

**Rock River Water Reclamation District  
Rockford, Illinois**

**Bidding Requirements and Contract Forms**

**for**

**2018-2019 Service Lateral Lining**

**Capital Project No. 1933**

# **Rock River Water Reclamation District Rockford, Illinois**

## **Bidding Requirements and Contract Forms and *General Provisions and Technical Specifications* for *Sanitary Sewer Construction***

**for**

## **2018-2019 Service Lateral Lining**

**Capital Project No. 1933**

### **Board of Trustees**

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**Section I**  
**Bidding Requirements**



## Article 1 — Notice to Bidders

The Rock River Water Reclamation District will receive sealed and signed bids for the 2018-2019 Service Lateral Lining, Capital Project No. 1933, sewerage improvements at the Rock River Water Reclamation District offices, 3501 Kishwaukee Street, Rockford, Illinois until 10:00 a.m. on Friday, August 24, 2018 at which time and place all bids will be publicly opened and read aloud.

The 2018-2019 Service Lateral Lining, Capital Project No. 1933 consists of the rehabilitation of existing sanitary sewer service laterals by installation of a cured-in-place pipe liner. Work also includes installation of cured-in-place sanitary main short liners, traffic control, restoration, and all other appurtenances as indicated on the plans and in the specifications.

Bidder's attention is called to Article 2 – Instructions to Bidders 3.8 requirements for Statement of Qualifications.

All cleaning, televising, lining, testing, and restoration shall be completed by April 30, 2019. Following review of final videos, District will issue a Final Punch List. All corrective work shall be completed within thirty (30) calendar days of Final Punch List issuance. Liquidated damages shall be \$300.00 per calendar day for each Contract completion deadline.

Copies of the specifications may be obtained by depositing Fifty Dollars (\$50.00) with the Rock River Water Reclamation District. The amount of the deposit for each set of specifications will not be refunded.

All construction will be done in accordance with specifications on file with the Rock River Water Reclamation District, including the *General Provisions and Technical Specifications for Sanitary Sewer Construction* (Current Edition) by the Rock River Water Reclamation District of Rockford.

Each proposal must be accompanied by the District Bid Bond form with an acceptable Bid Security attached, in the amount of five percent (5%) of the total bid price. This sum is a guarantee that, if the Proposal is accepted, a contract will be entered into and its performance properly secured.

Bid documents may be obtained by contacting the Engineering Department at the Rock River Water Reclamation District, (815) 387-7660, 3501 Kishwaukee St. For more information, visit the District web site at [www.rwrwd.dst.il.us](http://www.rwrwd.dst.il.us). Plans and specifications are also available for viewing through the Northern Illinois Building Contractors Association, whose office is located at 1141 S. Alpine Rd, Rockford, IL.

The successful bidder will be required to furnish a satisfactory performance bond in the full amount of the bid or proposal. No bid shall be withdrawn without the consent of the District for a period of 60 days after the scheduled time of receiving bids.

The Rock River Water Reclamation District, reserves the right to reject any or all bids, or any part thereof, or to accept any bid or any part thereof, or to waive any formalities in any bids, deemed to be in the best interest of the Rock River Water Reclamation District.

Dated this 8th day of July, 2018

Chris Black  
BY: Chris Black, Business Manager

Not to be used for bidding purposes

## **Article 2 — Instructions to Bidders**

### **1 General**

#### **1.1 Scope and Intent**

This section of the contract documents is concerned with furnishing detailed information and requirements for preparing bids to prospective bidders, bidders' responsibility, the preparation and the submission of bids, basis for awarding the contract and other general information concerned with bidding and executing the contract.

#### **1.2 Contradictions**

If in the case of apparent contradiction between or among the Contract Documents, the Contract Documents shall be consulted in the following order: Addenda, Agreement, Supplementary Drawings, Instructions to Bidders, Detailed Specifications, Plans, District General Provisions and Technical Specifications for Sanitary Sewer Construction. The language in the first such document in which language regarding the conflict, error or discrepancy occurs shall control.

### **2 Legal Requirements**

#### **2.1 Illinois Regulations**

1. The undersigned, as Bidder, declares he will comply with prevailing wages in accordance with the Illinois Department of Labor Standards. The State of Illinois requires contractors and subcontractors on public works projects (including Rock River Water Reclamation District) to submit certified payroll records on a monthly basis, along with a statement affirming that such records are true and accurate, that the wages paid to each worker are not less than the required prevailing rate and that the contractor is aware that filing false records is a Class B Misdemeanor.

The certified payroll records must include the name, address, telephone number, social security number, job classification, hourly wages paid in each pay period, the number of hours worked each day, and the starting and ending time of work each day, for every worker employed on the project. Any contractor who fails to submit a certified payroll or knowingly files a false certified payroll is guilty of a Class B Misdemeanor. Certified payroll reports shall be submitted on standard IDOT forms.

2. Public Act 83-1030 entitled "Steel Products Procurement Act" requires that steel products used or supplied in performance of this contract or subcontract shall be manufactured or produced in the United States with three exceptions.

The provisions of this Section shall not apply:

- a. Where the contract involves an expenditure of less than \$500.
- b. Where the executive head of the public agency certifies in writing that
  - i. the specified products are not manufactured or produced in the United States in sufficient quantities to meet the agency's requirements, or
  - ii. obtaining the specified products, manufactured or produced in the United States would increase the cost of the contract by more than 10%.
- c. When its application is not in the public interest.

3. Public Act 96-929 (30 ILCS 570) provides that Illinois residents be employed on Illinois public works projects, provided there has been a period of excessive unemployment (5%) in the State of Illinois as defined in the Act; and, further, that Illinois workers are available and capable of performing the particular type work involved.
4. Public Act 99-093 requires that any party to a contract adopt and promulgate written sexual harassment policies that include, as a minimum, the following information:
  - a. the illegality of sexual harassment
  - b. the definition of sexual harassment under Illinois State law
  - c. a description of sexual harassment, utilizing examples
  - d. my (our) organization's internal complaint process including penalties
  - e. the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Illinois Human Rights Commission
  - f. directions on how to contact the Department and the Commission
  - g. protection against retaliation as provided by Section 6-101 of the Illinois Human Rights Act

Upon request, this information shall be provided to the Illinois Department of Human Rights and the District.

5. With regard to nondiscrimination in employment, the Contractor for this project will be required to comply with the Illinois Fair Employment Practices Commission's Rules and Regulations.
6. The Contractor for this project shall comply with the Occupational Safety and Health Act.
7. The Contractor for this project shall comply with the Federal Drug-Free Workplace Act.
8. Public Act 96-1416 requires the Certification of Clean Construction and Demolition Debris (CCDD) and uncontaminated soil prior to disposal at a CCDD fill site. The Contractor for this project shall comply with Public Act 96-1416 and be responsible for the certifications and any fees associated with the disposal at a CCDD fill site.
  - a. In the event that contaminated soil is uncovered on the project, the Contractor shall notify the District immediately. Any extra costs resulting from the presence of contaminated soil shall be evaluated in accordance with District General Provisions & Technical Specs for Sanitary Sewer Construction; General Conditions: Article 5 – Time Provisions and Article 8 – Changes.

## **2.2 Americans with Disabilities Act**

The Contractor for this project will comply with all applicable requirements of the Americans with Disabilities Act of 1990 (ADA). The Contractor will hold harmless and indemnify Rock River Water Reclamation District (District) and their representatives from all:

1. suits, claims, or actions
2. costs, either for defense (including but not limited to reasonable attorney's fees and expert witness fees) or for settlement
3. damages of any kind (including but not limited to actual, punitive, and compensatory damages)

relating in any way to or arising out of the ADA, to which said firm is exposed or which it incurs in the execution of the contract.

### **2.3 Bidder Prequalification**

Prospective bidders shall submit pre-qualification information for approval prior to bid opening or bids will be rejected as unqualified. Pre-qualification submittals shall be presented to the District Engineering Manager on or before 2:00 p.m. on August 17, 2018; the District will review these submittals and will advise each applicant whether they are determined pre-qualified on or before August 21, 2018.

**Only bids from pre-qualified manufacturers and installers using pre-qualified products and methods will be opened and read. Bids submitted on products or from manufacturers/installers that have not been pre-qualified will be returned unopened. Bid Proposals shall be clearly labeled on the bid envelope with Contractor's name and C.I.P.P. manufacturer.**

**Bidders that have previously pre-qualified or have satisfactorily completed lateral lining work for the District are considered pre-qualified as long as they are using the same methods and materials as previously specified and as specified herein.**

The following Contractors are pre-qualified to bid this project:

<b>Contractor</b>	<b>CIPP Product</b>
BLD Services, LLC	BLD Service Connection Seal & Lateral
Performance Pipelining, Inc.	LMK T-Liner
MBI Pipelining Services	LMK T-Liner
LMK Technologies	LMK T-Liner
National Watermain Cleaning Company	Trelleborg EPROS

In order to be considered pre-qualified to bid on this project, the product, manufacturer and contractor must each demonstrate, to the District's satisfaction, compliance with the following requirements:

- a. **The bidder shall document a minimum of two (2) years of experience installing CIPP laterals of similar length and configuration as this contract and shall have successfully installed a minimum of 5,000 CIPP laterals in a wastewater collection system. The manufacturer system shall have a minimum of five (5) years of installation with a minimum of 10,000 CIPP laterals successfully installed.**
- b. Submittal of District approved **Third Party** test data supporting the following product performance requirements. Product samples used for testing shall be similar to those proposed for installation. Test samples shall be prepared so as to simulate installation methods and trauma of the product.
  - Chemical resistance – Test shall be conducted in accordance with ASTM F 1216, and meet the minimum guidelines listed therein.

- Long-term properties – Tests to confirm 50-year design values shall be conducted in accordance with ASTM D2990. As an alternative, third party testing of a 10,000 hour external loading test, conducted in a wet environment to simulate field conditions, can be used to verify long-term design values.
- External hydrostatic pressure testing – Testing of external hydrostatic loading capacity of at least ten (10) restrained pipe samples to verify design techniques.
- Contractor / Manufacturer shall demonstrate structural properties meet or exceed the requirements listed below by providing test results from an independent laboratory for three (3) recent lining projects. A minimum of twelve (12) test results must be submitted.

### STRUCTURAL PROPERTIES

Property	Minimum Value	ASTM Test Method
Flexural Strength	4,500 PSI	D790
Flexural Modulus	350,000 PSI	D790

- c. The Contractor shall provide a list of personnel working on this project, including previous project experience of the Foreman / Job Superintendent.
- d. The manufacturer and/or contractor shall submit a copy of the license or certificate verifying the manufacturer's or licensor's approval of the installer.

The final decision to accept or reject the product/manufacturer/installer lies solely with the District.

## 3 General Instructions

### 3.1 Bidder's Responsibility

Bidders are cautioned not to submit proposals until having carefully examined the entire site of the proposed work and adjacent premises and the various means of approach and access to the site, and having made all necessary investigations to inform themselves thoroughly as to the facilities for delivering, placing and handling the materials at the site, and having informed themselves thoroughly as to all difficulties involved in the completion of all the work under this Contract in accordance with its requirements.

Bidders must examine the Plans, Specifications and other Contract Documents and shall exercise their own judgment as to the nature and amount of the whole of the work to be done and for the bid prices must assume all risk of variance, by whomsoever made, in any computation or statement of amount or quantities necessary to complete fully the work in strict compliance with the Contract Documents. The Bidder must satisfy himself by making borings or test pits, or by such methods as he may prefer, as to the character and location of the materials to be encountered or work to be performed. No pleas of ignorance of conditions that exist or that may hereafter exist, or of conditions

or difficulties that may be encountered in the execution of the work under this Contract, as a result of failure to make the necessary examinations and investigations, will be accepted as an excuse for any failure or omission on the part of the Contractor to fulfill, in every detail, all of the requirements of the Contract Documents, or will be accepted as a basis for any claims whatsoever for extra compensation or for an extension of time.

**The Contractor is responsible for verifying the location of all existing utilities in the project areas.**

The Bidder, therefore, shall satisfy himself by such means as he may deem proper as to the location of all structures that may be encountered in construction of the work.

### **3.2 Addenda and Interpretations**

No interpretation of the meaning of the Plans, Specifications, or other Contract Documents will be made to any bidder orally. Every request for such interpretation must be in writing addressed to the Rock River Water Reclamation District, 3501 Kishwaukee Street, Rockford, Illinois. To be given consideration, such request must be received at least five (5) days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda which, if issued, will be sent by email, fax, or certified mail with acknowledgement of receipt requested, to all prospective bidders, at the respective addresses furnished for such purposes, not later than three (3) days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addenda or interpretation shall not relieve said bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the Contract Documents.

### **3.3 Laws and Regulations**

The prospective bidder is warned that he must comply with all laws of the United States Government, State of Illinois, all ordinances and regulations of the District in the performance of the work under this contract. The Bidder's attention is specifically called to that provision of the General Conditions regarding the rate of wage to be paid on the work.

### **3.4 Quantities Estimated Only**

Bidders are warned that the estimate of quantities of the various items of work and materials, as set forth in the proposal form, is approximate only and is given solely to be used as a uniform basis for the comparison of bids. The quantities actually required to complete the contract work may be less or more than so estimated, and if awarded a contract for the work specified, the Contractor further agrees that he will not make any claim for damages or for loss of profits or for an extension of time because of a difference between the quantities of the various classes of work assumed for comparison of bids and quantities of work actually performed.

### **3.5 Form, Preparation, and Presentation of Proposals**

For particulars as to the quantity and quality of the supplies, materials and equipment to be furnished, and the nature and extent of the work or labor to be done, prospective bidders are referred to the Contract Documents, which may be examined or obtained at the office of the District.

Each bid will be submitted upon the prescribed proposal form. All blank spaces for bid prices must be filled in, in ink, with the unit or total sum or both for which the proposal is made. If the proposal contains any omissions, erasures, alterations, additions or items not called for in the itemized proposal, or contains irregularities of any kind, such may constitute sufficient cause for rejection of bid. In case of any discrepancy in the unit price or amount bid for any item in the proposal, the unit price as expressed in figures will govern. In no case is the agreement form to be filled out or signed by the bidder.

*Should the Contractor desire to have an electronic proposal form e-mailed to him, the Contractor should contact the District's Engineering Department at (815) 387-7660. This form must be attached to the hard copy proposal form and appropriately signed and executed with the bid.*

The bid must be verified and be presented on the prescribed form in a sealed envelope on or before the time and at the place stated in the Advertisement for Bids, endorsed with the name of the person, firm or corporation presenting it, the date of presentation, and the title of the work for which the bid is made. If forwarded by mail, the sealed envelope containing the proposal and marked as directed above, must be enclosed in another envelope addressed to Clerk of the Rock River Water Reclamation District, 3501 Kishwaukee Street, Rockford, Illinois, 61109 and be sent preferably by certified mail. The District will not accept facsimile generated bids.

### **3.6 Bid Security**

Each proposal must be accompanied by the District Bid Bond form with an acceptable Bid Security attached, in the amount specified in Article One, Notice to Bidders. This sum is a guarantee that, if the Proposal is accepted, a contract will be entered into and its performance properly secured. The District's Bid Bond Form included in the bid packet must be used. No other Bid Bond form may be substituted.

Within ten (10) days after the opening of bids, the deposits of all but the three lowest bidders will be returned. The deposits of the remaining two unsuccessful bidders will be returned within three (3) days after the execution of the contract, or, if no such contract has been executed, within sixty (60) days after the date of opening bids. The deposit of the successful bidder will be returned only after he has duly executed the contract and furnished the required bond and insurance.

### **3.7 Affidavit of Compliance**

**Each proposal must be accompanied by an executed Affidavit of Compliance.** A separate Affidavit of Compliance form is enclosed with the Proposal packet. Failure to submit an executed Affidavit of Compliance with the proposal may constitute sufficient cause for rejection of the bid.

### **3.8 Statement of Qualifications**

Each proposal must be accompanied by a Statement of Qualifications certifying that the bidder is registered to do business in the State of Illinois and provides documentation that the bidder possesses the appropriate financial, material, equipment, facility and personnel resources and expertise



necessary to meet all contractual obligations. **The bidder shall document a minimum of two (2) years of experience installing CIPP laterals of similar length and configuration as this contract and shall have successfully installed a minimum of 5,000 CIPP laterals in a wastewater collection system. The manufacturer system shall have a minimum of five (5) years of installation with a minimum of 10,000 CIPP laterals successfully installed.** The District reserves the right to request additional information as needed to evaluate bids prior to making an award.

### **3.9 Comparison of Proposals**

Bids on item contracts will be compared on the basis of a total computed price arrived at by taking the sum of the estimated quantities of each item, multiplied by the corresponding unit prices and including any lump sum bids on individual items, in accordance with the estimate of quantities set forth in the proposal form. Bids on lump sum contracts will be considered upon the basis of the lowest sum bid.

### **3.10 Acceptance of Bids and Basis of Award**

No bidder may withdraw his bid after the scheduled closing time for receipt of bids, for at least sixty (60) days.

The contract will be awarded, if at all, to the lowest responsive, responsible bidder. The Rock River Water Reclamation District also reserves the right to reject any or all bids.

The bidder whose proposal is accepted shall enter into a written contract for the performance of the work and furnish the required bonds and insurance certificate within ten (10) days after written notice by the Engineering Manager of the District has been served on such bidder personally or by mailing a postpaid wrapper to such bidder at the address given in his proposal. If the bidder to whom the contract is awarded refuses or neglects to execute it or fails to furnish the required bond and insurance within five (5) days after receipt by him of the notice, the amount of his deposit shall be forfeited and shall be retained by the District as liquidated damage and not as a penalty. It being now agreed that said sum is a fair estimate of the amount of damages that the District will sustain in case said bidder fails to enter into a contract and furnish the required bond and insurance. No plea of mistake in the bid shall be available to the bidder for the recovery of his deposit or as a defense to any action based upon the neglect or refusal to execute a contract.

#### **3.10.1 Evaluation of Responsiveness**

The responsiveness of bidders will be judged on the basis of the completeness of the bid submitted. To be responsive, a Bid must be submitted on the forms provided as part of the Bid Documents and comply with all the requirements of the Instruction to Bidders.

### **3.10.2 Evaluation of Responsibility**

To be judged as responsible, the bidder shall:

- a. Have adequate financial resources for performance, the necessary experience, organization, technical qualifications, and facilities, or a firm commitment to obtain such by subcontracts;
- b. Be able to comply with the required completion schedule for the project;
- c. Have a satisfactory record of integrity, judgment, and performance, including, in particular, any prior performance on contracts from the District;
- d. Have an adequate financial management system and audit procedures, that provide efficient and effective accountability and control of all property, funds, and assets;
- e. Conform to the civil rights, equal employment opportunity and labor law requirements of the Bid Documents.
- f. Have satisfactorily completed no less than three (3) sanitary sewer system contracts within the past five (5) years of equal or greater value to the bid being submitted.

### **3.11 The Rejection of Bids**

The District reserves the right to reject any bid if the evidence submitted in the statement of the bidder's qualifications, or if investigation of such bidder fails to satisfy the District that such bidder is properly qualified to carry out the obligations and to complete the work contemplated therein. Any or all proposals will be rejected if there is reason to believe that collusion exists among the bidders. Conditional bids will not be accepted. The District reserves the right to reject any and all bids and to accept the bid which they deem most favorable to the interest of the District after all proposals have been examined and canvassed.

### **3.12 Insurance and Bonding**

Contractor shall provide all necessary insurance and bonds required to complete the project. No more than ten (10) calendar days subsequent to the District's issuance of an award letter, the Contractor shall provide documentation to prove that he has obtained all required insurance and bonds. The District shall be the sole judge as to the acceptability of any such proof.

Contractor shall provide and maintain all insurance and bonds as required by the District.

#### **3.12.1 General**

The Contractor shall ensure that:

1. All insurance policies shall be specific to the project.
2. The insurance certificate shall state: This certifies that the insurance coverage meets or exceeds that required for the Service Lateral Lining 2018-2019, Capital Project No. 1933.
3. The District shall be named as insured in all policies; this shall include the Owners Contractors Protective Policy option.
4. All completed operations coverages and bonds shall remain in force for a period of two (2) years following acceptance of the project and completed operations shall stay in force for two (2) years following completion of the project.

### **3.12.2 Insurance**

The Contractor shall, for the duration of the contract and for two (2) years following project acceptance, maintain the following:

1. General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project or the general aggregate limit shall be twice the required occurrence limit. The Contractor shall provide "XCU" coverage.
2. Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage including coverages for owned, hired or non—owned vehicles, as applicable.
3. Workers' Compensation and Employers Liability: Workers' Compensation limits as required by statute and Employers Liability limits of \$500,000 per accident and \$500,000 per disease.
4. Umbrella: \$2,000,000 per occurrence/aggregate for contracts valued at \$500,000 or over, or \$1,000,000 for contracts below \$500,000. \$10,000 is maximum allowable self-retained limit.
5. Errors and Omissions: If the Contractor performs professional services, he shall maintain errors and omissions insurance with a limit no lower than \$1,000,000 for the duration of the contract.

The policies shall contain, or be endorsed to contain, the following provisions in the General Liability and Automobile Liability Coverage's:

- a. Unless otherwise provided in paragraph "c" of this section, the District, its officers, officials, employees and volunteers shall be covered as additional insureds as respects liability arising out of activities performed by or on insured's general supervision of the Contractor, products and completed operations of the Contractor, premises owned, occupied or used by the Contractor, or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the District, its officers, officials, employees, volunteers, or agents.
- b. Unless otherwise provided in paragraph "c" of this section, the Contractor's insurance coverage shall be primary insurance as respects the District, its officers, officials, employees, volunteers, and agents. Any insurance or self-insurance maintained by the District, its officers, officials, employees, volunteers, or agents shall be excess of the Contractor's insurance and shall not contribute with it.
- c. As an acceptable alternative to provisions "a" and "b" of this section, the Contractor may provide owner's and contractor's protective liability insurance with coverage limits, named insureds, and in conformity with all applicable specifications of this section.

- d. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the District, its officers, officials, employees, volunteers, or agents.
- e. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- f. All Coverages — Each insurance policy required by this clause shall not be suspended, voided, canceled by either party, reduced in coverage, or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the District.

### **3.12.3 Best's Ratings**

The District shall be the sole judge of whether or not said insurer's ratios are satisfactory. The District's decision shall be final and the District's bidding procedures contain no appeal provision.

1. Alphabetical Rating: For purposes of this Request for Bids, "insurer" shall mean any surety, insurance carrier, or other organization which proposes to provide an insurance policy or bond for the Contractor. No insurer or surety rated lower than "A-, Excellent" in the current *Best's Key Rating Guide* shall be acceptable to the District.
2. Financial Size Rating: Provided an insurer's alphabetical rating is satisfactory, the District will examine said insurer's financial size rating.
  - a. If Best classifies the insurer XII or larger, said insurer shall be acceptable to the District.
  - b. If Best classifies the insurer as smaller than XII, but larger than VI, said insurer shall be submitted to the District's Business Manager and/or the District's insurance consultant for review.

Financial Size ratings less than VII are not acceptable and will disqualify the Contractor.

### **3.12.4 Performance Bond and Labor & Materials Payment Bond Form**

The Contractor shall provide a Performance Bond and Labor & Materials Payment Bond form acceptable to the District. The performance bond shall be for either 100% of the contract price or for the Contractor's unit price times the estimated number of units, as applicable.

This Request for Bids contains a Performance Bond and a Labor & Material Bond form for the Contractor's use.

If the Contractor fails to provide acceptable bonds within the specified time, he shall be in default.

**3.12.5 Correction of Contractor's Insurance or Bond Deficiencies**

If the District determines that the Contractor's insurance or bond documentation does not conform to these specifications, the District shall inform said Contractor of the non-conformity. If said Contractor fails to provide conforming insurance or bond documentation within five (5) calendar days of the District's deficiency notice, he shall be in default.

**3.12.6 Indemnification Clause**

Contractor shall protect, indemnify, hold and save harmless and defend the District, its officers, officials, employees, volunteers, and agents against any and all claims, costs, causes, actions and expenses, including but not limited to attorney's fees incurred by reason of a lawsuit or claim for compensation arising in favor of any person, including the employees, officers, independent contractors, or subcontractors of the Contractor or District, on account of personal injuries or death, or damages to property occurring, growing out of, incident to, or resulting directly or indirectly from the performance by the Contractor or subcontractor, whether such loss, damage, injury or liability is contributed to by the negligence of the District or by premises themselves or any equipment thereon whether latent or patent, or from other causes whatsoever, except that the successful bidder shall have no liability for damages or the costs incident thereto caused by the sole negligence of the District.

The indemnification shall not be limited by a limitation on amount or type of damages payable by or for the Contractor or its subcontractor under any employee benefits act including, but not limited, to the Workers Compensation Act.

No inspection by the District, its employees, or agents shall be deemed a waiver by the District of full compliance with the requirements of the Contract. This indemnification shall not be limited by the required minimum insurance coverages in the Contract.

**3.13 Tax Exemption**

The District is exempt, by law, from paying bidder Federal Excise Tax and Illinois Retailers' Occupational Tax. Therefore, the bidder shall exclude those taxes from his bid. The District's tax exemption number is E9992-3696-06. The bidder shall include all applicable taxes in his bid price.

## Article 3 — Detailed Specifications

### 1 General

This article contains Detailed Specifications relating to proposal items. The work to be done under each item is discussed along with units for payment and measurement for payment. However, the descriptions given do not necessarily outline all the work to be done under any item. The materials and workmanship provided for this project shall meet or exceed this article, the Rock River Water Reclamation District's *General Provisions and Technical Specifications for Sanitary Sewer Construction* and current National Association of Sewer Service Companies (NASSCO) recommendations. In the case of contradictions between these *Detailed Specifications* and the *General Provisions and Technical Specifications*, these *Detailed Specifications* shall govern. In addition, the materials and workmanship provided for this project shall conform to the following specifications:

- Standard Specifications for Water and Sewer Main Construction in Illinois, latest Edition; as published by the Associated General Contractors of Illinois, the Illinois Municipal League, the Illinois Society of Professional Engineers and the Underground Contractors Association.
- Standard Specifications for Road and Bridge Construction, Illinois Department of Transportation, current edition.
- American Society for Testing and Materials (ASTM):
  - ASTM D 543 Test Method for Resistance of Plastics to Chemical Reagents
  - ASTM D 638 Test Method for Tensile Properties of Plastics
  - ASTM D 790 Test Method for Tensile Properties of Non-reinforced and Reinforced Plastics and Electrical Insulating Materials
  - ASTM F 1216 Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube
  - ASTM F 1743 Standard Practice for Rehabilitation of Existing Pipelines and Conduits by Pulled-in-place Installation of Cured-in-place Resin Pipe
  - ASTM F 2561 Standard Practice for Rehabilitation for a sewer service lateral and its connections to the main using a one piece main and lateral cured-in-place liner.

**Contractor shall provide the District with a copy of all the applicable specifications listed for the materials to be used. See Part 3 of these specifications for all required submittals.**

The Contractor shall provide the District with a construction schedule prior to performing any work. Any work that is performed by the Contractor without the District's permission or not in the presence of a District inspector may, at the District's sole discretion, be rejected.

The Contractor shall notify the District forty-eight (48) hours prior to beginning any work to have an inspector present during all construction. The Contractor shall notify the District twenty-four (24) hours prior to working on a weekend or a District holiday. The Contractor will not be permitted to work on the following District holidays: Thanksgiving Day, Christmas Day, New Year's Day, President's Day, Good Friday, Memorial Day, Independence Day, or Labor Day.

It shall be the Contractor's responsibility to secure any temporary or permanent access, storage or construction easements from property(ies) deemed necessary to perform the work as described in the specifications. All easement acquisition costs shall be incidental to construction.

Excavated or other materials shall not be stored or cast upon pavement surfaces. At the end of each day and prior to leaving the site when work is interrupted by the weather, the Contractor shall clean up work areas by sweeping, washing or other approved methods and shall transport all materials cleaned from the work site to an approved dumping area.

The Contractor shall perform all operations in strict accordance with O.S.H.A. and manufacturer's safety requirements. The District shall not be responsible for the enforcement of safety standards and will not supervise, direct, control, have authority over, or be responsible for the Contractor's construction means, methods, techniques, sequences, procedures, or safety precautions and programs incident thereto, or for any failure of the Contractor to fully comply with all applicable Laws and Regulations related to the performance and completion of the specified Work.

All work in streets, highways, railroads or flood plains shall be subject to the regulations and requirements of the jurisdictional agency. The Contractor shall be responsible for securing all necessary permits, bonds, insurance, paying all fees and meeting all conditions required by any and all permits at no cost to the District. Copies of Contractor-secured permits shall be provided to the District prior to the start of construction. Should conflicts or contradictions arise between the specifications and the various permits required, the permit terms and conditions shall govern. The Contractor shall be responsible for the temporary maintenance of all roadways, drives and drainage facilities for the duration of the project and shall maintain access at all times to all affected businesses and residences. Upon completion of the Work, the Contractor shall restore the area to the satisfaction of the governing agency.

The Contractor shall contact JULIE at 1-800-892-0123 forty-eight (48) hours, minimum, prior to start of construction to have the on-site utilities located. All underground utilities shall be located by the utility owner and special care shall be taken when excavating near underground utilities to avoid damage. The Contractor shall notify the local roadway authority seventy-two (72) hours, minimum, prior to performing any roadway removal or restoration work. All roadway removal and restoration shall be inspected and approved by the governing roadway authority.

The Contractor shall be responsible for the final installation and all tests of materials required by the District. All deficiencies noted by the inspectors shall be corrected by the Contractor without cost to the District and prior to final payment. The District will not be responsible for the Contractor's failure to perform or complete the Work in accordance with the Contract Documents.

### **1.2 Required Submittals**

- ASTM installation standards
- Construction progress schedule
- Permits
- Agreements for access / storage – as requested

### **1.3 Payment** – Not used.

## 2 Scope of Work

### 2.1 General

It is the intent of these specifications to provide the description necessary to allow qualified bidders to submit formal quotations to the District for **2018-2019 Service Lateral Lining, Capital Project No. 1933**. These *Detailed Specifications* are provided for the rehabilitation of existing sanitary sewer service laterals from the sewer main to the property line by lining the existing service with a resin-impregnated flexible felt tube heated to cure the thermosetting resin/felt tube composite, formed to the existing service lateral. All service lateral lining will be on services that connect to mainline sewers that have been previously lined with cured-in-place pipe (CIPP). Service lateral rehabilitation shall be completed without excavation in the public roadway.

The Contractor shall be responsible for the pipe lining of sanitary services, complete restoration, all necessary permits and fees, testing, mobilization, securing access, flow control (bypass pumping), water acquisition, site preparation, site investigation, traffic control, public notification and all other appurtenances required to complete the project.

Service cleanouts are buried approximately 1.0' below grade and have 1/2" iron pins strapped to the riser pipe to facilitate locating with a metal detector. Service ties from the cleanout to the property line are provided in the *Lateral Reconstruction List* in *Section III*. The District will assist in locating cleanouts if required.

The cured-in-place lateral liner pipe shall be installed into the existing 6" diameter service lateral consistent with ASTM F-1216, F-1743 and/or ASTM F-2561 through the clean-out/access point at the property line or from the mainline pipe. The resin and tube shall be held in place using internal pressure and cured into a hard impermeable pipe. When cured, the pipe shall be a continuous, tight-fitting pipe-within-a-pipe. The rehabilitation shall provide a watertight connection at the mainline pipe and at the existing clay to PVC pipe transition. The lateral liner shall extend from the sewer main to a minimum of 1' upstream of the 6" Clay to 6" PVC pipe transition; reference the detail provided in *Section III*.

The District will be responsible for installing a 6" diameter cleanout on the existing 6" Clay sewer service at or near the property line for all laterals. The cleanout will connect to the existing service using a 6" x 6" x 6" tee fitting and a 6" VCP x 6" PVC transition coupling. Typically the District-provided cleanout will be located between 2 and 4 feet upstream of the 6" Clay to 6" PVC pipe transition. The Contractor will be responsible for lining the entire length of existing 6" Clay pipe and the 6" PVC pipe 1' upstream of the 6" Clay to 6" PVC transition. Reference the Detail in *Section III*. All service lateral lining will be on services that connect to mainline sewers that have been lined with cured-in-place pipe (CIPP).

### 2.2 Required Submittals – Not Used.

### 2.3 Payment – Not used.



### **3 Required Submittals**

#### **3.1 General** – Not used.

#### **3.2 Required Submittals**

This section contains items that are required to be submitted and approved by the Engineer prior to the start of construction. The required submittals are also found in the applicable parts of *Article 3 – Detailed Specifications*.

##### **Part 2**

- ASTM installation standards.
- Construction progress schedule.

##### **Part 4**

- 4.3(1) Chemical resistance test data.
- 4.3(2) Tube material specification.
- 4.3(3) Resin system material specification.
- 4.4 Liner thickness design calculations.
- 4.5 Structural property test results from previous project(s).
- 4.7 Curing details.

##### **Part 8**

- Door hanger notification.

##### **Part 9**

- Engineering Design Guide and Quality Control procedures for the liner manufacture and installation, including detailed inspection, testing of physical properties, retention of production samples, and taking of field samples.
- Installer training, testing and / or certification of being trained to install the product by the product manufacturer.

##### **Part 10**

- Applicable right-of-way permits.

##### **Part 18**

- 18.2 Design calculations, with resin and liner material submittals.

##### **Part 19**

- 19.3(1) Chemical resistance data.
- 19.3(2) Tube material specification.
- 19.3(3) Resin system material specification.
- 19.4 Design calculations.
- 19.5 Structural property test results.
- 19.7 Curing details.

#### **3.3 Payment** – Not Used.

## 4 Cured-in-place Pipe Lateral Reconstruction

### 4.1 General

It is the intent of the specification to provide for the reconstruction of service lateral pipes from the sewer main to the property line, without excavation, by the installation of a resin impregnated, flexible tube. The cured-in-place pipe shall be installed into the existing service lateral consistent with ASTM F-1216, ASTM F-1743, and/or ASTM F-2561 through a 6" diameter clean-out at the property line or from the mainline pipe. The resin and tube shall be held in place using internal pressure and cured into a hard impermeable pipe. When cured, the pipe shall be a continuous, tight-fitting pipe-within-a-pipe. The rehabilitation shall also provide a watertight connection at the mainline pipe.

#### (A) Cured-in-place Pipe Materials

The tube shall be fabricated to a size that, when installed, provides a cured-in-place pipe that will neatly fit the internal circumference of the existing service. **The Contractor shall be responsible for verifying the length, diameter and condition of all existing services.**

#### (1) Cured-in-place Pipe (CIPP) Material Specifications

- (a) Chemical resistance: The cured-in-place pipe shall be fabricated from materials which when cured will be chemically resistant to withstand internal exposure to domestic sewage, and meet the chemical corrosion resistance requirements of ASTM F-1216 and D-5813. All constituent materials will be suitable for service in the environment intended. The final product will not deteriorate, corrode or lose structural strength to reduce the projected product life.

#### (b) Tube: The tube material shall meet the requirements of ASTM F 1216, Section 5.1.

- (i) Absorbent Fabric Tube: The tube shall consist of one (1) or more layers of absorbent fabric capable of carrying resin, and capable of withstanding installation pressures and curing temperatures. The tube shall be compatible with the resin system used. The tube material shall be able to stretch to fit irregular pipe sections and negotiate bends. The tube shall be fabricated to a size that when installed, will fit the internal circumference and the length of the pipe.

Allowance should be made for circumferential stretch during inversion. For the pull-in methods of lining, the resin soaked tube shall have an outer plastic lining that effectively prevents the scrape off or wash off of resin.

- (ii) Thickness: The liner shall be designed in accordance with ASTM F-1216. The finished tube shall have a uniform thickness and shall not vary from the nominal minimum tube thickness by more than 5%. The minimum liner thickness for this project shall be 3.0 mm unless design calculations per the cured-in-place-pipe (CIPP) structural requirements provided in this specification demonstrate a thinner liner would be acceptable.

- (iii) Color: The tube shall be a light reflective color so that a clear, detailed examination with closed circuit television equipment may be made.

- (iv) Delaminations: The bond between all CIPP layers shall be strong and uniform. All layers, after cure, must form one homogeneous structural pipe wall with no part of the tube left unsaturated by resin. It shall not be possible to

separate any two (2) layers with a probe or point of a knife blade so that the layers separate cleanly or the probe or knife blade moves freely between the layers; nor shall separation of the layers occur during testing performed under the requirements of these *Detailed Specifications*.

- (c) Resin: The resin system shall be thermoset polyester, vinylester (or District approved alternate) resin meeting the requirements of ASTM F-1216, Section 5.2.

(i) The manufacturer shall certify that the proposed resin system and cure schedule are appropriate for the proposed application, and have been tested in laboratory and field conditions. The resin shall produce CIPP, which will comply with the structural and chemical resistance requirements specified.

(ii) The resin used shall be compatible with the tube and be able to cure in the presence of water. Thixotropic agents that enable the resin system to possess pseudo-plastic fluid flow properties, and that do not interfere with visual inspection, shall be added for viscosity control and to minimize resin washout.

Resins may contain pigments that do not interfere with visual inspection of, or the physical testing of, the CIPP Filler materials of a proprietary nature may be added as long as the final pipe product meets or exceeds the minimum standards set forth in this specification.

- (d) Deviations: The Contractor shall submit his price proposal for the appropriate length, size and thickness designated or required. No changes in prices will be entertained by the District as a result of the Contractor modifying the properties of the liner due to unexpected parent pipe conditions.

(B) Cured-in-place Pipe (CIPP) Structural Requirements

The CIPP pipe shall be designed in accordance with the requirements of ASTM F 1216, Appendix XI, with the following design parameters:

- Design safety factor: 2.0
- Reduction factor for long-term effects: 0.50 (applied to flexural modulus).
- Ovality: 2% min.
- Enhancement factor (K): 7
- Groundwater depth: To grade
- Soil Depth (above crown): To grade
- Soil Modulus: 1000 psi
- Soil density: 120 pcf
- Live load: 0
- Design condition: Fully deteriorated

Design calculations shall be submitted to the District for approval prior to lining.

(C) Physical Strength

The structural performance of the finished pipe must be able to accommodate all anticipated loads throughout the design life of the cured-in-place pipe. No cured-in-place pipe reconstruction technology will be allowed that requires bonding to the existing pipe for any part of its structural strength. If reinforcing materials (fiberglass, etc.) are used, those materials must be corrosion-resistant grade materials and be fully encapsulated within the resin to assure that the reinforcement is not compromised when exposed to the sewage.

The cured-in-place pipe shall conform to the minimum structural standards as listed below:

<u>Property</u>	<u>ASTM Standard</u>	<u>Results</u>
<b>Flexural Strength</b>	ASTM D-790	4,500 PSI
<b>Flexural Modulus of Elasticity</b>	ASTM D-790	250,000 PSI

(1) Testing

To verify past performance, the manufacturer shall submit independent laboratory test results from the same liner materials proposed for the actual installation. These test results must verify that the structural properties specified above have been achieved in previous similar field applications.

Samples shall be prepared and tested in accordance with ASTM F-1216. Copies of certified test reports by an approved testing laboratory shall be provided to the District.

- (2) Flexural (Bending) Properties: The Flexural Modulus of Elasticity and Flexural Strength shall be measured for gravity pipe applications in accordance with Test Method D-790, Test Method #1 - Procedure A.

(D) Installation Preparation

(1) Installation Procedures

The following installation procedures shall be adhered to unless otherwise approved by the District:

- **Access** – The District shall provide a cleanout at or beyond the termination point of the length of public service lateral to be rehabilitated. This will allow for the passage of the required cleaning and video equipment. The cleanout will be comprised of a 6" diameter PVC riser with a tee fitting on the existing 6" VCP sewer service per the detail provided in *Section III*.
- **Safety** – The installer shall carry out his operations in accordance with all applicable O.S.H.A. standards.
- **Notification** – Provide notification in accordance with *Article 3, Part 8 Notification*.
- **Cleaning** - Internal debris must be removed from the service lateral and main line at point of connection before installing the lateral lining system. Reference *Article 3, Part 5 Sewer Cleaning*.
- **Inspection of the existing pipe** –Service inspection shall be performed by experienced personnel trained in closed circuit television systems. The interior

of the pipeline shall be carefully inspected to determine the location of any condition which may prevent proper installation of the lateral lining system. Reference *Article 3, Part 7 Television Inspection*. If the Contractor determines that he cannot line a service due to conditions encountered, he shall indicate this in writing to the District and if the District concurs with the determination, the Service will be removed from the contract.

- **Bypassing Sewage** – Contractor shall be responsible for sewer flow control per *Article 3, Part 6 Sewer Flow Control*. Temporary plugging and bypassing of sewage around the section or sections of mainline pipe where the service lateral(s) is/are located may be required. It is required that the service lateral be inactive during the time of service liner installation. This may be accomplished plugging the upstream end of the service at the tee fitting and by requesting that the homeowner refrain from using their services during the period of installation. Notification shall be offered to the homeowner at least twenty-four (24) hours prior to starting their lateral repair. The Contractor shall be responsible for maintaining the current level of service to all users connected to the existing sanitary sewer and shall be responsible for all damage caused by sewer backups as a result of this project.
- **Line Obstructions** – If the inspection of the service lateral reveals an obstruction that cannot be removed using conventional sewer cleaning equipment, the obstruction shall be removed or repaired by the District or the lateral liner removed from the Contract.
- **Mainline Connection** - The service lateral pipe opening at the confluence with the lined mainline has been reinstated in a manner that is consistent with *ASTM F-1743, Section 6.9*. The method of connection of the service liner pipe to the main must be approved by the District. If the service reinstatement in the existing CIPP or fold and formed liner, has rough or jagged edges or is not fully open, the Contractor shall modify the service connection at the main per *Article 3, Part 15 Modification of Sewer Service Connection at Main*. The connection of the service to the mainline sewer must be watertight.

(2) Preparation of Liner

- Material shall conform with manufacturer's standards to provide lining thickness specified and inspected prior to impregnation.
- **Wet Out:** The tube shall be impregnated with resin under controlled conditions. The volume of resin used should be sufficient to fill all voids in the tube material at nominal thickness and diameter. A roller system shall be used to uniformly distribute the resin throughout the tube. All air in the tube shall be removed by vacuum, allowing the resin to thoroughly impregnate the tube. Should an unsaturated section of the tube be noticed before inversion, the unsaturated area of the tube shall be re-impregnated with the resin using methods developed by the Contractor and to the satisfaction of the District.

(E) Installation of the Lateral Lining System

Installation shall take place by one (1) or both of the following installation methods:

- (1) Install service liner through Sanitary Sewer Main: A pressure apparatus, with an end attached to a robotic device, shall be hand-winched through the mainline pipe to the service connection. The robotic device, together with a television camera, shall be used to position the pressure apparatus installation hardware at the service connection opening. Air pressure shall be used to install the wet-out tube into the lateral pipe.
- (2) Install service liner through existing cleanout: A pressure apparatus shall be pulled into place through the cleanout. Air pressure shall be used to install the wet-out tube into the lateral pipe.

Non-toxic lubricant may be used to reduce friction. The inversion / installation process shall be conducted at a maximum controlled speed of two feet per second (2 ft. /sec.).

- (a) Pressure: Tube installation forces or pressures shall be limited so as not to stretch the tube longitudinally by more than 5% of the original length. Before installation begins, the tube manufacturer shall determine the minimum pressure required to hold the tube tight against the host pipe and the maximum allowable pressure so as not to over stretch or damage the tube. Once the installation has started, the pressure shall be maintained between the minimum and the maximum pressures until the installation has been completed.
- (b) **The Contractor shall be responsible for coordinating with the appropriate water authority for the availability of public water for this project.** If public water is not directly available at specific sites, the Contractor shall be responsible for delivery of water to the site. The Contractor shall be responsible for any fees charged for water usage. If required, the Contractor shall obtain a calibrated water meter from the appropriate water department to gauge usage of water; contact information is listed in *Article 3, Section 5 Sewer Cleaning*.
- (c) Curing: Curing shall take place per the manufacturer's recommendations. The Contractor shall provide submittals on all lining materials and resins, and shall furnish manufacturer certification that the liner materials are in compliance with the specifications, codes, and standards referenced herein. The submittals shall include details of all component materials and construction details including complete manufacturers recommendations for storage procedures and temperature control (step curing temperature/hours at each and final stage for each section thickness and length), handling, inserting the liner, and curing details.
- (d) Finish: The finished cured-in-place pipe shall be free of dry spots, lifts, wrinkles or delamination. The cured-in-place pipe shall not inhibit the closed circuit television post video inspection of the mainline or service lateral pipes.
- (e) Final Acceptance: Upon completion, the contractor shall televise the lined lateral and provide a disk showing the installed liner to the District. Reference *Article 3, Part 7 Television Inspection* for televising requirements. Upon completion of service lining, District crews will televise the sewer main to verify acceptance of

the Sewer Service Connection at the Main. All main/service connections shall be watertight.

#### **4.2 Required Submittals**

- Chemical resistance test data from CIPP samples similar to that proposed for actual construction shall be submitted prior to installation.
- Tube material specification.
- Resin system material specification.
- Liner thickness design calculations (note groundwater depth to grade).
- Structural property testing results.
- Curing details.

#### **4.3 Payment**

Payment for Cured-in-place Pipe Lateral Reconstruction shall be made based on the contract unit price bid per each (EA) for CIPP Lateral Reconstruction.

### **5 Sewer Cleaning**

#### **5.1 General**

The Contractor shall be responsible for cleaning and removing foreign materials from the sewer lines to permit proper installation of the pipe lining materials. The sewer line cleaning shall be accomplished by using hydraulically propelled, high-velocity jet, or mechanically powered equipment. Selection of the equipment shall be the responsibility of the Contractor and shall be approved by the District prior to starting any of the work.

The cleaning procedure shall conform to current NASSCO recommendations and remove all dirt, grease, rocks, roots, sand, and any other material or obstructions from the sewer lines that would affect the proper installation of the sewer liner. Contractor shall notify the District of any sewer service segment that cannot be properly cleaned because of a broken pipe or a major blockage. If the District cannot make the necessary modifications to the sewer service to allow for lining, the service will be removed from the Contract.

##### **(A) Cleaning Precautions**

The Contractor shall take all necessary precautions in the use of cleaning equipment to prevent flooding or damage to any of the sewer lines, services, manholes and public or private property. To ensure safe operation, all machines shall be fully enclosed and shall have an automatic overload clutch or relief valve.

When hydraulically propelled cleaning tools or tools which retard the flow in the sewer line are used, precautions shall be taken to insure that the water pressure created does not damage the existing pipe or cause flooding of public or private property being served by the sewer.

##### **(B) Water and Electricity**

- Electricity: Any electricity required shall be the responsibility of the Contractor.
- Water: **The Contractor shall be responsible for coordinating with the appropriate water authority for the availability of public water for this project.** If public water is not directly available at specific sites, the Contractor shall be responsible for delivery of

water to the site. The Contractor shall be responsible for any fees charged for water usage. If required, the Contractor shall obtain a calibrated water meter from the appropriate water department to gauge usage of water. The Contractor shall notify the District prior to initiating cleaning and flushing.

<u>Authority</u>	<u>Contact</u>	<u>Telephone</u>
City of Rockford	Water Division	779-348-7152
City of Loves Park	Craig McDonald	815-877-1421
North Park Water Dept.	Ed Rice	815-633-5461

(C) Solids Disposal

All foreign materials cleaned from the sewers shall be removed at the downstream manhole for the section of sewer being cleaned. The Contractor shall not be allowed to pass foreign materials into other pipe sections. All materials shall be removed from the project site and properly disposed of by the Contractor no less often than at the end of each workday. Under no circumstances will the Contractor be allowed to accumulate debris, etc., on the site of work beyond the stated time, except in totally enclosed containers and as approved by the District.

(D) Acceptance of Sewer Line Cleaning

The Contractor shall televise all sewer services after they are cleaned and verify that the service is clean enough to line. If television inspection shows the cleaning to be unsatisfactory, the Contractor shall re-clean and re-televise the sewer line until it is acceptable to the District. No additional compensation will be awarded for re-cleaning or re-televising of sewers.

(E) Equipment Recovery

If any equipment becomes stuck in the sewer line such that excavation is required for removal, the Contractor shall be responsible for the cost of extraction work necessary, including but not limited to excavation, backfill, restoration, pipe repair and damage resulting from the backup of sewage in the pipe.

**5.2 Required Submittals** – Not used.

**5.3 Payment**

Payment for sewer cleaning shall be included in the contract unit price per each (EA) for Clean and Televise Service Lateral.



## **6 Sewer Flow Control**

### **6.1 General**

The Contractor shall be responsible for controlling the flow in the sewer main so that the liner can be installed properly. If required, the Contractor shall be allowed to reduce or eliminate the amount of flow by plugging or blocking an upstream line, or by pumping the flow at the upstream manhole into another sanitary sewer manhole. All plugs or blocking shall be restrained to ensure that they cannot be washed downstream.

It is required that the service lateral be inactive during the time of service liner installation. This shall be accomplished by plugging the upstream end of the service at the tee fitting and requesting that the homeowner refrain from using their service during the period of installation.

(A) Temporary Plugging: The Contractor shall insert an acceptable sewer line plug into the mainline upstream of the section being worked on. The plug shall be so designed that all or any portion of the sewage can be quickly released. During TV inspection and cleaning operations, flow shall be reduced to within the limits specified above. Contractor shall remove the plug well in advance of any possible sewage bypass or basement flooding. After the work has been completed, flow shall be restored to normal.

(B) Diversion/Bypass Pumping: When diversion pumping is required, the Contractor shall supply the pumps, conduits, and other equipment to divert the flow of sewage around the manhole section in which work is to be performed. The diversion system shall be of sufficient capacity to handle existing flow plus additional flow that may occur during/following a rainstorm. The Contractor will be responsible for furnishing the necessary labor and supervision to set up and operate the diversion pumping system.

The Contractor shall only pump flow into manholes approved by the District. The Contractor shall provide sufficient inspection personnel to ensure that surcharging and backups do not occur on public or private property while pumping or plugging operations are being conducted. If bypass pumping is required on a twenty-four (24) hour basis, the pumping equipment shall be equipped with mufflers to minimize noise to a level of 90 decibels or less.

Contractor shall be required to obtain permission from private property owners if it is necessary to place pipes or hoses on said property.

(C) Flooding Precautions: When flow in a sewer line is plugged, blocked, or diverted, the Contractor shall take sufficient precautions to protect the sewer lines from damage that might result from sewer surcharging, and to insure that sewer flow control operations do not cause flooding or damage to the public or private property being served by the sewer involved.

The Contractor shall be responsible and liable for any damage caused by sewer back-ups.

### **6.2 Required Submittals** – Not Used.

### **6.3 Payment**

Payment for sewer flow control shall be included in the contract unit price bid per each (EA) for CIPP Lateral Reconstruction.

## **7 Television Inspection**

### **7.1 General**

The Contractor shall be required to televise and document all service line conditions after cleaning the service but prior to installing the service liner. Final televising of the service and recording will be required after the liner is installed. The District will review the recordings for final acceptance of the lining process. All televising shall be performed by experienced technicians.

All sewer televising shall be done in accordance with recommended specifications as published by the National Association of Sewer Service Companies.

The Contractor shall also provide equipment to play back the recordings in the field as requested by the District; the minimum monitor size shall be seventeen inches (17"). The equipment shall play back at the same speed that it was recorded, and shall have a slow-motion or stop-action feature.

Prior to installing the liner, the interior of the service line shall be carefully inspected to verify the inside diameter and to determine the locations of any conditions that would prevent the proper installation of the sewer liner.

#### **(A) Televising Equipment**

All televising equipment utilized for television inspection of service lateral pipes by the Contractor shall conform to the minimum standards established herein.

##### **(1) Equipment Scope**

Television equipment shall include a push rod wide angle service camera, television monitor, cables, power source, lights, skids, and other required equipment. The television camera shall be specifically designed and constructed for operation in connection with sewer inspection.

##### **(2) Camera Specifications**

The camera, television monitor, and other components of the video system shall be capable of producing a minimum 600 line resolution color video picture. The camera shall be operative in one hundred percent (100%) humidity conditions. Lighting for the camera shall be supplied by a lamp on the camera and will minimize reflective glare. Lighting and camera quality shall be suitable to provide a clear, in-focus picture of the entire inside periphery of the sewer pipe for all conditions encountered during the work. Picture quality and definition shall be to the satisfaction of the District.

The camera used for televising the sewer service shall be a push service camera. Markings shall be made on the push camera cable to measure distance and the distances shall be verified above ground with a tape.

##### **(3) Recording Requirements**

All sewer televising shall be documented on digital media. The recording shall include information that accurately reproduces the original picture of the video inspection. The recording shall be free of electrical interference and shall produce a clear and stable image.

The pipeline inspection shall consist of identifying a location both within the pipe segment (physical location) and within the recording (video frame location) for each observation. This will allow the recording and inspection data to be cross-referenced for instant access to any point of interest within the recording.

Continuous measurements along service lines shall be electronically or manually recorded for purposes of referencing locations of pipe defects. The date and service address or Item number from the Lateral Reconstruction Schedule shall be continuously displayed on the recording header.

(4) Audio Recording Requirements: Not required.

(B) Labeling and Ownership

Electronic files shall be organized and labeled by Item Number from the *Lateral Reconstruction List* provided and *Section III*. **All final video files shall be delivered to the District on a single SSD external hard drive.** The hard drive containing final, approved videos shall become the property of the District. The cost of providing the hard drive shall be incidental to the sewer lining.

(C) Electrical Power

The electricity for all operations will be the responsibility of the Contractor.

(D) TV Inspection and Data Collection Practices

All inspection and recording practices shall conform to the minimum standards specified herein and all tape and inspection form recordings shall be evaluated against these standards.

- (1) Color: All recordings shall be in color with the ability to achieve proper balance of tint and brightness. The loss of color or severe redness due to equipment malfunction and black and white pictures irrespective of quality may be cause for rejection.
- (2) Focus: All pictures (recordings) shall be in focus, properly illuminated with good contrast and without interference.
- (3) Cleaning: Prior to televising, all lines shall be cleaned by the Contractor in accordance with applicable specifications or as directed by the District. All obstructions that restrict flow, prevent cleaning, or televising should be reported to the District immediately.
- (4) Maximum Flow Depth: If possible, televising shall be performed while the line segments are in service without plugging or flow diversion.
- (5) Camera Movement: The camera shall move through the line at a uniform rate, stopping when necessary to ensure proper documentation of the sewer's condition but in no case shall the television camera be pulled at a speed greater than 30 feet per minute.
- (6) Lens Cleaning: The camera lens must be kept clean and clear. Any fogging due to oil, grease, or other wastewater content or debris that obscures the lens shall be cleaned off before proceeding with the recording operations.

- (7) Sewer Length Accuracy: Measurements shall be accurate to +/- 1.0 feet over the length of the section being inspected. Distance marks shall be made on the push camera and all measurements verified above ground with a walking meter, roll-a-tape, or other suitable device.
- (8) Equipment Recovery  
If any equipment becomes stuck in the sewer line such that excavation is required, the Contractor shall be responsible for the cost of all work necessary, including but not limited to: replacement, excavation and backfill, restoration, pipe repair, and damage due to back-up of the wastewater.
- (9) Digital Recording Review  
The Contractor shall be required to provide to the District digital recordings (1 copy) of all sewer services before and after rehabilitation with visual records of all services and problem areas provided in a format that is compatible with the District's equipment. **Electronic files shall be organized by contract Item Numbers and labels shall clearly describe post-lining and pre-lining for each service.** During construction, the contractor may submit video inspections for review an approval to expedite any corrective work, but the final video submittal must contain all video inspections on a single SSD hard drive.  
  
All recordings submitted by the Contractor to the District shall be subject to review for acceptability of quality conforming to the minimum standards established herein.
- (10) Unacceptable Inspection  
If the recording of any portion of a line is unacceptable, the entire segment will be deemed unacceptable and must be re-televised from the main to the property line.
- (11) Complete Service Line Segments  
All services must be televised complete from the sewer main to property line on the same recording in a continuous run. Partial recording on one disk and then completing the run on another disk will be unacceptable.

**7.2 Required Submittals** – Not Used.

**7.3 Payment**

Payment for the television inspection of the lined service shall be included in the contract unit price bid per each (EA) for CIPP Lateral Reconstruction.

## **8 Notification**

**8.1 General**

The Contractor shall make every effort to maintain the current level of sanitary sewer service throughout the duration of the project. Property owners shall not be without sewer service for more than eight (8) hours. A public notification program shall be implemented, and shall as a minimum, require the Contractor to be responsible for contacting each home or business connected to the service lateral and informing them of the work to be conducted and when the sewer will be out of service. Adjustment to the lining schedule shall be made to accommodate property owners as necessary. The Contractor shall also provide the following:

- A minimum of forty-eight (48) hours advance written notice to be delivered to each home or business describing the work, schedule, how it affects them, and a toll free or local telephone number of the Contractor they can call to discuss the project or any problems that arise. Notice shall also include contact information for the District's Chief Inspector, Jude Torre at 815-871-8072.
- Personal contact or written notice the day prior to the beginning of work being conducted on the section relative to the residents affected.
- Personal contact with any home or business that cannot be reconnected within the time stated in the written notice.

### **8.2 Required Submittals**

- Door hanger notification

### **8.2 Payment**

Payment for notification shall be included in the contract unit price bid per each (EA) for CIPP Lateral Reconstruction.

## **9 Quality Assurance**

### **9.1 General**

The Contractor shall televise all service liners after installation of the liner. The television recording shall be used by the District to perform final inspection on the line. The finished pipe liner shall be continuous from the sewer main to the property line and shall be free from visual defects such as foreign inclusions, dry spots, pinholes, pilot holes, wrinkles or delamination. The lining shall be impervious and free of any leakage between the pipe and the surrounding ground, as well as any leakage at the connection to the sewer main.

**Upon completion of service lateral lining, the District will televise the Sewer Main to verify the acceptance of the sewer service connection at the main.**

The Contractor shall repair, at his own expense, any defects in the liner that will affect the integrity or strength of the pipe and any visual or functional defects such as wrinkles, drill holes, folds, pillows, etc. All repairs will be performed in a manner that is mutually agreed upon by the District and the Contractor. If a liner fails and is determined to be unacceptable by the District the entire length of lined pipe from the main to the property line shall be removed and replaced per District requirements and no additional cost to the District.

#### **(A) Wrinkles**

Any wrinkles in the finished liner pipe that are larger than five percent (5%) of the pipe diameter and located in the bottom half of the service are unacceptable and shall be removed and repaired by the Contractor at the Contractor's expense; method to be approved by the District.

(B) Post-Lining Televising

Visual inspection of the CIPP shall be in accordance with ASTM

F-1216, Section 8.6., and *Article 3, Part 7 Television Inspection* of these specifications.

(C) Structural Property Testing

For every twenty (20) laterals lined, one (1) flat plate sample shall be tested by a third party test laboratory for confirmation of flexural strength and flexural modulus of elasticity in accordance with ASTM F-1216. Should any samples fail to meet minimum structural properties, the Contractor shall excavate, sample and re-test material to the satisfaction of the District. The District will determine the quantity and individual liner(s) subject to additional structural property testing in the case of failed flat plate sample tests.

**9.2 Required Submittals**

- The Contractor shall submit an Engineering Design Guide and Quality Control procedures for the liner manufacture and installation, including detailed inspection, testing of physical properties, retention of production samples, and taking of field samples.
- Contractor shall submit evidence of installer training, testing and / or certification of being trained to install the product by the Manufacturer for the product.

**9.3 Payment**

Payment for quality assurance shall be included in the contract unit price per each (EA) for CIPP Lateral Reconstruction.

**10 Permit Requirements**

**10.1 General**

The Contractor shall comply with the requirements of any and all permits required for the construction of this project. Should excavation in roadways be required, a road cut permit will be required from the appropriate roadway authority. The Contractor shall provide all insurance, bonds, etc., as required by the necessary permits. The Contractor shall also obtain and comply with any additional permits required for the completion of this project. The Contractor shall provide all insurance, bonds, etc. as required by these permits at no extra cost.

**The City of Rockford will require a Blanket Right-of-way permit for all services located in the City of Rockford, contact Patricia Williams at (779)-348-7174 / [patricia.williams@rockfordil.gov](mailto:patricia.williams@rockfordil.gov) to obtain the permit.**

**For services in the City of Loves Park, notify Shannon Messinger at (815)-654-5040 / [shannonmessinger@loves-park.il.us](mailto:shannonmessinger@loves-park.il.us) a minimum of forty-eight (48) hours prior to completing any work.**

**For services located in Rockford Township Highway Department right-of-way, the Contractor shall notify Brad Trent at (815)-222-6950 / [btrent@twp.rockford.il.us](mailto:btrent@twp.rockford.il.us) a minimum of forty-eight (48) hours prior to completing any work.**

**For services located in the Village of Machesney Park, contact Chad Hunter at Machesney Park Village Hall, (815) 877-5432 / [chadh@machesneypark.org](mailto:chadh@machesneypark.org).**

### **10.2 Required Submittals**

- Copies of all permits obtained.

### **10.3 Payment**

Payment for compliance and procurement of any permits required shall be included in the contract unit price per each (EA) for CIPP Lateral Reconstruction.

## **11 Restoration Work**

### **11.1 General**

In the unlikely case excavation is required beyond the scope of exposing existing cleanouts, all restoration of private and public property, including sidewalks, driveways, all other slab work, concrete and asphalt, drainage channels, storm sewers and dry wells, disturbed or damaged as a result of this construction project shall be promptly completed, in conformance with roadway authority standards or on private property equal to or better than the existing conditions as directed by the District and guaranteed by the Contractor for a period of two (2) years following satisfactory completion and final acceptance of the total contract.

All excavated areas shall be guaranteed against subsidence and settlement for a period of three (3) years after final completion of the contract. Any restoration work damaged as a result of subsidence shall be restored again at no cost to the District.

All storm sewer, watermain, gas main, corrugated metal pipe, drainage tile or other drainage devices shall be repaired and re-laid or replaced at original elevations. Pipes which have been, in the estimation of the District significantly damaged by the Contractor, shall be replaced with new pipe of the same diameter, length and type, at no added expense to the Owner; any necessary couplings and fittings shall be used as necessary, and the work shall be satisfactory to the District. When necessary, temporary restoration of roads, drives, fences, etc., will be required.

Restoration work shall include the following provisions:

- All soil, brush and debris resulting from construction shall be removed and disposed of in a satisfactory manner. The surface of the ground, all fences and other structures on the premises or adjacent premises touched or in any manner altered by the construction of the sewer, shall be restored to a condition equally as good as or better than existed before the commencement of the work.
- Ground surfaces that were covered with grass prior to construction shall be restored to original grade and seeded per *Article 3, Part 12 Seeding*. Excavated and stockpiled topsoil may be used for this item if acceptable to the District; otherwise approved topsoil may have to be imported.
- On private property, the Contractor shall remove and replace (or replant) all bushes, shrubs and plants damaged or destroyed with species of similar type, size and quantity. These shall be guaranteed for a period of two (2) years after final completion.

### **11.2 Required Submittals** – Not used.

### **11.3 Payment**

Payment for restoration work shall be included in the contract unit price per each (EA) for CIPP Lateral Reconstruction.

## **12 Seeding**

### **12.1 General**

Ground surface including rights-of-way and easements that were covered with grass prior to construction shall be seeded according to all applicable specifications and as directed by the District. The Contractor shall make certain that all disturbed areas have the same depth (4" minimum) and quality of approved topsoil as existed prior to construction.

The seeding mixture used shall be compatible with the existing ground cover or as indicated under easement requirements and shall be acceptable to the District. Maintainable lawn areas shall be seeded with I.D.O.T. Class I seeding mixture. Existing non-maintained turf areas shall be seeded with I.D.O.T. Class 3-slope mixture or as indicated under specific easement requirements.

Reference is made to the *General Provisions and Technical Specifications for Sanitary Sewer Construction, T.S. 4-2*, for specifications on seeding and sodding and fertilizer, and to Sections 250, and 251 of the I.D.O.T. *Standard Specifications for Road and Bridges Construction*, current edition.

### **12.3 Required Submittals** – Not used.

### **12.2 Payment**

Payment for seeding shall be included in the contract unit price per each (EA) for CIPP Lateral Reconstruction.

## **13 Safety and Traffic Control**

### **13.1 General**

The work described under this contract includes work within sanitary sewers, an environment deemed hazardous by State and Federal authorities. The Contractor shall employ safety measures appropriate for such work. The Contractor shall be solely responsible for the safety of the operations. He shall comply with all state, local and O.S.H.A. regulations. The Contractor shall meet all the requirements of all permits secured for this project.

During the course of construction, the Contractor shall keep a minimum of one lane of traffic open through any affected streets.

#### **(A) Safety Program**

For the duration of this contract, the Contractor shall develop and maintain a safety program that will effectively incorporate and implement all required safety provisions as determined by O.S.H.A. 29 CFR.



(B) Roadway Safety

The Contractor shall comply with all rules and regulations of the State, County, and City authorities regarding closing or restricting the use of public streets or highways. No public or private road shall be closed, except by express permission of the District. Conduct the work so as to assure the least possible obstruction to traffic and normal commercial activities. Contractor shall protect all obstructions within traveled roadways by installing approved signs, barricades, and lights where necessary for the safety of the public. The Contractor shall notify the appropriate roadway authority a minimum of seventy-two (72) hours prior to beginning any work for approval of traffic control in any affected streets, as well as required detour routes, signing and permits.

The Contractor shall provide access to the residences and/or businesses, schools, etc. at all times (i.e., drives, roadways, ramps must remain open or must be provided) over the course of this Contract.

(C) Flagman

When flagmen and guards are required by regulation or when deemed necessary for safety, the Contractor shall furnish the flagmen or guards and other regulation traffic control devices.

**13.2 Required Submittals** – Not Used.

**13.3 Payment**

Payment for safety and traffic control shall be included in the contract unit price per each (EA) for CIPP Lateral Reconstruction.

## **14 Warranty**

The Contractor shall unconditionally warrant their products for a period of two (2) years (730 days) commencing on the date installation of the entire project is completed and accepted, in writing, by the District. The Contractor shall repair, at his own expense, any defects in the liner that will affect the integrity or strength of the pipe. All repairs will be performed in a manner that is mutually agreed upon by the District and the Contractor. Any such repairs shall likewise be covered by the same warranty period from the date of subsequent installation and written approval by the District.

Any repairs required after the service liner is installed and within the two year warranty period will require testing in accordance with *T.S. 9 Acceptance Tests*, Pages 94 through 98 of the *General Provisions and Technical Specifications for Service Lateral Construction*. This testing shall be performed by the Contractor at no additional cost to the District. Complete site restoration of any repairs shall also be the responsibility of the Contractor. All trenches and related restoration shall be guaranteed against settlement for a period of three (3) years from the date the project is completed.

During the warranty period, any defects, which will affect the integrity or strength of the cured-in-place pipe, will be repaired at the Contractor's expense in a manner mutually agreed upon by the Owner and the Contractor.

**14.2 Required Submittals** – Not Used.

**14.3 Payment** – Not Used.

## **15 Service Reinstatement Modification**

### **15.1 General**

(A) Prior to installing the service liner the Contractor shall locate the sewer lateral openings in the lined sewer main by televising. The Contractor shall inspect service openings in the existing liner pipe.

(B) If required the Contractor shall modify / re-cut or brush existing service connections to achieve one hundred percent (100%) of the original opening. Service modification shall be done without excavation from the interior of the pipe by means of a television camera and a remotely controlled cutting device or brush. The edges of the service cut-ins shall be smooth and even. There shall be no rough or jagged edges. The entire circumference (360°) of the sewer service reinstatement shall be televised and recorded on the post-lining videotape.

The service opening shall be reviewed by the District prior to modification and shall meet District approval prior to lining.

(C) Any pieces of the liner that were cut from the service connections shall be captured at the downstream manhole and disposed of by the Contractor.

**15.2 Required Submittals** – Not Used.

### **15.3 Payment**

Payment for modification of the sewer service connection at the main shall be made based on the contract unit price per each (EA) for Service Reinstatement Modification.

## **16 CIPP Short Liner**

### **16.1 General**

CIPP short liners shall consist of installing three-foot (3') lengths of cured-in-place pipe in existing lined sanitary sewers. The purpose of the short liner CIPP short liner is to seal off sanitary sewer service connections at the main which are no longer required. The short liner shall be designed per ASTM F1216 and take into consideration the condition of the existing lined pipe. The minimum short liner thickness shall be 3.0 mm. There shall be a smooth transition from the short liner to the host pipe. Bypass pumping shall be per *Article 3, Section 6 Sewer Flow Control*. Flow-through bladder plugs will be allowed if flow permits. Cleaning shall be per *Article 3, Part 5 Cleaning* and televising of the short liner in the main shall be per *Article 3, Part 7 Television Inspection*.

The tube shall consist of one (1) or more layers of flexible needled felt sewn to the prescribed circumference and length. It shall be capable of carrying resin, withstanding installation pressures and curing temperatures. The tube should be compatible with the resin system used. The tube shall be fabricated to a size that, when installed, will conform tightly to the internal circumference of the original pipe. Allowance should be made for circumferential stretching during installation.

(A) Structural Requirements

<b>PROPERTY</b>	<b>ASTM STANDARD</b>	<b>RESULTS</b>
<b>Flexural Strength</b>	<b>ASTM D-790</b>	<b>4,500 PSI</b>
<b>Flexural Modulus of Elasticity</b>	<b>ASTM D-790</b>	<b>250,000 PSI</b>

The tube shall be constructed to withstand installation pressures, have sufficient strength to bridge missing pipe, and stretch to fit irregular pipe sections. The wet out tube shall have a relatively uniform thickness that when compressed at installation pressures will equal or exceed the calculated minimum design thickness.

The CIPP design shall assume no bonding to the original pipe wall.

Design calculations, resin and liner material submittals shall be submitted to the District for review and approval.

(B) Preparation and Installation

Prior to rehabilitation using the short liner, the sewer segment will be flushed using a hydraulically propelled high velocity jet sprayer. The pipe must be clean and free from debris and encrustations. The tube shall be thoroughly wet out with a catalyzed resin using a vacuum impregnation process.

The tube shall be properly oriented and loaded into the carrier train or plug assembly and subsequently winched to the damaged area and positioned by closed circuit TV camera guiding the installation. The installation shall follow by inflating the bladder or plug to the recommended psi required to fully expand the CIPP against the existing host pipe.

Variations from true line and grade may be inherent because of the conditions of the original piping. The finished CIPP should be continuous over the length of the repair area plus one foot extending into structurally sound pipe.

(C) Resin Impregnation (Wet-Out)

The quantity of resin used for tube resin impregnation shall be sufficient enough to fill the volume of air voids in the tube with additional allowances for polymerization shrinkage and the loss of resin through cracks and irregularities in the original pipe wall. A vacuum impregnation process shall be used. To ensure thorough resin saturation through the entire length of the felt tube, the point of vacuum shall be no further than 10 feet from the point of initial resin introduction. After vacuum in the tube is established, a vacuum point shall be no further than ten feet from the leading edge of the resin. A roller system shall be used to uniformly distribute the resin throughout the tube.

**16.2 Required Submittals:**

- Design calculations.
- Resin and liner material submittals.

**16.3 Payment**

Payment for CIPP short liners shall be made based on the contract unit price per each (EA) for CIPP Short Liner of the diameter specified.

## 17 Cured-in-place Service Connection Repair

### 17.1 General

It is the intent of the specification to provide for the repair of service lateral connections from the sewer main extending a minimum of six inches (6") into the service pipe, without excavation, by the installation of a resin impregnated, T-shaped flexible tube liner. The cured-in-place pipe shall be installed into the existing service lateral consistent with ASTM F-2561 *Standard Practice for Rehabilitation of a Sewer Service Lateral and its connection to the Main Using a One-Piece man and Lateral Cured-in-place Liner*. The resin and tube shall be held in place using internal pressure and cured into a hard impermeable pipe. When cured, the pipe shall be a continuous, tight-fitting pipe-within-a-pipe. The rehabilitation shall provide a watertight connection at the mainline pipe.

The cured-in-place pipe shall be fabricated from materials which when cured will be chemically resistant to withstand internal exposure to domestic sewage, and meet the chemical corrosion resistance requirements of ASTM F-1216 and D-5813. All constituent materials will be suitable for service in the environment intended. The final product will not deteriorate, corrode or lose structural strength to reduce the projected product life.

#### (A) Cured-in-place Pipe Materials

The tube shall be fabricated to a size that, when installed, provides a cured-in-place pipe that will neatly fit the internal circumference of the existing service. **Note: The Contractor shall be responsible for verifying the length, diameter and condition of all existing services.**

#### (1) Cured-in-place Pipe (C.I.P.P.) Material Specifications

##### (a) Tube: The tube material shall meet the requirements of ASTM F 1216, Section 5.1.

(i) Absorbent Fabric Tube: The tube shall consist of one or more layers of absorbent fabric capable of carrying resin, and capable of withstanding installation pressures and curing temperatures. The tube shall be compatible with the resin system used. The tube material shall be able to stretch to fit irregular pipe sections and negotiate bends. The tube shall be fabricated to a size that when installed, will fit the internal circumference and the length of the pipe.

(ii) Thickness: The liner shall be designed in accordance with ASTM F-1216. The finished tube shall have a uniform thickness and shall not vary from the nominal minimum tube thickness by more than 5%. The minimum liner thickness for this project shall be 3.0 mm unless design calculations per Section 3.4 demonstrate a thinner liner would be acceptable.

(iii) Color: The tube shall be a light reflective color so that a clear, detailed examination with closed circuit television equipment may be made.

(iv) Delaminations: The bond between all C.I.P.P. layers shall be strong and uniform. All layers, after cure, must form one homogeneous structural pipe wall with no part of the tube left unsaturated by resin. It shall not be possible to separate any two layers with a probe or point of a knife blade so that the layers separate cleanly or the probe or knife blade moves freely between the layers; nor shall separation of the layers occur during testing performed under the requirements of these Detailed Specifications.

(b) Resin: The resin system shall be thermoset polyester, vinylester (or District approved alternate) resin meeting the requirements of ASTM F-1216.

(i) The manufacturer shall certify that the proposed resin system and cure schedule are appropriate for the proposed application, and have been tested in laboratory and field conditions. The resin shall produce C.I.P.P., which will comply with the structural and chemical resistance requirements specified.

(ii) The resin used shall be compatible with the tube and be able to cure in the presence of water. Thixotropic agents that enable the resin system to possess pseudo-plastic fluid flow properties, and that do not interfere with visual inspection, shall be added for viscosity control and to minimize resin washout. Resins may contain pigments that do not interfere with visual inspection of, or the physical testing of, the C.I.P.P. Filler materials of a proprietary nature may be added as long as the final pipe product can meet or exceed the minimum standards set forth in this specification.

(c) **Deviations:** The Contractor shall submit his price proposal for the appropriate length, size and thickness designated or required. No changes in prices will be entertained by the District as a result of the Contractor modifying the properties of the liner due to unexpected parent pipe conditions.

**Note:** The Contractor shall be responsible for field verifying the inside diameters of all services to be lined.

(B) Cured-in-place Pipe (C.I.P.P.) Structural Requirements

The C.I.P.P. pipe shall be designed in accordance with the requirements of ASTM F 1216, Appendix XI, with the following design parameters:

- Design safety factor: 2.0
- Reduction factor for long-term effects: 0.50 (applied to flexural modulus).
- Ovality: 2% min.
- Enhancement factor (K): 7
- Groundwater depth: To grade
- Soil Depth (above crown): To grade
- Soil Modulus: 1000 psi
- Soil density: 120 pcf

- Live load: 0
- Design condition: Fully deteriorated

Design calculations shall be submitted to the District for approval prior to lining.

(C) Physical Strength

The structural performance of the finished pipe must be able to accommodate all anticipated loads throughout the design life of the cured-in-place pipe. No cured-in-place pipe reconstruction technology will be allowed that requires bonding to the existing pipe for any part of its structural strength. If reinforcing materials (fiberglass, etc.) are used, those materials must be corrosion-resistant grade materials and be fully encapsulated within the resin to assure that the reinforcement is not compromised when exposed to the sewage.

The cured-in-place pipe shall conform to the minimum structural standards as listed below:

<b>PROPERTY</b>	<b>ASTM STANDARD</b>	<b>RESULTS</b>
<b>Flexural Strength</b>	<b>ASTM D-790</b>	<b>4,500 PSI</b>
<b>Flexural Modulus of Elasticity</b>	<b>ASTM D-790</b>	<b>250,000 PSI</b>

(D) Installation Preparations

(1) Installation Procedures

The following installation procedures shall be adhered to unless otherwise approved by the District:

- **Access** – The Contractor will have access to the upstream and downstream manholes on the applicable main line segments.
- **Safety** – The installer shall carry out his operations in accordance with all applicable O.S.H.A. standards. Particular attention is drawn to those safety requirements involving entrance into confined spaces.
- **Notification** – Provide notification in accordance with Article 3, Part 7.
- **Cleaning** - Internal debris must be removed from the service main line at point of connection before installing the lateral lining system. Reference Article 3, Part 4.
- **Inspection of the existing pipe** –Service inspection shall be performed by experienced personnel trained in closed circuit television systems. The interior of the pipeline shall be carefully inspected to determine the location of any condition which may prevent proper installation of the lateral lining system. Reference Article 3, Part 6. If the Contractor determines that he cannot line a service due to conditions encountered, he shall indicate this in writing to the District and if the District concurs with the determination, the Service will be removed from the contract. A service of the same proximity may be substituted in place of the service removed.
- **Bypassing Sewage** – Contractor shall be responsible for sewer flow control per Article 3, Part 5. Temporary plugging and bypassing of sewage around the section or sections of mainline pipe where the service lateral(s) is/are located may be required. It is required that the service lateral be inactive during the time of

service liner installation. This may be accomplished by requesting that the homeowner refrain from using their services during the period of installation. Notification shall be offered to the homeowner at least twenty-four (24) hours prior to starting their service connection repair. The Contractor shall be responsible for maintaining the current level of service to all users connected to the existing sanitary sewer and shall be responsible for all damage caused by sewer backups as a result of this project.

(2) Preparation of Liner

- Material shall conform with manufacturer's standards to provide lining thickness specified and inspected prior to impregnation.
- Wet Out: The tube shall be impregnated with resin under controlled conditions. The volume of resin used should be sufficient to fill all voids in the tube material at nominal thickness and diameter. No dry or unsaturated area in the mainline sheet or lateral tube will be accepted.

(E) Installation of the Lateral Lining System

(1) Install service liner through Sanitary Sewer Main: An inflatable bladder assembly, attached to a robotic device, shall be hand-winched through the mainline pipe to the service connection. The robotic device, together with a television camera, shall be used to position the pressure apparatus installation hardware at the service connection opening. The bladder assembly shall be inflated pressing the main line and lateral pipe firmly against the interior surface of the existing pipe. The inflated bladder shall extend past all ends of the liner so no cutting or trimming is required.

(2) Install service liner through existing cleanout: A pressure apparatus shall be pulled into place through the cleanout. Air pressure shall be used to install the wet-out tube into the lateral pipe.

Non-toxic lubricant may be used to reduce friction. The inversion / installation process shall be conducted at a maximum controlled speed of two feet per second (2 ft./sec.).

- (a) Curing: Curing shall take place per the manufacturer's recommendations.
- (b) Finish: The finished cured-in-place pipe shall be free of dry spots, lifts, wrinkles or delamination. The cured-in-place pipe shall not inhibit the closed circuit television post video inspection of the mainline or service lateral pipes. The finished C.I.P.P. shall cover a minimum of eighteen inches (18") of main line pipe and shall extend a minimum of six inches (6") into the existing service lateral pipe.
- (c) Final Acceptance: Upon completion, the contractor shall televise the repaired service connection and provide a disk showing the installed liner to the District. Reference Article 3, Part 6 for televising requirements. Upon completion of service lining. All main/service connections shall be watertight and flush with the existing liner.

**17.2 Required Submittals** – Not used.

**17.3 Payment**

Payment for Cured-in-place Sewer Service Connection Repair shall be made based on the contract unit price per each (EA) for Service Connection Repair for the diameter specified.

*Not to be used for bidding purposes*



**Section II**  
**Contract Forms**

## Proposal

**Project:** 2018-2019 Service Lateral Lining Capital Project No. 1933

**Location:** Throughout public right-of-way and sanitary easements in the City of Rockford and Rockford Township in Winnebago County, Illinois

**Completion Date:** April 30, 2019 – all work complete and video inspections delivered; Thirty (30) calendar days from Final Punch List – all corrective work complete and accepted by District

**Liquidated Damages:** \$300.00/calendar day per each completion date deadline

To: Board of Trustees  
Rock River Water Reclamation District  
3501 Kishwaukee Street  
Rockford, IL 61109

From: \_\_\_\_\_  
(Individual, Partnership or Corporation, as case may be)

\_\_\_\_\_  
(Address of Individual, Partnership or Corporation)

Gentlemen:

I (We), the undersigned, hereby propose to furnish all materials, equipment, tools, services, labor, and whatever else may be required to construct and place in service the above subject Sanitary Sewer for the Rock River Water Reclamation District all in accordance with the plans and specifications, provided by the Rock River Water Reclamation District. The undersigned also affirms and declares:

1. That I (we), have, examined and am (are) familiar with all the related contract documents and found that they are accurate and complete and are approved by the undersigned.
2. That I (we), have carefully examined the site of the work, and that, from my (our) investigation, has satisfied myself (ourselves) as to the nature and location of the work, the

character, quality, and quantity of materials and the kind and extent of equipment and other facilities needed for the performance of the work, the general and local conditions and all difficulties to be encountered, and all other items which may, in any way, effect the work or its performance.

3. That this bid is made without any understanding, agreement or connection with any other person, firm, or corporation making a bid for the same purposes, and is in all respects fair and without collusion or fraud; and that I (we) are not barred from bidding as a result of a bid-rigging or bid-rotating conviction.
4. That accompanying the Proposal is a Bidder's Bond in the amount specified in Article 1, Notice to Bidders, payable to the Board of Trustees of the Rock River Water Reclamation District, which it is agreed, shall be retained as liquidated damages by said Rock River Water Reclamation District if the undersigned fails to execute the Contract in conformity with the contract documents incorporated in the contract documents and furnish bond as specified, within ten (10) days after notification of the award of the contract to the undersigned.
5. The Bidder is of lawful age and that no other person, firm or corporation has any interest in this Proposal or in the Contract proposed to be entered into.
6. The Bidder is not in arrears to the Rock River Water Reclamation District, upon debt or contract, and is not a defaulter, as surety or otherwise, upon any obligation to the Rock River Water Reclamation District.
7. No officer or employee or person whose salary is payable in whole or in part by the District is, shall be or become interested, directly or indirectly as a contracting party, partner, stockholder, surety or otherwise, in this Proposal, or in the performance of the Contract, or in the work to which it is relates, or in any portion of the profits thereof.
8. The Bidder which I represent complies with all applicable requirements of the Americans with Disabilities Act (ADA) and the Occupational Safety and Health Act (OSHA) and that if said bidder is awarded a contract, it will complete all OSHA-required or ADA-required employee and customer training, will make available all required information, and will hold harmless and indemnify the District and the District's representatives.

In regard to participation in an approved Apprenticeship program, upon request, Contractor will be required to provide written proof of participation.

9. The undersigned, as Bidder, declares that he has adopted and promulgated written sexual harassment policies in accordance with Public Act 99-093 and will make this information available upon request.
10. The undersigned, as Bidder, declares he will comply with prevailing wages in accordance with the Illinois Department of Labor Standards. The State of Illinois requires contractors and subcontractors on public works projects (including the Rock River Water Reclamation District) to submit certified payroll records on a monthly basis, along with a statement affirming that such records are true and accurate, that the wages paid to each worker are not less than the required prevailing rate and that the contractor is aware that filing false records is a Class B Misdemeanor. The successful Bidder shall be responsible for verifying the prevailing wages each month and notifying all subcontractors of the appropriate monthly rates. [Prevailing wage rates may be found on the Illinois Department of Labor website at http://www.illinois.gov/idol/Laws-Rules/CONMED/Pages/Rates.aspx .](http://www.illinois.gov/idol/Laws-Rules/CONMED/Pages/Rates.aspx)

The certified payroll records must include the name, address, telephone number, social security number, job classification, hourly wages paid in each pay period, the number of hours worked each day, and the starting and ending time of work each day, for every worker employed on the project. Any contractor who fails to submit a certified payroll or knowingly files a false certified payroll is guilty of a Class B Misdemeanor. Certified payroll reports shall be submitted on industry standard forms such as IDOT Statement of Compliance (SBE 348) or other approved equal.

11. The undersigned, as Bidder, declares he will comply with the Federal Drug Free Workplace Act.
12. The undersigned, as Bidder, declares he will comply with Public Act 83-1030 entitled "Steel Products Procurement Act".
13. The undersigned, as Bidder, declares he will comply with Public Act 96-929 (30 ILCS 570) regarding Illinois residents employment.

14. The undersigned, as Bidder, declares he will comply with non-discrimination in employment in accordance with the Illinois Fair Employment Practices Commissions Rules & Regulations.
15. The undersigned, as Bidder, declares that he currently participates in an apprenticeship or training program that is registered with the United States Department of Labor's Bureau of Apprenticeship and Training or other acceptable State of Illinois Department of Labor monitored program.

In submitting this bid, it is understood that the right is reserved by the Rock River Water Reclamation District to reject any and all bids. It is agreed that this bid may not be withdrawn for a period of sixty (60) days from the opening thereof.

The undersigned further declares that he (they) has (have) carefully examined the following items of work and that the cost of all the work to complete this project is given in this Proposal.

Item No.	Quantity	Unit	Description	Unit Price (In Writing)	Unit Price (In Figures)	Total Price (In Figures)
1	219	EA	CIPP Lateral Reconstruction			
2	219	EA	Clean and Televiser Service Lateral			
3	5	EA	Service Reinstatement Modification			
4	3	EA	8" Dia. CIPP Short Liner			
5	2	EA	Service Connection Repair - 4"			
TOTAL BID PRICE:				(In Writing)	(In Figures)	

The undersigned acknowledges receiving Addendum numbers \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and realizes that all Addenda are considered part of the contract.

By: \_\_\_\_\_

Name: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

# Fair Employment Practices Affidavit of Compliance

PROJECT: **2018-2019 Service Lateral Lining, Capital Project No. 1933**

NOTE: THE BIDDER MUST EXECUTE THIS AFFIDAVIT AND SUBMIT IT WITH ITS SIGNED BID. THE ROCK RIVER WATER RECLAMATION DISTRICT CANNOT ACCEPT ANY BID WHICH DOES NOT CONTAIN THIS AFFIDAVIT

\_\_\_\_\_, being first duly sworn, deposes and says that:  
(Name of person making affidavit)

They are: \_\_\_\_\_ of \_\_\_\_\_  
(Officer's Title) (Company Name)

that said company is and "Equal Opportunity Employer" as defined by Section 2000(e) of Chapter 21, Title 42 of the United States Code annotated and Federal Executive Orders #11375 which are incorporated herein by reference;

and that said company will comply with any and all requirements of Title 44 Admin. Code 750. APPENDIX A – Equal Opportunity Clause, Rules and Regulations, Illinois Department of Human Rights, which read as follows:

"In the event of the contractor's non-compliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act or the Rules and Regulations of the Illinois Department of Human Rights ("Department"), the contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation. During the performance to this contract, the contractor agrees as follows:

1. That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, national origin or ancestry, citizen status, age, physical or mental handicap unrelated to ability, sexual orientation, military status or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
2. That, if he or she hires additional employees in order to perform this contract or any portion of this contract, he or she will determine the availability (in accordance with the Department's Rules and Regulations) of minorities and women in the areas from which he or she may reasonably recruit and he or she will hire for each job classification for which employees are hired in a way that minorities and women are not underutilized.
3. That, in all solicitations or advertisements for employees placed by him or her or on his or her behalf, he or she will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, national origin or ancestry, citizenship status, age, physical or mental handicap unrelated to ability, sexual orientation, military status or an unfavorable discharge from military service.
4. That he or she will send to each labor organization or representative of workers with which he or she has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the contractor's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the contractor in his or her efforts to comply with such Act and Rules and Regulations, the contractor will promptly so notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations under the contract.
5. That he or she will submit reports as required by the Department's Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations.
6. That he or she will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.
7. That he or she will include verbatim or by reference the provisions of this clause in every subcontract awarded under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply with the provisions. In addition, the contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

(Source: Amended at 32 Ill. Reg. 16484, effective September 23, 2008)"

IL Dept of Human Rights Registration No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

\_\_\_\_\_  
Signature

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Notary Public

## Bid Bond

KNOW ALL MEN BY THESE PRESENTS, that we:

\_\_\_\_\_ (hereinafter called the Principal) and

\_\_\_\_\_ (hereinafter called the Surety)

a Corporation chartered and existing under the laws of the State of \_\_\_\_\_ with its principal offices in the City of \_\_\_\_\_ and authorized to do business in the State of Illinois are held and firmly bound unto the Rock River Water Reclamation District of Winnebago County, Illinois (District), in the full and just sum of: **FIVE PERCENT (5%) OF THE TOTAL BID PRICE** good lawful money of the United States of America, to be paid upon demand of the District, to which payment will and truly to be made we bind ourselves, our heirs, executors, administrators, and assigns, jointly and severally and firmly by these presents.

WHEREAS, the Principal is about to submit, or has submitted to the District, a proposal for constructing Sanitary Sewers and Appurtenances.

WHEREAS, the Principal desires to file this bond, in accordance with law, to accompany this Proposal.

NOW THEREFORE, The conditions of this obligation are such that if the Proposal be accepted, the Principal shall, within ten days after the date of receipt of a written notice of award of Contract, execute a Contract in accordance with the Proposal and upon the terms, conditions, and prices set forth therein, in the form and manner required by the District, and execute a sufficient and satisfactory Contract Performance Bond payable to said District in an amount of one hundred percent (100%) of the Contract price (including alternates) in form and with security satisfactory to said District, then this obligation to be void, otherwise to be and remain in full force and virtue in law; and the Surety shall, upon failure of the Principal to comply with any or all of the foregoing requirements within the time specified above, immediately pay to the aforesaid District, upon demand, the amount hereof in good and lawful money of the United States of America, not as a penalty, but as liquidated damages.



IN TESTIMONY THEREOF, the Principal and Surety have caused these presents to be duly signed  
and sealed this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
**Principal**

(Seal)

By \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

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

ATTEST:

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
**Surety**

(Seal)

By \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

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

# Agreement

## 1. General

THIS AGREEMENT, made and concluded this\_\_ day of \_\_\_\_\_, 2018 between the Rock River Water Reclamation District, Rockford, Illinois (District), acting by and through the Board of Trustees, and \_\_\_\_\_, his/their executors, administrators, successors or assigns:

## 2. Scope of Work

WITNESSETH: That for and in consideration of the payments and agreements made in the Proposal attached hereto, to be made and performed by the District and according to the terms expressed in the Bond referring to these presents, the Contractor agrees with the District at his/their own proper cost and expense to do all the work, furnish all equipment, materials and all labor necessary to complete the work in accordance with the plans and specifications hereinafter described, and in full compliance with all of the terms of this agreement and the requirements of the District and its representative.

And it is also understood and agreed that the Bidding Requirements, Detailed Specifications, Contract Forms, General Conditions, General Requirements, Technical Specifications, Plans, Addenda, and provisions required by law are all essential documents of the contract, and are a part hereof, as if herein set out verbatim or as if attached, except for titles, subtitles, headings, table of contents and portions specifically excluded.

## 3. Contract Price

The District shall pay to the Contractor, and the Contractor shall accept, in full payment for the performance of this Contract, subject to any additions or deductions provided for hereby, in current funds, the Total Contract Price of \_\_\_\_\_ and 00/100 (\$\_\_\_\_\_).

Payments are to be made to the Contractor in accordance with and subject to the provisions of Section 7 of this Agreement, which is a part of this Contract.

#### **4. Bond**

The Contractor has entered into and herewith tenders a bond of even date herewith, in the penal sum of \_\_\_\_\_ and 00/100 (\$\_\_\_\_\_) to insure the faithful performance of this Contract, which said bond is hereby made a part of this Contract by reference.

#### **5. Maintenance and Guarantee**

The Contractor shall promptly repair, replace, restore or rebuild any imperfections that may arise and shall maintain satisfactory to the District all work for a period three years from the date of final acceptance of the Contract for trench settlement and for a period of two years all other work, except where periods of maintenance and guarantee are provided for. The Contractor shall, for this period, indemnify and save harmless the District, its officers and agents from any injury done to property or persons as a direct or alleged result of imperfections in the Contractors' work, and shall immediately assume and take charge of the defense of such action or suits in like manner and to all intents and purposes as if said actions and suits had been brought directly against the Contractor.

If the Contractor shall fail to repair, replace, rebuild or restore such defective or damaged work promptly after receiving notice given by the District, the District shall have the right to have the work done by others and to call on the Contractor and his bondsman to pay the costs thereof.

#### **6. Contract Execution**

IT IS EXPRESSLY UNDERSTOOD AND AGREED that the entire improvement shall be done in a thorough and workmanlike manner, under the direction and to the satisfaction of the District and in full compliance with all the requirements of its representative under them. All loss or damage arising out of the nature of the work to be done, or from any detention of unforeseen obstruction or difficulty which may be encountered in the prosecution of the work, or from the action of the elements, shall be sustained by the Contractor.

The Contractor will be held responsible for all accidents, and hereby agrees to indemnify and protect the District from all suits, claims, and actions brought against it, and all cost, and damages which the District may be put to by reason of an injury or alleged injury, to the person or property of another in the execution of this contract, or the performance of the work, or in guarding the same, or for any material used in its prosecution or in its construction.

Any person employed on the work who shall refuse or neglect to obey the directions of the District or its representative, or who shall be deemed by the District to be incompetent, or who shall be guilty of any disorderly conduct, or who shall commit any trespass on any public or private property in the vicinity of the work, shall at once be removed from the work by the Contractor when so requested by the District.

Any request to extend the contract completion date must be considered by the Board at the Board meeting prior to the then-existing contract termination date. Any deviation from this action will result in the liquidated damage clause in the contract to be exercised.

## **7. Payments to Contractor**

The District hereby covenants and agrees, in consideration of the covenants and agreements in this Contract, specified to be kept and performed by the Contractor and subject to the conditions herein contained, and if the District receives an acceptable invoice prior to the tenth day of the month and receives approval of the work by the District Engineering Manager, the District shall issue payment before the fifth day of the succeeding month. If the District receives an acceptable invoice on or after the tenth day of the month, the District shall issue payment before the fifth day of the second succeeding month.

The District reserves the right at all times to refuse to issue payment in case the Contractor has neglected or failed to pay any subcontractors, workmen or employee on the work.

## **8. Subcontracts**

No part of the work herein provided for shall be sublet or subcontracted without the express consent of the District, to be entered in the records, and in no case shall consent relieve the Contractor from the obligation herein entered into, or change the terms of this Agreement.

## **9. Contractor's Responsibility**

This Contract shall extend to and be binding upon the successors and assigns, and upon the heirs, administrators, executors, and legal representatives of the Contractor.

In consideration of and to induce the award of this Contract to him, the Contractor represents and warrants: that he is not in arrears to the District upon debt of the Contract and that he is not a defaulter, as surety, contractor or otherwise; that he is financially solvent and sufficiently experienced and competent to perform the work; that the work can be performed as called for by the Contract; that the facts stated in his proposal and the information given by him is true and correct in all respects, and that he is fully informed regarding all the conditions affecting the work to be done and labor and materials to be furnished for the completion of this Contract and that his information was secured by personal investigation and research.

The Contractor shall pay not less than the prevailing wage rate as determined by the Department of Labor, to all laborers, workmen and mechanics performing work under this Contract. Contractor shall comply with current revisions of the wage standards; as required by law. The Contractor shall be responsible for verifying the prevailing wages each month and notifying all subcontractors of the appropriate monthly rates. Certified payroll reports shall be submitted on industry standard forms such as IDOT Statement of Compliance (Form SBE 348).

In regard to nondiscrimination in employment, Contractor will be required to comply with the Illinois Fair Employment Practices Commission's Rules and Regulations as provided herein.

The Contractor shall comply with the American Disabilities Act of 1990 (ADA). The Contractor will hold harmless and indemnify the District and their representatives from all:

- (a) suits, claims, or actions;
- (b) costs, either for defense (including but not limited to reasonable attorney's fees and expert witness fees) or for settlement, and;
- (c) damages of any kind (including but not limited to actual, punitive, and compensatory damages)

relating in any way to or arising out of the ADA, to which said firm is exposed or which it incurs in the execution of the contract.

Contractor shall also comply with Public Act 99-0933, which requires any party to a contract to adopt and enforce a written policy regarding sexual harassment that includes, as a minimum, the following information:

- (a) the illegality of sexual harassment
- (b) the definition of sexual harassment under Illinois State law;
- (c) a description of sexual harassment, utilizing examples;
- (d) my (our) organization's internal complaint process including penalties;
- (e) through the Illinois Department of Human Rights and the Illinois Human Rights Commission;
- (f) directions on how to contact the Department and the Commission; and
- (g) protection against retaliation as provided by Section 6-101 of the Illinois Human Rights Act.

Upon request this information will be provided to the Illinois Department of Human Rights. Upon District award of a contract, the District will be provided this information described no more than ten working days after the District issues its award notification.

The Contractor shall comply with Article 2 of Public Act 83-1472 which provides that Illinois residents be employed on Illinois public works projects, provided there has been a period of excessive unemployment (5%) in the State of Illinois as defined in the Act; and further, that Illinois workers are available and capable of performing the particular type work involved.

The Contractor shall comply with all rules and regulations of OSHA during the execution of this Contract.

The Contractor shall comply with the Federal Drug Free Workplace Act.

The Steel Products Procurement Act, Illinois Public Act 83-1030, requires that steel products used or supplied in performance of this Contract or subcontract shall be manufactured or produced in the United States with three exceptions, as explained in the Instructions to Bidders.

The Contractor shall comply with Public Act 96-1416 regarding the disposal of CCDD and uncontaminated soil at CCDD fill sites as explained in the Instructions to Bidders.

## **10. Time**

Work under this Agreement shall be commenced upon written Notice to Proceed. All work shall be complete and inspection videos delivered by April 30, 2019. All corrective work shall be complete within thirty (30) calendar days from the date the District issues a Final Contract Punch List.

## **11. Liquidated Damages**

The amount of liquidated damages shall be \$300.00 per calendar day, for each Contract completion deadline.

## 12. Seals

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals, and such of them as are corporations have caused these presents to be signed by their duly authorized officers.

**Rock River Water Reclamation District  
Winnebago County, Illinois**

(Seal)

By \_\_\_\_\_  
President, Board of Trustees

ATTEST: \_\_\_\_\_  
Clerk of the Board

**Contractor**

(Corporate Seal)

By \_\_\_\_\_  
Contractor's Officer

Name: \_\_\_\_\_

Title: \_\_\_\_\_

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

ATTEST: \_\_\_\_\_

as Principal, and \_\_\_\_\_

a corporation of the State of \_\_\_\_\_ as Surety, are held and firmly bound unto the Rock River Water Reclamation District, as Obligee, for the use and benefit of claimants as hereinafter defined in the amount of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), for the payment where of Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated \_\_\_\_\_ 20\_\_ Entered into a Contract with Obligee for \_\_\_\_\_ in accordance with contract documents prepared by the Rock River Water Reclamation District which Contract is by reference made a part hereof, and is hereinafter referred to as "the Contract".

**NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION** is such that if Principal shall promptly pay for all laborers, workers and mechanics engaged in the work under the Contract, and not less than the general prevailing rate of hourly wages of a similar character in the locality in which the work is performed, as determined by the State of Illinois Department of Labor pursuant to the Illinois Compiled Statutes 280 ILCS 130 / 1-12 et.seq. and for all material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect.

1. A claimant is deemed as any person, firm, or corporation having contracts with the Principal or with any of Principal's subcontractors for labor or materials furnished in the performance of the Contract on account of which this Bond is given.

\_\_\_\_\_  
Contractor City, State

That \_\_\_\_\_ (Contractor)

a corporation of the State of \_\_\_\_\_ as Surety, are held and firmly bound unto the Rock River Water Reclamation District, as Obligee, for the use and benefit of claimants as hereinafter defined in the amount of \_\_\_\_\_

WHEREAS, Principal has by written agreement dated \_\_\_\_\_ 20\_\_\_\_ Entered into a Contract with Obligees for \_\_\_\_\_ in accordance with contract documents prepared by the Rock River Water Reclamation District which Contract is by reference made a part hereof, and is hereinafter referred to as "the Contract".

**NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION** is such that if Principal shall promptly pay for all laborers, workers and mechanics engaged in the work under the Contract, and not less than the general prevailing rate of hourly wages of a similar character in the locality in which the work is performed, as determined by the State of Illinois Department of Labor pursuant to the Illinois Compiled Statutes 280 ILCS 130 / 1-12 et.seq. and for all material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect.

1. A claimant is deemed as any person, firm, or corporation having contracts with the Principal or with any of Principal's subcontractors for labor or materials furnished in the performance of the Contract on account of which this Bond is given.
2. Nothing in this Bond contained shall be taken to make the Obligee liable to any subcontractor, material man or laborer, or to any other person to any greater extent than it would have been liable prior to the enactment of The Public Construction Bond Act, approved June 20, 1931, as amended; provided further, that any person having a claim for labor and materials furnished in the performance of the Contract shall have no right of action unless he shall have filed a verified notice of such claim with the Obligee within 180 days after the date of the last item of work or the furnishing of the last item of materials, which claim shall have been verified and shall contain the name and address of the claimant, the business address of the claimant within the State of Illinois, if any, or if the claimant be a foreign corporation having no place of business within the State the principal place of



business of the corporation, and in all cases of partnership the names and residences of each of the partners, the name of the Contractor for the Obligee, the name of the person, firm or corporation by whom the claimant was employed or to whom such claimant furnished materials, the amount of the claim and a brief description of the public improvement for the construction or installation of which the contract is to be performed. No defect in the notice herein provided for shall deprive the claimant of its right of action under the terms and provisions of this Bond unless it shall affirmatively appear that such defect has prejudiced the rights of an interested party asserting the same.

3. No action shall be brought on this Bond until the expiration of 120 days after the date of the last item of work or of the furnishing of the last item of material except in cases where the final settlement between Obligee and the Contractor shall have been made prior to the expiration of the 120 day period, in which case action may be taken immediately following such final settlement; nor shall any action of any kind be brought later than 6 months after the acceptance by the Obligee of the work. Such suit shall be brought only in the circuit court of this State in the judicial district in which the Contract is to be performed.
4. Surety hereby waives notice of any changes in the Contract, including extensions of time for the performance thereof.
5. The amount of this Bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder.
6. The Principal and Surety shall be liable for any attorneys fees, engineering costs, or court costs incurred by the Obligee relative to claims made against this Bond.

Signed and Sealed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

**CONTRACTOR SURETY**

*Contractor Firm Name*

By: \_\_\_\_\_  
Signature

By: \_\_\_\_\_  
Attorney-in-Fact

\_\_\_\_\_  
Title                  Resident Agent

ATTEST:

\_\_\_\_\_  
Corporate Secretary (Corporations only)

## Performance Bond

**KNOW ALL MEN BY THESE PRESENTS**, that WHEREAS, the Rock River Water Reclamation District has awarded to: \_\_\_\_\_ hereinafter designated as the “Principal”, a contract, dated, \_\_\_\_\_, for the Rock River Water Reclamation District.

**WHEREAS**, said Principal is required under the terms of said Contract to furnish a bond for the faithful performance of said Contract (the “Bond”);

**NOW, THEREFORE**, we the Principal and \_\_\_\_\_, as Surety, are firmly bound unto the Rock River Water Reclamation District in the penal sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_ ) lawful money of the United States for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally firmly by these presents for a performance bond. The conditions of this obligation is such that if the said Principal does well and faithfully performs all the conditions and covenants of said Contract, according to the true intent and meaning thereof, upon its part to be kept and performed, then the above obligation is to be null and void, otherwise to remain in full force and effect.

**THE CONDITION OF THIS OBLIGATION IS SUCH**, that if the above bounden Principal, its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the said Contract, including the provisions for liquidated damages in the said Contract, any changes, additions or alterations thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the Rock River Water Reclamation District, its officers and agents, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect. And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same and no inadvertent overpayment of progress payments shall in any way affect its obligations on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications or of any inadvertent overpayment of progress payments. The Rock River Water Reclamation District shall be named as beneficiary on this Performance Bond.

**IN WITNESS WHEREOF**, the above-bounden parties have executed this instrument under their seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

**CONTRACTOR**

Contractor Firm Name:

**SURETY**

By: \_\_\_\_\_

By: \_\_\_\_\_ Signature

Attorney-in-Fact

\_\_\_\_\_  
Title

\_\_\_\_\_  
Resident Agent

ATTEST:

\_\_\_\_\_  
Corporate Secretary (Corporations only)

## **Section III**

### **CIPP Lateral Reconstruction List, Detail, and Location Maps**

**2018-2019 SERVICE LATERAL LINING LIST**  
**CAPITAL PROJECT 1933 \*cleanouts 1 - 96 installed in Summer of 2018**

ITEM No.	MAP #	HouseNumber	StreetName	Service ID	End Meas.	Depth (FT)	Est. Length (FT)	Main Size (INCH)	Main Type	Roadway Authority
1	1	1120	RONCEVALLES AVE	17423	52.5NS	8	30	08"	LINCIP	CITY OF ROCKFORD
2	1	1107	RONCEVALLES AVE	15744	19.1 NS	8	30	08"	LINCIP	CITY OF ROCKFORD
3	1	3404	PIONEER DR	15757	14NS	8	30	08"	LINCIP	CITY OF ROCKFORD
4	2	3715	GUILFORD RD	22448	40WE	8.5	14	08"	LINCIP	CITY OF ROCKFORD
5	3	1012	BROOKFIELD RD	14925	19SN	8	30	08"	LINCIP	CITY OF ROCKFORD
6	3	1008	BROOKFIELD RD	14930	25.5SN	10	30	08"	LINCIP	CITY OF ROCKFORD
7	3	1011	BROOKFIELD RD	14924	18SN	8	30	08"	LINCIP	CITY OF ROCKFORD
8	3	1007	BROOKFIELD RD	14929	23.5SN	7	30	08"	LINCIP	CITY OF ROCKFORD
9	4	1108	BROOKFIELD RD	26133	31NS	7	30	08"	LINCIP	CITY OF ROCKFORD
10	4	1104	BROOKFIELD RD	14877	33NS	10	30	08"	LINCIP	CITY OF ROCKFORD
11	4	1107	BROOKFIELD RD	26132	27SN	10	30	08"	LINCIP	CITY OF ROCKFORD
12	4	1103	BROOKFIELD RD	14876	25.5SN	10	30	08"	LINCIP	CITY OF ROCKFORD
13	5	3705	BURRMONT RD	19370	40SN	11	30	08"	VCP	CITY OF ROCKFORD
14	5	1310	ARDEN AVE	26493	35.1 NS	11	30	08"	VCP	CITY OF ROCKFORD
15	5	1220	ARDEN AVE	26521	35.6 NS	8.5	30	08"	VCP	CITY OF ROCKFORD
16	5	1214	ARDEN AVE	26548	35.4 NS	6.5	30	08"	VCP	CITY OF ROCKFORD
17	5	1307	ARDEN AVE	26494	33.4 NS	11	30	08"	VCP	CITY OF ROCKFORD
18	6	4023	BURRMONT RD	18858	43.7EW	5	50	08"	LINCIP	ROCKFORD TOWNSHIP
19	6	4027	BURRMONT RD	18855	45.9EW	6.5	58	08"	LINCIP	ROCKFORD TOWNSHIP
20	6	4031	BURRMONT RD	18841	42EW	5.8	57	08"	LINCIP	ROCKFORD TOWNSHIP
21	7	1416	AL CREST RD	18740	26.6NS	5	30	08"	LINCIP	ROCKFORD TOWNSHIP
22	7	1503	AL CREST RD	18722	29.8NS	5	30	08"	LINCIP	ROCKFORD TOWNSHIP
23	7	1407	AL-CREST RD	18773	33.4 NS	5	30	08"	LINCIP	ROCKFORD TOWNSHIP
24	8	4116	BUCKINGHAM DR	18300	50.4EW	6	32	08"	LINCIP	ROCKFORD TOWNSHIP
25	8	4120	BUCKINGHAM DR	18296	49EW	5	32	08"	LINCIP	ROCKFORD TOWNSHIP
26	8	4117	BUCKINGHAM DR	18663	35.5EW	5	34	08"	LINCIP	ROCKFORD TOWNSHIP
27	9	1612	CYNTHIA DR	18264	25NS	6	30	08"	LINCIP	ROCKFORD TOWNSHIP
28	9	1608	CYNTHIA DR	18274	38.5NS	6	30	08"	LINCIP	ROCKFORD TOWNSHIP
29	9	1607	CYNTHIA DR	18268	40NS	6	30	08"	LINCIP	ROCKFORD TOWNSHIP
30	10	1624	CYNTHIA DR	18508	19NS	6	30	08"	LINCIP	CITY OF ROCKFORD
31	10	1629	CYNTHIA DR	18500	26NS	6	30	08"	LINCIP	CITY OF ROCKFORD
32	10	4000	CRESTVIEW DR	18193	43.3EW	6	24	08"	LINCIP	CITY OF ROCKFORD
33	11	3815	BRENDENWOOD RD	26111	45.5SN	8	32	08"	LINCIP	CITY OF ROCKFORD
34	11	3907	BRENDENWOOD RD	26110	34SN	10	28	08"	LINCIP	CITY OF ROCKFORD
35	12	4311	BRENDENWOOD RD	26089	29.5EW	10	30	08"	LINCIP	CITY OF ROCKFORD
36	13	4104	BRENDENWOOD RD	26052	37NS	10	23	08"	LINCIP	CITY OF ROCKFORD
37	13	4005	BARRINGTON RD	26063	33EW	11	30	08"	LINCIP	CITY OF ROCKFORD
38	13	4005	BRENDENWOOD RD	26065	56EW	10	30	08"	LINCIP	CITY OF ROCKFORD
39	14	3703	GUILFORD RD	17456	29WE	7.5	15	08"	LINCIP	CITY OF ROCKFORD
40	15	3820	BARRINGTON RD	26029	25EW	8	30	08"	LINCIP	CITY OF ROCKFORD
41	15	1215	GORHAM PL	26049	39EW	7	30	08"	LINCIP	CITY OF ROCKFORD
42	15	3815	BARRINGTON RD	26046	28WE	12	30	08"	LINCIP	CITY OF ROCKFORD

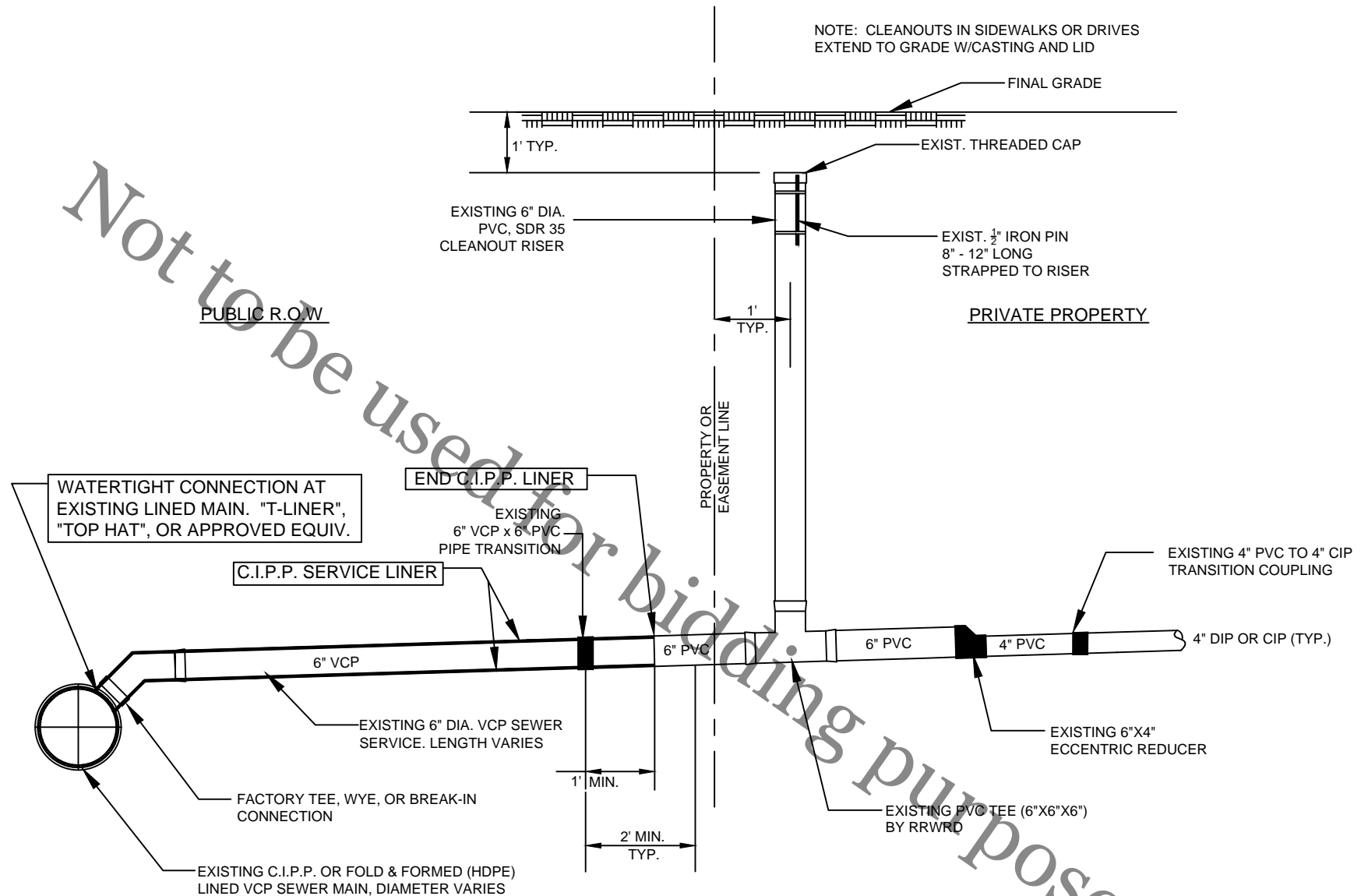
ITEM No.	MAP #	HouseNumber	StreetName	Service ID	End Meas.	Depth (FT)	Est. Length (FT)	Main Size (INCH)	Main Type	Roadway Authority
43	16	4004	CRESTVIEW DR	18199	49EW	6	23	08"	LINCIP	ROCKFORD TOWNSHIP
44	16	4008	CRESTVIEW DR	18201	22EW	6	26	08"	LINCIP	ROCKFORD TOWNSHIP
45	16	4016	CRESTVIEW DR	18197	46WE	5	34	08"	LINCIP	ROCKFORD TOWNSHIP
46	16	4003	CRESTVIEW DR	18222	50.7EW	6	40	08"	LINCIP	ROCKFORD TOWNSHIP
47	16	4011	CRESTVIEW DR	18214	27WE	5	36	08"	LINCIP	ROCKFORD TOWNSHIP
48	16	4015	CRESTVIEW DR	18212	52.7WE	5	32	08"	LINCIP	ROCKFORD TOWNSHIP
49	17	1020	SCOTTWOOD RD	15797	14SN	10	30	08"	LINCIP	CITY OF ROCKFORD
50	17	1016	SCOTTWOOD RD	15807	0SN	9.5	30	08"	LINCIP	CITY OF ROCKFORD
51	17	1012	SCOTTWOOD RD	14972	42.9 NS	10	31	08"	LINCIP	CITY OF ROCKFORD
52	17	1023	SCOTTWOOD RD	15785	28.0 NS	10	30	08"	LINCIP	CITY OF ROCKFORD
53	17	1017	SCOTTWOOD RD	15806	22.4 NS	11	30	08"	LINCIP	CITY OF ROCKFORD
54	17	1011	SCOTTWOOD RD	14963	25.6 NS	9	30	08"	LINCIP	CITY OF ROCKFORD
55	17	1005	SCOTTWOOD RD	14991	29.5 NS	7	30	08"	LINCIP	CITY OF ROCKFORD
56	18	908	CHELSEA AVE	26430	23.7 NS	8	30	08"	LINCIP	CITY OF ROCKFORD
57	19	4208	OSTRANDER RD	18838	34.4EW	6	30	08"	LINCIP	ROCKFORD TOWNSHIP
58	20	1509	ARDEN AVE	14531	29NS	9	30	08"	LINCIP	CITY OF ROCKFORD
59	20	1505	ARDEN AVE	14587	25NS	8	30	08"	LINCIP	CITY OF ROCKFORD
60	20	3706	BURRMONT RD	19348	41NS	8	30	08"	LINCIP	CITY OF ROCKFORD
61	21	4112	BURRMONT RD	18775	25.1EW	6.5	48	08"	LINCIP	ROCKFORD TOWNSHIP
62	21	4204	BURRMONT RD	18734	34EW	6	30	08"	LINCIP	ROCKFORD TOWNSHIP
63	21	4113	BURRMONT RD	18757	52.2EW	6	31	08"	LINCIP	ROCKFORD TOWNSHIP
64	21	4203	BURRMONT RD	18748	35.5EW	5	37	08"	LINCIP	ROCKFORD TOWNSHIP
65	21	4207	BURRMONT RD	18745	34EW	6	31	08"	LINCIP	ROCKFORD TOWNSHIP
66	22	3916	BARRINGTON RD	26018	25EW	6	30	08"	LINCIP	CITY OF ROCKFORD
67	22	3903	BARRINGTON RD	26044	32EW	9.5	30	08"	LINCIP	CITY OF ROCKFORD
68	23	3609	GUILFORD RD	26581	23EW	8	56	08"	LINCIP	CITY OF ROCKFORD
69	23	3615	GUILFORD RD	26578	26EWs	8	55	08"	LINCIP	CITY OF ROCKFORD
70	24	1611	GORHAM PL	18271	8.8NS	7	30	08"	LINCIP	CITY OF ROCKFORD
71	25	1508	CYNTHIA DR	18715	32.6NS	6	30	08"	LINCIP	ROCKFORD TOWNSHIP
72	25	1504	CYNTHIA DR	18732	30.5NS	5	30	08"	LINCIP	ROCKFORD TOWNSHIP
73	25	1507	CYNTHIA DR	18727	28.5NS	5.5	30	08"	LINCIP	ROCKFORD TOWNSHIP
74	26	1316	SCOTTWOOD RD	19387	37NS	9	30	08"	LINCIP	CITY OF ROCKFORD
75	26	1315	SCOTTWOOD RD	19388	33NS	9	30	08"	LINCIP	CITY OF ROCKFORD
76	26	1311	SCOTTWOOD RD	26497	32SN	9	30	08"	LINCIP	CITY OF ROCKFORD
77	26	1307	SCOTTWOOD RD	26505	30NS	9.5	30	08"	LINCIP	CITY OF ROCKFORD
78	27	1006	SCOTTWOOD RD	15021	56SN	8	30	08"	LINCIP	CITY OF ROCKFORD
79	27	928	SCOTTWOOD RD	26738	11NS	10	30	08"	LINCIP	CITY OF ROCKFORD
80	27	924	SCOTTWOOD RD	26750	17NS	10	30	08"	LINCIP	CITY OF ROCKFORD
81	27	927	SCOTTWOOD RD	15026	30.8 NS	6	30	08"	LINCIP	CITY OF ROCKFORD
82	27	923	SCOTTWOOD RD	26745	38.44 SN	7	28	08"	LINCIP	CITY OF ROCKFORD
83	28	916	SCOTTWOOD RD	26408	43SN	8	30	08"	LINCIP	CITY OF ROCKFORD
84	28	912	SCOTTWOOD RD	26426	29SN	8	30	08"	LINCIP	CITY OF ROCKFORD
85	28	915	SCOTTWOOD RD	26412	33.0 NS	8	30	08"	LINCIP	CITY OF ROCKFORD
86	28	911	SCOTTWOOD RD	26429	31.7 NS	6.5	30	08"	LINCIP	CITY OF ROCKFORD
87	29	1220	RONCEVALLES AVE	26540	42NS	8	30	08"	LINCIP	CITY OF ROCKFORD

ITEM No.	MAP #	HouseNumber	StreetName	Service ID	End Meas.	Depth (FT)	Est. Length (FT)	Main Size (INCH)	Main Type	Roadway Authority
88	30	1133	STERLING DR	14893	19.5NS	8	30	08"	VCP	CITY OF ROCKFORD
89	30	1131	STERLING DR	14903	12.6NS	8.5	30	08"	VCP	CITY OF ROCKFORD
90	30	1123	STERLING DR	14913	26NS	8.5	30	08"	VCP	CITY OF ROCKFORD
91	31	1207	MAYFAIR PL	26067	50.6 NS	8.5	33	08"	VCP	CITY OF ROCKFORD
92	32	3923	PIONEER DR	14883	45EW	8.5	30	08"	VCP	CITY OF ROCKFORD
93	32	3916	PIONEER DR	14880	28.5EW	8.5	37	08"	VCP	CITY OF ROCKFORD
94	32	3920	PIONEER DR	213945	35EWs	8.5	33	08"	VCP	CITY OF ROCKFORD
95	33	3610	BRENDENWOOD RD	17380	37.1 EW	8	30	08"	VCP	CITY OF ROCKFORD
96	33	1208	ARDEN AVE	17378	37.5 WE	8.5	30	08"	VCP	CITY OF ROCKFORD
97	34	4116	BRENDENWOOD RD	26034	35WE	7	48	08"	VCP	CITY OF ROCKFORD
98	35	3315	MINNESOTA DR	50307	8 WE	8	30	08"	LINCIP	CITY OF ROCKFORD
99	35	3319	MINNESOTA DR	50306	0 EW	9	30	08"	LINCIP	CITY OF ROCKFORD
100	35	3307	MINNESOTA DR	50313	23.5 EW	9.2	30	08"	LINCIP	CITY OF ROCKFORD
101	36	3208	MINNESOTA DR	50283	42 WE	9.5	33	08"	LINCIP	CITY OF ROCKFORD
102	36	3211	MINNESOTA DR	50321	3.5 WW	8.5	29	08"	LINCIP	CITY OF ROCKFORD
103	36	3119	MINNESOTA DR	50323	6.5 EW	9	29	08"	LINCIP	CITY OF ROCKFORD
104	36	3212	MINNESOTA DR	50282	26 EW	9	32	08"	LINCIP	CITY OF ROCKFORD
105	36	3114	MINNESOTA DR	50297	7.5 WE	9	32	08"	LINCIP	CITY OF ROCKFORD
106	36	3111	MINNESOTA DR	50331	0 EW	8.5	29	08"	LINCIP	CITY OF ROCKFORD
107	37	3107	WEST GATE PKWY	50403	29 NS	8.5	36	08"	LINCIP	CITY OF ROCKFORD
108	37	3111	WEST GATE PKWY	50421	36 NS	9.5	39	08"	LINCIP	CITY OF ROCKFORD
109	38	1718	OREGON AVE	50662	49 NS	10	26	08"	LINCIP	CITY OF ROCKFORD
110	38	1722	OREGON AVE	50688	43 NS	10	22	08"	LINCIP	CITY OF ROCKFORD
111	38	1707	OREGON AVE	50604	34 NS	9	33	08"	LINCIP	CITY OF ROCKFORD
112	38	1711	OREGON AVE	50633	33 NS	9	33	08"	LINCIP	CITY OF ROCKFORD
113	38	1710	OREGON AVE	50631	22.5 NS	10.5	26	08"	LINCIP	CITY OF ROCKFORD
114	38	1706	OREGON AVE	50602	34 NS	10	26	08"	LINCIP	CITY OF ROCKFORD
115	38	1630	OREGON AVE	50559	8 NS	11	26	08"	LINCIP	CITY OF ROCKFORD
116	38	1703	OREGON AVE	50578	55 NS	9	33	08"	LINCIP	CITY OF ROCKFORD
117	39	3203	MARYLAND RD	50745	20 WE	9	30	08"	LINCIP	CITY OF ROCKFORD
118	39	3131	MARYLAND RD	42697	8 NS	8.5	40	08"	LINCIP	CITY OF ROCKFORD
119	39	3139	MARYLAND RD	280334	14 NS	9.5	30	08"	LINCIP	CITY OF ROCKFORD
120	39	3116	MARYLAND RD	42662	10 NS	10.5	26	08"	LINCIP	CITY OF ROCKFORD
121	40	3220	MARYLAND RD	50778	28 WE	9	30	08"	LINCIP	CITY OF ROCKFORD
122	40	3216	MARYLAND RD	50769	31 WE	10	31	08"	LINCIP	CITY OF ROCKFORD
123	41	1905	OREGON AVE	42475	33 NS	9	30	08"	LINCIP	CITY OF ROCKFORD
124	42	1824	OREGON AVE	50791	33 NS	8	26	08"	LINCIP	CITY OF ROCKFORD
125	42	1816	OREGON AVE	50748	22 SN	9	27	08"	LINCIP	CITY OF ROCKFORD
126	43	3307	CALIFORNIA RD	50443	40 WE	8	34	08"	LINCIP	CITY OF ROCKFORD
127	44	3331	CALIFORNIA RD	50590	23 EW	8	39	08"	LINCIP	CITY OF ROCKFORD
128	45	3404	WEST GATE PKWY	42709	53 NS	11.5	33	08"	LINCIP	CITY OF ROCKFORD
129	45	1730	OHIO PKWY	42690	15 SN	10.5	33	08"	LINCIP	CITY OF ROCKFORD
130	46	1911	NEBRASKA RD	51249	36 EW	11	32	08"	LINCIP	CITY OF ROCKFORD
131	46	2004	IDAHO PKWY	51260	36 EW	8	44	08"	LINCIP	CITY OF ROCKFORD
132	46	3530	WEST GATE PKWY	51238	53 EW	8.5	30	08"	LINCIP	CITY OF ROCKFORD

ITEM No.	MAP #	HouseNumber	StreetName	Service ID	End Meas.	Depth (FT)	Est. Length (FT)	Main Size (INCH)	Main Type	Roadway Authority
133	47	1908	NEBRASKA RD	51174	25 NS	6.5	32	08"	LINCIP	CITY OF ROCKFORD
134	48	3516	CAROLINA AVE	42794	39 EW	6	33	08"	LINCIP	CITY OF ROCKFORD
135	48	3524	CAROLINA AVE	42808	45 WE	6	33	08"	LINCIP	CITY OF ROCKFORD
136	49	3503	CAROLINA AVE	42767	26.5 EW	11	24	08"	LINCIP	CITY OF ROCKFORD
137	49	3507	CAROLINA AVE	42775	32.5 EW	11	24	08"	LINCIP	CITY OF ROCKFORD
138	49	3427	CAROLINA AVE	42761	25.5 EW	10.5	24	08"	LINCIP	CITY OF ROCKFORD
139	49	2019	NEBRASKA RD	51360	31.5 SN	9	25	08"	LINCIP	CITY OF ROCKFORD
140	49	2026	NEBRASKA RD	51400	61 SN	7	37	08"	LINCIP	CITY OF ROCKFORD
141	49	2027	NEBRASKA RD	51397	40.9 SN	8.5	25	08"	LINCIP	CITY OF ROCKFORD
142	49	2023	NEBRASKA RD	51384	39.5 SN	8	25	08"	LINCIP	CITY OF ROCKFORD
143	50	3415	CAROLINA AVE	42762	19.5 EW	9	29	08"	LINCIP	CITY OF ROCKFORD
144	50	3407	CAROLINA AVE	42765	34 EW	8	29	08"	LINCIP	CITY OF ROCKFORD
145	50	3412	CAROLINA AVE	42739	38 WE	9	43	08"	LINCIP	CITY OF ROCKFORD
146	51	3309	CAROLINA AVE	42774	51.5 EW	6	29	08"	LINCIP	CITY OF ROCKFORD
147	51	3318	CAROLINA AVE	42744	47 EW	7	46	08"	LINCIP	CITY OF ROCKFORD
148	51	3323	CAROLINA AVE	42770	53.5 EW	7	29	08"	LINCIP	CITY OF ROCKFORD
149	52	3223	CAROLINA AVE	42792	27 WE	6	27	08"	LINCIP	CITY OF ROCKFORD
150	52	3235	CAROLINA AVE	42785	23 EW	5.5	27	08"	LINCIP	CITY OF ROCKFORD
151	52	3307	CAROLINA AVE	42778	22.5 EW	6.5	27	08"	LINCIP	CITY OF ROCKFORD
152	52	3247	CAROLINA AVE	42782	21.5 EW	6	27	08"	LINCIP	CITY OF ROCKFORD
153	53	2112	IDAHO PKWY	43573	27 EW	8	30	08"	LINCIP	CITY OF ROCKFORD
154	54	1324	FLORIST DR	277127	24 SN	8	30	08"	LINCIP	CITY OF ROCKFORD
155	55	1304	EAST GATE PKWY	37434	44 SN	9	37	08"	LINCIP	CITY OF ROCKFORD
156	56	1712	EASTMORELAND AVE	48313	26.5 SN	7.5	30	08"	LINCIP	CITY OF ROCKFORD
157	56	1719	EASTMORELAND AVE	48348	13 SN	6.5	30	08"	LINCIP	CITY OF ROCKFORD
158	57	1112	LEXINGTON WAY	38953	49 SN	8	28	08"	LINCIP	CITY OF ROCKFORD
159	57	1109	LEXINGTON WAY	38948	33 SN	9	31	08"	LINCIP	CITY OF ROCKFORD
160	58	4305	NEWBURG RD	47992	6 NS	5.75	34	08"	LINCIP	CITY OF ROCKFORD
161	59	1210	EASTON PKWY	69211	16 SN	9	87	08"	LINCIP	CITY OF ROCKFORD
162	59	1304	EASTON PKWY	69212	10 SN	8.9	87	08"	LINCIP	CITY OF ROCKFORD
163	60	5033	CAROL CT	29147	36 EW	10.5	32	08"	LINCIP	CITY OF ROCKFORD
164	60	5038	CAROL CT	37301	48 EW	9.5	30	08"	LINCIP	CITY OF ROCKFORD
165	60	5042	CAROL CT	37299	30 EW	9	30	08"	LINCIP	CITY OF ROCKFORD
166	60	5037	CAROL CT	29146	41 WE	10.5	32	08"	LINCIP	CITY OF ROCKFORD
167	61	5014	CAROL CT	37307	41.5 WE	9	29	08"	LINCIP	CITY OF ROCKFORD
168	61	5024	CAROL CT	37304	30 WE	9.6	29	08"	LINCIP	CITY OF ROCKFORD
169	61	5017	CAROL CT	29154	27 WE	9.4	32	08"	LINCIP	CITY OF ROCKFORD
170	61	5021	CAROL CT	29152	37 EW	10.5	32	08"	LINCIP	CITY OF ROCKFORD
171	61	5029	CAROL CT	29150	27 WE	10	32	08"	LINCIP	CITY OF ROCKFORD
172	61	5025	CAROL CT	29151	38 WE	9.5	32	08"	LINCIP	CITY OF ROCKFORD
173	62	407	MORNINGSIDE DR	39052	10.5 SN	8	32	08"	LINCIP	CITY OF ROCKFORD
174	63	336	VALE AVE	39006	31 S/N	9.5	42	08"	LINCIP	CITY OF ROCKFORD
175	64	2367	WISCONSIN RD	51011	36 NS	9.5	35	08"	LINCIP	CITY OF ROCKFORD
176	64	2359	WISCONSIN RD	50994	34 NS	9.5	35	08"	LINCIP	CITY OF ROCKFORD
177	64	2363	WISCONSIN RD	51004	30 NS	9	35	08"	LINCIP	CITY OF ROCKFORD



ITEM No.	MAP #	HouseNumber	StreetName	Service ID	End Meas.	Depth (FT)	Est. Length (FT)	Main Size (INCH)	Main Type	Roadway Authority
178	65	2929	PLEASANT VIEW AVE	50999	29.5 EW	9	29	08"	LINCIP	CITY OF ROCKFORD
179	66	3603	CORBRIDGE LN	26891	31 EW	8.5	30	08"	LINCIP	CITY OF ROCKFORD
180	66	3503	CORBRIDGE LN	26896	46.5 EW	6.5	30	08"	LINCIP	CITY OF ROCKFORD
181	66	803	FAIRVIEW BLVD	26875	79 EW	8	30	08"	LINCIP	CITY OF ROCKFORD
182	67	3603	BELVOIR DR	20930	39 SN	12	30	08"	LINCIP	CITY OF ROCKFORD
183	67	822	FAIRVIEW BLVD	20938	30 SN	10	32	08"	LINCIP	CITY OF ROCKFORD
184	67	3428	LAUDERDALE LN	26787	35 SN	8.5	32	08"	LINCIP	CITY OF ROCKFORD
185	67	828	FAIRVIEW BLVD	20922	35 SN	11	32	08"	LINCIP	CITY OF ROCKFORD
186	67	846	FAIRVIEW BLVD	20961	33 SN	9.5	32	08"	LINCIP	CITY OF ROCKFORD
187	67	815	FAIRVIEW BLVD	26784	37 SN	10	32	08"	LINCIP	CITY OF ROCKFORD
188	67	821	FAIRVIEW BLVD	20958	39 SN	11	32	08"	LINCIP	CITY OF ROCKFORD
189	68	4509	LINDER PLACE	17107	30 EW	5.8	33	08"	LINCIP	ROCKFORD TOWNSHIP
190	69	2317	SPRING BROOK AVE	16995	52 SN	9.5	27	08"	LINCIP	ROCKFORD TOWNSHIP
191	69	2321	SPRING BROOK AVE	16971	97 SN	9.5	17	08"	LINCIP	ROCKFORD TOWNSHIP
192	69	2322	SPRING BROOK AVE	16989	47 NS	9	42	08"	LINCIP	ROCKFORD TOWNSHIP
193	70	4565	SPRINGBROOK RD	255969	12 SN	9	21	10"	LINCIP	ROCKFORD TOWNSHIP
194	71	3060	SUFFOLK PL	2139	35 EW	9.5	30	08"	LINCIP	CITY OF ROCKFORD
195	71	5920	OLD MILLSTONE RD	2140	36 EW	10	30	08"	LINCIP	CITY OF ROCKFORD
196	71	5910	OLD MILLSTONE RD	2141	36 EW	10	30	08"	LINCIP	CITY OF ROCKFORD
197	71	5915	OLD MILLSTONE RD	9289	35 EW	9.5	30	08"	LINCIP	CITY OF ROCKFORD
198	72	4645	CROMWELL LN	43801	35 NS	9	38	08"	LINCIP	LOVES PARK
199	73	2011	EXETER AVE	43410	28 EW	11	31	08"	LINCIP	LOVES PARK
200	73	2015	EXETER AVE	43409	32 EW	9	31	08"	LINCIP	LOVES PARK
201	73	2008	EXETER AVE	43395	30.5 EW	9	34	08"	LINCIP	LOVES PARK
202	74	2112	EXETER AVE	43381	25 EW	9.5	34	08"	LINCIP	LOVES PARK
203	74	2107	EXETER AVE	43404	31 EW	9	33	08"	LINCIP	LOVES PARK
204	74	2103	EXETER AVE	43405	34 WE	9	33	08"	LINCIP	LOVES PARK
205	74	2104	EXETER AVE	43385	33 WE	9.5	34	08"	LINCIP	LOVES PARK
206	75	2120	EXETER AVE	43378	30 EW	9	34	08"	LINCIP	LOVES PARK
207	75	2124	EXETER AVE	43377	28.5 EW	8.5	34	08"	LINCIP	LOVES PARK
208	75	2203	EXETER AVE	43398	28 EW	9	33	08"	LINCIP	LOVES PARK
209	76	2109	EVANS AVE	55924	27 WE	8.5	32	08"	LINCIP	LOVES PARK
210	77	7742	BUFFALO GROVE RD	61036	60 SN	6.5	18	08"	LINCIP	LOVES PARK
211	77	7728	BUFFALO GROVE RD	49134	41 NS	6	30	08"	LINCIP	LOVES PARK
212	77	7727	BUFFALO GROVE RD	49135	32 NS	6	31	08"	LINCIP	LOVES PARK
213	77	7731	BUFFALO GROVE RD	49123	34 NS	7	31	08"	LINCIP	LOVES PARK
214	77	7735	BUFFALO GROVE RD	49115	18.5 NS	7	31	08"	LINCIP	LOVES PARK
215	77	7732	BUFFALO GROVE RD	49117	54 NS	6	30	08"	LINCIP	LOVES PARK
216	77	2501	DEVON AVE	61028	40 NS	7	38	08"	LINCIP	LOVES PARK
217	78	2801	LAPEY ST	65040	13 NS	8.6	25	08"	LINCIP	CITY OF ROCKFORD
218	79	1425	ASHLAND AVE	23884	46 EW	8.5	35	08"	LINCIP	CITY OF ROCKFORD
219	80	1736	WARREN RD	48401	7 WE	9	44	08"	LINCIP	ROCKFORD TOWNSHIP



THE CONTRACTOR SHALL LINE THE ENTIRE LENGTH OF EXISTING 6" CLAY SERVICE PIPE TO A POINT 1' UPSTREAM OF THE 6" CLAY TO 6" PVC PIPE TRANSITION WITH CURED IN PLACE PIPE (C.I.P.P.) PER ASTM F-1216, ASTM F-1743 OR ASTM F-2561.

# CURED IN PLACE SEWER SERVICE LINING DETAIL

NOT TO SCALE



3315  
BRENDENWOOD RD

1120  
RONCEVALLES  
AVE

1116  
RONCEVALLES  
AVE

1112  
RONCEVALLES  
AVE

1108  
RONCEVALLES  
AVE

3320  
PIONEER DR

1123  
RONCEVALLES  
AVE

1119  
RONCEVALLES  
AVE

1115  
RONCEVALLES  
AVE

1111  
RONCEVALLES  
AVE

1107  
RONCEVALLES  
AVE

3404  
PIONEER DR

8 in

6 in.

8 in

PIONEER DR

PIONEER DR

1

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1 inch = 40 feet



By: JMK  
Produced: 7/31/2018  
RRWRD Engineering Department





3823  
ABBOTSFORD RD

3827  
ABBOTSFORD RD

3730  
GUILFORD RD

37XX  
GUILFORD RD

3740  
GUILFORD RD

3802  
GUILFORD RD

GUILFORD RD

12 in.

8 in.

3707  
GUILFORD RD

3711  
GUILFORD RD

3715  
GUILFORD RD

3719  
GUILFORD RD

828  
TAMARACK LN

822  
TA 2 N

809  
ROBIN DALE CIR

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1 inch = 40 feet

0 20 40 80 120 Feet



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1 inch = 40 feet



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1120  
BROOKFIELD RD

1117  
BROOKFIELD RD

1120  
MAYFAIR PL

1116  
BROOKFIELD RD

1116  
MAYFAIR PL

1115  
BROOKFIELD RD

1112  
BROOKFIELD RD

1112  
MAYFAIR PL

1111  
BROOKFIELD RD

1108  
BROOKFIELD RD

1108  
MAYFAIR PL

1107  
BROOKFIELD RD

1104  
BROOKFIELD RD

1104  
MAYFAIR PL

1103  
BROOKFIELD RD

1032  
BROOKFIELD RD

1020  
MAYFAIR PL

1031  
BROOKFIELD RD

1028  
BROOKFIELD RD

1016  
MAYFAIR CT

1027  
BROOKFIELD RD

1023  
BROOKFIELD RD

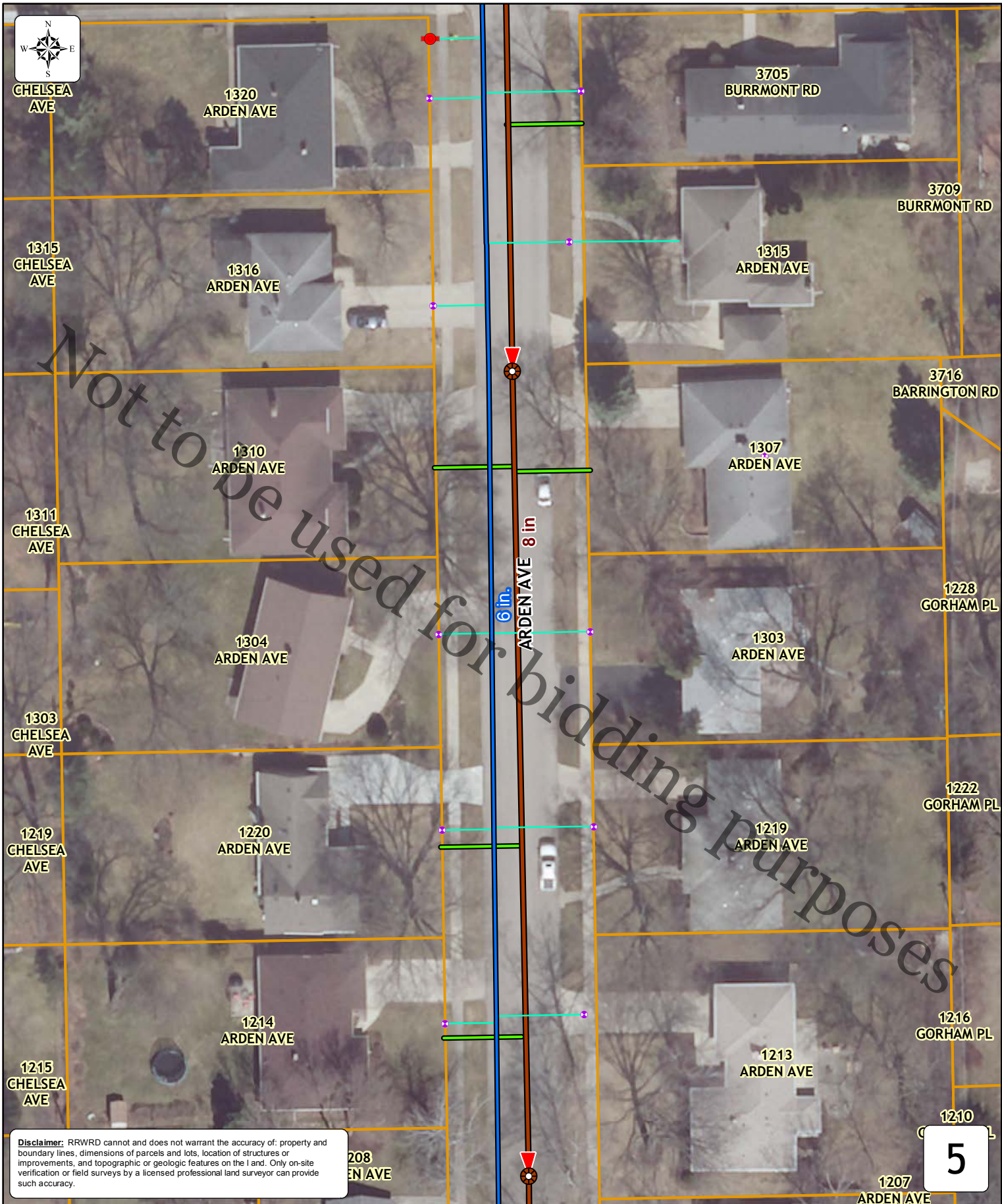
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6 in.

8 in

BROOKFIELD RD





CHELSEA AVE

1320 ARDEN AVE

3705 BURRMONT RD

3709 BURRMONT RD

1315 CHELSEA AVE

1316 ARDEN AVE

1315 ARDEN AVE

3716 BARRINGTON RD

1310 ARDEN AVE

1307 ARDEN AVE

1311 CHELSEA AVE

1304 ARDEN AVE

1228 GORHAM PL

1303 CHELSEA AVE

1303 ARDEN AVE

1222 GORHAM PL

1219 CHELSEA AVE

1220 ARDEN AVE

1219 ARDEN AVE

1215 CHELSEA AVE

1214 ARDEN AVE

1216 GORHAM PL

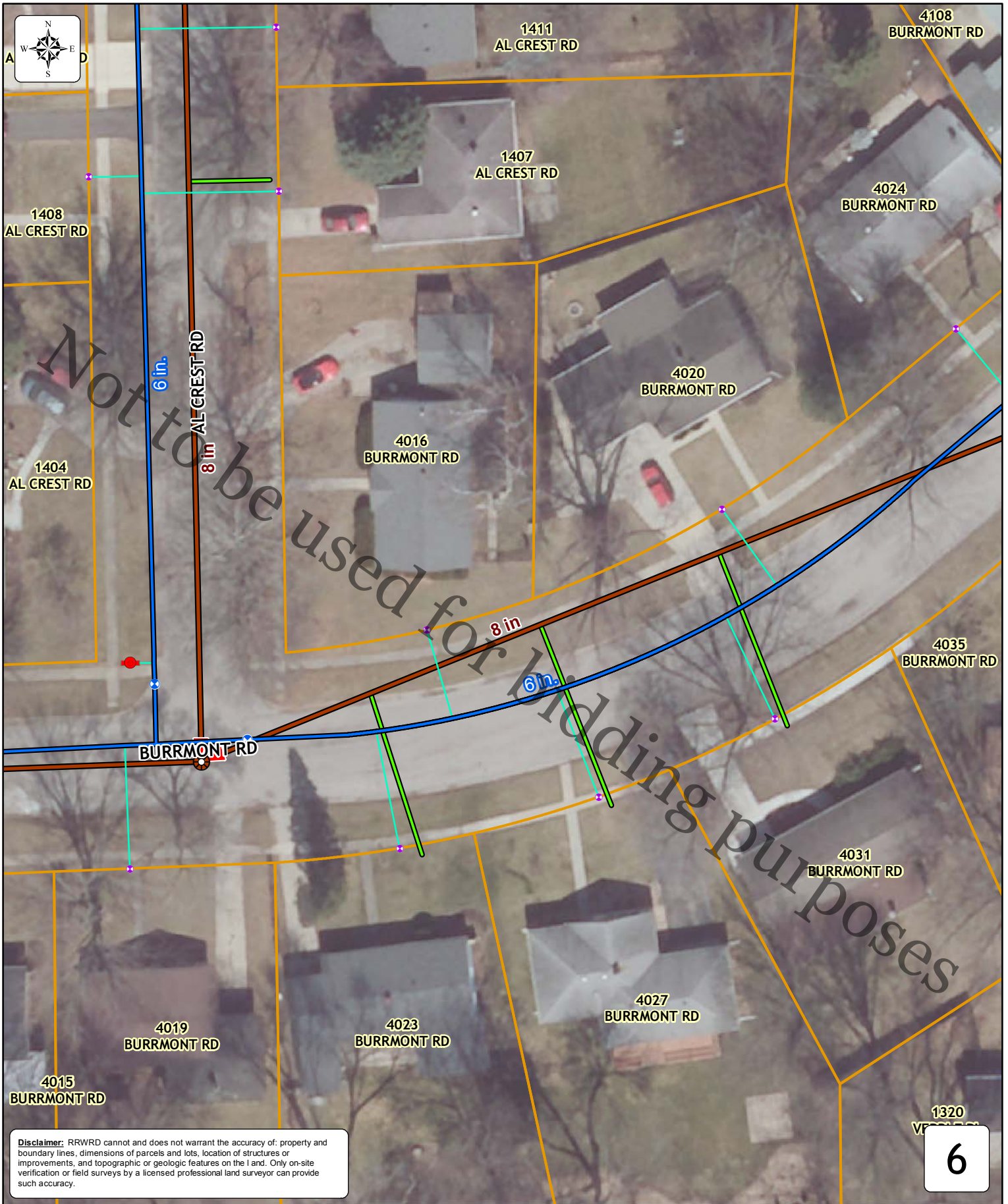
1213 ARDEN AVE

1210

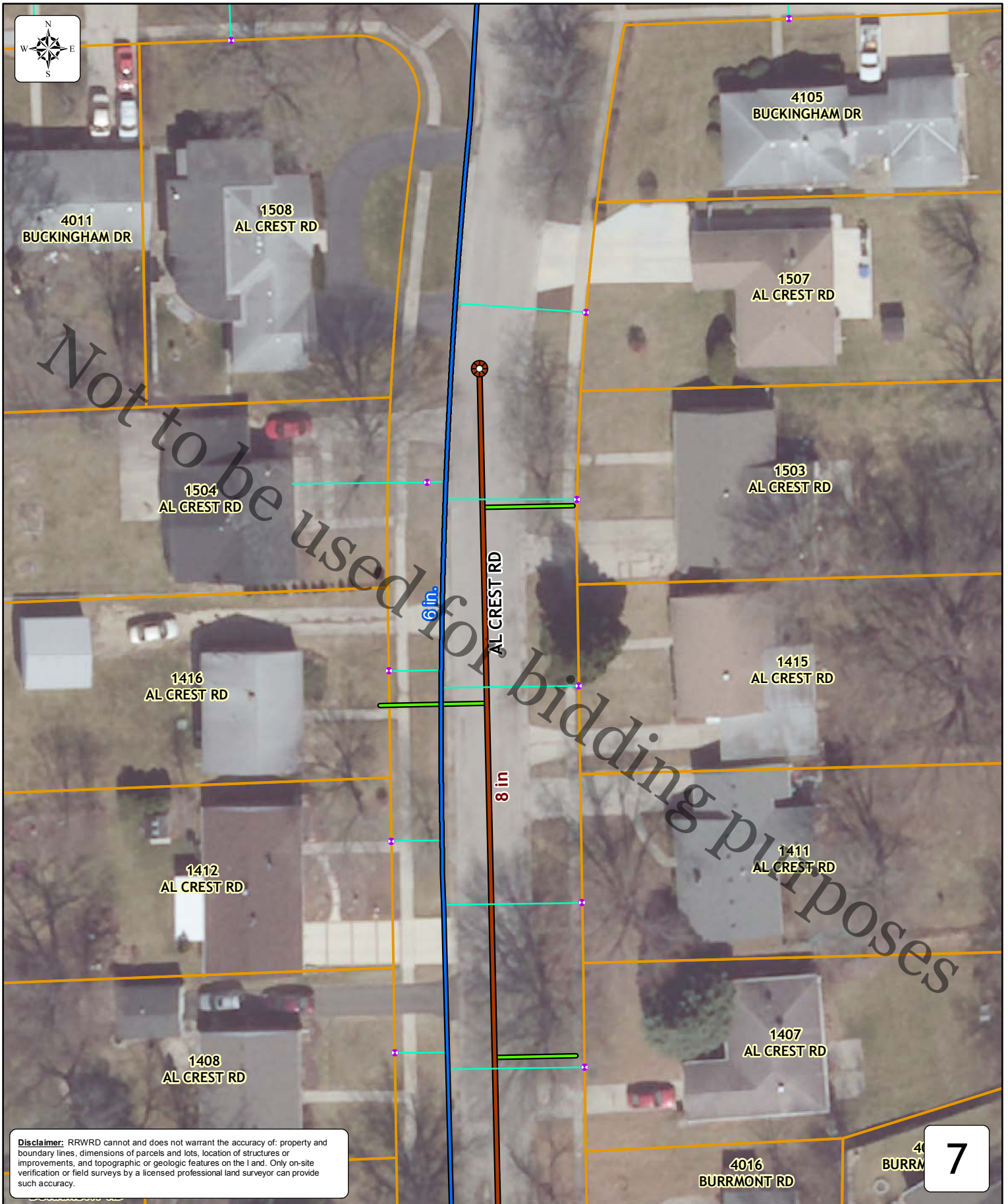
5

1207 ARDEN AVE

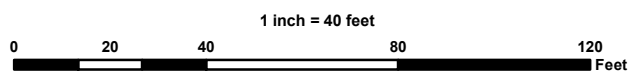








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1616  
CYNTHIA DR

1612  
CYNTHIA DR

1608  
CYNTHIA DR

3820  
BUCKINGHAM DR

4001  
CRESTVIEW DR

1607  
CYNTHIA DR

4002  
BUCKINGHAM DR

CYNTHIA DR 8 in

6 in.

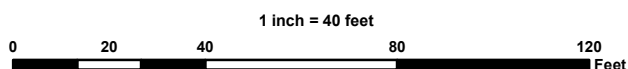
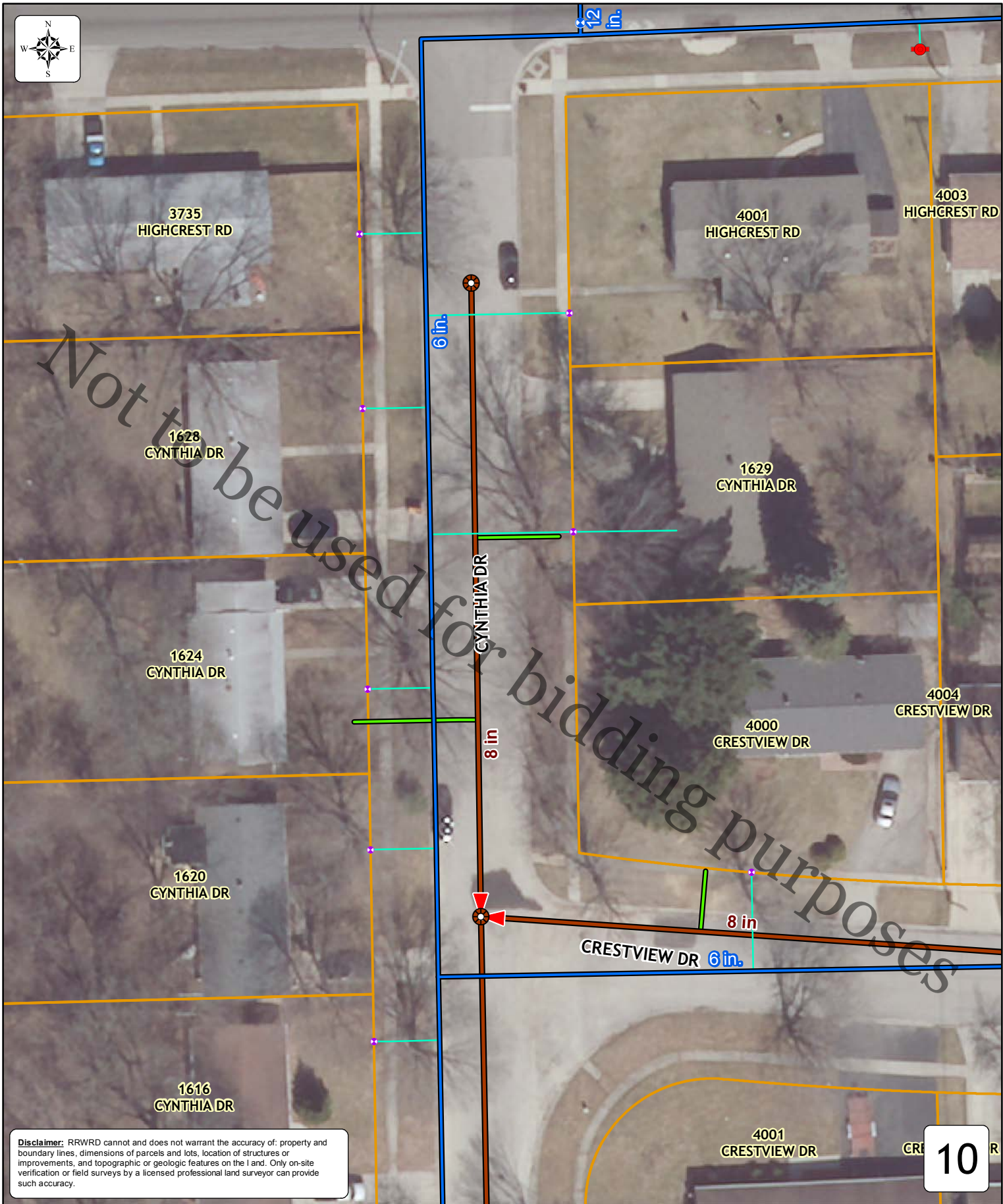
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9

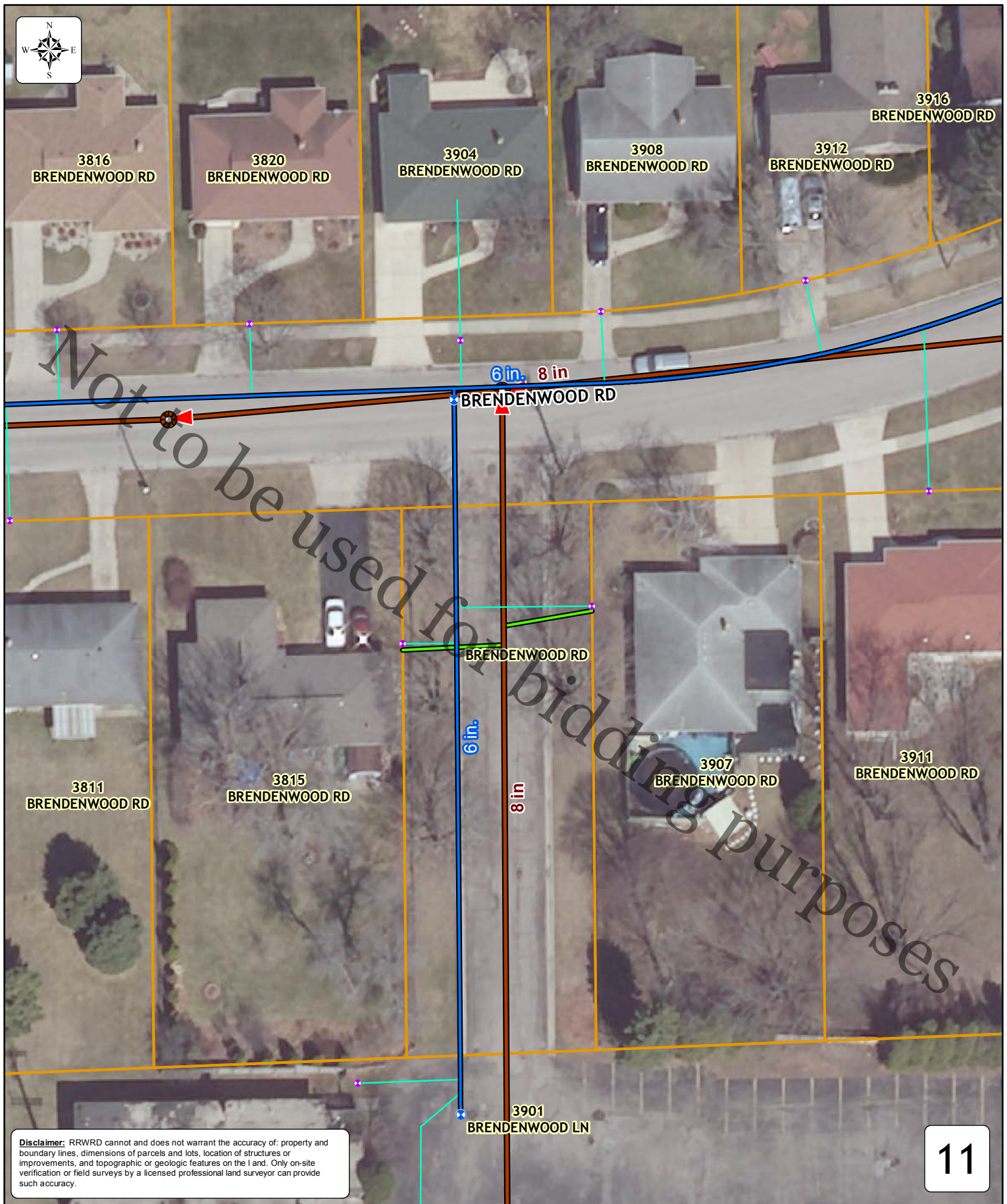
1 inch = 30 feet





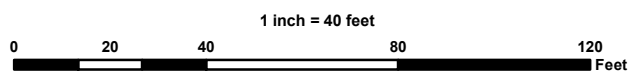






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11



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RRWRD Engineering Department





4303  
VILLA WOOD  
CIR

4307  
VILLA WOOD  
CIR

1302  
COOLIDGE PL

4306  
BRENDENWOOD RD

4310  
BRENDENWOOD RD

6 in.

8 in BRENDENWOOD RD

4303  
BRENDENWOOD RD

4307  
BRENDENWOOD RD

4311  
BRENDENWOOD RD

4315  
BRENDENWOOD RD

4319  
BRENDENWOOD RD

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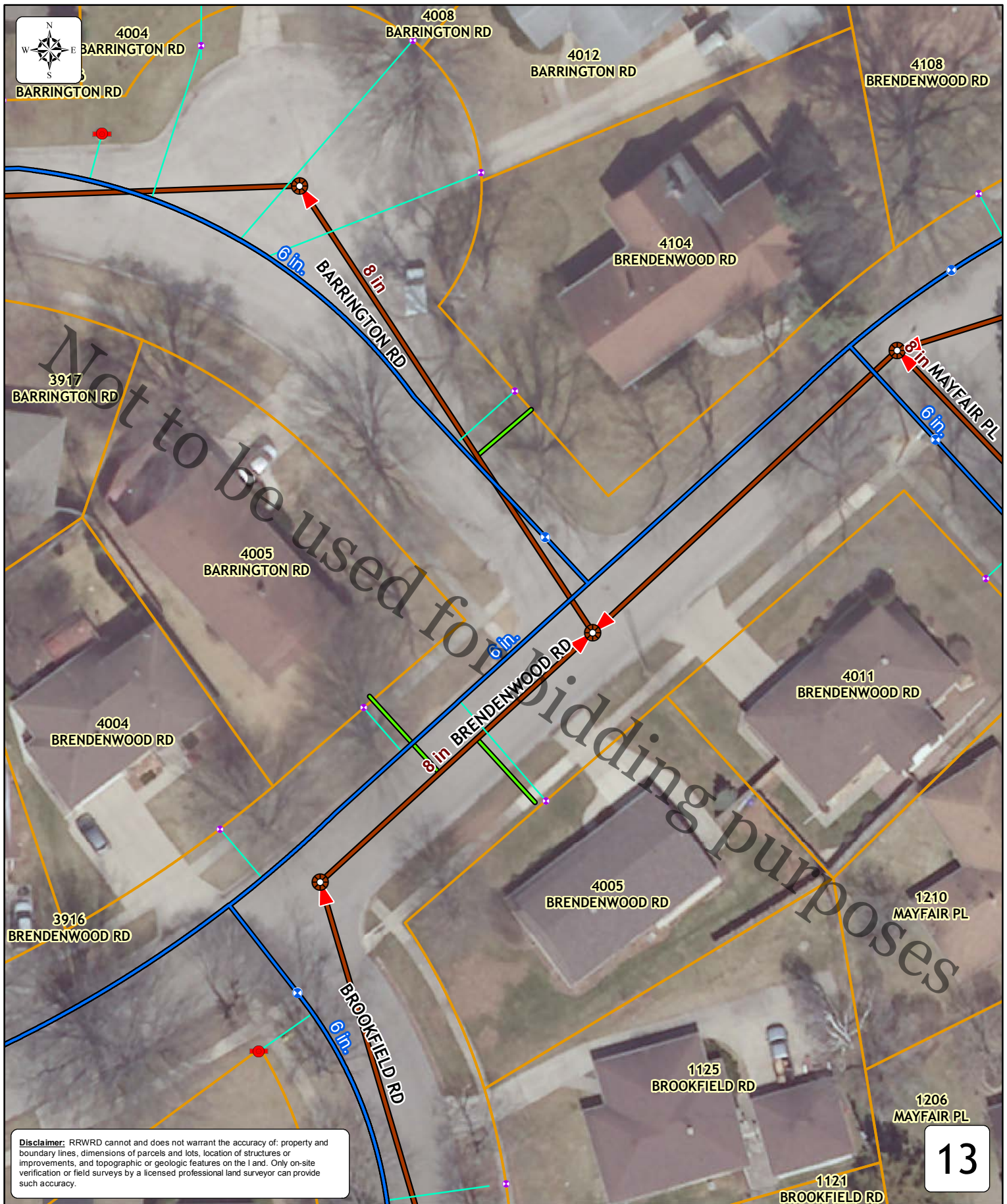
12

1 inch = 40 feet

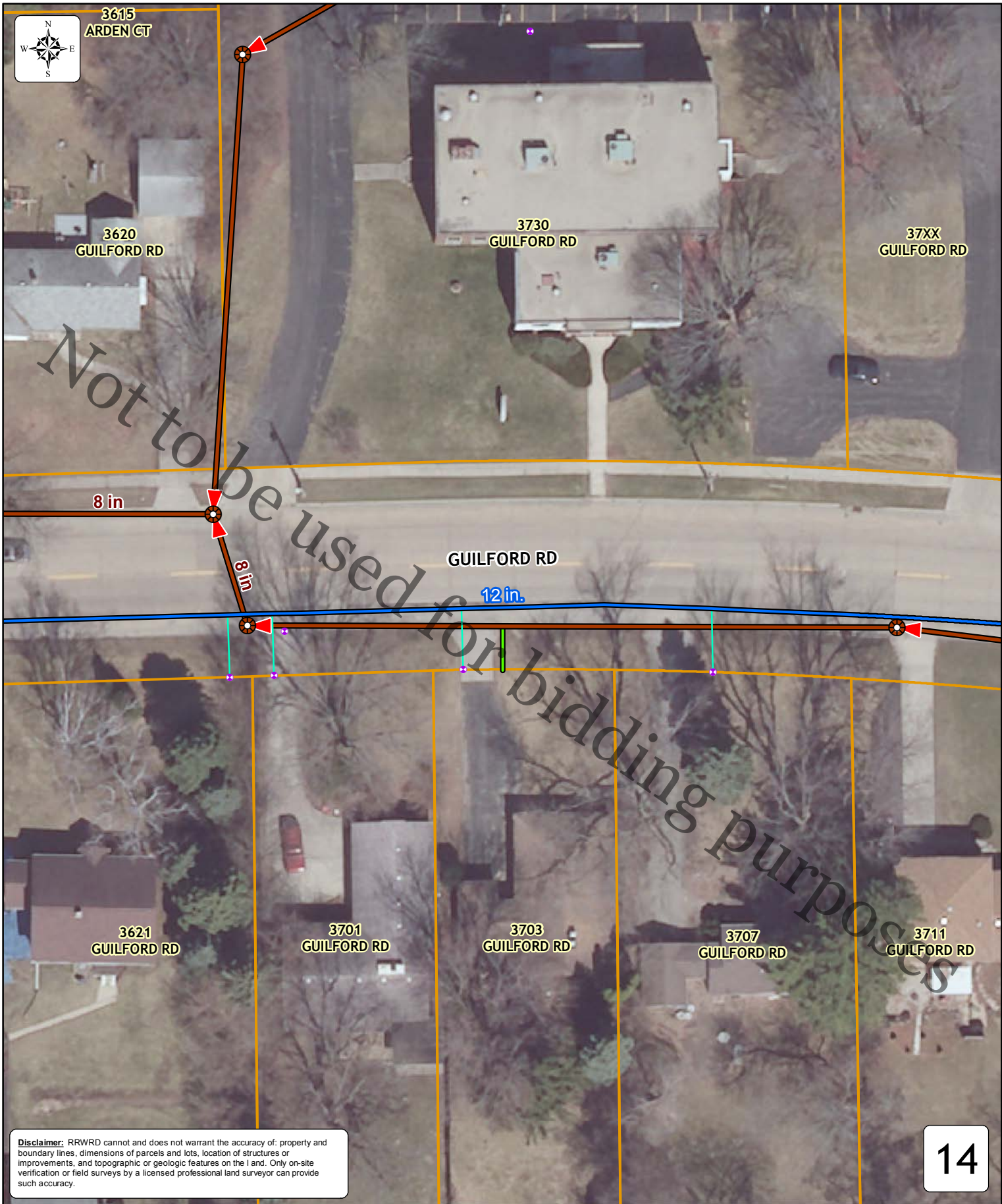


By: JMK  
Produced: 7/31/2018  
RRWRD Engineering Department

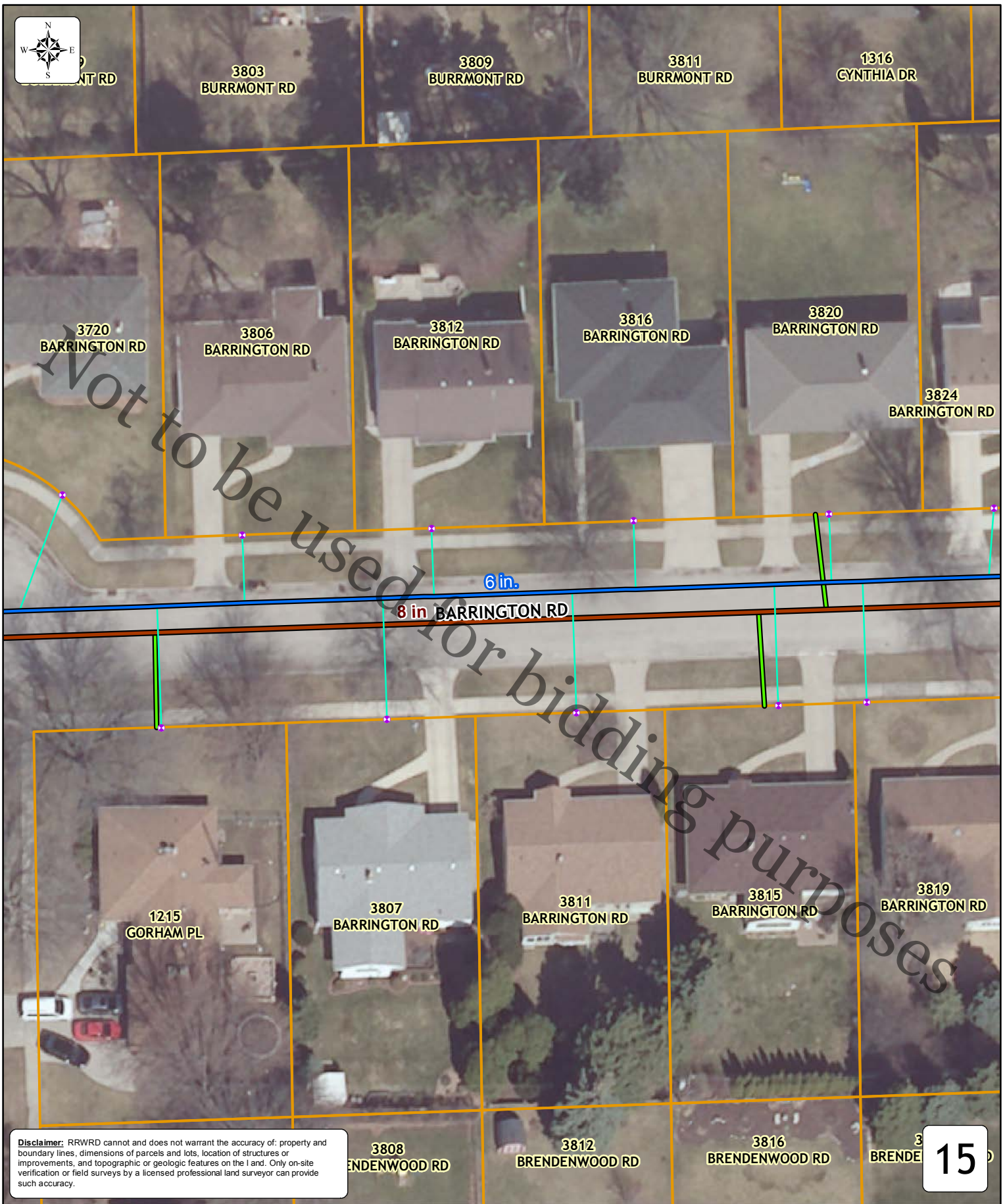






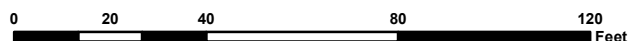






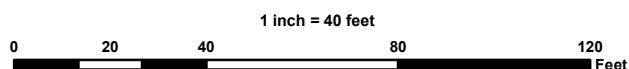
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1 inch = 40 feet



By: JMK  
Produced: 7/31/2018  
RRWRD Engineering Department









3415  
PIONEER DR

1023  
SCOTTWOOD RD

1020  
SCOTTWOOD RD

1017  
SCOTTWOOD RD

1016  
SCOTTWOOD RD

1011  
SCOTTWOOD RD

1012  
SCOTTWOOD RD

1005  
SCOTTWOOD RD

1006

927  
SCOTTWOOD RD

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17

1 inch = 30 feet



By: JMK  
Produced: 7/31/2018  
RRWRD Engineering Department





916  
CHELSEA  
AVE

919  
CHELSEA  
AVE

3615  
ARDEN CT

912  
CHELSEA  
AVE

915  
CHELSEA  
AVE

911  
CHELSEA  
AVE

908  
CHELSEA  
AVE

907  
CHELSEA  
AVE

3516  
GUILFORD RD

904  
CHELSEA  
AVE

903  
CHELSEA  
AVE

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GUILFORD RD

18

1 inch = 40 feet



By: JMK  
Produced: 7/31/2018  
RRWRD Engineering Department





13  
ONT RD

4203  
BURRMONT RD

4207  
BURRMONT RD

4211  
BURRMONT RD

1316  
REBECCA DR

4120  
OSTRANDER RD

4204  
OSTRANDER RD

4208  
OSTRANDER RD

4216  
OSTRANDER RD

1312  
REBECCA DR

6 in.

OSTRANDER RD 8 in

4203  
OSTRANDER RD

4207  
OSTRANDER RD

4211  
OSTRANDER RD

4215  
OSTRANDER RD

4219  
OSTRANDER RD

4113  
OSTRANDER RD

4206  
VILLA A

4210  
VILLA A

4214  
VILLA  
WOOD CIR

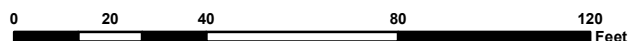
4304  
VILLA WOOD  
CIR

4308  
VILLA

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19

1 inch = 40 feet





3615  
BUCKINGHAM DR

1508  
ARDEN AVE

1502  
ARDEN AVE

1416  
ARDEN AVE

1412  
ARDEN AVE

3616  
BURRMONT RD

1509  
ARDEN AVE

1507  
ARDEN AVE

1505  
ARDEN AVE

1411  
ARDEN AVE

3706  
BURRMONT RD

BURRMONT RD

ARDEN AVE 8 in

6 in.

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20

1 inch = 40 feet



By: JMK  
Produced: 7/31/2018  
RRWRD Engineering Department













911  
CHELSEA  
AVE

3615  
ARDEN CT

907  
CHELSEA  
AVE

3612  
GUILFORD RD

3620  
GUILFORD RD

903  
CHELSEA  
AVE

8 in

GUILFORD RD

12 in.

3605  
GUILFORD RD

3609  
GUILFORD RD

3615  
GUILFORD RD

3621  
GUILFORD RD

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23

1 inch = 40 feet

0 20 40 80 120 Feet



By: JMK  
Produced: 7/31/2018  
RRWRD Engineering Department





1628  
GORHAM PL

1617  
GORHAM PL

1620  
GORHAM PL

1613  
GORHAM PL

1616  
GORHAM PL

1611  
GORHAM PL

1612  
GORHAM PL

1605  
GORHAM PL

1608  
GORHAM PL

1604  
GORHAM PL

1601  
GORHAM PL

6 in.  
GORHAM PL 8 in.

BUCKINGHAM DR

6 in.

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24

1 inch = 40 feet



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Produced: 7/31/2018  
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BUCKINGHAM DR

6 in.

8 in.

3819  
BUCKINGHAM DR

1511  
CYNTHIA DR

4007  
BUCKINGHAM DR

1511  
GORHAM PL

1508  
CYNTHIA DR

1507  
GORHAM PL

1504  
CYNTHIA DR

1507  
CYNTHIA DR

1503  
GORHAM PL

1503  
CYNTHIA DR

1419  
GORHAM PL

1416  
CYNTHIA DR

1415  
CYNTHIA DR

1415  
GORHAM PL

1412  
CYNTHIA DR

1411  
CYNTHIA DR

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25

1 inch = 40 feet

0 20 40 80 120 Feet



By: JMK  
Produced: 7/31/2018  
RRWRD Engineering Department





3415  
BURRMONT RD

1316  
SCOTTSWOOD RD

1308  
SCOTTSWOOD RD

1220  
SCOTTSWOOD RD

3505  
BURRMONT RD

1315  
SCOTTSWOOD RD

1311  
SCOTTSWOOD RD

1307  
SCOTTSWOOD RD

1303  
SCOTTSWOOD RD

1219  
SCOTTSWOOD RD

12 in.  
SCOTTSWOOD RD

8 in.

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26

1 inch = 40 feet

0 20 40 80 120 Feet



By: JMK  
Produced: 7/31/2018  
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1006  
SCOTTSWOOD RD

1005  
SCOTTSWOOD RD

927  
SCOTTSWOOD RD

928  
SCOTTSWOOD RD

923  
SCOTTSWOOD RD

924  
SCOTTSWOOD RD

920  
SCOTTSWOOD RD

919  
SCOTTSWOOD RD

916

915  
SCOTTSWOOD RD

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12 in.  
SCOTTSWOOD RD  
8 in

27

1 inch = 30 feet

0 15 30 60 90 Feet



By: JMK  
Produced: 7/31/2018  
RRWRD Engineering Department



924  
SCOTTSWOOD RD

920  
SCOTTSWOOD RD

916  
SCOTTSWOOD RD

912  
SCOTTSWOOD RD

904  
SCOTTSWOOD RD

3418  
GUILFORD RD

919  
SCOTTSWOOD RD

915  
SCOTTSWOOD RD

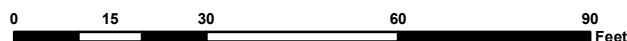
911  
SCOTTSWOOD RD

905  
SCOTTSWOOD RD

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GU 28 D

1 inch = 30 feet



By: JMK  
Produced: 7/31/2018  
RRWRD Engineering Department





1312  
RONCEVALLES  
AVE

1311  
RONCEVALLES  
AVE

1307  
RONCEVALLES  
AVE

1304  
RONCEVALLES  
AVE

1303  
RONCEVALLES  
AVE

1220  
RONCEVALLES  
AVE

1215  
RONCEVALLES  
AVE

1212  
RONCEVALLES  
AVE

1209  
RONCEVALLES  
AVE

1208  
RONCEVALLES  
AVE

1203  
RONCEVALLES  
AVE

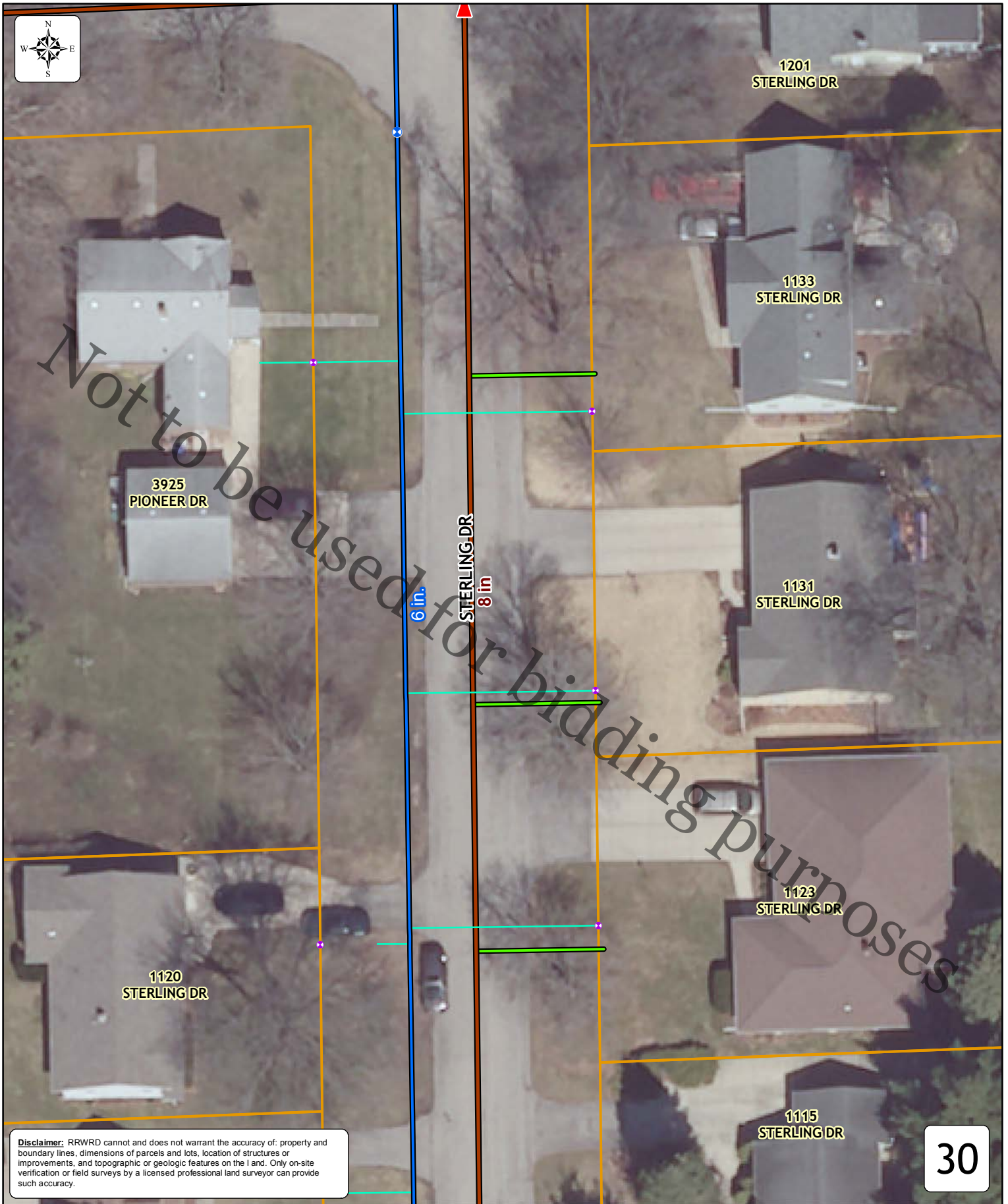
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RONCEVALLES AVE  
6 in.  
8 in.

29

1 inch = 40 feet





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1 inch = 30 feet

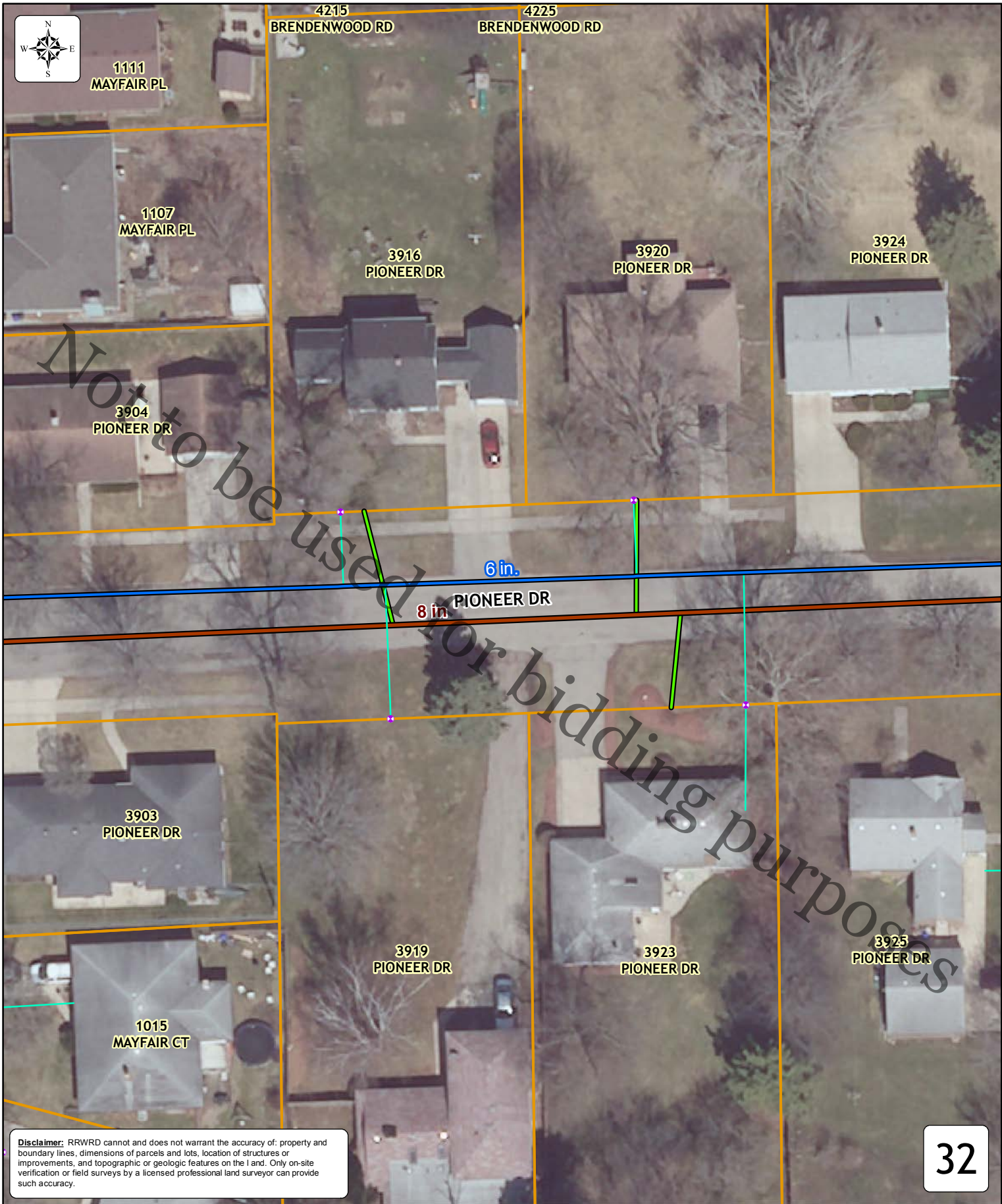


By: JMK  
Produced: 7/31/2018  
RRWRD Engineering Department



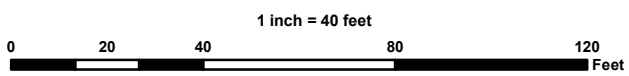




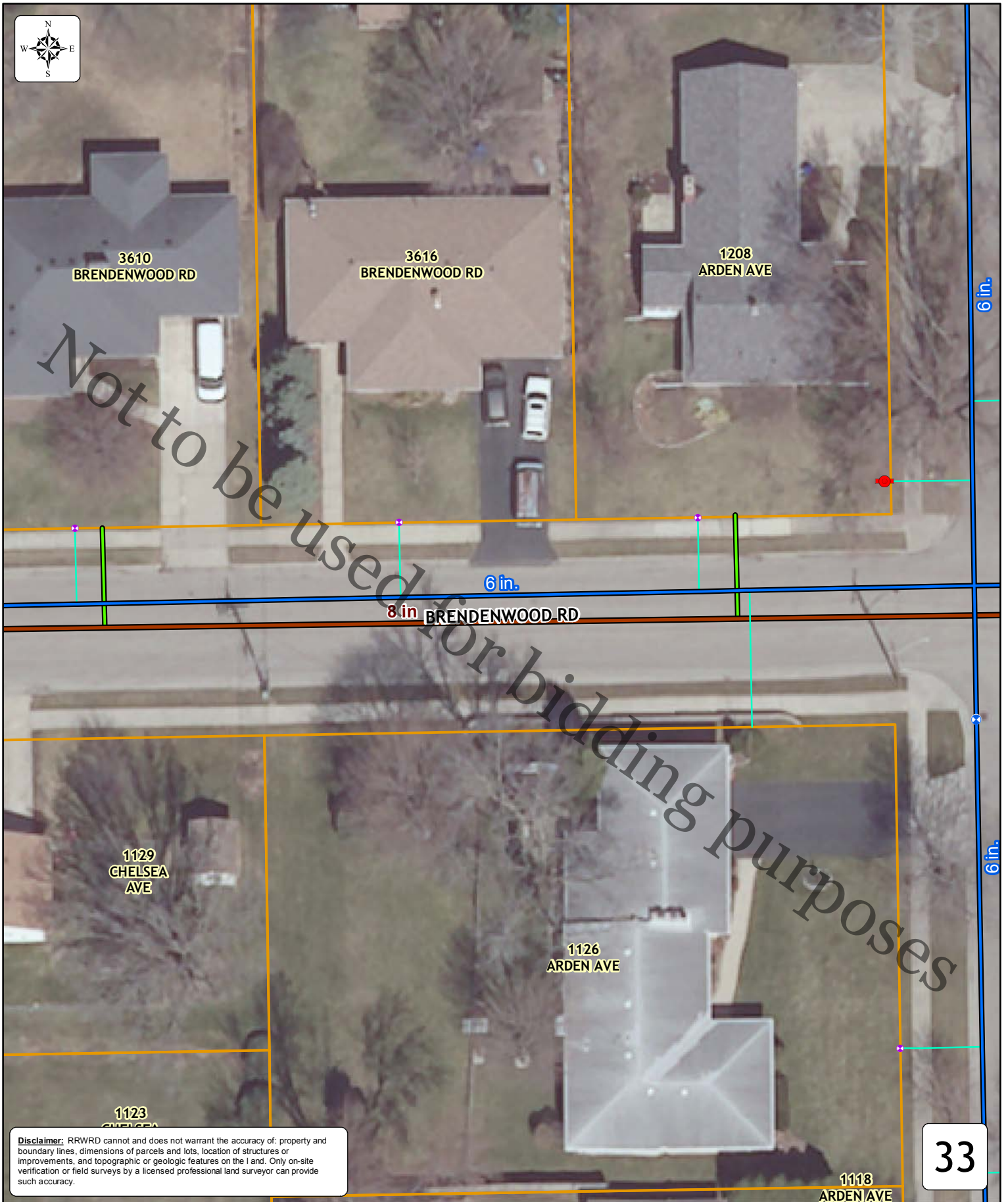


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32



By: JMK  
Produced: 7/31/2018  
RRWRD Engineering Department



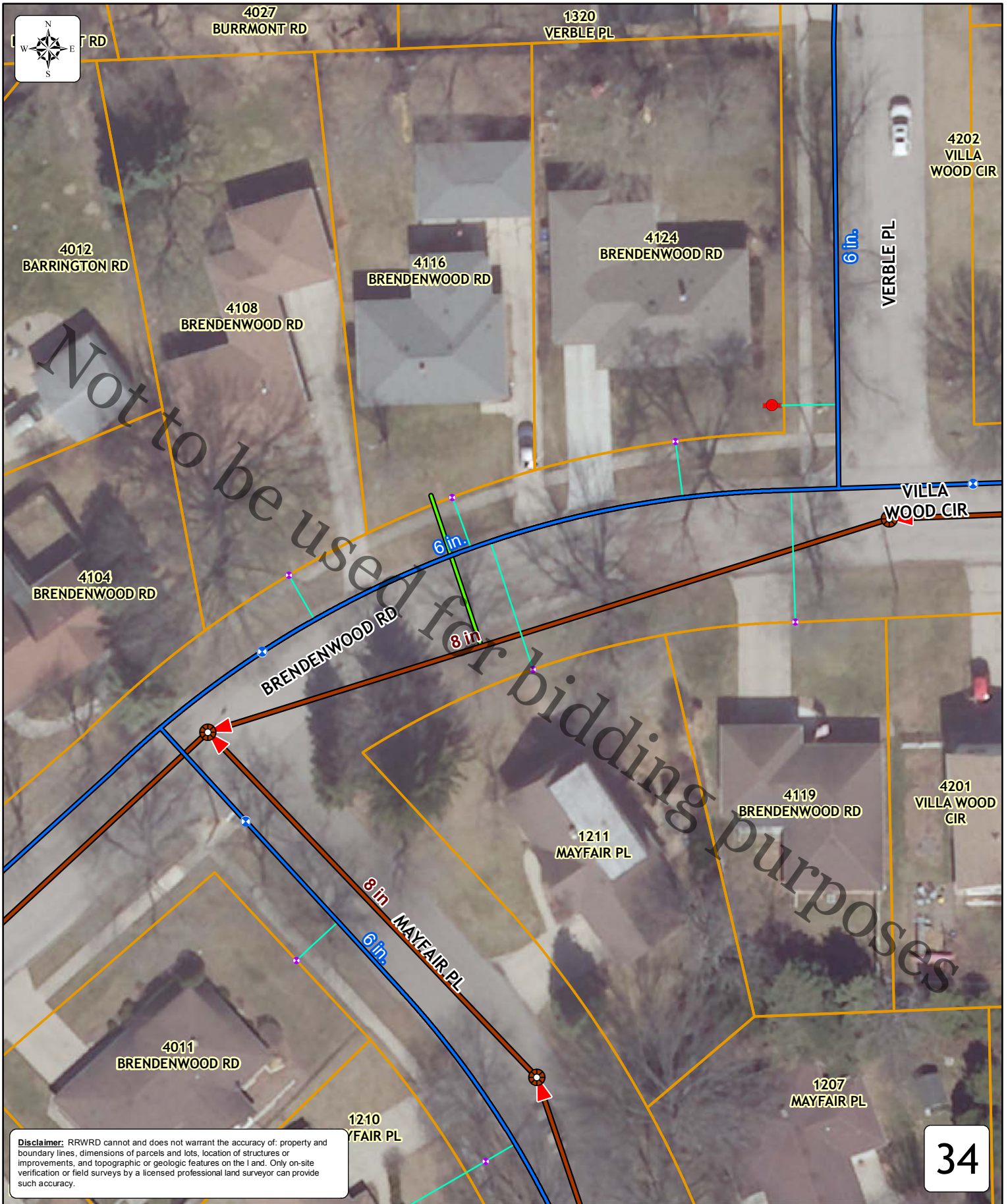
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1 inch = 30 feet



By: JMK  
Produced: 7/31/2018  
RRWRD Engineering Department





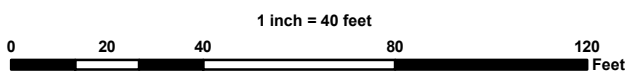








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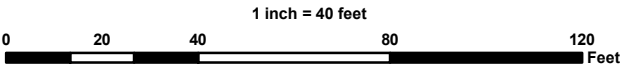


By: JMK  
Produced: 8/7/2018  
RRWRD Engineering Department

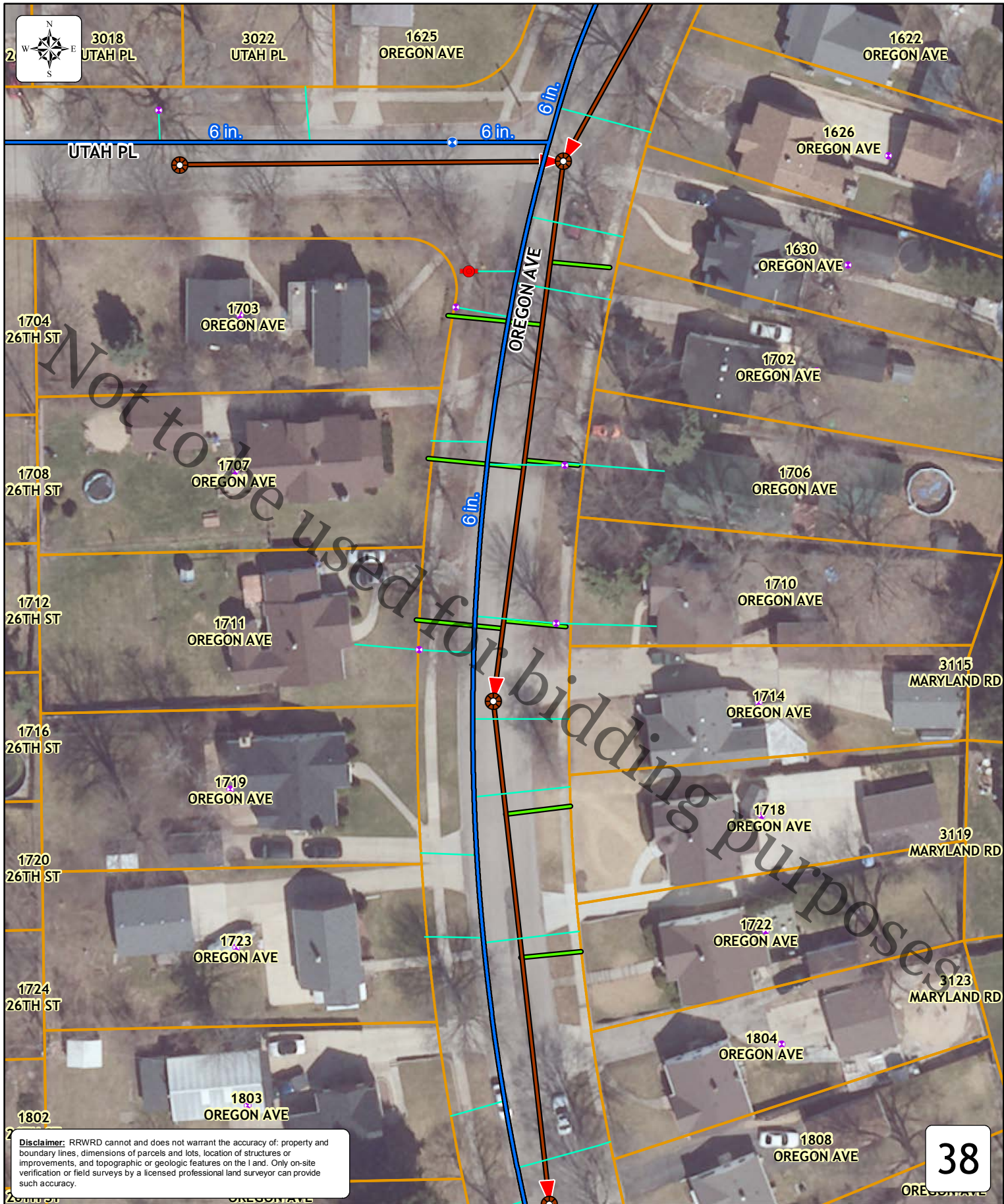




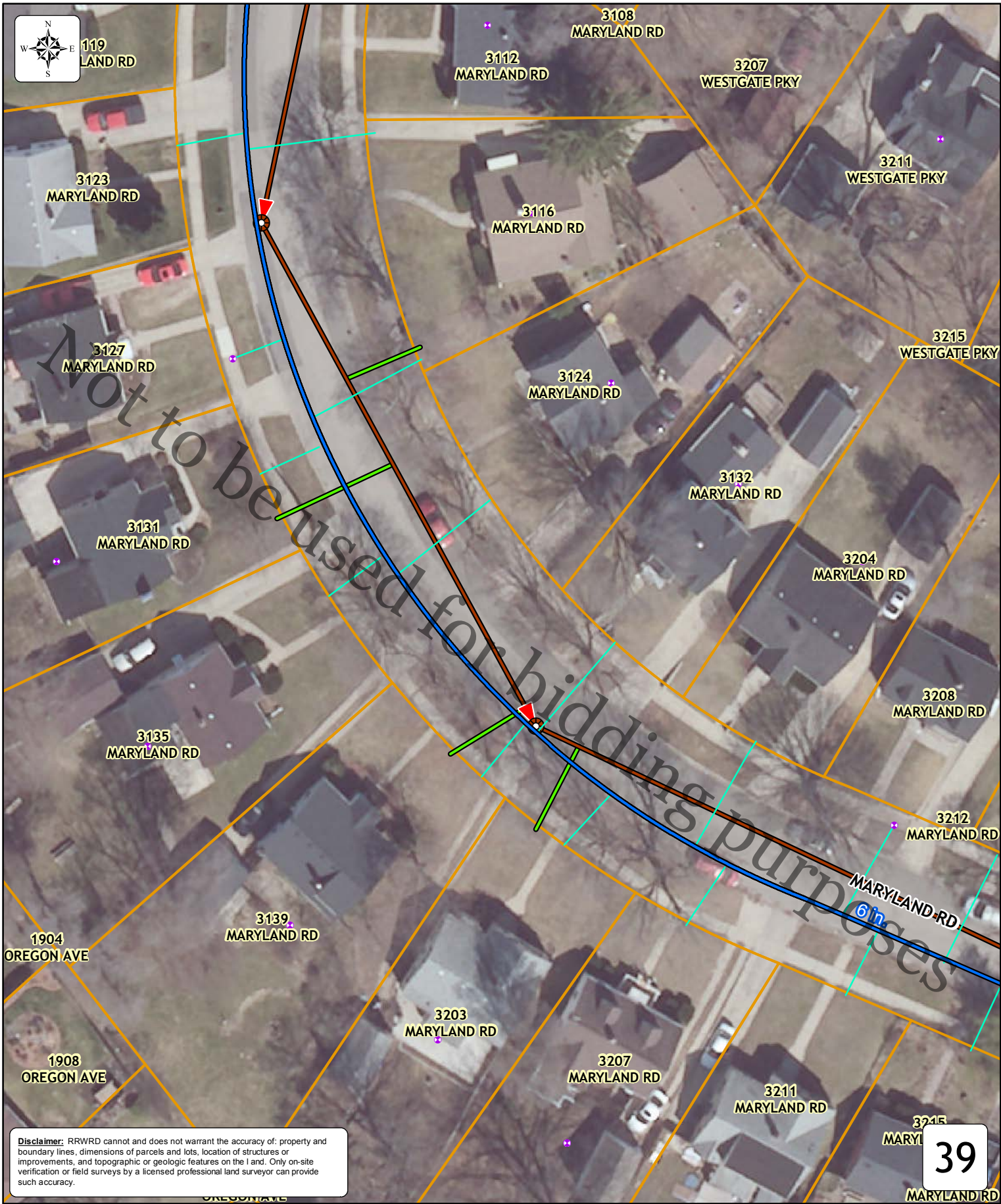
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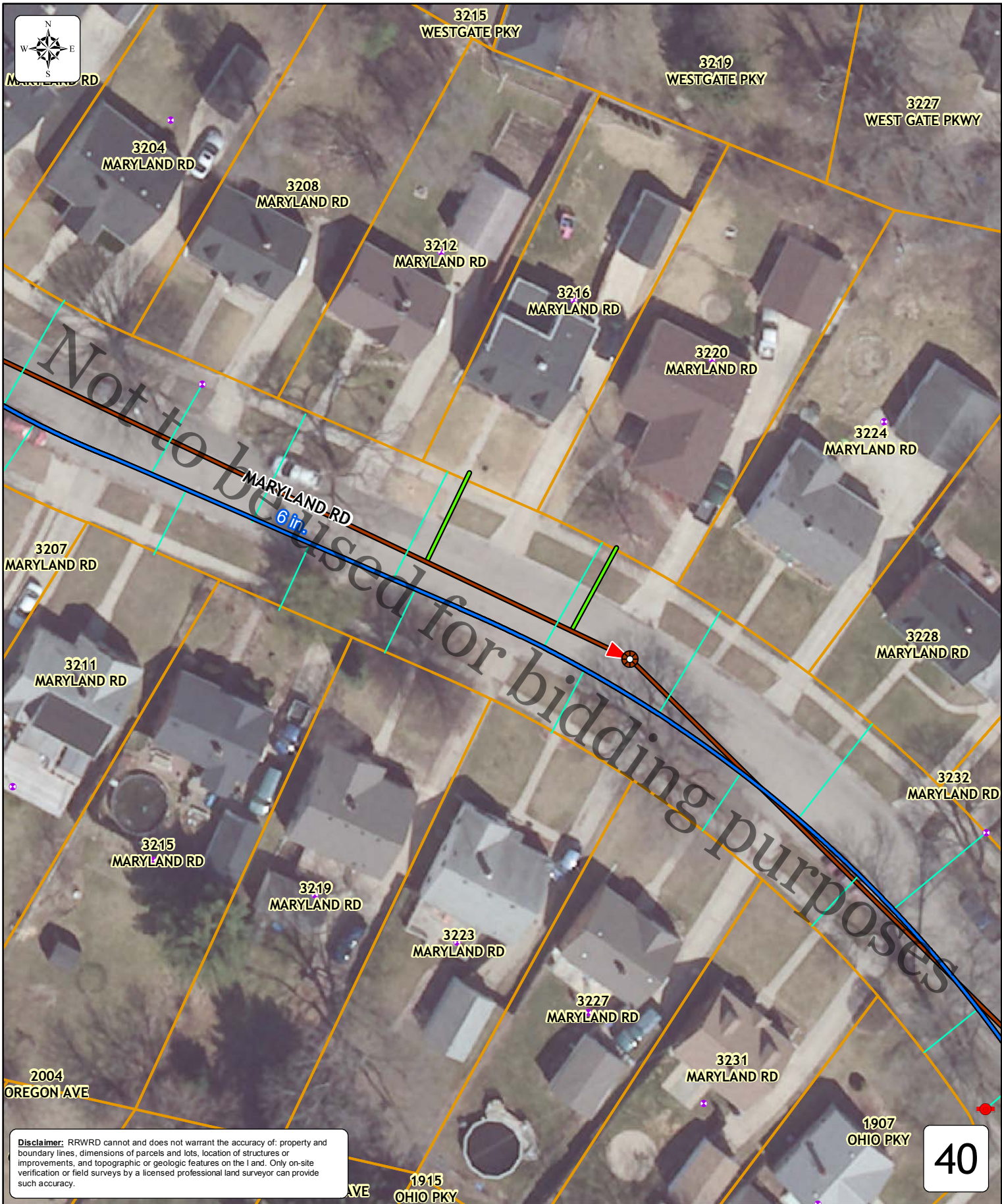




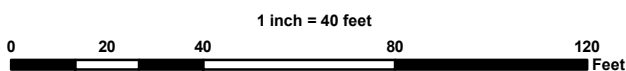




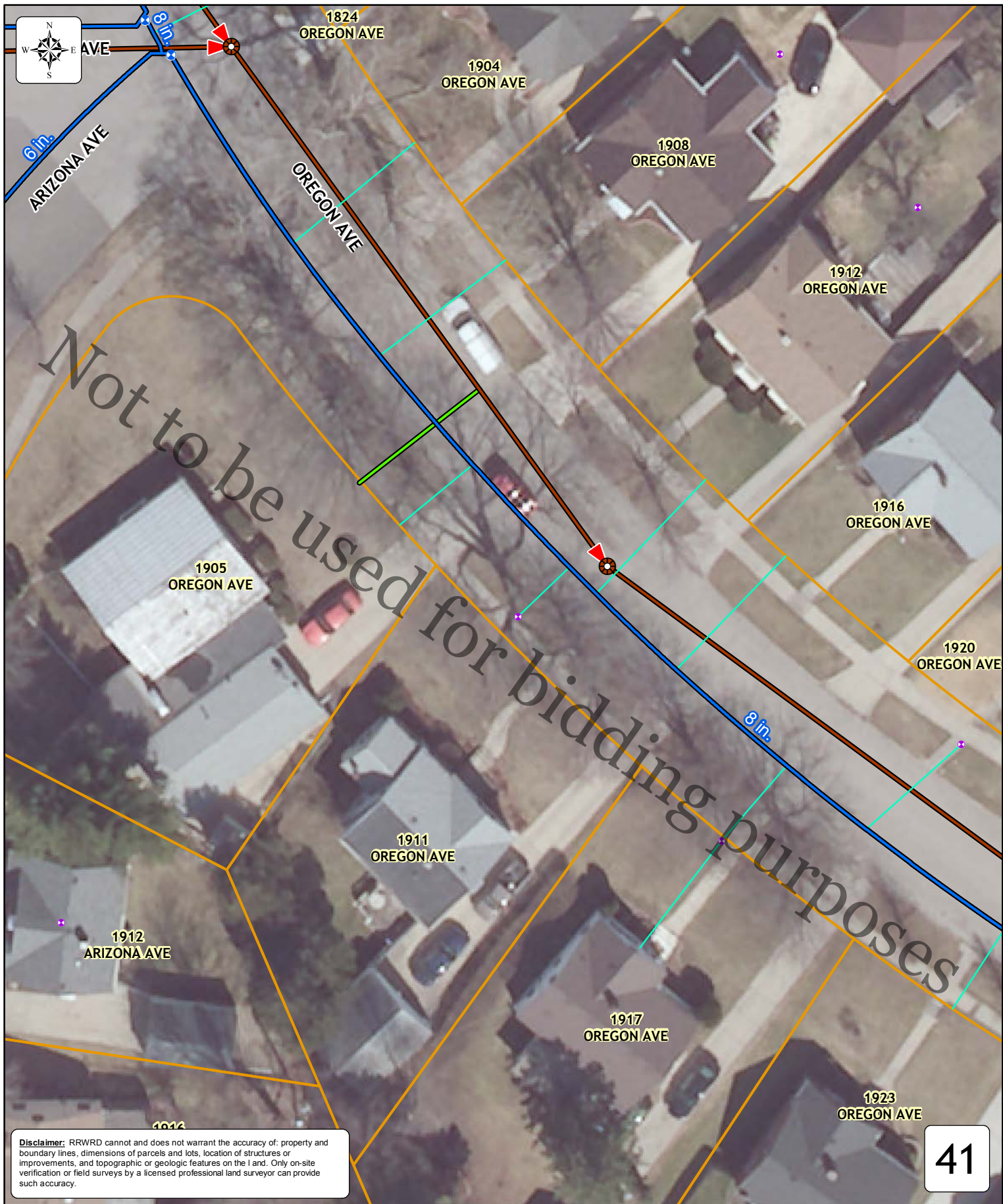




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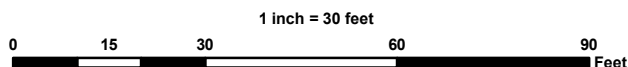






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41











3  
TA DR

3227  
MINNESOTA DR

3303  
MINNESOTA DR

3307  
MINNESOTA DR

3311  
MINNESOTA DR

3315  
MINNESOTA DR

3319  
MINNESOTA DR

3238  
CALIFORNIA RD

3242  
CALIFORNIA RD

3250  
CALIFORNIA RD

3302  
CALIFORNIA RD

CALIFORNIA RD

3308  
CALIFORNIA RD

3312  
CALIFORNIA RD

3316  
CALIFORNIA RD

CALIFORNIA RD

3231  
CALIFORNIA RD

3235  
CALIFORNIA RD

3303  
CALIFORNIA RD

3307  
CALIFORNIA RD

3311  
CALIFORNIA RD

3315  
CALIFORNIA RD

3319  
CALIFORNIA RD

3323  
CALIFORNIA RD

6 in.

Not to be used for bidding purposes

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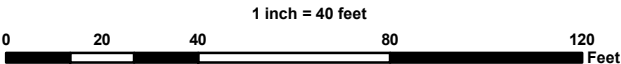
43

1 inch = 40 feet



By: JMK  
Produced: 8/7/2018  
RRWRD Engineering Department





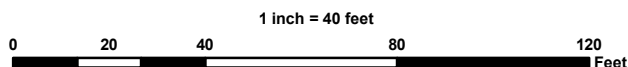
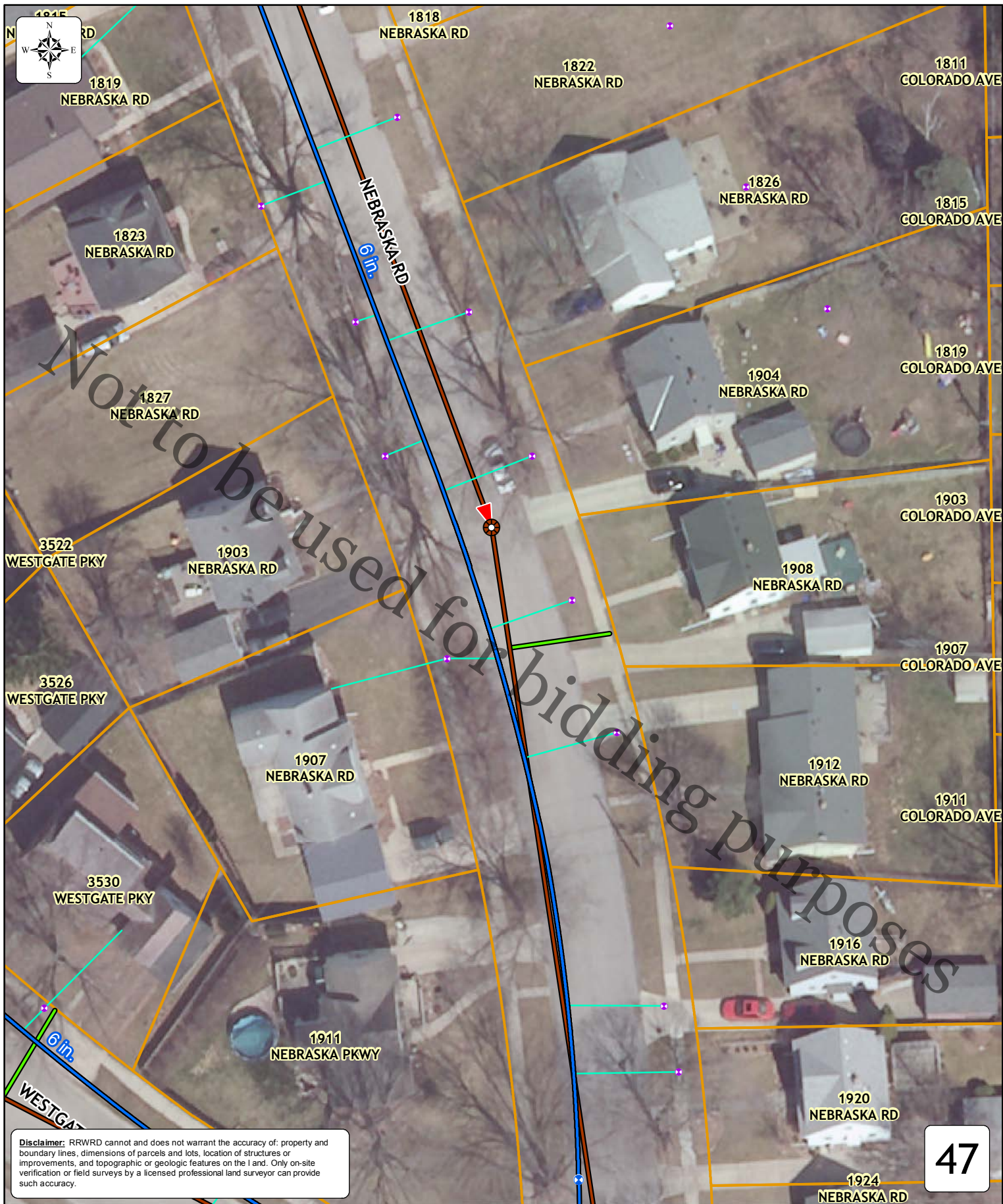




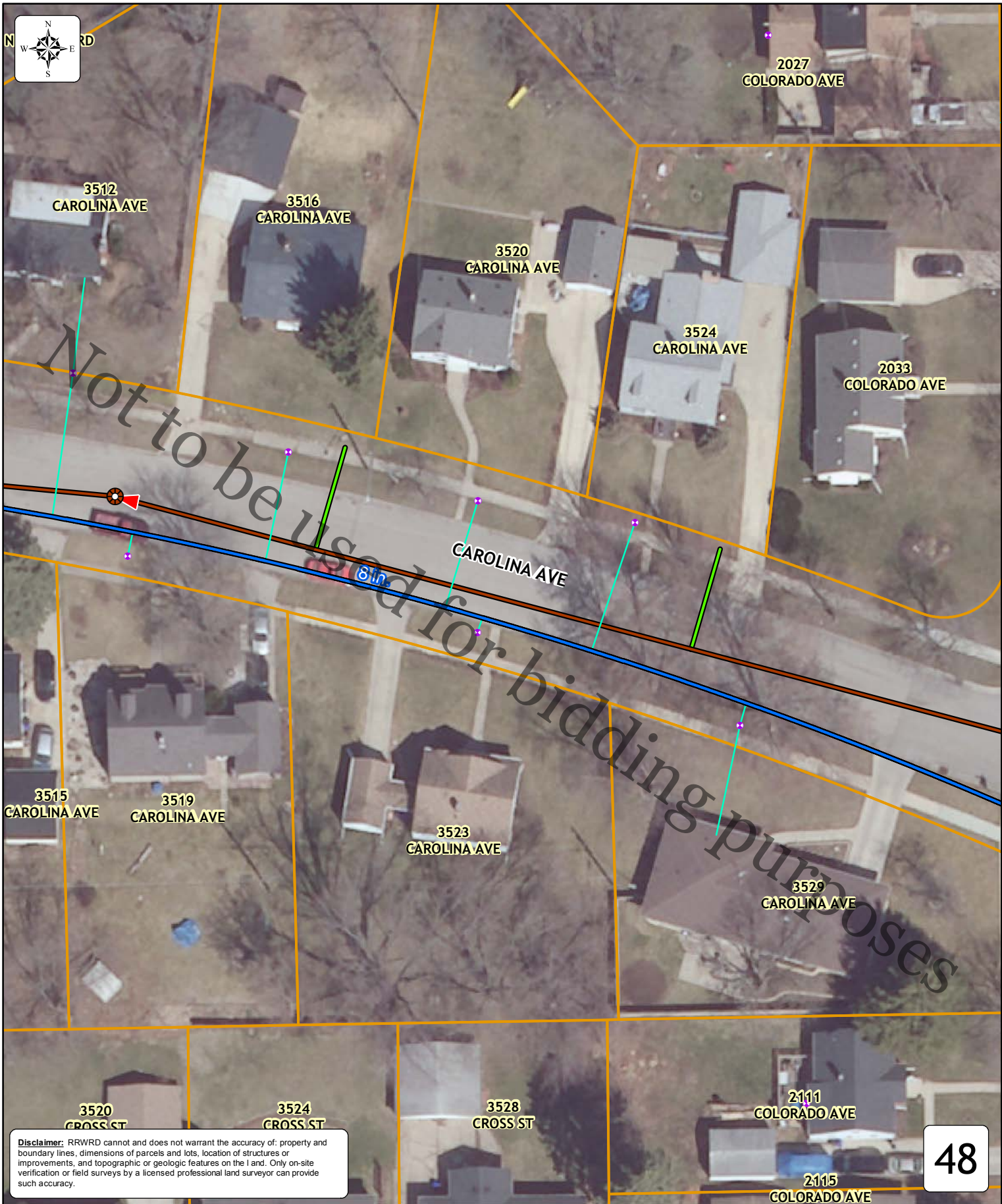












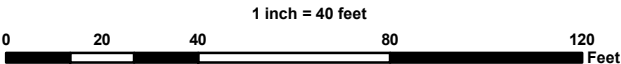
**Disclaimer:** RRWRD cannot and does not warrant the accuracy of: property and boundary lines, dimensions of parcels and lots, location of structures or improvements, and topographic or geologic features on the I and. Only on-site verification or field surveys by a licensed professional land surveyor can provide such accuracy.

48

















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52



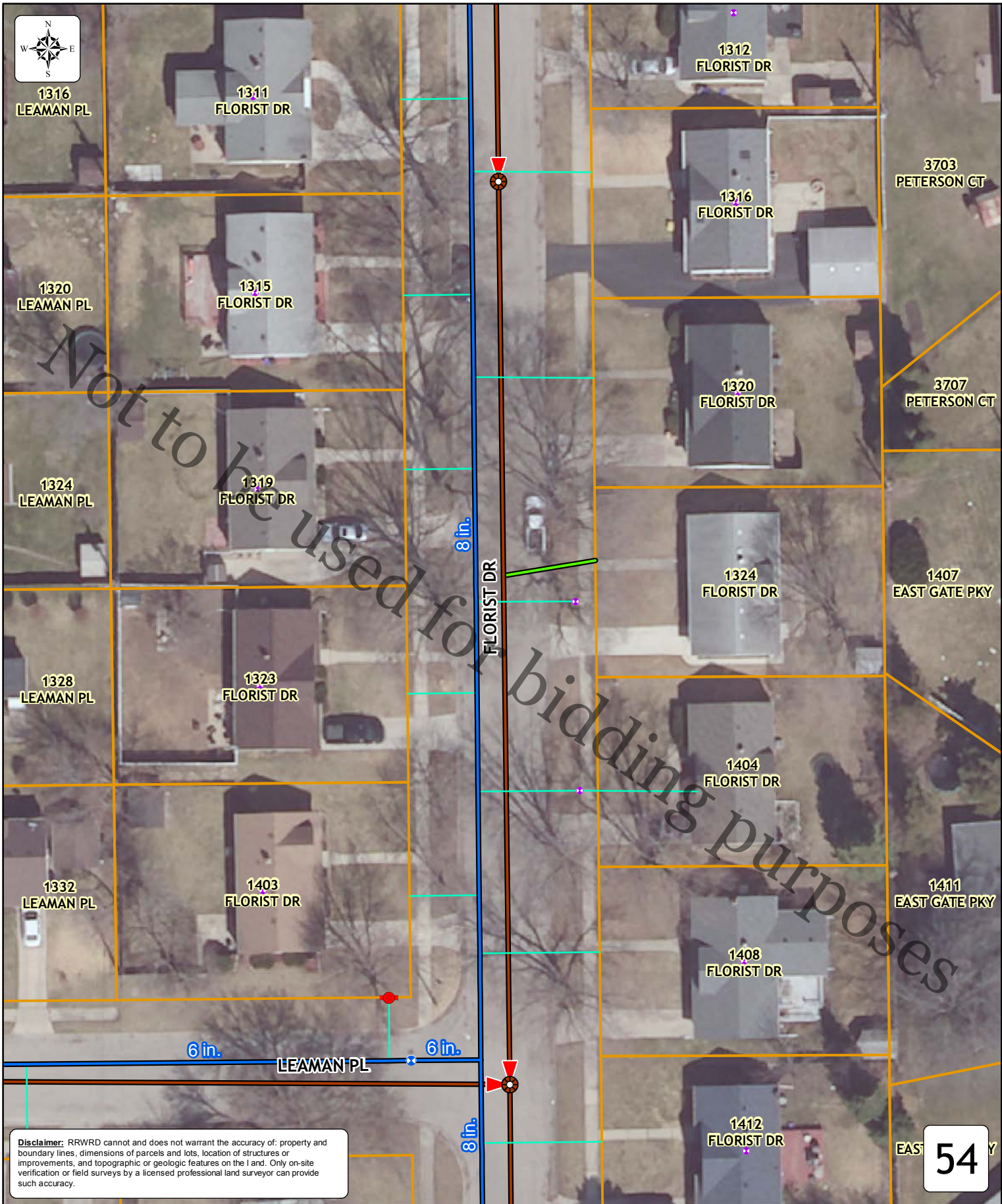


1 inch = 40 feet

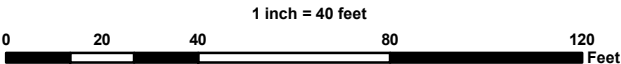
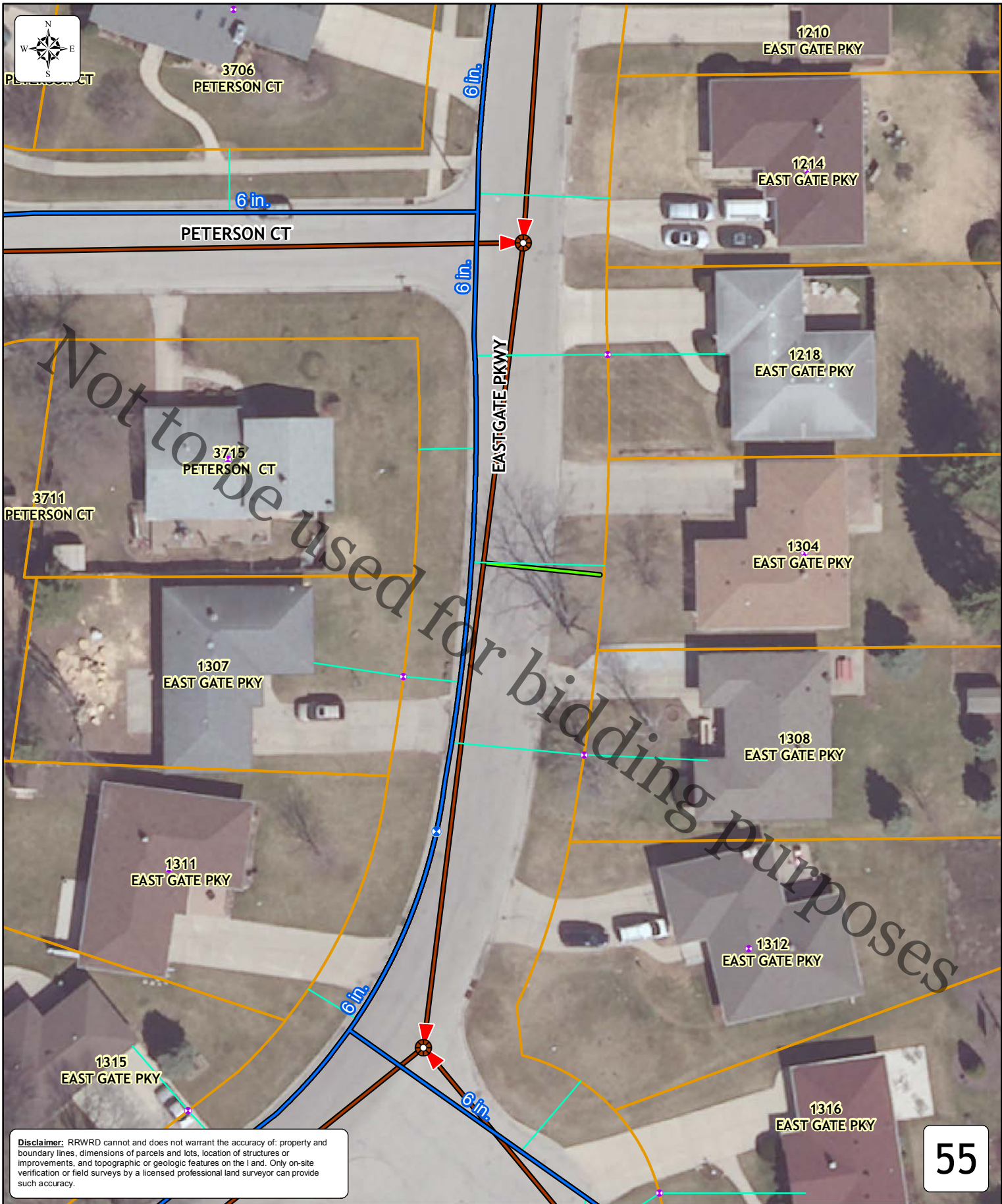


By: JMK  
Produced: 8/7/2018  
RRWRD Engineering Department













1703  
EASTMORELAND AVE

1704  
EASTMORELAND AVE

1707  
EASTMORELAND AVE

1708  
EASTMORELAND AVE

1711  
EASTMORELAND AVE

1712  
EASTMORELAND AVE

1715  
EASTMORELAND AVE

1720  
EASTMORELAND AVE

1719  
EASTMORELAND AVE

1724  
EASTMORELAND AVE

1723  
EASTMORELAND AVE

1726  
EASTMORELAND AVE

1728  
EASTMORELAND AVE

EASTMORELAND AVE  
6 in.

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56

1 inch = 40 feet

0 20 40 80 120 Feet



By: JMK  
Produced: 8/7/2018  
RRWRD Engineering Department





1021  
LEXINGTON WAY

1104  
LEXINGTON WAY

1103  
LEXINGTON WAY

1108  
LEXINGTON WAY

1109  
LEXINGTON WAY

1112  
LEXINGTON WAY

1113  
LEXINGTON WAY

1120  
LEXINGTON WAY

1133  
LEXINGTON WAY

4104  
TONAWANDA AVE

LEXINGTON WAY

6 in.

6 in.

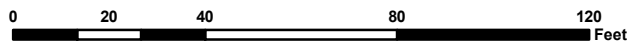
6 in.

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in.

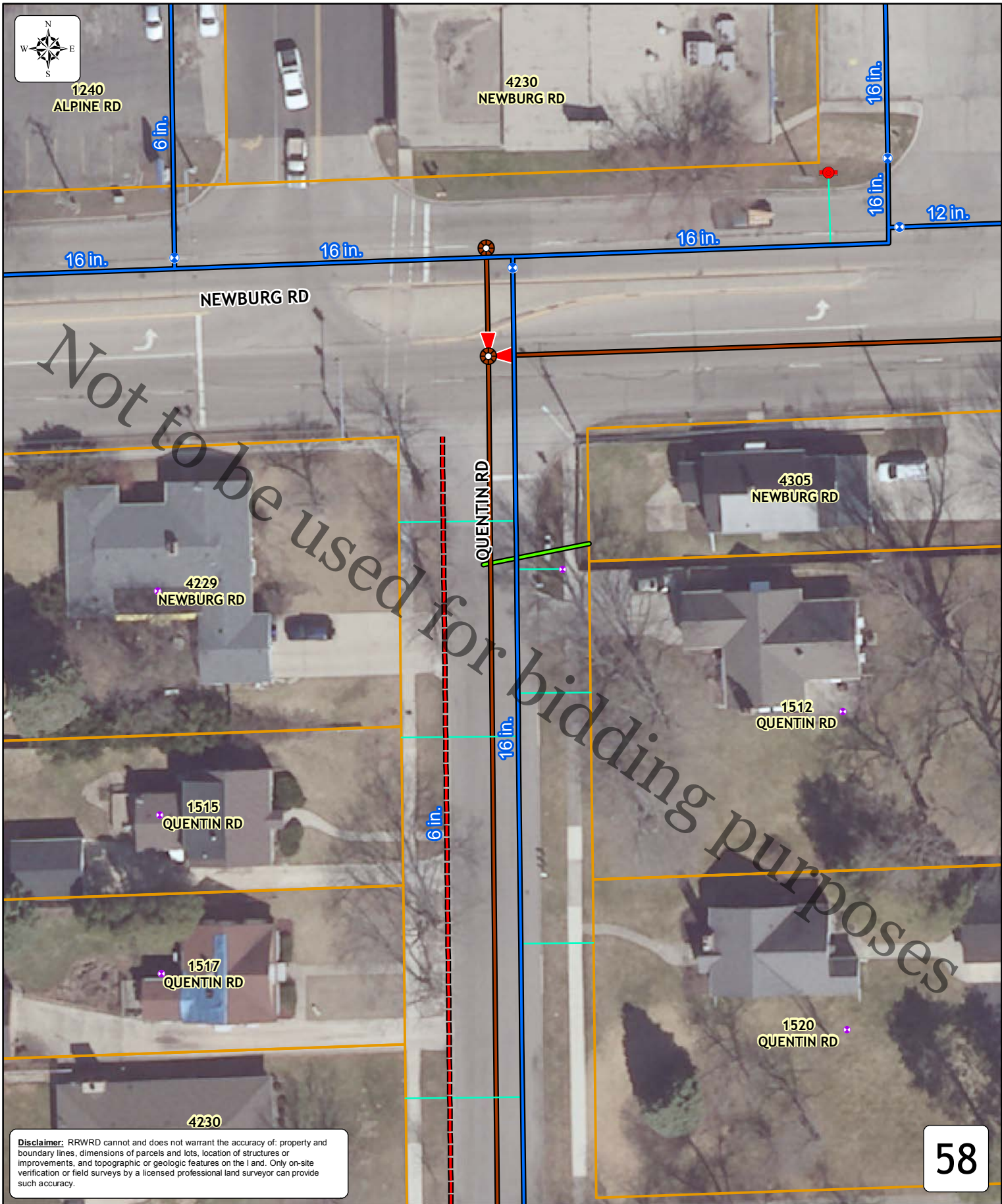
57

1 inch = 40 feet



By: JMK  
Produced: 8/7/2018  
RRWRD Engineering Department









4709  
LANEWOOD DR

1209  
EASTON PKY

1215  
EASTON PKY

1301  
EASTON PKY

1202  
EASTON PKY

1205  
LANEWOOD DR

1210  
EASTON PKY

1304  
EASTON PKY

1312  
EASTON PKY

EASTON PKWY

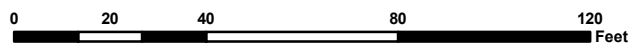
EASTON PKWY

12 in.

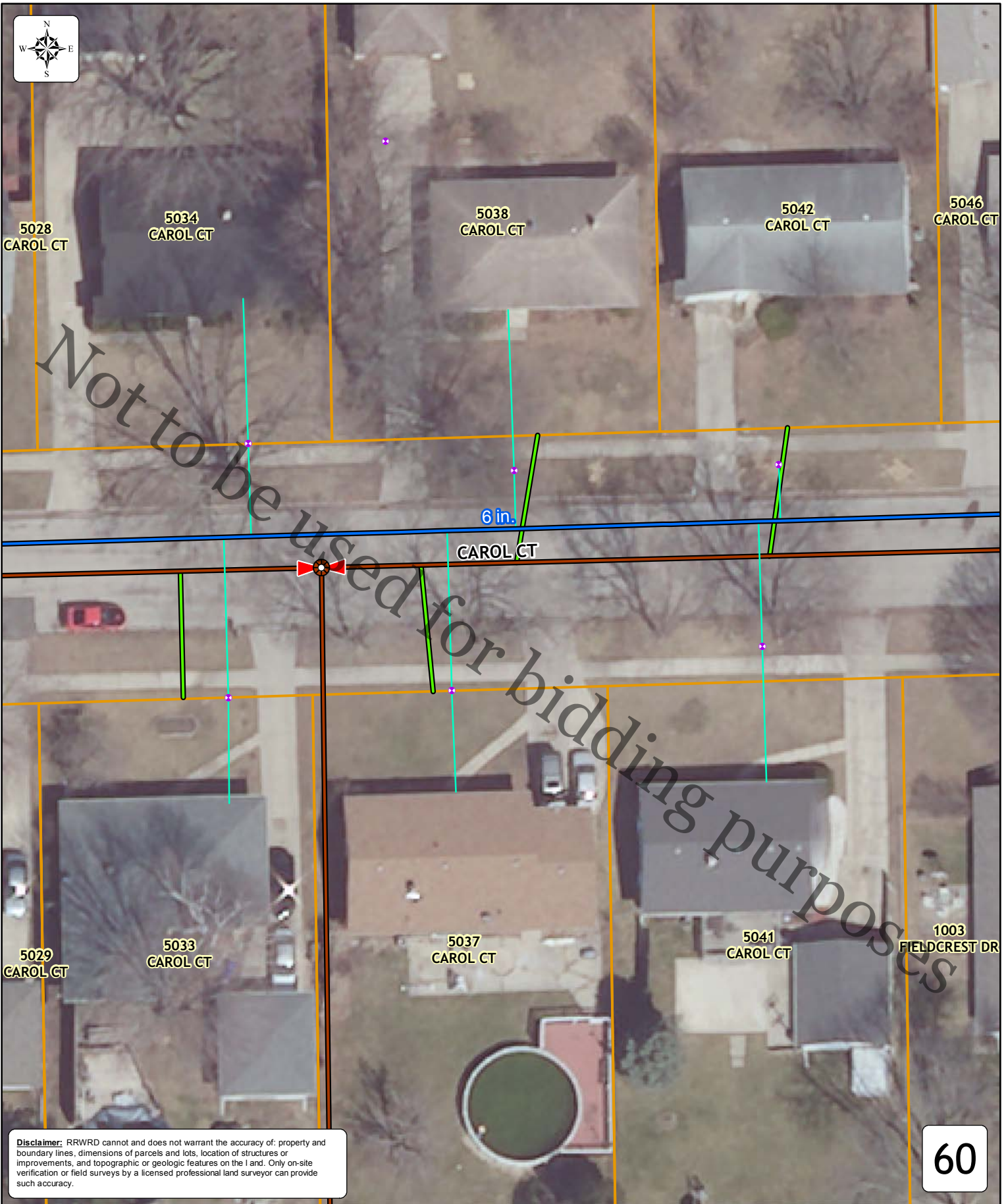
**Disclaimer:** RRWRD cannot and does not warrant the accuracy of: property and boundary lines, dimensions of parcels and lots, location of structures or improvements, and topographic or geologic features on the I and. Only on-site verification or field surveys by a licensed professional land surveyor can provide such accuracy.

59

1 inch = 40 feet

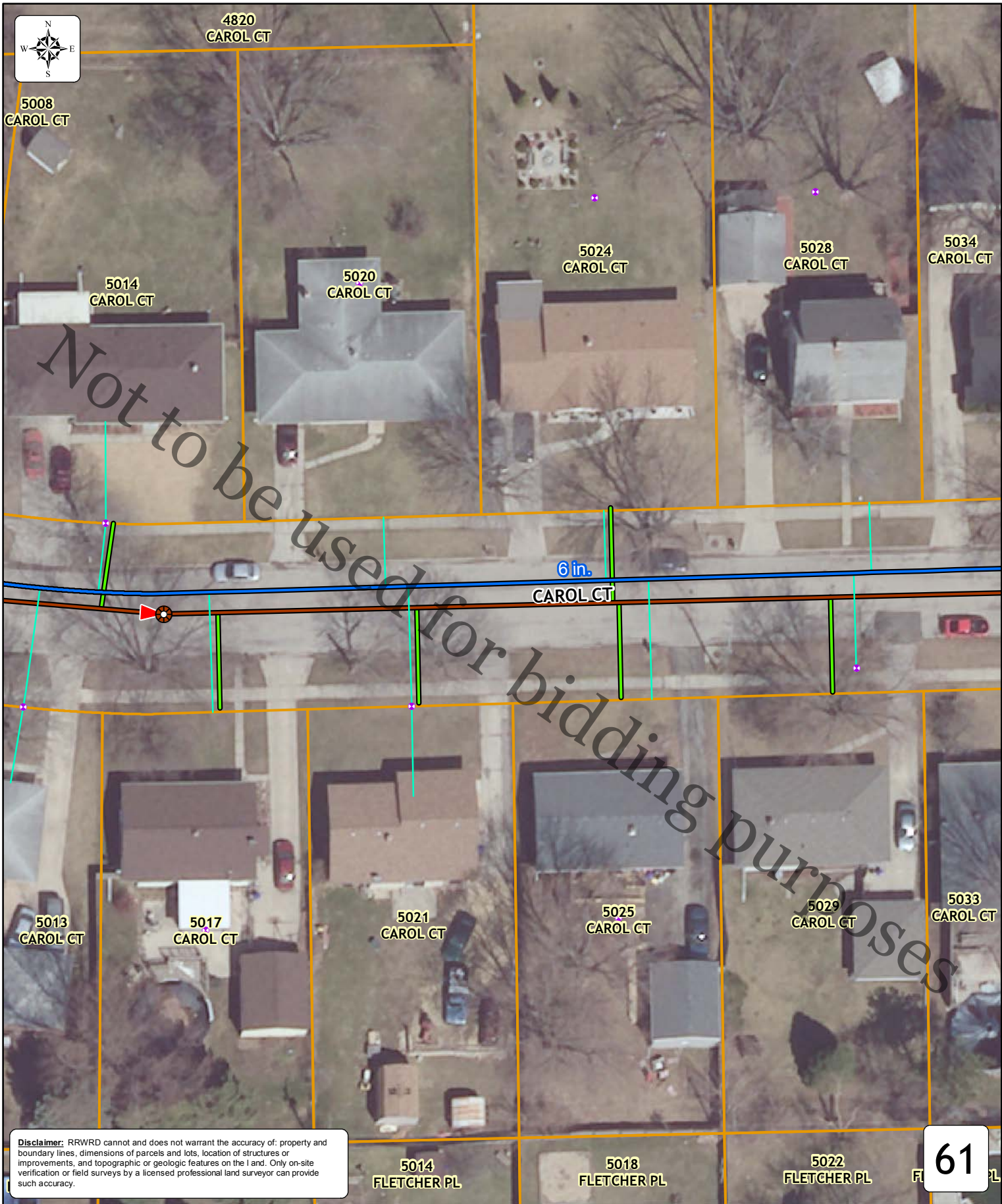


By: JMK  
Produced: 8/7/2018  
RRWRD Engineering Department



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311  
MORNINGSIDE DR

315  
MORNINGSIDE DR

319  
MORNINGSIDE DR

403  
MORNINGSIDE DR

407  
MORNINGSIDE DR

MORNINGSIDE DR

416  
FAIRVIEW AVE

416  
FAIRVIEW AVE

419

MORNINGSIDE DR

6 in.

310  
MORNINGSIDE DR

314  
MORNINGSIDE DR

318  
MORNINGSIDE DR

404  
MORNINGSIDE DR

403  
HAWTHORNE AVE

412  
MORNINGSIDE DR

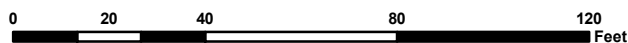
MORNINGSIDE DR

420  
MORNINGSIDE DR

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62

1 inch = 40 feet



By: JMK  
Produced: 8/7/2018  
RRWRD Engineering Department





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2351  
WISCONSIN RD

2352  
WISCONSIN RD

2355  
WISCONSIN RD

2356  
WISCONSIN RD

2359  
WISCONSIN RD

2360  
WISCONSIN RD

2363  
WISCONSIN RD

3328  
THELMA ST

2367  
WISCONSIN RD

3404  
THELMA ST

3408  
THELMA ST

6 in.

6 in.

6 in.

THELMA ST

6 in.

6 in.

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3407  
THELMA ST

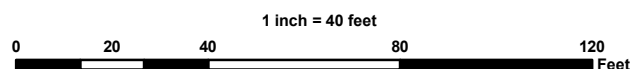
64

1 inch = 40 feet

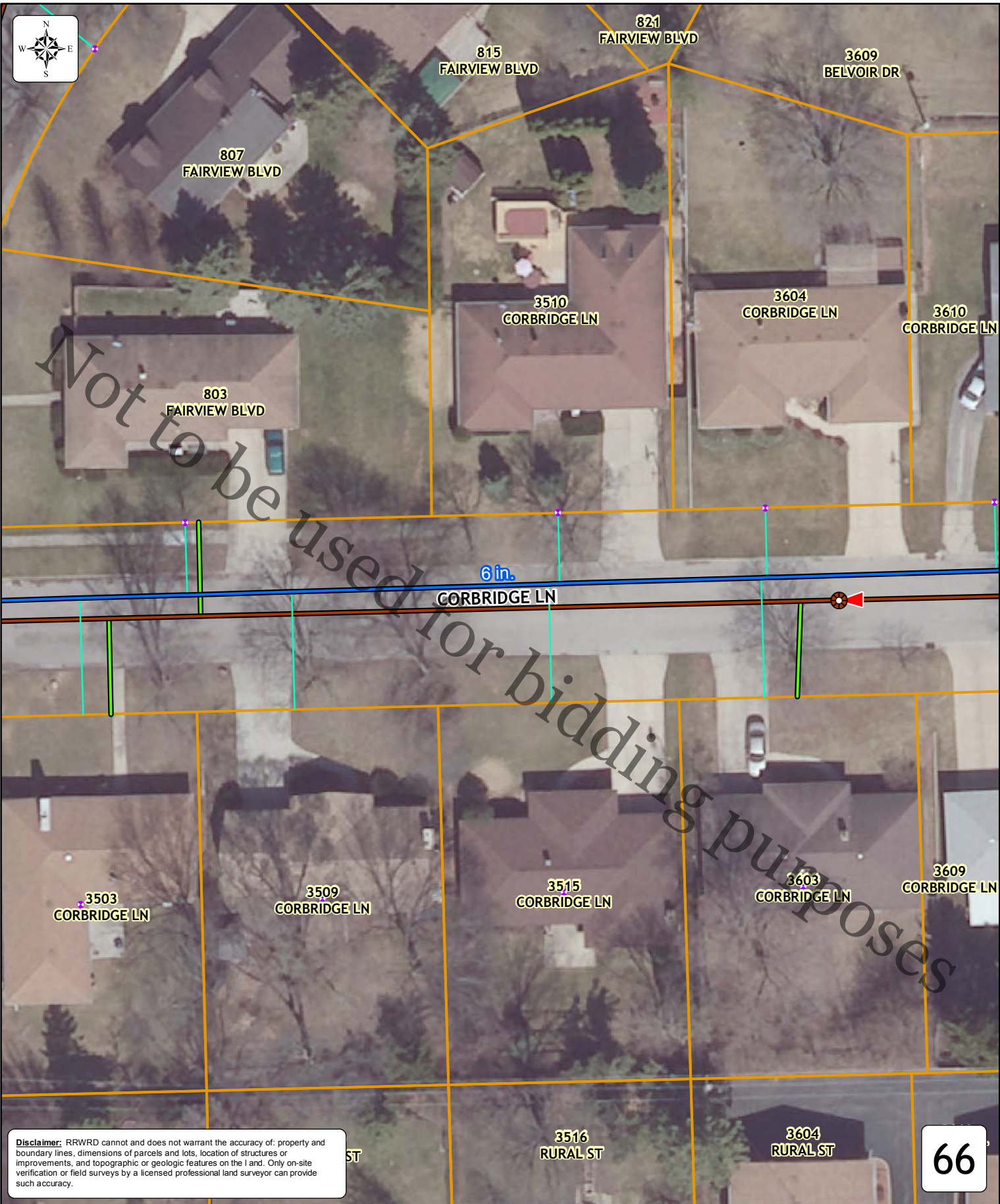


By: JMK  
Produced: 8/7/2018  
RRWRD Engineering Department

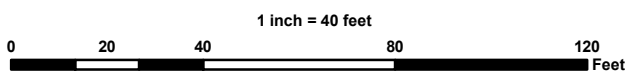








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By: JMK  
Produced: 8/7/2018  
RRWRD Engineering Department









2306  
SPRING BROOK AVE

2305  
SPRING BROOK AVE

2301  
SPRING BROOK AVE

4500  
LINDER PL

4504  
LINDER PL

4508  
LINDER PL

SPRING BROOK AVE

LINDER PL

4501  
LINDER PL

4505  
LINDER PL

4509  
LINDER PL

2225  
SPRING BROOK AVE

2221  
SPRING BROOK AVE

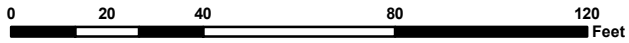
2217  
ALPINE RD

2220  
SPRING BROOK AVE

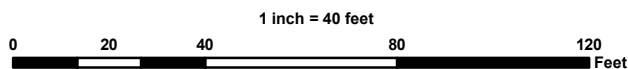
68

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1 inch = 40 feet



By: JMK  
Produced: 8/7/2018  
RRWRD Engineering Department







4606  
SPRING BROOK RD

4611  
SPRINGBROOK RD

WHITE OAK AVE

4500  
SPRING BROOK RD

4500  
SPRING CREEK RD

4575  
SPRING BROOK RD

4500  
SPRING CREEK RD

4565  
SPRING BROOK RD

SPRING BROOK RD

4545  
SPRINGBROOK RD

4500

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70

1 inch = 40 feet

0 20 40 80 120 Feet



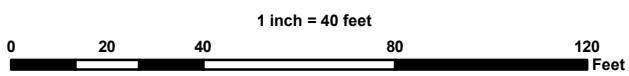
By: JMK  
Produced: 8/7/2018  
RRWRD Engineering Department





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71

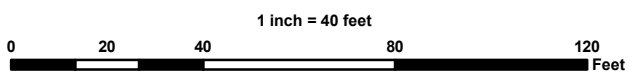


By: JMK  
Produced: 8/7/2018  
RRWRD Engineering Department



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72

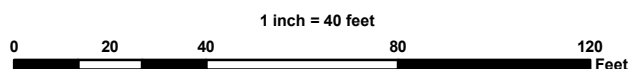


By: JMK  
Produced: 8/7/2018  
RRWRD Engineering Department





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By: JMK  
Produced: 8/7/2018  
RRWRD Engineering Department

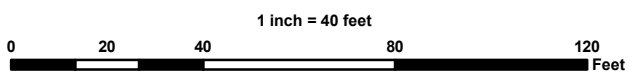






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75



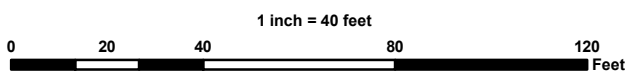
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Produced: 8/7/2018  
RRWRD Engineering Department



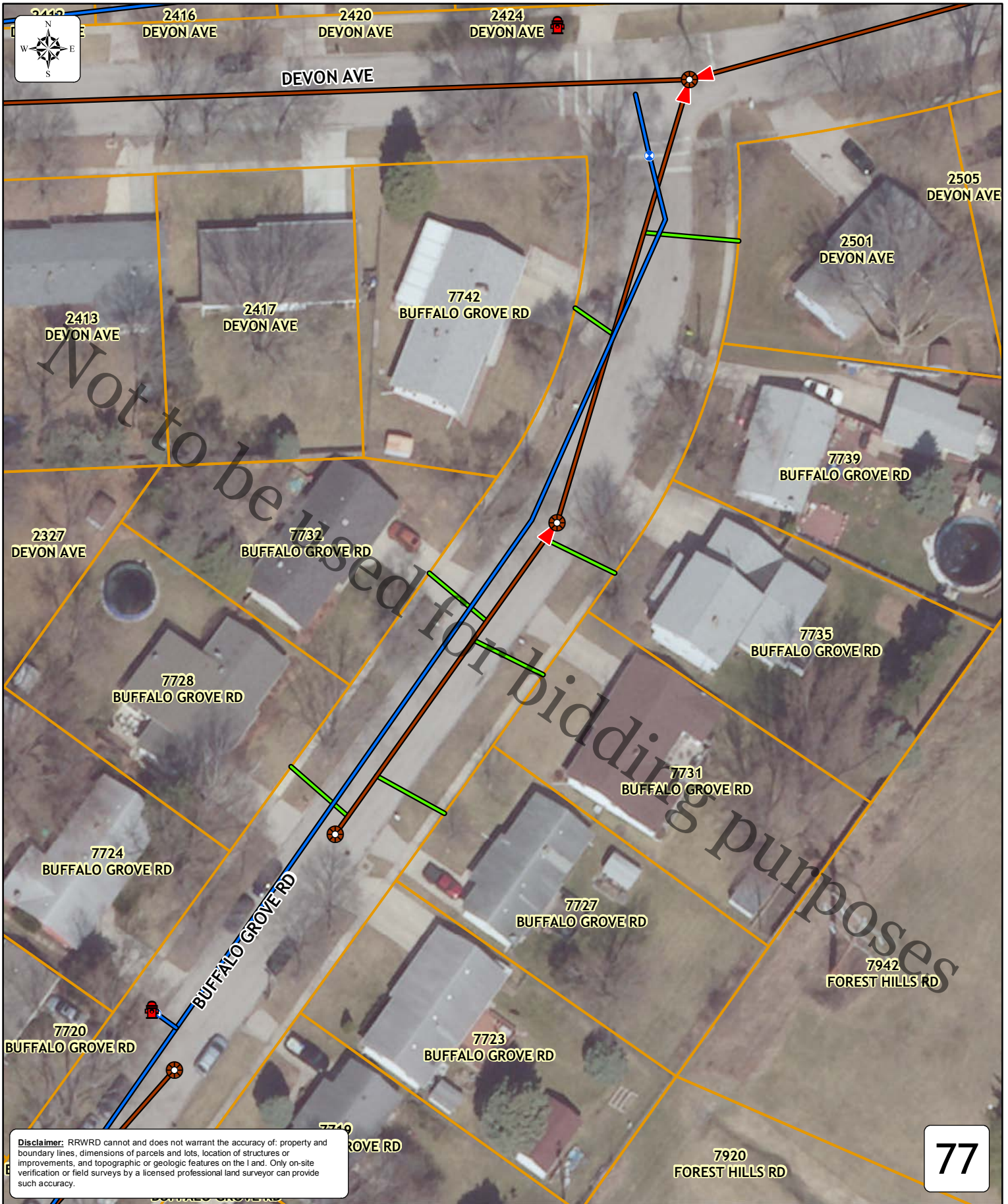


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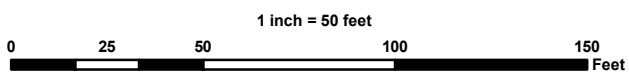
76







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By: JMK  
Produced: 8/7/2018  
RRWRD Engineering Department





LAPEY ST

2745  
LAPEY ST

2738  
LAPEY ST

27XX  
LAPEY ST

2746  
LAPEY ST

8 in.

12 in.

LAPEY ST

12 in.

WILLS AVE

2801  
LAPEY ST

LAPEY ST

2805  
LAPEY ST

LAPEY ST

2806  
LAPEY ST

LAPEY ST

2809  
LAPEY ST

LAPEY ST

2813  
LAPEY ST

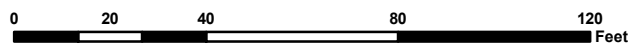
2814  
LAPEY ST

2818  
LAPEY ST

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78

1 inch = 40 feet



By: JMK  
Produced: 8/7/2018  
RRWRD Engineering Department





815  
IRVING AVE

818  
FURMAN ST

812  
FURMAN ST

1433  
ASHLAND AVE

1429  
ASHLAND AVE

1425  
ASHLAND AVE

1421  
ASHLAND AVE

1417  
ASHLAND AVE

1413  
ASHLAND AVE

ASHLAND AVE

6 in.  
8 in.

723  
IRVING AVE

728  
FURMAN ST

1426  
ASHLAND AVE

1422  
ASHLAND AVE

1418  
ASHLAND AVE

726  
FURMAN ST

715  
IRVING AVE

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79

1 inch = 40 feet



By: JMK  
Produced: 8/7/2018  
RRWRD Engineering Department





1711  
WARREN RD

1735  
WARREN RD

1809  
WARREN RD

1813  
WARREN RD

4524

1736  
WARREN RD

4606  
MARION AVE

4610  
MARION AVE

4614  
MARION AVE

MARION AVE

1812  
WARREN RD

4607  
MARION AVE

4611  
MARION AVE

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80

1 inch = 40 feet



By: JMK  
Produced: 8/7/2018  
RRWRD Engineering Department

**Section IV**

**CIPP Short Liner List, TV Reports,  
and Location Maps**

**CAPITAL PROJECT 1933**  
**2018-2019 SERVICE LATERAL LINING**

**2018-2019 SHORT LINERS**

NO.	ADDRESS	SEWER MAIN	LOCATION	DESCRIPTION	SERVICE SIZE & POSITION	MAIN DIA. & MATERIAL
1	1709 HAMILTON AVE., ROCKFORD	005094-005074	5.6' D/S	Abandoned service w/ roots.	4" PVC; 9:00	8" PVC
2	3188 CITY VIEW DR., ROCKFORD	086111-086110	54.1' D/S	Capped service w/ roots	4" CIP; 9:00	8" CIPP
3	3150 CITY VIEW DR., ROCKFORD	086111-086110	265.7' D/S	Cut CIPP Liner w/ roots	N/A; 9:00	8" CIPP

**2018-2019 SERVICE CONNECTION REPAIRS**

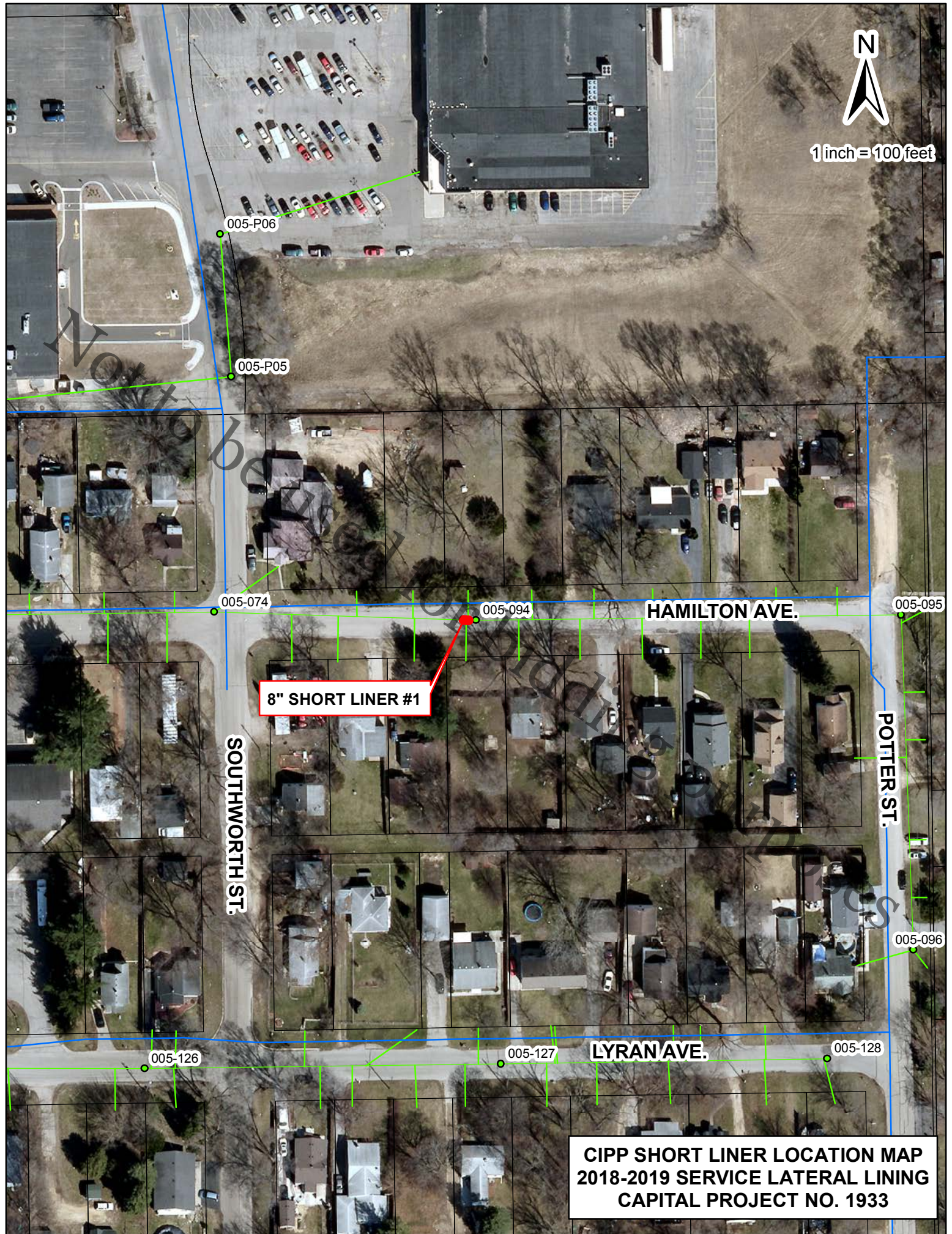
NO.	ADDRESS	SEWER MAIN	LOCATION	DESCRIPTION	SERVICE SIZE & POSITION	MAIN DIA. & MATERIAL
1	3206 POTTER ST., ROCKFORD	005096-005095	99.8' D/S	Service conn w/ roots	4" PVC; 12:00	8" PVC
2	1504 N. DAY AVE., ROCKFORD	125030-125010	222.5' D/S	Service conn w/ infiltration	4" PVC; 12:00	18" CIPP

Not to be used for bidding purposes





1 inch = 100 feet



**CIPP SHORT LINER LOCATION MAP  
2018-2019 SERVICE LATERAL LINING  
CAPITAL PROJECT NO. 1933**



# Rock River Water Reclamation District

3333 Kishwaukee Street

Rockford, IL 61126

(815) 387-7600 Fax (815) 387-7595

# SEWER MAIN INSPECTION

Report Date Tuesday, April 10, 2018

Group Inspection #

18444

Page

1

Inspection # 78557

Activity TVINSP - Main TV Inspection

From ID SMH 005094

To ID SMH 005074

Length 222.70

Address 1717 HAMILTON AVE  
ROCKFORD IL

## Location

Started Monday, March 26, 2018

Weather CLOUDY+35

Reverse Setup

☐

Completed Monday, March 26, 2018

Both Directions Setup

☐

Comp By 0051 VINCE MANGIARACINA

Prone to Blown Toilet

☐

Project 005

Survey Length 222.70 Survey Diam 8.00 UP Depth 9.50 DWN Depth 9.40 Pipe Type PVC

## Comments

## Observations

Setup	From	Position	Observation / Comments	Severity
B	0.00	-	MANHOLE	UPSTREAM MANHOLE
B	3.90	3 -	LATERAL PVC	FACTORY SERVICE - RIGHT
B	5.60	9 -	LATERAL PVC HEAVY ROOTS	FACTORY SERVICE - LEFT
B	52.20	9 -	LATERAL PVC	FACTORY SERVICE - LEFT
B	53.40	3 -	LATERAL PVC	FACTORY SERVICE - RIGHT
B	100.30	3 -	LATERAL PVC	FACTORY SERVICE - RIGHT
B	113.50	9 -	LATERAL PVC	FACTORY SERVICE - LEFT
B	155.60	9 -	LATERAL PVC	FACTORY SERVICE - LEFT
B	222.70	-	MANHOLE	DOWNSTREAM MANHOLE

SHORT LINER #1





1 inch = 100 feet



**CIPP SHORT LINER LOCATION MAP  
2018-2019 SERVICE LATERAL LINING  
CAPITAL PROJECT NO. 1933**



## Rock River Water Reclamation District

3333 Kishwaukee Street

Rockford, IL 61126

(815) 387-7600 Fax (815) 387-7595

## SEWER MAIN INSPECTION

Report Date Thursday, May 31, 2018

Group Inspection #

16922

Page 1

Inspection # 76381 Activity TVINSP - Main TV Inspection

From ID SMH 086111

To ID SMH 086110

Length 309.60

Address 3204 CITY VIEW DR  
ROCKFORD IL

Location EASEMENT

Started Friday, May 18, 2018

Weather

Reverse Setup ☐

Completed Friday, May 18, 2018

Both Directions Setup ☐

Comp By 0356 TONY RAFFERTY

Prone to Blown Toilet ☐

Project 086

Survey Length 309.60 Survey Diam 8.00 UP Depth 8.00 DWN Depth 8.90 Pipe Type LINCIP

Comments

## Observations

Setup	From	Position	Observation / Comments	Severity
B	0.00	-	MANHOLE	UPSTREAM MANHOLE
B	54.10	9 -	LATERAL	SERVICE CONNECTION CAPPED
			TWO FEET OF VCP TURNS TO CAPPED CIP	
B	62.00	11 -	LATERAL	PLUMBER SERVICE - LEFT
			CIP	
B	150.90	9 -	LATERAL	FACTORY SERVICE - LEFT
			VCP, HEAVY ROOTS IN SERVICE	
B	256.10	9 -	LATERAL	FACTORY SERVICE - LEFT
			CIP, HEAVY ROOTS AT SERVICE CONNECTION	
B	265.70	9 -	OTHER	OTHER
			HEAVY ROOTS LOOKS LIKE THEY CUT OUT FOR A SERVICE THAT WAS NOT THERE	
B	309.60	-	MANHOLE	DOWNSTREAM MANHOLE

Short Liner #2

Short Liner #3





**SERVICE CONNECTION REPAIR #1**  
**3206 POTTER ST.**  
**4" PVC SERV. / 8" PVC MAIN**

**CIPP SERVICE CONNECTION REPAIR LOCATION MAP**  
**2018-2019 SERVICE LATERAL LINING**  
**CAPITAL PROJECT NO. 1933**



# Rock River Water Reclamation District

3333 Kishwaukee Street

Rockford, IL 61126

(815) 387-7600 Fax (815) 387-7595

# SEWER MAIN INSPECTION

**Report Date** Tuesday, April 10, 2018

**Group Inspection #**

18444

**Page**

1

**Inspection #** 78556

**Activity** TVINSP - Main TV Inspection

**From ID** SMH 005096

**To ID** SMH 005095

**Length**

285.60

**Address** 3214 POTTER ST  
ROCKFORD IL

**Location**

**Started** Monday, March 26, 2018

**Weather** CLOUDY+35

**Reverse Setup**



**Completed** Monday, March 26, 2018

**Both Directions Setup**



**Comp By** 0051 VINCE MANGIARACINA

**Prone to Blown Toilet**



**Project** 005

**Survey Length** 285.60 **Survey Diam** 8.00 **UP Depth** 9.50 **DWN Depth** 11.00 **Pipe Type** PVC

**Comments**

## Observations

Setup	From	Position	Observation / Comments	Severity
E	285.60	-	MANHOLE	UPSTREAM MANHOLE
E	235.00	10 -	LATERAL PVC	FACTORY SERVICE - LEFT
E	185.60	12 -	LATERAL PVC	FACTORY SERVICE CROWN
E	114.80	2 -	LATERAL PVC	FACTORY SERVICE - RIGHT
E	99.80	12 -	LATERAL PVC MEDIUM ROOTS	FACTORY SERVICE CROWN
E	59.50	12 -	LATERAL PVC	FACTORY SERVICE CROWN
E	0.00	-	MANHOLE	DOWNSTREAM MANHOLE

SERV. COUN. REP. #1





1 inch = 100 feet

125-104

125-031

125-103

125-030

125-010

LIBERTY DR.

**SERVICE CONNECTION REPAIR #2**  
**1504 N. DAY AVE.**  
**4" PVC SERV. / 18" CIPP MAIN**

N. HORACE AVE.

N. DAY AVE.

125-011

125-032

**CIPP SERVICE CONNECTION REPAIR LOCATION MAP**  
**2018-2019 SERVICE LATERAL LINING**  
**CAPITAL PROJECT NO. 1933**



**Rock River Water Reclamation District**

3333 Kishwaukee Street

Rockford, IL 61126

(815) 387-7600 Fax (815) 387-7595

**SEWER MAIN INSPECTION****Report Date** Monday, March 21, 2016**Group Inspection #**

9622

**Page**

1

**Inspection #** 66629**Activity** TVINSP - Main TV Inspection**From ID** SMH 125030**To ID** SMH 125010**Length** 329.80**Address** LIBERTY DR  
ROCKFORD

IL

**Location** @ N HORACE AV**Started** Friday, July 31, 2015**Weather** SUNNY+80**Reverse Setup** ☐**Completed** Friday, July 31, 2015**Both Directions Setup** ☐**Comp By** 0051 VINCE MANGIARACINA**Prone to Blown Toilet** ☐**Project****Surveyed Length** 329.80**Surveyed Diam** 18.00**Surveyed Height** 13.50**Pipe Type** LINCIP**Comments****Observations**

<u>Setup</u>	<u>From</u>	<u>Position</u>	<u>Observation / Comments</u>	<u>Severity</u>
B	0.00	-	MANHOLE	UPSTREAM MANHOLE
B	25.40	-	OTHER	OTHER
			LINER HAS PIN HOLE LIGHT INFILTRATION	
B	222.50	12 -	LATERAL	FACTORY SERVICE CROWN
			PVC SERVICE TO THE RIGHT	
B	226.60	12 -	LATERAL	FACTORY SERVICE CROWN
			PVC SERVICE TO THE LEFT	
B	329.80	-	MANHOLE	DOWNSTREAM MANHOLE

(SERV. CROWN REPAIR)

Top Hat #2

-ABANDONED/LINED OVER

## **Section V**

# **General Provisions & Technical Specifications for Sanitary Sewer Construction**

(Separate document incorporated by reference)