

OVERVIEW

The purpose of this analysis is to determine the impact of the proposed Battery Energy Storage System (BESS) located on the south side of Lancaster Hwy in Monroe, NC. The BESS will be developed with a Tesla Megapack 2XL (10MW: 20 MWh BESS) and associated infrastructure on an approximate 1.00-acre site. The proposed BESS will be located on a former substation site that has had its infrastructure demolished and no longer in operation. To determine the impacts to the surrounding areas and cohesiveness of this development, we researched the surrounding land area uses and how this type of development typically impacts adjacent property.

MARKET OVERVIEW

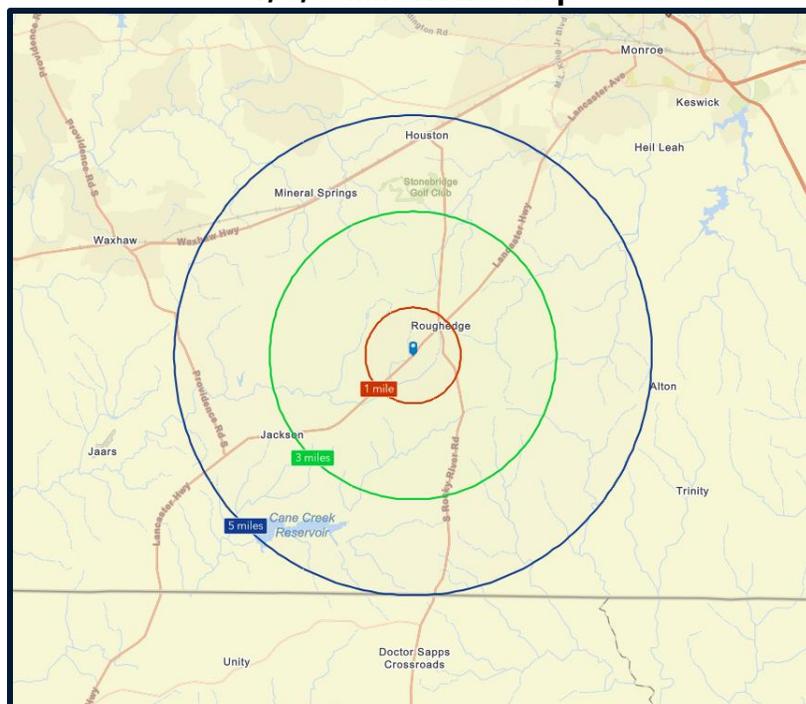
The proposed development is located in Monroe, Union County, NC. Though the site has a Monroe, NC address, it is located outside of its municipal boundaries in Union County. Union County's 2025 population estimate is 262,096 and is expected to increase to 280,484 by 2030. The median age is 39.4 and the median household income is \$104,706. The median household income is expected to increase to \$117,667 by 2030.

Monroe is a city and county seat of Union County, NC. Monroe is continuously attracting new residents with its blend of affordability and strategic location. The cost of living is significantly lower than the national average, with a housing index of around 71, making it an appealing alternative to pricier Charlotte suburbs. Its revitalized downtown offers a walkable mix of restaurants, breweries, and local shops, contributing to a strong sense of community. Monroe also benefits from proximity to Charlotte, just 30 miles away, providing access to urban amenities while preserving a quieter, suburban lifestyle. An influx of population is drawn to the area for its school systems, housing options, and a growing job market supported by manufacturing and logistics industries.

DEMOGRAPHICS

To determine the demographics for the proposed development area we relied on statistics obtained from *The Site to Do Business (STDB)* giving most weight to a 3-mile radius of the proposed development.

1, 3, 5-Mile Radius Map



ANALYSIS

Within a 3-mile radius of the subject property the population is estimated at 3,818 for 2025 with projected increases of approximately 0.70% annually, or 3,954 by 2030. There are 1,582 housing units within this 3-mile radius, of which 84.6% are owner-occupied and 11.4% renter-occupied. Similar to the growth in population, housing units are expected to grow 0.88% over this time period. The median household income is \$101,465 with an expected increase to \$114,682 by 2030. The market profile statistics are shown below:

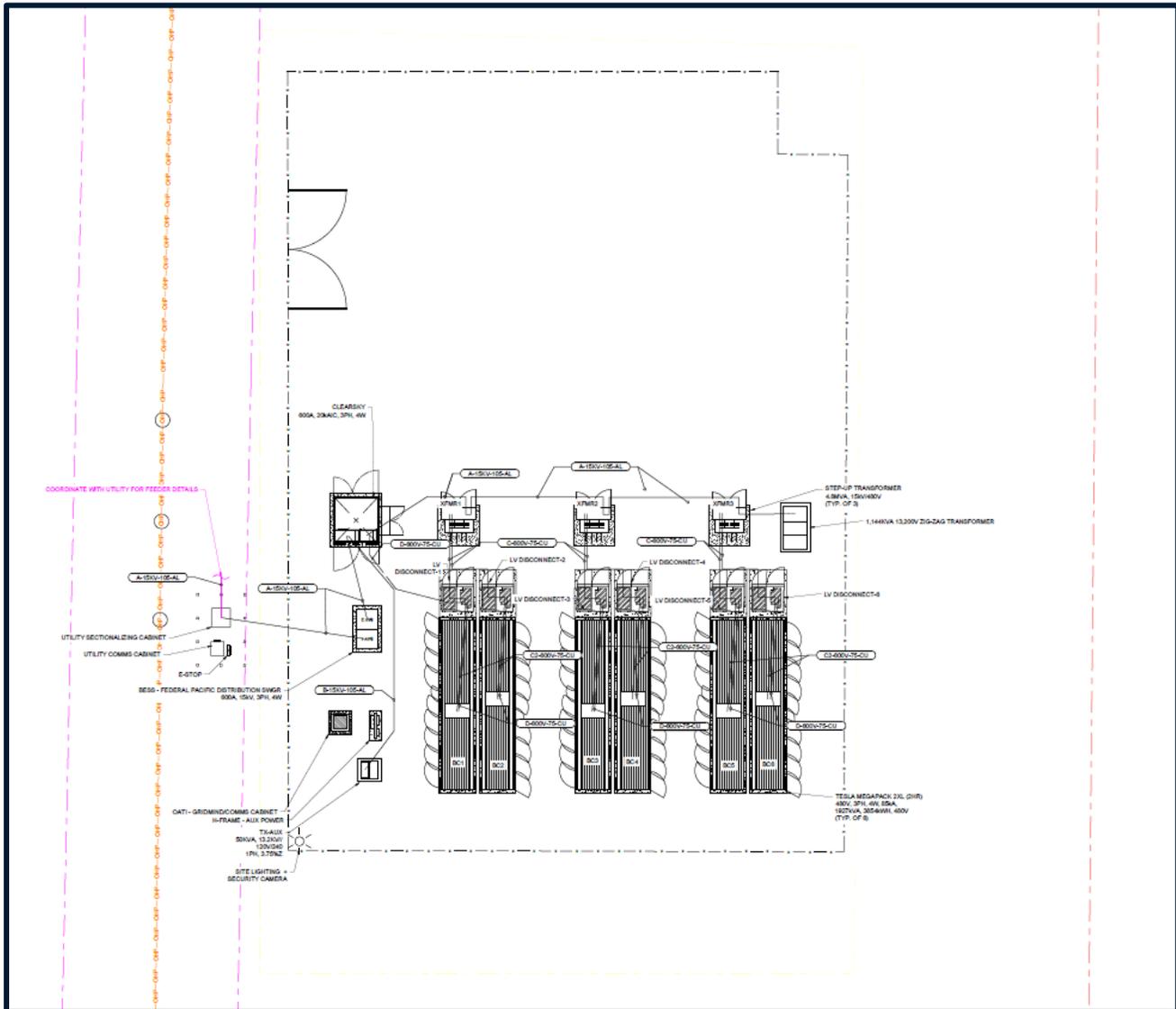
			
Market Profile			
5907 Lancaster Hwy, Monroe, North Carolina, 28112 Rings: 1, 3, 5 mile radii			Prepared by Esri Latitude: 34.89072 Longitude: -80.63388
	1 mile	3 miles	5 miles
Population Summary			
2010 Total Population	251	3,782	11,080
2020 Total Population	260	3,810	11,845
2020 Group Quarters	0	0	1
2025 Total Population	257	3,818	12,200
2025 Group Quarters	0	0	1
2030 Total Population	269	3,954	12,850
2025-2030 Annual Rate	0.92%	0.70%	1.04%
2025 Total Daytime Population	224	2,479	8,549
Workers	100	558	2,086
Residents	124	1,921	6,463
Household Summary			
2010 Households	88	1,367	4,027
2010 Average Household Size	2.85	2.77	2.75
2020 Total Households	93	1,437	4,422
2020 Average Household Size	2.80	2.65	2.68
2025 Households	101	1,518	4,703
2025 Average Household Size	2.54	2.52	2.59
2030 Households	107	1,591	5,022
2030 Average Household Size	2.51	2.49	2.56
2025-2030 Annual Rate	1.16%	0.94%	1.32%
2010 Families	72	1,100	3,159
2010 Average Family Size	3.17	3.08	3.10
2025 Families	76	1,118	3,495
2025 Average Family Size	2.74	2.77	2.92
2030 Families	80	1,164	3,708
2030 Average Family Size	2.71	2.74	2.89
2025-2030 Annual Rate	1.03%	0.81%	1.19%
Housing Unit Summary			
2000 Housing Units	63	1,099	3,327
Owner Occupied Housing Units	84.1%	85.2%	83.2%
Renter Occupied Housing Units	12.7%	12.6%	12.8%
Vacant Housing Units	3.2%	2.2%	4.0%
2010 Housing Units	92	1,436	4,320
Owner Occupied Housing Units	80.4%	80.9%	78.8%
Renter Occupied Housing Units	15.2%	14.3%	14.4%
Vacant Housing Units	4.3%	4.8%	6.8%
2020 Housing Units	98	1,502	4,689
Owner Occupied Housing Units	84.7%	84.2%	81.1%
Renter Occupied Housing Units	10.2%	11.5%	13.2%
Vacant Housing Units	7.1%	5.8%	5.7%
2025 Housing Units	106	1,582	4,958
Owner Occupied Housing Units	84.9%	84.6%	82.0%
Renter Occupied Housing Units	10.4%	11.4%	12.8%
Vacant Housing Units	4.7%	4.0%	5.1%
2030 Housing Units	112	1,653	5,293
Owner Occupied Housing Units	85.7%	85.7%	83.2%
Renter Occupied Housing Units	9.8%	10.6%	11.7%
Vacant Housing Units	4.5%	3.8%	5.1%

The demographics above represent a stable and healthy market that is expected to see an increase in population growth over the next five years. Based on these statistics new developments to the area are expected to keep up with population demands.

UN PARKWOOD BESS PROPOSED DEVELOPMENT

This analysis evaluates whether the proposed development aligns with the character of the surrounding area and assesses its potential impact on the value of adjacent and abutting properties. The project involves the installation of a Tesla Megapack 2XL (10MW: 20 MWh BESS), along with supporting infrastructure on an approximately 1.00-acre parcel. The site was previously occupied by a substation, though all prior infrastructure has since been removed. The following site plan illustrates the proposed configuration

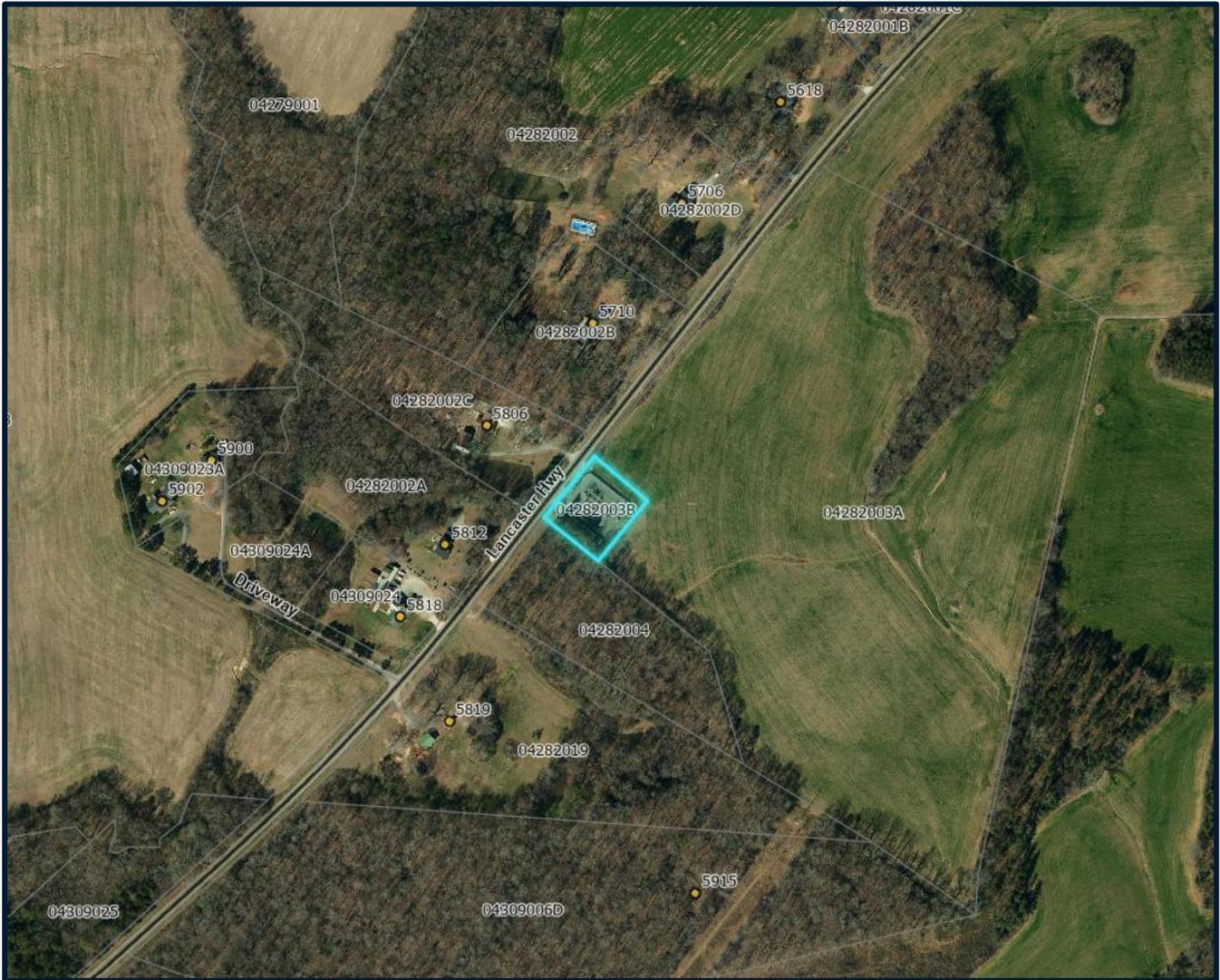
Site Plan



IMMEDIATE SURROUNDING LAND USES

The proposed site will adjoin vacant agricultural land uses with single-family residential dwellings located across Lancaster Highway. An aerial map of the proposed site and adjacent land uses is below:

Aerial Map

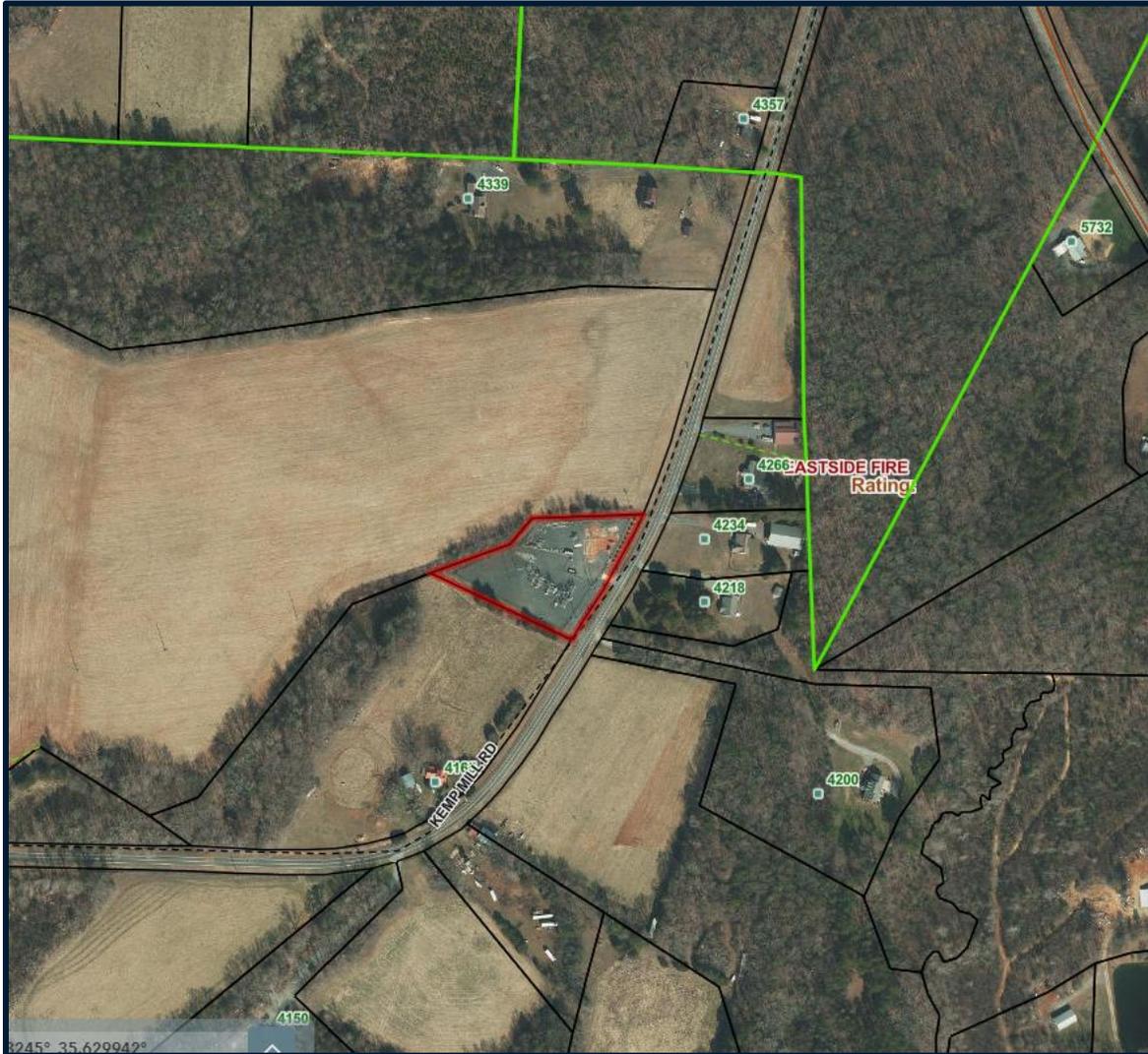


Given the proposed site’s location in a semi-rural area of Union County, this type of development is generally well-aligned with surrounding land uses and patterns. It represents a relatively low-intensity use, with minimal traffic generation and limited disruption to existing infrastructure or community character. The project’s scale and operational profile make it a compatible addition to the area.

HARMONY IN USE

To determine the cohesiveness of this type of proposed development in the subject's general neighborhood, we researched other locations of similar developments. Since the proposed development is a less prevalent use, we had to extend our search area to similar locations outside of the subject's direct market.

4241 Kemp Mill Rd, Asheboro



712 Queens Creek Rd, Hubert



820 Charlie Braswell Rd, Goldsboro



HARMONY IN USE CONCLUSIONS

The aerial imagery above highlights existing Battery Energy Storage System (BESS) developments that share similar locational characteristics and development profiles with the proposed site in Union County. As shown, these facilities are frequently situated alongside smaller-scale residential neighborhoods, vacant parcels, and agricultural land demonstrating a consistent pattern of compatibility across diverse land uses. While the examples presented represent only a portion of the BESS sites we've reviewed, the broader findings remain consistent: this type of development is well-established and integrates seamlessly into mixed-use environments, reinforcing its appropriateness for the proposed location. It should be further noted that the majority of established BESS sites are also incorporated into already developed substations. The Union County site is somewhat unique in it will be a stand-alone site; however, this is considered a less intensive use by itself, further warranting a limiting impact to the broader community.

PAIRED SALES ANALYSIS

The proposed development is situated adjacent to vacant land parcels, with several residential dwellings located to the north along Lancaster Highway. Based on our Harmony in Use analysis, we have found no evidence of adverse impacts resulting from proximity to this type of development. To further substantiate our findings, we conducted a paired sales analysis, comparing residential values in two subdivisions located adjacent to similar Battery Energy Storage System (BESS) installations. The results consistently demonstrated that adjacent residential property values remained stable and unaffected by BESS facilities, reinforcing our conclusion that the proposed development is compatible with surrounding land uses.

ANALYSIS

Brick Chimney Landing Subdivision

Brick Chimney Landing is a 200-lot residential subdivision situated along Shaw Hwy in Rocky Point, NC, with homes located on the west side of the roadway. Directly across on the east side lies the Rocky Point Battery Energy Storage System (BESS) development. To assess any potential impact this facility may have had on adjacent single-family residential values, we conducted a targeted sales analysis within the subdivision. Specifically, we examined home sales both directly facing the BESS site and those located on the opposite side of the neighborhood. To control variables such as construction year, home size, and build quality, all data points were drawn exclusively from within Brick Chimney Landing, ensuring a consistent and reliable comparison. A map and paired sales analysis are shown below:



SINGLE-FAMILY HOMES – ADJACENT

ADJACENT to BESS SITE				
Address	Dwelling SF	Sale Date	Sale Price	Sale Price/SF
51 Talbert Dr	1,662	10/8/2025	\$375,000	\$225.63
107 Talbert Dr	2,016	8/27/2025	\$434,000	\$215.28
125 Talbert Dr	2,683	7/1/2025	\$476,000	\$177.41
143 Talbert Dr	2,459	9/9/2025	\$447,000	\$181.78
Max				\$225.63
Min.				\$177.41
Average				\$200.03
Median				\$198.53

This sale set represents the adjacent home sales to the Rocky Point BESS development that sold in 2025. The homes sold ranged from \$375,000 to \$476,000 and had an average of \$200 per square foot value and a median of \$199 per square foot.

SINGLE-FAMILY HOMES – NON-ADJACENT

NON-ADJACENT to BESS SITE				
Address	Dwelling SF	Sale Date	Sale Price	Sale Price/SF
172 Talbert Dr	2,459	9/9/2024	\$459,000	\$186.66
190 Talbert Dr	2,016	5/5/2025	\$410,500	\$203.62
258 Talbert Dr	2,016	3/31/2025	\$420,500	\$208.58
346 Talbert Dr	2,037	8/20/2024	\$414,000	\$203.24
Max				\$208.58
Min.				\$186.66
Average				\$200.53
Median				\$203.43

This sale set represents home sales on the opposite side of the subdivision not located adjacent to the Rocky Point BESS development that sold between 2024 and 2025. The homes sold ranged from \$410,500 to \$459,000 and had an average of \$201 per square foot value and a median of \$203 per square foot.

These homes all had similar designs and sold within a reasonable similar time frame. Based on the average/median per square foot values, we found no measurable difference to be located adjacent to a BESS development.

ANALYSIS

Magnolia Green Subdivision

Magnolia Green is a 200-lot residential subdivision situated along Pittman Grove Church Rd in Raeford, NC with homes located on the east side of the roadway. Directly across on the west side lies the McLaughlin BESS development. To assess any potential impact this facility may have had on adjacent single-family residential values, we conducted a targeted sales analysis within the subdivision. Specifically, we examined home sales both directly facing the BESS site and those located on the opposite side of the neighborhood. To control variables such as construction year, home size, and build quality, all data points were drawn exclusively from within Magnolia Greens subdivision, ensuring a consistent and reliable comparison. A map and paired sales analysis are shown below:



SINGLE-FAMILY HOMES – ADJACENT

ADJACENT to BESS SITE				
Address	Dwelling SF	Sale Date	Sale Price	Sale Price/SF
515 Louisiana Dr	2,744	8/2/2021	\$325,000	\$118.44
545 Louisiana Dr	1,957	5/24/2023	\$285,000	\$145.63
575 Louisiana Dr	2,406	12/1/2021	\$300,000	\$124.69
603 Louisiana Dr	2,528	3/1/2022	\$319,000	\$126.19
Max				\$145.63
Min.				\$118.44
Average				\$128.74
Median				\$125.44

This sale set represents the adjacent home sales to the McLaughlin (BESS) development that sold between 2021 and 2023. The homes sold ranged from \$285,000 to \$325,000 and had an average of \$129 per square foot value and a median of \$125 per square foot.

SINGLE-FAMILY HOMES – NON-ADJACENT

NON-ADJACENT to BESS SITE				
Address	Dwelling SF	Sale Date	Sale Price	Sale Price/SF
121 Louisiana Dr	2,011	7/15/2021	\$266,500	\$132.52
160 Hildago Dr	1,803	3/22/2021	\$200,000	\$110.93
180 Hildago Dr	2,056	3/31/2025	\$296,000	\$143.97
220 Seabiscuit Dr	2,274	10/28/2025	\$264,000	\$116.09
Max				\$143.97
Min.				\$110.93
Average				\$125.88
Median				\$124.31

This sale set represents home sales on the opposite side of the subdivision not located adjacent to the McLaughlin BESS development that sold between 2021 and 2025. The homes sold ranged from \$200,000 to \$296,000 and had an average of \$126 per square foot value and a median of \$124 per square foot.

These homes all had similar designs and sold within a reasonable similar time frame. Based on the average/median per square foot values, we found no measurable difference to be located adjacent to a BESS development.

RESIDENTIAL VALUE IMPACT CONCLUSIONS

Based on the comparative data sets, examining homes located adjacent to Battery Energy Storage System (BESS) developments and those situated on the opposite side of the same subdivision, we found no measurable difference in residential property values. The subdivisions surveyed demonstrate that it is common for single-family homes to be located near BESS facilities, with no observable depreciation in market performance. Historically, when a proposed development does negatively affect surrounding property values, residential areas are typically the first to reflect such impacts. However, our paired sales analysis confirms that residential values remain stable in proximity to BESS installations, supporting the conclusion that other adjacent land uses are unlikely to experience adverse effects.

WHARTON RESEARCH SCHOLARS

In addition to conducting our own internal paired sales analysis, we reviewed external research studies to further validate our findings. Given that Battery Energy Storage System (BESS) developments are a relatively recent addition to the built environment, available market impact studies remain limited. However, one notable study, *The Impact of Utility-scale Battery Energy Storage System Projects on Property Values in California, Massachusetts, and New York* by Yixin Gwee (Wharton Research Scholars, University of Pennsylvania, May 2025), provides valuable insight.

The study concluded that residential properties located near operational utility-scale BESS projects did not experience statistically significant price changes when compared to homes located farther from the same installations. Specifically, the analysis ruled out price declines greater than 1.1% and increases beyond 1.3%, indicating a negligible impact. Of the 178 BESS projects examined, 144 showed no measurable effect on surrounding housing values, reinforcing the broader conclusion that proximity to BESS infrastructure does not adversely affect residential property markets.

FINAL CONCLUSIONS

Demographic trends indicate that the market area is stable, with sustained population growth supporting continued development to meet evolving community needs. The proposed Battery Energy Storage System (BESS) represents a modern, infrastructure-oriented use that aligns well with the character of the surrounding neighborhood, consistent with similar projects implemented across the state. Given that the site was previously occupied by a substation, the proposed BESS installation constitutes a less intensive use, one that is expected to generate minimal traffic and exert a lower impact on adjacent properties than its predecessor. Based on these factors, and supported by comparable case studies and market analysis, it is my professional opinion as an appraiser that the proposed development will not adversely affect surrounding property values and is compatible with existing land uses.

CERTIFICATION

I certify that, to the best of my knowledge and belief:

1. The statements of fact contained in this report are true and correct.
2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
3. I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
4. The undersigned has not performed services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
5. I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
6. My engagement in this assignment was not contingent upon developing or reporting predetermined results.
7. My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
8. My analyses, opinions and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice.
9. Hunter Howell has not personally inspected the subject property.
10. No one provided significant real property appraisal assistance to the person signing this certification, unless otherwise noted.
11. The reported analyses, opinions and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute.
12. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
13. As of the date of this report, the undersigned has completed the Standards and Ethics Education Requirement for Candidates/Practicing Affiliates of the Appraisal Institute.



Hunter Howell

Hunter Howell
Certified General Appraiser
North Carolina, License #A8436
License Expires June 30, 2026
hhowell@paramountappraisnc.com

ASSUMPTIONS & LIMITING CONDITIONS

- ▶ Information presented in this report has been obtained from reliable sources, and it is assumed that the information is accurate.
- ▶ This analysis assumes that the information provided for this appraisal accurately reflect the current condition of the subject property.
- ▶ This report shall be used for its intended purpose only, and by the party to whom it is addressed. Possession of this report does not include the right of publication.
- ▶ The appraiser may not be required to give testimony or to appear in court by reason of this appraisal, with reference to the property in question, unless prior arrangements have been made.
- ▶ The statements of value and all conclusions shall apply as of the dates shown herein.
- ▶ There is no present or contemplated future interest in the property by the appraiser which is not specifically disclosed in this report.
- ▶ Without the written consent or approval of the author neither all, nor any part of, the contents of this report shall be conveyed to the public through advertising, public relations, news, sales, or other media. This applies particularly to value conclusions and to the identity of the appraiser and the company with which the appraiser connected.
- ▶ This report must be used in its entirety. Reliance on any portion of the report independent of others, may lead the reader to erroneous conclusions regarding the property values. Unless approval is provided by the author no portion of the report stands alone.
- ▶ We assume no responsibility for matters legal in character, nor do we render any opinion as to title, which is assumed to be marketable. All existing liens, encumbrances, and assessments have been disregarded, unless otherwise noted, and the property is appraised as though free and clear, under responsible ownership, and competent management.
- ▶ The appraisal has provided exhibits to assist the client(s)/intended user(s) to understand from a graphical standpoint some of the salient issues which impact the subject property. We have made no survey of the property and if further verification is required, a survey by a registered surveyor is advised.
- ▶ The appraiser assumes no responsibility for determining if the property requires environmental approval by the appropriate governing agencies, nor if it is in violation thereof, unless otherwise noted herein. This analysis assumes that no asbestos or other hazardous materials are stored or found in or on the subject property. If evidence of hazardous materials of any kind occurs, the reader should seek qualified professional assistance. If hazardous materials are discovered and if future market conditions indicate an impact on value and increased perceived risk, a revision of the concluded values may be necessary.
- ▶ The valuation stated herein assumes professional management and operation of the buildings throughout the lifetime of the improvements, with an adequate maintenance and repair program.
- ▶ The liability of Paramount Commercial Appraisers, LLC, its principals, agents, and employees is limited to the client. Further, there is no accountability, obligation, or liability to any third party. If this report is placed in the hands of anyone other than the client, the client shall make such party aware of all limiting conditions and assumptions of the assignment and related discussions. The appraiser in no way responsible for any costs incurred to discover or correct any deficiency in the property.
- ▶ The appraiser is not qualified to detect the presence of toxic or hazardous substances or materials which may influence or be associated with the property or any adjacent properties, has made no investigation or analysis as to the presence of such materials, and expressly disclaims any duty to note the degree of fault. Paramount Commercial Appraisers, LLC and its principals, agents, employees, shall not be liable for any costs, expenses, assessments, or penalties, or diminution in value, property damage, or personal injury (including death) resulting from or otherwise attributable to toxic or hazardous substances or materials, including without limitation hazardous waste, asbestos material, formaldehyde, or any smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids, solids or gasses, waste materials or other irritants, contaminants or pollutants.
- ▶ The appraiser assumes no responsibility for determining if the subject property complies with the Americans with Disabilities Act (ADA). Paramount Commercial Appraisers, its principals, agents, and employees, shall not be liable for any costs, expenses, assessments, penalties or diminution in value resulting from non-compliance.
- ▶ This appraisal assumes that the subject meets an acceptable level of compliance with ADA standards; if the subject is not in compliance, the eventual renovation costs and/or penalties would negatively impact the present value of the subject. If the magnitude and time of the cost were known today, they would be reduced from the reported value conclusion.
- ▶ Unless otherwise noted herein, a detailed soils study was not provided for this analysis. The subject's soils and sub-soil conditions are assumed to be suitable based upon a visual inspection of the subject property and surrounding properties, which did not indicate evidence of excessive settling or unstable soils. No certification is made regarding the stability or suitability of the soil or sub-soil conditions.

QUALIFICATIONS OF HUNTER HOWELL, CERTIFIED GENERAL APPRAISER

Paramount Commercial Appraisers, LLC



State Certifications
Certified General
State of North Carolina

Education
NCSU - Sport Management with a
minor in Business Administration

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Appraisal Institute & Related Courses

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General Appraiser Site Valuation & Cost Approach
General Appraiser Market Analysis and Highest & Best Use
General Appraiser Report Writing & Case Studies
Expert Witness for Commercial Appraisers
Real Estate Finance Statistics & Valuation Modeling
Appraisal Subject Matter Electives

Continuing education courses taken through the Appraisal Institute and other real estate organizations.

Experience

President/Senior Appraiser
Paramount Commercial Appraisers, LLC (2024-Present)

Senior Appraiser
Valbridge Property Advisors | Raleigh-Durham (2014-2023)

Hunter Howell has been appraising in the state of North Carolina since 2014 and received his State Certified General Appraiser certification in August 2019.

Appraisal/valuation and consulting assignments include: Residential subdivisions, vacant land, office buildings, retail, shopping centers, restaurants, industrial buildings, special purpose properties, market studies, condemnation, litigation support, and expert witness testimony.

Paramount Commercial Appraisers cover the Raleigh-Durham-Chapel Hill metropolitan area as well as the majority of the regions in the eastern part of state, such as Fayetteville, Wilmington, Greenville, and Jacksonville to name a few. Paramount Commercial Appraisers serves a comprehensive list of clients including financial institutions, attorneys, government agencies, mortgage brokers, institutional owners, individual owners, and other real estate professionals. Services include mortgage loans, construction loans, condemnation, appraisal review, and expert witness testimony.