

INTRODUCED: July 22, 2019

AN ORDINANCE No. 2019-202

To authorize the special use of the property known as 3022 Jefferson Davis Highway for the purpose of a wireless telecommunications monopole and associated equipment, upon certain terms and conditions.

\_\_\_\_\_  
Patron – Mayor Stoney (By Request)

\_\_\_\_\_  
Approved as to form and legality  
by the City Attorney  
\_\_\_\_\_

PUBLIC HEARING: SEP 9 2019      AT 6 P.M.

WHEREAS, the owner of the property known as 3022 Jefferson Davis Highway, a portion of which is situated in an OS Office-Service District, desires to use such portion of such property for the purpose of a wireless telecommunications monopole and associated equipment, which use, among other things, is not currently allowed by section 30-450.1 of the Code of the City of Richmond (2015), as amended; and

WHEREAS, in accordance with section 17.11 of the Charter of the City of Richmond (2010), as amended, it has been made to appear that, if granted subject to the terms and conditions set forth in this ordinance, the special use granted by this ordinance will not be detrimental to the safety, health, morals and general welfare of the community involved, will not tend to create

AYES:            9            NOES:            0            ABSTAIN: \_\_\_\_\_

ADOPTED:      SEP 9 2019      REJECTED: \_\_\_\_\_      STRICKEN: \_\_\_\_\_

congestion in streets, roads, alleys and other public ways and places in the area involved, will not create hazards from fire, panic or other dangers, will not tend to overcrowding of land and cause an undue concentration of population, will not adversely affect or interfere with public or private schools, parks, playgrounds, water supplies, sewage disposal, transportation or other public requirements, conveniences and improvements, and will not interfere with adequate light and air; and

WHEREAS, (i) the City Planning Commission has conducted a public hearing to investigate the circumstances and conditions upon which the Council is empowered to authorize such use, (ii) the City Planning Commission has reported to the Council the results of such public hearing and investigation and its recommendations with respect thereto, and (iii) the Council has conducted a public hearing on this ordinance at which the person in interest and all other persons have had an opportunity to be heard;

NOW, THEREFORE,

THE CITY OF RICHMOND HEREBY ORDAINS:

§ 1. **Finding.** Pursuant to section 30-1050.1 of the Code of the City of Richmond (2015), as amended, the Council hereby finds that the special use set forth in and subject to the terms and conditions of this ordinance will not (i) be detrimental to the safety, health, morals and general welfare of the community involved, (ii) tend to create congestion in streets, roads, alleys and other public ways and places in the area involved, (iii) create hazards from fire, panic or other dangers, (iv) tend to overcrowding of land and cause an undue concentration of population, (v) adversely affect or interfere with public or private schools, parks, playgrounds, water supplies, sewage disposal, transportation or other public requirements, conveniences and improvements, or (vi) interfere with adequate light and air.

§ 2. **Grant of Special Use Permit.**

(a) Subject to the terms and conditions set forth in this ordinance, the property known as 3022 Jefferson Davis Highway and identified as Tax Parcel No. S008-0629/006 in the 2019 records of the City Assessor, being more particularly shown on sheet A-0 of the plans entitled “Proposed 190’ Monopole w/ a 5’ Lightning Rod in a New Fenced Compound,” prepared by BC Architects Engineers PLC, dated February 1, 2019, and last revised February 14, 2019, a copy of which is attached to and made a part of this ordinance, hereinafter referred to as “the Property,” is hereby permitted to be used for the purpose of a wireless telecommunications monopole and associated equipment, hereinafter referred to as “the Special Use,” substantially as shown on the plans entitled “Proposed 190’ Monopole w/ a 5’ Lightning Rod in a New Fenced Compound,” prepared by BC Architects Engineers PLC, dated February 1, 2019, and last revised February 14, 2019, hereinafter referred to as “the Plans,” copies of which are attached to and made a part of this ordinance.

(b) The adoption of this ordinance shall constitute the issuance of a special use permit for the Property. The special use permit shall inure to the benefit of the owner or owners of the fee simple title to the Property as of the date on which this ordinance is adopted and their successors in fee simple title, all of which are hereinafter referred to as “the Owner.” The conditions contained in this ordinance shall be binding on the Owner.

§ 3. **Special Terms and Conditions.** This special use permit is conditioned on the following special terms and conditions:

(a) The Special Use of the Property shall be as a wireless telecommunications monopole and associated equipment, substantially as shown on the Plans.

(b) All equipment shall be limited to a 2,500 square foot enclosed area, substantially as shown on the Plans.

(c) The Owner shall have a structural inspection conducted annually by a professional engineer licensed in the Commonwealth of Virginia, and a copy of the inspection report shall be filed with the Department of Planning and Development Review.

(d) The Owner shall file with the Department of Planning and Development Review a statement from a professional engineer licensed in the Commonwealth of Virginia that non-ionizing electromagnetic radiation emitted from the communications tower does not result in a ground level exposure at any point outside such facility which exceeds the lowest applicable exposure standards established by any regulatory agency of the United States Government or the American National Standards Institute.

(e) Obsolete, unused, or abandoned communications towers and antenna facilities shall be removed within 12 months of obsolescence, cessation of use, or abandonment.

(f) The tower shall have no markings signs or lighting except for lighting that may be required by the Federal Aviation Administration.

(g) No building permit shall be issued until the portion of the Property located within the OS Office-Service District is brought into conformance with section 30-450.2 of the Code of the City of Richmond (2015), as amended.

(h) Landscaping and fencing shall be provided for the Special Use substantially as shown on the Plans.

(i) The height of the Special Use shall not exceed the height as shown on the Plans.

§ 4. **Supplemental Terms and Conditions.** This special use permit is conditioned on the following supplemental terms and conditions:

(a) All required final grading and drainage plans, together with all easements made necessary by such plans, must be approved by the Director of Public Utilities prior to the issuance of the building permit.

(b) Storm or surface water shall not be allowed to accumulate on the land. The Owner, at its sole cost and expense, shall provide and maintain at all times adequate facilities for the drainage of storm or surface water from the Property so as not to adversely affect or damage any other property or public streets and the use thereof.

(c) Facilities for the collection of refuse shall be provided in accordance with the requirements of the Director of Public Works. Such facilities shall be located or screened so as not to be visible from adjacent properties and public streets.

(d) Any encroachments existing, proposed on the Plans or contemplated in the future shall require separate authorization and shall be subject to the applicable provisions of the Code of the City of Richmond (2015), as amended, and all future amendments to such laws.

(e) In all other respects, the use of the Property shall be in accordance with the applicable underlying zoning regulations.

§ 5. **General Terms and Conditions.** This special use permit is conditioned on the following general terms and conditions:

(a) No permit implementing this special use permit shall be approved until satisfactory evidence has been presented to the Zoning Administrator that any delinquent real estate taxes applicable to the Property have been paid.

(b) The Owner shall be bound by, shall observe and shall comply with all other laws, ordinances, rules and regulations applicable to the Property, except as otherwise expressly provided in this ordinance.

(c) Words and phrases used in this ordinance shall be interpreted to have the meanings ascribed to them by section 30-1220 of the Code of the City of Richmond (2015), as amended, unless the context clearly indicates that a different meaning is intended.

(d) Notwithstanding any other provision of law, this special use permit is being approved due, in part, to the mitigating effects of each and every condition attached hereto; consequently, if any portion of this ordinance is determined to be invalid for any reason by a final, non-appealable order of any Virginia or federal court of competent jurisdiction, the invalidity shall cause the entire ordinance to be void and of no further effect from the effective date of such order.

(e) The privileges granted by this ordinance may be revoked pursuant to the provisions of sections 30-1050.7 through 30-1050.11 of the Code of the City of Richmond (2015), as amended, and all future amendments to such laws. Failure to comply with the terms and conditions of this ordinance shall constitute a violation of section 30-1080 of the Code of the City of Richmond (2015), as amended, and all future amendments to such law, or any other applicable laws or regulations.

(f) When the privileges granted by this ordinance terminate and the special use permit granted hereby becomes null and void, whether as a result of the Owner relinquishing this special use permit in a writing addressed to the Director of Planning and Development Review or otherwise, use of the Property shall be governed thereafter by the zoning regulations prescribed for the district in which the Property is then situated.

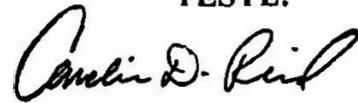
§ 6. **Implementation.** The Commissioner of Buildings is authorized to issue a building permit substantially in accordance with the Plans for the Special Use subject to the terms and conditions set forth in this ordinance. An application for the building permit shall be made within 730 calendar days following the date on which this ordinance becomes effective. If either the

application for the building permit is not made within the time period stated in the previous sentence or the building permit terminates under any provision of the Virginia Statewide Building Code, this ordinance and the special use permit granted hereby shall terminate and become null and void.

§ 7. **Effective Date.** This ordinance shall be in force and effect upon adoption.

**A TRUE COPY:**

**TESTE:**

A handwritten signature in black ink, appearing to read "Carolin D. Reed". The signature is written in a cursive style with a large initial 'C'.

**City Clerk**

# City of Richmond

900 East Broad Street  
2nd Floor of City Hall  
Richmond, VA 23219  
www.richmondgov.com

## Item Request

File Number: PRE.2019.251

**O & R REQUEST**

4-8940

JUN 26 2019

RECEIVED

JUL 15 2019

OFFICE OF THE CITY ATTORNEY

Office of the  
Chief Administrative Officer

### O & R Request

**DATE:** June 24, 2019

**EDITION:** 1

**TO:** The Honorable Members of City Council

**THROUGH:** The Honorable Levar M. Stoney, Mayor (Patron: Mayor, by Request)  
(This is no way reflects a recommendation on behalf of the Mayor.)

**THROUGH:** Selena Cuffee-Glenn, Chief Administrative Officer 

**THROUGH:** Sharon L. Ebert, Deputy Chief Administrative Officer for Economic Development and Planning 

**FROM:** Mark A. Olinger, Director, Department of Planning and Development Review 

**RE:** To authorize the special use of the property known as 3022 Jefferson Davis Highway to authorize a wireless telecommunications monopole and associated equipment, upon certain terms and conditions.

**ORD. OR RES. No.** \_\_\_\_\_

**PURPOSE:** To authorize the special use of the property known as 3022 Jefferson Davis Highway to authorize a wireless telecommunications monopole and associated equipment, upon certain terms and conditions.

**REASON:** The proposed communications tower will be located in the OS-Office Services District where the tower is not a permitted use. Therefore a special use permit is required.

**RECOMMENDATION:** In accordance with the requirements of the City Charter and the Zoning Ordinance, the City Planning Commission will review this request and make a recommendation to City Council. This item will be scheduled for consideration by the Commission at its September 3, 2019, meeting. A letter outlining the Commission's recommendation will be forwarded to City Council following that meeting.

**BACKGROUND:** The property is located in the Jefferson Davis neighborhood of the Broad Rock Planning District, on Jefferson Davis Highway between Lochaven Boulevard and Newhaven Drive. The proposed project calls for the installation of a 195' wireless telecommunications monopole (including a 5' lighting rod) and associated ground equipment within a 50 x 50 foot lease area.

The City of Richmond's Master Plan designates the subject property as an Economic Opportunity Area. Specifically for the Broad Rock District, the Master Plan states that "this area is identified as an Economic Opportunity Area in order to better accommodate a range of uses that can effectively contribute to the Jefferson Davis Highway corridor. The area generally identified on the Land Use Plan map currently consists of several parcels, and the most appropriate strategy is to encourage consolidation of as many of the parcels as practical to support a more substantial development.

The 5.46 acre subject property is split zoned, with the eastern portion of the property located in the B-3 General Business District and the remaining portion in the OS Office Services District. The proposed communications tower will be located within the OS Office Services District where it is not a permitted principal use. A truck maintenance shop and office are located within the B-3 General Business District section of the property fronting Jefferson Davis Highway. The portion of the property located within the OS Office Services District has no improvements and is currently used for outdoor storage of vehicles and vehicle parts. These uses are not allowed uses in the OS Office Services District.

The properties to the west, across a CSX Railroad corridor, are properties containing single-family dwellings located within the R-4 Single-Family Residential Districts. Abutting to the north are properties containing single-family dwellings on land located within the R-5 Single-Family Residential District. Abutting to the south is property containing an excavating contractor business on land zoned M-1 Light Industrial. Abutting to the east is a property containing an auto parts store on land zoned B-3 General Business District.

**FISCAL IMPACT / COST:** The Department of Planning and Development Review does not anticipate any impact to the City's budget for this or future fiscal years.

**FISCAL IMPLICATIONS:** Staff time for processing the request; preparation of draft ordinance; and publishing, mailing and posting of public notices.

**BUDGET AMENDMENT NECESSARY:** No.

**REVENUE TO CITY:** \$500 application fee.

**DESIRED EFFECTIVE DATE:** Upon adoption

**REQUESTED INTRODUCTION DATE:** July 22, 2019

**CITY COUNCIL PUBLIC HEARING DATE:** September 9, 2019

**REQUESTED AGENDA:** Consent

**RECOMMENDED COUNCIL COMMITTEE:** None

**CONSIDERATION BY OTHER GOVERNMENTAL ENTITIES:** City Planning Commission  
September 3, 2019

**AFFECTED AGENCIES:** Office of Chief Administrator Officer  
Law Department (for review of draft ordinance)  
City Assessor (for preparation of mailing labels for public notice)

**RELATIONSHIP TO EXISTING ORD. OR RES.:** None

**REQUIRED CHANGES TO WORK PROGRAM(S):** None

**ATTACHMENTS:** Draft Ordinance, Application Form, Applicant's Report, Photo Simulation and NIER Statement, Plans, Map

**STAFF:** David F. Watson, Senior Planner Land Use Administration 804-646-1036



SVP-052541-2019

Application for **SPECIAL USE PERMIT**

Department of Planning and Development Review  
Land Use Administration Division  
900 E. Broad Street, Room 511  
Richmond, Virginia 23219  
(804) 646-6304  
<http://www.richmond.gov/>

Application is hereby submitted for: (check one)

- special use permit, new
- special use permit, plan amendment
- special use permit, text only amendment

**Project Name/Location**

Property Address: 3022 Jefferson Davis Highway Date: \_\_\_\_\_  
 Tax Map #: S0080629006 Fee: \_\_\_\_\_  
 Total area of affected site in acres: 2500 sq feet

(See page 6 for fee schedule please make check payable to the "City of Richmond")

**Zoning**

Current Zoning: OS (Office- Service District)

Existing Use: \_\_\_\_\_

**Proposed Use**

(Please include a detailed description of the proposed use in the required applicant's report)

Construction of telecommunication tower with associated ground equipment

Existing Use \_\_\_\_\_

Is this property subject to any previous land use cases?

Yes

No

If Yes, please list the Ordinance Number: \_\_\_\_\_

**Applicant/Contact Person:** H. Karina Fournier

Company: Network Building and Consulting, LLC

Mailing Address: 8521 Six Forks Road Suite 105

City: Raleigh State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone: (860) 796-3988 Fax: ( )

Email: kfournier@nbcllc.com

**Property Owner:** 3022 Jefferson Davis Highway LLC

If Business Entity, name and title of authorized signee: \_\_\_\_\_

(The person or persons executing or attesting the execution of this Application on behalf of the Company certifies that he or she has or have been duly authorized and empowered to so execute or attest.)

Mailing Address: 3022 Jefferson Davis Highway

City: Richmond State: VA Zip Code: 23234

Telephone: ( ) Fax: ( )

Email: \_\_\_\_\_

Property Owner Signature: [Handwritten Signature]

The names, addresses, telephone numbers and signatures of all owners of the property are required. Please attach additional sheets as needed. If a legal representative signs for a property owner, please attach an executed power of attorney. **Faxed or photocopied signatures will not be accepted.**

**NOTE:** Please attach the required plans, checklist, and a check for the application fee (see Filing Procedures for special use permits)



**Applicant Narrative**  
**Site Name: VA-Richmond-Capital Garage (Richmond)**

**Proposal**

PI Tower Development, LLC (t/a "Parallel" or "Applicant") proposes to construct and operate a 195 foot monopole communications tower for T-Mobile on a 5.46 acre parcel located at 3022 Jefferson Davis Highway ("Property"). T-Mobile is licensed by the Federal Communications Commission to provide wireless communications services throughout the City of Richmond ("City"). As is indicated on the propagation maps submitted with this application, which depict the coverage objective of the proposed tower, T-Mobile currently has a gap of inbuilding coverage between VA11363A 2800 Lamberts Avenue and VA71595A 1850 Commerce Road. The enclosed propagation maps also depict T-Mobile's network of existing antenna sites in this portion of the City. This network of sites is largely based on the use of existing towers and tall structures built by T-Mobile, other carriers and tower companies.

The subject Property is used for various industrial uses. The Applicant is proposing to locate the tower and associated ground equipment within a 50' x 50' lease area/fenced compound located at the rear of the subject Property and next to the railroad tracks. The proposed tower will have an overall structure height of 195 feet (190 foot tower with a 5 foot lightning rod) and it will accommodate at least four (4) users. The tower will be made of galvanized steel, which will match the backdrop of the sky. The facility will be unmanned and will be visited approximately once a month by technicians. The facility will not be lit and will not emit any odor, fumes or glare. The noises emitted from the equipment on the ground will not be any louder than normal residential HVAC equipment. Therefore, the impact on surrounding properties resulting from this passive use will be minimal.

**Purpose of Tower**

The purpose of the tower is to provide improved voice and data coverage to the surrounding area. Specifically, the proposed tower will achieve the following:

- Enhance the existing wireless network by supporting the latest wireless technologies;
- Provide coverage to the following:
  - Those working in nearby businesses along Jefferson Davis Hwy
  - Those living in the adjacent residential neighborhoods
  - Those travelling on nearby roads
- Provide multiple collocation positions for other wireless carriers to expand their networks.

## Zoning Ordinance requirements

The subject property is zoned OS, Office-Service District. In accordance with Division 11, Wireless Telecommunications, wireless communications facilities are permitted uses provided that a plan of development shall be required. The following sections outline the standards applicable to wireless communications facilities.

### Sec. 30-692.2, Standards applicable to all facilities and antennas

(1) The applicant's narrative containing the following information:

a. The address and latitude/longitude of the proposed location;

*The address of the subject property is 3022 Jefferson Davis Highway and the proposed tower is at a latitude/longitude of 37°28'51.73"N, 77°26'49.50"W.*

b. A description of communications/broadcast services which the applicant intends to provide at the site;

*T-Mobile Radio Frequency Engineers have determined that there is diminished data capacity in the area due to increased usage, therefore, this tower will be used primarily to improve the data capacity issue. Improving the data capacity issue will support and enhance any activity done on a smartphone that requires access to the Internet. This includes, among other things, streaming video, making FaceTime video calls and reading the news on your phone.*

c. The methodology behind the site selection (i.e., describe alternative sites considered in the site selection process and why the proposed site is the most suitable);

*In building out its network, T-Mobile first looks to collocate on existing structures within a search ring (telecommunications towers, power transmission towers, rooftops, etc.). T-Mobile places a strong emphasis on collocation for two reasons: 1) it is the desire of most local governments and 2) it is typically much cheaper than building a new site. There are no existing cell towers within the search ring that will meet the coverage objective (and T-Mobile is already collocated on all of the closest towers).*

d. A description of any other regulatory review required for the site and the status of that review (Federal Communications Commission, Federal Aviation Administration, NEPA impact report);

*As a federal licensee, T-Mobile must comply with all federal requirements, including all National Environmental Policy Act (NEPA), State Historic Preservation Office (SHPO), FAA and FCC rules and regulations.*

e. The measures that will be taken to ensure compatibility with surrounding properties;

*This site will remain compatible with the surrounding properties for the following reasons:*

- *The tower will be located in a rural area at the rear of an OS zoned parcel near existing railroad tracks;*
- *The surrounding area is also zoned Light Industrial and contains commercial uses;*

f. A statement acknowledging removal of antennas upon termination of the use;

*T-Mobile agrees to remove its antennas upon termination of the use.*

g. A statement indicating compliance with NIER standards;

*T-Mobile will operate this facility in compliance with all applicable governmental regulations (including those adopted by the FCC) regarding RF emissions (see attached NIER).*

h. A noninterference statement;

*T-Mobile will operate this facility in compliance with all applicable governmental regulations (including those adopted by the FCC) regarding interference.*

i. A statement indicating willingness to allow and the feasibility of collocation of other users at the site; and

*Parallel will construct and own the proposed tower. While T-Mobile is the anchor tenant, Parallel will market the tower to other wireless carriers in an effort to have them collocate on the tower. This tower will have space available for at least four (4) wireless carriers.*

j. A statement indicating whether the site will be shared with the city if needed for public safety purposes.

*The applicant has no objections to the City sharing the tower for public safety purposes as long as a lease is in place between the City and Parallel to do so.*

(2) A map showing the location of the proposed site and the location of existing facilities operated or owned by the applicant within the city and within three miles of the corporate limits, with an accompanying description of each facility (address, latitude/longitude, height of support structure, mounting height of antenna array, and willingness to allow and feasibility of collocation of other users at site).

*A vicinity map of the existing site is located on Sheet T-1 of the enclosed site plan. The submitted propagation maps show the anchor tenant's (T-Mobile's) existing towers in the area. T-Mobile is already collocated on all of the closest existing towers, therefore, the proposed tower is needed.*

Plans required for applications shall also clearly depict the following:

a. The location of the facility within the overall property, the access point from a public street, the location of other structures within 100 feet.

*See Sheet A-0 of the enclosed site plan.*

b. A detailed layout plan consisting of a site plan, roof plan, floor plan, as applicable to the specific proposal.

*See Sheets A-0 and A-1 of the enclosed site plan.*

c. Detailed elevation drawings showing the location and type of antenna array, the structural element to which the array will be affixed, and for mounts using alternative support structures, any architectural device used to incorporate the array into building/structure design, the location and materials of any security fencing where required.

*See Sheet A-2 of the enclosed site plan.*

d. The location and details of lighting when required.

*No lighting is anticipated or proposed with this request. Lighting will not be installed unless required by the FAA or FCC.*

e. The location, type of equipment, noise suppression measures and operational procedure for any emergency power supply.

*The noises emitted from the equipment on the ground, including the emergency generator, will not be any louder than normal residential HVAC equipment. Furthermore, the tower location is in a rural location next to the railroad tracks. Therefore, the impact on surrounding properties resulting from this passive use will be minimal.*

- f. The color of antennas, cables, support structure.

*The proposed antennas will be white or grey, which is similar to the color of the tower.*

- g. Landscape plans-minimum evergreen hedge for the base of the support structure and ground-mounted equipment, with additional trees for support structure screening.

*Landscaping is part of our proposal and shown on page A-1 of the site plan.*

- (3) Any antenna, support structure, and/or related electronic equipment which has not been used for the purpose of radio transmission for a continuous period of 12 months shall be deemed to be abandoned and shall be removed from the premises within 90 days of such abandonment.

*Any antenna, support structure and/or related electronic equipment proposed herein which has not been used for the purpose of radio transmission for a continuous period of 12 months will be removed from the premises within 90 days of the end of such 12-month period.*

- (4) Statement regarding the need for a traditional array.

*A flush-mount antenna design does not provide the same functionality as a full antenna array. Specifically, with a flush-mount design, only three antennas can be located at each rad center; therefore, each carrier would need two rad centers to fit their antennas. Furthermore, a flush-mount design can limit the ability to tilt antennas and install radio heads, therefore, reducing antenna effectiveness. To achieve T-Mobile's coverage objective in this very populated area, a full antenna array is required and requested (see attached propagation maps showing the coverage provided by a full array).*

**Sec. 30-692.5. Review criteria for installations utilizing new support structures and for installations on existing support structures.**

(a) In addition to the information to be contained in the narrative required by section 30-692.2, the applicant shall thoroughly document the reasons the proposed antennas could not be accommodated on nearby existing buildings or be collocated with other users on nearby existing monopoles or towers and that the new support structure is the only feasible option. (b) All new support structures shall be limited to monopole designs, only, and shall be subject to the following locational standards:

- (1) There shall be a setback of 500 feet from any property within an R or RO zoning district.

*Since the passing of HB1258 this no longer applies to wireless carriers*

- (2) There shall be a setback of 1,000 feet from the shoreline of the James River.

*The proposed tower will be over 1 mile from the James River.*

- (3) The maximum height of any monopole and antenna array shall be 199 feet, except that for any monopole and antenna array proposed within 1,000 feet of the right-of-way of an interstate highway, the height shall not exceed 195 feet.

*The proposed tower will be over 1,000 feet from I-95 and over 1,000 feet from I-64. However, Parallel is only requesting approval for a 195 foot tower.*

(c) For any new monopole proposed to be over 110 feet in height, in addition to the information to be contained in the narrative required by section 30-692.2, the plans and an accompanying engineer's statement shall demonstrate that the proposed monopole is designed to accommodate two additional users (designed with increased height and loadbearing capacity), and it should be stated in the narrative required by section 30-692.2 that the owner will lease to additional users. This requirement for additional design capacity may be waived by the director when the applicant has provided information

from other communications services that the site is not needed and/or when the particular location requires a reduced visual impact and the limited design capacity provides that reduced visual impact due to reduced monopole width and height.

*The proposed tower will have space available for at least four (4) wireless carriers.*

(d) The antenna array shall be designed to present the least horizontal dimension possible. Where the proposed array is not designed either as a tubular antenna array (unicell) or as cluster-mounted array (panel antennas affixed directly to the side of the monopole), in addition to the information to be contained in the narrative required by section 30-692.2, a statement shall be provided as to why those types of hardware are not technically feasible.

*A flush-mount antenna design does not provide the same functionality as a full antenna array. Specifically, with a flush-mount design, only three antennas can be located at each rad center; therefore, each carrier would need two rad centers to fit their antennas. Furthermore, a flush-mount design can limit the ability to tilt antennas and install radio heads, therefore, reducing antenna effectiveness. To achieve T-Mobile's coverage objective in this very populated area, a full antenna array is required and requested (see attached propagation maps showing the coverage provided by a full array).*

(e) The support structure and antenna array shall be of a color that is of neutral tone, selected to blend with the natural background (e.g., gray, light blue or silver if in open ground; green if among trees).

*The proposed tower will be galvanized steel to match the backdrop of the sky. The antennas will be grey or white in color to match the tower.*

(f) There shall be no lighting of the support structure or antenna array unless required by the city or state or federal agency.

*No lighting is anticipated or proposed with this request. Lighting will not be installed unless required by the FAA or FCC.*

(g) Dish antennas as part of a microwave relay facility shall not exceed ten feet in diameter.

*Not applicable; Parallel is not proposing any dish antennas.*

(h) When microwave dish antennas are accessory to a wireless communication facility or radio or television broadcast antenna and are to be mounted on the monopole, such dishes shall not exceed six feet in diameter and shall not be mounted so as to extend more than six feet from the monopole.

*Not applicable; Parallel is not proposing any dish antennas.*

## Conclusion

In conclusion, Parallel requests approval of this POD application as it (1) meets the requirements of the City of Richmond Zoning Ordinance and (2) does not adversely affect the character of the surrounding neighborhood, adjoining properties or the environment. This proposal reflects a solution that will allow Parallel and T-Mobile to provide improved service while minimizing adverse impacts to the community.

**SITE NAME**  
VA-RICHMOND-CAPITAL GARAGE

**SITE ID**  
PIVA068 (VA71653C)



**VICINITY MAP**  
SCALE: 1" = 10 MILES (approx)



**LOCAL MAP**  
SCALE: 1" = 200' (approx)

**PREVIOUS TO SHEET**  
PIVA068 (VA71653C) SHEET NO. 1 OF 1  
DATE: 02-14-19  
PROJECT: VA-RICHMOND-CAPITAL GARAGE  
SHEET NO. 1 OF 1  
DATE: 02-14-19  
PROJECT: VA-RICHMOND-CAPITAL GARAGE

PI TOWER DEVELOPMENT, LLC  
C/O



**PROJECT DESCRIPTION:**  
PROPOSED 190' MONOPOLE W/ A 5' LIGHTNING ROD IN A NEW FENCED COMPOUND

CALL BEFORE YOU DIG, DIAL 811  
IN VIRGINIA OR 1-800-552-7001

EMERGENCY:  
CALL 911

REV. NO.	DESCRIPTION	BY	DATE	REV. NO.	DESCRIPTION	BY	DATE
1	TURNOVER CHANGES	ACT	02-14-19	4			
2	SHEET CHANGED 5' TOWER TO 4' TOWER TOWER	ACT	02-14-19	5			
3	AS IS			6			

PHONE NUMBER	PHONE NUMBER	PHONE NUMBER	PHONE NUMBER	PHONE NUMBER	PHONE NUMBER
PROPERTY OWNER / CONTACT	CONTRACTOR	ZONING	UTILITY	APPROVAL - CARRIER	CONTRACTOR
PIVA068 (VA71653C)	PIVA068 (VA71653C)	PIVA068 (VA71653C)	PIVA068 (VA71653C)	PIVA068 (VA71653C)	PIVA068 (VA71653C)

PI TOWER DEVELOPMENT, LLC  
C/O

**BC**  
ENGINEERS  
ARCHITECTS

1000 N. GLENN ROAD, SUITE 100  
FALLS CHURCH, VA 22034  
TEL: (703) 91-1400  
FAX: (703) 91-1335

**VA-RICHMOND-CAPITAL GARAGE**  
PIVA068

3022 JEFFERSON AVENUE, NW  
ALPHARETTA, VA 23234

**CHRISTOPHER D. MORIN**  
REGISTERED PROFESSIONAL ENGINEER  
No. 032984  
2/14/19

**TITLE SHEET, VICINITY MAP AND GENERAL INFORMATION**

SHEET NUMBER: T-1  
REV: 2



A LAND DEVELOPMENT LLC  
 10000 WOODBRIDGE BLVD  
 SUITE 100  
 FALLS CHURCH, VIRGINIA 22044

THIS SHEET AND THE ACCOMPANYING  
 SPECIFICATIONS AND NOTES ARE  
 PREPARED BY THE ARCHITECT AND  
 SHALL BE USED ONLY FOR THE PROJECT  
 IDENTIFIED HEREIN. ANY REUSE OF  
 THIS SHEET OR ANY PART THEREOF  
 FOR ANY OTHER PROJECT WITHOUT  
 THE WRITTEN CONSENT OF THE  
 ARCHITECT IS STRICTLY PROHIBITED.  
 THE ARCHITECT ASSUMES NO  
 LIABILITY FOR ANY DAMAGE TO  
 PERSONS OR PROPERTY ARISING  
 FROM THE USE OF THIS SHEET  
 UNLESS SUCH DAMAGE IS CAUSED  
 BY NEGLIGENCE ON THE PART OF  
 THE ARCHITECT.

**BC**  
 architects  
 5415 CALLE DEL SOL, SUITE 200  
 FALLS CHURCH, VA 22044-7044  
 TEL: (703) 871-4000  
 FAX: (703) 871-4100

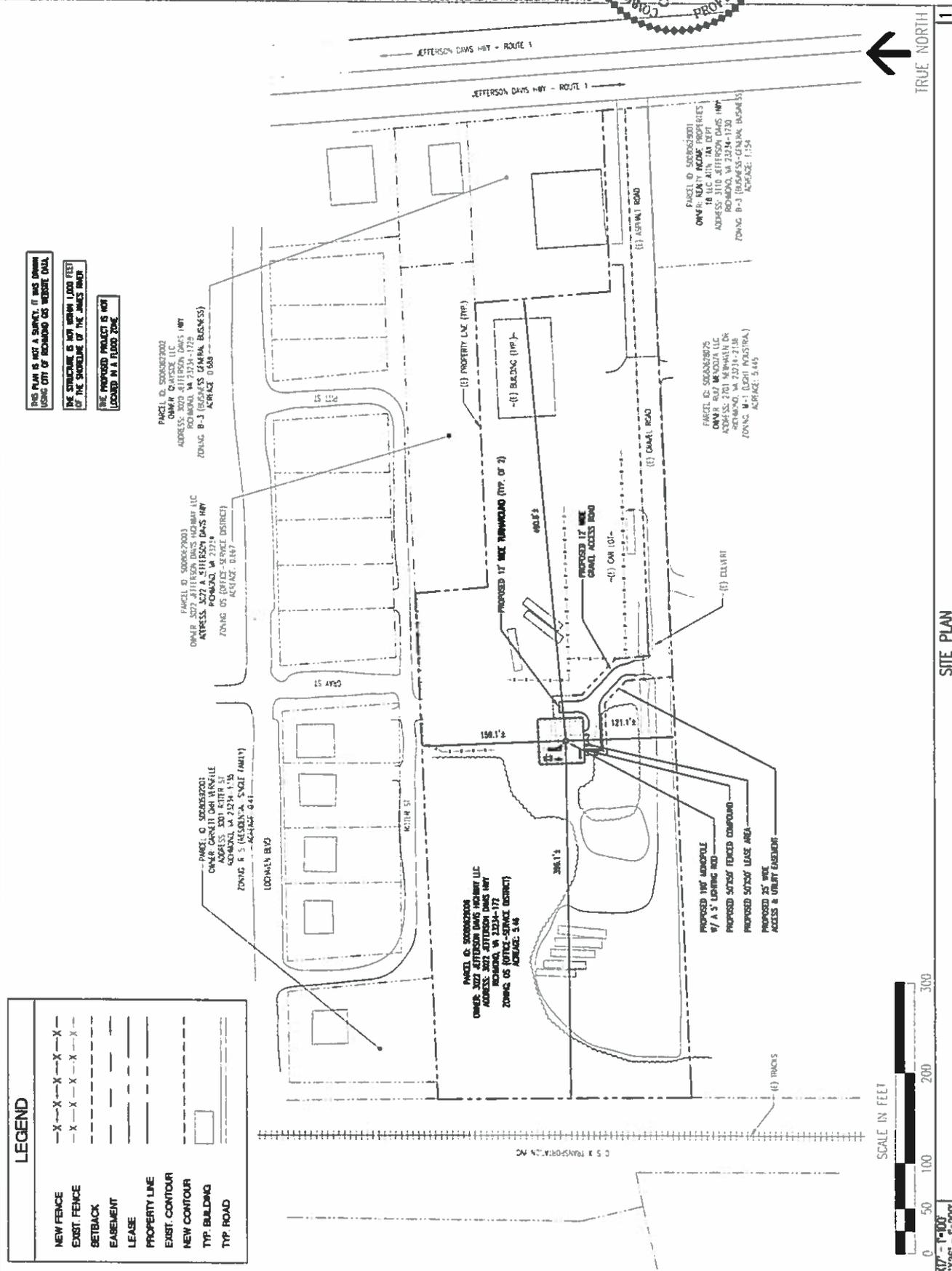
SHEET REVISION  
 NO. DESCRIPTION BY DATE  
 1. 10/11/19  
 2. 10/11/19  
 3. 10/11/19

VA-RICHMOND-  
 CAPITAL GARAGE  
 SITE PWA068  
 3022 JEFFERSON DAVIS HWY  
 RICHMOND, VA 23234

COMMONWEALTH OF VIRGINIA  
 CHRISTOPHER D. MORIN  
 No. 032984  
 2.14.19  
 PROFESSIONAL ENGINEER

CHECKED BY: [Signature] DATE: 02-01-19  
 SUBMITTED: [Signature] FINAL ZONING: [Signature]  
 SHEET TITLE: SITE PLAN

SHEET NUMBER: A-0 REV: 2



THIS PLAN IS NOT A SURVEY. IT HAS BEEN  
 PREPARED USING CITY OF RICHMOND GIS WEBSITE DATA.  
 THE STRUCTURE IS NOT NEARLY 1,000 FEET  
 OF THE SCHEDULE OF THE JAMES RIVER.  
 THE PROPOSED PROJECT IS NOT  
 LOCATED IN A FLOOD ZONE.

PARCEL ID: S000627003  
 OWNER: QWIKR QUINCY LLC  
 ADDRESS: 3070 JEFFERSON DAVIS HWY  
 RICHMOND, VA 23234-1729  
 ZONING: B-3 (BUSINESS GENERAL BUSINESS)  
 AREA: 0.68

PARCEL ID: S000627003  
 OWNER: QWIKR QUINCY LLC  
 ADDRESS: 3070 JEFFERSON DAVIS HWY  
 RICHMOND, VA 23234-1729  
 ZONING: B-3 (BUSINESS GENERAL BUSINESS)  
 AREA: 0.68

PARCEL ID: S000627001  
 OWNER: QWIKR QUINCY LLC  
 ADDRESS: 3070 JEFFERSON DAVIS HWY  
 RICHMOND, VA 23234-1729  
 ZONING: B-3 (BUSINESS GENERAL BUSINESS)  
 AREA: 0.44

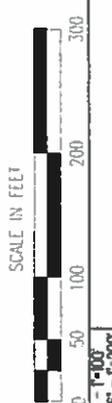
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 OWNER: QWIKR QUINCY LLC  
 ADDRESS: 3070 JEFFERSON DAVIS HWY  
 RICHMOND, VA 23234-1729  
 ZONING: B-3 (BUSINESS GENERAL BUSINESS)  
 AREA: 0.48

PARCEL ID: S000627005  
 OWNER: RAY WOODS LLC  
 ADDRESS: 2701 WHEATLAND DR  
 RICHMOND, VA 23234-2118  
 ZONING: M-3 (LIGHT INDUSTRIAL)  
 AREA: 3.45

PARCEL ID: S000627004  
 OWNER: RAY WOODS LLC  
 ADDRESS: 2701 WHEATLAND DR  
 RICHMOND, VA 23234-2118  
 ZONING: M-3 (LIGHT INDUSTRIAL)  
 AREA: 1.54

**LEGEND**

NEW FENCE	-X--X--X--X--X--X--X--
EXIST. FENCE	-X--X--X--X--X--X--X--
SETBACK	----
EASEMENT	----
LEASE	----
PROPERTY LINE	----
EXIST. CONTOUR	----
NEW CONTOUR	----
TYP. BUILDING	[Symbol]
TYP. ROAD	[Symbol]



TRUE NORTH

SITE PLAN

1



lendlease is a joint venture between Lend Lease LLC and the U.S. Army Corps of Engineers. Lend Lease LLC is a subsidiary of the U.S. Army Corps of Engineers. Lend Lease LLC is a 50/50 joint venture between Lend Lease LLC and the U.S. Army Corps of Engineers. Lend Lease LLC is a 50/50 joint venture between Lend Lease LLC and the U.S. Army Corps of Engineers.



**BC**  
Engineers  
201 S. 1st Street, Suite 100  
Arlington, VA 22202  
703.241.1100  
www.bcengineers.com

SITE NAME  
**VA-RICHMOND - CAPITAL GARAGE**  
DWT 0  
**PVA068**

DATE SUBMITTED  
02-01-18

DATE DRAWN  
02-01-18

DATE CHECKED  
02-01-18

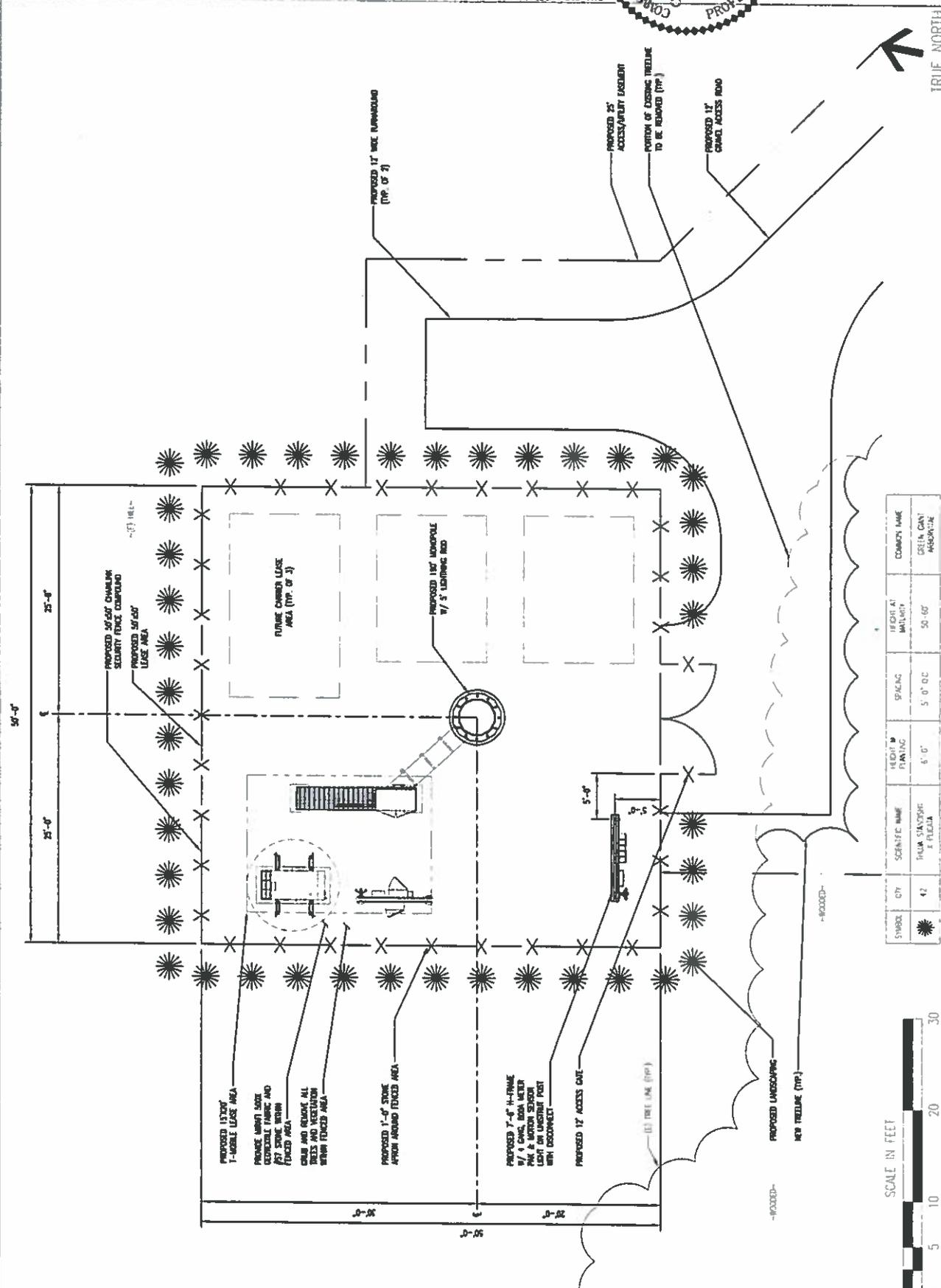
DATE APPROVED  
02-01-18

3022 JEFFERSON PARKS HWY  
FARMERS MARKET ZONE  
RICHMOND, VA 23234

STATE OF VIRGINIA  
PROFESSIONAL ENGINEER  
No. 032984  
2-1419

ENLARGED SITE PLAN

SHEET NUMBER A-1 REV # 2



SYMBOL	CITY	SCIENTIFIC NAME	HEIGHT PLANTING	SPACING	HEIGHT AT Maturity	COMMON NAME
	42	TRICHOSTEMA A. FLOIDA	8'-0"	5'-0" OC	50'-60"	DEER CANY HEBERTON



TRUE NORTH

ENLARGED SITE PLAN



IN ORDER TO OBTAIN THE FULL SCOPE OF SERVICES, THE CLIENT SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE AND FEDERAL AUTHORITIES. THE CLIENT SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE AND FEDERAL AUTHORITIES. THE CLIENT SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE AND FEDERAL AUTHORITIES.



**BC**  
**A R C H I T E C T S**  
**C H R I S T O P H E R D. MORIN**  
 3022 JEFFERSON DAVIS HWY  
 SUITE 2000  
 FALLS CHURCH, VA 22041-2048  
 TEL: 703.611.4000  
 FAX: (703) 611.8100

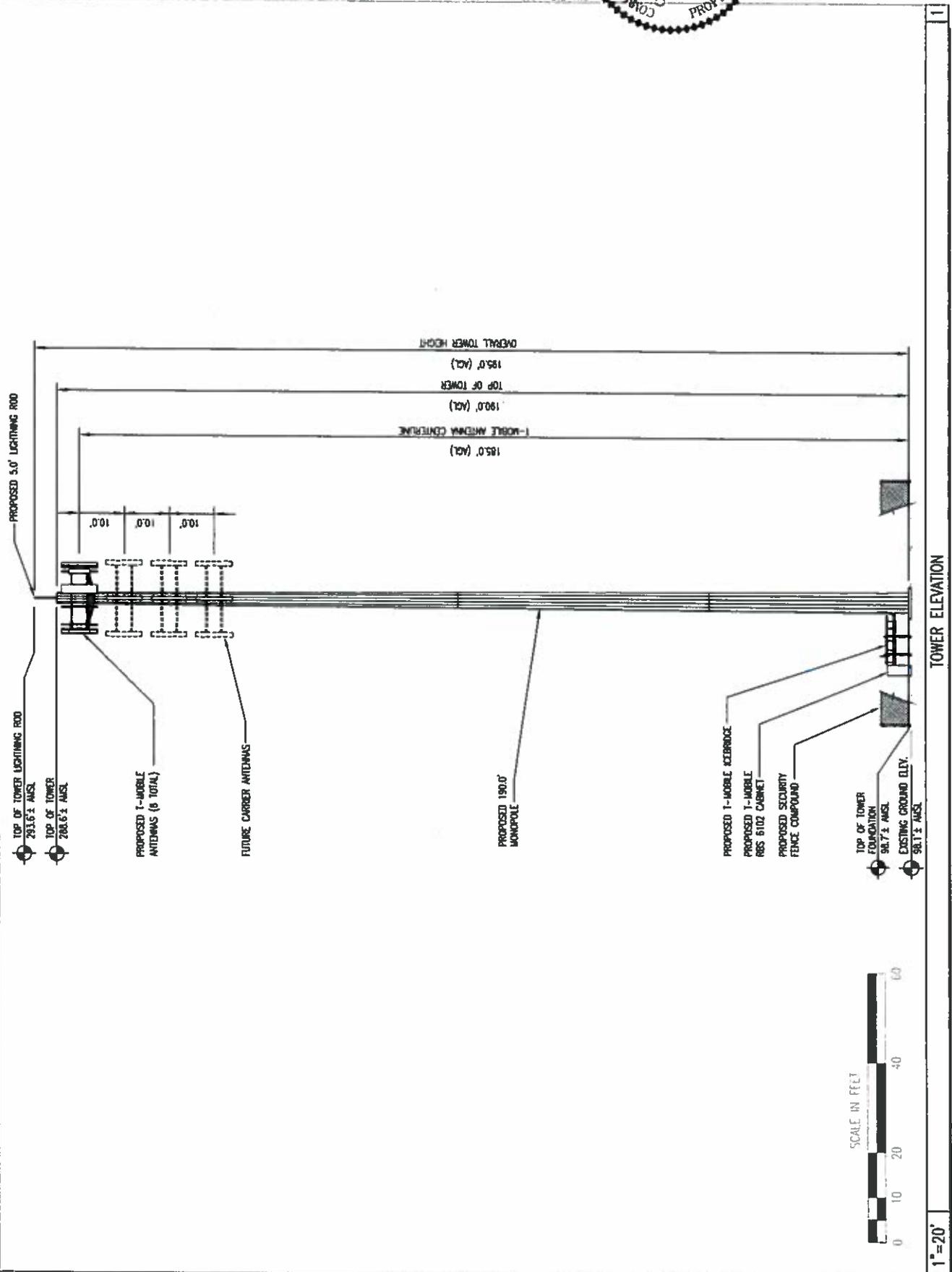
SHEET REVISION	BY	DATE
1	CHRISTOPHER D. MORIN	08-14-19
2	CHRISTOPHER D. MORIN	08-14-19
3	CHRISTOPHER D. MORIN	08-14-19
4	CHRISTOPHER D. MORIN	08-14-19
5	CHRISTOPHER D. MORIN	08-14-19

**SITE NAME**  
**VA-RICHMOND-CAPITAL GARAGE**  
**SITE ID**  
**PVA068**  
**SITE ADDRESS**  
**3022 JEFFERSON DAVIS HWY**  
**FALLS CHURCH, VA 22041-2048**



DRAWN BY	MS
DATE DRAWN	07-01-19
SUBMISSION	FINAL ZONING
SHEET TITLE	

<b>TOWER ELEVATION</b>	
SHEET NUMBER	A-2
REV #	2





lendlease is a leading provider of construction management services for the construction industry. We provide a full range of services from project management to construction management. Our services are designed to help our clients manage their construction projects more effectively and efficiently. We have a proven track record of successful projects and a team of experienced professionals who are committed to providing the highest quality of service to our clients.

**BC**  
architects  
architects

SHEET REVISION  
NO. DESCRIPTION BY DATE

**VA-RICHMOND-CAPITAL GARAGE**  
SITE ID: PWA068  
SITE ADDRESS: 3022 JEFFERSON DAVIS HWY, RICHMOND, VA 23234

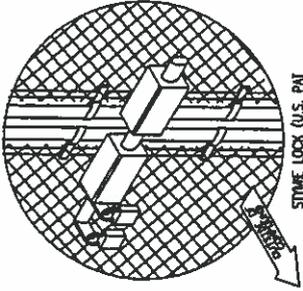


DATE DRAWN: 02-21-18  
DATE CHECKED: 02-21-18  
DRAWN BY: [Name]  
CHECKED BY: [Name]  
SHEET TITLE: FENCE, GATE AND COMPOUND CROSS SECTION DETAIL  
SHEET NUMBER: A-3  
REV # 2

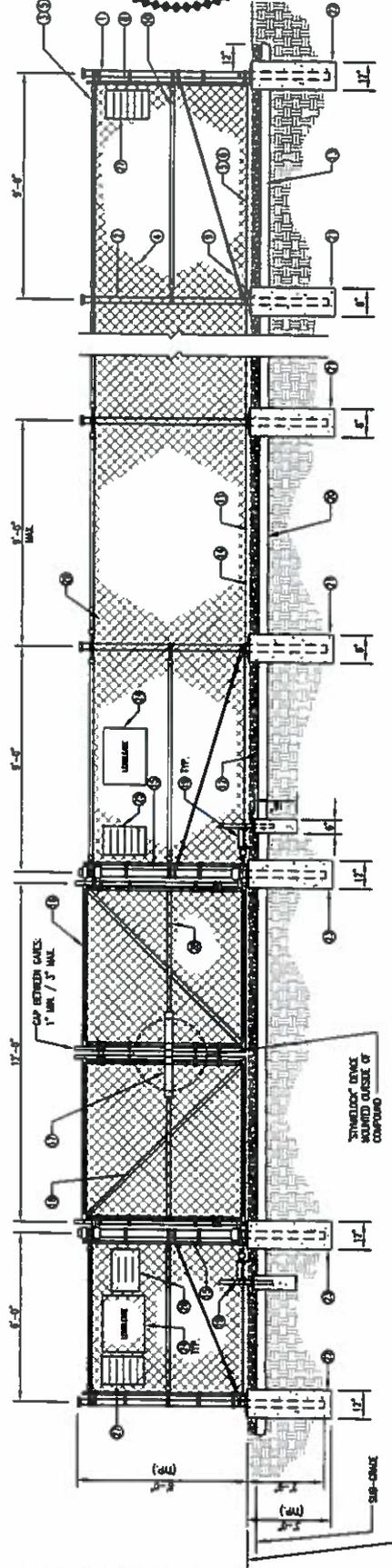
- GENERAL NOTES:**
1. INSTALL FENCING PER ASTM F-357
  2. INSTALL SWING GATES PER ASTM F- 300
  3. LOCAL ORDINANCE OF BARRIED WIRE PERMIT REQUIREMENT SHALL BE COMPLIED & RETURNED.
  4. POST & GATE PIPE SIZES ARE INDUSTRY STANDARDS.
  5. ALL PIPE TO BE 1 1/2" DIA.
  6. ALL GATES SHALL BE 10' WIDE.
  7. ALL RELINGS SHALL BE 1/2" DIA. (ON EQUAL).
  8. ALL OPEN POSTS SHALL HAVE DOP-GAPS.
  9. USE GALVANIZED HOC-WIRE WIRE TO MOUNT ALL SOCKS.
  10. ALL SOCKS MUST BE MOUNTED ON INSIDE OF FENCE FABRIC.

- REFERENCE NOTES:**
1. CONCRETE FOUNDATION SHALL BE 3" SCHEDULE 40 PIPE.
  2. WIRE POSTS SHALL BE SCHEDULE 40 PIPE PER ASTM-F1061.
  3. TOP RAIL & BRICE RAIL: 1 1/2" PFC PER ASTM-F1061.
  4. FABRIC: 5 GA ZINC WIRE SIZE 2 WESH, CONTINUING TO ASPH-ALZ.
  5. WESH: MINIMUM 1/4" GA GALVANIZED STEEL AT POSTS AND RAILS. A SINGLE WASH OF FABRIC TO AND AT TENSION WIRE BY THE RAILS SPACED MAX. 24" INTERVALS.
  6. TENSION WIRE: 3 GA. GALVANIZED STEEL.
  7. NOT USED.
  8. STRETCHER RAIL.
  9. 3/4" DIA. DRILL BIT WITH GALVANIZED STEEL TAPERED END ON INSIDE OF INSULATED RAIL.
  10. FENCE CORNER POST BRICE: 1 1/2" DIA. EACH CORNER EACH END.
  11. 1 1/2" MAXIMUM CLEARANCE FROM GATE.
  12. 2" FINISH OR AS DETERMINED BY CONSTRUCTION MANAGER DURING BID.
  13. 4" COMPACTED ROS PACE MATERIAL OR AS DETERMINED BY CONSTRUCTION MANAGER DURING BID.
  14. FINISH GRADE SHALL BE UNIFORM AND LEVEL.
  15. GATE POST 4" SCHEDULE 40 PIPE FOR GATE WINGS UP TO 10 FEET OR 20 FEET FOR DOUBLE SWING GATE, PER ASTM-F1061.
  16. GATE FRAME: 1 1/2" PFC SK. 40, PER ASTM-F1061.
  17. SYMBOLIC OR EQUIVALENT.
  18. GATE BRICE: GALVANIZED STEEL 1 1/2" PFC.
  19. DRILL WITH GATE HOLDER. VERIFY LOCATION IN FIELD PRIOR TO INSTALLATION.
  20. EQUIVALENT FABRIC.
  21. WIRE POST: CONCRETE FOUNDATION (3000 PSI).
  22. CORNER POST: CONCRETE FOUNDATION (3000 PSI).
  23. GATE POST: CONCRETE FOUNDATION (3000 PSI).
  24. 18" x 24" IN TOWER DEVELOPMENT SK. W/ CONCRETE WED. AND TOWER IDENTIFICATION.
  25. 17" x 18" YELLOW CHURN SK. SK.
  26. 12" x 18" EMPLOYEE NOTICE SK.
  27. 12" x 18" DANGER NO TRESPASSING SK.
  28. GATE FRAME BRICE: 1 1/2" DIA. WIRE.

PLUNGER OR MUSHROOM HEAD REQUIRED.



STONE LOCK (U.S. PAT 5668013) OR EQUIVALENT



FENCE, GATE AND COMPOUND CROSS SECTION DETAIL

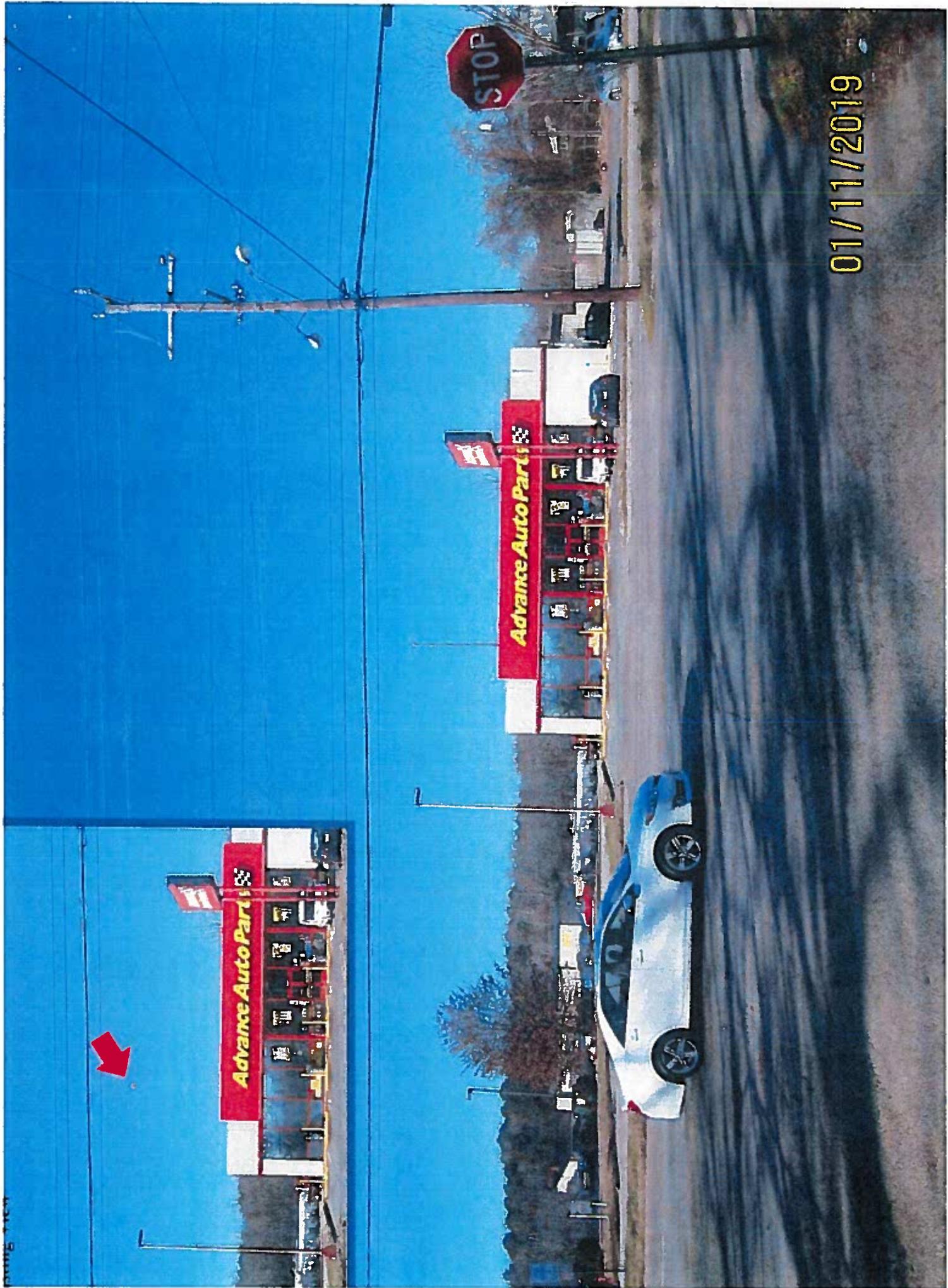
N.T.S.

- - Visible
- - Not Visible



190'-0" Monopole Tower w/ 4' Lightning Rod

VA - Richmond - Jefferson Davis Hw

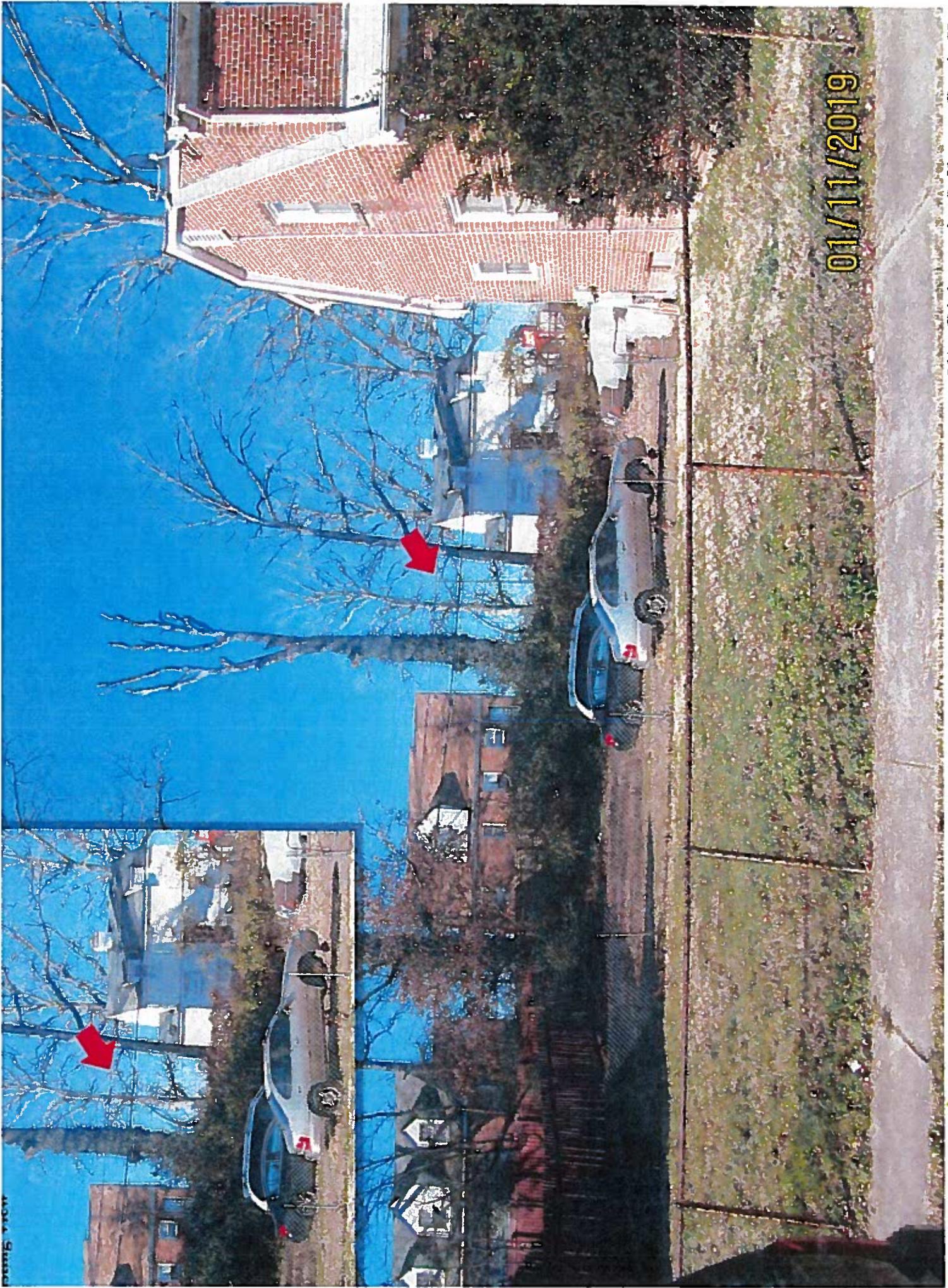


190'-0" Monopole Tower w/ 4' Lightning Rod - Visible

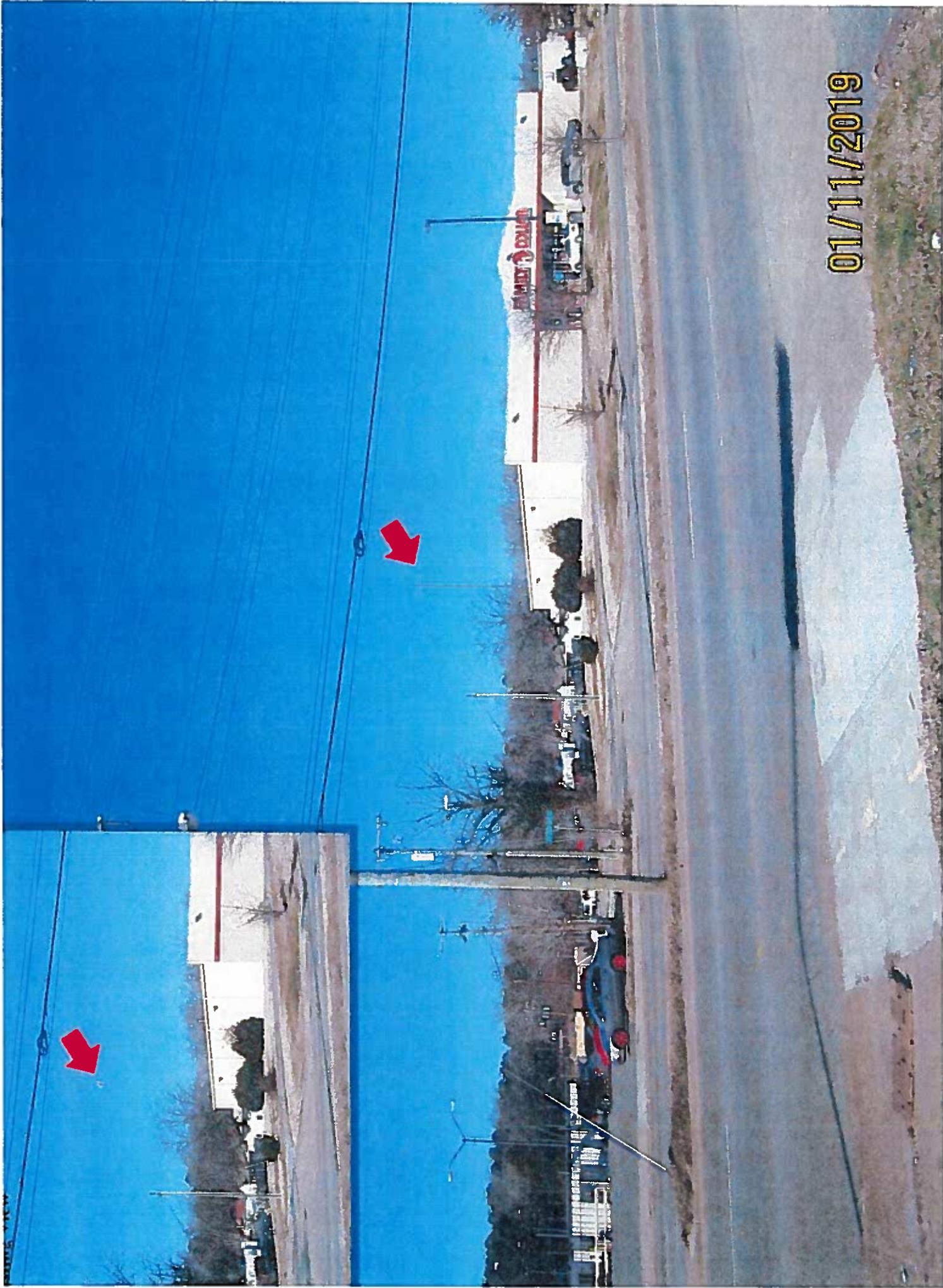
VA - Richmond - Jefferson Davis Hw



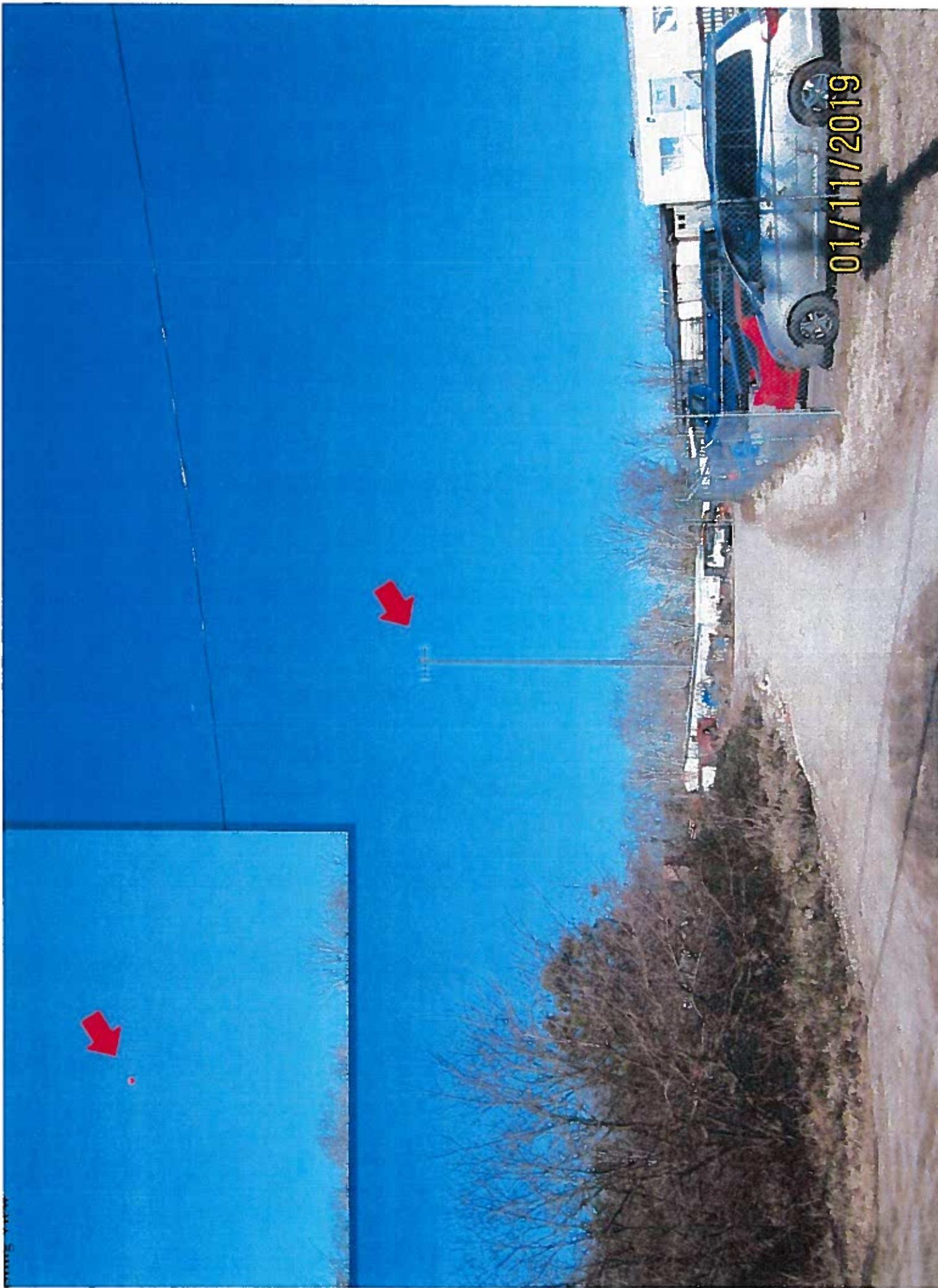
3C



01/11/2019

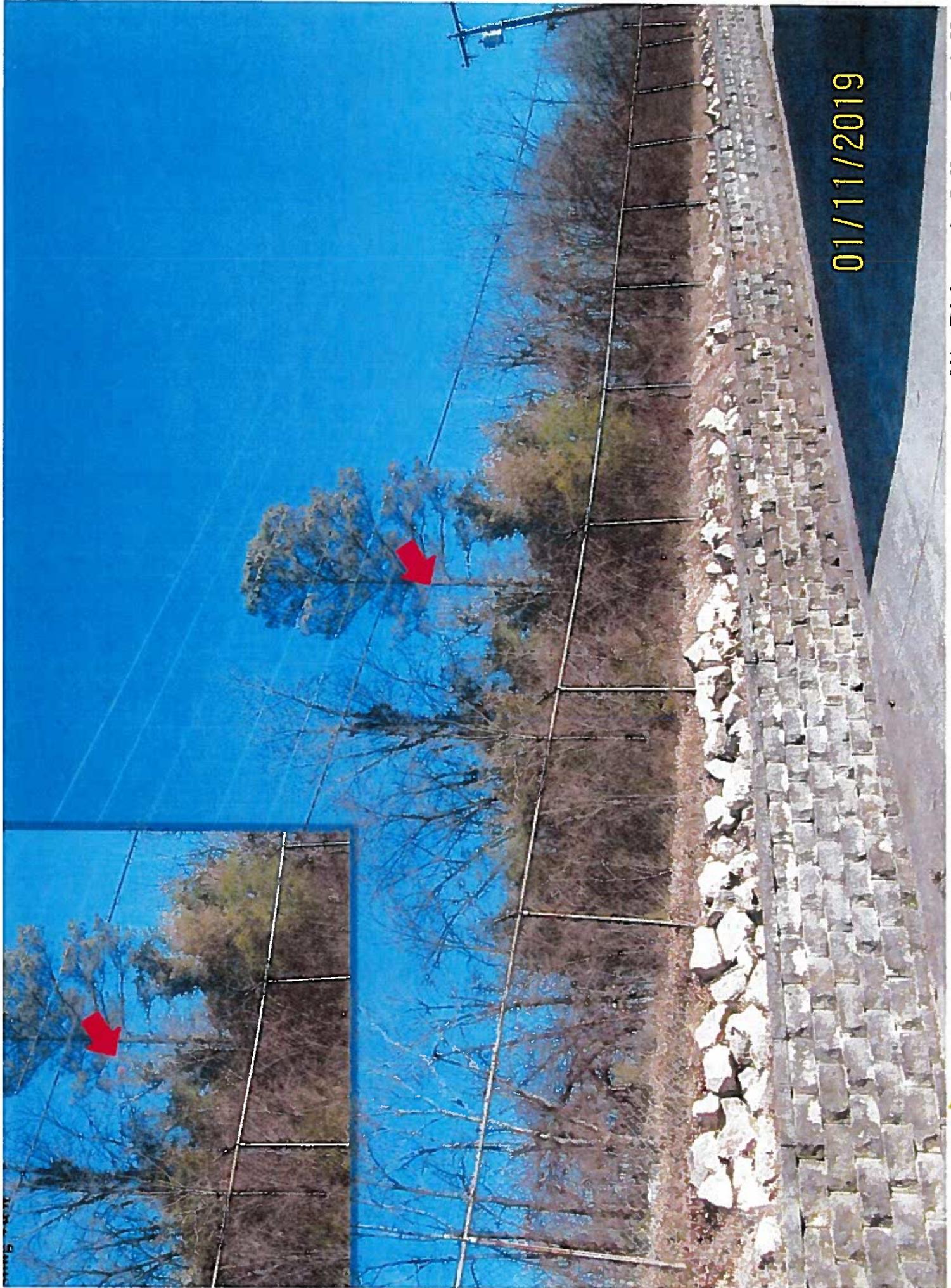


01/11/2019



01/11/2019





01/11/2019



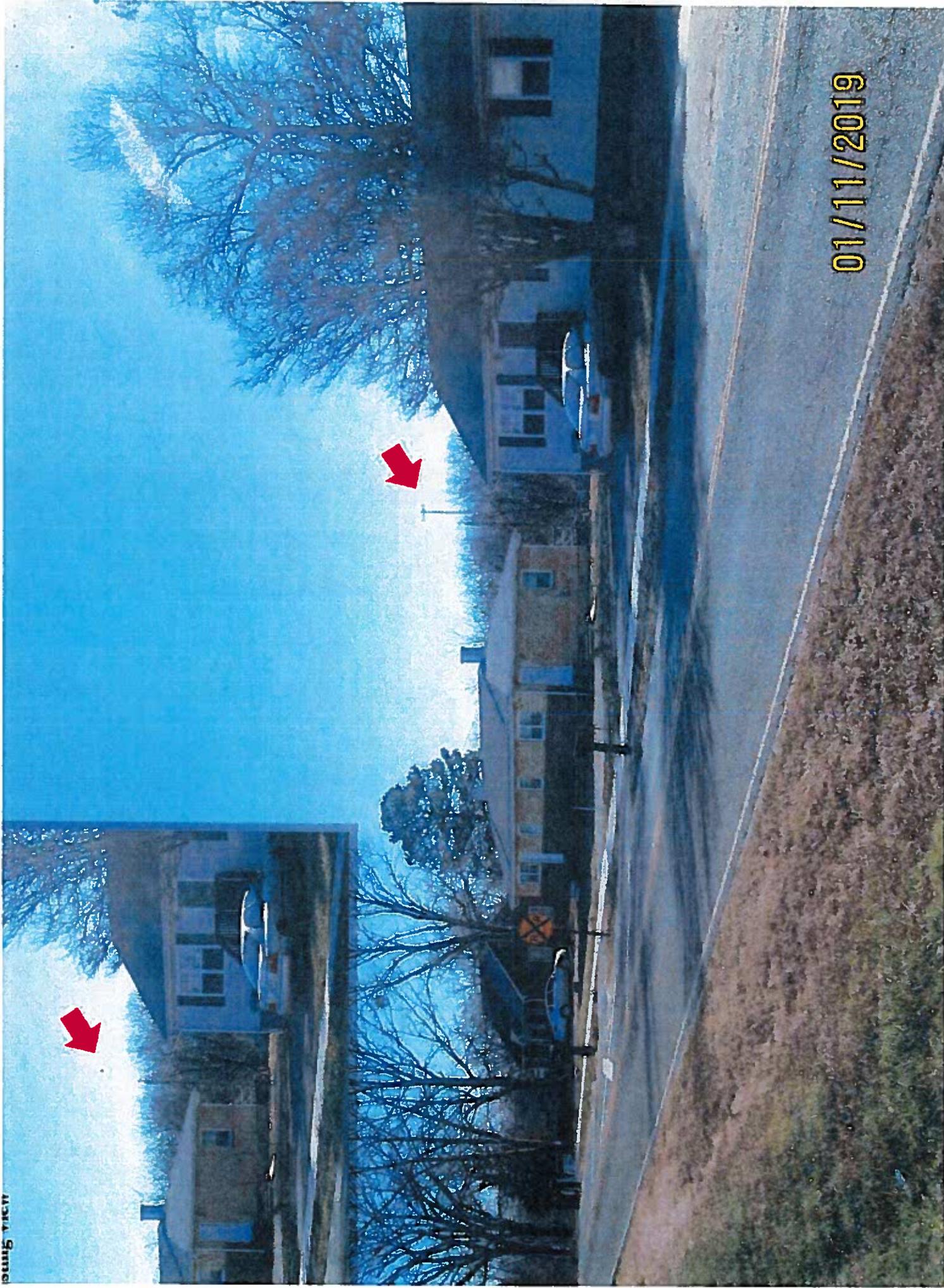
01/11/2019



190'-0" Monopole Tower w/ 4' Lightning Rod - Visible

VA - Richmond - Jefferson Davis Hw

Spring view

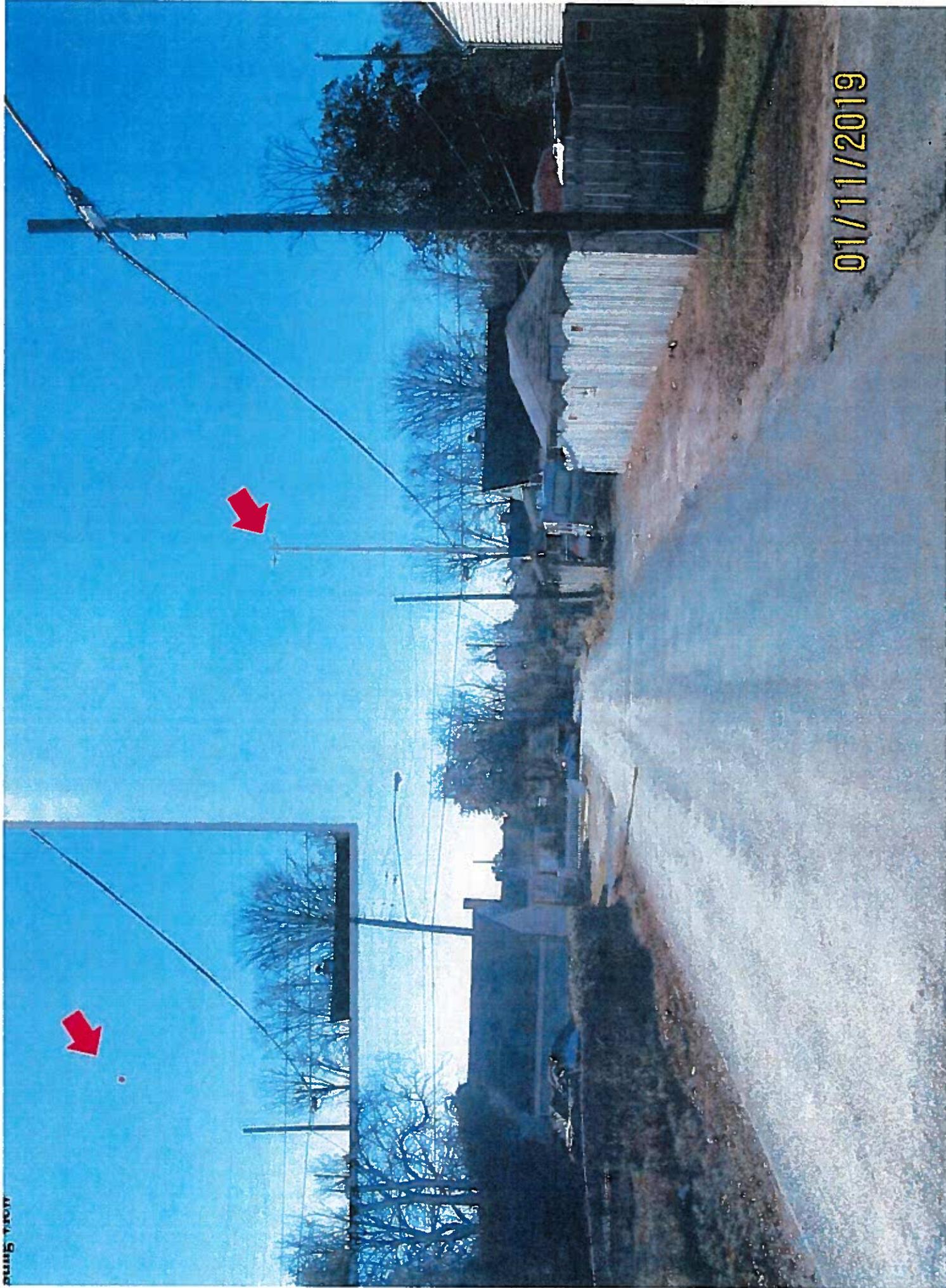


01/11/2019



190'-0" Monopole Tower w/ 4' Lightning Rod - Visible

VA - Richmond - Jefferson Davis Hw



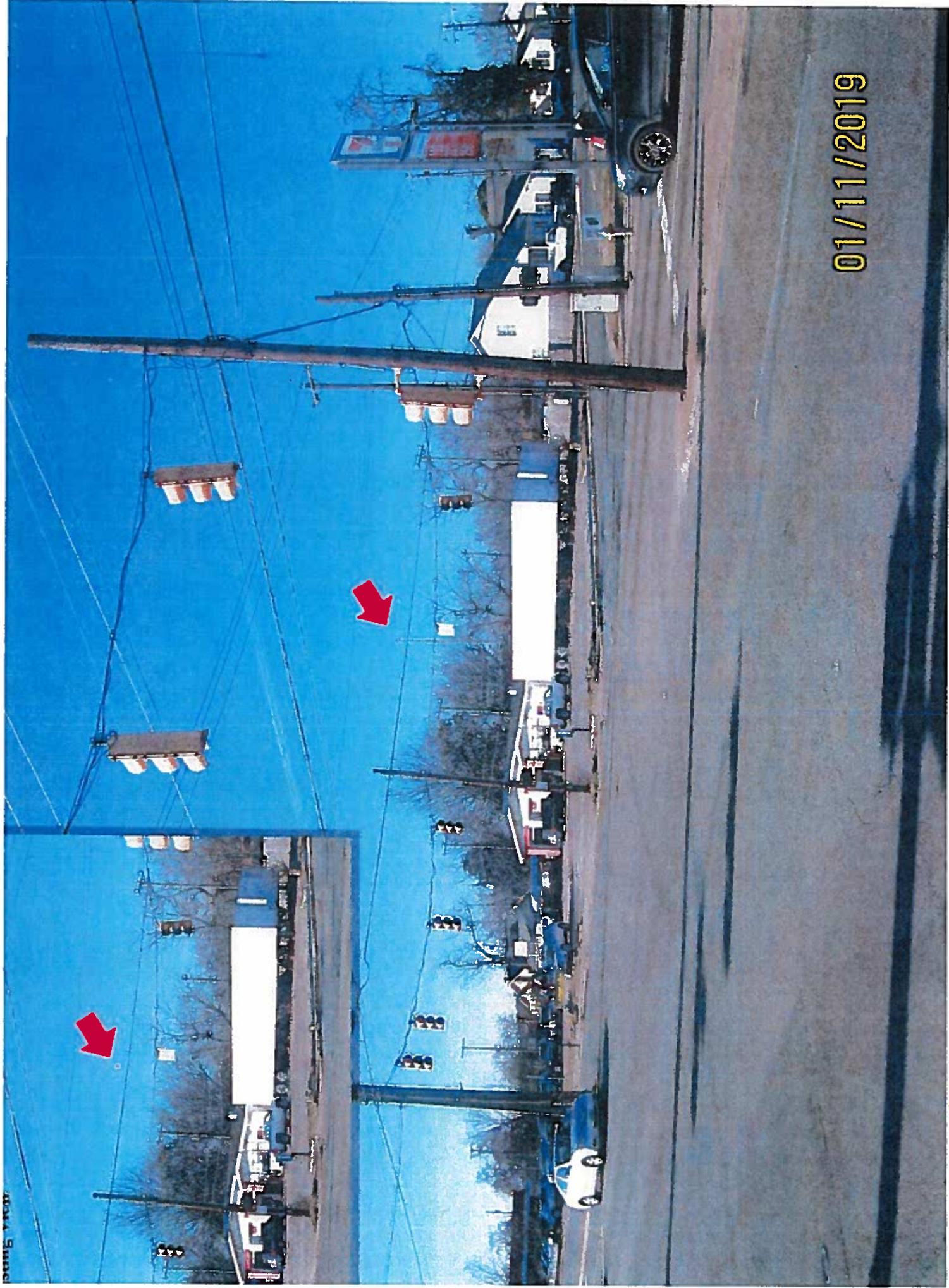
www.3C.com



190'-0" Monopole Tower w/ 4' Lightning Rod - Visible

VA - Richmond - Jefferson Davis Hw

01/11/2019



01/11/2019



01/11/2019

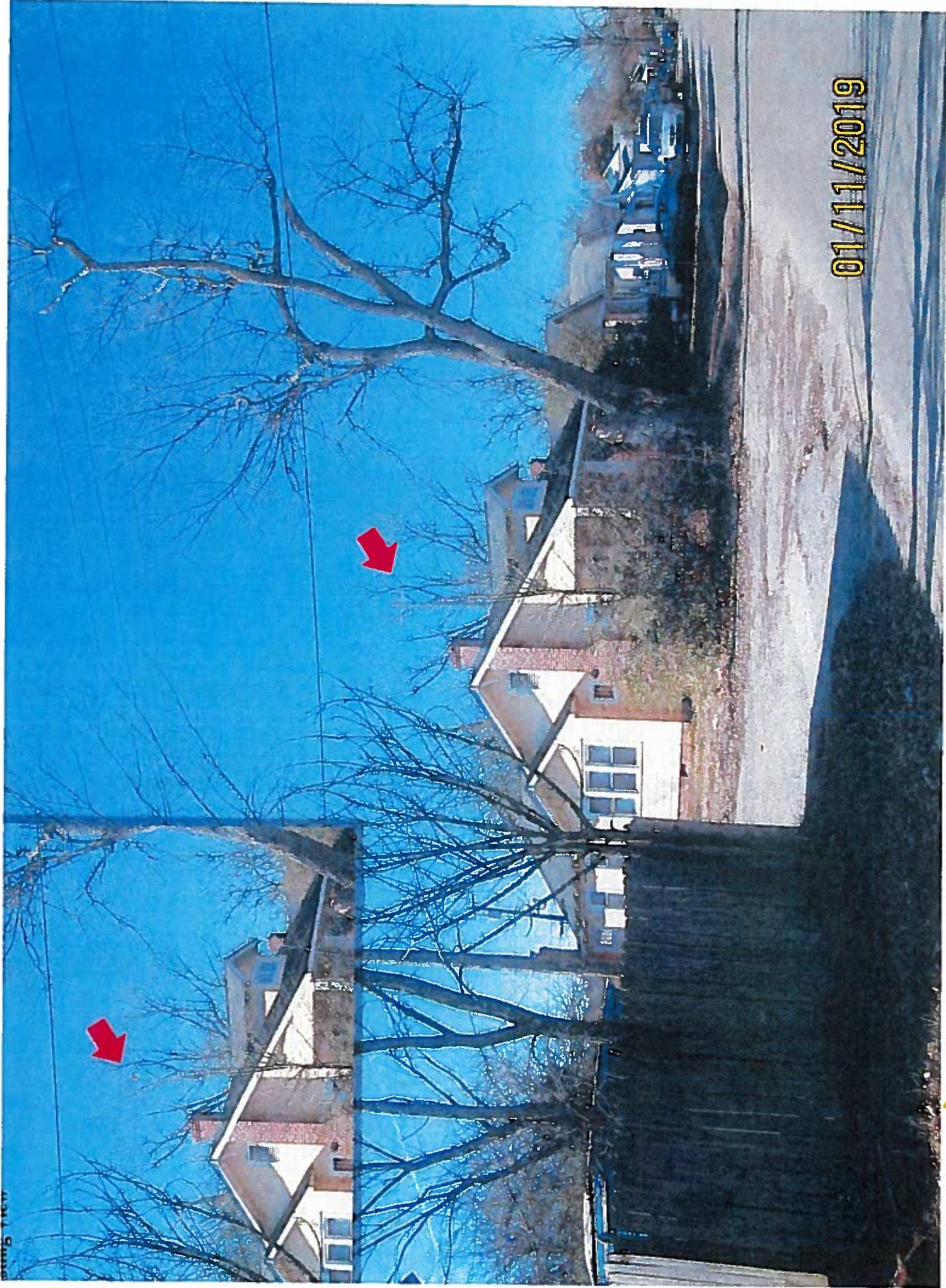
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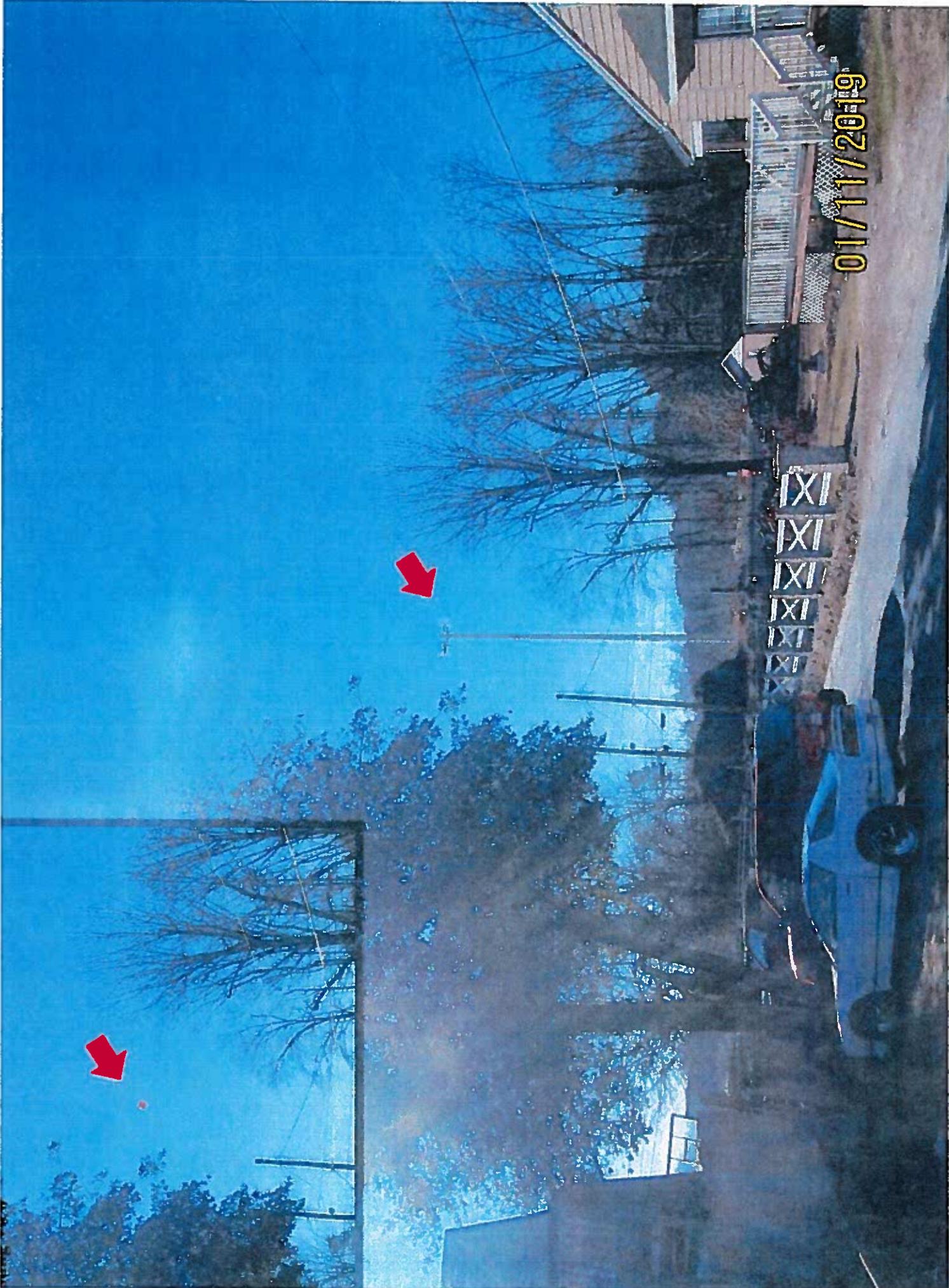
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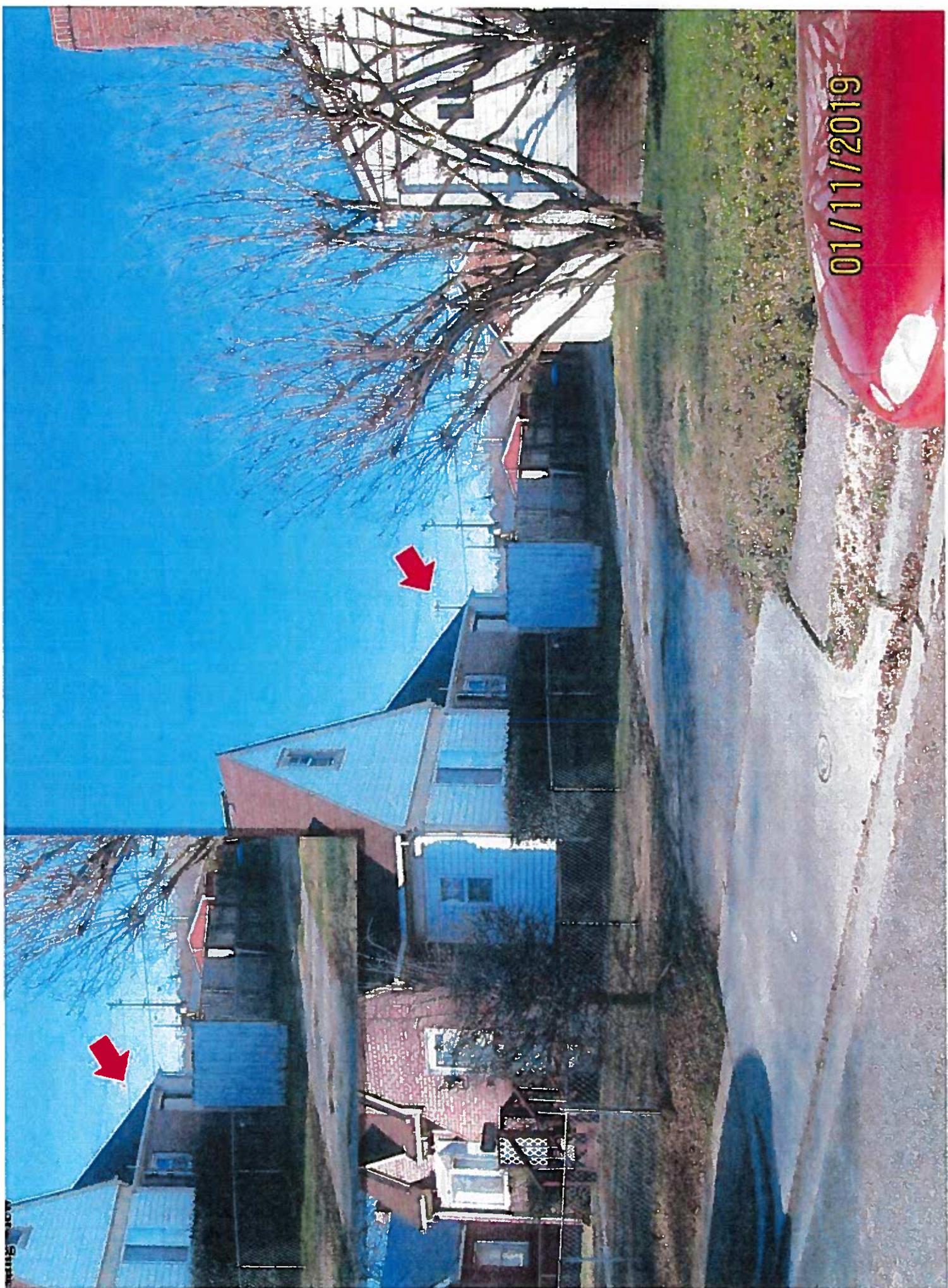
190'-0" Monopole Tower w/ 4' Lightning Rod - Visible

VA - Richmond - Jefferson Davis Hw





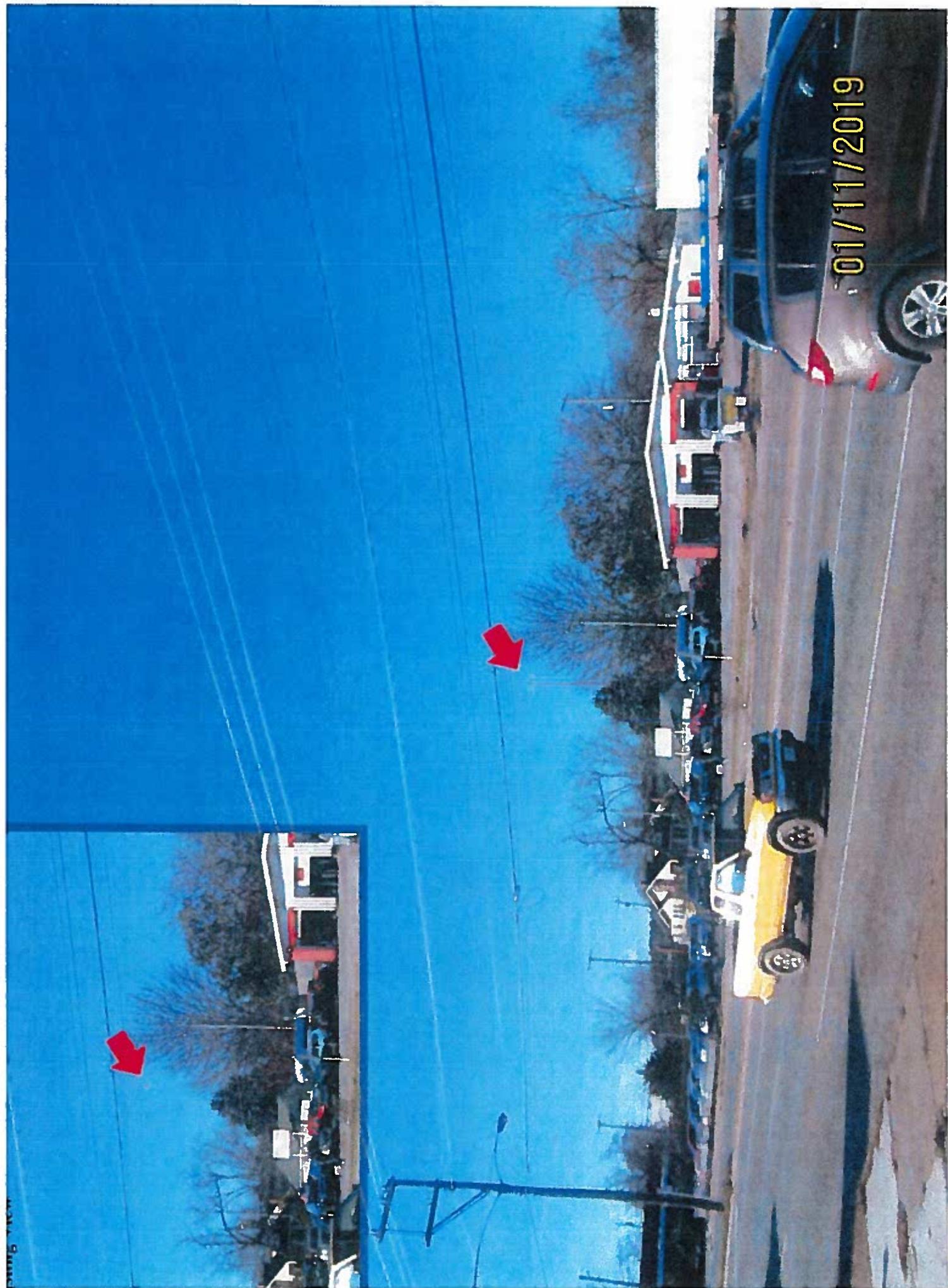




190'-0" Monopole Tower w/ 4' Lightning Rod - Visible

VA - Richmond - Jefferson Davis Hw

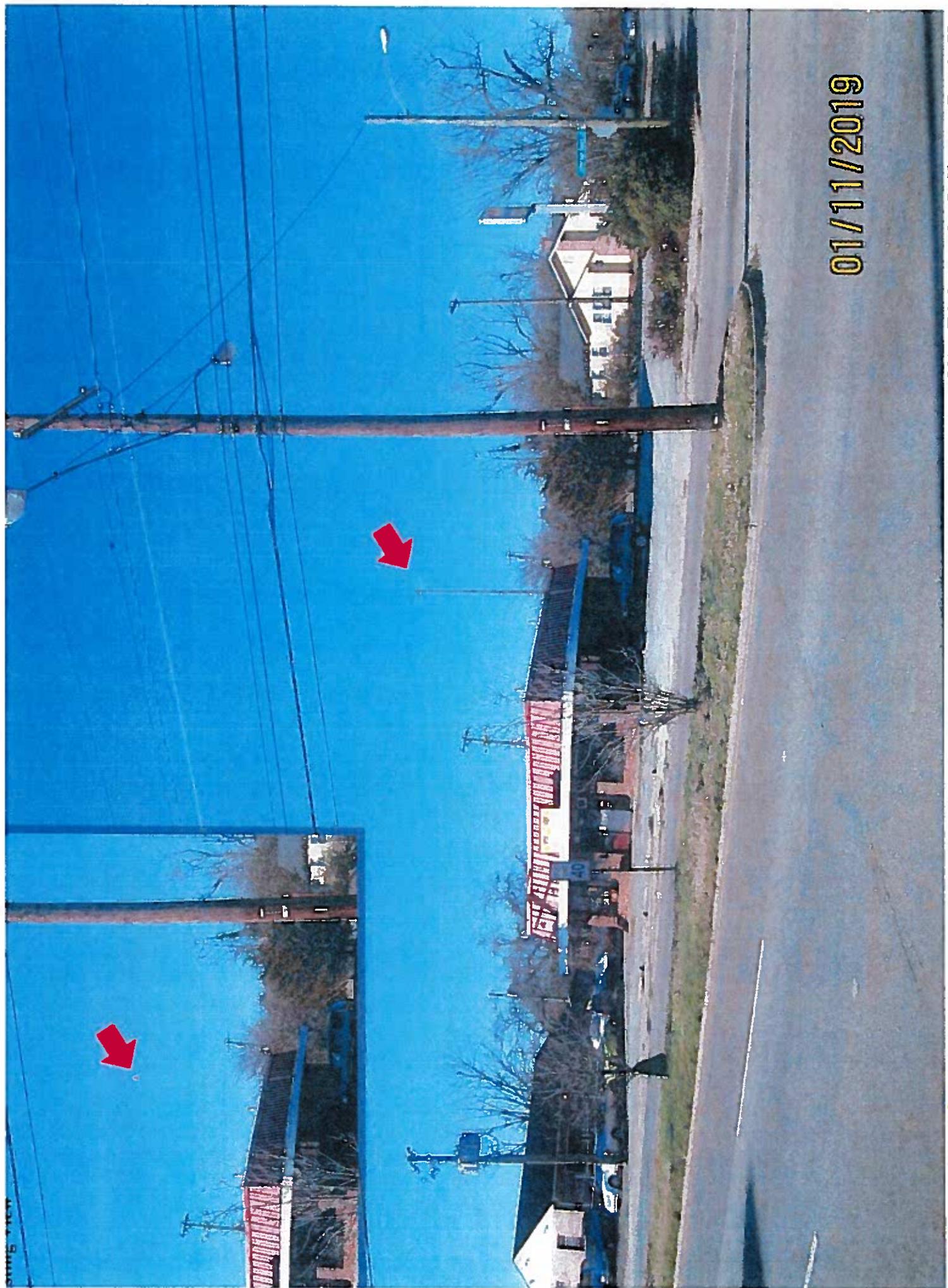




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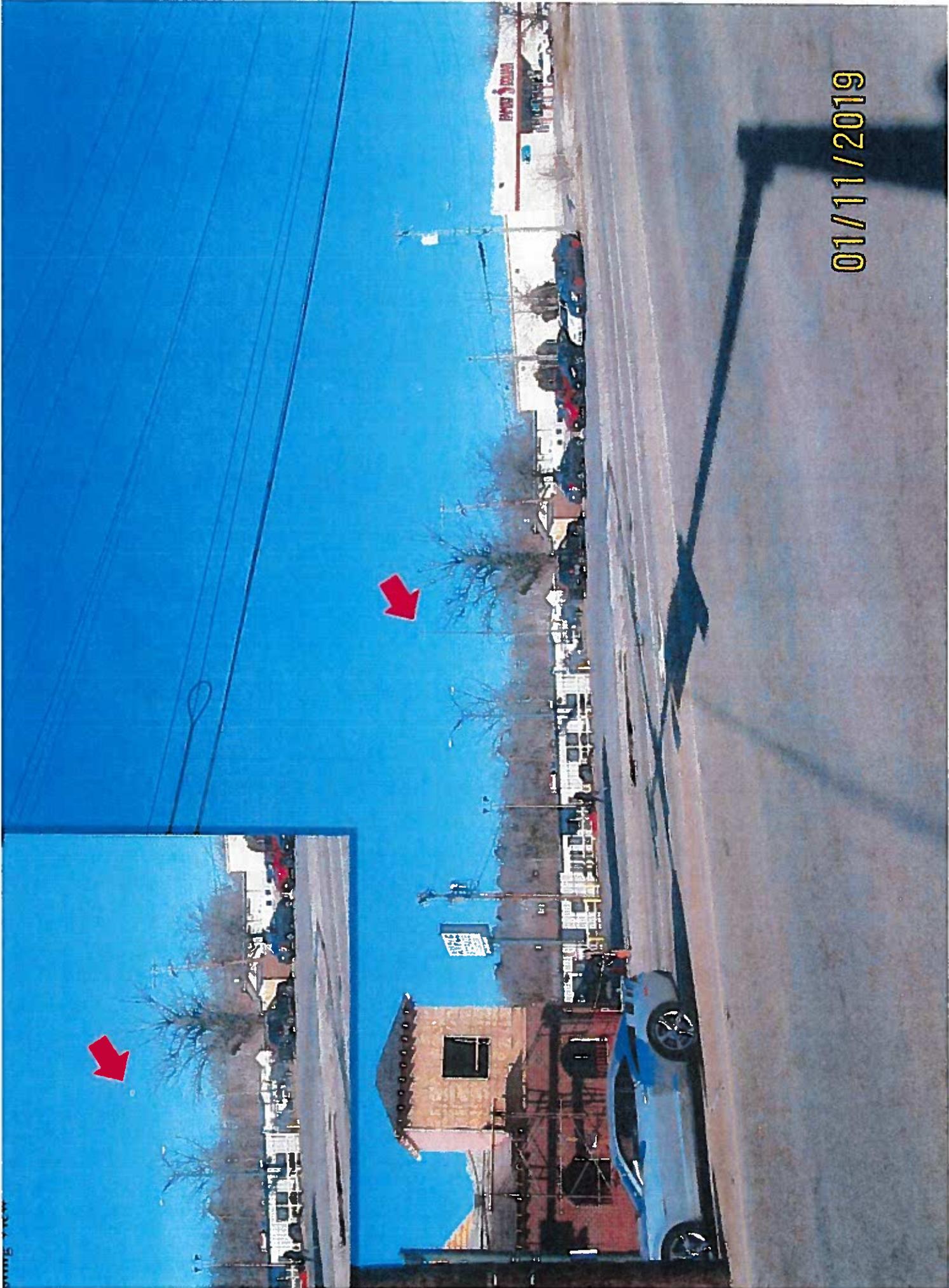
190'-0" Monopole Tower w/ 4' Lightning Rod - Visible

VA - Richmond - Jefferson Davis Hw

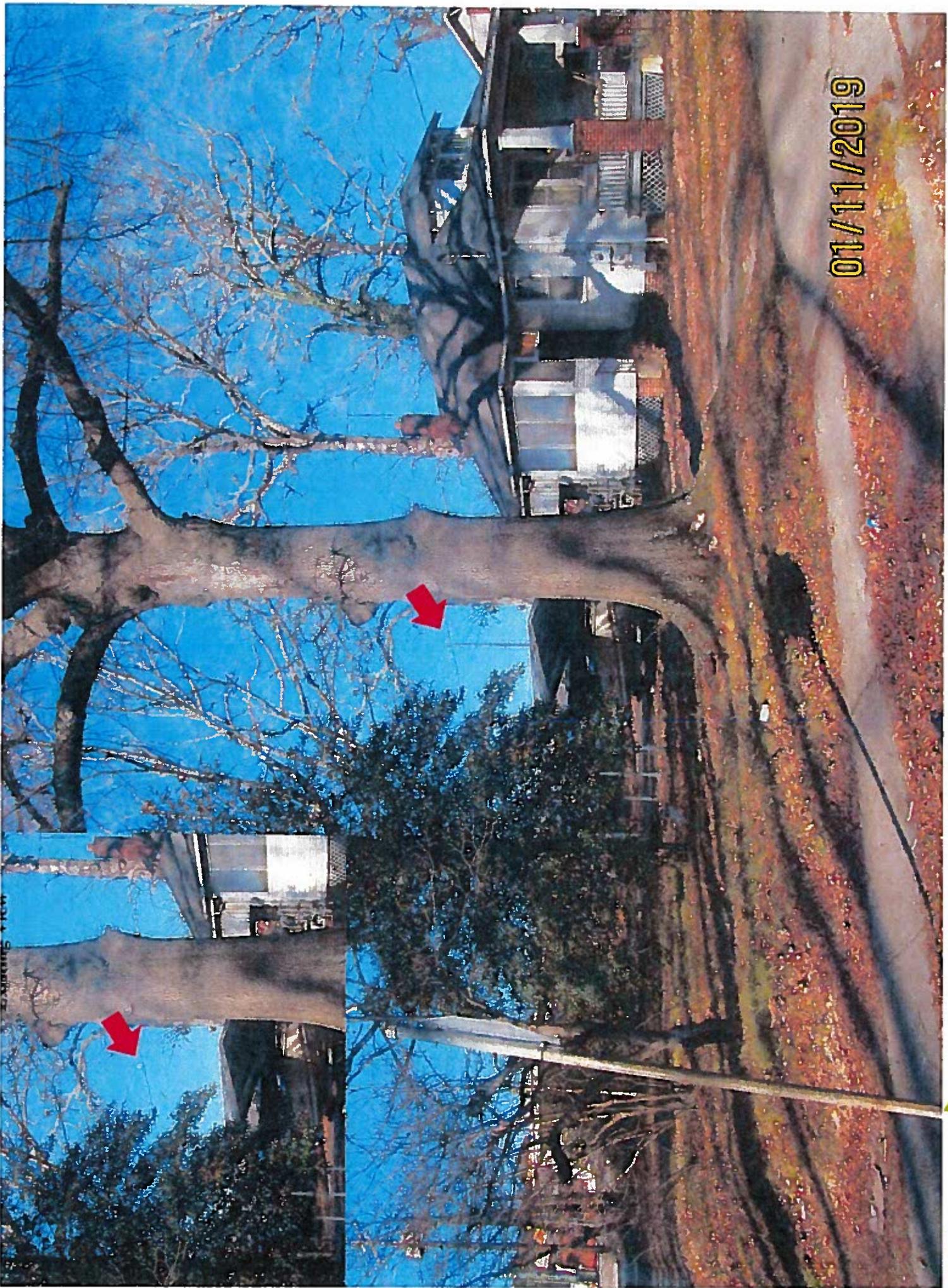


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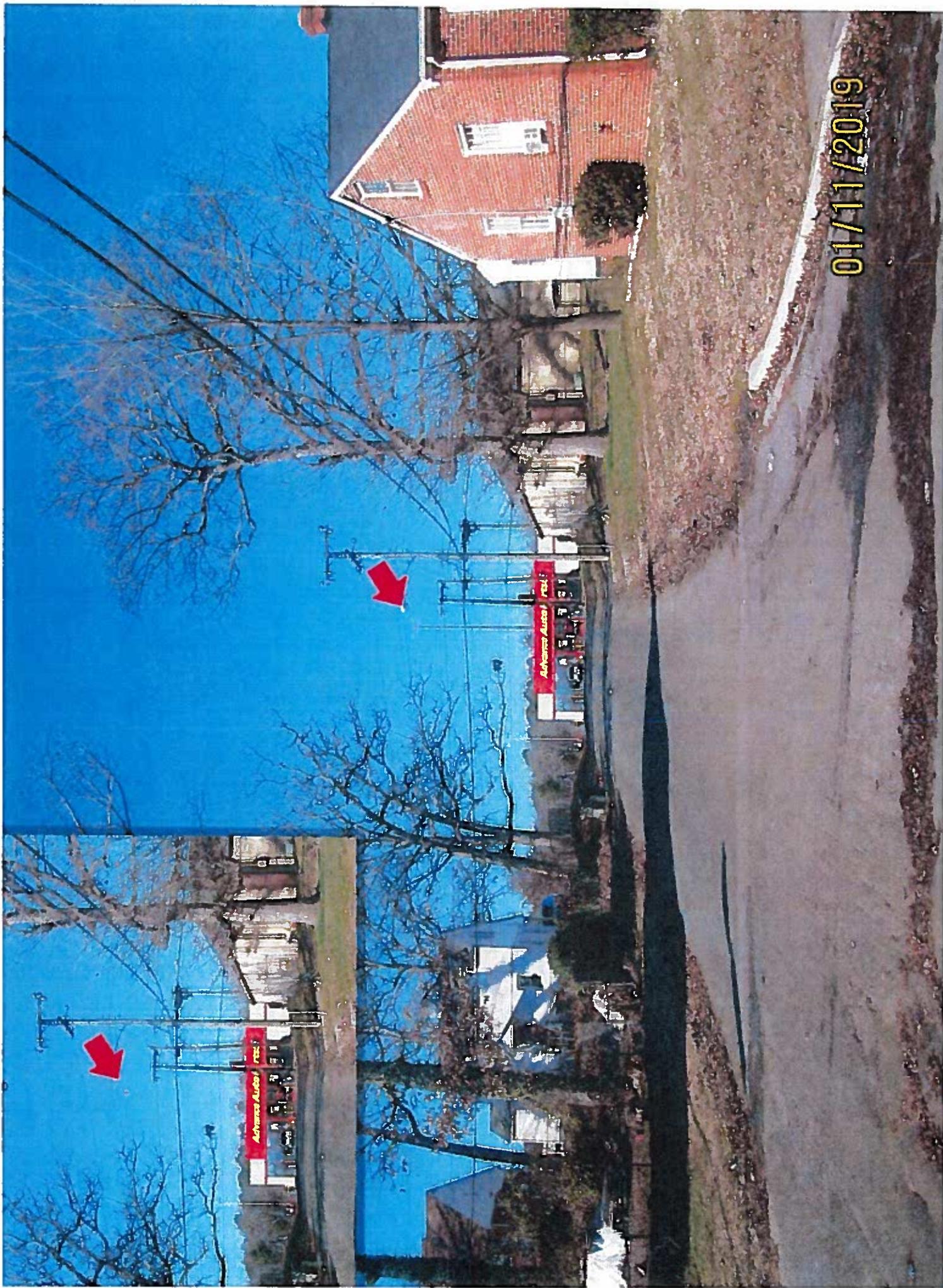




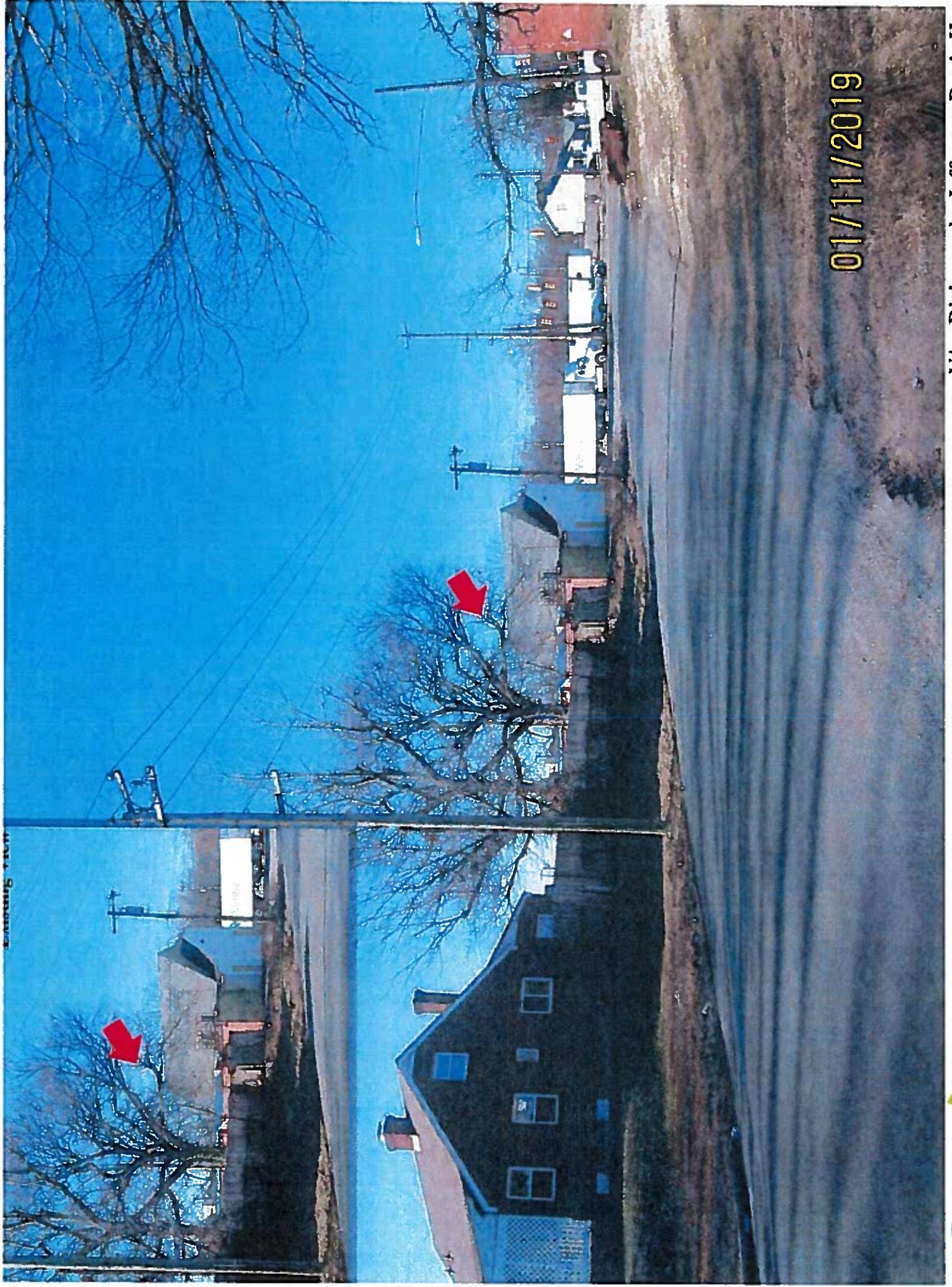
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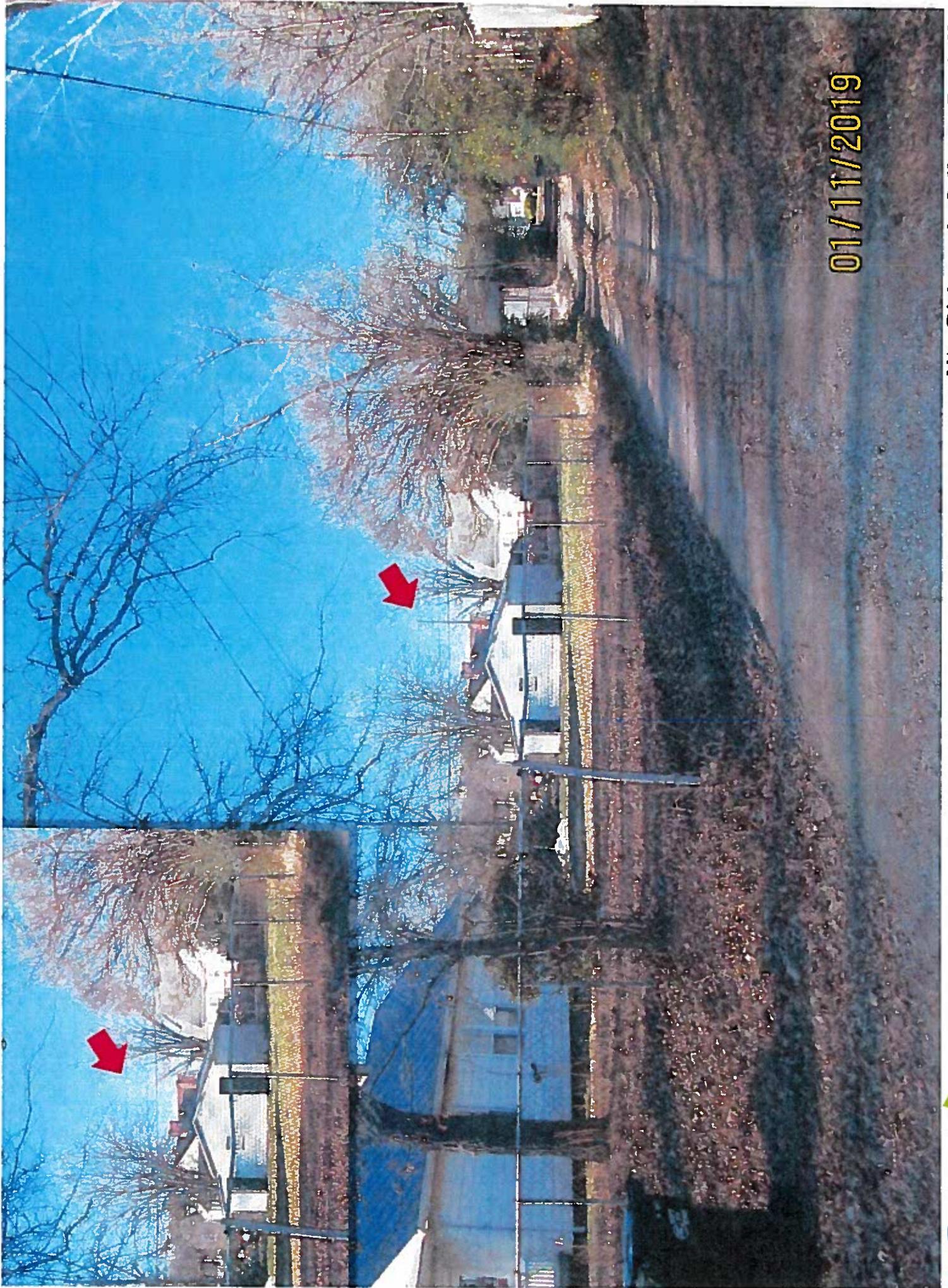
LA00016 7 12 W

VA - Richmond - Jefferson Davis Hw

190'-0" Monopole Tower w/ 4' Lightning Rod - Visible



3C



01/11/2019



a r c h i t e c t s  
e n g i n e e r s

January 30, 2019

Alejandra Stinson  
PI Tower Development, LLC c/o LendLease  
2320 Cascade Point Blvd., Suite 300  
Charlotte, NC 28208

Re: Parallel Site Name/Number: VA-Richmond-Jefferson Davis Hwy Capital Garage – PIVA068  
Site Address: 3022 Jefferson Davis Highway, Richmond, VA 23234

BC Architects Engineers, PLC has been commissioned to review the potential risk or hazard of RF or electromagnetic exposure which would result from the Parallel/T-Mobile installation located in the City of Richmond, Virginia.

Per FCC regulations regarding Human Exposure and Electromagnetic Radiation levels, the limit for prolonged, extended, or continuous exposure to RF at PCS frequencies is set at 1,000 microwatts per square centimeter for public applications. This value represents the amount of power in microwatts, which reaches a surface area of one square centimeter. The FCC limit is the most stringent of limits established by public and professional organizations and has the highest margin of safety of all limits. In establishing these limits, standards bodies add significant safety margins such that systems could operate at the limit. This is done to ensure public safety.

RF exposure levels for the T-Mobile installation with a typical 3-sector facility will approximately 3.6 microwatts per square centimeter ( $mW/cm^2$ ) at a distance of 185' from the antennas. This distance corresponds to the center height of T-Mobile's antennas. This is the closest distance to the antennas where the public would be exposed to the highest levels of RF energy. At this distance, the RF levels are 271 times below the FCC regulated limits for RF exposure of approximately 1,000 microwatts per square centimeter.

Electromagnetic energy at PCS frequencies is in the Non-Ionizing Electromagnetic Radiation (NIER) range. Ionizing frequency ranges damage human tissue. Non-ionizing frequency ranges do not damage human tissue.

Thousands of extensive studies have been conducted on exposure to RF energy. To date, no studies have indicated that PCS frequencies have a detrimental effect on human health. The results of these studies are public knowledge and are independent of T-Mobile and any other wireless carrier's own interests.



a r c h i t e c t s  
e n g i n e e r s

The Telecommunications Act of 1996 stipulates that RF exposure and safety is a non-issue at PCS frequencies and power levels. Further, the FCC website states the following:

*"Calculations corresponding to a "worst-case" situation (all transmitters operating simultaneously and continuously at the maximum licensed power) show that, in order to be exposed to RF levels near the FCC's guidelines, an individual would essentially have to remain in the main transmitting beam and within a few feet of the antenna for several minutes or longer. Thus, the possibility that a member of the general public could be exposed to RF levels in excess of the FCC guidelines is extremely remote."<sup>1</sup>*

In conclusion, the T-Mobile installation does not represent an increased health risk to the immediate community. Furthermore, the T-Mobile installation will operate at 1000 times below the most stringent of RF safety limits for public exposure and meets FCC requirements regarding RF exposure and safety.

Sincerely,

Christopher D. Morin, PE  
Principal Member of BC Architects Engineers, PLC



<sup>1</sup> Source = <http://www.fcc.gov/egb/consumerfacts/rfexposure.html>