I. SUPPLY LINE 36-9-09 NORTH TIMP PROJECT

A. Background and Summary

Supply Line 36-9-09 North was assessed from [redacted] in San Luis Obispo to [redacted] in Arroyo Grande. This Workpaper describes the activities associated with a Transmission Integrity Management Program (TIMP) [redacted] that includes Indirect Inspection using aboveground surveys, Direct Examinations made to six sites, and Post-Assessment analysis. The specific attributes of this Project are detailed below in General Project Information. The total loaded cost of the Project is $1,364,829.

Table 1: General Project Information

Integrity Assessment Details			
Pipeline	36-9-09 North		
Assessment Type	[redacted]		
Location	Atascadero, Arroyo Grande, Pismo Beach, San Luis Obispo		
Class	[redacted]		
HCA Length	1.96 miles		
Project Length	3.96 miles		
Vintage	[redacted]		
Pipe Diameter			
MAOP			
SMYS			
HCA Threats			
Indirect Inspection Completion Date			
Direct Examination Completion Date			
Construction Start Date			
Construction Completion Date			
Assessment Due Date			
Project Costs ($)	**Capital**	**O&M**	**Total**
Loaded Project Costs	0	1,364,829	1,364,829

[redacted]

B. Maps and Images

Figure 1: Supply Line 36-9-09 North Project Scope

II. ENGINEERING, DESIGN, AND CONSTRUCTABILITY

As described in the Prepared Direct Testimony of Jordan A. Zeoli, Fidel Galvan, and Travis Sera (Chapter II), TIMP projects follow a four-step assessment process: Pre-Assessment, Indirect Inspection, Direct Examination, and Post-Assessment. This Workpaper outlines construction activities during the Assessment process that occurred during the Indirect Inspection(s), Direct Examination(s) and Post-Assessment.

Prior to initiating execution of the assessment, SoCalGas reviewed available information and performed a detailed system analysis to verify the scope of the Project.

A. Indirect Inspection

SoCalGas initiated the planning process for the Supply Line 36-9-09 North by performing a Pre-Assessment engineering analysis to determine existing conditions and any impacts to the Project, confirm the appropriate assessment methods, and select the Indirect Inspection tools.

Key factors that influenced the planning and execution of the Project Indirect Inspection(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained:
    a. Permits, traffic control drawings and plans from the cities of Arroyo Grande, San Luis Obispo, Pismo Beach, and the County of San Luis Obispo.
    b. An Encroachment permit and traffic control plans from Caltrans to survey along the shoulder of highway 101 in San Luis Obispo.

5. Environmental: The Project Team obtained a standard Environmental Clearance. There was a risk of naturally occurring asbestos to be present in San Luis Obispo and additional measures had to be taken by the Project Team to minimize ground disturbance such as limiting vehicle speeds to 15 miles per hour, wetting down the work area and pipes, and washing down equipment before moving out of the property onto a paved road. Extra caution was advised for natural resources as several endangered species are known to occur along the pipeline.

Table 2: Indirect Inspection Segments

Line	Length	Threat Type	Indirect Inspection Tool Type
36-9-09 North	1.96 miles	[redacted]	[redacted]
36-9-09 North	1.96 miles		
36-9-09 North	1.96 miles		

B. Direct Examination

Following the completion of the Indirect Inspection, six Direct Examination sites were identified for validation. For each examination location, SoCalGas conducted site evaluations, communicated with stakeholders, performed potholing of the area to identify the presence of underground utilities and substructures, and prepared a project schedule that met criteria followed for examination.

Key factors that influenced the planning and execution of the Project Direct Examination(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts, contingencies were set in place if there was a need for pipeline isolation.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained permits, traffic control drawings and plans from the cities of Pismo Beach and San Luis Obispo
5. Environmental: No significant environmental constraints were identified.
6. SRC/IRC: N/A

Table 3: Final Direct Examination Project Details

Direct Examination Details	
Site	1
Examination ID	[redacted]
Pipeline	36-0-09N
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	16 feet
Cost Category	O&M

Direct Examination Details	
Site	2
Examination ID	[redacted]
Pipeline	36-0-09N
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	16.65 feet
Cost Category	O&M

Direct Examination Details	
Site	3
Examination ID	[redacted]
Pipeline	36-0-09N
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	18.5 feet
Cost Category	O&M

Direct Examination Details	
Site	4
Examination ID	[redacted]
Pipeline	36-0-09N
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	NA
Inspection Length	16.5 feet
Cost Category	O&M

Direct Examination Details	
Site	5
Examination ID	[redacted]
Pipeline	36-0-09N
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	NA
Inspection Length	16.6 feet
Cost Category	O&M

Direct Examination Details	
Site	6
Examination ID	[redacted]
Pipeline	36-0-09N
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	NA
Inspection Length	19 feet
Cost Category	O&M

Figure 2: Supply Line 36-9-09 North Project Scope Including Direct Examination Sites

C. Post-Assessment

The Post-Assessment step involves evaluating and documenting the effectiveness of the inspection tools, documenting the result of the assessment and the length of pipeline assessed, communicating assessment results to the stakeholders, identifying appropriate follow up Preventive and Mitigative measures, if necessary, and establishing the reassessment interval for the pipeline.

Final Summary

The [redacted] of 1.96 miles on Supply Line 36-9-09 North was completed on [redacted]. The validation analysis of the Direct Examinations following the Inspection resulted in no additional examinations.

Table 4: Project Summary

[redacted] Total Length	1.96 miles
Direct Examination Completion Date	[redacted]

III. CONSTRUCTION

A. Construction Contractor Selection

Following completion of the engineering, design, and planning activities described above, SoCalGas selected the Construction Contractor that best met the selection criteria for this Project.

B. Construction Schedule

Table 5: Construction Timeline – Direct Examination

Construction Start Date	[redacted]	
Construction Completion Date		

Figure 3: Direct Examination Site #1 – Coating Inspection

Figure 4: Direct Examination Site #1 – Excavation of Pipeline

Figure 5: Direct Examination Site #1 – Site Location

Figure 6: Direct Examination Site #2 – Excavation of Pipeline

Figure 7: Direct Examination Site #4 – Excavation of Pipeline

Figure 8: Direct Examination Site #6 – Site Location

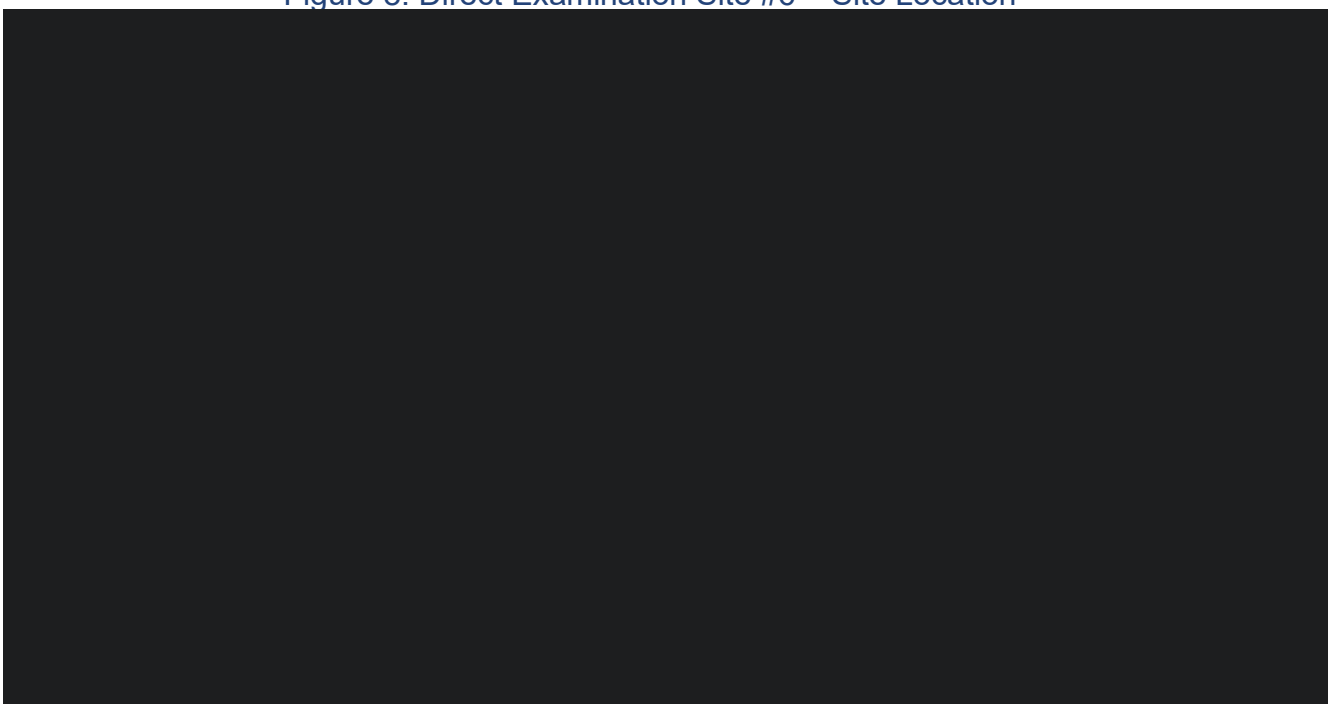


Figure 9: Direct Examination Site #6 – Excavation of Pipeline

C. Commissioning and Site Restoration

Commissioning activities include restoration of the site, final inspection, and placement of the pipeline back into service, and site demobilization. Closeout activities include development of final drawings, finalization of a reconciliation package, and updates to company recordkeeping systems to reflect the completed scope of work.

IV. PROJECT COSTS

A. Actual Costs[4]

Actual loaded costs reflect the Labor, Material, and Services costs incurred to execute the Project. The total loaded cost of the Project is $1,501,821.

Table 6: Actual Direct Costs[5]

Direct Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Company Labor	0	176,426	176,426
Contract Costs	0	794,925	794,925
Material	0	4,126	4,126
Other Direct Charges	0	235,504	235,504
Total Direct Costs	0	1,210,981	1,210,981

Table 7: Actual Indirect Costs[6]

Indirect Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Overheads	0	153,848	153,848
AFUDC	0	0	0
Property Taxes	0	0	0
Total Indirect Costs	0	153,848	153,848

Table 8: Total Costs[7]

Total Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Total Loaded Costs	0	1,364,829	1,364,829

[4] These are the total project costs incurred between January 1, 2019, and December 31, 2023. Only direct costs and vacation and sick contribute to the TIMPBA revenue requirement that is presented in the Prepared Direct Testimony of Rae Marie Yu (Chapter III).
[5] Values may not add to total due to rounding.
[6] Ibid.
[7] Ibid.

V. CONCLUSION

SoCalGas enhanced the integrity of its natural gas system by executing the Supply Line 36-9-09 North TIMP Project. Through this Project, SoCalGas implemented and managed the requirements set forth in 49 C.F.R. § 192, Subpart O including the continual identification of threats to its pipelines, determination of the risk posed by these threats, scheduling and tracking assessments to address threats, conducting appropriate assessment in a prescribed timeline, collecting information about the condition of the pipelines, taking actions to minimize applicable threats and integrity concerns to reduce the risk of a pipeline failure, and reporting the findings of the assessment. The total loaded cost of the Project is $1,364,829.

End of Supply Line 36-9-09 North TIMP Project Final Workpaper

I. SUPPLY LINE 36-9-21 TIMP PROJECT

A. Background and Summary

Supply Line 36-9-21 was assessed from [redacted] in the City of Atascadero to [redacted] in the City of Paso Robles. This Workpaper describes the activities associated with a Transmission Integrity Management Program (TIMP) [redacted] that includes Indirect Inspection using aboveground surveys, Direct Examinations made to six sites, and Post-Assessment analysis. The specific attributes of this Project are detailed below in General Project Information. The total loaded cost of the Project is $3,208,143.

Table 1: General Project Information

Integrity Assessment Details			
Pipeline	36-9-21		
Assessment Type	[redacted]		
Location	Atascadero, Paso Robles, Templeton		
Class	[redacted]		
HCA Length	3.32 miles		
Project Length	5.24 miles		
Vintage	Multiple between [redacted]		
Pipe Diameter	[redacted]		
MAOP			
SMYS			
HCA Threats			
Indirect Inspection Completion Date			
Direct Examination Completion Date			
Construction Start Date			
Construction Completion Date			
Assessment Due Date			
Project Costs ($)	**Capital**	**O&M**	**Total**
Loaded Project Costs	539,211	2,668,933	3,208,143

[redacted]

B. Maps and Images

Figure 1: Supply Line 36-9-21 Project Scope

II. ENGINEERING, DESIGN, AND CONSTRUCTABILITY

As described in the Prepared Direct Testimony of Jordan A. Zeoli, Fidel Galvan, and Travis Sera (Chapter II), TIMP projects follow a four-step assessment process: Pre-Assessment, Indirect Inspection, Direct Examination, and Post-Assessment. This Workpaper outlines construction activities during the Assessment process that occurred during the Indirect Inspection(s), Direct Examination(s) and Post-Assessment.

Prior to initiating execution of the assessment, SoCalGas reviewed available information and performed a detailed system analysis to verify the scope of the Project.

A. Indirect Inspection

SoCalGas initiated the planning process for the Supply Line 36-9-21 by performing a Pre-Assessment engineering analysis to determine existing conditions and any impacts to the Project, confirm the appropriate assessment methods, and select the Indirect Inspection tools.

Key factors that influenced the planning and execution of the Project Indirect Inspection(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained:
    a. Permits, traffic control drawings and plans from the cities of Paso Robles and Templeton.
    b. An Encroachment Permit from Caltrans and San Luis Obispo County.
5. Environmental: No significant environmental constraints were identified.

Table 2: Indirect Inspection Segments

Line	Length	Threat Type	Indirect Inspection Tool Type
36-9-21	3.32 miles	[redacted]	[redacted]
36-9-21	3.32 miles		
36-9-21	3.32 miles		
36-9-21	0.20 miles		
36-9-21	0.20 miles		
36-9-21	0.20 miles		
36-9-21	0.20 miles		

B. Direct Examination

Following the completion of the Indirect Inspection, six Direct Examination sites were identified for validation. For each examination location, SoCalGas conducted site evaluations, communicated with stakeholders, performed potholing of the area to identify the presence of underground utilities and substructures, and prepared a project schedule that met criteria followed for examination.

Key factors that influenced the planning and execution of the Project Direct Examination(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained:
    a. Permits, traffic control drawings and plans from the cities of Paso Robles and Templeton.
    b. An Encroachment Permit from Caltrans and San Luis Obispo county.
5. Land Use:
    a. Temporary Right of Entry (TRE) at Site #1.
    b. TRE from a local property owner to use as a laydown yard in the City of Atascadero.
6. Environmental: No significant environmental constraints were identified.
7. SRC/IRC: There was an Immediate Repair Condition (IRC) originating from Direct Examination at Site #4, rapid communications and procedures were followed for temporary pressure reduction. A band was utilized to remediate condition on the pipeline.

Table 3: Final Direct Examination Project Details

Direct Examination Details	
Site	1
Examination ID	[redacted]
Pipeline	36-9-21
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	17 feet
Cost Category	O&M

Direct Examination Details	
Site	2
Examination ID	[redacted]
Pipeline	36-9-21
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	24 feet
Cost Category	O&M

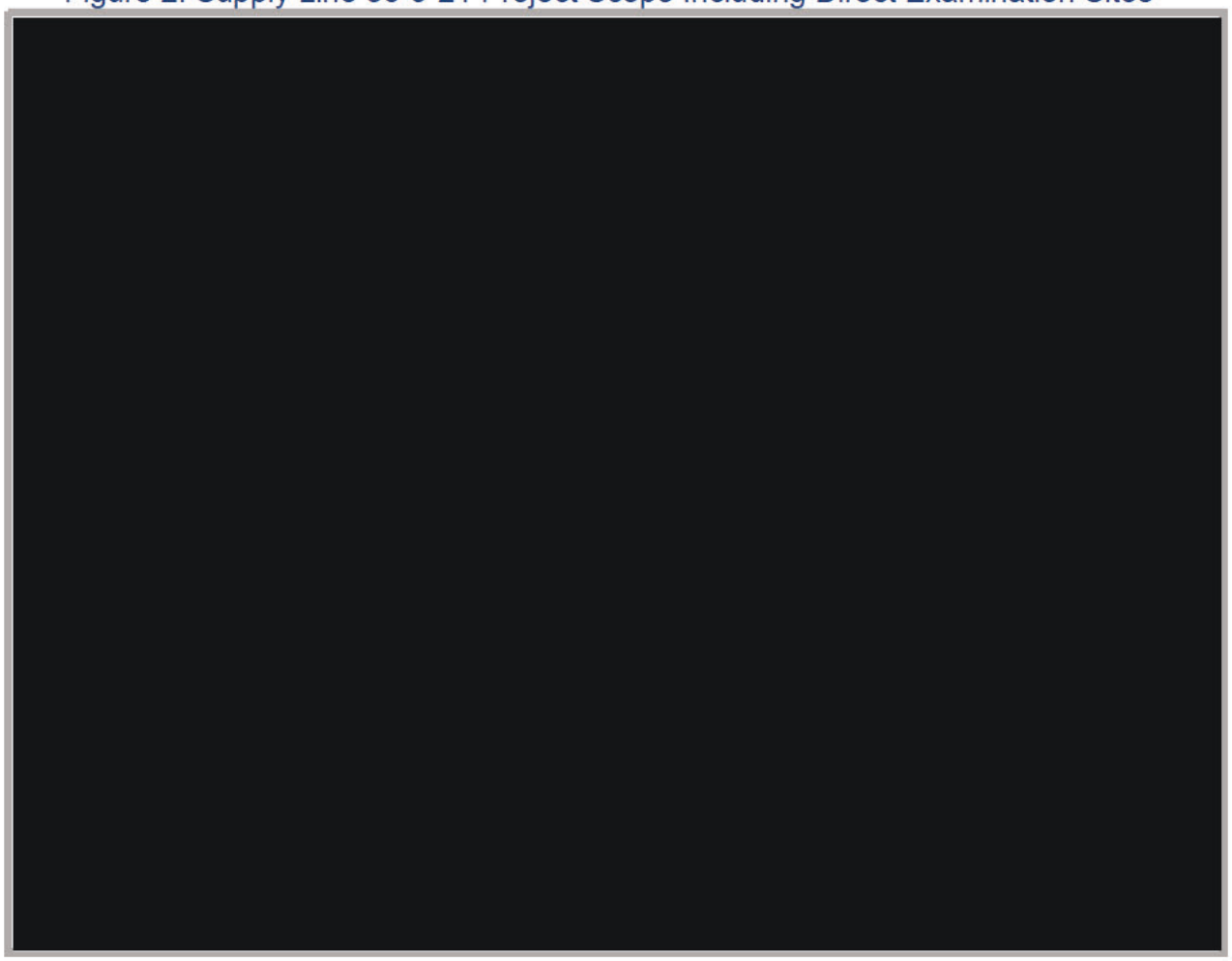
Direct Examination Details	
Site	3
Examination ID	[redacted]
Pipeline	36-9-21
Mitigation/Remediation Type	Soft Pad
Within HCA	No
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	16 feet
Cost Category	O&M

Direct Examination Details	
Site	4
Examination ID	[redacted]
Pipeline	36-9-21
Mitigation/Remediation Type	Soft Pad and Band
Within HCA	Yes
SRC/IRC	Yes
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	40 feet
Cost Category	Capital

Direct Examination Details	
Site	5
Examination ID	[redacted]
Pipeline	36-9-21
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	40 feet
Cost Category	O&M

Direct Examination Details	
Site	6
Examination ID	[redacted]
Pipeline	36-9-21
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	20 feet
Cost Category	O&M

Figure 2: Supply Line 36-9-21 Project Scope Including Direct Examination Sites



C. Post-Assessment

The Post-Assessment step involves evaluating and documenting the effectiveness of the inspection tools, documenting the result of the assessment and the length of pipeline assessed, communicating assessment results to the stakeholders, identifying appropriate follow up Preventive and Mitigative measures, if necessary, and establishing the reassessment interval for the pipeline.

Final Summary

The [redacted] of 3.32 miles and [redacted] of 0.20 miles on Supply Line 36-9-21 was completed on [redacted] The validation analysis of the Direct Examinations following the Inspection resulted in no additional examinations.

Table 4: Project Summary

[redacted] Length	3.32 miles
[redacted] Length	0.20 miles
Direct Examination Completion Date	[redacted]

III. CONSTRUCTION

A. Construction Contractor Selection

Following completion of the engineering, design, and planning activities described above, SoCalGas selected the Construction Contractor that best met the selection criteria for this Project.

B. Construction Schedule

Table 5: Construction Timeline – Direct Examination

Construction Start Date	[redacted]	
Construction Completion Date		

Figure 3: Direct Examination Site #1 – Direct Examination Location

Figure 4: Direct Examination Site #1 – Excavation of Pipeline

Figure 5: Direct Examination Site #2 – Excavation of Pipeline

Figure 6: Direct Examination Site #3 – Excavation Location

Figure 7: Direct Examination Site #4 – Band Repair

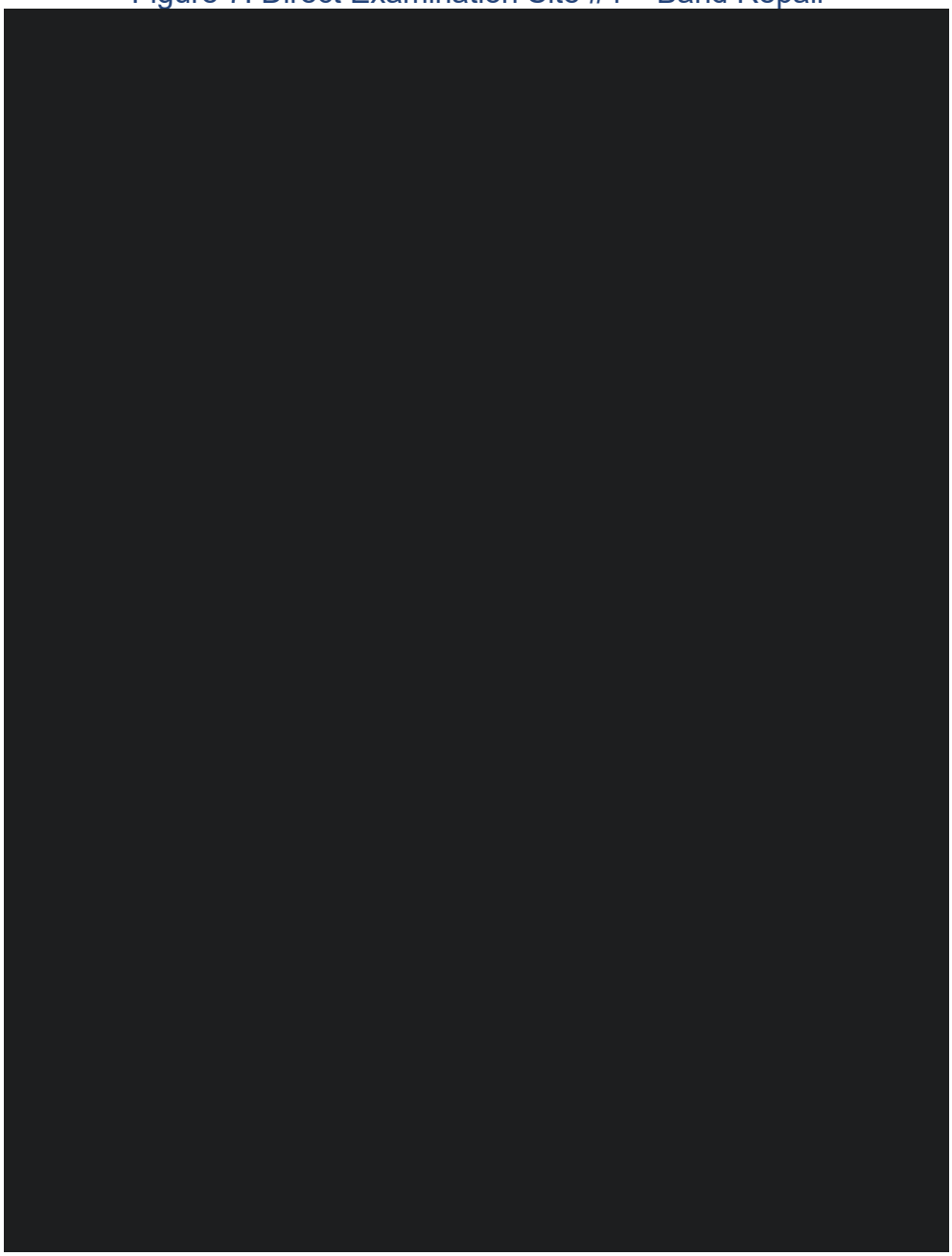


Figure 8: Direct Examination Site #5 – Bare Pipeline

C. Commissioning and Site Restoration

Commissioning activities include restoration of the site, final inspection, and placement of the pipeline back into service, transportation, disposal of hydrotest water and hazardous material, and site demobilization. Closeout activities include development of final drawings, finalization of a reconciliation package, and updates to company recordkeeping systems to reflect the completed scope of work.

IV. PROJECT COSTS

A. Actual Costs[3]

Actual loaded costs reflect the Labor, Material, and Services costs incurred to execute the Project. The total loaded cost of the Project is $3,208,143.

Table 6: Actual Direct Costs[4]

Direct Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Company Labor	5,269	234,210	239,479
Contract Costs	303,664	1,414,011	1,717,676
Material	117	4,899	5,016
Other Direct Charges	65,224	746,089	811,313
Total Direct Costs	374,274	2,399,210	2,773,483

Table 7: Actual Indirect Costs[5]

Indirect Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Overheads	164,472	269,723	434,196
AFUDC	51	0	51
Property Taxes	414	0	414
Total Indirect Costs	164,937	269,723	434,660

Table 8: Total Costs[6]

Total Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Total Loaded Costs	539,211	2,668,933	3,208,143

[3] These are the total project costs incurred between January 1, 2019, and December 31, 2023. Only direct costs and vacation and sick contribute to the TIMPBA revenue requirement that is presented in the Prepared Direct Testimony of Rae Marie Yu (Chapter III).
[4] Values may not add to total due to rounding.
[5] Ibid.
[6] Ibid.

V. CONCLUSION

SoCalGas enhanced the integrity of its natural gas system by executing the Supply Line 36-9-21 Project. Through this Project, SoCalGas implemented and managed the requirements set forth in 49 C.F.R. § 192, Subpart O including the continual identification of threats to its pipelines, determination of the risk posed by these threats, scheduling and tracking assessments to address threats, conducting appropriate assessment in a prescribed timeline, collecting information about the condition of the pipelines, taking actions to minimize applicable threats and integrity concerns to reduce the risk of a pipeline failure, and reporting the findings of the assessment. The total loaded cost of the Project is $3,208,143.

End of Supply Line 36-9-21 TIMP Project Final Workpaper

I. SUPPLY LINE 36-37 TIMP PROJECT

A. Background and Summary

Supply Line 36-37 was assessed from [redacted] in the City of Ventura. This Workpaper describes the activities associated with a Transmission Integrity Management Program (TIMP) [redacted] that includes Indirect Inspection using aboveground surveys, Direct Examinations made to two sites, and Post-Assessment analysis. The specific attributes of this Project are detailed below in General Project Information. The total loaded cost of the Project is $2,664,427.

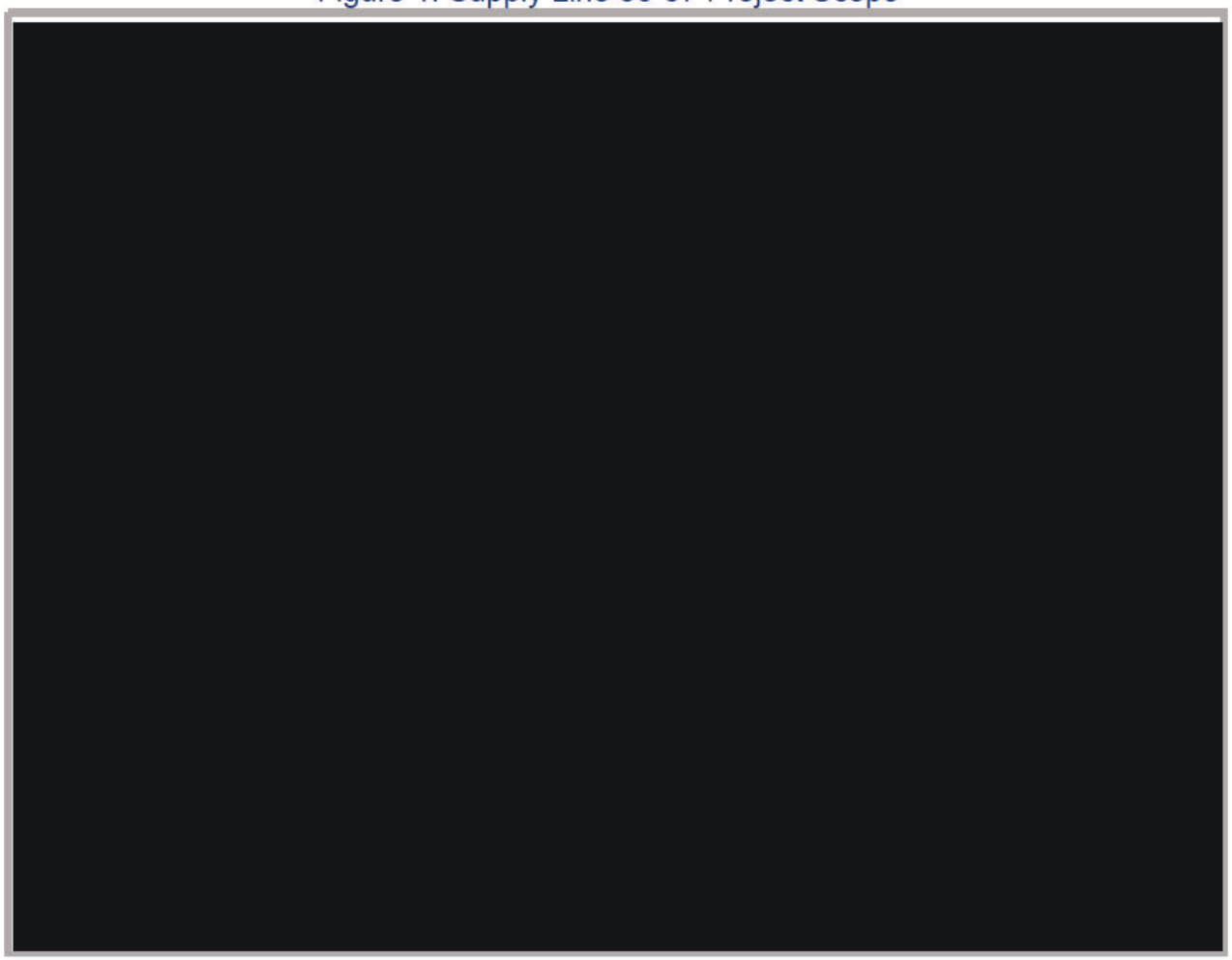
Table 1: General Project Information

Integrity Assessment Details			
Pipeline	36-37		
Assessment Type	[redacted]		
Location	Ventura		
Class	2, 3		
HCA Length	0.94 miles		
Project Length	0.99 miles		
Vintage	[redacted]		
Pipe Diameter			
MAOP			
SMYS			
HCA Threats			
Indirect Inspection Completion Date			
Direct Examination Completion Date			
Construction Start Date			
Construction Completion Date			
Assessment Due Date			
Project Costs ($)	**Capital**	**O&M**	**Total**
Loaded Project Costs	0	2,664,427	2,664,427

[redacted]

B. Maps and Images

Figure 1: Supply Line 36-37 Project Scope



II. ENGINEERING, DESIGN, AND CONSTRUCTABILITY

As described in the Prepared Direct Testimony of Jordan A. Zeoli, Fidel Galvan, and Travis Sera (Chapter II), TIMP projects follow a four-step assessment process: Pre-Assessment, Indirect Inspection, Direct Examination, and Post-Assessment. This Workpaper outlines construction activities during the Assessment process that occurred during the Indirect Inspection(s), Direct Examination(s) and Post-Assessment.

Prior to initiating execution of the assessment, SoCalGas reviewed available information and performed a detailed system analysis to verify the scope of the Project.

A. Indirect Inspection

SoCalGas initiated the planning process for the Supply Line 36-37 by performing a Pre-Assessment engineering analysis to determine existing conditions and any impacts to the Project, confirm the appropriate assessment methods, and select the Indirect Inspection tools.

Key factors that influenced the planning and execution of the Project Indirect Inspection(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained:
    a. Permits, traffic control drawings and plans from the City of Ventura and Ventura County.
    b. An Encroachment Permit from Caltrans.
5. Environmental: No significant environmental constraints were identified.

Table 2: Indirect Inspection Segments

Line	Length	Threat Type	Indirect Inspection Tool Type
36-37	0.94 miles	[redacted]	[redacted]
36-37	0.94 miles		
36-37	0.94 miles		

C. Direct Examination

Following the completion of the Indirect Inspection, two Direct Examination sites were identified for validation. For each examination location, SoCalGas conducted site evaluations, communicated with stakeholders, performed potholing of the area to identify the presence of underground utilities and substructures, and prepared a project schedule that met criteria followed for examination.

Key factors that influenced the planning and execution of the Project Direct Examination(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained:
    a. Permits, traffic control drawings and plans from the City of Ventura and Ventura County.
    b. An Encroachment Permit from Caltrans.
    c. A permit to perform work at night from the City of Ventura.
5. Environmental: No significant environmental constraints were identified.
6. SRC/IRC: N/A
7. Other Identified Risks:
    a. Construction activities for Site #1 took place by an underpass of Highway 101 and required that an access ramp and railing be partially removed.
    b. There was a lamp post near the site that had to be supported to allow for construction activities.

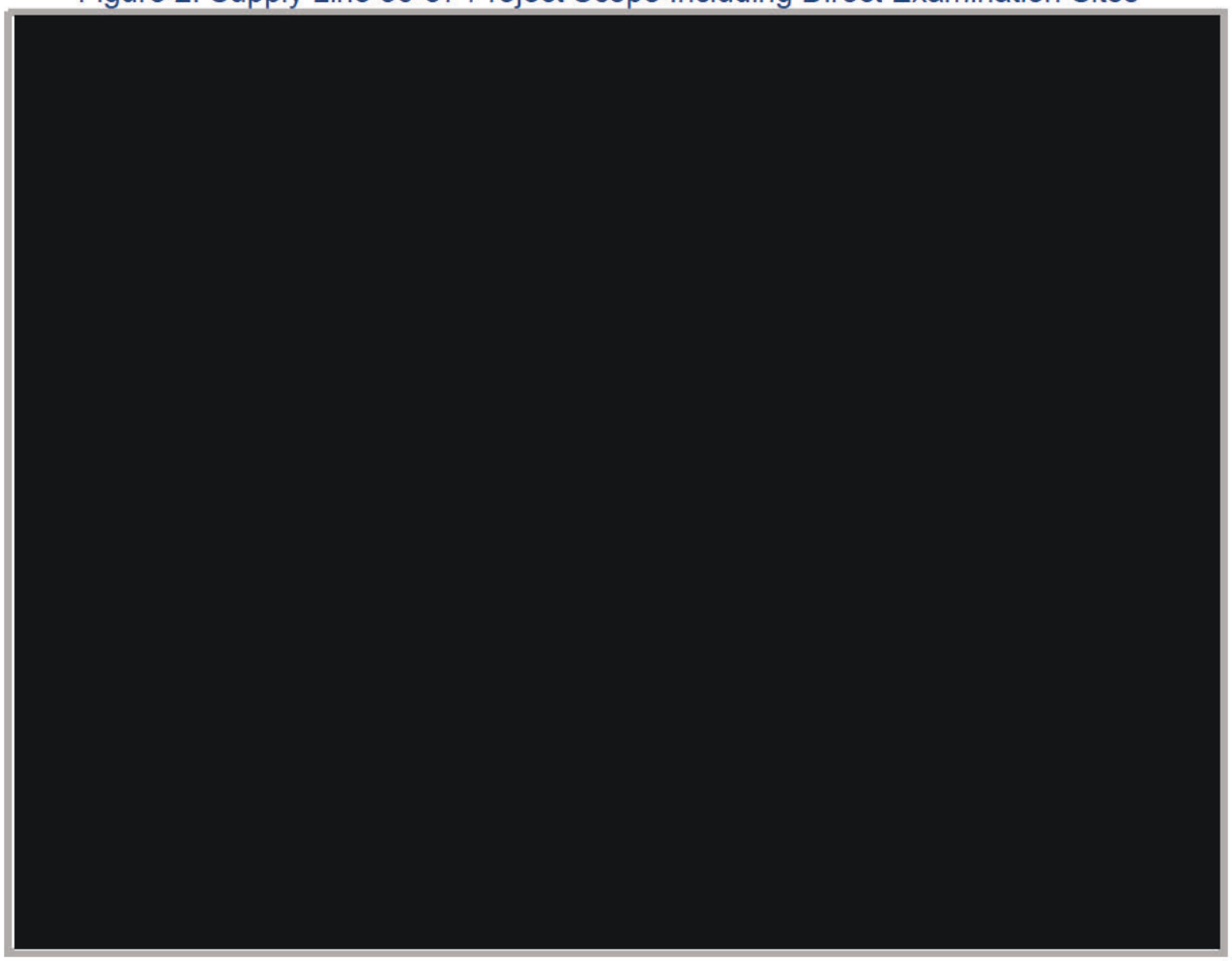
c. The Project Team had to restore the accessibility ramp to comply with Americans with Disabilties Act (ADA) standards.

Table 3: Final Direct Examination Project Details

Direct Examination Details	
Site	1
Examination ID	[redacted]
Pipeline	36-37
Mitigation/Remediation Type	Soft Pad and Band
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	17.2 feet
Cost Category	O&M

Direct Examination Details	
Site	2
Examination ID	[redacted]
Pipeline	36-37
Mitigation/Remediation Type	None
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	14.9 feet
Cost Category	O&M

Figure 2: Supply Line 36-37 Project Scope Including Direct Examination Sites



D. Post-Assessment

The Post-Assessment step involves evaluating and documenting the effectiveness of the inspection tools, documenting the result of the assessment and the length of pipeline assessed, communicating assessment results to the stakeholders, identifying appropriate follow up Preventive and Mitigative measures, if necessary, and establishing the reassessment interval for the pipeline.

Final Summary

The [redacted] of 0.94 miles on Supply Line 36-37 was completed on [redacted]. The validation analysis of the Direct Examinations following the Inspection resulted in no additional examinations.

Table 4: Project Summary

[redacted] Total Length	0.94 miles
Direct Examination Completion Date	[redacted]

III. CONSTRUCTION

A. Construction Contractor Selection

Following completion of the engineering, design, and planning activities described above, SoCalGas selected the Construction Contractor that best met the selection criteria for this Project.

B. Construction Schedule

Table 5: Construction Timeline – Direct Examination

Construction Start Date	[redacted]	
Construction Completion Date		

Figure 3: Direct Examination Site #1 – Direct Examination Location

Figure 4: Direct Examination Site #1 – Bare Pipeline

Figure 5: Direct Examination Site #2 – Direct Examination Location

Figure 6: Direct Examination Site #2 – Bare Pipeline

C. Commissioning and Site Restoration

Commissioning activities include restoration of the site, final inspection, and placement of the pipeline back into service, and site demobilization. Closeout activities include development of final drawings, finalization of a reconciliation package, and updates to company recordkeeping systems to reflect the completed scope of work.

IV. PROJECT COSTS

A. Actual Costs[4]

Actual loaded costs reflect the Labor, Material, and Services costs incurred to execute the Project. The total loaded cost of the Project is $2,664,427.

Table 6: Actual Direct Costs[5]

Direct Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Company Labor	0	182,615	182,615
Contract Costs	0	1,855,210	1,855,210
Material	0	35,535	35,535
Other Direct Charges	0	334,043	334,043
Total Direct Costs	0	2,407,403	2,407,403

Table 7: Actual Indirect Costs[6]

Indirect Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Overheads	0	257,025	257,025
AFUDC	0	0	0
Property Taxes	0	0	0
Total Indirect Costs	0	257,025	257,025

Table 8: Total Costs[7]

Total Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Total Loaded Costs	0	2,664,427	2,664,427

[4] These are the total project costs incurred between January 1, 2019, and December 31, 2023. Only direct costs and vacation and sick contribute to the TIMPBA revenue requirement that is presented in the Prepared Direct Testimony of Rae Marie Yu (Chapter III).
[5] Values may not add to total due to rounding.
[6] Ibid.
[7] Ibid.

V. CONCLUSION

SoCalGas enhanced the integrity of its natural gas system by executing the Supply Line 36-37 Project. Through this Project, SoCalGas implemented and managed the requirements set forth in 49 C.F.R. § 192, Subpart O including the continual identification of threats to its pipelines, determination of the risk posed by these threats, scheduling and tracking assessments to address threats, conducting appropriate assessment in a prescribed timeline, collecting information about the condition of the pipelines, taking actions to minimize applicable threats and integrity concerns to reduce the risk of a pipeline failure, and reporting the findings of the assessment. The total loaded cost of the Project is $2,664,427.

End of Supply Line 36-37 TIMP Project Final Workpaper

I. SUPPLY LINE 38-501 TIMP PROJECT

A. Background and Summary

Supply Line 38-501 was assessed from [redacted] through the cities of Laton, Lemoore, and Caruthers. This Workpaper describes the activities associated with a Transmission Integrity Management Program (TIMP) [redacted] that includes Indirect Inspection using aboveground surveys, Direct Examinations made to four sites, and Post-Assessment analysis. The specific attributes of this Project are detailed below in General Project Information. The total loaded cost of the Project is $3,243,764.

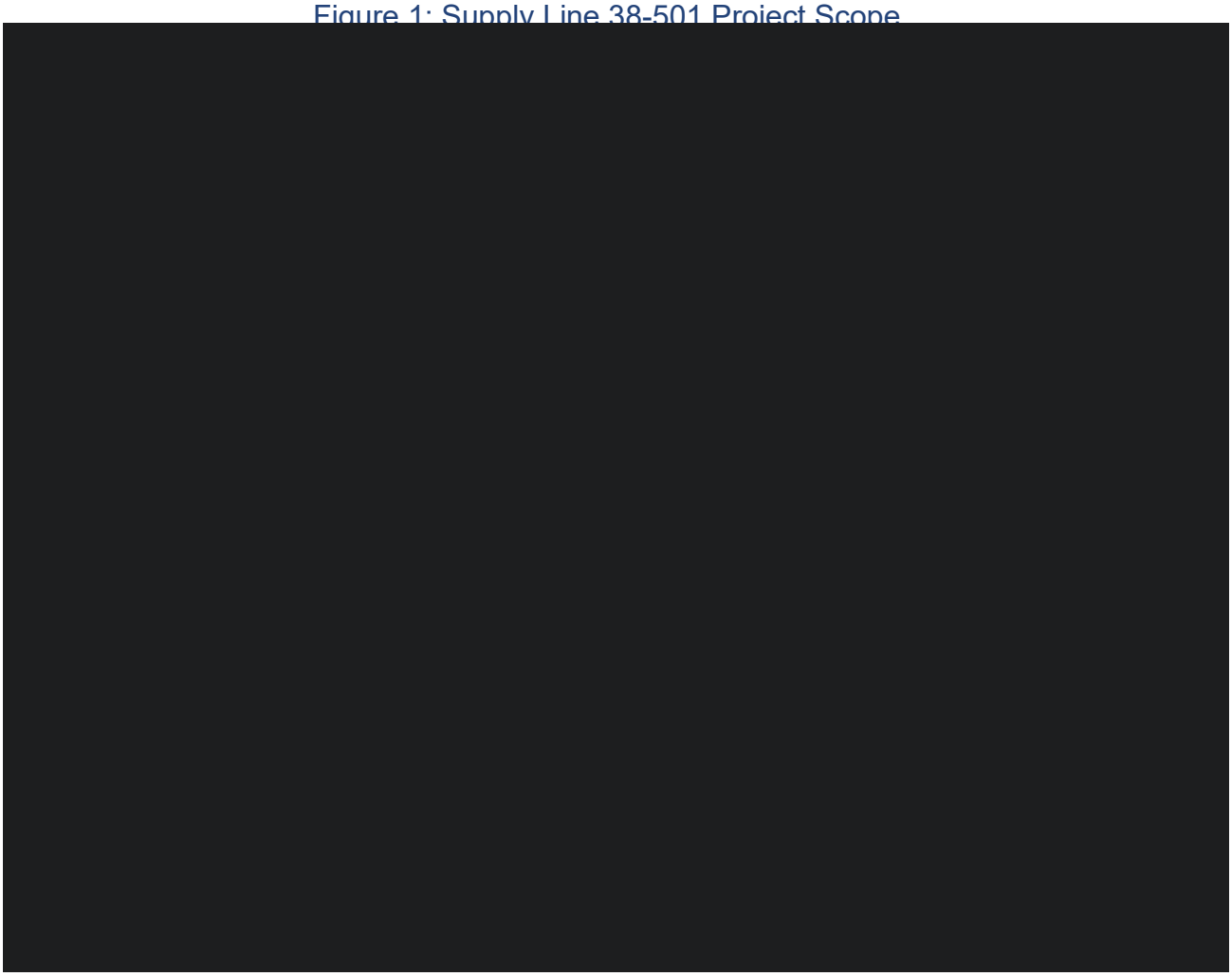
Table 1: General Project Information

Integrity Assessment Details			
Pipeline	38-501		
Assessment Type	[redacted]		
Location	Laton, Lemoore, Caruthers		
Class	2, 3		
HCA Length	0.75 miles		
Project Length	7.29 miles		
Vintage	[redacted]		
Pipe Diameter			
MAOP			
SMYS			
HCA Threats			
Indirect Inspection Completion Date			
Direct Examination Completion Date			
Construction Start Date			
Construction Completion Date			
Assessment Due Date			
Project Costs ($)	**Capital**	**O&M**	**Total**
Loaded Project Costs	0	3,243,764	3,243,764

[redacted]

B. Maps and Images

Figure 1: Supply Line 38-501 Project Scope



II. ENGINEERING, DESIGN, AND CONSTRUCTABILITY

As described in the Prepared Direct Testimony of Jordan A. Zeoli, Fidel Galvan, and Travis Sera (Chapter II), TIMP projects follow a four-step assessment process: Pre-Assessment, Indirect Inspection, Direct Examination, and Post-Assessment. This Workpaper outlines construction activities during the Assessment process that occurred during the Indirect Inspection(s), Direct Examination(s) and Post-Assessment.

Prior to initiating execution of the assessment, SoCalGas reviewed available information and performed a detailed system analysis to verify the scope of the Project.

A. Indirect Inspection

SoCalGas initiated the planning process for the Supply Line 38-501 by performing a Pre-Assessment engineering analysis to determine existing conditions and any impacts to the Project, confirm the appropriate assessment methods, and select the Indirect Inspection tools.

Key factors that influenced the planning and execution of the Project Indirect Inspection(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained:
    a. Permits, traffic control drawings and plans from Fresno County and County of Kings.
    b. An Encroachment Permit from Caltrans.
5. Environmental: No significant environmental constraints were identified.

Table 2: Indirect Inspection Segments

Line	Length	Threat Type	Indirect Inspection Tool Type
38-501	0.74 miles	[redacted]	[redacted]
38-501	0.74 miles		
38-501	0.74 miles		

B. Direct Examination

Following the completion of the Indirect Inspection, four Direct Examination sites were identified for validation. For each examination location, SoCalGas conducted site evaluations, communicated with stakeholders, performed potholing of the area to identify the presence of underground utilities and substructures, and prepared a project schedule that met criteria followed for examination.

Key factors that influenced the planning and execution of the Project Direct Examination(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained permits, traffic control drawings and plans from Fresno County.
5. Environmental: No significant environmental constraints were identified.
6. SRC/IRC: N/A

Table 3: Final Direct Examination Project Details

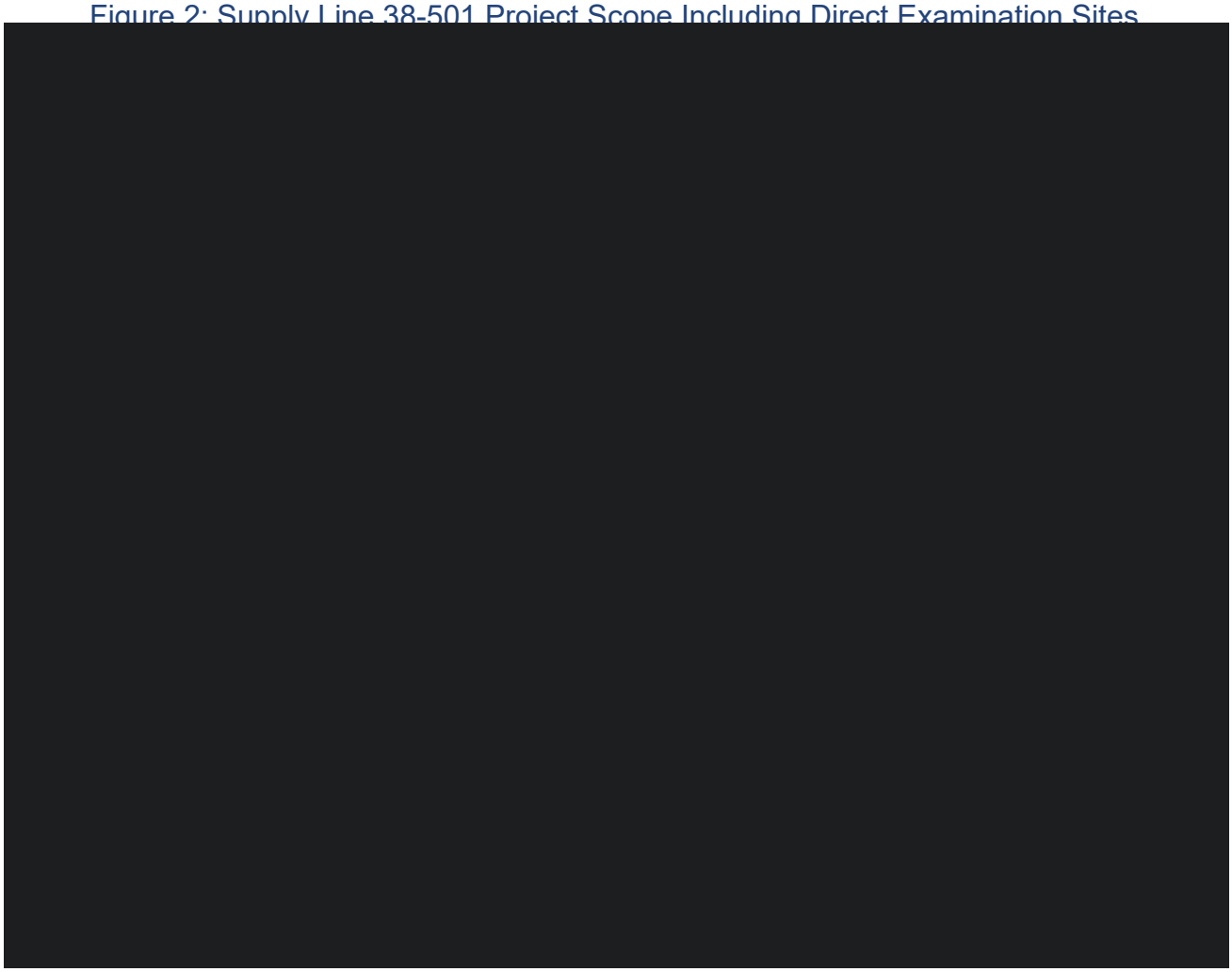
Direct Examination Details	
Site	1
Examination ID	[redacted]
Pipeline	38-501
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	15.7 feet
Cost Category	O&M

Direct Examination Details	
Site	2
Examination ID	[redacted]
Pipeline	38-501
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	17.5 feet
Cost Category	O&M

Direct Examination Details	
Site	3
Examination ID	[redacted]
Pipeline	38-501
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	17.41 feet
Cost Category	O&M

Direct Examination Details	
Site	4
Examination ID	[redacted]
Pipeline	38-501
Mitigation/Remediation Type	Soft Pad
Within HCA	No
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	17.33 feet
Cost Category	O&M

Figure 2: Supply Line 38-501 Project Scope Including Direct Examination Sites



C. Post-Assessment

The Post-Assessment step involves evaluating and documenting the effectiveness of the inspection tools, documenting the result of the assessment and the length of pipeline assessed, communicating assessment results to the stakeholders, identifying appropriate follow up Preventive and Mitigative measures, if necessary, and establishing the reassessment interval for the pipeline.

Final Summary

The [redacted] of 0.74 miles on Supply Line 38-501 was completed on [redacted] The validation analysis of the Direct Examinations following the Inspection resulted in no additional examinations.

Table 4: Project Summary

[redacted] Total Length	0.74 miles
Direct Examination Completion Date	[redacted]

III. CONSTRUCTION

A. Construction Contractor Selection

Following completion of the engineering, design, and planning activities described above, SoCalGas selected the Construction Contractor that best met the selection criteria for this Project.

B. Construction Schedule

Table 5: Construction Timeline – Direct Examination

Construction Start Date	[redacted]	
Construction Completion Date		

Figure 3: Direct Examination Site #1 – Coating Inspection

Figure 4: Direct Examination Site #2 – Direct Examination Location

Figure 5: Direct Examination Site #3 – Excavation of Pipeline

Figure 6: Direct Examination Site #4 – Excavation of Pipeline

C. Commissioning and Site Restoration

Commissioning activities include restoration of the site, final inspection, and placement of the pipeline back into service, and site demobilization. Closeout activities include development of final drawings, finalization of a reconciliation package, and updates to company recordkeeping systems to reflect the completed scope of work.

IV. PROJECT COSTS

A. Actual Costs[2]

Actual loaded costs reflect the Labor, Material, and Services costs incurred to execute the Project. The total loaded cost of the Project is $3,243,764.

Table 6: Actual Direct Costs[3]

Direct Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Company Labor	0	385,577	385,577
Contract Costs	0	1,607,420	1,607,420
Material	0	106,030	106,030
Other Direct Charges	0	736,593	736,593
Total Direct Costs	0	2,835,620	2,835,620

Table 7: Actual Indirect Costs[4]

Indirect Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Overheads	0	408,144	408,144
AFUDC	0	0	0
Property Taxes	0	0	0
Total Indirect Costs	0	408,144	408,144

Table 8: Total Costs[5]

Total Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Total Loaded Costs	0	3,243,764	3,243,764

[2] These are the total project costs incurred between January 1, 2019, and December 31, 2023. Only direct costs and vacation and sick contribute to the TIMPBA revenue requirement that is presented in the Prepared Direct Testimony of Rae Marie Yu (Chapter III).
[3] Values may not add to total due to rounding.
[4] Ibid.
[5] Ibid.

V. CONCLUSION

SoCalGas enhanced the integrity of its natural gas system by executing the Supply Line 38-501 TIMP Project. Through this Project, SoCalGas implemented and managed the requirements set forth in 49 C.F.R. § 192, Subpart O including the continual identification of threats to its pipelines, determination of the risk posed by these threats, scheduling and tracking assessments to address threats, conducting appropriate assessment in a prescribed timeline, collecting information about the condition of the pipelines, taking actions to minimize applicable threats and integrity concerns to reduce the risk of a pipeline failure, and reporting the findings of the assessment. The total loaded cost of the Project is $3,243,764.

End of Supply Line 38-501 TIMP Project Final Workpaper

I. SUPPLY LINE 38-504 TIMP PROJECT

A. Background and Summary

Supply Line 38-504 was assessed from [redacted] in the cities of Visalia and Hanford in County of Kings. This Workpaper describes the activities associated with a Transmission Integrity Management Program (TIMP) [redacted] that includes Indirect Inspection using aboveground surveys, Direct Examinations made to five sites, and Post- Assessment analysis. The specific attributes of this Project are detailed below in General Project Information. The total loaded cost of the Project is $2,785,790.

Table 1: General Project Information

Integrity Assessment Details			
Pipeline	38-504		
Assessment Type	[redacted]		
Location	Visalia, Hanford		
Class	2, 3		
HCA Length	9.36 miles		
Project Length	13.21 miles		
Vintage	[redacted]		
Pipe Diameter			
MAOP			
SMYS			
HCA Threats			
Indirect Inspection Completion Date			
Direct Examination Completion Date			
Construction Start Date			
Construction Completion Date			
Assessment Due Date			
Project Costs ($)	**Capital**	**O&M**	**Total**
Loaded Project Costs	78,299	2,707,491	2,785,790

[redacted]

B. Maps and Images

Figure 1: Supply Line 38-504 Project Scope

II. ENGINEERING, DESIGN, AND CONSTRUCTABILITY

As described in the Prepared Direct Testimony of Jordan A. Zeoli, Fidel Galvan, and Travis Sera (Chapter II), TIMP projects follow a four-step assessment process: Pre-Assessment, Indirect Inspection, Direct Examination, and Post-Assessment. This Workpaper outlines construction activities during the Assessment process that occurred during the Indirect Inspection(s), Direct Examination(s) and Post-Assessment.

Prior to initiating execution of the assessment, SoCalGas reviewed available information and performed a detailed system analysis to verify the scope of the Project.

A. Indirect Inspection

SoCalGas initiated the planning process for the Supply Line 38-504 by performing a Pre-Assessment engineering analysis to determine existing conditions and any impacts to the Project, confirm the appropriate assessment methods, and select the Indirect Inspection tools.

Key factors that influenced the planning and execution of the Project Indirect Inspection(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: The Project Team distributed notices to members of the surrounding community advising that construction operations would take place in the area.
4. Permit Restrictions: The Project Team obtained:
    a. Permits, traffic control drawings and plans from the City of Visalia.
    b. An Encroachment Permit from County of Kings.
5. Environmental: No significant environmental constraints were identified.

Table 2: Indirect Inspection Segments

Line	Length	Threat Type	Indirect Inspection Tool Type
38-504	9.36 miles	[redacted]	[redacted]
38-504	9.36 miles		
38-504	9.36 miles		

B. Direct Examination

Following the completion of the Indirect Inspection, five Direct Examination sites were identified for validation. For each examination location, SoCalGas conducted site evaluations, communicated with stakeholders, performed potholing of the area to identify the presence of underground utilities and substructures, and prepared a project schedule that met criteria followed for examination.

Key factors that influenced the planning and execution of the Project Direct Examination(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained permits, traffic control drawings and plans from the City of Visalia.
5. Land Use:
    a. Obtained a Temporary Right of Entry (TRE) from the property owner at Site #2 to use as a laydown yard and perform the Direct Examination.
    b. Obtained a TRE from a local property owner to use as a laydown yard.
6. Environmental: No significant environmental constraints were identified.
7. SRC/IRC: There was an Immediate Repair Condition originating from Direct Examination at Site #1. Pressure was reduced until a band was utilized to remediate condition on the pipeline.

Table 3: Final Direct Examination Project Details

Direct Examination Details	
Site	1
Examination ID	[redacted]
Pipeline	38-504
Mitigation/Remediation Type	Soft Pad and Band
Within HCA	Yes
SRC/IRC	Yes
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	19 feet
Cost Category	Capital

Direct Examination Details	
Site	2
Examination ID	[redacted]
Pipeline	38-504
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	15 feet
Cost Category	O&M

Direct Examination Details	
Site	3
Examination ID	[redacted]
Pipeline	38-504
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	15 feet
Cost Category	O&M

Direct Examination Details	
Site	4
Examination ID	[redacted]
Pipeline	38-504
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	15.25 feet
Cost Category	O&M

Direct Examination Details	
Site	5
Examination ID	[redacted]
Pipeline	38-504
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	19 feet
Cost Category	O&M

Figure 2: Supply Line 38-504 Project Scope Including Direct Examination Sites

C. Post-Assessment

The Post-Assessment step involves evaluating and documenting the effectiveness of the inspection tools, documenting the result of the assessment and the length of pipeline assessed, communicating assessment results to the stakeholders, identifying appropriate follow up Preventive and Mitigative measures, if necessary, and establishing the reassessment interval for the pipeline.

Final Summary

The [redacted] of 9.36 miles on Supply Line 38-504 was completed on [redacted]. The validation analysis of the Direct Examinations following the Inspection resulted in no additional examinations.

Table 4: Project Summary

[redacted] Total Length	9.36 miles
Direct Examination Completion Date	[redacted]

III. CONSTRUCTION

A. Construction Contractor Selection

Following completion of the engineering, design, and planning activities described above, SoCalGas selected the Construction Contractor that best met the selection criteria for this Project.

B. Construction Schedule

Table 5: Construction Timeline – Direct Examination

Construction Start Date	[redacted]	
Construction Completion Date		

Figure 3: Direct Examination Site #1 – Band Repair

Figure 4: Direct Examination Site #3 – Direct Examination Location

Figure 5: Direct Examination Site #3 – Coating Inspection

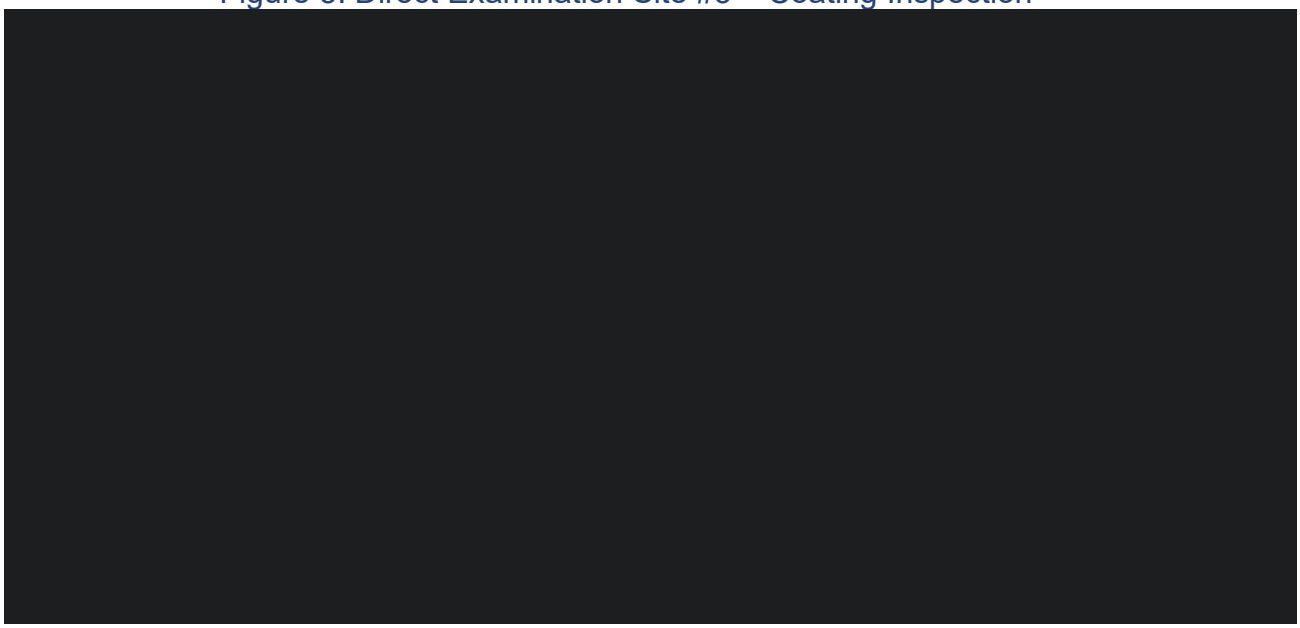
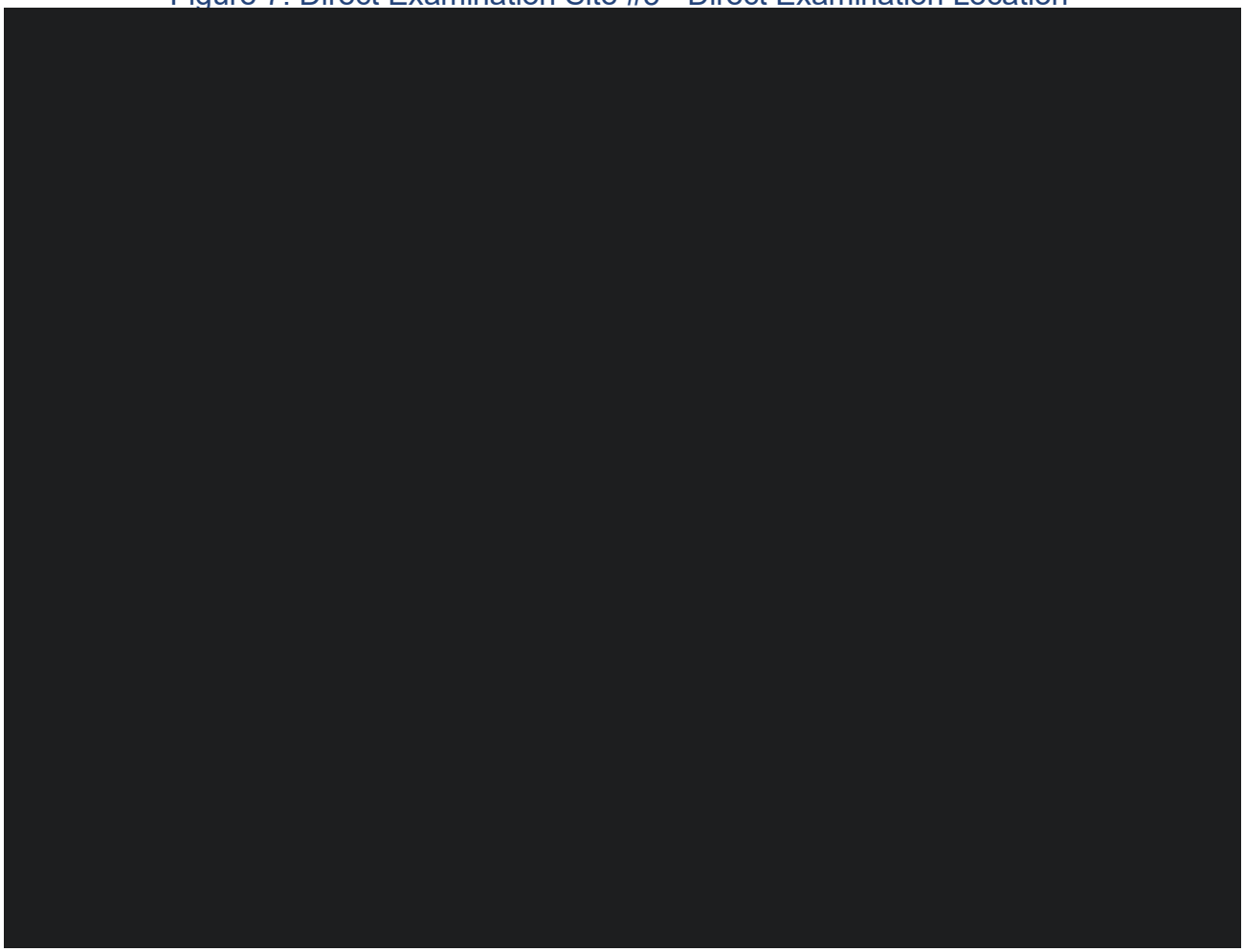


Figure 6: Direct Examination Site #4 - Direct Examination Location

Figure 7: Direct Examination Site #5 - Direct Examination Location



C. Commissioning and Site Restoration

Commissioning activities include restoration of the site, final inspection, and placement of the pipeline back into service, and site demobilization. Closeout activities include development of final drawings, finalization of a reconciliation package, and updates to company recordkeeping systems to reflect the completed scope of work.

IV. PROJECT COSTS

A. Actual Costs[2]

Actual loaded costs reflect the Labor, Material, and Services costs incurred to execute the Project. The total loaded cost of the Project is $2,785,790.

Table 6: Actual Direct Costs[3]

Direct Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Company Labor	33,807	237,432	271,239
Contract Costs	11,118	1,605,743	1,616,861
Material	376	29,404	29,781
Other Direct Charges	84	541,509	541,593
Total Direct Costs	45,386	2,414,088	2,459,474

Table 7: Actual Indirect Costs[4]

Indirect Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Overheads	32,761	293,403	26,164
AFUDC	79	0	79
Property Taxes	73	0	73
Total Indirect Costs	32,913	293,403	326,316

Table 8: Total Costs[5]

Total Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Total Loaded Costs	78,299	2,707,491	2,785,790

[2] These are the total project costs between January 1, 2019, and December 31, 2023. Only direct costs and vacation and sick contribute to the TIMPBA revenue requirement that is presented in the Prepared Direct Testimony of Rae Marie Yu (Chapter III).
[3] Values may not add to total due to rounding.
[4] Ibid.
[5] Ibid.

V. CONCLUSION

SoCalGas enhanced the integrity of its natural gas system by executing the Supply Line 38-504 TIMP Project. Through this Project, SoCalGas implemented and managed the requirements set forth in 49 C.F.R. § 192, Subpart O including the continual identification of threats to its pipelines, determination of the risk posed by these threats, scheduling and tracking assessments to address threats, conducting appropriate assessment in a prescribed timeline, collecting information about the condition of the pipelines, taking actions to minimize applicable threats and integrity concerns to reduce the risk of a pipeline failure, and reporting the findings of the assessment. The total loaded cost of the Project is $2,785,790.

End of Supply Line 38-504 TIMP Project Final Workpaper

I. SUPPLY LINE 41-05 TIMP PROJECT

A. Background and Summary

Supply Line 41-05 was assessed from [redacted] in San Bernardino. This Workpaper describes the activities associated with a Transmission Integrity Management Program (TIMP) [redacted] that includes Indirect Inspection using aboveground surveys, Direct Examinations made to two sites, and Post-Assessment analysis. The specific attributes of this Project are detailed below in General Project Information. The total loaded cost of the Project is $754,805.

Table 1: General Project Information

Integrity Assessment Details			
Pipeline	41-05		
Assessment Type	[redacted]		
Location	San Bernardino		
Class	[redacted]		
HCA Length	5.34 miles		
Project Length	5.54 miles		
Vintage	[redacted]		
Pipe Diameter	[redacted]		
MAOP	[redacted]		
SMYS	[redacted]		
HCA Threats	[redacted]		
Indirect Inspection Completion Date	[redacted]		
Direct Examination Completion Date	[redacted]		
Construction Start Date	[redacted]		
Construction Completion Date	[redacted]		
Assessment Due Date	[redacted]		
Project Costs ($)	**Capital**	**O&M**	**Total**
Loaded Project Costs	0	754,805	754,805

[redacted]

B. Maps and Images

Figure 1: Supply Line 41-05 Project Scope

II. ENGINEERING, DESIGN, AND CONSTRUCTABILITY

As described in the Prepared Direct Testimony of Jordan A. Zeoli, Fidel Galvan, and Travis Sera (Chapter II), TIMP projects follow a four-step assessment process: Pre-Assessment, Indirect Inspection, Direct Examination, and Post-Assessment. This Workpaper outlines construction activities during the Assessment process that occurred during the Indirect Inspection(s), Direct Examination(s) and Post-Assessment.

Prior to initiating execution of the assessment, SoCalGas reviewed available information and performed a detailed system analysis to verify the scope of the Project.

A. Indirect Inspection

SoCalGas initiated the planning process for the Supply Line 41-05 by performing a Pre-Assessment engineering analysis to determine existing conditions and any impacts to the Project, confirm the appropriate assessment methods, and select the Indirect Inspection tools.

Key factors that influenced the planning and execution of the Project Indirect Inspection(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No customer impacts were identified.
3. Community Impacts: No community impacts were identified.
4. Permit Restrictions: The Project Team obtained permits, traffic control and plans for the City of San Bernardino and county of San Bernardino.
5. Environmental: No significant environmental constraints were identified.

Table 2: Indirect Inspection Segments

Line	Length	Threat Type	Indirect Inspection Tool Type
41-05	5.34 miles	[redacted]	[redacted]
41-05	5.34 miles	[redacted]	[redacted]
41-05	5.34 miles	[redacted]	[redacted]

B. Direct Examination

Following the completion of the Indirect Inspection, two Direct Examination sites were identified for validation. For each examination location, SoCalGas conducted site evaluations, communicated with stakeholders, performed potholing of the area to identify the presence of underground utilities and substructures, and prepared a project schedule that met criteria followed for examination.

Key factors that influenced the planning and execution of the Project Direct Examination(s) are as follows:

1. System Analysis: The Project Team completed an analysis of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained permits, traffic control drawings and plans for the County of San Bernardino.
5. Environmental: The Project Team obtained a standard Environmental Clearance:
    a. It was determined that the excavation locations have the potential to contribute construction material to nearby waterways and work on asphalt may contain asbestos.
    b. An asbestos survey conducted by an industrial hygienist at both sites was required and it was recommended that best management practices be followed to ensure both water and air compliance.
6. SRC/IRC: N/A

Table 3: Final Direct Examination Project Details

Direct Examination Details	
Site	1
Examination ID	[redacted]
Pipeline	41-05
Mitigation/Remediation Type	None
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	15 feet
Cost Category	O&M

Direct Examination Details	
Site	2
Examination ID	[redacted]
Pipeline	41-05
Mitigation/Remediation Type	None
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	15 feet
Cost Category	O&M

Figure 2: Supply Line 41-05 Project Scope Including Direct Examination Sites

C. Post-Assessment

The Post-Assessment step involves evaluating and documenting the effectiveness of the inspection tools, documenting the result of the assessment and the length of pipeline assessed, communicating assessment results to the stakeholders, identifying appropriate follow up Preventive and Mitigative measures, if necessary, and establishing the reassessment interval for the pipeline.

Final Summary

The [redacted] of 5.34 miles on Supply Line 41-05 was completed on [redacted]. The validation analysis of the Direct Examinations following the Inspection resulted in no additional examinations.

Table 4: Project Summary

[redacted] Total Length	5.34 miles
Direct Examination Completion Date	[redacted]

III. CONSTRUCTION

A. Construction Contractor Selection

Following completion of the engineering, design, and planning activities described above, SoCalGas selected the Construction Contractor that best met the selection criteria for this Project.

B. Construction Schedule

Table 5: Construction Timeline – Direct Examination

Construction Start Date	[redacted]	
Construction Completion Date		

Figure 3: Direct Examination Site #1 – Coating Inspection

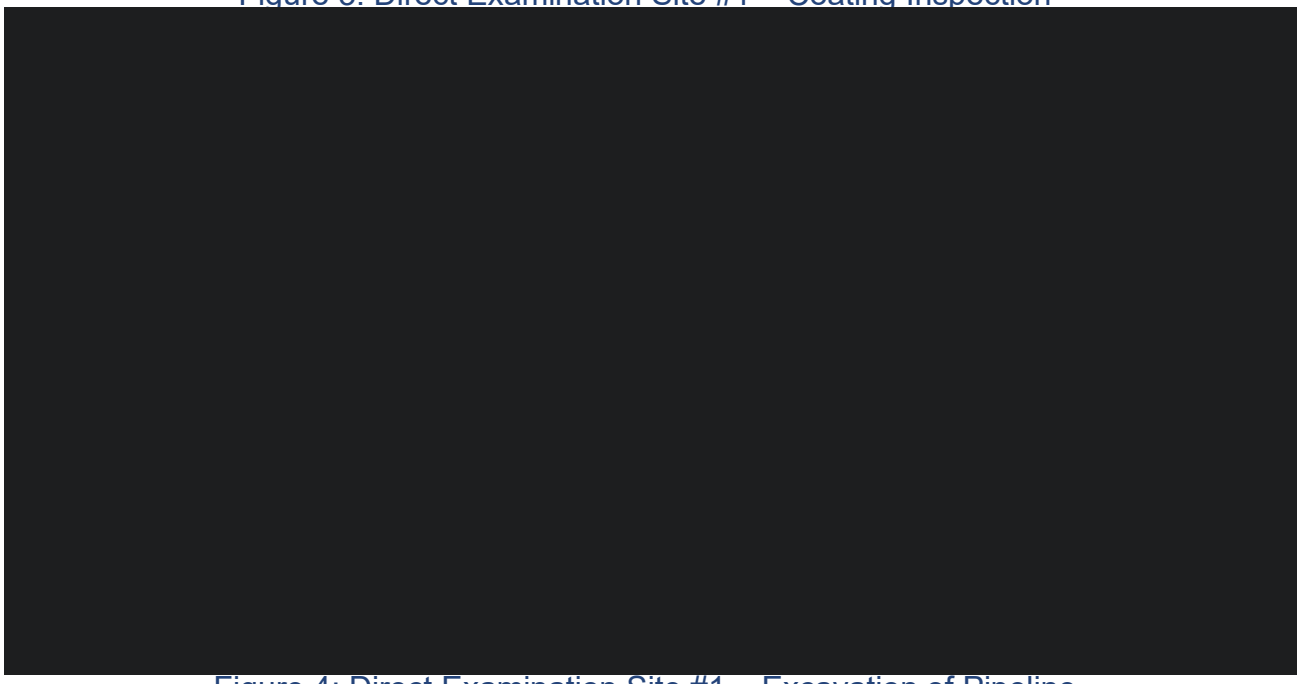


Figure 4: Direct Examination Site #1 – Excavation of Pipeline

Figure 5: Direct Examination Site #2 – Coating Inspection

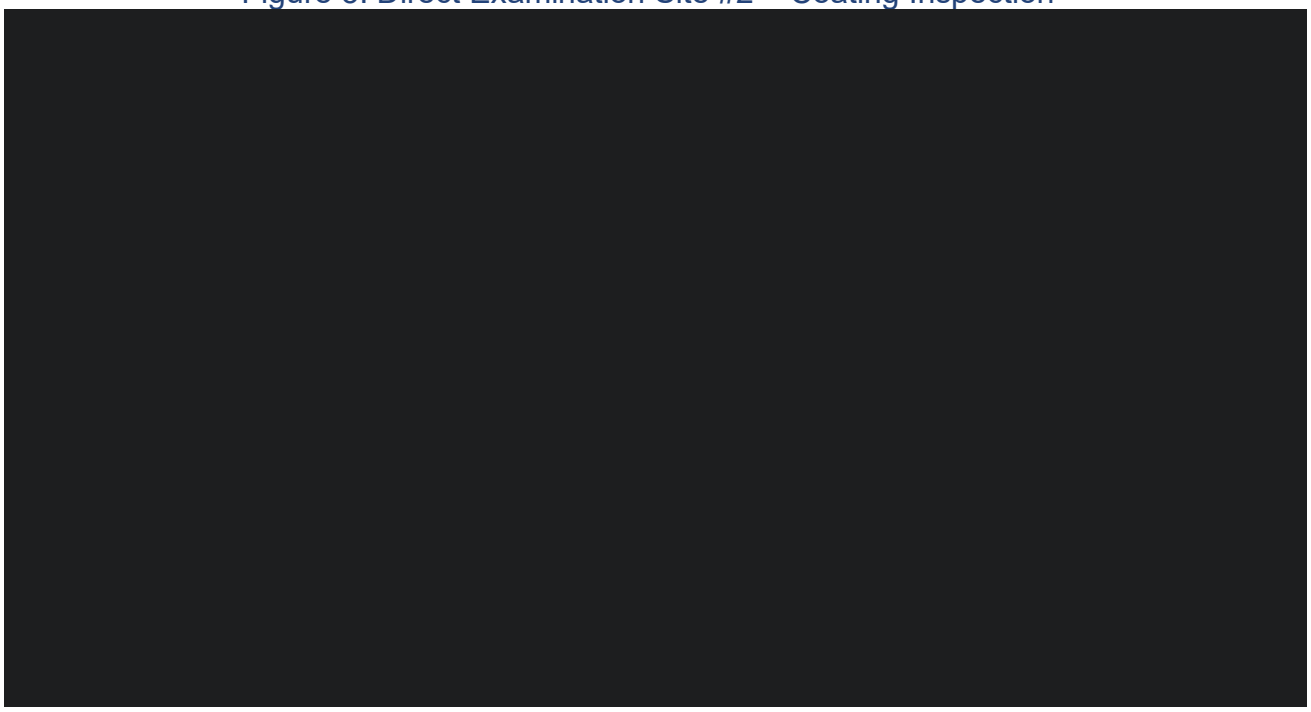


Figure 6: Direct Examination Site #2 – Excavation of Pipeline

C. Commissioning and Site Restoration

Commissioning activities include restoration of the site, final inspection, and placement of the pipeline back into service, and site demobilization. Closeout activities include development of final drawings, finalization of a reconciliation package, and updates to company recordkeeping systems to reflect the completed scope of work.

IV. PROJECT COSTS

A. Actual Costs[2]

Actual loaded costs reflect the Labor, Material, and Services costs incurred to execute the Project. The total loaded cost of the Project is $754,805.

Table 6: Actual Direct Costs[3]

Direct Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Company Labor	0	75,459	75,459
Contract Costs	0	316,572	316,572
Material	0	0	0
Other Direct Charges	0	286,545	286,545
Total Direct Costs	0	678,575	678,575

Table 7: Actual Indirect Costs[4]

Indirect Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Overheads	0	76,230	76,230
AFUDC	0	0	0
Property Taxes	0	0	0
Total Indirect Costs	0	76,230	76,230

Table 8: Total Costs[5]

Total Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Total Loaded Costs	0	754,805	754,805

[2] These are the total project costs incurred between January 1, 2019, and December 31, 2023. Only direct costs and vacation and sick contribute to the TIMPBA revenue requirement that is presented in the Prepared Direct Testimony of Rae Marie Yu (Chapter III).
[3] Values may not add to total due to rounding.
[4] Ibid.
[5] Ibid.

V. CONCLUSION

SoCalGas enhanced the integrity of its natural gas system by executing the Supply Line 41-05 TIMP Project. Through this Project, SoCalGas implemented and managed the requirements set forth in 49 C.F.R. § 192, Subpart O including the continual identification of threats to its pipelines, determination of the risk posed by these threats, scheduling and tracking assessments to address threats, conducting appropriate assessment in a prescribed timeline, collecting information about the condition of the pipelines, taking actions to minimize applicable threats and integrity concerns to reduce the risk of a pipeline failure, and reporting the findings of the assessment. The total loaded cost of the Project is $754,805.

End of Supply Line 41-05 TIMP Project Final Workpaper

I. SUPPLY LINE 41-12 TIMP PROJECT

A. Background and Summary

Supply Line 41-12 was assessed from [redacted] in the City of Corona to [redacted] in the City of Lake Elsinore. This Workpaper describes the activities associated with a Transmission Integrity Management Program (TIMP) [redacted] that includes Direct Examinations made to three sites, and Post-Assessment analysis. The specific attributes of this Project are detailed below in General Project Information. The total loaded cost of the Project is $334,860.

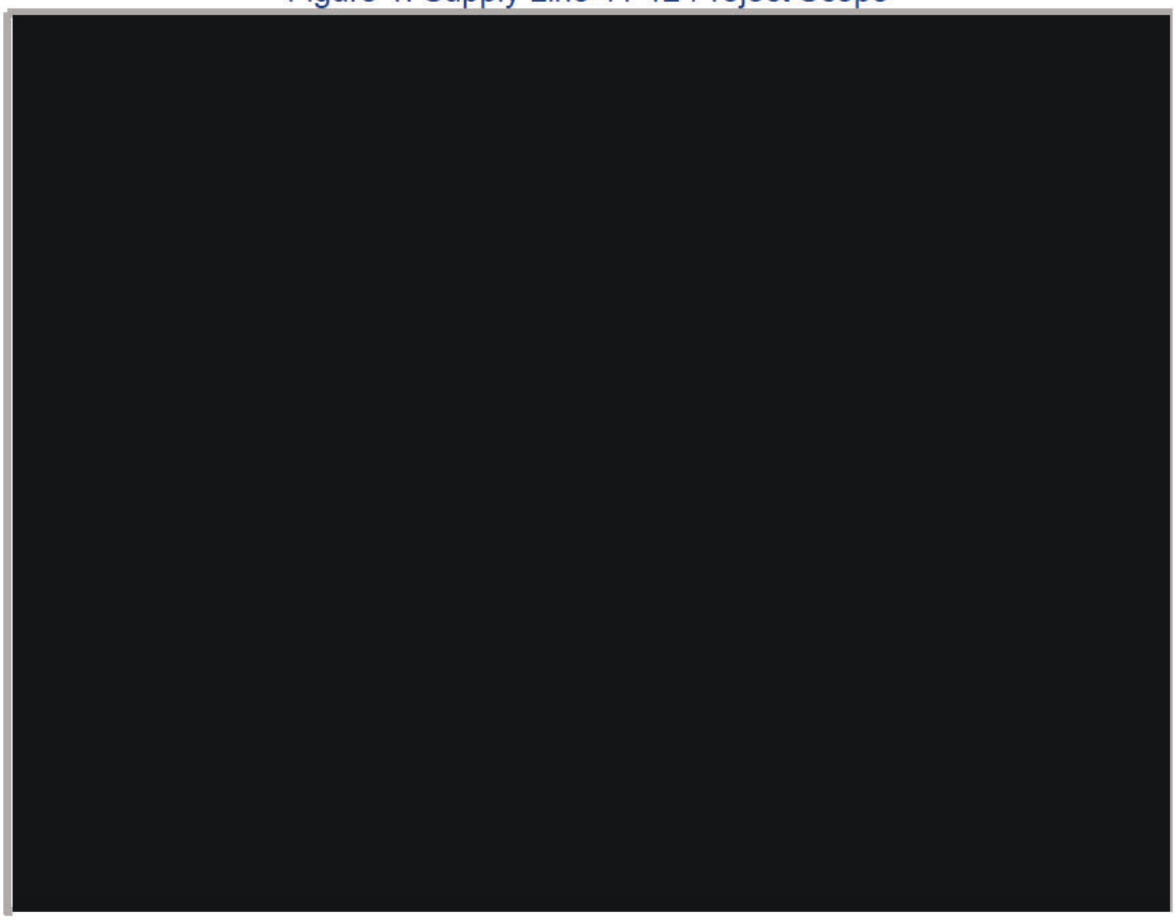
Table 1: General Project Information

Integrity Assessment Details			
Pipeline	41-12		
Assessment Type	[redacted]		
Location	Corona, Lake Elsinore		
Class	2, 3		
HCA Length	2.43 miles		
Project Length	3.71 miles		
Vintage	[redacted]		
Pipe Diameter			
MAOP			
SMYS			
HCA Threats			
Indirect Inspection Completion Date			
Direct Examination Completion Date			
Construction Start Date			
Construction Completion Date			
Assessment Due Date			
Project Costs ($)	**Capital**	**O&M**	**Total**
Loaded Project Costs	0	334,860	334,860

[redacted]

B. Maps and Images

Figure 1: Supply Line 41-12 Project Scope



II. ENGINEERING, DESIGN, AND CONSTRUCTABILITY

As described in the Prepared Direct Testimony of Jordan A. Zeoli, Fidel Galvan, and Travis Sera (Chapter II), TIMP projects follow a four-step assessment process: Pre-Assessment, Indirect Inspection, Direct Examination, and Post-Assessment. This Workpaper outlines construction activities during the Assessment process that occurred during the Indirect Inspection(s), Direct Examination(s) and Post-Assessment.

Prior to initiating execution of the assessment, SoCalGas reviewed available information and performed a detailed system analysis to verify the scope of the Project.

A. Indirect Inspection

SoCalGas initiated the planning process for the Supply Line 41-12 by performing a Pre-Assessment engineering analysis to determine existing conditions and any impacts to the Project, confirm the appropriate assessment methods, and select the Indirect Inspection tools.

Activities for this Project related to the Indirect Inspection step were completed under a previous General Rate Case (GRC)[2]

Table 2: Indirect Inspection Segments

Line	Length	Threat Type	Indirect Inspection Tool Type
41-12	2.43 miles	[redacted]	[redacted]
41-12	2.43 miles		
41-12	2.43 miles		

[2] Cost and activities within this Workpaper are summarized to align with A.17-10-008.

B. Direct Examination

Following the completion of the Indirect Inspection, three Direct Examination sites were identified for validation. For each examination location, SoCalGas conducted site evaluations, communicated with stakeholders, performed potholing of the area to identify the presence of underground utilities and substructures, and prepared a project schedule that met criteria followed for examination.

Key factors that influenced the planning and execution of the Project Direct Examination(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained permits, traffic control drawings and plans from Riverside County.
5. Environmental: The Project Team obtained a standard Environmental Clearance:
    a. All three Direct Examination sites were found to have the potential to contribute construction materials to adjacent water conveyances and thus additional precaution practices were needed.
6. SRC/IRC: N/A

Table 3: Final Direct Examination Project Details

Direct Examination Details	
Site	1
Examination ID	[redacted]
Pipeline	41-12
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	15.5 feet
Cost Category	O&M

Direct Examination Details	
Site	2
Examination ID	[redacted]
Pipeline	41-12
Mitigation/Remediation Type	None
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	15.0 feet
Cost Category	O&M

Direct Examination Details	
Site	3
Examination ID	[redacted]
Pipeline	41-12
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	16.0 feet
Cost Category	O&M

Figure 2: Supply Line 41-12 Project Scope Including Direct Examination Sites

C. Post-Assessment

The Post-Assessment step involves evaluating and documenting the effectiveness of the inspection tools, documenting the result of the assessment and the length of pipeline assessed, communicating assessment results to the stakeholders, identifying appropriate follow up Preventive and Mitigative measures, if necessary, and establishing the reassessment interval for the pipeline.

Final Summary

The [redacted] of 2.43 miles on Supply Line 41-12 was completed on [redacted]. The validation analysis of the Direct Examinations following the Inspection resulted in no additional examinations.

Table 4: Project Summary

[redacted] Total Length	2.43 miles
Direct Examination Completion Date	[redacted]

III. CONSTRUCTION

A. Construction Contractor Selection

Following completion of the engineering, design, and planning activities described above, SoCalGas selected the Construction Contractor that best met the selection criteria for this Project.

B. Construction Schedule

Table 5: Construction Timeline – Direct Examination

Construction Start Date	[redacted]	
Construction Completion Date		

Figure 3: Direct Examination Site #1 – Coating Inspection

Figure 4: Direct Examination Site #1 – Site Overview

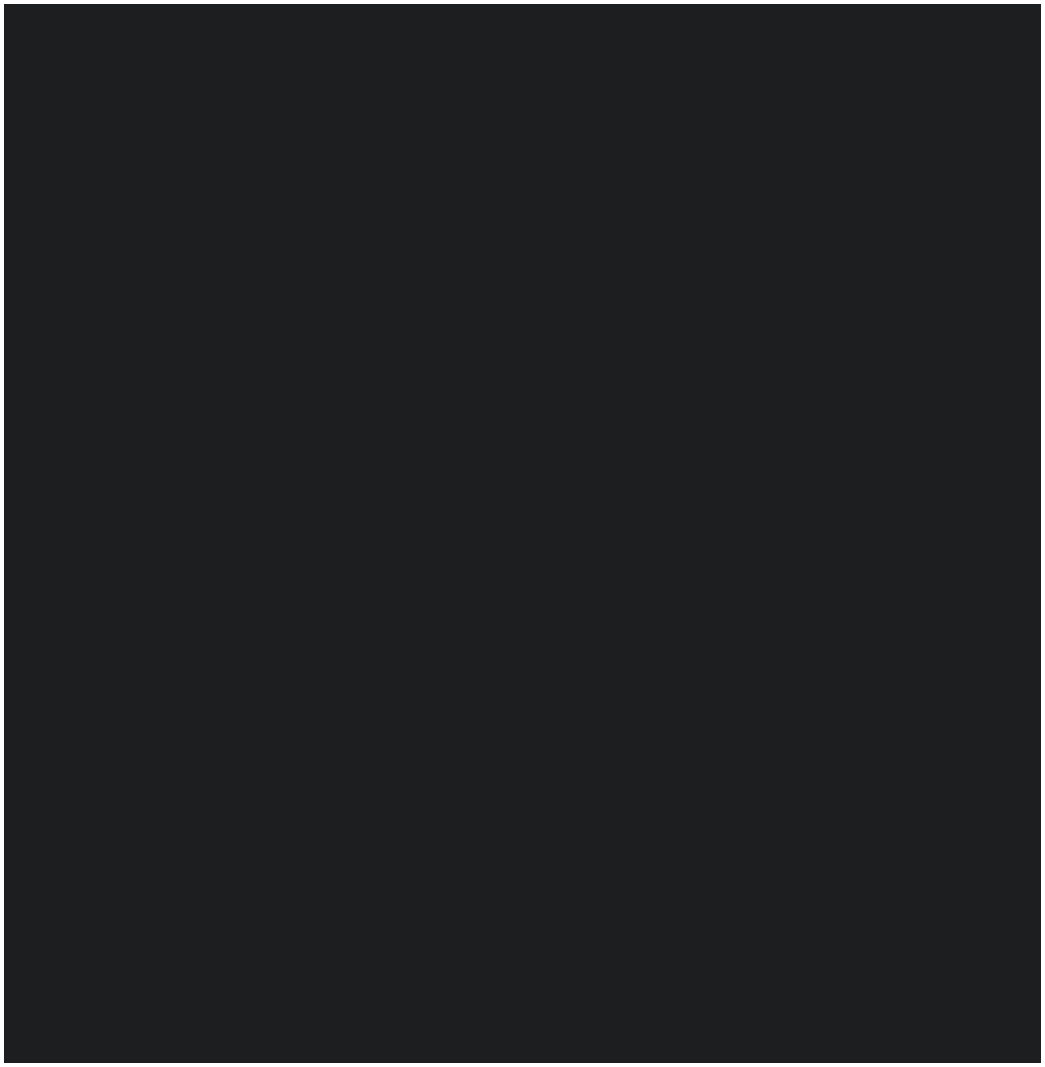


Figure 5: Direct Examination Site #3 – Excavation of Pipeline

C. Commissioning and Site Restoration

Commissioning activities include restoration of the site, final inspection, and placement of the pipeline back into service, and site demobilization. Closeout activities include development of final drawings, finalization of a reconciliation package, and updates to company recordkeeping systems to reflect the completed scope of work.

IV. PROJECT COSTS

A. Actual Costs[3]

Actual loaded costs reflect the Labor, Material, and Services costs incurred to execute the Project. The total loaded cost of the Project is $334,860.

Table 6: Actual Direct Costs[4]

Direct Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Company Labor	0	30,944	30,944
Contract Costs	0	251,975	251,975
Material	0	1,106	1,106
Other Direct Charges	0	16,542	16,542
Total Direct Costs	0	300,566	300,566

Table 7: Actual Indirect Costs[5]

Indirect Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Overheads	0	34,294	34,294
AFUDC	0	0	0
Property Taxes	0	0	0
Total Indirect Costs	0	34,294	34,294

Table 8: Total Costs[6]

Total Costs ($)	Capital Cost	O&M Cost	Total Actual Costs
Total Loaded Costs	0	334,860	334,860

[3] These are the total project costs incurred between January 1, 2019, and December 31, 2023. Only direct costs and vacation and sick contribute to the TIMPBA revenue requirement that is presented in the Prepared Direct Testimony of Rae Marie Yu (Chapter III).
[4] Values may not add to total due to rounding.
[5] Ibid.
[6] Ibid

V. CONCLUSION

SoCalGas enhanced the integrity of its natural gas system by executing the Supply Line 41-12 TIMP Project. Through this Project, SoCalGas implemented and managed the requirements set forth in 49 C.F.R. § 192, Subpart O including the continual identification of threats to its pipelines, determination of the risk posed by these threats, scheduling and tracking assessments to address threats, conducting appropriate assessment in a prescribed timeline, collecting information about the condition of the pipelines, taking actions to minimize applicable threats and integrity concerns to reduce the risk of a pipeline failure, and reporting the findings of the assessment. The total loaded cost of the Project is $334,860.

End of Supply Line 41-12 TIMP Project Final Workpaper

I. SUPPLY LINE 41-17 TIMP PROJECT

A. Background and Summary

Supply Line 41-17 was assessed from [redacted] in Hemet. This Workpaper describes the activities associated with a Transmission Integrity Management Program (TIMP) [redacted] that includes Indirect Inspection using aboveground surveys, Direct Examinations made to eight sites, and Post-Assessment analysis. The specific attributes of this Project are detailed below in General Project Information. The total loaded cost of the Project is $1,030,679.

Table 1: General Project Information

Integrity Assessment Details			
Pipeline	41-17		
Assessment Type	[redacted]		
Location	Hemet, San Jacinto		
Class	2, 3		
HCA Length	2.54 miles		
Project Length	2.61 miles		
Vintage	[redacted]		
Pipe Diameter			
MAOP			
SMYS			
HCA Threats			
Indirect Inspection Completion Date			
Direct Examination Completion Date			
Construction Start Date			
Construction Completion Date			
Assessment Due Date			
Project Costs ($)	**Capital**	**O&M**	**Total**
Loaded Project Costs	259	1,030,420	1,030,679

[redacted]

B. Maps and Images

Figure 1: Supply Line 41-17 Project Scope

II. ENGINEERING, DESIGN, AND CONSTRUCTABILITY

As described in the Prepared Direct Testimony of Jordan A. Zeoli, Fidel Galvan, and Travis Sera (Chapter II), TIMP projects follow a four-step assessment process: Pre-Assessment, Indirect Inspection, Direct Examination, and Post-Assessment. This Workpaper outlines construction activities during the Assessment process that occurred during the Indirect Inspection(s), Direct Examination(s) and Post-Assessment.

Prior to initiating execution of the assessment, SoCalGas reviewed available information and performed a detailed system analysis to verify the scope of the Project.

A. Indirect Inspection

SoCalGas initiated the planning process for the Supply Line 41-17 by performing a Pre-Assessment engineering analysis to determine existing conditions and any impacts to the Project, confirm the appropriate assessment methods, and select the Indirect Inspection tools.

Key factors that influenced the planning and execution of the Project Indirect Inspection(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained permits, traffic control drawings, and plans from the cities of San Jacinto and Hemet, and the county of Riverside.
5. Environmental: No significant environmental constraints were identified.

Table 2: Indirect Inspection Segments

Line	Length	Threat Type	Indirect Inspection Tool Type
41-17	2.54 miles	[redacted]	[redacted]
41-17	2.54 miles		
41-17	2.54 miles		
41-17	0.29 miles		
41-17	0.29 miles		
41-17	0.29 miles		
41-17	0.29 miles		

B. Direct Examination

Following the completion of the Indirect Inspection, eight Direct Examination sites were identified for validation. For each examination location, SoCalGas conducted site evaluations, communicated with stakeholders, performed potholing of the area to identify the presence of underground utilities and substructures, and prepared a project schedule that met criteria followed for examination.

Key factors that influenced the planning and execution of the Project Direct Examination(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained encroachment permits, traffic control drawings, and plans from the City of Hemet.
5. Environmental: No significant environmental constraints were identified.
6. SRC/IRC: N/A

Table 3: Final Direct Examination Project Details

Direct Examination Details	
Site	1
Examination ID	[redacted]
Pipeline	41-17
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	15 feet
Cost Category	O&M

Direct Examination Details	
Site	2
Examination ID	[redacted]
Pipeline	41-17
Mitigation/Remediation Type	None
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	19 feet
Cost Category	O&M

Direct Examination Details	
Site	3
Examination ID	[redacted]
Pipeline	41-17
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	15 feet
Cost Category	O&M

Direct Examination Details	
Site	4
Examination ID	[redacted]
Pipeline	41-17
Mitigation/Remediation Type	None
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	19 feet
Cost Category	O&M

Direct Examination Details	
Site	5
Examination ID	[redacted]
Pipeline	41-17
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	15 feet
Cost Category	O&M

Direct Examination Details	
Site	6
Examination ID	[redacted]
Pipeline	41-17
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	25 feet
Cost Category	O&M

Direct Examination Details	
Site	7
Examination ID	[redacted]
Pipeline	41-17
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	16 feet
Cost Category	O&M

Direct Examination Details	
Site	8
Examination ID	[redacted]
Pipeline	41-17
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	17.5 feet
Cost Category	O&M

Figure 2: Supply Line 41-17 Project Scope Including Direct Examination Sites

C. Post-Assessment

The Post-Assessment step involves evaluating and documenting the effectiveness of the inspection tools, documenting the result of the assessment and the length of pipeline assessed, communicating assessment results to the stakeholders, identifying appropriate follow up Preventive and Mitigative measures, if necessary, and establishing the reassessment interval for the pipeline.

Final Summary

The [redacted] of 2.54 miles and the [redacted] of 0.29 miles on Supply Line 41-17 was completed on [redacted]. The validation analysis of the Direct Examinations following the Inspection resulted in no additional examinations.

Table 4: Project Summary

[redacted] Total Length	2.54 miles
[redacted] Total Length	0.29 miles
Direct Examination Completion Date	[redacted]

III. CONSTRUCTION

A. Construction Contractor Selection

Following completion of the engineering, design, and planning activities described above, SoCalGas selected the Construction Contractor that best met the selection criteria for this Project.

B. Construction Schedule

Table 5: Construction Timeline – Direct Examination

Construction Start Date	[redacted]	
Construction Completion Date		

Figure 3: Direct Examination Site #2 – Coating Inspection

Figure 4: Direct Examination Site #3 – Excavation Location

Figure 5: Direct Examination Site #5 – Excavation Location

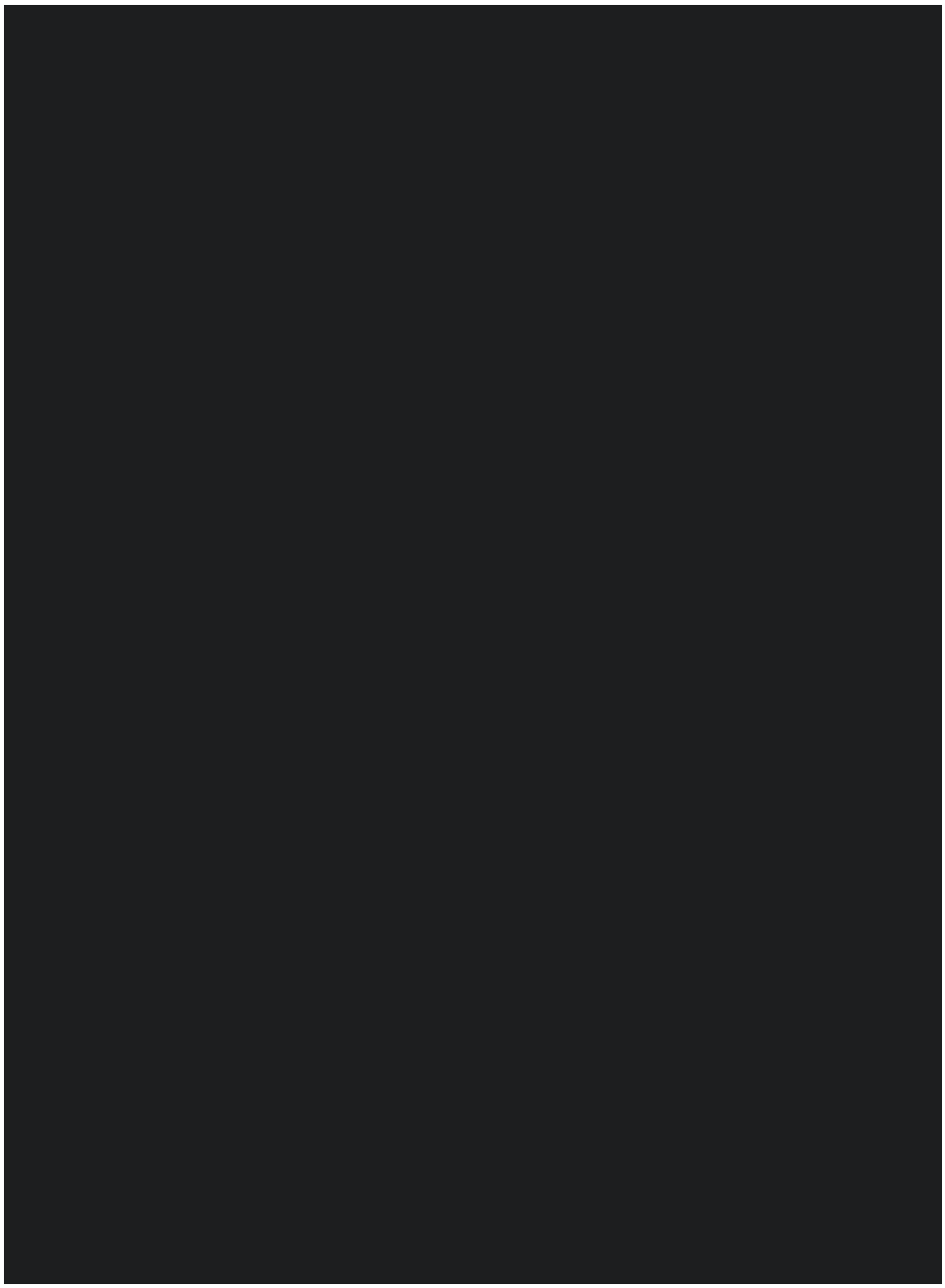


Figure 6: Direct Examination Site #6 – Excavation of Pipeline

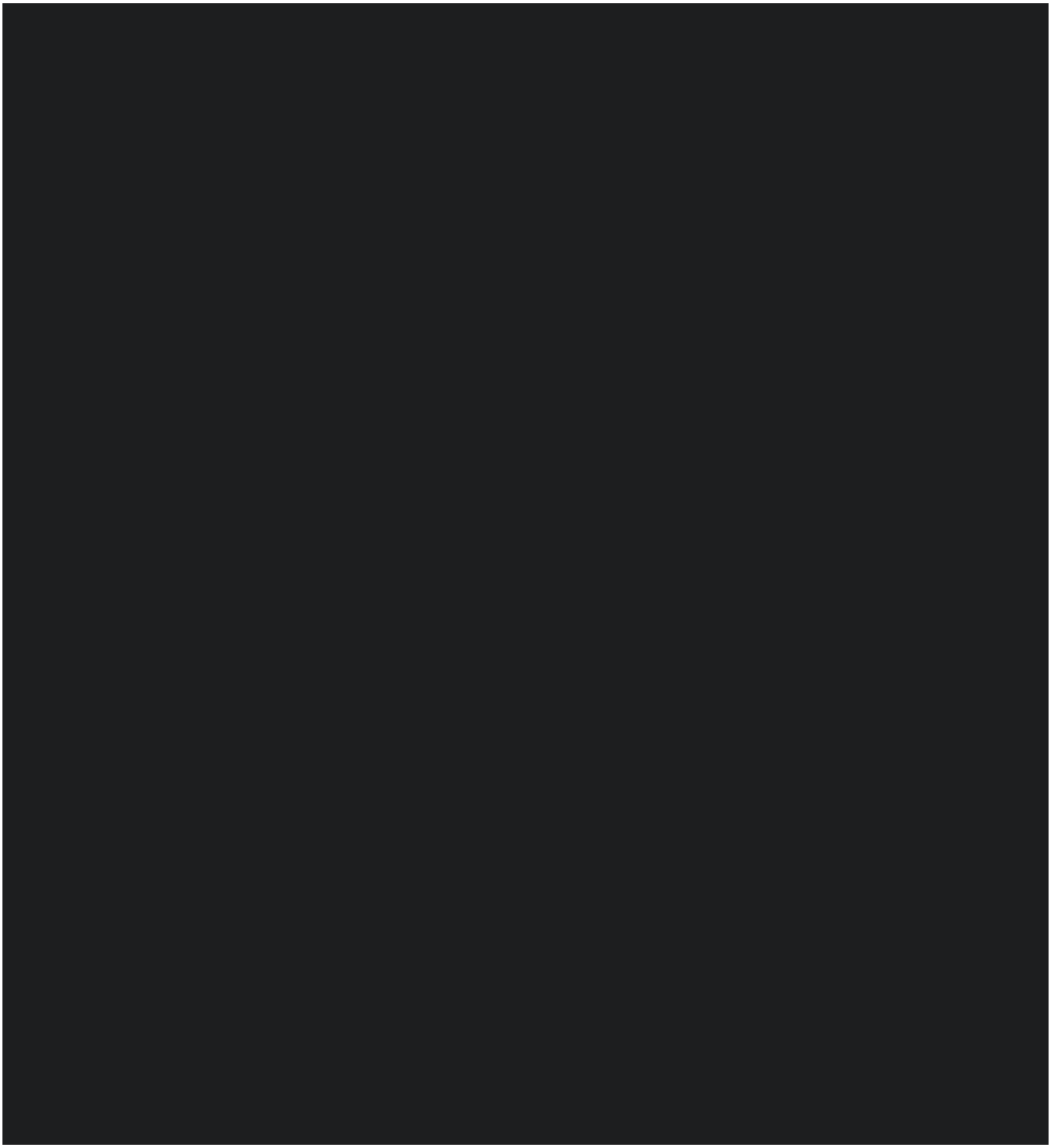


Figure 7: Direct Examination Site #7 – Excavation Location

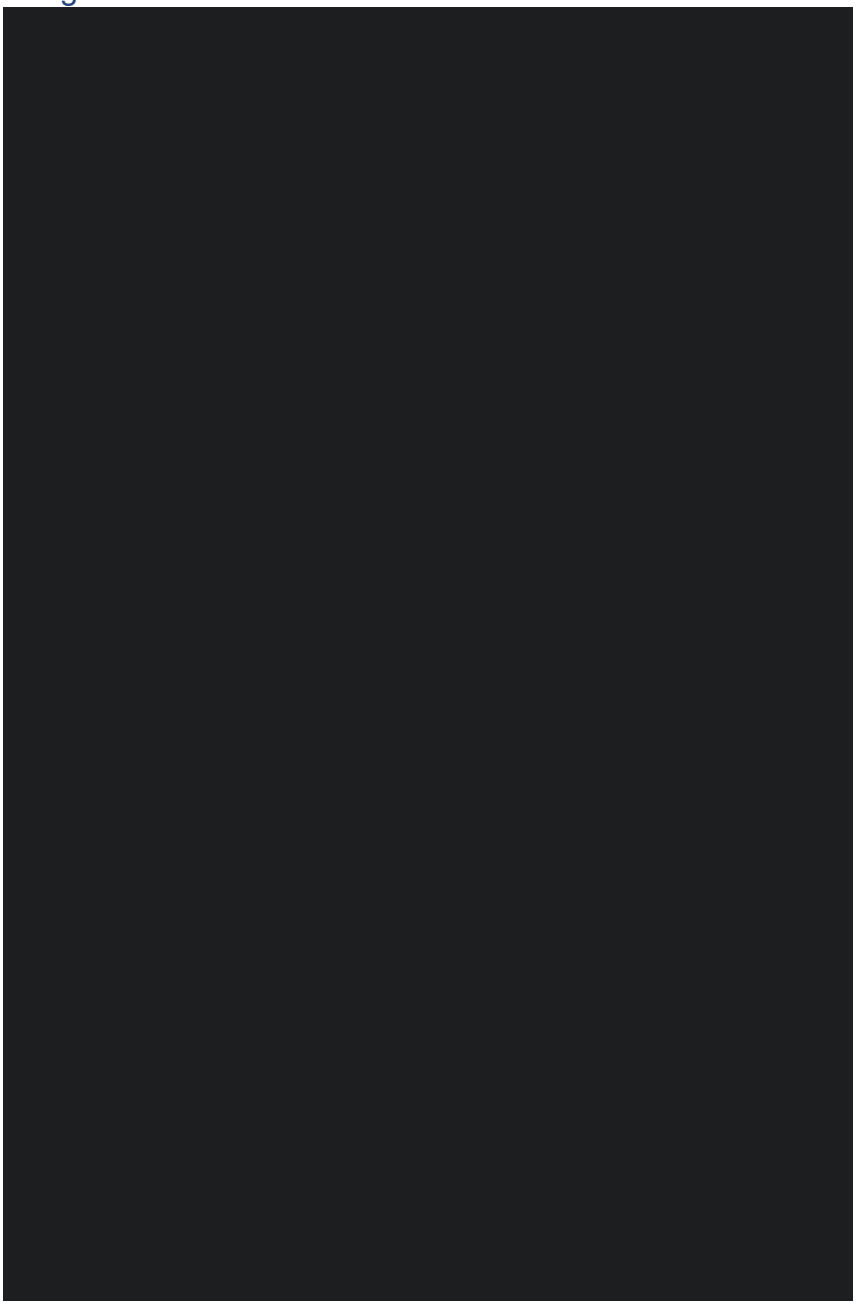
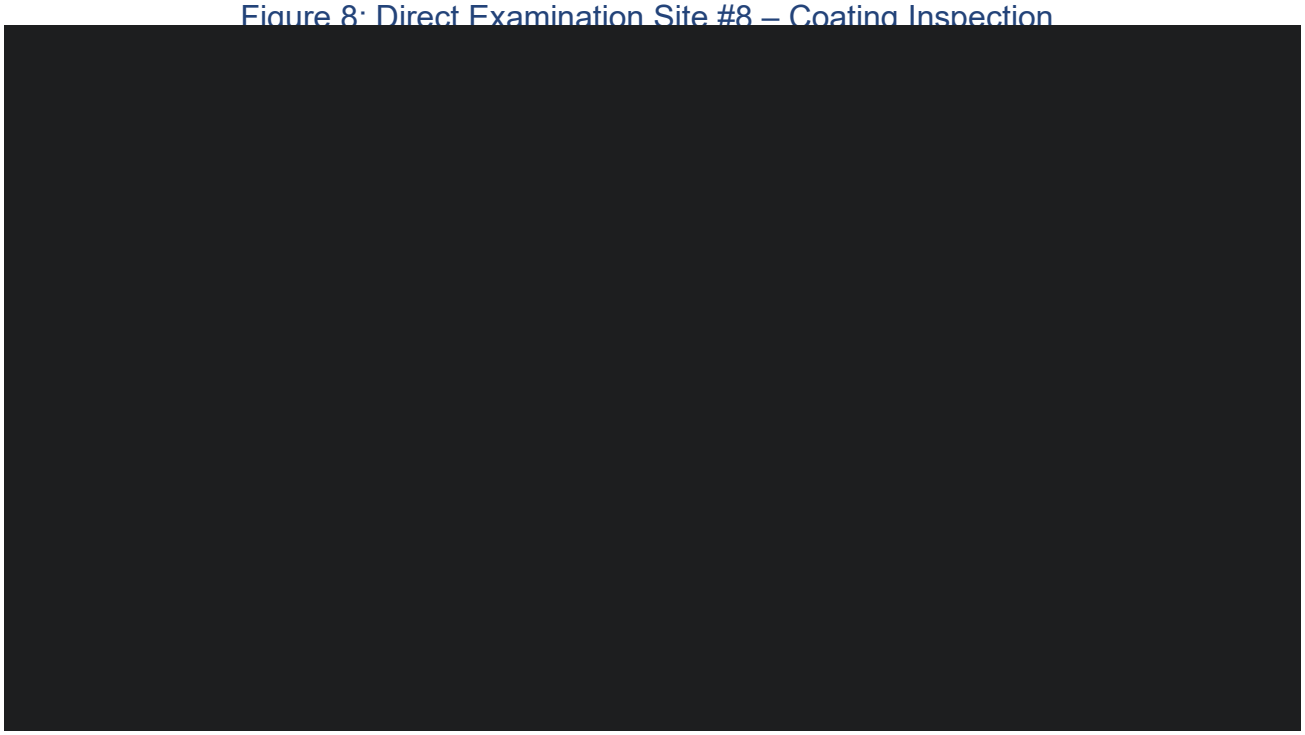


Figure 8: Direct Examination Site #8 – Coating Inspection



C. Commissioning and Site Restoration

Commissioning activities include restoration of the site, final inspection, and placement of the pipeline back into service, and site demobilization. Closeout activities include development of final drawings, finalization of a reconciliation package, and updates to company recordkeeping systems to reflect the completed scope of work.

IV. PROJECT COSTS

A. Cost Efficiency Actions

SoCalGas exercised due diligence in the design, planning, and construction activities for this Project to minimize or avoid costs when prudent to do so. As discussed above, the Project Team reviewed existing information, communicated with external stakeholders, and conducted a site evaluation to incorporate the site conditions in the Project plan and design. Specific examples of cost efficiency actions taken on this Project were:

1. Constructions Execution: The [redacted] Validation excavation [redacted] was conducted at the same location as the [redacted] excavation.

B. Actual Costs[3]

Actual loaded costs reflect the Labor, Material, and Services costs incurred to execute the Project. The total loaded cost of the Project is $1,030,679.

Table 6: Actual Direct Costs[4]

Direct Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Company Labor	0	83,082	83,082
Contract Costs	0	535,580	535,580
Material	0	256	256
Other Direct Charges	243	312,555	312,797
Total Direct Costs	243	931,473	931,715

Table 7: Actual Indirect Costs[5]

Indirect Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Overheads	14	98,948	98,962
AFUDC	2	0	2
Property Taxes	0	0	0
Total Indirect Costs	16	98,948	98,964

Table 8: Total Costs[6]

Total Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Total Loaded Costs	259	1,030,420	1,030,679

[3] These are the total project costs incurred between January 1, 2019, and December 31, 2023. Only direct costs and vacation and sick contribute to the TIMPBA revenue requirement that is presented in the Prepared Direct Testimony of Rae Marie Yu (Chapter III).
[4] Values may not add to total due to rounding.
[5] Ibid.
[6] Ibid.

V. CONCLUSION

SoCalGas enhanced the integrity of its natural gas system by executing the Supply Line 41-17 TIMP Project. Through this Project, SoCalGas implemented and managed the requirements set forth in 49 C.F.R. § 192, Subpart O including the continual identification of threats to its pipelines, determination of the risk posed by these threats, scheduling and tracking assessments to address threats, conducting appropriate assessment in a prescribed timeline, collecting information about the condition of the pipelines, taking actions to minimize applicable threats and integrity concerns to reduce the risk of a pipeline failure, and reporting the findings of the assessment. The total loaded cost of the Project is $1,030,679.

End of Supply Line 41-17 TIMP Project Final Workpaper

I. SUPPLY LINE 41-17A TIMP PROJECT

A. Background and Summary

Supply Line 41-17A was assessed from the [redacted] in the cities of San Jacinto and Hemet. This Workpaper describes the activities associated with a Transmission Integrity Management Program (TIMP) [redacted] that includes Indirect Inspection using aboveground surveys, Direct Examinations made to two sites, and Post-Assessment analysis. The specific attributes of this Project are detailed below in General Project Information. The total loaded cost of the Project is $1,512,242.

Table 1: General Project Information

Integrity Assessment Details			
Pipeline	41-17A		
Assessment Type	[redacted]		
Location	San Jacinto, Hemet		
Class	[redacted]		
HCA Length	0.74 miles		
Project Length	0.85 miles		
Vintage	[redacted]		
Pipe Diameter			
MAOP			
SMYS			
HCA Threats			
Indirect Inspection Completion Date			
Direct Examination Completion Date			
Construction Start Date			
Construction Completion Date			
Assessment Due Date			
Project Costs ($)	**Capital**	**O&M**	**Total**
Loaded Project Costs	0	1,512,242	1,512,242

B. Maps and Images

Figure 1: Supply Line 41-17A Project Scope

II. ENGINEERING, DESIGN, AND CONSTRUCTABILITY

As described in the Prepared Direct Testimony of Jordan A. Zeoli, Fidel Galvan, and Travis Sera (Chapter II), TIMP projects follow a four-step assessment process: Pre-Assessment, Indirect Inspection, Direct Examination, and Post-Assessment. This Workpaper outlines construction activities during the Assessment process that occurred during the Indirect Inspection(s), Direct Examination(s) and Post-Assessment.

Prior to initiating execution of the assessment, SoCalGas reviewed available information and performed a detailed system analysis to verify the scope of the Project.

A. Indirect Inspection

SoCalGas initiated the planning process for the Supply Line 41-17A by performing a Pre-Assessment engineering analysis to determine existing conditions and any impacts to the Project, confirm the appropriate assessment methods, and select the Indirect Inspection tools.

Key factors that influenced the planning and execution of the Project Indirect Inspection(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained permits, traffic control drawings and plans from the cities of San Jacinto and Hemet.
5. Environmental: No significant environmental constraints were identified.

Table 2: Indirect Inspection Segments

Line	Length	Threat Type	Indirect Inspection Tool Type
41-17A	0.74 miles	[redacted]	[redacted]
41-17A	0.74 miles	[redacted]	[redacted]
41-17A	0.74 miles	[redacted]	[redacted]

B. Direct Examination

Following the completion of the Indirect Inspection, two Direct Examination sites were identified for validation. For each examination location, SoCalGas conducted site evaluations, communicated with stakeholders, performed potholing of the area to identify the presence of underground utilities and substructures, and prepared a project schedule that met criteria followed for examination.

Key factors that influenced the planning and execution of the Project Direct Examination(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained permits, traffic control drawings and plans from the City of San Jacinto.
5. Environmental: No significant environmental constraints were identified.
6. SRC/IRC: N/A

Table 3: Final Direct Examination Project Details

Direct Examination Details	
Site	1
Examination ID	[redacted]
Pipeline	41-17A
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	16 feet
Cost Category	O&M

Direct Examination Details	
Site	2
Examination ID	[redacted]
Pipeline	41-17A
Mitigation/Remediation Type	None
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	15 feet
Cost Category	O&M

Figure 2: Supply Line 41-17A Project Scope Including Direct Examination Sites

C. Post-Assessment

The Post-Assessment step involves evaluating and documenting the effectiveness of the inspection tools, documenting the result of the assessment and the length of pipeline assessed, communicating assessment results to the stakeholders, identifying appropriate follow up Preventive and Mitigative measures, if necessary, and establishing the reassessment interval for the pipeline.

Final Summary

The [redacted] of 0.74 miles on Supply Line 41-17A was completed on [redacted] The validation analysis of the Direct Examinations following the Inspection resulted in no additional examinations.

Table 4: Project Summary

[redacted] Total Length	0.74 miles
Direct Examination Completion Date	[redacted]

III. CONSTRUCTION

A. Construction Contractor Selection

Following completion of the engineering, design, and planning activities described above, SoCalGas selected the Construction Contractor that best met the selection criteria for this Project.

B. Construction Schedule

Table 5: Construction Timeline – Direct Examination

Construction Start Date	[redacted]	
Construction Completion Date		

Figure 3: Direct Examination Site #1 – Excavation of Pipeline

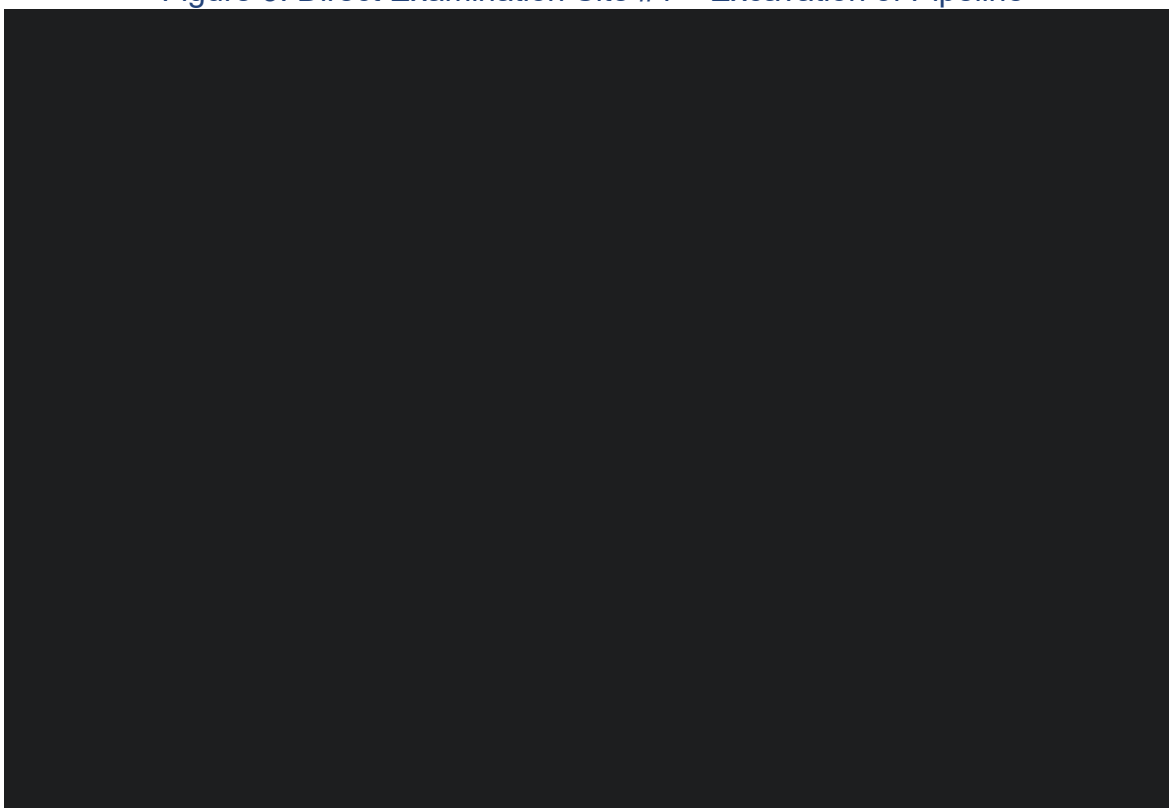


Figure 4: Direct Examination Site #2 – Bare Pipeline

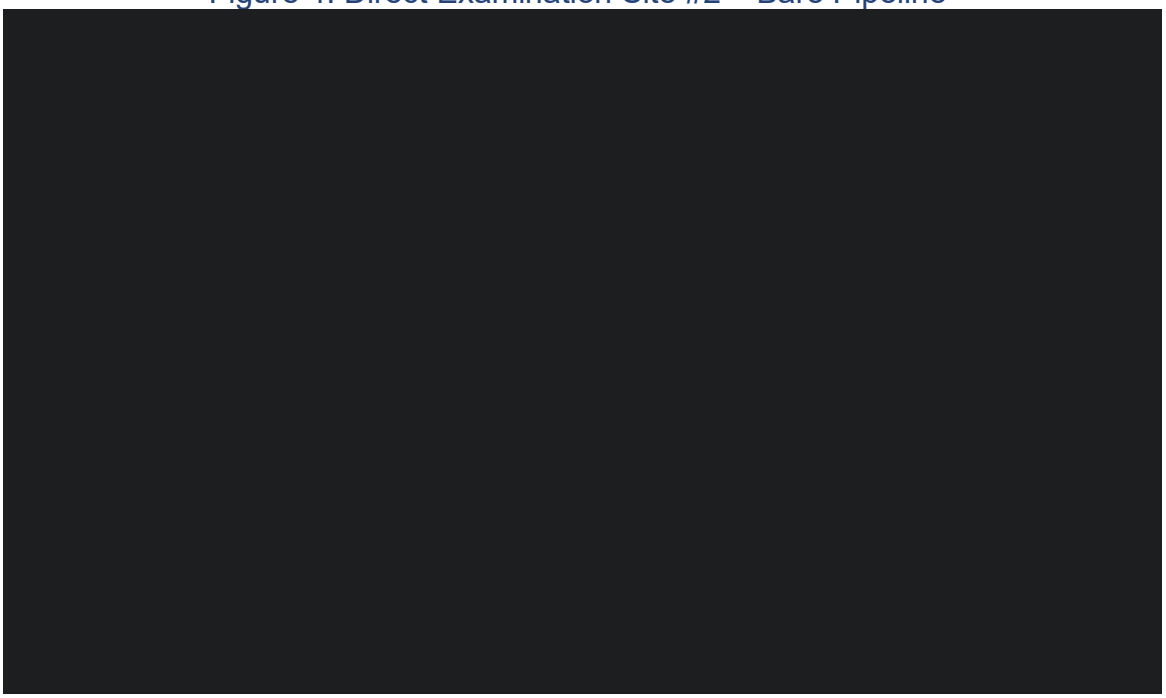


Figure 5: Direct Examination Site #2 – Excavation Location

C. Commissioning and Site Restoration

Commissioning activities include restoration of the site, final inspection, and placement of the pipeline back into service, and site demobilization. Closeout activities include development of final drawings, finalization of a reconciliation package, and updates to company recordkeeping systems to reflect the completed scope of work.

IV. PROJECT COSTS

A. Actual Costs[1]

Actual loaded costs reflect the Labor, Material, and Services costs incurred to execute the Project. The total loaded cost of the Project is $1,512,242.

Table 6: Actual Direct Costs[2]

Direct Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Company Labor	0	69,395	69,395
Contract Costs	0	1,125,635	1,125,635
Material	0	859	859
Other Direct Charges	0	171,866	171,866
Total Direct Costs	0	1,367,755	1,367,755

Table 7: Actual Indirect Costs[3]

Indirect Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Overheads	0	144,487	144,487
AFUDC	0	0	0
Property Taxes	0	0	0
Total Indirect Costs	0	144,487	144,487

Table 8: Total Costs[4]

Total Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Total Loaded Costs	0	1,512,242	1,512,242

[1] These are the total project costs incurred between January 1, 2019, and December 31, 2023. Only direct costs and vacation and sick contribute to the TIMPBA revenue requirement that is presented in the Prepared Direct Testimony of Rae Marie Yu (Chapter III).
[2] Values may not add to total due to rounding.
[3] Ibid.
[4] Ibid.

V. CONCLUSION

SoCalGas enhanced the integrity of its natural gas system by executing the Supply Line 41-17A TIMP Project. Through this Project, SoCalGas implemented and managed the requirements set forth in 49 C.F.R. § 192, Subpart O including the continual identification of threats to its pipelines, determination of the risk posed by these threats, scheduling and tracking assessments to address threats, conducting appropriate assessment in a prescribed timeline, collecting information about the condition of the pipelines, taking actions to minimize applicable threats and integrity concerns to reduce the risk of a pipeline failure, and reporting the findings of the assessment. The total loaded cost of the Project is $1,512,242.

End of Supply Line 41-17A TIMP Project Final Workpaper

I. SUPPLY LINE 41-19 TIMP PROJECT

A. Background and Summary

Supply Line 41-19 was assessed along [redacted] in the City of Moreno Valley. This Workpaper describes the activities associated with a Transmission Integrity Management Program (TIMP) [redacted] that includes Indirect Inspection using aboveground surveys, Direct Examinations made to three sites, and Post-Assessment analysis. The specific attributes of this Project are detailed below in General Project Information. The total loaded cost of the Project is $928,850.

Table 1: General Project Information

Integrity Assessment Details			
Pipeline	41-19		
Assessment Type	[redacted]		
Location	Moreno Valley		
Class	[redacted]		
HCA Length	0.63 miles		
Project Length	0.85 miles		
Vintage	[redacted]		
Pipe Diameter			
MAOP			
SMYS			
HCA Threats			
Indirect Inspection Completion Date			
Direct Examination Completion Date			
Construction Start Date			
Construction Completion Date			
Assessment Due Date			
Project Costs ($)	**Capital**	**O&M**	**Total**
Loaded Project Costs	0	928,850	928,850

[redacted]

B. Maps and Images

Figure 1: Supply Line 41-19 Project Scope

II. ENGINEERING, DESIGN, AND CONSTRUCTABILITY

As described in the Prepared Direct Testimony of Jordan A. Zeoli, Fidel Galvan, and Travis Sera (Chapter II), TIMP projects follow a four-step assessment process: Pre-Assessment, Indirect Inspection, Direct Examination, and Post-Assessment. This Workpaper outlines construction activities during the Assessment process that occurred during the Indirect Inspection(s), Direct Examination(s) and Post-Assessment.

Prior to initiating execution of the assessment, SoCalGas reviewed available information and performed a detailed system analysis to verify the scope of the Project.

A. Indirect Inspection

SoCalGas initiated the planning process for the Supply Line 41-19 by performing a Pre-Assessment engineering analysis to determine existing conditions and any impacts to the Project, confirm the appropriate assessment methods, and select the Indirect Inspection tools.

Key factors that influenced the planning and execution of the Project Indirect Inspection(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained permits, traffic control drawings and plans from the City of Moreno Valley.
5. Environmental: The Project Team obtained a standard Environmental Clearance.

Table 2: Indirect Inspection Segments

Line	Length	Threat Type	Indirect Inspection Tool Type
41-19	0.63 miles	[redacted]	[redacted]
41-19	0.63 miles		
41-19	0.63 miles		

B. Direct Examination

Following the completion of the Indirect Inspection, three Direct Examination sites were identified for validation. For each examination location, SoCalGas conducted site evaluations, communicated with stakeholders, performed potholing of the area to identify the presence of underground utilities and substructures, and prepared a project schedule that met criteria followed for examination.

Key factors that influenced the planning and execution of the Project Direct Examination(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained permits, traffic control drawings and plans from the City of Moreno Valley.
5. Environmental: The Project Team obtained a standard Environmental Clearance:
    a. No major impacts or issues were anticipated however additional best management practices were required for any construction activities to avoid possible discharge into the stormwater system along [redacted].
    b. An abatement survey was completed by an Industrial Hygienist at all Direct Examination sites.
6. SRC/IRC: N/A

Table 3: Final Direct Examination Project Details

Direct Examination Details	
Site	1
Examination ID	[redacted]
Pipeline	41-19
Mitigation/Remediation Type	None
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	15 feet
Cost Category	O&M

Direct Examination Details	
Site	2
Examination ID	[redacted]
Pipeline	41-19
Mitigation/Remediation Type	Band and Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	15 feet
Cost Category	O&M

Direct Examination Details	
Site	3
Examination ID	[redacted]
Pipeline	41-19
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	15 feet
Cost Category	O&M

Figure 2: Supply Line 41-19 Project Scope Including Direct Examination Sites

C. Post-Assessment

The Post-Assessment step involves evaluating and documenting the effectiveness of the inspection tools, documenting the result of the assessment and the length of pipeline assessed, communicating assessment results to the stakeholders, identifying appropriate follow up Preventive and Mitigative measures, if necessary, and establishing the reassessment interval for the pipeline.

Finaly Summary

The [redacted] of 0.63 miles on Supply Line 41-19 was completed on [redacted]. The validation analysis of the Direct Examinations following the Inspection resulted in no additional examinations.

Table 4: Project Summary

[redacted] Total Length	0.63 miles
Direct Examination Completion Date	[redacted]

III. CONSTRUCTION

A. Construction Contractor Selection

Following completion of the engineering, design, and planning activities described above, SoCalGas selected the Construction Contractor that best met the selection criteria for this Project.

B. Construction Schedule

Table 5: Construction Timeline – Direct Examination

Construction Start Date	[redacted]	
Construction Completion Date		

Figure 3: Direct Examination Site #1 – Coating Inspection

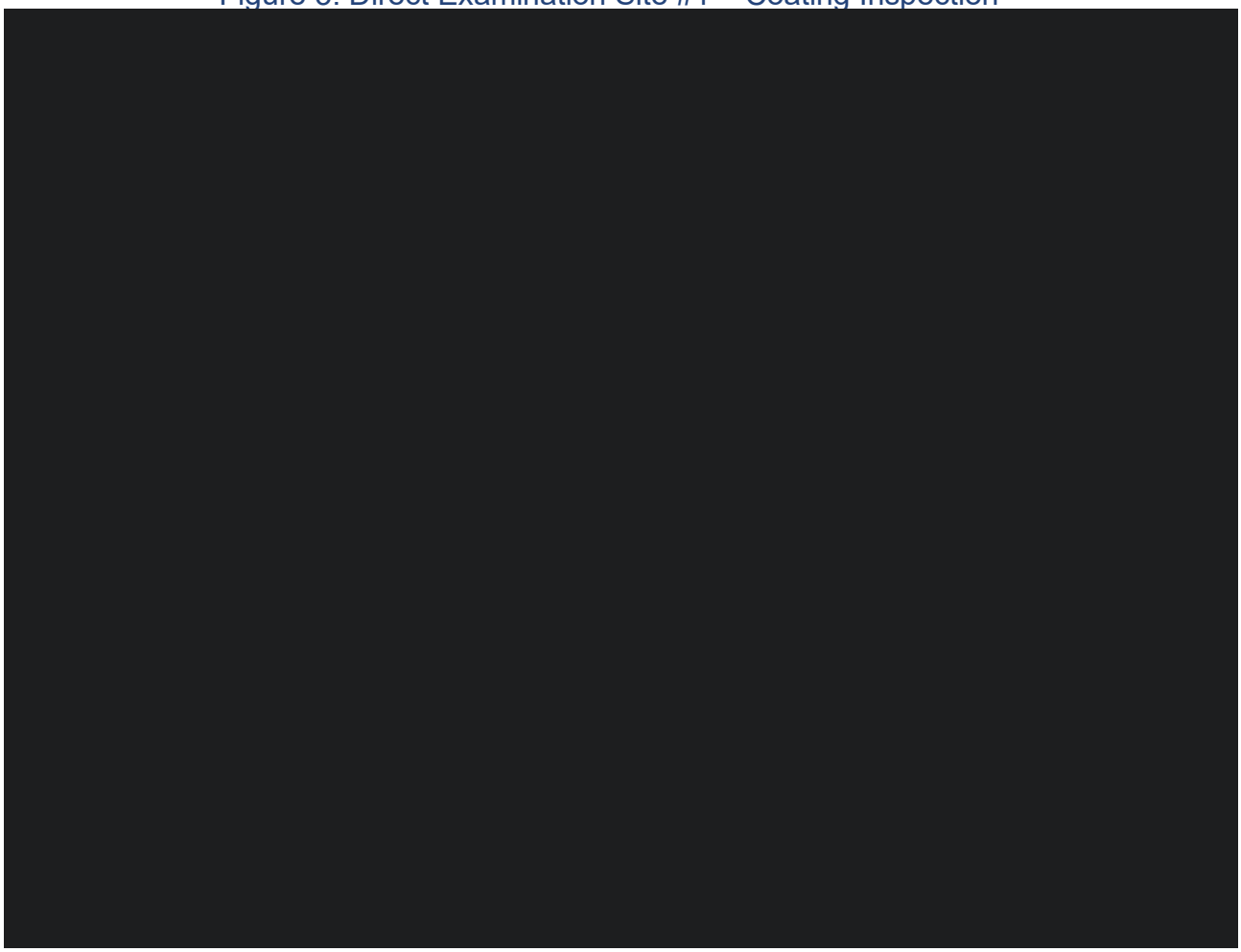


Figure 4: Direct Examination Site #1 – Excavation of Pipeline

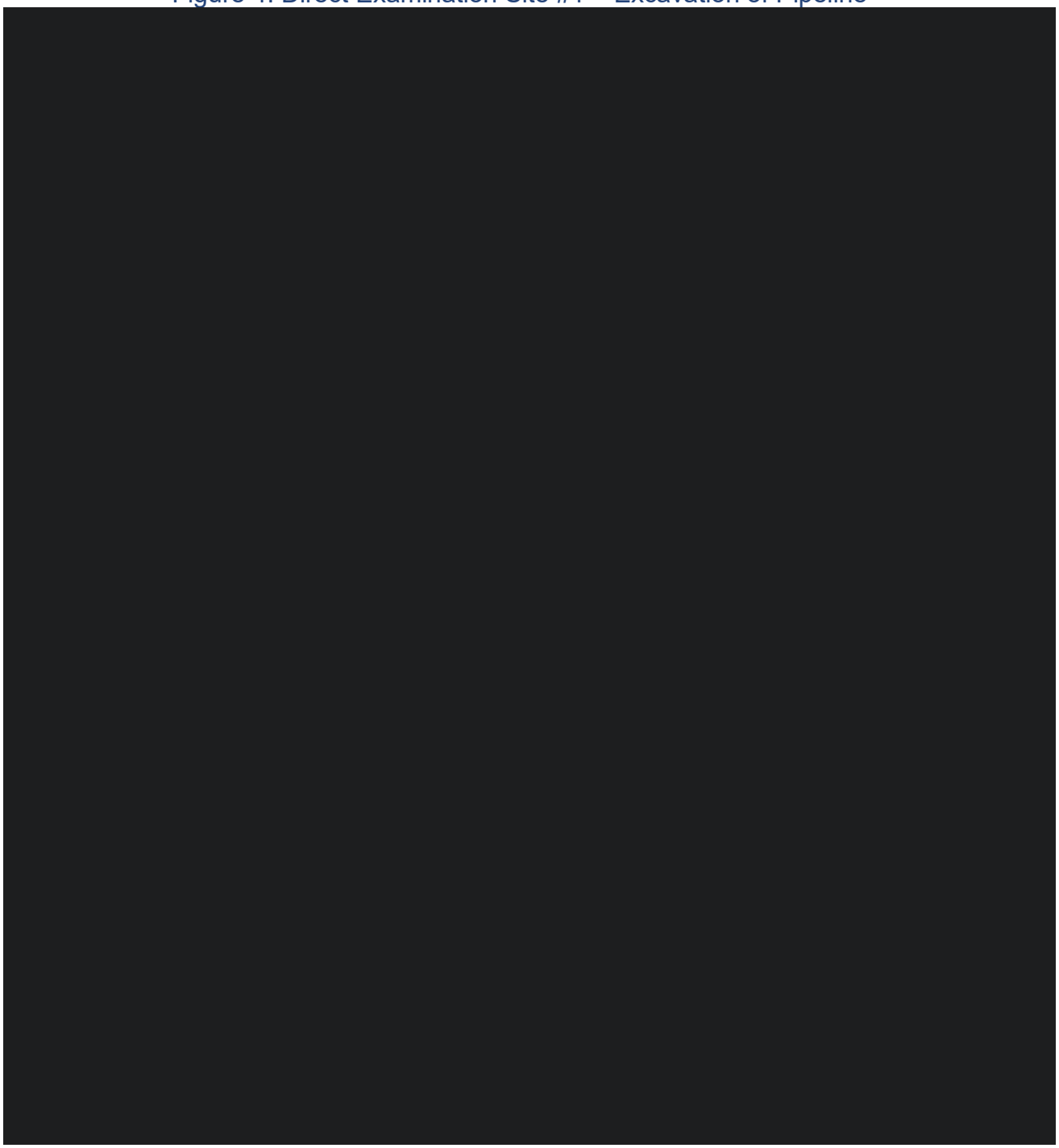


Figure 5: Direct Examination Site #2 - Bare Pipe Inspection

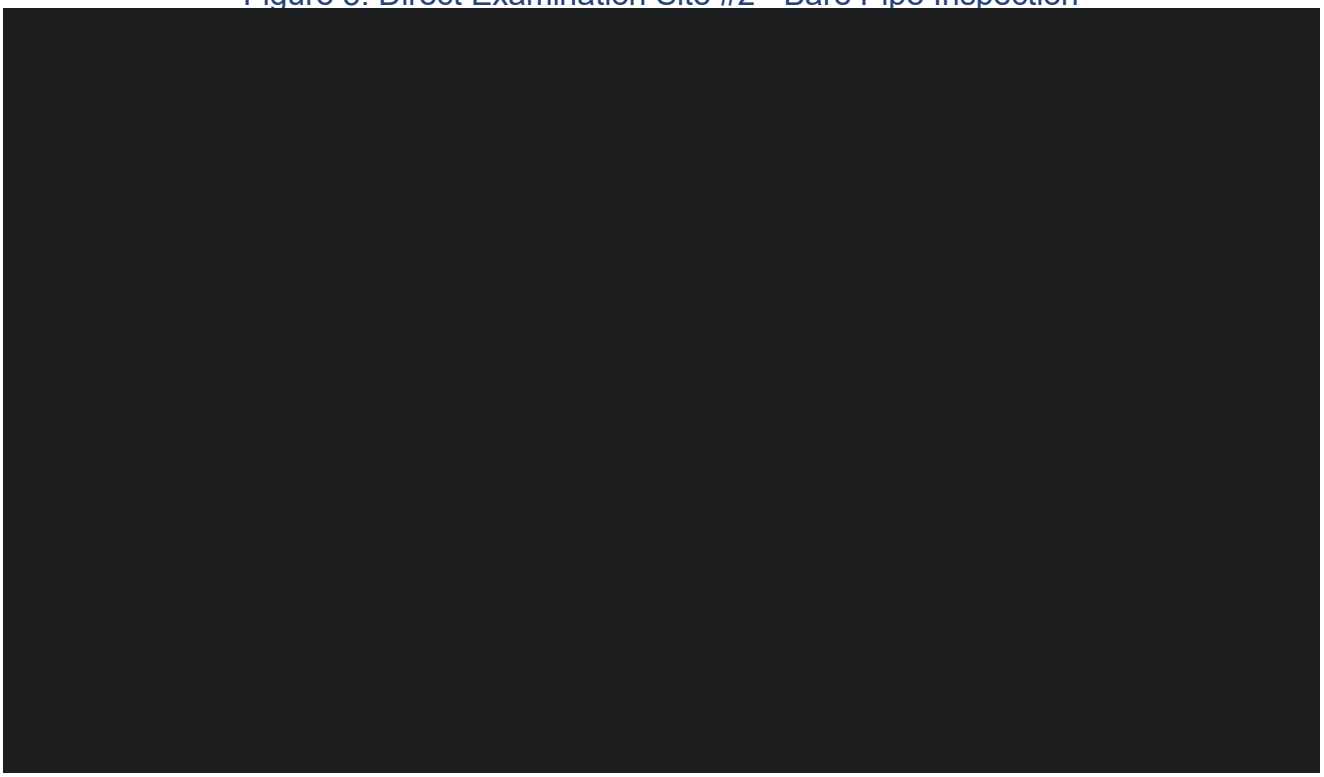


Figure 6: Direct Examination Site #3 – Excavation Location

C. Commissioning and Site Restoration

Commissioning activities include restoration of the site, final inspection, and placement of the pipeline back into service, and site demobilization. Closeout activities include development of final drawings, finalization of a reconciliation package, and updates to company recordkeeping systems to reflect the completed scope of work.

IV. PROJECT COSTS

A. Actual Costs[2]

Actual loaded costs reflect the Labor, Material, and Services costs incurred to execute the Project. The total loaded cost of the Project is $928,850.

Table 6: Actual Direct Costs[3]

Direct Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Company Labor	0	69,346	69,346
Contract Costs	0	631,150	631,150
Material	0	805	805
Other Direct Charges	0	149,462	149,462
Total Direct Costs	0	850,763	850,763

Table 7: Actual Indirect Costs[4]

Indirect Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Overheads	0	78,087	78,087
AFUDC	0	0	0
Property Taxes	0	0	0
Total Indirect Costs	0	78,087	78,087

Table 8: Total Costs[5]

Total Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Total Loaded Costs	0	928,850	928,850

[2] These are the total project costs incurred between January 1, 2019, and December 31, 2023. Only direct costs and vacation and sick contribute to the TIMPBA revenue requirement that is presented in the Prepared Direct Testimony of Rae Marie Yu (Chapter III).
[3] Values may not add to total due to rounding.
[4] Ibid.
[5] Ibid.

V. CONCLUSION

SoCalGas enhanced the integrity of its natural gas system by executing the Supply Line 41-19 TIMP Project. Through this Project, SoCalGas implemented and managed the requirements set forth in 49 C.F.R. § 192, Subpart O including the continual identification of threats to its pipelines, determination of the risk posed by these threats, scheduling and tracking assessments to address threats, conducting appropriate assessment in a prescribed timeline, collecting information about the condition of the pipelines, taking actions to minimize applicable threats and integrity concerns to reduce the risk of a pipeline failure, and reporting the findings of the assessment. The total loaded cost of the Project is $928,850.

End of Supply Line 41-19 TIMP Project Final Workpaper

I. SUPPLY LINE 41-6001-2 TIMP PROJECT

A. Background and Summary

Supply Line 41-6001-2 was assessed from [redacted] in the City of El Centro. This Workpaper describes the activities associated with a Transmission Integrity Management Program (TIMP) [redacted] that includes Indirect Inspection using aboveground surveys, Direct Examinations made to six sites, and Post-Assessment analysis. The specific attributes of this Project are detailed below in General Project Information. The total loaded cost of the Project is $3,394,834.

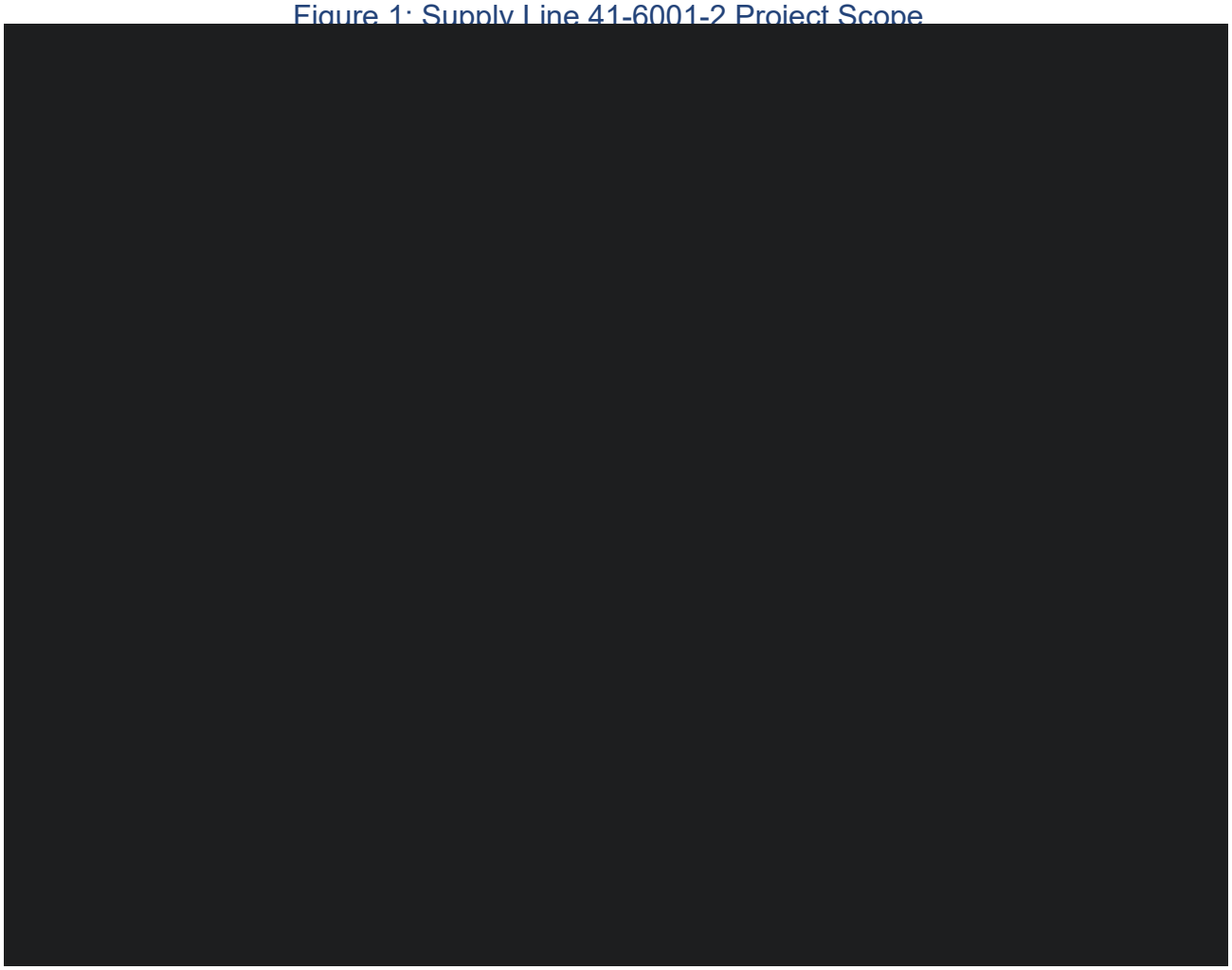
Table 1: General Project Information

Integrity Assessment Details			
Pipeline	41-6001-2		
Assessment Type	[redacted]		
Location	El Centro		
Class	1, 2, 3		
HCA Length	3.13 miles		
Project Length	5.76 miles		
Vintage	[redacted]		
Pipe Diameter			
MAOP			
SMYS			
HCA Threats			
Indirect Inspection Completion Date			
Direct Examination Completion Date			
Construction Start Date			
Construction Completion Date			
Assessment Due Date			
Project Costs ($)	**Capital**	**O&M**	**Total**
Loaded Project Costs	1,893,513	1,501,322	3,394,834

[redacted]

B. Maps and Images

Figure 1: Supply Line 41-6001-2 Project Scope



II. ENGINEERING, DESIGN, AND CONSTRUCTABILITY

As described in the Prepared Direct Testimony of Jordan A. Zeoli, Fidel Galvan, and Travis Sera (Chapter II), TIMP projects follow a four-step assessment process: Pre-Assessment, Indirect Inspection, Direct Examination, and Post-Assessment. This Workpaper outlines construction activities during the Assessment process that occurred during the Indirect Inspection(s), Direct Examination(s) and Post-Assessment.

Prior to initiating execution of the assessment, SoCalGas reviewed available information and performed a detailed system analysis to verify the scope of the Project.

A. Indirect Inspection

SoCalGas initiated the planning process for the Supply Line 41-6001-2 by performing a Pre-Assessment engineering analysis to determine existing conditions and any impacts to the Project, confirm the appropriate assessment methods, and select the Indirect Inspection tools.

Key factors that influenced the planning and execution of the Project Indirect Inspection(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained:
    a. Permits, traffic control drawings and plans from the cities of Brawley, Imperial, and El Centro.
    b. An Encroachment Permit from Caltrans.
5. Environmental: No significant environmental constraints were identified.

Table 2: Indirect Inspection Segments

Line	Length	Threat Type	Indirect Inspection Tool Type
41-6001-2	3.13 miles	[redacted]	[redacted]
41-6001-2	3.13 miles		
41-6001-2	3.13 miles		
41-6001-2	1.58 miles		
41-6001-2	1.58 miles		
41-6001-2	1.58 miles		
41-6001-2	1.58 miles		

B. Direct Examination

Following the completion of the Indirect Inspection, six Direct Examination sites were identified for validation. For each examination location, SoCalGas conducted site evaluations, communicated with stakeholders, performed potholing of the area to identify the presence of underground utilities and substructures, and prepared a project schedule that met criteria followed for examination.

Key factors that influenced the planning and execution of the Project Direct Examination(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: The Project Team distributed notices to members of the surrounding community advising that construction operations would take place in the area.
4. Permit Restrictions: The Project Team obtained:
    a. Permits, traffic control drawings and plans from the cities of Brawley, Imperial and El Centro.
    b. An Encroachment Permit from Caltrans.
5. Environmental: No significant environmental constraints were identified.
6. SRC/IRC: There were Immediate Repair Conditions (IRC) originating from Site #1, Site #4 and Site #5, all were remediated using band repair.

Table 3: Final Direct Examination Project Details

Direct Examination Details	
Site	1
Examination ID	[redacted]
Pipeline	41-6001-2
Mitigation/Remediation Type	Soft Pad and Band
Within HCA	Yes
SRC/IRC	Yes
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	15 feet
Cost Category	Capital

Direct Examination Details	
Site	2
Examination ID	[redacted]
Pipeline	41-6001-2
Mitigation/Remediation Type	None
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	15 feet
Cost Category	O&M

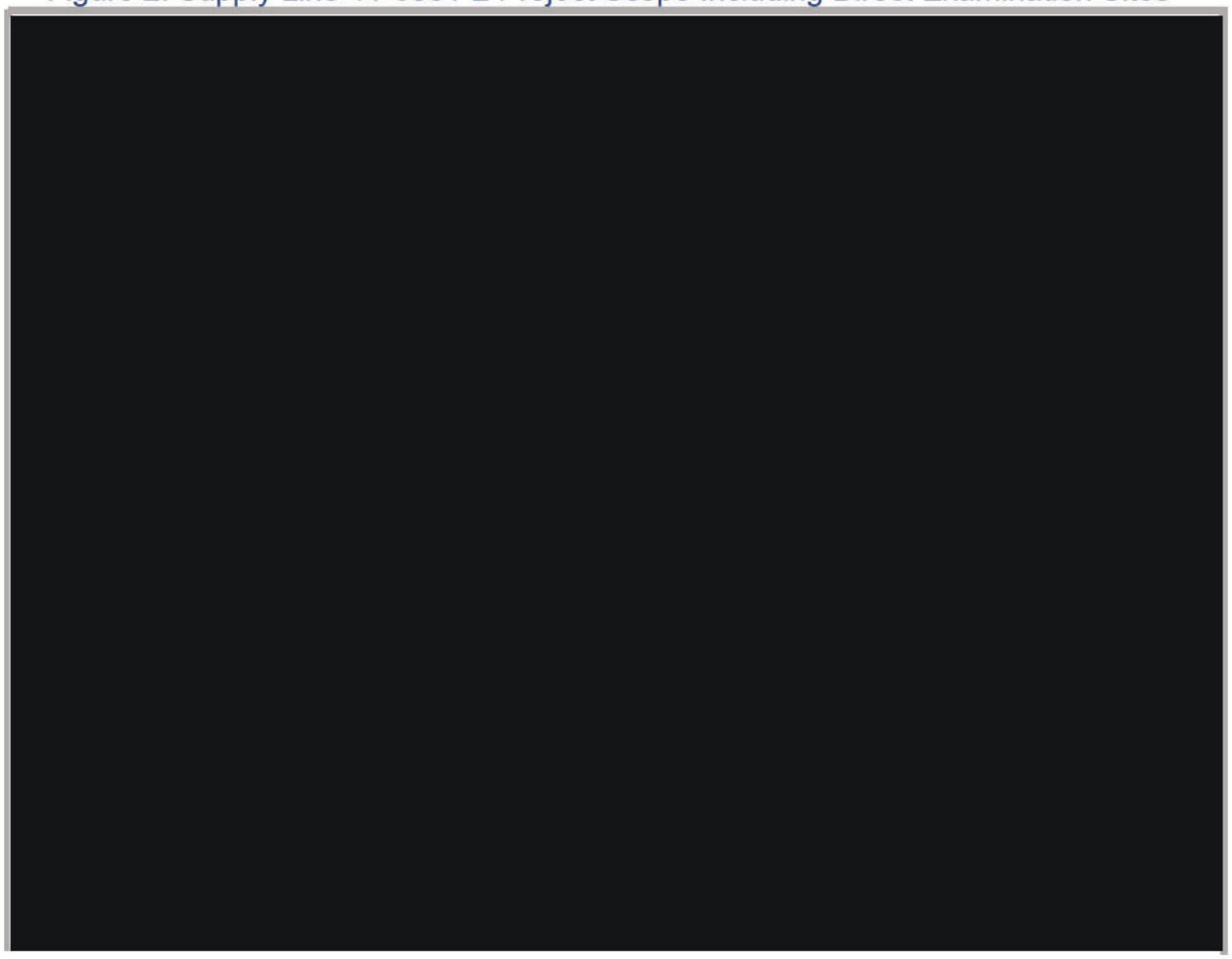
Direct Examination Details	
Site	3
Examination ID	[redacted]
Pipeline	41-6001-2
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	15 feet
Cost Category	O&M

Direct Examination Details	
Site	4
Examination ID	[redacted]
Pipeline	41-6001-2
Mitigation/Remediation Type	Soft Pad and Band
Within HCA	Yes
SRC/IRC	Yes
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	15.08 feet
Cost Category	Capital

Direct Examination Details	
Site	5
Examination ID	[redacted]
Pipeline	41-6001-2
Mitigation/Remediation Type	Soft Pad and Band
Within HCA	Yes
SRC/IRC	Yes
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	58.12 feet
Cost Category	Capital

Direct Examination Details	
Site	6
Examination ID	[redacted]
Pipeline	41-6001-2
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	15 feet
Cost Category	O&M

Figure 2: Supply Line 41-6001-2 Project Scope Including Direct Examination Sites



C. Post-Assessment

The Post-Assessment step involves evaluating and documenting the effectiveness of the inspection tools, documenting the result of the assessment and the length of pipeline assessed, communicating assessment results to the stakeholders, identifying appropriate follow up Preventive and Mitigative measures, if necessary, and establishing the reassessment interval for the pipeline.

Final Summary

The [redacted] of 3.13 miles and [redacted] of 1.58 miles on Supply Line 41-6001-2 was completed on [redacted]. The validation analysis of the Direct Examinations following the Inspection resulted in no additional examinations.

Table 4: Project Summary

[redacted]	Total Length	3.13 miles
[redacted]	Total Length	1.58 miles
Direct Examination Completion Date		[redacted]

III. CONSTRUCTION

A. Construction Contractor Selection

Following completion of the engineering, design, and planning activities described above, SoCalGas selected the Construction Contractor that best met the selection criteria for this Project.

B. Construction Schedule

Table 5: Construction Timeline – Direct Examination

Construction Start Date	[redacted]	
Construction Completion Date		

Figure 3: Direct Examination Site #1 – Band Repair

Figure 4: Direct Examination Site #2 – Excavation Location

Figure 5: Direct Examination Site #4 – Excavation Location

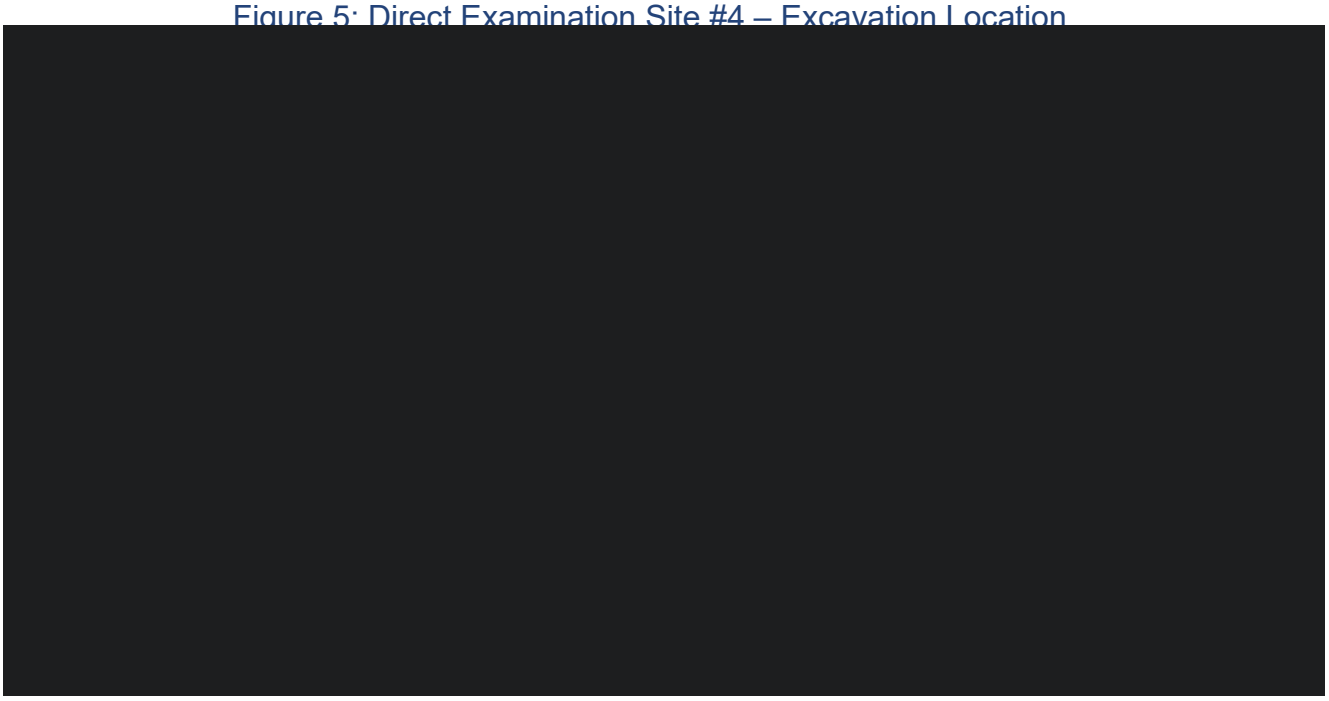
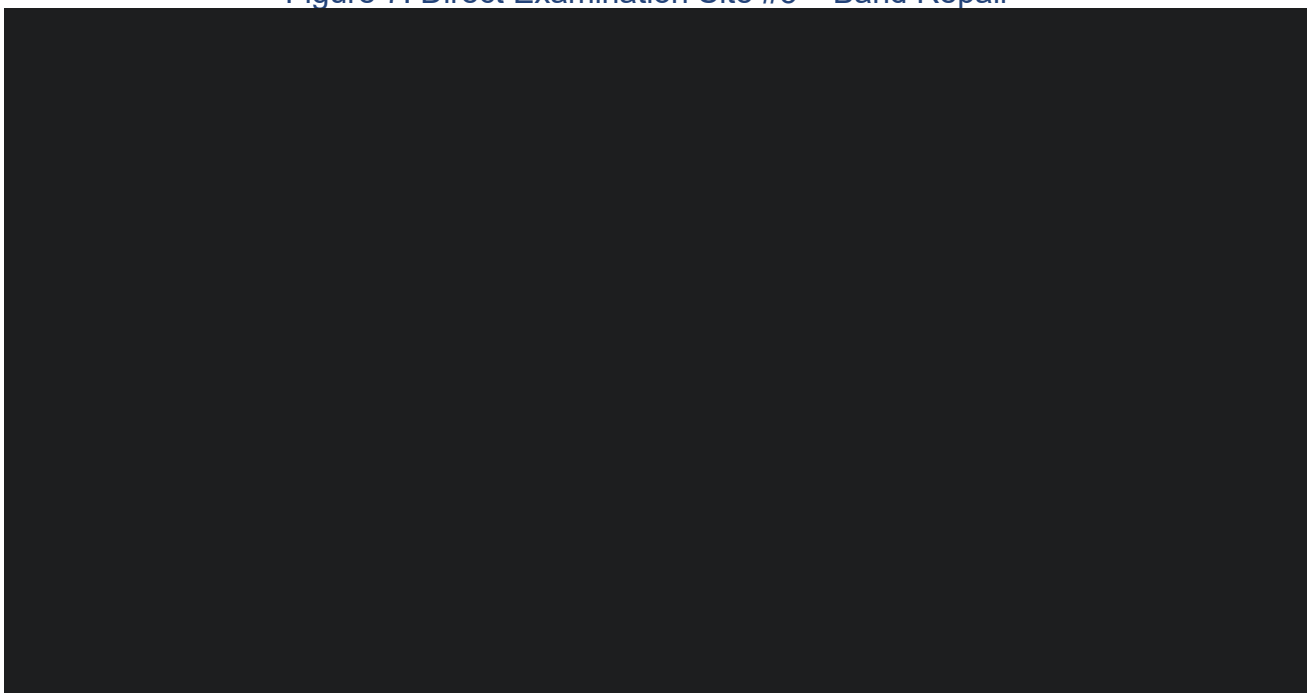


Figure 6: Direct Examination Site #4 – Coating Inspection

Figure 7: Direct Examination Site #5 – Band Repair



C. Commissioning and Site Restoration

Commissioning activities include restoration of the site, final inspection, and placement of the pipeline back into service, transportation, and disposal of hydrotest water and hazardous material, and site demobilization. Closeout activities include development of final drawings, finalization of a reconciliation package, and updates to company recordkeeping systems to reflect the completed scope of work.

IV. PROJECT COSTS

A. Actual Costs[3]

Actual loaded costs reflect the Labor, Material, and Services costs incurred to execute the Project. The total loaded cost of the Project is $3,394,834.

Table 6: Actual Direct Costs[4]

Direct Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Company Labor	64,836	146,483	211,319
Contract Costs	1,174,032	405,722	1,579,754
Material	495	129,008	129,503
Other Direct Charges	132,720	650,967	783,687
Total Direct Costs	1,372,083	1,332,180	2,704,263

Table 7: Actual Indirect Costs[5]

Indirect Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Overheads	517,419	169,142	686,561
AFUDC	3,118	0	3,118
Property Taxes	892	0	892
Total Indirect Costs	521,429	169,142	690,571

Table 8: Total Costs[6]

Total Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Total Loaded Costs	1,893,513	1,501,322	3,394,834

[3] These are the total project costs incurred between January 1, 2019, and December 31, 2023. Only direct costs and vacation and sick contribute to the TIMPBA revenue requirement that is presented in the Prepared Direct Testimony of Rae Marie Yu (Chapter III).
[4] Values may not add to total due to rounding.
[5] Ibid.
[6] Ibid.

V. CONCLUSION

SoCalGas enhanced the integrity of its natural gas system by executing the Supply Line 41-6001-2 TIMP Project. Through this Project, SoCalGas implemented and managed the requirements set forth in 49 C.F.R. § 192, Subpart O including the continual identification of threats to its pipelines, determination of the risk posed by these threats, scheduling and tracking assessments to address threats, conducting appropriate assessment in a prescribed timeline, collecting information about the condition of the pipelines, taking actions to minimize applicable threats and integrity concerns to reduce the risk of a pipeline failure, and reporting the findings of the assessment. The total loaded cost of the Project is $3,394,834.

End of Supply Line 41-6001-2 TIMP Project Final Workpaper

I. SUPPLY LINE 44-307 TIMP PROJECT

A. Background and Summary

Supply Line 44-307 was assessed from [redacted] in the cities of Atascadero, Templeton, and Morro Bay. This Workpaper describes the activities associated with three Transmission Integrity Management Program (TIMP) assessment methods: [redacted] and Inspection using In-Line Inspection (ILI) to assess identified threats on Supply Line 44-307. These activities include Indirect Inspection using aboveground surveys for the Direct Assessment methods, pipeline retrofits for ILI, Direct Examinations made to sixteen sites for validation, and Post-Assessment analysis. The specific attributes of this Project are detailed below in General Project Information. The total loaded cost of the Project is $10,276,999.

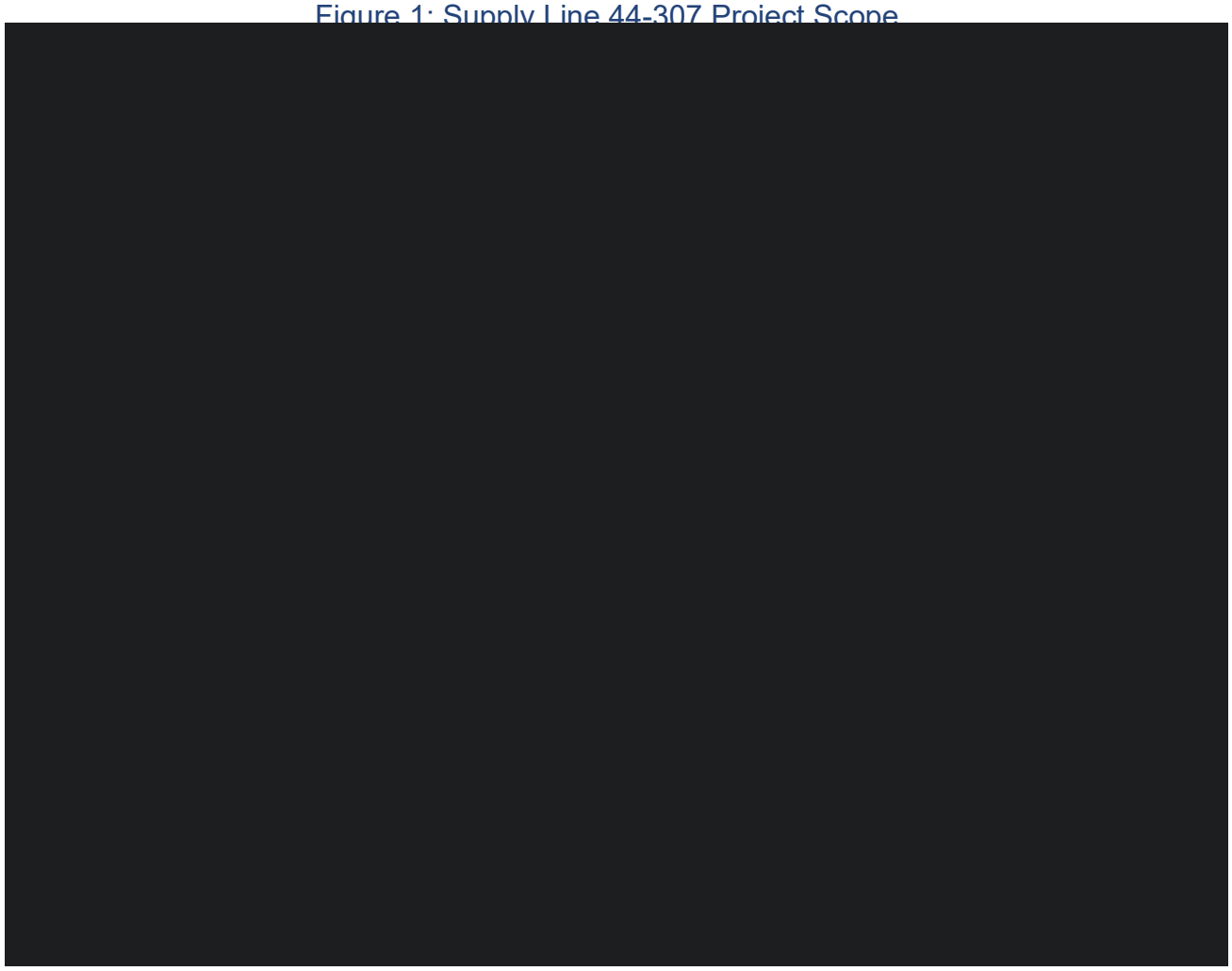
Table 1: General Project Information

Integrity Assessment Details			
General Project Information			
Pipeline	44-307		
Location	Atascadero, Paso Robles, Morro Bay		
Class	2, 3		
HCA Length	5.92 miles		
Vintage	[redacted]		
Pipe Diameter			
MAOP			
SMYS			
HCA Threats			
[redacted] **Details**			
Assessment Type			
[redacted] Project Length	11.18 miles		
[redacted] Project Length	5.92 miles		
Indirect Inspection Completion Date			
Direct Examination Completion Date			
Construction Start Date			
Construction Completion Date			
Assessment Due Date			
ILI Assessment Details			
Inspection Type			
ILI Length	1.27 miles		
Construction Start Date			
Construction Completion Date			
Direct Examination Construction Start Date			
Direct Examination Construction Completion Date			
Final Tool Run Date			
Inspection Due Date			
Project Costs ($)	**Capital**	**O&M**	**Total**
Loaded Project Costs	3,922,030	6,354,969	10,276,999

[redacted]

B. Maps and Images

Figure 1: Supply Line 44-307 Project Scope



II. ENGINEERING, DESIGN, AND CONSTRUCTABILITY

As described in the Prepared Direct Testimony of Jordan A. Zeoli, Fidel Galvan, and Travis Sera (Chapter II), TIMP projects follow a four-step assessment process: Pre-Assessment, Inspection, Direct Examination, and Post-Assessment. This Workpaper outlines construction activities during the Assessment process that occurred during the Indirect Inspection(s), Direct Examination(s) and Post-Assessment.

Prior to initiating execution of the assessment, SoCalGas reviewed available information and performed a detailed system analysis to verify the scope of the Project.

A. Inspection

SoCalGas initiated the planning process for the Supply Line 44-307 by performing a Pre-Assessment engineering analysis to determine existing conditions and any impacts to the Project, confirm the appropriate assessment methods, and select the inspection tools.

Indirect Inspections ([redacted])

Key factors that influenced the planning and execution of the Project Indirect Inspection(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained traffic control drawings and plans from the cities of Atascadero and Paso Robles.
5. Environmental: No significant environmental constraints were identified.

Table 2: Indirect Inspection Segments

Line	Length	Threat Type	Indirect Inspection Tool Type
44-307	5.92 miles		
44-307	5.92 miles		
44-307	5.92 miles		
44-307	5.92 miles		
44-307	5.92 miles		
44-307	5.92 miles		
44-307	5.92 miles		

In-line Inspection (ILI)

Key factors that influenced the planning and execution of the Project Inspection(s) are as follows:

1. System Analysis, Engineering, Design, and Constructability: The Project Team completed a review of the pipeline system to evaluate project feasibility and established a current interruption plan.
   a. A segment of pipeline could not be inspected using traditional [redacted] methods, and [redacted] was required. Previous assessments for Supply Line 44-307 were completed using other methods, a first-time ILI, and the required retrofits to facilitate the Inspection were performed.
   b. The Project Team installed two [redacted] in preparation for the [redacted] A validation spool piece was fabricated and utilized to validate the [redacted] data.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permits Restrictions: The Project Team obtained permits, traffic control drawings and plans from the City of Atascadero.
5. Land Use: The Project Team obtained:

a. Temporary Right of Entry (TRE) from a local property owner in the City of Atascadero for the installation of [redacted]

b. TRE from a local property owner in the City of Morro Bay.

c. TRE from a local property owner to use as a laydown yard in the City of Atascadero.

6. Inspection Tools and Technology: The Project Team utilized a [redacted] to inspect casings on the pipeline.
   a. The first [redacted] inspected two (2) cased pipeline segment in the City of Atascadero.
   b. The second [redacted] inspected one (1) cased pipeline segment in the City of Morro Bay.
7. Environmental: No significant environmental constraints were identified.

Table 3: Inspection Project Scope – [redacted]

Line	Length	Threat Type	Inspection Technology	Tool Method of Travel	Retrofits
44-307	1.27 miles	[redacted]	[redacted]	[redacted]	[redacted]

B. Direct Examination

Following the completion of the Inspection step, seven Direct Examination sites were identified for [redacted] validation, seven for [redacted] validation and two for ILI validation. For each examination location, SoCalGas conducted site evaluations, communicated with stakeholders, performed potholing of the area to identify the presence of underground utilities and substructures, and prepared a project schedule that met criteria followed for examination.

Key factors that influenced the planning and execution of the Project Direct Examination(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility and established a current interruption plan.
2. Customer Impacts: No customer impacts identified.
3. Community Impacts: No community impacts identified.
4. Permit Restrictions: The Project Team obtained permits, traffic control drawings and plans from the cities of Atascadero and Paso Robles.
5. Land Use:
    a. TRE at Site #1 obtained from a local property owner for use as a laydown yard and use of its 50-foot easement for excavation.
    b. TRE at Site #5 obtained from a local property owner for use as a laydown yard and use of its 50-foot easement for excavation.
    c. TRE at Site #7 obtained from a local property owner that for use as a laydown yard and use of its 50-foot easement for excavation.
    d. TRE at Site #8 obtained from a local property owner for use as a laydown yard and use of its 50-foot easement for excavation.

e. TRE at Site #10 obtained from a local property owner that for use as a laydown yard and use of its 50-foot easement for excavation.

f. TRE at Site #11 obtained from a local property owner for use as a laydown yard and use of its 50-foot easement for excavation.

g. TRE obtained from a local property owner to use as a laydown yard in the City of Paso Robles

6. Environmental: Additional considerations were taken for projects in San Luis Obispo Air Pollution Control District for the presence of asbestos during coating removal.

7. SRC/IRC: There were four Immediate Repair Conditions (IRC). Rapid communications and procedures were followed for temporary pressure reduction.

   a. There were two IRCs at Site #2 that originated from Direct Examination. Soft pad, and a band was utilized to remediate the condition on the pipeline.

   b. There was an IRC at Site #15 that originated from [redacted] Direct Examination. Soft pad and cylindrical replacement were performed to remove the condition.

   c. There was an IRC at Site #16 that originated from [redacted] Direct Examination. Soft pad and cylindrical replacement were performed to remove the condition.

Table 4: Final Direct Examination Project Details

Direct Examination Details	
Site	1
Examination ID	[redacted]
Pipeline	44-307
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	19.33 feet
Cost Category	O&M

Direct Examination Details	
Site	2
Examination ID	[redacted]
Pipeline	44-307
Mitigation/Remediation Type	Soft Pad and Band
Within HCA	Yes
SRC/IRC	Yes
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	20 feet
Cost Category	Capital

Direct Examination Details	
Site	3
Examination ID	[redacted]
Pipeline	44-307
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	41 feet
Cost Category	O&M

Direct Examination Details	
Site	4
Examination ID	[redacted]
Pipeline	44-307
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	18 feet
Cost Category	O&M

Direct Examination Details	
Site	5
Examination ID	[redacted]
Pipeline	44-307
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	20 feet
Cost Category	O&M

Direct Examination Details	
Site	6
Examination ID	[redacted]
Pipeline	44-307
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	20 feet
Cost Category	O&M

Direct Examination Details	
Site	7
Examination ID	[redacted]
Pipeline	44-307
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	40.08 feet
Cost Category	O&M

Direct Examination Details	
Site	8
Examination ID	[redacted]
Pipeline	44-307
Mitigation/Remediation Type	Soft Pad
Within HCA	No
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	40 feet
Cost Category	O&M

Direct Examination Details	
Site	9
Examination ID	[redacted]
Pipeline	44-307
Mitigation/Remediation Type	None
Within HCA	No
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	40 feet
Cost Category	O&M

Direct Examination Details	
Site	10
Examination ID	[redacted]
Pipeline	44-307
Mitigation/Remediation Type	Soft Pad
Within HCA	No
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	40 feet
Cost Category	O&M

Direct Examination Details	
Site	11
Examination ID	[redacted]
Pipeline	44-307
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	40 feet
Cost Category	O&M

Direct Examination Details	
Site	12
Examination ID	[redacted]
Pipeline	44-307
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	27.5 feet
Cost Category	O&M

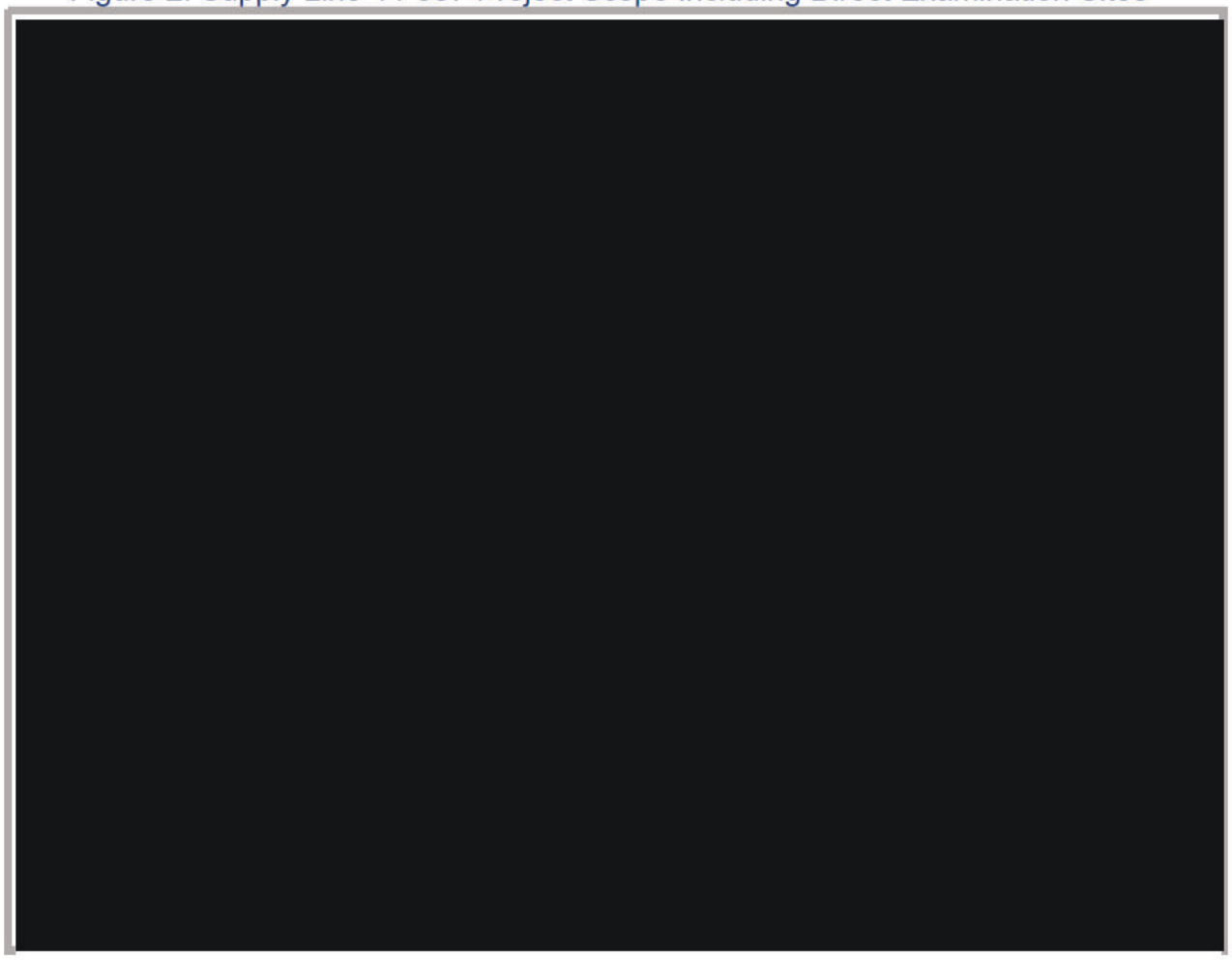
Direct Examination Details	
Site	13
Examination ID	[redacted]
Pipeline	44-307
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	40 feet
Cost Category	O&M

Direct Examination Details	
Site	14
Examination ID	[redacted]
Pipeline	44-307
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	20.83 feet
Cost Category	O&M

Direct Examination Details	
Site	15
Examination ID	[redacted]
Pipeline	44-307
Mitigation/Remediation Type	Soft Pad and Cylindrical Replacement
Within HCA	Yes
SRC/IRC	Yes
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	9 feet
Inspection Length	15.6 feet
Cost Category	Capital

Direct Examination Details	
Site	16
Examination ID	[redacted]
Pipeline	44-307
Mitigation/Remediation Type	Soft Pad and Cylindrical Replacement
Within HCA	Yes
SRC/IRC	Yes
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	9.3 feet
Inspection Length	15 feet
Cost Category	Capital

Figure 2: Supply Line 44-307 Project Scope Including Direct Examination Sites



C. Post-Assessment

The Post-Assessment step involves evaluating and documenting the effectiveness of the inspection tools, documenting the result of the assessment and the length of pipeline assessed, communicating assessment results to the stakeholders, identifying appropriate follow up Preventive and Mitigative measures, if necessary, and establishing the reassessment interval for the pipeline.

Final Summary

The [redacted] of 5.92 miles and [redacted] of 5.92 miles on Supply Line 44-307 was completed on [redacted]. The [redacted] of 1.27 miles of Supply Line 44-307 was completed on [redacted]. The validation analysis of the Direct Examinations following the inspection resulted in no additional examinations.

Table 5: Project Summary

[redacted] Total Length	5.92 miles
[redacted] Total Length	5.92 miles
[redacted] Total Length	1.27 miles
Direct Examination Completion Date	[redacted]

III. CONSTRUCTION

A. Construction Contractor Selection

Following completion of the engineering, design, and planning activities described above, SoCalGas selected the Construction Contractor that best met the selection criteria for this Project.

B. Construction Schedule

Table 6: Construction Timeline – Inspection

Construction Start Date	[redacted]	
Construction Completion Date		
Direct Examination Construction Start Date		
Direct Examination Construction Completion Date		
Inspection Due Date		

Table 7: Construction Timeline – [redacted] Direct Examination

Construction Start Date	[redacted]	
Construction Completion Date		

Figure 3: Direct Examination Site #3 – Coating Inspection

Figure 4: Direct Examination Site #4 – Direct Examination Location

Figure 5: Direct Examination Site #7 – Coating Inspection

Figure 6: Direct Examination Site #8 – Excavation Location

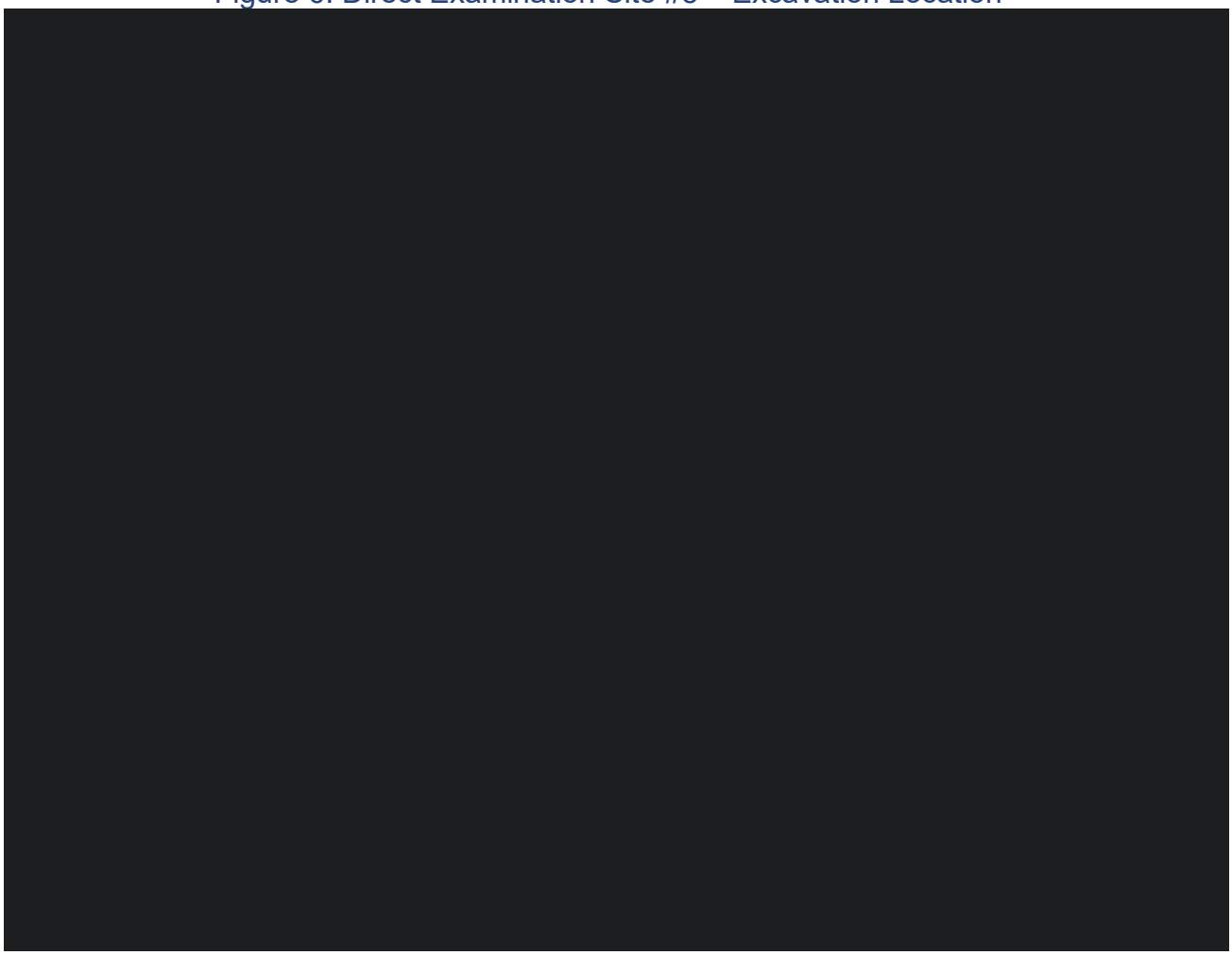


Figure 7: Direct Examination Site #11 – Excavation Location

C. Commissioning and Site Restoration

Commissioning activities include restoration of the site, final inspection, and placement of the pipeline back into service, transportation, and disposal of hydrotest water and hazardous material, and site demobilization. Closeout activities include development of final drawings, finalization of a reconciliation package, and updates to company recordkeeping systems to reflect the completed scope of work.

IV. PROJECT COSTS

A. Actual Costs[2]

Actual loaded costs reflect the Labor, Material, and Services costs incurred to execute the Project. The total loaded cost of the Project is $10,276,999.

Table 8: Actual Direct Costs[3]

Direct Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Company Labor	149,633	519,583	669,215
Contract Costs	2,067,406	3,662,655	5,730,061
Material	204,527	5,136	209,662
Other Direct Charges	359,209	1,517,582	1,876,791
Total Direct Costs	2,780,774	5,704,955	8,485,729

Table 9: Actual Indirect Costs[4]

Indirect Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Overheads	1,131,499	650,014	1,781,513
AFUDC	5,803	0	5,803
Property Taxes	3,954	0	3,954
Total Indirect Costs	1,141,256	650,014	1,791,269

Table 10: Total Costs[5]

Total Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Total Loaded Costs	3,922,030	6,354,969	10,276,999

[2] These are the total project costs incurred between January 1, 2019, and December 31, 2023. Only direct costs and vacation and sick contribute to the TIMPBA revenue requirement that is presented in the Prepared Direct Testimony of Rae Marie Yu (Chapter III).
[3] Values may not add to total due to rounding.
[4] Ibid.
[5] Ibid.

V. CONCLUSION

SoCalGas enhanced the integrity of its natural gas system by executing the Supply Line 44-307 TIMP Project. Through this Project, SoCalGas implemented and managed the requirements set forth in 49 C.F.R. § 192, Subpart O including the continual identification of threats to its pipelines, determination of the risk posed by these threats, scheduling and tracking assessments to address threats, conducting appropriate assessment in a prescribed timeline, collecting information about the condition of the pipelines, taking actions to minimize applicable threats and integrity concerns to reduce the risk of a pipeline failure, and reporting the findings of the assessment. The total loaded cost of the Project is $10,276,999.

End of Supply Line 44-307 TIMP Project Final Workpaper

I. SUPPLY LINE 44-800 & SUPPLY LINE 44-800A TIMP PROJECT

A. Background and Summary

Supply Line 44-800 & Supply Line 44-800A were assessed on [redacted] in the City of Santa Clarita. This Workpaper describes the activities associated with [redacted] made at two sites, and Post-Assessment analysis. The specific attributes of this Project are detailed below in General Project Information. The total loaded cost of the Project is $428,496.

Table 1: General Project Information

Integrity Assessment Details			
Assessment Type	[redacted]		
Location	Santa Clarita		
HCA Threats	[redacted]		
Construction Start Date	[redacted]		
Construction Completion Date	[redacted]		
Direct Examination Completion Date	[redacted]		
Project Costs ($)	**Capital**	**O&M**	**Total**
Loaded Project Costs	0	428,496	428,496

Integrity Assessment Details Per Line	
Pipeline	44-800
Class	[redacted]
HCA Length	13 feet
Project Length	13 feet
Vintage	[redacted]
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Assessment Due Date	[redacted]

Integrity Assessment Details Per Line	
Pipeline	44-800A
Class	[redacted]
HCA Length	13 feet
Project Length	13 feet
Vintage	[redacted]
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Assessment Due Date	[redacted]

B. Maps and Images

Figure 1: Supply Line 44-800 & Supply Line 44-800A Project Scope

II. ENGINEERING, DESIGN, AND CONSTRUCTABILITY

As described in the Prepared Direct Testimony of Jordan A. Zeoli, Fidel Galvan, and Travis Sera (Chapter II), Transmission Integrity Management Program (TIMP) projects follow a four-step assessment process: Pre-Assessment, Inspection, Direct Examination, and Post-Assessment. However, TIMP projects assessed using [redacted] use excavations of the covered segment in lieu of Indirect Inspection. This Workpaper outlines construction activities during the Assessment process that occurred during the Direct Examination(s) and Post-Assessment.

Prior to initiating execution of the assessment, SoCalGas reviewed available information and performed a detailed system analysis to verify the scope of the Project.

A. Direct Examination

SoCalGas initiated the planning process for the Supply Line 44-800 & Supply Line 44-800A by performing a Pre-Assessment engineering analysis to determine existing conditions and any impacts to the Project and identify covered segments to be assessed using [redacted] locations. For each examination location, SoCalGas conducted site evaluations, communicated with stakeholders, performed potholing of the area to identify the presence of underground utilities and substructures, and prepared a Project schedule that met criteria followed for examination.

Key factors that influenced the planning and execution of the Project Direct Examination(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained:
    a. Permits, traffic control drawings and plans from the City of Santa Clarita.
    b. An Encroachment Permit from the City of Santa Clarita to perform night work between 8:30pm and 4:30am.
5. Environmental: No significant environmental constraints were identified.

Table 2: Final Direct Examination Project Details

Direct Examination Details	
Site	1
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Cost Category	N/A

Direct Examination Details	
Examination ID	[redacted]
Pipeline	44-800
Mitigation/Remediation Type	None
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Replacement Length	N/A
Inspection Length	1.75 feet

Direct Examination Details	
Site	2
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Cost Category	O&M

Direct Examination Details	
Examination ID	[redacted]
Pipeline	44-800A
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	N/A
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Replacement Length	N/A
Inspection Length	0.5 feet

Figure 2: Supply Line 44-800 & Supply Line 44-800A Project Scope Including Direct Examination Sites

B. Post-Assessment

The Post-Assessment step involves evaluating and documenting the effectiveness of the inspection tools, documenting the result of the assessment and the length of pipeline assessed, communicating assessment results to the stakeholders, identifying appropriate follow up Preventive and Mitigative measures, if necessary, and establishing the reassessment interval for the pipeline.

Final Summary

The [redacted] of 13 feet on Supply Line 44-800 & Supply Line 44-800A was completed on [redacted]. The validation analysis of the Direct Examinations following the Inspection resulted in no additional examinations.

Table 3: Project Summary

[redacted]	Total Length	13 feet
Direct Examination Completion Date		[redacted]

III. CONSTRUCTION

A. Construction Contractor Selection

Following completion of the engineering, design, and planning activities described above, SoCalGas selected the Construction Contractor that best met the selection criteria for this Project.

B. Construction Schedule

Table 4: Construction Timeline – Direct Examination

Construction Start Date	[redacted]	
Construction Completion Date		

Figure 3: Direct Examination Site #1 – Coating Inspection

Figure 4: Direct Examination Site #1 – Excavation of Pipeline

Figure 5: Direct Examination Site #2 – Excavation of Pipeline

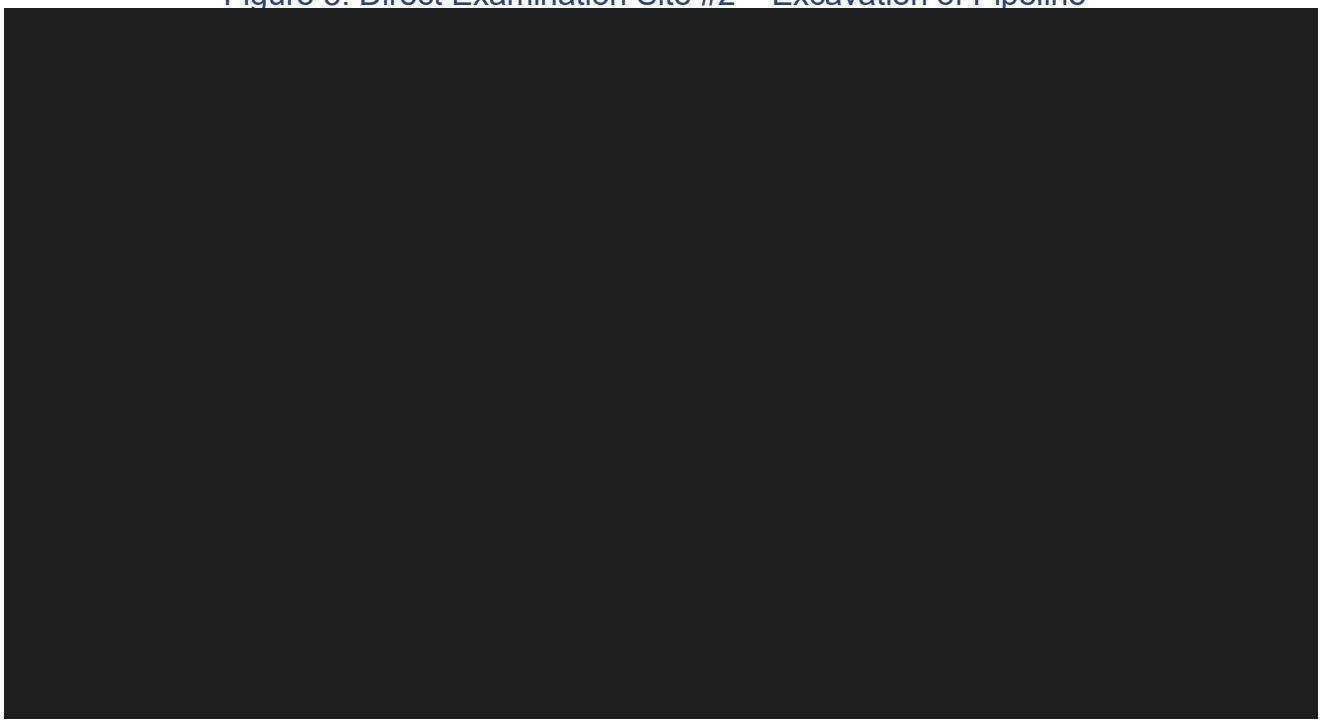


Figure 6: Direct Examination Site #2 - Location

C. Commissioning and Site Restoration

Commissioning activities include restoration of the site, final inspection, and placement of the pipeline back into service, and site demobilization. Closeout activities include development of final drawings, finalization of a reconciliation package, and updates to company recordkeeping systems to reflect the completed scope of work.

IV. PROJECT COSTS

A. Actual Costs[1]

Actual loaded costs reflect the Labor, Material, and Services costs incurred to execute the Project. The total loaded cost of the Project is $428,496.

Table 5: Actual Direct Cost[2]

Direct Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Company Labor	0	74,675	74,675
Contract Costs	0	192,282	192,282
Material	0	17,032	17,032
Other Direct Charges	0	75,783	75,783
Total Direct Costs	0	359,772	359,772

Table 6: Actual Indirect Costs[3]

Indirect Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Overheads	0	68,725	68,725
AFUDC	0	0	0
Property Taxes	0	0	0
Total Indirect Costs	0	68,725	68,725

Table 7: Total Costs[4]

Total Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Total Loaded Costs	0	428,496	428,496

[1] These are the total project costs incurred between January 1, 2019, and December 31, 2023. Only direct costs and vacation and sick contribute to the TIMPBA revenue requirement that is presented in the Prepared Direct Testimony of Rae Marie Yu (Chapter III).
[2] Values may not add to total due to rounding.
[3] Ibid.
[4] Ibid.

V. CONCLUSION

SoCalGas enhanced the integrity of its natural gas system by executing the Supply Line 44-800 & Supply Line 44-800A TIMP Project. Through this Project, SoCalGas implemented and managed the requirements set forth in 49 C.F.R. § 192, Subpart O including the continual identification of threats to its pipelines, determination of the risk posed by these threats, scheduling and tracking assessments to address threats, conducting appropriate assessment in a prescribed timeline, collecting information about the condition of the pipelines, taking actions to minimize applicable threats and integrity concerns to reduce the risk of a pipeline failure, and reporting the findings of the assessment. The total loaded cost of the Project is $428,496.

End of Supply Line 44-800 & Supply Line 44-800A TIMP Project Final Workpaper

I. SUPPLY LINE 44-1008 TIMP PROJECT

A. Background and Summary

Supply Line 44-1008 was assessed from the cities of Avenal and Atascadero. This Workpaper describes the activities associated with a Transmission Integrity Management Program (TIMP) [redacted] that includes Indirect Inspection using aboveground surveys, Direct Examinations made to five sites, and Post-Assessment. The specific attributes of this Project are detailed below in General Project Information. The total loaded cost of the Project is $2,388,911.

Table 1: General Project Information

Integrity Assessment Details			
Pipeline	44-1008		
Assessment Type	[redacted]		
Location	Avenal, Atascadero		
Class	2, 3		
HCA Length	0.23 miles		
Project Length	3.32 miles		
Vintage	[redacted]		
Pipe Diameter			
MAOP			
SMYS			
HCA Threats			
Indirect Inspection Completion Date			
Direct Examination Completion Date			
Construction Start Date			
Construction Completion Date			
Assessment Due Date			
Project Costs ($)	**Capital**	**O&M**	**Total**
Loaded Project Costs	0	2,388,911	2,388,911

[redacted]

B. Maps and Images

Figure 1: Supply Line 44-1008 Project Scope

II. ENGINEERING, DESIGN, AND CONSTRUCTABILITY

As described in the Prepared Direct Testimony of Jordan A. Zeoli, Fidel Galvan, and Travis Sera (Chapter II), TIMP projects follow a four-step assessment process: Pre-Assessment, Indirect Inspection, Direct Examination, and Post-Assessment. This Workpaper outlines construction activities during the Assessment process that occurred during the Indirect Inspection(s), Direct Examination(s) and Post-Assessment.

Prior to initiating execution of the assessment, SoCalGas reviewed available information and performed a detailed system analysis to verify the scope of the Project.

A. Indirect Inspection

SoCalGas initiated the planning process for the Supply Line 44-1008 by performing a Pre-Assessment engineering analysis to determine existing conditions and any impacts to the Project, confirm the appropriate assessment methods, and select the Indirect Inspection tools.

Key factors that influenced the planning and execution of the Project Indirect Inspection(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained:
    a. Permits, traffic control drawings and plans from the City of Atascadero.
    b. An Encroachment Permit from the County of San Luis Obispo.
5. Environmental: No significant environmental constraints were identified.

Table 2: Indirect Inspection Segments

Line	Length	Threat Type	Indirect Inspection Tool Type
44-1008	0.23 miles	[redacted]	[redacted]
44-1008	0.23 miles	[redacted]	[redacted]
44-1008	0.23 miles	[redacted]	[redacted]
44-1008	950 feet	[redacted]	[redacted]
44-1008	950 feet	[redacted]	[redacted]
44-1008	950 feet	[redacted]	[redacted]
44-1008	950 feet	[redacted]	[redacted]

B. Direct Examination

The objectives of the Direct Examination step are to determine which indications from the Indirect Inspection step are most severe and collect data to assess corrosion activity. Following the completion of the Indirect Inspections, five Direct Examination sites were identified for validation.

For each examination location, SoCalGas conducted site evaluations, communicated with stakeholders, performed potholing of the area to identify the presence of underground utilities and substructures, and prepared a project schedule that met criteria followed for examination.

Key factors that influenced the planning and execution of the Project Direct Examination(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No identified customer impacts.
3. Community Impacts: No identified community impacts.
4. Permit Restrictions: The Project Team obtained permits, traffic control drawings and plans from the City of Atascadero.
5. Land Use: Obtained a Temporary Right of Entry (TRE) from the property owner at Site #1 and Site #4 to use as a laydown yard and perform the Direct Examinations.
6. Environmental: The Project required a certified arborist to monitor construction activities at Sites #1 and #2 to ensure compliance with the City of Atascadero's Native Tree Ordinance Guidelines and Native Tree Regulations.
7. SRC/IRC: N/A

Table 3: Final Direct Examination Project Details

Direct Examination Details	
Site	1
Examination ID	[redacted]
Pipeline	44-1008
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	16 feet
Cost Category	O&M

Direct Examination Details	
Site	2
Examination ID	[redacted]
Pipeline	44-1008
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	16 feet
Cost Category	O&M

Direct Examination Details	
Site	3
Examination ID	[redacted]
Pipeline	44-1008
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	16 feet
Cost Category	O&M

Direct Examination Details	
Site	4
Examination ID	[redacted]
Pipeline	44-1008
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	16 feet
Cost Category	O&M

Direct Examination Details	
Site	5
Examination ID	[redacted]
Pipeline	44-1008
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	[redacted]
SMYS	[redacted]
Construction Start Date	[redacted]
Construction Completion Date	[redacted]
Replacement Length	N/A
Inspection Length	15.5 feet
Cost Category	O&M

Figure 2: Supply Line 44-1008 Project Scope Including Direct Examination Sites

C. Post-Assessment

The Post-Assessment step involves evaluating and documenting the effectiveness of the inspection tools, documenting the result of the assessment and the length of pipeline assessed, communicating assessment results to the stakeholders, identifying appropriate follow up Preventive and Mitigative measures, if necessary, and establishing the reassessment interval for the pipeline.

Final Summary

The [redacted] of 0.23 miles and the [redacted] of 0.23 miles on Supply Line 44-1008 was completed on [redacted]. The validation analysis of the Direct Examinations following the Inspection resulted in no additional examinations.

Table 4: Project Summary

[redacted] Total Length	0.23 miles
[redacted] Total Length	0.23 miles
Direct Examination Completion Date	[redacted]

III. CONSTRUCTION

A. Construction Contractor Selection

Following completion of the engineering, design, and planning activities described above, SoCalGas selected the Construction Contractor that best met the selection criteria for this Project.

B. Construction Schedule

Table 5: Construction Timeline – Direct Examination

Construction Start Date	[redacted]	
Construction Completion Date		

Figure 3: Direct Examination Site #1 – Coating Inspection

Figure 4: Direct Examination Site #2 – Direct Examination Location

Figure 5: Direct Examination Site #3 – Direct Examination Location

Figure 6: Direct Examination Site #5 – Bare Pipeline

C. Commissioning and Site Restoration

Commissioning activities include restoration of the site, final inspection, and placement of the pipeline back into service, and site demobilization. Closeout activities include development of final drawings, finalization of a reconciliation package, and updates to company recordkeeping systems to reflect the completed scope of work.

IV. PROJECT COSTS

A. Actual Costs[4]

Actual loaded costs reflect the Labor, Material, and Services costs incurred to execute the Project. The total loaded cost of the Project is $2,388,911.

Table 6: Actual Direct Costs[5]

Direct Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Company Labor	0	164,855	164,876
Contract Costs	0	1,416,434	1,416,434
Material	0	24,333	24,333
Other Direct Charges	0	548,820	548,805
Total Direct Costs	0	2,154,441	2,154,448

Table 7: Actual Indirect Costs[6]

Indirect Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Overheads	0	234,434	234,427
AFUDC	0	29	29
Property Taxes	0	7	7
Total Indirect Costs	0	234,469	234,462

Table 8: Total Costs[7]

Total Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Total Loaded Costs	0	2,388,911	2,388,911

[4] These are the total project costs incurred between January 1, 2019, and December 31, 2023. Only direct costs and vacation and sick contribute to the TIMPBA revenue requirement that is presented in the Prepared Direct Testimony of Rae Marie Yu (Chapter III).
[5] Values may not add to total due to rounding.
[6] Ibid.
[7] Ibid.

V. CONCLUSION

SoCalGas enhanced the integrity of its natural gas system by executing the Supply Line 44-1008 TIMP Project. Through this Project, SoCalGas implemented and managed the requirements set forth in 49 C.F.R. § 192, Subpart O including the continual identification of threats to its pipelines, determination of the risk posed by these threats, scheduling and tracking assessments to address threats, conducting appropriate assessment in a prescribed timeline, collecting information about the condition of the pipelines, taking actions to minimize applicable threats and integrity concerns to reduce the risk of a pipeline failure, and reporting the findings of the assessment. The total loaded cost of the Project is $2,388,911.

End of Supply Line 44-1008 TIMP Project Final Workpaper

I. SUPPLY LINE 45-163 TIMP PROJECT

A. Background and Summary

Supply Line 45-163 was assessed from [redacted] in the City of Newhall to [redacted] in the City of Stevenson Ranch. This Workpaper describes the activities associated with a Transmission Integrity Management Program (TIMP) [redacted] that includes Indirect Inspection using aboveground surveys, Direct Examinations made to two sites, and Post-Assessment analysis. The specific attributes of this Project are detailed below in General Project Information. The total loaded cost of the Project is $1,782,252.

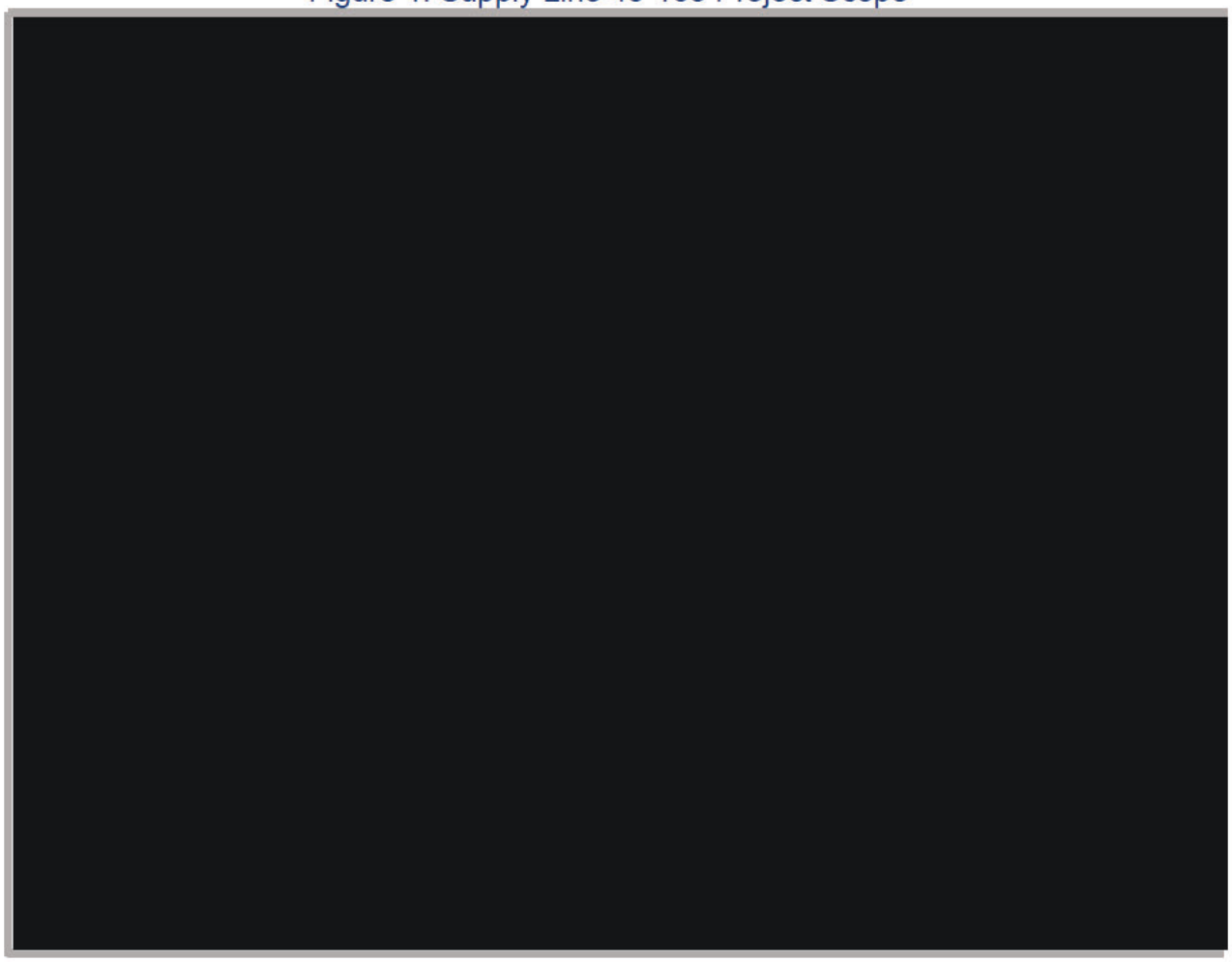
Table 1: General Project Information

Integrity Assessment Details			
Pipeline	45-163		
Assessment Type	[redacted]		
Location	Newhall, Stevenson Ranch		
Class	[redacted]		
HCA Length	1.84 miles		
Project Length	1.96 miles		
Vintage	[redacted]		
Pipe Diameter	[redacted]		
MAOP	[redacted]		
SMYS	[redacted]		
HCA Threats	[redacted]		
Indirect Inspection Completion Date	[redacted]		
Direct Examination Completion Date	[redacted]		
Construction Start Date	[redacted]		
Construction Completion Date	[redacted]		
Assessment Due Date	[redacted]		
Project Costs ($)	**Capital**	**O&M**	**Total**
Loaded Project Costs	1,246,800	535,452	1,782,252

[redacted]

B. Maps and Images

Figure 1: Supply Line 45-163 Project Scope



II. ENGINEERING, DESIGN, AND CONSTRUCTABILITY

As described in the Prepared Direct Testimony of Jordan A. Zeoli, Fidel Galvan, and Travis Sera (Chapter II), TIMP projects follow a four-step assessment process: Pre-Assessment, Indirect Inspection, Direct Examination, and Post-Assessment. This Workpaper outlines construction activities during the Assessment process that occurred during the Indirect Inspection(s), Direct Examination(s) and Post-Assessment.

Prior to initiating execution of the assessment, SoCalGas reviewed available information and performed a detailed system analysis to verify the scope of the Project.

A. Indirect Inspection

SoCalGas initiated the planning process for the Supply Line 45-163 by performing a Pre-Assessment engineering analysis to determine existing conditions and any impacts to the Project, confirm the appropriate assessment methods, and select the Indirect Inspection tools.

Key factors that influenced the planning and execution of the Project Indirect Inspection(s) are as follows:

1. System Analysis: The Project Team completed a review of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No customer impacts were identified.
3. Community Impacts: No community impacts were identified.
4. Permit Restrictions: The Project Team obtained permits, traffic control drawings and plans from the City of Santa Clarita and County of Los Angeles.
5. Environmental: No significant environmental constraints were identified.

Table 2: Indirect Inspection Segments

Line	Length	Threat Type	Indirect Inspection Tool Type
45-163	1.84 miles	[redacted]	[redacted]
45-163	1.84 miles		
45-163	1.84 miles		

B. Direct Examination

Following the completion of the Indirect Inspection, two Direct Examination sites were identified for validation. For each examination location, SoCalGas conducted site evaluations, communicated with stakeholders, performed potholing of the area to identify the presence of underground utilities and substructures, and prepared a project schedule that met criteria followed for examination.

Key factors that influenced the planning and execution of the Project Direct Examination(s) are as follows:

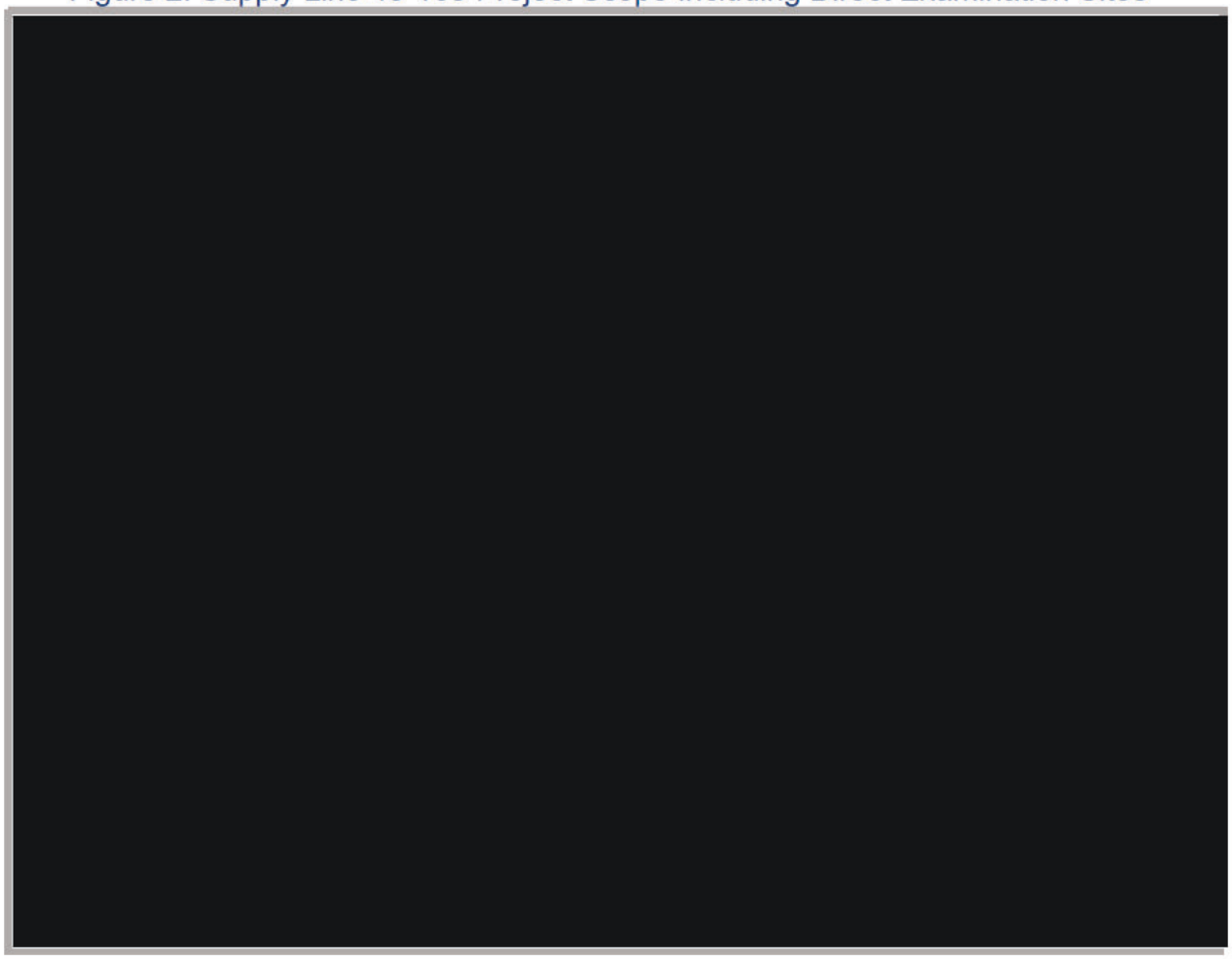
1. System Analysis: The Project Team completed an analysis of the pipeline system to evaluate project feasibility, and established a current interruption plan.
2. Customer Impacts: No customer impacts were identified.
3. Community Impacts: No community impacts were identified.
4. Permit Restrictions: The Project Team obtained flood and road permits, traffic control drawings and plans from the County of Los Angeles.
5. Environmental: No significant environmental constraints were identified.
6. SRC/IRC: N/A
7. Other Identified Risks: Three dents were found within two feet of each other requiring replacement for Site #2. In order to find a suitable tie-in location, the excavation and bare pipe inspection extents had to be extended twice.

Table 3: Final Direct Examination Project Details

Direct Examination Details	
Site	1
Examination ID	[redacted]
Pipeline	45-163
Mitigation/Remediation Type	Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	N/A
Inspection Length	19 feet
Cost Category	O&M

Direct Examination Details	
Site	2
Examination ID	[redacted]
Pipeline	45-163
Mitigation/Remediation Type	Replacement and Soft Pad
Within HCA	Yes
SRC/IRC	No
Pipe Diameter	[redacted]
MAOP	
SMYS	
Construction Start Date	
Construction Completion Date	
Replacement Length	22.25 feet
Inspection Length	18.5 feet
Cost Category	Capital

Figure 2: Supply Line 45-163 Project Scope Including Direct Examination Sites



C. Post-Assessment

The Post-Assessment step involves evaluating and documenting the effectiveness of the inspection tools, documenting the result of the assessment and the length of pipeline assessed, communicating assessment results to the stakeholders, identifying appropriate follow up Preventive and Mitigative measures, if necessary, and establishing the reassessment interval for the pipeline.

Final Summary

The [redacted] of 1.84 miles on Supply Line 45-163 was completed on [redacted]. The validation analysis of the Direct Examinations following the inspection resulted in no additional examinations.

Table 4: Project Summary

[redacted] Total Length	1.84 miles
Direct Examination Completion Date	[redacted]

III. CONSTRUCTION

A. Construction Contractor Selection

Following completion of the engineering, design, and planning activities described above, SoCalGas selected the Construction Contractor that best met the selection criteria for this Project.

B. Construction Schedule

Table 5: Construction Timeline – Direct Examination

Construction Start Date	[redacted]	
Construction Completion Date		

Figure 3: Direct Examination Site #1 – Coating Inspection

Figure 4: Direct Examination Site #1 – Bare Pipe Inspection

Figure 5: Direct Examination Site #2 – Coating Inspection

Figure 6: Direct Examination Site #2 – Extension of Bare Pipe Inspection

C. Commissioning and Site Restoration

Commissioning activities include restoration of the site, final inspection, and placement of the pipeline back into service, and disposal of hydrotest water and hazardous material, and site demobilization. Closeout activities include development of final drawings, finalization of a reconciliation package, and updates to company recordkeeping systems to reflect the completed scope of work.

IV. PROJECT COSTS

A. Actual Costs[3]

Actual loaded costs reflect the Labor, Material, and Services costs incurred to execute the Project. The total loaded cost of the Project is $1,782,252.

Table 6: Actual Direct Costs[4]

Direct Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Company Labor	49,281	89,805	139,086
Contract Costs	784,640	148,904	933,544
Material	0	0	0
Other Direct Charges	131,674	222,176	353,850
Total Direct Costs	965,595	460,885	1,426,480

Table 7: Actual Indirect Costs[5]

Indirect Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Overheads	280,612	74,567	355,179
AFUDC	555	0	555
Property Taxes	38	0	38
Total Indirect Costs	281,205	74,567	355,772

Table 8: Total Costs[6]

Total Costs ($)	Capital Costs	O&M Costs	Total Actual Costs
Total Loaded Costs	1,246,800	535,452	1,782,252

[3] These are the total project costs incurred between January 1, 2019, and December 31, 2023. Only direct costs and vacation and sick contribute to the TIMPBA revenue requirement that is presented in the Prepared Direct Testimony of Rae Marie Yu (Chapter III).
[4] Values may not add to total due to rounding.
[5] Ibid.
[6] Ibid.

V. CONCLUSION

SoCalGas enhanced the integrity of its natural gas system by executing the Supply Line 45-163 TIMP Project. Through this Project, SoCalGas implemented and managed the requirements set forth in 49 C.F.R. § 192, Subpart O including the continual identification of threats to its pipelines, determination of the risk posed by these threats, scheduling and tracking assessments to address threats, conducting appropriate assessment in a prescribed timeline, collecting information about the condition of the pipelines, taking actions to minimize applicable threats and integrity concerns to reduce the risk of a pipeline failure, and reporting the findings of the assessment. The total loaded cost of the Project is $1,782,252.

End of Supply Line 45-163 TIMP Project Final Workpaper

APPENDIX A

SOCALGAS'S TIMP GLOSSARY OF ACRONYMS AND TERMS

The following list of acronyms, terms and high-level definitions are intended to accompany the TIMP workpapers and testimony[1]. These acronyms and terms describe gas operations, construction and land use terms that may not be commonly known. This is not a comprehensive or detailed glossary of utility and construction terms. It is assumed that the reader is familiar with basic utility industry and regulatory terms, and those terms and acronyms have been intentionally omitted from this list.

Acronym	Term	Definition
AGS	Aboveground Survey	Equipment and practices used to take measurements at ground surface above or near a pipeline to locate or characterize corrosion activity, coating holidays, or other anomalies. Also known as an indirect inspection.
ACA	Alternating Current Attenuation Survey	Measures the electromagnetic field attenuation emanating from the pipe induced with an AC signal. Qualitatively ranks coating quality and highlights areas with the largest holidays.
ACVG	Alternating Current Voltage Gradient	A method of measuring the change in leakage current in the soil along and around a pipeline to locate coating holidays and characterize corrosion activity. Similar to a DCVG survey except that an AC signal is applied to the target pipeline. This survey technique is reserved for determining pipe-to-casing continuity and measuring voltage gradients in electrolyte.
	Band	A protective casing that can be used to repair gas transmission pipelines. It allows for full encirclement repair over damage/defects. Also known as welded steel sleeve.
	Brush Magnetic Tool	The tool is designed to clean pipelines and prepare them for inspection. This tool combines mechanical brushing with magnetic elements to remove debris, rust, and other contaminants from the pipeline's interior surface. This tool is utilized to increase the operating efficiency of a pipeline or to facilitate inspection of the pipeline.
CP	Cathodic Protection	The reduction or elimination of corrosion by making a steel pipeline a cathode by means of an impressed direct current or attachment of a sacrificial anode.
	Class Location	An onshore area that extends 220 yards on either side of the centerline of any continuous 1-mile length of pipeline. Class location units are categorized as Class 1 through 4. Class 1 locations are more rural, and Class 4 locations are more urban.

[1] Prepared Direct Testimony of Travis Sera (Chapter 1, Exhibit SCG-01) and Prepared Direct Testimony of Jordan Zeoli, Fidel Galvan and Travis Sera (Chapter 2, Exhibit SCG-02)

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Acronym	Term	Definition
CIS	Close Interval Survey	An inspection technique that includes a series of above ground pipe-to-soil potential measurements taken at predetermined increments of several feet (i.e. 2-100 feet) along the pipeline and used to provide information on the effectiveness of the cathodic protection system.
	Combination Tool	An instrumented in-line inspection tool designed to perform both geometry (deformation or caliper) inspections as well as metal loss inspections with a single tool chassis.
C	Construction Threat	Pipe girth weld, fabrication weld, wrinkle bend or buckle, stripped threads, broken pipe or coupling.
	Covered Segment	A segment of gas transmission pipeline located in a high consequence area (HCA).
	Curtailment	A temporary reduction or interruption of natural gas service to customers. This usually occurs due to system capacity limitations, maintenance, or emergencies. The process involves prioritizing certain customers and following regulation to manage the limited supply.
DCVG	Direct Current Voltage Gradient	An inspection technique that includes above ground electrical measurements taken at predetermined increments along the pipeline and used to provide information on the effectiveness of the coating system.
	Direct Examination	The direct physical inspection of the pipeline that may also include the use of nondestructive examination (NDE) techniques.
EC	External Corrosion	Corrosion occurring due to environmental conditions on the outside of the pipe. It is the natural interaction between the exterior surface of the pipe and the soil, air, or water surrounding it.
ECDA	External Corrosion Direct Assessment	A four-step process that includes pre-assessment, indirect inspection, direct examination, and post assessment, that is intended to improve safety by assessing and reducing the impact of external corrosion on pipeline integrity.
EMAT	Electromagnetic Acoustic Transducer	A type of transducer that generates ultrasound in steel pipe without a liquid couplant using magnets and coils for inspection of the pipe.
	Free-Swimming ILI Tool	An In-Line-Inspection (ILI) tool that moves through a pipeline without being tethered, it is used to inspect the pipelines condition, detecting anomalies such as corrosion, deformation, metal loss, and other defects.

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Acronym	Term	Definition
GTSR	Gas Transmission Safety Rule	GTSR is a term use to describe two sets of PHMSA regulations: • "Pipeline Safety: Safety of Gas Transmission Pipelines: MAOP Reconfirmation, Expansion of Assessment Requirements, and Other Related Amendments" (RIN 2137-AE72), and; • "Pipeline Safety: Safety of Gas Transmission Pipelines: Repair Criteria, Integrity Management Improvements, Cathodic Protection, Management of Change, and Other Related Amendments" (RIN 2137-AF39).
	Gauge Plate Tool	A utility pig mounted with a flexible metal plate of a specified diameter less than the minimum internal diameter of the pipeline. Pipe bore restrictions less than the plate diameter or short radius bends will permanently deflect the plate material.
	Geometry Tool	An in-line inspection tool designed to record conditions, such as dents, wrinkles, ovality, bend radius and angle by sensing the shape of the internal surface of the pipe.
GWUT	Guided wave ultrasonic testing	Inspection of pipe is typically accomplished using low frequency (usually in the range of 15-90 kHz) ultrasonic guided waves typically induced into the pipe through a collar of piezoelectric transducers; although systems utilizing electromagnetic approaches for wave generation and reception also exist. The waves propagate in several modes along the length of the pipe. Analysis of wave reflections in specific modes is used to detect and evaluate features of various types.
HCA	High Consequence Area	An area where a pipeline release could have greater consequences for health and safety or the environment.
	Hydrotest	A measure of the strength of a piece of equipment (pipe) in which the item is filled with water, sealed, and subjected to pressure. It is used to validate integrity and detect construction defects and defective materials.
IRC	Immediate Repair Conditions	Anomalies or features that might be expected to cause immediate or near-term leaks or ruptures based on their known or perceived effects on the strength of the pipeline in HCAs.
	Indirect Inspection	Also known as Aboveground Survey (AGS), Equipment and practices used to take measurements at ground surface above or near a pipeline to locate or characterize corrosion activity, coating holidays, or other anomalies.
IMU	Inertial Mapping Unit	An In-Line Inspection (ILI) tool that captures and records the inspection tool's position within the pipeline, enabling accurate tracking and evaluation of pipeline conditions.

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Acronym	Term	Definition
ILI	In-line Inspection	An inspection of a pipeline from the interior of the pipe using an inspection tool also called intelligent or smart pigging. This definition includes tethered and self-propelled inspection tools. These devices run inside the pipe and provide indications of metal loss, deformation, and other defects.
IC	Internal Corrosion	Corrosion occurring due to environmental conditions on the inside of the pipeline. In most cases, the corrosive materials are contaminants naturally contained within the transported gas such as hydrogen sulfide, carbon dioxide, other chemicals, or water.
ICDA	Internal Corrosion Direct Assessment	Is a process an operator uses to identify areas along the pipeline where fluid or other electrolyte introduced during normal operation or by an upset condition may reside, and then focuses direct examination on the locations in covered segments where internal corrosion is most likely to exist. The process identifies the potential for internal corrosion caused by microorganisms, or fluid with CO2, O2, hydrogen sulfide or other contaminants present in the gas.
LDS	Laser Deformation Sensor	A type of sensor integrated into ILI tools to detects geometric deformations in pipelines, such as dents, buckling, and ovality by using laser technology to measure the internal geometry of the pipeline.
	Launcher	A pipeline device used to insert a In-Line Inspection tool into a pressurized pipeline.
MFL	Magnetic Flux Leakage	A type of ILI technique that induces a magnetic field in a pipe wall between two poles of a magnet. Sensors record changes in the magnetic flux (flow) which can be used to evaluate metal loss. The magnetic field is induced in either the Axial or Circumferencial direction.
M	Manufacturing	Anomalies in pipe or weld metal resulting from the manufacturing process
MAOP	Maximum Allowable Operating Pressure	The highest pressure at which a piping system or segment of a piping system is qualified to operate based on design and testing, or design and operating history.
MD	Mechanical Damage	A type of metal damage in a pipe or pipe coating caused by the application of an external force. Mechanical damage can include denting, coating removal, metal removal, metal movement, cold working of the underlying metal, and residual stresses, any one of which can be detrimental.
	Receiver	A pipeline facility used for removing a pig from a pressurized pipeline. It may be referred to as trap, pig trap, or scraper trap.

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Acronym	Term	Definition
	Remediation	Is an operation or procedure that transforms an unacceptable condition to an acceptable condition by eliminating the causal factors of a defect. Remediation may include repairs, pressure reductions, or other actions intended to preclude a defect from failing.
	Retrofit	Retrofits are typically carried out to extend the lifespan of the pipeline, improve safety and reliability, reduce environmental impact, and ensure compliance with current standards and regulations.
ROW	Right of Way	A strip of land on which pipelines, railroads, power lines, and other similar facilities are constructed which allows the operator to perform operation and maintenance activities of the asset.
SRC	Safety Related Condition	Anomalies or features that might be expected to cause immediate or near-term leaks or ruptures based on their known or perceived effects on the strength of the pipeline in non-HCAs.
	Segment	A continuous length of pipe that starts and ends at a known demarcation point such as a change in pipe characteristics, pressure limiting or regulating station, or other practical divisions. A section of pipe can be made up of multiple segments.
	Soft Pad	Flexible grinding disks used with power grinders to precisely remove defects like arc burns, grooves, and scratches on pipes while maintaining acceptable wall thickness
	Soil Resistivity	Measures the resistivity of the soil in Ohm-cm. Can be used to approximate potential corrosivity along the pipeline, or correlate differences in current distribution.
SMYS	Specified Minimum Yield Strength	Means specified minimum yield strength, expressed in pounds per square inch, is: (a). For steel pipe manufactured in accordance with a listed specification, the yield strength specified as a minimum in that specification; or (b). For steel pipe manufactured in accordance with an unknown or unlisted specification, the yield strength determined in accordance with § 192.107(b).
SCC	Stress Corrosion Cracking	Is a form of environmental attack of the metal involving an interaction of a local corrosive environment and tensile stresses in the metal resulting in formation and growth of cracks.
SCCDA	Stress Corrosion Cracking Direct Assessment	A process to assess a covered pipe segment for the presence of SCC primarily by systematically gathering and analyzing excavation data for pipe having similar operational characteristics and residing in a similar physical environment [§192.927].

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Acronym	Term	Definition
	Unpiggable	A condition where a smart tool or a pipeline inspection gauge that traverses through the pipeline as part of an In-Line Inspection that cannot be used.
WROF	Weather Related/Outside Force	The Weather Related and Outside Force threat has localized susceptibility. WROF evaluation considers locations of extreme loading where pipe may be susceptible to earthquakes and seismicity, geology, soil stability, landslides, ground subsidence, extreme surface loading, flooding, lightning strikes, and frost.

BEFORE THE PUBLIC UTILITIES
COMMISSION OF THE STATE OF CALIFORNIA

DECLARATION OF TRAVIS T. SERA REGARDING CONFIDENTIALITY OF CERTAIN DOCUMENTS PURSUANT TO D.21-09-020

I, Travis T. Sera, do declare as follows:

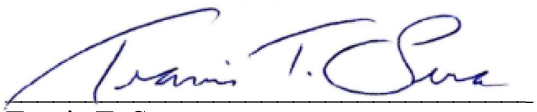
1. I am the Director of Integrity Management for Southern California Gas Company (SoCalGas). I have been delegated authority to sign this declaration by Amy Kitson, Vice President of Gas Engineering and System Integrity for SoCalGas. I have reviewed the confidential information included within SoCalGas-02-WP Amended Workpapers Supporting the Prepared Direct Testimony of Jordan A. Zeoli, Fidel Galvan, and Travis T. Sera (Technical – Project Execution and Management) ("TIMP Amended Workpapers"). I am personally familiar with the facts and representations in this Declaration and, if called upon to testify, I could and would testify to the following based upon my personal knowledge and/or information and belief.

2. I hereby provide this Declaration in accordance with Decision ("D.") 21-09-020 and General Order ("GO") 66-D to demonstrate that the confidential information ("Protected Information") provided in the TIMP Amended Workpapers is within the scope of data protected as confidential under applicable law.

3. In accordance with the legal authority described in Attachment A, the Protected Information should be protected from public disclosure.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct to the best of my knowledge.

Executed this 5th day of September, 2025 at Los Angeles, California.



Travis T. Sera
Director of Integrity Management
Southern California Gas Company

ATTACHMENT A

SoCalGas Request for Confidentiality on the following Protected Information in its Amended Transmission Integrity Management Program (TIMP) Workpapers

Location of Data	Applicable Confidentiality Provisions	Basis for Confidentiality
SCG-02-WP (Volumes I, IV, V, and VII); Amended Workpapers Supporting the Prepared Direct Testimony of Jordan A. Zeoli, Fidel Galvan, and Travis T. Sera (Technical – Project Execution and Management) have been marked/highlighted as confidential pursuant to PUC Section 583, GO 66-D, and D.21-09-020. Confidential Information: Critical Energy Infrastructure Information (CEII), Pipe attributes (SMYS, MAOP/MOP, Diameter, Seam type, Install date, Class location, HCA segment information, Assessment method, Assessment date, Coating type, Construction dates/schedules, Inspection results, Directional flow of natural gas), Threat type, Specific locational information and system pipeline map.	CPRA Exemption, Gov't Code § 7927.705 ("Records, the disclosure of which is exempted or prohibited pursuant to federal or state law") • Cal. Civil Code §§ 3426 *et seq.* (Uniform Trade Secrets Act) • *TMX Funding Inc. v. Impero Technologies, Inc.*, 2010 WL 2745484 at *4 (N.D. Cal. 2010) (defining trade secret in an injunction to include "business plans and strategies") • *O2 Micro Int'l Ltd. v. Monolithic Power Sys., Inc.*, 420 F. Supp. 2d 1070, 1089–1090 (N.D. Cal. 2006) ("It does not matter if a portion of the trade secret is generally known, or even that every individual portion of the trade secret is generally known, so long as the combination of all such information is not generally known.") • 18 CFR § 388.113(c) (defining CEII) • FERC Order Nos. 630, 643, 649, 662, 683, and 702 (defining CEII) • FERC Order 833 (including amendments to the CEII regulations, required by The FAST Act) • Critical Energy Infrastructure Information, 68 Fed. Reg. 9857, 9862 (Dep't of Energy Mar. 3, 2003) (final rule) (listing what **gas** information qualifies as CEII) • FERC's Guidelines for Filing Critical Energy/Electric	It is SoCalGas's practice to designate certain data as confidential because this data is similar to data protected by CEII regulations and, if made publicly available, could potentially present a risk to public and pipeline safety. Engineering design values (i.e., Pipe attributes and production data) for existing critical infrastructure could be used to determine the criticality of a gas facility and identify vulnerabilities of the gas delivery network. Because of the critical nature of these attributes, they have been identified by PHMSA to be restricted attributes available only to government officials. Inspection results (including assessment results/dates) are forms of production data that is protected and includes details related to the transmission and distribution of energy. This information if released to the public can be used to predict repair schedules and availability of segments of the transportation network. It may affect market pricing for gas transportation and delivery and lead to speculation in the energy markets that may be detrimental to consumers. This information could also be used to identify vulnerabilities of the gas network. It is SoCalGas's practice to designate portions of their threat analysis, such as threat types, as confidential because this data is considered proprietary, not currently published by PHMSA, and, if made publicly available, could potentially present a risk to public and

	Infrastructure Information, (Feb. 21, 2017), *available at* https://www.ferc.gov/sites/default/files/2020-04/CEII-Filing-guidelines.pdf o Exhibits G, G-1, G-II of pipeline certificate applications. 18 CFR § 157.14 o Exhibit V of abandonment applications. 18 CFR § 157.18 o FERC Form 567. 18 CFR § 260.8 • CPUC Res. L-436, at 8 (stating CPUC will "refrain from making available to the public detailed maps and schematic diagrams showing the location of specific utility regulator stations, valves, and similar facilities") • Cal. Pub. Util. Code § 364(d) ("The commission may, consistent with other provisions of law, withhold from the public information generated or obtained pursuant to this section that it deems would pose a security threat to the public if disclosed.") • The Pipeline and Hazardous Materials Safety Administration's (PHMSA) guidelines consider the data to be restricted pipeline information. PHMSA Guidelines, 81 Fed. Reg. 40757, 40764 (June 22, 2016). • PHMSA also issued an advisory bulletin on December 9, 2016: ABD-2016-0137; Pipeline Safety: Safeguarding and Securing Pipelines from Unauthorized Access detailing	pipeline safety, as well as a potential financial loss of future revenue as these documents could be monetized. Pipeline locations (including street names) and maps at a scale of 1 inch to 24,000 feet scale or less are identified as confidential because the data would provide sufficient information to be used by a third party to excavate or access above ground facilities without notifying the Utility through the local Underground Service Alert (USA) or could be used to identify locations for illegal tapping or other acts that could impact the safety of residents living near the natural gas pipeline or gas facility.

	the need for operators to protect their gas systems • *See* Administrative Law Judge's Ruling Granting Applicant's Motion for Leave to Submit Confidential Materials Under Seal as to Appendix K Geographic Information System (GIS) Data at 2, Application 16-07-016 (December 1, 2016); Administrative Law Judge's Ruling Granting Applicant's Motion to File Specified Documents Under Seal, Application 16-04-022 (June 2, 2016) • *See Mr. Doug Hall*, 114 FERC ¶ 62194, 2006 WL 463906 (Feb. 27, 2006) (letter from the FERC Office of External Affairs to an applicant seeking to review information containing CEII, explaining that "precise dam coordinates which could be used to target the dam. In addition, providing coordinate data for all facilities in a specific geographic region increases the vulnerability of those facilities to attack . . . this information could be used to compromise the dams, placing lives at risk.") • *Ms. Alison Arnold*, 108 FERC ¶ 62287, 64538 (Sept. 30, 2004) (ruling on a request to the U.S. Department of Interior for a copy of GIS data regarding hydropower projects located in the State of Washington that "contains critical energy infrastructure information (CEII)") • *N. Dakota Pipe Line Co., LLC 24-Inch Crude Oil Pipeline - Sandpiper Project Siting Application*, GE-13-193, 2014	

	WL 2567685, at *1 (May 13, 2014) (deeming confidential all the information in "a sealed envelope containing a CD and labeled 'Critical Energy Infrastructure Information.' The information also includes GIS mapping data, GIS data, and two plots of Souris River Crossing relating to the location of the Sandpiper Pipeline.") CPRA Exemption, Gov't Code § 7929.205 (Critical Infrastructure Information)	