

**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**



**ITEM: 3.16
(ID # 29638)**

MEETING DATE:
Tuesday, February 03, 2026

FROM : TLMA-TRANSPORTATION

SUBJECT: TRANSPORTATION AND LAND MANAGEMENT AGENCY/TRANSPORTATION:
Approval of Utility Agreement No. 001-UA-SCG between the County of Riverside Transportation Department (County) and Southern California Gas (SCG) for relocations of utility facilities for the I-10 / Monroe Street Interchange Project. District 4. [\$557,239.50 Total Cost - 25% Local Funds, 75% SCG]

RECOMMENDED MOTION: That the Board of Supervisors:

1. Approve the Utility Agreement No. 001-UA-SCG between the County of Riverside Transportation Department (County) and Southern California Gas (SCG) for relocations of utility facilities for the I-10 / Monroe Street Interchange Project;
2. Authorize the County of Riverside Director of Transportation or their designee to execute any subsequent amendments thereto; and
3. Authorize the Chairman of the Board to execute the same.

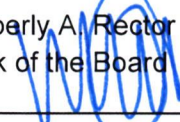
ACTION:Policy


Dennis Acuna, Director of Transportation 1/17/2026

MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Washington, seconded by Supervisor Gutierrez and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Medina, Spiegel, Washington, Perez, and Gutierrez
Nays: None
Absent: None
Date: February 3, 2026
xc: Transp.

Kimberly A. Rector
Clerk of the Board
By: 
Deputy

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,
STATE OF CALIFORNIA**

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost
COST	\$ 0	\$ 200,000	\$ 557,239.50	\$ 0
NET COUNTY COST	\$ 0	\$ 0	\$ 0	\$ 0
SOURCE OF FUNDS: Project Funds (25%): Local (Coachella Valley Association of Governments, City of Indio, State (Local Partnership Program, State Transportation Improvement Program, Active Transportation Program), and Federal (Surface Transportation Block Grant, Community Project Funding/Congressionally Directed Spending, Earmark). SCG (75%) . There are no General Funds being used in this project.			Budget Adjustment: No	
			For Fiscal Year: 25/26 - 28/29	

C.E.O. RECOMMENDATION: Approve

BACKGROUND:

Summary

The Monroe Street Interchange on Interstate 10 (I-10) between Jefferson Street and Jackson Street in the City of Indio serves as a major access point for surrounding residential and retail areas. Originally constructed in 1972, it now experiences congestion due to decades of growth, with traffic expected to continue increasing. Improvements to the interchange are needed to correct existing deficiencies, remove current bottlenecks, and accommodate future growth. Improving the Monroe Street interchange and the Coachella Valley Stormwater Channel (CVSC) bridge will address existing deficiencies, relieve congestion, and accommodate future development.

The City of Indio (City), in cooperation with the California Department of Transportation (Caltrans) and the Coachella Valley Association of Governments (CVAG), proposes to replace and reconstruct the existing I-10 / Monroe Street interchange (Project) with a new facility. Project improvements will include the construction of new structures crossing I-10 and the CVSC, and the construction of associated on- and off-ramps. The Project will also include pedestrian, bicycle, and golf cart facilities that are compatible with and connect to the Coachella Valley (CV)-Link active transportation pathway.

The project is located within the City's jurisdictional boundaries. The City, County, and CVAG have designated the County as the lead agency for the Project due to its extensive experience and expertise in delivering interchange projects. The Project is finalizing the final Plans, Specification, and Estimate (PS&E) phase. Construction is expected to begin in FY 26/27.

As part of this Project, Southern California Gas (SCG) owns and maintains gas utility facilities within the Project limits that require relocation to accommodate Project improvements. This Utility Agreement establishes the terms and conditions for the relocation of SCG's gas facilities, the allocation of costs and responsibilities between the County and SCG, and the procedures for executing the work.

A service agreement between the County and the City was executed on January 28, 2025, assigning responsibilities for providing services to complete the Project's construction phase. The County will be entering into a cooperative agreement with Caltrans, allowing the County to

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STATE OF CALIFORNIA**

advertise, award, and administer the construction contract in February 2026.

I-10 / Monroe Street Interchange: County Project Number: C7-0048
Caltrans Project Number: EA 0K730

Impact on Residents and Businesses

The proposed improvements will improve safety and enhance operational efficiency for local, regional, and interregional traveling motorists as well as provide accommodations dedicated for pedestrians, bicycles, and Low Speed Electric Vehicles (LSEVs).

SUPPLEMENTAL:

Additional Fiscal Information

The Project is responsible for paying 25% of the relocation cost following the agreed proration; and for reimbursing or billing SCG per the payment provisions, including auditing and Buy America compliance guidance. SCG is responsible for preparing relocation plans, relocating and installing gas facilities, construction of gas line supports, brackets, and casing, and paying 75% of the relocation cost.

A funding agreement between the City and CVAG for the Project was approved on October 17, 2007, and subsequent Amendments 1 and 2 provided additional funding for the Project Initiation and Project Approval & Environmental Document (PA&ED) phases. Amendments 2 through 7 designated the County as the lead agency, funded PS&E and Right of Way (ROW) phases and extended the time trigger for construction start. A future amendment will define the Project and provide construction funding for it.

Contract History and Price Reasonableness

This agreement aligns with project goals and is consistent with similar projects of the same scope and duration.

ATTACHMENTS:

- Utility Agreement No. 001-UA-SCG
- SCG Relocation Plans
- SCG Relocation Cost Estimate
- Vicinity Map


Crystal Carrillo, Senior Management Analyst 1/28/2026


Aaron Gettis, Chief Deputy County Counsel 1/26/2026

Exhibit 14-F Utility Agreements

UTILITY AGREEMENTS

RIVERSIDE COUNTY TRANSPORTATION DEPARTMENT (RCTD)

UTILITY AGREEMENT

County	Route	P.M.	Project #
Riverside	10	R53.2-R56.7	0800000368/ C7-0048
Fed. Aid. No. STPLN-5956(294)			
Owner's File Utility Agreement – Southern California Gas Company (SCG)			
FEDERAL PARTICIPATION: On the Project : Yes On the Utilities: Yes			

UTILITY AGREEMENT NO. 001-UA-SCG

The Riverside County Transportation Department hereinafter called "LOCAL AGENCY" proposes to reconstruct and widen Monroe Street at the interchange, including the existing on- and off-ramps, the Monroe Street I-10 overcrossing (I-10 OC), and the bridge over the Coachella Valley Stormwater Channel (Channel Bridge) on Monroe Street, in the City of Indio, Riverside County, California.

And: Southern California Gas Company (SCG) hereinafter called "OWNER," owns and maintains gas facilities within the limits of LOCAL AGENCY's project that requires relocation of said facilities to accommodate LOCAL AGENCY's project.

It is hereby mutually agreed that:

I. WORK TO BE DONE:

In accordance with Notice to Owner No. 01-NTO-SCG dated **December 4, 2025**, OWNER shall install the proposed 2-6" gas line, casing, supports, dowels, and brackets within Monroe Street and the Monroe Street Overcrossing and Coachella Valley Stormwater Channel Bridge structures. All work shall be performed substantially in accordance with OWNER's Plan No. 2042467502, 2042734711, 2042497731, and 2042719822 dated December 19, 2025, consisting of 73 sheets, a copy of which is on file in the Office of the LOCAL AGENCY at 4080 Lemon Street, Riverside, CA 92502. Deviations

from the OWNER's plan described above initiated by either the LOCAL AGENCY or the OWNER, shall be agreed upon by both parties hereto under a Revised Notice to Owner. Such Revised Notices to Owner, approved by the LOCAL AGENCY and agreed to/ acknowledged by the OWNER, will constitute an approved revision of the OWNER's plan described above and are hereby made a part hereof. No work under said deviation shall commence prior to written execution by the OWNER of the Revised Notice to Owner. Changes in the scope of the work will require an amendment to this Agreement in addition to the revised Notice to Owner.

In accordance with Notice to Owner No. 01-NTO-SCG dated **December 4, 2025**, OWNER shall prepare their relocation plans. Any revision to the OWNER's plan described above, after approval by the LOCAL AGENCY, shall be agreed upon by both parties hereto under a Revised Notice to Owner. Such Revised Notices to Owner, approved by the LOCAL AGENCY and agreed to/acknowledged by the OWNER, will constitute an approved revision of the OWNER's plan described above and are hereby made a part hereof. No redesign or additional engineering, after approval by the LOCAL AGENCY, shall commence prior to written execution by the OWNER of the Revised Notice to Owner and may require an amendment to this Agreement in addition to the Revised Notice to Owner.

II. LIABILITY FOR WORK

The existing facilities described in Section I above will be relocated in accordance with Sections 5B and 5C of the Master Contract dated November 1, 2004 in accordance with the following proration: 0/100 OWNER for Plan No. 2042734711, 2042719822 within State Right of Way; 50/50 OWNER for Plan No. 2042467502, 2042497731 outside of State Right of Way.

III. PERFORMANCE OF WORK

OWNER agrees to perform the herein-described work with its own forces or to cause the herein described work to be performed by the OWNER's contractor, employed by written contract on a continuing basis to perform work of this type, and to provide and furnish all necessary labor, materials, tools, and equipment required therefore; and to prosecute said work diligently to completion.

Use of personnel requiring lodging and meal "per diem" expenses will not be allowed without prior written authorization by LOCAL AGENCY's representative. Requests for such authorization must be contained in OWNER's estimate of actual and necessary relocation costs. OWNER shall include an explanation why local employee or contract labor is not considered adequate for the relocation work proposed. Per Diem expenses shall not exceed the per diem expense amounts allowed under the California Department of Human Resources travel expense guidelines.

Engineering services for locating, preparation of plans, specifications, estimates, supervision, inspection are to be furnished by the OWNER. Cost principles for determining the reasonableness and allowability of OWNER's costs shall be determined in accordance with 48 CFR, Chapter 1, Subpart E, Part 31; 23 CFR, Chapter 1, Part 645; and 18 CFR, Chapter 1, Parts 101, 201 and OMB Circular A-87, as applicable.

IV. PAYMENT FOR WORK

The LOCAL AGENCY shall pay its share of the actual and necessary cost of the herein described work within 45 days after receipt of OWNER's itemized bill, signed by a responsible official of OWNER's organization and prepared on OWNER's letterhead, compiled on the basis of the actual and necessary cost and expense incurred and charged or allocated to said work in accordance with the uniform system of accounts prescribed for OWNER by the California Public Utilities Commission, Federal Energy Regulatory Commission or Federal Communications Commission, whichever is applicable. The estimated cost to LOCAL AGENCY for the work performed by or on behalf of OWNER is \$557,240.50.

It is understood and agreed that the LOCAL AGENCY will not pay for any betterment or increase in capacity of OWNER's facilities in the new location and that OWNER shall give credit to the LOCAL AGENCY for the accrued depreciation of the replaced facilities and for the salvage value of any material or parts salvaged and retained or sold by OWNER.

The OWNER shall submit a final bill to the LOCAL AGENCY within 360 days after the completion of the work described in Section I above. If the STATE has not received a final bill within 360 days after notification of completion of OWNER's work described in Section I of this Agreement, and LOCAL AGENCY has delivered to OWNER fully executed Director's Deeds, Consents to Common Use or Joint Use Agreements for OWNER's facilities (if required), LOCAL AGENCY will provide written notification to OWNER of its intent to close its file within 30 days. OWNER hereby acknowledges, to the extent allowed by law, that all remaining costs will be deemed to have been abandoned. If the LOCAL AGENCY processes a final bill for payment more than 360 days after notification of completion of OWNER's work, payment of the late bill may be subject to allocation and/or approval by the California Transportation Commission.

The final billing shall be in the form of an itemized statement of the total costs charged to the project, less the credits provided for in this Agreement. However, the LOCAL AGENCY shall not pay final bills, which exceed the estimated cost of this Agreement without documentation of the reason for the increase of said cost from the OWNER and approval of documentation by LOCAL AGENCY. Except, if the final bill exceeds the OWNER's estimated costs solely as the result of a revised Notice to Owner as provided for in Section I, a copy of said revised Notice to Owner shall suffice as documentation.

In any event if the final bill exceeds 125% of the estimated cost of this Agreement, an amended Agreement shall be executed by the parties to this Agreement prior to the payment of the OWNERS final bill. Any and all increases in costs that are the direct result of deviations from the work described in Section I of this Agreement shall have the prior concurrence of LOCAL AGENCY.

Detailed records from which the billing is compiled shall be retained by the OWNER for a period of three years from the date of the final payment and will be available for audit in accordance with Contract Cost Principals and Procedures as set forth in 48 CFR, Chapter 1, Subpart E, Part 31 by LOCAL AGENCY and/or Federal Auditors. In performing work under this Agreement, OWNER agrees to comply with the Uniform System of Accounts for Public Utilities found at 18 CFR, Parts 101, 201, et al., to the extent they are applicable to OWNER doing work on the project that is the subject of this agreement, the contract cost principles and procedures as set forth in 48 CFR, Chapter 1, Part 31, et seq., 23 CFR, Chapter 1, Part 645 and 2 CFR, Part 200, et al. If a subsequent State and/or Federal audit determines payments to be unallowable, OWNER agrees to reimburse LOCAL AGENCY upon receipt of AGENCY billing. If OWNER is subject to repayment due to failure by Local Public Agency (LPA) to comply with applicable laws, regulations, and ordinances, then LPA will ensure that OWNER is compensated for actual cost in performing work under this agreement.

V. GENERAL CONDITIONS

OWNER shall submit a Notice of Completion to the LOCAL AGENCY within 30 days of the completion of the work described herein.

It is understood that said highway is a Federal aid highway and accordingly, 23 CFR, Chapter 1, Part 645 is hereby incorporated into this Agreement by reference; provided, however, that the provisions of any agreements entered into between the State and the OWNER pursuant to State law for apportioning the obligations and costs to be borne by each, or the use of accounting procedures prescribed by the applicable Federal or State regulatory body and approved by the Federal Highway Administration

(FHWA), shall govern in lieu of the requirements of said 23 CFR Part 645.

Owner understands and acknowledges that this project is subject to the requirements of the Buy America (BA) law (23 U.S.C., Section 313) and applicable regulations, including 23 CFR 635.410 and FHWA guidance. OWNER hereby certifies that in the performance of this Agreement, for products where BA requirements apply, it shall use only such products for which it has received a certification from its supplier, or provider of construction services that procures the product certifying BA compliance. This does not include products for which waivers have been granted under 23 CFR 635.410 or other applicable provisions or excluded material cited in the Department’s guidelines for the implementation of BA requirements for utility relocations issued on December 3, 2013.

LOCAL AGENCY further acknowledges that OWNER, in complying with the Buy America Rule, is expressly relying upon the instructions and guidance (collectively, “Guidance”) issued by LOCAL AGENCY and its representatives concerning the Buy America Rule requirements for utility relocations within the State of California. Notwithstanding any provision herein to the contrary, OWNER shall not be deemed in breach of this Agreement for any violations of the Buy America Rule if OWNER’s actions are in compliance with the Guidance.

IN WITNESS WHEREOF, the above parties have executed this Agreement the day and year above written.

**RIVERSIDE COUNTY
TRANSPORTATION DEPARTMENT**

SOUTHERN CALIFORNIA GAS COMPANY

By: 

Dennis Acuna
Local Agency Director

By: 

Dustin Tomlinson
Southeast Region Planning Manager

Date: 01/20/2026

Date: January 12, 2026

**NOTE: THIS AGREEMENT REFLECTS THE CONDITIONS OF UTILITY
RELOCATION AS OF THE DATE SIGNED ABOVE. THIS AGREEMENT IS
SUBJECT TO CHANGE BASED ON THE FINALIZATION OF UTILITY
RELOCATION DETAILS.**

Distribution: 1) Owner, 2) Utility Coordinator, 3) DLAE –File, 4) District Utility Coordinator – File

FORM APPROVED COUNTY COUNSEL
BY: 

STEPHANIE K. NELSON DATE

This estimate is based on today's 1/8/2026 current scope and available information; however, please note that it is subject to change and is only an estimate. The *True* estimate will become available when the Collectible Work Agreement is completed.

This estimate was expedited and created to help support funding for the Monroe Bridge/Channel Bridge project in Indio, CA.

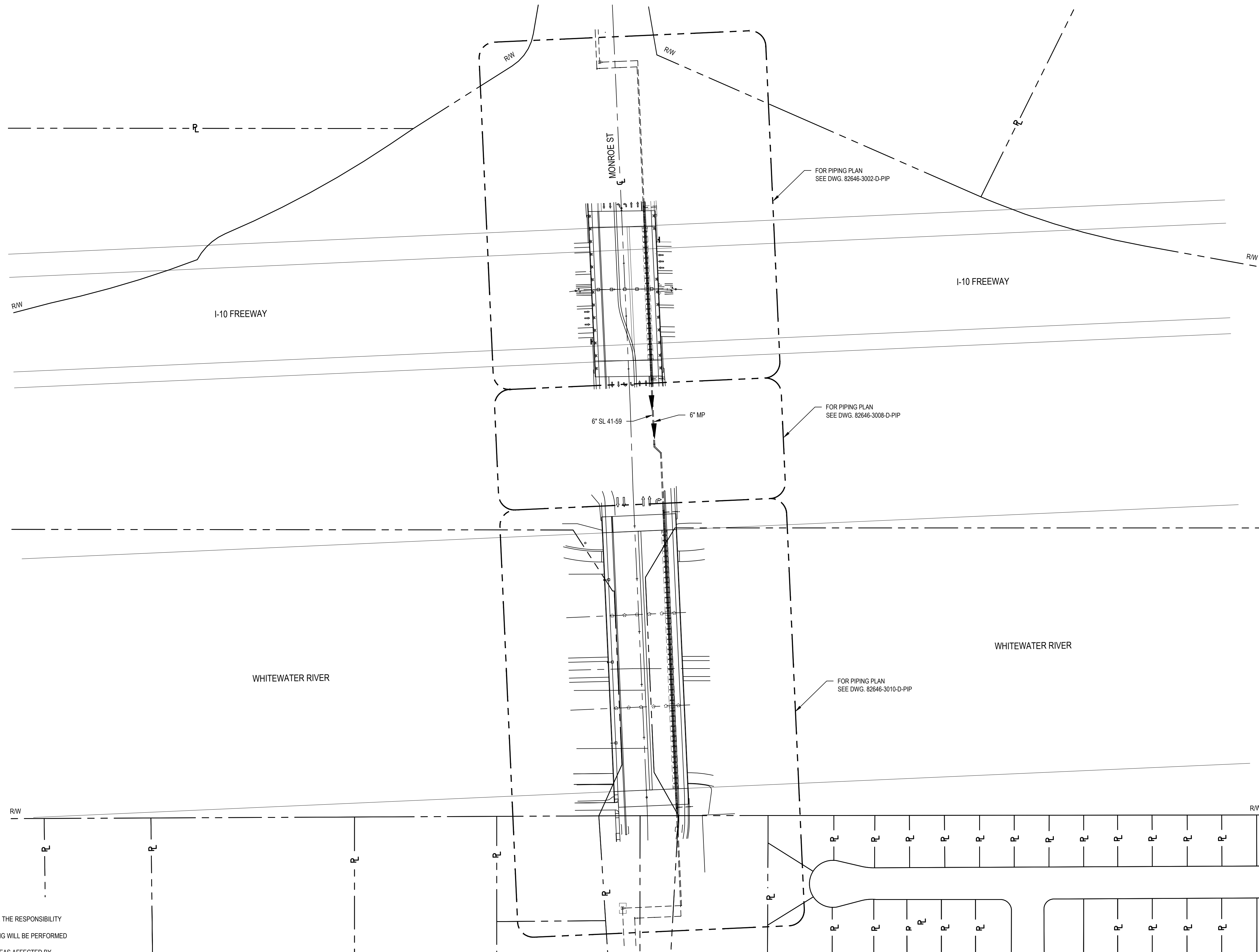
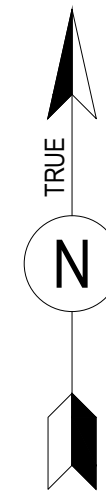
The collectible portion of this project is broken down into two job Work Orders (Notifications) based on our SCG design. You will see high pressure (HP) notification cost estimates and Medium Pressure (MP) notification cost estimates.

- HP Collectible Notification 2042467502/ \$565,308.31
 - Permits/Third Party/Other \$139,103.59
 - Total Materials \$74,939.50
 - Company Labor \$51,992.27
 - Contractor Labor \$178,817.81
 - Paving \$120,455.14
 - ITCCA – *Unknown at this time*

- MP Collectible Notification 2042497731/ \$549,171.52
 - Permits/Third Party/Other \$139,103.59
 - Total Materials \$175,372.35
 - Company Labor \$21,863.57
 - Contractor Labor \$188,624.10
 - Paving \$24,207.91
 - ITCCA – *Unknown at this time*

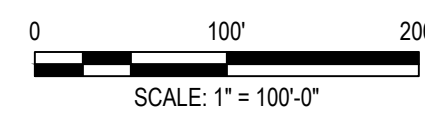
If you have any questions or need further clarification, feel free to reach out.

$565,308.31 + 549,171.52 = \$1,114,479.82 / 2 = \$557,239.50$ Total Project Cost



NOTES:

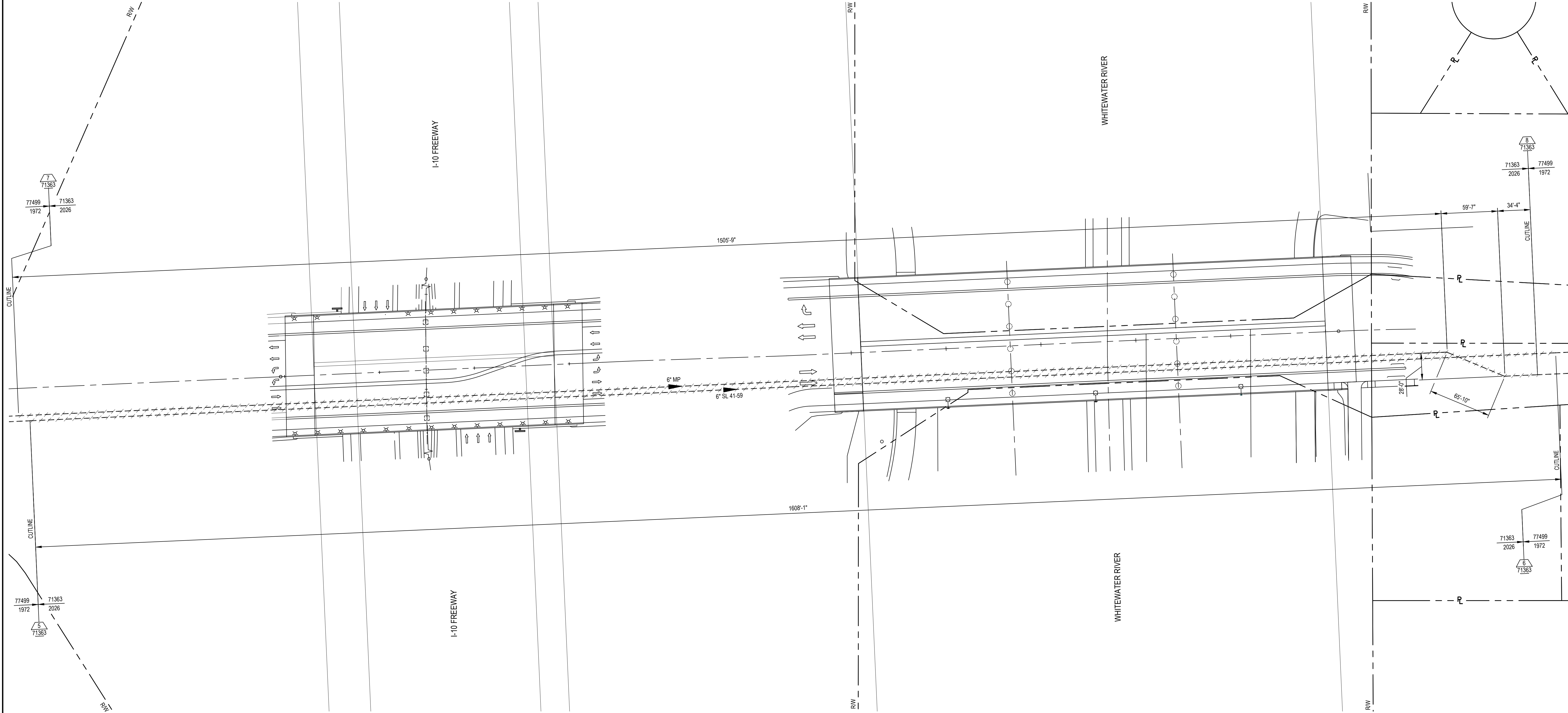
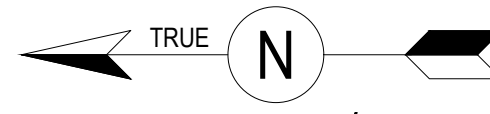
1. THE CONTRACTOR MUST VERIFY ALL MEASUREMENTS AFFECTING HIS WORK & ASSUME THE RESPONSIBILITY FOR THEIR CORRECTNESS.
2. ALL FABRICATION, WELDING, INSTALLATION, CLEANING, COATING, INSPECTION & TESTING WILL BE PERFORMED PER SOCALGAS SPECIFICATION.
3. CONTRACTOR TO REPAIR OR REPLACE CURB, GUTTER, PAVEMENT AND LANDSCAPE AREAS AFFECTED BY CONSTRUCTION WORK.
4. CONTRACTOR TO LEAVE PROJECT LOCATION IN EQUAL OR BETTER CONDITION.
5. ALL BELOW GRADE FITTINGS AND STEEL CARRIER PIPE WILL BE COATED PER GS 186.0100. E: POSED SECTION SHALL BE COATED PER GS 186.0104 OR 186.0117 FOR MARINE ENVIRONMENTS.
6. CASING TO BE IN ACCORDANCE WITH MSP 41-06.1
 - A. WELDING TO BE IN ACCORDANCE WITH GS 187.0056
 - B. WPS (WELD PROCEDURE SPECIFICATION), P: R: (PROCEDURE), UALIFICATION REPORT, AND W: R: (WELDER UALIFICATION REPORT). TO BE PROVIDED TO SCG MATERIAL AND EQUIPMENT TEAM.
 - C. BACKING RINGS SHALL NOT BE USED.
7. THE ABUTMENT OPENINGS AND HORIZONTAL LOCATION OF PIPE ON THE BRIDGE SHALL BE PER DIMENSIONS IN SHEET 82646-3002-D-PIP, 82646-3006-D-PIP, 82646-3010-D-PIP, AND 82646-3014-D-PIP. VERTICAL LOCATION SHALL FOLLOW VERTICAL CURVE OF BRIDGE DECK.
8. BRIDGE CONTRACTOR SHALL INITIATE A PRE-CONSTRUCTION MEETING WITH SCG 6 WEEKS PRIOR TO CONSTRUCTION. PRESENT SHALL BE THE SCG PROJECT PLANNER AND GENERAL FOREMAN FOR INSTALLATION. PER CAL TRANS REGULATIONS FOR CARRIER PIPE OPERATING PRESSURES OVER 200 PSIG - PRESSURE TEST OF 1.5 TIMES DESIGN LEVEL FOR 24 HOURS. RADIOGRAPHIC INSPECTION SHALL BE MADE FOR ALL FIELD WELDS.



PLAN

ISSUED FOR CONSTRUCTION

INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		SL 41-59 & MP GAS WHITTEWATER RIVER/I-10 & MONROE ST BRIDGE REPLACEMENT LOCATION PLAN							
COUNTY: RIVERSIDE	ISSUED BY	DESIGNER: H. LOPEZ	05/23/2025									
DISTRICT: SOUTHEAST	NUMBER	ENGINEER: N. HASAN	05/23/2025									
STRIP MAP NO. *		CHECKER: D. NAREZ	05/23/2025									
ATLAS NO. *		PROJECT APVR: H. ORDONEZ	05/23/2025									
DOT CL. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4		SCG ENG APVR: M. MECHELOWICZ	05/23/2025									
CATHODICALLY PROTECTED: *	REGION: *	ENG FILE NO: PE24-166		DWG CLASS: 39	DWG DIST: 200							
YEAR C.P. INSTALLED: *		WGA: 71363		SCALE: 1" = 100'-0"	DRAWING NUMBER: 82646-3001-D-PIP							
	REV	DATE	DES	ENGR	CHK	APVD	SCG #	ENG FILE NO	DESCRIPTION	WGA	VENDOR ID	REV
	0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363		0

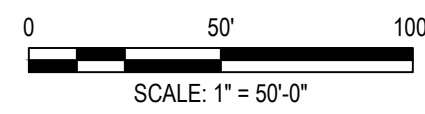


PLAN

LEGEND
 TO BE DEMOLISHED

ISSUED FOR DEMOLITION

- NOTES:
 1. SEE NOTES ON DWG. 82646-3001-D-PIP.



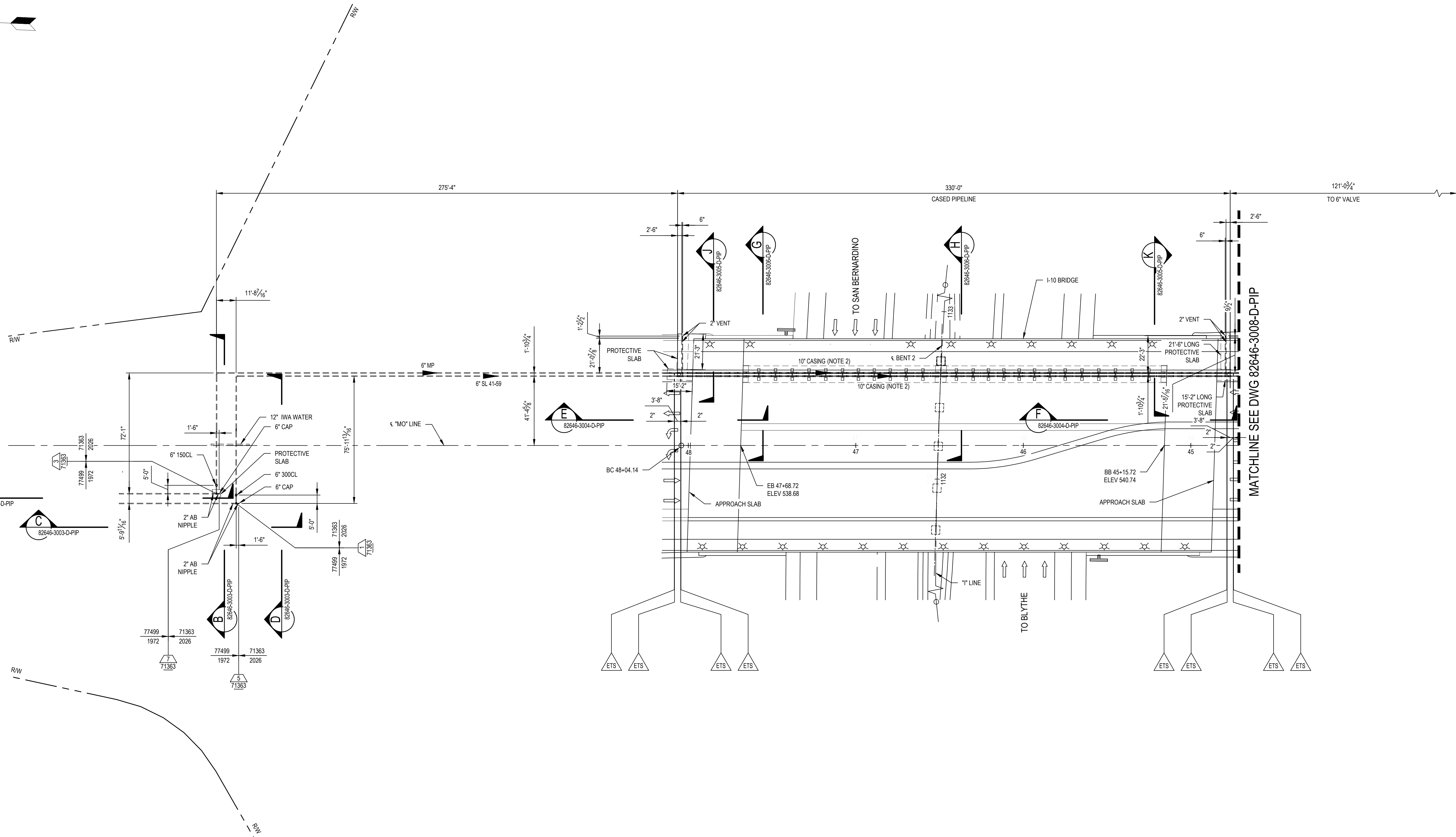
INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE		PERMIT INFORMATION													
COUNTY: RIVERSIDE	DATE MOVED ON: *	WOA	ISSUED BY												
DISTRICT: SOUTHEAST	DATE MOVED OFF: *	*	*												
STRIP MAP NO.:	DATE OF OPERATION: *														
ATLAS NO.:	CONST. CREW FOREMAN: *														
DOT CL. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. COMPANY: *														
CATHODICALLY PROTECTED: *	REGION: *														
YEAR C.P. INSTALLED: *															
0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR DEMOLITION	71363	*	ENG FILE NO: PE24-166	DWG CLASS: 41	DWG DIST: 200	DRAWING NUMBER	REV
REV	DATE	DES	ENGR	CHK	APVD	SCG #/SGP	ENG FILE NO	DESCRIPTION	WOA	VENDOR ID	WOA: 71363	SCALE: 1" = 50'-0"		82646-3002-D-DEM	0

BY		DATE
DESIGNER: H. LOPEZ		05/23/2025
ENGINEER: N. HASAN		05/23/2025
CHECKER: D. NAREZ		05/23/2025
PROJECT APVR: H. ORDONEZ		05/23/2025
SCG ENG APVR: M. MECZLOWICZ		05/23/2025



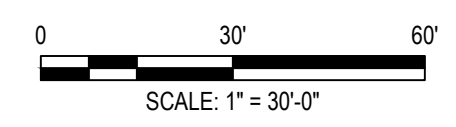
SL 41-59 & MP GAS
 WHITTEWATER RIVER/I-10 & MONROE ST BRIDGE
 REPLACEMENT
 DEMO PIPING PLAN

82646-3002-D-DEM



PLAN

- NOTES:**
- SEE NOTES ON DWG. 82646-3001-D-PIP.
 - SOCALGAS CREW/CONTRACTOR TO INSTALL GAS CARRIER PIPE, INSULATING SKIDS, END SEALS, VENT PIPING, CATHODIC PROTECTION, CASING, CONCRETE PEDESTAL SUPPORTS INCLUDING DOWELS, HOLD-DOWNS, GUIDES, ALL FRP SHIELDS AND FLATTIES, BRACKETS, AND BUILDING PAPER WHERE CASING IS CAST INTO ABUTMENT BACKWALL.



INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE		PERMIT INFORMATION		BY		DATE								
COUNTY: RIVERSIDE	DATE MOVED ON: *	WDA	ISSUED BY	NUMBER	DESIGNER: H. LOPEZ	05/23/2025								
DISTRICT: SOUTHEAST	DATE MOVED OFF: *				ENGINEER: N. HASAN	05/23/2025								
STRIP MAP NO. *	DATE OF OPERATION: *				CHECKER: D. NAREZ	05/23/2025								
ATLAS NO. *	CONST. CREW FOREMAN: *				PROJECT APVR: H. ORDONEZ	05/23/2025								
DOT CL. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. COMPANY: *	1	01/08/2026	DN	NH	DN	HO	MM	PE24-166	UPDATED NOTES	71363	*	SCG ENG APVR: M. MECZLOWICZ	05/23/2025
CATHODICALLY PROTECTED: *	REGION: *	0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	ENG FILE NO: PE24-166	
YEAR C.P. INSTALLED: *													WDA	VENDOR ID

ISSUED FOR CONSTRUCTION



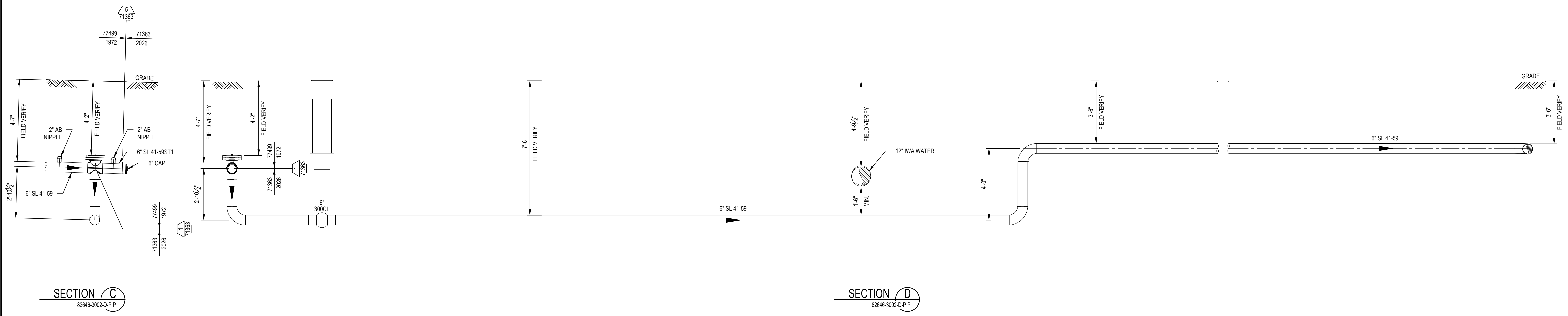
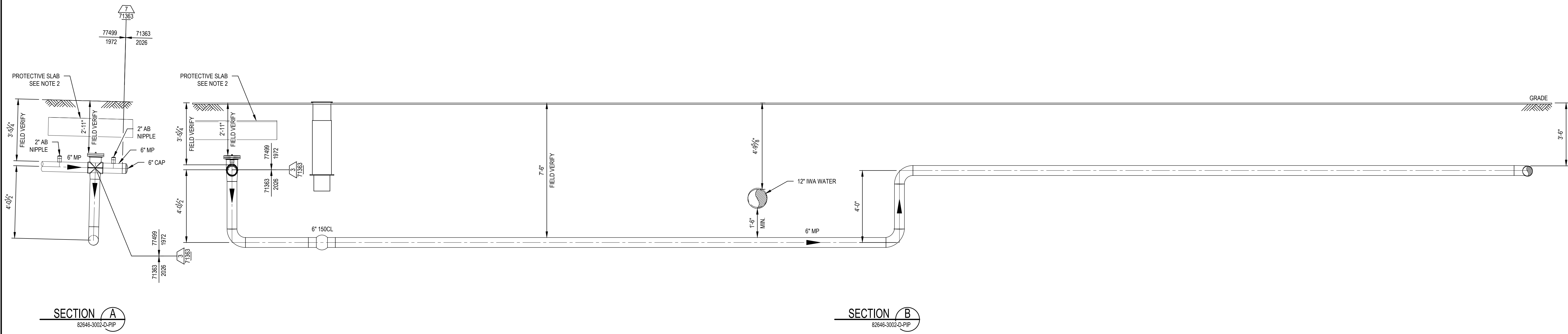
SL 41-59 & MP GAS
I-10 & MONROE ST BRIDGE
REPLACEMENT
PIPING PLAN

82646-3002-D-PIP 1

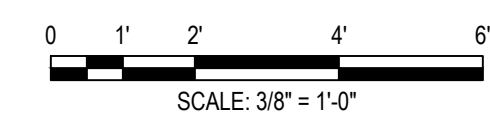
DWG CLASS: 41 DWG DIST: 200

SCALE: 1" = 30'-0"

1/8/2026 9:22 AM, Narez, David

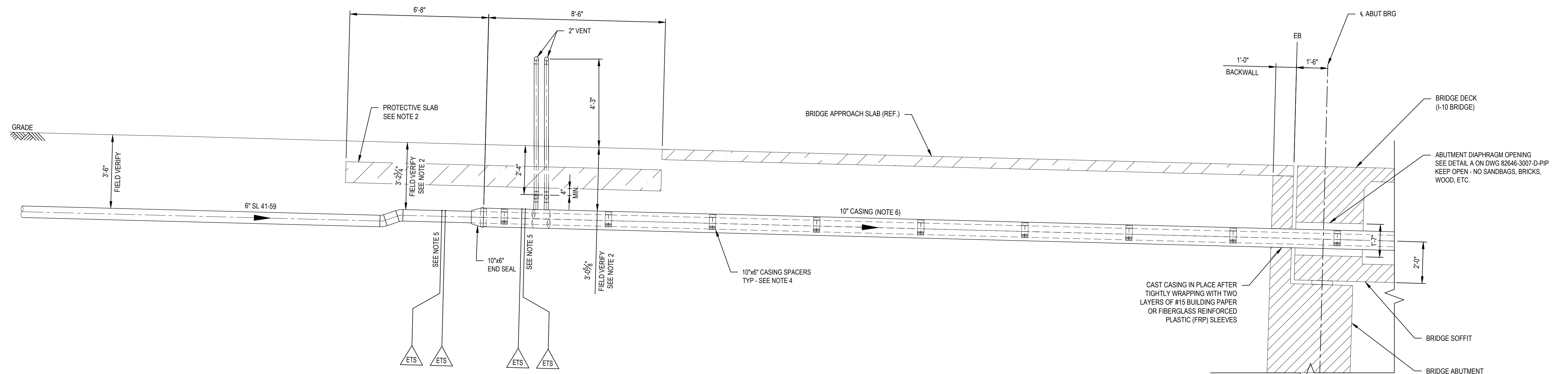


- NOTES:**
- SEE NOTES ON DWG. 82646-3001-D-PIP.
 - CONTRACTOR SHALL VERIFY DEPTH OF COVER PRIOR TO INSTALLING THE REINFORCED CONCRETE PROTECTIVE SLAB. IF THE MIN. DEPTH OF COVER DISTANCE IS NOT MET FROM TOP OF GRADE TO THE TOP OF BLIND FLANGE; THEN A PROTECTIVE SLAB MUST BE INSTALLED. OTHERWISE, THE PROTECTIVE SLAB MAY BE OMITTED.

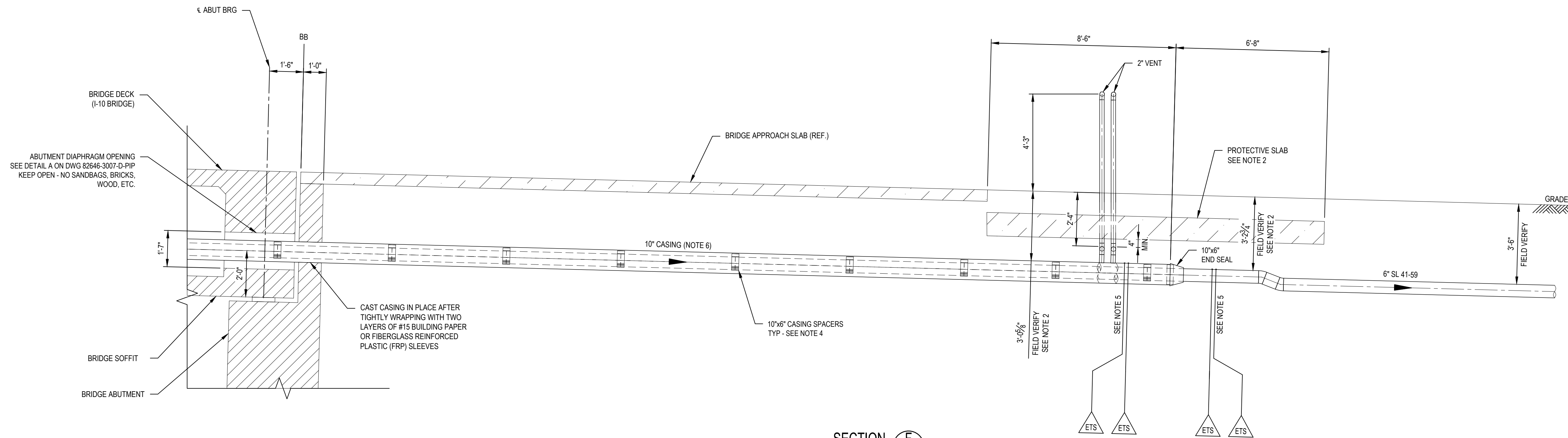


INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE		PERMIT INFORMATION		BY		DATE				SL 41-59 & MP GAS I-10 & MONROE ST BRIDGE REPLACEMENT PIPING SECTIONS															
COUNTY: RIVERSIDE	DATE MOVED ON: *	WQA	ISSUED BY	NUMBER	DESIGNER: H. LOPEZ	05/23/2025	<table border="1"> <tr><td>ENGINEER: N. HASAN</td><td>05/23/2025</td></tr> <tr><td>CHECKER: D. NAREZ</td><td>05/23/2025</td></tr> <tr><td>PROJECT APVR: H. ORDONEZ</td><td>05/23/2025</td></tr> <tr><td>SCG ENG APVR: M. MECHELOWICZ</td><td>05/23/2025</td></tr> </table>	ENGINEER: N. HASAN	05/23/2025	CHECKER: D. NAREZ	05/23/2025	PROJECT APVR: H. ORDONEZ	05/23/2025	SCG ENG APVR: M. MECHELOWICZ	05/23/2025	<table border="1"> <tr><td>DWG CLASS: 41</td><td>DWG DIST: 200</td><td>DRAWING NUMBER</td></tr> <tr><td colspan="3">82646-3003-D-PIP</td></tr> <tr><td>REV</td><td>0</td><td>0</td></tr> </table>	DWG CLASS: 41	DWG DIST: 200	DRAWING NUMBER	82646-3003-D-PIP			REV	0	0
ENGINEER: N. HASAN	05/23/2025																								
CHECKER: D. NAREZ	05/23/2025																								
PROJECT APVR: H. ORDONEZ	05/23/2025																								
SCG ENG APVR: M. MECHELOWICZ	05/23/2025																								
DWG CLASS: 41	DWG DIST: 200	DRAWING NUMBER																							
82646-3003-D-PIP																									
REV	0	0																							
DISTRICT: SOUTHEAST	DATE MOVED OFF: *				ENGINEER: N. HASAN	05/23/2025																			
STRIP MAP NO.: *	DATE OF OPERATION: *				CHECKER: D. NAREZ	05/23/2025																			
ATLAS NO.: *	CONST. CREW FOREMAN: *				PROJECT APVR: H. ORDONEZ	05/23/2025																			
DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. COMPANY: *				SCG ENG APVR: M. MECHELOWICZ	05/23/2025																			
CATHODICALLY PROTECTED: *	REGION: *				ENG FILE NO: PE24-166																				
YEAR C.P. INSTALLED: *					WQA: 71363																				
0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	ENG FILE NO: PE24-166	DWG CLASS: 41	DWG DIST: 200	DRAWING NUMBER	82646-3003-D-PIP	REV	0								
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ISSUED FOR CONSTRUCTION



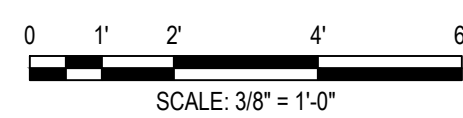
SECTION E
82646-3002-D-PIP



SECTION F
82646-3002-D-PIP

NOTES:

- SEE NOTES ON DWG. 82646-3001-D-PIP.
- FOR CARRIER & CASING PIPE WITH LESS THAN 42" BURIAL DEPTH AND FOR VENT PIPE WITH LESS THAN 30" BURIAL DEPTH, INSTALL AN ENGINEERED PROTECTIVE SLAB PER DETAILS GIVEN IN DWG. 82646-4009-D-STR.
- THE AXIS OF EACH DIAPHRAGM OPENING MUST BE PARALLEL TO AXIS OF PIPE.
- CARRIER SKIDS/SPACERS SHALL BE SPACED PER GAS STANDARD 182.0080 FOR STEEL CARRIER PIPE OR 182.0148 AND 182.0090 FOR PLASTIC CARRIER PIPE.
- TWO 32-LB MAGNESIUM ANODES TO BE INSTALLED AT BOTH ENDS OF CASING PER GAS STANDARD 186.0040 AND DWG. 82646-3016-D-PIP.
- SOCAL GAS CREW/CONTRACTOR TO INSTALL GAS CARRIER PIPE, INSULATING SKIDS, END SEALS, VENT PIPING, CATHODIC PROTECTION, CASING, CONCRETE PEDESTAL SUPPORTS INCLUDING DOWELS, HOLD-DOWNS, GUIDES, ALL FRP SHIELDS AND FLATTIES, BRACKETS, AND BUILDING PAPER WHERE CASING IS CAST INTO ABUTMENT BACKWALL.



INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE		PERMIT INFORMATION								
COUNTY: RIVERSIDE	DATE MOVED ON: *	WDA	ISSUED BY							
DISTRICT: SOUTHEAST	DATE MOVED OFF: *		NUMBER							
STRIP MAP NO.: *	DATE OF OPERATION: *									
ATLAS NO.: *	CONST. CREW FOREMAN: *									
DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	REGION: *									
CATHODICALLY PROTECTED: *										
YEAR C.P. INSTALLED: *										
REV	DATE	DES	ENGR	CHK	APVD	SCG #/PG	ENG FILE NO	DESCRIPTION	WDA	VENDOR ID
1	01/08/2026	DN	NH	DN	HO	MM	PE24-166	UPDATED NOTES	71363	*
0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*

BY		DATE
DESIGNER: H. LOPEZ		05/23/2025
ENGINEER: N. HASAN		05/23/2025
CHECKER: D. NAREZ		05/23/2025
PROJECT APVR: H. ORDONEZ		05/23/2025
SCG ENG APVR: M. MECHELOWICZ		05/23/2025
ENG FILE NO: PE24-166		

ISSUED FOR CONSTRUCTION

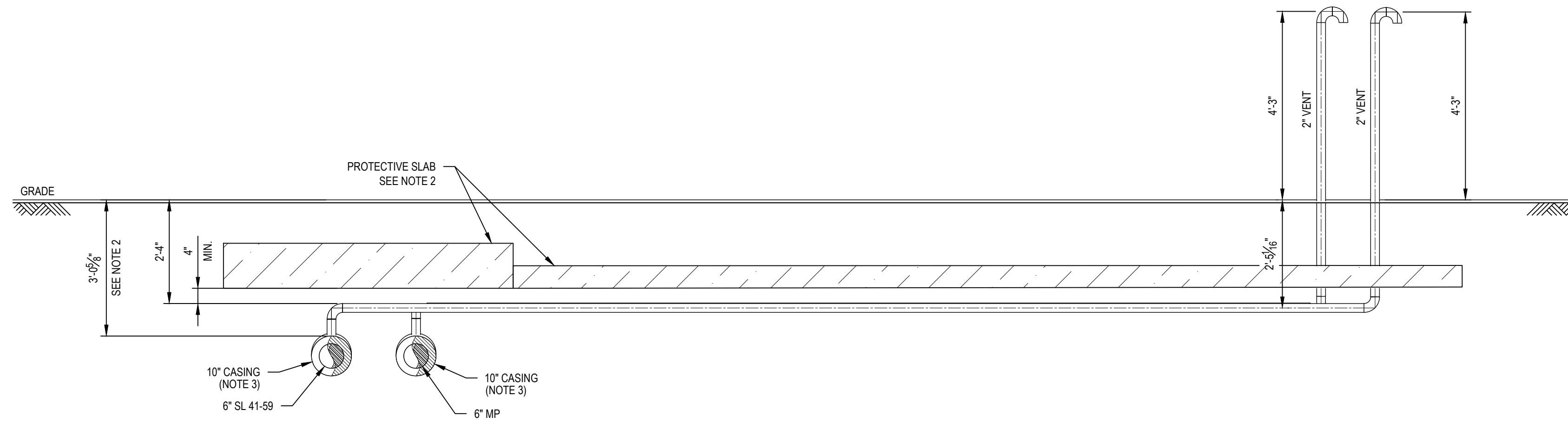
SL 41-59 & MP GAS
I-10 & MONROE ST BRIDGE
REPLACEMENT
PIPING SECTIONS

SoCalGas.

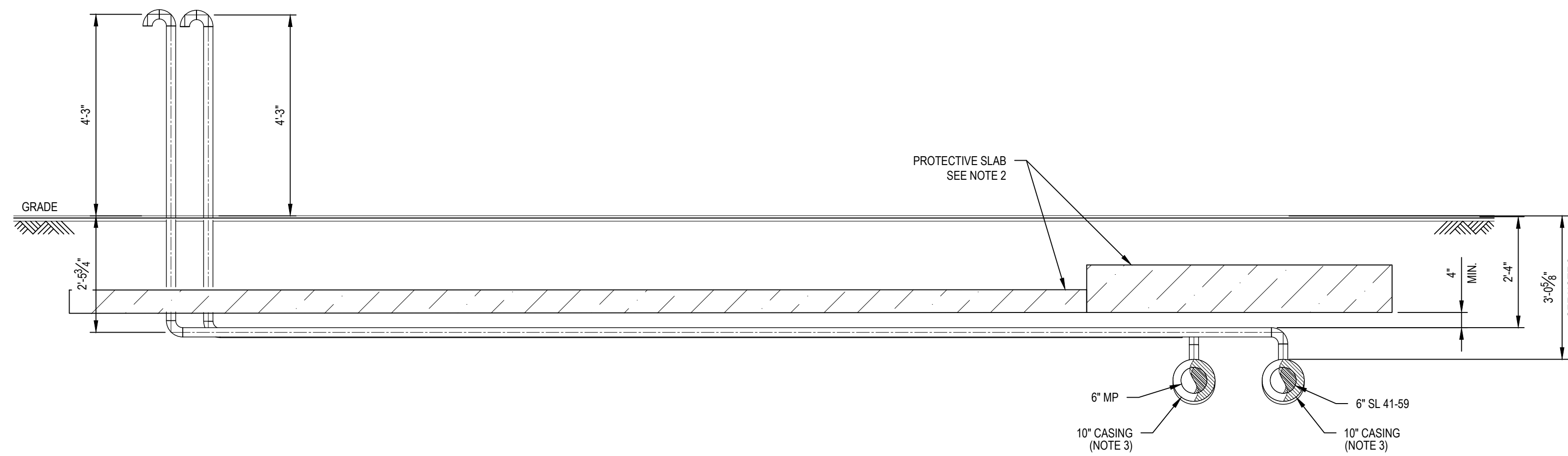
DWG CLASS: 41 DWG DIST: 200
SCALE: 3/8" = 1'-0"

82646-3004-D-PIP

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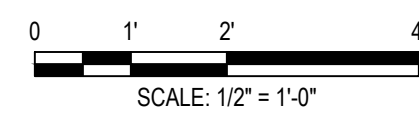
SECTION J
82646-3002-D-PIP



SECTION K
82646-3002-D-PIP

NOTES:

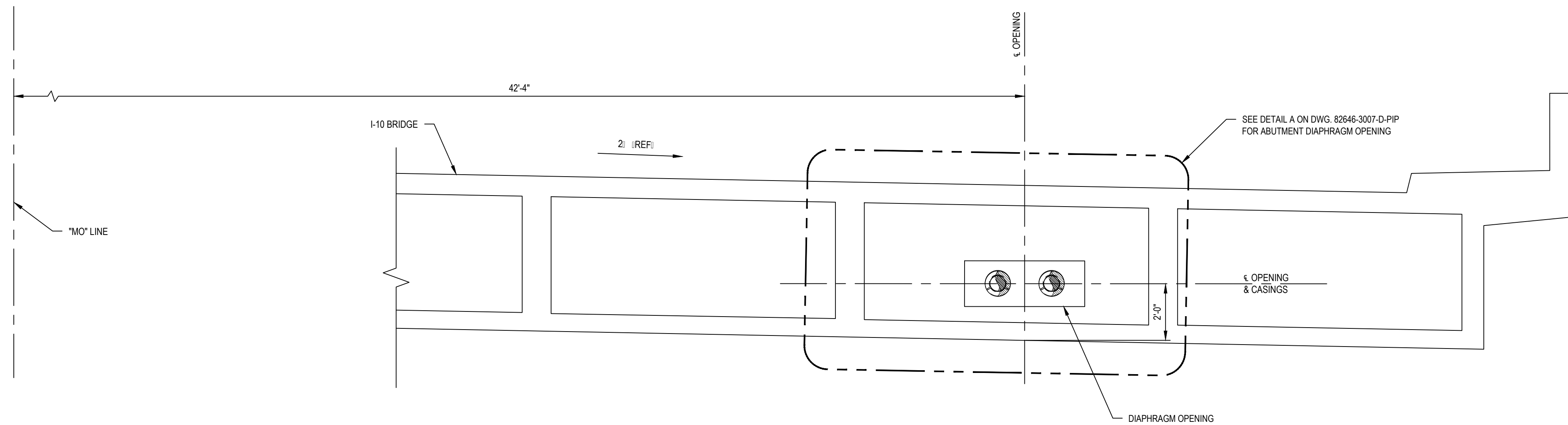
- SEE NOTES ON DWG. 82646-3001-D-PIP.
- FOR CARRIER & CASING PIPE WITH LESS THAN 42" BURIAL DEPTH AND FOR VENT PIPE WITH LESS THAN 30" BURIAL DEPTH, INSTALL AN ENGINEERED PROTECTIVE SLAB PER DETAILS GIVEN IN DWG. 82646-4009-D-STR.
- SOCALGAS CREW/CONTRACTOR TO INSTALL GAS CARRIER PIPE, INSULATING SKIDS, END SEALS, VENT PIPING, CATHODIC PROTECTION, CASING, CONCRETE PEDESTAL SUPPORTS INCLUDING DOWELS, HOLD-DOWNS, GUIDES, ALL FRP SHIELDS AND FLATTIES, BRACKETS, AND BUILDING PAPER WHERE CASING IS CAST INTO ABUTMENT BACKWALL.



ISSUED FOR CONSTRUCTION

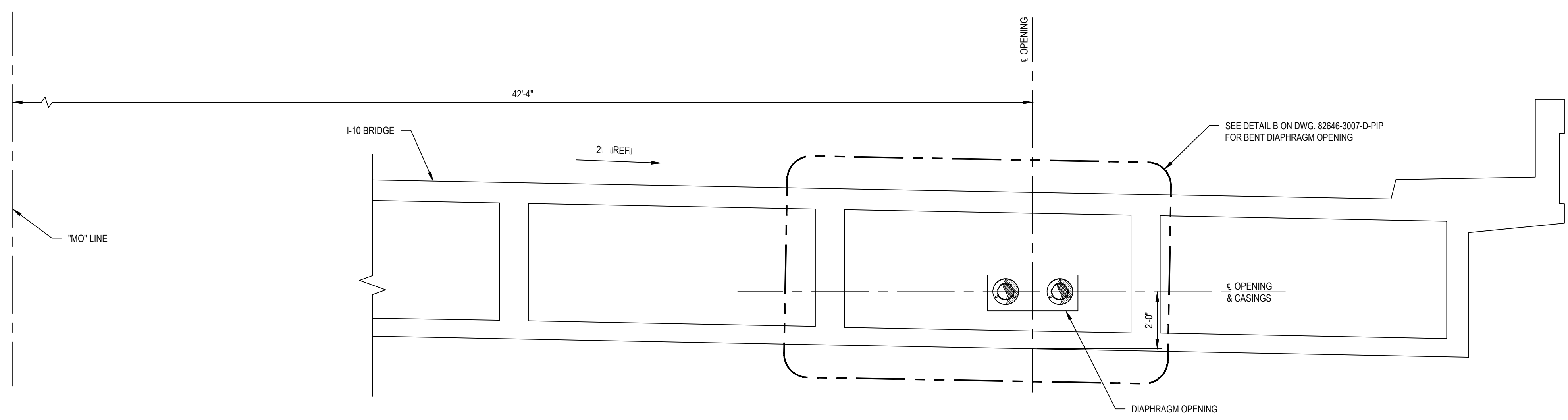
INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE										PERMIT INFORMATION			BY		DATE		DRAWING NUMBER	
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DISTRICT: SOUTHEAST	DATE MOVED OFF: *	*	*	*			ENGINEER: N. HASAN	05/23/2025										
STRIP MAP NO.:	DATE OF OPERATION: *						CHECKER: D. NAREZ	05/23/2025										
ATLAS NO.:	CONST. CREW FOREMAN: *						PROJECT APVR: H. ORDONEZ	05/23/2025										
DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. COMPANY: *						SCG ENG APVR: M. MECZLOWICZ	05/23/2025	DWG CLASS: 41	DWG DST: 200	REV	1						
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YEAR C.P. INSTALLED: *							WGA: 71363											
REV	DATE	DES	ENGR	CHK	APVD	SCG #/CIP	ENG FILE NO	DESCRIPTION	WGA	VENDOR ID								
1	01/08/2026	DN	NH	DN	HO	MM	PE24-166	UPDATED NOTES	71363	*								
0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*								

SL 41-59 & MP GAS
I-10 & MONROE ST BRIDGE
REPLACEMENT
PIPING SECTIONS



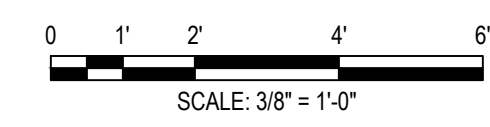
SECTION G
82646-3002-D-PIP

NOTE:
ABUTMENT 3 OPENING DETAILS SHOWN;
ABUTMENT 1 OPENING SIMILAR



SECTION H
82646-3002-D-PIP

NOTES:
1. SEE NOTES ON DWG. 82646-3001-D-PIP & 82646-3004-D-PIP.



INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE		PERMIT INFORMATION		BY		DATE										
COUNTY: RIVERSIDE	DATE MOVED ON: *	WGA	ISSUED BY	DESIGNER: H. LOPEZ	05/23/2025											
DISTRICT: SOUTHEAST	DATE MOVED OFF: *	*	*	ENGINEER: N. HASAN	05/23/2025											
STRIP MAP NO.: *	DATE OF OPERATION: *			CHECKER: D. NAREZ	05/23/2025											
ATLAS NO.: *	CONST. CREW FOREMAN: *			PROJECT APVR: H. ORDONEZ	05/23/2025											
DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. COMPANY: *			SCG ENG APVR: M. MECZLOWICZ	05/23/2025											
CATHODICALLY PROTECTED: *	REGION: *			ENG FILE NO: PE24-166												
YEAR C.P. INSTALLED: *				WGA: 71363												
REV	DATE	DES	ENGR	CHK	APVD	SCG #/PIP	ENG FILE NO	DESCRIPTION	WGA	VENDOR ID	BY	DATE	DWG CLASS	DWG DIST	DRAWING NUMBER	REV
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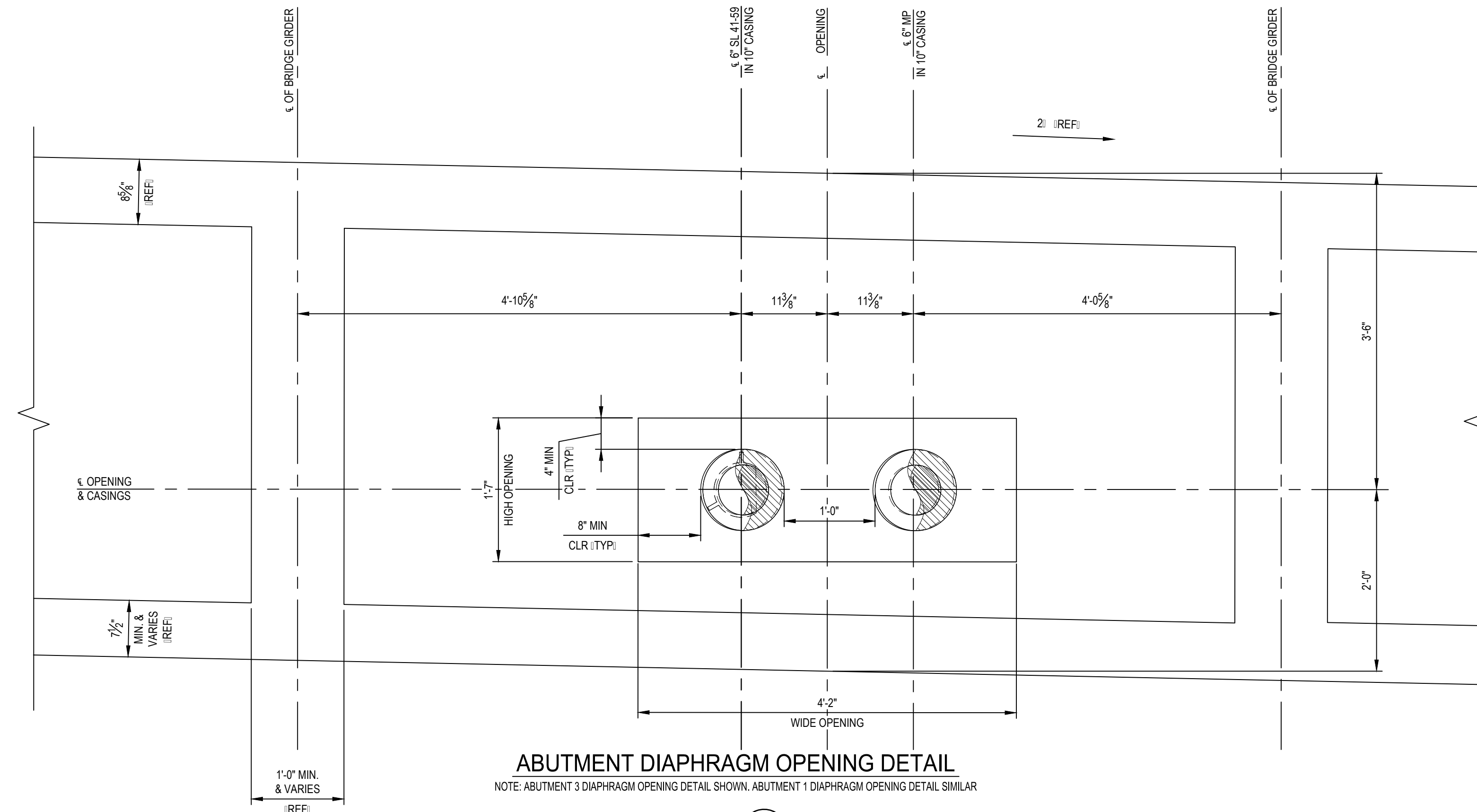


ISSUED FOR CONSTRUCTION

SL 41-59 & MP GAS
I-10 & MONROE ST BRIDGE
REPLACEMENT
PIPING SECTIONS

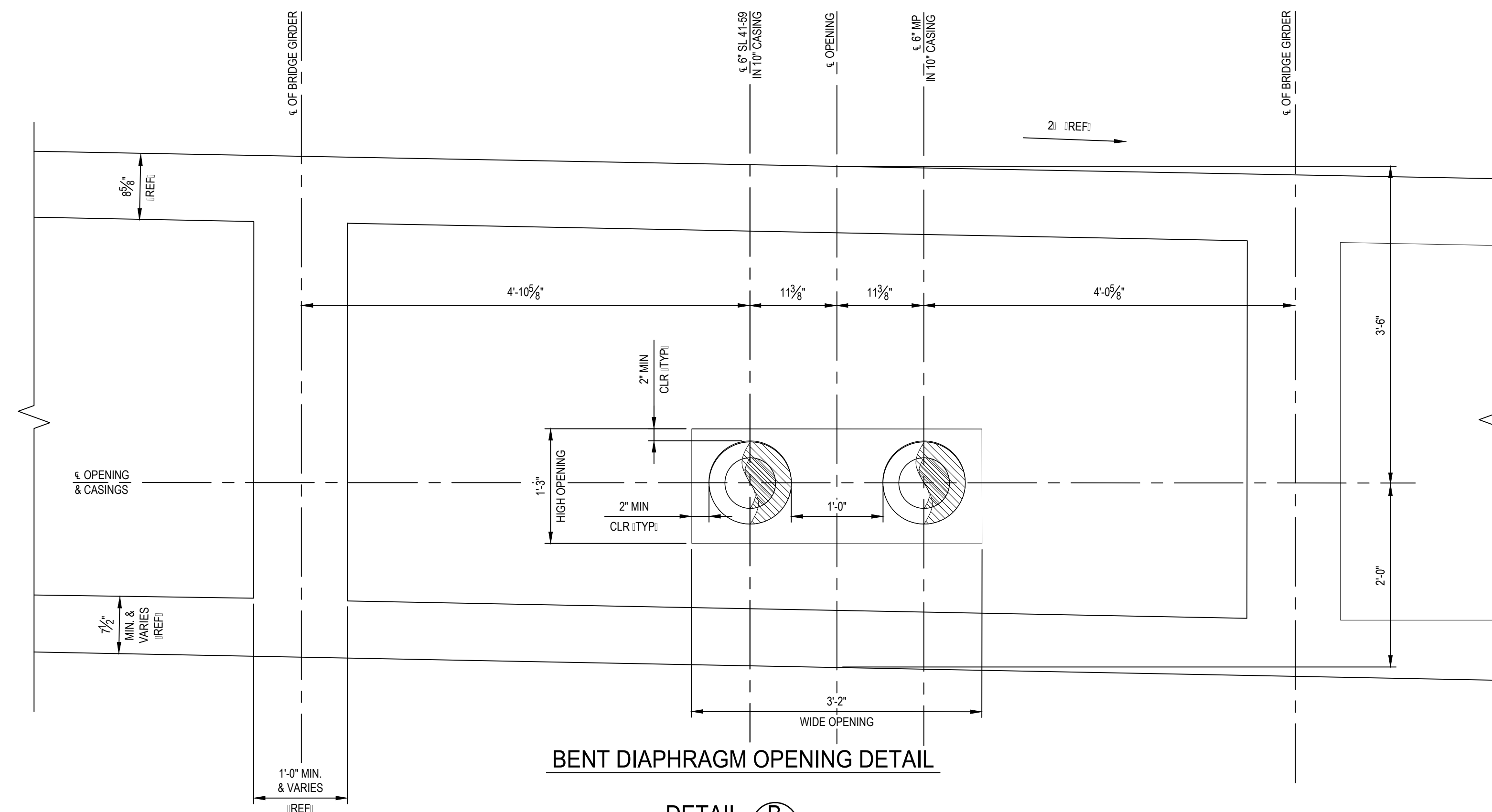
82646-3006-D-PIP

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ABUTMENT DIAPHRAGM OPENING DETAIL
NOTE: ABUTMENT 3 DIAPHRAGM OPENING DETAIL SHOWN. ABUTMENT 1 DIAPHRAGM OPENING DETAIL SIMILAR

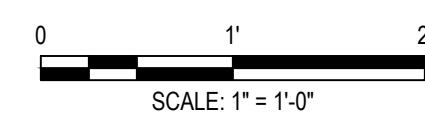
DETAIL A
82646-3006-D-PIP



BENT DIAPHRAGM OPENING DETAIL

DETAIL B
82646-3006-D-PIP

ISSUED FOR CONSTRUCTION

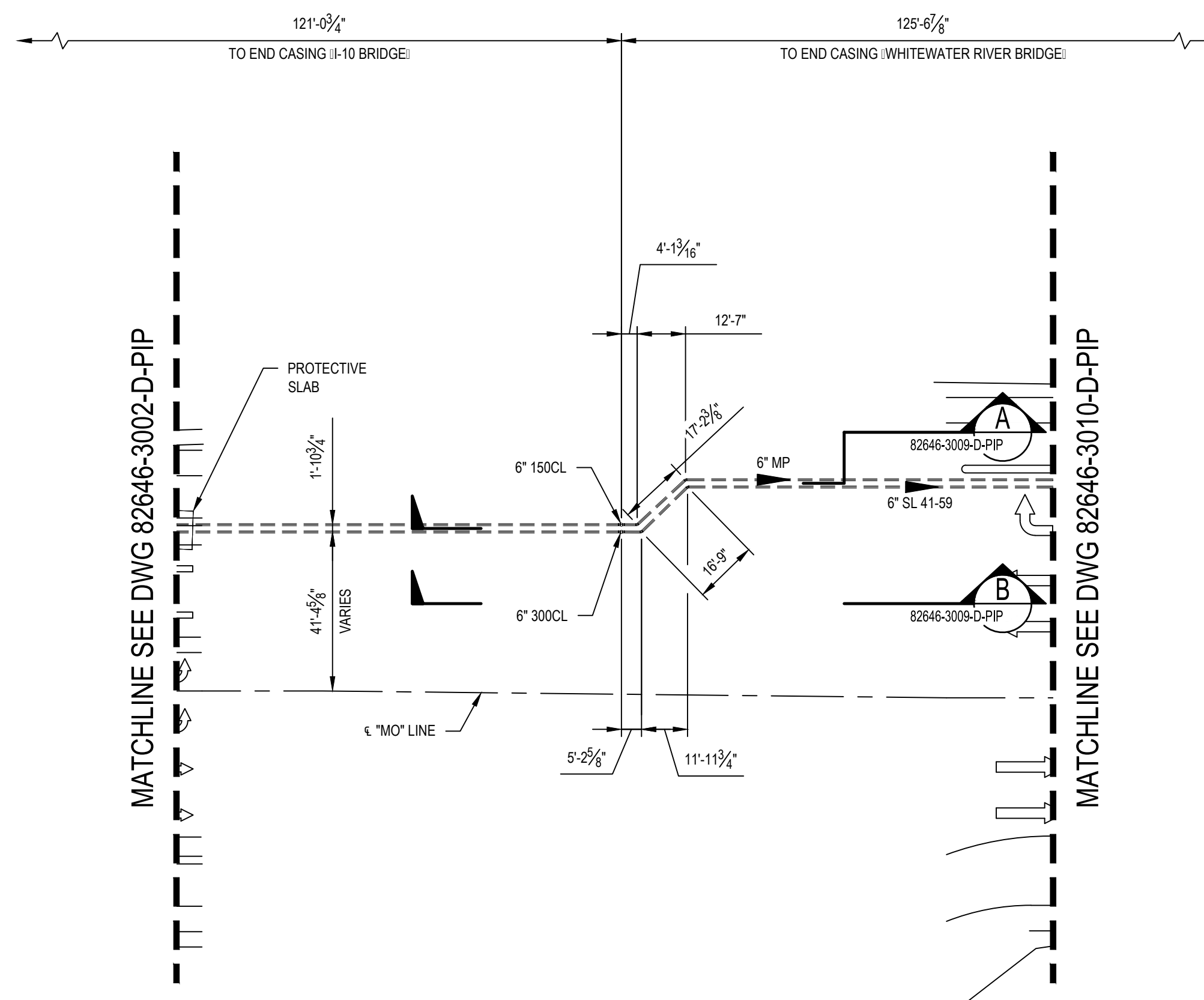


INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE
COUNTY: RIVERSIDE	WDA	DESIGNER: H. LOPEZ	05/23/2025
DISTRICT: SOUTHEAST	ISSUED BY	ENGINEER: N. HASAN	05/23/2025
STRIP MAP NO. *	NUMBER	CHECKER: D. NAREZ	05/23/2025
ATLAS NO. *		PROJECT APVR: H. ORDONEZ	05/23/2025
DOT CL. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4		SCG ENG APVR: M. MECHELOWICZ	05/23/2025
CATHODICALLY PROTECTED: *		ENG FILE NO: PE24-166	
YEAR C.P. INSTALLED: *		WDA: 71363	
	REV	DESCRIPTION	WDA
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	1	12/19/2025 HL NH DN HO MM PE24-166 ISSUED FOR CONSTRUCTION	71363



SL 41-59 & MP GAS
I-10 & MONROE ST BRIDGE
REPLACEMENT
PIPING DETAIL

82646-3007-D-PIP
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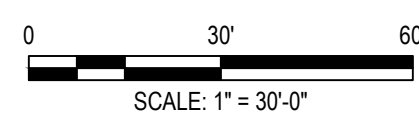


PLAN

ISSUED FOR CONSTRUCTION

NOTES:

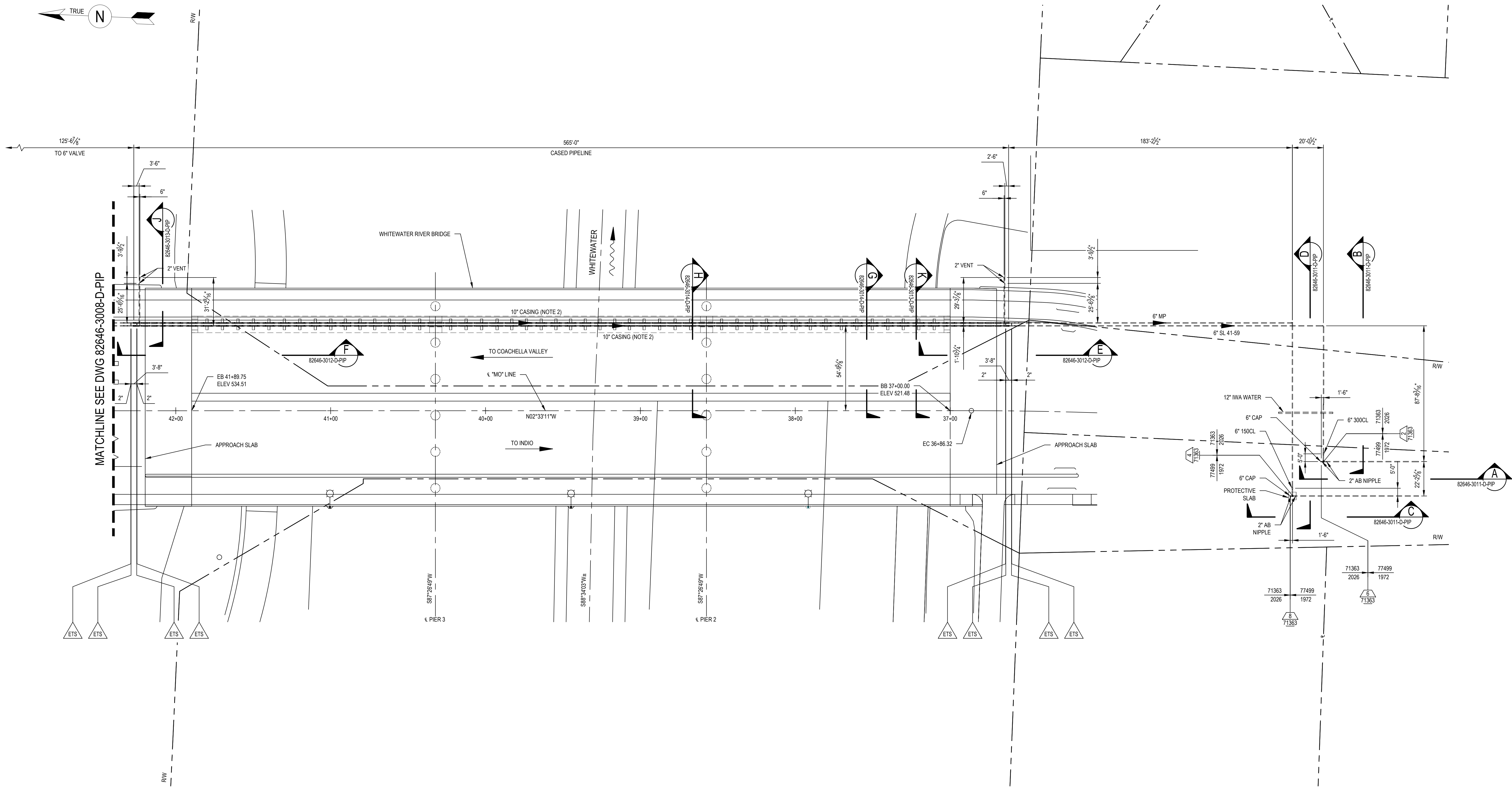
- SEE NOTES ON DWG. 82646-3001-D-PIP.



INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE		PERMIT INFORMATION		BY		DATE									
COUNTY: RIVERSIDE	DATE MOVED ON: *	WDA	ISSUED BY	NUMBER	DESIGNER: H. LOPEZ	05/23/2025									
DISTRICT: SOUTHEAST	DATE MOVED OFF: *				ENGINEER: N. HASAN	05/23/2025									
STRIP MAP NO.:	DATE OF OPERATION: *				CHECKER: D. NAREZ	05/23/2025									
ATLAS NO.:	CONST. CREW FOREMAN: *				PROJECT APVR: H. ORDONEZ	05/23/2025									
DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. COMPANY: *				SCG ENG APVR: M. MECHELOWICZ	05/23/2025									
CATHODICALLY PROTECTED: *	REGION: *				SCG FILE NO: PE24-166										
YEAR C.P. INSTALLED: *					WDA: 71363										
0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363		ENG FILE NO: PE24-166	DWG CLASS: 41	DWG DIST: 200	DRAWING NUMBER: 82646-3008-D-PIP	REV: 0



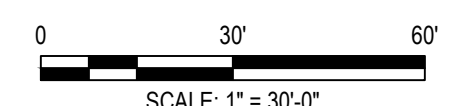
SL 41-59 & MP GAS
WHITTATER RIVER/I-10 & MONROE ST BRIDGE
REPLACEMENT
PIPING PLAN



PLAN

NOTES:

- SEE NOTES ON DWG. 82646-3001-D-PIP.
- SOCALGAS CREW/CONTRACTOR TO INSTALL GAS CARRIER PIPE, INSULATING SKIDS, END SEALS, VENT PIPING, CATHODIC PROTECTION, CASING, CONCRETE PEDESTAL SUPPORTS INCLUDING DOWELS, HOLD-DOWNS, GUIDES, ALL FRP SHIELDS AND FLATTIES, BRACKETS, AND BUILDING PAPER WHERE CASING IS CAST INTO ABUTMENT BACKWALL.



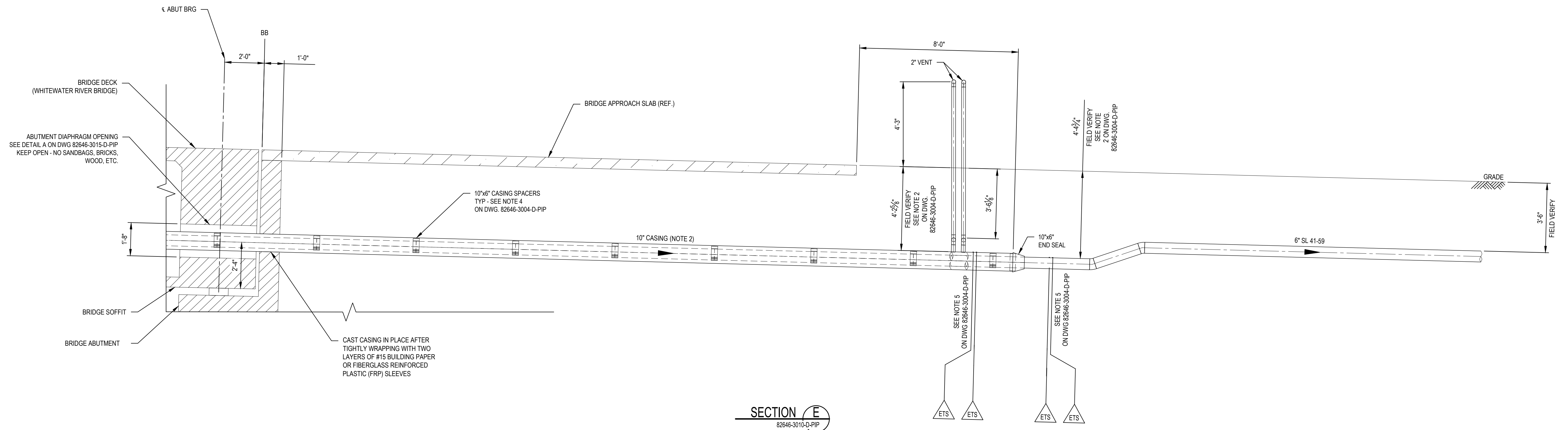
INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		SL 41-59 & MP GAS WHITWATER RIVER & MONROE ST BRIDGE REPLACEMENT PIPING PLAN
COUNTY: RIVERSIDE	WCA	ISSUED BY	NUMBER		
DISTRICT: SOUTHEAST	DATE MOVED ON *	ENGINEER: N. HASAN		CHECKER: D. NAREZ	05/23/2025
STRIP MAP NO. *	DATE MOVED OFF *	PROJECT APVR: H. ORDONEZ		SCG ENG APVR: M. MECHELOWICZ	05/23/2025
ATLAS NO. *	DATE OF OPERATION *	CONST. CREW FOREMAN *		ENG FILE NO: PE24-166	
DOT CL. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. COMPANY *	REGION *		DWG CLASS: 41	DWG DIST: 200
CATHODICALLY PROTECTED *	YEAR C.P. INSTALLED *			SCALE: 1" = 30'-0"	DRAWING NUMBER
					82646-3010-D-PIP

ISSUED FOR CONSTRUCTION

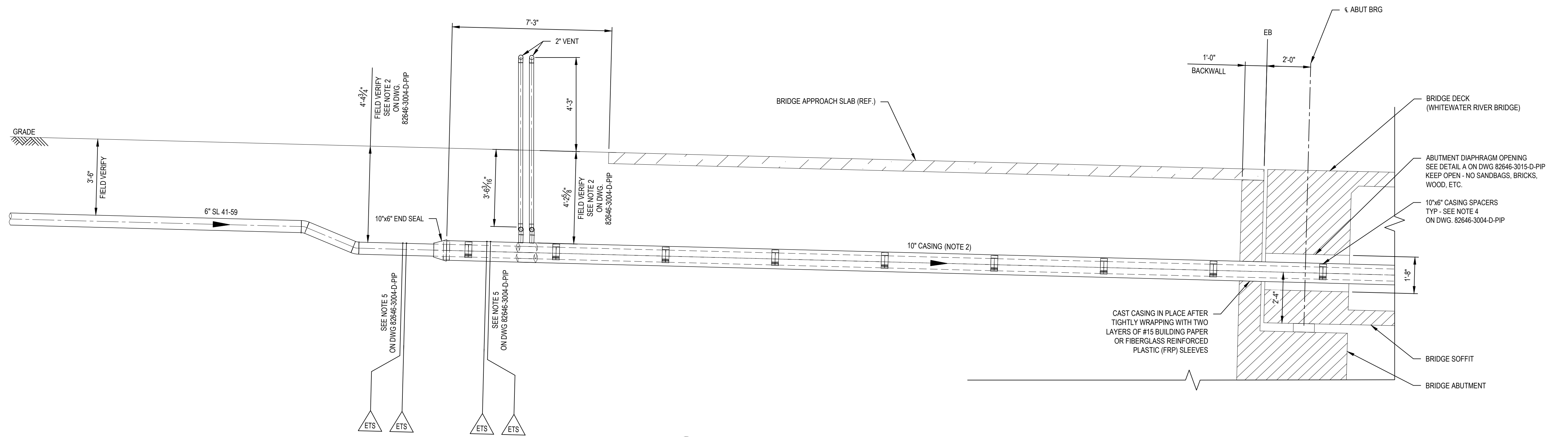
SL 41-59 & MP GAS
WHITWATER RIVER & MONROE ST BRIDGE
REPLACEMENT
PIPING PLAN

82646-3010-D-PIP

1



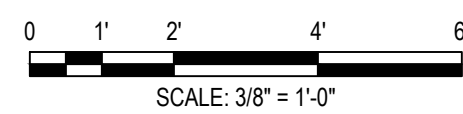
SECTION E
82646-3010-D-PIP



SECTION F
82646-3010-D-PIP

NOTES:

- SEE NOTES ON DWG. 82646-3001-D-PIP & 82646-3004-D-PIP.
- SOCALGAS CREW/CONTRACTOR TO INSTALL GAS CARRIER PIPE, INSULATING SKIDS, END SEALS, VENT PIPING, CATHODIC PROTECTION, CASING, CONCRETE PEDESTAL SUPPORTS INCLUDING DOWELS, HOLD-DOWNS, GUIDES, ALL FRP SHIELDS AND FLATTIES, BRACKETS, AND BUILDING PAPER WHERE CASING IS CAST INTO ABUTMENT BACKWALL.



ISSUED FOR CONSTRUCTION

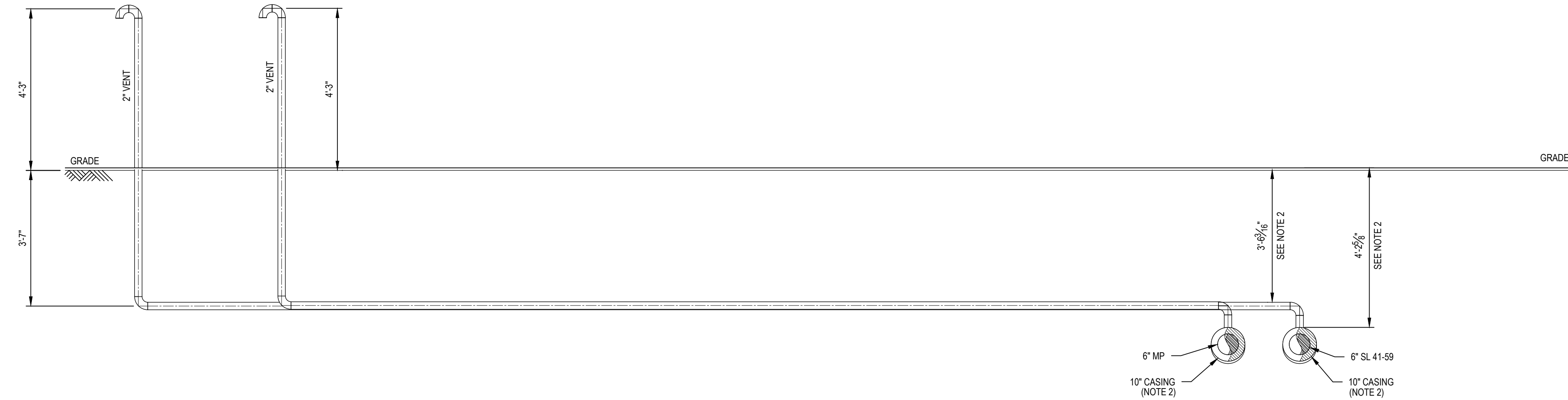
INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE		PERMIT INFORMATION		BY		DATE	
COUNTY: RIVERSIDE	DATE MOVED ON: *	WGA	ISSUED BY	DESIGNER: H. LOPEZ	05/23/2025		
DISTRICT: SOUTHEAST	DATE MOVED OFF: *			ENGINEER: N. HASAN	05/23/2025		
STRIP MAP NO.: *	DATE OF OPERATION: *			CHECKER: D. NAREZ	05/23/2025		
ATLAS NO.: *	CONST. CREW FOREMAN: *			PROJECT APVR: H. ORDONEZ	05/23/2025		
DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	REGION: *			SCG ENG APVR: M. MECHELOWICZ	05/23/2025	DWG CLASS: 41 DWG DIST: 200 DRAWING NUMBER: 82646-3012-D-PIP REV: 1	
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YEAR C.P. INSTALLED: *				WGA: 71363		VENDOR ID:	
						REV: 1	

SL 41-59 & MP GAS
WHITEWATER RIVER & MONROE ST BRIDGE
REPLACEMENT
PIPING SECTIONS

82646-3012-D-PIP



SECTION J
82646-3010-D-PIP



SECTION K
82646-3010-D-PIP

- NOTES:**
- SEE NOTES ON DWG. 82646-3001-D-PIP & 82646-3004-D-PIP.
 - SOCALGAS CREW/CONTRACTOR TO INSTALL GAS CARRIER PIPE, INSULATING SKIDS, END SEALS, VENT PIPING, CATHODIC PROTECTION, CASING, CONCRETE PEDESTAL SUPPORTS INCLUDING DOWELS, HOLD-DOWNS, GUIDES, ALL FRP SHIELDS AND FLATTIES, BRACKETS, AND BUILDING PAPER WHERE CASING IS CAST INTO ABUTMENT BACKWALL.



INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE		PERMIT INFORMATION		BY		DATE								
COUNTY: RIVERSIDE	DATE MOVED ON: *	WDA	ISSUED BY	NUMBER	DESIGNER: H. LOPEZ	05/23/2025								
DISTRICT: SOUTHEAST	DATE MOVED OFF: *	*	*	*	ENGINEER: N. HASAN	05/23/2025								
STRIP MAP NO.: *	DATE OF OPERATION: *				CHECKER: D. NAREZ	05/23/2025								
ATLAS NO.: *	CONST. CREW FOREMAN: *				PROJECT APVR: H. ORDONEZ	05/23/2025								
DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. COMPANY: *	1	01/08/2026	DN	NH	DN	HO	MM	PE24-166	UPDATED NOTES	71363	*	SCG ENG APVR: M. MECZLOWICZ	05/23/2025
CATHODICALLY PROTECTED: *	REGION: *	0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	ENG FILE NO: PE24-166	
YEAR C.P. INSTALLED: *		REV	DATE	DES	ENGR	CHK	APVD	SCG APVR	ENG FILE NO	DESCRIPTION	WDA	VENDOR ID	WDA	VENDOR ID



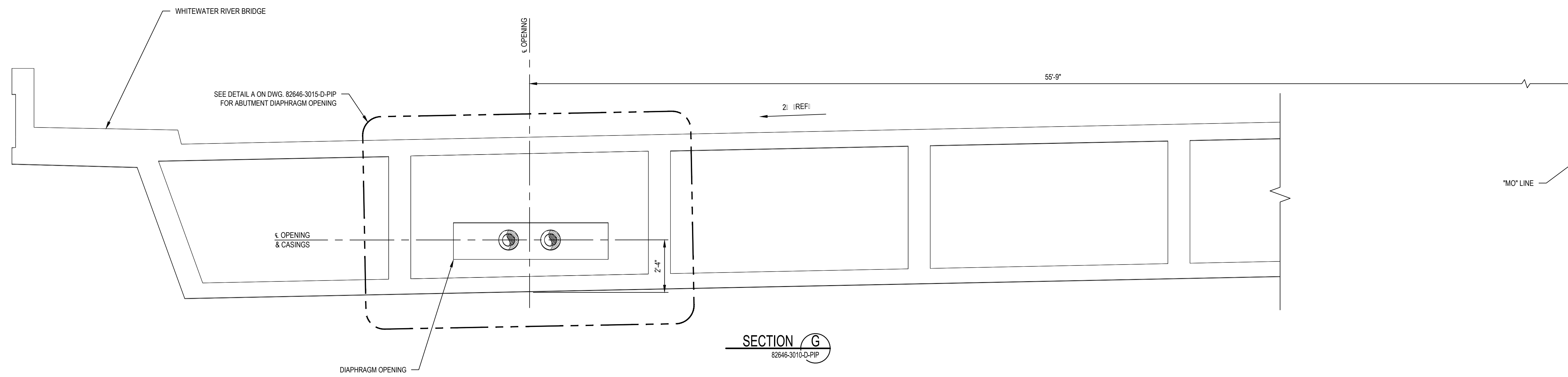
ISSUED FOR CONSTRUCTION

SL 41-59 & MP GAS
WHITWATER RIVER & MONROE ST BRIDGE
REPLACEMENT
PIPING SECTIONS

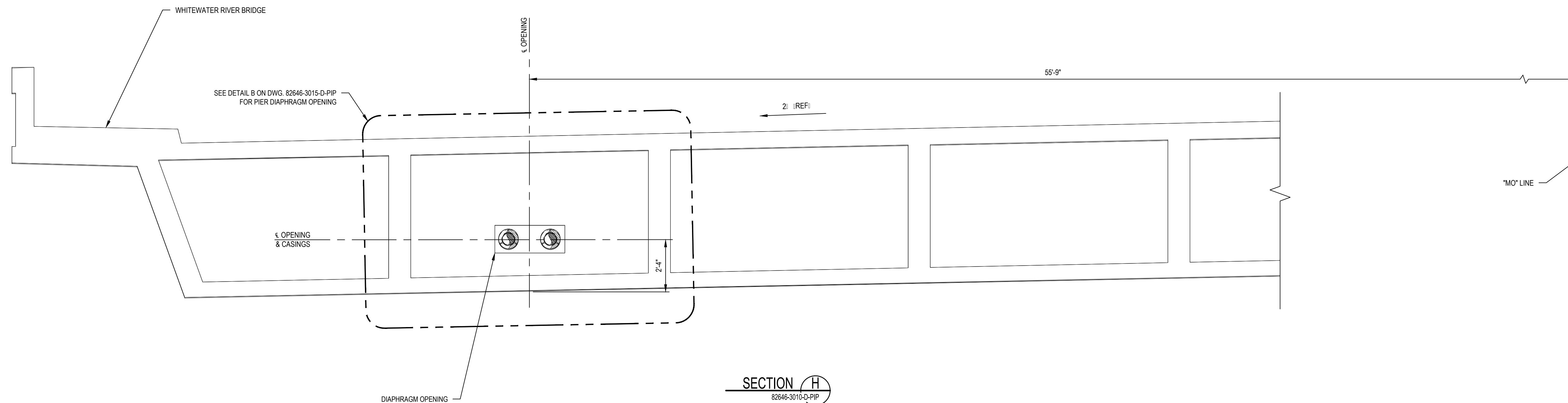
82646-3013-D-PIP

DWG CLASS: 41
DWG DIST: 200

REV 1

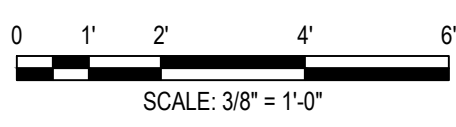


SECTION G
82646-3010-D-PIP



SECTION H
82646-3010-D-PIP

NOTES:
1. SEE NOTES ON DWG. 82646-3001-D-PIP & 82646-3004-D-PIP.



INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE		PERMIT INFORMATION	
COUNTY: RIVERSIDE	DATE MOVED ON: *	WOA	ISSUED BY
DISTRICT: SOUTHEAST	DATE MOVED OFF: *	*	*
STRIP MAP NO.: *	DATE OF OPERATION: *		
ATLAS NO.: *	CONST. CREW FOREMAN: *		
DOT CL. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. COMPANY: *		
CATHODICALLY PROTECTED: *	REGION: *		
YEAR C.P. INSTALLED: *			
REV	DATE	DES	ENGR
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		DN	HO
		MM	PE24-166
		SCG	ISSUED FOR CONSTRUCTION
		ENG FILE NO	71363
		DESCRIPTION	
		WOA	VENDOR ID

BY	DATE
DESIGNER: H. LOPEZ	05/23/2025
ENGINEER: N. HASAN	05/23/2025
CHECKER: D. NAREZ	05/23/2025
PROJECT APVR: H. ORDONEZ	05/23/2025
SCG ENG APVR: M. MECZLOWICZ	05/23/2025
ENG FILE NO: PE24-166	
WOA: 71363	

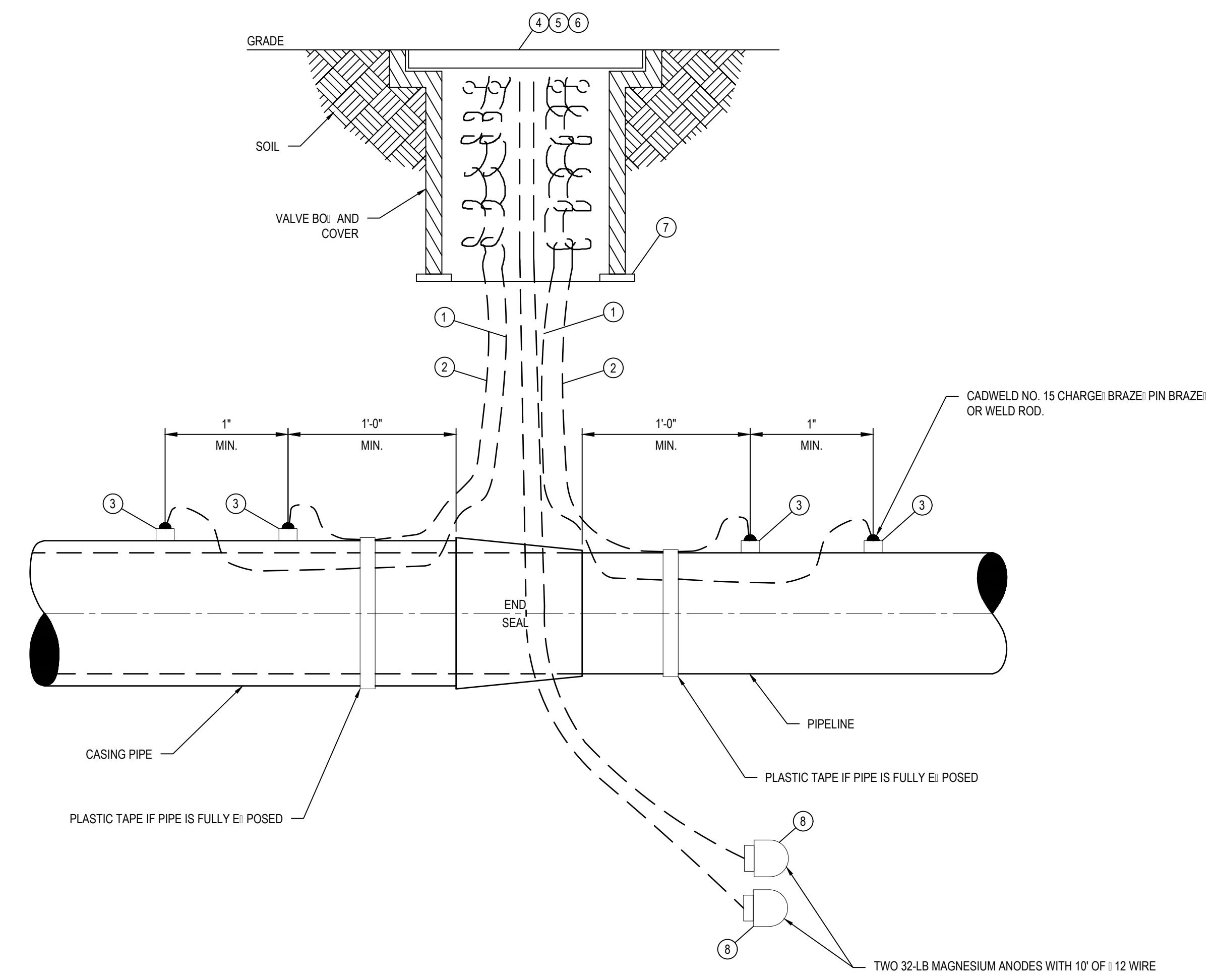


ISSUED FOR CONSTRUCTION

SL 41-59 & MP GAS
WHITEWATER RIVER & MONROE ST BRIDGE
REPLACEMENT
PIPING SECTIONS


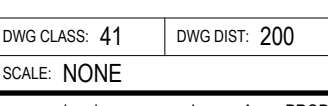
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SCALE: 3/8" = 1'-0"
DRAWING NUMBER: 82646-3014-D-PIP
REV: 0

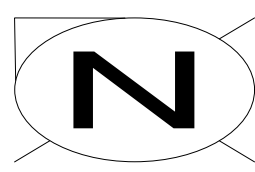
ITEM	TY.	SIZE	MATERIAL DESCRIPTION	STOCK
①	--	--	MIN. 18 INSULATED WIRE BOND COPPER	-----
②	--	--	MIN. 14 INSULATED WIRE STR COPPER	-----
③	4	1"	CAP S/W A-105 SMC 52-83; WELD W/ ETS	N529681
④	1	12" 36"	CASING; VALVE BO; STL.	N571440
⑤	1	12"	COVER; CAST IRON OR PLASTIC ;SEE NOTE 9; ROUND	N574652
⑥	1	12"	E; TENSION; SHEET METAL	N575237
⑦	1	12"	PLATE; SUPPORT	-----
⑧	2	--	32-LB MAGNESIUM ANODE WITH 10' OF 12 WIRE	-----



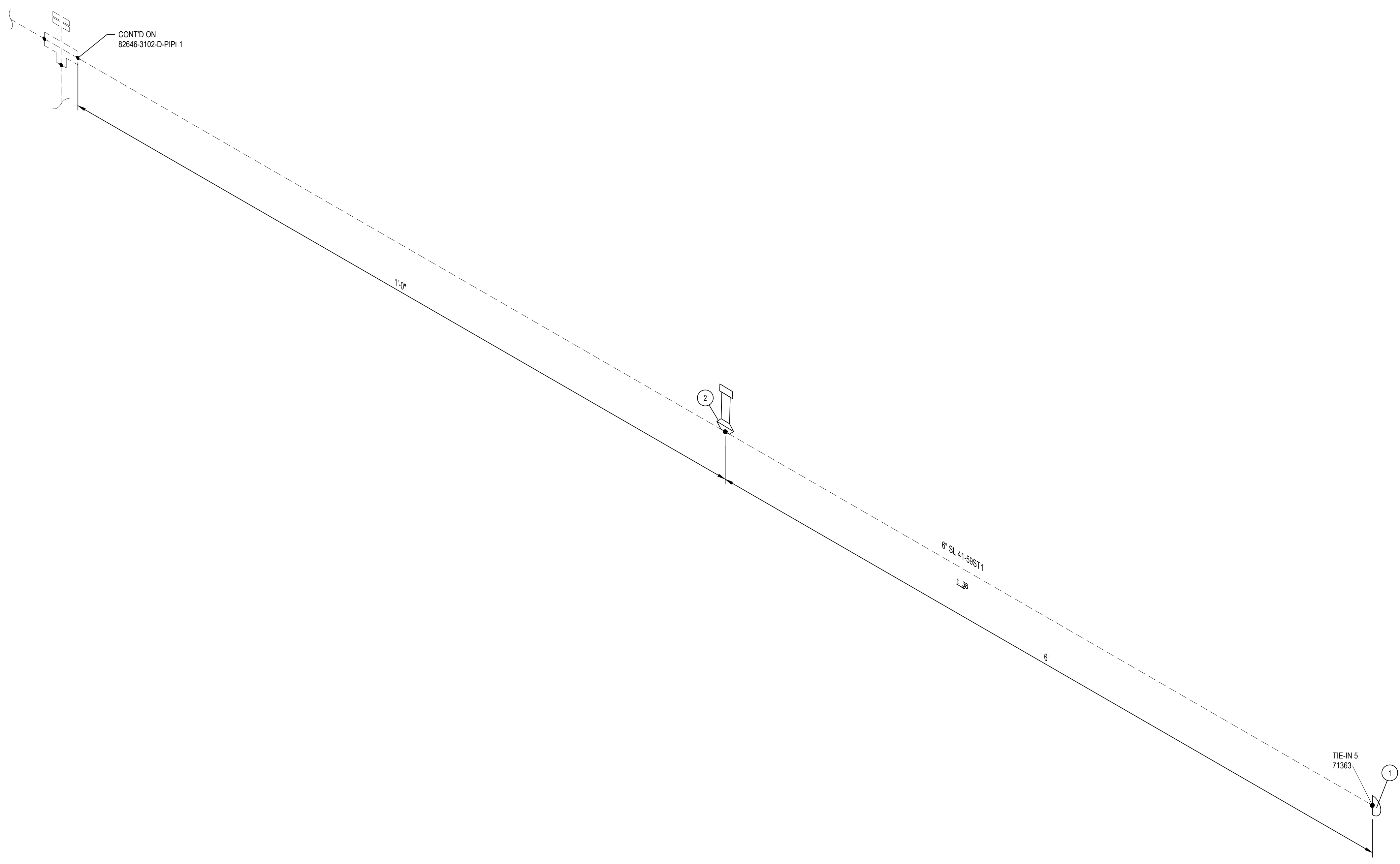
- NOTES:**
1. WIRE SMALLER THAN 18 RE; UIRES COPPER SLEEVE UNLESS PIN BRAZED.
 2. WIRE GAUGE VARIES MINIMUM WIRE GAUGE 14 TEST WIRE AND 18 BOND WIRE.
 3. RE-COAT ALL E; POSED METAL ON PIPE; CADWELD AND WIRE IN ACCORDANCE WITH GS 186.0100; APPROVED PROTECTIVE COATINGS FOR BELOW GROUND CORROSION CONTROL.
 4. WHEN BRAZING ON PIPELINES GREATER THAN 125 PSI OR BRAZING CABLE LARGER THAN 1/4; WIRE SHALL BE BRAZED TO A SOCKET WELD CAP OR DEAD END PLATE.
 5. PIN BRAZED CONNECTIONS DO NOT RE; UIRE A SOCKET WELD CAP OR DEAD END PLATE.
 6. WIRES ARE TO BE LONG ENOUGH TO E; TEND A MINIMUM OF 30" ABOVE GROUND LEVEL.
 7. IDENTIFY WIRES ON CASING AND CARRIER PIPE WITH BRASS OR PLASTIC TAG.
 8. CADWELD; BRAZE OR PIN BRAZE ALL WIRES INDEPENDENTLY.
 9. USE PLASTIC COVER IN NON-TRAFFIC AREAS.
 10. REFER TO S. C. G; GAS STANDARD 186.0075. CONTACT THE STANDARD OWNER FOR ANY DEVIATIONS FROM THE STANDARD.

ISSUED FOR CONSTRUCTION

INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		SL 41-59 & MP GAS WHITEWATER RIVER/1-10 & MONROE ST BRIDGE REPLACEMENT CASING END ETS DETAIL								
COUNTY: RIVERSIDE	WDA	DESIGNER: H. LOPEZ	05/23/2025										
DISTRICT: SOUTHEAST	ISSUED BY	ENGINEER: N. HASAN	05/23/2025		82646-3016-D-PIP								
STRIP MAP NO. *	NUMBER	CHECKER: D. NAREZ	05/23/2025										
ATLAS NO. *		PROJECT APVR: H. ORDONEZ	05/23/2025	DWG CLASS: 41	DWG DIST: 200								
DOT CL. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4		SCG ENG APVR: M. MECHELOWICZ	05/23/2025	SCALE: NONE	REV: 0								
CATHODICALLY PROTECTED: *	REGION: *	ENG FILE NO: PE24-166											
YEAR C.P. INSTALLED: *		WDA: 71363											
	REV	DATE	DES	ENGR	CHK	APVD	SCG APVR	ENG FILE NO	DESCRIPTION	WDA	VENDOR ID		
	0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*		



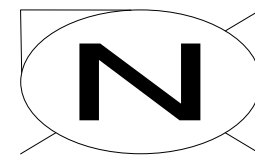
BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
FITTINGS									
1	1	6"	STD	CAP BW MSS SP75-WPHY52	52-96	0.280"	-----	B42	
BRANCH CONNECTIONS									
2	1	6" 1/2"	1440 PSI	HIGH PRESSURE STEEL ABANDON NIPPLE TOE INCLUDING PLUG AND CAP	50-12.2	-	N501272	B42	



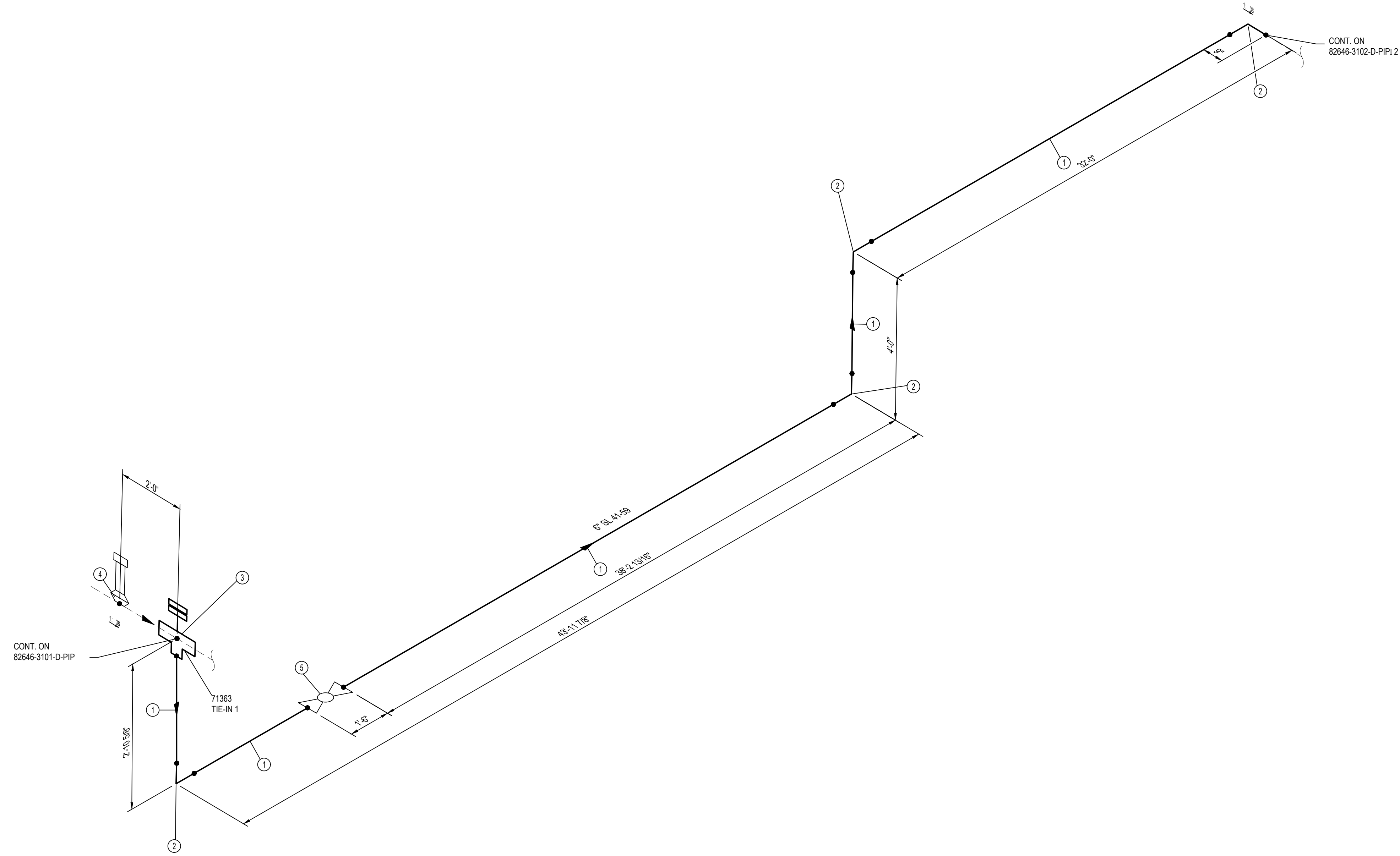
NOTES:
 1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH

MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		SL 41-59 I-10 & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM	
DESIGN PRESS (DL): 400 PSIG	MIN. TEST PRESS: 600 PSIG	NORM OPER. PRESS: 400 PSIG	COUNTY: RIVERSIDE	DATE MOVED ON: *	DESIGNER: H. LOPEZ	05/23/2025			
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED OFF: *	ENGINEER: N. HASAN	CHECKER: D. NAREZ	05/23/2025			
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: *	ATLAS NO: *	DATE OF OPERATION: *	PROJECT APVR: H. ORDONEZ	SCG ENG APVR: M. MECZLOWICZ	05/23/2025			
PAINT SYSTEM: FBE	COATING COLOR: B42	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. CREW FOREMAN: *	CONST. COMPANY: *	SCG FILE NO: PE24-166	05/23/2025	DWG CLASS: 08	DWG DIST: 200	DRAWING NUMBER
LINE NUMBER: SL 41-59ST1	3D DB REF: 6C12	CATHODICALLY PROTECTED: *	REGION: *	YEAR C.P. INSTALLED: *	ISSUED FOR CONSTRUCTION	71363	SCALE: NONE	82646-3101-D-PIP	REV 0

ISSUED FOR CONSTRUCTION



BILL OF MATERIALS									
ITEM NO.	QTY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	75'-6"	6"	STD	PIPE EW DRL API 5L-4 52 FBE COATED	41-06.1	0.280"	N410630	B42	
FITTINGS									
2	4	6"	STD	ELL 90 DEG LR BW MSS SP75-WPHY52	52-96	0.280"	N539005	B42	
3	1	6"	300CL	LINE STOP FITTING THIN WALL W/ BOTTOM OUT CONNECTION	56-48	-	N575560	B42	
BRANCH CONNECTIONS									
4	1	6" 2'	1440 PSI	HIGH PRESSURE STEEL ABANDON NIPPLE: TOE INCLUDING PLUG AND CAP	50-12.2	-	N501272	B42	
VALVES									
5	1	6"	300CL	VALVE BALL TRUNNION BW 1 BW SCH STD GR 2 52 CS FORGED STEEL BODY ENP BALL AND STEM RTFE SEALS/ SEATS OR EI UNVALENT FULL PORT FIRE SAFE PER API 607/ 6FA API 6D - MODIFIED	58-82	-	N589982M	B42	



NOTES:
 1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH

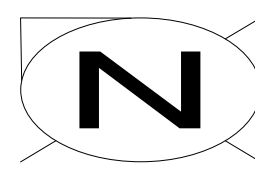
ISSUED FOR CONSTRUCTION

MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY: H. LOPEZ	DATE: 05/23/2025
DESIGN PRESS (DL): 400 PSIG	MIN. TEST PRESS: 600 PSIG	NORM OPER. PRESS: 400 PSIG	COUNTY: RIVERSIDE	WCA: *	ENGINEER: N. HASAN	05/23/2025
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY: *	CHECKER: D. NAREZ	05/23/2025
DOS: *	INSUL: *	INSUL THK: *	STRIP MAP NO: *	DATE OF OPERATION: *	PROJECT APVR: H. ORDONEZ	05/23/2025
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: B42	TRACE: *	ATLAS NO: *	CONST. CREW FOREMAN: *	SCG ENG APVR: M. MECHLOWICZ	05/23/2025
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. COMPANY: *	REGION: *	SCG FILE NO: PE24-166	DATE: 05/23/2025
P&ID: *	PLAN: 82646-3002-D-PIP	CATHODICALLY PROTECTED: *	YEAR C.P. INSTALLED: *	REV: 0	ISSUED FOR CONSTRUCTION	71363
LINE NUMBER: SL 41-59	3D DB REF: 6C12			REV: 0	DATE: 12/19/2025	HL NH DN HO MM PE24-166
				DESIGNER: H. LOPEZ	DATE: 05/23/2025	WCA: 71363
				ENGINEER: N. HASAN	DATE: 05/23/2025	WCA: 71363
				CHECKER: D. NAREZ	DATE: 05/23/2025	WCA: 71363
				PROJECT APVR: H. ORDONEZ	DATE: 05/23/2025	WCA: 71363
				SCG ENG APVR: M. MECHLOWICZ	DATE: 05/23/2025	WCA: 71363
				0	12/19/2025	HL NH DN HO MM PE24-166
				REV	DATE	DES
				0	12/19/2025	HL NH DN HO MM PE24-166
				REV	DATE	DES



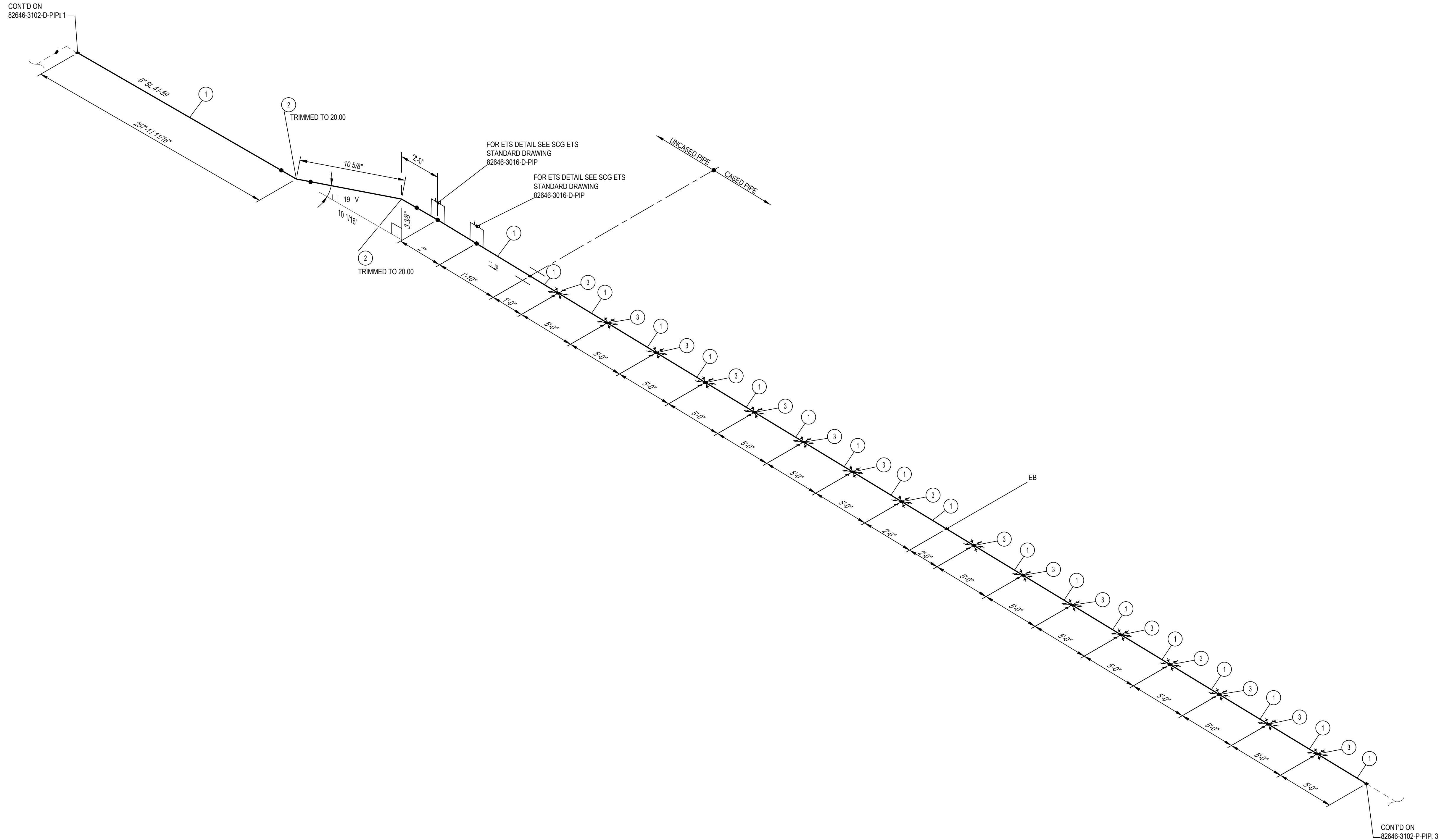
SL 41-59
 I-10 & MONROE ST BRIDGE
 REPLACEMENT
 PIPING ISOMETRIC & BOM

DRAWING NUMBER: 82646-3102-D-PIP 1



BILL OF MATERIALS									
ITEM NO.	QTY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	343'-5"	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	B42	
FITTINGS									
2	2	6"	STD	ELL 45 DEG LR BW MSS SP75-WPHY52	52-96	0.280"	N539003	B42	
SPECIALTY ITEMS									
3	16	6"	-	CASING INSULATING SKIDS MODEL CI	76-85.4	-	-----	A02	

* 6" 10' CASING INSULATING SKIDS TO BE INSTALLED.



- NOTES:**
- THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55° FROM ISO NORTH
 - VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

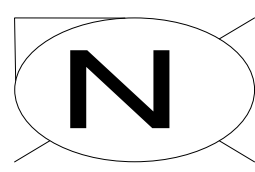
MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE														
DESIGN PRESS. (LI): 400 PSIG	MIN. TEST PRESS: 600 PSIG	NORM OPER. PRESS: 400 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025														
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025														
DDS: *	INSUL: *	INSUL THK: *	DATE MOVED OFF: *	NUMBER	CHECKER: D. NAREZ	05/23/2025														
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: B42/A02	TRACE: *	DATE OF OPERATION: *		PROJECT APVR: H. ORDONEZ	05/23/2025														
PAINT SYSTEM: FBE	COATING COLOR: *	ATLAS NO.:	CONST. CREW FOREMAN: *		SCG ENG APVR: M. MECHLOWICZ	05/23/2025														
PAID: *	PLAN: 82646-3002-D-PIP	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. COMPANY: *		SCG FILE NO: PE24-166															
LINE NUMBER: SL 41-59	3D DB REF: 6C12	CATHODICALLY PROTECTED: *	REGION: *	0	ENG FILE NO: PE24-166															
		YEAR C.P. INSTALLED: *		12/19/2025	ISSUED FOR CONSTRUCTION	71363														
				REV	DATE	DES	ENGR	CHK	APVD	SCG #/REV	ENG FILE NO	DESCRIPTION	WCA	VENDOR ID	SCALE: NONE	DWG CLASS: 08	DWG DST: 200	DRAWING NUMBER	REV	
																			82646-3102-D-PIP: 2	0

ISSUED FOR CONSTRUCTION



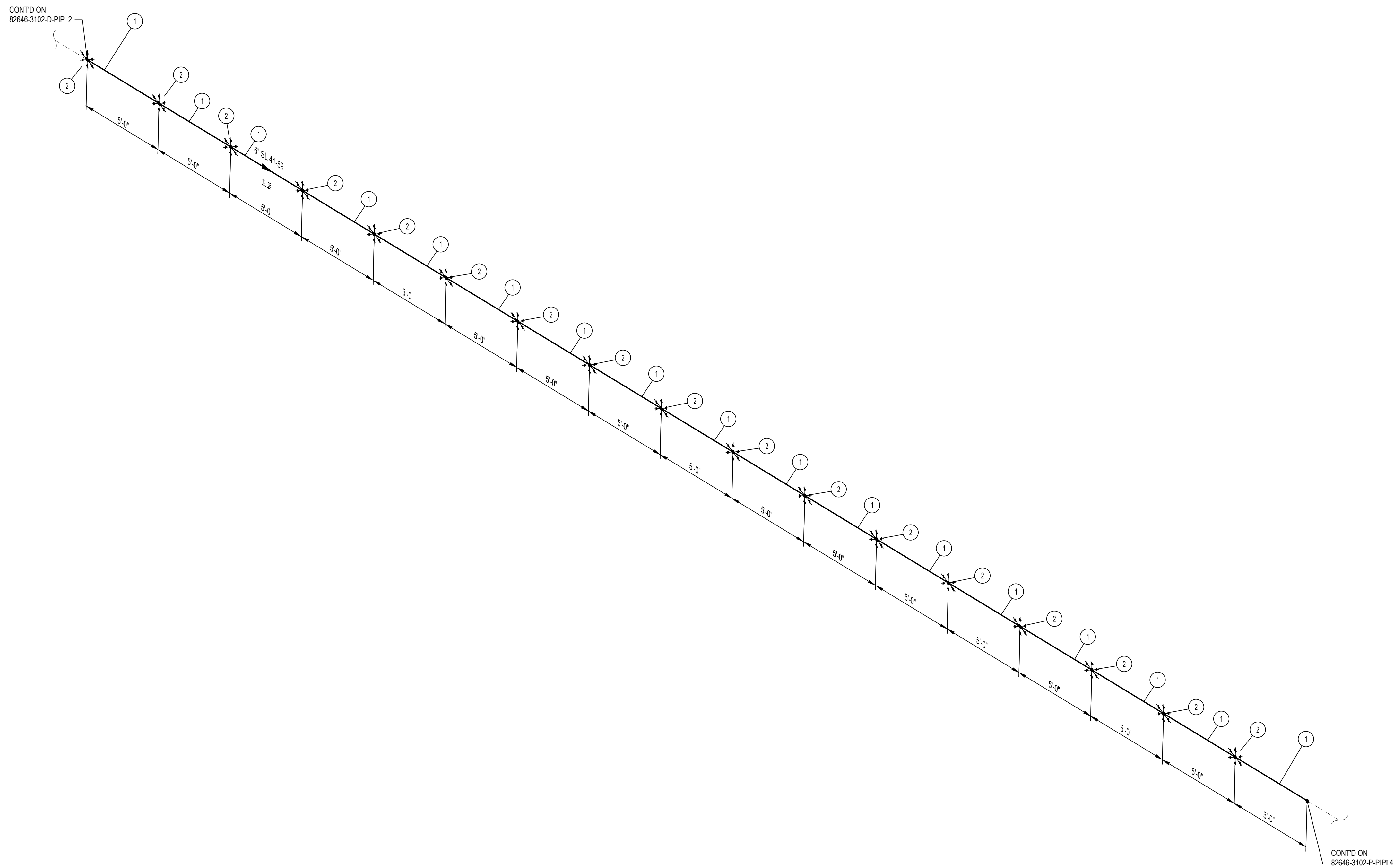
SL 41-59
I-10 & MONROE ST BRIDGE
REPLACEMENT
PIPING ISOMETRIC & BOM

82646-3102-D-PIP: 2



BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	85	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	B42	
SPECIALTY ITEMS									
2	17	6"	-	CASING INSULATING SKIDS MODEL CI	76-85.4	-	-----	A02	

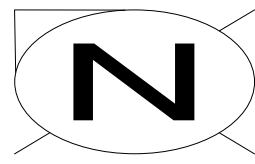
* 6"x10" CASING INSULATING SKIDS TO BE INSTALLED.



- NOTES:**
1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH
 2. VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

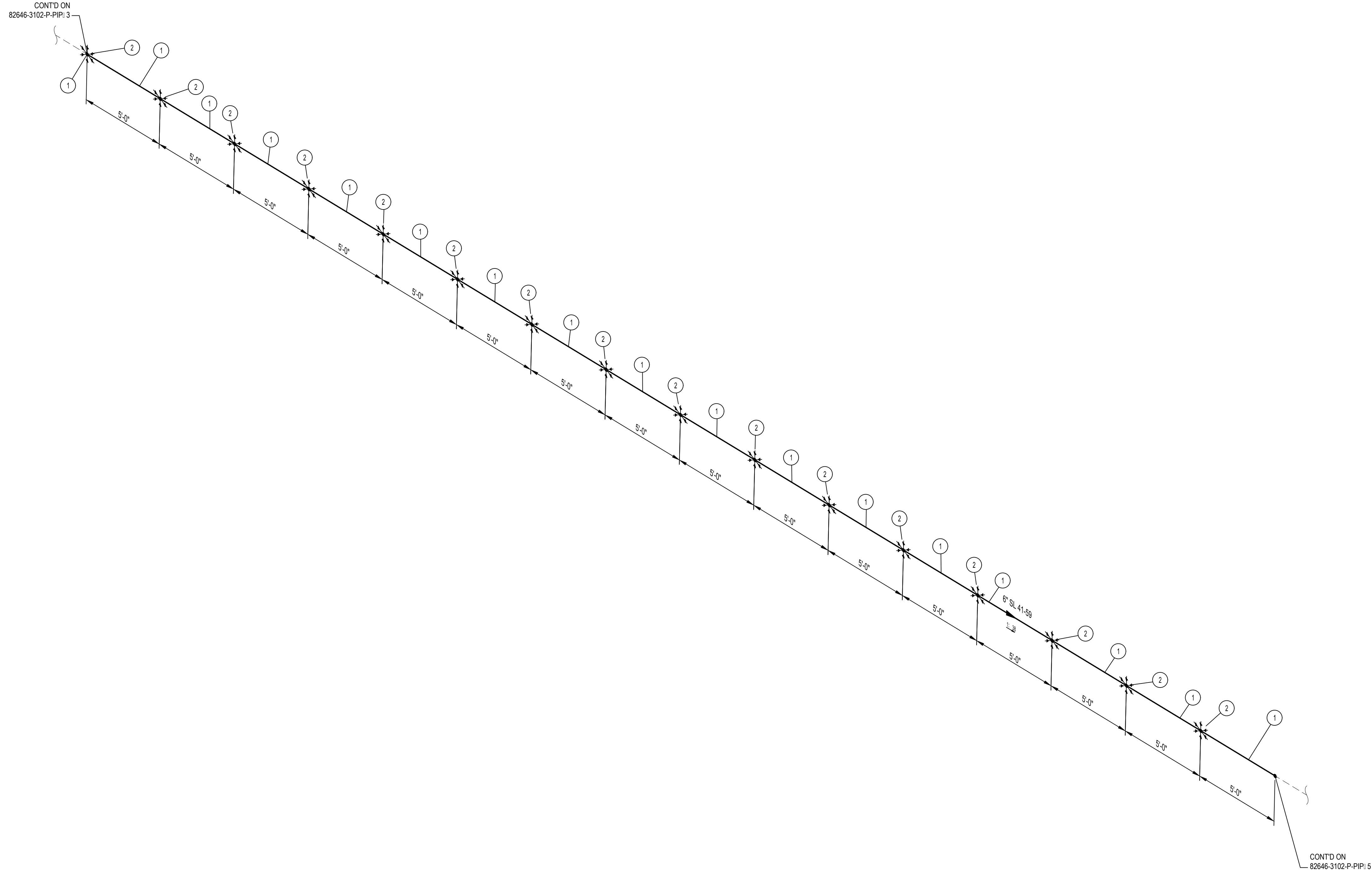
MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		SL 41-59 I-10 & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM								
DESIGN PRESS (DL): 400 PSIG	MIN. TEST PRESS: 600 PSIG	NORM OPER. PRESS: 400 PSIG	COUNTY: RIVERSIDE	DATE MOVED ON *	DESIGNER: H. LOPEZ	05/23/2025										
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED OFF *	ENGINEER: N. HASAN	CHECKER: D. NAREZ	05/23/2025										
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: B42/A02	ATLAS NO. *	DATE OF OPERATION *	PROJECT APVR: H. ORDONEZ	SCG ENG APVR: M. MECZLOWICZ	05/23/2025										
INSUL THK: *	TRACE: *	STRIP MAP NO. *	CONST. CREW FOREMAN: *	CONST. COMPANY: *	SCG FILE NO: PE24-166	05/23/2025	DWG CLASS: 08	DWG DIST: 200	DRAWING NUMBER							
PAINT SYSTEM: FBE	PLAN: 82646-3002-D-PIP	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CATHODICALLY PROTECTED: *	REGION: *	ISSUED FOR CONSTRUCTION	71363	SCALE: NONE	82646-3102-D-PIP: 3	REV							
LINE NUMBER: SL 41-59	3D DB REF: 6C12	YEAR C.P. INSTALLED: *			0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363		0

ISSUED FOR CONSTRUCTION



BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	80'	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	B42	
SPECIALTY ITEMS									
2	16	6"		CASING INSULATING SKIDS MODEL CI	76-85.4		-----	A02	

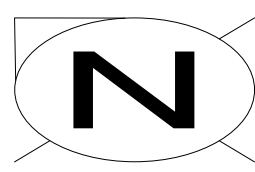
* 6" 10' CASING INSULATING SKIDS TO BE INSTALLED.



ISSUED FOR CONSTRUCTION

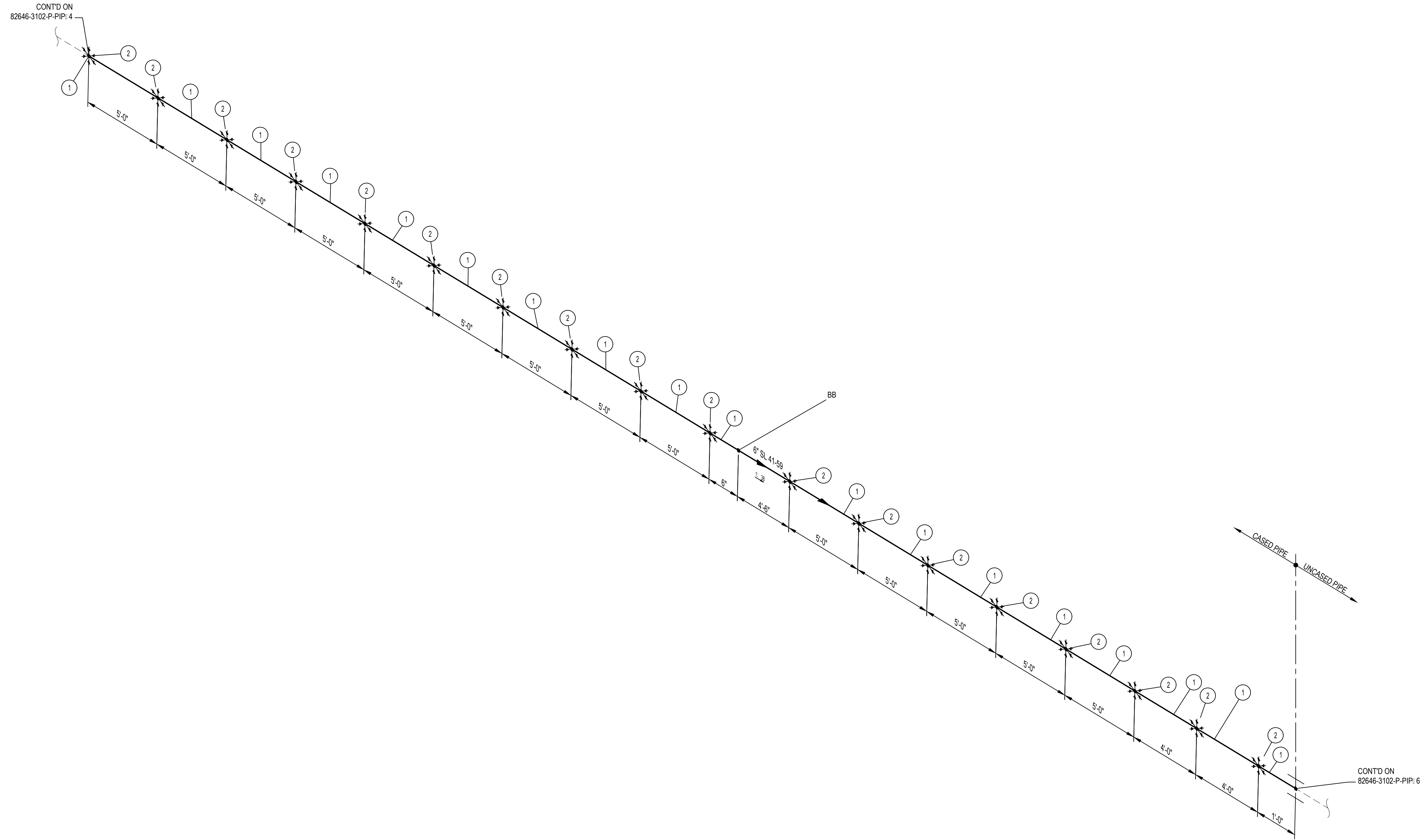
- NOTES:
1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55° FROM ISO NORTH
 2. VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		SL 41-59 I-10 & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM						
DESIGN PRESS (DL): 400 PSIG	MIN. TEST PRESS: 600 PSIG	NORM OPER. PRESS: 400 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025								
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025								
DOS: *	INSUL: *	INSUL THK: *	DATE OF OPERATION: *	NUMBER	CHECKER: D. NAREZ	05/23/2025								
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: B42/A02	TRACE: *	ATLAS NO: *		PROJECT APVR: H. ORDONEZ	05/23/2025								
PAINT SYSTEM: FBE	PLAN: 82646-3002-D-PIP	CATHODICALLY PROTECTED: *	CONST. CREW FOREMAN: *		SCG ENG APVR: M. MECZLOWICZ	05/23/2025								
LINE NUMBER: SL 41-59	3D DB REF: 6C12	YEAR C.P. INSTALLED: *	REGION: *		ENG FILE NO: PE24-166									
REV	DATE	DES	ENGR	CHK	APVD	SCG ENG	ENG FILE NO	DESCRIPTION	WCA	VENDOR ID	DWG CLASS: 08	DWG DST: 200	DRAWING NUMBER	REV
0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	NONE	NONE	82646-3102-D-PIP 4	0



BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	84'-1"	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	B42	
SPECIALTY ITEMS									
2	18	6"		CASING INSULATING SKIDS MODEL CI	76-85.4			A02	

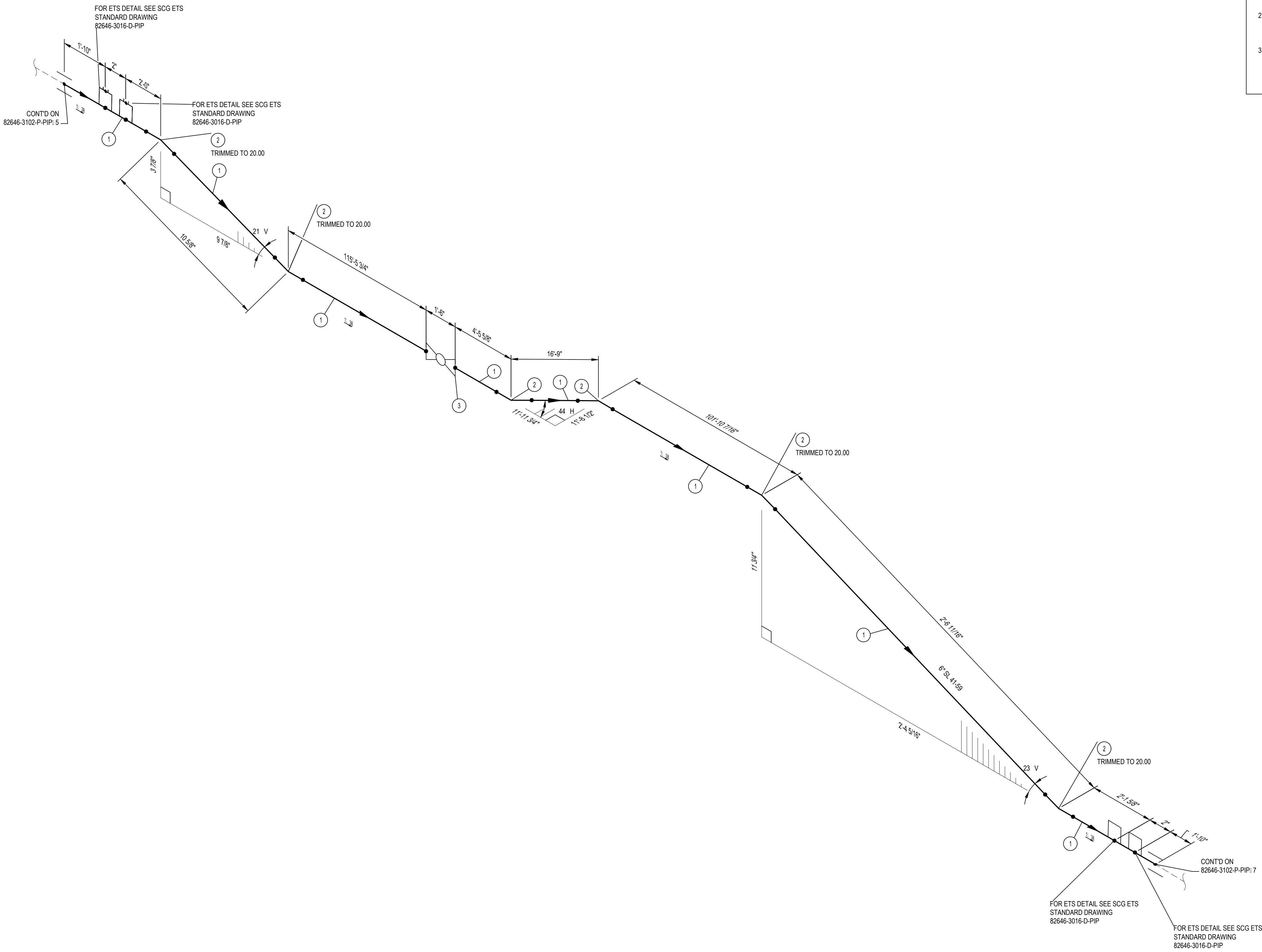
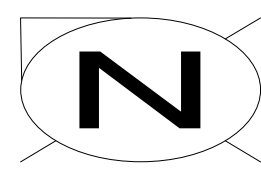
* 6" 10" CASING INSULATING SKIDS TO BE INSTALLED.



- NOTES:**
1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH
 2. VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		SL 41-59 I-10 & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM											
DESIGN PRESS. (DL): 400 PSIG	MIN. TEST PRESS: 600 PSIG	NORM OPER. PRESS: 400 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025													
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025													
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: B42/A02	ATLAS NO.:	DATE OF OPERATION: *	CONST. CREW FOREMAN: *	CHECKER: D. NAREZ	05/23/2025													
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	REGION: *	CONST. COMPANY: *	PROJECT APVR: H. ORDONEZ	05/23/2025	DWG CLASS: 08 DWG DIST: 200 SCALE: NONE	DRAWING NUMBER 82646-3102-D-PIP 5											
LINE NUMBER: SL 41-59	PLAN: 82646-3002-D-PIP	CATHODICALLY PROTECTED: *	YEAR C.P. INSTALLED: *	REV	SCG ENG APVR: M. MECHLOWICZ	05/23/2025			REV										
				0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	ENG FILE NO: PE24-166	WCA	VENDOR ID	WCA: 71363	0

ISSUED FOR CONSTRUCTION



BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	247'-10"	6"	STD	PIPE EW DRL API 5L- 52 FBE COATED	41-06.1	0.280"	N410630	B42	
FITTINGS									
2	6	6"	STD	ELL 45 DEG LR BW MSS SP75-WPHY52	52-96	0.280"	N539003	B42	
VALVES									
3	1	6"	300CL	VALVE BALL TRUNNION BW : BW SCH STD GR : 52 CS FORGED STEEL BODY ENP BALL AND STEM RTFE SEALS/ SEATS OR E: UNIVALENT FULL PORT FIRE SAFE PER API 607/ 6FA API 6D	58-82	-	N589982	B42	

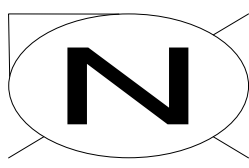
- NOTES:
- THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH
 - VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

MIN. DESIGN TEMP: AMBIENT		MAX. DESIGN TEMP: AMBIENT		NORM OPER. TEMP: AMBIENT		INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE		PERMIT INFORMATION		BY		DATE	
DESIGN PRESS. (LI): 400 PSIG		MIN. TEST PRESS: 600 PSIG		NORM OPER. PRESS: 400 PSIG		COUNTY: RIVERSIDE		WCA		DESIGNER: H. LOPEZ		05/23/2025	
SERVICE: NATURAL GAS		DESIGN CODE: 49 CFR PART 192		DISTRICT: SOUTHEAST		DATE MOVED ON: *		ISSUED BY		ENGINEER: N. HASAN		05/23/2025	
DDES: *		INSUL: *		INSUL THK: *		DATE MOVED OFF: *		NUMBER		CHECKER: D. NAREZ		05/23/2025	
WELD PROCOD: 187.0055 & 187.0056		PIPE SPEC: B42		TRACE: *		DATE OF OPERATION: *				PROJECT APRR: H. ORDONEZ		05/23/2025	
PAINT SYSTEM: FBE		COATING COLOR: *		ATLAS NO.:		CONST. CREW FOREMAN: *				SCG ENG APVR: M. MECHELOWICZ		05/23/2025	
PAID: *		PLAN: 82646-3008-D-PIP		DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4		REGION: *				ENG FILE NO: PE24-166		DWG CLASS: 08	
LINE NUMBER: SL 41-59		3D DB REF: 6C12		CATHODICALLY PROTECTED: *		YEAR C.P. INSTALLED: *		REV		WCA: 71363		DWG DIST: 200	
								0 12/19/2025 HL NH DN HO MM PE24-166 ISSUED FOR CONSTRUCTION 71363		WCA: 71363		DRAWING NUMBER: 82646-3102-D-PIP	
										SCALE: NONE		REV: 0	

ISSUED FOR CONSTRUCTION

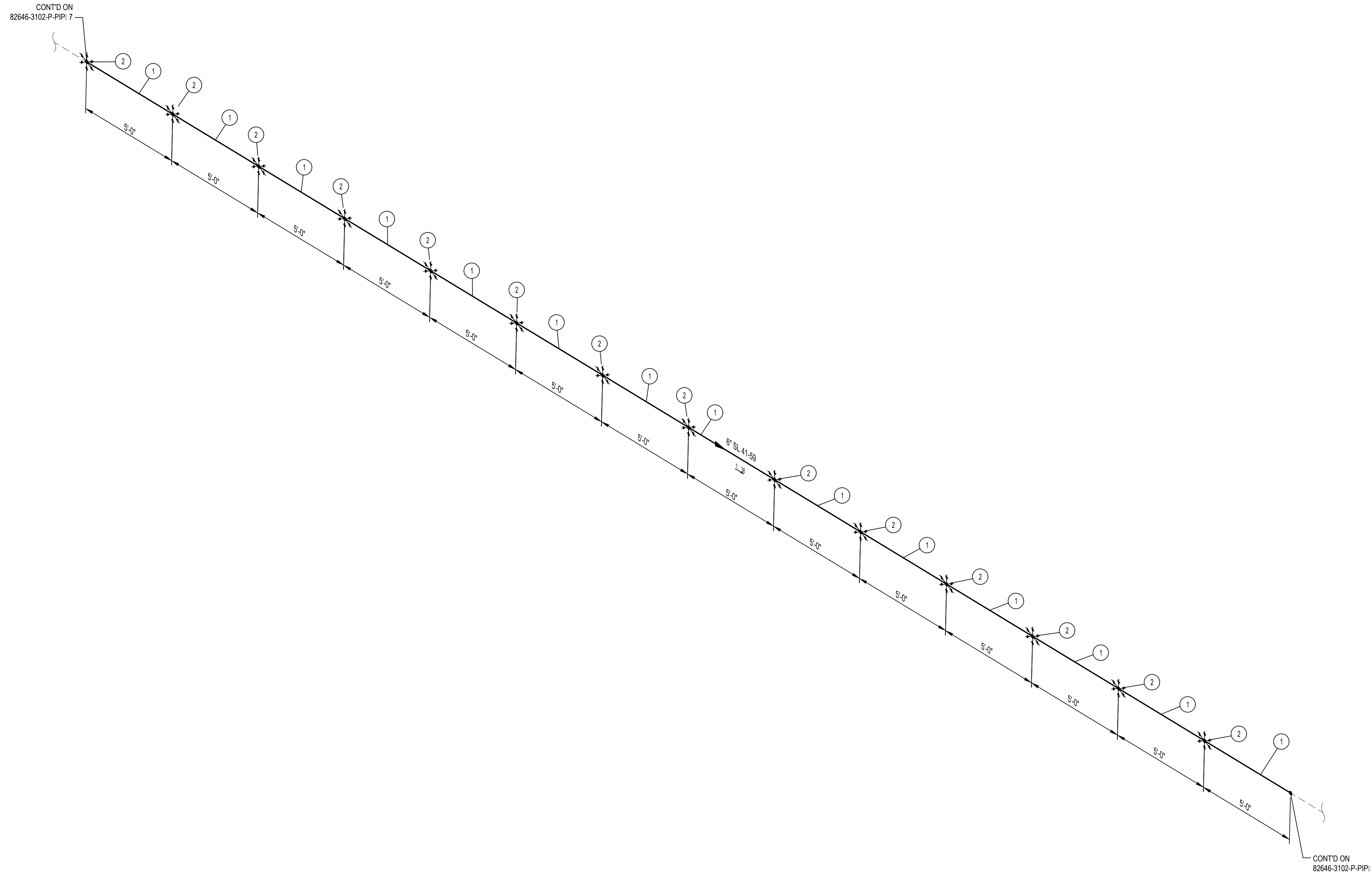
SL 41-59
 WHITEWATER RIVER/I-10 & MONROE ST BRIDGE
 REPLACEMENT
 PIPING ISOMETRIC & BOM





BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	70'-1"	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	B42	
SPECIALTY ITEMS									
2	14	6"		CASING INSULATING SKIDS MODEL CI	76-85.4		-----	A02	

* 6" 10" CASING INSULATING SKIDS TO BE INSTALLED.



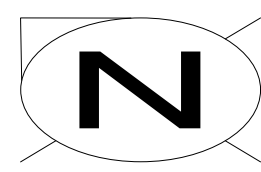
- NOTES:**
- THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH
 - VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

ISSUED FOR CONSTRUCTION

MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	DATE
DESIGN PRESS (DL): 400 PSIG	MIN. TEST PRESS: 600 PSIG	NORM OPER. PRESS: 400 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: B42/A02	ATLAS NO. *	DATE MOVED OFF: *	NUMBER	CHECKER: D. NAREZ
PAIN SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	DATE OF OPERATION: *		PROJECT APVR: H. ORDONEZ
LINE NUMBER: SL 41-59	3D DB REF: 6C12	CATHODICALLY PROTECTED: *	CONST. CREW FOREMAN: *		SCG ENG APVR: M. MECHLOWICZ
		YEAR C.P. INSTALLED: *	REGION: *		DATE: 05/23/2025
					05/23/2025
				0 12/19/2025 HL NH DN HO MM PE24-166	ISSUED FOR CONSTRUCTION
				71363	71363
					ENG FILE NO: PE24-166
					WCA: 71363
					DWG CLASS: 08
					DWG DIST: 200
					SCALE: NONE
					DRAWING NUMBER: 82646-3102-D-PIP 8
					REV: 0

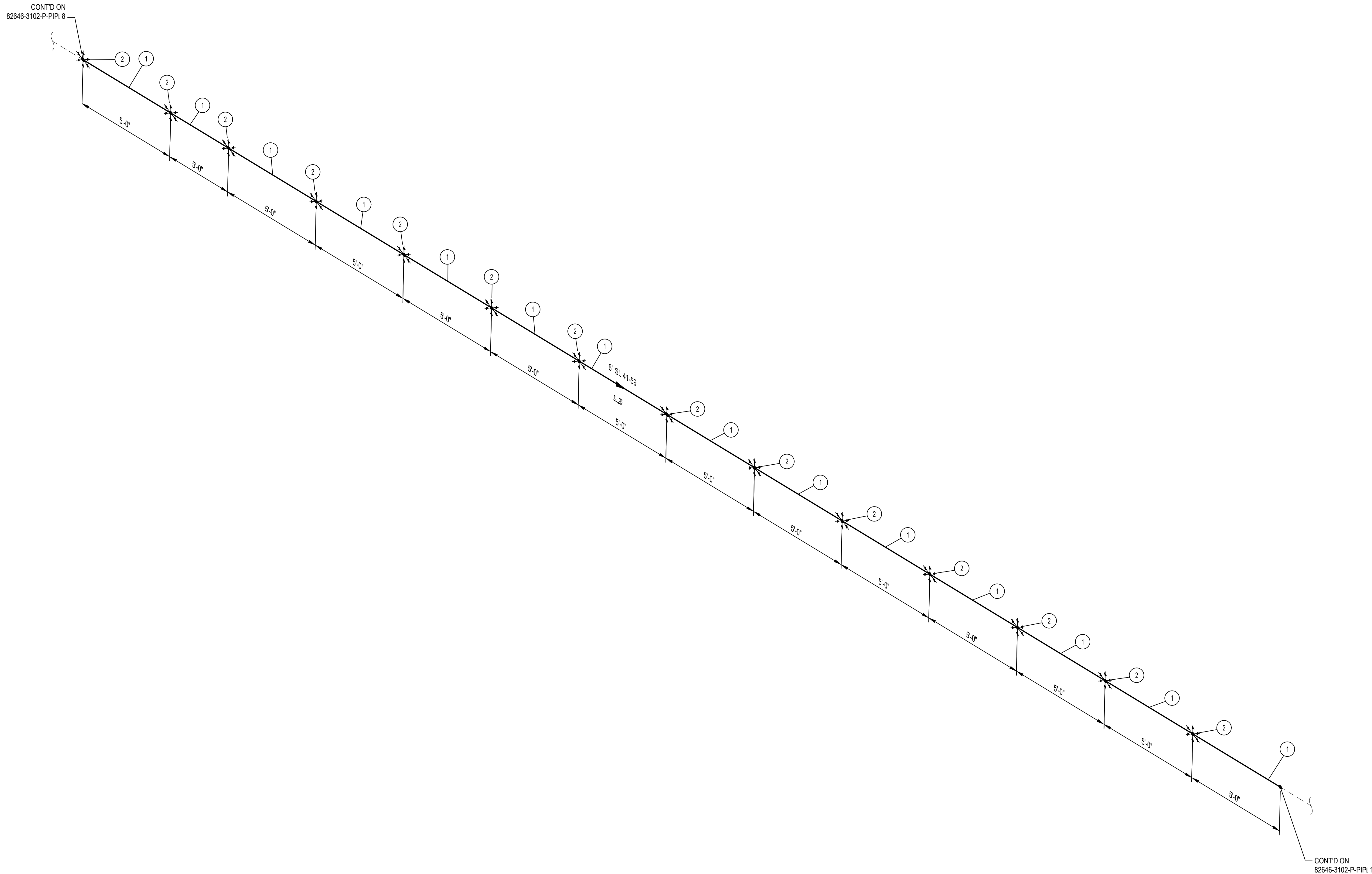


SL 41-59
 WHITEWATER RIVER & MONROE ST BRIDGE
 REPLACEMENT
 PIPING ISOMETRIC & BOM



BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	70'	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	B42	
SPECIALTY ITEMS									
2	14	6"	-	CASING INSULATING SKIDS MODEL CI	76-85.4	-	-----	A02	

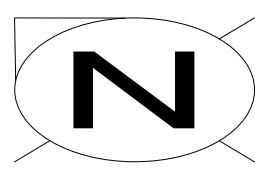
* 6" 10' CASING INSULATING SKIDS TO BE INSTALLED.



- NOTES:**
- THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH
 - VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

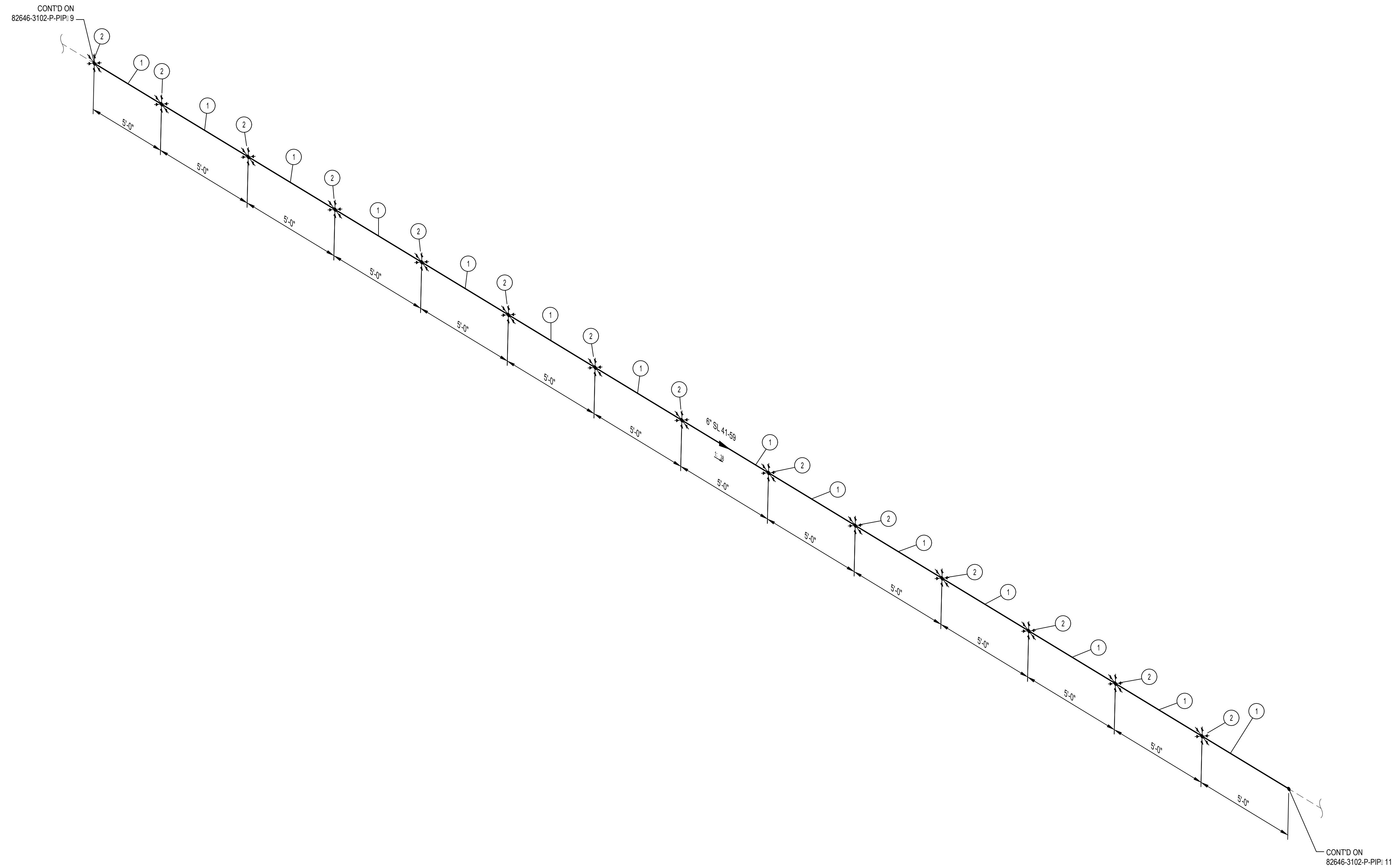
MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		SL 41-59 WHITEWATER RIVER & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM							
DESIGN PRESS (DL): 400 PSIG	MIN. TEST PRESS: 600 PSIG	NORM OPER. PRESS: 400 PSIG	COUNTY: RIVERSIDE	DATE MOVED ON: *	DESIGNER: H. LOPEZ	05/23/2025									
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED OFF: *	ENGINEER: N. HASAN	CHECKER: D. NAREZ	05/23/2025									
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: B42/A02	ATLAS NO: *	DATE OF OPERATION: *	PROJECT APVR: H. ORDONEZ	SCG ENG APVR: M. MECHLOWICZ	05/23/2025									
PAINT SYSTEM: FBE	PLAN: 82646-3010-D-PIP	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. CREW FOREMAN: *	CONST. COMPANY: *	SCG FILE NO: PE24-166	ISSUED FOR CONSTRUCTION	71363	ENG FILE NO: PE24-166	DWG CLASS: 08	DWG DIST: 200	DRAWING NUMBER	82646-3102-D-PIP 9	REV	0	
LINE NUMBER: SL 41-59	3D DB REF: 6C12	CATHODICALLY PROTECTED: *	YEAR C.P. INSTALLED: *	REGION: *	REV	DATE	DES	ENGR	CHK	APVD	SCG FILE NO	DESCRIPTION	WGA	VENDOR ID	SCALE: NONE

ISSUED FOR CONSTRUCTION



BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	70'-1"	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	B42	
SPECIALTY ITEMS									
2	14	6"	-	CASING INSULATING SKIDS MODEL CI	76-85.4	-	-----	A02	

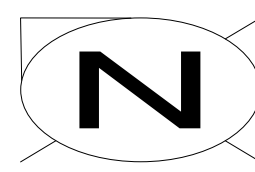
* 6" 10" CASING INSULATING SKIDS TO BE INSTALLED.



- NOTES:**
- THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH
 - VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

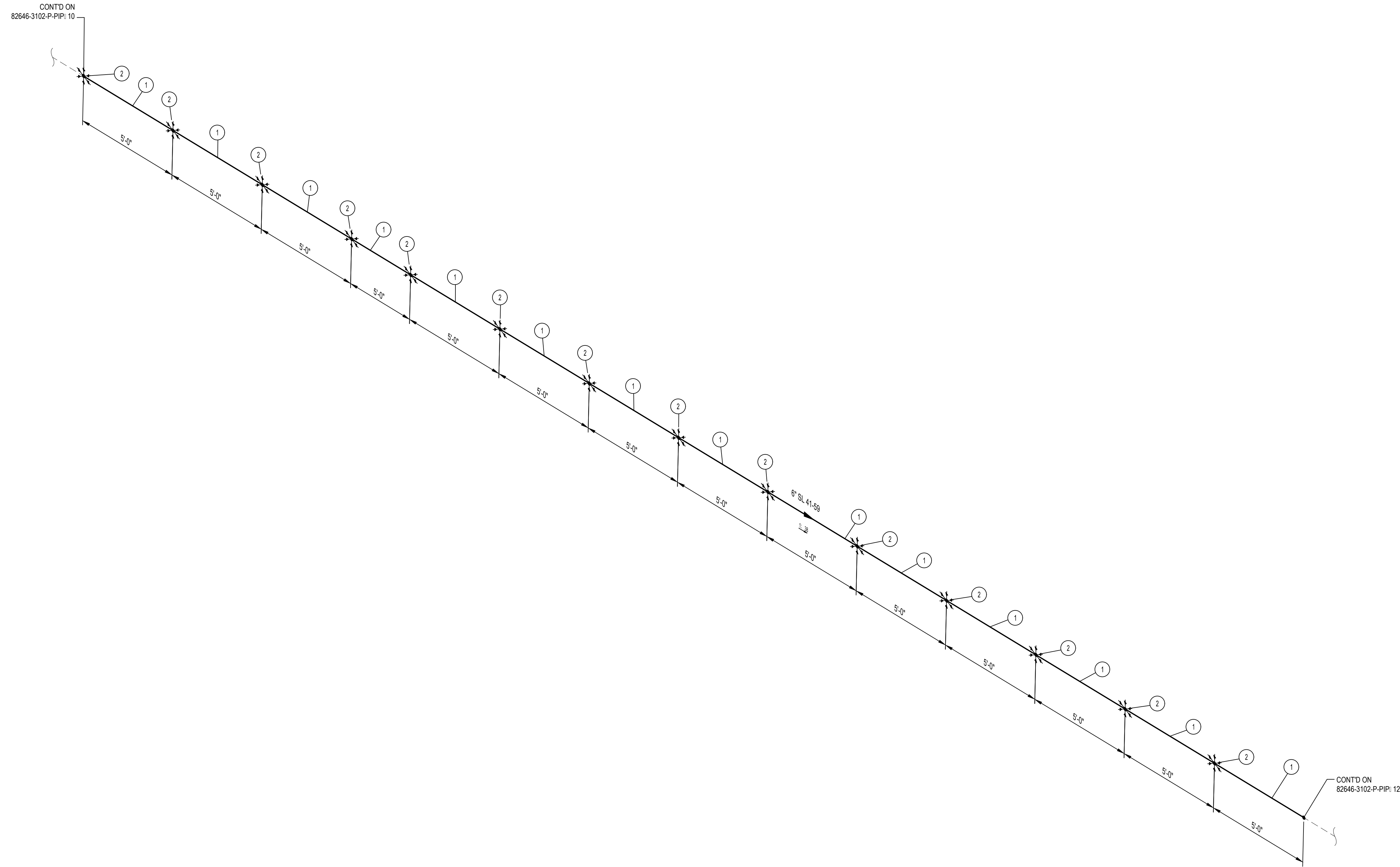
MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		SL 41-59 WHITEWATER RIVER & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM											
DESIGN PRESS. (DL): 400 PSIG	MIN. TEST PRESS: 400 PSIG	NORM OPER. PRESS: 400 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025													
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED OFF: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025													
WELD PROCOD: 187.0055 & 187.0056	PIPE SPEC: B42/A02	ATLAS NO. *	DATE OF OPERATION: *	NUMBER	CHECKER: D. NAREZ	05/23/2025													
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. CREW FOREMAN: *		PROJECT APVR: H. ORDONEZ	05/23/2025	82646-3102-D-PIP 10												
LINE NUMBER: SL 41-59	PLAN: 82646-3010-D-PIP	CATHODICALLY PROTECTED: *	REGION: *	0	SCG ENG APVR: M. MECZLOWICZ	05/23/2025													
	3D DB REF: 6C12	YEAR C.P. INSTALLED: *		REV	ENG FILE NO: PE24-166														
				0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	ENG FILE NO: PE24-166	DWG CLASS: 08	DWG DIST: 200	DRAWING NUMBER	REV
														WCA	VENDOR ID	WCA: 71363	SCALE: NONE	0	

ISSUED FOR CONSTRUCTION



BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	70'-1"	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	B42	
SPECIALTY ITEMS									
2	14	6"	-	CASING INSULATING SKIDS MODEL CI	76-85.4	-	-----	A02	

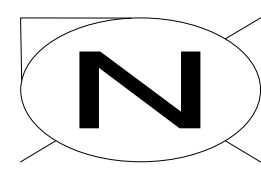
* 6" 10" CASING INSULATING SKIDS TO BE INSTALLED.



- NOTES:**
- THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH
 - VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

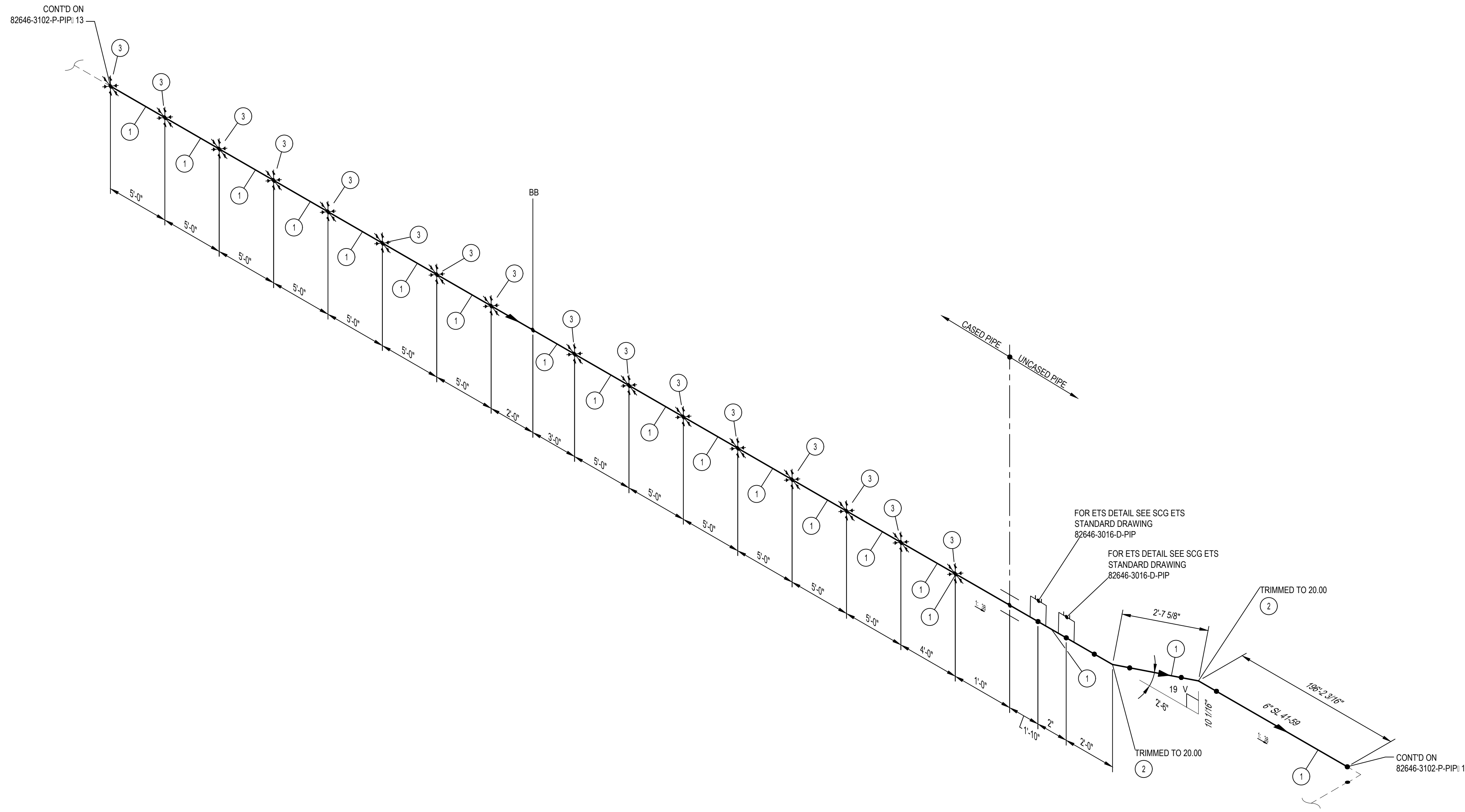
MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION			BY		DATE		SL 41-59 WHITEWATER RIVER & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM																																					
DESIGN PRESS (DL): 400 PSIG	MIN. TEST PRESS: 600 PSIG	NORM OPER. PRESS: 400 PSIG	COUNTY: RIVERSIDE	WCA	ISSUED BY	NUMBER	DESIGNER: H. LOPEZ	05/23/2025	<table border="1"> <tr> <td>ENGINEER: N. HASAN</td> <td>05/23/2025</td> </tr> <tr> <td>CHECKER: D. NAREZ</td> <td>05/23/2025</td> </tr> <tr> <td>PROJECT APVR: H. ORDONEZ</td> <td>05/23/2025</td> </tr> <tr> <td>SCG ENG APVR: M. MECHLOWICZ</td> <td>05/23/2025</td> </tr> </table>		ENGINEER: N. HASAN	05/23/2025	CHECKER: D. NAREZ	05/23/2025	PROJECT APVR: H. ORDONEZ	05/23/2025	SCG ENG APVR: M. MECHLOWICZ	05/23/2025	<table border="1"> <tr> <td>REV</td> <td>DATE</td> <td>DES</td> <td>ENGR</td> <td>CHK</td> <td>APVD</td> <td>SCG ENG</td> <td>ENG FILE NO</td> <td>DESCRIPTION</td> <td>WCA</td> <td>VENDOR ID</td> <td>DWG CLASS</td> <td>DWG DIST</td> <td>DRAWING NUMBER</td> <td>REV</td> </tr> <tr> <td>0</td> <td>12/19/2025</td> <td>HL</td> <td>NH</td> <td>DN</td> <td>HO</td> <td>MM</td> <td>PE24-166</td> <td>ISSUED FOR CONSTRUCTION</td> <td>71363</td> <td>*</td> <td>08</td> <td>200</td> <td>82646-3102-D-PIP 11</td> <td>0</td> </tr> </table>	REV	DATE	DES	ENGR	CHK	APVD	SCG ENG	ENG FILE NO	DESCRIPTION	WCA	VENDOR ID	DWG CLASS	DWG DIST	DRAWING NUMBER	REV	0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	08	200	82646-3102-D-PIP 11
ENGINEER: N. HASAN	05/23/2025																																															
CHECKER: D. NAREZ	05/23/2025																																															
PROJECT APVR: H. ORDONEZ	05/23/2025																																															
SCG ENG APVR: M. MECHLOWICZ	05/23/2025																																															
REV	DATE	DES	ENGR	CHK	APVD	SCG ENG	ENG FILE NO	DESCRIPTION	WCA	VENDOR ID	DWG CLASS	DWG DIST	DRAWING NUMBER	REV																																		
0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	08	200	82646-3102-D-PIP 11	0																																		
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *								<table border="1"> <tr> <td>WELD PROC: 187.0055 & 187.0056</td> <td>PIPE SPEC: B42/A02</td> <td>TRACE: *</td> <td>ATLAS NO: *</td> <td colspan="2">CONST. CREW FOREMAN: *</td> <td colspan="2">CONST. COMPANY: *</td> <td colspan="2">REGION: *</td> <td colspan="2"> DWG CLASS: 08 DWG DIST: 200 </td> <td rowspan="2"> SCALE: NONE </td> <td rowspan="2"> DRAWING NUMBER: 82646-3102-D-PIP 11 </td> <td rowspan="2"> REV: 0 </td> </tr> <tr> <td>PAINT SYSTEM: FBE</td> <td>PLAN: 82646-3010-D-PIP</td> <td>CATHODICALLY PROTECTED: *</td> <td>YEAR C.P. INSTALLED: *</td> <td colspan="7"></td> </tr> </table>		WELD PROC: 187.0055 & 187.0056	PIPE SPEC: B42/A02	TRACE: *	ATLAS NO: *	CONST. CREW FOREMAN: *		CONST. COMPANY: *		REGION: *		DWG CLASS: 08 DWG DIST: 200		SCALE: NONE	DRAWING NUMBER: 82646-3102-D-PIP 11	REV: 0	PAINT SYSTEM: FBE	PLAN: 82646-3010-D-PIP	CATHODICALLY PROTECTED: *	YEAR C.P. INSTALLED: *																	
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: B42/A02	TRACE: *	ATLAS NO: *	CONST. CREW FOREMAN: *		CONST. COMPANY: *		REGION: *		DWG CLASS: 08 DWG DIST: 200		SCALE: NONE	DRAWING NUMBER: 82646-3102-D-PIP 11	REV: 0																																		
PAINT SYSTEM: FBE	PLAN: 82646-3010-D-PIP	CATHODICALLY PROTECTED: *	YEAR C.P. INSTALLED: *																																													
LINE NUMBER: SL 41-59	3D DB REF: 6C12																																															

ISSUED FOR CONSTRUCTION



BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	277'-2"	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	B42	
FITTINGS									
2	2	6"	STD	ELL 45 DEG LR BW MSS SP75-WPHY52	52-96	0.280"	N539003	B42	
SPECIALTY ITEMS									
3	16	6"	-	CASING INSULATING SKIDS MODEL CI	76-85.4	-	-----	A02	

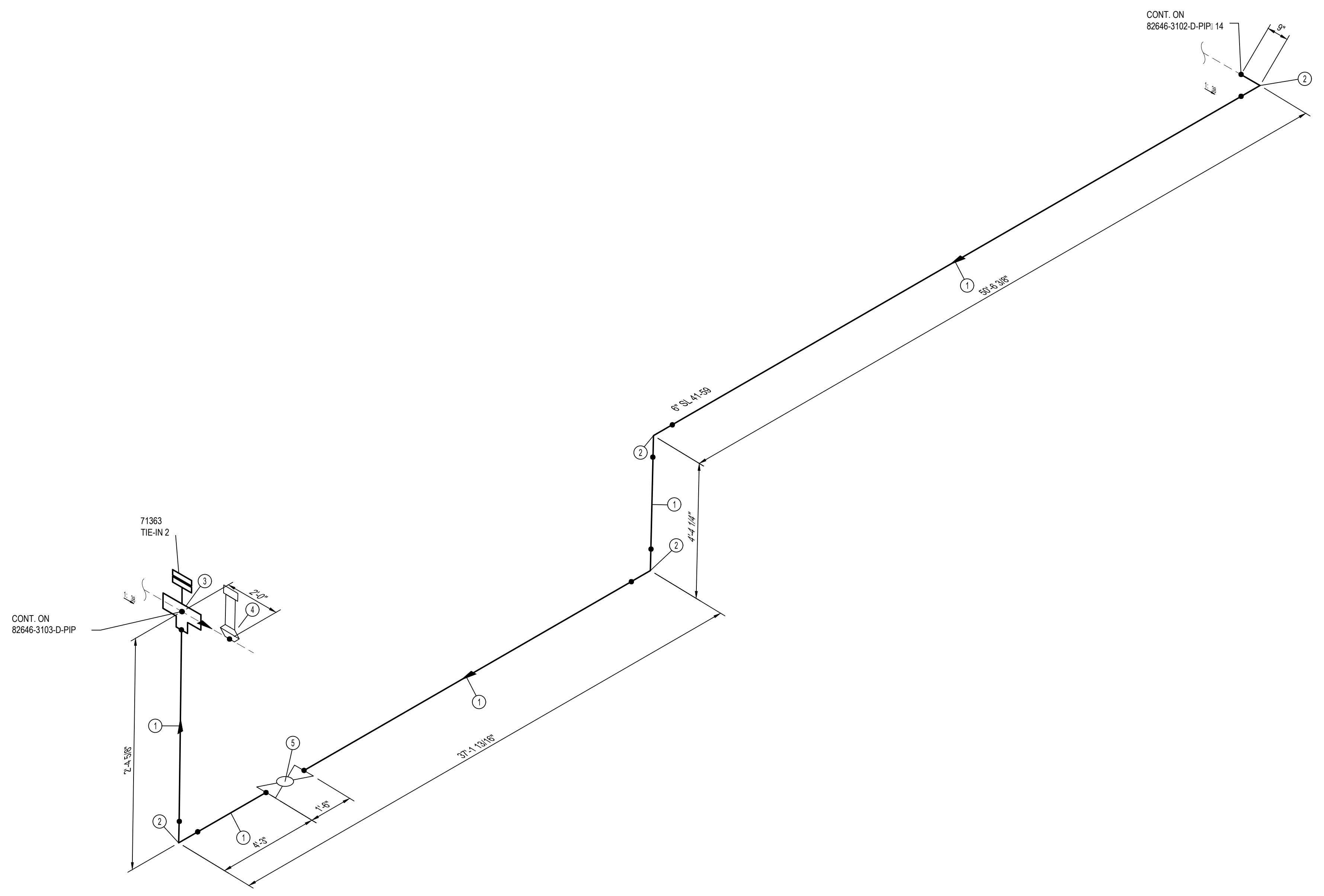
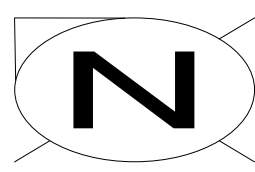
* 6" 10' CASING INSULATING SKIDS TO BE INSTALLED.



- NOTES:**
- THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH
 - VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		SL 41-59 WHITEWATER RIVER & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM											
DESIGN PRESS. (DL): 400 PSIG	MIN. TEST PRESS: 600 PSIG	NORM OPER. PRESS: 400 PSIG	COUNTY: RIVERSIDE	DATE MOVED ON: *	DESIGNER: H. LOPEZ	05/23/2025		DRAWING NUMBER 82646-3102-D-PIP 14											
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED OFF: *	ENGINEER: N. HASAN	05/23/2025														
WELD PROC.: 187.0055 & 187.0056	PIPE SPEC: B42/A02	ATLAS NO.:	DATE OF OPERATION: *	CHECKER: D. NAREZ	05/23/2025														
PAIN SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. CREW FOREMAN: *	PROJECT APVR: H. ORDONEZ	05/23/2025														
LINE NUMBER: SL 41-59	PLAN: 82646-3010-D-PIP	CATHODICALLY PROTECTED: *	REGION: *	SCG ENG APVR: M. MECHELWICZ	05/23/2025														
REV	DATE	DES	ENGR	CHK	APVD	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	ENG FILE NO: PE24-166	WGA	VENDOR ID	WGA	71363	DWG CLASS: 08	DWG DIST: 200	SCALE: NONE	REV	0

ISSUED FOR CONSTRUCTION



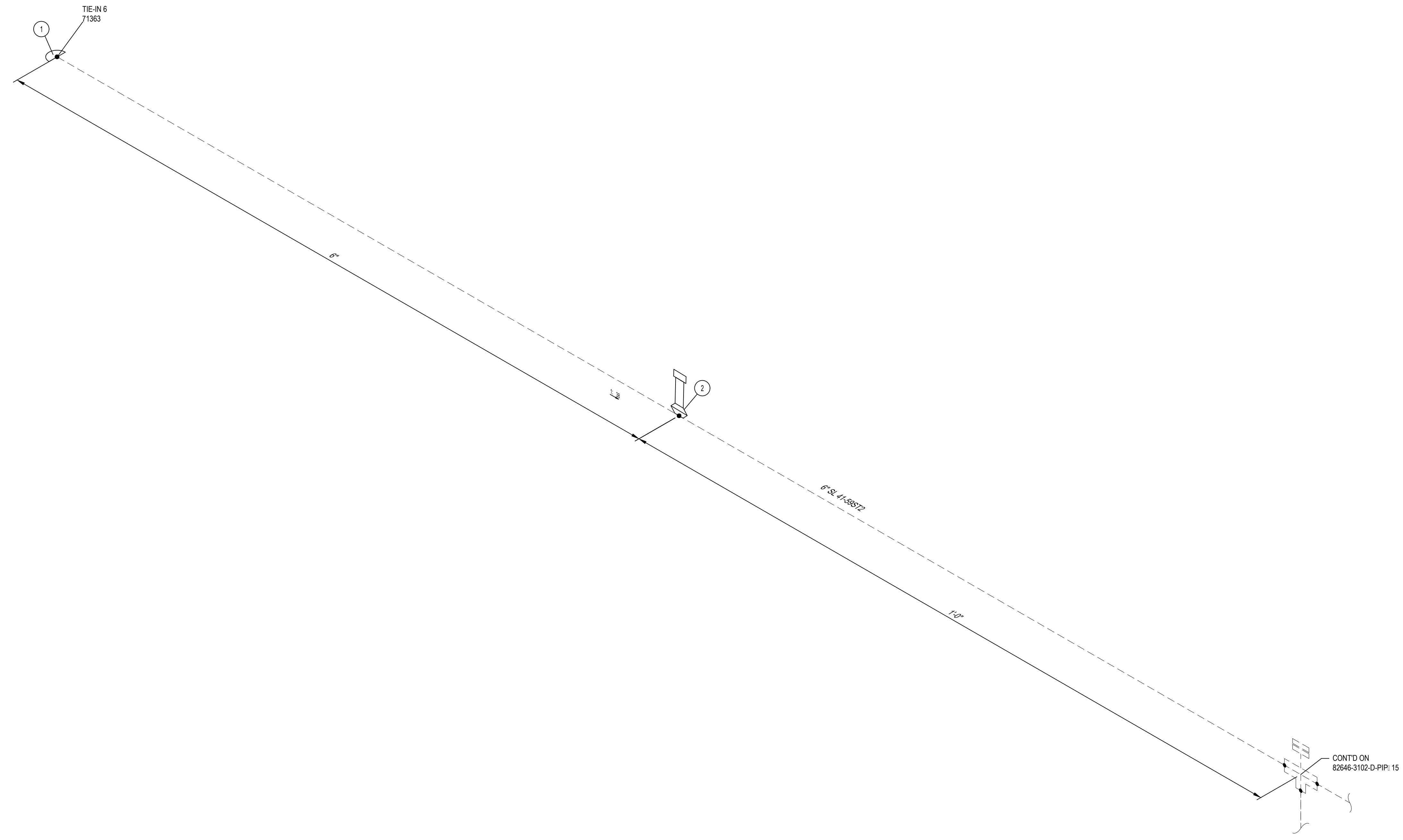
BILL OF MATERIALS									
ITEM NO.	QTY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	87'-1"	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	B42	
FITTINGS									
2	4	6"	STD	ELL 90 DEG LR BW MSS SP75-WPHY52	52-96	0.280"	N539005	B42	
3	1	6"	300CL	LINE STOP FITTING THIN WALL W/ BOTTOM OUT CONNECTION	56-48	-	N575560	B42	
BRANCH CONNECTIONS									
4	1	6" 2'	1440 PSI	HIGH PRESSURE STEEL ABANDON NIPPLE: TOE INCLUDING PLUG AND CAP	50-12.2	-	N501272	B42	
VALVES									
5	1	6"	300CL	VALVE BALL TRUNNION BW 1/2 SCH STD GR 52 CS FORGED STEEL BODY ENP BALL AND STEM RTFE SEALS/ SEATS OR E/ UNVALENT FULL PORT FIRE SAFE PER API 607/ 6FA API 6D - MODIFIED	58-82	-	N589982M	B42	

NOTES:
 1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH

MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		SL 41-59 WHITEWATER RIVER & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM
DESIGN PRESS (DL): 400 PSIG	MIN. TEST PRESS: 600 PSIG	NORM OPER. PRESS: 400 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025		
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025		
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: B42	ATLAS NO.:	DATE OF OPERATION: *	NUMBER	CHECKER: D. NAREZ	05/23/2025		
PAIN SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. CREW FOREMAN: *		PROJECT APVR: H. ORDONEZ	05/23/2025	DWG CLASS: 08 DWG DIST: 200 DRAWING NUMBER: 82646-3102-D-PIP 15	
LINE NUMBER: SL 41-59	3D DB REF: 6C12	CATHODICALLY PROTECTED: *	REGION: *	REV	SCG ENG APVR: M. MECZLOWICZ	05/23/2025		
0 12/19/2025 HL NH DN HO MM PE24-166 ISSUED FOR CONSTRUCTION 71363 *				WCA	VENDOR ID	WCA: 71363	SCALE: NONE	REV 0

ISSUED FOR CONSTRUCTION

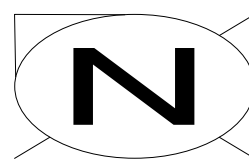
BILL OF MATERIALS									
ITEM NO.	QTY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
<u>FITTINGS</u>									
1	1	6"	STD	CAP BW MSS SP75-WPHY52	52.96	0.280"	-----	B42	
<u>BRANCH CONNECTIONS</u>									
2	1	6" x 2"	1440 PSI	HIGH PRESSURE STEEL ABANDON NIPPLE TOE INCLUDING PLUG AND CAP	50-12.2	-	N501272	B42	



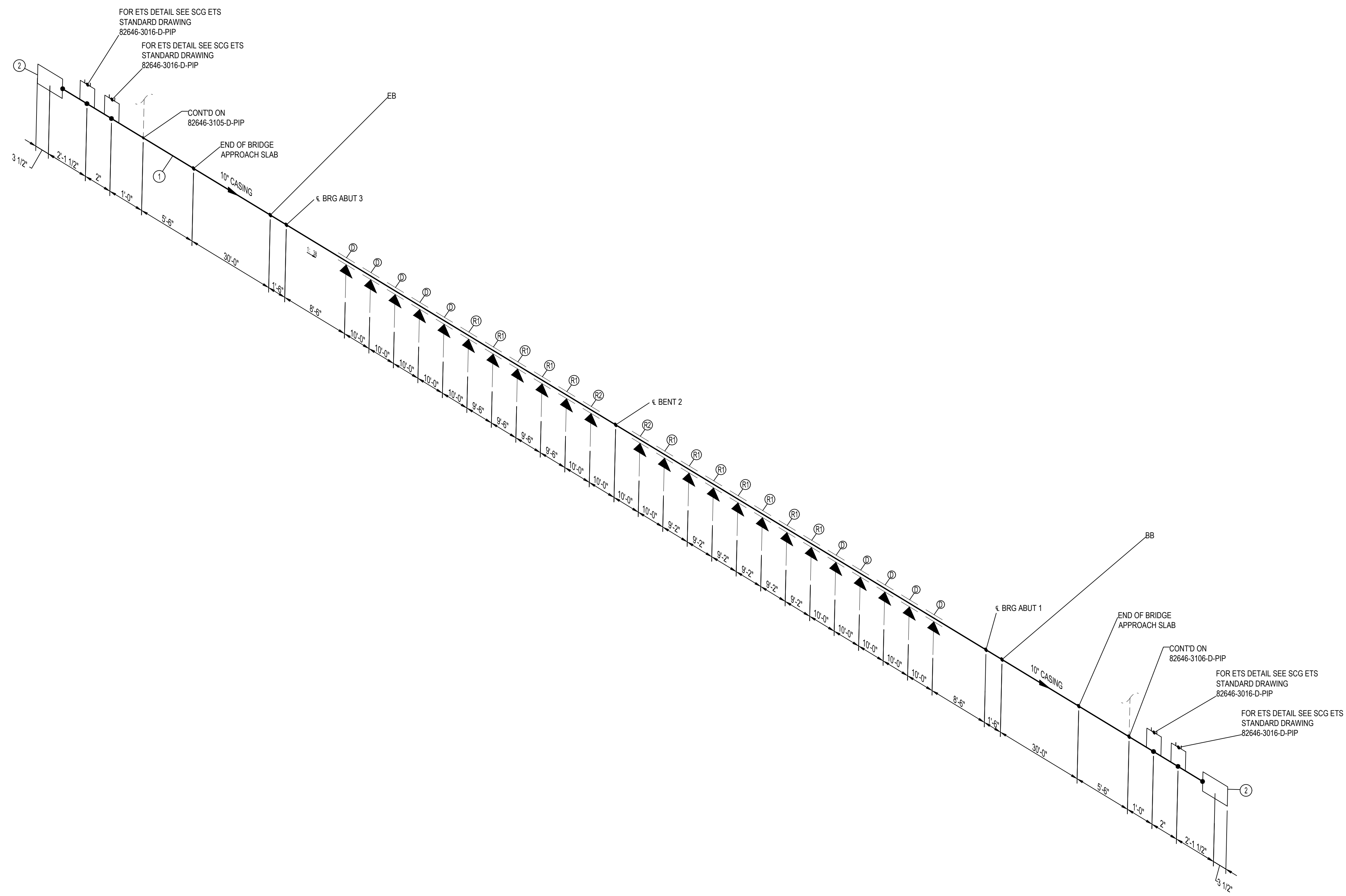
NOTES:
 1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH

MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION				BY		DATE		SL 41-59 WHITEWATER RIVER & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM							
DESIGN PRESS (DL): 400 PSIG	MIN. TEST PRESS: 600 PSIG	NORM OPER. PRESS: 400 PSIG	COUNTY: RIVERSIDE	DATE MOVED ON: *	WCA	ISSUED BY	NUMBER	DESIGNER: H. LOPEZ	05/23/2025										
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED OFF: *					ENGINEER: N. HASAN	05/23/2025										
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: B42	ATLAS NO.:	DATE OF OPERATION: *					CHECKER: D. NAREZ	05/23/2025										
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. CREW FOREMAN: *					PROJECT APVR: H. ORDONEZ	05/23/2025	DWG CLASS: 08 DWG DIST: 200 SCALE: NONE	DRAWING NUMBER 82646-3103-D-PIP								
LINE NUMBER: SL 41-59ST2	3D DB REF: 6C12	CATHODICALLY PROTECTED: *	REGION: *	REV	DATE	DES	ENGR	CHK	APVD			SCG #/PP	ENG FILE NO	DESCRIPTION	WCA	VENDOR ID	ENG FILE NO: PE24-166	WCA: 71363	REV
		YEAR C.P. INSTALLED: *		0	12/19/2025	HL	NH	DN	HO			MM	PE24-166	ISSUED FOR CONSTRUCTION					0

ISSUED FOR CONSTRUCTION



BILL OF MATERIALS									
ITEM NO.	QTY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	330'-1"	10"	STD	PIPE EW DRL API 5L- 52 FBE COATED	41-06.1	0.365"	N411050	A42	
SPECIALTY ITEMS									
2	2	10" 6"	-	END SEAL APS MODEL AC	76-85.1	-	-----	A02	



- LEGEND:**
- ⊕ - DISPLACEMENT TYPE SUPPORTS - SEE DWG 82646-4004-D-STR
 - ⊗ AND ⊙ - RESTRAINING TYPE SUPPORTS - SEE DWG 82646-4003-D-STR

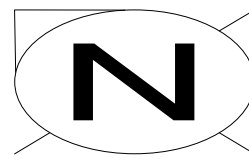
- NOTES:**
1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH.
 2. VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK.
 3. SOCIALGAS CREW/CONTRACTOR TO INSTALL GAS CARRIER PIPE INSULATING SKIDS END SEALS VENT PIPING CATHODIC PROTECTION CASING CONCRETE PEDESTAL SUPPORTS INCLUDING DOWELS HOLD-DOWNS GUIDES ALL FRP SHIELDS AND FLATTIES BRACKETS AND BUILDING PAPER WHERE CASING IS CAST INTO ABUTMENT BACKWALL.

ISSUED FOR CONSTRUCTION

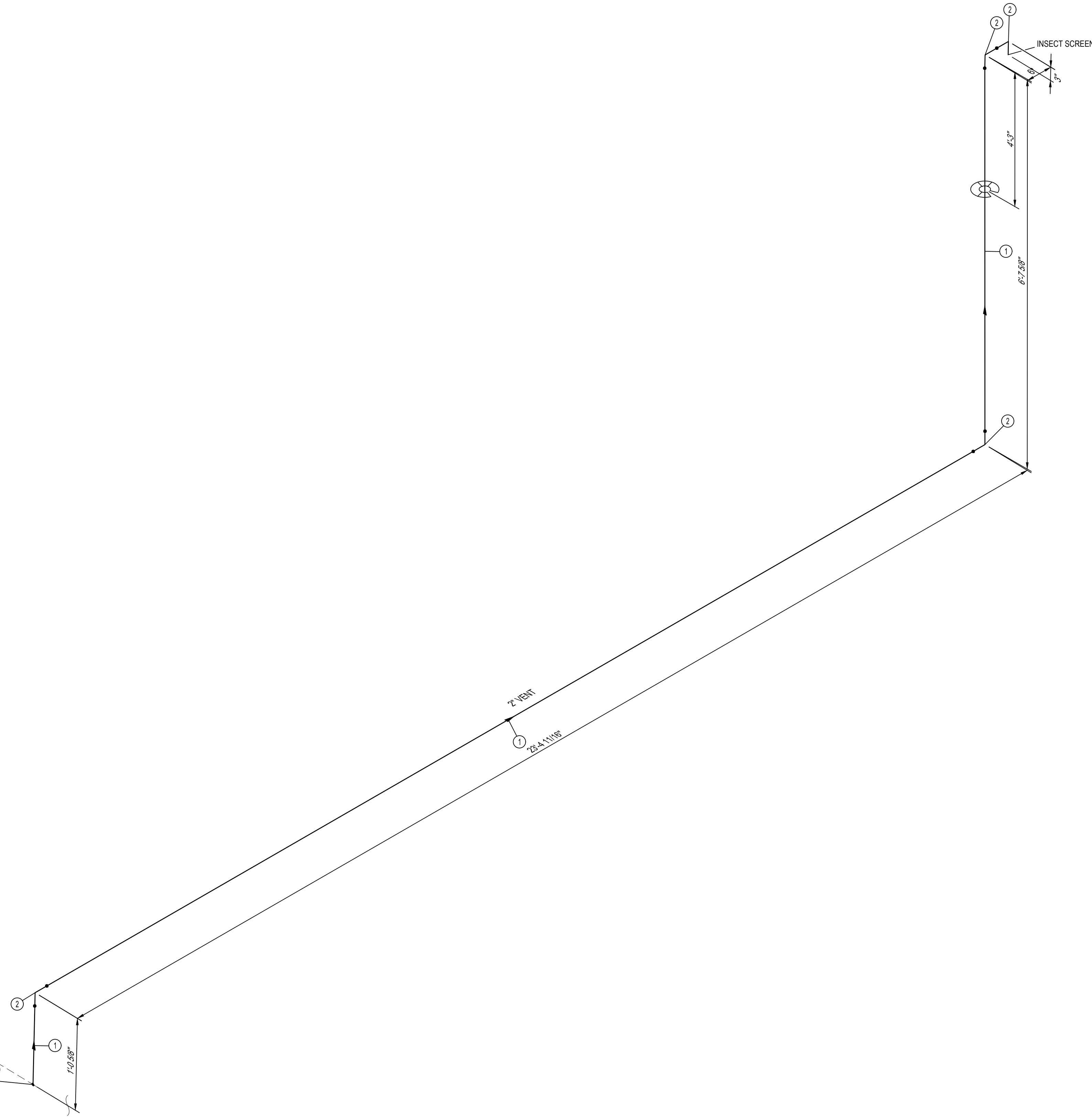
MIN DESIGN TEMP: AMBIENT	MA DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	DATE							
DESIGN PRESS DL: 400 PSIG	MIN TEST PRESS: 600 PSIG	NORM OPER. PRESS: 400 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ							
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY: *	NUMBER: *							
DATE MOVED OFF: *	DATE OF OPERATION: *	CONST. CREW FOREMAN: *	DATE MOVED ON: *	DATE MOVED OFF: *	DATE MOVED OFF: *							
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: A42/A02	TRACE: *	ATLAS NO: *	CONST. COMPANY: *	REGION: *							
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CATHODICALLY PROTECTED: *	YEAR C.P. INSTALLED: *	REV							
LINE NUMBER: CASING	3D DB REF: 6C12	REGION: *	YEAR C.P. INSTALLED: *	REV	DATE							
1	01/08/2026	DN	NH	DN	HO	MM	PE24-166	UPDATED NOTES	71363	*	ENG FILE NO: PE24-166	05/23/2025
0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	ENG FILE NO: PE24-166	05/23/2025



SL 41-59
I-10 & MONROE ST BRIDGE
REPLACEMENT
PIPING ISOMETRIC & BOM



CONT. ON
82646-3104-D-PIP

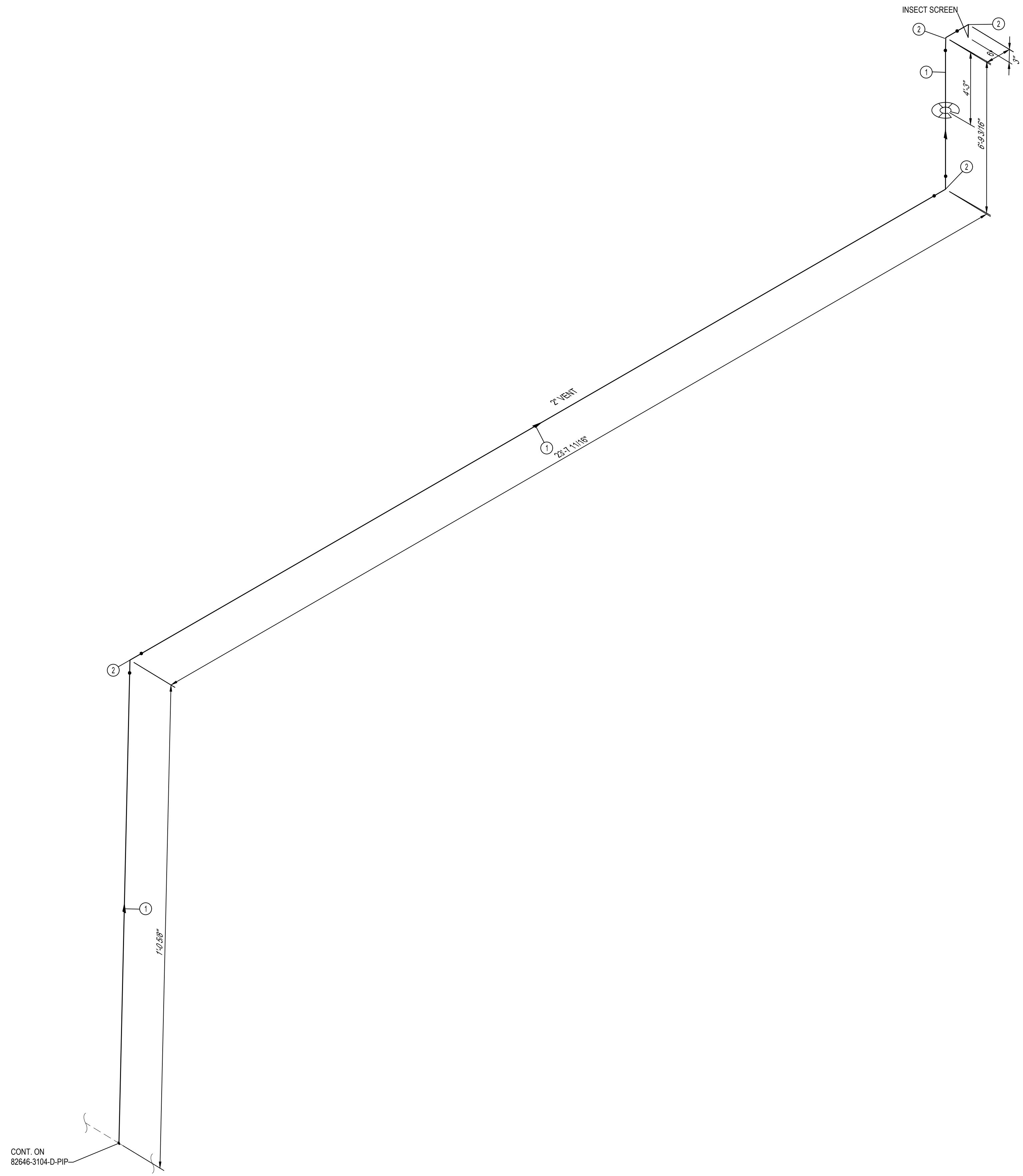
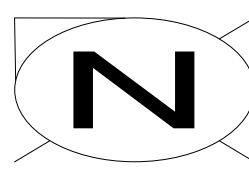


BILL OF MATERIALS									
ITEM NO.	QTY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	29'-5"	2"	S	PIPE SMLS SRL ASTM A106-B	41-06.1	0.218"	N407552	B42	
FITTINGS									
2	4	2"	S	ELL 90 DEG LR BW ASTM A234-WPB	52-96	0.218"	N529643	B42	

NOTES:
 1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH

MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY: DESIGNER: H. LOPEZ	DATE: 05/23/2025		SL 41-59 I-10 & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM											
DESIGN PRESS (DL): 400 PSIG	MIN. TEST PRESS: 600 PSIG	NORM OPER. PRESS: 400 PSIG	COUNTY: RIVERSIDE	WCA: *	ENGINEER: N. HASAN	05/23/2025													
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY: *	CHECKER: D. NAREZ	05/23/2025													
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: B42	ATLAS NO: *	DATE OF OPERATION: *	CONST. CREW FOREMAN: *	PROJECT APVR: H. ORDONEZ	05/23/2025													
PAINT SYSTEM: FBE (UG) 186.0104 (AG)	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	REGION: *	REV: 0	DATE: 12/19/2025	DES: HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	ENG FILE NO: PE24-166	DWG CLASS: 08	DWG DIST: 200	DRAWING NUMBER: 82646-3105-D-PIP	REV: 0
LINE NUMBER: VENT	3D DB REF: 6C12	YEAR C.P. INSTALLED: *																	

ISSUED FOR CONSTRUCTION



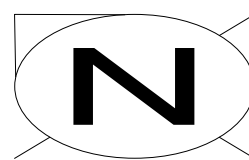
BILL OF MATERIALS									
ITEM NO.	QTY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	29-10"	2"	S	PIPE SMLS SRL ASTM A106-B	41-06.1	0.218"	N407552	B42	
FITTINGS									
2	4	2"	S	ELL 90 DEG LR BW ASTM A234-WPB	52-96	0.218"	N529643	B42	

CONT. ON
82646-3104-D-PIP

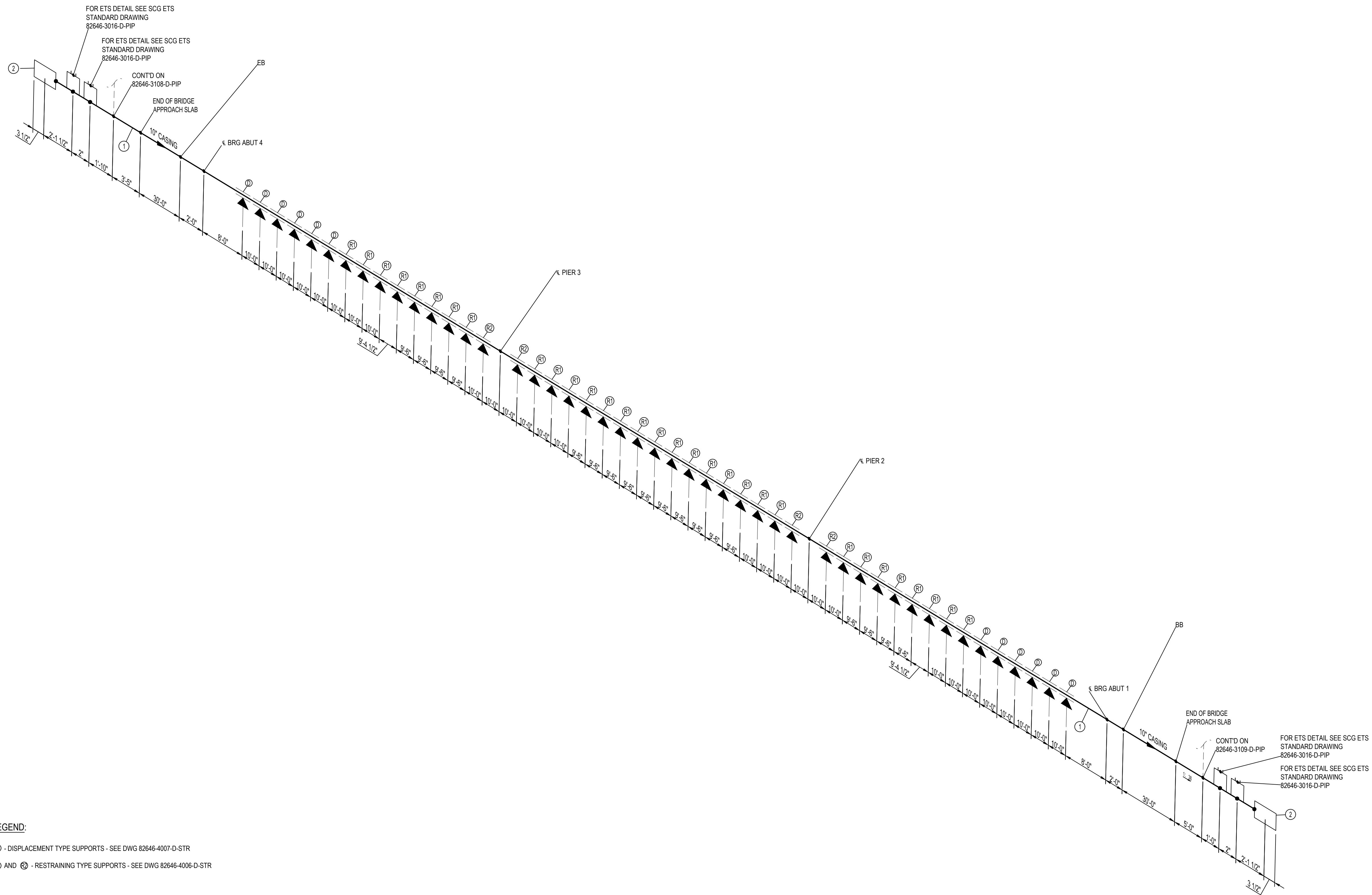
ISSUED FOR CONSTRUCTION

NOTES:
1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH

MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		SL 41-59 I-10 & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM							
DESIGN PRESS (DL): 400 PSIG	MIN. TEST PRESS: 600 PSIG	NORM OPER. PRESS: 400 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025									
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025									
WELD PROC: 187.0055 & 187.0056	INSUL THK: *	ATLAS NO: *	DATE OF OPERATION: *	NUMBER	CHECKER: D. NAREZ	05/23/2025									
PAINT SYSTEM: FBE (UG) 186.0104 (AG)	PIPE SPEC: B42	TRACE: *	CONST. CREW FOREMAN: *		PROJECT APVR: H. ORDONEZ	05/23/2025	DRAWING NUMBER 82646-3106-D-PIP								
COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CATHODICALLY PROTECTED: *	REGION: *	0	SCG ENG APVR: M. MECZLOWICZ	05/23/2025									
PLAN: 82646-3002-D-PIP	YEAR C.P. INSTALLED: *			REV	ENG FILE NO: PE24-166										
LINE NUMBER: VENT	3D DB REF: 6C12			12/19/2025	71363		DWG CLASS: 08	DWG DIST: 200	REV						
				HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363		SCALE: NONE		0



BILL OF MATERIALS									
ITEM NO.	QTY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	565'	10"	STD	PIPE EW DRL API 5L - 52 FBE COATED	41-06.1	0.365"	N411050	A42	
SPECIALTY ITEMS									
2	2	10" 6"	-	END SEAL APS MODEL AC	76-85.1	-	-----	A02	



LEGEND:

- ⓪ - DISPLACEMENT TYPE SUPPORTS - SEE DWG 82646-4007-D-STR
- Ⓢ AND Ⓡ - RESTRAINING TYPE SUPPORTS - SEE DWG 82646-4006-D-STR

NOTES:

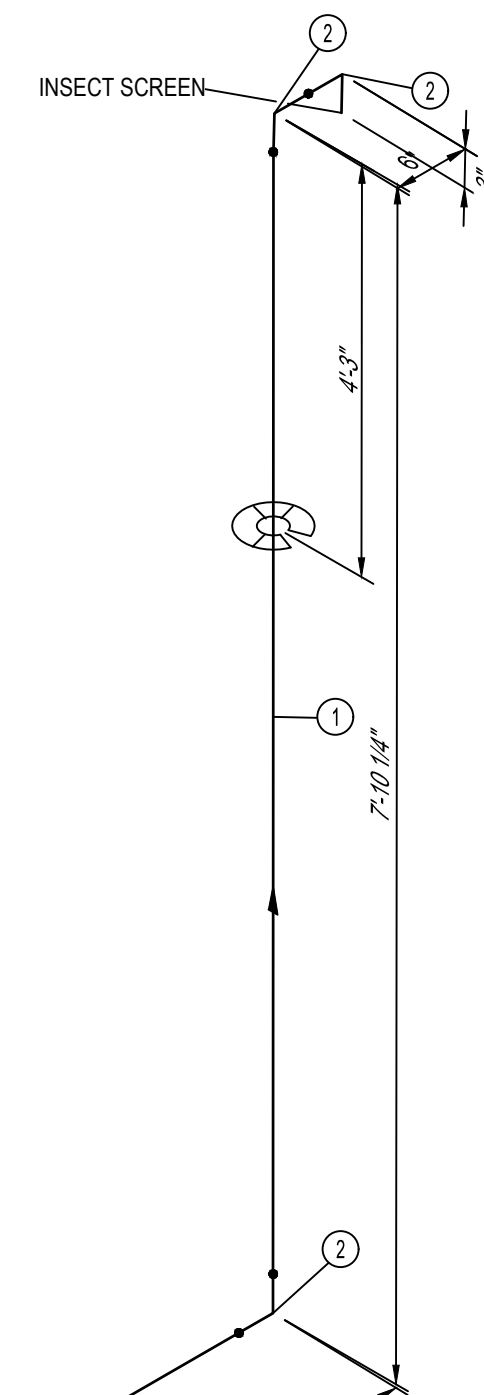
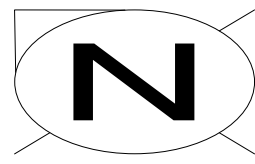
1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55° FROM ISO NORTH.
2. VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK.
3. SOCIAL GAS CREW/CONTRACTOR TO INSTALL GAS CARRIER PIPE INSULATING SKIDS END SEALS VENT PIPING CATHODIC PROTECTION CASING CONCRETE PEDESTAL SUPPORTS INCLUDING DOWELS HOLD-DOWNS GUIDES ALL FRP SHIELDS AND FLATTIES BRACKETS AND BUILDING PAPER WHERE CASING IS CAST INTO ABUTMENT BACKWALL.

MIN DESIGN TEMP: AMBIENT	MA DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	DATE	BY
DESIGN PRESS DL: 400 PSIG	MIN TEST PRESS: 600 PSIG	NORM OPER. PRESS: 400 PSIG	COUNTY: RIVERSIDE	DATE MOVED ON: *	05/23/2025	DESIGNER: H. LOPEZ
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED OFF: *	WCA	05/23/2025	ENGINEER: N. HASAN
DDS: *	INSUL: *	STRIP MAP NO: *	DATE OF OPERATION: *	ISSUED BY	05/23/2025	CHECKER: D. NAREZ
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: A42/A02	ATLAS NO: *	CONST. CREW FOREMAN: *	NUMBER	05/23/2025	PROJECT APVR: H. ORDONEZ
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. COMPANY: *	1	01/08/2026	SCG ENG APVR: M. MECZLOWICZ
PLAN: 82646-3010-D-PIP	TRACE: *	CATHODICALLY PROTECTED: *	REGION: *	0	12/19/2025	ENG FILE NO: PE24-166
LINE NUMBER: CASING	3D DB REF: GC12	YEAR C/P INSTALLED: *		REV	DATE	DESCRIPTION
				1	01/08/2026	UPDATED NOTES
				0	12/19/2025	ISSUED FOR CONSTRUCTION
				WCA	71363	
				VENDOR ID	71363	
				WCA	71363	
				SCALE: NONE	DWG CLASS: 08	DWG DIST: 200
				DRAWING NUMBER	82646-3107-D-PIP	REV
						1

ISSUED FOR CONSTRUCTION

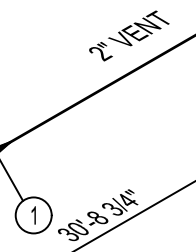
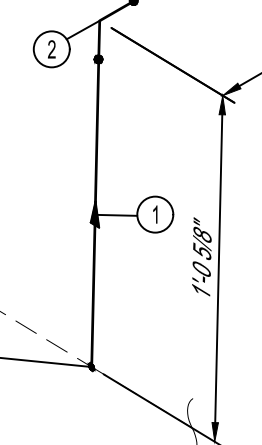
SL 41-59
 WHITEWATER RIVER & MONROE ST BRIDGE
 REPLACEMENT
 PIPING ISOMETRIC & BOM





BILL OF MATERIALS									
ITEM NO.	QTY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	38'	2"	S	PIPE SMLS SRL ASTM A106-B	41-06.1	0.218"	N407552	B42	
FITTINGS									
2	4	2"	S	ELL 90 DEG LR BW ASTM A234-WPB	52-96	0.218"	N529643	B42	

CONT. ON
82646-3107-D-PIP

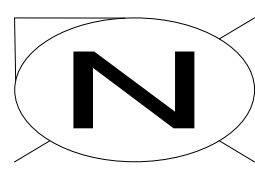


ISSUED FOR CONSTRUCTION

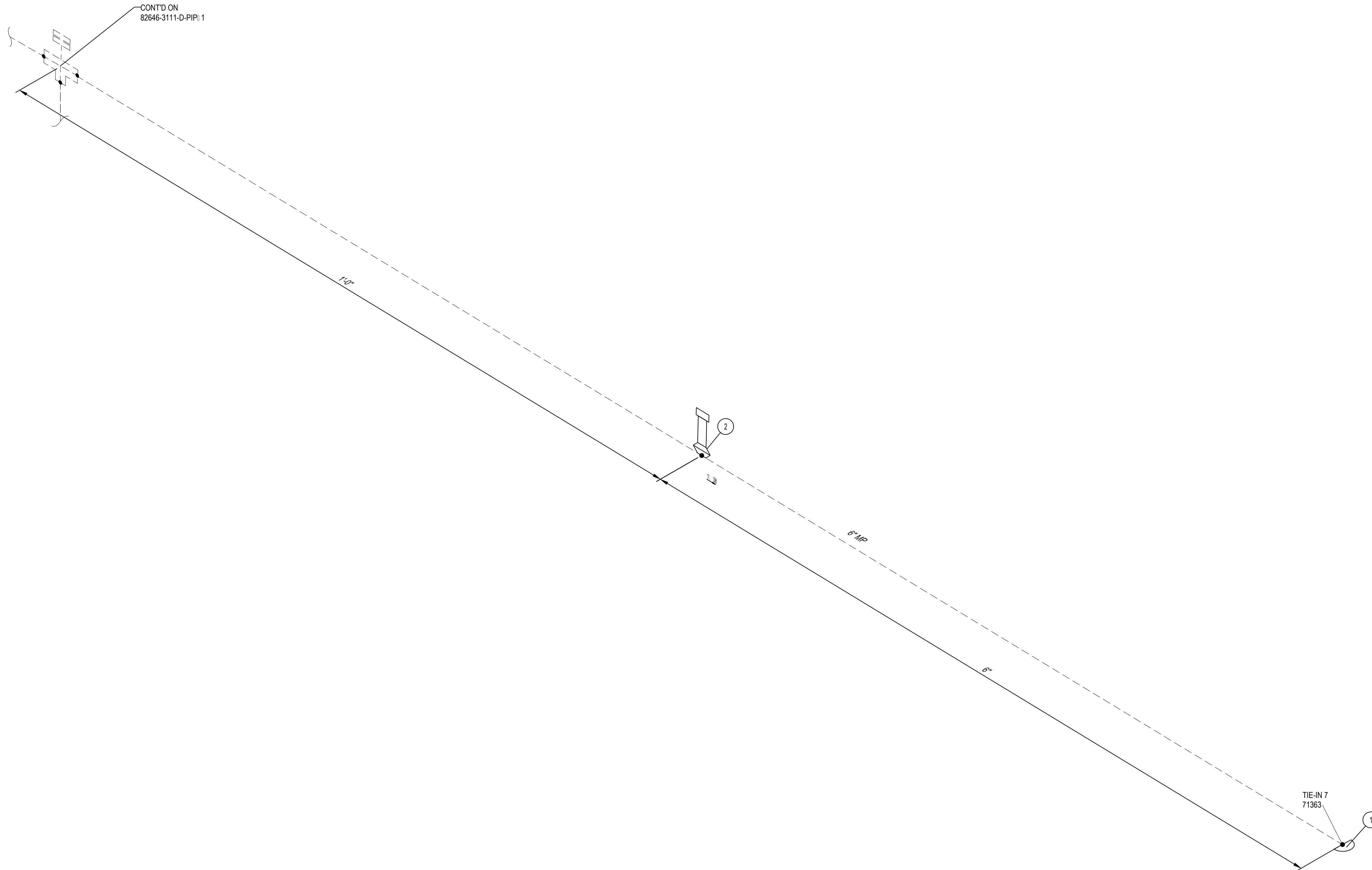
NOTES:
1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH

MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		SL 41-59 WHITEWATER RIVER & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM
DESIGN PRESS (DL): 400 PSIG	MIN. TEST PRESS: 600 PSIG	NORM OPER. PRESS: 400 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025		
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025		
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: B42	ATLAS NO.:	DATE OF OPERATION: *	NUMBER	CHECKER: D. NAREZ	05/23/2025		
PAINT SYSTEM: FBE (UG) 186.0117 (AG)	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. CREW FOREMAN: *		PROJECT APVR: H. ORDONEZ	05/23/2025	DRAWING NUMBER 82646-3108-D-PIP	
PLAN: 82646-3010-D-PIP	CATHODICALLY PROTECTED: *	REGION: *	REV	DATE	SCG ENG APVR: M. MECZLOWICZ	05/23/2025		
LINE NUMBER: VENT	3D DB REF: 6C12	YEAR C.P. INSTALLED: *	0	12/19/2025	ISSUED FOR CONSTRUCTION	71363		SCALE: NONE

REV 0



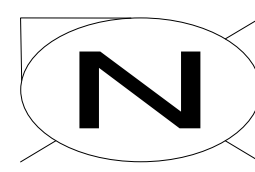
BILL OF MATERIALS									
ITEM NO.	QTY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
FITTINGS									
1	1	6"	STD	CAP BW MSS SP75-WPHY52	52.96	0.280"	N532105	A41	
BRANCH CONNECTIONS									
2	1	6" 1/2"	1440 PSI	HIGH PRESSURE STEEL ABANDON NIPPLE TOE INCLUDING PLUG AND CAP	50-12.2	-	N501272	A41	



NOTES:
 1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH

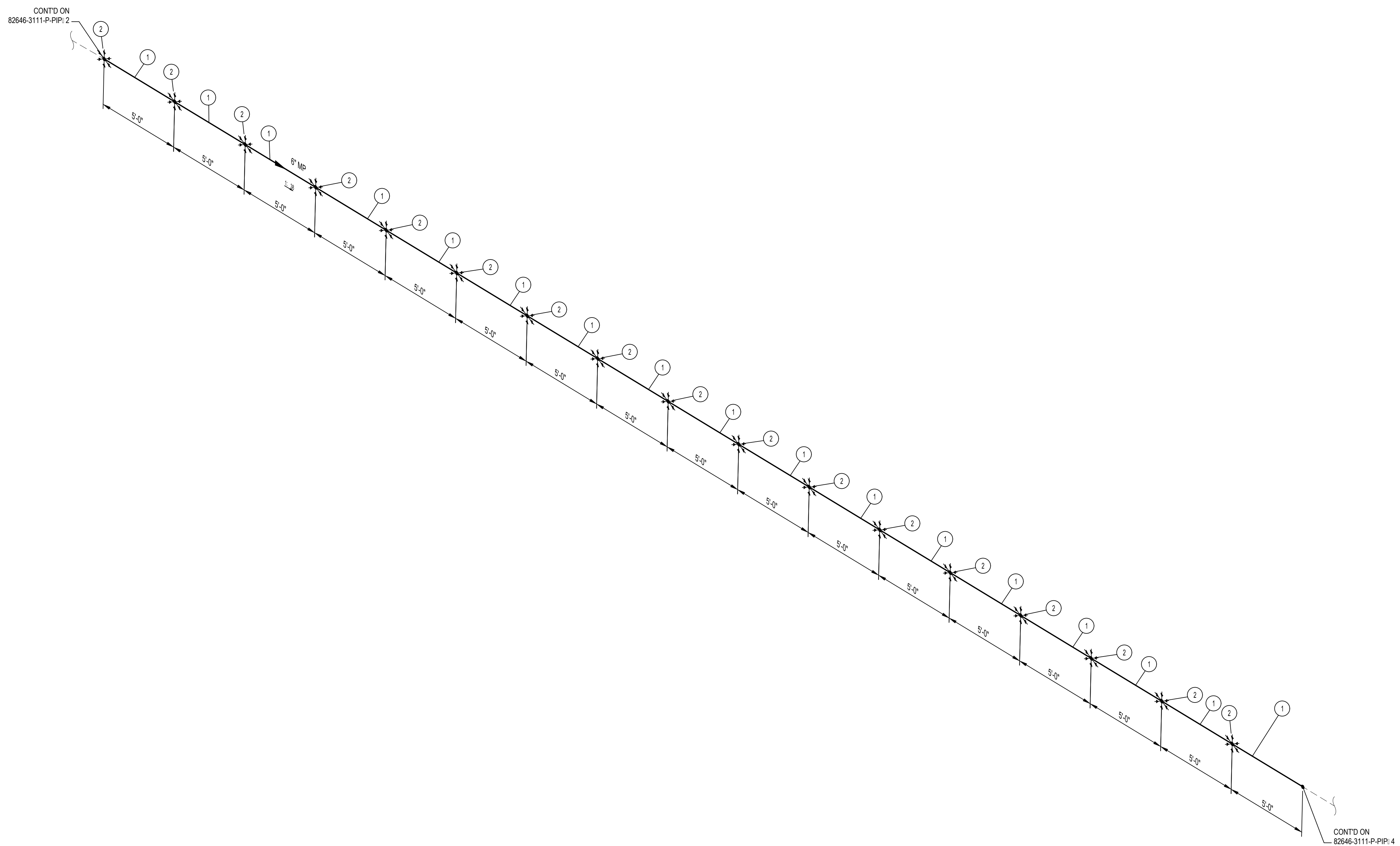
ISSUED FOR CONSTRUCTION

MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		MP GAS I-10 & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM								
DESIGN PRESS (DL): 60 PSIG	MIN. TEST PRESS: 90 PSIG	NORM OPER. PRESS: 60 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025										
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025										
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: A41	ATLAS NO: *	DATE MOVED OFF: *	NUMBER	CHECKER: D. NAREZ	05/23/2025										
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. CREW FOREMAN: *		PROJECT APVR: H. ORDONEZ	05/23/2025	DWG CLASS: 08 DWG DIST: 200 SCALE: NONE DRAWING NUMBER: 82646-3110-D-PIP REV: 0									
PLAN: 82646-3002-D-PIP	CATHODICALLY PROTECTED: *	REGION: *	REV	DATE	DES	ENGR		CHK	APVD	SCG REF	ENG FILE NO	DESCRIPTION	WCA	VENDOR ID	ENG FILE NO	DESCRIPTION
LINE NUMBER: MP	3D DB REF: 6C12	YEAR C.P. INSTALLED: *	0	12/19/2025	HL	NH		DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	71363	ISSUED FOR CONSTRUCTION



BILL OF MATERIALS									
ITEM NO.	QTY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	85'	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	A41	
SPECIALTY ITEMS									
2	17	6"		CASING INSULATING SKIDS MODEL CI	76-85.4			A02	

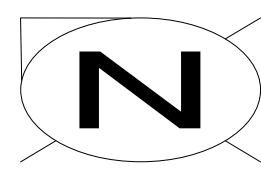
* 6" 10" CASING INSULATING SKIDS TO BE INSTALLED.



- NOTES:**
- THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH
 - VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

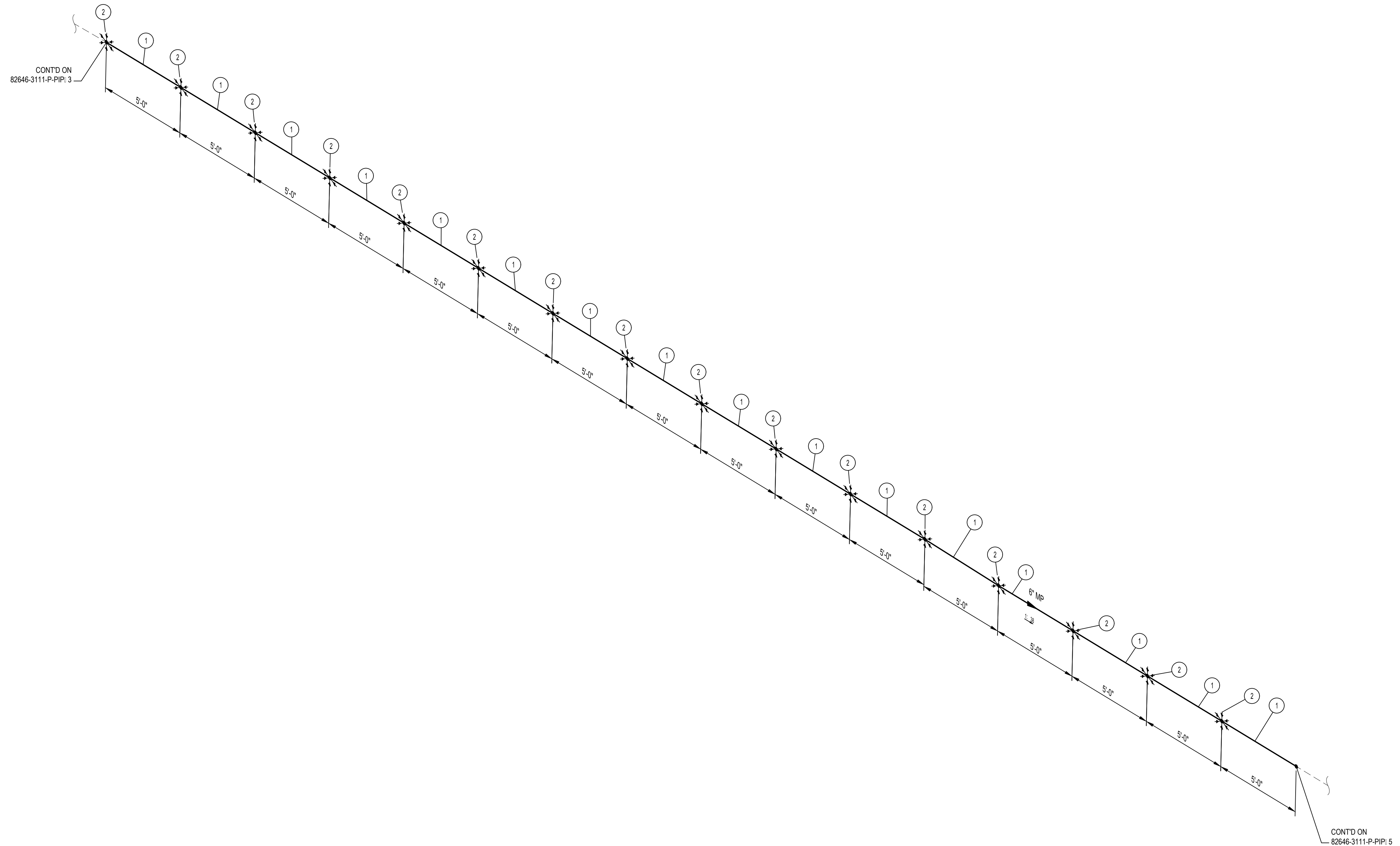
ISSUED FOR CONSTRUCTION

MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		MP GAS I-10 & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM													
DESIGN PRESS (DL): 60 PSIG	MIN. TEST PRESS: 90 PSIG	NORM OPER. PRESS: 60 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025															
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025															
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: A41/A02	ATLAS NO.:	DATE MOVED OFF: *	NUMBER	CHECKER: D. NAREZ	05/23/2025															
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. CREW FOREMAN: *		PROJECT APVR: H. ORDONEZ	05/23/2025	DRAWING NUMBER 82646-3111-D-PIP 3														
LINE NUMBER: MP	PLAN: 82646-3002-D-PIP	CATHODICALLY PROTECTED: *	REGION: *	0 12/19/2025	SCG ENG APVR: M. MECHLOWICZ	05/23/2025															
				REV	DATE	DES	ENGR	CHK	APVD	SCG #	ENG FILE NO	DESCRIPTION	WCA	VENDOR ID	WCA	71363	ENG FILE NO: PE24-166	DWG CLASS: 08	DWG DIST: 200	SCALE: NONE	REV



BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	80'	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	A41	
SPECIALTY ITEMS									
2	16	6"	-	CASING INSULATING SKIDS MODEL CI	76-85.4	-	-----	A02	

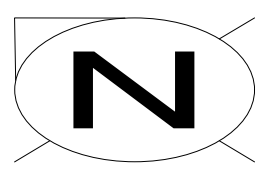
* 6" 10' CASING INSULATING SKIDS TO BE INSTALLED.



- NOTES:**
1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH
 2. VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

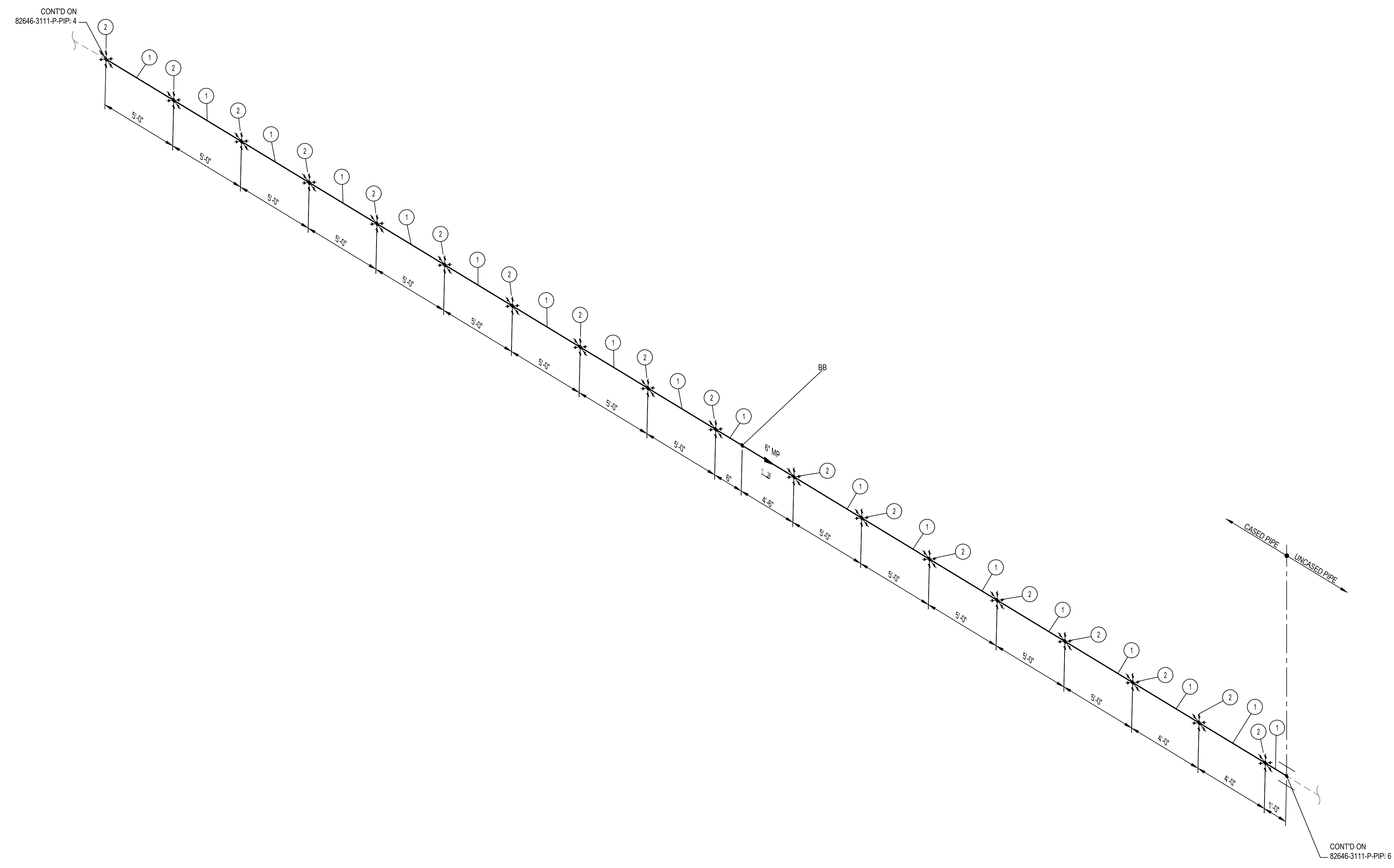
MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		MP GAS I-10 & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM									
DESIGN PRESS (DL): 60 PSIG	MIN. TEST PRESS: 90 PSIG	NORM OPER PRESS: 60 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025											
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025											
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: A41/A02	ATLAS NO.:	DATE MOVED OFF: *	NUMBER	CHECKER: D. NAREZ	05/23/2025											
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. CREW FOREMAN: *		PROJECT APVR: H. ORDONEZ	05/23/2025	DRAWING NUMBER 82646-3111-D-PIP 4										
LINE NUMBER: MP	PLAN: 82646-3002-D-PIP	CATHODICALLY PROTECTED: *	REGION: *	0 12/19/2025 HL NH DN HO MM	SCG ENG APVR: M. MECHLOWICZ	05/23/2025											
				REV	DATE	DES	ENGR	CHK	APVD	SCG ENG FILE NO	DESCRIPTION	WCA	VENDOR ID	WCA	SCALE: NONE	DWG DIST: 200	REV
										PE24-166	ISSUED FOR CONSTRUCTION	71363	*	ENG FILE NO: PE24-166			0

ISSUED FOR CONSTRUCTION



BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	84'-1"	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	A41	
SPECIALTY ITEMS									
2	18	6"		CASING INSULATING SKIDS MODEL CI	76-85.4			A02	

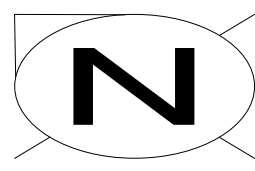
* 6" 10" CASING INSULATING SKIDS TO BE INSTALLED.



- NOTES:**
1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55° FROM ISO NORTH
 2. VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

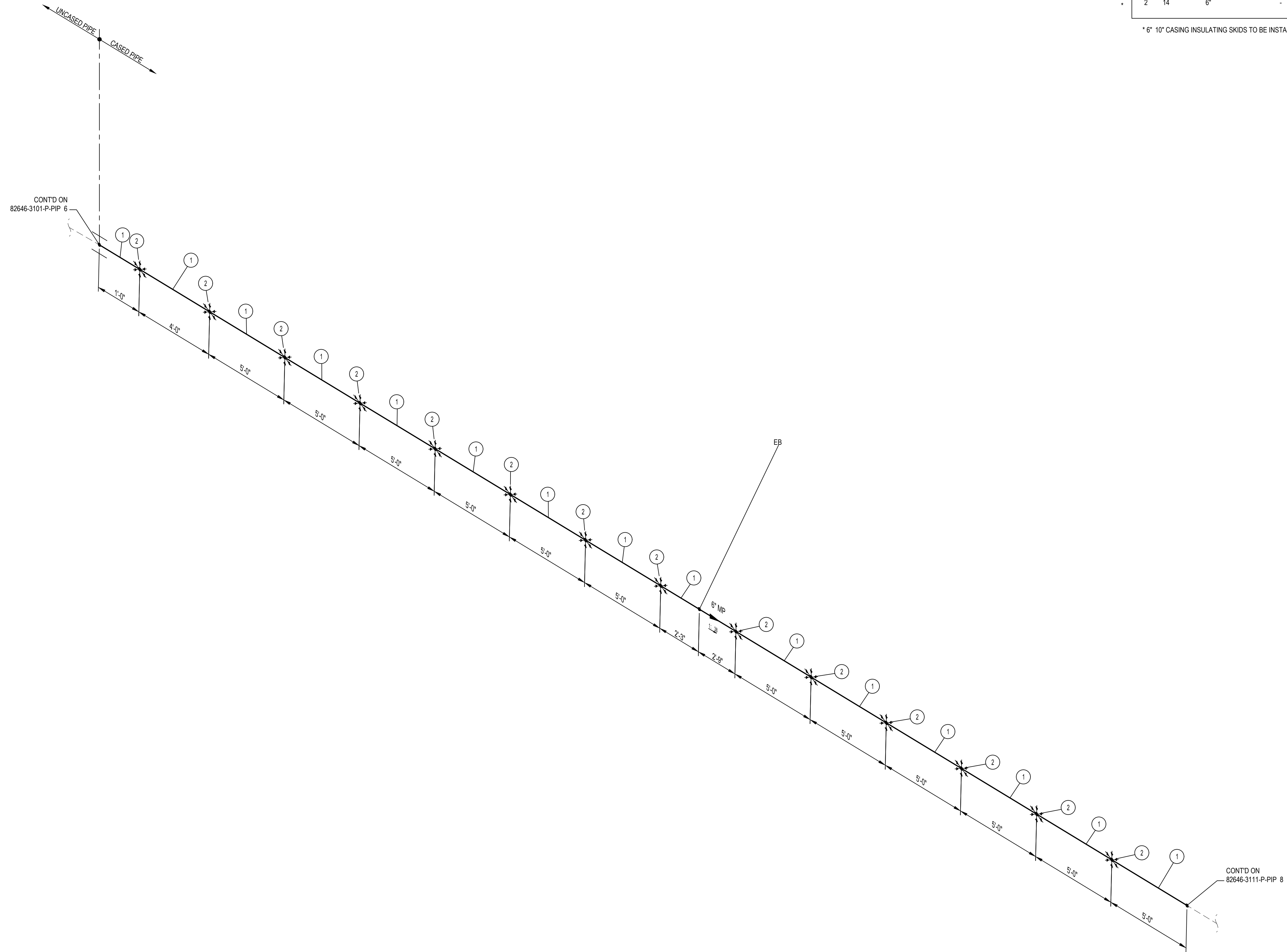
MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		MP GAS I-10 & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM										
DESIGN PRESS (DL): 60 PSIG	MIN. TEST PRESS: 90 PSIG	NORM OPER. PRESS: 60 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025												
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025												
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: A41/A02	ATLAS NO.:	DATE OF OPERATION: *	CONST. CREW FOREMAN: *	CHECKER: D. NAREZ	05/23/2025												
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	REGION: *	CONST. COMPANY: *	PROJECT APVR: H. ORDONEZ	05/23/2025	DWG CLASS: 08 DWG DIST: 200 SCALE: NONE	DRAWING NUMBER 82646-3111-D-PIP 5										
LINE NUMBER: MP	PLAN: 82646-3002-D-PIP	CATHODICALLY PROTECTED: *	YEAR C.P. INSTALLED: *	REV	SCG ENG APVR: M. MECHELOWICZ	05/23/2025			REV									
				0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	ENG FILE NO: PE24-166	WCA	VENDOR ID	WCA: 71363	0

ISSUED FOR CONSTRUCTION



BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	70'-1"	6"	STD	PIPE EW DRL API 5L- 52 FBE COATED	41-06.1	0.280"	N410630	A41	
SPECIALTY ITEMS									
2	14	6"	-	CASING INSULATING SKIDS MODEL CI	76-85.4	-	-----	A02	

* 6" 10" CASING INSULATING SKIDS TO BE INSTALLED.



NOTES:

1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH
2. VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

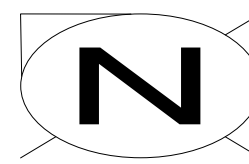
MIN DESIGN TEMP: AMBIENT	MA DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE									
DESIGN PRESS DL: 60 PSIG	MIN TEST PRESS: 90 PSIG	NORM OPER. PRESS: 60 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025									
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025									
DDS: *	INSUL: *	STRIP MAP NO: *	DATE MOVED OFF: *	NUMBER	CHECKER: D. NAREZ	05/23/2025									
WELD PROCD: 187.0055 & 187.0056	PIPE SPEC: A41/A02	ATLAS NO: *	DATE OF OPERATION: *		PROJECT APVR: H. ORDONEZ	05/23/2025									
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST CREW FOREMAN: *		SCG ENG APVR: M. MECHELOWICZ	05/23/2025									
PAID: *	PLAN: 82646-3010-D-PIP	CATHODICALLY PROTECTED: *	REGION: *		ENG FILE NO: PE24-166										
LINE NUMBER: MP	3D DB REF: 6C12	YEAR C.P. INSTALLED: *			WCA: 71363										
0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	ENG FILE NO: PE24-166	DWG CLASS: 08	DWG DIST: 200	DRAWING NUMBER	REV
REV	DATE	DES	ENGR	CHK	APVD	SCG APVD	ENG FILE NO	DESCRIPTION	WCA	VENDOR ID	WCA: 71363	SCALE: NONE		82646-3111-D-PIP 7	0

ISSUED FOR CONSTRUCTION



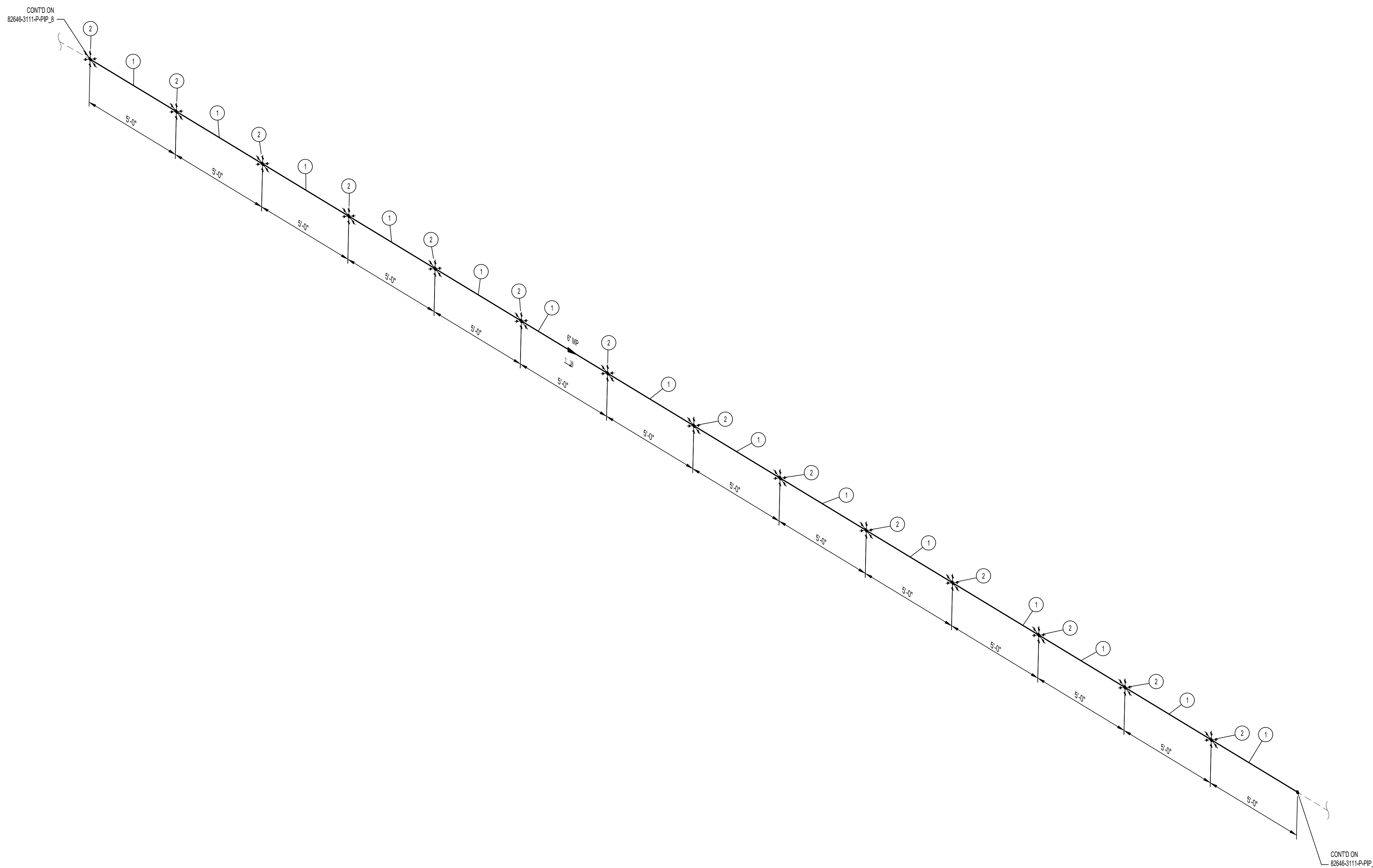
MP GAS
WHITEWATER RIVER & MONROE ST BRIDGE
REPLACEMENT
PIPING ISOMETRIC & BOM

82646-3111-D-PIP 7



BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	70'	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	A41	
SPECIALTY ITEMS									
2	14	6"	-	CASING INSULATING SKIDS MODEL CI	76-85.4	-	-----	A02	

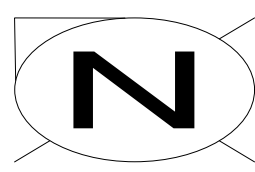
* 6" 10' CASING INSULATING SKIDS TO BE INSTALLED.



- NOTES:**
1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH
 2. VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

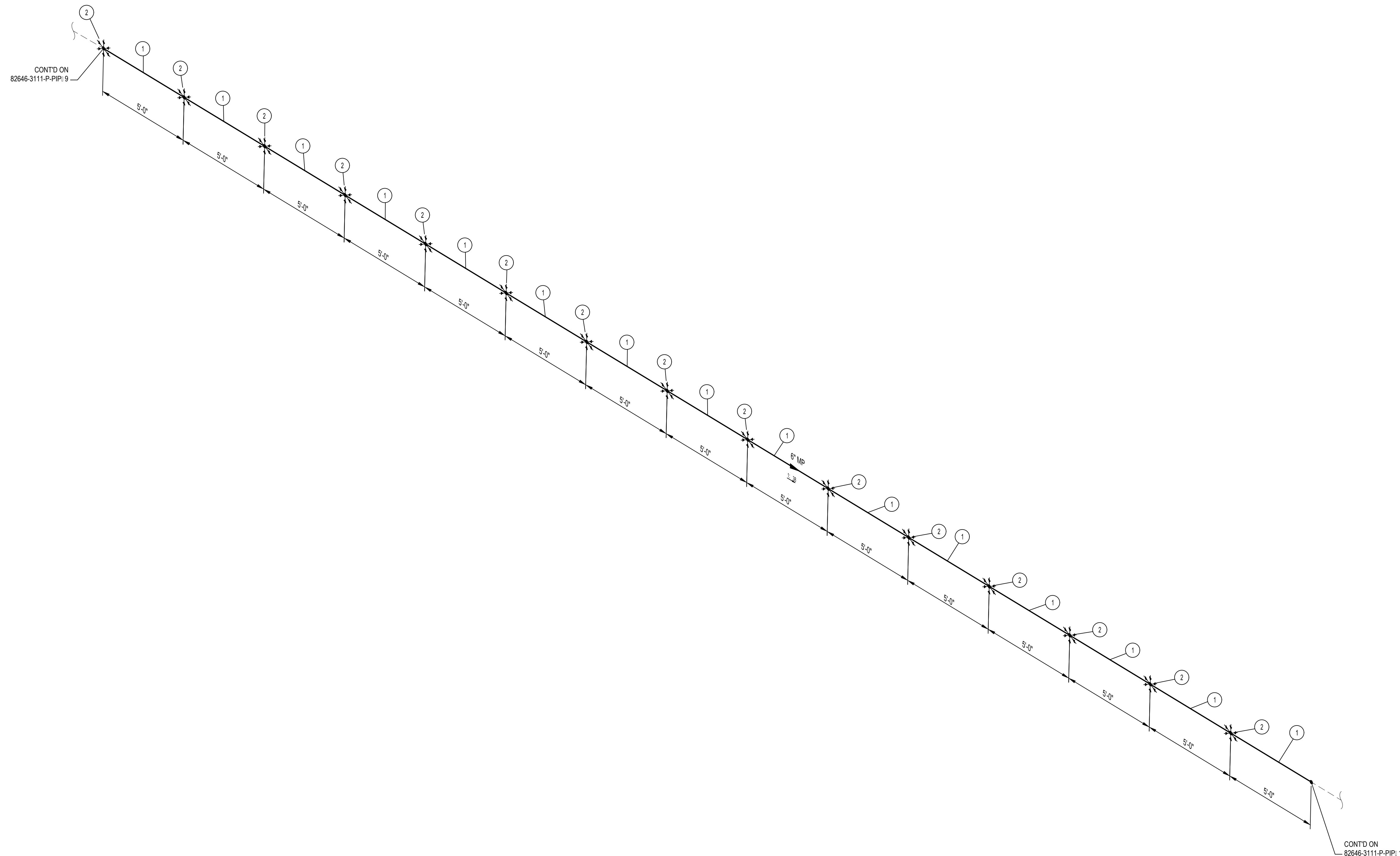
MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		MP GAS WHITEWATER RIVER & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM	DRAWING NUMBER 82646-3111-D-PIP 9	REV 0								
DESIGN PRESS (DL): 60 PSIG	MIN. TEST PRESS: 90 PSIG	NORM OPER. PRESS: 60 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025												
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025												
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: A41/A02	ATLAS NO: *	DATE OF OPERATION: *	CONST. CREW FOREMAN: *	CHECKER: D. NAREZ	05/23/2025												
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. COMPANY: *	REGION: *	PROJECT APVR: H. ORDONEZ	05/23/2025												
LINE NUMBER: MP	PLAN: 82646-3010-D-PIP	CATHODICALLY PROTECTED: *	YEAR C.P. INSTALLED: *	REV	SCG ENG APVR: M. MECHLOWICZ	05/23/2025	DWG CLASS: 08	DWG DIST: 200	SCALE: NONE									
					0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	ENG FILE NO: PE24-166	DWG CLASS: 08	DWG DIST: 200	SCALE: NONE
					REV	DATE	DES	ENGR	CHK	APVD	SCG APVR	ENG FILE NO	DESCRIPTION	WCA	VENDOR ID	WCA: 71363		

ISSUED FOR CONSTRUCTION



BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	75'	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	A41	
SPECIALTY ITEMS									
2	15	6"	-	CASING INSULATING SKIDS MODEL CI	76-85.4	-	-----	A02	

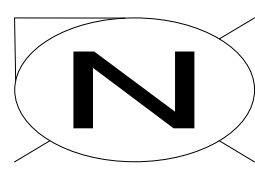
* 6" 10" CASING INSULATING SKIDS TO BE INSTALLED.



- NOTES:**
- THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH
 - VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

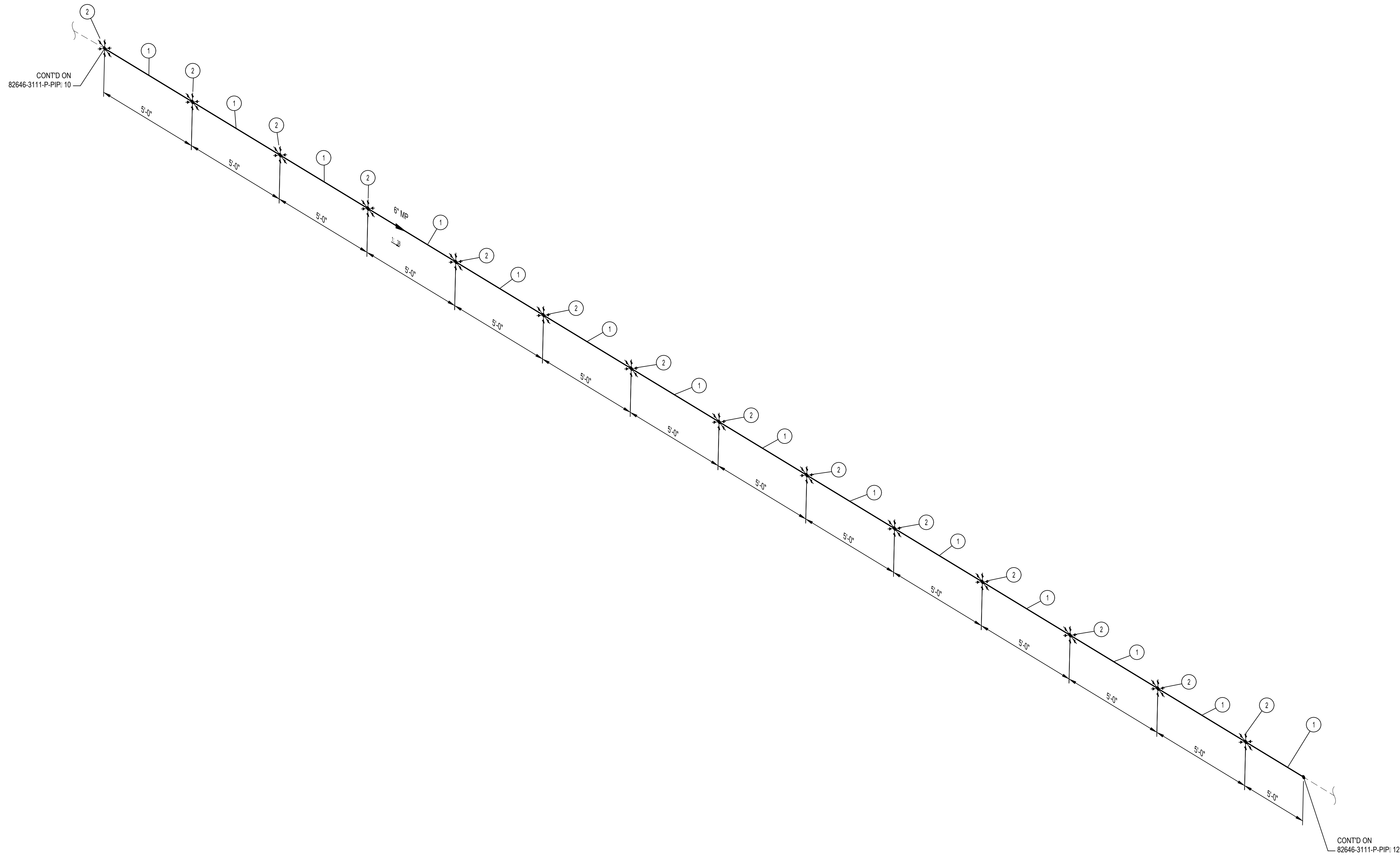
MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		MP GAS WHITEWATER RIVER & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM												
DESIGN PRESS (DL): 60 PSIG	MIN. TEST PRESS: 90 PSIG	NORM OPER. PRESS: 60 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025														
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025														
WELD PROC: 187.0055 & 187.0056	INSUL THK: *	ATLAS NO. *	DATE MOVED OFF: *	NUMBER	CHECKER: D. NAREZ	05/23/2025														
PIPE SPEC: A41/A02	TRACE: *	CONST. CREW FOREMAN: *	DATE OF OPERATION: *		PROJECT APVR: H. ORDONEZ	05/23/2025	DRAWING NUMBER 82646-3111-D-PIP 10													
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	REGION: *		SCG ENG APVR: M. MECHLOWICZ	05/23/2025														
PLAN: 82646-3010-D-PIP	CATHODICALLY PROTECTED: *	YEAR C.P. INSTALLED: *			ENG FILE NO: PE24-166															
LINE NUMBER: MP	3D DB REF: 6C12				WCA: 71363															
				0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363		ENG FILE NO: PE24-166	DWG CLASS: 08	DWG DIST: 200	SCALE: NONE	REV	0

ISSUED FOR CONSTRUCTION



BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	70'	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	A41	
SPECIALTY ITEMS									
2	14	6"	-	CASING INSULATING SKIDS MODEL CI	76-85.4	-	-----	A02	

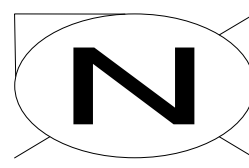
* 6" 10' CASING INSULATING SKIDS TO BE INSTALLED.



- NOTES:**
1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH
 2. VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

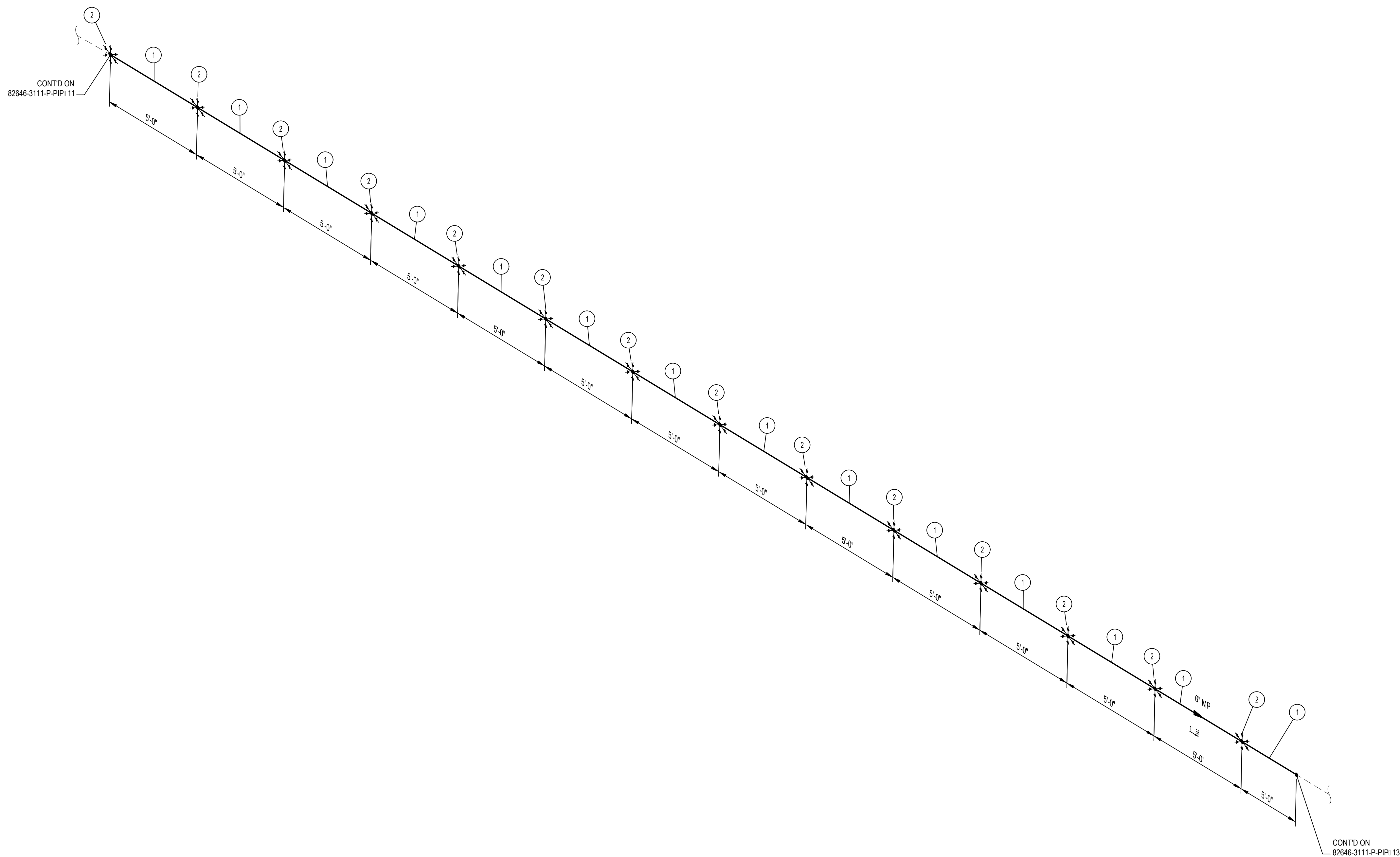
MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		MP GAS WHITEWATER RIVER & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM									
DESIGN PRESS. (DL): 60 PSIG	MIN. TEST PRESS: 90 PSIG	NORM OPER. PRESS: 60 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025											
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025											
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: A41/A02	ATLAS NO.:	DATE OF OPERATION: *	NUMBER	CHECKER: D. NAREZ	05/23/2025											
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. CREW FOREMAN: *		PROJECT APVR: H. ORDONEZ	05/23/2025	DRAWING NUMBER 82646-3111-D-PIP 11										
LINE NUMBER: MP	PLAN: 82646-3010-D-PIP	CATHODICALLY PROTECTED: *	REGION: *	0 12/19/2025 HL NH DN HO MM PE24-166	SCG ENG APVR: M. MECHLOWICZ	05/23/2025											
				REV	DATE	DES	ENGR	CHK	APVD	SCG ENG FILE NO	DESCRIPTION	WCA	VENDOR ID	DWG CLASS: 08	DWG DIST: 200	SCALE: NONE	REV
										71363	ISSUED FOR CONSTRUCTION						0

ISSUED FOR CONSTRUCTION



BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	70'-1"	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	A41	
SPECIALTY ITEMS									
2	14	6"	-	CASING INSULATING SKIDS MODEL CI	76-85.4	-	-----	A02	

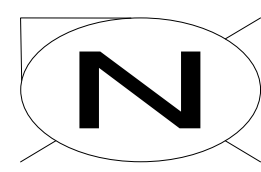
* 6" 10" CASING INSULATING SKIDS TO BE INSTALLED.



- NOTES:**
1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH
 2. VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

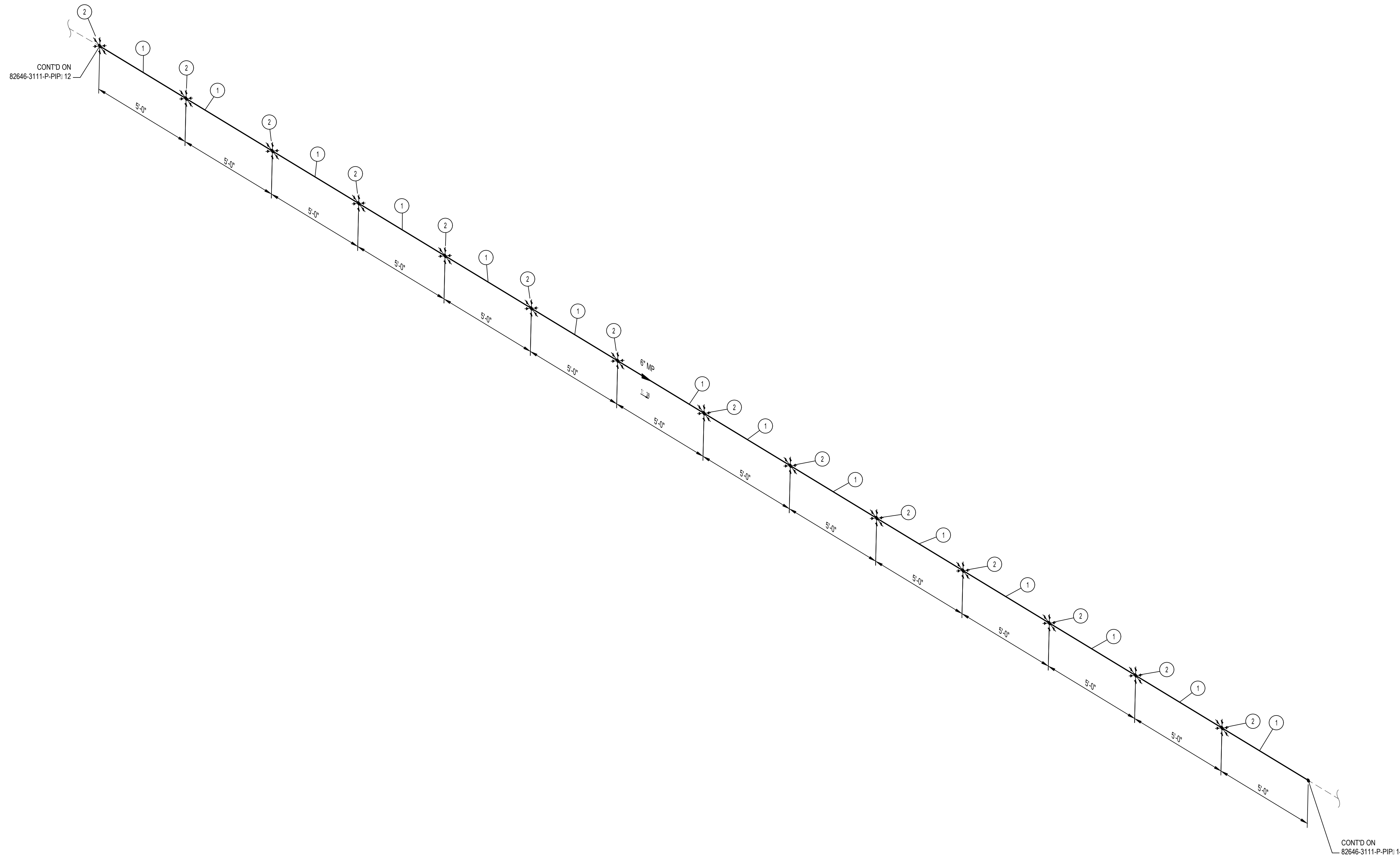
MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		MP GAS WHITEWATER RIVER & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM											
DESIGN PRESS (DL): 60 PSIG	MIN. TEST PRESS: 90 PSIG	NORM OPER. PRESS: 60 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025													
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025													
WELD PROC: 187.0055 & 187.0056	INSUL THK: *	ATLAS NO: *	DATE MOVED OFF: *	NUMBER	CHECKER: D. NAREZ	05/23/2025													
PIPE SPEC: A41/A02	TRACE: *	STRIP MAP NO: *	DATE OF OPERATION: *		PROJECT APVR: H. ORDONEZ	05/23/2025	DRAWING NUMBER 82646-3111-D-PIP 12												
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. CREW FOREMAN: *		SCG ENG APVR: M. MECHLOWICZ	05/23/2025													
PLAN: 82646-3010-D-PIP	CATHODICALLY PROTECTED: *	REGION: *	YEAR C.P. INSTALLED: *		ENG FILE NO: PE24-166														
LINE NUMBER: MP	3D DB REF: 6C12				WCA: 71363														
				0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	ENG FILE NO: PE24-166	DWG CLASS: 08	DWG DIST: 200	REV	0

ISSUED FOR CONSTRUCTION



BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	70'-1"	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	A41	
SPECIALTY ITEMS									
2	14	6"	-	CASING INSULATING SKIDS MODEL CI	76-85.4	-	-----	A02	

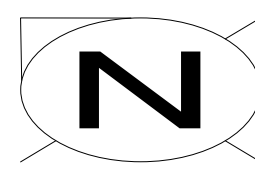
* 6" 10" CASING INSULATING SKIDS TO BE INSTALLED.



- NOTES:**
- THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH
 - VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

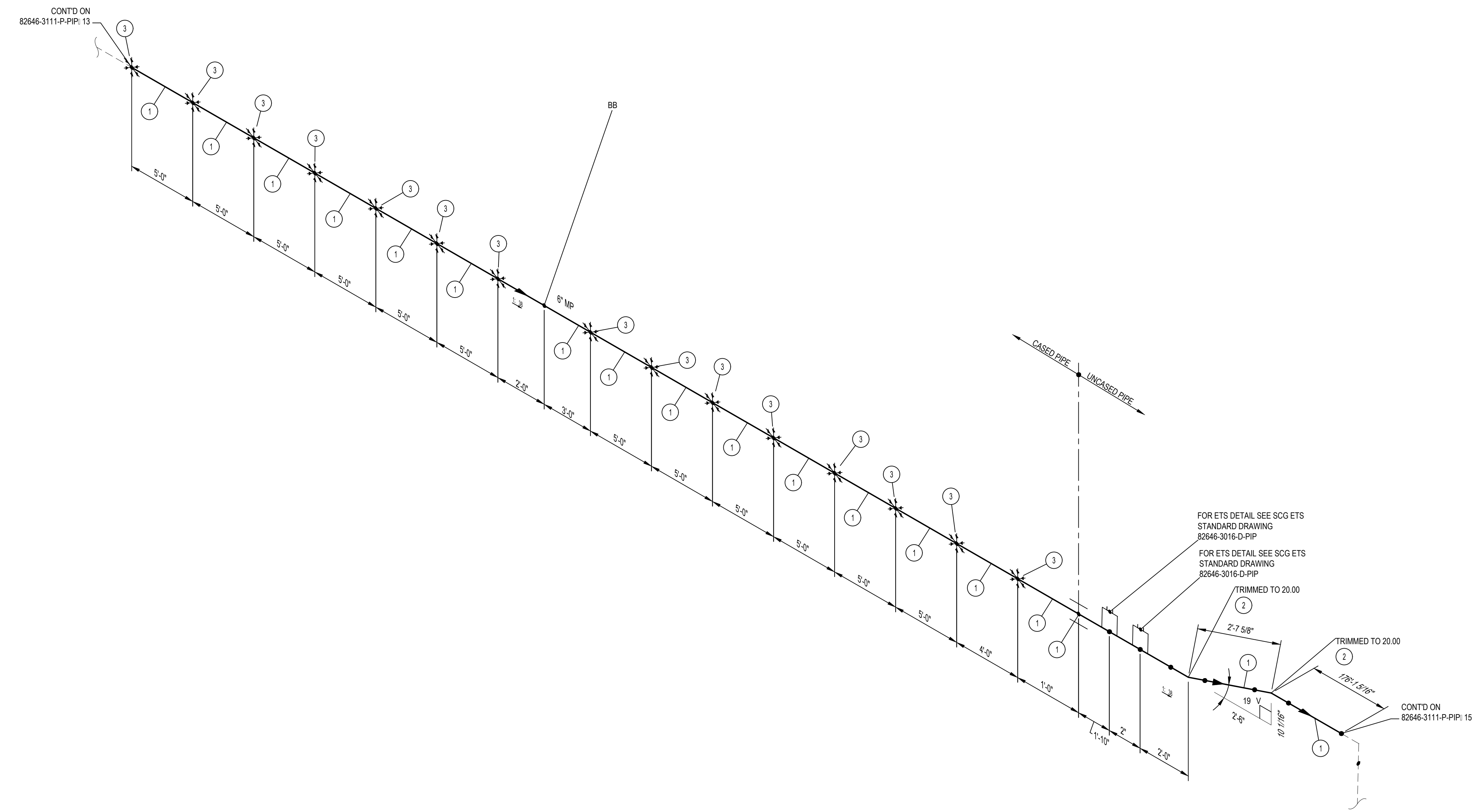
MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION		BY		DATE		MP GAS WHITEWATER RIVER & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM					
DESIGN PRESS. (DL): 60 PSIG	MIN. TEST PRESS: 90 PSIG	NORM OPER. PRESS: 60 PSIG	COUNTY: RIVERSIDE	WCA	ISSUED BY	NUMBER	DESIGNER: H. LOPEZ	05/23/2025		82646-3111-D-PIP 13	0				
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	*	*	*	ENGINEER: N. HASAN	05/23/2025							
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: A41/A02	TRAC: *	DATE MOVED OFF: *				CHECKER: D. NAREZ	05/23/2025							
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	DATE OF OPERATION: *				PROJECT APVR: H. ORDONEZ	05/23/2025							
LINE NUMBER: MP	PLAN: 82646-3010-D-PIP	CATHODICALLY PROTECTED: *	CONST. CREW FOREMAN: *				SCG ENG APVR: M. MECHLOWICZ	05/23/2025	DWG CLASS: 08	DWG DIST: 200	DRAWING NUMBER				
	3D DB REF: 6C12	YEAR C.P. INSTALLED: *	REGION: *	REV	DATE	DES	ENGR	CHK	APVD	SCG ENG FILE NO	DESCRIPTION	WCA	VENDOR ID	ENG FILE NO	SCALE: NONE
				0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	71363

ISSUED FOR CONSTRUCTION



BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	252-3"	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	A41	
FITTINGS									
2	2	6"	STD	ELL 45 DEG LR BW MSS SP75-WPHY52	52-96	0.280"	N539003	A41	
SPECIALTY ITEMS									
3	15	6"	-	CASING INSULATING SKIDS MODEL CI	76-85.4	-	-----	A02	

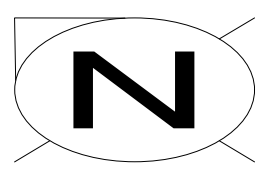
* 6" 10' CASING INSULATING SKIDS TO BE INSTALLED.



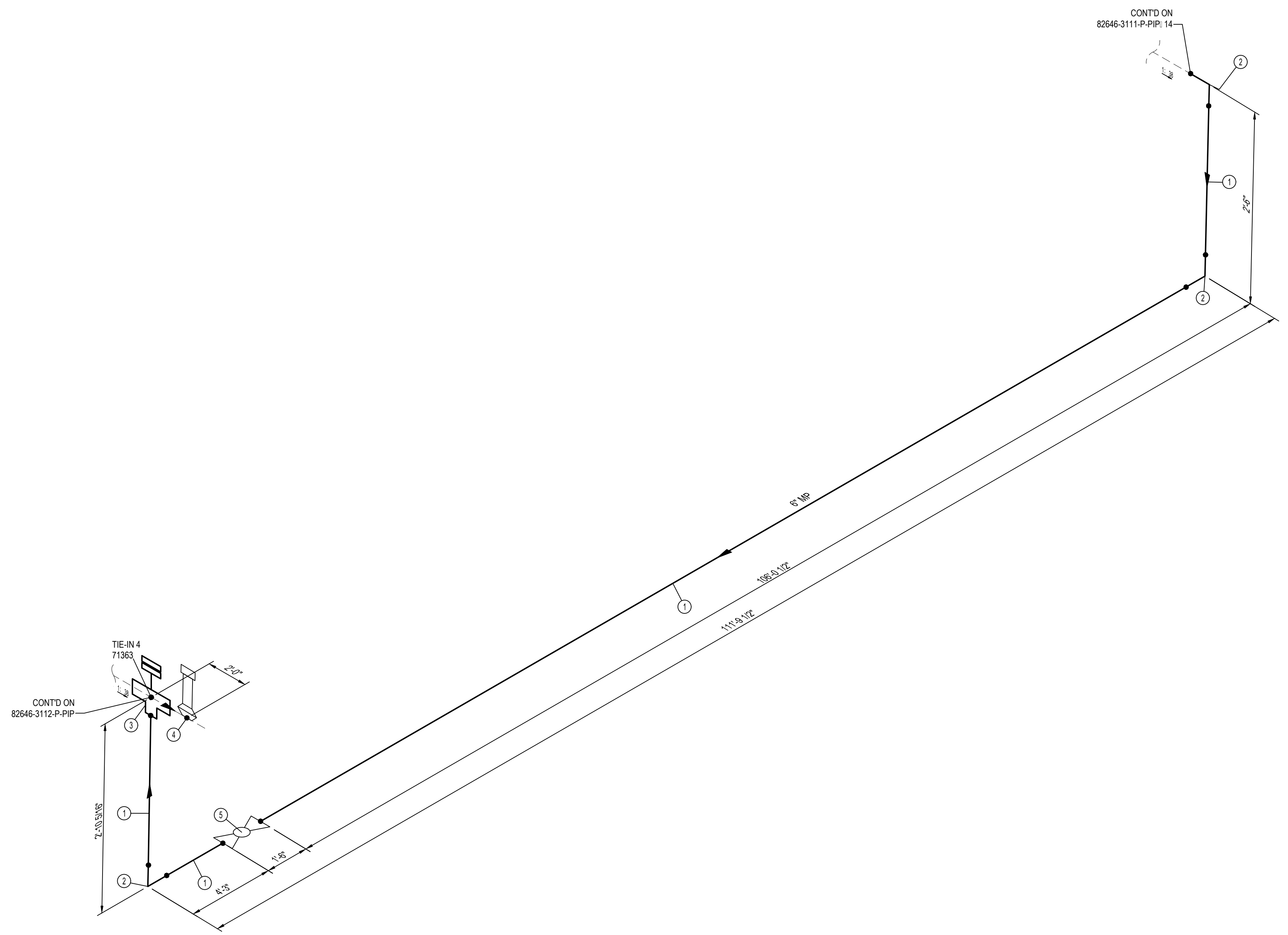
- NOTES:**
1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH
 2. VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK

MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		MP GAS WHITEWATER RIVER & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM	
DESIGN PRESS (DL): 60 PSIG	MIN. TEST PRESS: 90 PSIG	NORM OPER. PRESS: 60 PSIG	COUNTY: RIVERSIDE	DATE MOVED ON: *	DESIGNER: H. LOPEZ	05/23/2025			
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED OFF: *	ENGINEER: N. HASAN	CHECKER: D. NAREZ	05/23/2025			
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: A41/A02/A02	ATLAS NO.:	DATE OF OPERATION: *	PROJECT APVR: H. ORDONEZ	SCG ENG APVR: M. MECHLOWICZ	05/23/2025			
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CATHODICALLY PROTECTED: *	CONST. CREW FOREMAN: *	ENG FILE NO: PE24-166	71363	DWG CLASS: 08	DWG DIST: 200	DRAWING NUMBER
LINE NUMBER: MP	PLAN: 82646-3010-D-PIP	YEAR C.P. INSTALLED: *	REGION: *	REV	DESCRIPTION	WQA	VENDOR ID	SCALE: NONE	82646-3111-D-PIP 14

ISSUED FOR CONSTRUCTION



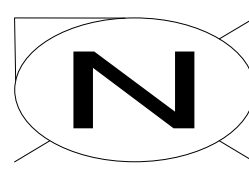
BILL OF MATERIALS									
ITEM NO.	QTY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	111'-4"	6"	STD	PIPE EW DRL API 5L-52 FBE COATED	41-06.1	0.280"	N410630	A41	
FITTINGS									
2	3	6"	STD	ELL 90 DEG LR BW MSS SP75-WPHY52	52-96	0.280"	N539005	A41	
3	1	6"	150CL	LINE STOP FITTING W/ BOTTOM OUT CONNECTION	56-48	-	N575866	A41	
BRANCH CONNECTIONS									
4	1	6" 2"	1440 PSI	HIGH PRESSURE STEEL ABANDON NIPPLE: TOE INCLUDING PLUG AND CAP	50-12.2	-	N501272	A41	
VALVES									
5	1	6"	150CL	VALVE BALL TRUNNION BW 1/2 BW SCH STD GR 52 CS FORGED STEEL BODY ENP BALL AND STEM RTFE SEALS/SEATS OR EQUIVALENT FULL PORT FIRE SAFE PER API 607/ 6FA API 6D	58-82	-	-----	A41	



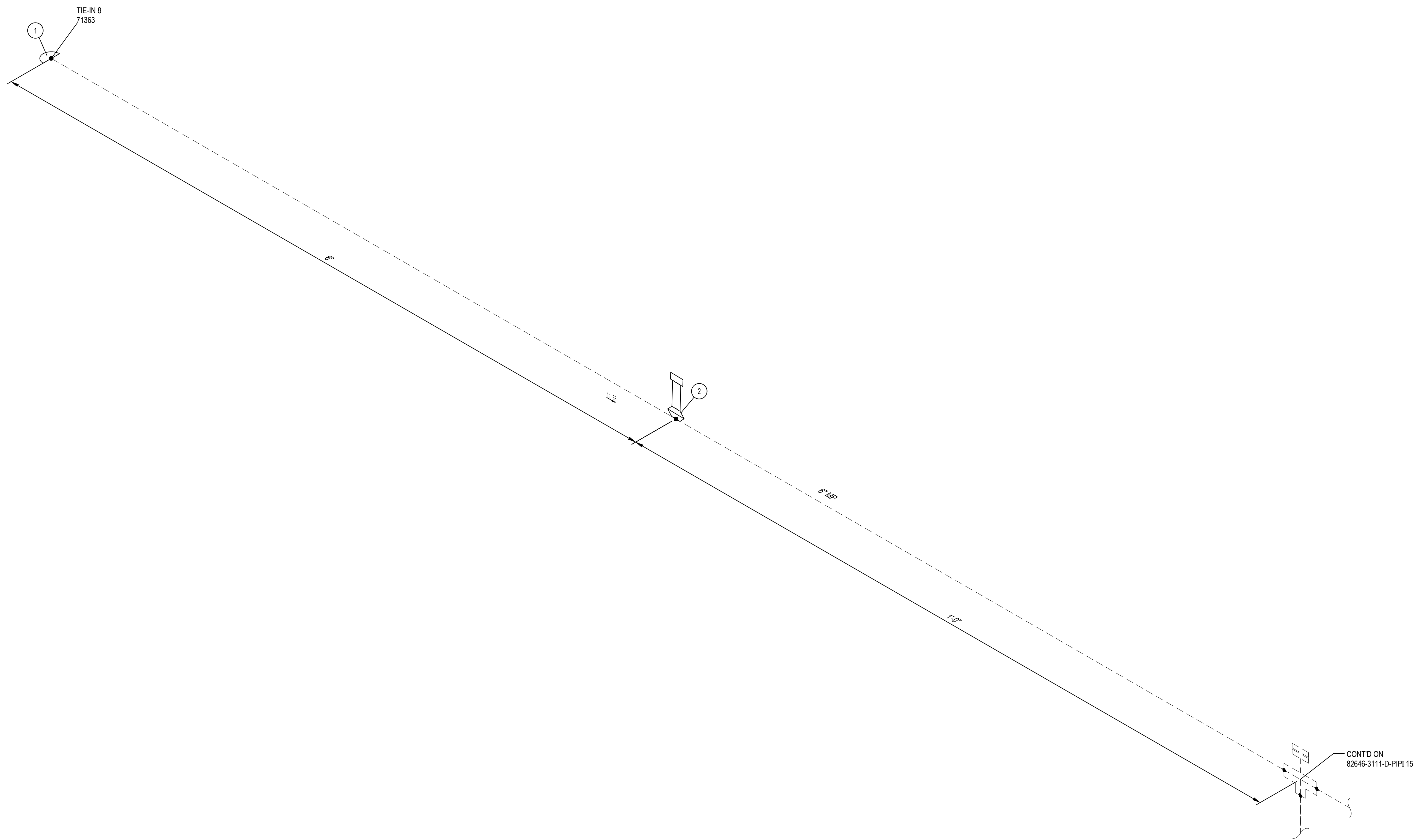
NOTES:
 1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH

ISSUED FOR CONSTRUCTION

MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		MP GAS WHITEWATER RIVER & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM												
DESIGN PRESS (DL): 60 PSIG	MIN. TEST PRESS: 90 PSIG	NORM OPER. PRESS: 60 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025														
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED OFF: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025														
WELD PROCOD: 187.0055 & 187.0056	PIPE SPEC: A41	ATLAS NO.:	DATE OF OPERATION: *	NUMBER	CHECKER: D. NAREZ	05/23/2025														
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. CREW FOREMAN: *		PROJECT APVR: H. ORDONEZ	05/23/2025	DRAWING NUMBER 82646-3111-D-PIP 15													
LINE NUMBER: MP	3D DB REF: 6C12	CATHODICALLY PROTECTED: *	REGION: *	0	SCG ENG APVR: M. MECHELOWICZ	05/23/2025														
		YEAR C.P. INSTALLED: *		REV	ENG FILE NO: PE24-166															
				0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	ENG FILE NO: PE24-166	DWG CLASS: 08	DWG DIST: 200	SCALE: NONE	REV	0



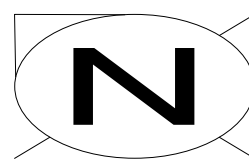
BILL OF MATERIALS									
ITEM NO.	TY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
FITTINGS									
1	1	6"	STD	CAP BW MSS SP75-WPHY52	52.96	0.280"	N532105	A41	
BRANCH CONNECTIONS									
2	1	6" 1/2"	1440 PSI	HIGH PRESSURE STEEL ABANDON NIPPLE TOE INCLUDING PLUG AND CAP	50-12.2	-	N501272	A41	



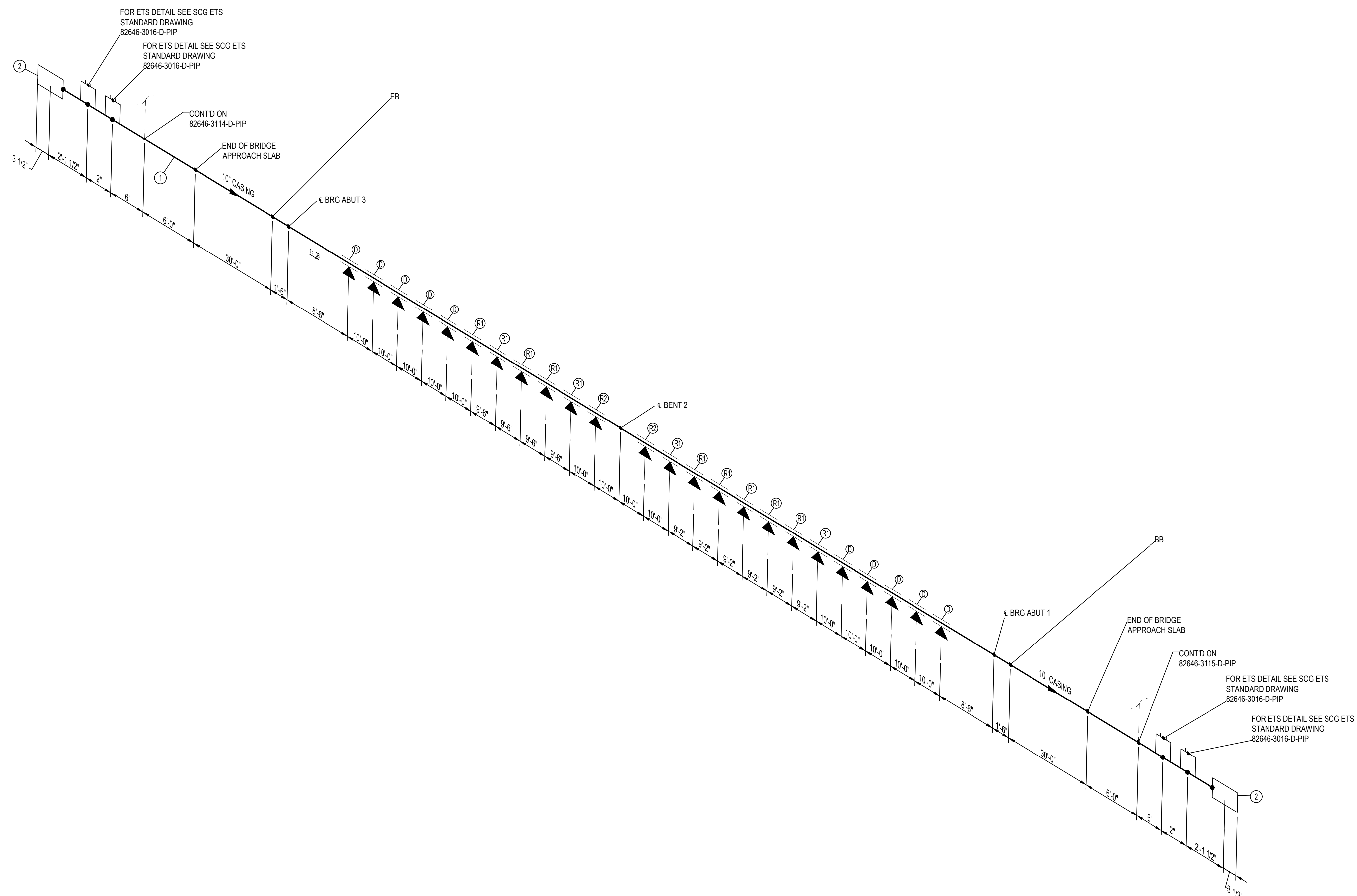
NOTES:
 1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH

ISSUED FOR CONSTRUCTION

MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		MP GAS WHITEWATER RIVER & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM										
DESIGN PRESS (DL): 60 PSIG	MIN. TEST PRESS: 90 PSIG	NORM OPER. PRESS: 60 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025												
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025												
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: A41	ATLAS NO. *	DATE MOVED OFF: *	NUMBER	CHECKER: D. NAREZ	05/23/2025												
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. CREW FOREMAN: *		PROJECT APVR: H. ORDONEZ	05/23/2025	DWG CLASS: 08 DWG DIST: 200 SCALE: NONE	DRAWING NUMBER 82646-3112-D-PIP										
PAID: *	PLAN: 82646-3010-D-PIP	CATHODICALLY PROTECTED: *	REGION: *	0	SCG ENG APVR: M. MECZLOWICZ	05/23/2025												
LINE NUMBER: MP	3D DB REF: 6C12	YEAR C.P. INSTALLED: *		REV	ENG FILE NO: PE24-166	71363												
				REV	DATE	DES	ENGR	CHK	APVD	SCG APVR	ENG FILE NO	DESCRIPTION	WCA	VENDOR ID	WCA	71363	REV	0



BILL OF MATERIALS									
ITEM NO.	QTY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	330'-1"	10"	STD	PIPE EW DRL API 5L- 52 FBE COATED	41-06.1	0.365"	N411050	A41	
SPECIALTY ITEMS									
2	2	10" 6"	-	END SEAL APS MODEL AC	76-85.1	-	-----	A02	



LEGEND:

⊕ - DISPLACEMENT TYPE SUPPORTS - SEE DWG 82646-4007-D-STR

⊗ AND ⊙ - RESTRAINING TYPE SUPPORTS - SEE DWG 82646-4006-D-STR

NOTES:

- THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55° FROM ISO NORTH.
- VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK.
- SOCAL GAS CREW/CONTRACTOR TO INSTALL GAS CARRIER PIPE INSULATING SKIDS END SEALS VENT PIPING CATHODIC PROTECTION CASING CONCRETE PEDESTAL SUPPORTS INCLUDING DOWELS HOLD-DOWNS GUIDES ALL FRP SHIELDS AND FLATTIES BRACKETS AND BUILDING PAPER WHERE CASING IS CAST INTO ABUTMENT BACKWALL.

ISSUED FOR CONSTRUCTION

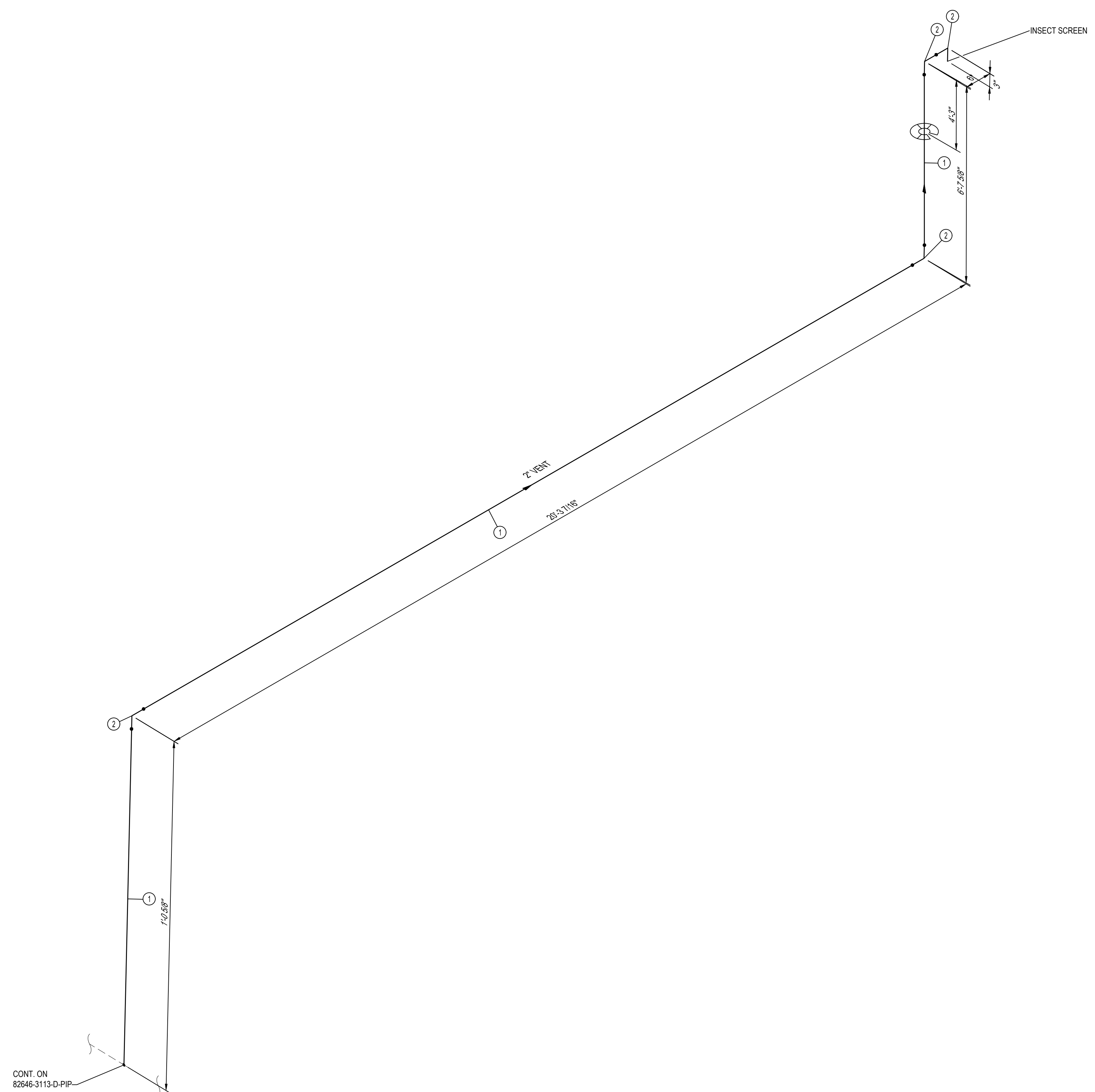
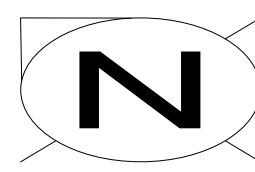
MIN DESIGN TEMP: AMBIENT	MA DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	DATE MOVED ON: *	WQA	ISSUED BY	NUMBER	BY	DATE							
DESIGN PRESS DL: 60 PSIG	MIN TEST PRESS: 90 PSIG	NORM OPER. PRESS: 60 PSIG	COUNTY: RIVERSIDE	DATE MOVED OFF: *					DESIGNER: H. LOPEZ	05/23/2025							
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE OF OPERATION: *	CONST. CREW FOREMAN: *					CHECKER: N. HASAN	05/23/2025							
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: A41A02	TRACE: *	ATLAS NO: *	CONST. COMPANY: *					PROJECT APVR: H. ORDONEZ	05/23/2025							
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CATHODICALLY PROTECTED: *	REGION: *	1	01/08/2026	DN	NH	DN	HO	MM	PE24-166	UPDATED NOTES	71363	*	SCG ENG APVR: M. MECHELOWICZ	05/23/2025
PAID: *	PLAN: 82646-3002-D-PIP	YEAR C.P. INSTALLED: *			0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	ENG FILE NO: PE24-166	
LINE NUMBER: CASING	3D DB REF: 6C12				REV	DATE	DES	ENGR	CHK	APVD	SCG APVD	ENG FILE NO	DESCRIPTION	WQA	VENDOR ID	WQA	VENDOR ID



MP GAS
I-10 & MONROE ST BRIDGE
REPLACEMENT
PIPING ISOMETRIC & BOM

DWG CLASS: 08 DWG DIST: 200
SCALE: NONE

REV 1



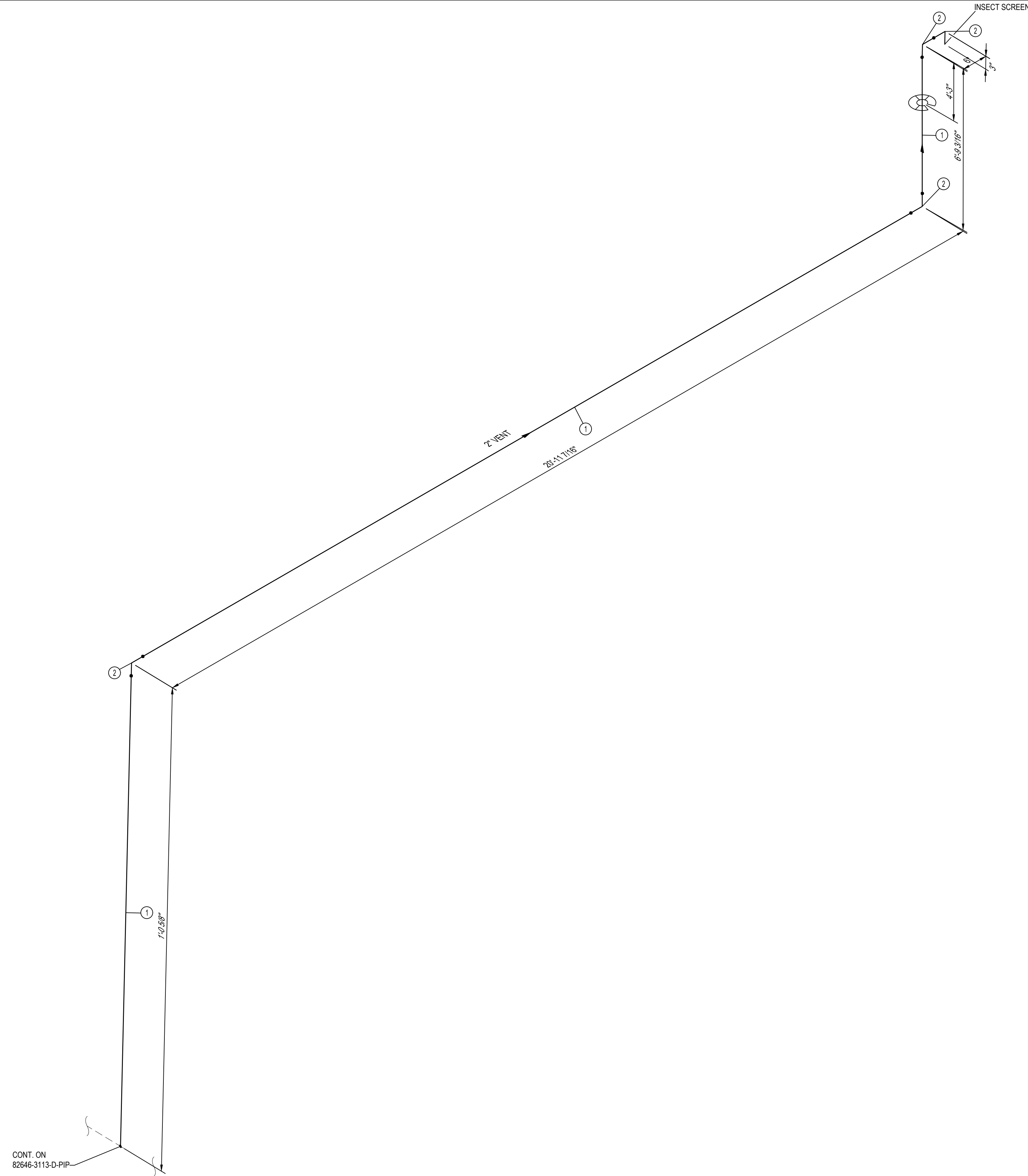
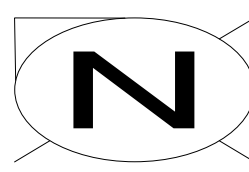
BILL OF MATERIALS									
ITEM NO.	QTY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	26'-4"	2"	1 S	PIPE SMLS SRL ASTM A106-B	41-06.1	0.218"	N407552	A41	
FITTINGS									
2	4	2"	1 S	ELL 90 DEG LR BW ASTM A234-WPB	52-96	0.218"	N529643	A41	

CONT. ON
82646-3113-D-PIP

NOTES:
1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH

MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		MP GAS I-10 & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM											
DESIGN PRESS (DL): 60 PSIG	MIN. TEST PRESS: 90 PSIG	NORM OPER. PRESS: 60 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025													
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025													
WELD PROC: 187.0055 & 187.0056	PIPE SPEC: A41	ATLAS NO.:	DATE MOVED OFF: *	NUMBER	CHECKER: D. NAREZ	05/23/2025													
PAIN SYSTEM: FBE (UG): 186.0104 (AG)	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. CREW FOREMAN: *	CONST. COMPANY: *	PROJECT APVR: H. ORDONEZ	05/23/2025	DWG CLASS: 08 DWG DIST: 200 SCALE: NONE DRAWING NUMBER: 82646-3114-D-PIP												
LINE NUMBER: VENT	3D DB REF: 6C12	CATHODICALLY PROTECTED: *	REGION: *	REV	SCG ENG APVR: M. MECZLOWICZ	05/23/2025		REV											
				0	12/19/2025	HL	NH	DN	HO	MM	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	ENG FILE NO: PE24-166	DWG CLASS: 08	DWG DIST: 200	DRAWING NUMBER: 82646-3114-D-PIP	REV: 0

ISSUED FOR CONSTRUCTION



BILL OF MATERIALS									
ITEM NO.	QTY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	27'-1"	2"	S	PIPE SMLS SRL ASTM A106-B	41-06.1	0.218"	N407552	A41	
FITTINGS									
2	4	2"	S	ELL 90 DEG LR BW ASTM A234-WPB	52-96	0.218"	N529643	A41	

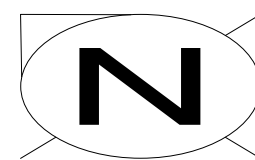
CONT. ON
82646-3113-D-PIP

ISSUED FOR CONSTRUCTION

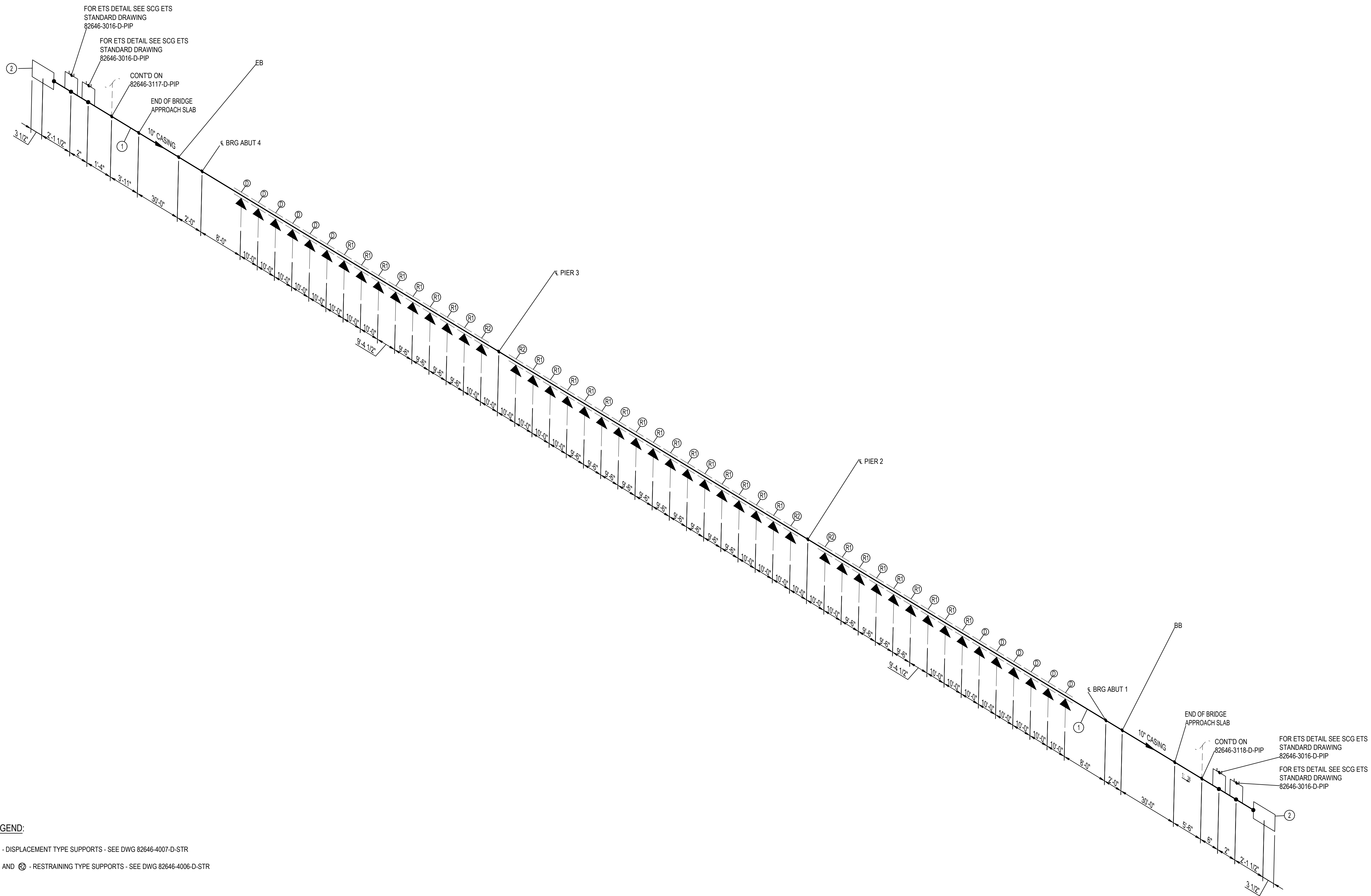
NOTES:
1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH

MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		MP GAS I-10 & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM
DESIGN PRESS (DL): 60 PSIG	MIN. TEST PRESS: 90 PSIG	NORM OPER. PRESS: 60 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025		
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025		
WELD PROC: 187.0055 & 187.0056	INSUL THK: *	ATLAS NO: *	DATE MOVED OFF: *	NUMBER	CHECKER: D. NAREZ	05/23/2025		
PIPE SPEC: A41	TRACE: *	CONST. CREW FOREMAN: *	DATE OF OPERATION: *		PROJECT APVR: H. ORDONEZ	05/23/2025	DRAWING NUMBER 82646-3115-D-PIP	
PAINT SYSTEM: FBE (UG) 186.0104 (AG)	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	REGION: *	0	SCG ENG APVR: M. MECHLOWICZ	05/23/2025		
PLAN: 82646-3002-D-PIP	CATHODICALLY PROTECTED: *	YEAR C.P. INSTALLED: *		REV	ENG FILE NO: PE24-166			
LINE NUMBER: VENT	3D DB REF: 6C12			DATE	WCA			

0



BILL OF MATERIALS									
ITEM NO.	QTY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	565'	10"	STD	PIPE EW DRL API 5L- 52 FBE COATED	41-06.1	0.365"	N411050	A41	
SPECIALTY ITEMS									
2	2	10" 6"	-	END SEAL APS MODEL AC	76-85.1	-	-----	A02	



- LEGEND:**
- ⓪ - DISPLACEMENT TYPE SUPPORTS - SEE DWG 82646-4007-D-STR
 - Ⓜ AND Ⓜ - RESTRAINING TYPE SUPPORTS - SEE DWG 82646-4006-D-STR

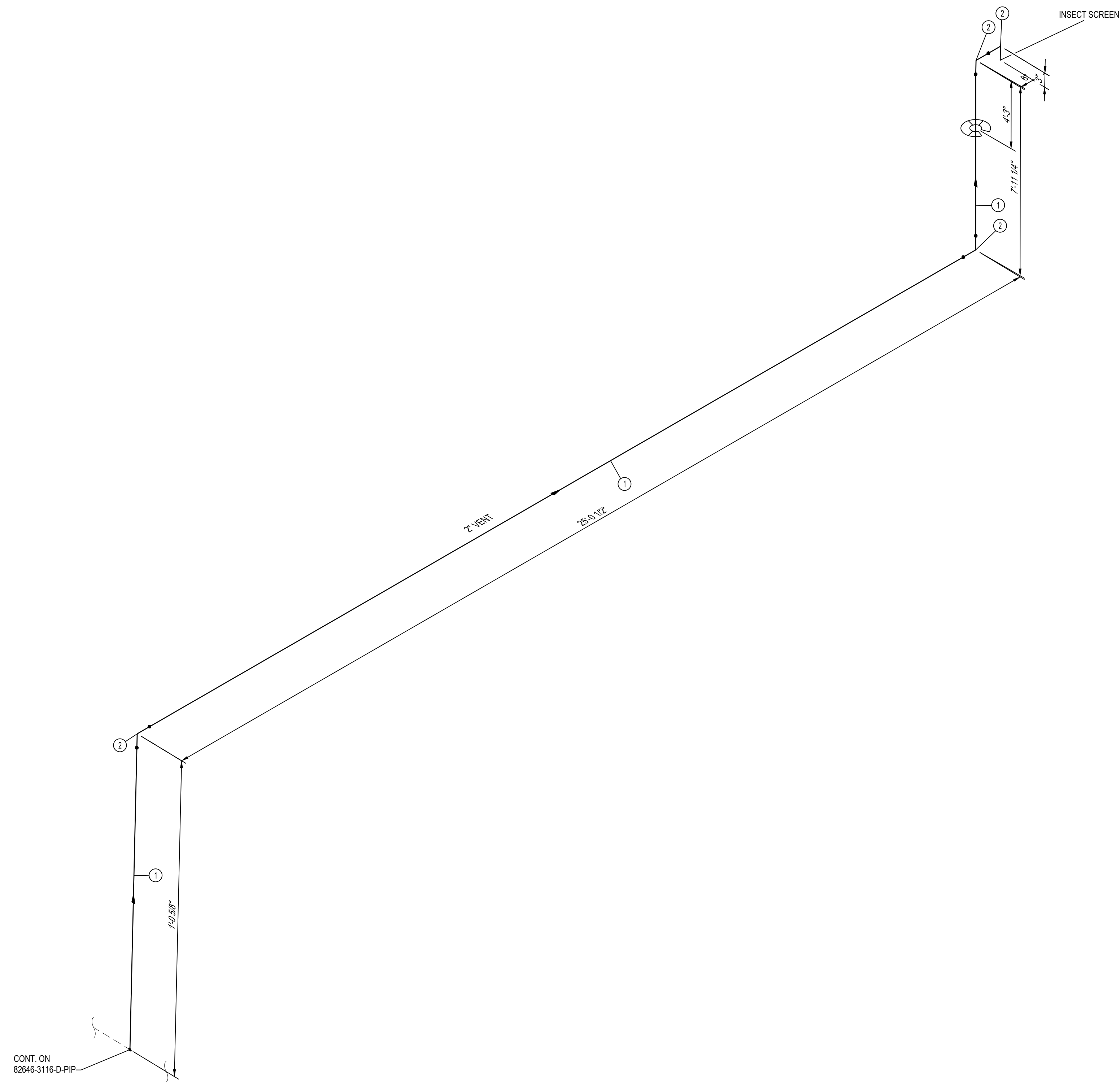
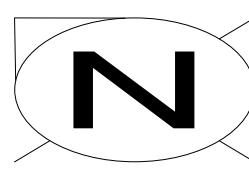
- NOTES:**
1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55° FROM ISO NORTH.
 2. VERTICAL LOCATION OF THE PIPE ON BRIDGE SHALL FOLLOW THE VERTICAL CURVE OF THE BRIDGE DECK.
 3. SOCIAL GAS CREW/CONTRACTOR TO INSTALL GAS CARRIER PIPE INSULATING SKIDS END SEALS VENT PIPING CATHODIC PROTECTION CASING CONCRETE PEDESTAL SUPPORTS INCLUDING DOWELS HOLD-DOWNS GUIDES ALL FRP SHIELDS AND FLATTIES BRACKETS AND BUILDING PAPER WHERE CASING IS CAST INTO ABUTMENT BACKWALL.

ISSUED FOR CONSTRUCTION

MIN DESIGN TEMP: AMBIENT	MA DESIGN TEMP: AMBIENT	NORM OPER. TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	DATE	BY
DESIGN PRESS DL: 60 PSIG	MIN TEST PRESS: 90 PSIG	NORM OPER. PRESS: 60 PSIG	COUNTY: RIVERSIDE	DATE MOVED ON: *	05/23/2025	DESIGNER: H. LOPEZ
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED OFF: *	WCA	05/23/2025	ENGINEER: N. HASAN
DDS: *	INSUL: *	STRIP MAP NO: *	DATE OF OPERATION: *	ISSUED BY	05/23/2025	CHECKER: D. NAREZ
WELD PROCD: 187.0055 & 187.0056	PIPE SPEC: A41/A02	ATLAS NO: *	CONST. CREW FOREMAN: *	NUMBER	05/23/2025	PROJECT APVR: H. ORDONEZ
PAINT SYSTEM: FBE	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	CONST. COMPANY: *	1	01/08/2026	SCG ENG APVR: M. MECHELOWICZ
PAID: *	PLAN: 82646-3010-D-PIP	CATHODICALLY PROTECTED: *	REGION: *	0	12/19/2025	ENG FILE NO: PE24-166
LINE NUMBER: CASING	3D DB REF: GC12	YEAR C/P INSTALLED: *		REV	DATE	DESCRIPTION
				1	01/08/2026	DN NH DN HO MM PE24-166 UPDATED NOTES
				0	12/19/2025	HL NH DN HO MM PE24-166 ISSUED FOR CONSTRUCTION
						WCA
						VENDOR ID
						WCA: 71363
						SCALE: NONE
						DWG CLASS: 08
						DWG DIST: 200
						DRAWING NUMBER
						82646-3116-D-PIP
						REV
						1

MP GAS
WHITewater RIVER & MONROE ST BRIDGE
REPLACEMENT
PIPING ISOMETRIC & BOM





BILL OF MATERIALS									
ITEM NO.	QTY.	SIZE	SCH. OR RATING	MATERIAL DESCRIPTION	MSP	WALL THICKNESS	MATERIAL CODE	LINE CLASS	
PIPE									
1	32'-5"	2"	1 S	PIPE SMLS SRL ASTM A106-B	41-06.1	0.218"	N407552	A41	
FITTINGS									
2	4	2"	1 S	ELL 90 DEG LR BW ASTM A234-WPB	52-96	0.218"	N529643	A41	

CONT. ON
82646-3116-D-PIP

NOTES:
1. THE CONFIGURATION OF THIS PIPING ISOMETRIC HAS BEEN ALIGNED WITH ISO NORTH FOR DRAWING CLARITY PURPOSES ONLY. TRUE NORTH IS ROTATED -2.55 FROM ISO NORTH

ISSUED FOR CONSTRUCTION

MIN. DESIGN TEMP: AMBIENT	MA: DESIGN TEMP: AMBIENT	NORM OPER TEMP: AMBIENT	INSTALL PIPE WITH AT LEAST 42" OF COVER BELOW GRADE	PERMIT INFORMATION	BY	DATE		MP GAS WHITEWATER RIVER & MONROE ST BRIDGE REPLACEMENT PIPING ISOMETRIC & BOM
DESIGN PRESS (DL): 60 PSIG	MIN. TEST PRESS: 90 PSIG	NORM OPER. PRESS: 60 PSIG	COUNTY: RIVERSIDE	WCA	DESIGNER: H. LOPEZ	05/23/2025		
SERVICE: NATURAL GAS	DESIGN CODE: 49 CFR PART 192	DISTRICT: SOUTHEAST	DATE MOVED ON: *	ISSUED BY	ENGINEER: N. HASAN	05/23/2025		
WELD PROC: 187.0055 & 187.0056	INSUL THK: *	ATLAS NO: *	DATE MOVED OFF: *	NUMBER	CHECKER: D. NAREZ	05/23/2025		
PIPE SPEC: A41	TRACE: *	CONST. CREW FOREMAN: *	DATE OF OPERATION: *		PROJECT APVR: H. ORDONEZ	05/23/2025	DRAWING NUMBER 82646-3118-D-PIP	
PAINT SYSTEM: FBE (UG) 186.0117 (AG)	COATING COLOR: *	DOT CL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	REGION: *	0	SCG ENG APVR: M. MECHLOWICZ	05/23/2025		
PLAN: 82646-3010-D-PIP	CATHODICALLY PROTECTED: *	YEAR C.P. INSTALLED: *		REV	ENG FILE NO: PE24-166			
LINE NUMBER: VENT	3D DB REF: 6C12			DATE	WCA	VENDOR ID		

REV 0

GENERAL NOTES:

- THESE NOTES ARE GENERAL AND APPLY TO THE ENTIRE PROJECT EXCEPT WHERE SPECIFICALLY INDICATED OTHERWISE.
- ALL CONSTRUCTION SHALL CONFORM TO THE 2022 CBC (CALIFORNIA BUILDING CODE) AND THE LATEST EDITION OF STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION AND SOCIAL GAS SPECIFICATIONS.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PLANS AND AT THE CONSTRUCTION SITE PRIOR TO COMMENCING WORK AND SHALL REPORT ANY DISCREPANCY TO OWNER BEFORE PROCEEDING.
- CONTRACTOR SHALL PHASE THEIR CONSTRUCTION OPERATIONS SO THAT THE OPERATION OF THE FACILITY WILL NOT BE INTERRUPTED. THE CONTRACTOR SHALL SUBMIT A PROPOSED SCHEDULE OF HIS OPERATIONS TO THE OWNER FOR APPROVAL BEFORE COMMENCING WORK AND SHALL NOTIFY THE OWNER OF ANY CHANGES IN THE SCHEDULE DURING THE PROGRESS OF WORK.
- CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE ANY EXISTING MATERIALS, STRUCTURES OR IMPROVEMENTS THAT ARE TO REMAIN AFTER THE CONSTRUCTION. CONTRACTOR SHALL REPAIR ANY DAMAGES TO THE SAME THAT ARE THE RESULT OF HIS OPERATIONS TO A CONDITION EQUAL TO OR BETTER THAN WAS EXISTING AT HIS OWN EXPENSE.
- CONTRACTOR SHALL ENSURE THAT ALL WORK IS CARRIED OUT IN A SAFE ENVIRONMENT. IT SHALL BE THEIR RESPONSIBILITY TO SEE THAT ALL CONSTRUCTION SAFETY REGULATIONS APPLICABLE ARE OBSERVED. CONTRACTOR SHALL COMPLY WITH ALL GOVERNING AND COMPANY FIRE REGULATIONS.
- ALL CONSTRUCTION MATERIALS SHALL BE NEATLY STACKED IN AREAS DESIGNATED AND APPROVED BY OWNER.
- DO NOT SCALE DRAWINGS. USE DIMENSIONS NOTED.
- A WET WEATHER EROSION CONTROL PLAN (WWECP), UTILIZING SEDIMENT AND EROSION CONTROL BMPs, FOR PROJECTS THAT WILL LEAVE DISTURBED SOIL DURING THE RAINY SEASON (OCTOBER 1 TO APRIL 15) IS REQUIRED. THE WWECP MUST BE PREPARED FOR PROJECTS THAT HAVE ALREADY BROKEN GROUND, NOT LESS THAN 30 DAYS PRIOR TO THE BEGINNING OF EACH RAINY SEASON DURING WHICH SOIL WILL BE DISTURBED, AND IMPLEMENTED THROUGHOUT THE ENTIRE RAINY SEASON. FOR ALL PROJECTS THAT WILL BEGIN CONSTRUCTION DURING THE RAINY SEASON, THE WWECP MUST BE SUBMITTED TO THE BUREAU OF ENGINEERING – PUBLIC WORKS, FOR REVIEW AND APPROVAL. THE WWECP IS NOT A REQUIREMENT FOR THE ISSUANCE OF A BUILDING OR GRADING PERMIT.
- EXISTING UNDERGROUND UTILITIES AND FOUNDATIONS SHALL BE LOCATED BY CAREFUL EXCAVATION INCLUDING AS REQUIRED. EXCAVATION BY HAND BEFORE STARTING FOUNDATION EXCAVATION WORK. SUPPORT AND PROTECTION OF THESE UTILITIES AND FOUNDATIONS SHALL BE PROVIDED DURING EARTHWORK OPERATIONS IF THEY ARE TO REMAIN IN PLACE. SHOULD UNCHANGED OR INCORRECTLY CHARTED UNDERGROUND UTILITIES AND FOUNDATIONS BE ENCOUNTERED DURING EXCAVATION, CONSULT THE OWNER'S CONSTRUCTION COORDINATOR IMMEDIATELY FOR DIRECTIONS.
- ALL UNDERGROUND PIPING, ELECTRICAL GROUNDING AND DUCTBANKS SHALL BE IN PLACE PRIOR TO POURING FOUNDATIONS AND PAVING.
- THE STRUCTURAL PLANS SHALL BE USED IN CONJUNCTION WITH ALL OTHER RELEVANT PLANS FOR THE PROJECT.
- INSPECTION FORM, STRUCTURAL OBSERVATION AND SPECIAL INSPECTION SHALL BE PERFORMED PER CBC 2022. SEE REQUIREMENTS ON THIS SHEET.
- DESIGN SHALL BE VERIFIED BY A REGISTERED CALIFORNIA CIVIL PROFESSIONAL ENGINEER IF PROJECT IS IN A KNOWN LIQUEFACTION OR LANDSLIDING ZONE.
- BRIDGE CONTRACTOR SHALL INITIATE A PRE-CONSTRUCTION MEETING WITH SCG 6 WEEKS PRIOR TO CONSTRUCTION. PRESENT SHALL BE SCG PROJECT PLANNER AND GENERAL FOREMAN FOR INSTALLATION.
- BRIDGE CONTRACTOR SHALL NOTIFY SCG PROJECT PLANNER PRIOR TO SCHEDULED WORK AND SHALL ALLOT TIME IN ITS CONSTRUCTION SCHEDULE FOR SCG TO PERFORM THE FOLLOWING TASKS:
 - EMBEDDED REBAR INSPECTION:
BRIDGE CONTRACTOR SHALL NOTIFY SCG AT LEAST 30 DAYS PRIOR TO PLACEMENT OF SOFFIT AND SHALL INSTALL ANCHOR REBAR BEFORE SOFFIT IS PLACED. BRIDGE CONTRACTOR SHALL ALLOW SCG ACCESS TO INSPECT ANCHOR REBAR PLACEMENT PRIOR TO PLACEMENT OF CONCRETE FOR SOFFIT.

GENERAL DESIGN CRITERIA:

- GOVERNING CODES:**
 - CBC 2022 : "CALIFORNIA BUILDING CODE (2022 EDITION)"
 - ASCE 7-16 : "AMERICAN SOCIETY OF CIVIL ENGINEERS"-MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES"
 - ACI 318-19 : "AMERICAN CONCRETE INSTITUTE"-BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"
 - AISC 360-16 : "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS"
 - AISC 303-16 : "CODE OF STANDARD PRACTICE FOR STEEL BUILDING AND BRIDGES"
- DESIGN LOADS:**
 - DEAD LOAD:
 - PIPING DEAD VERTICAL MAX MP LINE = 1200 LBS
 - PIPING DEAD VERTICAL MAX HP LINE = 1443 LBS
 - LIVE LOAD:
 - WHEEL LOAD (HS20-44) = 16 KIPS
 - SEISMIC LOAD:
 - SITE CLASS = D-DEFAULT
 - RISK CATEGORY = IV
 - SEISMIC DESIGN CATEGORY = D
 - SEISMIC IMPORTANCE FACTOR (Ie) = 1.5
 - MAPPED SPECTRAL RESPONSE COEFFICIENT (SS) = 2.24
 - MAPPED SPECTRAL RESPONSE COEFFICIENT (S1) = 0.95
 - DESIGN SPECTRAL RESPONSE COEFFICIENT (SDS) = 1.792
 - PIPING SEISMIC TRANSVERSE LOAD MAX (LRFD) BRIDGE OVER I-10 = 2900 LBS (FOR EACH GUIDE)
 - PIPING SEISMIC TRANSVERSE LOAD MAX (LRFD) BRIDGE OVER WHITewater = 4000 LBS (FOR EACH GUIDE)

SCG CIVIL/ STRUCTURAL SPECIFICATIONS

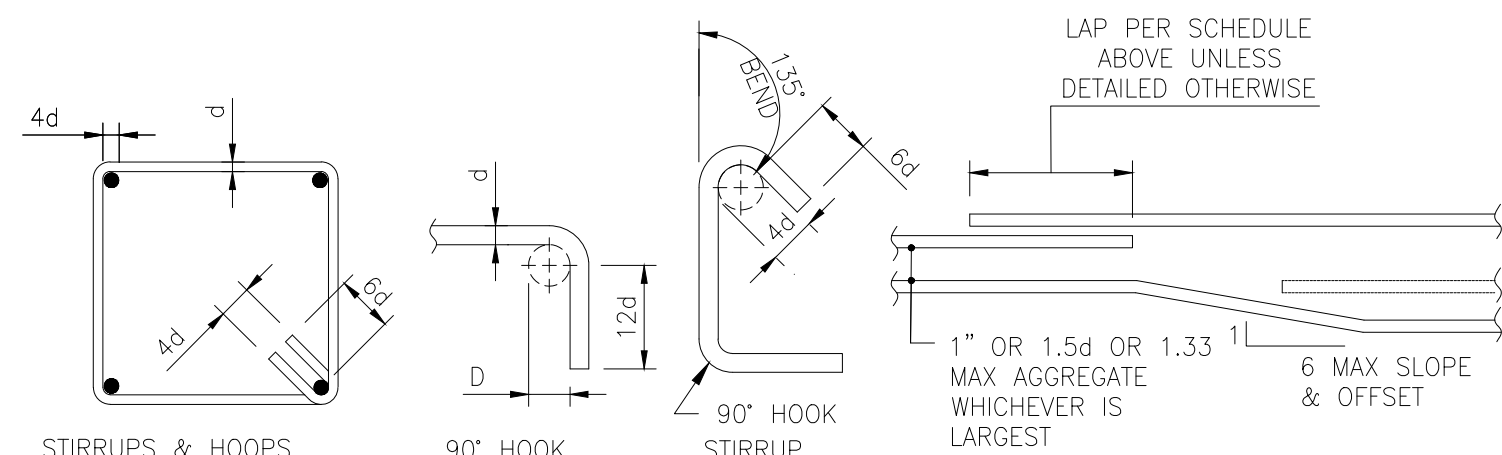
TABLE-1	
SPECIFICATION SCOPE	SPECIFICATION NO.
CAST-IN-PLACE CONCRETE	N-003-002
MISCELLANEOUS CAST-IN-PLACE CONCRETE	N-003-003
GROUT	N-004-003
STRUCTURAL STEEL FRAMING	N-005-001
STEEL DECKING	N-005-004
METAL FABRICATIONS	N-005-007
HIGH PERFORMANCE COATINGS	N-009-001
EXCAVATING, BACKFILLING AND COMPACTING	N-031-004

*TABLE 1, ABOVE, PRESENTS COMMON EXAMPLES ONLY. FOR A COMPREHENSIVE LIST OF COMPANY SPECIFICATIONS, PLEASE REFER TO THE CSA SPECIFICATIONS, LOCATED IN THE CSA FOLDER ON THE COMPANY SHAREPOINT SITE.

CONCRETE NOTES:

- CONCRETE CONSTRUCTION DETAILS SHALL CONFORM TO ACI 318-19.
- CEMENT SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150 TYPE II UNLESS OTHERWISE NOTED.
- AGGREGATE SHALL CONFORM TO ASTM C33 AND SHALL HAVE A MAXIMUM SIZE OF 1 INCH.
- REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A706, GRADE 60 UNLESS NOTED OTHERWISE. DETAILING, FABRICATION, AND ERECTION SHALL CONFORM TO ACI DETAILING MANUAL.
- CONCRETE PROTECTION FOR REINFORCEMENT: REINFORCING STEEL SHALL HAVE THE FOLLOWING MINIMUM CONCRETE COVERAGE (EXCEPT AS NOTED ON STRUCTURAL DRAWINGS).
 - CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH = 3"
 - CONCRETE EXPOSED TO EARTH OR WEATHER = 2"
 - CONCRETE NOT EXPOSED TO WEATHER AND NOT IN CONTACT WITH GROUND = 2"
- ALL REINFORCING BARS, ANCHOR BOLTS, DOWELS AND OTHER INSERTS SHALL BE ACCURATELY AND SECURELY PLACED BEFORE POURING CONCRETE.
- ALL BARS SHALL BE CLEAR OF DUST, GREASE, OR OTHER MATERIALS THAT MIGHT AFFECT ITS BOND TO CONCRETE. ALL BAR BENDS SHALL BE MADE COLD.
- ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 MIN GR 36 UNLESS NOTED OTHERWISE.
- GROUT
 - GROUT UNDER STEEL PLATES SHALL BE CEMENTITIOUS NON-SHRINK STRUCTURAL TYPE AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI.
- CURING AND PROTECTION:
 - CURING AND PROTECTION SHALL BE IN ACCORDANCE WITH ACI 301, CHAPTER 12. CONCRETE SHALL BE PROTECTED ADEQUATELY FROM DAMAGE BY SUN, RAIN, FLOWING WATER, OR MECHANICAL IMPACT, AND SHALL NOT BE ALLOWED TO DRY OUT FROM THE TIME IT IS PLACED UNTIL THE COMPLETION OF THE CURING PERIOD. CURING SHALL BE ACCOMPLISHED BY MOIST CURING OR BY APPLICATION OF LIQUID MEMBRANE-FORMING COMPOUND. CURING SHALL BE INITIATED IMMEDIATELY FOLLOWING THE REMOVAL OF FORMS.
- PLACING EQUIPMENT:
 - ALL EQUIPMENT SHALL BE PLACED AFTER VERIFICATION THAT THE CONCRETE MEETS THE REQUIRED STRENGTH.
- ALL EXPOSED EDGES ON CONCRETE STRUCTURE SHALL HAVE A 1", 45° CHAMFER UNLESS OTHERWISE NOTED.
- CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF $f'c = 4000$ PSI (UNLESS NOTED OTHERWISE ON DESIGN DRAWINGS) SHALL BE ACHIEVED ON OR BEFORE 28 DAYS OF THE CONCRETE BEING POURED/PLACED.
- CONCRETE FINISH:
 - HORIZONTAL SURFACE SHALL HAVE A STEEL TROWEL FINISH.
 - VERTICAL SURFACE SHALL BE FILLED AND SACKED TO PROVIDE A SMOOTH SURFACE FREE OF VOIDS.
- CONTRACTOR SHALL PROVIDE CONCRETE MIX DESIGN PER SOCIALGAS SPECIFICATION FOR CAST-IN-PLACE CONCRETE (SPECIFICATION 03300).
- ADMIXTURES MAY BE USED WITH APPROVAL OF THE ENGINEER OF RECORD. ADMIXTURES USED TO INCREASE THE WORKABILITY OF THE CONCRETE SHALL NOT BE CONSIDERED TO REDUCE THE SPECIFIED MINIMUM CEMENT CONTENT.
- FOR ELECTRICAL STUB-UPS AND GROUNDING REQUIREMENTS, SEE ELECTRICAL PLANS PRIOR TO SETTING FORMS.

BAR SIZE	LAP SCHEDULE					
	$f'c = 3,000$ psi $F_y = 60,000$ psi		$f'c = 4,000$ psi $F_y = 60,000$ psi		$f'c = 5,000$ psi $F_y = 60,000$ psi	
	TOP * BARS	OTHER BARS	TOP * BARS	OTHER BARS	TOP * BARS	OTHER BARS
#3	21"	16"	18"	16"	22"	16"
#4	28"	22"	24"	19"	29"	21"
#5	35"	27"	30"	23"	34"	28"
#6	42"	32"	36"	28"	44"	34"
#7	53"	38"	46"	33"	63"	49"
#8	69"	45"	60"	39"	72"	56"
#9	88"	57"	76"	50"	81"	63"
#10	108"	73"	94"	63"	102"	79"
#11	131"	89"	114"	77"	113"	87"



BEND SCHEDULE		d = DIAMETER OF REINF. BAR
BAR SIZE	D	
#3 THRU #8	6d	* = TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BAR, OR AS INDICATED ON PLANS
#9 THRU #11	8d	
#14 THRU #18	10d	

TYPICAL REINFORCEMENT DETAIL

SCALE: NTS

STATEMENT OF SPECIAL INSPECTIONS PER CBC 2022 REQUIREMENTS):

- SPECIAL TESTS AND INSPECTIONS SPECIFIED IN CHAPTER 17 OF THE CALIFORNIA BUILDING CODE ARE REQUIRED FOR THIS PROJECT. CERTIFIED SPECIAL INSPECTORS SHALL CONTINUOUSLY OR PERIODICALLY, AS REQUIRED, OBSERVE THE WORK AND PERFORM DUTIES SPECIFIED IN THE CODE DURING THE CONSTRUCTION OF THE FOLLOWING TYPES OF WORK:
 - THE OWNER SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS OR PROVIDE INSPECTION DURING CONSTRUCTION. THE SPECIAL INSPECTOR SHALL BE QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE TO THE SATISFACTION OF BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.
 - SPECIAL INSTRUCTIONS ARE NOT REQUIRED WHERE THE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION. APPROVED FABRICATORS MUST SUBMIT A CERTIFICATE OF COMPLIANCE FOR OFFSITE FABRICATIONS SUCH AS STRUCTURAL STEEL, PRECAST CONCRETE, GLUED, LAMINATED TIMBER, ETC
 - ALL INSPECTION SHALL BE PERFORMED BY INDEPENDENT SPECIAL INSPECTORS. JOB SITE VISITS BY THE STRUCTURAL ENGINEER OR BUILDING OFFICIAL DO NOT CONSTITUTE AND ARE NOT A SUBSTITUTE FOR INSPECTIONS BY A SPECIAL INSPECTOR.
 - ALL INSPECTION REPORTS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL AND EOR. THE FINAL REPORTS BY THE SPECIAL INSPECTOR(S) MUST CERTIFY THAT THE ENTIRE STRUCTURAL SYSTEM COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS.
 - IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT THESE INSPECTIONS ARE PERFORMED.
 - WORK REQUIRING SPECIAL INSPECTION SHALL BE INSPECTED BY THE SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS PERFORMED AND AT THE COMPLETION OF WORK. CONTINUOUS INSPECTION CONSISTS OF FULL-TIME INSPECTION; PERIODIC INSPECTION CONSISTS OF PART-TIME OR INTERMITTENT INSPECTION.
 - THE FOLLOWING SPECIAL INSPECTIONS ARE IN ADDITION TO INSPECTIONS BY THE BUILDING OFFICIAL. THIS LIST IS NOT INTENDED TO BE ALL INCLUSIVE.

SOILS SUPPORTING FOUNDATION

PERIODIC: VERIFY MATERIALS BELOW FOOTING ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY
 PERIODIC: VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL
 PERIODIC: PERFORM CLASSIFICATION AND TESTING OF THE CONTROLLED FILL MATERIALS.
 CONT.: VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF CONTROLLED FILLS
 PERIODIC: PRIOR TO PLACEMENT OF CONTROLLED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.

STRUCTURAL CONCRETE

PERIODIC: INSPECTION OF REINFORCING STEEL AND PLACEMENT
 CONT.: INSPECT BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE
 PERIODIC: VERIFY USE OF REQUIRED DESIGN MIX
 CONT.: SAMPLING FRESH CONCRETE AND PERFORMING SLUMP AND AIR CONTENT TESTS DETERMINING THE TEMPERATURE OF FRESH CONCRETE AT THE TIME OF MAKING SPECIMENS FOR STRENGTH TESTS
 CONT.: INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES
 PERIODIC: INSPECTION FOR THE MAINTENANCE OF A SPECIFIED CURING TEMPERATURE AND TECHNIQUE
 PERIODIC: VERIFICATION OF IN-SITU TO CONCRETE STRENGTH, PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAM AND STRUCTURAL SLABS
 PERIODIC: INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED
 PERIODIC: POST-INSTALLED AND ADHESIVE ANCHORS

STRUCTURAL STEEL

PERIODIC: HIGH-STRENGTH BOLTS, NUTS, AND WASHERS IDENTIFICATION MARKINGS TO CONFIRM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS, MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED
 PERIODIC: INSPECTION OF HIGH-STRENGTH BOLTING BEARING-TYPE CONNECTIONS
 PERIODIC: INSPECTION OF SLIP-CRITICAL CONNECTIONS USING TURN-OFF-NUT METHOD WITH MATCH MARKING, DIRECT TENSION INDICATOR METHOD OR TWIST OFF BOLTS
 CONT.: INSPECTION OF SLIP-CRITICAL CONNECTIONS USING CALIBRATED WRENCH METHOD OR TURN-OFF-NUT WITHOUT MATCHMARKING
 PERIODIC: STRUCTURAL STEEL IDENTIFICATION MARKINGS TO CONFIRM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS
 PERIODIC: STRUCTURAL STEEL MANUFACTURER'S CERTIFIED MILL TEST REPORTS REQUIRED
 PERIODIC: INSPECTION OF STEEL FRAME BRACING & STIFFENER DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS
 PERIODIC: STEEL FRAME MEMBER LOCATIONS
 PERIODIC: APPLICATIONS OF JOINT DETAILS AT EACH CONNECTION

WELDING

CONT.: COMPLETE AND PARTIAL PENETRATION GROOVE WELDS
 CONT.: FILLET WELDS > 5/16" AND MULTIPASS FILLET WELDS
 PERIODIC: FILLET WELDS <= 5/16"
 PERIODIC: WELD FILLER MATERIAL IDENTIFICATION MARKINGS TO CONFIRM TO AWS STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS, MANUFACTURER'S CERTIFICATION OF COMPLIANCE REQUIRED
 CONT.: WELDING OF REINFORCEMENT STEEL RESISTING SEISMIC FORCES INDICATED ON PLANS AND DETAILS AS LFRS ELEMENTS OR CONNECTIONS
 PERIODIC: VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A706
 PERIODIC: ALL OTHER REINFORCEMENT WELDS, UNO

NON STRUCTURAL COMPONENTS

PERIODIC: ANCHORAGE OF ELECTRICAL EQUIPMENT
 PERIODIC: ANCHORAGE OF PIPING SYSTEMS AND MECHANICAL UNITS CONTAINING FLAMMABLE, COMBUSTIBLE OR HIGHLY TOXIC MATERIAL
 PERIODIC: FLEXIBLE CONNECTIONS OF UTILITIES CROSSING EXPANSION OR SEISMIC JOINTS

PIER FOUNDATION

CONT.: OBSERVE DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH PIER
 CONT.: VERIFY PLACEMENTS, LOCATIONS AND PLUMBNESS, CONFIRM PIER DIAMETERS, BELL DIAMETERS, LENGTHS, EMBEDMENT INTO BEDROCK (IF APPLICABLE) AND ADEQUATE END BEARING STRATA CAPACITY

STRUCTURAL STEEL NOTES:

- STRUCTURAL STEEL DESIGN, FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH AISC 360-16 & AISC 303-16.
- MATERIAL SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS (UNLESS NOTED OTHERWISE):
 - STEEL PLATES & ANGLES ASTM A36
 - HIGH STRENGTH BOLTS (HSB) ASTM F3125 A325N
 - MACHINE BOLTS (MB) ASTM A307
 - ANCHORS ASTM F1554
 - NUTS ASTM A563, GR. A FOR MB, GR. DH FOR HSB
 - WASHERS ASTM F436 OR ASTM F959
- ALL STRUCTURAL STEEL MEMBERS, PLATES AND CONNECTION CLIPS SHALL BE MECHANICALLY GALVANIZED IN ACCORDANCE WITH ASTM SPECIFICATION A123.
- ALL BOLTS, INCLUDING NUTS AND WASHERS SHALL BE MECHANICALLY GALVANIZED IN ACCORDANCE WITH ASTM SPECIFICATION B695.
- BOLTS INDICATED AS MACHINE BOLTS SHALL BE 5/8" DIAMETER AND CONFORM TO ASTM A307, GRADE A, (UNLESS NOTED OTHERWISE ON DESIGN DRAWINGS).
- ALL BOLTED CONNECTIONS SHALL BE MADE WITH HIGH STRENGTH BOLTS (UNO). HIGH STRENGTH BOLTS SHALL BE 3/4" DIAMETER AND CONFORM TO ASTM A325 SLIP CRITICAL (MINIMUM TWO BOLTS PER CONNECTION). NO OVER SIZE HOLES ARE ALLOWED. CONNECTIONS DETAILS NOT SHOWN ON DESIGN DRAWINGS SHALL BE DESIGNED ACCORDING TO AISC 325-16.
- WELDING SHALL CONFORM TO THE "STRUCTURAL WELDING CODE" [AWS D1.1] OF THE USING A233 CLASS E-70 SERIES ELECTRODES AND SHALL BE PERFORMED BY CERTIFIED WELDERS IN AN APPROVED WELDING SHOP (APPROVED BY THE CITY OF LOS ANGELES OR EQUAL), OR IF WELDING IS PERFORMED IN THE FIELD, IT SHALL HAVE CONTINUOUS INSPECTION BY A DEPUTY WELDING INSPECTOR.
- ALL WELDS SHALL BE UNIFORM IN APPEARANCE AND FREE OF UNDERCUTTING.
- GRIND ALL CORNERS AND FIELD WELDS SMOOTH AND REMOVE ALL SLAG AND ARC SPATTER PRIOR TO PAINTING OR GALVANIZING.
- STRUCTURAL STEEL SHOP DRAWINGS SHALL BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO FABRICATION.
- NO HOLES OTHER THAN THOSE SPECIFICALLY DETAILED SHALL BE ALLOWED THROUGH STRUCTURAL STEEL MEMBERS. NO CUTTING OR BURNING OF STRUCTURAL STEEL WILL BE PERMITTED WITHOUT PRIOR CONSENT OF THE ENGINEER.
- REPAIR ALL GALVANIZED AREAS AFFECTED BY FIELD WELDING. USE RUST-OLEUM "INDUSTRIAL CHOICE 1600 COLD GALVANIZING COMPOUND" (PRODUCT I.D. 1685830) FOLLOW ALL MANUFACTURER RECOMMENDATIONS.

STRUCTURAL OBSERVATIONS (PER CBC 2022 REQUIREMENTS)

- VISUAL OBSERVATIONS WILL BE PERFORMED AT THE DISCRETION OF THE OWNER, EOR, AND AS REQUIRED BY THE BUILDING OFFICIAL IN ACCORDANCE WITH THE BUILDING CODE. VISUAL OBSERVATIONS SHALL NOT BE CONSIDERED AS A SUBSTITUTE FOR THE SPECIAL INSPECTION REQUIREMENTS.
- IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO NOTIFY THE SEOR AS TO WHEN EACH MAJOR PHASE OF CONSTRUCTION IS READY FOR OBSERVATION A MINIMUM OF FIVE (5) WORKING DAYS IN ADVANCE.
- THE FOLLOWING MAJOR PHASES OF CONSTRUCTION REQUIRE A SITE VISIT AND STRUCTURAL OBSERVATION REPORT FROM THE SEOR:
 - STRUCTURAL FRAMING – AFTER ERECTION AND PRIOR TO CLOSING IN
 - COMPLETION OF THE STRUCTURAL SYSTEM
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING NAILING, REINFORCEMENT, WELDS, CONNECTIONS ETC ARE VISIBLE FOR OBSERVATIONS WHEN THE SEOR IS ON SITE AND FOR ANY SCHEDULING DELAYS DUE TO NONCOMPLIANT ITEMS FOUND DURING THE OBSERVATION.
- AT THE CONCLUSION OF THE WORK INCLUDED IN THE PERMIT, THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND IDENTIFY ANY REPORTED DEFICIENCIES THAT, TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED.

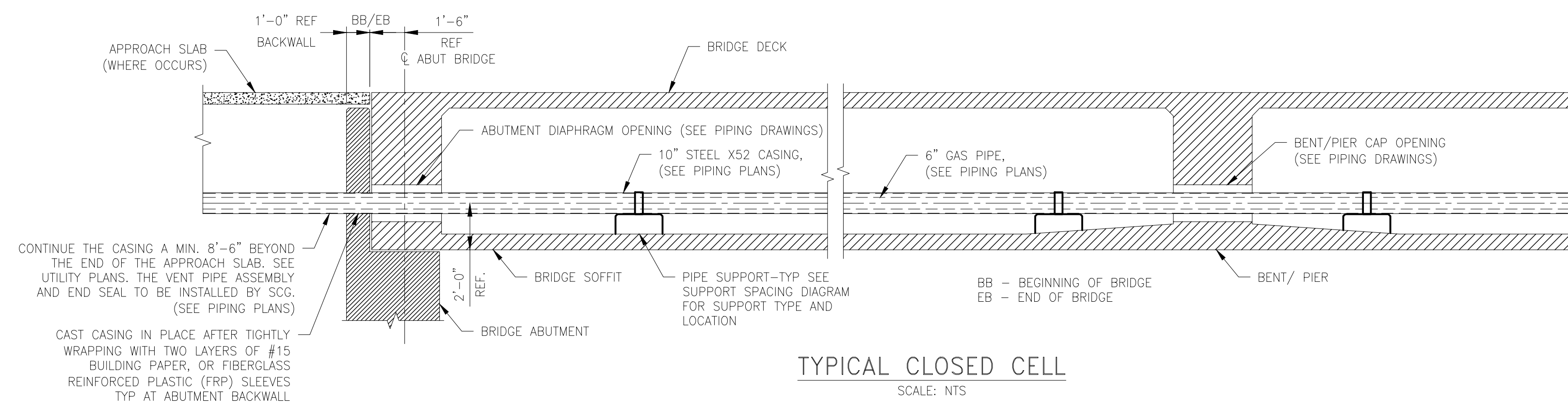


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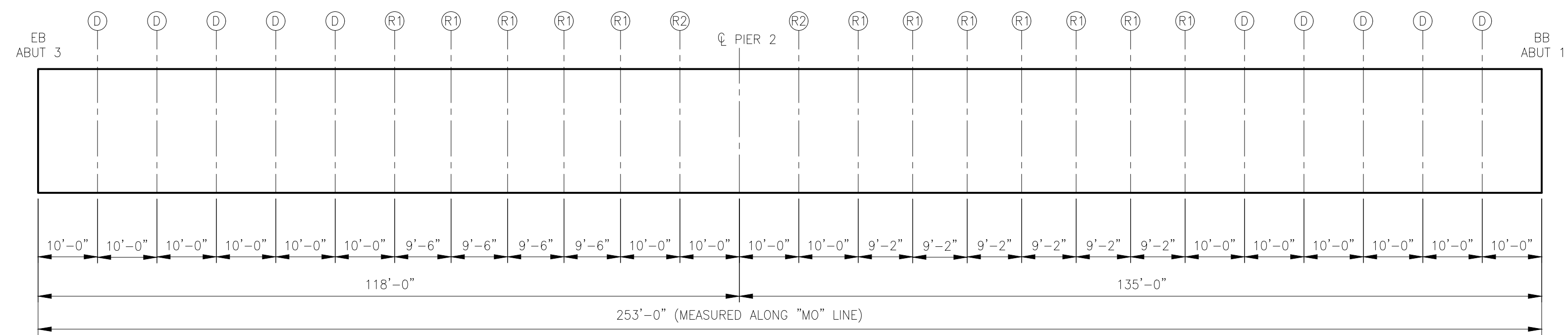
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											ENGINEER: M. JAISWAL	01/08/2026					
											CHECKER: D. MOON	01/08/2026					
											PROJECT APVR: H. ORDONEZ	*					
											SCG ENG APVR: J. CHEN	*					

SL 41-59 & MP GAS
 WHITewater RIVER/I-10 & MONROE ST BRIDGE REPLACEMENT
 GENERAL NOTES





- NOTES:
- FOR GENERAL NOTES SEE 82646-4001-D-STR.
 - SOCALGAS CREW/CONTRACTOR TO INSTALL GAS CARRIER PIPE, INSULATING SKIDS, END SEALS, VENT PIPING, CATHODIC PROTECTION, CASING, CONCRETE PEDESTAL SUPPORTS INCLUDING DOWELS, HOLD-DOWNS, GUIDES, ALL FRP SHIELDS AND FLATTIES, BRACKETS, AND BUILDING PAPER WHERE CASING IS CAST INTO ABUTMENT BACKWALL.
 - UTILITY WEIGHTS:
 - COMBINED CASING AND PIPE IN SERVICE: 73 LB/FT
 - VERTICALS LOADS:
 - CASED HP LINE = 725 LB (MAX)
 - CASED MP LINE = 600 LB (MAX)
 - TOTAL WEIGHT PER SUPPORT = 1325 LB (MAX)
 - TYPE R2 SUPPORTS:
 - CASED HP LINE = 2900 LBS (MAX)
 - CASED MP LINE = 2900 LBS (MAX)



LEGEND

(R1) & (R2) RESTRAINING TYPE SUPPORT, SEE DWG #82646-4003-D-STR

(D) DISPLACEMENT TYPE SUPPORT, SEE DWG #82646-4004-D-STR

SUPPORT SPACING DIAGRAM
NTS



ISSUED FOR CONSTRUCTION

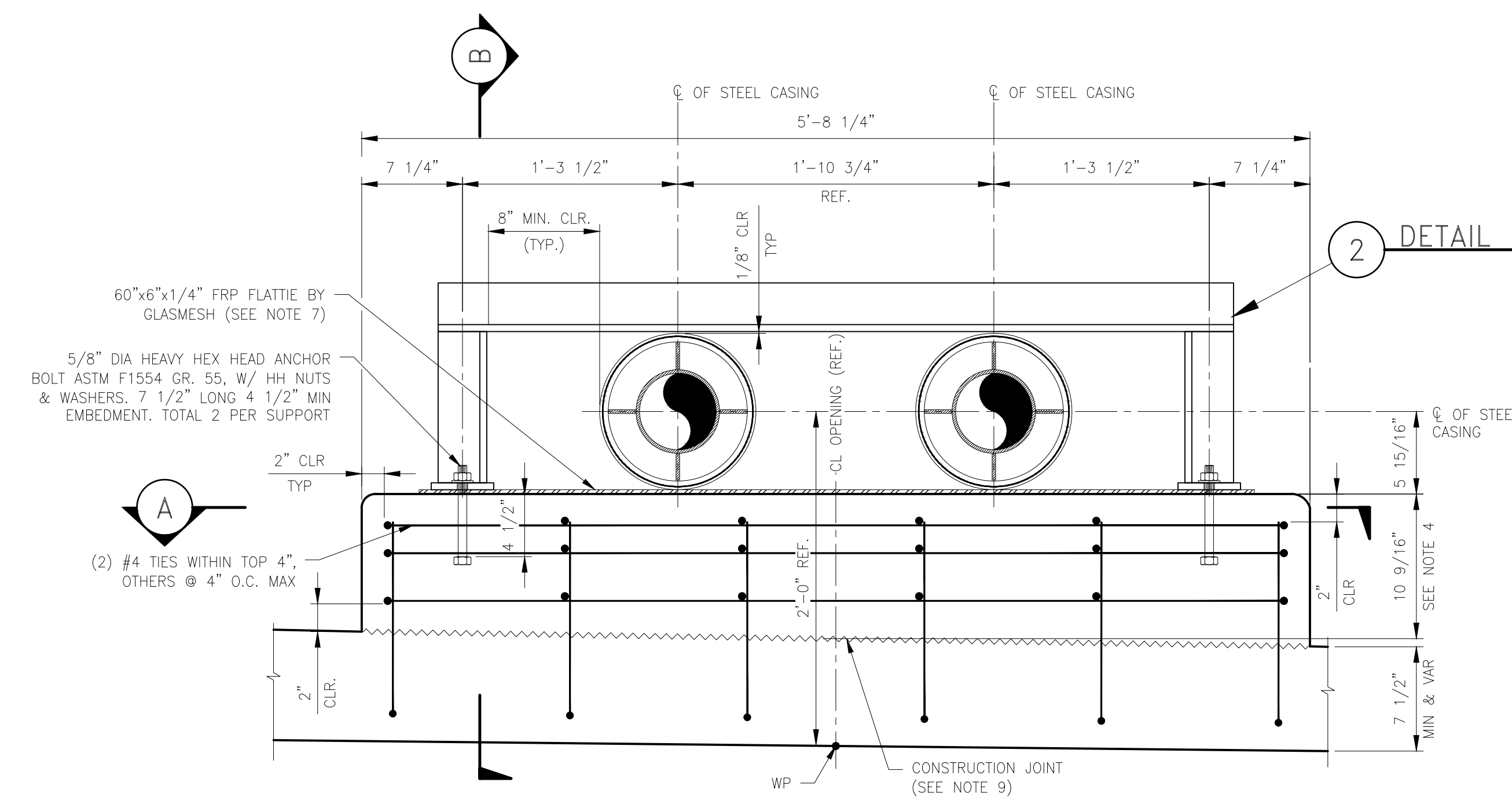
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										PROJECT APVR: H. ORDONEZ	*								
										SCG ENG APVR: J. CHEN	*								
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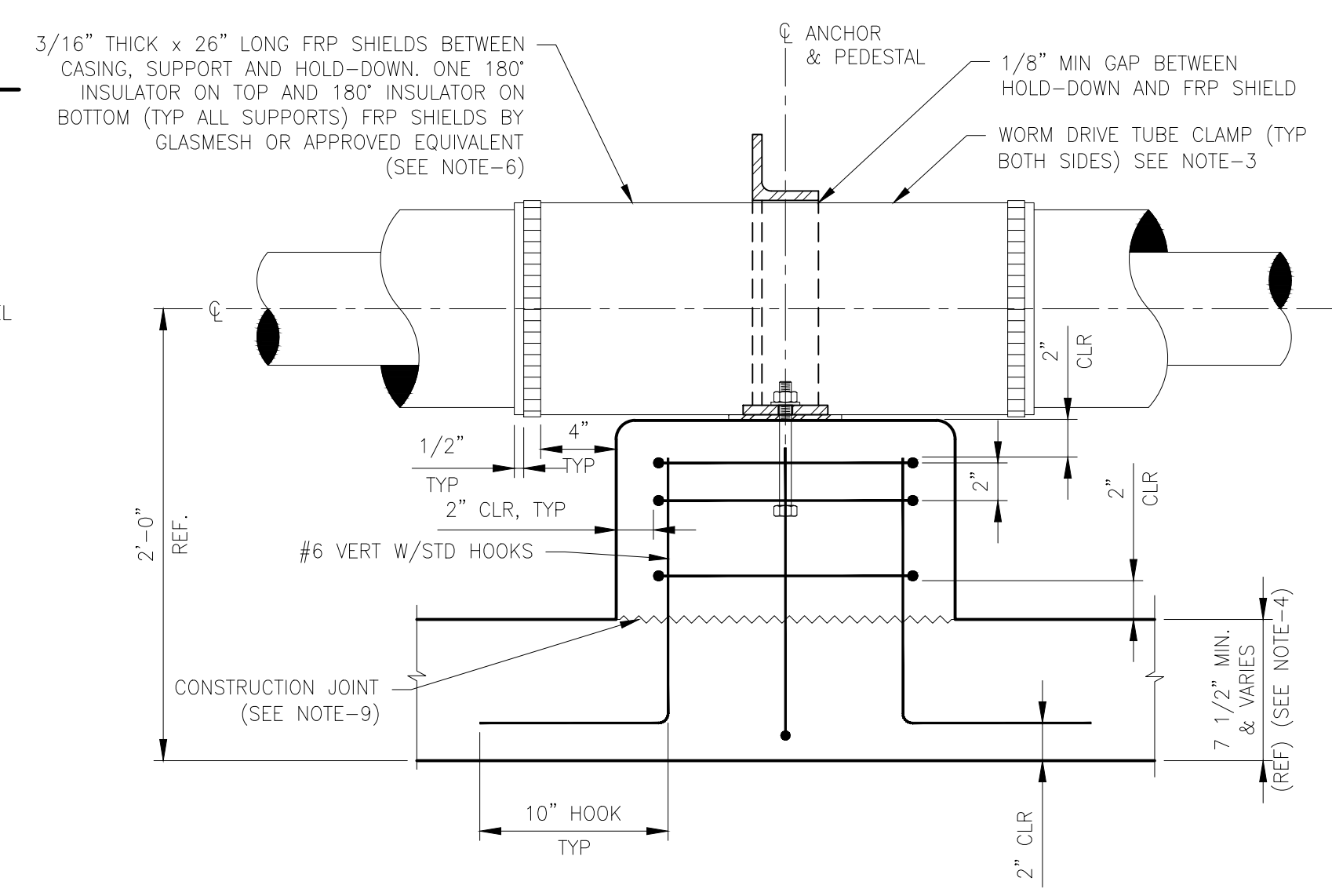
SL 41-59 & MP GAS
I-10 & MONROE ST BRIDGE REPLACEMENT
SUPPORT SPACING DIAGRAM & SECTIONS

NOTES:

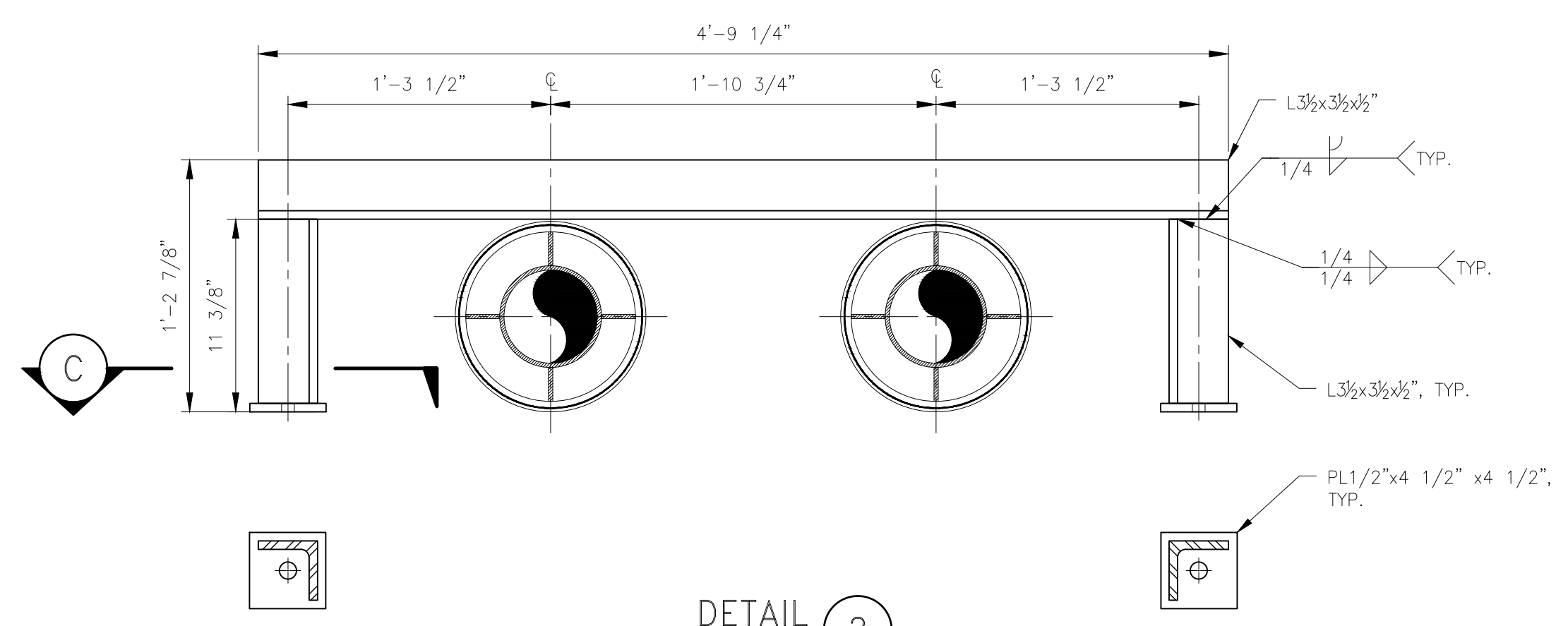
- FOR STRUCTURAL STEEL NOTES, SEE DWG. 82646-4001-D-STR.
- FOR SUPT. SPACING DIAGRAM, SEE DWG. 82646-4002-D-STR.
- STAINLESS STEEL WORM DRIVE TUBE CLAMP TO BE INSTALLED ON BOTH SIDES ON FRP SHIELDS. McMASTER CARR STOCK #5322K68 OR EQUIVALENT. LIMIT MAXIMUM TORQUE TO 30 IN-LBS.
- ADJUST HEIGHT OF SUPPORT TO ACCOMMODATE VARIATION OF SOFFIT THICKNESS. DIMENSIONS SHALL BE VERIFIED PRIOR TO FABRICATION.
- PIPELINE IS NOT TO FOLLOW THE FLARED GIRDER OF THE BRIDGE, BUT IT IS TO REMAIN STRAIGHT. HORIZONTAL POSITION OF SUPPORTS TO FOLLOW PIPE RATHER THAN GIRDER.
- SEAL THE SPACE BETWEEN THE INSIDE SURFACE OF THE GLASMESH FRP SHIELD AND COATED STEEL PIPE BY USING 3M EPOXY ADHESIVE 2216 OR POLYURETHANE TAPE PER GAS STANDARD 186.0100. ROUGHEN THE SURFACES WITH COARSE EMERY CLOTH. DO NOT GRIT BLAST. SEAL OF THE FRP SHIELD IS NOT NECESSARY FOR POLYURETHANE COATED STEEL PIPE.
- SEAL THE SPACE BETWEEN FRP FLATTE AND CONCRETE SURFACE WITH EPOXY SEAM SEALER BY GLASMESH OR APPROVED EQUIVALENT. APPLY EPOXY PER MANUFACTURER'S RECOMMENDATION.
- CONTRACTOR SHALL VERIFY ALL CONTROLLING DIMENSIONS PRIOR TO ORDERING, FABRICATING AND INSTALLING ANY MATERIAL.
- CONSTRUCTION JOINT (CJ) TO BE INTENTIONALLY ROUGHENED TO AN APPROXIMATE AMPLITUDE OF 1/4". SURFACE OF JOINT SHALL BE CLEANED AND CLEAR OF LAITANCE PRIOR TO PLACING PEDESTAL CONCRETE.
- CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF $f'_c = 5000$ PSI SHALL BE ACHIEVED ON OR BEFORE 28 DAYS OF THE CONCRETE BEING POURED/PLACED.



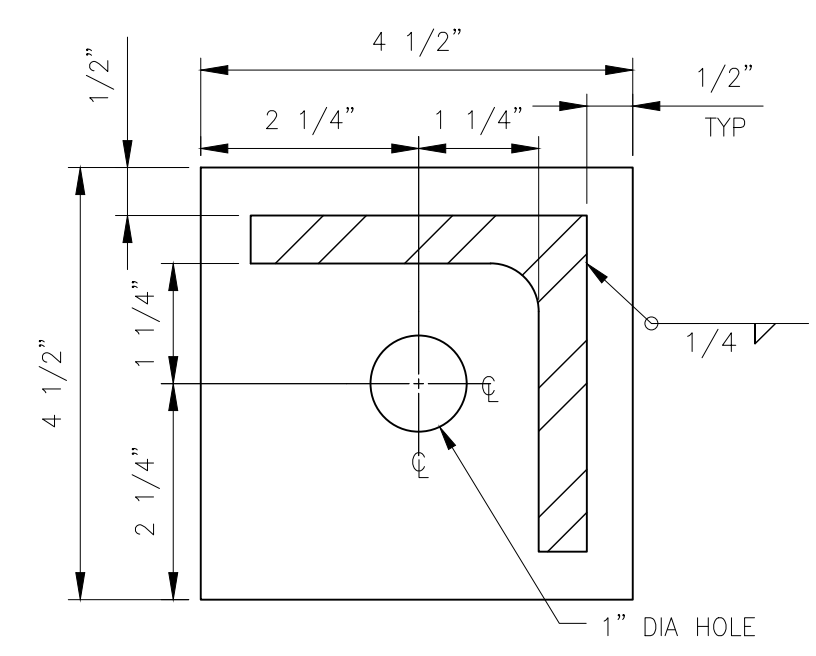
LATERAL DISPLACEMENT TYPE "D"
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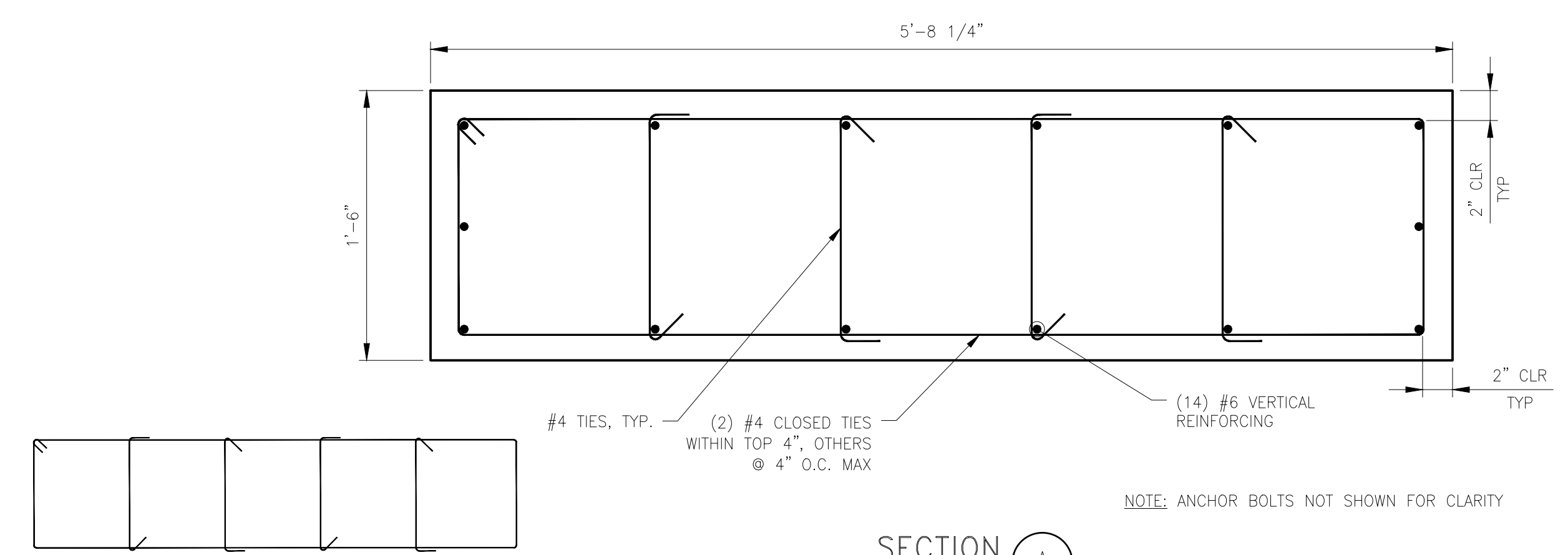
SECTION B
SCALE: 1-1/2"=1'-0"



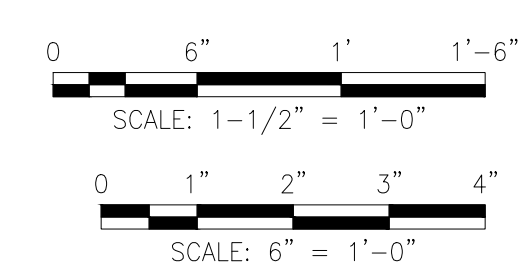
DETAIL 2
SCALE: 1-1/2"=1'-0"



SECTION C
SCALE: 6"=1'-0"

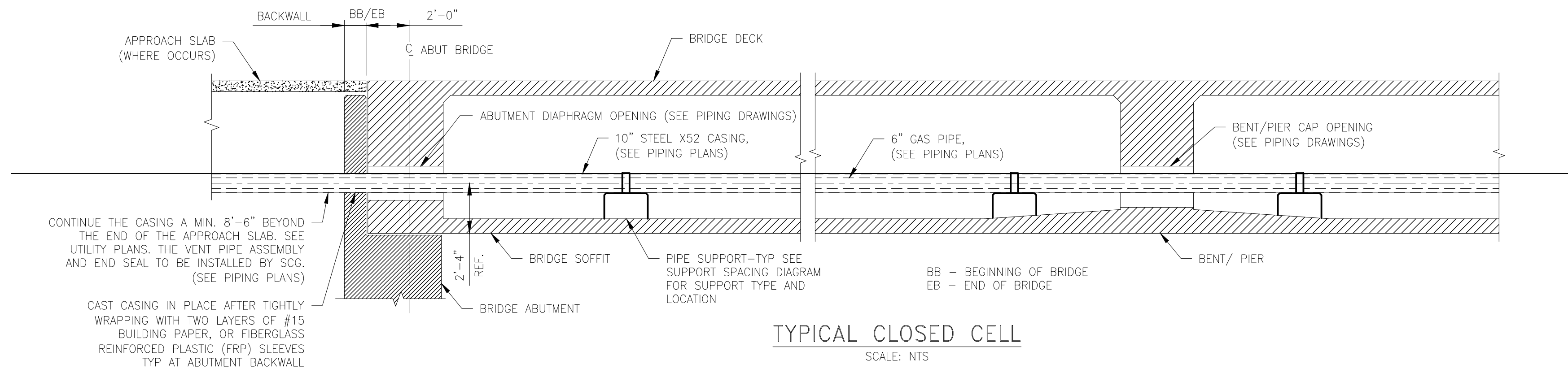


SECTION A
SCALE: 1-1/2"=1'-0"



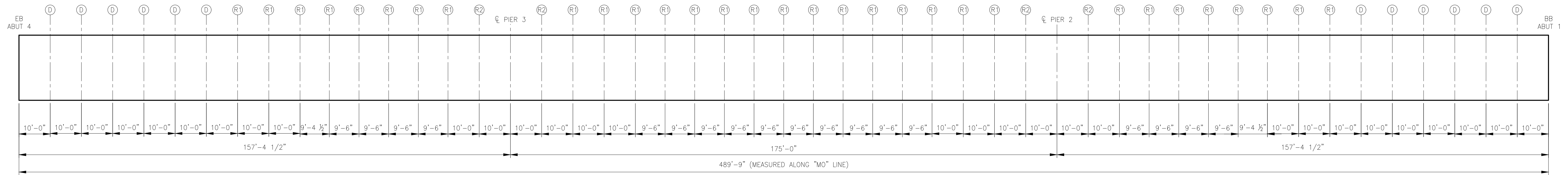
ISSUED FOR CONSTRUCTION

BY		DATE	SL 41-59 & MP GAS														
DESIGNER: R. SHAWMI		01/08/2026	I-10 & MONROE ST BRIDGE REPLACEMENT														
ENGINEER: M. JAISWAL		01/08/2026	DISPLACEMENT SUPPORT DETAILS														
CHECKER: D. MOON		01/08/2026															
PROJECT APVR: H. ORDONEZ		*															
SOC ENG APVR: J. CHEN		*															
0	01/08/2026	RS	MJ	DM	HO	JC	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	ENG FILE NO: PE24-166	DWG CLASS: 26	DWG DIST: 200	DRAWING NUMBER	82646-4004-D-STR	INDO	0



TYPICAL CLOSED CELL
SCALE: NTS

- NOTES:
- FOR GENERAL NOTES SEE 82646-4001-D-STR.
 - SOCALGAS CREW/CONTRACTOR TO INSTALL GAS CARRIER PIPE, INSULATING SKIDS, END SEALS, VENT PIPING, CATHODIC PROTECTION, CASING, CONCRETE PEDESTAL SUPPORTS INCLUDING DOWELS, HOLD-DOWNS, GUIDES, ALL FRP SHIELDS AND FLATTIES, BRACKETS, AND BUILDING PAPER WHERE CASING IS CAST INTO ABUTMENT BACKWALL.
 - UTILITY WEIGHTS:
 - COMBINED CASING AND PIPE IN SERVICE: 73 LB/FT
 - VERTICALS LOADS:
 - TYPE D AND TYPE R1 SUPPORTS:
CASED HP LINE = 725 LB (MAX)
CASED MP LINE = 600 LB (MAX)
TOTAL WEIGHT PER SUPPORT = 1325 LB (MAX)
 - TYPE R2 SUPPORTS:
CASED HP LINE = 1443 LB (MAX)
CASED MP LINE = 1200 LB (MAX)
TOTAL WEIGHT PER SUPPORT = 2643 LB (MAX)
 - LATERAL LOADS:
TYPE R1/R2 SUPPORTS:
CASED HP LINE = 4000 LBS (MAX)
CASED MP LINE = 4000 LBS (MAX)



LEGEND

- (R1) & (R2) RESTRAINING TYPE SUPPORT, SEE DWG #82646-4003-D-STR
- (D) DISPLACEMENT TYPE SUPPORT, SEE DWG #82646-4004-D-STR

SUPPORT SPACING DIAGRAM
NTS

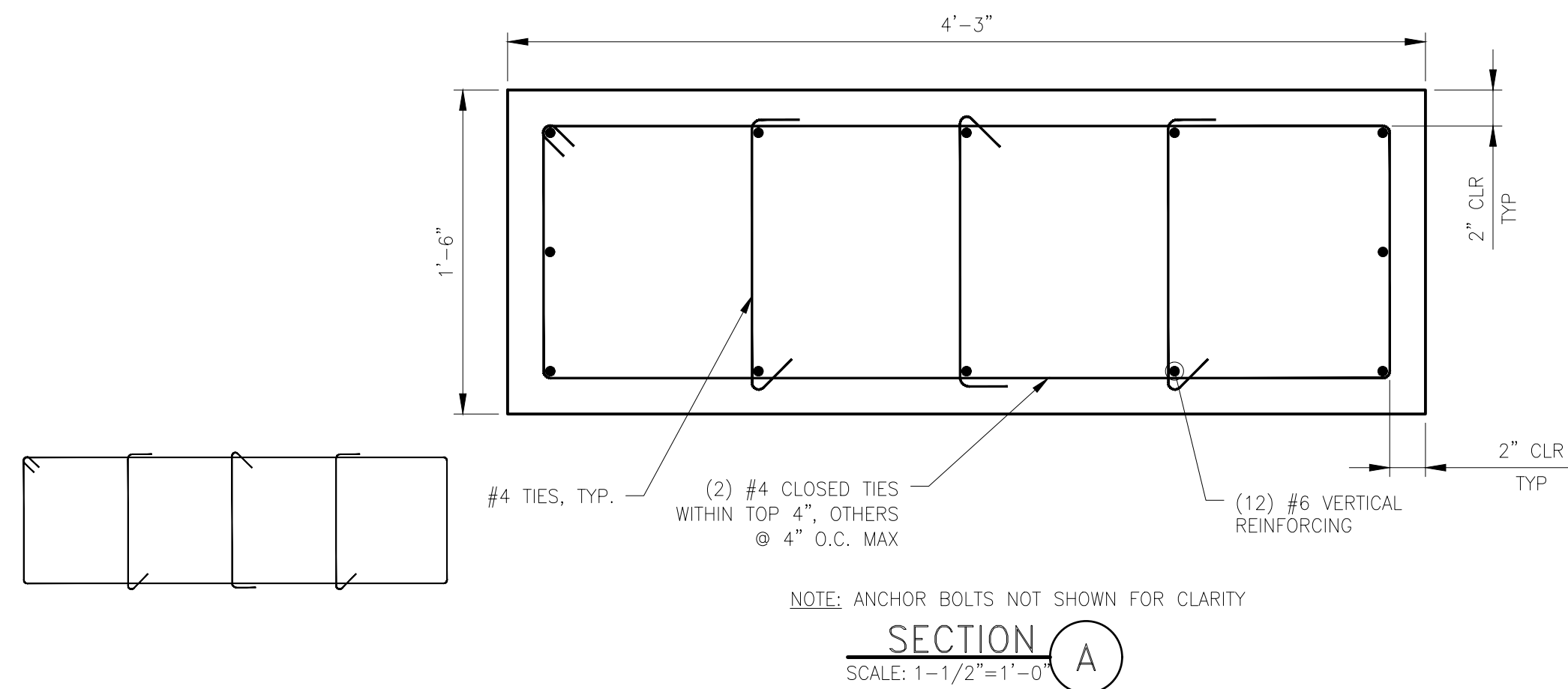
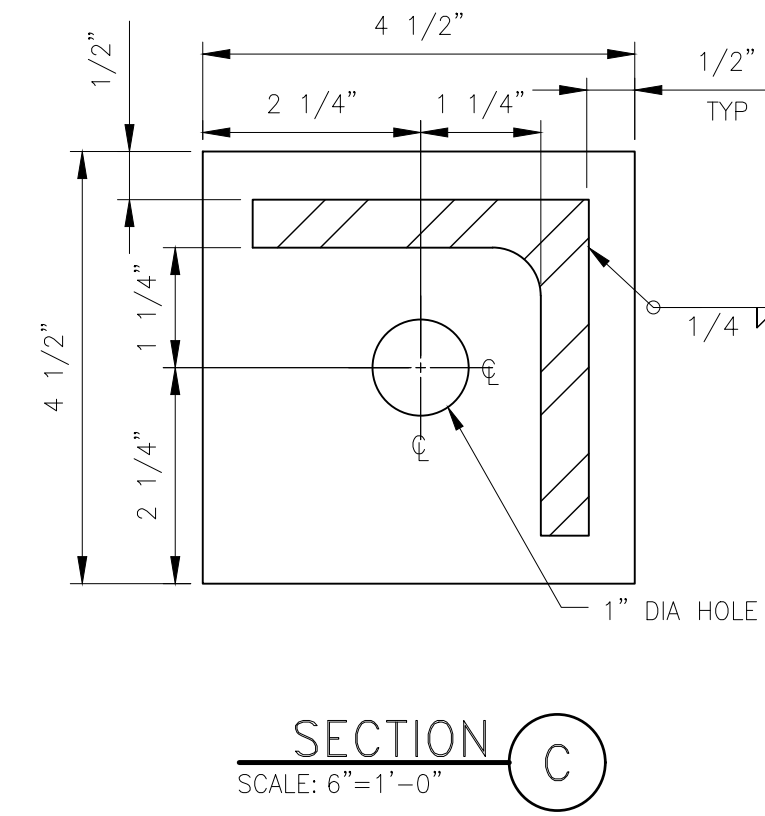
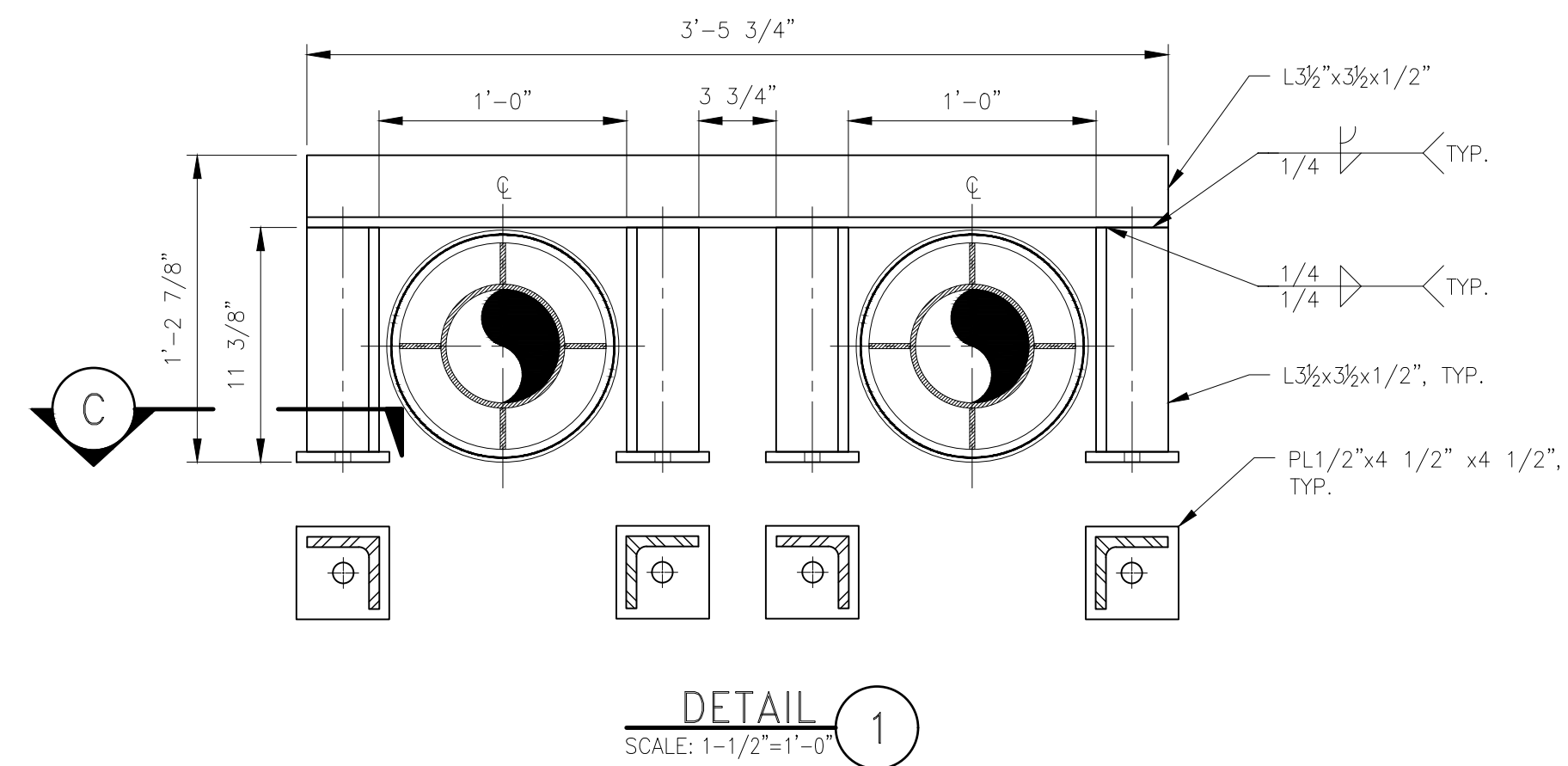
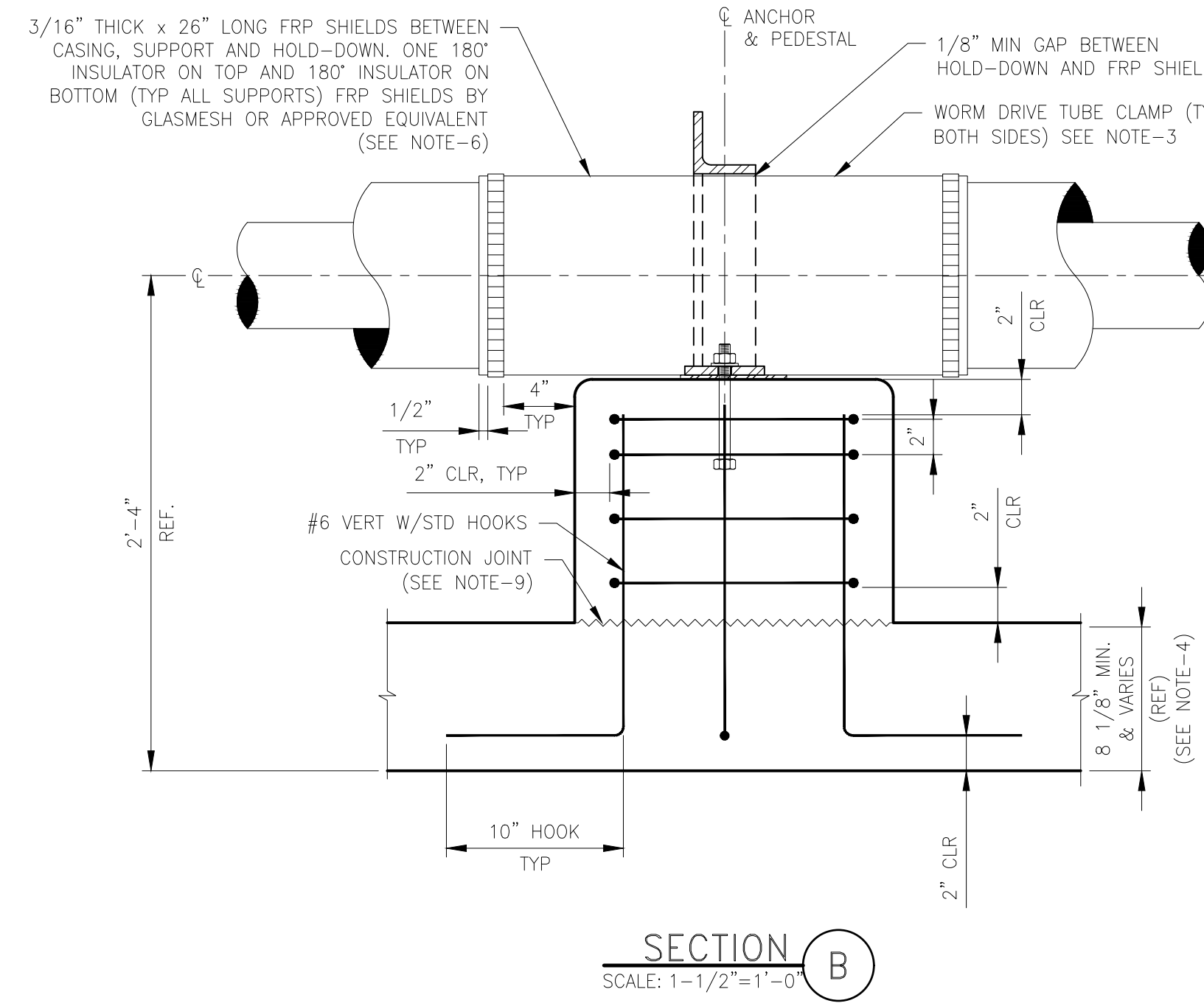
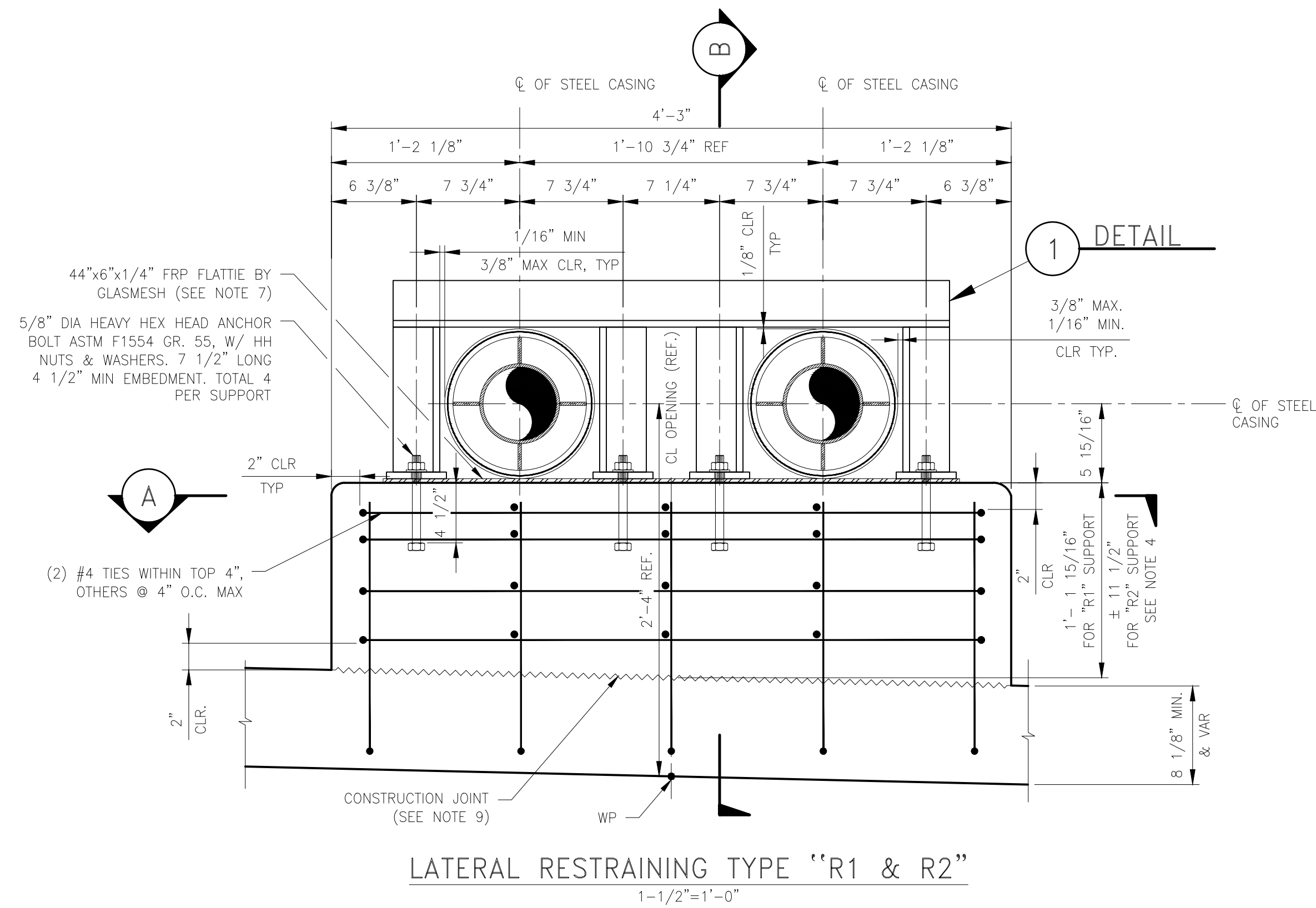


ISSUED FOR CONSTRUCTION

										BY	DATE								
										DESIGNER: R. SHAMI	01/08/2026								
										ENGINEER: M. JAISWAL	01/08/2026								
										CHECKER: D. MOON	01/08/2026								
										PROJECT APVR: H. ORDONEZ	*								
										SCG ENG APVR: J. CHEN	*								
0	01/08/2026	RS	MJ	DM	HO	JC	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	ENG FILE NO: PE24-166	DWG CLASS: 26	DWG DST: 200	DRAWING NUMBER: 82646-4005-D-STR	REV	INDO	0		
REV	DATE	DES	ENGR	CHK	APVD	SCG APGR	ENG FILE NO	DESCRIPTION	WOA	VENDOR ID	WOA: 71363	SCALE: NONE							



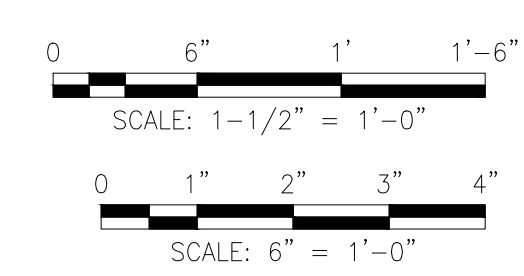
SL 41-59 & MP GAS
WHITWATER RIVER & MONROE ST BRIDGE REPLACEMENT
SUPPORT SPACING DIAGRAM & SECTIONS



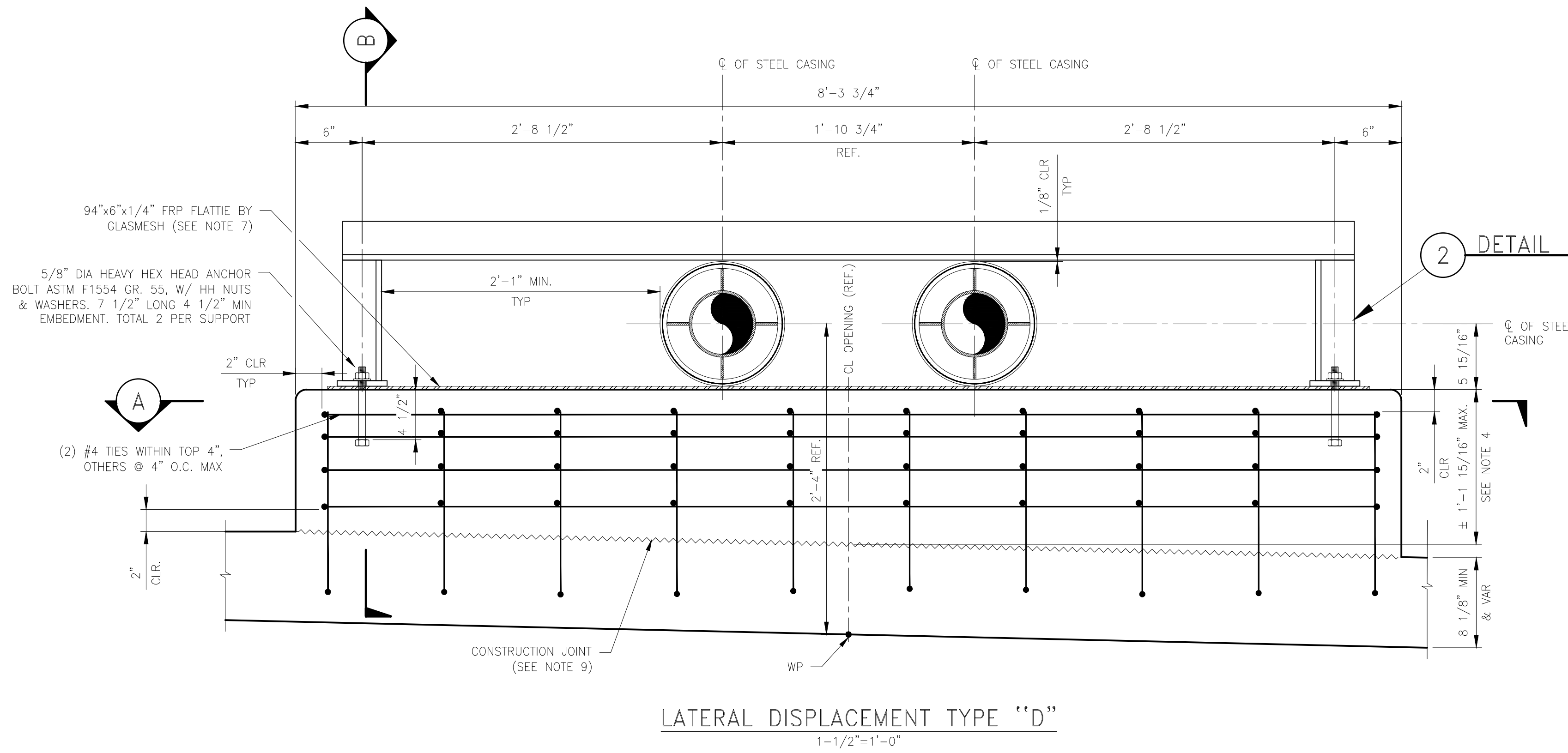
- NOTES:**
- FOR STRUCTURAL STEEL NOTES, SEE DWG. 82646-4001-D-STR.
 - FOR SUPT. SPACING DIAGRAM, SEE DWG. 82646-4005-D-STR.
 - STAINLESS STEEL WORM DRIVE TUBE CLAMP TO BE INSTALLED ON BOTH SIDES ON FRP SHIELDS. McMASTER CARR STOCK #5322K68 OR EQUIVALENT. LIMIT MAXIMUM TORQUE TO 30 IN-LBS.
 - ADJUST HEIGHT OF SUPPORT TO ACCOMMODATE VARIATION OF SOFFIT THICKNESS. DIMENSIONS SHALL BE VERIFIED PRIOR TO FABRICATION.
 - PIPELINE IS NOT TO FOLLOW THE FLARED GIRDER OF THE BRIDGE, BUT IT IS TO REMAIN STRAIGHT. HORIZONTAL POSITION OF SUPPORTS TO FOLLOW PIPE RATHER THAN GIRDER.
 - SEAL THE SPACE BETWEEN THE INSIDE SURFACE OF THE GLASMESH FRP SHIELD AND COATED STEEL PIPE BY USING 3M EPOXY ADHESIVE 2216 OR POLYURETHANE TAPE PER GAS STANDARD 186.0100. ROUGHEN THE SURFACES WITH COARSE EMERY CLOTH. DO NOT GRIT BLAST. SEAL OF THE FRP SHIELD IS NOT NECESSARY FOR POLYURETHANE COATED STEEL PIPE.
 - SEAL THE SPACE BETWEEN FRP FLATTIE AND CONCRETE SURFACE WITH EPOXY SEAM SEALER BY GLASMESH OR APPROVED EQUIVALENT. APPLY EPOXY PER MANUFACTURER'S RECOMMENDATION.
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 - CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF $f'_c = 5000$ PSI SHALL BE ACHIEVED ON OR BEFORE 28 DAYS OF THE CONCRETE BEING POURED/PLACED.



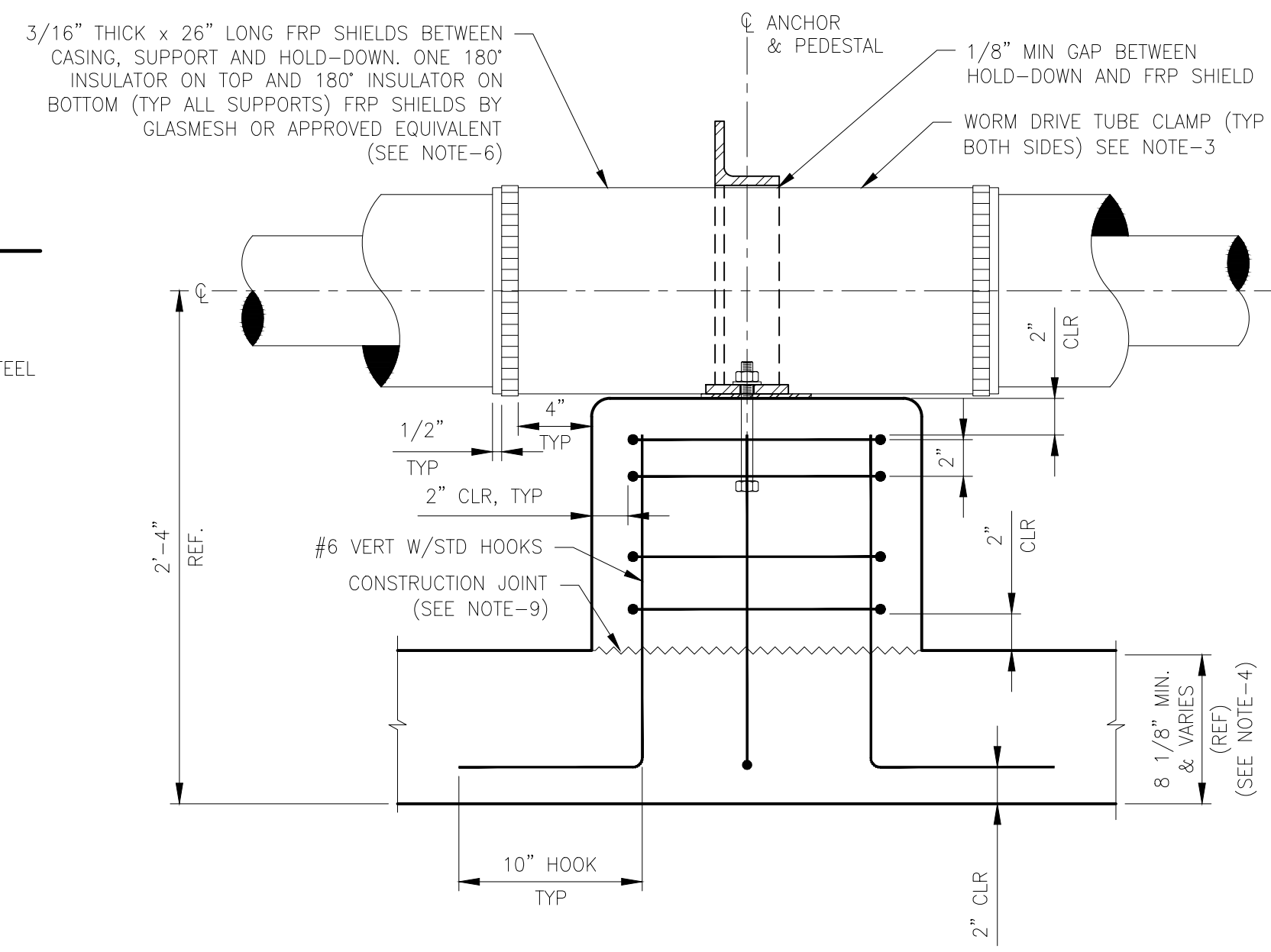
ISSUED FOR CONSTRUCTION



DESIGNER: R. SWAMI	DATE: 01/08/2026		SL 41-59 & MP GAS WHITEWATER RIVER & MONROE ST BRIDGE REPLACEMENT RESTRAINING SUPPORT DETAILS										
ENGINEER: M. JAISWAL	01/08/2026												
CHECKER: D. MOON	01/08/2026												
PROJECT APVR: H. ORDONEZ	*												
SCG ENG APVR: J. CHEN	*	DWG CLASS: 26	DWG DIST: 200	DRAWING NUMBER: 82646-4006-D-STR									
REV: 0	DATE: 01/08/2026	DES: RS	ENGR: MJ	CHK: DM	HO: HO	JC: JC	PE24-166	ISSUED FOR CONSTRUCTION	71363	WGA: *	VENDOR ID: WGA: 71363	SCALE: AS NOTED	INDO: 0

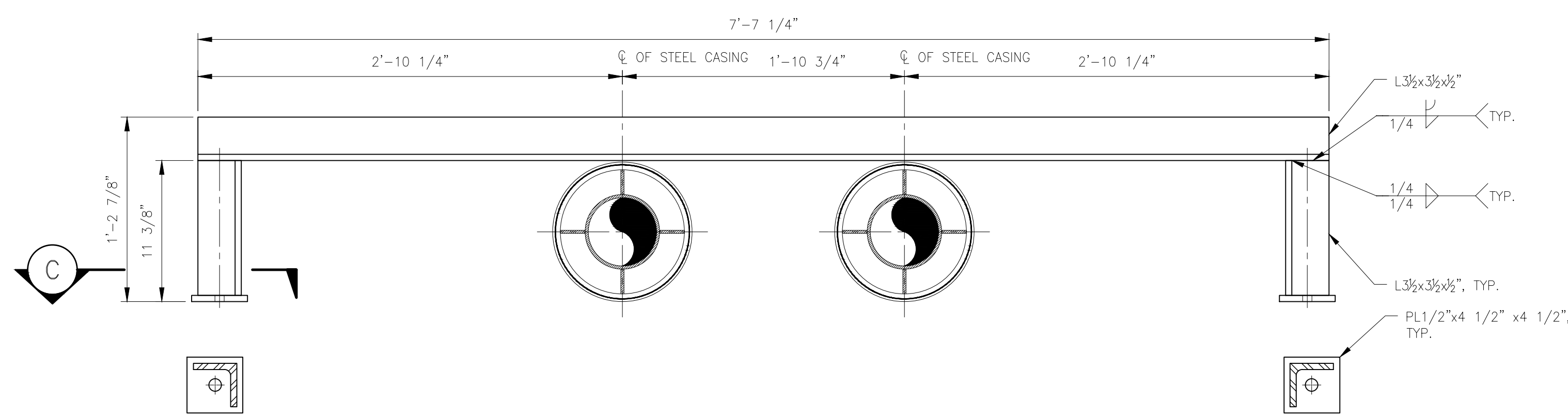


LATERAL DISPLACEMENT TYPE "D"
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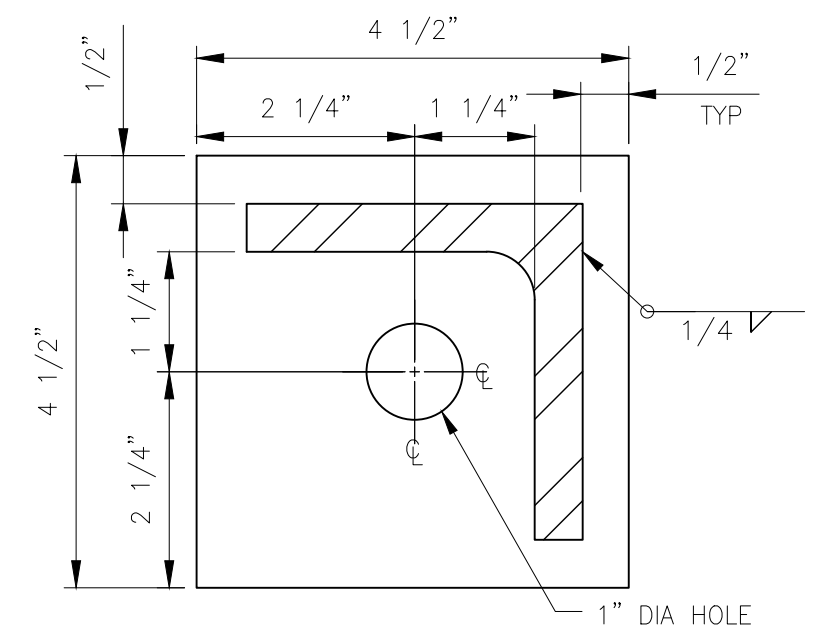


SECTION B
SCALE: 1-1/2"=1'-0"

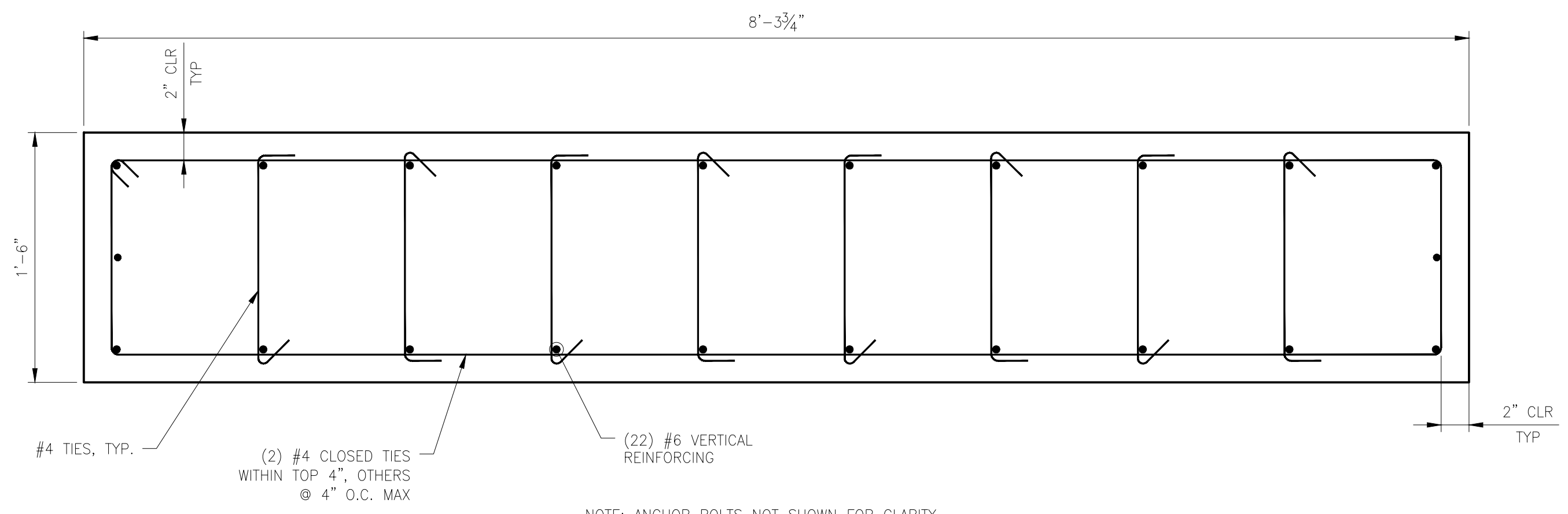
- NOTES:
- FOR STRUCTURAL STEEL NOTES, SEE DWG. 82646-4001-D-STR.
 - FOR SUPT. SPACING DIAGRAM, SEE DWG. 82646-4005-D-STR.
 - STAINLESS STEEL WORM DRIVE TUBE CLAMP TO BE INSTALLED ON BOTH SIDES ON FRP SHIELDS. McMASTER CARR STOCK #5322K68 OR EQUIVALENT. LIMIT MAXIMUM TORQUE TO 30 IN-LBS.
 - ADJUST HEIGHT OF SUPPORT TO ACCOMMODATE VARIATION OF SOFFIT THICKNESS. DIMENSIONS SHALL BE VERIFIED PRIOR TO FABRICATION.
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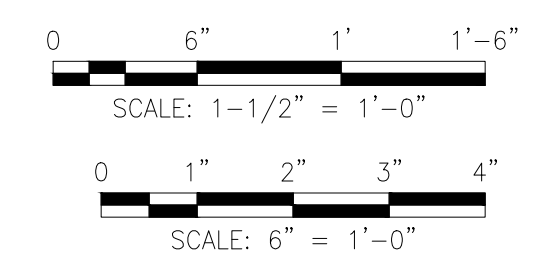
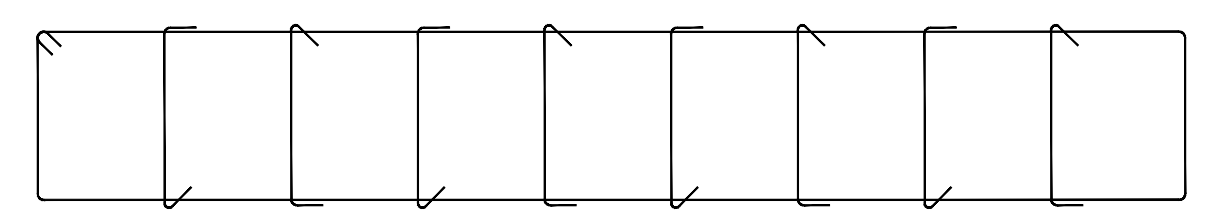
DETAIL 2
SCALE: 1-1/2"=1'-0"



SECTION C
SCALE: 6"=1'-0"



SECTION A
SCALE: 1-1/2"=1'-0"



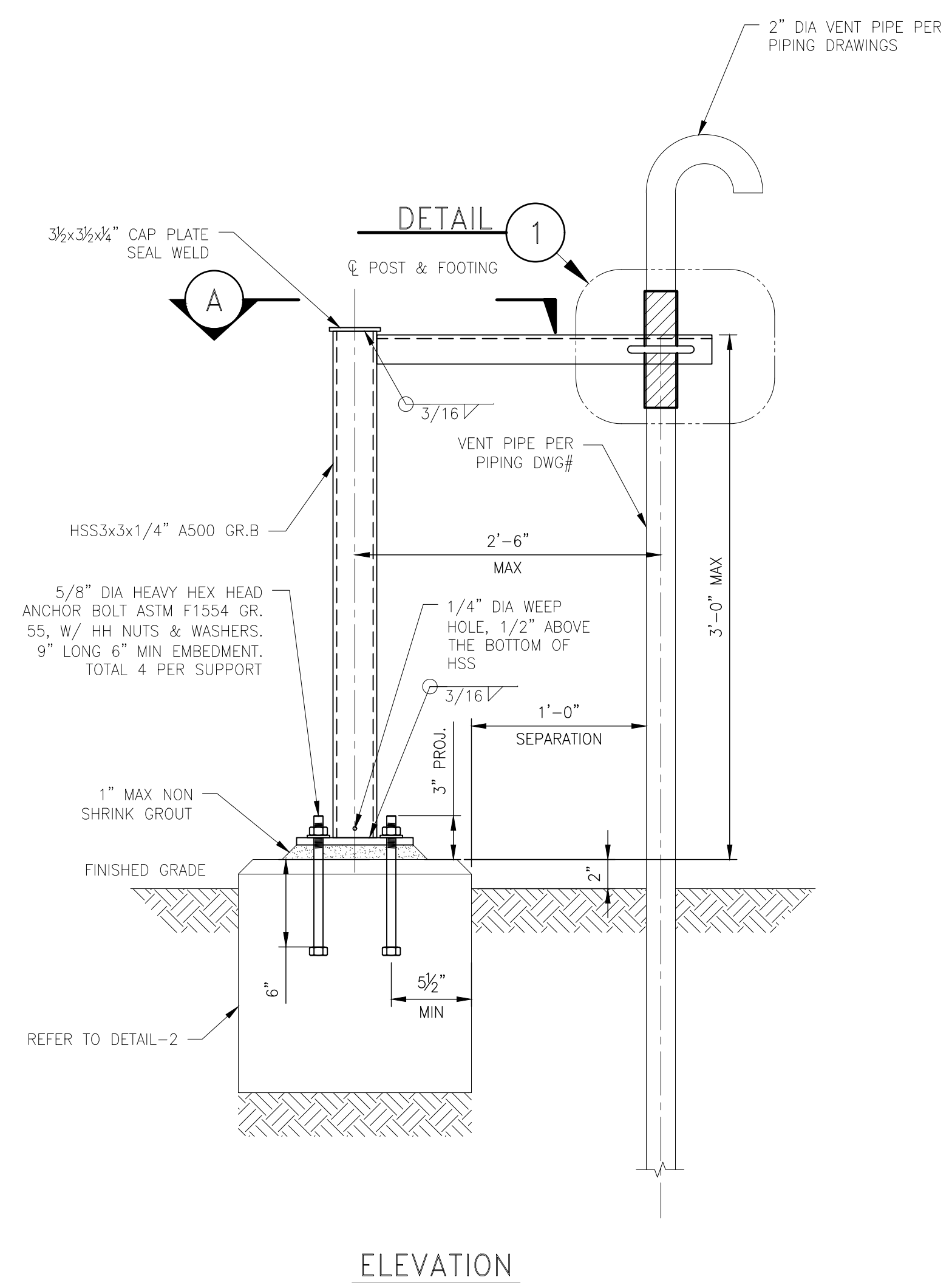
ISSUED FOR CONSTRUCTION

0		01/08/2026	RS	MJ	DM	HO	JC	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	ENG FILE NO: PE24-166	DWG CLASS: 26	DWG DIST: 200	DRAWING NUMBER: 82646-4007-D-STR	INDO: 0
REV	DATE	DES	ENGR	CHK	APVD	306	306	ENG FILE NO	DESCRIPTION	WOA	VENDOR ID	WOA: 71363	SCALE: AS NOTED			

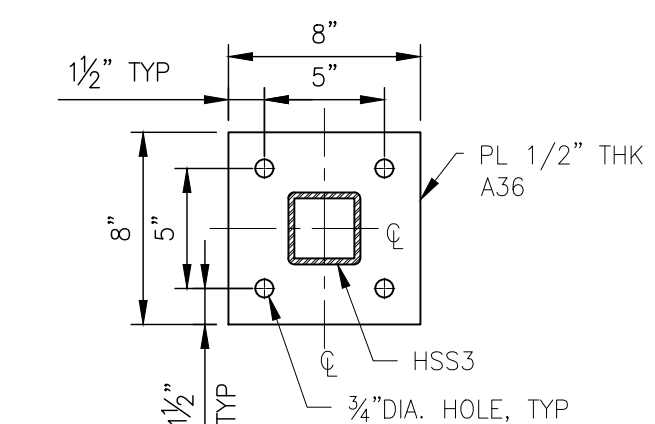
SL 41-59 & MP GAS
WHITWATER RIVER & MONROE ST BRIDGE REPLACEMENT
DISPLACEMENT SUPPORT DETAILS



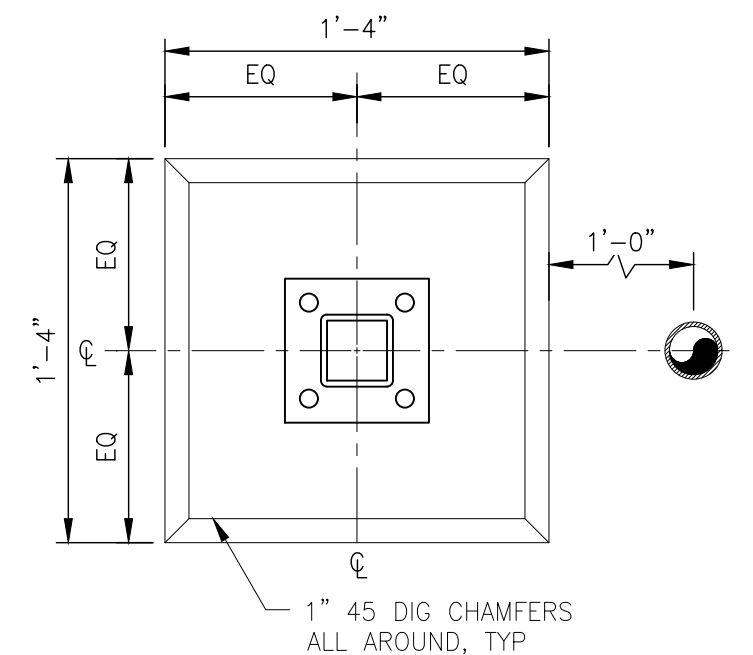
- NOTES:
- ALL COMPONENTS SHALL BE GALVANIZED/PAINTED IN ACCORDANCE WITH COMPANY SPECIFICATIONS.
 - SEE STRUCTURAL GENERAL NOTES FOR MATERIAL SPECIFICATIONS, SPECIAL INSPECTIONS AND ALL OTHER REVELANT INFORMATION NOT SHOWN ON THE DRAWING.
 - BOTTOM OF FOUNDATION SHALL BE SCARIFIED 6" AND RECOMPACTED WITH MIN 90% COMPACTED STRUCTURAL FILL.
 - TENSILE STRENGTH OF WELD ELECTRODE SHALL NOT BE LESS THAN 70 KSI CONFORMING TO AWS D1.1.
 - CONCRETE MIN COMPRESSIVE STRENGTH 4000 PSI AT 28 DAYS.
 - VENT PIPE SUPPORT IS DESIGNED FOR MAX 100 LBS OF LATERAL LOAD AT SERVICE LEVEL.



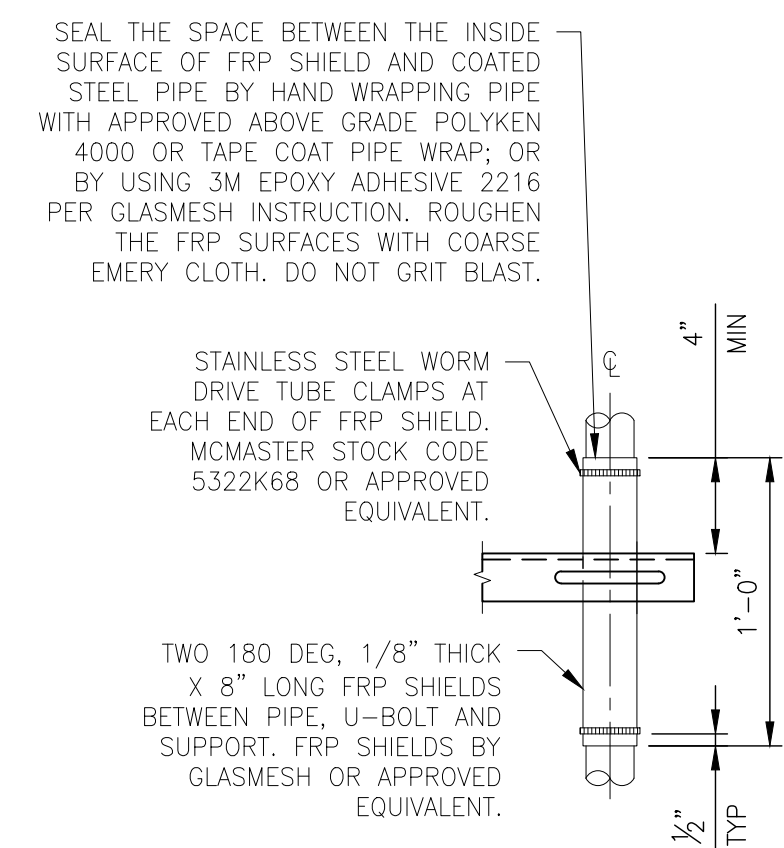
ELEVATION



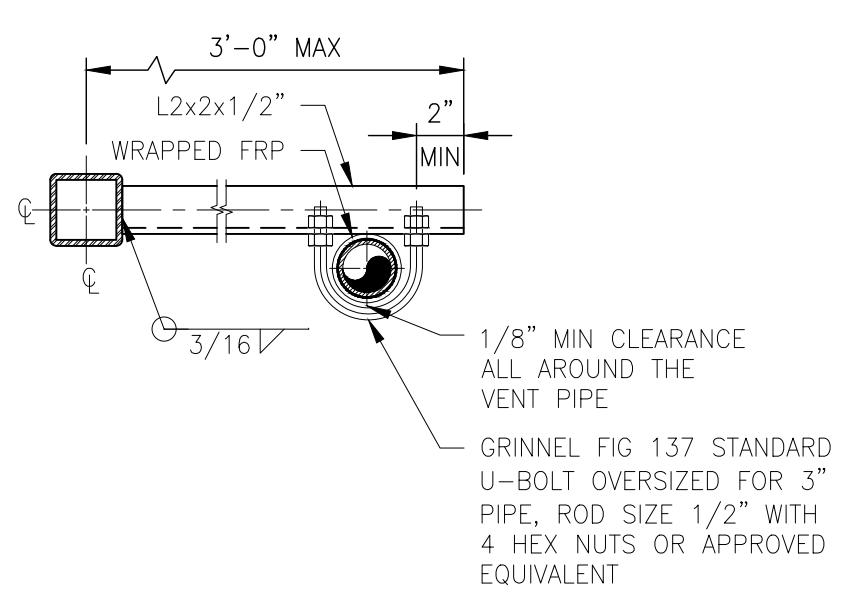
BASE PLATE DETAIL



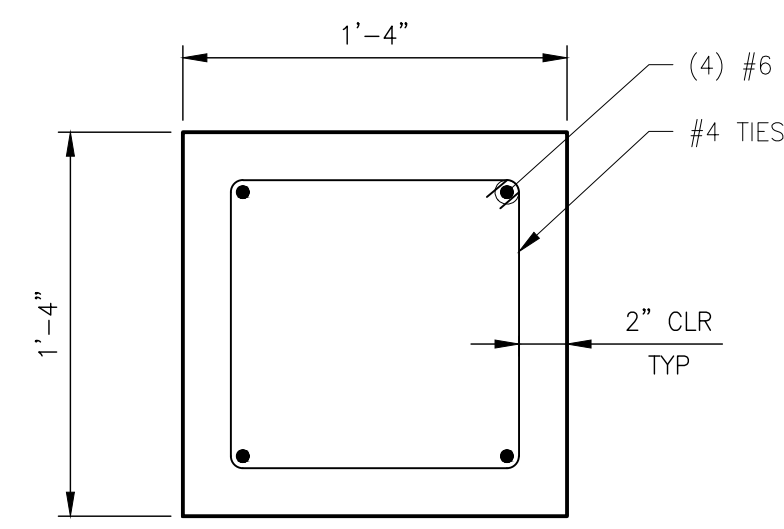
PLAN



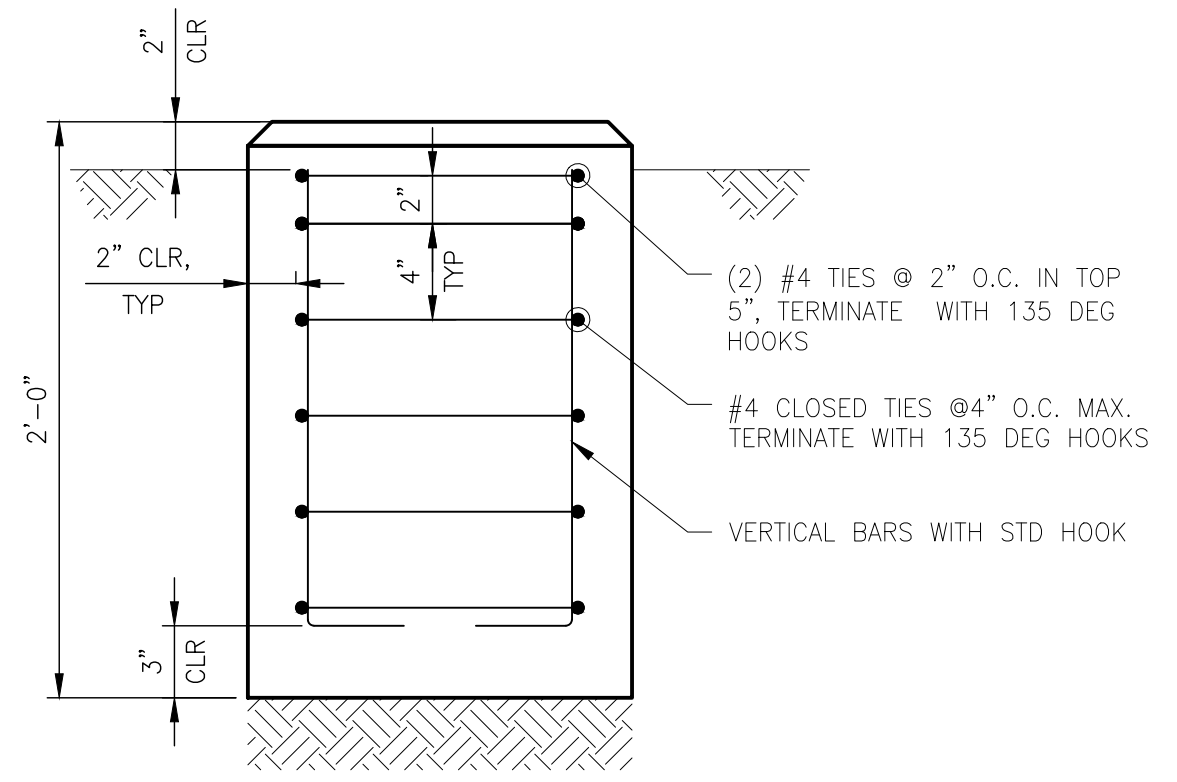
DETAIL 1



SECTION A

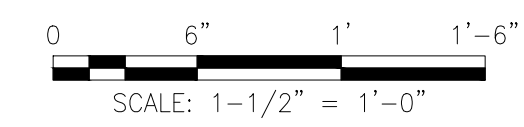


PLAN



DETAIL 2

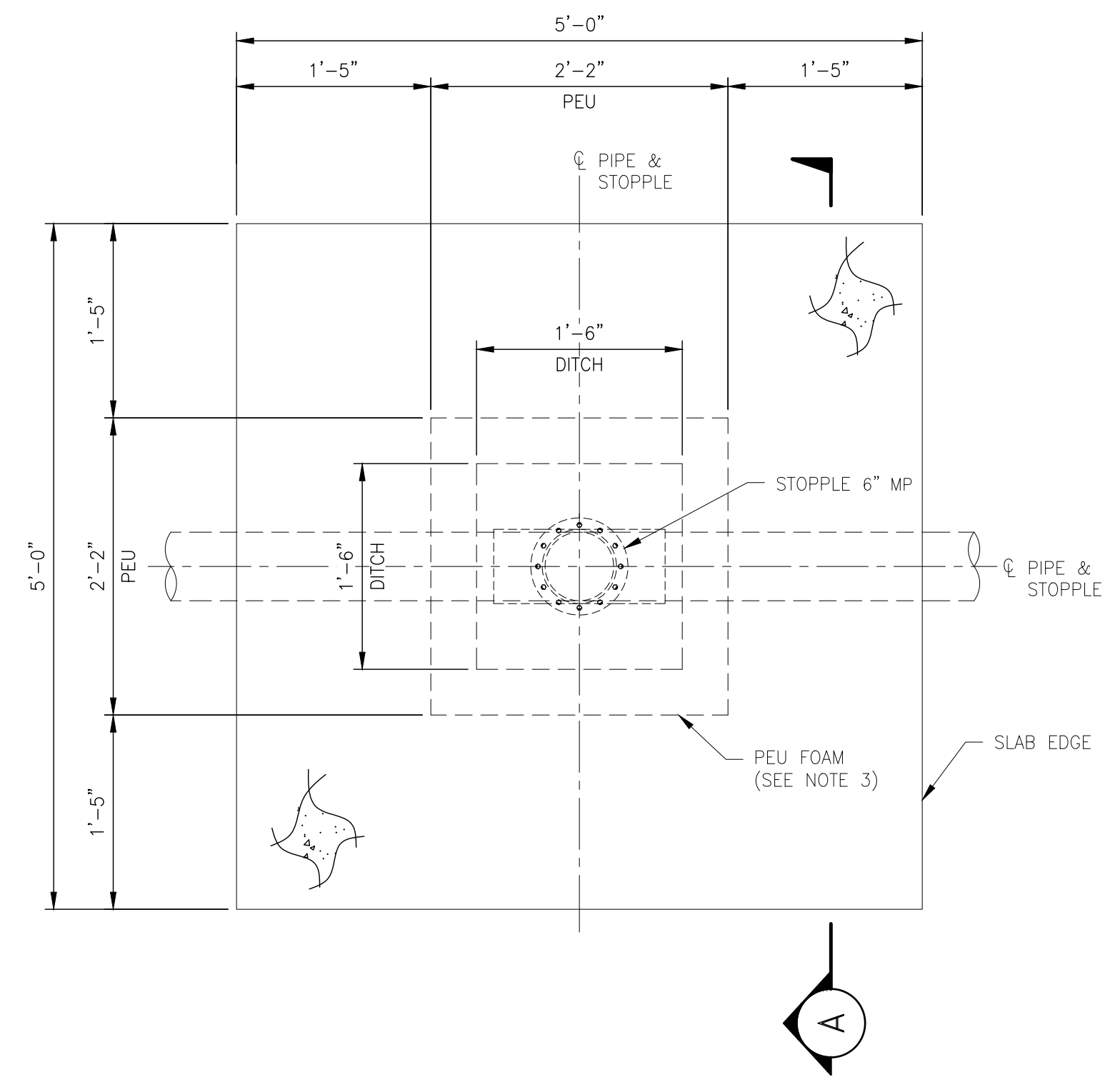
NOTE: ANCHOR AND BASE PLATE ARE NOT SHOWN FOR CLARITY.



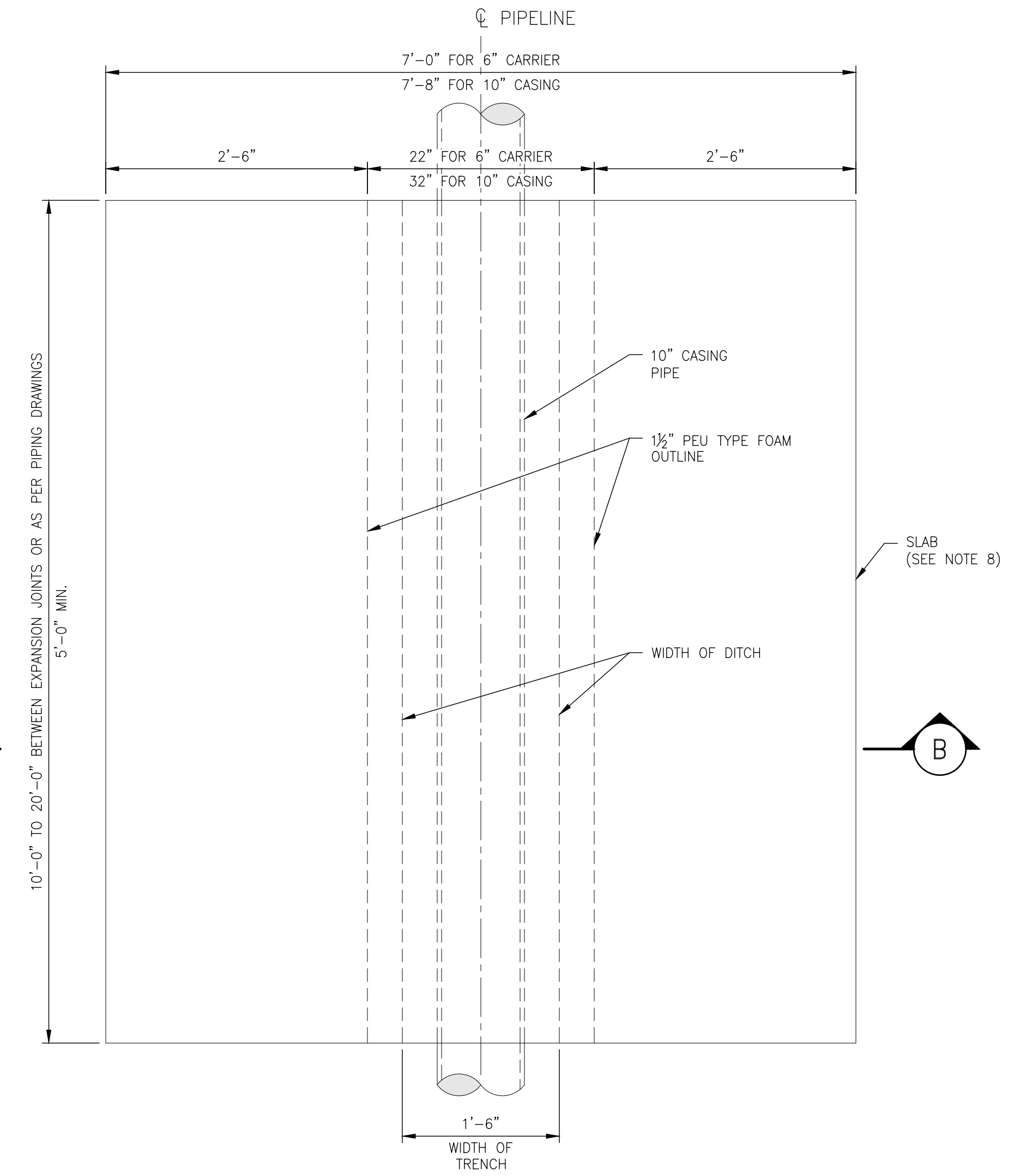
ISSUED FOR CONSTRUCTION

BY		DATE	SL 41-59 & MP GAS												
DESIGNER: R. SHAWMI		01/08/2026	WHITewater RIVER/I-10 & MONROE ST BRIDGE REPLACEMENT												
ENGINEER: M. JAISWAL		01/08/2026	VENT PIPE FIELD SUPPORT DETAILS												
CHECKER: D. MOON		01/08/2026													
PROJECT APVR: H. ORDONEZ		*													
SCG ENG APVR: J. CHEN		*													
0	01/08/2026	RS	MJ	DM	HO	JC	PE24-166	ISSUED FOR CONSTRUCTION	71363	*	ENG FILE NO: PE24-166	DWG CLASS: 26	DWG DIST: 200	DRAWING NUMBER: 82646-4008-D-STR	REV: 0

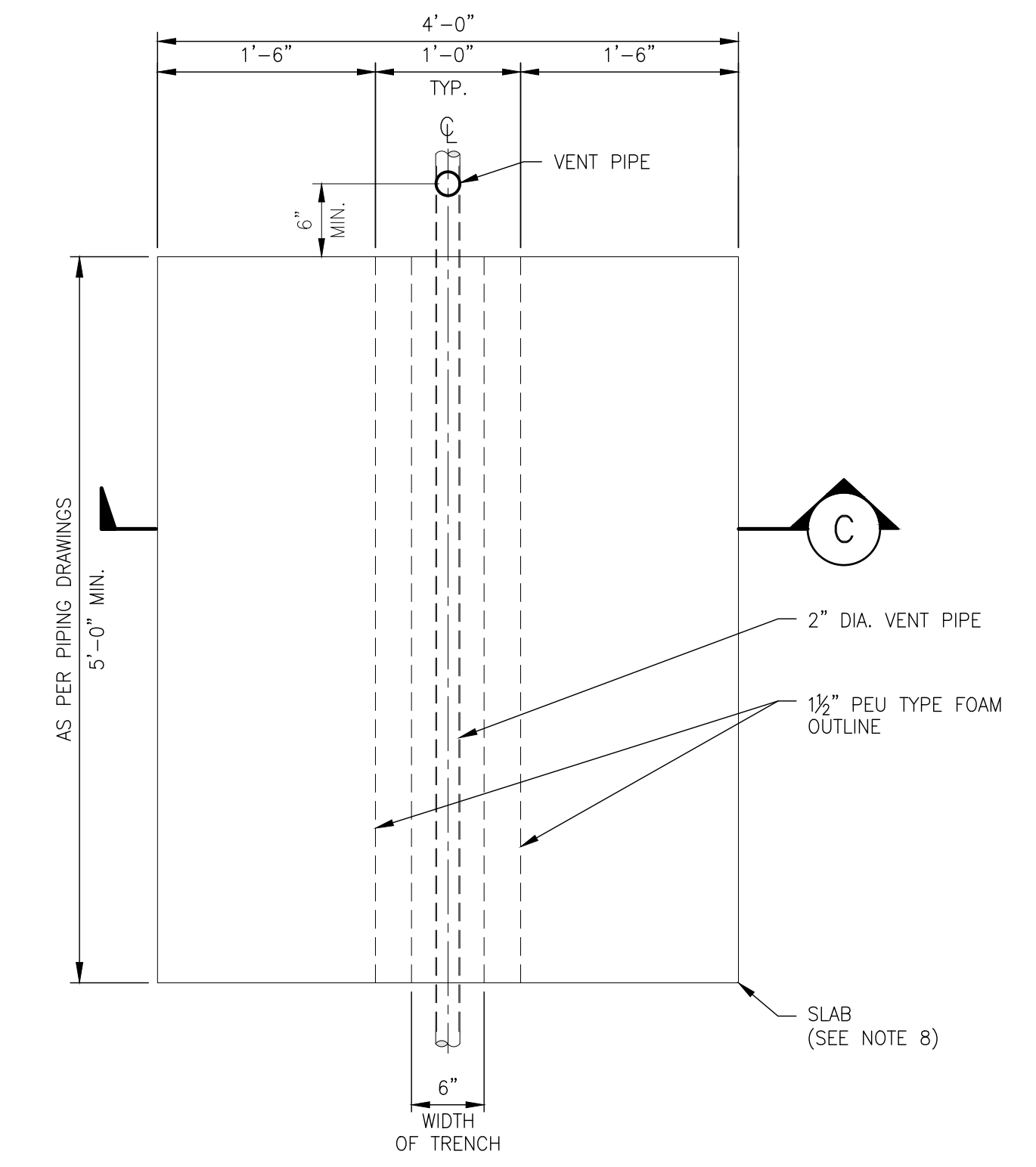
- NOTES:
- FOR GENERAL NOTES SEE DWG 82646-4001-D-STR.
 - BOTTOM OF FOUNDATION SHALL BE SCARIFIED 6" AND RECOMPACTED WITH MIN 90% COMPACTED STRUCTURAL FILL.
 - 1.80 #/CU FT CHARCOAL POLYETHER URETHANE (PEU) FOAM SHALL CONFORM TO ASTM D3574 AND SHALL BE 1 1/2" THICK AND CUT TO PLAN DIMENSIONS AND CENTERED OVER THE STOPPLE.
 - SEE 82646-3001-D-PIP TO 82646-3004-D-PIP FOR PIPE SUPPORT LOCATION.
 - CONCRETE MIN COMPRESSIVE STRENGTH 4000 PSI AT 28 DAYS.
 - PROTECTIVE SLAB DESIGN SHALL ONLY BE USED FOR NEW STOPPLE AS DETERMINED BY PIPELINE ENGINEERING & CIVIL/STRUCTURAL ENGINEERING. SLAB SHALL NOT BE USED FOR ANY OTHER NEW GAS PIPELINE & STOPPLE, FITTING INSTALLATION.
 - POLYETHYLENE SHEETING SHALL BE 5 MILS IN THICKNESS AND SHALL OVERLAP THE PEU FOAM BY AT LEAST 1 FOOT ON ALL SIDES.
 - CONTRACTOR SHALL VERIFY THAT SOIL BEARINGS MEETS THE MINIMUM SOIL BEARING OF 1500 PSF PER CBC 2022.
 - THE EXTENT OF CONCRETE PROTECTION SHALL BE AS PER PIPING DRAWING.



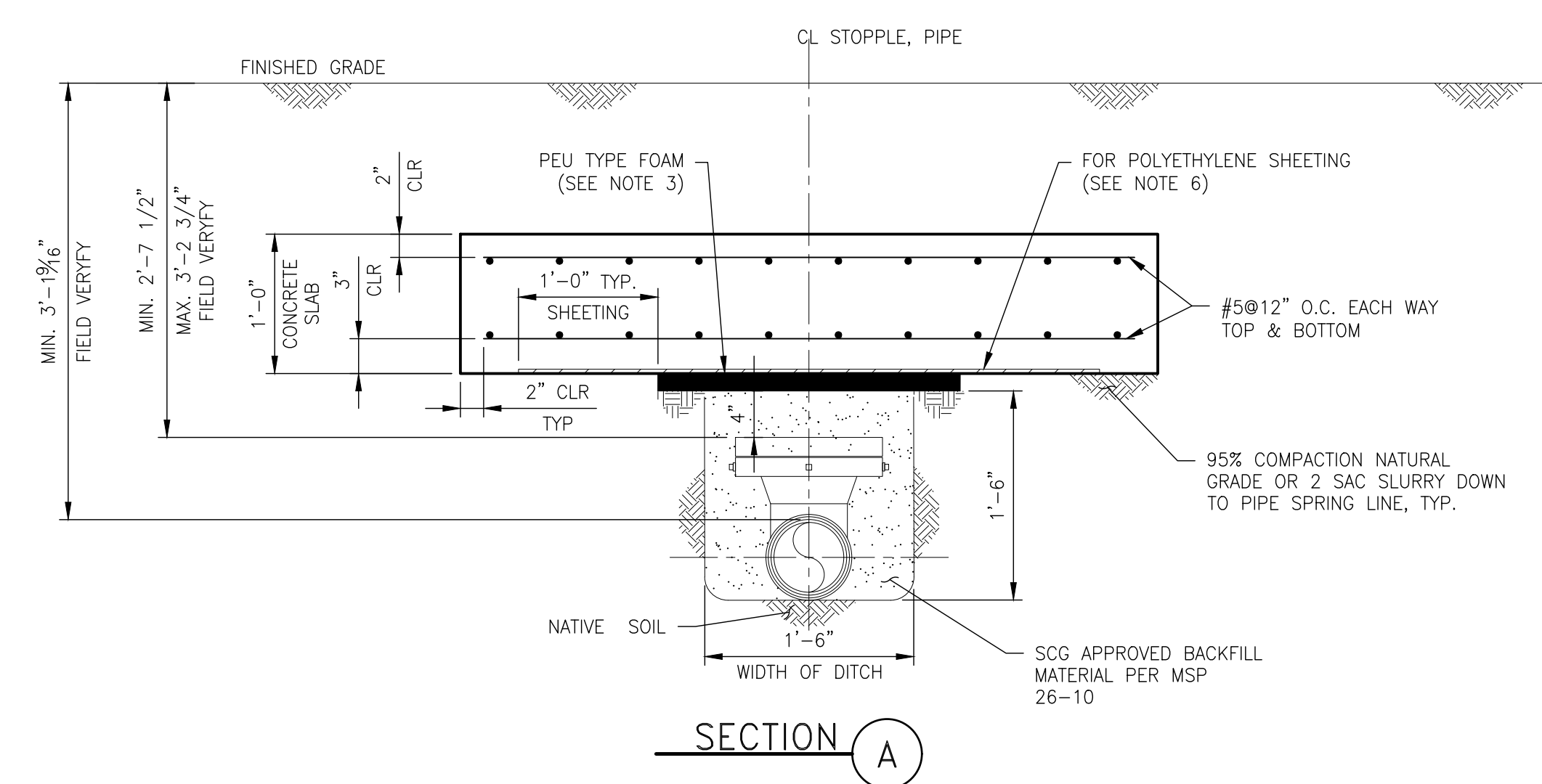
PLAN OF TYPICAL PROTECTIVE SLAB OVER STOPPLE



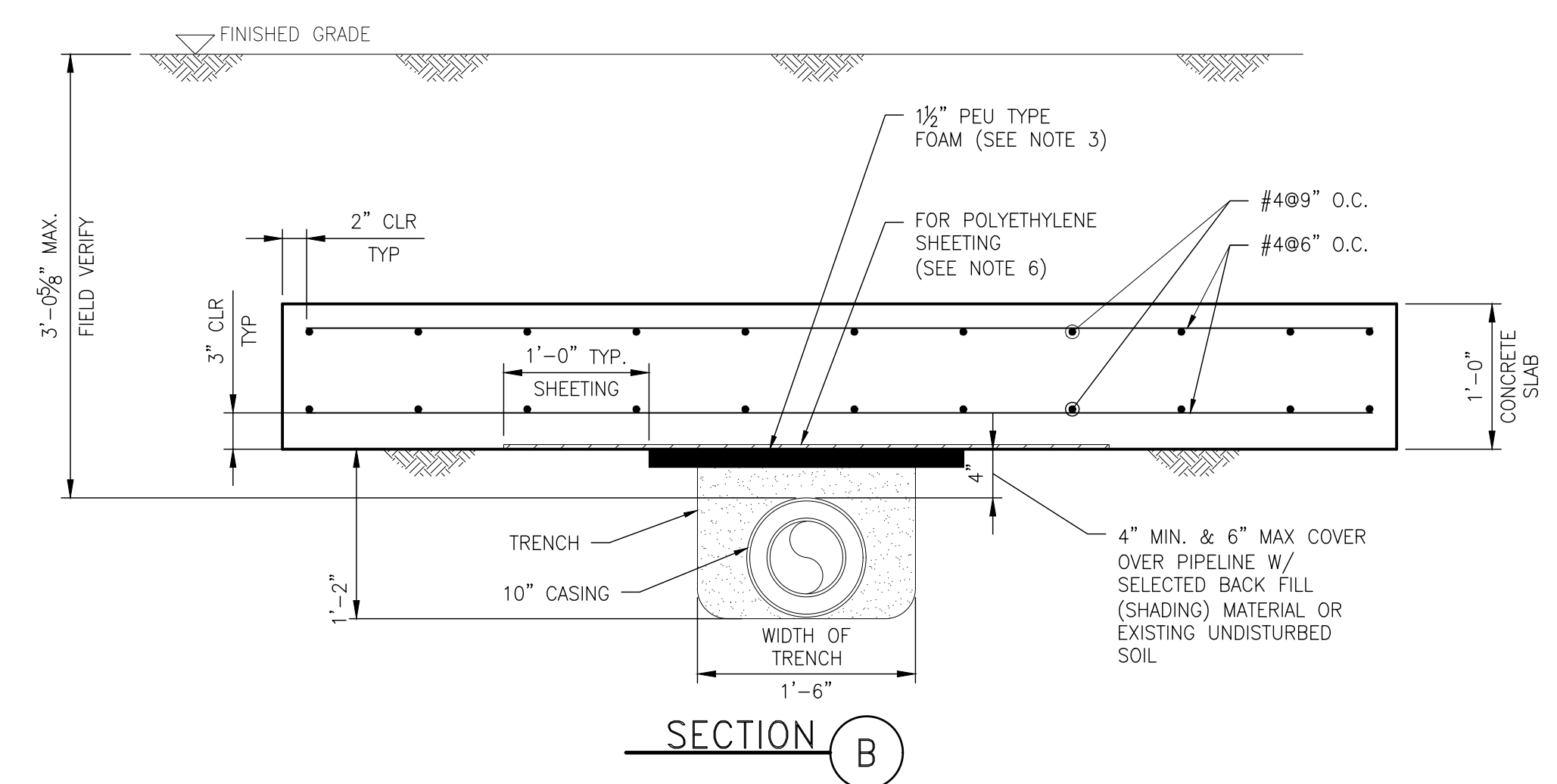
PROTECTIVE SLAB ON 6" CARRIER OR 10" CASING



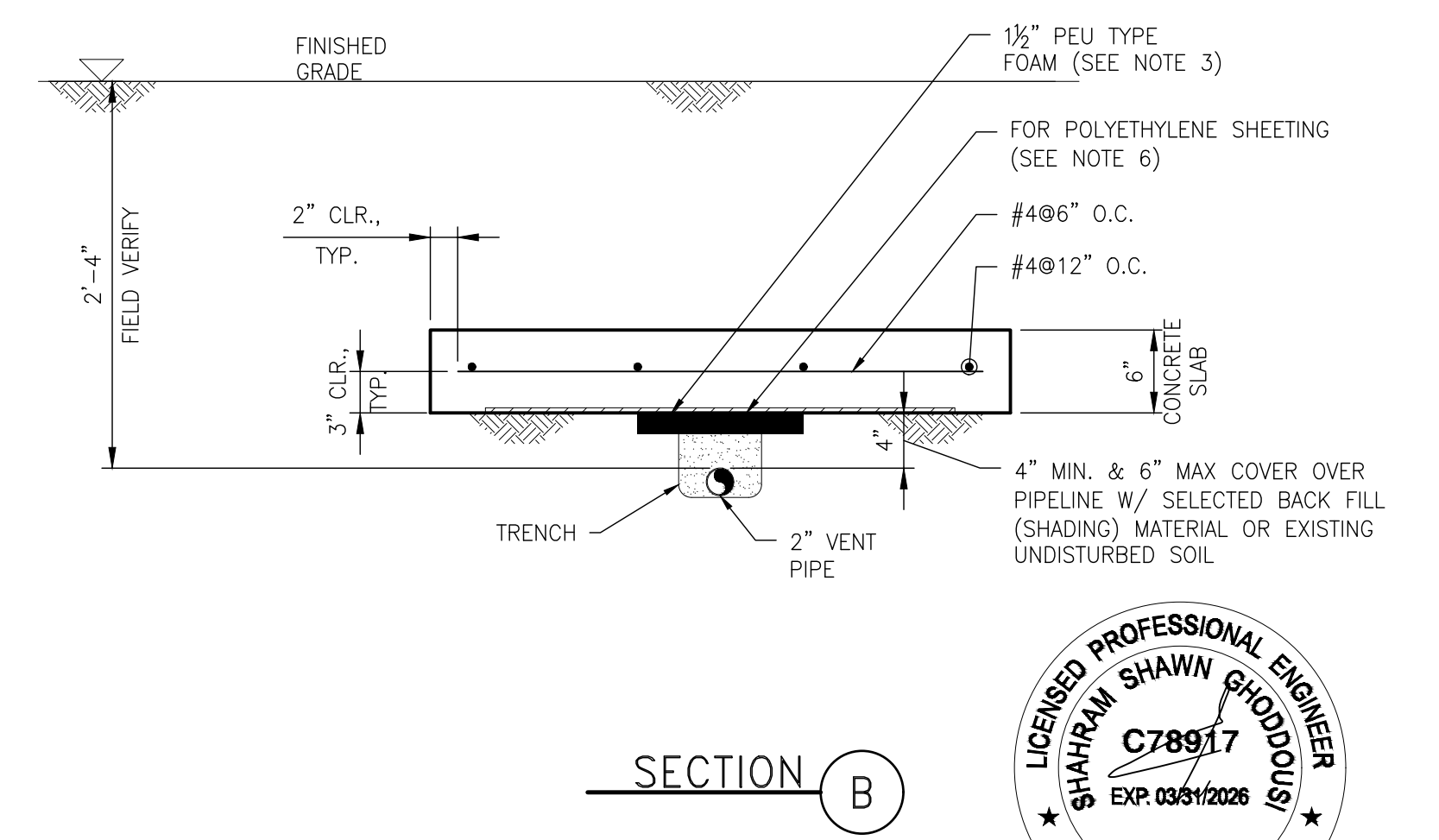
PROTECTIVE SLAB ON VENT PIPE



SECTION A



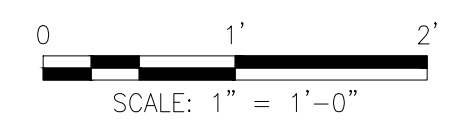
SECTION B



SECTION C

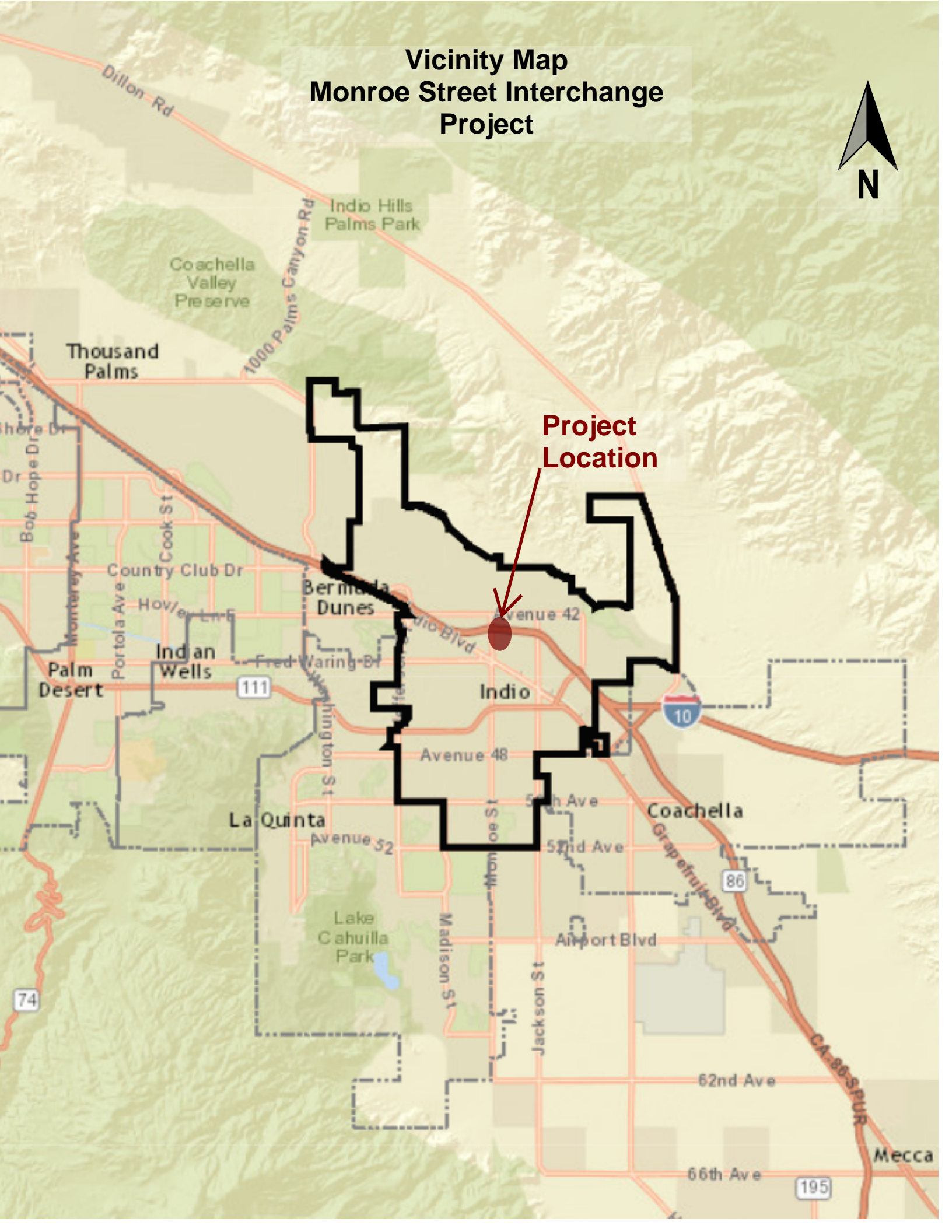


ISSUED FOR CONSTRUCTION



BY: DESIGNER: R. SWAMI		DATE: 01/08/2026		SL 41-59 & MP GAS											
ENGINEER: M. JAISWAL		01/08/2026		WHITWATER RIVER/I-10 & MONROE ST BRIDGE REPLACEMENT											
CHECKER: D. MOON		01/08/2026		CONCRETE PROTECTIVE SLAB OVER STOPPLE											
PROJECT APVR: H. ORDONEZ		*													
SCG ENG APVR: J. CHEN		*	DWG CLASS: 26	DWG DST: 200	DRAWING NUMBER: 82646-4009-D-STR										
0	01/08/2026	RS	MJ	DM	HO	JC	PE24-166	ISSUED FOR CONSTRUCTION	71363	VENDOR ID: *	ENG FILE NO: PE24-166	DWG CLASS: 26	DWG DST: 200	DRAWING NUMBER: 82646-4009-D-STR	INDO: 0

Vicinity Map Monroe Street Interchange Project



**Project
Location**

Dillon Rd

1000 Palms Canyon Rd

Indio Hills Palms Park

Coachella Valley Preserve

Thousand Palms

Bob Hope Dr

Monterey Ave

Portola Ave

Palm Desert

Indian Wells

111

Washington St

74

Country Club Dr

Hovle Ln

Bermuda Dunes

Fred Waring Dr

Indio

Avenue 48

La Quinta

Avenue 52

Lake Cahuilla Park

Madison St

5th Ave

Indio Blvd

Avenue 42

5th Ave

52nd Ave

Monroe St

Jackson St

62nd Ave

66th Ave

195

CA-86-SPUR

Mecca

Project Location

Indio Blvd

Avenue 42

5th Ave

52nd Ave

Monroe St

Jackson St

62nd Ave

66th Ave

195

CA-86-SPUR

Coachella

10

86

Grapefruit Blvd

Airport Blvd

62nd Ave

66th Ave

195

CA-86-SPUR

Mecca

CA-86-SPUR