

**MEETING NOTICE AND AGENDA  
FOR THE SPECIAL MEETING OF MORTON GROVE-NILES WATER COMMISSION (MGNWC)  
TO BE HELD ON MONDAY, DECEMBER 10, 2018 AT 3:00 PM  
AT THE NILES VILLAGE HALL ADMINISTRATIVE BUILDING  
1000 CIVIC CENTER DRIVE, NILES, ILLINOIS 60714**

- I. Call to Order
- II. Roll Call
- III. Pledge of Allegiance
- IV. **RESOLUTION 18-58** Approving Professional Services Agreement Between the Village of Niles and the Morton Grove-Niles Water Commission for Operation of the Water Transmission, Pumping and Storage Facilities for the Period from January 1, 2019 through December 31, 2020
- V. Public Comment
- VI. Adjournment

## RESOLUTION NO 18-58

### **A RESOLUTION AUTHORIZING THE APPROVAL AND EXECUTION OF PROFESSIONAL SERVICES AGREEMENT BETWEEN THE MORTON GROVE-NILES WATER COMMISSION AND THE VILLAGE OF NILES FOR OPERATION OF THE WATER TRANSMISSION, PUMPING AND STORAGE FACILITIES FOR THE PERIOD FROM JANUARY 1, 2019 THROUGH DECEMBER 31, 2020**

**WHEREAS**, in 2017, the Morton Grove-Niles Water Commission (“MGNWC” or “Commission”) was established by the Village of Morton Grove, a home rule Illinois municipal corporation (“Morton Grove”), and the Village of Niles, a home rule Illinois municipal corporation (“Niles”), by the adoption of ordinances pursuant to Division 135 of Article 11 of the Illinois Municipal Code (65 ILCS 5/11-135-1, *et seq.*) (“Division 135”). The establishing ordinances are Morton Grove Ordinance 17-5, which was adopted on March 13, 2017, and Niles Ordinance No. 2017-19, which was adopted on March 14, 2017; and

**WHEREAS**, the MGNWC was established for purposes of constructing and operating a public water supply system consisting of water transmission mains, pumping, storage, and other related water delivery and receiving infrastructure between a connection point on the Evanston water system and existing water receiving points of Niles and Morton Grove and

**WHEREAS**, on or about October 31, 2018, the Morton Grove-Niles Water Commission (MGNWC), issued a Request for Proposals, entitled “Request for Proposals Two Year Operating Contract for Morton Grove-Niles Water Commission *Water Transmission, Pumping And Storage Facilities January 2019-December 31, 2020*”, to operate and maintain the MGNWC wholesale water delivery system to its two customers, the Village of Morton Grove and the Village of Niles (the “Services”); and

**WHEREAS**, Niles submitted a response to the MGNWC RFP dated November 16, 2018, to perform the Services, and MGNWC and Niles further negotiated an Agreement for Niles to perform the Services on behalf of the MGNWC as set forth in Exhibit A; and

**WHEREAS**, the MGNWC Board has the authority to enter into the Agreement pursuant to Article VII, Section 10 of the 1970 Constitution of the State of Illinois, the Illinois Intergovernmental Cooperation Act (5 ILCS 220/1, *et seq.*) and the Illinois Municipal Code (65 ILCS 5/1, *et seq.*, including 65 ILCS 5/11-135-1, *et seq.*).

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE MORTON GROVE-NILES WATER COMMISSION, COOK COUNTY, ILLINOIS, AS FOLLOWS:**

**SECTION 1:** Each Whereas paragraph above is incorporated by reference into this Section 1 and made a part hereof as material and operative provisions of this Resolution.

**SECTION 2:** The Board of Commissioners of the Morton Grove-Niles Water Commission (“MGNWC Board”) authorizes the approval of the economic terms and the attached form of the Agreement entitled “Professional Services Agreement Between the Village of Niles and the Morton Grove-Niles Water Commission for Operation of the Water Transmission, Pumping and Storage

Facilities for the Period from January 1, 2019 through December 31, 2020” for the purposes set forth in the Agreement, attached hereto as **Exhibit A**. The MGNWC Board authorize and direct the Chair, or his/her designee, and the Clerk to execute the final version of the Agreement, which may contain certain modifications that are approved by the Superintendent, the Village Manager of Niles and the Village Administrator of Morton Grove, and to execute and deliver all other instruments and documents and pay all costs that are necessary to fulfill MGNWC’S obligations under the Agreement.

**SECTION 3:** This Resolution shall be in full force and effect from and after its adoption and approval as provided by law.

**ADOPTED** this 10th day of December 2018, pursuant to a roll call vote as follows:

**AYES:** John Pietron, Mark Fowler and Steven Vinezeano

**NAYS:** None

**ABSENT:** None

**PASSED** by the Board of Commissioners of the Morton Grove-Niles Water Commission, Cook County, Illinois on a roll call vote at a Regular Meeting thereof held on the 10th day of December 2018, and approved by the Chair, and attested by the Clerk on the same day.

\_\_\_\_\_  
Steven Vinezeano, Chair

**ATTEST:**

\_\_\_\_\_  
John Pietron, Clerk

**Exhibit A**

**PROFESSIONAL SERVICES AGREEMENT BETWEEN THE VILLAGE OF NILES AND THE  
MORTON GROVE-NILES WATER COMMISSION FOR OPERATION OF THE WATER TRANSMISSION,  
PUMPING AND STORAGE FACILITIES FOR THE PERIOD FROM JANUARY 1, 2019 THROUGH  
DECEMBER 31, 2020**

(attached)

**PROFESSIONAL SERVICES AGREEMENT BETWEEN THE VILLAGE OF NILES AND THE  
MORTON GROVE-NILES WATER COMMISSION FOR OPERATION OF  
THE WATER TRANSMISSION, PUMPING AND STORAGE FACILITIES  
FOR THE PERIOD FROM JANUARY 1, 2019 THROUGH DECEMBER 31, 2020**

This **PROFESSIONAL SERVICES AGREEMENT** (Agreement) is made this \_\_\_ day of December 2018, by and between the village of Niles an Illinois home rule municipal corporation located in Cook County Illinois (Niles) and the Morton Grove-Niles Water Commission (MGNWC), a water commission created by an intergovernmental agreement that was approved pursuant to Division 135 of Article 11 of the Illinois Municipal Code (65 ILCS 5/11-135-1, *et seq.*) Article VII, Section 10 of the 1970 Constitution of the State of Illinois and the Illinois Intergovernmental Cooperation Act (§ 5 ILCS 220/1, *et seq.*) (Commission or the MGNWC). Niles and the Commission are at times referred to herein individually as a Party and collectively as the Parties.

**RECITALS**

**WHEREAS**, on or about October 31, 2018, the Morton Grove-Niles Water Commission (MGNWC), issued a Request for Proposals, entitled "Request for Proposals Two Year Operating Contract for Morton Grove-Niles Water Commission *Water Transmission, Pumping And Storage Facilities January 2019-December 31, 2020*" attached hereto as Attachment A. (the MGNWC RFP), to operate and maintain the MGNWC wholesale water delivery system to its two customers, the Village of Morton Grove and the Village of Niles (the Services); and

**WHEREAS**, Niles submitted a response to the MGNWC RFP (the Niles Response), dated December 6, 2018, to perform the Services, and MGNWC and Niles further negotiated and refined the services to be performed. The Niles Response and additional negotiated and agreed terms (Agreed Scope of Services) are as set forth in Attachment B; and

**WHEREAS**, MGNWC agrees to retain Niles to perform the Services in accordance with the terms of this Agreement; and

**WHEREAS**, Niles agrees to perform the Services in accordance with the terms of this Agreement.

**NOW, THEREFORE**, in consideration of the recitals, mutual covenants and representations set forth in this Agreement, the Parties mutually agree that Niles shall perform the Services described below, and the MGNWC shall pay Niles for said performance, under the following terms and conditions:

**SECTION 1. INCORPORATION AND DEFINITIONS.**

Each of the above Whereas paragraphs are incorporated into this Section 1 as material provisions of this Agreement.

Whenever used in this Agreement, the following terms shall have the meanings indicated and the singular shall be read to include the plural and vice versa, and pronouns stated herein shall be construed to include all genders.

- A. The term "Agreement" includes the Recitals set forth above, which are incorporated into Section 1 of this Agreement, and shall mean this Agreement and its Attachments as entered into by Niles and MGNWC setting forth the terms and conditions governing the Services.

- B. The term “MGNWC Affiliates” means MGNWC’s former, current and future appointed officials, officers, commissioners, employees, engineers, attorneys, subcontractor, authorized representatives and volunteers.
- C. The term "Services" or “Work” means the services that are listed in Attachment A and Attachment B.
- D. The term “Scope of Work” has the same meaning as the term “Scope of Services” as used in the MGNWC RFP and this Agreement.
- E. The terms "sub-contractor” mean the person, independent contractor, partnership, corporation, joint venture or other business entity (including its employees, agents or others performing or supplying on its behalf, or at its direction) having a contract with Niles for the performance of any portion of the Services.

**SECTION 2. TERM OF AGREEMENT.**

This Agreement shall be effective on the date that the last signatory executes this Agreement, which date shall be inserted on page 1 of this Agreement, and shall terminate upon the completion and acceptance of the Services by the MGNWC and final payment to Niles by the MGNWC, or December 31, 2020 (the “Completion Date”), as provided below (the “Term”), unless this Agreement is terminated earlier by any Party, or by mutual agreement, or the Parties agree, in writing, to extend the Term.

**SECTION 3. SCOPE OF SERVICES**

- A. **Services; Non-Exclusive Relationship.** Niles agrees to perform the Services in order to complete the Scope of Work in accordance with the terms and conditions of this Agreement. Niles shall provide the Services on behalf of and at the direction of the MGNWC and understands that this Agreement is not an exclusive relationship in that the MGNWC, in its collective discretion, is free to enter other agreements with other vendors or Niles to perform work on the Project. The MGNWC, in its collective discretion, is also free to assign all or any portion of the Services to others upon ten (10) calendar days written notice to Niles’ Primary Representative, and the Compensation of Niles shall be reduced on an equitable basis. Unless otherwise indicated by the MGNWC, the primary contact point for the MGNWC (“MGNWC Representative”) to provide direction to Niles under this Agreement shall be:

Bill Balling  
 WRB, LLC  
 Cellular Phone: (847) 863-7101  
 Office Phone: (847) 398-8399  
 Email: [bill@wrblc.com](mailto:bill@wrblc.com)

- B. **Mutual Cooperation.** The MGNWC agrees to cooperate with Niles in the performance of the Services, including meeting with Niles on an as-needed basis and providing Niles with such “Confidential Information” (as defined in Section 10 below) and non-confidential information that the MGNWC may have that may be relevant and helpful to Niles’ performance of the Services. These documents shall be furnished to Niles without cost or expense to Niles. Niles agrees to cooperate with the MGNWC in the performance and completion of the Services, including meeting with the MGNWC on an as-needed basis, and with any other contractors or sub-contractors engaged by the MGNWC.

- C. **Niles’ Personnel and Representative.**

1. **Primary Representative.** Niles shall designate Thomas Powers as, who shall be available during normal business hours (Monday through Friday from 7:00 a.m. CST to 3:30 p.m. CST)

and who shall serve as Niles' primary authorized representative throughout the Term of this Agreement. This "Primary Representative" shall be readily available to respond to communications from the MGNWC and shall be primarily responsible for performing the Services as requested by the MGNWC. The Primary Representative shall receive requests from the MGNWC Representative to perform the Services and shall have full authority to execute the directions of the MGNWC, without delay, and promptly supply any necessary labor, equipment or incidentals to do so. Niles also shall provide the MGNWC with the name and phone number of Niles' Primary Representative who, in the case of an off-hour's emergency, shall be readily accessible and available for a quick response. Niles shall immediately notify the MGNWC in writing of any change in the identity and telephone number of Niles' Primary Representative. The Primary Representative shall not be changed by Niles without the MGNWC's prior written approval. If the Primary Representative fails to perform the Services to the satisfaction of the MGNWC, then Niles shall immediately replace the Primary Representative with a new person with comparable experience and knowledge.

2. **Availability of Personnel.** Niles shall provide adequate personnel necessary to complete the Services. Niles shall notify the MGNWC as soon as practicable prior to terminating the employment of, reassigning or receiving notice of the resignation of any personnel assigned to regularly perform the Services. Niles shall have no claim for damages and shall not bill the MGNWC for additional time and materials charges as the result of any portion of the Services which must be duplicated or redone due to such termination or for any delay or extension of time in performing the Services as a result of any such termination, reassignment or resignation.
3. **Approval and Use of Subcontractors.** Niles shall perform the Services with its own personnel and under the management, supervision and control of its own organization, unless otherwise approved in advance and in writing by the MGNWC. All subcontractors procured in accordance with the Village of Niles Purchasing Policy and Procedures Manual shall not be subject to MGNWC approval. The MGNWC's approval of any subcontractor or sub-contractor shall not relieve Niles of full responsibility and liability for the provision, performance and completion of the Services as required by this Agreement, including the agreed upon compensation for the Services. All Services performed under any sub-contract shall be subject to each of the terms of this Agreement, in the same manner as if performed by employees of Niles. Every subcontract that Niles enters into in regard to the performance of the Services under this Agreement shall include an express provision binding the subcontractor or sub-contractor to all of the terms of this Agreement.
4. **Removal of Personnel and Subcontractors.** If any of Niles' personnel or any subcontractor or sub-contractor fails to perform the Services in a manner satisfactory to the MGNWC and consistent with commonly accepted industry standards and professional practices, Niles shall immediately, upon notice from the MGNWC, remove and replace such personnel or subcontractor or sub-contractor. Niles shall have no claim for damages, for compensation in excess of the amount contained in this Agreement, or for a delay or extension of time of performance as a result of any such removal or replacement.
5. **Financial Ability to Perform.** Niles states that it is financially solvent, has the financial resources necessary, has sufficient experience and competence, and has the necessary capital, facilities, organization and staff necessary to provide, perform and complete the Services set forth in this Agreement.

- D. **Notice to Proceed with Services.** Niles shall commence the Services immediately upon execution of this Agreement. ("**Commencement Date**"). Niles shall diligently and continuously work on the Services until the completion of the Services or upon the termination of this Agreement, but in no event later than the Completion Date. The Parties may mutually agree in writing to modify the Completion Date.

- E. **Suspension of Services.** The MGNWC, at any time and for any reason, may suspend work on any or all Services by issuing a written work suspension notice to Niles. Niles must stop the performance of all Services within the scope of the suspension notice until the MGNWC directs Niles in writing to resume performance of the Services
- F. **Reporting.** Niles shall notify the MGNWC Representative as to suggested modifications, potential conflicts or problems within a reasonable time after such issues are identified. Unless agreed otherwise, Niles shall also regularly provide both written and verbal reports to the MGNWC Representative regarding the progress of the Services.

#### **SECTION 4. INTENTIONALLY DELETED**

#### **SECTION 5. INDEPENDENT CONTRACTOR STATUS.**

- A. **Relationship of the Parties.** Niles' role, and the role of its employees and its subcontractors, with respect to the performance of the Services, is solely that of an independent contractor. The following terms and conditions are operative and applicable to the Parties under this Agreement:
  - 1. **Non-Exclusive Contractual Arrangement.** Niles and its employees and its subcontractors are retained under a non-exclusive contractual arrangement to perform the Services only for the limited purposes set forth in this Agreement. No provision of this Agreement or subsequent conduct between the Parties shall be construed to create a relationship between the Parties as that of "employer-employee," "principal and agent," "partners" or "participants in a joint venture."
  - 2. **No Authority to Bind.** Niles and its employees and its subcontractors shall have no authority or right to enter into any contract or incur any debt or liability of any nature in the name of, or on behalf of the MGNWC.
  - 3. **Not Employees of MGNWC.** Niles and its employees and its subcontractors serve only as independent contractors of the MGNWC for all purposes, including, but not limited to, the application of the Fair Labor Standards Act minimum wage and overtime payments, including any similar Illinois wage laws, the Federal Insurance Contribution Act, the Social Security Act, the Federal Unemployment Tax Act, the Illinois Unemployment Insurance Act (820 ILCS 405/1 *et seq.*), and the Illinois Worker's Compensation and Occupational Diseases Act (820 ILCS 305/1, *et seq.*). Therefore, neither federal nor state nor local income tax nor payroll tax of any kind, nor any other withholding, shall be withheld or paid by the MGNWC on behalf of Niles, and its employees and its subcontractors. Nothing in this Agreement shall be construed as MGNWC, requiring or acquiring or incurring any liability for Worker's Compensation, FICA, withholding tax, unemployment compensation or any other payment which would be required to be paid by the MGNWC if the MGNWC and Niles, and its employees and its subcontractors, were engaged in an "employer-employee" relationship.
  - 4. **Payment of Taxes.** Niles and its employees and its subcontractors are responsible, pursuant to applicable law, for payment of any income and employment taxes or any other taxes of any kind arising from their receipt of compensation under this Agreement.
  - 5. **Autonomy.** Niles and its employees and its subcontractors are free to use their time, energy and skill when they are not performing the Services for the MGNWC on other endeavors, as they deem appropriate and advisable.



6. **Discretion Over Performance and Delivery of Services.** The MGNWC shall have no control over the timing, means and manner in which the Services are to be performed by Niles, and its employees or its subcontractors a. Niles is responsible for directing and controlling the performance and completion of the Services in a timely manner that meets MGNWC's requested schedule and the Completion Date.
7. **Certification, Training and Licensing.** Niles represents that its employees, and subcontractors: (a) are fully qualified, licensed, registered, trained and capable within their respective disciplines in accordance with applicable laws, regulations and industry standards, and (b) currently hold, and shall maintain throughout the Term of this Agreement, all required licenses, registrations, permits and certificates applicable to their performance of the Services. To the extent that equipment is being utilized in the providing of the Services, Niles and its employees and its subcontractors shall use their own equipment and tools of the trade and be qualified and authorized to operate same.
8. **Applicable Regulations.** Niles, and its employees and its subcontractors, shall be familiar with and comply with the applicable Federal, State, County and local codes, ordinances and regulations, and shall use, apply and enforce the same when performing the Services.

## **SECTION 6. COMPENSATION AND METHOD OF PAYMENT.**

### **A. Fee Amount.**

1. **Fee Schedule.** The MGNWC agrees to pay for any requested, fully completed Services rendered by Niles in the annual amount not to exceed Two Hundred Thirty-Five Thousand Eight Hundred Twenty-Five Dollars (\$235,825.00) invoiced in twelve monthly installments beginning February 1, 2019 in the amount of Nineteen Thousand, Six Hundred and Fifty-Two Dollars (\$19,652.00).
2. **Out-of-Pocket Costs.** Except as expressly provided otherwise in this Agreement, Niles, at its sole cost, shall pay all out of pocket and other expenses related to the performance of this Agreement including, but not limited to, travel, printing, reproduction, mailing, insurance premiums, licensing fees, fuel, overhead, administrative costs, delivery charges, and all costs associated with the acquisition and maintenance of vehicles and equipment.
3. **Scope of Fees.** The amounts set forth in the Compensation and Fee Schedule include all applicable Federal, State, County and Village taxes of every kind and nature applicable to the Services, as well as all taxes, contributions and premiums for unemployment insurance, old age or retirement benefits, pensions, annuities or similar benefits, and all costs, royalties and fees arising from the use on, or the incorporation into, the Services, of patented or copyrighted equipment, materials, supplies, tools, appliances, devices, processes or inventions. All claims or rights to claim additional compensation by reason of the payment by Niles of any such tax, contribution, premium, cost, royalty or fee are the sole responsibility of Niles, and any claim or demand from any person that the MGNWC pay such taxes, contributions, premiums, costs, royalties or fees are waived and released and shall be indemnified by Niles.

### **B. Invoices and Payment.**

1. **Frequency and Content.** Niles shall submit invoices to the MGNWC monthly to MGNWC Representative.
2. **Invoice Payment.** The MGNWC agrees to make payments to Niles within thirty (30) calendar days of receipt of the invoice, unless there is a dispute in regard to the invoice, and to pay interest on unpaid balances under the provisions of the Local Government Prompt Payment Act (50 ILCS 505/1, *et seq.*), unless the Parties mutually agree to waive the interest payment. If there is a dispute in regard to any invoice, the MGNWC shall make payment for that portion of the invoice not in dispute and the Parties shall cooperate to resolve the dispute as soon as possible in accordance with Subsection 6.G. below, but any such dispute shall not cause Niles to stop performing Services or delay in its completion of the Scope of Work. The MGNWC's failure to object to any monthly invoices and payment by the MGNWC for Services related to any monthly invoice or other periodic progress payment shall not be an acceptance by the MGNWC of such Services that are incomplete and in progress.
3. **Final Payment.** The Services will be considered complete on the date of final written acceptance by the MGNWC after completion of all of the Services for the entire Scope of Work or acceptance of the relevant phase of the Services for a portion of the Scope of Work. After delivery of the final report and completion of the Services, Niles shall request in writing a confirmation of acceptance of the Services by the MGNWC and shall also deliver an invoice for final acceptance and payment. The MGNWC will make final payment to Niles within thirty (30) calendar days after final written acceptance of the Services to be delivered under this Agreement, after deducting therefrom charges, if any, as provided in this Agreement ("Final Payment"). The acceptance by Niles of Final Payment will operate as a full and complete release of the MGNWC by Niles of and from any and all lawsuits, claims or demands for further payment of any kind for the Services encompassed by the Final Payment.
4. **Deductions.** Notwithstanding any other provision of this Agreement, the MGNWC may deduct and withhold from any payment or from Final Payment such amounts as may reasonably appear necessary to compensate the MGNWC for any loss due to: (1) Services that are defective, nonconforming or incomplete, (2) liens or claims of lien, (3) claims against Niles or the MGNWC made by any of Niles' subcontractors or suppliers or by other persons about the Services, (4) delay by Niles in the completion of the Services, (5) the cost to the MGNWC, including without limitation reasonable attorneys' fees, of correcting any of the matters stated in this Section or exercising any one or more of the MGNWC's remedies set forth in Section 6.G. (Informal Dispute Resolution) or Section 13.O. (Cumulative Rights and Remedies) below. The MGNWC will notify Niles in writing, in accordance with Section 13.D. below, of the MGNWC's determination to deduct and withhold funds, which notice will state with specificity the amount of, and reason or reasons for, such deduction and withholding.
5. **Use of Deducted Funds.** The MGNWC will be entitled to retain any and all amounts withheld, pursuant to Section 6.B.(4) (Deductions) above, until Niles either has performed the obligations in question or has furnished security for that performance satisfactory to the MGNWC. The MGNWC will be entitled to apply any money withheld or any other money due to Niles to reimburse itself for any and all costs, expenses, losses, damages, liabilities, suits, judgments, awards and reasonable attorneys' fees (collectively "Costs") incurred, suffered or sustained by the MGNWC and chargeable to Niles under this Agreement.

- C. **Records; Audit.** Niles shall maintain records showing the Services performed and a record of additional services performed and shall permit the MGNWC to inspect and audit all data and records of Niles and its subcontractors for Services performed pursuant to this Agreement. The records shall include all billable charges and costs, position description/classification and time entries by personnel (in minutes/hours increments) incurred in performing the Services in accordance with generally accepted accounting practices, consistently applied, and in such manner as to permit verification of all entries. Upon written request by the MGNWC, the records shall promptly be made available to the MGNWC or its auditors during normal business hours during the Term of this Agreement, and for three (3) consecutive calendar years after the termination of this Agreement. Copies of such records shall be promptly furnished by Niles to the MGNWC at a reasonable per page photocopy expense or in an electronic or digital format at no charge.
- D. **Claim In Addition To Agreement Amount.**
1. Niles shall provide written notice to the MGNWC of any claim for additional Compensation as a result of action taken by the MGNWC, within fifteen (15) calendar days after the occurrence of such action.
  2. Niles acknowledges and agrees that written notice pursuant to this Section shall not be deemed or interpreted as entitling Niles to any additional compensation; and that any changes in the Agreement Amount shall be valid only upon written amendment signed by all Parties.
  3. Regardless of the decision of the MGNWC relative to a claim submitted by Niles, Niles shall proceed with all of the Services required to complete the Services under this Agreement, as determined by the MGNWC, without interruption.
- E. **Additional Services.** Niles acknowledges and agrees that in no event shall the MGNWC be liable for any additional Compensation or fees or costs incurred by Niles or any subcontractor in connection with any Services provided by Niles or any subcontractor that are outside of, or exceed, the scope of this Agreement ("Additional Services"), except upon the prior written consent of the MGNWC Representative and the written approval of the Village Administrator of Morton Grove.
- F. **Services Change Orders; Delays.**
1. **Services Change Orders.** The MGNWC or Niles may request a Services Change Order based on new or different information or changes in conditions or circumstances that were not known or not anticipated at the time of approval of this Agreement that results in change in the scope of any Services to be performed under this Agreement. A Services Change Order may include additions to and deletions from the Services and will include any equitable increases or decreases to the Compensation as mutually agreed to by the Parties.
  2. **Revision Notices.** Within five (5) calendar days of receipt of a MGNWC-approved Services Change Order, Niles must notify the MGNWC Representative and the MGNWC Board in writing if Niles desires a revision to the Services Change Order (a "Revision Notice"). The Revision Notice must clearly state Niles' requested revisions and the reasons for the revisions. If the MGNWC Board agrees to any revision, then the MGNWC Representative will issue a revised Services Change Order in a form acceptable to the Parties. If Niles does not submit a Revision Notice within the 5calendar day period, then Niles will be deemed to have accepted the Services Change Order and the Services Change Order will be final.

3. **Disagreements over Services Change Order Terms.**  
If the MGNWC and Niles cannot agree on the proposed revisions to the Compensation or Project Schedule terms of a Services Change Order, then the Parties will apply the dispute resolution provisions of this Agreement in order to reach agreement. In that event, Niles must proceed diligently with the revised Services as directed by the MGNWC Board pending resolution of the disagreement. Niles will be compensated equitably for the work Niles undertakes during the informal dispute resolution process.
4. **No Change in Absence of a Services Change Order.** No claim for an adjustment in Compensation or Project Schedule will be made or allowed unless it is embodied in a Services Change Order signed by the MGNWC Representative and Niles. If Niles believes it is entitled to an adjustment in the Compensation or Project Schedule terms that has not been included, or fully included, in a Services Change Order, then Niles may submit to the MGNWC a written request for the issuance of, or revision of, a Services Change Order including the desired adjustment. Niles' request must be submitted before Niles proceeds with any Services for which an adjustment is desired.

G. **Informal Dispute Resolution.**

1. **Dispute Resolution.** If a dispute arises between any of the Parties concerning this Agreement, the Parties will first attempt to resolve the dispute by negotiation. Each Party will designate persons to negotiate on their behalf. The Party contending that a dispute exists must specifically identify in writing all issues and present it to the other Parties. The Parties will meet and negotiate in an attempt to resolve the matter. If the dispute is resolved as a result of such negotiation, there must be a written determination of such resolution, and ratified by the corporate authorities of each Party, which will be binding upon the Parties. If necessary, the Parties will execute an addendum to this Agreement. Each Party will bear its own costs, including attorneys' fees, incurred in all proceedings in this Section. If the Parties do not resolve the dispute through negotiation, any Party to this Agreement may pursue other remedies under Section 13.O. (Cumulative Rights and Remedies) below to enforce the provisions of this Agreement.
2. **Performance of Services.** During the dispute resolution process, Niles must proceed diligently with the performance of Services, and MGNWC must provide payments as required in the Agreement.

**SECTION 7. PERFORMANCE AND STANDARD OF SERVICES.**

A. **Niles Responsibilities.** Niles, at its sole cost, agrees as follows:

1. **Standard of Performance.** Niles shall perform the Services in a manner consistent with the degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances in the Chicago Metropolitan Region (the "Standard of Performance"). All Services must be free from defects and flaws, must conform to the requirements of this Agreement, and must be performed in accordance with the Standard of Performance. Niles is fully and solely responsible for the quality, technical accuracy, completeness and coordination of all Services. Such performance shall be to the satisfaction of the MGNWC. All Services shall be performed in a reasonably prompt manner.

2. **Corrections of Defects, Errors and Omissions.** If any errors, omissions or acts, intentional or negligent, are made by Niles and/or its employees, its and it in providing the Services, the correction of which requires additional Services, Niles shall be required to perform such additional Services as may be necessary to remedy same without undue delay and without any charge or cost to the MGNWC. Niles must provide, for no additional Compensation and at no separate expense to the MGNWC, all work required to correct any defects or deficiencies in the performance of Services, regardless of whether the defect or deficiency relates to the work of Niles or of Niles' subcontractors or suppliers.
3. **Risk of Loss.** Niles bears the risk of loss in providing all Services. Niles is responsible for any and all damages to property or persons arising from any Niles negligent or intentional error, omission or act and for any losses or costs to repair or remedy any work undertaken by the MGNWC based on the Services as a result of any such error, omission or act. Notwithstanding any other provision of this Agreement, Niles' obligations under this Section 7 exist without regard to, and may not be construed to be waived by, the availability or unavailability of any insurance, either of the MGNWC or Niles, to indemnify, hold harmless or reimburse Niles for damages, losses or costs. This paragraph shall not be construed to impose liability or responsibility upon Niles for damages or loss incurred not related to Niles' negligent or intentional errors, omissions or acts including losses due to defects relating to the design of the MGNWC wholesale water delivery system.
4. **Communications with Regulators.** Niles must comply with all statutes, ordinances, codes and regulations applicable to the Services. Except to the extent expressly set forth in this Agreement, Niles may not communicate directly with applicable governmental regulatory agencies with regard to Services without prior express authorization from the MGNWC Board or the MGNWC Representative. Niles must either direct inquiries from governmental regulatory agencies to the MGNWC Board for appropriate response or respond on behalf of the MGNWC as directed by the MGNWC Representative. To the extent that Niles communicates directly with applicable governmental regulatory agencies with regard to Services, it shall promptly (same day or within twenty-four (24) hours) inform the MGNWC Representative of such communications, provide copies to the MGNWC Representative of any such written communications (e.g., letters, emails, etc.) and shall copy the MGNWC Representative or the MGNWC Working Group on its own communications to the governmental regulatory agencies, as requested by the MGNWC. In those cases that the MGNWC will be either responding directly to the regulatory agencies or providing information to Niles to allow Niles to respond, the response must be made within five (5) calendar days so as not to delay the Project.
5. **Niles Payments; Waivers of Liens.** Niles must pay promptly for all services, labor, materials and equipment used or employed by Niles in the performance of any Services and must not cause any materials, equipment, structures, buildings, premises and property of the MGNWC to be impressed with any mechanic's lien or other liens. Niles, if requested, must provide the MGNWC with reasonable evidence that all services, labor, materials and equipment have been paid in full and with waivers of lien as appropriate.

6. **Permits and Licenses.** Niles, and its subcontractors, will assist the MGNWC in obtaining all permits and licenses, registrations, qualifications and other governmental authorizations required by all applicable laws and regulations that relate to the performance of the Services. The MGNWC retains responsibility to pay for all permits and licenses, registrations, qualifications and other governmental authorizations. If Niles pays for any permits and licenses, registrations, qualifications and other governmental authorizations on behalf of the MGNWC, the cost will be paid as an Additional Service (Subsection 6.E.) in addition to this Agreement's not to exceed fee. If engineering or architectural services are required for obtaining a required permit, that shall be considered an additional service.
7. **Safety; Hazardous Materials.**
  - i. **Protection of Health, Environment.** Niles' personnel must be experienced and properly trained to perform the Services and must take adequate precautions to protect human health and the environment in the performance of Services.
  - ii. **Notice of Hazardous Conditions.** If Niles observes a potentially hazardous condition relating to the Services, Niles must immediately bring that condition to the attention of the MGNWC Board, the MGNWC Representative and the MGNWC Working Group.
  - iii. **Hazardous Materials.** Niles acknowledges that there may be hazardous substances, wastes or materials as defined by applicable Law ("Hazardous Materials") within the proposed Project area or otherwise associated with Services, and Niles under those circumstances must take appropriate precautions to protect its employees, subcontractors and suppliers, and shall advise in writing the MGNWC Board, the MGNWC Representative of the presence or suspected presence and location of such Hazardous Materials.

B. **MGNWC Responsibilities.** The MGNWC, at its collective cost, agrees as follows:

1. To designate in writing a person with authority to act on behalf of the MGNWC with respect to the Services. The MGNWC Representative will have the authority to act on behalf of the MGNWC, except on matters that require approval of the respective corporate authorities of the MGNWC.
2. To provide to Niles all criteria and information about the requirements for the Services, including, as relevant, the MGNWC's objectives and constraints, schedule, space, capacity and performance requirements, and budgetary limitations.
3. To provide to Niles existing studies, reports and other available data relevant to the Services.
4. To arrange for access to, and make provisions for Niles (and its employees, and subcontractors) to enter on, public and private property as reasonably required for the Services.
5. To provide, as relevant, existing surveys and GIS data describing physical characteristics, legal limitations and utility locations in Evanston, Niles, Morton Grove and Skokie for the Services.

6. To provide structural, mechanical, chemical, air and water tests, tests for hazardous materials, and other laboratory and environmental tests, inspections and reports required by law to be provided by the MGNWC in connection with the Services, except to the extent such tests, inspections or reports are part of the Services.
7. To review reports, documents, data and all other information presented by Niles as appropriate in a timely manner and to provide responses within five (5) calendar days of receipt.
8. To provide approvals from all governmental authorities having jurisdiction over the Services when requested by Niles, except to the extent such approvals are part of the Services.
9. To attend meetings related to the Services.
10. To give prompt written notice to Niles whenever the MGNWC observes or otherwise becomes aware of any development that affects the scope of Services, except that the inability or failure of the MGNWC to give any such a notice will not relieve Niles of any of its responsibilities under this Agreement.

## **SECTION 8. INDEMNIFICATION**

### **A. Indemnification by Niles.**

1. **MGNWC.** To the fullest extent permitted by law, Niles shall defend, hold harmless and indemnify the MGNWC and its member agencies from and against any and all injury, death, loss, property damage, judgments, liens, claims, suits, liabilities, actions, causes of action, demands, expenses, costs or other liabilities of any character (including reasonable attorney fees and litigation costs) to the extent arising in whole or in part, relating to or resulting from the performance under this Agreement by Niles and/or its employees and its subcontractors, or others performing or furnishing any Services directly or indirectly on Niles' behalf, including but not limited to: (a) failure to comply with, or violation of, any federal, state or local law, statute, regulation, rule, ordinance, order or governmental directive; (b) negligent acts, omissions or willful misconduct; and (c) failure to comply with the terms, conditions, representations or warranties contained in this Agreement. In connection with any such liabilities, the MGNWC shall have the right to defense counsel of their choice and Niles shall be solely liable for all reasonable costs, fees and expenses of such defense. Any insurance policies required to be maintained pursuant to this Agreement shall in no way limit the extent of Niles' responsibility to indemnify as herein provided. The terms of this indemnity shall survive the suspension, expiration or termination of this Agreement.
2. **Kotecki Waiver.** Niles (and all subcontractors into whose subcontract this clause is incorporated) agrees to assume the entire liability for all personal injury claims suffered by its own employees and waives any limitation of liability defense based upon the Worker's Compensation Act and cases decided thereunder. Niles agrees to indemnify and defend MGNWC, the Village of Morton Grove from and against all such loss, expense, damage or injury, including reasonable attorney fees, which MGNWC, the Village of Morton Grove may sustain as a result of personal injury claims by Niles' employees and by the subcontractors and their respective employees, except to the extent those claims arise as a result of MGNWC's and the Village of Morton Grove's own negligence.

3. To the fullest extent permitted by law, MGNWC shall defend, hold harmless and indemnify Niles from and against any and all injury, death, loss, property damage, judgments, liens, claims, suits, liabilities, actions, causes of action, demands, expenses, costs or other liabilities of any character (including reasonable attorney fees and litigation costs) to the extent arising in whole or in part, relating to or resulting from the MGNWC's negligent act or omissions pursuant to this Agreement or the MGNWC's negligent acts or omissions relating to the design of the wholesale water delivery system, Niles shall have the right to defense counsel of their choice and MGNWC shall be solely liable for all reasonable costs, fees and expenses of such defense. Any insurance policies required to be maintained pursuant to this Agreement shall in no way limit the extent of MGNWC responsibility to indemnify as herein provided. The terms of this indemnity shall survive the suspension, expiration or termination of this Agreement.

B. **No Personal Liability.** No elected or appointed official or employee of the MGNWC shall be personally liable, in law or in contract, to Niles as the result of the execution of this Agreement. No employee of Niles, subcontractors shall be personally liable, in law or in contract, to the MGNWC as the result of the execution of this Agreement.

## **SECTION 9. INSURANCE.**

During the Term of this Agreement, or any extended term, Niles shall procure and maintain the adequate insurance coverage as dictated by industry standard and approved in writing by the MGNWC Representative.

## **SECTION 10. CONFIDENTIAL INFORMATION; OWNERSHIP OF DOCUMENTS.**

A. **No Disclosure of Confidential Information.** Niles acknowledges that it shall, in performing the Services for the MGNWC under this Agreement, have access, or be directly or indirectly exposed, to Confidential Information, as defined below. Niles shall hold confidential all Confidential Information of the MGNWC and shall not disclose or use such Confidential Information without the express prior written consent of the MGNWC. Niles shall use reasonable measures at least as strict as those Niles uses to protect its own confidential information. Such measures shall include, without limitation, requiring its employees and subcontractors to execute a non-disclosure agreement (in a format approved by the MGNWC) before obtaining access to Confidential Information.

B. **Confidential Information.** All confidential information and data disclosed by the MGNWC and developed or obtained from the MGNWC under this Agreement must be treated by Niles as proprietary and confidential information ("Confidential Information"). Based on whose Confidential Information is at issue, Niles must not disclose Confidential Information without the MGNWC's prior written consent. No person may use Confidential Information for any purpose other than for the proper performance of the Services. The obligations under this Section do not apply to Confidential Information that is (i) in the public domain without breach of this Agreement, (ii) developed by Niles independently from this Agreement, (iii) received by Niles on a non-confidential basis from others who had a right to disclose the information, or (iv) required by law to be disclosed, but only after prior written notice has been received by the MGNWC has had a reasonable opportunity to protect disclosure of the Confidential Information. Niles must ensure that the foregoing obligations of confidentiality and use extend to and bind Niles' employees, and subcontractors.

C. **Ownership of Data and Documents.** The Parties expressly agree that all data, documents, records, studies or other information (collectively "Data") provided by the MGNWC to Niles or generated, created, found or otherwise completed by Niles, and its employees, and subcontractors in the performance of Niles' Services under the terms of this Agreement shall at all times remain the proprietary information of and under the ownership of the MGNWC and



shall be provided to the MGNWC by Niles upon request of the MGNWC, or at the termination of this Agreement. All Data, regardless of its format, developed or obtained under this Agreement, other than Niles' confidential information, will be and remain the sole property of the MGNWC, unless the MGNWC agrees that certain portions of the Data is the sole property of Niles. Niles must promptly deliver all Data to the MGNWC at the MGNWC's request. Niles is responsible for the care and protection of the Data until that delivery. Niles may retain one or more copies of the Data. Notwithstanding the foregoing, upon request of the MGNWC at any time, or at the termination of this Agreement, Niles shall promptly return to the MGNWC all documents provided to Niles by the MGNWC during the Term of this Agreement.

- D. **Intellectual Property.** Niles may not infringe on any intellectual property (including but not limited to patents, trademarks, or copyrights) (collectively "Intellectual Property") in the performance of Services. If ever Niles is alleged to have infringed on any Intellectual Property, then, in addition to Niles' obligations to indemnify the MGNWC under this Agreement, Niles also, at the sole discretion of the MGNWC and at Niles' sole expense (a) procure for the MGNWC the right to continue using the infringing subject matter, or (b) replace or modify the infringing subject matter so that it becomes non-infringing but still complies with the requirements of this Agreement, or (c) reimburse the MGNWC for all payments made to Niles relating to or impacted by the infringing material and all costs incurred by the MGNWC resulting from such infringement.
- D. **Copyrights and Patents.** Niles agrees not to assert, or to allow persons performing under Niles' control to assert, any rights to Data or establish any claim under design, patent, or copyright laws. It is expressly agreed that all copyrightable or patentable Data produced as part of Services has been specifically commissioned by the MGNWC and is considered "work for hire," and that all copyrightable and other proprietary rights in that Data will vest solely in the MGNWC. Further, Niles agrees that all rights under copyright and patent laws under this Agreement belong to the MGNWC. Niles assigns any and all rights, title, and interests under copyright, trademark, and patent law to the MGNWC and agrees to assist the MGNWC in perfecting the same at the MGNWC's expense.
- E. **Advertisements; Media / News Releases; Use of Letterhead or Logo.** Niles, and its employees and subcontractors shall not issue any media news releases, advertisements, promotional materials or other public statements regarding the Services without the prior written consent of the MGNWC.

## **SECTION 11. COMPLIANCE WITH LAWS.**

- A. **Compliance with Laws.** Niles, and its employees, and subcontractors, shall comply with any and all applicable laws, regulations and rules promulgated by any Federal, State, County, local, or other governmental authority or regulatory body pertaining to all aspects of the Services, now in effect, or which may become in effect during the performance of the Services. The scope of the laws, regulations and rules referred to in this paragraph includes, but is in no way limited to, the Occupational Safety and Health Act standards, the Illinois Human Rights Act, the Illinois Equal Pay Act of 2003, along with the standards and regulations promulgated pursuant thereto (including but not limited to those safety requirements involving work on elevated platforms), all forms of traffic regulations, public utility, Interstate and Intrastate Commerce Commission regulations, Workers' Compensation Laws, the Substance Abuse Prevention on Public Works Projects Act, Prevailing Wage Laws, the Smoke Free Illinois Act, the USA Security Act, the Federal Social Security Act (and any of its titles), and any other law, rule or regulation of the Illinois Department of Labor, Illinois

Department of Transportation, Illinois Environmental Protection Act, Illinois Department of Human Rights, Human Rights Commission, EEOC, Metropolitan Water Reclamation District of Greater Chicago, the Village of Morton Grove and the Village of Niles. In the event that Niles, or its employees, and sub-contractors, in performing the Services are found to have not complied with any of the applicable laws and regulations as required by this Agreement, then Niles shall indemnify and hold the MGNWC harmless, and pay all amounts determined to be due from the MGNWC for such non-compliance by Niles, including, but not limited to fines, costs, attorneys' fees and penalties.

1. **Employment of Illinois Workers on Public Works Act Compliance.** To the extent required by law, Niles agrees to comply with the provisions of the Employment of Illinois Workers on Public Works Act (30 ILCS 570/0.01 *et seq.*).
2. **Preference To Veterans Act Compliance.** Niles will comply with the Preference to Veterans Act (330 ILCS 55).
3. **Patriot Act Compliance.** Niles represents and warrants to the Villages that neither it nor any of its principals, shareholders, members, partners, or affiliates, as applicable, is a person or entity named as a Specially Designated National and Blocked Person (as defined in Presidential Executive Order 13224) and that it is not acting, directly or indirectly, for or on behalf of a Specially Designated National and Blocked Person. Niles further represents and warrants to the Villages that Niles and its principals, shareholders, members, partners, or affiliates, as applicable, are not, directly or indirectly, engaged in, and are not facilitating, the transactions contemplated by this Agreement on behalf of any person or entity named as a Specially Designated National and Blocked Person. Niles hereby agrees to defend, indemnify and hold harmless the Villages, their respective corporate authorities, and all of each Village's elected or appointed officials, officers, employees, agents, representatives, engineers, and attorneys, from and against any and all claims, damages, losses, risks, liabilities, and expenses (including reasonable attorneys' fees and costs) arising from or related to any breach of the representations and warranties in this subsection.

B. The Parties to this Agreement shall further comply with all applicable federal, state and local laws, rules and regulations in carrying out the terms and conditions of this Agreement, including the following:

1. **Certification.** Each Party and its officers, corporate authorities, employees and agents certify that they are not barred from entering into this Agreement as a result of a violation of either 720 ILCS 5/33E-3 or 5/33E-4 (bid rigging or bid rotating) or 5/33E-6 (interference with contract submission and award by public official) or as a result of a violation of 820 ILCS 130/1 *et seq.* (the Illinois Prevailing Wage Act) or as a result of: (1) a delinquency in the payment of any tax administered by the Illinois Department of Revenue or any fee required by any unit of local government or the State, unless the Party is contesting, in accordance with the procedures established by the appropriate revenue act, its liability for the tax or the amount of the tax or the fee, as set forth in Section 11-42.1-1 *et seq.* of the Illinois Municipal Code, 65 ILCS 5/11-42.1-1 *et seq.* Each Party and its officers, corporate authorities, employees and agents further certify by signing this Agreement that the Party and its officers, corporate authorities, employees and agents have not been convicted of, or are not barred for attempting to rig bids, price-fixing or attempting to fix

prices as defined in the Sherman Anti-Trust Act and Clayton Act. 15 U.S.C. § 1 *et seq.*; and has not been convicted of or barred for bribery or attempting to bribe an officer or employee of a unit of state or local government or school district in the State of Illinois in that officer's or employee's official capacity. Nor has any of the Parties and their officers, corporate authorities, employees and agents made admission of guilt of such conduct which is a matter of record, nor has any official, officer, agent or employee of the Parties been so convicted nor made such an admission.

2. **Non-Discrimination.** Each Party and its officers, corporate authorities, employees and agents agree not to commit unlawful discrimination and agree to comply with all applicable provisions of the Illinois Human Rights Act, Title VII of the Civil Rights Act of 1964, as amended, the Americans with Disabilities Act, the Age Discrimination in Employment Act, Section 504 of the Federal Rehabilitation Act, and all applicable rules and regulations. Each Party maintains a written Sexual Harassment Policy in compliance with Section 2-105 of the Illinois Human Rights Act (775 ILCS 5/2-105(A)(4)). Each Party certifies that it is an "Equal Opportunity Employer" as defined by federal and State laws and regulations, and agrees to comply with the Illinois Department of Human Rights ("IDHR") Equal Opportunity Employment clause as required by the IDHR's Regulations (44 Ill. Adm. Code, Part 750, Appendix A). As required by Illinois law and IDHR Regulation, the Equal Opportunity Employment clause is incorporated by reference in its entirety as though fully set forth herein. Each Party certifies that it agrees to comply with the Prohibition of Segregated Facilities clause, which is incorporated by reference in its entirety as though fully set forth herein. See, *Illinois Human Rights Act (775 ILCS 5/2-105)*. See also, *Illinois Department of Human Rights Rules and Regulations, Title 44, Part 750. Administrative Code, Title 44: Government Contracts, Procurement and Property Management, Subtitle B: Supplemental Procurement Rules, Chapter X: Department of Human Rights, Part 750: Procedures Applicable to All Agencies, Section 750.160: Segregated Facilities (44 Ill. Adm. Code 750.160)*.
3. **Illinois Freedom of Information Act.** The definition of a public record in the Freedom of Information Act (5 ILCS 140/1 *et seq.*) ("FOIA") includes a "public record that is not in the possession of a public body but is in the possession of a party with whom the agency has contracted to perform a governmental function on behalf of the public body and that directly relates to the governmental function and is not otherwise exempt under this Act." (5 ILCS 140/7(2)). Consequently, the Parties must maintain and make available to the other Parties, upon request, their public records relating to the performance of this Agreement in compliance with the requirements of the Local Records Act (50 ILCS 205/1 *et seq.*) and FOIA. To facilitate a response by the MGNWC to any FOIA request, Niles agrees to provide all requested public records within five (5) business days of a request being made by MGNWC. Niles agrees to defend, indemnify and hold harmless MGNWC, and agrees to pay all reasonable costs connected therewith (including, but not limited to, reasonable attorney and witness fees, filing fees and any other expenses) for the MGNWC to defend any and all causes, actions, causes of action, disputes, prosecutions or conflicts arising from Niles' actual or alleged violation of the FOIA or Niles' failure to furnish all public records as requested by the MGNWC. Furthermore, should Niles request that the MGNWC utilize a lawful exemption under FOIA in relation to any FOIA request thereby denying that request, Niles agrees to pay all costs connected therewith (such as reasonable attorney and witness fees, filing fees and any other expenses) to defend the denial of the request. The defense

shall include, but not be limited to, challenged or appealed denials of FOIA requests to either the Illinois Attorney General or a court of competent jurisdiction. Niles agrees to defend, indemnify and hold harmless MGNWC and agrees to pay all costs incurred by the MGNWC connected therewith (such as reasonable attorney and witness fees, filing fees, penalties, fines, and any other expenses) to defend any denial of a FOIA request pursuant to Niles' request to utilize a lawful exemption.

C. **Niles Representations.**

1. **No Collusion.** Niles represents and certifies that Niles is not barred from contracting with a unit of State or local government as a result of: (1) a delinquency in the payment of any tax administered by the Illinois Department of Revenue unless Niles is contesting, in accordance with the procedures established by the appropriate revenue act, its liability for the tax or the amount of the tax or the fee, as set forth in Section 11-42.1-1 *et seq.* of the Illinois Municipal Code, 65 ILCS 5/11-42.1-1 *et seq.*; or (2) a violation of either Section 33E-3 or Section 33E-4 of Article 33E of the Criminal Code of 1961, 720 ILCS 5/33E-1 *et seq.* Niles represents that the only persons, firms or corporations interested in this Agreement as principals are those disclosed to the MGNWC prior to the execution of this Agreement, and that this Agreement is made without collusion with any other person, firm or corporation. If at any time it shall be found that Niles has, in procuring this Agreement, colluded with any other person, firm or corporation, then Niles shall be liable for any loss or damage that the MGNWC may suffer, and this Agreement shall, at the MGNWC's option, be null and void.
2. **Conflict of Interest.** Niles represents and certifies that, to the best of its knowledge neither Niles nor any person employed or associated with Niles has any interest that would conflict in any manner or degree with the performance of the obligations under this Agreement; and neither Niles nor any person employed by or associated with Niles shall at any time during the Term of this Agreement obtain or acquire any interest that would conflict in any manner or degree with the performance of the obligations under this Agreement.
3. **Compliance with Laws, Grant Regulations.**  
All Services must be provided, performed, and completed in accordance with all required governmental permits, licenses, or other approvals and authorizations, and with applicable statutes, ordinances, rules, and regulations. Niles also must comply with applicable conditions of any federal, state, or local grant received by the MGNWC with respect to this Agreement. Niles will be solely responsible for any fines or penalties that may be imposed or incurred by a governmental agency with jurisdiction over the Services as a result of Niles' improper performance of, or failure to properly perform, any Services.

**SECTION 12. DEFAULT AND TERMINATION OF SERVICES.**

- A. This Agreement is at-will and may be terminated by the MGNWC at MGNWC'S convenience after providing 90 days written notice to Niles, without reason or cause. If the MGNWC terminates this Agreement without reason or cause, then the MGNWC will liable to Niles only for payment of all actual, completed, documented Services through the date of termination. Niles shall not be entitled to Compensation of any kind, including without limitation for lost profit, for any Services not performed by Niles.

- B. **Termination by MGNWC for Breach.** MGNWC at any time, by written notice, may terminate this Agreement because breach by Niles and failure of Niles to cure the breach within ten (10) calendar days after that written notice or such further time as the MGNWC may agree, in the MGNWC's sole discretion, in response to a written notice from Niles seeking additional time to cure. "Breach" by Niles includes (a) failure of Niles to adhere to any terms or conditions of this Agreement, (b) failure of Niles to properly perform Services, (c) failure of Niles to maintain progress in the performance of Services so as to endanger proper performance of the Services within the Project Schedule, or (d) failure of Niles to have or maintain adequate financial or legal capacity to properly complete any Services.
- C. **MGNWC Remedies.** If MGNWC terminates this Agreement for Breach by Niles, then the MGNWC will have the right, at its election and without prejudice to any other remedies provided by law or equity, to pursue any one or more of the following remedies:
1. MGNWC may recover from Niles any and all costs, including without limitation reasonable attorneys' fees, incurred by the MGNWC as the result of any Breach or as a result of actions taken by MGNWC in response to any Breach.
  2. Subject to the dispute resolution clause herein, MGNWC may withhold any or all outstanding Compensation to reimburse itself or pay for any and all costs, including without limitation reasonable attorneys' fees, incurred by the MGNWC as the result of any Breach or as a result of actions taken by the MGNWC in response to any Breach. In that event, the MGNWC will pay any excess funds to Niles, if any, after all of the MGNWC's costs are reimbursed or paid. If the Compensation withheld by the MGNWC is insufficient to reimburse the MGNWC for, or pay, all costs, then the MGNWC will have the right to recover directly from Niles a sum of money sufficient to reimburse itself, or pay, all remaining costs.
- D. **Termination for Convenience.** If, after termination of this Agreement by the MGNWC for breach, it is determined that Niles was not in breach or that the termination otherwise was irregular or improper, then the termination shall be deemed to have been made for the convenience of the MGNWC under this Section 12.
- E. **Termination by Niles for Breach.** Niles at any time, by written notice, terminate this Agreement on account of a failure by the MGNWC to adhere to any terms or conditions of this Agreement and a failure of the MGNWC to cure the breach within ten (10) calendar days after that written notice or such further time as Niles may agree, in Niles' sole discretion, in response to a written notice from the MGNWC seeking additional time to cure.
- F. **Termination by Niles without Cause.** Niles may terminate this agreement for convenience after providing 6 months written notice to MGNWC.

### **SECTION 13. GENERAL PROVISIONS.**

- A. **Amendment.** No amendment or modification to this Agreement shall be effective until it is reduced to writing and approved by the MGNWC Board and Niles.
- B. **Assignment.** Niles shall not assign this Agreement or any portion thereof without the prior written approval of the MGNWC Board.

- C. **Binding Effect.** The terms of this Agreement shall bind and inure to the benefit of the MGNWC and Niles, and their agents, successors and assigns.
- D. **Notice.** All notices required or permitted to be given under this Agreement shall be in writing and shall be delivered: (1) by personal delivery; (2) by a reputable overnight courier; (3) by certified mail, return receipt requested, and deposited in the U.S. Mail, postage prepaid; or (4) by email delivery to the Party's business email address set forth below. Unless otherwise expressly provided in this Agreement, notices shall be deemed received upon the earlier of: (a) actual receipt; (b) one (1) business day after deposit with an overnight courier, as evidenced by a receipt of deposit; (c) four (4) business days following deposit in the U.S. mail, as evidenced by a return receipt; or (d) date of delivery of the email. By notice complying with the requirements of this Section 13.D., each Party shall have the right to change the address or the addressee, or both, for all future notices and communications to the other Party, but no notice of a change of addressee or address shall be effective until actually received.

Notices and communications to the MGNWC with copies to the MGNWC Working Group shall be addressed to, and delivered at, the following addresses:

William Balling, MGNWC Superintendent,  
1000 Civic Center Dr.  
Niles, IL 60714  
Cellular Phone: (847) 863-7101  
Office Phone: (847) 398-8399  
Email: [bill@wrblc.com](mailto:bill@wrblc.com)

With a copy to:

Teresa Hoffman Liston, MGNWC  
6101 Capulina Avenue,  
Morton Grove, IL 60053  
Direct: 847-663-3001  
Mobile 847-917-5416  
Email: [tliston@mortongroveil.org](mailto:tliston@mortongroveil.org)

Notices and communications to Niles shall be addressed delivered to the following address:

Steven C. Vinezeano  
Village Manager, Village of Niles  
1000 Civic Center Dr.  
Niles, IL 60714  
[847-588-8002](tel:847-588-8002)  
Email: [scv@niles.com](mailto:scv@niles.com)

With a copy to:

D. Danielle Grcic  
Village Attorney, Village of Niles  
1000 Civic Center Drive  
Niles, IL 60714  
[847-588-8007](tel:847-588-8007)  
Email: [dg@vniles.com](mailto:dg@vniles.com)

- E. **Third Party Beneficiary.** No claim as a third-party beneficiary under this Agreement by any person, firm or corporation shall be made or be valid against.
- F. **Provisions Severable.** If any term, covenant, condition or provision of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the provisions shall remain in full force and effect and shall in no way be affected, impaired or invalidated.
- G. **Time.** Time is of the essence in the performance of all terms and provisions of this Agreement.
- H. **Calendar Days and Time.** Unless otherwise provided in this Agreement, any reference in this Agreement to "day" or "days" shall mean calendar days and not business days. If the date for giving of any notice required to be given, or the performance of any obligation, under this Agreement falls on a Saturday, Sunday or federal holiday, then the notice or obligation may be given or performed on the next business day after that Saturday, Sunday or federal holiday.
- I. **Venue and Governing Law.** All questions of interpretation, construction and enforcement, and all controversies with respect to this Agreement, shall be governed by the applicable constitutional, statutory and common law of the State of Illinois. The Parties agree that, for the purpose of any litigation relative to this Agreement and its enforcement, venue shall be in the Circuit Court of Cook County, Illinois or the Northern District of the United States District Court, Chicago, Illinois, and the Parties consent to the jurisdiction of said Courts for any such action or proceeding.
- J. **Authority to Execute.**
1. **MGNWC Water Commission.** The MGNWC warrants and represents to Niles that the persons executing this Agreement on its behalf have been properly authorized to do so by its corporate authorities.
  2. **Niles.** Niles warrants and represents to the MGNWC that the persons executing this Agreement on its behalf have the full and complete right, power and authority to enter into this Agreement and to agree to the terms, provisions and conditions set forth in this Agreement, and that all legal actions needed to authorize the execution, delivery and performance of this Agreement have been taken.
- K. **Entire Agreement.** This Agreement constitutes the entire agreement between the Parties to this Agreement and supersedes all prior agreements and negotiations between the Parties, whether written or oral, relating to the subject matter of this Agreement.
- L. **Waiver.** The failure of either Party to enforce any term, condition or covenant (herein referred to as "provision") of this Agreement shall not be deemed a waiver or limitation of that Party's right to subsequently enforce and compel strict compliance with such provision and every other provision of this Agreement. No provision of this Agreement shall be deemed to have been waived by either Party unless such waiver is in writing by said Party.
- M. **Survival.** The aforesaid covenants, agreements, representations and warranties shall survive the expiration or termination of this Agreement.
- N. **Counterpart Execution.** This Agreement may be executed in counterparts, each of which, when executed, shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

- O. **Cumulative Rights and Remedies.** Unless expressly provided to the contrary in this Agreement, each and every one of the rights, remedies, and benefits provided by this Agreement shall be cumulative and shall not be exclusive of any other rights, remedies, and benefits allowed by law.
- P. **Effective Date.** This Agreement shall become effective on the date the last signatory signs this Agreement.

**IN WITNESS WHEREOF**, this Agreement was executed on behalf of the Parties through their authorized representatives, after all duly required corporate action was taken, as set forth below on the signature pages.



**SIGNATURE PAGE FOR NILES**

**IN WITNESS WHEREOF**, the below authorized corporate officer of HNTB Corporation signed this Agreement pursuant to legal authority and direction granted to him/her by the required corporate action.

Village of Niles  
By: \_\_\_\_\_  
Andrew Przybylo, Village President

Date: \_\_\_\_\_, 2018

**Attest:**

By: \_\_\_\_\_  
Marlene J. Victorine, Village Clerk

Date: \_\_\_\_\_, 2018

**SIGNATURE PAGE FOR  
MORTON GROVE-NILES WATER COMMISSION**

**IN WITNESS WHEREOF**, the below authorized officials of the Morton Grove-Niles Water Commission have signed this Agreement pursuant to legal authorization granted to him/her under Article VII, Section 10 of the 1970 Illinois Constitution, the Intergovernmental Cooperation Act (5 ILCS 220/1 *et seq.*) and Division 135 of Article 11 of the Illinois Municipal Code (65 ILCS 5/11-135-1, *et seq.*) (“Division 135”) and the corporate approval granted by passage of a Resolution by the Corporate Authorities of the Morton Grove-Niles Water Commission.

**Morton Grove-Niles Water Commission**

By: \_\_\_\_\_  
Steven Vinezeano, Chair

Date: \_\_\_\_\_, 2018.

**Attest:**

By: \_\_\_\_\_  
John Pietron, Clerk

Date: \_\_\_\_\_, 2018

Approved as to form and legality:

By: \_\_\_\_\_  
Teresa Hoffman Liston, MGNWC General Counsel

**Attachment A**

MGNWC RFP

## REQUEST FOR PROPOSALS

### TWO YEAR OPERATING CONTRACT FOR THE MORTON GROVE-NILES WATER COMMISSION WATER TRANSMISSION, PUMPING, AND STORAGE FACILITIES JANUARY 2019-DECEMBER 31, 2020

The Morton Grove-Niles Water Commission (MGNWC) is seeking Proposals from qualified potable water entities to provide contractual services to operate and maintain the MGNWC wholesale water delivery system to its two customers, the Village of Morton Grove and the Village of Niles beginning in December, 2018 through participation in MGNWC Commissioning activities, with the operations of the water delivery system planned for January 2019. The intended level of service is described in **The MGNWC System Operation and Maintenance Manual Draft-REV 4 dated August 2018**, a copy of the outlined services is attached to this notice. A complete copy of this manual is available in electronic form by contacting the MGNWC Superintendent William Balling at (847) 863-7101, [Bill@wrblc.com](mailto:Bill@wrblc.com), or at the offices of the MGNWC C/O Village of Niles 1000 Civic Center Drive Niles, Illinois 60714.

The new system includes the following:

#### **Vertical Structures:**

##### **Main Pumping Station: 7900 Nagle Avenue Morton Grove**

One story masonry water pumping station with partial basement on Water Commission owned property, with an operational capacity of 12.7 mgd with eight pumps, standby by electrical generating capacity, electronic controls, HVAC systems, operational controls, piping, and operating equipment allowing for the manual and remote control of the facility. Anticipated final cost: \$7,600,000. Expected operational commissioning: May, 2019.

##### **Intermediate Booster Pump Station: 2551 Church Street Evanston**

One story masonry water pumping station with no basement located on an easement on land owned by the MWRDGC with an operational capacity of 12.7 mgd with three pumps, standby electrical generating capacity, electronic controls, HVAC systems, operational controls, piping, and operating equipment allowing for manual and remote control of the facility. Anticipated final cost: \$ 3,000,000. Expected operational commissioning: April, 2019. NOTE: The City of Evanston is contractually obligated to operate the pumping system at this facility, but the MGNWC is responsible for maintenance of the station.

### **Standpipe/Reservoir: 7900 Nagle Avenue Morton Grove**

This 7mgd pre-stressed concrete above ground structure is 95' tall and 115' in diameter, with piping and appurtenances is designed to meet the average daily requirements of the MGNWC member demands when filled. It is located on Water Commission owned property. Anticipated final cost: \$ 8,400,000. Expected operational commissioning: May, 2019.

### **Underground structures:**

**Pipe System Contract 1-** The eastern segment of the water transmission main is located in Skokie and consists of 18,600 'of 30" and 24" diameter wrapped ductile iron water transmission main with valves and appurtenances located on easements and public Rights -of -Way. The constructed value is \$ 17,200,000. Expected operational commissioning: January 2019.

**Pipe System Contract #2-** The western segment of the water transmission main is located in Skokie and Morton Grove and consists of 15,000' of 30" wrapped ductile iron water transmission main with valves and appurtenances located on easements, licensed access, and Public Rights -of -Way. The system also includes two redundant 24" water main crossings under the Eden's expressway (I-94 and the METRA railroad). The constructed value is \$14,800,000. Expected operational commissioning: January, 2019

**Pipe System Contract #3-** These water transmission main segments connects the Main Pump Station with receiving reservoirs in the Village of Morton Grove (2) and the Village of Niles (one reservoir connection and one pressure connection at 7900 Nagle Ave.) This system consists of 11,300 'of 20" wrapped ductile iron pipe, and 3,900 'of 16" wrapped ductile pipe, including valves, and appurtenances. Improvements are located on Commission owned land, easements, and public Rights- of- Way. The constructed value is \$14,400,000. Expected operational commissioning: January, 2019.

**Pipe Maintenance System, contract #4-** This segment improves 14,000 'of existing 20" water main that was lined using the cured in place piping (CIPP) process. The original water main is a combination of cast iron and asbestos concrete main. This line, including valves, interconnections, and appurtenances, located primarily in Morton Grove on public Rights- of -Way and easement property. Upon completion of this maintenance work Morton Grove will convey the transmission line to the Morton Grove-Niles Water Commission. Pipe maintenance work is \$ 4,700,000. Expected operational commissioning: August, 2019.

**Pipe System, Contract #10-** This segment connects the Intermediate Booster Pump Station to the main transmission system and is located on an easement granted by the MRWDGC and consists of two water mains: one 24" inbound and one 24" outbound, with valves and appurtenances. This system is 1,100' in length. The constructed value is \$ 1,820,000. Expected operational commissioning: April 2019.

### **Communications and control system:**

**Fiber optic cable installation and connection.** This work entails installation of 49,500' of fiber optic cable inside conduit installed during pipe construction located in the City of Evanston, and the Villages of Skokie, Morton Grove, and Niles. This system will allow the communication and operations of the elements of the water delivery system. The constructed value is: \$350,000. Expected commissioning: August, 2019.

The initial water delivery will be phased to the completion of the MGNWC infrastructure. January service will rely on direct pressure from the City of Evanston using the MGNWC water transmission system from the Evanston point of connection at McCormick and Emerson in Evanston directly to the receiving reservoirs in Morton Grove at Oakton and Caldwell, and in Niles on Touhy Ave. and Milwaukee Ave. Operations will be enhanced after completion and commissioning of the following additional facilities:

Intermediate Booster Pump Station: 2551 Church Street Evanston April 1, 2019

Standpipe Reservoir: 7900 Nagle Ave. Morton Grove May, 2019

Main Pump Station: 7900 Nagle Ave. Morton Grove May, 2019

**Responding to this Request for Proposal:**

1. All submissions shall be efficiently prepared and delivered in email format to William Balling Superintendent Morton Grove-Niles Water Commission at [Bill@wrblc.com](mailto:Bill@wrblc.com). Questions should be directed either electronically to the MGNWC Superintendent at the address above or by phone at (847) 863-7101. The responses shall contain a statement that the proposal will meet or exceed the planned level of operations and maintenance contained in **the MGNWC System Operation and Maintenance Manual** along with a contract pricing from January 1, 2019 through December 31, 2020. Proposals are due by 12:00 noon Friday November 16, 2018.
2. The Morton Grove-Niles Water Commission reserves the right to select the best contractor for this work and consideration will be given to both price and operational service record. The proposal should describe the system currently operated which is most similar to the MGNWC facilities and information which the proposer believes best describes the operational performance record of such system.
3. The proposal must include the commitment to provide overall supervision of the operational personnel and overall system maintenance by a qualified water operator who possesses at least a Class C licensing from the IEPA. This person will advise the MGNWC Superintendent on operational and technical matters related to the operations of the system. Availability to respond to operational issues on a 24/7 basis will be required of the contractor. The Operational staffing needs anticipates the access to two part time operators with at least one of the operators being designated as the operations Supervisor and reporting to the MGNWC Superintendent.
4. The Morton Grove-Niles Water Commission intends to review all submitted proposals, and if necessary interview qualified firms in November. Final negotiations will be conducted in November. Service contract award is planned for the Monthly MGNWC meeting November 29, 2018. Ratification by authorizing elected Boards should be completed by December, 2018.
5. THE MGNWC under separate cover will be issuing an additional RFP for emergency excavation and repair services from multiple excavation contractors. The Operations Contractor should be capable to respond to on demand coordination of services of an emergency for MGNWC vertical structures and SCADA, IT systems through a recommended contractor.

6. The MGNWC once in full operations will be an automated system and rely on a SCADA monitoring and control system. Consideration will be given to proposers to also include their own SCADA/IT consultant firm in which they have a successful operating experience. The City of Evanston is already obligated under the MGNWC/Evanston Water Supply Agreement to control the operation of the MGNWC booster pump station located at 2551 Church in Evanston.

**MGNWC Operations Contractor Proposals ( November 2018)**

**Submittal Requirements:**

Responding Entity, Name and Primary Contract for Proposal:

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**Personnel assigned for Work and Licensing**

1. Licensed Operator (part time) \_\_\_\_\_
2. Maintenance Custodian (part time) \_\_\_\_\_
3. On demand electrician \_\_\_\_\_ (Retained as needed)
4. On demand SCADA/IT Support \_\_\_\_\_ (Retained as needed)
5. Emergency Response Contractor \_\_\_\_\_ (Retained as needed)

**Operations Personnel Pricing**

2019 \_\_\_\_\_

2020 \_\_\_\_\_



**IT/SCADA Consultant Pricing**

**2019** \_\_\_\_\_

**2020** \_\_\_\_\_

**Presented by:**

**Chief Administrative Officer** \_\_\_\_\_

**Date:** \_\_\_\_\_

**For Public Agencies, ratification of awarded Operations Contract is required prior to commencement of operations.**

# System Maintenance

### 6.1 Useful Life

The design life of the transmission main is expected to be 100 years or longer if corrosion is monitored and controlled. All ductile iron pipe in the MGNWC system was installed with V-Bio Enhanced Polyethylene Encasement, which provides corrosion control and will extend the useful life of the pipeline. Alternatively, if V-Bio encasement was not used or the pipeline was not installed with proper care the pipeline would experience significant corrosion and would start to experience leakage within 25 to 30 years.

At the time of construction, leak sensors were not installed with the transmission main. After a period of 20 years from the completion of the transmission main construction in 2018, MGNWC should consider installing leak sensors, using industry standard technologies at the time. Therefore, when the sensors are needed when leakage may start to occur, the technology installed is up to date.

Once the transmission main has exceeded its useful life and the number of main breaks becomes unacceptable, MGNWC should install a liner in the pipe to reestablish the integrity of the pipeline. The insertion of a structural liner will extend the service life of the pipeline for an additional 50 to 75 years.

The advancement of pipeline lining technology is eliminating the need to plan for the installation of a redundant transmission mains, but opportunities to interconnect with neighboring systems should be pursued as they become available.

When maintenance is required, valves are provided every 3,000 feet to facilitate the pipeline repairs and maintenance. To facilitate maintenance at complex locations, the transmission main was placed in a 48-inch diameter casing at major intersections and dual 24-inch diameter pipes in 36-inch diameter casings were installed under I-94 and the Metra Railroad.

The design lives of the masonry pumping station structures and the precast concrete standpipe are expected to be 100 years or longer if the facilities are properly maintained.

Mechanical equipment is expected to have service lives that range from 15 to 50 years, again depending on the level of maintenance provided. Both pump stations use split case horizontal type pumps. These types of pumps are easy to maintain, disassemble, and repair. With regular maintenance, it is rare that an entire pump would require replacement. The centrifugal pumps installed at each pump station should have a useful life in excess of 50 years.

The two natural gas generators, 350 kW at the Intermediate Pump Station and 500 kW at the Nagle Avenue Pump Station, should have a useable life expectancy of approximately 20 years based on an average of 150 hours of operation each year.

The electromagnetic flowmeters used at the pump stations and points of delivery should have a useable life expectancy of approximately 20 years. When flowmeters reach the end of their useful life, flow recordings will become increasingly inaccurate despite regular calibration, and will then require replacement.

The 2-ton bridge crane installed at each pump station is expected to have a structural useful life in excess of 30 years and a service life of approximately 20 years for the mechanical parts. In that time, as the products on the market advance, it may become increasingly difficult to secure replacement parts for the aging crane.

The chemical metering peristaltic pumps at the Nagle Avenue Pump Station are expected to have a useful life of approximately 10-15 years. The flexible tubing and other parts of the pump will require replacement more frequently.

## **6.2 Equipment Maintenance**

This section describes general maintenance activities throughout the MGNWC system. See Section 7 for maintenance records and reports forms.

### **6.2.1 Pumps**

At the Intermediate Pump Station, each of the three pumps should be rotated to have equal hours of use each year. At the Nagle Ave. Pump Station, each pair of MG-1 and MG-2, N-1 and N-2, and ND-1 and ND-2 should have equal hours of use each year and will need periodic maintenance. Pumps MG-3 and N-3 are expected to have fewer operating hours. Entire pumps are rarely replaced and with proper maintenance can remain in service for more than 50 years if parts of the pump are maintained and replaced as they wear. Impellers, mechanical seals, shafts, and motors are the most common parts needing maintenance and replacement while pump casings rarely require maintenance. Apart from motors, pumps rarely fail suddenly. Rather their performance declines or they begin to leak. Spare parts shall be kept available for the anticipated pump repairs.

One common maintenance issue with centrifugal pumps is impeller corrosion and cavitation, caused by the collapse of vapor bubbles in the pump. If operators observe abnormal levels of

vibration, a noticeable decrease in flow, or excess noise from the pump, then the pump may require a replacement impeller.

Refer to the Centrifugal Water Pump Operation and Maintenance Manual in Appendix B-4 for additional information.

### **6.2.2 Natural Gas Generator**

The natural gas engine generators at both pump stations should be exercised for 30 minutes each month. A maintenance log should be completed each time the generator is exercised. Refer to the Natural Gas Engine Generator Operation and Maintenance Manual in Appendix B-9 for additional information.

### **6.2.3 Sodium Hypochlorite Feed Equipment**

The flexible rubber tubing located in the pumphead of the peristaltic metering pumps will periodically wear down and require replacement. The Watson Marlow Qdos30 peristaltic metering pumphead is a consumable part and cannot be serviced. Typically, this part will require replacement every 6 to 12 months, depending on usage. Replacement will be required when the tubing in the pumphead is worn down to the point of leakage. For reordering purposes, the pumphead part number is 0M0.225H.GRA.

### **6.2.4 Standpipe**

The 7.0-million-gallon standpipe will eventually need to be inspected, cleaned, and repainted. This interior and exterior maintenance should generally occur every 20 years. The Standpipe must be disinfected after interior inspection, cleaning, and maintenance. See AWWA C652 for more information. Sodium hypochlorite from the Nagle Avenue Pump Station may be used for disinfection procedures.

Routine inspections should occur after the first year of service, and then every 5 to 10 years following the initial inspection<sup>1</sup>. Routine inspection should include the tank walls, floor, dome roof, appurtenances, and should test the water tightness of the Standpipe by isolating the Standpipe and measuring water level drop over time. See AWWA D110 for detailed information.

When the Standpipe is drained for cleaning, inspection, or interior repair, most of the volume can be drained using MG-P-3 and N-P-3. The final 8 inches of the water level are below the outlet pipe and will need to be drained with sump pumps. One sump is provided adjacent to each of the two manways. Any sludge build-up on the tank floor should be brought to the sump and removed from the Standpipe. This sludge should be discharged to the sanitary sewer and not the storm sewer.

### **6.2.5 Butterfly Valves**

Butterfly valves are present throughout the system, both in the transmission main and at the Nagle Ave. Pump Station. Typically, valves require maintenance on the actuator and shaft seals. Valves that are not used frequently should be exercised, either manually or automatically

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<sup>1</sup> AWWA Standard D110: Wire- and Strand- Wound, Circular, Prestressed Concrete Water Tanks

depending on each valves operator, at least once per year. This will help ensure that all valves are operational when needed. If a valve is stuck in the open, closed, or intermediate position, there could be interference with the actuator or inside the valve. If no disrepair is apparent, do not apply excessive force as this could cause internal damage to the valve. Major valve failure will likely require the removal of the valve and repair by the manufacturer<sup>2</sup>. See Section 8.2.11. A valve maintenance log, either on paper or electronically, should be kept ensuring that this maintenance task is documented. Refer to the butterfly valve operation and maintenance manual in Appendix B-3 for additional information.

#### **6.2.6 Magnetic Flow Meters**

The MGNWC system contains a total of 11 magnetic flow meters, one at the IPS, three at the Nagle Ave. Pump Station, three at the Niles Main Plant, two each at the Morton Grove South Reservoir and North Reservoir. These flow meters should be tested and calibrated annually. This work is typically done by a third-party testing and calibration company. Magnetic flowmeters can be calibrated using many different methods, including dry calibration, volumetric calibration, gravimetric calibration, and the master meter method<sup>3</sup>. Refer to the Magnetic Flow Meter Operation and Maintenance Manual in Appendix B-8 for additional information.

#### **6.2.7 Heating, Ventilation, and Air Conditioning (HVAC)**

The MGNWC system utilizes an HVAC system at both the IPS and Nagle Ave. Pump Station. Refer to the (AWWA) Heating, Ventilation, and Air Conditioning (HVAC) Operation and Maintenance Manual in Appendix B-6 for additional information.

#### **6.2.8 Pressure Relief Valves**

The pressure relief valves installed at both pump stations are not lubricated and require minimal maintenance. The valves should be inspected quarterly for proper operation. There are three primary issues that may cause the valve to malfunction, including valve is stuck and does not open or close, valve is free to move but cannot close due to a worn-out diaphragm, or the valve leaks even though it is free to move. See the pressure relief valve specific operation and maintenance manual (Appendix B-13) for specific instructions on performing valve maintenance.

### **6.3 General Maintenance**

Operators should make continuous visual inspections of the MGNWC facilities during operation. Observations of equipment or facility deterioration should be recorded and reported to the Superintendent. Pressing issues that compromise the security or operation of the facility (i.e. basement flooding at the Nagle Ave. Pump Station, free access to pump stations, etc.) should be reported immediately to the Superintendent and repaired as quickly as possible.

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<sup>2</sup> AWWA Standard C504: Rubber Seated Butterfly Valves

<sup>3</sup> AWWA Standard C751: Magnetic Inductive Flowmeters

### **6.3.1 General Maintenance Tasks**

The following list should be used as a reference and operators should update the list as necessary.

#### Daily tasks:

- Check water meter and readings
- Check and fill sodium hypochlorite day tanks
- Inspect chemical feed pumps and tubing
- Check chlorine residual at the application point
- Visually inspect the Intermediate Pump Station
- Visually inspect the Nagle Avenue Pump Station
- Visually inspect the Standpipe
- Check Standpipe water level
- Check system instrumentation
- Ensure site security
- Record threats or suspicious activity
- Investigate customer complaints
- Check transmission system pressure
- Respond to JULIE requests

#### Weekly Tasks:

- Inspect chlorine analyzers
- Clean pump stations
- Ensure fire hydrants are accessible
- Conduct weekly security check
- Inspect basement sump pump and clean out sump

#### Monthly Tasks:

- Analyze monthly water quality samples
- Read all customer meters and compare against total water purchased for the month
- Check onsite readings against lab results
- Confirm submittal of monthly reports
- Inspect and replace light bulbs as necessary
- Inspect coiling overhead doors at each pump station and maintain as necessary

- Exercise high-head pumps (MG-P-3 and N-P-3) at the Nagle Ave. Pump Station<sup>4</sup>

Quarterly Tasks:

- Calibrate chemical feed pumps
- Review emergency response plans
- Inspect chemical safety equipment and repair or replace as needed
- Inspect, clean, and repair control panels in pump stations
- Inspect pressure relief valves

Semi-Annual Tasks:

- Inspect storage tanks for defects and clean if necessary
- Exercise fire hydrant valves
- Exercise butterfly valves<sup>5</sup>
- Exercise automatic air release and pressure relief valves
- Inspect chemical feed pumps and replace flexible pumphead tubing if necessary

Annual Tasks:

- Calibrate flow meters
- Overhaul chemical feed pumps, such as O-rings, check valves, and diaphragms
- Prepare for winter operation
- Properly decommission unnecessary equipment
- Pump accumulated water out of each air release valve vault
- Flush hydrants to remove sediment buildup in the pipeline<sup>6</sup>

### 6.3.2 JULIE Requests

Before any excavator begins to dig, they must contact JULIE at least 48 hours in advance. This means that anytime an excavator, whether a homeowner or a utility, plans to dig near any MGNWC buried infrastructure, an alert will come from JULIE and MGNWC will have 48 hours to visibly mark the surface where MGNWC infrastructure is located. Due to the 48 hour turnaround, responding to JULIE requests must be a daily task.

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<sup>4</sup> Operate the high-head pumps for approximately 5-10 minutes per month. Ensure that downstream reservoirs are prepared to receive influx of water from the pump.

<sup>5</sup> Certain butterfly valves will affect flow to the centrifugal pumps in the IPS and Nagle Ave. Pump Station. Pumps must be temporarily shut down while these valves are exercised in order to protect the pumps.

<sup>6</sup> Hydrant flushing may not be required every year depending on the amount of sediment buildup. Adjust frequency based on in-field findings. If water is continually clear when flushing, this may be reduced to every third year. Hydrants should not go more than three years without flushing so that the hydrants are exercised.

In addition to surface markings for excavators, JULIE also handles design requests. When an engineer contacts JULIE regarding underground utility locations, JULIE sends an alert to all utilities in the area. Those utilities are required to send electronic utility location information to the requestor within 48 hours. This is typically a PDF GIS atlas, or design drawings if the area is small enough.

### 6.3.3 Contract Labor

The MGNWC intends to hire contract labor to operate and maintain the water transmission system described in this O&M Manual. Work contracted out by MGNWC includes system operation, system management, legal services, accounting, clerk services, and on-demand services discussed further in this section (see Section 5.8 for additional info) . Listed below is an estimate for the expected full time equivalent<sup>7</sup> (FTE) labor required for the successful operation and maintenance of the system.

**Table 6-1: Estimated Contract Labor Requirements**

<b>Role</b>	<b>Labor (FTE)</b>
<b>Manager/Administrator</b>	0.25
<b>Operator</b>	0.5
<b>Maintenance Custodian</b>	0.5
<b>Electrician</b>	On Call
<b>Pipe Repair Contractor</b>	On Call
<b>SCADA IT Support</b>	On Call

The contract operator will be responsible for the regular maintenance tasks discussed in this section.

The contract operator will also be responsible for having certain on-demand contractors ready to respond to any sort of system failure that will inhibit MGNWC from providing service to its customers, including an electrician, pipe repair contractor, and IT support to respond to any possible malfunctions in the SCADA system. Invoices for these services, when required, will be paid directly by MGNWC.

In addition to the 0.5 FTE operator for normal operations, the system also requires an operator to be available on-call 24 hours per day to respond to alarms and address any emergencies or system failures.

The contract operator will also be responsible for providing liability insurance to cover the Morton Grove – Niles Water Commission, the Village of Morton Grove, and the Village of Niles.

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<sup>7</sup> Full time is considered 40 hours per week.



The superintendent will be responsible for the management of the MGNWC system as described within this Operation and Maintenance Manual. See Section 5 for additional information.

The legal services, accounting, and clerk services will all be contracted labor fulfilling the administrative and legal needs of MGNWC.

#### **6.3.4 Non-MGNWC Maintenance**

The construction and operation of the MGNWC water transmission system will create maintenance tasks for Morton Grove and Niles, notably the maintenance of existing connections with the City of Chicago. These connections will be dead-end connections once the MGNWC system is online, and therefore required additional maintenance. The maintenance of these dead-end connections is the responsibility of Morton Grove and Niles and is not a maintenance task of MGNWC.

Morton Grove and Niles have two options regarding the flushing and disinfecting these dead-end connections.

1. Let the connection sit unused until it is needed, and then flush the line aggressively until water is of acceptable quality. Bacteria levels should be tested, and if unacceptable, the connection should be disinfected with chlorine from the Villages' chlorine feed system.
2. Flush and disinfect the dead-end connection every 6 months to maintain the connection in ready-working condition.

### **6.4 Spare Parts**

MGNWC should have a sufficient supply of spare parts to ensure that system operation is not severely interrupted when a new part is needed. Most equipment has been supplied with important spare parts at the time of installation. These spare parts should be replaced when they are put into service. It is also important for MGNWC to have a small supply of 16, 20, 24, and 30-inch ductile iron in stock so that MGNWC can respond quickly to major water main breaks. For example, if a major main break renders the 30-inch shared transmission main out of service, Table 8-1 lists the time available to make the pipeline repair. Therefore, it is important to have pipe readily available to repair the pipeline in the time available.

#### **6.4.1 Pipe Appurtenances**

Joints:

- Pipe joints are generally push-on type with some mechanical type joints where appropriate. The pipe manufacturer's standard restrained joints are used to prevent the separation of joints in the vicinity of bends and tees.

Interior Pipe Coatings:

- All pipe and fittings have an interior cement lining per AWWA C104 and an exterior asphaltic coating per AWWA C151.

Pipe Fittings (Bends & Tees):

- All fittings are rated for 350 psi and be provided with restrained mechanical joints.

Pipe Gaskets:

- Most gaskets will be styrene butadiene rubber conforming to AWWA C111. Where the pipe is installed in areas of hydrocarbon contamination (oil/gas) Viton or nitrile gaskets are used.

Pipe Hardware:

- Nuts and bolts needed for mechanical buried fittings are manufactured from 316 stainless steel.

Underground Warning Tape:

- Underground warning tape is placed in the trench above the pipe.

Fiber Optic Cable Conduit:

- A 3 or 4-inch diameter plastic conduit is buried in the trench with the water main to allow the installation of a fiber optic cable for the SCADA system.

# Reports and Records

### 7.1 Water Quality Monitoring

The MGNWC is designated as a community water supplier (CWS) and as such is required to perform water quality monitoring of its' water transmission system. However, many of the water quality monitoring requirements apply to water distribution systems as opposed to water transmission systems. As such, the MGNWC is only required to perform Coliform monitoring. As the monitoring deadline approaches, the Illinois Environmental Protection Agency (IEPA) will send reminder notifications that detail the requirements and specific timeline within which documents must be completed. The IEPA also provides drinking water testing services as part of their Community Water Supply Testing Program (CWSTP). There is an annual deadline to sign up for the program each fiscal year and in doing so the CWS receives a streamlined and cost-effective process for chemical, coliform, and additional water quality testing. Testing is setup to be performed at EPA laboratories and should the need arise than the IEPA will coordinate and pay for testing provided by other labs. If the MGNWC participates in the CWSTP, all sample containers will be sent to the MGNWC prior to the monitoring period. If the MGNWC does not participate in the CWSTF, it is their responsibility to have all testing completed by an IEPA certified laboratory and submitted on the correct reporting forms within 10 days after the end of a monitoring period. Below are brief descriptions of the parameters that will be sampled and the required documents to submit to IEPA.

### 7.1.1 Total Coliform

The IEPA's Revised Total Coliform Rule (RTCR) requires that all CWS's monitor for the presence of total coliforms in a water system<sup>1</sup>. For water distribution systems, rules are in place regarding the number of samples to be collected per month which are based off the population served as well as the required collection locations. However, the MGNWC pipeline is a transmission main and is consequently subjected to less stringent monitoring requirements. There are two locations along the transmission main where water can be accessed, at the Intermediate Pump Station and the Nagle Avenue Pump Station. Two coliform samples should be collected at each pump station per month. The samples should be collected on separate days of the month, ideally at least one week apart from one another. The samples should be obtained near the beginning of the month to allow time to re-obtain samples within the same testing period should the need arise. The locations where the monthly routine coliform samples are to be registered on MGNWC's approved coliform sample site plan (CSSP). The CSSP is a list of sites by street address, lot number, or other permanent description, that identifies all the approved locations where your monthly coliform samples will be collected. The CSSP must be approved by and on file at the appropriate IEPA Regional Office. Contact the appropriate Regional Office to obtain instructions on how to create a coliform sample site plan or make changes to an existing one.

Only bottles received from a certified laboratory should be used to collect samples. It is extremely important that the sample collector uses only the approved sampling locations and follows proper sampling techniques. Contamination from the sampling faucet can occur if caution is not used. Should an incident occur during sample collection that may result in contamination, the sample should be discarded and a new bottle requested. It is assumed that all samples submitted for testing are properly collected. Sample error will not be accepted as an excuse to avoid repeat sampling. Generally, the following protocol should be followed:

1. Sample bottles should be examined when received. If for any reason (loose caps, caps off, etc.) the sterility of the bottle is in question, the bottles should not be used.
2. Open an approved sampling faucet so that a smooth flow of water at moderate pressure is obtained. Be sure that there is no splashing. Allow the water to flow for sufficient time 2016 Sample Collector's Handbook – Total Coliform Rule Chapter 3-8 to clear the service line. Depending on time of year and water source you may notice a water temperature change when the line has been cleared.
3. If your WS is chlorinated, check for residual chlorine. These results MUST be included on the reporting form. Indicate whether the residual measured is free (F) or total (T) chlorine.
4. The bottle cap should not be removed until you are ready to collect the sample. Do not lay the bottle cap down or put it in a pocket. Hold the bottle in one hand and the

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<sup>1</sup> Chapter 3, Appendix A in an EPA document titled, "Sample Collector's Handbook", provided for in this O&M Manual.

cap in the other, keeping the bottle cap right side up (threads down) and taking care not to touch the inside of the cap. Avoid touching the inside of the sterile bottle(s) with your fingers or the faucet nose.

5. Once you start filling the bottles do not adjust the stream flow. Do not allow splashing drops of water from the ground or sink to enter the bottle. Fill the bottle to the 100 ml mark on the side of the bottle. Cap the bottle immediately. Then turn off the faucet.

### **7.1.2 Asbestos**

For the MGNWC system, a portion of the existing water transmission line connecting the Morton Grove South Reservoir to the Morton Grove North Reservoir is asbestos-cement (A-C) pipe. However, this pipe has been rehabilitated with a Class IV structural pipe liner and therefore asbestos contamination is not expected in the MGNWC system. Despite the presence of the pipe liner it is still recommended to abide by the monitoring requirements set forth by the IEPA for A-C pipes. Systems that have A-C pipes and an aggressive water quality index, less than 12, must monitor once every nine years. To maintain an accurate inventory of the current number of systems in the country that have A-C pipes the IEPA send out an asbestos related questionnaire every nine years. The presence of an A-C pipe, determined from the questionnaire, will trigger an initial testing and only if the water quality index indicates that the water is corrosive will monitoring for asbestos be required from a location served by the A-C pipe. Quarterly monitoring will be required if any sample results exceeds 7 million fibers per liter. If actual asbestos monitoring is required for your CWS, specific sampling instructions/requirements will be sent from the IEPA to MGNWC. It is very unlikely that they water quality of Evanston Lake Michigan water will ever reach a water quality index of 12 or less and therefore it is very unlikely that MGNWC will ever be subject to asbestos testing.

## **7.2 Notification of Responsible Operational Personnel**

MGNWC is required to maintain a record with the Illinois Environmental Protection Agency of the key operational personnel. This includes an official custodian, administrative contact, responsible operator in charge (ROINC), and the sampler collector.

The official custodian is the person designated to act on behalf of MGNWC. This person should be the current chairman or chairwoman of the commission.

The administrative contact is a person designated by the official custodian to oversee daily managerial operations for the water system. Documents from IEPA such as sample demand letters, public notice advisories, violations notices, notice of intent to pursue legal action, and other regulator and permitting notices will be sent to the attention of the designated administrative contact.

The responsible operator in charge is the person designated to be responsible for the operation of the water system. The ROINC runs and oversees daily transmission operations. Only one person can be designated as a ROINC for MGNWC.

The sample collector is the person dedicated by MGNWC to collect samples and complete the paperwork associated with sampling.

The personnel currently on file with IEPA for these various roles are:

- Official custodian: Steven Vinezeano, Chair
- Administrative contact: Bill Balling, Superintendent
- Responsible operator in charge: Jeffrey Gattuso
- Sample collector: Jeffrey Gattuso

Any time these roles change, an updated Notification of Responsible Operational Personnel form must be sent to IEPA. The original form and the first update form for MGNWC are attached to this manual as Appendix A. A blank copy of this form is included at the end of this section.

### **7.3 Consumer Confidence Report**

Each year, MGNWC is required to issue a Consumer Confidence Report (CCR) as required by the Safe Drinking Water Act. This report must include the source of drinking water, a statement regarding any violations from the prior year, testing results of regulated contaminants, and water quality data supplied by the City of Evanston. Typically, Community Water Supplies will send the annual CCR or a notification of availability to all residents served by the system. MGNWC does not directly serve any residents and therefore will only be required to post the annual CCR to the MGNWC website.

### **7.4 Additional Records**

In addition to water quality reporting forms, this section also includes blank record logs for daily, weekly, and monthly tasks. These records should be filled out by the operators in order to keep full and complete records of the operations and maintenance work completed by the staff.



**FIGURE 3-16 MIGNWC INTERMEDIATE PUMP STATION WITH SPLASH PARK  
MWRDGC NORTHSORE CHANNEL PROPERTY AT BECK PARK  
2551 W. CHURCH STREET EVANSTON, IL 60201**

**KNIGHT**

Engineers & Architects

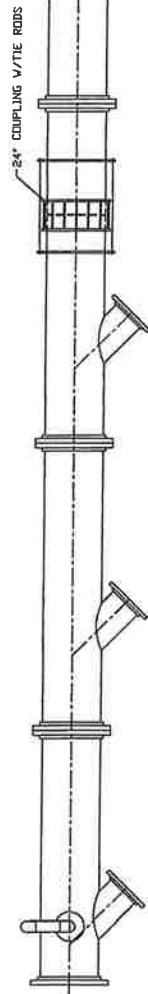


**FIGURE 3-17: NAGLE AVENUE PUMP STATION  
7900 NAGLE AVE. MORTON GROVE, IL 60053**

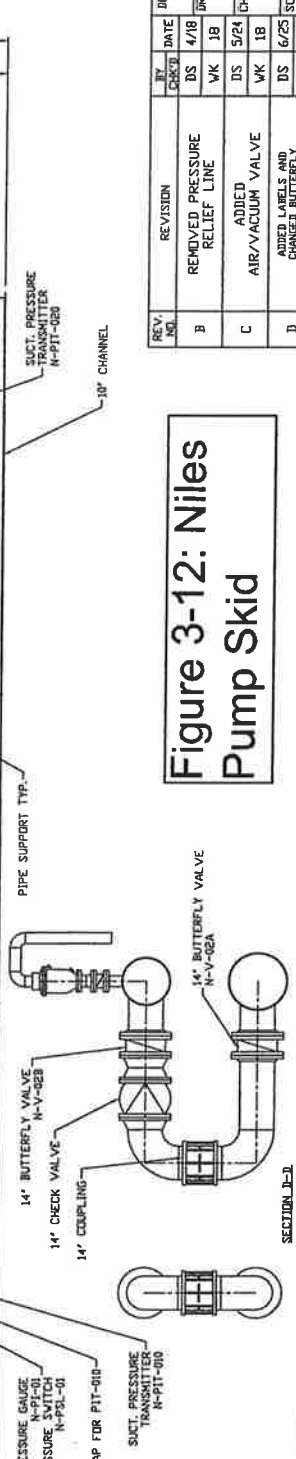
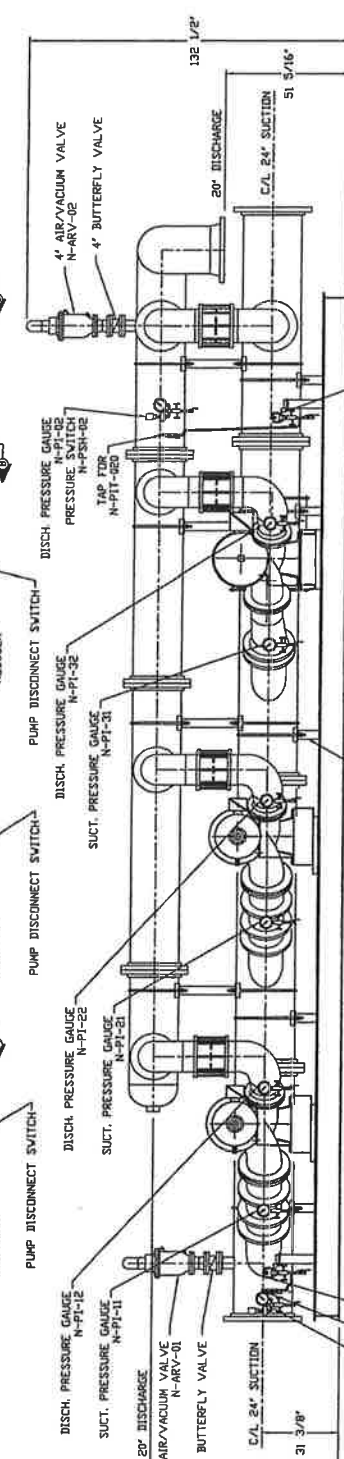
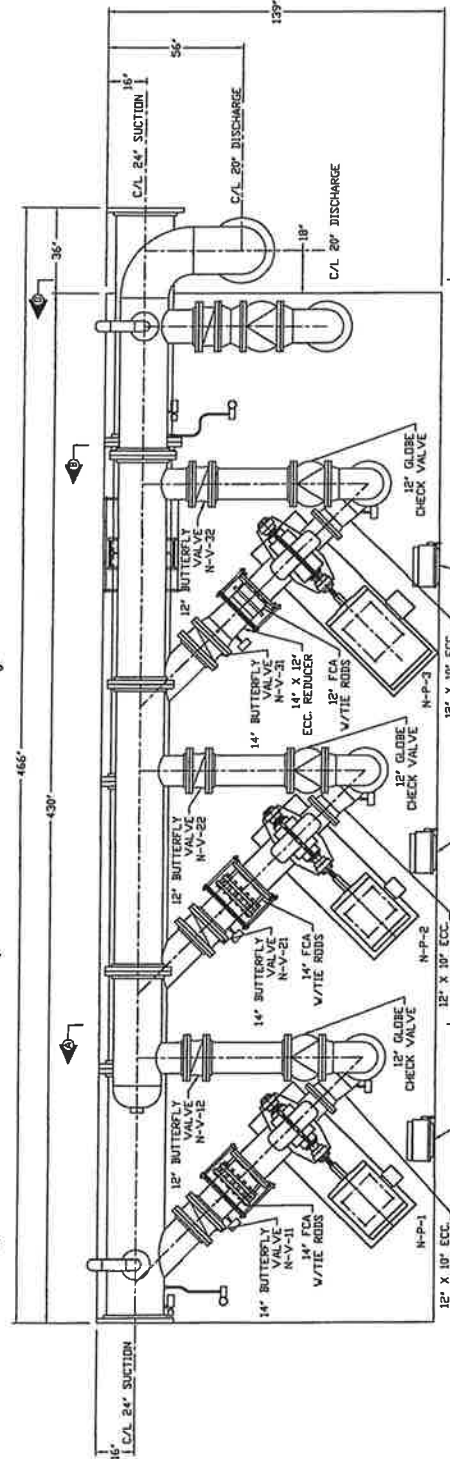
**KNIGHT**

Engineers & Architects





PAINT REQUIREMENTS:  
 APPLY 6 MILS EPOXY ENAMEL  
 INTERIOR OF PIPING  
 FUSION BONDED EPOXY COATED PER CB13



**Figure 3-12: Niles Pump Skid**

REV. NO.	REVISION	BY	DATE	DESIGNED BY	DATE
B	REMOVED PRESSURE RELIEF LINE	DS	4/18	JB	3/9
C	ADDED AIR/VACUUM VALVE	DS	5/24	JB	3/9
D	ADDED LABELS AND CHANGED BUTTERFLY VALVES (A15)	DS	6/25	WK	18

SCALE	SCALE
18	18

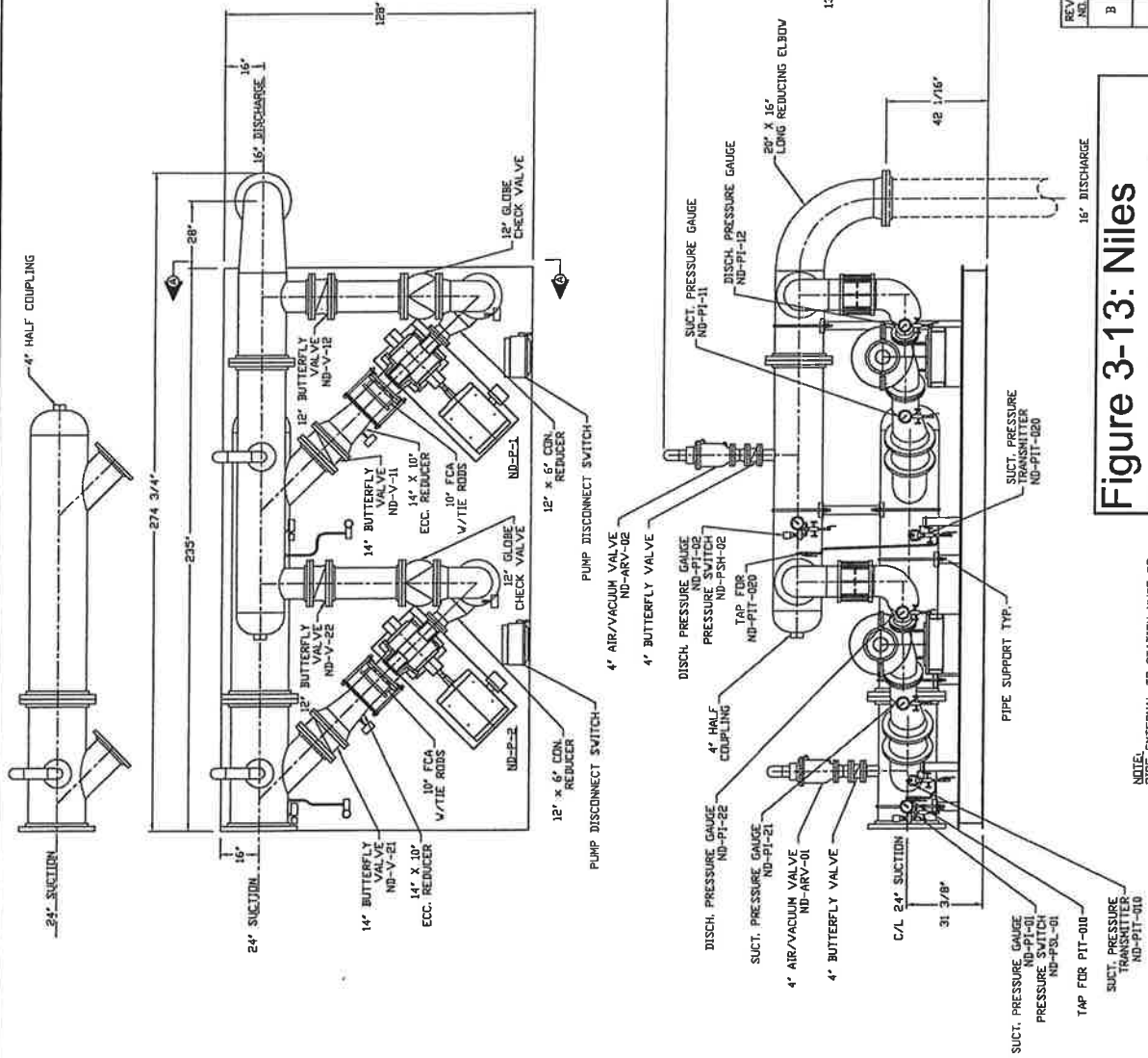
  

JOB NO.	8193
DWG. NO.	8193

USEMCO	USEMCO INCORPORATED
DESIGNATION	MORTON GROVE, IL
FILE NO.	580 6589 372-5911 TDMH VL 54650

PAINT REQUIREMENTS:  
 APPLY 6 MILS EPOXY ENAMEL  
 INTERIOR OF PIPING  
 FUSION BONDED EPOXY COATED PER C213



**Figure 3-13: Niles Distribution Pump Skid**

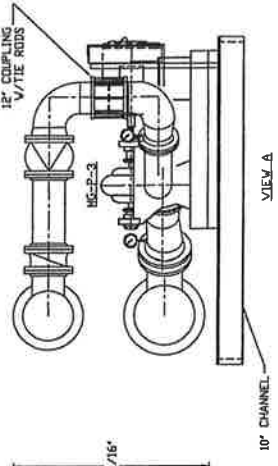
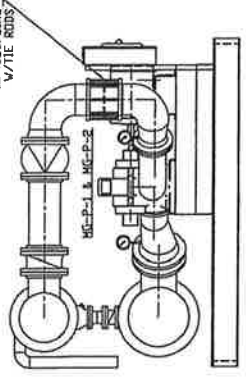
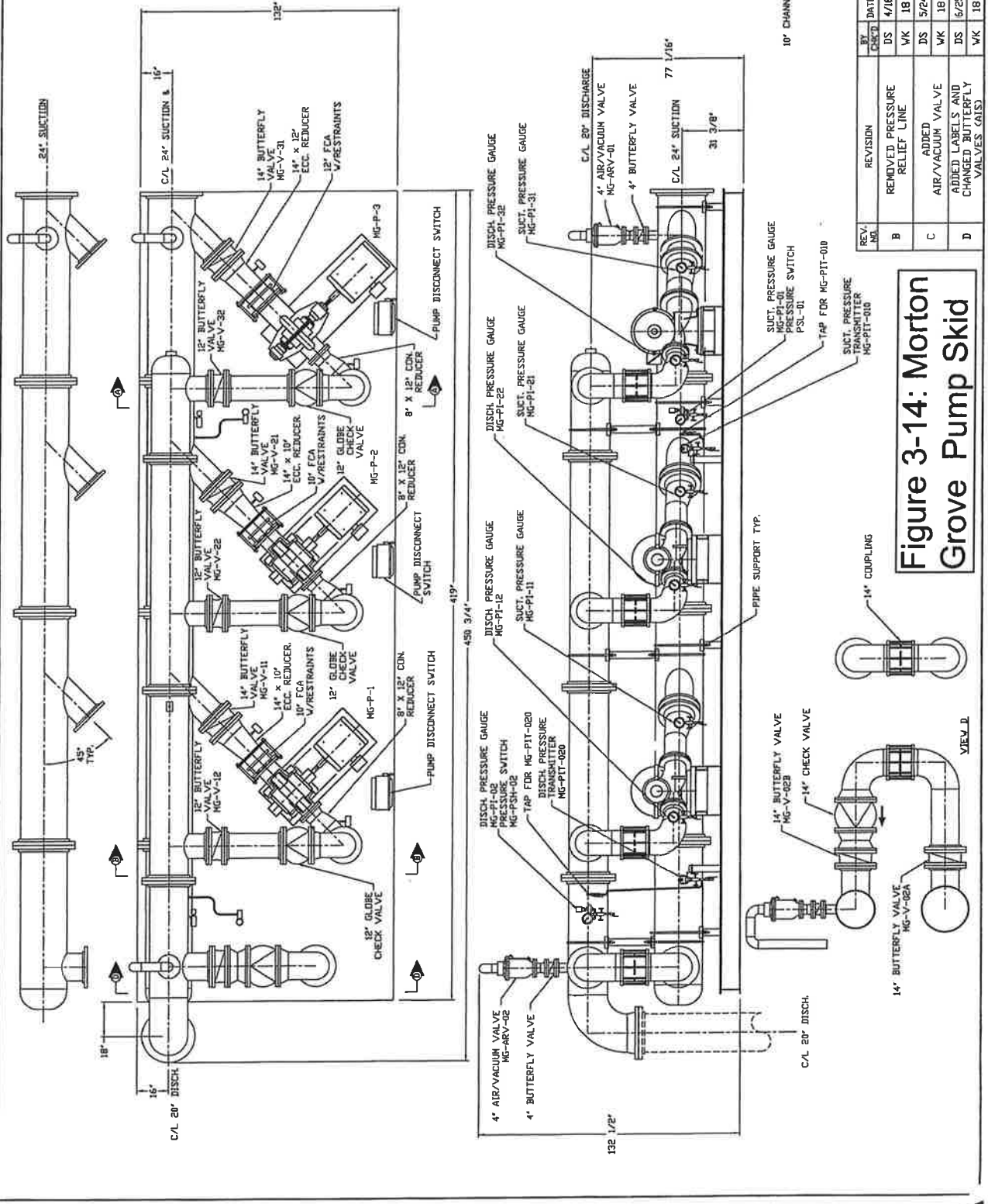
NOTE:  
 PIPE EXTERNAL TO STATION MUST BE  
 INDEPENDENTLY SUPPORTED.

REV. NO.	REVISION	BY	DATE	DESIGNED BY	DATE
B	20" DISCHARGE TO 16"	DS	4/17	DRAWN BY	DATE
C	AIR/VACUUM VALVE ADDED LABELS AND CHANGED BUTTERFLY VALVES GAS	WK	5/24	JB	3/8
D		WK	6/25	WK	1B

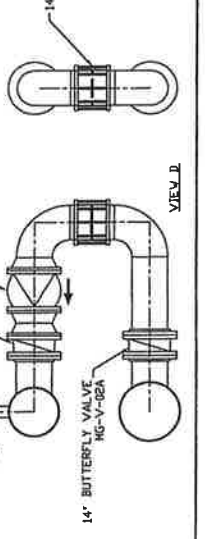
USEMCO INCORPORATED P.O. BOX 559 60603 376-5911 TOWNAH VI. 54660
MORTON GROVE, IL (MGNVC NILES DIST.)
DWG. NO. 8192
JOB NO.

PAINT REQUIREMENTS:  
 APPLY 6 MILS EPOXY ENAMEL  
 INTERIOR OF PIPING  
 FUSION BONDED EPOXY COATED PER C213



REV. NO.	REVISION	BY	DATE	DESIGNED BY	DATE
B	REMOVED PRESSURE RELIEF LINE	DS	4/18	USEMCO INCORPORATED	
C	ADDED AIR/VACUUM VALVE	WS	5/24	USEMCO INCORPORATED	
D	ADDED LABELS AND CHANGED BUTTERFLY VALVES (A1S)	DS	6/25	USEMCO INCORPORATED	

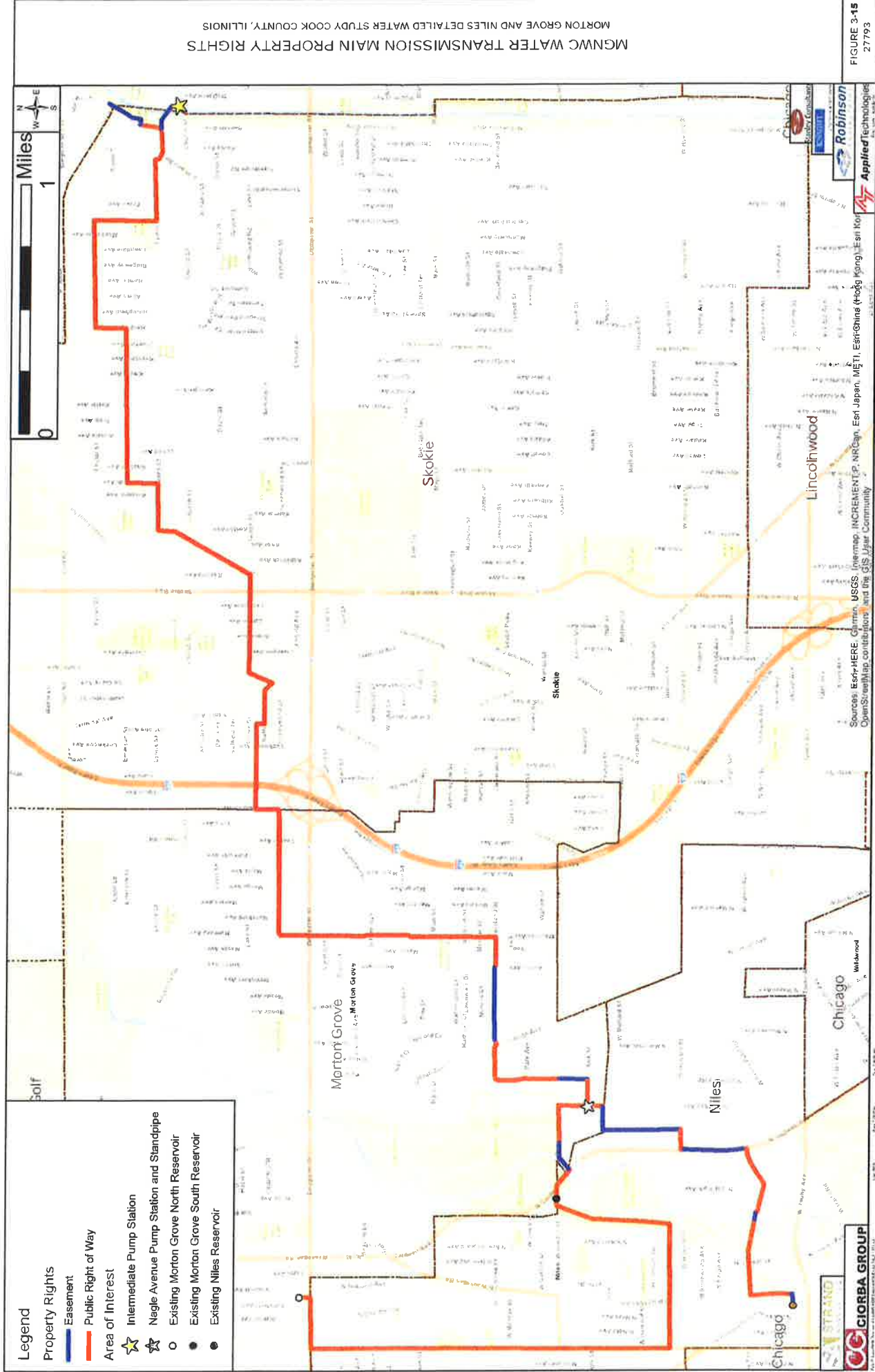
**Figure 3-14: Morton Grove Pump Skid**



**USEMCO**  
 USEMCO INCORPORATED  
 P.O. BOX 580 GARDNER, ILL. 61033  
 MORTON GROVE, ILL.  
 CHGNVC MORTON GROVE P.S.  
 DWG. NO. 81194  
 WK 18  
 JOB NO.

MORTON GROVE AND NILES DETAILED WATER STUDY COOK COUNTY, ILLINOIS

FIGURE 3-15  
27793



- Legend**
- Property Rights**
- Easement
  - Public Right of Way
- Area of Interest**
- ☆ Intermediate Pump Station
  - ☆ Negle Avenue Pump Station and Standpipe
  - Existing Morton Grove North Reservoir
  - Existing Morton Grove South Reservoir
  - Existing Niles Reservoir

Applied Technologies  
Robinson  
CANNON DESIGN GROUP

Sources: Esri-HERE, Garmin, Bing, Invermap, INCREMENT, ARCAN, Esri Japan, METI, Esri-Online (Hobo King), Esri Korea, OpenStreetMap contributors, and the GIS User Community

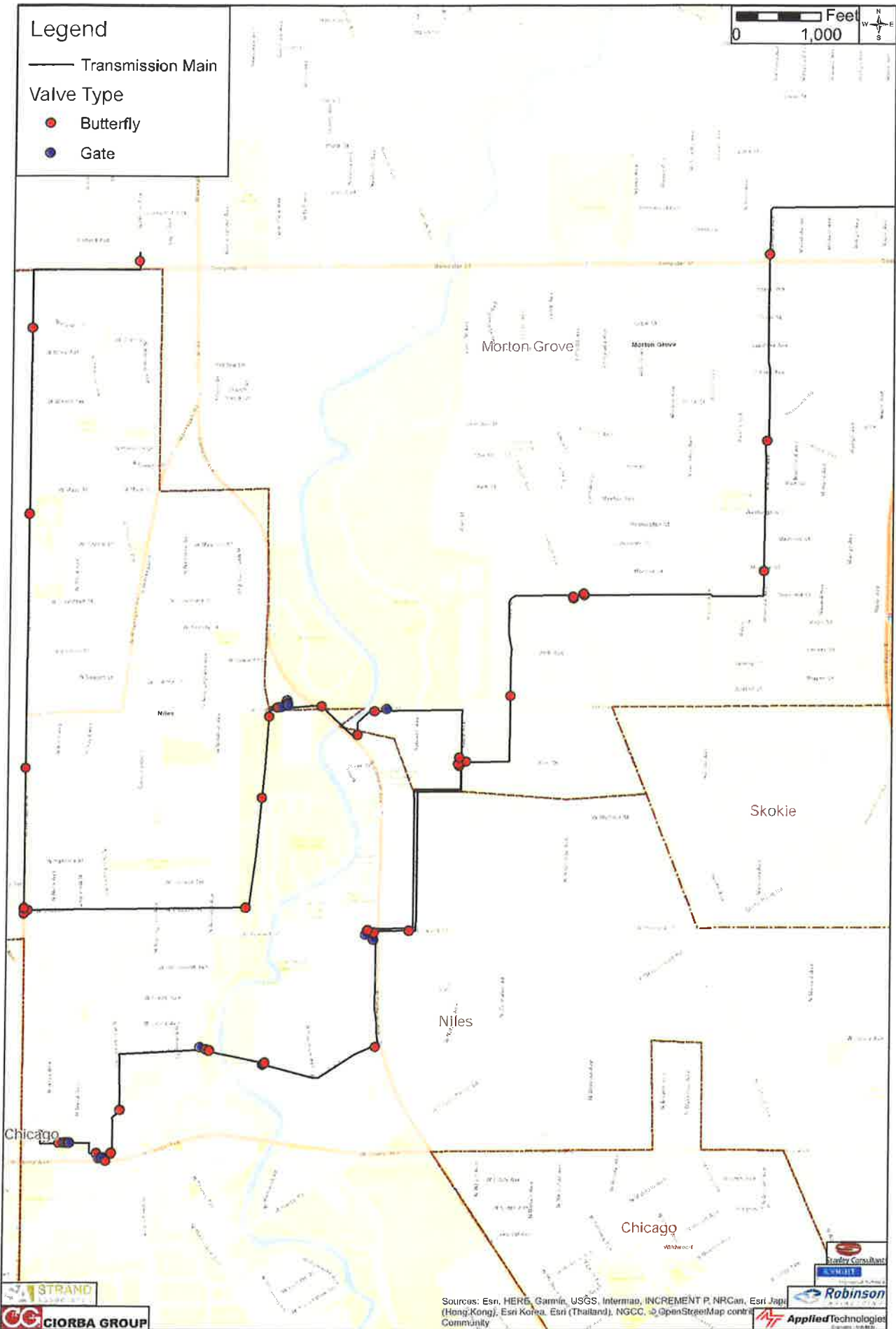
STRAND  
GIORBA GROUP

**Legend**

— Transmission Main

**Valve Type**

- Butterfly
- Gate



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan (Hong Kong), Esri Korea, Esri (Thailand), NGCC, OpenStreetMap contributors



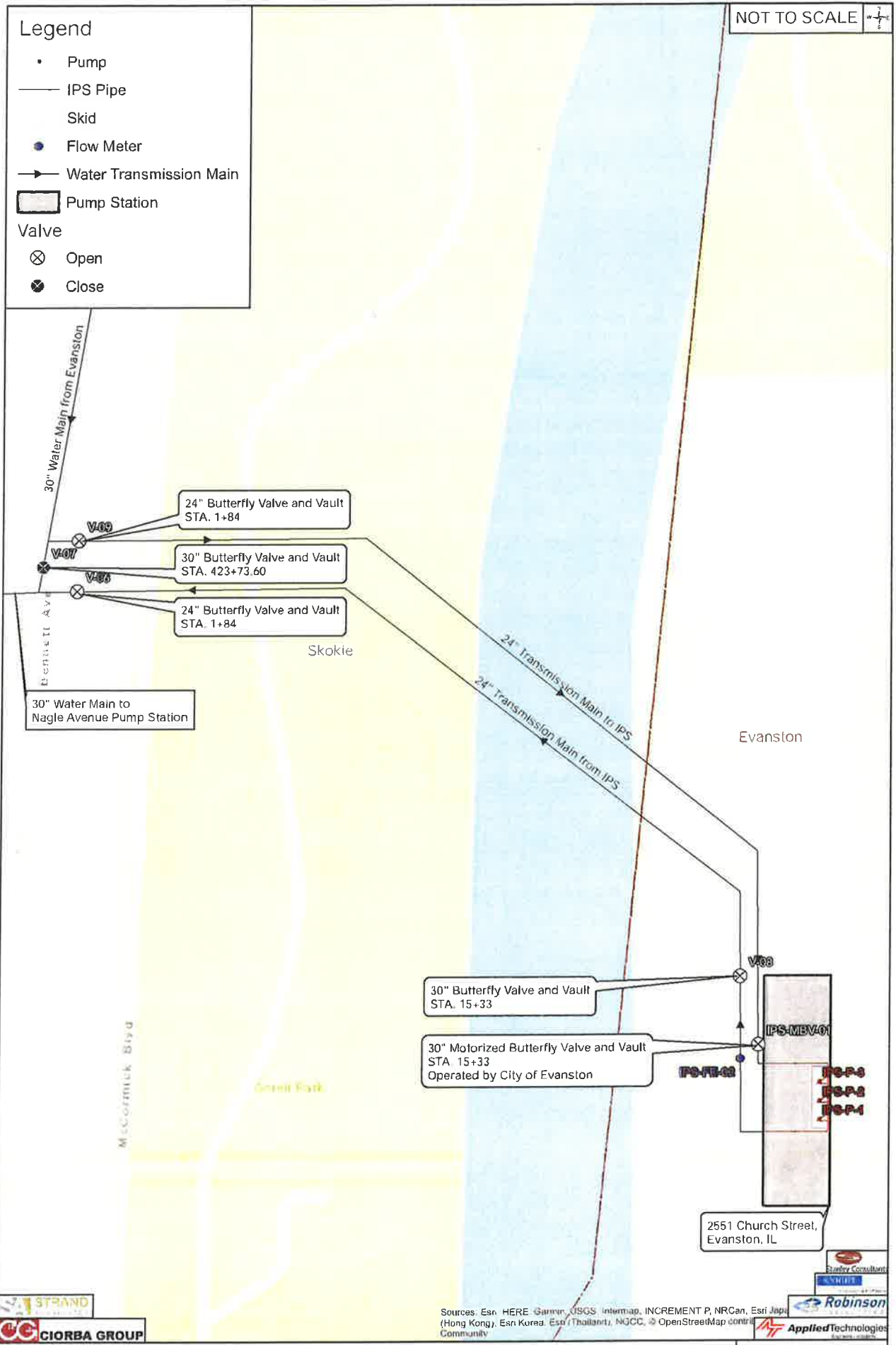
**MGNWC ISOLATION VALVE DETAIL - WEST**  
MORTON GROVE AND NILES DETAILED WATER STUDY COOK COUNTY ILLINOIS

**FIGURE 3-8**  
27793

Legend

- Pump
- IPS Pipe
- Skid
- Flow Meter
- Water Transmission Main
- ☐ Pump Station
- Valve
- ⊗ Open
- ⊗ Close

NOT TO SCALE

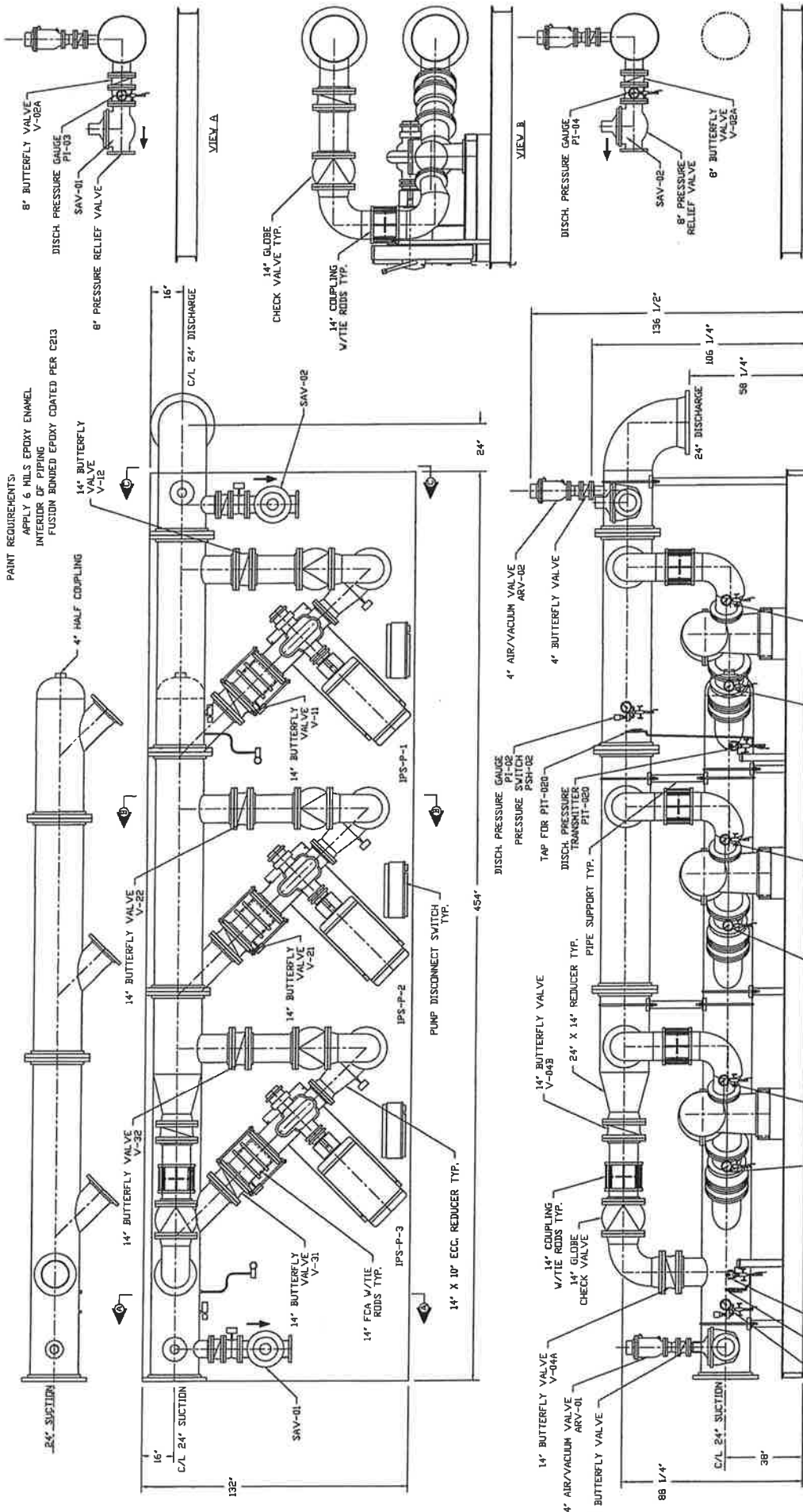


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan (Hong Kong), Esri Korea, Esri (Thailand), NGCC, OpenStreetMap contributors, Swatch, Stanley Consultants, Robinson, Applied Technologies

MGNWC INTERMEDIATE PUMP STATION NORMAL OPERATIONS SCHEMATIC  
MORTON GROVE AND NILES DETAILED WATER STUDY COOK COUNTY, ILLINOIS

FIGURE 3-9  
27793

PAINT REQUIREMENTS:  
 APPLY 6 MILS EPOXY ENAMEL  
 INTERIOR OF PIPING  
 FUSION BONDED EPOXY COATED PER C213



REV. NO.	REVISION	BY	DATE	DESIGNED BY	DATE
A	DESIGNED PRESSURE RELIEF VALVE AND ASSOCIATED PIPING CHANGED BUTTERFLY VALVES 0453	DS	6/75	DS	4/79
B	ADDED LABELS, PRESSURE RELIEF LINES AND GAUGES	WK	6/26	DS	18

**USEMCO**  
 USEMCO INCORPORATED  
 501 BOX 550 6083 272-5911 TOMAH, WI 54660












DESCRIPTION  
 MORTON GROOVE, IL  
 (MGNWC INTERMEDIATE\_P.S.)

DWG. NO. 8224  
 JOB NO.

**Figure 3-10: IPS Pump Skid**

NOTE:  
 PIPE EXTERNAL TO STATION MUST BE INDEPENDENTLY SUPPORTED.

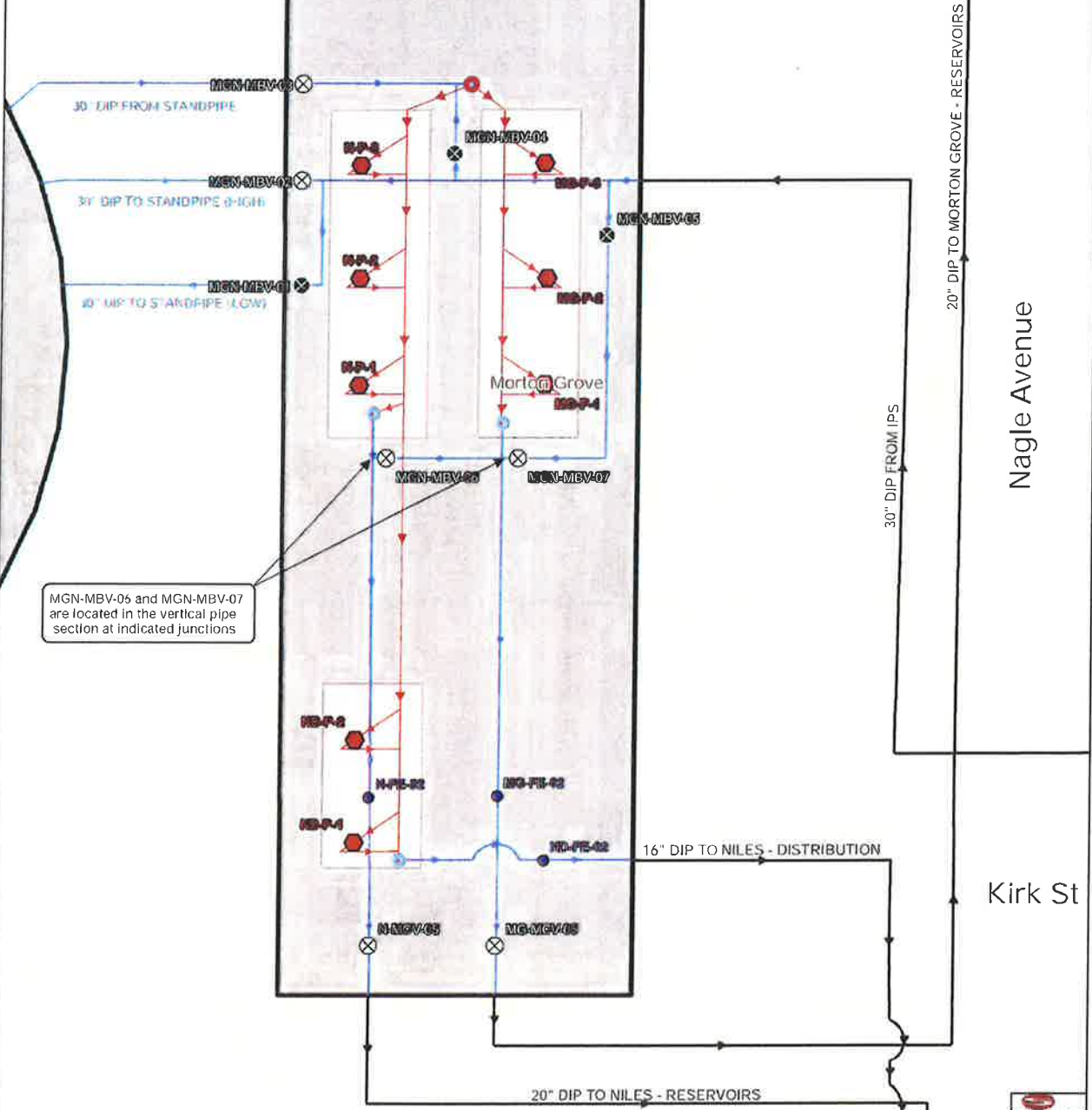
Legend

-  Pump
-  Suction Riser
-  First Floor Pipe
-  Skid
-  Discharge to Basement
-  Flow Meter
-  Basement/Underground Pipe
-  Water Transmission Main
-  Pump Station / Standpipe
- Valve
-  Open
-  Close

Red = First Floor  
 Blue = Basement/Underground

NOT TO SCALE

7900 Nagle Avenue,  
 Morton Grove, IL



MGN-MBV-06 and MGN-MBV-07 are located in the vertical pipe section at indicated junctions



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, Community



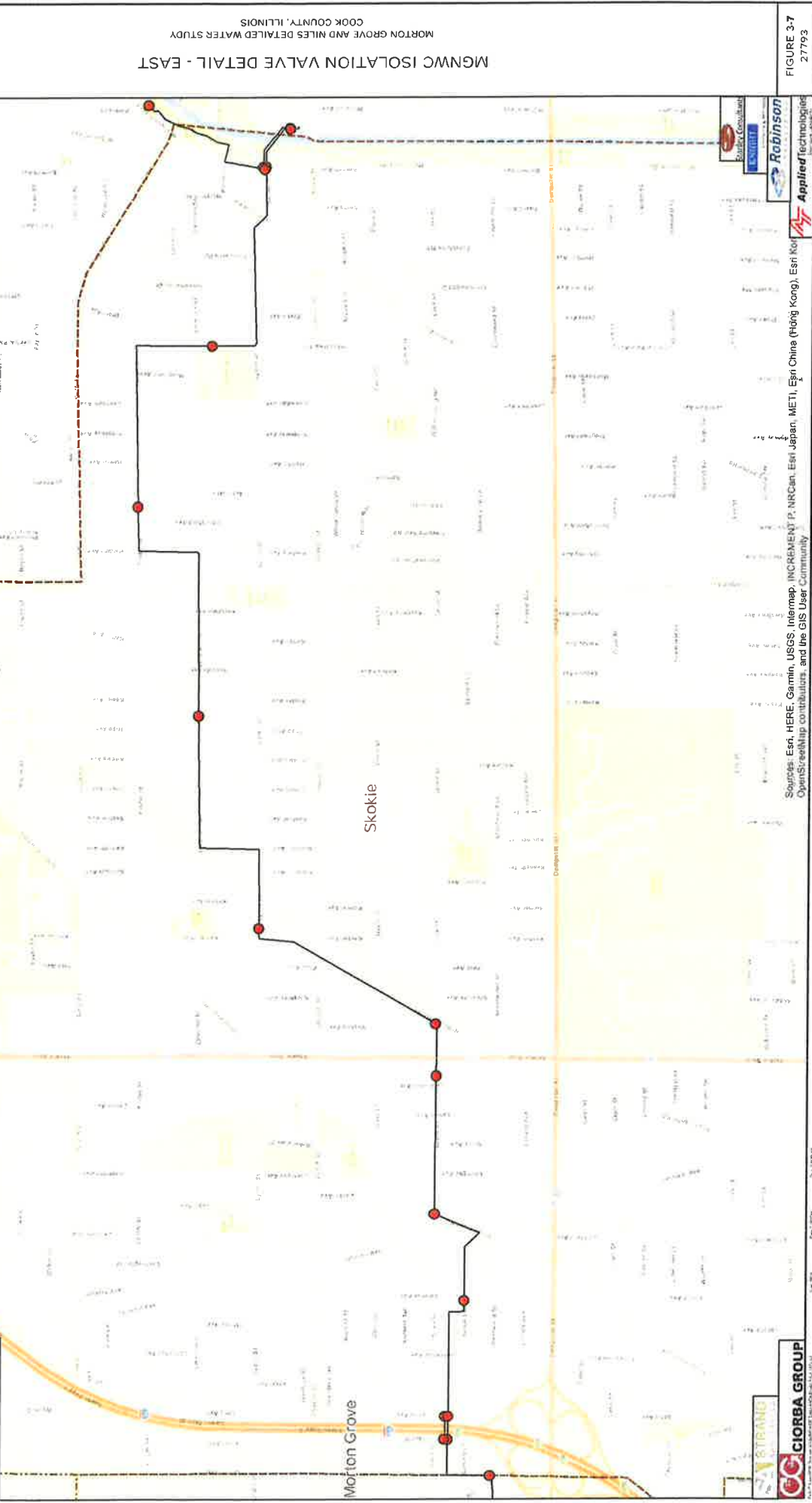
MGNWC NAGLE AVENUE PUMP STATION NORMAL OPERATION CONDITIONS SCHEMATIC  
 MORTON GROVE AND NILES DETAILED WATER STUDY COOK COUNTY, ILLINOIS



**Legend**

- Transmission Main
- Valve Type
- Butterfly
- Gate

0 1,000 Feet



MGWVC ISOLATION VALVE DETAIL - EAST  
MORTON GROVE AND NILES DETAILED WATER STUDY  
COOK COUNTY, ILLINOIS

FIGURE 3-7  
27793

**Applied Technologies**  
Water & Wastewater Division

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Swisstopo, DeLorme, NAVTEQ, and the GIS User Community

**Robinson**  
L. SULLIVAN  
Sanitary Consultant

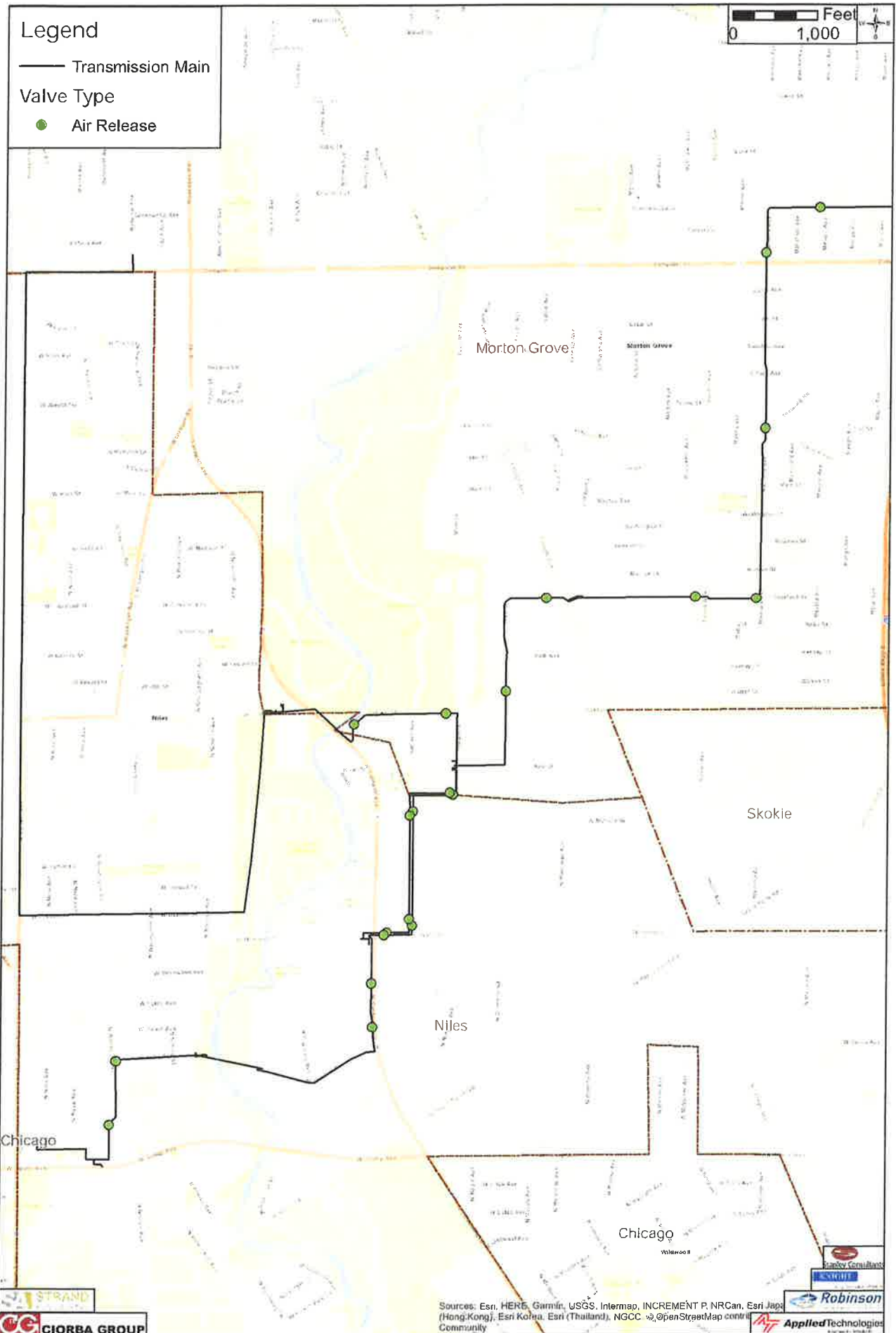
**CIORBA GROUP**  
Water & Wastewater Division

Legend

— Transmission Main

Valve Type

● Air Release



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan (Hong Kong), Esri Korea, Esri (Thailand), NGCC, @OpenStreetMap contributors



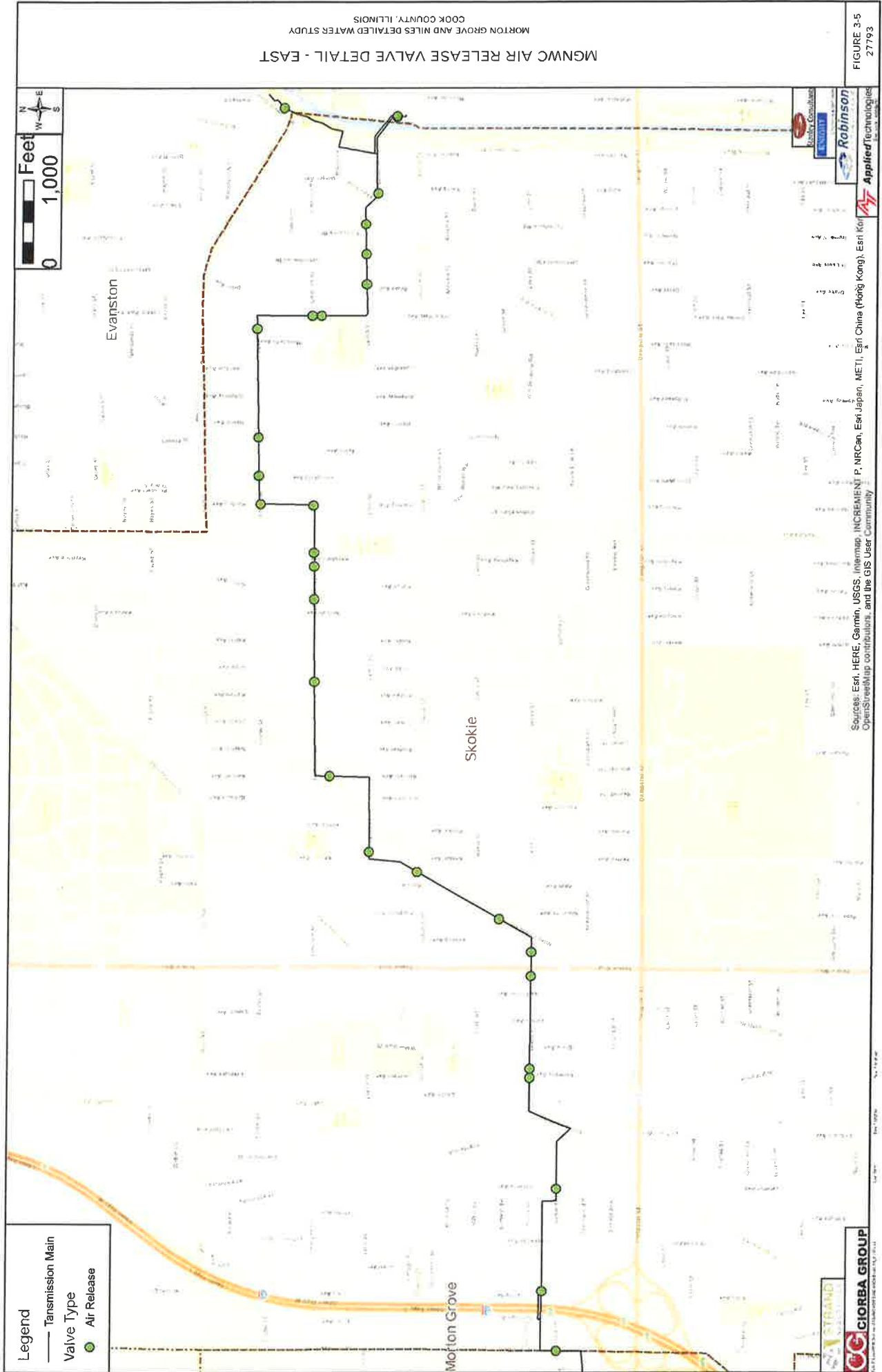
MGNWC AIR RELEASE VALVE DETAIL - WEST  
MORTON GROVE AND NILES DETAILED WATER STUDY COOK COUNTY, ILLINOIS

FIGURE 3-6  
27793

# MGNWC AIR RELEASE VALVE DETAIL - EAST

MORTON GROVE AND MILES DETAILED WATER STUDY  
COOK COUNTY, ILLINOIS

FIGURE 3-5  
27793



Legend  
— Transmission Main  
● Air Release

Feet  
0 1,000

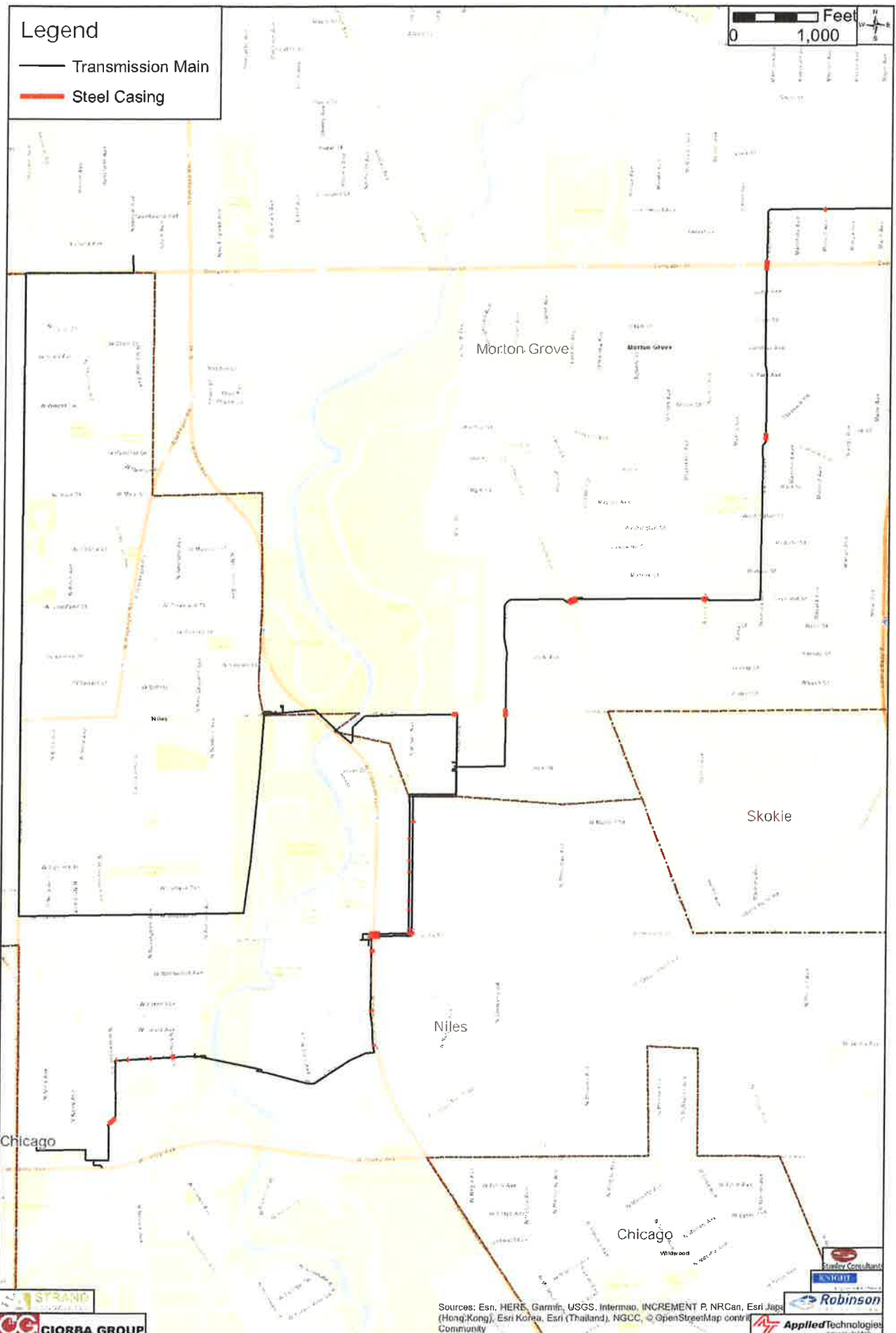
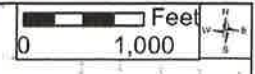


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Singapore), Esri (Switzerland), Esri (Taiwan), Esri (USA), Esri (UK), Esri (France), Esri (Germany), Esri (Italy), Esri (Spain), Esri (India), Esri (Brazil), Esri (Mexico), Esri (Colombia), Esri (Chile), Esri (Argentina), Esri (Venezuela), Esri (Cuba), Esri (Czech Republic), Esri (Poland), Esri (Slovak Republic), Esri (Slovenia), Esri (Croatia), Esri (Hungary), Esri (Romania), Esri (Bulgaria), Esri (Greece), Esri (Turkey), Esri (Russia), Esri (Ukraine), Esri (Belarus), Esri (Kazakhstan), Esri (Kyrgyzstan), Esri (Uzbekistan), Esri (Tajikistan), Esri (Korea), Esri (China), Esri (Japan), Esri (India), Esri (Australia), Esri (New Zealand), Esri (South Africa), Esri (Egypt), Esri (Saudi Arabia), Esri (Iraq), Esri (Jordan), Esri (Lebanon), Esri (Syria), Esri (Yemen), Esri (Oman), Esri (UAE), Esri (Qatar), Esri (Bahrain), Esri (Kuwait), Esri (Kosovo), Esri (Albania), Esri (Serbia), Esri (Montenegro), Esri (Czech Republic), Esri (Slovak Republic), Esri (Slovenia), Esri (Croatia), Esri (Hungary), Esri (Romania), Esri (Bulgaria), Esri (Greece), Esri (Turkey), Esri (Russia), Esri (Ukraine), Esri (Belarus), Esri (Kazakhstan), Esri (Kyrgyzstan), Esri (Uzbekistan), Esri (Tajikistan), Esri (Korea), Esri (China), Esri (Japan), Esri (India), Esri (Australia), Esri (New Zealand), Esri (South Africa), Esri (Egypt), Esri (Saudi Arabia), Esri (Iraq), Esri (Jordan), Esri (Lebanon), Esri (Syria), Esri (Yemen), Esri (Oman), Esri (UAE), Esri (Qatar), Esri (Bahrain), Esri (Kuwait), Esri (Kosovo), Esri (Albania), Esri (Serbia), Esri (Montenegro)



Legend

- Transmission Main
- Steel Casing



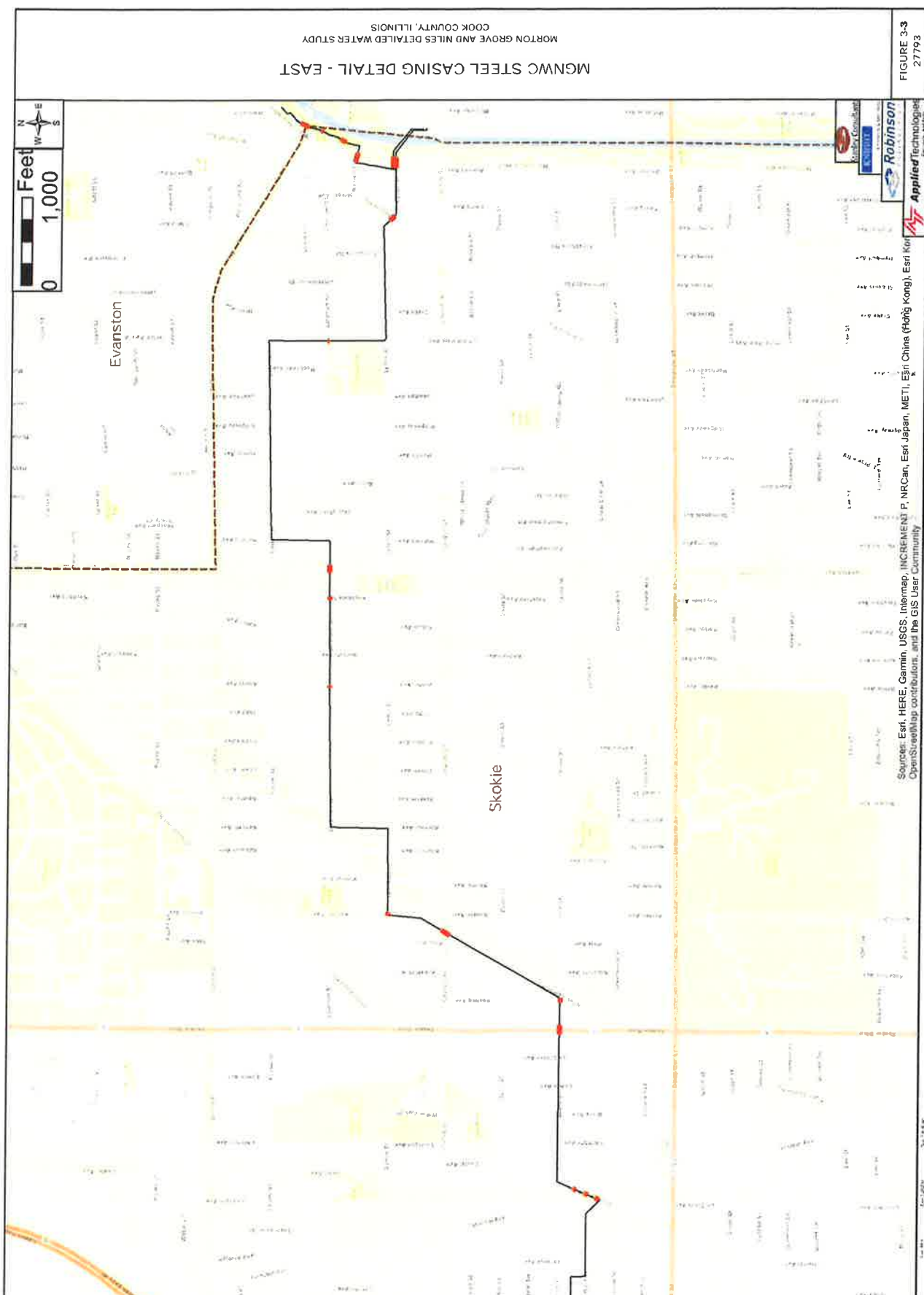
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Jaga (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, Applied Technologies

MGNWC STEEL CASING DETAIL - WEST  
MORTON GROVE AND NILES DETAILED WATER STUDY COOK COUNTY ILLINOIS

FIGURE 3-4  
27793

**Legend**

- Transmission Main
- Steel Casing



MGWC STEEL CASING DETAIL - EAST  
 MORTON GROVE AND NILES DETAILED WATER STUDY  
 COOK COUNTY, ILLINOIS

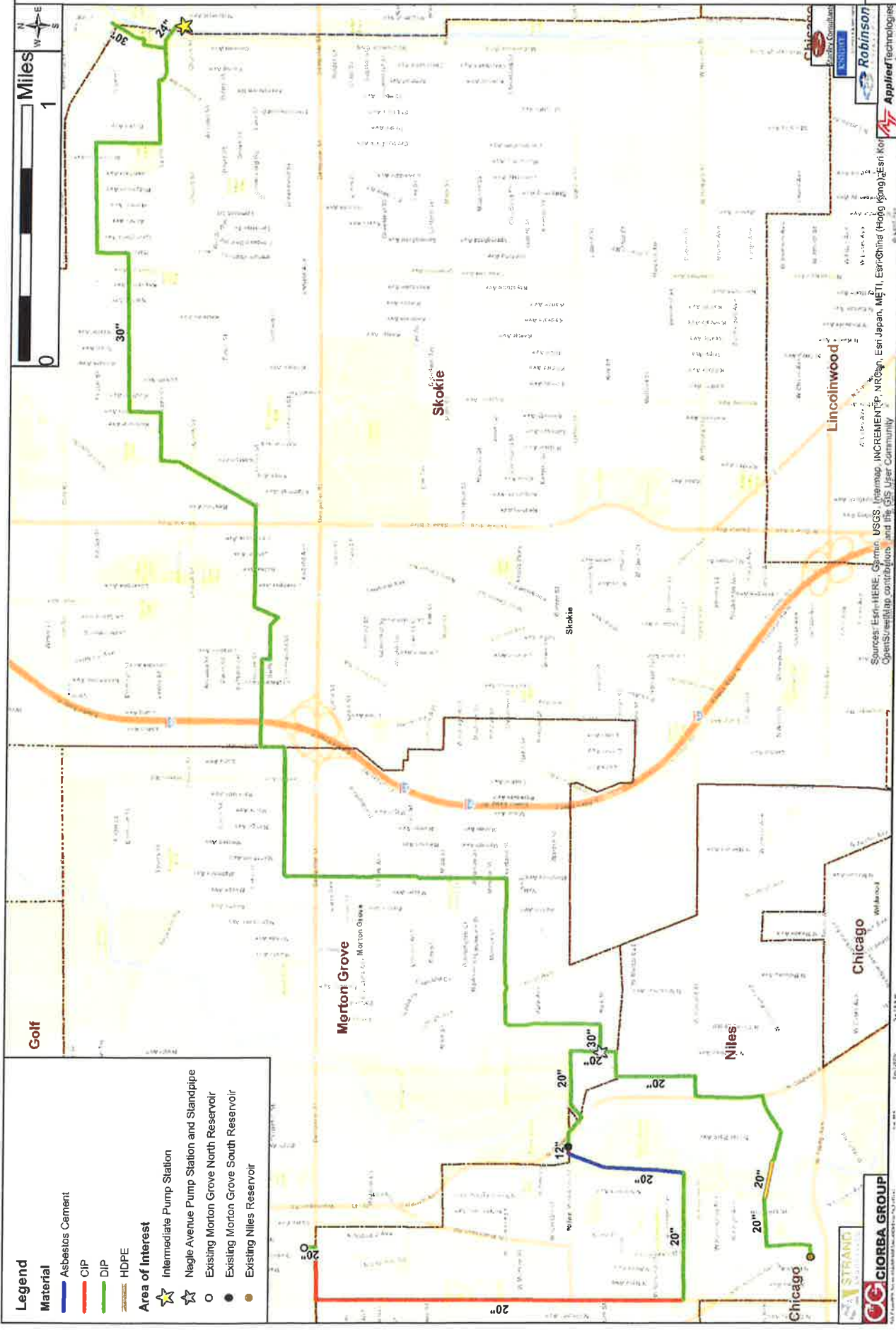
**GIORBA GROUP**  
 3111 North Lincoln Avenue, Suite 200  
 Chicago, IL 60642  
 Phone: (773) 348-1100  
 Fax: (773) 348-1101  
 Email: info@giorgbargroup.com  
 Website: www.giorgbargroup.com

**Applied Technologies**  
 1100 North Lincoln Avenue, Suite 200  
 Chicago, IL 60642  
 Phone: (773) 348-1100  
 Fax: (773) 348-1101  
 Email: info@appliedtechnologies.com  
 Website: www.appliedtechnologies.com

**Robinson**  
 1100 North Lincoln Avenue, Suite 200  
 Chicago, IL 60642  
 Phone: (773) 348-1100  
 Fax: (773) 348-1101  
 Email: info@robinson.com  
 Website: www.robinson.com

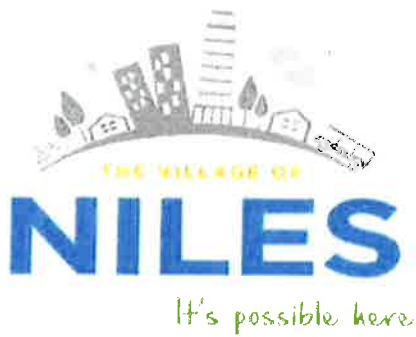
Source: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Switzerland), Swisstopo, Esri Taiwan, DeLorme, NAVTEQ, AeroGRID, IGN, Esri, Mapbox, Swire, Ngeo, OpenStreetMap contributors, and the GIS User Community

MORTON GROVE AND NILES DETAILED WATER STUDY COOK COUNTY, ILLINOIS  
**MGWC WATER TRANSMISSION MAIN SIZES & MATERIALS**



**FIGURE 9-2**  
 27793

**Attachment B**  
**Agreed Scope of Services**



## PUBLIC SERVICES

### MAYOR

Andrew Przybylo

### VILLAGE MANAGER

Steven C. Vinezeano

### VILLAGE CLERK

Marlene J. Victorine

### TRUSTEES

George D. Alipogianis

John C. Jelen

Joe LaVerde

Danette O'Donovan Matyas

Dennis McCreery

Dean Strzeleski

November 16, 2018

Bill Balling  
Superintendent  
MGNWC  
1000 Civic Center  
Niles, IL 60714

Subject: Proposal for Operation of the MGNWC Water system

Dear Mr. Balling,

Please find the enclosed proposal for Niles to operate the MGNWC water system. In addition to the lump sum price, we have included a line item breakdown of the proposal for your review. We look forward to discussing this proposal with the commission in more detail.

In order to prepare this proposal within the response timeline we made some assumptions and exclusions. In the spirit of full transparency, we provide a brief list of the critical items:

#### Assumptions

- We recommend that a watch and protect level inspection is provided for work around the transmission main. In order for Niles to provide this level of service it would require a dedicated FTE.
- See attached IT assumptions

#### Key Exclusions

- Spare Parts and Chemicals will be purchased directly by the Commission based on the recommendations of the operator. The Operations contract budget does not include these procurements.
- Utility Bills will be paid directly by the commission.
- The Stand Pipe will be subject to a full evaluation near the completion of the 1-year warranty period circa April 2020. Subsequent inspections will be based on the condition of the tank, but are assumed to be outside the initial contract period.
- Stand Pipe will not require cleaning after 1-year of use.
- Water sampling and testing for UCMR and TTHM is not included.



- Significant Engineering design, analysis, or oversight is not included.

Thank you for the opportunity to submit this proposal. We believe that Niles has a long term track record of efficient water operations, including serving the North Maine/Aqua system for many years. We look forward to continuing that track record with MGNWC.

Respectfully Submitted,

Steven Vinezeano  
Village Manager

## **IT and SCADA Support Proposal - Detail**

Niles is submitting this proposal to provide the IT portion of the SCADA/IT contractual services to operate the technical systems in the MGNWC wholesale water delivery system. Since the RFP is vague on the details for this category of operational support, this proposal is contingent on the following assumptions being acceptable:

### **Assumptions**

- **The Initial Install/Build of the system includes a monitoring system which:**
  - Tests and alerts on any communications link that goes down
  - Alerts on any security issues
  - Alerts on any systems issues
  - Monitors network performance and alerts outside of normal thresholds
  - Monitors used/available disk space and alerts outside of normal thresholds
  - Monitors UPS battery status and replacement status
  - Monitors server logs
  - Monitors building access
  - Monitors power status
  - Monitors building temperature
- The monitoring system will be installed and setup prior to contract award winner assuming responsibility
- Repair and replacement of equipment will be a budget and expenditure from the commission and not covered in this proposal
- Each Community is responsible for any equipment that they provide
- The group awarded the Operations Contract must be included in the decision process for what equipment and software is installed.
- The group awarded the Operations Contract is to be provided a printed and digital set of all as-builts for entire system
- The group awarded the Operations Contract is to be provided training on all systems
- Any costs related to repair or replacement will be charged to the Commission and not considered to be included in this proposal
- Any programming changes made to the system will first be approved by and then signed off on by the Group awarded the contract
- A detailed digital warranty schedule will be provided including terms and instructions as to how to initiate a warranty repair and a detailed list of who installed each component.
- Any undefined situation, especially where responsibility is not clearly defined, shall be resolved via a consensus of the principle agencies.
- A formal procedure must be developed to allow 24x7 access to a commission decision maker.

## IT and SCADA Support Proposal - Detail

### Included in this proposal (Deliverables)

- Monitoring the systems and addressing the alerts
- Weekly Site Visits
- Troubleshooting any problems that arise
- Alerting the appropriate agency or vendor to a problem or issue that they are responsible for
- Working with the Commission to plan, schedule, execute and pay for any work needed in the system.
- Supervising technical work done on the system or on site
- As much as possible, staff will attempt to perform required work during the Village of Niles normal business hours. Work done during normal business is included in the proposal with no additional cost.
- Technical Staff will be on call/available after hours to address/respond to alerts or issues brought to our attention (with a maximum of 100 hours per year ~ 1/2 day per week). Any after-hour hours over 100 shall be billed to the Commission at a rate of \$80.00 per hour with a two hour minimum.
- Staff will create card access ID's per authorized request from Commission
- Will provide supervised access to facilities during technical work
- Hours spent supporting the MGNWC will be documented and reported monthly to the commission.
- Staff shall be responsible for managing: the Network and all its components, the facility security system(s) and all computer systems and related components. Everything else in the system is not covered by this component of the proposal.
- SCADA shall be managed by the Niles Public Works Water Department by either their staff or a consultant assigned to these tasks.
- Niles IT will work together with PW and the SCADA support staff on any cross over technologies or issues.
- Assist the commission in creating a technical operating budget for the next year.

### IT Support Costs

- \$10,000 Annual allowance for SCADA support Consultant
- \$40,000 for two years – General IT
- At the end of the first year an option to renew will be provided. The cost of the renewal will be based on the real costs experienced in the first year.
- Any after-hour hours of support over 100 hours per year shall be billed to the Commission at a rate of \$80.00 per hour with a two hour minimum.

MGNWC Operations Contract Proposal

Line Item	Description	Costs (2 year Duration)
1	Operator - Labor	\$ 218,850.00
2	Valve Exercising -12"	\$ 1,500.00
3	Valve Exercising -Greater than 12"	\$ 40,000.00
4	Cl-Valve and ARV Maintenance	\$ 15,000.00
5	Fire Hydrant Flushing	\$ 9,000.00
6	Meter Calibration	\$ 15,000.00
7	Vehicle	\$ 10,900.00
8	Tank Inspection	NIC
9	Insurance	\$ -
10	Julie - Locates	\$ 90,000.00
11	Chemicals	NIC
12	Administrative Costs	\$ 50,000.00
13	Spare Parts	NIC
14	Laboratory Costs	\$ 1,400.00
15	Misc. Supplies	\$ 20,000.00
	<b>Total</b>	<b>\$ 471,650.00</b>

**MGNWC Operations Contractor Proposals ( November 2018)**

**Submittal Requirements:**

Responding Entity, Name and Primary Contract for Proposal:

Village of Niles, 1000 Civic Center Drive, Niles, IL 60714

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Primary Contact for Proposal - Thomas Powers - Village Engineer

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**Personnel assigned for Work and Licensing**

1. Licensed Operator (part time) Jeff Gattuso
2. Maintenance Custodian (part time) Jeff Gattuso
3. On demand electrician John Kosina (Retained as needed)
4. On demand SCADA/IT Support Bill Shaw IT/ Bill Schmidt SCADA (Retained as needed)
5. Emergency Response Contractor TBD by Commission (Retained as needed)

**Operations Personnel Pricing**

2019 \$258,525

2020 \$258,525

**IT/SCADA Consultant Pricing**

**2019** \$30,000 \_\_\_\_\_

**2020** \$30,000 \_\_\_\_\_

**Presented by:**

**Chief Administrative Officer** Steve Vinezeano

**Date:** 11/16/19

**For Public Agencies, ratification of awarded Operations Contract is required prior to commencement of operations.**



## REQUEST FOR PROPOSALS

### TWO YEAR OPERATING CONTRACT FOR THE MORTON GROVE-NILES WATER COMMISSION WATER TRANSMISSION, PUMPING, AND STORAGE FACILITIES JANUARY 2019-DECEMBER 31, 2020

The Morton Grove-Niles Water Commission (MGNWC) is seeking Proposals from qualified potable water entities to provide contractual services to operate and maintain the MGNWC wholesale water delivery system to its two customers, the Village of Morton Grove and the Village of Niles beginning in December, 2018 through participation in MGNWC Commissioning activities, with the operations of the water delivery system planned for January 2019. The intended level of service is described in **The MGNWC System Operation and Maintenance Manual Draft-REV 4 dated August 2018**, a copy of the outlined services is attached to this notice. A complete copy of this manual is available in electronic form by contacting the MGNWC Superintendent William Balling at (847) 863-7101, [Bill@wrblc.com](mailto:Bill@wrblc.com), or at the offices of the MGNWC C/O Village of Niles 1000 Civic Center Drive Niles, Illinois 60714.

The new system includes the following:

#### **Vertical Structures:**

##### **Main Pumping Station: 7900 Nagle Avenue Morton Grove**

One story masonry water pumping station with partial basement on Water Commission owned property, with an operational capacity of 12.7 mgd with eight pumps, standby by electrical generating capacity, electronic controls, HVAC systems, operational controls, piping, and operating equipment allowing for the manual and remote control of the facility. Anticipated final cost: \$7,600,000. Expected operational commissioning: May, 2019.

##### **Intermediate Booster Pump Station: 2551 Church Street Evanston**

One story masonry water pumping station with no basement located on an easement on land owned by the MWRDGC with an operational capacity of 12.7 mgd with three pumps, standby electrical generating capacity, electronic controls, HVAC systems, operational controls, piping, and operating equipment allowing for manual and remote control of the facility. Anticipated final cost: \$ 3,000,000. Expected operational commissioning: April, 2019. NOTE: The City of Evanston is contractually obligated to operate the pumping system at this facility, but the MGNWC is responsible for maintenance of the station.



### **Standpipe/Reservoir: 7900 Nagle Avenue Morton Grove**

This 7mgd pre-stressed concrete above ground structure is 95' tall and 115' in diameter, with piping and appurtenances is designed to meet the average daily requirements of the MGNWC member demands when filled. It is located on Water Commission owned property. Anticipated final cost: \$ 8,400,000. Expected operational commissioning: May, 2019.

### **Underground structures:**

**Pipe System Contract 1-** The eastern segment of the water transmission main is located in Skokie and consists of 18,600 'of 30" and 24" diameter wrapped ductile iron water transmission main with valves and appurtenances located on easements and public Rights -of -Way. The constructed value is \$ 17,200,000. Expected operational commissioning: January 2019.

**Pipe System Contract #2-** The western segment of the water transmission main is located in Skokie and Morton Grove and consists of 15,000' of 30" wrapped ductile iron water transmission main with valves and appurtenances located on easements, licensed access, and Public Rights -of -Way. The system also includes two redundant 24" water main crossings under the Eden's expressway (I-94 and the METRA railroad). The constructed value is \$14,800,000. Expected operational commissioning: January, 2019

**Pipe System Contract #3-** These water transmission main segments connects the Main Pump Station with receiving reservoirs in the Village of Morton Grove (2) and the Village of Niles (one reservoir connection and one pressure connection at 7900 Nagle Ave.) This system consists of 11,300 'of 20" wrapped ductile iron pipe, and 3,900 'of 16" wrapped ductile pipe, including valves, and appurtenances. Improvements are located on Commission owned land, easements, and public Rights- of -Way. The constructed value is \$14,400,000. Expected operational commissioning: January, 2019.

**Pipe Maintenance System, contract #4-** This segment improves 14,000 'of existing 20" water main that was lined using the cured in place piping (CIPP) process. The original water main is a combination of cast iron and asbestos concrete main. This line, including valves, interconnections, and appurtenances, located primarily in Morton Grove on public Rights- of -Way and easement property. Upon completion of this maintenance work Morton Grove will convey the transmission line to the Morton Grove-Niles Water Commission. Pipe maintenance work is \$ 4,700,000. Expected operational commissioning: August, 2019.

**Pipe System, Contract #10-** This segment connects the Intermediate Booster Pump Station to the main transmission system and is located on an easement granted by the MRWDGC and consists of two water mains: one 24" inbound and one 24" outbound, with valves and appurtenances. This system is 1,100' in length. The constructed value is \$ 1,820,000. Expected operational commissioning: April 2019.

### **Communications and control system:**

**Fiber optic cable installation and connection.** This work entails installation of 49,500' of fiber optic cable inside conduit installed during pipe construction located in the City of Evanston, and the Villages of Skokie, Morton Grove, and Niles. This system will allow the communication and operations of the elements of the water delivery system. The constructed value is: \$350,000. Expected commissioning: August, 2019.

The initial water delivery will be phased to the completion of the MGNWC infrastructure. January service will rely on direct pressure from the City of Evanston using the MGNWC water transmission system from the Evanston point of connection at McCormick and Emerson in Evanston directly to the receiving reservoirs in Morton Grove at Oakton and Caldwell, and in Niles on Touhy Ave. and Milwaukee Ave. Operations will be enhanced after completion and commissioning of the following additional facilities:

Intermediate Booster Pump Station: 2551 Church Street Evanston April 1, 2019

Standpipe Reservoir: 7900 Nagle Ave. Morton Grove May, 2019

Main Pump Station: 7900 Nagle Ave. Morton Grove May, 2019

### **Responding to this Request for Proposal:**

1. All submissions shall be efficiently prepared and delivered in email format to William Balling Superintendent Morton Grove-Niles Water Commission at [Bill@wrblc.com](mailto:Bill@wrblc.com). Questions should be directed either electronically to the MGNWC Superintendent at the address above or by phone at (847) 863-7101. The responses shall contain a statement that the proposal will meet or exceed the planned level of operations and maintenance contained in **the MGNWC System Operation and Maintenance Manual** along with a contract pricing from January 1, 2019 through December 31, 2020. Proposals are due by 12:00 noon Friday November 16, 2018.
2. The Morton Grove-Niles Water Commission reserves the right to select the best contractor for this work and consideration will be given to both price and operational service record. The proposal should describe the system currently operated which is most similar to the MGNWC facilities and information which the proposer believes best describes the operational performance record of such system.
3. The proposal must include the commitment to provide overall supervision of the operational personnel and overall system maintenance by a qualified water operator who possesses at least a Class C licensing from the IEPA. This person will advise the MGNWC Superintendent on operational and technical matters related to the operations of the system. Availability to respond to operational issues on a 24/7 basis will be required of the contractor. The Operational staffing needs anticipates the access to two part time operators with at least one of the operators being designated as the operations Supervisor and reporting to the MGNWC Superintendent.
4. The Morton Grove-Niles Water Commission intends to review all submitted proposals, and if necessary interview qualified firms in November. Final negotiations will be conducted in November. Service contract award is planned for the Monthly MGNWC meeting November 29, 2018. Ratification by authorizing elected Boards should be completed by December, 2018.
5. THE MGNWC under separate cover will be issuing an additional RFP for emergency excavation and repair services from multiple excavation contractors. The Operations Contractor should be capable to respond to on demand coordination of services of an emergency for MGNWC vertical structures and SCADA, IT systems through a recommended contractor.

6. The MGNWC once in full operations will be an automated system and rely on a SCADA monitoring and control system. Consideration will be given to proposers to also include their own SCADA/IT consultant firm in which they have a successful operating experience. The City of Evanston is already obligated under the MGNWC/Evanston Water Supply Agreement to control the operation of the MGNWC booster pump station located at 2551 Church in Evanston.

**MGNWC Operations Contractor Proposals ( November 2018)**

**Submittal Requirements:**

Responding Entity, Name and Primary Contract for Proposal:

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**Personnel assigned for Work and Licensing**

1. Licensed Operator (part time) \_\_\_\_\_
2. Maintenance Custodian (part time) \_\_\_\_\_
3. On demand electrician \_\_\_\_\_ (Retained as needed)
4. On demand SCADA/IT Support \_\_\_\_\_ (Retained as needed)
5. Emergency Response Contractor \_\_\_\_\_ (Retained as needed)

**Operations Personnel Pricing**

2019 \_\_\_\_\_

2020 \_\_\_\_\_

**IT/SCADA Consultant Pricing**

**2019** \_\_\_\_\_

**2020** \_\_\_\_\_

**Presented by:**

**Chief Administrative Officer** \_\_\_\_\_

**Date:** \_\_\_\_\_

**For Public Agencies, ratification of awarded Operations Contract is required prior to commencement of operations.**

# System Maintenance

### 6.1 Useful Life

The design life of the transmission main is expected to be 100 years or longer if corrosion is monitored and controlled. All ductile iron pipe in the MGNWC system was installed with V-Bio Enhanced Polyethylene Encasement, which provides corrosion control and will extend the useful life of the pipeline. Alternatively, if V-Bio encasement was not used or the pipeline was not installed with proper care the pipeline would experience significant corrosion and would start to experience leakage within 25 to 30 years.

At the time of construction, leak sensors were not installed with the transmission main. After a period of 20 years from the completion of the transmission main construction in 2018, MGNWC should consider installing leak sensors, using industry standard technologies at the time. Therefore, when the sensors are needed when leakage may start to occur, the technology installed is up to date.

Once the transmission main has exceeded its useful life and the number of main breaks becomes unacceptable, MGNWC should install a liner in the pipe to reestablish the integrity of the pipeline. The insertion of a structural liner will extend the service life of the pipeline for an additional 50 to 75 years.

The advancement of pipeline lining technology is eliminating the need to plan for the installation of a redundant transmission mains, but opportunities to interconnect with neighboring systems should be pursued as they become available.

When maintenance is required, valves are provided every 3,000 feet to facilitate the pipeline repairs and maintenance. To facilitate maintenance at complex locations, the transmission main was placed in a 48-inch diameter casing at major intersections and dual 24-inch diameter pipes in 36-inch diameter casings were installed under I-94 and the Metra Railroad.

The design lives of the masonry pumping station structures and the precast concrete standpipe are expected to be 100 years or longer if the facilities are properly maintained.

Mechanical equipment is expected to have service lives that range from 15 to 50 years, again depending on the level of maintenance provided. Both pump stations use split case horizontal type pumps. These types of pumps are easy to maintain, disassemble, and repair. With regular maintenance, it is rare that an entire pump would require replacement. The centrifugal pumps installed at each pump station should have a useful life in excess of 50 years.

The two natural gas generators, 350 kW at the Intermediate Pump Station and 500 kW at the Nagle Avenue Pump Station, should have a useable life expectancy of approximately 20 years based on an average of 150 hours of operation each year.

The electromagnetic flowmeters used at the pump stations and points of delivery should have a useable life expectancy of approximately 20 years. When flowmeters reach the end of their useful life, flow recordings will become increasingly inaccurate despite regular calibration, and will then require replacement.

The 2-ton bridge crane installed at each pump station is expected to have a structural useful life in excess of 30 years and a service life of approximately 20 years for the mechanical parts. In that time, as the products on the market advance, it may become increasingly difficult to secure replacement parts for the aging crane.

The chemical metering peristaltic pumps at the Nagle Avenue Pump Station are expected to have a useful life of approximately 10-15 years. The flexible tubing and other parts of the pump will require replacement more frequently.

## **6.2 Equipment Maintenance**

This section describes general maintenance activities throughout the MGNWC system. See Section 7 for maintenance records and reports forms.

### **6.2.1 Pumps**

At the Intermediate Pump Station, each of the three pumps should be rotated to have equal hours of use each year. At the Nagle Ave. Pump Station, each pair of MG-1 and MG-2, N-1 and N-2, and ND-1 and ND-2 should have equal hours of use each year and will need periodic maintenance. Pumps MG-3 and N-3 are expected to have fewer operating hours. Entire pumps are rarely replaced and with proper maintenance can remain in service for more than 50 years if parts of the pump are maintained and replaced as they wear. Impellers, mechanical seals, shafts, and motors are the most common parts needing maintenance and replacement while pump casings rarely require maintenance. Apart from motors, pumps rarely fail suddenly. Rather their performance declines or they begin to leak. Spare parts shall be kept available for the anticipated pump repairs.

One common maintenance issue with centrifugal pumps is impeller corrosion and cavitation, caused by the collapse of vapor bubbles in the pump. If operators observe abnormal levels of

vibration, a noticeable decrease in flow, or excess noise from the pump, then the pump may require a replacement impeller.

Refer to the Centrifugal Water Pump Operation and Maintenance Manual in Appendix B-4 for additional information.

### **6.2.2 Natural Gas Generator**

The natural gas engine generators at both pump stations should be exercised for 30 minutes each month. A maintenance log should be completed each time the generator is exercised. Refer to the Natural Gas Engine Generator Operation and Maintenance Manual in Appendix B-9 for additional information.

### **6.2.3 Sodium Hypochlorite Feed Equipment**

The flexible rubber tubing located in the pumphead of the peristaltic metering pumps will periodically wear down and require replacement. The Watson Marlow Qdos30 peristaltic metering pumphead is a consumable part and cannot be serviced. Typically, this part will require replacement every 6 to 12 months, depending on usage. Replacement will be required when the tubing in the pumphead is worn down to the point of leakage. For reordering purposes, the pumphead part number is 0M0.225H.GRA.

### **6.2.4 Standpipe**

The 7.0-million-gallon standpipe will eventually need to be inspected, cleaned, and repainted. This interior and exterior maintenance should generally occur every 20 years. The Standpipe must be disinfected after interior inspection, cleaning, and maintenance. See AWWA C652 for more information. Sodium hypochlorite from the Nagle Avenue Pump Station may be used for disinfection procedures.

Routine inspections should occur after the first year of service, and then every 5 to 10 years following the initial inspection<sup>1</sup>. Routine inspection should include the tank walls, floor, dome roof, appurtenances, and should test the water tightness of the Standpipe by isolating the Standpipe and measuring water level drop over time. See AWWA D110 for detailed information.

When the Standpipe is drained for cleaning, inspection, or interior repair, most of the volume can be drained using MG-P-3 and N-P-3. The final 8 inches of the water level are below the outlet pipe and will need to be drained with sump pumps. One sump is provided adjacent to each of the two manways. Any sludge build-up on the tank floor should be brought to the sump and removed from the Standpipe. This sludge should be discharged to the sanitary sewer and not the storm sewer.

### **6.2.5 Butterfly Valves**

Butterfly valves are present throughout the system, both in the transmission main and at the Nagle Ave. Pump Station. Typically, valves require maintenance on the actuator and shaft seals. Valves that are not used frequently should be exercised, either manually or automatically

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<sup>1</sup> AWWA Standard D110: Wire- and Strand- Wound, Circular, Prestressed Concrete Water Tanks



depending on each valves operator, at least once per year. This will help ensure that all valves are operational when needed. If a valve is stuck in the open, closed, or intermediate position, there could be interference with the actuator or inside the valve. If no disrepair is apparent, do not apply excessive force as this could cause internal damage to the valve. Major valve failure will likely require the removal of the valve and repair by the manufacturer<sup>2</sup>. See Section 8.2.11. A valve maintenance log, either on paper or electronically, should be kept ensuring that this maintenance task is documented. Refer to the butterfly valve operation and maintenance manual in Appendix B-3 for additional information.

#### **6.2.6 Magnetic Flow Meters**

The MGNWC system contains a total of 11 magnetic flow meters, one at the IPS, three at the Nagle Ave. Pump Station, three at the Niles Main Plant, two each at the Morton Grove South Reservoir and North Reservoir. These flow meters should be tested and calibrated annually. This work is typically done by a third-party testing and calibration company. Magnetic flowmeters can be calibrated using many different methods, including dry calibration, volumetric calibration, gravimetric calibration, and the master meter method<sup>3</sup>. Refer to the Magnetic Flow Meter Operation and Maintenance Manual in Appendix B-8 for additional information.

#### **6.2.7 Heating, Ventilation, and Air Conditioning (HVAC)**

The MGNWC system utilizes an HVAC system at both the IPS and Nagle Ave. Pump Station. Refer to the (AWWA) Heating, Ventilation, and Air Conditioning (HVAC) Operation and Maintenance Manual in Appendix B-6 for additional information.

#### **6.2.8 Pressure Relief Valves**

The pressure relief valves installed at both pump stations are not lubricated and require minimal maintenance. The valves should be inspected quarterly for proper operation. There are three primary issues that may cause the valve to malfunction, including valve is stuck and does not open or close, valve is free to move but cannot close due to a worn-out diaphragm, or the valve leaks even though it is free to move. See the pressure relief valve specific operation and maintenance manual (Appendix B-13) for specific instructions on performing valve maintenance.

### **6.3 General Maintenance**

Operators should make continuous visual inspections of the MGNWC facilities during operation. Observations of equipment or facility deterioration should be recorded and reported to the Superintendent. Pressing issues that compromise the security or operation of the facility (i.e. basement flooding at the Nagle Ave. Pump Station, free access to pump stations, etc.) should be reported immediately to the Superintendent and repaired as quickly as possible.

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<sup>2</sup> AWWA Standard C504: Rubber Seated Butterfly Valves

<sup>3</sup> AWWA Standard C751: Magnetic Inductive Flowmeters

### 6.3.1 General Maintenance Tasks

The following list should be used as a reference and operators should update the list as necessary.

#### Daily tasks:

- Check water meter and readings
- Check and fill sodium hypochlorite day tanks
- Inspect chemical feed pumps and tubing
- Check chlorine residual at the application point
- Visually inspect the Intermediate Pump Station
- Visually inspect the Nagle Avenue Pump Station
- Visually inspect the Standpipe
- Check Standpipe water level
- Check system instrumentation
- Ensure site security
- Record threats or suspicious activity
- Investigate customer complaints
- Check transmission system pressure
- Respond to JULIE requests

#### Weekly Tasks:

- Inspect chlorine analyzers
- Clean pump stations
- Ensure fire hydrants are accessible
- Conduct weekly security check
- Inspect basement sump pump and clean out sump

#### Monthly Tasks:

- Analyze monthly water quality samples
- Read all customer meters and compare against total water purchased for the month
- Check onsite readings against lab results
- Confirm submittal of monthly reports
- Inspect and replace light bulbs as necessary
- Inspect coiling overhead doors at each pump station and maintain as necessary

- Exercise high-head pumps (MG-P-3 and N-P-3) at the Nagle Ave. Pump Station<sup>4</sup>

Quarterly Tasks:

- Calibrate chemical feed pumps
- Review emergency response plans
- Inspect chemical safety equipment and repair or replace as needed
- Inspect, clean, and repair control panels in pump stations
- Inspect pressure relief valves

Semi-Annual Tasks:

- Inspect storage tanks for defects and clean if necessary
- Exercise fire hydrant valves
- Exercise butterfly valves<sup>5</sup>
- Exercise automatic air release and pressure relief valves
- Inspect chemical feed pumps and replace flexible pumphead tubing if necessary

Annual Tasks:

- Calibrate flow meters
- Overhaul chemical feed pumps, such as O-rings, check valves, and diaphragms
- Prepare for winter operation
- Properly decommission unnecessary equipment
- Pump accumulated water out of each air release valve vault
- Flush hydrants to remove sediment buildup in the pipeline<sup>6</sup>

### 6.3.2 JULIE Requests

Before any excavator begins to dig, they must contact JULIE at least 48 hours in advance. This means that anytime an excavator, whether a homeowner or a utility, plans to dig near any MGNWC buried infrastructure, an alert will come from JULIE and MGNWC will have 48 hours to visibly mark the surface where MGNWC infrastructure is located. Due to the 48 hour turnaround, responding to JULIE requests must be a daily task.

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<sup>4</sup> Operate the high-head pumps for approximately 5-10 minutes per month. Ensure that downstream reservoirs are prepared to receive influx of water from the pump.

<sup>5</sup> Certain butterfly valves will affect flow to the centrifugal pumps in the IPS and Nagle Ave. Pump Station. Pumps must be temporarily shut down while these valves are exercised in order to protect the pumps.

<sup>6</sup> Hydrant flushing may not be required every year depending on the amount of sediment buildup. Adjust frequency based on in-field findings. If water is continually clear when flushing, this may be reduced to every third year. Hydrants should not go more than three years without flushing so that the hydrants are exercised.

In addition to surface markings for excavators, JULIE also handles design requests. When an engineer contacts JULIE regarding underground utility locations, JULIE sends an alert to all utilities in the area. Those utilities are required to send electronic utility location information to the requestor within 48 hours. This is typically a PDF GIS atlas, or design drawings if the area is small enough.

### 6.3.3 Contract Labor

The MGNWC intends to hire contract labor to operate and maintain the water transmission system described in this O&M Manual. Work contracted out by MGNWC includes system operation, system management, legal services, accounting, clerk services, and on-demand services discussed further in this section (see Section 5.8 for additional info) . Listed below is an estimate for the expected full time equivalent<sup>7</sup> (FTE) labor required for the successful operation and maintenance of the system.

**Table 6-1: Estimated Contract Labor Requirements**

<b>Role</b>	<b>Labor (FTE)</b>
<b>Manager/Administrator</b>	0.25
<b>Operator</b>	0.5
<b>Maintenance Custodian</b>	0.5
<b>Electrician</b>	On Call
<b>Pipe Repair Contractor</b>	On Call
<b>SCADA IT Support</b>	On Call

The contract operator will be responsible for the regular maintenance tasks discussed in this section.

The contract operator will also be responsible for having certain on-demand contractors ready to respond to any sort of system failure that will inhibit MGNWC from providing service to its customers, including an electrician, pipe repair contractor, and IT support to respond to any possible malfunctions in the SCADA system. Invoices for these services, when required, will be paid directly by MGNWC.

In addition to the 0.5 FTE operator for normal operations, the system also requires an operator to be available on-call 24 hours per day to respond to alarms and address any emergencies or system failures.

The contract operator will also be responsible for providing liability insurance to cover the Morton Grove – Niles Water Commission, the Village of Morton Grove, and the Village of Niles.

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<sup>7</sup> Full time is considered 40 hours per week.

The superintendent will be responsible for the management of the MGNWC system as described within this Operation and Maintenance Manual. See Section 5 for additional information.

The legal services, accounting, and clerk services will all be contracted labor fulfilling the administrative and legal needs of MGNWC.

#### **6.3.4 Non-MGNWC Maintenance**

The construction and operation of the MGNWC water transmission system will create maintenance tasks for Morton Grove and Niles, notably the maintenance of existing connections with the City of Chicago. These connections will be dead-end connections once the MGNWC system is online, and therefore required additional maintenance. The maintenance of these dead-end connections is the responsibility of Morton Grove and Niles and is not a maintenance task of MGNWC.

Morton Grove and Niles have two options regarding the flushing and disinfecting these dead-end connections.

1. Let the connection sit unused until it is needed, and then flush the line aggressively until water is of acceptable quality. Bacteria levels should be tested, and if unacceptable, the connection should be disinfected with chlorine from the Villages' chlorine feed system.
2. Flush and disinfect the dead-end connection every 6 months to maintain the connection in ready-working condition.

### **6.4 Spare Parts**

MGNWC should have a sufficient supply of spare parts to ensure that system operation is not severely interrupted when a new part is needed. Most equipment has been supplied with important spare parts at the time of installation. These spare parts should be replaced when they are put into service. It is also important for MGNWC to have a small supply of 16, 20, 24, and 30-inch ductile iron in stock so that MGNWC can respond quickly to major water main breaks. For example, if a major main break renders the 30-inch shared transmission main out of service, Table 8-1 lists the time available to make the pipeline repair. Therefore, it is important to have pipe readily available to repair the pipeline in the time available.

#### **6.4.1 Pipe Appurtenances**

Joints:

- Pipe joints are generally push-on type with some mechanical type joints where appropriate. The pipe manufacturer's standard restrained joints are used to prevent the separation of joints in the vicinity of bends and tees.

Interior Pipe Coatings:

- All pipe and fittings have an interior cement lining per AWWA C104 and an exterior asphaltic coating per AWWA C151.

Pipe Fittings (Bends & Tees):

- All fittings are rated for 350 psi and be provided with restrained mechanical joints.

Pipe Gaskets:

- Most gaskets will be styrene butadiene rubber conforming to AWWA C111. Where the pipe is installed in areas of hydrocarbon contamination (oil/gas) Viton or nitrile gaskets are used.

Pipe Hardware:

- Nuts and bolts needed for mechanical buried fittings are manufactured from 316 stainless steel.

Underground Warning Tape:

- Underground warning tape is placed in the trench above the pipe.

Fiber Optic Cable Conduit:

- A 3 or 4-inch diameter plastic conduit is buried in the trench with the water main to allow the installation of a fiber optic cable for the SCADA system.

### Reports and Records

#### **7.1 Water Quality Monitoring**

The MGNWC is designated as a community water supplier (CWS) and as such is required to perform water quality monitoring of its' water transmission system. However, many of the water quality monitoring requirements apply to water distribution systems as opposed to water transmission systems. As such, the MGNWC is only required to perform Coliform monitoring. As the monitoring deadline approaches, the Illinois Environmental Protection Agency (IEPA) will send reminder notifications that detail the requirements and specific timeline within which documents must be completed. The IEPA also provides drinking water testing services as part of their Community Water Supply Testing Program (CWSTP). There is an annual deadline to sign up for the program each fiscal year and in doing so the CWS receives a streamlined and cost-effective process for chemical, coliform, and additional water quality testing. Testing is setup to be performed at EPA laboratories and should the need arise than the IEPA will coordinate and pay for testing provided by other labs. If the MGNWC participates in the CWSTP, all sample containers will be sent to the MGNWC prior to the monitoring period. If the MGNWC does not participate in the CWSTF, it is their responsibility to have all testing completed by an IEPA certified laboratory and submitted on the correct reporting forms within 10 days after the end of a monitoring period. Below are brief descriptions of the parameters that will be sampled and the required documents to submit to IEPA.

### 7.1.1 Total Coliform

The IEPA's Revised Total Coliform Rule (RTCR) requires that all CWS's monitor for the presence of total coliforms in a water system<sup>1</sup>. For water distribution systems, rules are in place regarding the number of samples to be collected per month which are based off the population served as well as the required collection locations. However, the MGNWC pipeline is a transmission main and is consequently subjected to less stringent monitoring requirements. There are two locations along the transmission main where water can be accessed, at the Intermediate Pump Station and the Nagle Avenue Pump Station. Two coliform samples should be collected at each pump station per month. The samples should be collected on separate days of the month, ideally at least one week apart from one another. The samples should be obtained near the beginning of the month to allow time to re-obtain samples within the same testing period should the need arise. The locations where the monthly routine coliform samples are to be registered on MGNWC's approved coliform sample site plan (CSSP). The CSSP is a list of sites by street address, lot number, or other permanent description, that identifies all the approved locations where your monthly coliform samples will be collected. The CSSP must be approved by and on file at the appropriate IEPA Regional Office. Contact the appropriate Regional Office to obtain instructions on how to create a coliform sample site plan or make changes to an existing one.

Only bottles received from a certified laboratory should be used to collect samples. It is extremely important that the sample collector uses only the approved sampling locations and follows proper sampling techniques. Contamination from the sampling faucet can occur if caution is not used. Should an incident occur during sample collection that may result in contamination, the sample should be discarded and a new bottle requested. It is assumed that all samples submitted for testing are properly collected. Sample error will not be accepted as an excuse to avoid repeat sampling. Generally, the following protocol should be followed:

1. Sample bottles should be examined when received. If for any reason (loose caps, caps off, etc.) the sterility of the bottle is in question, the bottles should not be used.
2. Open an approved sampling faucet so that a smooth flow of water at moderate pressure is obtained. Be sure that there is no splashing. Allow the water to flow for sufficient time 2016 Sample Collector's Handbook – Total Coliform Rule Chapter 3-8 to clear the service line. Depending on time of year and water source you may notice a water temperature change when the line has been cleared.
3. If your WS is chlorinated, check for residual chlorine. These results **MUST** be included on the reporting form. Indicate whether the residual measured is free (F) or total (T) chlorine.
4. The bottle cap should not be removed until you are ready to collect the sample. Do not lay the bottle cap down or put it in a pocket. Hold the bottle in one hand and the

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<sup>1</sup> Chapter 3, Appendix A in an EPA document titled, "Sample Collector's Handbook", provided for in this O&M Manual.



cap in the other, keeping the bottle cap right side up (threads down) and taking care not to touch the inside of the cap. Avoid touching the inside of the sterile bottle(s) with your fingers or the faucet nose.

5. Once you start filling the bottles do not adjust the stream flow. Do not allow splashing drops of water from the ground or sink to enter the bottle. Fill the bottle to the 100 ml mark on the side of the bottle. Cap the bottle immediately. Then turn off the faucet.

### **7.1.2 Asbestos**

For the MGNWC system, a portion of the existing water transmission line connecting the Morton Grove South Reservoir to the Morton Grove North Reservoir is asbestos-cement (A-C) pipe. However, this pipe has been rehabilitated with a Class IV structural pipe liner and therefore asbestos contamination is not expected in the MGNWC system. Despite the presence of the pipe liner it is still recommended to abide by the monitoring requirements set forth by the IEPA for A-C pipes. Systems that have A-C pipes and an aggressive water quality index, less than 12, must monitor once every nine years. To maintain an accurate inventory of the current number of systems in the country that have A-C pipes the IEPA send out an asbestos related questionnaire every nine years. The presence of an A-C pipe, determined from the questionnaire, will trigger an initial testing and only if the water quality index indicates that the water is corrosive will monitoring for asbestos be required from a location served by the A-C pipe. Quarterly monitoring will be required if any sample results exceeds 7 million fibers per liter. If actual asbestos monitoring is required for your CWS, specific sampling instructions/requirements will be sent from the IEPA to MGNWC. It is very unlikely that they water quality of Evanston Lake Michigan water will ever reach a water quality index of 12 or less and therefore it is very unlikely that MGNWC will ever be subject to asbestos testing.

## **7.2 Notification of Responsible Operational Personnel**

MGNWC is required to maintain a record with the Illinois Environmental Protection Agency of the key operational personnel. This includes an official custodian, administrative contact, responsible operator in charge (ROINC), and the sampler collector.

The official custodian is the person designated to act on behalf of MGNWC. This person should be the current chairman or chairwoman of the commission.

The administrative contact is a person designated by the official custodian to oversee daily managerial operations for the water system. Documents from IEPA such as sample demand letters, public notice advisories, violations notices, notice of intent to pursue legal action, and other regulator and permitting notices will be sent to the attention of the designated administrative contact.

The responsible operator in charge is the person designated to be responsible for the operation of the water system. The ROINC runs and oversees daily transmission operations. Only one person can be designated as a ROINC for MGNWC.

The sample collector is the person dedicated by MGNWC to collect samples and complete the paperwork associated with sampling.

The personnel currently on file with IEPA for these various roles are:

- Official custodian: Steven Vinezeano, Chair
- Administrative contact: Bill Balling, Superintendent
- Responsible operator in charge: Jeffrey Gattuso
- Sample collector: Jeffrey Gattuso

Any time these roles change, an updated Notification of Responsible Operational Personnel form must be sent to IEPA. The original form and the first update form for MGNWC are attached to this manual as Appendix A. A blank copy of this form is included at the end of this section.

### **7.3 Consumer Confidence Report**

Each year, MGNWC is required to issue a Consumer Confidence Report (CCR) as required by the Safe Drinking Water Act. This report must include the source of drinking water, a statement regarding any violations from the prior year, testing results of regulated contaminants, and water quality data supplied by the City of Evanston. Typically, Community Water Supplies will send the annual CCR or a notification of availability to all residents served by the system. MGNWC does not directly serve any residents and therefore will only be required to post the annual CCR to the MGNWC website.

### **7.4 Additional Records**

In addition to water quality reporting forms, this section also includes blank record logs for daily, weekly, and monthly tasks. These records should be filled out by the operators in order to keep full and complete records of the operations and maintenance work completed by the staff.



**FIGURE 3-16 MGNWC INTERMEDIATE PUMP STATION WITH SPLASH PARK  
MWRDGC NORTHSORE CHANNEL PROPERTY AT BECK PARK  
2551 W. CHURCH STREET EVANSTON, IL 60201**

**KNIGHT**

Engineers & Architects

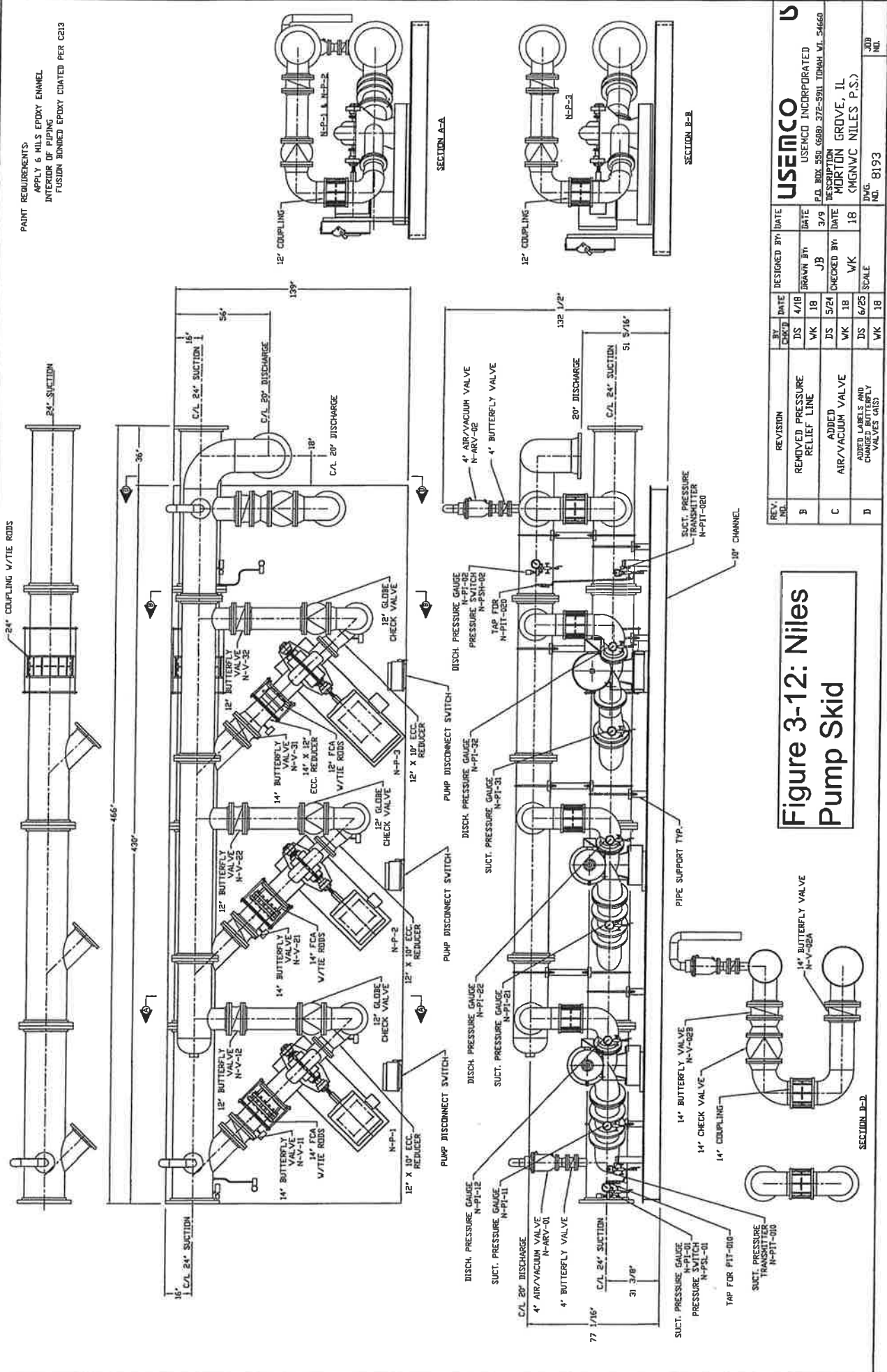


**FIGURE 3-17: NAGLE AVENUE PUMP STATION  
7900 NAGLE AVE. MORTON GROVE, IL 60053**

**KNIGHT**

Engineers & Architects

PAINT REQUIREMENTS:  
 APPLY 6 MILS EPOXY ENAMEL  
 INTERIOR OF PIPING  
 FUSION BONDED EPOXY COATED PER C813



**Figure 3-12: Niles Pump Skid**

REV. NO.	REVISION	BY	DATE	DESIGNED BY	DATE
B	REMOVED PRESSURE RELIEF LINE	DS	4/18	JB	3/9
C	ADDED AIR/VACUUM VALVE	DS	5/24	WK	18
D	ADDED LABELS AND CHANGED BUTTERFLY VALVES (A15)	DS	6/25	WK	18

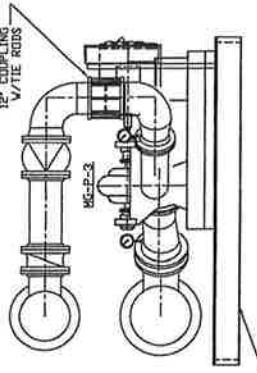
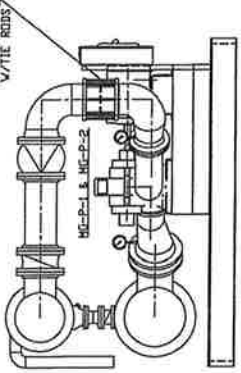
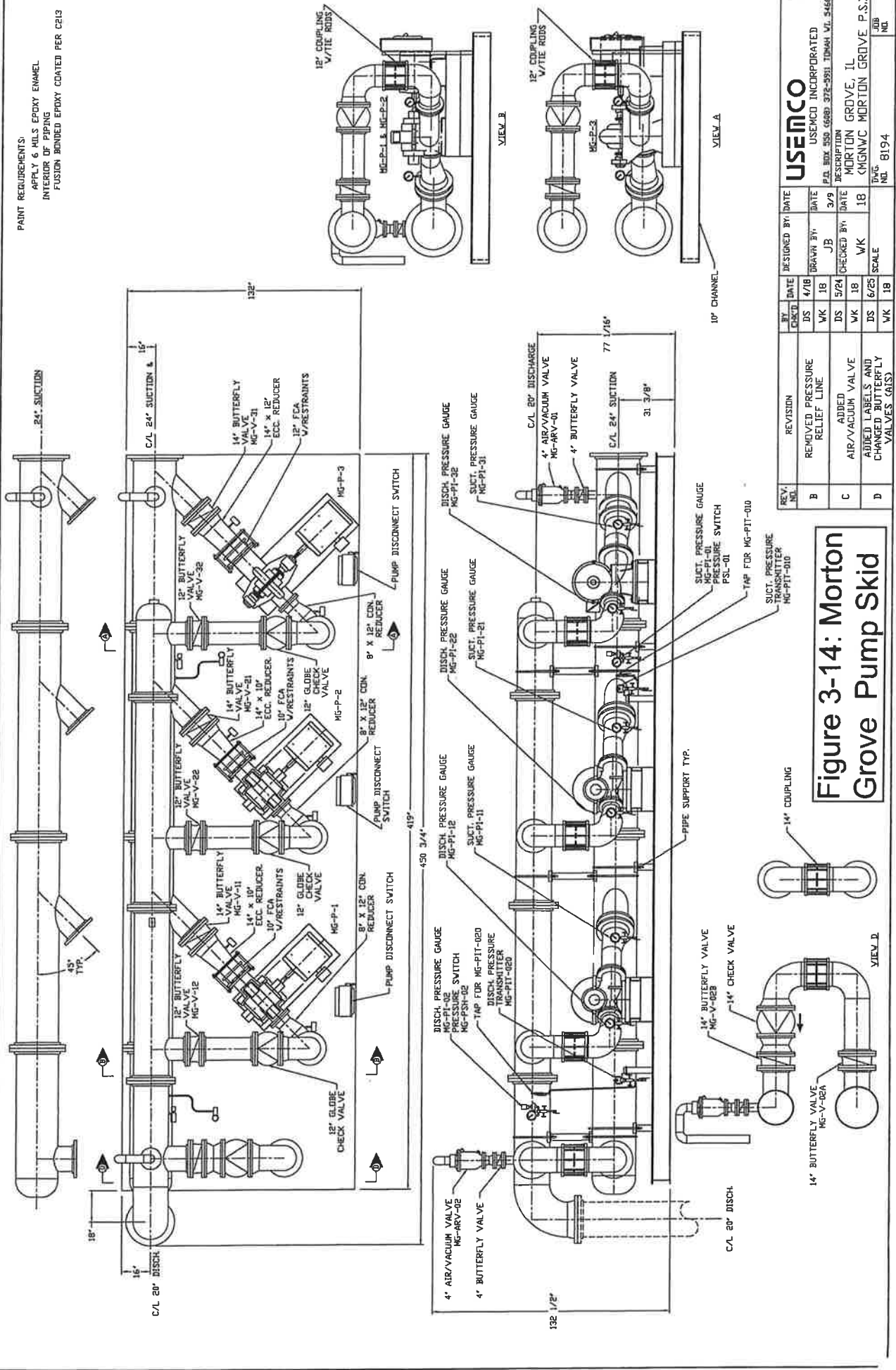
USEMCO INCORPORATED P.O. BOX 550 (6889) 372-5911 TOWNAH VT. 54660	DESCRIPTION MORTON GROVE, IL (MGNVC NILES P.S.)
--	---

JWG	SCALE	18
NO. 8193	JOB NO.	18



PAINT REQUIREMENTS:  
 APPLY 6 MILS EPOXY ENAMEL  
 INTERIOR OF PIPING  
 FUSION BONDED EPOXY COATED PER CE13

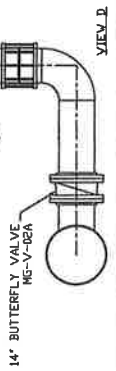
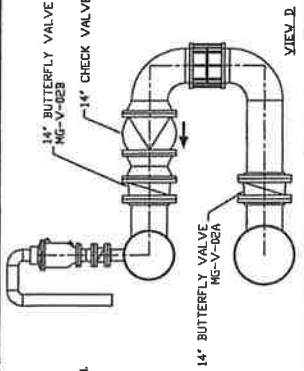


**Figure 3-14: Morton Grove Pump Skid**

REV. NO.	REVISION	BY	DATE	DESIGNED BY	DATE
B	REMOVED PRESSURE RELIEF LINE	DS	4/18	USEMCO INCORPORATED	
C	AIR/VACUUM VALVE ADDED LABELS AND CHANGED BUTTERFLY VALVES (A15)	WK	3/9	MORTON GROVE, IL	
D		DS	6/23	CMGNWC MORTON GROVE P.S.	

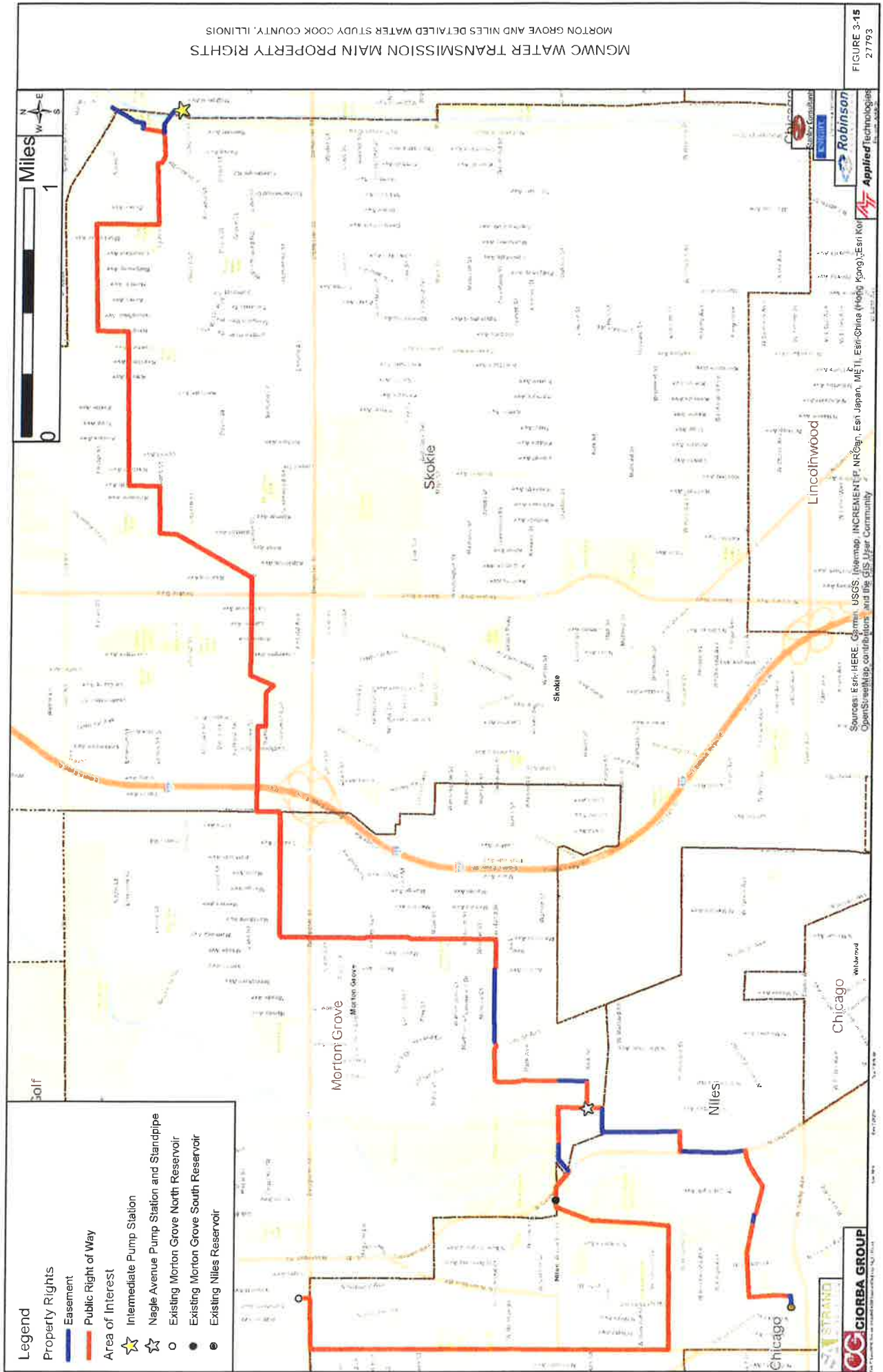
**USEMCO**

USEMCO INCORPORATED  
 P.O. BOX 550 668B 372-3551 TIDWAL, IL 54656  
 MORTON GROVE, IL  
 CMGNWC MORTON GROVE P.S.  
 DWG. NO. 8194



MGWNC WATER TRANSMISSION MAIN PROPERTY RIGHTS  
MORTON GROVE AND NILES DETAILED WATER STUDY COOK COUNTY, ILLINOIS

FIGURE 3-15  
27.793



**Legend**

**Property Rights**

- Easement
- Public Right of Way
- Area of Interest

**Area of Interest**

- ☆ Intermediate Pump Station
- ☆ Nagle Avenue Pump Station and Starrpipe
- Existing Morton Grove North Reservoir
- Existing Morton Grove South Reservoir
- Existing Niles Reservoir

**GIORRA GROUP**

GIORRA GROUP

Sources: Esri, HERE, Garmin, INCREMENT P, NRCan, Esri Japan, NE.TI, Esri-China (Hong Kong), Esri Korea, Esri-UK, Swisstopo, USGS, AeroGRID, IGN, Esri, Mapbox, Swisstopo, OpenStreetMap contributors, and the GIS User Community

**Applied Technologies**

**Robinson**

**ESRI**

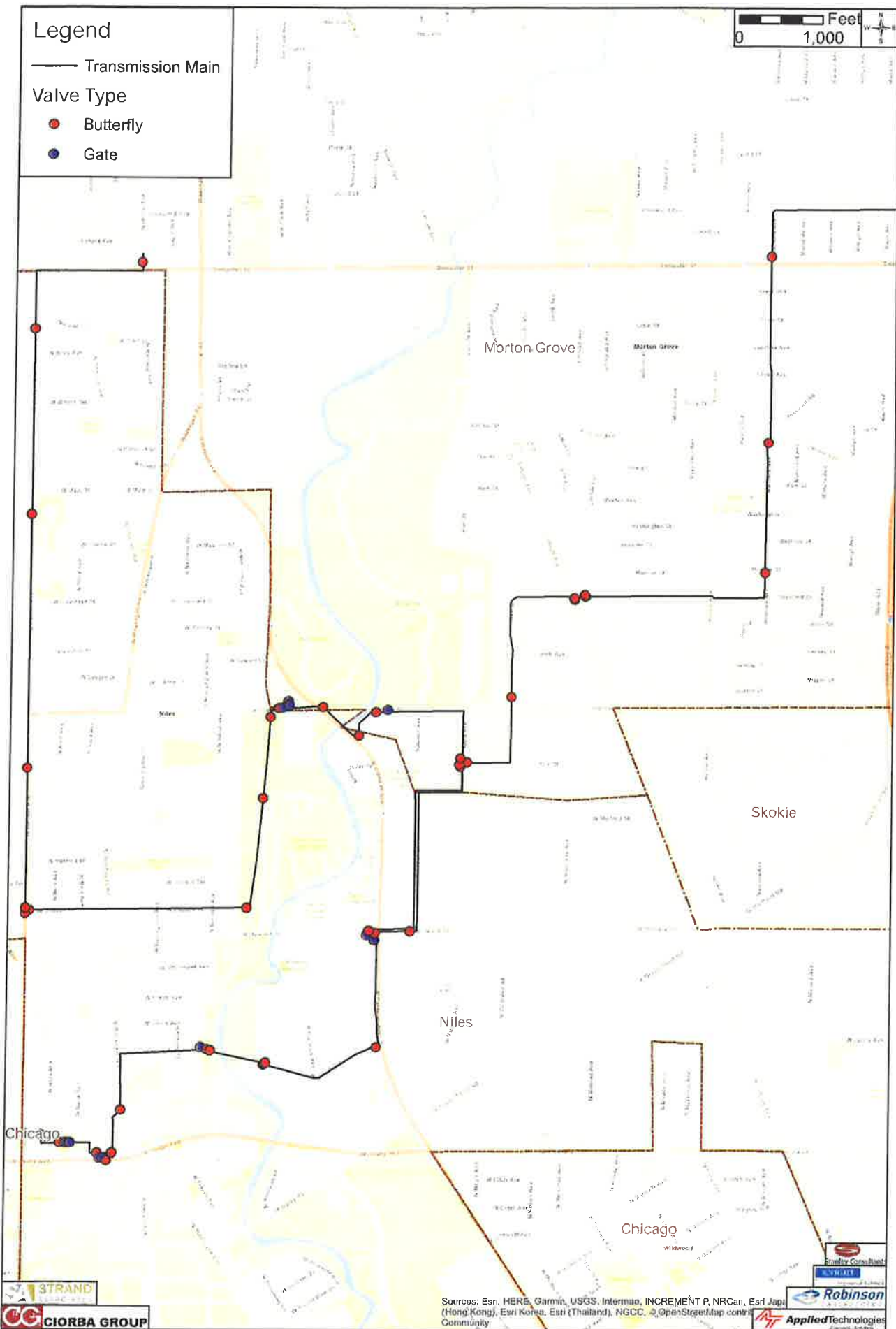
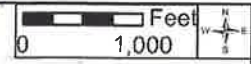


**Legend**

— Transmission Main

**Valve Type**

- Butterfly
- Gate



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan (Hong Kong), Esri Korea, Esri (Thailand), NGCC, OpenStreetMap contributors, Swire



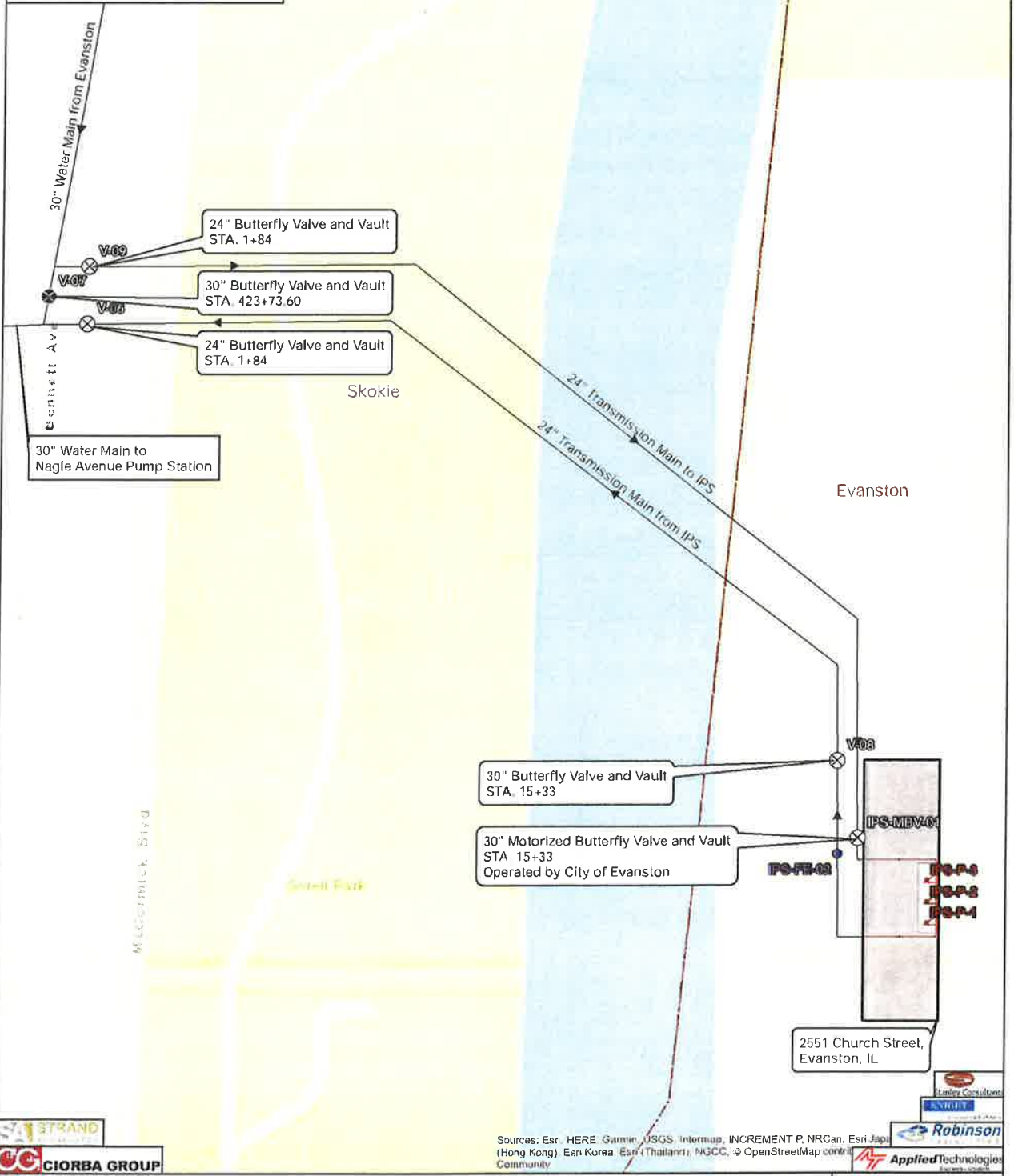
**MGNWC ISOLATION VALVE DETAIL - WEST**  
MORTON GROVE AND NILES DETAILED WATER STUDY COOK COUNTY, ILLINOIS

**FIGURE 3-8**  
27793

Legend

- Pump
- IPS Pipe
- Skid
- Flow Meter
- Water Transmission Main
- ▭ Pump Station
- Valve
- ⊗ Open
- ⊗ Close

NOT TO SCALE

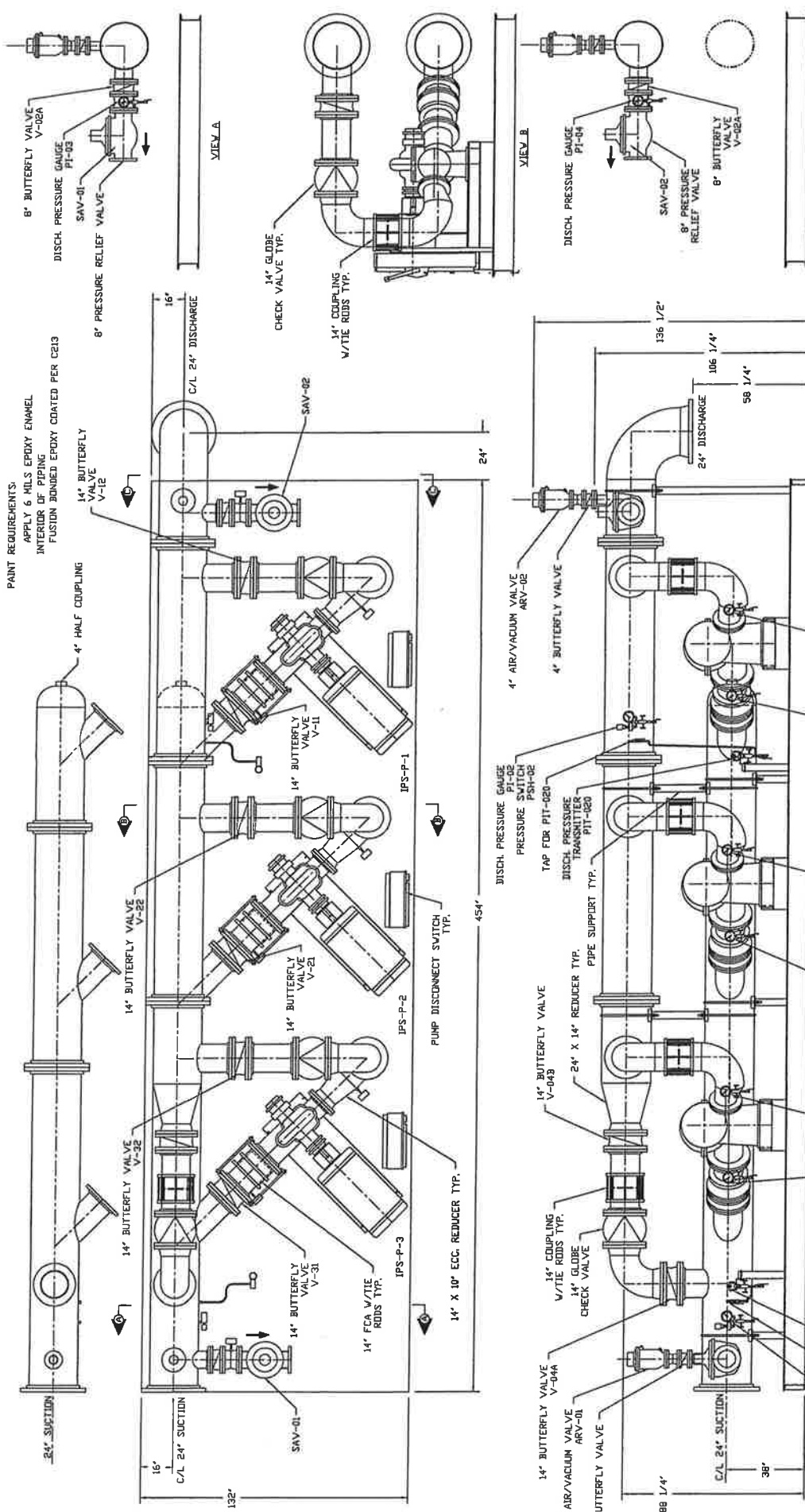


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, Applied Technologies

MGNWC INTERMEDIATE PUMP STATION NORMAL OPERATIONS SCHEMATIC  
MORTON GROVE AND NILES DETAILED WATER STUDY COOK COUNTY, ILLINOIS

FIGURE 3-9  
27793

PAINT REQUIREMENTS:  
 APPLY 6 MILS EPOXY ENAMEL  
 INTERIOR OF PIPING  
 FUSION BONDED EPOXY COATED PER CE13



REV. NO.	REVISION	BY	DATE	DESIGNED BY	DATE
A	REVISED PRESSURE RELIEF PIPING, CHANGED BUTTERFLY VALVES AND	DS	6/75	DS	4/79
B	ADDED LABELS, PRESSURE RELIEF LINES AND GAUGES	WK	6/26	WK	6/26

**USEMCO**  
 USEMCO INCORPORATED  
 P.O. BOX 550 (609) 372-5911 TOLAH, IL 61660  
 DESCRIPTION: MORTON GROOVE, IL  
 CMGNVC INTERMEDIATE, P.S.J.

**Figure 3-10: IPS Pump Skid**

NOTE:  
 PIPE EXTERNAL TO STATION MUST BE INDEPENDENTLY SUPPORTED.



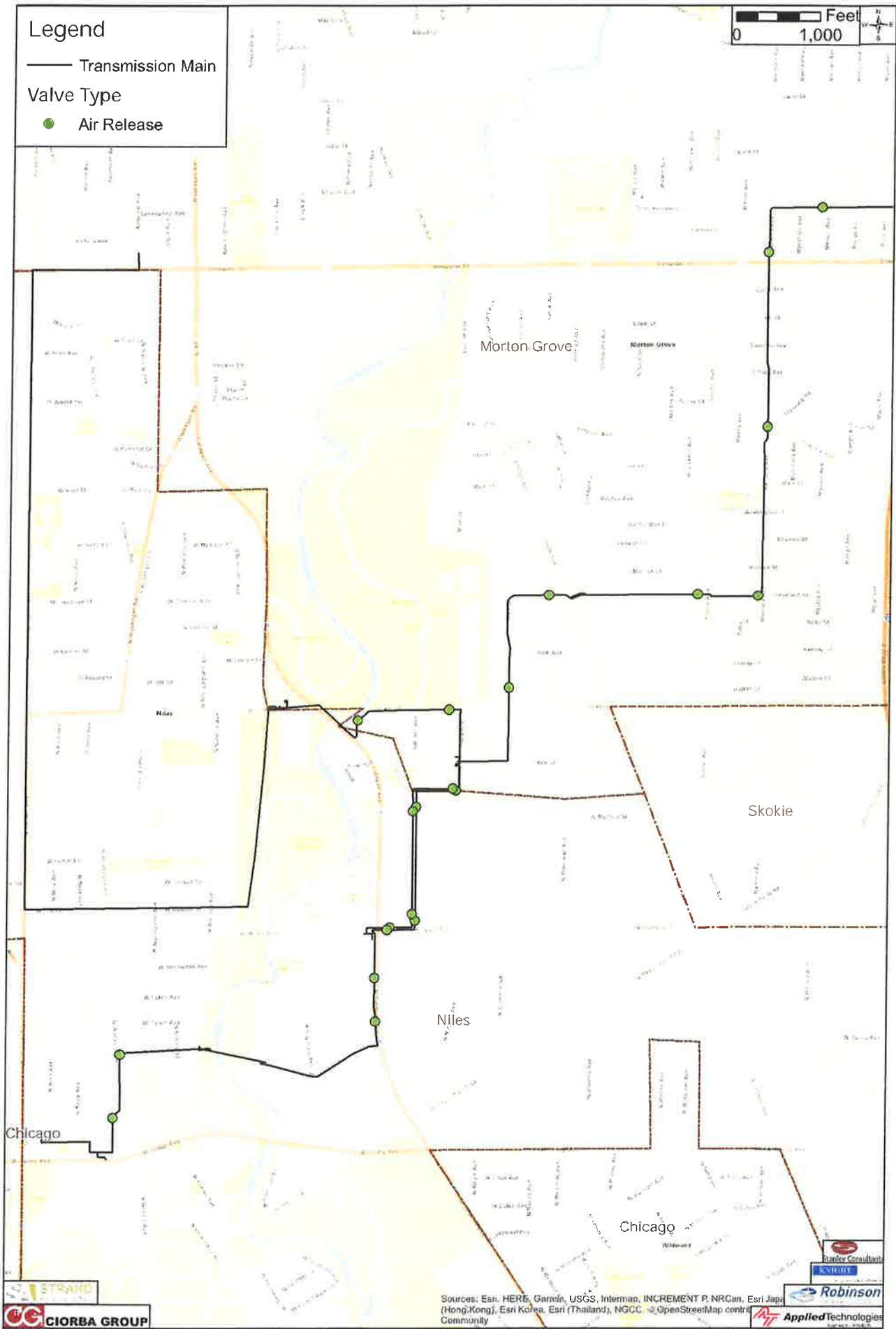
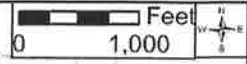


Legend

— Transmission Main

Valve Type

● Air Release



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan (Hong Kong), Esri Korea, Esri (Thailand), NGCC, OpenStreetMap contributors



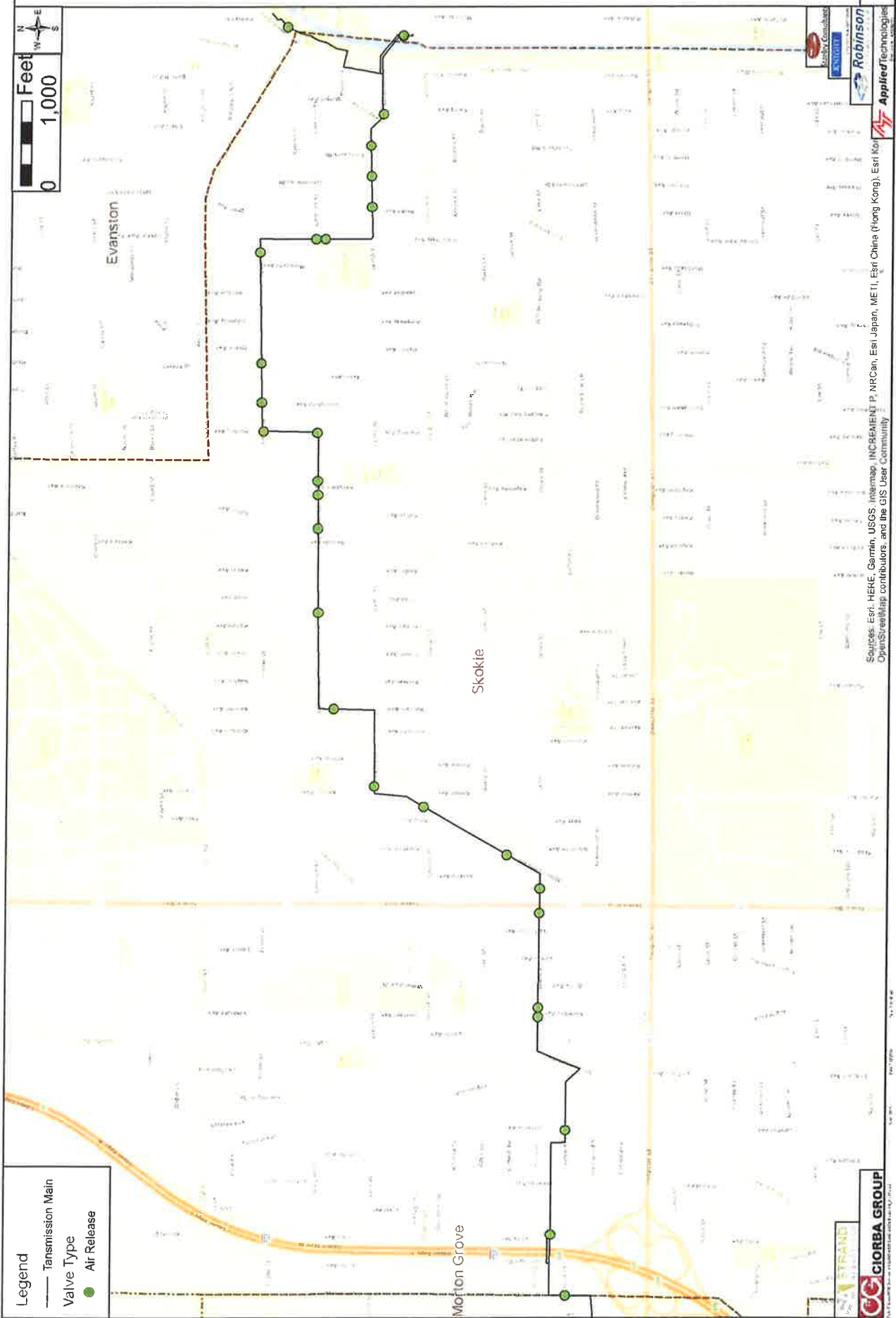
MGNWC AIR RELEASE VALVE DETAIL - WEST  
MORTON GROVE AND NILES DETAILED WATER STUDY COOK COUNTY, ILLINOIS

FIGURE 3-6  
27793

MGWNC AIR RELEASE VALVE DETAIL - EAST

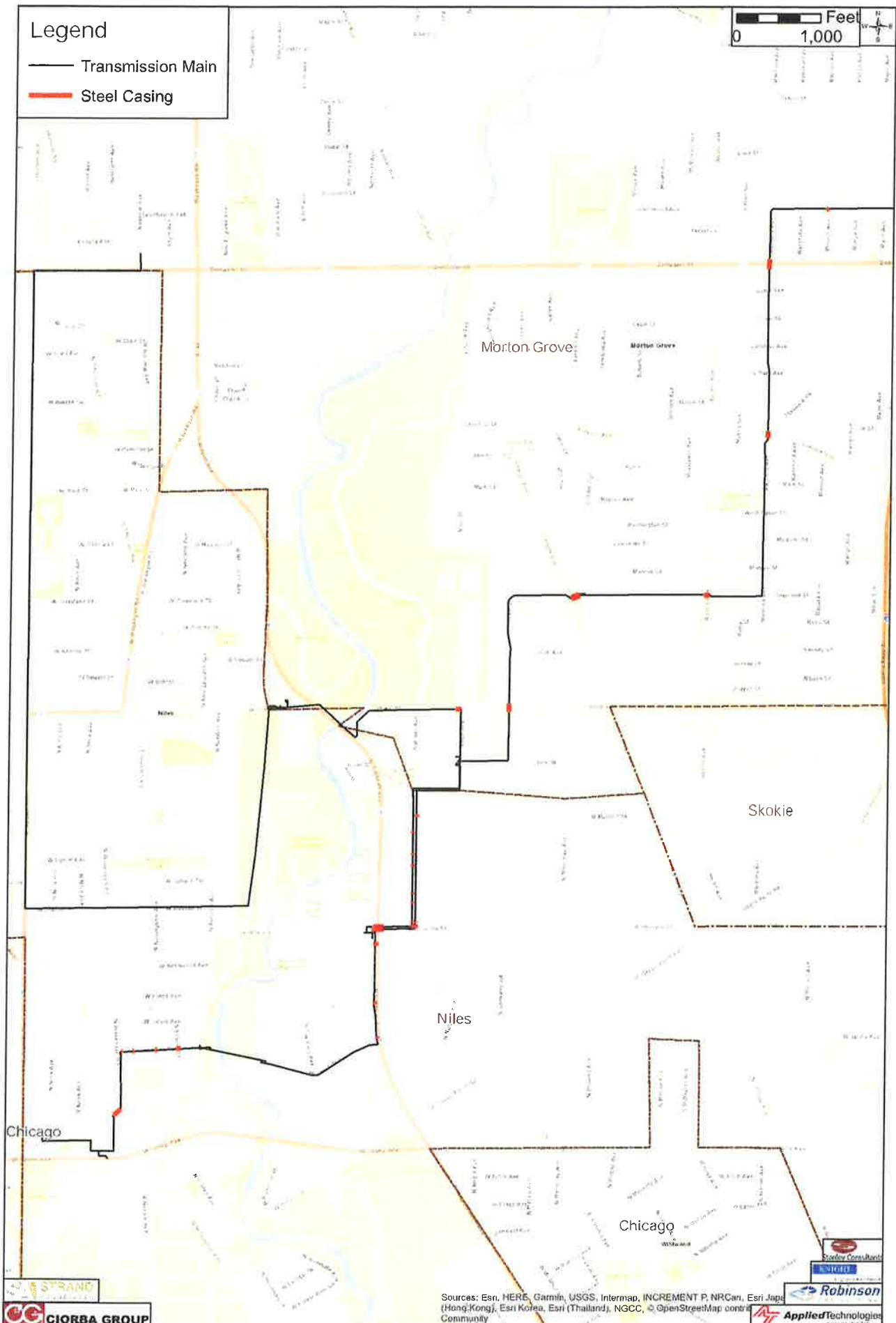
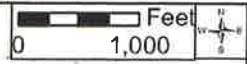
MORTON GROVE AND NILES DETAILED WATER STUDY  
COOK COUNTY, ILLINOIS

FIGURE 3-5  
27793



Legend

- Transmission Main
- Steel Casing



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors



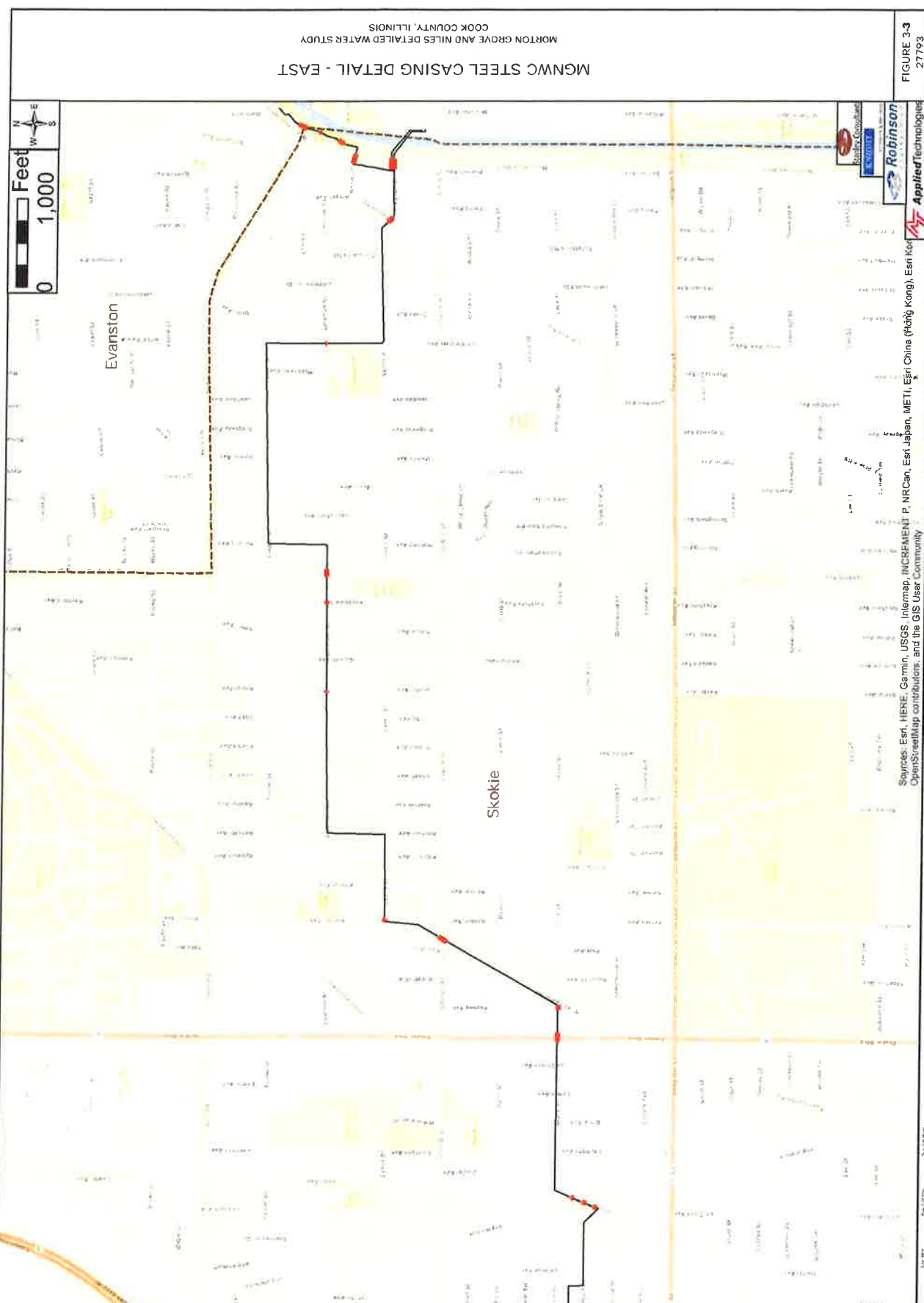
MGNWC STEEL CASING DETAIL - WEST  
MORTON GROVE AND NILES DETAILED WATER STUDY COOK COUNTY, ILLINOIS

FIGURE 3-4  
27793



**Legend**

- Transmission Main
- Steel Casing



MGWC STEEL CASING DETAIL - EAST  
 MORTON GROVE AND NILES DETAILED WATER STUDY  
 COOK COUNTY, ILLINOIS

FIGURE 3-3  
 27793

Sources: Esri, HERE, Garmin, USGS, Intelmap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (UK), Swisstopo, Swisstopo, IGN, etc., OpenStreetMap contributors, and the GIS User Community

**Applied Technologies**  
 Esri Authorized Reseller

**Robinson**  
 Esri Authorized Reseller

**Esri**  
 Esri Authorized Reseller

**GIORBA GROUP**  
 Esri Authorized Reseller



Additional Key Elements to Agreement:

- 1) Niles will operate a temporary pumping facility located in the vicinity of Kirk and Nagle in Morton Grove until April 1, 2019. MGNWC shall procure a pump rental contract which includes diesel driven pumps with (Local 150) operators full time in 12 hour shifts, one during the day and two at night. When in operation the rental contract provides labor for operators to be at the pump station 24/7. Niles will oversee the temporary pump operations but will not provide full time staff for the temporary pump station in addition to the contract labor.
- 2) Niles will begin to maintain the 2552 Church booster pump (IPS) on or around April 2, 2019.
- 3) Niles will begin operations and maintenance of the full system on or around August 31, 2019
- 4) Transportation and Administrative budget was reduced per the attached proposal.
- 5) The maintenance service plan indicated in the RFP will be attached to the contract to establish the level of service, with the following exception: Tank Inspection will not be required during the initial 2-year contract period.
- 6) Within 90 days of receiving the final as-built drawings Niles will establish a watch and protect level of service for the transmission mains. Watch and protect shall be provided for all perpendicular crossings within 3 vertical feet of the transmission main or parallel work within 5 horizontal feet of the transmission main.
- 7) The Nile Operation team shall report to the MGNWC Water Superintendent.
- 8) Niles shall have the ability to terminate the agreement 90-day after proving written notices. MGNWC shall have the ability to terminate the agreement 6 months after proving written notice.
- 9) The administrative fee shall be a fixed fee, the fee shall not be adjusted based on a change in expenses. The fee shall be distributed as follows: \$30,000 Contract year 1, \$20,000 Contract year 2.
- 10) The operating contract shall not include providing legal services, accounting, or clerk services for MGNWC.

STATE OF ILLINOIS    )  
                                  ) SS  
COUNTY OF COOK    )

**CLERK’S CERTIFICATE**

I, John Pietron, Clerk of the Morton Grove-Niles Water Commission, Cook County, State of Illinois, certify that the attached and foregoing is a true and correct copy of that certain Resolution now on file in my office, entitled:

**RESOLUTION NO 18-58**

**A RESOLUTION AUTHORIZING THE APPROVAL AND EXECUTION OF PROFESSIONAL SERVICES AGREEMENT BETWEEN THE MORTON GROVE-NILES WATER COMMISSION AND THE VILLAGE OF NILES FOR OPERATION OF THE WATER TRANSMISSION, PUMPING AND STORAGE FACILITIES FOR THE PERIOD FROM JANUARY 1, 2019 THROUGH DECEMBER 31, 2020**

which Resolution was passed by the Board of Commissioners of the Morton Grove-Niles Water Commission at a Regular Meeting held on the 10th day of December 2018, at which meeting a quorum was present.

I further certify that the vote on the question of the passage of said Resolution by the Board of Commissioners of the Morton Grove-Niles Water Commission was taken by Ayes and Nays and recorded in the minutes of the Board of Commissioners of the Morton Grove-Niles Water Commission, and that the result of said vote was as follows, to-wit:

- AYES:**           John Pietron and Steven Vinezeano
- NAYS:**           None
- ABSENT:**       None (Cook County Appointee not appointed yet)

I do further certify that the original Resolution, of which the foregoing is a true copy, is entrusted to my care for safekeeping, and that I am the lawful keeper of the same.

**IN WITNESS WHEREOF**, I have hereunto set my hand this 10th day of December 2018.

\_\_\_\_\_  
John Pietron, Clerk