

ADDENDUM # 1

November 15, 2024

City of Sedalia Project Number: 2024-009

Sedalia Small Sewer Project “A”

Closing date: 2:00 P.M., Monday, December 2, 2024

Bidders shall note these changes to the above Request for Quotation and incorporate these changes in their submittal. Bidders shall attach a signed acknowledged copy of this addendum to their quotation.

This addendum consists of the following information:

Bid Date

The bid date has not been changed.

Questions & Responses Date

The questions due by date has been extended to November 19, 2024 at the end of business day.

The responses due by date has been extended to November 22, 2024 at the end of business day.

Bid Form

The bid form has been changed to include RailPros Construction Observation and Flagging for both Option #1 and Option #2. The revised bid form is enclosed with this Addendum #1.

Responses to Contractor Questions

See included pre-bid meeting minutes for responses to all Contractor questions asked during the pre-bid meeting.

Questions Received Outside Pre-Bid Meeting:

1. What testing methods will be required for the force main and for the gravity main?
 - a. **ES&S Answer** – Contractor will be required to follow the KC APWA Specification Section 2500 for all testing requirements. Specification is included in the Project Manual for reference.
2. Will the jack and boring companies still be required to work 24 hours a day once they are within the railroad right of way?
 - a. **ES&S Answer** – Yes, 24 hr./7 day per week construction is required for any work within Zone A Embankments, see plans for Zone A illustrated on the profiles.

Project Manual

The project manual other than the bid form has not changed.

Plans

Option #1 Plan Set – sheet C1.01 was revised to add RailPros Construction Observation & Flagging requirements as well as 24/7 continuous construction notes for the bore under Union Pacific Railroad. The revised sheet is included with this Addendum #1.

Option #2 Plan Set – sheet C1.01 was revised to add RailPros Construction Observation & Flagging requirements as well as 24/7 continuous construction notes for the bore under Union Pacific Railroad. The revised sheet is included with this Addendum #1.

General Comment:

The requirement for RailPros Construction Observation and Flagging is once again required for construction, this has changed since the November 12th Pre-Bid meeting. The Track and Ground Monitoring is still not required.

The reason behind the addition of the RailPros Construction Observation and Flagging back to the scope of work for the contractor was because when ES&S asked Union Pacific and RailPros if 24 hr/7 day a week construction was required now that the boring depths were deeper, we were told that the track and ground monitoring will no longer be required. However, RailPros Construction Observation and Flagging would be required regardless of depth of pipe beneath the railroad tracks. The contractor is responsible for contracting with RailPros to provide Construction Observation and Flagging 24/7 during the boring work in Zone A under the railroad. The City of Sedalia acknowledges the previous concerns of contractors with managing the risk of including the RailPros work for a lump sum cost in their bids. The City of Sedalia has revised the bid form to include unit prices for RailPros provided work. The RailPros provided rate schedule is attached to this Addendum #1. The City of Sedalia has included 3 days of continuous 24/7 work within the revised bid form. This provides risk sharing between the City and the Contractor to cover the work by RailPros. If the time it takes to complete the RailPros work is less than the bid form estimated quantity, then a credit would be applied to the contract value. If more time is required than the estimated bid form quantity, then the City will compensate the Contractor at the provided unit rates. The City and ES&S understands that more questions may come from this change in scope; therefore, the questions and responses due dates have been extended.

11/15/2024



Kelly Lohsandt

Kelly Lohsandt, P.E.
MO PE-2021032813

ACKNOWLEDGEMENT

The undersigned bidder hereby certifies that the changes set forth in this addendum have been incorporated in their bid and is a part of the project.

FIRM _____

Date _____

SIGNED _____

Title _____

PRE-BID MEETING MINUTES

PROJECT: SEDALIA SMALL SEWER PROJECT A

CLIENT: CITY OF SEDALIA



PRE-BID MEETING MINUTES

November 12, 2024

2:00 P.M. – 3:00 P.M.

Attendees: (See attached Sign-In Sheet)

City of Sedalia: Jeremy Stone

Engineering Surveys & Services: Kelly Lohsandt

Contractors: C&E Excavating, McColleston Construction

Others: WireCo: Mark Svuba

I. Meeting Minutes:

- A. Meeting started at 2:00 P.M.
- B. Kelly Lohsandt explained the history of the project, that this is the second bidding, cited that needing to involve RailPros for Construction Observation and Track Monitoring in the first design was the reason for no bids received in May 2024.
- C. Kelly Lohsandt explained that there are two different design options being bid for the project now, Option #1 is a Force Main & Lift Station and Option #2 is a Gravity Sewer. Bidders can bid on one, or both of the design options.
- D. Kelly Lohsandt stated that the City will select the lowest responsive bidder on the chosen design option. Not necessarily the lowest responsive bidder of all bids received.
- E. Kelly Lohsandt went through the meeting agenda, discussed plans, bid form, and project manual.
- F. Note that RailPros Construction Observation and Track Monitoring is not required as part of construction
- G. Kelly Lohsandt noted that any tree and brush removal necessary for construction that had not already been completed be brought to the attention of the City and ES&S prior to removal.
- H. Contractor asked about the concern of removing trees during the bat clearing window. Kelly Lohsandt noted that the winter tree clearing time is November 1 – April 1 and that any clearing of trees would need to be completed by then. The C&E Excavating representatives noted that the only trees requiring removal would be on the WireCo property and are primarily small brushy trees with little concern for bat habitats.
- I. Kelly Lohsandt noted that FTC Equipment would be the packaged lift station supplier and that the design is already completed by FTC Equipment. The design plans are included in the Option #1 plan set. Contractors should contact Sydney O'Brien at SydneyF@ftcequipment.com or 816-833-7200 for pricing.
- J. Construction schedule of 60 days substantial completion and 90 days final completion was brought up, the City will be sticking with this timeframe.
- K. Kelly defined 'substantial completion' as the pipe is in the ground, tested, and ready for the city to use; 'final completion' was grass is seeded and equipment is gone from the site, demobilization has completed.
- L. C&E Excavating representatives asked about weather delays in the contract.

- a. Upon discussion with Kelly Lohsandt and Jeremy Stone of the City, it was stated that no weather delay language is included in the Project Manual; however, weather delay days should be tracked by the Contractor.
- b. Upon further review of the Project Manual Section C-700 Standard General Conditions of the Construction Contract page 46 of 60 provides clarification on contract delays.
- M. The recommendation of Contractor award will be presented to the Sedalia City Council at the December 16th Council meeting if not sooner, depending on if a special Council session can be arranged.
- N. Kelly Lohsandt noted that the awarded bidder will be required to have the contract fully executed by December 27, 2024. The notice to proceed will be delayed until the Union Pacific railroad crossing permit is executed.
- O. The Union Pacific Railroad crossing permit has not been submitted for approval yet. Once the design option that will be constructed is selected by the City, ES&S will submit for the Union Pacific Railroad crossing permit.
- P. Once the contract is awarded, the Contractor can start placing material orders prior to issuance of Notice to Proceed
- Q. The Notice to Proceed will be given once the Union Pacific Railroad crossing permit is finalized.
- R. It is not expected that the Corps of Engineers to be present for stream impacts.
- S. Once asked, no one wanted to go walk the site as most present had walked the site after the May 2024 pre-bid meeting.
- T. Meeting concluded approximately 2:20 P.M.

PRE-CONSTRUCTION MEETING

PROJECT: SEDALIA SMALL SEWER PROJECT A

CLIENT: CITY OF SEDALIA



Engineering Surveys
& Services

DELIVERING YOUR VISION™

PRE-CONSTRUCTION MEETING SIGN-IN SHEET

November 12, 2024

2:00 P.M. – 4:00 P.M.

Name:	Company:	Phone Number:	Email:
Jake Fetterman	C+E Excavating	660-619-3615	jake@candeeexcavating.net
Kevin Long	C-E Excavating	660-620-2276	Kevin@candeeexcavating.net
MARK SVUBA	WIRECO	810-617-3216	MARK.SVUBA@WIRECO.COM
Chris Holm	C+E Excavating	660-829-3478	Chris@candeeexcavating.net
REED MCCOLLESTER	MCCOLLESTER Const	660-620-2546	REED@MCCOLLESTER CONSTRUCTION .com
Kelly Kohnsandt	ES+S	660-826-8618	Kkohnsandt@ess-inc.com
Jeremy Stone	City	660-619-1209	jstone@sedalia.com

Sedalia Sanitary Sewer Project "A" - BID FORM**OPTION #1 - FORCE MAIN & LIFT STATION SEWER PLAN**

November 15, 2024

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
1	MOBILIZATION	LS	1		
2	CONNECT TO EXISTING SANITARY SEWER	EA	1		
3	4 INCH DR 11 HDPE SEWER PIPE WITH TRACER WIRE	LF	507		
4	FORCE MAIN FITTINGS & THRUST BLOCKS	EA	4		
5	FORCE MAIN MARKER	EA	5		
6	SANITARY SEWER ID TAPE	LF	396		
7	OPEN CUT ROCK EXCAVATION	CY	10		
8	12" D50 RIP RAP	CY	24.4		
9	CLEANOUTS	EA	2		
10	JACK & BORE SEWER WITH 12" STEEL CASING	LF	101		
11	JACK & BORE SEWER WITH 12" STEEL CASING IN ROCK	LF	10		
12	CONCRETE PIPE ENCASEMENT	LF	20		
13	TRENCH CHECK DAM	CY	12		
14	TREE PRESERVATION BARRIER W/ SILT FENCE	LF	835		
15	SEED AND STRAW	LS	1		
16	CHAINLINK FENCE REMOVAL AND REPLACEMENT	LF	150		
17	8 INCH PVC SDR35 SEWER PIPE	LF	50		

Sedalia Sanitary Sewer Project "A" - BID FORM**OPTION #1 - FORCE MAIN & LIFT STATION SEWER PLAN**

November 15, 2024

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
18	PACKAGED FIBERGLASS LIFT STATION & CONTROL PANEL	EA	1		
19	36" DUAL WALL SANITITE PIPE WITH END CAPS	LF	22		
20	12" DUAL WALL SANITITE PIPE WITH FITTINGS	LF	9.1		
21	3/4" GRAVEL PAD (6" DEEP) W/ GEOTEXTILE	SY	245		
22	6' TALL CHAIN LINK FENCE W/ 3 STRAND BARBED WIRE	LF	160		
23	GATE KNOX BOX	EA	1		
24	LIGHT POLE (INCL. BASE, POLE, 500 LUMEN FIXTURE)	EA	1		
25	4" SCH 40 PVC CONDUIT	LF	95		
26	ELECTRICAL SERVICE (SINGLE PHASE 120/240 V)	LS	1		
27	ONSITE GRADING, PLACEMENT & COMPACTION	CY	90		
28	LIFT STATION SIGNAGE	EA	4		
29	CONTRACTOR FURNISHED SURVEYING AND STAKING	LS	1		

Sedalia Sanitary Sewer Project "A" - BID FORM

OPTION #1 - FORCE MAIN & LIFT STATION SEWER PLAN

November 15, 2024

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
30	RAILPROS CONSTRUCTION OBSERVATION - MOBILZATION/ ADMINISTRATION FEE	EA	2		
31	RAILPROS CONSTRUCTION OBSERVATION - STANDARD 8-HR DAY (2 PEOPLE FOR 3 DAYS)	EA	6		
32	RAILPROS CONSTRUCTION OBSERVATION - OVERTIME BEYOND STANDARD 8-HR DAY (OVERTIME FOR 2 PEOPLE OVER 3 DAYS OF 24/7 CONSTRUCTION)	HR	24		
33	RAILPROS FLAGGING - STANDARD 8-HR WORKDAY (2 PEOPLE FOR 3 DAYS)	EA	6		
34	RAILPROS FLAGGING - OVERTIME BEYOND 8-HR DAY (OVERTIME FOR 2 PEOPLE OVER 3 DAYS OF 24/7 CONSTRUCTION)	HR	24		
Option #1 - Total of All Bid Prices					

Sedalia Sanitary Sewer Project "A" - BID FORM

OPTION #1 - FORCE MAIN & LIFT STATION SEWER PLAN ALTERNATES

November 15, 2024

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
1	ABANDON BORE AND GROUT FULL	LS	1		
Option #1 - Total of All Alternate Bid Prices					

Sedalia Sanitary Sewer Project "A" - BID FORM

OPTION #2 - GRAVITY SANITARY SEWER PLAN

November 15, 2024

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
1	MOBILIZATION	LS	1		
2	CONNECT TO EXISTING MANHOLE	EA	1		
3	8 INCH PVC SDR26 SEWER PIPE	LF	35.8		
4	8 INCH PVC SDR35 SEWER PIPE	LF	429.1		
5	OPEN CUT TRENCH ROCK EXCAVATION	CY	20		
6	12" D50 RIP RAP	CY	24.4		
7	DEEP DOUBLE CAGE CONCRETE MANHOLE (INCLUDES 17.48 TOTAL VERTICAL FEET)	EA	1		
8	CONCRETE MANHOLE (INCLUDES 20.14 TOTAL VERTICAL FEET)	EA	2		
9	8" STUB IN MANHOLE (CAP AND A-LOK)	EA	2		
10	JACK & BORE SEWER WITH 16" STEEL CASING	LF	98		
11	JACK & BORE SEWER WITH 16" STEEL CASING IN ROCK	LF	15		
12	CONCRETE PIPE ENCASEMENT	LF	20		
13	TRENCH CHECK DAM	CY	15		

Sedalia Sanitary Sewer Project "A" - BID FORM

OPTION #2 - GRAVITY SANITARY SEWER PLAN

November 15, 2024

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
14	TREE PRESERVATION BARRIER W/ SILT FENCE	LF	830		
15	SEED AND STRAW	LS	1		
16	CHAINLINK FENCE REMOVAL AND REPLACEMENT	LF	150		
17	CONTRACTOR FURNISHED SURVEYING AND STAKING	LS	1		
18	RAILPROS CONSTRUCTION OBSERVATION - MOBILIZATION/ADMINISTRATION FEE	EA	2		
19	RAILPROS CONSTRUCTION OBSERVATION - STANDARD 8-HR DAY (2 PEOPLE FOR 3 DAYS)	EA	6		
20	RAILPROS CONSTRUCTION OBSERVATION - OVERTIME BEYOND STANDARD 8-HR DAY (OVERTIME FOR 2 PEOPLE OVER 3 DAYS OF 24/7 CONSTRUCTION)	HR	24		
21	RAILPROS FLAGGING - STANDARD 8-HR WORKDAY (2 PEOPLE FOR 3 DAYS)	EA	6		
22	RAILPROS FLAGGING - OVERTIME BEYOND 8-HR DAY (OVERTIME FOR 2 PEOPLE OVER 3 DAYS OF 24/7 CONSTRUCTION)	HR	24		
Option #2 - Total of All Bid Prices					

Sedalia Sanitary Sewer Project "A" - BID FORM

OPTION #2 - GRAVITY SANITARY SEWER PLAN ALTERNATES

November 15, 2024

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
1	ABANDON BORE AND GROUT FULL	LS	1		
Option #2 - Total of All Alternate Bid Prices					

RailPros Provided Rates
November 15, 2024

Observation Rates:

The daily rates for said services to be provided under this Agreement are based on eight (8) hours per day and will be as follows:

- **Mobilization/Administrative Fee**.....\$1,000 per Observer Required (each project number(s) will incur a fee for travel and administrative costs per Observer). 24 Hour continuous work requires two Observers. Project must be cancelled 4 business days prior to the scheduled start date to avoid additional mobilization fee. Cancellations and release of field staff must be made in writing to Utilities.Office.Staff@railpros.com. Multiple mobilization fees or additional labor fees will be charged if the project cannot be constructed in consecutive days (Monday through Saturday is considered a work week) or if there is any delay during installation.
- **Construction Observation Fees**.....\$1,400/Standard 8-hour day. Overtime rate after 8 hours is \$200 per hour (all scheduling requests require a minimum 10-business days' notification).
- **Surcharge Fee**.....Activity in certain regions of the U.S. has created high demand for hotel rooms and increased related travel costs. The Project falls within such a region, therefore a surcharge of **\$300.00 per day** will be added to the invoice.

*** Please note, rates are subject to change. ***

Flagging Rates:

The rates for our services are as follows for work performed on, over or under Union Pacific ROW:

Standard Workday:	
Standard 8-hour day	\$1,018.00
Overtime rate per hour after 8 hours	\$135.00
Nights, Weekends, and Holidays:	
Standard 8-hour day	\$1,285.00
Overtime rate per hour after 8 hours	\$154.00

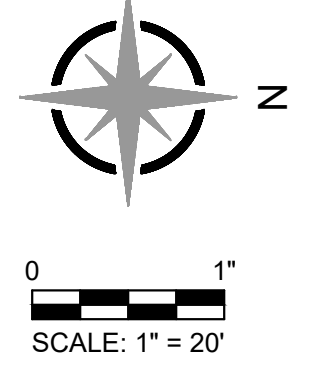
In the event of cancellation, if RailPros Management is given less than 24 hours' notice, it is considered a billable day. Cancellations must be made in writing to UP.Info@RailPros.com.

This quote is based on RailPros standard labor rates and does not take into any account prevailing wage requirements. If prevailing wages are applicable for this project, RailPros will re-quote based on the prevailing wage requirements.

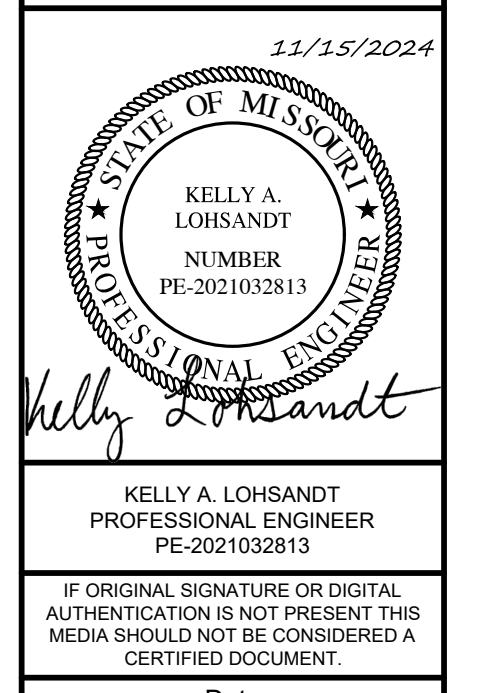
Invoices are submitted upon completion of the job or at month's end. On-going jobs are billed on a monthly basis. Payments of invoices are due upon receipt. Invoices are subject to a 1.5% fee for every 30 days the payment is delinquent. Please contact RailPros at 877-315-0513 or UP.Info@railpros.com for more information.

The quoted rates are valid for 30 days and is subject to the Services Agreement (SA).

*** Please note that these rates are subject to change based on factors such as location and prevailing wage conditions. ***



CITY OF SEDALIA
SMALL SEWER PROJECT "A"
 SEDALIA, PETTIS COUNTY, MISSOURI

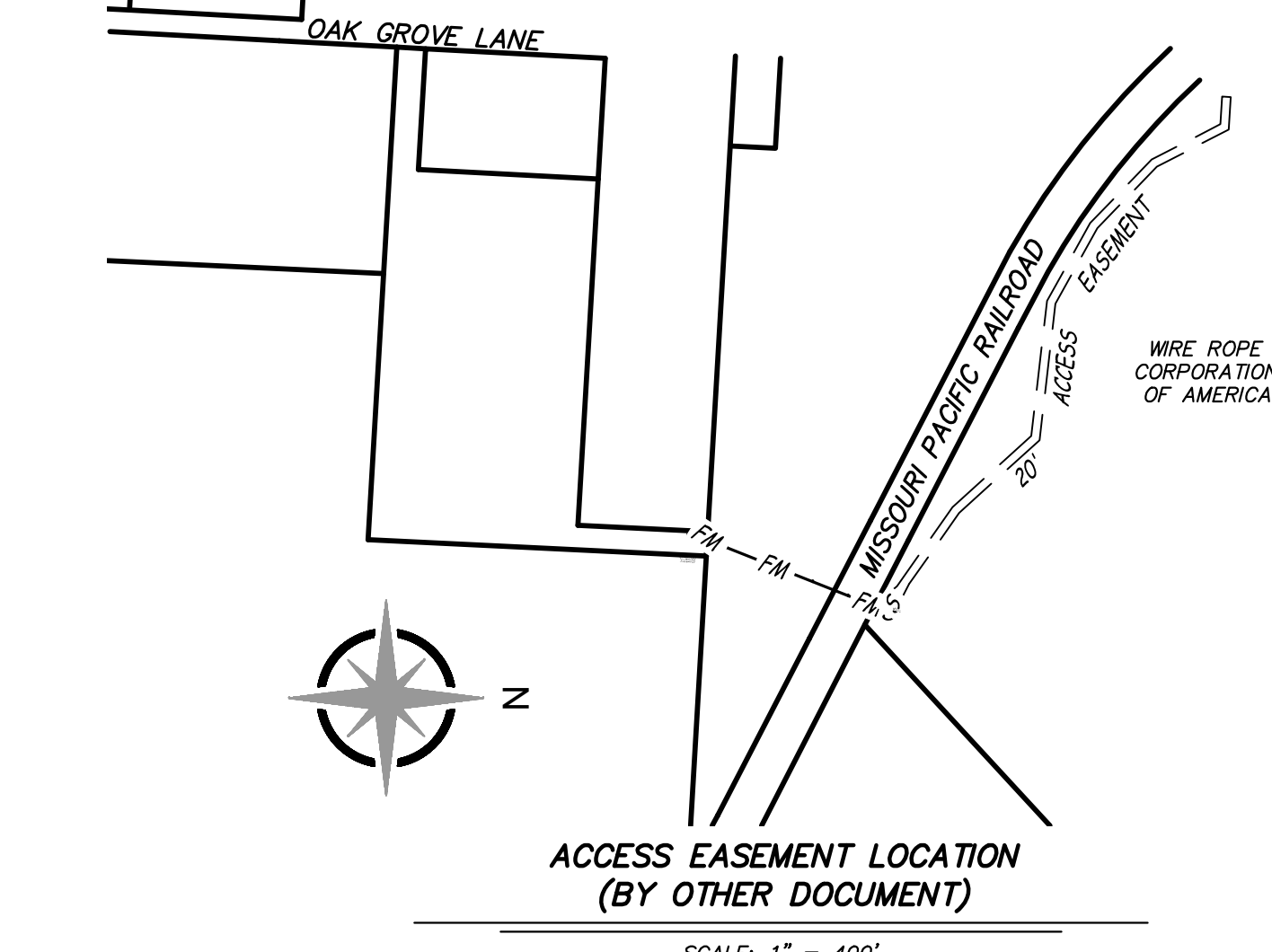
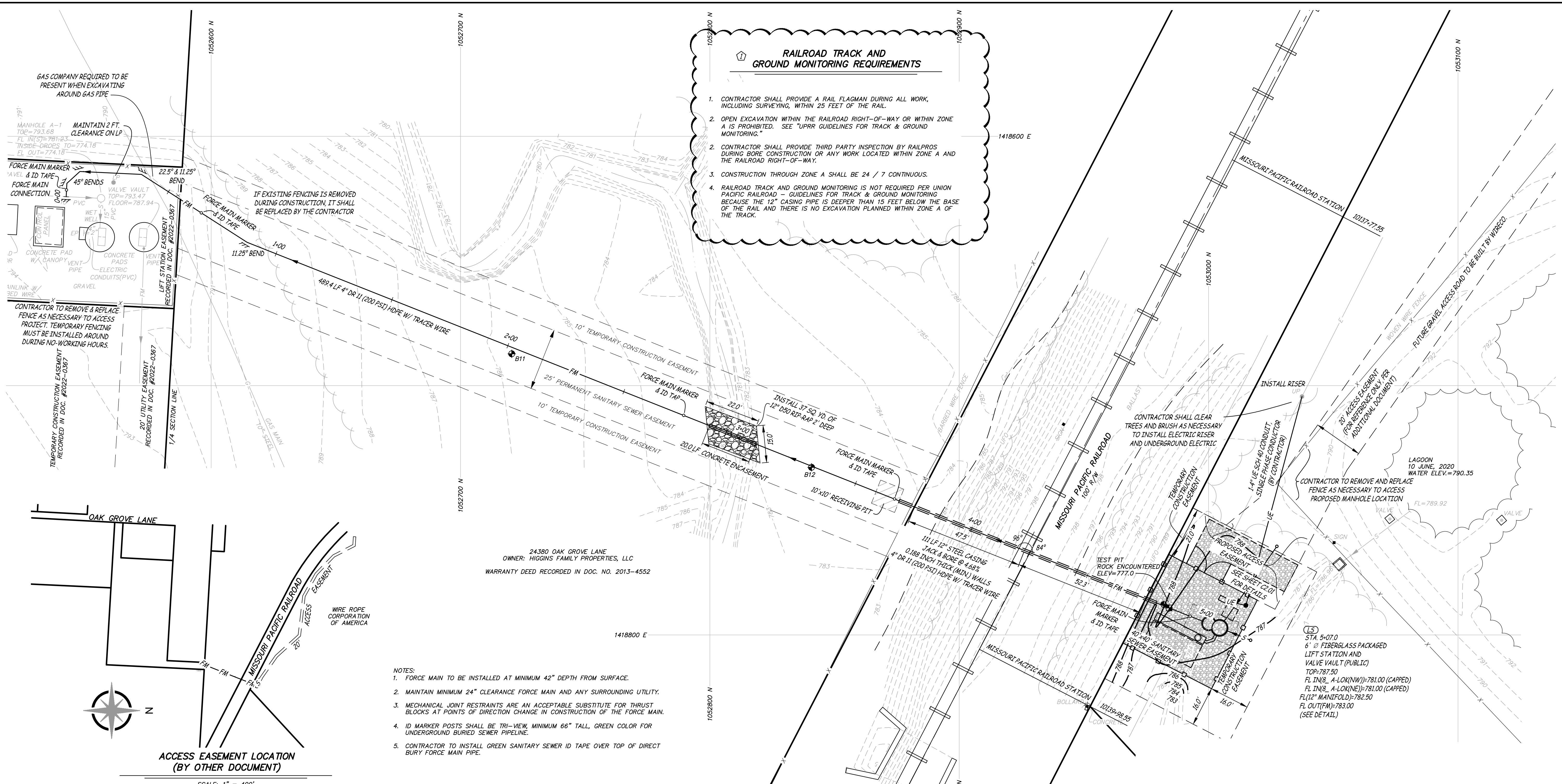


100% CONSTRUCTION DOCUMENTS

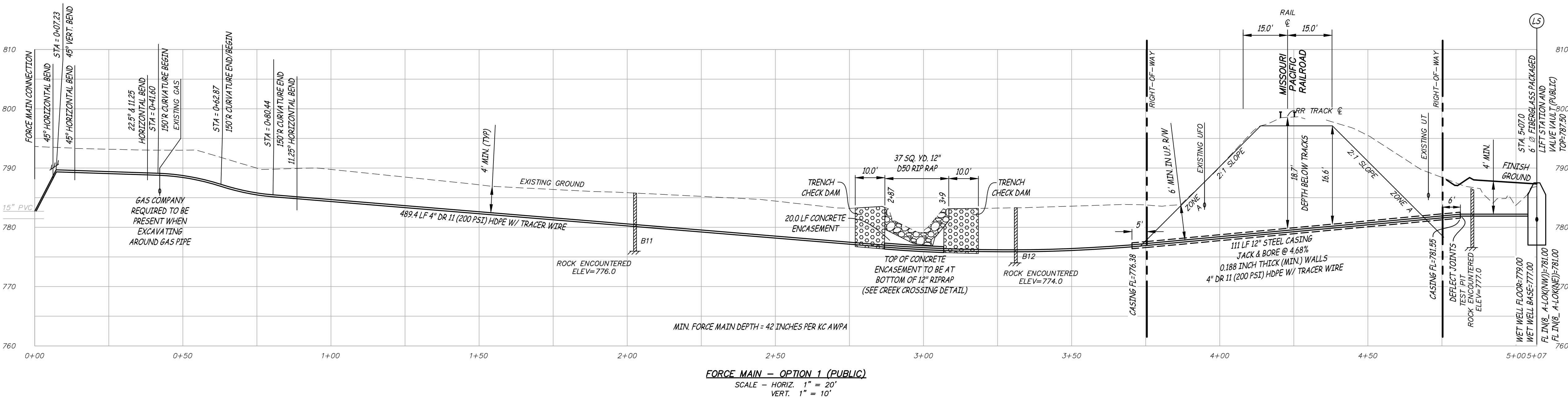
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SANITARY SEWER PLAN & PROFILE			
Sheet			
C1.01			
ES&S PROJECT NO. 16408			

RAILROAD TRACK AND GROUND MONITORING REQUIREMENTS

- CONTRACTOR SHALL PROVIDE A RAIL FLAGMAN DURING ALL WORK, INCLUDING SURVEYING, WITHIN 25 FEET OF THE RAIL.
- OPEN EXCAVATION WITHIN THE RAILROAD RIGHT-OF-WAY OR WITHIN ZONE A IS PROHIBITED. SEE "UPRR GUIDELINES FOR TRACK & GROUND MONITORING."
- CONTRACTOR SHALL PROVIDE THIRD PARTY INSPECTION BY RAILPROS DURING BORE CONSTRUCTION OR ANY WORK LOCATED WITHIN ZONE A AND THE RAILROAD RIGHT-OF-WAY.
- CONSTRUCTION THROUGH ZONE A SHALL BE 24 / 7 CONTINUOUS.
- RAILROAD TRACK AND GROUND MONITORING IS NOT REQUIRED PER UNION PACIFIC RAILROAD - GUIDELINES FOR TRACK & GROUND MONITORING BECAUSE THE 12" CASING PIPE IS DEEPER THAN 15 FEET BELOW THE BASE OF THE RAIL AND THERE IS NO EXCAVATION PLANNED WITHIN ZONE A OF THE TRACK.



- NOTES:**
- FORCE MAIN TO BE INSTALLED AT MINIMUM 42" DEPTH FROM SURFACE.
 - MAINTAIN MINIMUM 24" CLEARANCE FORCE MAIN AND ANY SURROUNDING UTILITY.
 - MECHANICAL JOINT RESTRAINTS ARE AN ACCEPTABLE SUBSTITUTE FOR THRUST BLOCKS AT POINTS OF DIRECTION CHANGE IN CONSTRUCTION OF THE FORCE MAIN.
 - ID MARKER POSTS SHALL BE TRI-VIEW, MINIMUM 66" TALL, GREEN COLOR FOR UNDERGROUND BURIED SEWER PIPELINE.
 - CONTRACTOR TO INSTALL GREEN SANITARY SEWER ID TAPE OVER TOP OF DIRECT BURY FORCE MAIN PIPE.

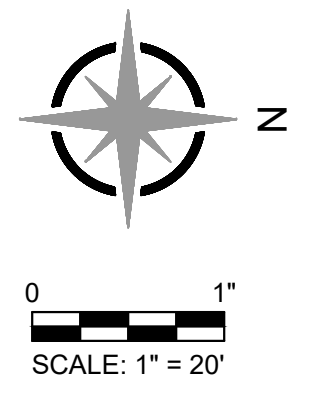


RAILROAD CROSSING DATA

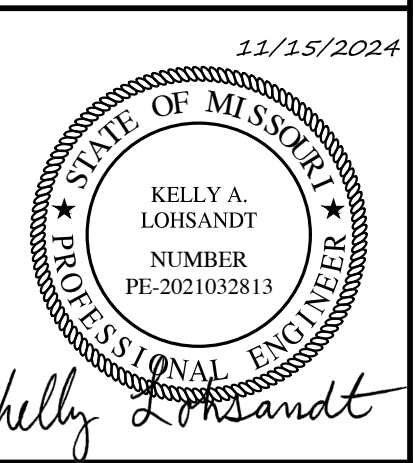
	CARRIER PIPE	CASING PIPE
CONTENTS TO BE HANDLED:	SANITARY SEWER	SANITARY SEWER
OUTSIDE DIAMETER:	4.50 INCHES	12 INCHES
PIPE MATERIAL:	HDPE	STEEL CASING
SPECIFICATION AND GRADE:	DR11 HDPE	35,000 PSI GRADE B
WALL THICKNESS:	0.409 INCHES	0.188 INCH MIN.
ACTUAL WORKING PRESSURE:	8.7 PSI	N/A
TYPE OF JOINT:	GASKETED	WELDED
COATING:	NONE	ASPHALT COATING
METHOD OF INSTALLATION:	JACK AND BORE	
SEALS:	RUBBER, SEALED CASING PIPE	
BURY (BASE OF RAIL TO TOP OF CASING):	18.7 FEET	
BURY (NOT BENEATH TRACK):	16.6 FEET	
BURY (ROADWAY DITCHES):	6 FEET	
BURY (BASE OF RAIL TO BOTTOM JACKING/RECEIVING PITS):	19.5 FEET MIN.	
CATHODIC PROTECTION:	NONE	

NOTES:
 1. KANSAS CITY APWA SPECIFICATIONS SHALL BE FOLLOWED WITHIN PROJECT.

C:\USERS\ME\ONEDRIVE - ENGINEERING SURVEYS & SERVICES\GENERAL PROJECTS\16408-SEDALIA-SEWER-PROJECT\A-ALTERNATE DESIGN\CAD\16408 FORCE MAIN OPTION 1.DWG 11/14/2024



CITY OF SEDALIA
SMALL SEWER PROJECT "A"
 SEDALIA, PETTIS COUNTY, MISSOURI



Kelly A. Lohsandt
 PROFESSIONAL ENGINEER
 NUMBER PE-2021032813

IF ORIGINAL SIGNATURE OR DIGITAL AUTHENTICATION IS NOT PRESENT THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

Date
OCTOBER 28, 2024

Revised
 NOVEMBER 15, 2024

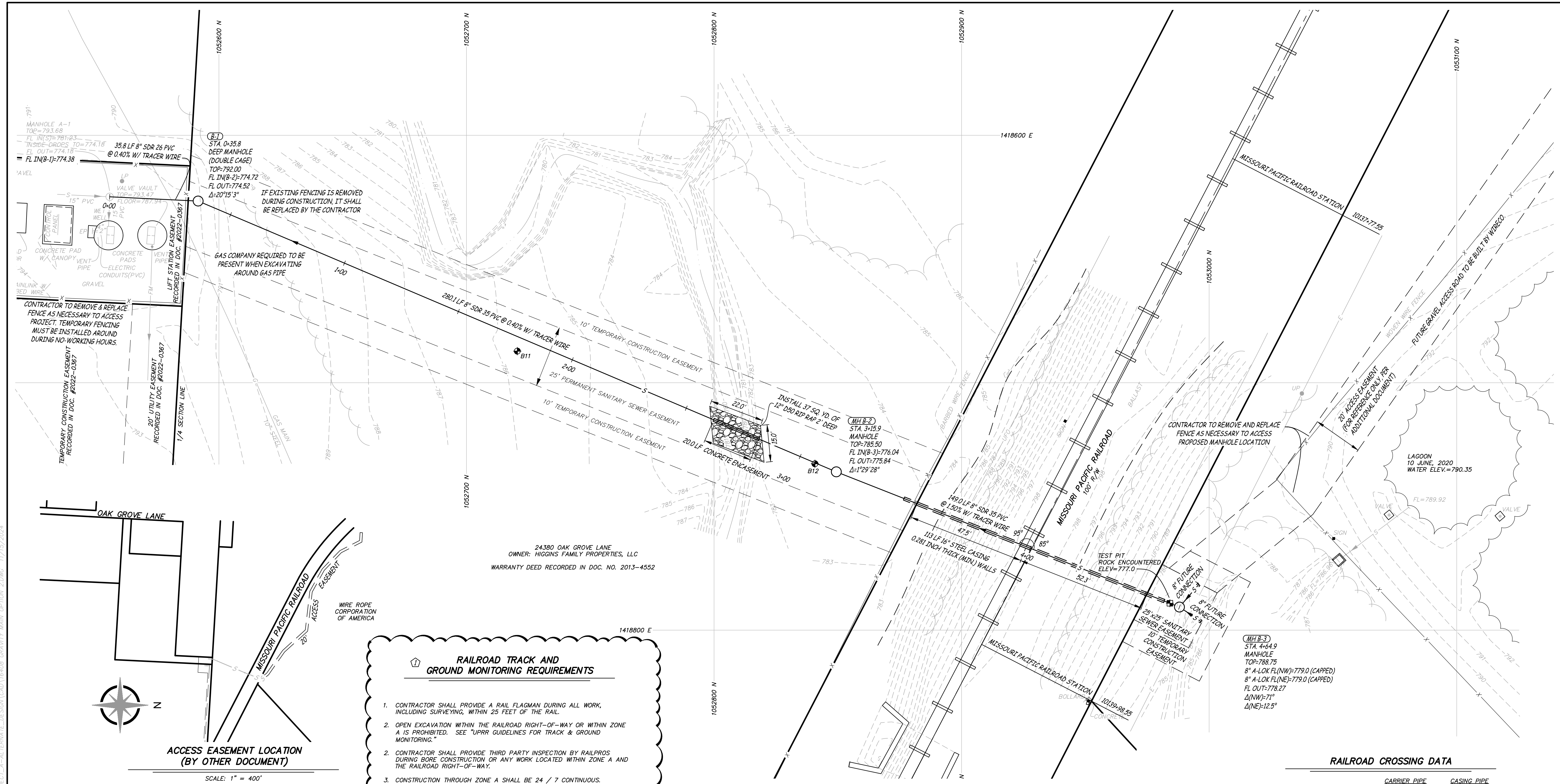
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SANITARY SEWER PLAN & PROFILE

Sheet
C1.01

ES&S PROJECT NO. 16408

100% CONSTRUCTION DOCUMENTS



RAILROAD TRACK AND GROUND MONITORING REQUIREMENTS

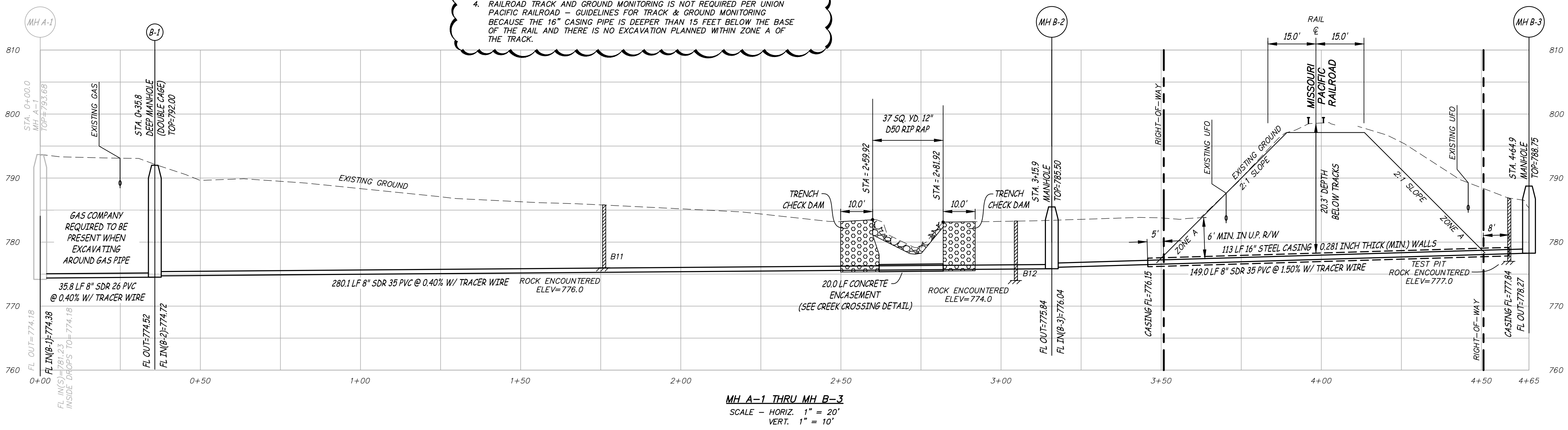
- CONTRACTOR SHALL PROVIDE A RAIL FLAGMAN DURING ALL WORK, INCLUDING SURVEYING, WITHIN 25 FEET OF THE RAIL.
- OPEN EXCAVATION WITHIN THE RAILROAD RIGHT-OF-WAY OR WITHIN ZONE A IS PROHIBITED. SEE "UPRR GUIDELINES FOR TRACK & GROUND MONITORING."
- CONTRACTOR SHALL PROVIDE THIRD PARTY INSPECTION BY RAILPROS DURING BORE CONSTRUCTION OR ANY WORK LOCATED WITHIN ZONE A AND THE RAILROAD RIGHT-OF-WAY.
- CONSTRUCTION THROUGH ZONE A SHALL BE 24 / 7 CONTINUOUS.

RAILROAD TRACK AND GROUND MONITORING IS NOT REQUIRED PER UNION PACIFIC RAILROAD - GUIDELINES FOR TRACK & GROUND MONITORING BECAUSE THE 16" CASING PIPE IS DEEPER THAN 15 FEET BELOW THE BASE OF THE RAIL AND THERE IS NO EXCAVATION PLANNED WITHIN ZONE A OF THE TRACK.

RAILROAD CROSSING DATA

	CARRIER PIPE	CASING PIPE
CONTENTS TO BE HANDLED:	SANITARY SEWER	SANITARY SEWER
OUTSIDE DIAMETER:	8.4 INCHES	16 INCHES
PIPE MATERIAL:	PVC	STEEL CASING
SPECIFICATION AND GRADE:	SDR 35 PVC	35,000 PSI GRADE B
WALL THICKNESS:	0.24 INCHES	0.312 INCH MIN.
ACTUAL WORKING PRESSURE:	N/A	N/A
TYPE OF JOINT:	GASKETED	WELDED
COATING:	NONE	ASPHALT COATING
METHOD OF INSTALLATION:	JACK AND BORE	
SEALS:	RUBBER, SEALED CASING PIPE	
BURY (BASE OF RAIL TO TOP OF CASING):	20.3 FEET	
BURY (NOT BENEATH TRACK):	13.2 FEET	
BURY (ROADWAY DITCHES):	6.3 FEET	
TYPE, SIZE AND SPACING OF INSULATORS OR SUPPORTS:	2-PIECE SHELL OR BAND 7-304 STAINLESS STEEL OF MIN. 14 GAUGE THICKNESS 8-FOOT MAX. SPACING	
DISTANCE OF TRACK TO FACE OF JACKING/RECEIVING PITS:	52.5 FEET / 60.3 FEET ±	
BURY (BASE OF RAIL TO BOTTOM JACKING/RECEIVING PITS):	23 FEET MIN.	
CATHODIC PROTECTION:	NO	

NOTES:
 1. SET NEW MANHOLE B-2 AND B-3 TOPS MINIMUM OF 2 FEET ABOVE FINISHED GRADE.
 2. KANSAS CITY APWA SPECIFICATIONS SHALL BE FOLLOWED WITHIN PROJECT.



MH A-1 THRU MH B-3
 SCALE - HORIZ. 1" = 20'
 VERT. 1" = 10'

C:\USERS\WENDY\DRAWING - ENGINEERING SURVEYS & SERVICES\GENERAL PROJECTS\16408-SEDALIA-SEWER-PROJECT\A-ALTERNATE DESIGN\CAD\16408-GRANTY MAIN OPTION-2.DWG 11/15/2024