

March 15, 2013

Mr. Scott Rozanas
Business Development Director
City of Rochelle
420 North 6th Street
Rochelle, IL 61068

RE: City of Rochelle Quiet Zone Analysis

Dear Scott,

Please accept this executive summary which identifies potential conflicts associated with the implementation and installation of channelization devices at the eleven (11) at-grade railroad crossings and the two (2) pedestrian crossings as detailed below. This summary is in conjunction with the prepared crossing exhibits (11 sheets) which provide additional details of each crossing.

15th Street - BNSF DOT No. 069803B

- Discussion with property owner (24-23-476-003) regarding closure of access point
- Discussion with property owner (24-23-452-005) regarding closure of access point
- Review geometrics of 15th Street / Lincoln Avenue with IDOT and City Engineer
- Consider quad gates or wayside horns as alternatives to channelization

1st Avenue / Jack Dame Road - UPRR DOT No. 175123V

- Discussion with property owner (24-23-484-001) regarding closure of access point
- Channelization potential option with property owner cooperation

9th Street - BNSF DOT No. 069801M

- Discussion with RMU regarding closure of south access point to electric operations facility
- Discussion with City of Rochelle regarding eliminating or relocating entrance to property (24-24-362-003)
- Channelization potential option with RMU and City of Rochelle cooperation

9th Street - UPRR DOT No. 175122N

- Discussion with UPRR regarding closure of access point
- Discussion with RMU regarding closure of access point to electric operations overhead door
- Discussion with City of Rochelle regarding relocating Rail Fan Park access point
- Channelization potential option with RMU, City of Rochelle and BNSF cooperation

Washington Street - UPRR DOT No. 175120A

- Discussion with property owner (24-24-382-017) and UPRR regarding relocating access point
- Discussion with UPRR regarding eliminating southern access points
- Channelization potential option with property owner and UPRR cooperation

Washington Street - BNSF DOT No. 069799N

- Discussion with BNSF regarding closure of north and south access points
- Discussion with property owner (24-24-389-004) regarding relocating access point
- Channelization potential option with property owner and BNSF cooperation

Main Street - UPRR DOT No. 175119F

- Discussion with UPRR regarding closure of all north and south access points
- Channelization potential option with UPRR cooperation

Main Street - BNSF DOT No. 069798G

- Discussion with BNSF regarding closure of north access points
- Discussion with property owner (24-24-394-002) regarding closure of access point
- Discussion with property owners (24-24-393-004/006) regarding modifying access point
- Channelization potential option with property owner and BNSF cooperation

1st Avenue - BNSF DOT No. 069797A

- Realignment of Popular Street to accommodate truck movements, geometrics of intersection are not ideal
- Acquisition of property from land owner (24-25-227-001) and Flagg-Rochelle Park District
- Discussion with BNSF regarding relocating or closure of access points
- Consider quad gates or wayside horns as alternatives to channelization

Caron Road - UPRR DOT No. 176396T

- Channelization potential option

Steam Plant Road - BNSF DOT No. 069796T

- Due to geometrics of intersection, quad gates or wayside horns are the only alternatives for this crossing
- Permanent closure of this crossing could be considered

7th Street Pedestrian Crossings - UPRR and BNSF

- Permanent closure of these un-signalized pedestrian crossings

As the above demonstrates, there are numerous conflicts requiring the modification or elimination of cross streets and commercial/industrial access points. With cooperation from the adjacent property owners and the two Class I railroads, channelization could be implemented on eight (8) of the crossings meeting the criteria for establishing a quiet zone as determined by the Federal Railroad Administration (FRA). Three (3) of the crossings involve complex truck route intersections and the improvements necessary for the implementation of channelization appear to be capital intensive or simply not feasible. For these three crossings, alternative Supplemental Safety Measures (SSM) should be considered including the installation of wayside horns or quad gates.

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The estimated cost for the above-described quiet zone improvements is \$850,000 to \$1,500,000 depending upon the chosen SSM at each crossing. These costs can be refined once the implementation plan is prepared and approved by all agencies. The above figures should be used as preliminary budgetary values only and the actual cost may vary substantially from those estimated herein.

Should the City believe it in their best interest to further advance the feasibility of the implementation of a Quiet Zone, it is our opinion that conversations with the Class I Railroads, as well as the various property owners should be initiated to better determine and quantify the improvements necessary for implementation.

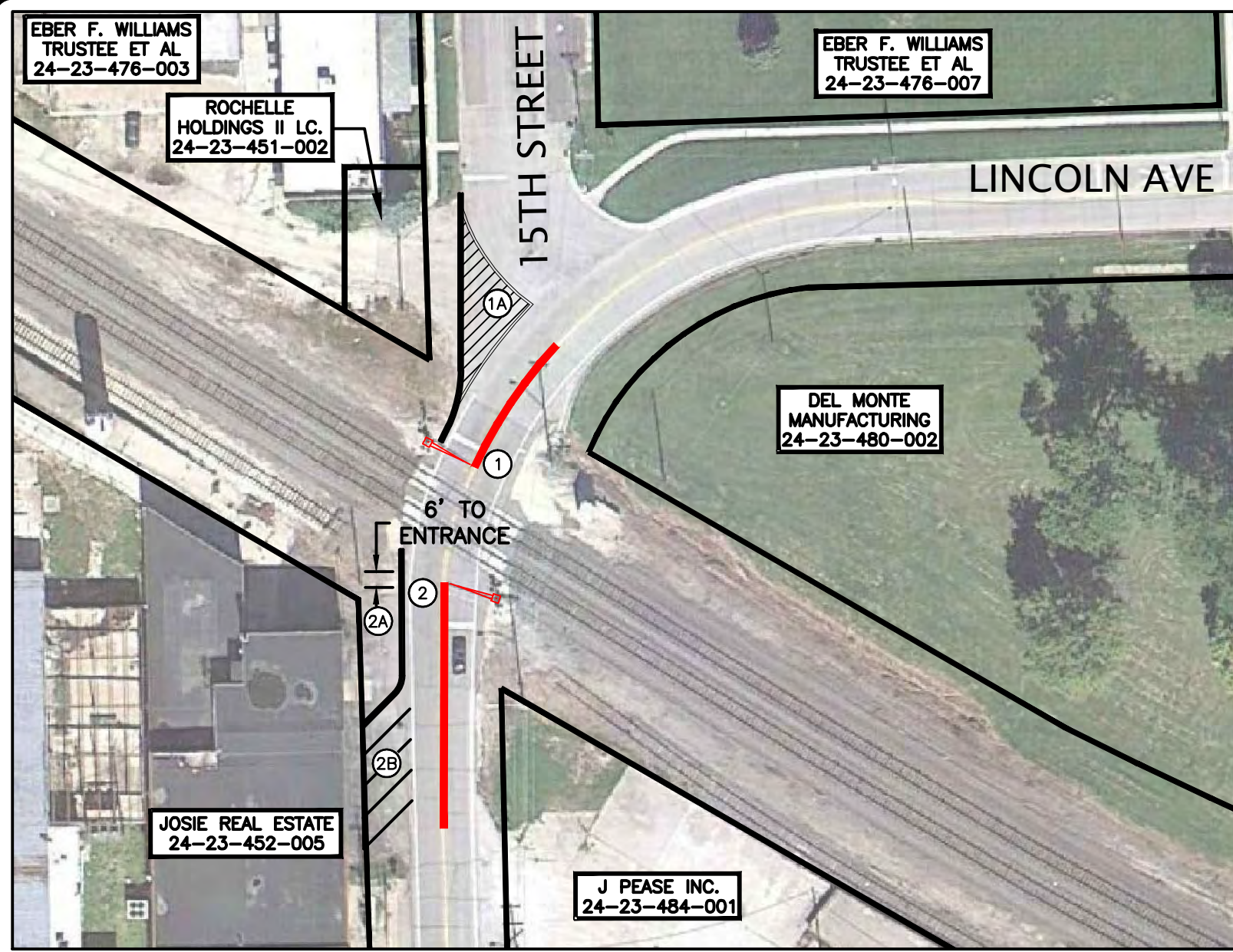
I trust the information provided herein is in line with your expectations. Please contact me with any questions or concerns associated with this project or to discuss the next steps in moving forward.

Respectfully,

A handwritten signature in black ink, appearing to read "Noah Carmichael". The signature is fluid and cursive, with the first name "Noah" and last name "Carmichael" clearly distinguishable.

Noah J. Carmichael, PE
Branch Manager

NJC:rfs



15TH STREET - BNSF DOT NO. 069803B

LEGEND

- PROPERTY LINE
- CHANNELIZATION STARTING AT MECHANICAL GATES
- PROPOSED CURB & GUTTER

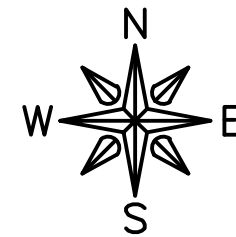
TREATMENT OPTION FOR 15TH STREET AT BNSF	ESTIMATED COST
CHANNELIZATION	\$15,000

POTENTIAL CONFLICT	PROPOSED SOLUTION	ESTIMATED COST
①A 15TH STREET	ELIMINATE ENTRANCE AND REDIRECT 15TH STREET WITH CURBING AND MOUNTABLE ISLAND	\$25,000
②A COMMERCIAL ENTRANCE	COMMERCIAL VEHICLES UTILIZE THIS ENTRANCE TO ACCESS BULK STORAGE TANKS. ALTERNATE ACCESS MUST BE PROVIDED.	N/A
②B COMMERCIAL PARKING	CURBING AND PAINT 45° ANGLE PARKING	\$5,000

ALTERNATE SOLUTION	FOUR QUADRANT GATE SYSTEM	\$250,000
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○ **KEY NOTES**

1. 60' CHANNELIZATION DEVICES
2. 100' CHANNELIZATION DEVICES

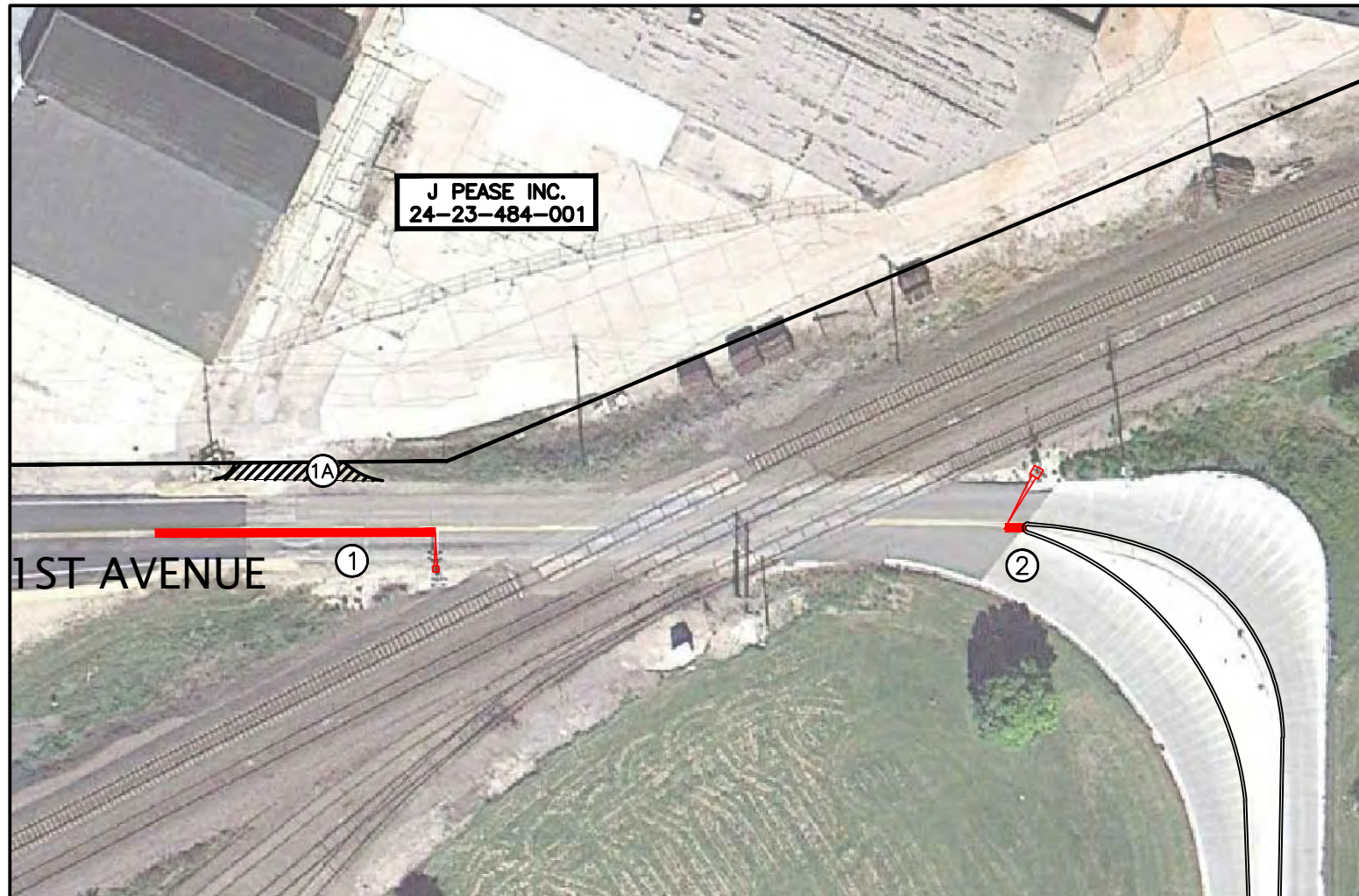


QUIET ZONE IMPROVEMENT
CITY OF ROCHELLE
SHEET 1 OF 11

3/12/13


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1ST AVENUE – UPRR DOT NO. 175123V

LEGEND

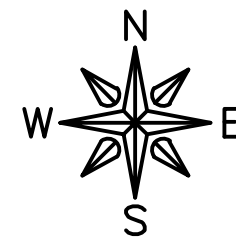
- PROPERTY LINE
-  CHANNELIZATION STARTING AT MECHANICAL GATES
- EXISTING RAISED MEDIAN

<u>TREATMENT OPTION FOR 1ST AVENUE AT UPRR</u>	<u>ESTIMATED COST</u>
CHANNELIZATION	\$15,000

<u>POTENTIAL CONFLICT</u>	<u>PROPOSED SOLUTION</u>	<u>ESTIMATED COST</u>
①A COMMERCIAL ENTRANCE	REMOVAL OF ENTRANCE	\$1,500

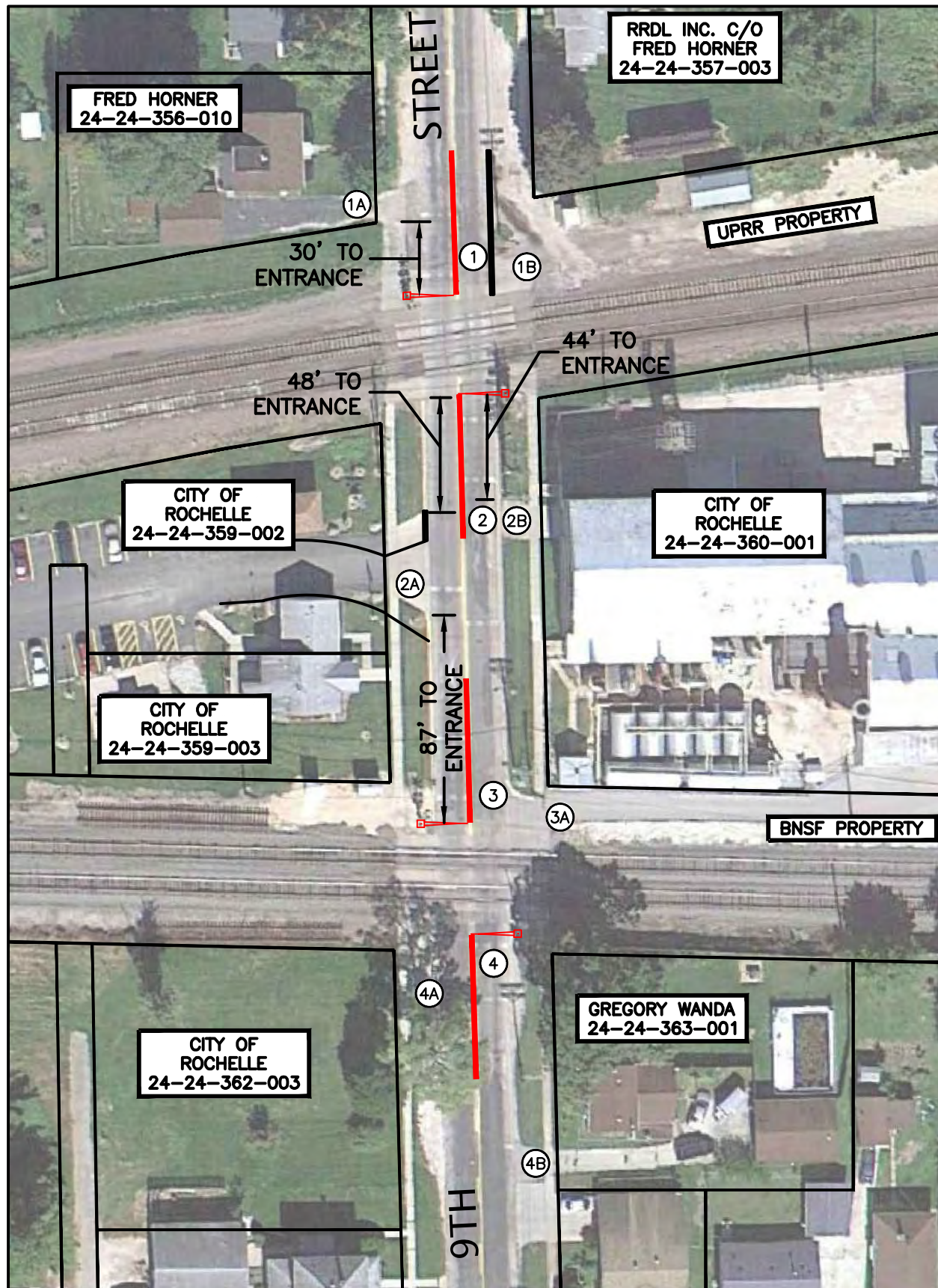
○ **KEY NOTES**

1. 100' CHANNELIZATION DEVICES
2. 7' CHANNELIZATION DEVICES



QUIET ZONE IMPROVEMENT
CITY OF ROCHELLE
SHEET 2 OF 11

3/12/13



9TH STREET
BNSF DOT NO. 069801M & UPRR NO. 175122N

G:\EGLPT\12\12-575\12-575 Exhibit 9th St.dwg, 9th Street UPRR & BNSF

TREATMENT OPTION FOR 9TH STREET	ESTIMATED COST
UPRR CHANNELIZATION (175122N)	\$15,000
BNSF CHANNELIZATION (069801M)	\$15,000

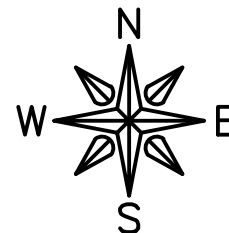
POTENTIAL CONFLICT	PROPOSED SOLUTION	ESTIMATED COST
①A PRIVATE ENTRANCE	RIGHT IN / RIGHT OUT ONLY	N/A
①B UPRR PROPERTY	ELIMINATE ACCESS OR REQUEST FRA VARIANCE	\$2,500
②A PARK ENTRANCE	RECONFIGURE ENTRANCE	\$7,500
②B COMMERCIAL ENTRANCE	ELIMINATE ENTRANCE OR REQUEST FRA VARIANCE	\$2,500
③A RMU ENTRANCE	ELIMINATE ENTRANCE OR REQUEST FRA VARIANCE	\$5,000
④A 24-24-362-003 PROPERTY	ELIMINATE ENTRANCE (ALLEY ACCESS ONLY)	\$1,500
④B PRIVATE ENTRANCE	NO IMPACT	N/A

LEGEND

- PROPERTY LINE
- CHANNELIZATION STARTING AT MECHANICAL GATES
- PROPOSED CURB & GUTTER

○ KEY NOTES

1. 60' CHANNELIZATION DEVICES
2. 60' CHANNELIZATION DEVICES
3. 60' CHANNELIZATION DEVICES
4. 60' CHANNELIZATION DEVICES



QUIET ZONE IMPROVEMENT
CITY OF ROCHELLE
SHEET 3 OF 11

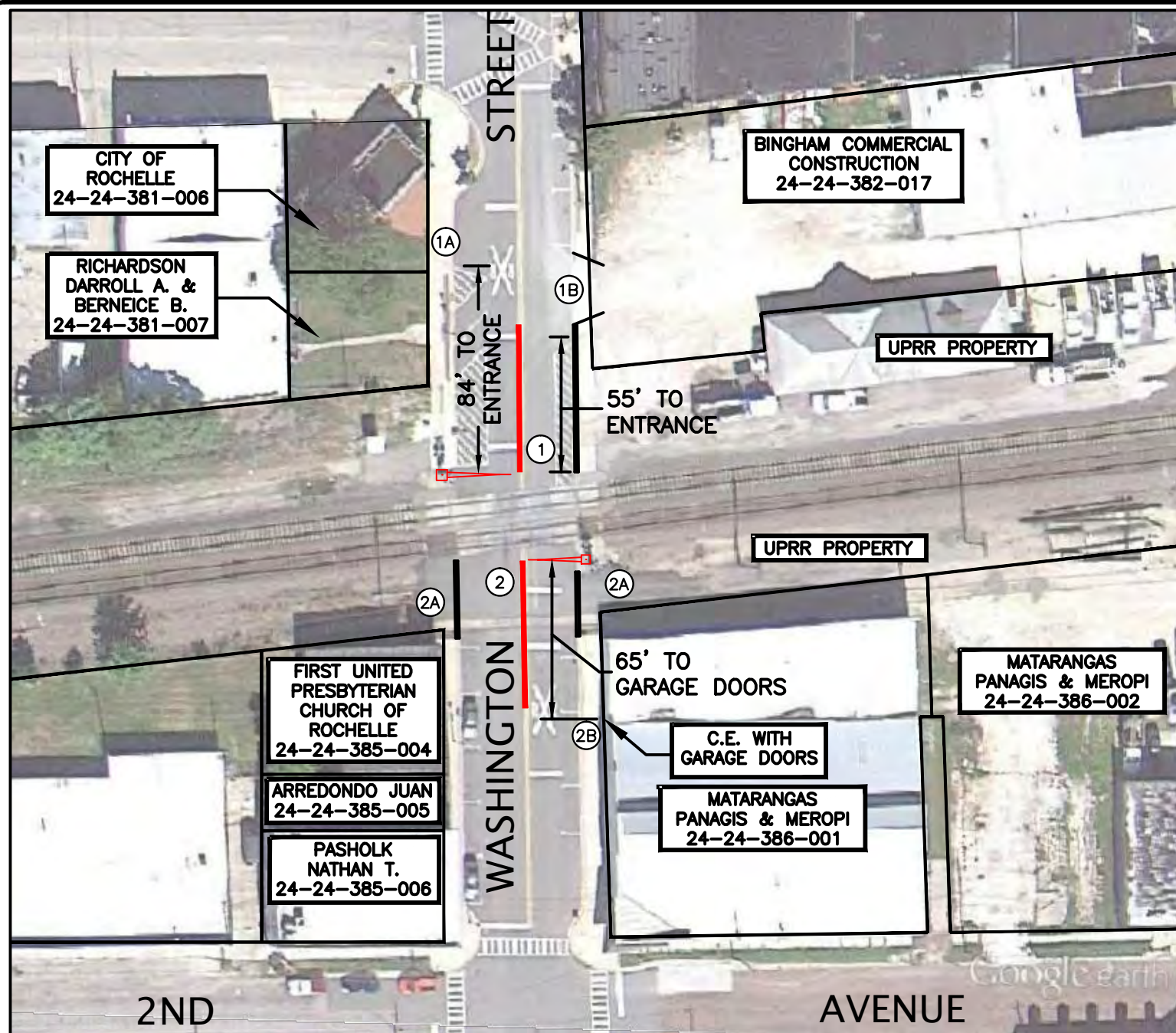
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WASHINGTON STREET - UPRR DOT NO. 175120A

TREATMENT OPTION FOR WASHINGTON STREET AT UPRR	ESTIMATED COST
CHANNELIZATION	\$15,000

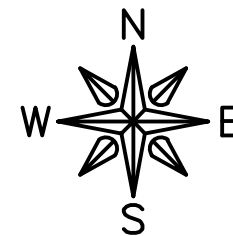
POTENTIAL CONFLICT	PROPOSED SOLUTION	ESTIMATED COST
①A COMMERCIAL ENTRANCE	NO IMPACT	N/A
①B COMERCIAL ENTRANCE	MODIFY ENTRANCE	\$7,500
②A UPRR PROPERTY	ELIMINATE ACCESS OR REQUEST FRA VARIANCE	\$2,500
②B 24-24-386-001	NO IMPACT	N/A

○ **KEY NOTES**

- 60' CHANNELIZATION DEVICES
- 60' CHANNELIZATION DEVICES

LEGEND

- PROPERTY LINE
- CHANNELIZATION STARTING AT MECHANICAL GATES
- PROPOSED CURB & GUTTER

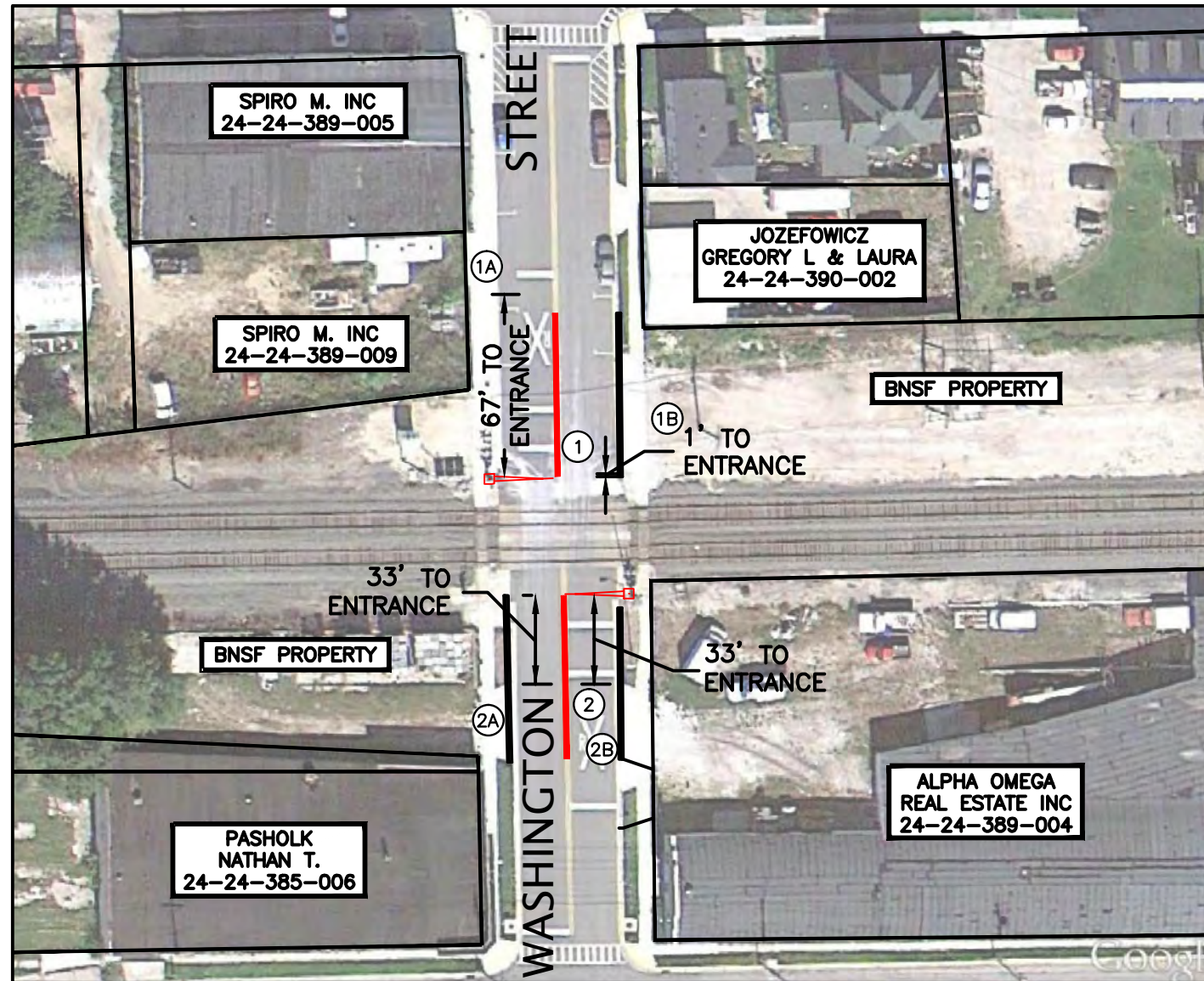


QUIET ZONE IMPROVEMENT
CITY OF ROCHELLE
SHEET 4 OF 11

2/27/13

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<u>TREATMENT OPTION FOR WASHINGTON STREET AT BNSF</u>	<u>ESTIMATED COST</u>
CHANNELIZATION	\$15,000

<u>POTENTIAL CONFLICT</u>	<u>PROPOSED SOLUTION</u>	<u>ESTIMATED COST</u>
①A COMMERCIAL ENTERANCE	NO IMPACT	N/A
①B BNSF PROPERTY	ELIMINATE ENTRANCE OR REQUEST FRA VARIANCE	\$2,500
②A BNSF PROPERTY	ELIMINATE ENTRANCE OR REQUEST FRA VARIANCE	\$2,500
②B COMMERCIAL ENTERANCE	MODIFY ENTRANCE	\$5,000

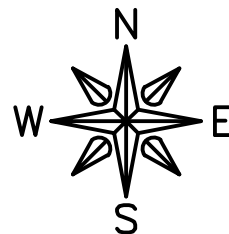
○ **KEY NOTES**

- 60' CHANNELIZATION DEVICES
- 60' CHANNELIZATION DEVICES

WASHINGTON STREET – BNSF DOT NO. 069799N

LEGEND

- PROPERTY LINE
- CHANNELIZATION STARTING AT MECHANICAL GATES

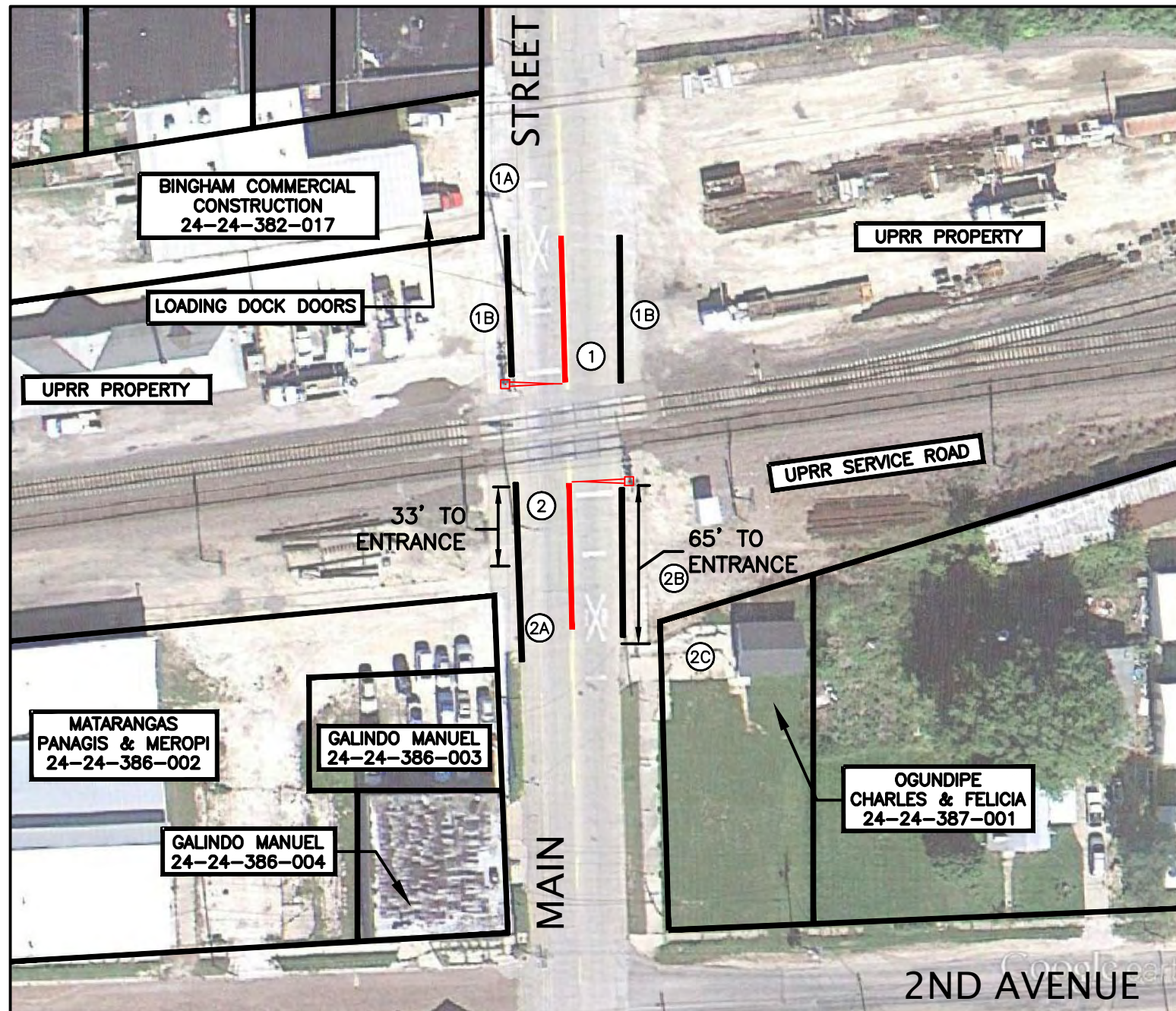


QUIET ZONE IMPROVEMENT
CITY OF ROCHELLE
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3/12/13

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MAIN STREET - UPRR DOT NO. 175119F

LEGEND

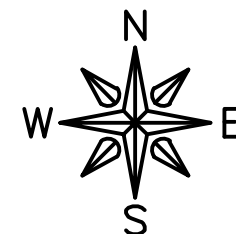
- PROPERTY LINE
- CHANNELIZATION STARTING AT MECHANICAL GATES
- PROPOSED CURB & GUTTER

TREATMENT OPTION FOR MAIN STREET AT UPRR	ESTIMATED COST
CHANNELIZATION	\$15,000

POTENTIAL CONFLICT	PROPOSED SOLUTION	ESTIMATED COST
①A COMMERCIAL ENTRANCE	NO IMPACT	N/A
①B UPRR PROPERTY	ELIMINATE ACCESS OR REQUEST FRA VARIANCE	\$5,000
②A COMMERCIAL ENTRANCE	ELIMINATE ACCESS (ABLE TO BE ACCESSED OFF OF 2ND AVE)	\$2,500
②B UPRR PROPERTY	ELIMINATE ACCESS OR REQUEST FRA VARIANCE	\$2,500
②C PRIVATE ENTRANCE	NO IMPACT	N/A

○ **KEY NOTES**

1. 60' CHANNELIZATION DEVICES
2. 60' CHANNELIZATION DEVICES

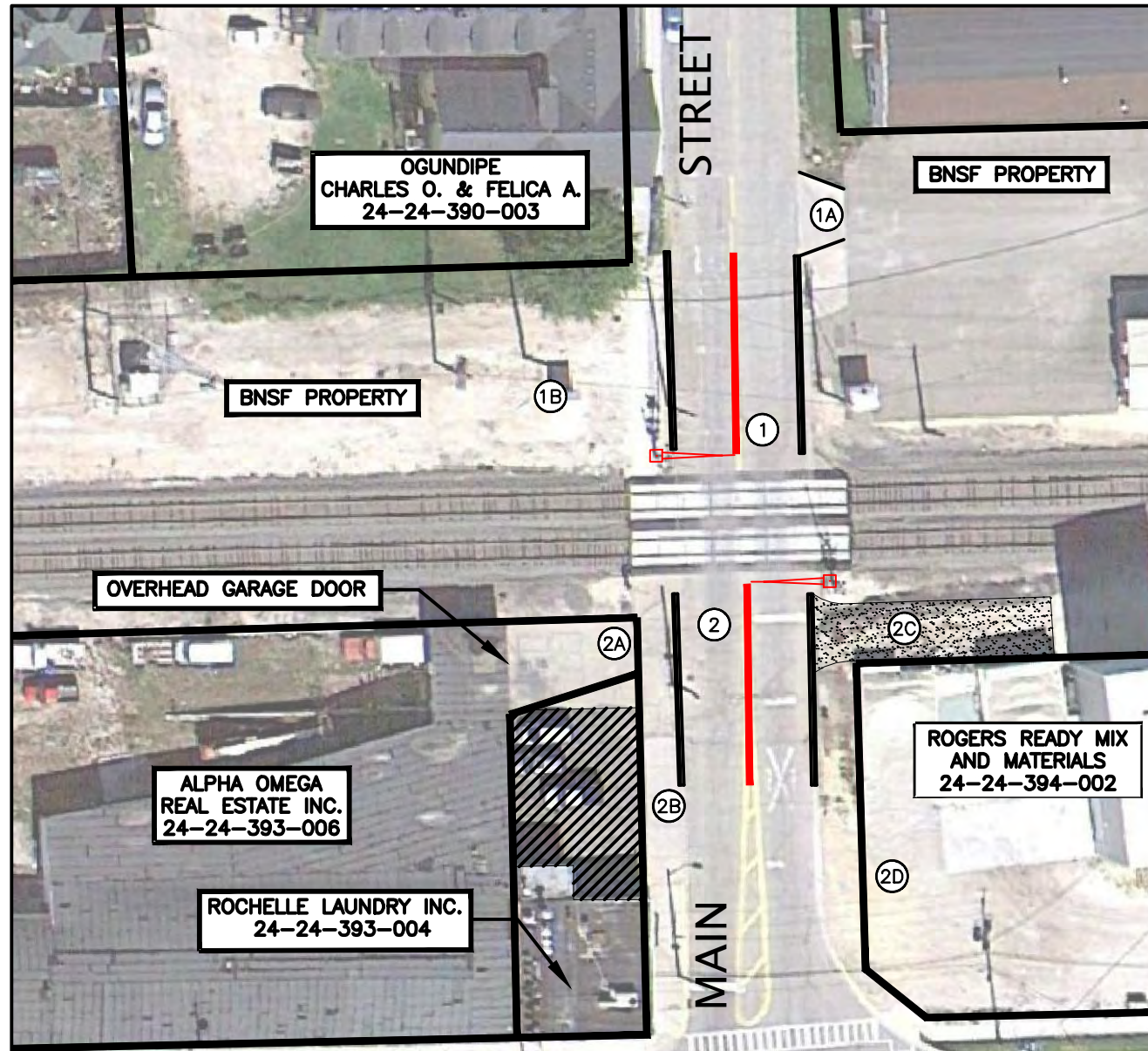


QUIET ZONE IMPROVEMENT
CITY OF ROCHELLE
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MAIN STREET – BNSF DOT NO. 069798G

LEGEND

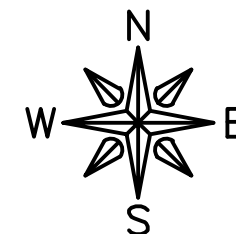
- PROPERTY LINE
- ▨ BITUMINOUS PARKING
- └─ CHANNELIZATION STARTING AT MECHANICAL GATES
- ▤ GRAVEL DRIVEWAY
- PROPOSED CURB & GUTTER

<u>TREATMENT OPTION FOR MAIN STREET AT BNSF</u>	<u>ESTIMATED COST</u>
CHANNELIZATION	\$15,000

<u>POTENTIAL CONFLICT</u>	<u>PROPOSED SOLUTION</u>	<u>ESTIMATED COST</u>
①A COMMERCIAL ENTRANCE	ADD CURBING AND REDUCE SIZE ON ENTRANCE	\$5,000
①B BNSF PROPERTY	ELIMINATE ACCESS OR REQUEST FRA VARIANCE	\$2,500
②A COMMERCIAL ENTRANCE	REMOVAL OF ENTRANCE – ADDING CURB AND GUTTER WOULD ENCOURAGE PROPER TRAFFIC FLOW AND DETER MOTORIST FROM USING GRAVEL AREA TO ENTER ROADWAY AHEAD OF CHANNELIZED DEVICES. CAN ACCESS AREA FROM BITUMINOUS PARKING LOT.	\$2,500
②B BITUMINOUS PARKING	NO IMPACT	N/A
②C COMMERCIAL ENTRANCE	REMOVAL OF ENTRANCE – ADDING CURB AND GUTTER WOULD ENCOURAGE PROPER TRAFFIC FLOW AND DETER MOTORIST FROM USING GRAVEL AREA TO ENTER ROADWAY AHEAD OF CHANNELIZED DEVICES.	\$2,500
②D COMMERCIAL ENTRANCE	NO IMPACT	N/A

○ **KEY NOTES**

1. 60' CHANNELIZATION DEVICES
2. 60' CHANNELIZATION DEVICES

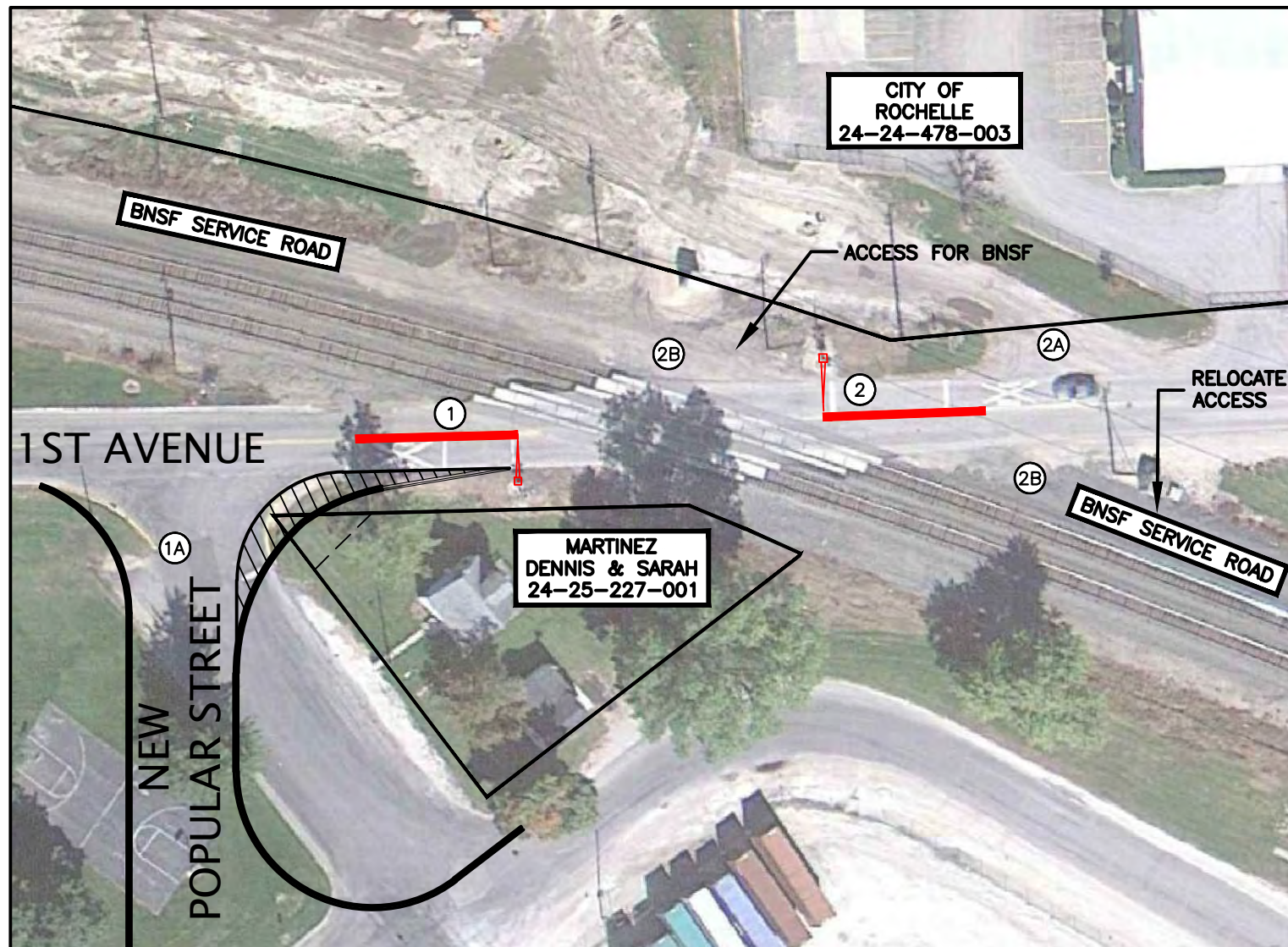


QUIET ZONE IMPROVEMENT
CITY OF ROCHELLE
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1ST AVENUE - BNSF DOT NO. 069797A

LEGEND

- PROPERTY LINE
-  CHANNELIZATION STARTING AT MECHANICAL GATES
- PROPOSED REALIGNED POPULAR STREET

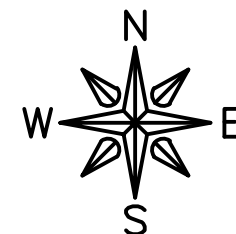
TREATMENT OPTION FOR 1ST AVENUE AT BNSF	ESTIMATED COST
CHANNELIZATION	\$15,000

POTENTIAL CONFLICT	PROPOSED SOLUTION	ESTIMATED COST
①A TURNING MOVEMENT FOR SEMI	REALIGNMENT OF POPULAR STREET AND ACQUISITION 24-25-227-001 REQUIRED	\$250,000
②A COMMERCIAL ENTRANCE	NO IMPACT	N/A
②B BNSF SERVICE ROAD	RELOCATE ACCESS	\$1,500

ALTERNATE SOLUTION	FOUR QUADRANT GATE SYSTEM	\$250,000
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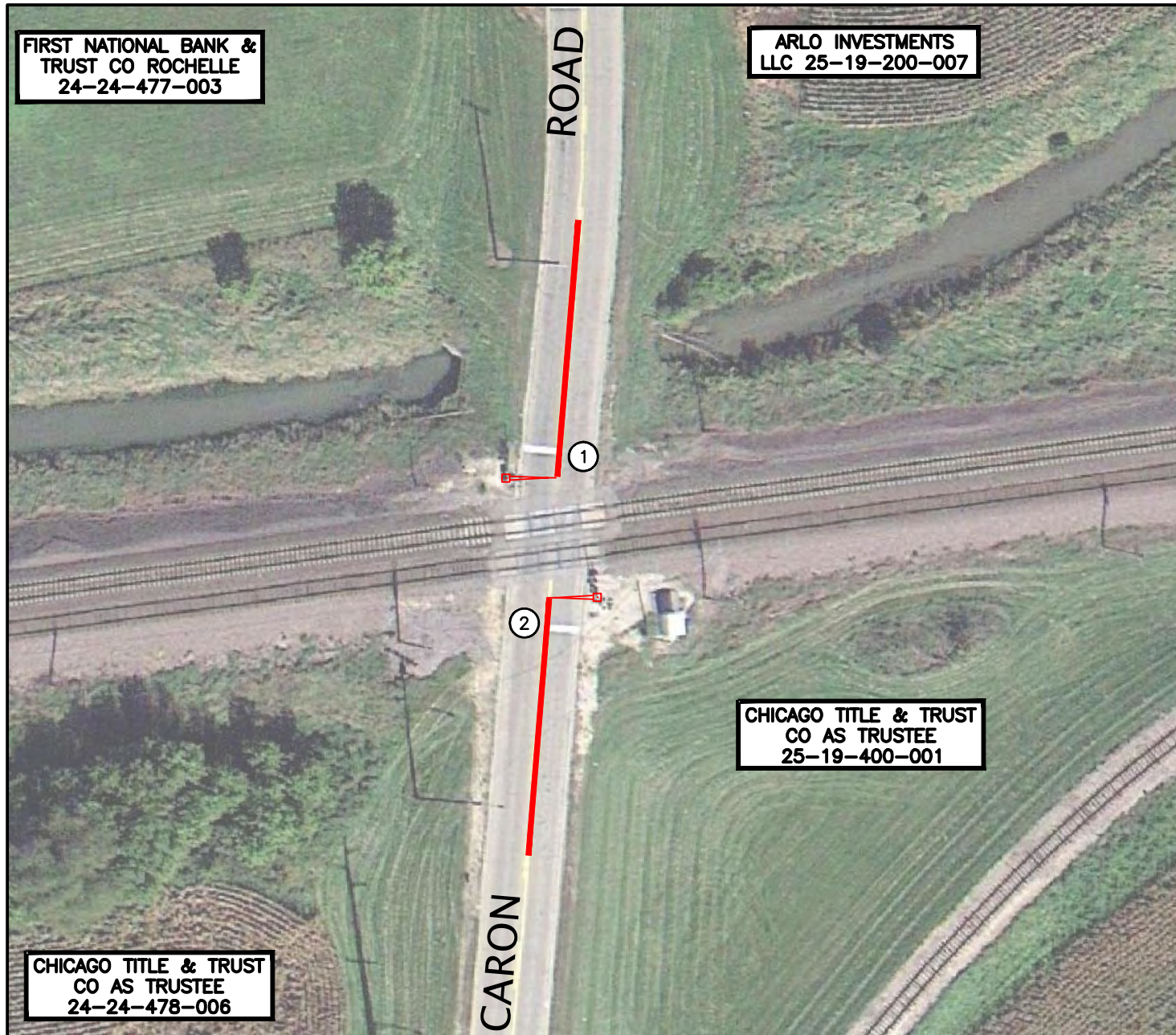
○ **KEY NOTES**

1. 60' CHANNELIZATION DEVICES
2. 60' CHANNELIZATION DEVICES



QUIET ZONE IMPROVEMENT
CITY OF ROCHELLE
SHEET 8 OF 11

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CARON ROAD - UPRR DOT NO. 176396T

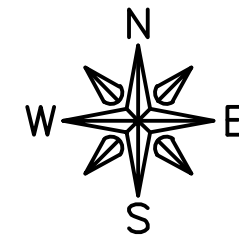
<u>TREATMENT OPTION FOR CARON ROAD AT UPRR</u>	<u>ESTIMATED COST</u>
CHANNELIZATION	\$15,000

○ **KEY NOTES**

1. 100' CHANNELIZATION DEVICES
2. 100' CHANNELIZATION DEVICES

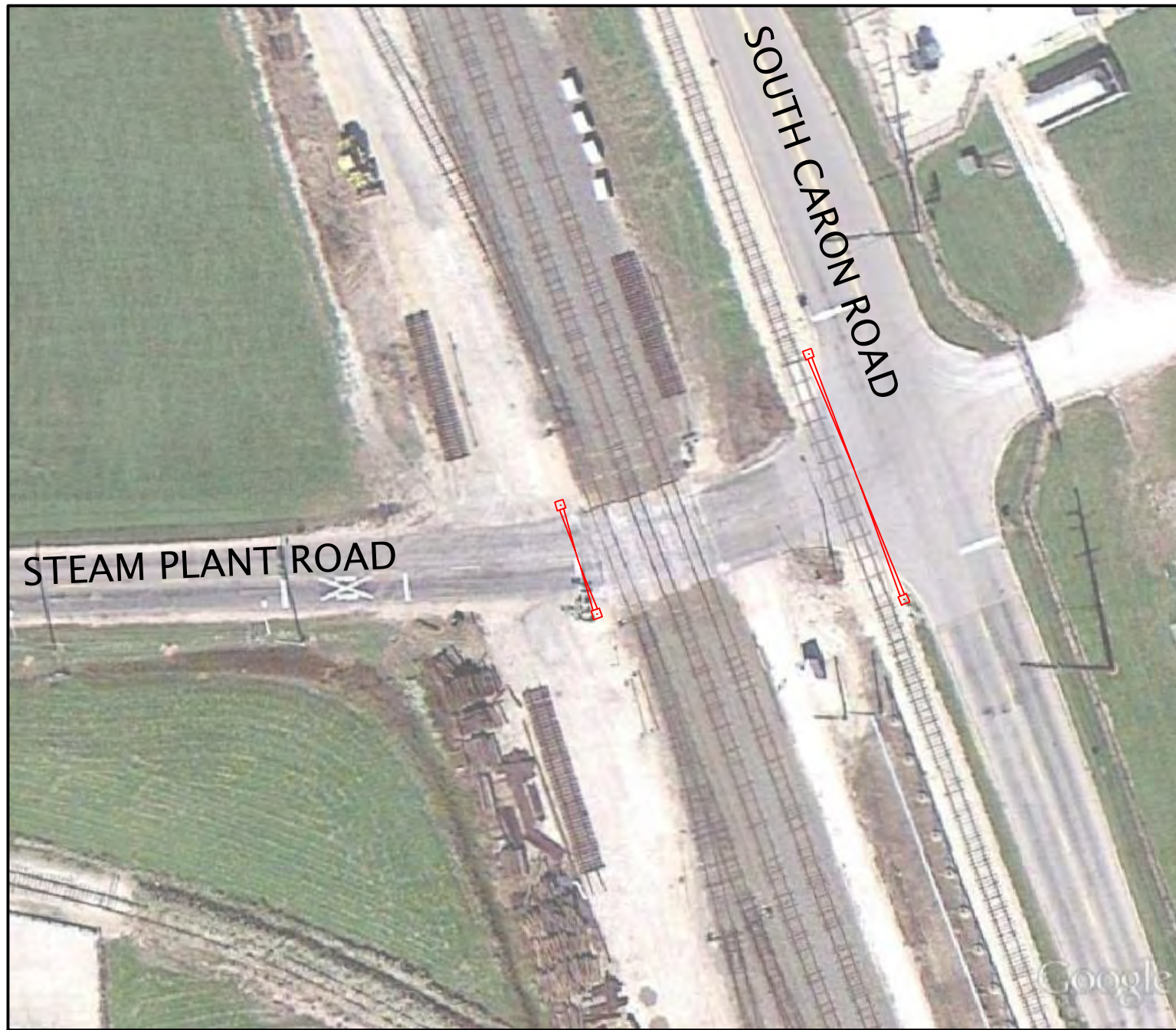
LEGEND

 CHANNELIZATION STARTING AT MECHANICAL GATES



QUIET ZONE IMPROVEMENT
CITY OF ROCHELLE
SHEET 9 OF 11


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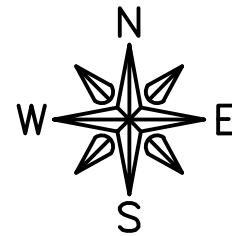


<u>TREATMENT OPTION FOR STEAM PLANT ROAD AT BNSF</u>	<u>ESTIMATED COST</u>
FOUR QUADRANT GATE SYSTEM	\$350,000

STEAM PLANT ROAD - BNSF DOT NO. 069796T

LEGEND

 FOUR QUADRANT GATE SYSTEM



QUIET ZONE IMPROVEMENT
CITY OF ROCHELLE
SHEET 10 OF 11

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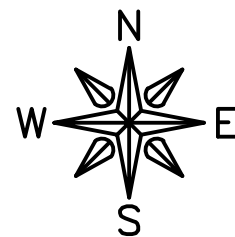


PEDESTRIAN CROSSINGS – BNSF & UPRR

<u>TREATMENT OPTION FOR 7TH STREET</u>	<u>ESTIMATED COST</u>
UPRR PERMANENT CLOSURE	\$1,000
BNSF PERMANENT CLOSURE	\$1,000

LEGEND

 PERMANENT CLOSURE



QUIET ZONE IMPROVEMENT
CITY OF ROCHELLE
SHEET 11 OF 11

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