

MINUTES
NORTH AURORA ROAD (NAR) PROJECT TEAM MEETING
DECEMBER 17, 2024, 1:30 P.M.
CONFERENCE ROOM 247
CITY OF NAPERVILLE
400 S. EAGLE STREET
NAPERVILLE, IL 60540

I. CALL TO ORDER / ROLL CALL

Chairman Novack called the December 17, 2024 NAR Project Team meeting to order at 1:38 p.m. The meeting was held in Conference Room 247 of the Naperville Municipal Center, 400 S. Eagle St., Naperville, IL.

Present:

(NAR Project Team Members Listed by Agency)

City of Aurora: Tim Weidner

City of Naperville: Bill Novack; Andy Hynes; and Matt Calpin

Naperville Township: Eddie Bedford and Paul Santucci

Absent:

City of Aurora: Brian Witkowski

Also Present:

Pat Lord, City of Naperville Legal Counsel; Sean McGrath, Naperville Township Legal Counsel (by audio conference); and Rebecca DeLarme, City of Naperville staff

II. APPROVAL OF ATTENDANCE OF NAR PROJECT TEAM MEMBERS BY OTHER MEANS (if a quorum of four members of the NAR Project Team is physically present).

No NAR Project Team Members were attending by other means.

III. PUBLIC COMMENT

There were no public comments.

IV. APPROVAL OF MINUTES of July 18, 2024 NAR Project Team meeting.

A motion was made to approve the July 18, 2024 NAR Project Team meeting minutes by Weidner and seconded by Bedford. MOTION PASSED with Santucci abstaining

V. NEW BUSINESS

1. Approval of Resolution No. 24-04 of the NAR Project Team Approving the following agreements and Resolutions in the manner set forth in the Resolution:

- (i) ComEd Grant for Public Roadway and Sub-surface Grading and Other Facilities
- (ii) ComEd Local Public Agency Agreement for Reimbursable Utility Adjustment
- (iii) Construction Reimbursement Agreement for Replacement of Enbridge Pipeline
- (iv) Construction Reimbursement Agreement for Replacement of ONEOK Pipeline
- (v) An IDOT Local Public Agency Engineering Services Agreement between the City of Naperville and TranSystems
- (vi) A City of Naperville Consultant Services Agreement with TransSystems, RFP 21-083: Phase 3-North Aurora Road Underpass Project
- (vii) A Joint Funding Agreement (BLR 05310C) between the City of Naperville (as Local Public Agency for the Project) and IDOT for Construction and Construction Engineering Services for the North Aurora Underpass at the CN Railroad Project and Approving the Appropriation of Local Share Funding
- (viii) A City of Naperville Resolution Approving a Joint Funding Agreement (BLR 05310C) with IDOT for Construction and Construction Engineering Services for the North Aurora Underpass at the CN Railroad Project and Approving the Appropriation of Local Share Funding; and
- (ix) A City of Naperville Resolution Approving an Appropriation for Construction Services for the North Aurora Road Underpass at the CN RR.

Lord noted that approval of Resolution 24-04 by the NAR Project Team would include approval of all the agreements and resolutions listed above as agenda items V. 1. (i) through V. 1. (ix). She encouraged the group to bring forth any questions at this time.

Weidner inquired about items (ii), (iii), (iv) and asked if language for the reimbursement agreements was received from IDOT. It was noted it was not and Calpin advised that utilities and railroads were referenced within the BLR 05310C with the dollar amounts considered to be reimbursable listed and broken out by different line items. It was noted that the full agreements are posted on the City's website.

Weidner inquired about the three-year time frame in the ComEd agreement (Section 9.6 of page 92 of the full meeting packet), asking if it was previously approved. Lord advised that it was derived from a limited partnership agreement (LPA) template that she received from IDOT. Discussion followed with Novack noting that IDOT always has the option to audit. Lord noted that Weidner's point was well taken and that we need to adhere to the timeframe so the records are available.

Weidner inquired about the personnel change in the Local Public Agency Engineering Services Agreement, item V. 1. (v), with Calpin noting the change was correct.

Weidner requested that the Joint Funding Agreement (BLR 05310C) with IDOT, referenced in Recital 7 (iii) and in Section 3 (iii) of Resolution 24-04 be updated to include Utility Relocations.

The Project Number, Section Number and Job Number will also be added in the first recital to reference the IDOT items. Lord made the requested changes and provided the revised Resolution 24-04 for signatures. Novack will discuss the minor changes to the Joint Funding Agreement to be approved by the Naperville City Council with the City Council.

A motion was made to approve Resolution No. 24-04 (as revised) of the NAR Project Team Approving the above nine listed agreements and Resolutions with item V. 1. (viii) being revised by adding the utility relocation language and the project, section and job number information, by Bedford and seconded by Weidner. MOTION PASSED by the following votes per Agency:

Aye: 3 –
City of Aurora (Weidner)
City of Naperville (Calpin)
Naperville Township (Bedford)

2. NAR PROJECT TEAM COMMENTS

Weidner inquired about the watermain looping project. The City of Aurora will take the lead on drafting the intergovernmental agreement between the City of Aurora and the City of Naperville. They will also contact Calpin regarding the plan submittal to the City of Naperville's Development Review Team.

3. ADJOURNMENT

A motion to adjourn the meeting was made by Hynes and seconded by Weidner. The meeting adjourned at 2:07 p.m. MOTION PASSED UNANIMOUSLY

Respectfully submitted by,
Rebecca DeLarme, City of Naperville staff

**FIRST AMENDMENT TO THE
UTILITY CONSTRUCTION REIMBURSEMENT AGREEMENT
FOR RELOCATION OF ENBRIDGE PIPELINE**

Road Authority/LPA: The City of Naperville, the City of Aurora, and Naperville Township
Route: 1509 (North Aurora)
Section: 06-00133-00-BR
Job No.: C-91-424-19
IDOT Contract No: 61G79
County: DuPage
Federal Project Number: XUXZ(984)

THIS UTILITY CONSTRUCTION REIMBURSEMENT AGREEMENT FOR RELOCATION OF ENBRIDGE PIPELINE (“**Agreement**”) is made and entered into this _____ day of _____, 2025 (“**Effective Date**”), by and between Enbridge Energy, Limited Partnership, licensed to do business in the State of Illinois, with offices at 1500 West Main Street, Griffith, Indiana 46319 (“**Enbridge**”) and the City of Naperville, an Illinois municipal corporation and home rule unit of local government under the laws and Constitution of the State of Illinois, the City of Aurora, an Illinois municipal corporation and home rule unit of local government under the laws and Constitution of the State of Illinois, and Naperville Township, a body politic and corporate. Enbridge and the Road Authority (as Road Authority is defined in Section 1.1 below) may be referred to in this Agreement as a “**Party**,” or together as the “**Parties**.”

For and in consideration of the premises and mutual covenants herein contained, the receipt and sufficiency of which are acknowledged, the Parties agree as follows:

1. Introductory Matters.

1.1 In the interest of public safety and convenience the City of Naperville and its public entity partners, the City of Aurora and Naperville Township (together referenced herein as the “**Road Authority**”), desire to widen and reconstruct North Aurora Road from Pennsbury Lane to Frontenac Road (hereinafter the “**NAR Project**”). The City of Naperville (“**City**”) is Lead Local Agency for said NAR Project and where it is provided herein that the City or City Engineer will take an action of any kind, that action shall be deemed to be taken on behalf of the Road Authority.

Enbridge owns, operates, and maintains a 34-inch diameter pipeline (“**Pipeline**” or “**Enbridge Pipeline**”) that runs north to south, perpendicular to North Aurora Road roadway in Naperville Township, within property owned by Commonwealth Edison Company for which Enbridge has an easement. The existing above-ground valve and fence, on the north side of North Aurora Road, roughly aligns with the location of Enbridge’s Pipeline.

1.2 The Road Authority has determined that adjustments must be made to a portion of the Enbridge Pipeline within the limits of and necessitated by the NAR Project in order to lower the Enbridge Pipeline at its current location to a lower elevation (hereinafter referenced as the “**Enbridge Pipeline Relocation Project**” or “**Project**”). Enbridge has documented its right to occupy the property on which the

Pipeline is located and will be relocated and the costs associated with said adjustments are reimbursable as provided herein. A location map showing the location of the existing Pipeline is attached hereto as **Exhibit A**.

1.3 Enbridge desires to cooperate with the Road Authority in the Project Work described herein.

1.4 On May 19, 2021, the City and Enbridge entered into a reimbursement agreement for Enbridge to perform a Class 4 Estimate which explored the conceptual feasibility of two options to relocate the Pipeline and removing the hand-operated main line valve MLV-406.83-6-V. The Class 4 Estimate was completed and a preliminary Pipeline relocation design was agreed upon by the Parties.

1.5 On June 15, 2022, the City and Enbridge entered into a reimbursement agreement for Enbridge to perform Phase 2 Design Engineering to support and progress towards a full engineering design of the agreed upon option selected as part of the Class 4 Estimate.

1.6 On September 21, 2022, the City informed Enbridge that a third-party assessment of the Enbridge Pipeline relocation design/constructability option was to be performed (“**Constructability Options Analysis Report**”) prior to Enbridge moving ahead with the agreed upon option selected as part of the Class 4 Estimate.

1.7 On July 14, 2023, the City provided Enbridge with the Constructability Options Analysis Report that was performed by Burns and McDonnell for review and consideration of an alternative pipeline relocation design.

1.8 In response to the Constructability Options Analysis Report, Enbridge proposed an alternative construction option known as the sleeve option and a rough order of magnitude (“**ROM**”) cost estimate to accomplish said sleeve approach.

1.9 On November 1, 2023, the City and Enbridge entered into a reimbursement agreement for Enbridge to perform the design engineering for design of the Enbridge Pipeline Relocation Project using the sleeve option.

1.10 Enbridge issued bids for the Contractor’s Work, as defined herein, and has issued a Letter of Intent to Award the Bid to the low bidder (hereinafter referenced as the “**Contractor**”). The Contractor shall not be an agent, employee or representative of the Road Authority, but shall solely be contracted by Enbridge.

1.11 The Road Authority desires for Enbridge to perform the Enbridge Pipeline Relocation Project using the sleeve option plans (“**Sleeve Option Plans**”) developed by Enbridge which are attached hereto as **Exhibit B** which plans may be modified by written agreement of the Parties. **Exhibit B** has been redacted so that materials which are proprietary, privileged, or confidential to Enbridge are not disclosed since their disclosure would cause competitive harm to Enbridge’s business. The adjustments to the Enbridge Pipeline pursuant to the Sleeve Option Plans and the traffic management plan attached hereto as **Exhibit H** (“**Traffic Management Plan**”) shall be performed by the Contractor retained by Enbridge to perform the work described in the Sleeve Option Plans (hereinafter the “**Contractor’s Work**”).

Said Contractor's Work and the costs thereof, shall be inspected, overseen, and managed by Enbridge, and Enbridge shall also be responsible to procure some of the materials needed for the Project and to perform work associated with the final tie-in welds for the Project (hereinafter the "**Enbridge Work**"). The Road Authority shall be entitled to inspect Contractor's Work throughout the Project at reasonable times and subject to reasonable safety limitations required by Enbridge or the Contractor.

Together the Contractor's Work and the Enbridge Work shall be referenced herein as the "**Project Work**" which shall include all construction and services expressly required by or reasonably inferable from the Sleeve Option Plans, the Traffic Management Plan, and the provisions of this Agreement and its exhibits and includes all labor, materials, equipment, and services required to provide a fully functional and operable Pipeline with the adjustments and improvements described or referenced herein.

2. Performance of Project Work.

2.1 The City Engineer shall issue Enbridge a written Notice to Proceed with the Project Work (as defined herein) which Notice to Proceed will be issued the earlier of: (i) 5 business days after IDOT's letting of the NAR Project, or (ii) within 5 business days of federal authorization to proceed with the Project having been given. Upon said Notice to Proceed, Enbridge may commence all Project Work.

2.2 Enbridge shall cause the Contractor's Work to be performed by the Contractor in compliance with the **Project Schedule** set forth on **Exhibit C** unless: (i) events of force majeure, as defined in Section 9 hereof, necessitates a delay in performance as agreed upon by the Parties; or (ii) the Project Schedule is modified by written agreement of Enbridge and the City Engineer which may be accomplished by email.

2.3 If, during the course of performance of the Contractor's Work, Enbridge or its Contractor determine that there is a need, or that for some reason it would be preferable, to modify the agreed upon design of the Sleeve Option Plans or the Traffic Management Plan, Enbridge shall promptly contact the City to discuss the proposed modification to ensure that: (i) such modification will not increase the cost of the Contractor's Work or the Enbridge Work set forth on **Exhibit D** unless otherwise agreed to in writing by the Road Authority; and (ii) that such modification will not conflict or interfere with the improvements associated with the expansion of North Aurora Road to be undertaken by or on behalf of the Road Authority after completion of the Project Work unless otherwise agreed to in writing by the Road Authority .

2.4 Except as provided in Section 4.2 hereof, at all times throughout this Agreement and upon completion of the Project Work described herein, Enbridge shall own and maintain any and all existing and relocated Pipeline and associated materials and equipment.

2.5 Enbridge shall email the City Engineer with a project status report ("**Project Status Report**") every two weeks until completion of the Project which summarizes the work done in the previous weeks and outlines the work to be completed in the upcoming weeks.

2.6. Compliance with Laws. At all times relevant to this Agreement Enbridge and its Contractor and any subcontractors shall comply with all applicable local, state, and federal laws, including but not limited to the following:

2.6.1 All aspects of this Agreement shall be in accordance with the Federal-Aid Policy Guide, Chapter I, Subchapter G, Part 645A&B (23 CFR 645A&B).

2.6.2 This Agreement is subject to all terms contained in the "General Provisions for Utility Adjustment Agreements" attached hereto as **Exhibit F** attached hereto and made a part hereof.

2.6.3 The Project Work herein contemplated shall be subject to FHWA requirements and applicable Federal and State laws, rules, regulations, orders and approvals pertaining to all Agreements, plans, estimates, specifications, award of contract, acceptance of work and procedure in general as well as all those pertaining to nondiscrimination equal, employment opportunity. Enbridge shall meet the Buy America requirements specified in 23 CFR 635.410. Upon completion of the Project, Enbridge shall sign and return with its final invoice, the Certification of Compliance with Buy America attached hereto as **Exhibit G**.

2.6.4 Prevailing Wage Act. Because construction of the Project Work as provided herein constitutes construction of a "public work" within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/01 et seq. ("the Act"), Enbridge shall require its Contractor and all subcontractors that perform the Project Work comply with the provisions of said Act, including but not limited to payment of laborers, workers and mechanics no less than the "prevailing rate of wages" (hourly cash wages plus fringe benefits) in DuPage County and requiring such contractors and subcontractors to comply with all wage, notice and record keeping requirements set forth in the Act. For information regarding current prevailing wage rates, refer to the Illinois Department of Labor's website at: <http://www.state.il.us/agency/idol/rates/rates.HTM>.

2.6.5 IDOT will audit bills for work performed by or on behalf of Enbridge in accordance with Federal Highway Administration (FHWA) requirements on all projects involving the use of federal funds. Enbridge shall maintain, for a minimum of 3 years after the completion of the Project Work, adequate books, records, and supporting documents to verify the amounts, recipients, and uses of all disbursements of funds passing in conjunction with this Agreement; the Agreement and all books, records, and supporting documents related to the contract shall be available for review and audit.

2.6.6 In accord with the requirements of the Illinois Public Construction Bond Act, Section 30 ILCS 550/0.01 et seq., Enbridge shall require the Contractor to provide the Road Authority with a performance bond and a payment bond in the amount of the Project Amount reflected on **Exhibit D**.

2.6.7 The Employment of Illinois Workers on Public Works Act ("Act"). 30 ILCS 570/1 et seq. The Act has been triggered by more than 5% unemployment in Illinois for two

consecutive months. The City shall give ENBRIDGE written notice if the Act is suspended in the future, or if after such suspension it is thereafter reinstated.

3. Reimbursement to Enbridge. Enbridge shall pay all costs associated with the Contractor's Work and the Enbridge Work and shall be reimbursed by the Road authority therefor as provided herein.

3.1 The Contractor bid on the Contractor's Work is based on a fixed lump sum amount. Said lump sum amount ("**Lump Sum Amount**"), set forth in the Schedule of Costs on **Exhibit D includes all costs** for which the Contractor shall be entitled to payment under this Agreement and includes an inflation factor to account for the delay in performing the work between the date of issuance of the Letter of Intent to Award the Bid and the actual date upon which performance of the Contractor's Work begins.

3.2 The Road Authority shall remit payment to Enbridge for Contractor payments as follows:

3.2.1 10% of the Lump Sum Amount not less than 30 days prior to commencement of construction by the Contractor as set forth on the Project Schedule.

3.2.2 An additional forty percent (40%) of the Lump Sum Amount upon completion of approximately half of the Contractor's Work as determined by Enbridge and agreed upon by the Road Authority subject to: (i) provision of the Documentation specified in Subsection 3.2.4 below; and (ii) inspection and written approval of the Contractor's work by Enbridge (which approval shall be provided to the City Engineer).

3.2.3 An additional forty percent (40%) of the Lump Sum Amount upon Substantial Completion of the Contractor's Work and the Enbridge Work subject to: (i) provision of the Documentation specified in Subsection 3.2.4 below; and (ii) inspection and written approval of the Contractor's work by the Enbridge (which approval shall be provided to the City Engineer). For the purposes of this payment subsection "Substantial Completion" is defined as when Enbridge has completed all work associated with the final tie-in welds and so that no part of the Project Work interferes with or prohibits the opening North Aurora Road for traffic.

3.2.4 10% retainage to be paid upon completion of any outstanding work (i.e. punch list items) subject to: (i) provision of any additional or final Documentation specified in Subsection 3.2.5 below; and (ii) inspection and final written approval of the Contractor's Work by Enbridge (which approval shall be provided to the City Engineer).

3.2.5 Required documentation ("**Documentation**") for the purposes of an obligation to make payment (for other than the initial 10% payment) hereunder includes the following:

- (i) A notarized application for payment documenting that the required percentage of Contractor's Work has been completed, copies of detailed Contractor and subcontractor billing statements setting forth the work performed, the number of hours and reflecting a ten percent (10%) retainage), a current waiver of lien by the Contractor (conditioned only upon payment of the requested amount) for itself and a waiver of lien for each of its subcontractors and suppliers, covering the pending payment which waivers of lien shall be evidence that 100% of the Contractor's Work completed to date has been paid for; and
- (ii) A sworn statement as to Contractor's Work listing (i) the names and address of all parties furnishing materials, labor or services in connection with said Contractor's Work (ii) the materials, labor or services to be furnished by each such party, (iii) the full contract prices (adjusted for extras or credits previously approved in writing by Owner) for all such materials, labor or services, (iv) the amounts actually paid to each party furnishing materials, labor or services (v) the amounts due or to become due to each such party, (vi) good faith estimates of the prices of all materials, labor and services not yet subcontracted for, and (vii) a statement that there are no other contracts outstanding except as previously stated, and that there is nothing due or to become due to any party for materials, labor or services.

3.3 Reimbursement for Enbridge Work. Payment for Enbridge Work as defined herein shall be paid on a time and material basis and set forth on monthly invoices submitted to the Road Authority as provided herein. Each invoice shall set forth in detail the materials procured by Enbridge, the nature of the work performed by Enbridge, the number of hours spent on each category of such work, the hourly rates for each individual performing work that is invoiced, and setting forth any applicable "Other Costs" as denoted on **Exhibit D** –Schedule of Costs.

3.4 Contingency Funding. Only in extremely unusual and unforeseeable circumstances shall contingency funding be approved by the Road Authority for the Contractor's Work and/or for the Enbridge Work. Such circumstances shall not include labor shortages, increased costs of materials or other components of the Project Work, conditions in the work area (other than, for example, serious environmental contamination). If the Road authority determines that circumstances exist which warrant an increase over the Lump Sum Amount, an amount of up to three percent (3%) of the total amount for the Project Work set forth on **Exhibit D** - Schedule of Costs may be approved in writing by the Road Authority (herein "Contingency Funding"). Contingency Funding may not be used without prior written approval of the Road Authority.

3.5 Federal Income Tax Delineation. Invoices for either Contractor's Work and/or Enbridge Work which contain costs for federal income tax ("FIT") shall set forth the basis for the amount calculated therefor.

3.6 Amendment. If unforeseen circumstances arise which the Road Authority and Enbridge agree results in a revised scope of the Project Work such that the amounts in the Project Work-Schedule of Costs attached as **Exhibit D** will be insufficient to complete the Project Work, Enbridge shall give the City notice thereof as set forth in Section 13 hereof and Enbridge and the City and/or City representatives shall collaborate on options to avoid or minimize an increase in said costs. As part of that collaboration, Enbridge shall provide the City with documentation and estimated costs for the revised scope of work. Any funding sought in excess of the Contingency Funding described in Section 3.4 above due to an event of Force Majeure, as defined herein, or for any other reason, shall require an amendment of this Agreement.

3.7 Time is of the Essence. Time is of the essence in the performance of the Project Work under this Agreement. Failure to meet the timeframes for completion of the Contractor's Work and the Enbridge Work as set forth in the Project Schedule attached as Exhibit C, unless extended by written agreement of the Parties which may be due to an event of Force Majeure as set forth in Section 9 or a delay caused by third party utilities to the extent that the Project Work is impacted, shall constitute a material default under this Agreement for which the Road Authority shall have the right to seek such remedies at law or in equity as it deems appropriate, including but not limited to damages caused thereby. If a delay is caused by a third party utility, Enbridge shall give the City written notice which shall include in reasonable detail the circumstances of the delay, its expected duration, and the steps that Enbridge and/or the Contractor are taking to mitigate the effects of the delay on its performance. If the delay will cause an increase in costs or a substantial change in the Project Schedule, an amendment of this Agreement may be required.

3.8 Invoices for Project Work performed shall be sent by email to:

Matthew Calpin,
Project Engineer/ City of Naperville
calpinm@naperville.il.us

With a copy to:
Andy Hynes
Engineer Manager/ City of Naperville
hynesa@naperville.il.us

If an invoice is for both Contractor's Work and Enbridge Work, the invoice shall delineate between the two and provide the Documentation specified in Sections 3.2.4 and 3.3 above.

3.9 The City shall, on behalf of the Road Authority, pay the invoice amount to Enbridge within thirty (30) days after the City receives Enbridge's invoice.

Payment shall be made as per invoice instructions. Notwithstanding the foregoing if the City disputes or seeks clarification of any aspect of an invoice, the Parties shall confer to come to an understanding and agreement as to the correct amount to be paid, and payment by the City shall be made within thirty (30) days thereafter.

4. Termination.

4.1 The Road Authority may terminate this Agreement by written notification to Enbridge no later than the date set forth in the Project Schedule-Exhibit C for the “Hot taps for stopple isolation” which date is subject to change upon written agreement of Enbridge and the Road Authority.

Upon termination by the Road Authority, the Road Authority shall be responsible for paying Enbridge (i) costs for Enbridge Work expended to the date of termination; and (ii) for the percentage of Contractor’s work performed by the Contractor to the date of termination (on a pro rata basis in the context of the Lump Sum Amount) and for any Contractor costs that cannot be terminated, modified, or otherwise mitigated.

4.2 Materials purchased by Enbridge to perform Contractor’s Work specified on Exhibit B with costs therefor set forth on **Exhibit C** for which Enbridge seeks reimbursement from the Road Authority shall be transferred to the Road Authority upon written request therefor and to the member of the Road Authority designated in said request. Such transfer shall be effected only after Road Authority has reimbursed Enbridge as provided herein. Notwithstanding the foregoing, Enbridge, at its sole discretion, may retain said materials and reduce the amount owed by the Road Authority by the value as reasonably negotiated and agreed upon by both Parties for said materials.

5. Confidentiality. This Agreement, the matters discussed herein, information provided by one Party to the other in connection herewith, information gathered from the Project Work and information derived from any of the foregoing, shall be confidential and shall not be disclosed by the receiving Party without the written consent of the other, except to the extent that disclosure is required by law. When disclosure is required, the Party making the disclosure shall provide notice of the intended disclosure to the other Party and shall take all reasonable steps to limit the extent of the disclosure to the minimum required to comply with its legal obligations. Notwithstanding the foregoing, the entities which comprise the Road Authority will be provided with this Agreement and information relative thereto and this Agreement will be included on a public agenda for approval pursuant to the Illinois Open Meetings Act.

6. Indemnification.

Enbridge shall indemnify, hold harmless and defend the City of Naperville, the City of Aurora, and Naperville Township, and their respective officials, officers, employees, and agents from and against all liabilities, claims, suits, demands, proceedings, and actions, including costs and expenses of defense, arising from or related to, any loss, damage, injury, death, or damage to property resulting from, or connected to the performance of the

Project Work to the extent caused by the negligent or willful misconduct of employees, agents, or contractors of Enbridge or Enbridge's Contractor. However, this indemnity shall not apply to the extent of the negligent or willful misconduct of the City of Naperville, the City of Aurora, or Naperville Township, its officials, officers, employees, agents or contractors. The provisions of this Section 6 of this Agreement shall survive completion of the Project Work and shall remain in full force and effect upon the expiration or termination of this Agreement. Neither by insurance or by indemnification, or by the provisions herein, do the City of Naperville, the City of Aurora, or Naperville Township, or their officers, employees, agents, or representatives waive any defense or immunity which may be available to them at law including but not limited to those provided by the Local Governmental and Governmental Employees Tort Immunity Act.

7. Insurance. Insurance for Project Work shall be provided and maintained in amounts and subject to the provisions set forth on Exhibit E attached hereto and made part hereof.

8. Assignment.

This Agreement may not be assigned by either Party without the written consent of the other Party.

9. Force Majeure.

Whenever a period of time is provided for or referenced in this Agreement for either Party to do or perform any act or obligation, neither Party shall be liable for any delays or inability to perform due to causes beyond the control of said Party such as war, riot, strike or lockout by or against either Party's own employees or suppliers, unavoidable casualty or damage to personnel, materials or equipment, fire, flood, storm, earthquake, tornado, pandemic, or any act of God. Provided, however, that said Party shall be required to give notice of and specify the nature of the event of Force Majeure within no more than three (3) business days of its occurrence and the time period shall be extended for only the actual amount of time said Party is so delayed. Except as to a strike or lockout by or against either Party's own employees or suppliers, an act or omission shall not be deemed to be beyond that Party's control if committed, omitted or caused by that Party or that Party's employees, officers or agents or a subsidiary, affiliate or parent of said Party.

If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The non-Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement during the pendency of the Force Majeure Event. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

10. Entire Agreement.

This Agreement constitutes the entire agreement, and supersedes all other prior agreements and understandings, both written and oral, among the Parties, with respect to the subject matter of this Agreement. This Agreement may not be amended except by an agreement in writing signed by authorized representatives of both Parties.

11. Severability.

If any term or provision of this Agreement shall be found to be invalid, illegal, or otherwise unenforceable, the same shall not affect the other terms or provisions hereof or the whole of this Agreement.

12. Governing Law.

This Agreement shall be construed in accordance with the laws of the State of Illinois, without regard to such state's conflicts of law rules. Venue for any action arising out of the terms or conditions of this Agreement shall be proper only in the Circuit Court for the Eighteenth Judicial Circuit, DuPage County, Illinois.

13. Notices.

Unless otherwise expressly specified or permitted by the terms hereof, every request, demand, notice or other communication provided for herein will be made in writing and any such request, demand, notice or other communication shall become effective: (a) upon personal delivery thereof, including by overnight mail or courier service; (b) in the case of notice by mail, certified or registered, postage prepaid, return receipt requested, upon receipt thereof; (c) in the case of notice by facsimile, upon receipt thereof; or (d) electronic mail (with written confirmation of receipt); provided that such transmission is promptly confirmed by either the methods set forth in clauses (a) or (b) above, in each case addressed to each Party at its address set forth below or at such other address as such Party may from time to time designate by written notice.

The **Road Authority** [City of Aurora, City of Naperville, and Naperville Township (with City of Naperville as Lead Local Agency)]:

William Novack, City Engineer
City of Naperville
400 S. Eagle Street
Naperville, IL 60540

With a copy to:

Mike DiSanto, City Attorney
City of Naperville
400 S. Eagle Street
Naperville, IL 60540

With email copies to:

Andy Hynes
Engineer Manager/ City of Naperville
hynesa@naperville.il.us

and

Matthew Calpin
Project Engineer/ City of Naperville
calpinm@naperville.il.us

With a copy to:

City Engineer
City of Aurora
44 E. Downer Place
Aurora, IL 60507

With a copy to:

Corporation Counsel
City of Aurora
44 E. Downer Place
Aurora, IL 60507

Richard Veenstra, Esq. and Patrick Collins, Esq.
Schain, Banks, Kenny & Schwartz, Ltd.
70 W Madison St. Suite 5400
Chicago, Illinois 60602-4213

With a copy to:

Naperville Township Supervisor
Attention: Eddie Bedford
139 Water Street
Naperville, IL 60540

With a copy to:

Ross Secler, Esq. and Sean McGrath, Esq.
Odelson, Sterk, Murphey, Frazier & McGrath. Ltd.
3318 West 95th Street
Evergreen Park, Illinois 60805-2233

Enbridge Energy, Limited Partnership

1500 West Main Street
Griffith, IN 46319
Attention: David Bareham, Manager Griffith Area

With a copy to:

Enbridge Energy, Limited Partnership
119 N. 25th Street East
Superior, WI 54880
Attention: Lands & ROW
With email copies to:
kelly.khuu@enbridge.com
and legalnotices@enbridge.com

14. Ambiguity.

If any term of this Agreement is ambiguous, it shall not be construed for or against either Party on the basis that the Party did or did not write it.

15. Binding Effect.

This Agreement shall be binding upon the Parties and their successors and assigns.

16. Revision of Timeframes. Any timeframe provided for herein may be modified by mutual agreement of the Parties which agreement may be evidenced by letter or email.

17. Exhibits. Each exhibit referenced herein is attached to this Agreement and deemed incorporated herein in its entirety.

18. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original but all of which shall, together, constitute one and the same instrument.

19. Captions. Captions and paragraph headings are for convenience only and are not a part of this Agreement and shall not be used in construing it.

20. Breach. If a Party breaches or otherwise violates the terms and conditions of this Agreement, then the other Party shall have the right to pursue all remedies available at law or in equity, including without limitation, specific performance of this Agreement.

21. Waiver. No waiver of any obligation or default of a Party shall be implied from the omission by a Party to take any action on account of such obligation or default and no express waiver shall affect any obligation or default other than the obligation or default specified in any express waiver and then only for the time and to the extent therein stated.

22. Audit. This Agreement is subject to audit. In the event of an audit, the final costs between Enbridge and the Road Authority shall be based upon the audit findings.

EXHIBITS:

Exhibit A – Location Map

Exhibit B – Sleeve Option Plans

Exhibit C – Project Schedule

Exhibit D – Project Work– Schedule of Costs

Exhibit E – Insurance

Exhibit F - General Provisions for Utility Adjustment Agreements

Exhibit G – Buy America Certificate

Exhibit H - Traffic Management Plan

IN WITNESS WHEREOF, Enbridge and the entities which comprise the Road Authority hereto separately and severally have caused this Agreement to be executed in their respective names by and through their duly authorized representatives, as of the day and year first above written.

Enbridge Energy, Limited Partnership

**By: Enbridge Pipelines (Lakehead) L.L.C.,
Its Managing General Partner**

Typed: _____

Title: _____

Date: _____

ROAD AUTHORITY: CITY OF
NAPERVILLE, CITY OF AURORA,
NAPERVILLE TOWNSHIP
CITY OF NAPERVILLE

By: _____
Douglas A. Krieger
City Manager of the City of Naperville

Attest
By: _____
Dawn C. Portner
City Clerk

Date: _____

CITY OF AURORA

By: _____
Richard Irvin
Mayor of the City of Aurora

Attest
By: _____
Jennifer Stallings
City Clerk

Date: _____

NAPERVILLE TOWNSHIP

By: _____
Eddie Bedford
Naperville Township Supervisor

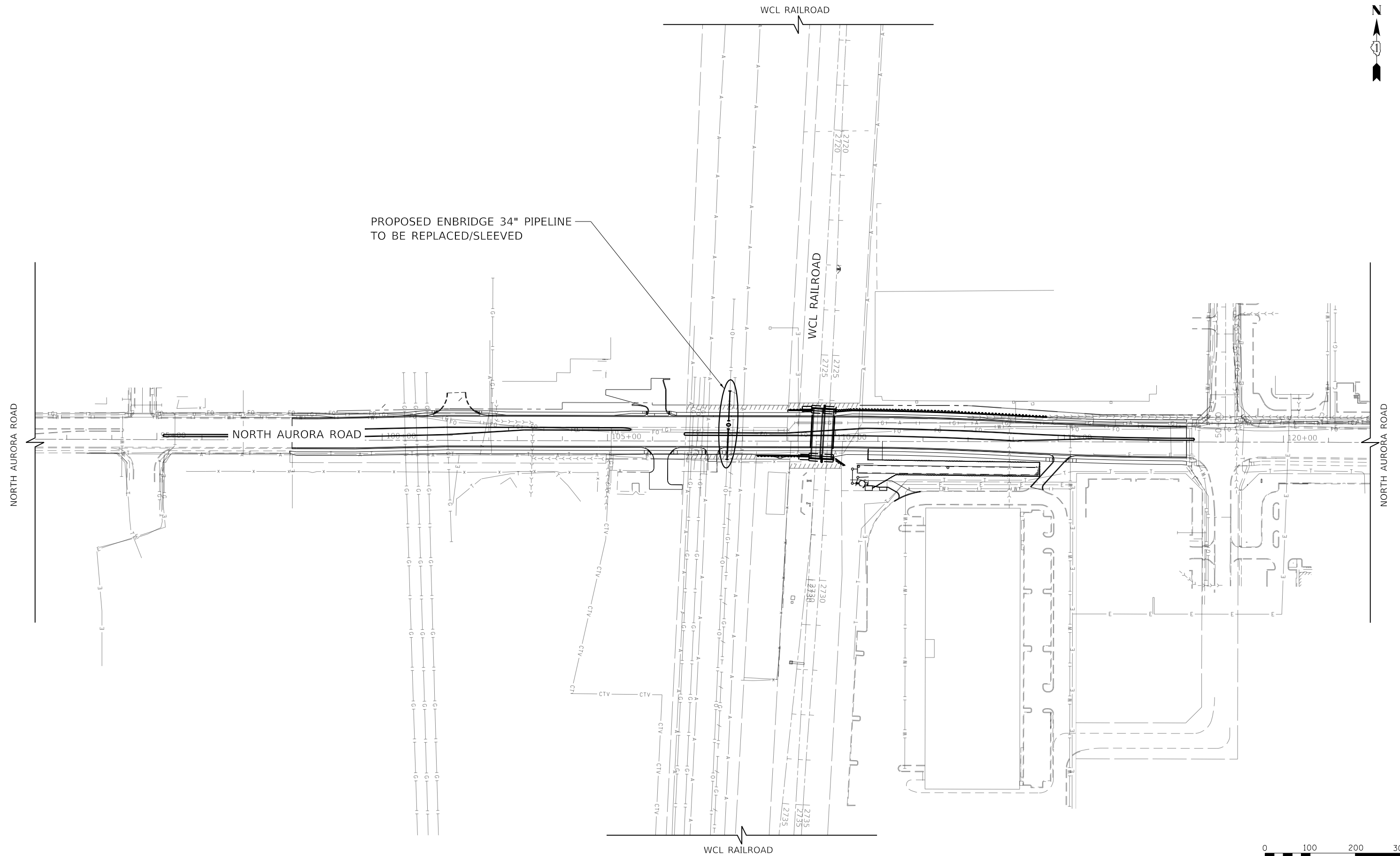
Attest
By: _____
Nathanael Sippel
Town Clerk

Date: _____

PLAN	SURVEYED	DATE
NOTE BOOK NO.	PLOTTED	BY
	CHECKED	
	ALIGNMENT	
	FILE NAME	

PROFILE	SURVEYED	DATE
NOTE BOOK NO.	GRADES CHECKED	BY
	STRUCTURE	
	NOT AT THIS CHYKD	

FILE NAME = Exh A_NorthAuroraRd_Enbridge.dgn



TRANSYSTEMS

USER NAME = brvanderwal	DESIGNED - MKW	REVISED -
PLOT SCALE = 200.0000' / in.	DRAWN - BMS	REVISED -
PLOT DATE = 12/13/2024	CHECKED - BVW	REVISED -
	DATE - 12/13/2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**NORTH AURORA ROAD - ENBRIDGE PIPELINE
EXHIBIT A**

SCALE: 1"=100' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1509	06-00133-00-BR	DUPAGE		
				CONTRACT NO. 61G79
ILLINOIS FED. AID PROJECT				

EXHIBIT B

SLEEVE OPTION PLANS



Line 6 Removal and Replacement

Project Number 2000014

Line 6 MP 406.8370

Design Basis Memorandum Final

Document ID:	Line 6 Replacement
Version No.:	0.0
Version Date:	2024-08-09
Effective Date:	2024-08-09

Internal Information - Uncontrolled Copy if Printed or Downloaded

LINE 6 REMOVAL AND REPLACEMENT DESIGN BASIS MEMORANDUM

Version Date: 2024-08-09

DOCUMENT VERSION REGISTER

Version #	Version Date [yyyy-mm-dd]	Author / Department	Reviewer / Department	Approved By / Department	<ul style="list-style-type: none">• Change Area [Section and Title]○ Change Description
0.0	2024-01-23	Barr Engineering	Enbridge	Enbridge	<ul style="list-style-type: none">• IFC Final

APPROVALS

Position	Name / Department	Signature	Author / Department	Approval Date [yyyy-mm-dd]
Engineering Contractor	Heather M. Lewis/Barr		Barr Engineering	2024-08-09

ACKNOWLEDGEMENT

Position	Name / Department	Signature	Author / Department	Acknowledgement Date [yyyy-mm-dd]
Engineering Lead	Jomir Soroardy/Enbridge			<yyyy-mm-dd>
Project Development Lead	Eli Castaneda/Enbridge			<yyyy-mm-dd>
Project Manager	Derrick Chan/Enbridge			<yyyy-mm-dd>

TABLE OF CONTENTS

DOCUMENT VERSION REGISTER	II
APPROVALS	III
ACKNOWLEDGEMENT	III
TABLE OF CONTENTS	IV
LIST OF TABLES	IV
CERTIFICATIONS	1
DEFINITIONS/GLOSSARY OF TERMS	2
1 EXECUTIVE SUMMARY	3
2 PROJECT DESCRIPTION	4
3 PROJECT SCOPE	5
3.1 PROJECT SCOPE OF WORK	5
3.2 SCOPE PERFORMED BY OTHERS	6
4 GOVERNANCE	7
4.1 DESIGN CODES AND REGULATIONS	7
4.2 STANDARDS	7
5 PROJECT DESIGN BASIS	8
5.1 GENERAL ASSUMPTIONS	8
5.2 FLUID PROPERTIES	8
5.2.1 <i>Liquid Properties</i>	8
6 DETAILED SCOPE OF WORK	9
6.1 PIPELINE	9
6.1.1 <i>General</i>	9
6.1.2 <i>Design Life</i>	9
6.1.3 <i>Safety and Environmental</i>	9
6.1.4 <i>Constructability</i>	10
6.1.5 <i>Geotechnical</i>	10
6.1.6 <i>Civil</i>	11
6.1.7 <i>Mechanical</i>	11
6.1.8 <i>Painting and Coatings</i>	13
6.1.9 <i>Cathodic Protection and AC Mitigation</i>	13
6.1.10 <i>Temporary Structures and Facilities</i>	14
6.1.11 <i>Retirement</i>	14
7 DESIGN DELIVERABLES	14
8 APPENDICES	15

LIST OF TABLES

Table 1. Liquid Properties	8
Table 2. Line Pipe Design Parameters	108

CERTIFICATIONS

I hereby certify that Section 6 of this Design Basis Memorandum was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Illinois.



Erik J. Elmstrand

Date: 2024/08/09
Exp. 11/30/2025
Firm no. 184.003666

August 9, 2024

Erik Elmstrand
PE #: 062.072354
Responsible for mechanical sections of the DBM

Date



Craig Bunger
8/09/24
exp. 11/30/25

August 9, 2024

Craig Bunger
PE #: 062.067410
Responsible for civil sections of the DBM

Date

DEFINITIONS/GLOSSARY OF TERMS

TERM	DEFINITION
Design Pressure (DP)	The pressure which meets or exceeds MAOP or the anticipated Maximum Operating Pressure, used as a basis for designing pipelines and associated facilities.
Maximum Operating Pressure (MOP)	For LP, in Canada, the maximum operating pressure is defined by CSA Z662 as the maximum pressure at which piping is qualified to be operated. In the US, the maximum operating pressure is defined by 49 CFR Part 195 as the maximum pressure at which a pipeline or segment of a pipeline may be normally operated.

1 EXECUTIVE SUMMARY

In 2021 Enbridge was contacted by the City of Naperville, IL (City) to review plans for a road widening project for North Aurora Road (see **Appendix A**). North Aurora Road crosses Line 6 within the Com-Ed utility easement. The initial plan proposed by the City was rejected by Enbridge since it did not provide adequate protection for the pipe.

The options considered were short bore replacement and in-place cut-out replacement, both at a lower elevation than the current pipe elevation. This decision was made proceed with the Short Bore option with support from the Enbridge risk team in 2021 and carried forward through IFB Design. Based on discussions with the City, an alternative design, using a sleeve and section of pipe replacement, was desired and carried through to IFC in 2024.

2 PROJECT DESCRIPTION

Line 6 crosses North Aurora Road with several other underground utilities as well as overhead utilities within the Com-ed right of way. The modifications proposed by the City for the road widening will decrease the depth of cover over the top of the pipe since the elevation of the road is being lowered as well as widened towards the existing valve site. Based on the proposed road changes Pipeline Integrity has proposed to increase the depth of cover of the existing Line 6, move the location of the existing cathodic protection anode and remove the manual valve MLV-406.83-6-V and station from this area.

Line 6 is a 34-inch diameter pipe that runs between Superior, WI and Griffith, IN. The pipe is API-5L X52 material with a wall thickness of 0.281 and 0.500 inch in the project vicinity. The project location is in Dupage County, Illinois near MP 406.90, GPS Coordinates (Lat. 41.781459°, Long. -88.232443°). The existing Line 6 pipe crossing North Aurora Road is in a 40-inch diameter casing that is approximately 47 feet long. The current pipe depth under the road is approximately 5 feet to 6 feet deep. The work proposed by the City will decrease the depth of cover based on the existing pipe elevation.



3 PROJECT SCOPE

3.1 PROJECT SCOPE OF WORK

The project scope is to mitigate the low depth of cover of Line 6 and remove MLV 406.83-6-V due to the road modifications planned by the City. Line 6 is a 34-inch diameter pipe (wall thickness is 0.281-inch and 0.500-inch in the project vicinity) API 5L-X-52 steel pipe and is Polyken tape coated per the alignment sheets. The site is located near two valve stations MLV 406.83-6-V (approximately 53-feet from the edge of the road) and MLV 406.79-6-V (approximately 250 feet from the edge of road). For more details see the alignment sheet included in **Appendix B**.

It is expected for the pipe modifications to occur in one mobilization and includes the below activities:

1. Set up Temporary Workspaces (TWS's) and signage for traffic control.
2. Approximately 108 LF of proposed Line 6 replacement pipe will be welded, inspected and hydrotested on site and approximately 55 LF will be sleeved (following the installation of replacement pipe section). Once hydrotesting is completed coating will be completed at the weld locations.
3. Stopples, valves and TOR's to be installed to obtain isolation of the existing Line 6.
4. An excavation pit will be installed through N. Aurora Rd.
5. Remove approximately 47 LF of existing casing installed over pipeline under N. Aurora Rd.
6. The existing Line 6 will be drained, cut, cleaned and removed.
7. The approximately 108 LF of proposed Line 6 replacement pipe will be installed in the same alignment.
8. Installation of a approximately 55 LF section of Type B containment sleeve from the pipe replacement to the south road ROW line as shown in the plans.
9. Tie-in bends to be installed to the north of the replacement pipe section to align elevation to the existing Line 6 and welded.
10. Line 6 filled.
11. Excavations to be filled in and site restoration to be completed

Scope Boundaries and Clarifications

1. A pipeline outage is required for the pipe replacement activities. The outage will last for approximately 24 - 36 hours.
2. Repair of integrity anomalies are not included in this scope.
3. Other utility pipelines will be moved by others following the Line 6 relocation.
4. Stopples will be needed to isolate the north and south side of the Line 6 crossing.
5. Tie-in weld and stopple Tee will be installed as per O&M procedure.

3.2 SCOPE PERFORMED BY OTHERS

 N/A

It is the intent of this project to replace the pipe via open cut methods. Other methods of replacement are excluded from this scope.

- Design of temporary supports – the general contractor will be responsible for providing shop drawings to Enbridge for the temporary supports for the existing and new pipeline. Enbridge may request to have the engineer review and/or evaluate the support design.
- Cover remediation of the existing line not being excavated in the scoped construction area. All sections being excavated will be returned to existing DOC or better.
- No integrity digs, other than those listed in project definition, are included in this work.
- NDE testing will not be conducted on the portions of the existing Line 6 that are not being excavated per the scope of work. NDE testing will be completed on excavated sections of Line 6 and the new welds per PCS-003.
- Lifting and lowering pipe stress calculation will be directed upon based on construction mythology and equipment selection.
- The removal of other utilities and road modifications will be completed by others.

4 GOVERNANCE

4.1 DESIGN CODES AND REGULATIONS

The design standards that will be followed for the project will include existing established standards and codes. A listing of the major design codes and regulations for this project follows:

- US Code of Federal Regulations: 49 CFR Part 195
- ASME B31.4-2006: Pipeline Transportation Systems for Liquid Hydrocarbons and other Liquids
- ASME B31.4-2022: Pipeline Transportation Systems for Liquids and Slurries

4.2 STANDARDS

The Enbridge design standards that will be followed for the project will include existing established standards and codes. A listing of the major standards for this project follows:

- Enbridge Standard Specifications (frozen standards, June 11, 2021) (**Appendix C**)
- Enbridge's Environmental Protection Program

5 PROJECT DESIGN BASIS

5.1 GENERAL ASSUMPTIONS

The following table outlines the main assumptions considered for this Project and identified during the design phase.

- The top of the 12 inches storm sewer will be located at approximately EL.705.
- All other utilities will be located with a minimum separation of 40 inches from the new pipe depth.
- Retaining walls will not be required. All excavation can be managed via trench box or benching.
- Department of Transportation will approve the design once they are able to review the plan set.
- Road construction debris or large rocks/boulders buried will not interfere with the open cut excavation.

5.2 FLUID PROPERTIES

5.2.1 Liquid Properties

N/A

Line 6 transports hydrocarbons with a maximum specific gravity of 0.94. Fluid properties are tabulated in Table 1.

Table 1. Liquid Properties

Property	Units	Min	Max
Design Capacity	m ³ /hr	3000	4780
Density (Range)	kg/m ³ @15°C	800	940
Viscosity	cSt	10	450
Reid Vapor Pressure	kPaa@30°C	15	78
Receipt Temp	°F	50	90
Receipt Pressure	psig	0	618

6 DETAILED SCOPE OF WORK

The details of Scope or Work to be completed by Barr in executing this project are described below.

6.1 PIPELINE

N/A

6.1.1 General

The project scope is to mitigate the low depth of cover of Line 6 and remove MLV 406.83-6-V due to the road modifications planned by the City.

6.1.1.1 Site-Specific Information

Line 6 is a 34-inch diameter pipe (wall thickness is mainly 0.281 inch) transporting crude oil between Superior and Griffith Terminals. The project location is between Superior and Griffith Terminals near MP 406.90, located in Dupage County, Illinois, GPS Coordinates (Lat. 41.781459°, Long. -88.232443°). The pipe currently is in a 40-inch diameter casing underneath the road that is approximately 47 feet long. The current pipe depth under the road is approximately 5 feet to 6 feet deep. The pipe runs north to south and crosses North Aurora Road with several other underground utilities as well as overhead utilities within the Com-ed right of way.

6.1.1.2 Routing

The project is located in the north half of Section seventeen (17), Township thirty-eight (38) North, Range nine (9) East, Dupage County, Illinois. The coordinate system corresponds to NAD83 Illinois State Plane, East Zone, US survey feet. vertical datum and corresponds to North American vertical datum of 1988 (NAVD 88). The surface pipe locations and depths shown in the plans are based on site survey completed by Northwestern Survey on June 22, 2021 and are approximate.

The new pipe, approximately 108 foot section, will be located in the same trench as the existing Line 6 route and 55 foot section of existing pipe will be sleeved. A minimum of 18 inches of the new pipe to be included in the sleeved section of pipe. Both the existing and proposed pipe locations are located within a 50 foot buffer of a wetland area. Approximately 108 LF of pipe and approx. 47 LF of existing casing will be removed.

6.1.2 Design Life

The design life for the section on new pipe will be based on Enbridge's maintenance and cathodic protection program.

6.1.3 Safety and Environmental

Environmental requirements apply to the construction of the pipe and these will be given with the environmental and city permits acquired by Enbridge.

6.1.4 Constructability

The plan set will go through a constructability review with the Enbridge construction group and Enbridge's construction contractor. The Enbridge construction group has been participating in all design reviews and comments have been incorporated into the plans.

6.1.5 Geotechnical

6.1.5.1 Geotechnical

A geotechnical engineering investigation was performed at this site to evaluate subsurface soil and groundwater conditions as they relate to the planned installation of a new section of the Line 6 pipeline below North Aurora Road via trenchless methods. The geotechnical engineering report dated February 4, 2022 outlines the findings of this investigation and provides recommendations for the pipeline crossing and construction considerations.

Two geotechnical soil borings were performed at this site. One on either side of the proposed crossing location. The geotechnical soil borings encountered topsoil over glacial till soils to the termination depth of the borings at 30 and 41.5 feet below existing grade. Fill soil was encountered in one boring (SB-2) to a depth of 0.3 to 1.5 feet, just above the glacial till. The till consists primarily of silty lean clay, with various amounts of gravel. Standard Penetration Test (SPT) N-values in the glacial till ranged from 6 to 23 blows per foot (bpf) with an occasional 50+ bpf. N-values generally were between 10 to 20 bpf, correlating to a consistency of medium stiff to stiff for cohesive samples, and a relative density from loose to medium dense. Some of the high N-values may have been influenced by the presence of gravel, cobbles, or boulders, which are typical for glacial till soils.

The August 31, 2022 Geotechnical Evaluation Report is included as **Appendix D**.

6.1.5.2 Buoyancy Control

The proposed Line 6 pipe replacement and transition bends may theoretically be subject to a net upward buoyant force if the pipeline were to be submerged fully in water when the pipe is drained and empty, however the weight of the soil above the pipeline (following backfill) would easily counteract the net upward buoyant forces. In addition, the excavations are expected to be de-watered during the duration of construction activities. Therefore, no buoyancy control (i.e., pipe weights) are anticipated to be required.

6.1.5.3 Special Backfill

Designated fill should be placed in maximum 8-inch compacted lifts, provided standard compaction equipment is used (note that small units such as "jumping jacks" are not recommended for compaction unless used in very localized areas). If rain occurs during construction, the subgrade should be allowed to dry prior to continuing work. For compaction below roadways, parking areas, and as foundation backfill, we recommend that backfill be compacted to 98% (within the proposed road ROW) and 95% (outside the

proposed road ROW) of the standard Proctor maximum dry density (ASTM D698). Fill should be free of organic matter or debris, and rocks greater than 1.5 inches in diameter.

6.1.6 Civil

The civil portion of this work encompasses the site layout of the work and extents of the temporary workspace. These are shown in the plan set.

6.1.7 Mechanical

The mechanical scope includes installation of the following:

6.1.7.1 Maximum Operating Pressure

The existing mainline MOP was determined to be 619 psig based off the existing mainline material and wall thickness. This is based on information listed on alignment sheets and confirmed with ILI spreadsheets.

6.1.7.2 Line Pipe Specification

Piping utilized for this project is surplus piping in storage at an Enbridge facility. Pipe and sleeve materials will be evaluated and specified during detailed design.

Table 2. Line Pipe Design Parameters

Property	Details
Pipe Size	NPS 34
Existing Pipe Wall Thickness	0.281" south side, 0.500" near North Side tie-in
Replacmenet pipe wall thickness	0.500" minimum
Design Pressure	619psig
Maximum Operating Pressure	619psig
Design Temperature	100°F
Installation Temperature	~50°F
Minimum Design Temperature	23°F
Service	Crude
Material Standard	API 5L PSL-2
Existing L6 Material Grade	X52
Replacment Pipe Material Grade	X52 min.
Joint Factor	1.0
Hoop Stress Design Factor	0.72
Temperature Derating Factor	N/A
Manufacturing Method	SAW
Pipe Wall Transition	Transitions will be created from new piping WT to existing piping WT of 0.281"/0.500" utilizing the standard bevel requirements of ASME B31.4 and Enbridge design standard
Pipeline Depth of Cover	Varies Up to 168", 48" min. at road or ditches.

Property	Details
Replacement Pipeline Length	~109 LF new pipe, ~56 LF new sleeve
Pipe Design Code	49 CFR Part 195 / ASME B31.4-2006 / ASME B31.4-2019
Corrosion Allowance	N/A

6.1.7.2.1 Fracture Control

Charpy V-notch impact testing shall be performed per the requirements of API 5L for piping, ASME B16.49 for bends, and ASME B31.4, whichever is more stringent, at the minimum design temperature of 23°F or lower if required by one of these codes.

6.1.7.3 Depth of Cover

Per Enbridge specification D06-103:

- Minimum clearance for the crossing of a utility shall be as follows:
 - 48” under the ditch and roadbed.
 - When crossing above the other structure using open-cut construction: 300 mm in Canada and 12 in. in the US.
 - When crossing below the other structure using open-cut construction: 600 mm in Canada and 24 in. in the US.

Per 49 CFR 195:

- requires 36” of cover at the ditch,

Per ASME B31.4:

- requiring 48” at the drainage ditch

Per IL DOT Title 92: Transportation Chapter I: Department of Transportation Subchapter F: Highways, Part 530 Accommodation of Utilities on Right-of-Way:

- Crossings without encasement are allowed if the following are followed (section 530.420):
 - a) Extra heavy pipe is used (def: extra heavy pipe is defined as “Pipe meeting ASTM standards for this pipe designation” (section 530.30))
 - b) Cathodic protection is provided

6.1.7.4 Pipe Stress Analysis and Fatigue Analysis

The replacement pipe section is in like-kind with existing geometry. The replacement pipe material is a higher grade (X70) than the existing pipe (X52) and therefore has an increased allowable stress capacity. Therefore, detailed stress analysis modeling is not required for thermal and flexibility. Circumferential (hoop stress checks due solely to pressure will be performed on all in scope mainline piping to verify it is in accordance with the requirements of US Code of Federal Regulations (CFR) 49 Part 195 and ASME B31.4. No vibration analysis or related fatigue analysis will be performed as this piping is buried.

Pipeline stresses due to Surface loads will be evaluated using the CEPA (Canadian Energy Pipeline Association) Pipeline Surface Loading Screen and Assessment calculator. This methodology utilizes a comprehensive approach to evaluate surface load on an operating pipeline. The vehicle loading is based on an AASHTO HS-20 surface load input. The

surface loads are considered based on the minimum depth of cover under the Proposed N. Aurora Road for both the unsleeved and sleeved mainlines and in the parking/staging area south of the road in the utility ROW that crosses over the pipe. Stresses are acceptable for all three scenarios considered. See **Appendix E** for the calculations.

6.1.7.5 Flanges, Fittings, and Appurtenances

Flanges (as required) shall meet ASME B16.5/16.47A requirements. All fittings shall meet ASME B16.9 (as required) requirements and be joined by butt weld. Wall thicknesses shall be suitable for the mating pipe.

6.1.7.6 Bends

Two induction bends, 10D radius (340in.) and bend angle approximately 10 degrees, will be utilized to accommodate the proposed elevation offset to accommodate matching existing pipe elevation on North side tie-in. Design and testing of the induction bends will be per Enbridge EES071 and ASME B16.49

6.1.7.7 Road and Railroad Crossings

The only road crossing is at North Aurora Rd. The pipeline is parallel to the railroad but is not located in the ROW.

Per Enbridge specification D06-103:

- Crossings of roads and highways should be level and should maintain a consistent depth of cover. The crossing angle should be as close to perpendicular as possible and should not be less than 45° unless otherwise required (e.g., where there is an engineering risk or when paralleling an existing utility). Bends shall not be made within the highway or road ROW. Additional setback requirements from the ROW boundary may be required by the applicable regulations or governing jurisdictions.

6.1.7.8 Warning Signs and Markers

All markers shall be removed and replaced by the construction contractor once the work is complete.

6.1.8 Painting and Coatings

The construction contractor shall evaluate the coating for signs of damage or deterioration and notify Enbridge if any defects are observed. If coating requires repair or replacement, refer to or use other method pre-approved by Enbridge.

6.1.9 Cathodic Protection and AC Mitigation

There is an existing linear anode in the area being fed by rectifier C0406.80-700-CR-301ML that was installed within the last five years due to CP potentials that did not achieve compliance with criteria at that time. The linear anode has had success so far in the discrete area to bring the pipe potentials back into compliance. The linear anode section is approximately 225 feet long, and a section of that will potentially be affected by the pipe replacement. An existing above grade test station exists in the area that likely serves to

support the casing measurements at North Aurora Rd. The test station will be removed as part of the project as the measurements will no longer be needed.

The entirety of the existing casing will be removed as part of the project and will be replaced by new pipe as well as some sleeving over the existing pipe on each side of the replacement section. The ~225 foot section of anode is needed in the area of the new pipe. In the scenario that the excavation extends into the area of the linear anode, the project team should attempt to cleanly expose the anode and roll it back as needed without damaging the exterior fabric. If the exterior fabric is damaged and the coke breeze is disturbed, the project team should be prepared to make the repair at the time of construction to avoid delays. The linear anode will need to be cleanly cut (if the damaged length is not needed) or spliced to another section of Matcor SPL-FBR MMO linear anode. Any cutting or splicing of the anode must be completed following the manufacturer's instructions to ensure the anode is restored and continues functioning to protect the existing mainline. Following backfill operations, a cathodic protection technician will need to be sent into the field to adjust CP levels. Per conversations with the Enbridge SME discussing the potential lengths being removed, it is anticipated that minimal additional protection will be required from linear anodes for the new road crossing pipe.

During construction when the pipe is cut and the continuity of the mainline is lost, there is probability of AC voltage to be present on the pipeline due to the nearby electrical transmission power lines. A device such as the Tinker & Rasor AC-15 AC Warning System is recommended to monitor personnel safety during pipeline removal and installation activities.

6.1.10 Temporary Structures and Facilities

The contractor shall employ temporary support structures per Enbridge specifications for supporting the Enbridge pipeline and other utilities as required throughout construction.

6.1.11 Retirement

There will be approximately 108 LF of Line 6 pipe and approximately 47 LF of casing as well as a valve station that will be removed as a result of this project.

7 DESIGN DELIVERABLES

Deliverable reviews will include a 60% Issued for Review (IFR), Issued for Bid (IFB) and Issued for Construction (IFC) packages. A 60% design will be developed showing the workspace layout and include existing and proposed plans, cross sections, and engineering/restoration details. The Issued for Bid (IFB) and Issued for Construction (IFC) drawings will incorporate client comments and appropriate details and notes/specifications.

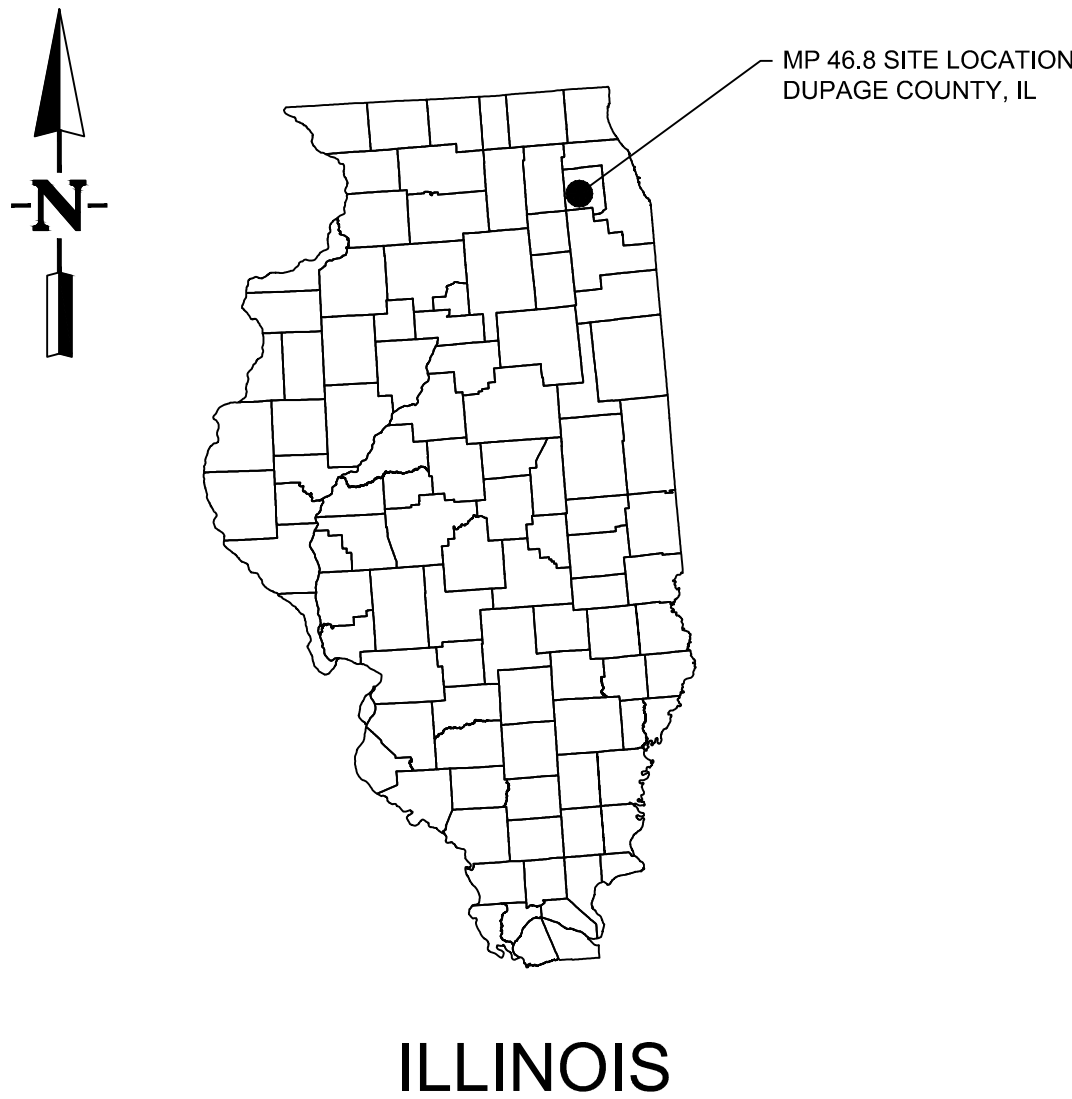
The design will be developed to a IFC completion level. The IFC drawing package is anticipated to include the following:

- General sheets
- Scope of work and temporary workspace layout
- Proposed plan with proposed layout (civil, mechanical, and electrical)
- Technical specifications (civil, mechanical, and electrical)
- Approximate material quantities.

8 APPENDICES

Appendix	Description
A	Plans for a road widening project for North Aurora Road
B	Alignment sheet
C	Enbridge Specifications
D	Geotechnical report
E	Surface Loading Stress Calculations

ENBRIDGE PIPELINES, INC.
1409 HAMMOND AVENUE
SUPERIOR, WI 54880 USA



MP 406.84
LINE 6 REPLACEMENT
AFE 40000035-2200090
CIVIL AND MECHANICAL
CWP NUMBER PUR-1844-2000014



ISSUED FOR CONSTRUCTION - AUGUST 9, 2024



MP 406.84
DRAWING INDEX

INCL THIS ISSUE	REV. NO.	DRAWING NUMBER	DESCRIPTION
			GENERAL
X	0.D	D-6-0.0-SKG001-538	COVER SHEET
X	0.D	D-6-0.0-SKG002-538	INDEX SHEET
X	0.D	D-6-0.0-SCG003-538R	SCOPE OF WORK - REMOVALS
X	0.D	D-6-0.0-SCG003-538	SCOPE OF WORK
X	0.D	D-6-0.0-SKG004-538	DRAWING SET ISSUE RECORD
			CIVIL
X	0.D	D-6-5.8-102013-538	PLAN AND PROFILE
X	0.C	D-6-1.7-1048988-538	PIPE RELOCATION PLAN
X	0.C	D-6-1.7-1048989-538	PIPELINE PROFILE AND DETAILS
X	0.C	D-6-1.7-104890-538	SITE RESTORATION DETAILS
			MECHANICAL
X	0.D	D-6-3.72-111615-538R	MECHANICAL REMOVALS
X	0.D	D-6-3.72-111615-538	PLOT PLAN
X	0.D	D-6-3.72-111616-538	PIPING SECTIONS AND DETAILS
X	0.D	D-6-3.72-111617-538	PIPING ISOMETRIC

ISSUED FOR CONSTRUCTION

REV: 0.D	PROJECT TITLE: LINE 6 REPLACEMENT	SEQ #:	
AFE: 40000035	PROJ NO: 2200090		
WP NO: PUR-1844-2000014			
REV	SUBSEQUENT REVISION	DATE BY	CHK APPR
0.A	ISSUED FOR 60% REVIEW	2022-06-13 KKB	HMB R. OLAH
0.B	RE-ISSUED FOR 60% REVIEW	2024-01-23 KKB	HMB C.BUNGER
0.C	ISSUED FOR PERMIT	2024-02-27 KKB	HMB C.BUNGER
0.D	ISSUED FOR CONSTRUCTION	2024-08-09 KKB	HMB C.BUNGER

REFERENCE DRAWINGS

REV NO.	REVISION DESCRIPTION	DATE	CHK	APPR

COPYRIGHT © THIS DRAWING IS THE PROPERTY OF ENBRIDGE AND SHALL NOT BE REPRODUCED EITHER IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN CONSENT OF ENBRIDGE.



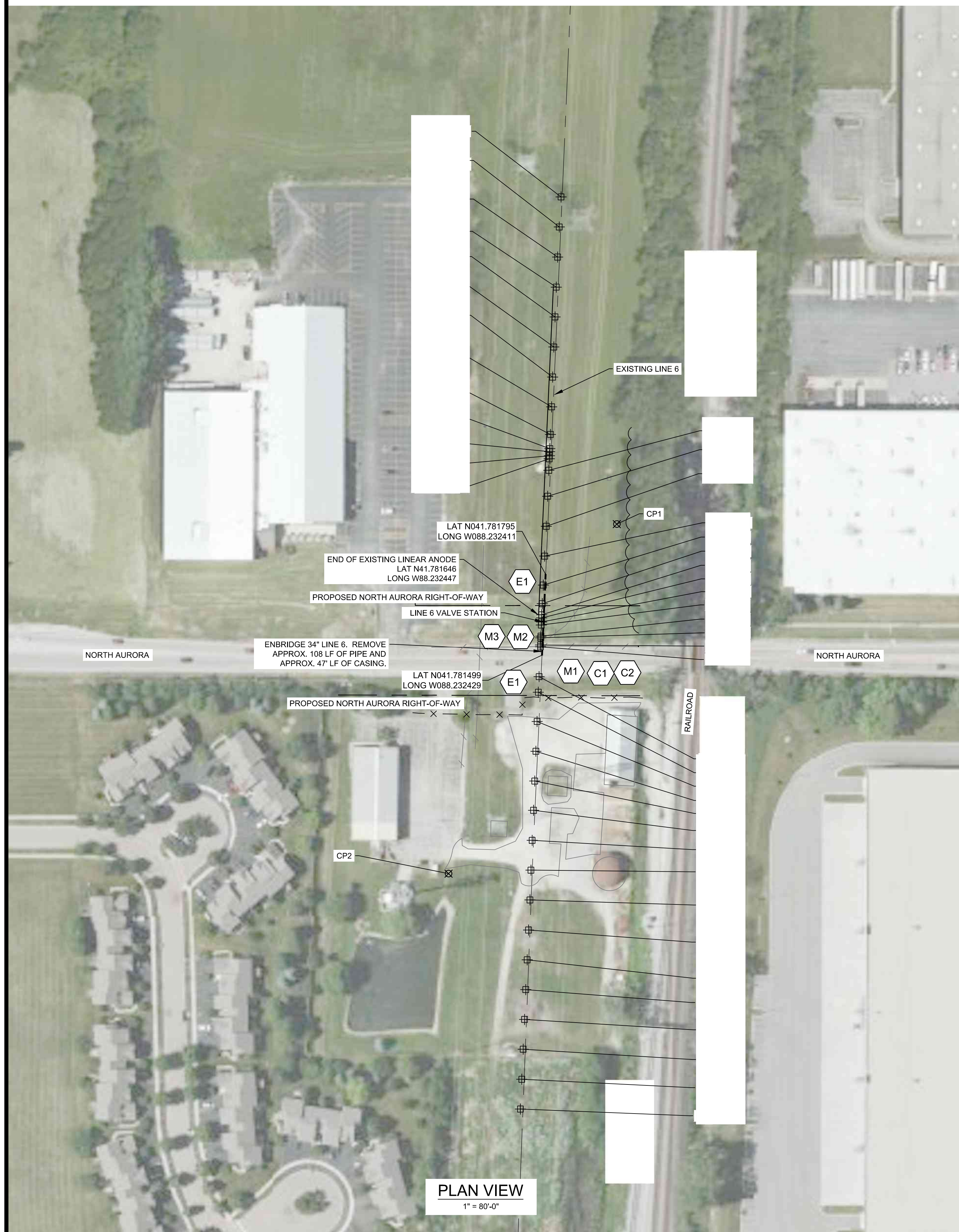
MP 406.84
LINE 6 - ROAD
LINE 6 REPLACEMENT
INDEX SHEET

BY: KKB CHK: HMB ENG.: C. BUNGER ENB APPR: J. SOROARDY

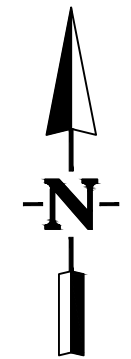
DATE: 2022-05-18 SCALE: NTS STATUS: DESIGN

DWG NO.: D-6-0.0-SKG002-538 REV NO.: 0.D

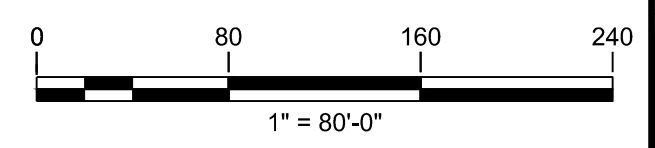




PLAN VIEW
1" = 80'-0"



CONTROL POINTS					
POINT ID	NORTHING	EASTING	LATITUDE	LONGITUDE	ELEVATION
CP1	1863159.62	1011870.60	N41.781978	W88.23262	719.49
CP2	1862693.62	1011646.14	N41.780700	W88.232887	717.76



REMOVALS SCOPE OF WORK

MECHANICAL

- M1 REMOVAL OF CASING.
- M2 REMOVE LINE 6.
- M3 REMOVE LINE 6 VALVE STATION.

ELECTRICAL

- E1 REMOVE TEST STATION.

CIVIL

- C1 ROAD REMOVAL AND REPLACEMENT IN KIND (PER ENBRIDGE AGREEMENT WITH CITY OF NAPERVILLE).
- C2 SITE EXCAVATION.

LEGEND:

- — — — — EXISTING PIPE CENTERLINE
- — — — — PIPE TO BE REMOVED
- x — x — EXISTING FENCE
- — — — — EXISTING TREELINE
- ⊕ GIRTH WELD
- ⊗ CONTROL POINT
- — — — — EXISTING LINEAR ANODE

NOTE:

1. COORDINATE SYSTEM CORRESPONDS TO NAD83 ILLINOIS STATE PLANE, EAST ZONE, US SURVEY FEET. VERTICAL DATUM, CORRESPONDS TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. CONTRACTOR TO COORDINATE WITH ENBRIDGE/ILDOT/CITY OF NAPERVILLE ON TRAFFIC CONTROL PLAN FOR ROAD CLOSURE.

ISSUED FOR CONSTRUCTION

REV: 0.D	PROJECT TITLE: LINE 6 REPLACEMENT	SEQ #:	
AFE: 40000035	PROJ NO: 2200090		
WP NO: PUR-1844-200014			
REV	SUBSEQUENT REVISION	DATE BY	CHK APPR
0.A	ISSUED FOR 60% REVIEW	2022-06-13 KKB	HMB R. CLAH
0.B	RE-ISSUED FOR 60% REVIEW	2024-01-23 KKB	HMB C.BUNGER
0.C	ISSUED FOR PERMIT	2024-02-27 KKB	HMB C.BUNGER
0.D	ISSUED FOR CONSTRUCTION	2024-08-09 KKB	HMB C.BUNGER

REFERENCE DRAWINGS

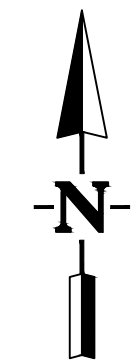
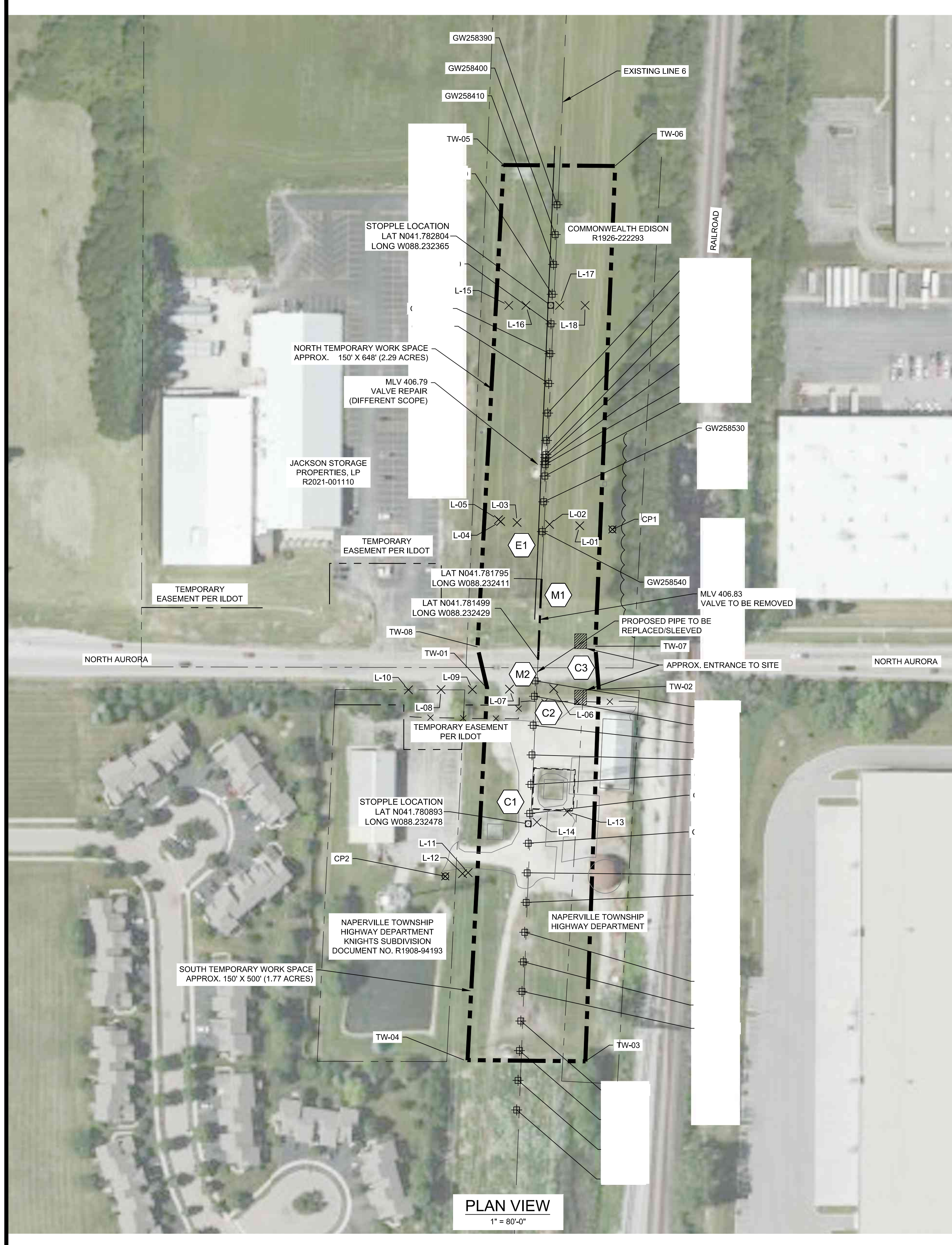
REV NO	REVISION DESCRIPTION	DATE	CHK	APPR

COPYRIGHT © THIS DRAWING IS THE PROPERTY OF ENBRIDGE AND SHALL NOT BE REPRODUCED EITHER IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN CONSENT OF ENBRIDGE.



MP 406.84
LINE 6 - ROAD
LINE 6 REPLACEMENT
SCOPE OF WORK - REMOVALS

BY: KKB	CHK: HMB	ENG.: C. BUNGER	ENB APPR: J. SOROARDY
DATE: 2021-11-10	SCALE: AS SHOWN	STATUS: DESIGN	
DWG NO: D-6-0.0-SCG003-538R	REV NO: 0.D		



PLAN VIEW
1" = 80'-0"

CABLE WIRE HEIGHT			
POINT ID	NORTHING	EASTING	WIRE HEIGHT (FT)*
L-01	1863164.56	1011826.74	51.2
L-02	1863166.38	1011786.21	51.3
L-03	1863168.97	1011742.52	35.8
L-04	1863170.28	1011720.45	37.3
L-05	1863172.70	1011717.54	50.8
L-06	1862945.74	1011791.80	16.8
L-07	1862945.03	1011732.29	14.3
L-08	1862944.36	1011640.42	14.5
L-09	1862944.58	1011682.50	18.2
L-10	1862944.12	1011596.65	16.1
L-11	1862698.48	1011676.73	39.3
L-12	1862697.17	1011669.24	38.3
L-13	1862780.24	1011810.27	67.8
L-14	1862766.39	1011769.09	66.0
L-15	1863460.62	1011731.47	49.5
L-16	1863460.62	1011754.29	49.3
L-17	1863460.62	1011799.53	64.8
L-18	1863460.62	1011833.93	64.4

*ALL WIRE HEIGHTS ARE APPROXIMATE.

CONSTRUCTION SCOPE OF WORK

CIVIL

- C1** INSTALL TEMPORARY JERSEY BARRIERS APPROXIMATELY 15 FEET FROM THE UTILITY TOWER FOUNDATION.
- C2** REMOVE AND REPLACE FENCE.
- C3** INSTALL SITE ACCESS ENTRANCE.

MECHANICAL

- M1** INSTALL PROPOSED LINE 6 PIPE.
- M2** INSTALL SLEEVE ON EXISTING LINE 6.

ELECTRICAL

- E1** REPLACE EXISTING ANODE IF DAMAGED DURING CONSTRUCTION.

LEGEND:

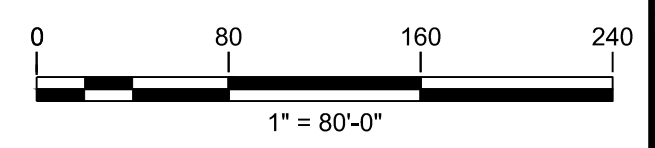
- EXISTING PIPE CENTERLINE
- PROPOSED PIPE CENTERLINE
- PROPOSED TEMPORARY WORKSPACE
- PROPERTY LINES
- EXISTING EASEMENTS
- EXISTING FENCE
- EXISTING TREELINE
- GIRTH WELD
- CONTROL POINT
- EXISTING LINEAR ANODE
- STOPPLE LOCATION

TEMPORARY WORKSPACE				
POINT ID	NORTHING	EASTING	LATITUDE	LONGITUDE
TW-01	1862946.08	1011702.37	N41.781392	W88.232680
TW-02	1862944.84	1011852.37	N41.781388	W88.232130
TW-03	1862445.09	1011834.27	N41.780017	W88.232198
TW-04	1862446.78	1011676.00	N41.780022	W88.232779
TW-05	1863649.16	1011724.38	N41.783322	W88.232596
TW-06	1863647.84	1011874.37	N41.783318	W88.232046
TW-07	1863000.10	1011847.64	N41.781540	W88.232147
TW-08	1863001.78	1011689.37	N41.781545	W88.232727

CONTROL POINTS					
POINT ID	NORTHING	EASTING	LATITUDE	LONGITUDE	ELEVATION
CP1	1863159.62	1011870.60	N41.781978	W88.23262	719.49
CP2	1862693.62	1011646.14	N41.780700	W88.232887	717.76

ISSUED FOR CONSTRUCTION

REV: 0.D	PROJECT TITLE: LINE 6 REPLACEMENT	SEQ #:	
AFE: 40000035	PROJ NO: 2200090		
WP NO: PUR-1844-2000014			
REV	SUBSEQUENT REVISION	DATE BY	CHK APPR
0.A	ISSUED FOR 60% REVIEW	2022-06-13 KKB	HMB R. OLAH
0.B	RE-ISSUED FOR 60% REVIEW	2024-01-23 KKB	HMB C. BUNGER
0.C	ISSUED FOR PERMIT	2024-02-27 KKB	HMB C. BUNGER
0.D	ISSUED FOR CONSTRUCTION	2024-08-09 KKB	HMB C. BUNGER



CONSTRUCTION NOTES:

1. THIS DRAWING REPRESENTS A GENERAL GRAPHIC SUMMARY OF THE WORK. WORK INCLUDES BUT IS NOT LIMITED TO WHAT IS DESCRIBED. FOR DETAILS REFER TO DRAWINGS AND PROJECT SPECIFICATIONS.
2. CONTRACTOR IS RESPONSIBLE FOR ALL WORK UNLESS OTHERWISE NOTED.
3. ALL MEASUREMENTS ARE APPROXIMATE. VERIFY ALL DIMENSIONS IN FIELD PRIOR TO CONSTRUCTION.
4. POSITIVELY ID ALL UTILITY CROSSINGS PRIOR TO CONSTRUCTION TO VERIFY DEPTHS AND LOCATIONS.
5. COORDINATE WITH ENBRIDGE R.O.W. FOR ACCESS TO SITE.
6. DO NOT COMMENCE ANY WORK WITHOUT REQUIRED ENBRIDGE PERSONNEL ON SITE.
7. WORK SHALL BE IN ACCORDANCE WITH TO ENBRIDGE SITE PREPARATION AND EARTHWORK SPECIFICATIONS PCS-001.
8. PROTECT SURVEY CONTROL POINTS. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING ADDITIONAL CONTROL FOR CONSTRUCTION AND RECORD SURVEY ACTIVITIES.
9. THE LOCATION FOR STOCKPILING OF EXCESS SOIL SHALL BE COORDINATED WITH ENBRIDGE AND THE LANDOWNER. EROSION CONTROLS SHALL BE INSTALLED AT THE PERIMETER OF ALL TEMPORARY STOCKPILES. STOCKPILES SHALL NOT BE PLACED WITHIN WETLANDS OR WETLAND BUFFERS.
10. "DAYLIGHT" BURIED UTILITIES PER THE ENBRIDGE LP/MP SAFETY MANUAL.
11. EXCESS SOIL MAY BE REMOVED OFFSITE OR IN AREAS APPROVED BY ENBRIDGE AND THE LANDOWNER AND IN ACCORDANCE WITH THE ENVIRONMENTAL CLEARANCE. ENBRIDGE TO COORDINATE FINAL LOCATION OF EXCESS SOIL WITH LANDOWNER.
12. DISTURBED AREAS ON THE PROTECTED AREA SHALL BE RESTORED ACCORDING TO ENVIRONMENTAL PERMITS FOR THIS PROJECT AND THE ENBRIDGE ENVIRONMENTAL PROTECTION PLAN (EPP) UNLESS OTHERWISE SPECIFIED.
13. DE-WATER AND PUMP AROUND AS NEEDED. PERFORM CONSTRUCTION DE-WATERING IN ACCORDANCE WITH EPP SECTION 25, FIGURES 19 AND 20. SUBMIT PLAN FOR ENBRIDGE APPROVAL PRIOR TO DE-WATERING ACTIVITIES. DEWATERING IS PROHIBITED WITHIN 100 FEET OF WETLANDS ON COMED PROPERTY.
14. CONSTRUCTION ACTIVITIES SHALL COMPLY WITH THE ENBRIDGE EPP.
15. OBTAIN WRITTEN AUTHORIZATION FROM ENBRIDGE PROJECT MANAGER PRIOR TO WORK THAT WOULD RESULT IN A COST INCREASE.
16. CONTRACTOR IS RESPONSIBLE FOR ALL SURVEY INCLUDING STAKING, RECORDING TOP OF PIPE ELEVATIONS EVERY 5 FEET IN AREAS WHERE THE PIPELINE IS EXPOSED (OR DAYLIGHTED), AND FINISHED GRADE ELEVATIONS ABOVE THE PIPELINE WITHIN THE CONSTRUCTION LIMITS.
17. PROVIDE AS-BUILT INFORMATION WITHIN TWO WEEKS OF CONSTRUCTION COMPLETION.
18. COORDINATE SYSTEM CORRESPONDS TO NAD83 ILLINOIS STATE PLANE, EAST ZONE, US SURVEY FEET, VERTICAL DATUM CORRESPONDS TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
19. SURFACE PIPE LOCATIONS AND DEPTHS SHOWN ARE BASED ON SITE SURVEY COMPLETED BY NORTHWESTERN SURVEY ON JUNE 22, 2021 AND ARE APPROXIMATE.
20. SPECIFICATIONS FOR THIS PROJECT WERE FROZEN ON APRIL 1, 2021.

REFERENCE DRAWINGS				
NO.	REVISION DESCRIPTION	DATE	CHK	APPR

COPYRIGHT © THIS DRAWING IS THE PROPERTY OF ENBRIDGE AND SHALL NOT BE REPRODUCED EITHER IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN CONSENT OF ENBRIDGE.



**MP 406.84
LINE 6 - ROAD
LINE 6 REPLACEMENT
SCOPE OF WORK**

BY: KKB	CHK: HMB	ENG.: C. BUNGER	ENB APPR. J. SOROARDY
DATE: 2021-11-10	SCALE: AS SHOWN	STATUS: DESIGN	
DWG NO.: D-6-0.0-SCG003-538		REV NO.: 0.D	

DRAWING SET ISSUE RECORD

AFE / SUFFIX:		40000035					
PROJECT:		LINE 6 REPLACEMENT					
DRAWING PACKAGE ISSUE	SUBMISSION DATE						CONSULTANT'S DRAWING COORDINATOR
	PROCESS	CIVIL/ STRUCTURAL	MECHANICAL	ELECTRICAL	CONT. SYS./ INSTRUMENT.	VENDOR	
60% REVIEW	N/A	2022-06-13	2022-06-13	2022-06-13	N/A	N/A	KKB
RE-60% REVIEW	N/A	2024-01-23	2024-01-23	2024-01-23	N/A	N/A	KKB
ISSUED FOR PERMIT	N/A	2024-02-27	2024-02-27	N/A	N/A	N/A	KKB
ISSUED FOR CONSTRUCTION	N/A	2024-08-09	2024-08-09	N/A	N/A	N/A	KKB
PREPARED BY: BARR ENGINEERING							
ALL DRAWINGS IN THIS ISSUE HAVE BEEN REVIEWED BY THE FOLLOWING:							
COMPANY PROJECT MANAGER:		JOMIR SOROARDY			_____		
CONSULTANT PROJECT MANAGER:		HEATHER LEWIS			_____		

ISSUED FOR CONSTRUCTION

REV: 0.D	PROJECT TITLE: LINE 6 REPLACEMENT	SEQ #:	
AFE: 40000035	PROJ NO: 2200090		
WP NO: PUR-1844-2000014			
REV	SUBSEQUENT REVISION	DATE BY	CHK APPR
0.A	ISSUED FOR 60% REVIEW	2022-06-13 KKB	HMB R. CLAH
0.B	RE-ISSUED FOR 60% REVIEW	2024-01-23 KKB	HMB C.BUNGER
0.C	ISSUED FOR PERMIT	2024-02-27 KKB	HMB C.BUNGER
0.D	ISSUED FOR CONSTRUCTION	2024-08-09 KKB	HMB C.BUNGER

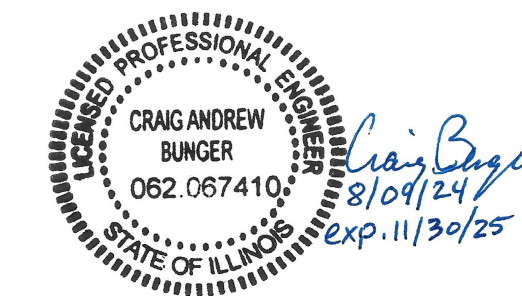
REFERENCE DRAWINGS

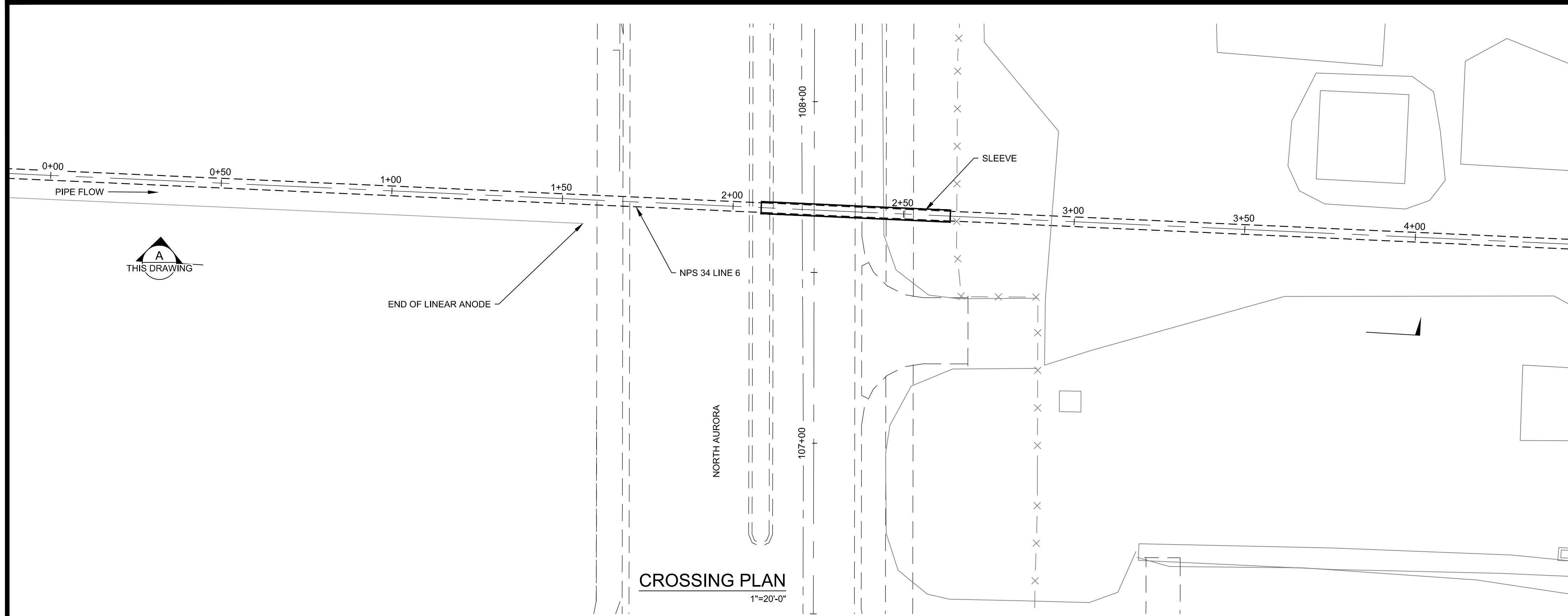
REV NO. REVISION DESCRIPTION DATE BY CHK APPR
 COPYRIGHT © THIS DRAWING IS THE PROPERTY OF ENBRIDGE AND SHALL NOT BE REPRODUCED EITHER IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN CONSENT OF ENBRIDGE.



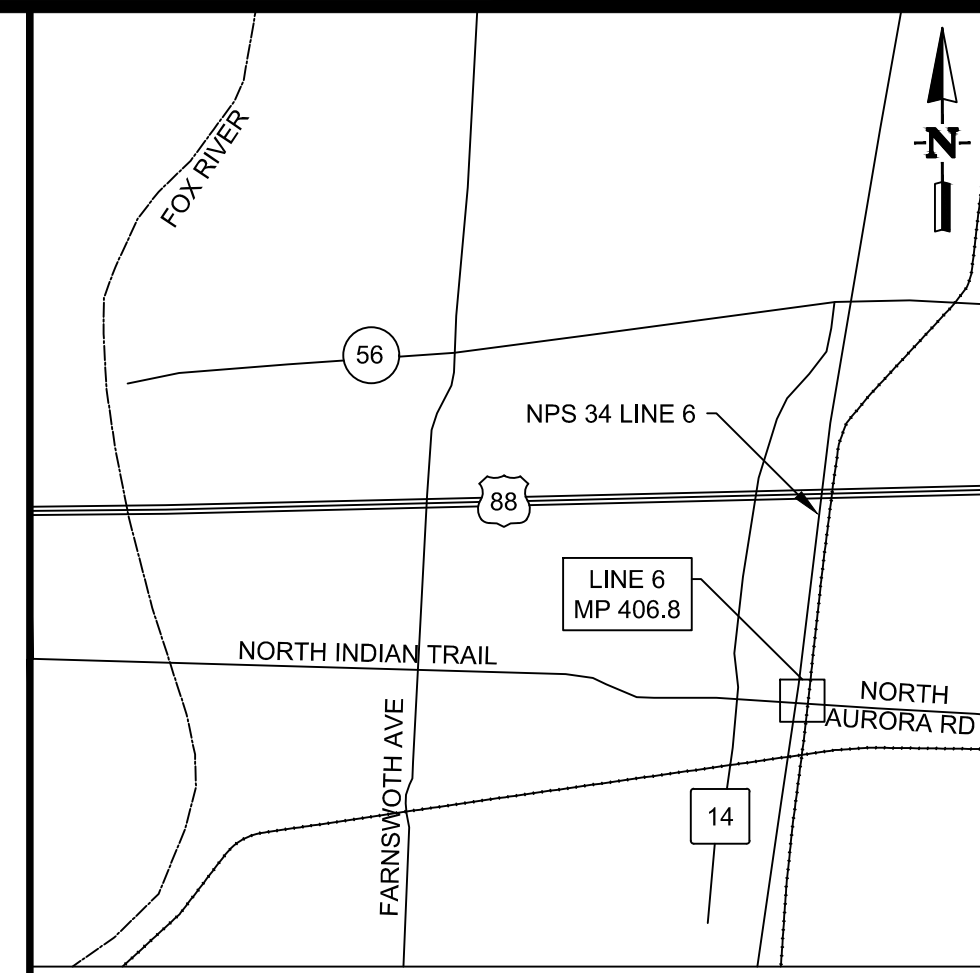
MP 406.84
 LINE 6 - ROAD
 LINE 6 REPLACEMENT
 DRAWING SET ISSUE RECORD

BY: KKB	CHK: HMB	ENG.: C. BUNGER	ENB APPR: J. SOROARDY
DATE: 2022-05-18	SCALE: NONE	STATUS: DESIGN	
DWG NO:	D-6-0.0-SKG004-538		REV NO: 0.D





CROSSING PLAN
1"=20'-0"

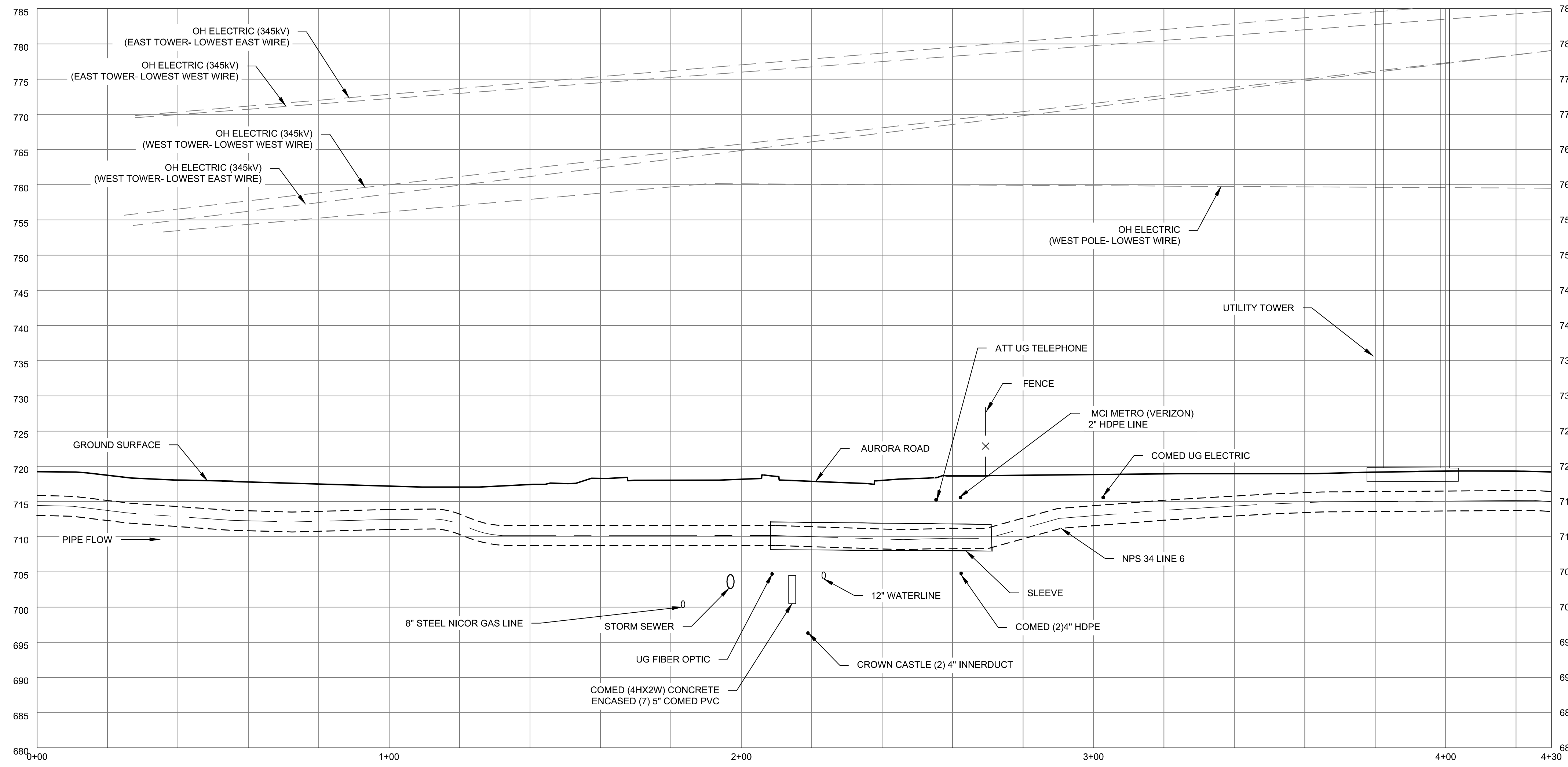


LOCATION PLAN

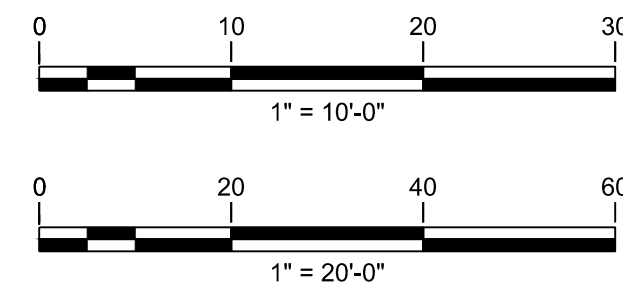
NORTH HALF OF SECTION SEVENTEEN (17), TOWNSHIP THIRTY-EIGHT (38)
NORTH, RANGE NINE (9) EAST, DUPAGE COUNTY, ILLINOIS

- NOTES:**
- COORDINATE SYSTEM CORRESPONDS TO NAD83 ILLINOIS STATE PLANE, EAST ZONE, US SURVEY FEET. VERTICAL DATUM CORRESPONDS TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
 - SURFACE PIPE LOCATIONS AND DEPTHS SHOWN ARE BASED ON SITE SURVEY COMPLETED BY NORTHWESTERN SURVEY ON JUNE 22, 2021 AND ARE APPROXIMATE.

- LEGEND:**
- PIPE CENTERLINE: - - - - -
 - PIPE SLEEVE: [Solid Line]



CROSSING PROFILE
HORIZONTAL 1"=20'-0" & VERTICAL 1"=10'-0"
THIS DWG



ISSUED FOR CONSTRUCTION

REV: 0.0	PROJECT TITLE: LINE 6 REPLACEMENT	SEQ #:	
AFE: 40000035	PROJ NO: 2200090		
WP NO: PUR-1844-2000014			
REV	SUBSEQUENT REVISION	DATE BY	CHK APPR
0.A	ISSUED FOR 60% REVIEW	2022-06-13 KKB	HMB R. CLAH
0.B	RE-ISSUED FOR 60% REVIEW	2024-01-23 KKB	HMB C.BUNGER
0.C	ISSUED FOR PERMIT	2024-02-27 KKB	HMB C.BUNGER
0.D	ISSUED FOR CONSTRUCTION	2024-08-09 KKB	HMB C.BUNGER

REFERENCE DRAWINGS

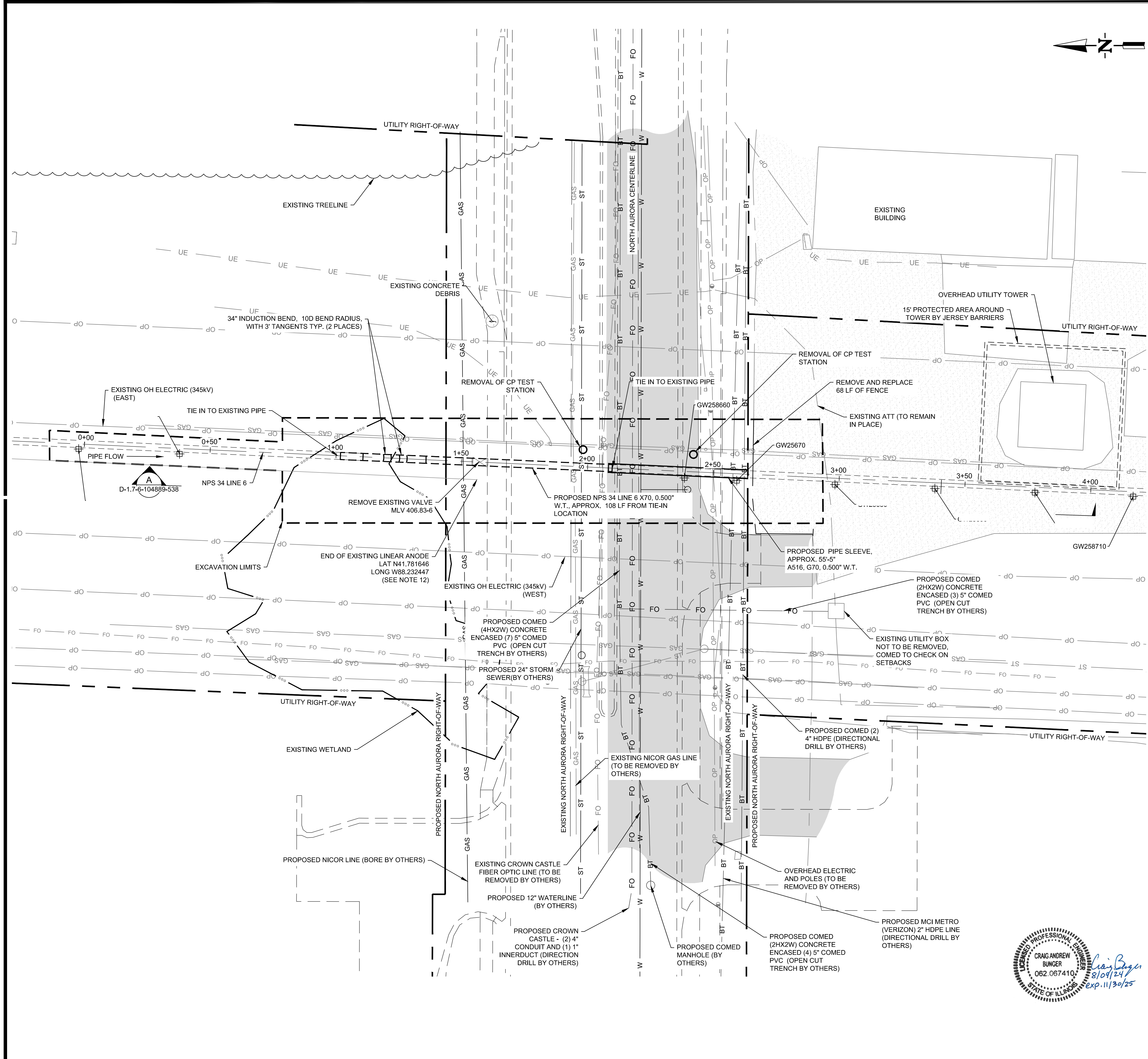
REV NO	REVISION DESCRIPTION	DATE	CHK	APPR

RIGHT © THIS DRAWING IS THE PROPERTY OF ENBRIDGE AND SHALL NOT BE REPRODUCED EITHER IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN CONSENT OF ENBRIDGE.



MP 406.84
LINE 6 REPLACEMENT
CROSSING
PLAN AND PROFILE

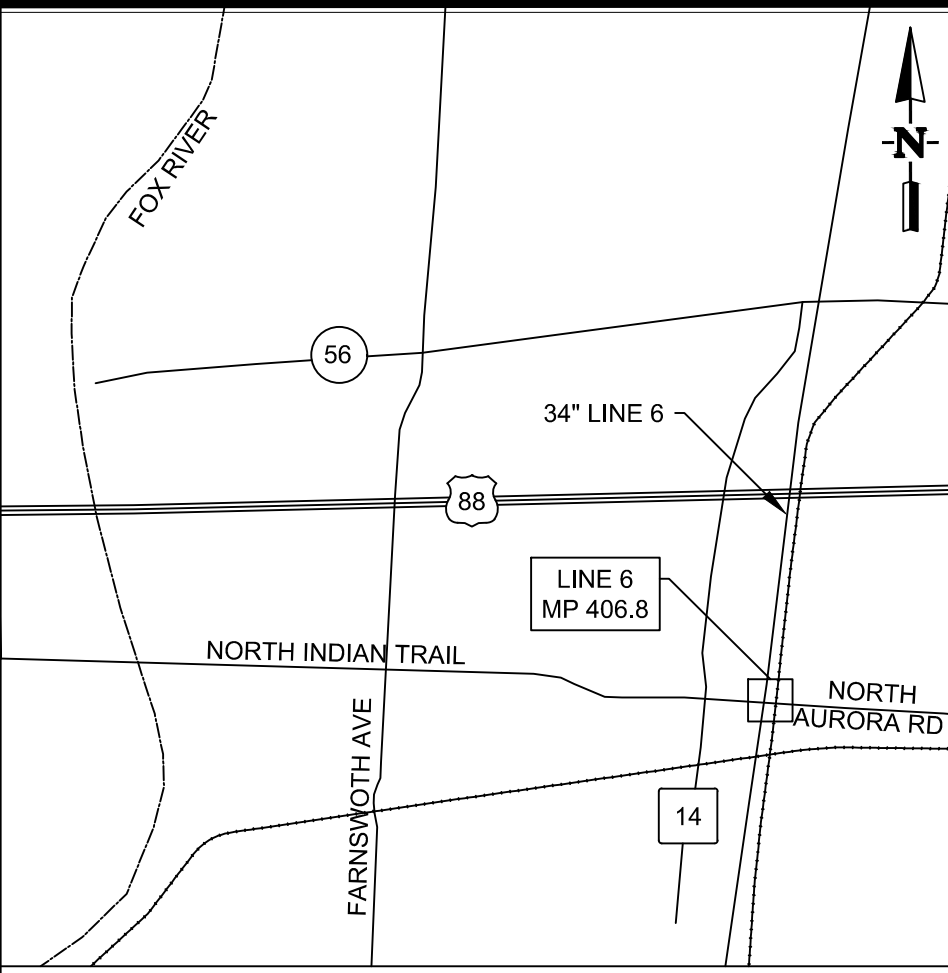
BY: KKB	CHK: HMB	ENG.: C. BUNGER	ENB APPR: J. SOROARDY
DATE: 2022-05-19	SCALE: AS SHOWN	STATUS: DESIGN	
DWG NO: D-6-5.8-102013-538	REV NO: 0.0		



ESTIMATED QUANTITIES*	
EXCAVATION/REPLACEMENT	4,046 CY
PAVEMENT REMOVAL/REPLACEMENT	172 SY
FENCE REMOVAL/REPLACEMENT	68 LF
GRAVEL REMOVAL/REPLACEMENT	126 SY
EROSION CONTROL BLANKET	815 SY
TOPSOIL AND SEED	815 SY

*THESE QUANTITIES ARE BASED OFF OF CURRENT EXISTING ROAD CONDITIONS.

- GENERAL NOTES:**
- CONTRACTOR TO INSTALL EROSION CONTROL PER ENBRIDGE EPP AS NEEDED DURING CONSTRUCTION.
 - CONTRACTOR TO CLEAR AND GRUB AS NEEDED FOR CONSTRUCTION WITHIN WORKSPACE AREA. DO NOT REMOVE TREES GREATER THAN 3" DIAMETER WITHOUT PRIOR ENBRIDGE APPROVAL.
 - COORDINATE WITH ENBRIDGE REPRESENTATIVE FOR STOCKPILE LOCATION.
 - FOR ALL DISTURBED SURFACES UNLESS OTHERWISE SHOWN: PLACE AND SMOOTH GRADE TOPSOIL, SEED, AND INSTALL EROSION CONTROL BLANKET.
 - FILL MATERIAL SHALL BE CLEAR OF VEGETATION, BRUSH, ROOTS, AND OTHER DEBRIS. FILL SHALL ALSO BE FREE OF EXCESSIVE MOISTURE, FROZEN SOILS, AND ROCKS LARGER THAN 2 INCHES.
 - ENGINEERED FILL TO BE PLACED IN ROAD AND PLACE COMMON FILL (ENBRIDGE SPEC FCS-001) WITHIN ROW IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE THICKNESS. COMPACT COMMON FILL TO AN IN PLACE DENSITY 98 PERCENT IN THE PROPOSED ROAD RIGHT OF WAY AND 95 PERCENT OUTSIDE OF PROPOSED ROAD RIGHT OF WAY AS MEASURED BY ASTM D698. CONTRACTOR SHALL USE SITE PREP AND EARTHWORK PCS-001 FOR EARTHWORK GUIDANCE.
 - CONTRACTOR SHALL INSTALL EROSION CONTROLS INCLUDING (BUT NOT LIMITED TO) SILT FENCE TO PREVENT SOIL LOSS FROM DISTURBED AREAS. FOR EROSION CONTROL DETAILS SEE SITE RESTORATION DETAILS.
 - EXCAVATION SUPPORT TO BE DESIGNED BY CONSTRUCTION CONTRACTOR. REFER TO GEOTECHNICAL EVALUATION DATA.
 - PROPOSED ROAD PROFILE GENERATED FROM NORTH AURORA ROAD IMPROVEMENT PLANS PROPOSED TYPICAL SECTION STATION 16+70.00 TO STATION 110+60.40 AND ESTIMATED UNDERCUT LIMITS LOCATION 2: STATION 105+50.00 TO STATION 109+75.00.
 - A MINIMUM DISTANCE OF 20 FEET MUST BE MAINTAINED FROM ALL OVERHEAD ELECTRIC LINES THROUGHOUT CONSTRUCTION.
 - CONTRACTOR SHALL ARRANGE PROPER GROUNDING OF PIPE DURING PIPE INSTALLATION ACTIVITIES TO AVOID POTENTIAL ARCS FROM AC INDUCED CURRENT.
 - CONTRACTOR TO PROTECT EXISTING SECTION OF ANODE THAT FALLS WITHIN THE EXCAVATION LIMITS. IF ANODE IS DAMAGED DURING CONSTRUCTION IN ANYWAY, A REPLACEMENT SECTION OF EQUIVALENT LINEAR ANODE SHALL BE SPLICED IN WITH A MANUFACTURER APPROVED SPLICE KIT/PROCEDURE. EXISTING AVAILABLE NOTES THE ANODE AS A MATCOR SPL-FBR MM LINEAR ANODE. CONFIRM ANODE MANUFACTURER AND MODEL AFTER EXPOSURE AND CUT PER MANUFACTURER'S INSTRUCTIONS. CONTACT ENGINEER ID ADDITIONAL INFORMATION IS REQUIRED.
 - SHALLOW GROUND WATER WAS ENCOUNTERED DURING THE COURSE OF GEOTECHNICAL BORINGS AND DEWATERING SHOULD BE CONSIDERED AS PART OF CONSTRUCTION. CONTRACTOR SHALL REFERENCE THE GEOTECHNICAL DATA REPORT-REVISION 2 LINE 6A RELOCATION COMPLETED BY BARR ENGINEERING IN AUGUST, 2022.



LOCATION PLAN
NORTH HALF OF SECTION SEVENTEEN (17), TOWNSHIP THIRTY-EIGHT (38) NORTH, RANGE NINE (9) EAST, DUPAGE COUNTY, ILLINOIS

- SURVEY NOTES:**
- COORDINATE SYSTEM CORRESPONDS TO NAD83 ILLINOIS STATE PLANE, EAST ZONE, US SURVEY FEET. VERTICAL DATUM CORRESPONDS TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
 - SURFACE PIPE LOCATIONS AND DEPTHS SHOWN ARE BASED ON SITE SURVEY COMPLETED BY NORTHWESTERN SURVEY ON JUNE 22, 2021 AND ARE APPROXIMATE.

LEGEND:

	EXISTING CENTERLINE
	PROPOSED PIPE REPLACEMENT
	PIPE CASING
	PROPOSED RIGHT-OF-WAY
	EXISTING RIGHT-OF-WAY
	EXISTING GROUND MINOR CONTOUR
	EXISTING FENCE
	EXISTING GAS LINE
	EXISTING UNDERGROUND ELECTRIC
	EXISTING UNDERGROUND TELEPHONE
	EXISTING UNDERGROUND FIBER OPTIC
	EXISTING OVERHEAD POWER
	EXISTING STORMWATER
	EXISTING WETLAND
	EXISTING TREELINE
	EXISTING POWER POLE
	EXISTING CULVERT
	EXISTING MANHOLE
	EXISTING CP TEST STATION
	EXISTING ROAD
	GRAVEL
	FUTURE ROAD AND SIDEWALK DESIGN
	EXCAVATION LIMITS
	PROPOSED FENCE LINE

ISSUED FOR CONSTRUCTION

REV: 0.C	PROJECT TITLE: LINE 6 REPLACEMENT	SEQ #: 1	
AFE: 40000035	PROJ NO: 2200090		
WP NO: PUR-1844-200014			
REV	SUBSEQUENT REVISION	DATE BY	CHK APPR
0.A	RE-ISSUED FOR 60% REVIEW	2024-01-23 KKB	HMB C.BUNGER
0.B	ISSUED FOR PERMIT	2024-02-27 KKB	HMB C.BUNGER
0.C	ISSUED FOR CONSTRUCTION	2024-08-09 KKB	HMB C.BUNGER



D-6-17-SK006-538

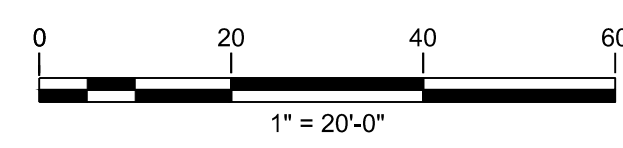
REV NO	REVISION DESCRIPTION	DATE	CHK	APPR

REFERENCE DRAWINGS

ENBRIDGE

MP 406.84
LINE 6 - ROAD
LINE 6 REPLACEMENT
PLAN

BY: KKB CHK: HMB ENG.: C. BUNGER ENB APPR: J. SOROARDY
DATE: 2021-07-09 SCALE: 1"=20'-0" STATUS: DESIGN
DWG NO.: D-6-1.7-104888-538 REV NO.: 0.C



- GENERAL NOTES:**
- CONTRACTOR SHALL PROTECT EXISTING PIPELINES AND COORDINATE WITH ENBRIDGE AND OTHER UTILITIES TO ESTABLISH PIPELINE CROSSING AREAS.
 - CONTRACTOR TO PROTECT AND SUPPORT ALL UNDERGROUND UTILITIES AND FOUNDATIONS IMPACTED DURING THE WORK.
 - CONTRACTOR TO MAINTAIN 20' MIN. SAFE DISTANCE FROM OVERHEAD ELECTRIC ACCORDING TO OSHA SAFETY REGULATIONS.
 - EXCAVATION SUPPORT TO BE DESIGNED BY CONSTRUCTION CONTRACTOR. REFER TO THE GEOTECHNICAL DATA REPORT-REVISION 2 LINE 6A RELOCATION COMPLETED BY BARR ENGINEERING IN AUGUST, 2022.
 - PROPOSED ROAD (TO BE CONSTRUCTED BY OTHERS) PROFILE GENERATED FROM NORTH AURORA ROAD IMPROVEMENT PLANS PROPOSED TYPICAL SECTION STATION 16+70.00 TO STATION 110+60.40 AND ESTIMATED UNDERCUT LIMITS LOCATION 2: STATION 105+50.00 TO STATION 109+75.06.
 - ALL REASONABLE PRECAUTIONS SHALL BE UNDERTAKEN DURING CONSTRUCTION TO PROTECT AND SAFEGUARD PUBLIC SAFETY AND PROPERTY OWNERS. THIS INCLUDES BARRICADING, SIGNING AND FLAG PERSONS AS REQUIRED, TO PROTECT AND SAFEGUARD LIVES AND PROPERTY OF THE TRAVELING PUBLIC AND ADJACENT PROPERTY OWNERS.
 - CONTRACTOR IS RESPONSIBLE FOR TEMPORARY EXCAVATION SUPPORT IN ACCORDANCE WITH OSHA GUIDELINES. SURFACE LOADS AND EXISTING INFRASTRUCTURE SHALL BE PROTECTED DURING EXCAVATION ACTIVITIES.
 - ALL MEASUREMENTS ARE APPROXIMATE. VERIFY ALL DIMENSIONS IN FIELD PRIOR TO CONSTRUCTION.
 - ALL THIRD PARTY UTILITY RELOCATIONS TO BE PROVIDED TO ENBRIDGE BY THE CITY OF NAPERVILLE PRIOR TO CONSTRUCTION.

- LEGEND:**
- EXISTING PIPE CENTERLINE
 - - - PROPOSED PIPE
 - - - EXISTING OH POWER
 - EXISTING UTILITY CROSSING
 - X - X - EXISTING FENCELINE
 - PROPOSED ROAD
 - - - PROPOSED PIT EXCAVATION
 - PROPOSED RETAINING WALL
 - - - PROPOSED RIGHT-OF-WAY

ISSUED FOR CONSTRUCTION

REV: 0.B	PROJECT TITLE: LINE 6 REPLACEMENT	SEQ #:	
AFE: 40000035	PROJ NO: 2200090		
WP NO: PUR-1844-2000014			
REV	SUBSEQUENT REVISION	DATE BY	CHK APPR
0.A	RE-ISSUED FOR 60% REVIEW	2024-01-23 KKB	HMB C.BUNGER
0.B	ISSUED FOR PERMIT	2024-02-27 KKB	HMB C.BUNGER
0.C	ISSUED FOR CONSTRUCTION	2024-08-09 KKB	HMB C.BUNGER

D-6-3.72-111616-538 PIPING SECTION & DETAILS

REFERENCE DRAWINGS

REV NO	REVISION DESCRIPTION	DATE	CHK	APPR

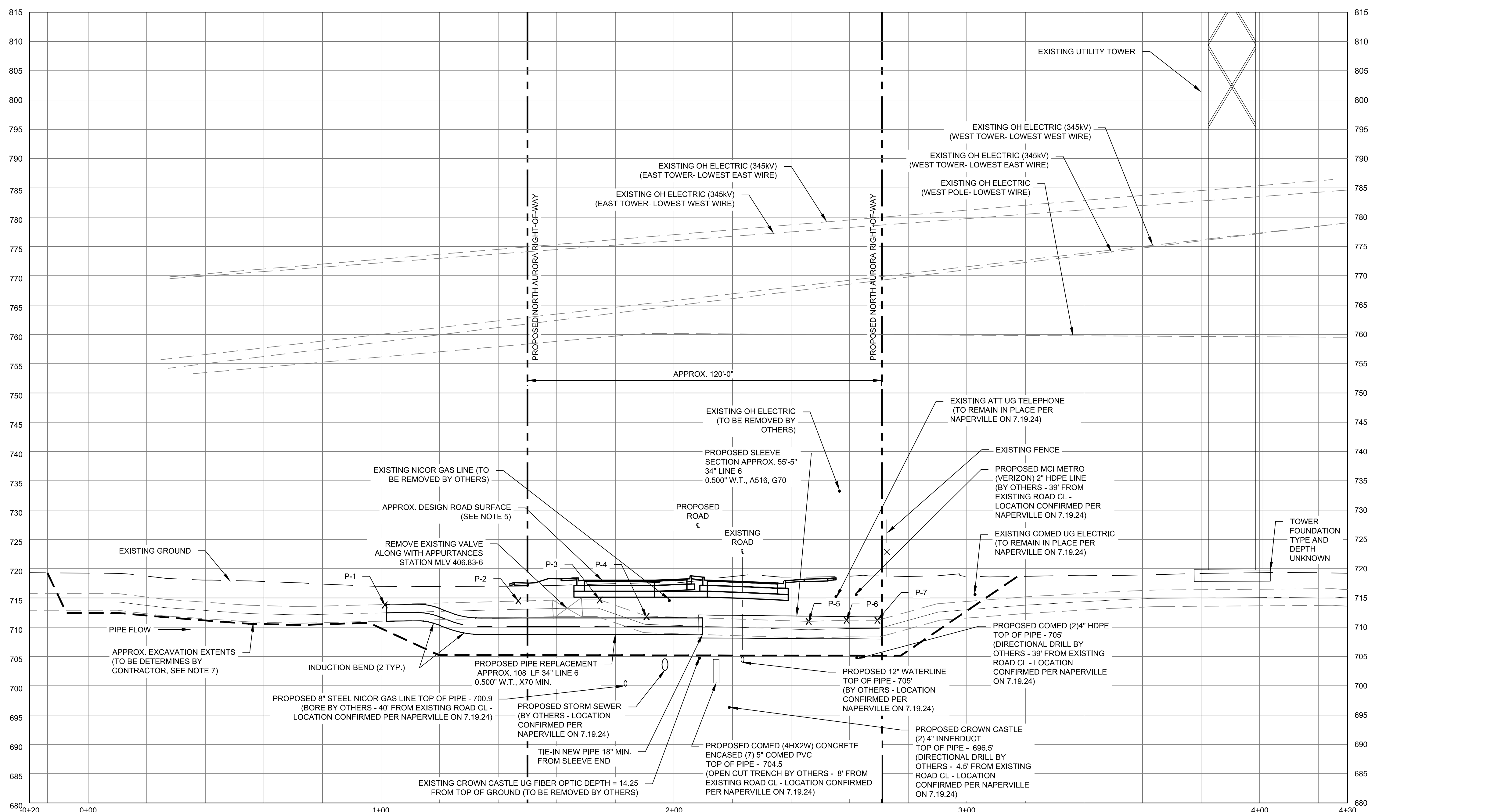
COPYRIGHT © THIS DRAWING IS THE PROPERTY OF ENBRIDGE AND SHALL NOT BE REPRODUCED EITHER IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN CONSENT OF ENBRIDGE.



MP 406.84
LINE 6 - ROAD
LINE 6 REPLACEMENT
PIPE PROFILE

BY: KKB	CHK: HMB	ENG.: C. BUNGER	ENB APPR. J. SOROARDY
DATE: 2021-07-09	SCALE: 1"=20'-0"		STATUS: DESIGN

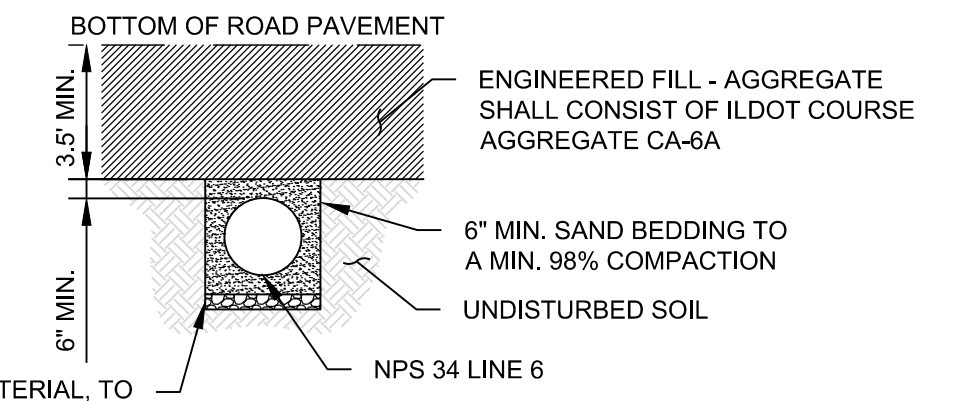
DWG NO.: D-6-1.7-104889-538 REV NO.: 0.C



A PROFILE: LINE 6
1" = 20'-0"
D-6-1.7-104889-538

LINE 6 DEPTH OF COVER

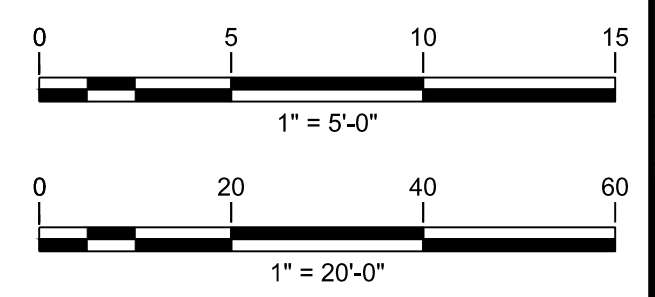
ID	POINT TYPE	ELEVATION	NORTHING	EASTING	LATITUDE	LONGITUDE
P-1	PROBE	713.81	1863093.33	1011774.22	N041.685651	W094.869948
P-2	PROBE	714.49	1863047.80	1011772.25	N041.685526	W094.869946
P-3	PROBE	714.66	1863020.05	1011770.60	N041.685450	W094.869946
P-4	PROBE	710.99	1862948.79	1011767.26	N041.685254	W094.869944
P-5	POTHOLE	711.19	1862935.71	1011766.97	N041.685219	W094.869943
P-6	POTHOLE	711.17	1862925.32	1011766.54	N041.685190	W094.869942

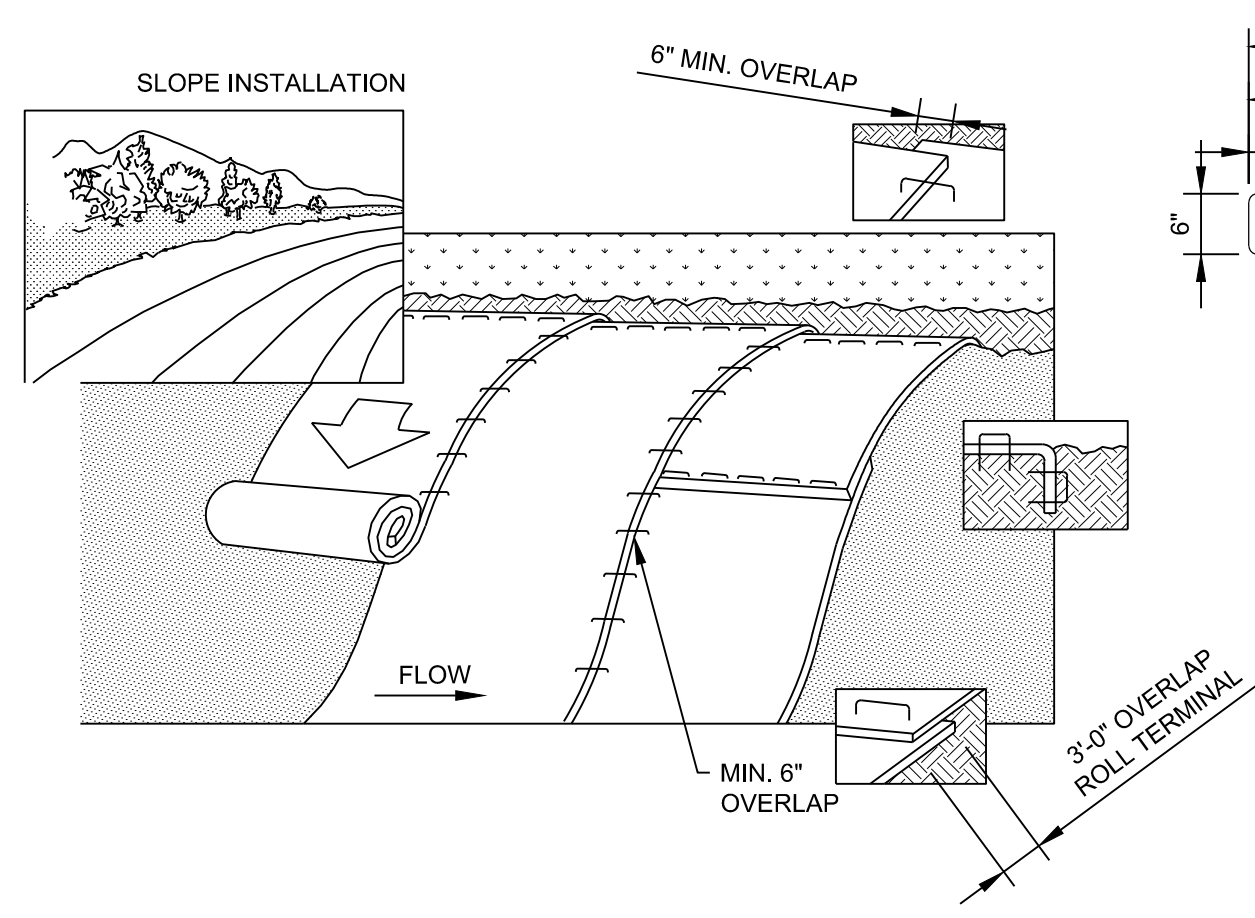


GRANULAR FOUNDATION MATERIAL TO BE PLACED IN AREAS OF UNSUITABLE SOIL (ONLY AS APPROVED BY OWNER)

- NOTES:**
- DESIGN OF TEMPORARY EXCAVATIONS FOR INSTALLATION OF PIPING SHALL BE COMPLETED BY CONTRACTOR IN ACCORDANCE TO OSHA REQUIREMENTS.
 - ROAD MATERIAL REPLACEMENT TO BE COORDINATED WITH ENBRIDGE AND THE CITY OF NAPERVILLE FOLLOWING PIPE REPLACEMENT ACTIVITIES.

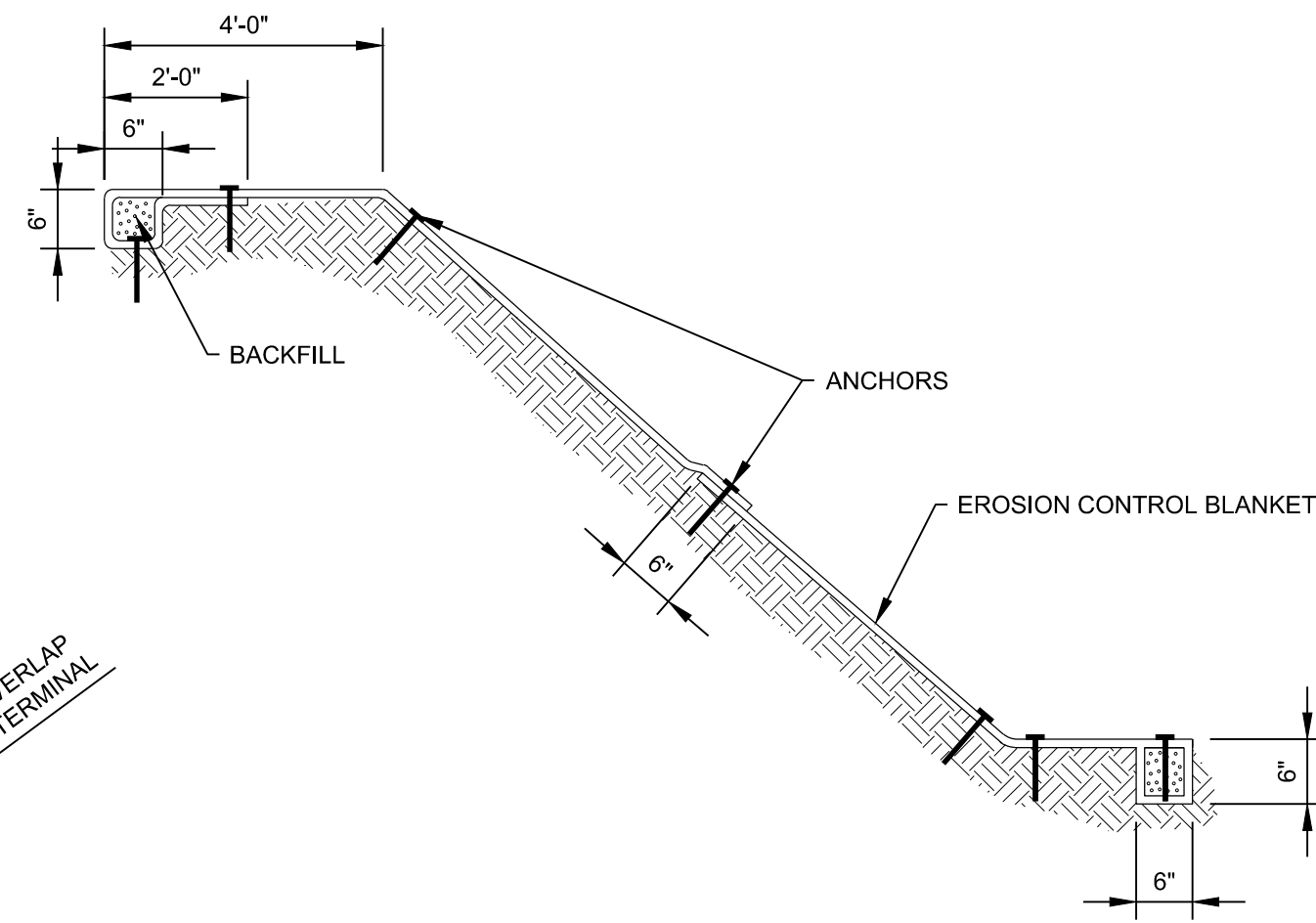
B PIPE BEDDING
1" = 5'-0"
THIS DRAWING





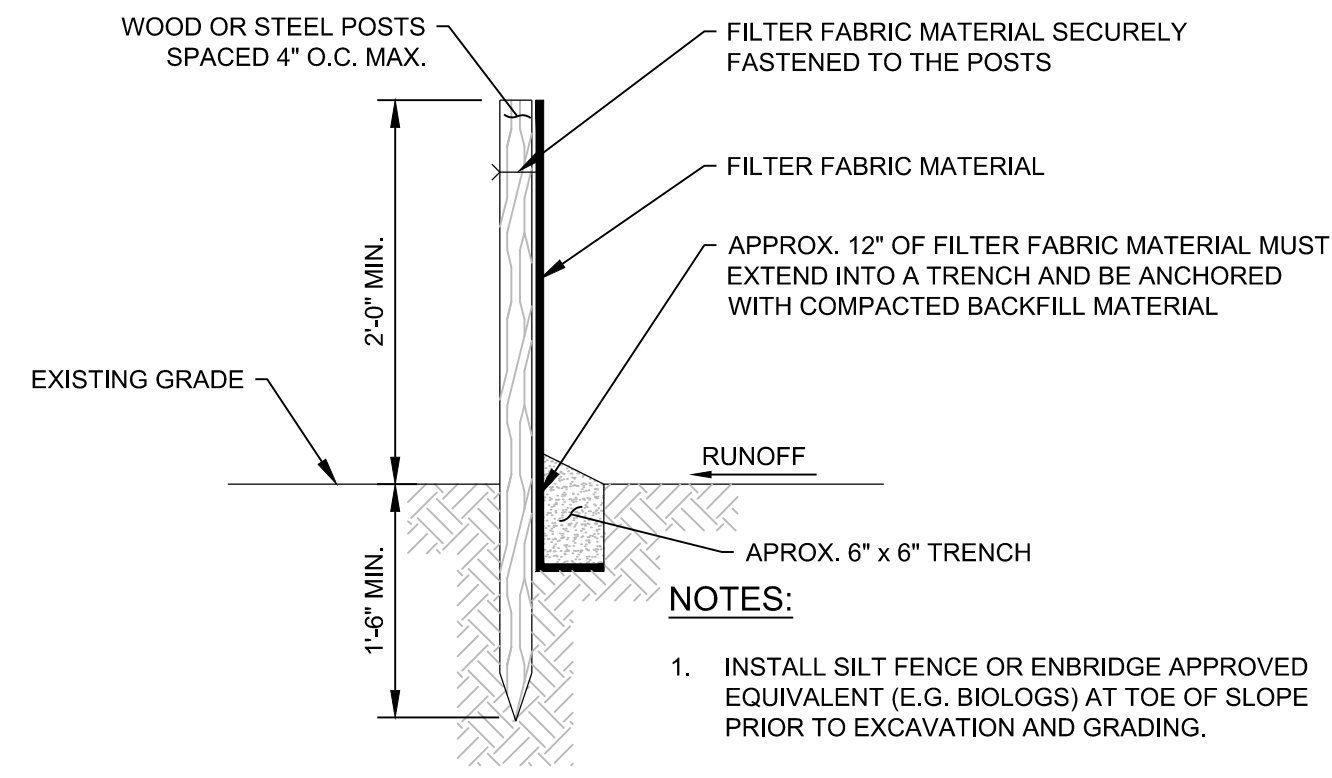
A EROSION CONTROL BLANKET CHANNEL ANCHOR INSTALLATION

NTS
D-6-1.7-SKC005-538



B EROSION CONTROL BLANKET CHANNEL ANCHOR TRENCH CROSS SECTION

NTS
D-6-1.7-SKC005-538



C SILT FENCE

NTS

EROSION CONTROL BLANKET NOTES:

- REFER TO MANUFACTURER RECOMMENDATIONS FOR STAPLE PATTERNS FOR EROSION CONTROL BLANKET INSTALLATIONS.
- PREPARE SOIL BY LOOSENING TOP 2-4 INCHES AND APPLY SEED PRIOR TO INSTALLING BLANKETS. GROUND SHOULD BE SMOOTH AND FREE OF DEBRIS PER THE ENBRIDGE ENVIRONMENTAL PROTECTION PLAN (EPP).
- BEGIN (A) AT THE TOP OF THE SLOPE AND ROLL THE BLANKETS DOWN OR (B) AT ONE END OF THE SLOPE AND ROLL THE BLANKETS HORIZONTALLY ACROSS THE SLOPE (FROM BOTTOM UP IF HORIZONTAL).
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 6" OVERLAP, WITH THE UPHILL BLANKET ON TOP.
- WHEN BLANKETS MUST BE SPICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 6" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART (MIN.) OR AS RECOMMENDED BY MANUFACTURER FOR TYPE OF INSTALLATION.
- EROSION CONTROL BLANKET SHALL BE ERO-GAURD 2C (NN) OR PRE-APPROVED NATURAL FIBER EQUAL.
- GRADE AND COMPACT SUBGRADE OF DISTURBED AREA. SUBGRADE SHALL BE UNIFORM AND SMOOTH. REMOVE ALL ROCKS, SOIL CLOS, VEGETATION OR OTHER OBJECTS SO THE INSTALLED EROSION CONTROL BLANKET WILL HAVE DIRECT CONTACT WITH SOIL SURFACE.

SEED MIX AND SEEDING NOTES:

- SEEDING SHALL BE PER THE TABLES IN THE EPP IN EXPOSED AREAS WHERE EROSION CONTROL BLANKET IS APPLIED.
- WETLAND AREAS WITHIN THE NORTHERN TWS ARE CHARACTERIZED AS WET MEADOW AND WILL BE SEEDDED WITH CARDNO'S WET-TO-MESIC PRAIRIE SEED MIX, SEE TABLE 2.
- UPLAND AREAS WITHIN MAINTAINED LAWN AREAS WILL BE SEEDDED WITH THE RESIDENTIAL SEED MIX FROM ENBRIDGE'S EPP OR ILDOT'S CLASS 1 LAWN MIXTURE WITH SIMILAR COMPOSITION, SEE TABLE 1.
- SEED SHALL BE VERIFIED WEED FREE AND SEED SOURCE TAGS OR TICKETS SHALL BE AVAILABLE UPON REQUEST.
- NO SPECIES SUBSTITUTIONS SHALL BE ALLOWED WITHOUT PRIOR APPROVAL OF THE ENGINEER.
- SEED SHALL BE SHOWN 1/4" DEEP AND NO DEEPER THAN 1/2" DEEP.
- SEEDING WILL TAKE PLACE USING A "NO-TILL" DRILL EXCEPT ON SLOPES DEEMED TOO STEEP FOR "NO-TILL" DRILL METHOD OR AREAS DEEMED TOO WET. DRILL SHALL BE CHECKED AT THE END OF EACH SEEDING PASS TO ENSURE EVEN DISTRIBUTION OF SEED THROUGH EACH PASS.
- BROADCAST METHOD OF SEEDING CAN BE USED, IN WHICH CASE THE FOLLOWING REQUIREMENTS SHALL BE FOLLOWED:
 - THE BROADCAST METHOD WILL USE BROADCAST SEEDING EQUIPPED WITH AN AGITATOR THAT EFFECTIVELY PREVENTS SEED FROM BRIDGING OR PLUGGING.
 - SEED SHALL BE BROADCAST TWICE OVER EACH AREA TO HELP ENSURE EVEN DISTRIBUTION. BROADCAST SEEDING RATE WILL BE DOUBLE THE DRILL-SEEDING RATE DETAILED IDENTIFIED IN THE EPP.
 - THE SEEDED AREA SHALL BE HAND-RAKED OR DRAGGED WITH AN IMPLEMENT TO THE EXTENT NECESSARY TO COVER A MAJORITY OF THE SEED WITH 1/4" TO 1/2" OF SOIL.
- WITHIN 12 HOURS, OR AS SOON THEREAFTER AS PRACTICAL, ALL SEEDED AREAS SHALL BE ROLLED AT RIGHT ANGLES TO THE LINE OF RUN-OFF WITH AN APPROVAL TYPE ROLLER OR CULTIPACKER (TYPE TO BE APPROVED BY OWNER) TO COMPACT THE SEEDBED TO PLACE THE SEED IN CONTACT WITH THE SOIL.
- SEEDING REQUIREMENTS COULD CHANGE BASED ON LANDOWNER PREFERENCES AND SHALL BE COORDINATED WITH ENBRIDGE.

Table 16. Non-Native Residential Area Mix (Soil Moisture Regime Score 7-18)

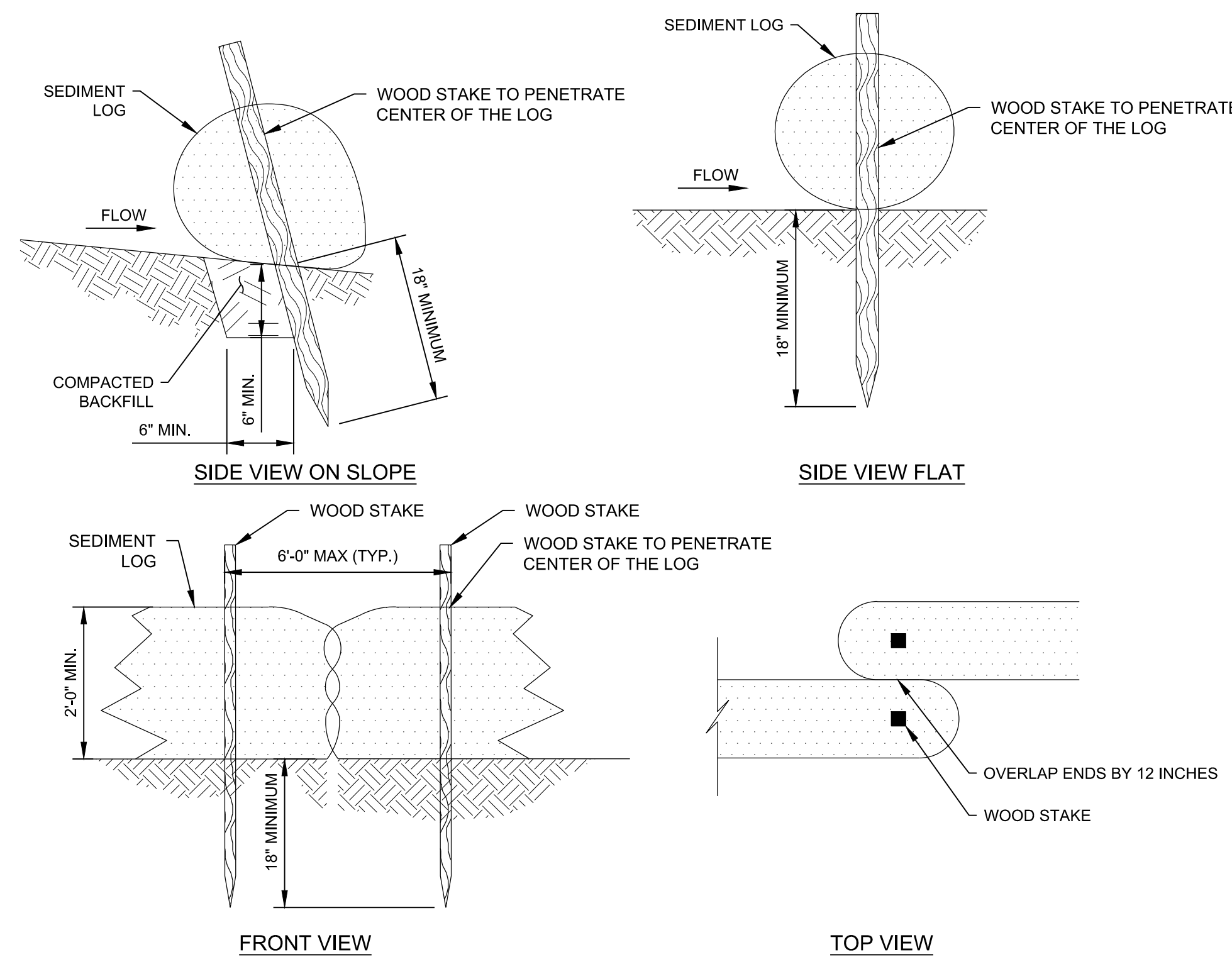
Species	% Mix by Weight	Pure Live Seed Pounds Per Acre (Broadcast)
Kentucky bluegrass (<i>Poa pratensis</i>)	42.9	60.0
Perennial ryegrass (<i>Lolium perenne</i>)	21.4	30.0
Creeping red fescue (<i>Festuca rubra</i>)	21.4	30.0
Total	85.7	120.0
Associated Nurse Crop		
Oats (<i>Avena sativa</i>) if summer seeding or winter wheat (<i>Triticum aestivum</i>) if late fall or spring seeding	14.3	20.0
Grand Total	100	140.0

Species components of individual mixes are subject to availability at the time of purchase and may be substituted with alternative native or non-invasive species, or similar locally available seed mixes, subject to approval by Enbridge.

TABLE 1: ENBRIDGE EPP SEED MIX RECOMMENDATIONS

Botanical Name	Common Name	PLS Oz/Acre
Permanent Grasses/Sedges		
<i>Andropogon gerardii</i>	Big Bluestem	16.00
<i>Calamagrostis canadensis</i>	Bluejoint Grass	1.00
<i>Carex lurida</i>	Bottlebrush Sedge	3.00
<i>Carex stricta</i>	Common Tussock Sedge	1.00
<i>Carex vulpinoidea</i>	Brown Fox Sedge	1.00
<i>Elymus virginicus</i>	Virginia Wild Rye	24.00
<i>Juncus canadensis</i>	Canadian Rush	0.50
<i>Panicum virgatum</i>	Switch Grass	2.00
<i>Scirpus cyperinus</i>	Wool Grass	0.50
<i>Sorghastrum nutans</i>	Indian Grass	8.00
<i>Spartina pectinata</i>	Prairie Cord Grass	3.00
Total		60.00
Temporary Cover		
<i>Avena sativa</i>	Common Oat	512.00
Total		512.00
Forbs		
<i>Asclepias syriaca</i>	Common Milkweed	2.00
<i>Baptisia alba</i>	White Wild Indigo	1.00
<i>Chamaecrista fasciculata</i>	Partridge Pea	10.00
<i>Careopsis lanceolata</i>	Sand Coreopsis	4.00
<i>Careopsis tripteris</i>	Tall Coreopsis	2.00
<i>Desmodium illinoense</i>	Illinois Tick Trefol	0.50
<i>Doellingeria umbellata</i>	Flat-Top Aster	0.50
<i>Echinacea purpurea</i>	Broad-Leaved Purple Coneflower	4.00
<i>Eryngium yuccifolium</i>	Rattlesnake Master	2.00
<i>Helianthus autumnale</i>	Sneezeweed	2.00
<i>Helianthus grosseserratus</i>	Sawtooth Sunflower	0.50
<i>Lespedeza capitata</i>	Round-Headed Bush Clover	1.50
<i>Liatris spicata</i>	Marsh Blazing Star	1.00
<i>Monarda fistulosa</i>	Wild Bergamot	1.00
<i>Oligoneuron rigidum</i>	Stiff Goldenrod	1.00
<i>Parthenium integrifolium</i>	Wild Quinine	1.00
<i>Physostegia virginiana</i>	Obedient Plant	0.25
<i>Pycnanthemum virginianum</i>	Common Mountain Mint	0.50
<i>Ratibida pinnata</i>	Yellow Coneflower	4.00
<i>Rudbeckia hirta</i>	Black-Eyed Susan	4.00
<i>Rudbeckia laciniata</i>	Wild Golden Glow	1.00
<i>Rudbeckia subtomentosa</i>	Sweet Black-Eyed Susan	0.50
<i>Senna hebecarpa</i>	Wild Senna	2.25
<i>Silphium integrifolium</i>	Rosin Weed	1.00
<i>Silphium laciniatum</i>	Compass Plant	2.00
<i>Silphium perfoliatum</i>	Cup Plant	2.00
<i>Silphium terebinthaceum</i>	Prairie Dock	3.00
<i>Solidago juncea</i>	Early Goldenrod	0.25
<i>Solidago rugosa</i>	Rough Goldenrod	0.25
<i>Symphotrichum nove-angliae</i>	New England Aster	0.50
<i>Tradescantia ohiensis</i>	Common Spiderwort	1.25
<i>Veronica fasciculata</i>	Common Ironweed	3.00
<i>Veronicastrum virginicum</i>	Culver's Root	0.25
<i>Zizia aurea</i>	Golden Alexanders	1.00
Total		59.00

TABLE 2: WET-TO-MESIC PRAIRIE SEED MIXES



NOTES:

- SEDIMENT LOG SHOULD BE INSTALLED ALONG CONTOURS (CONSTANT ELEVATION).
- NO GAPS SHALL BE PRESENT UNDER SEDIMENT LOG. PREPARE AREA AS NEEDED TO SMOOTH SURFACE OR REMOVE DEBRIS.
- ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN REACHING 1/2 OF LOG HEIGHT.
- SEDIMENT LOG SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AND REPAIRED OR REPLACED AS REQUIRED.

D SEDIMENT BIO LOGS

NTS



ISSUED FOR CONSTRUCTION

REV: 0.B	PROJECT TITLE: LINE 6 REPLACEMENT	SEO #:	
AFE: 40000035	PROJ: 2200090		
WP NO: PUR-1844-2000014			
REV	SUBSEQUENT REVISION	DATE BY	CHK APPR
0.A	RE-ISSUED FOR 60% REVIEW	2024-01-23 KKB	HMB C.BUNGER
0.B	ISSUED FOR PERMIT	2024-02-27 KKB	HMB C.BUNGER
0.C	ISSUED FOR CONSTRUCTION	2024-08-09 KKB	HMB C.BUNGER

REFERENCE DRAWINGS

REV NO:	REVISION DESCRIPTION:	DATE	CHK	APPR

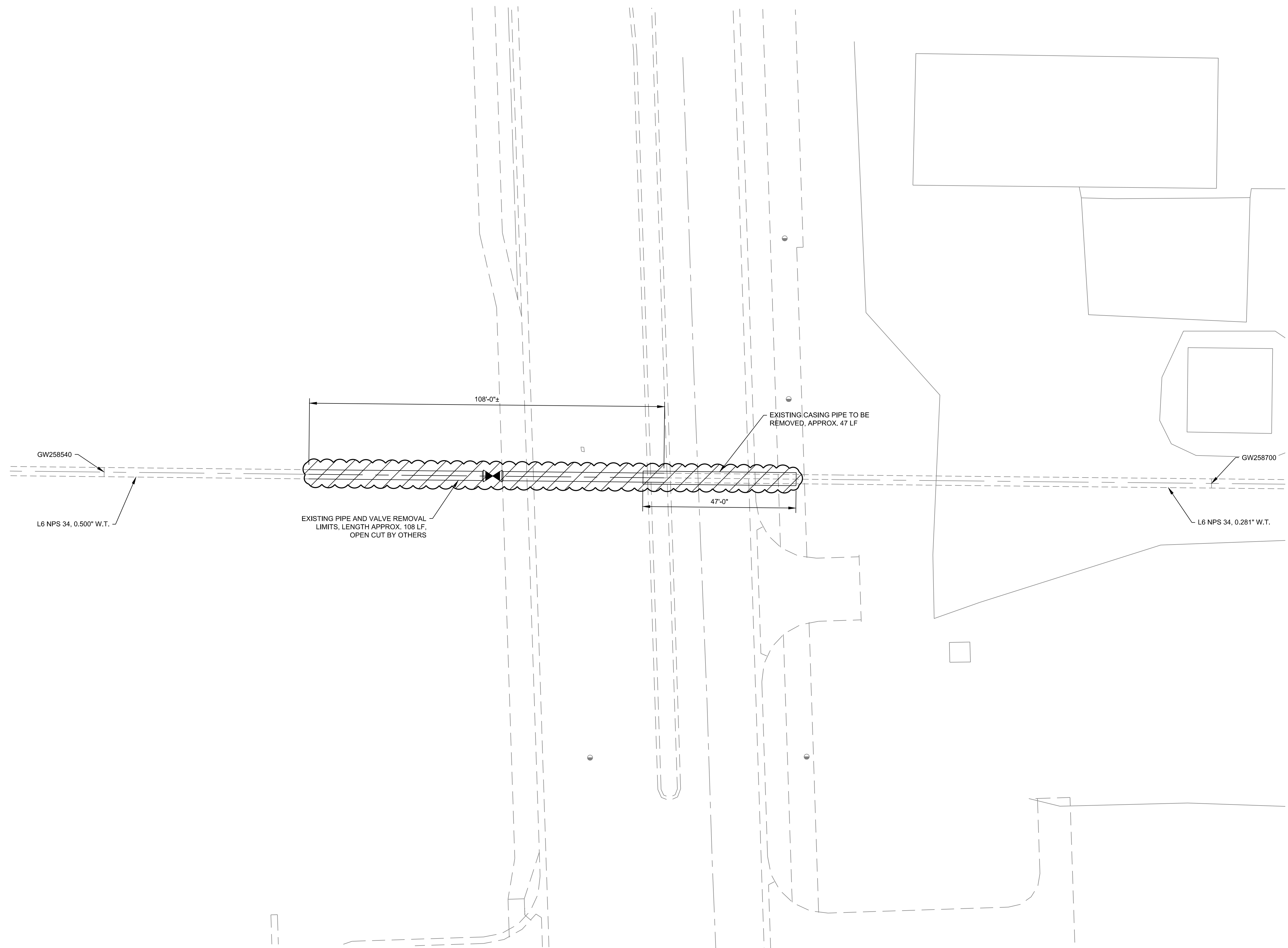
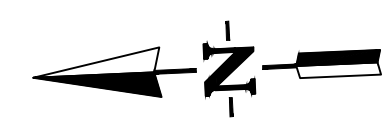
COPYRIGHT © THIS DRAWING IS THE PROPERTY OF ENBRIDGE AND SHALL NOT BE REPRODUCED EITHER IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN CONSENT OF ENBRIDGE.



**MP 406.8
LINE 6 - ROAD
LINE 6 REPLACEMENT
SITE RESTORATION DETAILS**

BY: KKB	CHK: HMB	ENG.: C. BUNGER	ENB APPR. J. SOROARDY
DATE: 2021-05-28	SCALE: NTS		STATUS: DESIGN

DWG NO.: **D-6-1.7-104890-538** REV NO.: **0.C**



CONSTRUCTION NOTES:

- CONTRACTOR TO ENSURE PIPE IS SAFELY GROUNDED PRIOR TO CUTTING. ADJACENT HIGH VOLTAGE AC POWER LINES CAN RESULT IN INDUCED CURRENT ON THE PIPE AND THE POTENTIAL FOR SPARKS AND SHOCKS. USE CAUTION AND VERIFY VOLTAGE LEVELS ARE SAFE PRIOR TO WORKING ON THE PIPE.

Erik J. Elmstrand
 Date: 2024/08/09
 Exp. 11/30/2025
 Firm no. 184.003666

ISSUED FOR CONSTRUCTION

REV: 0.D	PROJECT TITLE: LINE 6 REPLACEMENT	SEQ #:	
AFE: 40000035	PROJ NO: 2200090		
WP NO: PUR-1844-2000014			
REV	SUBSEQUENT REVISION	DATE BY	CHK APPR
0.A	ISSUED FOR 60% REVIEW	2022-06-13 MNE	BPT E. ELMSTRAND
0.B	RE-ISSUED FOR 60% REVIEW	2024-01-23 MJB3	BPT E. ELMSTRAND
0.C	ISSUED FOR PERMIT	2024-02-27 MJB3	BPT E. ELMSTRAND
0.D	ISSUED FOR CONSTRUCTION	2024-08-09 MJB3	BPT E. ELMSTRAND

REFERENCE DRAWINGS

REV NO	REVISION DESCRIPTION	DATE	CHK	APPR

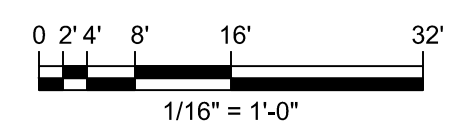
COPYRIGHT © THIS DRAWING IS THE PROPERTY OF ENBRIDGE AND SHALL NOT BE REPRODUCED EITHER IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN CONSENT OF ENBRIDGE.

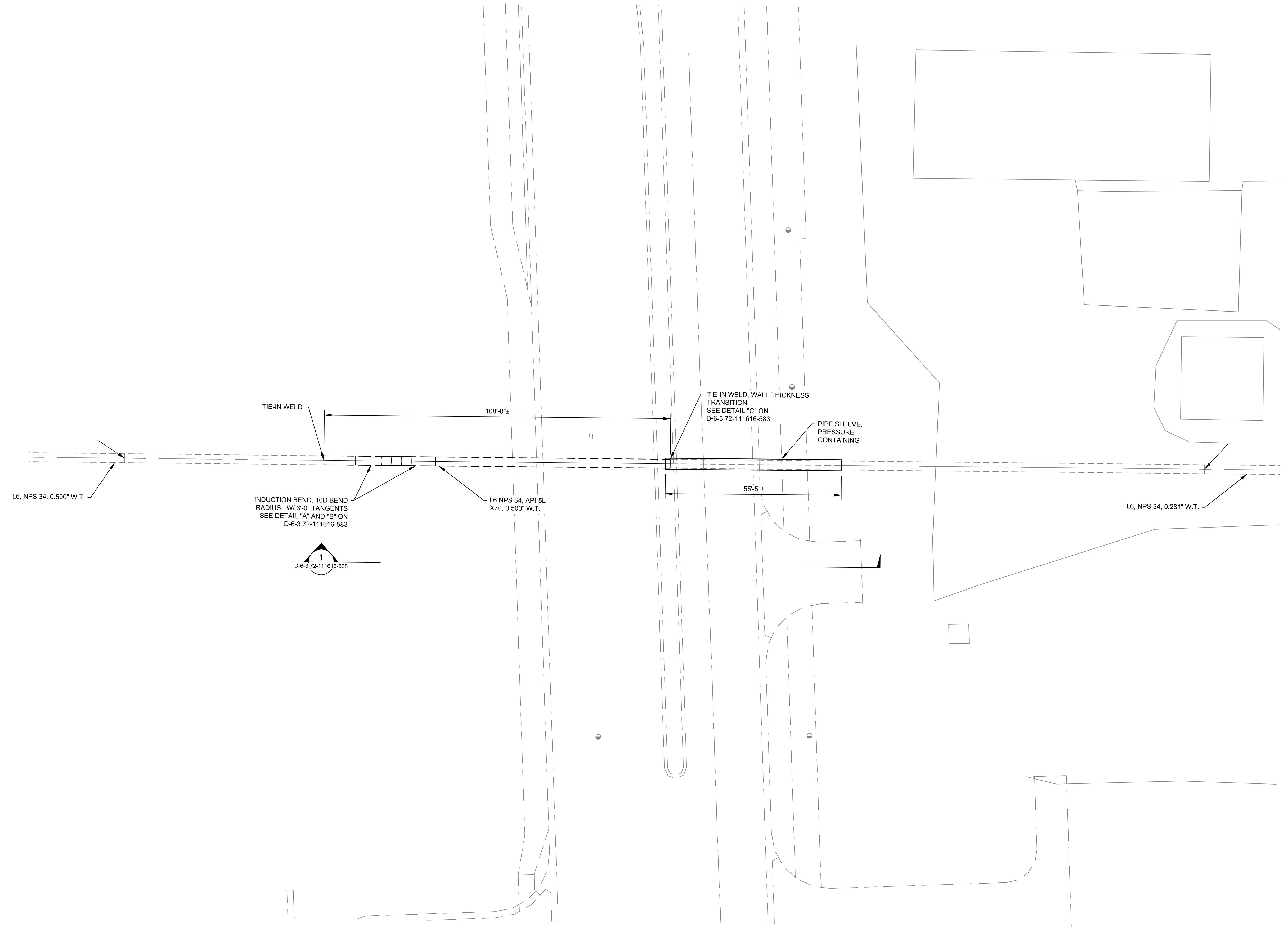
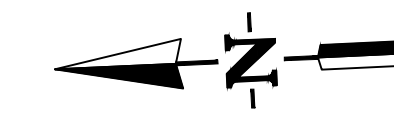


MP 406.84
 LINE 6
 PIPING
 PLOT PLAN

BY: AJE CHK: BPT ENG.: E. ELMSTRAND ENB APPR: J. SOROARDY
 DATE: 2021-08-31 SCALE: 1/16" = 1'-0" STATUS: DESIGN

DWG NO.: D-6-3.72-111615-538R REV NO.: 0.D





- NOTES:**
1. ALL DIMENSIONS USED IN GENERATING THIS DRAWING ARE TAKEN FROM THE BEST INFORMATION AVAILABLE. CONTRACTOR TO VERIFY DIMENSIONS PRIOR TO START OF ANY WORK.
 2. EXACT LOCATION & ELEVATIONS OF EXISTING BURIED PIPING, CONDUITS, AND DUCT BANKS ARE UNKNOWN. THEREFORE, EXTREME CARE MUST BE TAKEN WHEN EXCAVATING.
 3. TIE-IN WELD LOCATIONS APPROXIMATE. ACTUAL LOCATION OF TIE-INS DETERMINED BY NDE CONTRACTOR AND PLM.
 4. PRESSURE CONTAINING SLEEVE SHALL NOT BE TERMINATED WITHIN 18 INCHES OF A GIRTH WELD.



Erik J. Elmstrand
 Date: 2024/08/09
 Exp. 11/30/2025
 Firm no. 184.003666

ISSUED FOR CONSTRUCTION

REV: 0.D	PROJECT TITLE: LINE 6 REPLACEMENT	SEQ #:	
AFE: 40000035	PROJ NO: 2200090		
WP NO: PUR-1844-2000014			
REV	SUBSEQUENT REVISION	DATE BY	CHK APPR
0.A	ISSUED FOR 60% REVIEW	2022-06-13 MNF	BPT E. ELMSTRAND
0.B	RE-ISSUED FOR 60% REVIEW	2024-01-23 MJB3	BPT E. ELMSTRAND
0.C	ISSUED FOR PERMIT	2024-02-27 MJB3	BPT E. ELMSTRAND
0.D	ISSUED FOR CONSTRUCTION	2024-08-09 MJB3	BPT E. ELMSTRAND

D-6-3.72-111616-538 PIPING SECTION & DETAILS
 REFERENCE DRAWINGS

REV NO	REVISION DESCRIPTION	DATE BY	CHK	APPR

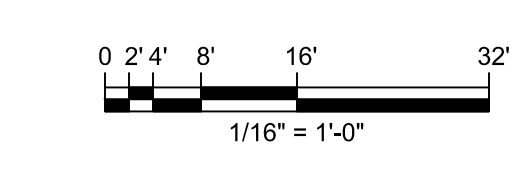
COPYRIGHT © THIS DRAWING IS THE PROPERTY OF ENBRIDGE AND SHALL NOT BE REPRODUCED EITHER IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN CONSENT OF ENBRIDGE.

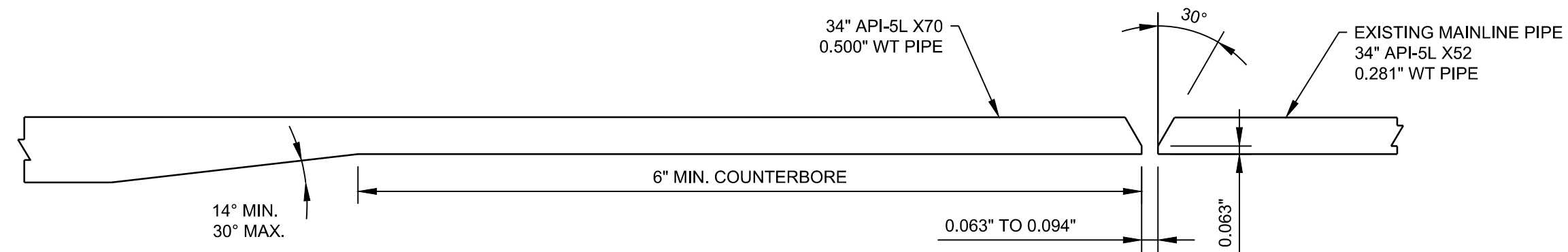


MP 406.84
 LINE 6
 PIPING
 PLOT PLAN

BY: AJE	CHK: BPT	ENG.: E. ELMSTRAND	ENB APPR: J. SOROARDY
DATE: 2021-08-31	SCALE: 1/16" = 1'-0"	STATUS: DESIGN	

DWG NO.: **D-6-3.72-111615-538** REV NO.: **0.D**

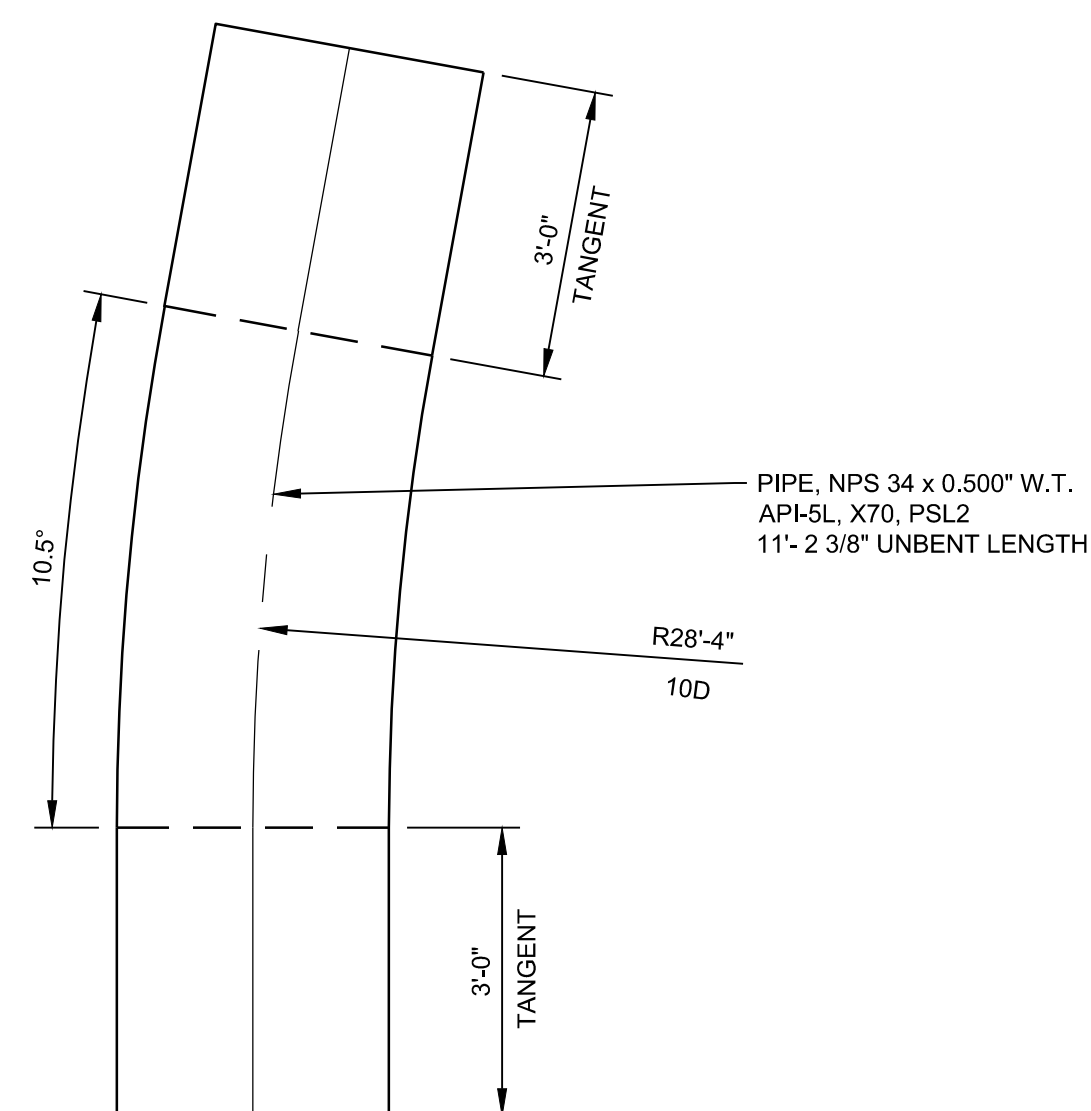




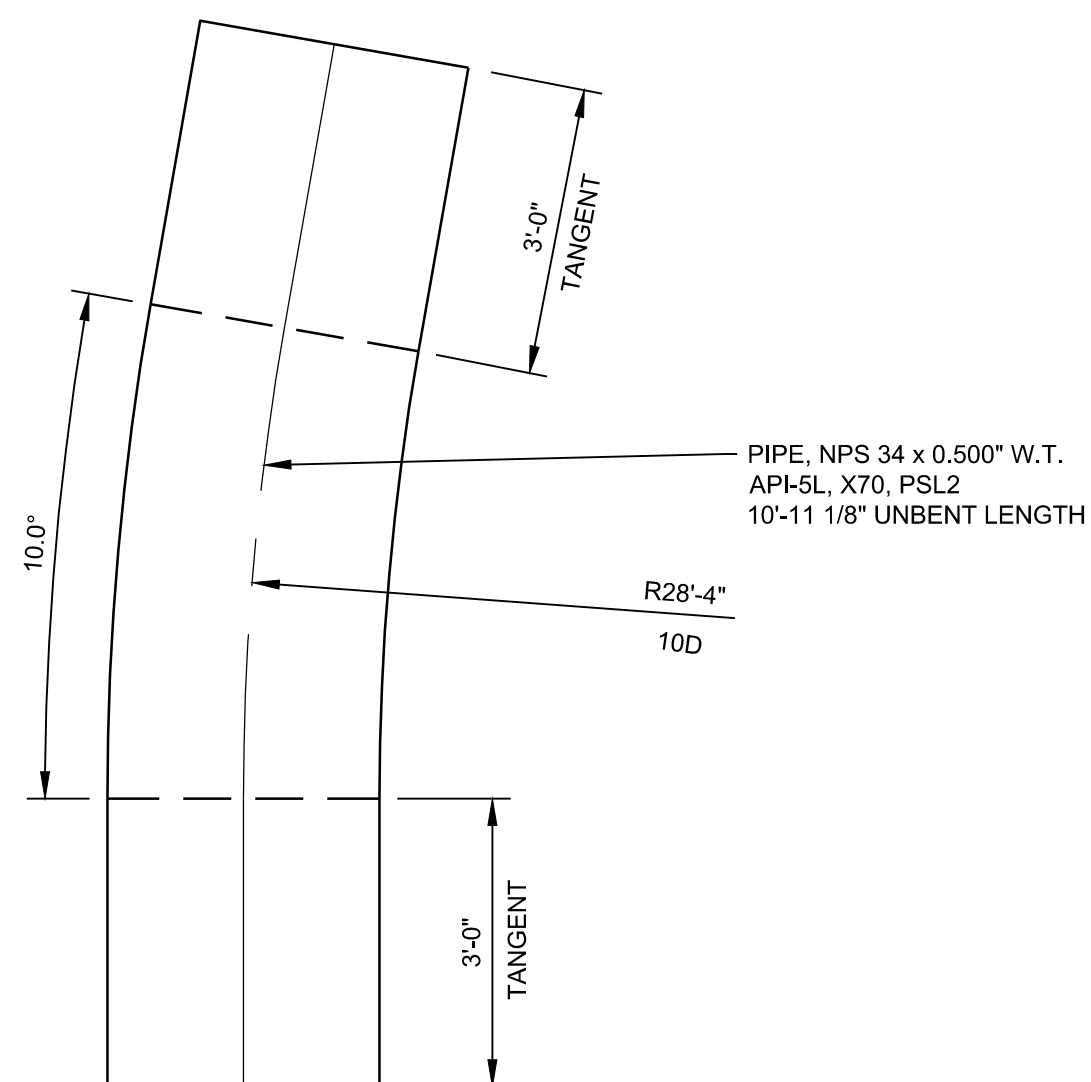
C WALL THICKNESS TRANSITION DETAIL
 1'-0" = 1'-0"
 D-6-3.72-111615-538

NOTES:

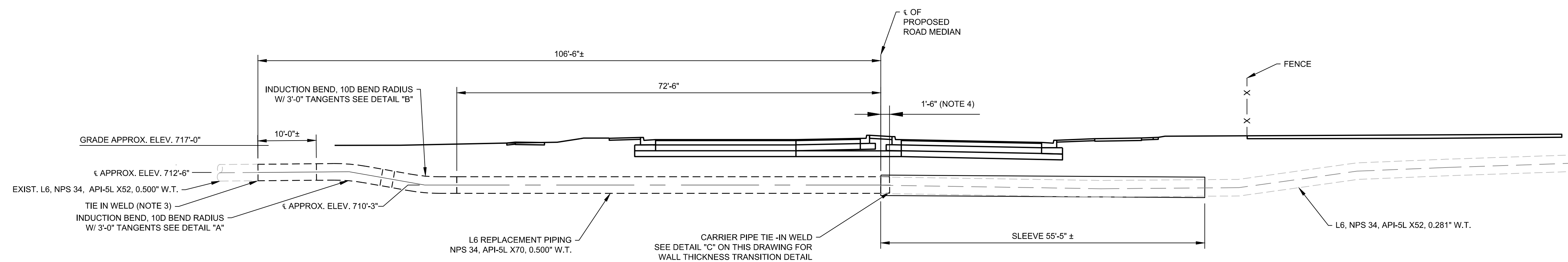
1. INDUCTION BENDS (DETAIL A & B) TO BE CHARPY TESTED PER ENBRIDGE STANDARD D06-104 AND/OR ASME B31.4, WHICHEVER IS MORE STRINGENT AT THE TEMPERATURE OF 14°F PER ASME B16.49.
2. ALL PIPE AND BENDS TO BE EXTERNALLY COATED (FBE) PER CS-001-LP AND/OR CS-002-LP.
3. TIE-IN WELD LOCATIONS APPROXIMATE. ACTUAL LOCATION OF TIE-INS DETERMINED BY NDE CONTRACTOR AND PLM.
4. PIPE SLEEVE TO OVERLAP TIE-IN WELD BY APPROXIMATELY 18 INCHES, NOT TO BE LESS THAN ONE-HALF PIPE DIAMETER.



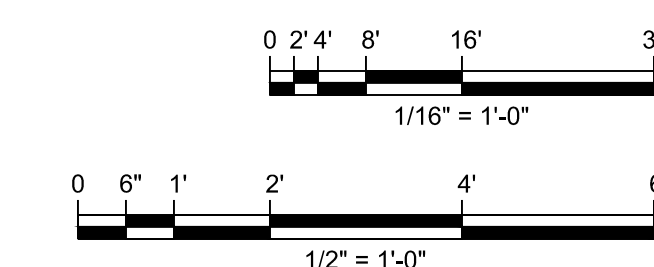
A INDUCTION BEND - 10D - 10.5° (QTY. 1)
 1/2" = 1'-0"
 D-6-3.72-111615-538



B INDUCTION BEND - 10D - 10.0° (QTY. 1)
 1/2" = 1'-0"
 D-6-3.72-111615-538



1 L6 REPLACEMENT ELEVATION
 3/32" = 1'-0"
 D-6-3.72-111615-538



Date: 2024/08/09
 Exp. 11/30/2025
 Firm no. 184.003666

ISSUED FOR CONSTRUCTION

REV: 0.D	PROJECT TITLE: LINE 6 REPLACEMENT	SEQ #:		
AFE: 40000035	PROJ NO: 2200090			
WP NO: PUR-1844-2000014				
REV	SUBSEQUENT REVISION	DATE	CHK	APPR
0.A	ISSUED FOR 60% REVIEW	2022-06-13	MNF	BPT
0.B	RE-ISSUED FOR 60% REVIEW	2024-01-23	MJB3	BPT
0.C	ISSUED FOR PERMIT	2024-02-27	MJB3	BPT
0.D	ISSUED FOR CONSTRUCTION	2024-08-09	MJB3	BPT

D-6-3.72-111615-538 PIPING PLAN

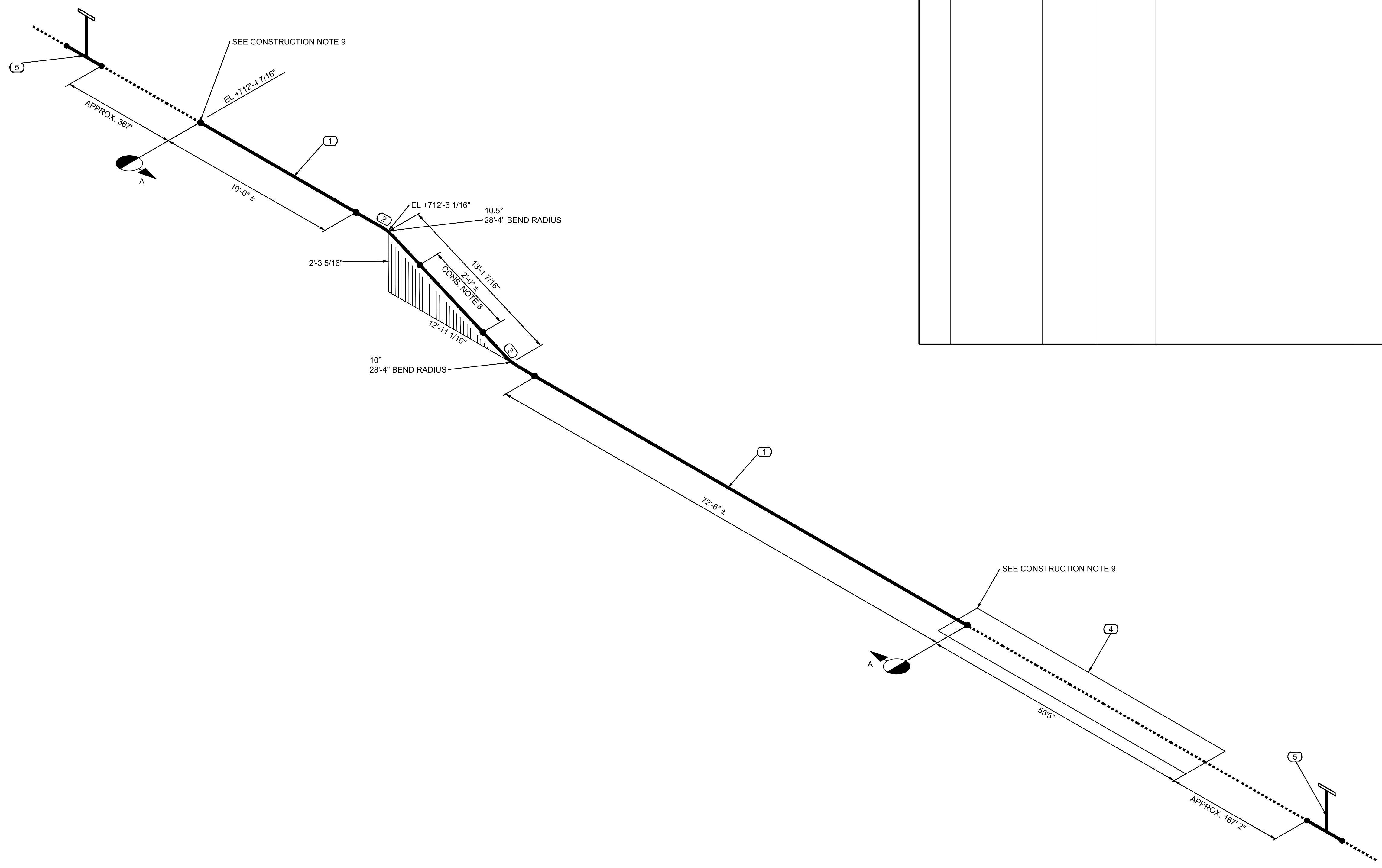
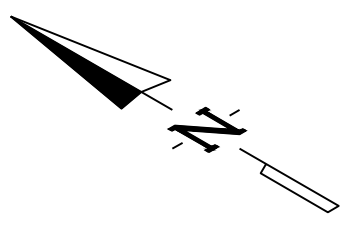
REV NO.	REVISION DESCRIPTION	DATE	CHK	APPR

COPYRIGHT © THIS DRAWING IS THE PROPERTY OF ENBRIDGE AND SHALL NOT BE REPRODUCED EITHER IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN CONSENT OF ENBRIDGE.



MP 406.84
 LINE 6
 PIPING
 SECTIONS AND DETAILS

BY: MNF	CHK: BPT	ENG.: E. ELMSTRAND	ENB APPR: J. SOROARDY
DATE: 2022-06-13	SCALE: AS SHOWN	STATUS: DESIGN	
DWG NO: D-6-3.72-111616-538	REV NO: 0.D		



ITEM	TAG	QUANTITY	SIZE	DESCRIPTION	MTR
1		85'	34	PIPE, SAW, API 5L PSL-2 X70, BE, NPS 34" X 0.500" WT, EXTERNALLY COATED	
2		1	34	INDUCTION BEND A, 10.5 DEGREES, 10D RADIUS, W/ 3FT TANGENTS, 0.500" WT, API-5L X70 PSL2, ASME B16.49, CVN TEST TO 14°F, EXTERNALLY COATED	
3		1	34	INDUCTION BEND B, 10.0 DEGREES, 10D RADIUS, W/ 3FT TANGENTS, 0.500" WT, API-5L X70 PSL2, ASME B16.49, CVN TEST TO 14°F, EXTERNALLY COATED	
4		55'5"	34	PRESSURE CONTAINING SLEEVE, TYPE B, 0.500" WT, ASTM A516 GR 70	
5		2	34	STOPPLE TEE, STOPPLE TEE, NPS 34, T.D. WILLIAMSON, ANSI 600 BRANCH RATING	
6		6	34x2	TORN, INTERGRATED WELDOLET TORN, C/W PLUG AND CAP, WORLDWIDE PART# 2.0-600TN-4-FF-5.0-SA350-BRASS PLUG (NOTE 7)	

- NOTES:**
- ALL PIPING SHALL COMPLY WITH ENBRIDGE SPECIFICATION D06-101 INCLUDING TEST PRESSURE CLASS.
 - ALL CARBON FLANGES, PIPE, AND FITTINGS TO BE EXTERNALLY COATED PER CS-001-LP AND/OR CS-002-LP (PLANT SUPPLIED) OR PAINTED PER CS-003-LP.
- CONSTRUCTION NOTES:**
- ALL DIMENSIONS USED IN GENERATING THIS DRAWING ARE TAKEN FROM THE BEST INFORMATION AVAILABLE. CONTRACTOR TO VERIFY DIMENSIONS PRIOR TO START OF ANY WORK.
 - NOTCH TOUGHNESS TESTING (CHARPY V-NOTCH) SHALL BE COMPLETED AT THE MDMT (MINIMUM DESIGN METAL TEMPERATURE) OR BELOW.
 - CONTRACTOR SHALL FOLLOW ENBRIDGE CONSTRUCTION SPECIFICATIONS PCS-001, AND PCS-005.
 - CONTRACTOR TO ENSURE ALL MATERIAL TEST RECORDS ARE AVAILABLE AND VERIFY GRADES AND HEAT NUMBERS MATCH THE MATERIAL TEST RECORDS RECEIVED.
 - ALL INSTRUMENTS TO BE USED IN PRESSURE TESTING OF PIPE SYSTEMS COMPONENTS SHALL BE CLEAN AND IN GOOD WORKING ORDER, AND SUPPLIED WITH A CURRENT CALIBRATION CERTIFICATE.
 - LEAK TEST NOT REQUIRED PROVIDED A COMPLETE VISUAL INSPECTION TO DETECT LEAKS IS CONDUCTED AND DOCUMENTED DURING THE STRENGTH TEST.
 - TORN LOCATIONS TO BE DETERMINED BY CONTRACTOR.
 - FIELD DETERMINE FINAL LENGTH. MINIMUM DISTANCE BETWEEN GIRTH WELDS IS 8 INCHES.
 - TIE-IN WELD LOCATIONS APPROXIMATE. ACTUAL LOCATION OF TIE-INS DETERMINED BY NDE CONTRACTOR AND PLM.



Erik J. Elmstrand
 Date: 2024/08/09
 Exp. 11/30/2025
 Firm no. 184.003666

ISSUED FOR CONSTRUCTION

REV: 0.D	PROJECT TITLE: LINE 6 REPLACEMENT	SEQ #:		
A/E: 40000035	PROJ NO: 2200090			
WP NO: PUR-1844-2000014				
REV	SUBSEQUENT REVISION	DATE	CHK	APPR
0.A	ISSUED FOR 60% REVIEW	2022-06-13 MNF	BPT E.ELMSTRAND	
0.B	RE-ISSUED FOR 60% REVIEW	2024-01-23 MJB3	BPT E.ELMSTRAND	
0.C	ISSUED FOR PERMIT	2024-02-27 MJB3	BPT E.ELMSTRAND	
0.D	ISSUED FOR CONSTRUCTION	2024-08-09 MJB3	BPT E.ELMSTRAND	

REFERENCE DRAWINGS

REV NO	REVISION DESCRIPTION	DATE	CHK	APPR

COPYRIGHT © THIS DRAWING IS THE PROPERTY OF ENBRIDGE AND SHALL NOT BE REPRODUCED EITHER IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN CONSENT OF ENBRIDGE.



MP 406.84
LINE 6

PIPING ISOMETRIC

BY: MNF	CHK: BPT	ENG.: E.ELMSTRAND	ENB APPR: J.SOROARDY
DATE: 2022-06-13	SCALE: NTS	STATUS: DESIGN	

DWG NO.: D-6-3.701-111617-538 REV NO.: 0.D

PRESSURE TEST DETAILS

SECTION	PRESSURE RATING	DESIGN PRESSURE	DESIGN TEMP	MIN. LEAK TEST PRESSURE	MIN. STRENGTH TEST PRESSURE	MAX. STRENGTH TEST PRESSURE	TEST DURATION (HRS)
A-A	N/A	619 PSIG	23F TO 100F	681 PSIG	860 PSIG	945 PSIG	STRENGTH TEST: 4 HOURS LEAK TEST: N/A (SEE CONSTRUCTION NOTE 6)

EXHIBIT C

PROJECT SCHEDULE



L6A Relocation at MP 407 - Naperville 4000035

GAS Core- General Layout-Naperville

Data Date: 11/30/24

Activity ID	Activity Name	Start	Finish	Remaining Duration	Total Float	2022				2023				2024				2025				2026													
						S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F
L6A Relocation at MP 407 - Naperville 4000035		08/27/21 A	12/15/25	271	0																														
Level 1 Portfolio Schedule		08/27/21 A	12/15/25	271	0																														
SBV-M-100	Enbridge (Development) Stage 1	08/27/21 A	05/31/22 A	0																															
SBV-M-165	Surveys	11/01/21 A	11/05/21 A	0																															
SBV-M-105	Detailed Engineering	11/05/21 A	09/30/24 A	0																															
SBV-M-120	Enbridge Stage 2	05/31/22 A	06/15/22 A	0																															
SBV-E-250	60% Design Review		08/08/22 A	0																															
SBV-M-155	Permitting	01/15/24 A	02/03/25	44	16																														
SBV-M-145	Regulatory	01/15/24 A	02/03/25	44	16																														
SBV-M-135	90% / IFB (Issue for Bid) Package Issued		02/06/24 A	0																															
SBV-M-140	Finalize Bid Evaluation		08/06/24 A	0																															
SBV-M-130	Issue for Construction (IFC) Package Issued		09/30/24 A	0																															
SBV-M-111	Construction reimbursable agreement with the City of Naperville		01/31/25*	0	0																														
SBV-M-110	Procurement	02/01/25	03/30/25	57	9																														
SBV-M-125	Construction Contract Bid & Award		02/03/25	0	0																														
SBV-M-175	Start of Construction	02/26/25		0	0																														
SBV-C-375	Hot taps for stopple isolation	03/15/25	03/27/25	11	0																														
SBV-M-190	Outage-36H (day/night 12 hr shifts)	04/08/25	04/09/25	2	0																														
SBV-M-195	In Service Date		04/30/25*	0	0																														
SBV-M-205	Project Clean up and Demobilization	05/01/25	05/30/25	21	0																														
SBV-M-210	Project "invoicing" and close outs	05/01/25	12/15/25	158	0																														

WBS Summary
 Actual Work
 Remaining Level of Effort
 Remaining Work

EXHIBIT D

**PROJECT WORK
SCHEDULE OF COSTS**

Project Work - Schedule of Costs	Funds to complete Project	Rationale
Contractor Work		
Construction Contractor - Michels	\$ 1,374,691	Lowest Bid Construction Contractor
Traffic Management Plan	\$ 35,000	Michels subcontractor
Enbridge Work		
Materials	\$ 596,800	Long lead items: Stopples, Bends Short term materials: Pipe, bulk materials
Land	\$ 149,767	Additional support during construction
Enbridge Construction Management & Inspection	\$ 1,823,433	Coverage during construction activities by Construction Manager, Field Inspector, Environmental Inspector, Scheduler, Cost Control, PLM Supervisor, Operations Support
Project Management & Support	\$ 661,840	Same people as the planning but expected increased support during Construction
Engineering	\$ 210,793	Engineering close out
Base Cost Estimate	\$ 4,852,324	
Contingency (3%)	\$ 177,598	Contingency moved to the end of the project
Total Estimated CAPEX (excl. AFUDC)	\$ 5,029,922	

EXHIBIT E
INSURANCE

EXHIBIT E

INSURANCE

Enbridge Energy, Limited Partnership (“ENBRIDGE”) shall, at their own expense, maintain insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of Project Work as described in the Construction Reimbursement Agreement for Relocation of Enbridge Pipeline (“Agreement”) to which this Exhibit E is attached. All insurance policies shall be written with insurance companies licensed or authorized to do business in the State of Illinois and having a rating of A - VII according to the A.M. Best Company.

Enbridge may, at its discretion, either (1) maintain; or (2) choose to self-insure in lieu of insurance (either in whole or part), the insurance coverages required herein.

Self-Insurance. When the insurance requirements are self-insured by Enbridge in lieu of insurance, Enbridge shall, as applicable and to the extent of its obligations herein and in the Agreement, provide defense and indemnity support to the City of Naperville, the City of Aurora, and Naperville Township, and their respective officers, officials, agents, and employees, in the same manner and to the same extent, using industry standard claims adjustment practices, as if it were fully insured by a financially sound third-party insurer on insurance forms customarily available for similar operations undertaken by similar organizations at the time such obligations are realized. Where provisions herein reference provisions to be included in insurance policies, they shall apply equally to any self-insurance coverage provided by Enbridge. Enbridge’s self-insurance shall cover vicarious liability for the Contractor (as Contractor is defined in the Agreement) and for any subcontractors and their agents, employees, and representatives who perform Project Work (as Project Work is defined in the Agreement).

Where policies as provided for herein are written on a claims made basis, then the policy retroactive date must coincide with or precede the start of services under the Agreement, and the coverage shall be maintained for ten (10) years after the completion of the Project Work.

ENBRIDGE shall provide insurance in the following amounts:

a. General Liability coverage:

Limits:

Each Occurrence	\$10,000,000.00
including products and completed operations, property damage, bodily injury and personal & advertising injury	

b. Reserved.

c. Worker's Compensation:

- (i) Worker's Compensation Insurance shall be provided in accordance with the provisions of the laws of the State of Illinois, including occupational disease provisions, for all employees at the site of the project, and in

the event work is sublet, the Enbridge shall require each Contractor and subcontractors to provide Worker's Compensation Insurance. In the event employees engaged in hazardous work under this Agreement at the Project site are not protected under the Worker's Compensation statute, ENBRIDGE shall provide, and cause each Contractor and subcontractors to provide, adequate and suitable insurance coverage for the protection of each employee not otherwise provided.

- ii. Employer's Liability
Per occurrence for Bodily Injury or Disease \$1,000,000.00

d. Automobile Liability:

Coverage shall include all owned, hired, non-owned vehicles, and/or trailers and other equipment required to be licensed.

Limits:

Per occurrence for Bodily Injury and Property Damage - \$5,000,000.00

e. Combination of Primary and Umbrella Coverages:

The limits set forth in paragraphs (a) through (d) above may be met by a combination of primary and umbrella coverages.

- f. Subcontractors: ENBRIDGE shall require and verify that all the Contractor and subcontractors maintain insurance appropriate to the scope of their work as determined by Enbridge and shall ensure that the City of Naperville, the City of Aurora, and Naperville Township, and their respective officers, officials, agents, and employees, are additional insureds on insurance provided by the Contractor and subcontractors. For CGL coverage, Contractor and subcontractors shall provide coverage with a form at least as broad as CG 20 38 04 13 or equivalent. Provisions related to Waiver of Subrogation are set forth in section h.5 of this Exhibit.

g. Reserved.

h. Other Insurance Provisions:

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

- 1. Any policy of Commercial General Liability Insurance shall include an endorsement adding the City of Naperville, the City of Aurora, Naperville Township, and their respective officers, officials, agents, and employees as additional insureds for the Project Work described in the Agreement to which this Exhibit is attached. To the extent that Enbridge is self-insured, the City of Naperville, the City of Aurora, Naperville Township, and their respective officers, officials, agents, and employees shall be treated as though they are additional insureds.

2. The fifty (50) foot railroad exclusion is removed through CG 2417 10 01, or equivalent, for general liability and umbrella policies.
3. The City of Naperville, the City of Aurora, Naperville Township, and their respective officers, officials, agents, and employees, are to be added as additional insureds with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of ENBRIDGE and its Contractor and the subcontractors.
4. For any claims related to Project Work performed by ENBRIDGE or its Contractor and the subcontractors, insurance coverage (whether provided through ENBRIDGE self-insurance and/or through insurance policies) shall be primary insurance as respects the City of Naperville, the City of Aurora, Naperville Township, and their respective officers, officials, agents, and employees. Any insurance or self-insurance maintained by the City of Naperville, the City of Aurora, or Naperville Township, or their respective officers, officials, agents, or employees, shall be excess of ENBRIDGE's insurance and ENBRIDGE's Contractor and the Subcontractors' insurance, and shall not contribute with it.

Enbridge shall provide the City with not less than 30 days' written notice of the cancellation of any insurance policy described herein.

5. Waiver of Subrogation. ENBRIDGE agrees to waive subrogation and shall require its Contractor and the subcontractors performing Project Work to waive subrogation, which any insurer thereof may acquire by virtue of the payment of any loss, and to obtain any endorsement that may be necessary to effect this waiver of subrogation. The Workers' Compensation policies for Enbridge and Enbridge's Contractor and the subcontractors shall be endorsed with a waiver of subrogation in favor of the City of Naperville, the City of Aurora, Naperville Township, and their respective officers, officials, agents, and employees for all Project Work performed by ENBRIDGE and/or its employees, agents, subconsultants, Contractor, and the subcontractors.
6. Verification of Coverage. Upon request, where ENBRIDGE has insurance policies Enbridge shall furnish the City of Naperville with original certificates of insurance for ENBRIDGE or its Contractor and the subcontractors, as applicable. However, failure to do so shall not operate as a waiver of these insurance requirements. When ENBRIDGE is self-insured, their obligations to provide coverage shall be as set forth in the Self-Insurance Letter provided by Enbridge.

EXHIBIT F

**GENERAL PROVISIONS
FOR UTILITY ADJUSTMENT AGREEMENTS**

GENERAL PROVISIONS FOR UTILITY ADJUSTMENT AGREEMENTS

1. In the event this adjustment is caused by the construction of the National System of Interstate and Defense Highways or Supplemental Freeway System, it is understood that the COMPANY at no time will perform any normal maintenance on the utility facilities from the through traffic lanes or shoulders of the Interstate or Supplemental Freeway Route or any ramps or shoulders leading thereto. Proper maintenance procedures to be used in cases of emergency are to be obtained from the District Engineer of the State Department of Transportation.
2. In the event any of this utility adjustment work is performed by other than COMPANY forces, the provision of "an act regulating wages of laborers, mechanics and other workers employed in public works by the State, County, City or any public body or political subdivision or by one under contract for public works" (Illinois Compiled Statutes, 820 ILCS 130/1) shall apply.
3. In the event the COMPANY does not perform the relocation work with its own forces, i.e., where the COMPANY enters into a contract or agreement with the construction Contractor, or similar party, to perform such relocation work, the COMPANY shall include the clauses which follow and are made a part of the "General Provisions" in its contract, or agreement, with the Contractor. Appendix A requires that the COMPANY will not discriminate, in its choice of Contractor and that its Contractor will not discriminate in the choice of subcontractors, including procurement of materials and leases of equipment.

CONTRACTOR DISADVANTAGED BUSINESS ASSURANCE

The COMPANY, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

NOTICE TO CONTRACTORS COMPLIANCE WITH THE TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 FOR FEDERAL-AID CONTRACTS APPENDIX A

During the performance of this contract, the Contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "Contractor"), agrees as follows:

1. **Compliance and Regulation:** The Contractor will comply with the Regulations of the U. S. Department of Transportation relative to nondiscrimination in Federally-assisted programs of the U. S. Department of Transportation (Title 49, Code of Federal Regulations, Part 21, hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
2. **Nondiscrimination:** The Contractor, with regard to the work performed by it, after award and prior to completion of the contract work, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
3. **Solicitations of Subcontracts Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials or equipment, each potential subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color or national origin.
4. **Information and Reports:** The Contractor will provide all information and reports required by the Regulations, or orders and instructions issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the State Department of Transportation or the Federal Highways Administration to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to the State Department of Transportation or the Federal Highway Administration, as appropriate, and shall set forth what efforts it has made to obtain the information.
5. **Sanction for Non-compliance:** In the event of the Contractor's non-compliance with the nondiscrimination provisions of this contract, the State Department of Transportation shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to,
 - a. Withholding of payments to the Contractor under the contract until the Contractor complies, and/or
 - b. Cancellation, termination or suspension of the contract, in whole or in part.
6. **Incorporation of Provisions:** The Contractor will include the provisions of paragraph 1 through 6 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, order, or instructions issued pursuant thereto. The Contractor will take such action with respect to any subcontract or procurement as the State Department of Transportation or the Federal Highway Administration may direct as a means of enforcing such provisions, including sanctions for non-compliance: Provided, however, that, in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request the state to enter into such litigation to protect the interests of the State, and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

EXHIBIT G

BUY AMERICA CERTIFICATE OF COMPLIANCE

**BUY AMERICA
CERTIFICATE OF COMPLIANCE**

**LPA:
Route
Section No.
Job No.**

WE, _____
(UTILITY/RAILROAD OWNER)

Address: _____

Hereby certify that we are in compliance with the "Buy America" requirements of this project.

(Insert Project No. and Description Here)

As required, we will maintain all records and documents pertinent to the Buy America requirement, at the address given above, for not less than 3 years from the date of project completion and acceptance. These files will be available for inspection and verification by the LPA, the Illinois Department of Transportation, and/or the Federal Highway Administration.

We further certify that the total value of foreign steel as described in the Buy America requirements 23 CFR 635.410 for this project does not exceed one-tenth of one percent (0.1%) of the total contract price or \$2,500.00, whichever is greater.

Signed by _____ Title _____

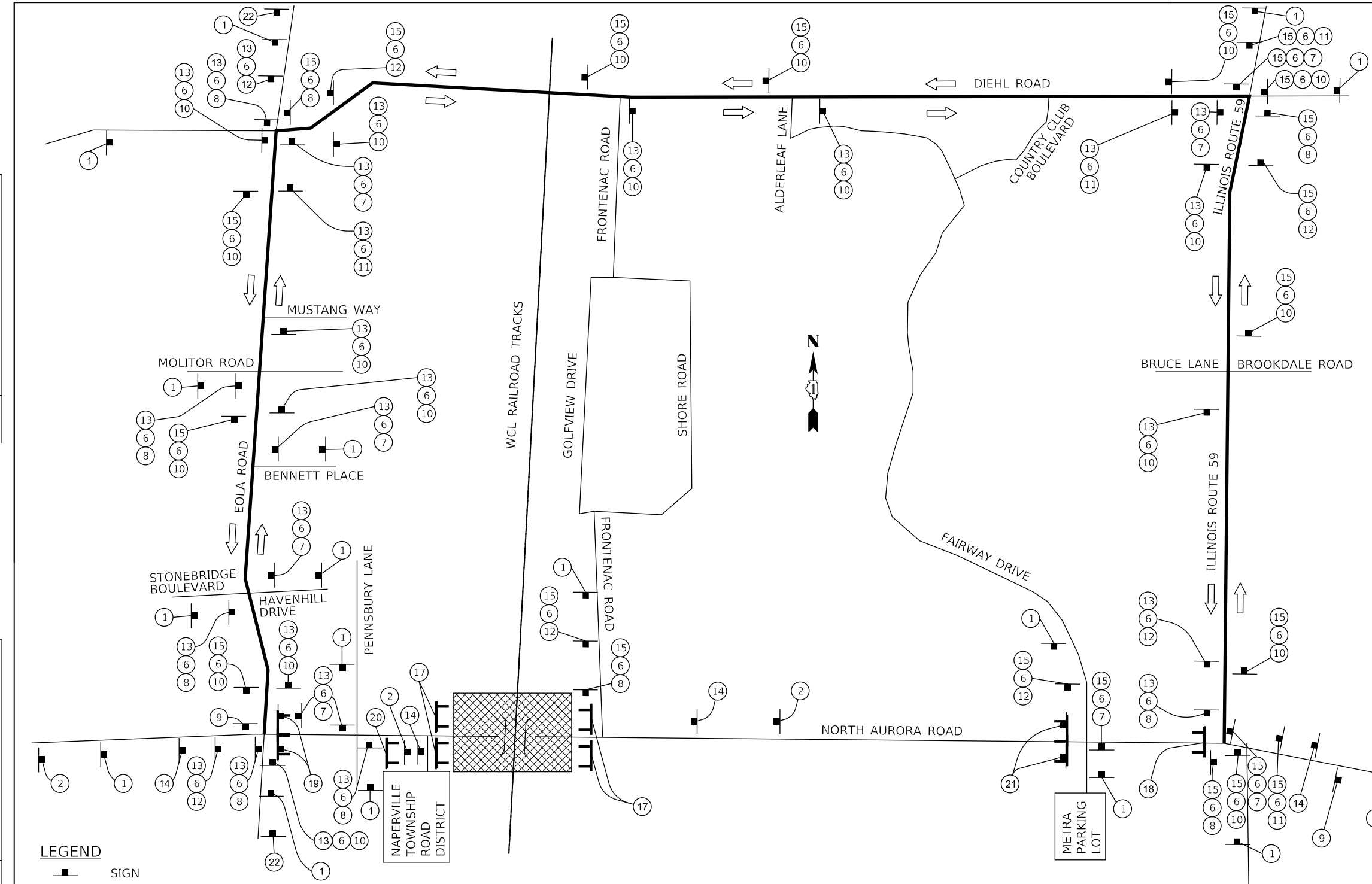
Subscribed and sworn to before me _____ day of _____, _____
this _____

EXHIBIT H

TRAFFIC MANAGEMENT PLAN

PLAN	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	CHECKED	
	DATE	
	FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	CHECKED	
	DATE	
	FILE NAME	



SIGN LEGEND

1 W20-2 48"X48"	2 W20-3 48"X48"	3 R11-2 48"X30"
4 M4-10R OR M4-10L 48"X18"	5 R11-4 60"X30"	6 30"X12"
7 M4-9-R 30"X24"	8 M4-9-L 30"X24"	9 M4-8A 24"X18"
10 M4-9-S 30"X24"	11 M4-9-AR 30"X24"	12 M4-9-AL 30"X24"
13 M3-2(0) 24"X12"	14 W20-3 48"X48"	15 M3-4(0) 24"X12"
	16 M4-10L 48"X18"	22 SPECIAL (O)*** 54"X30"

LEGEND

- SIGN
- DETOUR ROUTE FOR NORTH AURORA ROAD THRU TRAFFIC
- TYPE III BARRICADE
- DETOUR ROUTE
- CLOSED ROAD

NOTE

- FOR DETAILS NOT SHOWN ON PLANS, SEE IDOT DISTRICT 1 DETAILS TC-21.
- INSTALL ALL CHANGEABLE MESSAGE SIGNS, INFORMING THE PUBLIC OF THE DETOUR, AT LEAST TWO WEEKS PRIOR TO THE ROADWAY CLOSURE.

R11-2-4830	SPECIAL (O)*** 48"X30"	R11-3a-6030	R11-3a-6030	R11-4-6030	WHEN "X" MILES > 0.5 MILES, USE R3-11a INSTEAD OF R11-4
17	M4-10R-4818	M4-10L-4818	18	19	20
21					

THE FOLLOWING SIGNALIZED INTERSECTIONS WILL HAVE THEIR SIGNAL TIMING TEMPORARY ADJUSTED FOR THE DURATION OF CONSTRUCTION DETOUR:

- N AURORA RD & IL-59
- IL-59 & BRUCE LN / BROOKDALE RD
- IL-59 & DIEHL RD
- DIEHL RD & EOLA RD *
- EOLA RD & MUSTANG WAY *
- EOLA RD & MOLITOR RD *
- EOLA RD & HAVENHILL DR / STONEBRIDGE BLVD *
- N AURORA RD & EOLA RD **
- EOLA RD & LIBERTY ST *

* DUPAGE COUNTY TEMPORARY SIGNAL TIMINGS SHALL BE COORDINATED WITH DUPAGE COUNTY'S SENIOR PROJECT ENGINEER, (630) 407-6908
 ** TEMP TIMING MAY REQUIRE DISABLING THE NB RT OVERLAP
 *** SEE SHEET 38 FOR SIGN DETAIL

FILE NAME = 060092-DETOUR-01



USER NAME = brvanderwal	DESIGNED - MKW	REVISD -
PLOT SCALE = 2.0000' / in.	DRAWN - BMS	REVISD -
PLOT DATE = 1/24/2025	CHECKED - BVW	REVISD -
	DATE - 1/7/2025	REVISD -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH AURORA ROAD
PENNSBURY LANE TO FRONTENAC ROAD
DETOUR ROUTE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1509	06-00133-00-BR	DUPAGE	425	35
CONTRACT NO. 61G79			ILLINOIS FED. AID PROJECT	

SCALE: NONE SHEET 1 OF 2 SHEETS STA. TO STA.

DETOUR GENERAL NOTES:

- ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY, 1, 2022", "THE QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES ADOPTED 2010, "THE DETAILS IN THESE PLANS AND THE LATEST EDITION OF THE STATE OF ILLINOIS "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
- THE ENGINEER SHALL BE NOTIFIED IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT. THE ENGINEER SHALL DETERMINE THE HOUR OF CLOSURE. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.
- IF DEEMED NECESSARY BY THE ENGINEER A PRE- CONSTRUCTION MEETING WITH THE CONTRACTOR SHALL BE HELD AT LEAST TWO WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT. SEE NOTE 27.
- THE CONTRACTOR SHALL SUPPLY TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF HIS REPRESENTATIVES ON THE CONSTRUCTION SITE AND HIS REPRESENTATIVE RESPONSIBLE FOR THE DETOUR SIGNING PRIOR TO THE START OF THE WORK.

THE NAPERVILLE POLICE DEPARTMENT REPRESENTATIVE FOR THIS DETOUR IS:

NAPERVILLE POLICE DEPARTMENT
POLICE NON-EMERGENCY NUMBER
1350 AURORA AVENUE
NAPERVILLE, IL 60540
(630) 420-6666

THE ILLINOIS DEPARTMENT OF TRANSPORTATION REPRESENTATIVE FOR THIS DETOUR IS:

DISTRICT ONE TRAFFIC CONTROL SUPERVISOR
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196
KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV

THE DUPAGE COUNTY DIVISION OF TRANSPORTATION REPRESENTATIVE FOR THIS DETOUR IS:

HIGHWAY PERMITS
DUPAGE COUNTY DIVISION OF TRANSPORTATION
421 N. COUNTY FARM ROAD
WHEATON, IL 60187
HWYPERMITS@DUPAGECOUNTY.GOV
(630) 407-6900

THE CITY OF AURORA POLICE DEPARTMENT REPRESENTATIVE FOR THIS DETOUR IS:

AURORA POLICE DEPARTMENT
POLICE NON-EMERGENCY NUMBER
1200 E INDIANA TRAIL
AURORA, IL 60507
(630) 256-5000

THE DUPAGE COUNTY SHERIFF'S DEPARTMENT REPRESENTATIVE FOR THIS DETOUR IS:

DUPAGE COUNTY SHERIFF'S DEPARTMENT
NON-EMERGENCY NUMBER
501 N COUNTY FARM ROAD
WHEATON, IL 60187
(630) 682-7256

- IF REQUESTED BY THE CONTRACTOR IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT THE ENGINEER WILL FIELD LOCATE THE POSITIONS OF ANY SIGNS.
- DIMENSIONS SHOWN ON THESE PLANS MAY BE ADJUSTED TO FIT FIELD CONDITIONS, WITH THE APPROVAL OF THE ENGINEER.
- THE ROAD SHALL NOT BE CLOSED UNTIL ALL SIGNING IS ERECTED IN ACCORDANCE WITH THE DETOUR PLAN AND INSPECTED AND APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL BARRICADES, SIGNS, LIGHTS, AND OTHER DEVICES INSTALLED BY THE CONTRACTOR ARE IN PLACE AND OPERATING 24 HOURS EACH DAY INCLUDING SUNDAYS AND HOLIDAYS DURING THE TIME THE DETOUR IS IN EFFECT.
- THE TRAFFIC CONTROL SHOWN ON THE DETOUR PLAN IS THE MINIMUM NECESSARY TO ENSURE THIS ROAD CLOSURE. THE CONTRACTOR SHALL MAKE ALL CHANGES IN TRAFFIC CONTROL THAT IS DEEMED NECESSARY BY THE ENGINEER. ADDITIONS AND DELETIONS OF TRAFFIC CONTROL FOR THIS DETOUR SHALL BE CONSIDERED INCLUDED IN THE COST OF THE PAY ITEM "TRAFFIC CONTROL AND PROTECTION, (SPECIAL)".
- ALL EXISTING SIGNING THAT IS NOT APPLICABLE WHILE THE DETOUR IS IN EFFECT SHALL BE COMPLETELY COVERED BY THE CONTRACTOR, IN A MANNER APPROVED BY THE ENGINEER.
- ALL DETOUR SIGNING SHALL BE POST MOUNTED UNLESS OTHERWISE APPROVED BY THE ENGINEER
- ALL DETOUR SIGNING EXCEPT REGULATORY SIGNS SHALL HAVE BLACK LEGENDS ON FLUORESCENT ORANGE SHEETING AND STANDARD BLACK BORDERS. THE FLUORESCENT ORANGE REFLECTIVE SHEETING SHALL MEET THE REQUIREMENTS OF SECTION 1091 OF THE STANDARD SPECIFICATIONS. ALL DETOUR SIGNING SHALL BE NEW OR LIKE NEW CONDITION. THE ENGINEER SHALL BE THE SOLE JUDGE OF THE CONDITION OF THE SIGNS.

- THE SIZES OF ALL SIGNS NOT SPECIFIED IN THESE PLANS SHALL BE AS REQUIRED BY THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- WHEN REQUIRED THE MINIMUM DIMENSIONS OF THE ORANGE WARNING FLAGS SHOWN IN THESE PLANS ARE 18"X 18".
- ALL BARRICADES SHALL HAVE REFLECTORIZED STRIPING ON BOTH SIDES OF THE BARRICADES. THE TYPE III BARRICADES USED AT THE POINT OF CLOSURE TO THRU TRAFFIC SHALL NOT EXCEED 8 FEET IN WIDTH EACH, FOR A SINGLE APPROACH LANE.
- THE "ROAD CLOSED" (R11-2), THE "ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY" (R11-3) AND THE "ROAD CLOSED TO THRU TRAFFIC" (R11-4) SIGNS SHALL BE MOUNTED ABOVE THE TOP OF THE BARRICADE. ALL TYPE III BARRICADES SHALL HAVE TWO (2) AMBER TYPE A-LOW INTENSITY FLASHING LIGHTS SPACED NEAR THE CENTERLINE OF THE SUPPORTS.
- THE ROAD NAME SIGN SHALL HAVE A BLACK LEGEND ON THE FLUORESCENT ORANGE REFLECTIVE SHEETING. THE SIGN BLANK SHALL BE A 9" X VARIABLE OR A 12" X VARIABLE WITH DESIGN SERIES C LETTERS. THE CAPITAL LETTERS SHALL BE 6" WITH 4.5" LOWER CASE.
- DURING NON-WORKING HOURS AT THE POINT OF ROAD CLOSURE TO ALL TRAFFIC THE CONTRACTOR SHALL PROVIDE A MEANS TO RESTRAIN THE BARRICADES FROM EASY MOVEMENT BY VANDALS. THE CHOSEN METHOD SHALL BE APPROVED BY THE ENGINEER.
- CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED IMMEDIATELY BEHIND THE TYPE III BARRICADES DURING NON-WORKING HOURS. IN ANY EVENT ARTICLE 701.04 OF THE STANDARD SPECIFICATIONS SHALL APPLY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE VISIBILITY OF ALL DETOUR AND CONSTRUCTION SIGNING, INCLUDING BRUSHING BACK VEGETATION IF DEEMED NECESSARY BY THE ENGINEER.
- THE FOLLOWING ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARDS ARE APPLICABLE FOR THIS WORK:

- STANDARD 701001-02
- STANDARD 701006-05
- STANDARD 701011-04
- STANDARD 701101-05
- STANDARD 701206-05
- STANDARD 701301-04
- STANDARD 701311-03
- STANDARD 701427-05
- STANDARD 701501-06
- STANDARD 701502-09
- STANDARD 701601-09
- STANDARD 701602-10
- STANDARD 701701-10
- STANDARD 701801-06
- STANDARD 701901-09

- THE ENGINEER SHALL BE NOTIFIED AT LEAST TWO (2) HOURS BEFORE THE ROAD IS TO BE OPENED TO TRAFFIC. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.
- CARE IS TO BE TAKEN AS NOT TO DAMAGE ANY OF THE EXISTING TRAFFIC SIGNAL CONDUITS, AND EQUIPMENT. IF ANY OF THE TRAFFIC SIGNAL CONDUITS, CABLES AND/OR EQUIPMENT IS DAMAGED, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE THE CONDUITS, CABLES AND/OR EQUIPMENT AT NO COST TO THE PUBLIC AGENCY.
- TWO WEEKS ADVANCE NOTICE TO IDOT, DUPAGE COUNTY, CITY OF NAPERVILLE, CITY OF AURORA, LOCAL AGENCIES, SCHOOL DISTRICTS, FIRE DISTRICTS AND IDOT DISTRICT-1, WILL BE REQUIRED PRIOR TO OPERATION OF DETOUR ROUTE.
- NOTIFY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, DUPAGE COUNTY, THE CITY OF NAPERVILLE, THE CITY OF AURORA, AND NAPERVILLE TOWNSHIP UPON INSTALLATION OF THE DETOUR AND ITS REMOVAL.
- THE DETOUR IS REQUIRED FOR TWO SEPARATE WORK ITEMS WHICH MAY OCCUR AT DIFFERENT TIMES:
 - 1) ONEOK PIPELINE ADJUSTMENT (WORK PERFORMED BY OTHERS), ONEOK DESIRES TO PERFORM THEIR WORK DURING THE STAGE 1 ROAD CLOSURE.
 - 2) STAGE 1 ROADWAY WORK

THE CONTRACTOR SHALL INSTALL ALL TRAFFIC CONTROL ITEMS AS SHOWN ON THE DETOUR PLAN TO ACCOMMODATE UP TO TWO SEPARATE INSTANCES OF THE ROAD CLOSURE. THE CONTRACTOR MAY LEAVE TRAFFIC CONTROL ITEMS IN PLACE, PROVIDED THAT THE CONTRACTOR COVERS ALL DETOUR SIGNAGE FOR THE TIME PERIODS BETWEEN REQUIRED CLOSURES. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE DATES OF CLOSURE WITH ONEOK AND IS RESPONSIBLE FOR GIVING ALL ADVANCED NOTIFICATIONS AS REQUIRED HEREIN.

STAGE 1 WORK REQUIRING THE ROADWAY CLOSURE IS TO BE COMPLETED WITHIN 60 CALENDAR DAYS AND THE DETOUR REMOVED. ANY DEVIATION FROM THIS REQUIREMENT WILL REQUIRE THE APPROVAL OF THE ENGINEER.

- DUPAGE COUNTY IS EXPECTED TO BE PERFORMING RESURFACING ON EOLA ROAD DURING THE SUMMER/FALL OF 2025. THE CONTRACTOR OF THIS CONTRACT SHALL COORDINATE WITH DUPAGE COUNTY'S SENIOR PROJECT ENGINEER, (630) 407-6913, TO MINIMIZE ANY OVERLAP IN SCHEDULE BETWEEN THIS DETOUR SCHEDULE AND EOLA ROAD'S RESURFACING SCHEDULE.

















PLAN	SURVEYED	DATE
NOTE BOOK NO.	PLOTTED	BY
	CHECKED	
	FILE NAME	

PROFILE	SURVEYED	DATE
NOTE BOOK NO.	GRADES CHECKED	BY
	STRUCTURE	
	NOTATIONS	

FILE NAME : 060002-DETOUR-01

	USER NAME : brvanderwal	DESIGNED - MKW	REVISED -	<p align="center">STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>	<p align="center">NORTH AURORA ROAD PENNSBURY LANE TO FRONTENAC ROAD DETOUR ROUTE</p>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE : 2,0000 ' / in.	CHECKED - BVW	REVISED -			1509	06-00133-00-BR	DUPAGE	425	36	
PLOT DATE : 1/23/2025	DATE - 1/7/2025	REVISED -		SCALE: NONE	SHEET 2 OF 2 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			
						CONTRACT NO. 61G79					

PLAN AND TYPICAL SECTION LEGEND

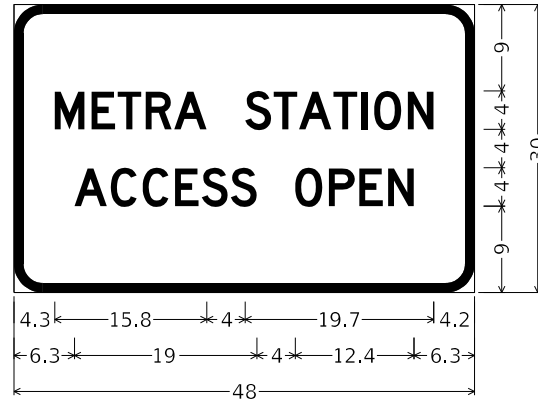
-  CONSTRUCTION WORK ZONE (PLAN ONLY)
-  TEMPORARY PAVEMENT
-  ARROW BOARD
-  SIGN TO BE PLACED ON PERMANENT OR PORTABLE SUPPORT
-  MONO-DIRECTIONAL FLASHING LIGHT
-  DRUMS WITH STEADY BURN MONO-DIRECTIONAL LIGHT @ 50' C-C (TYP), 25' C-C IN CURVES AND RADII, AND 20' C-C IN TAPERS
-  DRUMS WITH STEADY BURN BI-DIRECTIONAL LIGHT @ 50' C-C (TYP), 25' C-C IN CURVES AND RADII, AND 20' C-C IN TAPERS
-  TYPE 1 BARRICADE
-  TEMPORARY CONCRETE BARRIER WITH TYPE C REFLECTORS PER 704001 AND 782006.
-  IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2
-  TYPE III BARRICADE WITH TWO (2) FLASHING LIGHTS
-  VERTICAL PANELS WITH STEADY BURN MONO-DIRECTIONAL LIGHT @ 50' C-C (TYP), 25' C-C IN CURVES AND RADII, AND 20' C-C IN TAPERS
-  DOUBLE VERTICAL PANELS WITH STEADY BURN BI-DIRECTIONAL LIGHT @ 50' C-C (TYP), 25' C-C IN CURVES AND RADII, AND 20' C-C IN TAPERS
-  MONO-DIRECTIONAL INDICATOR BARRICADES WITH STEADY BURN LIGHTS @ 20' C-C
-  DIRECTION OF TRAFFIC FLOW
-  TYPE C ARROW BOARD

PAVEMENT MARKING LEGEND

- (A) TEMPORARY PAVEMENT MARKING 4" YELLOW EDGE LINE
- (B) TEMPORARY PAVEMENT MARKING 4" WHITE EDGE LINE
- (C) TEMPORARY PAVEMENT MARKING 6" WHITE EDGE LINE
- (D) TEMPORARY PAVEMENT MARKING DOUBLE YELLOW 4" @ 11" C-C
- (E) TEMPORARY PAVEMENT MARKING 6" WHITE SKIP-DASH (2' LINE, 6' SPACE)
- (F) TEMPORARY PAVEMENT MARKING WHITE LETTERS & SYMBOLS
- (G) TEMPORARY PAVEMENT MARKING 24" WHITE STOP BAR
- (H) TEMPORARY PAVEMENT MARKING 4" WHITE SKIP-DASH (10' LINE, 30' SPACE)
- (I) TEMPORARY CONCRETE BARRIER ALONG LANE LINE OR @ 12:1 ON TAPERS UNLESS OTHERWISE NOTED
- (J) RELOCATE TEMPORARY CONCRETE BARRIER ALONG LANE LINE OR @ 12:1 ON TAPERS UNLESS OTHERWISE NOTED
- (K) PINNING TEMPORARY CONCRETE BARRIER

PLAN	SURVEYED	DATE
NOTE BOOK NO.	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	

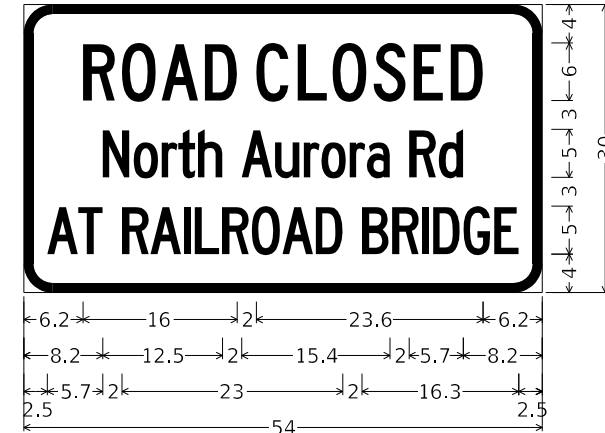
PROFILE	SURVEYED	DATE
NOTE BOOK NO.	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	



3.0" Radius, 1.0" Border, Black on Orange;
 "METRA STATION", D 2K 75% spacing;
 "ACCESS OPEN", D 2K 75% spacing;
 Table of letter and object lefts

M	E	T	R	A	S	T	A	T	I	O	N
4.3	8.1	10.8	13.7	16.7	24.1	27.1	29.7	33.3	36.2	37.5	41.0

A	C	C	E	S	S	O	P	E	N
6.3	10.1	13.4	16.8	19.6	22.6	29.3	32.8	36.0	39.0



3.0" Radius, 1.0" Border, Black on Orange;
 "ROAD", C 2K 80% spacing;
 "CLOSED", C 2K 80% spacing;
 "North", C 2K 50% spacing;
 "Aurora", C 2K 50% spacing;
 "Rd", C 2K 50% spacing;
 "AT", C 2K 5% spacing;
 "RAILROAD", C 2K 40% spacing;
 "BRIDGE", C 2K 40% spacing;
 Table of letter and object lefts

R	O	A	D	C	L	O	S	E	D
6.2	10.2	14.3	18.9	24.2	28.5	32.2	36.4	40.6	44.5

N	o	r	t	h
8.2	11.4	14.4	16.1	18.1

A	u	r	o	r	a	R	d
22.7	26.2	29.2	31.0	33.9	35.7	40.1	43.2

A	T	R	A	I	L	R	O	A	D
2.5	5.7	10.2	13.2	16.7	17.8	20.6	23.7	26.9	30.4

B	R	I	D	G	E
35.2	38.4	41.5	42.6	45.8	49.0

FILE NAME = 060092-MOT-00-00



USER NAME = brvanderwal	DESIGNED - MKW	REVISED -
	DRAWN - BMS	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - BVW	REVISED -
PLOT DATE = 1/24/2025	DATE - 1/7/2025	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**NORTH AURORA ROAD
 PENNSBURY LANE TO FRONTENAC ROAD
 MOT GENERAL NOTES**

SCALE: NONE SHEET 2 OF 28 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1509	06-00133-00-BR		425	38
			CONTRACT NO. 61G79	
ILLINOIS FED. AID PROJECT				