I-10 LAKE CHARLES
CALCASIEU RIVER BRIDGE

APPENDIX I

LADOTD Acquisition of Right of Way and Relocation Assistance Brochure

LOUISIANA DEPARTMENT OF
TRANSPORTATION & DEVELOPMENT

ACQUISITION OF RIGHT OF WAY

AND

RELOCATION ASSISTANCE

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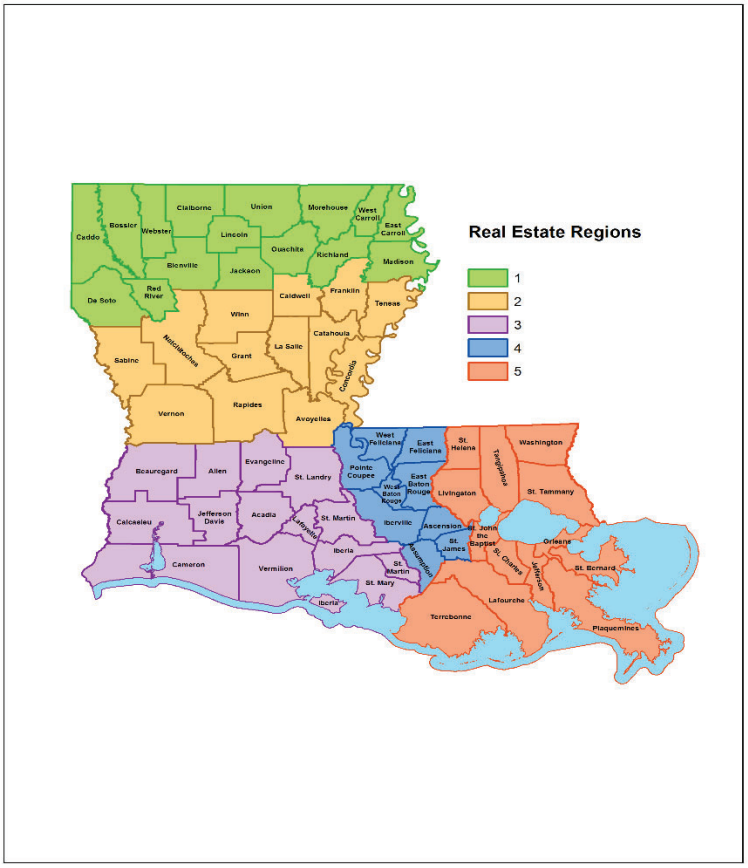
Revised: May 21, 2019

Right of Way Regions Map

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



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INTRODUCTION

Government programs designed to benefit the public as a whole often result in acquisition of private property and, sometimes, in the displacement of people from their residences, businesses or farms. Acquisition of this kind has long been recognized as a right of government and is known as the power of eminent domain. The Fifth Amendment of the Constitution requires that private property shall not be taken for public use without payment of just compensation.

To provide uniform and equitable treatment for persons whose property is acquired for public use, Congress passed the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, and amended it in 1987. This law, called the Uniform Act, is the foundation for the information discussed in this brochure. This brochure explains your rights under the Uniform Act as an owner of real property that is being acquired for a state or federally funded project. It also provides information about Relocation Assistance benefits and advisory services that are available for displaced residences, businesses, farms, and nonprofit organizations.

If you are required to move as a result of a state or federally funded project, a representative of the acquiring Agency will contact you. The representative will answer your specific questions and provide any additional information you may need. If you have a disability that prevents you from reading or understanding this brochure, you will be provided appropriate assistance. You should notify the sponsoring Agency if you have special requirements for assistance.

**********NOTICE**********

RELOCATION BENEFITS CANNOT BE PAID UNTIL THE PROPERTY IS ACQUIRED BY THE DEPARTMENT. IF YOU MOVE OR PURCHASE REPLACEMENT HOUSING BEFORE YOU HAVE BEEN AUTHORIZED TO DO SO BY THE DEPARTMENT, YOU COULD LOSE ALL POSSIBLE BENEFITS PROVIDED BY THE RELOCATION ASSISTANCE PROGRAM

IMPORTANT TERMS USED IN THIS BROCHURE

Acquisition Acquisition is the process of acquiring real property (real estate) or some interest therein.

Agency An agency can be a government organization (Federal, State, or local), a non-government organization (such as a utility company), or a private person using Federal financial assistance for a program or project that acquires real property or displaces a person.

Alien Not Lawfully Present The law provides that if a displaced person is an alien not lawfully present in the United States such person is not eligible for relocation payments under the Uniform Act, unless ineligibility would result in exceptional and extremely unusual hardship to the alien's spouse, parent or child, and such spouse, parent or child is a citizen or an alien lawfully admitted for permanent residence.

Appraisal An appraisal is a written statement independently and impartially prepared by a qualified appraiser setting forth an opinion of the value of an adequately described property as of a specific date, supported by the presentation and analysis of relevant market information.

Business Any lawful activity, with the exception of a farm operation, conducted primarily for the purchase, sale, lease, and rental of personal or real property; or for the manufacture, processing, and/or marketing of products, commodities, or any other personal property; or for the sale of services to the public; or solely for the purpose of the Uniform Relocation Assistance Act, an outdoor advertising display or displays, when the display(s) must be moved as a result of the project.

Displaced Person Any person (individual, family, partnership, association or corporation) who moves from real property, or moves personal property from real property as a direct result of (1) the acquisition of the real property, in whole or in part, (2) a written notice from the Agency of its intent to acquire, (3) the initiation of negotiations for the purchase of the real property by the Agency, or (4) a written notice requiring a person to vacate real property for the purpose of rehabilitation or demolition of improvements, provided the displacement is permanent and the property is needed for a Federal or federally assisted program or project.

Eminent Domain Eminent domain is the right of government to take private property for public use. In the United States, just compensation must be paid for private property acquired for federally-funded projects

Expropriation Expropriation is the legal process of acquiring private property for public use or purpose through the Agency's power of eminent domain. Expropriation is usually not used until all attempts to reach a mutually satisfactory agreement through negotiations have failed. An agency then goes to court to acquire the needed property.

IMPORTANT TERMS USED IN THIS BROCHURE (continued)

Farm Any activity conducted solely or primarily for the production of one or more agricultural products or commodities, including timber, for sale and home use, and customarily producing such products or commodities in sufficient quantity to be capable of contributing materially to the operator's support.

Interest An interest is a right, title, or legal share in something. People who share in ownership of real property have an interest in the property.

Just Compensation Just compensation is the price an agency must pay to acquire real property. An agency official must make the estimate of just compensation to be offered to you for the property needed. That amount may not be less than the amount established in the approved appraisal report as the value for your property. If you and the agency cannot agree on the amount to be paid for the property needed, and it becomes necessary for the agency to use the expropriation process, the amount determined by the court will be the just compensation for your property.

Lien A lien is a charge against a property in which the property is the security for payment of a debt. A mortgage is a lien. So are taxes. Customarily, liens must be paid in full when the property is sold.

Market Value Market value is the sale price that a willing and informed seller and a willing and informed buyer agree to for a particular property.

Negotiation Negotiation is the process used by an agency to reach an amicable agreement with a property owner for the acquisition of needed property. An offer is made for the purchase of property in person, or by mail, and the offer is discussed with the owner.

Nonprofit Organization A public or private entity that has established its nonprofit status under applicable Federal or State law.

Person A person is an individual, partnership, corporation, or association.

Personal Property In general, personal property is property that can be moved. It is not permanently attached to, or a part of, the real property. Personal property is not included or valued in the appraisal.

Program or Project A program or project is any activity or series of activities undertaken by an agency where Federal financial assistance is used in any phase of the activity.

Servitude In general, a servitude is the right of one person to use all or part of the property of another person for some specific purpose. A servitude can be permanent or temporary.

IMPORTANT TERMS USED IN THIS BROCHURE (continued)

Small Business A business having not more than 500 employees working at a site which is the location of economic activity and which will be acquired for a program or project, or is displaced by a program or project. A site occupied solely by an outdoor advertising sign(s) does not qualify for purposes of the reestablishment expense benefit.

ACQUISITION PROCESS

An agency determines what specific property needs to be acquired for a public program or project after the project has been planned and government requirements are met.

If your property, or a portion of it, needs to be acquired, you will be notified as soon as possible of (1) the agency's interest in acquiring your property, (2) the agency's obligation to secure any necessary appraisals, and (3) any other useful information. When an agency begins the acquisition process, the first personal contact with you, the property owner, should be no later than during the appraisal of the property.

PROPERTY APPRAISAL

An appraiser will contact you to make an appointment to inspect your property. The appraiser is responsible for determining the initial value of the property. The agency will have a review appraiser study and accept the appraisal report to establish the just compensation to be offered to you for the property needed.

You, or a representative that you designate, will be invited to accompany the appraiser when the appraiser inspects your property. You can point out any unusual or hidden features of the property that the appraiser could overlook. At this time, you should advise the appraiser if any of these conditions exist:

- There are other persons who have ownership or interest in the property.
- There are tenants on the property.
- Items of real or personal property that belong to others located on your property.
- The presence of hazardous material, underground storage or utilities.

This is your opportunity to tell the appraiser about anything relevant to your property, including other properties in your area that have recently sold. The appraiser will inspect your property and note its physical characteristics. He or she will review sales of properties similar to yours to compare the facts of those sales with the facts about your property. The appraiser will analyze all elements that affect value. The appraiser must consider normal depreciation and physical deterioration that has taken place. By law, the appraiser must disregard the influence of the future public project on the value of the property. The appraisal report will describe your property and the agency will determine a value based on the condition of the property on the day that the appraiser last inspected it.

If you elect to donate the property and formally release the agency from the obligation of performing an appraisal, the appraisal requirement will be waived and an appraisal will not be performed.

JUST COMPENSATION

Once the appraisal is complete, a review appraiser will review the report(s) to ensure that all applicable appraisal standards and requirements are met. When they are, the review appraiser will give the agency the approved appraisal to use in determining the amount of just compensation to be offered for your real property. This amount will never be less than the value established by the approved appraisal.

If the agency is only acquiring a part of your property, there may be damages or benefits to your remaining property. Any allowable damages or benefits will be reflected in the just compensation amount. The agency will prepare a written offer of just compensation for you when negotiations begin.

Buildings, Structures and Improvements

Sometimes buildings, structures, or other improvements are located on the property to be acquired. If they are real property, the agency must offer to acquire at least an equal interest in them if they must be removed or if the agency determines that the improvements will be adversely affected by the public program or project. An improvement will be valued as real property regardless of who owns it.

Tenant-Owned Buildings, Structures and Improvements

Sometimes tenants lease real property and build or add improvements for their use. Frequently, they have the right or obligation to remove the improvements at the expiration of the lease term. If, under State law, the improvements are considered to be real property, the agency must make an offer to the tenants to acquire these improvements as real property. In order to be paid for these improvements, the tenant-owner must assign, transfer, and release to the agency all right, title, and interest in the improvements. Also, the owner of the real property on which the improvements are located must disclaim all interest in the improvements.

For an improvement, just compensation is the amount that the improvement contributes to the value of the whole property, or its value for removal from the property (salvage value), whichever amount is greater.

A tenant-owner can reject payment for the tenant-owned improvements and obtain payment for his or her property interests in accordance with other applicable laws. The agency cannot pay for tenant-owned improvements if such payment would result in the duplication of any other compensation otherwise authorized by law.

If improvements are considered personal property under State law, the tenant-owner may be reimbursed for moving them via the relocation assistance program. The agency will contact the tenant-owner of improvements to explain the procedures to be followed. All payments must be in accordance with Federal rules and applicable State laws.

THE WRITTEN OFFER

After the agency approves the just compensation offer the agency will begin negotiations with you or your designated representative by delivering the written offer of just compensation for the purchase of the real property. If practical, this offer will be delivered in person by a representative of the agency. Otherwise, the offer will be made by mail and followed up with a contact in person or by telephone. All owners of the property with known addresses will be contacted unless they collectively have designated one person to represent their interests.

An agency representative will explain agency acquisition policies and procedures in writing, either by use of an informational brochure, such as this one, or in person.

The agency's written offer will consist of a written summary statement that includes all of the following information:

- The amount offered as just compensation.
- The description and location of the property and the interest to be acquired.
- The identification of the buildings and other improvements that are considered to be part of the real property.

The offer may list items of real property that you may retain and remove from the property and their retention values. If you decide to retain any or all of these items, the offer will be reduced by the value of the items retained. You are responsible for removing the items from the property in a timely manner. The agency may elect to withhold a portion of the remaining offer until the retained items are removed.

Any separately held ownership interests in the property, such as tenant-owned improvements, will be identified by the agency. The agency may negotiate with each person who holds a separate ownership interest, or, may negotiate with the primary owner and prepare a check payable jointly to all owners.

The agency will give you a reasonable amount of time to consider the written offer and ask questions or seek clarification of anything that is not understood. If you believe that all relevant material was not considered during the appraisal, you may present such information at this time. Modifications in the proposed terms and conditions of the purchase may be requested. The agency will consider any reasonable requests that are made during negotiations.

Partial Acquisition

Often an agency does not need all the property you own. The agency will usually purchase only what it needs. If the agency intends to acquire a portion of the property, the agency must state the amount to be paid for the part to be acquired. An amount will be stated separately for damages, if any, to the portion of the property you will keep.

If the agency determines that the remainder property will have little or no value or use to you, the agency will consider this remainder to be an uneconomic remnant and will offer to purchase

it. You have the option of accepting the offer for purchase of the uneconomic remnant or keeping the property.

Agreement Between You and The Agency

When you reach agreement with the agency on the offer, you will be asked to sign a deed prepared by the agency. Your signature will affirm that you and the agency are in agreement concerning the acquisition of the property, including terms and conditions.

If you do not reach an agreement with the agency because of some important point connected with the acquisition offer, the agency may suggest mediation as a means of coming to agreement. If the agency thinks that a settlement cannot be reached, it will initiate expropriation proceedings.

The agency may not take any action to force you into accepting its offer. Prohibited actions include:

- Advancing the expropriation process.
- Deferring negotiations.
- Deferring expropriation.
- Delaying the deposit of funds with the court when expropriation is initiated.
- Any other coercive action designed to force an agreement regarding the price to be paid for your property.

ACQUISITIONS WHERE EXPROPRIATION WILL NOT BE USED

An agency may not possess the power of eminent domain. Or an agency elects not to use eminent domain for a program or project. If this is the case, you will be informed in writing, before negotiations begin, that the agency will not expropriate your property if you and the agency fail to reach agreement. Before making you an offer, the agency will inform you, in writing, of what it believes to be the value for the property it would like to acquire. An owner, in this situation, is not eligible for relocation assistance benefits. Tenants on the property may be eligible for relocation benefits.

PAYMENT

The next step in the acquisition process is payment for your property. As soon as all the necessary paperwork is completed for transferring title of the property, the agency will pay any liens that exist against the property and pay your equity to you. Your incidental expenses will also be paid or reimbursed. Incidental expenses are reasonable expenses incurred as a result of transferring title to the agency, such as:

- Recording fees and transfer taxes.
- Documentary stamps.
- Evidence of title, however, the agency is not required to pay costs solely to perfect your title or to assure that title to the real property is without defect.

- Surveys and legal descriptions of the real property.
- Other similar expenses necessary to convey the property to the agency.

Penalty costs and other charges for prepaying preexisting recorded mortgages entered into in good faith encumbering the real property will be reimbursed. If possible, the agency will pay these costs directly so that you will not need to pay the costs and then claim reimbursement. Property taxes will be pro-rated to the time when the agency obtains title to the property or takes possession of it.

POSSESSION

The agency may not take possession of your property unless:

- You have been paid the agreed purchase price, or
- In the case of expropriation, the agency has deposited with the court an amount for your benefit and use that is at least the amount of the agency's approved appraisal of the value of your property, or
- The agency has paid the amount of the court award of compensation in the expropriation proceeding.

If the agency takes possession while persons still occupy the property:

- All persons occupying the property must receive a written notice to move at least 30 days in advance of the required date to move. In this context, the term person includes residential occupants, homeowners, tenants, businesses, non-profit organizations, and farms.
- An occupant of a residence cannot be required to move until at least 90 days after a comparable replacement dwelling has been made available for occupancy. Only in unusual circumstances, such as when continued occupancy would constitute a substantial danger to the health or safety of the occupants, can vacation of the property be required in less than 90 days.

SETTLEMENT

The agency will make every effort to reach agreement with you during negotiations. You may provide additional information, and make reasonable counter offers for the agency to consider. When it is in the public interest, most agencies use the information provided as a basis for administrative or legal settlements, as appropriate.

EXPROPRIATION

If an agreement cannot be reached, the agency can acquire the property by exercising its power of eminent domain. It will do this by instituting formal expropriation proceedings with the appropriate State court and the procedures will follow State law. The court will set the final amount of just compensation after it has heard all arguments.

Litigation Expense

Normally, the agency does not reimburse you for costs you incur as a result of expropriation proceedings. The agency will reimburse you, however, under any of the following conditions:

- The court determines that the agency cannot acquire your property by expropriation.
- The expropriation proceedings are abandoned by the agency without an agreed-upon settlement.
- You initiate an inverse expropriation action and the court agrees with you that the agency has taken your real property rights without the payment of just compensation, or the agency elects to settle the case without further legal action.
- The agency is subject to State laws that require reimbursement for these or other expropriation costs.
- If ordered by the Court to pay these expenses.

RELOCATION ASSISTANCE BENEFITS

SECTION 1 - RELOCATION ADVISORY SERVICES

Any individual, family, business or farm displaced by a Federal or federally assisted program shall be offered relocation assistance services for the purpose of locating a suitable replacement property. Relocation services are provided by qualified personnel employed by the Agency. It is their goal and desire to be of service to you, and assist in any way possible to help you successfully relocate. Remember, the Agency's representative is there to **help** and **advise** you, so please be sure to make full use of their services. Ask questions and be sure you understand all your rights and benefits.

An individual with a disability will be provided the assistance needed to locate and move to a replacement dwelling or site. The individual should notify the Agency of any special requirements for assistance.

Residential Assistance

An agency representative will contact and interview you to find out your needs. Relocation services and payments will be explained in accordance with your eligibility. During the initial interview your housing needs and desires will be determined as well as your need for assistance.

Later, the agency representative will offer assistance and provide a current listing of comparable properties. You will be provided a written determination of the amount of replacement housing payment for which you qualify. The agency representative can supply information on other Federal and State programs in your area. Transportation will be offered to inspect housing referrals. The Agency will provide counseling or help you get assistance from other sources as a means of minimizing hardships in adjusting to your new location.

You cannot be required to move unless at least one comparable decent, safe, and sanitary (DSS) replacement dwelling is made available to you. Please let the agency representative

know if you locate a replacement dwelling so that it can be inspected to assure that it meets DSS standards.

Business, Farm, and Nonprofit Organization Assistance

An agency representative will contact and interview you to find out your needs and replacement site requirements and estimate the time needed to accomplish the move. Relocation services and payments will be explained in accordance with your eligibility. It is important to explain to the agency representative any anticipated problems. During the initial interview the agency representative will ask many questions to determine your financial ability to accomplish the move, including lease terms and other obligations.

The agency representative will help determine the need for outside specialists to plan, move, and reinstall personal property. The agency representative will identify and resolve any issues regarding what is real estate and what is personal property to be relocated. The agency representative will explore and provide advice as to possible sources of funding and assistance from other local, State, and Federal agencies. In addition, as needed, the agency representative will maintain listings of commercial properties and farms. The goal is to achieve a successful relocation back into the community.

Social Services Provided By Other Agencies

The agency representative will be familiar with the services provided by other public and private agencies in your community. If you have special problems, the agency representative will make every effort to secure the services of those agencies with trained personnel who have the expertise to help you. Make your needs known in order that you may receive the help you need.

SECTION 2 - INDIVIDUALS AND FAMILIES
Moving Costs

If you qualify as a displaced person, you are entitled to reimbursement of your moving costs and certain related moving expenses. Displaced individuals and families may choose to be paid either on the basis of actual, reasonable, and necessary moving costs and related expenses, **or** according to a fixed moving cost schedule. If you elect to be moved by a professional mover, the agency will secure bids and provide you with an eligibility letter for the amount of the selected bid.

Actual, Reasonable Moving Costs

You may be paid for your actual, reasonable moving costs by a professional mover plus related expenses, **or** you may move yourself. Reimbursement will be limited to a 50-mile distance in most cases. Related expenses involved in the move may include:

- Packing and unpacking personal property.
- Disconnecting and reconnecting household appliances.
- Temporary storage of personal property.
- Insurance while property is in storage or transit.
- Transfer of telephone service and other similar utility reconnections.
- Other expenses considered eligible by the Agency.

Remember, all expenses must be approved and considered necessary and reasonable by the Agency and supported by paid receipts or other evidence of expenses incurred.

Moving Costs For Mobile Homes

If you are the owner of a displaced mobile home, you may be entitled to a payment for the cost of moving the mobile home to a replacement site on an actual cost basis. Displaced mobile home occupants may also be eligible for a payment for moving personal property from the mobile home such as furniture, appliances and clothing on an actual cost basis, or on the basis of a moving cost schedule. For a complete explanation of all moving cost options involving a mobile home, please discuss the matter with the agency representative.

LOUISIANA RESIDENTIAL MOVING COST SCHEDULE

A. UNFURNISHED UNITS (Furniture Owned by Occupant)

1 Room	2 Rooms	3 Rooms	4 Rooms	5 Rooms	6 Rooms	7 Rooms	8 Rooms	Each Extra
$600	$800	$1000	$1200	$1300	$1550	$1700	$1900	$300

B. FURNISHED UNITS (Furniture Not Owned by Occupant)

1 Room	2 Rooms	3 Rooms	4 Rooms	5 Rooms	6 Rooms	7 Rooms	8 Rooms	Each Extra
$400	$470	$610	$750	$820	$890	$960	$1030	$70

EXCEPTIONS:

a. A person displaced from a residential dwelling, including a mobile home, is eligible for a moving payment regardless of whether they move into DSS or NON-DSS housing.

b. Payment for moving expenses shall be processed in accordance with Section 4.19.

c. The payment to a person with minimal personal possessions who's in occupancy of a seasonal residence, dormitory style room, or a person whose residential move is performed by an Agency at no cost to them shall be limited to the amount stated in the Fixed Residential Moving Cost Schedule, Section B.

d. Move of Mobile Home: Actual costs, plus a payment for packing and securing personal property on the basis of $80.00 for the first room and $40.00 for each additional room.

Replacement Housing

There are three types of replacement housing payments: purchase supplement, rental assistance, and down payment. To understand replacement housing payments, you first need to become familiar with the terms **Comparable; Financial Means; Decent, Safe, and Sanitary (DSS); and Last Resort Housing.**

Comparable

A **comparable** replacement dwelling must be DSS and functionally equivalent to your present dwelling. While not necessarily identical to your present dwelling, a comparable replacement dwelling should provide the same utility and function as the dwelling from which you are displaced. In addition, a comparable replacement dwelling should be:

- Adequate in size to accommodate the occupants (e.g., you and your family).
- Located in an area that is not subject to unreasonable adverse environmental conditions.
- Located in an area that is not less desirable than your present location with respect to public utilities and commercial and public facilities.
- Reasonably accessible to your place of employment.
- Located on a site that is typical in size for residential development with normal site improvements.
- Currently available on the private market.
- Within your **financial means**.

Financial Means

For a homeowner, if a purchase supplement is needed and provided, in addition to the acquisition price for your dwelling, then the replacement dwelling is considered to be within your financial means.

For a tenant, the monthly rent and estimated average monthly utility (electricity, gas, other heating and cooking fuels, water and sewer) cost for a comparable replacement dwelling is considered to be within financial means if, after receiving rental assistance, this amount does not exceed the base monthly rent (including average monthly utility cost) for the dwelling from which the tenant is displaced. The Agency may need to calculate the base monthly rent using 30% of the displaced tenant's total monthly gross household income, if that income qualifies as low income in accordance with established low income amounts determined by the U.S. Department of Housing and Urban Development (HUD). The Agency will also evaluate the amounts designated for shelter and utilities for a tenant that receives government assistance.

The rental assistance payment will be computed using the lesser of the three (rent and average monthly utility cost; 30% of the total monthly gross household income for a qualified low income tenant; or the total amount designated for shelter and utilities for a tenant receiving government assistance). To ensure the maximum benefit, it is important to provide the Agency appropriate evidence of total monthly household income when asked. There are some amounts that are not included as monthly household income, including income earned by dependents. The Agency will explain this procedure in greater detail.

Decent, Safe, and Sanitary

The DSS standard means the replacement dwelling meets the minimum requirements established by Federal regulations and conforms to applicable local housing and occupancy codes. The dwelling shall:

- Be structurally sound, weather tight, and in good repair.
- Contain a safe electrical wiring system adequate for lighting and other devices.
- Contain a heating system capable of sustaining a healthful temperature (approximately 70 degrees Fahrenheit) except in those areas where local climatic conditions do not require such a system.
- Be adequate in size with respect to the number of rooms and area of living space to accommodate the displaced person.
- Contain a well-lighted and ventilated bathroom providing privacy to the user and containing a sink, bathtub or shower stall, and a toilet, all in good working order and properly connected to appropriate sources of water and sewage drainage system.
- Contain a kitchen area with a fully usable sink, properly connected to potable hot and cold water and to a sewage drainage system, with adequate space and utility connections for a stove and refrigerator.
- Have unobstructed egress to safe, open space at ground level.
- Be free of any barriers which prevent reasonable ingress, egress or, in the case of a handicapped displaced person, use of the dwelling.

IMPORTANT NOTICE

Please understand that the replacement dwelling inspection for decent, safe, and sanitary requirements is conducted by the agency representative for the sole purpose of determining your eligibility for a relocation payment. Therefore, you must not interpret the Agency's approval of a dwelling to provide any assurance or guarantee that there are no deficiencies in the dwelling or in its fixtures and equipment that may be discovered at a later date. It is your responsibility to protect your best interest and investment in the purchase or rental of your replacement property and you must clearly understand that the Agency will assume no responsibility if structural, mechanical, legal, or other unforeseen problems are discovered after the inspection has been conducted.

Last Resort Housing

The term Last Resort Housing is an administrative procedure authorized by law to address those times when comparable replacement housing is not available under statutory limits specified in law. The law and regulation allow the Agency to provide a replacement housing payment in excess of the statutory maximums of $7,200 and $31,000. Because this provision is commonly used, the statutory maximums will not be restated throughout this brochure.

The Agency must provide comparable replacement housing, that is DSS and within your financial means, before you are required to move. The Agency may provide the necessary housing in a number of ways, such as:

- Making a replacement housing payment in excess of the maximum $7,200 or $31,000 statutory limits.
- Purchasing an existing comparable residential dwelling and making it available to you in exchange for your dwelling.
- Moving and rehabilitating a dwelling and making it available to you in exchange for your property.
- Purchasing, rehabilitating or reconstructing an existing dwelling to make it comparable to your property.
- Purchasing land and constructing a new replacement dwelling comparable to your dwelling when comparables are not otherwise available.
- Purchasing an existing dwelling, removing barriers or rehabilitating the structure to accommodate a handicapped displaced person when a suitable comparable replacement dwelling is not available.
- Providing a direct loan which will enable you to construct or contract for the construction of a decent, safe, and sanitary replacement dwelling.

Freedom of Choice

All eligible displaced persons have the freedom of choice in the selection of a replacement dwelling. The Agency will not require you, without your written consent, to accept a replacement dwelling provided by the Agency. If you decide not to accept the replacement housing offered

by the Agency, you may secure a replacement dwelling of your choice but it must meet the DSS standard. If you are eligible for Last Resort Housing, the agency representative will thoroughly explain the program to you.

Length of Occupancy - Basic Occupancy Requirements

The type of payment you are eligible for depends on whether you are an owner or a tenant, and how long you have lived in the property being acquired prior to the initiation of negotiations. "Length of occupancy" simply means counting the number of days that you occupied the dwelling before the date of initiation of negotiations by the Agency for the purchase of the property.

The term "initiation of negotiations" is usually the date the Agency makes the first personal contact with the owner of real property, or his/her representative, to provide a written offer to purchase the property being acquired.

Owners who were in occupancy 90 days or more prior to the initiation of negotiations may be eligible for a purchase supplement or a rental assistance payment.

Tenants who were in occupancy 90 days or more prior to the initiation of negotiations may be eligible for a rental assistance payment or a down payment.

Owners who were in occupancy less than 90 days prior to the initiation of negotiations, may be eligible for a rental assistance payment or a down payment, however, the down payment cannot exceed the amount you would have received if you had been a 90 -day owner.

If you were in occupancy at the time of the initiation of negotiations, but less than 90 days prior to that date, you are considered a displaced person entitled to relocation assistance advisory services and moving payments. You may be entitled to a rental assistance payment if comparable replacement rental housing is not available within your financial means. The Agency will use the financial means test described earlier in this brochure. You should meet with the agency representative for an explanation of the relocation benefits that you may be eligible to receive.

Replacement Housing - Purchase Supplement For Owner Occupants of 90 Days or More

If you are an owner and occupied your home for 90 days or more immediately prior to the initiation of negotiations for your property, you may be eligible – in addition to the value of your property – for a supplemental payment for costs necessary to purchase a comparable DSS replacement dwelling. The Agency will compute the maximum payment you are eligible to receive. You must purchase and occupy a DSS replacement dwelling within one year. A purchase supplement has three components: a price differential, an amount for increased mortgage interest and incidental expenses. The purchase supplement is in addition to the acquisition price paid for your property.

The price differential payment is the amount by which the cost of a replacement dwelling exceeds the acquisition cost of the displacement dwelling. You may also be reimbursed for increased mortgage interest costs if the interest rate on your new mortgage exceeds that of

your present mortgage. To be eligible your acquired dwelling must have been encumbered by a bona fide mortgage which was a valid lien for at least 90 days prior to the initiation of negotiations. Finally, you may be reimbursed for other expenses such as reasonable costs incurred for title search, recording fees, and certain other closing costs, but not for prepaid expenses such as real estate taxes and property insurance.

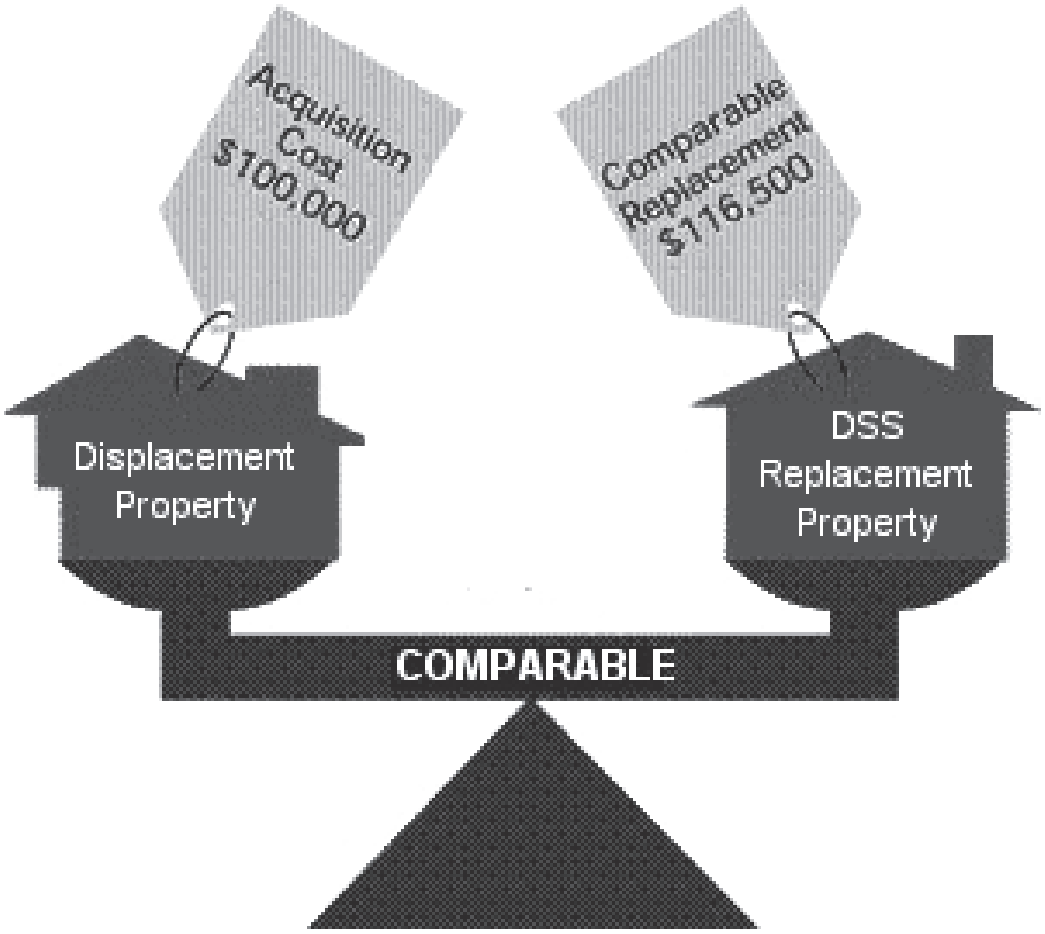
Example of a Price Differential Computation

Example A: Assume the Agency purchases your property for $100,000. After a thorough study of available comparable residential properties on the open market, the Agency determines that a comparable replacement property will cost $116,500. If you purchase a DSS replacement property for $116,500, you will be eligible for a price differential payment of $16,500.

Example B: If you purchase a DSS replacement property costing more than $116,500, you pay the difference as shown in Example B.

Example C: If your purchase price is less than $116,500, the price differential payment will be based on your actual cost.

Agency Computation of Maximum Price Differential Payment	Cost of Comparable Replacement Acquisition Price of Your Property **Maximum Price Differential Payment**	$ 116,500 - 100,000 **$ 16,500**
Example A	Actual Cost of Replacement Property (Same Purchase Price as Comparable) Acquisition Price of Your Property **Price Differential Payment**	$116,500 - 100,000 **$ 16,500**
Example B	Actual Cost of Replacement Property Acquisition Price of Your Property Difference **Price Differential Payment** You Are Responsible for This Amount	$ 125,000 - 100,000 $ 25,000 **$ 16,500** $ 8,500
Example C	Actual Cost of Replacement Property Acquisition Price of Your Property **Price Differential Payment** Payment is Based on Actual Cost	$ 114,000 - 100,000 **$ 14,000**



Replacement Housing - Rental Assistance
90-Day Owners Who Elect to Rent

A rental computation will be computed based on a determination of the fair market rent for the acquired dwelling compared to a comparable rental dwelling available on the market. The difference will be multiplied by 42. In no instance will the rental assistance payment exceed the amount the owner would have received as a price differential.

For Owner Occupants and Tenants of 90 Days or More

Owner occupants and tenants of 90 days or more may be eligible for a rental assistance payment. To be eligible for a rental assistance payment, tenants and owners must have been in occupancy at least 90 days immediately preceding initiation of negotiations for the property. This payment is designed to enable you to rent a comparable DS&S replacement dwelling for a 42-month period. If you choose to rent a replacement dwelling and the cost of rent and utilities are higher than you were paying, you may be eligible for a rental assistance payment. The Agency will determine the maximum payment you may be eligible to receive in accordance with established procedures. The rental assistance payment is paid in a lump sum unless the Agency determines that the payment should be in installments. You must rent and occupy a DSS replacement dwelling within one year to be eligible.

Example: Assume you have been paying $500 per month rent for the dwelling unit occupied by you and purchased by the Agency. You also pay $150 per month for utilities (electricity, gas, other heating and cooking fuels, water, and sewer). The rental assistance payment computation always includes the cost of basic utilities (electricity, gas, other heating and cooking fuels, water, and sewer), as well as the cost of rent. If rent includes utilities, a separate computation is not necessary. After a study of the rental market, the Agency determines that a replacement rental unit, that is DSS and comparable to your unit, is available for $645 per month. It is estimated that average monthly utility costs for the replacement unit will be $175 per month. The maximum rental assistance payment you can receive is $170 per month for a 42-month period, or a total of $7,140.

Example A: If you select a DSS replacement dwelling unit that rents for $695 per month plus $175 for utilities, despite the availability of comparable DSS replacement rental units that rent for $645 per month plus $175 for utilities, you will receive the maximum amount computed by the Agency, or $7,140. You will be required to pay the additional $50 per month yourself.

Example B: If you select a DSS replacement dwelling unit that rents for more than your present unit, but less than the amount determined by the Agency as necessary to rent a comparable unit, your payment will be based on actual cost. For example, assume you select a replacement dwelling unit that rents for $575 per month plus $165 for utilities. On the basis of actual cost, you will be eligible for a payment of $90 per month for 42 months, or $3,780.

Agency Computation of Maximum Rental Assistance Payment	Rent You are Currently Paying Plus Cost for Utilities You are Paying Rent for a Comparable DSS Dwelling Estimated Cost for Utilities Difference ($820-650=$170) x 42 months **Maximum Rental Assistance Payment**	$ 500 + 150 $ 650 $ 645 + 175 $ 820 $ 7140 **$ 7140**
Example A	Actual Rent for DSS Replacement Property Plus Estimated Cost for Utilities Difference ($870-650=$220) x 42 months **Rental Assistance Payment**	$ 695 + 175 $ 870 $ 9240 **$ 7140**
Example B	Actual Rent for DSS Replacement Property Plus Estimated Cost for Utilities Difference ($740-650=$90) x 42 months **Rental Assistance Payment**	$ 575 + 165 $ 740 $ 3780 **$ 3780**

Replacement Housing - Down Payment
Owner Occupants of 90 Days and Tenants of 90 Days

Owner occupants of 90 days and tenants of 90 days may be eligible for a down payment and incidental expenses. The Agency will determine the maximum down payment you may be eligible to receive based on its computation for a rental assistance payment. However, the payment for a displaced owner occupant shall not exceed the amount they would receive as a 90-day owner for the same property.

To be eligible for the full amount of the down payment assistance payment, the entire payment must be used to purchase a DSS replacement dwelling. The payment may be utilized for a down payment toward the purchase price and/or eligible incidental expenses. Incidental expenses include the reasonable costs of title search, recording fees, and certain other closing costs but do not include prepaid expenses such as real estate taxes and property insurance. You may be eligible for the reimbursement of loan origination or loan assumption fees if such fees are normal to real estate transactions in your area and do not represent prepaid interest. The combined amount of the down payment and incidental expenses cannot exceed the amount the Agency computed as your maximum rental assistance payment. The agency representative will explain how the Agency determines the maximum down payment assistance payment.

DSS REMINDER

It is very important to remember that the replacement dwelling you select must meet the basic DSS standard. Do not execute a sales contract or a lease agreement until a representative from the Agency has inspected and certified in writing that the dwelling you propose to purchase or rent meets the DSS standard. Please do not jeopardize your replacement housing payment by moving into a substandard dwelling.

Fair Housing Laws

Title VI of the Civil Rights Act of 1964 and Title VIII of the Civil Rights Act of 1968 set forth the policy of the United States to provide, within constitutional limitations, for fair housing throughout the United States. These Acts and Executive Order 11063 make discriminatory practices in the purchase and rental of residential units illegal if based on race, color, religion, sex, or national origin. Whenever possible, a minority person shall be given reasonable opportunity to relocate to a DSS replacement dwelling which is not located in an area of minority concentration that is within their financial means. This does not require an Agency to provide a displaced person with a larger payment than is necessary to enable the person to relocate to a comparable replacement dwelling.

SECTION 3 - BUSINESS, FARMS, AND NONPROFIT ORGANIZATIONS

Moving Cost Reimbursement

Owners or tenants may be paid on the basis of actual, reasonable moving costs and related expenses or, under certain circumstances, a fixed payment. Actual, reasonable moving expenses may be paid when the move is performed by a professional mover or if you move yourself. Related expenses, such as personal property losses, expenses in finding a replacement site, and reestablishment expenses may also be reimbursable.

You must provide the Agency with an inventory of the personal property to be moved and advance notice of the approximate date of the move, unless the Agency specifically tells you these notices are not necessary. If you elect to be moved by a professional mover, the agency will secure bids and provide you with an eligibility letter for the amount of the selected bid. The Agency has the right to inspect the personal property at the displacement and replacement sites, and to monitor the move.

Actual Cost Move

You may be paid the actual, reasonable and necessary cost of your move when the move is performed by a professional mover or when you elect to move yourself, however, all your moving costs must be supported by paid receipts or other evidence of expenses incurred. In addition to the transportation costs of your personal property, certain other expenses may be reimbursable, such as packing, crating, unpacking and uncrating, and the disconnecting, dismantling, removing, reassembling, and reinstalling relocated machinery, equipment and other personal property. Other expenses such as professional services necessary for planning and carrying out the move, temporary storage costs, and the cost of licenses, permits and

certifications may be reimbursable. The agency representative will provide you with a complete explanation of reimbursable expenses.

Estimated Cost Move

If you agree to take full responsibility for all or part of the move of your operation, the Agency may approve a payment not to exceed the lower of two acceptable bids or estimates obtained by the Agency from qualified moving firms, moving consultants, or a qualified Agency staff employee. A low cost or uncomplicated move may be based on a single bid or estimate at the Agency's discretion. The advantage of this moving option is that it relieves you from documenting all moving expenses because the payment is limited to the amount of the lowest acceptable bid or estimate.

Direct Loss of Tangible Personal Property

Displaced businesses, farms, and nonprofit organizations may be eligible for a payment for the actual direct loss of tangible personal property which is incurred as a result of the move or discontinuance of the operation. This payment is based on the lesser of the value of the item for continued use at the displacement site less the proceeds from its sale, or the estimated cost of moving the item. The agency representative will explain this procedure in detail if this is a consideration for you.

Low Value High Bulk Property

If an Agency considers a personal property item to be of low value and high bulk, and moving costs are disproportionate to its value (such as minerals, metals, rock, or topsoil), the allowable moving cost payment shall not exceed the lesser of the amount which would be received if the property were sold at the site, or, the replacement cost of a comparable quantity delivered to the new business location.

Searching Expenses for Replacement Property

Displaced businesses, farms, and nonprofit organizations are entitled to reimbursement for actual, reasonable expenses incurred in searching for a replacement property, not to exceed $2,500. Expenses may include transportation, meals, and lodging when away from home; the reasonable value of the time spent during the search; and other expenses determined to be reasonable and necessary by the Agency.

Fees paid to real estate agents or brokers to locate a replacement site may be reimbursed, exclusive of any commissions or fees related to the purchase of the site. Commissions and fees related to the purchase of a replacement site are not eligible relocation expenses and will not be reimbursed.

Related Eligible Expenses

In addition to the moving expenses listed above, costs for these items may be reimbursed if the Agency determines they are actual, reasonable, and necessary

- Connection to available nearby utilities from the right-of-way to improvements at the replacement site.
- Professional services to determine a sites' suitability for the displaced person's operation.
- Impact fees or one time assessments for heavy utility usage as determined necessary by the Agency.

Please discuss this with your agency representative before incurring these costs to assure that they are reimbursable.

Reestablishment Expenses

A small business, farm, or nonprofit organization may be eligible for a payment, not to exceed $25,000, for expenses actually incurred in relocating and reestablishing the enterprise at a replacement site. To qualify, the business, farm, or nonprofit organization must not have more than 500 employees working at the site who will be displaced by a program or project. Reestablishment expenses may include, but are not limited to:

- Repairs or improvements to the replacement real property required by Federal, State, and local laws, codes or ordinances.
- Modifications to the replacement real property to make the structure(s) suitable for the operation.
- Construction and installation costs of exterior advertising signs.
- Redecoration or replacement such as painting, wallpapering, paneling, and carpeting when required by the condition of the replacement site.
- Advertising the replacement location.
- Estimated increased costs of operation at the replacement site during the first two years for items such as: lease or rental charges; personal or real property taxes; insurance premiums; utility charges (excluding impact fees).
- Other items that the Agency considers essential for reestablishment.

Fixed Payment For Actual Moving Expenses (In Lieu Payment)

Displaced businesses, farms, and nonprofit organizations may be eligible for a fixed payment in lieu of (in place of) actual moving expenses, personal property losses, searching expense, and reestablishment expenses. The fixed payment may not be less than $1,000 nor more than $40,000. For a business to be eligible for a fixed payment, the Agency must determine the following:

- Business owns or rents personal property that must be moved due to the displacement.
- Business cannot be relocated without a substantial loss of its existing patronage.
- Business is not part of a commercial enterprise having more than three other businesses engaged in the same or similar activity which are under the same ownership and are not being displaced by the Agency.

- Business contributed materially to the income of the displaced business operator during the two taxable years prior to displacement.

Any business operation that is engaged solely in the rental of space to others is not eligible for a fixed payment. This includes the rental of space for residential or business purposes.

Eligibility requirements for farms and nonprofit organizations are slightly different than business requirements. The computation for nonprofit organizations differs in that the payment is computed on the basis of average annual gross revenues less administrative expenses for the two year period specified. If you are interested in a fixed payment, please consult your agency representative for additional information.

Computation of Your Fixed Payment

The fixed payment for a displaced business or farm is based upon the average annual net earnings of the operation for the two taxable years immediately preceding the taxable year in which it was displaced, or a two-year period deemed more representative by the Agency. You must provide the Agency with proof of net earnings to support your claim. Proof of net earnings can be documented by income tax returns, certified financial statements, or other reasonable evidence acceptable to the Agency.

Fixed Payment Example

2012	2013	2014
Annual Net Earnings $16,500	Annual Net Earnings $18,500	Year Displaced
Average annual net earnings $16,500 + $18,500 = $35,000 / 2 = $17,500 Fixed Payment = $17,500		

Project Office

The Agency may establish a relocation office near the project. Project relocation offices are usually open during hours convenient to persons being displaced, including evening hours when necessary. If the Agency opens a project office, the staff will be happy to assist you, answer questions, and will maintain various types of information.

Relocation Payments Are Not Considered To Be Income

No relocation payment received will be considered as income for the purpose of the Internal Revenue Code. No relocation payment received will be considered income for the purposes of determining eligibility or the extent of eligibility of any person for assistance under the Social Security Act or any other Federal law (except for any Federal law providing low-income housing assistance).

Right To Appeal

Any aggrieved person may file a written appeal with the head of the Agency if the person believes the Agency has failed to properly determine his or her eligibility for relocation assistance advisory services, or the amount of a relocation payment. If you have a grievance, you will be given a prompt and full opportunity to be heard. You will also have the right to be represented by legal counsel or other representative in connection with the appeal, but solely at your own expense.

The Agency will promptly review your appeal and consider all pertinent justification and information available to ensure a fair and full review. The Agency will provide you with a written determination as well as an explanation of the decision. If you are still dissatisfied with the relief granted, the Agency will advise you of your right to seek judicial review of the Agency decision.

An alien not lawfully present in the United States shall not be eligible to receive relocation payments or any other assistance provided under 49 CFR Part 24.

The information is provided to assist you in understanding the requirements that must be met by agencies, and your rights and obligations. If you have any questions, contact your agency representative.

NOTICE: Relocation Assistance payments cannot be made until the property is acquired by the Agency.*

*In rare cases a Notice of Intent to Acquire may be issued which would allow payment of relocation benefits in advance of acquisition.

Title VI Plan

Notification of Rights

The Louisiana Department of Transportation and Development (LADOTD) assures that no person shall on the grounds of race, color, or national origin as provided by Title VI of the Civil Rights Act of 1964, and the Civil Rights Restoration Act of 1987 (P.L. 100.259) be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any programs or activities. LADOTD assures every effort will be made to ensure nondiscrimination in all of its programs and activities, whether those programs and activities are federally funded or not (inclusive of additional Title VI Authorities and citations).

The Civil Rights Restoration Act of 1987, broadened the scope of Title VI coverage by expanding the definition of terms "programs or activities" to include all programs or activities of Federal Aid recipients, sub-recipients, and contractor/consultants, whether such programs and activities are federally assisted or not (Public Law 100259 [S.557] March 22, 1988.)

LADOTD will be responsible for initiating and monitoring Title VI activities, preparing required reports and other LADOTD responsibilities as required by 23 Code of Federal Regulation, (CFR) 200 and 49 Code of Federal Regulation 21.

In the event the LADOTD distributes federal aid funds to sub-recipient, the recipient will include Title VI language in all written agreements/contracts and will monitor for compliance.

Shawn D. Wilson, Ph.D.
Secretary, Louisiana Department of
Transportation and Development

8/31/16
Date

Any individual, group of individuals or entity that believes they have been discriminated against on the basis of race, color or national origin by the **Louisiana Department of Transportation and Development** may file a Title VI complaint by submitting the agency's Title VI Complaint Form.

For all Title VI matters, please contact

Compliance Programs Director
P.O. Box 94245
Baton Rouge, LA 70804-9245

Telephone Number: (225)379-1382
Fax Number: (225)379-1865

LADOTD Title VI Notice to Public

LDOTD hereby gives public notice that it is the policy of the department to assure full compliance with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, Executive Order 12898 on Environmental Justice, and related statutes and regulations in all programs and activities. Title VI requires that no person in the United States of America shall, on the grounds of race, color, sex, national origin or disability/handicap be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which LDOTD receives federal financial assistance.

Any person who believes they have been aggrieved by an unlawful discriminatory practice under Title VI has a right to file a formal complaint with the LDOTD. Any such complaint must be in writing and filed with the LDOTD Title VI Coordinator within one hundred eighty (180) days following the date of the alleged discriminatory occurrence. Title VI Discrimination Complaint Forms may be obtained from the Compliance Programs Office by calling (225) 379-1382

Non-discrimination Complaint Procedures for Federally Assisted Programs or Activities

These procedures cover all complaints filed under Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Civil Rights Restoration Act of 1987, and the Americans with Disabilities Act of 1990, relating to any program or activity administered by LDOTD as to sub-recipients, consultants, and contractors.

Intimidation or retaliation of any kind is prohibited by law. The procedures do not deny the right of the complainant to file formal complaints with other state or federal agencies or to seek private counsel for complaints alleging discrimination.

Every effort will be made to obtain early resolution of complaints at the lowest level possible. The option of informal mediation meeting(s) between the affected parties and the Title VI Specialist may be utilized for resolution.

Procedure

1. Any individual, group of individuals or entity that believes they have been subjected to discrimination prohibited by Title VI nondiscrimination provisions may file a written complaint with the LDOTD's Compliance Programs Office. A formal complaint must be filed within 180 calendar days of the alleged occurrence.

2. Upon receipt of the complaint, CPO will determine its jurisdiction, acceptability, need for additional information, and investigative merit of the complaint. In cases where the complaint is against one of LDOTD's sub-recipients of federal highway funds, the Department will assume the jurisdiction and will investigate and adjudicate the case.

3. Once CPO decides to accept the complaint for investigation, the complainant and the respondent will be notified in writing of such determination within five calendar days. The complaint will then be logged in CPO's records identifying its basis, the race, color, national origin and gender of the complainant.

4. In cases where LDOTD assumes the investigation of the complaint, CPO will provide the respondent with the opportunity to respond to the allegations in writing. The respondent will have 10 calendar days to furnish CPO his/her response to the allegations.

5. Within 50 calendar days of receipt of the complaint, the LDOTD's investigator* will prepare an investigative report for the Compliance Programs Director. The report shall include a narrative description of the incident, identification of persons interviewed, findings and recommendations for disposition. *This can be the Program Area Title VI Liaison or LDOTD's Title VI Specialist.

6. Once LDOTD investigative report becomes final, the parties will be properly notified of the outcome and appeal rights.

7. LDOTD's investigative report and a copy of the complaint will be forwarded to FHWA, within 60 calendar days of the receipt of the complaint.

8. If the complainant is not satisfied with the results of the investigation, s/he shall be advised of their rights to appeal LDOTD's determination to the FHWA — Louisiana Regional Office, USDOT or USDOJ. Appeals must be filed within 180 days after LDOTD's final resolution. Unless new facts not previously considered come to light, reconsideration of LDOTD's determination will not be available.

9. LDOTD will serve as appealing forum to a complainant that is not satisfied with the outcome of an investigation conducted by a LDOTD sub-recipient. LDOTD will analyze the facts of the case and will issue its conclusion to the appellant within 60 days of the receipt of the appeal.

QUESTIONS FREQUENTLY ASKED ABOUT RELOCATION ADVISORY SERVICES

1. **Who is eligible to receive relocation advisory services?**
   Relocation Assistance Advisory Services shall be offered to:
   - All persons occupying property to be acquired.
   - All persons occupying property adjacent to the real property acquired when the Department determines that such persons are caused substantial economic injury because of the acquisition.
   - All persons who, because of the acquisition of real property used for a business or farm operation, move from other real property used for a dwelling or move their personal property from such other real property.

2. **As a "displaced person", what relocation assistance advisory services will be offered to me?**
   The Department's Real Estate Representative assigned to the project will:
   - Give you a Real Estate Brochure;
   - Determine your need, if any, for relocation assistance;
   - Discuss and explain the services available, relocation payments and the eligibility requirements, and assist you in completing any applications or other forms required;
   - Provide current information on the availability, prices, and rentals of comparable, decent, safe, and sanitary housing, and of comparable commercial properties and locations for displaced businesses;
   - Assist you, if your business or farm is displaced, in obtaining and becoming established in a suitable replacement location;
   - Supply information concerning Federal and State housing programs, disaster loan programs, and other Federal or State programs offering assistance to displaced persons;
   - Provide advisory services in order to minimize hardships on adjusting to a new location.

QUESTIONS FREQUENTLY ASKED ABOUT REPLACEMENT HOUSING PAYMENTS

1. **If I own my home, can I elect to rent replacement housing?**
   Yes.

QUESTIONS FREQUENTLY ASKED ABOUT MOVING EXPENSE PAYMENTS

NOTES

Louisiana Department of Transportation and Development

Title VI Discrimination Complaint Form

Name	Phone	Name of Person(s) Who Discriminated Against you.
Address (Street No., P.O. Box, Etc.)		Location and Position of Person (If known)
City, State, Zip		City, State, Zip

Discrimination Because Of: __Race/Color __Sex __Disability __Age __National Origin __Retaliation	Date of Alleged Incident

Explain as briefly and clearly as possible what happened and how you were discriminated against. Indicate who was involved and witnessed the discrimination. Be sure to include how other persons were treated differently than you. Attach any written material pertaining to your case.

Signature	Date

Please return this form to: **Heather Huval**
Title VI/ADA
LADOTD - Compliance Programs Office
P.O. Box 94245
Baton Rouge, LA 70804-9245

Telephone Number: (225) 379-1923
Fax Number: (225) 379-1385

I-10 LAKE CHARLES
CALCASIEU RIVER BRIDGE

APPENDIX J

Air Quality Analysis Technical Report

I-10 LAKE CHARLES
CALCASIEU RIVER BRIDGE

Air Quality Analysis

I-10 Calcasieu River Bridge Improvements

(I-10/I-210 West End to I-10/I-210 East End)

Calcasieu Parish, Louisiana

State Project Number: H.003931

October 2021

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

U.S. Department of Transportation
Federal Highway Administration

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1.0 INTRODUCTION

This report documents the results of an air quality assessment as part of the environmental process for the I-10 Calcasieu River Bridge Improvements in Lake Charles, Louisiana. Air quality impact assessment was performed for the preferred alternative for the I-10 bridge analyzed for the EIS.

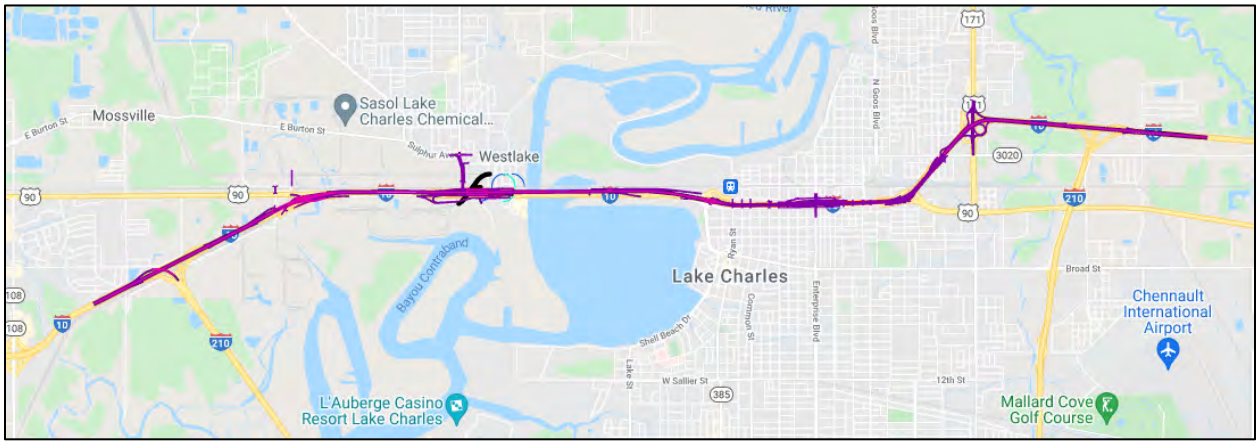
A Travel Demand Model (TDM) Tier 1 Analysis was developed for the project by the Imperial Calcasieu Metropolitan Planning Organization (IMCAL MPO). Using a base year of 2013, the MPO updated the model to a Base Year of 2019 and the Design Year of 2042. This analysis provided data for this air quality analysis. A copy of the TDM-Based Tier 1 Analysis is provided in Appendix B. To develop future volumes, the base year traffic volumes of 2019 were grown to the future year of 2042 using an annual growth rate of 1.4%, which was agreed upon by the MPO and the LADOTD traffic team and its consulting engineers.

The I-10 Calcasieu River Bridge replacement was approved by the Metropolitan Planning Organization (MPO) for the Transportation Improvement Plan (TIP) for Stage Beyond 2045; therefore, the bridge replacement is not in the Metropolitan Transportation Plan 2045 (MTP). However, the MPO approved the I-10 widening within Stage II 2035, and the widening is in both the TIP and MTP 2045. The bridge replacement will be programmed in the next update of the MTP.

1.1 Project Description

The I-10 Calcasieu River Bridge Improvements Project is located in Southwest Louisiana in Calcasieu Parish. Alternative 3 (5-G) consists of a bridge with the westbound approach built on a retaining wall for the I-10 mainline over the Calcasieu River and is showed in Figure 1. This involves widening I-10 from 4 lanes to 6 lanes and would allow a fully directional interchange to be elevated over the I-10 mainline. Improvements to connecting roadways will also be performed such as elevating Sampson Street, connecting four ramps to the interstate, and providing a grade separation for the railroad crossings. Tracks on the southside of the bridge would have to be relocated as well.

Figure 1: Alternative 3 (5-G)



The highest traffic volume on I-10 in the study area occurs on the west of I-10 and I-210 interchange west of the Calcasieu River. The volume for that segment is expected to be 143,200 in 2042 No-Build condition and increases to 145,600 for proposed 2042 Build alternative.

2.0 REGULATORY SETTING

The federal Clean Air Act (CAA), first enacted in 1963 and amended numerous times in subsequent years, forms the basis for the nation's air pollution control effort. The U.S. Environmental Protection Agency (USEPA) is responsible for implementing most aspects of the CAA. The last amendment (1990) establishes guidelines for air quality standards, known as National Ambient Air Quality Standards (NAAQS), for six criteria pollutants. The CAA section 176(c) requires that the transportation projects should be consistent with state air quality goals, established by the State Implementation Plan (SIP). This process of ensuring the consistency is called Transportation Conformity. Conformity to the SIP means that the transportation activities will not cause new violations of the standards, worsen existing violations of the standards, or delay timely attainment of the NAAQS. In addition to the criteria air pollutants for which there are NAAQS, the EPA also regulates Mobile Source Air Toxics (MSATs).

The National Environmental Policy Act (NEPA), signed into law on January 1, 1970, requires federal agencies to assess the environmental effects of their proposed actions in their decision-making processes. The human environment includes natural, cultural, and socioeconomic resources. The Council on Environmental Quality (CEQ) was created by NEPA (42 U.S.C. 4342), and CEQ has regulations for NEPA implementation at 40 CFR parts 1500 through 1508. These guidelines set forth the procedures for agencies to comply with NEPA. CEQ issued "Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews" 81 FR 51866 (Aug. 5, 2016) to help agencies to consider climate impacts in their reviews. This guidance was withdrawn in 2017. New draft guidance was proposed in 2019, but in January 2021, CEQ was

directed to rescind the 2019 draft GHG guidance. More air quality regulations might be proposed from USEPA in line with forthcoming GHGs reduction goals and efforts.

The Louisiana Department of Environmental Quality (LDEQ) operates the air quality monitoring program and enforces air quality regulations in Louisiana to meet the air quality standards.

3.0 CRITERIA POLLUTANTS

Criteria pollutants regulated by USEPA are carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone (O_3), sulfur dioxide (SO_2) and particulate matter (PM). The proposed project is located in Calcasieu parish which is in attainment for all criteria pollutants. Hence, no air quality conformity analysis to conform to the SIP for attainment and maintenance of the NAAQS is required.

Since carbon monoxide (CO), ozone (O_3) and particulate matter ($PM_{2.5}$ and PM_{10}) are associated with roadway transportation sources, impacts of the proposed project to these pollutants in the study area are typically reviewed.

3.1 Carbon Monoxide

CO is a colorless, odorless gas generated from incomplete combustion of fuel. The greatest sources of CO to outdoor air are cars, trucks and other vehicles or machinery that burn fossil fuels. CO is harmful to human health since breathing air with a high concentration of CO reduces the amount of oxygen that can be transported in the blood stream. Very high-level CO can even cause dizziness, confusion, unconsciousness and death.

Louisiana is currently in attainment statewide for CO. The highest traffic volume on the I-10 corridor is between 140,000-150,000 for both build and no-build alternatives. Additionally, CO analyses performed for projects with similar and higher ADT to the proposed project such as the Pecue Lane/I-10 project in East Baton Rouge Parish and I-10 LA 415 to Essen Lane (I-10/I-12) in East and West Baton Rouge Parishes have shown no violations of the NAAQS. Therefore, this proposed project would not likely cause a violation of the NAAQS for CO, and no air quality modeling for CO is required.

3.2 Particulate Matter

Particulate Matter (PM) refers to a mixture of microscopic solid particles and liquid droplets suspended in the air. It is also called particle pollution. These particles can be emitted directly from sources, such as construction sites, unpaved roads, fields, smokestacks, fires or can be made up of hundreds of different chemicals. The particles form in the atmosphere as a result of complex reactions of chemicals such as sulfur dioxide and nitrogen oxides, which are pollutants emitted from power plants, industries and automobiles.

Particle pollution includes inhalable coarse particles (PM_{10}) and fine particles ($PM_{2.5}$). Coarse dust particles (PM_{10}) are 2.5 to 10 micrometers in diameter and can be generated by dust stirred up by vehicles on roads. Fine particles ($PM_{2.5}$) are 2.5 micrometers in diameter or smaller and can only be seen with an electron microscope. Fine particles are produced from all types of combustion, including motor vehicles, power plants, residential wood burning, forest fires, agricultural burning, and some industrial processes. Particulate matter can cause serious health problems since they can be inhaled and can get deep into human lungs or even into the bloodstream.

The project is located in Calcasieu Parish, which is designated as being in attainment for PM_{10} and $PM_{2.5}$ and is in compliance with NAAQS. Hence, no hot-spot analysis is necessary for PM.

3.3 Ozone

Ground level or tropospheric ozone is formed by chemical reactions between oxides of nitrogen (NOx) and volatile organic compounds (VOC). When these pollutants emitted by cars, power plants, industrial boilers, refineries, chemical plants, and other sources chemically react in the presence of sunlight, ground level ozone is generated. Ozone can be harmful to our health, especially for people with asthma. This project is located in an area designated by the USEPA as being in attainment for ozone; therefore, no assessment is required.

3.4 Mobile Source Air Toxics Analysis (MSAT)

The MSATs are hazardous air pollutants emitted from highway vehicles and non-road equipment. EPA identified nine compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers or contributors and non-cancer hazard contributors such as 1,3-butadiene, acetaldehyde, acrolein, benzene, diesel particulate matter (diesel PM), ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. Additional MSAT information has been included in Appendix A.

The Federal Highway Administration (FHWA) has issued MSAT guidance "Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents" on October 18, 2016. This includes a tiered approach on how MSAT for transportation projects should be evaluated. Depending on the specific project circumstances, FHWA has identified the following three categories of analysis.

1. No analysis for projects with no potential for meaningful MSAT effects.
2. Qualitative analysis for projects with low potential MSAT effects.
3. Quantitative analysis for projects with higher potential MSAT effects.

The Guidance states that "Projects with Higher Potential MSAT Effects" should:

1. Create or significantly alter a major intermodal freight facility that has the potential to concentrate high levels of diesel particulate matter in a single location, involving a significant number of diesel vehicles for new projects or accommodating with a significant increase in the number of diesel vehicles for expansion projects; or

2. Create new capacity or add significant capacity to urban highways such as interstates, urban arterials, or urban collector-distributor routes with traffic volumes where the AADT is projected to be in the range of 140,000 to 150,000 or greater by the design year.

And also,

3. Be proposed to be located in proximity to populated areas.

The Build Alternative includes the widening and reconstruction of I-10 through populated Lake Charles area. Roadway volumes from travel demand model (TDM) were analyzed to determine the type of MSAT analysis required for this project. The segments of I-10 on the west of I-210 interchange west end are projected to carry more than 140,000 vehicles per day according to the TDM in Design Year 2042. Although that segment does not fall under the project corridor/segment to be widened, conservative approach was taken to assess the MSAT quantitatively for this project. Figure 2 and Figure 3 represents roadway segments with volume from TDM on the west of I-210 interchange west end area in no build and build scenario respectively.

Figure 2: 2042 Travel Demand Model (No Build)

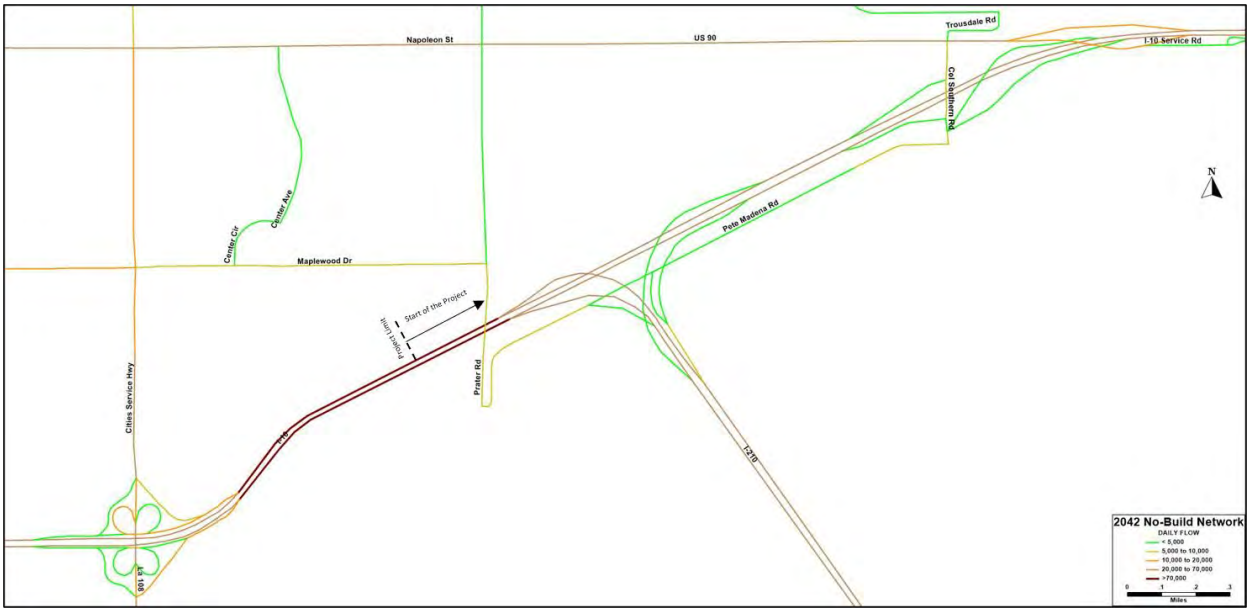
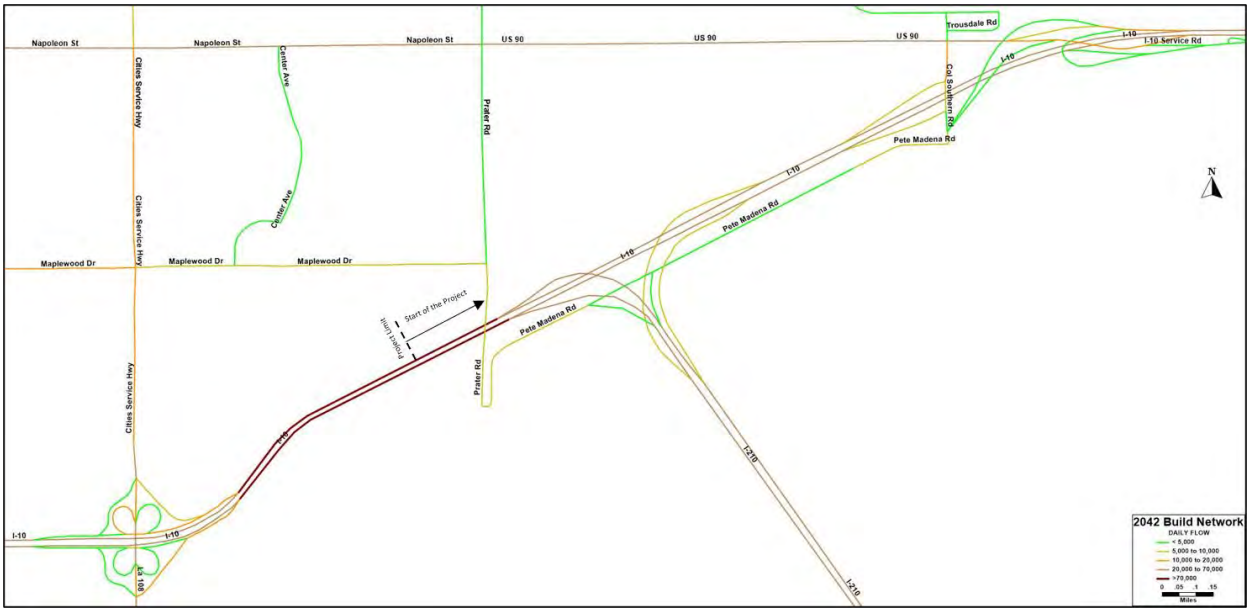


Figure 3: 2042 Travel Demand Model (Build)



3.5 Greenhouse Gas Emissions

A large amount of greenhouse gas emission (GHGs) occurs from the transportation sector. Among various pollutants emitted from on-road vehicles some are greenhouse gases which trap heat and are responsible for the global warming and climate change. GHGs emissions associated with operation of the proposed project were calculated using EPA's Motor Vehicle Emissions Simulator (MOVES).

4.0 PROJECT QUANTITATIVE ANALYSIS

Quantitative analysis was conducted for MSAT and Green House Gases (GHGs) consistent with the latest guidance developed by FHWA. These include the MSAT Interim Guidance Update mentioned earlier and the FHWA guidance for addressing a quantitative MSAT analysis using MOVES (Motor Vehicle Emission Simulator) titled "Frequently Asked Questions (FAQ) Conducting Quantitative MSAT Analysis for FHWA NEPA Documents".

For this project, three study scenarios, 2019 Existing, 2042 No-Build, 2042 Build were selected for the modeling analysis. The first step for the quantitative MSAT/GHGs analysis is to identify the affected transportation network to capture the anticipated changes in MSAT emissions as a direct result of a proposed project. The affected transportation network provides a framework for an objective quantitative assessment with minimized uncertainty and bias. It helps to keep the analysis manageable by analyzing all segments associated with the project plus those segments with likely meaningful changes in emissions. The primary data sources used in identifying the

affected transportation network are the loaded network from the Imperial Calcasieu (IMCAL) Regional Planning and Development Commission MPO Travel Demand Model's outputs. The affected network links are selected based on the following three criteria. The full extent of the affected network and the affected links are demonstrated in Figure 4. A reasonable study boundary was also established to include meaningful affected links around the project corridor.

1. +/-5% or greater change in average daily traffic on congested highway links with level of service (LOS) D or worse
2. +/-10% or greater change in AADT on uncongested highway links with LOS C or better
3. +/-10% or greater change in travel time

Figure 4: Affected Transportation Network for MOVES Analysis

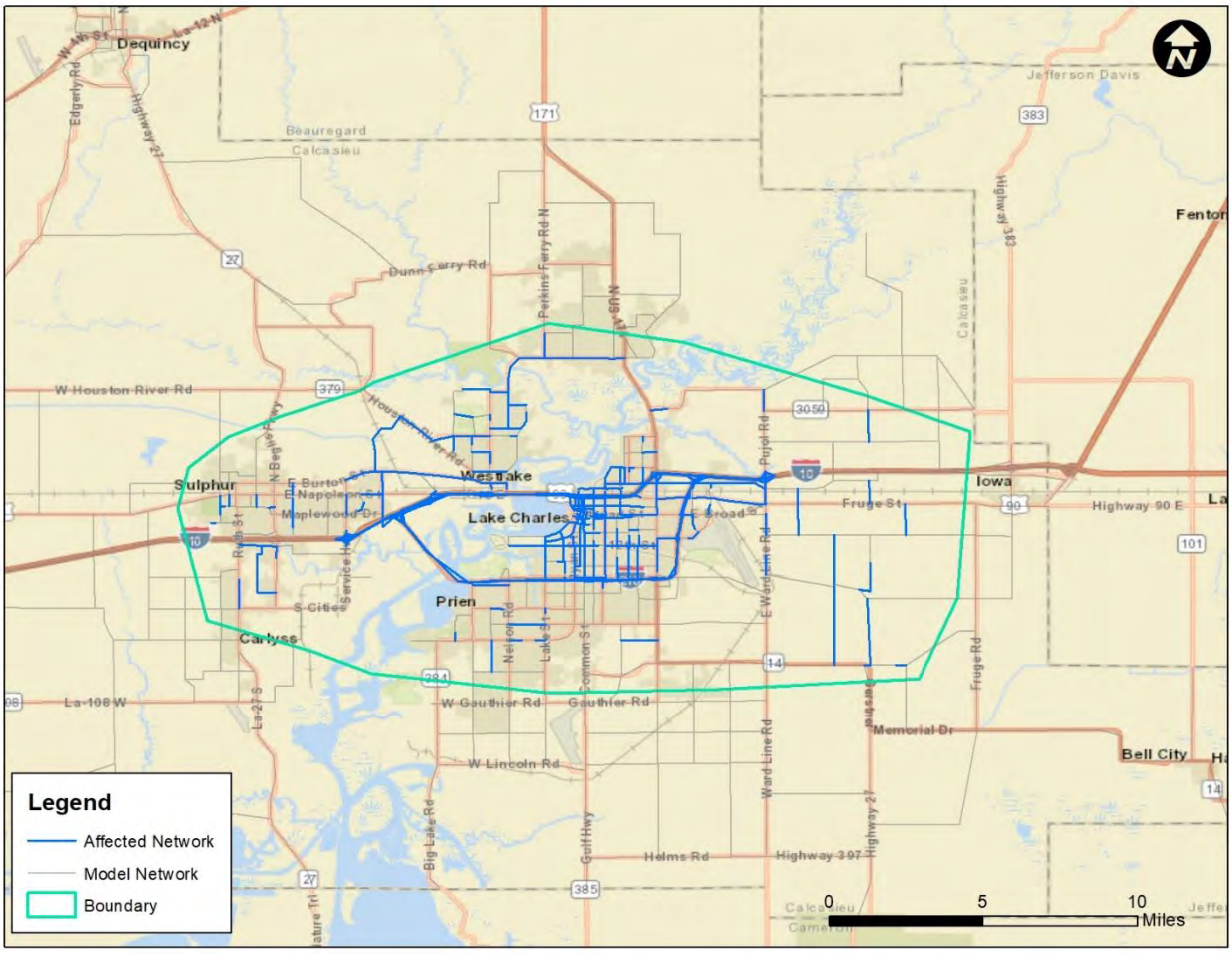


Table 1 and Table 2 illustrate the MOVES inputs for Runspec and MOVES inputs for County data manager.

Table 1: MOVES Inputs for Runspec

MOVES input Section	**Modeled Parameters**	
Description		Varies by scenario
Scale	Domain/Scale	County
	Calculation Type	Inventory
Time Spans	Time Aggregation Level	Hour
	Years	2019, 2042
	Days	Weekday
	Months	January, April, July, October
	Start Hour	0:00 - 0:59
	End Hour	23:00 - 23:59

MOVES input Section	**Modeled Parameters**	
Geographic Bounds	Region	Calcasieu Parish, Louisiana
	Domain Input Database Server and Database	Varies by Scenario
Vehicles/Equipment-On Road Vehicle Equipment	Selections	All permissible source use types with Compressed Natural Gas, Diesel Fuel, Electricity, Ethanol and Gasoline
Road Type	Selected Road Types	All road types (only Urban Restricted Access & Urban Unrestricted Access are used in the analysis)
Pollutants and Processes	Pollutants	Total Gaseous Hydrocarbons (chained to other pollutants) Non-Methane Hydrocarbons (chained to other pollutants) Non-Methane Organic Gases (chained to other pollutants) Total Organic Gases (chained to other pollutants) Volatile Organic Compounds (chained to other pollutants) Methane (chained to other pollutants) Nitrous Oxide (NO2) Primary Exhaust PM_{10} Total Primary Exhaust $PM_{2.5}$ Total Primary Exhaust $PM_{2.5}$ – Species Primary Exhaust $PM_{2.5}$ – Brakewear & Tirewear Particulates Primary Exhaust PM_{10} – Brakewear & Tirewear Particulates Total Energy Consumption (chained to other pollutants) Atmospheric CO_2 CO_2 Equivalent Benzene 1,3-Butadiene Formaldehyde Acetaldehyde Acrolein Ethyl Benzene Polycyclic Aromatic Hydrocarbons (PAH) Acenaphthene particle, gas Acenaphthylene particle, gas Anthracene particle, gas Benz(a)anthracene particle, gas Benzo(a)pyrene particle, gas Benzo(b)fluoranthene particle, gas

MOVES input Section	Modeled Parameters		
			Benzo(g,h,i)perylene particle, gas Benzo(k)fluoranthene particle, gas Chrysene particle, gas Dibenzo(a,h)anthracene particle, gas Fluoranthene particle, gas Fluorene particle, gas Indenol(1,2,3,c,d)pyrene particle, gas Naphthalene particle, gas Phenanthrene particle, gas Pyrene particle, gas
	Processes		Running Exhaust, Crankcase Exhaust, Evaporation, Idling, Refueling (Varies over pollutants)
Output-General Output	Units	Mass Units	Grams
		Energy Units	Joules
		Distance Units	Miles
	Activity		Distance Traveled Population
Output - Output Emissions Detail	For All Vehicle/Equipment Categories		Model Year Fuel Type Emission Process
	On Road		Road Type

Table 2: MOVES County Data Manager Inputs

Data Tab	Data Source Input Table	Scope of Data	Source
Source Type Population	SourceTypeYear	Number of vehicles by 13 different source types for each modeled year.	MOVES default
Vehicle Type VMT	HPMSTypeYear	Annual vehicle miles traveled (VMT) in the affected area by the 6 HPMS vehicle types	TDM
	monthVMTFraction	Proportion of VMT per month for each of the 13 MOVES source types	MOVES default
	dayVMTFraction	Proportion of VMT occurring over the course of days of the week for each of the 13 MOVES source types and fore each month modeled and each road type	MOVES default
	hourVMTFraction	Proportion of VMT occurring in each hour modeled for each of the 13 MOVES source types, road types and day	TDM

Data Tab	Data Source Input Table	Scope of Data	Source
I/M Programs	IMCoverage	Inspection and maintenance program data for different fuel type vehicles and for each year	N/A
Fuel type and Technologies	Avft	Fraction of engine types by different source types	MOVES default
Fuel	FuelSupply	Market share and available fuel formulations within Fulton and Forsyth County	MOVES default
	FuleFormulation	Properties of the available fuels	MOVES
Meteorology	ZoneMonthHour	Meteorology data for each month and hour of the day modeled	MOVES default
Road Type Distribution	RoadTypeDistribution	Fraction of VMT by the 13 MOVES source types and 2 Road types	TDM
Age Distribution	sourceTypeAgeDistribution	Fraction of vehicles by age for each vehicle type	MOVES default
Average Speed Distribution	avgSpeedDistribution	Fraction of traffic within several speed bins by vehicle and road type for each hour of the modeled period	TDM

Annual MSAT and GHGs emissions for 2019 Existing, 2042 No-Build, and 2042 Build are shown in Table 3. The results were compared to determine the overall trend in emissions over time and to understand how the project would impact the overall emission levels within the affected transportation network. As shown in Table 3 MSAT emissions increase slightly (5%~11%) for 2042 Build scenarios when compared to the corresponding No-Build scenario. GHGs also has a similar trend, increased by 5% compared with No Build scenario. Those increases in MSAT and GHGs are mainly due to the VMT increase (2%), which is likely due to the toll project potentially pushing the travelers to some longer and more congested alternative routes. However, when compared to the 2019 Existing conditions, emissions of all MSAT pollutants in the build scenarios show substantial decreases (49%-100%), despite the projected increases in VMT from 2019 to the 2042. The GHGs also has slight decrease (<1%) in the 2042 Build scenario relative to the existing scenario. EPA's vehicle and fuel regulations are expected to result in substantially lower MSAT levels in the future than exist today due to cleaner engine standards coupled with fleet turnover (Appendix A). The magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area will be substantially lower in the future than they are today, regardless of the scenario (No Build or Build) chosen.

Table 3: Air Quality Analysis Results

Pollutant/GHGs/VMT (Annual)		2019	2042 No Build	% change from 2019	2042 Build	% change from No Build	% change from 2019
MSAT (Kg)	Benzene	2,775	1,247	-55%	1,327	6.4%	-52%
	1,3-Butadiene	227	-	-100%	-	NA	-100%
	Formaldehyde	2,355	617	-74%	675	9.3%	-71%
	Acrolein	157	29	-82%	31	9.2%	-80%
	Naphthalene	273	51	-81%	54	6.5%	-80%
	Acetaldehyde	1,348	429	-68%	476	11%	-65%
	Ethyl Benzene	1,369	652	-52%	706	8.2%	-49%
	POM	115	21	-82%	22	5.3%	-81%
	Diesel PM	11,293	1,065	-91%	1,184	11%	-90%
GHGs (Metric Ton)		349,705	333,016	-4.8%	348,480	4.6%	-0.4%
VMT		703,317,014	905,856,485	29%	922,616,165	1.9%	31%

EPA's stringent vehicle emission and fuel regulations, combined with fleet turnover, are expected to substantially lower fleet average emission rates for MSATs in the future relative to today. Overall, best available information indicates that, nationwide, regional levels of MSATs are expected to decrease in the future due to fleet turnover and the continued implementation of more stringent emission and fuel quality regulations. Nevertheless, it is possible that some localized areas may show an increase in emissions and ambient levels of these pollutants due to locally increased traffic levels associated with the project.

The understanding of mobile source air toxics is an area of continued study. This air quality assessment has provided a quantitative analysis of MSAT emissions relative to the proposed project. However, available technical tools do not enable prediction of the project-specific health impacts of the emission changes associated with the alternatives. Because of these limitations, there is a discussion included in Appendix A in accordance with the President's Council on Environmental Quality (CEQ) regulations (40 CFR, Section 1502.22[b]) regarding incomplete or unavailable information.

5.0 CONSTRUCTION AIR QUALITY

Construction activities of the project may cause temporary increases in air pollution emissions and dust. Best available technology and best management practices would be implemented to control emissions from fuel-burning mobile-source equipment. Fugitive dust control and other measures for construction activities will be implemented to reduce particulate emissions.

6.0 CONCLUSION

The project corridor is located in Calcasieu Parish, which is in attainment for the criteria pollutants. Therefore, no further analyses were required for these pollutants.

The project meets FHWA's criteria for a Project with Higher Potential MSAT Effects, and quantitative analysis was performed. Emissions of all MSAT pollutants were projected to increase slightly from the No-Build to the Build scenario in 2042, although these increases are not considered substantial especially in light of the fact that, when compared to existing conditions, emissions of all MSAT pollutants under the 2042 Build scenarios are projected to be substantially lower than in the 2019 scenario.

The GHGs emission also followed similar emission difference as the MSAT pollutants among the various scenarios. The emission is reduced slightly in the No Build and Build scenario comparing with the existing condition despite of the significantly increase in VMT.

The project may cause temporary increase of emissions and dust due to the construction work, but these should be minimized using newer technology and practice.

The air quality quantitative outputs were focused on the preferred alternative but a qualitative analysis to compare these impacts among the proposed alternatives was conducted. The three proposed build alternative differ only in the section between Sampson Street in Westlake and Ryan Street in Lake Charles. This means that intersection operations at Enterprise Boulevard and PPG Drive are generally the same for all three. Alternative 3E, which would add ramp terminals to a new interchange but otherwise be the same as Alternative 3A, was ranked to perform worse operationally than Alternative 3A, which is designed with free flow ramps in two directions. At Sampson Street, Alternative 5G has lower delay at Sampson and Sulphur Street when compared to Alternative 3A and Alternative 3E. Additional turn lanes at the Sampson Street ramp terminals were incorporated into the final concept design for Alternative 5G, improving traffic flow and reducing queues and congestion to acceptable levels.

Based on the results of this air quality analysis, the project is not expected to cause to any adverse effect upon the air quality.

References:

1. Federal Highway Administration (FHWA), Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents, October 18, 2016.

2. Federal Highway Administration (FHWA), Frequently Asked Questions (FAQ) Conducting Quantitative MSAT Analysis for FHWA NEPA Documents, November 07, 2017.

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APPENDIX A

MSAT Background Information

Appendix A – MSAT Background Information

Background

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the U.S. Environmental Protection Agency (EPA) regulate 188 air toxics, also known as hazardous air pollutants. The EPA assessed this expansive list in its rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007), and identified a group of 93 compounds emitted from mobile sources that are part of EPA's Integrated Risk Information System (IRIS) . In addition, EPA identified nine compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers or contributors and non-cancer hazard contributors from the 2011 National Air Toxics Assessment (NATA). These are 1,3-butadiene, acetaldehyde, acrolein, benzene, diesel particulate matter (diesel PM), ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. While FHWA considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future EPA rules. The 2007 EPA rule mentioned above requires controls that will dramatically decrease MSAT emissions through cleaner fuels and cleaner engines.

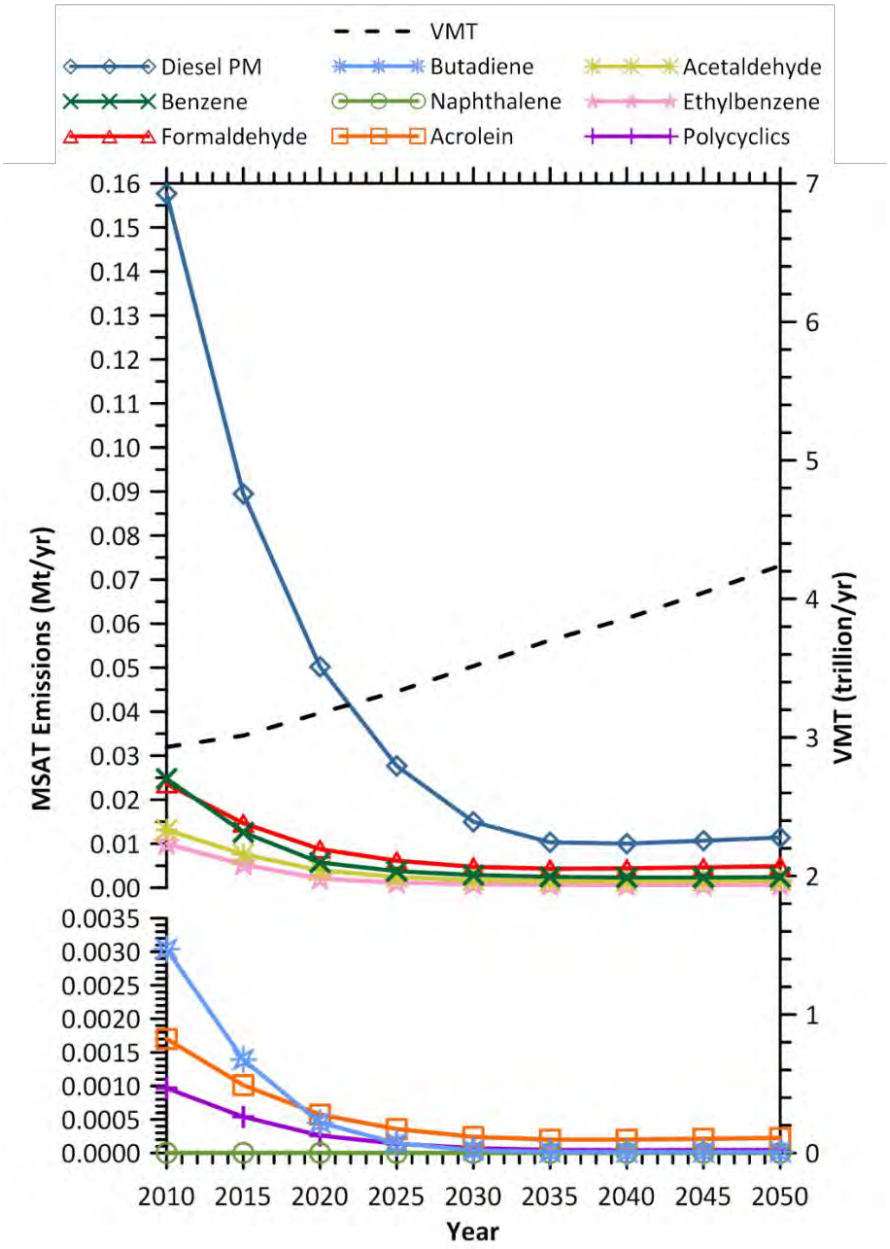
Motor Vehicle Emissions Simulator (MOVES)

In this study, Motor Vehicle Emissions Simulator (MOVES) Version 3 is used for the MSATs analysis which is the latest official version of MOVES and has been updated and improved from the previous version MOVES2014b According to EPA, MOVES2014 is a major revision to MOVES2010 and improves upon it in many respects. MOVES2014 includes new data, new emissions standards, and new functional improvements and features. It incorporates substantial new data for emissions, fleet, and activity developed since the release of MOVES2010. These new emissions data are for light- and heavy-duty vehicles, exhaust and evaporative emissions, and fuel effects. MOVES2014 also adds updated vehicle sales, population, age distribution, and vehicle miles travelled (VMT) data. MOVES2014 incorporates the effects of three new Federal emissions standard rules not included in MOVES2010. These new standards are all expected to impact MSAT emissions and include Tier 3 emissions and fuel standards starting in 2017 (79 FR 60344), heavy-duty greenhouse gas regulations that phase in during model years 2014-2018 (79 FR 60344), and the second phase of light duty greenhouse gas regulations that phase in during model years 2017-2025 (79 FR 60344). Since the release of MOVES2014, EPA has released MOVES2014a. In the November 2015 MOVES2014a Questions and Answers Guide, EPA states that for on-road emissions, MOVES2014a adds new options requested by users for the input of local VMT, includes minor updates to the default fuel tables, and corrects an error in

MOVES2014 brake wear emissions. The change in brake wear emissions results in small decreases in PM emissions, while emissions for other criteria pollutants remain essentially the same as MOVES2014.

Using EPA's MOVES2014a model, as shown in Figure 1 below, FHWA estimates that even if VMT increases by 45 percent from 2010 to 2050 as forecast, a combined reduction of 91 percent in the total annual emissions for the priority MSAT is projected for the same time period.

Figure 1: NATIONAL MSAT EMISSION TRENDS 2010 - 2050
FOR VEHICLES OPERATING ON ROADWAYS
USING EPA's MOVES2014a MODEL



Note: Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorology, and other factors

Source: EPA MOVES2014a model runs conducted by FHWA, September 2016.

Diesel PM is the dominant component of MSAT emissions, making up 50 to 70 percent of all priority MSAT pollutants by mass, depending on calendar year. Users of MOVES2014a will notice some differences in emissions compared with MOVES2010b. MOVES2014a is based on updated data on some emissions and pollutant processes compared to MOVES2010b, and also reflects the latest Federal emissions standards in place at the time of its release. In addition, MOVES2014a emissions forecasts are based on lower VMT projections than MOVES2010b, consistent with recent trends suggesting reduced nationwide VMT growth compared to historical trends.

MSAT Research

Air toxics analysis is a continuing area of research. While much work has been done to assess the overall health risk of air toxics, many questions remain unanswered. In particular, the tools and techniques for assessing project-specific health outcomes as a result of lifetime MSAT exposure remain limited. These limitations impede the ability to evaluate how potential public health risks posed by MSAT exposure should be factored into project-level decision-making within the context of NEPA.

Nonetheless, air toxics concerns continue to arise on highway projects during the NEPA process. Even as the science emerges, the public and other agencies expect FHWA to address MSAT impacts in its environmental documents. The FHWA, EPA, the Health Effects Institute, and others have funded and conducted research studies to try to more clearly define potential risks from MSAT emissions associated with highway projects. The FHWA will continue to monitor the developing research in this field.

NEPA Context

The NEPA requires, to the fullest extent possible, that the policies, regulations, and laws of the Federal Government be interpreted and administered in accordance with its environmental protection goals, and that Federal agencies use an interdisciplinary approach in planning and decision-making for any action that adversely impacts the environment (42 U.S.C. 4332). In addition to evaluating the potential environmental effects, FHWA must also take into account the need for safe and efficient transportation in reaching a decision that is in the best overall public interest (23 U.S.C. 109(h)). The FHWA policies and procedures for implementing NEPA are contained in regulation at 23 CFR Part 771.

The following discussion is included in accordance with the President's Council on Environmental Quality (CEQ) regulations (40 CFR, Section 1502.22[b]) regarding incomplete or unavailable information.

Incomplete or Unavailable Information for Project-Specific MSAT Health Impacts Analysis

In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in mobile source air toxic (MSAT) emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

The Environmental Protection Agency (EPA) is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the Clean Air Act and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. The EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. They maintain the Integrated Risk Information System (IRIS), which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects" (EPA, https://www.epa.gov/iris). Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSAT, including the Health Effects Institute (HEI). A number of HEI studies are summarized in Appendix D of FHWA's Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents. Among the adverse health effects linked to MSAT compounds at high exposures are: cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the adverse human health effects of MSAT compounds at current environmental concentrations (HEI Special Report 16, https://www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects) or in the future as vehicle emissions substantially decrease.

The methodologies for forecasting health impacts include emissions modeling; dispersion modeling; exposure modeling; and then final determination of health impacts – each step in the process building on the model predictions obtained in the previous step. All are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70 year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame, since such information is unavailable.

It is particularly difficult to reliably forecast 70-year lifetime MSAT concentrations and exposure near roadways; to determine the portion of time that people are actually exposed at a specific

location; and to establish the extent attributable to a proposed action, especially given that some of the information needed is unavailable.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by HEI (Special Report 16, https://www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects). As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel PM. The EPA states that with respect to diesel engine exhaust, "the absence of adequate data to develop a sufficiently confident dose-response relationship from the epidemiologic studies has prevented the estimation of inhalation carcinogenic risk (EPA IRIS database, Diesel Engine Exhaust, Section II.C.)."

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by the EPA as provided by the Clean Air Act to determine whether more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards, such as benzene emissions from refineries. The decision framework is a two-step process. The first step requires EPA to determine an "acceptable" level of risk due to emissions from a source, which is generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million. In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld EPA's approach to addressing risk in its two-step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than deemed acceptable.

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against project benefits, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, that are better suited for quantitative analysis (https://www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD59852578000050C9DA/$file/07-1053-1120274.pdf).

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APPENDIX B

TDM-based Tier 1 Analysis

Memorandum

To: *HNTB Corporation*
From: *CDM Smith*
Date: *10/8/2020*
Project: *Task Order #4*
31831 PL 008 – Calcasieu River Bridge Supplement #8
Calcasieu River Bridge, Route I-10, Calcasieu Parish

Subject: *Interim TDM-Based Tier 1 Analysis*
Planning-Level Traffic Analysis Rev. 01

Introduction

This report presents the planning-level traffic analysis to support the interim Travel Demand Model (TDM)-based Tier 1 Analysis for the I-10 Calcasieu River Bridge corridor between I-210 and US 171. Tier 1 Analysis evaluates build alternatives based on various metrics (including operations) and recommends advancement of alternatives to Tier 2 Analysis. The purpose of this planning-level traffic analysis is to provide the information needed for the operations metric of the interim TDM-Based Tier 1 Analysis. Results from this analysis will be used by HNTB to conduct the complete Tier 1 Analysis.

The overall purpose and proposed methodology of this analysis were presented in CDM Smith's *Revised Proposal for Interim TDM-Based Tier 1 Analysis* memorandum, which was submitted to HNTB project team on May 21, 2020 and approved by Louisiana Department of Transportation and development (LADOTD) thereafter. This memorandum was included in HNTB's *I-10 Calcasieu EIS SA No.8 Request for Data* memorandum, which was submitted to Imperial Calcasieu Regional Planning and Development Commission (IMCAL) on May 28, 2020. As proposed in CDM Smith's memo, the following procedures were completed to prepare for this analysis:

1. HNTB, in coordination with LADOTD, sent the schematics for the proposed three future Build Alternatives to IMCAL

2. IMCAL coded the three Build Alternatives to the TDM model network and developed the following five modeling scenarios:

   - 2019 Existing Conditions
   - 2042 No-Build Alternative
   - 2042 Alternative 1 (3-A)
   - 2042 Alternative 2 (3-E)
   - 2042 Alternative 3 (5-G)

3. IMCAL conducted model runs for the five scenarios and produced the following five measures-of-effectiveness (MOEs) for the AM peak hour (5:30-6:30 AM), the PM peak hour (4:30-5:30 PM), and the daily total:

- Study area:
  - Link volumes
  - Link speeds
  - Volume-to-capacity (V/C) ratios
- Entire model:
  - Vehicle-miles-travelled (VMT)
  - Vehicle-hours-travelled (VHT)

4. Through coordination with HNTB, IMCAL provided the model results to CDM Smith to conduct this analysis.
   - On August 8th, 2020, CDM Smith received the model input networks for all five scenarios. CDM Smith performed a QC review on the networks and identified a list of issues that needed to be addressed. CDM Smith summarized the QC review results in an Excel matrix and submitted it to IMCAL for their review and revision.
   - On August 28th, 2020, CDM Smith received the revised model networks as well as model outputs for all five scenarios. CDM Smith performed another QC review on the model files and identified a list of issues needed to be resolved, which included some remaining issues from the first QC review and new issues found in the revised version of model files. CDM Smith updated this QC review results to the original review matrix and submitted it to IMCAL for their review and revision.
   - On September 11th, 2020, CDM Smith received the second revised version of the model files. CDM Smith performed another QC review on the model files and confirmed that although there were still some minor issues remaining, all the critical issues were resolved in this version, and all the data requested in Step 3 above were provided in the model files. These revised model files were used for this analysis.

Analysis Methodology

Definition of MOEs

Link Volume is the traffic volume assigned to each link (roadway segment) of the network by the trip assignment step of the TDM. It is the number of vehicles that travel through each link during a certain period (AM peak, PM peak or daily), which represents the traffic flow.

Link Speed is the congested travel speed on each link of the network, calculated by the TDM after all trips are assigned to each link. Link speed represents the average speed of the vehicles traveling on a roadway segment occupied by other vehicles, which simulates the real-world traffic conditions.

Volume-to-Capacity (V/C) Ratio is calculated by dividing the link volume by roadway capacity, and is used to measure the congestion level. Roadways with higher V/C ratios are more congested compared to roadways with lower V/C ratios. A V/C ratio of one means the roadway is operating at capacity, which indicates significant congestion. V/C ratios higher than one mean the roadway is operating over capacity, which indicates more severe congestion.

Vehicle-Miles-Travelled (VMT) is the total miles traveled by all vehicles in the network during a certain period (AM peak, PM peak or daily). VMT is a key measure of the quantity of travel demand and efficiency of transportation system usage for a given area of the network or a region. A lower VMT under the same total travel demand would typically indicate that vehicles are traveling on more efficient routes, which leads to better system performance.

Vehicle-Hours-Travelled (VHT) is the total hours traveled by all vehicles in the network during a certain period (AM peak, PM peak or daily). As another key measure of system efficiency, a lower VHT would typically indicate that vehicles are traveling at higher speeds, which leads to better system performance.

In addition to these five MOEs listed above, the study team also included the following two factors for additional support:

System Speed is calculated by dividing the VMT by VHT, which represents the average speed of all vehicles traveling in the entire modeling area during a certain period (AM peak, PM peak or daily). System speed was added to provide a more intuitive demonstration of system performance.

Railroad Crossing Delay was added as a factor because a railroad crossing at Sampson Street north of I-10 causes significant delay in the peak hours, and this delay was not accounted for in the TDM. This delay exists in all scenarios except Alternative 3, where that segment of Sampson Street will be elevated as an overpass above the railroad crossing. During the field study, this delay was recorded for the AM and PM peak hours.

Study Area Roadway Groups

To analyze the study area roadways in greater detail and better understand the network performance, the study team divided the study area roadways into four groups based on their functional classification and characteristics:

- **Group 1 – I-10 Mainline**
  This includes the freeway mainline of I-10
- **Group 2 – I-10 Ramps and Service Roads**
  This includes the ramps and service roads/frontage roads along I-10
- **Group 3 – Major Corridors**
  This includes the five major corridors identified in the study area, which were further broken down into three sub-groups:
  - Group 3-A: Sampson Street
  - Group 3-B: Sulphur Avenue
  - Group 3-C: PPG Drive, Enterprise Boulevard and Ryan Street
- **Group 4 – Other Local Streets**

Analysis results of the MOEs will be summarized for each group to provide a detailed measure of the traffic operations in the study area. **Figure 1** in the **Appendix** shows the study area roadway groups.

MOE Summarization Methods

Different MOEs and factors need to be summarized using different methods in order to properly represent the traffic operations performance.

Link Volumes are summarized as the average traffic volume of all links within each group, weighted by length of each link. This weighted average value captures the average volume more accurately by accounting for different ways of segmenting the same roadway link in the model network.

Link Speeds and **V/C Ratios** are summarized as the average values of all links within each group, weighted by the VMT of each link. This weighted average captures the average speed more accurately by accounting for different traffic volumes and lengths of each link.

VMT and **VHT** are summarized as the total values of all the links in the entire modeling area, in order to provide a system-wide evaluation.

System Speed is directly calculated by dividing VMT by VHT and therefore does not need to be summarized.

Railroad Crossing Delay is just a single set of numbers and therefore do not need to be summarized.

Analysis Results

Using the analysis methodology as discussed above, the study team conducted this planning-level traffic analysis for each of the MOEs and summarized the results in the following tables:

- **Table 1** shows the analysis results for 2019 Existing Conditions and 2042 No-Build Alternative.
- **Table 2** shows the analysis results for 2042 Alternative 1, 2 and 3. Detailed design schematics for each alternative were included in HNTB's *I-10 Calcasieu EIS SA No.8 Request for Data* memorandum.
- **Table 3** shows the performance comparison between each Build alternative to the No-Build alternative. This table shows data bars as a visual aid to provide a more intuitive understanding of the results. Green color means the alternative shows more favorable performance compared to the No-Build; Red color means the opposite. Besides the comparative differences, the actual V/C ratios are also included in this table for reference.

To further illustrates these results in a visual format in greater detail, the study team developed a set of maps for each alternative to show the traffic volumes, speeds, and V/C ratios for every link in the study area. All 31 maps are included in the **Appendix**.

Table 1 – Analysis Results for 2019 Existing Conditions and 2042 No-Build Alternative

Scenario	Study Area							Entire Model			
	Study Area Roadway Groups		Time Period	Link Volume (veh)	Link Speed (mph)	Railroad Crossing Delay (min)	V/C Ratio	Time Period	VMT (in 000s)	VHT (in 000s)	System Speed (mph)
2019 Existing Conditions	Group 1: I-10 Mainline*		AM Peak	5,400	41.7	-	0.74	AM Peak	1,290	34	37.9
			PM Peak	6,300	42.3	-	0.73				
			Daily Total	28,500	39.8	-	0.69				
	Group 2: I-10 Ramps & Service Roads		AM Peak	1,100	29.1	-	0.39				
			PM Peak	1,300	29.5	-	0.40				
			Daily Total	5,700	27.2	-	0.39				
	Group 3: Major Corridors	Group 3-A: Sampson St	AM Peak	4,600	21.4	3	0.90	PM Peak	1,572	41	37.9
			PM Peak	5,600	22.6	18	0.86				
			Daily Total	25,000	23.5	-	0.73				
		Group 3-B: Sulphur Ave	AM Peak	700	24.5	-	0.44				
			PM Peak	700	21.7	-	0.35				
			Daily Total	3,400	23.2	-	0.39				
		Group 3-C: PPG Dr, Enterprise Blvd, Ryan St	AM Peak	900	31.3	-	0.40	Daily Total	7,053	192	36.8
			PM Peak	1,100	31.2	-	0.40				
			Daily Total	4,800	30.4	-	0.37				
	Group 4: Other Local Streets		AM Peak	1,100	27.4	-	0.56				
			PM Peak	1,400	28.3	-	0.55				
			Daily Total	6,100	28.0	-	0.50				
2042 No-Build	Group 1: I-10 Mainline*		AM Peak	6,900	33.8	-	0.97	AM Peak	1,736	53	33.0
			PM Peak	8,100	34.8	-	0.95				
			Daily Total	37,500	30.9	-	0.91				
	Group 2: I-10 Ramps & Service Roads		AM Peak	1,400	22.9	-	0.51				
			PM Peak	1,600	23.9	-	0.51				
			Daily Total	7,400	21.2	-	0.51				
	Group 3: Major Corridors	Group 3-A: Sampson St	AM Peak	5,900	17.0	3	1.13	PM Peak	2,101	63	33.2
			PM Peak	7,300	18.1	18	1.10				
			Daily Total	32,700	19.2	-	0.96				
		Group 3-B: Sulphur Ave	AM Peak	700	22.3	-	0.42				
			PM Peak	800	24.5	-	0.48				
			Daily Total	3,700	23.4	-	0.44				
		Group 3-C: PPG Dr, Enterprise Blvd, Ryan St	AM Peak	1,100	27.9	-	0.47	Daily Total	9,513	300	31.7
			PM Peak	1,300	29.4	-	0.48				
			Daily Total	6,200	26.4	-	0.47				
	Group 4: Other Local Streets		AM Peak	1,600	27.9	-	0.67				
			PM Peak	1,900	27.9	-	0.65				
			Daily Total	8,900	26.5	-	0.62				

Note:
* Because each direction of I-10 mainline is represented by one individual link in the TDM, volumes for I-10 mainline only represent one-way volumes. Other volumes in this table represent two-way combined volumes.

Table 2 – Analysis Results for 2042 Alternative 1, 2 and 3

Scenario	Study Area							Entire Model			
	Study Area Roadway Groups		Time Period	Link Volume (veh)	Link Speed (mph)	Railroad Crossing Delay (min)	V/C Ratio	Time Period	VMT (in 000s)	VHT (in 000s)	System Speed (mph)
2042 Alt 1 (3-A)	Group 1: I-10 Mainline*		AM Peak	7,200	44.0	-	0.74	AM Peak	1,732	51	33.9
			PM Peak	8,500	44.5	-	0.74				
			Daily Total	38,800	41.8	-	0.70				
	Group 2: I-10 Ramps & Service Roads		AM Peak	1,300	25.2	-	0.46				
			PM Peak	1,500	26.0	-	0.45				
			Daily Total	7,000	23.4	-	0.46				
	Group 3: Major Corridors	Group 3-A: Sampson St	AM Peak	5,000	20.1	3	1.00	PM Peak	2,098	62	34.0
			PM Peak	6,400	20.5	18	0.99				
			Daily Total	28,600	21.1	-	0.87				
		Group 3-B: Sulphur Ave	AM Peak	2,500	34.1	-	0.56				
			PM Peak	2,800	37.7	-	0.50				
			Daily Total	13,400	34.1	-	0.55				
		Group 3-C: PPG Dr, Enterprise Blvd, Ryan St	AM Peak	1,100	26.9	-	0.46	Daily Total	9,496	291	32.7
			PM Peak	1,300	28.6	-	0.47				
			Daily Total	6,200	26.2	-	0.46				
	Group 4: Other Local Streets		AM Peak	1,500	27.6	-	0.62				
			PM Peak	1,800	27.8	-	0.61				
			Daily Total	8,200	26.5	-	0.60				
2042 Alt 2 (3-E)	Group 1: I-10 Mainline*		AM Peak	7,200	44.0	-	0.74	AM Peak	1,733	51	33.8
			PM Peak	8,500	44.6	-	0.73				
			Daily Total	38,700	41.8	-	0.70				
	Group 2: I-10 Ramps & Service Roads		AM Peak	1,300	24.6	-	0.46				
			PM Peak	1,500	25.9	-	0.45				
			Daily Total	6,900	23.1	-	0.45				
	Group 3: Major Corridors	Group 3-A: Sampson St	AM Peak	5,000	20.4	3	1.00	PM Peak	2,099	62	34.0
			PM Peak	6,400	20.8	18	0.98				
			Daily Total	28,700	21.3	-	0.86				
		Group 3-B: Sulphur Ave	AM Peak	2,300	33.0	-	0.51				
			PM Peak	2,700	35.3	-	0.49				
			Daily Total	12,900	32.5	-	0.53				
		Group 3-C: PPG Dr, Enterprise Blvd, Ryan St	AM Peak	1,200	28.6	-	0.49	Daily Total	9,497	291	32.6
			PM Peak	1,300	28.1	-	0.48				
			Daily Total	6,400	26.5	-	0.47				
	Group 4: Other Local Streets		AM Peak	1,500	27.6	-	0.64				
			PM Peak	1,800	27.8	-	0.63				
			Daily Total	8,300	26.2	-	0.61				
2042 Alt 3 (5-G)	Group 1: I-10 Mainline*		AM Peak	7,600	43.5	-	0.76	AM Peak	1,735	51	33.8
			PM Peak	9,000	44.0	-	0.74				
			Daily Total	41,000	41.1	-	0.72				
	Group 2: I-10 Ramps & Service Roads		AM Peak	1,300	25.4	-	0.48				
			PM Peak	1,600	27.1	-	0.46				
			Daily Total	7,100	23.8	-	0.47				
	Group 3: Major Corridors	Group 3-A: Sampson St	AM Peak	6,400	16.0	-	1.23	PM Peak	2,101	62	33.9
			PM Peak	7,800	17.0	-	1.15				
			Daily Total	35,900	17.4	-	1.05				
		Group 3-B: Sulphur Ave	AM Peak	800	23.0	-	0.56				
			PM Peak	1,000	22.2	-	0.54				
			Daily Total	4,600	23.5	-	0.52				
		Group 3-C: PPG Dr, Enterprise Blvd, Ryan St	AM Peak	1,100	27.6	-	0.45	Daily Total	9,511	292	32.6
			PM Peak	1,300	28.6	-	0.46				
			Daily Total	6,200	26.4	-	0.45				
	Group 4: Other Local Streets		AM Peak	1,500	27.3	-	0.66				
			PM Peak	1,800	27.7	-	0.65				
			Daily Total	8,200	26.3	-	0.61				

Note:
* Because each direction of I-10 mainline is represented by one individual link in the TDM, volumes for I-10 mainline only represent one-way volumes. Other volumes in this table represent two-way combined volumes.

Table 3 – Comparison Between the Three Build Alternatives and the No-Build Alternative

Scenario	Study Area								Entire Model			
	Study Area Roadway Groups		Time Period	Link Volume (veh)	Link Speed (mph)	Railroad Crossing Delay (min)	V/C Ratio		Time Period	VMT	VHT	System Speed (mph)
							Actual	Diff (Alt - NB)				
2042 Alt 1 (3-A)	Group 1: I-10 Mainline		AM Peak	4%	30%	-	0.74	-0.22	AM Peak	-0.2%	-2.6%	2.5%
			PM Peak	5%	28%	-	0.74	-0.21				
			Daily Total	4%	35%	-	0.70	-0.21				
	Group 2: I-10 Ramps & Service Roads		AM Peak	-5%	10%	-	0.46	-0.04				
			PM Peak	-4%	9%	-	0.45	-0.06				
			Daily Total	-5%	10%	-	0.46	-0.05				
	Group 3: Major Corridors	Group 3-A: Sampson St	AM Peak	-16%	18%	-	1.00	-0.13	PM Peak	-0.1%	-2.4%	2.3%
			PM Peak	-13%	13%	-	0.99	-0.11				
			Daily Total	-13%	10%	-	0.87	-0.10				
		Group 3-B: Sulphur Ave	AM Peak	269%	53%	-	0.56	0.14				
			PM Peak	227%	54%	-	0.50	0.03				
			Daily Total	258%	46%	-	0.55	0.11				
		Group 3-C: PPG Dr, Enterprise Blvd, Ryan St	AM Peak	0%	-3%	-	0.46	-0.01	Daily Total	-0.2%	-3.2%	3.1%
			PM Peak	0%	-3%	-	0.47	0.00				
			Daily Total	0%	-1%	-	0.46	-0.01				
	Group 4: Other Local Streets		AM Peak	-9%	-1%	-	0.62	-0.05				
			PM Peak	-7%	0%	-	0.61	-0.04				
			Daily Total	-8%	0%	-	0.60	-0.02				
2042 Alt 2 (3-E)	Group 1: I-10 Mainline		AM Peak	4%	30%	-	0.74	-0.22	AM Peak	-0.2%	-2.5%	2.4%
			PM Peak	4%	28%	-	0.73	-0.21				
			Daily Total	3%	35%	-	0.70	-0.21				
	Group 2: I-10 Ramps & Service Roads		AM Peak	-5%	8%	-	0.46	-0.04				
			PM Peak	-6%	8%	-	0.45	-0.06				
			Daily Total	-6%	9%	-	0.45	-0.06				
	Group 3: Major Corridors	Group 3-A: Sampson St	AM Peak	-16%	20%	-	1.00	-0.13	PM Peak	-0.1%	-2.3%	2.2%
			PM Peak	-13%	15%	-	0.98	-0.12				
			Daily Total	-12%	11%	-	0.86	-0.10				
		Group 3-B: Sulphur Ave	AM Peak	242%	48%	-	0.51	0.09				
			PM Peak	221%	44%	-	0.49	0.01				
			Daily Total	246%	39%	-	0.53	0.09				
		Group 3-C: PPG Dr, Enterprise Blvd, Ryan St	AM Peak	7%	3%	-	0.49	0.02	Daily Total	-0.2%	-3.0%	3.0%
			PM Peak	0%	-5%	-	0.48	0.00				
			Daily Total	2%	0%	-	0.47	0.00				
	Group 4: Other Local Streets		AM Peak	-5%	-1%	-	0.64	-0.03				
			PM Peak	-5%	0%	-	0.63	-0.03				
			Daily Total	-6%	-1%	-	0.61	-0.01				
2042 Alt 3 (5-G)	Group 1: I-10 Mainline		AM Peak	10%	29%	-	0.76	-0.21	AM Peak	0.0%	-2.2%	2.2%
			PM Peak	10%	26%	-	0.74	-0.20				
			Daily Total	9%	33%	-	0.72	-0.20				
	Group 2: I-10 Ramps & Service Roads		AM Peak	-3%	11%	-	0.48	-0.03				
			PM Peak	-3%	13%	-	0.46	-0.05				
			Daily Total	-3%	12%	-	0.47	-0.04				
	Group 3: Major Corridors	Group 3-A: Sampson St	AM Peak	9%	-6%	-3	1.23	0.10	PM Peak	0.0%	-2.1%	2.2%
			PM Peak	6%	-6%	-18	1.15	0.05				
			Daily Total	10%	-9%	-	1.05	0.08				
		Group 3-B: Sulphur Ave	AM Peak	25%	3%	-	0.56	0.14				
			PM Peak	20%	-10%	-	0.54	0.06				
			Daily Total	23%	0%	-	0.52	0.07				
		Group 3-C: PPG Dr, Enterprise Blvd, Ryan St	AM Peak	0%	-1%	-	0.45	-0.02	Daily Total	0.0%	-2.7%	2.8%
			PM Peak	0%	-3%	-	0.46	-0.02				
			Daily Total	0%	0%	-	0.45	-0.02				
	Group 4: Other Local Streets		AM Peak	-8%	-2%	-	0.66	0.00				
			PM Peak	-8%	0%	-	0.65	-0.01				
			Daily Total	-7%	-1%	-	0.61	-0.01				

Conclusion

Based on the analysis results, the study team presents the following conclusions:

- From the system-wide perspective, all three alternatives show improvements in VMT, VHT and system speed compared to the No-Build alternative, with Alternative 1 showing slightly better results than Alternatives 2 and 3.
- From the study area perspective –
  - **Link Volumes**
    - Alternatives 1 and 2 show a very significant increase in volume in Group 3-B (Sulphur Avenue) by over 250 percent. These two alternatives include a second bridge (north of the Calcasieu River Bridge) and access road connecting Sulphur Avenue to I-10 on the east side of the river, which diverts more traffic to this route. This is likely the reason for the significant surge in traffic volume on Sulphur Avenue.
    - In contrast, Alternative 3 does not include a second bridge and therefore shows a much lower increase in traffic on Sulphur Avenue (approximately 20 percent). This lower increase is likely due to more traffic getting diverted to the I-10 corridor as a result of the mainline widening.
  - **Link Speeds**
    - All three alternatives show an increase in speeds in Group 1 (I-10 Mainline) by approximately 30 percent and Group 2 (I-10 Ramps and Service Roads) by approximately 10 percent, which indicates improvement in traffic operations compared to the No-Build alternative.
    - Additionally, Alternatives 1 and 2 show a significant increase in speeds in Group 3-B (Sulphur Avenue) where speeds increased by over 50 percent. As explained above, the second bridge under Alternatives 1 and 2 has a speed limit of 50 mph, which allows vehicles to travel much faster than the existing Sulphur Avenue (30 mph speed limit). This results in higher overall average speed in Group 3-B.
    - Under all three alternatives, some minor decreases in speeds were observed in other roadway groups, but those are not significant.
  - **V/C Ratios**
    - Similar to link speeds, all three alternatives show a decrease in V/C ratios in Group 1 (I-10 Mainline) by approximately 0.2 and Group 2 (I-10 Ramps and Service Roads) by approximately 0.05, which indicates an improvement compared to the No-Build alternative.
    - Alternatives 1 and 2 show increased (degraded) V/C ratios in Group 3-B (Sulphur Avenue) by approximately 0.1. As explained above, the second bridge under

Alternatives 1 and 2 results in an increase in traffic along Sulphur Avenue. However, because the second bridge has a higher capacity than the existing Sulphur Avenue, the resulting V/C ratios do not show a significant increase. On the other hand, Alternative 3 does not include a second bridge but still shows a minor increase in V/C ratios, which could be explained by the overall increase in traffic along I-10 route as the result of mainline widening.

- Group 3-A (Sampson Street) is estimated to be over-capacity under the No-Build alternative. Alternatives 1 and 2 show a slight decrease (improvement) in V/C ratios on Sampson Street, which could be the result of southbound traffic diverting to the second bridge to access I-10 rather than staying on Sampson Street. On the other hand, Alternative 3 shows a slight increase (degraded) in V/C ratios on Sampson Street due to the lack of a second bridge.

- It should be taken into consideration that Alternative 3 is the only alternative where the railroad crossing does not conflict with vehicular traffic because it includes an overpass on Sampson Street, whereas all the other three alternatives experience delay of three minutes in the AM Peak Hour and 18 minutes in the PM Peak Hour. Because the TDM did not account for this delay, traffic volumes, speeds and V/C ratios on Sampson Street under the other three scenarios would be worse than what are presented in the results.

Verification of Deliverable Quality Control

Project Deliverable Review

Name	Signature	Date
M. Kamal	Mustafa Kamal	10/05/2020

Project Deliverable Verification

Name	Signature	Date
O. E. Ramadan, PhD, PE	Ossama Ramadan	10/06/2020

Project Deliverable Validation

Name	Signature	Date
P. Jammalamadaka, PE, PMP	Phani Jammalamadaka	10/07/2020

Appendix

Study Area Analysis Result Maps

List of Figures

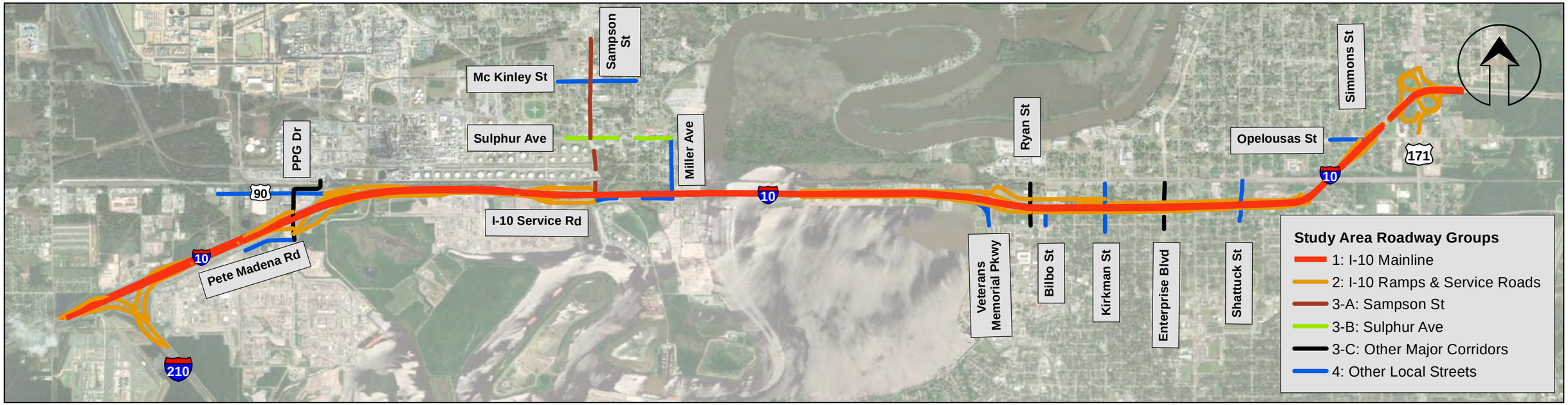
STUDY AREA

I-10 Calcasieu River Bridge
Planning Level Traffic Analysis
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 1 of 31

Scale: 1:40,000



DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

CDM Smith

2019 Existing Conditions - VOLUMES

I-10 Calcasieu River Bridge
Planning Level Traffic Analysis

(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 2 of 31

Scale: 1:40,000

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

CDM Smith

2019 Existing Conditions - VOLUMES

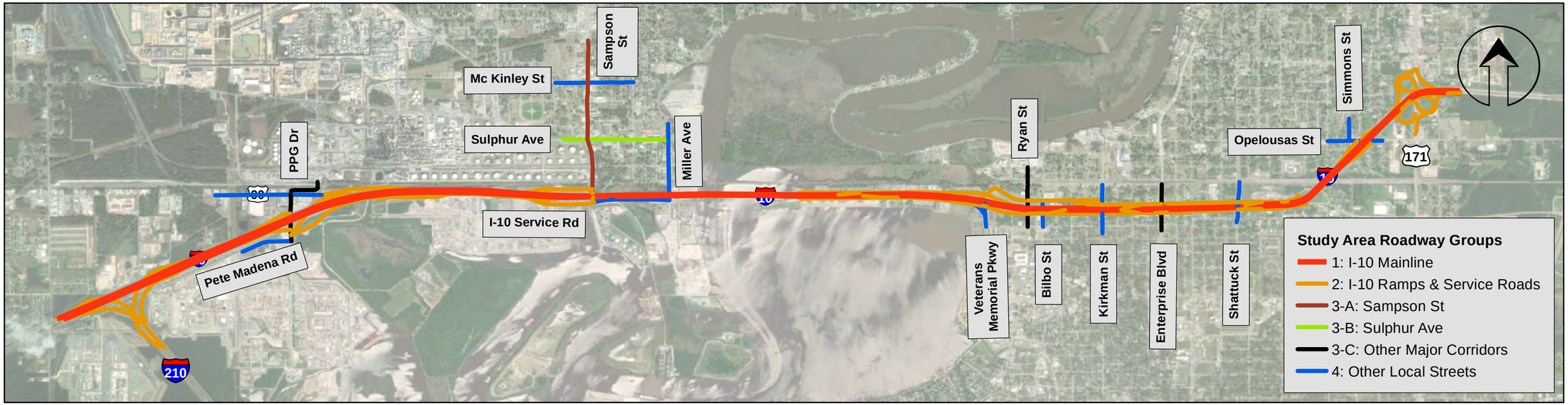
I-10 Calcasieu River Bridge
Planning Level Traffic Analysis

(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 3 of 31

Scale: 1:40,000



LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

CDM Smith

2019 Existing Conditions - SPEEDS

I-10 Calcasieu River Bridge
Planning Level Traffic Analysis

(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 4 of 31

Scale: 1:40,000

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

CDM Smith

2019 Existing Conditions - SPEEDS

I-10 Calcasieu River Bridge
Planning Level Traffic Analysis

(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 5 of 31

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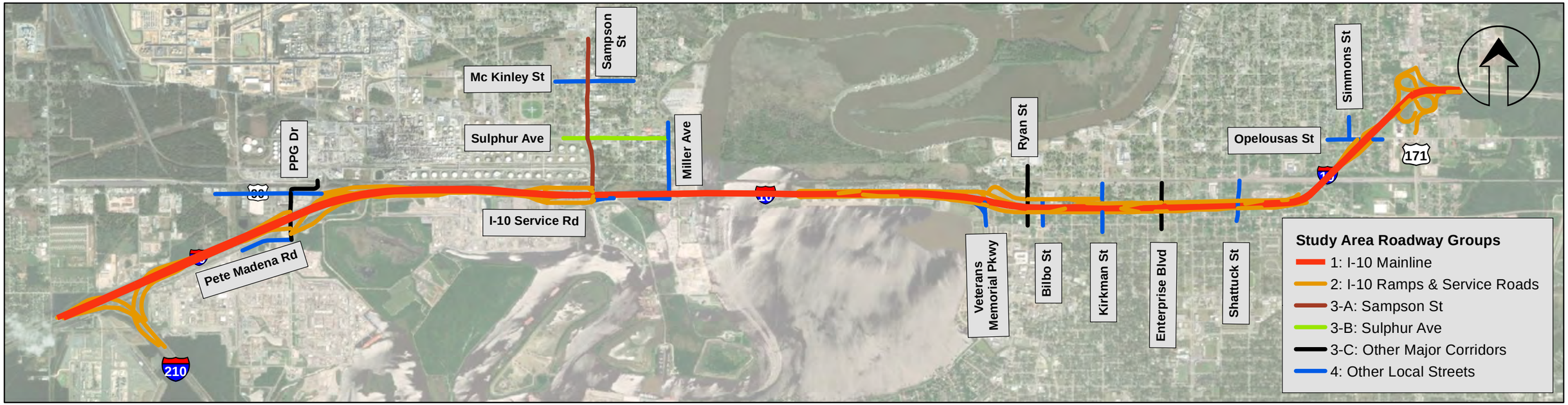

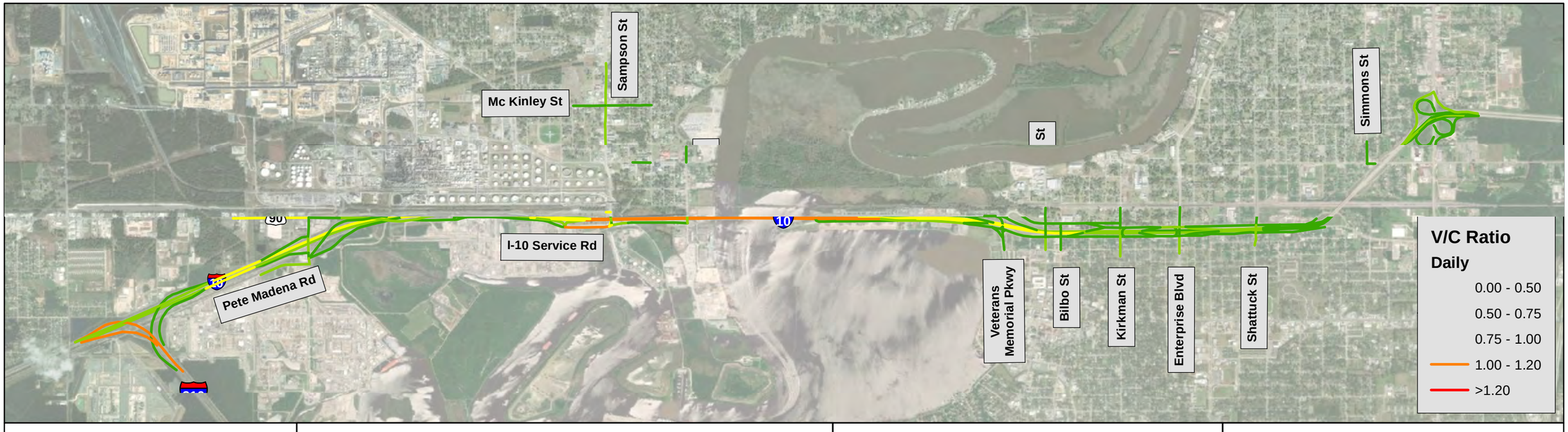

DOTD Louisiana Department of Transportation & Development

CDM Smith

2019 Existing Conditions - V/C RATIOS

I-10 Calcasieu River Bridge
Planning Level Traffic Analysis
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 6 of 31

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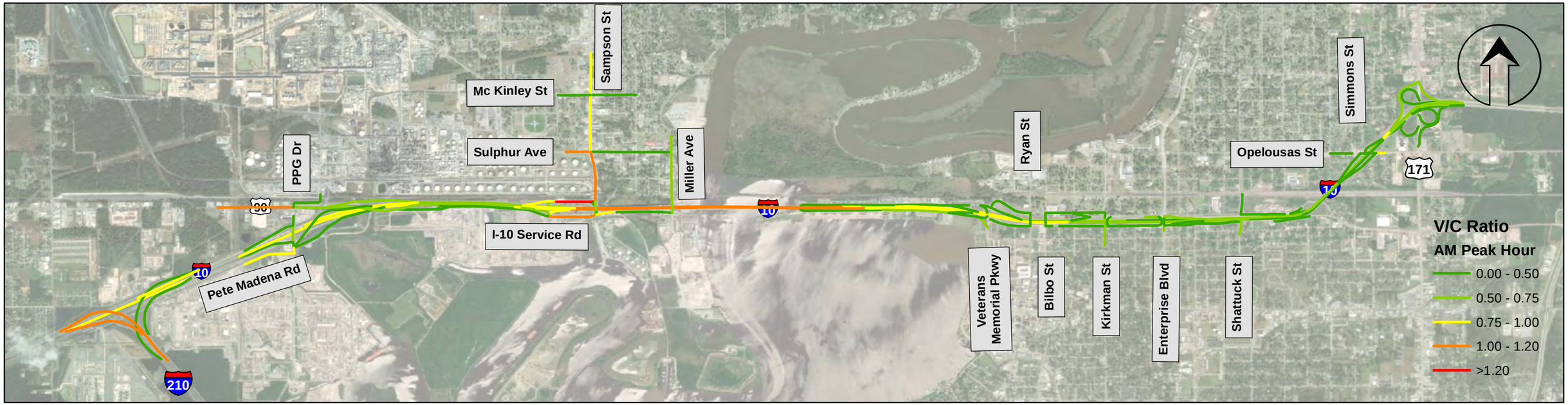

2019 Existing Conditions - V/C RATIOS

I-10 Calcasieu River Bridge
Planning Level Traffic Analysis

(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 7 of 31

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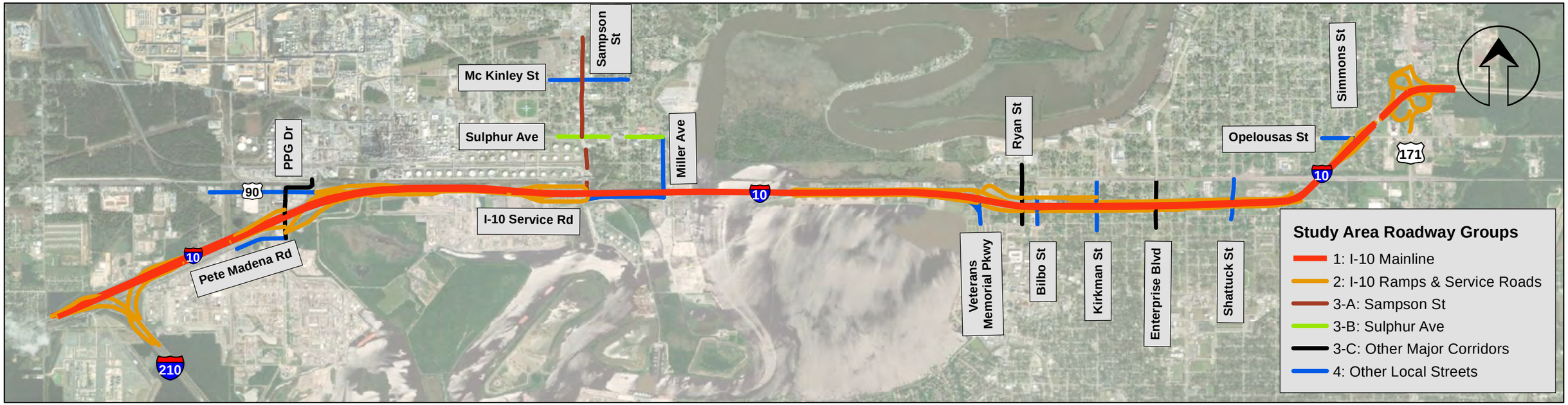


2042 No Build - VOLUMES

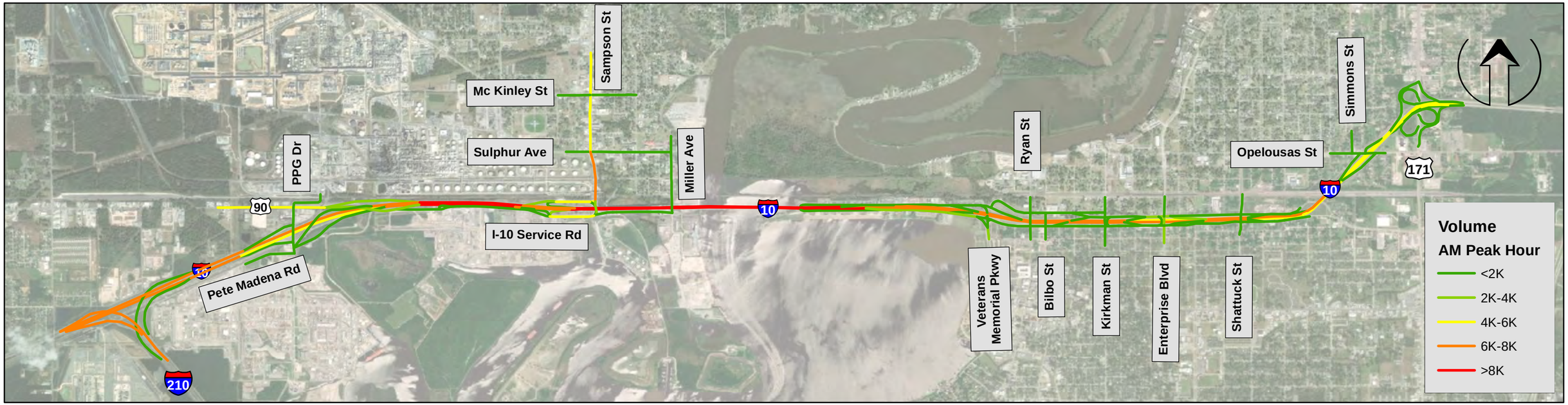
I-10 Calcasieu River Bridge
Planning Level Traffic Analysis

(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 8 of 31

Scale: 1:40,000



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2042 No Build - VOLUMES

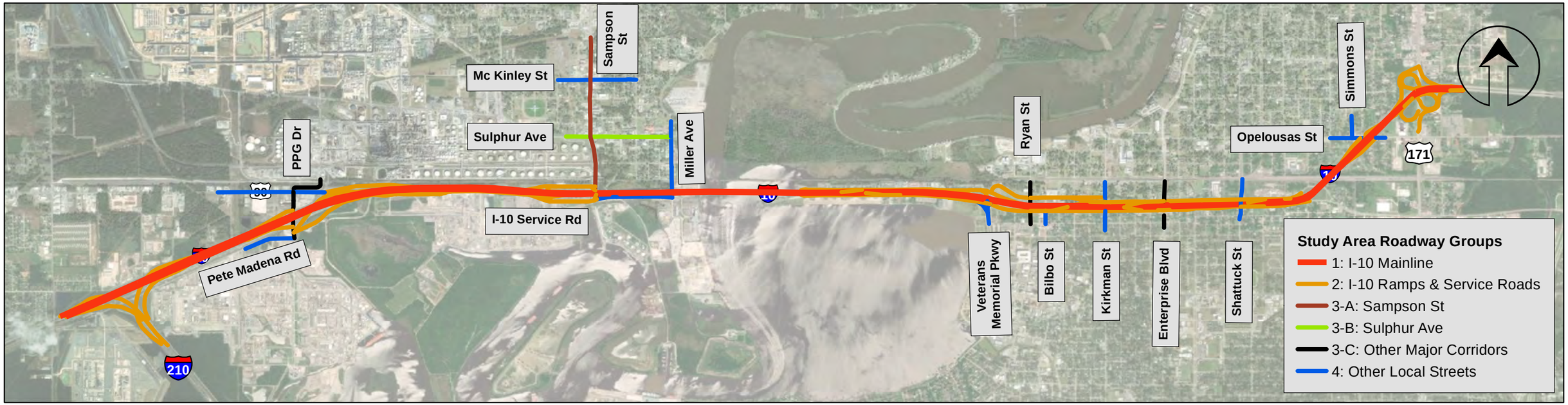
I-10 Calcasieu River Bridge
Planning Level Traffic Analysis

(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 9 of 31

Scale: 1:40,000



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2042 No Build - SPEEDS

I-10 Calcasieu River Bridge
Planning Level Traffic Analysis
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

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Scale: 1:40,000

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2042 No Build - SPEEDS

I-10 Calcasieu River Bridge
Planning Level Traffic Analysis
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

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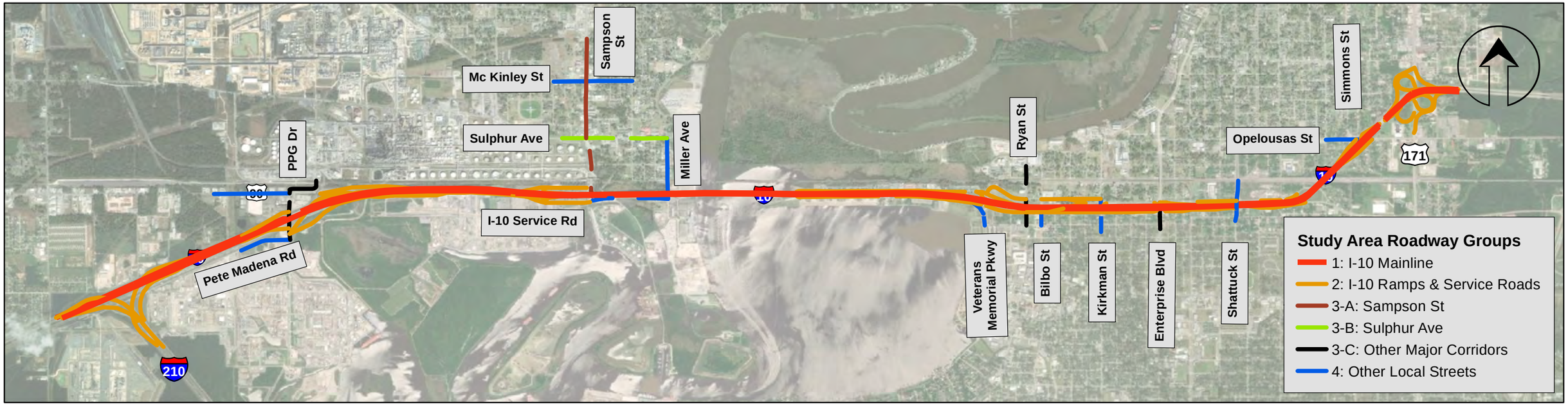
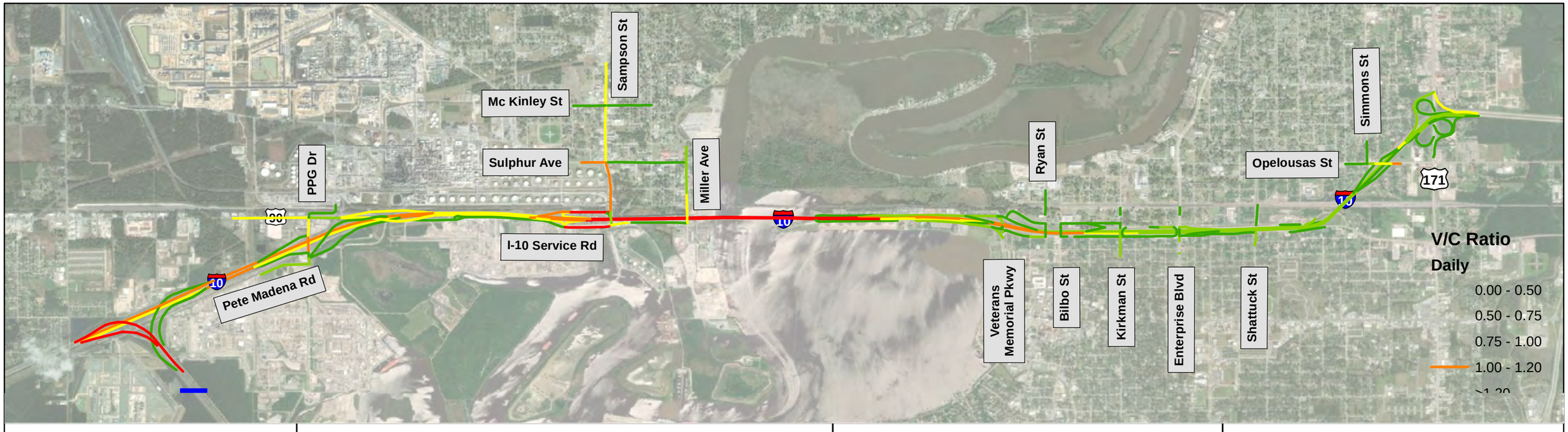
Scale: 1:40,000





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2042 No Build - V/C RATIOS

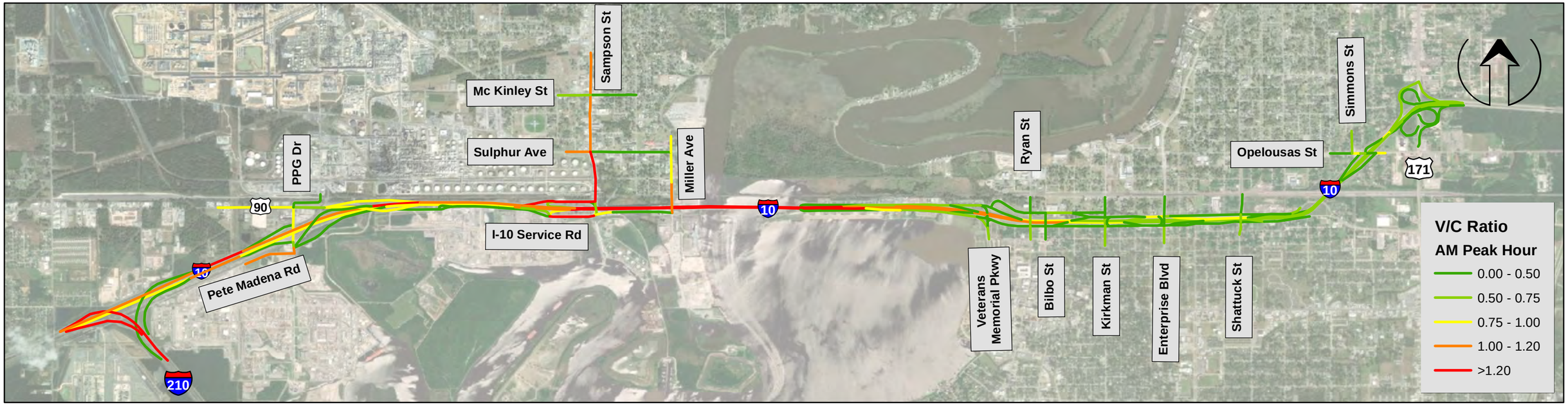
I-10 Calcasieu River Bridge
Planning Level Traffic Analysis

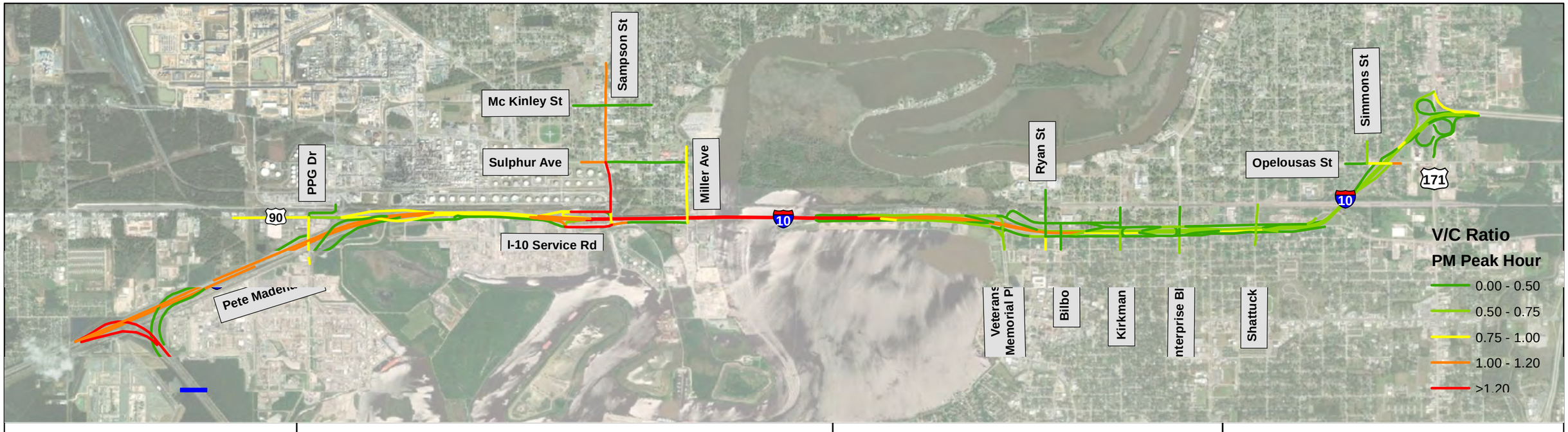
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 12 of 31

Scale: 1:40,000





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CDM Smith

2042 No Build - V/C RATIOS

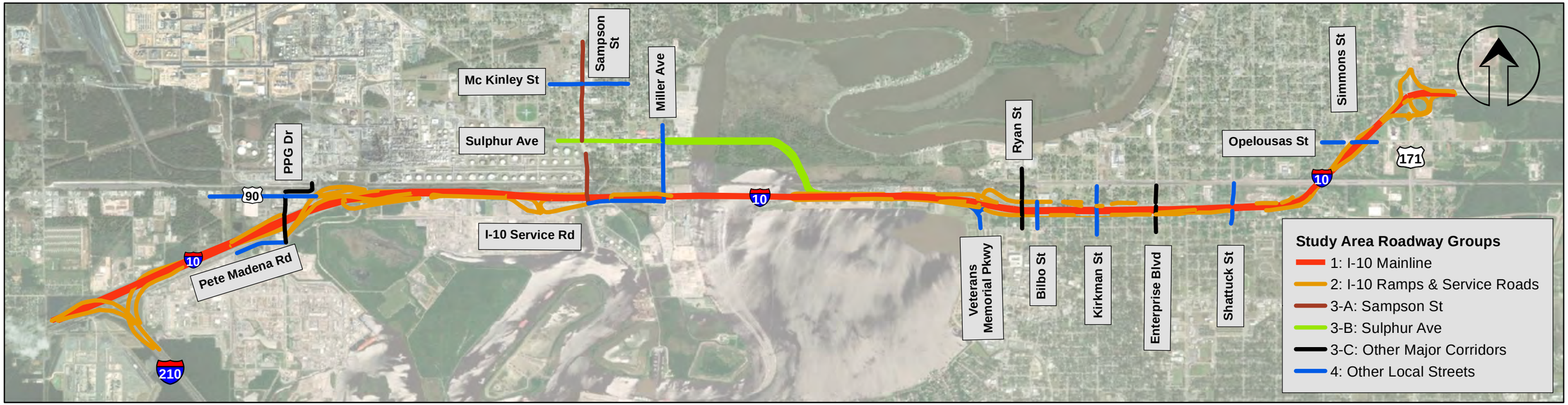
I-10 Calcasieu River Bridge
Planning Level Traffic Analysis

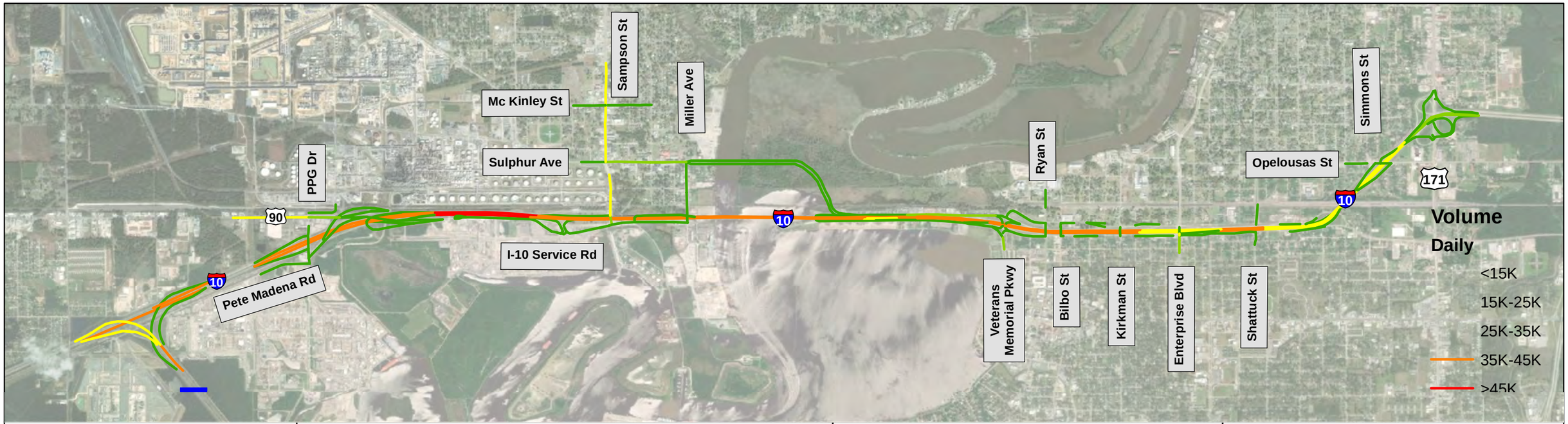
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 13 of 31

Scale: 1:40,000





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CDM Smith

2042 Alternative 1 - VOLUMES

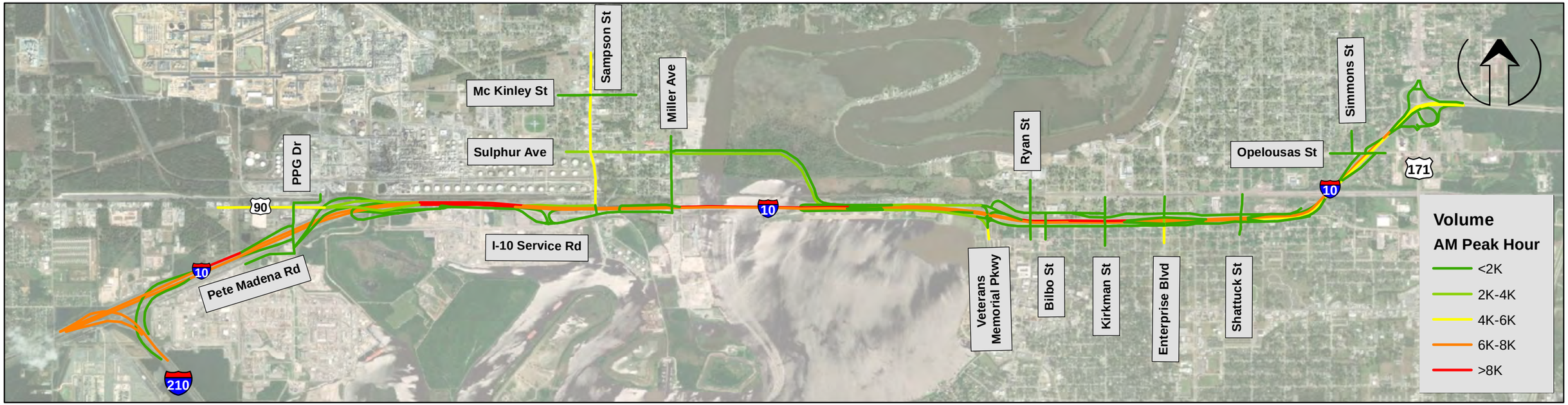
I-10 Calcasieu River Bridge
Planning Level Traffic Analysis

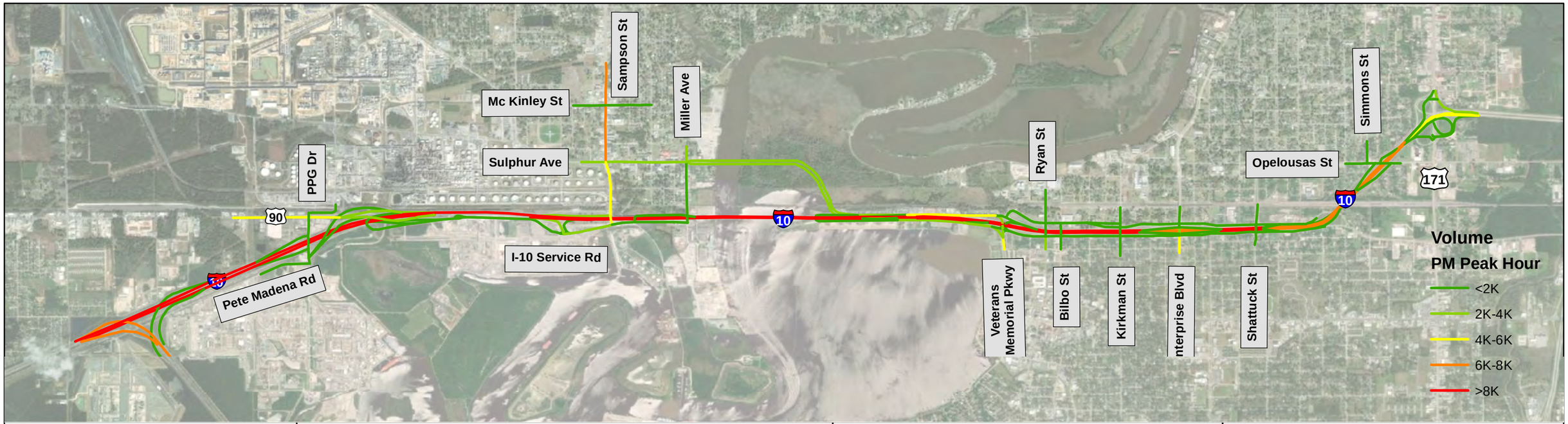
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 14 of 31

Scale: 1:40,000





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2042 Alternative 1 - VOLUMES

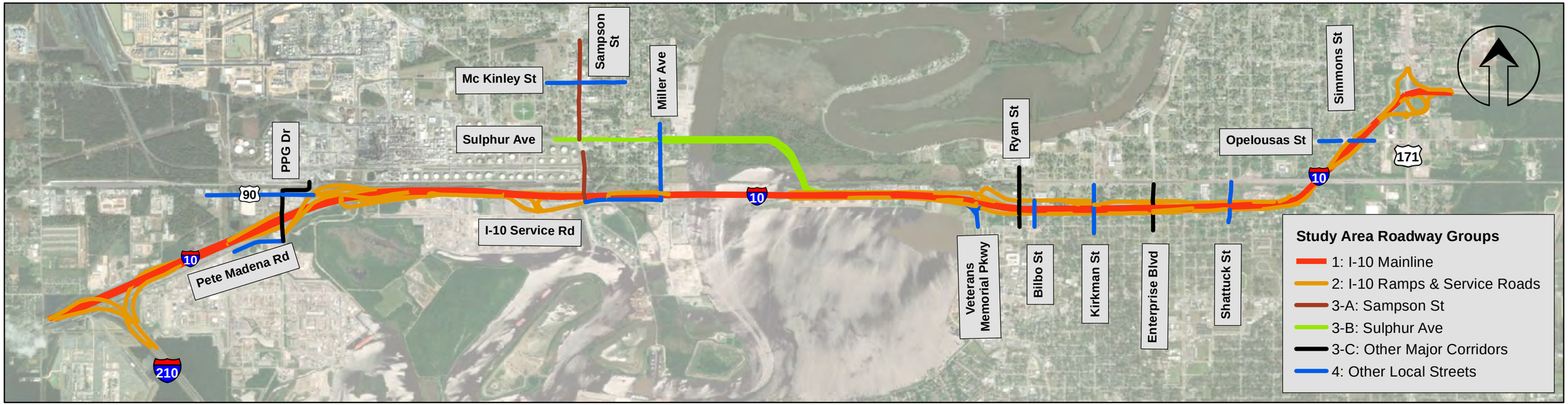
I-10 Calcasieu River Bridge
Planning Level Traffic Analysis

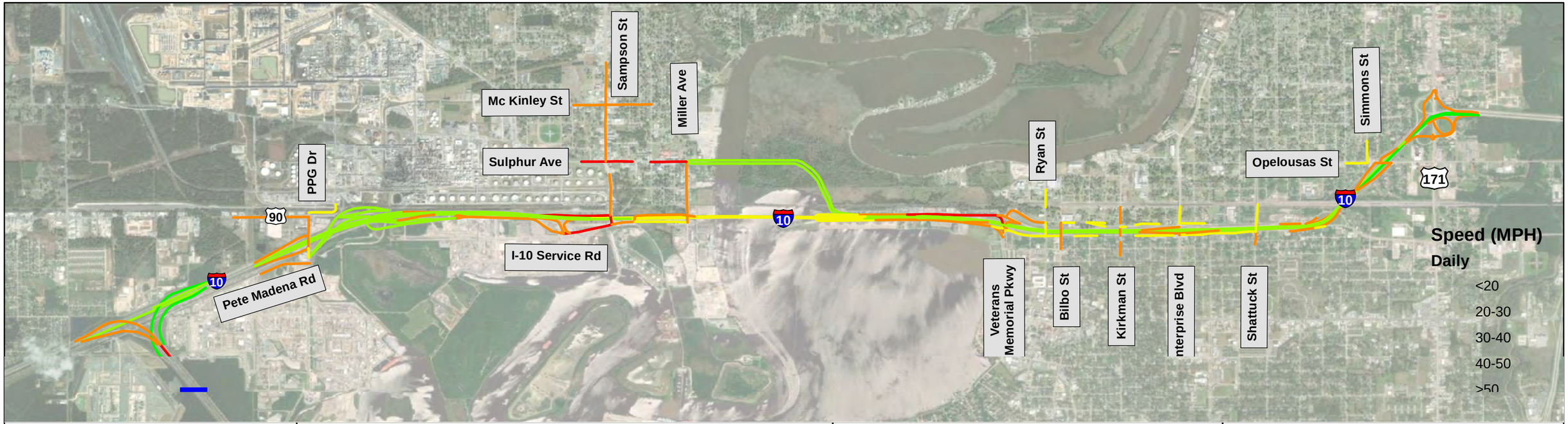
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 15 of 31

Scale: 1:40,000





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2042 Alternative 1 - SPEEDS

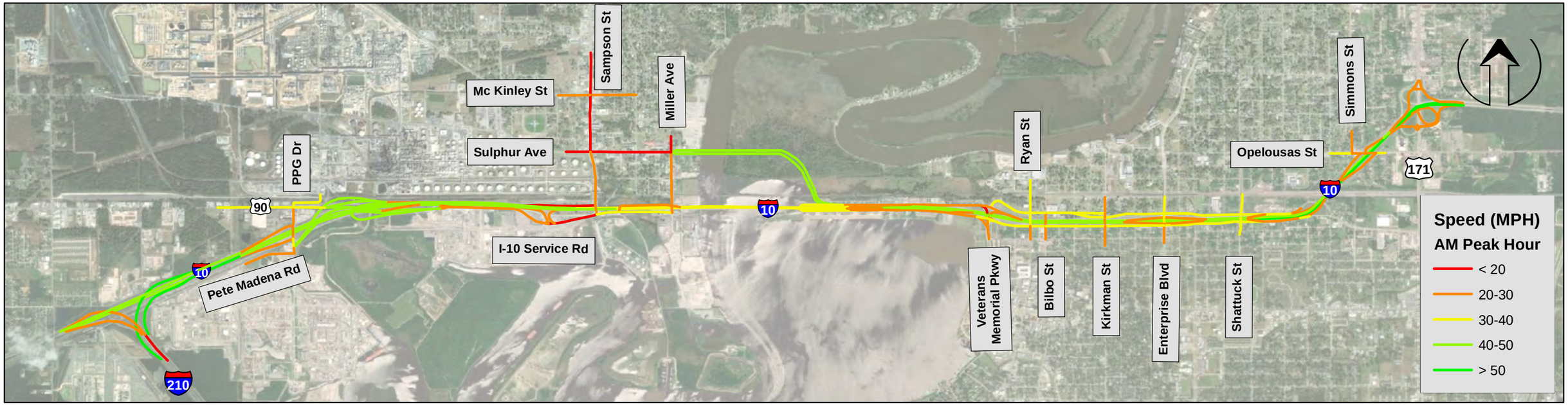
I-10 Calcasieu River Bridge
Planning Level Traffic Analysis

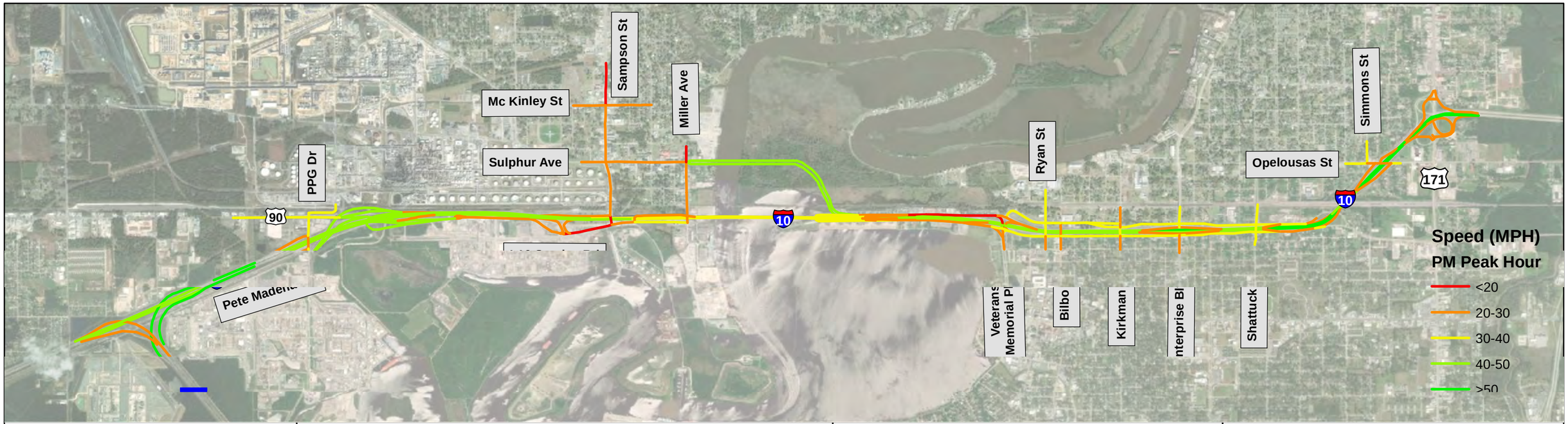
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 16 of 31

Scale: 1:40,000





DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

CDM Smith

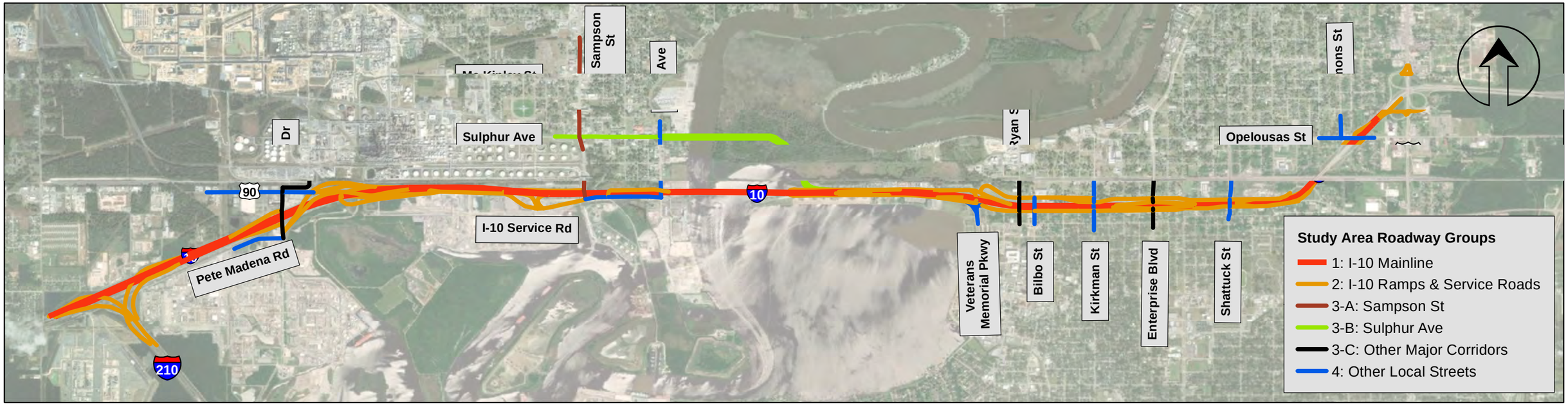
2042 Alternative 1 - SPEEDS

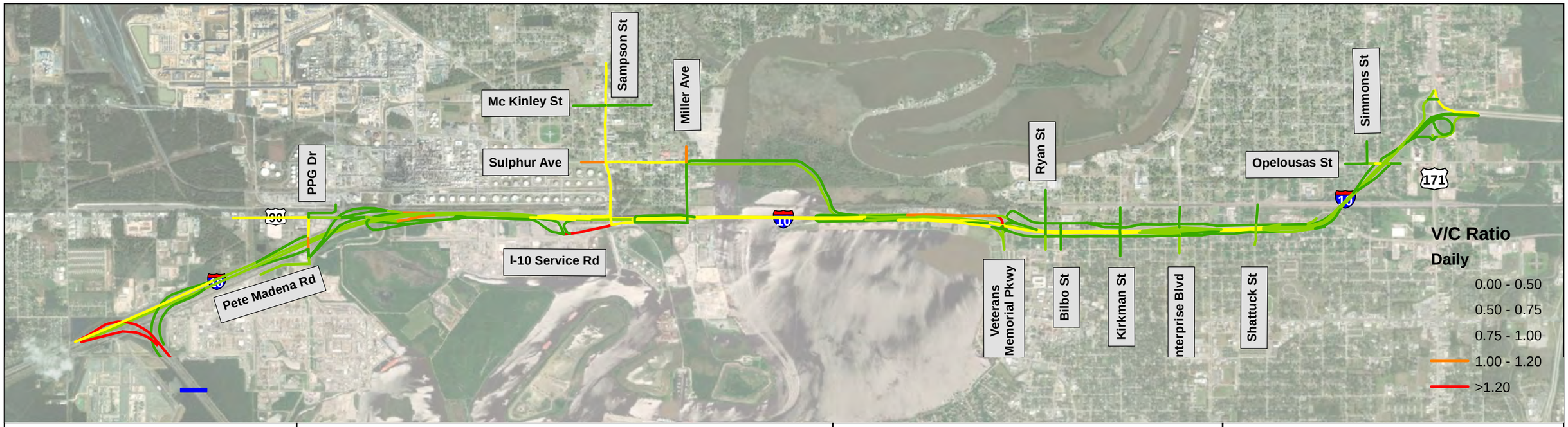
I-10 Calcasieu River Bridge
Planning Level Traffic Analysis
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 17 of 31

Scale: 1:40,000





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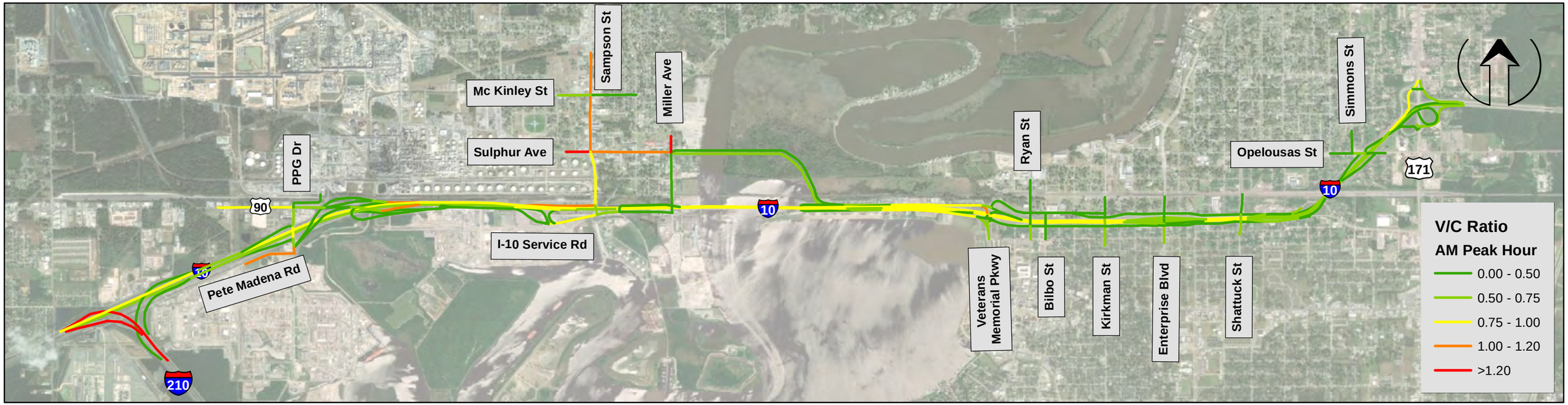
2042 Alternative 1 - V/C RATIOS

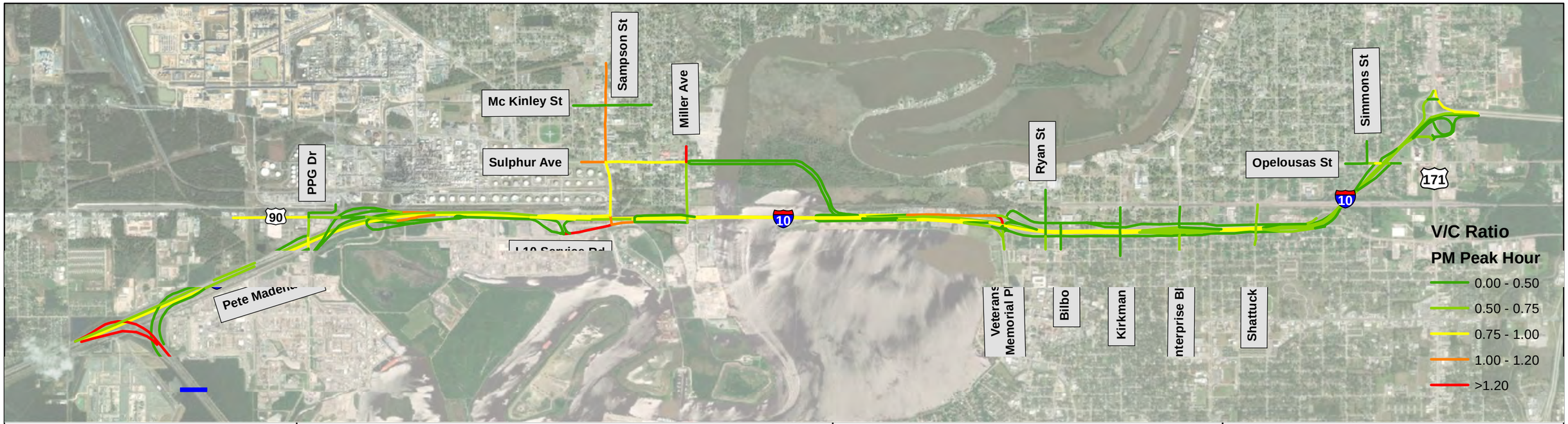
I-10 Calcasieu River Bridge
Planning Level Traffic Analysis
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 18 of 31

Scale: 1:40,000





2042 Alternative 1 - V/C RATIOS

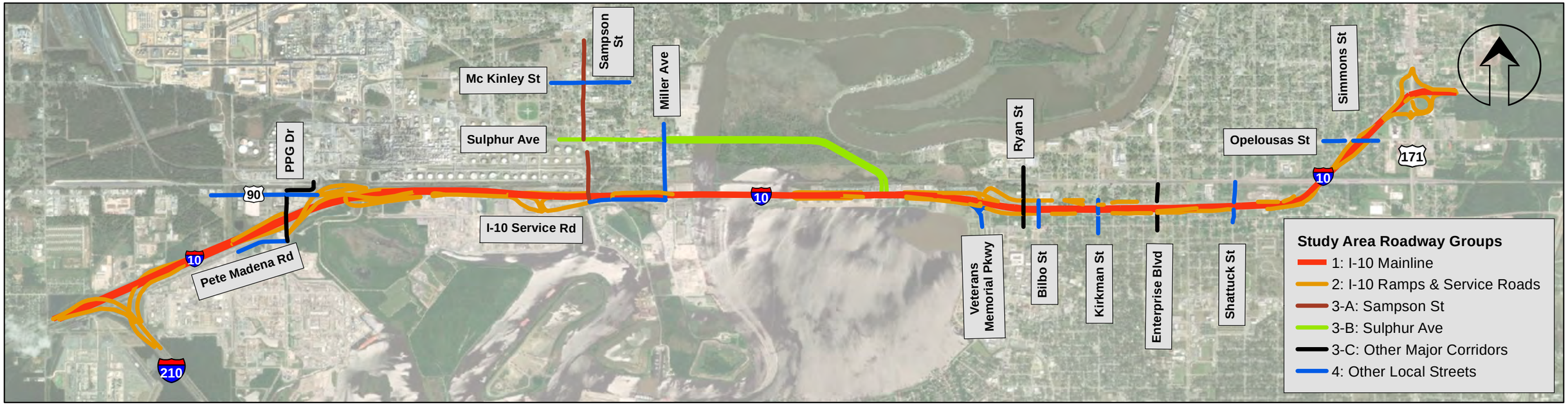
I-10 Calcasieu River Bridge
Planning Level Traffic Analysis

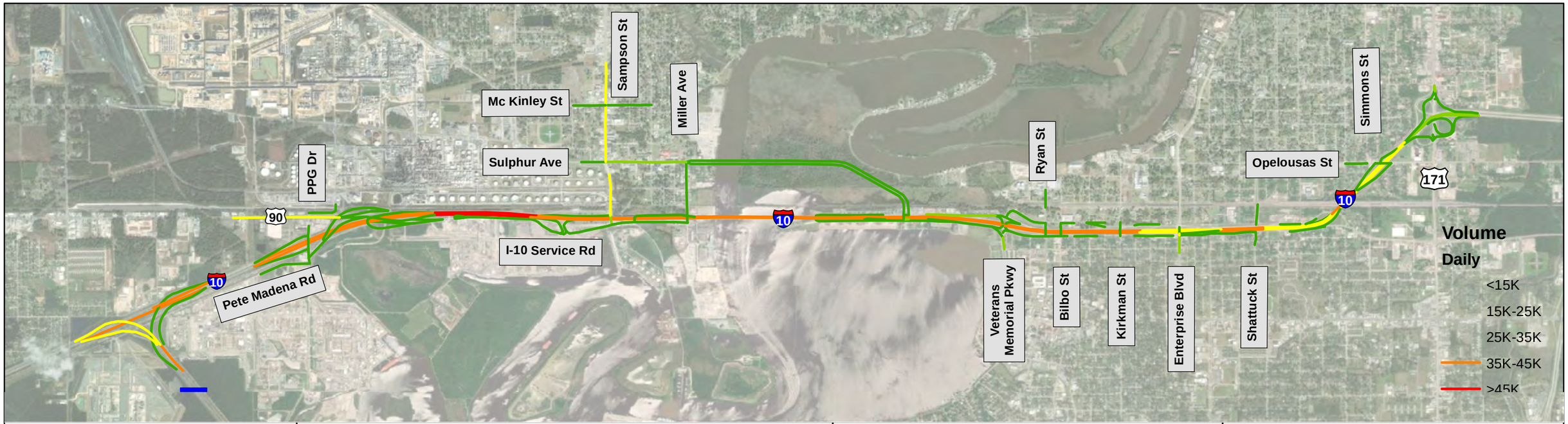
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 19 of 31

Scale: 1:40,000





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2042 Alternative 2 - VOLUMES

I-10 Calcasieu River Bridge
Planning Level Traffic Analysis
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

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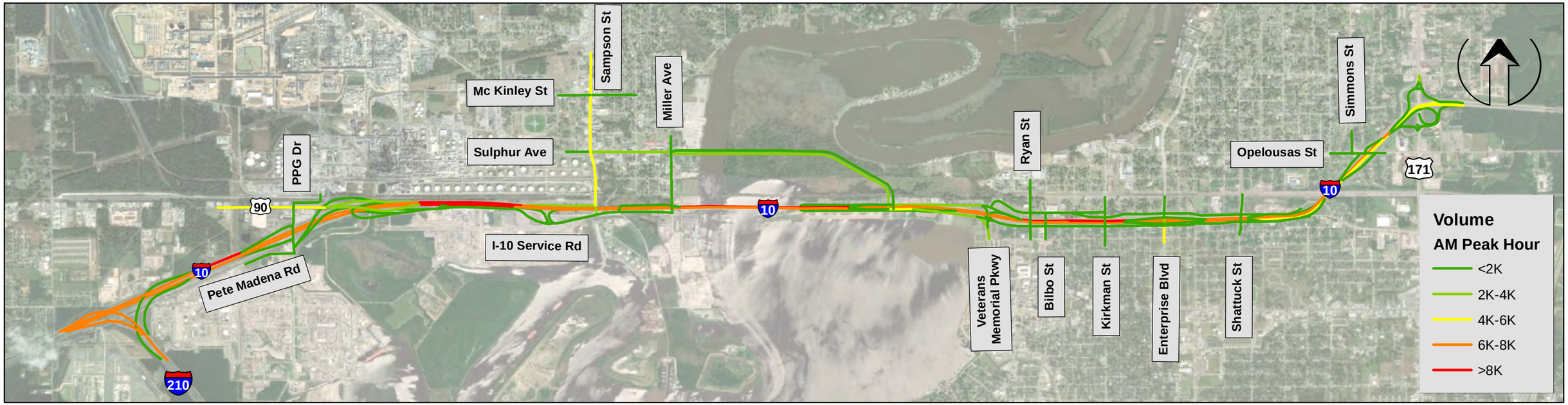
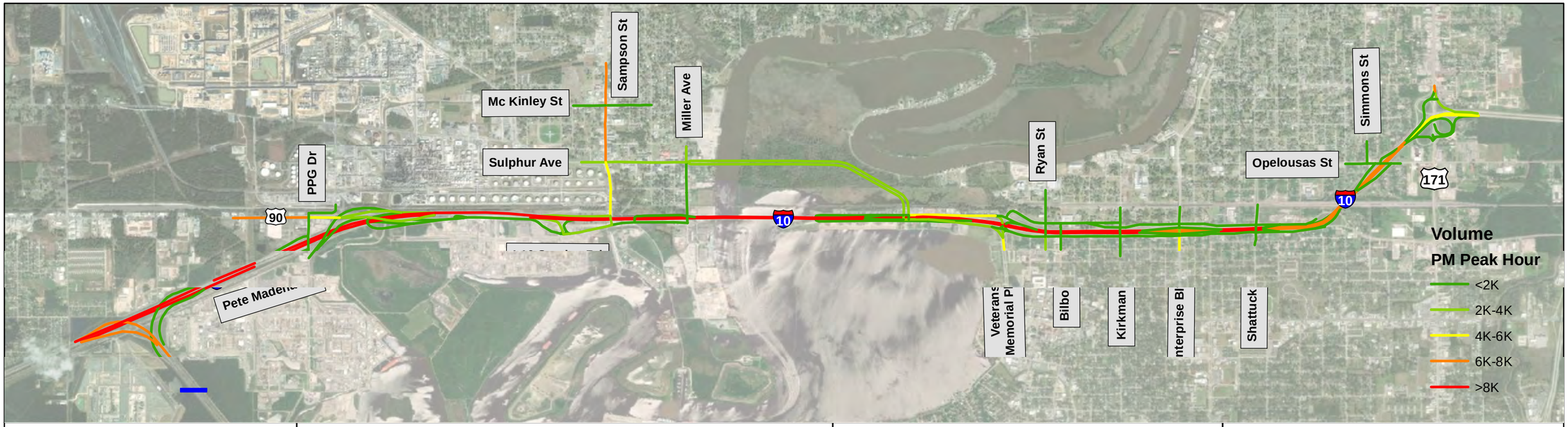
Scale: 1:40,000





DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

CDM Smith

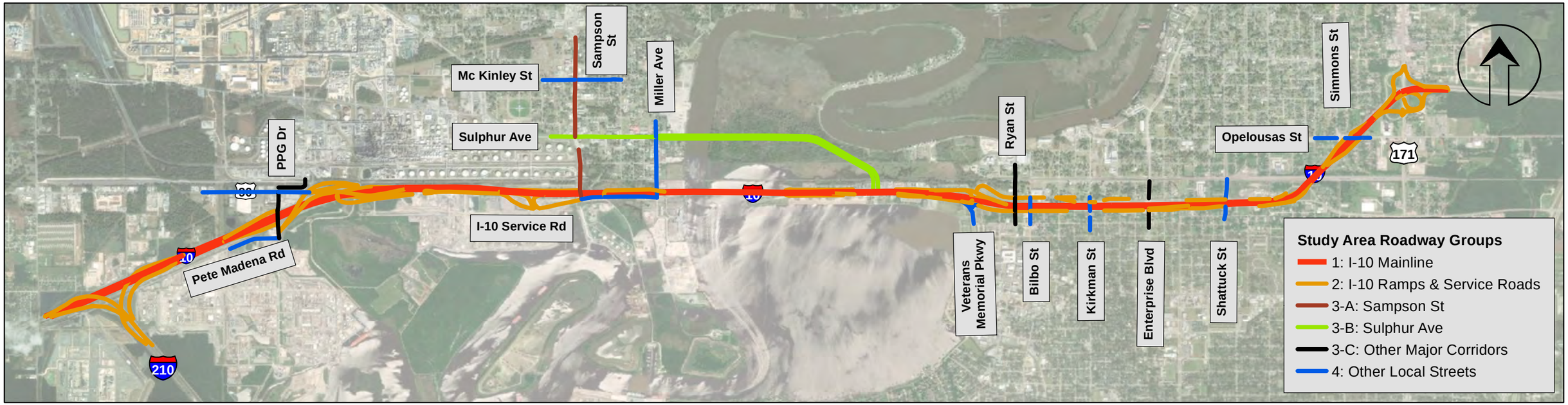
2042 Alternative 2 - VOLUMES

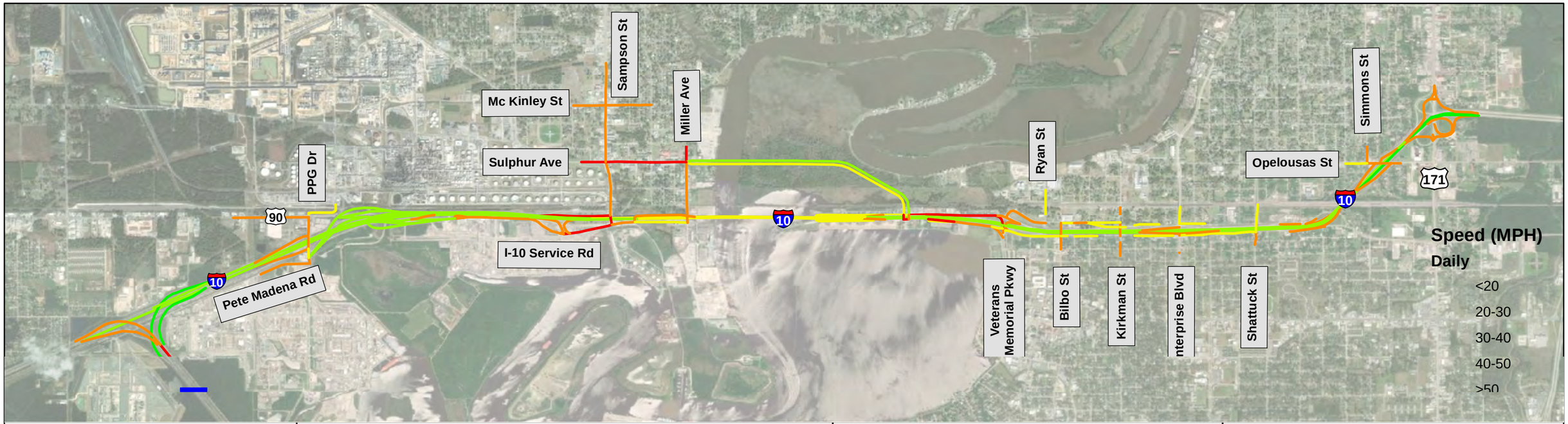
I-10 Calcasieu River Bridge
Planning Level Traffic Analysis
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 21 of 31

Scale: 1:40,000





DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

CDM Smith

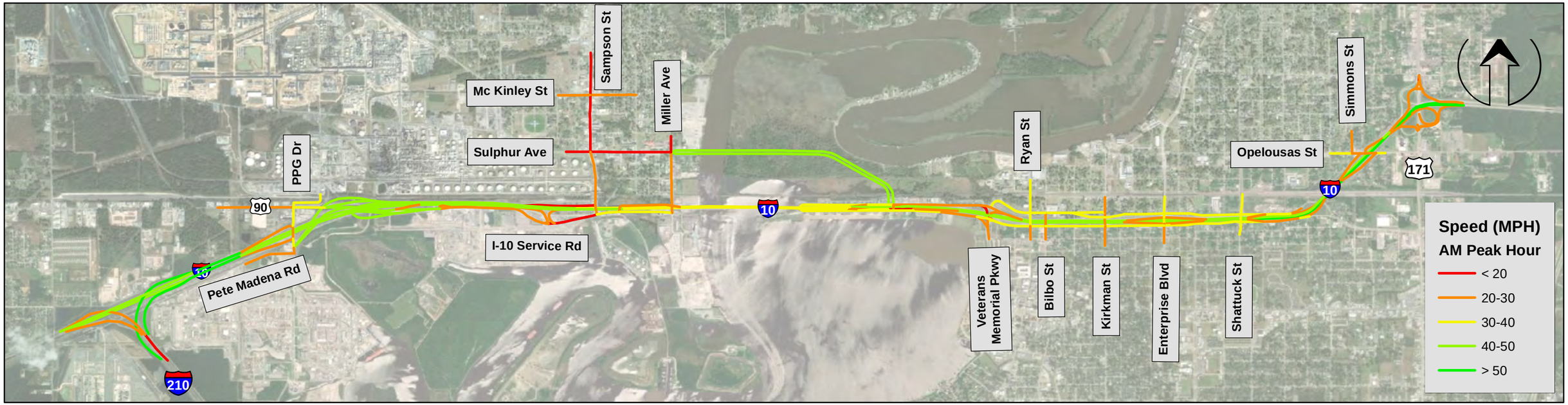
2042 Alternative 2 - SPEEDS

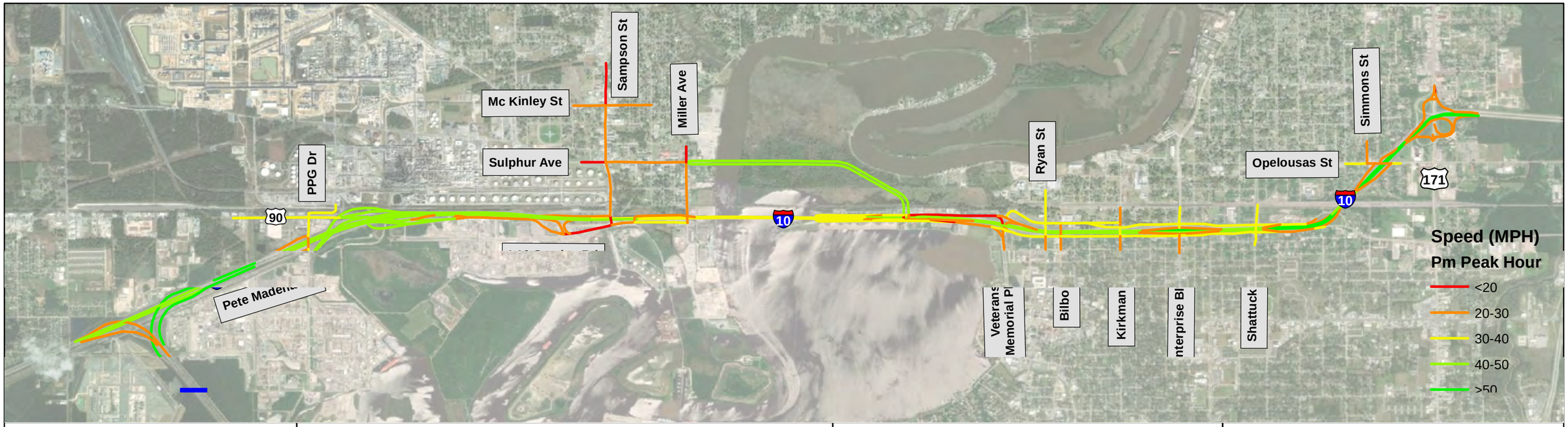
I-10 Calcasieu River Bridge
Planning Level Traffic Analysis
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 22 of 31

Scale: 1:40,000





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CDM Smith

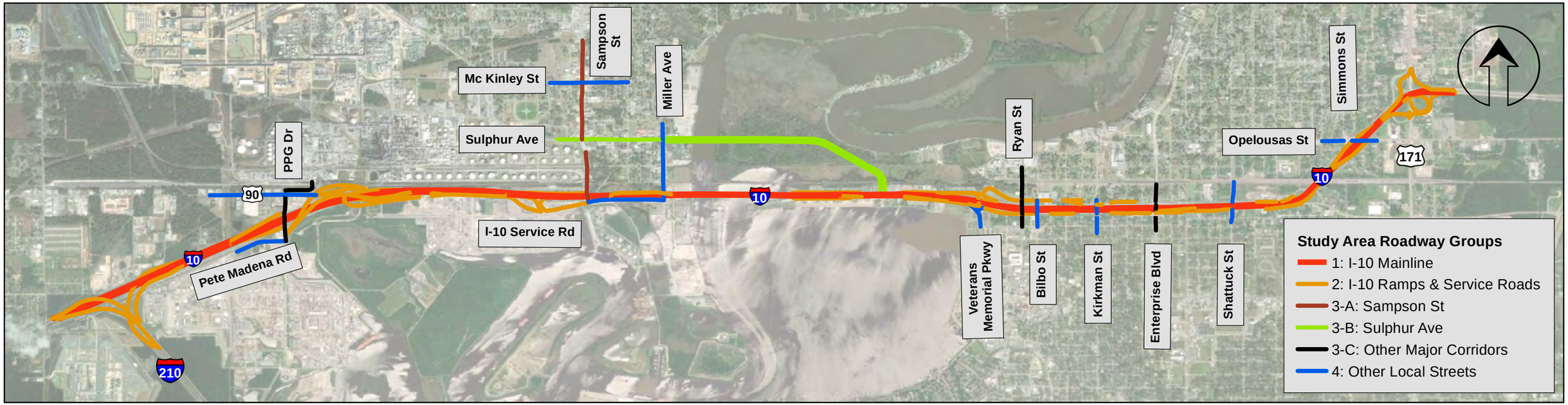
2042 Alternative 2 - SPEEDS

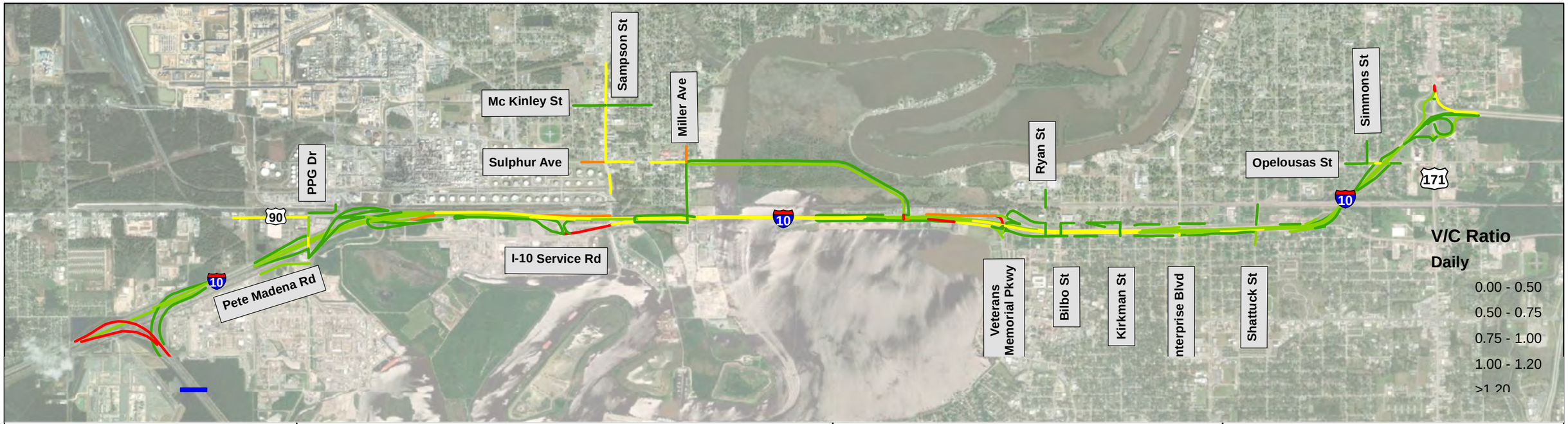
I-10 Calcasieu River Bridge
Planning Level Traffic Analysis
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 23 of 31

Scale: 1:40,000





DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

CDM Smith

2042 Alternative 2 - V/C RATIOS

I-10 Calcasieu River Bridge
Planning Level Traffic Analysis

(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

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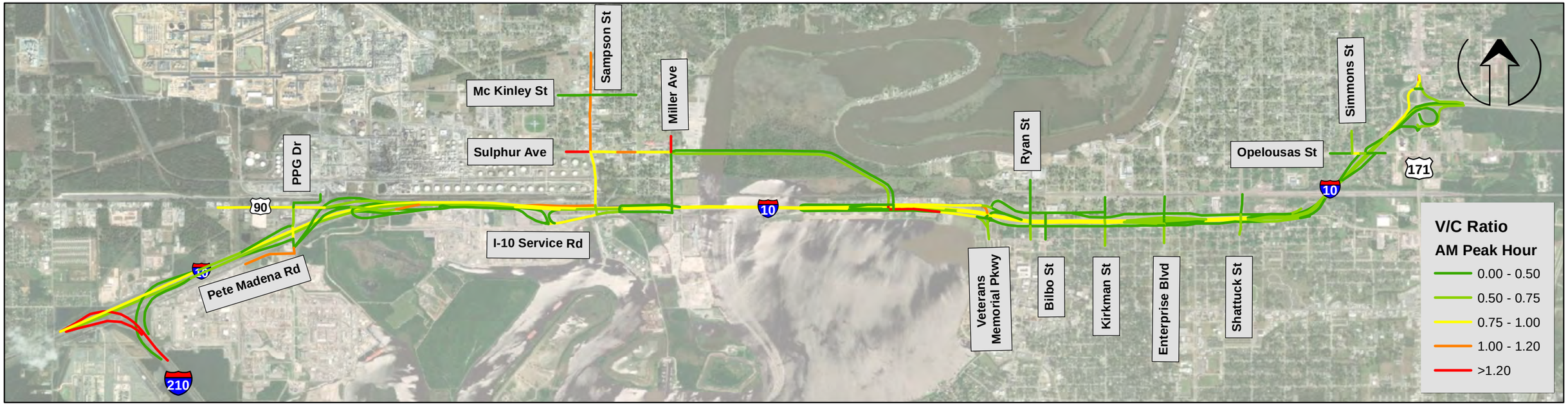
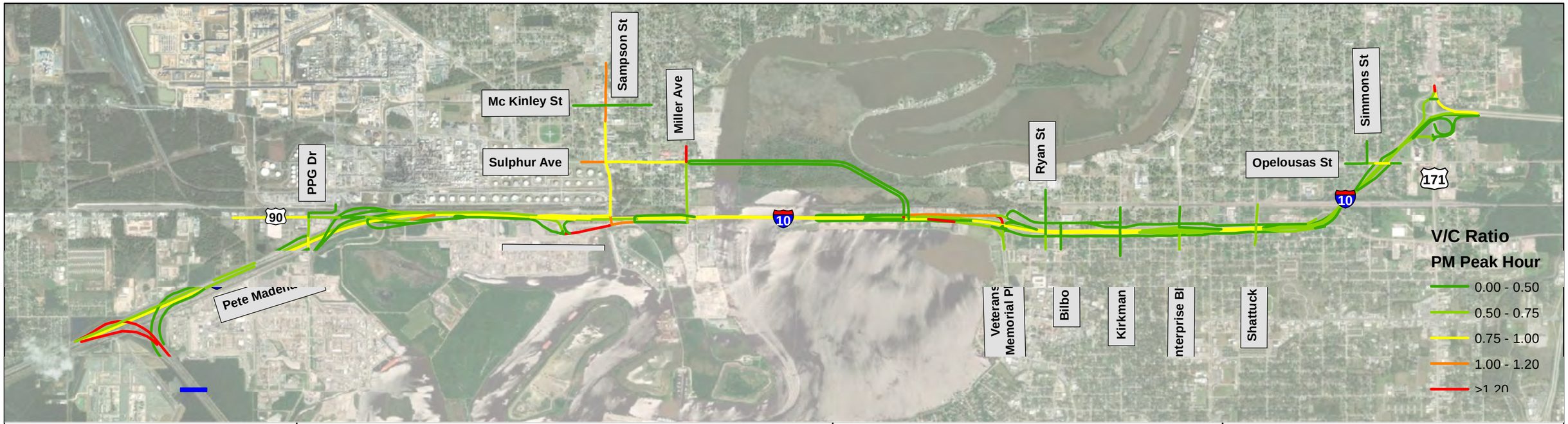
Scale: 1:40,000





2042 Alternative 2 - V/C RATIOS

I-10 Calcasieu River Bridge
Planning Level Traffic Analysis

(I-210 to US-171)

Parish:	Calcasieu
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Project:	H.003931

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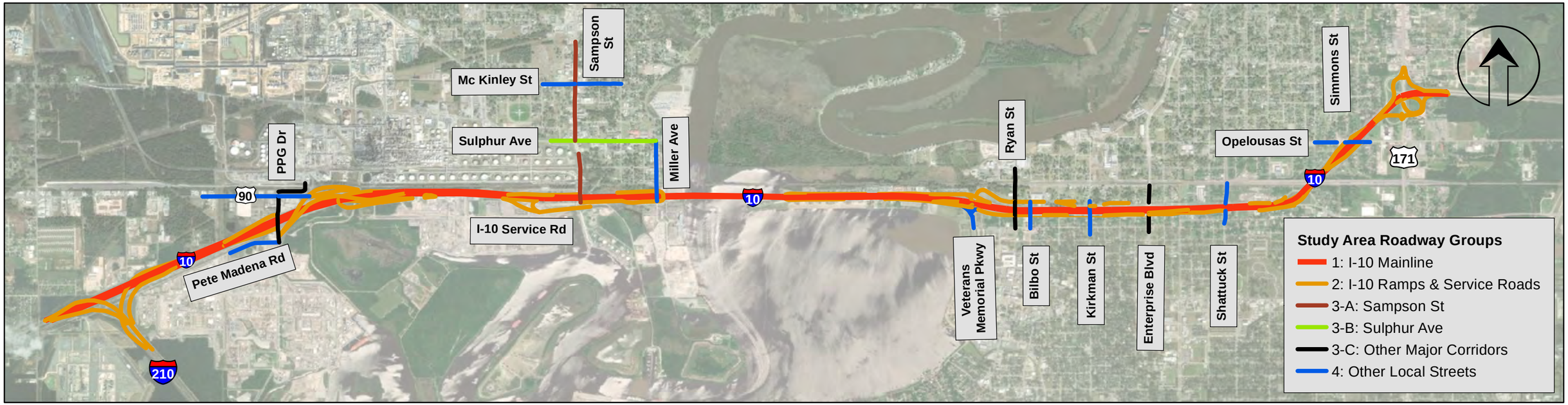
Scale: 1:40,000



LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

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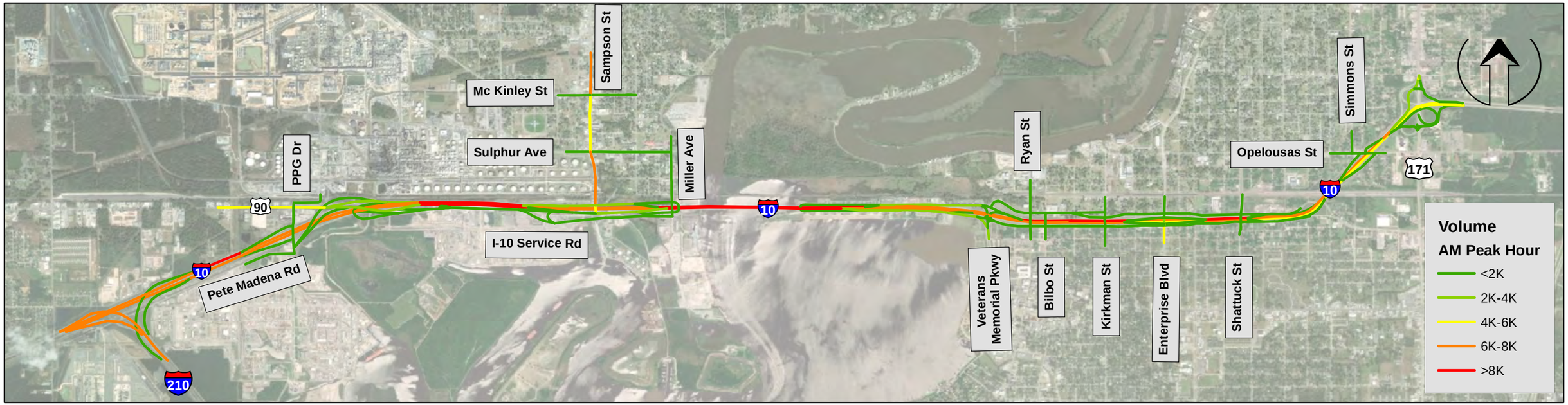
2042 Alternative 3 - VOLUMES

I-10 Calcasieu River Bridge
Planning Level Traffic Analysis
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 26 of 31

Scale: 1:40,000



DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

CDM Smith

2042 Alternative 3 - VOLUMES

I-10 Calcasieu River Bridge
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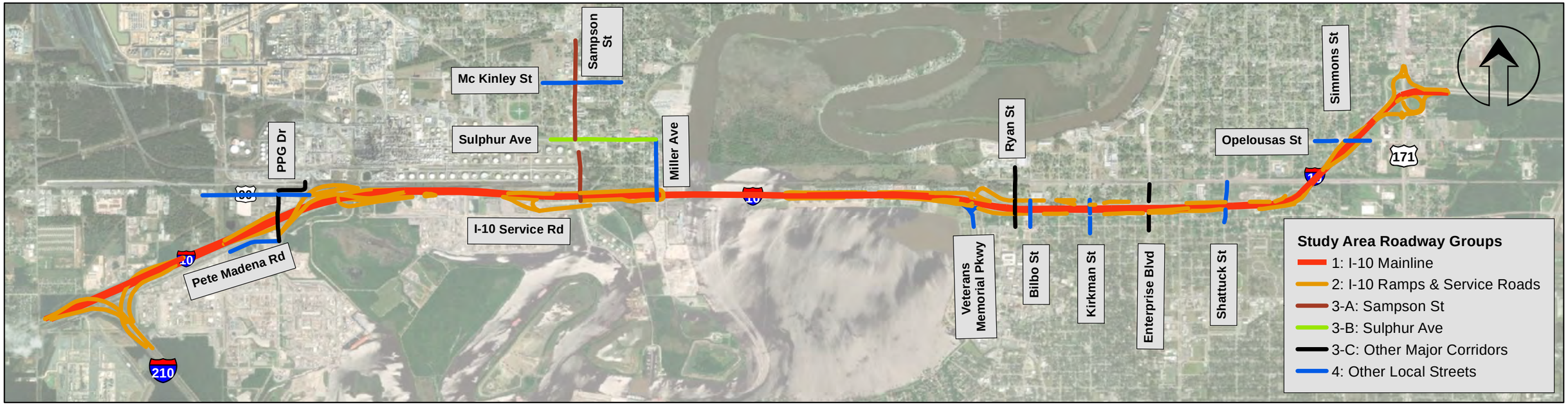
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 27 of 31

Scale: 1:40,000



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CDM Smith

2042 Alternative 3 - SPEEDS

I-10 Calcasieu River Bridge
Planning Level Traffic Analysis

(I-210 to US-171)

Parish:	Calcasieu
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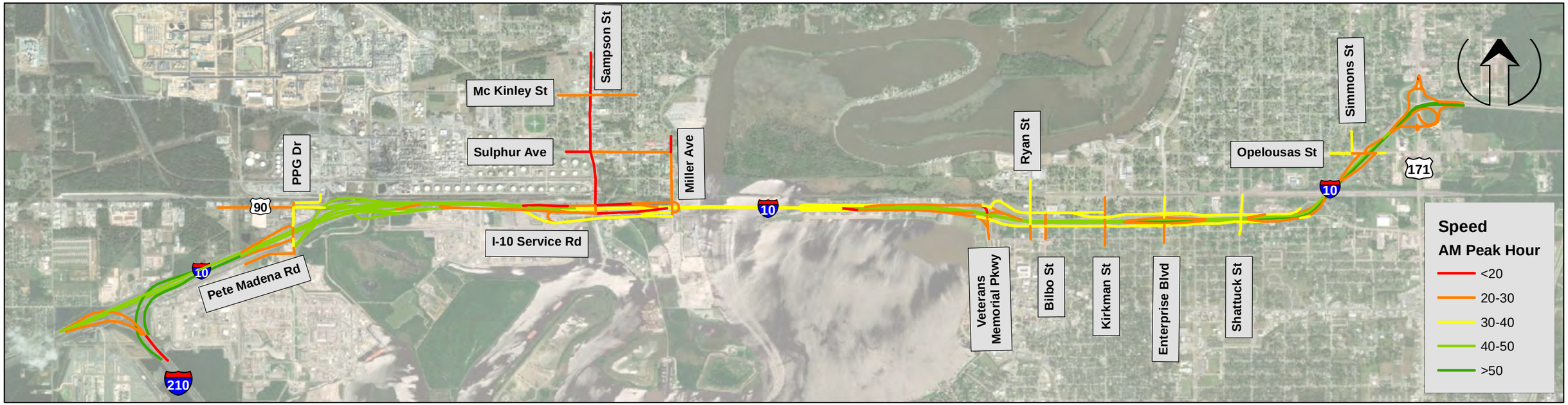
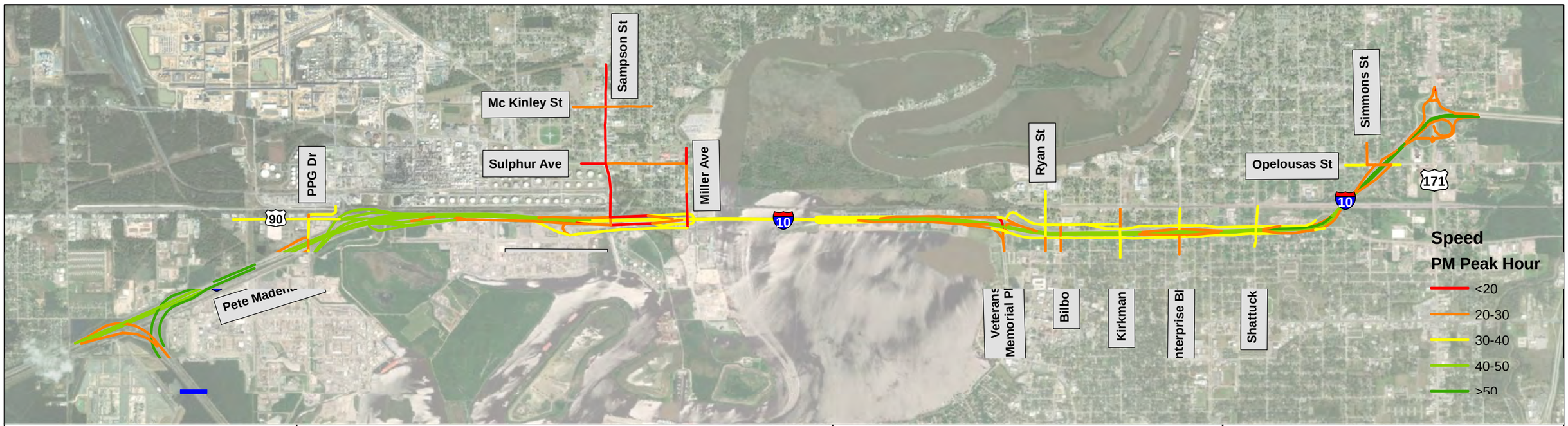
Scale: 1:40,000





DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

CDM Smith

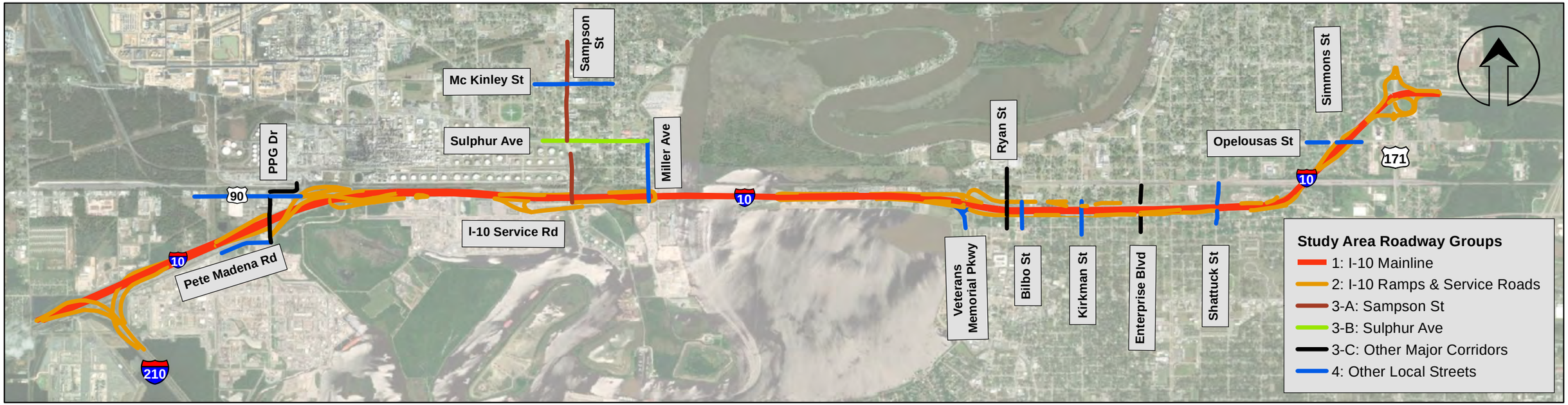
2042 Alternative 3 - SPEEDS

I-10 Calcasieu River Bridge
Planning Level Traffic Analysis
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 29 of 31

Scale: 1:40,000



DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

CDM Smith

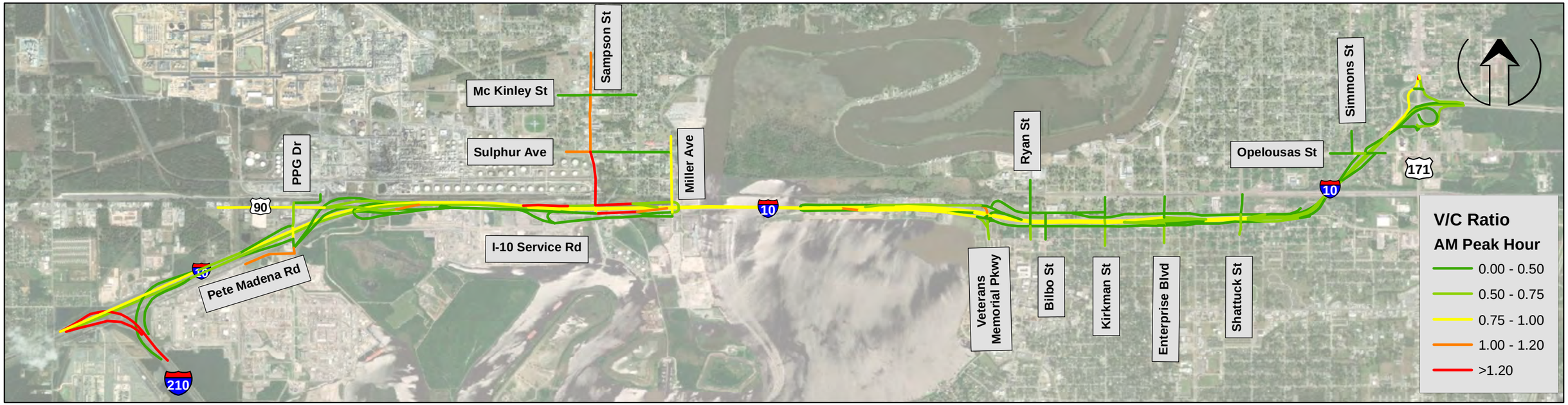
2042 Alternative 3 - V/C RATIOS

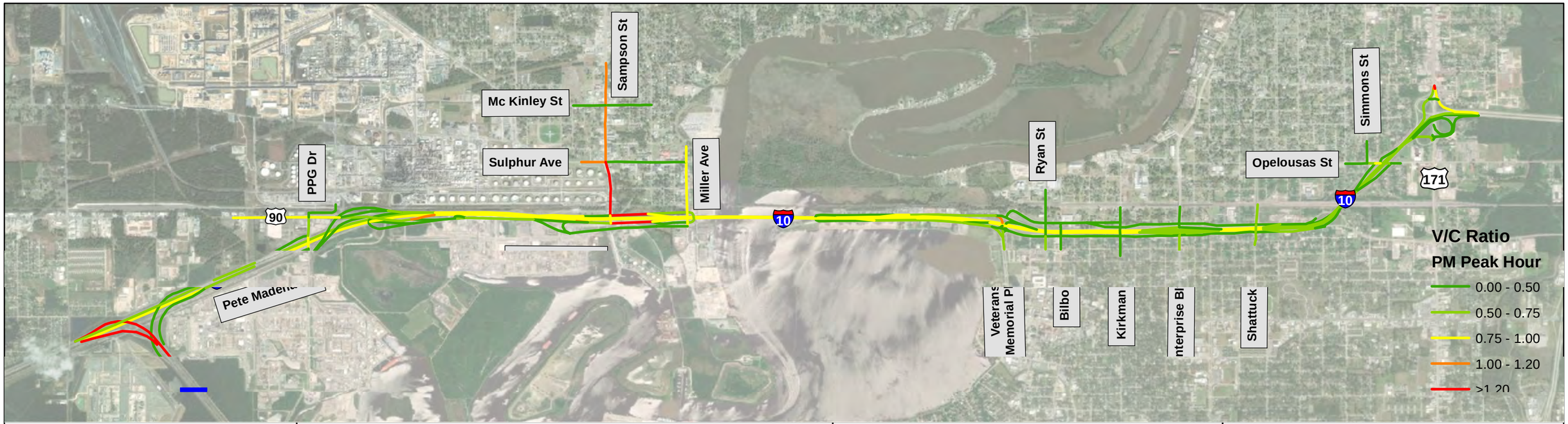
I-10 Calcasieu River Bridge
Planning Level Traffic Analysis
(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

Figure: 30 of 31

Scale: 1:40,000





2042 Alternative 3 - V/C RATIOS

I-10 Calcasieu River Bridge
Planning Level Traffic Analysis

(I-210 to US-171)

Parish:	Calcasieu
City:	Lake Charles
Project:	H.003931

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Scale: 1:40,000

I-10 LAKE CHARLES
CALCASIEU RIVER BRIDGE

APPENDIX K

Traffic Noise Technical Report

I-10 LAKE CHARLES
CALCASIEU RIVER BRIDGE

TRAFFIC NOISE TECHNICAL REPORT

I-10 Calcasieu River Bridge Improvements

(I-10/I-210 West End to I-10/I-210 East End)

Calcasieu Parish, Louisiana

State Project Number: H.003931

July 11, 2022

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

U.S. Department of Transportation
Federal Highway Administration

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ATTACHMENTS

1.0 INTRODUCTION

The Louisiana Department of Transportation and Development (LADOTD) is conducting a noise impact assessment (NIA) for the proposed replacement of the Calcasieu River Bridge in the City of Lake Charles, Calcasieu Parish, Louisiana. The NIA will determine noise impacts associated with the Build Alternatives and abatement will be evaluated for both feasibility and reasonableness. This noise analysis was prepared in accordance with the requirements of the Federal Highway Administration (FHWA) noise standards, Procedure for Abatement of Highway Traffic and Construction Noise [23 Code of Federal Regulations (CFR) Part 772] and state requirements. The LADOTD's Highway Traffic Noise Policy issued July 2011 (revised October 2021) provides information on how highway traffic noises are defined, how noise abatement is evaluated, and how noise abatement decisions are made in Louisiana. This report documents the methodology and results of the Calcasieu River Bridge traffic noise analysis in accordance with FHWA and the LADOTD requirements.

"Highway Traffic Noise Policy and Guidance," was issued in July 2010 (revised January 2011) by the Federal Highway Administration (FHWA). Pursuant to 23 CFR 772, a Type I project is:

(1) The construction of a highway on new location; or,

(2) The physical alteration of an existing highway where there is either:

(i) Substantial Horizontal Alteration. A project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition; or,

(ii) Substantial Vertical Alteration. A project that removes shielding therefore exposing the line-of-sight between the receptor and the traffic noise source. This is done by either altering the vertical alignment of the highway or by altering the topography between the highway traffic noise source and the receptor; or,

(3) The addition of a through-traffic lane(s). This includes the addition of a through-traffic lane that functions as a (high occupancy vehicle (HOV) lane, High-Occupancy Toll (HOT) lane, bus lane, or truck climbing lane; or,

(4) The addition of an auxiliary lane, except for when the auxiliary lane is a turn lane; or,

(5) The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange; or,

(6) restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane, except for when the auxiliary lane is a turn lane; or,

(7) The addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot or toll plaza.

The proposed I-10 Calcasieu River Bridge project will include the addition of through traffic lanes and, therefore, it will be classified as a Type I project.

1.1 Project Description

The project is located in Calcasieu Parish, Louisiana (see Figure 1). The three Build Alternatives are Alternative 3A, Alternative 3E, and Alternative 5G (see Attachment 3). Alternative 5G also includes three railroad configuration alternatives between Sampson Street and the Calcasieu River, noted as RR1, RR2, and RR3.

Alternative 3A

This alternative consists of a 240-foot steel-span bridge for the I-10 mainline over the Calcasieu River. A long-span bridge crossing over the endocrine-disrupting chemical (EDC) area of contamination would extend the bridge west of Sampson Street. The westbound off-ramp to Sampson would curve under the long-span section and come to grade at Isle of Capri Boulevard near Mike Hooks Road. The other three ramps would be improved in the same locations and the at-grade railroad crossings at Sampson Street would remain. An extension of Sulphur Avenue crossing the river to the north of the mainline with a moveable bridge would be provided as an alternate route to avoid the railroad crossings. This extension would connect with the I-10 mainline east of the river, but only westbound exit and eastbound entrance ramps would be provided.

Alternative 3E

This alternative consists of a 240-foot steel-span bridge for the I-10 mainline over the Calcasieu River. A long-span bridge crossing over the EDC area of contamination would extend the bridge west of Sampson Street. The westbound off-ramp to Sampson would curve under the long-span section and come to grade at Isle of Capri Boulevard near Mike Hooks Road. The other three ramps would be improved in the same locations and the at-grade railroad crossings at Sampson Street would remain. An extension of Sulphur Avenue crossing the river to the north of the mainline with a moveable bridge would be provided as an alternate route to avoid the railroad crossings. This extension would connect with the I-10 mainline east of the river. Four ramps, eastbound entrance and exit and westbound entrance and exit, would be provided.

Figure 1. Project Location

Alternative 5G

This alternative consists of a 240-foot steel-span bridge over the Calcasieu River. At its western end, the bridge would pass under Sampson Street, crossing the EDC area on a retaining wall. The retaining wall would be filled with lightweight earthen material and supported on a shallow platform designed to spread the load horizontally. This design would allow a fully directional interchange to be elevated over the I-10 mainline. At-grade Sampson Street would also be elevated, connecting four ramps to the interstate and providing a grade separation for the railroad crossings.

1.2 Noise Background

Noise is typically defined as unwanted or undesirable sound. The basic parameters of noise that affect humans are:

1. intensity or level,
2. frequency content, and
3. variation with time.

The first parameter is determined by the level of sound, which is expressed in units of decibels (dB). By using this scale, the range of normally encountered sound can be expressed by values between 0 and 120 dB. On a relative basis, a 3-dB change in sound level generally represents a barely perceptible change in a common outdoor setting to someone with average hearing. A 5-dB positive change presents a "noticeable" change, and a 10-dB positive change is typically perceived as a doubling in the loudness while a 10-dB decrease in noise levels is perceived as a 50 percent reduction in loudness.

The frequency of noise is related to the tone or pitch of the sound and is expressed in terms of cycles per second called hertz (Hz). The human ear can detect a wide range of frequencies from about 20 Hz to 17,000 Hz. However, because the sensitivity of human hearing varies with frequency, the A-weighting system is commonly used. Sound levels measured using this weighting system are called "A-weighted" sound levels and are expressed in decibel notation as "dBA." The A-weighted sound level is widely accepted as a proper unit for describing environmental noise.

Because environmental noise fluctuates from moment to moment, it is common practice to condense all of this information into a single number called the "equivalent" sound level (Leq). The Leq is a measure of the average sound energy during a specified period of time (typically 1 hour or 24 hours). The Leq is defined as the constant level that, over a given period of time, transmits the same amount of acoustical energy to the receiver as the actual time-varying sound. Studies have shown that Leq is well correlated with human annoyance to sound, and therefore, this descriptor is widely used for environmental noise impact assessment. The Leq measured over a 1-hour period is the hourly Leq (1-hour), which is used to analyze highway noise impacts and abatement.

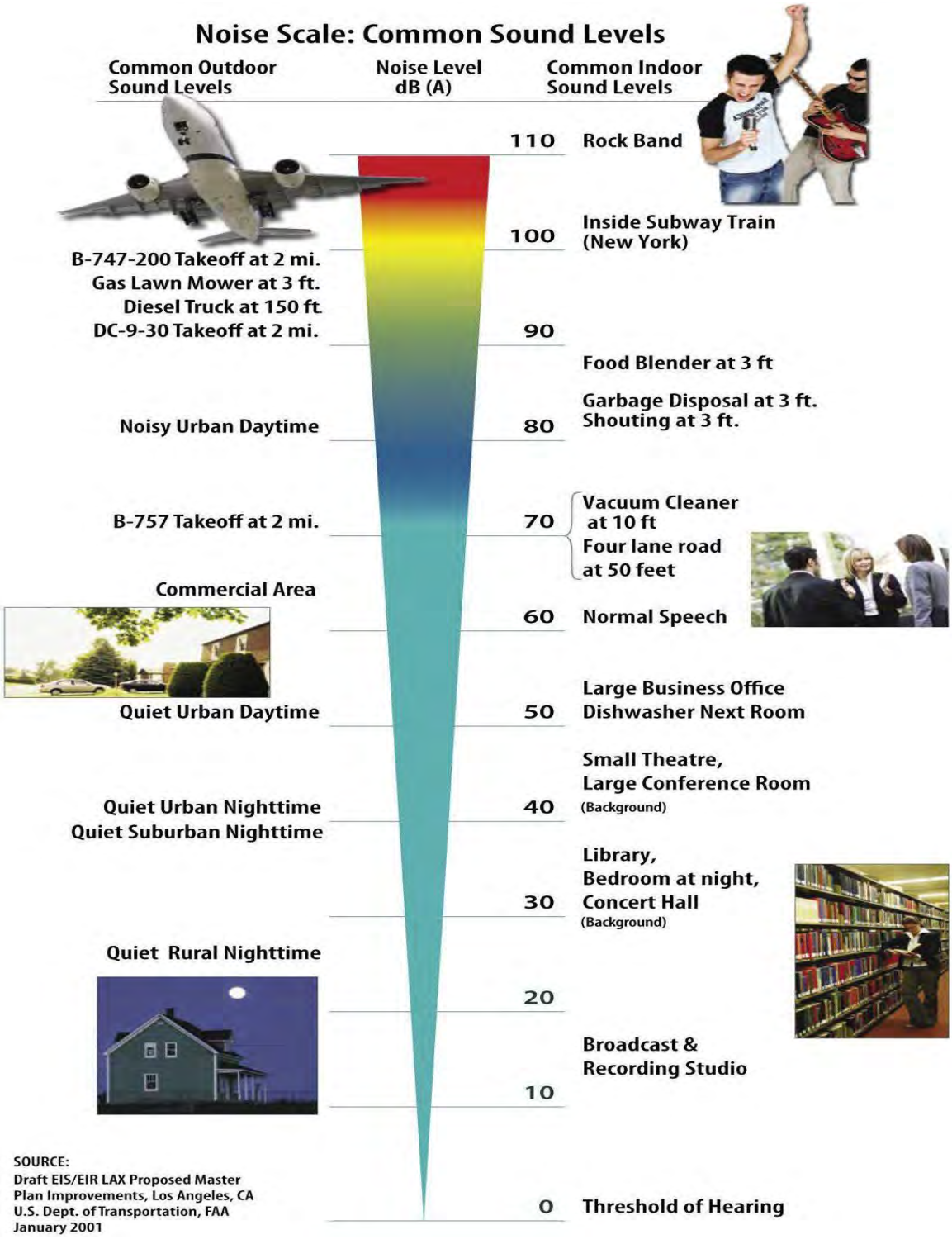


Figure 2. Common Sound Levels

The noise abatement criteria (NAC) are used to determine noise impacts. Noise abatement must be considered for properties that will be impacted by the project (approach or exceed the NAC in the future build scenario and/or experience a substantial increase in the future build scenario over existing levels). Table 1 shows the FHWA Activity Categories, the description of the type of land use within the category, and the NAC based on loudest- hour Leq noise levels. These abatement criteria apply to design-year noise conditions for a proposed project regardless of whether the proposed Project would increase or decrease noise conditions compared to the existing or No Action condition. In accordance with FHWA regulations, noise is evaluated at existing noise sensitive uses and locations already permitted for noise sensitive use. If lands have not been permitted for noise sensitive use prior to the Record of Decision (the approval date of the Environmental Impact Statement), they are not eligible for potential noise mitigation.

LADOTD implements the NAC by defining that “approaching the NAC” means noise levels are 1 dB(A) below the NAC criteria. For example, if design-year noise levels would be 66 dB(A) (Leq(h)) at a residential receptor, that would approach the NAC of 67 dB(A) (Leq(h) and noise abatement must be considered. LADOTD also defines a “substantial increase” in noise as an increase of 10 dB(A) or more between design year noise levels and existing levels. A substantial increase does not depend on whether the design year noise levels approach or exceed the absolute NAC.

NAC is divided into seven categories (A-G). NAC Category A refers to land uses for which serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential for the area to continue to serve its intended purpose. No NAC Category A land uses were identified in the study area. NAC Category B refers to single and multi-family residential properties. NAC Category C land uses include schools, parks, and public facilities. NAC Category D refers to interior use impacts for certain NAC Category C land uses; analysis of these locations is discussed in Section 2.5.4. NAC Category E land uses include hotels and restaurants. NAC Category G land uses include vacant land that is not currently permitted for development. Finally, NAC Category F refers to non-noise sensitive land uses for which noise abatement is not considered.

Table 1. Noise Abatement Criteria [Hourly A-Weighted Sound Level-decibels (dB(A))]

Activity Category	Activity Leq(h)[1]		Evaluation Location	Description of Activity Category
	FHWA	LADOTD		
A	57	56	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B[2]	67	66	Exterior	Residential
C[2]	67	66	Exterior	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreational areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	51	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E[2]	72	71	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.
F	--	--	--	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	--	--	--	Undeveloped lands that are not permitted.

(Based on Table 1 of 23 CFR Part 772)

1 The Leq(h) Activity Criteria values are for impact determination only and are not a design standard for noise abatement measures.

2 Includes undeveloped lands permitted for this activity category.

2.0 TRAFFIC NOISE ANALYSIS

Per LADOTD's Noise Policy, highway traffic noise analysis includes the following:

- Identification of noise sensitive sites,
- Prediction of Existing and Design Year Noise Levels
- Assessment of traffic noise impacts, and
- Evaluation of noise abatement for impacted locations.

2.1 Land Use Identification

Noise-sensitive receptors in the study area have been identified through aerial photography, field observations, and land use parcel data for Calcasieu Parish and the City of Lake Charles dated February 20, 2020. Modeling limits generally extend 500 feet beyond the nearest noise source (I-10), starting on the west side of the project area approximately 0.75 mile west of I-210, and extending approximately 1 mile east of I-210 on the east side of the project area. A *receiver* represents a discrete point utilized in the TNM. In some cases, a single receiver can be used to represent several *receptors*, such as a row of houses that are equally distant from a noise source, or a single floor of an apartment building. Under the existing condition, 1,091 receivers representing 1,503 noise sensitive receptors were identified in the project area. Due to anticipated displacements within each evaluated Alternative, the number of analyzed receptors differ between each Alternative evaluation.

Table 2. Receivers by NAC Category

NAC Category	Receivers (Receptors)
Category B	1,013 (1,114)
Category C	36 (36)
Category E	41 (353)
Total	**1,090 (1,503)**

No NAC Category A receptors were identified in the project study area. Most modeled receptors consist of single-family residences (NAC Category B), as well as multi-family dwellings located primarily along Winterhalter Street between Goos Street and Albert Street. In addition, several churches, Section 4(f) properties, cemeteries, community centers, recreation areas, and public meeting facilities were identified (NAC Category C). Finally, NAC Category E land uses include hotels and restaurants.

No noise sensitive land used were identified between PPG Drive and Sampson Drive; this area is industrial land (NAC Category F), where noise analysis and abatement are not required.

Receptors were grouped into eighteen (18) Common Noise Environments (CNEs) (see Figure 3). For abatement assessment, some CNEs (I,P) were further subdivided. CNEs are a group of receptors within the same Activity Category that are exposed to similar noise sources, traffic volumes, traffic mix, speed, and topographic features. A CNE often includes a group of receptors that would benefit from the same noise barrier or noise barrier system.

An additional set of receptors is located on the north side of I-10 along North Lake Shore Drive. This CNE consists of motels and restaurants (NAC Category E) as well as a radio broadcast facility (NAC Category C). All of these receptors in this group designated CNE S, would be displaced under all Build Alternatives; therefore, CNE S receptors were not analyzed. See Figure 3 for locations of CNEs. See Table 3 for a summary of land uses identified CNEs.

Figure 3. Common Noise Environments

Table 3. Common Noise Environments

Barrier Analysis	Location	Land Use Description
CNE A	Western project limits, north of I-10	Single-family residential (NAC Category B)
CNE B	Bel Verdine Road, north of I-10	Single-family residential (NAC Category B)
CNE C	Between Sampson Street and the Calcasieu River, north of I-10	Single-family residential (NAC Category B)
CNE D	Between Sampson Street and the Calcasieu River, south of Sulphur Avenue	Single-family residential (NAC Category B), churches (NAC Category C)
CNE E	Between Flowers Street and the Calcasieu River, north of Sulphur Avenue	Single-family and multi-family residential (NAC Category B), churches and a school (NAC Category C), restaurants and businesses (NAC Category E)
CNE F	South of N Lake Shore Drive and I-10	Public beach, a cemetery, and Section 4(f) property (NAC Category C), office (NAC Category E)
CNE G	Between Ann Street and Enterprise Boulevard, south of I-10	Single-family residential (NAC Category B), a church, and meeting facilities (NAC Category C), office (NAC Category E)
CNE H	Between Ryan Street and Enterprise Boulevard, north of I-10	Single-family residential (NAC Category B), meeting facility and cemetery (NAC Category C)
CNE I	Between Enterprise Boulevard and railroad, south of I-10	Single-family and multi-family residential (NAC Category B), churches, cemeteries, and meeting facilities (NAC Category C), a restaurant (NAC Category E)
CNE J	Between Enterprise Boulevard and Libby Street, north of I-10	Single-family residential (NAC Category B)
CNE K	Between Orrin Street and Opelousas Street, north of I-10	Single-family residential (NAC Category B)
CNE L	Between railroad and Martin Luther King Highway, south of I-10	Single-family residential (NAC Category B), churches (NAC Category C)
CNE M	Between Opelousas Street and Martin Luther King Highway, north of I-10	Single-family residential (NAC Category B), public facility (NAC Category C), hotels (NAC Category E)
CNE N	Southeast quadrant of Martin Luther King highway interchange	Single-family residential (NAC Category B), cemetery (NAC Category C), hotel (NAC Category E)
CNE O	Northeast quadrant of Martin Luther King highway interchange	Single-family residential (NAC Category B), hotels, restaurants (NAC Category E)
CNE P	Eastern project limits, north of Opelousas Street and south of I-10	Single-family residential (NAC Category B), park (NAC Category C)
CNE Q	Eastern project limits, north of I-10	Single-family residential (NAC Category B)
CNE R	Along west side of Lake Charles, south of I-10	Hotel (NAC Category E)
CNE S*	Along N Lake Shore Drive, north of I-10	Radio studio (NAC Category C), Motels, restaurants (NAC Category E)

*All receptors in CNE S would be displaced under all build alternatives; CNE S receptors were not analyzed.

2.2 Determination of Existing Noise Levels

A field visit was conducted between August 17-19, 2020. Noise measurements were taken at twenty-four (24) representative locations, approved by LADOTD, to validate (+/- 3 dBA) that the noise levels predicted by the existing TNM model are consistent with actual field measurements, given the same traffic and meteorological conditions. Twenty-two (22) noise measurements included concurrent traffic counts, while two (2) measurements were taken to establish ambient conditions in areas where no traffic counts were conducted.

Noise measurements were collected utilizing a Larson Davis SoundTrack LxT1 sound level meter. The A-weighted frequency scale was used, and the sound meter was calibrated to 114 dB(A) utilizing a Larson Davis CAL200 sound level calibration device. Fifteen (15)-minute measurements were taken at each measurement site at a height approximately five feet above the ground surface.

Traffic data, including vehicle classifications and average traffic speed, was recorded from DOTD traffic cameras located within the corridor. Vehicles were classified into five TNM-categories, including automobiles, medium trucks, heavy trucks, buses, and motorcycles. Average vehicle speeds were collected with a Bushnell Velocity speed gun, model 101911. Traffic volumes collected during each 15-minute period were multiplied by four (4) to reflect hourly volumes for modeling within TNM.

2.3 Prediction of Existing and Future Noise Levels

In accordance with current FHWA noise regulations, the TNM Version 2.5 (TNM) computer program was used to predict the noise levels associated with the proposed project.

2.3.1 Model Validation

The purpose of model validation is to demonstrate that the TNM model used to predict existing noise levels accurately reflects actual measurements taken at a representative sample of sites in the field. Field measurements are collected with a sound level meter (SLM) concurrently with traffic counts adjacent to each field measurement location. For each measurement location, the noise model is considered valid if the measured noise level is within +/-3 dB(A) of the TNM-predicted value, given the same traffic and meteorological conditions documented in the field.

All but one of the predicted noise levels were within +/- 3dB(A) of the measured values. Despite adjustments to terrain, confirmation of traffic counts, and field measurement placement, Field Measurement 19 was recorded as lower than the predicted TNM value. Additional features, including adjacent buildings as well as a private fence located at the edge of ROW, may have contributed to the discrepancy, providing more abatement than the TNM model would otherwise predict. Nevertheless, all remaining noise measurements are within appropriate thresholds, so the TNM model is considered valid. The locations of the measurement sites are provided in Attachment 2. Field data sheets and calibration documentation are provided in Attachment 5.

Table 4. Validation Results

Field Measurement	Time Period	Description	Measured Leq (dBA)	Predicted Leq (dBA)	Difference (dBA)	Valid
1	8:42 – 8:57	8/18/2020	72.1	72.4	-0.3	Yes
2	9:15-9:30	8/18/2020	59.4	57.3	2.1	Yes
3	9:48 – 10:03	8/18/2020	64.5	67.2	-2.7	Yes
4	10:25 – 10:40	8/18/2020	61.4	64.3	-2.9	Yes
5	10:49 – 11:04	8/18/2020	64.9	66.5	-1.6	Yes
6	13:04-13:19	8/18/2020	66.2	69.1	-2.9	Yes
7	9:20-9:35	8/19/2020	55.8	Ambient	Ambient	--
8	13:38-13:53	8/18/2020	74.1	75.5	-1.4	Yes

Table 4. Validation Results (cont.)

Field Measurement	Time Period	Description	Measured Leq (dBA)	Predicted Leq (dBA)	Difference (dBA)	Valid
9	8:45-9:00	8/19/2020	71.5	69.3	2.2	Yes
10	14:14-14:29	8/18/2020	63.9	66.9	-3.0	Yes
11	8:17-8:32	8/19/2020	69.0	67.9	1.1	Yes
12	14:41-14:56	8/18/2020	70.4	67.8	2.6	Yes
13	12:23-12:38	8/18/2020	71.1	69.6	1.5	Yes
14	12:52-13:07	8/18/2020	67.3	68.9	-1.6	Yes
15	10:50-11:05	8/18/2020	62.0	64.9	-2.9	Yes
16	10:19-10:34	8/18/2020	59.8	60.2	-0.4	Yes
17	15:46-16:01	8/17/2020	68.2	66.5	1.7	Yes
18	13:23-13:38	8/18/2020	73.4	71.1	2.3	Yes
19	14:51-15:06	8/18/2020	60.9	65.9	-5.0	No
20	9:44-9:59	8/18/2020	61.5	62.9	-1.4	Yes
21	9:15-9:30	8/18/2020	65.1	62.4	2.7	Yes
22	14:21-14:36	8/18/2020	67.1	69.5	-2.4	Yes
23	8:37-8:52	8/18/2020	69.5	69.4	0.1	Yes
24	12:24-12:39	8/18/2020	58.4	Ambient	Ambient	--

2.3.2 Traffic Predictions

Traffic data utilized to predict existing and future noise levels were extracted from the traffic analysis prepared for the project. Hourly volumes were developed for the 2019 existing year and 2042 no-build and build design years for the I-10 Calcasieu Bridge and Improvements Project Traffic Engineering Report as detailed in Attachment 6. Traffic characteristics that are expected to yield the worst hourly traffic noise impact on a regular basis for the design year were identified. The freeway peak periods were from 4:00-7:30 AM and 2:45- 8:15 PM. Because the highest sound levels may not be at the peak traffic hour but may instead occur during some period when traffic volumes are lower but the truck mix or vehicle speeds are higher, traffic volumes and truck percentages throughout the day at several locations were evaluated. Truck percentages and speeds vary throughout the corridor, but the review determined that the highest noise hour would occur during the PM peak. These volumes were input into the TNM.

2.3.3 Model Setup

The TNM model estimates the total sound energy perceived at a modeling receptor by determining the logarithmic sum of the sound energy generated from each of the adjacent roadway segments. The total noise level estimated at a given receptor is a function of the number of automobiles, medium trucks, heavy trucks, buses, motorcycles, and travel speed at which these vehicles are moving on each roadway segment. Moreover, roadway segments with a higher number of heavy trucks generate more noise than those with lower truck volumes. In general, roadway segments located further away contribute less to the estimated total noise level than those roadway segments closer to the receptor. In addition, the TNM model also considers attenuating effects of distance, building rows, topography, average pavement surface, ground surface conditions outside the roadway boundary, trees zones, atmospheric absorption, and any existing sound barriers. Tree zones were not included in this analysis. Noise generated from sources other than traffic is not included in the model.

Major roadways, terrain features, building structures, Lake Charles, and sensitive receptors were modeled in TNM by importing roadway geometry into the TNM program. Elevations for the TNM model runs were obtained from existing project data as well as United States Geological Survey (USGS) data. Lastly, the number of automobiles, medium trucks, and heavy trucks, as well as their associated travel speeds (posted speeds) for each modeled roadway segment, were input into the model. The TNM model preparation was completed, and the program executed. Upon completion, noise level estimates at the receptors were provided in an output summary table, provided in Attachment 1.

2.4 Determination of Traffic Noise Impacts

Per Section 2.1, traffic noise impacts occur when the future noise levels approach or exceed the FHWA NAC or when the future noise levels exceed the existing noise levels by 10 dBA. The Noise Abatement Criteria [Hourly A-Weighted Sound Level-decibels (dB(A))] from Table 1 was used to predict traffic noise impacts for the Design Year No- Build and Build Alternatives. Table 5 provides a summary of impacts by NAC category. A complete summary of the TNM predicted levels and predicted impacts can be found in Attachment 1.

Table 5. Impacts by NAC Category

Receivers (Receptors)	Existing	No Build	Alt 3A	Alt 3E	Alt 5G RR1	Alt 5G RR2	Alt 5G RR3
Category B	156 (156)	226 (234)	242 (269)	241 (268)	239 (266)	242 (269)	242 (269)
Category C	16 (16)	19 (19)	18 (18)	16 (16)	14 (14)	14 (14)	14 (14)
Category E	3 (3)	3 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Total	**175 (175)**	**248 (256)**	**260 (287)**	**257 (284)**	**253 (280)**	**256 (283)**	**256 (283)**

Existing

Predicted noise levels ranged from approximately 42 to 75 dBA at 1,090 analyzed receivers, representing 1,503 receptors. A total of 175 receptors are anticipated to be impacted.

No Build

Predicted noise levels ranged from approximately 43 to 76 dBA at 1,090 analyzed receivers, representing 1,503 receptors. Predicted levels are expected to be approximately 2 dBA higher than existing levels. A total of 256 receptors are anticipated to be impacted.

Alternative 3A

Predicted noise levels ranged from approximately 43 to 76 dBA at 1,060 analyzed receivers, representing 1,389 receptors. Predicted levels are expected to be approximately 2 dBA higher than existing levels. A total of 287 receptors are predicted to be impacted. All impacts are due to noise levels exceeding or approaching the NAC. There are no receptors that would be impacted by a substantial increase in noise levels.

Alternative 3E

Predicted noise levels ranged from approximately 43 to 76 dBA at 1,060 analyzed receivers, representing 1,389 receptors. Predicted levels are expected to be approximately 2 dBA higher than existing levels. A total of 284 receptors are anticipated to be impacted. All impacts are due to noise levels exceeding or approaching the NAC. There are no receptors that would be impacted by a substantial increase in noise levels.

Alternative 5G RR1

Predicted noise levels ranged from approximately 43 to 76 dBA at 1,055 analyzed receivers, representing 1,384 receptors. Predicted levels are expected to be approximately 2 dBA higher than existing levels. A total of 280 receptors are anticipated to be impacted. All impacts are due to noise levels exceeding or approaching the NAC. There are no receptors that would be impacted by a substantial increase in noise levels.

Alternative 5G RR2

Predicted noise levels ranged from approximately 43 to 76 dBA at 1,061 analyzed receivers, representing 1,390 receptors. Predicted levels are expected to be approximately 2 dBA higher than existing levels. A total of 283 receptors are anticipated to be impacted. All impacts are due to noise levels exceeding or approaching the NAC. There are no receptors that would be impacted by a substantial increase in noise levels.

Alternative 5G RR3

Predicted noise levels ranged from approximately 43 to 76 dBA at 1,061 analyzed receivers, representing 1,390 receptors. Predicted levels are expected to be approximately 2 dBA higher than existing levels. A total of 283 receptors are anticipated to be impacted. There are no receptors that would be impacted by a substantial increase in noise levels.

2.5 Evaluation of Noise Abatement

Noise abatement measures must be considered when a traffic noise impact occurs. A noise abatement measure is any positive action taken to reduce the impact of traffic noise on an activity area. Noise abatement shall be considered and evaluated for both feasibility and reasonableness when traffic noise impacts are identified, according to FHWA guidance and the LADOTD policy. This information is assessed to determine if the abatement goals can be achieved and, if so, if the abatement measures can be physically implemented. Noise abatement measures were evaluated for impacted receptors identified in Build Alternatives 3A, 3E, and 5G.

2.5.1 Traffic Management Measures

Traffic management techniques such as the restriction of truck traffic, use by only certain types of vehicles, restricting use to certain times of the day, traffic calming devices, and reduction in operating speeds were considered for noise abatement measures to impacted receptors. Because construction is taking place on a designated Interstate, prohibition of certain types of vehicles and reductions in speed would not be consistent with the roadway's intended purpose.

2.5.2 Alteration of Horizontal and Vertical Alignments

A reduction in noise levels may be gained by suppressing a roadway vertical alignment to create a natural berm or by shifting the horizontal alignment away from the noise sensitive receptor. Due to the number of residential and commercial structures located along the north and south sides of I-10, the potential corridor space is limited and will not allow for further shifting of the horizontal alignment. Additionally, several portions of the Build Alternatives are on-structure. Consequently, it would not be feasible to alter the horizontal or vertical alignment to abate traffic noise impacts.

2.5.3 Acquisition of Property Rights

Land use to create buffer zones or separation between noise sensitive receivers and traffic is considered during the design of a project. One noise abatement measure is the application of land use controls to minimize impacts to future development. In particular, land use controls can be used to create buffer zones. Although LADOTD is typically not able to acquire land to create buffer zones, it is sometimes possible to relocate an impacted property outside of the potential noise impact zone. This approach is sometimes applied to mobile home parks where relocation of the homes to a location

outside the impact zone is possible. Typically, this approach would be made in consultation with the owner of the mobile home. However, none of the receivers to be impacted are of the type that such relocation is practical. Therefore, such action is not appropriate for consideration for this project.

2.5.4 Noise Insulation of Public Use or Non-Profit Institutional Structures

A reduction of highway traffic noise may be gained by insulating buildings. “Highway agencies may only consider noise insulation for public use or nonprofit institutional structures, e.g., places of worship, schools, hospitals, libraries, etc. Public use or nonprofit institutional structures is defined as a facility that is open for public use, owned by the public, or that a nonprofit organization owns the facility” (FHWA, 2011). Six (6) impacted NAC Category C receivers were identified as buildings where noise abatement was not found to be feasible and reasonable. These locations include two community centers, one recreation center, one meeting facility, and two churches. A 25 dBA reduction was applied to these locations’ predicted noise levels under all Build Alternatives to account for building attenuation. In all instances, the interior noise level was predicted to be lower than the NAC Category D threshold in Table 1. Consequently, abatement in the form of insulation would not be required.

2.5.5 Construction of Noise Barriers

The last noise abatement measure considered was construction of noise barriers. Noise barriers are typically a solid wall-like structure located between the noise source and the impacted receptor to reduce noise levels. The LADOTD’s noise policy establishes the criteria for determining a noise barrier’s feasibility and reasonableness. A noise barrier must result in at least a 5 dBA reduction in highway traffic noise for 75 percent of the first row impacted receptors to be considered feasible. Other feasibility factors include access to adjacent properties, barrier height, safety, topography, utilities, drainage, and maintenance of the abatement.

The reasonableness of any abatement measure is determined if the following three criteria are met:

- At least one receptor receives an 8 dBA noise reduction
- The cost estimate is equal to or less than $47,000 per benefited receptor (a benefitted receptor is defined as a receiver that receives at least a 5 dBA noise reduction, regardless of whether or not the receptor is impacted)
- No relevant objections are made during initial public involvement or if during follow-up solicitation with benefited receptors, 50 percent or more of the responses are positive.

Noise barriers for each alternative were evaluated for impacts identified within each CNE. Across all Build Alternatives, 28 barrier analyses were conducted. With exception of CNEs C, D, E, and F, noise barrier analyses were identical across all Build Alternatives. No impacts were identified in CNE B, CNE D, and CNE E under all alternatives; therefore, no abatement was evaluated for these areas. Overall, 25 noise barriers or noise barrier systems consisting of multiple noise barriers were analyzed across three Build Alternatives. Of those analyzed, three noise barriers were found to be both feasible and reasonable for CNE G, CNE I (I1), and CNE I (I3). Due to the

identical configuration of Alternatives at these locations, the barrier configurations would be the same across all three Build Alternatives. The with barrier sound levels were compared to the sound levels from the build files due to some irregularities in the no barrier sound levels shown in the barrier files caused by the barrier line acting as a new terrain line. Table 6 provides a summary of barriers analyzed. Summaries of analyzed barrier locations, benefited receptors, and cost are provided in Attachment 4.

Table 6. Noise Barrier Summary

Barrier Analysis	Feasible?	Reasonableness Criteria			
		(a) Meets Noise Reduction Design Goal?	(b) Cost Effectiveness		
			Number of Benefited Receptors	Barrier Cost	Cost Less than or Equal to $47,000 per Benefited Receptor?
CNE A	Yes	Yes	15	$1,777,485	No
CNE C - Alt 3A	Yes	Yes	11	$859,850	No
CNE C - Alt 3E	Yes	Yes	10	$790,018	No
CNE C - Alt 5G RR1	Yes	Yes	22	$2,822,164	No
CNE C - Alt 5G RR2	Yes	Yes	28	$2,822,164	No
CNE C - Alt 5G RR3	Yes	Yes	28	$2,822,164	No
CNE F - Alt 3A	Yes	Yes	2	$782,304	No
CNE F - Alt 3E	Yes	Yes	6	$6,088,686	No
CNE F - Alt 5G	Yes	Yes	5	$2,699,449	No
CNE G	Yes	Yes	90	$4,043,122	Yes
CNE H	Yes	Yes	20	$2,668,754	No
CNE I1	Yes	Yes	88	$3,679,435	Yes
CNE I2	Yes	Yes	4	$484,648	No
CNE I3	Yes	Yes	78	$2,188,978	Yes
CNE J	Yes	Yes	23	$1,497,618	No
CNE K	Yes	Yes	24	$1,778,744	No
CNE L	Yes	Yes	13	$1,441,936	No
CNE M	Yes	Yes	9	$1,875,181	No
CNE N	Yes	Yes	6	$1,149,064	No
CNE O	Yes	Yes	10	$725,549	No

Table 6. Noise Barrier Summary (cont.)

Barrier Analysis	Feasible?	Reasonableness Criteria			
		(a) Meets Noise Reduction Design Goal?	(b) Cost Effectiveness		
			Number of Benefited Receptors	Barrier Cost	Cost Less than or Equal to $47,000 per Benefited Receptor?
CNE P1	Yes	Yes	4	$2,226,063	No
CNE P2	Yes	Yes	23	$2,175,511	No
CNE Q	Yes	Yes	5	$1,168,305	No

CNE A – All Alternatives

While overhead utilities cross I-10 in this location, it was assumed that a single continuous noise barrier could be constructed. Noise abatement was also considered for an isolated impacted receptor, A83, but was not found to be feasible. The optimized barrier was found to be acoustically feasible and acoustically reasonable. However, the estimated cost exceeded the allowable cost and is therefore not considered reasonable.

CNE C – Alternative 3A

A noise barrier system consisting of two barriers was evaluated for impacted receptors. The optimized barrier system was found to be acoustically feasible and acoustically reasonable. However, due to the relative low density of receptors, the estimated cost exceeded the allowable cost and is therefore not considered reasonable.

CNE C – Alternative 3E

A noise barrier system consisting of two barriers was evaluated for impacted receptors. The optimized barrier system was found to be acoustically feasible and acoustically reasonable. However, due to the relative low density of receptors, the estimated cost exceeded the allowable cost and is therefore not considered reasonable.

CNE C – Alternative 5G RR1

A noise barrier system consisting of two barriers was evaluated for impacted receptors. The optimized barrier system was found to be acoustically feasible and acoustically reasonable. However, due to the relative low density of receptors, the estimated cost exceeded the allowable cost and is therefore not considered reasonable.

CNE C – Alternative 5G RR2

A noise barrier system consisting of two barriers was evaluated for impacted receptors.

The optimized barrier system was found to be acoustically feasible and acoustically reasonable. However, due to the relative low density of receptors, the estimated cost exceeded the allowable cost and is therefore not considered reasonable.

CNE C – Alternative 5G RR3

A noise barrier system consisting of two barriers was evaluated for impacted receptors. The optimized barrier system was found to be acoustically feasible and acoustically reasonable. However, due to the relative low density of receptors, the estimated cost exceeded the allowable cost and is therefore not considered reasonable.

CNE F – Alternative 3A

A noise barrier was evaluated for impacted receptors. Because a feasible reduction could not be achieved at F3, F4, F5, and F6, an optimized noise barrier was evaluated for the remaining first row receptors. The optimized barrier was found to be acoustically feasible and acoustically reasonable for the remaining receptors; however, due to the relative low density of receptors, the estimated cost exceeded the allowable cost and is therefore not considered reasonable.

CNE F – Alternative 3E

A noise barrier system was evaluated for impacted receptors. Because a feasible reduction could not be achieved at F8, an optimized noise barrier was evaluated for the remaining first row receptors. The optimized barrier was found to be acoustically feasible and acoustically reasonable for the remaining receptors; however, due to the relative low density of receptors, the estimated cost exceeded the allowable cost and is therefore not considered reasonable.

CNE F – Alternative 5G

A noise barrier system was evaluated for impacted receptors. The optimized barrier was found to be acoustically feasible and acoustically reasonable for the first row receptors; however, due to the relative low density of receptors, the estimated cost exceeded the allowable cost and is therefore not considered reasonable.

CNE G – All Alternatives

A noise barrier system was evaluated for impacted receptors. The optimized barrier was found to be acoustically feasible and acoustically reasonable. Additionally, due to the relative high density of receivers in this location, noise abatement was found to be cost effective in this location.

CNE H – All Alternatives

A noise barrier system was evaluated for impacted receptors. Because a feasible reduction could not be achieved at H34, H38, and H41, an optimized noise barrier was evaluated for the remaining first row receptors. The optimized barrier was found to be acoustically feasible and acoustically reasonable for the remaining receptors; however, due to the relative low density of receptors, the estimated cost exceeded the allowable

cost and is therefore not considered reasonable.

CNE I1 – All Alternatives

A noise barrier system was evaluated for impacted receptors located on the south side of I-10 between Enterprise Boulevard and Goos Street. The optimized barrier was found to be acoustically feasible and acoustically reasonable. Additionally, due to the relative high density of receivers in this location, noise abatement was found to be cost effective in this location.

CNE I2 – All Alternatives

A noise barrier was evaluated for impacted receptors. The optimized barrier was found to be acoustically feasible and acoustically reasonable. However, due to the low density of noise sensitive receptors and their distances from I-10, the estimated cost exceeded the allowable cost and is therefore not considered reasonable.

CNE I3 – All Alternatives

A noise barrier system was evaluated for impacted receptors. The optimized barrier was found to be acoustically feasible and acoustically reasonable. Additionally, due to the relative high density of receivers in this location, specifically apartments and multi-family units located along Winterhalter Street, noise abatement was found to be cost effective in this location.

CNE J – All Alternatives

A noise barrier was evaluated for impacted receptors. The optimized barrier was found to be acoustically feasible and acoustically reasonable. However, due to the relative low density of receptors, the estimated cost exceeded the allowable cost and is therefore not considered reasonable.

CNE K – All Alternatives

A noise barrier was evaluated for impacted receptors. The optimized barrier was found to be acoustically feasible and acoustically reasonable. However, the estimated cost exceeded the allowable cost and is therefore not considered reasonable.

CNE L – All Alternatives

A noise barrier was evaluated for impacted receptors. The optimized barrier was found to be acoustically feasible and acoustically reasonable. However, the estimated cost exceeded the allowable cost and is therefore not considered reasonable.

CNE M – All Alternatives

A noise barrier was evaluated for impacted receptors. The optimized barrier was found to be acoustically feasible and acoustically reasonable. However, the estimated cost exceeded the allowable cost and is therefore not considered reasonable.

CNE N – All Alternatives

A noise barrier was evaluated for impacted receptors. The optimized barrier was found to be acoustically feasible and acoustically reasonable. However, the estimated cost exceeded the allowable cost and is therefore not considered reasonable.

CNE O – All Alternatives

A noise barrier was evaluated for impacted receptors. First row parcels on the east side of this development are mostly vacant, with no identified building permits identified from local sources as of March 1, 2021. The optimized barrier was found to be acoustically feasible and acoustically reasonable. This optimized analysis did not include receptor O50, as its location at the far eastern end of the residential development prevented design of a cost-effective noise barrier. Despite its exclusion, the estimated abatement cost for the remaining impacted receptors exceeded the allowable cost and is therefore not considered reasonable.

CNE P1 – All Alternatives
A noise barrier was evaluated for impacted receptors. The optimized barrier was found to be acoustically feasible and acoustically reasonable. However, the estimated cost exceeded the allowable cost and is therefore not considered reasonable.

CNE P2 – All Alternatives

A noise barrier was evaluated for impacted receptors. The optimized barrier was found to be acoustically feasible and acoustically reasonable. However, the estimated cost exceeded the allowable cost and is therefore not considered reasonable.

CNE Q – All Alternatives

A noise barrier was evaluated for impacted receptors. The optimized barrier was found to be acoustically feasible and acoustically reasonable. However, the estimated cost exceeded the allowable cost and is therefore not considered reasonable.

2.5.6 Statement of Likelihood for Noise Barriers

Noise barriers were considered for all impacted receptors. It has been determined that noise abatement is likely, but not guaranteed, at three locations under All Build Alternatives. CNE G is located along the south side of I-10 between Ann Street and Enterprise Boulevard. A noise barrier system approximately 12 feet in height and a combined 5,809 feet in length would benefit 90 noise sensitive receptors. The estimated cost of abatement would be $4,043,122. CNE I (I1) is located along the south side of I-10 between Enterprise Boulevard and Goos Street. A noise barrier system approximately 14 feet in height and a combined 4,497 feet in length would benefit 88 noise sensitive receptors. The estimated cost of abatement would be $3,679,435. CNE I (I3) is located along the south side of I-10 between Goos Street and Fruge Street. A noise barrier system approximately 3,105 feet in length would benefit 78 noise sensitive receptors. The estimated cost of abatement would be $2,188,978. See Table 6a.

Table 6a. Reasonable and Feasible Noise Barriers

Barrier ID	Likely Barrier Location	Average Barrier Height	Estimated Insertion Loss (First Row)	Estimated Cost
CNE G	Begin point adjacent and south of I-10, north of Belden St @ Ann St; end point Enterprise Blvd adjacent and south of I-10, north of Belden St	12 ft	7.4 dBA	$4,043,122
CNE I1	Begin point adjacent and south of I-10, Enterprise Blvd adjacent and south of I-10, north of Belden St; end point adjacent and south of I-10, north of Belden St @ Goos St	14 ft	8.4 dBA	$3,679,435
CNE I3	Begin point adjacent and south of I-10, north of Belden St @ Goos St; end point adjacent and south of I-10, north of Belden St @ Fruge St	12.2 ft	6.7 dBA	$2,188,978

The final decision on the implementation of noise barriers will be made by the Department during project design. If during final design conditions substantially change that impact the implementation of likely barriers, the Department will solicit the viewpoints of those affected as part of the reevaluation of reasonableness. Only barriers determined to be both reasonable and feasible will be constructed. Barriers that are no longer reasonable and feasible will be removed from the project.

3.0 INFORMATION FOR LOCAL OFFICIALS

In accordance with 23 CFR Part 772 (772.17) and as outlined in the DOTD Noise Policy (July 2011), information is to be provided that may be useful to local communities to limit future land development to that which will be compatible with anticipated highway noise levels. At a minimum, this information includes an estimation of future design year noise levels at various distances from the edge of the nearest travel lane of the proposed project where future noise levels are within one decibel of the corresponding exterior values shown in Table 1.

The data in Table 7 below provides information to aid local officials with jurisdiction over properties in proximity to the project. Undeveloped lands without permitted/anticipated future development, as well as representative locations of vacant parcels throughout the corridor, were modeled at 50-feet (from the nearest edge of pavement), 100 feet, and then 100-foot intervals. Sites were selected for this analysis at each location along the corridor where noise conditions are anticipated to change.

Five locations (Study Areas 1 through Study Area 5) were identified for this analysis. These sample areas are the same across all Build Alternatives, and include:

- Study Area 1: West side of project area, west of I-210 along the south side of I-10
- Study Area 2: West side of project area, east of I-210 and north of I-10
- Study Area 3: North of I-10, between Shattuck Street and Prater Street
- Study Area 4: East side of project area, just east of Kayouche Coulee
- Study Area 5: East side of project area, north of I-10 and east of Goodman Road

Local officials with jurisdiction over the development of parcels along the project corridor are encouraged to consider the information provided in Table 7 and Table 1 when considering future land use and development changes.

Table 7. Projected Sound Levels

Study Area	50 feet	100 feet	200 feet	300 feet	400 feet	500 feet	600 feet	700 feet	800 feet
1	79	75.9	72.2	69.3	66.9	65.1	63.5	62.2	61.1
2	77.9	75	71	68	65.9	64	62.5	61.2	60
3	74.1	72.4	70.1	68.3	66.3	65	63.7	62.9	61.4
4	78.4	75.6	71.7	69.1	66.9	65.1	63.6	62.2	60.9
5	75.2	73.5	70.9	68.8	67	65.6	64.4	63	61.9

4.0 CONSTRUCTION NOISE

For all Build Alternatives, construction of the proposed project would result in temporary noise increases within the study area. Primary noise generators would be from heavy equipment used in hauling materials and building the proposed roadway and proposed structure. Sensitive areas located close to the construction may temporarily experience increased sound levels.

The construction contractor has the responsibility for protection of the public in all aspects of construction throughout the duration of the proposed project. All construction equipment will be required to comply with Occupational Safety and Health Administration regulations as they apply to the employees' safety and in accordance with LADOTD Standard Specifications. All construction equipment used during the construction phase should be properly muffled, and all motor panels should be closed during operation.

5.0 NOISE ANALYSIS SUMMARY

A NIA was conducted comparing three Build Alternatives for the proposed replacement of the Calcasieu River Bridge in the City of Lake Charles, Calcasieu Parish, Louisiana. Based on the studies completed to date, impacted receptors have been identified under the Existing, No Build, and three Build Alternatives (3A, 3E, and 5G). These impacts are summarized in Table 5 of this report. Noise abatement measures were considered, and three (3) noise barriers were determined to be feasible and potentially reasonable.

6.0 REFERENCES

FHWA. Highway Traffic Noise: Analysis and Abatement Guidance. FHWA, Dec. 2011.

LADOTD. Highway Traffic Noise Policy, July 2011 (Revised October 2021).

LADOTD. "Noise Barrier Construction Cost (2021)." LADOTD, 2021.

US DOT. "Procedure for Abatement of Highway Traffic and Construction Noise." Code of Federal Regulations (CFR) Title 23, Part 772, 2010.

I-10 LAKE CHARLES
CALCASIEU RIVER BRIDGE

ATTACHMENT 1

Noise Sensitive Receiver Table

Receiver	Existing Year (dBA)	No Build (dBA)	Alt3a (dBA)	Alt3e (dBA)	Alt5g (dBA)	Receivers	Receptors	Land Use	NAC Category	NAC	Existing Impact Receivers	Existing Impact Receptors	No Build Impact Receivers	No Build Impact Receptors	Alt 3a Impact Receivers	Alt3a Impact Receptors	Alt3a Impact	Alt 3e Impact Receivers	Alt3e Impact Receptors	Alt3e Impact	Alt 5g RR1 Impact Receivers	Alt 5g RR1 Impact Receptors	Alt 5g RR2 Impact Receivers	Alt 5g RR2 Impact Receptors	Alt 5g RR3 Impact Receivers	Alt 5g RR3 Impact Receptors	Alt5g Impact
A1	68.1	68.6	71	71	71	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A2	68.4	68.9	71.8	71.8	71.8	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A3	69.1	69.6	72	72	72	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A4	69.5	70	72.4	72.4	72.4	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A5	70.7	71.1	73.1	73.1	73.1	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A6	71.2	71.6	73.7	73.7	73.7	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A7	73.4	73.8	75.9	75.9	75.9	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A8	72.3	72.7	75.1	75.1	75.1	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A9	70	70.4	72.4	72.4	72.4	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A10	58.1	58.8	61.1	61.1	61.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A11	58.8	59.5	61.7	61.7	61.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A12	57.8	58.5	60.6	60.6	60.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A13	59.5	60.2	62	62	62	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A14	59	59.7	61.8	61.8	61.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A15	59.7	60.4	62.7	62.7	62.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A16	60.6	61.2	63.5	63.5	63.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A17	62.2	62.8	65.1	65.1	65.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A18	64.1	64.7	66.8	66.8	66.8	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A19	72.3	72.7	75.3	75.3	75.3	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A20	70.3	70.7	73.1	73.1	73.1	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A21	68.8	69.3	72.3	72.3	72.3	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A22	68	68.5	71.2	71.2	71.2	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A23	67.7	68.2	70.6	70.6	70.6	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A24	65.6	66.1	68.7	68.7	68.7	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A25	63.7	64.2	66.6	66.6	66.6	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A26	60.9	61.5	64.2	64.2	64.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A27	57.6	58.3	61	61	61	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A28	55.2	55.9	58.5	58.5	58.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A29	53.8	54.6	56.7	56.7	56.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A30	70.7	71.3	73.7	73.7	73.7	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A31	69.8	70.3	72.9	72.9	72.9	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A32	65	65.6	68.1	68.1	68.1	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A33	64.9	65.5	68	68	68	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A34	63.9	64.5	67.3	67.3	67.3	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A35	61	61.6	64.3	64.3	64.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A36	59.6	60.2	62.7	62.7	62.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A37	56	56.7	59.1	59.1	59.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A38	57.1	57.8	60	60	60	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A39	69.5	70.1	72.6	72.6	72.6	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A40	67.4	68	70.6	70.6	70.6	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A41	64.5	65.1	67.6	67.6	67.6	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A42	62.3	63	65.6	65.6	65.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A43	55.4	56.3	58.6	58.6	58.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A44	57.8	58.5	61.3	61.3	61.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A45	56.2	56.9	59.3	59.3	59.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A46	60.2	60.8	63.6	63.6	63.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A47	62.1	62.8	65.6	65.6	65.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A48	58	58.8	61.3	61.3	61.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A49	62.4	63	65.5	65.5	65.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A50	58.8	59.4	62	62	62	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A51	60.1	60.7	63.1	63.1	63.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A52	58.6	59.2	62	62	62	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A53	58.9	59.6	62.2	62.2	62.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A54	64.2	64.8	67.1	67.1	67.1	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A55	58.7	59.9	62.1	62.1	62.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A56	59.1	60.2	62.7	62.7	62.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A57	58.9	60.2	62.3	62.3	62.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A58	58.3	59.6	62	62	62	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No

Receiver	Existing Year (dBA)	No Build (dBA)	Alt3a (dBA)	Alt3e (dBA)	Alt5g (dBA)	Receivers	Receptors	Land Use	NAC Category	NAC	Existing Impact Receivers	Existing Impact Receptors	No Build Impact Receivers	No Build Impact Receptors	Alt 3a Impact Receivers	Alt3a Impact Receptors	Alt3a Impact	Alt 3e Impact Receivers	Alt3e Impact Receptors	Alt3e Impact	Alt 5g RR1 Impact Receivers	Alt 5g RR1 Impact Receptors	Alt 5g RR2 Impact Receivers	Alt 5g RR2 Impact Receptors	Alt 5g RR3 Impact Receivers	Alt 5g RR3 Impact Receptors	Alt5g Impact
A59	57.1	58.5	60.7	60.7	60.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A60	56.8	58.1	60.4	60.4	60.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A61	52.9	54	55.8	55.8	55.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A62	48.8	49.7	51.7	51.7	51.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A63	54.4	55.5	57.5	57.5	57.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A64	55.8	56.8	58.8	58.8	58.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A65	57.4	58.2	60.4	60.4	60.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A66	52.2	53.6	55.7	55.7	55.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A67	61.1	61.8	64	64	64	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A68	51.9	53	54.9	54.9	54.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A69	52.4	53.5	55.2	55.2	55.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A70	45.1	46.3	48	48	48	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A71	53.8	55.1	56.7	56.7	56.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A72	55.4	56.7	58.6	58.6	58.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A73	57.2	58.6	60.7	60.7	60.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A74	57.7	59.1	61.3	61.3	61.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A75	58.1	59.6	61.7	61.7	61.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A76	57.6	58.9	61.3	61.3	61.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A77	59.5	60.9	62.8	62.8	62.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A78	59.9	61.4	63.5	63.5	63.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A79	60.4	61.9	63.8	63.8	63.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A80	60.7	62.3	64.1	64.1	64.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A81	61.6	63.1	64.9	64.9	64.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A82	59.8	61.5	63.2	63.2	63.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A83	63.7	64.9	66.6	66.6	66.6	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
A84	60.9	62	63.7	63.7	63.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A85	56	57.5	58.9	58.9	58.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A86	55.1	56.8	58.6	58.6	58.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A87	55.7	57.2	58.8	58.8	58.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A88	54.2	55.6	57.4	57.4	57.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A89	54.3	55.6	57.7	57.7	57.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A90	51.5	52.8	54.6	54.6	54.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A91	51.8	53	54.7	54.7	54.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A92	50.7	52	53.6	53.6	53.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A93	50.6	52	53.8	53.8	53.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A94	50	51.3	52.8	52.8	52.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A95	59.4	60.6	62.3	62.3	62.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A96	56.2	57.6	59.5	59.5	59.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A97	55.2	56.7	58.7	58.7	58.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A98	53	54.7	56.7	56.7	56.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A99	52.7	54.1	55.9	55.9	55.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A100	51.4	52.7	54.7	54.7	54.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A101	51.1	52.4	53.9	53.9	53.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A102	50.8	52.1	53.8	53.8	53.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A103	50.2	51.5	53.1	53.1	53.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A104	49.9	51.1	52.7	52.7	52.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A105	49.7	50.9	52.7	52.7	52.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
A106	51.6	52.8	54.8	54.8	54.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
B1	60	59.9	61.6	61.6	61.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
B2	62.8	63.2	64.5	64.5	64.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
B3	63.9	64.3	65.9	65.9	65.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
B4	60.3	60.7	62.6	62.6	62.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C1	65.4	66.2	68.2	68.1	68.3	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	DISP	DISP	1	1	1	1	Yes
C2	63.8	64.6	66.8	66.7	66.9	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	DISP	DISP	1	1	1	1	Yes
C3	60.4	61.2	62.9	62.9	61.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	DISP	DISP	0	0	0	0	Yes
C4	60.8	61.6	62.4	62.6	61.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	DISP	DISP	0	0	0	0	Yes
C5	59.4	60.3	62.3	62.2	61.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C6	59.2	60	61.7	61.6	60.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	DISP	DISP	0	0	0	0	No

Receiver	Existing Year (dBA)	No Build (dBA)	Alt3a (dBA)	Alt3e (dBA)	Alt5g (dBA)	Receivers	Receptors	Land Use	NAC Category	NAC	Existing Impact Receivers	Existing Impact Receptors	No Build Impact Receivers	No Build Impact Receptors	Alt 3a Impact Receivers	Alt3a Impact Receptors	Alt3a Impact	Alt 3e Impact Receivers	Alt3e Impact Receptors	Alt3e Impact	Alt 5g RR1 Impact Receivers	Alt 5g RR1 Impact Receptors	Alt 5g RR2 Impact Receivers	Alt 5g RR2 Impact Receptors	Alt 5g RR3 Impact Receivers	Alt 5g RR3 Impact Receptors	Alt5g Impact
C7	59.8	60.6	62.1	62.1	60.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C8	60.6	61.5	63.5	63.5	62.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C9	61.2	62	64.3	64.2	63.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C10	58.7	59.6	61	60.9	60.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C11	64.6	65.5	68	68	67.4	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	DISP	DISP	1	1	1	1	Yes
C12	60.6	61.4	62.3	62.4	62.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C13	61.4	62.2	63.7	63.7	63.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C14	61.6	62.4	63.7	63.7	63.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C15	61.9	62.7	63.9	63.9	63.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C16	63.5	64.2	65.6	65.6	64.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C17	59.5	60.4	62.2	61.8	61.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C18	63.3	64.1	65.8	65.8	65.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C19	64.8	65.6	67.7	67.7	67.5	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
C20	59.9	60.7	63	63	61.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C21	59.7	60.6	62.3	62.3	61.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C22	61.1	61.9	63.3	63.2	62.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C23	60.7	61.5	63.2	63.1	62.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C24	59.8	60.6	62	62	61.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C25	54.6	55.3	56.6	56.6	56.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C26	59.5	60.4	62.2	62.1	62.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
C27	63.3	64.1	66	65.6	66.5	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	0	0	No	1	1	1	1	1	1	Yes
C28	63.8	64.7	66.8	66.4	67.7	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
C29	63.8	64.7	67.3	67.4	67.7	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
C30	67.1	67.9	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
C31	68.9	69.7	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
C32	63	63.8	66	66	66.3	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
C33	59	59.9	61.4	61.3	60.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D1	55	56.7	58.3	57.6	59.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D2	56.1	57.3	58.8	58.5	60.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D3	55.4	56.7	58.1	57.9	59.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D4	56.6	57.8	59.2	59.1	60.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D5	56.7	57.8	59.2	59.1	59.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D6	52.1	53.1	54.6	54.5	54.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D7								Westlake Police Department	F				0		0	0		0	0		0	0	0	0	0	0	
D8	52.6	53.5	55.4	55.1	54.9	1	1	Westlake United Church	C	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D9	54.5	55.4	57.8	58	56.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D10	51.3	52.6	56	55.4	54.4	1	1	Church	C	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D11	55.1	56.1	59.2	59.2	54.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D12	53.7	54.5	55.5	55.7	54.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D13	52.9	53.7	54.8	55.5	55.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D14	43.8	44.6	45.4	46	45.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D15	42.2	43.1	45.6	46	43.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D16	52.6	53.4	55.4	55.3	53.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D17	50.6	51.5	52.5	52.2	50.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D18	54	55.1	60.4	60.5	54.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D19	53.1	54.1	58.5	59.1	54.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D20	45.7	46.5	47.7	48.3	47.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D21	55.8	56.7	57.5	57.5	56.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D22	53.9	54.9	59.2	59.2	54.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D23	54.5	55.3	58.8	58.8	54.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D24	52.9	53.7	59.4	59.6	54.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D25	52.2	53	56.1	56.3	54.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D26	54.5	55.4	55.8	55.7	55.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D27	54.2	55.1	57.3	58.2	57.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D28	55.2	56	57.7	58.9	58.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D29	54.2	55.1	57	56.6	54.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D30	57.1	57.9	58.5	57.8	58.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D31	57.6	58.5	60.1	60.6	61.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No

Receiver	Existing Year (dBA)	No Build (dBA)	Alt3a (dBA)	Alt3e (dBA)	Alt5g (dBA)	Receivers	Receptors	Land Use	NAC Category	NAC	Existing Impact Receivers	Existing Impact Receptors	No Build Impact Receivers	No Build Impact Receptors	Alt 3a Impact Receivers	Alt3a Impact Receptors	Alt3a Impact	Alt 3e Impact Receivers	Alt3e Impact Receptors	Alt3e Impact	Alt 5g RR1 Impact Receivers	Alt 5g RR1 Impact Receptors	Alt 5g RR2 Impact Receivers	Alt 5g RR2 Impact Receptors	Alt 5g RR3 Impact Receivers	Alt 5g RR3 Impact Receptors	Alt5g Impact
D32	55.8	56.7	60.9	61.9	60.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D33	57.3	58.1	60.9	61.6	61.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D34	57.3	58.1	61.1	61.9	61.9	1	3	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D35	55.3	56.1	62.4	63.5	60.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
D36	54.7	55.6	DISP	DISP	60.2	1	1	Single-Family Residential	B	67	0	0	0	0	DISP	DISP	DISP	DISP	DISP	DISP	0	0	0	0	0	0	No
D37	54.9	55.8	63.8	64.3	59.8	1	3	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E1	51.3	52.2	54.3	54.8	53.2	1	3	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E2	53.9	54.8	58.4	58.9	57.2	1	3	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E3	54.9	56.1	60.8	60.8	55.9	1	1	School	C	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E4	53.1	54.1	56.8	56.9	54.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E5	49.8	50.8	54	54.4	51.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E6	45.9	47.1	51.4	51.5	47.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E7	49.3	50.4	54.6	54.4	50.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E8	49.4	50.4	53.6	53.3	50.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E9	47.8	49	53.2	53.2	48.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E10	48.1	49.4	54.9	54.7	49.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E11	50.6	52.1	57.9	57.7	48.9	1	4	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E12	47.5	48.5	50.5	50.4	48.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E13	45.5	46.5	49.3	49.2	46.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E14	49.3	50.2	52.3	52	49.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E15	52.1	53	53.9	54.1	52.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E16	52.8	53.8	56.7	56.5	53.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E17	52.9	53.9	56.8	56.9	53.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E18	53.2	54.3	57.4	57.5	54	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E19	53.7	54.9	58.8	58.7	54.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E20	52.3	53.3	55.1	55.1	53	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E21	52.7	53.8	56.1	55.9	53.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E22	50	51.1	52.2	52.5	51.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E23	44.6	45.8	46.5	45.9	46.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E24	49	50.1	53.1	52.8	49.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E25	52.6	53.8	56.7	56.7	53.6	1	1	St. Matthew Baptist Church	C	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E26	64.7	65.5	64.8	64.9	64.8	1	1	Restaurant	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E27	60.5	61.9	60.7	60.5	62	1	1	Outpatient Medical	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E28	53.3	54.7	55.2	55	54.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E29	53.5	54.9	55.3	55.2	54.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E30	53.8	55.2	55.7	55.5	55	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E31	58.1	59.6	59.2	59.3	59.6	1	1	Good Hope Baptist Church	C	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E32	61.6	62.1	61.5	61.6	61.4	1	1	Church	C	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E33	49.3	50.1	49.5	49.9	49.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E34	57.6	59	58.7	58.6	59.2	1	1	Restaurant	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E35	52	53.3	53.2	53.1	52.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E36	49.6	50.7	52	51	51	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E37	53.3	54.6	54.4	54.4	54.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E38	50.2	50.8	51.4	51	51.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E39	54.3	54.5	54.9	54.3	54.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E40	53.5	53.8	54.4	53.8	53.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E41	58.6	60	59.1	59	60.5	1	1	Clinic	C	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E42	49.7	51.1	51.4	51.4	51.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E43	46.3	47.6	48.1	47.8	47.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E44	42	43.2	43.2	43.3	42.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
E45	47.1	48.1	48.4	49.2	48.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
F1	69.8	70.6	67.7	67.7	68.2	1	1	Boat Launch	C	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
F2	70.3	71.2	68.8	68.4	68.2	1	1	Picnic Area	C	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
F3	67.4	68.1	67	65.6	64.9	1	1	Beach	C	67	1	1	1	1	1	1	Yes	0	0	No	0	0	0	0	0	0	No
F4	67.2	67.7	66.1	65.4	64.7	1	1	Beach	C	67	1	1	1	1	1	1	Yes	0	0	No	0	0	0	0	0	0	No
F5	68.9	69.4	66.3	66.5	64.8	1	1	Beach	C	67	1	1	1	1	1	1	Yes	1	1	Yes	0	0	0	0	0	0	No
F6	68.5	69	64.4	65.6	64.9	1	1	Beach	C	67	1	1	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
F7	65.5	66	62.2	62.5	62.3	1	1	Department of Wildlife	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No

Receiver	Existing Year (dBA)	No Build (dBA)	Alt3a (dBA)	Alt3e (dBA)	Alt5g (dBA)	Receivers	Receptors	Land Use	NAC Category	NAC	Existing Impact Receivers	Existing Impact Receptors	No Build Impact Receivers	No Build Impact Receptors	Alt 3a Impact Receivers	Alt3a Impact Receptors	Alt3a Impact	Alt 3e Impact Receivers	Alt3e Impact Receptors	Alt3e Impact	Alt 5g RR1 Impact Receivers	Alt 5g RR1 Impact Receptors	Alt 5g RR2 Impact Receivers	Alt 5g RR2 Impact Receptors	Alt 5g RR3 Impact Receivers	Alt 5g RR3 Impact Receptors	Alt5g Impact
F8	69.7	70.1	66.5	66.4	65.8	1	1	Cypress Pond	C	67	1	1	1	1	1	1	Yes	1	1	Yes	0	0	0	0	0	0	No
F9	67.2	67.6	67.5	67	67.1	1	1	Bilbo Cemetery	C	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G1	65.2	65.7	66.3	66.3	66.3	1	1	Community Center	C	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G2	64.6	65.2	67.3	67.3	67.3	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G3	63.9	64.4	65.6	65.6	65.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G4	64.7	65.3	69.3	69.3	69.3	1	1	Engineers Local	C	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G5	63.7	64.2	65.9	65.9	65.9	1	1	Office	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G6	66.2	66.9	68.8	68.8	68.8	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G7	72.3	73.4	74.9	74.9	74.9	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G8	67.7	68.4	68.6	68.6	68.6	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G9	66.2	66.9	68.8	68.8	68.8	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G10	63.8	64.4	66.3	66.3	66.3	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G11	62.7	63.3	65.6	65.6	65.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G12	67.9	68.5	67.6	67.6	67.6	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G13	61.6	62.2	63.6	63.6	63.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G14	58.7	59.4	62.6	62.6	62.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G15	61.1	61.7	63.9	63.9	63.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G16	62.6	63.2	65.4	65.4	65.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G17	74	75.1	75.3	75.3	75.3	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G18	64.6	65.3	65.7	65.7	65.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G19	62.7	63.6	66.6	66.6	66.6	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G20	61.1	62.3	65.7	65.7	65.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G21	57.4	58.4	62.8	62.8	62.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G22	58.7	59.3	63.7	63.7	63.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G23	61.3	62	66.1	66.1	66.1	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G24	61.2	62.1	65.8	65.8	65.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G25	61.4	62.8	65.6	65.6	65.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G26	65.3	66.3	67.3	67.3	67.3	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G27	69.5	70.2	70.3	70.3	70.3	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G28	73.6	74.6	74.2	74.2	74.2	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G29	74	75	74.6	74.6	74.6	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G30	74.2	75.3	75.1	75.1	75.1	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G31	71.6	73.2	72.1	72.1	72.1	1	1	First Baptist Church of Lake Char	C	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G32	65.6	67.4	67.1	67.1	67.1	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G33	65.5	67.2	66.8	66.8	66.8	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G34	64.5	66.2	65.9	65.9	65.9	1	1	Single-Family Residential	B	67	0	0	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
G35	59.6	61.2	61.7	61.7	61.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G36	58.7	60.2	61.2	61.2	61.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G37	60.2	61.7	62.7	62.7	62.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G38	61.4	62.9	63.5	63.5	63.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G39	57.1	58.2	60.4	60.4	60.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G40	58.9	60.4	61.5	61.5	61.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G41	57	58.2	60.5	60.5	60.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G42	57	57.9	60.5	60.5	60.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G43	57.9	58.6	62.2	62.2	62.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G44	57.4	57.9	59.5	59.5	59.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G45	69.5	71.5	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
G46	68	69.9	71.2	71.2	71.2	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G47	64.5	66.3	67.6	67.6	67.6	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G48	63.8	65.6	66.5	66.5	66.5	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G49	63.1	64.8	65.1	65.1	65.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G50	63.1	64.9	65.7	65.7	65.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G51	63.3	65.1	66.1	66.1	66.1	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G52	62.8	64.5	65.7	65.7	65.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G53	61.9	63.6	64.9	64.9	64.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G54	62.4	64.2	65.9	65.9	65.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G55	63.1	64.7	67.5	67.5	67.5	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G56	63	64.9	70	70	70	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes

Receiver	Existing Year (dBA)	No Build (dBA)	Alt3a (dBA)	Alt3e (dBA)	Alt5g (dBA)	Receivers	Receptors	Land Use	NAC Category	NAC	Existing Impact Receivers	Existing Impact Receptors	No Build Impact Receivers	No Build Impact Receptors	Alt 3a Impact Receivers	Alt3a Impact Receptors	Alt3a Impact	Alt 3e Impact Receivers	Alt3e Impact Receptors	Alt3e Impact	Alt 5g RR1 Impact Receivers	Alt 5g RR1 Impact Receptors	Alt 5g RR2 Impact Receivers	Alt 5g RR2 Impact Receptors	Alt 5g RR3 Impact Receivers	Alt 5g RR3 Impact Receptors	Alt5g Impact
G57	69.7	71.7	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
G58	59.6	61.2	61.1	61.1	61.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G59	55.6	57.3	56.8	56.8	56.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G60	57	58.7	58.6	58.6	58.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G61	69.6	71.7	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
G62	65.5	67.4	69.5	69.5	69.5	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G63	60.9	62.5	64	64	64	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G64	62	63.7	64.2	64.2	64.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G65	61.1	62.8	63.2	63.2	63.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G66	62.6	64.4	64.3	64.3	64.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G67	63.9	65.7	65.7	65.7	65.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G68	63.3	65.1	65.1	65.1	65.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G69	62	63.7	64.4	64.4	64.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G70	64.5	66.4	66.8	66.8	66.8	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G71	67	68.8	69.1	69.1	69.1	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G72	71.4	73.1	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
G73	72	73.7	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
G74	74.1	75.8	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
G75	74	75.7	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
G76	73.8	75.5	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
G77	68.5	70.3	70.5	70.5	70.5	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G78	65.1	66.7	67.2	67.2	67.2	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G79	62.1	63.7	64.1	64.1	64.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G80	63.8	65.4	67.9	67.9	67.9	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G81	58.9	60.4	61.7	61.7	61.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G82	52.7	53.8	53.1	53.1	53.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G83	60.6	62.1	64.4	64.4	64.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G84	59.7	61	63.1	63.1	63.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G85	58.8	60.3	62.6	62.6	62.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G86	50.1	50.7	50.9	50.9	50.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G87	58.7	60.3	60.9	60.9	60.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G88	62.8	64.5	66.4	66.4	66.4	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G89	58	59.7	59.4	59.4	59.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G90	58.2	59.8	59.5	59.5	59.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G91	58.3	60	60.4	60.4	60.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G92	57.3	59.1	58.9	58.9	58.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G93	58.4	60	60.7	60.7	60.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G94	57.7	59.3	60.8	60.8	60.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G95	57.8	59.2	60.7	60.7	60.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G96	58.2	59.6	60.1	60.1	60.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G97	58.7	60.1	60.8	60.8	60.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G98	66	67.6	69.7	69.7	69.7	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G99	61	62.5	64.6	64.6	64.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G100	61.3	62.8	64.7	64.7	64.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G101	60.6	62.1	63.8	63.8	63.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G102	54.8	55.4	54.4	54.4	54.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G103	50.4	51.2	50.1	50.1	50.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G104	48.3	49.2	49.1	49.1	49.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G105	47.2	48.2	48.6	48.6	48.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G106	47.5	48.7	49.6	49.6	49.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G107	50.5	51.7	52.3	52.3	52.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G108	59.2	60	59.3	59.3	59.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G109	58.3	59.1	58.3	58.3	58.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G110	57.4	58.1	57.3	57.3	57.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G111	57	57.7	57.4	57.4	57.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G112	56.9	57.7	58	58	58	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G113	57.6	58.7	58.5	58.5	58.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G114	58	59.2	59.3	59.3	59.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No

Receiver	Existing Year (dBA)	No Build (dBA)	Alt3a (dBA)	Alt3e (dBA)	Alt5g (dBA)	Receivers	Receptors	Land Use	NAC Category	NAC	Existing Impact Receivers	Existing Impact Receptors	No Build Impact Receivers	No Build Impact Receptors	Alt 3a Impact Receivers	Alt3a Impact Receptors	Alt3a Impact	Alt 3e Impact Receivers	Alt3e Impact Receptors	Alt3e Impact	Alt 5g RR1 Impact Receivers	Alt 5g RR1 Impact Receptors	Alt 5g RR2 Impact Receivers	Alt 5g RR2 Impact Receptors	Alt 5g RR3 Impact Receivers	Alt 5g RR3 Impact Receptors	Alt5g Impact
G115	58.6	59.9	59.6	59.6	59.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G116	58.5	59.8	60	60	60	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G117	67	68.4	68.5	68.5	68.5	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
G118	64.9	65.9	65.8	65.8	65.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G119	60.3	61.5	60.8	60.8	60.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G120	58.7	59.8	59.5	59.5	59.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G121	58.3	59.2	58.9	58.9	58.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G122	56	56.1	55.7	55.7	55.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G123	64.2	64.6	65.6	65.6	65.6	1	1	Restaurant	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G124	55.6	56.4	59	59	59	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G125	54.7	55.4	58.2	58.2	58.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G126	56.1	56.8	59.1	59.1	59.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G127	55.4	56.1	59	59	59	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G128	54.9	55.6	58.1	58.1	58.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G129	56	57.4	58.7	58.7	58.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G130	54.9	56.1	58.4	58.4	58.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G131	54.4	55.7	56.5	56.5	56.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G133	54.2	55.5	57.7	57.7	57.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G134	56.2	57.5	57.8	57.8	57.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G135	57.8	59.4	59.8	59.8	59.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G136	57.3	58.9	59.8	59.8	59.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G137	57.4	59.1	60.5	60.5	60.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G138	57.2	58.9	59.1	59.1	59.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G139	56.4	58	59	59	59	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G140	56.2	57.7	58.6	58.6	58.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G141	56.1	57.6	58.8	58.8	58.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G142	56.1	57.3	57.9	57.9	57.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G143	54	55.4	55.8	55.8	55.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G144	55.8	57.1	57.8	57.8	57.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G145	55.7	56.8	58.6	58.6	58.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G146	55.9	56.9	57.3	57.3	57.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G147	55.9	56.7	56.6	56.6	56.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G148	57.8	58.5	58.6	58.6	58.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G149	59	59.6	59.8	59.8	59.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
G150	58.9	59.6	60.4	60.4	60.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H1	63.3	63.9	65.3	65.3	65.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H2	66.4	67.2	69.9	69.9	69.9	1	1	Longshore men's Local	C	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
H3	56.9	57.5	59.5	59.5	59.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H4	59.7	60.5	62	62	62	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H5	58.7	59.5	61.4	61.4	61.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H6	58.6	59.5	61.4	61.4	61.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H7	58.5	59.4	61.3	61.3	61.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H8	58.6	59.5	61.3	61.3	61.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H9	58.5	59.5	61.2	61.2	61.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H10	71.6	72.6	73.1	73.1	73.1	1	1	Cemetery	C	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
H11	65	65.9	67.2	67.2	67.2	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
H12	55.4	56.2	57.9	57.9	57.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H13	67.4	69.2	69	69	69	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
H14	67.3	69.7	68.9	68.9	68.9	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
H15	67.7	70.5	69.1	69.1	69.1	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
H16	68.6	71	70.8	70.8	70.8	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
H17	72.1	74	72.7	72.7	72.7	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
H18	60.2	61.8	62.8	62.8	62.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H19	60	61.7	62.2	62.2	62.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H20	59	60.7	61	61	61	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H21	61.9	63.6	64	64	64	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H22	63	64.8	64.9	64.9	64.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H23	65.1	67	66.2	66.2	66.2	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes

Receiver	Existing Year (dBA)	No Build (dBA)	Alt3a (dBA)	Alt3e (dBA)	Alt5g (dBA)	Receivers	Receptors	Land Use	NAC Category	NAC	Existing Impact Receivers	Existing Impact Receptors	No Build Impact Receivers	No Build Impact Receptors	Alt 3a Impact Receivers	Alt3a Impact Receptors	Alt3a Impact	Alt 3e Impact Receivers	Alt3e Impact Receptors	Alt3e Impact	Alt 5g RR1 Impact Receivers	Alt 5g RR1 Impact Receptors	Alt 5g RR2 Impact Receivers	Alt 5g RR2 Impact Receptors	Alt 5g RR3 Impact Receivers	Alt 5g RR3 Impact Receptors	Alt5g Impact
H24	67.3	69.2	69.2	69.2	69.2	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
H25	56.2	57.4	60.2	60.2	60.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H26	62.6	64.1	65	65	65	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H27	66.1	67.7	68.2	68.2	68.2	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
H28	65.3	67	69.5	69.5	69.5	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
H29	64.4	66	69.6	69.6	69.6	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
H30	65.3	66.8	69.6	69.6	69.6	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
H31	61.9	63.6	65.7	65.7	65.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H32	62	63.2	63.9	63.9	63.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H33	65.5	66.9	68.2	68.2	68.2	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
H34	64.9	66.1	68.4	68.4	68.4	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
H35	71.3	73.4	72	72	72	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
H36	69.8	72.3	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
H37	69.4	71.7	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
H38	64.8	65.7	68.6	68.6	68.6	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
H39	62.7	63.5	65.9	65.9	65.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H40	61.9	62.8	64.8	64.8	64.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
H41	62.2	63.4	66.6	66.6	66.6	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I1	75	75.3	DISP	DISP	DISP	1	1	Restaurant	E	72	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
I2	68.2	68.9	66.4	66.4	66.4	1	1	Church	C	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I3	56.2	57.5	55.2	55.2	55.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I4	53.3	54.6	52.3	52.3	52.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I5	52	53.3	50.8	50.8	50.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I6	56.7	59.1	55.4	55.4	55.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I7	67.4	68.5	64.9	64.9	64.9	1	1	Single-Family Residential	B	67	1	1	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
I8	57.2	57.8	DISP	DISP	DISP	1	1	Church	C	67	0	0	0	0	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
I9	67.8	68.7	65.4	65.4	65.4	1	1	Single-Family Residential	B	67	1	1	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
I10	67.3	67.7	66	66	66	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I11	67.4	67.8	65.3	65.3	65.3	1	1	Single-Family Residential	B	67	1	1	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
I12	66.7	67	64	64	64	1	1	Single-Family Residential	B	67	1	1	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
I13	64.6	66	62.4	62.4	62.4	1	1	Single-Family Residential	B	67	0	0	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
I14	61.8	64.5	62.4	62.4	62.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I15	62.8	65.3	63.6	63.6	63.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I16	64.7	66.1	62.4	62.4	62.4	1	1	Single-Family Residential	B	67	0	0	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
I17	64.5	65.7	62	62	62	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I18	63.8	65.4	61.6	61.6	61.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I19	61.6	62.4	59.1	59.1	59.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I20	68.5	71.6	69.7	69.7	69.7	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I21	65.1	67.6	64	64	64	1	1	Mason Lodge	C	67	0	0	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
I22	69.3	72.1	70.3	70.3	70.3	1	1	Cemetery	C	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I23	66.3	68.9	65.6	65.6	65.6	1	1	Single-Family Residential	B	67	1	1	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
I24	62.4	64.9	62.5	62.5	62.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I25	58.6	59.6	56	56	56	1	1	New Life Baptist Church	C	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I26	63.7	66.5	63.4	63.4	63.4	1	1	Single-Family Residential	B	67	0	0	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
I27	62.3	64.9	61.2	61.2	61.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I28	62.7	65.2	61	61	61	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I29	63.8	66	63.2	63.2	63.2	1	1	Single-Family Residential	B	67	0	0	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
I30	62.8	65.4	61.4	61.4	61.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I31	56.3	57.7	57.7	57.7	57.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I32	52.2	53.7	51.6	51.6	51.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I33	58.8	60.9	59.1	59.1	59.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I34	58.6	59.7	58.7	58.7	58.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I35	58.6	60.4	57.2	57.2	57.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I36	57.3	58.5	59	59	59	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I37	57.7	59	59	59	59	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I38	56.9	58.3	57	57	57	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I39	62	64.2	62.2	62.2	62.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I40	60.8	62.8	61.7	61.7	61.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No

Receiver	Existing Year (dBA)	No Build (dBA)	Alt3a (dBA)	Alt3e (dBA)	Alt5g (dBA)	Receivers	Receptors	Land Use	NAC Category	NAC	Existing Impact Receivers	Existing Impact Receptors	No Build Impact Receivers	No Build Impact Receptors	Alt 3a Impact Receivers	Alt3a Impact Receptors	Alt3a Impact	Alt 3e Impact Receivers	Alt3e Impact Receptors	Alt3e Impact	Alt 5g RR1 Impact Receivers	Alt 5g RR1 Impact Receptors	Alt 5g RR2 Impact Receivers	Alt 5g RR2 Impact Receptors	Alt 5g RR3 Impact Receivers	Alt 5g RR3 Impact Receptors	Alt5g Impact
I41	60.7	62.2	62.1	62.1	62.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I42	62	63.2	63.4	63.4	63.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I43	51.6	52.8	51.4	51.4	51.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I44	55.7	57.4	55.3	55.3	55.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I45	56.5	58.1	56.2	56.2	56.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I46	56.8	58.4	57	57	57	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I47	63.2	64.3	62.6	62.6	62.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I48	62.8	64.1	62.1	62.1	62.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I49	62.2	63.6	63.5	63.5	63.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I50	67.8	69.6	69.4	69.4	69.4	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I51	68	69.1	69.6	69.6	69.6	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I52	68.2	69.2	70	70	70	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I53	67.4	68.5	69.2	69.2	69.2	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I54	60.3	62.2	62.9	62.9	62.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I55	66.9	67.8	69.3	69.3	69.3	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I56	67.2	68.3	69.3	69.3	69.3	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I57	66.6	67.8	68.7	68.7	68.7	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I58	64.3	65.6	66.8	66.8	66.8	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I59	65.9	66.7	68.9	68.9	68.9	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I60	57.6	58.8	59.2	59.2	59.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I61	71	72.1	73.5	73.5	73.5	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I62	71	72.1	73.5	73.5	73.5	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I63	63.6	64.7	67.4	67.4	67.4	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I64	64.1	65	67.2	67.2	67.2	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I65	56.7	57.7	58.9	58.9	58.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I66	57.9	59	61.2	61.2	61.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I67	73.3	74.1	75.4	75.4	75.4	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I68	60.9	61.9	64	64	64	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I69	61	62	63.7	63.7	63.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I70	61.5	62.4	63.7	63.7	63.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I71	62.2	63.1	63.8	63.8	63.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I72	63.3	64.2	64.7	64.7	64.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I73	56.7	57.8	57.5	57.5	57.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I74	56.6	57.6	57.8	57.8	57.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I75	57.2	58.2	58.4	58.4	58.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I76	55.7	56.7	57.8	57.8	57.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I77	51.7	52.7	56.2	56.2	56.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I78	55.9	56.8	58	58	58	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I79	64.4	65.3	65.5	65.5	65.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I80	65.3	66.2	66.1	66.1	66.1	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I81	65.4	66.2	66.1	66.1	66.1	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I82	65.4	66.3	66.3	66.3	66.3	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I83	55.4	56.3	58.6	58.6	58.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I84	55.3	56.3	59	59	59	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I85	60.3	61.2	61	61	61	1	2	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I85.2	64.3	65.3	66.1	66.1	66.1	1	2	Apartments	B	67	0	0	0	0	1	2	Yes	1	2	Yes	1	2	1	2	1	2	Yes
I87	62.3	63.2	64.5	64.5	64.5	1	4	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I87.2	65.1	66.1	68.3	68.3	68.3	1	4	Apartments	B	67	0	0	1	4	1	4	Yes	1	4	Yes	1	4	1	4	1	4	Yes
I89	57.7	58.5	61.9	61.9	61.9	1	4	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I89.2	61.8	62.7	66.2	66.2	66.2	1	4	Apartments	B	67	0	0	0	0	1	4	Yes	1	4	Yes	1	4	1	4	1	4	Yes
I91	53.4	54.4	57.5	57.5	57.5	1	4	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I91.2	62.2	63.3	66.3	66.3	66.3	1	4	Apartments	B	67	0	0	0	0	1	4	Yes	1	4	Yes	1	4	1	4	1	4	Yes
I93	62.1	63.1	65.2	65.2	65.2	1	4	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I93.2	65.4	66.4	68.2	68.2	68.2	1	4	Apartments	B	67	0	0	1	4	1	4	Yes	1	4	Yes	1	4	1	4	1	4	Yes
I95	56.1	57	59.1	59.1	59.1	1	2	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I95.2	61.8	62.8	66.5	66.5	66.5	1	2	Apartments	B	67	0	0	0	0	1	2	Yes	1	2	Yes	1	2	1	2	1	2	Yes
I97	53.1	54.1	57.1	57.1	57.1	1	2	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I97.2	61.3	62.3	66.6	66.6	66.6	1	2	Apartments	B	67	0	0	0	0	1	2	Yes	1	2	Yes	1	2	1	2	1	2	Yes

Receiver	Existing Year (dBA)	No Build (dBA)	Alt3a (dBA)	Alt3e (dBA)	Alt5g (dBA)	Receivers	Receptors	Land Use	NAC Category	NAC	Existing Impact Receivers	Existing Impact Receptors	No Build Impact Receivers	No Build Impact Receptors	Alt 3a Impact Receivers	Alt3a Impact Receptors	Alt3a Impact	Alt 3e Impact Receivers	Alt3e Impact Receptors	Alt3e Impact	Alt 5g RR1 Impact Receivers	Alt 5g RR1 Impact Receptors	Alt 5g RR2 Impact Receivers	Alt 5g RR2 Impact Receptors	Alt 5g RR3 Impact Receivers	Alt 5g RR3 Impact Receptors	Alt5g Impact
I98.2	60.7	61.7	66.1	66.1	66.1	1	4	Apartments	B	67	0	0	0	0	1	4	Yes	1	4	Yes	1	4	1	4	1	4	Yes
I100	53.5	54.5	56.5	56.5	56.5	1	4	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I101	62.1	63.2	64.5	64.5	64.5	1	2	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I101.2	65.3	66.4	67.9	67.9	67.9	1	2	Apartments	B	67	0	0	1	2	1	2	Yes	1	2	Yes	1	2	1	2	1	2	Yes
I103	57.8	58.8	59	59	59	1	8	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I103.2	61.5	62.5	66.5	66.5	66.5	1	8	Apartments	B	67	0	0	0	0	1	8	Yes	1	8	Yes	1	8	1	8	1	8	Yes
I105	44.1	45.2	47	47	47	1	2	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I105.2	57.1	58.2	61.2	61.2	61.2	1	2	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I107	65.2	66	66.5	66.5	66.5	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I108	64.4	65.2	67.2	67.2	67.2	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I109	65	65.9	68.6	68.6	68.6	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I110	60	60.9	66.6	66.6	66.6	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I111	64.3	65.4	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	0	0	0	0	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
I112	68.4	69.6	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
I113	70.9	72.1	69.6	69.6	69.6	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I114	71.1	72	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
I115	68.7	69.5	71.1	71.1	71.1	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I116	69.1	69.8	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
I117	73.4	74.3	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
I118	66.7	67.4	69.3	69.3	69.3	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I119	58.3	59	64.2	64.2	64.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I120	66.7	67.4	68.6	68.6	68.6	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I121	67	67.7	69	69	69	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I122	63.5	64.3	65.2	65.2	65.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I123	69.9	70.7	70.8	70.8	70.8	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I124	63.8	64.5	66.1	66.1	66.1	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I125	62.5	63.2	64.6	64.6	64.6	1	1	Union Mission Baptist Church	C	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I126	58.5	59.2	62.4	62.4	62.4	1	6	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I127	60.3	61	64	64	64	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I128	60.9	61.7	64.2	64.2	64.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I129	58.9	59.6	62.9	62.9	62.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I130	57	57.6	61.2	61.2	61.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I131	58.5	59.3	62.3	62.3	62.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I132	61	61.7	63.9	63.9	63.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I133	54.3	54.9	59.4	59.4	59.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I134	52.6	53.2	58.7	58.7	58.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I135	55.3	56	60.6	60.6	60.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I136	56.5	57.2	60.8	60.8	60.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I137	69.3	70.2	71.1	71.1	71.1	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I138	65.6	66.4	67.4	67.4	67.4	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I139	63.2	63.9	64.9	64.9	64.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I140	62.1	62.9	65.6	65.6	65.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I141	55.8	56.4	60.9	60.9	60.9	1	2	Duplex	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I142	56.3	56.9	61.1	61.1	61.1	1	2	Duplex	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I143	69.8	70.7	72.2	72.2	72.2	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I144	55	55.4	60.7	60.7	60.7	1	1	Community Center	C	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I145	60.1	60.9	64.2	64.2	64.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I146	59.7	60.4	63.6	63.6	63.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I147	59.2	59.9	63.1	63.1	63.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I148	58.4	59.1	62.5	62.5	62.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I149	57.4	57.9	61.7	61.7	61.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I150	57	57.4	61.6	61.6	61.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I151	58	58.7	61.9	61.9	61.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I152	57.2	57.9	60.8	60.8	60.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I153	56.6	57.3	60.7	60.7	60.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I154	55.8	56.3	60.7	60.7	60.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I155	51.4	52	54.7	54.7	54.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I156	52.7	53.5	56.6	56.6	56.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No

Receiver	Existing Year (dBA)	No Build (dBA)	Alt3a (dBA)	Alt3e (dBA)	Alt5g (dBA)	Receivers	Receptors	Land Use	NAC Category	NAC	Existing Impact Receivers	Existing Impact Receptors	No Build Impact Receivers	No Build Impact Receptors	Alt 3a Impact Receivers	Alt3a Impact Receptors	Alt3a Impact	Alt 3e Impact Receivers	Alt3e Impact Receptors	Alt3e Impact	Alt 5g RR1 Impact Receivers	Alt 5g RR1 Impact Receptors	Alt 5g RR2 Impact Receivers	Alt 5g RR2 Impact Receptors	Alt 5g RR3 Impact Receivers	Alt 5g RR3 Impact Receptors	Alt5g Impact
I157	54	54.6	58.3	58.3	58.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I158	52.2	51.9	52.8	52.8	52.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I159	53.1	52.9	55.6	55.6	55.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I160	53.8	53.6	55.9	55.9	55.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I161	51.6	51.1	51.7	51.7	51.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I162	64.6	64.4	66.1	66.1	66.1	1	1	Community Center	C	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I163	52	52	55.2	55.2	55.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I164	61.8	60.4	61.4	61.4	61.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I165	57.2	57.8	59.8	59.8	59.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I166	58	58.5	60.8	60.8	60.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I167	58	58.3	60.4	60.4	60.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I168	58.7	58.8	60.6	60.6	60.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
1I69	66	64.4	66	66	66	1	1	Single-Family Residential	B	67	1	1	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I170	65.7	65.5	67.9	67.9	67.9	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I171	55.9	56.4	58.5	58.5	58.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I172	58.3	58.7	60.6	60.6	60.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I173	56.8	57.4	60.4	60.4	60.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I174	56.2	56.6	59.3	59.3	59.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I175	56	56.4	57.6	57.6	57.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I176	58.6	59.5	61.2	61.2	61.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I177	59.7	60.6	62.2	62.2	62.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I178	59.3	60	62.6	62.6	62.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I179	61.5	62.3	64.8	64.8	64.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I180	63.1	63.8	66.6	66.6	66.6	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I181	65.5	66.1	69.1	69.1	69.1	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I182	65.2	66.3	68.7	68.7	68.7	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I183	63.9	64.9	67.5	67.5	67.5	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I184	62.4	63.3	66.4	66.4	66.4	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I185	65.1	66.1	68.9	68.9	68.9	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I186	65.8	66.8	69.1	69.1	69.1	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I187	69.2	70.3	72.1	72.1	72.1	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I188	62.6	63.5	66	66	66	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I189	59.2	60.1	61.1	61.1	61.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I190	68.6	69.5	71.3	71.3	71.3	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I191	69.5	70.2	72.7	72.7	72.7	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I192	67.1	67.9	68.2	68.2	68.2	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I193	70.6	71.7	72	72	72	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
I194	60.5	61.3	63.9	63.9	63.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I195	62	63.3	60.3	60.3	60.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I196	62.6	64	60.5	60.5	60.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I197	63.2	64.5	60.8	60.8	60.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I198	61.4	63.4	58.6	58.6	58.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I199	57.8	58.6	55.4	55.4	55.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I200	58	59.2	55.7	55.7	55.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I201	61.6	63.4	60.3	60.3	60.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I202	59.5	61.3	60.1	60.1	60.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I203	59.7	61.1	60.5	60.5	60.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I204	59.5	61.1	60.3	60.3	60.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I205	59	60.8	60.7	60.7	60.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I207	58.8	60.1	60.8	60.8	60.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I208	60.2	61.3	62.1	62.1	62.1	1	2	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I209	56.6	57.6	59	59	59	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I210	54.9	56.1	58.3	58.3	58.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I211	53	53.9	56.1	56.1	56.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I212.1	50.6	51.4	56	56	56	1	2	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I212.2	56.8	57.9	63.7	63.7	63.7	1	2	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I213.1	53.5	54.5	58.2	58.2	58.2	1	2	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I213.2	60.9	61.9	65	65	65	1	2	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No

Receiver	Existing Year (dBA)	No Build (dBA)	Alt3a (dBA)	Alt3e (dBA)	Alt5g (dBA)	Receivers	Receptors	Land Use	NAC Category	NAC	Existing Impact Receivers	Existing Impact Receptors	No Build Impact Receivers	No Build Impact Receptors	Alt 3a Impact Receivers	Alt3a Impact Receptors	Alt3a Impact	Alt 3e Impact Receivers	Alt3e Impact Receptors	Alt3e Impact	Alt 5g RR1 Impact Receivers	Alt 5g RR1 Impact Receptors	Alt 5g RR2 Impact Receivers	Alt 5g RR2 Impact Receptors	Alt 5g RR3 Impact Receivers	Alt 5g RR3 Impact Receptors	Alt5g Impact
I214.1	53.8	54.8	57.4	57.4	57.4	1	2	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I214.2	59.6	60.7	63.8	63.8	63.8	1	2	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I215.1	50.8	52.1	52.5	52.5	52.5	1	2	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I215.2	57	58.2	62.2	62.2	62.2	1	2	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I216.1	52.6	53.6	57.7	57.7	57.7	1	4	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I216.2	59.1	60.2	64.8	64.8	64.8	1	4	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I217.1	51.1	52.2	52.9	52.9	52.9	1	2	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I217.2	56.8	57.9	61.5	61.5	61.5	1	2	Apartments	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I218	51.4	52.4	53.4	53.4	53.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I219	57.7	58.4	61.8	61.8	61.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I220	56.1	56.8	60.5	60.5	60.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I221	55.4	56.1	60.1	60.1	60.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I222	56.1	56.8	60.4	60.4	60.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I223	55.8	56.6	59.3	59.3	59.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I224	54.2	54.9	57.8	57.8	57.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I225	50.4	51	55	55	55	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I226	54	54.8	58	58	58	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I227	53.3	53.9	57.3	57.3	57.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I228	51.8	52.4	56.5	56.5	56.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I229	54.1	54.8	59.3	59.3	59.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I230	54.6	55.2	59	59	59	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I231	56.7	57.3	60.2	60.2	60.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I232	55.5	56.3	60.2	60.2	60.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I233	55.6	56.5	60	60	60	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I234	50.8	51.4	53.4	53.4	53.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I235	61.3	62.2	62	62	62	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I235	61.3	62.2	62	62	62	1	1	Park	C	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I236	52.2	52.8	57	57	57	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
I237	56.1	56.8	60	60	60	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J1	65.8	66.9	65.8	65.8	65.8	1	1	Single-Family Residential	B	67	0	0	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
J2	70.8	71.4	72.9	72.9	72.9	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	YES	1	1	Yes	1	1	1	1	1	1	YES
J3	60.5	61.7	64.1	64.1	64.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J4	67.7	68.8	69.9	69.9	69.9	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
J5	65.1	66.2	65.4	65.4	65.4	1	1	Single-Family Residential	B	67	0	0	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
J6	62.5	63.1	62.3	62.3	62.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J7	62.1	62.7	61.3	61.3	61.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J8	60.6	61.2	59.5	59.5	59.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J9	61.4	62	60.5	60.5	60.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J10	61.9	62.5	61.3	61.3	61.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J11	63.4	64.6	63.2	63.2	63.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J12	65.1	65.7	65.9	65.9	65.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J13	67.3	68.6	69	69	69	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
J14	66.3	67.3	68.9	68.9	68.9	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
J15	63.9	64.6	64.9	64.9	64.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J16	62.3	63.1	62.2	62.2	62.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J17	61.2	61.9	62	62	62	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J18	61.8	62.6	62.4	62.4	62.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J19	70	70.4	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
J20	66.2	68.3	69.8	69.8	69.8	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
J21	68.3	69.5	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
J22	67	68.2	DISP	DISP	DISP	1	1	Single-Family Residential	B	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
J23	65.8	67.6	68.6	68.6	68.6	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
J24	68.1	69.9	70.3	70.3	70.3	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
J25	64.5	66.5	66.1	66.1	66.1	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
J26	62.7	64.9	63.7	63.7	63.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J27	63.2	65.2	64.2	64.2	64.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J28	61	63.3	60.9	60.9	60.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J29	59.9	62.3	59.6	59.6	59.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No

Receiver	Existing Year (dBA)	No Build (dBA)	Alt3a (dBA)	Alt3e (dBA)	Alt5g (dBA)	Receivers	Receptors	Land Use	NAC Category	NAC	Existing Impact Receivers	Existing Impact Receptors	No Build Impact Receivers	No Build Impact Receptors	Alt 3a Impact Receivers	Alt3a Impact Receptors	Alt3a Impact	Alt 3e Impact Receivers	Alt3e Impact Receptors	Alt3e Impact	Alt 5g RR1 Impact Receivers	Alt 5g RR1 Impact Receptors	Alt 5g RR2 Impact Receivers	Alt 5g RR2 Impact Receptors	Alt 5g RR3 Impact Receivers	Alt 5g RR3 Impact Receptors	Alt5g Impact
J30	61.1	62.9	61.3	61.3	61.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J31	61.5	63.3	61.7	61.7	61.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J32	55.4	57	55	55	55	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J33	58.9	60.7	60.5	60.5	60.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J34	61.3	63.5	61.9	61.9	61.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J35	62.7	64.7	63.7	63.7	63.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J36	62.1	63.2	63.8	63.8	63.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J37	65.3	66.3	67	67	67	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
J38	61	62.1	62.3	62.3	62.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J39	62.3	63.4	64	64	64	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J40	53.1	54.3	53.8	53.8	53.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J41	53.2	54.7	52.6	52.6	52.6	1	5	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J42	62.2	63.2	63.9	63.9	63.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J43	63.6	64.8	65.2	65.2	65.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J44	65.2	66.2	66.6	66.6	66.6	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
J45	67.6	68.5	69.5	69.5	69.5	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
J46	63.3	64.5	64.3	64.3	64.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J47	63.5	64.8	64.5	64.5	64.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J48	63.4	64.7	64.3	64.3	64.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J49	61.3	62.9	62.7	62.7	62.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J50	74.5	75	74.5	74.5	74.5	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
J51	72.4	73	73.6	73.6	73.6	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
J52	71.3	72	73	73	73	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
J53	70.9	71.6	72.9	72.9	72.9	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
J54	46.3	47.4	47.5	47.5	47.5	1	2	Duplex	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J55	58.5	59.4	59.6	59.6	59.6	1	2	Duplex	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
J56	58.5	59.6	59	59	59	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K1	68.5	69.1	69.7	69.7	69.7	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
K2	71.4	72.4	71.5	71.5	71.5	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
K3	58.9	59.9	60.7	60.7	60.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K4	60.1	61.1	61.5	61.5	61.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K5	52.7	54	49	49	49	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K6	58.3	59.2	60.3	60.3	60.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K7	68.1	69.2	68.7	68.7	68.7	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
K8	67.4	68.5	67.8	67.8	67.8	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
K9	62.8	63.8	63.1	63.1	63.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K10	59.6	60.6	59.7	59.7	59.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K11	54.4	55	56.3	56.3	56.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K12	68.2	69.3	68.7	68.7	68.7	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
K13	68.1	69.3	68.6	68.6	68.6	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
K14	67.4	68.5	68	68	68	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
K15	66.5	67.7	67	67	67	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
K16	65.9	67	66.3	66.3	66.3	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
K17	61.4	62.5	61.7	61.7	61.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K18	61.1	62.2	61.3	61.3	61.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K19	63.3	64.3	63.5	63.5	63.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K20	59.5	60.7	59.6	59.6	59.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K21	64.2	65.1	64.1	64.1	64.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K22	62.5	63.4	63.2	63.2	63.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K23	59.4	60.2	61.1	61.1	61.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K24	57.4	58.3	58.2	58.2	58.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K25	59.8	60.8	60.3	60.3	60.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K26	59.6	60.5	60.5	60.5	60.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K27	60.4	61.2	60.4	60.4	60.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K28	54.4	55.1	56.1	56.1	56.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K29	63.3	64.2	63.2	63.2	63.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K30	64.4	65.2	64	64	64	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K31	66.8	67.8	66	66	66	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes

Receiver	Existing Year (dBA)	No Build (dBA)	Alt3a (dBA)	Alt3e (dBA)	Alt5g (dBA)	Receivers	Receptors	Land Use	NAC Category	NAC	Existing Impact Receivers	Existing Impact Receptors	No Build Impact Receivers	No Build Impact Receptors	Alt 3a Impact Receivers	Alt3a Impact Receptors	Alt3a Impact	Alt 3e Impact Receivers	Alt3e Impact Receptors	Alt3e Impact	Alt 5g RR1 Impact Receivers	Alt 5g RR1 Impact Receptors	Alt 5g RR2 Impact Receivers	Alt 5g RR2 Impact Receptors	Alt 5g RR3 Impact Receivers	Alt 5g RR3 Impact Receptors	Alt5g Impact
K32	67.4	68.4	66.2	66.2	66.2	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
K33	66.8	67.8	65.7	65.7	65.7	1	1	Single-Family Residential	B	67	1	1	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
K34	64.2	65.1	63.9	63.9	63.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K35	60	60.9	61.1	61.1	61.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K36	63.6	64.5	63.6	63.6	63.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K37	63.3	64.3	63.4	63.4	63.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K38	63.2	64.1	63.2	63.2	63.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K39	60.4	61.3	60.5	60.5	60.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K40	61.2	62.1	61.2	61.2	61.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K41	65.2	66.1	63.7	63.7	63.7	1	1	Single-Family Residential	B	67	0	0	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
K42	61.4	62.3	60.6	60.6	60.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K43	66.8	67.8	67.3	67.3	67.3	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
K44	65.6	66.5	64.9	64.9	64.9	1	1	Single-Family Residential	B	67	0	0	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
K45	68.2	69	68.9	68.9	68.9	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
K46	64.3	65.2	65.2	65.2	65.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K47	64.6	65.5	65.4	65.4	65.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
K48	61.5	62.4	61.9	61.9	61.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L1	71.2	71.9	73.4	73.4	73.4	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
L2	69.8	70.6	71.1	71.1	71.1	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
L3	72.5	73.3	72.4	72.4	72.4	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
L4	56.8	57.6	58.5	58.5	58.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L5	59.8	60.6	61.3	61.3	61.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L6	59.8	60.5	61.5	61.5	61.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L7	63.8	64.6	65.4	65.4	65.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L8	70.3	71.1	72.3	72.3	72.3	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
L9	68.2	69	70.3	70.3	70.3	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
L10	67.6	68.4	69.6	69.6	69.6	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
L11	67.7	68.5	69.7	69.7	69.7	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
L12	66.9	67.7	69.1	69.1	69.1	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
L13	65.2	66	66.7	66.7	66.7	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
L14	65.2	66	66.5	66.5	66.5	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
L15	63.8	64.5	64.7	64.7	64.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L16	63	63.8	64.4	64.4	64.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L17	61.2	62	63.6	63.6	63.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L18	60.3	61.2	61.7	61.7	61.7	1	1	Family Baptist Church	C	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L19	67.5	68.4	69.2	69.2	69.2	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
L20	63.4	64.3	64.8	64.8	64.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L21	59	59.7	60.3	60.3	60.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L22	63.4	64.3	64.9	64.9	64.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L23	64.7	65.5	65.2	65.2	65.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L24	62.3	63	64.5	64.5	64.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L25	62.6	63.4	64.3	64.3	64.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L26	61.3	62.1	62.6	62.6	62.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L27	60	60.8	61.3	61.3	61.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L28	59.1	59.9	60.8	60.8	60.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L29	51.5	52.3	52.4	52.4	52.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L30	62	62.7	63	63	63	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L31	59.2	59.9	60.7	60.7	60.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L32	59.3	60.1	61.3	61.3	61.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L33	59.7	60.4	61.8	61.8	61.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L34	60.2	61	62.3	62.3	62.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L35	61.9	62.6	64	64	64	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L36	62.2	63	64.4	64.4	64.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L37	62.2	63	64.3	64.3	64.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L38	62.7	63.5	64.5	64.5	64.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L39	61.4	62.2	63.2	63.2	63.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L40	55.7	56.5	57.2	57.2	57.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L41	67.6	68.4	68.5	68.5	68.5	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes

Receiver	Existing Year (dBA)	No Build (dBA)	Alt3a (dBA)	Alt3e (dBA)	Alt5g (dBA)	Receivers	Receptors	Land Use	NAC Category	NAC	Existing Impact Receivers	Existing Impact Receptors	No Build Impact Receivers	No Build Impact Receptors	Alt 3a Impact Receivers	Alt3a Impact Receptors	Alt3a Impact	Alt 3e Impact Receivers	Alt3e Impact Receptors	Alt3e Impact	Alt 5g RR1 Impact Receivers	Alt 5g RR1 Impact Receptors	Alt 5g RR2 Impact Receivers	Alt 5g RR2 Impact Receptors	Alt 5g RR3 Impact Receivers	Alt 5g RR3 Impact Receptors	Alt5g Impact
L42	66.3	67	67.2	67.2	67.2	1	1	Eastwood United Penecostal	C	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
L43	65.7	66.5	66.5	66.5	66.5	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
L44	65.1	66	66.3	66.3	66.3	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
L45	64.4	65.2	65.6	65.6	65.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L46	52.9	53.7	54.1	54.1	54.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L47	51.1	52	52.4	52.4	52.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L48	51.4	52.2	52.9	52.9	52.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L49	51.4	52.3	52.5	52.5	52.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L50	54.6	55.4	56.9	56.9	56.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
L51	53.4	54.1	54.5	54.5	54.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M1	58.2	59.1	59	59	59	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M2	61.6	62.4	62.4	62.4	62.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M3	60.7	61.5	62.1	62.1	62.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M4	63.1	63.9	64.5	64.5	64.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M5	60.1	60.9	61.8	61.8	61.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M6	59.9	60.7	61.3	61.3	61.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M7	60.2	61.1	61.5	61.5	61.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M8	60.8	61.6	62	62	62	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M9	62.3	63.1	63.9	63.9	63.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M10	58	58.9	59.3	59.3	59.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M11	60.7	61.6	62.2	62.2	62.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M12	60.8	61.8	62.4	62.4	62.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M13	59.5	60.4	60.8	60.8	60.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M14	56.2	57	56.5	56.5	56.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M15	56.3	57.1	57.8	57.8	57.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M16	62.2	63.1	63.6	63.6	63.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M17	60.4	61.3	61.7	61.7	61.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M18	61	61.9	62	62	62	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M19	60.1	61.1	61.4	61.4	61.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M20	63.4	64.3	64.4	64.4	64.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M21	65	65.9	66.6	66.6	66.6	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
M22	60.4	61.3	62.1	62.1	62.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M23	58.5	59.4	60.3	60.3	60.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M24	62.5	63.4	63	63	63	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M25	64.1	65	64.8	64.8	64.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M26	70.4	71.2	71.2	71.2	71.2	1	1	Recreation Center	C	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
M27	62	62.8	62.6	62.6	62.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M28	50.6	51.4	50.6	50.6	50.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M29	50	50.8	50.7	50.7	50.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M30	51.8	52.7	53	53	53	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M31	61	61.7	61.1	61.1	61.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M32	57.2	58.1	57.8	57.8	57.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M33	55.6	56.4	56.7	56.7	56.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M34	51.8	52.7	52.5	52.5	52.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M35	58.3	59.3	58.6	58.6	58.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M36	63	63.9	63.4	63.4	63.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M37	56.7	57.5	57.4	57.4	57.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M38	44.8	45.6	45.5	45.5	45.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M39	52.7	53.5	53.5	53.5	53.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M40	51	51.8	51.4	51.4	51.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M41	53.6	54.7	54.2	54.2	54.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M42	53.5	54	53.9	53.9	53.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M43	55.9	56.5	56.7	56.7	56.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M44	52.7	53.5	53.1	53.1	53.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M45	51.6	52.3	52.2	52.2	52.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M46	52.4	53.1	53.2	53.2	53.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M47	50.1	50.8	50.5	50.5	50.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M48	51.5	52.4	52.1	52.1	52.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No

Receiver	Existing Year (dBA)	No Build (dBA)	Alt3a (dBA)	Alt3e (dBA)	Alt5g (dBA)	Receivers	Receptors	Land Use	NAC Category	NAC	Existing Impact Receivers	Existing Impact Receptors	No Build Impact Receivers	No Build Impact Receptors	Alt 3a Impact Receivers	Alt3a Impact Receptors	Alt3a Impact	Alt 3e Impact Receivers	Alt3e Impact Receptors	Alt3e Impact	Alt 5g RR1 Impact Receivers	Alt 5g RR1 Impact Receptors	Alt 5g RR2 Impact Receivers	Alt 5g RR2 Impact Receptors	Alt 5g RR3 Impact Receivers	Alt 5g RR3 Impact Receptors	Alt5g Impact
M49	53.6	54.2	53.8	53.8	53.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M50	52	52.8	52.6	52.6	52.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M51	57.6	58.4	57.6	57.6	57.6	1	6	Duplex	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M52	65.5	66.3	66.5	66.5	66.5	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
M53	64.3	65.1	65.8	65.8	65.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M54	63.2	63.9	64.8	64.8	64.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M55	63.8	64.6	65	65	65	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M56	60.3	61.1	61.7	61.7	61.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M57	55.7	56.5	60.3	60.3	60.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M58	55.3	56	55.8	55.8	55.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M59	57.1	57.5	57.7	57.7	57.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M60	58.1	58.6	58.9	58.9	58.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M61	56.8	57.5	57.5	57.5	57.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M62	48.7	49.4	49.1	49.1	49.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M63	47.3	48	48.2	48.2	48.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M64	53.5	54	54.2	54.2	54.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M65	49.8	50.6	50.2	50.2	50.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M66	50.1	51	51.2	51.2	51.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M67	52.2	52.9	52.1	52.1	52.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M68	49.4	50.2	50.1	50.1	50.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M69	53.5	54.2	53.5	53.5	53.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M70	54.7	55.4	54.9	54.9	54.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M71	60.4	61.1	62.1	62.1	62.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M72	57.7	58.3	58.3	58.3	58.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M73	58.5	59.3	59.3	59.3	59.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M74	62.4	63.3	63.9	63.9	63.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M75	65.2	66.1	66.8	66.8	66.8	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
M76	58.7	59.7	59.9	59.9	59.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M77	64.5	65.2	65.5	65.5	65.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M78	66.3	67	67.5	67.5	67.5	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
M79	52.2	52.6	52.7	52.7	52.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M80	47.1	47.9	47.7	47.7	47.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M81	54.2	54.8	54.2	54.2	54.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M82	52.3	52.8	52.8	52.8	52.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M83	50.4	51.2	50.4	50.4	50.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M84	57.4	56.8	57.7	57.7	57.7	1	15	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M84.2	64.3	64.5	64.2	64.2	64.2	1	15	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M85	62.9	63.8	62.8	62.8	62.8	1	15	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M85.2	65.3	66.1	65.5	65.5	65.5	1	15	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M86	65.5	66.5	66.2	66.2	66.2	1	1	Cathedral of Faith Church	C	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
M86	65.5	66.5	66.2	66.2	66.2	1	2	Two-Family (Permitted)	B	67	0	0	1	2	1	2	Yes	1	2	Yes	1	2	1	2	1	2	Yes
M87	58.2	58.8	57.7	57.7	57.7	1	1	Bank	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
M88	71	70.4	69.8	69.8	69.8	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
M89	71.5	70.9	70.2	70.2	70.2	1	1	Hotel	E	72	1	1	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
N1	65.7	66.2	59.3	59.3	59.3	1	1	Hotel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
N2	59.9	60.7	60.1	60.1	60.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
N3	57.2	58.2	57.9	57.9	57.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
N4	61.1	61.6	61.2	61.2	61.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
N5	59.5	60.2	60.3	60.3	60.3	1	1	Cemetery	C	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
N6	66.1	66.1	65.2	65.2	65.2	1	1	Single-Family Residential	B	67	1	1	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
N7	62.5	62.8	62.6	62.6	62.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
N8	65.1	65.1	65	65	65	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
N9	66	66	66	66	66	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
N10	66.6	66.7	66.9	66.9	66.9	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
N11	68.7	68.9	69.8	69.8	69.8	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
N12	71.5	71.9	74	74	74	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
N13	70.7	71	73.7	73.7	73.7	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
N14	71.4	71.5	74.4	74.4	74.4	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes

Receiver	Existing Year (dBA)	No Build (dBA)	Alt3a (dBA)	Alt3e (dBA)	Alt5g (dBA)	Receivers	Receptors	Land Use	NAC Category	NAC	Existing Impact Receivers	Existing Impact Receptors	No Build Impact Receivers	No Build Impact Receptors	Alt 3a Impact Receivers	Alt3a Impact Receptors	Alt3a Impact	Alt 3e Impact Receivers	Alt3e Impact Receptors	Alt3e Impact	Alt 5g RR1 Impact Receivers	Alt 5g RR1 Impact Receptors	Alt 5g RR2 Impact Receivers	Alt 5g RR2 Impact Receptors	Alt 5g RR3 Impact Receivers	Alt 5g RR3 Impact Receptors	Alt5g Impact
N15	64.4	64.9	66.7	66.7	66.7	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
N16	65.7	65.9	68	68	68	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O1	58.5	58.2	57.5	57.5	57.5	1	15	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O2	62	61.9	61.3	61.3	61.3	1	15	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O3	56.8	57.2	56.4	56.4	56.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O4	59.9	60.2	58.9	58.9	58.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O5	55.9	56.8	55.4	55.4	55.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O6	66.6	67.3	64.3	64.3	64.3	1	7	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O7	52.1	53.2	54.1	54.1	54.1	1	7	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O7.2	62.7	63.7	62.5	62.5	62.5	1	7	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O8.2	68.7	69.7	67.3	67.3	67.3	1	7	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O10	69.1	71	66.5	66.5	66.5	1	1	Restaurant	E	72	0	0	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
O11	52.7	53.7	51.9	51.9	51.9	1	11	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O11.2	61.9	62.9	62	62	62	1	11	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O13	59.5	61	60	60	60	1	11	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O13.2	65.9	67.1	66	66	66	1	11	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O15	57.2	58.8	56.1	56.1	56.1	1	11	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O15.2	65.5	66.8	65.6	65.6	65.6	1	11	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O17	56.6	57.6	57	57	57	1	11	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O17.2	62.4	63.4	62.5	62.5	62.5	1	11	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O19	56.8	58	56.9	56.9	56.9	1	11	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O19.2	61.7	62.9	61.3	61.3	61.3	1	11	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O21	53.3	54.5	52.1	52.1	52.1	1	11	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O21.2	59	60.1	58.6	58.6	58.6	1	11	Motel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O23	56.2	57.2	56.9	56.9	56.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O24	55.9	56.8	56.7	56.7	56.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O25	55.6	56.4	57.1	57.1	57.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O26	55.7	56.5	57.9	57.9	57.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O27	56.6	57.5	58.7	58.7	58.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O28	58	59	60.1	60.1	60.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O29	69.5	70.9	73.4	73.4	73.4	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O30	69.2	70.6	73.2	73.2	73.2	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O31	68.6	69.9	72.5	72.5	72.5	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O32	69.7	71.2	73.8	73.8	73.8	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O33	71.2	72.7	75.9	75.9	75.9	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O34	68.4	69.7	72.4	72.4	72.4	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O35	68.3	69.5	72.5	72.5	72.5	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O36	65.1	66.6	68.7	68.7	68.7	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O37	61.1	62.3	63	63	63	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O38	60.7	61.6	63.3	63.3	63.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O39	60.3	61.3	62.2	62.2	62.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O40	59.1	60.1	61.5	61.5	61.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O41	61.9	63.2	65.1	65.1	65.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O42	57.1	58.2	60.2	60.2	60.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O43	57.5	58.4	58.3	58.3	58.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O44	70.8	72.5	75.2	75.2	75.2	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O45	71	72.8	75	75	75	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O46	65.6	67.1	68.5	68.5	68.5	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O47	63.5	64.9	66.7	66.7	66.7	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O48	63.7	65.1	67.1	67.1	67.1	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O49	63.7	65.2	67.1	67.1	67.1	1	1	Single-Family Residential	B	67	0	0	0	0	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O50	69.6	71.6	72.6	72.6	72.6	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O51	66.8	68.4	69.8	69.8	69.8	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O52	65.3	66.7	68.3	68.3	68.3	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O53	66.4	68	69.5	69.5	69.5	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O54	65.9	67.4	68.9	68.9	68.9	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
O55	60.1	61.2	63.2	63.2	63.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O56	61.1	62.3	64.2	64.2	64.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No

Receiver	Existing Year (dBA)	No Build (dBA)	Alt3a (dBA)	Alt3e (dBA)	Alt5g (dBA)	Receivers	Receptors	Land Use	NAC Category	NAC	Existing Impact Receivers	Existing Impact Receptors	No Build Impact Receivers	No Build Impact Receptors	Alt 3a Impact Receivers	Alt3a Impact Receptors	Alt3a Impact	Alt 3e Impact Receivers	Alt3e Impact Receptors	Alt3e Impact	Alt 5g RR1 Impact Receivers	Alt 5g RR1 Impact Receptors	Alt 5g RR2 Impact Receivers	Alt 5g RR2 Impact Receptors	Alt 5g RR3 Impact Receivers	Alt 5g RR3 Impact Receptors	Alt5g Impact
O57	61.2	62.4	64.4	64.4	64.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O58	61.1	62.4	64.6	64.6	64.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O59	60.4	61.6	64.1	64.1	64.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
O60	57.8	58.7	60.8	60.8	60.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P1	58	61.6	59.8	59.8	59.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P2	59.4	62.8	61.3	61.3	61.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P3	61.8	66.1	65.1	65.1	65.1	1	1	Park	C	67	0	0	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
P4	65.6	69.7	67.6	67.6	67.6	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P5	64	68.4	67.1	67.1	67.1	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P6	62.4	66.6	64.6	64.6	64.6	1	1	Single-Family Residential	B	67	0	0	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
P7	60.2	64.6	63.4	63.4	63.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P8	54.4	58.5	57.3	57.3	57.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P9	54.6	58.9	57.7	57.7	57.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P10	54.9	59.4	58.4	58.4	58.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P11	54.1	58.6	57.5	57.5	57.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P12	56.1	60.9	60.5	60.5	60.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P13	61.9	66.6	66.4	66.4	66.4	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P14	65.5	70.2	70.2	70.2	70.2	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P15	60.2	65	65.1	65.1	65.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P16	56.8	61.5	61	61	61	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P17	66	70.6	70.7	70.7	70.7	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P18	61.7	66.4	66.1	66.1	66.1	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P19	65.3	69.9	69.7	69.7	69.7	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P20	60.5	65.3	65	65	65	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P21	55.8	60.5	60	60	60	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P22	54	58.7	58.5	58.5	58.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P23	63.2	68	68.5	68.5	68.5	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P24	58.1	62.9	62.9	62.9	62.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P25	54.7	59.5	59.1	59.1	59.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P26	66.8	71.4	71.8	71.8	71.8	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P27	64.6	69.3	69.7	69.7	69.7	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P28	56.9	61.8	61.7	61.7	61.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P29	55.7	60.4	60	60	60	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P30	56.8	61.5	61.4	61.4	61.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P31	61.3	66.1	66.8	66.8	66.8	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P32	65.8	70.5	71.1	71.1	71.1	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P33	59.9	64.7	65	65	65	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P34	49.2	54	52.7	52.7	52.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P35	51.8	56.6	55.8	55.8	55.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P36	69.2	73.6	73.4	73.4	73.4	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P37	63.1	67.8	67.7	67.7	67.7	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P38	58.9	63.7	63.4	63.4	63.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P39	59.1	63.9	63.4	63.4	63.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
P40	62.3	67	67.1	67.1	67.1	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P41	68.6	73	72.7	72.7	72.7	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P42	71.3	75.6	74.5	74.5	74.5	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P43	66.8	71.4	70.7	70.7	70.7	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P44	64.5	69.2	68.6	68.6	68.6	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P45	67.7	72.1	71.1	71.1	71.1	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P46	62.9	67.7	67	67	67	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
P47	70.9	75.2	74.4	74.4	74.4	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
Q1	59.4	63.9	63.2	63.2	63.2	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q2	59.4	63.9	63.3	63.3	63.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q3	59.5	64	63.4	63.4	63.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q4	59.7	64.2	63.5	63.5	63.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q5	59.7	64.2	63.5	63.5	63.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q6	60	64.5	63.6	63.6	63.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q7	60.1	64.6	63.7	63.7	63.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No

Receiver	Existing Year (dBA)	No Build (dBA)	Alt3a (dBA)	Alt3e (dBA)	Alt5g (dBA)	Receivers	Receptors	Land Use	NAC Category	NAC	Existing Impact Receivers	Existing Impact Receptors	No Build Impact Receivers	No Build Impact Receptors	Alt 3a Impact Receivers	Alt3a Impact Receptors	Alt3a Impact	Alt 3e Impact Receivers	Alt3e Impact Receptors	Alt3e Impact	Alt 5g RR1 Impact Receivers	Alt 5g RR1 Impact Receptors	Alt 5g RR2 Impact Receivers	Alt 5g RR2 Impact Receptors	Alt 5g RR3 Impact Receivers	Alt 5g RR3 Impact Receptors	Alt5g Impact
Q8	60.1	64.5	63.8	63.8	63.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q9	60.1	64.6	63.9	63.9	63.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q10	60.2	64.7	63.9	63.9	63.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q11	59.9	64.5	64.1	64.1	64.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q12	59.9	64.5	63.8	63.8	63.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q13	59.8	64.4	63.8	63.8	63.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q14	59.8	64.4	63.9	63.9	63.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q15	59.9	64.5	64	64	64	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q16	60	64.5	64	64	64	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q17	59.9	64.5	64	64	64	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q18	59.8	64.4	64.1	64.1	64.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q19	59.8	64.4	64.1	64.1	64.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q20	59.9	64.4	64	64	64	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q21	59.8	64.4	63.9	63.9	63.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q22	59.8	64.4	63.9	63.9	63.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q23	59.7	64.3	63.8	63.8	63.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q24	59.7	64.3	63.8	63.8	63.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q25	59.7	64.3	63.9	63.9	63.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q26	59.7	64.2	63.8	63.8	63.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q27	59.6	64.2	63.7	63.7	63.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q28	59.6	64.1	63.7	63.7	63.7	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q29	59.5	64	63.6	63.6	63.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q30	59.5	64	63.6	63.6	63.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q31	59.4	64	63.5	63.5	63.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q32	59.5	64	63.6	63.6	63.6	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q33	59.4	64	63.5	63.5	63.5	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q34	59.3	63.9	63.4	63.4	63.4	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q35	59.3	63.8	63.3	63.3	63.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q36	59.2	63.7	63.3	63.3	63.3	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q37	59.1	63.6	63.1	63.1	63.1	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q38	58.9	63.5	63	63	63	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q39	58.8	63.4	62.9	62.9	62.9	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q40	58.5	63	62.8	62.8	62.8	1	1	Single-Family Residential	B	67	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
Q41	70.5	74.3	72.6	72.6	72.6	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
Q42	62.9	66.9	65.5	65.5	65.5	1	1	Single-Family Residential	B	67	0	0	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
Q43	68.8	72.7	71.5	71.5	71.5	1	1	Single-Family Residential	B	67	1	1	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
Q44	65	68.7	67.3	67.3	67.3	1	1	Single-Family Residential	B	67	0	0	1	1	1	1	Yes	1	1	Yes	1	1	1	1	1	1	Yes
Q45	63.6	67.2	65.5	65.5	65.5	1	1	Single-Family Residential	B	67	0	0	1	1	0	0	No	0	0	No	0	0	0	0	0	0	No
R1	61.8	62.6	61.7	61.9	63.3	1	1	Hotel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
R2	64.1	64.9	64.5	64.5	65.5	1	1	Hotel	E	72	0	0	0	0	0	0	No	0	0	No	0	0	0	0	0	0	No
S1	70.1	70.6	DISP	DISP	DISP	1	32	Motel	E	72	0	0	0	0	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
S1.2	72.7	73.2	DISP	DISP	DISP	1	1	Motel	E	72	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
S2	50.7	51.2	DISP	DISP	DISP	1	1	Restaurant	E	72	0	0	0	0	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
S3	55	55.5	DISP	DISP	DISP	1	54	Motel	E	72	0	0	0	0	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
S4	67.2	67.7	DISP	DISP	DISP	1	1	Radio Station	C	67	1	1	1	1	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
S5	50.4	50.9	DISP	DISP	DISP	1	1	Restaurant	E	72	0	0	0	0	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
S6	67.5	68	DISP	DISP	DISP	1	1	Restaurant	E	72	0	0	0	0	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP	DISP
MIN	42	43	43	43	43	1090	1503				175	175	248	256	260	287		257	284		253	280	256	283	256	283	
MAX	75	76	76	76	76																						
AVG	60	62	62	62	62																						

I-10 LAKE CHARLES
CALCASIEU RIVER BRIDGE

ATTACHMENT 2

Receivers
(NAC Category)

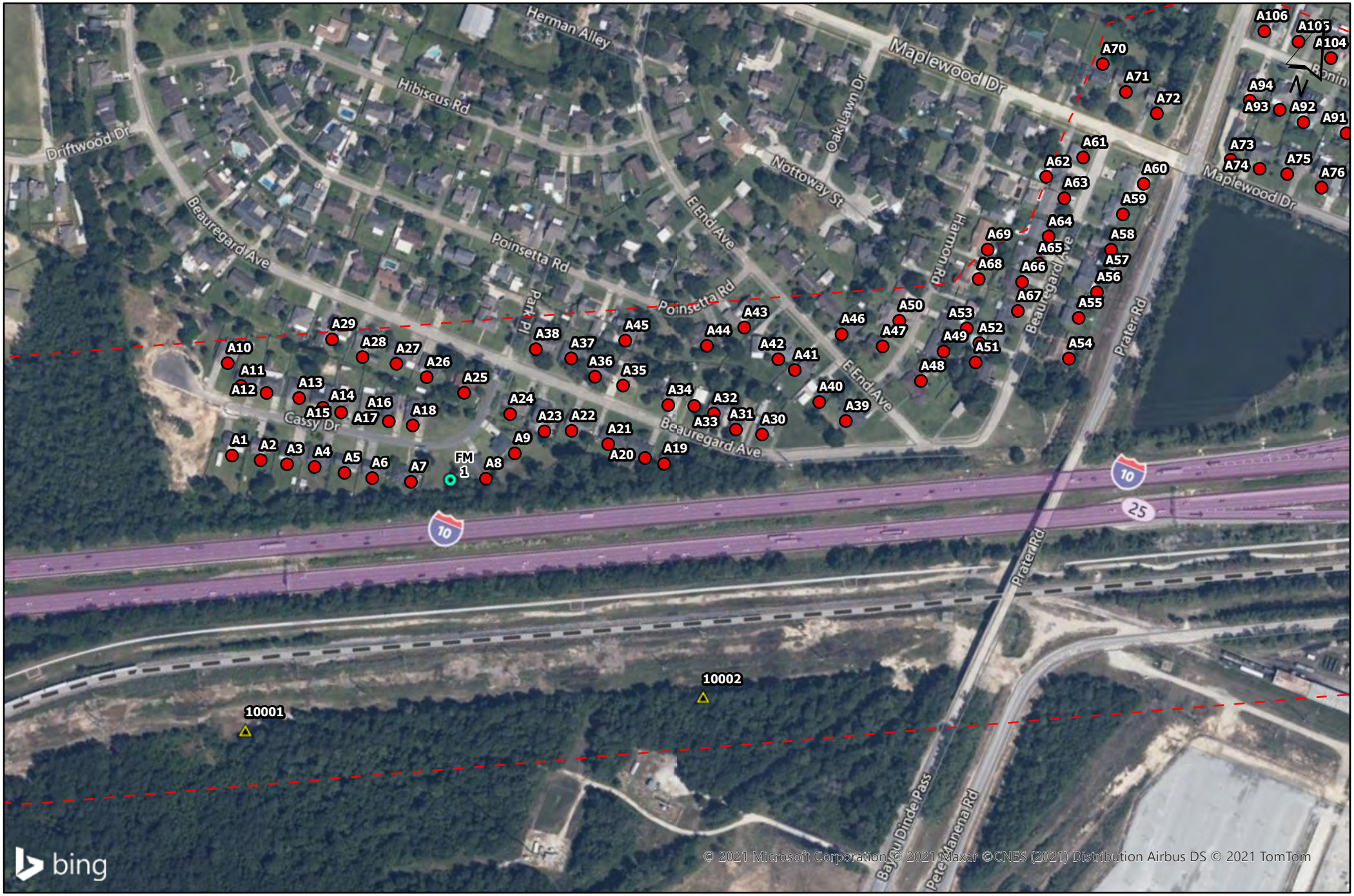


Figure 1. Receivers (NAC Category)

I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

0 150 300 600 Feet

- Category B
- Category F
- Field Measurement

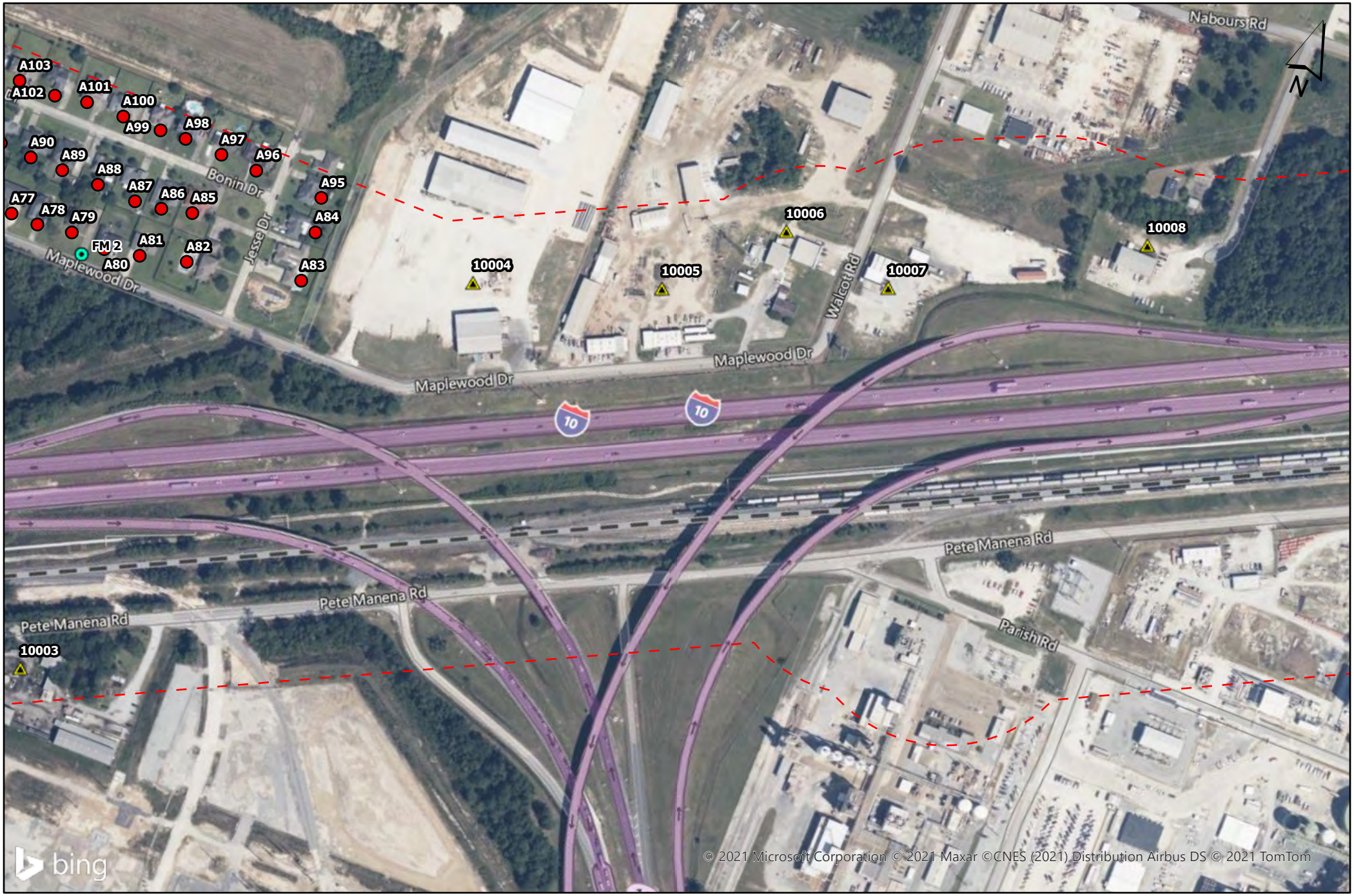


Figure 2. Receivers (NAC Category)

I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

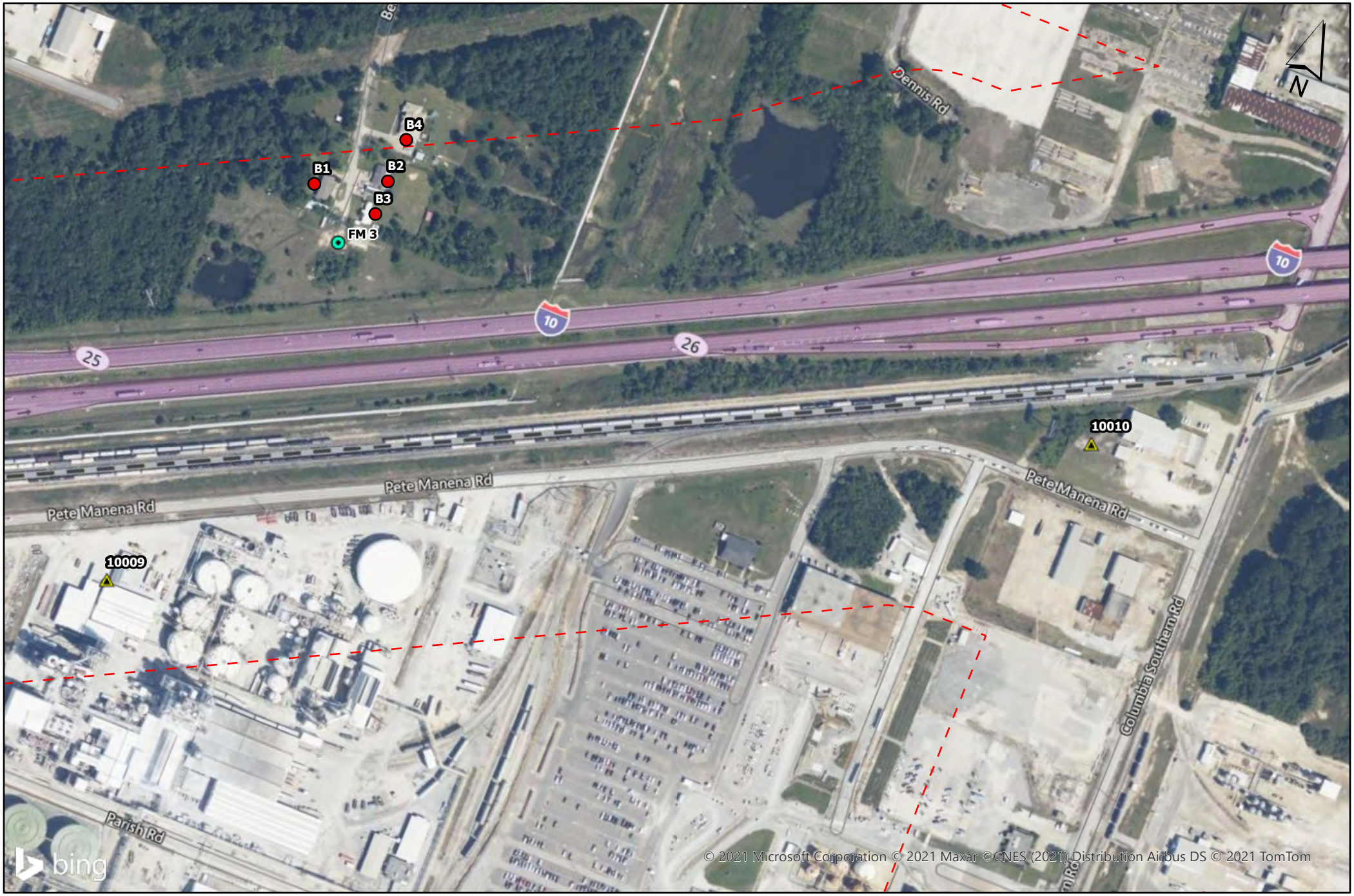


Figure 3. Receivers (NAC Category)

I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

Figure 4. Receivers (NAC Category)

I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

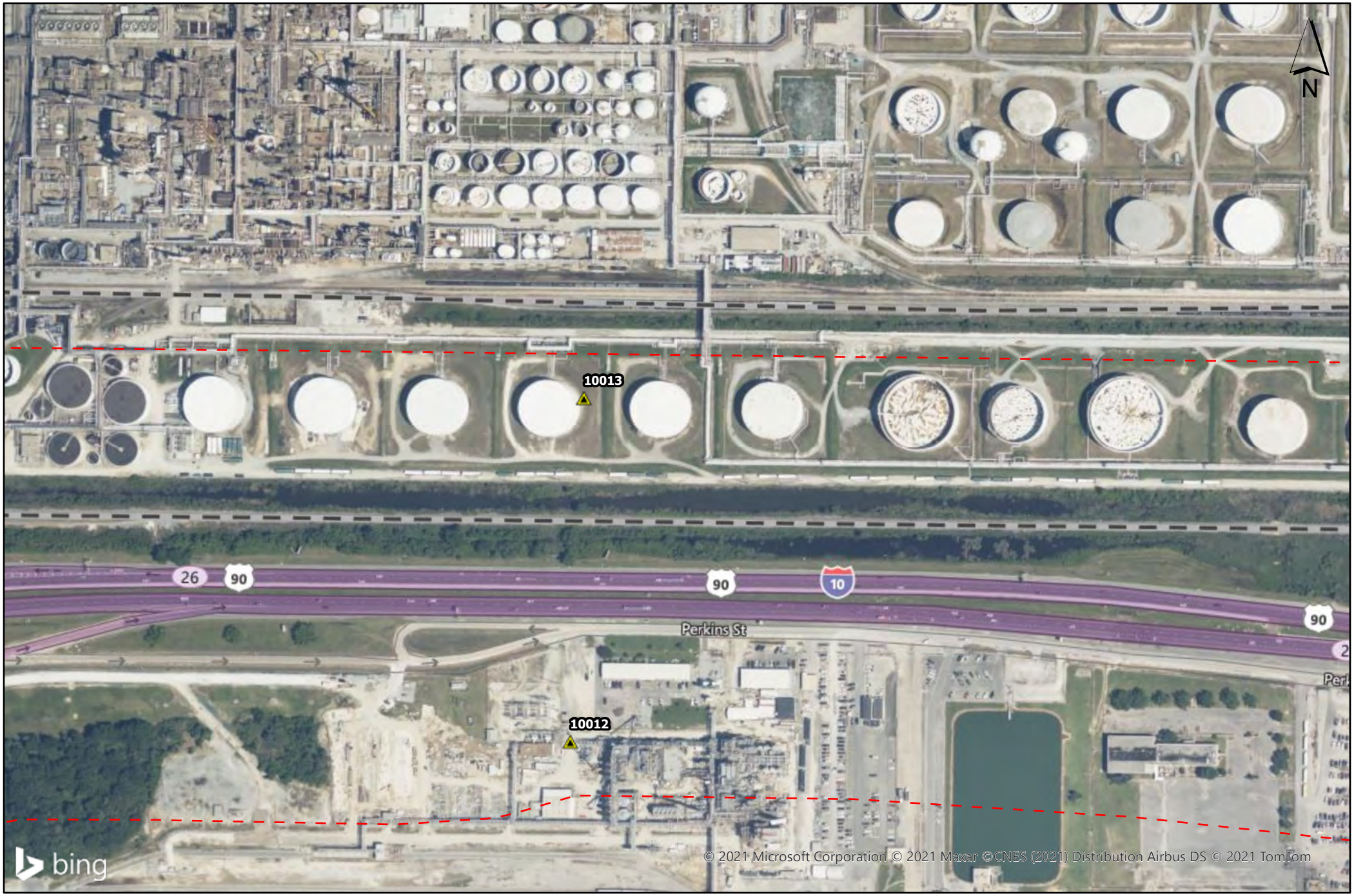


Figure 5. Receivers (NAC Category)

I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

Figure 7. Receivers (NAC Category)

I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

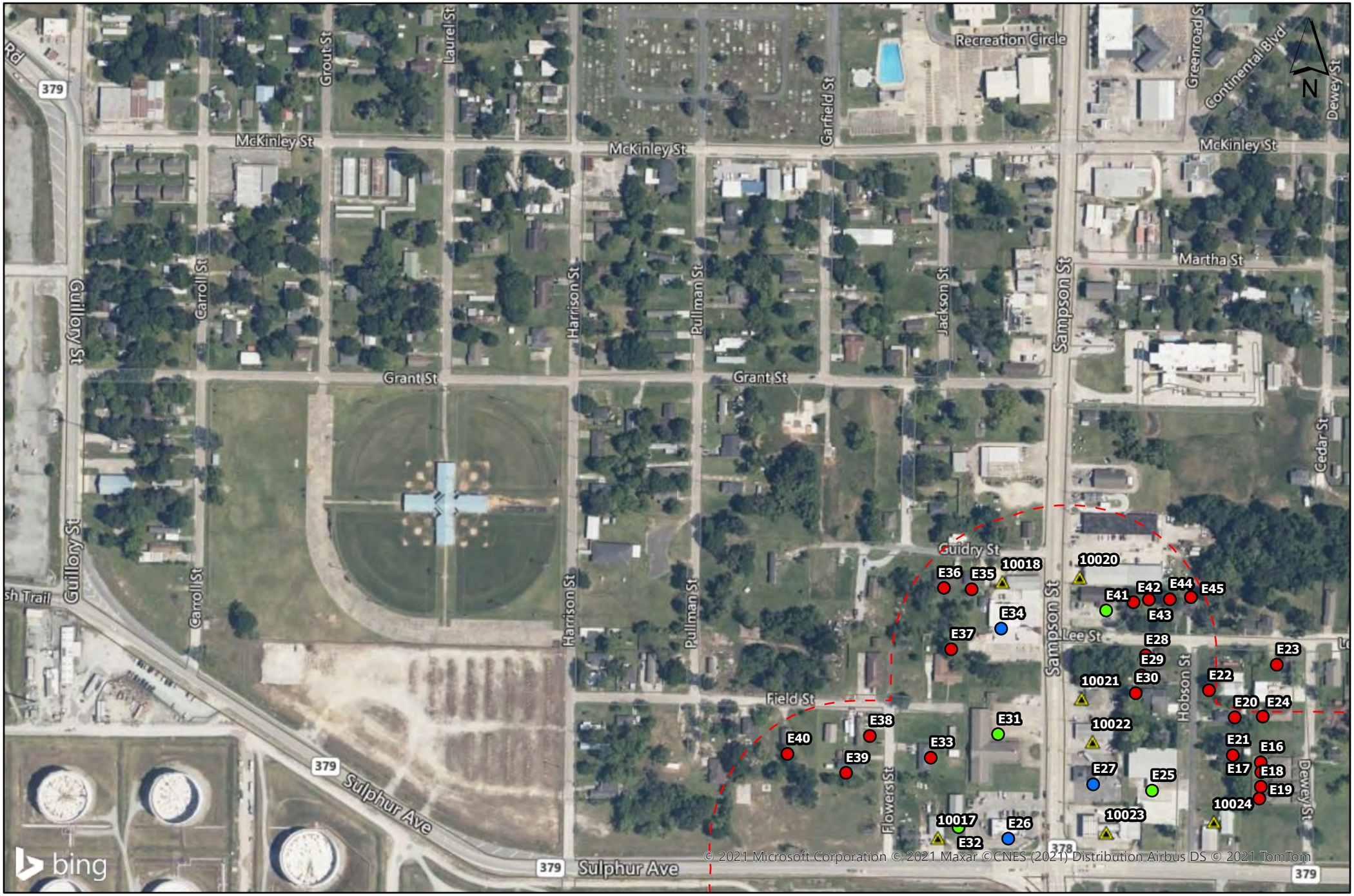


Figure 8. Receivers (NAC Category)

I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

0 150 300 600 Feet

- Category B
- Category C
- Category E
- Category F
- Field Measurement

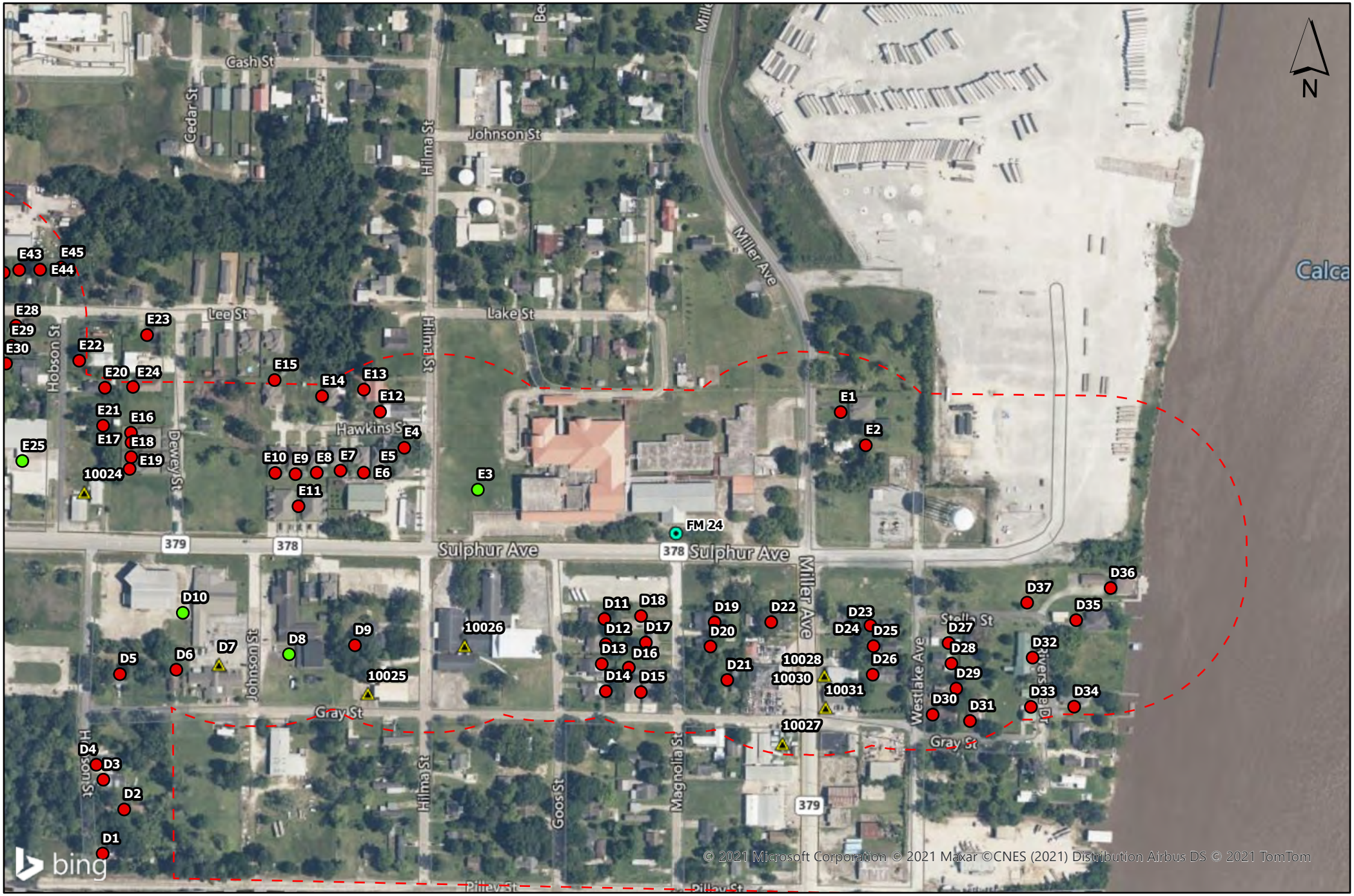


Figure 9. Receivers (NAC Category)

I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

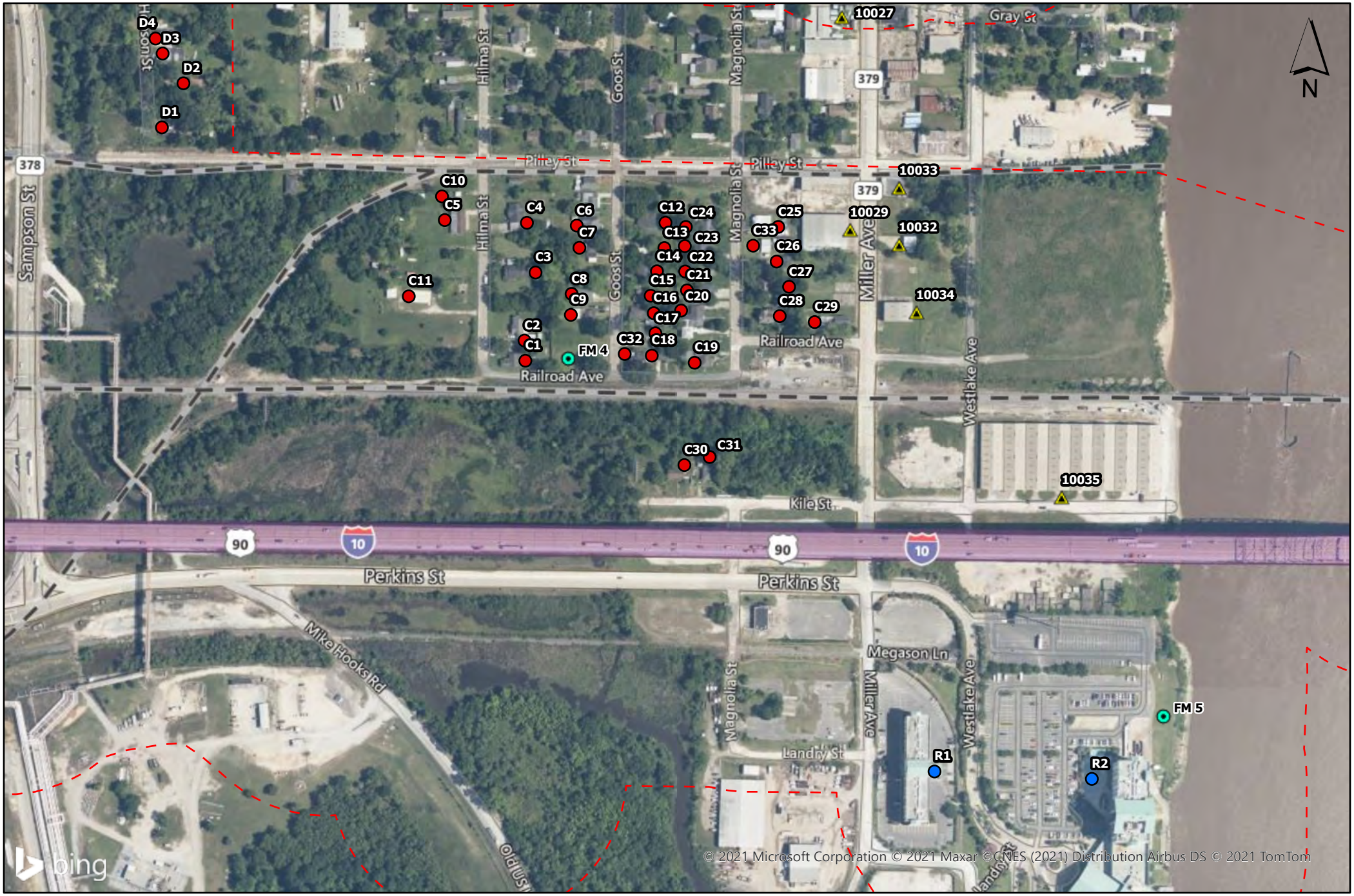


Figure 10. Receivers (NAC Category)

I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

Figure 11. Receivers (NAC Category)
I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

Figure 12. Receivers (NAC Category)

I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

0 150 300 600 Feet

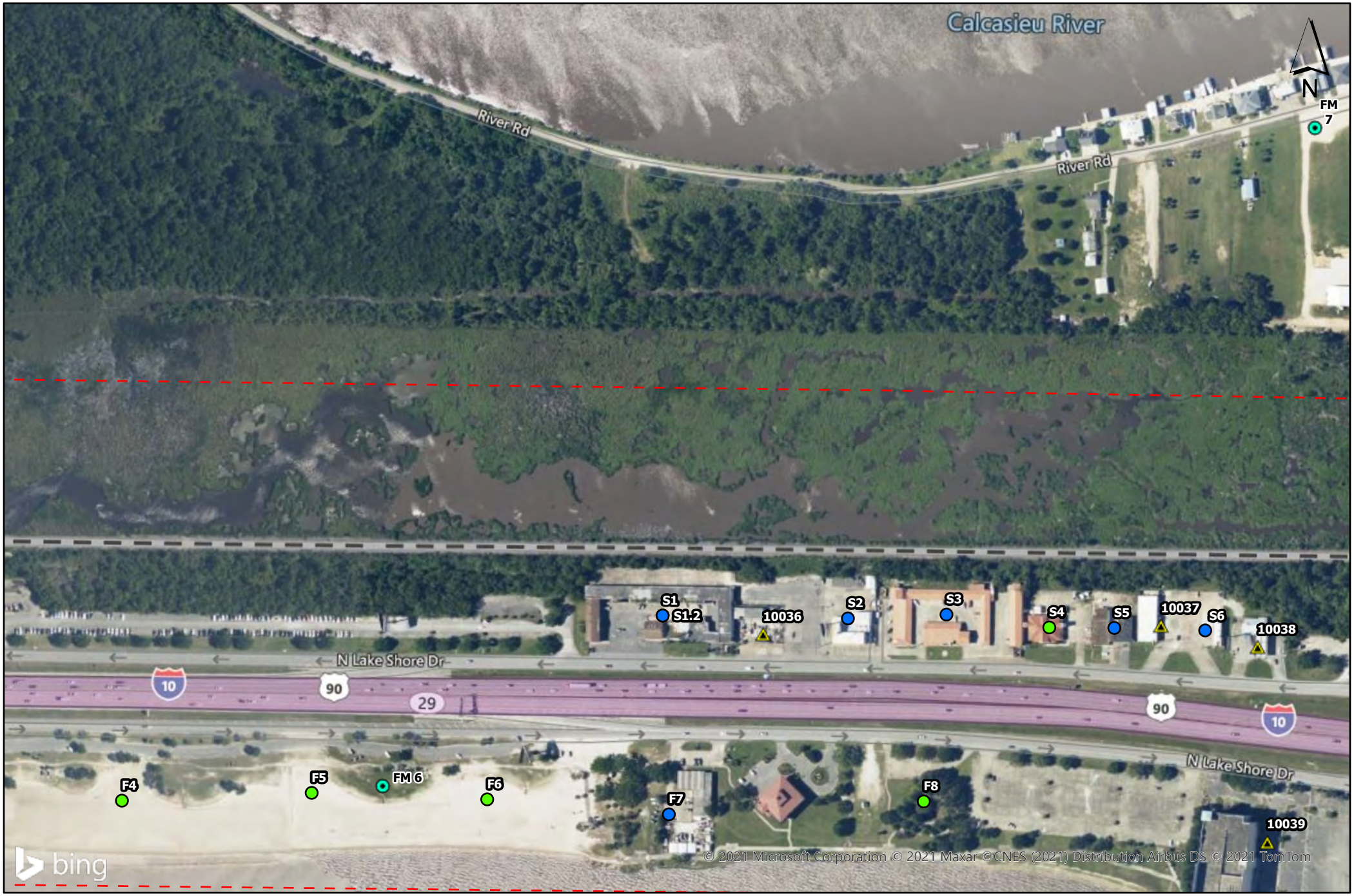


Figure 13. Receivers (NAC Category)
I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

Figure 14. Receivers (NAC Category)

I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

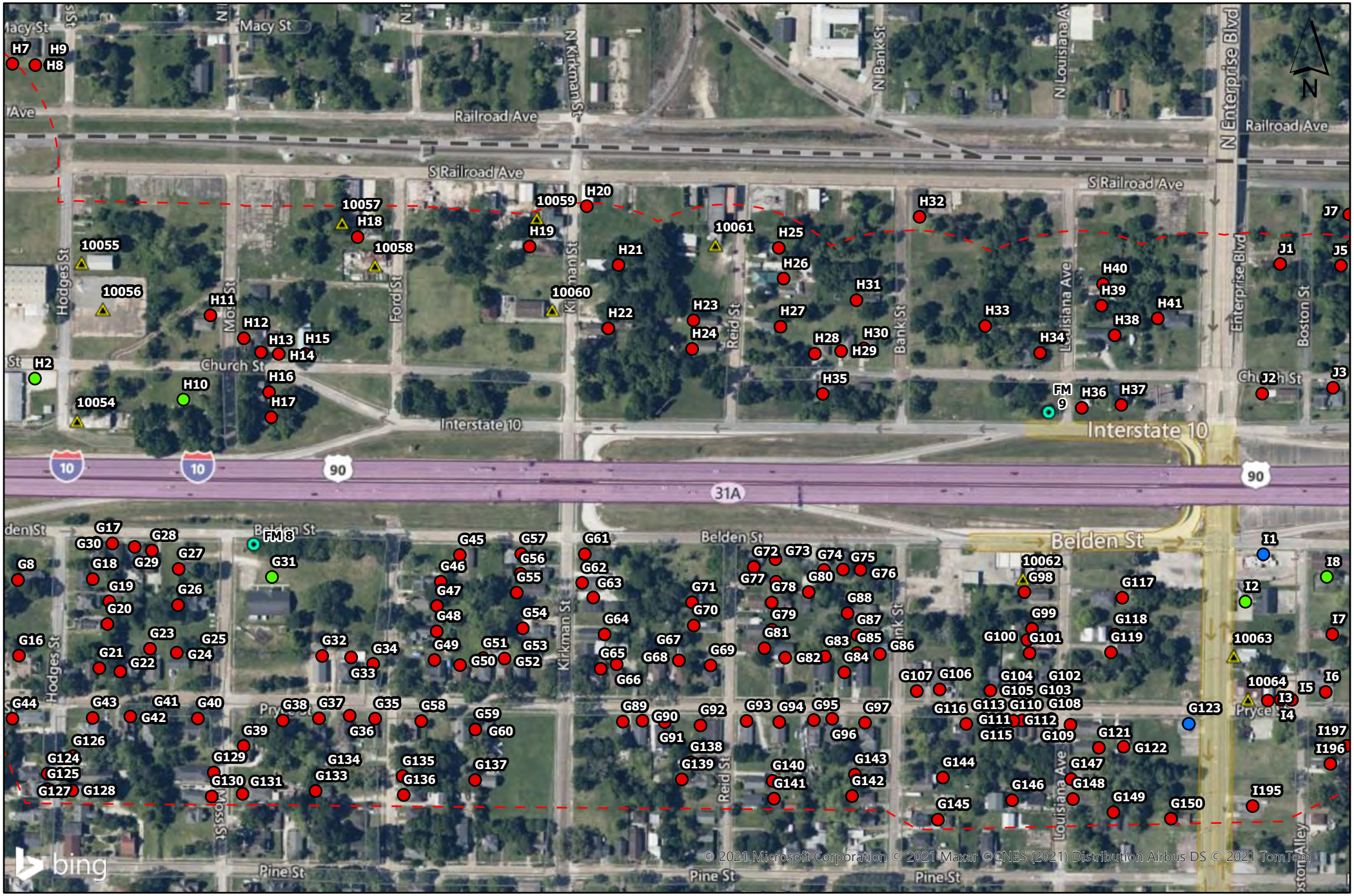


Figure 15. Receivers (NAC Category)

I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

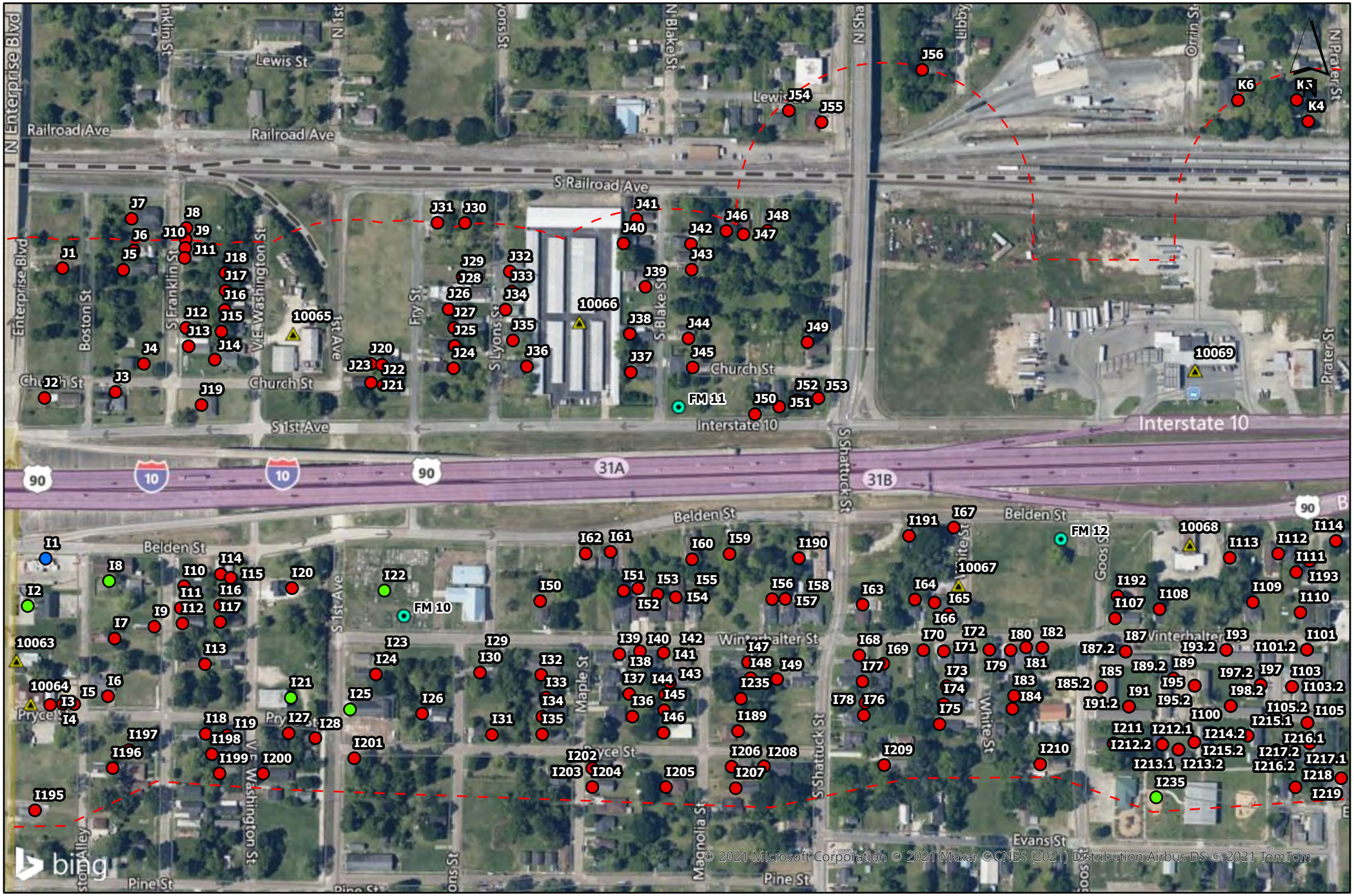


Figure 16. Receivers (NAC Category)

I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

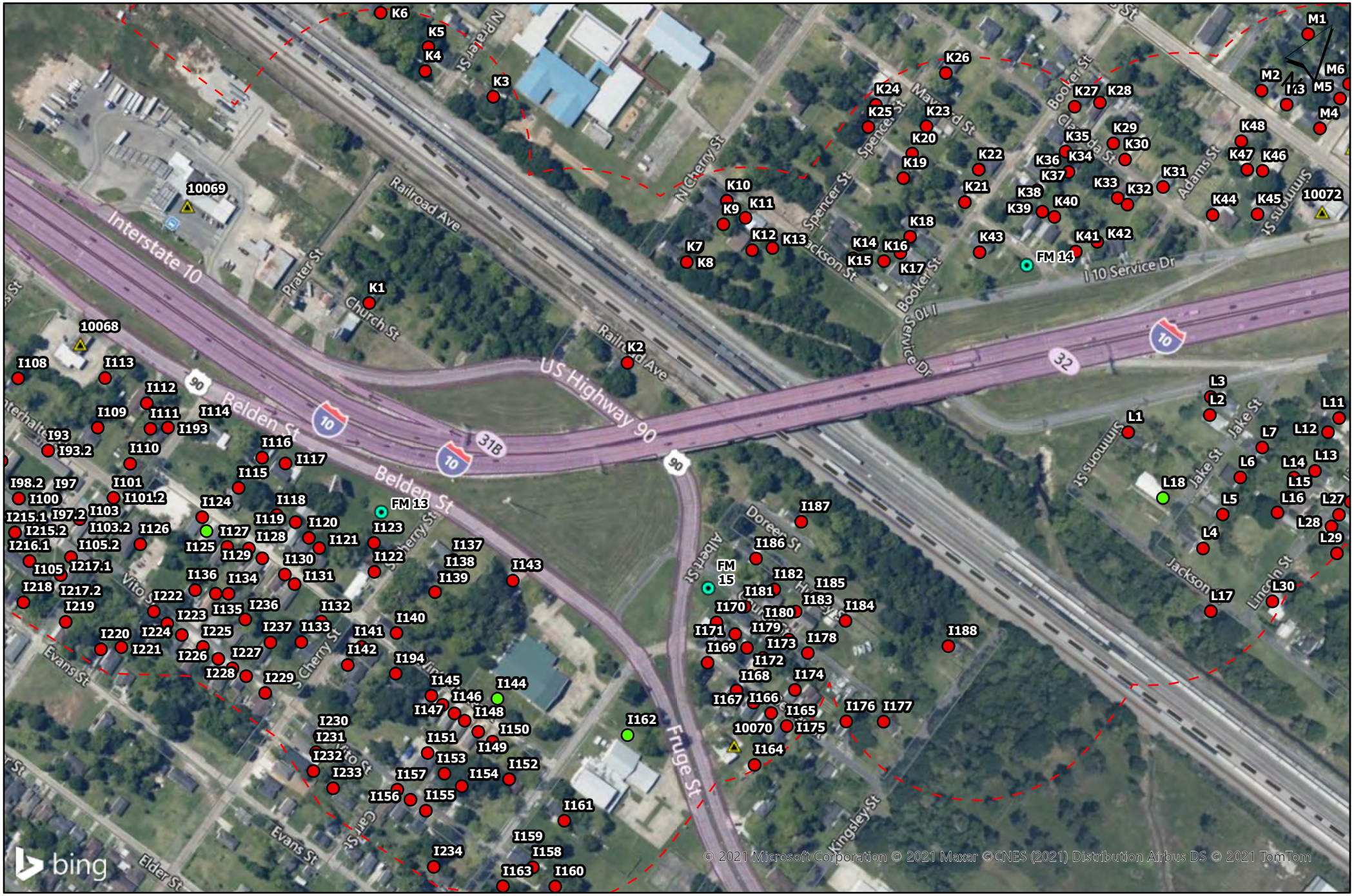


Figure 17. Receivers (NAC Category)

I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

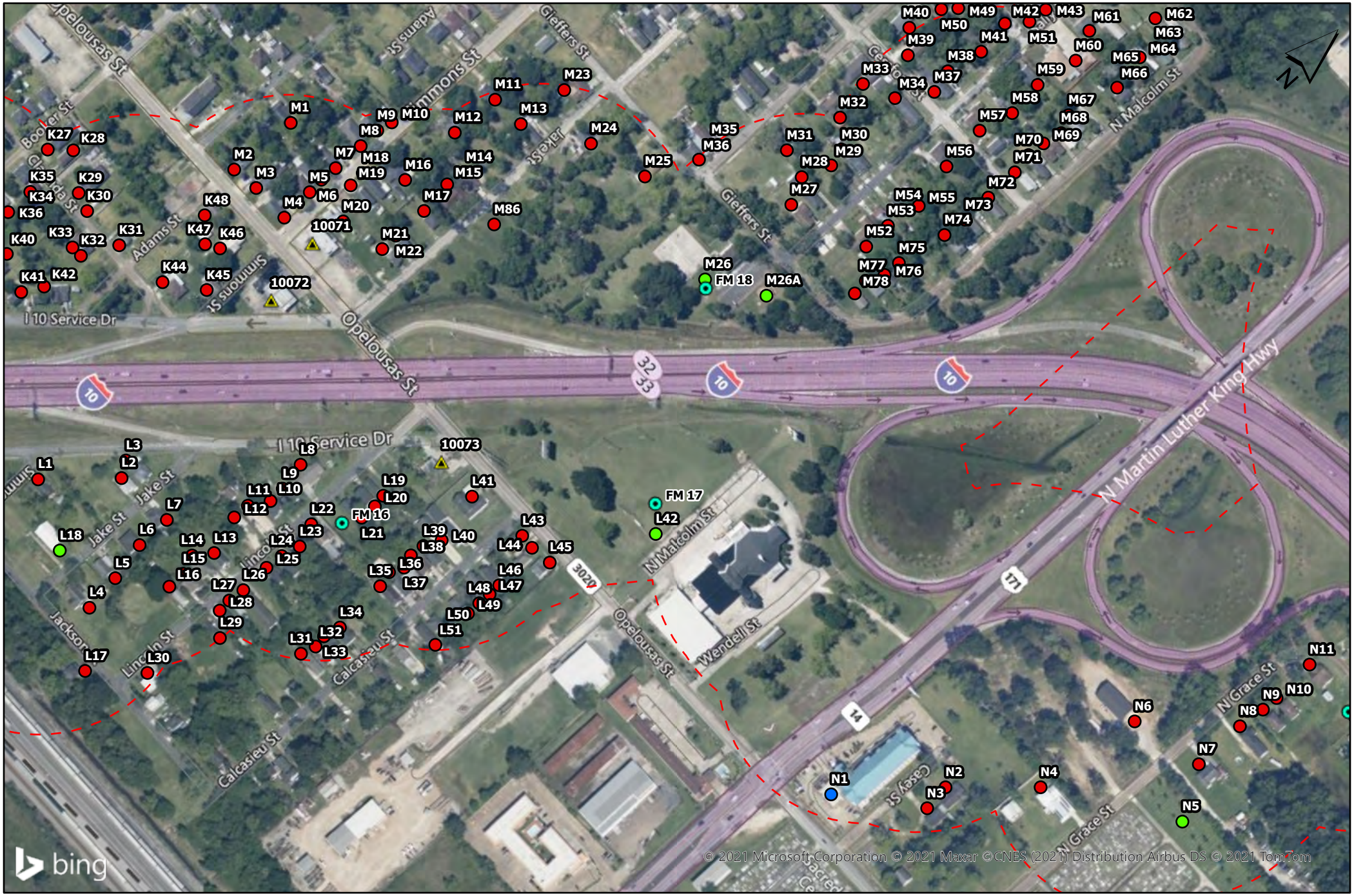
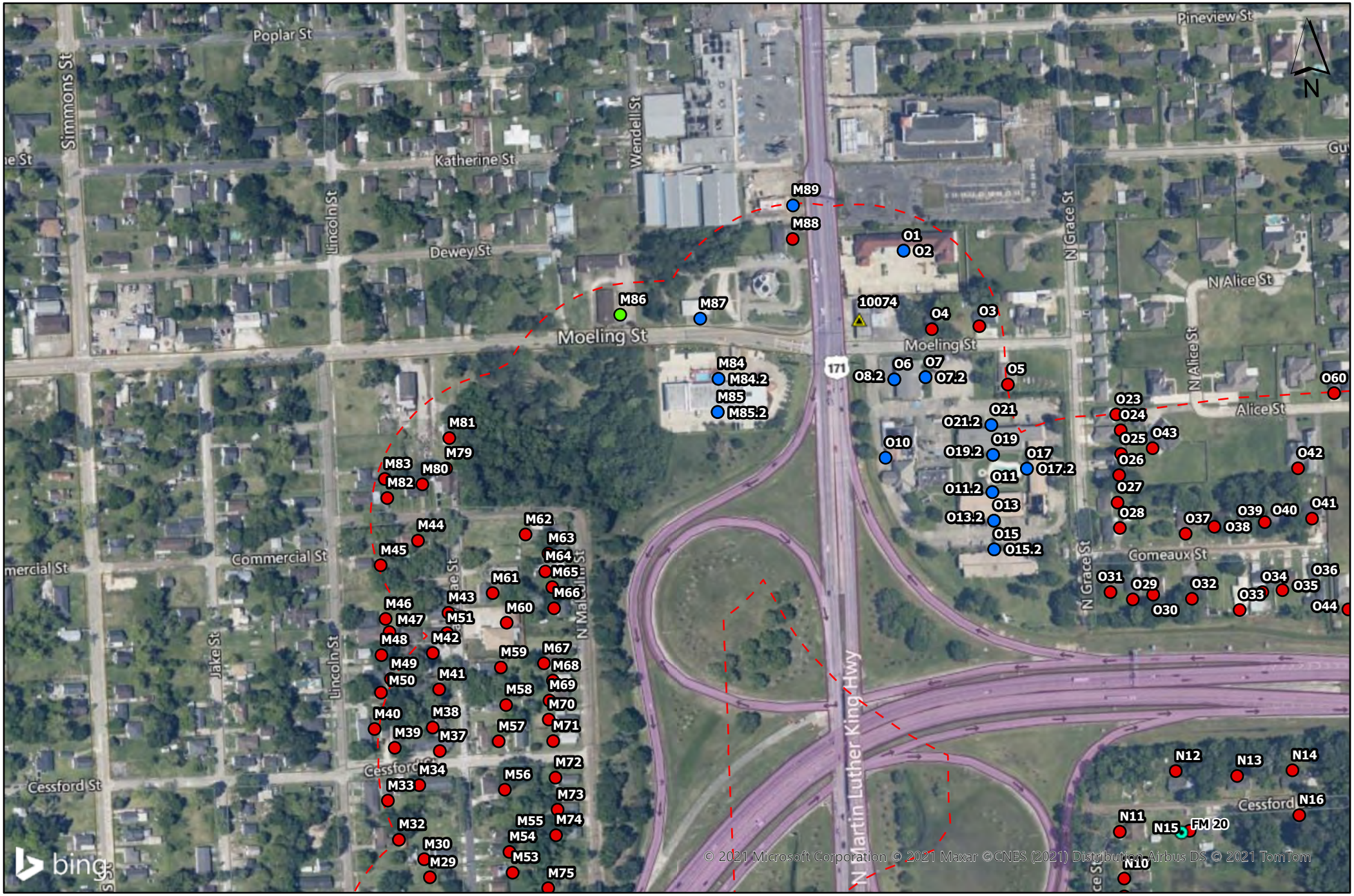


Figure 18. Receivers (NAC Category)

I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

0 150 300 600 Feet

- Category B
- Category C
- Category E
- Category F
- Field Measurement



Category B
Category C
Category E
Category F
Field Measurement

Figure 19. Receivers (NAC Category)

I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

0 150 300 600 Feet

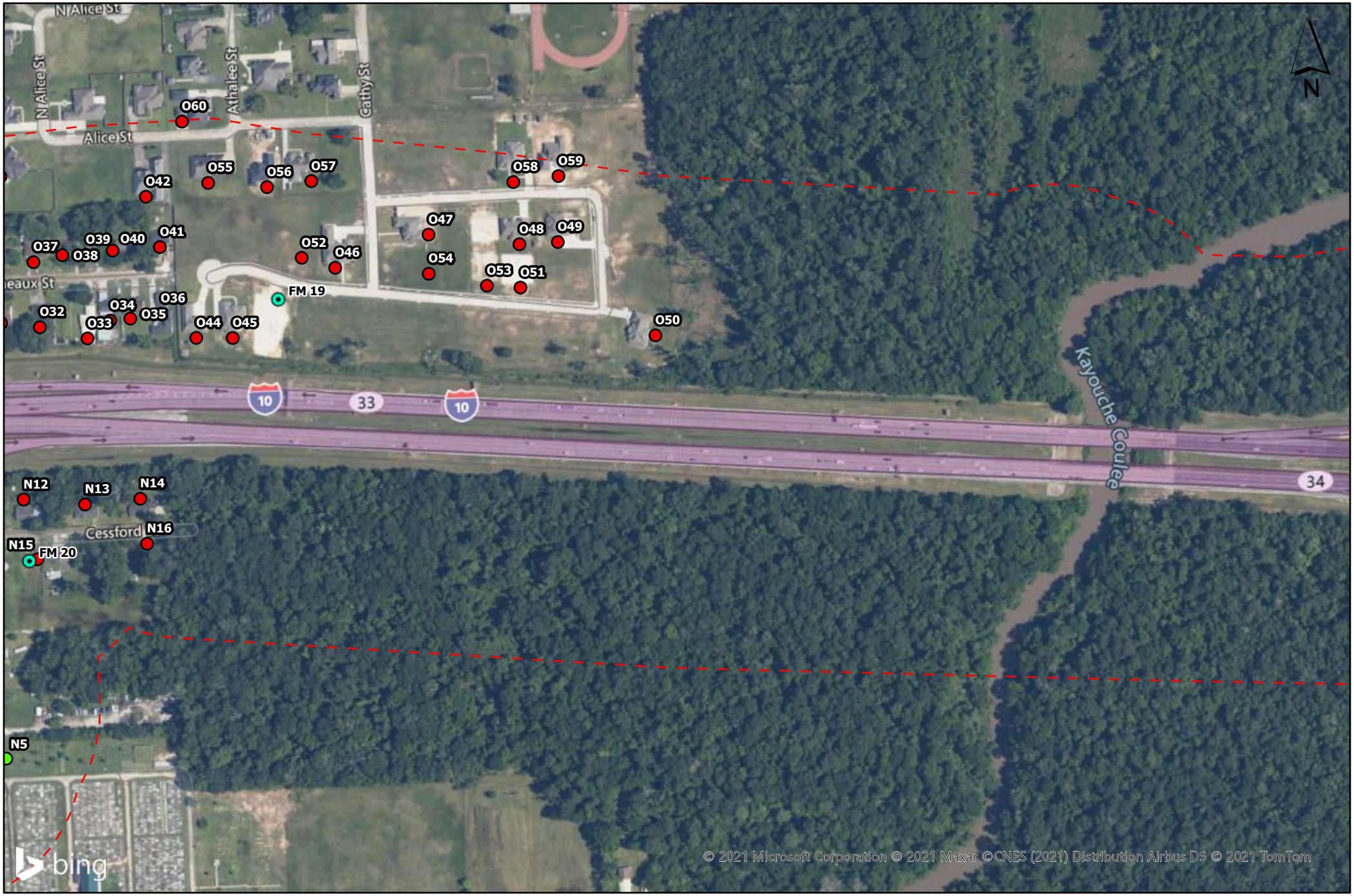


Figure 20. Receivers (NAC Category)

I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

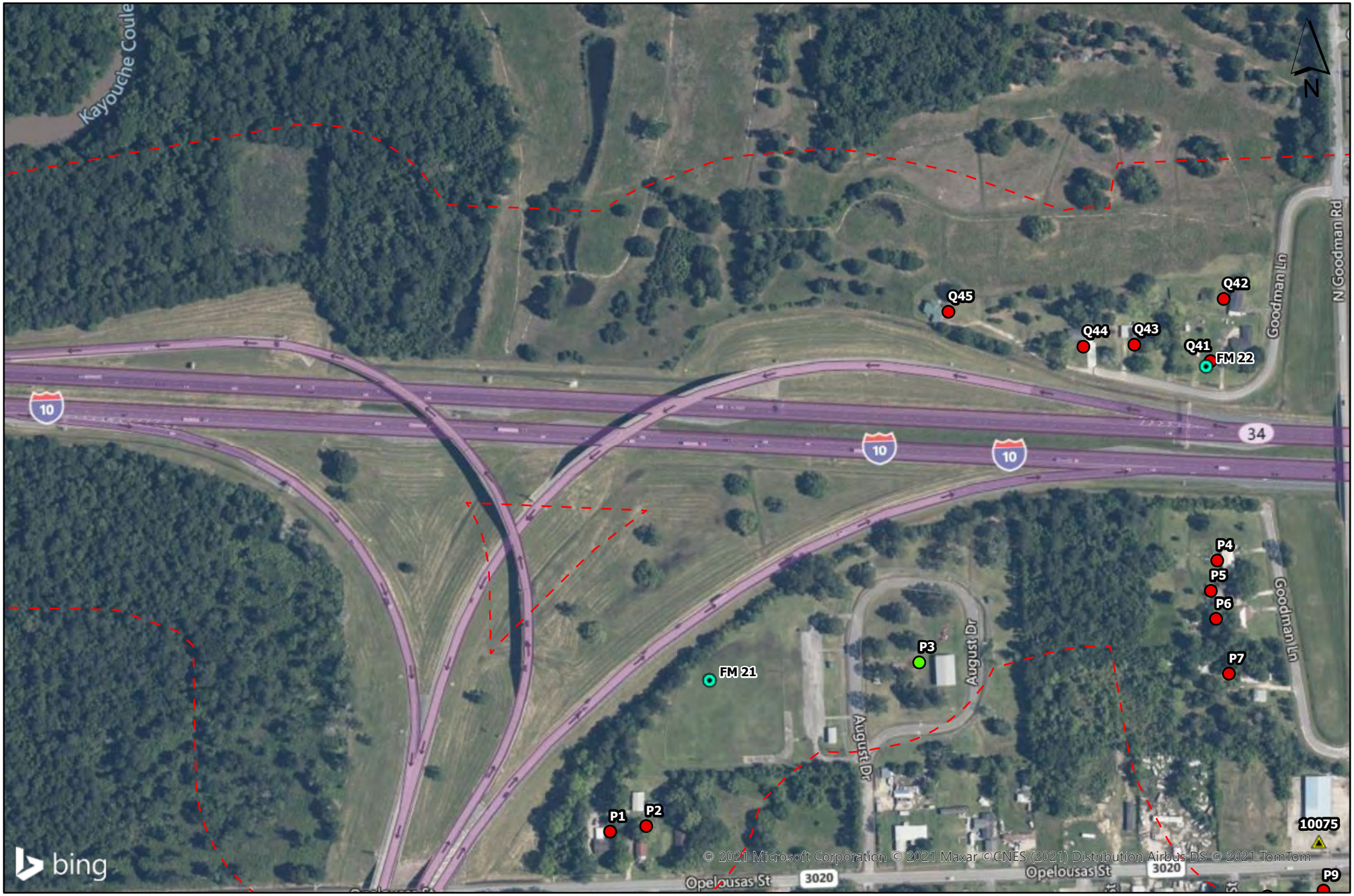
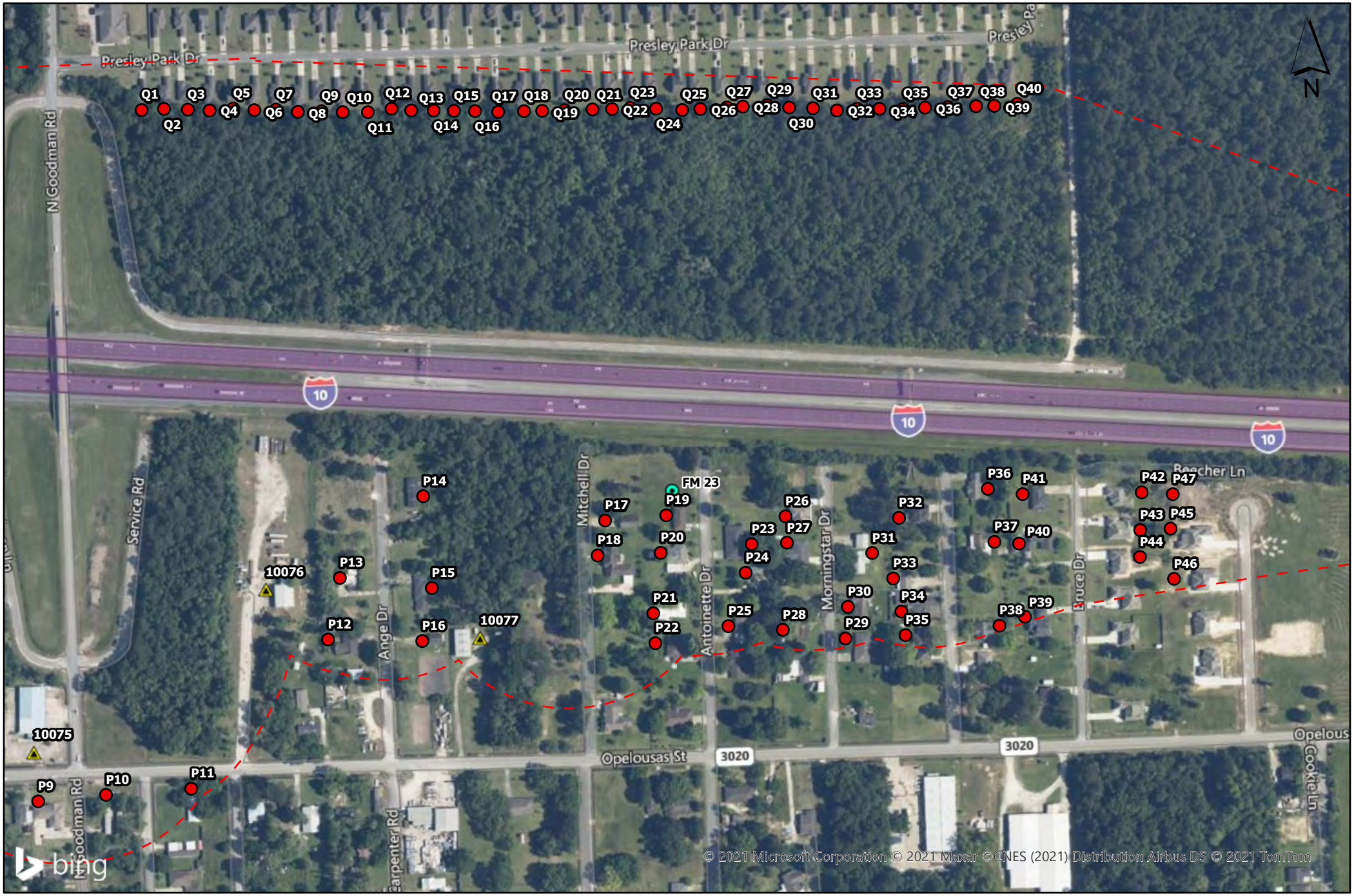


Figure 21. Receivers (NAC Category)

I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana



Category B
Category F
Field Measurement

Figure 22. Receivers (NAC Category)

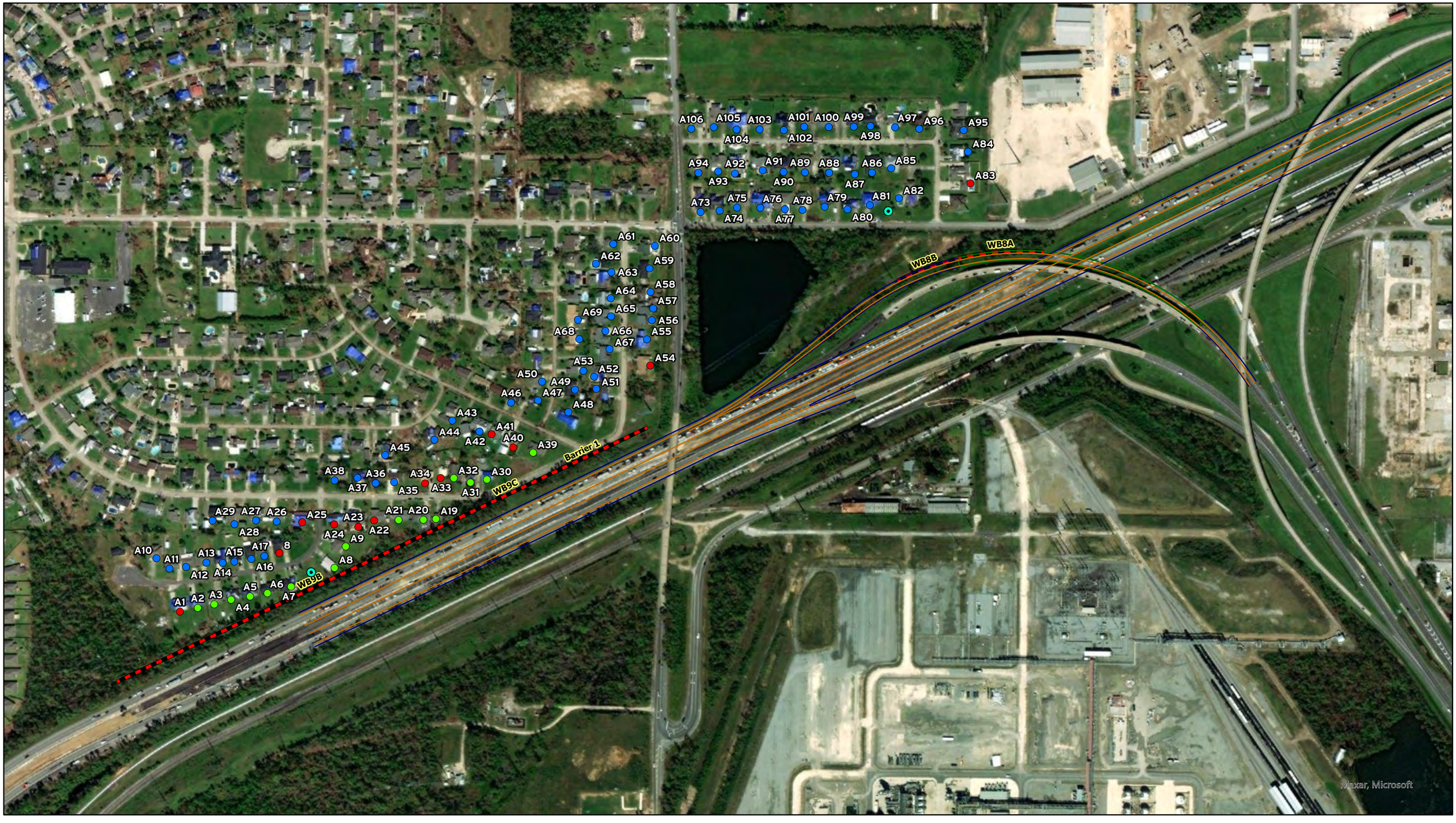
I-10 Calcasieu River Bridge
I-10/I-210 West End to I-10/I-210 East End
Calcasieu Parish, Louisiana

0 150 300 600 Feet

I-10 LAKE CHARLES
CALCASIEU RIVER BRIDGE

ATTACHMENT 3

Receivers (Impact)



Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 3A

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 3A

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad

Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 3A

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Maxar, Microsoft

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 3A

N

0 125 250 500 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 3A

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 3A

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier
- Feasible and Reasonable Barrier

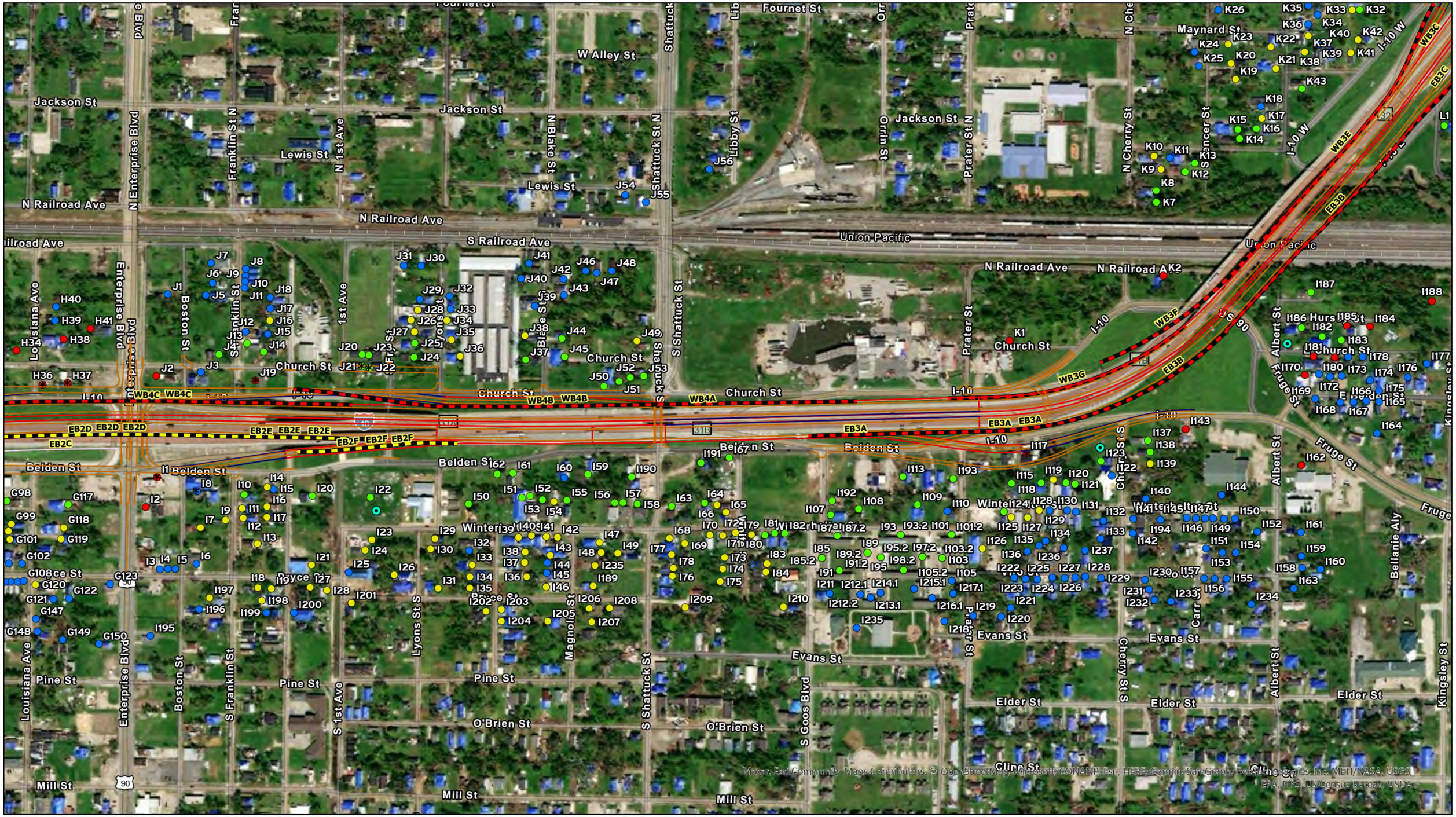
Note: Benefited / Not Benefited based on analyzed barriers. * = Displacements

RECEIVERS - ALTERNATIVE 3A

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3



Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier
- Feasible and Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers. *=Displacements

RECEIVERS - ALTERNATIVE 3A

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier
- Feasible and Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 3A

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

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Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier
- Feasible and Reasonable Barrier

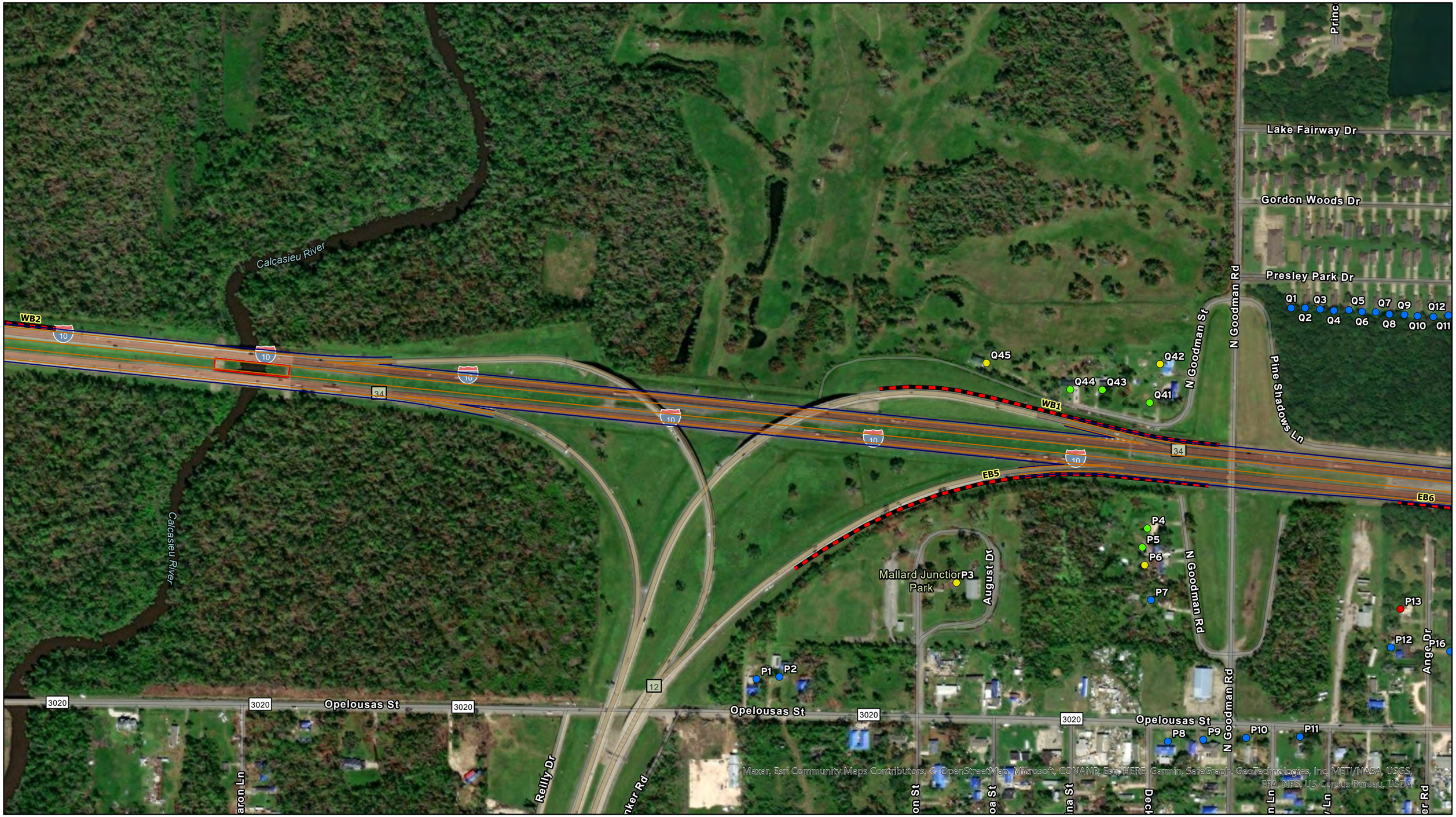
Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 3A

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3



Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier
- Feasible and Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 3A

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier
- Feasible and Reasonable Barrier

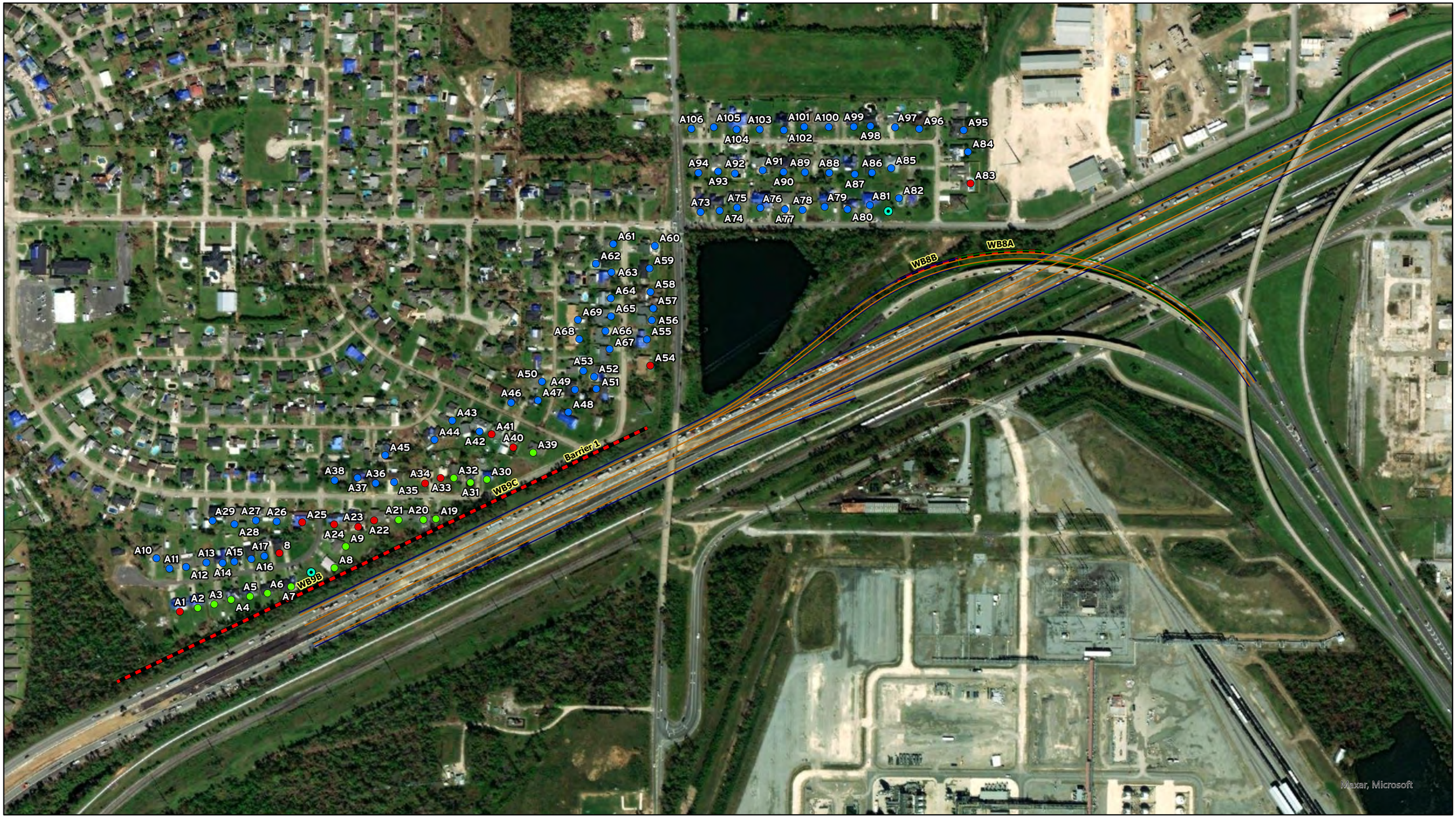
Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 3A

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3



Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 3E

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier

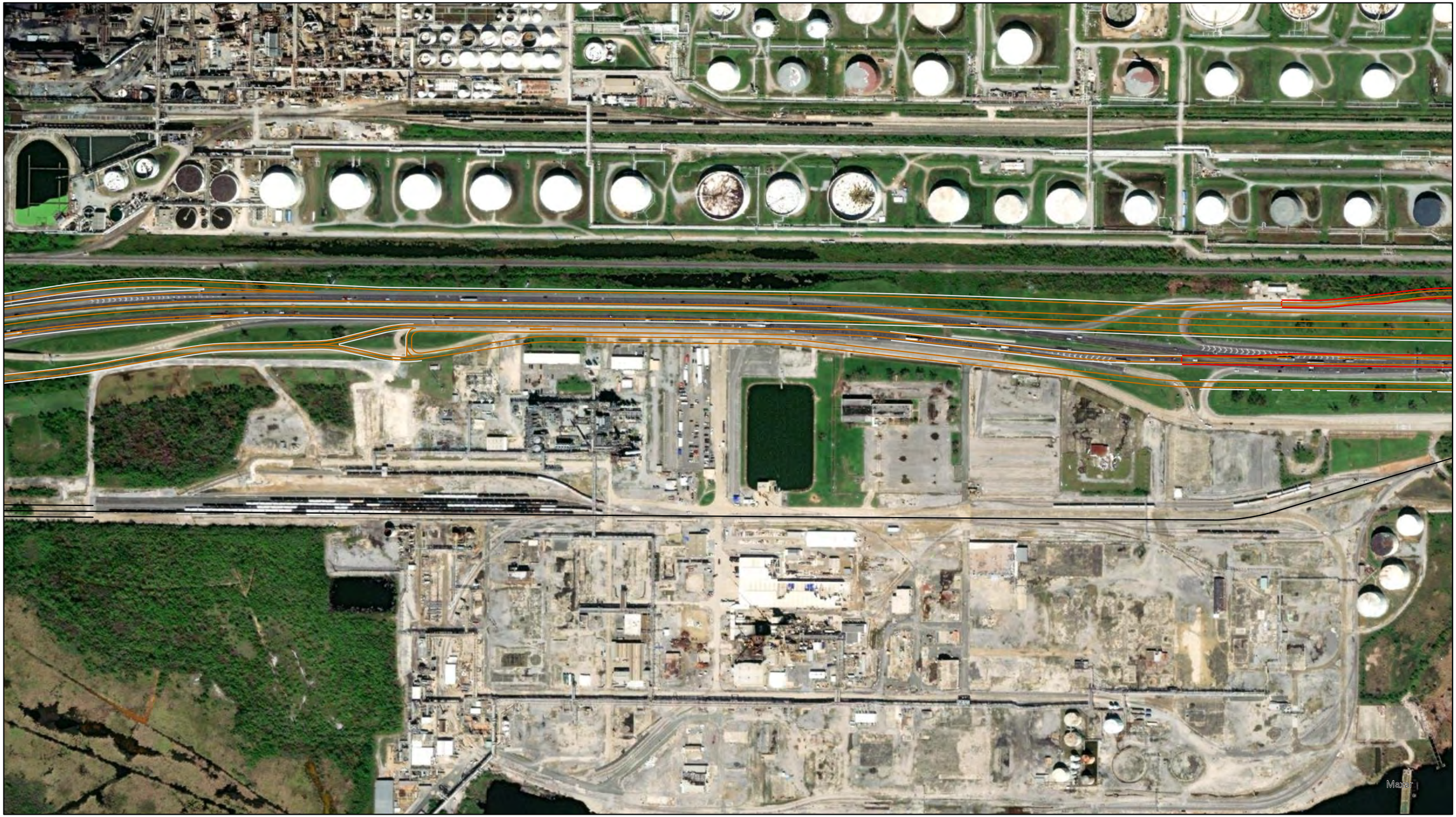
Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 3E

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3



Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad

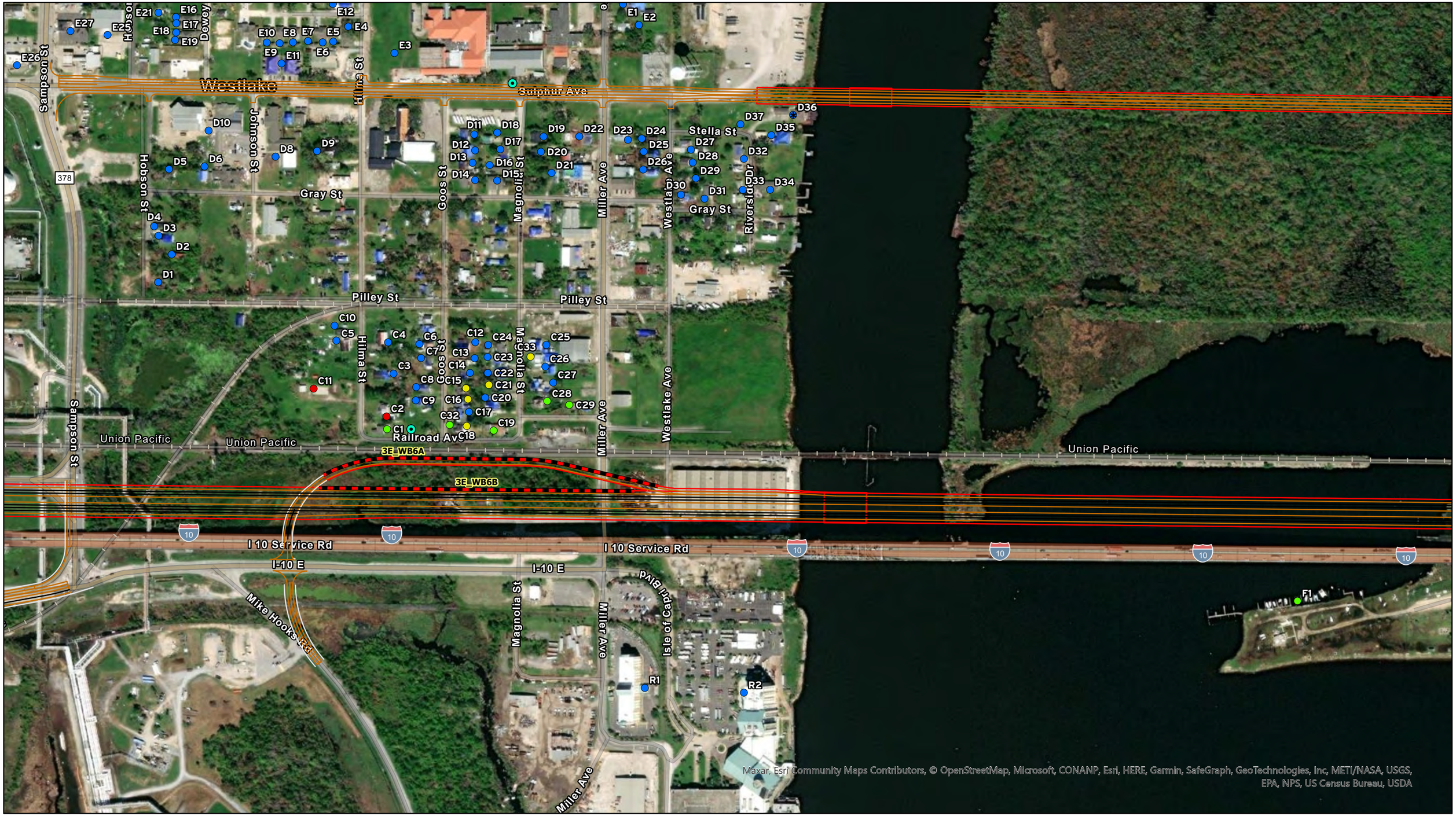
Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 3E

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3



Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge

Note: Benefited / Not Benefited based on analyzed barriers. *= Displacement

- Not Feasible or Reasonable Barrier
- Railroad
- Rail Spur Relocation Option 1

RECEIVERS - ALTERNATIVE 3E

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers. *=Displacement

RECEIVERS - ALTERNATIVE 3E

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers. * = Displaced

RECEIVERS - ALTERNATIVE 3E

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier
- Feasible and Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers. * = Displacements

RECEIVERS - ALTERNATIVE 3E

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier
- Feasible and Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers. *=Displacements

RECEIVERS - ALTERNATIVE 3E

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier
- Feasible and Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 3E

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier
- Feasible and Reasonable Barrier

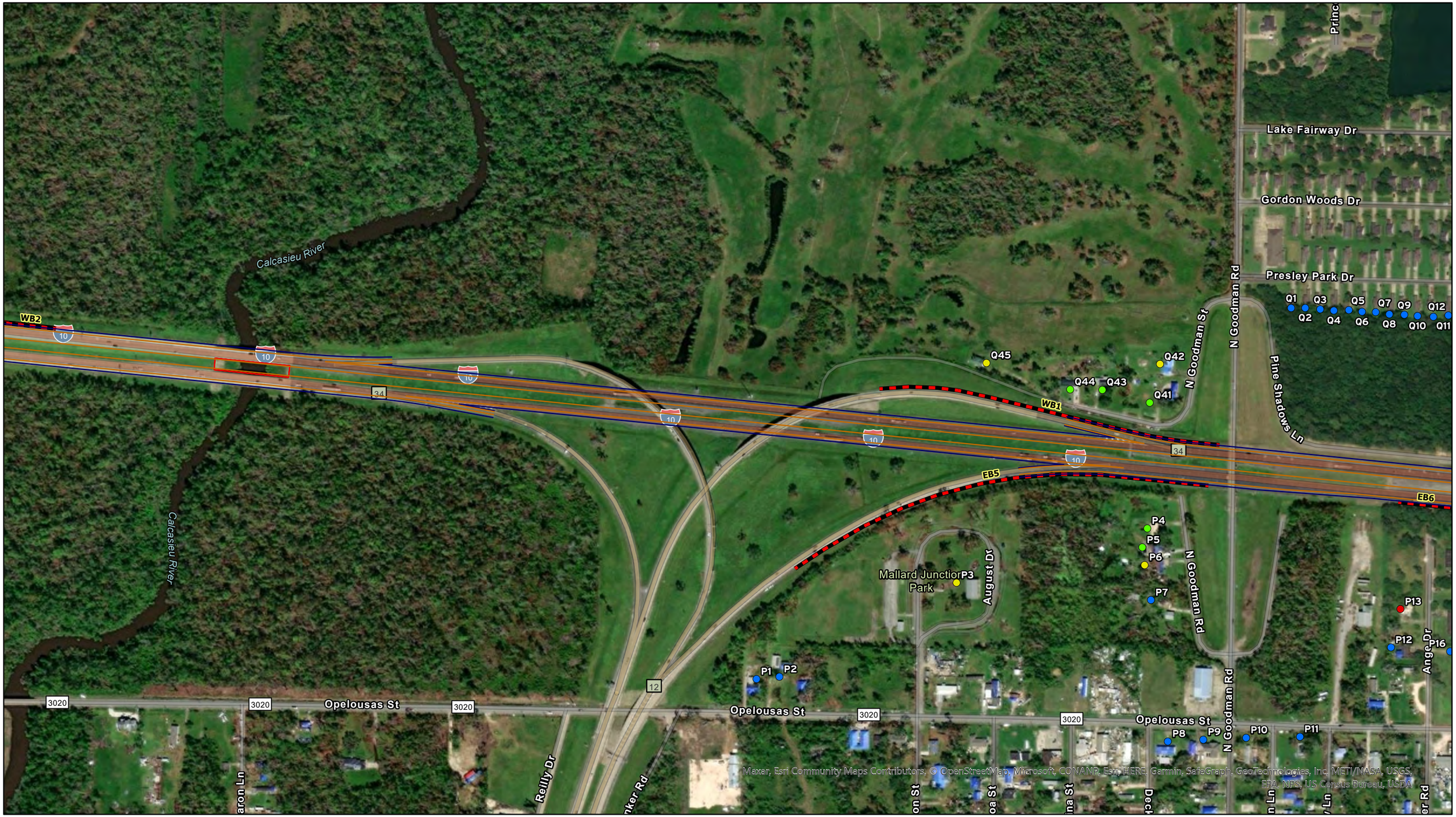
Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 3E

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3



Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier
- Feasible and Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 3E

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier
- Feasible and Reasonable Barrier

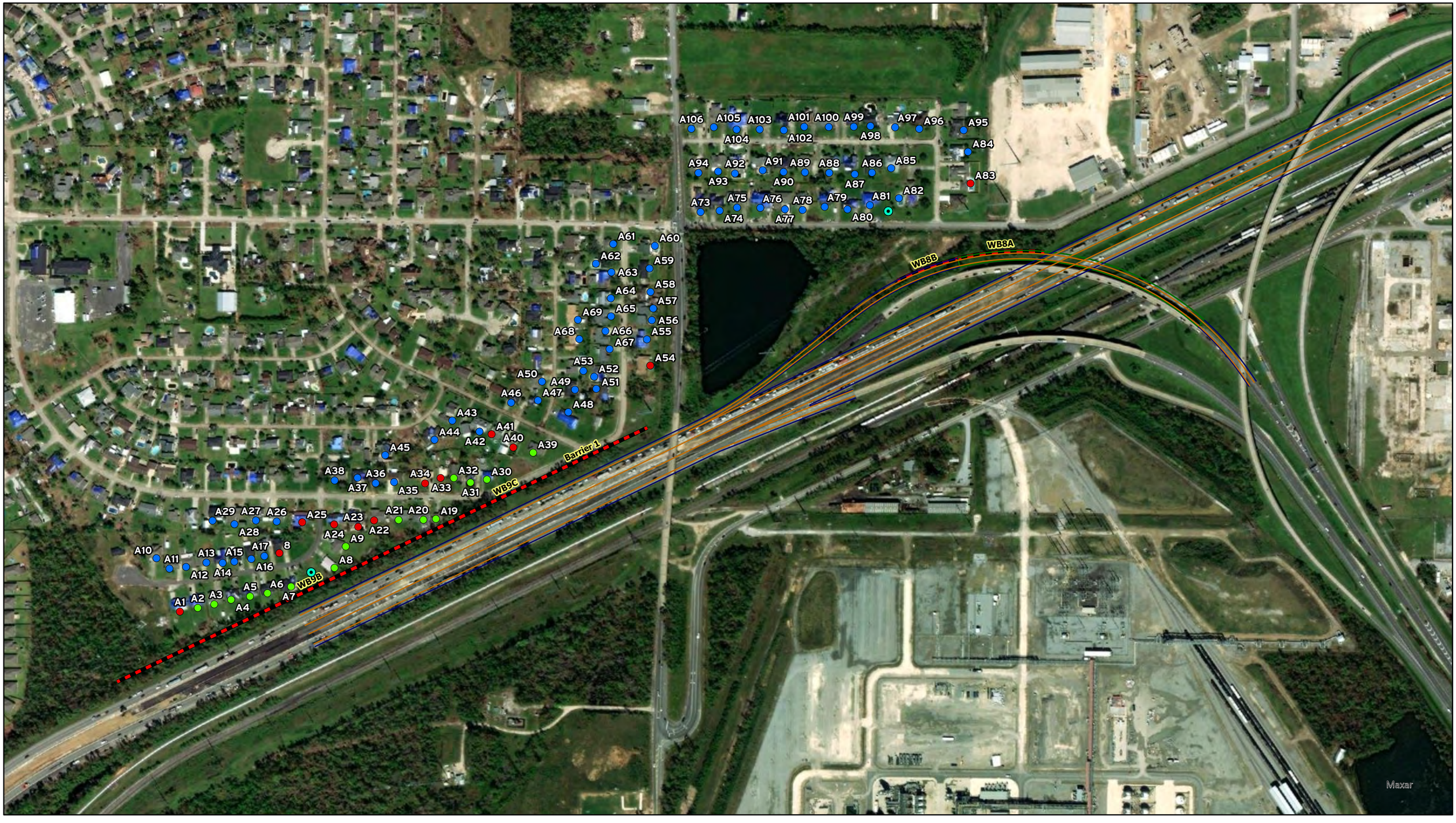
Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 3E

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3



Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 5G

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier

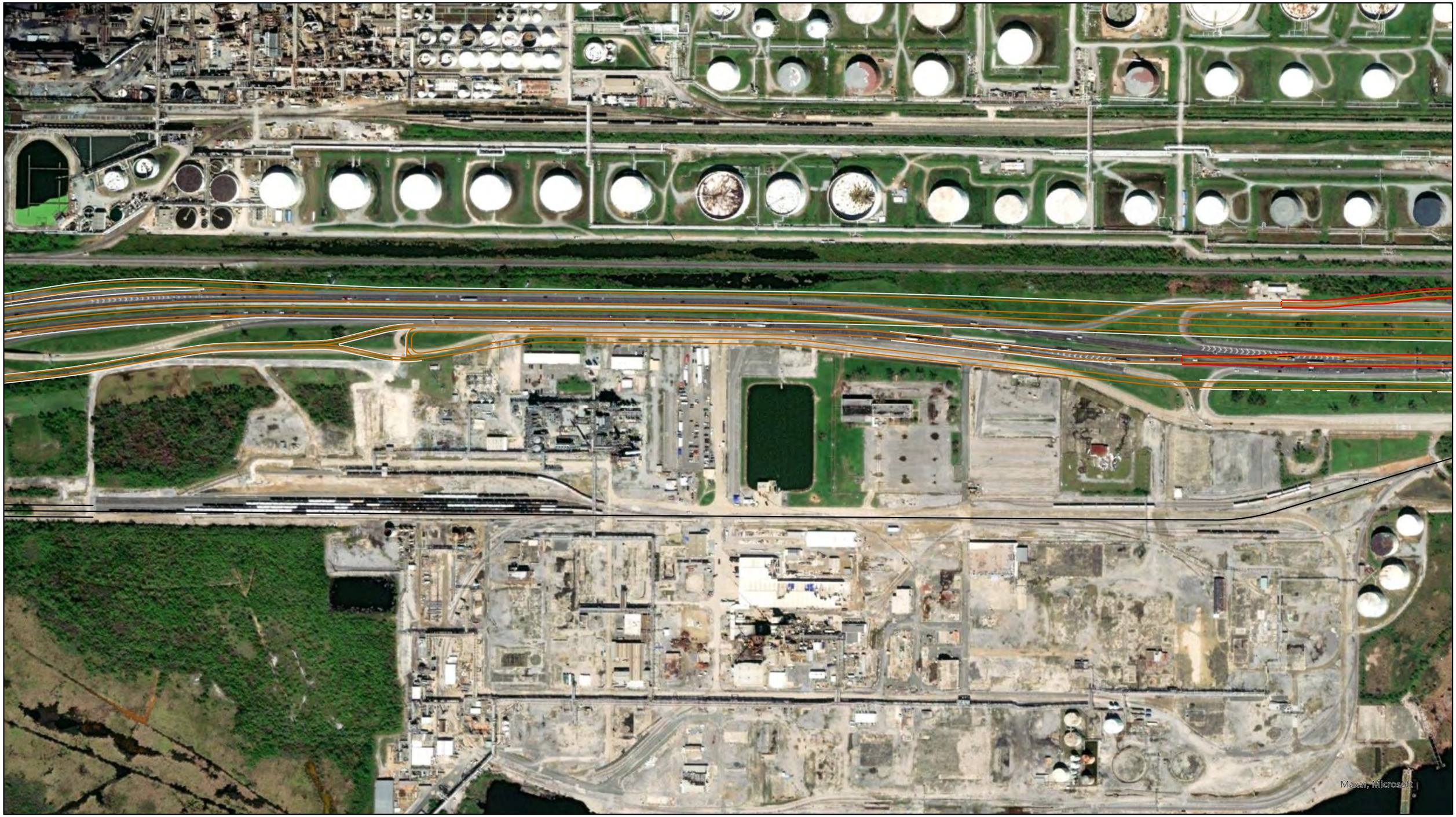
Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 5G

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3



Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad

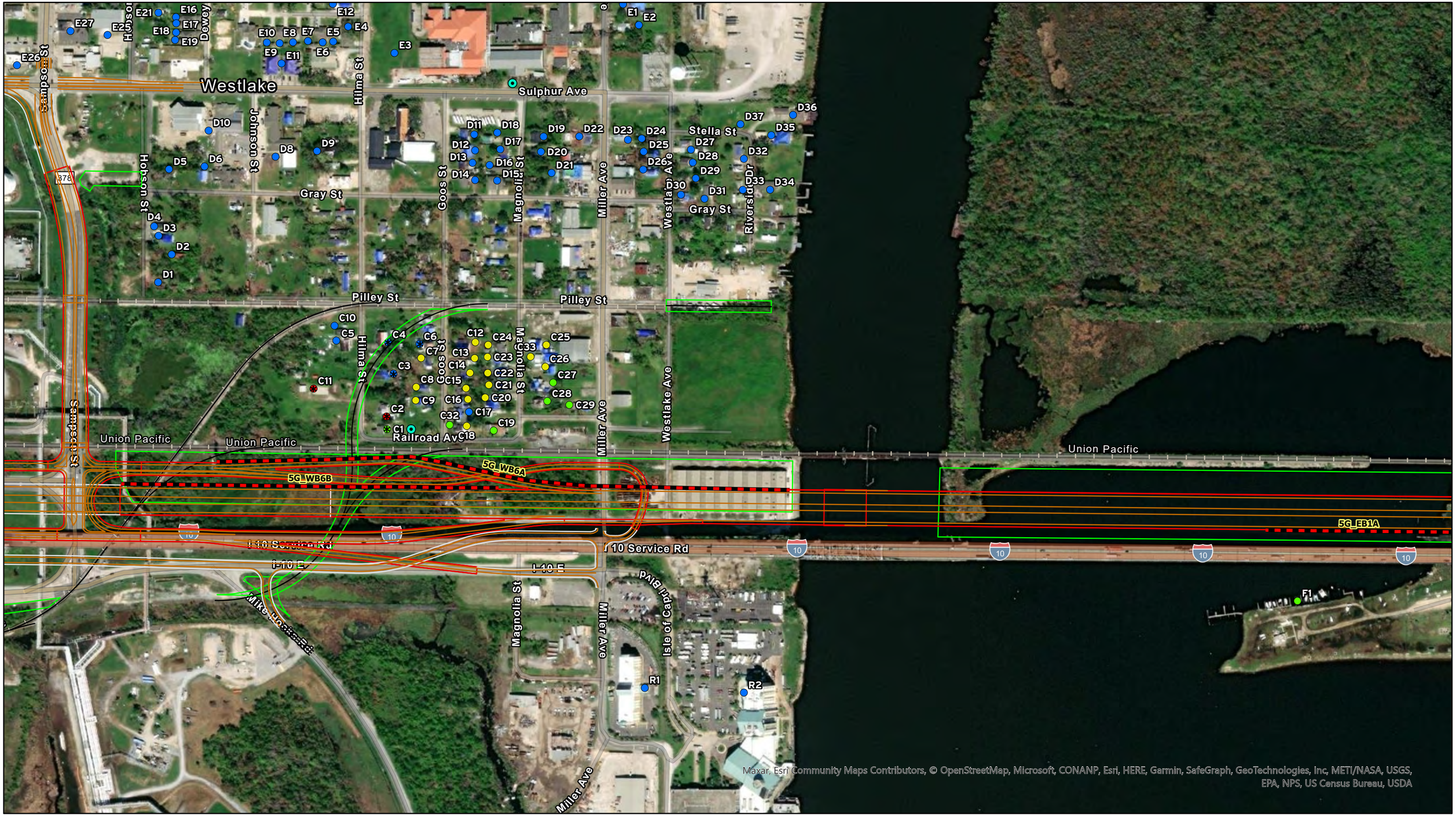
Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 5G

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3



Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge

Note: Benefited / Not Benefited based on analyzed barriers. *=Displacements

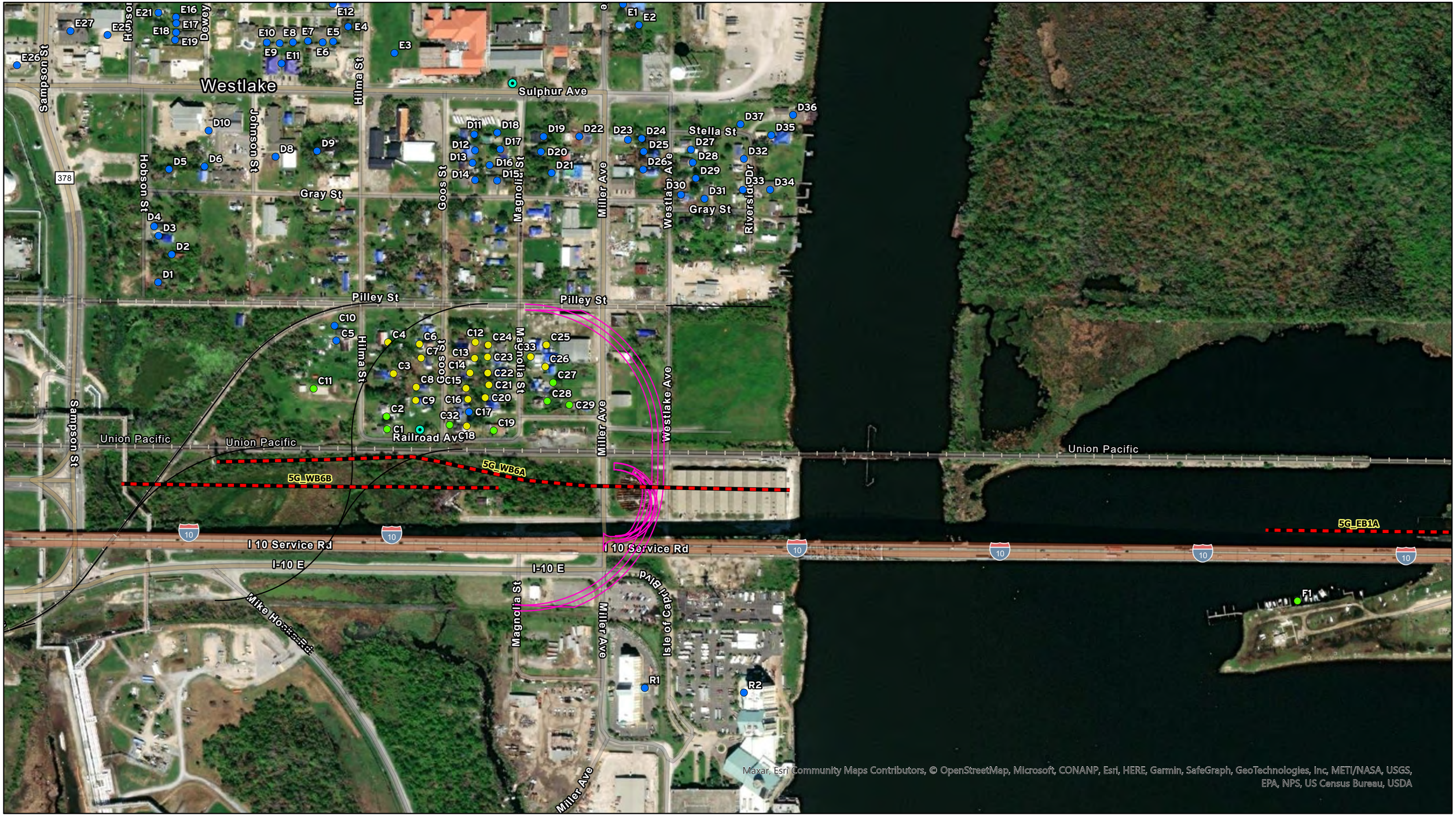
- Not Feasible or Reasonable Barrier
- Railroad
- Rail Spur Relocation Option 1

RECEIVERS - ALTERNATIVE 5G
Rail Spur Relocation Option 1

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3



Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge

Note: Benefited / Not Benefited based on analyzed barriers.

- Not Feasible or Reasonable Barrier
- Railroad
- Rail Spur Relocation Option 2

RECEIVERS - ALTERNATIVE 5G
Rail Spur Relocation Option 2

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge

Note: Benefited / Not Benefited based on analyzed barriers.

- Not Feasible or Reasonable Barrier
- Railroad
- Rail Spur Relocation Option 3 Right of Way

RECEIVERS - ALTERNATIVE 5G
Rail Spur Relocation Option 3

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 5G

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers. * = Displacements

RECEIVERS - ALTERNATIVE 5G

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier
- Feasible and Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers. * = Displacements

RECEIVERS - ALTERNATIVE 5G

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier
- Feasible and Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers. *=Displacements

RECEIVERS - ALTERNATIVE 5G

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier
- Feasible and Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 5G

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
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Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier
- Feasible and Reasonable Barrier

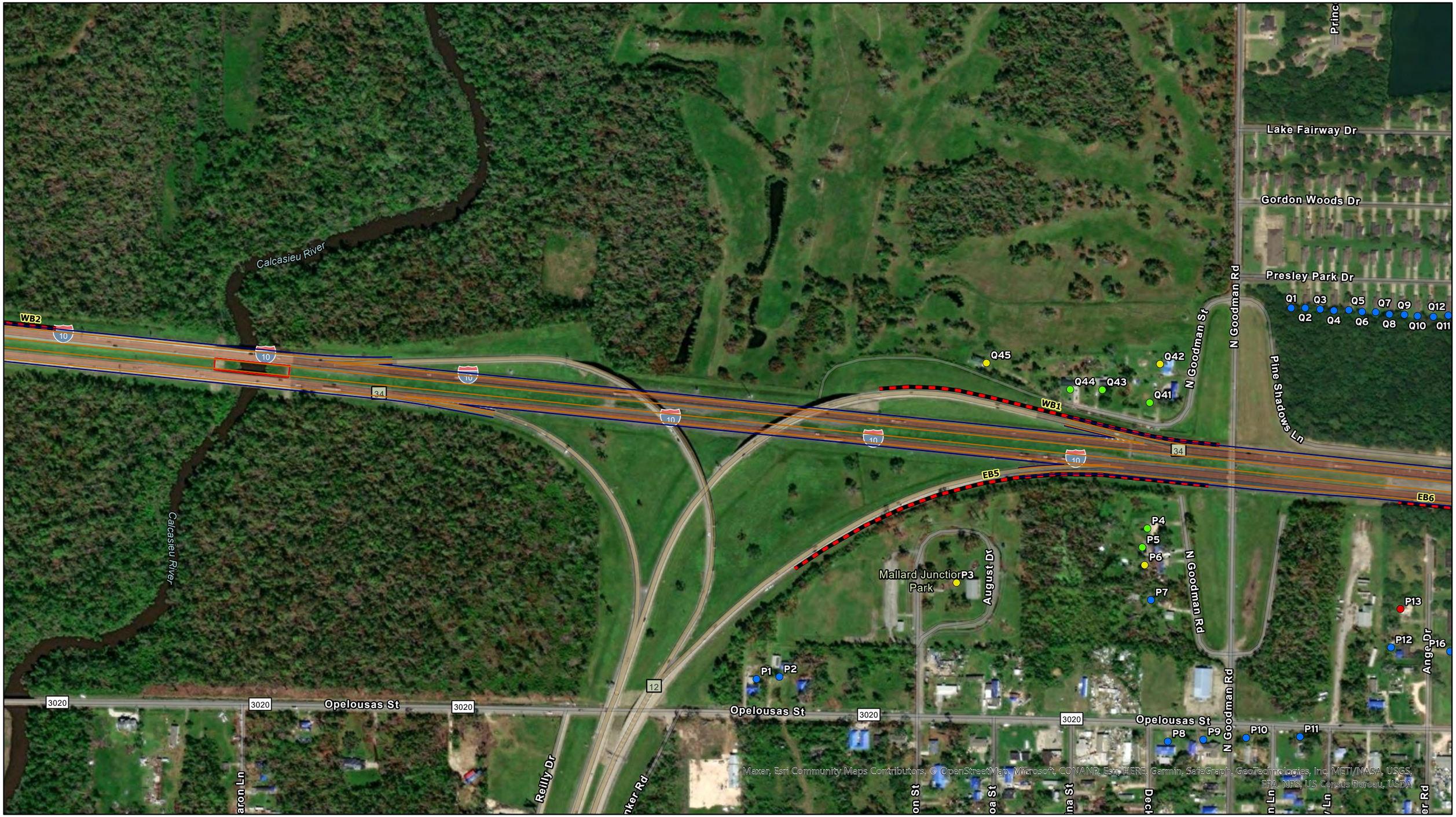
Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 5G

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3



Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier
- Feasible and Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 5G

N

0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

Legend

- Impacted, Benefited
- Impacted, Not Benefited
- Not Impacted, Benefited
- Not Impacted, Not Benefited
- Field Measurement
- Road
- Edge of Paved Shoulder
- Bridge
- Railroad
- Not Feasible or Reasonable Barrier
- Feasible and Reasonable Barrier

Note: Benefited / Not Benefited based on analyzed barriers.

RECEIVERS - ALTERNATIVE 5G

N

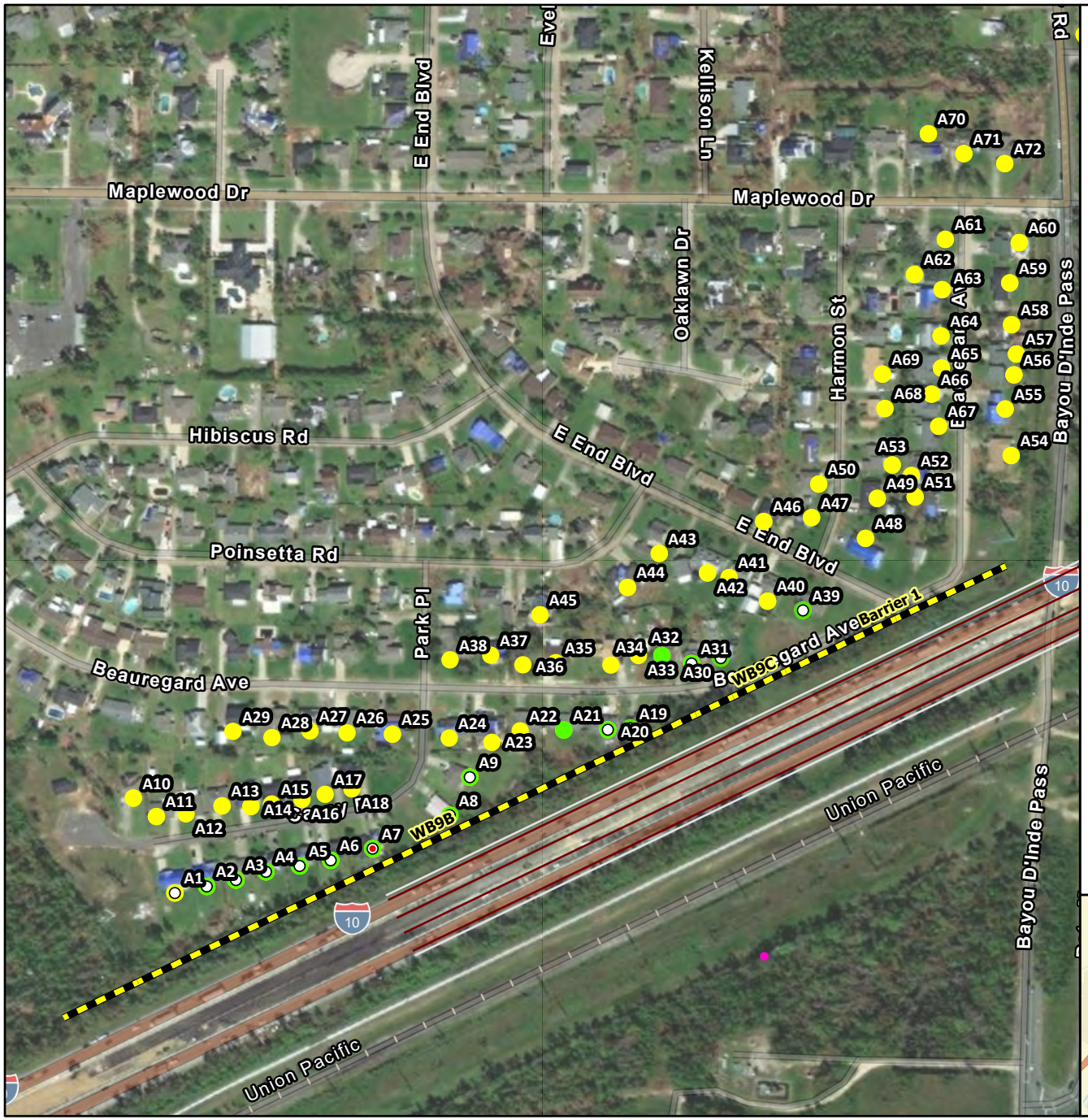
0 250 500 1,000 Feet

I-10 Calcasieu River Bridge Improvements Project
State Project No. H.003931
Noise Technical Report
Attachment 3

I-10 LAKE CHARLES
CALCASIEU RIVER BRIDGE

ATTACHMENT 4

Noise Barrier Summaries and Worksheets



CNE A - All Alternatives

First Row, Impacted: 14

First Row, Impacted, Benefited: 13

% First Row Impacted Benefitted: 93%

Total Benefits: 15

15 x $47,000 per Benefited = $705,000

Total Abatement Cost: $1,777,485

Height: 12 ft: 3,904 sqft x $71 = $277,184
Height: 12 ft: 19,438 sqft x $71 = $1,380,098
Height: 12 ft: 1,693 sqft x $71 = $120,203

Feasible?
YES

Reasonable?
NO

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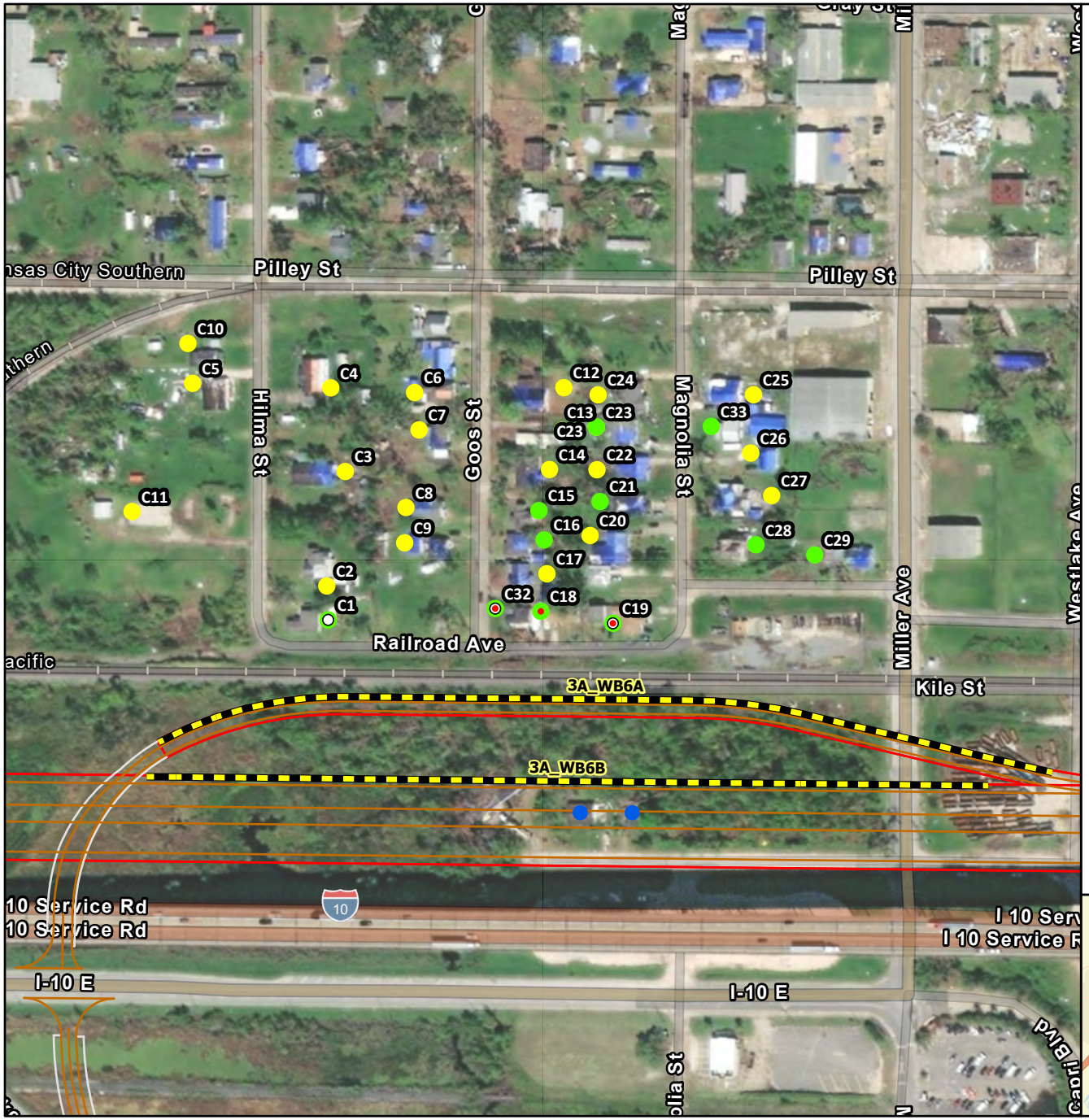
LEGEND

- >8 dBA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barriers
- Roadway
- Edge of Paved Shoulder
- Elevated Structure

N

0 200 400 800 Feet



CNE C - Alternative 3A

First Row, Impacted: 3

First Row, Impacted, Benefited: 3

% First Row Impacted Benefited: 100%

Total Benefits: 11

11 X $47,000 per Benefited = $517,000

Total Abatement Cost: $859,850

Height: 8 ft : 6,425 sqft X $58 = $372,650
Height: 8 ft : 8,400 sqft X $58 = $487,200

Notes:

Feasible?
YES

Reasonable?
NO

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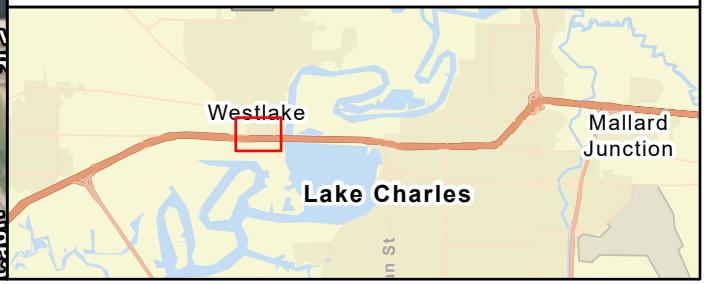
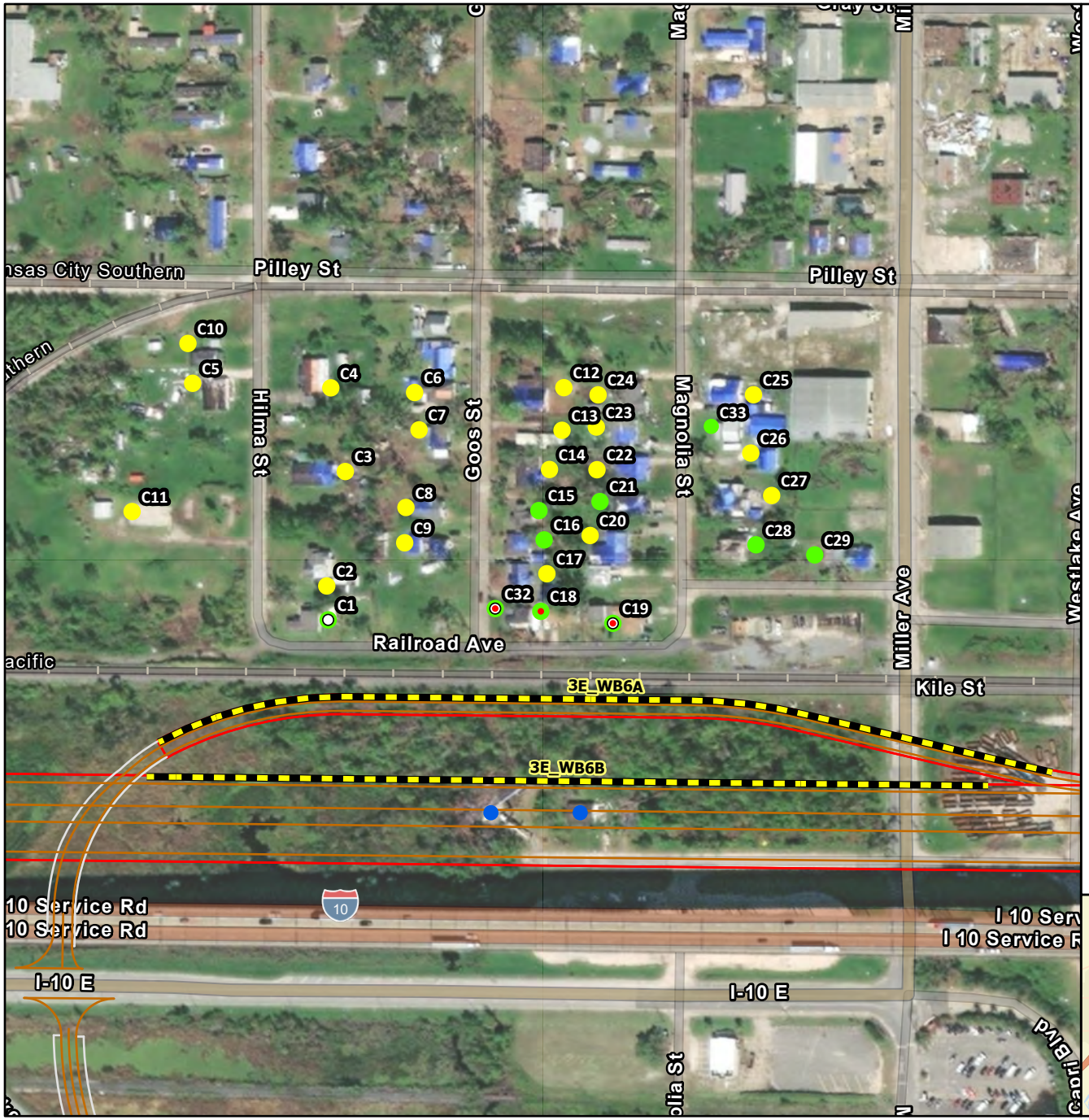


LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure
- Displacements

0 125 250 500 Feet

N



CNE C - Alternative 3E

First Row, Impacted: 3

First Row, Impacted, Benefited: 3

% First Row Impacted Benefited: 100%

Total Benefits: 10

10 X $47,000 per Benefited = $470,000

Total Abatement Cost: $790,018

Height: 8 ft : 4.820 sqft X $58 = $279,560
Height: 8 ft : 8.801 sqft X $58 = $510,458

Feasible?
YES

Reasonable?
NO

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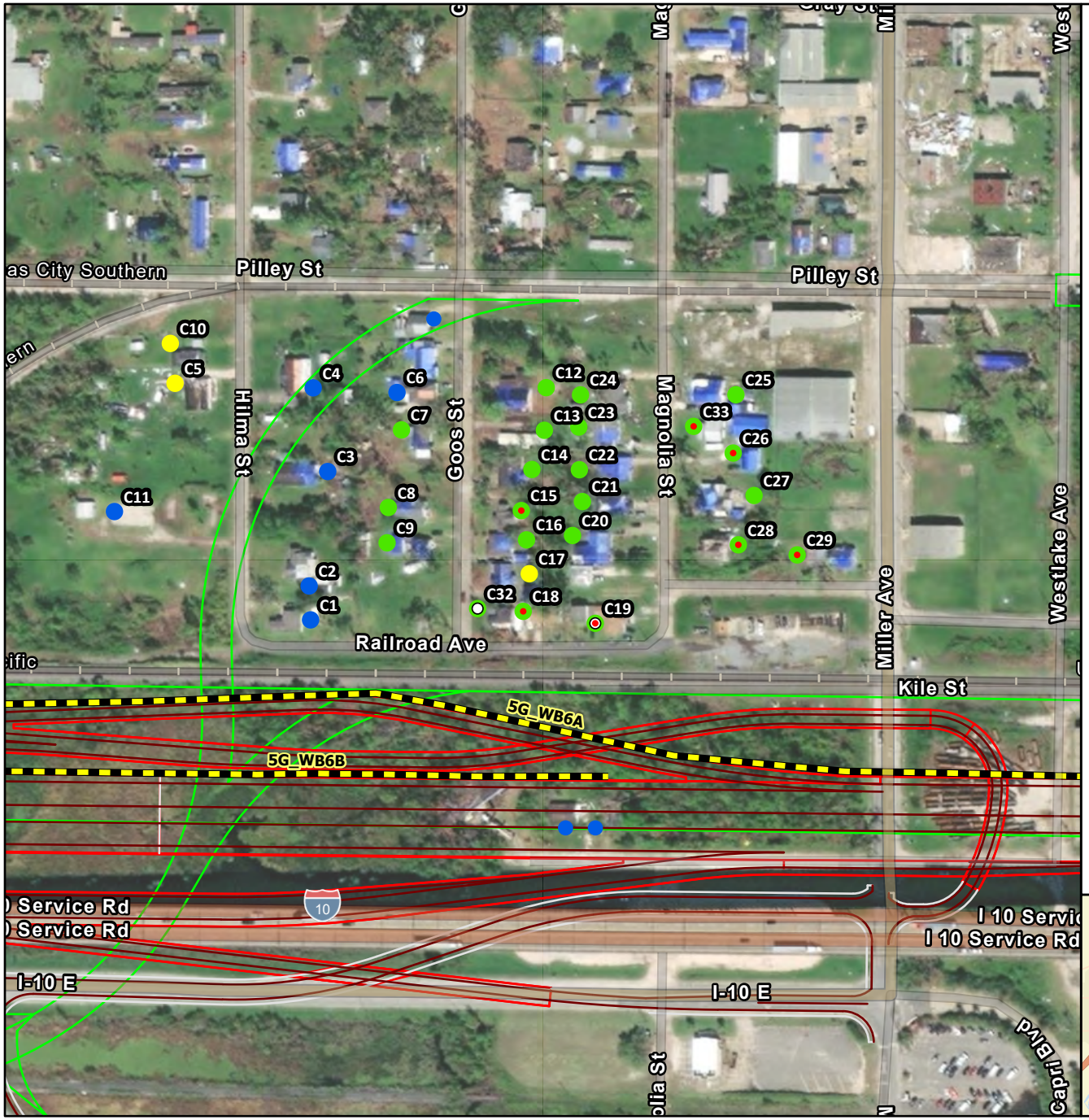
LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure
- Displacements

0 125 250 500 Feet

N



CNE C - Alternative 5G RR1

First Row, Impacted: 2

First Row, Impacted, Benefited: 2

% First Row Impacted Benefited: 100%

Total Benefits: 22

22 X $47,000 per Benefited = $1,034,000

Total Abatement Cost: $2,822,164

Height: 12 ft : 28,284 sqft X $58 = $1,640,472
Height: 12 ft : 20,374 sqft X $58 = $1,181,692

Feasible?
YES

Reasonable?
NO

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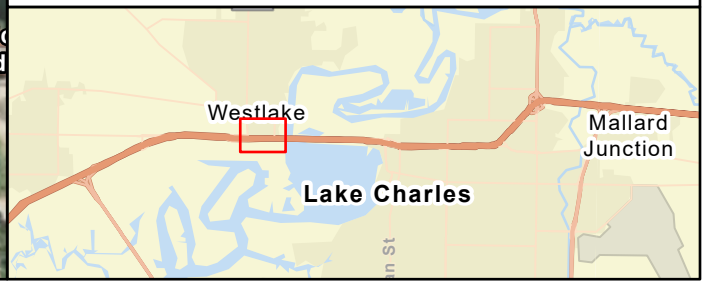
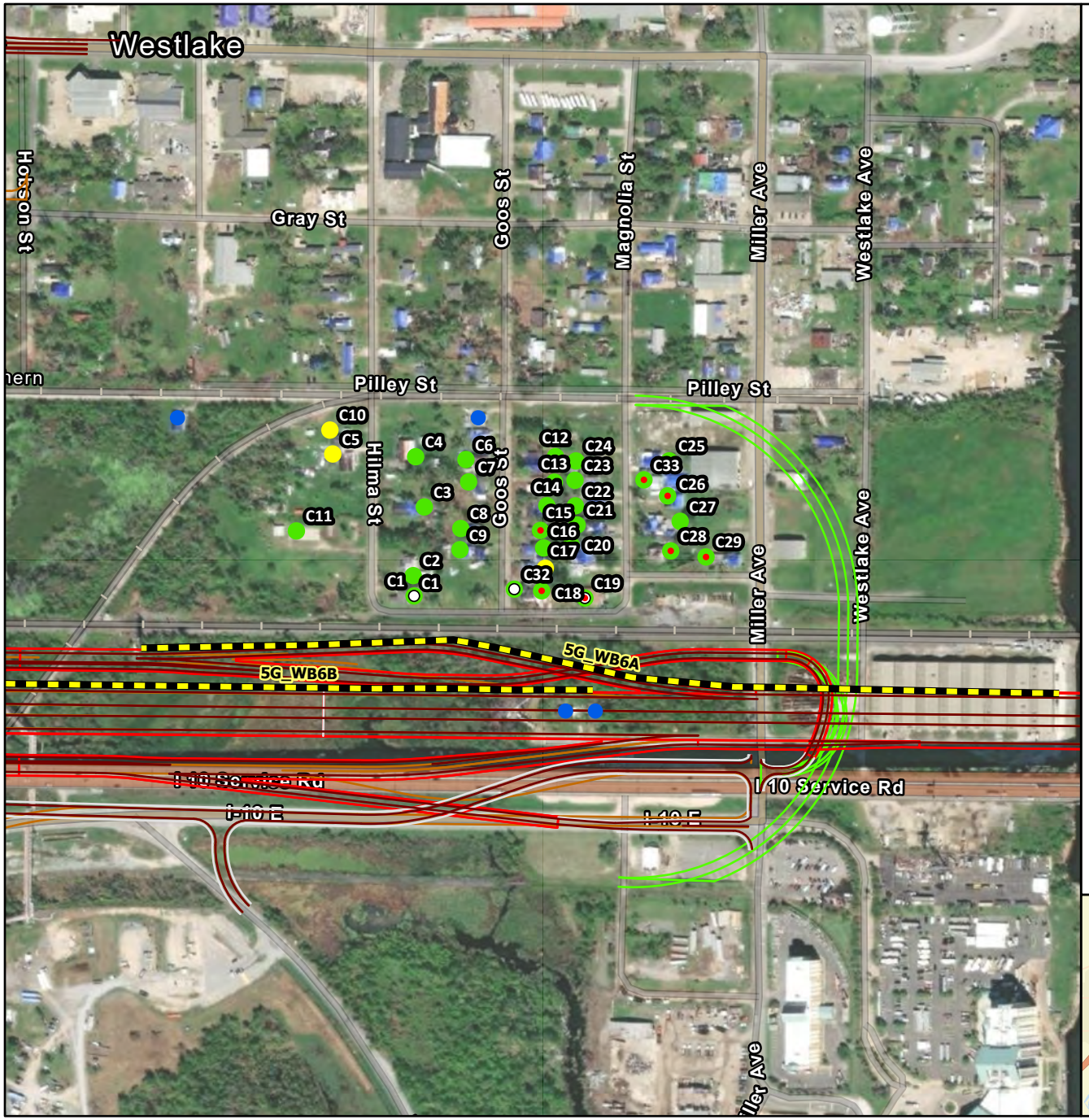


LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure
- Displacements
- Rail Spur Relocation Option1

0 125 250 500 Feet

N



CNE C - Alternative 5G RR2

First Row, Impacted: 3

First Row, Impacted, Benefited: 3

% First Row Impacted Benefited: 100%

Total Benefits: 28

28 X $47,000 per Benefited = $1,316,000

Total Abatement Cost: $2,822,164

Height: 12 ft : 28,284 sqft X $58 = $1,640,472
Height: 12 ft : 20,374 sqft X $58 = $1,181,692

Feasible?
YES

Reasonable?
NO

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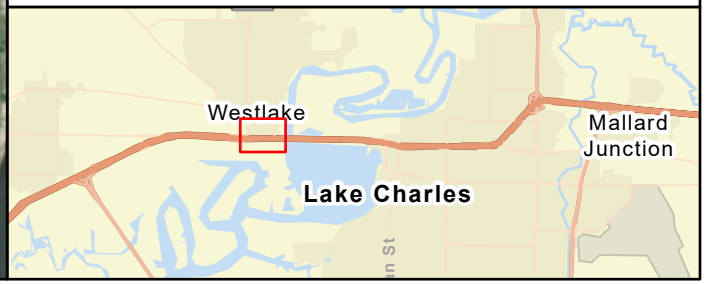
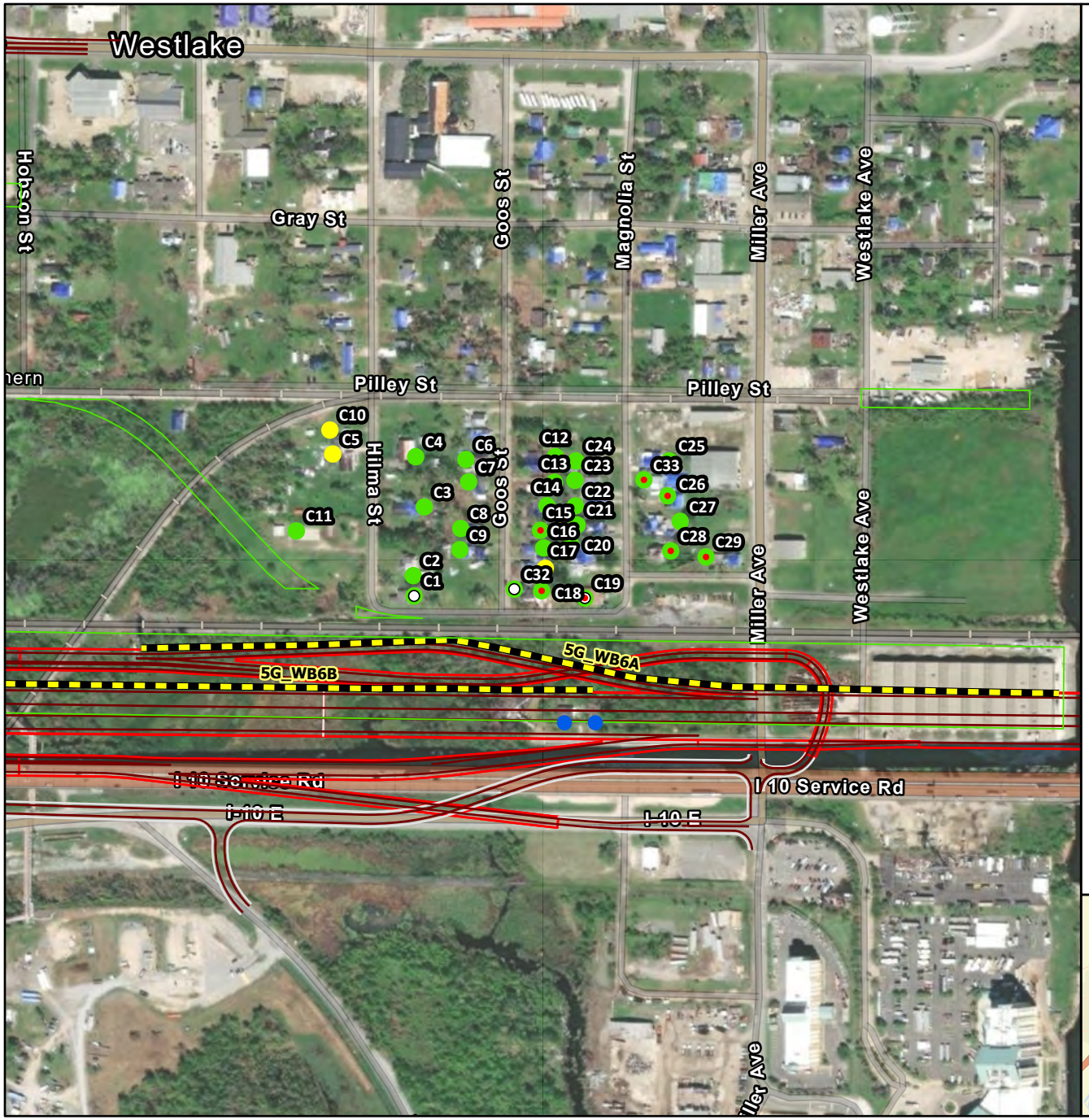


LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure
- Displacements
- Rail Spur Relocation Option 2

0 200 400 800 Feet

N



CNE C - Alternative 5G RR3

First Row, Impacted: 3

First Row, Impacted, Benefited: 3

% First Row Impacted Benefited: 100%

Total Benefits: 28

28 X $47,000 per Benefited = $1,316,000

Total Abatement Cost: $2,822,164

Height: 12 ft : 28,284 sqft X $58 = $1,640,472
Height: 12 ft : 20,374 sqft X $58 = $1,181,692

Feasible?
YES

Reasonable?
NO

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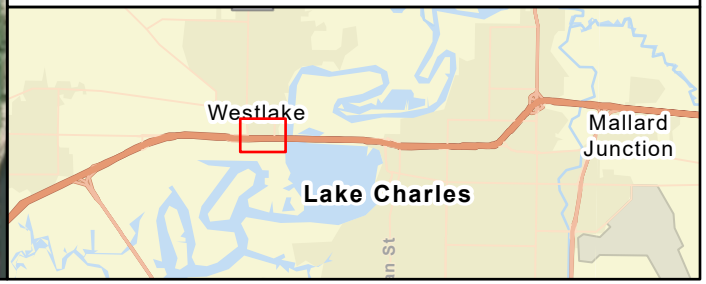

LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure
- Displacements
- Rail Spur Relocation Option 3

0 200 400 800 Feet

N

CNE F - Alternative 3A

First Row, Impacted: 2

First Row, Impacted, Benefited: 2

% First Row Impacted Benefited: 100%

Total Benefits: 2

2 X $47,000 per Benefited = $94,000

Total Abatement Cost: $782,304
Height: 10 ft : 13,488 sqft X $58 = $782,304

Feasible?
YES

Reasonable?
NO

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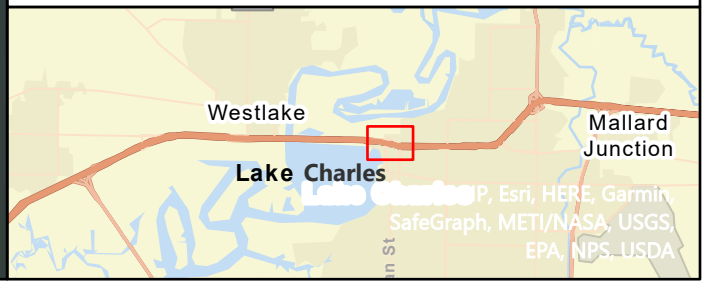


LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure

0 250 500 1,000 Feet

N

CNE F - Alternative 3E

First Row, Impacted: 5

First Row, Impacted, Benefited: 4

% First Row Impacted Benefited: 80%

Total Benefits: 6

6 X $47,000 per Benefited = $282,000

Total Abatement Cost: $6,088,686

Height: 10 ft : 23,543 sqft X $58 = $1,365,494
Height: 14 ft : 18,232 sqft X $71 = $1,294,472
Height: 12 ft : 14,587 sqft X $71 = $1,035,677
Height: 12 ft : 14,205 sqft X $58 = $823,890
Height: 14 ft : 5,651 sqft X $71 = $401,221
Height: 12 ft : 10,952 sqft X $71 = $777,592
Height: 12 ft : 6,730 sqft X $58 = $390,340

Feasible?
YES

Reasonable?
NO

LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure

0 475 950 1,900 Feet

N

CNE F - Alternative 5G

First Row, Impacted: 2

First Row, Impacted, Benefited: 2

% First Row Impacted Benefited:100%

Total Benefits: 5

5 X $47,000 per Benefited = $235,000

Total Abatement Cost: $2,699,449

Height: 14 ft : 21,055 sqft X $71 = $1,494,905
Height: 10 ft : 20,768 sqft X $58 = $1,204,544

Note: Barrier optimized to exclude 1 first row impacted receptor where benefit would be unreasonable.

Feasible?
YES

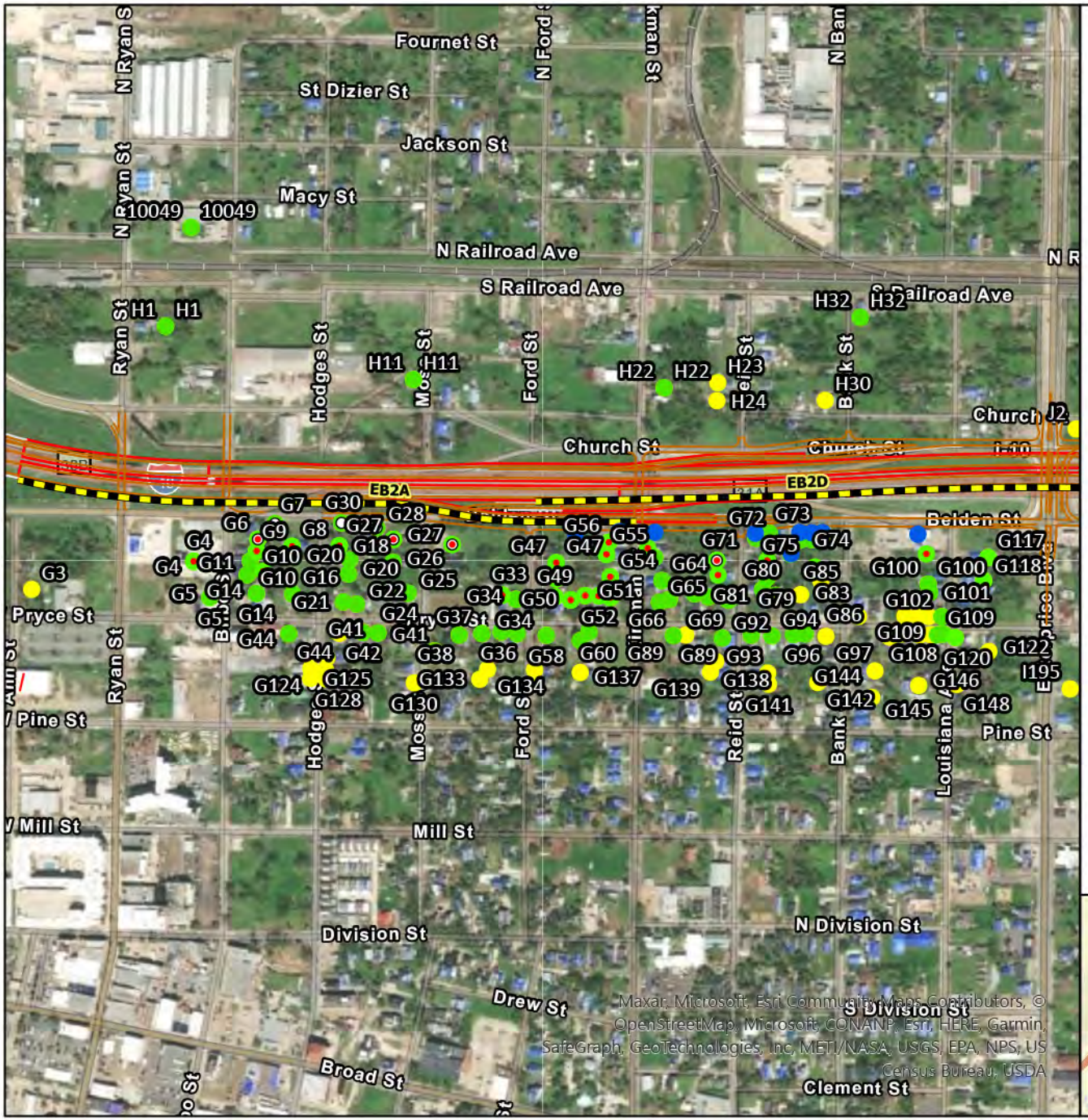
Reasonable?
NO

LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure

0 475 950 1,900 Feet

N



CNE G - All Alternatives

First Row, Impacted: 10

First Row, Impacted, Benefited: 10

% First Row Impacted Benefited:100%

Total Benefits: 90

90 X $47,000 per Benefited = $4,230,000

Total Abatement Cost: $4,043,122

Height: 12 ft : 17,613 sqft X $58 = $1,021,554
Height: 12 ft : 18,334 sqft X $58 = $1,063,372
Height: 12 ft : 24,218 sqft X $58 = $1,404,644
Height: 12 ft : 9,544 sqft X $58 = $553,552

Feasible?
YES

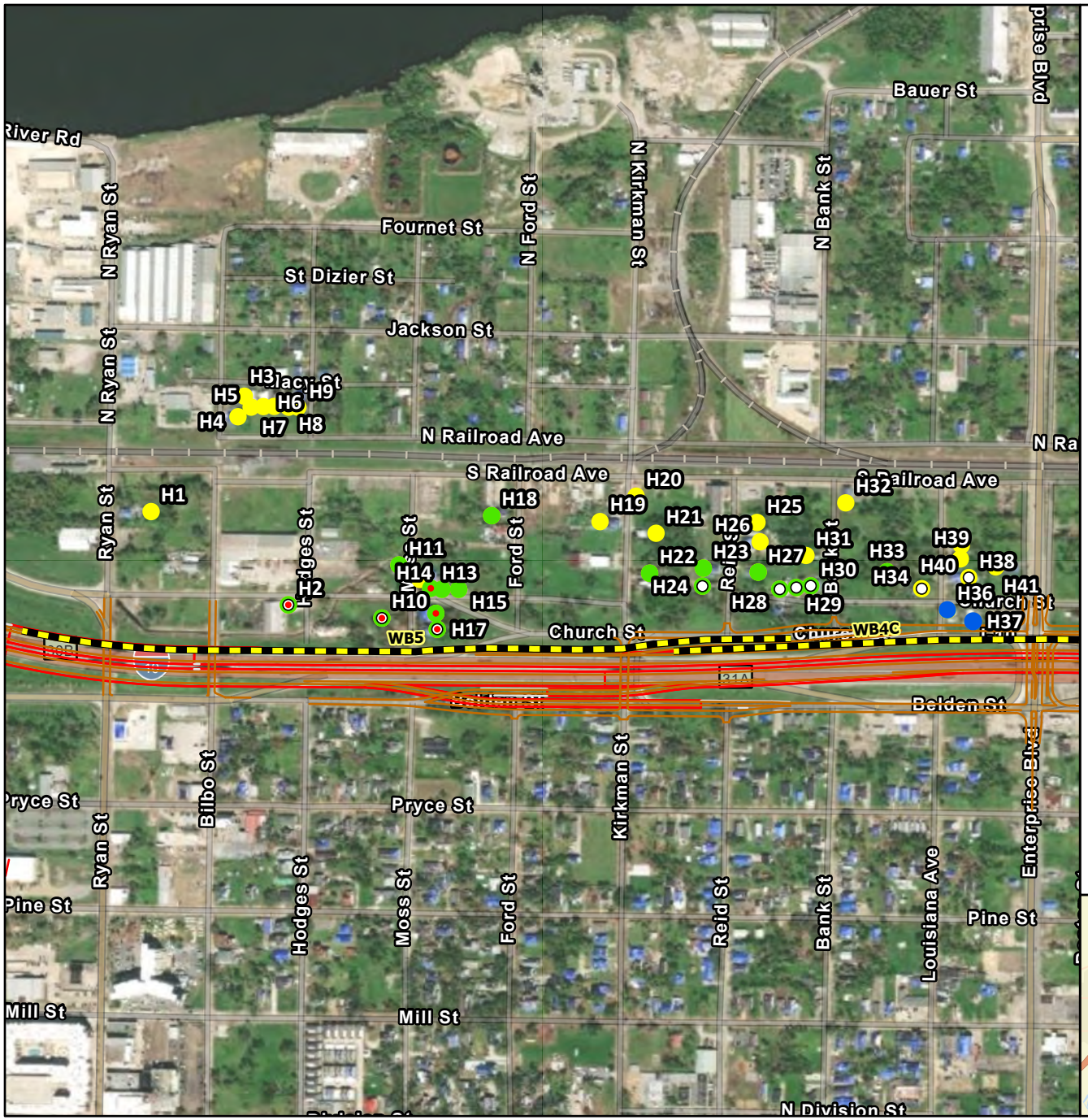
Reasonable?
YES

LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure
- Displacements

0 200 400 800 Feet

N



CNE H - All Alternatives

First Row, Impacted: 10

First Row, Impacted, Benefited: 8

% First Row Impacted Benefited: 80%

Total Benefits: 20

20 X $47,000 per Benefited = $940,000

Total Abatement Cost: $2,668,754

Height: 8 ft : 32,520 sqft X $58 = $1,886,160
Height: 10 ft : 13,493 sqft X $58 = $782,594

Feasible?
YES

Reasonable?
NO

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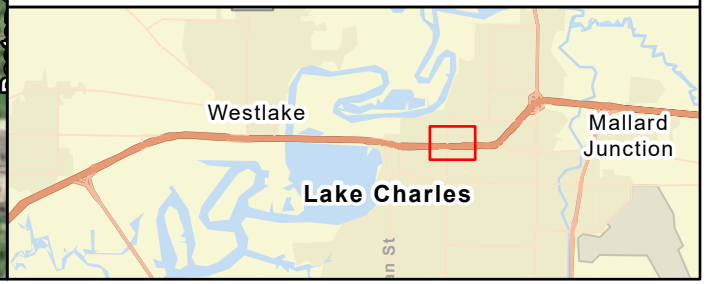
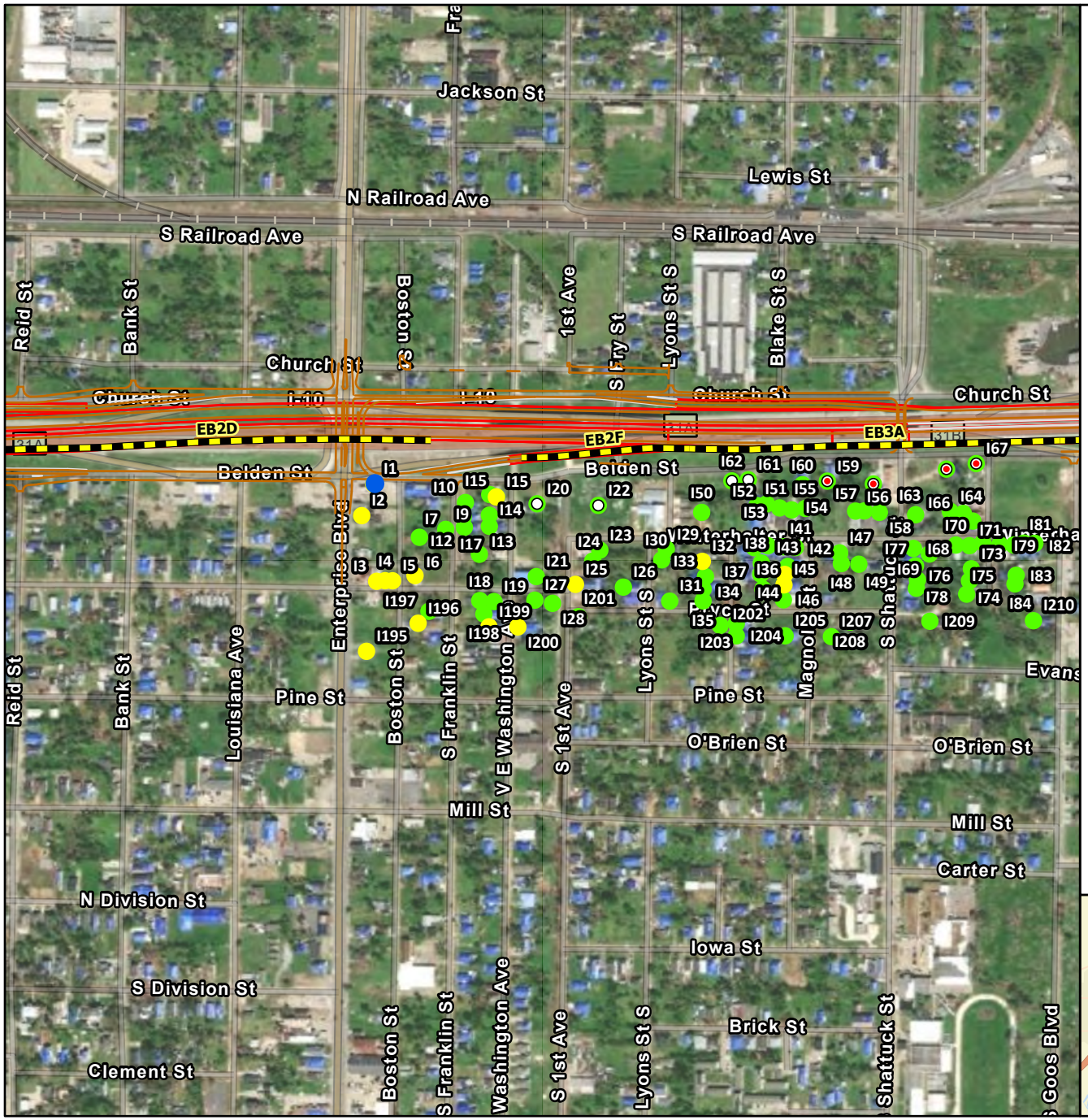


LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure
- Displacements

0 250 500 1,000 Feet

N



CNE I1 - All Alternatives

First Row, Impacted: 8

First Row, Impacted, Benefited: 8

% First Row Impacted Benefited:100%

Total Benefits: 88

88 X $47,000 per Benefited = $4,136,000

Total Abatement Cost: $3,679,435

Height: 14 ft : 26,487 sqft X $58 = $1,536,246
2,135 sqft X $71 = $151,585
Height: 14 ft : 12,581 sqft X $58 = $729,698
Height: 14 ft : 21,757 sqft X $58 = $1,261,906

Feasible?
YES

Reasonable?
YES

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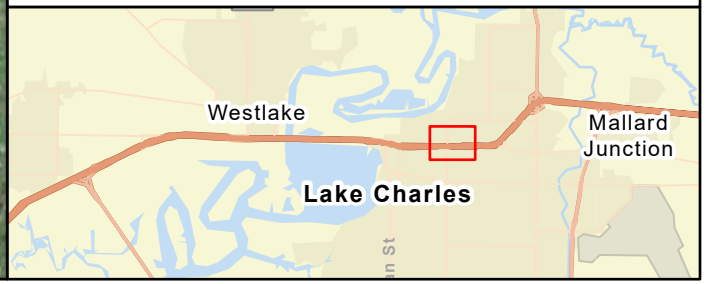
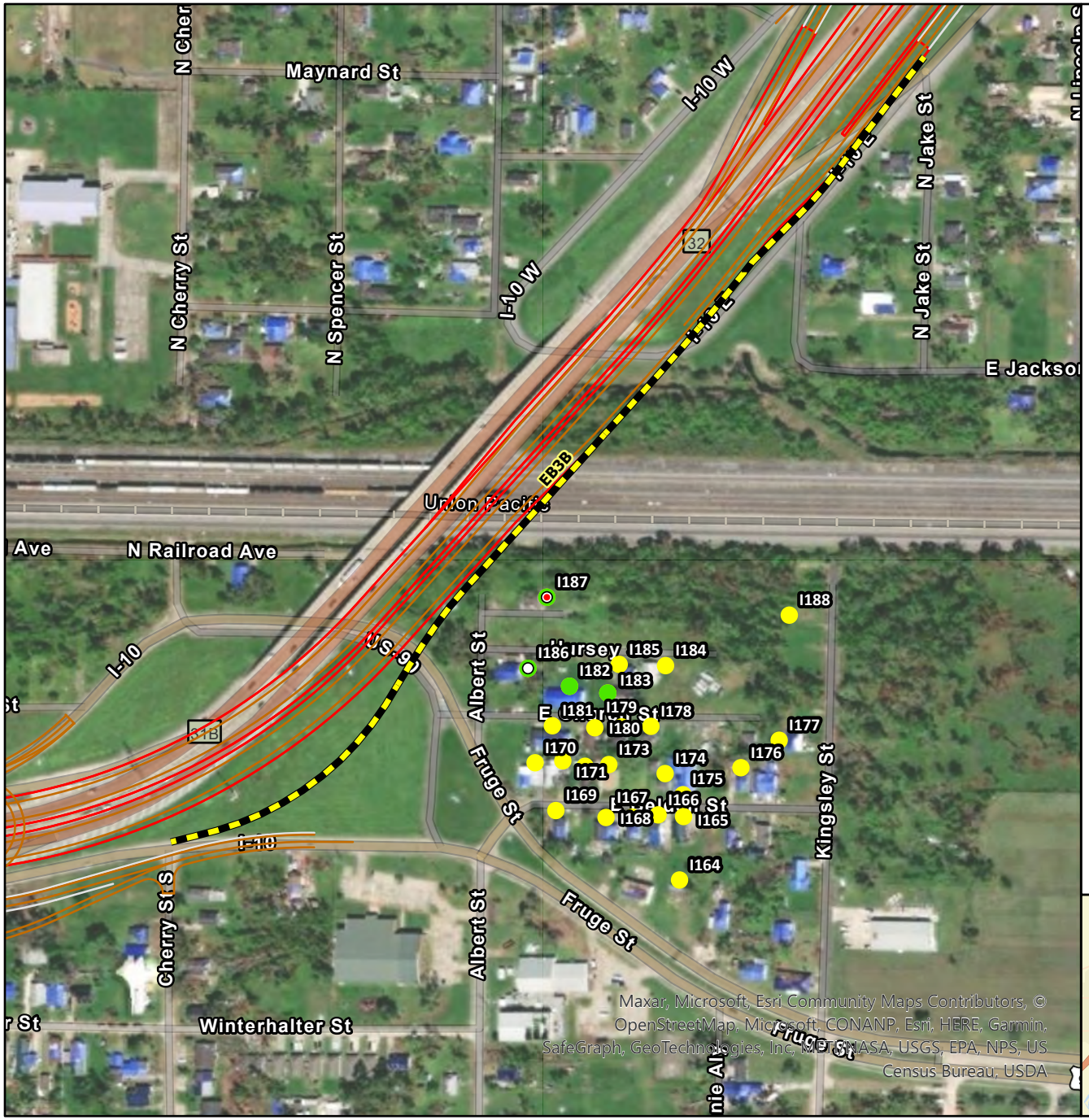


LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure
- Displacements

0 250 500 1,000 Feet

N



CNE I2 - All Alternatives

First Row, Impacted: 2

First Row, Impacted, Benefited: 2

% First Row Impacted Benefited:100%

Total Benefits: 4

4 X $47,000 per Benefited = $188,000

Total Abatement Cost: $484,648

Height: 8 ft : 8,356 sqft X $58 = $484,648

Feasible?
YES

Reasonable?
NO

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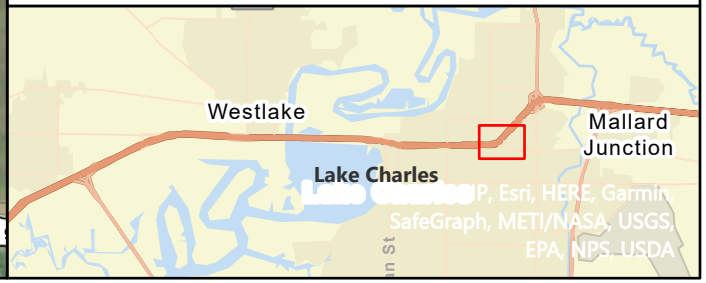
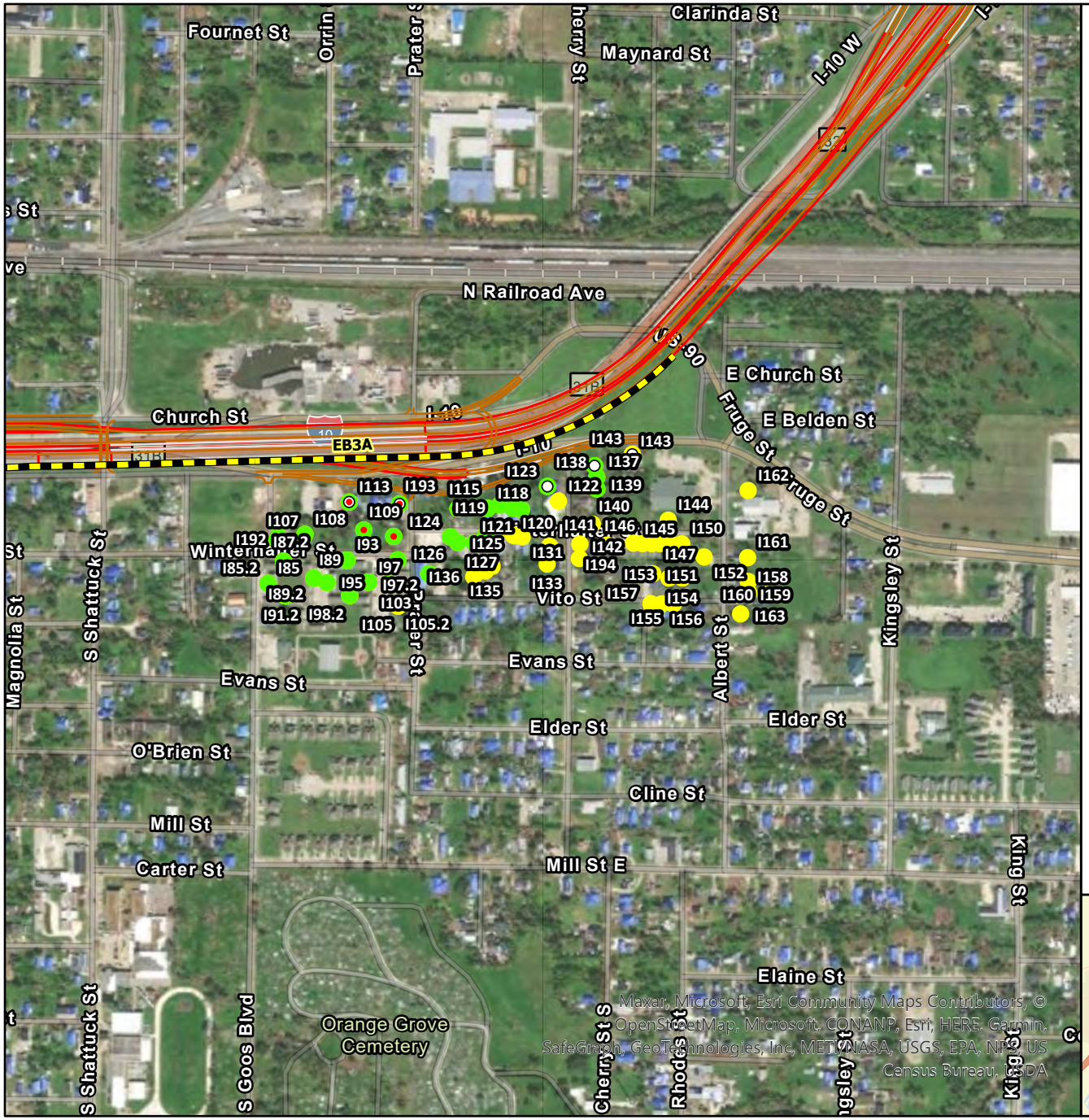


LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure

0 150 300 600 Feet

N



CNE I3 - All Alternatives

First Row, Impacted: 6

First Row, Impacted, Benefited: 5

% First Row Impacted Benefited: 83%

Total Benefits: 78

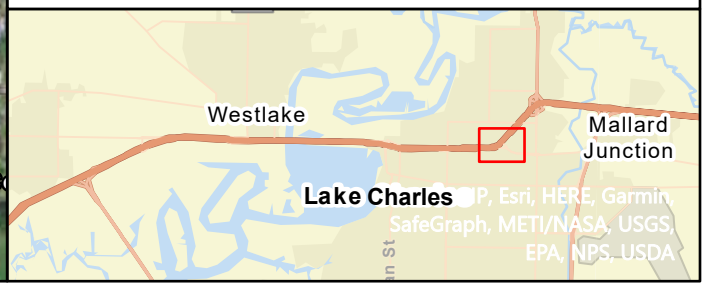
78 X $47,000 per Benefited = $3,666,000

Total Abatement Cost: $2,188,978

Height: 10 ft : 16,628 sqft X $58 = $964,424
Height: 12 ft : 21,113 sqft X $58 = $1,224,554

Feasible?
YES

Reasonable?
YES

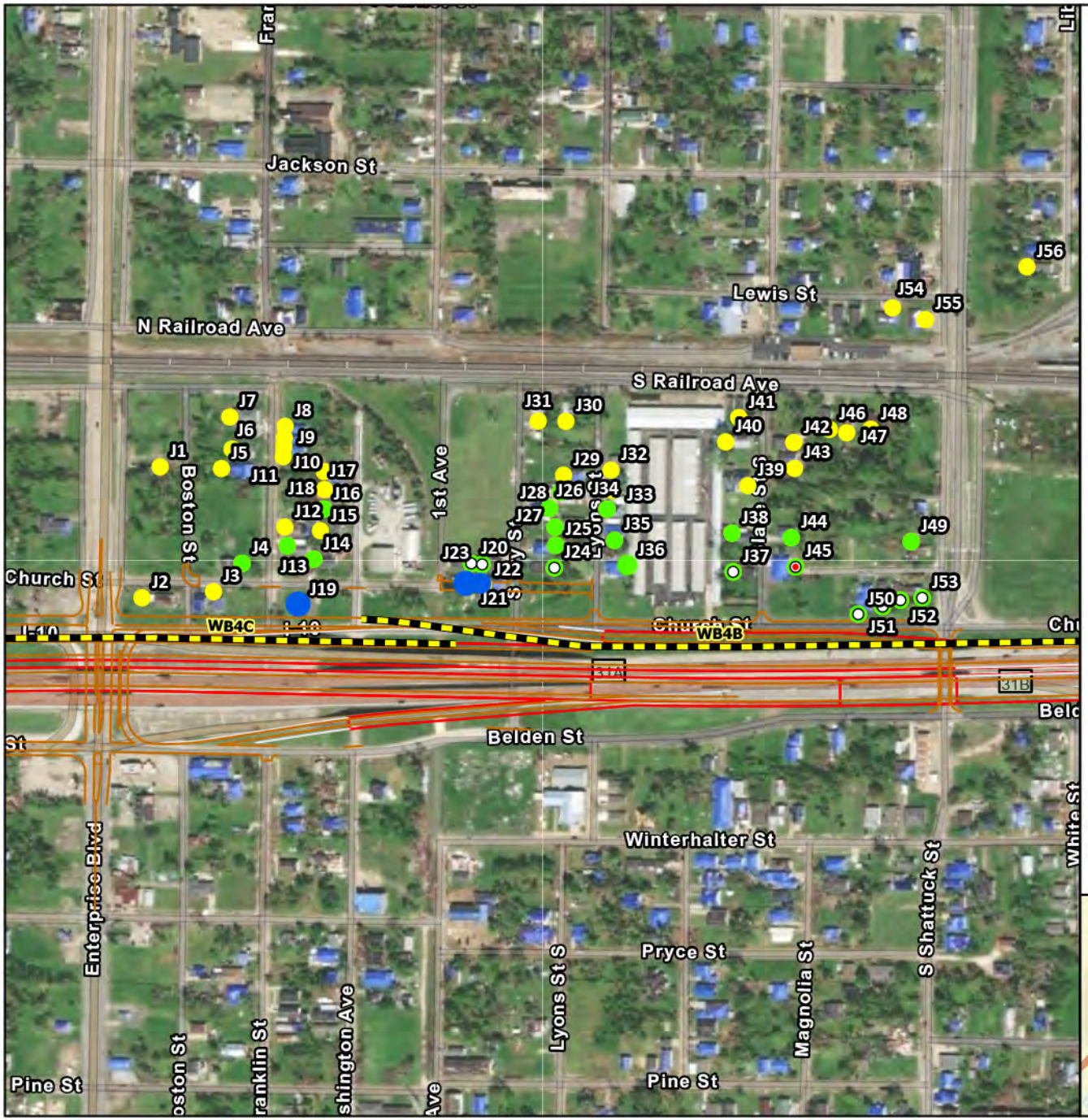


LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure
- Displacements

0 250 500 1,000 Feet

N



CNE J - All Alternatives

First Row, Impacted: 9

First Row, Impacted, Benefited: 9

% First Row Impacted Benefited:100%

Total Benefits: 23

23 X $47,000 per Benefited = $1,081,000

Total Abatement Cost: $1,497,618

Height: 8 ft : 15,889 sqft X $58 = $921,562
Height: 10 ft : 9,932 sqft X $58 = $576,056

Feasible?
YES

Reasonable?
NO

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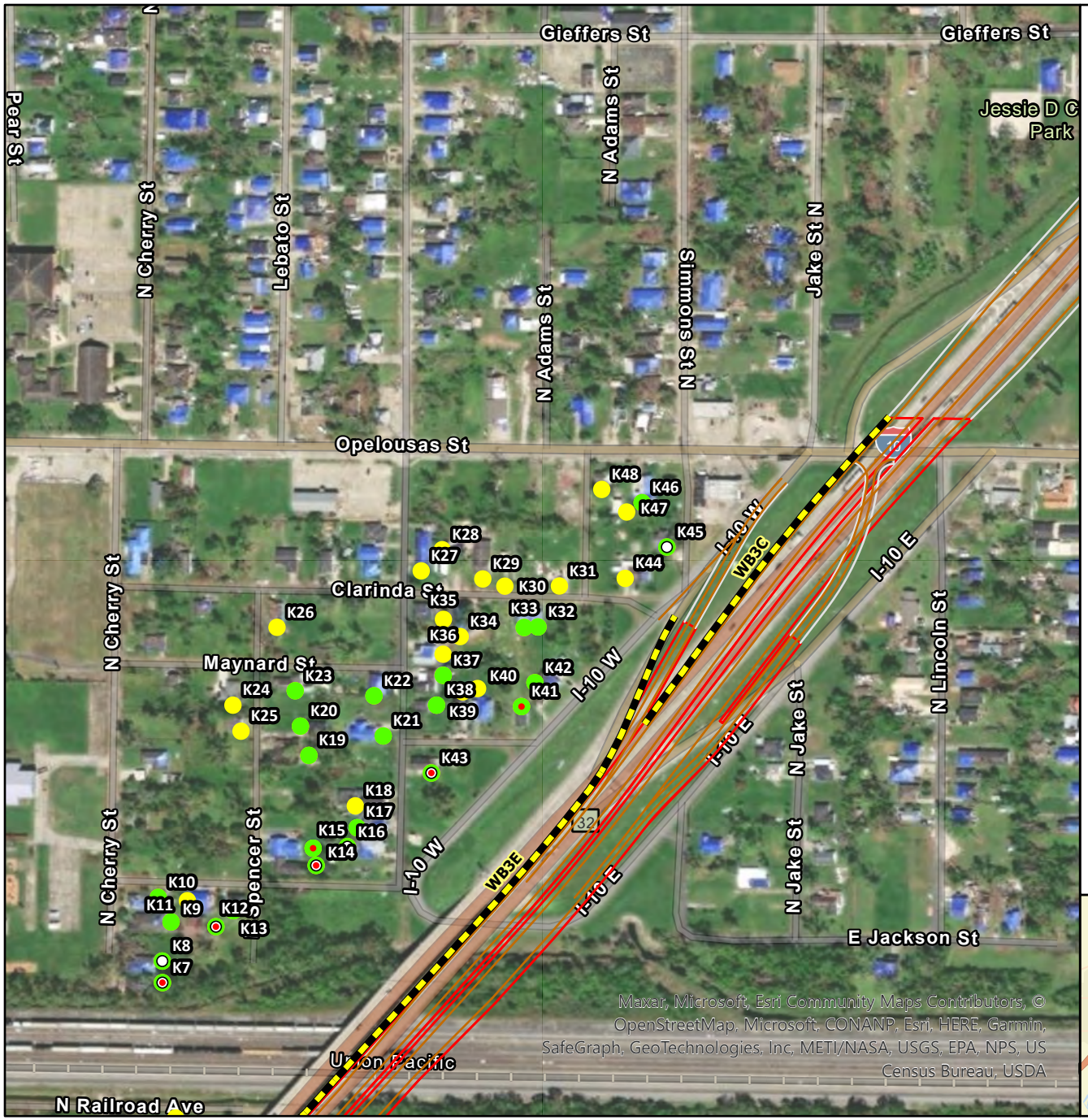
LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure
- Displacements

0 200 400 800 Feet

N



CNE K - All Alternatives

First Row, Impacted: 8

First Row, Impacted, Benefited: 8

% First Row Impacted Benefited:100%

Total Benefits: 24

24 X $47,000 per Benefited = $1,128,000

Total Abatement Cost: $1,778,744

Height: 14 ft : 11,174 sqft X $58 = $648,092
Height: 10 ft : 2,234 sqft X $58 = $129,572
Height: 10 ft : 3,057 sqft X $58 = $177,306
Height: 12 ft : 7,067 sqft X $58 = $409,886
Height: 10 ft : 7,136 sqft X $58 = $413,888

Feasible?
YES

Reasonable?
NO

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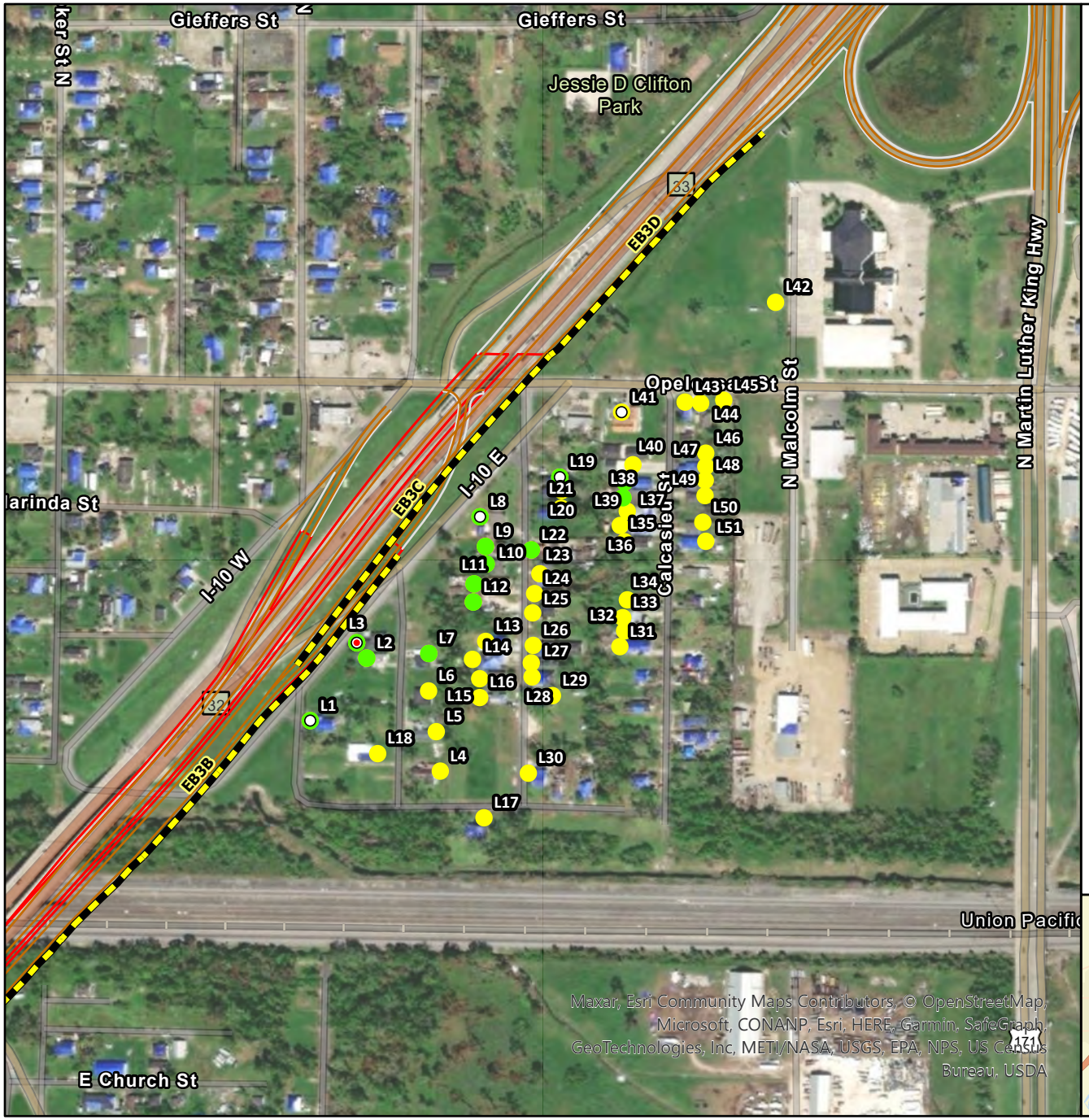
LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure

0 150 300 600 Feet

N



CNE L - All Alternatives

First Row, Impacted: 5

First Row, Impacted, Benefited: 4

% First Row Impacted Benefited: 80%

Total Benefits: 13

13 X $47,000 per Benefited = $611,000

Total Abatement Cost: $1,441,936

Height: 10 ft : 11,152 sqft X $58 = $646,816
Height: 8 ft : 9,542 sqft X $58 = $553,436
Height: 8 ft : 3,404 sqft X $71 = $241,684

Feasible?
YES

Reasonable?
NO

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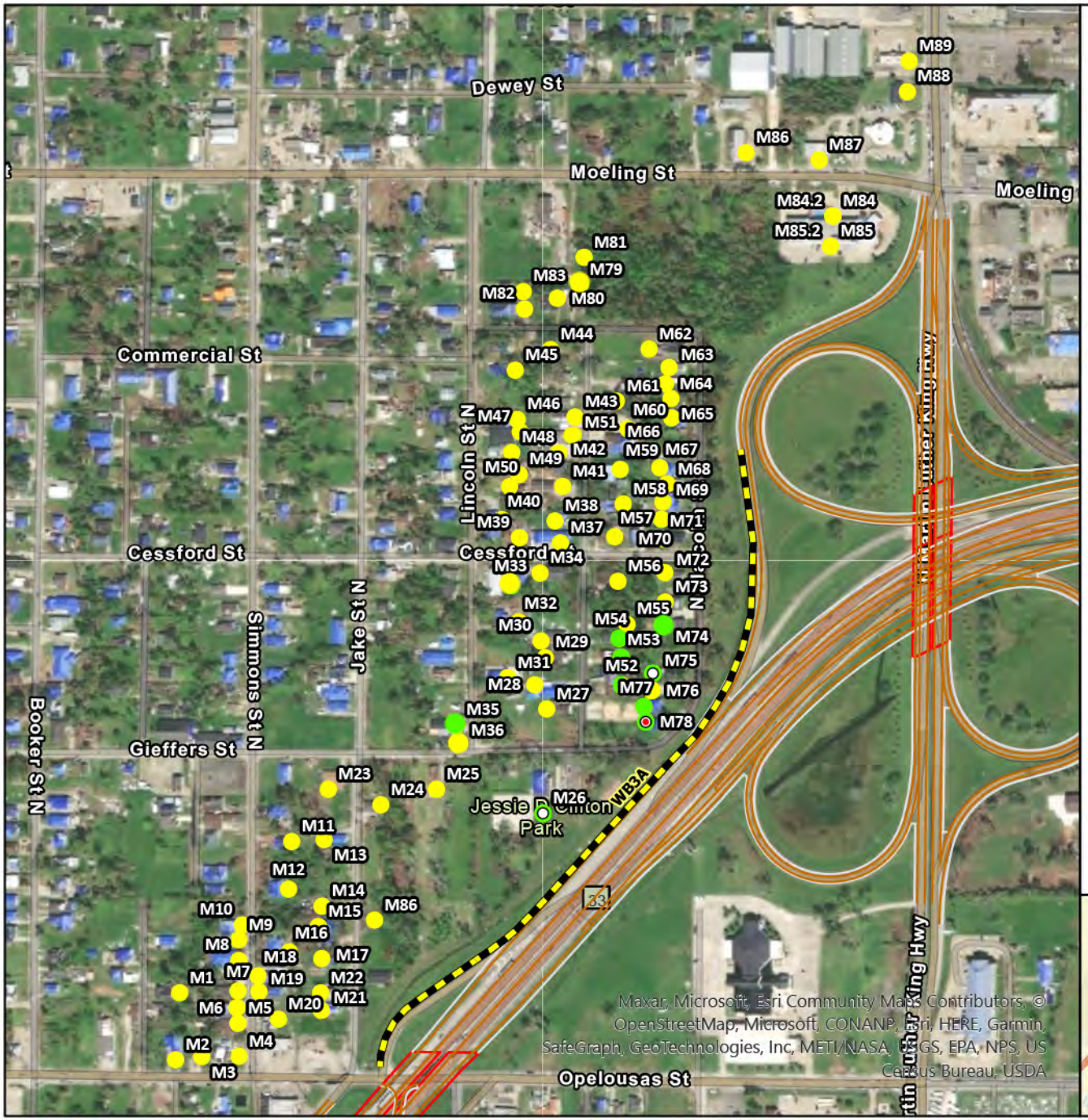
LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure

0 175 350 700 Feet

N



CNE M - All Alternatives

First Row, Impacted: 3

First Row, Impacted, Benefited: 3

% First Row Impacted Benefited: 100%

Total Benefits: 9

9 X $47,000 per Benefited = $423,000

Total Abatement Cost: $1,875,181

Height: 22 ft : 26,411 sqft X $71 = $1,875,181

Feasible?
YES

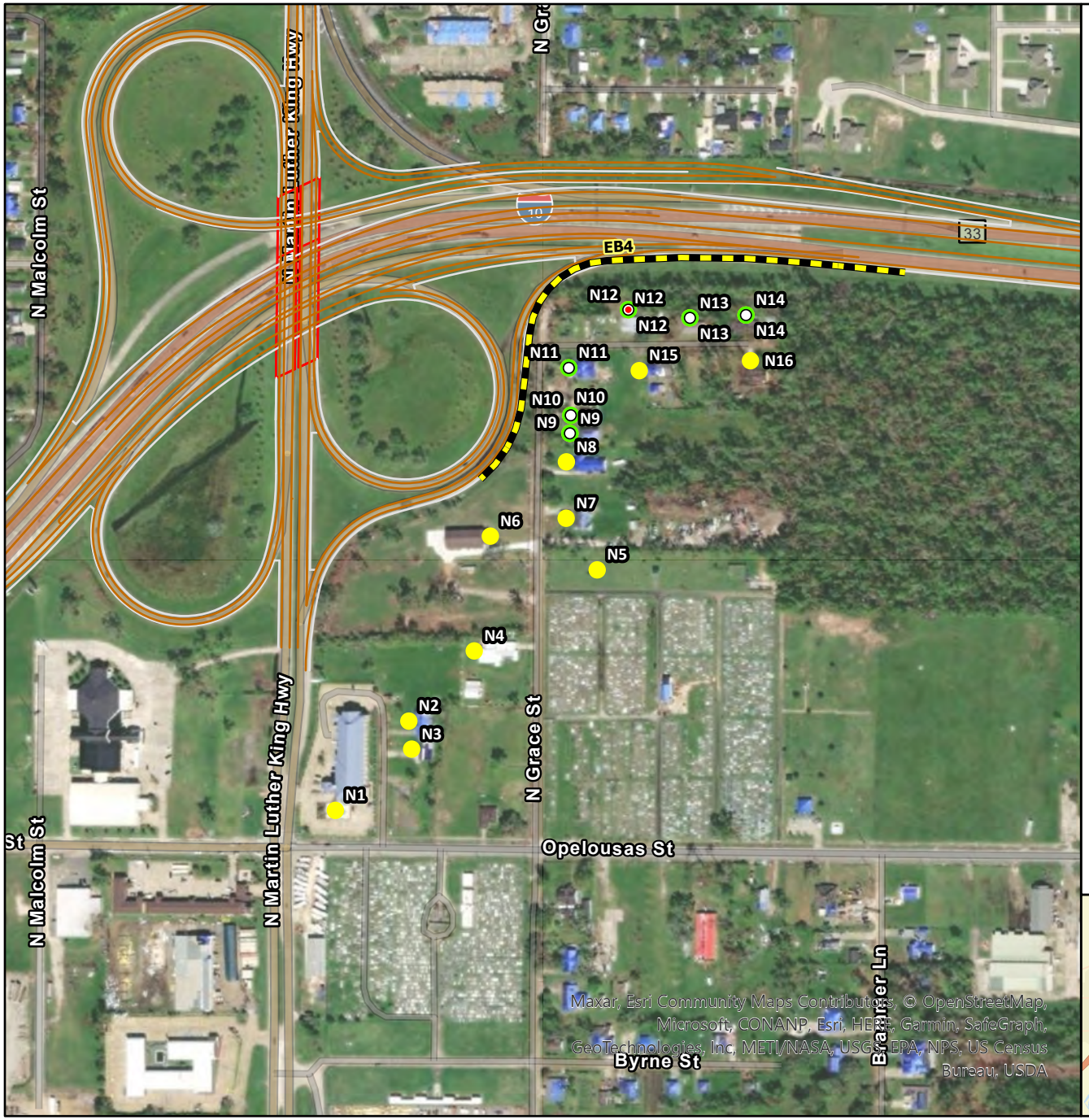
Reasonable?
NO

LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure

0 250 500 1,000 Feet

N



CNE N - All Alternatives

First Row, Impacted: 6

First Row, Impacted, Benefited: 6

% First Row Impacted Benefited: 100%

Total Benefits: 6

6 X $47,000 per Benefited = $282,000

Total Abatement Cost: $1,149,064

Height: 10-12 ft : 16,184 sqft X $71 = $1,149,064

Feasible?
YES

Reasonable?
NO

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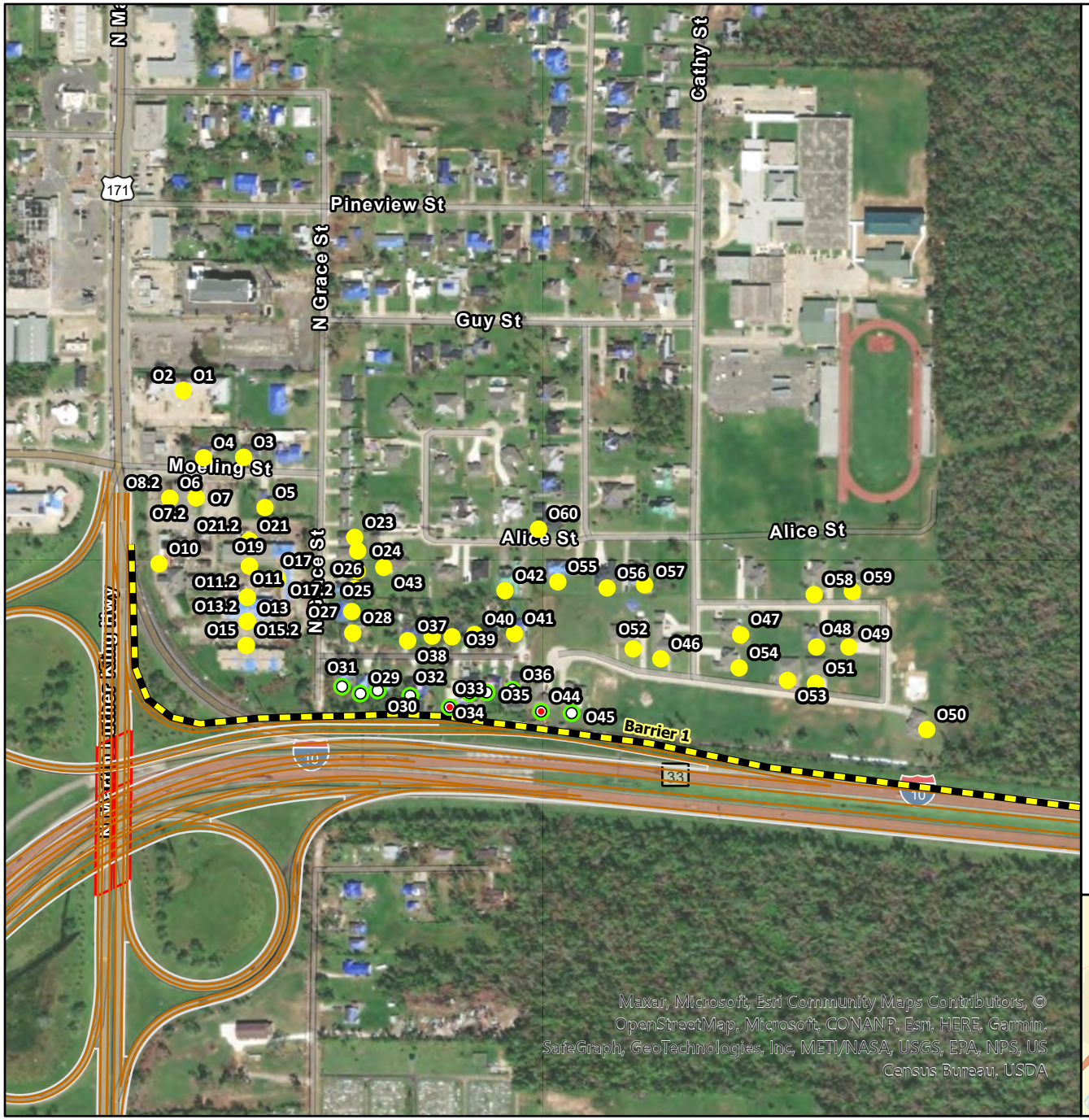
LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure

0 175 350 700 Feet

N



CNE O - All Alternatives

First Row, Impacted: 10

First Row, Impacted, Benefited: 10

% First Row Impacted Benefited: 100%

Total Benefits: 10

10 X $47,000 per Benefited = $470,000

Total Abatement Cost: $725,549

Height: 8-10 ft : 10,219 sqft X $71 = $725,549

Feasible?
YES

Reasonable?
NO

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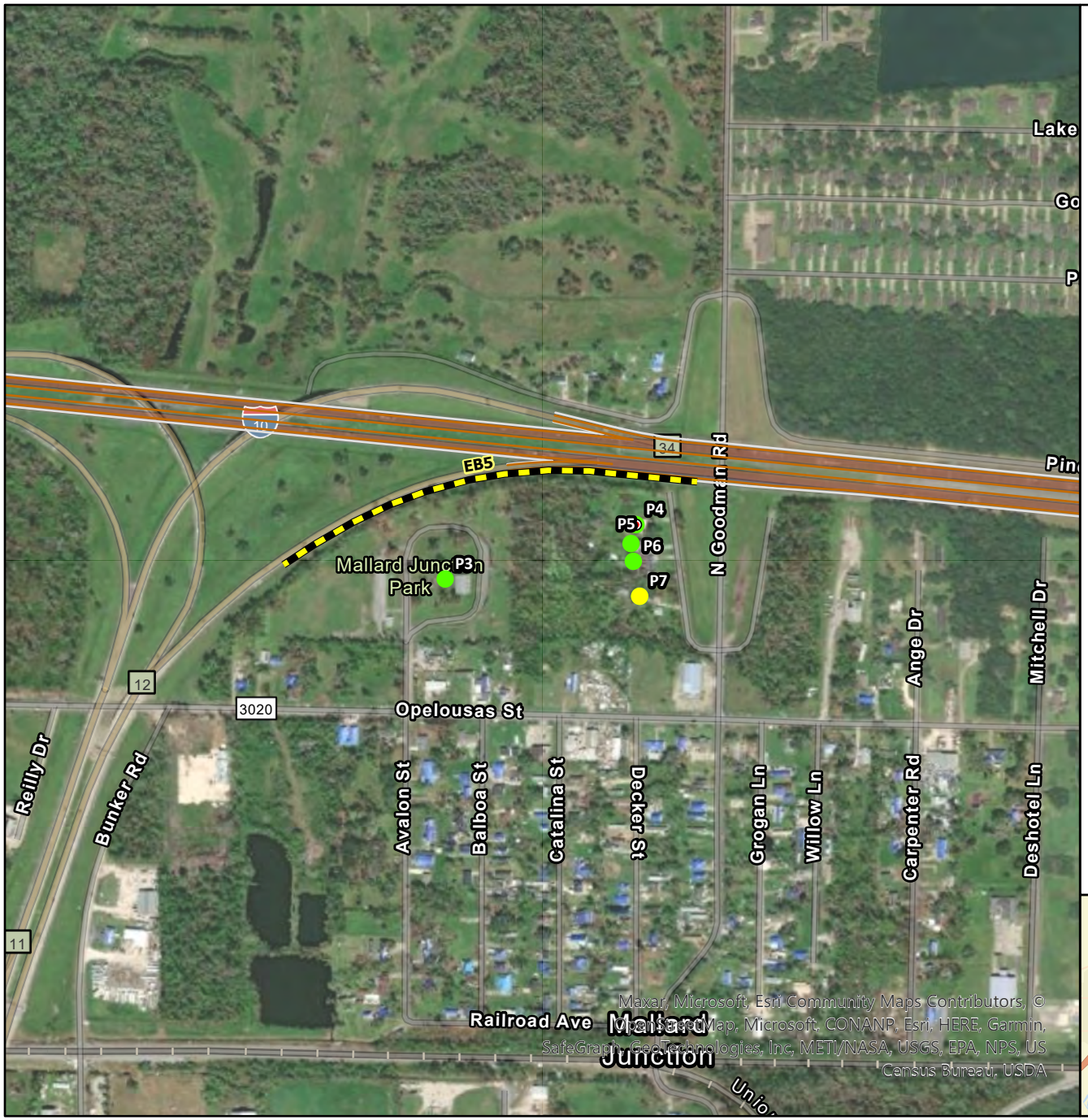
LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure

0 250 500 1,000 Feet

N



CNE P1 - All Alternatives

First Row, Impacted: 1

First Row, Impacted, Benefited: 1

% First Row Impacted Benefited: 100%

Total Benefits: 4

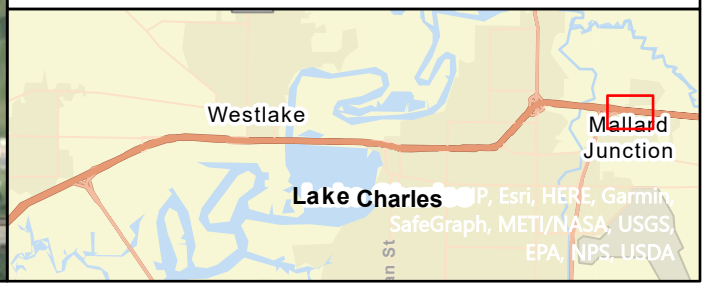
4 X $47,000 per Benefited = $188,000

Total Abatement Cost: $2,226,063

Height: 18 ft : 31,353 sqft X $71 = $2,226,063

Feasible?
YES

Reasonable?
NO

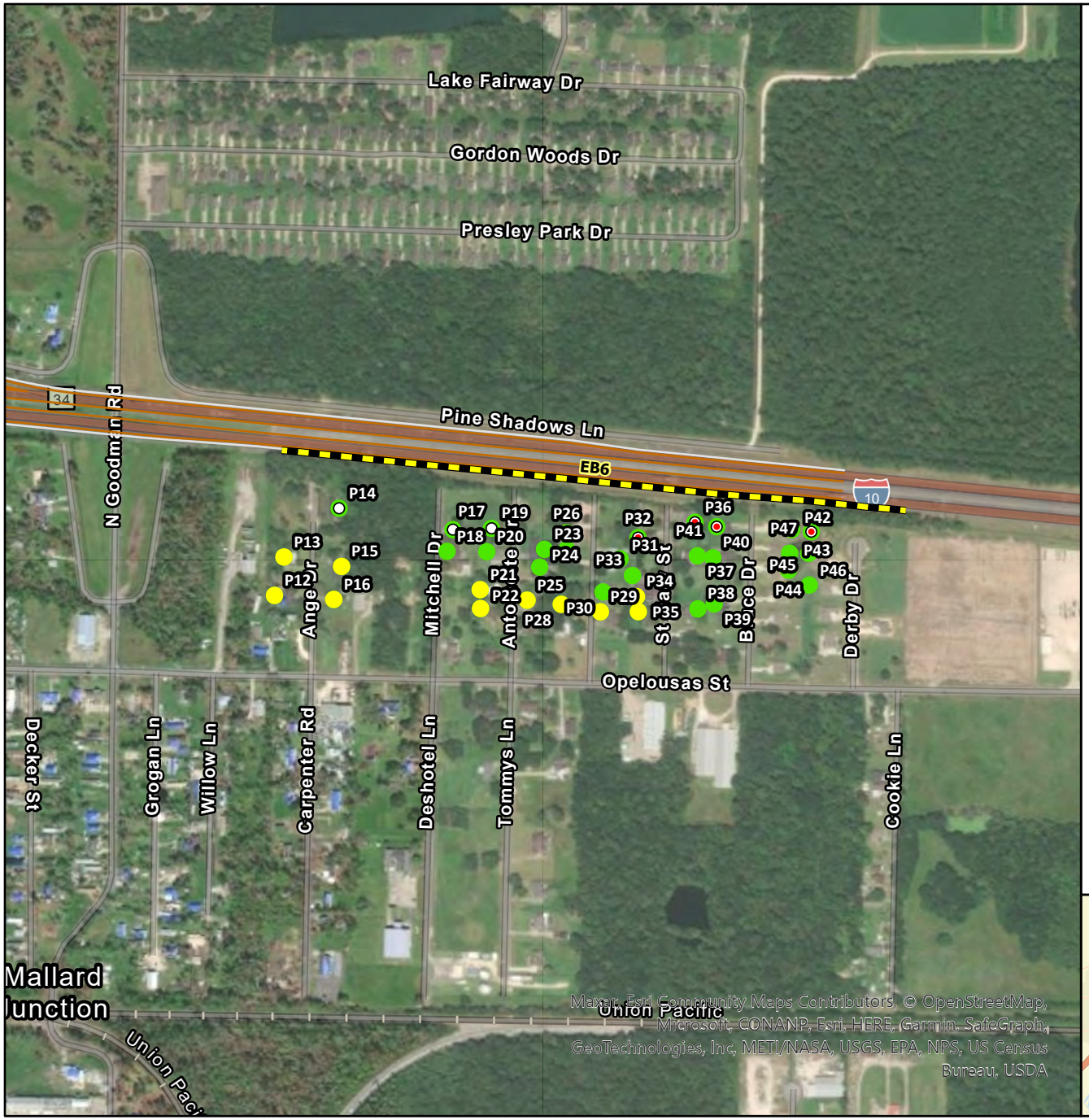


LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure

0 320 640 1,280 Feet

N



CNE P2 - All Alternatives

First Row, Impacted: 9

First Row, Impacted, Benefited: 9

% First Row Impacted Benefited: 100%

Total Benefits: 23

23 X $47,000 per Benefited = $1,081,000

Total Abatement Cost: $2,175,511

Height: 10-12ft : 30,641 sqft X $71 = $2,175,511

Feasible?
YES

Reasonable?
NO

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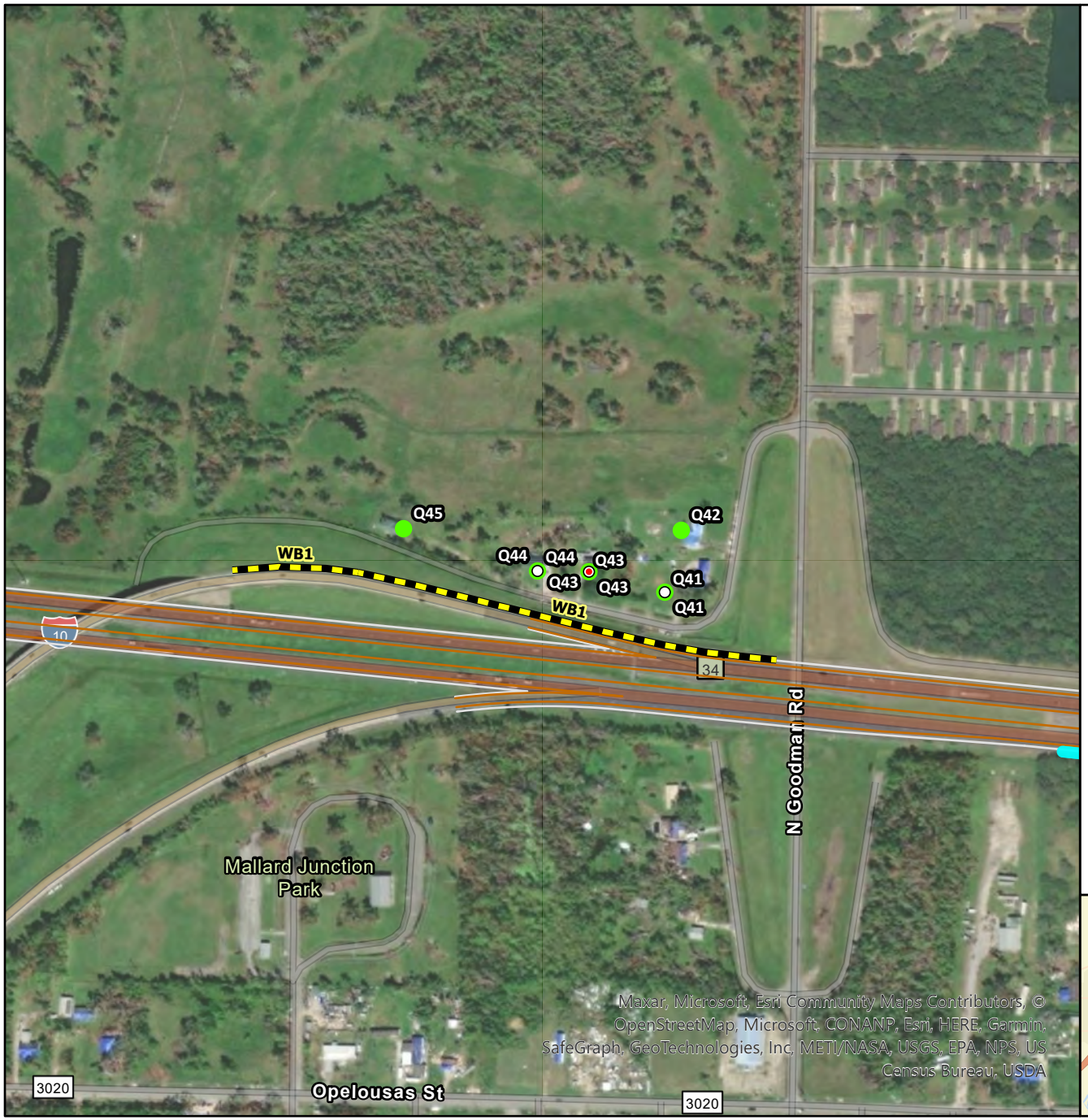
LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure

0 250 500 1,000 Feet

N



CNE Q - All Alternatives

First Row, Impacted: 3

First Row, Impacted, Benefited: 3

% First Row Impacted Benefited: 100%

Total Benefits: 5

5 X $47,000 per Benefited = $235,000

Total Abatement Cost: $1,168,305

Height: 12-16 ft : 16,455 sqft X $71 = $1,168,305

Feasible?
YES

Reasonable?
NO

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LEGEND

- >= 8 dbA Reduction
- First Row, Impacted
- Benefited
- Not Benefited
- Analyzed Barrier
- Roadway
- Edge of Paved Shoulder
- Elevated Structure

0 200 400 800 Feet

N

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE A All Alternatives	1,921 ft	12 ft – 14 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve $\geq$ 5 dBA reduction:
14	13		93%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE C Alternative 3A	1,853.5 ft	8 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve $\geq$ 5 dBA reduction:
3	3		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE C Alternative 3E	1,702.6 ft	8 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve $\geq$ 5 dBA reduction:
3	3		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE C Alternative 5G RR1	4,055 ft	12 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
2	2		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE C Alternative 5G RR2	4,055 ft	12 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
3	3		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE C Alternative 5G RR3	4,055 ft	12 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
3	3		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE F Alternative 3A	1,349 ft	10 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
2	2		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE F Alternative 3E	7,252 ft	10 ft – 14 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
5	4		80%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE F Alternative 5G	3,302 ft	10 ft – 14 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
2	2		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE G All Alternatives	5,809 ft	12 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
10	10		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE H All Alternatives	4,338 ft	8 ft – 12 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve $\geq$ 5 dBA reduction:
10	8		80%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE I1 All Alternatives	4,497 ft	14 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve $\geq$ 5 dBA reduction:
8	8		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE I2 All Alternatives	1,001 ft	8 ft - 10 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve $\geq$ 5 dBA reduction:
2	2		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE I3 All Alternatives	3,105 ft	10 ft - 14 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve $\geq$ 5 dBA reduction:
6	5		83%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE J All Alternatives	2,372 ft	8 ft - 12 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve $\geq$ 5 dBA reduction:
9	9		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE K All Alternatives	2,624 ft	10 ft - 14 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve $\geq$ 5 dBA reduction:
8	8		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE L All Alternatives	2,341 ft	8 ft - 14 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve $\geq$ 5 dBA reduction:
5	4		80%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE M All Alternatives	1,157 ft	22 ft - 24 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve $\geq$ 5 dBA reduction:
3	3		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE N All Alternatives	1,102 ft	10 ft - 14 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve $\geq$ 5 dBA reduction:
6	6		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE O All Alternatives	1,108 ft	8 ft - 10 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve $\geq$ 5 dBA reduction:
10	10		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE P1 All Alternatives	1,701 ft	18 ft - 20 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
1	1		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE P2 All Alternatives	2,676 ft	10 ft - 12 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve $\geq$ 5 dBA reduction:
9	9		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet			
Project	ID number	Route Location	
	H 0.003931	I-10 Calcasieu Parish, Lake Charles	
Barrier	Location	Length (feet)	Height (feet)
	CNE Q All Alternatives	1,143 ft	12 ft - 16 ft
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve $\geq$ 5 dBA reduction:
3	3		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Reasonableness Worksheet <u>DURING NEPA</u>					
Project	ID number	Route	Parish/City		
	H.003931	I-10	Calcasieu Parish, Lake Charles		
Barrier	Length	Height	Location		
	1,921 ft	12 ft -14 ft	CNE A - All Alternatives		
Criterion 1: Cost					
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor	
25,035	$71	$1,777,485	15	$118,499	
Criterion 2: Design Goal					
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No				
	Notes:				
Criterion 3: Desires of Benefited Receptors					
Public Involvement events showing *Likely* barrier	Event(s) and date(s):				
	Notes:				
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative				
	Notes:				
Separate Query of Benefitted Receptors	Circle: Yes or No				
	If Yes, note type and results (% of responses for barrier):				
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022	

Reasonableness Worksheet <u>DURING NEPA</u>				
Project	ID number	Route	Parish/City	
	H.003931	I-10	Calcasieu Parish, Lake Charles	
Barrier	Length	Height	Location	
	1,853.5 ft	8 ft	CNE C - 3A	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
14,825	$58	$859,850	11	$78,168
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing *Likely* barrier	Event(s) and date(s):			
	Notes:			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes:			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022

Reasonableness Worksheet <u>DURING NEPA</u>					
Project	ID number	Route	Parish/City		
	H.003931	I-10	Calcasieu Parish, Lake Charles		
Barrier	Length	Height	Location		
	1,702.6 ft	8 ft	CNE C - 3E		
Criterion 1: Cost					
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor	
13,621	$58	$790,018	10	$79,002	
Criterion 2: Design Goal					
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No				
	Notes:				
Criterion 3: Desires of Benefited Receptors					
Public Involvement events showing *Likely* barrier	Event(s) and date(s):				
	Notes:				
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative				
	Notes:				
Separate Query of Benefitted Receptors	Circle: Yes or No				
	If Yes, note type and results (% of responses for barrier):				
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022	

Reasonableness Worksheet <u>DURING NEPA</u>					
Project	ID number	Route	Parish/City		
	H.003931	I-10	Calcasieu Parish, Lake Charles		
Barrier	Length	Height	Location		
	4,055 ft	12 ft	CNE C - 5G RR1		
Criterion 1: Cost					
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor	
48,658	$58	$2,822,164	22	$128,280	
Criterion 2: Design Goal					
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No				
	Notes:				
Criterion 3: Desires of Benefited Receptors					
Public Involvement events showing *Likely* barrier	Event(s) and date(s):				
	Notes:				
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative				
	Notes:				
Separate Query of Benefitted Receptors	Circle: Yes or No				
	If Yes, note type and results (% of responses for barrier):				
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022	

Reasonableness Worksheet <u>DURING NEPA</u>					
Project	ID number	Route	Parish/City		
	H.003931	I-10	Calcasieu Parish, Lake Charles		
Barrier	Length	Height	Location		
	4,055 ft	12 ft	CNE C - 5G RR2		
Criterion 1: Cost					
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor	
48,658	$58	$2,822,164	28	$100,792	
Criterion 2: Design Goal					
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No				
	Notes:				
Criterion 3: Desires of Benefited Receptors					
Public Involvement events showing *Likely* barrier	Event(s) and date(s):				
	Notes:				
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative				
	Notes:				
Separate Query of Benefitted Receptors	Circle: Yes or No				
	If Yes, note type and results (% of responses for barrier):				
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022	

Reasonableness Worksheet <u>DURING NEPA</u>					
Project	ID number	Route	Parish/City		
	H.003931	I-10	Calcasieu Parish, Lake Charles		
Barrier	Length	Height	Location		
	4,055 ft	12 ft	CNE C - 5G RR3		
Criterion 1: Cost					
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor	
48,658	$58	$2,822,164	28	$100,792	
Criterion 2: Design Goal					
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No				
	Notes:				
Criterion 3: Desires of Benefited Receptors					
Public Involvement events showing *Likely* barrier	Event(s) and date(s):				
	Notes:				
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative				
	Notes:				
Separate Query of Benefitted Receptors	Circle: Yes or No				
	If Yes, note type and results (% of responses for barrier):				
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022	

Reasonableness Worksheet <u>DURING NEPA</u>					
Project	ID number	Route	Parish/City		
	H.003931	I-10	Calcasieu Parish, Lake Charles		
Barrier	Length	Height	Location		
	1,349 ft	10 ft	CNE F - 3A		
Criterion 1: Cost					
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor	
13,488	$58	$782,304	2	$391,152	
Criterion 2: Design Goal					
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No				
	Notes:				
Criterion 3: Desires of Benefited Receptors					
Public Involvement events showing *Likely* barrier	Event(s) and date(s):				
	Notes:				
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative				
	Notes:				
Separate Query of Benefitted Receptors	Circle: Yes or No				
	If Yes, note type and results (% of responses for barrier):				
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022	

Reasonableness Worksheet <u>DURING NEPA</u>					
Project	ID number	Route	Parish/City		
	H.003931	I-10	Calcasieu Parish, Lake Charles		
Barrier	Length	Height	Location		
	7,252 ft	10 ft - 14 ft	CNE F - 3E		
Criterion 1: Cost					
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor	
93,900	$58 & $71	$6,088,686	6	$1,014,781	
Criterion 2: Design Goal					
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No				
	Notes:				
Criterion 3: Desires of Benefited Receptors					
Public Involvement events showing *Likely* barrier	Event(s) and date(s):				
	Notes:				
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative				
	Notes:				
Separate Query of Benefitted Receptors	Circle: Yes or No				
	If Yes, note type and results (% of responses for barrier):				
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022	

Reasonableness Worksheet <u>DURING NEPA</u>				
Project	ID number	Route	Parish/City	
	H.003931	I-10	Calcasieu Parish, Lake Charles	
Barrier	Length	Height	Location	
	3,302 ft	10 ft -14 ft	CNE F - 5G	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
41,821	$58 & $71	$2,699,449	5	$539,890
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing *Likely* barrier	Event(s) and date(s):			
	Notes:			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes:			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022

Reasonableness Worksheet <u>DURING NEPA</u>					
Project	ID number	Route	Parish/City		
	H.003931	I-10	Calcasieu Parish, Lake Charles		
Barrier	Length	Height	Location		
	5,809 ft	12 ft	CNE G - All Alternatives		
Criterion 1: Cost					
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor	
69,709	$58	$4,043,122	90	$44,924	
Criterion 2: Design Goal					
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No				
	Notes:				
Criterion 3: Desires of Benefited Receptors					
Public Involvement events showing *Likely* barrier	Event(s) and date(s):				
	Notes:				
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative				
	Notes:				
Separate Query of Benefitted Receptors	Circle: Yes or No				
	If Yes, note type and results (% of responses for barrier):				
Reasonableness criteria met?	Criterion 1 (yes or no)	Criterion 2 (yes or no)	Criterion 3 (yes or no)	Date 6/12/2022	

Reasonableness Worksheet <u>DURING NEPA</u>				
Project	ID number	Route	Parish/City	
	H.003931	I-10	Calcasieu Parish, Lake Charles	
Barrier	Length	Height	Location	
	4,338 ft	8 ft -12 ft	CNE H - All Alternatives	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
46,013	$58	$2,668,754	20	$133,438
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing *Likely* barrier	Event(s) and date(s):			
	Notes:			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes:			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022

Reasonableness Worksheet <u>DURING NEPA</u>					
Project	ID number	Route	Parish/City		
	H.003931	I-10	Calcasieu Parish, Lake Charles		
Barrier	Length	Height	Location		
	4,497 ft	14 ft	CNE I1 - All Alternatives		
Criterion 1: Cost					
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor	
62,960	$58 & $71	$3,679,435	88	$41,812	
Criterion 2: Design Goal					
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No				
	Notes:				
Criterion 3: Desires of Benefited Receptors					
Public Involvement events showing *Likely* barrier	Event(s) and date(s):				
	Notes:				
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative				
	Notes:				
Separate Query of Benefitted Receptors	Circle: Yes or No				
	If Yes, note type and results (% of responses for barrier):				
Reasonableness criteria met?	Criterion 1 ((yes) or no)	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022	

Reasonableness Worksheet <u>DURING NEPA</u>				
Project	ID number	Route	Parish/City	
	H.003931	I-10	Calcasieu Parish, Lake Charles	
Barrier	Length	Height	Location	
	1,001 ft	8 ft - 10 ft	CNE I2 - All Alternatives	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
8,356	$58	$484,648	4	$121,162
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing *Likely* barrier	Event(s) and date(s):			
	Notes:			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes:			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022

Reasonableness Worksheet DURING NEPA				
	ID number	Route	Parish/City	
Project	H.003931	I-10	Calcasieu Parish, Lake Charles	
	Length	Height	Location	
Barrier	3,105 ft	10 ft -14 ft	CNE I3 - All Alternatives	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
37,741	$58	$2,188,978	78	$28,064
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing *Likely* barrier	Event(s) and date(s):			
	Notes:			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes:			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 ((yes) or no)	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022

Reasonableness Worksheet <u>DURING NEPA</u>				
Project	ID number	Route	Parish/City	
	H.003931	I-10	Calcasieu Parish, Lake Charles	
Barrier	Length	Height	Location	
	2,372 ft	8 ft -12 ft	CNE J - All Alternatives	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
25,821	$58	$1,497,618	23	$65,114
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing *Likely* barrier	Event(s) and date(s):			
	Notes:			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes:			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022

Reasonableness Worksheet <u>DURING NEPA</u>				
Project	ID number	Route	Parish/City	
	H.003931	I-10	Calcasieu Parish, Lake Charles	
Barrier	Length	Height	Location	
	2,624 ft	10 ft - 14 ft	CNE K - All Alternatives	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
30,668	$58	$1,778,744	24	$74,114
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing *Likely* barrier	Event(s) and date(s):			
	Notes:			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes:			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022

Reasonableness Worksheet <u>DURING NEPA</u>					
Project	ID number	Route	Parish/City		
	H.003931	I-10	Calcasieu Parish, Lake Charles		
Barrier	Length	Height	Location		
	2,341 ft	8 ft - 14 ft	CNE L - All Alternatives		
Criterion 1: Cost					
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor	
24,098	$58 & $71	$1,441,936	13	$110,918	
Criterion 2: Design Goal					
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No				
	Notes:				
Criterion 3: Desires of Benefited Receptors					
Public Involvement events showing *Likely* barrier	Event(s) and date(s):				
	Notes:				
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative				
	Notes:				
Separate Query of Benefitted Receptors	Circle: Yes or No				
	If Yes, note type and results (% of responses for barrier):				
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022	

Reasonableness Worksheet <u>DURING NEPA</u>					
Project	ID number	Route	Parish/City		
	H.003931	I-10	Calcasieu Parish, Lake Charles		
Barrier	Length	Height	Location		
	1,157 ft	22 ft - 24 ft	CNE M - All Alternatives		
Criterion 1: Cost					
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor	
26,411	$71	$1,875,181	9	$208,353	
Criterion 2: Design Goal					
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No				
	Notes:				
Criterion 3: Desires of Benefited Receptors					
Public Involvement events showing *Likely* barrier	Event(s) and date(s):				
	Notes:				
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative				
	Notes:				
Separate Query of Benefitted Receptors	Circle: Yes or No				
	If Yes, note type and results (% of responses for barrier):				
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022	

Reasonableness Worksheet <u>DURING NEPA</u>					
Project	ID number	Route	Parish/City		
	H.003931	I-10	Calcasieu Parish, Lake Charles		
Barrier	Length	Height	Location		
	1,102 ft	10 ft - 14 ft	CNE N - All Alternatives		
Criterion 1: Cost					
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor	
16, 184	$71	$1,149,064	6	$191,511	
Criterion 2: Design Goal					
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No				
	Notes:				
Criterion 3: Desires of Benefited Receptors					
Public Involvement events showing *Likely* barrier	Event(s) and date(s):				
	Notes:				
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative				
	Notes:				
Separate Query of Benefitted Receptors	Circle: Yes or No				
	If Yes, note type and results (% of responses for barrier):				
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022	

Reasonableness Worksheet <u>DURING NEPA</u>				
Project	ID number	Route	Parish/City	
	H.003931	I-10	Calcasieu Parish, Lake Charles	
Barrier	Length	Height	Location	
	1,108 ft	8 ft -10 ft	CNE O - All Alternatives	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
10,219	$71	$725,549	10	$72,555
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing *Likely* barrier	Event(s) and date(s):			
	Notes:			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes:			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022

Reasonableness Worksheet <u>DURING NEPA</u>					
Project	ID number	Route	Parish/City		
	H.003931	I-10	Calcasieu Parish, Lake Charles		
Barrier	Length	Height	Location		
	1,701 ft	18 ft - 20 ft	CNE P1 - All Alternatives		
Criterion 1: Cost					
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor	
31,353	$71	$2,226,063	4	$556,516	
Criterion 2: Design Goal					
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No				
	Notes:				
Criterion 3: Desires of Benefited Receptors					
Public Involvement events showing *Likely* barrier	Event(s) and date(s):				
	Notes:				
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative				
	Notes:				
Separate Query of Benefitted Receptors	Circle: Yes or No				
	If Yes, note type and results (% of responses for barrier):				
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022	

Reasonableness Worksheet <u>DURING NEPA</u>					
Project	ID number	Route	Parish/City		
	H.003931	I-10	Calcasieu Parish, Lake Charles		
Barrier	Length	Height	Location		
	2,676 ft	10 ft - 12 ft	CNE P2 - All Alternatives		
Criterion 1: Cost					
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor	
30,641	$71	$2,175,511	23	$94,587	
Criterion 2: Design Goal					
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No				
	Notes:				
Criterion 3: Desires of Benefited Receptors					
Public Involvement events showing *Likely* barrier	Event(s) and date(s):				
	Notes:				
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative				
	Notes:				
Separate Query of Benefitted Receptors	Circle: Yes or No				
	If Yes, note type and results (% of responses for barrier):				
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022	

Reasonableness Worksheet <u>DURING NEPA</u>				
Project	ID number	Route	Parish/City	
	H.003931	I-10	Calcasieu Parish, Lake Charles	
Barrier	Length	Height	Location	
	1,143 ft	12 ft - 16 ft	CNE Q - All Alternatives	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
16,455	$71	$1,168,305	5	$233,631
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: (Yes) or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing *Likely* barrier	Event(s) and date(s):			
	Notes:			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes:			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 (yes or (no))	Criterion 2 ((yes) or no)	Criterion 3 (yes or no)	Date 6/12/2022

I-10 LAKE CHARLES
CALCASIEU RIVER BRIDGE

ATTACHMENT 5

Field Data Sheets

NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 1
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/18/2020 8:42:00 AM
Pre-Calib: -0.01
Post-Calib: 0.02

By: BB/MT
Duration: 15 min
Weighting: A

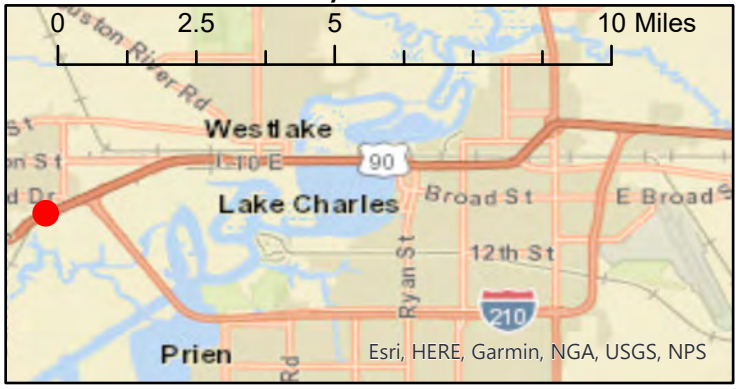
ROAD	I-10 EB	I-10 WB
AUTOS	245	308
MED TRUCKS	5	96
HVY TRUCKS	49	11
BUS	0	0
MOTORCYCLE	0	0
SPEED	64	64

INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

Leq: **72.1 dB(A)**

Wind Speed: 4 Wind Direction: N Temperature: 80 Humidity: 66 Cloud Cover: PC

Notes:
None



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 2
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/18/2020 9:15:00 AM
Pre-Calib: -0.02
Post-Calib: 0.05

By: BB/MT
Duration: 15 min
Weighting: A

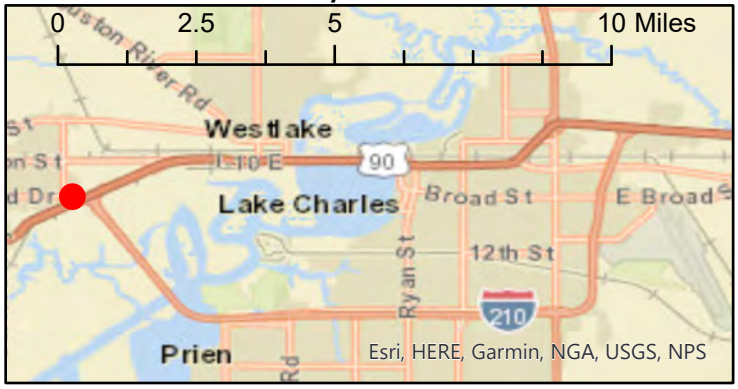
ROAD	I-10 EB	I-10 WB
AUTOS	203	165
MED TRUCKS	18	15
HVY TRUCKS	11	45
BUS	0	0
MOTORCYCLE	0	0
SPEED	65	65

INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

Leq: **59.4 dB(A)**

Wind Speed: 4 Wind Direction: NE Temperature: 82 Humidity: 63 Cloud Cover: PC

Notes:
Maplewood Drive: 2 EB (auto), 3 WB (auto)



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 3
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/18/2020 9:48:00 AM
Pre-Calib: 0
Post-Calib: 0.01

By: BB/MT
Duration: 15 min
Weighting: A

ROAD	I-10 EB	I-10 WB
AUTOS	251	198
MED TRUCKS	31	28
HVY TRUCKS	78	112
BUS	0	0
MOTORCYCLE	0	0
SPEED	64	64

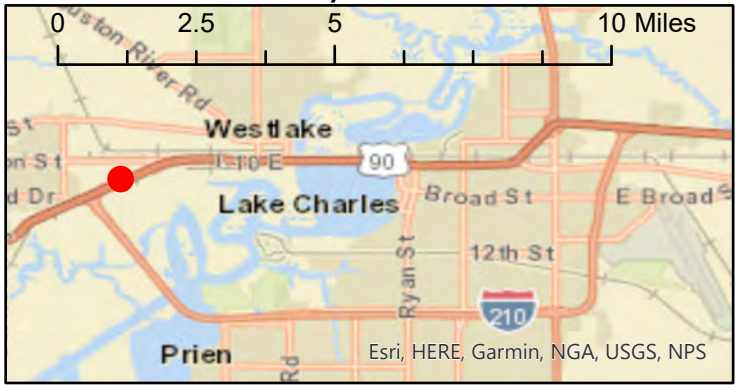
INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

0 125 250 500 Feet

Leq: **64.5 dB(A)**

Wind Speed: 6 Wind Direction: NNE Temperature: 84 Humidity: 58 Cloud Cover: PC

Notes:
None



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 4
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/18/2020 10:25:00 AM
Pre-Calib: -0.04
Post-Calib: 0

By: BB/MT
Duration: 15 min
Weighting: A

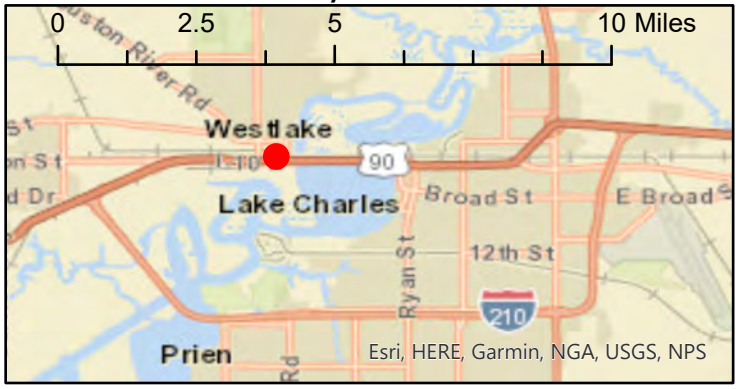
ROAD	I-10 EB	I-10 WB
AUTOS	205	138
MED TRUCKS	16	12
HVY TRUCKS	88	48
BUS	0	0
MOTORCYCLE	0	0
SPEED	64	64

INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

Leq: **61.4 dB(A)**

Wind Speed: 6 Wind Direction: NNE Temperature: 84 Humidity: 58 Cloud Cover: PC

Notes:
None



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 5
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/18/2020 10:49:00 AM
Pre-Calib: 0.01
Post-Calib: 0

By: BB/MT
Duration: 15 min
Weighting: A

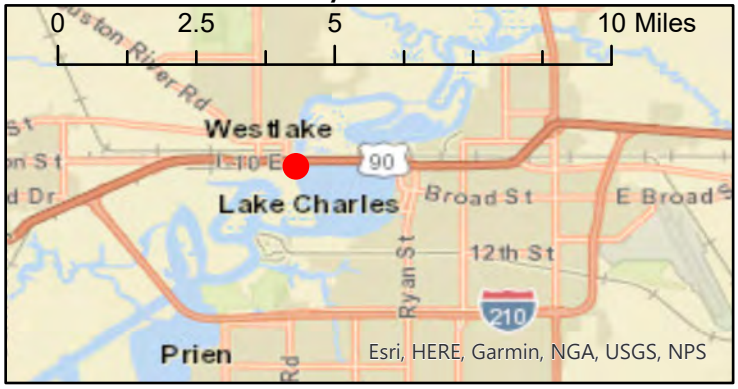
ROAD	I-10 EB	I-10 WB
AUTOS	345	263
MED TRUCKS	16	22
HVY TRUCKS	48	139
BUS	0	0
MOTORCYCLE	0	1
SPEED	65	65

INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

Leq: **64.9 dB(A)**

Wind Speed: 6 Wind Direction: NE Temperature: 88 Humidity: 51 Cloud Cover: PC

Notes:
None



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 6
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/18/2020 1:04:00 PM
Pre-Calib: 0.02
Post-Calib: -0.02

By: BB/MT
Duration: 15 min
Weighting: A

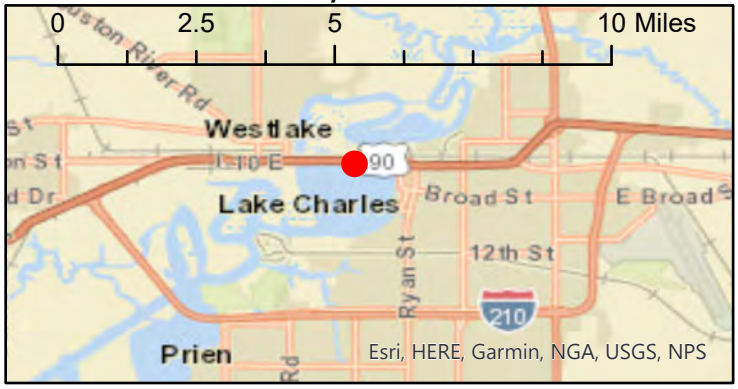
ROAD	I-10 EB	I-10 WB
AUTOS	458	353
MED TRUCKS	30	8
HVY TRUCKS	195	45
BUS	0	0
MOTORCYCLE	0	0
SPEED	64	64

INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

Leq: **66.2 dB(A)**

Wind Speed: 7 Wind Direction: NNE Temperature: 92 Humidity: 42 Cloud Cover: PC

Notes:
N. Lakeshore Drive: 18 EB (auto)



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 7
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/19/2020 9:20:00 AM
Pre-Calib: 0
Post-Calib: 0.1

By: AP/BB
Duration: 15 min
Weighting: A

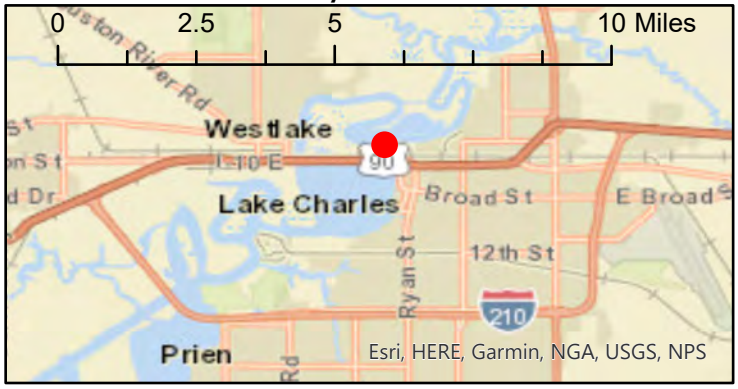
ROAD	I-10 EB	I-10 WB
AUTOS	0	0
MED TRUCKS	0	0
HVY TRUCKS	0	0
BUS	0	0
MOTORCYCLE	0	0
SPEED	0	0

INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

Leq: **55.8 dB(A)**

Wind Speed: 6 Wind Direction: NW Temperature: 80 Humidity: 69 Cloud Cover: PC

Notes:
Ambient, River Road. Train @ 9:28, people @ 9:30, residential piel driving approximately 0.25m away, River Road: 5 auto



NOISE MEASUREMENT DATA SHEET

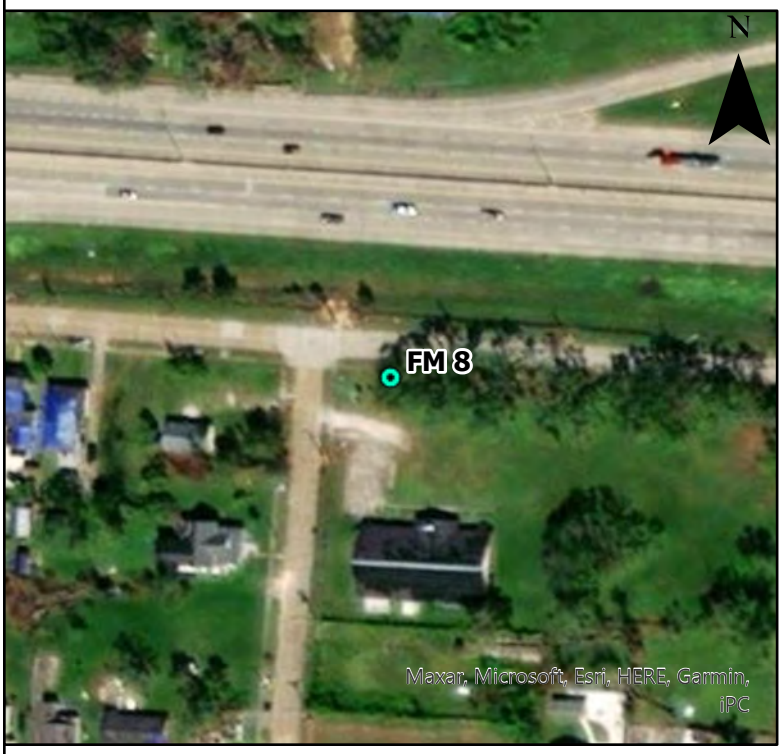
Project: I-10 Calcasieu River Bridge
Site: FM 8
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/18/2020 1:38:00 PM
Pre-Calib: 0.04
Post-Calib: 0.07

By: BB/MT
Duration: 15 min
Weighting: A

ROAD	I-10 EB	I-10 WB
AUTOS	338	382
MED TRUCKS	21	9
HVY TRUCKS	220	68
BUS	0	0
MOTORCYCLE	4	0
SPEED	64	64

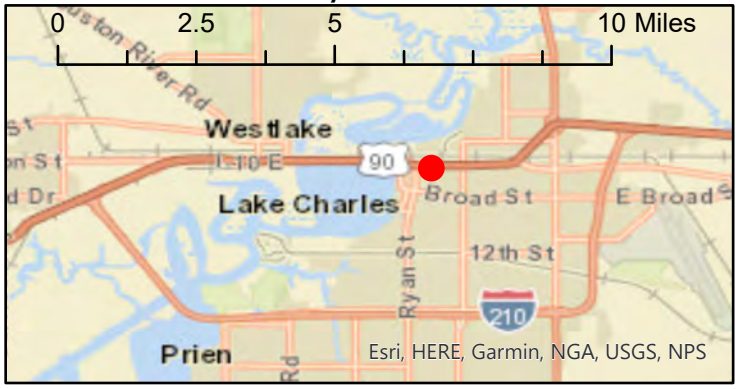
INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121



Leq: **74.1 dB(A)**

Wind Speed: 8 Wind Direction: NNE Temperature: 93 Humidity: 40 Cloud Cover: PC

Notes:
Belden St: 21 EB (Auto)



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 9
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/19/2020 8:45:00 AM
Pre-Calib: 0.02
Post-Calib: -0.08

By: AP/BB
Duration: 15 min
Weighting: A

ROAD	I-10 EB	I-10 WB
AUTOS	228	249
MED TRUCKS	12	18
HVY TRUCKS	83	56
BUS	0	0
MOTORCYCLE	0	0
SPEED	67	67

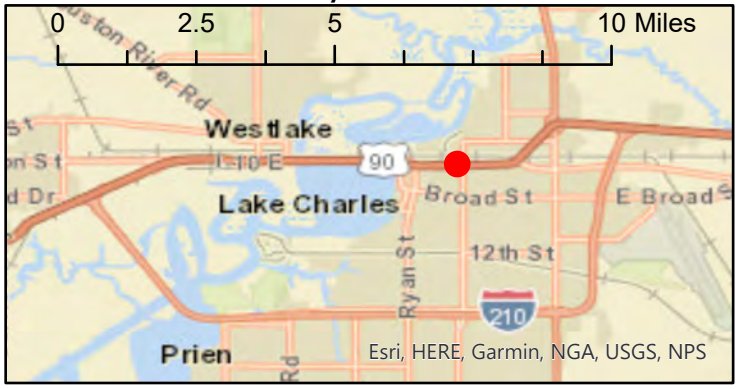
INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

0 125 250 500 Feet

Leq: **71.5 dB(A)**

Wind Speed: 6 Wind Direction: NNW Temperature: 78 Humidity: 73 Cloud Cover: PC

Notes:
Construction activity required moving location from DOTD approved location, Service Rd WB: 37 auto, 3 HT



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 10
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/18/2020 2:14:00 PM
Pre-Calib: 0.13
Post-Calib: -0.1

By: BB/MT
Duration: 15 min
Weighting: A

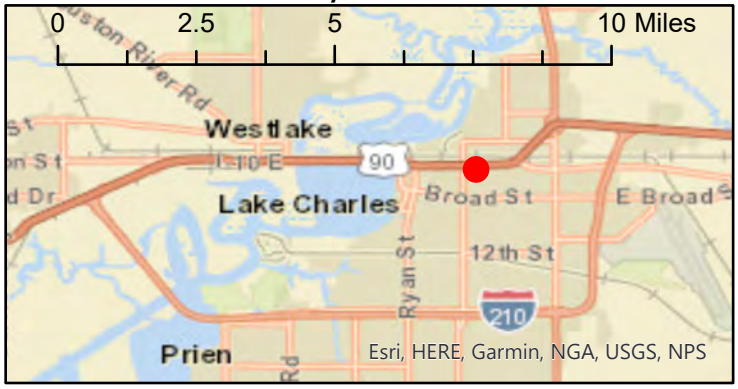
ROAD	I-10 EB	I-10 WB
AUTOS	221	203
MED TRUCKS	12	19
HVY TRUCKS	78	97
BUS	0	0
MOTORCYCLE	0	0
SPEED	67	67

INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

Leq: **63.9 dB(A)**

Wind Speed: 8 Wind Direction: N Temperature: 92 Humidity: 40 Cloud Cover: PC

Notes:
None



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 11
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/19/2020 8:17:00 AM
Pre-Calib: -0.13
Post-Calib: 0.03

By: AP/BB
Duration: 15 min
Weighting: A

ROAD	I-10 EB	I-10 WB
AUTOS	165	375
MED TRUCKS	8	28
HVY TRUCKS	68	105
BUS	0	0
MOTORCYCLE	0	0
SPEED	67	67

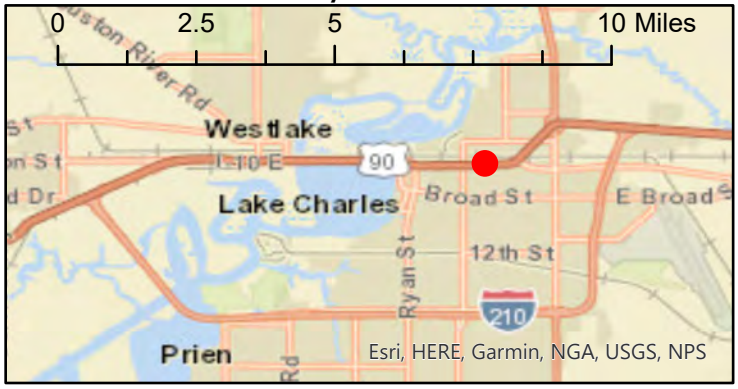
INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

0 125 250 500 Feet

Leq: **69 dB(A)**

Wind Speed: 5 Wind Direction: NNW Temperature: 79 Humidity: 76 Cloud Cover: PC

Notes:
Service Rd: 9 (auto), 1 (HT)



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 12
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/18/2020 2:41:00 PM
Pre-Calib: 0.17
Post-Calib: -0.13

By: BB/MT
Duration: 15 min
Weighting: A

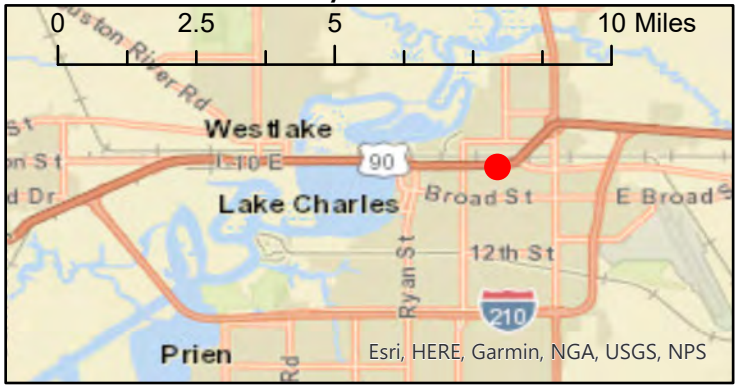
ROAD	I-10 EB	I-10 WB
AUTOS	398	308
MED TRUCKS	12	15
HVY TRUCKS	148	16
BUS	0	0
MOTORCYCLE	0	0
SPEED	67	67

INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

Leq: **70.4 dB(A)**

Wind Speed: 8 Wind Direction: N Temperature: 92 Humidity: 39 Cloud Cover: PC

Notes:
Belden St: 22 (auto)



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 13
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/18/2020 12:23:00 PM
Pre-Calib: 0.07
Post-Calib: -0.11

By: AP/M
Duration: 15 min
Weighting: A

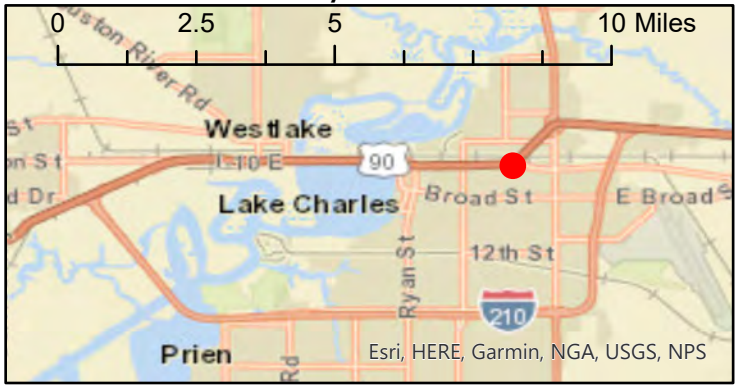
ROAD	I-10 EB	I-10 WB
AUTOS	287	282
MED TRUCKS	16	8
HVY TRUCKS	64	106
BUS	0	0
MOTORCYCLE	0	0
SPEED	68	68

INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

Leq: **71.1 dB(A)**

Wind Speed: 6 Wind Direction: NE Temperature: 91 Humidity: 70 Cloud Cover: PC

Notes:
Belden St: 43 (auto), 3 (MT), 1 (HT)



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 14
Calibration: 113.8 at 1k HZ
Response: SLOW

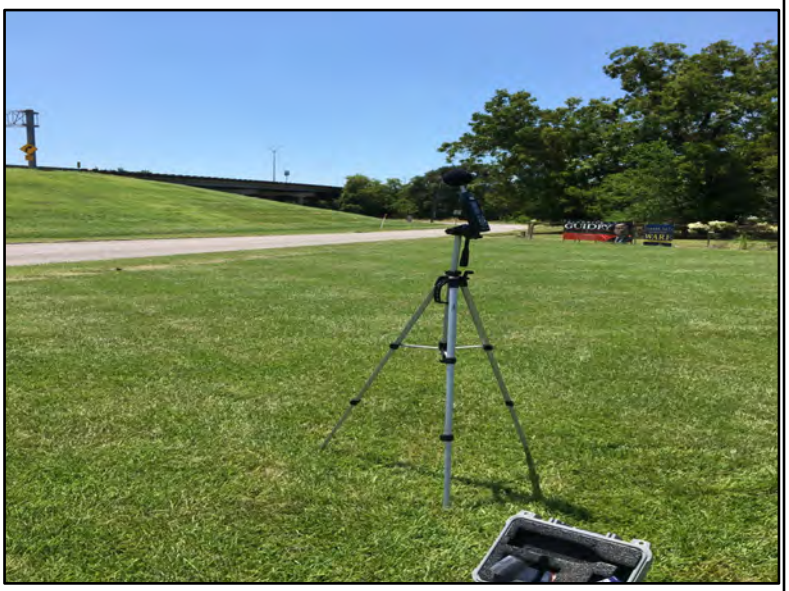
Job Number: H003931
Date: 8/18/2020 12:52:00 PM
Pre-Calib: 0.09
Post-Calib: 0

By: AP/M
Duration: 15 min
Weighting: A

ROAD	I-10 EB	I-10 WB
AUTOS	237	267
MED TRUCKS	4	10
HVY TRUCKS	74	88
BUS	0	0
MOTORCYCLE	1	1
SPEED	71	71

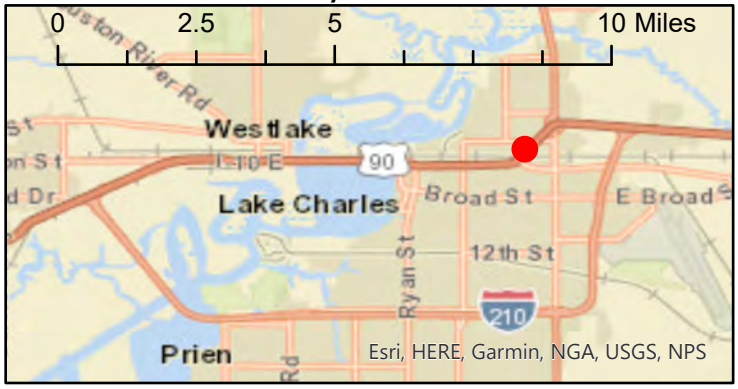
INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

Leq: **67.3 dB(A)**



Wind Speed: 6 Wind Direction: NE Temperature: 91 Humidity: 70 Cloud Cover: PC

Notes:
paused @ 20sec, Service Rd: 16 (auto)



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 15
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/18/2020 10:50:00 AM
Pre-Calib: 0.04
Post-Calib: 0.02

By: AP/M
Duration: 15 min
Weighting: A

ROAD	I-10 EB	I-10 WB
AUTOS	234	219
MED TRUCKS	7	13
HVY TRUCKS	83	101
BUS	0	0
MOTORCYCLE	0	1
SPEED	64	64

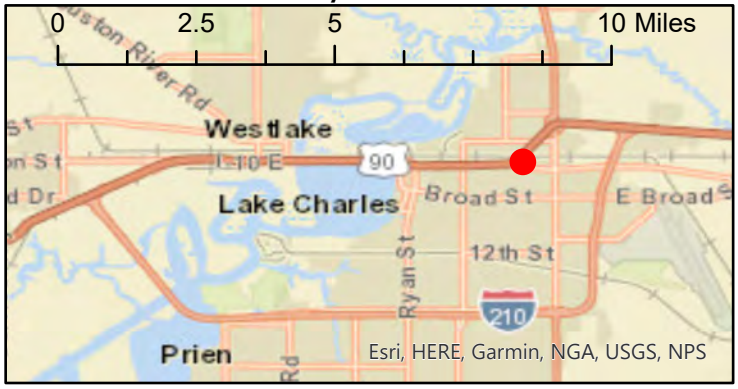
INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

0 125 250 500 Feet

Leq: **62 dB(A)**

Wind Speed: 7 Wind Direction: NNE Temperature: 86 Humidity: 70 Cloud Cover: PC

Notes:
moved field measurement to avoid fence,
Albert St: 52 (auto), 8 (MT), 11 (HT)



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 16
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/18/2020 10:19:00 AM
Pre-Calib: 0.07
Post-Calib: 0.14

By: AP/M
Duration: 15 min
Weighting: A

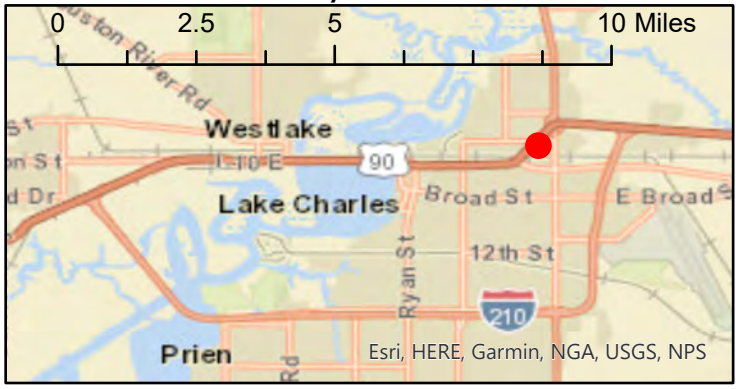
ROAD	I-10 EB	I-10 WB
AUTOS	232	174
MED TRUCKS	18	9
HVY TRUCKS	77	86
BUS	0	0
MOTORCYCLE	1	0
SPEED	71	71

INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

Leq: **59.8 dB(A)**

Wind Speed: 8 Wind Direction: NE Temperature: 82 Humidity: 70 Cloud Cover: PC

Notes:
Lincoln Street: 2 (auto)



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 17
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/17/2020 3:46:00 PM
Pre-Calib: 0.08
Post-Calib: 0.03

By: AP/M
Duration: 15 min
Weighting: A

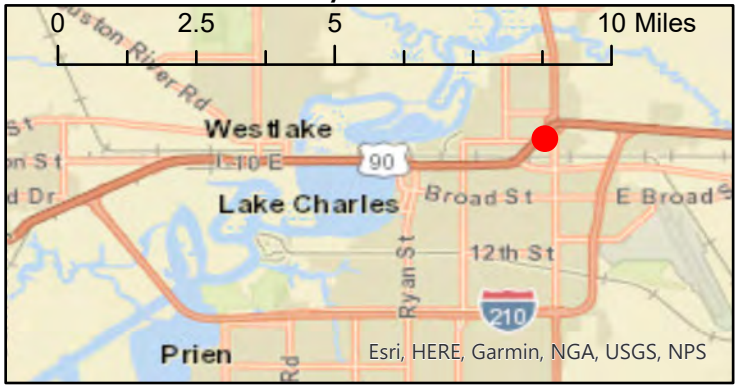
ROAD	I-10 EB	I-10 WB
AUTOS	259	436
MED TRUCKS	5	8
HVY TRUCKS	53	71
BUS	0	0
MOTORCYCLE	2	0
SPEED	67	67

INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

Leq: **68.2 dB(A)**

Wind Speed: 6 Wind Direction: N Temperature: 92 Humidity: 70 Cloud Cover: PC

Notes:
None



NOISE MEASUREMENT DATA SHEET

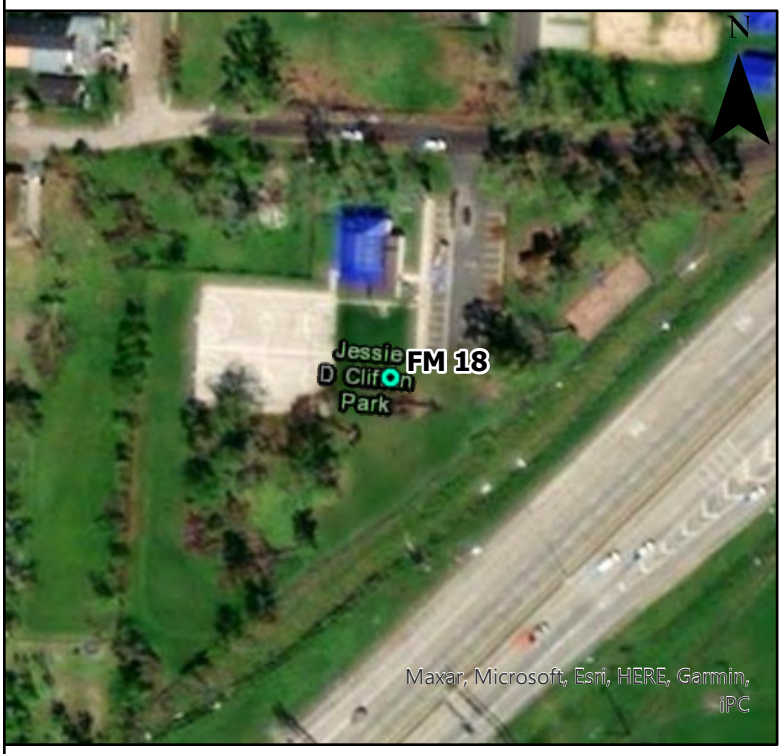
Project: I-10 Calcasieu River Bridge
Site: FM 18
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/18/2020 1:23:00 PM
Pre-Calib: 0.01
Post-Calib: -0.05

By: AP/M
Duration: 15 min
Weighting: A

ROAD	I-10 EB	I-10 WB
AUTOS	229	401
MED TRUCKS	10	12
HVY TRUCKS	70	129
BUS	0	0
MOTORCYCLE	0	1
SPEED	69	69

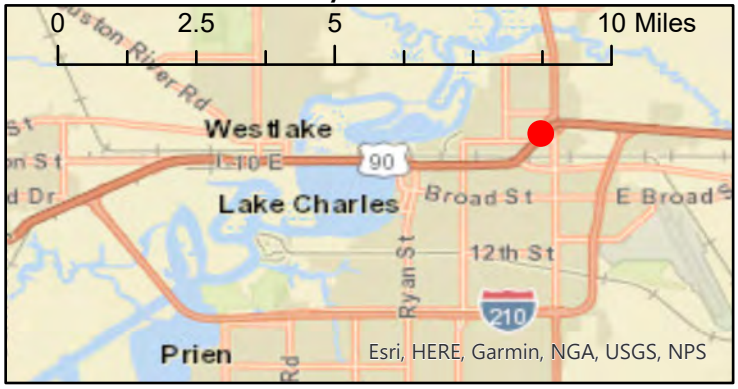
INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121



Leq: **73.4 dB(A)**

Wind Speed: 7 Wind Direction: NE Temperature: 91 Humidity: 70 Cloud Cover: PC

Notes:
None



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 19
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/18/2020 2:51:00 PM
Pre-Calib: 0.01
Post-Calib: -0.07

By: AP/M
Duration: 15 min
Weighting: A

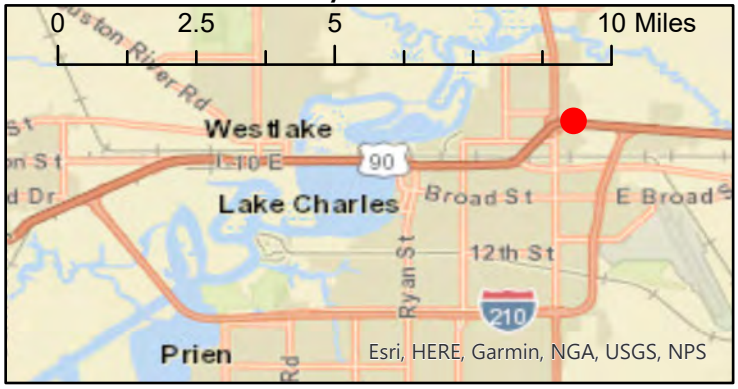
ROAD	I-10 EB	I-10 WB
AUTOS	266	277
MED TRUCKS	3	8
HVY TRUCKS	75	69
BUS	0	0
MOTORCYCLE	0	0
SPEED	67	67

INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

Leq: **60.9 dB(A)**

Wind Speed: 7 Wind Direction: NNE Temperature: 92 Humidity: 70 Cloud Cover: PC

Notes:
None



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 20
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/18/2020 9:44:00 AM
Pre-Calib: 0.08
Post-Calib: 0.01

By: AP/M
Duration: 15 min
Weighting: A

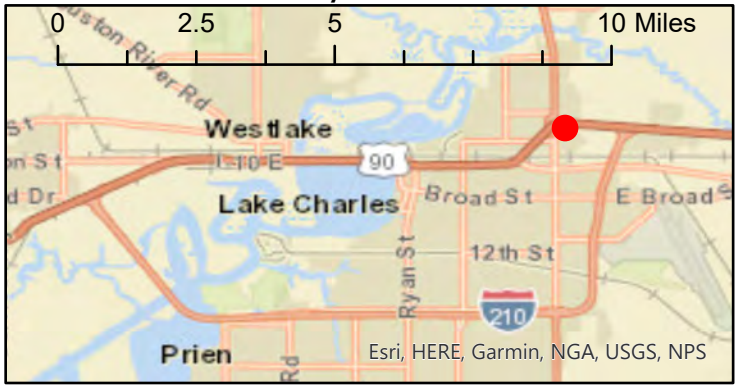
ROAD	I-10 EB	I-10 WB
AUTOS	198	276
MED TRUCKS	6	13
HVY TRUCKS	94	56
BUS	0	0
MOTORCYCLE	0	0
SPEED	54	54

INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

Leq: **61.5 dB(A)**

Wind Speed: 7 Wind Direction: NE Temperature: 82 Humidity: 70 Cloud Cover: PC

Notes:
dogs barking



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 21
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/18/2020 9:15:00 AM
Pre-Calib: 0.11
Post-Calib: 0.08

By: AP/M
Duration: 15 min
Weighting: A

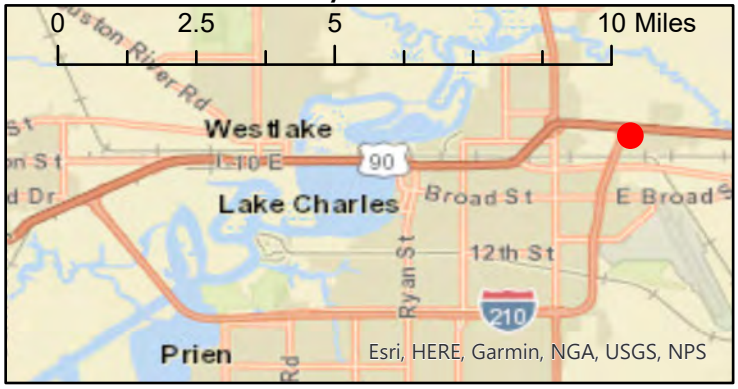
ROAD	I-10 EB	I-10 WB
AUTOS	181	204
MED TRUCKS	10	7
HVY TRUCKS	51	109
BUS	0	0
MOTORCYCLE	0	0
SPEED	63	63

INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

Leq: **65.1 dB(A)**

Wind Speed: 6 Wind Direction: NE Temperature: 78 Humidity: 50 Cloud Cover: PC

Notes:
airplane @ 9:18am, EB Ramp: 102 (auto), 24 (MT), 4 (HT)



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 22
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/18/2020 2:21:00 PM
Pre-Calib: 0.13
Post-Calib: -0.11

By: AP/M
Duration: 15 min
Weighting: A

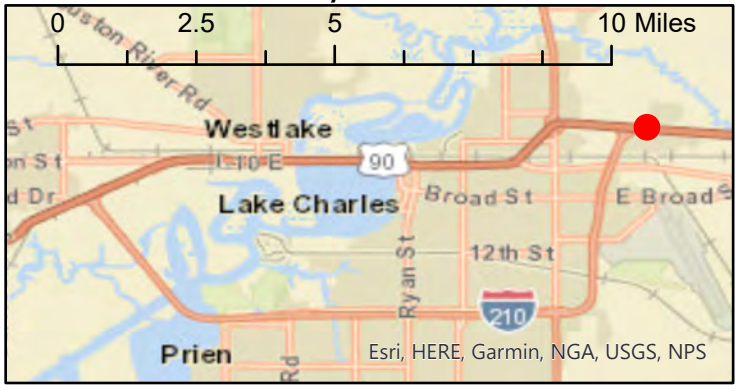
ROAD	I-10 EB	I-10 WB
AUTOS	208	377
MED TRUCKS	2	10
HVY TRUCKS	65	109
BUS	0	0
MOTORCYCLE	1	1
SPEED	72	72

INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

Leq: **67.1 dB(A)**

Wind Speed: 7 Wind Direction: NNE Temperature: 91 Humidity: 70 Cloud Cover: PC

Notes:
SB Off Ramp: 122 (auto), 3 (MT), 6 (HT)



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Site: FM 23
Calibration: 113.8 at 1k HZ
Response: SLOW

Job Number: H003931
Date: 8/18/2020 8:37:00 AM
Pre-Calib: 0.17
Post-Calib: -0.29

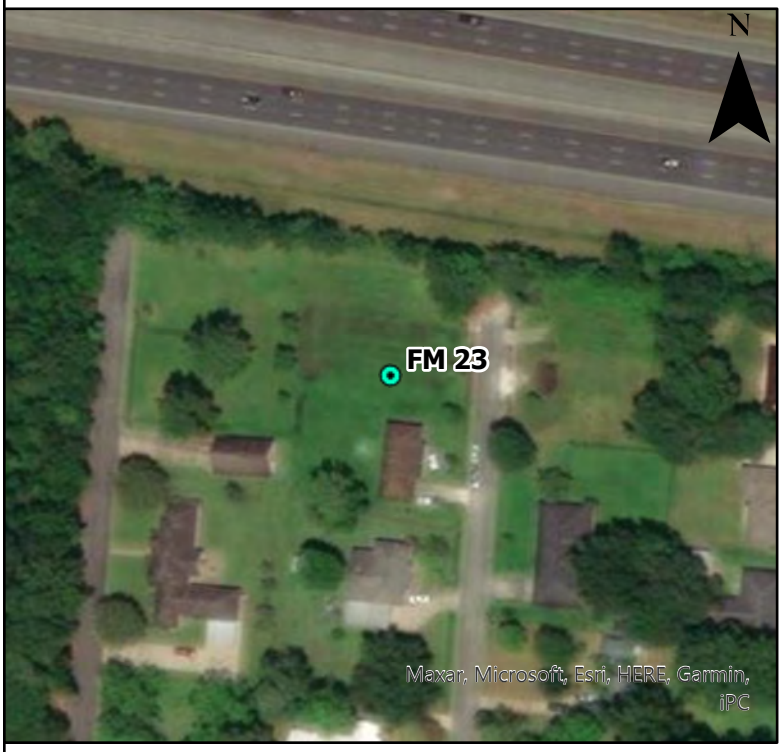
By: AP/M
Duration: 15 min
Weighting: A

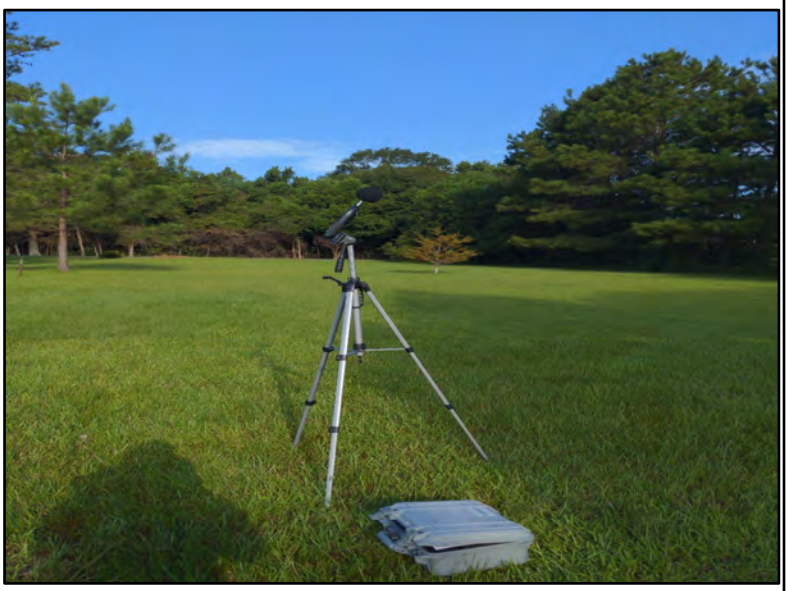
ROAD	I-10 EB	I-10 WB
AUTOS	168	224
MED TRUCKS	10	17
HVY TRUCKS	65	123
BUS	0	0
MOTORCYCLE	0	0
SPEED	64	64

INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

0 125 250 500 Feet

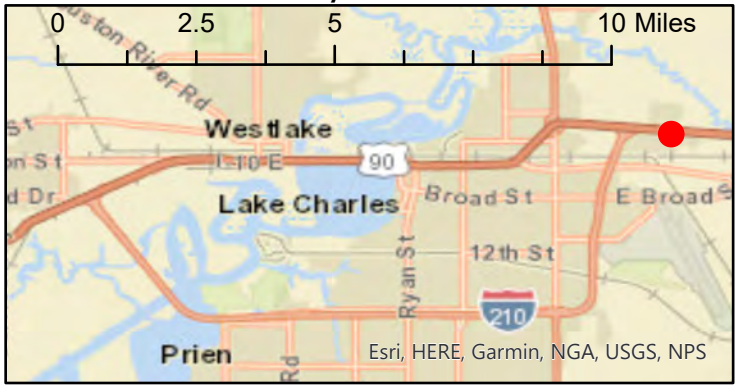
Leq: **69.5 dB(A)**





Wind Speed: 8 Wind Direction: NNE Temperature: 77 Humidity: 65 Cloud Cover: PC

Notes:
None



NOISE MEASUREMENT DATA SHEET

Project: I-10 Calcasieu River Bridge
Job Number: H003931
By: BB/MT
Site: FM 24
Date: 8/18/2020 12:24:00 PM
Duration: 15 min
Calibration: 113.8 at 1k HZ
Pre-Calib: 0.07
Weighting: A
Response: SLOW
Post-Calib: -0.05

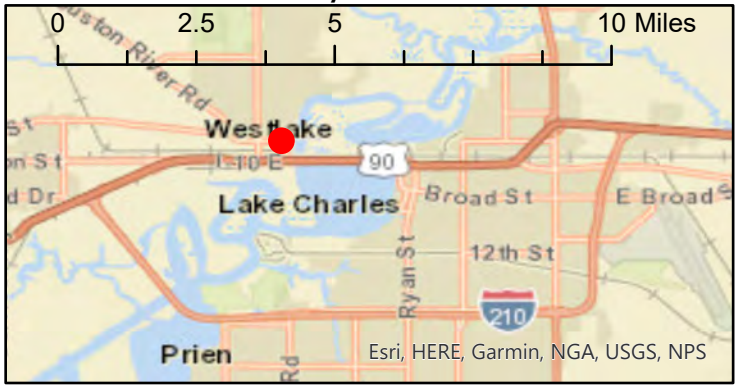
ROAD	I-10 EB	I-10 WB
AUTOS	0	0
MED TRUCKS	0	0
HVY TRUCKS	0	0
BUS	0	0
MOTORCYCLE	0	0
SPEED	0	0

INSTRUMENT	LxT1
MANUFACTURER	Larson Davis
MODEL	LxT1
SLM	3941/5742
MICROPHONE	LW125762/377B02
CALIBRATOR	15740/16121

Leq: **58.4 dB(A)**

Wind Speed: 6 Wind Direction: NE Temperature: 91 Humidity: 45 Cloud Cover: PC

Notes:
Ambient only



I-10 LAKE CHARLES
CALCASIEU RIVER BRIDGE

ATTACHMENT 6

Traffic Noise Volumes Methodology

Traffic Noise Volume Methodology

Traffic volumes and speeds in the model for each vehicle category and vehicle speed were assigned in accordance with the data inputs into the HCS model for the traffic analysis.

Volumes for mainline and ramp segments as outlined in ***I-10 Calcasieu Bridge and Improvements Project Traffic Engineering Report, Appendix B – Final Data Collection*** for the project were generated from representative days in 2018. Mainline speed data can be found in Section B.7.2 of that appendix. Ramp speed data is based on existing speed limit and advisory signage at each ramp location. Freeway adjustment factors remained default throughout analysis. Detailed segment information for traffic data (demand volume, truck percentages, heavy vehicle adjustment factors, etc.) was taken from the Segment Report, located within the HCS Freeways model files for the ***Traffic Engineering Report***.

Traffic control devices used in the models are those most similar to those existing at the project location. The HCS Streets models have volume inputs for each movement within a given intersection. Volumes used for analysis were field collected on 3/19/19. All available turning movement count (TMC) data was incorporated into the intersections. Volumes coded into the models for each intersection and movement are outlined in Section B.2. of the ***Traffic Engineering Report, Appendix B***. Speed limit inputs were taken from surrounding roadway speed limit signage. Detailed and multimodal input data remained default values. Signal data came from DOTD TSI files. The Input Report (located within the HCS Streets model files) displays all timing, phasing, demand volume, heavy vehicle percentage, and geometric inputs.

The HCS Stop tool was utilized to evaluate the remaining unsignalized intersections. All six of the remaining key intersections were identified as two-way stop-controlled. The HCS Stop models have volume inputs for each movement within a given intersection. Volumes coded into the models for each intersection and movement are outlined in Appendix B Section B.2. of the ***Traffic Engineering Report*** Volumes used for analysis were field collected on 3/19/19. All available TMC data was incorporated into the intersections.

Headway and adjustment factors remained default throughout analysis. The Two-Way Stop-Control Report (located within the HCS Stop model files of the ***Traffic Engineering Report***) displays all geometric, volume, heavy vehicle percentage, and configuration/layout inputs.

Growth rates and volume forecasting for the future no-build models utilized methodology described in ***Traffic Engineering Report, Appendix B***. The overall growth factor of 1.4 percent was used to escalate values from the existing years 2018 and 2019 to design year 2042. Heavy vehicle percentages and other traffic related values were assumed to remain constant between 2018 and 2042. Signal optimization was performed for all future no-build scenarios containing signalized intersections. PM Design Hourly Volume (DHV) was calculated from the projected Average Daily Traffic (ADT) utilizing a K-factor of 0.1.

Traffic characteristics that are expected to yield the worst hourly traffic noise impact on a regular basis for the design year were identified. The freeway peak periods were from 4:00-7:30 AM and 2:45- 8:15 PM. Because the highest sound levels may not be at the peak traffic hour but may instead occur during some period when traffic volumes are lower but the truck mix or vehicle speeds are higher, traffic volumes and truck percentages throughout the day at several locations were evaluated. It was determined that the highest noise hour would occur during the PM peak. Therefore, the DHV for the PM peak were input into the models.