



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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JB PRITZKER, GOVERNOR

JOHN J. KIM, DIRECTOR

Project Summary and Preliminary Environmental Impacts Determination

Date: **FEB 27 2024**

Loan Applicant: City of Joliet

IEPA Loan Project Numbers: L176787, L176801 and L176802

To all interested persons:

Section 662.330 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. Within 60 days of 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.

For information purposes only, a copy of this document is being provided to your local newspaper.

Your participation in this process is appreciated.

Sincerely,

Gary Bingenheimer, P.E.

Manager

Infrastructure Financial Assistance Section

Bureau of Water

GB:JM:n:\bow\grants\com_docs\mallory\projects\drinking water\joliet - 6787-peid (water system improvements).docx

Attachment

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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
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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. Information in this report was obtained, in part, from the following sources: The City of Joliet Water System, Storage, Pump Station, and Transmission Main Improvements Phase 1 Project Plan dated August 2023; Project Planning Submittal Checklist; and Letter of Transmittal dated August 22, 2023, prepared by Strand Associates, Inc.

Part I –Applicant and Project Information

Loan Applicant: City of Joliet

Project Numbers: L176787, L176801 and L176802

Project Name: Water System Improvements

Counties: Will and Kendall

Current Population: 150,372

Future Population (2050): 202,559

The City of Joliet currently receives water from multiple groundwater wells that collect water from the Ironton-Galesville aquifer. The City owns and operates 11 hydrous manganese oxide (HMO) water treatment plants and over 665 miles of watermains ranging in size from 2 to 24-inches.

Project Description: The City of Joliet is proposing to construct many projects as they anticipate implementing an alternative water source by the year 2030. The proposed project consists of constructing two water towers, one booster pump station, upgrading two existing booster pump stations and one pressure reducing valve (PRV) station, and installing watermains in four locations throughout the City.

Elevated Storage Tanks (L176787): Constructing a 1-million-gallon elevated water tower equipped with SCADA on Black Road and constructing another 1-million-gallon elevated water tower equipped with SCADA for the Southeast high-pressure zone.

Booster Pump Station & Morgan Street PRV (L176801): Along Ridge Road constructing a new 52 feet by 45 feet, one and a half story masonry pump station equipped with three booster pumps, disinfection facilities, a SCADA system, and two 16-inch distribution mains to transport water. Upgrading the Essington Road pump station with three new pumps, metering station, chlorine booster equipment and generator; and upgrading the Ingalls Avenue pump station with three new pumps, chlorine booster equipment, a generator, and a bypass to the reservoir. They will also be installing a pressure reducing valve station along Morgan Street.

Distribution Improvements (L176802): Replacing 180 linear feet (LF) of 12-inch ductile iron watermain with 16-inch ductile water along Ridge Road. Replacing 2,750 LF of watermain along Von Esch Road from Canton Farm Road to Amber Court. Replacing 1,380 LF of watermain along Woodruff Road from Collins Street to Harrison Ave and across to the Fairmount and Garvin site with a 16-inch watermain. Installing 9,220 LF of 24-inch transmission main from the

Stryker Avenue site to Regency Ridge Drive along Morgan Street and connect to the Morgan Street PRV station.

Project Location: The Black Road water tower will be constructed on the north side of Black Road, east of Interstate 55 and the Southeast HPZ water tower will be constructed on the east side of Chicago Street (United States Route 53), south of Breen Road.

The booster pump station will be constructed on the site of the existing Ridge Road Standpipe, adjacent to Plainfield South High School. The pumps station upgrades are located on Essington Road and Ingalls Avenue, and the pressure reducing valve station along Morgan Street.

Watermain replacements along Ridge Road, Von Esch Road, Woodruff Road and the transmission main replacement along Morgan Street. See attached map for project locations.

Project Justification: The City currently depends on groundwater aquifers for its water source, which have been studied and concluded to be depleted, and unable to meet the City's maximum day water demands, by the year 2030. The City of Joliet has executed a preliminary agreement with five other communities, the Village of Channahon, Minooka, Romeoville, Shorewood, and the City of Crest Hill, to establish a new regional water commission that will deliver Lake Michigan water treated by the City of Chicago to the communities. The City is implementing an alternative water source program referred to as the Capital Improvement Project 8 (CIP-08), that will switch the drinking water source from groundwater to Lake Michigan water, supplied by the City of Chicago.

In order to transition from groundwater to lake water, the City will have to make significant improvements to the existing distribution system and upgrade existing pump stations, add new pumping and storage facilities, construct several transmission mains and water distribution reinforcements.

Construction Time Frame: Construction of the elevated storage tanks are projected to begin October 2024 and be completed in August 2025. Installation of the booster pump station and Morgan PRV is projected to begin November 2024 and be completed in September 2026. Construction of the distribution improvements are projected to begin November 2024 and be completed in July 2027.

Total Project Cost Estimate: \$67,419,000

Elevated Storage Tanks: \$16,927,000

Booster Pump Station & Morgan Street PRV: \$16,608,000

Distribution Improvements: \$33,884,000

Part II – Environmental Review and Impacts

Project construction impacts: Temporary adverse environmental impacts such as construction-associated noise, blowing dust, air emissions, traffic disruption, and soil erosion will likely occur during construction.

Illinois Department of Natural Resources-State Historic Preservation Office (IDNR-SHPO): The loan applicant submitted project information to the IDNR-SHPO to ensure compliance with

the National Historic Preservation Act. IDNR letters dated April 14, July 7, and July 10, 2023, indicate there are no historic properties affected by these projects and are in compliance with Section 106 of the National Historic Preservation Act.

Illinois Department of Natural Resources (IDNR): The loan applicant submitted project information to the IDNR EcoCAT to determine compliance with the Illinois Endangered Species Act, Illinois Natural Areas Preservation Act and the Illinois Wetlands Act. IDNR letters dated February 1, 6 and 21, 2023, states adverse effects are unlikely for these locations and terminated their consultation. An IDNR letter dated February 6, 2023, indicated the protected resource, the Northern Long-eared Bat (*Myotis septentrionalis*) may be in the vicinity of the Fairmont Distribution Main project location. Due to the potential presence of the bat species on the project site, the Department recommends any tree removal occurs between November 15th and March 31st when the bats are likely hibernating off site. If these dates cannot be accommodated, a field visit should be performed by a qualified individual (biologist, forester, or others who have been trained accordingly) to determine of suitable trees are present to provide northern long-eared bat habitat. If suitable habitat trees are found within the project area, they should be clearly flagged and/or marked and shall not be cut between April 1st – November 14th when the bats are most likely to be present. Suitable habitat trees are defined as trees ≥ 5 inches diameter breast height, with exfoliating bark and other features potentially utilized by rooting bats. All non-suitable trees may be cut at any time. Given the above recommendations are adopted, the Department has determined that impacts to these protected resources are unlikely. The information regarding the northern long-eared bat must be incorporated into the City’s plans and specifications for the proposed project.

United States Army Corps of Engineers (USACE): The loan applicant submitted project information to the USACE to determine compliance regarding projects involving construction within any river, stream, wetland, floodway, waterway, or any body of water. Letters dated February 14, 2024, from the Department of the Army Chicago District indicate the proposed project does not require a permit since the project does not occur in water of the United States.

Indian Tribes: The loan applicant submitted project information to numerous Indian tribes. For certain projects, Section 106 of the National Historic Preservation Act of 1966 requires consultation with all interested, federally recognized Indian Tribes. Consultation is required if construction has the potential to affect properties that have religious or cultural significance to Indian tribes previously residing in Illinois. Forest County Potawatomi Community Tribal Historic Preservation Office submitted a response dated December 11, 2023, requesting they remain a consulting party for this project since they have a known village site within the vicinity and proximity of the proposed project. They also requested that in the event of inadvertent discovery occurs, work should cease immediately.

Part III – Project Affordability for Residents and Utility Customers

The applicant is proposing to finance the project costs with loans from the IEPA Public Water Supply Loan Program (PWSLP). All phases together add up to \$67,419,000; with an estimated interest rate of 1.81% for a thirty (30) year period, this would result in an annual repayment of approximately \$2,914,044.

The current loan program interest rate is 1.81%. 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, and extended repayment periods for qualifying applicants. The criteria used to determine incentive qualifications are found in Section 662.210 and 662.250 of the Procedures for Issuing Loans from the PWSLP, which is available on the Agency's website. The final decision for incentive qualifications 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 and the community specific information is also subject to change.

Source of Loan Repayment: Increase user fees.

Current Average Monthly Residential Cost of Service: \$40.05

Projected Average Monthly Residential Cost of Service: \$56.14

How is the monthly residential rate/cost of service calculated? The City of Joliet charges customers a fixed monthly fee of \$7.55 plus a water rate volume charge of \$2.00 per 100 cubic feet for the first 200 cubic feet used, then \$6.00 per 100 cubic feet in excess of 200 cubic feet of water used. For an average residential user, 675 cubic feet of water is used per month; this calculates to $(\$2.00 \times 2) + (\$6.00 \times 4.75) + \$7.55 = \40.05 .

In order to repay the loan, Joliet is proposing to increase user rates to \$56.14 by the year 2023.

Number of Customers or Service Connections: The City of Joliet currently has a total of 44,634 residential customers.

Median Household Income (MHI): \$77,373

Financial Evaluation of the proposed project:

To evaluate the costs of the proposed project for the community, a percentage comparison of the MHI to the average, annual cost for water service is utilized. The MHI listed above is from the current fiscal year's census information. The projected annual water cost of \$673.68 is 0.87% of the MHI for Joliet. The 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.

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

Jasmine Mallory, Project Manager
Infrastructure Financial Assistance Section
Illinois Environmental Protection Agency
Bureau of Water
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276



Figure No
4.2-1

Proposed Phase I CIP-08 Project Location Map

Client/Project

Alternative Water Source
Capital Improvement Plan 8 Project Plan

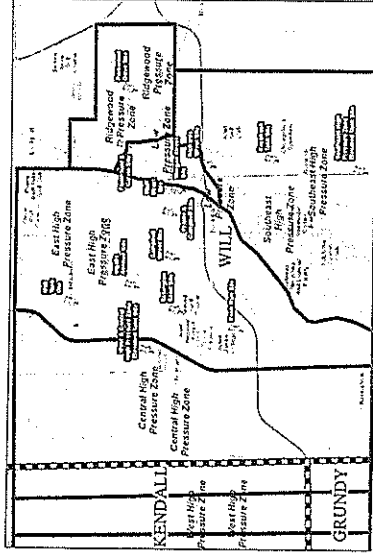
Prepared by MR. & MS. on 2019-08-09
Will, Cook, DuPage, Kendall, Grundy,
and LaSalle County, IL, Lake County, IN
IR Review by TJJ on



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(At original document size of 11x17)
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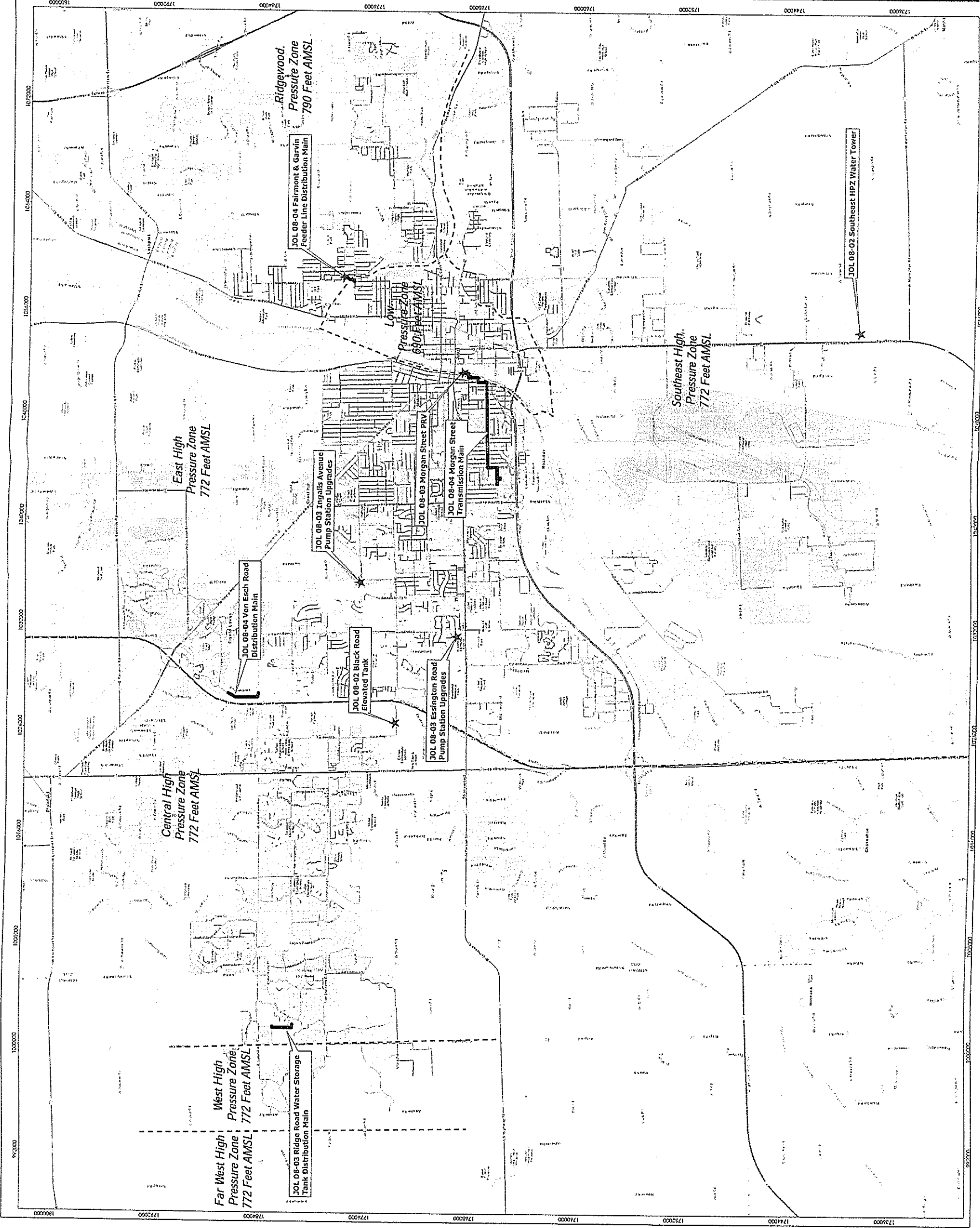
Legend

- Playlines
- Pressure Zone Boundary
- Diameter
 - 6"
 - 8"
 - 10" & 12"
 - 14" & 15"
 - 20"
 - 24"



Location Map: Not to Scale

ES&S
1. Coordinate System: NAD 1983 StatePlane Illinois East Feet 1251 Feet
2. Contour Interval: 5 Feet
3. Horizontal Datum: NAD 1983
4. Vertical Datum: NAVD 83
5. Projection: UTM
6. Units: Feet
7. Date: 08/09/19
8. Drawn by: TJJ
9. Checked by: TJJ
10. Approved by: TJJ



Far West High Pressure Zone
772 Feet AMSL

West High Pressure Zone
772 Feet AMSL

Central High Pressure Zone
772 Feet AMSL

East High Pressure Zone
772 Feet AMSL

Ridgewood Pressure Zone
790 Feet AMSL

Southeast High Pressure Zone
772 Feet AMSL

JOL 08-04 Von Esch Road
Distribution Main

JOL 08-02 Black Road
Elevated Tank

JOL 08-03 Essington Road
Pump Station Upgrades

JOL 08-03 Ingalls Avenue
Pump Station Upgrades

JOL 08-04 Morgan Street
Transmission Main

JOL 08-04 Fairmont & Garvin
Feeder Line Distribution Main

JOL 08-02 Southeast HP2 Water Tower

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.