



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

2520 WEST ILES AVENUE, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

JB PRITZKER, GOVERNOR

JAMES JENNINGS, ACTING DIRECTOR

Project Summary and Preliminary Environmental Impacts Determination

Date: **JAN 23 2025**

Loan Applicant: City of North Chicago

IEPA Loan Project Numbers: L177339,
L177340, L177341, L177342,
L177343, L177344

To all interested persons:

Section 663.330 of the Illinois Procedures for Issuing Loans from the Public Water Supply Loan Program requires that the Illinois Environmental Protection Agency (IEPA) conduct an assessment of the environmental impacts of proposed public water supply projects to be funded with loans. This review is carried out in conjunction with the Agency's review of the applicant's project plan.

Prior to final approval of the project plan, the public's comments are sought regarding environmental impacts of the proposed project. Unless new information obtained through the public comment process causes reconsideration, the Agency will approve the project plan at the close of the public comment period.

The applicant will make the attached Project Summary and Preliminary Environmental Impacts Determination (PEID) available for public inspection. After receiving this letter, the applicant must conduct a public hearing regarding both the PEID and project planning. Advertisement of the hearing must be made at least 10 days in advance. The advertisement must include the purpose of the project along with the date, time, and location of the hearing. A comment period of at least 10 days shall be provided after the hearing in which written comments may be submitted to the loan applicant or to the IEPA contact person identified in the attached document.

Your participation in this process is appreciated.

Sincerely,

Nidhan Singh, M.B.A.
State Revolving Fund Manager
Infrastructure Financial Assistance Section
Bureau of Water

NS:EJ:N:\BOW\Grants\COM_DOCS\Jordal\NORTH CHICAGO\L177339\North Chicago L177339 PEID.docx

Attachment

2125 S. First Street, Champaign, IL 61820 (217) 278-5800
115 S. LaSalle Street, Suite 2203, Chicago, IL 60603
1101 Eastport Plaza Dr., Suite 100, Collinsville, IL 62234 (618) 346-5120
9511 Harrison Street, Des Plaines, IL 60016 (847) 294-4000

595 S. State Street, Elgin, IL 60123 (847) 608-3131
2309 W. Main Street, Suite 116, Marion, IL 62959 (618) 993-7200
412 SW Washington Street, Suite D, Peoria, IL 61602 (309) 671-3022
4302 N. Main Street, Rockford, IL 61103 (815) 987-7760

**Project Summary and
Preliminary Environmental Impacts Determination (PEID)**

The following project summary and environmental assessment has been prepared by the IEPA to assist the loan applicant in complying with the public notice requirements. This report is based on information submitted to the IEPA by the City of North Chicago. Sources of information include the following documents: the North Chicago Lead Service Line Replacement Project Planning Report, dated September 2024 and prepared by Trotter and Associates, Inc.; and, in response to IEPA requests for additional information, correspondence dated January 16, 2025, with attachments, also prepared by Trotter and Associates.

Part I – Project Information

Project Name: Lead Service Line Replacement

Loan Applicant: City of North Chicago

County: Lake

Project Numbers: L177339, L177340, L177341, L177342, L177343, L177344

Current Population Served: 16,813

Future City Population (30 year): 39,744

Residential Customers Served: 3,893

Project Description: The City of North Chicago owns, operates, and maintains a drinking water treatment and distribution system. The United States Navy also owns and operates a water treatment and distribution system within the City, which serves a large fraction of the City's 30,416 residents. Only 16,813 residents are served by the City's system.

The City's water treatment plant (WTP) draws from Lake Michigan and has a maximum treatment capacity of 16 million gallons per day (MGD). A separate surface water intake conveys up to 32 MGD of untreated lake water to the AbbVie pharmaceutical manufacturing plant. The North Chicago water distribution system includes a 4-million-gallon (MG) standpipe, of which useable storage capacity is limited to 212,000 gallons, due to the drawdown required for maintaining acceptable system pressure. Peak demands are therefore met by variable rate pumping from the WTP, which has an additional 0.78 MG of clear well and storage tanks for treated water. A separate loan program project, approved under L174589, is planned to construct an elevated storage tank, so the City can meet peak demands during power outages that would prevent water from being pumped from the WTP's existing storage.

The existing distribution system consists largely of 3 to 24-inch watermains, totaling an estimated 60.9 miles. A service line inventory found that, of the system's 5,654 service lines, 849 are lead, and an additional 140 are galvanized requiring replacement (i.e., partially lead, where the lead is upstream). The rest are unknown. Most of the lines that must be replaced are concentrated in the

central and eastern areas of the City. Through this project, the City will replace all full and partial lead service lines with copper service lines.

The City presently has a violation notice for exceedance of di(2-ethylhexyl) phthalate maximum contaminant levels. This is being addressed under the terms of a Compliance Commitment Agreement dated August 14, 2024.

Project Location: See attached map for details.

Project Justification: Service lines are small pipes that carry drinking water from the water mains into homes. Older service lines may be constructed from lead. Older household plumbing fixtures and faucets may also contain lead. Lead can enter drinking water when corrosion of pipes and/or fixtures occurs. Lead is a toxic metal that can accumulate in the body over time. The adverse health effects of lead exposure in children and adults are numerous and well-documented. Replacing these lead service lines will reduce the community’s risk of lead exposure. All lead service lines in the City will be replaced as part of this project.

Estimated Construction Dates:

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
Loan Number	L177339	L177340	L177341	L177342	L177343	L177344
Construction Start	July 2025	July 2026	July 2027	July 2028	July 2029	July 2030
Construction End	Oct. 2026	Oct. 2027	Oct. 2028	Oct. 2029	Oct. 2030	Oct. 2031

Part II – Project Affordability for Residents and Utility Customers

Project Cost Estimate, each of Phases 1 - 5	
	Lead Service Line Replacement (L177339, L177340, L177341, L177342, L177343)
Construction (150 lines)	\$2,415,750
Construction Contingency (10%)	\$ 241,575
Design Engineering	\$199,300
Construction Engineering	\$ 199,300
Total	\$ 3,055,925

Project Cost Estimate, Phase 6	
	Lead Service Line Replacement (L177344)
Construction (143 lines)	\$2,303,015
Construction Contingency (10%)	\$ 230,300
Design Engineering	\$190,000
Construction Engineering	\$ 190,000
Total	\$ 2,913,315

The City of North Chicago is proposing to finance the project costs with loans from the IEPA Public Water Supply Loan Program (PWSLP). For lead service line replacement in each of phases 1 - 5, a loan in the amount of \$3,055,925, with an estimated interest rate of 0% for a thirty (30) year period, would have an annual repayment of approximately \$101,864. The current loan program interest rate for lead service line replacement projects is 0%. The interest rate adjusts annually on July 1st. All loans are subject to the interest rate in effect at the time a loan agreement is issued.

The loan program rules include provisions for incentives such as reduced interest rates, partial principal forgiveness (a reduction in the amount of principal borrowed that would otherwise have to be repaid), and an extended repayment period for qualifying applicants. The final decision for incentive qualification will be determined at the time a loan agreement is issued, using updated Census Bureau and Department of Labor data. The Agency adjusts qualifying criteria annually on July 1st. During State fiscal years 2024 through 2028 (July 1, 2023, through June 30, 2028), the Agency will be issuing loans for lead service line replacement (LSLR) activities from funds provided to the Agency by the Bipartisan Infrastructure Law (BIL). Applicants will be evaluated for disadvantaged community status to determine principal forgiveness eligibility. Projects will be scored and ranked for priority in accordance with program rules. Projects which have obtained planning approval by March 31st are eligible for inclusion on the annual Intended Funding List for the subsequent fiscal year, thus reserving funding.

Applicants should be aware that funding for their LSLR project may be entirely in the form of loan principal that must be repaid, but certain applicants may qualify for LSLR funding in the form of principal forgiveness. Applicants for LSLR funding should review the Intended Use Plan issued by the Agency prior to each fiscal year to see the Intended Funding List, funding caps, the breakdown of projects with funds reserved for them and the type of funding reserved. Applicants should submit a Funding Nomination Form prior to March 31st of each year, indicating the amount of funding the applicant would like to receive, and the anticipated construction schedule for activity in the upcoming fiscal year. The Agency may limit the amount of funding per project based on the funds available and the number of projects seeking funding. Applicants should be in contact with their assigned project manager to discuss their intent to move forward with the project should funds be reserved for their project.

Using current data, the City is eligible to receive 40-year loan terms, a 0% interest rate, and principal forgiveness. Principal forgiveness is not guaranteed until a loan agreement is issued. For each phase, the final loan and annual repayment amounts will be based on the as-bid project costs

and the loan terms in effect on the date the loan agreement is issued. A rate increase is not anticipated as necessary to repay the debt burden associated with these loans.

Source of Loan Repayment: The City anticipates receiving principal forgiveness for the entirety of the project.

Current Average Monthly Residential Water Use: 6,623 gallons

Current and Anticipated Monthly Residential Cost of Service: \$51.04

How the monthly residential rate/cost of service is calculated:

System customers currently pay a \$17.20 flat fee, plus \$5.11 per each 1,000 gallons of water use. Therefore, the average customer pays a total of $\$17.20 + \$5.11(6.623) = \underline{\$51.04}$ per month.

Median Household Income (MHI): \$52,011

Percentage of MHI needed to pay the projected average annual residential cost of service: 1.18%

Financial Evaluation of the proposed project: To evaluate the costs of the proposed project for the community, a percentage comparison of MHI to the average, annual cost for water service is utilized. The projected average annual water cost for residential customers of \$612.48 is 1.18% of the MHI for the City of North Chicago. This percentage is for comparison only and has no impact on whether a project qualifies for funding from the IEPA. The percentage comparison and MHI are two of several criteria used to determine whether a loan project qualifies for interest rate reductions or principal forgiveness.

Part III – Environmental Issues Associated with the Project

Project construction impacts: Temporary adverse environmental impacts such as construction-associated noise, blowing dust, air emissions, and soil erosion will likely take place during construction. Ground disturbances will occur during excavation for service line installation. The replacement of lead service lines may temporarily increase lead concentrations in drinking water due to the release of metal from scale on pipes within the home that have not been replaced. The lead concentration will decrease after time. The contractor performing lead service line replacement will flush the new service lines to each home. Residents will be instructed on how to flush the interior plumbing.

Consultation under Section 106 of the National Historic Preservation Act (NHPA) of 1966: The City of North Chicago submitted project information to the Illinois Department of Natural Resources (IDNR), State Historic Preservation Office (SHPO) for consultation under Section 106 of the NHPA. SHPO concluded that adverse effects are unlikely.

Illinois Department of Natural Resources (IDNR): The City also submitted project information to the IDNR EcoCAT website to determine compliance with the Illinois Endangered Species Act,

Illinois Natural Areas Preservation Act, the Illinois Wetlands Act, and Title 17 Ill. Adm. Code Parts 1075 and 1090. The Department has concluded that adverse effects are unlikely.

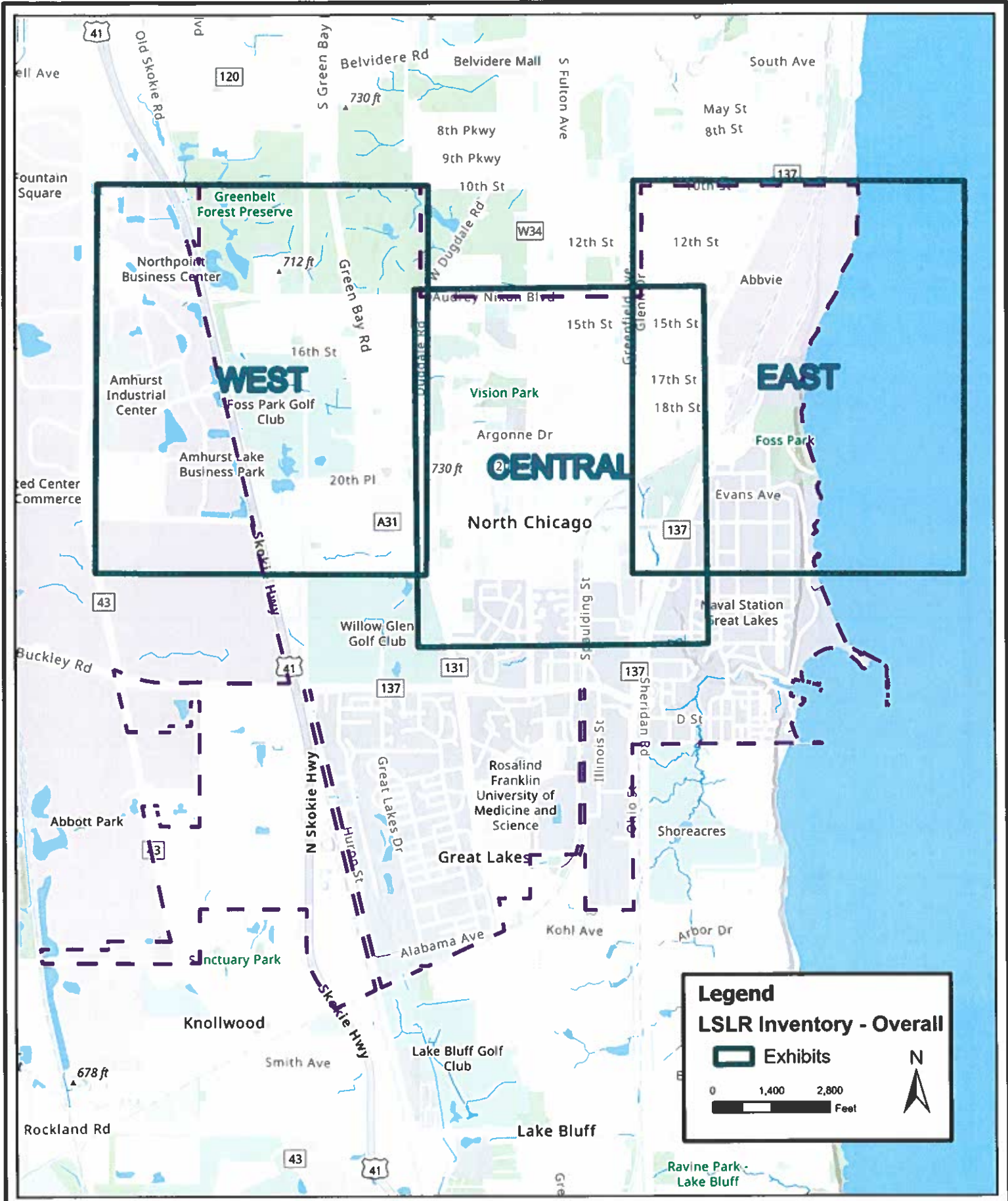
U.S. Army Corps of Engineers (USACE): No construction will be performed at or near a body of water that will require review from the U.S. Army Corps of Engineers

Public comments are invited on the proposed project. For further information, contact:

Ellen Jordal, Project Manager
Infrastructure Financial Assistance Section
Illinois Environmental Protection Agency
Bureau of Water

2520 West Iles Avenue
P.O. Box 19276
Springfield, Illinois 62794-9276
(217)782-2027

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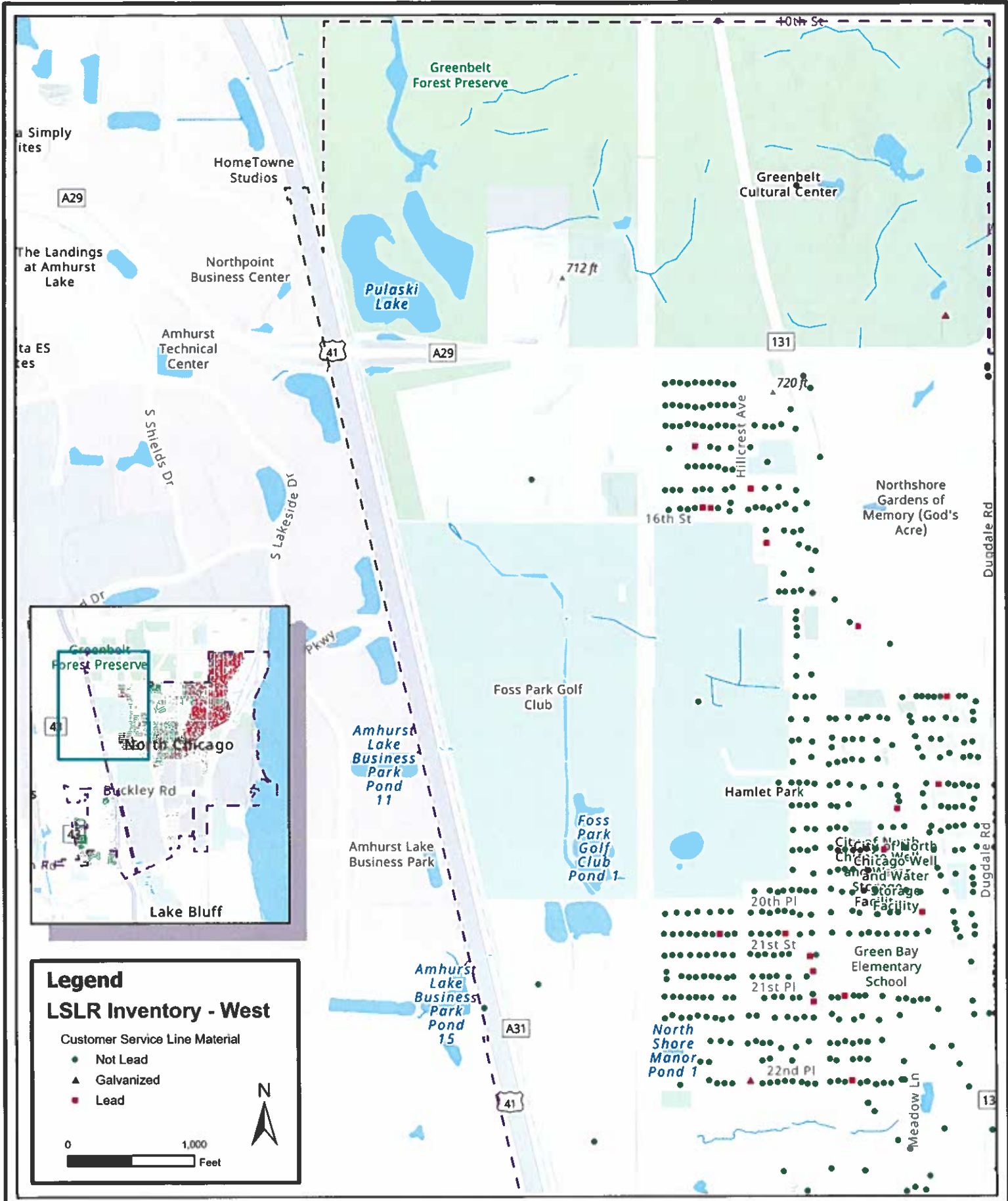


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LSLR Plan
Overall
North Chicago, Lake County, IL

Project No.: CNC004
Base File:
Sheet File:
Issue Date: 9/12/2024
Scale: 1" = 3,000'

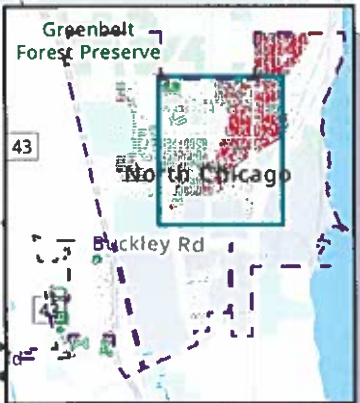
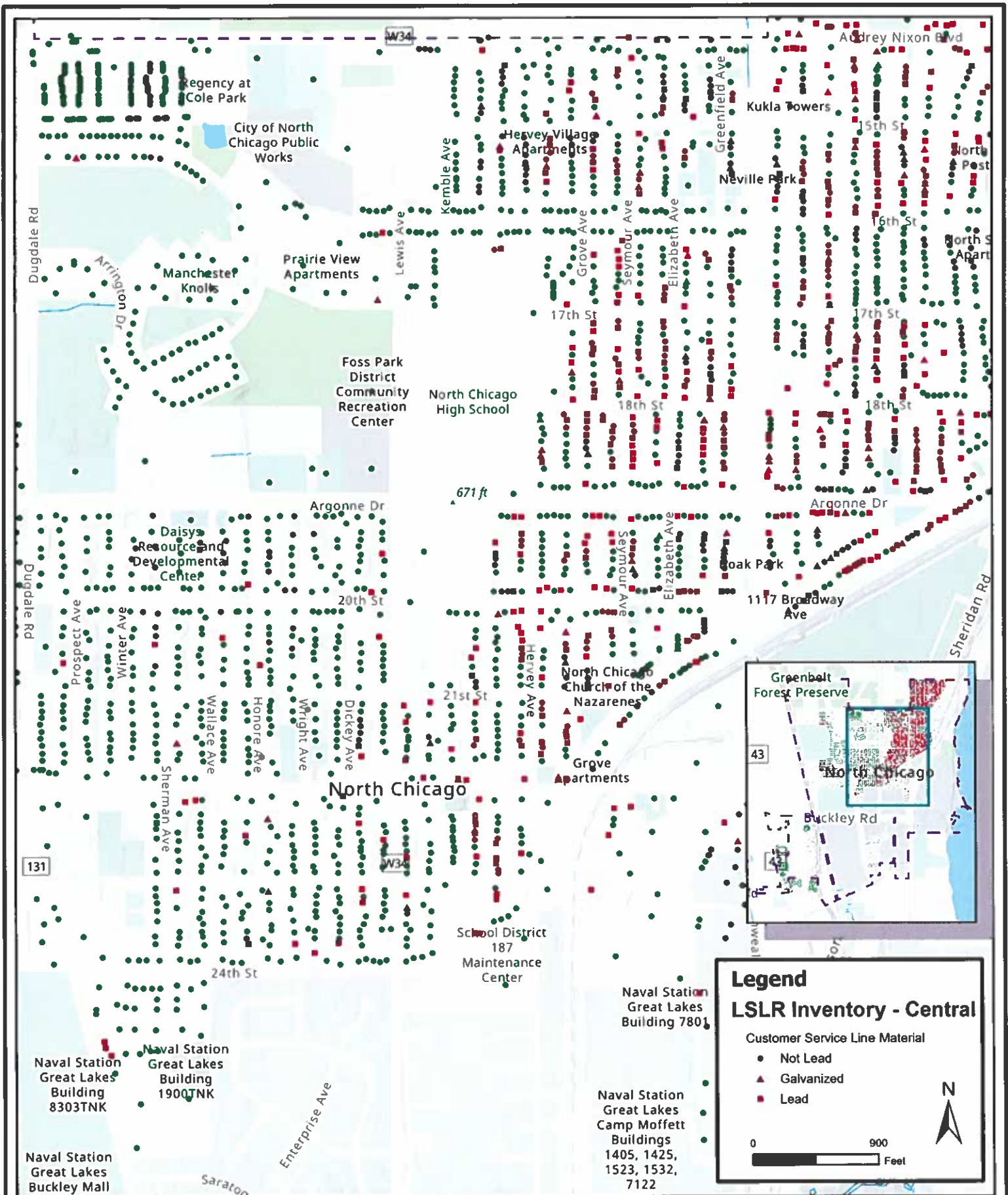
Exhibit
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LSLR Plan
Water Service Line Material
North Chicago, Lake County, IL

Project No.: CNC004
Base File:
Sheet File:
Issue Date: 9/12/2024
Scale: 1" = 1,000'



Legend

LSLR Inventory - Central

Customer Service Line Material

- Not Lead
- ▲ Galvanized
- Lead

0 900 Feet

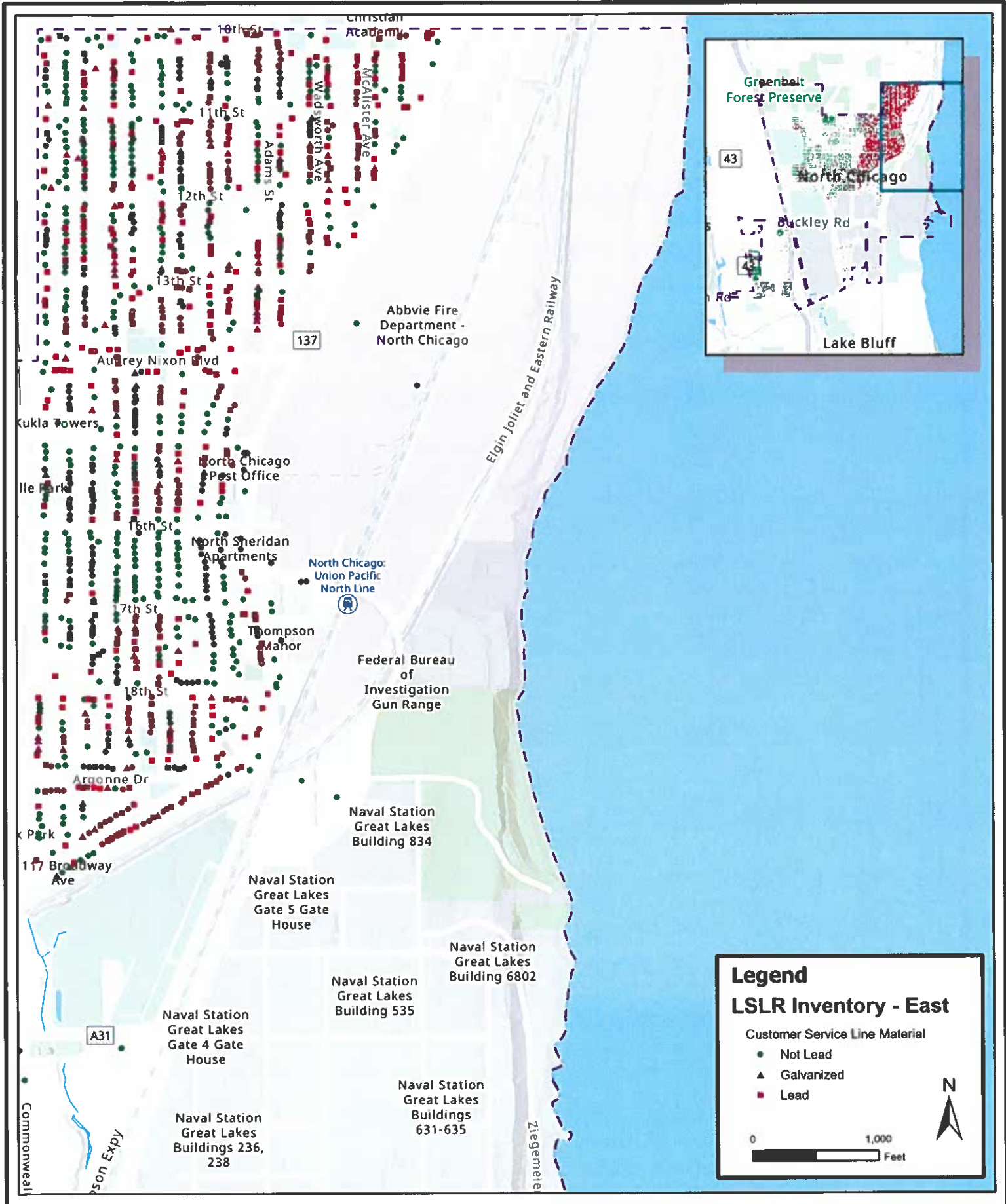
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LSLR Plan
Water Service Line Material
North Chicago, Lake County, IL

Project No.: CNC004
Base File:
Sheet File:
Issue Date: 9/12/2024
Scale: 1" = 900'

Exhibit
3



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LSLR Plan
Water Service Line Material
North Chicago, Lake County, IL

Project No.: CNC004
Base File:
Sheet File:
Issue Date: 9/12/2024
Scale: 1" = 1,000'

Exhibit
4

Mailing List – Environmental Review

Project: North Chicago

L17: 7.339

Check entities to receive Preliminary Environmental Impacts Determination/Notice of Categorical Exclusion. Agencies may be omitted if they have already provided an unconditional written sign-off on the planning.

_____ Illinois Historic Preservation Agency (SHPO)

_____ Illinois Department of Natural Resources
Office of Realty & Environmental Planning (for rare/endangered species, natural areas, and Interagency Wetlands Policy Act)

_____ Illinois Department of Natural Resources
Office of Water Resources (for lakes, rivers and stream crossings, floodway/floodplain construction)

_____ Illinois Department of Agriculture

U.S. Army Corps of Engineers – Check Appropriate Regional Office

_____ Rock Island District

_____ St. Louis District

_____ Chicago District

Designated 208 Areawide Planning Agency – Check Appropriate Agency

_____ CMAP

_____ GERPDC

_____ SWIPC

Green Infrastructure Coordinator: _____ Chris Covert

IEPA Field Office (Elgin)

Loan Applicant

Mr. Bob Miller, Interim Public Works Director

City of North Chicago

1850 Lewis Avenue

North Chicago, IL 60064

(Continued on Back)

Consulting Engineer

Trotter and Associates, Inc.
40 W 201 Wasco Rd, Suite D
St. Charles, IL 60175

Other Interested Parties

chron file

planning folder

scan to Ellen Jordal (with this sheet)

Project Manager: de zordel

Date: 1-22-25

Copies of the Preliminary Environmental Impacts Determination/Notice of Categorical Exclusion have been mailed to the above entities.

Signed: Lee Robinson

Date: 1/23/25