have been
8 placed in service in the Company's Southern Nevada system since the end of
9 the certification period in Southwest Gas' 2023 general rate case (GRC) and
10 those capital investments projects that at the time of this filing are anticipated to
11 be placed in service by May 31, 2026,¹ and,
- 12 • Justification of prudence for the facilities placed in service for the Mesquite
13 Expansion Project to be included in rate base in accordance with Nevada
14 Administrative Code (NAC) 704.9757(2) since the Company's last GRC.

15 **II. ANNUAL LEAK SURVEY**

16 **Q. 7 Please provide an overview of the Company's Annual Leak Survey.**

17 A. 7 The Commission's Order in Docket No. 19-09011 (Order) adopted the
18 regulation, codified as NAC 703.915 and effective January 1, 2023, which
19 requires, among other things, that a person who operates or maintains any
20 intrastate pipeline in Nevada which is used to transport natural gas, to conduct
21 a leakage survey with leak detector equipment on any such intrastate pipeline
22 at least once per calendar year, at an interval not to exceed 15 months (Annual
23 Leak Survey). The Order also authorized the establishment of a regulatory

24 _____
25 ¹ The Company will update plant in service in its certification filing in the instant docket based on capital projects placed into service on or before May 31, 2026.

1 asset. In Southwest Gas' 2023 GRC,² the Commission authorized the Company
2 to continue tracking incremental costs associated with the Annual Leak Survey
3 in a regulatory asset, as well as a 2-year amortization period.

4 **Q. 8 Please describe the costs incurred to meet the requirements of the Annual**
5 **Leak Survey.**

6 A. 8 The incremental costs associated with the Annual Leak Survey in Southern
7 Nevada, as recorded to the Company's regulatory asset account since
8 December 2023 and through November 2025, is \$9,819,623. Since inception,
9 the Company has spent \$1,444,212 on vehicles and equipment to support leak
10 survey activities.

11 **Q. 9 How much has the Company incurred in incremental Annual Leak Survey**
12 **costs since inception?**

13 A. 9 Since the inception of the Annual Leak Survey program in July 2022 and
14 through November 2025, the Company has incurred \$15,365,9183 deferred
15 expenditures in Southern Nevada.

16 **Q. 10 Were the costs associated with annual leak survey in Northern Nevada**
17 **reasonably and prudently incurred?**

18 A. 10 Yes. First, pursuant to NAC 703.915, the annual leak survey program is a safety
19 requirement in the State of Nevada. Southwest Gas supported the adoption of
20 an annual leak survey to enhance safety.

21 Second, the costs associated with annual leak survey in Southern Nevada
22 were prudently incurred. Since the implementation of annual leak survey,

23 _____
24 ² Docket No. 23-09012.

25 ³ Balance of at March 2024 (\$5,546,296 (thru 11/2023) plus \$1,472,117 (post 11/23)) plus April 2024 thru
November 2025 monthly activity. Reference: WP H-18, Sh-1, Col (d) Ln 1 + Col (f) Ln 1 + Sum Col (f)
Lns 4-23.

1 Southern Nevada began a process for tracking and documenting leak survey
2 activities which would have normally been completed under the Company's
3 former three-year leak survey cycle, separately from the areas that were
4 incrementally leak surveyed in association with the annual requirements. Leak
5 survey processes and procedures are consistent throughout Southern Nevada,
6 regardless of which area is being leak surveyed, with the only difference being
7 which account is used to track actual expenses.

8 **Q. 11 What is the Company's proposal with respect to Annual Leak Survey cost**
9 **tracking?**

10 A. 11 As further detailed in the prepared direct testimony of Company witness Celine
11 Louise R. Apo, the Company is requesting that the Commission authorize an
12 Adjustment No. 15 to normalize the Company's operation & maintenance (O&M)
13 expenses and associated discontinuance of the Company's current regulatory
14 accounting treatment for the Annual Leak Survey.

15 **III. CAPITAL INVESTMENT PROJECTS**

16 **Q. 12 Please describe the scope of the Southern Nevada capital investment**
17 **projects discussed in your prepared direct testimony.**

18 A. 12 I support all capital investments for distribution projects, and certain general
19 plant projects, in Southern Nevada that have been placed in service since
20 December 1, 2023.⁴ Work orders greater than \$100,000 in total are listed on
21 Exhibit No.__(PDW-1).⁵ My prepared direct testimony specifically discusses the
22 twelve blanket work orders, thirteen individual projects, and early vintage plastic
23

24 ⁴ The certification period in the Company's most recent general rate case (Docket No. 23-09012) ended
November 30, 2023.

25 ⁵ Southern Nevada operations-related work orders presented in response to Master Data Request 106.

1 pipe projects (EVPP) with incurred costs equal to \$1 million or more as of
2 November 30, 2025.

3 **Q. 13 Please provide an overview of the capital investment projects with**
4 **incurred costs of more than \$1 million that closed to plant in service**
5 **between December 1, 2023 and November 30, 2025.**

6 A. 13 The capital investment projects with incurred costs of more than \$1 million are
7 categorized as: blanket work orders, 7000/8000 Non-Conforming Driscopipe
8 (NCDP) replacement, franchise, distribution system improvements, new
9 business infrastructure, and EVPP. Each of these projects are discussed in
10 detail below.

11 **BLANKET WORK ORDERS**

12 **Q. 14 Please describe the purpose of blanket work orders.**

13 A. 14 Blanket Work Order (BWO) numbers were established to efficiently capture the
14 cost of many small main, service, and meter transactions by consolidating
15 similar activities (e.g., meter installations) into a single umbrella work order. This
16 consolidation streamlines project management, reduces the administrative
17 burden of creating and tracking many discrete work orders, and improves
18 accuracy and clarity in cost accounting. In Southern Nevada, Southwest Gas
19 maintains a series of BWO numbers specifically used to record material
20 acquisition and installation charges relating to the following: 1) new meter
21 installations; 2) regular service replacements; 3) new main installations of less
22 than 100 feet; 4) new service installations (Las Vegas Valley and Mesquite); 5)
23 new random service installations; 6) new service commercial installations; 7)
24 regular replacement mains of less than 100 feet; 8) franchise related main
25

1 replacement of less than 100 feet; (9) replacement meters; 10) PVC service
2 replacement; and 11) 7000/8000 Driscopipe service replacement.

3 **Q. 15 Please describe the BWO's with recorded costs of at least \$1 million.**

4 A. 15 As of November 30, 2025, the following BWOs incurred costs of at least \$1
5 million:

- 6 1. 0021CB030000 New Meters – The New Meters BWO includes the
7 acquisition and installation of meter set assemblies for customers where
8 such an installation did not previously exist. The meter set assemblies
9 regulate the delivery pressure to the customer and measure the amount
10 of natural gas used by the customer for billing purposes. As of November 30,
11 2025, this BWO incurred costs of \$33,447,098.
- 12 2. 0021CB025000 Replacement Services – The Replacement Services
13 BWO includes the replacement of existing services based on several
14 factors including risk-based analyses, engineering judgment, and the
15 Company's planned system improvement projects. As of November 30,
16 2025, this BWO incurred costs of \$16,440,549.
- 17 3. 0021CB010000 New Mains – The New Mains BWO includes the
18 installation of new mains for serving new customers. As of November 30,
19 2025, this BWO incurred costs of \$25,152,912.
- 20 4. 0021CB041000 New Service Subdivision – The New Service Subdivision
21 for Las Vegas area, Nevada BWO includes the installation of new services
22 for serving new customers in subdivisions where such an installation did
23 not previously exist. As of November 30, 2025, this BWO incurred costs
24 of \$20,837,553.
- 25 5. 0020CB041000 New Service Subdivision – The New Service Subdivision
for Mesquite, Nevada BWO includes the installation of new services for
serving new customers in subdivisions where such an installation did not
previously exist. As of November 30, 2025, this BWO incurred costs of
\$1,554,122.
6. 0021CB043000 New Random Service – The New Random Services BWO
includes the installation of new services for serving new customers where
such an installation did not previously exist. As of November 30, 2025,
this BWO incurred costs of \$16,750,800.
7. 0021CB042000 New Service Commercial – The New Service Commercial
BWO includes the installation of new services for serving new commercial
customers where such an installation did not previously exist. As of
November 30, 2025, this BWO incurred costs of \$6,706,029.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

- 8. 0021CB015000 Replacement Mains – The Replacement Mains BWO includes the replacement of existing mains based on several factors including risk-based analyses, engineering judgment, and the Company’s planned system improvement projects. As of November 30, 2025, this BWO incurred costs of \$9,741,986.
- 9. 0021CB013000 Franchise Replacement Main – The Franchise Replacement Mains BWO includes the replacement of existing mains based on several factors including municipal projects, risk-based analyses, engineering judgment, and the Company’s planned system improvement projects. As of November 30, 2025, this BWO incurred costs of \$2,671,131.
- 10. 0021CB035000 Replacement Meters – The Replacement Meters BWO includes the procurement of materials and replacement of meter set assemblies for existing customers based on factors including the Company’s meter performance program or customer requests to increase or reduce their usage. The meter set assemblies regulate the delivery pressure to the customer and measure the amount of natural gas used by the customer for billing purposes. As of November 30, 2025, this BWO incurred costs of \$3,277,412.
- 11. 0021CB025002 PVC Service Replacement – The PVC Service Replacement BWO includes the replacement of existing PVC services based on several factors including risk-based analyses, engineering judgment, and the Distribution Integrity Program. As of November 30, 2025, this BWO incurred costs of \$1,004,567.
- 12. 0021CB026000 NCDP Polyethylene (PE) Service Replacement - The 7000/8000 Driscopipe Service Replacement BWO includes the replacement of existing M7000 and M8000 services that have experienced periods of continuous inactivity in excess of 60 months based on several factors including risk-based analyses, engineering judgment, and the Company’s Distribution Integrity Management Program. As of November 30, 2025, this BWO incurred costs of \$32,932,390.

Q. 16 Are the facilities installed under the BWOs used and useful?

A. 16 Yes. Projects completed under the BWOs represent investments made in the Company’s system necessary provide safe and reliable service to customers and accommodate growth.

...

...

1 **7000/8000 DRISCOPIPE REPLACEMENT**

2 **Q. 17 Please provide an overview of the 7000/8000 Driscopipe Replacement.**

3 A. 17 Driscopipe is the brand name for Phillips Driscopipe, Inc., and its predecessor
4 company Phillips Products Company. The brand name Driscopipe is still in use
5 today. Driscopipe is a PE plastic pipe type that has been installed in natural gas
6 systems since the 1960s. The family of Driscopipe that is known to be installed
7 in the Southern Nevada system includes Driscopipe model 7000 and 8000 pipe
8 (collectively, 7000/8000 pipe). The 7000/8000 pipe is used for distribution
9 pressure mains and services, typically between one-half inch and six inches in
10 diameter and installed between 1974 and 2000. The Company currently
11 replaces 7000/8000 pipe employing a risk-based approach using material
12 degradation testing data that is evaluated each year. Starting in 2015, the
13 Company began the proactive process of evaluating samples of degraded pipe
14 in the Company's laboratory using sophisticated material equipment capable of
15 determining the extent of material degradation throughout the wall of the sample
16 pipe in question. This evaluation identified that material degradation does not
17 appear to occur homogeneously throughout pipe, but primarily from the outer-
18 wall-inward or the inner-wall-outward.

19 Southwest Gas currently collects samples of degraded 7000/8000 pipe
20 whenever material degradation is witnessed when the pipe is exposed in the
21 field. Exposure may occur due to pipe excavations associated with typical field
22 activities such as new facility installations, field repairs, or other operations and
23 maintenance activities. Southern Nevada Operations will initiate the material
24 investigation process and submit samples to the Company's laboratory services.
25 The System Integrity department will notify Southern Nevada when a material

1 defect is confirmed that warrants replacement. Projects are identified in
2 accordance with the Company's plastic pipe inspection procedure.

3 **Q. 18 Why does the Company's plastic pipe inspection procedure require such**
4 **replacement?**

5 A. 18 Replacement of the pipe based on wall loss meets a threshold where
6 manufacturers and industry organizations recommend repair or replacement.
7 Repair is not practical for degraded pipe. Therefore, Southwest Gas' plastic pipe
8 inspection procedure requires replacement or abandonment.

9 **Q. 19 How many 7000/8000 Driscopipe Replacement projects incurred costs**
10 **equal to or greater than \$1 million?**

11 A. 19 There are four 7000/8000 Driscopipe Replacement projects with costs incurred
12 equal to or greater than \$1 million that are discussed below.

13 **NCDP 2024-CNLV La Madre & Spring Falls – Phase One & Phase Two**

14 **Q. 20 Please describe the La Madre and Spring Falls project.**

15 A. 20 The La Madre and Spring Falls consists of two phases due to the size and scope
16 of the footage being replaced. Both phases, Phase One (0021W4491965,) and
17 Phase Two (0021W4547547), are 7000/8000 pipe replacement projects. The
18 projects involved a single-family residential neighborhood where the pipe was
19 installed in 1991 and is located near the intersection of La Madre Way and Valley
20 Drive in North Las Vegas, Nevada. Phase One involved the replacement of
21 5,093 feet of two inch main and 4,618 feet of half inch service. Phase Two
22 involved the replacement of 5,648 feet of two inch main, 774 feet of four inch
23 main, and 4,049 feet of service.

24 . . .

25 . . .

1 **Q. 21 Why was the La Madre and Spring Falls project necessary?**

2 A. 21 The Company's plastic pipe inspection procedure requires replacement of all
3 7000/8000 pipe with wall thickness loss greater than or equal to 17%2 percent
4 of the facilities contemplated in the original installation work request. This
5 project had 7000/8000 pipe facilities that exceeded the aforementioned
6 threshold and was, therefore, necessary.

7 **Q. 22 What was the total cost of the La Madre and Spring Falls project?**

8 A. 22 As of November 30, 2025, the project costs for Phase One and Phase Two were
9 \$3,918,841 and \$4,575,195, respectively. Phase One was placed in service on
10 August 1, 2024, and Phase Two on June 25, 2024.

11 **NCDP 2021—CC-Spanish Hills**

12 **Q. 23 Please describe the Spanish Hills Project.**

13 A. 23 The Spanish Hills project (0021W3818375) involved a residential community
14 where the infrastructure was installed in 1992 and is located near the
15 intersection of Tropicana Avenue and Durango Drive in Las Vegas, Nevada. It
16 involved the replacement of 4,342 feet of four inch main, 4,752 feet of two inch
17 main, and 5,065 feet of one inch service.

18 **Q. 24 Why was the Spanish Hills project necessary?**

19 A. 24 The Company's plastic pipe inspection procedure required replacement of all
20 7000/8000 pipe with wall thickness loss of 17 percent of the facilities
21 contemplated in the original installation work request. This project had
22 7000/8000 pipe facilities that exceeded the aforementioned threshold and was,
23 therefore, necessary.

24 . . .

25 . . .

1 **Q. 25 What was the total cost of the Spanish Hills project?**

2 A. 25 The project cost as of November 30, 2025 was \$4,607,376. The project was
3 placed in service on October 14, 2024.

4 **NCDP-FTIR – CLV-South Shores #3**

5 **Q. 26 Please describe the South Shore #3 Project.**

6 A. 26 The South Shores #3 (0021W4890588) involved a residential community with
7 pipe installed in 1989 and is located near the intersection of Lake Mead and
8 Rampart Boulevard in Las Vegas, Nevada. It involved the replacement of 3,548
9 feet of two inch main and 3,898 feet of service.

10 **Q. 27 Why was the South Shore # 3 necessary?**

11 A. 27 The Company's plastic pipe inspection procedure requires replacement of all
12 7000/8000 pipe with wall thickness loss of 17 percent of the facilities
13 contemplated in the original installation work request. This project had
14 7000/8000 pipe facilities that exceeded the aforementioned threshold and was,
15 therefore, necessary.

16 **Q. 28 What was the total cost of the South Shore #3 project?**

17 A. 28 The project cost as of November 30, 2025 was \$1,582,974. The project was
18 placed in service on November 25, 2025.

19 **FRANCHISE PROJECTS**

20 **Q. 29 Please provide an overview of the need for the franchise replacement**
21 **projects.**

22 A. 29 Franchise projects are driven by agreements between the Company and
23 municipalities that grant Southwest Gas the right to install, operate, and maintain
24 facilities within public rights-of-way. When no prior rights exist, Southwest Gas
25 is obligated to relocate its infrastructure to accommodate municipal or entity-

1 driven construction projects, such as road widening or utility improvements.
2 These relocations ensure compliance with local regulations and maintain
3 uninterrupted service delivery while supporting community development
4 initiatives.

5 **Q. 30 How many franchise projects incurred costs of \$1 million or greater?**

6 A. 30 There are three franchise projects with costs incurred equal to or greater than
7 \$1 million that are discussed below.

8 **FN-CLV Storm Drain Various Relocations Project**

9 **Q. 31 Please describe the FN-City of Las Vegas (CLV) Storm Drain Various**
10 **Relocations project.**

11 A. 31 The FN-CLV Storm Drain Project (0021W4802913) is part of a broader storm
12 drain improvement initiative on Maryland Parkway—extending from Sahara
13 Avenue to the Las Vegas Medical District where the City of Las Vegas installed
14 storm drains along Wellness Way. The planned 36-inch and 48-inch storm
15 drains along Wellness Way, from Tonopah Drive to Shadow Lane, conflicted
16 with existing two-inch PE and four-inch steel mains. Likewise, a proposed 24-
17 inch storm drain along Carson Avenue, from 7th Street to Maryland Parkway,
18 conflicted with existing two-inch steel and two-inch PE mains. To resolve these
19 conflicts, Southwest Gas replaced 28 feet of four-inch PE8400, 202 feet of four-
20 inch steel, 642 feet of two-inch PE8400, and 851 feet of two-inch steel mains in
21 place of 30 feet of four-inch PE, 174 feet of four-inch steel, 608 feet of two-inch
22 PE, and 849 feet of two-inch steel mains.

23 **Q. 32 Was the FN-CLV Storm Drain Various Relocations necessary?**

24 A. 32 Yes, Southwest Gas resolved six conflicts where no prior rights existed, requiring
25 relocation of facilities to accommodate the City's storm drain construction.

1 **Q. 33 What was the total cost of the FN-CLV Storm Drain Various Relocations**
2 **project?**

3 A. 33 The project cost as of November 30, 2025 was \$1,259,322. The project was
4 placed in service on September 11, 2025.

5 **F-CLV Meadow-Charleston & Essex to Lindell SD Replacement**

6 **Q. 34 Please describe the F-CLV Meadow-Charleston & Essex to Lindell Storm**
7 **Drain Replacement project.**

8 A. 34 The Charleston Storm Drain Project (0021W4385668) is where the City of Las
9 Vegas planned to install a new storm drain along Charleston Boulevard from
10 Lindell Road to Essex Drive. This installation conflicted with an existing four-
11 inch main PE gas line. As part of this project, Southwest Gas abandoned 1,885
12 feet of four-inch PE, 12 feet of six-inch PE, 133 feet of two-inch PE, 71 feet of
13 one-inch PE, and 256 feet of ½-inch PE service; and, installed 12 feet of six-inch
14 PE8400, 1,872 feet of four-inch PE8400, 117 feet of two-inch PE8400, and 91
15 feet of one-inch PE8400 service.

16 **Q. 35 Was the F-CLV Meadow-Charleston & Essex to Lindell Storm Drain**
17 **Replacement project necessary?**

18 A. 35 Yes, the project was necessary. The majority of the facilities requiring relocation
19 were located within Charleston Boulevard, where Southwest Gas holds
20 established prior rights. Accordingly, the City of Las Vegas assumed financial
21 responsibility for the relocation work performed within that corridor. A limited
22 portion of the project extended outside of Charleston Boulevard into an area
23 where Southwest Gas did not possess prior rights. For that segment of the work,
24 Southwest Gas was responsible for the associated relocation costs.

25

1 **Q. 36 What was the total cost of the F-CLV Meadow-Charleston & Essex to**
2 **Lindell SD Replacement project?**

3 A. 36 The project cost that the Company incurred as of November 30, 2025 was
4 \$1,480,376. The project was placed in service on November 6, 2024.

5 **F-CLV Charleston Storm Drain – Fremont to Maryland**

6 **Q. 37 Please describe the F-CLV Charleston Storm Drain – Fremont to Maryland**
7 **replacement project?**

8 A. 37 The Charleston Storm Drain – Fremont to Maryland (0021W3937174) project is
9 a City of Las Vegas initiative that includes regional storm drain improvements
10 along Charleston Boulevard, Fremont Street, Maryland Parkway, and
11 surrounding side streets. To accommodate the proposed storm drain
12 installations, the City requested Southwest Gas to relocate its natural gas
13 facilities where conflicts exist. Approximately 586 feet of two-inch PE and 471
14 feet of two-inch steel mains were abandoned, while approximately 776 feet of
15 two-inch PE and 324 feet of two-inch steel mains were installed in the new
16 alignment.

17 **Q. 38 Was the F-CLV Charleston Storm Drain – Fremont to Maryland project**
18 **necessary?**

19 A. 38 Yes, Southwest Gas resolved eleven conflicts where no prior rights existed,
20 requiring relocation of facilities to accommodate the city's storm drain
21 construction.

22 **Q. 39 What was the total cost of the F-CLV Charleston Storm Drain – Fremont to**
23 **Maryland replacement project?**

24 A. 39 The project cost as of November 30, 2025 was \$1,232,494. The project was
25 placed in service on December 21, 2023.

1 **DISTRIBUTION INTEGRITY MANAGEMENT PROGRAM**

2 **Q. 40 Please provide an overview of the Company's Distribution Integrity**
3 **Management Program (DIMP).**

4 **A. 40** DIMP is a risk-based process designed to gather and evaluate information about
5 the Company's distribution pipelines and to prioritize and implement actions
6 based on that information to maintain the safety and integrity of the Company's
7 distribution system. One of the key elements of DIMP is evaluation and ranking
8 of risk. The objective of risk evaluation and ranking is to provide an ongoing
9 process for understanding what factors affect the risk posed by threats to the
10 distribution pipelines and their relative importance.

11 The primary objectives of the evaluation and ranking of distribution pipeline
12 risk include: (1) consider each applicable current and potential threat; (2)
13 consider the likelihood of failure associated with each threat; (3) consider the
14 potential consequences of such failure; (4) estimate and rank the risks (i.e.,
15 determine the relative importance) posed to the pipelines; and (5) consider the
16 relevance of threats in one location to other areas. The Company implements
17 risk management measures and techniques to reduce the likelihood and/or
18 alleviate the consequences of a failure. Appropriate actions depend on the type
19 of threat, magnitude of risk and viability of the actions in effectively allocating
20 resources to manage the relevant risk factors. The DIMP process enables the
21 Company to effectively identify and prioritize the system segments most in need
22 of replacement.

23 . . .

24 . . .

25

1 Q. 41 How many DIMP replacement projects incurred costs of \$1 million or
2 greater?

3 A. 41 The three DIMP replacement projects with a cost incurred equal to or greater
4 than \$1 million are discussed below.

5 **2023 PRA-CC-Valley View & Diablo**

6 Q. 42 Please describe the 2023 PRA-Clark County (CC)-Valley View & Diablo
7 project.

8 A. 42 The 2023 PRA-CC-Valley View & Diablo project (0021W4523940,) involved a
9 residential community with natural gas pipelines installed in 1989 and located
10 near the intersection of Valley View Boulevard and Russell Road in Las Vegas,
11 Nevada. This project involved the replacement of 5,384 feet of four-inch PE
12 main, 1,607 feet of two-inch main, and 759 feet of PE service.

13 Q. 43 Why was the 2023 PRA-CC-Valley View & Diablo project necessary?

14 A. 43 Under the Company's DIMP risk assessment methodology in place at the time,
15 any pipeline segment scoring 5.5 or higher required replacement. Because the
16 2023 PRA-CC – Valley View & Diablo segment received a score of 6.1, it met
17 the criteria for replacement.

18 Q. 44 What was the total cost of the Crystal Springs project?

19 A. 44 The project cost as of November 30, 2025, was \$6,619,772. The project was
20 placed in service on June 6, 2024.

21 **PRA-CLV-2023-New West**

22 Q. 45 Please describe the PRA-CLV-2023-New West project.

23 A. 45 The PRA-CLV-2023-New West project (0021W4528184) involved a residential
24 community with natural gas pipelines installed in 1979 and located near the
25

1 intersection of Smoke Ranch Road and Michael Way in Las Vegas, Nevada. It
2 involved the replacement of 21 feet of four-inch PE main, 3,603 feet of two-inch
3 main PE, 1,607 feet of two-inch main, and 3,783 feet of PE service.

4 **Q. 46 Why was the PRA-CLV-2023-New West project necessary?**

5 A. 46 Under the Company's DIMP risk assessment methodology in place at the time,
6 any pipeline segment scoring 5.5 or higher required replacement. Because the
7 2023 PRA-CC-Valley View & Diablo project received a score of 5.5, it met the
8 criteria for replacement.

9 **Q. 47 What was the total cost of the PRA-CLV-2023-New West project?**

10 A. 47 The project cost as of November 30, 2025 was \$2,645,417. The project was
11 placed in service on January 16, 2024.

12 **2023 PRA-CLV-Cheyenne & Mirama**

13 **Q. 48 Please describe the 2023 PRA-CLV-Cheyenne & Mirama project.**

14 A. 48 The 2023 PRA-CLV-Cheyenne & Mirama (0021W4513962, 0021S4513962)
15 project involved a residential community where natural gas pipelines were
16 installed in 1984 and located near the intersection of Cheyenne Avenue and
17 Jones Boulevard in Las Vegas, Nevada. This project involved the replacement
18 of 660 feet of four-inch PE main, 1,741 feet of two-inch PE main, 1,607 feet of
19 two-inch main, and 1,683 feet of PE service.

20 **Q. 49 Why was the 2023 PRA-CLV-Cheyenne & Mirama project necessary?**

21 A. 49 Under the Company's DIMP risk assessment methodology in place at the time,
22 any pipeline segment scoring 5.5 or higher required replacement. Because the
23 2023 PRA-CLV-Cheyenne & Mirama project received a score of 5.5, it met the
24 criteria for replacement.

25

1 Q. 50 What was the total cost of the 2023 PRA-CLV-Cheyenne & Mirama project?

2 A. 50 The project cost as of November 30, 2025 was \$1,026,015. The project was
3 placed in service on January 3, 2024.

4 **New Business Infrastructure**

5 Q. 51 Please provide an overview of the new business infrastructure projects.

6 A. 51 Southwest Gas' new-business projects typically extend natural gas service to
7 residential, commercial, or master-planned developments through a structured
8 process. Southern Nevada integrates operational efficiency and plans for future
9 system requirements by conducting hydraulic gas modeling for proposed
10 new-business system additions. The model optimizes natural gas networks by
11 producing simulations that predict and mitigate operational challenges—such as
12 system flow and pressure behavior. The results provide the Southern Nevada
13 operations team decision support for planning, design, and assist with future
14 system operations and maintenance.

15 The sections below discuss one high-pressure new business system
16 project and one new business system improvement project, each with incurred
17 costs of \$1 million or greater.

18 Q. 52 Please describe the VTS Village 1 Upper Sonoran to Revere Infrastructure
19 project.

20 A. 52 As part of the Tule Springs Project discussed in the prepared direct testimony of
21 Company witness Thomas W. Cardin, the VTS Village 1 Upper Sonoran to
22 Revere Infrastructure (0021W4484599) project strengthens the natural gas
23 system and service in North Las Vegas by installing a new 16-inch high-pressure
24 steel main and a vaulted regulator station that decreases the natural gas
25

1 pressure from 720 psig to 55 psig for the local distribution system. The project
2 also extends the distribution system with 6-inch PE to support current loads and
3 future growth along the Tule Springs corridor. Mr. Cardin addresses the Tule
4 Springs Project that involves a joint trench with the VTS Phase 2 HP Distribution
5 as identified as workorder 0021W4748670.

6 **Q. 53 Why was the VTS Village 1 Upper Sonoran to Revere Infrastructure project**
7 **necessary?**

8 A. 53 Based on the new master planned community's projected 4,100 customers and
9 connected natural gas load, the existing Southern Nevada distribution pipe
10 system could not serve the project. If the development were added without the
11 approach main, then the existing system pressure would decrease and result in
12 the loss of current customers. The approach main is required to serve the new
13 community of Tule Springs.

14 **Q. 54 What was the total cost of the VTS Village 1 Upper Sonoran to Revere**
15 **Infrastructure project?**

16 A. 54 The project cost as of November 30, 2025 was \$2,585,694. The project was
17 placed in service on December 19, 2024.

18 **Q. 55 Please describe the NBSI-2020-4" PE Valley View project.**

19 A. 55 The NBSI-2020-4" PE Valley View (0021W3653963) project installed
20 approximately 2,664 feet of new 4-inch (PE) natural gas main along Valley View
21 Boulevard, from Spring Mountain Road to Viking Road in Las Vegas, Nevada,
22 crossing major intersections including Twain Avenue.

23 . . .

24 . . .

25

1 **Q. 56 Why was the NBSI-2020-4" PE Valley View project necessary?**

2 A. 56 This project was needed to increase pressure above 12 psig in order to use the
3 standard line sizing service table to eliminate individual engineering reviews of
4 new services line sizes. Consequently, the increase in system pressure will
5 allow Southwest Gas to deliver more reliable service to existing and future
6 customers. This system improvement project was necessary to maintain
7 adequate system pressures to the area and resulted in a pressure increase of
8 approximately 5.45 psig, raising the average system pressure from 8.88 psig to
9 approximately 14.33 psig in the surrounding area. This project was needed to
10 increase the distribution pressures above the minimum 12 psig required to
11 withstand an extreme heating design day and provide safe and reliable service
12 to existing and future customers.

13 **Q. 57 What was the total cost of the NBSI-2020-4" PE Valley View project?**

14 A. 57 The project cost as of November 30, 2025 was \$1,221,498. The project was
15 placed in service on August 10, 2024.

16 **EARLY VINTAGE PLASTIC PIPE (EVPP) REPLACEMENT**

17 **Q. 58 Please provide an overview of EVPP Replacement.**

18 A. 58 On March 8, 2022, the Commission issued an order in Docket No 21-08009
19 approving a stipulation between the Regulatory Operations Staff of the
20 Commission and Southwest Gas. The order includes a Commission directive
21 that required the Company to remove all known EVPP in Southern Nevada by
22 December 31, 2024, unless prevented by circumstances beyond the Company's
23
24
25

1 direct control which include, but are not limited to, labor shortages, permitting
2 delays, and force majeure events.⁶

3 **Q. 59 Has the Southern Nevada complied with the order?**

4 A. 59 Yes. As documented in Exhibit No.__(PDW-1), a total of 88 EVPP projects with
5 work orders exceeding \$100,000 were undertaken between December 2023
6 and November 2025. Of these, 44 work orders exceeded \$1 million.
7 Collectively, these activities resulted in the replacement of approximately 54
8 miles of EVPP infrastructure replacement across Southern Nevada, with an
9 aggregate capital expenditure of \$106,317,488.

10 **Q. 60 Did Southern Nevada have EVPP remaining beyond December 31, 2024?**

11 A. 60 Yes, in accordance with the aforementioned order, Southwest Gas has filed two
12 prior updates in Docket No. 21-08009 identifying EVPP mileage impacted by
13 extended permitting timelines and municipal construction restrictions related to
14 “no-cut” streets—conditions outside the Company’s direct control:

15 1. June 2024: Southwest Gas identified approximately 13.5 miles of EVPP
16 affected by extended permitting and municipal no-cut restrictions.

17 2. June 2025: Southwest Gas reported that, of the previously identified 13.5
18 miles, all but 7.8 miles had been replaced. This figure includes
19 approximately 3.9 miles of newly discovered EVPP not contemplated in
20 the original estimate.

21 In addition, Southwest Gas has approximately 2 miles remaining from the
22 original 13.5-mile scope that will carry into 2026. Of the previously identified 3.9
23 miles of “found” EVPP, all work has been completed.

24
25 ⁶ Commission’s March 8, 2022, Final Order in Docket No. 21-08009 at pages 5 and 6.

1 **IV. SOUTHERN NEVADA LAS VEGAS RADIO COMMUNICATION EQUIPMENT**

2 **Q. 61 Please describe the Southern Nevada Las Vegas Radio Communication**
3 **Equipment project.**

4 A. 61 The Southern Nevada Las Vegas Radio Communication Equipment project was
5 part of a companywide radio replacement project. The old system was an
6 unsecure analog radio system that was no longer serviceable due to
7 manufacturer limitations. The new secure digital radio equipment helps to
8 increase employee safety and customer service through a reliable
9 communications network that increases communication efficiency and
10 emergency operations support capabilities. The new equipment was purchased
11 and installed for each emergency response vehicle in Southern Nevada;
12 handheld portable radios were purchased for use on-site at an emergency, radio
13 tower equipment was upgraded, and new Federal Communication Commission
14 (FCC) licenses were purchased. This equipment was placed in service
15 December 1, 2024. The prepared direct testimony of Company witness Keith A.
16 Bacon explains this project in more detail.

17 **V. DETERMINATION OF PRUDENCY FOR THE MESQUITE EXPANSION**
18 **PROJECT**

19 **Q. 62 Please provide an overview of the Mesquite Expansion Project.**

20 A. 62 In Docket No. 17-11008, the Commission authorized the expansion of natural
21 gas infrastructure to Mesquite, Nevada (The Mesquite Expansion Project).
22 Specifically, the Commission approved a 17.1-mile steel approach main and
23
24
25

1 19.8 miles of PE pipe for the interior distribution backbone.⁷ My prepared direct
2 testimony discusses two separate work orders for Mesquite-related projects that
3 have been placed in service since the certification period in the Company's last
4 general rate case proceeding. One work order is consistent with the expansion
5 project contemplated in Docket No. 17-11008³ (Mesquite Expansion Project),
6 East I-15 Crossing.

7 **1. SB 151 Mesquite**

8 **Q. 63 Please describe the Mesquite SB 151 project.**

9 A. 63 There is one project pertaining to the Mesquite Expansion Project as described
10 below.

11 SB 151 Mesquite: East I-15 Crossing - The project (0020W3955368) involved
12 the installation of approximately 1,050 feet of 6-inch PE main located at the
13 Interstate 15 crossing between Pioneer Boulevard and Sandhill Boulevard in
14 Mesquite, Nevada.

15 **Q. 64 Why was the SB 151 Mesquite: East I-15 Crossing project necessary?**

16 A. 64 The Commission approved the Company's request to bring natural gas to the
17 City of Mesquite, which did not have natural gas service. The Mesquite East I-
18 15 crossing involved the installation of approximately 1,050 feet of 6-inch PE
19 main that delivers natural gas to the service lines that serve customers in
20 Mesquite.

21 **Q. 65 What was the total cost of the SB 151 Mesquite: East I-15 Crossing project?**

22
23
24 ⁷ Table 2 at page 24 of the Order issued May 30, 2018, identifies the segments of pipe approved. The
25 19.8 miles of PE includes the following segments: Approach Main & Tap – 14.3 miles, Approach Main –
2.8 miles, City Loop - 7.7 miles, MTCC – 2 miles, Business Loop – 2.4 miles, Sun City - 0.8 miles and
Existing/Growth – 6.9 miles.

1 A. 65 The total Mesquite East I-15 Crossing project cost as of November 30, 2025,
2 was \$1,580,049. In the Company's 2023 general rate case, approximately
3 \$502,706⁸ was placed into service. The remaining \$1,069,440, which is
4 reflected in this instant docket, is primarily related to pavement restoration and
5 traffic control expenditures.

6 **Q. 66 Is the Company seeking a determination of prudence for Mesquite-related**
7 **projects in this Application?**

8 A. 66 Yes. The Company is seeking a determination of prudence for the costs related
9 to the Mesquite East I-15 Crossing project.

10 **Q. 67 Please describe the requirements for seeking a determination of prudence**
11 **for Mesquite-related projects.**

12 A. 67 Pursuant to NAC 704.9757, a utility must seek a determination of prudence for
13 any infrastructure expansion activity previously approved by the Commission
14 which have been accounted for in an Infrastructure Expansion Rate and is
15 required to submit evidence in support of the recorded cost for each project
16 completed in Mesquite since the last general rate application filed. This
17 evidence should include invoices for each project, a copy of the work order, a
18 breakout of labor costs, and any other evidence that demonstrates prudence.

19 **Q. 68 Was this Mesquite-related project prudent?**

20 A. 68 Yes. This Mesquite-related project was proposed for inclusion into rate base
21 and general rates and was approved by the Commission in Docket No. 17-
22 11008. Accordingly, the Mesquite-related projects are prudent and should be
23 included in rate base and general rates.

24 _____
25 ⁸ Refer to the prepared testimony of Company witness Thomas W. Cardin in Docket No. 23-09012, page
31, lines 6-9.

1 | **Q. 69 Please describe the evidence the Company has submitted in this**
2 | **Application supporting the recorded costs for the Mesquite-related**
3 | **projects.**

4 | A. 69 Southwest Gas has compiled a package for the associated work order related
5 | to the approved Mesquite Expansion Project which include the following: (1) a
6 | copy of the work order with cost breakout by charge type, (2) a summary of all
7 | invoices by the six cost categories, as applicable, referred to in NAC 704.9757,
8 | and (3) a copy of each invoice. This information is included as Exhibit
9 | No.__(PDW-2) to my prepared direct testimony.

10 | **Q. 70 Does this conclude your prepared direct testimony?**

11 | A. 70 Yes.

12 |
13 |
14 |
15 |
16 |
17 |
18 |
19 |
20 |
21 |
22 |
23 |
24 |
25 |

SUMMARY OF QUALIFICATIONS PRESTON WEAKLEND

In 2005, I graduated from Arizona State University with a Bachelor of Science degree in Business Management. In 2014, I earned a Master of Business Administration from Grand Canyon University.

Before joining Southwest Gas, I began my natural gas career working for an underground pipeline contractor as a laborer, installing residential natural gas mains and service lines. My experience also included installing electrical conduit, performing boring operations, and contributing to a 16-inch steel pipeline project.

I started my career with Southwest Gas as an intern from 2003 to 2005 and was hired as an Operations Analyst in Phoenix, Arizona, in 2005. In this role, I contributed to the creation of three-year budget plans for multiple departments and was responsible for developing and tracking performance metrics and operational efficiencies for the Central Arizona Division. I was subsequently promoted to Human Resource Analyst I in 2007, Human Resource Analyst II in 2008, and Customer Service Supervisor in 2012. As a Customer Service Supervisor, I oversaw service and field technicians responsible for emergency response, service establishment, maintenance orders, and incident response. I also implemented the incident management system and helped lead outage restoration efforts.

In 2014, I was promoted to Administration Superintendent, where I oversaw the division's Accounting, Facilities, Transportation, and Warehouse departments. I also managed the development and presentation of the monthly budget variance reporting and the division's three-year operating plan and operational metrics.

I was promoted to Manager of Operations Planning & Analysis in 2017 and later to Senior Manager of Operations Planning & Analysis in 2019. In these roles, I oversaw

and participated in company-wide initiative planning and implementation; developed operational metrics; represented the Company to external agencies and industry associations; improved compliance activities; served as a liaison between corporate departments and operating divisions; recommended actions to senior leadership to support continuous improvement; and implemented best practices across operations.

In 2022, I was promoted to Director of District Operations in the Southern Arizona Division, overseeing operations in Casa Grande, Globe, Graham County, Sierra Vista, and Yuma. I was also responsible for the division's monthly budget variance reporting and the development of its five-year financial plan.

Since 2024, I have served in my current role as Director of Gas Operations for the Southern Nevada Division. I am responsible for overseeing the operations and maintenance departments, including Bullhead City, Construction (Capital and O&M), and Administration.

I have actively participated in numerous industry organizations such as the Western Energy Institute and the American Gas Association (AGA). From 2018 to 2024, I served on AGA's Best Practices Steering Committee, including terms as co-chair and chair from 2023 to 2024. In this role, I helped drive improvements in national pipeline metric reporting and established a scalable committee structure designed to optimize member expertise and support equitable workload distribution.

**SOUTHWEST GAS CORPORATION
SOUTHERN NEVADA
CAPITAL INVESTMENT PROJECTS
CLOSED TO PLANT IN SERVICE DECEMBER 2023 - NOVEMBER 2025**

Line No.	Work Order Number	Work Order Description	Date First Transferred to Plant	Total Amount Excluding CIAC	CIAC	AFUDC	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
<u>Blanket Work Orders</u>							
1	0021CB030000	Bwo - New Meters		33,447,098	0	94,541	1
2	0021CB026000	BWO - NCDP PE Service Replc		32,932,390	0	91,705	2
3	0021CB010000	Bwo - New Mains		25,152,912	(51,219)	70,607	3
4	0021CB041000	Bwo - New Service Subdivision		20,837,553	(15,940)	58,042	4
5	0021CB043000	Bwo - New Random Svc-Swg Trmch		16,750,800	(748,124)	45,618	5
6	0021CB025000	Bwo - Replc Services		16,440,549	(5,399)	56,206	6
7	0021CB015000	Bwo - Replc Mains		9,741,986	(21,019)	33,832	7
8	0021CB042000	Bwo - New Service Commercial		6,706,029	(158,381)	20,814	8
9	0021CB035000	Bwo - Replc Meters		3,277,412	0	9,122	9
10	0021CB013000	Bwo - Franchise Replc Main		2,671,131	(26,417)	7,399	10
11	0020CB041000	Bwo - New Service Subdivision		1,554,122	0	4,353	11
12	0021CB025002	Bwo - Pvc Service Replacements		1,004,567	0	2,736	12
13	0020CB043000	Bwo - New Random Svc-Swg Trmch		396,217	(3,386)	1,099	13
14	0021CB025120	BWO - COYL		324,777	0	1,121	14
15	0021CB045000	Bwo - New Service Multifamily		294,969	0	831	15
16	0020CB030000	Bwo - New Meters		252,475	0	705	16
17	0021CB016000	BWO - NCDP PE Main Replc		232,038	0	653	17
18	0020CB010000	Bwo - New Mains		176,357	0	474	18
19	0021CB044000	Bwo-New Random Svc-Cust Trench		166,821	(42,019)	486	19
20	0021CB023000	Bwo - Franchise Replc Service		108,733	0	296	20
	Subtotal			172,468,935	(1,071,904)	500,639	
<u>Early Vintage Plastic Pipe (EVPP)</u>							
21	0021W3215775	EVPP-REPL- CC- ROBINDALE RD. &	Mar-24	5,759,809	0	39,263	21
22	0021W3753761	EVPP-REPL-CLV-DECATUR AND LORN	Jul-24	4,368,852	0	124,598	22
23	0021W5026836	EVPP-COH-BUTCH CASSIDY & CHERR	Nov-25	3,316,494	0	20,076	23
24	0021W3375040	EVPP-2022-CNLV- MITCHELL AND W	May-24	3,277,698	0	18,785	24
25	0021W3999408	EVPP REPLACEMENT-COH LAKE MEAD	Jan-24	3,044,366	0	19,940	25
26	0021W4345985	EVPP REPLACEMENT-CC-WESTWOOD A	May-24	2,729,345	0	48,947	26
27	0021W3995986	EVPP-COH-NDOT-ARROWHEAD TRAIL	Nov-25	2,639,839	0	63,674	27
28	0021W3736250	EVPP REPLACEMENT-COH-LAKE MEAD	Jun-24	2,438,204	0	20,012	28
29	0021W4541165	AREA 16 - CC - EVPP REPLACEMEN	Nov-24	2,362,649	0	17,856	29
30	0021W3997028	EVPP REPLACEMENT-COH-CALICO RI	Mar-24	2,332,842	0	14,299	30
31	0021W3875691	EVPP-COH-NDOT-TAYLOR & LAKE ME	Dec-24	2,298,589	0	25,251	31
32	0021W4030639	EVPP-CC-LAMB AND VEGAS VALLEY	Dec-23	2,280,047	0	35,282	32
33	0021W4013982	EVPP REPLACEMENT-COH LAKE MEAD	Mar-24	2,269,698	0	23,721	33
34	0021W4010419	EVPP-COH-NDOT-ALTA VISTA MHP	Jan-25	2,259,295	0	12,144	34
35	0021W3999410	EVPP REPLACEMENT-CC-HOLIDAY ES	Mar-24	2,181,557	0	7,829	35
36	0021W3713268	EVPP-REPL-CC-NDOT-E LAKE MEAD	May-25	2,149,666	0	20,966	36
37	0021W4146492	EVPP-CLV-ST LOUIS AND EASTERN	May-25	2,145,108	0	34,723	37
38	0021W4028556	EVPP- COH- LAKE MEAD AND OLSEN	Aug-25	2,112,197	0	50,934	38
39	0021W4150831	EVPP 2021-CC-DESERT INN AND SA	Jun-24	2,076,168	0	19,159	39
40	0021W4004399	EVPP-COH-WHITNEY RANCH & IRONB	Jan-24	2,030,818	0	11,395	40
41	0021W4691465	EVPP-CNLV-CARROLL & CAREY	Nov-24	2,005,710	0	16,327	41
42	0021W4417610	EVPP -COH-ATHENS AND EMDEN PHA	Dec-24	1,942,604	0	50,355	42
43	0021W3710075	EVPP-CC-CLV-NDOTLAKE MEAD & DO	Apr-25	1,843,145	0	18,119	43
44	0021W4747616	2024-EVPP-COH-LEGACY LEGENDS P	Jun-25	1,765,748	0	12,327	44
45	0021W4604816	EVPP-COH-MAGIC AND COLT - PH 2	Sep-24	1,730,887	0	10,131	45
46	0021W4547191	EVPP-CC-PAYSON AND DOLLY	Jun-24	1,624,720	0	1,105	46
47	0021W4435411	AREA 27 - ISOLATED EVPP	Oct-24	1,608,264	0	14,875	47
48	0021W4877646	EVPP-CC-LEWIS HOMES CRAIG ESTA	Oct-24	1,486,056	0	4,656	48
49	0021W4679301	AREA 34 - CC - EVPP REPLACEMEN	Jun-25	1,450,640	0	8,851	49
50	0021W4011526	EVPP-CLV-KINKENON AND ROCKAWAY	Oct-25	1,339,348	0	47,281	50
51	0021W4828225	EVPP-COH-SKY MOUNTAIN & FRANCI	Jan-25	1,292,835	0	3,767	51
52	0021W4051470	EVPP-NDOT-CC-ACE VILLAGE & CAN	Jul-24	1,278,392	0	6,300	52
53	0021W4514466	AREA 1 - ISOLATED EVPP	Dec-24	1,254,711	0	4,526	53
54	0021W3326209	EVPP-REPL-CC-NDOT-LEWIS HOMES	Aug-24	1,237,320	0	5,815	54
55	0021W4902590	EVPP-COH - PACIFIC AVE & DELAM	Jun-25	1,191,685	0	2,261	55
56	0021W3797053	EVPP-COH-NDOT-LAKE MEAD AND IV	Jan-25	1,157,021	0	8,806	56
57	0021W4073681	EVPP-CNLV-CARTIER & WEBSTER	Sep-24	1,139,165	0	9,961	57
58	0021W4449701	EVPP-SANDWEDGE AND BIRDIE PHAS	Dec-23	1,130,775	0	2,281	58
59	0021W4084808	EVPP-CC-SOMBRERO DR & CAMELBAC	Oct-24	1,112,217	0	10,626	59
60	0021W4001363	EVPP-CLV-CC-EUGENE & DECATUR	Dec-24	1,094,010	0	8,465	60
61	0021W4117316	EVPP-COH-PUEBLO & APACHE	Mar-25	1,016,537	0	8,423	61
62	0021W3585913	GIR-EVPP-CLV-BONANZA AND DELAM	Apr-25	1,016,149	0	32,985	62
63	0021W4547721	AREA 43 - ISOLATED EVPP REPLAC	Jul-25	1,013,956	0	4,246	63
64	0021W3812535	COH-PARK AND FIR EVPP REPLACEM	Feb-24	1,005,340	0	2,445	64
65	0021W3985898	EVPP-CNLV-LAKE MEAD BLVD IMPRO	Jul-23	989,932	0	707	65
66	0021W3145047	EVPP -CLV JUDY RICH TR 1&2	Jun-24	941,670	0	12,939	66

**SOUTHWEST GAS CORPORATION
SOUTHERN NEVADA
CAPITAL INVESTMENT PROJECTS
CLOSED TO PLANT IN SERVICE DECEMBER 2023 - NOVEMBER 2025**

Line No.	Work Order Number (a)	Work Order Description (b)	Date First Transferred to Plant (c)	Total Amount Excluding CIAC (d)	CIAC (e)	AFUDC (f)	Line No.
67	0021W3982295	EVPP-CC-CLV-WESTWIND & CHARLES	Jan-25	821,170	0	2,621	67
68	0021W4543417	EVPP-CC-TARA HILLS APARTMENTS	May-24	793,148	0	2,162	68
69	0021W4544377	AREA 32 - ISOLATED EVPP REPLAC	Jun-24	748,962	0	1,021	69
70	0021W4923968	EVPP-COH-NORMANDY & SEINE	Apr-25	684,674	0	1,501	70
71	0021W4578404	EVPP-NDOT-COH-PROFESSIONAL & I	Oct-24	684,131	0	1,132	71
72	0021W3993699	EVPP-CLV-CHARLESTON HEIGHTS PH	Sep-23	652,976	0	465	72
73	0021W3818422	EVPP REPLACEMENT 2020- CC - BL	Nov-23	607,107	0	888	73
74	0021W3670965	EVPP-NDOT-CLV-CNLV-CRAIG RD &	Oct-24	575,899	0	3,437	74
75	0021W4446063	AREA 49- ISOLATED EVPP	Sep-24	548,832	0	2,436	75
76	0021W4011887	EVPP-COH-WHITNEY RANCH & RISIN	Nov-23	548,089	0	661	76
77	0021W4084585	EVPP-CLV-21ST ST & KIRK AVE	Jan-24	539,302	0	2,042	77
78	0021W4544613	AREA 33 - ISOLATED EVPP REPLAC	Jan-25	515,789	0	2,004	78
79	0021W4261867	EVPP- GREGORY AND LAKE MEAD	Apr-24	511,997	0	1,076	79
80	0021W4429545	EVPP-COH-PACIFIC & FAIRWAY	Sep-24	506,279	0	6,931	80
81	0021W4011547	EVPP-COH-MAGIC AND COLT - PH 1	Apr-24	486,998	0	4,600	81
82	0021W4544781	AREA 42 - ISOLATED EVPP REPLAC	Oct-24	461,229	0	5,428	82
83	0021W4515866	AREA 41 - ISOLATED EVPP	May-24	447,046	0	1,016	83
84	0021W3994379	EVPP CLV-NDOT-BONANZA RD & MAI	Jan-25	433,237	0	11,891	84
85	0021W4074168	EVPP-NDOT-CC-BLAMANS TRAILER P	Oct-24	432,823	0	2,956	85
86	0021W4564650	EVPP-NCDP-FTIR-CNLV-RENADA CIR	Aug-24	430,783	0	966	86
87	0021W4530200	AREA 18 - ISOLATED EVPP REPLAC	Mar-25	427,892	0	2,246	87
88	0021W4546286	AREA 55 - EVPP REPLACEMENT	May-25	420,548	0	3,984	88
89	0021W3060311	EVPP-COH-NAVARRE & LA PRESA PH	Oct-23	417,465	0	1,152	89
90	0021W4082655	EVPP REPLACEMENT-CLV-LAS VEGAS	Feb-25	407,458	0	10,506	90
91	0021W4304881	EVPP-CC-TOMIYASU LN	Dec-24	384,948	0	1,496	91
92	0021W3332830	EVPP-CC-TROPICANA AVE, MARYLAN	May-24	374,634	0	6,319	92
93	0021W4693020	AREA 53 - ISOLATED EVPP REPLAC	Sep-24	342,238	0	825	93
94	0021W3792006	EVPP-CLV-CHARLESTON HEIGHTS PH	May-23	317,640	0	1,821	94
95	0021W4543565	AREA 28 - ISOLATED EVPP REPLAC	Oct-24	314,153	0	459	95
96	0021W4235607	EVPP-SI-CLV-SOUTH ADDITION OFF	Apr-25	312,736	0	4,267	96
97	0021W3995781	EVPP-COH-UPRR-ARROWHEAD TRAIL	Sep-25	303,930	0	5,460	97
98	0021W4543404	AREA 22 - ISOLATED EVPP REPLAC	Jul-25	300,406	0	3,796	98
99	0021W4531382	EVPP-CC-BOULDER HWY & DESERT I	Sep-25	287,124	0	5,267	99
100	0021W4429820	EVPP-CC-HELM & SURRY	May-24	240,509	0	515	100
101	0021W4544837	AREA #26 - CC - ISOLATED EVPP	Jan-25	213,561	0	3,118	101
102	0021S3710075	EVPP-CC-CLV-NDOTLAKE MEAD & DO	Dec-24	195,946	0	552	102
103	0021W4004401	EVPP-COH-PALM VILLAS APTS REPL	Oct-23	181,181	0	1,454	103
104	0021W4068265	EVPP REPLACEMENT-CC-EDNA AND J	Nov-24	176,514	0	807	104
105	0021W4192158	AREA 19-CC-ISOLATED EVPP	Oct-25	165,117	0	1,707	105
106	0021W4547484	AREA 50 - ISOLATED EVPP REPLAC	Feb-25	146,462	0	1,572	106
107	0021W3337535	EVPP-CC-NELLIS PLAZA	Jul-24	109,181	0	1,541	107
108	0021S3215775	EVPP-REPL- CC- ROBINDALE RD. &	Dec-23	105,293	0	278	108
	Subtotal			106,317,488	0	1,051,810	
<u>NCDP & PRA</u>							
109	0021W4523940	2023 PRA-CC-VALLEY VIEW & DIAB	Jun-24	6,619,772	0	39,530	109
110	0021W3818375	NCDP-2021-CC-SPANISH HILLS	Oct-24	4,607,376	0	68,941	110
111	0021W4547547	NCDP-FTIR-CNLV-LA MADRE & SPRI	Jun-24	4,575,195	0	10,387	111
112	0021W4491965	NCDP-FTIR-CNLV-LA MADRE & SPRI	Jul-24	3,918,841	0	12,240	112
113	0021W4528184	PRA-CLV-2023-NEW WEST	Dec-23	2,645,417	0	29,806	113
114	0021W4890588	NCDP-FTIR-CLV-SOUTH SHORES #3	Nov-25	1,582,974	0	30,034	114
115	0021W4513962	2023 PRA-CLV-CHEYENNE & MIRAMA	Dec-23	1,026,015	0	7,798	115
116	0021W4624075	NCDP-FTIR-CC-CRESTLOCK & DEWEY	Jun-24	857,074	0	2,292	116
117	0021W4624124	NCDP-FTIR-2024-COH-PARADISE HI	Apr-24	590,699	0	1,299	117
118	0021W4013649	NCDP 2021-FTIR-CLV CHARLESTON	Oct-23	570,357	0	261	118
119	0021W4718115	NCDP-FTIR-2024-CC-SHATZ ST & F	Oct-24	508,511	0	1,228	119
120	0021W4524016	2023-PRA-CC-SPRING MOUNTAIN & J	Dec-23	432,260	0	1,053	120
121	0021W4709427	NCDP-FTIR-2024-CLV-SAHARA VIST	Apr-24	367,425	0	198	121
122	0021W4670607	NCDP-SS-BC-INDUSTRIAL & WELLS	Oct-25	313,679	0	3,071	122
123	0021W4042904	NCDP-FTIR-CNLV-SIMMONS & TAHIT	Jul-23	172,161	0	156	123
124	0021W4615184	NCDP-FTIR-CLV-6900 W. SAHARA A	Nov-24	135,181	0	814	124
125	0021W4587435	2023-NCDP-CLV-DECATUR & O'BANN	Oct-23	122,605	0	31	125
	Subtotal			29,045,540	0	209,138	

**SOUTHWEST GAS CORPORATION
SOUTHERN NEVADA
CAPITAL INVESTMENT PROJECTS
CLOSED TO PLANT IN SERVICE DECEMBER 2023 - NOVEMBER 2025**

Line No.	Work Order Number (a)	Work Order Description (b)	Date First Transferred to Plant (c)	Total Amount Excluding CIAC (d)	CIAC (e)	AFUDC (f)	Line No.
	<u>Remaining WOs</u>						
126	0021W4484599	VTS VILLAGE 1 UPPER SONORAN TO	Dec-24	2,585,694	0	9,661	126
127	0021W4385668	F-CLV MEADOW-CHARLESTON & ESSE	Nov-24	1,480,376	(235,456)	14,059	127
128	0021W4802913	FN-CLV STORM DRAIN VARIOUS REL	Mar-25	1,259,322	0	19,110	128
129	0021W3937174	F-CLV-CHARLESTON STORM DRAIN,	Dec-23	1,232,494	0	90,381	129
130	0021W3653963	NBSI - 2020 - 4" PE VALLEY VIE	Aug-24	1,221,498	0	27,410	130
131	0020W3955368	SB 151 MESQUITE: EAST I-15 CRO	Dec-22	1,069,440	0	0	131
132	0021W3603522	NBSI - 2020 - REPLACE 2" PE WI	Dec-24	974,212	0	32,653	132
133	0021W4554713	LEGACY AHD-CC-IDLEWOOD & LINCO	Oct-23	873,695	0	1,199	133
134	0021W4810466	NBSI - 4" - RANCHO AND MEADE	Apr-25	857,570	0	7,462	134
135	0021W4857784	BOULDER AND 95	Aug-25	850,341	0	8,658	135
136	0021W4776121	BOULDER HIGHWAY REIMAGINED REL	Nov-24	817,931	0	3,973	136
137	0020W4013270	S UNIT 12 APPROACH MAIN (DANCI	Jan-25	797,965	0	6,879	137
138	0021W4741987	VILLAGE 27 PARCEL "M" PHASE 1	Nov-24	794,334	0	7,157	138
139	0021W0006916	PROJECT #21-16-22	Oct-24	789,238	0	0	139
140	0021W4521695	ALTO & LAMB DISTRIBUTION CENTE	Jun-24	787,655	(70,023)	0	140
141	0021W4306573	2022-DPI-CLV-RANCHO TOWNE & CO	Dec-23	739,424	0	2,205	141
142	0021W0008630	North Ops - LED Lighting	Dec-24	732,974	0	0	142
143	0021W0009331	LIQUITECH FLUID APPLIED ROOFING RES	Mar-25	730,924	0	0	143
144	0021W5060141	2025 GREEN ILI DIG - WETLANDS	Oct-25	727,330	0	131	144
145	0021W0007990	Southern Nevada A/V Modernization	Nov-24	699,318	0	0	145
146	0021W0007360	SNV EWS Desktop Replacement Project	Dec-23	695,261	0	0	146
147	0021W4298026	NBSI - 2022 - 4" PE INSTALL -	Nov-24	651,414	0	1,248	147
148	0021W0006390	PROJECT #21-03-21	Jul-24	651,203	0	0	148
149	0021W4507741	NB- APPROACH-HP MAIN/APEX EAST	Jan-25	626,659	0	3,881	149
150	0021W4911385	SOLO MOUNTAIN PAD 7 16" MAIN	Dec-24	593,019	0	100	150
151	0021W4258594	S CADENCE N7 SUMMIT & FALLS AP	Dec-23	578,009	0	5,031	151
152	0021W0006632	PROJECT #21-06-22	Oct-24	577,390	0	0	152
153	0021W4830685	F-CC-MARYLAND BRT	Nov-25	572,579	0	12,029	153
154	0021W0008921	PROJECT #E21-04-23	Aug-25	571,951	0	0	154
155	0021W4469371	OTONOMUS PROJECT	Mar-25	570,139	0	36,025	155
156	0021W4846438	S ALIA AT SUNSTONE UNIT 1	Jun-25	566,791	0	4,615	156
157	0021W4507748	NB/MAIN/APEX SOLO MOUNTAIN 6"	Nov-25	558,604	0	33,945	157
158	0021W4469674	PICERNE AT QUARTERHORSE	Jul-23	545,574	0	30	158
159	0021W4484244	TENAYA AND FORD	Mar-25	538,928	(154,603)	1,619	159
160	0021W4612892	N. BELT ROAD PROLOGIS	Feb-24	535,461	(339,602)	1,227	160
161	0021W5036096	F-LAKE LAS VEGAS & STRADA DI V	Nov-25	532,502	0	3,452	161
162	0021W3260539	ISO 120 SPLIT AND IMPROVEMENTS	May-24	516,362	0	13,364	162
163	0021W3934383	NBSI-2021-MOP INCREASE-TENAYA	Apr-23	511,246	0	0	163
164	0021W4912385	NB/2024/MAIN INSTALL_SNWA XING	Jun-25	508,689	0	522	164
165	0021W4781136	NB/CNLV/SOLO MTN 8" RELO FOR P	Aug-25	504,375	0	3,904	165
166	0021W4742351	S VTS VILLAGE 1 PHASE 4	Jun-25	486,186	0	5,649	166
167	0021W4542461	NB/2023/6" MAIN INSTALL TO SHO	Jun-24	481,196	0	5,540	167
168	0021W0006948	ROW LRS 14690 - Nellis AFB Range Rd	Jan-25	477,370	0	0	168
169	0021W4724578	S VTS VILLAGE 1 PH3-PARCELS 1.	Jun-25	471,788	0	1,865	169
170	0021W4821828	CENTENNIAL TAP CONTROL VALVE R	Oct-25	458,906	0	5,152	170
171	0021W4490927	IDV DEVELOPMENT SERVICE, LLC M	Feb-24	450,228	0	394	171
172	0021W4387311	SI - REG STATION REPLACEMENT -	Nov-25	448,099	0	4,016	172
173	0021W4529758	ISO SPLITS OF 501 SUNSET & LAK	Sep-24	444,384	0	3,523	173
174	0021W4534275	LYRA AT SUNSTONE UNIT 1	Feb-24	444,011	0	3,119	174
175	0021W4751674	F-NDOT-4" STL REG. STATION REL	Oct-25	440,041	0	6,690	175
176	0021W4425958	THE FOOTHILLS AT MACDONALD HIG	Oct-25	439,213	(149,242)	88	176
177	0021W4703737	S - WEST LAKE MEAD HP - SCURRY	Feb-24	425,277	0	2,736	177
178	0021W4830433	LOSEE AER - HP INSTALL	May-25	424,935	0	2,380	178
179	0021W0008286	PROJECT #21-27-23	Oct-25	419,137	0	0	179
180	0021W4555715	SI-CP-CLV-INDUSTRIAL RD	Nov-24	416,759	0	11,820	180
181	0021W4512918	NBSI - COURIER/SUNSET/FOSTER R	Jan-24	415,615	0	1,480	181
182	0021W0006514	PROJECT #21-22-21	Feb-24	409,066	0	0	182
183	0021W4738966	CP-CLV- YALE ST AND IOWA AVE	Mar-25	407,855	0	215	183
184	0021W4702709	R GREYSTAR THE RESIDENCES AT T	Aug-24	406,523	0	746	184
185	0021W0006912	PROJECT #21-20-22	Aug-25	406,423	0	0	185
186	0021W4586449	NB/2023/MAIN INSTALL_HORSESHOE	Dec-23	397,652	0	1,969	186
187	0021W4212965	F-CLV-4" PE RELOCATION ON DEER	Oct-23	396,906	0	665	187
188	0021W4693798	S - CADENCE PARCELS 55-58 (PRE	Apr-24	396,883	0	746	188
189	0021W4689471	S - INSPIRADA POD 6-4 UNIT 2	Apr-24	394,899	0	801	189
190	0021W4581137	LONE MOUNTAIN AND ALLEN (THE M	Nov-24	394,202	0	1,886	190
191	0021W4381671	LAKE MEAD AND 8TH INDUSTRIAL P	Feb-25	388,593	(150,631)	226	191
192	0021W4650367	LVB & CHARTAN APARTMENTS	Aug-24	388,082	0	2,948	192
193	0021W0008998	South Ops - LED Lighting	Oct-24	386,549	0	0	193
194	0020W4538193	VISTA DEL LUNA PHASE 1	Dec-24	374,131	0	9,611	194
195	0021W4203543	NBSI-2021-6" PE- MEADOWS LANE	Apr-25	374,031	0	2,319	195

**SOUTHWEST GAS CORPORATION
SOUTHERN NEVADA
CAPITAL INVESTMENT PROJECTS
CLOSED TO PLANT IN SERVICE DECEMBER 2023 - NOVEMBER 2025**

Line No.	Work Order Number (a)	Work Order Description (b)	Date First Transferred to Plant (c)	Total Amount Excluding CIAC (d)	CIAC (e)	AFUDC (f)	Line No.
196	0021W3995930	S DRAGON ROCK-MACDONALD HIGHLA	Jun-25	373,497	(92,316)	1,691	196
197	0021W4507751	NB/REG STATION/APEX EAST SOLO	Nov-25	372,856	0	12,290	197
198	0021W4004427	RSI- 2022 - 4" REGUALTOR STATI	Apr-25	372,115	0	24,446	198
199	0021W4465329	AGATE AND CIMARRON	Feb-25	371,101	0	7,868	199
200	0021W4521286	NBSI - 2023 - 2" PE INSTALL -	Dec-24	369,842	0	4,858	200
201	0021W4693801	S - CADENCE PARCELS 55-58 (PRE	May-24	367,153	0	447	201
202	0021W4868132	OMP I-15 FREEWAY CENTER	Nov-24	365,026	(36,683)	51	202
203	0021W0007871	MC4 Radios Meter Reading Las Vegas	Dec-23	350,510	0	0	203
204	0021W4619605	F-CLV-FARM RD RELOCATIONS	Nov-24	349,392	0	6,004	204
205	0021W4507986	RAINBOW CANYON PARCELS N2 & N3	Jul-24	344,672	0	10,116	205
206	0021W4540388	AXEL AT SUNSTONE	Jun-24	340,989	0	12,484	206
207	0021W4619725	ELYSIAN AT BADURA	Nov-24	340,796	0	1,871	207
208	0021W4935855	MANZANO	Sep-25	339,213	0	1,921	208
209	0021W4813428	S VTS - VILLAGE 1 PARCEL 1.15	Apr-25	337,877	0	874	209
210	0021W4720251	F-COH- NEVADA STATE DR 4" PE R	Nov-24	333,577	0	2,373	210
211	0021W4555272	UPTON	Feb-24	330,935	0	463	211
212	0021W4386502	S VERONA	May-24	327,280	0	2,450	212
213	0021W4802808	NORTH 5TH & WASHBURN	Apr-25	326,900	(159,548)	226	213
214	0021W4839527	S LLV FALLS EAST - PIAZZA PARA	Aug-25	326,267	0	2,966	214
215	0021W3870228	NBSI - REG STATION - SUNSET &	Apr-24	325,381	0	12,369	215
216	0021W4638378	KYLE CANYON GATEWAY UNIT 3	Aug-24	324,553	0	271	216
217	0021W4174420	M GRAND CANYON APT HOMES; WARM	Oct-24	319,511	0	25,123	217
218	0021W4503271	V 27 PARK DRIFT TRAIL (SUNSET	Jan-25	313,983	0	969	218
219	0021W4737357	VILLAGE 27 PARCEL "M" PHASE 1	Aug-24	310,413	0	2,265	219
220	0021W4312508	I20 AT RAINBOW INDUSTRIAL PARK	May-25	309,709	0	21,106	220
221	0021W3942872	THE BEND	Apr-24	304,167	0	1,978	221
222	0021W4708216	S SKYE CANYON PARCEL 5.06 PHAS	Aug-25	301,394	0	1,365	222
223	0021W4752784	CADENCE NEIGHBORHOOD PAR 3-J3	Jul-24	299,991	0	175	223
224	0021W4641441	APPROACH MAIN SUMMERLIN VILLAG	Oct-24	296,170	0	3,043	224
225	0021W4534894	C STORE	Nov-23	293,790	0	12	225
226	0021W4761115	S VTS-VILLAGE 1 PARCEL 1.12	Jul-24	293,713	(91,578)	123	226
227	0021W4755776	CADENCE NEIGHBORHOOD 4 PARCEL	Aug-24	290,318	(28,408)	42	227
228	0021W4857600	S ASHLAND TAYLOR MORRISON	Jan-25	285,923	0	867	228
229	0021W0009409	SNV Facility Data Collection Table	May-25	284,980	0	0	229
230	0021W4387407	SI- REG STATION REPLACEMENT OU	Nov-25	281,700	0	142	230
231	0021W4457646	PARCEL 3 AT SUNSTONE PHASE 3	Feb-24	281,661	0	873	231
232	0021W0008455	SNV Desktop Replacement Project	Oct-25	279,698	0	0	232
233	0021W4397933	SKYE CANYON 5.01 AND 5.03 UNIT	Feb-24	274,625	0	932	233
234	0021W4961613	N5TH LINE STOPPER INSTALL	Nov-25	272,797	0	293	234
235	0021W4497391	V25 ADD17 AND V29 ADD3 - DIST	Jun-25	271,808	0	7,717	235
236	0021W4507657	PULTE SUMMERLIN 17A PARCEL D	May-24	267,973	0	4,786	236
237	0021W4935857	CASPIAN BAY	Oct-25	266,061	0	3,813	237
238	0021W4465493	F-CC-8" STL HP DROP SECTION	Jan-24	265,479	0	955	238
239	0021W5043616	SI-DEAN MARTIN AND STARR REG R	Nov-25	265,287	0	456	239
240	0021W4469798	BLM 270 PARCEL E PHASE 3	Jan-24	265,195	0	948	240
241	0021W4520570	VILLAGE 17A PARCEL C	Dec-23	265,166	0	1,127	241
242	0021W4552607	CADENCE VILLAGE C PARCEL 5C2 P	Nov-24	262,008	0	3,610	242
243	0021W4830984	S-ARETE -ALPINE RIDGE AND ROCK	Apr-25	255,940	0	502	243
244	0021W4367692	S TROPICAL & LOSEE - SINGLE FA	Dec-23	255,837	0	827	244
245	0020W4466508	DUSTY ROSE SUBDIVISION	Dec-23	255,810	0	11,684	245
246	0021W0009789	PROJECT #E21-01-24	Oct-25	255,685	0	0	246
247	0021W4739465	S VIA ALLEGRO & VIA NAPOLI, I	Feb-25	255,173	0	311	247
248	0021W4704265	S CADENCE N7 PHASE 3 BAY FALLS	May-24	254,694	0	437	248
249	0021W4356490	S KYLE CANYON GATEWAY UNIT 1	Dec-23	254,389	0	4,083	249
250	0021W4714220	M NEVADA HAND SOUTHERN PINES A	Aug-24	254,177	0	587	250
251	0021W4906223	S SUMMERLIN V29 PARCEL GH	Jun-25	253,144	0	1,655	251
252	0021W4353809	SI-CP-CLV-R18 RECTIFIER & GROU	Jun-24	251,940	0	6,965	252
253	0021W4175075	M CORE APTS; WARMINGTON HOMES	Dec-23	251,638	0	12,553	253
254	0021W4674546	S-CIMARRON-OQUENDO	Dec-23	249,349	0	281	254
255	0021W4755723	SI - REG STATION REPLACEMENT -	Nov-25	247,957	0	3,053	255
256	0021W4824275	S RAINBOW CANYON PARCEL N-1 UN	Dec-24	247,490	0	271	256
257	0021W4716126	S ANN & GRAND CANYON PHASE 1	Mar-25	247,323	0	4,050	257
258	0021W4282171	*KAM* DIST. MAINMINERS MESA I	Dec-23	245,344	0	5,673	258
259	0021W0006403	PROJECT #21-17-21	Oct-24	244,836	0	0	259
260	0021W4640500	RUSSELL & TOMSIK	Mar-24	243,221	0	679	260
261	0021W4714150	F-CCWRD DROP SECTIONS VARIOUS	Aug-24	243,183	0	634	261
262	0020W4376972	UNIT 20 - ROARING CREEK	Dec-24	242,528	0	1,573	262
263	0021W4813180	SI-CP-COH- VICTORY RD AND SILV	Nov-24	242,522	0	249	263
264	0021W4507465	PULTE SUMMERLIN VILLAGE 17A PA	Feb-24	236,885	0	552	264
265	0021W4811848	S RICHMAR & VALLEY VIEW	Jan-25	235,914	0	636	265
266	0021W4895560	S NOVI KB HOME HINSON AND RICH	Feb-25	235,821	0	189	266

**SOUTHWEST GAS CORPORATION
SOUTHERN NEVADA
CAPITAL INVESTMENT PROJECTS
CLOSED TO PLANT IN SERVICE DECEMBER 2023 - NOVEMBER 2025**

Line No.	Work Order Number (a)	Work Order Description (b)	Date First Transferred to Plant (c)	Total Amount Excluding CIAC (d)	CIAC (e)	AFUDC (f)	Line No.
267	0020W4845556	S SUN CITY MESQUITE - UNIT 23	Jan-25	232,884	0	1,017	267
268	0021W4519741	VILLAGE 17A PARCEL E	Dec-23	232,238	0	579	268
269	0021W4657631	ER AT SKYE HILLS	Feb-25	232,001	(56,866)	66	269
270	0021W4297068	DEAN MARTIN FRIAS PHASE 1	Feb-24	231,914	0	1,464	270
271	0021W4836471	M NV HAND ST JUDES RELOCATION	Jun-25	231,912	0	219	271
272	0021W4678201	S THE ESTATES @ FISHER	Apr-24	227,678	0	257	272
273	0021W4719375	S AMBRIDGE @ CADENCE PH 1	Aug-24	226,941	(9,999)	60	273
274	0021W4840802	S LLV FAR EAST- SORRENTO PHASE	Aug-25	223,156	0	3,045	274
275	0021W4701503	C TEC EQUIPMENT	Nov-24	222,232	(48,343)	246	275
276	0021W4637136	BADURA & CIMARRON INDUSTRIAL B	Jan-25	220,915	0	1,120	276
277	0021W4812845	S VTS - VILLAGE 1 PARCEL 1.16	Jun-25	220,198	0	420	277
278	0021W4880181	PULTE KL PHASE 2	Apr-25	219,830	0	249	278
279	0021W4716147	S LLV FAR EAST- SORRENTO PHASE	Jan-25	219,593	0	1,117	279
280	0021W4560117	F-CC- 6" STL HP RELOCATION - W	May-24	218,255	0	391	280
281	0021W4305534	LONE MOUNTAIN TAP - 6" CONTROL	Apr-24	217,741	0	11,319	281
282	0021W4146052	S TRESOR PHASE 4	Dec-23	217,573	0	1,221	282
283	0021W4724566	S JONES & ELKHORN PHASE 2	Aug-24	216,385	(2,788)	351	283
284	0021W4717694	S VTS-VILLAGE 1 PARCEL 1.11	Jul-24	215,301	0	424	284
285	0021W4563109	KYLE CANYON GATEWAY UNIT 3 APP	Apr-25	214,672	0	7,898	285
286	0021W4355681	S MERANTO/GRAND CANYON - PHASE	Apr-24	212,633	0	3,467	286
287	0021W4703743	S - WEST LAKE MEAD HP - SUNSET	Feb-24	209,629	0	1,176	287
288	0020W4793246	S SUNTERO SUBDIVISION PHASE 2	Jun-24	208,129	0	366	288
289	0020W4917381	S SUN CITY MESQUITE UNIT 24 (A	Apr-25	207,249	0	407	289
290	0021W4794280	S INSPIRADA POD 6-3 UNIT 2	Feb-25	205,583	0	253	290
291	0021W4805439	S INSPIRADA POD 6-2 PHASE 1	Jun-25	205,242	0	475	291
292	0021W4733249	WARM SPRINGS & TENAYA 1	Dec-23	202,409	0	16	292
293	0021W4754803	R SUMMERLIN VILLAGE 22 PARCEL	Aug-24	202,184	0	285	293
294	0021W4328318	S COPPER RANCH UNIT 2	Feb-24	200,800	0	974	294
295	0021W0006917	PROJECT #21-15-22	Mar-25	199,327	0	0	295
296	0021W0006611	PROJECT #21-05-22	Jun-24	198,913	0	0	296
297	0020W4380159	SUN CITY MESQUITE PARCELS 20-2	Nov-23	198,284	0	2,598	297
298	0021W4617170	WARM SPRINGS & TENAYA 1	May-24	196,986	(43,558)	353	298
299	0021W4401049	SUMMERLIN VILLAGE 25 PARCEL G	Jan-24	196,448	0	803	299
300	0021W4819917	S CHALLENGER & ISAAC NEWTON (P	May-25	194,885	0	754	300
301	0021W4811301	S SUNSET AND QUARTERHORSE KB	Sep-24	194,462	0	134	301
302	0021W4739087	S WARM SPRINGS MONTESSORI	Aug-24	193,181	0	42	302
303	0021W4465776	VTS VILLAGE 1 PARCEL 1.13	Jan-24	193,032	0	754	303
304	0021W4610447	CADENCE N7 PHASE 2 UNIT 2 (SUM	Jan-24	191,875	(16,048)	993	304
305	0021W4716376	LVPT WELLNESS CENTER	Oct-24	191,627	(42,624)	23	305
306	0021W0008010	PROJECT #E21-09-23	Oct-24	190,865	0	0	306
307	0021W0007799	PROJECT #21-16-23	Jul-24	190,628	0	0	307
308	0021W4465801	VTS VILLAGE 1 PARCEL 1.14	Dec-23	190,212	0	1,263	308
309	0021W0006908	PROJECT #21-23-23	Mar-24	190,093	0	0	309
310	0021W4624666	C 7126 MYERS ST - MYERS & ARBY	Dec-24	189,978	0	392	310
311	0021W4773461	S ARBY & CAMERON	Jun-24	189,058	0	179	311
312	0021W4822908	S SUMMERLIN KL PHASE 1/FAR HIL	Jan-25	186,224	0	847	312
313	0021W0008830	PROJECT #21-06-24	Feb-25	185,408	0	0	313
314	0021W4552212	NB/HP MAIN/CENTER STRIP	Apr-24	184,600	0	768	314
315	0021W0006635	PROJECT #21-04-22	Nov-25	183,077	0	0	315
316	0021W4814173	S ALTON, GRAND PARK AND FAR HI	Mar-25	181,751	0	756	316
317	0021W4873993	ALTON UNIT 2	Mar-25	180,942	0	1,156	317
318	0021W0006398	PROJECT #21-05-21	May-24	180,372	0	0	318
319	0021W0009551	PROJECT #21-01-25	Oct-25	179,689	0	0	319
320	0021W0009619	Video Surveillance Equip-NOPS	Jul-25	179,497	0	0	320
321	0021W4429227	HIGHLANDS RANCH UNIT 26 - PHAS	Feb-24	178,267	0	800	321
322	0021W4857512	S SUMMERLIN VILLAGE 22 PARCEL	May-25	178,030	0	488	322
323	0021W4928517	CALDWELL PARK UNIT 2	Jul-25	177,251	0	381	323
324	0021W4547917	SILVERADO COURT VIII	Jun-24	176,520	0	884	324
325	0021W4438579	SUMMERLIN VILLAGE 17A MASS GRA	Dec-23	176,493	0	4,433	325
326	0021W4814757	S INSPIRADA POD 6-2 PHASE 2	Apr-25	175,797	0	386	326
327	0021W4484155	CADENCE VILLAGE PARCEL 5-R3-47	Apr-24	173,892	(460)	1,062	327
328	0021W4561995	S IRON MOUNTAIN UNIT 2A	Nov-24	173,882	0	4,108	328
329	0021W4917399	S BRISCOE	Apr-25	171,556	0	684	329
330	0021W4688424	S - OLETA CONQUISTADOR	Apr-25	171,301	0	457	330
331	0021W4904831	8765 HICKAM AVENUE	Aug-25	169,157	0	321	331
332	0021W4335936	M SYNC APTS; WARMINGTON	Sep-25	168,831	0	9,418	332
333	0021W0008889	PROJECT #21-09-24	Jan-25	168,661	0	0	333
334	0021W4470568	VILLAGE 25 LAKE MEAD-SUNSET RU	Feb-24	168,033	0	2,193	334
335	0021W4814228	S SUMMERLIN V25 PARCEL M (EDGE	May-25	167,898	(3,244)	541	335
336	0021W4992687	SUMMERLIN VILLAGE 29 PARCEL J	Jun-25	167,871	0	350	336
337	0021W4725390	R OQUENDO PROJECT	Mar-25	166,528	0	405	337

**SOUTHWEST GAS CORPORATION
SOUTHERN NEVADA
CAPITAL INVESTMENT PROJECTS
CLOSED TO PLANT IN SERVICE DECEMBER 2023 - NOVEMBER 2025**

Line No.	Work Order Number	Work Order Description	Date First Transferred to Plant	Total Amount Excluding CIAC	CIAC	AFUDC	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
338	0021W4617819	INSPIRADA POD 6-4 UNIT 1	Dec-23	166,066	0	212	338
339	0021W4617308	NORTH PARK LIVING APTS, PHASE	Apr-25	165,107	0	865	339
340	0021W4353813	SI-CP-NDOT-CLV-R147 RECTIFIER	Dec-24	163,461	0	8,426	340
341	0021W4304224	S SWC CENTENNIAL PECOS	Feb-24	163,056	0	3,733	341
342	0021W4630388	KENSINGTON ESTATES (DECATUR&SH	Jul-24	163,047	0	574	342
343	0021W4731477	TS-2023-REG REPLACEMENT THOMAS	Jul-25	161,617	0	407	343
344	0021W4617860	ELYSIAN AT SKYE CANYON	Aug-24	161,499	0	1,286	344
345	0021W0006470	PROJECT #21-21-21	Jun-24	160,803	0	0	345
346	0021W4753374	C NEC SILVERADO RANCH & ROGERS	Sep-25	160,605	0	385	346
347	0021W4808639	S CIMARRON AND PATRICK PHASE 3	Sep-24	160,558	0	40	347
348	0021W5018954	R PYLE HAVEN II	Oct-25	159,043	(51,171)	44	348
349	0021W4902504	NB/2024/MAIN INSTALL_BIG APPLE	Mar-25	158,673	0	476	349
350	0021W4647893	POLARIS APARTMENTS	May-24	157,904	0	370	350
351	0021W4258414	M ROME SOUTH SENIORS P1	Aug-24	157,759	0	2,661	351
352	0021W0008204	PROJECT #E21-11-23	Aug-24	157,756	0	0	352
353	0021W4724852	S TROPICAL LOSEE TOWN HOMES PH	Sep-24	156,906	(3,517)	348	353
354	0021W4823203	S SUMMERLIN VILLAGE 29 PARCEL	Nov-24	156,647	0	328	354
355	0021W4503276	V 27 PHASE 2B INFRASTRUCTURE	Feb-25	156,040	0	1,674	355
356	0021W4808390	S DEAN MARTIN & LE BARON	Nov-24	155,941	0	921	356
357	0020W3816728	SB 151 MESQUITE TAP SITE INSTA	Dec-20	155,402	0	0	357
358	0021W4898233	SI-COH-97 LAKE MEAD ENCROACHME	May-25	155,379	0	870	358
359	0020W4964024	SUNTERO PHASE 3	Oct-25	153,071	0	1,002	359
360	0021W4903710	RAVEN @ RAINBOW MAIN EXTENSION	May-25	150,595	0	202	360
361	0021W4528554	ERHARDT ESTATES	Nov-23	148,609	77,064	4	361
362	0021W4497384	VILLAGE 29 (FAR HILLS) PARK D	Apr-24	144,807	0	3,665	362
363	0021W4355695	S MERANTO/GRAND CANYON - PHASE	Feb-25	143,760	0	7,445	363
364	0021W4414743	LOGISTICENTER AT I-215 NORTH	Sep-24	142,253	(27,977)	790	364
365	0020W4640601	PARCEL 21-B- SUN CITY MESQUITE	Feb-24	141,720	0	165	365
366	0021W4730201	ASCAYA CANYON	Aug-25	141,567	0	319	366
367	0021W0009552	PROJECT #E21-04-24	Aug-25	141,448	0	0	367
368	0021W4995832	CHELSEA COMMONS	Oct-25	141,428	0	32	368
369	0021W4387302	SI - REG STATION REPLACEMENT H	Apr-25	141,333	0	938	369
370	0021W4692384	OWENS & SANDY	Aug-24	140,934	(19,080)	122	370
371	0021W4512671	NBSI-2023-4" PE INSTALL-DEAN M	Apr-24	139,898	0	671	371
372	0021W4706269	C WARM SPRINGS INDUSTRIAL	Feb-25	139,779	0	1,333	372
373	0021W0006391	PROJECT #E21-02-21	Jan-25	139,283	0	0	373
374	0021W4546175	AREA 51 AREA 54 - ISOLATED EVP	Feb-25	139,281	0	1,652	374
375	0021W4405133	MERANTO/GRAND CANYON - PHASE 1	Mar-24	137,746	0	1,610	375
376	0021W4889778	CHELSEA	Jan-25	137,589	0	120	376
377	0021W4622506	CADENCE NEIGHBORHOOD 6 VILLAGE	Dec-23	137,212	0	321	377
378	0021W4688386	S - TEE PEE BIG PARK	Jun-25	137,009	0	1,141	378
379	0021W4629667	SKYE CANYON 5.06 PHASE 1	Apr-25	136,995	0	1,630	379
380	0021W4910890	S CALDWELL PARK UNIT 1	May-25	136,253	0	116	380
381	0021W0007895	PROJECT #21-19-23	Aug-24	135,777	0	0	381
382	0021W4620030	MAIN EXTENSION 8007 W SAHARA S	Dec-23	135,301	0	75	382
383	0021W4926881	CAPELLA AT SUNSTONE	May-25	133,902	0	223	383
384	0021W4398328	AGATE & DURANGO PHASE 1	Apr-25	133,417	0	673	384
385	0021W4774392	S BREVI UNIT 2	Jul-24	133,175	0	178	385
386	0021W4920017	CADENCE ACACIA	Jan-25	133,012	0	73	386
387	0021W4761943	S SKYE CANYON PARCEL 5.06 PHAS	Nov-25	132,728	0	3,269	387
388	0021W4460214	CADENCE NEIGHBORHOOD 5 VILLAGE	Nov-23	132,594	0	4	388
389	0021W4940912	TROPICAL & WALNUT	Apr-25	132,564	0	104	389
390	0021W0007683	PROJECT #21-12-23	Mar-24	132,387	0	0	390
391	0021W0007896	PROJECT #21-20-23	Aug-24	132,387	0	0	391
392	0021W4564668	ASHWOOD	Jun-24	131,996	0	1,862	392
393	0021W4936190	C PARK HIGHLANDS COMMERCIAL	Sep-25	131,921	0	2,943	393
394	0021W4617177	WARM SPRINGS & TENAYA 2	Jun-24	131,841	(20,200)	225	394
395	0021W0009547	PROJECT #E21-03-24	Jul-25	130,406	0	0	395
396	0021W4588428	RUSSEL TENAYA PARCEL 2	Oct-23	129,339	0	9	396
397	0020W4430233	SUN CITY MESQUITE - UNIT 21A R	Dec-23	128,960	0	2,789	397
398	0021W4481543	IDV DEVELOPMENT SERVICE, LLC	Feb-24	128,015	0	1,810	398
399	0021W0006915	PROJECT #21-17-22	Jun-25	127,916	0	0	399
400	0021W4636070	SKYE CANYON 5.06 PHASE 1 APPRO	Mar-25	127,580	0	706	400
401	0021W4700758	LEAK REPAIR ON HOLLYWOOD BLVD	Dec-24	127,563	0	359	401
402	0021W4812782	S BREVI UNIT 1	Jul-24	127,252	0	254	402
403	0020W4660857	NB/MAIN/MESQUITE GAMING LAUNDR	Feb-24	127,205	0	213	403
404	0021W0008682	2024-02 GS700-SOPS	Jul-24	127,124	0	0	404
405	0021W3574636	S WEST RIDGE ACCESS ROAD - STA	Dec-24	127,123	0	834	405
406	0021W4530432	VILLAGE 22 LOT NOP	Feb-24	126,595	0	762	406
407	0021W4409166	PSI COMMERCE CENTER	Feb-24	125,890	0	611	407
408	0021W4695297	S HIGHLANDS RANCH EAST PHASE 2	Mar-25	124,817	0	60	408

**SOUTHWEST GAS CORPORATION
SOUTHERN NEVADA
CAPITAL INVESTMENT PROJECTS
CLOSED TO PLANT IN SERVICE DECEMBER 2023 - NOVEMBER 2025**

Line No.	Work Order Number (a)	Work Order Description (b)	Date First Transferred to Plant (c)	Total Amount Excluding CIAC (d)	CIAC (e)	AFUDC (f)	Line No.
409	0021W4620090	NB/MAIN/DIST. MAIN/MINERS MESA	Dec-23	124,244	0	153	409
410	0021W4889220	R CADENCE MIDTOWN PHASE 3	May-25	123,212	0	172	410
411	0021W4814574	R STAFFORD RESIDENCE	Nov-24	122,176	0	67	411
412	0021W4706247	C DMV SILVERADO RANCH	Oct-25	121,435	0	1,091	412
413	0021W4705440	RSIN - LAKE MEAD BLVD & PARK D	Apr-25	119,579	0	354	413
414	0021W4865397	S OPUS PHASE 2 WARM SPRINGS AN	Oct-24	119,521	0	184	414
415	0021W4261744	NORTH PARK LIVING APTS, PHASE	Jun-23	119,502	0	17	415
416	0021W0008008	PROJECT #E21-07-23	Dec-24	119,411	0	0	416
417	0021W0008009	PROJECT #E21-03-23	Dec-24	119,411	0	0	417
418	0021W4387313	SI-REG STATION REPLACEMENT HP	Nov-25	119,376	0	133	418
419	0021W4481980	SUMMERLIN VILLAGE 17A ONSITE I	Feb-24	118,765	0	1	419
420	0021W4787148	S CENTENNIAL COMMERCE UNIT 2	Jun-24	115,135	0	58	420
421	0021W4787293	CRAIG PLS/6" TURBINE METER REP	Aug-25	114,207	0	2,627	421
422	0021W4405165	MERANTO/GRAND CANYON - PHASE 2	Mar-24	113,417	0	634	422
423	0021W4660636	BUFFALO CACTUS WEST	Oct-23	113,375	0	10	423
424	0021W4925063	CADENCE MERIDAN P62	Mar-25	112,486	0	144	424
425	0021W4983080	SI- REG STATION REPLACEMENT -	Apr-25	112,142	0	129	425
426	0021W0008184	PROJECT #21-25-23	Dec-23	111,900	0	0	426
427	0021W4657863	F-CC-4" & 2" RELOCATION-WARM S	May-24	110,477	0	84	427
428	0021W4719670	S IRON MOUNTAIN UNIT 2B	Feb-25	109,304	0	3,614	428
429	0021W4723227	S TEE & WASHBURN (ESTATES @ WA	Feb-25	109,215	0	425	429
430	0021W0008185	PROJECT #21-24-23	Dec-23	108,890	0	0	430
431	0021W4695967	S BUFFALO RUSSEL PHASE 1	Jun-24	108,331	0	243	431
432	0021W4806238	R SANDRINGHAM MANOR	Mar-25	107,962	0	253	432
433	0021W4580865	NB/REG/NORTHPOINT - APEX	Sep-24	107,677	0	882	433
434	0021W4877944	R FRIAS AND HAVEN	Nov-24	107,311	(5,128)	14	434
435	0021W4875952	S AZURE & COMMERCE	Feb-25	106,795	0	351	435
436	0021W4126252	C CC - RAINBOW & ARBY RETAIL C	Aug-25	106,457	0	11,787	436
437	0021W4624663	7150 S BUFFALO DR - MAJESTIC E	May-24	106,039	0	438	437
438	0021W4739320	S CAMERON HEIGHTS	Mar-24	105,242	0	34	438
439	0021W4952807	SR-CC-6" REPLACEMENT AT 6060 E	Jan-25	105,210	0	31	439
440	0021W0006374	PROJECT #21-07-21	Oct-24	104,963	0	0	440
441	0021W0008287	PROJECT #21-26-23	Oct-25	104,784	0	0	441
442	0021W4961162	INSPIRADA POD 7-1	Aug-25	104,603	0	262	442
443	0021W4902537	NB/2024/LG SVC INSTALL_BIG APP	Mar-25	104,187	0	101	443
444	0021W4923806	S AMBRIDGE PHASE 3	Jan-25	104,100	0	284	444
445	0021W4520485	FOUNDERS VILLAGE UNIT 2	Oct-23	104,015	0	161	445
446	0021W4924327	OPUS AT CADENCE UNIT 3	Apr-25	103,772	0	169	446
447	0021W4552621	ADAIR PHASE 1	May-24	103,247	0	1,534	447
448	0021W4677877	C CCSD LVA GYM	Feb-25	103,038	0	413	448
449	0021W4633491	SUMMERLIN VILLAGE 22 PARCEL ST	Mar-24	102,794	0	60	449
450	0021W0008648	PROJECT #21-03-24	Jun-24	102,706	0	0	450
451	0021W0006384	PROJECT #21-20-21	Oct-24	102,023	0	0	451
452	0021W4623156	RUFFIAN & BRIGHT ANGEL	Apr-24	101,366	0	194	452
453	0021W0006612	PROJECT #21-01-22	Sep-24	101,149	0	0	453
454	0021W0006394	PROJECT #21-06-21	Oct-24	101,065	0	0	454
455	0021W4931624	C CADENCE SUNSET COMMERCIAL PH	May-25	100,843	0	383	455
456	0021W4718706	S BUFFALO MOUNTAINS EDGE	Jan-24	100,736	0	39	456
457	0021W4601741	GATEWAY APARTMENTS	Jan-25	100,611	0	894	457
458	0021W0009107	PROJECT #21-11-24	Feb-25	100,579	0	0	458
459	Subtotal			94,307,157	(1,782,028)	845,693	459
460	Total			402,139,121	(2,853,932)	2,607,279	460

**Southwest Gas Corporation
Southern Nevada
Prudency Review Package**

Work Order 3955368

SB 151 MESQUITE: EAST I-15 CROSSING

**0020W3955368 CR Summary by Cost Element
Southwest Gas Corporation**

Ferc Account Cost Element	Work Order	Amount
10700		
3515 - O/S SVCS - OTHER	0020W3955368 - SB 151 MESQUITE: EAST I-15 CRO	\$1,023,870.54
9993 - CAP PROP TAX ACCRUAL	0020W3955368 - SB 151 MESQUITE: EAST I-15 CRO	(\$1,845.14)
9995 - A & G OVERHEAD ALLOCATION	0020W3955368 - SB 151 MESQUITE: EAST I-15 CRO	\$47,415.01
10700 Total		\$1,069,440.41
		\$1,069,440.41

CRITERIA

CRITERIA

Account Activity <> 1010
 Amount Type in Actuals, Statistics
 Month Number BETWEEN '202312' AND '202511'
 Work Order = 0020W3955368

Work Order	ORC	RD	FERC	Activity	CE	Accounting Date	Amount	Invoice Number	Voucher Number	Vendor Name	Control Id	Journal Number	Journal Line Description
0020W3955368	4381	0020	10700	1031	3515	1/31/2024	(\$849,321.20)	90383303	81124140	NPL CONSTRUCTION CO			Journal Import Created
0020W3955368	4381	0020	10700	1031	3515	1/31/2024	\$849,321.20	90383303	81124140	NPL CONSTRUCTION CO			Journal Import Created
0020W3955368	4381	0020	10700	1031	3515	1/31/2024	\$174,549.34	90384282	81124141	NPL CONSTRUCTION CO			Journal Import Created
0020W3955368	4381	0020	10700	1031	3515	2/29/2024	\$849,321.20	90383303 102923	81137072	NPL CONSTRUCTION CO			Journal Import Created
0020W3955368	1305	0020	10700	9603	9993	12/31/2023	\$881.88					882	Journal Import Created
0020W3955368	4381	0020	10700	1031	3515	12/31/2023	\$0.00					54	Journal Import Created
0020W3955368	4381	0020	10700	9603	3515	12/31/2023	\$1,500,000.00					54	Journal Import Created
0020W3955368	4381	0020	10700	1031	3515	1/31/2024	\$0.00					54	Journal Import Created
0020W3955368	4381	0020	10700	9603	3515	1/31/2024	(\$1,500,000.00)					54	Journal Import Created
0020W3955368	1305	0020	10700	9603	9995	1/31/2024	\$8,102.62					880	Journal Import Created
0020W3955368	1305	0020	10700	9603	9993	1/31/2024	(\$3,441.63)					882	Journal Import Created
0020W3955368	1305	0020	10700	9603	9995	2/29/2024	\$39,312.39					880	Journal Import Created
0020W3955368	1305	0020	10700	9603	9993	2/29/2024	\$714.61					882	Journal Import Created

\$1,069,440.41



NPL Construction Co.
19820 North 7th Avenue Suite 120
 Phoenix, AZ 85027

DOCKET NO. 26-03
 EXHIBIT NO. (PDW-2)
Invoice SHEET 4 OF 5

90384282

Date: 10/29/2023
 To: SOUTHWEST GAS CORPORATION
 6355 SHATZ STREET
 N. LAS VEGAS, NV 89115
 Attn:

AL
 W3955368
 PO#1097994
 JO 1/12/24

Contract No: CONTRACT #13688
 Description : SWG MESQUITE BLANKET
 Terms : Net Due in 30 Days

"QUALITY, SAFETY, BEST COST"

Work Performed				Footage	Units	UoM	\$Unit Price	\$ Total
WR#	DPR#	Work Code	Description					
3955368	2000704302	20.1117	"ASPHALT REPLACEMEN		10,732.500	FT2	13.83	148,430.48
3955368	2000704302	20.1302	"SAW CUTTING 4 1/8"-8"		1,643.500	LF	3.55	5,834.43
3955368	2000704302	20.1809	FOG SEAL		10,732.500	FT2	0.12	1,287.90
3955368	2000704302	20.1406	ROTOMILL/PLATE MILLIN		10,732.500	FT2	1.77	18,996.53
Total for: 3955368								174,549.34

Total	174,549.34
Taxes	0.00
Invoice Total	\$174,549.34

APPROVED BY _____ APPROVED BY _____



NPL Construction Co.
19820 North 7th Avenue Suite 120
 Phoenix, AZ 85027

DOCKET NO. 26-03
 EXHIBIT NO. (PDW-2)
Invoice SHEET 5 OF 5

90383303

Date: 10/29/2023

JC
 W3955368

To: SOUTHWEST GAS CORPORATION
 6355 SHATZ STREET
 N. LAS VEGAS, NV 89115

PO#1107064
 JO 2/26/24

Contract No: CONTRACT #13688
 Description : SWG MESQUITE BLANKET
 Terms : Net Due in 30 Days

Attn:

"QUALITY, SAFETY, BEST COST"

Work Performed				Footage	Units	UoM	\$Unit Price	\$ Total
WR#	DPR#	Work Code	Description					
3955368	242063	REIM	REIMBURSABLE		849,321.200	EA	1.00	849,321.20
Total for: 3955368								849,321.20

Total	849,321.20
Taxes	0.00
Invoice Total	\$849,321.20

APPROVED BY _____ APPROVED BY _____

1 **AFFIRMATION OF PRESTON D. WEAKLEND**

2 Pursuant to NAC 703.710, Preston D.Weaklend affirms and declares the following:

- 3 1. I am over 18 years of age and am competent to testify to facts stated below which
4 are based upon my personal knowledge.
- 5 2. That I am the person identified in the foregoing prepared testimony, including,
6 where applicable, any exhibits.
- 7 3. That such testimony and exhibits were prepared by me or under my direction.
- 8 4. That the information appearing in my testimony and exhibits are true to the best
9 of my knowledge and belief and that if I were asked the questions stated therein
10 under oath, my answers would be the same.
- 11 5. Pursuant to NRS 53.045, I declare under penalty of perjury under the law of the
12 State of Nevada that the foregoing is true and correct.

13 EXECUTED and DATED this 13 day of March , 2026.

14 

15 _____
16 PRESTON D. WEAKLEND

17
18
19
20
21
22
23
24
25

IN THE MATTER OF
SOUTHWEST GAS CORPORATION
DOCKET NO. 26-03____

PREPARED DIRECT TESTIMONY
OF
CHRISTOPHER R. ANDERSON

ON BEHALF OF
SOUTHWEST GAS CORPORATION

MARCH 17, 2026

Table of Contents
Prepared Direct Testimony
of
Christopher R. Anderson

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

<u>Description</u>	<u>Page No.</u>
I. INTRODUCTION	2
II. OPERATIONAL OVERVIEW OF NORTHERN NEVADA.....	3
III. INITIATIVES AND COST RELATED ENHANCEMENTS IN NORTHERN NEVADA ..	6
IV. CAPITAL INVESTMENT PROCEDURAL FRAMEWORK AND OVERSIGHT FOR NORTHERN NEVADA	11
V. ANNUAL LEAK SURVEY COST TRACKING	14
Appendix A – Summary of Qualifications of Christopher R. Anderson	
Affirmation of Christopher R. Anderson	

BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA

Prepared Direct Testimony
of
Christopher R. Anderson

I. INTRODUCTION

Q. 1 Please state your name and business address.

A. 1 My name is Christopher R. Anderson. My business address is 400 Eagle Station Lane, Carson City, NV 89701.

Q. 2 By whom and in what capacity are you employed?

A. 2 I am employed by Southwest Gas Corporation (Southwest Gas or Company), and my title is Vice President/Northern Nevada Division.

Q. 3 Please summarize your educational background and relevant business experience.

A. 3 My educational background and relevant business experience are summarized in Appendix A to this testimony.

Q. 4 Have you previously testified before any regulatory commission?

A. 4 Yes. I have previously provided testimony before the Public Utilities Commission of Nevada (Commission).

Q. 5 What is the purpose of your prepared direct testimony in this proceeding?

A. 5 The purpose of my prepared direct testimony is to provide an overview of the Company's Northern Nevada rate jurisdiction (Northern Nevada) and provide justification for the creation of a new administrative District 18. I also provide support for initiatives to enhance operational efficiencies and cost tracking that the Company has implemented in Northern Nevada.

1 **Q. 6 Please summarize your prepared direct testimony.**

2 A. 6 My prepared direct testimony consists of the following key topics:

- 3 • Operational overview of Northern Nevada, including pipeline mileage by pipe
- 4 type, and number of customers;
- 5 • Discussion on recent initiatives and cost tracking enhancements that the
- 6 Company has implemented in Northern Nevada;
- 7 • Description of the planning for and oversight of capital investments for
- 8 projects in Northern Nevada; and,
- 9 • Support, from an operations perspective, for a rate making adjustment to
- 10 normalize the Company's O&M and associated discontinuance of the
- 11 Company's current regulatory accounting treatment for annual leak survey.

12 **II. OPERATIONAL OVERVIEW OF NORTHERN NEVADA**

13 **Q. 7 Please provide an operational overview of Northern Nevada.**

14 A. 7 Northern Nevada encompasses a large and geographically diverse natural gas
15 distribution system serving various communities including Carson City, Fernley,
16 Elko, Spring Creek, and Winnemucca, as well as communities on the Nevada side
17 of Lake Tahoe. These service areas include a mix of urban centers, rural towns,
18 mountainous terrain, and remote service corridors. Throughout Northern Nevada,
19 the Company operates and maintains approximately 3,380 miles¹ of natural gas
20 distribution mains and services² necessary to serve a total of 106,204 customers.³
21 There are no transmission lines⁴ in Northern Nevada.

22
23 ¹ 2024 Annual Report data submitted to the Pipeline and Hazardous Materials Safety Administration (PHMSA)

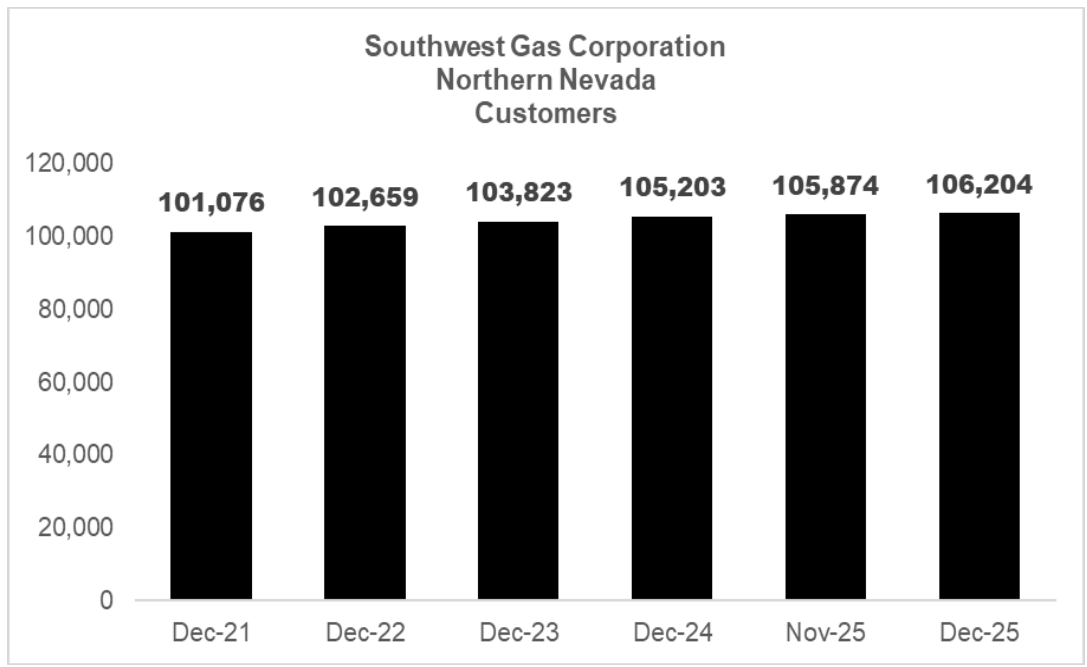
24 ² Refer to 49 CFR Part 192.3 for definitions of "distribution line", "main" and "service line" as used in this response.

25 ³ Actual number of customers in the Northern Nevada rate jurisdiction as of December 31, 2025.

⁴ Refer to 49 CFR Part 192.3 for definition of "transmission line" as used in this response.

1 Q. 8 Has the Company's Northern Nevada pipeline mileage and customer
2 growth increased during the last five years?

3 A. 8 Yes. Like many natural gas utilities, Southwest Gas has experienced steady
4 system growth over time due to the addition of new customers, new
5 developments, main replacement programs, and system modernization. Even
6 modest yearly growth translates to significant cumulative increases in the total
7 infrastructure the Company must operate and maintain. Northern Nevada added
8 approximately 262 miles of main and service pipeline and 6,691 customers, which
9 equates to an 8.4% and 6.8% increase, respectively, during the period from
10 December 2019 through December 2024. New customer additions in Northern
11 Nevada are also depicted in the chart below from the period beginning December
12 2021 through December 2025.



24 ...
25 ...

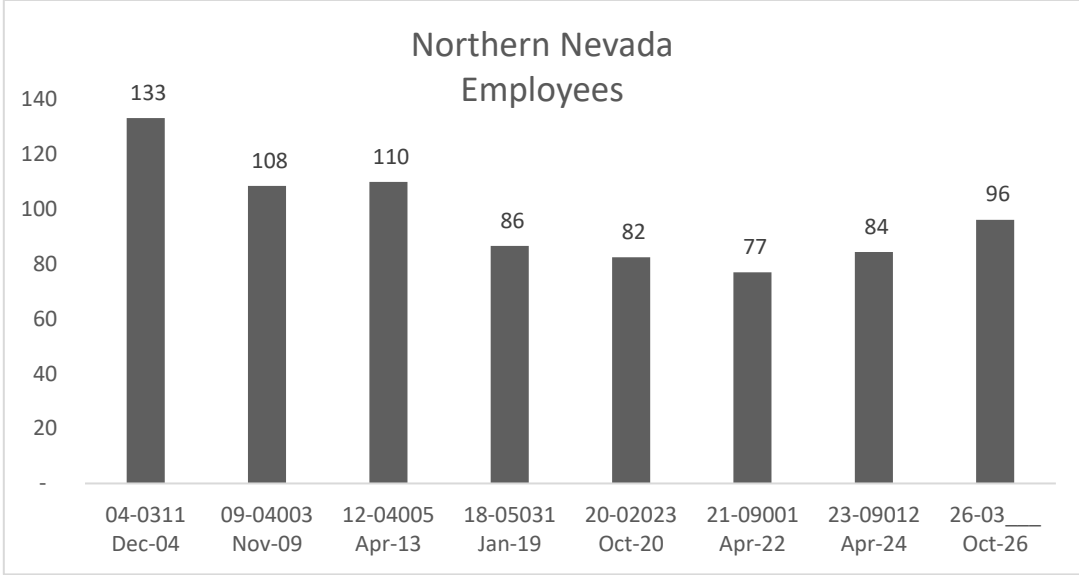
1 **Q. 9 Please describe the Company’s approach to managing employee efficiency**
2 **while maintaining safe and reliable service.**

3 A. 9 Southwest Gas actively manages workforce efficiency by continually evaluating
4 how work is performed and identifying opportunities to improve productivity
5 without compromising safety, reliability, or service quality. The Company
6 leverages technology, process improvement initiatives, and targeted investments
7 in training to enable employees to perform their duties more efficiently. This
8 approach allows the Company to meet increasing operational demands—such as
9 regulatory requirements, system modernization, and customer growth—without a
10 proportional increase in employee headcount. Maintaining an efficient workforce
11 is a key component of the Company’s commitment to cost control and responsible
12 stewardship of customer funds.

13 **Q. 10 Please summarize the long-term trend in Northern Nevada headcount and**
14 **what it indicates about workforce efficiency.**

15 A. 10 The Company’s Northern Nevada employee headcount has declined substantially
16 over the long term—from 133 employees in December 2004 to 96 employees in
17 this test period, which equates to a net reduction of 37 employees (approximately
18 28%). Even with evolving regulatory requirements, safety expectations, and
19 customer needs, the workforce today is smaller than historic levels, which reflects
20 sustained productivity gains, process improvements, and targeted technology
21 investments. This long-term reduction demonstrates management discipline and
22 a commitment to cost control while maintaining safety and reliability. The graph
23 below shows the number of employees contemplated in the labor annualization in
24 each of the Company’s rate cases since 2004.

25



III. INITIATIVES AND COST RELATED ENHANCEMENTS IN NORTHERN NEVADA

Q. 11 Does Southwest Gas manage customer and infrastructure growth while maintaining relatively stable operations and maintenance (O&M) expenses?

A. 11 Yes. Southwest Gas has managed customer growth and system expansion with a focus on maintaining stable O&M expenses to help ensure long-term affordability for customers. Rather than increasing operating costs in proportion to growth in pipeline mileage and new customer additions, the Company emphasizes operational efficiency, process improvements, and technology enhancements to support a larger and more complex system.

Maintaining stable O&M expenses helps control labor-related and overhead costs that ultimately affect customer rates, while continuing to meet or exceed all federal and state safety, compliance, and emergency response requirements. This disciplined approach enables Southwest Gas to responsibly accommodate growth, manage infrastructure expansion, and deliver safe, reliable service while providing sustainable, long-term value to the customers and communities it serves.

1
2 Southwest Gas continues to focus on operational efficiency, workforce
3 productivity, and investments in technology and process improvements. As a
4 result, the Company has been able to safely and reliably support a growing
5 customer base and an expanding distribution system while maintaining a relatively
6 stable workforce. This approach helps manage O&M expenses, supports
7 long-term affordability for customers, and ensures continued compliance with all
8 applicable safety and regulatory requirements. Below, I describe recent
9 operational efficiencies and process improvements implemented in Northern
10 Nevada.

11 **Q. 12 Can you compare Northern Nevada's O&M expenses today versus where**
12 **they were five years ago?**

13 A. 12 Yes. While expanding infrastructure into the community of Spring Creek to re-
14 allocating the completion of line locating activities from contracted resources to
15 Company employees, the Company's O&M expenses in Northern Nevada have
16 decreased. This is highlighted by a reduced year-over-year O&M per customer
17 and compound annual growth rate (CAGR) of -6.50% from 2022 – November
18 2025 (test year-end), showing efficient and prudent expense management.
19 Please refer to the prepared direct testimony of Company witness Amy L.
20 Timperley for an overall perspective on Nevada.

21 **Q. 13 Has the Company recently implemented any new initiatives in Northern**
22 **Nevada?**

23 A. 13 Yes. The Company recently hired additional employees for the purposes of in-
24 sourcing line locating activities in Northern Nevada, which has historically been a
25

1 contracted service. As further described below, these actions led to
2 corresponding operational efficiencies and cost management.

3 **Q 14 Why did the Company pursue the in-sourcing of line locating activities in**
4 **Northern Nevada?**

5 A. 14 Due to winter weather and various permitting agency requirements, Northern
6 Nevada experiences a distinct construction season that generally falls between
7 April and November each year. Specifically, in the Lake Tahoe basin, there is an
8 annual construction moratorium from October 15th through May 1st. This
9 seasonality in construction activity translates to fluctuations in line locate ticket
10 volumes throughout the year, which historically led to complications for
11 contractors in providing adequate staffing levels commensurate with the actual
12 level of line locate tickets.

13 In 2024, Northern Nevada completed a phased process of hiring additional
14 employees for the purpose of reducing and ultimately eliminating the assignment
15 of line locate ticket completion to contracted resources.

16 **Q. 15 How has the in-sourcing of line locating led to efficiencies?**

17 A. 15 To in-source line locating activities from its contracted resources, the Company
18 strategically hired Construction Technicians in Northern Nevada that are trained
19 and qualified in line locating and activities associated with capital construction.
20 During periods of decreased line locate ticket volumes, these Construction
21 Technicians are reassigned to assist with available capital work. In addition, these
22 new Construction Technicians have the ability of completing their own trouble
23 locates, which would historically be turned over from contracted resources to the
24 Company for completion.

25

1 **Q. 16 Please provide an overview of the Company’s Northern Nevada line locating**
2 **cost recovery activities.**

3 A. 16 Effective January 1, 2025, the Commission approved Southwest Gas’ application,
4 designated as Docket No. 25-01017, to establish regulatory accounting treatment
5 for line locate activity expenses for both its Northern and Southern Nevada rate
6 jurisdictions. This allows the Company to track the actual level of line locate O&M
7 expenses incurred and balance that O&M expense to the level established in the
8 Company’s most recent general rate case, and record the difference to a
9 regulatory asset or regulatory liability account.

10 **Q. 17 Is the Company proposing to continue its regulatory accounting treatment**
11 **for line locate activities?**

12 A. 17 Yes, please refer to the prepared direct testimony of Company witness
13 Christopher M. Brown for the proposal to continue the regulatory accounting
14 treatment.

15 **Q. 18 Has the Company’s efforts to in-source line locating activities in Northern**
16 **Nevada been positively recognized by the Commission’s Regulatory**
17 **Operations Staff (Staff)?**

18 A. 18 Yes. In February 2026, Staff invited me to attend the National Association of
19 Regulatory Utility Commissioners (NARUC) 2026 Winter Policy Summit to
20 participate in a panel discussion titled Damage Prevention Today – Emerging
21 Trends and Measurable Successes. During this panel discussion, I presented a
22 10-year history of line locating trends in Northern Nevada and the various factors
23 that led to the decision of in-sourcing line locating activities. My presentation also
24 discussed the subsequent improvements in timely completion of line locate
25 tickets, the overall enhancements to Northern Nevada’s damage prevention

1 efforts, and the Company's continued focus on the safety of excavators, the
2 community, and the Company's pipeline facilities.

3 **Q. 19 Has the Company recently implemented any new cost tracking mechanisms**
4 **in its Northern Nevada rate jurisdiction?**

5 A. 19 Yes. As further detailed in the prepared direct testimony of Company witness
6 Randy L. Cunningham, the Company recently established a new Lake Tahoe Area
7 Allocation with the creation of Receiving District (RD) 0018 for the improved
8 allocation of costs across its Lake Tahoe districts: RD 0023 (Tahoe, NV), RD
9 0014/0015 (North Tahoe, CA) and RD 0016 (South Lake Tahoe, CA).

10 **Q. 20 Describe the operational benefits associated with this new RD 0018.**

11 A. 20 The Company operates three district office locations in and around the Lake
12 Tahoe area where employees are based: Incline Village, NV (RD 0023); Truckee,
13 CA (RD 0015); and South Lake Tahoe, CA (RD 0016). Although employees are
14 primarily based in each of these three district office locations, they generally work
15 as a single, cohesive team that performs work throughout the Lake Tahoe area,
16 which requires them to frequently cross state lines and rate jurisdiction
17 boundaries. Although non-management employees charge their time to each rate
18 jurisdiction based on actual work performed, the process to properly allocate
19 Company general plant that benefits the entire Lake Tahoe area has historically
20 been overly complicated. As further detailed in the prepared direct testimony of
21 Company witness Randi L. Cunningham, the creation of the new Lake Tahoe Area
22 Allocation streamlines this process.

23 . . .

24 . . .

25 . . .

1 **IV. CAPITAL INVESTMENT PROCEDURAL FRAMEWORK AND OVERSIGHT FOR**
2 **NORTHERN NEVADA**

3 **Q. 21 Please describe the process for planning and oversight of capital**
4 **investment projects in Northern Nevada.**

5 A. 21 Southwest Gas' Northern Nevada employs a structured, collaborative approach
6 to planning and overseeing capital investment projects. The process integrates
7 cross-functional input from Engineering, Construction, Technical Services,
8 Customer Service, and support departments to identify system trends, safety
9 risks, and operational needs, with external stakeholders consulted as appropriate.

10 Once projects are identified, they are evaluated for scope, cost, duration, and
11 resource requirements, then prioritized and scheduled for execution. Formal
12 project closeout includes performance assessments to evaluate efficiency and
13 effectiveness, with lessons learned incorporated into future planning.

14 This disciplined approach supports efficient resource allocation, enhances
15 system reliability, and promotes continuous improvement. Capital investment
16 plans and budgets are subject to an extensive, iterative review by senior
17 management and receive final approval from the Company's Board of Directors.
18 The process is further detailed in the prepared direct testimony of Matthew A.
19 Helmers.

20 **Q. 22 How does Northern Nevada determine when pipelines need to be replaced?**

21 A. 22 Throughout the capital investment planning process outlined above, Northern
22 Nevada continuously evaluates the many different facets associated with
23 replacement activities for prioritization and timing. Factors considered include but
24 are not limited to projects identified through the Company's annual Distribution
25

1 Integrity Management Program (DIMP) Synergi Risk Assessment (SRA) process,
2 localized relative risk ranking for Northern Nevada pipeline segments, Vintage
3 Steel Pipe (VSP) replacement projects, system uprating for improved pressures,
4 and routine work that leads to replacements, such as those driven by, for example
5 line breaks, leaks and relocations.

6 **Q. 23 Please describe the Company's capital investment projects in Northern**
7 **Nevada since its last GRC.**

8 A. 23 As further detailed in the prepared direct testimony of Company witness Matthew
9 A. Helmers, the following capital projects in Northern Nevada have incurred costs
10 of \$1 million or more as of November 30, 2025:

- 11 • Spring Creek Area Expansion Project
- 12 • Minden/Gardnerville Lateral, Alternating Current Mitigation Project
- 13 • Arrowhead Pressure Reinforcement Project
- 14 • NNV Carson Radio Communication Equipment
- 15 • Replacement Meters Blanket Work Order (BWO)
- 16 • New Service Subdivision BWO
- 17 • New Random Service – Southwest Gas Trench BWO
- 18 • New Random Service – Customer Trench BWO

19 **COYL Replacement Program**

20 **Q. 24 What is a COYL?**

21 A. 24 A COYL refers to the underground houseline running from the meter to the
22 customer's building, which is owned and maintained by the customer. Due to
23 limited awareness and resources, customers often do not monitor these service
24 lines, posing potential safety risks.

25

1 **Q. 25 Please provide an overview of the COYL Replacement Program in Northern**
2 **Nevada.**

3 A. 25 The Commission approved a Northern Nevada COYL Replacement Program for
4 the Company in Docket No. 16-06001 and concluded that the program was eligible
5 for Gas Infrastructure Replacement (GIR) treatment because COYLs present
6 unique safety and reliability issues that justify replacement on an accelerated
7 basis. Those issues include: 1) that the COYL pipelines are subject to corrosion
8 and leaks; 2) COYLs are supposed to be maintained and monitored by the
9 customers who own them and, therefore, are not maintained or leak surveyed by
10 the Company; and 3) the pipelines are in very close proximity to homes and
11 structures.

12 Southwest Gas' COYL Replacement Program was expanded in Docket No.
13 21-08003 to allow the Company to replace residential and public school COYLs
14 in both its Northern and Southern Nevada service territories over a five-year
15 period. The Company is permitted to include other individual COYL replacements
16 in the program as specific needs or emergencies arise, such as COYLs
17 discovered at non-profit and/or other publicly funded facilities where private
18 funding is limited or unavailable for COYL replacement and the COYL is believed
19 to be a safety concern. The program aims to relocate meters to the building and
20 replace COYL piping with infrastructure owned and maintained by the Company.
21 Participation in the program is voluntary and requires customer approval prior to
22 performing work. The Commission approved regulatory asset treatment for the
23 COYL Replacement Program-related costs and established a program end date
24 of June 30, 2027.

25

1 **Q. 26 How are the COYL costs accounted for within the test year?**

2 A. 26 The Company is currently authorized to spend \$2 million annually in Northern
3 Nevada for the COYL Replacement Program through June 30, 2027. The process
4 of tracking and recording expenditures associated with the COYL Replacement
5 Program is further discussed in the prepared direct testimony of Company witness
6 Matthew A. Helmers.

7 **V. ANNUAL LEAK SURVEY COST TRACKING**

8 **Q. 27 Please provide background associated with the Company's regulatory**
9 **accounting treatment for annual leak survey.**

10 A. 27 Pursuant to the Commission's Order in Docket No. 19-09011, and subsequent to
11 various workshops and review of filed comments, the Commission found that it is
12 in the public interest to adopt as permanent the proposed Nevada Administrative
13 Code (NAC) regulations for the annual leak survey of distribution pipelines
14 transporting natural gas and/or liquefied petroleum. The Commission agreed with
15 the participants that the incremental costs of compliance should be tracked in a
16 regulatory asset account and brought for consideration to a utility's next rate case.

17 **Q. 28 What is the level of incremental cost associated with annual leak survey in**
18 **Northern Nevada for the current test year?**

19 A. 28 The level of incremental costs associated with the Company's annual leak survey
20 in its Northern Nevada rate jurisdiction, as recorded to the Company's regulatory
21 asset account since December 2023 through November 2025, is \$2,914,977.
22 Since the inception of the annual leak survey program in October 2022, the
23 Company has spent \$3,766,207 on vehicles and equipment to support the
24 program.

25

1 | **Q. 29 Were the costs associated with annual leak survey in Northern Nevada**
2 | **reasonably and prudently incurred?**

3 | A. 29 Yes. First, pursuant to NAC 703.915, the annual leak survey program is a safety
4 | requirement in the State of Nevada. Southwest Gas supported the adoption of an
5 | annual leak survey program to promote safety.

6 | Second, the costs associated with annual leak survey in Northern Nevada
7 | were prudently incurred. Since the implementation of annual leak survey,
8 | Northern Nevada began a process for tracking and documenting leak survey
9 | activities which would have normally been completed under the Company's
10 | former three-year leak survey cycle separately from the areas that were
11 | incrementally leak surveyed in association with annual leak survey requirements.
12 | Leak survey processes and procedures are consistent throughout Northern
13 | Nevada, regardless of which area is being leak surveyed, with the only difference
14 | being which account is used to track actual expenses.

15 | **Q. 30 What is the Company's proposal with respect to annual leak survey cost**
16 | **tracking?**

17 | A. 30 As further detailed in the prepared direct testimony of Company witness Celine
18 | Louise R. Apo, the Company requests that the Commission authorize a rate
19 | making adjustment to normalize the Company's O&M and associated
20 | discontinuance of the Company's current regulatory accounting treatment for
21 | annual leak survey.

22 | **Q. 31 Does this conclude your prepared direct testimony in this matter?**

23 | A. 31 Yes.
24 |
25 |

**SUMMARY OF QUALIFICATIONS
CHRISTOPHER R. ANDERSON**

I graduated from the University of Nevada, Reno in 2005 with a Bachelor of Science degree in Mechanical Engineering and a Minor in Mathematics.

I began my career with Southwest Gas Corporation (Southwest Gas) as an Engineer in the Northern Nevada Division (NNV) in 2007. I was assigned responsibility for the design of transmission facilities, compliance reviews, project management, and regulatory audits associated with Southwest Gas' wholly owned subsidiary Great Basin Gas Transmission Company (Great Basin; formerly known as Paiute Pipeline Company).

In 2010, I was promoted to Engineering Supervisor in the NNV engineering department. My responsibilities included the supervision, oversight and general project management over all new and replacement capital distribution facility designs.

In 2012, I was promoted to Plant Manager at the Liquefied Natural Gas (LNG) Plant, with oversight for strategic planning and execution of all capital, operations and maintenance projects for Great Basin's LNG Plant outside Lovelock, Nevada. I also represented Great Basin during LNG Plant regulatory audits performed by the Pipeline and Hazardous Materials Safety Administration (PHMSA) and the Federal Energy Regulatory Commission (FERC). I transferred to the Southern Nevada Division (SNV) in 2015 as the Technical Services Manager, with responsibilities including oversight for capital, operations and maintenance activities associated with large measurement and pressure control facilities, cathodic protection, pipeline odorization and the Davis Dam Compressor Station. In 2016, I transitioned to the Engineering Manager role in SNV,

overseeing capital project budgeting and forecasting, design approvals, and posting of facilities in GIS.

I was promoted to Director of Operations for Great Basin in 2018. In that role, I was responsible for all operational aspects of Great Basin, including the transmission system, compressor stations and the LNG Plant.

I have been in my current role of Vice President / Northern Nevada Division since 2023, with responsibility for all NNV operations.

1 **AFFIRMATION OF CHRISTOPHER R. ANDERSON**

2 Pursuant to NAC 703.710, Christopher R. Anderson affirms and declares the following:

- 3 1. I am over 18 years of age and am competent to testify to facts stated below which
4 are based upon my personal knowledge.
- 5 2. That I am the person identified in the foregoing prepared testimony, including,
6 where applicable, any exhibits.
- 7 3. That such testimony and exhibits were prepared by me or under my direction.
- 8 4. That the information appearing in my testimony and exhibits are true to the best
9 of my knowledge and belief and that if I were asked the questions stated therein
10 under oath, my answers would be the same.
- 11 5. Pursuant to NRS 53.045, I declare under penalty of perjury under the law of the
12 State of Nevada that the foregoing is true and correct.

13 EXECUTED and DATED this 17th day of March 2026

14
15 

16 _____
CHRISTOPHER R. ANDERSON

IN THE MATTER OF
SOUTHWEST GAS CORPORATION
DOCKET NO. 26-03____

PREPARED DIRECT TESTIMONY
OF
MATTHEW A. HELMERS

ON BEHALF OF
SOUTHWEST GAS CORPORATION

March 17, 2026

Table of Contents
Prepared Direct Testimony
of
Matthew A. Helmers

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

<u>Description</u>	<u>Page No.</u>
I. INTRODUCTION	2
II. CAPITAL INVESTMENT PROJECT PROCEDURAL PLANNING AND OVERSIGHT PROCESS	3
III. CAPITAL INVESTMENT PROJECTS	5
IV. COYL REGULATORY ASSET.....	10
APPENDIX A – Summary of Qualifications of Matthew A. Helmers Exhibit No.____(MAH-1) Affirmation of Matthew A. Helmers	

BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA

Prepared Direct Testimony
of
Matthew A. Helmers

I. INTRODUCTION

Q. 1 Please state your name and business address.

A. 1 My name is Matthew A. Helmers. My business address is 400 Eagle Station Lane, Carson City, Nevada 89701.

Q. 2 By whom and in what capacity are you employed?

A. 2 I am employed by Southwest Gas Corporation (Southwest Gas or Company) in the Northern Nevada Division. My title is Director/Operations.

Q. 3 Please summarize your educational background and relevant business experience.

A. 3 My educational background and relevant business experience are summarized in Appendix A to this testimony.

Q. 4 Have you previously testified before any regulatory commission?

A. 4 Yes. I have previously testified before the Public Utilities Commission of Nevada (Commission).

Q. 5 What is the purpose of your prepared direct testimony in this proceeding?

A. 5 The purpose of my prepared direct testimony is to provide an overview of the planning process and management of capital investments. I also provide support for the reasonableness and prudence of the Company's investments in capital projects for Southwest Gas' Northern Nevada rate jurisdiction (Northern Nevada) that are included in its revenue requirement.

1 **Q. 6 Please summarize your prepared direct testimony.**

2 A. 6 My prepared direct testimony consists of the following key issues:

- 3 • Description of the planning and oversight of capital investments for
4 projects in the Northern Nevada Division;
- 5 • Determination of the prudence of capital investment projects and
6 provide discussion on capital investment projects equal to or
7 exceeding \$1 million which have been placed in service in the
8 Company's Northern Nevada system since the end of the certification
9 period in Southwest Gas' 2023 general rate case (GRC)¹ and those
10 capital investments projects that at the time of this filing are anticipated
11 to be placed in service by May 31, 2026,² and
- 12 • Discussion on incurred costs recorded to the Customer Owned Yard
13 Line (COYL) regulatory asset approved by the Commission in Docket
14 No. 21-08033.

15 **II. CAPITAL INVESTMENT PROJECT PROCEDURAL PLANNING AND OVERSIGHT**
16 **PROCESS**

17 **Q. 7 Describe the planning/oversight applicable to the Company's capital**
18 **investments in Northern Nevada.**

19 A. 7 The procedural framework for Northern Nevada capital investment projects
20 consists of controls, processes, and procedures for anticipating and mitigating the
21 variability in capital projects. The four key components are transparency of
22

23 _____
24 ¹ The certification period in the Company's most recent GRC filing (Docket No. 23-09012) ended
November 30, 2023.

25 ² The Company will update plant in service in its certification filing in the instant docket based on capital
projects placed into service on or before May 31, 2026.

1 controls, accountability of responsibilities, a project evaluation program, and
2 project risk management process.

3 **Q. 8 Describe the four key components of the capital investment planning and**
4 **oversight process.**

5 A. 8 The first component is transparency of control for capital projects across different
6 business units. To coordinate the process that strengthens project outcomes,
7 Northern Nevada uses a capital procedural framework composed of six project
8 lifecycle phases and nine project elements. Depending on the complexity and
9 size of the project, some or all phases and elements may be used. The project
10 lifecycle phases consist of planning, design, construction, completion,
11 acceptance, and operations & maintenance. The nine project elements that
12 support the project lifecycle are: 1) project organization framework, 2)
13 procurement and contracts, 3) project scope and change management, 4) costs,
14 5) schedules, 6) systems and tools, 7) issue management, 8) communication and
15 reporting, and 9) quality and safety.

16 Second, accountability of responsibilities supports the processes important
17 for successful project outcomes. The processes are backed with definition of
18 responsibilities and reporting hierarchy so there is accountability for each level in
19 the organization. This is accomplished using policies, procedures, best practices
20 and guidelines, and training for the correct use of policies and procedures. This
21 clarity helps the organization manage capital projects more efficiently by avoiding
22 gaps. Key stakeholders within the Company include: Gas Operations Support
23 Staff, Engineering Services, System Integrity, Staff Planning, Regulatory and
24 Compliance, Supply Chain, Internal Audit, Risk Management and Safety,
25 Purchasing, and Legal.

1 Third, the project evaluation program benefits capital projects in the
2 following ways: (1) improves policies, procedures and controls; (2) prevents
3 deviations from policies, procedures, and controls; (3) identifies higher risk
4 activities requiring management focus; (4) recommends cost reduction,
5 avoidance, or recovery activities; and (5) provides opportunities for lessons
6 learned and actionable recommendations for continuous improvement for existing
7 and future projects.

8 Fourth, the project risk management process advances an opportunity to
9 monitor risks and identify when a mitigation plan is needed to manage the risk.
10 The process provides the ability to recognize and respond to the early signs of
11 project deviations, such as budgets, construction schedules, project scope
12 changes, material delays, quality and safety concerns, design revisions, contract
13 change orders, and other delays. These situations signal when it is necessary for
14 management to investigate and gather key stakeholders to discuss causes and
15 solutions.

16 **III. CAPITAL INVESTMENT PROJECTS**

17 **Q. 9 Please describe the scope of the capital investment projects discussed in**
18 **your prepared direct testimony.**

19 A. 9 I support all capital investments for distribution projects and certain general plant
20 projects in Northern Nevada placed in service since December 1, 2023. Projects
21 represented by work orders greater than \$100,000 in total cost are listed in Exhibit
22 No.__(MAH-1). My prepared direct testimony specifically discusses work orders
23 which incurred costs equal to \$1 million or more as of November 30, 2025.

24 Spring Creek Expansion Area (SCEA) capital projects placed into service
25 through November 2025 are not included in the Company's rate base or revenue

1 requirement in the instant application. Consequently, there are no specific
2 discussions or prudency packages included for those SCEA work orders in my
3 testimony. SCEA work orders begin with the number 0028.

4 **BLANKET WORK ORDERS**

5 **Q. 10 Please describe the purpose of blanket work orders.**

6 A. 10 Blanket work orders (BWOs) were established to efficiently capture the cost of
7 many small main, service, meter, and COYL transactions into a BWO for similar
8 type of work. BWOs, in essence, combine what would otherwise be many different
9 work orders for similar work (i.e., meter installations) into one BWO. The BWO
10 structure helps Southwest Gas manage the multitude of projects and lowers the
11 administrative burden of tracking and accounting for a large number of separate
12 work orders. Southwest Gas has a series of BWO numbers for Northern Nevada
13 that are used to capture the material acquisition and installation charges related
14 to the following: 1) new main installation less than 20 feet; 2) new service
15 installations; 3) meter installations; 4) franchise-related main replacements less
16 than 20 feet; 5) regular replacements less than 20 feet; 6) meter replacements;
17 and 7) regular service replacements. Each type of BWO is established for each
18 of the six districts in the Northern Nevada Division.³

19 **Q. 11 Please describe the BWOs with recorded costs of at least \$1 million.**

20 A. 11 As of November 30, 2025, the following BWOs incurred costs of at least \$1 million:
21 • Replacement Meters BWO 0024CB035000 – The Replacement Meters
22 BWO recorded costs associated with the purchase of replacement meters
23 for all Northern Nevada districts and replacement of meter set assemblies

24 _____
25 ³ The six districts included in the Northern Nevada Division are 0023-Tahoe, 0024-Carson City, 0025-
Elko, 0026-Winnemucca, 0027-Fernley (includes Fallon and Yerington), and 0028-Spring Creek.

1 in the Carson district. As of November 30, 2025, this BWO incurred costs
2 of \$3,687,976.

3 • New Service Subdivision BWO 0024CB041000 – The New Service
4 Subdivision BWO recorded costs associated with the installation of
5 services to new residential homes within a subdivision in the Carson City
6 district. As of November 30, 2025, this BWO incurred costs of \$4,681,100.

7 • New Random Service – Southwest Gas Trench 0024CB43000 – New
8 Random Service – Southwest Gas Trench BWO recorded costs
9 associated with the installation of services to random residential homes
10 outside of a subdivision within the Carson City district. As of
11 November 30, 2025, this BWO incurred costs of \$2,068,523.

12 • New Random Service – Customer Trench 0024CB044000 – New
13 Random Service – Customer Trench BWO recorded costs associated with
14 the installation of services to random residential homes outside of a
15 subdivision within the Carson district. As of November 30, 2025, this BWO
16 incurred costs of \$2,303,699.

17 **Q. 12 Are the facilities installed under the Replacement Meters BWOs**
18 **(0024CB035000) used and useful?**

19 A. 12 Yes. Each customer requires a meter set assembly to regulate the delivery
20 pressure to the customer and to measure the amount of natural gas for billing
21 purposes. At times, one or more of the parts of the meter set assembly may need
22 replacement. The Replacement Meter BWOs capture the costs involved with the
23 purchase and partial or full replacement of meter set assemblies. This work
24 happens on a daily basis throughout the service territory, and the Replacement
25

1 BWOs capture the associated costs with that partial or full replacement. The
2 replacement of meter set assemblies that are captured in the Replacement Meters
3 BWOs are necessary and utilized in the provision of natural gas service to the
4 Company's customers.

5 **Q. 13 Are the facilities installed under the New Service Subdivision BWO**
6 **(0024CB041000) used and useful?**

7 A. 13 Yes. Each customer requires a service to deliver natural gas from the main to the
8 meter set. While the main in a subdivision is installed at one time or in a phased
9 format, the services are not run at the same time. For safety, the service is not
10 installed from the main to the riser until a majority of excavation is complete on
11 the homesite. Once the service is installed, it is gassed and placed into service.

12 **Q. 14 Are the facilities installed under the New Random Services – Southwest Gas**
13 **Trench BWOs (0024CB043000) used and useful?**

14 A. 14 Yes. Each customer requires a service to deliver natural gas from the main to the
15 meter set. If required, the main to a new random residential home is installed at
16 one time, but the service is not run at the same time. For safety, the service is not
17 installed from the main to the riser until a majority of excavation is complete on
18 the homesite. Once the service is installed, it is gassed and placed into service.

19 **Q. 15 Are the facilities installed under the New Random Services – Customer**
20 **Trench BWOs (0024CB044000) used and useful?**

21 A. 15 Yes. Each customer requires a service to deliver natural gas from the main to the
22 meter set. If required, the main to a new random residential home is installed at
23 one time, but the service is not run at the same time. For safety, the service is not
24 installed from the main to the riser until a majority of excavation is complete on
25 the homesite. Once the service is installed, it is gassed and placed into service.

1 **MINDEN/GARNERVILLE LATERAL AC MITIGATION**

2 **Q. 16 Please describe the Minden/Gardnerville Lateral AC Mitigation project.**

3 A. 16 The Minden/Gardnerville Lateral AC Mitigation work request (0024W4322714) is
4 a project to mitigate stray alternating current (AC) that was affecting the cathodic
5 protection on the lateral. It involved the installation of 7,416 feet of zinc ribbon to
6 run parallel to the pipeline to allow the AC current to flow along the zinc ribbon
7 and not the steel pipe.

8 **Q. 17 Why was the Minden/Gardnerville Lateral AC Mitigation project necessary?**

9 A. 17 AC current induces electrochemical reactions on the steel pipeline that can
10 accelerate the deterioration of the pipeline. This can lead to uniform and/or pitting
11 corrosion, while also disrupting the effectiveness of the cathodic protection system
12 for the pipeline. The zinc ribbon installation was required to safely return cathodic
13 protection to approved levels.

14 **Q. 18 What was the cost of the Minden/Gardnerville AC Mitigation project?**

15 A. 18 The project cost as of November 30, 2025, was \$1,676,196. This project was
16 placed in service on March 22, 2024.

17 **Arrowhead Pressure Reinforcement Project**

18 **Q. 19 Please describe the Arrowhead Pressure Reinforcement project.**

19 A. 19 The Arrowhead Pressure Reinforcement Project included the installation of a 6-
20 inch PE main (0024W4386899), a tap from Great Basin Gas Transmission
21 Company (GBGTC), and a new District Regulator Station (0024W4386220).

22 **Q. 20 Why was the Arrowhead Pressure Reinforcement project necessary?**

23 A. 20 The Arrowhead Drive area in North Carson City consists of mostly commercial
24 and industrial customers. The Northern Nevada distribution pipe system did not
25 have sufficient natural gas capacity to serve new customer load. Further

1 expansion would cause the existing system pressure to decrease and result in the
2 loss of current customers. Planning studies were conducted and determined that
3 a new source from GBGTC was required to serve the area. The installation for
4 this project included 2,988 feet of 6" PE main, 22 feet of 4" PE main, and 135' of
5 2" PE main.

6 **Q. 21 What was the total cost of the Arrowhead Pressure Reinforcement project?**

7 A. 21 The project cost as of November 30, 2025, was \$1,216,344. The cost for the 6"
8 PE reinforcement (0024W4386899) was \$403,455 and the new tap from GBTC
9 and the corresponding district regulator station (0024W4386899) was \$812,889.
10 This project was placed in service on March 12, 2025.

11 **Northern Nevada (NNV) Carson Radio Communication Equipment**

12 **Q. 22 Please describe the NNV Carson Radio Communication Equipment project.**

13 A. 22 The NNV Carson Radio Communication Equipment project was part of a
14 companywide radio replacement project. New digital radio equipment was
15 purchased and installed for each emergency response vehicle in the division,
16 handheld portable radios were purchased for use on-site at an emergency, radio
17 tower equipment was upgraded, and new Federal Communication Commission
18 (FCC) licenses were purchased. This equipment is currently being used in the
19 Company's Northern Nevada Division. The prepared direct testimony of
20 Company witness Keith Bacon provides additional details regarding this project.

21 **IV. COYL REGULATORY ASSET**

22 **Q. 23 Please provide an overview of the COYL Program approved by the**
23 **Commission in Docket No. 21-08003.**

24 A. 23 Southwest Gas and the Regulatory Operations Staff of the Commission (Staff)
25 jointly filed a joint petition in Docket No. 21-08003, and the Commission approved,

1 the creation of a new, broader program for the Company's COYL replacements
2 which allows for replacement of primarily residential and public school COYLs in
3 its Northern Nevada service territories (COYL Program). The COYL Program has
4 an estimated annual investment of \$5 million per year (\$25 million total program
5 cost) with approximately \$2 million/year allocated to Northern Nevada and
6 approximately \$3 million/year allocated to Southern Nevada.⁴ The Commission
7 authorized the COYL Program to include replacements of COYLs discovered at
8 non-profit or other publicly funded facilities where private funding is limited or
9 unavailable for COYL replacement and the COYL is believed to be a safety
10 concern. Moreover, the Commission authorized the Company to record COYL
11 Program capital costs in a regulatory asset account.⁵ Southwest Gas would then
12 seek recovery of those deferred COYL Program capital costs in a future GRC
13 application.

14 **Q. 24 Provide an overview of the Northern Nevada's COYL progress and the**
15 **related capital costs incurred since the last GRC.**

16 **A. 24** The Company has replaced 32 COYLs in Northern Nevada since the Company's
17 last GRC under this program. This includes 9 at schools, 1 at the Carson City
18 Department of Motor Vehicles (DMV), and 22 residential services.

19 Single service COYL replacements are completed under a blanket work order
20 which are reflected in 0024CB025120 and 0027CB025120. Specific jobs that
21 include installation or replacement of main to facilitate the elimination of the
22 COYLs include 0027W5018637 – Fernley Elementary and Middle School COYL
23 Replacement, 0024W4787166 – Carson City DMV COYL Replacement, and

24 _____
25 ⁴ See the Commission's Order in Docket 21-08003 at page 4.

⁵ See the Commission's Order in Docket No. 21-08003 at pages 4 and 5.

1 0024W4730231 – Carson City Middle School COYL Replacement. This work
2 represents a total capital investment of \$1,601,010 to improve safety.

3 **Q. 25 Were the COYL Program capital costs incurred in Northern Nevada**
4 **reasonable and prudent?**

5 A. 25 Yes. In coordination with Staff, the Company identified, prioritized, and
6 successfully completed the construction of multiple COYL projects, as
7 contemplated by the Commission’s order approving the COYL Program.

8 **Q. 26 Will you be supporting any certification adjustments in the instant**
9 **application?**

10 A. 26 Yes. I will file prepared certification testimony to support amounts recorded to
11 plant in service as of May 31, 2026.

12 **Q. 27 Does this conclude your prepared direct testimony?**

13 A. 27 Yes.

14
15
16
17
18
19
20
21
22
23
24
25

SUMMARY OF QUALIFICATIONS MATTHEW A. HELMERS

Matthew A. Helmers is the director/Operations for the Northern Nevada Division for Southwest Gas Corporation (Southwest Gas). Mr. Helmers joined Southwest Gas in 2001 as an engineer in Carson City, NV. He was subsequently promoted to engineer II in 2003 and then transferred to Paiute Pipeline (currently known as Great Basin Gas Transmission Company), a wholly owned subsidiary of Southwest Gas, in 2004. He was promoted to transmission engineer in 2005 and then returned to Southwest Gas as supervisor/Engineering in 2006. During this period, Mr. Helmers oversaw the design of transmission and distribution facilities for new business, franchise and system reinforcements; PVC pipeline replacements, pipeline safety code compliance, pipeline pigging plans, MAOP studies; and preparation of short and long-term capital budgets.

He was promoted to manager/Operations Planning and Analysis in 2012 where he organized operational metric tracking, represented the company and became the chairperson for the American Gas Association's Best Practices program, represented operations in various projects and initiatives, budget planning; and oversaw company-wide initiatives to improve safety, quality and reliability.

Mr. Helmers was promoted director/Operations in 2017 where he is responsible for the construction and customer service departments throughout the Northern Nevada Division. He focuses on improving safety and quality initiatives that reduce emergency response times and pipeline damages, while improving the customer experience.

He holds a Bachelor of Science degree in Mechanical Engineering and Master of Business Administration from the University of Nevada, Reno.

**SOUTHWEST GAS CORPORATION
NORTHERN NEVADA
OPERATIONS-RELATED WORK ORDERS GREATER THAN \$100,000 IN TOTAL COST
CLOSED TO PLANT IN SERVICE DECEMBER 2023 - NOVEMBER 2025**

Line No.	Work Order Number	Work Order Description	Date First Transferred to Plant	Total Amount Excluding CIAC	CIAC	AFUDC	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
1	0024CB041000	Bwo - New Service Subdivision		4,681,099.51	0.00	13,514.97	1
2	0024CB035000	Bwo - Replc Meters		3,687,976.34	0.00	10,478.61	2
3	0028CB041000	Bwo - New Service Subdivision		2,711,767.47	0.00	7,943.46	3
4	0024CB044000	Bwo-New Random Svc-Cust Trench		2,303,698.61	(280,641.45)	5,712.22	4
5	0024CB043000	Bwo - New Random Svc-Swg Trnch		2,068,522.71	(63,811.37)	5,669.24	5
6	0024W4322714	MINDEN GARDNERVILLE LATERAL AC	Mar-24	1,676,196.06	0.00	22,959.04	6
7	0025W0006609	CNG Fueling Station	Feb-25	986,708.23	0.00	0.00	7
8	0023CB030000	Bwo - New Meters		931,609.14	0.00	3,559.34	8
9	0024CB025000	Bwo - Replc Services		927,081.10	0.00	2,715.87	9
10	0027CB030000	Bwo - New Meters		856,074.74	0.00	2,538.88	10
11	0023CB025000	Bwo - Replc Services		841,063.55	0.00	2,425.03	11
12	0028W4418523 [1]	SPCRK 2023 - PEMBERTON DR	Aug-24	822,958.79	0.00	3,444.18	12
13	0028CB010000 [1]	Bwo - New Mains		819,534.68	0.00	6,001.42	13
14	0024W4386220	DRS - ARROWHEAD CENTENNIAL PAR	Apr-25	812,889.42	0.00	94,065.21	14
15	0028W4418060 [1]	SPCRK 2023 - PARKRIDGE PKWY PH	Oct-24	806,363.64	0.00	9,391.21	15
16	0028W4548814 [1]	SPCRK 2024 - FLOWING WELLS DR	Apr-25	724,718.12	0.00	2,577.81	16
17	0027CB043000	Bwo - New Random Svc-Swg Trnch		722,070.21	(6,821.30)	2,002.23	17
18	0024CB015000	Bwo - Replc Mains		687,562.20	0.00	1,963.37	18
19	0024W4830215	10TH ST VSP REPLACEMENT - CARS	Mar-25	652,519.08	0.00	1,159.03	19
20	0024CB025120	BWO - COYL		623,061.30	0.00	1,744.84	20
21	0024W4892775	NBMC TRADITIONS COMMERCIAL	Mar-25	581,960.85	(48,901.00)	2,149.55	21
22	0024CB010000	Bwo - New Mains		544,388.47	(1,461.60)	1,577.15	22
23	0024W4460371	SI - SUNRIDGE DRS INSTALL	Jul-25	539,790.91	0.00	27,517.85	23
24	0028W4723137 [1]	SPCRK 2025 - HAYLAND DR	Jul-25	532,435.70	0.00	3,465.40	24
25	0027CB025120	BWO - COYL		524,562.27	0.00	1,481.35	25
26	0024W0008022	PROJECT #24-04-23	May-24	499,148.70	0.00	0.00	26
27	0023W4749666	SI - ALPINE VIEW MAIN REPLACEM	Sep-24	481,080.48	0.00	1,244.70	27
28	0028W4546040 [1]	SPCRK 2024 - SPRING VALLEY PKY	Jun-25	469,980.34	0.00	3,727.16	28
29	0028W4276235 [1]	SPCRK 2022 - SPRING VALLEY PKW	Mar-24	463,441.72	0.00	3,631.93	29
30	0025CB030000	Bwo - New Meters		461,771.79	0.00	1,865.69	30
31	0028W4548824 [1]	SPCRK 2024 - ARROYO DR	May-25	461,081.79	0.00	3,781.71	31
32	0024W4745109	NBMS HEYBOURNE MEADOWS PH 6	Sep-24	458,935.30	0.00	2,144.71	32
33	0028W4417915	SPCRK 2023 - SPRING VALLEY PKW	Jun-24	450,445.48	0.00	2,388.74	33
34	0028W4418045	SPCRK 2023 - LAWNSDALE DRIVE	Sep-25	439,779.03	0.00	3,414.10	34
35	0026CB030000	Bwo - New Meters		427,566.84	0.00	1,214.08	35
36	0028W4418050 [1]	SPCRK 2023 - BLAKELAND DRIVE	Nov-24	425,155.53	0.00	3,692.58	36
37	0028W4723140 [1]	SPCRK 2025 - SMOKEY DR	Jul-25	418,077.63	0.00	2,453.57	37
38	0026W4904790	SI GRASS VALLEY ROAD VSP REPLA	Dec-24	404,412.82	0.00	4,043.63	38
39	0024W4386899	SI - ARROWHEAD 6" PE MAIN REIN	Nov-24	404,085.20	0.00	1,562.34	39
40	0028CB043000 [1]	Bwo - New Random Svc-Swg Trnch		395,727.19	0.00	1,828.39	40
41	0027CB035000	Bwo - Replc Meters		389,268.50	0.00	1,130.55	41
42	0028W4418008 [1]	SPCRK 2023 - OAKSHIRE DRIVE	Nov-25	386,342.37	0.00	4,309.23	42
43	0028W4546039 [1]	SPCRK 2024 - SPRING VALLEY PKW	Jul-25	384,839.39	0.00	3,157.19	43
44	0028W4548807 [1]	SPCRK 2024 - DIAMONDBACK DR PH	Apr-25	375,274.64	0.00	2,604.34	44
45	0025CB010000	Bwo - New Mains		374,923.90	0.00	1,101.17	45
46	0028W4418040 [1]	SPCRK 2023 - FLORA DRIVE	Oct-25	372,380.60	0.00	3,282.02	46
47	0024CB042000	Bwo - New Service Commercial		363,479.61	0.00	1,004.19	47
48	0028W4723139 [1]	SPCRK 2025 - WESTBY DR	Aug-25	363,026.70	0.00	3,152.63	48
49	0023W0006810	PROJECT #23-01-22	Oct-25	361,202.88	0.00	0.00	49
50	0025CB035000	Bwo - Replc Meters		361,055.18	0.00	1,020.77	50
51	0023CB035000	Bwo - Replc Meters		356,132.72	0.00	1,064.83	51
52	0028W4276318 [1]	SPCRK 2022 - TRES CARTES AVE	Dec-23	353,824.24	0.00	3,081.15	52
53	0028W4546038 [1]	SPCRK 2024 - SPRING VALLEY PKW	Jul-25	349,959.53	0.00	2,910.57	53
54	0028W4417920 [1]	SPCRK 2023 - CEDARLAWN DR	Mar-24	346,744.20	0.00	1,891.83	54
55	0028W4546033 [1]	SPCRK 2024 - SPRING VALLEY PKW	Aug-25	335,255.86	0.00	3,728.09	55
56	0028W4417982 [1]	SPCRK 2023 - SHADYBROOK DR PH	Sep-24	332,577.27	0.00	2,033.21	56
57	0028W4276295 [1]	SPCRK 2022 - SPRING VALLEY PKW	Jan-24	327,112.33	0.00	823.40	57
58	0028W4723138 [1]	SPCRK 2025 - MERINO DR	Aug-25	322,523.67	0.00	2,848.26	58
59	0028W4418004 [1]	SPCRK 2023 - PARKCHESTER DRIVE	Oct-25	322,073.91	0.00	3,539.25	59
60	0028W4417976 [1]	SPCRK 2023 - RAWLINGS DRIVE	Jul-24	320,371.91	0.00	1,787.58	60
61	0028W4546026 [1]	SPCRK 2024 - LAWNSDALE DR PH2	Oct-25	317,630.27	0.00	2,753.50	61
62	0028W4276276 [1]	SPCRK 2022 - BUFFSIDE DRIVE	Apr-24	317,384.58	0.00	2,819.44	62
63	0024W4819653 [1]	NBMS PLATEAU PHASE 1 REVISED	Dec-24	316,606.85	0.00	1,227.42	63
64	0024W0006809	PROJECT #24-04-22	Apr-25	314,731.55	0.00	0.00	64
65	0024W5004065	NBMS TRADITIONS VILLAGE PH 4	Nov-25	306,125.09	0.00	3,187.86	65
66	0028W4546035 [1]	SPCRK 2024 - SPRING VALLEY PKW	Oct-25	291,766.83	0.00	4,029.50	66
67	0028W4276264 [1]	SPCRK 2022 - CASTLE CREST DRIV	Mar-24	276,577.68	0.00	2,765.76	67
68	0023W0007887	PROJECT #23-01-23	Nov-25	270,017.94	0.00	0.00	68

**SOUTHWEST GAS CORPORATION
NORTHERN NEVADA
OPERATIONS-RELATED WORK ORDERS GREATER THAN \$100,000 IN TOTAL COST
CLOSED TO PLANT IN SERVICE DECEMBER 2023 - NOVEMBER 2025**

Line No.	Work Order Number	Work Order Description	Date First Transferred to Plant	Total Amount Excluding CIAC	CIAC	AFUDC	Line No.
69	0028W4546041 [1]	SPCRK 2024 - TIFFANY DR PH1	May-24	268,304.77	0.00	1,401.23	69
70	0024W4964878	NBS SILVER OAK PH 25	Apr-25	263,174.04	0.00	121.60	70
71	0028W4548816 [1]	SPCRK 2024 - GALINAS DR	May-25	257,007.12	0.00	2,587.72	71
72	0024W0007868	MC4 Radios Meter Reading-Carson	Dec-23	252,143.50	0.00	0.00	72
73	0028W4417446 [1]	SPCRK 2023 - DIAMONDBACK DRIVE	Apr-25	249,782.68	0.00	3,209.68	73
74	0024W0009425	NNV Facility Data Collection Tablet	May-25	247,849.36	0.00	0.00	74
75	0024W5045021	NBS WOODBRIDGE ESTATES PHASE 2	Nov-25	245,878.24	(111,392.00)	3,029.52	75
76	0028W4546025 [1]	SPCRK 2024 - LAWNDALDE DR PH1	Sep-25	245,572.85	0.00	2,030.61	76
77	0028W4546047 [1]	SPCRK 2024 - LYNX DR	Jun-24	235,736.47	0.00	1,002.65	77
78	0024W4898340	NBMS TRADITIONS VILLAGE 2 PHAS	Apr-25	231,203.11	0.00	288.52	78
79	0024CB013000	Bwo - Franchise Replc Main		230,032.61	0.00	13,375.90	79
80	0028W4417240 [1]	SPCRK 2023 - EMPRESS DRIVE	Jul-24	228,974.30	0.00	2,129.93	80
81	0026W0006804	PROJECT #26-01-22	Mar-25	225,166.86	0.00	0.00	81
82	0023CB044000	Bwo-New Random Svc-Cust Trench		225,122.92	(116,004.66)	533.99	82
83	0028W4276306 [1]	SPCRK 2022 - BERRY CREEK DR	Dec-23	224,629.43	0.00	2,126.30	83
84	0026W4137879	SI WINNEMUCCA DRS 3 REPLACEMENT	Feb-24	224,434.44	0.00	5,543.60	84
85	0028W4265909 [1]	SPCRK 2022 - BELLOAK DRIVE	Oct-24	223,732.04	0.00	3,525.32	85
86	0026CB025000	Bwo - Replc Services		223,156.91	0.00	609.86	86
87	0028W4548827 [1]	SPCRK 2024 - BUTTERFIELD DR	May-25	217,488.76	0.00	1,224.06	87
88	0026W0007656	Winnemucca Building A/V	Jun-24	213,195.06	0.00	0.00	88
89	0028W4546044 [1]	SPCRK 2024 - GYPSUM DR	May-24	213,109.54	0.00	1,322.07	89
90	0028W4546046 [1]	SPCRK 2024 - BRENT DR	Jun-24	211,332.11	0.00	1,185.47	90
91	0027W0006802	PROJECT #27-02-22	Aug-25	209,449.27	0.00	0.00	91
92	0028W4546027 [1]	SPCRK 2024 - GLENVISTA DR PH1	Nov-25	208,273.58	0.00	2,668.32	92
93	0024W0006805	PROJECT 24-05-22	Aug-25	207,336.06	0.00	0.00	93
94	0023CB015000	Bwo - Replc Mains		203,239.99	0.00	567.66	94
95	0028W4548826 [1]	SPCRK 2024 -DIAMONDBACK DR PH2	Jun-25	202,900.74	0.00	1,817.40	95
96	0024W4262292	NBMS CLEAR CREEK PH 3B	Apr-24	199,261.71	0.00	2,972.64	96
97	0024W3927636	NBMS HERITAGE RANCH PH 4	Sep-25	197,998.88	0.00	743.67	97
98	0028W4276246 [1]	SPCRK 2022 - WESTCLIFF DR	Mar-24	190,491.39	0.00	1,981.84	98
99	0024W0006598	PROJECT #24-03-22	May-24	189,388.37	0.00	0.00	99
100	0028W4417960 [1]	SPCRK 2023 - BRENT DRIVE	Mar-24	186,205.90	0.00	1,211.50	100
101	0024W4730231	SI CARSON MIDDLE SCHOOL COYL R	Jul-24	178,678.76	0.00	680.44	101
102	0025CB044000	Bwo-New Random Svc-Cust Trench		177,291.94	(5,083.46)	795.78	102
103	0028CB030000 [1]	Bwo - New Meters		176,181.02	0.00	498.09	103
104	0027CB044000	Bwo-New Random Svc-Cust Trench		171,561.91	(10,802.00)	457.44	104
105	0023CB043000	Bwo - New Random Svc-Swg Trnch		171,151.49	0.00	494.48	105
106	0028CB044000 [1]	Bwo-New Random Svc-Cust Trench		170,293.87	0.00	477.47	106
107	0024W4696644	NBMS CAPITAL CROSSING PH 3	Oct-24	168,960.17	0.00	1,114.05	107
108	0028W4417999 [1]	SPCRK 2023 - SHADYBROOK DR PH	Sep-24	166,652.78	0.00	2,059.80	108
109	0028W4723141 [1]	SPCRK 2025 - KIMBLE DR	Sep-25	165,022.33	0.00	1,793.09	109
110	0028W4417966 [1]	SPCRK 2023 - SPRINGFIELD PKWY	Jun-23	162,476.81	0.00	81.02	110
111	0024W4696652	NBMS CAPITAL CROSSING PH 4	Nov-24	161,936.48	0.00	586.77	111
112	0025CB043000	Bwo - New Random Svc-Swg Trnch		160,737.58	(4,951.00)	442.65	112
113	0024W4451589	NBMS VALLEY KNOLLS PH 3	Oct-23	159,508.64	0.00	4.17	113
114	0024W4658202	DRAKO WAY REPLACEMENT	Nov-24	159,304.25	0.00	403.24	114
115	0028W4548829 [1]	SPCRK 2024 - CUERNO VERDE DR	May-25	159,062.99	0.00	1,465.62	115
116	0024W4676580	NBMM NORTH COMMONS UNIT 1	Nov-24	157,616.86	0.00	458.71	116
117	0024W4755513	NBMS HERITAGE RANCH PH 3	Sep-24	153,456.71	0.00	531.39	117
118	0027W4741686	NBS FRIENDLY 5 RANCH VILLAGE 2	Jul-24	148,138.40	0.00	253.10	118
119	0024W4648415	NBMS CAPITAL CROSSING BACKBONE	Oct-24	147,865.30	0.00	3,675.35	119
120	0027W5018637	SI FERNLEY ELEMENTARY & MIDDLE	Aug-25	145,832.04	0.00	1,466.46	120
121	0028W4546029 [1]	SPCRK 2024 - FLORA DR	Nov-25	144,912.17	0.00	2,573.74	121
122	0028W0006206 [1]	PROJECT #28-02-21	Jan-25	144,166.61	0.00	0.00	122
123	0028W4546028 [1]	SPCRK 2024 - GLENVISTA DR PH2	Nov-25	139,801.01	0.00	2,582.23	123
124	0024W4708988	NBMS TRADITIONS VILLAGE PH 3	Dec-23	138,413.27	0.00	657.18	124
125	0025W0009572	PROJECT #E25-01-24	Oct-25	132,646.82	0.00	0.00	125
126	0022W0008668	Warehouse Racking Phase II	Mar-25	130,502.67	0.00	0.00	126
127	0024W4787166	SI CARSON DMV COYL REPLACEMENT	Aug-24	128,875.51	0.00	390.46	127
128	0027CB025000	Bwo - Replc Services		126,172.58	0.00	356.26	128
129	0028W4102121 [1]	SPCRK 2021 - LICHT PKWY	Oct-22	124,160.74	0.00	0.00	129
130	0024W4892755	BLACKSTONE RANCH ROADWAY PH 1	Oct-24	124,016.72	0.00	508.80	130
131	0024W0008480	NNV RTU Equipment	Aug-25	122,017.65	0.00	0.00	131
132	0024W0006599	PROJECT #24-02-22	Jan-25	121,602.73	0.00	0.00	132
133	0024W4718065	NBMS WASHOE STEWART LIHTC REVI	Aug-24	120,233.66	0.00	479.11	133
134	0027W0006803	PROJECT #27-01-22	Feb-25	116,515.32	0.00	0.00	134
135	0024W0008662	PROJECT #24-07-23	Mar-25	114,412.01	0.00	0.00	135
136	0024W0008645	PROJECT #24-06-23	Mar-25	113,853.03	0.00	0.00	136
137	0024W4997259	NBMS BIG GEORGE UNIT 2 PH 4B	Jun-25	109,442.47	0.00	583.53	137
138	0024W4997271	NBMS BIG GEORGE PH2B	Aug-25	106,942.94	0.00	526.44	138

**SOUTHWEST GAS CORPORATION
 NORTHERN NEVADA
 OPERATIONS-RELATED WORK ORDERS GREATER THAN \$100,000 IN TOTAL COST
 CLOSED TO PLANT IN SERVICE DECEMBER 2023 - NOVEMBER 2025**

Line No.	Work Order Number	Work Order Description	Date First Transferred to Plant	Total Amount Excluding CIAC	CIAC	AFUDC	Line No.
139	0028W0008023 [1]	PROJECT #28-02-23	Mar-24	101,829.74	0.00	0.00	139
140	0024W4731058	FMBRP - MAIN DROP SECTIONS @ M	Jul-24	101,651.65	0.00	391.33	140
141	0023W4340454	SI - GROUNDBED AT SKI WAY & FA	Mar-24	101,452.98	0.00	6,861.20	141

[1] Spring Creek Expansion Area projects removed from rate under test year Adjustment No. 21.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

AFFIRMATION OF MATTHEW A. HELMERS

Pursuant to NAC 703.710, Matthew A. Helmers affirms and declares the following:

1. I am over 18 years of age and am competent to testify to facts stated below which are based upon my personal knowledge.
2. That I am the person identified in the foregoing prepared testimony, including, where applicable, any exhibits.
3. That such testimony and exhibits were prepared by me or under my direction.
4. That the information appearing in my testimony and exhibits are true to the best of my knowledge and belief and that if I were asked the questions stated therein under oath, my answers would be the same.
5. Pursuant to NRS 53.045, I declare under penalty of perjury under the law of the State of Nevada that the foregoing is true and correct.

EXECUTED and DATED this 17th day of March, 2026



MATTHEW A. HELMERS

IN THE MATTER OF
SOUTHWEST GAS CORPORATION
DOCKET NO. 26-03_---

PREPARED DIRECT TESTIMONY
OF
THOMAS W. CARDIN

ON BEHALF OF
SOUTHWEST GAS CORPORATION

MARCH 17, 2026

Table of Contents
Prepared Direct Testimony
of
Thomas W. Cardin

<u>Description</u>	<u>Page No.</u>
I. INTRODUCTION	2
II. OVERVIEW OF SOUTHERN NEVADA OPERATIONS	3
III. CAPITAL INVESTMENT PROJECT PROCEDURAL FRAMEWORK AND OVERSIGHT PROCESS.....	6
IV. NEW SINGLE EXTENSION FACILITIES PROJECTS	9
V. SYSTEM INTEGRITY PROJECTS	16
VI. LAMB TAP PROJECT AND PROPOSING EXPECTED CHANGE IN CIRCUMSTANCE.....	22
VII. SOUTHERN NEVADA LINE LOCATE ACTIVITIES.....	27

Appendix A – Summary of Qualifications of Thomas W. Cardin

- Exhibit No.__(TWC-1)
- Exhibit No.__(TWC-2)
- Exhibit No.__(TWC-3)
- Exhibit No.__(TWC-4)
- Exhibit No.__(TWC-5)
- Exhibit No.__(TWC-6)
- Exhibit No.__(TWC-7)
- Exhibit No.__(TWC-8)
- Exhibit No.__(TWC-9)
- Exhibit No.__(TWC-10)
- Exhibit No.__(TWC-11)
- Exhibit No.__(TWC-12)
- Exhibit No.__(TWC-13)

1 Exhibit No.____(TWC-14)

2 Exhibit No.____(TWC-15)

3 Exhibit No.____(TWC-16)

4 Affirmation of Thomas W. Cardin

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA

Prepared Direct Testimony
of
Thomas W. Cardin

I. INTRODUCTION

Q. 1 Please state your name and business address.

A. 1 My name is Thomas W. Cardin. My business address is 6355 Shatz Street, North Las Vegas, Nevada 89115.

Q. 2 By whom and in what capacity are you employed?

A. 2 I am employed by Southwest Gas Corporation (Southwest Gas or Company) in the Southern Nevada Division . My title is Vice President/Southern Nevada Division.

Q. 3 Please summarize your educational background and relevant business experience.

A. 3 My educational background and relevant business experience are summarized in Appendix A to this testimony.

Q. 4 Have you previously testified before any regulatory commission?

A. 4 Yes. I have previously testified before the Public Utilities Commission of Nevada (Commission).

Q. 5 What is the purpose of your prepared direct testimony in this proceeding?

A. 5 The purpose of my prepared direct testimony is to provide an overview of the Company's Southern Nevada rate jurisdiction (Southern Nevada), discussion related to the procedural framework and oversight controls applicable to Southern Nevada capital investment projects, and support the reasonableness

1 and prudence of the Company's investment in capital projects for the Company's
2 Southern Nevada rate jurisdiction that are included in the Company's revenue
3 requirement. I also provide support for capital projects and why each project is
4 required to provide safe and reliable natural gas service to the Company's
5 Southern Nevada customers, the estimated cost of construction for each activity,
6 and the annual cost of operation.

7 **Q. 6 Please summarize your prepared direct testimony.**

8 A. 6 My prepared direct testimony consists of the following key items:

- 9 • An overview of the Company's Southern Nevada operations;
- 10 • Discussion of the Company's capital investment project procedural
11 framework and oversight controls in Southern Nevada;
- 12 • Discussion of and support for the transmission and feeder strategy (TAFS)
13 plan, high-pressure approach and system reinforcement projects;
- 14 • Discussion of and support for the system integrity projects required to
15 maintain customers' level of service;
- 16 • Discussion for the Lamb Tap Project and the request for Expected Change
17 in Circumstance (ECIC) treatment; and
- 18 • Support for the Southern Nevada line locating activities.

19 **II. OVERVIEW OF SOUTHERN NEVADA OPERATIONS**

20 **Q. 7 Please provide an operational overview of the Southern Nevada rate**
21 **jurisdiction.**

22 A. 7 Southwest Gas' Southern Nevada rate jurisdiction operates its natural gas
23 distribution system serving the Las Vegas Valley and the surrounding
24 communities including Mesquite and Laughlin. Its facilities are comprised of an
25

1 integrated system that includes 286 miles of transmission pipeline, 297 miles of
2 high-pressure distribution pipeline, one compressor station, numerous pressure
3 regulator stations, service lines, meters for individual customers, and all
4 necessary and related facilities, equipment, and improvements required to
5 control, maintain, and operate the system.

6 **Q. 8 In the last five years, has the customer growth and installation of**
7 **infrastructure increased?**

8 **A. 8** Yes. Southwest Gas' Southern Nevada rate jurisdiction has experienced
9 continued growth over time, driven by new customer additions, new residential
10 and commercial developments, replacement projects, and system
11 modernizations. Over the past five years, approximately 42,000 new customers
12 have been added to the Southern Nevada system, which equates to nearly a 6
13 percent cumulative customer growth rate. The graph below illustrates the
14 number of customers that have been added annually. During this same period,
15 the Company added approximately 660 miles of mains and 513 miles of services
16 to the Southern Nevada system, reflecting a combination of new construction
17 and replacement pipeline mileage.

18 ...

19 ...

20 ...

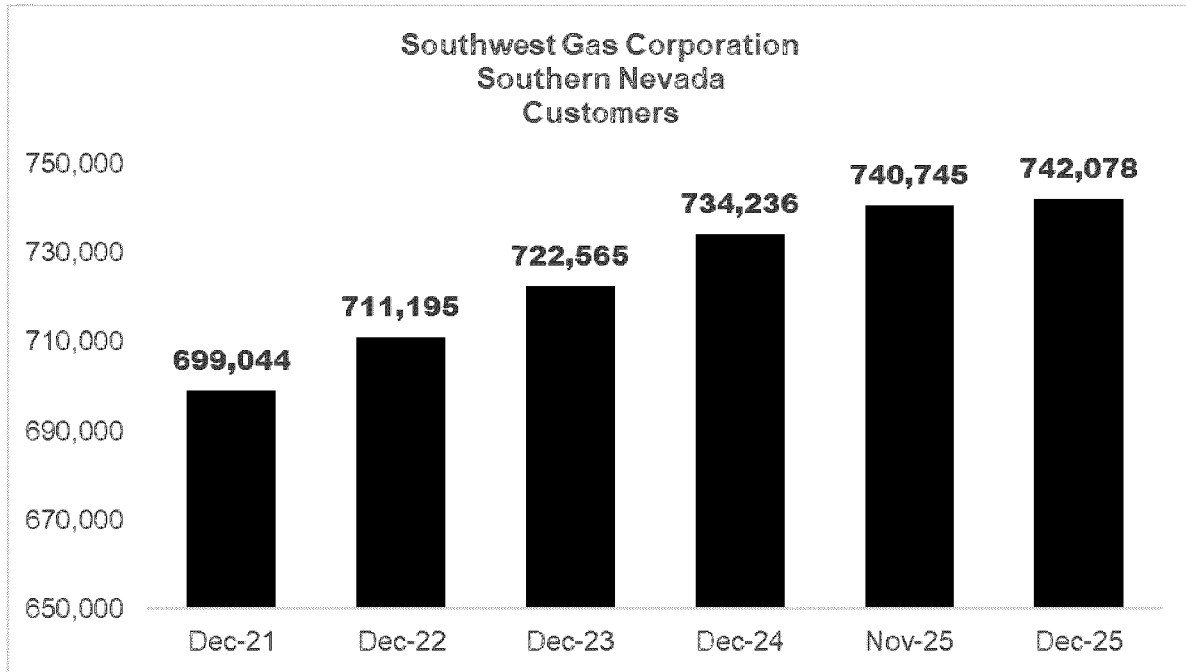
21 ...

22 ...

23 ...

24 ...

25 ...

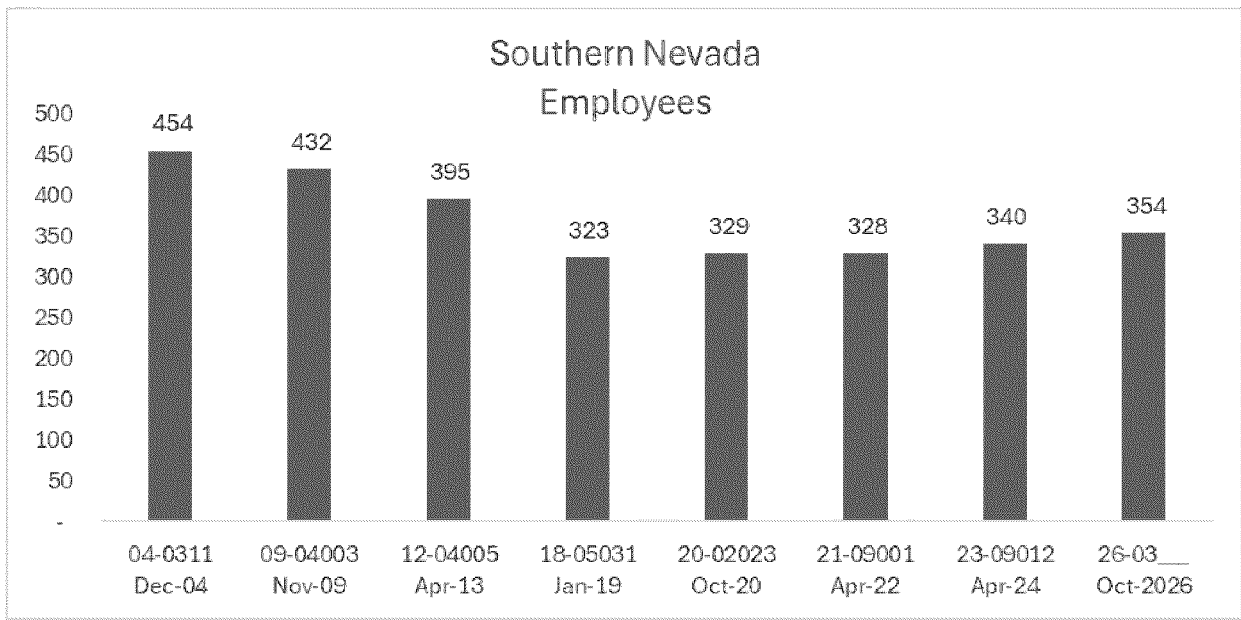


11 **Q. 9 Since the Company's 2004 general rate case, how has employee**
 12 **headcount in Southern Nevada changed over time?**

13 **A. 9** Since the Company's 2004 general rate case, employee headcount in Southern
 14 Nevada has declined overall. Although staffing levels have adjusted over time
 15 to reflect operational, regulatory, and safety needs, current and projected
 16 headcount remains meaningfully below 2004 levels. The headcount trend
 17 shown below reflects the Company's long-term focus on workforce efficiency
 18 while continuing to provide safe and reliable service.

19 From 454 employees in December 2004 to 354 projected for October 2026
 20 when rates in this instant docket go into effect, staffing is down 100 employees
 21 (approximately 22%). At recent points, staffing was even lower—340 in April
 22 2024 (approximately 25% below 2004) and 323 in January 2019 (approximately
 23 29% below 2004). This long-term reduction reflects sustained productivity
 24 gains, process improvements, and targeted technology investments, while
 25

maintaining safety and reliability. The graph below shows the number of employees contemplated in the labor annualization in each of the Company's rate cases since 2004.



III. CAPITAL INVESTMENT PROJECT PROCEDURAL FRAMEWORK AND OVERSIGHT PROCESS

Q. 10 Describe the procedural framework and oversight process applicable to Southern Nevada capital investments.

A. 10 The procedural framework for Southern Nevada capital investment projects consists of controls, processes, and procedures for anticipating, identifying, managing and mitigating the variability in capital projects. To ensure a robust capital investment process, various internal departments with diverse areas of expertise are involved in the identification and execution of Southern Nevada capital projects. In addition, the overarching key components of transparency of controls, accountability of responsibilities, a project evaluation program, and project risk management processes are implemented to ensure oversight and

1 quality. The Nevada capital budget goes through an extensive, iterative review
2 process with executive management and ultimately the final capital budget, as
3 proposed, is presented to the Company's Board of Directors for final approval.

4 **Q. 11 What is the general process for capital investment projects in Southern**
5 **Nevada?**

6 A. 11 To coordinate the processes that strengthen project outcomes, Southern
7 Nevada uses a capital procedural framework composed of six project lifecycles
8 phases and multiple project elements. Depending on the complexity and size of
9 the project, some or all of the phases and elements may be used. The project
10 lifecycle is planning, design, construction, completion, acceptance, and
11 operations & maintenance. Project elements that support the project lifecycle
12 are project organization framework, procurement and contracts, project scope
13 and change management, costs, schedules, systems and tools, issue
14 management, communication and reporting, quality, and safety.

15 Southern Nevada utilizes definitions of responsibilities and reporting
16 hierarchy, so there is accountability in the execution of the project. This is
17 accomplished through use of the Company's policies, procedures, best
18 practices and guidelines, and training for the correct use of policies and
19 procedures. This clarity helps the organization manage capital projects more
20 efficiently by avoiding gaps. Key stakeholders include personnel from the
21 following departments: Safety Quality Training Qualifications; Engineering
22 Services; System Integrity; Regulation; Supply Chain; Internal Audit; Risk
23 Management; Purchasing; and Legal.

24 ...

25 ...

1 Southern Nevada also uses a project risk management process to monitor
2 risks and identify when a mitigation plan is needed to manage risks. The project
3 risk management process allows for the ability to recognize and respond to the
4 early signs of project deviations, such as budgets, construction schedules,
5 project scope changes, material delays, quality and safety concerns, damage
6 prevention design revisions, contract change orders, and other deviations.
7 These situations signal when it is necessary for management to investigate and
8 gather the key stakeholders to discuss causes and solutions.

9 After a capital project is completed, Southern Nevada evaluates the project
10 to determine efficiencies and effectiveness. This project evaluation benefits
11 capital projects in several ways by: (1) identifying opportunities to improve
12 policies, procedures, and controls; (2) preventing deviations from policies,
13 procedures, and controls; (3) identifying higher risk activities requiring
14 management focus; (4) recognizing opportunities for cost reduction, avoidance
15 or recovery activities; and (5) providing opportunities to examine lessons learned
16 and provide actionable recommendations for continuous improvement for
17 existing and future projects.

18 **Q. 12 Please provide an overview of how the Company evaluates the**
19 **configuration for high-pressure distribution facilities in Southern Nevada.**

20 **A. 12** Southern Nevada integrates future system requirements and operational
21 efficiency considerations with current system demands by conducting a
22 hydraulic gas model (model) for the addition of high-pressure distribution
23 facilities. The model is optimized, and simulated gas networks predict
24 operational capabilities and address operational challenges, such as overall
25 system flows and pressures. The results provide Southern Nevada with the

1 decision support for planning and design, which assists with current and future
2 system operations and maintenance while considering current system needs.

3 The hydraulic gas model is optimized to predict system-wide flows and
4 pressures under both normal and peak operating conditions. The model allows
5 Southern Nevada to identify and address potential operational challenges,
6 including capacity constraints, pressure limitations, and system resiliency
7 concerns, prior to finalizing project designs. The results of the modeling provide
8 critical decision support for capital planning, engineering design, and future
9 system operations and maintenance.

10 Southern Nevada evaluates high-pressure approach projects in
11 conjunction with their associated distribution system improvements to ensure
12 that investments function cohesively and efficiently.

13 **Q. 13 Please describe the scope of the capital investment projects discussed in**
14 **your prepared direct testimony.**

15 **A. 13** I am sponsoring the following major projects with costs equal to or exceeding \$1
16 million, which are listed in Exhibit No.__(TWC-1). The capital investment project
17 procedural framework and oversight process outlined above was applied to the
18 projects listed below.

19 **IV. NEW SINGLE EXTENSION HIGH PRESSURE FACILITIES PROJECTS**

20 **Q. 14 What is a new single extension high pressure facility project?**

21 **A. 14** New single extension high-pressure pipeline projects, which generally serve
22 master-planned residential and commercial developments, are undertaken to
23 ensure the Company can provide safe and reliable gas service to new growth
24 areas. These projects extend the Company's high-pressure distribution
25 pipelines into areas where existing infrastructure does not have sufficient

1 capacity to serve anticipated demand. These projects may include the
2 installation of high-pressure distribution mains, regulator stations, and
3 associated appurtenances, while supporting community development and
4 maintaining system reliability. The Tule Springs, Summerlin West, and Solo
5 Mountain projects, which are examples of new single extension facility initiatives,
6 and are discussed in further detail below.

7 **Tule Springs Projects**

8 **Q. 15 Please describe the Tule Springs Project.**

9 A. 15 The Tule Springs Project is a residential and commercial master planned
10 development located in North Las Vegas, Nevada and estimated, at full build-
11 out, to serve approximately 10,000 homes east of Revere Street and the Bruce
12 Woodberry Beltway (Interstate 215). As discussed in my prepared direct
13 testimony in the Company's most recent Nevada Triennial Resource Plan
14 (Resource Plan) filing¹, given the project was located in an undeveloped area
15 that lacked natural gas infrastructure, the project required the installation of 16-
16 inch high-pressure distribution main, 4-inch and 6-inch polyethylene (PE)
17 distribution main and a regulator station, which supplies natural gas to PE
18 distribution mains and service lines. These facilities will deliver natural gas to
19 the homes and commercial buildings that are built in and near the development.
20 As discussed in my prepared direct testimony in the Company's last general rate
21 case (Docket No. 23-09012), Southwest Gas has been constructing the Tule
22 Springs Project since 2022. The estimated completion for full build-out of
23 Southwest Gas' facilities at the Tule Springs Project is 2028.

24 _____
25 ¹ Southwest Gas' Nevada Triennial Resource Plan was filed on September 18, 2025, Docket No. 25-09010, starting at Q&A 16.

1 **Q. 16 Why is the Tule Springs Project necessary?**

2 A. 16 The Tule Springs Project is necessary to meet demand and customer growth
3 and ensure safe and reliable service to customers. Based on the new master
4 planned community's connected natural gas load, the existing Southern Nevada
5 distribution system did not have existing facilities in the location nor sufficient
6 system capacity to serve the project. If the development were added without a
7 high-pressure distribution approach main, then the existing system pressure
8 would decrease and result in the loss of service to new and current customers,
9 and likely unpredictable outages in the future. Planning studies were conducted
10 and determined that the Tule Springs projects required approximately 1.3 miles
11 of high-pressure 6-inch steel distribution approach main to serve the project as
12 shown in Exhibit No.__(TWC-2) and Exhibit No.__(TWC-3) to my prepared
13 direct testimony.

14 **Q. 17 Why was the 16-inch high-pressure distribution main required?**

15 A. 17 In 2015, the Company's Southern Nevada Division developed the TAFS plan,
16 which is a long-term strategic plan. The TAFS plan integrates key
17 considerations and generates a model of a future concept of the Company's
18 Southern Nevada transmission and high-pressure distribution systems. The
19 TAFS plan incorporates growth, adaptation to changing conditions, and
20 operational efficiencies, such as increasing pipe size at the time of installation
21 and avoiding future costly pipeline reinforcements. It is a roadmap for how the
22 Company will manage and develop infrastructure addressing areas like safety,
23 reliability, and growth. Consistent with the TAFS plan, the Company identified
24 the Tule Springs Project as an opportunity to install a 16-inch high-pressure
25 distribution pipe, which will connect with an existing bridge crossing located near

1 Interstate 215 and Losee Road and the new Lamb Tap facilities high-pressure
2 reinforcement project in North Las Vegas, Nevada. The 16-inch high-pressure
3 distribution main will allow the Company to serve current and anticipated future
4 load in the area without the need for a pipeline reinforcement or future upsizing
5 of the pipeline.

6 **1. 16-inch Distribution Approach for Tule Springs**

7 **Q. 18 Please describe the 16-inch Distribution Approach for Tule Springs.**

8 A. 18 The 16-inch high-pressure approach main for the Tule Springs Project, identified
9 as Work Order (WO) 0021W4748670, involved the installation of high-pressure
10 facilities required to serve a new residential and commercial master plan
11 development located near the intersection of Elkhorn Road and Tule Springs
12 Parkway in North Las Vegas, Nevada. The project involved the installation of
13 approximately 4,100 feet of high-pressure steel pipeline.

14 **Q. 19 What was the total cost of the Tule Springs Project?**

15 A. 19 The project cost as of November 30, 2025, was \$1,222,311. The project was
16 placed in service on December 19, 2024.

17 **2. 16-inch Distribution Approach for Tule Springs**

18 **Q. 20 Please describe the 16-inch Distribution Approach for Tule Springs.**

19 A. 20 The 16-inch steel distribution approach for the Tule Springs project
20 (0021W4796019) involved the installation of high-pressure facilities required to
21 serve a new residential and commercial master plan development located near
22 the intersection of Evelyn Brook Street and Tule Springs Parkway in North Las
23 Vegas, Nevada. The project involved the installation of approximately 2,952 feet
24 of high-pressure steel pipeline.

25 . . .

1 **Q. 21 What was the total cost of the Tule Springs Project?**

2 A. 21 The project cost as of November 30, 2025, was \$1,859,428. The project was
3 placed in service on May 23, 2025.

4 **3. New 4-inch Regulator Station**

5 **Q. 22 Please describe the 4-inch Regulator Station project.**

6 A. 22 The 4-inch Regulator Station project involved the installation of a new regulator
7 station (0021W4830460) located near the intersection of Revere Street and Tule
8 Springs Parkway in North Las Vegas, Nevada.

9 **Q. 23 Was the 4-inch Regulator Station project necessary?**

10 A. 23 Yes. There was no existing Southern Nevada distribution regulator station to
11 serve the area. The installation of the regulator station was required to serve
12 the Tule Springs project.

13 **Q. 24 What was the total cost of the 4-inch Regulator Station project?**

14 A. 24 The project cost as of November 30, 2025, was \$349,098. The project was
15 placed in service on December 19, 2024.

16 **Summerlin West Project**

17 **Q. 25 Please describe the Summerlin West Project?**

18 A. 25 The Summerlin West Project is a residential master planned development
19 located in Las Vegas, Nevada and estimated to serve several thousand homes
20 west of Sky Vista between Alta Drive and Lake Mead Boulevard as provided in
21 Exhibit No.____(TWC-4). The project is contiguous to the Company's existing
22 infrastructure and is located within its certificated service area, however, the
23 undeveloped area lacks gas infrastructure. Given the lack of gas infrastructure,
24 the project required the construction of high-pressure distribution main and a
25

1 regulator station, which will supply gas to low-pressure distribution mains and
2 service lines.

3 **Q. 26 Why was the Summerlin West Project necessary?**

4 A. 26 The Summerlin West Project is necessary to meet demand and customer growth
5 and ensure safe and reliable service to customers. Based on the master
6 planned community's connected gas load, the existing Southern Nevada
7 distribution pipe system did not have existing facilities or sufficient system
8 capacity to serve the project. If the development were added without a high-
9 pressure distribution approach main, then the existing system pressure would
10 decrease and result in the loss of service to new and current customers and
11 likely unpredictable outages in the future. Planning studies were conducted and
12 determined that the Summerlin West Project required an 8-inch steel distribution
13 high-pressure approach main to serve the area as shown in Exhibit
14 No.__(TWC-5) to my prepared direct testimony.

15 **Q. 27 Please describe the 8-inch Distribution Approach for the Summerlin West**
16 **Project.**

17 A. 27 The 8-inch high-pressure approach main for the Summerlin West Project
18 (0021W4806589) involved the installation of high-pressure facilities required to
19 serve a new residential and commercial master plan development located near
20 the intersection of Lake Mead Boulevard and Park Drift Trail in Las Vegas,
21 Nevada. The project involved the installation of approximately 6,229 feet of
22 high-pressure steel pipeline.

23 **Q. 28 What was the total cost of the Summerlin Project?**

24 A. 28 The project cost as of November 30, 2025, was \$1,583,583. The project was
25 placed in service on June 18, 2025.

1 **SOLO MOUNTAIN PROJECT**

2 **Q. 29 Please describe the Solo Mountain Project?**

3 A. 29 The Solo Mountain Project is an industrial development located in North Las
4 Vegas, Nevada, intended to serve the Apex Industrial complex west of Interstate
5 15 and Pabco Road. While the project lies within the Company's certificated
6 service area, it is not contiguous with existing infrastructure and is located in an
7 area with insufficient capacity to serve the area. As a result, the project
8 necessitated the installation of a high-pressure distribution main to supply
9 natural gas to subsequent low-pressure distribution mains and service lines.

10 **Q. 30 Why was the Solo Mountain Project necessary?**

11 A. 30 The Solo Mountain Project is located within the City of North Las Vegas' Apex
12 Industrial complex, as shown in Exhibit No.__(TWC-6) to my prepared direct
13 testimony. The project was necessary to meet demand and customer growth
14 and ensure safe and reliable service to customers. Based on the connected
15 natural gas load, the existing Southern Nevada high-pressure distribution
16 system did not have sufficient system capacity to serve the project. If the
17 development were added without a high-pressure distribution approach main,
18 then the existing system pressure would decrease and result in the loss of
19 service to current customers and likely unpredictable outages in the future.
20 Planning studies were conducted and determined that the Solo Mountain Project
21 required an upsize from the existing 8-inch steel distribution high-pressure
22 approach main to serve the area.

23 **Q. 31 Please describe the 16-inch Distribution Approach for the Solo Mountain**
24 **Project.**

25

1 A. 31 The existing 8-inch high-pressure pipeline serving current customers was
2 operating near its capacity. To support the Solo Mountain Project
3 (0021W4745373), the Company replaced the existing pipeline with a 16-inch
4 high-pressure approach main. This project included the installation of high-
5 pressure facilities necessary to provide service to the Solo Mountain
6 development located west of Interstate 15 and Pabco Road in North Las Vegas,
7 Nevada, and involved the installation of approximately 2,740 feet of high-
8 pressure approach main. The 16-inch pipeline was sized not only to meet the
9 immediate load requirements of the Solo Mountain development, but also to
10 accommodate anticipated future growth and increased system demand within
11 the Apex area.

12 **Q. 32 What was the total cost of the Solo Mountain Project?**

13 A. 32 The project cost as of November 30, 2025, was \$2,131,029. The project was
14 placed in service on July 19, 2024.

15 **V. SYSTEM INTEGRITY PROJECTS**

16 **Q. 33 What is a system integrity project?**

17 A. 33 A system integrity project is undertaken to ensure the Company's system
18 continues to deliver safe, reliable and resilient service to its customers and may
19 contemplate a variety of facilities, including, but not limited to, mains, services,
20 meters, regulator stations and related appurtenances. These projects are
21 designed to maintain and enhance the overall performance, capacity, and safety
22 of the system. By proactively addressing areas of potential vulnerability or
23 capacity constraints, these projects help mitigate risks, support operational
24 efficiency, and accommodate future growth within the service area. The
25 Southern Nevada system has three system integrity projects that were placed in

1 service since the Company's last general rate case, including the Grand Teton,
2 Centennial Tap, and Independence projects discussed in more detail below.
3 The Lamb Tap Project is discussed later in my testimony.

4 **Grand Teton Project**

5 **Q. 34 Please describe the Grand Teton Project.**

6 A. 34 Consistent with the TAFS plan, the Grand Teton Project presented an
7 opportunity to install a 16-inch high-pressure distribution pipe on a new City of
8 Las Vegas bridge at Veterans Memorial Highway (US 95) and West Grand Teton
9 Drive. The Company has an existing Kern River mainline tap (Lone Mountain
10 Tap), which supports the northwest area of Las Vegas. There is a high-pressure
11 system located east of US 95 and a high-pressure system located west of US
12 95 as shown as shown in Exhibit No.__(TWC-7). Also shown in Exhibit
13 No.__(TWC-8) is the connection of the two high-pressure systems with the
14 Grand Teton Project which provides system reinforcement and improves flow
15 capacity while increasing reliability and enhancing the integrity of the Company's
16 Southern Nevada system.

17 **Q. 35 Why is the 16-inch high-pressure approach project required?**

18 A. 35 The City of Las Vegas bridge at US 95 and West Grand Teton Drive was
19 structurally designed for a 16-inch pipeline. Future upsizing of the high-pressure
20 pipeline installed on an existing bridge is complex and, if constructed in the
21 future, would likely be entirely prohibitive due to limited access, structural
22 integrity concerns, and higher costs of construction. Installing the 16-inch high-
23 pressure pipeline in the Grand Teton Bridge offered benefits by simplifying
24 complex crossings, reducing construction impacts, and lowering overall
25 construction costs. It also allowed for a more established corridor for the

1 pipeline. By elevating the pipeline above ground, bridge crossings can protect
2 it from potential damage and the need for extensive ground disturbance by way
3 of a technically complex horizontal directional drilling process under a major
4 highway. The Grand Teton project will provide reinforcement for the system east
5 of US 95 as shown in Exhibit No.__(TWC-8).

6 The existing system is comprised of 6-inch diameter high-pressure
7 pipelines installed between 1995 and 1998 and serve the area east and north of
8 US 95 as shown in Exhibit No.__(TWC-9). The project was not undertaken to
9 address a defined capacity deficiency. Rather, it was intended to proactively
10 strengthen the system by improving pressure stability and reliability for existing
11 customers. The Grand Teton Project is part of an integrated high-pressure
12 system designed to maintain stable operating pressure across the network. Its
13 purpose is to enhance pressure stability and reliability within the existing system,
14 especially under varying demand conditions.

15 **1. 16-inch Grand Teton Project**

16 **Q. 36 Please describe the 16-inch Distribution System Improvement for Grand**
17 **Teton.**

18 **A. 36** The 16-inch high-pressure approach main for the Grand Teton Project
19 (0021W4471751) involved the installation of high-pressure facilities required to
20 serve a new residential and commercial master plan development located near
21 the intersection of Fort Apache Road and Grand Teton Drive in Las Vegas,
22 Nevada. The project involved the installation of approximately 2,185 feet of
23 high-pressure steel pipeline.

24 . . .

25 . . .

1 | **Q. 37 What was the total cost of the Grand Teton Project?**

2 | A. 37 The project cost as of November 30, 2025, was \$1,997,602. The project was
3 | placed in service on March 10, 2025.

4 | **2. 16-inch Grand Teton Project**

5 | **Q. 38 Please describe the 16-inch Distribution System Improvement for Grand**
6 | **Teton.**

7 | A. 38 The 16-inch high-pressure approach main for the Grand Teton project
8 | (0021W4780948) involved the installation of high-pressure facilities required to
9 | serve a new residential and commercial master plan development located near
10 | the intersection of Tee Pee Lane and Grand Teton Drive in Las Vegas, Nevada.
11 | The project involved the installation of approximately 1,657 feet of high-pressure
12 | steel pipeline.

13 | **Q. 39 What was the total cost of the Grand Teton Project?**

14 | A. 39 The project cost as of November 30, 2025, was \$1,121,853. The project was
15 | placed in service on March 10, 2025.

16 | **3. 16-inch Grand Teton Project**

17 | **Q. 40 Please describe the 16-inch Distribution System Improvement for Grand**
18 | **Teton.**

19 | A. 40 The 16-inch high-pressure approach main for the Grand Teton project
20 | (0021W4795813) involved the installation of high-pressure facilities required to
21 | serve a new residential and commercial master plan development located near
22 | the intersection of Fort Apache Road and Grand Teton Drive in Las Vegas,
23 | Nevada. The project involved the installation of approximately 500 feet of high-
24 | pressure steel pipeline.

25 | ...

1 **Q. 41 What was the total cost of the Grand Teton Project?**

2 A. 41 The project cost as of November 30, 2025, was \$1,017,630. The project was
3 placed in service on October 10, 2024.

4 **Centennial Tap Project**

5 **Q. 42 Please describe the Centennial Tap Project.**

6 A. 42 The Centennial Tap Project (0021W4938732) is located in North Las Vegas,
7 Nevada near the intersection of North 5th Street and East Azure Avenue. To
8 comply with a City of North Las Vegas use permit, the project required
9 reconfiguration of an existing 16-inch high-pressure distribution pipeline and the
10 installation of new valves.

11 **Q. 43 Why is the Centennial Tap Project necessary?**

12 A. 43 At the December 2001 meeting of the City of North Las Vegas (CNLV) Planning
13 Commission, a use permit was approved for the Centennial Tap site. As part of
14 that approval, CNLV recorded a restrictive covenant deferring the construction
15 of off-site improvements adjacent to the Centennial Tap until such time as the
16 CNLV Director of Public Works determined the improvements to be necessary.
17 Subsequently, CNLV notified the Company that construction of the half-street
18 improvements along North 5th Street, as shown in Exhibit No.__(TWC-10),
19 adjacent to the Centennial Tap frontage was required to support the expansion
20 of regional infrastructure capacity. The CNLV notified the Company that it was
21 responsible for pavement restoration in front of the Centennial Tap site related
22 to a roadway widening. The roadway improvements included a change in road
23 grade that required a setback to maintain adequate Company vehicle and
24 equipment access to the Centennial Tap site.

25 . . .

1 **Q. 44 Please describe the high-pressure modifications made at Centennial Tap.**

2 A. 44 As a result of the CNLV road grade change, Kern River determined that its
3 facilities along North 5th Street, which directly supply the Centennial Tap site,
4 required relocation, necessitating a planned outage at the Centennial Tap. The
5 Company and Kern River coordinated closely to ensure the outage was
6 executed efficiently and minimized impacts to existing customers. As part of this
7 coordinated effort, the Company replaced approximately 435 feet of 16-inch
8 high-pressure transmission pipeline within the Centennial Tap site and installed
9 three new above-ground valves which provide operational, safety, and reliability
10 benefits.

11 **Q. 45 What was the total cost of the Centennial Tap Project?**

12 A. 45 The project cost as of November 30, 2025, was \$1,474,521. The project was
13 placed in service on June 22, 2024.

14 **Independence Project**

15 **Q. 46 Please describe the Independence Project.**

16 A. 46 The Independence Project (0021W4660334) is located in Las Vegas, Nevada
17 along Sloan Lane between Vegas Valley Drive and Desert Inn Road. A local
18 homebuilder identified a conflict with the Company's existing facilities. At the
19 request of the homebuilder, the Company relocated the affected facilities, with
20 the developer funding its portion of the design and relocation costs.

21 **Q. 47 Why is the Independence high-pressure system integrity project
22 necessary?**

23 A. 47 During the design phase, the Company determined that three separate drop
24 sections were required to resolve the conflicts while maintaining adequate cover.
25 Additionally, the Company extended the length of one drop section beyond the

1 homebuilder's work area into Desert Inn Road to address potential exposure and
2 overstressing of the existing high-pressure pipeline resulting from the
3 homebuilder's over-excavation and compaction work. The Company also
4 upsized the replacement sections from 12-inch steel to 16-inch steel, as the 12-
5 inch steel is no longer standard in Southern Nevada.

6 The limited work area and concurrent activities by multiple contractors
7 required daily coordination, frequent adjustments to work zones, and additional
8 procedures for gas-ups on each drop section. During excavation around the 84-
9 inch sewer in Desert Inn Road, trench remediations were necessary to prevent
10 loose material from collapsing, necessitating shoring and slurry work to protect
11 and stabilize the sewer before pipeline installation could continue.

12 **Q. 48 What was the estimated total cost of the Independence Project?**

13 A. 48 The project cost as of November 30, 2025, was \$1,315,030 net of the
14 contribution in aid of construction (CIAC). The project was placed in service on
15 September 18, 2024.

16 **VI. LAMB TAP PROJECT AND PROPOSED EXPECTED CHANGE IN CIRCUMSTANCE**

17 **TREATMENT**

18 **Q. 49 Please provide an overview of the Lamb Tap Project.**

19 A. 49 Consistent with the TAFS plan and as described in the Company's recently filed
20 Resource Plan², Southwest Gas forecasted a need for a new interconnect with
21 Kern River Pipeline in the Northeast area of North Las Vegas, referred to as the
22 Lamb Tap Project. The Lamb Tap Project includes several miles of steel
23 transmission pipeline that will connect to the Company's existing high-pressure
24

25 ² The Company initially identified the need for a new interconnection with Kern River in its Informational Reports filed in Docket Nos. 23-06029 and 24-06034.

1 system and is needed to serve projected extreme weather demands starting in
2 the 2025/2026 heating season. Construction-related activities on the Lamb Tap
3 Project are scheduled for May 2026 and continue to be underway as of the filing
4 of the instant docket. I further discuss the current status of the Lamb Tap Project
5 below.

6 **Q. 50 Why is the Lamb Tap high-pressure system integrity project necessary?**

7 A. 50 The Company completed a supply requirement study and concluded that a new
8 source of supply was needed to ensure continued operations of a safe and
9 reliable system, and to support continued growth (residential, commercial and
10 industrial) in the northeast area of the Las Vegas valley, provided as Exhibit
11 No.__(TWC-11). The Lamb Tap Project is needed to meet the projected
12 customer demand that will exceed the current system capacity.

13 **Q. 51 What tap sites currently serve the northern portion of the Las Vegas
14 valley?**

15 A. 51 The Company's Southern Nevada system has two existing tap sites located in
16 the northwest and the northern central portion of the Las Vegas valley as shown
17 in Exhibit No.__(TWC-12). The Lone Mountain Tap was constructed in 1993,
18 and the Centennial Tap was constructed in 2002. Both tap sites are nearing their
19 maximum capacity. The Pecos Tap is also located in the northern portion of the
20 Las Vegas valley, and it will be decommissioned after Lamb Tap is placed into
21 service.

22 **Q. 52 Why is a 24-inch high-pressure distribution pipeline required?**

23 A. 52 The Lamb Tap Project consists of two interconnections on Kern River, a new
24 pressure limiting station, an in-line inspection launcher and receiver,
25 approximately three-miles of 24-inch diameter high-pressure pipeline, and

1 supporting facilities located in the northeast area of North Las Vegas.
2 Consistent with the TAFS plan, the three-mile 24-inch high-pressure
3 transmission pipeline will improve system reliability by establishing a connection
4 with an existing 16-inch high-pressure pipeline located in the vicinity of east
5 Craig Road and north Lamb Boulevard in North Las Vegas as shown in in Exhibit
6 No.__(TWC-12). The connection to the existing 16-inch high-pressure pipeline
7 will enable the Lamb Tap Project to increase pressure on the existing high-
8 pressure pipelines from 300-psig to 720-psig as depicted by the dashed green
9 line as shown in Exhibit No.__(TWC-13).

10 **Q. 53 How does the Lamb Tap Project provide redundancy to the Southern**
11 **Nevada system?**

12 A. 53 Once the Lamp Tap Project is completed and placed in service, it will support
13 the two existing tap sites that are near maximum – Lone Mountain Tap and
14 Centennial Tap – located in the northwest and northeast areas of the Las Vegas
15 Valley. The connection to the to the existing 16-inch high-pressure pipeline will
16 allow the Lamb Tap Project to provide the system reinforcement and redundancy
17 necessary to serve the northern and eastern parts of the Las Vegas Valley as
18 shown in Exhibit No.__(TWC-13).

19 **Q. 54 What is the estimated total cost and in-service date of the Lamb Tap**
20 **Project?**

21 A. 54 The estimated total cost of the Lamb Tap Project is approximately \$35.5 million
22 as of 2026, of which approximately \$13 million has been incurred through
23 January 31, 2026 and reflected in Schedule H-EC1, Sheet 1.

24 ...

25 ...

1 | **Q. 55 Is the Company proposing an expected change in circumstance**
2 | **adjustment (ECIC) in the instant docket?**

3 | A. 55 Yes.

4 | **Q. 56 What criteria is established for consideration of an ECIC inclusion in**
5 | **general rates?**

6 | A. 56 In summary, Nevada Revised Statute (NRS) 704.110(4) provides a utility with
7 | the opportunity to submit with its general rate application a statement showing
8 | the effects, on an annualized basis, of all expected changes in circumstances
9 | reasonably known and measurable with reasonable accuracy. The Commission
10 | shall consider expected changes in circumstances to be reasonably known and
11 | measurable with reasonable accuracy if the expected changes in circumstances
12 | consist of specific and identifiable events or programs rather than general
13 | trends, patterns or developments, have an objectively high probability of
14 | occurring to the degree, in the amount and at the time expected, are primarily
15 | measurable by recorded or verifiable revenues and expenses and are easily and
16 | objectively calculated, with the calculation of the expected changes relying only
17 | secondarily on estimates, forecasts, projections or budgets.

18 | **Q. 57 Please describe the activity for which the Company is proposing an ECIC**
19 | **adjustment.**

20 | A. 57 The Company is proposing to include in rates, through an ECIC adjustment, the
21 | capital expenditures related to the construction of the Lamb Tap Project.

22 | **Q. 58 Has the Company executed contracts or purchased required materials for**
23 | **the construction of the Lamb Tap Project?**

24 | ...

25 | ...

1 A. 58 Yes. The Company has executed several contracts for the Lamb Tap Project,
2 including an interconnect agreement with Kern River on April 11, 2025, provided
3 as Exhibit No.__(TWC-14). The Company is utilizing its Division Operations
4 Services (DOS) Contract in southern Nevada for the pipeline design and site
5 improvement plans for the Lamb Tap project. The DOS Contract was signed on
6 May 1, 2023, provided as Exhibit No.__(TWC-15). The necessary permitting
7 was obtained from the Union Pacific railroad (UPRR) on November 19, 2025,
8 the Bureau of Land Management (BLM) on April 28, 2025, and approval from
9 the City of North Las Vegas for a block wall and site approval on December 10,
10 2025 and is provided as Exhibit No.__(TWC-16). The 24-inch steel pipeline was
11 procured in April 11, 2025 and received by the Company in November 2025.

12 **Q. 59 You indicated that the Lamb Tap Project is currently underway. What is**
13 **the current construction status of the Lamb Tap Project?**

14 A. 59 As of February 27, 2026, prefabrication work is underway for the Lamb tap
15 regulator station components. The installation of the Lamb Tap regulating
16 equipment is scheduled for the second and third quarters of 2026. Site
17 preparation for the Lamb tap project and pipeline is scheduled to commence in
18 May 2026.

19 **Q. 60 Is there a high probability that the ECIC will occur to the degree, in the**
20 **amount and at the time expected, as outlined in your prepared direct**
21 **testimony?**

22 A. 60 Yes. The Lamb Tap Project is a specific, identifiable event that is currently being
23 constructed and is supported by contracted expenditures and material
24 purchases as discussed above. The construction of the Lamb Tap Project is
25

1 progressing as designed and the Company anticipates an in-service date of
2 October 2026.

3 **Q. 61 Does the Company anticipate increases and decreases in revenue and**
4 **expenses which may occur within 210 days after the filing the instant**
5 **docket with the Commission and are such changes reasonably known and**
6 **measurable with reasonable accuracy?**

7 A. 61 The Company anticipates incremental ongoing operations & maintenance
8 expenses of approximately \$95 thousand per year following the in-service date.
9 Company witness Kasey D. Bohannon discusses the impact the Lamb Tap
10 Project is anticipated to have on revenues, related offsets resulting from the
11 Lamb Tap Project, as well as the related ECIC adjustment from a ratemaking
12 perspective.

13 **VII. SOUTHERN NEVADA LINE LOCATING ACTIVITIES**

14 **Q. 62 Please provide an overview of the Company's Southern Nevada Line**
15 **Locating cost recovery activities.**

16 A. 62 Effective January 1, 2025, the Commission approved Southwest Gas'
17 application, designated as Docket No. 25-01017, to establish regulatory
18 accounting treatment for line locate activity expenses for both its Northern and
19 Southern Nevada rate jurisdictions. This allows the Company to track the actual
20 level of line locate O&M expenses incurred and balance that O&M expense to
21 the level established in the Company's most recent general rate case, and
22 record the difference to a regulatory asset or regulatory liability account.

23 **Q. 63 What is the level of costs related to Southern Nevada Line Locate Activities**
24 **in the Test Year**

25

1 A. 63 From January 1, 2025 to November 30, 2025, the line locate expenses recorded
2 in the regulatory asset/liability account was \$2,072,841.

3 **Q. 64 Is the Company proposing to continue its regulatory accounting treatment**
4 **for line locate activities?**

5 A. 64 Yes, please refer to the prepared direct testimony of Company witness
6 Christopher M. Brown for the proposal to continue the regulatory accounting
7 treatment.

8 **Q. 65 Will you be supporting any certification adjustments in the instant**
9 **application?**

10 A. 65 Yes. I will file prepared certification testimony to support amounts recorded to
11 plant in service as of May 31, 2026 related to the above referenced projects
12 capital projects, including any updates to the ECIC adjustment for the Lamb Tap
13 Project.

14 **Q. 66 Does this conclude your prepared direct testimony?**

15 A. 66 Yes.

16

17

18

19

20

21

22

23

24

25

**SUMMARY OF QUALIFICATIONS
THOMAS CARDIN**

I graduated from University of Nevada at Las Vegas in 1996 and in 2001 with a Bachelor of Science degree and a Master of Science of degree in Mechanical Engineering. I graduated from Colorado State University in 2014 with a Master of Business Administration degree.

I began my career with Southwest as an Engineer in the Southern Nevada Division (SND) engineering department in 1996. I was assigned responsibility for design of distribution and transmission facilities, project management, and regulatory audits. In 2000, I was promoted to Engineering Supervisor in the SND engineering department. My responsibilities included the supervision of franchise and new business activities, development of short and long-term operational planning initiatives, and regulatory matters. I was promoted to Engineering Manager of Paiute Pipeline Company in 2004. In addition to the day-to-day management, my responsibilities included the management of construction, engineering, technical services, and compressor station departments and system operations. I represented Paiute Pipeline in PHMSA regulatory audits.

From 2005 to 2008, I was employed by Focus Property Group as Vice-President of Community Development. My responsibilities were primarily involved in the management of commercial and residential real estate and master planned community developments in California and Nevada. I managed Desert Utilities, Inc., which is a water and wastewater utility, located in Pahrump, NV.

In September 2008, I returned to Southwest as an Engineering Supervisor and subsequently was promoted to Key Account Management Supervisor in 2010. I was responsible for transportation accounts in California and Nevada. In 2011, I was promoted

to Engineering Manager of SND engineering department. My responsibilities included the management of engineering, right-of-way, regulatory, and GIS. I was promoted to Director of Gas Operations in 2014, and I was responsible for the SND operations and maintenance departments, which are composed of construction, engineering, administration, and special projects. I was promoted to Vice-President of Gas Operations in the SND in 2024. I oversee the day-to-day operations in Las Vegas, Nevada, Bullhead City, Arizona, and Needles, California, with approximately 354 Southwest employees and an annual budget of \$265 million. SND Gas Operations serves approximately 765,000 customers.

SOUTHWEST GAS CORPORATION
SOUTHERN NEVADA
HIGH-PRESSURE APPROACH & SYSTEM REINFORCEMENT PROJECTS, & SYSTEM INTEGRITY PROJECTS
CLOSED TO PLANT IN SERVICE DECEMBER 2023 - NOVEMBER 2025

Line No.	Work Order Number (a)	Work Order Description (b)	Date First Transferred to Plant (c)	Total Amount Excluding CIAC (d)	CIAC (e)	AFUDC (f)	Line No.
1	<u>System Allocable</u> 0021W4748670	VTS PHASE 2 HP DISTRIBUTION	Dec-24	1,222,311.19	0.00	6,812.77	1



MEMORANDUM

To: James Frame
From: Jordyn Penniman
Date: 01/18/2021
Subject: Preliminary Infrastructure Planning, System Improvements, and Cost Analysis for Tule Springs Master Plan Community (MPC)

***** DISCLAIMER: FOR INTERNAL SOUTHWEST GAS USE ONLY *****

Summary:

SNV Division System Planning has completed a preliminary review per the request of Energy Solutions. The request included the following information:

Customer: KBS SOR Park Highlands, LLC
Location: Tule Springs MPC north of the I-215 in North Las Vegas
Requested Load: 1,796 MCFH (total MPC demand)
Delivery Pressure: 7IWC

It was requested that SNV System Planning review the viability of serving the customer from the existing distribution system. Due to the **COVID-19 pandemic**, the customer's requested timing for installation is currently unknown. This review is preliminary and may change depending on the final design, field conditions, and other factors at the time of construction.

Alignment:

The following design options will service Tule Springs MPC Village 1, Phases 1 & 2 (see exhibit A):

The proposed alignment for the distribution infrastructure for **Design Options 1, 2, 3, & 4** (see exhibits B, C, D, & E respectively) is within paved and unpaved Public Right-of-Way within the City of North Las Vegas.

Assumptions:

- Cost estimate is based on historical project information and field conditions of each design option.

- Design will be installed by means of open trench, in streets with moderate volume of traffic.
- All streets considered for gas installation are currently paved, unpaved, and/or will be paved in the future; pavement repairs are a major contribution to total estimated costs.
- For installation of high-pressure feeder, anticipated cost changes may vary in the range of 20% of the total cost.

Analysis:

Based on the information provided by Energy Solutions and per the analysis of SNV system Planning, these are the parameters to serve the customer for Village 1, Phases 1 & 2:

Total Customers: 4,089 units
Maximum Load: 613.35 MCFH
Maximum Pressure: 71WC

The following installation options address these parameters with the existing gas infrastructure in the area and provide an analysis for how each option will serve the customer (Note: The proposed pipe size and alignment for Design Options 2 & 4 follow the recommendation of the *Transmission and Feeder Strategy (TAFS) Map*):

System Planning Installation Options												
	Maximum Number of Customers	Maximum Demand	Total Footage	Size/Material	Location	High Pressure Infrastructure (Y/N)	Regulator Station (Y/N - #)	Estimated Total Cost	Cost Per Foot	Install Later Option Cost	Cost Per Foot	Total Cost Difference
Install Option 1	2,966	445 MCFH	3,537 - STL (In Dirt) 8,607 - STL (In Pavement)	6" HP STL	Elkhorn Rd. from Aviary Way to Tule Springs Pkwy.	Y	Y - 1	\$3,661,164.00	\$193 (In Dirt) \$337 (In Pavement)	\$ 4,169,074.00	\$337	\$ 507,910.00
Install Option 2	2,966	445 MCFH	3,537 - STL (In Dirt) 8,607 - STL (In Pavement)	16" HP STL	Elkhorn Rd. from Aviary Way to Tule Springs Pkwy.	Y	Y - 1	\$4,736,408.00	\$282 (In Dirt) \$426 (In Pavement)	\$ 5,244,318.00	\$426	\$ 507,910.00
Install Option 3	4,833	725 MCFH	7,114 - STL (In Dirt) 8,607 - STL (In Pavement)	6" HP STL	Elkhorn Rd. from Aviary Way to Tule Springs Pkwy.	Y	Y - 2	\$4,425,045.00	\$193 (In Dirt) \$337 (In Pavement)	\$ 5,450,278.00	\$337	\$1,025,233.00
Install Option 4	4,833	725 MCFH	7,114 - STL (In Dirt) 8,607 - STL (In Pavement)	16" HP STL	Elkhorn Rd. from Aviary Way to Tule Springs Pkwy.	Y	Y - 2	\$5,817,001.00	\$281 (In Dirt) \$426 (In Pavement)	\$ 6,842,234.00	\$426	\$1,025,233.00

Schedule:

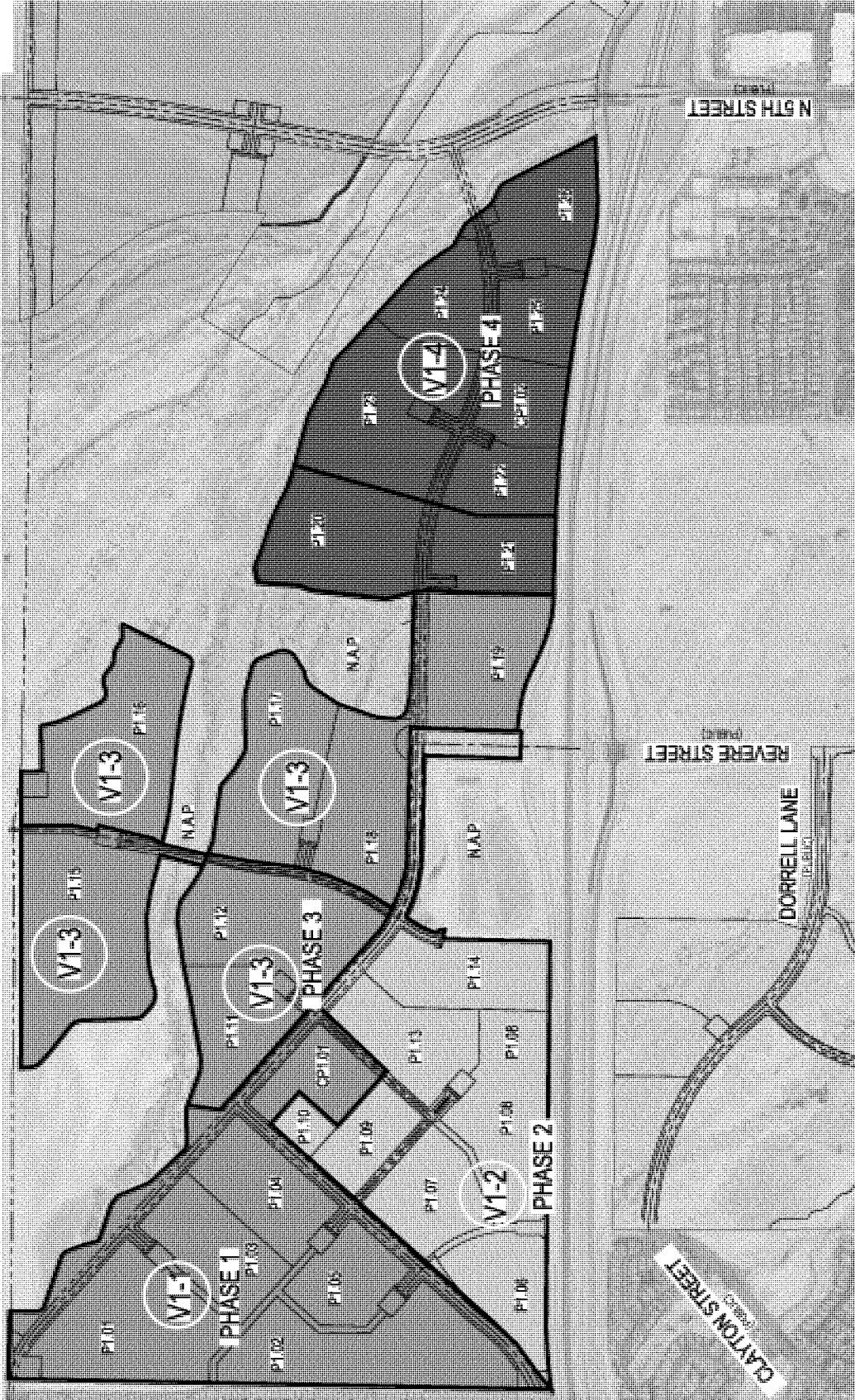
Option 1									
Project Elements	Comments	Timeline							
		2021							
		February	March	April	May	June	July	August	September
Engineering Design									
<i>Alignment</i>	1 month								
<i>Regulator Station(s)</i>	2 months								
Project Approvals	4 weeks. Staff and Operations approvals.								
Material Procurement									
<i>Pipe</i>	3 months								
<i>Regulator Station(s)</i>	3 months								
Permitting**									
CNLV	3 weeks								
Construction									
<i>Bid</i>	Contractor bid process.								
<i>Alignment</i>	Bid with SWG Construction Inspection crews								

Option 2									
Project Elements	Comments	Timeline							
		2021							
		February	March	April	May	June	July	August	September
Engineering Design									
<i>Alignment</i>	1 month								
<i>Regulator Station(s)</i>	2 months								
Project Approvals	4 weeks. Staff and Operations approvals.								
Material Procurement									
<i>Pipe</i>	3 months								
<i>Regulator Station(s)</i>	3 months								
Permitting**									
CNLV	3 weeks								
Construction									
<i>Bid</i>	Contractor bid process.								
<i>Alignment</i>	Bid with SWG Construction Inspection crews								

Option 3									
Project Elements	Comments	Timeline							
		2021							
		February	March	April	May	June	July	August	September
Engineering Design									
<i>Alignment</i>	1 month								
<i>Regulator Station(s)</i>	2 months								
Project Approvals	4 weeks. Staff and Operations approvals.								
Material Procurement									
<i>Pipe</i>	3 months								
<i>Regulator Station(s)</i>	3 months								
Permitting**									
CNLV	3 weeks								
Construction									
<i>Bid</i>	Contractor bid process.								
<i>Alignment</i>	Bid with SWG Construction Inspection crews								

Option 4									
Project Elements	Comments	Timeline							
		2021							
		February	March	April	May	June	July	August	September
Engineering Design									
<i>Alignment</i>	1 month								
<i>Regulator Station(s)</i>	2 months								
Project Approvals	4 weeks. Staff and Operations approvals.								
Material Procurement									
<i>Pipe</i>	3 months								
<i>Regulator Station(s)</i>	3 months								
Permitting**									
CNLV	3 weeks								
Construction									
<i>Bid</i>	Contractor bid process.								
<i>Alignment</i>	Bid with SWG Construction Inspection crews								

EXHIBIT A NORTHWEST VILLAGE 1



LEGEND

- PROPERTY LINE
- - - - - RIGHT-OF-WAY LINE
- CLOSING PHASE
- V1-2 CLOSING PHASE
- P1.01 PARCEL NUMBER
- VILLAGE 1 PHASE 1
- VILLAGE 1 PHASE 2
- VILLAGE 1 PHASE 3
- VILLAGE 1 PHASE 4

North Arrow

Scale: 0 20 40 60 80 FEET

SLATER
HANIYAN
GROUP
CONSULTING ENGINEERS & PLANNERS

PHONE (702) 244-5300
FAX (702) 244-5399
4045 S. WARELE STREET #2116, LAS VEGAS, NV 89119

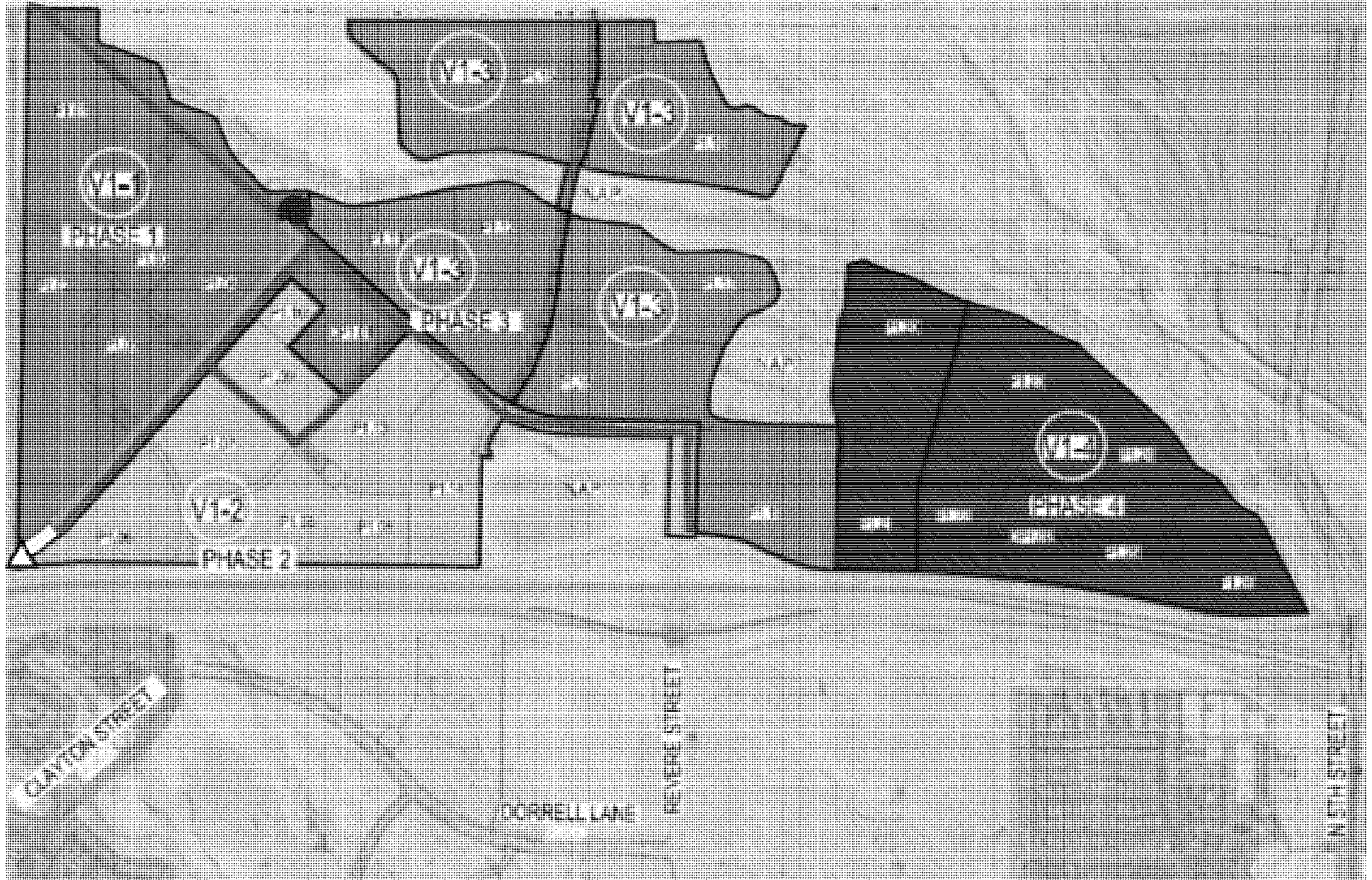
NO.	DESCRIPTION	DATE	BY	CHK

KBS SOR PARK HIGHLANDS, LLC
TULE SPRINGS SALES &
VTS DEVELOPMENT PHASING BUSINESS PLAN

DATE: 02/08/19
DRAFTER:
DESIGNER:
CHECKED:
PROJECT NO.:
KBS1702

EX-1
SHEET 1 OF 1

Proposed Alignment Exhibit B – Design Option 1



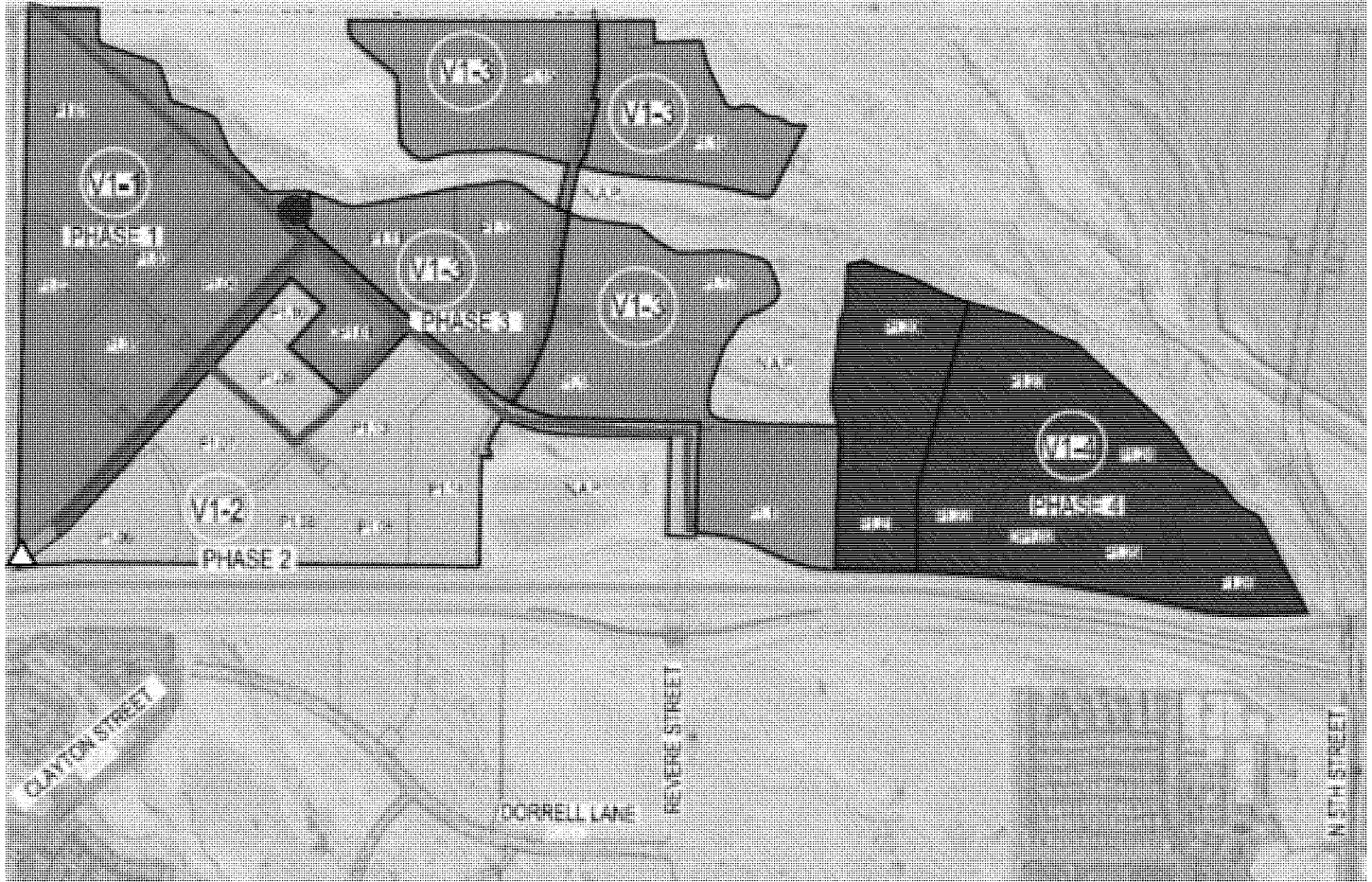
LEGEND

- Proposed MPC Infrastructure
- New 6" HP STL in Pavement
- New 6" HP STL in Dirt
- New 4" Regulator Station
- Tie-in & Approach (Exhibit F)

Tule Springs Master Plan Community

Energy Solutions Key Accounts requested for a preliminary review regarding a potential new customer, Tule Springs Master Plan Community, located at Elkhorn Road and Clayton Street, north of the I-215. The projected load is 613.35 MCFH with a delivery pressure of 71WC. This proposed design utilizes 3,537 feet of 6" HP STL in dirt and 8,607 feet of 6" HP STL in pavement to serve a total of 2,966 customers or a maximum load of 445 MCFH. This proposed alignment is preliminary and may change depending on field conditions and other unknown factors at this time.

Proposed Alignment Exhibit C – Design Option 2



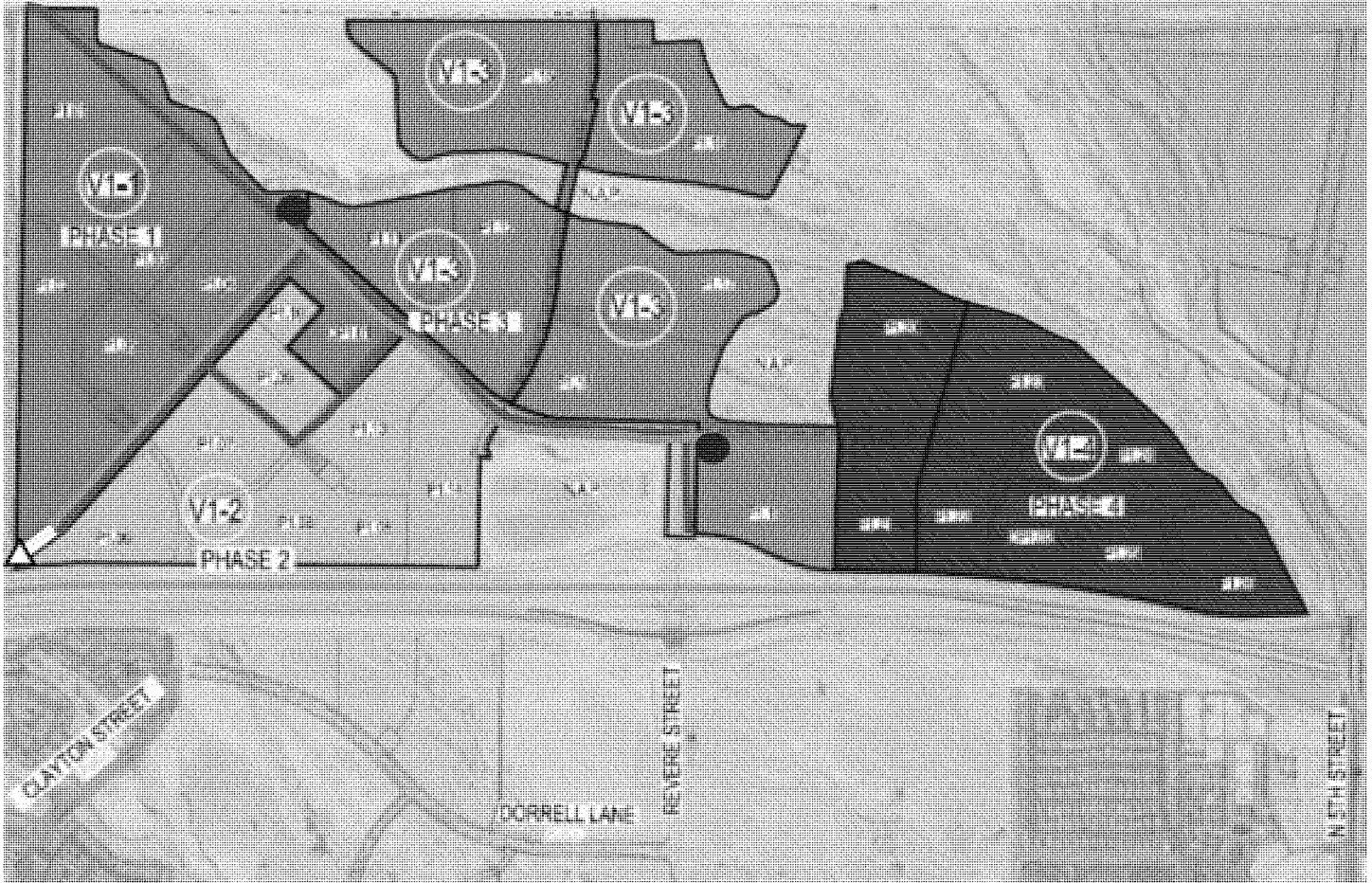
LEGEND

- Proposed MPC Infrastructure
- New 16" HP STL in Pavement
- New 16" HP STL in Dirt
- New 4" Regulator Station
- Tie-in & Approach (Exhibit G)

Tule Springs Master Plan Community

Energy Solutions Key Accounts requested for a preliminary review regarding a potential new customer, Tule Springs Master Plan Community, located at Elkhorn Road and Clayton Street, north of the I-215. The projected load is 613.35 MCFH with a delivery pressure of 71WC. This proposed design utilizes 3,537 feet of 16" HP STL in dirt and 8,607 feet of 16" HP STL in pavement to serve a total of 2,966 customers or a maximum load of 445 MCFH. This proposed alignment is preliminary and may change depending on field conditions and other unknown factors at this time.

Proposed Alignment Exhibit D – Design Option 3



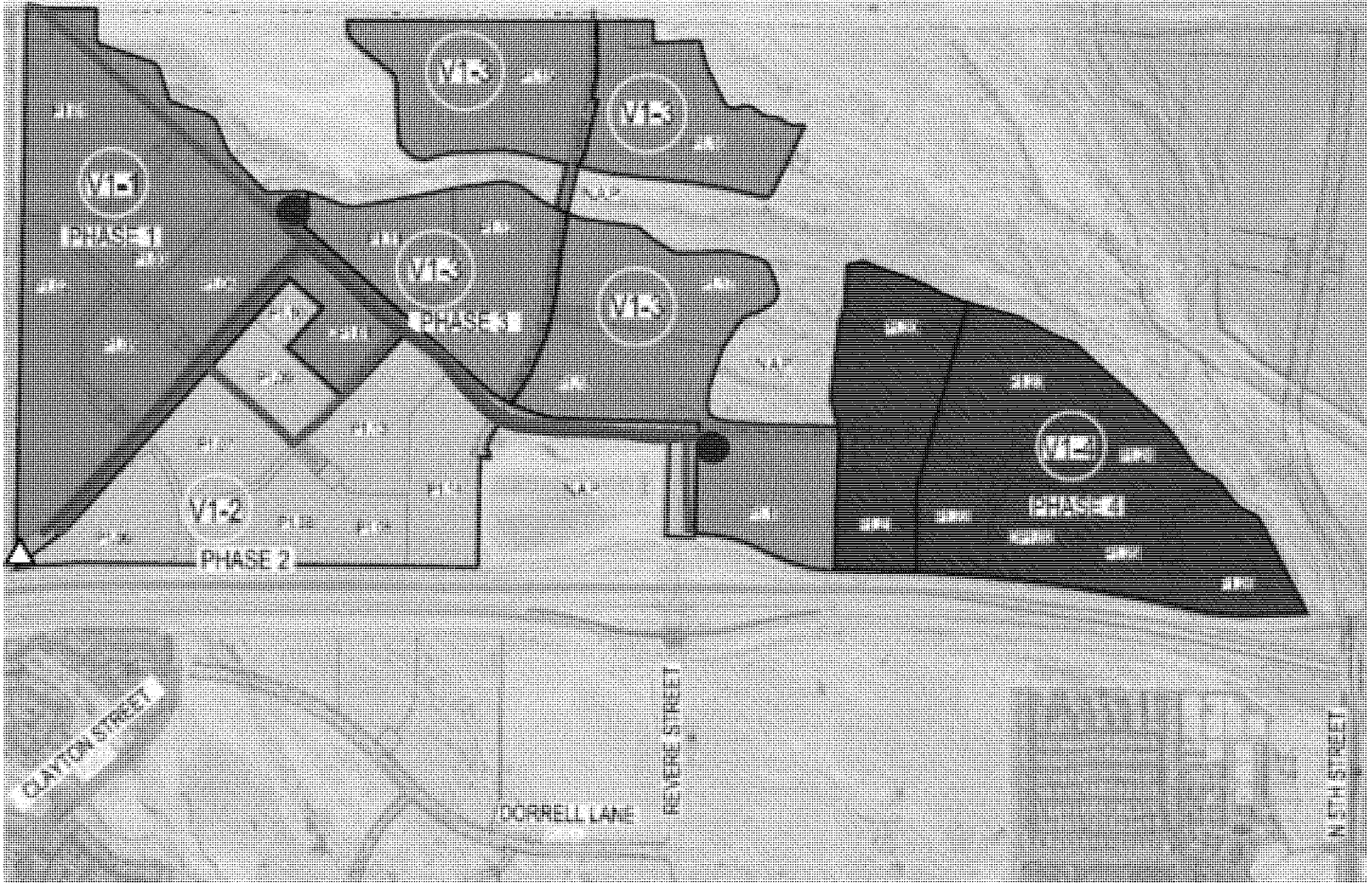
LEGEND

- Proposed MPC Infrastructure
- New 6" HP STL in Pavement
- New 6" HP STL in Dirt
- New 4" Regulator Station
- Tie-in & Approach (Exhibit F)

Tule Springs Master Plan Community

Energy Solutions Key Accounts requested a preliminary review regarding a potential new customer, Tule Springs Master Plan Community, located at Elkhorn Road and Clayton Street, north of the I-215. The projected load is 613.35 MCFH with a delivery pressure of 71WC. This proposed design utilizes 7,114 feet of 6" HP STL in dirt and 8,607 feet of 6" HP STL in pavement to serve a total of 4,833 customers or a maximum load of 725 MCFH. This proposed alignment is preliminary and may change depending on field conditions and other unknown factors at this time.

Proposed Alignment Exhibit E – Design Option 4



LEGEND

- Proposed MPC Infrastructure
- New 16" HP STL in Pavement
- New 16" HP STL in Dirt
- New 4" Regulator Station
- Tie-In & Approach (Exhibit G)

Tule Springs Master Plan Community

Energy Solutions Key Accounts requested for a preliminary review regarding a potential new customer, Tule Springs Master Plan Community, located at Elkhorn Road and Clayton Street, north of the I-215. The projected load is 613.35 MCFH with a delivery pressure of 71WC. This proposed design utilizes 7,114 feet of 16" HP STL in dirt and 8,607 feet of 16" HP STL in pavement to serve a total of 4,833 customers or a maximum load of 725 MCFH. This proposed alignment is preliminary and may change depending on field conditions and other unknown factors at this time.

Proposed Alignment Exhibit F



LEGEND

Existing 10" HP STL



New 6" HP STL in Pavement



Tule Springs Master Plan Community

Energy Solutions Key Accounts requested for a preliminary review regarding a potential new customer, Tule Springs Master Plan Community, located at Elkhorn Road and Clayton Street, north of the I-215. The projected load is 613.35 MCFH with a delivery pressure of 71WC. This proposed design utilizes **8,607 feet of 6" HP STL** in pavement approaching the Tule Springs Village 1 location. This footage is included in the design and costs for Design Options 1 & 3. This proposed alignment is preliminary and may change depending on field conditions and other unknown factors at this time.

Proposed Alignment Exhibit G

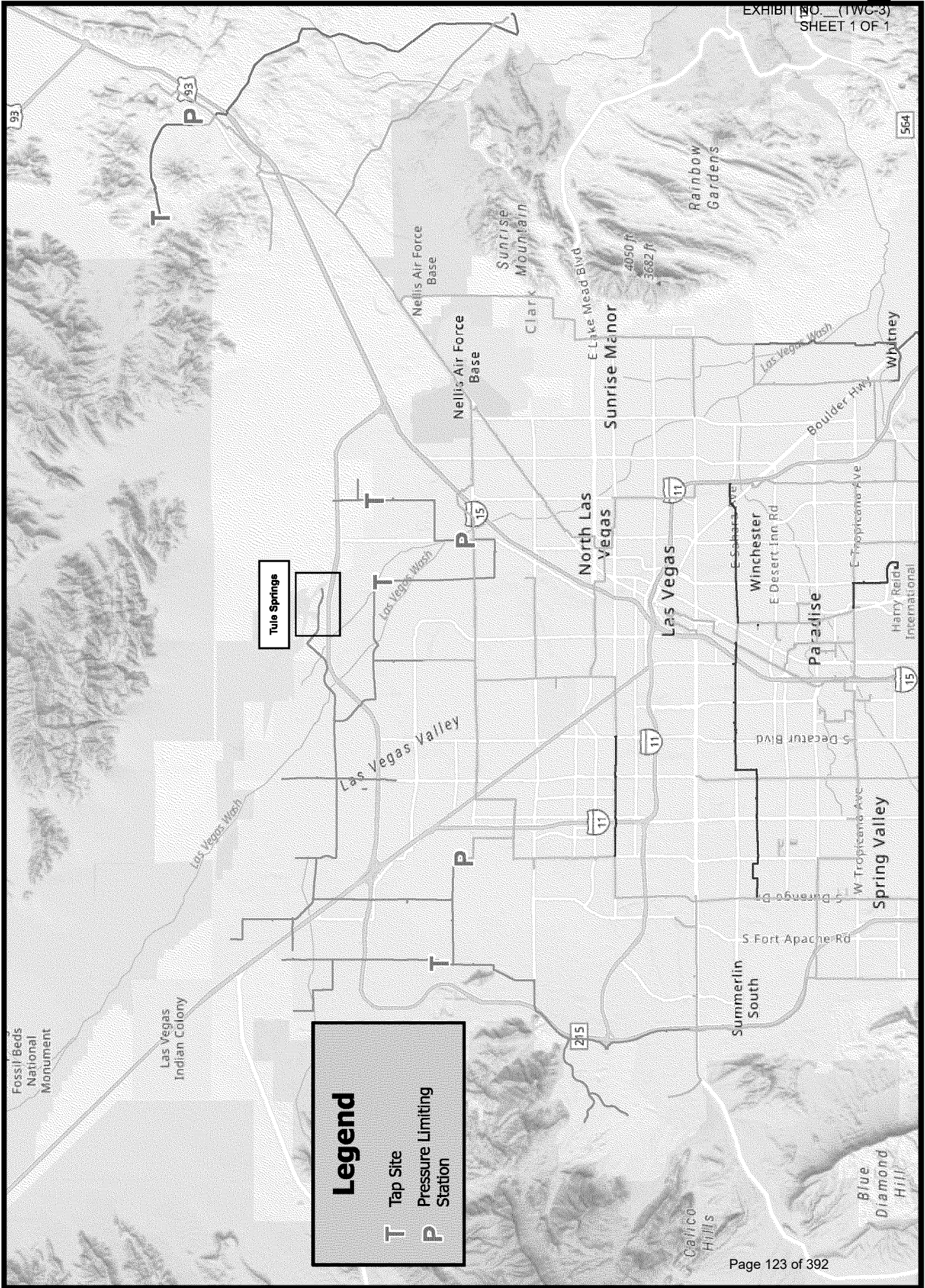


LEGEND

- Existing 10" HP STL 
- New 16" HP STL in Pavement 

Tule Springs Master Plan Community

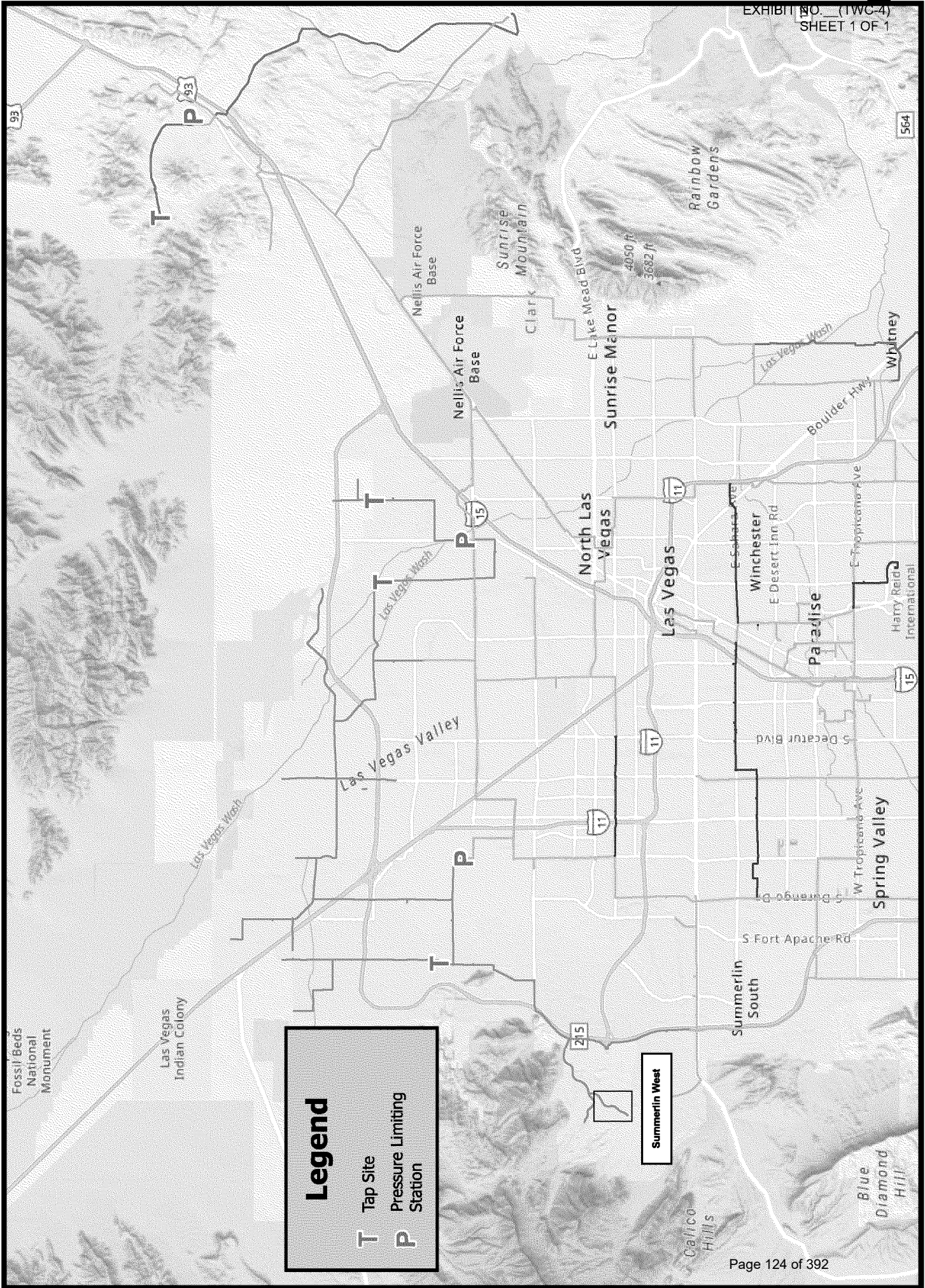
Energy Solutions Key Accounts requested for a preliminary review regarding a potential new customer, Tule Springs Master Plan Community, located at Elkhorn Road and Clayton Street, north of the I-215. The projected load is 613.35 MCFH with a delivery pressure of 71WC. This proposed design utilizes 8,607 feet of 16" HP STL in pavement approaching the Tule Springs Village 1 location. This footage is included in the design and costs for Design Options 2 & 4. This proposed alignment is preliminary and may change depending on field conditions and other unknown factors at this time.



Legend

T Tap Site
P Pressure Limiting Station

Tule Springs



Legend

T Tap Site
P Pressure Limiting Station

Summerlin West



MEMORANDUM

To: James Frame

From: Ryan Stemmerik

Date: 03/31/2021

Subject: Preliminary Infrastructure Planning, System Improvements, and Cost Analysis for Summerlin West MPC

Summary:

In July of 2020, SNV System Planning was provided with the projected customers/demand for Summerlin West, located east of the 215 Beltway in Las Vegas. The total projected load for this Master Plan Community is **2,834.55 MCFH**. SNV System Planning has reviewed the viability of the new community utilizing new HP infrastructure and System Improvements. This review is preliminary and may change depending on final design, field conditions, and other unknown factors at this time.

Alignment:

The proposed alignment for the HP infrastructure for **Design Option 1A** (see exhibit A) is without secondary HP loop.

The proposed alignment for the HP infrastructure for **Design Option 1B** (see exhibit B) is with secondary HP loop.

Assumptions:

- Cost estimate is based on historical project information and field conditions of each design option.
- Design will be installed by means of open trench, in streets with moderate volume of traffic.
- All streets considered for gas installation are currently paved, unpaved, and/or will be paved in the future; pavement repairs are a major contribution to total estimated costs.
- For installation of high-pressure feeder, anticipated cost changes may vary in the range of 15% of the total cost.

Analysis:

Based on the information provided by Energy Solutions, the current HP feeder system cannot support the inclusion of a new community load of 2,834.55 MCFH. To serve this community in time to support Summerlin West Villages 21, 22, 25, 27, 28, and 29, new HP facilities must be installed. The minimum pipe diameter/material to serve this community is 8-inch steel.

Design & Estimated Costs:

Two design options to serve this customer were reviewed and are as follows:

Design Option Advantages and Disadvantages		
Design Options	Advantages	Disadvantages
Design Option 1 - Summerlin West HP Infrastructure Installed without HP loop	*Lowest cost *Prevent future paving costs	*Less impactful third reg station location
Design Option 2 - Summerlin West HP Infrastructure Installed with HP loop	*Increases viability of HP loop for additional Summerlin West expansions *Prevent future paving costs *More advantageous third reg station location	*Larger cost *More pavement cuts and re-paving *Close coordination needed with CLV for installation

System Planning Estimated Costs				
Design Options	Item Description	Footage	Estimated Cost	Est. Unit Cost
Design Option 1 - Summerlin West HP Infrastructure Installed without HP loop	8" HP Steel	27,067	\$ 7,347,828.32	\$ 271
	Three 4" Regulator Stations	N/A	\$ 231,000.00	\$ -
Design Option 2 - Summerlin West HP Infrastructure Installed with HP loop	8" HP Steel	29,667	\$ 8,156,711.58	\$ 275
	Three 4" Regulator Stations	N/A	\$ 231,000.00	\$ -

See attached Exhibit C for more detailed cost breakdown of each design option. These costs are preliminary and may change depending on final design, field conditions, and other unknown factors at this time.

Recommendations:

It is the recommendation of SNV System Planning that Option 1B be utilized to serve

Page 3

Summerlin West due to the potential improvement to the surrounding and future areas.

Exhibit C – Design Options Cost Breakdowns

These cost estimates are preliminary and may change depending on final design, field conditions, or other unknown factors.

Design Option #1A Estimated Cost Breakdown			
8" HP STL	Summary: 5.13 miles of new 8" HP STL feeder; alignment within existing R/W that is both paved and unpaved.		
	Item	Cost	Assumptions
	Engineering Services	\$ 137,214	2% of total project cost
	Heavy Construction (Earthwork)	\$ 1,563,443	Based on RS Means 2016; inflation taken into account.
	Light Construction Equipment (Rental)	\$ 676,678	Based on historical costs.
	Materials	\$ 1,218,020	Based on historical costs.
	Contractor Labor	\$ 2,706,711	Based on historical costs.
	SWG Labor	\$ 270,671	Based on historical costs.
	Cathodic Protection	\$ 20,000	Based on historical costs; inclusion of potential anodes, ground bed, etc.
	Permitting	\$134,523.87	2% of total project cost
	Mobilization & Demobilization	\$ 270,671	Based on historical costs.
	Anticipated Design Changes	\$ 349,896.59	5% of total project cost.
	Total Estimated Cost	\$ 7,347,828	
	Unit Cost	\$ 271	per foot
4" Regulator Stations	Summary: Two 4" regulator stations to be installed.		
	Item	Cost	Assumptions
	Distribution Category 1 Regulator Station x 2	\$ 210,000.00	Based on historical cost
	10% Contingency	\$ 21,000.00	
	Total Estimated Cost	\$ 231,000.00	

Design Option #1B Estimated Cost Breakdown			
8" HP STL	Summary: 5.62 miles of new 8" HP STL feeder; alignment within existing R/W that is both paved and unpaved.		
	Item	Cost	Assumptions
	Engineering Services	\$ 152,320	2% of total project cost
	Heavy Construction (Earthwork)	\$ 1,809,969	Based on RS Means 2016; inflation taken into account.
	Light Construction Equipment (Rental)	\$ 741,668	Based on historical costs.
	Materials	\$ 1,335,002	Based on historical costs.
	Contractor Labor	\$ 2,966,671	Based on historical costs.
	SWG Labor	\$ 296,667	Based on historical costs.
	Cathodic Protection	\$ 20,000	Based on historical costs; inclusion of potential anodes, ground bed, etc.
	Permitting	\$ 149,332.89	2% of total project cost
	Mobilization & Demobilization	\$ 296,667	Based on historical costs.
	Anticipated Design Changes	\$ 388,414.84	5% of total project cost.
	Total Estimated Cost	\$ 8,156,712	
	Unit Cost	\$ 275	per foot
4" Regulator Stations	Summary: Two 4" regulator stations to be installed.		
	Item	Cost	Assumptions
	Distribution Category 1 Regulator Station x 2	\$ 210,000.00	Based on historical cost
	10% Contingency	\$ 21,000.00	
	Total Estimated Cost	\$ 231,000.00	



To: Brandon Jones
From: Laretta Fagan
Date: 7/31/2023
Subject: Preliminary Review for Summerlin West

Summary:

SNV Division System Planning has completed a re- review per the request of SNV Engineering Management. The request information is as follows:

Customer: Howard Hughes Corporation
Location: Northwest Las Vegas
Total Requested Load: 1,178.00 MCFH
Previous Requested Load 940 MCFH
Additional Load Needed 238 MCFH
Delivery Pressure: 7" WC

It was requested that SNV System Planning review the viability of serving the customer from the existing distribution system. This review is preliminary and may change depending on the final design, field conditions, and other factors at the time of construction.

Alignment:

The proposed alignment for Design Option 1 is within Public Right-of-Way (see exhibit A); a portion of the alignment is within paved streets.

Assumptions:

- Design options will be installed by means of open trench , in streets with medium volume of traffic.
- Some streets considered for gas installation are currently paved; pavement repairs are a contribution to total estimated costs.
- For installation of distribution and/or high pressure main, anticipated cost changes may vary in the range of 20% of the total cost.

Analysis:

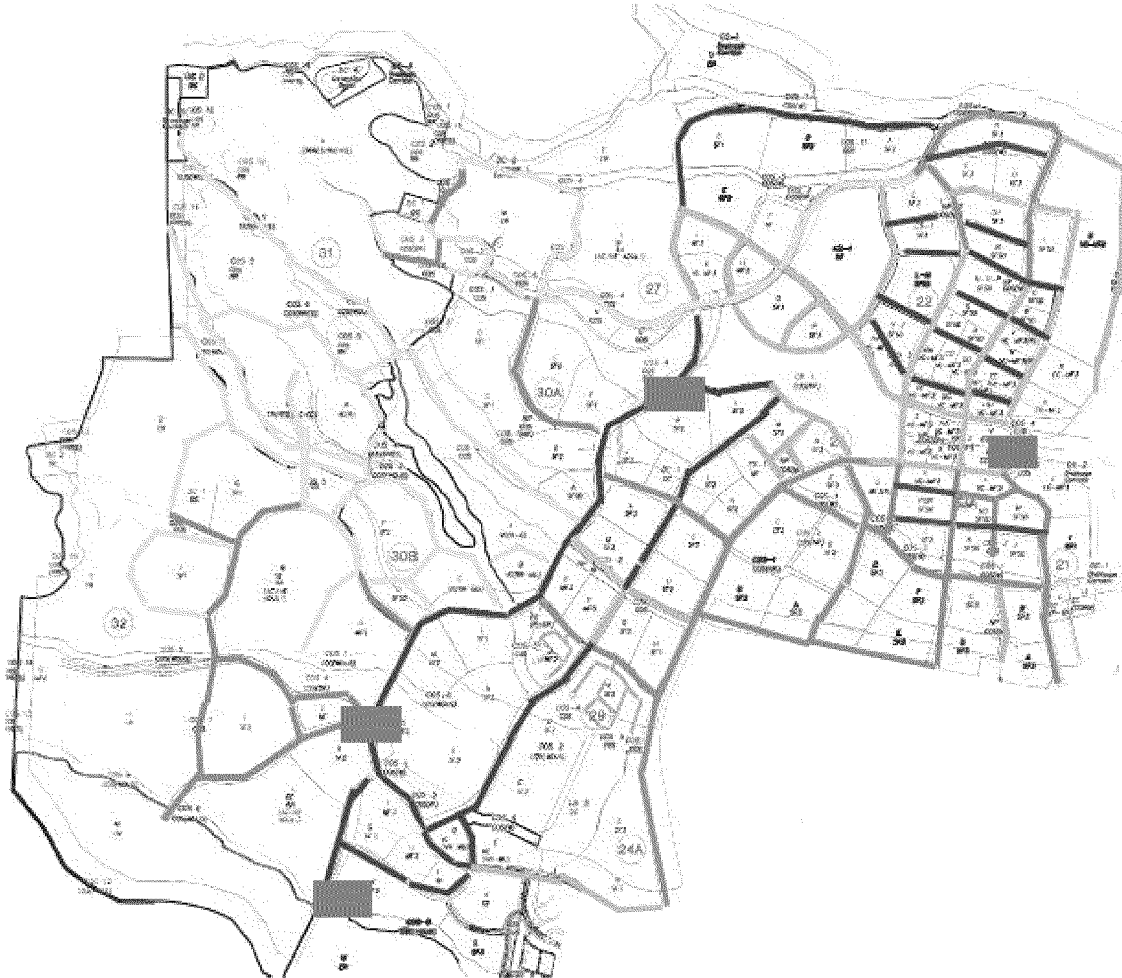
Based on the information provided by Energy Solutions and per the analysis of SNV System Planning, these are

the parameters to serve the customer using the existing gas infrastructure in the area:









Min. Pipe Size/Material: 2 "

Install Options						
	PE Install		Steel Install		Tap Site	
	Diameter	Footage	Diameter	Footage	Required	Quantity
Install Option 1	2	3,232.00	N/A	N/A	Yes	4
Install Option 1	4	113,398.02	8	27,000	No	0
Install Option 1	6	79,858.41	N/A	N/A	No	0

Proposed Alignment Exhibit

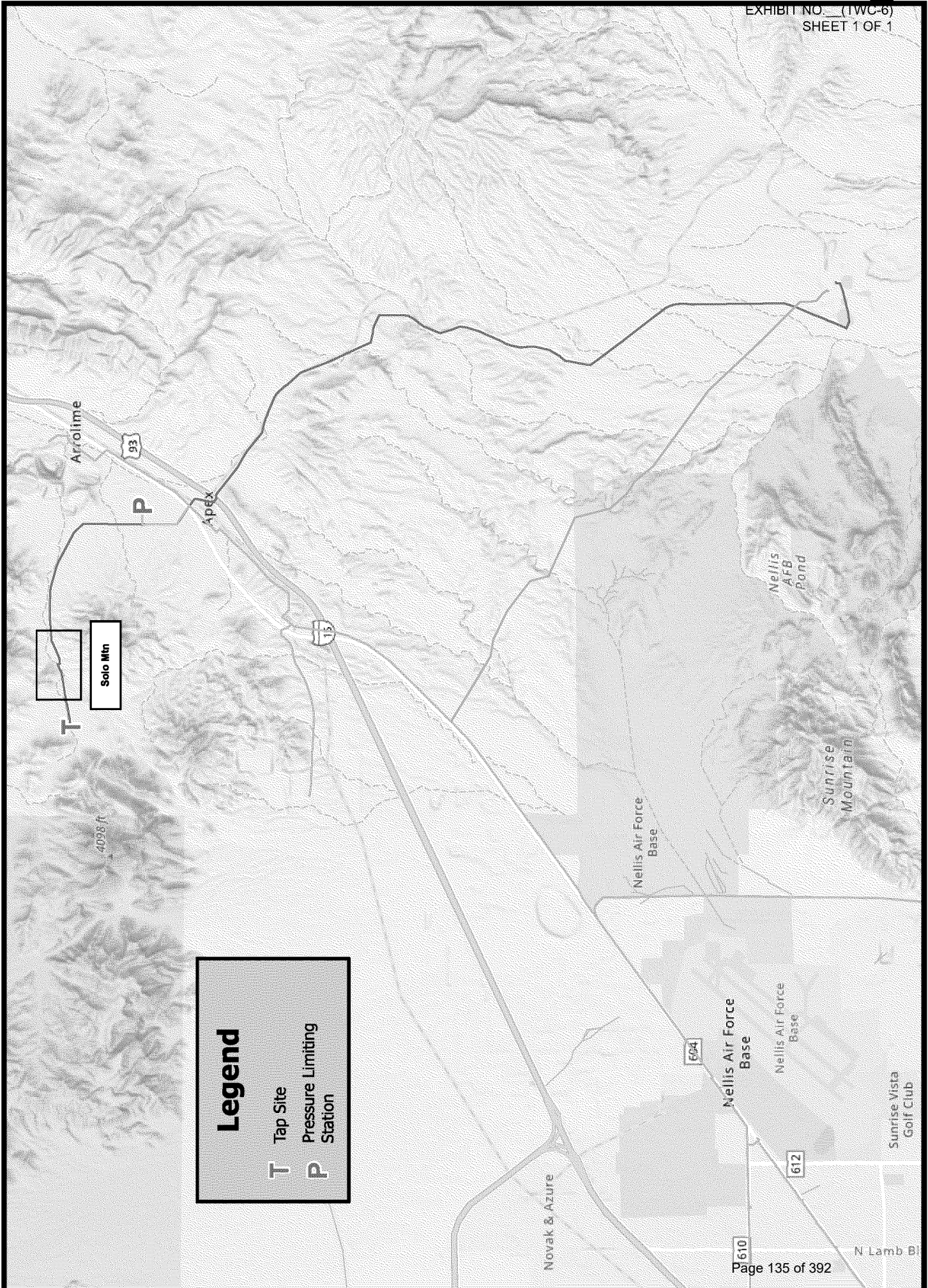


LEGEND

-  4" Regulator Station
-  4" PE Future Infrastructure
-  6" PE Future Infrastructure
-  2" PE Existing
-  4" PE Existing
-  6" PE Existing
-  4" PE Proposed
-  8" Steel Proposed

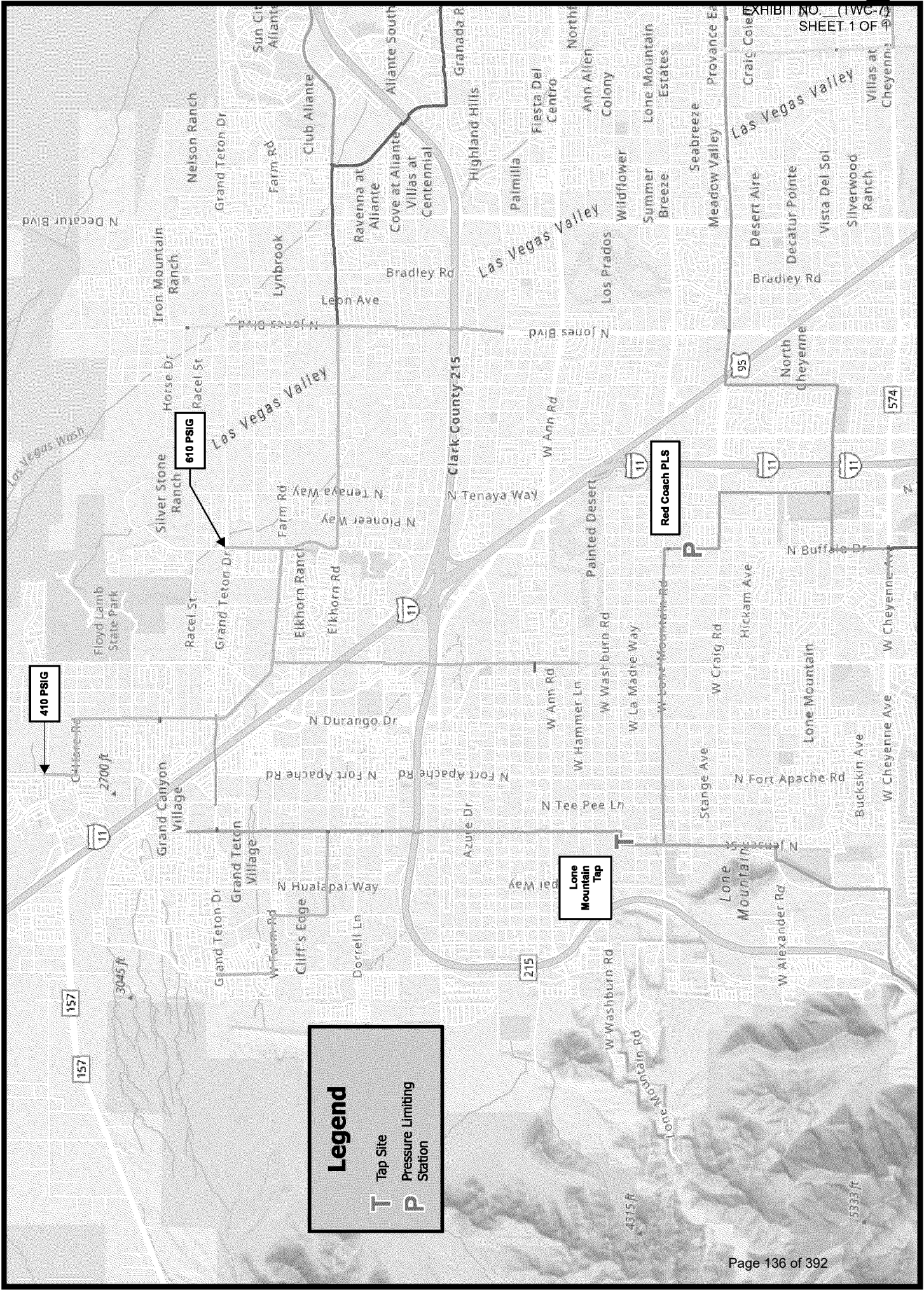
Howard Hughes Corporation

SNV Engineering Management requested for as preliminary review regarding a potential new customer, Howard Hughes Corporation, located in Summerlin West. The projected load is 1178.16 MCFH with a delivery pressure of 7" WC. This proposed design utilizes 70,167 feet of 4" PE, and 27,956.01 of 6" PE to serve the customer. This proposed alignment is preliminary and may change depending on field conditions and other unknown factors at this time.



Legend

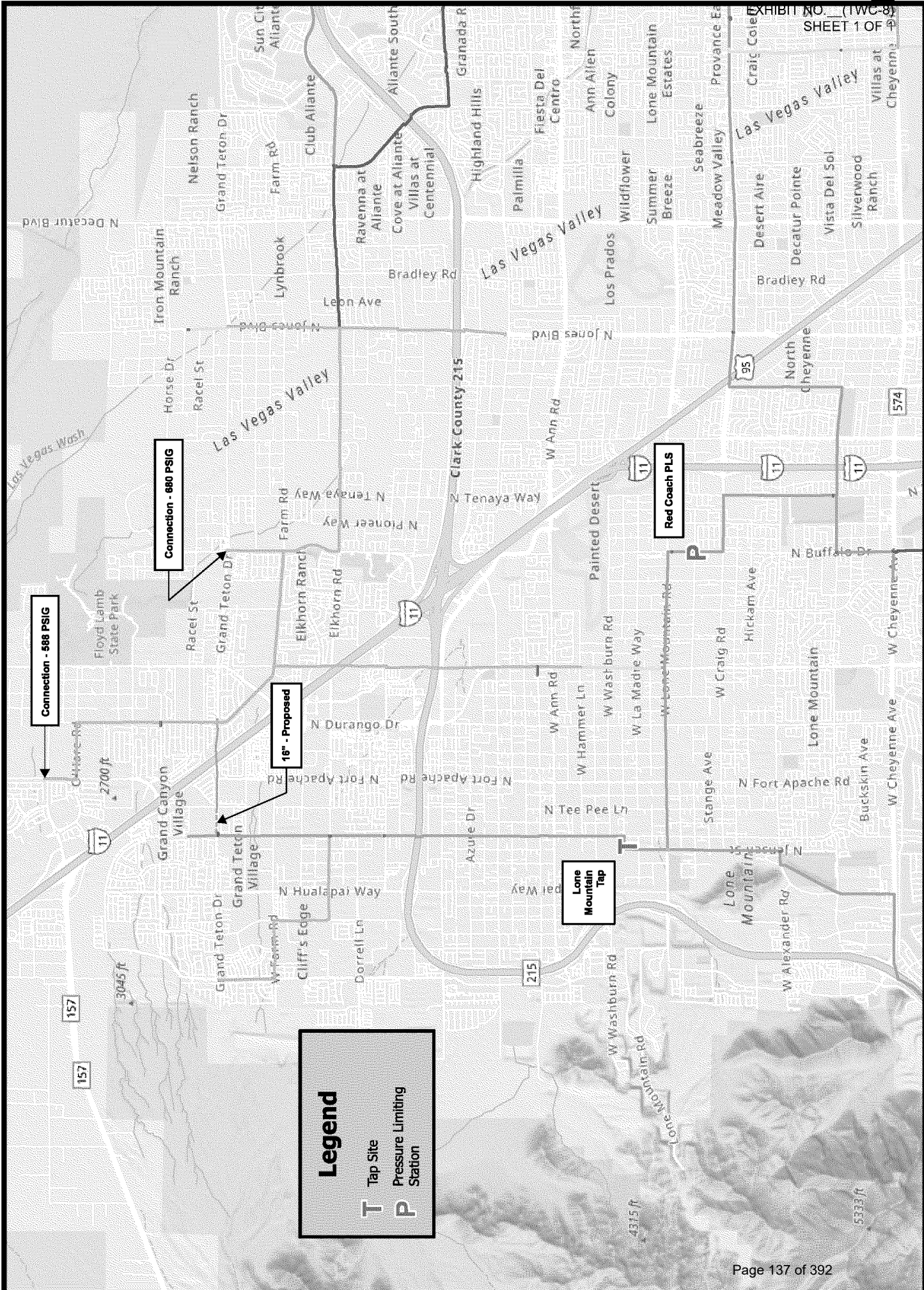
- T Tap Site
- P Pressure Limiting Station



Legend

T Tap Site

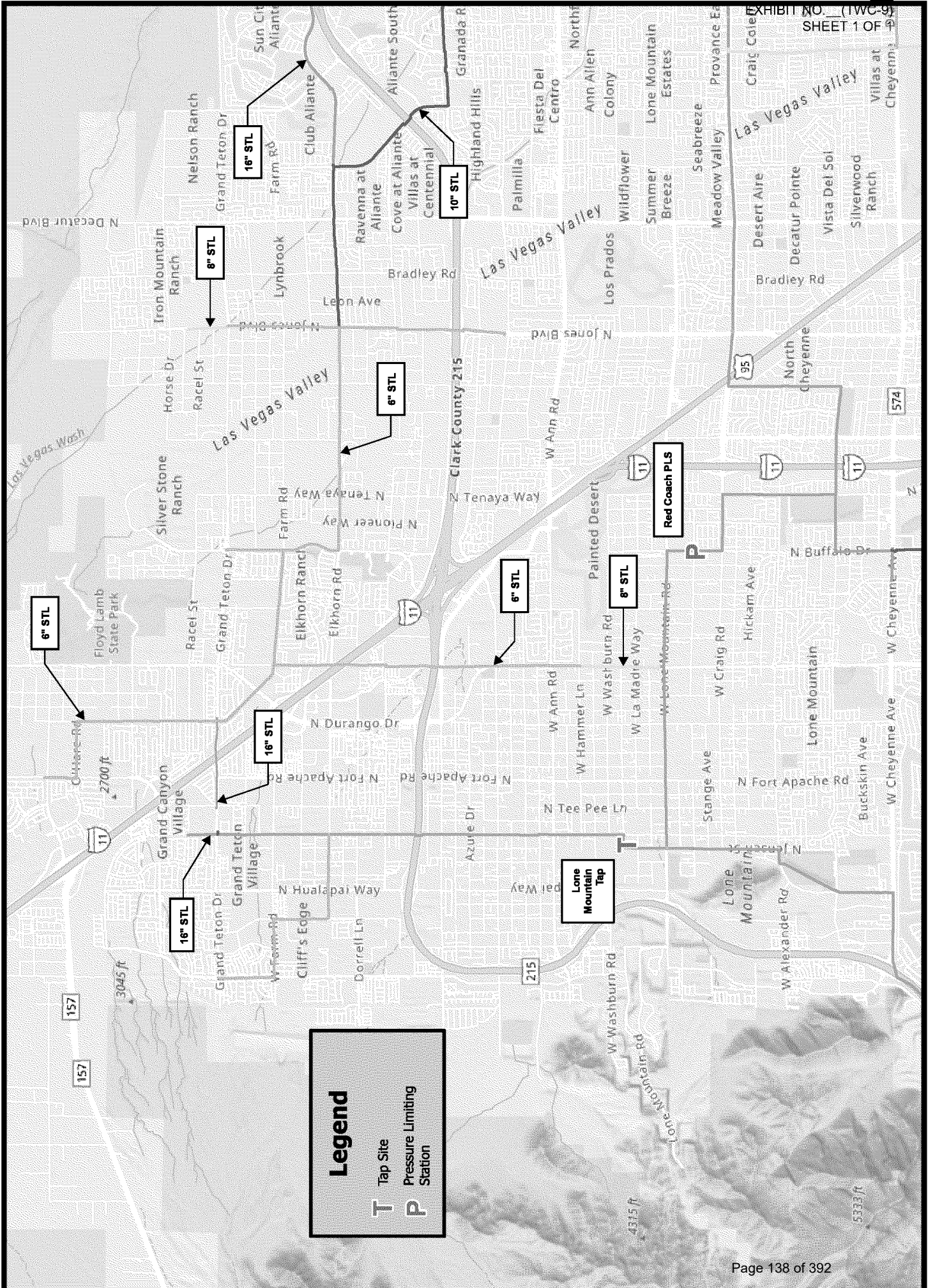
P Pressure Limiting Station



Legend

T Tap Site

P Pressure Limiting Station







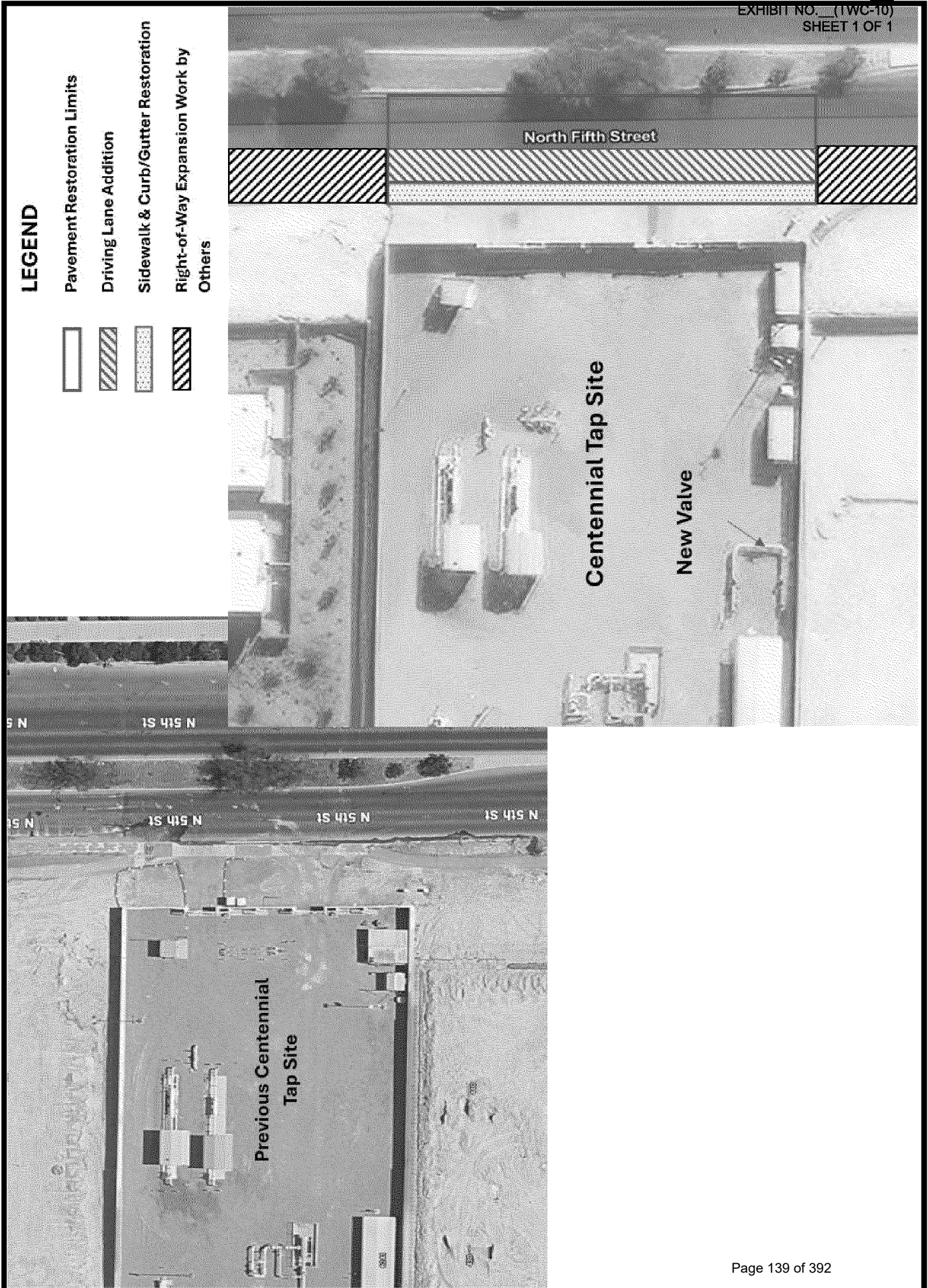
Legend

T Tap Site

P Pressure Limiting Station

LEGEND

-  Pavement Restoration Limits
-  Driving Lane Addition
-  Sidewalk & Curb/Gutter Restoration
-  Right-of-Way Expansion Work by Others





MEMORANDUM

To: Thomas Cardin and Craig Sisco

From: Penio Penev, Brandon Frampton *BPF*

Date: 06/30/2023

Subject: Lamb Tap

Engineering Planning completed a 10-year Supply Requirements study for Gas Resources Planning which the study indicated that a new Kern River tap will be required to serve the projected 2024-2025 heating season sales demands during a 43 HDD event. Without the new tap, Southwest Gas will only be able to serve approximately 580,000 Dth/day, which corresponds to a projected 42 HDD sales demand level for the 2024-2025 heating season. The analysis was based on the current long-range forecast.

In addition, three locations for the new tap were assessed. Of the three locations evaluated, Engineering Planning recommends the new tap is located at the intersection of Kern River's pipeline and Lamb Blvd. This is because this location requires the least amount of pipe to connect the new tap to the existing system and it will provide the greatest flexibility to accommodate a future expansion to serve growth in Las Vegas. As such, approximately 3-miles of 24-inch pipeline will be required along Lamb Blvd to connect the new tap to the existing feeder system on Craig Rd. This pipeline segment will become a part of the outer 720 psig loop on the east side of the Valley.

Also, it is recommended the new Lamb Tap be designed for a capacity of 8,000 Mscf/h (192,000 Dth/d) which will be adequate to serve more than 10 years of growth. Please note, if the Division wants to extend the 24-inch pipeline to Vegas Drive and connect to the existing 720/650 psig Southern Nevada Energy Project (SNEP) system in the future, then it is recommended the capacity of the new Lamb tap be increased by another 13,000 Mscf/h to a total of 21,000 Mscf/h (504,000 Dth/d).

The following are the cost estimates of the new Lamb Tap and the 24-inch pipeline to connect the tap to the existing feeder system on Craig Road. The following assumptions and conditions apply:

- The proposed Lamb Tap would be installed east of Lamb Blvd., approximately 2,500' north of the intersection of Lamb Blvd. and Centennial Pkwy.
- Southwest Gas facilities, including metering, regulation, and appurtenances, would be installed at the tap site and would regulate from Kern River's linepressure (MAOP 1,333 PSIG) to distribution pressures (MAOP 720 PSIG).
- Once an interconnect agreement is signed and payment is made to Kern River, the required time to the commissioning of the Kern River facilities is estimated at approximately 12 to 16 months, depending on long-lead items.

Page 2

- Interconnect costs are approximate and are based on recently executed SWG interconnect agreements with Kern River, namely, the Mesquite and Ft. Irwin taps.
- The proposed 24"-diameter main would be installed via open trench in Lamb Blvd, extending south to Craig Road, and would be installed primarily in public rights-of-way.
- The alignment would involve two technically challenging crossings, one beneath the railway at Donovan Way and the other beneath the I-15 freeway. The railway crossing would be accomplished via traditional bore while the freeway crossing would be via open trench methodology as Lamb Blvd. crosses the freeway in an underpass.
- Approximately 85% of the project would require installation in pavement within the City of North Las Vegas.
- The proposed pipeline would be classified as transmission pipe (greater than 20% SMYS) and would consequently be made piggable, having a launcher and receiver installed at either endpoint.
- A new pressure limit station / high pressure system-to-system (MAOP 720 PSIG to MAOP 300 PSIG) regulator station would be installed east of Lamb Blvd. in undeveloped lands approximately 600' north of Craig Road.
- Land for the aboveground facilities would be acquired at market rates.
- No protected natural, biological, or cultural resources would be adversely impacted by the project.
- Gross-up tax is not included.

Given the stated results and assumptions, the costs for the facilities are summarized in the table below:

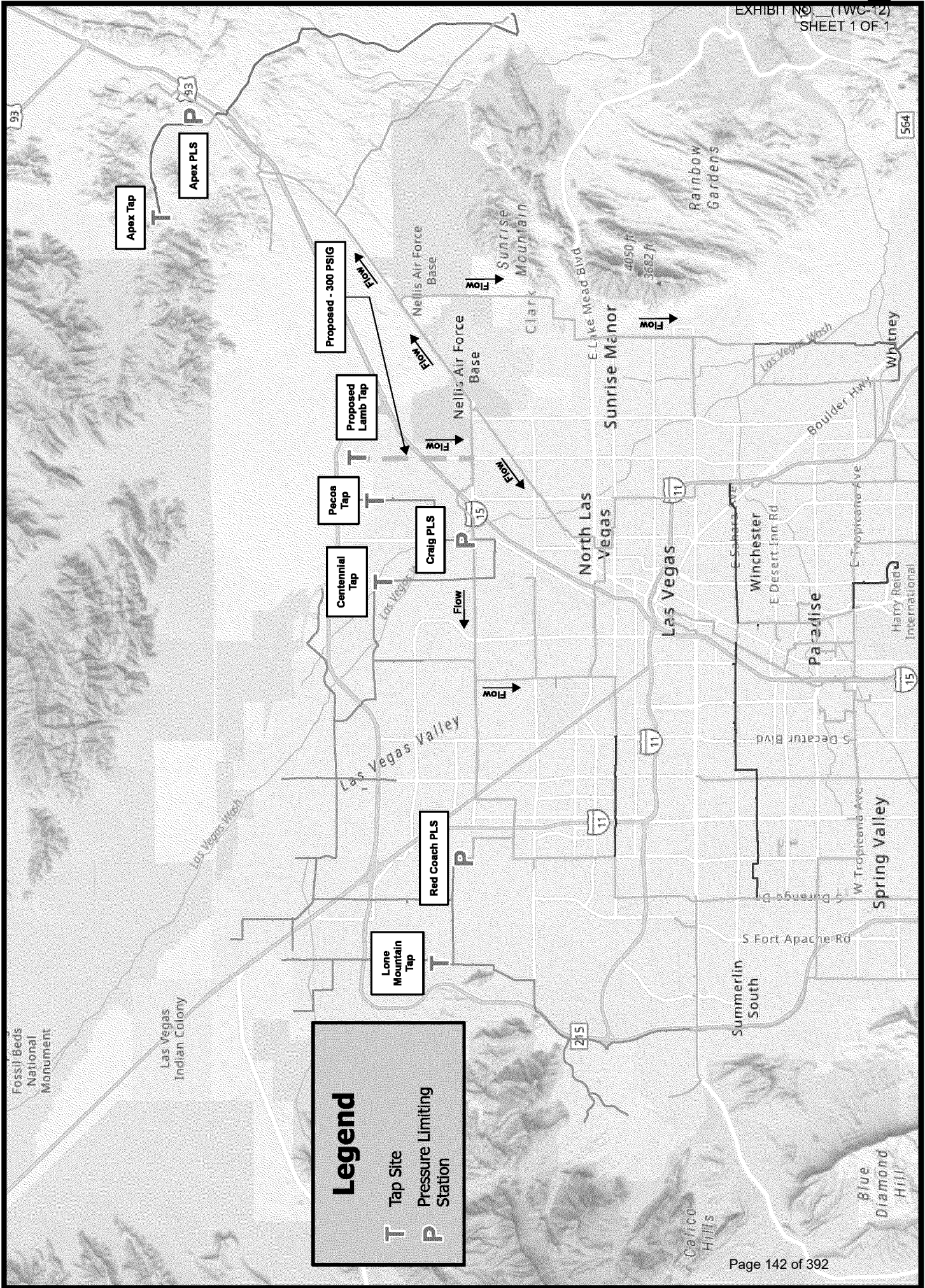
Description	Cost
Kern River Tap & Interconnect Facilities	\$ 2,886,000
SWG Interconnect Facilities	\$ 1,608,000
3 Miles of New 24"-diameter Transmission Steel Main	\$ 13,017,000
Downstream Pressure Limit Station	\$ 975,000
Total	\$ 18,486,000

Please let us know if you have any questions about the analysis.

Attachment(s)

Distribution:

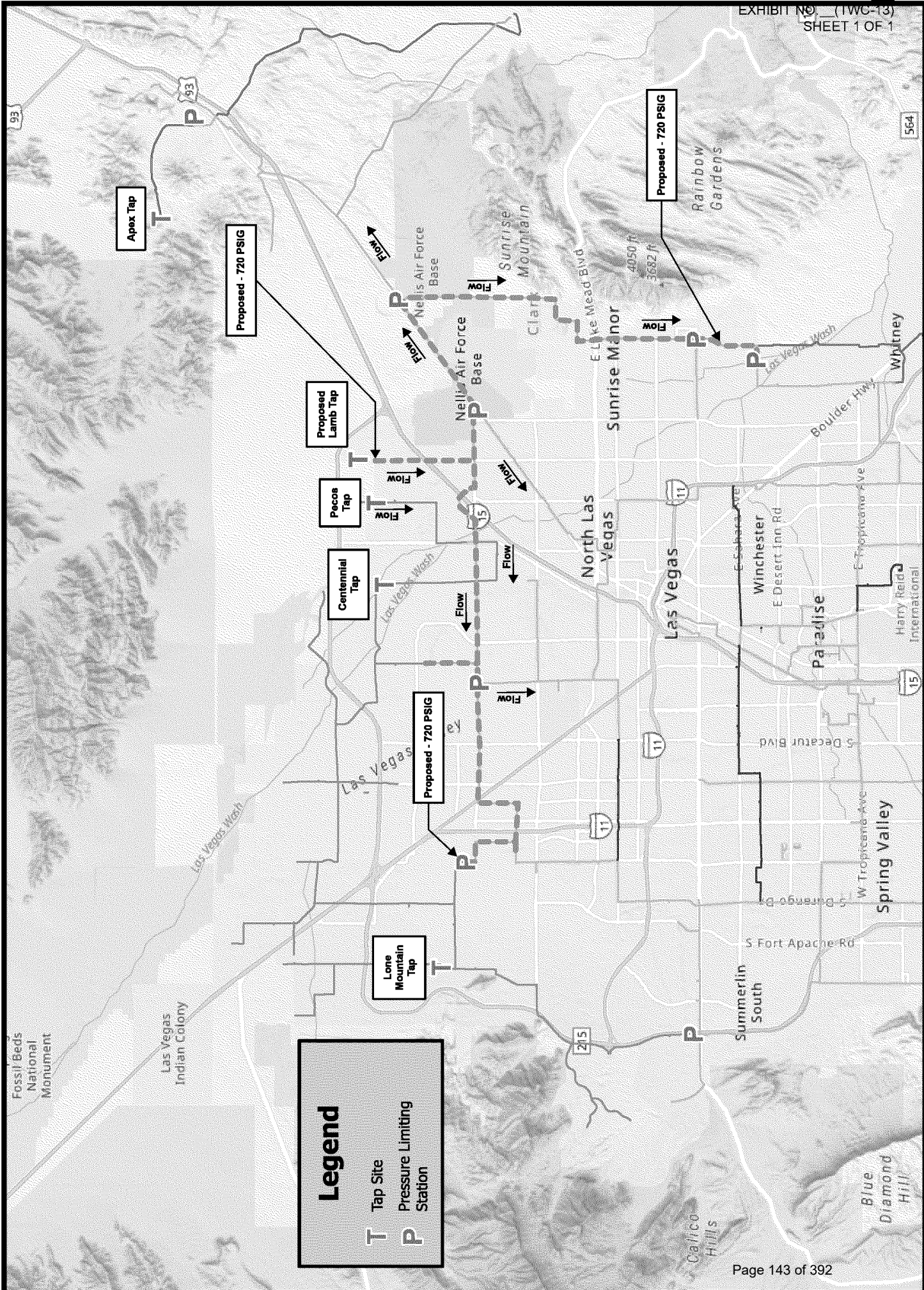
R. Fitzpatrick	J. Frame	B. Jones	B. Kalina
J. Martell	J. Penniman	M. Safa	C. Sohus
F. Stanbrough	R. Stemmerick	B. Thatcher	S. Williams



Legend

T Tap Site

P Pressure Limiting Station



Legend

T Tap Site

P Pressure Limiting Station

**INTERCONNECTION AGREEMENT
LAMB DELIVERY METER STATION**

This INTERCONNECTION AGREEMENT (this "**Agreement**") is made and entered into as of February 20, 2025 ("**Effective Date**"), by and between KERN RIVER GAS TRANSMISSION COMPANY, a Delaware Corporation, with an office at 2755 E. Cottonwood Parkway, Salt Lake City, Utah 84121 ("**Kern River**"), and SOUTHWEST GAS CORPORATION ("**Connecting Party**"), a California corporation, with an address at 8360 S Durango Drive, Las Vegas, Nevada 89113. Kern River and Connecting Party are also referred to herein individually as a "**Party**" and collectively as the "**Parties**".

BACKGROUND

- A. Kern River owns and operates an interstate natural gas pipeline system extending from receipt points near Opal, Wyoming to delivery points in Utah, Nevada, and California;
- B. Connecting Party has requested that Kern River construct, establish and operate a new delivery meter station and associated facilities, to facilitate the delivery and measurement of natural gas, which facilities are hereinafter referred to, and further defined below, as the ("**Interconnect Facilities**");
- C. Connecting Party is willing to reimburse Kern River, in accordance with this Agreement, for Actual Costs, as defined below incurred by Kern River in designing, permitting, constructing, commissioning, owning, operating, and maintaining the Interconnect Facilities; and
- D. The Parties desire to set forth herein their respective rights and obligations with respect to the construction, installation, ownership, operation, and maintenance of the Interconnect Facilities and related facilities.

In consideration of the mutual covenants and agreements herein contained, and subject to all of the terms, conditions, and provisions of this Agreement, Kern River and Connecting Party do hereby agree as follows:

**ARTICLE I
DEFINITIONS**

When used in this Agreement, the capitalized terms set forth below shall have the following meanings:

- 1.1. "**Actual Cost**" shall mean the actual cost of the Interconnect Facilities, as reasonably incurred by Kern River in accordance with Prudent Industry Practice, including but not limited to (i) planning, designing, permitting, land acquisition, materials, labor, contract and engineering costs, and post construction costs; (ii) overheads; (iii) Net Income Tax Liability and allowance for funds used during construction, when applicable; (iv) operating and maintenance costs and ad valorem taxes, if applicable; (v) any reservation charge

KR Interconnection Agmt
(v. 2 0 Jan 2020)

Credits paid to other shippers by Kern River as a result of any outage caused by the construction of the Interconnect Facilities, if applicable; and (vi) any Gas Loss Cost, if applicable. The Actual Cost is subject to True-Up from time to time during construction of the Interconnect Facilities and, at a minimum, at the end of construction of the Interconnect Facilities.

- 1.2. **“Claims”** shall have the meaning set forth in Section 7.6.
- 1.3. **“Connecting Party’s Data Sharing Equipment”** shall mean cables and such other equipment, Connecting Party, at its sole risk, cost, and expense, may install or cause to be installed as Kern River, in its sole discretion, deems reasonable and necessary for Connecting Party to obtain access to Kern River’s electronic measurement data.
- 1.4. **“Connecting Party’s Facilities”** shall mean any and all facilities not owned or operated by Kern River that may be necessary, in the opinion of Connecting Party, to protect and connect Connecting Party’s facilities to the Interconnect Facilities, to meet applicable regulatory, governmental, and environmental requirements, to meet gas quality requirements, and to protect Connecting Party’s facilities, which may include odorization facilities, pressure regulation, over-pressure protection equipment, liquid separation and gas filtration equipment, and applicable cathodic protection equipment. The Connecting Party’s Facilities will accommodate pressures up to Kern River’s maximum allowable operating pressure of 1,333 psig, and Connecting Party shall adhere to Title 49 of the Code of Federal Regulations, Section 192.195 and all other applicable federal and state requirements.
- 1.5. **“Corrective Action(s)”** shall have the meaning set forth in Section 4.6.
- 1.6. **“Custody Transfer Point”** shall mean the point of interconnection between the Interconnect Facilities and Connecting Party’s Facilities.
- 1.7. **“Delivery Gas”** shall mean the natural gas to be delivered from Kern River’s pipeline system into Connecting Party’s Facilities
- 1.8. **“Design Flow”** shall mean Connecting Party’s requested delivery measurement range of 4,800 Mcf per day (200 Mcf per hour) minimum through 192,000 Mcf per day (8,000 Mcf per hour) maximum of natural gas. Additionally, the Interconnect Facilities shall consist of taps, piping, valves and electronic measurement to allow future expansion to facilitate the delivery of up to 500,000 Mcf per day (20,833 Mcf per hour) maximum. The Interconnect Facilities will use a design pressure of no less than 650 psig, and not greater than 1,333 psig; provided however, the pressure design assumptions set forth in this Agreement are not to be construed as implying a guaranty of any particular level of pressure during service.
- 1.9. **“Dth”** shall mean dekatherm. For the purposes of this Agreement, one dekatherm shall equal one thousand (1,000) standard cubic feet of natural gas based on an assumed heat content of one thousand (1,000) British thermal units per cubic feet.

KR Interconnection Agmt
(v. 2.0 Jan 2020)

- 1.10. “**FERC**” shall mean the Federal Energy Regulatory Commission.
- 1.11. “**FERC Interest Rate**” shall mean the refund interest rate as specified in 18 C.F.R. §154.501(d).
- 1.12. “**Gas Loss Cost**” shall mean the costs of any natural gas losses incurred by Kern River which are related to the installation of the Interconnect Facilities.
- 1.13. “**Imaged Document**” shall have the meaning set forth in Section 7.22.
- 1.14. “**Interconnect Facilities**” shall mean those facilities and equipment set forth on **Exhibit A** including, but not limited to, a meter station and associated facilities owned by Kern River capable of receiving and delivering the Design Flow.
- 1.15. “**Interconnect Facilities Cost Estimate**” shall mean the estimated cost, determined in Kern River’s sole and reasonable discretion, to permit, construct, own, and operate the Interconnect Facilities.
- 1.16. “**Location**” shall mean Section 20 Township 19 South Range 62 East, Mt. Diablo Base and Meridian, approximately 36.281033 latitude, -115.079079 longitude.
- 1.17. “**MAOP**” shall mean maximum allowable operating pressure, in pounds per square inch gauge (“psig”).
- 1.18. “**Measurement Services**” shall have the meaning set forth in Section 5.1.
- 1.19. “**Necessary Approvals**” shall mean an order or approval that has become final and is no longer subject to rehearing or appeal regarding the construction and operation of the Interconnect Facilities, issued by FERC, any federal, state, local, or municipal agency, or any other governmental authority in a form and substance satisfactory to Kern River in its sole determination; provided, however, at Kern River’s sole discretion, Kern River may waive a Necessary Approval. Necessary Approvals shall specifically include, but shall not be limited to, all rights of way, permits and authorizations for the Interconnect Facilities.
- 1.20. “**Net Income Tax Liability**” shall mean the difference between Kern River’s immediate recognition of federal and state tax liability, as the result of Connecting Party’s reimbursement to Kern River of the Actual Costs for the Interconnect Facilities, and the present value of Kern River’s future tax benefits resulting from tax depreciation on the Interconnect Facilities, as set forth in **Exhibit C**. The Net Income Tax Liability is subject to True-Up from time to time during construction of the Interconnect Facilities and, at a minimum, at the end of construction of the Interconnect Facilities.
- 1.21. “**Notice of Termination**” shall mean a written notice of termination of this Agreement in accordance with Article VI.

- 1.22. “**OBA**” shall mean the OPERATING BALANCE AGREEMENT as referenced in Section 7.3 of this Agreement.
- 1.23. “**Prudent Industry Practice**” shall mean, as of the relevant time, those methods and acts generally engaged in or applied by the gas pipeline industry in the United States that, in the exercise of reasonable judgment in light of the circumstances known at the time of performance, would have been expected to accomplish the desired result at a reasonable cost consistent with functionality, reliability, safety and expedition with due regard for health, safety, security and environmental considerations. Prudent Industry Practice is not intended to be limited to the optimum practices, methods or acts to the exclusion of others, but rather is intended to include reasonably acceptable practices, methods and acts generally engaged in or applied by the pipeline industries in the United States.
- 1.24. “**Reservation Charge Credit Costs**” shall mean costs incurred and paid by Kern River to provide its affected shippers with monetary credits under the provision of its Tariff in the event construction and installation of the Interconnect Facilities requires Kern River to temporarily alter its operations during such installation such that Ken River is unable to meet all of its firm service obligations to its shippers.
- 1.25. “**Tariff**” shall mean Kern River’s FERC GAS TARIFF, as revised from time to time.
- 1.26. “**Termination Costs**” shall mean all Actual Costs incurred or to be incurred by Kern River, and associated reasonable carrying charges and winding up expenses for the Interconnect Facilities in the event this Agreement is terminated in accordance with the provisions of Article VI.
- 1.27. “**True-Up**” shall mean a written adjustment to the Interconnect Facilities Cost Estimate to reflect the Actual Cost. A True-Up may be made at any time during construction of the Interconnect Facilities or upon completion of the Interconnect Facilities. Each True-Up shall be delivered by Kern River to Connecting Party as soon as reasonably practicable upon Kern River’s assessment that a True-Up is reasonably necessary. True-Ups may affect the Net Income Tax Liability.
- 1.28. “**TSA**” shall mean, to the extent applicable to the delivery of gas to the Connecting Party, a firm TRANSPORTATION SERVICE AGREEMENT entered into between Connecting Party and Kern River.
- 1.29. “**Utility Power**” shall mean 120-volt/240-volt, 100-amp, 60-hertz, single-phase, 3-wire, permanent utility power service drop.

ARTICLE II INTERCONNECT FACILITIES

- 2.1. **FACILITIES TO BE CONSTRUCTED BY KERN RIVER.** The Interconnect Facilities shall consist of those facilities required or necessary to effectuate the delivery of the Design Flow in accordance with this Agreement, Kern River’s specifications, the Tariff, Prudent

KR Interconnection Agmt
(v. 2.0 Jan 2020)

Industry Practice, and in compliance with any and all applicable laws, rules, regulations and orders of any duly constituted governmental authority having jurisdiction over Kern River or the Interconnect Facilities. Kern River shall design, procure, construct, install, test, and commission, at the Location, and at the sole cost and expense of Connecting Party, the Interconnect Facilities. Kern River reserves the right to modify the design of the Interconnect Facilities as necessary in accordance with Prudent Industry Practice. Customer acknowledges that, once installed, the Interconnect Facilities become part of Kern River's FERC jurisdictional transmission facilities and are not for Customer's exclusive use.

- 2.2. NECESSARY APPROVALS.** Kern River shall obtain all the Necessary Approvals. Such Necessary Approvals shall be obtained by and in the name of Kern River. Kern River shall be under no obligation to commence construction of the Interconnect Facilities until such time as all Necessary Approvals have been obtained. Kern River shall not be liable to Connecting Party under this Agreement for failure to obtain, or for delays in obtaining, the Necessary Approvals.
- 2.3. INTERCONNECT FACILITIES COST ESTIMATE.** The estimated cost of the Interconnect Facilities, determined in accordance with Prudent Industry Practice, includes but is not limited to the sum of: (i) planning, design, environmental, permitting, land acquisition, materials, labor, contract and engineering costs; (ii) overheads; (iii) Net Income Tax Liability (consistent with U.S. Internal Revenue Service guidelines for "contributions in aid of construction"); (iv) allowance for funds used during construction, when applicable; (v) operating and maintenance costs and ad valorem taxes, if applicable; (vi) Reservation Charge Credit Costs; and (vii) Gas Loss Cost (collectively, "**Estimated Cost**"). The Estimated Cost for the Interconnect Facilities in this Agreement is projected to be \$7,307,429.
- 2.4. FACILITIES TO BE CONSTRUCTED BY CONNECTING PARTY.** Connecting Party shall design, procure, construct and install, at Connecting Party's sole cost and expense, any facilities and/or equipment necessary to connect Connecting Party's natural gas facilities to the Interconnect Facilities and shall obtain all necessary federal, state, and local governmental approvals as may be necessary to construct, own, and operate such facilities and equipment. The Connecting Party's Facilities will accommodate pressures up to Kern River's mainline pressure in the location of the Interconnect Facilities, which has a design MAOP of 1,333 psig. Connecting Party has the responsibility to adhere to 49 C.F.R. §192.195 and any other applicable federal and state requirements. Connecting Party expressly agrees that Kern River is not responsible for the pressure regulation, over-pressure protection or odorization of the Connecting Party's Facilities, and that Connecting Party is solely liable for any and all damages due to inadequate over-pressure protection on the Connecting Party's Facilities. Connecting Party shall design, procure, construct and install, at Connecting Party's sole cost and expense, the following:

2.4.1. Utility Power, including dedicated meter for Kern River's sole use;

2.4.2. permanent access road to the Interconnect Site from nearest public road;

KR Interconnection Agmt
(v. 2.0 Jan 2020)

- 2.4.3. perimeter security wall with vehicle and personnel gates meeting Kern River specifications and U.S. Transportation Security Administration critical infrastructure facility requirements;
 - 2.4.4. associated tie-in piping with cathodic protection equipment connecting the Connecting Party's facilities to the Interconnect Facilities;
 - 2.4.5. other equipment that may be deemed necessary such as overpressure protection, regulation, odorization, back-up power, etc.;
 - 2.4.6. equipment required for data sharing, if access is requested in accordance with this Agreement;
 - 2.4.7. such other equipment as is necessary to ensure the facilities described in this Section satisfy the requirements of this Agreement.
- 2.5. **FACILITIES DESIGN AND CONSTRUCTION.** Each Party represents and warrants that its facilities shall be designed, procured, constructed, and installed in accordance with Prudent Industry Practice and all valid and applicable laws, regulations, codes, rules, ordinances, and directives of all applicable federal, state, local and tribal authorities, if any, having jurisdiction over such facilities including, without limitation, the provisions of 49 C.F.R. Part 192.
- 2.6. **INTERCONNECT SITE.** Connecting Party, at its sole cost and expense, shall secure/furnish a site (the "**Interconnect Site**") immediately adjacent to the Kern River's right-of-way at or near the Location. Connecting Party's acquisition of the Interconnect Site shall be in accordance with Prudent Industry Practice, governmental authorizations, environmental laws, and the latest edition of the Kern River's engineering standards and specifications. Connecting Party shall perform, as required by Kern River, the necessary site preparations, maintenance, and improvements for the Interconnect Site, including installation of (a) Utility Power, and (b) permanent access road. Kern River shall maintain responsibility for all ongoing costs associated its Utility Power at the Interconnect Site.
- 2.7. **EASEMENTS.** Connecting Party shall provide necessary easements at the Interconnect Site that will exist during the term of this Agreement and for the life of the Interconnect Facilities, required for Kern River's personnel, contractors, representatives, permittees, and invitees to perform their respective obligations under this Agreement. Connecting Party shall be responsible for all costs, if any, associated with such easements. Kern River shall be responsible for any easements required to install the Interconnect Facilities between the Interconnect Site and Kern River's mainlines.
- 2.8. **FACILITY ACCESS.** Unless already existing and acceptable to Kern River, consistent with Prudent Industry Practice, Connecting Party shall construct and maintain, at Connecting Party's sole cost and expense, an all-weather access road for Kern River to enter the interconnect site and access the Interconnect Facilities. Connecting Party's failure to

KR Interconnection Agmt
(v. 2.0 Jan 2020)

adequately maintain, in Kern River's reasonable judgment consistent with Prudent Industry Practice, said access road, may result in Kern River shutting-in the Interconnect Facilities in accordance with Section 4.11. Connecting Party shall provide Kern River an opportunity to review and modify any access road agreements prior to Connecting Party's execution of same.

- 2.9. CONSTRUCTION NEAR KERN RIVER'S FACILITIES.** Connecting Party shall not use Kern River's easements or right-of-way without Kern River's prior written consent, which shall not be unreasonably withheld. Kern River shall have the right to have its representatives present, at Connecting Party's sole cost and expense, during any work performed by Connecting Party within Kern River's easements or right-of-way. Kern River shall perform the activities necessary to connect the Connecting Party's Facilities to the Interconnect Facilities including the installation of any cathodic protection isolation kit(s).
- 2.10. DAMAGE NOTIFICATION.** If any damage occurs to the Interconnect Facilities, or if situations arise creating a reasonable likelihood that damage will occur to the Interconnect Facilities, the Party causing the damage or identifying the potentially damaging situation shall immediately inform the other Party and, if either Party determines it necessary, all activities contributing to the damage or the potential damage shall cease until the damage is repaired and/or the situation is remedied. The Party responsible for causing the damage shall be responsible for remedying the damage and/or the cause of the potential damage.
- 2.11. COMMENCEMENT OF CONSTRUCTION, COMMISSIONING, AND START-UP.** Upon (i) Kern River's receipt of Connecting Party's Prepayment, as required by Section 3.1, (ii) Kern River's obtainment of all necessary contractor agreements and required materials, (iii) Kern River's obtainment of land rights and construction access, and (iv) Kern River's receipt of all Necessary Approvals, Kern River will commence installation of the Interconnect Facilities. Kern River and Connecting Party shall coordinate all activities associated with commissioning the Interconnect Facilities including, but not limited to, purging and activating the Interconnect Facilities. Connecting Party is responsible for the cost of all gas required to purge the facilities constructed pursuant to this Agreement. No gas shall be delivered through the Interconnect Facilities until all Necessary Approvals have been received and accepted; the Interconnect Facilities have been constructed, tested, and approved by Kern River; and the Parties are in compliance with the terms and conditions of this Agreement.

ARTICLE III FACILITIES REIMBURSEMENT

- 3.1. PREPAYMENT.** Upon execution of this Agreement, Connecting Party shall prepay Kern River for the Estimated Cost, by check or wire transfer per invoice provided by Kern River for the project described herein. If Connecting Party fails to make prepayment in accordance with the invoice, Kern River shall have no obligation to continue work and shall incur no liability for discontinuing work. Furthermore, Connecting Party expressly acknowledges that the installation of the Interconnect Facilities on Kern River's system may require Kern River to temporarily alter its operations before, during, and/or after such

KR Interconnection Agmt
(v. 2.0 Jan 2020)

installation which may cause Kern River to be unable to meet all of its firm service obligations to its customers. In such event, and if Kern River is therefore required to provide its affected customers with monetary credits under the provisions of its Tariff ("Reservation Charge Credits"), Connecting Party expressly acknowledges that such direct costs to Kern River are attributable to the installation of the Interconnect Facilities. Connecting Party shall reimburse Kern River for any such Reservation Charge Credits that are incurred by Kern River in connection with the installation of the Interconnect Facilities. Connecting Party shall also reimburse Kern River for Gas Loss Cost.

- 3.2. **REVISED ESTIMATED COST.** In addition to prepayment of the Estimated Cost as required in Section 3.1 above, Kern River may re-evaluate the Estimated Cost. If any Revised Estimated Cost exceeds the original Estimated Cost, Kern River will notify Connecting Party and may require Connecting Party to remit to Kern River such additional costs prior to Kern River, (a) continuing work on the design, construction, and installation of the Interconnect Facilities, and/or (b) incurring additional costs in connection with the design, construction, and installation of the Interconnect Facilities.
- 3.3. **STATUS REPORT.** Kern River shall provide periodic status reports on progress toward completion of the Interconnect Facilities, which shall include both an estimated project completion date and a comparison of the Interconnect Facilities Cost Estimate and the actual costs incurred to that point. If at any point a revised Interconnect Facilities Cost Estimate is projected by Kern River to exceed one hundred ten percent (110%) of the Interconnect Facilities Cost Estimate, Kern River shall provide notice to Connecting Party as soon as practicable and shall provide documentation to Connecting Party reasonably evidencing the need for the additional costs, including, but not limited to, an explanation of the circumstances causing the increased costs and a description of the steps Kern River took, or is taking, to mitigate the increased costs. Kern River agrees to cooperate with Connecting Party to implement reasonable recommendations of Connecting Party to minimize any increase in the costs.
- 3.4. **TRUE-UP AND FINAL INVOICE.** Upon completion, the Parties shall True-up the Interconnect Facilities Cost Estimate as compared to the Actual Cost such that Connecting Party ultimately pays the Actual Cost. Upon completion of the Interconnect Facilities and determination of Actual Cost, Kern River shall tender to Connecting Party a detailed accounting of the Actual Cost along with an invoice for the Actual Cost net of any amounts previously paid by Connecting Party pursuant to this Agreement and indicating the underpayment or overpayment by Connecting Party.
 - 3.4.1. In the event of underpayment, Connecting Party shall pay Kern River the invoiced amount within thirty (30) days of the date of the invoice. Should Connecting Party fail to make payment of such invoice within thirty (30) days of the date of the invoice, Kern River shall be entitled to collect from Connecting Party the amount of said invoice together with interest at a rate equal to the then-applicable FERC Interest Rate. Such interest shall accrue on unpaid amounts, including on unpaid interest, compounded monthly, beginning on the payment due date of Kern River's invoice to Connecting Party and terminating when such invoice is paid. Kern River

KR Interconnection Agmt
(v. 2.0 Jan 2020)

reserves the right not to flow gas through the Interconnect Facilities if Connecting Party fails to timely pay Kern River the invoiced amount.

- 3.4.2.** In the event of overpayment, Kern River shall refund to Connecting Party the difference between any amounts previously paid by Connecting Party pursuant to this Agreement and the Actual Cost within thirty (30) days of the date on the invoice. If Kern River fails to make payment of such refund within thirty (30) days of the date of the invoice, interest shall accrue on the overpaid portion of the invoice due under this agreement at the FERC Interest Rate. Such interest shall accrue on unpaid amounts, including on unpaid interest, compounded monthly, beginning on the payment due date of Kern River's invoice to Connecting Party and terminating when such invoice is paid.
- 3.5.** INVOICE DISPUTE. If the Connecting Party disputes one or more items in the invoice referenced in Section 3.4, the Party obligated to make the payment pursuant to Section 3.4.1 or Section 3.4.2, as applicable, shall, without waiving any disputes, remit payment by the due date specified in the invoice for the full amount indicated on the invoice. Connecting Party shall notify Kern River in writing within thirty (30) calendar days of receipt of the invoice, and such notice shall contain a detailed description of the item(s) being disputed and the basis thereof. Kern River shall respond to Connecting Party within fifteen (15) calendar days of receipt of the notification. Kern River and Connecting Party shall work in good faith to resolve all disputes. Promptly after resolution of any dispute, the amount of any identified overpayment shall be refunded to the appropriate party.
- 3.6.** CREDITWORTHINESS. Section 29 of the Tariff shall govern Connecting Party's creditworthiness and the establishment and maintenance of credit under this Agreement and any TSA (as applicable).
- 3.6.1** Kern River, in order to satisfy itself of the ability of Connecting Party to meet its obligations under this Agreement, may conduct periodic credit reviews in accordance with standard commercial practices and Kern River internal policy. Connecting Party agrees to assist in these reviews by providing financial information reasonably requested by Kern River, and will maintain such credit support requested by Kern River including, but not limited to, an unconditional and irrevocable letter of credit, escrow or parent guaranty, should reasonable grounds for insecurity arise with respect to Connecting Party's performance under this Agreement.
- 3.6.2** If at any time there is a material adverse change in Connecting Party's creditworthiness, then in addition to any other remedies available to Kern River, Kern River may elect, in its sole discretion, to exercise one or both of the following remedies: (i) cease providing service pursuant to a notice of suspension; or (ii) decline to accept a service request or other requests from Connecting Party to provide service unless Connecting Party gives an assurance of payment satisfactory to Kern River.

3.6.3 A material adverse change in Connecting Party's creditworthiness shall include, but not be limited to: (i) Connecting Party's default of its obligations to Kern River under this Agreement; (ii) default on outstanding debt or other material commercial or financial obligation; (iii) credit rating downgrade; (iv) merger or acquisition of Connecting Party (whether in whole or by majority or controlling interest) by or with an entity which is insolvent, which is subject to bankruptcy or insolvency proceedings, which owes past due amounts to Kern River or any entity affiliated with Kern River or which is a materially greater credit risk than Connecting Party; or (v) Connecting Party being subject to or having filed for bankruptcy or insolvency proceedings or the legal insolvency of Connecting Party.

ARTICLE IV
INTERCONNECT OWNERSHIP, OPERATION AND MAINTENANCE

- 4.1. **OWNERSHIP AND OPERATION OF FACILITIES.** Kern River shall have title to and ownership of the Interconnect Facilities; Connecting Party shall have title to and ownership of the Connecting Party Facilities. It is understood and agreed that subsequent to the installation of the Interconnect Facilities and Connecting Party Facilities, Kern River shall operate and maintain the Interconnect Facilities at the sole cost and expense of Kern River, while Connecting Party shall operate and maintain the Connecting Party Facilities at the sole cost and expense of Connecting Party.
- 4.2. **OPERATION OF THE INTERCONNECT.** Connecting Party shall be the operator of the Connecting Party Facilities and Kern River for the Interconnect Facilities for all purposes including compliance with all applicable pipeline safety regulations and Prudent Industry Practice. Kern River shall perform Measurement Services at the Interconnect Facilities as specifically provided for in Article V below. As operator, each Party shall procure and furnish all materials, equipment, services, supplies, tools, and labor necessary for the operation and maintenance of the applicable facilities including, without limitation, cleaning, coating/painting, overhauling, maintaining, repairing, modifying, and replacing the facilities in accordance with sound and Prudent Industry Practice.
- 4.3. **OVER PRESSURE PROTECTION.** The Interconnect Facilities and Connecting Party Facilities shall be designed to a sufficient MAOP, regardless of the actual operating pressures maintained by the Parties in their respective facilities. Connecting Party shall construct and own, operate and maintain, at the sole risk, cost, and expense of Connecting Party, overpressure protection equipment and any other pressure control regulation equipment required by Connecting Party to receive the gas into its facilities. Connecting Party has the responsibility to adhere to 49 C.F.R §192.195 and any other applicable federal and state requirements.
- 4.4. **CATHODIC PROTECTION AND ODORIZATION.** Each Party shall be fully responsible for the operation and maintenance of cathodic protection devices on their respective facilities. The Parties shall cooperate to resolve any issues relating to cathodic protection. Connecting Party, at its sole cost, risk, and liability may odorize the Delivery Gas if required by any local, state, federal, or other governmental authority having such jurisdiction. If Connecting

KR Interconnection Agmt
(v. 2.0 Jan 2020)

Party elects to odorize the Delivery Gas, then Connecting Party shall be responsible for the installation, operation, and maintenance of any necessary odorant equipment, supplying odorant chemicals, and for the injection of odorant at levels required by applicable regulatory authorities. Connecting Party shall indemnify Kern River for all Claims brought against Kern River arising from Connecting Party's odorization of the Delivery Gas.

- 4.5. **CONTROL AND POSSESSION.** Custody of the gas shall pass between the Parties when it passes through the Custody Transfer Point. Subject to the terms of the Tariff, as between Kern River and Connecting Party: (i) Connecting Party shall be in control and possession of the gas and shall indemnify, defend, and hold Kern River harmless, against any losses including, but not limited to, loss of gas, Claims, liens, demands, and causes of action related to Connecting Party's possession of the gas, when such gas is in any of Connecting Party's facilities downstream of the Custody Transfer Point; and (ii) Kern River shall be in control and possession of the gas and shall indemnify, defend, and hold Connecting Party harmless, against any losses including, but not limited to, loss of gas, Claims, liens, demands, and causes of action related to Kern River's possession of the gas, when such gas is in any of Kern River's facilities upstream of the Custody Transfer Point.
- 4.6. **INTERCONNECT FACILITIES ACCURACY.** The Interconnect Facilities shall measure Connecting Party's requested Design Flow. The terms of this Agreement shall in no way obligate Kern River to operate its pipeline facilities at a certain pressure. If Kern River determines that the Interconnect Facilities are registering inaccurately due to factors created by the Connecting Party's facilities or its operations (including, but not limited to, Connecting Party operating outside the design range of the Interconnect Facilities and/or compressor pulsation), Connecting Party shall, at its sole cost and expense, perform the actions required, in Kern River's reasonable discretion, to restore the accuracy of the Interconnect Facilities including, but not limited to, designing, constructing, and installing any necessary modifications or improvements to Connecting Party's facilities ("**Corrective Action(s)**"). If restoration of the Interconnect Facilities' accuracy entails designing, constructing, and installing modifications or improvements to the Interconnect Facilities, Kern River shall perform such modifications or improvements in accordance with Prudent Industry Practice and at Connecting Party's sole cost and expense. If such Corrective Action(s) fail to restore measurement accuracy, Kern River shall provide Connecting Party written notice of the failure to correct the problem and provide Connecting Party additional opportunities to restore measurement accuracy; provided, however, that if (i) Connecting Party is not proceeding in good faith to restore the accuracy of the Interconnect Facilities, or (ii) Kern River has repeatedly shut-in the Interconnect Facilities due to measurement inaccuracies, then Kern River may shut-in the Interconnect Facilities in accordance with Section 4.12, without further obligation to the Connecting Party. Should any inaccuracy be determined to be resultant of Kern River's systems or operations, Kern River shall bear responsibility for the Corrective Actions and associated costs.
- 4.7. **FLOW OBLIGATIONS.** In the event that the amount of gas flowing through the Interconnect Facilities is less than, or more than, the Design Flow for accurate measurement (per Section 1.8 and Section 4.6), Kern River may shut-in the Interconnect Facilities in accordance with

KR Interconnection Agmt
(v. 2.0 Jan 2020)

Section 4.11 until: (i) Connecting Party has increased or decreased flow through the Interconnect Facilities, (ii) Connecting Party, at its sole expense, has taken Corrective Action(s) that restore measurement accuracy to the extent reasonably required by Kern River and/or (iii) modifications or improvements to the Interconnect Facilities, at the sole cost and expense to Connecting Party, have been completed.

- 4.8. PERMITS.** Each Party, at Connecting Party's sole cost and expense, shall be responsible for obtaining any and all permits, licenses, Necessary Approvals, and governmental authorizations as set forth in this Agreement necessary to construct, install, operate, and maintain such Party's facilities. Each Party (the "**Indemnifying Party**") shall indemnify and hold harmless the other Party (the "**Indemnified Party**") for any penalties, fines, expenses, costs, or liabilities incurred by the Indemnified Party as the result of the Indemnifying Party's failure to secure the permits, licenses, and Necessary Approvals for the Indemnifying Party to construct, install, operate, and maintain its facilities. Notwithstanding the foregoing, to the extent a governmental authority: (A) elects not to grant a required permit, license, authorization or Necessary Approval; or (B) conditions or changes the regulatory pathway for a required permit, license, authorization or Necessary Approval (e.g., FERC requiring a Section 7(c) proceeding in lieu of a prior notice proceeding), unless such decisions were caused by Indemnifying Party's negligence or willful misconduct, the Indemnifying Party will have no indemnification obligation under this Section 4.8. The Parties agree if a Necessary Approval remains reasonably obtainable despite an adverse decision by a governmental authority as described in sub-Sections 4.8(A) and (B) above, and Connecting Party elects to proceed regardless of potential schedule delays and increased costs, Kern River will continue to make reasonable commercial efforts to obtain the Necessary Approval.
- 4.9. MODIFICATIONS, REPAIRS AND SERVICE OUTAGES.** Each Party shall advise the other Party, as soon as reasonably practical, and in a manner consistent with custom in the industry, before taking its respective facilities out of service for modifications or repairs, provided that in the event of an emergency situation either Party may immediately commence repairs to its facilities and provide notice to the other Party as soon as reasonably practicable. Kern River retains the unilateral right to change the operations of its facilities and/or upgrade its system. Such operational changes may require the adjustment and/or addition of equipment and facilities by Connecting Party in order to maintain flow of gas volumes. To the extent modifications, repairs or outages to the Interconnect Facilities are caused or required by Connecting Party, Connecting Party shall be responsible for all associated costs.
- 4.10. SAFETY AND HEALTH.** Each Party shall ensure that any time its employees, agents, contractors, or subcontractors are accessing the other Party's facilities, such employees, agents, contractors or subcontractors are abiding by reasonable safety, operational and drug policies, practices and procedures, consistent with Prudent Industry Practice.
- 4.11. FAILURE TO PERFORM.** If Connecting Party fails to comply with any of its obligations under this Agreement, and such failure affects Kern River's operation of the Interconnect Facilities, Kern River will notify Connecting Party of such failure, and if Connecting Party

KR Interconnection Agmt
(v. 2.0 Jan 2020)

does not remedy such failure within the timeframe indicated in the notice from Kern River, Kern River may immediately shut-in, or cause Connecting Party to shut-in, the Interconnect Facilities until, in Kern River's sole judgment, Connecting Party is fully complying with all of the terms and conditions of this Agreement. Kern River, in its reasonable judgment, shall have the right to perform whatever actions are necessary to cease gas flow through the Interconnect Facilities without first providing Connecting Party notice if (i) equipment is not operating properly, (ii) an overpressure condition exists, (iii) design limitations are exceeded, (iv) safe operating conditions are compromised, (v) public health and safety could be compromised, or (vi) failure to conform with gas quality requirements. Connecting Party further acknowledges that the Interconnect Facilities may require manual intervention before gas flow resumes. Furthermore, Kern River has the right to keep the Interconnect Facilities shut-in until Connecting Party rectifies the situation. If abnormal conditions repeatedly arise, Kern River has the right to shut-in the Interconnect Facilities temporarily and require a meeting with Connecting Party to have Connecting Party either (a) reasonably demonstrate that its operations are consistent with Prudent Industry Practice, or (b) implement recommendations of Kern River to make operations consistent with Prudent Industry Practice.

- 4.12. **ACTIONS OF THE PARTIES.** Each Party covenants that its operations pursuant to this Agreement shall be in compliance and in accordance with all Necessary Approvals and Prudent Industry Practice.

ARTICLE V MEASUREMENT

- 5.1. **MEASUREMENT SERVICES.** The measurement services ("**Measurement Services**") to be performed by Kern River hereunder at the Interconnect Facilities shall consist of volume and energy calculations, calibration of secondary measurement devices, and measurement recording instrumentation consistent with the terms of the Tariff.
- 5.2. **WITNESSING OF MAINTENANCE AND CALIBRATION ACTIVITIES.** Except in the case of emergencies, both Parties shall have the right to be present during the installation, cleaning, changing, repairing, inspecting, testing, calibrating and/or adjusting of the gas measurement equipment. Connecting Party, in the presence of Kern River shall have access to the gas measurement equipment; however, reading, calibrating and/or adjusting such facilities shall be performed by Kern River. Kern River, in the presence of Connecting Party shall have access to Connecting Party's gas measurement equipment; however, reading, calibrating and/or adjusting such facilities shall be performed by Connecting Party.
- 5.3. **MEASUREMENT AND RECORDS.** Kern River shall operate and maintain the meters, electronic gas measurement equipment, and all related appurtenances and communications equipment installed and associated with the Interconnect Facilities. The information generated by Kern River's measurement facilities shall constitute the official measurement data for gas quantities delivered through the Interconnect Facilities. Kern River shall preserve all records relating to the measurement data for gas quantities delivered through

KR Interconnection Agmt
(v. 2.0 Jan 2020)

the Interconnect Facilities for a period of at least one (1) year, or such longer periods as shall be required by law, regulation, rule, or order. During such period, Connecting Party, or its designated representative, shall have access to such records during regular business hours upon reasonable written notice.

5.4. DATA SHARING. As a courtesy and as requested by Connecting Party, Kern River will execute a separate signal letter agreement to provide Connecting Party with certain operational information for the purpose of acquiring signals and data necessary to view and monitor gas flow data, including a corrected gas flow rate representing the volumes being received from Connecting Party, or delivered to Connecting Party. An example of a signal letter agreement is included in **Exhibit D**. Kern River provides this information to Connecting Party without receipt of consideration from Connecting Party, and Connecting Party acknowledges that such information may be discontinued, altered, or limited by Kern River at any time without notice. Kern River shall provide Connecting Party access to certain measurement data for the Interconnect Facilities described herein, subject to the following terms and conditions, which shall be applicable only to this Section:

5.4.1. INSTALLATION OF EQUIPMENT. Connecting Party, at its sole risk, cost, and expense, may install or cause to be installed Connecting Party's Data Sharing Equipment to obtain access to Kern River's electronic measurement data. Connecting Party's Data Sharing Equipment shall be installed only at locations mutually agreed upon by Kern River and Connecting Party. Kern River will terminate all cabling in Kern River-owned equipment as necessary. Connecting Party's Data Sharing Equipment shall include supply isolation devices acceptable to Kern River which provide surge protection between Kern River's and Connecting Party's facilities.

5.4.2. DATA ACCESS. Pursuant to the execution of a signal letter agreement, Connecting Party shall have access to such electronic measurement data only in a format established by Kern River that will not interfere with the operation of the Interconnect Facilities. Connecting Party shall (i) only poll registers or serial ports approved by Kern River (ii) have read-only access to the approved registers and/or serial ports, and (iii) poll for data at a frequency as determined by Kern River. Kern River's electronic measurement data is "raw" data without refinement or correction and may be subject to interruption due to maintenance, repair, or other activities by Kern River, or due to events of force majeure. The term "**force majeure**" as employed herein shall have the meaning set forth in the Tariff. Kern River shall use reasonable efforts to provide accurate and continuous information to Connecting Party; however, Kern River does not warrant the accuracy or availability of the data. Kern River shall have no obligation to advise Connecting Party of any potential interruptions that may prevent Connecting Party from monitoring data at the Interconnect Facilities, whether or not resulting from activities performed by Kern River. Connecting Party shall utilize this data solely for information purposes. The data furnished to Connecting Party shall not be used for the measurement of gas for any gas transportation contracts. Kern River shall maintain responsibility

for the official measurement data for gas quantities delivered through the Interconnect Facilities.

- 5.4.3. OWNERSHIP & OPERATION.** Connecting Party shall retain title to, own, operate, and maintain Connecting Party's Data Sharing Equipment and appurtenant connection facilities installed by Connecting Party. Title to the facilities installed by Kern River shall remain in Kern River's name and said facilities shall be owned, operated, and maintained by Kern River.
- 5.4.4. KERN RIVER'S RIGHT TO DISCONNECT EQUIPMENT.** Kern River reserves the right to disconnect Connecting Party's Data Sharing Equipment from the Interconnect Facilities, without prior notice, if Connecting Party's Data Sharing Equipment in any way interferes with or adversely affects Kern River's operations, including but not limited to, Kern River's ability to perform effective measurement. If it becomes necessary for Kern River to disconnect Connecting Party's Data Sharing Equipment from the Interconnect Facilities, Kern River shall (i) notify Connecting Party of said disconnection prior to or as soon as possible thereafter, and (ii) coordinate with Connecting Party the reconnection of Connecting Party's Data Sharing Equipment following correction of the problem by Connecting Party to Kern River's satisfaction.
- 5.4.5. MODIFICATION AND/OR REMOVAL OF FACILITIES.** Connecting Party may modify and/or remove Connecting Party's Data Sharing Equipment at any time, at Connecting Party's sole risk, cost, and expense, after giving reasonable prior written notice to Kern River, so long as such removal does not interfere with Kern River's facilities and/or Kern River's operations. Notwithstanding any provision in this Agreement to the contrary, if for any reason Kern River constructs new facilities or moves, modifies, removes, sells, assigns, abandons or otherwise disposes of its facilities covered under this Agreement, then Connecting Party shall promptly move, remove or change the installation, operation or maintenance of Connecting Party's Data Sharing Equipment at Connecting Party's sole risk, cost and expense in a manner acceptable to Kern River.
- 5.4.6. "AS BUILT" DRAWINGS.** Within one hundred and eighty (180) days following completion of installation of Connecting Party's Data Sharing Equipment, Connecting Party shall furnish Kern River with an "as installed" set of drawings of Connecting Party's Data Sharing Equipment for Kern River's files.
- 5.4.7. FAILURE TO COMPLY.** If Kern River determines that Connecting Party has failed to comply with any of the terms of this Section 5.4, Kern River will provide Connecting Party with reasonable notice to correct such failure. Absent Connecting Party's expeditious correction of such failure, Kern River will have the right to (i) immediately terminate Connecting Party's rights to connect to Kern River's equipment or to access data as provided hereunder, and (ii) upon not less than twenty-four (24) hours' notice, remove Connecting Party's Data Sharing Equipment at Connecting Party's sole risk, cost, and expense and without any

KR Interconnection Agmt
(v. 2.0 Jan 2020)

liability to Kern River; provided, however, nothing herein shall restrict Kern River's rights to take immediate action, as Kern River deems necessary, to protect its personnel, its equipment, the public and/or the integrity of its data, which action may include but shall not be limited to shut-down, disconnection, or removal of any of Connecting Party's Data Sharing Equipment.

5.4.8. DATA PROVIDED "AS-IS". Connecting Party understands and agrees that Kern River is providing operational information with absolutely no warranties or representations as to the accuracy, consistency, availability, or continued accessibility of such information, and any and all warranties, whether express or implied, are hereby expressly disclaimed. Connecting Party further agrees that such operational information will not be used or relied upon in any billing, volume nomination or other dispute of any kind which may arise between Connecting Party and Kern River. Connecting Party hereby releases Kern River from any and all liability of any nature whatsoever which may arise in connection with Connecting Party's use of such information, and Connecting Party shall defend and indemnify Kern River against any and all liabilities to third parties which may arise in connection with Connecting Party's use of such information.

5.4.9. SIGNALING NOTICES. Notwithstanding Section 7.5 governing general notices below, communications specifically relating to signaling under this Section 5.4 shall be deemed duly given if provided in writing, sent U.S. Mail, nationally recognized express courier service, email, or other mutually acceptable means and addressed to the respective Party at the address stated below or such other address as either Party shall respectively hereinafter designate in writing from time to time:

KERN RIVER GAS TRANSMISSION COMPANY
2755 E. Cottonwood Parkway, Suite 300
Salt Lake City, UT 84121

SOUTHWEST GAS CORPORATION
8360 S Durango Drive
Las Vegas, Nevada 89113

Contact: Technical Services Manager
Phone: (801) 937-6000

Email: KRTechnicalServices@midamerican.com

Technical Contact: Jeff Gremore
Phone: (702) 528-8281

Email: jeffrey.gremore@swgas.com

ARTICLE VI TERM AND TERMINATION

- 6.1. TERM.** Subject to the provisions hereof, this Agreement shall become effective on the Effective Date and, unless terminated earlier as provided in this Agreement, shall continue and remain in full force and effect until the Interconnect Facilities are disconnected, removed, or abandoned in accordance with Section 7.1 of this Agreement.
- 6.2. TERMINATION.** At any time prior to the Interconnect Facilities being placed into service, either Party may terminate this Agreement by providing the other Party at least thirty (30) days' Notice of Termination. Kern River may terminate this Agreement immediately if Connecting Party fails to make the prepayment in accordance with Section 3.1. The

KR Interconnection Agmt
(v. 2.0 Jan 2020)

provisions of Sections 3.4, 3.5, 6.2, 6.3, 7.5, 7.6 and 7.7 shall survive the termination of this Agreement. Connecting Party will remain responsible for all Termination Costs.

6.3. TERMINATION COSTS INVOICE. In the event Kern River or Connecting Party terminates this Agreement pursuant to Section 6.2, Kern River shall provide an invoice detailing the Termination Costs and, if applicable, damages pursuant to Section 7.8.

6.3.1. In the event Connecting Party's prepayment(s) exceeds the Termination Costs plus any applicable damages pursuant to Section 7.8, Kern River shall refund the full amount of such overpayment within thirty (30) calendar days of the date of the invoice. If Kern River fails to make payment of such refund within said thirty (30) calendar days, interest shall accrue on the overpaid portion of the invoice due under this Agreement at the FERC Interest Rate. Such interest shall accrue on unpaid amounts, including on unpaid interest, compounded monthly, beginning on the payment due date of Kern River's invoice to Connecting Party and terminating when such invoice is paid. Further, Kern River agrees to reimburse Connecting Party for any reasonable attorney's fees and costs that may be incurred in collection or enforcement of any such payments due.

6.3.2. In the event the Termination Costs plus any applicable damages pursuant to Section 7.8 exceed Connecting Party's prepayments, Connecting Party shall pay Kern River, as applicable, for all outstanding Termination Costs. If Connecting Party fails to make payment of such Termination Costs invoice within said thirty (30) calendar days, interest shall accrue on the unpaid portion of the Termination Costs due under this Agreement at the FERC Interest Rate. Such interest shall accrue on unpaid amounts, including on unpaid interest, compounded monthly, beginning on the payment due date of Kern River's invoice to Connecting Party and terminating when such invoice is paid. Further, Connecting Party agrees to reimburse Kern River for any reasonable attorney's fees and costs that may be incurred in collection or enforcement of any such payments due.

ARTICLE VII MISCELLANEOUS

7.1. DISCONNECTION, REMOVAL & ABANDONMENT. Other than to perform maintenance and/or replacement, neither Party shall permanently remove any facilities or equipment constructed pursuant to this Agreement until all transportation services through the facilities have ceased for twelve (12) consecutive months, unless (i) all shippers who have received transportation service through the facilities in the previous twelve (12) consecutive months provide their written consent; (ii) the Interconnect Facilities are not listed as a primary receipt or delivery point under any firm transportation service agreement; and (iii) the Party desiring to remove its facilities provides the other Party not less than thirty (30) days' prior written notice of its intent to remove facilities. Upon termination of this Agreement, Connecting Party, at its sole cost, risk, and expense, shall be responsible for the proper disconnection, removal, and abandonment of the Connecting Party Facilities and Connecting Party's Data Sharing in accordance with all governmental

KR Interconnection Agmt
(v 2.0 Jan 2020)

authorization. Kern River shall have the right to disconnect and remove its Interconnect Facilities and any other equipment owned by Kern River from the Connecting Party Facilities, at its sole cost, upon termination of this Agreement.

- 7.2. **TRANSPORTATION SERVICES.** Connecting Party and Kern River acknowledge that nothing contained in this Agreement shall be construed to obligate Kern River provide transportation services to Connecting Party, at any time. The Parties acknowledge that all deliveries and receipts of gas at the Interconnect Facilities shall be governed by the terms and conditions of the Tariff and its operational procedures thereto, including those nominations and scheduling standards established by the NORTH AMERICAN ENERGY STANDARDS BOARD or such successor entity as such standards are set forth or incorporated by reference in the Tariff.
- 7.3. **OPERATING BALANCING AGREEMENT.** Connecting Party and Kern River shall enter into an OPERATIONAL BALANCING AGREEMENT prior to the In-Service Date in order to facilitate more efficient operation of such Interconnect Facilities. An example of the OPERATIONAL BALANCING AGREEMENT, which is updated from time to time, can be found on Kern River's website.
- 7.4. **FORCE MAJEURE.** If either Party is rendered unable, in whole or in part, by force majeure to carry out its obligations under this Agreement, then such Party shall give notice to the other Party, in accordance with this Agreement, including reasonably full particulars of such force majeure event within a reasonable time after it becomes aware of the occurrence of the force majeure, and the obligations of such Party, insofar as they are affected by such force majeure, shall be suspended from the commencement of such force majeure through the continuance of any inability so caused, but for no longer period, and such force majeure shall so far as possible be remedied with all reasonable dispatch. Kern River's notice shall be provided through its electronic bulletin board and deemed duly given if Kern River posts such notice on its electronic bulletin board. Any suspension of obligation for reasons of force majeure shall be proportional to the effect of such force majeure on the particular obligation from which relief is sought, and shall not relieve any Party from its obligation to make payments hereunder which were due prior to such force majeure. The term "force majeure" as employed herein shall have the meaning set forth in the Tariff.
- 7.5. **NOTICES.** Any notice, request, statement, invoice, payment or other communication provided for in this Agreement shall be deemed duly given if provided in writing, sent by U.S. Mail, nationally recognized express courier service, or some other mutually acceptable means and addressed to the respective Party at the address stated below or such other address as either Party shall respectively hereinafter designate in writing from time to time:

KERN RIVER GAS TRANSMISSION COMPANY
2755 E. Cottonwood Pkwy, STE 300
Salt Lake City, Utah 84121
Attention: Business Development
Telephone: (801) 937-6000
Email: KRBusinessDevelopment@kernrivergas.com

SOUTHWEST GAS CORPORATION
8360 S Durango Drive
Las Vegas, Nevada 89113
Attention: Manager/Engineering Planning
Telephone: (702) 876-7391
Email: bryan.thatcher@swgas.com

- 7.6. **INDEMNIFICATION.** Subject to the limitations set forth in Section 7.8 below, to the fullest extent permitted by law, each Party agrees to protect, defend, indemnify and hold the other Party, its directors, officers, employees, attorneys-in-fact, agents and affiliated companies (collectively, the “**Indemnitees**”), free and harmless from and against any and all losses, claims, liens, demands, and causes of action of every kind and character, arising out of, in connection with, or incident to this Agreement, including, but not limited to, the amounts of judgments, penalties, interest, court costs, investigation expenses and costs and legal fees incurred by Indemnitees, in defense of same arising in favor of any governmental agencies, third persons, contractors or subcontractors, on account of taxes, claims, liens, debts, personal injuries, death or damages to property, and all other claims or demands of every character occurring or incident to, in connection with or arising out of the indemnifying party’s or its contractors’ or subcontractors’ negligence, willful misconduct, acts or omissions in the performance of indemnifying party’s obligations under this Agreement (collectively, “**Claims**”).
- 7.7. **REPRESENTATIONS AND WARRANTIES.** Each Party represents and warrants that it has full and complete authority to enter into and perform this Agreement. Each person who executes this Agreement on behalf of either Party represents and warrants that it has full and complete authority to do so and that such Party will be bound thereby. As of the Effective Date, each party represents and warrants to the other Party that:
- 7.7.1. Its operations pursuant to this Agreement shall be in compliance and in accordance with all governmental authorization and environmental laws;
 - 7.7.2. It is duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization/incorporation;
 - 7.7.3. The execution, delivery and performance of this Agreement have been and remain duly authorized by all necessary corporate or organizational action and do not contravene any provision of law or Party’s constitutional documents or any contractual restriction binding on Party or its assets;
 - 7.7.4. All consents, authorizations and approvals of, and registrations and declarations with, any governmental authority necessary for the due execution, delivery and performance of this Agreement have been obtained and remain in full force and effect and all conditions thereof have been duly complied with, and no other action by and no notice to or filing with, any governmental authority is required in connection with Party’s execution, delivery or performance of this Agreement;

- 7.7.5. There are not pending or, to its knowledge, threatened legal proceedings that could materially adversely affect its ability to perform its obligations under this Agreement;
- 7.7.6. It is acting for its own account, has made its own independent decision to enter into this Agreement and as to whether this Agreement is appropriate or proper for it based upon its own judgment, is not relying upon the advice or recommendations of the other Party in so doing, and is capable of assessing the merits of and understanding, and understands and accepts, the terms, conditions and risks of this Agreement; and
- 7.7.7. Its assets, at their respective fair value, exceed its liabilities and it has, or will have, sufficient cash and capital to pay its liabilities and obligations as they become due.
- 7.8. **BREACH AND LIMITATION OF LIABILITY.** A Party's failure to comply with the terms of this Agreement, the OBA, Tariff or TSA (if applicable) is a breach and will constitute a default under this Agreement. Upon default, the defaulting Party will be liable for any and all damages at law or in equity hereunder, including any such rights the non-defaulting Party may exercise pursuant to the Tariff. Either Party may terminate this Agreement for breach or non-performance by the other Party if such other Party fails to cure its breach or non-performance within thirty (30) calendar days after receipt of written notice hereunder; provided however, NEITHER PARTY, NOR ITS REPRESENTATIVE OFFICERS, DIRECTORS, EMPLOYEES, REPRESENTATIVES, DESIGNEES, AFFILIATES, SUCCESSORS OR ASSIGNS WILL BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, CONSEQUENTIAL, SPECIAL, OR PUNITIVE DAMAGES HOWEVER CAUSED, WHETHER ARISING OUT OF CONTRACT, TORT, STRICT LIABILITY, INDEMNITY, WARRANTY, PROFESSIONAL LIABILITY, CONTRIBUTION, OR OTHERWISE.
- 7.9. **INSURANCE REQUIREMENTS.** Each Party shall procure, at its own expense, from reliable insurance companies having an A.M. Best rating of not less than A-/VII and carry for the entire duration of this Agreement, the following types of insurance or maintain equivalent forms of self-insurance, with terms and limits not less than shown for the respective items:
- 7.9.1. Workers' compensation insurance as required by the laws of the state in which the operations under this Agreement are to be conducted;
- 7.9.2. Employer's liability insurance with limits of not less than \$1,000,000 each accident, \$1,000,000 disease each employee, and \$1,000,000 disease policy limit. If any operations contemplated under this Agreement take place on or adjacent to a navigable waterway, such policy shall include coverage as required under the U.S. Longshoreman's and Harborworker's Act and/or the Jones Act as may be applicable;
- 7.9.3. Commercial general liability insurance with a combined single limit of not less than \$1,000,000 per occurrence/\$2,000,000 general aggregate (on a per location and/or per job basis) and including coverage for bodily and personal injury, broad form

property damage, premises liability, blanket contractual liability, sudden and accidental pollution liability, completed operations and products liability. Any exclusion for “Explosion”, “Collapse”, and/or “Underground” (XCU) operations shall be removed from such coverage;

- 7.9.4. Automobile liability insurance, covering the operation of all owned, hired, rented, or non-owned licensed motor vehicles, with a combined single limit for each occurrence of not less than \$1,000,000;
- 7.9.5. Excess/Umbrella liability coverage in excess of the limits and with terms at least as broad as the coverages outlined above for employers’ liability insurance, commercial general liability insurance and automobile liability insurance, with a combined single limit for Bodily Injury and Property Damage of at least \$10,000,000 for each occurrence;
- 7.9.6. If a Party utilizes aircraft or unmanned aircraft systems (UAS), in the performance of this Agreement, operator shall maintain Aircraft/UAS liability insurance including owned, non-owned, chartered or hired aircraft with limits of at least \$10,000,000 combined single limits for passenger and third-party bodily injury and property damage during all phases of flight operations and insure the risks associated with the Agreement, including contractual and war liability coverage. The Party shall comply with all applicable federal, state, and local laws, including Federal Aviation Association (FAA) laws and certifications for all aircraft/UAS operations;
- 7.9.7. If a Party in any way collects, obtains, maintains or in any way accesses or uses Confidential Information or Data, then the Party, and its agents, contractors, and subcontractors of any tier shall maintain Network Security & Privacy Liability coverage, including Professional Errors & Omissions, throughout the term of this Contract and for a period of two (2) years thereafter, with a minimum required limit of \$5,000,000 each claim;
- 7.9.8. If applicable to the work, Pollution Liability insurance with limits not less than \$3,000,000 per claim and \$6,000,000 annual aggregate, covering sudden, accidental and gradual pollution losses arising from the work as detailed in subsections below:
 - 7.9.8.1. For pollution arising during the performance of the work and after completion of the work, coverage shall apply to the discharge, dispersal, release, or escape of dust, smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials, or other irritants, contaminants, or pollutants into or upon land, the atmosphere, or any watercourse or body of water, which result in any bodily injury, sickness, disease, mental anguish, or shock sustained by any person, including death; and/or property damage, including physical injury to or destruction of tangible property including the resulting loss of use thereof, clean-up costs, and the loss of use of tangible property that has not been

physically injured or destroyed (any such incident referred to herein as a pollution incident). Coverage shall apply to the cost of defending any claims arising from a pollution incident including costs, charges and expenses incurred in the investigation, adjustment or defense of such claims.

7.9.8.2. If applicable to the work, coverage shall apply to pollution liability arising out of the use of vehicles to transport pollutants or contaminants; such coverage to be included in the pollution liability policy or by endorsing the Commercial Auto Liability policy with the Pollution Liability – Broadened Coverage For Covered Autos – Business Auto, Motor Carrier And Truckers Coverage Form (form CA 99 48) or a similar form; and where required by law, the Commercial Auto Liability policy shall include the MCS-90 endorsement.

7.9.8.3. If applicable to the work, coverage shall apply to pollution liability arising out of owned and non-owned disposal sites.

7.9.9. Cancellation or termination of policies providing coverage hereunder, as it affects the interest of the other Party, shall be effective not less than thirty (30) days after written notice of cancellation or termination is received from the insurance company by the affected Party except for non-payment of premium which shall require ten (10) days prior written notice. Prior to commencing work under this Agreement, the Parties shall deliver certificates of insurance and/or proof of equivalent self-insurance evidencing the existence of insurance provided for above. Each Party shall provide the other Party with annual renewal certificates evidencing the required coverages so long as this Agreement is in effect;

7.9.10. Irrespective of the requirements as to insurance to be carried, the insolvency, bankruptcy, or failure of any such insurance company carrying insurance for either Party, or failure of any such insurance company to pay claims occurring shall not be held to waive any of the provisions of this Agreement. All of the above-described insurance policies, together with all other insurance policies now owned or purchased in the future by either Party relating to work to be performed hereunder, shall contain provisions that the insurance companies will have no right of recovery or subrogation against the other Party, its designee, or any of its subsidiary or affiliated companies. Each Party shall also be included as an additional insured under all policies required (with the exception of the Workers' Compensation and employer's liability policies) with respect to the indemnity obligations assumed herein. Any and all deductibles, self-insurance, self-insured retentions or retrospective premium arrangements that may be carried in the above-described insurance policies shall be assumed by, for the account of, and at the sole risk of the respective first named insured party. All required insurance policies shall provide that the policy is primary and will not contribute with any policy carried by the other Party;

7.9.11. Each Party shall ensure that all contractors and subcontractors performing work under this agreement carry that Party's standard insurance coverages and limits for

KR Interconnection Agmt
(v. 2.0 Jan 2020)

any work undertaken pursuant to this Agreement. Any deficiency in the coverage, policy limits, or endorsements of said contractors or subcontractors will be the sole responsibility of the contracting Party.

- 7.10. **GOVERNING LAW.** The construction, interpretation, and enforcement of this Agreement shall be governed by and construed in accordance with laws of the State of Utah, excluding any conflict of law rule, which would refer any matter to the laws of a jurisdiction other than the State of Utah. Exclusive jurisdiction and venue shall lie in Salt Lake City, Utah.
- 7.11. **JOINT EFFORTS.** The Parties stipulate and agree that this Agreement shall be deemed and considered for all purposes as prepared through the joint effort of the Parties and shall not be construed against one Party or the other as a result of the preparation, submittal, or other event of negotiation, drafting or execution hereof.
- 7.12. **WAIVER.** A Party's failure to insist upon the performance of any of the terms and conditions set forth in this Agreement, or the waiver of any breach of any of the terms and conditions hereof, shall not be construed or deemed to be a waiver of any succeeding breach thereof, whether of like or different character or nature, but the same shall continue and remain in full force and effect as if no such failure or waiver had occurred. Moreover, any failure to exercise any right hereunder shall not be considered as a waiver of such right in the future.
- 7.13. **SEVERABILITY.** If any term or provision of this Agreement or the application thereof to any person or circumstance is held to be illegal, invalid or unenforceable under any present or future law, then (i) such term or provision shall be fully severable, (ii) this Agreement shall be construed and enforced as if such illegal, invalid or unenforceable provision had never been contained herein, and (iii) the remaining provisions of this Agreement shall remain in full force and effect and shall not be affected by the illegal, invalid, or unenforceable provision or by its severance herefrom.
- 7.14. **SUCCESSION AND ASSIGNMENT.** Connecting Party shall not assign or transfer this Agreement, including by operation of law such as by purchase, merger, or consolidation, without the express prior written consent of Kern River, which consent shall not be unreasonably withheld or delayed. Any such purported assignment, transfer or delegation without Kern River's express written consent shall be null and void. No such Kern River consent shall be required if the assignee will meet and satisfy the credit requirements set forth in the applicable sections of the general terms and conditions of the Tariff, if any.
- 7.15. **COUNTERPART SIGNATURES.** This Agreement may be executed in one or more counterparts each of which when executed and delivered, including by facsimile or a scan in Portable Document Format (i.e., ".pdf"), shall be an original but all of which together shall constitute but one and the same instrument.
- 7.16. **THIRD PARTY BENEFICIARIES.** This Agreement is made for the express and exclusive benefit of Kern River and Connecting Party and no other person or party who is not a

KR Interconnection Agmt
(v. 2.0 Jan 2020)

signatory hereto shall have the benefit of, or any right to seek enforcement or recovery under, this Agreement.

- 7.17. **JURY WAIVER.** To the fullest extent permitted by law, each of the parties hereto waives any right it may have to a trial by jury in respect of litigation directly or indirectly arising out of, under or in connection with this Agreement. Each party further waives any right to consolidate any action in which a jury trial has been waived with any other action in which a jury cannot be or has not been waived.
- 7.18. **ATTORNEYS' FEES.** The prevailing party shall have the right to collect from the other party its reasonable costs and attorneys' fees incurred in enforcing this Agreement.
- 7.19. **CONFIDENTIALITY.** Kern River and Connecting Party agree to maintain this Agreement, all of its contents and subsequent and related documents (including any information disclosed to the recipient, which by its nature is considered proprietary or confidential, shall be considered confidential information regardless of whether such information is specifically labeled as "Confidential" by the transmitting party) in strict confidence and shall not cause or permit disclosure thereof to any third party without the express written consent of the other Party except to the extent necessary to comply with valid laws, regulations or orders of any court or agency having jurisdiction. Connecting Party shall limit access to Confidential information to those of its parent(s), affiliates, and its and their officers, directors, members, managers, employees, agents, contractor(s) at any tier or other representatives, including without limitation attorneys, accountants, consultants, and financial advisors, who need to know the Confidential information to facilitate the purpose of this Agreement and the work contemplated in this Agreement; provided however, those individuals shall be under the same obligations of confidentiality as required by this Section of the Agreement. The foregoing restrictions on confidentiality and non-disclosure shall not apply to information (A) that is, at the time of disclosure, available to the general public; (B) that, following disclosure, becomes available to the general public through no fault of the recipient; or (C) that is disclosed to the recipient without restriction on disclosure by a third-party which has the legal right to disclose the same.
- 7.20. **DISCLOSURE.** The Parties specifically agree that disclosure to FERC shall be authorized under this Section. If either Party becomes aware of a judicial or administrative proceeding or request that has resulted in or may result in such disclosure, it shall so notify the other Party sufficiently in advance of any disclosure for such Party to take any and all actions necessary to prevent the disclosure and maintain the confidentiality of this Agreement and all related documents. Notwithstanding any other provision of this Agreement, if the disclosing Party fails to notify the other Party prior to such disclosure, the disclosing Party shall be liable for damages for such disclosure without notice.
- 7.21. **AMENDMENTS.** No amendments to, or modifications of, this Agreement shall be effective unless agreed to in a written executed by Kern River and Connecting Party that expressly refers to this Agreement.

7.22. **IMAGED DOCUMENTS.** Any document generated by the Parties with respect to this Agreement, including this Agreement, may be imaged and stored electronically ("**Imaged Document**"). Imaged Documents may be introduced as evidence in any proceeding as if such were original business records and neither party shall contest the admissibility of Imaged Documents as evidence in any proceeding.

7.23. **ENTIRE AGREEMENT.** The entire agreement between the Parties shall include those provisions contained in this Agreement and any Exhibit, which supersede any prior understanding or written or oral agreement relative thereto. Each Exhibit is hereby incorporated into and made a part of this Agreement. In the event of a conflict between the terms of any Exhibit and the terms of this Agreement, the terms of this Agreement shall govern. The Exhibits to this Agreement are:

- EXHIBIT A – MAJOR EQUIPMENT COMPRISING THE INTERCONNECT FACILITIES
- EXHIBIT B – DELIVERY FACILITIES COST ESTIMATE
- EXHIBIT C – NET INCOME TAX LIABILITY CALCULATION
- EXHIBIT D – SIGNAL LETTER AGREEMENT

IN WITNESS WHEREOF, the Parties have duly executed this Agreement to be effective on the day and year first above written.

KERN RIVER GAS TRANSMISSION COMPANY

SOUTHWEST GAS CORPORATION

JB
4.9.25

Signature: *Mac McGuire*

Signature #1: *Justin Brown*
Justin Brown (Mar 28, 2025 14:02 PDT)

Name: **Mac McGuire**

Name: **Justin Brown**

Title: **VP, Customer Service and Business Development**

Title: **President/SWG**

Date: **4/11/2025**

Date: **03/28/2025**

Signature #2: *Tom Cardin*
Tom Cardin (Mar 28, 2025 14:01 PDT)

Name: **Tom Cardin**

Title: **VP/Gas Operations**

Date: **03/28/2025**

Southwest Gas Corporation

Joel Martell

Joel Martell

Signature #3: *Craig Sisco*
Craig Sisco (Mar 28, 2025 10:25 PDT)

Name: **Craig Sisco**

Title: **Dir/Gas Operations**

Manager/SNV Engineering

03/14/2025

Date: **03/28/2025**

KR Interconnection Agmt
(v. 2.0 Jan 2020)

**EXHIBIT A
TO
INTERCONNECTION AGREEMENT
DATED FEBRUARY 20, 2025
BETWEEN KERN RIVER GAS TRANSMISSION
AND
SOUTHWEST GAS CORPORATION**

MAJOR EQUIPMENT COMPRISING THE INTERCONNECT FACILITIES

METER

Ultrasonic flow meters
Actuated valves
(2) Mainline hot taps
Meter canopy
Data acquisition and control building
Pipeline launcher and receiver facilities

KR Interconnection Agmt
(v. 2.0 Jan 2020)

EXHIBIT B
TO
INTERCONNECTION AGREEMENT
DATED FEBRUARY 20, 2025
BETWEEN KERN RIVER GAS TRANSMISSION
AND
SOUTHWEST GAS CORPORATION

INTERCONNECT FACILITIES COST ESTIMATE

Kern River and Connecting Party acknowledge that this is a good faith estimate of the Actual Cost of the Kern River Facilities. Kern River and Connecting Party agree that in the event the estimate of the Actual Cost changes prior to completion of the construction ("Cost Variance"), Kern River may provide notice of the Cost Variance to Connecting Party and Connecting Party will promptly pay Kern River the difference between the Cost Variance and the estimate of Actual Cost previously paid to Kern River. In the event Kern River requests additional payment to cover the Cost Variance, Connecting Party shall have the right subject to Section 6.2 to terminate the Agreement.

DESCRIPTION	METER STATION ESTIMATE
COMPANY LABOR, PAYROLL OVERHEADS	\$170,000
MATERIALS	\$2,310,000
CONTRACTS	\$1,540,000
TEMP. LABOR AND PROF. SERVICES	\$1,180,000
A&G OVERHEADS	\$160,000
SUB TOTAL	\$5,360,000
ENVIRONMENTAL, LAND, ROW, AND FILING FEES	\$440,000
CONTINGENCY	\$530,000
SUB TOTAL	\$6,330,000
NET INCOME TAX LIABILITY	\$977,429
GRAND TOTAL ESTIMATE	\$7,307,429

KR Interconnection Agmt
(v. 2 0 Jan 2020)

**EXHIBIT C
 TO
 INTERCONNECTION AGREEMENT
 DATED FEBRUARY 20, 2025
 BETWEEN KERN RIVER GAS TRANSMISSION
 AND
 SOUTHWEST GAS CORPORATION
 NET INCOME TAX LIABILITY CALCULATION**

KERN RIVER GAS TRANSMISSION COMPANY
 Contribution In Aid of Construction
 Income Tax Gross-up Calculation
 Transmission Plant - 15 Year MACRS with No Bonus Depreciation

Project:	Lamb MS
Location:	Clark County, NV
Customer:	Southwest Gas
In-Service Date:	
Plant Cost:	\$ 8,330,000

Federal Income Tax Rate:	21.00%
California Income Tax Rate:	8.84%
Utah Income Tax Rate:	4.55%
Tax Year:	2027
California Apportionment:	28.3111%
Utah Apportionment:	45.5283%
Effective Tax Rate:	24.61%
Discount Rate:	11.88%

Year	Plant Cost	Fed Tax Depr 15 Yr MACRS No Bonus	CA Tax Depr 22 Yr 200 D5 SL No Bonus	Total Tax Benefit	Present Value	Tax Benefit Lost	Income Tax Gross up
1	8,330,000	316,500	287,699	77,332	77,332	0	
2		601,350	549,306	146,984	131,765	15,219	
3		541,215	499,368	132,384	109,399	22,985	
4		487,084	453,071	119,236	85,901	33,335	
5		438,416	412,700	107,401	69,353	38,038	
6		394,549	375,182	96,726	56,003	40,723	
7		373,787	341,074	91,355	47,415	43,940	
8		373,787	310,007	90,742	42,220	48,522	
9		373,787	281,879	90,185	37,616	52,569	
10		373,787	256,253	89,678	32,532	56,146	
11		373,787	232,857	89,218	29,906	59,312	
12		373,787	211,756	88,799	26,683	62,115	
13		373,787	192,828	88,418	23,818	64,600	
14		373,787	202,672	88,019	21,400	67,219	
15		373,787	202,645	88,618	19,184	69,434	
16		196,703	202,669	46,290	6,983	37,307	
17			202,650	4,007	697	3,310	
18			202,661	4,007	625	3,382	
19			202,657	4,007	560	3,447	
20			202,663	4,007	502	3,605	
21			202,658	4,007	450	3,557	
22			202,656	4,007	404	3,603	
23			101,329	2,003	181	1,822	
	6,330,000	6,330,000	6,330,000	1,558,032	820,929	737,103	977,429

INVOICE		
Plant Cost	6,330,000	
Income Tax Gross-Up	977,429	15.4412%
Total Invoice	7,307,429	

PROOF	
Plant Cost	6,330,000
Inc. Tax Out on Invoice	1,798,358
Pres. Value of Tax Depr.	(820,929)
Net Cost to Kern River	7,307,429

Total Invoice (from above)	7,307,429
Combined Inc. Tax Rate	24.61%
Income Tax Due	1,798,358

KR Interconnection Agmt
 (v. 2.0 Jan 2020)

**EXHIBIT D
TO
INTERCONNECTION AGREEMENT
DATED FEBRUARY 20, 2025
BETWEEN KERN RIVER GAS TRANSMISSION
AND
SOUTHWEST GAS CORPORATION**

**COURTESY DATA SIGNAL FOR LAMB METER STATION FORM
(NEXT PAGE)**

**KR Interconnection Agmt
(v. 2 0 Jan 2020)**

COURTESY DATA SIGNAL FOR LAMB METER STATION FORM

Kern River offers several courtesy data signals for Connecting Party's informal use in viewing and monitoring recent gas flow data. Kern River's offer to provide such signals is governed by the terms of the Interconnection Agreement, including but not limited to Section 5.4 thereof.

Two options are available:

1. Internet – Flat Transfer Protocol (FTP) OR Daily Report via e-mail
2. Analog (the number of local 4-20mA analog signals is limited to three)

Kern River encourages its customers to obtain any required signals through the Internet using FTP, or through daily reports via email.

Kern River provides courtesy signals in lieu of its customers physically connecting transmitters, transducers, or equipment to meters or other facilities operated as part of Kern River's interstate Transmission system.

1) SIGNAL AVAILABLE VIA FTP OR EMAIL (CHECK DESIRED TRANSFER METHOD)
 FLAT-FILE VIA FILE TRANSFER PROTOCOL (FTP)¹ OR DAILY REPORT VIA EMAIL²

<input type="checkbox"/> Instantaneous Total Station Flow Rate (Mscf/d) <input type="checkbox"/> Instantaneous Total Station Energy Flow Rate ³ (Dth/d) <input type="checkbox"/> Pressure at Kern River Pipeline or Lateral (psig) <input type="checkbox"/> Pressure at Customer Interconnect (psig) <input type="checkbox"/> Primary Meter Temperature (°F) <input type="checkbox"/> Accumulated Daily Total Flow (Mscf) <input type="checkbox"/> Accumulated Daily Total Energy ³ (Dth) <input type="checkbox"/> Higher Heating Value ³ (dry) (btu/scf) <input type="checkbox"/> Specific Gravity ³ <input type="checkbox"/> Sulfur (Total) ³ (grains/100 scf) <input type="checkbox"/> Sulfur (Hydrogen Sulfide – H ₂ S) ³ (grains/100 scf)	<p style="text-align: center;"><u>Gas Composition data³</u></p> <input type="checkbox"/> Nitrogen (N ₂) (mole %) <input type="checkbox"/> Carbon Dioxide (CO ₂) (mole %) <input type="checkbox"/> Methane (C ₁) (mole %) <input type="checkbox"/> Ethane (C ₂) (mole %) <input type="checkbox"/> Propane (C ₃) (mole %) <input type="checkbox"/> Iso-Butane (I-C ₄) (mole %) <input type="checkbox"/> Normal-Butane (N-C ₄) (mole %) <input type="checkbox"/> Iso-Pentane (I-C ₅) (mole %) <input type="checkbox"/> Normal-Pentane (N-C ₅) (mole %) <input type="checkbox"/> Hexane (C ₆) (mole %) <input type="checkbox"/> Heptane (C ₇) (mole %) <input type="checkbox"/> Octane (C ₈) (mole %) <input type="checkbox"/> Nonane+ (C ₉ +) (mole %)
---	--

OR

2) ANALOG⁴ (CHECK DESIRED SIGNALS)

<input type="checkbox"/> Instantaneous Total Station Flow Rate (Mscf/d) <input type="checkbox"/> Instantaneous Total Station Energy Flow Rate ³ (Dth/d) <input type="checkbox"/> Pressure at Kern River Pipeline or Lateral (psig) <input type="checkbox"/> List Others (limited by availability): _____	<input type="checkbox"/> Pressure at Customer Interconnect (psig) <input type="checkbox"/> Primary Meter Temperature (°F) <input type="checkbox"/> Control Valve Position (% Open)
--	--

¹ The Flat File Internet system allows the customer to access data in a text file through the Internet. Security is assured by using FTP with username and password protection. The data is updated as frequently as every 5 minutes or as infrequently as every gas day depending on the customer's requirements.

² The daily email report method allows the customer to receive previous gas day values in a formatted report delivered via email.

³ Gas composition, sulfur analysis and energy data is provided from the most representative of Kern River's area Chromatographs and sulfur analyzers and is not warranted as instantaneous data at the meter station site.

⁴ Analog signal systems require the customer to install the necessary facilities in order to connect to Kern River's facilities at a defined demarcation point.

KR Interconnection Agmt
 (v. 2.0 Jan 2020)











Southwest Gas_Interconnection Agmt for Lamb MS 250204

Final Audit Report

2025-03-28

Created:	2025-03-14
By:	James Frame (James.Frame@swgas.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAPyXvpCMpQWnVEzxc5VF6vjwKeCZwb7W

"Southwest Gas_Interconnection Agmt for Lamb MS 250204" History

-  Document created by James Frame (James.Frame@swgas.com)
2025-03-14 - 4:00:13 PM GMT- IP address: 170.85.54.174
-  Document emailed to Joel Martell (joel.martell@swgas.com) for signature
2025-03-14 - 4:26:02 PM GMT
-  Email viewed by Joel Martell (joel.martell@swgas.com)
2025-03-14 - 4:26:44 PM GMT- IP address: 104.47.56.254
-  Document e-signed by Joel Martell (joel.martell@swgas.com)
Signature Date: 2025-03-14 - 4:28:20 PM GMT - Time Source: server- IP address: 170.85.54.196
-  Document emailed to Craig Sisco (Craig.Sisco@swgas.com) for signature
2025-03-14 - 4:28:22 PM GMT
-  Email viewed by Craig Sisco (Craig.Sisco@swgas.com)
2025-03-14 - 4:31:15 PM GMT- IP address: 104.47.58.254
-  Document e-signed by Craig Sisco (Craig.Sisco@swgas.com)
Signature Date: 2025-03-28 - 5:25:54 PM GMT - Time Source: server- IP address: 104.129.198.86
-  Document emailed to Tom Cardin (Thomas.Cardin@swgas.com) for signature
2025-03-28 - 5:25:56 PM GMT
-  Email viewed by Tom Cardin (Thomas.Cardin@swgas.com)
2025-03-28 - 9:00:19 PM GMT- IP address: 104.47.56.254
-  Document e-signed by Tom Cardin (Thomas.Cardin@swgas.com)
Signature Date: 2025-03-28 - 9:01:01 PM GMT - Time Source: server- IP address: 104.129.198.74

✉ Document emailed to Justin Brown (Justin.Brown@swgas.com) for signature

2025-03-28 - 9:01:03 PM GMT

📄 Email viewed by Justin Brown (Justin.Brown@swgas.com)

2025-03-28 - 9:01:53 PM GMT - IP address: 72.193.5.173

✍ Document e-signed by Justin Brown (Justin.Brown@swgas.com)

Signature Date: 2025-03-28 - 9:02:07 PM GMT - Time Source: server- IP address: 172.226.2.21

✔ Agreement completed.

2025-03-28 - 9:02:07 PM GMT

C# 21940

V# 124899

EXP 4-30-2026

With 2 yr opt

Southwest Gas Corporation
Southern Nevada Division
Division Operations Services (DOS)
Blair Church & Flynn Consulting Engineers

CRAFT SERVICE AGREEMENT

**SOUTHWEST GAS CORPORATION
CRAFT SERVICES AGREEMENT
(INDEPENDENT CONTRACTOR)**

This CRAFT SERVICES AGREEMENT (“Agreement”) is made and entered into as of May 1, 2023 (“Effective Date”), by and between SOUTHWEST GAS CORPORATION, a California corporation, with principal business offices at 8360 South Durango Drive; Las Vegas, Nevada 89113-4444 (“Utility”), and Blair Church and Flynn Consulting Engineers, a California Corporation, with its principal business offices at 451 Clovis Avenue, Suite 200, Clovis, CA 93612 (“Contractor”). Utility and Contractor may be referred to herein as a “Party” or collectively as the “Parties.”

Recitals

Utility is engaging Contractor to provide the services described herein, as an independent contractor;

Contractor will provide such services to Utility, on the terms and subject to the conditions of this Agreement;

NOW, in consideration of the mutual agreements set forth in this Agreement and for other good and valuable consideration, the receipt and sufficiency which are acknowledged, Utility and Contractor agree as follows:

AGREEMENT

1. SERVICES

1.1. Services. Contractor, subject to the terms and conditions of this Agreement, shall provide the services or work to be performed (collectively “Work”) described and set forth in one or more applicable Statement(s) of Work (“SOW”) that are entered into by and between the Parties. Contractor’s work products generated pursuant to this Agreement or applicable SOW are deemed “Deliverables” under this Agreement. The description of the Work is intended to delineate and describe the Deliverables Contractor is to achieve under this Agreement or any applicable SOW. Contractor shall determine the method, details and means of performing the Work, subject to Utility’s requirements, for the completed project. Unless specified in the applicable SOW, Utility will not be required to furnish or provide any training to Contractor or to Contractor’s personnel to enable Contractor to perform the Work required by this Agreement. References to Contractor Personnel shall refer to all of Contractor’s labor resources engaged for Work under the Agreement, including, but not limited to: direct Contractor employees, whether full-time or part-time; any temporary or subcontracted labor resources; or any other labor resource for which Contractor provides or is responsible (collectively, “Contractor Personnel”).

1.2. Equipment and Supplies. Unless otherwise agreed between Utility and Contractor on the applicable SOW or in a separate writing between the Parties, Contractor shall furnish, at Contractor’s expense, all labor, tools, transportation, equipment, supplies, and other materials and resources required to perform the Work.

1.3. Security. Access to Utility facilities is controlled in accordance with specific site requirements, which Utility may in its sole discretion modify from time to time. Contractor and all of Contractor Personnel must comply with Utility's security requirements and guidelines.

2. NON-EXCLUSIVE AGREEMENT

2.1. This Agreement does not establish an exclusive agreement for the Work between Contractor and Utility. Utility reserves the right to use others to perform the same or similar services and to solicit bids from other contractors. Subject to the conditions of this Agreement, Contractor may provide its professional services to other clients throughout the duration of this Agreement.

3. TERM

3.1. Term. This Agreement shall commence on the "Effective Date" and shall continue thereafter until the expiration of **April 30, 2026**, unless sooner terminated pursuant to this Agreement.

3.2. Renewal.

3.2.1. Utility may renew this Agreement for an additional two (2) years by providing written notice of its intent to renew at least ten (10) calendar days prior to the end of the then-current term (each a "Renewal Term" and together with the Initial Term, the "Term"). If the Term is renewed for one or more Renewal Terms, the terms and conditions of this Agreement during each Renewal Term shall be the same as the terms and conditions in effect immediately prior to such renewal, subject to any change in fees in accordance with the applicable SOW. If timely notice of intent to renew this Agreement is not provided, then this Agreement will terminate on the expiration of the then-current Term ("Expiration Date"), unless sooner terminated as provided in this Agreement.

3.2.2. Notwithstanding any termination or expiration of this Agreement, continued performance by the Parties shall be deemed an amendment and renewal of the term of this Agreement on a month-to-month basis. All future performance shall be subject to the terms and conditions of the Agreement, unless subsequently modified by written amendment by authorized representatives of both Parties.

3.3. Master Agreement. Upon agreement of the Parties, the terms and conditions of this Agreement may be deemed a "Master Agreement"; and apply to multiple schedules of rates ("Schedules") and/or multiple SOWs that may be issued pursuant to this Agreement setting forth the scope of the Work and Work to be performed by Contractor under the Schedule(s) and/or SOWs.

4. CONTRACTOR COMPENSATION

4.1. Utility shall pay Contractor as set forth on in the applicable SOW and any associated Schedule hereto ("Contractor Compensation"); provided the Work is delivered timely, in compliance with the terms of this Agreement, and to the satisfaction of Utility.

4.2. The total Contractor Compensation under this Agreement, including applicable taxes, shall not exceed the amount set forth in the applicable SOW or mutually agreed-upon Change Order.

5. INVOICING, MANNER AND TIME OF PAYMENT

5.1. Regular Invoicing. Contractor shall submit billing invoices to Utility on a regular basis, but in no event less than once a month (unless otherwise stated in the applicable SOW), at the prices and fees set forth in the applicable SOW. The invoice(s) for any subcontractor and appropriate documentation must be presented to Utility. Each invoice must specify that the services billed were rendered pursuant to this Agreement and the charges must be identified as to the work order, contract number, or account number provided by Utility prior to submission of invoice. Upon Utility's approval of the submitted invoice(s), Utility shall pay each approved invoice within thirty (30) days of approval. Unless otherwise agreed to by Utility, final invoicing and appropriate documentation must be presented to Utility within thirty (30) days of completion of the Work and acceptance of all Deliverables contemplated by this Agreement or applicable SOW.

5.2. Retention. Utility, at its discretion, may retain up to 10 percent (10%) of Contractor Compensation until (i) Contractor has completed and Utility has accepted in writing the Work as described in the applicable SOW and (ii) Contractor has shown evidence to Utility that Contractor has satisfied and released any and all potential liens.

5.3. Liens. Upon completion of the Work, Contractor shall deliver to Utility an affidavit or release that there are no liens or claims existing or threatened that might arise out of this Agreement, including for all labor and materials supplied by Contractor for which a lien or claim may be filed within twenty (20) business days of completion of the Work. Should any lien or claim remain unsatisfied, Contractor shall be liable for and hold Utility harmless for any monies Utility may be compelled to pay, including all costs and attorney fees incurred, in releasing such liens or claims.

5.4. Taxes. Contractor shall bear and pay all sales, consumer, use, and all other taxes and costs of every kind and nature assessed against Contractor by any federal, state, local, or other governmental entity in connection with the Work performed by Contractor or assessed upon or against any equipment or property of Contractor used, purchased, or employed under this Agreement. Contractor shall be fully responsible for the payment and deduction of all state and federal taxes and benefits for Contractor Personnel, including but not limited to any applicable payroll and income taxes, unemployment insurance, disability insurance, retirement, workers' compensation, pension, or other social security benefits for all persons or entities employed or retained by Contractor in the performance of the Work under this Agreement.

5.5. Modification. Utility may modify internal invoicing and payment procedures at any time, and from time to time, upon written notice to Contractor.

5.6. Remedies. For any breach of this Agreement, in addition to any other remedies afforded Utility, Utility shall have the right to exclude Contractor from participation on bids for future work opportunities with Utility and the right to withhold payment for any other work that Contractor is providing Utility until such breach is cured; and Contractor waives the right to object or complain concerning such exclusion from future bid participation or the withholding of payment for any other work Contractor is providing..

6. RELATIONSHIP OF THE PARTIES

6.1. Contractor shall perform the Work as an independent contractor. Contractor is not an employee or agent of Utility for any purpose. Contractor has no authority (and shall not hold itself out as having authority) to bind Utility. Contractor shall not make any agreements or representations on Utility's behalf without Utility's prior written consent. Nothing contained in this Agreement shall be construed as creating any agency, partnership, joint venture or other form of joint enterprise, employment or fiduciary relationship between the Parties.

6.2. Any provisions in this Agreement or the SOW or specifications which may appear to give Utility the right to direct Contractor as to the details of accomplishing the Work to be performed, or to exercise a measure of control over said Work, shall be deemed to mean that Contractor shall follow the desires of Utility in the results of the Work only and not in the means said Work is to be accomplished. Utility reserves the right of approval over the general methods employed by Contractor in the performance of the Work, but only insofar as they may affect the maintenance of good public relations and the safety of the general public and Utility personnel and facilities.

6.3. Contractor and Contractor Personnel are not entitled to and shall not participate in any Utility benefits including, but not limited to, the Utility's Retirement/Pension Plan, its 401-K plan, medical benefits, and other benefits provided to Utility's employees; and shall not be entitled to retroactive benefits if they are reclassified as Utility employees.

6.4. Contractor also may be performing work for Utility's subsidiaries or affiliated interests. Contractor shall inform Utility if it is performing such work. Except to coordinate schedules or Work under this Agreement to avoid conflicts or interference with work for the subsidiary or affiliated entities, Contractor and Contractor Personnel shall not share or discuss any non-public, confidential information or knowledge gained for matters related to this Agreement with representatives of the subsidiary or affiliated entities; nor shall Contractor or Contractor Personnel share or discuss any non-public, confidential information or knowledge gained for matters related to the work and agreement with the subsidiary or affiliated entities with Utility representatives under this Agreement.

7. CONTRACT MANAGEMENT

7.1. Contractor shall coordinate its Work under this Agreement with the Utility contract manager and/or project manager identified by the Utility ("Utility Contract Manager").

8. PERFORMANCE

8.1. All Work performed by Contractor shall be performed in compliance with all applicable federal, state, county, city, or township laws, rules, regulations, and ordinances; and Utility policies, standards and practices. Contractor, at Contractor's expense, shall be responsible for obtaining all necessary licenses, permits and governmental authorizations required to perform the Work, including any export of software, equipment, or services from the country of origin.

8.2. Contractor shall be responsible to completely perform the Work in accordance with all the provisions of this Agreement and applicable project schedules or SOWs. Any and all Work to be performed under this Agreement shall be completed in a timely, professional and workmanlike

manner, in accordance with the latest industry standards, applicable practices, and defined quality measures; all to the reasonable satisfaction of Utility.

8.3. All materials furnished by Contractor, if applicable, shall be new and of the brand and quality designated in this Agreement unless prior written approval for any substitution has been provided by Utility or a Change Order provides for the substitution. If brand and/or quality of materials are not designated, Contractor shall use materials of a quality at least comparable to the materials used in the industry for similar purposes.

8.4. Contractor shall furnish and all Work shall be performed by Contractor Personnel that have the requisite skills, experience, care and qualification to perform the Work in an expeditious manner and consistent with the degree of skill and care ordinarily exercised under similar condition by reputable members of the profession practicing in a similar locality at the time of performance of the Work. Utility shall have the right to require the removal of any Contractor Personnel, or of any of Contractor's subcontractors, who in the Utility's sole opinion: (a) may be careless or not qualified to perform the assigned Work; (b) violates provisions of this Agreement or applicable SOW; (c) may display improper conduct or impair the performance of Work; or (d) was a Utility employee terminated for cause. Contractor shall supervise and direct the Work, using Contractor's best skill, knowledge, and attention. Contractor shall provide competent supervision and any necessary assistance on the job during its progress.

8.5. Contractor shall employ, maintain and devote ample resources to meet project schedules. If Contractor has multiple obligations underway concurrently, Contractor must clearly show appropriate resources and convincing evidence that it can meet the schedule for the Work.

8.6. Time is of the essence in the performance of Work contemplated under this Agreement and the applicable SOWs. Contractor shall perform the Work in accordance with the schedule set out in the applicable SOW. Further, during the course of performance of the Work, Contractor shall meet the milestones for performance, if any, set forth in the applicable SOW.

8.7. At intervals specified by Utility and/or whenever Utility requests, Contractor shall advise Utility in writing of the status of the Work and provide such further assurances as Utility may reasonably request. If the Work is not on schedule, Contractor shall immediately advise Utility in writing of proposed action to bring the Work on schedule.

8.8. If the Work is not on schedule and Utility determines, in its sole discretion, that the proposed action to bring the Work on schedule is not adequate, or the proposed action proves inadequate, then Contractor shall be deemed in breach of this Agreement, and the progress of the Work shall be deemed unsatisfactory.

8.9. All Contractor Personnel shall comply with Utility's rules, policies and standards for workplace safety, security and conduct while on Utility premises and in the performance of Work under this Agreement.

8.10. Except in exigent circumstances, such as illness, termination of employment for cause, or voluntary separation by the employee, Contractor shall not replace the Project Manager, assistant Project Manager, or other key employee or subcontractor personnel identified in the Request for

Proposal responses and/or SOW without the prior written consent of Utility and with proper training and transition to replacement by equally-qualified resources.

8.11. Contractor shall study and compare all specifications and drawings and shall report in writing within two business days to Utility any error, inconsistency, or omission which Contractor may discover. Contractor shall fully cooperate with and coordinate its Work with Utility and other contractors so as to allow such other contractors to provide any services (including services similar to the Work) or products in an integrated and seamless manner without unnecessary interruption to Utility's business operations or to any and all Work contemplated under this Agreement. Contractor shall not commit or permit any act which interferes with the performance of other work or services performed by Utility or by other contractors.

8.12. All Work performed by Contractor shall be subject to the inspection and approval of Utility. Utility shall at all times have safe access to the Work site; and shall have the right to stop or reject any Work which, in its sole opinion, is defective and requires correction. Rejected Work shall be satisfactorily corrected without charge to Utility. If Contractor does not correct such defective Work within a reasonable time, Utility may correct the Work and charge the expenses to Contractor.

8.13. All individuals performing services under this Agreement for Contractor, whether as agent, employee, contractor or subcontractor, shall be advised by Contractor of their obligations under the provisions of this Agreement, including but not limited to the confidentiality and data security provisions. Utility may require such individuals to execute a separate non-disclosure agreement or an acknowledgment and agreement to abide by the confidentiality provisions of this Agreement.

9. BACKGROUND CHECKS

9.1. Contractor shall be responsible for conducting, at Contractor's expense, background investigations of Contractor Personnel who will have access (whether physical, remote, or otherwise) to Utility's facilities, equipment, systems, or data. Such investigations shall include, without limitation, (a) a search of the employee's or subcontractor's Social Security number or other appropriate government-issued identification number to verify the individual's identity and current and previous addresses; (b) a criminal background search of all court records in each venue in which the employee or subcontractor has resided during the past seven (7) years; (c) a motor vehicle report for positions that require Contractor Personnel to drive a Utility vehicle (including rental cars paid for by the Utility) or personal vehicles operated on behalf of Utility; and (d) drug testing for Contractor Personnel performing Work. Contractor shall make the results of such background checks available to Utility upon Utility's request.

9.2. Contractor shall not knowingly permit any Contractor Personnel to have access to the confidential information, premises, records, or data of Utility when such individual: (a) has been convicted of a crime or has agreed to or entered into a pretrial diversion or similar program in connection with: (i) any act of dishonesty or physical harm to any person, or (ii) a felony; or (b)(i) uses illegal drugs, or (ii) uses legal drugs or substances in excess of recommended or prescribed levels, affecting judgment or performance.

9.3 Unauthorized Aliens (8 U.S.C. § 1324a(a) and (b)). Contractor shall comply with the Immigration Reform and Control Act of 1986 as amended; and shall not knowingly hire unauthorized aliens to perform any Work under this Agreement in accordance with 8 U.S.C. § 1324a(a) and (b).

10. PERMITS, LICENSES, & CERTIFICATION

10.1. Unless otherwise specified by Utility, Contractor, at Contractor's expense shall be responsible for securing and maintaining all permits, licenses, and certifications required and/or necessary to perform any work under this Agreement. A copy of all required permits, licenses, and certifications obtained by Contractor shall be provided to the Utility Contract Manager immediately after issuance.

10.2. If Contractor is a specialty contractor, all work to be performed outside of the licensed or certified specialty must be performed by appropriately licensed or certified subcontractors.

10.3. All subcontractors employed by Contractor whose services require licensure must have a current license or certification in the specialty for the work being done; and are limited to performing only work for which licensed.

10.4. A copy of all Contractor and subcontractor licenses or certifications shall be submitted to Utility's Contract Manager prior to beginning the Work.

11. INSPECTION AND QUALITY MANAGEMENT

11.1 Inspection

11.1.1. All Work done by Contractor shall be subject to the inspection and approval of Utility.

11.1.2. Utility shall, at all times, have safe access to examine the quality of the Work and the procedures employed. Contractor shall provide facilities for such access and inspection. Utility shall have the right to stop the Work if it does not meet any requirement of this Agreement. If Work is completed or partially completed without the opportunity for inspection by Utility, Contractor may be required to expose such Work at the expense of Contractor.

11.1.3. Utility reserves the right to perform, or instruct Contractor to perform, quality control inspections of the Work or Project(s), at any time. In the event Contractor's Work proves satisfactory, the quality control inspection shall be performed at Utility's expense. If Utility determines Contractor's Work is unsatisfactory, the quality control inspection and correction of the Work shall be performed at Contractor's expense.

11.2 Quality Management System (QMS) Requirements

11.2.1. The Quality Management System (QMS) requirements outlined in this section of the Contract are developed and administered exclusively by

Utility's Operational Quality Assurance department (OQA). The QMS requirements are standard in all Utility service/product supplier contracts where a QMS is required, and cannot be waived, altered, removed, added to, or superseded, without the express written permission of OQA and the Vice President of Engineering Staff. No section of the Agreement (Service Agreement, General Terms and Conditions, Special Terms and Conditions, Pricing Proposal Sheet, and/or Addendum) will contain QMS requirements which contradicts, subtracts, adds to, or augments the QMS requirements in this section of the Agreement, unless express written permission is obtained from OQA and the Vice President of Engineering Staff.

- 11.2.2. Throughout the contract term, Contractor shall establish, maintain, and enforce a well-documented QMS.
- 11.2.3. Prior to any Work being performed under this Agreement, Contractor shall provide its written QMS program and updates to Utility's OQA department for Utility review. Such review shall not be interpreted or construed as any endorsement or acceptance by Utility of the QMS sufficiency, adequacy, compliance with applicable standards, or approval. Utility reserves the right to request changes to Contractor's QMS, related to the Work, and such changes shall be made at Contractor's expense.
- 11.2.4. If a Contractor cannot meet the QMS requirements listed in this Agreement by the Agreement execution date, the Contractor may be granted written approval by Utility to start Work under certain agreed upon conditions. All provisional approvals for QMS requirements will require a written Action Plan from the Contractor, outlining the timeframe needed to build the program, which shall not exceed twelve (12) months from the Agreement execution date. The Action Plan must also contain appropriate milestone points with reviews to ensure the program is progressing, and the core requirements are being included, on at least a quarterly basis. The Action Plan must be agreed upon by OQA and the Utility Project Manager. If a provisional acceptance is agreed upon, a written Addendum will be attached to the Agreement, stating the agreed upon terms and timeline. If at the end of the agreed upon provisionally accepted timeline, the Contractor has failed to establish a QMS substantively meeting or exceeding the minimum requirements outlined in this section of the Contract, OQA will provide a Progress Report to the Utility Project Manager. After reviewing OQA's Progress Report, the Utility reserves the right to terminate this Agreement if the requirements are not satisfied.
- 11.2.5. Contractor's QMS shall address and detail, at a minimum, the following:
 - A. Employee training procedures covering customer relations, equipment and computer operation (particularly field computers and access to and interface with required Utility systems), quality procedures, job training classification, reporting, and documentation.

- B. Operational procedures including chain-of-command, supervisory responsibilities, quality procedures, computer operations, reporting, and documentation.
- C. Management responsibilities for operational systems, processes and quality procedures.
- D. The QMS shall include sufficient procedures to ensure:
 - (1) Systemic problems are recognized, and root causes are determined;
 - (2) Remedial, corrective, and preventative actions are systematically determined, implemented, and results are verified; and
 - (3) Key Performance Indicators (KPI) are identified and tracked through an appropriate metrics/trending process, with suitable reporting at regular intervals.
- E. Contractor's QMS should include Quality Assurance (QA)/Quality Control (QC) procedures, which, at a minimum, shall include the following:
 - (1) All QC evaluations will be conducted in a manner that is consistent with the Utility Operations Manual, the General Terms and Conditions, and/or the Special Terms and Conditions of this Agreement, where the most stringent requirements are followed.
 - (2) A defined minimum number of QC evaluations on each Contractor employee performing operator qualification covered tasks (OQ covered tasks) to show Contractor management confidence in the quality performance.
 - (3) Utility reserves the right to request additional QCs, inspections, or audits. Additional requests will be located in the General Terms and Conditions and/or the Special Terms and Conditions of this Agreement.
 - (4) All unsuccessful QC evaluations shall be reviewed by a Quality Assurance Manager (QA Manager) or designee with periodic field reviews of QC activities. Reviews shall be performed by a higher-level manager who did not perform the QC evaluation.
 - (5) A definition of nonconformance or QA/QC errors that includes any deviation from the appropriate policy/procedure section(s) of the Utility Operations Manual, required training, applicable

codes, Federal, State and local laws or Contractor's internal requirements.

11.2.6. As part of the QMS, Contractor shall provide a QA Manager. The QA Manager is to be sufficiently independent of Contractor operations personnel to avoid potential conflicts of interest associated with field operations that will be the subject of the QMS audit and oversight process; and to maximize objectivity and impartiality.

11.2.7. The QA Manager shall be responsible for the following:

A. Duties

- (1) Establish auditing procedures for Contractor's QMS, QA/QC, employee training, and safety (including implementation of safety practices and monitoring compliance).
- (2) Conduct audits for Contractor's procedures for QMS, QA/QC, employee training, and safety (including implementation of safety practices and monitoring compliance). The frequency of such audits shall be no less than annually.
- (3) Oversee quality risk management.
- (4) Manage documentation requirements.
- (5) Perform noncompliance oversight.
- (6) Resolve problems, including but not limited to, nonconformance with Contractor's QMS and performance of Work.
- (7) Track errors and analyze trends using applicable metrics/quality tools identified in the Contractor's QMS or as requested by Utility.
- (8) Report results to Contractor executive level management to drive continuous quality improvement.

B. Oversight of:

- (1) Continuous training and testing, including refresher training, of Contractor's QMS and other quality-related matters and procedures.
- (2) Contractor's QMS and quality-related matters and procedures.
- (3) All other Contractor QA/QC-related functions.

C. Reporting to Utility OQA:

- (1) All KPIs, quality-related metrics and safety-related metrics annually. Utility Project Manager overseeing the Agreement has the right to request additional reporting. All additional requests for Work performance reporting will be outlined in the General Terms and Conditions and/or the Special Terms and Conditions of this Agreement.
 - (2) Any Contractor Quality Manager changes or updates to the QMS, along with a copy of the revised QMS, need to be communicated to OQA in writing within 10 business days of the effective date.
- 11.2.8. Contractor shall report to the Utility Project Manager any unsuccessful rating resulting from a QA/QC evaluation and provide a copy of all completed QC evaluations, as defined in the General Terms and Conditions and/or the Special Terms and Conditions of this Contract.
- 11.2.9 Utility reserves the right to audit Contractor at reasonable times to ascertain compliance with Utility's requirements and the adequacy of Contractor's implementation of its procedures and processes. Utility has a right to audit Contractor's books, records, Work processes, financial and quality documents related to this Agreement and all Work performed for Utility.
- 11.2.10 Contractor must maintain all records pertaining to the performance of its QMS for a period of six (6) years following the later of the termination or expiration date of this Agreement.

12. SUBCONTRACTORS

12.1. Contractor shall not subcontract nor utilize any third-party or offshore resources for any portion or portions of the Work without prior written consent of Utility. If subcontractors, third party, or offshore resources are authorized, they shall in no way alter the terms and conditions of this Agreement between Contractor and Utility; and shall not under any circumstances, release Contractor from its responsibilities and liabilities as outlined in this Agreement. Any consent by Utility shall not waive Contractor's obligation to seek Utility's consent for future subcontracts or use of offshore resources.

12.2. All agreements between Contractor and any permitted subcontractor or permitted third-party or offshore resources involved in the completion of any Work under the terms of this Agreement shall require that the subcontractor and/or third-party or offshore resources comply in all respects with the terms and conditions as contained in this Agreement between Contractor and Utility. Nothing in this Agreement between Contractor and Utility shall create any contractual relationship between Utility and any subcontractor, third party, or offshore resource of Contractor. No subcontract shall relieve Contractor of any liabilities or obligations under this Agreement. Contractor agrees that

it is fully responsible for the acts and omissions of its subcontractors and all persons either directly or indirectly employed by Contractor in the provision of Work under this Agreement.

13. INTELLECTUAL PROPERTY RIGHTS

13.1. Unless otherwise provided, all work product, Deliverables, and documents arising out of or relating to this Agreement or applicable SOW shall be deemed “Works for Hire” (as defined under 17.U.S.C. §101, et seq.) and are the sole and exclusive property of Utility solely for the specified site and project. Utility shall retain all common law and statutory rights, title and interests related thereto (collectively, “Intellectual Property Rights”). The only exception applies to those items developed at Contractor’s private expense and specifically identified prior to the Effective Date of this Agreement or applicable SOW. Contractor shall not be responsible and is hereby expressly released from any and all liability for any unauthorized use or modification of such Deliverables by Utility or others.

13.2. To the extent that any of Contractor’s pre-existing materials (“Contractor IP”) are incorporated in any Deliverables, Contractor hereby grants to Utility an irrevocable, worldwide, unlimited, royalty-free license to use, publish, reproduce, display, distribute copies of, and prepare derivative works based upon such Contractor IP and derivative works thereof for Utility’s use in its ordinary course of business Utility may assign, transfer and sublicense such rights to others without Contractor’s approval.

13.3. Ownership of plans and specifications or copies thereof furnished to Contractor, shall be and remain the property of Utility and shall be returned to Utility at the completion of the Work.

13.4. Except for Contractor’s pre-existing materials, Contractor has no right or license to use, publish, reproduce, prepare derivative works based upon, distribute, perform, or display any Deliverables. Contractor has no right or license to use Utility’s trademarks, service marks, trade names, trade names, logos, symbols or brand names in any manner or form.

13.5. Contractor may not publish, publicize, or sell any information from or about this Agreement without the prior written consent of Utility.

14. CONFIDENTIAL INFORMATION

Confidentiality and Non-Disclosure

14.1. Contractor hereby agrees that all information provided by Utility pursuant to the Work performed under this Agreement shall be considered confidential; and shall not be reproduced, transmitted, used, or disclosed by Contractor without the written consent of Utility, except as expressly provided herein. Contractor agrees to use the Confidential Information, as defined below, of Utility only for the purposes of performing its obligations under this Agreement. In the event Contractor performs services for an affiliate or subsidiary of Utility, Contractor agrees not to disclose or transmit Utility Confidential Information to such affiliate or subsidiary. The requirements of this provision shall survive the termination or expiration of this Agreement.

14.2. Confidential Information.

14.2.1. In this Agreement, "Confidential Information" means all data and information relating to the business and management of either Party, including, without limitation, any software and other proprietary information and trade secrets; technology; financial, operational, and accounting records; logos, trademarks, tradenames, employee or customer data or lists; and practices to which access is obtained hereunder by the other Party, regardless of whether it is marked as "confidential" or "proprietary".

14.2.2. Notwithstanding the foregoing, Confidential Information shall not include any data or information which:

14.2.2.1. is within the public domain at time of the disclosure;

14.2.2.2. is or becomes publicly available through no fault of the other Party;

14.2.2.3. is already in the rightful possession of the other Party prior to its receipt from the other Party and without any obligation of confidentiality;

14.2.2.4. can be demonstrated by written records as being independently developed by a Party without reference to any of the Confidential Information of the other Party;

14.2.2.5. is rightfully obtained by the other Party from a third party who is not under any obligation of confidentiality; or

14.2.2.6. is disclosed pursuant to court order or other legal compulsion, provided that the Party which is required to disclose the Confidential Information shall give the other Party reasonable prior written notice of any legal proceeding to allow the other Party an opportunity to seek a protective order or otherwise oppose or limit such disclosure.

14.3. Each party shall use all commercially reasonable measures to safeguard and protect the other Party's Confidential Information in its possession from unauthorized access, use, or disclosure, utilizing the same degree of care it uses to protect its own confidential information and, in no event, less than a commercially reasonable degree of care. Neither Party shall make any use of the Confidential Information of the other Party other than for the business purposes of this Agreement or legal or regulatory compliance purposes. Utility is a regulated utility that is subject to the jurisdiction of multiple public utility commissions and consumer advocacy agencies established by statute. As such, the Parties agree that Utility may disclose such information, including Confidential Information, as needed to Utility's regulators and such statutorily-established consumer agencies, without additional Contractor approval.

14.4. Upon termination of this Agreement, the respective Party and all its personnel shall immediately cease to use any Confidential Information of the other Party and arrange for its return or certified secure destruction. Disclosure of a party's Confidential Information does not grant any expressed or implied rights or license to copy, use, disclose or alter or in any way appropriate said Confidential Information, unless agreed to in writing by both Parties. Notwithstanding the foregoing,

neither Party will be obligated to erase Confidential Information contained in an archived computer system backup made in accordance with such Party's security and/or disaster recovery procedures, provided that such archived copy will (a) eventually be erased or destroyed in the ordinary course of such Party's data processing procedures and (b) will remain fully subject to the obligations of confidentiality and non-use stated herein.

14.5. Confidential Information disclosed under this Agreement is delivered "AS IS," and no representations or warranties, either express or implied, including, without limitation, warranties or conditions for fitness for a particular purpose, merchantability, title, accuracy, or completeness of the Confidential Information, are made.

14.6. A Party shall immediately notify the other Party of any actual or suspected unauthorized access, disclosure, or use of the other Party's Confidential Information; and will assist in remedying any unauthorized access, use or disclosure of the Confidential Information and take immediate steps to prevent further unauthorized access, use, or disclosure, including, without limitation, investigation of the circumstances of the unauthorized access, use, or disclosure; monitoring for further unauthorized access; and notification of affected persons.

14.7. In the event of a breach of these confidentiality requirements, each Party consents to an injunction being issued against it restraining it from any further breach. The granting of an injunction shall not limit or restrict any other remedy which may be available to a Party in the event of a breach of those obligations.

14.8. Contractor shall not divulge any information concerning the Work to anyone without the Utility's prior written authorization. Contractor shall obtain similar agreements from subcontractors, persons, firms and corporations rightfully receiving any Utility Confidential Information pursuant to this Agreement.

14.9. The Confidentiality requirements of this Agreement shall survive the latter of: (a) the termination or Expiration Date of this Agreement for a period of six (6) years; or (b) for so long as the information is eligible for protection under applicable laws.

15. DATA SECURITY

15.1 Contractor shall comply with the requirements provided in Data Security and Privacy Requirements Appendix, attached hereto and incorporated by this reference.

16. REPRESENTATIONS AND WARRANTIES

16.1. Contractor represents and warrants to Utility that:

16.1.1. Contractor has the right to enter into this Agreement; to grant the rights granted herein; and to perform fully all of the Work and Contractor's obligations in this Agreement and applicable SOW;

16.1.2. Contractor's entering into this Agreement with Utility and Contractor's performance of the Work do not and will not conflict with or result in any breach or default under any other agreement to which Contractor is subject;

16.1.3. Contractor and Contractor Personnel have the required skill, experience and qualifications to perform the Work;

16.1.4. Contractor will perform the Work in accordance with the professional standard of care and practice appropriate to the nature of the technical and professional services rendered;

16.1.5. The recommendations, guidance, and performance of Contractor and Contractor Personnel shall reflect their professional knowledge and judgment;

16.1.6. Utility will receive good and valid title to all Deliverables, free and clear of all encumbrances and liens of any kind;

16.1.7. All Deliverables are and shall be Contractor's original work (except for material in the public domain or provided by Utility) and do not and will not violate or infringe upon the intellectual property right or any other right whatsoever of any person, firm, corporation or other entity;

16.1.8. The Work will be performed in accordance with the terms of this Agreement, applicable laws and regulations, existing licenses, Utility requirements, and industry technical guidelines. Work in progress, Deliverables, and finished products will be reviewed by Utility for completion, compliance with required standards, and responsiveness to contract requirements. If, within two (2) years after the date of completion, any Work, items of material or equipment, or workmanship furnished by Contractor are found to be defective, Contractor shall, at once and at Contractor's own expense, make all repairs or furnish and install replacement Work, parts, design, workmanship or material, as approved by the Utility Contract Manager. If Contractor is obliged to furnish and install replacement parts, the warranty period for the parts shall extend for one year from the installation of such parts; and

16.1.9. All warranties, including any specific warranties set forth hereto, shall be unconditional and shall not be invalidated by details of Utility's design or the approval of Contractor's "or equal" submittals. Any detail that would cause an exception to a manufacturer's standard warranty must be brought to the attention of the Utility Contract Manager, in writing, prior to accomplishment of that part of the work or Contractor shall not have cause to request approval of the exception. All expense of furnishing and installing parts or making alterations to existing parts, and of tests made necessary by failure of the apparatus to meet the warranties or other requirements of the Agreement, shall be borne by Contractor. In the event Contractor fails to comply with any warranty provisions within ten (10) days of being notified in writing, Contractor authorizes Utility to proceed to have the defects repaired at Contractor's expense and Contractor will promptly pay the costs and damages therefrom within ten (10) days of demand.

17. INDEMNIFICATION

17.1. To the maximum extent allowed by law, Contractor shall indemnify, hold harmless, and defend Utility, including its parent, affiliated, and subsidiary interests, and their shareholders,

directors, officers, employees, , and authorized assigns (“Indemnified Parties”) from and against all claims, liabilities, civil penalties, actions, administrative proceedings, citations, damages, settlements, losses, costs, expenses, demands, and attorney fees, that occur or manifest at any time during or after the term of this Agreement, to the extent such arise out of, relate to, result from or are in any way connected with the negligent performance or non-performance of the Work by Contractor. This indemnity includes but is not limited to: claims for monetary or economic injuries or losses; expenses; delays; bodily injuries; personal injuries; sicknesses, diseases, or deaths of persons; damages to or loss of use of properties; trespasses; the actual or suspected breaches, losses, unauthorized access, or compromises of any personal identifying information or the Indemnified Parties’ Confidential Information, data, or intellectual properties; infringement or misappropriation of any third party’s intellectual property rights; fines, citations, or penalties; or any other damages or harms to the extent occasioned by strict liability or any active or passive negligent act, omission, or knowing and willful misconduct by the Indemnifying Parties, or whether occasioned by the Indemnified Parties’ actual or alleged concurrent negligence, including active and/or passive negligence. Nothing herein shall be construed to render Contractor liable to indemnify the Indemnified Parties for claims arising wholly from the Indemnified Parties’ sole negligence or knowing and willful misconduct.

17.2. Contractor’s proportionate defense of any lawsuit, claim, and/or demand, as required by the preceding Section, shall be at the Contractor’s sole expense. Contractor shall have the obligation to defend the lawsuit, claim, and/or demand even if it is groundless, false, or frivolous. Contractor shall select counsel and experts which are reasonably acceptable to Utility. Utility shall have the right and at its own expense, if it so elects, to take an active part in the defense of any such lawsuit, claim, and/or demand and to file intervention or other similar proceedings therein, if it deems such action is desirable.

17.3. Contractor shall inform Utility and promptly investigate and seek to resolve any such lawsuit, claim, and/or demand whenever Contractor receives actual or constructive notice of such lawsuit, claim, and/or demand due to or associated with any act or omission or Work or service performed under this Agreement by Contractor, or Contractor Personnel.

17.4. Contractor shall have the right to make settlement, at its sole expense, of any such lawsuit, claim, and/or demand as may be deemed expedient by Contractor, provided that no admissions or representations or obligations to pay money are made on behalf of Utility without Utility’s prior written consent.

17.5. For any claims for infringement, misappropriation, or violation of third-party intellectual property rights, Contractor will, at its expense: (a) modify the Deliverable, or (b) procure the right to continue using the Deliverable, and if (a) or (b) are not commercially reasonable, terminate Utility’s right to use the Deliverable and issue a refund for the amounts paid for the Deliverable in question.

17.6. Contractor will provide immediate oral notification to Utility, followed by written notice to Utility, of any of the following:

17.6.1. Whenever Contractor receives notification (oral or written) from any source that an incident has occurred in which property damage or any personal injuries or deaths have resulted because of or associated with any Work or service performed under this Agreement by Contractor,

its subcontractors, suppliers, agents, employees, or anyone directly or indirectly employed by any of them.

17.6.2. Whenever any accident or incident occurs which may cause an interruption in the Work or in gas service by Utility to its customers.

18. INSURANCE & BONDS

18.1. Insurance. Without limiting any of the other obligations or liabilities of Contractor, Contractor shall provide and maintain insurance coverage at its sole cost and expense in accordance with requirements established in the attached Insurance Requirements Appendix, incorporated herein by this reference. Unless otherwise specified, Contractor shall maintain the required insurance coverage and types throughout the Term of this Agreement and for a period of three (3) years thereafter.

18.2. Bonds. Utility may require that Contractor provide performance bonds from a corporate surety authorized to do business in the state where the Work is performed and acceptable to Utility, in its sole discretion, in the penal sum of up to one hundred percent (100%) of Contractor's bid. The bonds shall be duly executed by Contractor as principal and by the corporate surety. It is understood and agreed that execution and furnishing of such bonds shall be a condition precedent to the commencement or continuation of any Work under this Agreement if Utility elects to require bonds. The cost of the bonds shall be borne by Contractor.

19. PRESERVATION OF RECORDS, AUDIT RIGHTS

19.1. Contractor agrees to preserve, maintain, and not destroy its records relating to performance of Work and invoicing pursuant to this Agreement for a period of at least thirty-six (36) months after the later of the termination or Expiration Date of this Agreement. Contractor agrees that Utility, at Utility's expense, shall have the right, at reasonable times and during regular business hours, to examine and audit Contractor's books, records, and other financial documents as they relate to this Agreement or applicable SOW, during the Work and for a minimum of thirty-six (36) months after the later of the termination or Expiration Date of this Agreement. Utility shall be given access to and the opportunity to copy Contractor's cost books, correspondence, instructions, receipts, vouchers, memoranda, and all other records relating to this Agreement and all amendments thereto.

19.2. Contractor shall include an audit provision providing Utility with the audit rights set forth herein in all subcontracts entered into by Contractor in connection with the Work.

19.3. Such audits shall be performed either by Utility personnel or by an independent third party used by Utility for the purpose of making such audits. Utility and Contractor shall establish procedures for performing such audits and shall preserve the confidential and proprietary status of audited documents and information.

20. COMPLIANCE WITH LAWS; EQUAL EMPLOYMENT OPPORTUNITY

20.1. Contractor shall comply with all applicable federal, state, and local employment and labor laws, ordinances, rules, regulations, and orders in effect on the date of this Agreement, including, but

not limited to Executive Order No. 11246 of September 24, 1965, as amended, and the orders of the Secretary of Labor pursuant thereto. Additionally, Contractor shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, sexual orientation, gender identity, age, national origin, disability, veteran status, or because any employee or applicant for employment is a member of any other protected class or group as defined by any established law or court of competent jurisdiction. Contractor further agrees to comply with all applicable laws, executive orders and regulations as amended, concerning, without limitation, nondiscrimination in employment and immigration and employment eligibility.

20.2. Contractor acknowledges Utility maintains a Supplier Diversity Program (“Program”) to develop procurement and utilization opportunities for minority-, female-, and disabled veteran-owned business enterprises as well as Small Business Concerns and Small Business Concerns Owned and Controlled by Socially and Economically Disadvantaged Individuals or Women (as defined by 15 U.S.C. Section 637(d)). To the extent feasible, Contractor shall utilize commercially reasonable measures to encourage similar procurement opportunities when engaging U.S. employees or subcontractors in the performance of Work under this Agreement or for procuring goods and supplies utilized in the performance of Work under this Agreement.

21. CHANGE ORDERS

21.1. If either Party wishes to change the scope or performance of the Work (“Change Order”), it shall submit details of the requested change to the other Party in writing in a form acceptable to Utility.

21.2. Contractor shall, within a reasonable time (not to exceed ten (10) business days) after receiving a Utility-initiated Change Order request, or at the time that Contractor initiates a Change Order request, provide a written estimate to Utility of: (a) the likely time required to implement the change; (b) any necessary variations to the fees and other charges for the Work arising from the change; (c) the likely effect of the change on the Work; (d) any other impact the change might have on the performance of this Agreement; and (e) any other information reasonably requested by Utility.

21.3. Contractor-initiated Change Order requests must be received within thirty (30) calendar days of discovery of the circumstances giving rise to the requested change in scope or performance of the Work, particularly if Contractor is requesting a change in price for an existing scope or performance of the Work. Change Order Requests submitted more than thirty (30) days after discovery of the circumstances giving rise to the Change Order Requests may be denied by Utility and, in all events, considered only in the sole discretion of Utility.

21.4. Promptly after timely receipt of a Change Order Estimate, the Parties shall negotiate the terms of such change. In the event the Parties agree to the terms of such change, such agreement shall be documented in a written Change Order. Neither Party shall be bound by any Change Order unless mutually agreed upon in writing and mutually signed by the authorized representatives of the Parties.

22. HAZARDOUS MATERIALS

22.1 If applicable for the Work contemplated pursuant to this Agreement or any SOW, Contractor and all subcontractors retained by Contractor to perform any services hereunder shall, prior to the commencement of any work hereunder, procure and provide the Utility Contract Manager with:

22.1.1. Material Safety Data Sheets for all hazardous substances which may or will be brought to the work site;

22.1.2. The location where the hazardous materials will be stored and/or used in conjunction with the performance of any work hereunder; and

22.1.3. A description of the labeling system used on Contractor's or any subcontractor's containers used for the handling, storage and/or transport of such hazardous materials.

22.1.4. Identify the transporter of any hazardous waste and hazardous waste disposal facility used in conjunction with the performance of any work hereunder. Said transporter and disposal facility shall be subject to prior approval by the Utility Contract Manager.

22.2. Contractor shall furnish the Utility Contract Manager with the name and telephone number of the individual responsible for administering Contractor's or any subcontractor's hazardous materials communications program. Contractor and its subcontractors shall, upon request, provide the Utility Contract Manager with written evidence of Contractor's or any subcontractor's employee training associated with the handling of hazardous materials.

22.3. Contractor and Contractor Personnel shall perform all work in accordance with all applicable federal, state, and local laws, rules, regulations and ordinances pertaining to hazardous waste management.

22.4. Contractor and its subcontractors shall promptly correct and remedy any discharge of hazardous materials or hazardous wastes occurring on the jobsite as a result of or in connection with its work, consistent with Section 24.5.

22.5. ASBESTOS NOTIFICATION

22.5.1. Numerous Utility facilities were constructed with some asbestos-containing components. An asbestos information sheet shall be provided to all of Contractor Personnel performing work on such Utility facilities.

23. CHANGED CONDITIONS FOR SITE WHERE WORK IS PERFORMED

23.1. Contractor shall immediately, and before the conditions at a site where work is to be performed are disturbed, notify the Utility Contract Manager of:

23.1.1. Material that Contractor believes may be hazardous in nature or deemed hazardous material or waste; that is required to be removed to a disposal site approved to receive such hazardous waste or materials, in accordance with the provisions of existing law;

23.1.2. Subsurface or latent physical conditions at the site differing materially from those indicated in this Agreement or applicable SOW; or

23.1.3. Unknown physical conditions at the site which are of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Agreement.

23.2. Upon receipt of such notice, the Utility Contract Manager will promptly investigate the conditions. If the Utility Contract Manager determines that such conditions are unusual and materially different, or do involve hazardous waste, and cause an increase or decrease in the cost of the work or time required for the performance of this Agreement, an equitable adjustment may be made. Time or cost adjustments will not be allowed unless Contractor has given proper notice as specified above.

23.3. In the event a dispute arises, Contractor shall not be excused from any scheduled completion date provided for by the Agreement and shall proceed with all work to be performed under the Agreement. Contractor shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the contracting parties.

24. ADDITIONAL SAFETY MATTERS

24.1. Air Pollution. Contractor shall conform to all local, state, and federal air pollution control rules and regulations which apply to any Work performed under this Agreement. This includes, but is not limited to, burning, use of solvents, painting, and liquid asphalt. Contractor shall immediately and continually abate dust nuisance resulting from the Work performance or site condition by cleaning, sweeping, sprinkling of water, or other means as approved by the Utility Contract Manager.

24.2. Water Pollution: Contractor shall take all precautions necessary to protect streams, lakes, reservoirs, drainage waterways, groundwater, or other waters from pollution or muddying resulting from its work under this Agreement. Water pollution prevention methods shall conform to all local, state and federal requirements and permits.

24.3. Employee Drug & Alcohol Testing, Education and Training Program (49 U.S.C. §§ 60101, et al.) – If required as part of the Work or SOW contemplated under this Agreement, then Contractor shall establish and follow a written employee drug and alcohol testing, education, and training program that complies with Utility and USDOT requirements. Such requirements shall be set forth in the applicable SOW.

24.4. Operator Qualification (OQ). If required as part of the Work or SOW contemplated under this Agreement, then Contractor Personnel that perform Work involving a covered task must comply with the Operator Qualification Rule and be qualified under Utility's Operator Qualification Plan; consistent with 49 CFR Parts 192.801-809. Such requirements shall be set forth in the applicable SOW.

24.5. Hazardous Waste.

24.5.1. Contractor and its subcontractors shall perform all Work in accordance with all federal, state and local laws, rules, and regulations pertaining to hazardous waste management including but not limited to the Resources Conservation and Recovery Act (RCRA) of 1976, 42 USC Section 6901; and following Title 40 Code of Federal Regulations for environmental protection.

24.5.2. Contractor and its subcontractors shall promptly correct and remedy any discharge of hazardous materials or hazardous wastes occurring on the jobsite as a result of or in connection with its work. Such cleanup shall be performed in accordance with all applicable federal, state and local laws, rules, regulations and/or ordinances. Contractor shall notify the Utility Contract Manager and any governmental regulatory agency of competent jurisdiction as may be required by any applicable federal, state and local law, rule, regulation and/or ordinance. Contractor shall begin such cleanup within 24 hours of notification and shall complete the corrections within 10 calendar days. If correction cannot be commenced within 24 hours of notification or completed within 10 calendar days, Contractor shall immediately demonstrate to the satisfaction of Utility the reasons therefore, otherwise Utility has the right to proceed with the cleanup itself or through a third party and Contractor agrees to reimburse Utility promptly for costs it incurs to do so. Such cleanup shall restore the jobsite to its condition prior to the discharge.

24.5.3. In the event hazardous waste or spill residue is generated as a result of the Work at the jobsite by Contractor or its subcontractors, Contractor or its subcontractors shall arrange for proper transportation and disposal of these materials at their own expense. All such arrangements shall be approved by Utility. Any interim storage of these materials prior to their prompt removal from the jobsite shall be approved by the Utility Contract Manager; and shall take place only in areas approved by the Utility Contract Manager. Surplus hazardous substances and empty containers shall be removed from the jobsite as soon as they are no longer needed for the work.

24.6. Sanitary Conditions. All portions of the jobsite shall be maintained in a safe, neat, clean and sanitary condition at all times. Toilets shall be furnished, maintained at least weekly, and kept in a clean condition, by Contractor for all personnel on the jobsite, and they shall comply with all applicable local, state, and federal laws, ordinances, and regulations pertaining to public health and sanitation.

24.7. Noise. All motor vehicles and construction equipment shall be equipped with the manufacturer's specified mufflers and/or other appropriate sound attenuation devices. Contractor shall conduct its operations at a time and in a manner so as to cause a minimum of noise disturbance, and shall comply with all local, state, and federal laws, ordinances and regulations.

24.8. Fire. Contractor shall ensure that all motor driven vehicles and construction equipment have proper exhaust spark arrestors installed. Contractor shall conduct its operations so as to prevent fire danger in conformity with all applicable local, state and federal laws, ordinances and regulations. Contractor shall provide and maintain, at the jobsite, fire extinguishers, tools, and equipment in the proper quantity and of the proper type to conform to the local fire protection ordinances and requirements.

25. PUBLIC SAFETY, SAFE PRACTICES, AND PROTECTION AT THE JOB SITE

25.1. Contractor shall take all necessary precautions to protect the Work completed or in progress and all persons and property on or about the job site, Utility premises, or Utility facilities.

25.2. Contractor shall observe and enforce any safety and fire precautions that may be prescribed by Utility and by applicable law and regulations for the protection of Utility and other personnel and property.

25.3. Contractor shall provide and use safe and adequate signage and barricades by day, and signage, barricades, and lights by night, to adequately warn and protect the public as required by federal, state, county, city, local, or other governmental agencies having jurisdiction. If applicable, and unless otherwise detailed in the SOW or other special terms and conditions, Contractor shall also provide traffic control and flag persons to warn traffic as required by federal, state, county, city, local or other governmental agencies having jurisdiction, and as may be reasonably prudent under the circumstances.

25.4. Contractor shall assign a properly qualified employee of Contractor as a Safety Coordinator to ensure all job sites are safe and Utility's interests and property are protected, at Contractor's expense. Contractor shall maintain accurate accident records and injury reports; and provide reports to Utility of any safety-related issues, including without limit, any findings and initiatives taken in response.

25.5. Contractor shall observe and abide by all laws, ordinances, rules, and regulations with regard to safety, signs, advertisements, explosives, training, written programs, and fire prevention as set forth in the Occupational Safety and Health Act (OSHA) and regulations promulgated pursuant thereto and any other federal, state, county, city, local, or other governmental regulations bearing on the manner of conducting Work under this Agreement, as well as all applicable Utility requirements. In the case of any conflicts, the strictest requirement shall apply.

25.6. Contractor will immediately notify the Utility Contract Manager of any OSHA reportable accident occurring on/in Utility premises, facilities, or work sites. Accidental damage to Utility equipment and/or property also must be reported immediately to the Utility Contract Manager. Each notification will be followed within two (2) business days with a written report of the details of the reportable accident and damage and all remedial actions taken.

25.7. If Utility notifies Contractor of non-compliance with proper safety requirements, Contractor shall immediately if so directed, or in not more than 24 hours after receipt of such notice, make all reasonable efforts to correct the existent condition. If Contractor fails or refuses to take immediate corrective action, the Utility Contract Manager may:

25.7.1. Have the unsafe conditions corrected by others at Contractor's expense; or

25.7.2. Issue an order stopping all or part of the work until satisfactory corrective action has been taken; however, this right to stop work shall not give rise to any duty on the part of Utility to exercise this right.

25.7.3. Contractor shall not base any claim or request for adjustment in time or money on any stop order issued under these circumstances. Utility's failure to notify Contractor of any non-compliance shall not relieve Contractor from any safety requirements.

25.8. Equipment. Contractor shall furnish safety and health equipment and enforce the use of such equipment by all persons on the jobsite.

25.9. Waiver. Contractor waives the right to bring claim for damages against Utility for any cause whatsoever because of any action taken or not taken, including but not limited to, the correction of unsafe conditions or work stoppages in connection with the safety requirements of this Agreement.

26. TERMINATION; EXPIRATION; and POSTPONEMENT

26.1. Termination for Convenience. Utility may terminate this Agreement or applicable SOW, in whole or in part, at any time, upon ten (10) calendar days' written notice to Contractor, for any reason or for no reason. In the event Utility terminates this Agreement or applicable SOW pursuant to this section, so long as Contractor is not in breach of this Agreement or applicable SOW, Utility will pay Contractor for all Work satisfactorily performed through the date of termination, subject to the other terms and conditions of this Agreement. Contractor shall not be entitled to receive any lost profits or other consequential damages as a result of a termination for convenience by Utility.

26.2. Termination for Cause/Breach.

26.2.1. Utility may terminate Contractor's services under this Agreement at any time for cause, without liability to Utility. As used in the preceding sentence, "cause" may include, but is not limited to, Contractor's material default or breach of any provision of this Agreement and Contractor's failure to cure the default/breach within ten (10) business days of written notice by Utility describing the default/breach.

26.2.2. Should Contractor fail to cure the default/breach within ten (10) business days of the written notice, Utility may provide written notice to Contractor indicating the reason for termination and the effective termination date. Upon the effective date of termination, Contractor shall immediately cease Work under this Agreement or applicable SOW; and shall take all steps reasonably necessary to mitigate any costs or expenses for which Utility or Contractor may be liable hereunder.

26.2.3. Notwithstanding anything to the contrary contained herein, Utility shall not be liable for any cost or expense incurred by Contractor after termination for cause of this Agreement or applicable SOW. Contractor shall not be entitled to receive any lost profits or other consequential damages as a result of such termination.

26.3. Termination for Insolvency.

26.3.1. Either party may terminate this Agreement or any SOW, effective upon written notice to the other party (the "Defaulting Party"), if the Defaulting Party: (i) becomes insolvent or admits its inability to pay its debts generally as they become due; (ii) becomes subject, voluntarily or involuntarily, to any proceeding under any domestic or foreign bankruptcy or insolvency law; (iii) is

dissolved or liquidated or takes any corporate action for such purpose; (iv) makes a general assignment for the benefit of creditors; or (v) has a receiver, trustee, custodian, or similar agent appointed by order of any court of competent jurisdiction to take charge of or sell any material portion of its property or business.

26.4. Contractor's Obligations Upon Termination or Expiration.

26.4.1. Upon expiration or termination of this Agreement or applicable SOW, in whole or in part for either; or at any other time upon Utility's written request, Contractor shall promptly:

26.4.1.1 Stop all Work if the entire Agreement or applicable SOW is terminated or expires; or, if less than the entire Agreement or SOW is terminated or expires, stop all Work pertaining to the portion(s) of the Agreement or SOW that is terminated or expired;

26.4.1.2. Not place any further orders or enter into any further contracts with respect to the subject Work;

26.4.1.3. Immediately deliver to Utility all Deliverables which have been completed as of the termination or Expiration Date or are in progress and all hardware, software, tools, equipment or other materials, if any, provided for Contractor's use by Utility;

26.4.1.4. Immediately deliver to Utility all tangible documents and materials (and any copies) containing, reflecting, incorporating, or based on the Confidential Information;

26.4.1.5. Immediately permit Utility or its nominee access to and to take possession of all Work, materials, and all other items incorporated or purchased for inclusion in the Work;

26.4.1.6. Not interfere with Utility efforts to engage the services of other contractors or Utility's own employees to complete the Work;

26.4.1.7. Immediately assign to Utility or its nominee, to the extent desired by Utility, all rights and benefits of Utility under existing commitments of third parties;

26.4.1.8. Except as otherwise instructed by Utility: (i) immediately cease access to Utility data systems; and (ii) immediately erase and delete by secure means all Utility Confidential Information from Contractor's computer systems; and

26.4.1.9. Immediately certify in writing to Utility that Contractor has complied with the requirements of this section.

26.4.2. In addition to the foregoing requirements, Contractor shall:

26.4.2.1. Take all reasonable steps to protect property, data, or information in the possession of Contractor in which Utility has or may acquire an interest and to arrange for the return or other disposition of such property, data, or information as directed by Utility;

26.4.2.2. Immediately remove Contractor's property from Utility premises unless otherwise agreed or directed by Utility; and

26.4.2.3. Immediately take any other action relating to the termination or expiration of the Work, as Utility reasonably requires.

26.5. Termination Costs. In no event shall Utility be liable for any Contractor Personnel termination costs and expenses arising from the expiration or termination of this Agreement or applicable SOW.

26.6. Postponement. Utility reserves the right to delay, postpone, or suspend all or any portion of the Work at any time upon notice to Contractor for any reason deemed by Utility to be in its interest. Any such delay, postponement, or suspension shall not give rise to liability on the part of Utility for any damages, costs, charges, or out of pocket expenses; provided, however, if the delay, postponement or suspension is due to circumstances solely within Utility's control and not due in whole or in part to any act or omission of Contractor, Utility shall reimburse Contractor for any reasonable charges or expenses that were approved in advance by Utility and incurred by Contractor as a direct result of the postponement.

27. REMEDIES

In addition to Utility's right to terminate and other remedies provided for in this Agreement, Utility shall be entitled to any of the following remedies:

27.1. If Contractor fails to furnish skilled labor, suitable tools or supplies, or adequate equipment sufficient for the prompt and diligent completion of the Work. Utility, without fully taking over the Work, may expedite delivery of and procure and furnish such labor, materials, supplies, or equipment. Contractor shall bear and be responsible for any and all expenses, costs, and fees incurred by Utility in taking these actions;

27.2. If Work is not on schedule, Utility, at Utility's discretion, may require Contractor to work such additional time over regular hours, including Saturdays, Sundays, and holidays, and provide such additional labor and equipment as necessary, without additional cost to Utility, to bring the Work on schedule;

27.3. If Contractor fails to comply with or breaches this Agreement or applicable SOW, Utility shall have the right to withhold or back-charge against any amounts owing to Contractor for any expenses and costs or debts incurred by Utility in its efforts to cure or protect itself; and/or

27.4. At Utility's option, Utility may award the Work or any part of it to another contractor to perform all or any part of the Work, at the expense of Contractor. Should the cost of another contractor, in addition to the amounts paid to Contractor, exceed the Contract Price plus damages, Contractor shall be responsible for the additional costs. This remedy is cumulative with any other remedies which provide for breach of this Agreement at law or equity.

27.5. For any breach of this Agreement or applicable SOW, in addition to any other remedies afforded Utility, Utility shall have the right to exclude Contractor from participation on bids for future

work opportunities with Utility and the right to withhold payment for any other work that Contractor is providing Utility until such breach is cured.

28. DISPUTE RESOLUTION, ATTORNEYS' FEES

28.1. Utility reserves the right to require any dispute that the Parties are unable to resolve informally, including a dispute over the validity, enforceability or scope of this Dispute Resolution provision, to be resolved by final and binding arbitration conducted in accordance with and subject to the applicable Arbitration Rules of the American Arbitration Association or the equivalent rules from JAMS (the "Rules"). In the event Utility exercises the right to resolve the dispute by final and binding arbitration, the arbitration will be conducted by either: (a) three arbitrators—with one arbitrator appointed by each of the Parties, and the third arbitrator appointed by the two Party-appointed arbitrators; or (b) a single neutral arbitrator selected by the Parties in accordance with the applicable Rules. For disputes in which the amount in dispute is less than \$50,000 dollars, then one neutral arbitrator shall be appointed in accordance with the Rules. For all other disputes, the Utility retains the discretion to utilize three arbitrators or a single arbitrator to resolve the dispute. The decision of the arbitrator(s) will be rendered in writing and will explain the reasons therefore. Unless the Parties agree otherwise, all arbitration decisions shall be confidential. The arbitration shall take place in Clark County, Nevada, unless otherwise agreed to by Utility and the Contractor; and Nevada law will apply (including its offer of judgment rules), exclusive of conflict or choice of law rules. Each Party will initially bear its own attorneys' fees and other costs and expenses, and each Party will equally share the cost of the arbitrator(s) as they accrue. The arbitrator(s) may render awards of monetary damages, direction to take or refrain from taking action, or both. The arbitrator(s) shall determine whether either Party is a "prevailing party" in the arbitration. Notwithstanding the preceding requirement for the Parties to initially bear their own fees and expenses and to equally share in the costs of the arbitration, the non-prevailing party shall reimburse the prevailing party for attorneys' fees and other expenses reasonably incurred by the prevailing party, as determined by the arbitrator(s), in connection with the arbitration including the cost of the arbitrator(s). Judgment upon the award rendered in any such arbitration may be entered in any court having jurisdiction thereof, or application may be made to such court for a judicial acceptance of the award and an enforcement, as the law of such jurisdiction may require or allow. Contractor acknowledges and agrees that it is waiving its right to require arbitration pursuant to this provision, but retains the right to request the dispute be submitted to final and binding arbitration with the costs to be paid and reimbursed as described above, and the Utility will timely notify the Contractor of its consent or rejection of such request. In the event the dispute is not arbitrated in whole or in part but is litigated, the prevailing party shall be entitled to an award of its reasonably incurred attorney fees and litigation costs.

28.2 The provisions of this Agreement relating to Alternative Dispute Resolution shall survive the termination or Expiration Date of this Agreement.

29. GENERAL PROVISIONS

29.1. Amendment. No amendment, modification or supplement to this Agreement shall be binding on any of the parties unless it is in writing and signed by the authorized representatives of the Parties.

29.2. Force Majeure.

29.2.1. The failure of any Party to comply with the terms and conditions of this Agreement because of, without limitation, an act of nature, fire, earthquake, act of public enemies, unavailability of power or transportation, pandemic, epidemic, adverse weather conditions not reasonably anticipated, actions of any governmental authorities, or any other force or event beyond the control of said Party, and not reasonably foreseeable, shall not be deemed a breach of this Agreement, unless said Party was negligent in foreseeing or preventing or responding to said event. The foregoing events shall be designated as a "Force Majeure event." Contractor's labor disputes and a failure of a subcontractor to perform shall not be deemed a Force Majeure event and shall not excuse non-performance or delays in performance.

29.2.2. Upon occurrence of a Force Majeure event, the affected Party shall give notice, in writing, of such Force Majeure event and its details to the other Party as soon as possible after the occurrence. The affected Party shall act diligently so as to resume performance as soon as reasonably practicable.

29.2.3. The time schedule for completion may be extended by a Change Order for a period of time equal to the duration of any resulting delays. In no event shall any delays or extensions of time be construed as cause or justification for payment of extra compensation to Contractor or an increase in the price of the Work under this Agreement as a result of this section.

29.2.4. This Force Majeure provision shall not be construed to limit any of Utility's rights, including termination of this Agreement.

29.3. Successors and Assigns. This Agreement and all of its provisions shall inure to the benefit of and be binding upon the successors and assigns of the Parties, provided, however, that Contractor shall not assign or subcontract this Agreement nor any performance hereunder, in whole or in part, nor delegate any monies which shall become due Contractor on any project(s) performed under this Agreement, without the prior written consent of Utility. Any assignment or delegation by Contractor without Utility's prior written consent shall be void and not merely voidable. If Utility consents to a particular assignment or delegation by Contractor, said consent shall not waive Contractor's obligation to seek Utility's consent for future assignments or delegations. Utility may assign this Agreement in whole or part or delegate any monies that shall become due to Utility at its sole discretion and without the approval of Contractor.

29.4. Notices. Except as otherwise provided herein for service of legal process, or as otherwise agreed to in writing by the parties, any notices, documents, or statements required pursuant to the terms and conditions of this Agreement may be sent either: (i) electronically by email; (ii) by overnight or 2nd day mail; or (iii) by facsimile transmission with confirmed receipt by the other party at the address; or, as appropriate, facsimile number, and marked for the attention of such person as specified in the Agreement. Any notice sent electronically by email shall be deemed to have been received by the other party by close of business on next business day following delivery to the email address specified in this Agreement. Any notice sent by overnight or 2nd day mail shall be deemed to have been received as of close of business of the next business day after confirmation of such delivery. Any notice sent by confirmed facsimile transmission under this Section shall be deemed to

have been duly received by the other party as of the close of business on the next business day following the date of transmission. Any service of legal process must be directed to Utility's registered agent to be effective. Contractor may contact Utility or the Nevada or California Secretary of State's Office for most current registered agent information.

For Utility: Southwest Gas Corporation
Attn: Manager/Contract Administration – LVD-560
PO Box 98510
Las Vegas, NV 89193-8510
(702) 364-3060
Fax: (702) 364-3249
Email: ContractAdmin@swgas.com

For Contractor: Blair Church and Flynn Consulting Engineers
Attn: Adam Holt
451 Clovis Avenue, Suite 200
Clovis, CA 93612
(559) 326-1400
Cell (559) 352-1916

29.5. Severability, Divisibility, & Interpretation

29.5.1. Severability. Whenever possible, each provision of this Agreement shall be interpreted in such a manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be deemed prohibited or invalid under such applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, and such prohibition or invalidity shall not invalidate the remainder of such provision or the other provisions of this Agreement.

29.5.2. Divisibility. Performance under this Agreement or applicable SOW is not divisible for the purposes of enforcement under the remainder of the Agreement with respect to the subject matter of the Agreement or applicable SOW. In the event of a material breach of performance, except for those provisions which, by their nature, are to survive expiration or termination of this Agreement or applicable SOW, a material breach by one Party shall relieve the other Party of further obligation or performance; and, except for the express remedies set forth in the Agreement or SOW, shall not entitle the non-breaching party to further benefits of the Agreement or applicable SOW.

29.5.3. Interpretation. Each Party agrees this Agreement is the product of their joint efforts; and, if there is any ambiguity in any provision, that the provision shall be construed with the fair meaning of the language used and shall not be strictly construed against either party.

29.6. Utility's Code of Business Conduct & Ethics

29.6.1. Contractor acknowledges that it must read, understand and comply, to the extent applicable, with the Utility's Code of Business Conduct & Ethics ("Code") when performing work for, or when transacting business with Utility. The Utility's Code may be found at__

<https://www.swgas.com/code-of-business-conduct-and-ethics>. Contractor and Contractor Personnel will not engage in any action or inaction that would induce or cause any Utility employee to violate the Utility's Code.

29.6.2. During the term of the Agreement, Contractor or Contractor Personnel shall not accept any employment or engage in any work which creates a conflict of interest with Utility or in any way compromises the Work to be performed under this Agreement.

29.6.3. Contractor and Contractor Personnel shall not offer, or cause to be offered, gifts, entertainment, payments, loans, and/or other services, benefits, or considerations of other than those permitted under the Utility's Code to Utility's employees, their families, vendors, subcontractors and other third parties.

29.6.4. Contractor further understands and agrees that the offering or giving of cash or gifts, other than those permitted under the Utility's Code, by the Contractor, its employees, or representatives, whether or not made with the intent to obtain special consideration or preferential treatment, shall be deemed to be a material breach of this Agreement entitling the Utility to terminate this Agreement at any time if Utility elects to do so.

29.6.5. Contractor understands and agrees that the Utility has established an Ethics Hotline pursuant to the Utility's Code, and the Contractor agrees that it will not retaliate against any Contractor Personnel that makes a good faith report to the Utility's Ethics Hotline. Contractor further agrees that the Utility may inform the Contractor's employees of the existence of and purpose of the Ethics Hotline, and of the Contractor's agreement to refrain from retaliation as provided by the first sentence of this subparagraph. This subparagraph is not intended to benefit any third party, including but not limited to any Contractor Personnel, nor is it intended to create any third-party cause of action.

29.7. Identity Theft Prevention.

29.7.1. Utility has implemented written Identity Theft Prevention Policies and Procedures to identify, detect, prevent, and mitigate the risk of identity theft or privacy considerations of its customers, employees, and third parties (collectively "Privacy Parties"). In furtherance of those efforts Contractor:

29.7.1.1. shall not communicate, disclose, or otherwise make any Privacy Parties' information available to the public or to an entity or individual outside of the Utility without written prior approval from Utility's Legal Affairs Department.

29.7.1.2. shall not create or use a printed document or electronically stored data system that includes Privacy Parties' information without prior written approval from Utility's Legal Affairs Department.

29.7.1.3. shall securely transmit or transport electronically stored Privacy Parties' information beyond the direct control of the Utility by encrypting the data or transmitting the data using encrypted network connections only and will consult with Utility's Information Services Department through a Help Desk request if there is uncertainty concerning the security of the transmittal.

29.7.1.4. shall not require any of the Privacy Parties to divulge passwords or other personally identifiable information, including but not limited to Social Security number; government-issued driver's license number, or other identification number, such as passport, alien registration, financial account number, or credit or debit card number in combination with any required security code, access code, or password that allows access to the person's financial account, signature, date of birth, physical home address, telephone number, e-mail address, education, employment, employment history, or any financial or other such information.

29.7.2. Contractor shall immediately notify Utility of Contractor's detection or suspicion of the unauthorized acquisition, use of, or access to records, electronic files, media, databases, or computerized data of Contractor, including but not limited to Privacy Parties' information and data, that compromises, or is reasonably likely to compromise the security, confidentiality, or integrity of the personal identifying information or privacy of Privacy Parties. Further, Contractor shall take all reasonable steps to maintain the confidentiality of any and all such information, including the proper disposal and/or destruction of such information by secure means when no longer necessary for the Work, and to secure and protect such information from unauthorized access, use, or disclosure.

29.8. Cumulative Rights; No Waiver of Rights. Each and every right granted to Utility under this Agreement, or allowed Utility by law or equity, shall be cumulative and not exclusive and may be exercised from time to time. No failure on the part of Utility to exercise, or delay in exercising any right, will operate as a waiver thereof, nor will any single or partial exercise of any right by Utility preclude any other or future exercise thereof or the exercise of any other right.

29.9. Section Headings. The descriptive headings in this Agreement have been inserted for convenience only and shall not be deemed to limit or otherwise affect the construction of any provision hereof.

29.10. Choice of Law. This Agreement shall be governed, construed and interpreted solely by and under the laws of the state of Nevada, without consideration of conflict of laws provisions. Each Party irrevocably and unconditionally waives any right it may have to a trial by jury in respect of any legal action arising out of or relating to this Agreement or the transactions contemplated hereby.

29.11. Further Assurances. In accordance with the notice procedure set forth in this Agreement, at any time or from time to time each of the Parties shall, at the request of the other, execute and deliver or cause to be executed and delivered all such further assurances and take or cause to be taken all such other reasonable actions as may be necessary or desirable in order to more fully and effectively carry out the intents and purposes of this Agreement. Failure of a party to provide such assurances within twenty (20) calendar days of request will be deemed a material default under this Agreement.

29.12. Publicity. Neither Party shall issue press releases or other publicity regarding this Agreement and the Work performed hereunder; nor use the other Party's name, trademarks, registrations, or any other information in other publicity, advertising, promotion, client listing, or any other purpose in any manner or form without first obtaining the written approval of the other Party. Such approval may be withheld, at discretion of consenting Party. Notwithstanding, the Parties agree that Utility may disclose information, including Confidential Information, about the Work performed

as needed to Utility's regulators and statutorily-established consumer agencies without additional Contractor approval.

29.13. Survival of Covenants. All covenants, agreements, representations, and warranties of Contractor made herein, except as provided otherwise in this Agreement, shall survive the termination, Expiration Date, and Date of Completion of this Agreement.

29.14. Third Party Beneficiaries/Parties in Interest. This Agreement and all conditions and provisions hereof are for the sole and exclusive benefit of the parties hereto and their respective successors and assigns and are not intended for the benefit of any other person.

29.15. Time of the Essence. Time is of the essence in respect to all provisions of this Agreement in which a definite time for performance is specified; provided, however, that the foregoing shall not be construed to limit or deprive a party of the benefits of any grace or use period provided for in this Agreement.

29.16. Waiver. No waiver of any of the provisions of this Agreement shall be deemed, or shall constitute, a waiver of any other provisions, whether or not similar, nor shall any waiver constitute a continuing waiver. No waiver shall be binding unless executed in writing by the party making the waiver.

29.17. Entire Agreement.

29.17.1. This Agreement and any associated SOWs shall constitute the sole and entire agreement and understanding between the Parties as to the subject matter. Any prior understandings, commitments or representations, expressed or implied, written or verbal, between the Parties shall not be construed to alter or waive any part of this Agreement.

29.17.2. The documents contained in this Agreement are complementary to each other, and any Work described, or stipulation made in any of them shall be as binding as if made in each of them.

29.17.3 Any existing agreements between the Parties covering the same Work are hereby terminated and superseded by this Agreement.

29.17.4. Any Special Terms and Conditions attached to this Agreement are incorporated by reference into this Agreement.

29.17.5. Order of Precedence.

29.17.5.1. In the event of inconsistent or contradictory terms, conditions, or provisions, the order of precedence among the Agreement documents shall be: (1) any Change Order(s); (2) any Amendment(s); (3) this Agreement; (4) any Special Terms and Conditions; and (5) the applicable SOW.

29.17.5.2. If Contractor has requested changes, alterations, or modifications to this Agreement's terms and conditions in any SOW, Change Order, Amendment, Special Terms and

Conditions, or other submittal, then Contractor shall expressly identify the Agreement terms affected and bring those to Utility's attention for review prior to execution of any such SOW, Change Order, Amendment, Special Term and Conditions, or other submittal. If Contractor fails to bring such matters to Utility's attention, then the terms and conditions of the Agreement shall govern and control.

29.18. Counterpart and Electronic Signatures. This Agreement may be executed in multiple counterparts and electronic signature, each of which shall be deemed an original and all of which together shall constitute one instrument. Each Party agrees that electronic signatures of the Parties, whether digital or encrypted, are intended to authenticate this Agreement and to have the same force and effect as manual signatures.

29.19. Authority. The undersigned, by their respective signatures hereon, certify that they are the duly authorized and acting officers or representatives of the respective Parties as set forth by their names and that they and each of them are authorized and empowered to execute this Agreement on behalf of said Party, and that this Agreement has been duly approved and they are authorized to obligate the respective Parties and to take such other and further action as may be necessary or appropriate to effectuate and carry out this Agreement.

[SIGNATURE PAGE FOLLOWS]


ACCEPTED FOR
**BLAIR CHURCH & FLYNN
CONSULTING ENGINEERS**

ACCEPTED FOR
SOUTHWEST GAS CORPORATION


BJ


CS

By: 
Adam Holt (May 26, 2023 13:07 PDT)

By: 
Chris Sohus (May 26, 2023 12:47 PDT)

Name: Adam Holt

Name: Chris Sohus

(Type or Print)
Title: CFO

(Type or Print)
Title: VP/Southern Nevada Div

Date: May 26, 2023

Date: May 26, 2023


Julie Williams (May 26, 2023 12:55 PDT)

May 26, 2023

Attachments incorporated into and made part of this Agreement:

Appendix ___ Data Security and Privacy Requirements Appendix

Appendix ___ Insurance Requirements Appendix

Appendix ___ Drug & Alcohol Requirements

Appendix ___ OQ Covered Task List

Appendix ___ Statement of Work (SOW)

Appendix ___ Proposal Sheet

DATA SECURITY & PRIVACY REQUIREMENTS APPENDIX

- A.** These terms provide the data security, cybersecurity, and privacy procedures and requirements Contractor must implement on or before the effective date of any agreement or Statement of Work that involves access to Utility's Confidential Information, data, or computer or data processing systems ("Utility Data" or "Utility Data Systems"); and must be maintained by Contractor as long as Contractor has access to, possession, custody, creation, collection, storage, usage, processing, sharing, transfer, retention, destruction, or control of Utility Data or Utility Data Systems for the provision of work or services ("Work") to Utility (collectively "Data Security Requirements"). These Data Security Requirements are in addition to any other security and confidentiality requirements of the applicable agreement and present a minimum standard only.
- B.** Defined terms not set forth within these Data Security Requirements shall have the meanings set forth in the applicable agreement for Work or Statement of Work between the Contractor and Utility.
- C.** References to "Contractor Employee(s)" shall include any contractors, subcontractors, consultants, agents or any other individual or entity engaged by Contractor in providing the Work to Utility.
- D.** Contractor represents and warrants:
1. If not otherwise provided by Utility, all computer systems and resources to be utilized in providing the Work to Utility, if any, are owned and managed by Contractor and physically in the control of Contractor.
 2. "Cloud"-based or third-party computer resources may not be utilized for Work to Utility without Utility's prior approval, which approval may be denied at Utility's sole discretion.
 3. Contractor will implement and maintain appropriate administrative, technical, physical, environmental, electronic, and procedural controls, policies, and measures: (i) to ensure security, integrity, availability, and confidentiality of Utility Data and Data Systems; (ii) to protect against any threats or hazards to the security or integrity of the Utility Data or Utility Data Systems accessed by Contractor; (iii) to protect against unauthorized access, use, modification, loss, damage, destruction, or disclosure of Utility Data and Utility Data Systems; and (iv) to report and respond to any suspected or actual intrusion, breach, or other unauthorized access, use, or disclosure of Utility Data and Utility Data Systems ("Data Security Incident").
 4. Contractor shall comply with applicable law and regulations to protect Utility Data and Utility Data Systems, including but not limited to privacy laws regarding Utility's customer and employee data, accessed by Contractor from unauthorized access, use, or disclosure; and consistent with industry best practices and standards.
 5. The administrative, technical, physical, environmental, electronic and procedural controls, policies, measures, and best practices to be implemented and maintained by Contractor shall include, but are not limited to:
 - a. Regular scans for vulnerabilities to Contractor's internal and external data and communication networks, equipment, and devices. Such scans shall be conducted not less frequently than on an annual basis; and be conducted at Contractor's expense by an independent third party.

- b.** Periodic reviews of the risks and threat profiles, testing, audits, and revision, if necessary, of Contractor's cyber and information systems security programs and protective measures for adequacy, effectiveness, and compliance with these Data Security Requirements and applicable data security and privacy laws and regulations.

 - i.** Such periodic reviews shall occur not less frequently than annually and whenever a change is made by Contractor in Contractor's systems, practices, measures, or policies that may materially affect the security and integrity of Utility Data or Utility Data Systems accessed by Contractor.
 - ii.** Contractor shall not alter or modify its programs and measures in such a way as to weaken or compromise the security and integrity of Utility Data or Utility Data Systems accessed by Contractor.
 - iii.** Contractor shall notify Utility in writing when Contractor changes its information security and its privacy policies. Mere posting of such changes on Contractor's website or log-in page deemed insufficient notice.
- c.** Monitoring and logging of all networks, servers, and workstation activities and network traffic, including log-in attempts and administrative activities, to ensure only appropriately-authorized personnel are accessing Utility Data and Utility Data Systems.
- d.** Use of firewalls and segmentation and segregation of Contractor's internal network from public or Internet access; and segregation of Contractor's internal systems containing Confidential Information and Utility Data from other, less restricted internal networks and systems.
- e.** Public-facing firewalls, portals, and services will be strictly limited to only those public-facing firewalls, portals, and services required to provide the Work to Utility under the applicable agreement or statement of work.
- f.** Installation and use of most current, up-to-date anti-malware software on networks, servers, workstations, and portable devices that may be used to access Utility Data and Utility Data Systems; or to access, use, or store Utility Data.
- g.** Contractor shall utilize intrusion detection and intrusion prevention systems that generate alerts and are sufficient to detect, evaluate and document potential Data Security Incidents and attempted unauthorized access into Contractor's data systems.
- h.** Contractor shall follow industry best practices of patching and updating software and firmware on Contractor's networks, servers, workstations, and portable devices that may be used to access Utility Data Systems, or to transmit, access, use, process, or store Utility Data.
- i.** Appropriate protective measures and safeguards shall be taken to prevent unauthorized physical or logical access or intentional or accidental damage to Contractor's premises or systems that access, use, process, or store Utility Data. Such measures shall also protect against environmental risks and system malfunctions or failures.

11. No Utility Data at any time will be processed or transferred outside of Contractor's data centers; and such data centers shall be physically located in the continental United States. If Contractor utilizes regional availability zones for data center operations, then Contractor shall inform Utility and allow Utility to select among the multiple zones where Utility Data will be processed or stored, without further cost or expense to Utility.
 12. **Export/Unauthorized Transfers.** No Utility Data at any time will be processed in, transferred to, or stored in any foreign country; or processed on, transferred to, or stored on any portable or laptop computing device or any portable storage medium without the prior consent of Utility and such device or storage medium is in use as part of Contractor's designated backup and recovery processes and encrypted in accordance with generally-recognized industry standards and these Data Security requirements.
 13. Contractor shall ensure that all of Contractor's or Contractor Personnel devices, including cell phones or other portable storage devices, used to access, process, or store Utility Data shall be equipped with industry-standard security and encryption features. These features shall include, at a minimum, remote wipe and remote shutdown capabilities. Contractor's and Contractors' Personnel may not access or store Utility Data on any personal or third-party devices, including mobile devices, tablets or personally-owned computers, laptops, or electronic devices unless approved in writing by Utility's Information Services Department.
 14. Except as necessary for disaster recovery and business continuity purposes, any Contractor device or system accessing or storing Utility Data must be disabled for any export or further copying or transfer of Utility Data outside of such device or system.
 15. All files and Contractor's data systems containing Utility Data will be encrypted with industry-standard encryption features and password-protected (at rest and in motion), using strong password protocols and multi-factor authentication, to avoid unauthorized access, use, or disclosure.
 16. Any electronic or physical transmission or exchange of system or application data with Utility and/or any other permitted parties shall take place via secure means over secure connections and solely in accordance with applicable industry standards and the applicable agreement, Statement of Work, and these Data Security requirements.
- E. Utility reserves the right to monitor and to inspect any portable or laptop computing devices, mobile devices, or storage mediums used by Contractor to provide Work to Utility to ensure Utility Data is not being processed, stored, or transferred in violation of the applicable agreement and these Data Security requirements. In all events, Contractor remains solely responsible for the security and protection of Utility's Confidential Information and Utility Data provided under the applicable agreement or Statement of Work.
- F. No more than once every calendar year, or within thirty (30) days of Utility's request, Contractor shall make available to Utility a copy of Contractor's latest certification of compliance with the latest generally accepted audit standards and service organization attestations for data security controls (formerly SAS 70 and SSAE16/SSAE 18 report) for any cloud-based resources utilized in providing Work to Utility; or any successor or similarly-equivalent report adopted by the industry. In addition, upon Utility's written request, Contractor shall allow Utility to review any associated audit reports, summaries of test

results, or equivalent measures taken by Contractor to assess whether its information security program meets the foregoing objectives.

G. Upon request, Contractor shall make available to Utility, in accordance with Contractor's standard processes, a copy of Contractor's then current standard external policy document or statement on security incident management. Such document or statement and its content shall be treated as Contractor's Confidential Information.

H. Should Contractor seek to outsource the computer systems or resources used in the provision of Work to Utility, then Contractor shall provide not less than ninety (90) days prior notice to Utility; and Utility reserves the right to re-evaluate and/or terminate the applicable agreement or Statement of Work. In all events, Contractor remains solely responsible for the security and protection of Utility Confidential Information, Utility Data, or access to Utility Data Systems provided under the applicable agreement or Statement of Work.

I. Utility reserves the right to require Contractor conduct an independent third-party audit from a network security auditing/assessment firm (acceptable to Utility) of the security methods used to protect Contractor's computer systems and the information and data stored or processed thereon. The costs of a network security audit/assessment requested by Utility shall be the responsibility of Utility, unless the network security audit/assessment indicates that Contractor is not in compliance with the applicable agreement or Statement of Work, including but not limited to these Data Security Requirements.

J. Notwithstanding any other provisions of the agreement or Statement of Work, Contractor shall immediately notify Utility of any actual or suspected unauthorized access, disclosure, or use of the Utility Data or Utility Data Systems; and will assist in remedying any unauthorized access, use, or disclosure and take immediate steps to prevent further unauthorized access, use or disclosure. Such steps shall, include, without limitation: investigation of the circumstances of the Data Security Incident; monitoring for further unauthorized access; notification of affected persons; and, if applicable, credit monitoring for the affected individuals, for a period as required by law but, in all instances for a period of not less than twelve (12) months, at Contractor's expense, to the extent any such unauthorized access, disclosure, or use was the result of any action or inaction by Contractor or its personnel, including permitted contractors and subcontractors, agents, or representatives. Contractor shall also provide resources, cooperation, and be responsible for expenses related to public relations and reputational repair in the event of an actual breach or unauthorized use, access, or disclosure of the Utility Data or Utility Data Systems.

K. If Utility approves of use of third-party hosting or data storage services by Contractor, then:

- 1.** Contractor shall ensure and require in writing that any third-party providing hosting and data storage services to Contractor in connection with the Work shall abide by confidentiality and data security requirements no less restrictive than these Data Security requirements;
- 2.** Such third party shall promptly notify Contractor of any requested or compelled access or disclosure of the third-party provider involving Utility Data. Contractor shall then promptly notify Utility of such requested or compelled disclosure and cooperate with Utility to seek appropriate protections for such Utility Data residing with the third-party service provider; and
- 3.** Contractor will require its data storage and hosting service providers to comply with the latest generally-accepted audit standards and service organization attestations for data security controls (formerly SAS 70 and SSAE16/SSAE18), or the latest available equivalent industry standard for such reviews; and conduct such security audits on a semi-annual basis.

Contractor, upon Utility request, shall provide the security audit reports (“Audit Reports”) prepared for the data storage and hosting service providers.

L. In the event that the location of the data center(s) or service providers used to host and provide the Work to Utility are changed, Contractor shall provide Utility with written notice of not less than ninety (90) days prior to said change and disclose the address and contact information for the new facility or service provider.

- 1.** The replacement hosting provider shall be a reputable hosting provider comparable to Contractor’s current providers and said replacement providers shall be located within the United States.
- 2.** Prior to transferring Utility Data, Contractor shall require the replacement hosting providers to perform a security audit utilizing the latest available industry standards; and conduct and provide such audits and reports on a semi-annual basis thereafter.

M. Contractor shall ensure Utility has the right and ability to contact such third-party storage and service providers directly to access and retrieve Utility Data and confidential information from such third parties in the event the applicable agreement or Statement of Work is terminated by Utility for cause or Contractor ceases to provide the Work to Utility.

N. Unless prohibited by law or court order, Contractor shall notify Utility in writing within two (2) business days of receipt of a subpoena for disclosure of any Utility Data. If Utility informs Contractor that it will seek a protective order, then Contractor shall delay responding to the subpoena to permit Utility time seek such protective order. Upon request by Utility, Contractor shall confirm whether it has received any subpoena for Utility Data within the prior twelve months and the date and scope of all such subpoenas. Nothing in these Data Security Requirements is intended to preclude Contractor from complying with the subpoena when and as required to do so by law or court order.

O. Utility may require Contractor to certify the results of a background check for each person who will require access to Utility systems. If required, the background check shall meet the requirements set forth in the applicable agreement or SOW.

P. All Utility information technology systems are monitored for acceptable use. Contractor, and Contractor’s employees or permitted subcontractors, acknowledge that there is no expectation of any right to privacy in any such materials and data stored, processed, transmitted and /or maintained on Utility property. Such material and data are subject to inspection and can be confiscated by Utility at any time, with or without notice and with or without password protection.

Q. Except for one copy retained solely for compliance with Contractor’s reasonable document retention policies or legal purposes, Contractor shall return, destroy, or render irretrievable, all by secure means, any Utility Data or Confidential Information in Contractor’s possession, custody, or control within fifteen (15) days of the termination of the applicable agreement or Statement of Work. Contractor shall provide Utility with written confirmation of such secured destruction or return of Utility’s Confidential Information and Utility Data. Any Utility Data or Confidential Information retained by Contractor pursuant to this provision remains subject to all terms and conditions contained in these Data Security Requirements until such time that Utility Data or Confidential Information is securely destroyed or returned to Utility.

R. Contractor acknowledges Utility’s Data Systems and computing architecture are based primarily on Microsoft Windows operating system and Utility’s implementation of mobile technology utilizes

primarily Apple iOS. While software applications required for completing Utility work may be available for other operating systems (e.g. Android), Utility makes no guarantee that such applications will work outside of a Windows or iOS platform. Contractor agrees that it is Contractor's responsibility to ensure that any Contractor-supplied devices or data systems are compatible with Utility-supplied software, devices, or systems required to complete Utility business.

INSURANCE REQUIREMENTS APPENDIX

TYPE OF COVERAGE & GENERAL REQUIREMENTS

All liability policies must include coverage for natural gas and or natural gas operations, or any exclusions must be expressly exempted or waived by the carrier for natural gas from the exclusion.

Coverage for explosion (X); collapse (C); or underground (U) must show evidence carrier has waived these exclusions, resulting in full coverage for explosion (X), collapse (C), and underground (U).

Exclusions other than mold and nuclear activity must be approved on a per-item basis.

All coverage must include contractual defense of indemnitee either in the policy or amendatory endorsement extending insurer's duty to defend to Company and duty to defend in actions where insurer reserves rights for issues of coverage.

Defense costs and expenses shall not erode insurance limits.

Required coverage amounts can be a combination of primary and excess or umbrella policies

EXTENDED REPORTING PERIOD (3 YEARS)

Unless otherwise provided for or required by SWG, all policies must have an extended reporting period of not less than three (3) years.

WAIVERS OF SUBROGATION

All policies and endorsements must contain express waivers of subrogation in favor of SWG.

COMMERCIAL GENERAL LIABILITY (CGL) REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	EXPLANATION	MINIMUM COVERAGE LIMITS	
ISO Form CG 0001 1093, or another form acceptable to SWG. <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Additional Insured Endorsement Include coverage for on-going & completed operations hazards/products. Covering any act, error, or omission of Contractor. <input type="checkbox"/> Y <input type="checkbox"/> N Contractor Professional Liability Endorsement CGL policy must include endorsement for professional liability, ISO Form CG 22 79 04 13, or equivalent approved by company.	Personal Injury, Bodily Injury (including accidental death), Property Damage, Contractual Liability. Remove any exclusions for personal injury or property damage arising from professional liability. No 3 rd -party claim exclusions.	Per occurrence Combined Single Limit basis, for both accidents & injuries.	<u>\$1,000,000</u>
VEHICLE LIABILITY INSURANCE REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
<input type="checkbox"/> Y <input type="checkbox"/> N Additional Insured Endorsement Covering claims arising from the ownership, operation, loading-unloading of owned, hired, leased, non-owned and or borrowed private passenger and commercial vehicles.	Bodily Injury, Property Damage	Combined Single Limit Basis	<u>\$1,000,000</u>
POLLUTION LIABILITY/ENVIRONMENTAL IMPAIRMENT REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
<input type="checkbox"/> Y <input type="checkbox"/> N Additional Insured Endorsement Covering claims arising from both gradual and "sudden and accidental" pollution conditions, releases, or environmental impairment as a result of Contractor's work; plus, handling, abatement, and transport of pollutants and hazardous materials and substances, including, but not limited to asbestos and lead paint. Coverage must include the cost of off-site clean-up and remediation.	First & Third-party Bodily Injury, Property Damage	Per Occurrence	\$ _____
WORKERS COMPENSATION REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
All coverage from companies authorized and approved to issue such insurance by the applicable state(s) where the work is to be performed; or through the applicable state fund or agency established for such Workers' Compensation claims.		Per Claim	\$ _____ Not less than statutory minimums for the state where work is to be performed.

EMPLOYER'S LIABILITY REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
<input type="checkbox"/> Y <input type="checkbox"/> N Additional Insured Endorsement Covering first and third-party claims for work-related bodily injury or disease; loss of consortium, dual capacity suits, and consequential bodily injury.		Per Claim	\$1,000,000 Greater of \$1,000,000.00 or statutory minimums for Workers' Compensation.
PROFESSIONAL LIABILITY (Errors & Omissions) REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
Comprehensive professional liability coverage for, but not limited to: any error and or omissions; personal injury; bodily injury, including accidental death or illness; property damage; advertising injury; reputational harm; misuse or disclosure of confidential information; intellectual property infringement; trade secret misappropriation; and cyber-security, if applicable. Coverage must provide for payment of all sums for which Contractor is obligated to pay due to liability imposed on Contractor for damages resulting from or arising out of the performance of professional services for Company and caused by any act, error, or omission of Contractor or person for whose acts the insured is legally liable. Required coverage may be included as part of CGL above. <input type="checkbox"/> YES <input type="checkbox"/> NO Five (5) year extended reporting period.		Per claim, with extended reporting period.	\$1,000,000
CYBERSECURITY/CYBER LIABILITY REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
Coverage must include, but not limited to: network security and privacy liability; unauthorized access; unauthorized use; unauthorized disclosure; data loss; transmission of malicious code or virus; exploitation designed to compromise network or data security and or denial of or impairment of service; failure to protect the confidentiality of information of Company, its employees or customers; violation of any right to privacy; corruption, misuse or disclosure of personal information of third parties; and failure to protect privacy or personal identifying information, covering first and third parties for the liability of Contractor or any other person for whose acts the insured is legally liable, and the liability of Company and its Affiliates arising from or out of the performance of work or services for Company. Required coverage may be included as part of CGL above. <input type="checkbox"/> YES <input type="checkbox"/> NO Two (2) year extended reporting period.		Per claim, with the extended reporting period \$5,000,000.00	\$5,000,000 It will depend on what data/systems the contractor has access to.
MOLD & FUNGUS REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
<input type="checkbox"/> Y <input type="checkbox"/> N Additional Insured Endorsement		Per Occurrence	N/A
OTHER REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
Railroad Protective Liability (Contractor operations within 50 feet of the railroad)		Per Claim \$2,000,000.00 Only when applicable	\$_____ Aggregate \$6,000,000.00 Only when applicable
FIDUCIARY REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
(For funds managed or held in trust. The company as Loss Payee)			\$_____
CRIME INSURANCE REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
(Covering, but not limited to; fraud, theft, dishonesty, disappearance)		Per Claim \$_____	Aggregate \$_____
OTHER INSURANCE (SPECIFY)			

Primary Coverage: Contractor shall obtain adequate insurance during the performance of work, sufficient in scope and coverage to provide for the indemnifications required under the applicable Agreement or Statement of Work insurance required above shall be primary and non-contributory for any other insurance maintained by Gas Corporation ("Company" or "SWG"). Damages recoverable by Company shall not be limited by the amount of insurance required or the proceeds thereof. The Contractor shall be responsible for any deductible under its insurance policies. The Contractor shall require that all of its Subcontractors maintain insurance of the same types and same amounts required of Contractor unless the Company agrees to or requires a different amount. The Company, as indemnitee, may possess other insurance for the same risk, but, in all instances, Company's insurance shall be secondary to Contractor's insurance. The company is not obligated to notify any other insurer of any claims or legal actions.

Additional Insured, Severability of Interests, Waivers of Subrogation, Duty to Defend: The Company, including its officers, directors, and employees, shall be named as additional insured with respect to its interests to the extent appropriate, including coverage for on-going and completed operations; and for claims arising from Contractor's work or work product included in products-completed operations hazard coverage.

Waiver of subrogation clauses shall be included in all required policies. Insurance maintained or procured by Contractor shall not reduce or limit Contractor's obligation to indemnify and defend Company for claims made or suits brought which result from, or in connection with, the performance of the applicable Agreement.

The Contractor's responsibility to indemnify, defend, and hold Company harmless shall not be diminished by any inclusion or exclusion of insurance. Payments for costs of defense or investigation expenses under the required policies shall not reduce the limits of insurance.

Products/Completed Operations: The coverages required herein, when written on an occurrence form, shall be maintained during the entire term of the Agreement. All coverages shall be written on a per claims-made basis. Required coverages shall be maintained during the entire term of the applicable Agreement and further until at least three (3) years following completion and acceptance of all work under the applicable Agreement. Additional insured endorsements providing products/completed operations coverage shall continue to provide coverage through the expiration of the time within which a claim may be filed under all applicable laws.

Insurer Security: Insurers must be rated A- /VIII or better A.M. Best; or shall be otherwise acceptable to SWG; and must be authorized to do business in the state(s) in which the services are to be provided.

Insurance Certificates, Endorsements, Notice of Policy Change/Cancellation: The Contractor shall provide Company with satisfactory evidence of compliance with insurance requirements. Before commencing work under the applicable Agreement, the Contractor's broker or agent shall provide copies of additional insured and waiver of subrogation endorsements, as well as certificates of insurance verifying that at least the minimum insurance coverages required above are in effect. The Company reserves the right to require a Broker's Opinion Letter to accompany the certificates of insurance, reflecting Contractor's broker has reviewed these insurance requirements and that the insurance coverage reflected on the certificates complies with these requirements. The Company reserves the right to view the original or certified copy of any insurance policy applicable to the Agreement.

In the event of a loss or claim potentially arising out of Contractor's Scope of Services, the Contractor shall promptly provide complete copies of its insurance policies upon request. Certificates must disclose any self-insured retention of \$250,000 or more. Certificates must specify whether the liability coverages are written on an occurrence form or a claims-made form. The Contractor shall provide thirty (30) days' advance written notice to SWG of any material change(s) or cancellation(s) of coverage. The Contractor's failure to provide such advance written notice shall be construed as a material breach of the applicable Agreement.

Should any of the policies described and identified in the Certificate expire or otherwise terminate during the term of the applicable Agreement, the Contractor must replace the policies before the expiration date with policies providing the same or comparable coverage which meets Company's approval. In addition to other remedies, if the Contractor fails to procure and maintain required insurance, the Company shall have the option to procure, at Contractor's expense, the required insurance coverages for Contractors and Subcontractors and deduct the costs from amounts due to the Contractor under the applicable Agreement. The filing of a new Certificate shall also be a condition precedent to the prosecution of the continuation of any Work. All required certificates shall be sent to:

SOUTHWEST GAS CORPORATION
8360 S Durango Dr.
LAS VEGAS, NEVADA 89113-4444
ATTENTION: CONTRACT ADMINISTRATION/MS LVD-560
Email: ContractAdmin@swgas.com

NOTES:

STATEMENT OF WORK

**SOUTHWEST GAS CORPORATION
SOUTHERN NEVADA DIVISION**

2023 DIVISION OPERATIONS SERVICES

STATEMENT OF WORK

1. GENERAL DESCRIPTION

- 1.1 Work performed under this Agreement is for Southern Nevada (SNV) Division Operations for design services and/or drafting of construction drawings for the installation, abandonment, replacement, or relocation of new and/or existing Southwest Gas Corporation (Utility) gas facilities related to new business, replacement, franchise and system reinforcement projects. This may include but shall not be limited to: transmission and feeder system steel mainlines (where pressure is greater than 60 psig), and main and service distribution systems (where pressure is 60 psig or less and the pipe is steel or plastic). Required disciplines may include, but shall not be limited to: Land Survey, Civil, Mechanical, Structural and Environmental Engineering. All associated activities shall be generically referred to as "Work."
- 1.2 Typical work under this contract includes but is not limited to the following SNV Division Operations services:
- Gas pipeline design for new installation, relocation and abandonment of transmission and distribution systems.
 - Supervisory Control and Data Acquisition (SCADA) system design.
 - Meter Set Assembly (MSA) design.
 - Utility measurement and control standards.
 - Bridge supports for suspended gas lines.
 - Directional drilling of steel pipelines. Requires calculations for depth, stress, and maximum deflection.
 - Design for valves, insulators, and/or pressure recorders.
 - Cathodic protection continuity.
 - Preparing cost estimates and bid documents, if required.
 - Determine material selection based on established Maximum Allowable Operating Pressure (MAOP).
 - Prepare Storm Water Pollution Prevention Plans (SWPPPs), if requested.
 - Provide construction field support.
 - Complete design drawings in accordance with Utility Operations Manual, or as otherwise directed.
 - Generate permit drawings, project extents exhibits, and shell drawings.

- Surveying.
- Process and Instrumentation Diagrams or other electrical drawings.
- GIS/Mapping services.
- Potholing by qualified personnel for design.
- Third Party Plan Review assignment.
- As-built drawing creation, review, and corrections.
- Digital documentation collection, creation, review, and corrections.
- Data and records collection and analysis for specialized projects.
- Third Party Improvement Plan and/or Records Review such as the following:
 - Civil Improvement Plan Review (may include utility conflict resolution design)
 - Vacation Request Review
 - Final Map Review
 - Amended Final Maps Review

1.3 SNV Division Operations will require experience and efficiency with the following tasks:

- Topographic survey base maps.
- Include X-Ray locations and GNSS/GPS data on as-builts as provided.
- Right-of-way, easements, ownership, section line research.
- Utility research, utility conflict review, and coordination.
- Geotechnical research (including research/verification of soil conditions).
- Generate design drawings, select pipeline alignment, and establish profiles and isometric details.
- Complete required design calculations and Professional Engineer stamp when required by Utility.
- Complete required drainage studies and applications.
- Prepare permit applications for local jurisdictions.
- Assist in procurement of traffic control plans and encroachment permits as required by Utility.
- Identify pothole locations, coordination of analyzing pothole reports.
- Specify construction materials and notes.
- Include design details, test data sheets, pressure test procedures, and purge calculations in drawings.
- Perform site visit and take field measurements, as necessary.
- Finalize design drawings and construction documents.
- Collect GNSS/GPS data using Utility designated software and equipment for documentation of materials, measurements, and notes.
- Prepare material list and Engineering cost estimate, including Work Management System (WMS) entry when required by Utility.

- 1.4 Work will be performed throughout the Southern Nevada Division which includes Arizona, California, and Nevada.

2. SCOPE OF WORK

- 2.1 Contractor shall commence Work on or about **May 1, 2023**. All Work shall be completed no later than **April 30, 2026**. At Utility's option, Agreement may be extended for up to two (2) additional years by mutual agreement.
- 2.2 Contractor shall provide all labor and equipment necessary to perform Work for the design of natural gas facilities for installation, abandonment, and/or replacement, as assigned by Utility. Contractor shall provide land-based maps, valve sketches, material selection of mains and service designs, pothole requests, or other engineering services when specifically requested by the Utility. All material, travel, administrative support, etc., not specifically exempted by Utility will be supplied by Contractor.
- 2.3 Costs for all Contractor labor, equipment, materials, travel expenses, research, performing field work and design survey (if land-base not provided by the Utility), design, drawings, materials, and performing WMS input shall be included in the project costs.
- 2.4 Utility reserves the right to withhold Projects which are anticipated to have engineering design/drafting costs in excess of limits set by Utility.
- 2.5 Utility reserves the right to assign Project in whole or in part, to one or more service providers based on expertise in any given area.
- 2.6 Contractor shall show locations of existing facilities for other utilities on Project drawings. This information shall be obtained by contacting the utility companies and/or through field investigations. This shall be part of the Project unit costs. Contractor shall use the Design Ticket process via USA North for projects in Nevada, as required. Contractor shall be required to register with USA North for these purposes, independently of Utility.
- 2.7 Utility reserves the right to use multiple contractors as needed. Work performance and productivity will dictate how many contractors will be required.
- 2.8 If Contractor is unable to meet quality control, productivity, and/or performance requirements as noted herein, Utility will have the right to terminate the Agreement. Uncompleted Work may be offered to other bidders at a mutually negotiated rate.
- 2.9 Upon termination of Agreement, all Work completed by or in progress by Contractor shall be provided to Utility.

- 2.10 All Work performed by Contractor (drawings, exhibits, details, etc.) under this Agreement shall be considered Utility property.

3. UTILITY REQUIREMENTS

- 3.1 Utility will establish each Project scope and facility boundaries. Project scope will be communicated through marked up and/or highlighted tile sheets or electronic equivalent, marked up civil plans, marked up maps, written description, or other means to convey the scope. Basic design information such as the existing MAOP/MOP, future MAOP/MOP, and the proposed pipe size will be provided by Utility. Geospatially accurate AutoCAD files with appropriate facility location data will be provided, as available.
- 3.2 Utility or Contractor, at Utility's request, will create the Work Request (WR) in WMS prior to Contractor beginning Work. However, for related Accelerated Construction (AC) requests as directed by Utility, Contractor shall create the WRs in WMS.
- 3.3 Utility will provide program access through Virtual Machine software (VMware/Virtual Desktop) to Utility internal mainframe and server applications for the design of each Project. Currently, these include WMS, FOMS Connections, FieldSmart, PaperVision, etc. These programs may be superseded by other similar software at the discretion of Utility. References to the current programs apply to any similar program that supersedes the previous.
- 3.4 Utility will provide access to, or copies of, Utility Design Standards, Drawing Standards, Material Specifications, Materials Catalog, and/or Operations Manual.
- 3.5 Utility reserves the right to add new Contractors or remove Contractors from future Project assignment lists, and/or to enter into a separate agreement for Work outside of this Agreement. This Agreement shall not be construed as a guarantee that any/all Contractors will be requested by Utility to provide Engineering Services.
- 3.6 Utility will provide Contractor with a drawing template package that contains approved title block, north arrow, text font, line weights, etc. for drawing consistency.
- 3.7 Utility will request construction survey which includes the scope of work, required staking (offset cut stakes, ROW, stationing, etc.), improvement plans (if available), and contact information for the Work. Upon such request

Contractor shall provide a quote for requested survey within 1-3 day(s) depending on urgency of request.

- 3.8 Utility will request potholing which includes the exact location of each pothole needed and contact information for the Work. Upon such request Contractor shall provide a quote for requested potholing within 1-3 day(s) depending on urgency of request.
- 3.9 Utility shall provide pre-approval of potholing personnel and provide Operator Qualification training through Utility's Gas Operations Support Staff (GOSS). Utility shall review Drug and Alcohol program of contractor(s) performing potholing.
- 3.10 Utility will provide project area, exhibit, and/or preliminary civil drawings, vacation requests, final maps, and amended final maps to Contractor to perform Third Party Improvement Plan and/or Records Review.
- 3.11 Utility will submit appropriate forms and/or requests for non-standard material or material not currently in Utility systems (e.g. WMS).

4. CONTRACTOR REQUIREMENTS

- 4.1 Contractor shall maintain a minimum of one (1) computer at its work site capable of communicating with Utility main frame and server. Computer must have an Internet connection and be capable of running a browser similar to Microsoft Edge. Contractor shall be given web-based access to Utility programs as noted above. Computer specifications are not absolute but should approach current industry standards. Contractor may utilize multiple computers at work site. Internet connection and speeds are the responsibility of Contractor and its Internet Service Provider of choice.
- 4.2 Contractor shall designate employee or employees who will access Utility programs. Said employee(s) will be reviewed and approved by Utility for Intranet access. Each employee will be given a unique username and password to be used only by that individual. Contractor shall notify Utility if its employee(s) no longer require access.
- 4.3 Contractor shall maintain software compatible to Utility, including Microsoft Office and AutoCAD. Alternative programs that can save to equivalent formats are acceptable; however, correspondence with Utility must be compatible with Microsoft Office programs and drawings must be compatible with AutoCAD 2019, or older.
- 4.4 Contractor shall participate in scheduled Project meetings with Utility. Frequency of meetings will be determined by Utility Designate (e.g., Design Engineer, Design Engineering Technician, Engineering Supervisor, GIS, or

other designate). These meetings can be in person or can be via a telephone conference call, depending upon the subject matter and the need as determined by the Utility Designate. Project may be in remote location with varying terrain. The purpose of the meetings will be to provide activity status updates, exchange information on the Project, and identify and resolve issues associated with the Project. Scheduled meetings shall be included in total project costs. Contractor shall have one (1) person available to physically attend 30%, 60%, and 90% field meetings at the request of Utility. This shall be included in the total project cost. If specified by Utility, the person in attendance must be a Professional Engineer.

- 4.5 When a meeting outside the regularly scheduled meetings is requested by Utility, Contractor shall have only one (1) person in attendance, unless additional personnel is requested in writing from Utility Supervisor. Contractor shall invoice Utility for meeting attendance at the hourly rates for the applicable job description defined in the Contractor's Proposal Sheet and up to one additional hour for travel time.
- 4.6 Utility may request Contractor to submit regularly scheduled status reports to Utility Designate. Utility Designate will determine frequency of reports. The status report shall identify tasks completed during the review period, planned activities for the following review period, and changes to schedule. The status report can be e-mailed to expedite receipt to Utility Designate.
- 4.7 Contractor shall perform records search of existing gas main facilities. Records obtained by contractor shall be uploaded to Utility network project folder. Partial research can be done remotely via PaperVision and/or WMS; however, complete as-built records may be available at Utility's Las Vegas North Operations Center and/or Bullhead City (BHC) Office upon request. If records cannot be found, contact Utility. Typical research tasks may include, but are not limited to:
- Determine existing material type.
 - Select pipe specifications.
 - Create installation Work Request.
 - Confirm month/year and material specifications of existing facilities installed.
 - Determine gas flow direction.
 - Verify system MOP/MAOP at precise location of existing gas facilities.
 - Identify tax code boundaries.
 - Obtain tiles.
 - Land Rights (easement extents/records).
 - Identify isolation boundaries/isolation valves.

- 4.8 Contractor shall perform records search of existing service facilities to be worked, replaced, and/or tied-over. Service records obtained by Contractor shall be uploaded to Utility network project folder, at Utility's request. Research can be performed by reviewing pending posting files and via PaperVision and/or WMS that show service history of service as-built documents. If records cannot be found, contact Utility. Accelerated Construction (AC) work process expectations may include, but are not limited to:
- Complete detail service investigation.
 - Prepare excel service replacement list.
 - Identify appropriate Excess Flow Valve (EFV) or Service Line Shut-off Valve (SLSV) candidates.
 - Identify and design for the abandonment of idle risers and meters.
 - Identify and design for the abandonment of existing multi-branch and cross-lot services.
 - Assign appropriate AC WR type.
- 4.9 Contractor may be required to perform a field check of all Projects to verify that as-built drawings and service information match actual field conditions. Significant differences between as-built and field information must be communicated to Utility as soon as practical. Contractor shall note potential conflicts that may impact the design of new gas facilities. Contractor shall acquire all research necessary to complete design. Contractor shall also investigate whether city or county projects are planned (e.g., franchise paving) which may be in conflict with existing or proposed gas facilities.
- 4.10 Contractor shall perform FOMS WR input for assigned Projects, unless otherwise specified by Utility. FOMS WR input will include material input and costs (including labor, vouchers, permits, etc.). Utility will provide initial training to Contractor on FOMS process. After initial training Contractor will be responsible for additional training and cost for training new Contractor Personnel. Contractor FOMS expectations are:
- Input of compatible units, i.e. material and labor, for each point span.
 - Follow appropriate point span structure as indicated by Southern Nevada Division.
 - Installation and abandonment information shall be on separate point spans.
 - Voucher data – input voucher items (i.e., permits, compaction tests, and other items not available as Compatible Units). Review Comments – note if designed for unit cost, crew day, Utility crew, or other.
 - Verify units of property are correct using FOMS Connections and property unit catalog.

- Verify all materials required for WR are included in the WMS entry estimate using the Reports in FOMS Connections.
- 4.11 For Utility errors and scope changes/revisions, Contractor shall provide a quote for services with a not to exceed amount and invoice Utility for all tasks at the hourly rates identified on Contractor's Proposal Sheet.
- 4.12 Projects may include, but are not limited to, the following:
- High pressure projects and large station designs (Pressure Limiting Stations (PLS) and Tap Sites) – Utility may request Contractor provide a projected timeline and “not-to-exceed” price for these Projects for Utility’s consideration.
 - Regulator Stations, Meter Set Assemblies (MSA), and Cathodic Protection (CP) designs.
 - Large Project (Main Work over 5,000-feet).
 - Medium Project (Main Work 1,000-feet up to and including 5,000-feet).
 - Small Project (Main Work under 1,000-feet).
 - Third Party Improvement Plan and/or Records Review.
 - As-built drawing creation and review.
 - Digital documentation collection, creation, correction, and review.
 - Third Party Plan Review assignment.
- 4.13 Contractor shall complete the Work within the timeline established by Utility. Each Project will have a unique timeline but will not exceed fourteen (14) calendar days for 100 percent (%) design drawings, unless stated otherwise or agreed upon. All timelines are considered from the date that the Project is received, unless previously agreed upon by Utility and Contractor in writing prior to required deadlines. Contractor shall notify Utility if agreed upon deadlines cannot be met prior to the established deadline. Typical timelines include, but are not limited to, the following:
- Replacement/Relocation Main and Service Design – Ten (10) business days.
 - New business projects (large, medium, or small as referenced above in section 4.12) - Five (5) business days.
 - All Third-Party Plan and/or Records Reviews – Five (5) business days.
 - Resubmittals/Revisions – Three (3) business days.
 - As-built Review – Three (3) business days.
 - As-built Drawing Creation – Ten (10) business days.
 - Digital Documentation Creation – Five (5) business days after conclusion of facility data collection
 - Third Party Plan Review assignment – Two (2) business days.

- 4.14 Contractor shall provide a minimum of two (2) pothole quotes which shall include all work necessary to remove existing asphalt, expose the pipeline, acquire all necessary survey information, backfill per applicable entity and Utility standards, and provide a temporary asphalt repair at each location. Potholing subcontractor shall be Operator Qualified (OQ'd) per Utility requirements. Pothole reports must include a description (e.g. utility "type" with "OD", "exploration"), top of pipe (or excavation) depths with absolute elevations, and dimensioning per Operations Manual, or as otherwise directed. Contractor shall comply with other utility and entity requirements for potholes. Contractor will provide all obtained information, such as pothole information, to the Utility within ten (10) business days.
- 4.15 Contractor shall design each Project in accordance with Utility standards, industry codes, regulations specific to the local agency, and jurisdictional requirements. Utility will specify locations where different main or service pipe is required. Contractor shall consider other factors in the design and discuss its needs with Utility. These include but are not limited to:
- Isolation zone boundaries – if the main crosses existing or proposed isolation zone boundaries, a valve may be required.
 - Valve locations – should be positioned to maximize accessibility and allow for blow-downs of high pressure main segments as applicable.
 - Large diameter PE Backbone – general guidelines are 4" PE on all section line roads and 4" main extending from 4" main. Utility may specify other locations and/or the use of 6" PE.
 - Looping – if existing main terminates less than 200-feet from another dead-end main, tying the two together may be beneficial.
 - Pressure test – test requirements to be noted on drawings.
 - Tie-ins – must offer least possible resistance to flow utilizing standard materials.
 - Purge (degas & regas).
 - Replacement of early vintage plastic pipe (EVPP) and vintage steel pipe (VSP).
 - Main Stubs – Installation of a stub will be considered for 4" and larger PE pipe to ease future tie-in. Stubs will be a minimum of 10 feet, but may be longer. Stub shall terminate beyond edge of paving.
 - Existing Service Stub(s) – Existing service stubs will be abandoned with no replacement. Size/material/age and lot use are factors. Stub installs should terminate at property line.
 - Idle risers/meters – existing services without a meter set or with a meter that has not been active for 36 months may be abandoned.
 - Multi-branch services – no more than two risers will be allowed on a single service line. In existing situations with more than two risers off an obviously installed service (e.g., 1/2" or 1" size, on private property,

branched off a main in the street, etc.), Contractor's design shall eliminate the multi-branch condition.

- Cross-lot services – service lines should not cross lots parallel to the main or street, either as single service or branch service. Contractor's design shall eliminate cross-lot services.
- If multi-branch or cross-lot services cannot be replaced by installing additional main and the standard service/branch configuration, it may be necessary to install new main on private property. Contractor shall develop easement drawing. Utility will obtain easement from landowner.
- Contractor shall identify location of isolated steel risers. Isolated steel risers are to be replaced.
- New paving – consideration must be given for proposed main locations to avoid no-cut pavement restrictions.
- Third party construction – identify locations where future third party construction, such as storm drains, grade changes, paving work, etc., are proposed and land survey will be required to locate gas components and/or facilities.
- Contractor shall identify the location of Excess Flow Valves (EFVs) and/or Service Line Shut-Off Valve (SLSVs) for all new services.
- Contractor shall identify the location of the boundary names of any High Consequence Areas (HCAs).

4.16 Contractor shall, in the best interest of Utility, identify cost saving opportunities and identify reductions in scope of Work where applicable.

4.17 Contractor shall prepare drawings in accordance with the latest sections of Operations Manual, or as otherwise directed, including but not limited to, Design Drawings Procedure and As-built Drawings Procedure. Drawing shall be consistent with the latest drawing template as provided by Utility. Examples of completed designs will be provided.

4.18 Contractor shall verify all land base within Project boundaries with a professional land survey/boundary survey. FieldSmart **shall not** be used as a land base resource. Design drawings shall show current paved street widths and all existing rights-of-way, easements, and parcel dimensions per actual County recorded data. Right-of-way and land base information from Utility as-builts and FieldSmart shall not be construed as the most current information. Assessor map and FieldSmart map mark-ups shall be submitted with design package to provide to Utility's Right-of-Way department. Copies of any relevant right-of-way documentation shall also be included in the submitted package. Contractor resources may include, but shall not be limited to:

- County Assessor maps
- County Assessor web-site

- Subdivision maps
 - Third party recorded property documentation
- 4.19 Contractor shall denote all tax area code boundaries on design drawings. Utility's Tile map may show approximate tax code boundaries, but actual location must be established from entity information.
- 4.20 Contractor shall determine which excavation permits will be required (if any) to perform construction of the Work. Utility will obtain permits such as city and/or county permits using drawings prepared by Contractor in the normal course of Work. Utility may require Contractor to prepare the application and/or any drawing required to obtain State ROW agency permits (ADOT, NDOT, and Caltrans). The need for other permits such as Railroad, Bureau of Land Management, Department of Fish & Game, etc., shall be researched by Contractor and communicated to Utility. Utility's use of Contractor to apply for and obtain non-routine permits shall be determined separate from this Agreement.
- 4.21 Contractor shall provide additional detail drawings as needed for application of city, county, or state (NDOT, ADOT, Caltrans) permits with metric measurements when applicable.
- 4.22 Contractor shall provide additional detail drawings as needed to meet Storm Water and other types of environmental permitting requirements. Contractor may be asked to provide a Storm Water Pollution Prevention Plan (SWPPP) for the Project. Contractor shall coordinate with Clark County Regional Flood Control District to satisfy these requirements.
- 4.23 Contractor shall provide a Registered Professional Land Surveyor or Professional Engineer (within the state which Work is being performed) for signature and approval of all surveying services. Survey data that is acquired for required projects shall be provided to Utility in electronic format (Excel/CSV, AutoCAD, and PDF).
- 4.24 Contractor shall provide an adequate number of qualified personnel for the services to be performed based on a minimum of 48-hour notification of Work from Utility.
- 4.25 Unless otherwise agreed upon by authorized personnel, Contractor shall provide Utility with the completed drawing in a properly projected Geo-Referenced land base utilizing the following GPS coordinate system and shall include three (3) surveyed monuments:

Las Vegas, Boulder City, Laughlin, and Mesquite, Nevada:
Needles, California:
Parker, Ehrenberg and Bullhead City, Arizona:

- System: US State Plane 83
 - Zone: Nevada East 2701
 - Datum: NAD 83 (Conus)
 - Coordinate Units: US Survey Feet
 - Altitude Units: US Survey Feet (altitude being measured from Mean Sea Level)
 - Three points: rotation, location, and scale.
- 4.26 All GNSS/GPS data provided by Contractor shall be post-processed or collected with RTK (real time kinematic). Utility requires that Survey Grade GPS/GNSS units, with sub foot accuracy are used. Contractor shall acquire the most accurate real time differential correction signal via the Wide Area Augmentation System (WAAS). Data provided by Contractor shall use the Utility Standard Schema and file naming convention.
- 4.27 Contractor shall keep all design and cost information confidential from all affiliated entities that may become involved in project constructions (including departments within Contractor's own Utility).
- 4.28 Contractor shall verify city and/or county pavement restoration requirements and show them on the Project design drawings. In addition, Contractor shall include associated costs within the WMS entry estimate. Contractor shall investigate whether city, county, or state projects are planned (e.g. franchise paving) which may be in conflict with existing or proposed gas facilities.
- 4.29 Contractor shall perform Third Party Improvement Plan and Records review as instructed by the Utility.
- Comprehensive preliminary research gathering Utility tiles and as-builts for all existing distribution main, services, and high pressure in the project area.
 - All tiles and as-builts shall be uploaded to Utility shared project folder.
 - Comprehensive review of submittals or other documents in accordance with Utility practices.
 - Contractor shall inform Utility immediately of potential conflicts with the maintenance (e.g. minimum separation requirements) or operation (e.g. depth of cover requirements, relocation) of Utility facilities and/or impacts to the ability for Utility to provide natural gas service to customers.

- 4.30 Contractor shall perform As-Built Reviews and Creation as instructed by the Utility.
- As-builts will be reviewed and created in accordance with the Operations Manual, and as directed by Utility personnel.
 - AutoCAD reference material is to be used in the process.
- 4.31 Contractor shall perform Digital Documentation collection, creation, reviews and correction as instructed by the Utility.
- Digital Documentation will be reviewed and created in accordance with the Operations Manual, and as directed by Utility personnel.
 - GNSS/GPS collected data to be used in the process
 - AutoCAD reference material is to be used in the process.
- 4.32 Contractor shall perform Third Party Plan Assignments as instructed by the Utility.
- Categorizing Third Party Plan Review requests.
 - Assigning Third Party Plan Review requests to the Utility designers.
- 4.33 Contractor shall notify Utility if project material used in the project is non-standard or not available in Utility systems (e.g. WMS).
- 4.34 Contractor shall provide all utility research and approvals if necessary to Utility. Utility research shall include but not be limited to:
- Water, such as but not limited to:
 - City of Henderson (COH)
 - City of North Las Vegas (CNLV)
 - City of Mesquite (COM)
 - Southern Nevada Water Authority (SNWA) with approvals
 - Las Vegas Valley Water District (LVVWD) with approvals
 - Sewer
 - Storm Drain
 - Communications
 - Electrical

5. PROJECT ACCEPTANCE

- 5.1 Contractor shall send e-mail notification to Utility Designate upon completion of a specific Project's initial Work. Contractor may be required to utilize project folder on Utility shared network for documentation sharing.

- 5.2 For intricate design Projects, as specified by Utility, Contractor shall submit a 30%, 60%, 90%, and 100% submittal. Each submittal will be clearly labeled as 30%, 60%, or 90%. Utility Designate will determine on a job-by-job basis if any submittals are not required. Contractor shall provide each submittal in DWG or PDF files. Required information for each submittal includes:
- 30%: Submittal must contain all general information needed on the drawing per Utility requirements (e.g., proposed main type and alignment, footages, scale, MAOP and/or MOP, gas flow arrows, street names, Lot Numbers / APN Numbers, Right-of-Way, Utility drawing templates). Drawing should display approved title block containing Utility Project Engineer, isolation area, Project title and location, entity/permit information, and Utility Property Unit totals. Design survey and identification of visible geographical and potential utility conflicts is required. Utility Designate shall determine if profiles are required.
 - 60%: Submittal must contain accurate profile showing all subsurface utility crossings and other pothole locations with elevations. A hydrostatic profile shall be included, if required. Any comments provided by Utility after 30% submittal shall be addressed on the 60% design drawing. Contractor shall notify Utility Designate of any design or scheduling problems.
 - 90%: Any comments provided by Utility after 60% submittal shall be addressed. On the 90% design drawing Material list, quantities, and strength test information, etc., shall be finalized, where applicable.
 - 100%: All Utility comments have been addressed, and drawings are in a constructible and/or entity submittal state.
- 5.3 Utility will evaluate Contractor performance on a continual basis. Utility will review AutoCAD drawings, legal descriptions and associated exhibits, all other submitted documents and WMS input, Third Party Improvement Plan and Records Review, As-Built Reviews, As-built Drawing Creation, and Digital Documentation collection, creation, and review for the completeness and accuracy of Contractor Work. If Project Work meets Utility standard of quality, Utility Designate will notify Contractor to invoice Utility for Work.
- 5.4 Contractor errors shall be corrected for drawings and/or FOMS input until accepted by Utility Designate. The cost of corrections of Contractor errors will be borne by Contractor. Corrected Work shall be resubmitted to Utility until accepted. Necessary corrections shall be returned to the Utility within two (2) business days, unless otherwise agreed upon with Utility.
- 5.5 Contractor may work on more than one Project at a time; however, individual Project completion must meet or precede any assigned and agreed to 'completion' dates. Utility Supervisor has the right to prioritize

Work when more than one Project has been requested from a single Contractor.

- 5.6 Contractor must bring potential problems and/or delays in Work completion to the attention of Utility Designate immediately. Failure to meet Work completion deadline may result in termination of Agreement and non-inclusion in future Work bid requests.
- 5.7 Contractor must bring any changes in the Scope of Work to the attention of Utility Designate. If a Change Order and/or additional Contractor design time is warranted, Utility Designate will prepare and route necessary paperwork. Any Work requiring Utility approval shall not begin until Contractor receives written authorization from Utility.
- 5.8 Revisions initiated by Utility or Customer to previously completed and approved construction drawings or corrections of Utility errors shall be paid on an hourly rate as specified under this Agreement. Requested design changes shall be returned to the Utility within five (5) business days, unless otherwise agreed upon with Utility. Design changes, Contractor errors discovered after acceptance, or corrections due to Utility errors will be billed at the hourly rate.

6. CONTRACTOR TRAINING AND QUALITY CONTROL

- 6.1 At Contractor's request, Utility will provide up to 40 man-hours (five man-days) of Utility labor to train and assist up to two (2) Contractor personnel on WMS procedures and Utility design and drawing practices. Additional training will be at Contractor's expense.
- 6.2 Contractor shall be responsible for the professional quality, technical accuracy, and coordination of all designs, drawings, specifications, and other services furnished by Contractor under this contract. Contractor shall have a Project Manager who is responsible for reviewing all projects prior to being released to the Utility.
- 6.3 Qualifications and performance of individuals assigned to Projects will have a direct effect on whether Contractor is assigned Work or removed from the Division Operations Services Agreement.
- 6.4 All changes in Contractor personnel assigned to Projects must be approved by Utility Designate prior to billing hours to the Project. New personnel assigned to the Project shall adhere to the existing rate structure for each job description.

- 6.5 Contractor must provide an adequate number of qualified personnel to maintain quality and schedule requirements. Contractor shall provide for persons to be trained for the duration of the Agreement.
- 6.6 Contractor shall warrant Utility's training investment for the term of the Agreement subsequent to Contractor employee's successful completion of the respective training. Should Contractor employee be promoted, transferred or reassigned, or Contractor employee resigns (either voluntarily or involuntarily) prior to the expiration of the Agreement, Contractor shall bear all of the training reimbursement expenses associated with training a suitable replacement. The only exception to this stipulation shall be Contractor employee being hired by Utility as a permanent employee. Any Utility reimbursement relative to the respective training shall be contingent upon Contractor employee's successful completion of all classroom and provisional period (60 days) requirements.
- 6.7 Contractor design and drawing personnel shall work under the direction of Contractor's Professional Engineer (PE) licensed in the states of Arizona, California, and Nevada. Contractor's PE shall be an employee or subcontractor of Contractor and have immediate and direct oversight of Contractor personnel performing Work. Utility may require a letter on Contractor letterhead upon Utility acceptance of each Project. Letter shall be signed and stamped by Contractor's PE and shall state to the best of his/her knowledge Work meets all applicable local, state, federal and Utility Operations Manual guidelines, or as otherwise directed. In lieu of a separate letter for each Project, Utility may accept evidence of continuing employment of PE within Contractor's organization. If PE-stamped drawings are required, Contractor will not charge Utility any additional fees.
- 6.8 Utility will perform thorough quality review of Projects submitted as complete by Contractor. Errors will be noted and communicated to Contractor, then returned for correction. Utility anticipates a learning curve for Contractor personnel and will provide this feedback to Contractor to eliminate future errors. After feedback of Projects, Utility expects errors to decrease to an acceptable level as determined by Utility and reserves the right to terminate Agreement if excessive errors continue.
- 6.9 Errors will be categorized, but not limited to, the following areas:
- Drawing review
 - Engineering design calculations
 - WMS data review
 - AC Address listing
 - WMS AC data review
 - Timeliness
 - Accuracy

- 6.10 Additional items reviewed by Utility under the quality check may be found in the Review Checklist provided by Utility.

7. QUALITY AND PERFORMANCE REQUIREMENTS

- 7.1 The Quality and Performance Requirements outlined below are in addition to the QMS section defined previously in the Service/Construction Agreement. The items in this section are not to supersede the QMS requirements, but are additional items requested by the Utility Project Manager based on the Work to be performed. If at any time, a potential conflict appears between the requirements in the sections of this Agreement, written clarification will be provided to the Contractor by the Utility Project Manager and OQA.

7.2 QC Requirements

- A. A minimum of four (4) QC evaluations will be conducted annually on each Contractor employee performing OQ covered tasks, with no fewer than one (1) QC evaluations per quarter. Utility management may require additional QC inspections to be conducted by the Contractor, as deemed necessary.
- B. Contractor shall report to Utility any unsuccessful rating resulting from a QA/QC evaluation, no later than the next business day. In the event it is determined a qualified individual is unable to demonstrate the requisite knowledge, skills, and ability to perform an OQ covered task, Contractor will notify Utility immediately and suspend the individual until they are approved to return to Work by Utility.
- C. Contractor shall provide a copy of all completed QC evaluations to the Utility Project Manager per the Utility Operations Manual no less than monthly. Contractor shall retain the completed QC evaluation form(s) for a minimum of six (6) years following the later of the termination or expiration date of this Agreement.

7.3 Reporting to Utility:

- A. All KPIs, quality-related metrics, and safety-related metrics requested by the Utility Project Manager shall be submitted on a monthly or quarterly basis, as determined by the Utility Division Office.

8. LOCAL CODES, STANDARDS AND REGULATIONS REQUIREMENTS

- 8.1 In the event that apparently applicable and comparable, but not identical, codes, standards or regulations have been established by more than one municipality, agency or utility, Contractor shall notify Utility in writing. The

governing agency shall provide direction to Utility and Contractor as to which codes, standards or regulations will apply.

9. EXHIBIT AND PRESENTATION MATERIALS

- 9.1 Contractor shall supply exhibit material necessary for preliminary reviews both within Utility and for external presentations. Exhibits may include proposed gas pipeline alignments, existing utilities, assessor's parcel information, existing right-of-way, future proposed public works projects, future proposed land development projects and traffic control plans. Specific requirements shall be determined by the Project scope of work.

10. ENVIRONMENTAL SCOPE AND PRELIMINARY PERMITTING APPROVAL

- 10.1 Contractor shall identify all necessary federal, regional, state, and local permits, approvals, and consultations required for the Project. Based on the requirements of these permitting agencies, Contractor shall provide a full scope of the environmental work required, the cost associated with performing such work, as well as an estimated cost of the environmental mitigation work required pre, during, and post construction of the facilities.
- 10.2 Contractor shall be responsible for identifying all preliminary approvals required from various governmental entities. The objective is to determine permitting requirements, all environmental and permitting costs, and the time needed to perform the environmental work including the acquisition of the permits. Contractor shall be responsible for identifying requirements to ensure compliance with all federal, state, and local regulations.
- 10.3 Contractor shall be responsible for submitting and obtaining any permits requested by Utility.

11. LAND SURVEYING/EASEMENT PREPARATION

- 11.1 Survey and installation of survey stakes for centerline, lot line, property line, running line, including off-set stakes for each of those listed, along an existing or proposed street right-of-way line or property line or defined metes and bounds.
- 11.2 Survey the exact location of new or existing gas facilities as marked by Utility personnel on the ground surface.
- 11.3 Contractor shall be responsible for any and all research, either field or office, to accurately complete the required surveying task.

- 11.4 Contractor shall provide a print out of the closure program to verify accuracy of the metes and bounds used on the easement documentation. An example will be provided.
- 11.5 Contractor must comply with state statute recording requirements when preparing a legal description and other required documents. An example will be provided.
- 11.6 Contractor shall use Utility format and minimum required information when preparing a legal description and easement documentation. An example will be provided.
- 11.7 Survey requirements under this Agreement may include but shall not be limited to:
- Writing easements.
 - Legal descriptions and associated exhibits shall be stamped by a Professional Land Survey (P.L.S.).
 - Researching land/property/title information.
 - Describing property boundaries.
 - Plotting ground profiles.
 - Researching documents and historical records.
 - Preparing drawings.
 - Design Survey
 - Construction Survey
 - As-Built Survey
 - Field Data Collection Survey
- 11.8 Prior to performing on site survey Work, the surveyor(s) must contact Utility Inspector.
- 11.9 In the event Contractor is called out to a site and the Work cannot be performed that day, through no fault of Contractor, Contractor will be paid up to one day as negotiated with Utility allowed under Section 13.

12. INVOICING

- 12.1 Unless otherwise mutually agreed to by the Parties on a project-by-project basis, and pursuant to Section 6.2 above, invoices shall be for completed Work. Partial billings or payments will be allowed for high pressure design work only; invoices for this Work shall be submitted monthly. Invoice shall be only for the specific Projects completed under this project and must note the following information:
- Utility Contract Number

- Invoice Number
- Invoice Submittal Date
- Utility Engineer or Engineering Technician's Name
- Contractor Project Number
- Utility Job Number (WR Number)
- Job Name
- Remit to Address
- Project Footage (by type and size)
- Number of services
- Main abandonment footage total
- Total service footage
- Bid Rate Breakdown for each job classification
- Invoices shall include a thorough description of Work performed by each job classification.
- Other costs billed, if previously authorized by Utility, with running total
- Total billed amount for Project

- 12.2 Contractor shall submit a separate invoice for each individual WR.
- 12.3 As applicable, Utility shall be invoiced at the rate of actual work performed and not solely on classification of personnel performing the work as described in the Contractor Proposal Sheet. Project per foot pricing and other unit costs shall include all labor costs. Contractor shall submit explanation of tasks completed for hourly invoices upon request by Utility.
- 12.4 Contractor shall provide additional support documentation as requested by Utility.
- 12.5 Contractor shall itemize invoices with unit costs and hourly rates, as applicable.
- 12.6 If multiple survey personnel are on site, Contractor shall invoice Utility as a 2-man or 3-man crew upon pre-approval by Utility.
- 12.7 Invoices shall be sent electronically to designated Utility personnel.
- 12.8 Reimbursement for travel time/expenses will not be allowed for any location within the greater metropolitan area of Las Vegas (Las Vegas, North Las Vegas, City of Henderson, etc.). Upon Utility pre-approval, travel may be reimbursed for Work in Boulder City, or areas further away. Travel time will be measured from a central point: the interchange of US-95 and I-15. A maximum time allotment of one hour will be allowed, with pre-approval by Utility.

13. WORK MANAGEMENT SYSTEM (WMS)

- 13.1 Utility reserves the option to request Contractor to utilize Utility's cost estimating software within WMS for each Project.
- 13.2 Contractor shall perform WMS WR input whether or not cost estimating is requested. Contractor WMS minimum expectations include but are not limited to:
- Utilization of the WMS/ FOMS Connections, Asset Manager software per Staff Training and Division procedures.
 - Input of Compatible Units, contract code, material and labor for Design Points.
 - A separate Design Point Span must be used for each tax area code. A tax area may use more than one Design Point.
 - Abandonment information must be on separate Design Point Spans from installation information, identified by pipe type and year.
 - Justification Memo – add retirement information for facilities to be abandoned, e.g., WO#, mo./yr. installed, footage.
 - Voucher Data – input voucher items, e.g., permits, compaction tests, and other items not available as Compatible Units.
 - Comments – note if designed for unit cost or other.
 - Check Units of Property with FOMS Connections.
 - Check material list with Reports in FOMS Connections, printout and verify that all materials required for Work are accounted for. Voucher input will account for items not in the design points.
 - Task Updates – set Status to Completed, "C," on items appropriate tasks in WMS.
- 13.3 For Projects in which Utility has created defaulted information in the WR, Contractor shall not accept this as correct information and shall modify as necessary.
- 13.4 Contractor shall create all necessary ACs for the specific Project in WMS. Utility may provide limited training to Contractor on WMS AC tasks at Contractor's request, as noted below.
- NOTE: Depending upon the size/type of the WR and the number of associated ACs, the Contractor may be instructed to perform all AC design steps with the exception of the actual WMS AC population/creation.
- 13.5 Contractor shall use Microsoft Excel and Word compatible software in conjunction with WMS entry.

- 13.6 Contractor shall include comments within WMS indicating first draft and project completion dates.
- 13.7 Contractor shall attach design drawings in WMS including permitting, construction and shell copies.

14. WMS HARDWARE REQUIREMENTS

- 14.1 When required, Utility will provide Contractor with a copy of the FOMS software along with installation instructions for installation on Contractor's computer hard drives. This will be provided via CD-ROM/DVD or other Utility approved methods.
- 14.2 When required, Contractor shall be responsible for the following:
 - Providing a Trainer/Administrator and backup personnel for each Contractor office. Utility will train the Trainer/Administrator in the use of WMS/Field Smart software. The Trainer/Administrator will train Contractor's employees, support Contractor's computers, and be responsible for updating the software when updates are provided by Utility.
 - Reporting any WMS related problems to the Trainer/ Administrator or designate. If the Trainer/Administrator or designate is unable to correct problem, then the Trainer/ Administrator or designate will call Utility Help Desk.
- 14.3 Contractor shall receive daily Work via an internet or virtual private network (VPN) connection to Utility network or other means as defined by Utility. Field computers, compatible with Utility's Operating Systems may be required for Contractor crews on an as-needed basis.
- 14.4 Contractor shall notify Utility of any discrepancies or errors found in Utility provided data, records, maps, etc., used as an aid in performing the Work. These conditions will be submitted on Form 230, Leakage Maintenance Report (LMR), or electronic equivalent.
- 14.5 When directed by Utility, Contractor shall input data from the forms into FieldSmart Mobile Gas Suite (FSMGS). Contractor shall also initiate a new field generated Work Request (WR). All field generated field documents will be scanned and attached to the appropriate WR.
- 14.6 Utility will be responsible for the following:
 - Training Contractor Trainer/Administrator. Additionally, Utility will assist Contractor Trainer/Administrator with training the initial class of technicians.

- Providing Contractor with a list of release notes describing all changes within an upgrade and, when needed, training to Contractor Trainer/Administrator.
- Providing updates of the WMS/FieldSmart software and electronic maps on a regular basis via a network connection. Contractor will be provided adequate notification of when these updates will be available. It will be Contractor's responsibility to upgrade the software on its computers on or before the date specified by Utility.
- Answering questions and helping correct any problems reported to Utility Help Desk by the Trainer/Administrator or designate.

14.7 In the event Contractor is using WMS and it is inoperable or if additional documentation is required (e.g., SXs, LMRs, and As-Builts), Utility will make available maps, information/documentation, and records of facilities to assist Contractor in the performance of the Work. Contractor shall maintain all such charts and records in a confidential manner.

15. GEOGRAPHIC INFORMATION SYSTEM (GIS)

- 15.1 Contractor may be asked to perform mapping services utilizing ESRI's ArcMap and ArcFM solutions. Contractor may be asked to interpret as-built and use ESRI GIS to process and post information concerning installation, maintenance, and operation of Utility facilities. Contractors shall complete the Work within the timeline established by Utility.
- 15.2 Contractor may be asked to perform field data collection services utilizing the CartoPac application.
- 15.3 Utility shall provide training for standard practices and procedures for mapping services.

16. MISCELLANEOUS

- 16.1 This Statement of Work is intended for the assistance of the Contractor. The inclusion or omission of any information provided in this document cannot be construed to relieve Contractor of any duty or obligation necessary for completion of the Work. Utility assumes no liability for errors or omissions of the information contained herein.
- 16.2 All maps and records shall remain the property of Utility and may not be duplicated or distributed without the prior written approval of Utility. All such original maps and records shall remain on Utility premises.
- 16.3 Utility is not responsible for any lost, damaged or stolen property, either leased or owned, by the Contractor during the performance of Contractor's

duties, either remote or on-site. This includes travel to and from job location(s).

17. DEFINITIONS

- 17.1 As-Built Survey: Survey of newly installed gas facilities which may include surveying exact location of pipe, components, and welds with associated material information.
- 17.2 Utility Errors: Discrepancies or mistakes due to Utility, or customer, provided information related to, but not limited to: material (e.g. footage, descriptions, specifications, call-outs), calculations, dimensioning, administrative (e.g. tile numbers, tax codes, sheet/detail numbering, WMS entries), etc.
- 17.3 Construction Drawings: Drawings provided by Contractor to Utility detailing specifications and location of pipeline and facility installation.
- 17.4 Construction Survey: Survey and installation of survey stakes for centerline, lot line, property line, running line, including off-set stakes for each of those listed, along an existing or proposed street right-of-way line or property line or defined metes and bounds.
- 17.5 Contractor Errors: Any discrepancies or mistakes related to, but not limited to: material (e.g. footage, descriptions, specifications, call-outs), calculations, dimensioning, administrative (e.g. tile numbers, tax codes, drawing sheets/details, WMS entries), etc. Errors also discussed in Section 6 above.
- 17.6 Design Survey: Control Survey [consisting of establishing positions (northing, easting, and elevations) based on good condition and stable monuments], Boundary Surveys (that conform to requirements of county, city, and jurisdictional requirements), and Mapping Surveys (which include collection of points to define features of a physical surface.)
- 17.7 Digital Documentation: The electronic equivalent to the current as-built drawing. The electronic information will be gathered through facility data collection survey
- 17.8 Field Data Collection Survey: The process of gathering electronic data using GNSS to create an electronic record that records pipe type, size, geospatial location, joint types, pipe joining qualifications, landmarks, and other pertinent data through the use of the CartoPac application. The information gathered through the application is sufficient to provide the necessary data to create an electronic drawing.
- 17.9 FOMS: Facilities Operations Management System.

17.10 GNSS: Global Navigation Satellite System

17.11 WMS: Work Management System

17.12 Scope Change/Revisions: Changes requested by Utility that differs from original request or after acceptance of project deliverable.

17.13 Subsurface utility locating: collection and depiction of existing subsurface utility data which should conform to ASCE CI 38-02. Note: All high pressure utility crossings shall have precise horizontal and vertical location obtained by actual exposure of the utility crossing and subsequent measurement of the utilities.

18. ANNUAL PRICE ADJUSTMENT

18.1 For the duration of this Agreement, on the anniversary of each year, the pricing set forth in Contractor's proposal sheet, as amended from time to time, shall be subject to an annual price adjustment based upon the most recent *December* Consumer Price Index. The base for computing the adjustment will be the Consumer Price Index – All Urban, All Items (CPI) as published by the Bureau of Labor Statistics of the United States Department of Labor, using 1982-1984 as the base period. If the 1982-1984 base period shall no longer be used as an index, the revised base period and index established by the United States Bureau of Labor Statistics shall be utilized to calculate all rate adjustments. If the index is discontinued during the term of the Agreement, such other government index or computation with which it is replaced shall be used in order to obtain substantially the same result as would be obtained if the index had not been discontinued.



**SOUTHWEST GAS CORPORATION & GREAT BASIN GAS
TRANSMISSION COMPANY (Company) Department of Transportation
(DOT) Anti-Drug & Alcohol Misuse Prevention (D&A) Requirements**

For prospective contractors who are currently in a DOT, Pipeline and Hazardous Materials Safety Administration (PHMSA) D&A program, the Company requires the following information to verify compliance of said program. For prospective contractors who are not already in a PHMSA D&A program, a list of the required information begins on page two (2).

If prospective contractor is currently in a PHMSA D&A Program:

1. Contractor must provide a copy of their PHMSA D&A Plan that complies with current DOT 49 CFR Parts 199 and 40. An electronic version of the plans is preferable.
2. Contractor must provide a blank copy of its Federal D&A Testing Custody and Control Form.
3. Contractor must provide copies of Reasonable Cause/Suspicion training records for supervisors that will monitor its employees in the Company's service areas (except for temporary employment agencies). A minimum of two supervisors' training records is required for operators with over 50 employees subject to testing. For operators with 50 or fewer employees subject to testing, only one supervisor training record is required. This training must comply with Part 199.113(c) and 199.241 and shall consist of at least one (1) hour of drug and one (1) hour of alcohol Reasonable Cause/Suspicion substance abuse determinations.
4. Contractor must provide a copy of its last DOT D&A Testing Statistical Report. Contractors must submit subsequent D&A Testing Statistical Reports to the Company upon request, but no less than semi-annually (January-June and July-December periods of each year). These are due thirty (30) days after each period.
5. Contractors must provide a list of its covered employees that are subject to PHMSA D&A random testing. This list must contain the last four digits of their Social Security number or other contractor employee identifier of each covered employee, the date that each employee passed his or her last DOT drug test, and the type of test passed. Contractors must send updated covered employee lists to the Company upon request, but no less than semi-annually, (January-June and July-December periods of each year). These are due thirty (30) days after each period.

6. Contractor must provide a letter certifying that a DOT D&A testing background check was completed on all applicable covered employees pursuant to 49 CFR Part 40.25. Contractors must send updated background check records for subsequent new hires that will perform DOT covered functions to the Company semi-annually, (January-June and July-December periods of each year). These are due thirty (30) days after each period. As an option, the contractor's DOT D&A testing Consortium/Third Party Administrator may send the Company current and future background check records to indicate that each applicable background check was completed and recorded in the time prescribed by 49 CFR Part 40.25. The Company reserves the right to request copies of said records.
7. Contractor must provide initial copies of the records that show that it provided D&A training and educational material to each covered employee. These records may be in the form of an acknowledgment of receipt of the contractor's DOT D&A plan and D&A educational material. Contractors need not send future copies of said acknowledgments unless requested.

If prospective contractor is not currently in a PHMSA D&A Program:

1. Prospective contractors must implement a D&A testing program in accordance with the PHMSA and DOT D&A testing requirements of 49 CFR Parts 199 and 40 and provide a copy of said plan to the Company. An electronic version of the plans is preferable.
2. Contractor must provide a copy of its Federal D&A Testing Custody and Control Form.
3. Contractors with over 50 employees subject to testing must train a minimum of two (2) supervisors in Reasonable Cause/Suspicion of substance abuse. Contractors with 50 or fewer employees subject to testing must train a minimum of one (1) supervisor in Reasonable Cause/Suspicion of substance abuse. Training must be in compliance with Part 199.113(c) and 199.241. This training must consist of at least one (1) hour of drug and one (1) hour of alcohol (minimum two (2) hours total) Reasonable Cause/Suspicion determinations. Those supervisors must observe and monitor their employees in the Company's service areas (except for temporary employment agencies). Contractor must provide a copy of the initial Supervisor training to the Company.
4. Contractor must train and provide D&A educational material to its covered employees pursuant to Part 199.113(b) and 199.239. Contractors must obtain written acknowledgment from covered employees that each has received a copy of the contractor's PHMSA D&A plan and associated DOT D&A training and educational material. Contractors must provide a copy of the initial acknowledgment and training records for each covered employee. Contractors do not need to provide future acknowledgment and training records unless specifically requested.

5. Contractor must provide copies of all future PHMSA D&A Testing Statistical Reports to the Company upon request, but no less than semi-annually (January-June and July-December periods of each year). These are due thirty days after each period.
6. Contractors must provide a list of its covered employees that are subject to DOT/PHMSA D&A random testing. This list must contain the last four digits of their Social Security number or other contractor employee identifier of each covered employee, the date that each employee passed his or her last DOT/PHMSA drug test, and the type of test passed. Contractors must provide updated covered employee lists to the Company semi-annually, (January-June and July-December periods of each year). Lists of contractors covered employees are due thirty (30) days after each period.
7. In conformance with CFR 49 Part 40.25, contractors who do not already have a qualified DOT PHMSA D&A Testing Program must perform a DOT D&A testing background check for each new hire after the beginning of said program and before covered employees may perform covered functions for the Company. Contractor must submit copies of all employee-signed and completed DOT D&A background checks for new hires for covered positions before the Company will consider the contractor eligible. After the contractor provides copies of its initial employee D&A background check records and the Company approves the contractor's D&A program, then the contractor need only provide copies of future D&A testing background checks upon special request by the Company.

The Company prefers electronic copies of the above information attached to an email. Contractors or their D&A testing Consortiums/Third Party Administrators may submit the information as electronic or hard copy to the address below. Please direct the above information and/or questions related to the Company's D&A Contractor Monitoring Procedures to:

Alyse Baker
Administrator/Compliance/LVD-581
Southwest Gas Corporation
8360 S Durango Drive
Las Vegas, NV 89113
Office: (702) 364-3272
Cell: (702) 528-7719
Alyse.Baker@swgas.com

COVERED TASK LIST

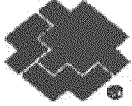
SOUTHWEST GAS CORPORATION

Covered Task List

Project Name:		Division Operations Services				
Location (City / State):		Las Vegas, Nevada				
Company Name:						
Work Order Number:						
Work Request Number:						
Southwest Gas Covered Task List						
Task Number	 Covered Task	Is this covered task required to be performed on this project?		Ops Manual Cross Reference	Code Reference	Responsible Group
		Yes	No			
1	Pipe Inspection - Examining exposed steel pipe for external and internal corrosion and determining extent of corrosion			Corrosion Control Procedures Section I. Inspections	192.459 192.475	GOSS
2	Application of coating or wrap for below ground facilities			Corrosion Control Procedures Section I. Tape Coating	192.461 192.483	GOSS
3	Inspecting above ground facilities for Atmospheric Corrosion			Corrosion Control Procedures Section I. Inspections	192.479	GOSS
4	Application of coating for above ground facilities. (MSA Primer & Paint)			Corrosion Control Procedures Section I. Paint Applications Meters Procedures - Primer and Paint Applications	192.479	GOSS
5	Connecting an anode to a riser			Corrosion Control Procedures Section I. Anodes	192.463	GOSS
6	Installing test lead connection - Thermit welding			Corrosion Control Procedures Section I. Conductor Attachment	192.471	GOSS
7	Installing test lead connection Thermit welding - automatic			Corrosion Control Procedures Section I. Conductor Attachment		GOSS
8	Installing test lead connection Brazing and Silver Solder			Corrosion Control Procedures Section I. Conductor Attachment	192.471	GOSS
9	Pipe to soil reads			Corrosion Control Procedures Section I. Inspections	192.465	GOSS
10	Interference bond testing			Corrosion Control Procedures Section II C.P.	192.465	ENG STAFF
11	Locating shorts			Corrosion Control Procedures Section II C.P.	192.467	ENG STAFF
12	Testing insulators			Corrosion Control Procedures Section II C.P.	192.467	ENG STAFF
13	Close interval testing			Corrosion Control Procedures Section II C.P.	192.463	ENG STAFF
14	Rectifier testing			Corrosion Control Procedures Section II C.P.	192.465	ENG STAFF
15	Testing for interference			Corrosion Control Procedures Section II C.P.	192.473	ENG STAFF
16	100 Millivolt polarization testing			Corrosion Control Procedures Section II C.P.	192.463	ENG STAFF
17	Soil Resistivity			Corrosion Control Procedures Section II C.P.	192.453	ENG STAFF
18	Soil resistivity - Collins Rod			Corrosion Control Tools and Equipment		ENG STAFF
19	Testing requirements and methods for testing pipeline facilities			Pipe & Component Testing Procedure	192.503	GOSS
20	Locating Facilities - Procedures and Equipment			Line Locating Procedure Line Locating	192.614	GOSS
21	Repair of imperfections or damage to Plastic and Steel Pipe (Non-Welder)			Pipe Joining (Plastic) Procedure P.E. Repair Steel Welding - Procedure Repairs	192.311	GOSS
22	Squeezing Plastic Pipe			Pipe Joining (Plastic) Procedure P.E. Repair	192.311	GOSS
23	Squeezing Steel Pipe			Steel Welding - Procedure Repairs	192.605	GOSS
24	Backfill (Bedding & Shading)	x		Main & Service installation Requirements Procedure	192.319 192.361	GOSS
25	Arc burn repairs			Steel Welding - Procedure Repairs	192.309	GOSS
26	Dent repairs			Steel Welding - Procedure Repairs	192.309	GOSS
27	Inspection of materials (Welding Steel Pipe)			Steel (Welding) - Procedure	192.307	GOSS
28	Leak Repairs - Steel below 40% SMYS			Steel Welding - Procedure Repairs	192.715 192.717	GOSS
29	Tapping, stopping, and completion procedures and equipment, up to 4 inch			Pressure Control Procedure Section 1	192.627	GOSS
30	Tapping, stopping, and completion procedures for above 4 inches			Pressure Control Procedure Section 1	192.627	GOSS
31	Construction Purging and preventing accidental ignition			Purging Procedure Section 1	192.629 192.751	GOSS
32	Customer Service Purging and Preventing Accidental Ignition			Purging Procedure Section 1	192.629 192.751	GOSS

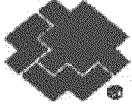
SOUTHWEST GAS CORPORATION

Covered Task List

Project Name:		Division Operations Services				
Location (City / State):		Las Vegas, Nevada				
Company Name:						
Work Order Number:						
Work Request Number:						
Southwest Gas Covered Task List						
Task Number	 Covered Task	Is this covered task required to be performed on this project?		Ops Manual Cross Reference	Code Reference	Responsible Group
		Yes	No			
33	Patrolling (distribution and/or transmission)			Patrolling Procedure Section 1	192.613 192.705 192.721	GOSS
34	Line Marker Placement			Patrolling Procedure Section 2	192.707	GOSS
35	Leak Survey			Leakage Procedure	192.706 192.723	GOSS
36	Leak Investigation			Leakage Investigation	192.706 192.723	GOSS
37	Repair methods for imperfections or damage at or above 40% SMYS			Steel Welding - Procedure Repairs	192.713	GOSS
38	Inspect and test, pressure limiting regulator stations.			Pressure Regulation Procedure Section 1	192.739	ENG STAFF
39	Inspect and test pressure relief devices.			Pressure Regulation Procedure Section 1	192.739	ENG STAFF
40	Monitor Telemetering and/or pressure recording devices.			Mechanical pressure/temperature recorders procedure section I	192.605	ENG STAFF
41	Retrieval and Analysis of Pressure Recording Data			Pressure monitoring/recording procedure section II	192.741	ENG STAFF
42	Disconnecting an abandoned pipeline from all sources.			Abandonment Procedure Section1	192.727	GOSS
43	Vault Maintenance			Pressure Regulation Procedure Station Inspections	192.749	GOSS
44	Odorant Checks & Equipment			Odorization Procedure - Testing	192.625	GOSS/ENG STAFF
45	Heat Fusion; Electro Fusion; Solvent Cement; Mechanical Fittings; Inspection of Joints			Pipe Joining Plastic Procedure	192.273 192.281 192.283 192.285	GOSS
46	Visual Inspection of Plastic Joints			Pipe Joining Qualification Procedure	192.287	GOSS
47	SMAW - Cellulose			General Code Requirements Operations and Maintenance Requirements	192.225 192.227	GOSS
48	SMAW - Lo/Hydrogen			General Code Requirements Operations and Maintenance Requirements	192.225 192.227	GOSS
49	GMAW			General Code Requirements Operations and Maintenance Requirements	192.225 192.227	GOSS
50	Visual Inspection of Welds			Pipe Joining Qualification Procedure	192.241	GOSS
51	Inspecting and testing remote control shutdown devices			Compressure Station Inspection & Testing of Relief Devices	192.731	ENG STAFF
52	Starting, operating and shutting down gas compressor units			Compressure Stations Starting, Operating & Shut Down	192.605	ENG STAFF
53	Soap Testing Facilities			Pipe & Component Testing Procedure	192.503	GOSS
54	Maintaining Gas Detection & Alarm Systems			Compressure Station Maintenance	192.736	ENG STAFF
55	Mueller Stopcock Changer			Tools and Equipment Section 1	192.627	GOSS
56	Emergency Response	x		Emergency Plan Manual	192.615	GOSS
57	Underground Valve Operation			Valves Procedure	192.745	GOSS
58	Underground Valve Maintenance			Valves Procedure	192.745	GOSS
59	Underground Valve Installation			Valves Procedure	192.745	GOSS
60	Above Ground Valve Operation (stopcocks)	x		Valves Procedure	192.745	GOSS
61	Damage Prevention During Excavation	x		Trained on approved procedure as specified by acceptable standard.	192.915	GOSS
62	AOR -Abnormal Operations and response				192.803	ENG STAFF
63	SCADA Monitoring				192.631	ENG STAFF
64	SCADA Operating				192.631	ENG STAFF

SOUTHWEST GAS CORPORATION

Covered Task List

Project Name:		Division Operations Services				
Location (City / State):		Las Vegas, Nevada				
Company Name:						
Work Order Number:						
Work Request Number:						
Southwest Gas Covered Task List						
Task Number	 Covered Task	Is this covered task required to be performed on this project?		Ops Manual Cross Reference	Code Reference	Responsible Group
		Yes	No			
65	SCADA Shut Down				192.631	ENG STAFF
66	SCADA Starting				192.631	ENG STAFF
67	LNG Start operate and shutdown compressor units				192.605	ENG STAFF
68	CNG - High Pressure Gas Tube Operation				192.605	ENG STAFF
69	CNG - High Pressure Gas Tube Operation				192.605	ENG STAFF
70	CNG - Connection to and set up of the vaporizer/regulator trailers				192.605	ENG STAFF
71	CNG - Remote Monitoring of CNG Station Operating Pressures				192.605	ENG STAFF
72	NDT - Ultrasonic Testing			Steel Welding Procedure	192.243	ENG STAFF
73	PBV Valve Repair Procedure				192.605	ENG STAFF
74	Steel Pipe Flaw Measurement				192.605	ENG STAFF
75	HCA Indetified Site/ Data Collection OQ				192.605	ENG STAFF
76	Digital Ultrasonic Thickness Testing			Steel Welding Procedure	192.243	GOSS
77	Radiographic Testing			Steel Welding Procedure	192.243	GOSS
78	Magnetic Particle Testing			Steel Welding Procedure	192.243	GOSS
79	Dye Penetrant Testing			Steel Welding Procedure	192.243	GOSS
NON - OPERATOR QUALIFICATION COVERED TASKS (TRIMP) - These covered tasks may not pass the four part test, but are required under 192.915 are identified for administrative purposes only.						
	Select Integrity Management Inspection/ Assessment Method for Pipeline Segment				192.915	
	Confirmatory Direct Assessment CDA B31.8S Appendix B				192.915	
	* External Corrosion Direct Assessment ECDA NACE RP0205				192.915	
	Internal Corrosion Direct Assessment ICDA NACE RP0104				192.915	
	* Stress Corrosion Cracking Direct Assessment SCCDA - RP0204				192.915	
	Inline Inspection Data Analysis ASNT ILI PQ				192.915	
	Evaluation Assessment Results and Make Remediation/ Mitigation Decisions PQ Part 9				192.915	
	Conduct Inline Inspection API 1163				192.915	
	Indirect Inspection Techniques				192.915	
	Direct Examination Techniques				192.915	

PROPOSAL

**SOUTHWEST GAS CORPORATION
SOUTHERN NEVADA DIVISION**

**Division Operations Services (DOS)
2023-2026 CONTRACT**

2.9%

REVISED CPI INCREASE PROPOSAL SHEETS EFFECTIVE MAY 1, 2025

1. GENERAL MAIN AND SERVICE DESIGN PRICE

Pricing is per foot installed or abandoned for design and drafting. Pricing includes all labor, equipment, materials, etc. necessary to perform these services. Design survey is required by the Contractor if land base is not provided by the Company. The project shall be completed (FOMS entry and design drawings) within thirty business days regardless of the size of project, unless otherwise agreed upon in writing by Company and Contractor. Requested design changes or necessary corrections shall be returned to Company within five working days without exception. Billing rate will be based on main footage only unless mutually agreed upon.

A.LARGE Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 5,000 feet or greater in length.

Main Installation (LARGE, land base provided)	\$ <input type="text" value="\$1.70"/> /FT
Main Installation (LARGE, survey required)	\$ <input type="text" value="\$1.86"/> /FT
Main Replacement (LARGE, land base provided)	\$ <input type="text" value="\$1.65"/> /FT
Main Replacement (LARGE, survey required)	\$ <input type="text" value="\$2.18"/> /FT
Main Abandonment (LARGE, land base provided)	\$ <input type="text" value="\$0.42"/> /FT
Main Abandonment (LARGE, survey required)	\$ <input type="text" value="\$0.94"/> /FT

B.MEDIUM Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 1,000 feet or greater in length, but less than 5,000 feet in length.

Main Installation (MEDIUM, land base provided)	\$ <input type="text" value="\$2.28"/> /FT
Main Installation (MEDIUM, survey required)	\$ <input type="text" value="\$2.72"/> /FT
Main Replacement (MEDIUM, land base provided)	\$ <input type="text" value="\$2.28"/> /FT
Main Replacement (MEDIUM, survey required)	\$ <input type="text" value="\$2.92"/> /FT
Main Abandonment (MEDIUM, land base provided)	\$ <input type="text" value="\$1.22"/> /FT
Main Abandonment (MEDIUM, survey required)	\$ <input type="text" value="\$1.97"/> /FT

C.SMALL Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main less than 1,000 feet in length including but not limited to short segments of distribution pipe, which may not be geologically contiguous.

Main Installation (SMALL, land base provided)	\$ <input type="text" value="\$3.41"/> /FT
Main Installation (SMALL, survey required)	\$ <input type="text" value="\$3.83"/> /FT
Main Replacement (SMALL, land base provided)	\$ <input type="text" value="\$3.19"/> /FT
Main Replacement (SMALL, survey required)	\$ <input type="text" value="\$4.26"/> /FT
Main Abandonment (SMALL, land base provided)	\$ <input type="text" value="\$2.13"/> /FT

Main Abandonment (SMALL, survey required) \$ **\$3.09**/FT

2. GENERAL AS-BUILT CREATION PRICE

Pricing is per foot installed or abandoned for As-Built designs and drawings. Pricing includes all labor, equipment, materials, etc. necessary to perform these services. The project shall be completed (As-Built drawings and FOMS entry) within ten (10) business days regardless of the size of project, unless otherwise agreed upon in writing by Company and Contractor. Requested As-Built changes or necessary corrections shall be returned to Company within three (3) business days without exception. Billing rate will be based on main footage only unless mutually agreed upon.

D.LARGE Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 5,000 feet or greater in length.

Main Installation (LARGE) \$ **\$0.64**/FT

Main Replacement (LARGE) \$ **\$0.85**/FT

Main Abandonment (LARGE) \$ **\$0.54**/FT

E.MEDIUM Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 1,000 feet or greater in length, but less than 5,000 feet in length.

Main Installation (MEDIUM) \$ **\$1.17**/FT

Main Replacement (MEDIUM) \$ **\$1.33**/FT

Main Abandonment (MEDIUM) \$ **\$0.64**/FT

F.SMALL Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main less than 1,000 feet in length including but not limited to short segments of distribution pipe, which may not be geologically contiguous.

Main Installation (SMALL) \$ **\$1.49**/FT

Main Replacement (SMALL) \$ **\$1.70**/FT

Main Abandonment (SMALL) \$ **\$1.06**/FT

3. OTHER MISCELLANEOUS INFRASTRUCTURE PROJECTS

For other miscellaneous projects not referenced above, pricing shall be at a rate mutually agreed upon in advance by the parties based on the hourly rates in Section 4 of this proposal sheet.

4.MISCELLANEOUS WORK REQUIRED

Unit price for certifying one easement legal description\$ /EA \$ **\$351.12**/EA

Unit price for certifying one easement exhibit drawing \$ /EA \$ **\$425.59**/EA

Unit price for preparing one exhibit/permit drawing \$ **\$505.39**/EA

Unit price for Field Survey (Data Acquisition) \$ **\$157.47**/HR 2-Man Survey Crew

Unit price for Field Data Collection Survey \$ **\$69.16**/HR 1-Person Team

5. GENERAL AS-BUILT REVIEW PRICE

Pricing is per foot installed or abandoned for As-Built reviews. Pricing includes all labor, equipment, materials, etc. necessary to perform these services. The project shall be completed (As-Built reviews and FOMS entry) within three (3) business days regardless of the size of project, unless otherwise agreed upon in writing by Company and Contractor. Requested As-Built changes or necessary corrections shall be returned to Company within three (3) business days without exception. Billing rate will be based on main footage only unless mutually agreed upon.

G.LARGE Project. Pricing shall include such work as installation, replacement and/or abandonment of existing main 5,000 feet or greater in length.

Main Installation (LARGE)	\$	\$0.32	/FT
Main Replacement (LARGE)	\$	\$0.42	/FT
Main Abandonment (LARGE)	\$	\$0.27	/FT

H.MEDIUM Project. Pricing shall include such work as installation, replacement and/or abandonment of existing main 1,000 feet or greater in length, but less than 5,000 feet in length.

Main Installation (MEDIUM)	\$	\$0.48	/FT
Main Replacement (MEDIUM)	\$	\$0.64	/FT
Main Abandonment (MEDIUM)	\$	\$0.42	/FT

I.SMALL Project. Pricing shall include such work as installation, replacement and/or abandonment of existing main less than 1,000 feet in length including but not limited to short segments of distribution pipe, which may not be geologically contiguous.

Main Installation (SMALL)	\$	\$0.42	/FT
Main Replacement (SMALL)	\$	\$0.48	/FT
Main Abandonment (SMALL)	\$	\$0.42	/FT

6. OTHER MISCELLANEOUS AS BUILT REVIEW PROJECTS

For other miscellaneous projects not referenced above, pricing shall be at a rate mutually agreed upon in advance by the parties based on the hourly rates in Section 7 of this proposal sheet.

7. MISCELLANEOUS WORK REQUIRED

Unit price for initial review of Service Installations,AcS	\$	\$85.12	/HR
Unit price for review of High Pressure/Transmission Steel	\$	\$85.12	/HR
Unit price for review of Distribution Steel	\$	\$85.12	/HR

8. HOURLY RATES

Contractor is to provide a copy of job classifications for all personnel who could bill time to the Work. The following basic position descriptions are provided. Hourly rates should include these positions, as a minimum. All rates billed by Contractor must be straight time only.

A. Project Manager - Engineering

- Coordinate communications concerning management of the project with Company representative.
- Coordinate all activities for which his/her firm has been contracted to perform.
- Provide Company with timely reports concerning the project of work completed, the timing of future work, and the costs associated with each.

\$ **\$118.10** /HR

B. Project Manager– Field & Office Operations

- Has full responsibility and accountability for a project or projects
- Monitors the progress of all received projects
- Provides and maintains reports on a regular basis to management
- Other duties as assigned from Division point of contact (Supervision/Management)
- Coordinates with other departments both internal and external on a regular and professional basis

\$ **\$93.63** /HR

C. Project Engineer

- Field Activity Involvement (Field walks/site visits, Data collection, On-site approval of engineering and design detail of a project)
- Control assessments and reports.
- Direct environmental studies if it is within the scope of the contract.

\$ **\$93.63** /HR

D. Project Coordinator

- Completes all copying, scanning, and attaching of project field work
- Transcribe and maintain all project daily summaries
- Maintains lists of project employees
- Schedules and attends meetings
- Assist in development and implementation of new package flow procedures
- Coordinates with other departments both internal and external on a regular and professional basis

\$ **\$58.52** /HR

E. Coordinator

- Manage, track and analyze projects and report to management
- Submit to Entities for Permitting
- Manage and coordinate permit renewals and related issues
- Maintain/update files & folders for projects
- Track, update, and maintain cut sheet packages and related information
- Monitor and follow up on the completion of all tasks
- Coordinates with other departments both internal and external on a regular and professional basis

\$ **\$69.16** /HR

F. Engineer/Designer

- Prepare and verify the proper procedures, specifications, and accuracy of the design components that Contractor is responsible for.
- Perform research and analyze data from the field for environmental and/or archaeological studies, prepare the reports and study results.
- Determine and verify the appropriate regulatory compliance and procedures that apply to a specific project.
- Review drawings and reports.
- PE Stamp designs.
- Third Party Improvement Plan and Records Review (excluding vacation requests) completed for the Franchise group.
- As-built drawing creation.
- FOMS Entries.

\$ **\$85.12** /HR

G. Draftsman

- Prepare construction drawings.
- Prepare easement exhibits.
- Process information concerning installation and design of facilities.
- Incorporate survey data into a design drawing.
- Third Party Improvement Plan and Records Review (excluding vacation requests) completed for the New Business group.

\$ **\$69.16** /HR

H. Analyst

- Records Research
- Utility Research
- Compile and send weekly summaries of projects
- Manage and track projects and reports
- Assist in development and implementation of new procedures
- Pick up/Drop off permits
- Field Walks
- Coordinates with other departments both internal and external on a regular and professional basis

\$ **\$58.52** /HR

I. Clerical II

- Data Entry
- Compile and send weekly project summaries
- Help Develop and implement new as-built flow procedures
- Other duties as assigned up to and including Clerical I duties
- Coordinates with other departments both internal and external on a regular and professional basis

\$ **\$51.07** /HR

J. Clerical I

- Data Entry
- General secretarial services as required
- Spreadsheet Tracking and Maintenance
- Filing
- Technical Support
- Quality Assurance
- Vacation Requests
- Attend Meetings
- Create payment authorizations
- Pick up/Drop off permits
- Coordinates with other departments both internal and external on a regular and professional basis

\$ **\$44.69** /HR

K. GIS Specialist

- Use ESRI GIS system to process and post information concerning installation, maintenance, and operation of Company facilities.
- Records and GIS data research
- Interpret facility design and construction drawings.
- Use PaperVision Capture and PaperVision Enterprise to scan and subsequently use to store and retrieve as-built records using Company policy and procedures and indexing standards.

\$ **\$63.84** /HR

Blair, Church & Flynn Consulting Engineers, Inc. (BC&F)
Company:

**SOUTHWEST GAS CORPORATION
SOUTHERN NEVADA DIVISION**

**Division Operations Services (DOS)
2023-2026 CONTRACT**

3.49%

REVISED CPI INCREASE PROPOSAL SHEETS EFFECTIVE MAY 1, 2024

1. GENERAL MAIN AND SERVICE DESIGN PRICE

Pricing is per foot installed or abandoned for design and drafting. Pricing includes all labor, equipment, materials, etc. necessary to perform these services. Design survey is required by the Contractor if land base is not provided by the Company. The project shall be completed (FOMS entry and design drawings) within thirty business days regardless of the size of project, unless otherwise agreed upon in writing by Company and Contractor. Requested design changes or necessary corrections shall be returned to Company within five working days without exception. Billing rate will be based on main footage only unless mutually agreed upon.

A.LARGE Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 5,000 feet or greater in length.

Main Installation (LARGE, land base provided)	\$ <input type="text" value="\$1.65"/> /FT
Main Installation (LARGE, survey required)	\$ <input type="text" value="\$1.81"/> /FT
Main Replacement (LARGE, land base provided)	\$ <input type="text" value="\$1.60"/> /FT
Main Replacement (LARGE, survey required)	\$ <input type="text" value="\$2.12"/> /FT
Main Abandonment (LARGE, land base provided)	\$ <input type="text" value="\$0.41"/> /FT
Main Abandonment (LARGE, survey required)	\$ <input type="text" value="\$0.91"/> /FT

B.MEDIUM Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 1,000 feet or greater in length, but less than 5,000 feet in length.

Main Installation (MEDIUM, land base provided)	\$ <input type="text" value="\$2.22"/> /FT
Main Installation (MEDIUM, survey required)	\$ <input type="text" value="\$2.64"/> /FT
Main Replacement (MEDIUM, land base provided)	\$ <input type="text" value="\$2.22"/> /FT
Main Replacement (MEDIUM, survey required)	\$ <input type="text" value="\$2.84"/> /FT
Main Abandonment (MEDIUM, land base provided)	\$ <input type="text" value="\$1.19"/> /FT
Main Abandonment (MEDIUM, survey required)	\$ <input type="text" value="\$1.91"/> /FT

C.SMALL Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main less than 1,000 feet in length including but not limited to short segments of distribution pipe, which may not be geologically contiguous.

Main Installation (SMALL, land base provided)	\$ <input type="text" value="\$3.31"/> /FT
Main Installation (SMALL, survey required)	\$ <input type="text" value="\$3.72"/> /FT
Main Replacement (SMALL, land base provided)	\$ <input type="text" value="\$3.10"/> /FT
Main Replacement (SMALL, survey required)	\$ <input type="text" value="\$4.14"/> /FT
Main Abandonment (SMALL, land base provided)	\$ <input type="text" value="\$2.07"/> /FT

Main Abandonment (SMALL, survey required) \$ **\$3.00**/FT

2. GENERAL AS-BUILT CREATION PRICE

Pricing is per foot installed or abandoned for As-Built designs and drawings. Pricing includes all labor, equipment, materials, etc. necessary to perform these services. The project shall be completed (As-Built drawings and FOMS entry) within ten (10) business days regardless of the size of project, unless otherwise agreed upon in writing by Company and Contractor. Requested As-Built changes or necessary corrections shall be returned to Company within three (3) business days without exception. Billing rate will be based on main footage only unless mutually agreed upon.

D.LARGE Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 5,000 feet or greater in length.

Main Installation (LARGE) \$ **\$0.62**/FT

Main Replacement (LARGE) \$ **\$0.83**/FT

Main Abandonment (LARGE) \$ **\$0.52**/FT

E.MEDIUM Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 1,000 feet or greater in length, but less than 5,000 feet in length.

Main Installation (MEDIUM) \$ **\$1.14**/FT

Main Replacement (MEDIUM) \$ **\$1.29**/FT

Main Abandonment (MEDIUM) \$ **\$0.62**/FT

F.SMALL Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main less than 1,000 feet in length including but not limited to short segments of distribution pipe, which may not be geologically contiguous.

Main Installation (SMALL) \$ **\$1.45**/FT

Main Replacement (SMALL) \$ **\$1.65**/FT

Main Abandonment (SMALL) \$ **\$1.03**/FT

3. OTHER MISCELLANEOUS INFRASTRUCTURE PROJECTS

For other miscellaneous projects not referenced above, pricing shall be at a rate mutually agreed upon in advance by the parties based on the hourly rates in Section 4 of this proposal sheet.

4.MISCELLANEOUS WORK REQUIRED

Unit price for certifying one easement legal description\$ /EA \$ **\$341.22**/EA

Unit price for certifying one easement exhibit drawing \$ /EA \$ **\$413.60**/EA

Unit price for preparing one exhibit/permit drawing \$ **\$491.15**/EA

Unit price for Field Survey (Data Acquisition) \$ **\$153.03**/HR

\$148/hr is for 2-Man Survey Crew

Unit price for Field Data Collection Survey \$ **\$67.21**/HR

\$65/hr is for 1-Person Team

5. GENERAL AS-BUILT REVIEW PRICE

Pricing is per foot installed or abandoned for As-Built reviews. Pricing includes all labor, equipment, materials, etc. necessary to perform these services. The project shall be completed (As-Built reviews and FOMS entry) within three (3) business days regardless of the size of project, unless otherwise agreed upon in writing by Company and Contractor. Requested As-Built changes or necessary corrections shall be returned to Company within three (3) business days without exception. Billing rate will be based on main footage only unless mutually agreed upon.

G.LARGE Project. Pricing shall include such work as installation, replacement and/or abandonment of existing main 5,000 feet or greater in length.

Main Installation (LARGE)	\$ <input type="text" value="\$0.31"/> /FT
Main Replacement (LARGE)	\$ <input type="text" value="\$0.41"/> /FT
Main Abandonment (LARGE)	\$ <input type="text" value="\$0.26"/> /FT

H.MEDIUM Project. Pricing shall include such work as installation, replacement and/or abandonment of existing main 1,000 feet or greater in length, but less than 5,000 feet in length.

Main Installation (MEDIUM)	\$ <input type="text" value="\$0.47"/> /FT
Main Replacement (MEDIUM)	\$ <input type="text" value="\$0.62"/> /FT
Main Abandonment (MEDIUM)	\$ <input type="text" value="\$0.41"/> /FT

I.SMALL Project. Pricing shall include such work as installation, replacement and/or abandonment of existing main less than 1,000 feet in length including but not limited to short segments of distribution pipe, which may not be geologically contiguous.

Main Installation (SMALL)	\$ <input type="text" value="\$0.41"/> /FT
Main Replacement (SMALL)	\$ <input type="text" value="\$0.47"/> /FT
Main Abandonment (SMALL)	\$ <input type="text" value="\$0.41"/> /FT

6. OTHER MISCELLANEOUS AS BUILT REVIEW PROJECTS

For other miscellaneous projects not referenced above, pricing shall be at a rate mutually agreed upon in advance by the parties based on the hourly rates in Section 7 of this proposal sheet.

7. MISCELLANEOUS WORK REQUIRED

Unit price for initial review of Service Installations,Acs	\$ <input type="text" value="\$82.72"/> /HR
Unit price for review of High Pressure/Transmission Steel	\$ <input type="text" value="\$82.72"/> /HR
Unit price for review of Distribution Steel	\$ <input type="text" value="\$82.72"/> /HR

8. HOURLY RATES

Contractor is to provide a copy of job classifications for all personnel who could bill time to the Work. The following basic position descriptions are provided. Hourly rates should include these positions, as a minimum. All rates billed by Contractor must be straight time only.

A. Project Manager - Engineering

- Coordinate communications concerning management of the project with Company representative.
- Coordinate all activities for which his/her firm has been contracted to perform.
- Provide Company with timely reports concerning the project of work completed, the timing of future work, and the costs associated with

each.

\$ **\$114.77** /HR

B. Project Manager– Field & Office Operations

- Has full responsibility and accountability for a project or projects
- Monitors the progress of all received projects
- Provides and maintains reports on a regular basis to management
- Other duties as assigned from Division point of contact (Supervision/Management)
- Coordinates with other departments both internal and external on a regular and professional basis

\$ **\$90.99** /HR

C. Project Engineer

- Field Activity Involvement (Field walks/site visits, Data collection, On-site approval of engineering and design detail of a project)
- Control assessments and reports.
- Direct environmental studies if it is within the scope of the contract.

\$ **\$90.99** /HR

D. Project Coordinator

- Completes all copying, scanning, and attaching of project field work
- Transcribe and maintain all project daily summaries
- Maintains lists of project employees
- Schedules and attends meetings
- Assist in development and implementation of new package flow procedures
- Coordinates with other departments both internal and external on a regular and professional basis

\$ **\$56.87** /HR

E. Coordinator

- Manage, track and analyze projects and report to management
- Submit to Entities for Permitting
- Manage and coordinate permit renewals and related issues
- Maintain/update files & folders for projects
- Track, update, and maintain cut sheet packages and related information
- Monitor and follow up on the completion of all tasks
- Coordinates with other departments both internal and external on a regular and professional basis

\$ **\$67.21** /HR

F. Engineer/Designer

- Prepare and verify the proper procedures, specifications, and accuracy of the design components that Contractor is responsible for.
- Perform research and analyze data from the field for environmental and/or archaeological studies, prepare the reports and study results.
- Determine and verify the appropriate regulatory compliance and procedures that apply to a specific project.
- Review drawings and reports.
- PE Stamp designs.
- Third Party Improvement Plan and Records Review (excluding vacation requests) completed for the Franchise group.
- As-built drawing creation.
- FOMS Entries.

\$ **\$82.72** /HR

G. Draftsman

- Prepare construction drawings.
- Prepare easement exhibits.
- Process information concerning installation and design of facilities.
- Incorporate survey data into a design drawing.
- Third Party Improvement Plan and Records Review (excluding vacation requests) completed for the New Business group.

\$ **\$67.21**/HR

H. Analyst

- Records Research
- Utility Research
- Compile and send weekly summaries of projects
- Manage and track projects and reports
- Assist in development and implementation of new procedures
- Pick up/Drop off permits
- Field Walks
- Coordinates with other departments both internal and external on a regular and professional basis

\$ **\$56.87**/HR

I. Clerical II

- Data Entry
- Compile and send weekly project summaries
- Help Develop and implement new as-built flow procedures
- Other duties as assigned up to and including Clerical I duties
- Coordinates with other departments both internal and external on a regular and professional basis

\$ **\$49.63**/HR

J. Clerical I

- Data Entry
- General secretarial services as required
- Spreadsheet Tracking and Maintenance
- Filing
- Technical Support
- Quality Assurance
- Vacation Requests
- Attend Meetings
- Create payment authorizations
- Pick up/Drop off permits
- Coordinates with other departments both internal and external on a regular and professional basis

\$ **\$43.43**/HR

K. GIS Specialist

- Use ESRI GIS system to process and post information concerning installation, maintenance, and operation of Company facilities.
- Records and GIS data research
- Interpret facility design and construction drawings.
- Use PaperVision Capture and PaperVision Enterprise to scan and subsequently use to store and retrieve as-built records using Company policy and procedures and indexing standards.

\$ **\$62.04**/HR

Blair, Church & Flynn Consulting Engineers, Inc. (BC&F)
Company:

**SOUTHWEST GAS CORPORATION
SOUTHERN NEVADA DIVISION**

Division Operations Services (DOS)
2023-2026 CONTRACT

CONTRACTOR'S PROPOSAL SHEET

1. GENERAL MAIN AND SERVICE DESIGN PRICE

Pricing is per foot installed or abandoned for design and drafting. Pricing includes all labor, equipment, materials, etc. necessary to perform these services. Design survey is required by the Contractor if land base is not provided by the Company. The project shall be completed (FOMS entry and design drawings) within thirty business days regardless of the size of project, unless otherwise agreed upon in writing by Company and Contractor. Requested design changes or necessary corrections shall be returned to Company within five working days without exception. Billing rate will be based on main footage only unless mutually agreed upon.

A. LARGE Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 5,000 feet or greater in length.

Main Installation (LARGE, land base provided)	\$ <u>1.60</u> /FT
Main Installation (LARGE, survey required)	\$ <u>1.75</u> /FT
Main Replacement (LARGE, land base provided)	\$ <u>1.55</u> /FT
Main Replacement (LARGE, survey required)	\$ <u>2.05</u> /FT
Main Abandonment (LARGE, land base provided)	\$ <u>0.40</u> /FT
Main Abandonment (LARGE, survey required)	\$ <u>0.88</u> /FT

B. MEDIUM Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 1,000 feet or greater in length, but less than 5,000 feet in length.

Main Installation (MEDIUM, land base provided)	\$ <u>2.15</u> /FT
Main Installation (MEDIUM, survey required)	\$ <u>2.55</u> /FT
Main Replacement (MEDIUM, land base provided)	\$ <u>2.15</u> /FT
Main Replacement (MEDIUM, survey required)	\$ <u>2.75</u> /FT
Main Abandonment (MEDIUM, land base provided)	\$ <u>1.15</u> /FT
Main Abandonment (MEDIUM, survey required)	\$ <u>1.85</u> /FT

C. SMALL Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main less than 1,000 feet in length including but not limited to short segments of distribution pipe, which may not be geologically contiguous.

Main Installation (SMALL, land base provided)	\$ <u>3.20</u> /FT
Main Installation (SMALL, survey required)	\$ <u>3.60</u> /FT
Main Replacement (SMALL, land base provided)	\$ <u>3.00</u> /FT
Main Replacement (SMALL, survey required)	\$ <u>4.00</u> /FT
Main Abandonment (SMALL, land base provided)	\$ <u>2.00</u> /FT
Main Abandonment (SMALL, survey required)	\$ <u>2.90</u> /FT

2. GENERAL AS-BUILT CREATION PRICE

Pricing is per foot installed or abandoned for As-Built designs and drawings. Pricing includes all labor, equipment, materials, etc. necessary to perform these services. The project shall be completed (As-Built drawings and FOMS entry) within ten (10) business days regardless of the size of project.

unless otherwise agreed upon in writing by Company and Contractor. Requested As-Built changes or necessary corrections shall be returned to Company within three (3) business days without exception. Billing rate will be based on main footage only unless mutually agreed upon.

D.LARGE Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 5,000 feet or greater in length.

Main Installation (LARGE)	\$	<u>\$0.60 /FT</u>
Main Replacement (LARGE)	\$	<u>\$0.80 /FT</u>
Main Abandonment (LARGE)	\$	<u>\$0.50 /FT</u>

E.MEDIUM Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 1,000 feet or greater in length, but less than 5,000 feet in length.

Main Installation (MEDIUM)	\$	<u>\$1.10 /FT</u>
Main Replacement (MEDIUM)	\$	<u>\$1.25 /FT</u>
Main Abandonment (MEDIUM)	\$	<u>\$0.60 /FT</u>

F.SMALL Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main less than 1,000 feet in length including but not limited to short segments of distribution pipe, which may not be geologically contiguous.

Main Installation (SMALL)	\$	<u>\$1.40 /FT</u>
Main Replacement (SMALL)	\$	<u>\$1.60 /FT</u>
Main Abandonment (SMALL)	\$	<u>\$1.00 /FT</u>

3. OTHER MISCELLANEOUS INFRASTRUCTURE PROJECTS

For other miscellaneous projects not referenced above, pricing shall be at a rate mutually agreed upon in advance by the parties based on the hourly rates in Section 4 of this proposal sheet.

4. MISCELLANEOUS WORK REQUIRED

Unit price for certifying one easement legal description \$ /EA	\$	<u>\$330.00 /EA</u>	
Unit price for certifying one easement exhibit drawing \$ /EA	\$	<u>\$400.00 /EA</u>	
Unit price for preparing one exhibit/permit drawing	\$	<u>\$475.00 /EA</u>	
Unit price for Field Survey (Data Acquisition)	\$	<u>\$148.00 /HR</u>	\$148/hr is for 2-Man Survey Crew
Unit price for Field Data Collection Survey	\$	<u>\$65.00 /HR</u>	\$65/hr is for 3-Person Team

5. GENERAL AS-BUILT REVIEW PRICE

Pricing is per foot installed or abandoned for As-Built reviews. Pricing includes all labor, equipment, materials, etc. necessary to perform these services. The project shall be completed (As-Built reviews and FOMS entry) within three (3) business days regardless of the size of project, unless otherwise agreed upon in writing by Company and Contractor. Requested As-Built changes or necessary corrections shall be returned to Company within three (3) business days without exception. Billing rate will be based on main footage only unless mutually agreed upon.

G.LARGE Project. Pricing shall include such work as installation, replacement and/or abandonment of existing main 5,000 feet or greater in length.

Main Installation (LARGE)	\$	<u>\$0.30 /FT</u>
Main Replacement (LARGE)	\$	<u>\$0.40 /FT</u>

Main Abandonment (LARGE) \$ \$0.25 /FT

H.MEDIUM Project. Pricing shall include such work as installation, replacement and/or abandonment of existing main 1,000 feet or greater in length, but less than 5,000 feet in length.

Main Installation (MEDIUM) \$ \$0.45 /FT

Main Replacement (MEDIUM) \$ \$0.60 /FT

Main Abandonment (MEDIUM) \$ \$0.40 /FT

I.SMALL Project. Pricing shall include such work as installation, replacement and/or abandonment of existing main less than 1,000 feet in length including but not limited to short segments of distribution pipe, which may not be geologically contiguous.

Main Installation (SMALL) \$ \$0.40 /FT

Main Replacement (SMALL) \$ \$0.45 /FT

Main Abandonment (SMALL) \$ \$0.40 /FT

9. OTHER MISCELLANEOUS AS BUILT REVIEW PROJECTS

For other miscellaneous projects not referenced above, pricing shall be at a rate mutually agreed upon in advance by the parties based on the hourly rates in Section 7 of this proposal sheet.

7. MISCELLANEOUS WORK REQUIRED

Unit price for initial review of Service Installations, Acs \$ \$80.00 /HR

Unit price for review of High Pressure/Transmission Steel \$ \$80.00 /HR

Unit price for review of Distribution Steel \$ \$80.00 /HR

8. HOURLY RATES

Contractor is to provide a copy of job classifications for all personnel who could bill time to the Work. The following basic position descriptions are provided. Hourly rates should include these positions, as a minimum. All rates billed by Contractor must be straight time only.

- A. Project Manager - Engineering**
- Coordinate communications concerning management of the project with Company representative.
 - Coordinate all activities for which his/her firm has been contracted to perform.
 - Provide Company with timely reports concerning the project of work completed, the timing of future work, and the costs associated with each.

\$ \$111.00 /HR

- B. Project Manager- Field & Office Operations**
- Has full responsibility and accountability for a project or projects
 - Monitors the progress of all received projects
 - Provides and maintains reports on a regular basis to management
 - Other duties as assigned from Division point of contact (Supervision/Management)
 - Coordinates with other departments both internal and external on a regular and professional basis

\$ \$88.00 /HR

- C. Project Engineer**
- Field Activity Involvement (Field walks/site visits, Data collection, On-site approval of engineering and design detail of a project)
 - Control assessments and reports.
 - Direct environmental studies if it is within the scope of the contract.

\$ \$88.00 /HR

- D. Project Coordinator**
- Completes all copying, scanning, and attaching of project field work
 - Transcribe and maintain all project daily summaries
 - Maintains lists of project employees
 - Schedules and attends meetings

- Assist in development and implementation of new package flow procedures
- Coordinates with other departments both internal and external on a regular and professional basis

\$ \$55.00 /HR

E. Coordinator

- Manage, track and analyze projects and report to management
- Submit to Entities for Permitting
- Manage and coordinate permit renewals and related issues
- Maintain/update files & folders for projects
- Track, update, and maintain cut sheet packages and related information
- Monitor and follow up on the completion of all tasks
- Coordinates with other departments both internal and external on a regular and professional basis

\$ \$65.00 /HR

F. Engineer/Designer

- Prepare and verify the proper procedures, specifications, and accuracy of the design components that Contractor is responsible for.
- Perform research and analyze data from the field for environmental and/or archaeological studies, prepare the reports and study results.
- Determine and verify the appropriate regulatory compliance and procedures that apply to a specific project.
- Review drawings and reports.
- PE Stamp designs.
- Third Party Improvement Plan and Records Review (excluding vacation requests) completed for the Franchise group.
- As-built drawing creation.
- FOMS Entries.

\$ \$80.00 /HR

G. Draftsman

- Prepare construction drawings.
- Prepare easement exhibits.
- Process information concerning installation and design of facilities.
- Incorporate survey data into a design drawing.
- Third Party Improvement Plan and Records Review (excluding vacation requests) completed for the New Business group.

\$ \$65.00 /HR

H. Analyst

- Records Research
- Utility Research
- Compile and send weekly summaries of projects
- Manage and track projects and reports
- Assist in development and implementation of new procedures
- Pick up/Drop off permits
- Field Walks
- Coordinates with other departments both internal and external on a regular and professional basis

\$ \$65.00 /HR

I. Clerical II

- Data Entry
- Compile and send weekly project summaries
- Help Develop and implement new as-built flow procedures
- Other duties as assigned up to and including Clerical I duties
- Coordinates with other departments both internal and external on a regular and professional basis

\$ \$45.00 /HR

J. Clerical I

- Data Entry
- General secretarial services as required
- Spreadsheet Tracking and Maintenance
- Filing
- Technical Support
- Quality Assurance
- Vacation Requests
- Attend Meetings
- Create payment authorizations
- Pick up/Drop off permits
- Coordinates with other departments both internal and external on a

regular and professional basis

\$ 42.00 /HR

K. GIS Specialist

- Use ESRI GIS system to process and post information concerning installation, maintenance, and operation of Company facilities.
- Records and GIS data research
- Interpret facility design and construction drawings.
- Use PaperVision Capture and PaperVision Enterprise to scan and subsequently use to store and retrieve as-built records using Company policy and procedures and indexing standards.

\$ 60.00 /HR

Frank Sen

Print Name:

Signature:

Blair, Church & Flynn Consulting Engineers, Inc. (BC&F)

Company:

4/13/2023

Date:

ADDENDUM

ADDENDUM NO. 1

April 11, 2023

RE: Division Operations Services (DOS)

From: Southwest Gas Corporation
Southern Nevada Division

To: Prospective Bidders

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents. Acknowledge receipt of this Addendum by signing and including it with your proposal. Failure to do so may subject the bidder to disqualification.

This Addendum consists of answers to the following questions received:

1. What is the expected volume of work in the various areas identified in the Statement of Work?

ANSWER: Quantity of workload depends on the needs of the Division and the quality of Contractor's work.

2. The Statement of Work Paragraph 3.8 identifies that Southwest Gas will request potholing work. Paragraph 4.14 states that the Contractor will provide a minimum of two pothole quotes. How will the costs associated with the pothole work be handled?

ANSWER: After potholing is complete, the Contractor will submit an invoice for the cost of the potholes. If using a subcontractor for potholing, the Contractor will include any receipts or invoices from the subcontractor as supporting documentation for the cost of the potholes.

3. The Statement of Work Paragraph 4.13 provides timelines for the Contractor to complete work. The Contractor's Proposal Sheet (1. General Main and Service Design Price), however, identifies a different timeline. Please explain the differences.

ANSWER: The SOW references the timeline for strictly the drawing for the project. The proposal references the timeline for the full design, drawing and survey included.

4. The Statement of Work Paragraph 2.3 states that the Contractor will be responsible for performing a land survey of the project if the land base is not provided by Southwest Gas. When does Southwest Gas typically provide land survey files/information?

ANSWER: Utility may provide land base files for New Business projects where the land base is provided to us by the customer requesting gas service.

5. Would you provide additional information concerning what is needed when performing the Digital Document collection work?

ANSWER: Digital Documentation is the overarching term being used by the Utility for the long-term goal of moving from paper records to electronic records. In order to achieve this goal, the Utility will be moving towards Facility Data Collection

ADDENDUM NO. 1

April 11, 2023

(FDC). FDC is defined as: The process of gathering electronic data using the Global Navigation Satellite System (GNSS) and barcode technology to create an electronic record that records pipe type, size, geospatial location, joint types, pipe joining qualifications, landmarks, and other pertinent data using the CartoPac Software application. The information gathered through the application is sufficient to provide the necessary data to create an electronic drawing.

The data collector would be provided a survey pole that is equipped with a tablet that has the CartoPac software, a GNSS device, a barcode scanner and a laser range finder to perform the work. Training will be provided on the use of the equipment, requirements/best practices for the data collection activities. The data collector would be responsible to coordinate with the point of contact from the Utility and/or the Contractor installing the facilities to collect the data associated with the installation of Utility piping facilities in a prompt manner to reduce downtime. Upon completion of the data collection for a given project, the data collector would be responsible for moving the work from a state of work in progress to where the data is accessible to the Utility's workgroups. This is all done through the CartoPac software solution.

6. The Statement of Work Paragraph 5.4 specifies the turn-around time when making necessary corrections. The Contractor's Proposal Sheet (Items 2 and 5) identifies different turn-around times. Please explain the differences.

ANSWER: Section 5.4 of the Statement of Work refers to the turnaround criteria for designs, whereas items 2 & 5 of the Proposal Sheet refers to the criteria for as-built documents.

7. Section 10 of the Statement of Work concerning Environmental items appears to require the Contractor to provide the scope of the environmental work as well as an estimated cost for the work. How will the costs associated with the Environmental work be handled?

ANSWER: The Contractor will submit an invoice for any costs relating to environmental research, permitting, or work done by the Contractor. The Contractor will include any receipts or invoices from any subcontractors or external entities as supporting documentation for the cost of the environmental work.

8. Section 12 of the Statement of Work concerning invoicing references Section 6.2 in the same agreement. Please explain what this means.

ANSWER: The reference to 6.2 is in regard to the completion of the work which is dependent on the continuing quality of work by the Contractor. If the project is only partially completed and the Contractor is not performing work to Utility standards, they will be paid only for the portion of work completed.

ADDENDUM NO. 1

April 11, 2023

9. On section 1 of the proposal sheet, there are options for land base provided and survey required. Is there an option to create a non-surveyed land base using ROW/parcel maps, and as-builts/utility maps from other utility operators?

ANSWER: Survey will be required for all Contractor generated land base drawings. ROW/parcel maps may be used for preliminary exhibits, but all design drawings must use a landbase generated by survey or provided by the customer.

10. On section 2 of the proposal sheet, will the as-built survey be provided or does that need to be factored into the cost/ft?

ANSWER: As-Built Survey may be requested by the company.

11. Will high pressure design work be estimated using the hourly rates on section 8 of the proposal sheet?

ANSWER: High pressure design work is to be estimated using the hourly rates section. The main and service per foot section of the proposal sheet only applies to distribution designs.

12. For the job classification 'Engineer/Designer', can you please confirm if the person billing out at this rate will need to have their PE based on bullet point 5 ('PE Stamp designs')?

ANSWER: The PE stamp would be at the Engineer/Designer rate but not all engineer/designers require a PE

13. Does Southwest Gas require evidence (as per the D&A Requirements document) of a PHMSA D&A program to be submitted as part of the RFP or just prior to the performance of work?

ANSWER: The D&A plan is required to be approved before any work can start, and before the Contractor can attend any OQ classes that may be required. This can be submitted as part of the RFP or just prior to work but doing this later may delay the start of work. It takes a week or two for Utility to review and approve.

14. Is there a diverse spend requirement or goal associated with this contract (i.e. does a certain percentage of the work we complete for SWG need to be completed by a diverse supplier under this contract)?

ANSWER: There is no diverse spend requirement.

15. Is your team able to provide information related to the anticipate volume of work (i.e. number of projects, LF of main replaced, etc.) and distribution of project types per year? The project types we are referring to are defined in Section 4.12 of the Statement of Work.

ANSWER: No. We are unable to predict the volume of work.

ADDENDUM NO. 1

April 11, 2023

16. When a survey is required/requested, would the survey be performed and billed:

a) at the hourly rate provided under Section 4 of the Contractor's Proposal Sheet?

ANSWER: Yes, for miscellaneous projects.

b) as part of the LF rate provided under Section 1 of the Contractor's Proposal Sheet?

ANSWER: Yes, based upon the project size description given in Section 1

c) under a separate work request agreement?

ANSWER: No.

17. Approximately what percentage of the time will a survey be required?

ANSWER: There is not an approximation available, as we don't know where the future projects will take place.

18. For the "SMALL" project type (i.e. less than 1,000') as defined in the Contractor's proposal sheet, is there a minimum length those projects will be?

ANSWER: No.

19. For the "SMALL" project type (i.e. less than 1,000') as defined in the Contractor's proposal sheet, is your team able to provide what the average length those projects (or is there an average length that we should assume)?

ANSWER: No.

20. For the "LARGE" project type (i.e. more than 5,000') as defined in the Contractor's proposal sheet, is there a maximum length those projects will be?

ANSWER: No.

21. For the "LARGE" project type (i.e. more than 5,000') as defined in the Contractor's proposal sheet, is your team able to provide what the average length those projects (or is there an average length that we should assume)?

ANSWER: We are unable to predict future work.

22. Is your team able to provide a go-by of the construction drawings for the major project types? The project types we are referring to are defined in Section 4.12 of the Statement of Work.

ANSWER: As-Builts will be provided when available.

ADDENDUM NO. 1

April 11, 2023

23. Is your team able to provide a go-by of the as-built drawings?

ANSWER: We cannot answer this question as it is unclear.

24. Regarding the staff augmentation request, what percentage of the time would contractors need to be on-site and in SWG's office (i.e. 100%, 2-days/week, etc.)?

ANSWER: Utility would need Contractor's on-site 2 –5 days per week

25. Under this contract, is there the potential your team will select a contractor for one portion of the contract (i.e. General Main and Service Design) and not another (i.e. Staff Augmentation)?

ANSWER: All the Contractors will be available for all groups to use at their discretion.

26. Statement of Work 1.3 – Do structural and electrical designs require stamping, or only designs pertaining to gas-carrying components?

ANSWER: Currently, only some designs with gas-carrying components require a PE stamp.

27. Statement of Work 2.4 – Are you able to provide the referenced limits?

ANSWER: We are not able to provide the referenced limits.

28. To ensure we are providing the intended per foot unit pricing, could you clarify the level of effort expected for the items referenced in the following sections as they pertain to the General Main and Service Design Price requested, and/or if any of these items should be invoiced on a time and expense basis, instead?

- a) 3.1/4.25 – If AutoCAD files provided by Utility are not Geospatially/Geo-Reference accurate, will a survey be required to accurately locate the project to ensure consistency during construction staking? Or is another procedure anticipated?

ANSWER: Yes, unless land base is provided by developer. All entities must be surveyed for land base.

- b) 4.4 – Scheduled Project meetings with Utility.

ANSWER: Three field meets (30%, 60%, 90%) must be included in the project cost, meetings outside these are to be charged on an hourly basis.

- c) 4.7 – Does acquiring Land Rights records include ordering and reviewing Title Survey documents? Title documents are significantly more expensive to procure.

ANSWER: This will not be involved in the process.

ADDENDUM NO. 1

April 11, 2023

- d) 4.18 – Does Contractor need to verify project boundaries for all projects, including when land base is provided by Utility, or only for projects where land base is not provided by Utility?

ANSWER: Section 4.18 is stating to verify specifically the land base within the project boundaries, not the project boundaries themselves.

- e) 4.20/4.34 – Is the Contractor required to acquire all permits necessary for construction, even those that may not be specifically listed? Are utility requests required when the land base is provided?

ANSWER: This will be specifically requested to be done if needed. Currently, Engineering has many of our construction contractors pull the permits. And utility requests are not typically required when land base is provided.

- f) 4.21/4.22 – Additional detail drawings required from Contractor.

ANSWER: The majority of details will be provided by Utility, however Contractor may be required to create additional details for designs.

- g) 4.28 – Please clarify what these pavement restoration requirements entail in the planset, along with the procedure and requirements for investigating city/county/state projects in the project area.

ANSWER: The pavement restoration requirement will entail, most commonly, construction notes and callouts for RTC repaving standards in the project area. Investigating entity projects will involve going onto the RTC Regional Project Coordination Map.

- h) 4.8 – Will Utility continue to provide the Accelerated Construction (AC) spreadsheets, or will that now be part of Contractor scope to include in per foot pricing?

ANSWER: AC's per 3.2 will be at T&M at Company Request/Approval. Section 4.8 requirements shall be included in the cost per foot pricing as part of service design.

- i) 10 – Does this section pertain to every project or only for certain designated projects?

ANSWER: This will only be for certain projects.

29. 4.14 – Will the Contractor have 10 business days once potholes have been concluded to provide pothole information to Utility?

ANSWER: Yes, provide pothole information to Utility within ten (10) business days of the completion.

ADDENDUM NO. 1

April 11, 2023

30. 4.24/6.4/6.5 – Can Contractor anticipate a certain volume of work from Utility to ensure Contractor can prepare accordingly and provide an adequate number of qualified personnel?

ANSWER: We are unable to predict workload or work prioritization.

31. 4.30 – Will in-person and/or virtual meetings be required for As-Built Reviews and Creations?

ANSWER: Yes, either would work.

32. 4.31 – Please expand on what Digital Documentation Collection is, what it entails, what is the procedure, and what is required by Contractor.

ANSWER: Digital Documentation is the overarching term being used by the Company for the long-term goal of moving from paper records to electronic records. In order to achieve this goal the Company will be moving towards Facility Data Collection (FDC). FDC is defined as: The process of gathering electronic data using the Global Navigation Satellite System (GNSS) and barcode technology to create an electronic record that records pipe type, size, geospatial location, joint types, pipe joining qualifications, landmarks, and other pertinent data using the CartoPac Software application. The information gathered through the application is sufficient to provide the necessary data to create an electronic drawing.

The data collector would be provided a survey pole that is equipped with a tablet that has the CartoPac software, a GNSS device, a barcode scanner and a laser range finder to perform the work. Training will be provided on the use of the equipment, requirements/best practices for the data collection activities. The data collector would be responsible to coordinate with the point of contact from the Company and/or the contractor installing the facilities to collect the data associated with the installation of Company piping facilities in a prompt manner to reduce downtime. Upon completion of the data collection for a given project, the data collector would be responsible for moving the work from a state of work in progress to where the data is accessible to the Company's workgroups. This is all done through the CartoPac software solution.

33. 7.3 – Does Utility have a list of KPIs for Contractor to track and report? Is there a specific volume of reporting Utility is looking for?

ANSWER: There is no list of KPI's for the Contractor.

34. For any contractors or subcontractors that may be under an existing Services Agreement with SWG, is the intent of the Craft Agreement to replace an existing Services Agreement for this program?

ANSWER: Yes.

ADDENDUM NO. 1

April 11, 2023

35. The Craft Agreement mentions Special Terms and Conditions a couple times – are there any Special Terms and Conditions available for review?

ANSWER: The Craft Services Agreement, Statement of Work and Proposal Sheets and any appendices to these documents will be the documents that constitute this Agreement.

36. 3.1 – should the expiration date be April 30, 2026?

ANSWER: Yes, the expiration is April 30, 2026. This is a sample document and if awarded a contract correct dates will be referenced.

37. Which OQ Covered Tasks are expected as part of this Design and Engineering contract? Does Section 7 of the Scope of Work pertain only to OQ Covered Tasks, or also to Design and Engineering services? If contractor or subcontractor are not involved in OQ Covered Tasks, are the provided DOT D&A requirements applicable?

ANSWER: The OQ tasks are in the provided OQ Task list. The only task in the SOW that this is required for is pothole work. If contractor or subcontractor is not doing that work, the requirement is not applicable.

38. Does the QMS need to be included with the proposal, or only after award?

ANSWER: QMS only needs to be provided after award.

39. Is \$5M cyber liability required for subconsultants who will not access the SWG system (i.e. survey and pothole subconsultants)?

ANSWER: The Cyber Liability requirement does not apply to subconsultants who do not access Utility systems.

40. Will admins in the SWG office be guaranteed full-time work, and if so, for what duration?

ANSWER: Full-time work is not guaranteed. In office personnel hours will be based on the amount of Division department workload. However, a successful bidder is not guaranteed to be used for all positions. Each department may use one or multiple contracts to fill the positions.

41. Will any diverse supplier certificates be required?

ANSWER: This is not a requirement to bid, but we ask for it if the Contractor is a diverse supplier.

42. For SMALL projects less than 1,000 LF, would a minimum bound be considered, where any designs with footage less than that bound could be invoiced on an hourly basis?

ANSWER: There is no minimum bound where work would be invoiced on an hourly basis.

ADDENDUM NO. 1

April 11, 2023

43. For projects with a large portion of Service, would Service footage be included in the footage total for per foot unit pricing?

ANSWER: Services are not included in most design's costs, but there are cases that arise when they are needed.

44. Does all contractor, sub-contractor and contractor staff require to reside in the United States? Please confirm that any offshore outsourcing for work related to SWG is not permitted in any capacity.

ANSWER: No, it is not permitted. All contractor, sub-contractor and contractor staff must reside in the US.

45. Will \$/ft numbers be used to issue lump sum project assignments for individual WRs, or are the \$/ft numbers provided for reference only and specific estimates will be requested for each WR?

ANSWER: Specific estimates will need to be provided.

46. We've been engaged with similar work for SWG NNV and other clients, but the level of effort for specific design services can vary. Is there a representative site-specific scope of work that can be provided for the three types of projects (main installation, replacement, abandonment) to ensure accurate price per foot estimates?

ANSWER: Contractors will use the estimator tool provided by the Utility.

47. Similarly, is there a representative scope of work that can be provided for the survey when that is within our scope? Will it include utility locates, topography, boundary, etc.?

ANSWER: Generally, it will include any or all of them.

48. For WRs where land base IS provided, will the design contractor need to provide any field noting activities or will all necessary features (edge of pavement, foreign utility locates, etc.) be provided with land base?

ANSWER: Most of the time, necessary features are noted with the land base.

49. For As-Built Creation pricing, will the design contractor be responsible for any field-based survey activities? Will existing drawings be provided for As-Built revision, or will they need to be created from scratch?

ANSWER: Yes, the Contractor is responsible for the survey activities. Drawings should be made available for as-built purposes.

ADDENDUM NO. 1

April 11, 2023

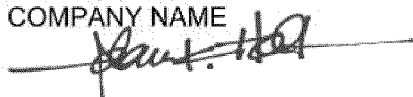
50. Can you clarify the difference between the two final unit prices from the Proposal Sheet as shown below? "Field Survey (Data Acquisition)" and "Field Data Collection Survey" seem to be the same thing?

ANSWER: Field Survey (Data Acquisition) is for survey done prior to construction, but not design (as this is captured in Section 1). Field Data Collection Survey is for the new process of Digital Documentation, detailed in the pre-bid presentation and in this Addendum.

END OF ADDENDUM

Blair, Church & Flynn Consulting Engineers

COMPANY NAME



AUTHORIZED SIGNATURE

Adam Holt, CFO

4-12-2023

PRINT NAME

DATE

CHANGE ORDERS



SOUTHWEST GAS CORPORATION

INTERNAL ADJUSTMENT FORM

Date Prepared

1/7/2025

Category:	Pipeline	This form does not require an Analyst Approval, NTP or signatures.
Division:	SNV	
Requester Name/Title:	Patrick Chow / Supervisor	
Facilitator:	Ellie Thomson	
Contract Analyst:	Damon Murray	

Contract Number	21940
Supplier Name:	Blair Church & Flynn Consulting Engineers
Type of Change:	Funding/Add dollars (unit price contracts)
Current Contract Total Amount:	\$ 6,000,000.00
Increase Amount	\$ 12,000,000.00
New Contract Total Amount:	\$ 18,000,000.00
Details of requested Changes:	
Add \$12,000,000. Contract expires 4/30/2026.	

Contract Number:	
Supplier Name:	
Type of Change:	
Current Contract Total Amount:	\$
Increase Amount	\$
New Contract Total Amount:	\$
Details of requested Changes:	

NON-CONTRACTURAL CHANGE:

Submit this form directly to contractadmin@swgas.com ONLY.
 Please ensure to copy the Requester when submitting request to
 Contract Administration.

CA Approval Gabriela Lotruglio

11/6/2024

C# 21941

V# 124328

EXP 4-30-2026

With 2 yr opt

Southwest Gas Corporation
Southern Nevada Division
Division Operations Services (DOS)
Bowman Consulting Group Ltd

CRAFT SERVICE AGREEMENT

**SOUTHWEST GAS CORPORATION
CRAFT SERVICES AGREEMENT
(INDEPENDENT CONTRACTOR)**

This CRAFT SERVICES AGREEMENT (“Agreement”) is made and entered into as of **May 23, 2023**, by and between SOUTHWEST GAS CORPORATION, a California corporation, with principal business offices at 8360 South Durango Drive; Las Vegas, Nevada 89113-4444 (“Utility”), and BOWMAN CONSULTING GROUP LTD, a Delaware Corporation, with its principal business offices at 12355 Sunrise Valley Drive, Suite 520, Reston, VA 20191 (“Contractor”). Utility and Contractor may be referred to herein as a “Party” or collectively as the “Parties.”

Recitals

Utility is engaging Contractor to provide the services described herein, as an independent contractor;

Contractor will provide such services to Utility, on the terms and subject to the conditions of this Agreement;

NOW, in consideration of the mutual agreements set forth in this Agreement and for other good and valuable consideration, the receipt and sufficiency which are acknowledged, Utility and Contractor agree as follows:

AGREEMENT

1. SERVICES

1.1. **Services.** Contractor, subject to the terms and conditions of this Agreement, shall provide the services or work to be performed (collectively “Work”) described and set forth in one or more applicable Statement(s) of Work (“SOW”) that are entered into by and between the Parties. Contractor’s work products generated pursuant to this Agreement or applicable SOW are deemed “Deliverables” under this Agreement. The description of the Work is intended to delineate and describe the Deliverables Contractor is to achieve under this Agreement or any applicable SOW. Contractor shall determine the method, details and means of performing the Work, subject to Utility’s requirements, for the completed project. Unless specified in the applicable SOW, Utility will not be required to furnish or provide any training to Contractor or to Contractor’s personnel to enable Contractor to perform the Work required by this Agreement. References to Contractor Personnel shall refer to all of Contractor’s labor resources engaged for Work under the Agreement, including, but not limited to: direct Contractor employees, whether full-time or part-time; any temporary or subcontracted labor resources; or any other labor resource for which Contractor provides or is responsible (collectively, “Contractor Personnel”).

1.2. **Equipment and Supplies.** Unless otherwise agreed between Utility and Contractor on the applicable SOW or in a separate writing between the Parties, Contractor shall furnish, at Contractor’s

expense, all labor, tools, transportation, equipment, supplies, and other materials and resources required to perform the Work.

1.3. Security. Access to Utility facilities is controlled in accordance with specific site requirements, which Utility may in its sole discretion modify from time to time. Contractor and all of Contractor Personnel must comply with Utility's security requirements and guidelines.

2. NON-EXCLUSIVE AGREEMENT

2.1. This Agreement does not establish an exclusive agreement for the Work between Contractor and Utility. Utility reserves the right to use others to perform the same or similar services and to solicit bids from other contractors. Subject to the conditions of this Agreement, Contractor may provide its professional services to other clients throughout the duration of this Agreement.

3. TERM

3.1. Term. This Agreement shall commence as of **May 1, 2023** ("Effective Date") and shall continue thereafter until the expiration of **April 30, 2026**, unless sooner terminated pursuant to this Agreement.

3.2. Renewal.

3.2.1. Utility may renew this Agreement for an additional two (2) years by providing written notice of its intent to renew at least ten (10) calendar days prior to the end of the then-current term (each a "Renewal Term" and together with the Initial Term, the "Term"). If the Term is renewed for one or more Renewal Terms, the terms and conditions of this Agreement during each Renewal Term shall be the same as the terms and conditions in effect immediately prior to such renewal, subject to any change in fees in accordance with the applicable SOW. If timely notice of intent to renew this Agreement is not provided, then this Agreement will terminate on the expiration of the then-current Term ("Expiration Date"), unless sooner terminated as provided in this Agreement.

3.2.2. Notwithstanding any termination or expiration of this Agreement, continued performance by the Parties shall be deemed an amendment and renewal of the term of this Agreement on a month-to-month basis. All future performance shall be subject to the terms and conditions of the Agreement, unless subsequently modified by written amendment by authorized representatives of both Parties.

3.3. Master Agreement. Upon agreement of the Parties, the terms and conditions of this Agreement may be deemed a "Master Agreement"; and apply to multiple schedules of rates ("Schedules") and/or multiple SOWs that may be issued pursuant to this Agreement setting forth the scope of the Work and Work to be performed by Contractor under the Schedule(s) and/or SOWs.

4. CONTRACTOR COMPENSATION

4.1. Utility shall pay Contractor as set forth on in the applicable SOW and any associated Schedule hereto (“Contractor Compensation”); provided the Work is delivered timely, in compliance with the terms of this Agreement, and to the satisfaction of Utility.

4.2. The total Contractor Compensation under this Agreement, including applicable taxes, shall not exceed the amount set forth in the applicable SOW or mutually agreed-upon Change Order.

5. INVOICING, MANNER AND TIME OF PAYMENT

5.1. Regular Invoicing. Contractor shall submit billing invoices to Utility on a regular basis, but in no event less than once a month (unless otherwise stated in the applicable SOW), at the prices and fees set forth in the applicable SOW. The invoice(s) for any subcontractor and appropriate documentation must be presented to Utility. Each invoice must specify that the services billed were rendered pursuant to this Agreement and the charges must be identified as to the work order, contract number, or account number provided by Utility prior to submission of invoice. Upon Utility’s approval of the submitted invoice(s), Utility shall pay each approved invoice within thirty (30) days of approval. Unless otherwise agreed to by Utility, final invoicing and appropriate documentation must be presented to Utility within thirty (30) days of completion of the Work and acceptance of all Deliverables contemplated by this Agreement or applicable SOW.

5.2. Retention. Utility, at its discretion, may retain up to 10 percent (10%) of Contractor Compensation until (i) Contractor has completed and Utility has accepted in writing the Work as described in the applicable SOW and (ii) Contractor has shown evidence to Utility that Contractor has satisfied and released any and all potential liens.

5.3. Liens. Upon completion of the Work, Contractor shall deliver to Utility an affidavit or release that there are no liens or claims existing or threatened that might arise out of this Agreement, including for all labor and materials supplied by Contractor for which a lien or claim may be filed within twenty (20) business days of completion of the Work. Should any lien or claim remain unsatisfied, Contractor shall be liable for and hold Utility harmless for any monies Utility may be compelled to pay, including all costs and attorney fees incurred, in releasing such liens or claims.

5.4. Taxes. Contractor shall bear and pay all sales, consumer, use, and all other taxes and costs of every kind and nature assessed against Contractor by any federal, state, local, or other governmental entity in connection with the Work performed by Contractor or assessed upon or against any equipment or property of Contractor used, purchased, or employed under this Agreement. Contractor shall be fully responsible for the payment and deduction of all state and federal taxes and benefits for Contractor Personnel, including but not limited to any applicable payroll and income taxes, unemployment insurance, disability insurance, retirement, workers’ compensation, pension, or other social security benefits for all persons or entities employed or retained by Contractor in the performance of the Work under this Agreement.

5.5. Modification. Utility may modify internal invoicing and payment procedures at any time, and from time to time, upon written notice to Contractor.

5.6. Remedies. For any breach of this Agreement, in addition to any other remedies afforded Utility, Utility shall have the right to exclude Contractor from participation on bids for future work opportunities with Utility and the right to withhold payment for any other work that Contractor is providing Utility until such breach is cured; and Contractor waives the right to object or complain concerning such exclusion from future bid participation or the withholding of payment for any other work Contractor is providing..

6. RELATIONSHIP OF THE PARTIES

6.1. Contractor shall perform the Work as an independent contractor. Contractor is not an employee or agent of Utility for any purpose. Contractor has no authority (and shall not hold itself out as having authority) to bind Utility. Contractor shall not make any agreements or representations on Utility's behalf without Utility's prior written consent. Nothing contained in this Agreement shall be construed as creating any agency, partnership, joint venture or other form of joint enterprise, employment or fiduciary relationship between the Parties.

6.2. Any provisions in this Agreement or the SOW or specifications which may appear to give Utility the right to direct Contractor as to the details of accomplishing the Work to be performed, or to exercise a measure of control over said Work, shall be deemed to mean that Contractor shall follow the desires of Utility in the results of the Work only and not in the means said Work is to be accomplished. Utility reserves the right of approval over the general methods employed by Contractor in the performance of the Work, but only insofar as they may affect the maintenance of good public relations and the safety of the general public and Utility personnel and facilities.

6.3. Contractor and Contractor Personnel are not entitled to and shall not participate in any Utility benefits including, but not limited to, the Utility's Retirement/Pension Plan, its 401-K plan, medical benefits, and other benefits provided to Utility's employees; and shall not be entitled to retroactive benefits if they are reclassified as Utility employees.

6.4. Contractor also may be performing work for Utility's subsidiaries or affiliated interests. Contractor shall inform Utility if it is performing such work. Except to coordinate schedules or Work under this Agreement to avoid conflicts or interference with work for the subsidiary or affiliated entities, Contractor and Contractor Personnel shall not share or discuss any non-public, confidential information or knowledge gained for matters related to this Agreement with representatives of the subsidiary or affiliated entities; nor shall Contractor or Contractor Personnel share or discuss any non-public, confidential information or knowledge gained for matters related to the work and agreement with the subsidiary or affiliated entities with Utility representatives under this Agreement.

7. CONTRACT MANAGEMENT

7.1. Contractor shall coordinate its Work under this Agreement with the Utility contract manager and/or project manager identified by the Utility ("Utility Contract Manager").

8. PERFORMANCE

8.1. All Work performed by Contractor shall be performed in compliance with all applicable federal, state, county, city, or township laws, rules, regulations, and ordinances; and Utility policies,

standards and practices. Contractor, at Contractor's expense, shall be responsible for obtaining all necessary licenses, permits and governmental authorizations required to perform the Work, including any export of software, equipment, or services from the country of origin.

8.2. Contractor shall be responsible to completely perform the Work in accordance with all the provisions of this Agreement and applicable project schedules or SOWs. Any and all Work to be performed under this Agreement shall be completed in a timely and good and workmanlike manner, in accordance with the latest industry standards, applicable practices, and defined quality measures; all to the reasonable satisfaction of Utility.

8.3. All materials furnished by Contractor, if applicable, shall be new and of the brand and quality designated in this Agreement unless prior written approval for any substitution has been provided by Utility or a Change Order provides for the substitution. If brand and/or quality of materials are not designated, Contractor shall use materials of a quality at least comparable to the materials used in the industry for similar purposes.

8.4. Contractor shall furnish and all Work shall be performed by Contractor Personnel that have the requisite skills, experience, and qualifications to perform the Work in an expeditious manner and consistent with Work schedules set forth in an applicable SOW. Utility shall have the right to require the removal of any Contractor Personnel, or of any of Contractor's subcontractors, who in the Utility's sole opinion: (a) may be careless or not qualified to perform the assigned Work; (b) violates provisions of this Agreement or applicable SOW; (c) may display improper conduct or impair the performance of Work; or (d) was a Utility employee terminated for cause. Contractor shall supervise and direct the Work, using Contractor's best skill, knowledge, and attention. Contractor shall provide competent supervision and any necessary assistance on the job during its progress.

8.5. Contractor shall employ, maintain and devote ample resources to meet project schedules. If Contractor has multiple obligations underway concurrently, Contractor must clearly show appropriate resources and convincing evidence that it can meet the schedule for the Work.

8.6. Time is of the essence in the performance of Work contemplated under this Agreement and the applicable SOWs. Contractor shall perform the Work in accordance with the schedule set out in the applicable SOW. Further, during the course of performance of the Work, Contractor shall meet the milestones for performance, if any, set forth in the applicable SOW.

8.7. At intervals specified by Utility and/or whenever Utility requests, Contractor shall advise Utility in writing of the status of the Work and provide such further assurances as Utility may reasonably request. If the Work is not on schedule, Contractor shall immediately advise Utility in writing of proposed action to bring the Work on schedule.

8.8. If the Work is not on schedule and Utility determines, in its sole discretion, that the proposed action to bring the Work on schedule is not adequate, or the proposed action proves inadequate, then Contractor shall be deemed in breach of this Agreement, and the progress of the Work shall be deemed unsatisfactory.

8.9. All Contractor Personnel shall comply with Utility's rules, policies and standards for workplace safety, security and conduct while on Utility premises and in the performance of Work under this Agreement.

8.10. Except in exigent circumstances, such as illness, termination of employment for cause, or voluntary separation by the employee, Contractor shall not replace the Project Manager, assistant Project Manager, or other key employee or subcontractor personnel identified in the Request for Proposal responses and/or SOW without the prior written consent of Utility and with proper training and transition to replacement by equally-qualified resources.

8.11. Contractor shall carefully study and compare all specifications and drawings and shall report in writing immediately to Utility any error, inconsistency, or omission which Contractor may discover. Contractor shall fully cooperate with and coordinate its Work with Utility and other contractors so as to allow such other contractors to provide any services (including services similar to the Work) or products in an integrated and seamless manner without interruption to Utility's business operations or to any and all Work contemplated under this Agreement. Contractor shall not commit or permit any act which interferes with the performance of other work or services performed by Utility or by other contractors.

8.12. All Work performed by Contractor shall be subject to the inspection and approval of Utility. Utility shall at all times have safe access to the Work site; and shall have the right to stop or reject any Work which, in its sole opinion, is defective and requires correction. Rejected Work shall be satisfactorily corrected without charge to Utility. If Contractor does not correct such defective Work within a reasonable time, Utility may correct the Work and charge the expenses to Contractor.

8.13. All individuals performing services under this Agreement for Contractor, whether as agent, employee, contractor or subcontractor, shall be advised by Contractor of their obligations under the provisions of this Agreement, including but not limited to the confidentiality and data security provisions. Utility may require such individuals to execute a separate non-disclosure agreement or an acknowledgment and agreement to abide by the confidentiality provisions of this Agreement.

9. BACKGROUND CHECKS

9.1. Contractor shall be responsible for conducting, at Contractor's expense, background investigations of Contractor Personnel who will have access (whether physical, remote, or otherwise) to Utility's facilities, equipment, systems, or data. Such investigations shall include, without limitation, (a) a search of the employee's or subcontractor's Social Security number or other appropriate government-issued identification number to verify the individual's identity and current and previous addresses; (b) a criminal background search of all court records in each venue in which the employee or subcontractor has resided during the past seven (7) years; (c) a motor vehicle report for positions that require Contractor Personnel to drive a Utility vehicle (including rental cars paid for by the Utility) or personal vehicles operated on behalf of Utility; and (d) drug testing for Contractor Personnel performing Work. Contractor shall make the results of such background checks available to Utility upon Utility's request.

9.2. Contractor shall not knowingly permit any Contractor Personnel to have access to the confidential information, premises, records, or data of Utility when such individual: (a) has been convicted of a crime or has agreed to or entered into a pretrial diversion or similar program in connection with: (i) any act of dishonesty or physical harm to any person, or (ii) a felony; or (b)(i) uses illegal drugs, or (ii) uses legal drugs or substances in excess of recommended or prescribed levels, affecting judgment or performance.

9.3 Unauthorized Aliens (8 U.S.C. § 1324a(a) and (b)). Contractor shall comply with the Immigration Reform and Control Act of 1986 as amended; and shall not knowingly hire unauthorized aliens to perform any Work under this Agreement in accordance with 8 U.S.C. § 1324a(a) and (b).

10. PERMITS, LICENSES, & CERTIFICATION

10.1. Unless otherwise specified by Utility, Contractor, at Contractor's expense shall be responsible for securing and maintaining all permits, licenses, and certifications required and/or necessary to perform any work under this Agreement. A copy of all required permits, licenses, and certifications obtained by Contractor shall be provided to the Utility Contract Manager immediately after issuance.

10.2. If Contractor is a specialty contractor, all work to be performed outside of the licensed or certified specialty must be performed by appropriately licensed or certified subcontractors.

10.3. All subcontractors employed by Contractor whose services require licensure must have a current license or certification in the specialty for the work being done; and are limited to performing only work for which licensed.

10.4. A copy of all Contractor and subcontractor licenses or certifications shall be submitted to Utility's Contract Manager prior to beginning the Work.

11. INSPECTION AND QUALITY MANAGEMENT

11.1 Inspection

11.1.1. All Work done by Contractor shall be subject to the inspection and approval of Utility.

11.2.1. Utility shall, at all times, have safe access to examine the quality of the Work and the procedures employed. Contractor shall provide facilities for such access and inspection. Utility shall have the right to stop the Work if it does not meet any requirement of this Agreement. If Work is completed or partially completed without the opportunity for inspection by Utility, Contractor may be required to expose such Work at the expense of Contractor.

11.3.1. Utility reserves the right to perform, or instruct Contractor to perform, quality control inspections of the Work or Project(s), at any time. In the event Contractor's Work proves satisfactory, the quality control inspection shall be performed at Utility's expense. If Utility determines Contractor's

Work is unsatisfactory, the quality control inspection and correction of the Work shall be performed at Contractor's expense.

11.2 Quality Management System (QMS) Requirements

- 11.2.1. The Quality Management System (QMS) requirements outlined in this section of the Contract are developed and administered exclusively by Utility's Operational Quality Assurance department (OQA). The QMS requirements are standard in all Utility service/product supplier contracts where a QMS is required, and cannot be waived, altered, removed, added to, or superseded, without the express written permission of OQA and the Vice President of Engineering Staff. No section of the Agreement (Service Agreement, General Terms and Conditions, Special Terms and Conditions, Pricing Proposal Sheet, and/or Addendum) will contain QMS requirements which contradicts, subtracts, adds to, or augments the QMS requirements in this section of the Agreement, unless express written permission is obtained from OQA and the Vice President of Engineering Staff.
- 11.2.2. Throughout the contract term, Contractor shall establish, maintain, and enforce a well-documented QMS.
- 11.2.3. Prior to any Work being performed under this Agreement, Contractor shall provide its written QMS program and updates to Utility's OQA department for Utility review. Such review shall not be interpreted or construed as any endorsement or acceptance by Utility of the QMS sufficiency, adequacy, compliance with applicable standards, or approval. Utility reserves the right to request changes to Contractor's QMS, related to the Work, and such changes shall be made at Contractor's expense.
- 11.2.4. If a Contractor cannot meet the QMS requirements listed in this Agreement by the Agreement execution date, the Contractor may be granted written approval by Utility to start Work under certain agreed upon conditions. All provisional approvals for QMS requirements will require a written Action Plan from the Contractor, outlining the timeframe needed to build the program, which shall not exceed twelve (12) months from the Agreement execution date. The Action Plan must also contain appropriate milestone points with reviews to ensure the program is progressing, and the core requirements are being included, on at least a quarterly basis. The Action Plan must be agreed upon by OQA and the Utility Project Manager. If a provisional acceptance is agreed upon, a written Addendum will be attached to the Agreement, stating the agreed upon terms and timeline. If at the end of the agreed upon provisionally accepted timeline, the Contractor has failed to establish a QMS substantively meeting or exceeding the minimum requirements outlined in this section of the Contract, OQA will provide a Progress Report to the Utility Project Manager. After reviewing OQA's Progress Report, the Utility reserves the right to terminate this Agreement if the requirements are not satisfied.

11.2.5. Contractor's QMS shall address and detail, at a minimum, the following:

- A. Employee training procedures covering customer relations, equipment and computer operation (particularly field computers and access to and interface with required Utility systems), quality procedures, job training classification, reporting, and documentation.
- B. Operational procedures including chain-of-command, supervisory responsibilities, quality procedures, computer operations, reporting, and documentation.
- C. Management responsibilities for operational systems, processes and quality procedures.
- D. The QMS shall include sufficient procedures to ensure:
 - (1) Systemic problems are recognized, and root causes are determined;
 - (2) Remedial, corrective, and preventative actions are systematically determined, implemented, and results are verified; and
 - (3) Key Performance Indicators (KPI) are identified and tracked through an appropriate metrics/trending process, with suitable reporting at regular intervals.
- E. Contractor's QMS should include Quality Assurance (QA)/Quality Control (QC) procedures, which, at a minimum, shall include the following:
 - (1) All QC evaluations will be conducted in a manner that is consistent with the Utility Operations Manual, the General Terms and Conditions, and/or the Special Terms and Conditions of this Agreement, where the most stringent requirements are followed.
 - (2) A defined minimum number of QC evaluations on each Contractor employee performing operator qualification covered tasks (OQ covered tasks) to show Contractor management confidence in the quality performance.
 - (3) Utility reserves the right to request additional QCs, inspections, or audits. Additional requests will be located in the General Terms and Conditions and/or the Special Terms and Conditions of this Agreement.

- (4) All unsuccessful QC evaluations shall be reviewed by a Quality Assurance Manager (QA Manager) or designee with periodic field reviews of QC activities. Reviews shall be performed by a higher-level manager who did not perform the QC evaluation.
- (5) A definition of nonconformance or QA/QC errors that includes any deviation from the appropriate policy/procedure section(s) of the Utility Operations Manual, required training, applicable codes, Federal, State and local laws or Contractor's internal requirements.

11.2.6. As part of the QMS, Contractor shall provide a QA Manager. The QA Manager is to be sufficiently independent of Contractor operations personnel to avoid potential conflicts of interest associated with field operations that will be the subject of the QMS audit and oversight process; and to maximize objectivity and impartiality.

11.2.7. The QA Manager shall be responsible for the following:

A. Duties

- (1) Establish auditing procedures for Contractor's QMS, QA/QC, employee training, and safety (including implementation of safety practices and monitoring compliance).
- (2) Conduct audits for Contractor's procedures for QMS, QA/QC, employee training, and safety (including implementation of safety practices and monitoring compliance). The frequency of such audits shall be no less than annually.
- (3) Oversee quality risk management.
- (4) Manage documentation requirements.
- (5) Perform noncompliance oversight.
- (6) Resolve problems, including but not limited to, nonconformance with Contractor's QMS and performance of Work.
- (7) Track errors and analyze trends using applicable metrics/quality tools identified in the Contractor's QMS or as requested by Utility.
- (8) Report results to Contractor executive level management to drive continuous quality improvement.

B. Oversight of:

- (1) Continuous training and testing, including refresher training, of Contractor's QMS and other quality-related matters and procedures.
- (2) Contractor's QMS and quality-related matters and procedures.
- (3) All other Contractor QA/QC-related functions.

C. Reporting to Utility OQA:

- (1) All KPIs, quality-related metrics and safety-related metrics annually. Utility Project Manager overseeing the Agreement has the right to request additional reporting. All additional requests for Work performance reporting will be outlined in the General Terms and Conditions and/or the Special Terms and Conditions of this Agreement.
- (2) Any Contractor Quality Manager changes or updates to the QMS, along with a copy of the revised QMS, need to be communicated to OQA in writing within 10 business days of the effective date.

11.2.8. Contractor shall report to the Utility Project Manager any unsuccessful rating resulting from a QA/QC evaluation and provide a copy of all completed QC evaluations, as defined in the General Terms and Conditions and/or the Special Terms and Conditions of this Contract.

11.2.9 Utility reserves the right to audit Contractor at reasonable times to ascertain compliance with Utility's requirements and the adequacy of Contractor's implementation of its procedures and processes. Utility has a right to audit Contractor's books, records, Work processes, financial and quality documents related to this Agreement and all Work performed for Utility.

11.2.10 Contractor must maintain all records pertaining to the performance of its QMS for a period of six (6) years following the later of the termination or expiration date of this Agreement.

12. SUBCONTRACTORS

12.1. Contractor shall not subcontract nor utilize any third-party or offshore resources for any portion or portions of the Work without prior written consent of Utility. If subcontractors, third party, or offshore resources are authorized, they shall in no way alter the terms and conditions of this Agreement between Contractor and Utility; and shall not under any circumstances, release Contractor from its responsibilities and liabilities as outlined in this Agreement. Any consent by Utility shall not waive Contractor's obligation to seek Utility's consent for future subcontracts or use of offshore resources.

12.2. All agreements between Contractor and any permitted subcontractor or permitted third-party or offshore resources involved in the completion of any Work under the terms of this Agreement shall require that the subcontractor and/or third-party or offshore resources comply in all respects with the terms and conditions as contained in this Agreement between Contractor and Utility. Nothing in this Agreement between Contractor and Utility shall create any contractual relationship between Utility and any subcontractor, third party, or offshore resource of Contractor. No subcontract shall relieve Contractor of any liabilities or obligations under this Agreement. Contractor agrees that it is fully responsible for the acts and omissions of its subcontractors and all persons either directly or indirectly employed by Contractor in the provision of Work under this Agreement.

13. INTELLECTUAL PROPERTY RIGHTS

13.1. Unless otherwise provided, all work product, Deliverables, and documents arising out of or relating to this Agreement or applicable SOW shall be deemed “Works for Hire” (as defined under 17.U.S.C. §101, et seq.) and the exclusive property of Utility. Utility shall retain all common law and statutory rights, title and interests related thereto (collectively, “Intellectual Property Rights”). The only exception applies to those items developed at Contractor’s private expense and specifically identified prior to the award of this Agreement or applicable SOW.

13.2. To the extent that any of Contractor’s pre-existing materials (“Contractor IP”) are incorporated in any Deliverables, Contractor hereby grants to Utility an irrevocable, worldwide, unlimited, royalty-free license to use, publish, reproduce, display, distribute copies of, and prepare derivative works based upon such Contractor IP and derivative works thereof for Utility’s use in its ordinary course of business Utility may assign, transfer and sublicense such rights to others without Contractor’s approval.

13.3. Ownership of plans and specifications or copies thereof furnished to Contractor, shall be and remain the property of Utility and shall be returned to Utility at the completion of the Work.

13.4. Except for Contractor’s pre-existing materials, Contractor has no right or license to use, publish, reproduce, prepare derivative works based upon, distribute, perform, or display any Deliverables. Contractor has no right or license to use Utility’s trademarks, service marks, trade names, trade names, logos, symbols or brand names in any manner or form.

13.5. Contractor may not publish, publicize, or sell any information from or about this Agreement without the prior written consent of Utility.

14. CONFIDENTIAL INFORMATION

Confidentiality and Non-Disclosure

14.1. Contractor hereby agrees that all information provided by Utility pursuant to the Work performed under this Agreement shall be considered confidential; and shall not be reproduced, transmitted, used, or disclosed by Contractor without the written consent of Utility, except as expressly provided herein. Contractor agrees to use the Confidential Information, as defined below, of Utility only for the purposes of performing its obligations under this Agreement. In the event

Contractor performs services for an affiliate or subsidiary of Utility, Contractor agrees not to disclose or transmit Utility Confidential Information to such affiliate or subsidiary. The requirements of this provision shall survive the termination or expiration of this Agreement.

14.2. Confidential Information.

14.2.1. In this Agreement, "Confidential Information" means all data and information relating to the business and management of either Party, including, without limitation, any software and other proprietary information and trade secrets; technology; financial, operational, and accounting records; logos, trademarks, tradenames, employee or customer data or lists; and practices to which access is obtained hereunder by the other Party, regardless of whether it is marked as "confidential" or "proprietary".

14.2.2. Notwithstanding the foregoing, Confidential Information shall not include any data or information which:

14.2.2.1. is within the public domain at time of the disclosure;

14.2.2.2. is or becomes publicly available through no fault of the other Party;

14.2.2.3. is already in the rightful possession of the other Party prior to its receipt from the other Party and without any obligation of confidentiality;

14.2.2.4. can be demonstrated by written records as being independently developed by a Party without reference to any of the Confidential Information of the other Party;

14.2.2.5. is rightfully obtained by the other Party from a third party who is not under any obligation of confidentiality; or

14.2.2.6. is disclosed pursuant to court order or other legal compulsion, provided that the Party which is required to disclose the Confidential Information shall give the other Party reasonable prior written notice of any legal proceeding to allow the other Party an opportunity to seek a protective order or otherwise oppose or limit such disclosure.

14.3. Each party shall use all commercially reasonable measures to safeguard and protect the other Party's Confidential Information in its possession from unauthorized access, use, or disclosure, utilizing the same degree of care it uses to protect its own confidential information and, in no event, less than a commercially reasonable degree of care. Neither Party shall make any use of the Confidential Information of the other Party other than for the business purposes of this Agreement or legal or regulatory compliance purposes. Utility is a regulated utility that is subject to the jurisdiction of multiple public utility commissions and consumer advocacy agencies established by statute. As such, the Parties agree that Utility may disclose such information, including Confidential Information, as needed to Utility's regulators and such statutorily-established consumer agencies, without additional Contractor approval.

14.4. Upon termination of this Agreement, the respective Party and all its personnel shall immediately cease to use any Confidential Information of the other Party and arrange for its return or certified secure destruction. Disclosure of a party's Confidential Information does not grant any expressed or implied rights or license to copy, use, disclose or alter or in any way appropriate said Confidential Information, unless agreed to in writing by both Parties. Notwithstanding the forgoing, neither Party will be obligated to erase Confidential Information contained in an archived computer system backup made in accordance with such Party's security and/or disaster recovery procedures, provided that such archived copy will (a) eventually be erased or destroyed in the ordinary course of such Party's data processing procedures and (b) will remain fully subject to the obligations of confidentiality and non-use stated herein.

14.5. Confidential Information disclosed under this Agreement is delivered "AS IS," and no representations or warranties, either express or implied, including, without limitation, warranties or conditions for fitness for a particular purpose, merchantability, title, accuracy, or completeness of the Confidential Information, are made.

14.6. A Party shall immediately notify the other Party of any actual or suspected unauthorized access, disclosure, or use of the other Party's Confidential Information; and will assist in remedying any unauthorized access, use or disclosure of the Confidential Information and take immediate steps to prevent further unauthorized access, use, or disclosure, including, without limitation, investigation of the circumstances of the unauthorized access, use, or disclosure; monitoring for further unauthorized access; and notification of affected persons.

14.7. In the event of a breach of these confidentiality requirements, each Party consents to an injunction being issued against it restraining it from any further breach. The granting of an injunction shall not limit or restrict any other remedy which may be available to a Party in the event of a breach of those obligations.

14.8. Contractor shall not divulge any information concerning the Work to anyone without the Utility's prior written authorization. Contractor shall obtain similar agreements from subcontractors, persons, firms and corporations rightfully receiving any Utility Confidential Information pursuant to this Agreement.

14.9. The Confidentiality requirements of this Agreement shall survive the latter of: (a) the termination or Expiration Date of this Agreement for a period of six (6) years; or (b) for so long as the information is eligible for protection under applicable laws.

15. DATA SECURITY

15.1 Contractor shall comply with the requirements provided in Data Security and Privacy Requirements Appendix, attached hereto and incorporated by this reference.

16. REPRESENTATIONS AND WARRANTIES

16.1. Contractor represents and warrants to Utility that:

16.1.1. Contractor has the right to enter into this Agreement; to grant the rights granted herein; and to perform fully all of the Work and Contractor's obligations in this Agreement and applicable SOW;

16.1.2. Contractor's entering into this Agreement with Utility and Contractor's performance of the Work do not and will not conflict with or result in any breach or default under any other agreement to which Contractor is subject;

16.1.3. Contractor and Contractor Personnel have the required skill, experience and qualifications to perform the Work;

16.1.4. Contractor will perform the Work in accordance with the highest standard of care and practice appropriate to the nature of the services rendered;

16.1.5. The recommendations, guidance, and performance of Contractor and Contractor Personnel shall reflect their best knowledge and judgment;

16.1.6. Utility will receive good and valid title to all Deliverables, free and clear of all encumbrances and liens of any kind;

16.1.7. All Deliverables are and shall be Contractor's original work (except for material in the public domain or provided by Utility) and do not and will not violate or infringe upon the intellectual property right or any other right whatsoever of any person, firm, corporation or other entity;

16.1.8. The Work will be performed in accordance with the terms of this Agreement, applicable laws and regulations, existing licenses, Utility requirements, and industry technical guidelines. Work in progress, Deliverables, and finished products will be reviewed by Utility for completion, compliance with required standards, and responsiveness to contract requirements. If, within two (2) years after the date of completion, any Work, items of material or equipment, or workmanship furnished by Contractor are found to be defective, Contractor shall, at once and at Contractor's own expense, make all repairs or furnish and install replacement Work, parts, design, workmanship or material, as approved by the Utility Contract Manager. If Contractor is obliged to furnish and install replacement parts, the warranty period for the parts shall extend for one year from the installation of such parts; and

16.1.9. All warranties, including any specific warranties set forth hereto, shall be unconditional and shall not be invalidated by details of Utility's design or the approval of Contractor's "or equal" submittals. Any detail that would cause an exception to a manufacturer's standard warranty must be brought to the attention of the Utility Contract Manager, in writing, prior to accomplishment of that part of the work or Contractor shall not have cause to request approval of the exception. All expense of furnishing and installing parts or making alterations to existing parts, and of tests made necessary by failure of the apparatus to meet the warranties or other requirements of the Agreement, shall be borne by Contractor. In the event Contractor's fails to comply with any warranty provisions

within ten (10) days of being notified in writing, Contractor authorizes Utility to proceed to have the defects repaired at Contractor's expense and Contractor will promptly pay the costs and damages therefrom within ten (10) days of demand.

17. INDEMNIFICATION

17.1. To the maximum extent allowed by law, Contractor shall indemnify, hold harmless, and defend Utility, including its parent, affiliated, and subsidiary interests, and their shareholders, directors, officers, employees, agents, and assigns ("Indemnified Parties") from and against all claims, liabilities, civil penalties, actions, administrative proceedings, citations, damages, settlements, losses, costs, expenses, demands, and attorney fees, that occur or manifest at any time during or after the term of this Agreement, that arise out of, relate to, result from or are in any way connected with the performance or non-performance of the Work by Contractor. This indemnity includes but is not limited to: claims for monetary or economic injuries or losses; expenses; delays; bodily injuries; personal injuries; sicknesses, diseases, or deaths of persons; damages to or loss of use of properties; trespasses; the actual or suspected breaches, losses, unauthorized access, or compromises of any personal identifying information or the Indemnified Parties' Confidential Information, data, or intellectual properties; infringement or misappropriation of any third party's intellectual property rights; fines, citations, or penalties; or any other damages or harms that arise out of, relate to, result from or are in any way connected with the performance or non-performance of the Work by Contractor, its subcontractors, suppliers, agents, employees, or anyone directly or indirectly employed by any of them under this Agreement ("Indemnifying Parties"), whether occasioned by strict liability or any active or passive negligent act, omission, or knowing and willful misconduct by the Indemnifying Parties, or whether occasioned by the Indemnified Parties' actual or alleged concurrent negligence, including active and/or passive negligence. Nothing herein shall be construed to render Contractor liable to indemnify the Indemnified Parties for claims arising wholly from the Indemnified Parties' sole negligence or knowing and willful misconduct. In all cases, Contractor shall have the primary duty to defend against all claims with counsel and testifying expert witnesses reasonably acceptable to the Indemnified Parties.

17.2. Contractor's defense of any lawsuit, claim, and/or demand, as required by the preceding Section, shall be at the Contractor's sole expense. Contractor shall have the obligation to defend the lawsuit, claim, and/or demand even if it is groundless, false, or frivolous. Contractor shall select counsel and experts which are acceptable to Utility. Utility shall have the right and at its own expense, if it so elects, to take an active part in the defense of any such lawsuit, claim, and/or demand and to file intervention or other similar proceedings therein, if it deems such action is desirable.

17.3. Contractor shall inform Utility and promptly investigate and seek to resolve any such lawsuit, claim, and/or demand whenever Contractor receives actual or constructive notice of such lawsuit, claim, and/or demand due to or associated with any act or omission or Work or service performed under this Agreement by Contractor, or Contractor Personnel.

17.4. Contractor shall have the right to make settlement, at its sole expense, of any such lawsuit, claim, and/or demand as may be deemed expedient by Contractor, provided that no admissions or representations or obligations to pay money are made on behalf of Utility without Utility's prior written consent.

17.5. For any claims for infringement, misappropriation, or violation of third-party intellectual property rights, Contractor will, at its expense: (a) modify the Deliverable, or (b) procure the right to continue using the Deliverable, and if (a) or (b) are not commercially reasonable, terminate Utility's right to use the Deliverable and issue a refund for the amounts paid for the Deliverable in question.

17.6. Contractor will provide immediate oral notification to Utility, followed by written notice to Utility, of any of the following:

17.6.1. Whenever Contractor receives notification (oral or written) from any source that an incident has occurred in which property damage or any personal injuries or deaths have resulted because of or associated with any Work or service performed under this Agreement by Contractor, its subcontractors, suppliers, agents, employees, or anyone directly or indirectly employed by any of them.

17.6.2. Whenever any accident or incident occurs which may cause an interruption in the Work or in gas service by Utility to its customers.

18. INSURANCE & BONDS

18.1. Insurance. Without limiting any of the other obligations or liabilities of Contractor, Contractor shall provide and maintain insurance coverage at its sole cost and expense in accordance with requirements established in the attached Insurance Requirements Appendix, incorporated herein by this reference. Unless otherwise specified, Contractor shall maintain the required insurance coverage and types throughout the Term of this Agreement and for a period of three (3) years thereafter.

18.2. Bonds. Utility may require that Contractor provide performance bonds from a corporate surety authorized to do business in the state where the Work is performed and acceptable to Utility, in its sole discretion, in the penal sum of up to one hundred percent (100%) of Contractor's bid. The bonds shall be duly executed by Contractor as principal and by the corporate surety. It is understood and agreed that execution and furnishing of such bonds shall be a condition precedent to the commencement or continuation of any Work under this Agreement if Utility elects to require bonds. The cost of the bonds shall be borne by Contractor.

19. PRESERVATION OF RECORDS, AUDIT RIGHTS

19.1. Contractor agrees to preserve, maintain, and not destroy its records relating to performance of Work and invoicing pursuant to this Agreement for a period of at least thirty-six (36) months after the later of the termination or Expiration Date of this Agreement. Contractor agrees that Utility, at Utility's expense, shall have the right, at reasonable times and during regular business hours, to examine and audit Contractor's books, records, and other financial documents as they relate to this Agreement or applicable SOW, during the Work and for a minimum of thirty-six (36) months after the later of the termination or Expiration Date of this Agreement. Utility shall be given access to and the opportunity to copy Contractor's cost books, correspondence, instructions, receipts, vouchers, memoranda, and all other records relating to this Agreement and all amendments thereto.

19.2. Contractor shall include an audit provision providing Utility with the audit rights set forth herein in all subcontracts entered into by Contractor in connection with the Work.

19.3. Such audits shall be performed either by Utility personnel or by an independent third party used by Utility for the purpose of making such audits. Utility and Contractor shall establish procedures for performing such audits and shall preserve the confidential and proprietary status of audited documents and information.

20. COMPLIANCE WITH LAWS; EQUAL EMPLOYMENT OPPORTUNITY

20.1. Contractor shall comply with all applicable federal, state, and local employment and labor laws, ordinances, rules, regulations, and orders in effect on the date of this Agreement, including, but not limited to Executive Order No. 11246 of September 24, 1965, as amended, and the orders of the Secretary of Labor pursuant thereto. Additionally, Contractor shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, sexual orientation, gender identity, age, national origin, disability, veteran status, or because any employee or applicant for employment is a member of any other protected class or group as defined by any established law or court of competent jurisdiction. Contractor further agrees to comply with all applicable laws, executive orders and regulations as amended, concerning, without limitation, nondiscrimination in employment and immigration and employment eligibility.

20.2. Contractor acknowledges Utility maintains a Supplier Diversity Program (“Program”) to develop procurement and utilization opportunities for minority-, female-, and disabled veteran-owned business enterprises as well as Small Business Concerns and Small Business Concerns Owned and Controlled by Socially and Economically Disadvantaged Individuals or Women (as defined by 15 U.S.C. Section 637(d)). To the extent feasible, Contractor shall utilize commercially reasonable measures to encourage similar procurement opportunities when engaging U.S. employees or subcontractors in the performance of Work under this Agreement or for procuring goods and supplies utilized in the performance of Work under this Agreement.

21. CHANGE ORDERS

21.1. If either Party wishes to change the scope or performance of the Work (“Change Order”), it shall submit details of the requested change to the other Party in writing in a form acceptable to Utility.

21.2. Contractor shall, within a reasonable time (not to exceed ten (10) business days) after receiving a Utility-initiated Change Order request, or at the time that Contractor initiates a Change Order request, provide a written estimate to Utility of: (a) the likely time required to implement the change; (b) any necessary variations to the fees and other charges for the Work arising from the change; (c) the likely effect of the change on the Work; (d) any other impact the change might have on the performance of this Agreement; and (e) any other information reasonably requested by Utility.

21.3. Contractor-initiated Change Order requests must be received within thirty (30) calendar days of discovery of the circumstances giving rise to the requested change in scope or performance of the Work, particularly if Contractor is requesting a change in price for an existing scope or performance of the Work. Change Order Requests submitted more than thirty (30) days after

discovery of the circumstances giving rise to the Change Order Requests may be denied by Utility and, in all events, considered only in the sole discretion of Utility.

21.4. Promptly after timely receipt of a Change Order Estimate, the Parties shall negotiate the terms of such change. In the event the Parties agree to the terms of such change, such agreement shall be documented in a written Change Order. Neither Party shall be bound by any Change Order unless mutually agreed upon in writing and mutually signed by the authorized representatives of the Parties.

22. HAZARDOUS MATERIALS

22.1 If applicable for the Work contemplated pursuant to this Agreement or any SOW, Contractor and all subcontractors retained by Contractor to perform any services hereunder shall, prior to the commencement of any work hereunder, procure and provide the Utility Contract Manager with:

22.1.1. Material Safety Data Sheets for all hazardous substances which may or will be brought to the work site;

22.1.2. The location where the hazardous materials will be stored and/or used in conjunction with the performance of any work hereunder; and

22.1.3. A description of the labeling system used on Contractor's or any subcontractor's containers used for the handling, storage and/or transport of such hazardous materials.

22.1.4. Identify the transporter of any hazardous waste and hazardous waste disposal facility used in conjunction with the performance of any work hereunder. Said transporter and disposal facility shall be subject to prior approval by the Utility Contract Manager.

22.2. Contractor shall furnish the Utility Contract Manager with the name and telephone number of the individual responsible for administering Contractor's or any subcontractor's hazardous materials communications program. Contractor and its subcontractors shall, upon request, provide the Utility Contract Manager with written evidence of Contractor's or any subcontractor's employee training associated with the handling of hazardous materials.

22.3. Contractor and Contractor Personnel shall perform all work in accordance with all applicable federal, state, and local laws, rules, regulations and ordinances pertaining to hazardous waste management.

22.4. Contractor and its subcontractors shall promptly correct and remedy any discharge of hazardous materials or hazardous wastes occurring on the jobsite as a result of or in connection with its work, consistent with Section 24.5.

22.5. ASBESTOS NOTIFICATION

22.5.1. Numerous Utility facilities were constructed with some asbestos-containing components. An asbestos information sheet shall be provided to all of Contractor Personnel performing work on such Utility facilities.

23. CHANGED CONDITIONS FOR SITE WHERE WORK IS PERFORMED

23.1. Contractor shall immediately, and before the conditions at a site where work is to be performed are disturbed, notify the Utility Contract Manager of:

23.1.1. Material that Contractor believes may be hazardous in nature or deemed hazardous material or waste; that is required to be removed to a disposal site approved to receive such hazardous waste or materials, in accordance with the provisions of existing law;

23.1.2. Subsurface or latent physical conditions at the site differing materially from those indicated in this Agreement or applicable SOW; or

23.1.3. Unknown physical conditions at the site which are of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Agreement.

23.2. Upon receipt of such notice, the Utility Contract Manager will promptly investigate the conditions. If the Utility Contract Manager determines that such conditions are unusual and materially different, or do involve hazardous waste, and cause an increase or decrease in the cost of the work or time required for the performance of this Agreement, an equitable adjustment may be made. Time or cost adjustments will not be allowed unless Contractor has given proper notice as specified above.

23.3. In the event a dispute arises, Contractor shall not be excused from any scheduled completion date provided for by the Agreement and shall proceed with all work to be performed under the Agreement. Contractor shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the contracting parties.

24. ADDITIONAL SAFETY MATTERS

24.1. Air Pollution. Contractor shall conform to all local, state, and federal air pollution control rules and regulations which apply to any Work performed under this Agreement. This includes, but is not limited to, burning, use of solvents, painting, and liquid asphalt. Contractor shall immediately and continually abate dust nuisance resulting from the Work performance or site condition by cleaning, sweeping, sprinkling of water, or other means as approved by the Utility Contract Manager.

24.2. Water Pollution: Contractor shall take all precautions necessary to protect streams, lakes, reservoirs, drainage waterways, groundwater, or other waters from pollution or muddying resulting from its work under this Agreement. Water pollution prevention methods shall conform to all local, state and federal requirements and permits.

24.3. Employee Drug & Alcohol Testing, Education and Training Program (49 U.S.C. §§ 60101, et al.) – If required as part of the Work or SOW contemplated under this Agreement, then Contractor shall establish and follow a written employee drug and alcohol testing, education, and training program that complies with Utility and USDOT requirements. Such requirements shall be set forth in the applicable SOW.

24.4. Operator Qualification (OQ). If required as part of the Work or SOW contemplated under this Agreement, then Contractor Personnel that perform Work involving a covered task must comply with the Operator Qualification Rule and be qualified under Utility's Operator Qualification Plan; consistent with 49 CFR Parts 192.801-809. Such requirements shall be set forth in the applicable SOW.

24.5. Hazardous Waste.

24.5.1. Contractor and its subcontractors shall perform all Work in accordance with all federal, state and local laws, rules, and regulations pertaining to hazardous waste management including but not limited to the Resources Conservation and Recovery Act (RCRA) of 1976, 42 USC Section 6901; and following Title 40 Code of Federal Regulations for environmental protection.

24.5.2. Contractor and its subcontractors shall promptly correct and remedy any discharge of hazardous materials or hazardous wastes occurring on the jobsite as a result of or in connection with its work. Such cleanup shall be performed in accordance with all applicable federal, state and local laws, rules, regulations and/or ordinances. Contractor shall notify the Utility Contract Manager and any governmental regulatory agency of competent jurisdiction as may be required by any applicable federal, state and local law, rule, regulation and/or ordinance. Contractor shall begin such cleanup within 24 hours of notification and shall complete the corrections within 10 calendar days. If correction cannot be commenced within 24 hours of notification or completed within 10 calendar days, Contractor shall immediately demonstrate to the satisfaction of Utility the reasons therefore, otherwise Utility has the right to proceed with the cleanup itself or through a third party and Contractor agrees to reimburse Utility promptly for costs it incurs to do so. Such cleanup shall restore the jobsite to its condition prior to the discharge.

24.5.3. In the event hazardous waste or spill residue is generated as a result of the Work at the jobsite by Contractor or its subcontractors, Contractor or its subcontractors shall arrange for proper transportation and disposal of these materials at their own expense. All such arrangements shall be approved by Utility. Any interim storage of these materials prior to their prompt removal from the jobsite shall be approved by the Utility Contract Manager; and shall take place only in areas approved by the Utility Contract Manager. Surplus hazardous substances and empty containers shall be removed from the jobsite as soon as they are no longer needed for the work.

24.6. Sanitary Conditions. All portions of the jobsite shall be maintained in a safe, neat, clean and sanitary condition at all times. Toilets shall be furnished, maintained at least weekly, and kept in a clean condition, by Contractor for all personnel on the jobsite, and they shall comply with all applicable local, state, and federal laws, ordinances, and regulations pertaining to public health and sanitation.

24.7. Noise. All motor vehicles and construction equipment shall be equipped with the manufacturer's specified mufflers and/or other appropriate sound attenuation devices. Contractor shall conduct its operations at a time and in a manner so as to cause a minimum of noise disturbance, and shall comply with all local, state, and federal laws, ordinances and regulations.

24.8. Fire. Contractor shall ensure that all motor driven vehicles and construction equipment have proper exhaust spark arrestors installed. Contractor shall conduct its operations so as to prevent fire danger in conformity with all applicable local, state and federal laws, ordinances and regulations. Contractor shall provide and maintain, at the jobsite, fire extinguishers, tools, and equipment in the proper quantity and of the proper type to conform to the local fire protection ordinances and requirements.

25. PUBLIC SAFETY, SAFE PRACTICES, AND PROTECTION AT THE JOB SITE

25.1. Contractor shall take all necessary precautions to protect the Work completed or in progress and all persons and property on or about the job site, Utility premises, or Utility facilities.

25.2. Contractor shall observe and enforce any safety and fire precautions that may be prescribed by Utility and by applicable law and regulations for the protection of Utility and other personnel and property.

25.3. Contractor shall provide and use safe and adequate signage and barricades by day, and signage, barricades, and lights by night, to adequately warn and protect the public as required by federal, state, county, city, local, or other governmental agencies having jurisdiction. If applicable, and unless otherwise detailed in the SOW or other special terms and conditions, Contractor shall also provide traffic control and flag persons to warn traffic as required by federal, state, county, city, local or other governmental agencies having jurisdiction, and as may be reasonably prudent under the circumstances.

25.4. Contractor shall assign a properly qualified employee of Contractor as a Safety Coordinator to ensure all job sites are safe and Utility's interests and property are protected, at Contractor's expense. Contractor shall maintain accurate accident records and injury reports; and provide reports to Utility of any safety-related issues, including without limit, any findings and initiatives taken in response.

25.5. Contractor shall observe and abide by all laws, ordinances, rules, and regulations with regard to safety, signs, advertisements, explosives, training, written programs, and fire prevention as set forth in the Occupational Safety and Health Act (OSHA) and regulations promulgated pursuant thereto and any other federal, state, county, city, local, or other governmental regulations bearing on the manner of conducting Work under this Agreement, as well as all applicable Utility requirements. In the case of any conflicts, the strictest requirement shall apply.

25.6. Contractor will immediately notify the Utility Contract Manager of any OSHA reportable accident occurring on/in Utility premises, facilities, or work sites. Accidental damage to Utility equipment and/or property also must be reported immediately to the Utility Contract Manager. Each notification will be followed within two (2) business days with a written report of the details of the reportable accident and damage and all remedial actions taken.

25.7. If Utility notifies Contractor of non-compliance with proper safety requirements, Contractor shall immediately if so directed, or in not more than 24 hours after receipt of such notice, make all reasonable efforts to correct the existent condition. If Contractor fails or refuses to take immediate corrective action, the Utility Contract Manager may:

25.7.1. Have the unsafe conditions corrected by others at Contractor's expense; or

25.7.2. Issue an order stopping all or part of the work until satisfactory corrective action has been taken; however, this right to stop work shall not give rise to any duty on the part of Utility to exercise this right.

25.7.3. Contractor shall not base any claim or request for adjustment in time or money on any stop order issued under these circumstances. Utility's failure to notify Contractor of any non-compliance shall not relieve Contractor from any safety requirements.

25.8. Equipment. Contractor shall furnish safety and health equipment and enforce the use of such equipment by all persons on the jobsite.

25.9. Waiver. Contractor waives the right to bring claim for damages against Utility for any cause whatsoever because of any action taken or not taken, including but not limited to, the correction of unsafe conditions or work stoppages in connection with the safety requirements of this Agreement.

26. TERMINATION; EXPIRATION; and POSTPONEMENT

26.1. Termination for Convenience. Utility may terminate this Agreement or applicable SOW, in whole or in part, at any time, upon ten (10) calendar days' written notice to Contractor, for any reason or for no reason. In the event Utility terminates this Agreement or applicable SOW pursuant to this section, so long as Contractor is not in default under this Agreement or applicable SOW, Utility will pay Contractor for all Work satisfactorily performed through the date of termination, subject to the other terms and conditions of this Agreement. Contractor shall not be entitled to receive any lost profits or other consequential damages as a result of a termination for convenience by Utility.

26.2. Termination for Cause/Breach.

26.2.1. Utility may terminate Contractor's services under this Agreement at any time for cause, without liability to Utility. As used in the preceding sentence, "cause" may include, but is not limited to, Contractor's material default or breach of any provision of this Agreement and Contractor's failure to cure the default/breach within ten (10) business days of written notice by Utility describing the default/breach.

26.2.2. Should Contractor fail to cure the default/breach within ten (10) business days of the written notice, Utility may provide written notice to Contractor indicating the reason for termination and the effective termination date. Upon the effective date of termination, Contractor shall immediately cease Work under this Agreement or applicable SOW; and shall take all steps reasonably necessary to mitigate any costs or expenses for which Utility or Contractor may be liable hereunder.

26.2.3. Notwithstanding anything to the contrary contained herein, Utility shall not be liable for any cost or expense incurred by Contractor after termination for cause of this Agreement or applicable SOW. Contractor shall not be entitled to receive any lost profits or other consequential damages as a result of such termination.

26.3. Termination for Insolvency.

26.3.1. Either party may terminate this Agreement or any SOW, effective upon written notice to the other party (the "Defaulting Party"), if the Defaulting Party: (i) becomes insolvent or admits its inability to pay its debts generally as they become due; (ii) becomes subject, voluntarily or involuntarily, to any proceeding under any domestic or foreign bankruptcy or insolvency law; (iii) is dissolved or liquidated or takes any corporate action for such purpose; (iv) makes a general assignment for the benefit of creditors; or (v) has a receiver, trustee, custodian, or similar agent appointed by order of any court of competent jurisdiction to take charge of or sell any material portion of its property or business.

26.4. Contractor's Obligations Upon Termination or Expiration.

26.4.1. Upon expiration or termination of this Agreement or applicable SOW, in whole or in part for either; or at any other time upon Utility's written request, Contractor shall promptly:

26.4.1.1 Stop all Work if the entire Agreement or applicable SOW is terminated or expires; or, if less than the entire Agreement or SOW is terminated or expires, stop all Work pertaining to the portion(s) of the Agreement or SOW that is terminated or expired;

26.4.1.2. Not place any further orders or enter into any further contracts with respect to the subject Work;

26.4.1.3. Immediately deliver to Utility all Deliverables which have been completed as of the termination or Expiration Date or are in progress and all hardware, software, tools, equipment or other materials, if any, provided for Contractor's use by Utility;

26.4.1.4. Immediately deliver to Utility all tangible documents and materials (and any copies) containing, reflecting, incorporating, or based on the Confidential Information;

26.4.1.5. Immediately permit Utility or its nominee access to and to take possession of all Work, materials, and all other items incorporated or purchased for inclusion in the Work;

26.4.1.6. Not interfere with Utility efforts to engage the services of other contractors or Utility's own employees to complete the Work;

26.4.1.7. Immediately assign to Utility or its nominee, to the extent desired by Utility, all rights and benefits of Utility under existing commitments of third parties;

26.4.1.8. Except as otherwise instructed by Utility: (i) immediately cease access to Utility data systems; and (ii) immediately erase and delete by secure means all Utility Confidential Information from Contractor's computer systems; and

26.4.1.9. Immediately certify in writing to Utility that Contractor has complied with the requirements of this section.

26.4.2. In addition to the foregoing requirements, Contractor shall:

26.4.2.1. Take all reasonable steps to protect property, data, or information in the possession of Contractor in which Utility has or may acquire an interest and to arrange for the return or other disposition of such property, data, or information as directed by Utility;

26.4.2.2. Immediately remove Contractor's property from Utility premises unless otherwise agreed or directed by Utility; and

26.4.2.3. Immediately take any other action relating to the termination or expiration of the Work, as Utility reasonably requires.

26.5. Termination Costs. In no event shall Utility be liable for any Contractor Personnel termination costs and expenses arising from the expiration or termination of this Agreement or applicable SOW.

26.6. Postponement. Utility reserves the right to delay, postpone, or suspend all or any portion of the Work at any time upon notice to Contractor for any reason deemed by Utility to be in its interest. Any such delay, postponement, or suspension shall not give rise to liability on the part of Utility for any damages, costs, charges, or out of pocket expenses; provided, however, if the delay, postponement or suspension is due to circumstances solely within Utility's control and not due in whole or in part to any act or omission of Contractor, Utility shall reimburse Contractor for any reasonable charges or expenses that were approved in advance by Utility and incurred by Contractor as a direct result of the postponement.

27. REMEDIES

In addition to Utility's right to terminate and other remedies provided for in this Agreement, Utility shall be entitled to any of the following remedies:

27.1. If Contractor fails to furnish skilled labor, suitable tools or supplies, or adequate equipment sufficient for the prompt and diligent completion of the Work. Utility, without fully taking over the Work, may expedite delivery of and procure and furnish such labor, materials, supplies, or equipment. Contractor shall bear and be responsible for any and all expenses, costs, and fees incurred by Utility in taking these actions;

27.2. If Work is not on schedule, Utility, at Utility's discretion, may require Contractor to work such additional time over regular hours, including Saturdays, Sundays, and holidays, and provide such additional labor and equipment as necessary, without additional cost to Utility, to bring the Work on schedule;

27.3. If Contractor fails to comply with or breaches this Agreement or applicable SOW, Utility shall have the right to withhold or back-charge against any amounts owing to Contractor for any expenses and costs or debts incurred by Utility in its efforts to cure or protect itself; and/or

27.4. At Utility's option, Utility may award the Work or any part of it to another contractor to perform all or any part of the Work, at the expense of Contractor. Should the cost of another contractor, in addition to the amounts paid to Contractor, exceed the Contract Price plus damages, Contractor shall be responsible for the additional costs. This remedy is cumulative with any other remedies which provide for breach of this Agreement at law or equity.

27.5. For any breach of this Agreement or applicable SOW, in addition to any other remedies afforded Utility, Utility shall have the right to exclude Contractor from participation on bids for future work opportunities with Utility and the right to withhold payment for any other work that Contractor is providing Utility until such breach is cured.

28. DISPUTE RESOLUTION, ATTORNEYS' FEES

28.1. Utility reserves the right to require any dispute that the Parties are unable to resolve informally, including a dispute over the validity, enforceability or scope of this Dispute Resolution provision, to be resolved by final and binding arbitration conducted in accordance with and subject to the applicable Arbitration Rules of the American Arbitration Association or the equivalent rules from JAMS (the "Rules"). In the event Utility exercises the right to resolve the dispute by final and binding arbitration, the arbitration will be conducted by either: (a) three arbitrators—with one arbitrator appointed by each of the Parties, and the third arbitrator appointed by the two Party-appointed arbitrators; or (b) a single neutral arbitrator selected by the Parties in accordance with the applicable Rules. For disputes in which the amount in dispute is less than \$50,000 dollars, then one neutral arbitrator shall be appointed in accordance with the Rules. For all other disputes, the Utility retains the discretion to utilize three arbitrators or a single arbitrator to resolve the dispute. The decision of the arbitrator(s) will be rendered in writing and will explain the reasons therefore. Unless the Parties agree otherwise, all arbitration decisions shall be confidential. The arbitration shall take place in Clark County, Nevada, unless otherwise agreed to by Utility and the Contractor; and Nevada law will apply (including its offer of judgment rules), exclusive of conflict or choice of law rules. Each Party will initially bear its own attorneys' fees and other costs and expenses, and each Party will equally share the cost of the arbitrator(s) as they accrue. The arbitrator(s) may render awards of monetary damages, direction to take or refrain from taking action, or both. The arbitrator(s) shall determine whether either Party is a "prevailing party" in the arbitration. Notwithstanding the preceding requirement for the Parties to initially bear their own fees and expenses and to equally share in the costs of the arbitration, the non-prevailing party shall reimburse the prevailing party for attorneys' fees and other expenses reasonably incurred by the prevailing party, as determined by the arbitrator(s), in connection with the arbitration including the cost of the arbitrator(s). Judgment upon the award rendered in any such arbitration may be entered in any court having jurisdiction thereof, or application may be made to such court for a judicial acceptance of the award and an enforcement, as the law of such jurisdiction may require or allow. Contractor acknowledges and agrees that it is waiving its right to require arbitration pursuant to this provision, but retains the right to request the dispute be submitted to final and binding arbitration with the costs to be paid and reimbursed as described above, and the Utility will timely notify the Contractor of its consent or rejection of such

request. In the event the dispute is not arbitrated in whole or in part but is litigated, the prevailing party shall be entitled to an award of its reasonably incurred attorney fees and litigation costs.

28.2 The provisions of this Agreement relating to Alternative Dispute Resolution shall survive the termination or Expiration Date of this Agreement.

29. GENERAL PROVISIONS

29.1. Amendment. No amendment, modification or supplement to this Agreement shall be binding on any of the parties unless it is in writing and signed by the authorized representatives of the Parties.

29.2. Force Majeure.

29.2.1. The failure of any Party to comply with the terms and conditions of this Agreement because of, without limitation, an act of nature, fire, earthquake, act of public enemies, unavailability of power or transportation, pandemic, epidemic, adverse weather conditions not reasonably anticipated, actions of any governmental authorities, or any other force or event beyond the control of said Party, and not reasonably foreseeable, shall not be deemed a breach of this Agreement, unless said Party was negligent in foreseeing or preventing or responding to said event. The foregoing events shall be designated as a "Force Majeure event." Contractor's labor disputes and a failure of a subcontractor to perform shall not be deemed a Force Majeure event and shall not excuse non-performance or delays in performance.

29.2.2. Upon occurrence of a Force Majeure event, the affected Party shall give notice, in writing, of such Force Majeure event and its details to the other Party as soon as possible after the occurrence. The affected Party shall act diligently so as to resume performance as soon as reasonably practicable.

29.2.3. The time schedule for completion may be extended by a Change Order for a period of time equal to the duration of any resulting delays. In no event shall any delays or extensions of time be construed as cause or justification for payment of extra compensation to Contractor or an increase in the price of the Work under this Agreement as a result of this section.

29.2.4. This Force Majeure provision shall not be construed to limit any of Utility's rights, including termination of this Agreement.

29.3. Successors and Assigns. This Agreement and all of its provisions shall inure to the benefit of and be binding upon the successors and assigns of the Parties, provided, however, that Contractor shall not assign or subcontract this Agreement nor any performance hereunder, in whole or in part, nor delegate any monies which shall become due Contractor on any project(s) performed under this Agreement, without the prior written consent of Utility. Any assignment or delegation by Contractor without Utility's prior written consent shall be void and not merely voidable. If Utility consents to a particular assignment or delegation by Contractor, said consent shall not waive Contractor's obligation to seek Utility's consent for future assignments or delegations. Utility may assign this Agreement in whole or part or delegate any monies that shall become due to Utility at its sole discretion and without the approval of Contractor.

29.4. Notices. Except as otherwise provided herein for service of legal process, or as otherwise agreed to in writing by the parties, any notices, documents, or statements required pursuant to the terms and conditions of this Agreement may be sent either: (i) electronically by email; (ii) by overnight or 2nd day mail; or (iii) by facsimile transmission with confirmed receipt by the other party at the address; or, as appropriate, facsimile number, and marked for the attention of such person as specified in the Agreement. Any notice sent electronically by email shall be deemed to have been received by the other party by close of business on next business day following delivery to the email address specified in this Agreement. Any notice sent by overnight or 2nd day mail shall be deemed to have been received as of close of business of the next business day after confirmation of such delivery. Any notice sent by confirmed facsimile transmission under this Section shall be deemed to have been duly received by the other party as of the close of business on the next business day following the date of transmission. Any service of legal process must be directed to Utility's registered agent to be effective. Contractor may contact Utility or the Nevada or California Secretary of State's Office for most current registered agent information.

For Utility: Southwest Gas Corporation
Attn: Manager/Contract Administration – LVD-560
PO Box 98510
Las Vegas, NV 89193-8510
(702) 364-3060
Fax: (702) 364-3249
Email: ContractAdmin@swgas.com

For Contractor: Bowman Consulting Group Ltd
Attn: Billy Orr
12355 Sunrise Valley Drive, Suite 520
Reston, VA 20191
703/464-1000
worr@bowman.com

29.5. Severability, Divisibility, & Interpretation

29.5.1. Severability. Whenever possible, each provision of this Agreement shall be interpreted in such a manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be deemed prohibited or invalid under such applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, and such prohibition or invalidity shall not invalidate the remainder of such provision or the other provisions of this Agreement.

29.5.2. Divisibility. Performance under this Agreement or applicable SOW is not divisible for the purposes of enforcement under the remainder of the Agreement with respect to the subject matter of the Agreement or applicable SOW. In the event of a material breach of performance, except for those provisions which, by their nature, are to survive expiration or termination of this Agreement or applicable SOW, a material breach by one Party shall relieve the other Party of further obligation

or performance; and, except for the express remedies set forth in the Agreement or SOW, shall not entitle the non-breaching party to further benefits of the Agreement or applicable SOW.

29.5.3. Interpretation. Each Party agrees this Agreement is the product of their joint efforts; and, if there is any ambiguity in any provision, that the provision shall be construed with the fair meaning of the language used and shall not be strictly construed against either party.

29.6. Utility's Code of Business Conduct & Ethics

29.6.1. Contractor acknowledges that it must read, understand and comply, to the extent applicable, with the Utility's Code of Business Conduct & Ethics ("Code") when performing work for, or when transacting business with Utility. The Utility's Code may be found at <https://www.swgas.com/code-of-business-conduct-and-ethics>. Contractor and Contractor Personnel will not engage in any action or inaction that would induce or cause any Utility employee to violate the Utility's Code.

29.6.2. During the term of the Agreement, Contractor or Contractor Personnel shall not accept any employment or engage in any work which creates a conflict of interest with Utility or in any way compromises the Work to be performed under this Agreement.

29.6.3. Contractor and Contractor Personnel shall not offer, or cause to be offered, gifts, entertainment, payments, loans, and/or other services, benefits, or considerations of other than those permitted under the Utility's Code to Utility's employees, their families, vendors, subcontractors and other third parties.

29.6.4. Contractor further understands and agrees that the offering or giving of cash or gifts, other than those permitted under the Utility's Code, by the Contractor, its employees, or representatives, whether or not made with the intent to obtain special consideration or preferential treatment, shall be deemed to be a material breach of this Agreement entitling the Utility to terminate this Agreement at any time if Utility elects to do so.

29.6.5. Contractor understands and agrees that the Utility has established an Ethics Hotline pursuant to the Utility's Code, and the Contractor agrees that it will not retaliate against any Contractor Personnel that makes a good faith report to the Utility's Ethics Hotline. Contractor further agrees that the Utility may inform the Contractor's employees of the existence of and purpose of the Ethics Hotline, and of the Contractor's agreement to refrain from retaliation as provided by the first sentence of this subparagraph. This subparagraph is not intended to benefit any third party, including but not limited to any Contractor Personnel, nor is it intended to create any third-party cause of action.

29.7. Identity Theft Prevention.

29.7.1. Utility has implemented written Identity Theft Prevention Policies and Procedures to identify, detect, prevent, and mitigate the risk of identity theft or privacy considerations of its customers, employees, and third parties (collectively "Privacy Parties"). In furtherance of those efforts Contractor:

29.7.1.1. shall not communicate, disclose, or otherwise make any Privacy Parties' information available to the public or to an entity or individual outside of the Utility without written prior approval from Utility's Legal Affairs Department.

29.7.1.2. shall not create or use a printed document or electronically stored data system that includes Privacy Parties' information without prior written approval from Utility's Legal Affairs Department.

29.7.1.3. shall securely transmit or transport electronically stored Privacy Parties' information beyond the direct control of the Utility by encrypting the data or transmitting the data using encrypted network connections only and will consult with Utility's Information Services Department through a Help Desk request if there is uncertainty concerning the security of the transmittal.

29.7.1.4. shall not require any of the Privacy Parties to divulge passwords or other personally identifiable information, including but not limited to Social Security number; government-issued driver's license number, or other identification number, such as passport, alien registration, financial account number, or credit or debit card number in combination with any required security code, access code, or password that allows access to the person's financial account, signature, date of birth, physical home address, telephone number, e-mail address, education, employment, employment history, or any financial or other such information.

29.7.2. Contractor shall immediately notify Utility of Contractor's detection or suspicion of the unauthorized acquisition, use of, or access to records, electronic files, media, databases, or computerized data of Contractor, including but not limited to Privacy Parties' information and data, that compromises, or is reasonably likely to compromise the security, confidentiality, or integrity of the personal identifying information or privacy of Privacy Parties. Further, Contractor shall take all reasonable steps to maintain the confidentiality of any and all such information, including the proper disposal and/or destruction of such information by secure means when no longer necessary for the Work, and to secure and protect such information from unauthorized access, use, or disclosure.

29.8. Cumulative Rights; No Waiver of Rights. Each and every right granted to Utility under this Agreement, or allowed Utility by law or equity, shall be cumulative and not exclusive and may be exercised from time to time. No failure on the part of Utility to exercise, or delay in exercising any right, will operate as a waiver thereof, nor will any single or partial exercise of any right by Utility preclude any other or future exercise thereof or the exercise of any other right.

29.9. Section Headings. The descriptive headings in this Agreement have been inserted for convenience only and shall not be deemed to limit or otherwise affect the construction of any provision hereof.

29.10. Choice of Law. This Agreement shall be governed, construed and interpreted solely by and under the laws of the state of Nevada, without consideration of conflict of laws provisions. Each Party irrevocably and unconditionally waives any right it may have to a trial by jury in respect of any legal action arising out of or relating to this Agreement or the transactions contemplated hereby.

29.11. Further Assurances. In accordance with the notice procedure set forth in this Agreement, at any time or from time to time each of the Parties shall, at the request of the other, execute and deliver or cause to be executed and delivered all such further assurances and take or cause to be taken all such other reasonable actions as may be necessary or desirable in order to more fully and effectively carry out the intents and purposes of this Agreement. Failure of a party to provide such assurances within twenty (20) calendar days of request will be deemed a material default under this Agreement.

29.12. Publicity. Neither Party shall issue press releases or other publicity regarding this Agreement and the Work performed hereunder; nor use the other Party's name, trademarks, registrations, or any other information in other publicity, advertising, promotion, client listing, or any other purpose in any manner or form without first obtaining the written approval of the other Party. Such approval may be withheld, at discretion of consenting Party. Notwithstanding, the Parties agree that Utility may disclose information, including Confidential Information, about the Work performed as needed to Utility's regulators and statutorily-established consumer agencies without additional Contractor approval.

29.13. Survival of Covenants. All covenants, agreements, representations, and warranties of Contractor made herein, except as provided otherwise in this Agreement, shall survive the termination, Expiration Date, and Date of Completion of this Agreement.

29.14. Third Party Beneficiaries/Parties in Interest. This Agreement and all conditions and provisions hereof are for the sole and exclusive benefit of the parties hereto and their respective successors and assigns and are not intended for the benefit of any other person.

29.15. Time of the Essence. Time is of the essence in respect to all provisions of this Agreement in which a definite time for performance is specified; provided, however, that the foregoing shall not be construed to limit or deprive a party of the benefits of any grace or use period provided for in this Agreement.

29.16. Waiver. No waiver of any of the provisions of this Agreement shall be deemed, or shall constitute, a waiver of any other provisions, whether or not similar, nor shall any waiver constitute a continuing waiver. No waiver shall be binding unless executed in writing by the party making the waiver.

29.17. Entire Agreement.

29.17.1. This Agreement and any associated SOWs shall constitute the sole and entire agreement and understanding between the Parties as to the subject matter. Any prior understandings, commitments or representations, expressed or implied, written or verbal, between the Parties shall not be construed to alter or waive any part of this Agreement.

29.17.2. The documents contained in this Agreement are complementary to each other, and any Work described, or stipulation made in any of them shall be as binding as if made in each of them.

29.17.3 Any existing agreements between the Parties covering the same Work are hereby terminated and superseded by this Agreement.

29.17.4. Any Special Terms and Conditions attached to this Agreement are incorporated by reference into this Agreement.

29.17.5. Order of Precedence.

29.17.5.1. In the event of inconsistent or contradictory terms, conditions, or provisions, the order of precedence among the Agreement documents shall be: (1) any Change Order(s); (2) any Amendment(s); (3) this Agreement; (4) any Special Terms and Conditions; and (5) the applicable SOW.

29.17.5.2. If Contractor has requested changes, alterations, or modifications to this Agreement's terms and conditions in any SOW, Change Order, Amendment, Special Terms and Conditions, or other submittal, then Contractor shall expressly identify the Agreement terms affected and bring those to Utility's attention for review prior to execution of any such SOW, Change Order, Amendment, Special Term and Conditions, or other submittal. If Contractor fails to bring such matters to Utility's attention, then the terms and conditions of the Agreement shall govern and control.

29.18. Counterpart and Electronic Signatures. This Agreement may be executed in multiple counterparts and electronic signature, each of which shall be deemed an original and all of which together shall constitute one instrument. Each Party agrees that electronic signatures of the Parties, whether digital or encrypted, are intended to authenticate this Agreement and to have the same force and effect as manual signatures.

29.19. Authority. The undersigned, by their respective signatures hereon, certify that they are the duly authorized and acting officers or representatives of the respective Parties as set forth by their names and that they and each of them are authorized and empowered to execute this Agreement on behalf of said Party, and that this Agreement has been duly approved and they are authorized to obligate the respective Parties and to take such other and further action as may be necessary or appropriate to effectuate and carry out this Agreement.


[SIGNATURE PAGE FOLLOWS]

ACCEPTED FOR
BOWMAN CONSULTING GROUP LTD

ACCEPTED FOR
SOUTHWEST GAS CORPORATION


BJ


CS

By: 

By: 

Name: Billy Orr

Name: Chris Sohus

(Type or Print)
Title: Sr. Project Manager

(Type or Print)
Title: VP/Southern Nevada Div

Date: May 26, 2023

Date: May 26, 2023

Attachments incorporated into and made part of this Agreement:

Appendix ___ Data Security and Privacy Requirements Appendix

Appendix ___ Insurance Requirements Appendix

Appendix ___ Drug & Alcohol Requirements

Appendix ___ OQ Covered Task List

Appendix ___ Statement of Work (SOW)

Appendix ___ Proposal Sheet

DATA SECURITY & PRIVACY REQUIREMENTS APPENDIX

A. These terms provide the data security, cybersecurity, and privacy procedures and requirements Contractor must implement on or before the effective date of any agreement or Statement of Work that involves access to Utility’s Confidential Information, data, or computer or data processing systems (“Utility Data” or “Utility Data Systems”); and must be maintained by Contractor as long as Contractor has access to, possession, custody, creation, collection, storage, usage, processing, sharing, transfer, retention, destruction, or control of Utility Data or Utility Data Systems for the provision of work or services (“Work”) to Utility (collectively “Data Security Requirements”). These Data Security Requirements are in addition to any other security and confidentiality requirements of the applicable agreement and present a minimum standard only.

B. Defined terms not set forth within these Data Security Requirements shall have the meanings set forth in the applicable agreement for Work or Statement of Work between the Contractor and Utility.

C. References to “Contractor Employee(s)” shall include any contractors, subcontractors, consultants, agents or any other individual or entity engaged by Contractor in providing the Work to Utility.

D. Contractor represents and warrants:

- 1.** If not otherwise provided by Utility, all computer systems and resources to be utilized in providing the Work to Utility, if any, are owned and managed by Contractor and physically in the control of Contractor.
- 2.** “Cloud”-based or third-party computer resources may not be utilized for Work to Utility without Utility’s prior approval, which approval may be denied at Utility’s sole discretion.
- 3.** Contractor will implement and maintain appropriate administrative, technical, physical, environmental, electronic, and procedural controls, policies, and measures: (i) to ensure security, integrity, availability, and confidentiality of Utility Data and Data Systems; (ii) to protect against any threats or hazards to the security or integrity of the Utility Data or Utility Data Systems accessed by Contractor; (iii) to protect against unauthorized access, use, modification, loss, damage, destruction, or disclosure of Utility Data and Utility Data Systems; and (iv) to report and respond to any suspected or actual intrusion, breach, or other unauthorized access, use, or disclosure of Utility Data and Utility Data Systems (“Data Security Incident”).
- 4.** Contractor shall comply with applicable law and regulations to protect Utility Data and Utility Data Systems, including but not limited to privacy laws regarding Utility’s customer and employee data, accessed by Contractor from unauthorized access, use, or disclosure; and consistent with industry best practices and standards.
- 5.** The administrative, technical, physical, environmental, electronic and procedural controls, policies, measures, and best practices to be implemented and maintained by Contractor shall include, but are not limited to:
 - a.** Regular scans for vulnerabilities to Contractor’s internal and external data and communication networks, equipment, and devices. Such scans shall be conducted not less frequently than on an annual basis; and be conducted at Contractor’s expense by an independent third party.

- b.** Periodic reviews of the risks and threat profiles, testing, audits, and revision, if necessary, of Contractor's cyber and information systems security programs and protective measures for adequacy, effectiveness, and compliance with these Data Security Requirements and applicable data security and privacy laws and regulations.

 - i.** Such periodic reviews shall occur not less frequently than annually and whenever a change is made by Contractor in Contractor's systems, practices, measures, or policies that may materially affect the security and integrity of Utility Data or Utility Data Systems accessed by Contractor.
 - ii.** Contractor shall not alter or modify its programs and measures in such a way as to weaken or compromise the security and integrity of Utility Data or Utility Data Systems accessed by Contractor.
 - iii.** Contractor shall notify Utility in writing when Contractor changes its information security and its privacy policies. Mere posting of such changes on Contractor's website or log-in page deemed insufficient notice.
- c.** Monitoring and logging of all networks, servers, and workstation activities and network traffic, including log-in attempts and administrative activities, to ensure only appropriately-authorized personnel are accessing Utility Data and Utility Data Systems.
- d.** Use of firewalls and segmentation and segregation of Contractor's internal network from public or Internet access; and segregation of Contractor's internal systems containing Confidential Information and Utility Data from other, less restricted internal networks and systems.
- e.** Public-facing firewalls, portals, and services will be strictly limited to only those public-facing firewalls, portals, and services required to provide the Work to Utility under the applicable agreement or statement of work.
- f.** Installation and use of most current, up-to-date anti-malware software on networks, servers, workstations, and portable devices that may be used to access Utility Data and Utility Data Systems; or to access, use, or store Utility Data.
- g.** Contractor shall utilize intrusion detection and intrusion prevention systems that generate alerts and are sufficient to detect, evaluate and document potential Data Security Incidents and attempted unauthorized access into Contractor's data systems.
- h.** Contractor shall follow industry best practices of patching and updating software and firmware on Contractor's networks, servers, workstations, and portable devices that may be used to access Utility Data Systems, or to transmit, access, use, process, or store Utility Data.
- i.** Appropriate protective measures and safeguards shall be taken to prevent unauthorized physical or logical access or intentional or accidental damage to Contractor's premises or systems that access, use, process, or store Utility Data. Such measures shall also protect against environmental risks and system malfunctions or failures.

11. No Utility Data at any time will be processed or transferred outside of Contractor's data centers; and such data centers shall be physically located in the continental United States. If Contractor utilizes regional availability zones for data center operations, then Contractor shall inform Utility and allow Utility to select among the multiple zones where Utility Data will be processed or stored, without further cost or expense to Utility.
 12. **Export/Unauthorized Transfers.** No Utility Data at any time will be processed in, transferred to, or stored in any foreign country; or processed on, transferred to, or stored on any portable or laptop computing device or any portable storage medium without the prior consent of Utility and such device or storage medium is in use as part of Contractor's designated backup and recovery processes and encrypted in accordance with generally-recognized industry standards and these Data Security requirements.
 13. Contractor shall ensure that all of Contractor's or Contractor Personnel devices, including cell phones or other portable storage devices, used to access, process, or store Utility Data shall be equipped with industry-standard security and encryption features. These features shall include, at a minimum, remote wipe and remote shutdown capabilities. Contractor's and Contractor's Personnel may not access or store Utility Data on any personal or third-party devices, including mobile devices, tablets or personally-owned computers, laptops, or electronic devices unless approved in writing by Utility's Information Services Department.
 14. Except as necessary for disaster recovery and business continuity purposes, any Contractor device or system accessing or storing Utility Data must be disabled for any export or further copying or transfer of Utility Data outside of such device or system.
 15. All files and Contractor's data systems containing Utility Data will be encrypted with industry-standard encryption features and password-protected (at rest and in motion), using strong password protocols and multi-factor authentication, to avoid unauthorized access, use, or disclosure.
 16. Any electronic or physical transmission or exchange of system or application data with Utility and/or any other permitted parties shall take place via secure means over secure connections and solely in accordance with applicable industry standards and the applicable agreement, Statement of Work, and these Data Security requirements.
- E. Utility reserves the right to monitor and to inspect any portable or laptop computing devices, mobile devices, or storage mediums used by Contractor to provide Work to Utility to ensure Utility Data is not being processed, stored, or transferred in violation of the applicable agreement and these Data Security requirements. In all events, Contractor remains solely responsible for the security and protection of Utility's Confidential Information and Utility Data provided under the applicable agreement or Statement of Work.
- F. No more than once every calendar year, or within thirty (30) days of Utility's request, Contractor shall make available to Utility a copy of Contractor's latest certification of compliance with the latest generally accepted audit standards and service organization attestations for data security controls (formerly SAS 70 and SSAE16/SSAE 18 report) for any cloud-based resources utilized in providing Work to Utility; or any successor or similarly-equivalent report adopted by the industry. In addition, upon Utility's written request, Contractor shall allow Utility to review any associated audit reports, summaries of test

results, or equivalent measures taken by Contractor to assess whether its information security program meets the foregoing objectives.

G. Upon request, Contractor shall make available to Utility, in accordance with Contractor's standard processes, a copy of Contractor's then current standard external policy document or statement on security incident management. Such document or statement and its content shall be treated as Contractor's Confidential Information.

H. Should Contractor seek to outsource the computer systems or resources used in the provision of Work to Utility, then Contractor shall provide not less than ninety (90) days prior notice to Utility; and Utility reserves the right to re-evaluate and/or terminate the applicable agreement or Statement of Work. In all events, Contractor remains solely responsible for the security and protection of Utility Confidential Information, Utility Data, or access to Utility Data Systems provided under the applicable agreement or Statement of Work.

I. Utility reserves the right to require Contractor conduct an independent third-party audit from a network security auditing/assessment firm (acceptable to Utility) of the security methods used to protect Contractor's computer systems and the information and data stored or processed thereon. The costs of a network security audit/assessment requested by Utility shall be the responsibility of Utility, unless the network security audit/assessment indicates that Contractor is not in compliance with the applicable agreement or Statement of Work, including but not limited to these Data Security Requirements.

J. Notwithstanding any other provisions of the agreement or Statement of Work, Contractor shall immediately notify Utility of any actual or suspected unauthorized access, disclosure, or use of the Utility Data or Utility Data Systems; and will assist in remedying any unauthorized access, use, or disclosure and take immediate steps to prevent further unauthorized access, use or disclosure. Such steps shall, include, without limitation: investigation of the circumstances of the Data Security Incident; monitoring for further unauthorized access; notification of affected persons; and, if applicable, credit monitoring for the affected individuals, for a period as required by law but, in all instances for a period of not less than twelve (12) months, at Contractor's expense, to the extent any such unauthorized access, disclosure, or use was the result of any action or inaction by Contractor or its personnel, including permitted contractors and subcontractors, agents, or representatives. Contractor shall also provide resources, cooperation, and be responsible for expenses related to public relations and reputational repair in the event of an actual breach or unauthorized use, access, or disclosure of the Utility Data or Utility Data Systems.

K. If Utility approves of use of third-party hosting or data storage services by Contractor, then:

- 1.** Contractor shall ensure and require in writing that any third-party providing hosting and data storage services to Contractor in connection with the Work shall abide by confidentiality and data security requirements no less restrictive than these Data Security requirements;
- 2.** Such third party shall promptly notify Contractor of any requested or compelled access or disclosure of the third-party provider involving Utility Data. Contractor shall then promptly notify Utility of such requested or compelled disclosure and cooperate with Utility to seek appropriate protections for such Utility Data residing with the third-party service provider; and
- 3.** Contractor will require its data storage and hosting service providers to comply with the latest generally-accepted audit standards and service organization attestations for data security controls (formerly SAS 70 and SSAE16/SSAE18), or the latest available equivalent industry standard for such reviews; and conduct such security audits on a semi-annual basis.

Contractor, upon Utility request, shall provide the security audit reports (“Audit Reports”) prepared for the data storage and hosting service providers.

L. In the event that the location of the data center(s) or service providers used to host and provide the Work to Utility are changed, Contractor shall provide Utility with written notice of not less than ninety (90) days prior to said change and disclose the address and contact information for the new facility or service provider.

- 1.** The replacement hosting provider shall be a reputable hosting provider comparable to Contractor’s current providers and said replacement providers shall be located within the United States.
- 2.** Prior to transferring Utility Data, Contractor shall require the replacement hosting providers to perform a security audit utilizing the latest available industry standards; and conduct and provide such audits and reports on a semi-annual basis thereafter.

M. Contractor shall ensure Utility has the right and ability to contact such third-party storage and service providers directly to access and retrieve Utility Data and confidential information from such third parties in the event the applicable agreement or Statement of Work is terminated by Utility for cause or Contractor ceases to provide the Work to Utility.

N. Unless prohibited by law or court order, Contractor shall notify Utility in writing within two (2) business days of receipt of a subpoena for disclosure of any Utility Data. If Utility informs Contractor that it will seek a protective order, then Contractor shall delay responding to the subpoena to permit Utility time seek such protective order. Upon request by Utility, Contractor shall confirm whether it has received any subpoena for Utility Data within the prior twelve months and the date and scope of all such subpoenas. Nothing in these Data Security Requirements is intended to preclude Contractor from complying with the subpoena when and as required to do so by law or court order.

O. Utility may require Contractor to certify the results of a background check for each person who will require access to Utility systems. If required, the background check shall meet the requirements set forth in the applicable agreement or SOW.

P. All Utility information technology systems are monitored for acceptable use. Contractor, and Contractor’s employees or permitted subcontractors, acknowledge that there is no expectation of any right to privacy in any such materials and data stored, processed, transmitted and /or maintained on Utility property. Such material and data are subject to inspection and can be confiscated by Utility at any time, with or without notice and with or without password protection.

Q. Except for one copy retained solely for compliance with Contractor’s reasonable document retention policies or legal purposes, Contractor shall return, destroy, or render irretrievable, all by secure means, any Utility Data or Confidential Information in Contractor’s possession, custody, or control within fifteen (15) days of the termination of the applicable agreement or Statement of Work. Contractor shall provide Utility with written confirmation of such secured destruction or return of Utility’s Confidential Information and Utility Data. Any Utility Data or Confidential Information retained by Contractor pursuant to this provision remains subject to all terms and conditions contained in these Data Security Requirements until such time that Utility Data or Confidential Information is securely destroyed or returned to Utility.

R. Contractor acknowledges Utility’s Data Systems and computing architecture are based primarily on Microsoft Windows operating system and Utility’s implementation of mobile technology utilizes

primarily Apple iOS. While software applications required for completing Utility work may be available for other operating systems (e.g. Android), Utility makes no guarantee that such applications will work outside of a Windows or iOS platform. Contractor agrees that it is Contractor's responsibility to ensure that any Contractor-supplied devices or data systems are compatible with Utility-supplied software, devices, or systems required to complete Utility business.

INSURANCE REQUIREMENTS APPENDIX

TYPE OF COVERAGE & GENERAL REQUIREMENTS

All liability policies must include coverage for natural gas and or natural gas operations, or any exclusions must be expressly exempted or waived by the carrier for natural gas from the exclusion.

Coverage for explosion (X); collapse (C); or underground (U) must show evidence carrier has waived these exclusions, resulting in full coverage for explosion (X), collapse (C), and underground (U).

Exclusions other than mold and nuclear activity must be approved on a per-item basis.

All coverage must include contractual defense of indemnitee either in the policy or amendatory endorsement extending insurer's duty to defend to Company and duty to defend in actions where insurer reserves rights for issues of coverage.

Defense costs and expenses shall not erode insurance limits.

Required coverage amounts can be a combination of primary and excess or umbrella policies

EXTENDED REPORTING PERIOD (3 YEARS)

Unless otherwise provided for or required by SWG, all policies must have an extended reporting period of not less than three (3) years.

WAIVERS OF SUBROGATION

All policies and endorsements must contain express waivers of subrogation in favor of SWG.

COMMERCIAL GENERAL LIABILITY (CGL) REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	EXPLANATION	MINIMUM COVERAGE LIMITS	
ISO Form CG 0001 1093, or another form acceptable to SWG. <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Additional Insured Endorsement Include coverage for on-going & completed operations hazards/products. Covering any act, error, or omission of Contractor. <input type="checkbox"/> Y <input type="checkbox"/> N Contractor Professional Liability Endorsement CGL policy must include endorsement for professional liability, ISO Form CG 22 79 04 13, or equivalent approved by company.	Personal Injury, Bodily Injury (including accidental death), Property Damage, Contractual Liability. Remove any exclusions for personal injury or property damage arising from professional liability. No 3 rd -party claim exclusions.	Per occurrence Combined Single Limit basis, for both accidents & injuries.	<u>\$1,000,000</u>
VEHICLE LIABILITY INSURANCE REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
<input type="checkbox"/> Y <input type="checkbox"/> N Additional Insured Endorsement Covering claims arising from the ownership, operation, loading-unloading of owned, hired, leased, non-owned and or borrowed private passenger and commercial vehicles.	Bodily Injury, Property Damage	Combined Single Limit Basis	<u>\$1,000,000</u>
POLLUTION LIABILITY/ENVIRONMENTAL IMPAIRMENT REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
<input type="checkbox"/> Y <input type="checkbox"/> N Additional Insured Endorsement Covering claims arising from both gradual and "sudden and accidental" pollution conditions, releases, or environmental impairment as a result of Contractor's work; plus, handling, abatement, and transport of pollutants and hazardous materials and substances, including, but not limited to asbestos and lead paint. Coverage must include the cost of off-site clean-up and remediation.	First & Third-party Bodily Injury, Property Damage	Per Occurrence	\$ _____
WORKERS COMPENSATION REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
All coverage from companies authorized and approved to issue such insurance by the applicable state(s) where the work is to be performed; or through the applicable state fund or agency established for such Workers' Compensation claims.		Per Claim	\$ _____ Not less than statutory minimums for the state where work is to be performed.

EMPLOYER'S LIABILITY REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
<input type="checkbox"/> Y <input type="checkbox"/> N Additional Insured Endorsement Covering first and third-party claims for work-related bodily injury or disease; loss of consortium, dual capacity suits, and consequential bodily injury.		Per Claim	\$1,000,000 Greater of \$1,000,000.00 or statutory minimums for Workers' Compensation.
PROFESSIONAL LIABILITY (Errors & Omissions) REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
Comprehensive professional liability coverage for, but not limited to: any error and or omissions; personal injury; bodily injury, including accidental death or illness; property damage; advertising injury; reputational harm; misuse or disclosure of confidential information; intellectual property infringement; trade secret misappropriation; and cyber-security, if applicable. Coverage must provide for payment of all sums for which Contractor is obligated to pay due to liability imposed on Contractor for damages resulting from or arising out of the performance of professional services for Company and caused by any act, error, or omission of Contractor or person for whose acts the insured is legally liable. Required coverage may be included as part of CGL above. <input type="checkbox"/> YES <input type="checkbox"/> NO Five (5) year extended reporting period.		Per claim, with extended reporting period.	\$1,000,000
CYBERSECURITY/CYBER LIABILITY REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
Coverage must include, but not limited to: network security and privacy liability; unauthorized access; unauthorized use; unauthorized disclosure; data loss; transmission of malicious code or virus; exploitation designed to compromise network or data security and or denial of or impairment of service; failure to protect the confidentiality of information of Company, its employees or customers; violation of any right to privacy; corruption, misuse or disclosure of personal information of third parties; and failure to protect privacy or personal identifying information, covering first and third parties for the liability of Contractor or any other person for whose acts the insured is legally liable, and the liability of Company and its Affiliates arising from or out of the performance of work or services for Company. Required coverage may be included as part of CGL above. <input type="checkbox"/> YES <input type="checkbox"/> NO Two (2) year extended reporting period.		Per claim, with the extended reporting period \$5,000,000.00	\$5,000,000 It will depend on what data/systems the contractor has access to.
MOLD & FUNGUS REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
<input type="checkbox"/> Y <input type="checkbox"/> N Additional Insured Endorsement		Per Occurrence	N/A
OTHER REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
Railroad Protective Liability (Contractor operations within 50 feet of the railroad)		Per Claim \$2,000,000.00 Only when applicable	\$_____ Aggregate \$6,000,000.00 Only when applicable
FIDUCIARY REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
(For funds managed or held in trust. The company as Loss Payee)			\$_____
CRIME INSURANCE REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	EXPLANATION	BASIS	ENTER \$ AMOUNT
(Covering, but not limited to; fraud, theft, dishonesty, disappearance)		Per Claim \$_____	Aggregate \$_____
OTHER INSURANCE (SPECIFY)			

Primary Coverage: Contractor shall obtain adequate insurance during the performance of work, sufficient in scope and coverage to provide for the indemnifications required under the applicable Agreement or Statement of Work insurance required above shall be primary and non-contributory for any other insurance maintained by Gas Corporation ("Company" or "SWG"). Damages recoverable by Company shall not be limited by the amount of insurance required or the proceeds thereof. The Contractor shall be responsible for any deductible under its insurance policies. The Contractor shall require that all of its Subcontractors maintain insurance of the same types and same amounts required of Contractor unless the Company agrees to or requires a different amount. The Company, as indemnitee, may possess other insurance for the same risk, but, in all instances, Company's insurance shall be secondary to Contractor's insurance. The company is not obligated to notify any other insurer of any claims or legal actions.

Additional Insured, Severability of Interests, Waivers of Subrogation, Duty to Defend: The Company, including its officers, directors, and employees, shall be named as additional insured with respect to its interests to the extent appropriate, including coverage for on-going and completed operations; and for claims arising from Contractor's work or work product included in products-completed operations hazard coverage.

Waiver of subrogation clauses shall be included in all required policies. Insurance maintained or procured by Contractor shall not reduce or limit Contractor's obligation to indemnify and defend Company for claims made or suits brought which result from, or in connection with, the performance of the applicable Agreement.

The Contractor's responsibility to indemnify, defend, and hold Company harmless shall not be diminished by any inclusion or exclusion of insurance. Payments for costs of defense or investigation expenses under the required policies shall not reduce the limits of insurance.

Products/Completed Operations: The coverages required herein, when written on an occurrence form, shall be maintained during the entire term of the Agreement. All coverages shall be written on a per claims-made basis. Required coverages shall be maintained during the entire term of the applicable Agreement and further until at least three (3) years following completion and acceptance of all work under the applicable Agreement. Additional insured endorsements providing products/completed operations coverage shall continue to provide coverage through the expiration of the time within which a claim may be filed under all applicable laws.

Insurer Security: Insurers must be rated A- /VIII or better A.M. Best; or shall be otherwise acceptable to SWG; and must be authorized to do business in the state(s) in which the services are to be provided.

Insurance Certificates, Endorsements, Notice of Policy Change/Cancellation: The Contractor shall provide Company with satisfactory evidence of compliance with insurance requirements. Before commencing work under the applicable Agreement, the Contractor's broker or agent shall provide copies of additional insured and waiver of subrogation endorsements, as well as certificates of insurance verifying that at least the minimum insurance coverages required above are in effect. The Company reserves the right to require a Broker's Opinion Letter to accompany the certificates of insurance, reflecting Contractor's broker has reviewed these insurance requirements and that the insurance coverage reflected on the certificates complies with these requirements. The Company reserves the right to view the original or certified copy of any insurance policy applicable to the Agreement.

In the event of a loss or claim potentially arising out of Contractor's Scope of Services, the Contractor shall promptly provide complete copies of its insurance policies upon request. Certificates must disclose any self-insured retention of \$250,000 or more. Certificates must specify whether the liability coverages are written on an occurrence form or a claims-made form. The Contractor shall provide thirty (30) days' advance written notice to SWG of any material change(s) or cancellation(s) of coverage. The Contractor's failure to provide such advance written notice shall be construed as a material breach of the applicable Agreement.

Should any of the policies described and identified in the Certificate expire or otherwise terminate during the term of the applicable Agreement, the Contractor must replace the policies before the expiration date with policies providing the same or comparable coverage which meets Company's approval. In addition to other remedies, if the Contractor fails to procure and maintain required insurance, the Company shall have the option to procure, at Contractor's expense, the required insurance coverages for Contractors and Subcontractors and deduct the costs from amounts due to the Contractor under the applicable Agreement. The filing of a new Certificate shall also be a condition precedent to the prosecution of the continuation of any Work. All required certificates shall be sent to:

SOUTHWEST GAS CORPORATION
8360 S Durango Dr.
LAS VEGAS, NEVADA 89113-4444
ATTENTION: CONTRACT ADMINISTRATION/MS LVD-560
Email: ContractAdmin@swgas.com

NOTES:

STATEMENT OF WORK

**SOUTHWEST GAS CORPORATION
SOUTHERN NEVADA DIVISION**

2023 DIVISION OPERATIONS SERVICES

STATEMENT OF WORK

1. GENERAL DESCRIPTION

- 1.1 Work performed under this Agreement is for Southern Nevada (SNV) Division Operations for design services and/or drafting of construction drawings for the installation, abandonment, replacement, or relocation of new and/or existing Southwest Gas Corporation (Utility) gas facilities related to new business, replacement, franchise and system reinforcement projects. This may include but shall not be limited to: transmission and feeder system steel mainlines (where pressure is greater than 60 psig), and main and service distribution systems (where pressure is 60 psig or less and the pipe is steel or plastic). Required disciplines may include, but shall not be limited to: Land Survey, Civil, Mechanical, Structural and Environmental Engineering. All associated activities shall be generically referred to as "Work."
- 1.2 Typical work under this contract includes but is not limited to the following SNV Division Operations services:
- Gas pipeline design for new installation, relocation and abandonment of transmission and distribution systems.
 - Supervisory Control and Data Acquisition (SCADA) system design.
 - Meter Set Assembly (MSA) design.
 - Utility measurement and control standards.
 - Bridge supports for suspended gas lines.
 - Directional drilling of steel pipelines. Requires calculations for depth, stress, and maximum deflection.
 - Design for valves, insulators, and/or pressure recorders.
 - Cathodic protection continuity.
 - Preparing cost estimates and bid documents, if required.
 - Determine material selection based on established Maximum Allowable Operating Pressure (MAOP).
 - Prepare Storm Water Pollution Prevention Plans (SWPPPs), if requested.
 - Provide construction field support.
 - Complete design drawings in accordance with Utility Operations Manual, or as otherwise directed.
 - Generate permit drawings, project extents exhibits, and shell drawings.

- Surveying.
- Process and Instrumentation Diagrams or other electrical drawings.
- GIS/Mapping services.
- Potholing by qualified personnel for design.
- Third Party Plan Review assignment.
- As-built drawing creation, review, and corrections.
- Digital documentation collection, creation, review, and corrections.
- Data and records collection and analysis for specialized projects.
- Third Party Improvement Plan and/or Records Review such as the following:
 - Civil Improvement Plan Review (may include utility conflict resolution design)
 - Vacation Request Review
 - Final Map Review
 - Amended Final Maps Review

1.3 SNV Division Operations will require experience and efficiency with the following tasks:

- Topographic survey base maps.
- Include X-Ray locations and GNSS/GPS data on as-builts as provided.
- Right-of-way, easements, ownership, section line research.
- Utility research, utility conflict review, and coordination.
- Geotechnical research (including research/verification of soil conditions).
- Generate design drawings, select pipeline alignment, and establish profiles and isometric details.
- Complete required design calculations and Professional Engineer stamp when required by Utility.
- Complete required drainage studies and applications.
- Prepare permit applications for local jurisdictions.
- Assist in procurement of traffic control plans and encroachment permits as required by Utility.
- Identify pothole locations, coordination of analyzing pothole reports.
- Specify construction materials and notes.
- Include design details, test data sheets, pressure test procedures, and purge calculations in drawings.
- Perform site visit and take field measurements, as necessary.
- Finalize design drawings and construction documents.
- Collect GNSS/GPS data using Utility designated software and equipment for documentation of materials, measurements, and notes.
- Prepare material list and Engineering cost estimate, including Work Management System (WMS) entry when required by Utility.

- 1.4 Work will be performed throughout the Southern Nevada Division which includes Arizona, California, and Nevada.

2. SCOPE OF WORK

- 2.1 Contractor shall commence Work on or about **May 1, 2023**. All Work shall be completed no later than **April 30, 2026**. At Utility's option, Agreement may be extended for up to two (2) additional years by mutual agreement.
- 2.2 Contractor shall provide all labor and equipment necessary to perform Work for the design of natural gas facilities for installation, abandonment, and/or replacement, as assigned by Utility. Contractor shall provide land-based maps, valve sketches, material selection of mains and service designs, pothole requests, or other engineering services when specifically requested by the Utility. All material, travel, administrative support, etc., not specifically exempted by Utility will be supplied by Contractor.
- 2.3 Costs for all Contractor labor, equipment, materials, travel expenses, research, performing field work and design survey (if land-base not provided by the Utility), design, drawings, materials, and performing WMS input shall be included in the project costs.
- 2.4 Utility reserves the right to withhold Projects which are anticipated to have engineering design/drafting costs in excess of limits set by Utility.
- 2.5 Utility reserves the right to assign Project in whole or in part, to one or more service providers based on expertise in any given area.
- 2.6 Contractor shall show locations of existing facilities for other utilities on Project drawings. This information shall be obtained by contacting the utility companies and/or through field investigations. This shall be part of the Project unit costs. Contractor shall use the Design Ticket process via USA North for projects in Nevada, as required. Contractor shall be required to register with USA North for these purposes, independently of Utility.
- 2.7 Utility reserves the right to use multiple contractors as needed. Work performance and productivity will dictate how many contractors will be required.
- 2.8 If Contractor is unable to meet quality control, productivity, and/or performance requirements as noted herein, Utility will have the right to terminate the Agreement. Uncompleted Work may be offered to other bidders at a mutually negotiated rate.
- 2.9 Upon termination of Agreement, all Work completed by or in progress by Contractor shall be provided to Utility.

- 2.10 All Work performed by Contractor (drawings, exhibits, details, etc.) under this Agreement shall be considered Utility property.

3. UTILITY REQUIREMENTS

- 3.1 Utility will establish each Project scope and facility boundaries. Project scope will be communicated through marked up and/or highlighted tile sheets or electronic equivalent, marked up civil plans, marked up maps, written description, or other means to convey the scope. Basic design information such as the existing MAOP/MOP, future MAOP/MOP, and the proposed pipe size will be provided by Utility. Geospatially accurate AutoCAD files with appropriate facility location data will be provided, as available.
- 3.2 Utility or Contractor, at Utility's request, will create the Work Request (WR) in WMS prior to Contractor beginning Work. However, for related Accelerated Construction (AC) requests as directed by Utility, Contractor shall create the WRs in WMS.
- 3.3 Utility will provide program access through Virtual Machine software (VMware/Virtual Desktop) to Utility internal mainframe and server applications for the design of each Project. Currently, these include WMS, FOMS Connections, FieldSmart, PaperVision, etc. These programs may be superseded by other similar software at the discretion of Utility. References to the current programs apply to any similar program that supersedes the previous.
- 3.4 Utility will provide access to, or copies of, Utility Design Standards, Drawing Standards, Material Specifications, Materials Catalog, and/or Operations Manual.
- 3.5 Utility reserves the right to add new Contractors or remove Contractors from future Project assignment lists, and/or to enter into a separate agreement for Work outside of this Agreement. This Agreement shall not be construed as a guarantee that any/all Contractors will be requested by Utility to provide Engineering Services.
- 3.6 Utility will provide Contractor with a drawing template package that contains approved title block, north arrow, text font, line weights, etc. for drawing consistency.
- 3.7 Utility will request construction survey which includes the scope of work, required staking (offset cut stakes, ROW, stationing, etc.), improvement plans (if available), and contact information for the Work. Upon such request

Contractor shall provide a quote for requested survey within 1-3 day(s) depending on urgency of request.

- 3.8 Utility will request potholing which includes the exact location of each pothole needed and contact information for the Work. Upon such request Contractor shall provide a quote for requested potholing within 1-3 day(s) depending on urgency of request.
- 3.9 Utility shall provide pre-approval of potholing personnel and provide Operator Qualification training through Utility's Gas Operations Support Staff (GOSS). Utility shall review Drug and Alcohol program of contractor(s) performing potholing.
- 3.10 Utility will provide project area, exhibit, and/or preliminary civil drawings, vacation requests, final maps, and amended final maps to Contractor to perform Third Party Improvement Plan and/or Records Review.
- 3.11 Utility will submit appropriate forms and/or requests for non-standard material or material not currently in Utility systems (e.g. WMS).

4. CONTRACTOR REQUIREMENTS

- 4.1 Contractor shall maintain a minimum of one (1) computer at its work site capable of communicating with Utility main frame and server. Computer must have an Internet connection and be capable of running a browser similar to Microsoft Edge. Contractor shall be given web-based access to Utility programs as noted above. Computer specifications are not absolute but should approach current industry standards. Contractor may utilize multiple computers at work site. Internet connection and speeds are the responsibility of Contractor and its Internet Service Provider of choice.
- 4.2 Contractor shall designate employee or employees who will access Utility programs. Said employee(s) will be reviewed and approved by Utility for Intranet access. Each employee will be given a unique username and password to be used only by that individual. Contractor shall notify Utility if its employee(s) no longer require access.
- 4.3 Contractor shall maintain software compatible to Utility, including Microsoft Office and AutoCAD. Alternative programs that can save to equivalent formats are acceptable; however, correspondence with Utility must be compatible with Microsoft Office programs and drawings must be compatible with AutoCAD 2019, or older.
- 4.4 Contractor shall participate in scheduled Project meetings with Utility. Frequency of meetings will be determined by Utility Designate (e.g., Design Engineer, Design Engineering Technician, Engineering Supervisor, GIS, or

other designate). These meetings can be in person or can be via a telephone conference call, depending upon the subject matter and the need as determined by the Utility Designate. Project may be in remote location with varying terrain. The purpose of the meetings will be to provide activity status updates, exchange information on the Project, and identify and resolve issues associated with the Project. Scheduled meetings shall be included in total project costs. Contractor shall have one (1) person available to physically attend 30%, 60%, and 90% field meetings at the request of Utility. This shall be included in the total project cost. If specified by Utility, the person in attendance must be a Professional Engineer.

- 4.5 When a meeting outside the regularly scheduled meetings is requested by Utility, Contractor shall have only one (1) person in attendance, unless additional personnel is requested in writing from Utility Supervisor. Contractor shall invoice Utility for meeting attendance at the hourly rates for the applicable job description defined in the Contractor's Proposal Sheet and up to one additional hour for travel time.
- 4.6 Utility may request Contractor to submit regularly scheduled status reports to Utility Designate. Utility Designate will determine frequency of reports. The status report shall identify tasks completed during the review period, planned activities for the following review period, and changes to schedule. The status report can be e-mailed to expedite receipt to Utility Designate.
- 4.7 Contractor shall perform records search of existing gas main facilities. Records obtained by contractor shall be uploaded to Utility network project folder. Partial research can be done remotely via PaperVision and/or WMS; however, complete as-built records may be available at Utility's Las Vegas North Operations Center and/or Bullhead City (BHC) Office upon request. If records cannot be found, contact Utility. Typical research tasks may include, but are not limited to:
- Determine existing material type.
 - Select pipe specifications.
 - Create installation Work Request.
 - Confirm month/year and material specifications of existing facilities installed.
 - Determine gas flow direction.
 - Verify system MOP/MAOP at precise location of existing gas facilities.
 - Identify tax code boundaries.
 - Obtain tiles.
 - Land Rights (easement extents/records).
 - Identify isolation boundaries/isolation valves.

- 4.8 Contractor shall perform records search of existing service facilities to be worked, replaced, and/or tied-over. Service records obtained by Contractor shall be uploaded to Utility network project folder, at Utility's request. Research can be performed by reviewing pending posting files and via PaperVision and/or WMS that show service history of service as-built documents. If records cannot be found, contact Utility. Accelerated Construction (AC) work process expectations may include, but are not limited to:
- Complete detail service investigation.
 - Prepare excel service replacement list.
 - Identify appropriate Excess Flow Valve (EFV) or Service Line Shut-off Valve (SLSV) candidates.
 - Identify and design for the abandonment of idle risers and meters.
 - Identify and design for the abandonment of existing multi-branch and cross-lot services.
 - Assign appropriate AC WR type.
- 4.9 Contractor may be required to perform a field check of all Projects to verify that as-built drawings and service information match actual field conditions. Significant differences between as-built and field information must be communicated to Utility as soon as practical. Contractor shall note potential conflicts that may impact the design of new gas facilities. Contractor shall acquire all research necessary to complete design. Contractor shall also investigate whether city or county projects are planned (e.g., franchise paving) which may be in conflict with existing or proposed gas facilities.
- 4.10 Contractor shall perform FOMS WR input for assigned Projects, unless otherwise specified by Utility. FOMS WR input will include material input and costs (including labor, vouchers, permits, etc.). Utility will provide initial training to Contractor on FOMS process. After initial training Contractor will be responsible for additional training and cost for training new Contractor Personnel. Contractor FOMS expectations are:
- Input of compatible units, i.e. material and labor, for each point span.
 - Follow appropriate point span structure as indicated by Southern Nevada Division.
 - Installation and abandonment information shall be on separate point spans.
 - Voucher data – input voucher items (i.e., permits, compaction tests, and other items not available as Compatible Units). Review Comments – note if designed for unit cost, crew day, Utility crew, or other.
 - Verify units of property are correct using FOMS Connections and property unit catalog.

- Verify all materials required for WR are included in the WMS entry estimate using the Reports in FOMS Connections.
- 4.11 For Utility errors and scope changes/revisions, Contractor shall provide a quote for services with a not to exceed amount and invoice Utility for all tasks at the hourly rates identified on Contractor's Proposal Sheet.
- 4.12 Projects may include, but are not limited to, the following:
- High pressure projects and large station designs (Pressure Limiting Stations (PLS) and Tap Sites) – Utility may request Contractor provide a projected timeline and “not-to-exceed” price for these Projects for Utility’s consideration.
 - Regulator Stations, Meter Set Assemblies (MSA), and Cathodic Protection (CP) designs.
 - Large Project (Main Work over 5,000-feet).
 - Medium Project (Main Work 1,000-feet up to and including 5,000-feet).
 - Small Project (Main Work under 1,000-feet).
 - Third Party Improvement Plan and/or Records Review.
 - As-built drawing creation and review.
 - Digital documentation collection, creation, correction, and review.
 - Third Party Plan Review assignment.
- 4.13 Contractor shall complete the Work within the timeline established by Utility. Each Project will have a unique timeline but will not exceed fourteen (14) calendar days for 100 percent (%) design drawings, unless stated otherwise or agreed upon. All timelines are considered from the date that the Project is received, unless previously agreed upon by Utility and Contractor in writing prior to required deadlines. Contractor shall notify Utility if agreed upon deadlines cannot be met prior to the established deadline. Typical timelines include, but are not limited to, the following:
- Replacement/Relocation Main and Service Design – Ten (10) business days.
 - New business projects (large, medium, or small as referenced above in section 4.12) - Five (5) business days.
 - All Third-Party Plan and/or Records Reviews – Five (5) business days.
 - Resubmittals/Revisions – Three (3) business days.
 - As-built Review – Three (3) business days.
 - As-built Drawing Creation – Ten (10) business days.
 - Digital Documentation Creation – Five (5) business days after conclusion of facility data collection
 - Third Party Plan Review assignment – Two (2) business days.

- 4.14 Contractor shall provide a minimum of two (2) pothole quotes which shall include all work necessary to remove existing asphalt, expose the pipeline, acquire all necessary survey information, backfill per applicable entity and Utility standards, and provide a temporary asphalt repair at each location. Potholing subcontractor shall be Operator Qualified (OQ'd) per Utility requirements. Pothole reports must include a description (e.g. utility "type" with "OD", "exploration"), top of pipe (or excavation) depths with absolute elevations, and dimensioning per Operations Manual, or as otherwise directed. Contractor shall comply with other utility and entity requirements for potholes. Contractor will provide all obtained information, such as pothole information, to the Utility within ten (10) business days.
- 4.15 Contractor shall design each Project in accordance with Utility standards, industry codes, regulations specific to the local agency, and jurisdictional requirements. Utility will specify locations where different main or service pipe is required. Contractor shall consider other factors in the design and discuss its needs with Utility. These include but are not limited to:
- Isolation zone boundaries – if the main crosses existing or proposed isolation zone boundaries, a valve may be required.
 - Valve locations – should be positioned to maximize accessibility and allow for blow-downs of high pressure main segments as applicable.
 - Large diameter PE Backbone – general guidelines are 4" PE on all section line roads and 4" main extending from 4" main. Utility may specify other locations and/or the use of 6" PE.
 - Looping – if existing main terminates less than 200-feet from another dead-end main, tying the two together may be beneficial.
 - Pressure test – test requirements to be noted on drawings.
 - Tie-ins – must offer least possible resistance to flow utilizing standard materials.
 - Purge (degas & regas).
 - Replacement of early vintage plastic pipe (EVPP) and vintage steel pipe (VSP).
 - Main Stubs – Installation of a stub will be considered for 4" and larger PE pipe to ease future tie-in. Stubs will be a minimum of 10 feet, but may be longer. Stub shall terminate beyond edge of paving.
 - Existing Service Stub(s) – Existing service stubs will be abandoned with no replacement. Size/material/age and lot use are factors. Stub installs should terminate at property line.
 - Idle risers/meters – existing services without a meter set or with a meter that has not been active for 36 months may be abandoned.
 - Multi-branch services – no more than two risers will be allowed on a single service line. In existing situations with more than two risers off an obviously installed service (e.g., 1/2" or 1" size, on private property,

branched off a main in the street, etc.), Contractor's design shall eliminate the multi-branch condition.

- Cross-lot services – service lines should not cross lots parallel to the main or street, either as single service or branch service. Contractor's design shall eliminate cross-lot services.
- If multi-branch or cross-lot services cannot be replaced by installing additional main and the standard service/branch configuration, it may be necessary to install new main on private property. Contractor shall develop easement drawing. Utility will obtain easement from landowner.
- Contractor shall identify location of isolated steel risers. Isolated steel risers are to be replaced.
- New paving – consideration must be given for proposed main locations to avoid no-cut pavement restrictions.
- Third party construction – identify locations where future third party construction, such as storm drains, grade changes, paving work, etc., are proposed and land survey will be required to locate gas components and/or facilities.
- Contractor shall identify the location of Excess Flow Valves (EFVs) and/or Service Line Shut-Off Valve (SLSVs) for all new services.
- Contractor shall identify the location of the boundary names of any High Consequence Areas (HCAs).

4.16 Contractor shall, in the best interest of Utility, identify cost saving opportunities and identify reductions in scope of Work where applicable.

4.17 Contractor shall prepare drawings in accordance with the latest sections of Operations Manual, or as otherwise directed, including but not limited to, Design Drawings Procedure and As-built Drawings Procedure. Drawing shall be consistent with the latest drawing template as provided by Utility. Examples of completed designs will be provided.

4.18 Contractor shall verify all land base within Project boundaries with a professional land survey/boundary survey. FieldSmart **shall not** be used as a land base resource. Design drawings shall show current paved street widths and all existing rights-of-way, easements, and parcel dimensions per actual County recorded data. Right-of-way and land base information from Utility as-builts and FieldSmart shall not be construed as the most current information. Assessor map and FieldSmart map mark-ups shall be submitted with design package to provide to Utility's Right-of-Way department. Copies of any relevant right-of-way documentation shall also be included in the submitted package. Contractor resources may include, but shall not be limited to:

- County Assessor maps
- County Assessor web-site

- Subdivision maps
 - Third party recorded property documentation
- 4.19 Contractor shall denote all tax area code boundaries on design drawings. Utility's Tile map may show approximate tax code boundaries, but actual location must be established from entity information.
- 4.20 Contractor shall determine which excavation permits will be required (if any) to perform construction of the Work. Utility will obtain permits such as city and/or county permits using drawings prepared by Contractor in the normal course of Work. Utility may require Contractor to prepare the application and/or any drawing required to obtain State ROW agency permits (ADOT, NDOT, and Caltrans). The need for other permits such as Railroad, Bureau of Land Management, Department of Fish & Game, etc., shall be researched by Contractor and communicated to Utility. Utility's use of Contractor to apply for and obtain non-routine permits shall be determined separate from this Agreement.
- 4.21 Contractor shall provide additional detail drawings as needed for application of city, county, or state (NDOT, ADOT, Caltrans) permits with metric measurements when applicable.
- 4.22 Contractor shall provide additional detail drawings as needed to meet Storm Water and other types of environmental permitting requirements. Contractor may be asked to provide a Storm Water Pollution Prevention Plan (SWPPP) for the Project. Contractor shall coordinate with Clark County Regional Flood Control District to satisfy these requirements.
- 4.23 Contractor shall provide a Registered Professional Land Surveyor or Professional Engineer (within the state which Work is being performed) for signature and approval of all surveying services. Survey data that is acquired for required projects shall be provided to Utility in electronic format (Excel/CSV, AutoCAD, and PDF).
- 4.24 Contractor shall provide an adequate number of qualified personnel for the services to be performed based on a minimum of 48-hour notification of Work from Utility.
- 4.25 Unless otherwise agreed upon by authorized personnel, Contractor shall provide Utility with the completed drawing in a properly projected Geo-Referenced land base utilizing the following GPS coordinate system and shall include three (3) surveyed monuments:

Las Vegas, Boulder City, Laughlin, and Mesquite, Nevada:
Needles, California:
Parker, Ehrenberg and Bullhead City, Arizona:

- System: US State Plane 83
 - Zone: Nevada East 2701
 - Datum: NAD 83 (Conus)
 - Coordinate Units: US Survey Feet
 - Altitude Units: US Survey Feet (altitude being measured from Mean Sea Level)
 - Three points: rotation, location, and scale.
- 4.26 All GNSS/GPS data provided by Contractor shall be post-processed or collected with RTK (real time kinematic). Utility requires that Survey Grade GPS/GNSS units, with sub foot accuracy are used. Contractor shall acquire the most accurate real time differential correction signal via the Wide Area Augmentation System (WAAS). Data provided by Contractor shall use the Utility Standard Schema and file naming convention.
- 4.27 Contractor shall keep all design and cost information confidential from all affiliated entities that may become involved in project constructions (including departments within Contractor's own Utility).
- 4.28 Contractor shall verify city and/or county pavement restoration requirements and show them on the Project design drawings. In addition, Contractor shall include associated costs within the WMS entry estimate. Contractor shall investigate whether city, county, or state projects are planned (e.g. franchise paving) which may be in conflict with existing or proposed gas facilities.
- 4.29 Contractor shall perform Third Party Improvement Plan and Records review as instructed by the Utility.
- Comprehensive preliminary research gathering Utility tiles and as-builts for all existing distribution main, services, and high pressure in the project area.
 - All tiles and as-builts shall be uploaded to Utility shared project folder.
 - Comprehensive review of submittals or other documents in accordance with Utility practices.
 - Contractor shall inform Utility immediately of potential conflicts with the maintenance (e.g. minimum separation requirements) or operation (e.g. depth of cover requirements, relocation) of Utility facilities and/or impacts to the ability for Utility to provide natural gas service to customers.

- 4.30 Contractor shall perform As-Built Reviews and Creation as instructed by the Utility.
- As-builts will be reviewed and created in accordance with the Operations Manual, and as directed by Utility personnel.
 - AutoCAD reference material is to be used in the process.
- 4.31 Contractor shall perform Digital Documentation collection, creation, reviews and correction as instructed by the Utility.
- Digital Documentation will be reviewed and created in accordance with the Operations Manual, and as directed by Utility personnel.
 - GNSS/GPS collected data to be used in the process
 - AutoCAD reference material is to be used in the process.
- 4.32 Contractor shall perform Third Party Plan Assignments as instructed by the Utility.
- Categorizing Third Party Plan Review requests.
 - Assigning Third Party Plan Review requests to the Utility designers.
- 4.33 Contractor shall notify Utility if project material used in the project is non-standard or not available in Utility systems (e.g. WMS).
- 4.34 Contractor shall provide all utility research and approvals if necessary to Utility. Utility research shall include but not be limited to:
- Water, such as but not limited to:
 - City of Henderson (COH)
 - City of North Las Vegas (CNLV)
 - City of Mesquite (COM)
 - Southern Nevada Water Authority (SNWA) with approvals
 - Las Vegas Valley Water District (LVVWD) with approvals
 - Sewer
 - Storm Drain
 - Communications
 - Electrical

5. PROJECT ACCEPTANCE

- 5.1 Contractor shall send e-mail notification to Utility Designate upon completion of a specific Project's initial Work. Contractor may be required to utilize project folder on Utility shared network for documentation sharing.

- 5.2 For intricate design Projects, as specified by Utility, Contractor shall submit a 30%, 60%, 90%, and 100% submittal. Each submittal will be clearly labeled as 30%, 60%, or 90%. Utility Designate will determine on a job-by-job basis if any submittals are not required. Contractor shall provide each submittal in DWG or PDF files. Required information for each submittal includes:
- 30%: Submittal must contain all general information needed on the drawing per Utility requirements (e.g., proposed main type and alignment, footages, scale, MAOP and/or MOP, gas flow arrows, street names, Lot Numbers / APN Numbers, Right-of-Way, Utility drawing templates). Drawing should display approved title block containing Utility Project Engineer, isolation area, Project title and location, entity/permit information, and Utility Property Unit totals. Design survey and identification of visible geographical and potential utility conflicts is required. Utility Designate shall determine if profiles are required.
 - 60%: Submittal must contain accurate profile showing all subsurface utility crossings and other pothole locations with elevations. A hydrostatic profile shall be included, if required. Any comments provided by Utility after 30% submittal shall be addressed on the 60% design drawing. Contractor shall notify Utility Designate of any design or scheduling problems.
 - 90%: Any comments provided by Utility after 60% submittal shall be addressed. On the 90% design drawing Material list, quantities, and strength test information, etc., shall be finalized, where applicable.
 - 100%: All Utility comments have been addressed, and drawings are in a constructible and/or entity submittal state.
- 5.3 Utility will evaluate Contractor performance on a continual basis. Utility will review AutoCAD drawings, legal descriptions and associated exhibits, all other submitted documents and WMS input, Third Party Improvement Plan and Records Review, As-Built Reviews, As-built Drawing Creation, and Digital Documentation collection, creation, and review for the completeness and accuracy of Contractor Work. If Project Work meets Utility standard of quality, Utility Designate will notify Contractor to invoice Utility for Work.
- 5.4 Contractor errors shall be corrected for drawings and/or FOMS input until accepted by Utility Designate. The cost of corrections of Contractor errors will be borne by Contractor. Corrected Work shall be resubmitted to Utility until accepted. Necessary corrections shall be returned to the Utility within two (2) business days, unless otherwise agreed upon with Utility.
- 5.5 Contractor may work on more than one Project at a time; however, individual Project completion must meet or precede any assigned and agreed to 'completion' dates. Utility Supervisor has the right to prioritize

Work when more than one Project has been requested from a single Contractor.

- 5.6 Contractor must bring potential problems and/or delays in Work completion to the attention of Utility Designate immediately. Failure to meet Work completion deadline may result in termination of Agreement and non-inclusion in future Work bid requests.
- 5.7 Contractor must bring any changes in the Scope of Work to the attention of Utility Designate. If a Change Order and/or additional Contractor design time is warranted, Utility Designate will prepare and route necessary paperwork. Any Work requiring Utility approval shall not begin until Contractor receives written authorization from Utility.
- 5.8 Revisions initiated by Utility or Customer to previously completed and approved construction drawings or corrections of Utility errors shall be paid on an hourly rate as specified under this Agreement. Requested design changes shall be returned to the Utility within five (5) business days, unless otherwise agreed upon with Utility. Design changes, Contractor errors discovered after acceptance, or corrections due to Utility errors will be billed at the hourly rate.

6. CONTRACTOR TRAINING AND QUALITY CONTROL

- 6.1 At Contractor's request, Utility will provide up to 40 man-hours (five man-days) of Utility labor to train and assist up to two (2) Contractor personnel on WMS procedures and Utility design and drawing practices. Additional training will be at Contractor's expense.
- 6.2 Contractor shall be responsible for the professional quality, technical accuracy, and coordination of all designs, drawings, specifications, and other services furnished by Contractor under this contract. Contractor shall have a Project Manager who is responsible for reviewing all projects prior to being released to the Utility.
- 6.3 Qualifications and performance of individuals assigned to Projects will have a direct effect on whether Contractor is assigned Work or removed from the Division Operations Services Agreement.
- 6.4 All changes in Contractor personnel assigned to Projects must be approved by Utility Designate prior to billing hours to the Project. New personnel assigned to the Project shall adhere to the existing rate structure for each job description.

- 6.5 Contractor must provide an adequate number of qualified personnel to maintain quality and schedule requirements. Contractor shall provide for persons to be trained for the duration of the Agreement.
- 6.6 Contractor shall warrant Utility's training investment for the term of the Agreement subsequent to Contractor employee's successful completion of the respective training. Should Contractor employee be promoted, transferred or reassigned, or Contractor employee resigns (either voluntarily or involuntarily) prior to the expiration of the Agreement, Contractor shall bear all of the training reimbursement expenses associated with training a suitable replacement. The only exception to this stipulation shall be Contractor employee being hired by Utility as a permanent employee. Any Utility reimbursement relative to the respective training shall be contingent upon Contractor employee's successful completion of all classroom and provisional period (60 days) requirements.
- 6.7 Contractor design and drawing personnel shall work under the direction of Contractor's Professional Engineer (PE) licensed in the states of Arizona, California, and Nevada. Contractor's PE shall be an employee or sub-contractor of Contractor and have immediate and direct oversight of Contractor personnel performing Work. Utility may require a letter on Contractor letterhead upon Utility acceptance of each Project. Letter shall be signed and stamped by Contractor's PE and shall state to the best of his/her knowledge Work meets all applicable local, state, federal and Utility Operations Manual guidelines, or as otherwise directed. In lieu of a separate letter for each Project, Utility may accept evidence of continuing employment of PE within Contractor's organization. If PE-stamped drawings are required, Contractor will not charge Utility any additional fees.
- 6.8 Utility will perform thorough quality review of Projects submitted as complete by Contractor. Errors will be noted and communicated to Contractor, then returned for correction. Utility anticipates a learning curve for Contractor personnel and will provide this feedback to Contractor to eliminate future errors. After feedback of Projects, Utility expects errors to decrease to an acceptable level as determined by Utility and reserves the right to terminate Agreement if excessive errors continue.
- 6.9 Errors will be categorized, but not limited to, the following areas:
- Drawing review
 - Engineering design calculations
 - WMS data review
 - AC Address listing
 - WMS AC data review
 - Timeliness
 - Accuracy

- 6.10 Additional items reviewed by Utility under the quality check may be found in the Review Checklist provided by Utility.

7. QUALITY AND PERFORMANCE REQUIREMENTS

7.1 The Quality and Performance Requirements outlined below are in addition to the QMS section defined previously in the Service/Construction Agreement. The items in this section are not to supersede the QMS requirements, but are additional items requested by the Utility Project Manager based on the Work to be performed. If at any time, a potential conflict appears between the requirements in the sections of this Agreement, written clarification will be provided to the Contractor by the Utility Project Manager and OQA.

7.2 QC Requirements

- A. A minimum of four (4) QC evaluations will be conducted annually on each Contractor employee performing OQ covered tasks, with no fewer than one (1) QC evaluations per quarter. Utility management may require additional QC inspections to be conducted by the Contractor, as deemed necessary.
- B. Contractor shall report to Utility any unsuccessful rating resulting from a QA/QC evaluation, no later than the next business day. In the event it is determined a qualified individual is unable to demonstrate the requisite knowledge, skills, and ability to perform an OQ covered task, Contractor will notify Utility immediately and suspend the individual until they are approved to return to Work by Utility.
- C. Contractor shall provide a copy of all completed QC evaluations to the Utility Project Manager per the Utility Operations Manual no less than monthly. Contractor shall retain the completed QC evaluation form(s) for a minimum of six (6) years following the later of the termination or expiration date of this Agreement.

7.3 Reporting to Utility:

- A. All KPIs, quality-related metrics, and safety-related metrics requested by the Utility Project Manager shall be submitted on a monthly or quarterly basis, as determined by the Utility Division Office.

8. LOCAL CODES, STANDARDS AND REGULATIONS REQUIREMENTS

8.1 In the event that apparently applicable and comparable, but not identical, codes, standards or regulations have been established by more than one municipality, agency or utility, Contractor shall notify Utility in writing. The

governing agency shall provide direction to Utility and Contractor as to which codes, standards or regulations will apply.

9. EXHIBIT AND PRESENTATION MATERIALS

- 9.1 Contractor shall supply exhibit material necessary for preliminary reviews both within Utility and for external presentations. Exhibits may include proposed gas pipeline alignments, existing utilities, assessor's parcel information, existing right-of-way, future proposed public works projects, future proposed land development projects and traffic control plans. Specific requirements shall be determined by the Project scope of work.

10. ENVIRONMENTAL SCOPE AND PRELIMINARY PERMITTING APPROVAL

- 10.1 Contractor shall identify all necessary federal, regional, state, and local permits, approvals, and consultations required for the Project. Based on the requirements of these permitting agencies, Contractor shall provide a full scope of the environmental work required, the cost associated with performing such work, as well as an estimated cost of the environmental mitigation work required pre, during, and post construction of the facilities.
- 10.2 Contractor shall be responsible for identifying all preliminary approvals required from various governmental entities. The objective is to determine permitting requirements, all environmental and permitting costs, and the time needed to perform the environmental work including the acquisition of the permits. Contractor shall be responsible for identifying requirements to ensure compliance with all federal, state, and local regulations.
- 10.3 Contractor shall be responsible for submitting and obtaining any permits requested by Utility.

11. LAND SURVEYING/EASEMENT PREPARATION

- 11.1 Survey and installation of survey stakes for centerline, lot line, property line, running line, including off-set stakes for each of those listed, along an existing or proposed street right-of-way line or property line or defined metes and bounds.
- 11.2 Survey the exact location of new or existing gas facilities as marked by Utility personnel on the ground surface.
- 11.3 Contractor shall be responsible for any and all research, either field or office, to accurately complete the required surveying task.

- 11.4 Contractor shall provide a print out of the closure program to verify accuracy of the metes and bounds used on the easement documentation. An example will be provided.
- 11.5 Contractor must comply with state statute recording requirements when preparing a legal description and other required documents. An example will be provided.
- 11.6 Contractor shall use Utility format and minimum required information when preparing a legal description and easement documentation. An example will be provided.
- 11.7 Survey requirements under this Agreement may include but shall not be limited to:
- Writing easements.
 - Legal descriptions and associated exhibits shall be stamped by a Professional Land Survey (P.L.S.).
 - Researching land/property/title information.
 - Describing property boundaries.
 - Plotting ground profiles.
 - Researching documents and historical records.
 - Preparing drawings.
 - Design Survey
 - Construction Survey
 - As-Built Survey
 - Field Data Collection Survey
- 11.8 Prior to performing on site survey Work, the surveyor(s) must contact Utility Inspector.
- 11.9 In the event Contractor is called out to a site and the Work cannot be performed that day, through no fault of Contractor, Contractor will be paid up to one day as negotiated with Utility allowed under Section 13.

12. INVOICING

- 12.1 Unless otherwise mutually agreed to by the Parties on a project-by-project basis, and pursuant to Section 6.2 above, invoices shall be for completed Work. Partial billings or payments will be allowed for high pressure design work only; invoices for this Work shall be submitted monthly. Invoice shall be only for the specific Projects completed under this project and must note the following information:
- Utility Contract Number

- Invoice Number
- Invoice Submittal Date
- Utility Engineer or Engineering Technician's Name
- Contractor Project Number
- Utility Job Number (WR Number)
- Job Name
- Remit to Address
- Project Footage (by type and size)
- Number of services
- Main abandonment footage total
- Total service footage
- Bid Rate Breakdown for each job classification
- Invoices shall include a thorough description of Work performed by each job classification.
- Other costs billed, if previously authorized by Utility, with running total
- Total billed amount for Project

- 12.2 Contractor shall submit a separate invoice for each individual WR.
- 12.3 As applicable, Utility shall be invoiced at the rate of actual work performed and not solely on classification of personnel performing the work as described in the Contractor Proposal Sheet. Project per foot pricing and other unit costs shall include all labor costs. Contractor shall submit explanation of tasks completed for hourly invoices upon request by Utility.
- 12.4 Contractor shall provide additional support documentation as requested by Utility.
- 12.5 Contractor shall itemize invoices with unit costs and hourly rates, as applicable.
- 12.6 If multiple survey personnel are on site, Contractor shall invoice Utility as a 2-man or 3-man crew upon pre-approval by Utility.
- 12.7 Invoices shall be sent electronically to designated Utility personnel.
- 12.8 Reimbursement for travel time/expenses will not be allowed for any location within the greater metropolitan area of Las Vegas (Las Vegas, North Las Vegas, City of Henderson, etc.). Upon Utility pre-approval, travel may be reimbursed for Work in Boulder City, or areas further away. Travel time will be measured from a central point: the interchange of US-95 and I-15. A maximum time allotment of one hour will be allowed, with pre-approval by Utility.

13. WORK MANAGEMENT SYSTEM (WMS)

13.1 Utility reserves the option to request Contractor to utilize Utility's cost estimating software within WMS for each Project.

13.2 Contractor shall perform WMS WR input whether or not cost estimating is requested. Contractor WMS minimum expectations include but are not limited to:

- Utilization of the WMS/ FOMS Connections, Asset Manager software per Staff Training and Division procedures.
- Input of Compatible Units, contract code, material and labor for Design Points.
- A separate Design Point Span must be used for each tax area code. A tax area may use more than one Design Point.
- Abandonment information must be on separate Design Point Spans from installation information, identified by pipe type and year.
- Justification Memo – add retirement information for facilities to be abandoned, e.g., WO#, mo./yr. installed, footage.
- Voucher Data – input voucher items, e.g., permits, compaction tests, and other items not available as Compatible Units.
- Comments – note if designed for unit cost or other.
- Check Units of Property with FOMS Connections.
- Check material list with Reports in FOMS Connections, printout and verify that all materials required for Work are accounted for. Voucher input will account for items not in the design points.
- Task Updates – set Status to Completed, "C," on items appropriate tasks in WMS.

13.3 For Projects in which Utility has created defaulted information in the WR, Contractor shall not accept this as correct information and shall modify as necessary.

13.4 Contractor shall create all necessary ACs for the specific Project in WMS. Utility may provide limited training to Contractor on WMS AC tasks at Contractor's request, as noted below.

NOTE: Depending upon the size/type of the WR and the number of associated ACs, the Contractor may be instructed to perform all AC design steps with the exception of the actual WMS AC population/creation.

13.5 Contractor shall use Microsoft Excel and Word compatible software in conjunction with WMS entry.

- 13.6 Contractor shall include comments within WMS indicating first draft and project completion dates.
- 13.7 Contractor shall attach design drawings in WMS including permitting, construction and shell copies.

14. WMS HARDWARE REQUIREMENTS

- 14.1 When required, Utility will provide Contractor with a copy of the FOMS software along with installation instructions for installation on Contractor's computer hard drives. This will be provided via CD-ROM/DVD or other Utility approved methods.
- 14.2 When required, Contractor shall be responsible for the following:
 - Providing a Trainer/Administrator and backup personnel for each Contractor office. Utility will train the Trainer/Administrator in the use of WMS/Field Smart software. The Trainer/Administrator will train Contractor's employees, support Contractor's computers, and be responsible for updating the software when updates are provided by Utility.
 - Reporting any WMS related problems to the Trainer/ Administrator or designate. If the Trainer/Administrator or designate is unable to correct problem, then the Trainer/ Administrator or designate will call Utility Help Desk.
- 14.3 Contractor shall receive daily Work via an internet or virtual private network (VPN) connection to Utility network or other means as defined by Utility. Field computers, compatible with Utility's Operating Systems may be required for Contractor crews on an as-needed basis.
- 14.4 Contractor shall notify Utility of any discrepancies or errors found in Utility provided data, records, maps, etc., used as an aid in performing the Work. These conditions will be submitted on Form 230, Leakage Maintenance Report (LMR), or electronic equivalent.
- 14.5 When directed by Utility, Contractor shall input data from the forms into FieldSmart Mobile Gas Suite (FSMGS). Contractor shall also initiate a new field generated Work Request (WR). All field generated field documents will be scanned and attached to the appropriate WR.
- 14.6 Utility will be responsible for the following:
 - Training Contractor Trainer/Administrator. Additionally, Utility will assist Contractor Trainer/Administrator with training the initial class of technicians.

- Providing Contractor with a list of release notes describing all changes within an upgrade and, when needed, training to Contractor Trainer/Administrator.
- Providing updates of the WMS/FieldSmart software and electronic maps on a regular basis via a network connection. Contractor will be provided adequate notification of when these updates will be available. It will be Contractor's responsibility to upgrade the software on its computers on or before the date specified by Utility.
- Answering questions and helping correct any problems reported to Utility Help Desk by the Trainer/Administrator or designate.

14.7 In the event Contractor is using WMS and it is inoperable or if additional documentation is required (e.g., SXs, LMRs, and As-Builts), Utility will make available maps, information/documentation, and records of facilities to assist Contractor in the performance of the Work. Contractor shall maintain all such charts and records in a confidential manner.

15. GEOGRAPHIC INFORMATION SYSTEM (GIS)

- 15.1 Contractor may be asked to perform mapping services utilizing ESRI's ArcMap and ArcFM solutions. Contractor may be asked to interpret as-built and use ESRI GIS to process and post information concerning installation, maintenance, and operation of Utility facilities. Contractors shall complete the Work within the timeline established by Utility.
- 15.2 Contractor may be asked to perform field data collection services utilizing the CartoPac application.
- 15.3 Utility shall provide training for standard practices and procedures for mapping services.

16. MISCELLANEOUS

- 16.1 This Statement of Work is intended for the assistance of the Contractor. The inclusion or omission of any information provided in this document cannot be construed to relieve Contractor of any duty or obligation necessary for completion of the Work. Utility assumes no liability for errors or omissions of the information contained herein.
- 16.2 All maps and records shall remain the property of Utility and may not be duplicated or distributed without the prior written approval of Utility. All such original maps and records shall remain on Utility premises.
- 16.3 Utility is not responsible for any lost, damaged or stolen property, either leased or owned, by the Contractor during the performance of Contractor's

duties, either remote or on-site. This includes travel to and from job location(s).

17. DEFINITIONS

- 17.1 As-Built Survey: Survey of newly installed gas facilities which may include surveying exact location of pipe, components, and welds with associated material information.
- 17.2 Utility Errors: Discrepancies or mistakes due to Utility, or customer, provided information related to, but not limited to: material (e.g. footage, descriptions, specifications, call-outs), calculations, dimensioning, administrative (e.g. tile numbers, tax codes, sheet/detail numbering, WMS entries), etc.
- 17.3 Construction Drawings: Drawings provided by Contractor to Utility detailing specifications and location of pipeline and facility installation.
- 17.4 Construction Survey: Survey and installation of survey stakes for centerline, lot line, property line, running line, including off-set stakes for each of those listed, along an existing or proposed street right-of-way line or property line or defined metes and bounds.
- 17.5 Contractor Errors: Any discrepancies or mistakes related to, but not limited to: material (e.g. footage, descriptions, specifications, call-outs), calculations, dimensioning, administrative (e.g. tile numbers, tax codes, drawing sheets/details, WMS entries), etc. Errors also discussed in Section 6 above.
- 17.6 Design Survey: Control Survey [consisting of establishing positions (northing, easting, and elevations) based on good condition and stable monuments], Boundary Surveys (that conform to requirements of county, city, and jurisdictional requirements), and Mapping Surveys (which include collection of points to define features of a physical surface.)
- 17.7 Digital Documentation: The electronic equivalent to the current as-built drawing. The electronic information will be gathered through facility data collection survey
- 17.8 Field Data Collection Survey: The process of gathering electronic data using GNSS to create an electronic record that records pipe type, size, geospatial location, joint types, pipe joining qualifications, landmarks, and other pertinent data through the use of the CartoPac application. The information gathered through the application is sufficient to provide the necessary data to create an electronic drawing.
- 17.9 FOMS: Facilities Operations Management System.

- 17.10 GNSS: Global Navigation Satellite System
- 17.11 WMS: Work Management System
- 17.12 Scope Change/Revisions: Changes requested by Utility that differs from original request or after acceptance of project deliverable.
- 17.13 Subsurface utility locating: collection and depiction of existing subsurface utility data which should conform to ASCE CI 38-02. Note: All high pressure utility crossings shall have precise horizontal and vertical location obtained by actual exposure of the utility crossing and subsequent measurement of the utilities.

18. ANNUAL PRICE ADJUSTMENT

- 18.1 For the duration of this Agreement, on the anniversary of each year, the pricing set forth in Contractor's proposal sheet, as amended from time to time, shall be subject to an annual price adjustment based upon the most recent *December* Consumer Price Index. The base for computing the adjustment will be the Consumer Price Index – All Urban, All Items (CPI) as published by the Bureau of Labor Statistics of the United States Department of Labor, using 1982-1984 as the base period. If the 1982-1984 base period shall no longer be used as an index, the revised base period and index established by the United States Bureau of Labor Statistics shall be utilized to calculate all rate adjustments. If the index is discontinued during the term of the Agreement, such other government index or computation with which it is replaced shall be used in order to obtain substantially the same result as would be obtained if the index had not been discontinued.



**SOUTHWEST GAS CORPORATION & GREAT BASIN GAS
TRANSMISSION COMPANY (Company) Department of Transportation
(DOT) Anti-Drug & Alcohol Misuse Prevention (D&A) Requirements**

For prospective contractors who are currently in a DOT, Pipeline and Hazardous Materials Safety Administration (PHMSA) D&A program, the Company requires the following information to verify compliance of said program. For prospective contractors who are not already in a PHMSA D&A program, a list of the required information begins on page two (2).

If prospective contractor is currently in a PHMSA D&A Program:

1. Contractor must provide a copy of their PHMSA D&A Plan that complies with current DOT 49 CFR Parts 199 and 40. An electronic version of the plans is preferable.
2. Contractor must provide a blank copy of its Federal D&A Testing Custody and Control Form.
3. Contractor must provide copies of Reasonable Cause/Suspicion training records for supervisors that will monitor its employees in the Company's service areas (except for temporary employment agencies). A minimum of two supervisors' training records is required for operators with over 50 employees subject to testing. For operators with 50 or fewer employees subject to testing, only one supervisor training record is required. This training must comply with Part 199.113(c) and 199.241 and shall consist of at least one (1) hour of drug and one (1) hour of alcohol Reasonable Cause/Suspicion substance abuse determinations.
4. Contractor must provide a copy of its last DOT D&A Testing Statistical Report. Contractors must submit subsequent D&A Testing Statistical Reports to the Company upon request, but no less than semi-annually (January-June and July-December periods of each year). These are due thirty (30) days after each period.
5. Contractors must provide a list of its covered employees that are subject to PHMSA D&A random testing. This list must contain the last four digits of their Social Security number or other contractor employee identifier of each covered employee, the date that each employee passed his or her last DOT drug test, and the type of test passed. Contractors must send updated covered employee lists to the Company upon request, but no less than semi-annually, (January-June and July-December periods of each year). These are due thirty (30) days after each period.

6. Contractor must provide a letter certifying that a DOT D&A testing background check was completed on all applicable covered employees pursuant to 49 CFR Part 40.25. Contractors must send updated background check records for subsequent new hires that will perform DOT covered functions to the Company semi-annually, (January-June and July-December periods of each year). These are due thirty (30) days after each period. As an option, the contractor's DOT D&A testing Consortium/Third Party Administrator may send the Company current and future background check records to indicate that each applicable background check was completed and recorded in the time prescribed by 49 CFR Part 40.25. The Company reserves the right to request copies of said records.
7. Contractor must provide initial copies of the records that show that it provided D&A training and educational material to each covered employee. These records may be in the form of an acknowledgment of receipt of the contractor's DOT D&A plan and D&A educational material. Contractors need not send future copies of said acknowledgments unless requested.

If prospective contractor is not currently in a PHMSA D&A Program:

1. Prospective contractors must implement a D&A testing program in accordance with the PHMSA and DOT D&A testing requirements of 49 CFR Parts 199 and 40 and provide a copy of said plan to the Company. An electronic version of the plans is preferable.
2. Contractor must provide a copy of its Federal D&A Testing Custody and Control Form.
3. Contractors with over 50 employees subject to testing must train a minimum of two (2) supervisors in Reasonable Cause/Suspicion of substance abuse. Contractors with 50 or fewer employees subject to testing must train a minimum of one (1) supervisor in Reasonable Cause/Suspicion of substance abuse. Training must be in compliance with Part 199.113(c) and 199.241. This training must consist of at least one (1) hour of drug and one (1) hour of alcohol (minimum two (2) hours total) Reasonable Cause/Suspicion determinations. Those supervisors must observe and monitor their employees in the Company's service areas (except for temporary employment agencies). Contractor must provide a copy of the initial Supervisor training to the Company.
4. Contractor must train and provide D&A educational material to its covered employees pursuant to Part 199.113(b) and 199.239. Contractors must obtain written acknowledgment from covered employees that each has received a copy of the contractor's PHMSA D&A plan and associated DOT D&A training and educational material. Contractors must provide a copy of the initial acknowledgment and training records for each covered employee. Contractors do not need to provide future acknowledgment and training records unless specifically requested.

5. Contractor must provide copies of all future PHMSA D&A Testing Statistical Reports to the Company upon request, but no less than semi-annually (January-June and July-December periods of each year). These are due thirty days after each period.
6. Contractors must provide a list of its covered employees that are subject to DOT/PHMSA D&A random testing. This list must contain the last four digits of their Social Security number or other contractor employee identifier of each covered employee, the date that each employee passed his or her last DOT/PHMSA drug test, and the type of test passed. Contractors must provide updated covered employee lists to the Company semi-annually, (January-June and July-December periods of each year). Lists of contractors covered employees are due thirty (30) days after each period.
7. In conformance with CFR 49 Part 40.25, contractors who do not already have a qualified DOT PHMSA D&A Testing Program must perform a DOT D&A testing background check for each new hire after the beginning of said program and before covered employees may perform covered functions for the Company. Contractor must submit copies of all employee-signed and completed DOT D&A background checks for new hires for covered positions before the Company will consider the contractor eligible. After the contractor provides copies of its initial employee D&A background check records and the Company approves the contractor's D&A program, then the contractor need only provide copies of future D&A testing background checks upon special request by the Company.

The Company prefers electronic copies of the above information attached to an email. Contractors or their D&A testing Consortiums/Third Party Administrators may submit the information as electronic or hard copy to the address below. Please direct the above information and/or questions related to the Company's D&A Contractor Monitoring Procedures to:

Alyse Baker
Administrator/Compliance/LVD-581
Southwest Gas Corporation
8360 S Durango Drive
Las Vegas, NV 89113
Office: (702) 364-3272
Cell: (702) 528-7719
Alyse.Baker@swgas.com

COVERED TASK LIST


SOUTHWEST GAS CORPORATION

Covered Task List

Project Name:		Division Operations Services				
Location (City / State):		Las Vegas, Nevada				
Company Name:						
Work Order Number:						
Work Request Number:						
Southwest Gas Covered Task List						
Task Number	 Covered Task	Is this covered task required to be performed on this project?		Ops Manual Cross Reference	Code Reference	Responsible Group
		Yes	No			
1	Pipe Inspection - Examining exposed steel pipe for external and internal corrosion and determining extent of corrosion			Corrosion Control Procedures Section I. Inspections	192.459 192.475	GOSS
2	Application of coating or wrap for below ground facilities			Corrosion Control Procedures Section I. Tape Coating	192.461 192.483	GOSS
3	Inspecting above ground facilities for Atmospheric Corrosion			Corrosion Control Procedures Section I. Inspections	192.479	GOSS
4	Application of coating for above ground facilities. (MSA Primer & Paint)			Corrosion Control Procedures Section I. Paint Applications Meters Procedures - Primer and Paint Applications	192.479	GOSS
5	Connecting an anode to a riser			Corrosion Control Procedures Section I. Anodes	192.463	GOSS
6	Installing test lead connection - Thermit welding			Corrosion Control Procedures Section I. Conductor Attachment	192.471	GOSS
7	Installing test lead connection Thermit welding - automatic			Corrosion Control Procedures Section I. Conductor Attachment		GOSS
8	Installing test lead connection Brazing and Silver Solder			Corrosion Control Procedures Section I. Conductor Attachment	192.471	GOSS
9	Pipe to soil reads			Corrosion Control Procedures Section I. Inspections	192.465	GOSS
10	Interference bond testing			Corrosion Control Procedures Section II C.P.	192.465	ENG STAFF
11	Locating shorts			Corrosion Control Procedures Section II C.P.	192.467	ENG STAFF
12	Testing insulators			Corrosion Control Procedures Section II C.P.	192.467	ENG STAFF
13	Close interval testing			Corrosion Control Procedures Section II C.P.	192.463	ENG STAFF
14	Rectifier testing			Corrosion Control Procedures Section II C.P.	192.465	ENG STAFF
15	Testing for interference			Corrosion Control Procedures Section II C.P.	192.473	ENG STAFF
16	100 Millivolt polarization testing			Corrosion Control Procedures Section II C.P.	192.463	ENG STAFF
17	Soil Resistivity			Corrosion Control Procedures Section II C.P.	192.453	ENG STAFF
18	Soil resistivity - Collins Rod			Corrosion Control Tools and Equipment		ENG STAFF
19	Testing requirements and methods for testing pipeline facilities			Pipe & Component Testing Procedure	192.503	GOSS
20	Locating Facilities - Procedures and Equipment			Line Locating Procedure Line Locating	192.614	GOSS
21	Repair of imperfections or damage to Plastic and Steel Pipe (Non-Welder)			Pipe Joining (Plastic) Procedure P.E. Repair Steel Welding - Procedure Repairs	192.311	GOSS
22	Squeezing Plastic Pipe			Pipe Joining (Plastic) Procedure P.E. Repair	192.311	GOSS
23	Squeezing Steel Pipe			Steel Welding - Procedure Repairs	192.605	GOSS
24	Backfill (Bedding & Shading)	x		Main & Service installation Requirements Procedure	192.319 192.361	GOSS
25	Arc burn repairs			Steel Welding - Procedure Repairs	192.309	GOSS
26	Dent repairs			Steel Welding - Procedure Repairs	192.309	GOSS
27	Inspection of materials (Welding Steel Pipe)			Steel (Welding) - Procedure	192.307	GOSS
28	Leak Repairs - Steel below 40% SMYS			Steel Welding - Procedure Repairs	192.715 192.717	GOSS
29	Tapping, stopping, and completion procedures and equipment, up to 4 inch			Pressure Control Procedure Section 1	192.627	GOSS
30	Tapping, stopping, and completion procedures for above 4 inches			Pressure Control Procedure Section 1	192.627	GOSS
31	Construction Purging and preventing accidental ignition			Purging Procedure Section 1	192.629 192.751	GOSS
32	Customer Service Purging and Preventing Accidental Ignition			Purging Procedure Section 1	192.629 192.751	GOSS


SOUTHWEST GAS CORPORATION

Covered Task List

Project Name:		Division Operations Services				
Location (City / State):		Las Vegas, Nevada				
Company Name:						
Work Order Number:						
Work Request Number:						
Southwest Gas Covered Task List						
Task Number	 Covered Task	Is this covered task required to be performed on this project?		Ops Manual Cross Reference	Code Reference	Responsible Group
		Yes	No			
33	Patrolling (distribution and/or transmission)			Patrolling Procedure Section 1	192.613 192.705 192.721	GOSS
34	Line Marker Placement			Patrolling Procedure Section 2	192.707	GOSS
35	Leak Survey			Leakage Procedure	192.706 192.723	GOSS
36	Leak Investigation			Leakage Investigation	192.706 192.723	GOSS
37	Repair methods for imperfections or damage at or above 40% SMYS			Steel Welding - Procedure Repairs	192.713	GOSS
38	Inspect and test, pressure limiting regulator stations.			Pressure Regulation Procedure Section 1	192.739	ENG STAFF
39	Inspect and test pressure relief devices.			Pressure Regulation Procedure Section 1	192.739	ENG STAFF
40	Monitor Telemetering and/or pressure recording devices.			Mechanical pressure/temperature recorders procedure section I	192.605	ENG STAFF
41	Retrieval and Analysis of Pressure Recording Data			Pressure monitoring/recording procedure section II	192.741	ENG STAFF
42	Disconnecting an abandoned pipeline from all sources.			Abandonment Procedure Section1	192.727	GOSS
43	Vault Maintenance			Pressure Regulation Procedure Station Inspections	192.749	GOSS
44	Odorant Checks & Equipment			Odorization Procedure - Testing	192.625	GOSS/ENG STAFF
45	Heat Fusion; Electro Fusion; Solvent Cement; Mechanical Fittings; Inspection of Joints			Pipe Joining Plastic Procedure	192.273 192.281 192.283 192.285	GOSS
46	Visual Inspection of Plastic Joints			Pipe Joining Qualification Procedure	192.287	GOSS
47	SMAW - Cellulose			General Code Requirements Operations and Maintenance Requirements	192.225 192.227	GOSS
48	SMAW - Lo/Hydrogen			General Code Requirements Operations and Maintenance Requirements	192.225 192.227	GOSS
49	GMAW			General Code Requirements Operations and Maintenance Requirements	192.225 192.227	GOSS
50	Visual Inspection of Welds			Pipe Joining Qualification Procedure	192.241	GOSS
51	Inspecting and testing remote control shutdown devices			Compressure Station Inspection & Testing of Relief Devices	192.731	ENG STAFF
52	Starting, operating and shutting down gas compressor units			Compressure Stations Starting, Operating & Shut Down	192.605	ENG STAFF
53	Soap Testing Facilities			Pipe & Component Testing Procedure	192.503	GOSS
54	Maintaining Gas Detection & Alarm Systems			Compressure Station Maintenance	192.736	ENG STAFF
55	Mueller Stopcock Changer			Tools and Equipment Section 1	192.627	GOSS
56	Emergency Response	x		Emergency Plan Manual	192.615	GOSS
57	Underground Valve Operation			Valves Procedure	192.745	GOSS
58	Underground Valve Maintenance			Valves Procedure	192.745	GOSS
59	Underground Valve Installation			Valves Procedure	192.745	GOSS
60	Above Ground Valve Operation (stopcocks)	x		Valves Procedure	192.745	GOSS
61	Damage Prevention During Excavation	x		Trained on approved procedure as specified by acceptable standard.	192.915	GOSS
62	AOR -Abnormal Operations and response				192.803	ENG STAFF
63	SCADA Monitoring				192.631	ENG STAFF
64	SCADA Operating				192.631	ENG STAFF

SOUTHWEST GAS CORPORATION

Covered Task List

Project Name:		Division Operations Services				
Location (City / State):		Las Vegas, Nevada				
Company Name:						
Work Order Number:						
Work Request Number:						
Southwest Gas Covered Task List						
Task Number	 Covered Task	Is this covered task required to be performed on this project?		Ops Manual Cross Reference	Code Reference	Responsible Group
		Yes	No			
65	SCADA Shut Down				192.631	ENG STAFF
66	SCADA Starting				192.631	ENG STAFF
67	LNG Start operate and shutdown compressor units				192.605	ENG STAFF
68	CNG - High Pressure Gas Tube Operation				192.605	ENG STAFF
69	CNG - High Pressure Gas Tube Operation				192.605	ENG STAFF
70	CNG - Connection to and set up of the vaporizer/regulator trailers				192.605	ENG STAFF
71	CNG - Remote Monitoring of CNG Station Operating Pressures				192.605	ENG STAFF
72	NDT - Ultrasonic Testing			Steel Welding Procedure	192.243	ENG STAFF
73	PBV Valve Repair Procedure				192.605	ENG STAFF
74	Steel Pipe Flaw Measurement				192.605	ENG STAFF
75	HCA Indetified Site/ Data Collection OQ				192.605	ENG STAFF
76	Digital Ultrasonic Thickness Testing			Steel Welding Procedure	192.243	GOSS
77	Radiographic Testing			Steel Welding Procedure	192.243	GOSS
78	Magnetic Particle Testing			Steel Welding Procedure	192.243	GOSS
79	Dye Penetrant Testing			Steel Welding Procedure	192.243	GOSS
NON - OPERATOR QUALIFICATION COVERED TASKS (TRIMP) - These covered tasks may not pass the four part test, but are required under 192.915 are identified for administrative purposes only.						
	Select Integrity Management Inspection/ Assessment Method for Pipeline Segment				192.915	
	Confirmatory Direct Assessment CDA B31.8S Appendix B				192.915	
	* External Corrosion Direct Assessment ECDA NACE RP0205				192.915	
	Internal Corrosion Direct Assessment ICDA NACE RP0104				192.915	
	* Stress Corrosion Cracking Direct Assessment SCCDA - RP0204				192.915	
	Inline Inspection Data Analysis ASNT ILI PQ				192.915	
	Evaluation Assessment Results and Make Remediation/ Mitigation Decisions PQ Part 9				192.915	
	Conduct Inline Inspection API 1163				192.915	
	Indirect Inspection Techniques				192.915	
	Direct Examination Techniques				192.915	

PROPOSAL

**SOUTHWEST GAS CORPORATION
SOUTHERN NEVADA DIVISION**

**Division Operations Services (DOS)
2023-2026 CONTRACT**

2.9%

REVISED CPI INCREASE PROPOSAL SHEETS EFFECTIVE MAY 1, 2025

1. GENERAL MAIN AND SERVICE DESIGN PRICE

Pricing is per foot installed or abandoned for design and drafting. Pricing includes all labor, equipment, materials, etc. necessary to perform these services. Design survey is required by the Contractor if land base is not provided by the Company. The project shall be completed (FOMS entry and design drawings) within thirty business days regardless of the size of project, unless otherwise agreed upon in writing by Company and Contractor. Requested design changes or necessary corrections shall be returned to Company within five working days without exception. Billing rate will be based on main footage only unless mutually agreed upon.

A.LARGE Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 5,000 feet or greater in length.

Main Installation (LARGE, land base provided)	\$	\$0.83	/FT
Main Installation (LARGE, survey required)	\$	\$2.16	/FT
Main Replacement (LARGE, land base provided)	\$	\$1.31	/FT
Main Replacement (LARGE, survey required)	\$	\$2.70	/FT
Main Abandonment (LARGE, land base provided)	\$	\$0.83	/FT
Main Abandonment (LARGE, survey required)	\$	\$1.90	/FT

B.MEDIUM Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 1,000 feet or greater in length, but less than 5,000 feet in length.

Main Installation (MEDIUM, land base provided)	\$	\$1.22	/FT
Main Installation (MEDIUM, survey required)	\$	\$3.14	/FT
Main Replacement (MEDIUM, land base provided)	\$	\$2.05	/FT
Main Replacement (MEDIUM, survey required)	\$	\$3.72	/FT
Main Abandonment (MEDIUM, land base provided)	\$	\$1.22	/FT
Main Abandonment (MEDIUM, survey required)	\$	\$2.75	/FT

C.SMALL Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main less than 1,000 feet in length including but not limited to short segments of distribution pipe, which may not be geologically contiguous.

Main Installation (SMALL, land base provided)	\$ <input type="text" value="\$2.93"/> /FT
Main Installation (SMALL, survey required)	\$ <input type="text" value="\$5.27"/> /FT
Main Replacement (SMALL, land base provided)	\$ <input type="text" value="\$3.67"/> /FT
Main Replacement (SMALL, survey required)	\$ <input type="text" value="\$6.25"/> /FT
Main Abandonment (SMALL, land base provided)	\$ <input type="text" value="\$2.93"/> /FT
Main Abandonment (SMALL, survey required)	\$ <input type="text" value="\$5.27"/> /FT

2. GENERAL AS-BUILT CREATION PRICE

Pricing is per foot installed or abandoned for As-Built designs and drawings. Pricing includes all labor, equipment, materials, etc. necessary to perform these services. The project shall be completed (As-Built drawings and FOMS entry) within ten (10) business days regardless of the size of project, unless otherwise agreed upon in writing by Company and Contractor. Requested As-Built changes or necessary corrections shall be returned to Company within three (3) business days without exception. Billing rate will be based on main footage only unless mutually agreed upon.

D.LARGE Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 5,000 feet or greater in length.

Main Installation (LARGE)	\$ <input type="text" value="\$0.85"/> /FT
Main Replacement (LARGE)	\$ <input type="text" value="\$1.06"/> /FT
Main Abandonment (LARGE)	\$ <input type="text" value="\$0.42"/> /FT

E.MEDIUM Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 1,000 feet or greater in length, but less than 5,000 feet in length.

Main Installation (MEDIUM)	\$ <input type="text" value="\$1.06"/> /FT
Main Replacement (MEDIUM)	\$ <input type="text" value="\$1.28"/> /FT
Main Abandonment (MEDIUM)	\$ <input type="text" value="\$0.54"/> /FT

F.SMALL Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main less than 1,000 feet in length including but not limited to short segments of distribution pipe, which may not be geologically contiguous.

Main Installation (SMALL)	\$ <input type="text" value="\$1.38"/> /FT
Main Replacement (SMALL)	\$ <input type="text" value="\$1.59"/> /FT
Main Abandonment (SMALL)	\$ <input type="text" value="\$0.85"/> /FT

3. OTHER MISCELLANEOUS INFRASTRUCTURE PROJECTS

For other miscellaneous projects not referenced above, pricing shall be at a rate mutually agreed upon in advance by the parties based on the hourly rates in Section 4 of this proposal sheet.

4. MISCELLANEOUS WORK REQUIRED

Unit price for certifying one easement legal description\$ /EA	\$	\$851.19	/EA
Unit price for certifying one easement exhibit drawing \$ /EA	\$	\$957.59	/EA
Unit price for preparing one exhibit/permit drawing	\$	\$957.59	/EA
Unit price for Field Survey (Data Acquisition)	\$	\$180.88	/HR
Unit price for Field Data Collection Survey	\$	\$101.08	/HR

5. GENERAL AS-BUILT REVIEW PRICE

Pricing is per foot installed or abandoned for As-Built reviews. Pricing includes all labor, equipment, materials, etc. necessary to perform these services. The project shall be completed (As-Built reviews and FOMS entry) within three (3) business days regardless of the size of project, unless otherwise agreed upon in writing by Company and Contractor. Requested As-Built changes or necessary corrections shall be returned to Company within three (3) business days without exception. Billing rate will be based on main footage only unless mutually agreed upon.

G.LARGE Project. Pricing shall include such work as installation, replacement and/or abandonment of existing main 5,000 feet or greater in length.

Main Installation (LARGE)	\$	\$0.22	/FT
Main Replacement (LARGE)	\$	\$0.27	/FT
Main Abandonment (LARGE)	\$	\$0.10	/FT

H.MEDIUM Project. Pricing shall include such work as installation, replacement and/or abandonment of existing main 1,000 feet or greater in length, but less than 5,000 feet in length.

Main Installation (MEDIUM)	\$	\$0.32	/FT
Main Replacement (MEDIUM)	\$	\$0.37	/FT
Main Abandonment (MEDIUM)	\$	\$0.22	/FT

I.SMALL Project. Pricing shall include such work as installation, replacement and/or abandonment of existing main less than 1,000 feet in length including but not limited to short segments of distribution pipe, which may not be geologically contiguous.

Main Installation (SMALL)	\$	\$0.37	/FT
Main Replacement (SMALL)	\$	\$0.48	/FT

Main Abandonment (SMALL)

\$ /FT

6. OTHER MISCELLANEOUS AS BUILT REVIEW PROJECTS

For other miscellaneous projects not referenced above, pricing shall be at a rate mutually agreed upon in advance by the parties based on the hourly rates in Section 7 of this proposal sheet.

7. MISCELLANEOUS WORK REQUIRED

Unit price for initial review of Service Installations, Acs

\$ /HR

Unit price for review of High Pressure/Transmission Steel

\$ /HR

Unit price for review of Distribution Steel

\$ /HR

8. HOURLY RATES

Contractor is to provide a copy of job classifications for all personnel who could bill time to the Work. The following basic position descriptions are provided. Hourly rates should include these positions, as a minimum. All rates billed by Contractor must be straight time only.

A. Project Manager - Engineering

- Coordinate communications concerning management of the project with Company representative.
- Coordinate all activities for which his/her firm has been contracted to perform.
- Provide Company with timely reports concerning the project of work completed, the timing of future work, and the costs associated with each.

\$ /HR

B. Project Manager– Field & Office Operations

- Has full responsibility and accountability for a project or projects
- Monitors the progress of all received projects
- Provides and maintains reports on a regular basis to management
- Other duties as assigned from Division point of contact (Supervision/Management)
- Coordinates with other departments both internal and external on a regular and professional basis

\$ /HR

C. Project Engineer

- Field Activity Involvement (Field walks/site visits, Data collection, On-site approval of engineering and design detail of a project)
- Control assessments and reports.
- Direct environmental studies if it is within the scope of the contract.

\$ /HR

D. Project Coordinator

- Completes all copying, scanning, and attaching of project field work
- Transcribe and maintain all project daily summaries
- Maintains lists of project employees
- Schedules and attends meetings
- Assist in development and implementation of new package flow procedures
- Coordinates with other departments both internal and external on a

regular and professional basis

\$ /HR

E. Coordinator

- Manage, track and analyze projects and report to management
- Submit to Entities for Permitting
- Manage and coordinate permit renewals and related issues
- Maintain/update files & folders for projects
- Track, update, and maintain cut sheet packages and related information
- Monitor and follow up on the completion of all tasks
- Coordinates with other departments both internal and external on a regular and professional basis

\$ /HR

F. Engineer/Designer

- Prepare and verify the proper procedures, specifications, and accuracy of the design components that Contractor is responsible for.
- Perform research and analyze data from the field for environmental and/or archaeological studies, prepare the reports and study results.
- Determine and verify the appropriate regulatory compliance and procedures that apply to a specific project.
- Review drawings and reports.
- PE Stamp designs.
- Third Party Improvement Plan and Records Review (excluding vacation requests) completed for the Franchise group.
- As-built drawing creation.
- FOMS Entries.

\$ /HR

G. Draftsman

- Prepare construction drawings.
- Prepare easement exhibits.
- Process information concerning installation and design of facilities.
- Incorporate survey data into a design drawing.
- Third Party Improvement Plan and Records Review (excluding vacation requests) completed for the New Business group.

\$ /HR

H. Analyst

- Records Research
- Utility Research
- Compile and send weekly summaries of projects
- Manage and track projects and reports
- Assist in development and implementation of new procedures
- Pick up/Drop off permits
- Field Walks
- Coordinates with other departments both internal and external on a regular and professional basis

\$ /HR

I. Clerical II

- Data Entry
- Compile and send weekly project summaries
- Help Develop and implement new as-built flow procedures
- Other duties as assigned up to and including Clerical I duties
- Coordinates with other departments both internal and external on a

regular and professional basis

\$ /HR

J. Clerical I

- Data Entry
- General secretarial services as required
- Spreadsheet Tracking and Maintenance
- Filing
- Technical Support
- Quality Assurance
- Vacation Requests
- Attend Meetings
- Create payment authorizations
- Pick up/Drop off permits
- Coordinates with other departments both internal and external on a regular and professional basis

\$ /HR

K. GIS Specialist

- Use ESRI GIS system to process and post information concerning installation, maintenance, and operation of Company facilities.
- Records and GIS data research
- Interpret facility design and construction drawings.
- Use PaperVision Capture and PaperVision Enterprise to scan and subsequently use to store and retrieve as-built records using Company policy and procedures and indexing standards.

\$ /HR

Bowman Consulting

Company:

**SOUTHWEST GAS CORPORATION
SOUTHERN NEVADA DIVISION**

**Division Operations Services (DOS)
2023-2026 CONTRACT**

3.4%

REVISED CPI INCREASE PROPOSAL SHEETS EFFECTIVE MAY 1, 2024

1. GENERAL MAIN AND SERVICE DESIGN PRICE

Pricing is per foot installed or abandoned for design and drafting. Pricing includes all labor, equipment, materials, etc. necessary to perform these services. Design survey is required by the Contractor if land base is not provided by the Company. The project shall be completed (FOMS entry and design drawings) within thirty business days regardless of the size of project, unless otherwise agreed upon in writing by Company and Contractor. Requested design changes or necessary corrections shall be returned to Company within five working days without exception. Billing rate will be based on main footage only unless mutually agreed upon.

A.LARGE Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 5,000 feet or greater in length.

Main Installation (LARGE, land base provided)	\$	\$0.81	/FT
Main Installation (LARGE, survey required)	\$	\$2.10	/FT
Main Replacement (LARGE, land base provided)	\$	\$1.27	/FT
Main Replacement (LARGE, survey required)	\$	\$2.62	/FT
Main Abandonment (LARGE, land base provided)	\$	\$0.81	/FT
Main Abandonment (LARGE, survey required)	\$	\$1.85	/FT

B.MEDIUM Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 1,000 feet or greater in length, but less than 5,000 feet in length.

Main Installation (MEDIUM, land base provided)	\$	\$1.19	/FT
Main Installation (MEDIUM, survey required)	\$	\$3.05	/FT
Main Replacement (MEDIUM, land base provided)	\$	\$1.99	/FT
Main Replacement (MEDIUM, survey required)	\$	\$3.62	/FT
Main Abandonment (MEDIUM, land base provided)	\$	\$1.19	/FT
Main Abandonment (MEDIUM, survey required)	\$	\$2.67	/FT

C.SMALL Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main less than 1,000 feet in length including but not limited to short segments of distribution pipe, which may not be geologically contiguous.

Main Installation (SMALL, land base provided)	\$ <input type="text" value="\$2.85"/> /FT
Main Installation (SMALL, survey required)	\$ <input type="text" value="\$5.12"/> /FT
Main Replacement (SMALL, land base provided)	\$ <input type="text" value="\$3.57"/> /FT
Main Replacement (SMALL, survey required)	\$ <input type="text" value="\$6.07"/> /FT
Main Abandonment (SMALL, land base provided)	\$ <input type="text" value="\$2.85"/> /FT
Main Abandonment (SMALL, survey required)	\$ <input type="text" value="\$5.12"/> /FT

2. GENERAL AS-BUILT CREATION PRICE

Pricing is per foot installed or abandoned for As-Built designs and drawings. Pricing includes all labor, equipment, materials, etc. necessary to perform these services. The project shall be completed (As-Built drawings and FOMS entry) within ten (10) business days regardless of the size of project, unless otherwise agreed upon in writing by Company and Contractor. Requested As-Built changes or necessary corrections shall be returned to Company within three (3) business days without exception. Billing rate will be based on main footage only unless mutually agreed upon.

D.LARGE Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 5,000 feet or greater in length.

Main Installation (LARGE)	\$ <input type="text" value="\$0.83"/> /FT
Main Replacement (LARGE)	\$ <input type="text" value="\$1.03"/> /FT
Main Abandonment (LARGE)	\$ <input type="text" value="\$0.41"/> /FT

E.MEDIUM Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 1,000 feet or greater in length, but less than 5,000 feet in length.

Main Installation (MEDIUM)	\$ <input type="text" value="\$1.03"/> /FT
Main Replacement (MEDIUM)	\$ <input type="text" value="\$1.24"/> /FT
Main Abandonment (MEDIUM)	\$ <input type="text" value="\$0.52"/> /FT

F.SMALL Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main less than 1,000 feet in length including but not limited to short segments of distribution pipe, which may not be geologically contiguous.

Main Installation (SMALL)	\$ <input type="text" value="\$1.34"/> /FT
Main Replacement (SMALL)	\$ <input type="text" value="\$1.55"/> /FT
Main Abandonment (SMALL)	\$ <input type="text" value="\$0.83"/> /FT

3. OTHER MISCELLANEOUS INFRASTRUCTURE PROJECTS

For other miscellaneous projects not referenced above, pricing shall be at a rate mutually agreed upon in advance by the parties based on the hourly rates in Section 4 of this proposal sheet.

4. MISCELLANEOUS WORK REQUIRED

Unit price for certifying one easement legal description\$ /EA	\$ <input type="text" value="\$827.20"/> /EA
Unit price for certifying one easement exhibit drawing \$ /EA	\$ <input type="text" value="\$930.60"/> /EA
Unit price for preparing one exhibit/permit drawing	\$ <input type="text" value="\$930.60"/> /EA
Unit price for Field Survey (Data Acquisition)	\$ <input type="text" value="\$175.78"/> /HR
Unit price for Field Data Collection Survey	\$ <input type="text" value="\$98.23"/> /HR

5. GENERAL AS-BUILT REVIEW PRICE

Pricing is per foot installed or abandoned for As-Built reviews. Pricing includes all labor, equipment, materials, etc. necessary to perform these services. The project shall be completed (As-Built reviews and FOMS entry) within three (3) business days regardless of the size of project, unless otherwise agreed upon in writing by Company and Contractor. Requested As-Built changes or necessary corrections shall be returned to Company within three (3) business days without exception. Billing rate will be based on main footage only unless mutually agreed upon.

G.LARGE Project. Pricing shall include such work as installation, replacement and/or abandonment of existing main 5,000 feet or greater in length.

Main Installation (LARGE)	\$ <input type="text" value="\$0.21"/> /FT
Main Replacement (LARGE)	\$ <input type="text" value="\$0.26"/> /FT
Main Abandonment (LARGE)	\$ <input type="text" value="\$0.10"/> /FT

H.MEDIUM Project. Pricing shall include such work as installation, replacement and/or abandonment of existing main 1,000 feet or greater in length, but less than 5,000 feet in length.

Main Installation (MEDIUM)	\$ <input type="text" value="\$0.31"/> /FT
Main Replacement (MEDIUM)	\$ <input type="text" value="\$0.36"/> /FT
Main Abandonment (MEDIUM)	\$ <input type="text" value="\$0.21"/> /FT

I.SMALL Project. Pricing shall include such work as installation, replacement and/or abandonment of existing main less than 1,000 feet in length including but not limited to short segments of distribution pipe, which may not be geologically contiguous.

Main Installation (SMALL)	\$ <input type="text" value="\$0.36"/> /FT
Main Replacement (SMALL)	\$ <input type="text" value="\$0.47"/> /FT

Main Abandonment (SMALL)

\$ /FT

6. OTHER MISCELLANEOUS AS BUILT REVIEW PROJECTS

For other miscellaneous projects not referenced above, pricing shall be at a rate mutually agreed upon in advance by the parties based on the hourly rates in Section 7 of this proposal sheet.

7. MISCELLANEOUS WORK REQUIRED

Unit price for initial review of Service Installations, Acs

\$ /HR

Unit price for review of High Pressure/Transmission Steel

\$ /HR

Unit price for review of Distribution Steel

\$ /HR

8. HOURLY RATES

Contractor is to provide a copy of job classifications for all personnel who could bill time to the Work. The following basic position descriptions are provided. Hourly rates should include these positions, as a minimum. All rates billed by Contractor must be straight time only.

A. Project Manager - Engineering

- Coordinate communications concerning management of the project with Company representative.
- Coordinate all activities for which his/her firm has been contracted to perform.
- Provide Company with timely reports concerning the project of work completed, the timing of future work, and the costs associated with each.

\$ /HR

B. Project Manager– Field & Office Operations

- Has full responsibility and accountability for a project or projects
- Monitors the progress of all received projects
- Provides and maintains reports on a regular basis to management
- Other duties as assigned from Division point of contact (Supervision/Management)
- Coordinates with other departments both internal and external on a regular and professional basis

\$ /HR

C. Project Engineer

- Field Activity Involvement (Field walks/site visits, Data collection, On-site approval of engineering and design detail of a project)
- Control assessments and reports.
- Direct environmental studies if it is within the scope of the contract.

\$ /HR

D. Project Coordinator

- Completes all copying, scanning, and attaching of project field work
- Transcribe and maintain all project daily summaries
- Maintains lists of project employees
- Schedules and attends meetings
- Assist in development and implementation of new package flow procedures
- Coordinates with other departments both internal and external on a

regular and professional basis

\$ /HR

E. Coordinator

- Manage, track and analyze projects and report to management
- Submit to Entities for Permitting
- Manage and coordinate permit renewals and related issues
- Maintain/update files & folders for projects
- Track, update, and maintain cut sheet packages and related information
- Monitor and follow up on the completion of all tasks
- Coordinates with other departments both internal and external on a regular and professional basis

\$ /HR

F. Engineer/Designer

- Prepare and verify the proper procedures, specifications, and accuracy of the design components that Contractor is responsible for.
- Perform research and analyze data from the field for environmental and/or archaeological studies, prepare the reports and study results.
- Determine and verify the appropriate regulatory compliance and procedures that apply to a specific project.
- Review drawings and reports.
- PE Stamp designs.
- Third Party Improvement Plan and Records Review (excluding vacation requests) completed for the Franchise group.
- As-built drawing creation.
- FOMS Entries.

\$ /HR

G. Draftsman

- Prepare construction drawings.
- Prepare easement exhibits.
- Process information concerning installation and design of facilities.
- Incorporate survey data into a design drawing.
- Third Party Improvement Plan and Records Review (excluding vacation requests) completed for the New Business group.

\$ /HR

H. Analyst

- Records Research
- Utility Research
- Compile and send weekly summaries of projects
- Manage and track projects and reports
- Assist in development and implementation of new procedures
- Pick up/Drop off permits
- Field Walks
- Coordinates with other departments both internal and external on a regular and professional basis

\$ /HR

I. Clerical II

- Data Entry
- Compile and send weekly project summaries
- Help Develop and implement new as-built flow procedures
- Other duties as assigned up to and including Clerical I duties
- Coordinates with other departments both internal and external on a

regular and professional basis

\$ /HR

J. Clerical I

- Data Entry
- General secretarial services as required
- Spreadsheet Tracking and Maintenance
- Filing
- Technical Support
- Quality Assurance
- Vacation Requests
- Attend Meetings
- Create payment authorizations
- Pick up/Drop off permits
- Coordinates with other departments both internal and external on a regular and professional basis

\$ /HR

K. GIS Specialist

- Use ESRI GIS system to process and post information concerning installation, maintenance, and operation of Company facilities.
- Records and GIS data research
- Interpret facility design and construction drawings.
- Use PaperVision Capture and PaperVision Enterprise to scan and subsequently use to store and retrieve as-built records using Company policy and procedures and indexing standards.

\$ /HR

Bowman Consulting

Company:

**SOUTHWEST GAS CORPORATION
SOUTHERN NEVADA DIVISION**

**Division Operations Services (DOS)
2023-2026 CONTRACT**

CONTRACTOR'S PROPOSAL SHEET

1. GENERAL MAIN AND SERVICE DESIGN PRICE

Pricing is per foot installed or abandoned for design and drafting. Pricing includes all labor, equipment, materials, etc. necessary to perform these services. Design survey is required by the Contractor if land base is not provided by the Company. The project shall be completed (FOMS entry and design drawings) within thirty business days regardless of the size of project, unless otherwise agreed upon in writing by Company and Contractor. Requested design changes or necessary corrections shall be returned to Company within five working days without exception. Billing rate will be based on main footage only unless mutually agreed upon

A.LARGE Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 5,000 feet or greater in length.

Main Installation (LARGE, land base provided)	\$ <u> \$0.78</u> /FT
Main Installation (LARGE, survey required)	\$ <u> \$2.03</u> /FT
Main Replacement (LARGE, land base provided)	\$ <u> \$1.23</u> /FT
Main Replacement (LARGE, survey required)	\$ <u> \$2.53</u> /FT
Main Abandonment (LARGE, land base provided)	\$ <u> \$0.78</u> /FT
Main Abandonment (LARGE, survey required)	\$ <u> \$1.79</u> /FT

B.MEDIUM Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 1,000 feet or greater in length, but less than 5,000 feet in length

Main Installation (MEDIUM, land base provided)	\$ <u> \$1.15</u> /FT
Main Installation (MEDIUM, survey required)	\$ <u> \$2.95</u> /FT
Main Replacement (MEDIUM, land base provided)	\$ <u> \$1.92</u> /FT
Main Replacement (MEDIUM, survey required)	\$ <u> \$3.50</u> /FT
Main Abandonment (MEDIUM, land base provided)	\$ <u> \$1.15</u> /FT
Main Abandonment (MEDIUM, survey required)	\$ <u> \$2.58</u> /FT

C.SMALL Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main less than 1,000 feet in length including but not limited to short segments of distribution pipe, which may not be geologically contiguous.

Main Installation (SMALL, land base provided)	\$ <u> \$2.76</u> /FT
Main Installation (SMALL, survey required)	\$ <u> \$4.95</u> /FT

Main Replacement (SMALL, land base provided)	\$ <u> \$3.45</u> /FT
Main Replacement (SMALL, survey required)	\$ <u> \$5.87</u> /FT
Main Abandonment (SMALL, land base provided)	\$ <u> \$2.76</u> /FT
Main Abandonment (SMALL, survey required)	\$ <u> \$4.95</u> /FT

2. GENERAL AS-BUILT CREATION PRICE

Pricing is per foot installed or abandoned for As-Built designs and drawings. Pricing includes all labor, equipment, materials, etc. necessary to perform these services. The project shall be completed (As-Built drawings and FOMS entry) within ten (10) business days regardless of the size of project, unless otherwise agreed upon in writing by Company and Contractor. Requested As-Built changes or necessary corrections shall be returned to Company within three (3) business days without exception. Billing rate will be based on main footage only unless mutually agreed upon

D.LARGE Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 5,000 feet or greater in length.

Main Installation (LARGE)	\$ <u> \$0.80</u> /FT
Main Replacement (LARGE)	\$ <u> \$1.00</u> /FT
Main Abandonment (LARGE)	\$ <u> \$0.40</u> /FT

E.MEDIUM Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main 1,000 feet or greater in length, but less than 5,000 feet in length

Main Installation (MEDIUM)	\$ <u> \$1.00</u> /FT
Main Replacement (MEDIUM)	\$ <u> \$1.20</u> /FT
Main Abandonment (MEDIUM)	\$ <u> \$0.50</u> /FT

F.SMALL Project. Pricing shall include such work as installation (including service installations), replacement (including service replacements/tie-overs) and/or abandonment of existing main less than 1,000 feet in length including but not limited to short segments of distribution pipe, which may not be geologically contiguous.

Main Installation (SMALL)	\$ <u> \$1.30</u> /FT
Main Replacement (SMALL)	\$ <u> \$1.50</u> /FT
Main Abandonment (SMALL)	\$ <u> \$0.80</u> /FT

3. OTHER MISCELLANEOUS INFRASTRUCTURE PROJECTS

For other miscellaneous projects not referenced above, pricing shall be at a rate mutually agreed upon in advance by the parties based on the hourly rates in Section 4 of this proposal sheet.

4. MISCELLANEOUS WORK REQUIRED

Unit price for certifying one easement legal description \$ /EA	\$ <u>800.00</u> /EA
Unit price for certifying one easement exhibit drawing \$ /EA	\$ <u>900.00</u> /EA
Unit price for preparing one exhibit/permit drawing	\$ <u>900.00</u> /EA
Unit price for Field Survey (Data Acquisition)	\$ <u>170.00</u> /HR
Unit price for Field Data Collection Survey	\$ <u>95.00</u> /HR

5. GENERAL AS-BUILT REVIEW PRICE

Pricing is per foot installed or abandoned for As-Built reviews. Pricing includes all labor, equipment, materials, etc. necessary to perform these services. The project shall be completed (As-Built reviews and FOMS entry) within three (3) business days regardless of the size of project, unless otherwise agreed upon in writing by Company and Contractor. Requested As-Built changes or necessary corrections shall be returned to Company within three (3) business days without exception. Billing rate will be based on main footage only unless mutually agreed upon

G.LARGE Project. Pricing shall include such work as installation, replacement and/or abandonment of existing main 5,000 feet or greater in length.

Main Installation (LARGE)	\$ <u>0.20</u> /FT
Main Replacement (LARGE)	\$ <u>0.25</u> /FT
Main Abandonment (LARGE)	\$ <u>0.10</u> /FT

H.MEDIUM Project. Pricing shall include such work as installation, replacement and/or abandonment of existing main 1,000 feet or greater in length, but less than 5,000 feet in length.

Main Installation (MEDIUM)	\$ <u>0.30</u> /FT
Main Replacement (MEDIUM)	\$ <u>0.35</u> /FT
Main Abandonment (MEDIUM)	\$ <u>0.20</u> /FT

I.SMALL Project. Pricing shall include such work as installation, replacement and/or abandonment of existing main less than 1,000 feet in length including but not limited to short segments of distribution pipe, which may not be geologically contiguous

Main Installation (SMALL)	\$ <u>0.35</u> /FT
Main Replacement (SMALL)	\$ <u>0.45</u> /FT
Main Abandonment (SMALL)	\$ <u>0.30</u> /FT

6.OTHER MISCELLANEOUS AS BUILT REVIEW PROJECTS

For other miscellaneous projects not referenced above, pricing shall be at a rate mutually agreed upon in advance by the parties based on the hourly rates in Section 7 of this proposal sheet.

7.MISCELLANEOUS WORK REQUIRED

Unit price for initial review of Service Installations,Acs	\$ <u>85.00</u> /HR
Unit price for review of High Pressure/Transmission Steel	\$ <u>115.00</u> /HR

Unit price for review of Distribution Steel

\$ \$100.00 /HR

8. HOURLY RATES

Contractor is to provide a copy of job classifications for all personnel who could bill time to the Work. The following basic position descriptions are provided. Hourly rates should include these positions, as a minimum. All rates billed by Contractor must be straight time only

A. Project Manager - Engineering

- Coordinate communications concerning management of the project with Company representative.
- Coordinate all activities for which his/her firm has been contracted to perform.
- Provide Company with timely reports concerning the project of work completed, the timing of future work, and the costs associated with each.

\$ \$165.00 /HR

B. Project Manager– Field & Office Operations

- Has full responsibility and accountability for a project or projects
- Monitors the progress of all received projects
- Provides and maintains reports on a regular basis to management
- Other duties as assigned from Division point of contact (Supervision/Management)
- Coordinates with other departments both internal and external on a regular and professional basis

\$ \$160.00 /HR

C. Project Engineer

- Field Activity Involvement (Field walks/site visits, Data collection, On-site approval of engineering and design detail of a project)
- Control assessments and reports.
- Direct environmental studies if it is within the scope of the contract.

\$ \$145.00 /HR

D. Project Coordinator

- Completes all copying, scanning, and attaching of project field work
- Transcribe and maintain all project daily summaries
- Maintains lists of project employees
- Schedules and attends meetings
- Assist in development and implementation of new package flow procedures
- Coordinates with other departments both internal and external on a regular and professional basis

\$ \$85.00 /HR

E. Coordinator

- Manage, track and analyze projects and report to management
- Submit to Entities for Permitting
- Manage and coordinate permit renewals and related issues
- Maintain/update files & folders for projects
- Track, update, and maintain cut sheet packages and related information
- Monitor and follow up on the completion of all tasks
- Coordinates with other departments both internal and external on a regular and professional basis

\$ \$75.00 /HR

F. Engineer/Designer

- Prepare and verify the proper procedures, specifications, and

accuracy of the design components that Contractor is responsible for.

- Perform research and analyze data from the field for environmental and/or archaeological studies, prepare the reports and study results
- Determine and verify the appropriate regulatory compliance and procedures that apply to a specific project.
- Review drawings and reports.
- PE Stamp designs.
- Third Party Improvement Plan and Records Review (excluding vacation requests) completed for the Franchise group.
- As-built drawing creation.
- FOMS Entries.

\$ \$135.00 /HR

G. Draftsman

- Prepare construction drawings.
- Prepare easement exhibits.
- Process information concerning installation and design of facilities.
- Incorporate survey data into a design drawing.
- Third Party Improvement Plan and Records Review (excluding vacation requests) completed for the New Business group.

\$ \$115.00 /HR

H. Analyst

- Records Research
- Utility Research
- Compile and send weekly summaries of projects
- Manage and track projects and reports
- Assist in development and implementation of new procedures
- Pick up/Drop off permits
- Field Walks
- Coordinates with other departments both internal and external on a regular and professional basis

\$ \$75.00 /HR

I. Clerical II

- Data Entry
- Compile and send weekly project summaries
- Help Develop and implement new as-built flow procedures
- Other duties as assigned up to and including Clerical I duties
- Coordinates with other departments both internal and external on a regular and professional basis

\$ \$75.00 /HR

J. Clerical I

- Data Entry
- General secretarial services as required
- Spreadsheet Tracking and Maintenance
- Filing
- Technical Support
- Quality Assurance
- Vacation Requests
- Attend Meetings
- Create payment authorizations
- Pick up/Drop off permits
- Coordinates with other departments both internal and external on a regular and professional basis

\$ \$65.00 /HR

K. GIS Specialist

- Use ESRI GIS system to process and post information concerning installation, maintenance, and operation of Company facilities
- Records and GIS data research

- Interpret facility design and construction drawings.
- Use PaperVision Capture and PaperVision Enterprise to scan and subsequently use to store and retrieve as-built records using Company policy and procedures and indexing standards

\$ \$125.00 /HR

Billy Orr

Print Name:



Signature:

Bowman Consulting

Company:

4/13/2023

Date:

ADDENDUM 1

ADDENDUM NO. 1

April 11, 2023

RE: Division Operations Services (DOS)

From: Southwest Gas Corporation
Southern Nevada Division

To: Prospective Bidders

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents. Acknowledge receipt of this Addendum by signing and including it with your proposal. Failure to do so may subject the bidder to disqualification.

This Addendum consists of answers to the following questions received:

1. What is the expected volume of work in the various areas identified in the Statement of Work?

ANSWER: Quantity of workload depends on the needs of the Division and the quality of Contractor's work.

2. The Statement of Work Paragraph 3.8 identifies that Southwest Gas will request potholing work. Paragraph 4.14 states that the Contractor will provide a minimum of two pothole quotes. How will the costs associated with the pothole work be handled?

ANSWER: After potholing is complete, the Contractor will submit an invoice for the cost of the potholes. If using a subcontractor for potholing, the Contractor will include any receipts or invoices from the subcontractor as supporting documentation for the cost of the potholes.

3. The Statement of Work Paragraph 4.13 provides timelines for the Contractor to complete work. The Contractor's Proposal Sheet (1. General Main and Service Design Price), however, identifies a different timeline. Please explain the differences.

ANSWER: The SOW references the timeline for strictly the drawing for the project. The proposal references the timeline for the full design, drawing and survey included.

4. The Statement of Work Paragraph 2.3 states that the Contractor will be responsible for performing a land survey of the project if the land base is not provided by Southwest Gas. When does Southwest Gas typically provide land survey files/information?

ANSWER: Utility may provide land base files for New Business projects where the land base is provided to us by the customer requesting gas service.

5. Would you provide additional information concerning what is needed when performing the Digital Document collection work?

ANSWER: Digital Documentation is the overarching term being used by the Utility for the long-term goal of moving from paper records to electronic records. In order to achieve this goal, the Utility will be moving towards Facility Data Collection

ADDENDUM NO. 1

April 11, 2023

(FDC). FDC is defined as: The process of gathering electronic data using the Global Navigation Satellite System (GNSS) and barcode technology to create an electronic record that records pipe type, size, geospatial location, joint types, pipe joining qualifications, landmarks, and other pertinent data using the CartoPac Software application. The information gathered through the application is sufficient to provide the necessary data to create an electronic drawing.

The data collector would be provided a survey pole that is equipped with a tablet that has the CartoPac software, a GNSS device, a barcode scanner and a laser range finder to perform the work. Training will be provided on the use of the equipment, requirements/best practices for the data collection activities. The data collector would be responsible to coordinate with the point of contact from the Utility and/or the Contractor installing the facilities to collect the data associated with the installation of Utility piping facilities in a prompt manner to reduce downtime. Upon completion of the data collection for a given project, the data collector would be responsible for moving the work from a state of work in progress to where the data is accessible to the Utility's workgroups. This is all done through the CartoPac software solution.

6. The Statement of Work Paragraph 5.4 specifies the turn-around time when making necessary corrections. The Contractor's Proposal Sheet (Items 2 and 5) identifies different turn-around times. Please explain the differences.

ANSWER: Section 5.4 of the Statement of Work refers to the turnaround criteria for designs, whereas items 2 & 5 of the Proposal Sheet refers to the criteria for as-built documents.

7. Section 10 of the Statement of Work concerning Environmental items appears to require the Contractor to provide the scope of the environmental work as well as an estimated cost for the work. How will the costs associated with the Environmental work be handled?

ANSWER: The Contractor will submit an invoice for any costs relating to environmental research, permitting, or work done by the Contractor. The Contractor will include any receipts or invoices from any subcontractors or external entities as supporting documentation for the cost of the environmental work.

8. Section 12 of the Statement of Work concerning invoicing references Section 6.2 in the same agreement. Please explain what this means.

ANSWER: The reference to 6.2 is in regard to the completion of the work which is dependent on the continuing quality of work by the Contractor. If the project is only partially completed and the Contractor is not performing work to Utility standards, they will be paid only for the portion of work completed.

ADDENDUM NO. 1

April 11, 2023

9. On section 1 of the proposal sheet, there are options for land base provided and survey required. Is there an option to create a non-surveyed land base using ROW/parcel maps, and as-builts/utility maps from other utility operators?

ANSWER: Survey will be required for all Contractor generated land base drawings. ROW/parcel maps may be used for preliminary exhibits, but all design drawings must use a landbase generated by survey or provided by the customer.

10. On section 2 of the proposal sheet, will the as-built survey be provided or does that need to be factored into the cost/ft?

ANSWER: As-Built Survey may be requested by the company.

11. Will high pressure design work be estimated using the hourly rates on section 8 of the proposal sheet?

ANSWER: High pressure design work is to be estimated using the hourly rates section. The main and service per foot section of the proposal sheet only applies to distribution designs.

12. For the job classification 'Engineer/Designer', can you please confirm if the person billing out at this rate will need to have their PE based on bullet point 5 ('PE Stamp designs')?

ANSWER: The PE stamp would be at the Engineer/Designer rate but not all engineer/designers require a PE

13. Does Southwest Gas require evidence (as per the D&A Requirements document) of a PHMSA D&A program to be submitted as part of the RFP or just prior to the performance of work?

ANSWER: The D&A plan is required to be approved before any work can start, and before the Contractor can attend any OQ classes that may be required. This can be submitted as part of the RFP or just prior to work but doing this later may delay the start of work. It takes a week or two for Utility to review and approve.

14. Is there a diverse spend requirement or goal associated with this contract (i.e. does a certain percentage of the work we complete for SWG need to be completed by a diverse supplier under this contract)?

ANSWER: There is no diverse spend requirement.

15. Is your team able to provide information related to the anticipate volume of work (i.e. number of projects, LF of main replaced, etc.) and distribution of project types per year? The project types we are referring to are defined in Section 4.12 of the Statement of Work.

ANSWER: No. We are unable to predict the volume of work.

ADDENDUM NO. 1

April 11, 2023

16. When a survey is required/requested, would the survey be performed and billed:

a) at the hourly rate provided under Section 4 of the Contractor's Proposal Sheet?

ANSWER: Yes, for miscellaneous projects.

b) as part of the LF rate provided under Section 1 of the Contractor's Proposal Sheet?

ANSWER: Yes, based upon the project size description given in Section 1

c) under a separate work request agreement?

ANSWER: No.

17. Approximately what percentage of the time will a survey be required?

ANSWER: There is not an approximation available, as we don't know where the future projects will take place.

18. For the "SMALL" project type (i.e. less than 1,000') as defined in the Contractor's proposal sheet, is there a minimum length those projects will be?

ANSWER: No.

19. For the "SMALL" project type (i.e. less than 1,000') as defined in the Contractor's proposal sheet, is your team able to provide what the average length those projects (or is there an average length that we should assume)?

ANSWER: No.

20. For the "LARGE" project type (i.e. more than 5,000') as defined in the Contractor's proposal sheet, is there a maximum length those projects will be?

ANSWER: No.

21. For the "LARGE" project type (i.e. more than 5,000') as defined in the Contractor's proposal sheet, is your team able to provide what the average length those projects (or is there an average length that we should assume)?

ANSWER: We are unable to predict future work.

22. Is your team able to provide a go-by of the construction drawings for the major project types? The project types we are referring to are defined in Section 4.12 of the Statement of Work.

ANSWER: As-Builts will be provided when available.

ADDENDUM NO. 1

April 11, 2023

23. Is your team able to provide a go-by of the as-built drawings?

ANSWER: We cannot answer this question as it is unclear.

24. Regarding the staff augmentation request, what percentage of the time would contractors need to be on-site and in SWG's office (i.e. 100%, 2-days/week, etc.)?

ANSWER: Utility would need Contractor's on-site 2 –5 days per week

25. Under this contract, is there the potential your team will select a contractor for one portion of the contract (i.e. General Main and Service Design) and not another (i.e. Staff Augmentation)?

ANSWER: All the Contractors will be available for all groups to use at their discretion.

26. Statement of Work 1.3 – Do structural and electrical designs require stamping, or only designs pertaining to gas-carrying components?

ANSWER: Currently, only some designs with gas-carrying components require a PE stamp.

27. Statement of Work 2.4 – Are you able to provide the referenced limits?

ANSWER: We are not able to provide the referenced limits.

28. To ensure we are providing the intended per foot unit pricing, could you clarify the level of effort expected for the items referenced in the following sections as they pertain to the General Main and Service Design Price requested, and/or if any of these items should be invoiced on a time and expense basis, instead?

a) 3.1/4.25 – If AutoCAD files provided by Utility are not Geospatially/Geo-Reference accurate, will a survey be required to accurately locate the project to ensure consistency during construction staking? Or is another procedure anticipated?

ANSWER: Yes, unless land base is provided by developer. All entities must be surveyed for land base.

b) 4.4 – Scheduled Project meetings with Utility.

ANSWER: Three field meets (30%, 60%, 90%) must be included in the project cost, meetings outside these are to be charged on an hourly basis.

c) 4.7 – Does acquiring Land Rights records include ordering and reviewing Title Survey documents? Title documents are significantly more expensive to procure.

ANSWER: This will not be involved in the process.

ADDENDUM NO. 1

April 11, 2023

- d) 4.18 – Does Contractor need to verify project boundaries for all projects, including when land base is provided by Utility, or only for projects where land base is not provided by Utility?

ANSWER: Section 4.18 is stating to verify specifically the land base within the project boundaries, not the project boundaries themselves.

- e) 4.20/4.34 – Is the Contractor required to acquire all permits necessary for construction, even those that may not be specifically listed? Are utility requests required when the land base is provided?

ANSWER: This will be specifically requested to be done if needed. Currently, Engineering has many of our construction contractors pull the permits. And utility requests are not typically required when land base is provided.

- f) 4.21/4.22 – Additional detail drawings required from Contractor.

ANSWER: The majority of details will be provided by Utility, however Contractor may be required to create additional details for designs.

- g) 4.28 – Please clarify what these pavement restoration requirements entail in the planset, along with the procedure and requirements for investigating city/county/state projects in the project area.

ANSWER: The pavement restoration requirement will entail, most commonly, construction notes and callouts for RTC repaving standards in the project area. Investigating entity projects will involve going onto the RTC Regional Project Coordination Map.

- h) 4.8 – Will Utility continue to provide the Accelerated Construction (AC) spreadsheets, or will that now be part of Contractor scope to include in per foot pricing?

ANSWER: AC's per 3.2 will be at T&M at Company Request/Approval. Section 4.8 requirements shall be included in the cost per foot pricing as part of service design.

- i) 10 – Does this section pertain to every project or only for certain designated projects?

ANSWER: This will only be for certain projects.

29. 4.14 – Will the Contractor have 10 business days once potholes have been concluded to provide pothole information to Utility?

ANSWER: Yes, provide pothole information to Utility within ten (10) business days of the completion.

ADDENDUM NO. 1

April 11, 2023

30. 4.24/6.4/6.5 – Can Contractor anticipate a certain volume of work from Utility to ensure Contractor can prepare accordingly and provide an adequate number of qualified personnel?

ANSWER: We are unable to predict workload or work prioritization.

31. 4.30 – Will in-person and/or virtual meetings be required for As-Built Reviews and Creations?

ANSWER: Yes, either would work.

32. 4.31 – Please expand on what Digital Documentation Collection is, what it entails, what is the procedure, and what is required by Contractor.

ANSWER: Digital Documentation is the overarching term being used by the Company for the long-term goal of moving from paper records to electronic records. In order to achieve this goal the Company will be moving towards Facility Data Collection (FDC). FDC is defined as: The process of gathering electronic data using the Global Navigation Satellite System (GNSS) and barcode technology to create an electronic record that records pipe type, size, geospatial location, joint types, pipe joining qualifications, landmarks, and other pertinent data using the CartoPac Software application. The information gathered through the application is sufficient to provide the necessary data to create an electronic drawing.

The data collector would be provided a survey pole that is equipped with a tablet that has the CartoPac software, a GNSS device, a barcode scanner and a laser range finder to perform the work. Training will be provided on the use of the equipment, requirements/best practices for the data collection activities. The data collector would be responsible to coordinate with the point of contact from the Company and/or the contractor installing the facilities to collect the data associated with the installation of Company piping facilities in a prompt manner to reduce downtime. Upon completion of the data collection for a given project, the data collector would be responsible for moving the work from a state of work in progress to where the data is accessible to the Company's workgroups. This is all done through the CartoPac software solution.

33. 7.3 – Does Utility have a list of KPIs for Contractor to track and report? Is there a specific volume of reporting Utility is looking for?

ANSWER: There is no list of KPI's for the Contractor.

34. For any contractors or subcontractors that may be under an existing Services Agreement with SWG, is the intent of the Craft Agreement to replace an existing Services Agreement for this program?

ANSWER: Yes.

ADDENDUM NO. 1

April 11, 2023

35. The Craft Agreement mentions Special Terms and Conditions a couple times – are there any Special Terms and Conditions available for review?

ANSWER: The Craft Services Agreement, Statement of Work and Proposal Sheets and any appendices to these documents will be the documents that constitute this Agreement.

36. 3.1 – should the expiration date be April 30, 2026?

ANSWER: Yes, the expiration is April 30, 2026. This is a sample document and if awarded a contract correct dates will be referenced.

37. Which OQ Covered Tasks are expected as part of this Design and Engineering contract? Does Section 7 of the Scope of Work pertain only to OQ Covered Tasks, or also to Design and Engineering services? If contractor or subcontractor are not involved in OQ Covered Tasks, are the provided DOT D&A requirements applicable?

ANSWER: The OQ tasks are in the provided OQ Task list. The only task in the SOW that this is required for is pothole work. If contractor or subcontractor is not doing that work, the requirement is not applicable.

38. Does the QMS need to be included with the proposal, or only after award?

ANSWER: QMS only needs to be provided after award.

39. Is \$5M cyber liability required for subconsultants who will not access the SWG system (i.e. survey and pothole subconsultants)?

ANSWER: The Cyber Liability requirement does not apply to subconsultants who do not access Utility systems.

40. Will admins in the SWG office be guaranteed full-time work, and if so, for what duration?

ANSWER: Full-time work is not guaranteed. In office personnel hours will be based on the amount of Division department workload. However, a successful bidder is not guaranteed to be used for all positions. Each department may use one or multiple contracts to fill the positions.

41. Will any diverse supplier certificates be required?

ANSWER: This is not a requirement to bid, but we ask for it if the Contractor is a diverse supplier.

42. For SMALL projects less than 1,000 LF, would a minimum bound be considered, where any designs with footage less than that bound could be invoiced on an hourly basis?

ANSWER: There is no minimum bound where work would be invoiced on an hourly basis.

ADDENDUM NO. 1

April 11, 2023

43. For projects with a large portion of Service, would Service footage be included in the footage total for per foot unit pricing?

ANSWER: Services are not included in most design's costs, but there are cases that arise when they are needed.

44. Does all contractor, sub-contractor and contractor staff require to reside in the United States? Please confirm that any offshore outsourcing for work related to SWG is not permitted in any capacity.

ANSWER: No, it is not permitted. All contractor, sub-contractor and contractor staff must reside in the US.

45. Will \$/ft numbers be used to issue lump sum project assignments for individual WRs, or are the \$/ft numbers provided for reference only and specific estimates will be requested for each WR?

ANSWER: Specific estimates will need to be provided.

46. We've been engaged with similar work for SWG NNV and other clients, but the level of effort for specific design services can vary. Is there a representative site-specific scope of work that can be provided for the three types of projects (main installation, replacement, abandonment) to ensure accurate price per foot estimates?

ANSWER: Contractors will use the estimator tool provided by the Utility.

47. Similarly, is there a representative scope of work that can be provided for the survey when that is within our scope? Will it include utility locates, topography, boundary, etc.?

ANSWER: Generally, it will include any or all of them.

48. For WRs where land base IS provided, will the design contractor need to provide any field noting activities or will all necessary features (edge of pavement, foreign utility locates, etc.) be provided with land base?

ANSWER: Most of the time, necessary features are noted with the land base.

49. For As-Built Creation pricing, will the design contractor be responsible for any field-based survey activities? Will existing drawings be provided for As-Built revision, or will they need to be created from scratch?

ANSWER: Yes, the Contractor is responsible for the survey activities. Drawings should be made available for as-built purposes.

ADDENDUM NO. 1


April 11, 2023

50. Can you clarify the difference between the two final unit prices from the Proposal Sheet as shown below? "Field Survey (Data Acquisition)" and "Field Data Collection Survey" seem to be the same thing?

ANSWER: Field Survey (Data Acquisition) is for survey done prior to construction, but not design (as this is captured in Section 1). Field Data Collection Survey is for the new process of Digital Documentation, detailed in the pre-bid presentation and in this Addendum.

END OF ADDENDUM

Bowman Consulting
COMPANY NAME


AUTHORIZED SIGNATURE

Billy Orr 4/13/2023
PRINT NAME DATE

CHANGE ORDERS



CONTRACT CHANGE ORDER NO. 1

DOCKET NO. 26-03
EXHIBIT NO. (TWC-15)
SHEET 217 OF 217

Date Prepared 1/15/2026

Contract No. 21941	"Contract"	Department Name	Engineering
Contractor Name	Bowman Consulting	District Name & Number	SNV-0021
Project Name/Description	Extending Contract	Requestor Name	Patrick Chow
		Title	Supervisor
		Approved By	Joel Martell <i>JM</i>
		Contract Analyst	Johnathan Ray

Requested Change Extending contract for 2 years. New Expiration date 4/30/2028.

Comments _____

Except as herein modified, all of the terms, conditions and provisions of the Contract shall remain in full force and effect. This Change Order shall become effective upon execution by both parties. This Change Order may be executed in counterparts, and of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement. A signed copy of this Change Order delivered by facsimile, e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Change Order.

CONTRACTOR ACCEPTANCE:		SOUTHWEST GAS CORPORATION AUTHORIZATION:	
	02/19/2026		02/19/2026
Authorized Signature	Date Signed	Authorized Signature	Date Signed
Principal – Branch Manager		Director Gas Operations	
Title		Title	