

DATE: March 18, 2025

TO: Fauquier Planning Commission, Board of Supervisors and Staff RE: The Remington Data Centers/aka Gigaland: COMA-24-022560, REZN-24-022561, SPEX-24-022562 and WAIV-24-022693

Dear Honorable Planning Commissioners, Board of Supervisors and Staff:

Citizens for Fauquier County (CFFC)¹ respectfully submits these comments for your consideration of the Remington Data Centers, aka Gigaland, application for a Comprehensive Plan Amendment, Rezoning, and Special Exceptions to accommodate the Lucky Hill, LLC owners. These comments are based on Gigaland's submissions and other information as of the above date, and may require amendment as more information is provided to the public.

CFFC opposes the Gigaland application for the following reasons:

- Gigaland's application is contrary to Fauquier's Comprehensive Plan and Ordinances;
- Gigaland's application is contrary to the Remington Service District Plan;
- Gigaland's application is contrary to Fauquier's Policy on Data Centers that should be incorporated with Fauquier's Comp Plan and ordinances, together with noise and decommissioning rules for data centers²; and,
- Gigaland's data center will generate excessive water, noise, air and light pollution, harming residents' health, welfare and safety.

SUMMARY

Remington already has an approved data center project, the Remington Technology Park (RTP) that can bring more than \$50 million a year in tax revenues to Fauquier. See Exhibit A. More data centers in Remington are contrary to the public good, unnecessary, and, at best,

¹ CFFC is Fauquier's oldest conservation nonprofit representing thousands of residents throughout the County in order to protect and preserve Fauquier's rural, agricultural and historic heritage. We are advocates, not data center experts, with no money to gain in this matter.

² Note that **if** Gigaland's Proffers do not comply with the Fauquier Data Center Policy and deviate from the ordinances, then the Policy and, arguably, the ordinances will not be binding on the developer or subsequent owners/operators. Hence, it is extremely important for Fauquier to incorporate the Data Center Policy into its Comp Plan and ordinances, and to add provisions for cumulative data center noise and decommissioning. Likewise, Gigaland's Proffers should mirror the Data Center Policy and ordinances.

premature. This application for a Comp Plan amendment, rezoning and special exceptions should not replace a full, public review of Fauquier's Comprehensive Plan.

CFFC opposes any such Comp Plan amendments and rezoning requests by data center developers because their consequences are enormous in terms of the impact on the surrounding community, on Fauquier's incomparably beautiful countryside, on our clean air, on all of Dominion's ratepayers, and on our goals for a rural, historic, and agricultural county. Rezoning in a Service District for more data centers would set an irreversible precedent with sweeping consequences for the County.

Remington's Service District Plan calls for development that is consistent with the surrounding walkable, historic community. Residents of Remington have been developing a plan for heritage tourism that would best serve the unique characteristics of this community. Unplanned, unnecessary, and incomplete data center applications should not upend years of planning for the future of Remington and Fauquier.

Fauquier's Policy on Data Centers is an initial attempt to set standards for sustainable data centers that this application does not address or meet. Before data center applications that require Comp Plan amendments and rezoning are approved, Fauquier's Policy and ordinances should be updated to address data centers' unique, cumulative challenges, including noise and decommissioning.³

This application for data centers likely will generate excessive stormwater, as shown on CFFC's hydrology mapping, that will exacerbate flooding in the town of Remington and drive more residents into the Flood Hazard Area. See Exhibit B. The noise generated by the HVAC systems, servers, and generators likely will exceed Fauquier's existing noise ordinance, diesel generators will pollute Fauquier's pristine air, and light emanating from towering buildings will caste a glow over Remington that will disturb the sleep of residents and animals alike. The Gigaland complex, sitting almost 100 feet above The Meadows subdivision, will be plainly visible to many residents in Remington, and as far away as Skyline Drive. See Exhibit C.

CFFC unequivocally opposes this application due to its infringement on the health, welfare and safety of Remington and Fauquier residents.

GIGALAND PROJECT DESCRIPTION

The Applicant has applied for a Comp Plan amendment and to rezone @202.54 acres zoned R-1 to a BP zone, including seven 80+8 feet tall data center buildings, including an elevator penthouse, totaling up to 2,221,639 square feet, not including other impermeable surfaces

³ Legislators in Virginia's General Assembly have introduced legislation based on the JLARC Study to implement "Four Pillars" regulating data centers by: 1. ensuring that residents' do not pay for data centers' share of electric infrastructure; 2. ensuring transparency in data centers' use of water, energy, and environmental impacts; 3. ensuring appropriate siting only in industrial areas; and, 4. incentivizing energy efficiency with use of Tier 4 and alternative generators, and more renewable energy. Fauquier should do no less for its residents.

such as driveways and generators. Gigaland also requests Special Exceptions for 46.03 of the acres, on which Gigaland plans to build a utility infrastructure, including four 300MW electric substations, a water tower and a water treatment facility.

The Gigaland property lies atop an upland area that straddles the Tincup and Marsh Runs. The property was clear-felled in 2021-2022, and is traversed by a series of 230kV and 500 kV transmission lines, and possible water and gas lines. The property sits approximately 100 feet above the adjacent Meadows subdivision⁴, and is located along Lucky Hill Road, between Strodes Mill Road and Old Grassdale Road. It is within the Lee Magisterial District, and all but the 46.03 acres are within the Remington Service District, currently zoned for housing.

THE GIGALAND PROJECT IS CONTRARY TO FAUQUIER'S COMPREHENSIVE PLAN AND ORDINANCES

"The Fauquier County <u>Comprehensive Plan</u> guides development within the County to promote, preserve and protect the health, safety and general welfare of its citizens." An applicant for an amendment to the Comp Plan must demonstrate that any change in land use designation or density/intensity:

• would benefit the public health⁵, safety and welfare;

⁴ Gigaland proffers include payment to the Town of Remington of up to \$1,110,319 (based on data center building square footage) for recreational and heritage improvements. However, other Remington residents, particularly the residents of The Meadows, will also be impacted negatively by the adjacent Gigaland project. This Proffer should be redirected to Fauquier County for appropriate distribution to Fauquier Parks and Recreation, the Town of Remington and the surrounding area, including The Meadows. Monetary "proffers" to other organizations should not be permitted. See Proffers at VII.C page 11.

⁵ Shaolei Ren, UC Riverside, and colleagues have written a <u>scientific paper</u>, currently under review, on the economic and human costs of diseases directly linked to pollution associated with data centers. The primary issues stem from toxic gases, such as nitric oxide and PM2.5 particles, released during the <u>electricity generation process</u> that powers these facilities. These pollutants come from both the power plants, typically located near the data centers, and from the backup generators used when the primary power supply is interrupted.

Data centers are neither more nor less polluting than other industries. The difference, according to Ren, is the rapid growth of the sector and the apparent lack of awareness about the pollution it generates. "It is well known that cars pollute, and, precisely for that reason, there are strict regulations to control and reduce the gases they emit. But data centers are growing at such a dizzying rate that by 2028 they will exceed the emissions of the entire California vehicle fleet — even if we add 35 million vehicles — according to the Department of Energy's recent projection of data center energy demand." See "The Unpaid Toll: Quantifying the Public Health Impact of Al." Preprint, 2024 at shaoleiren.github.io.

- is consistent with the Goals, Objectives, and Policies of the Comprehensive Plan and appropriate Service District, if applicable;
- will not be detrimental to uses of property in the immediate vicinity of the subject property;
- has merit and value for the community as a whole; and
- will result in benefits (fiscal, aesthetic, employment, etc.) that will outweigh any significant impact of the change.

See Comp Plan at 5.

Gigaland fails to satisfy any and all of these requirements.

CFFC is not against all data centers and recognizes their utility in today's world. It has not opposed any appropriately sited data centers in Fauquier, including the Remington Technology Park. That is because Fauquier adopted ordinances that astutely determined the best locations for data centers in the County to be in the Remington Business Park (BP) and the Planned Commercial Industrial Development (PCID) in Vint Hill. See Fauquier Zoning Ordinances 3-200 12., 3-316 4., 3-400 fn. 25, and 4-603. Although there were other Service Districts established that included industrial zoned areas, none of the other Service Districts, as well as the remainder of Remington's Service District, included a Business Park zoned for data centers — for good reason.

In particular, data centers need huge amounts of electric power from high voltage transmission lines. Thus, Fauquier designated the Remington BP and the Vint Hill PCID for data center development as these two areas are near high voltage transmission lines and do not take prime agricultural or residential land. These two areas have yet to be fully built with data centers, although there is one approved and soon to be constructed in Remington (The Remington Technology Park) and one operating, with three or more proposed to be developed in the Vint Hill PCID. Notably, Fauquier County has no practical experience managing greenfield data center development, as both of the current data centers (Warrenton Training Center and the OVH Cloud facility) were developed under Federal supervision.

Data centers also require considerable water. Fauquier's ordinances require that data centers use recycled water to ensure our aquifers are not drained and remain accessible for usage by residents, farms and local businesses with regularity and reliability, even during times of drought.

The possibility of tax revenues from data centers is alluring. However, if Fauquier's existing and By-Right data centers are built and operating, the County and CFFC estimate that more than

⁶ As the Virginia Farm Bureau has noted, Fauquier is 4th among Virginia counties in terms of farmland acreage, although it is 8th in terms of square miles. Hence, our community development efforts should to be focussed on preserving our farmlands and their related commercial and industrial businesses.

\$100 million in tax revenues could be obtained each year without creating or expanding more BPs. See Exhibit A. Once fully operating, the approved RTP alone could generate \$55 million each year in tax revenues. These total tax revenues would be equal to approximately 25% of the County's currently balanced budget that has earned it a top bond rating. Thus, there is no emergent need for more data center tax revenues.⁷

The County has yet to determine how much data center revenue it needs in the future, how or where such revenue would be spent, and just how dependent it should be on a single industry that could evaporate quickly given the pace of technological Innovation. More data center tax income will encourage more county capital expenditures, as in Loudoun and PWC, that ultimately require maintenance that the County may not be able to afford after the data center boom ends. Thus, there is no need to rezone any more of Remington's service district as a Business Park.

To date, Fauquier County has not approved data centers outside the existing Remington BP and Vint Hill PCID. This is wise because high voltage transmission lines and substations required by data centers for electricity are not only unsightly and require considerable taking of land for rights of way, but also are paid for by all rate payers, not just the data centers they primarily service (unless otherwise established by the State Corporation Commission (SCC). 9

This Gigaland Project proposes to create four new substations and use the existing transmission lines, but there is no evidence that the electric capacity exists for such use by Gigaland, nor that Gigaland, and not all ratepayers, will pay for **all** the necessary electric infrastructure. Existing transmission lines and substations likely will have to be supplemented, given data centers' enormous appetite for energy throughout the region. **In addition, any new transmission lines needed to service the data centers will require taking @ 30 acres per running mile for new rights of way, intruding on rural and residential properties alike. ¹⁰ Thus, CFFC strongly opposes such an unplanned, unsightly and expensive imposition on all rate payers and residents. ¹¹**

⁷ It is notable that the Fauquier Ordinance provides for a technology business tax rebate that could considerably compromise the anticipated tax revenues from new data centers for at least the first five years of operation. See <u>Fauquier County</u>, <u>Virginia - Code of Ordinances</u> Chapter 8 - FINANCE AND TAXATION ARTICLE XIX. - BUSINESS ZONES—TA. The prospect or proffer of copious tax revenues must be measured against such possible rebates.

 $^{{\}color{blue}^{8}\ \underline{https://eelp.law.harvard.edu/wp-content/uploads/2025/03/Harvard-ELI-Extracting-Profits-from-the-Public.pdf}}$

⁹ PJM, the grid operator for this region, has publicly stated that the transmission lines running through Remington are "overloaded," so the proposed data centers likely will require additional electric infrastructure. See Exhibit E.

¹⁰ Typical 250 foot transmission line right of way multiplied by 5280 feet per mile divided by 43,560 square feet per acre equals 30.30 acres. (N.B., the current ROW running through Gigaland is 250 feet wide.)

¹¹ The source of sufficient energy for all the data centers proposed in the BP and PCID, as well as noise near residential areas, greatly concerns CFFC and should be addressed by the County. Fauquier currently uses @ 130.6 MW of electricity, while Gigaland alone may use up to @600 MW. See <u>findenergy.com</u> and Gigaland's Dominion Energy Load Letters.

In addition, more data centers than the County originally intended will detract from other commercial, industrial and residential development that could bring more jobs and uses that are compatible with our rural, agricultural and historic heritage. Data centers will discourage more reasonable development, while creating a locked-up, commercial desert, as witnessed in Loudoun's data center alleys. Our community development efforts should focus on businesses compatible with Remington's historic and agricultural character, while expanding its recreational opportunities, not data centers. Remington needs public recreation facilities, residences, small businesses, and heritage tourism, as planned, not more data centers.

It is premature to consider Comp Plan amendments and rezoning for data centers. Once the existing BP and PCID are fully built out with operating data centers, the County could then thoughtfully decide whether more data centers are worth considering as part of a full, public review of our Comp Plan and ordinances. Such large energy consuming and polluting development should be planned, not reacted to at the request of developers who will reap the profits, but not the problems that data centers can generate. Good planning begets good results—Fauquier should stick to its existing plan for data centers. Accordingly, CFFC is unwaveringly opposed to Comp Plan amendments and rezoning for unplanned data centers.

THE GIGALAND PROJECT IS CONTRARY TO REMINGTON'S SERVICE DISTRICT PLAN

That the Gigaland Project is totally inconsistent with the Remington Service District Plan as described in the Comp Plan is an understatement. The Service District is within an historic area that encompasses two significant Civil War battlefields, the Rappahannock I and II Battlefields, The Journey Through Hallowed Ground along James Madison Highway, and other historic attributes in and around Remington.¹² The Service District is envisioned as a "people friendly"

¹² It should be noted that along with the easements described below, there are nearby Historic Districts as noted on the Remington Community Partnership website:

The historic district boundaries encompass the cultural landscape directly related to the river, including prominent rural and urban features within the view shed. All attempts were made to exclude concentrations of non-contributing resources, such as recent residential and industrial development along the proposed district's edges. The proposed district overlaps with rural estates, working agricultural enterprises, urban properties within the historic town of Remington, and concentrations of historically-related buildings in smaller hamlets and villages. It also contains within its bounds significant portions of publicly owned lands, in particular the C.F. Phelps Wildlife Management Area.

There are few recent intrusions that upset the dramatic, historic view sheds visible from the river valley and its adjoining lands. The proposed district contains portions of several other historic districts, including the register-listed Remington Historic District (288-5001) and Rappahannock Navigation System (Canal) Historic District (111-0134) plus the register-eligible

[&]quot;The Hedgeman-Rappahannock Rural Historic District (DHR ID# 030-5607) is centered on the Rappahannock River. It extends from around Waterloo and U.S. Rt. 211 southeast to the waterway's confluence with the Rapidan River and generally covers one half-mile from the centerline of the river, incorporating acreage in Culpeper, Stafford, and Fauquier Counties.

area with walkable neighborhoods connecting a network of parks open to the public and based on the floodplains of Tinpot Run and the Rappahannock River. See Comp Plan, Remington Service District at 32-3 as adopted May 2013 and revised December 2017.

Nothing could be more different from this vision than a closed data center campus, akin to a maximum security prison complex, with a cobweb of electric equipment overhead and in the substations, but with fewer jobs and no amenities for residents. If the Comp Plan and Service District are to be amended, it should not be at the behest of developers, but rather at the behest of a thorough public process that takes into consideration the historic and natural attributes of Remington and Fauquier as a whole, and the impact of data centers throughout.

Remington's proximity to the Rappahannock River and historic battlefields provides a unique opportunity to develop a public/private recreation area similar to those elsewhere in this country. Envision an area where history and recreation merge, with a river park that provides for rafting, paddle-boarding, fishing and boating, with walking, hiking and biking trails alongside the river and throughout the battlefields. Some residences built in a style that complements Remington's historic character could supplement commercial breweries, wineries, restaurants, professional offices, and shops that will enliven Remington and attract national tourism that will lift up the community. This is the type of development Remington and Fauquier should seek. It has been done and can be done.¹³

In addition to cultural and historic resources, there are many conservation resources located near the Gigaland Project that warrant protection. Private residents and the county, state, and federal governments have all made significant investments in land conservation in the Remington area. There are about 99 permanent easements, totaling over 6300 acres, that are held by various land trusts and Fauquier County within five miles of the data center projects. The majority of these easements are in the PDR program financed by the County. See Exhibit D.

Another 88 properties totaling over 5800 acres, anchor the Fauquier Agroforestal District (AFD)] within that same five-mile distance. While there is some overlap in these program properties, these two conservation programs together total approximately 12,000 acres and represent an enormous investment in conservation and open space. These conservation interests will be poorly served by the Gigaland Project, impacting land valuation, impeding view sheds, and imposing floods, noise and air pollution. The unforeseen impacts on land valuation, water displacement and pollution caused by the data center "boom" must be better understood prior to any rezoning. See Exhibit D.

The Town of Remington is the anchor of the Remington Service District, although it is not in the Service District itself. The security requirements for the proposed, extremely large and tall

Springs Valley (030-5427) and Mt. Holly Ridge-Marsh Run Rural Historic District (030-5587). Citizens for Fauquier County and the Remington Community Partnership partnered together to produce the nomination for the Hedgeman-Rappahannock Rural Historic District, which was deemed eligible by the Department of Historic Resources in 2015."

¹³ See <u>boaterparks.com</u> that lists projects where rivers have been developed for public recreation.

(80'+) data center buildings are antithetical to the Remington Service District Plan's concept for an integrated village sensibility. Sidewalks and nature trails within the industrial area will be absent. The public will be locked out and excluded at security checkpoints, while the buildings will loom over Remington, drawing enormous amounts of energy and emitting noise and air pollution from their cooling equipment, servers and hundreds of fossil-fuel generators. At night, the security lighting will cause Gigaland's seven buildings to rise like multiples of Oz over Remington, warning residents and animals alike to stay away, alert and awake. During rainstorms, flooding could increase as water will cascade over millions of square feet of new, impermeable surfaces, deluging the already flood-prone watershed. There are an estimated 1,159 residences within one mile of all of the data centers currently proposed that could be impacted.

The Gigaland Project is not the clean, low impact complement to the village scale of Remington at the southwestern gateway to Fauquier County that the Remington Service District Plan contemplates. The famous Journey Through Hallowed Ground view shed along James Madison Highway, the western gateway to Remington, will also be imperiled by the gigantic, tall, industrial data centers. Nor will this data center project respect the historic, hallowed Rappahannock II battlefield that will be destroyed irreparably for private purposes and exclude heritage tourism. Several more large data centers, with hundreds of generators are not compatible with Remington. There will be sufficient data center development with the already approved RTP that is currently being built. Approval of this Comp Plan amendment, rezoning application, special exceptions and waiver request would establish a precedent that would make it difficult not to approve the other data center projects pending in Remington, and will only encourage more data center applications in Remington and Fauquier. Currently, there are at least two other data center projects with similar features, zoning, and large lot size within or adjacent to the Remington Service District requesting approval. The Vint Hill PCID has demonstrated how difficult it may be to limit the number of data center proposals to expand the Business Park once one is approved. There is a very real possibility that once one residential or agricultural area is rezoned to BP, more landowners in and near the Service District may be encouraged to request rezoning consideration. See Exhibit C.

THE GIGALAND PROJECT IS CONTRARY TO FAUQUIER'S DATA CENTER POLICY

The Gigaland Project largely ignores Fauquier County's new data center development policy (FC Policy) that the Board of Supervisors adopted on December 14, 2023. Perhaps this is because the Gigaland Project simply cannot or will not comply. The policy states: "Applicant sponsored Comprehensive Plan amendments, which expand a Service District or change the Land Use designation within a Service District are not appropriateThe Data Center use should not be expanded to other zoning districts without a comprehensive review of the County's Comprehensive Plan and Zoning Ordinance." FC Policy at I.A. a. and 3. The entire Remington Service district is not a Business Park and data centers are not a designated land use in the project area. Only a comprehensive, public review of Fauquier's Comp Plan should initiate consideration of such impactful rezoning.

Siting. Again, FC Policy states that "Data centers should be where existing infrastructure exists to support the development...." FC Policy 1.B. While the Gigaland Project proffers under

grounding new electric lines, as required by Fauquier's ordinance, it also requires use of four new substations. See Statement of Justification at page 1 and 5-6. This increase in electricity will require additional transmission lines, upgrades, and substations outside the Gigaland property that will be built at considerable cost to all ratepayers, not just the data centers operators. There is no written, public proof that Gigaland and/or other data centers, and not all ratepayers, will pay for more electric substations and more transmission lines/upgrades outside the Gigaland property that this Gigaland Project will necessitate.¹⁴

The FC Policy also states that data centers and their associated energy infrastructure should not disturb or interrupt scenic view sheds, as defined in the Comp Plan, or view sheds of properties listed in the National Register of Historic Places, e.g., the Remington Battlegrounds that are eligible for such designation,...nor be located along National Scenic Byways or Virginia Scenic Byways. FC Policy at 2, C.3. See also footnote 10 above. If approved, this Gigaland Project, with its seven tall buildings and a tall water tower likely will be visible from the James Madison Highway that is part of the Journey Through Hallowed Ground. See www.hallowedground.org. Gigaland certainly will be visible from the Town of Remington and the Meadows residential development. Instead of historic vistas, travelers will see seven, tall, industrial buildings and a campus that is closed to the community and heritage tourism, leading to more data centers that crowd out other forms of desirable development with more potential benefit to the community. The Gigaland Project simply is not compatible in scale and intensity to the surrounding area and should be rejected.

Site Sustainability. FC's Policy calls for a setback of 35 feet from all water bodies, wetlands, and floodplains, while a vegetated riparian buffer of at least 25 feet is strongly encouraged along all water bodies, wetlands and floodplains. FC Policy at 4, E. 5 and 6.¹⁵ However, on the site plat, it appears that the Gigaland buildings will be located near or on top of wetlands that feed the stormwater management ponds, as well as the Tinpot Run watershed. This watershed regularly overflows during downpours that have flooded the Remington area, isolating residents. See Exhibit B. **CFFC urges the County to require the Applicant to fund an independent, third party stormwater management study to determine how the addition of over 2.2 million square feet of impervious surfaces, including generators, parking spaces, and internal roadways, will affect the surrounding area during torrential rainfalls that have become more frequent in recent years.**

The appropriate riparian buffers and setbacks do not appear to be included in the Gigaland Project, and the siting of buildings near or over the runs and wetlands could lead to disastrous displacement of water in an area already prone to flooding. It is imperative that a storm water

¹⁴ Note that PJM, the regional grid operator, has stated that the existing transmission lines around Remington are "overloaded." More data centers will require adding capacity to existing or new transmission lines, as well as substations both inside and outside (e.g., Morrisville) data center properties. See Exhibit D, PJM slide, 12/24. As noted above, any new transmission lines needed to service the data centers will require taking @ 24 acres per running mile for new rights of way, intruding on rural and residential properties alike.

¹⁵ Fauquier's John Marshall Soil and Water District typically requires a minimum of 35 or more feet on each side of a run, wetland or waterbody when planting riparian buffers.

management plan detail exactly how the storm water management will operate, given the considerable run-off from the impervious surfaces, to avoid contributing to future flooding.

Building Design. FC Policy states that data centers should be compatible in scale, both size and height, and intensity to the surrounding area; building heights "shall not be increased above the 45-foot maximum, unless the Applicant can demonstrate that the proposed height is compatible with the surrounding development and that it will not have an adverse impact on adjacent and nearby properties." FC Policy at 2 & 4, 1.C & III. B. A visual impact analysis needs to be submitted that is verified, at Applicant's expense. Id.

While site renderings can prettify the data center campus, they cannot hide the fact that the data centers are far and away not in scale with the village scale of Remington and the surrounding area. The proposed 80-88 foot tall data centers, will loom over Remington and homes in The Meadows, totally overwhelming the character of the area and announce an unsustainable industrial taking of Remington at the western gateway to southern Fauquier County. This enormous, closed, tall, industrial complex is antithetical to Remington and Fauquier.

Noise. FC Policy requires site plans to demonstrate how Fauquier's ordinance for noise limits will be met and strongly encourages rezoning applications to provide the same level of documentation. PC Policy at 6, C and F.1 (emphasis added). FC Policy specifies that the noise study should be prepared and certified by a professional noise engineer, verified by a third party at Applicant's expense, **factor in all data center related equipment, including generators**¹⁶, and update and resubmit the noise study within 30 days of occupancy. Id. ¹⁷

Gigaland's application fails to demonstrate how it will meet Fauquier's noise ordinance. There is no noise study with the publicly available application to demonstrate its commitment to noise compliance. Instead, the Applicant states it has conducted a preliminary nose analysis and that the noise levels comply with Fauquier's ordinance. However, in its proffers, Gigaland appears to separate the various noise sources by stating that "Any noise which emanates from any operation, activity, or source on the Property," will meet the noise ordinance. **This needs to be restated as "All noise which emanates from any and all operations, activities and sources on the Property..."** to include the totality of noises emanating from Gigaland. Then Gigaland exempts emergency operation of generators and separates out the noise from generators for

¹⁶ To see and hear diesel generators in action, click on this link (<u>HOA Roundtable</u>) and scroll down to the video: "When a Data Center Runs on Diesel Generators."

¹⁷ CFFC is greatly concerned about the inadequacy of Fauquier's noise ordinance as applied to data centers. For instance, Fauquier's noise ordinance exempts air conditioning equipment and generators from its noise ordinance. See Sec. 13.5-4. - Exemptions at (12) and (13). These are the very sources of much of the data center noise that is harmful to the health and welfare of residents. The ordinance also fails to address the constant vibrations emanating from the servers within the data centers. A new noise ordinance that takes into account the scale of data centers, their equipment and the cumulative impact of noise and vibrations is warranted prior to any rezoning or approvals of data centers in Fauquier.

testing purposes. Gigaland Proffer Statement at G.i, ii, iii, and iv. Finally, Gigaland limits noise measurements to "no more than one set of sound or noise measurements required in any one calendar year." Proffers at G.vi.

These noise and testing proffers are inadequate. Data centers eject noise from air-cooling systems and generators, simultaneously, whether being tested or used for emergencies, from all data center buildings, along with constant humming vibrations from the operation of servers within the buildings. Added to this noise from seven data center buildings and hundreds of generators, will be the noise from four electric substations. Given the specifications for the substations, air-cooling equipment, servers, and generators, desk-top software can demonstrate the cumulative noise levels at various distances from the property line of the Gigaland Project. Surely Gigaland has some knowledge of the specifications for all the equipment, including generators and substations, that will be used and should submit a third party certified noise study demonstrating the entire Gigaland Project's compliance. Simply stating that it will comply, after operations have commenced, based on unsubstantiated testing, is totally inadequate.

Remington Technology Park will have its own, thus far unspecified, noise level. As a result, the residential community in the Meadows will be subjected to a cumulation of noise and vibration between these two facilities, and perhaps two more proposed data centers with at least six more data center buildings. While the Fauquier noise ordinance requires that Gigaland only meet the standard at its property boundaries, the fact is that the cumulative noise generated by all the data centers, generators and substations likely will exceed Fauquier's noise ordinance, separately and together.

Perhaps Gigaland is punting on the noise policy because it knows that the noise generated by seven data center buildings, hundreds of generators (that require monthly testing occurring sequentially on a daily basis), and four substations will exceed the County's policy on noise. A "real-world" study after building the fully operational Gigaland Project will be futile, as the Applicant or its successors can simply pay the wholly inadequate fine of \$250 for the first offense, plus \$500 for every day thereafter, as limited by VA State law. That is peanuts for a data center operator.

After a year of attempted noise abatement, Amazon in Haymarket has been unable to prove it could comply with Prince William County's more lenient noise ordinance. See Prince William Times, "Residents turn up the volume on data center noise complaints; Protesters warn of data centers' impacts across the county," Jill Palermo, August 31, 2022, updated February 6, 2023. See also Washington Post, Caroline O'Donovan, "Fighting back data centers, one small town at a time," October 5, 2024 (with embedded data center noise video). Remington should not be our county's guinea pig for data center experiments that exceed Fauquier's existing noise policy or ordinance.

Gigaland has also ignored FC Policy's request that it consider providing, at Applicant's cost, continuous noise monitoring devices around the property to transmit actual noise levels on a continuous basis to a remote, publicly accessible, on-line database, probably because that

also would be an admission against interest that this Gigaland Project will inevitably exceed Fauquier's noise policy and any ordinance for data centers. FC Policy at page 6, III. F. 4 and 5.

In any event, Fauquier's current noise ordinance is wholly inadequate to address the unique noise and vibration emissions of data centers and substations. The only known remedy for real-world data center sounds is to locate them far away from any residence, village or town. Given CFFC's previous analysis and that of others in PWC, it is not prudent to allocate land to data centers that are less than 1/2 mile (2640 feet) from the closest residence. **Residences in the Meadows are within 750 feet of the Gigaland data centers.** Moreover, seven data center buildings will emit more noise than one, just as multiple car horns are louder than one. So, the amplification of noise from multiple data centers warrants removal further away from any residence. Applicant is simply a broker that will be long gone when residents' complaints about noise are realized.

With this Gigaland Project, nearby residents will be forced to endure unremitting noise and vibrations, 24/7 from seven enormous data center buildings, hundreds of generators when tested daily or in continual use during likely power blackouts, plus four substations, in addition to other background and data center noise. Even if the Applicant ultimately were to try to divide and conquer the noise ordinance by claiming that each data center building has a different "operator" subject to the noise ordinance, it is unlikely that even one of the data center buildings could meet Fauquier's data center noise policy.

CFFC has demonstrated that the one, relatively smaller Amazon data center building in Warrenton would exceed Fauquier's noise ordinance. The Gigaland Project as a whole must comply with the County's noise ordinance, without exception, and should comply with its data center policy, too. Gigaland has failed to demonstrate this compliance requiring that this Application should be denied.

Traffic Analysis. During all of the stakeholder engagement meetings residents cited the issue of traffic congestion as a major objection. Construction and operations traffic for both Gigaland and Remington Technology Park will ultimately exit onto Lucky Hill Road. Gigaland traffic will travel first on State Road 782 before arriving at Lucky Hill Road. There are two serious problems with this. The first is that Lucky Hill Road is a very narrow road that is unlikely to be able to handle the projected volume of heavy equipment traffic. The civil works for both of these data center projects will necessitate hundreds of 10 ton dump trucks. The second Issue is that once they turn onto Lucky Hill Road they must travel south toward Remington through the small Meadows development, only to then have to cross over Remington. Rest assured, residents will object to this traffic.

Sustainability. FC Policy encourages data centers to commit to and proffer a **Power Usage Effectiveness (PUE) of 1.5 or less**, and recommends: orientation of buildings to use passive cooling and daylight opportunities, incorporation of innovative technologies which reduce power consumption, reuse of heat generated by the data center operations, use of heat reflective roofing, use of sustainable building materials, and use of **EPA Tier 4** generators. FC Policy at page 6, III.G.1-7.

These are not unattainable goals, but rather existing, sustainable practices to which a world-class data center could commit. The Applicant's failure to make these specific commitments demonstrates its inability to meet FC's Policy on sustainability of data centers and should, therefore, be denied. Fauquier and Remington must not be dumping grounds for low quality data centers that are not committed to specific sustainability standards.

Utilities. FC Policy requires that a successful Gigaland Project will thoroughly demonstrate how the data center's utility needs will be met. Applications are expected to provide information related to electrical load requirements and illustrate that any needed expansion of utilities can be done with minimal impacts and compatibility with the surrounding area. FC Policy at page 7 IV. Gigaland's application does not meet these requirements. Based on the Dominion Load Letters that Gigaland provided, it could use @600 MW of electricity. Further, Gigaland appears to be "future proofing" its electricity needs by proposing four substations rather than the one or two the data center would require. This is far from a minimal impact, exceeding by multiples the totality of Fauquier's current electric usage, and is incompatible with the surrounding area. Existing transmission lines will have to be augmented, and new substation(s) will be required, both inside the property and outside, while all ratepayers will be paying for an increased electric infrastructure that benefits a private, subsidized industry. See Exhibit E, PJM slide. 18

Water. Fauquier's ordinance and policy require operations to use recycled water. Other data centers in Fauquier, including the RTP, have committed to compliance with Fauquier's ordinance. Gigaland's Proffers commit to using water sourced from water hauling companies, but does not consistently use the word "recycled" for charging or recharging its air cooled data centers. Gigaland Proffers at V. B. Use of "recycled" water must be emphasized and required. Just this past summer and fall, Fauquier encountered a long drought necessitating restricted water usage. Recycled water must be used, not just water that is hauled from another source. During a drought, whose water supply will be prioritized—Fauquier's residents, farmers, or data centers?

Decommissioning. Unfortunately, FC Policy does not address decommissioning of data centers, nor does the Applicant. Given the speed of technological innovation that could render large-scale data center buildings obsolete, ¹⁹ CFFC urges the County to develop a decommissioning plan for this and other data center proposals similar to that provided under Fauquier's Utility Scale Solar ordinance, as amended to incorporate CFFC's recommendations that were previously submitted to the County. See FO, Pt. 20, 5-2003, 26-29, and CFFC, "Minimizing the Impact of Utility Scale Solar Facilities on Agricultural Land, Open Space, and

¹⁸ Gigaland proffers \$2 million to pay for a fire truck. However, such trucks today cost more: \$2.2 million and rising. The proffer formula for price increases requires adjustment to reflect real-world costs and should be redirected to Fauquier. See Proffers at pp. 9-10, VI. Fire Mitigation; NYT, February 17, 2025: "As Wall Street Chases Profits, Fire Departments Have Paid the Price."

¹⁹ "Moore's Law," is an observation that the number of transistors on a chip doubles about every two years. This is an empirical relationship that describes a long-term trend in technology that requires planning for decommissioning of the potentially obsolete data center buildings and their contents.

the Environment" at pp. 9-17, 26-29. The scale of the Gigaland Project and magnitude of its impact warrants such a requirement. Otherwise, Fauquier and Remington could be left with huge, abandoned warehouses with obsolete equipment leaching toxic chemicals that blight our countryside.

THE GIGALAND PROJECT WILL GENERATE WATER, NOISE, AIR AND LIGHT POLLUTION

The Remington area currently suffers from repeated flooding. Adding over 2.2 million square feet of impervious surfaces will only exacerbate this issue and needs to be addressed with an independent stormwater management study, prior to further consideration of this application. Additionally, CFFC believes that a **third party, independent cumulative impact assessment** should be conducted before any more data center projects are approved in Remington. FEMA floodplain information and Virginia SWM requirements are back dated, being based on past data, particularly given the increasing velocity and frequency of heavy rain events that could result in catastrophic flooding of Remington, and given the volume of additional impervious surfaces being considered with each application. Clear-cutting tree cover has only exacerbated the problem, while removing valuable carbon, noise and water absorbing flora.

Data centers are large, noisy, high energy consuming, brightly-lit buildings on closed campuses. Not only will these Gigaland data center buildings be out of character for Remington, but they will also operate 24/7, using enormous amounts of energy that will contribute to Dominion's plans to retain its fossil fuel-sourced electricity, emitting diesel or gas generator particulates and fumes, emitting constant noise and vibrations, and, throughout the night, emitting lights from the seven 80-88 foot tall rooftops that will loom over homes and buildings in Remington and the surrounding residential developments. Sleep for residents and animals alike will be disturbed, destroying Remington's rural, agricultural and historic character. These problems will be amplified with truck traffic along Rt 15/29 that exceed 75 dBA in the evenings, and where, also along this axis, the Norfolk Southern Railroad achieves 80 to 85 dBA north of Remington. See Exhibit F.

CONCLUSION

Amending Fauquier's Comp Plan and Rezoning Remington's service district for additional data centers would be wrong for Remington's historic, rural character. Notwithstanding Fauquier's Comp Plan, Ordinances and Data Center Policy, the Gigaland Project will generate noise and vibrations that will be a constant nuisance, generate emissions that will pollute the pristine air in Remington and Fauquier, and produce light pollution at night that will disturb the historic, rural, agricultural character of Remington. In addition, without implementation of a cumulative storm water management plan, flooding in Remington will increase. Approval of this application will eviscerate the peace and quietude of Remington and the surrounding residential areas, and detrimentally affect the health, safety and welfare of its residents.

This Application should be denied for all of the reasons discussed above.

Respectfully submitted,

Kevin Ramundo

President

Citizens for Fauquier County

Exhibit A: Estimates of Tax Revenues For Built and Approved/By-Right Data Centers

3-18-23 update by CJB/Protect Fauquier

DATA CENTERS IN FAUQUIER

Existing, Built, Operating DATA CENTER	SQUARE FEET	EST TAXES/YEAR, BPP & RE	NOTES
OVH	84,000 sf	\$1.38 M actual in 2023 (BPP=\$1.246 M0 (RE = \$0.125 M)	Reportedly only 62% of capacity is being used. If capacity is fully utilized, BPP taxes would increase. OVH also seeking expansion; see entry further below.
Warrenton Training Center WTC01 – Microsoft WTC02 – AWS WTC03 – AWS WTC04 - ??	42,500 sf? 41,200 sf? 83,200 sf? unknown	\$5.418 M actual in 2023 - for BPP only, per Eric Maybach in 3/13/24 email. No RE because of location on Federal property.	WTC04 may have been built in 2023. Need verification.

Approved or By-Right DATA CENTER	SQUARE FEET	EST TAXES/YEAR, BPP & RE Based on \$22 – \$35 per sf under roof	NOTES
Amazon/Blackwell	220,000 sf	\$4.8 M - \$7.7 M	In litigation. SDP pending for ToW approval as of 3-18-24.
Cyrus 1/Vint Hill	898,000 in four 2-story buildings	\$19.8 M - \$31 M	Cyrus 1 submitted application to County 3/11/24. Will remain "by right" after 3/16/24 rezoning of PCID by BOS.
OVH expansion/Vint Hill	117,000 DG est	\$2.6 M - \$4.1 M	Proposed. Will remain "by right" after 3/16/24 rezoning of PCID by BOS.
Remington Tech Park	Up to 1.7 M sf in 6 buildings	\$37.4 M - \$59.5 M	Was approved by BOS in 2018 but has not been developed. Site owned by Canadian company which seeks leasing for tenants

Exhibit B: Potential Flooding Requires Independent and Cumulative SWM Assessment



Historic Flooding in Remington

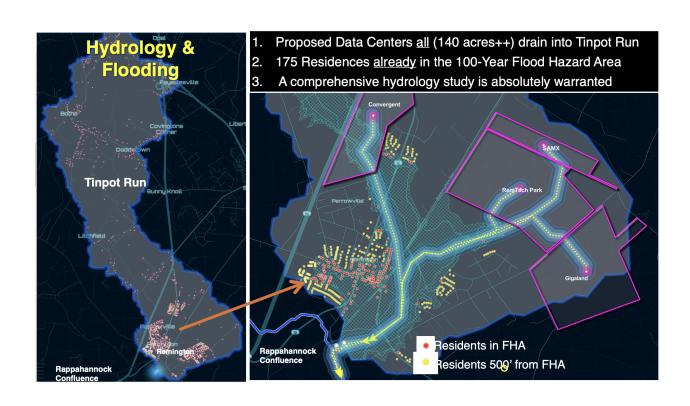
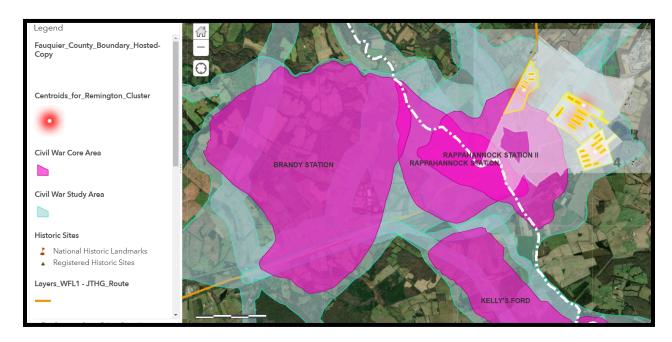


Exhibit C: Approval will generate more data center projects in Remington and more electric infrastructure on top of historic Rappahannock battlefields and elsewhere in Fauquier.

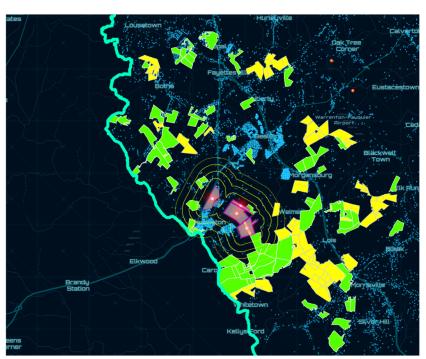


Pivotal Civil War battles occurred in the Rappahannock area. Gigaland lies in the Civil War Study Area.

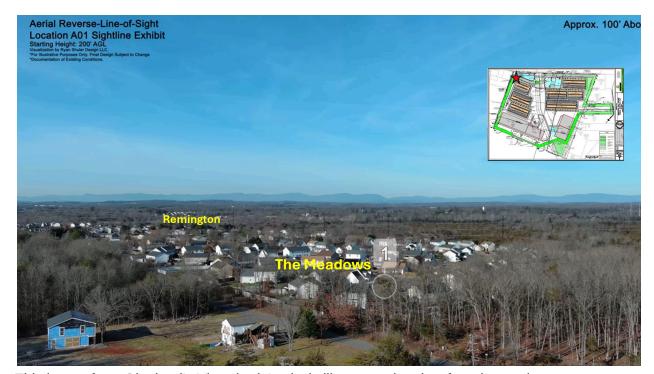
Exhibit D: Land in Permanent Easement (green) and Agroforestal Districts (yellow) within Five Miles of the Proposed Data Centers. There is overlap between these programs which, combined, total approximately 12,000 acres in public and private conservation investments.

Remington Data Center Direct Impact on Land Conservation

- 99 Permanent Easements totaling 6,311 acres within Five Miles of Proposed Remington Data Centers
- 88 Properties in Agforestal Districts totaling 5,858 acres within Five Miles of Proposed Remington Data Centers
- In addition, each running mile of new transmission lines require 25 acres in RoW



Dave Gibson (CFFC)



This image from Gigaland's Viewshed Analysis illustrates the view from its southwestern-most data center roof at 100 feet above the corner grade (433'). Most of The Meadows are visible, as is the Town of Remington..

Exhibit E: Existing Transmission Lines through Remington Are Overloaded

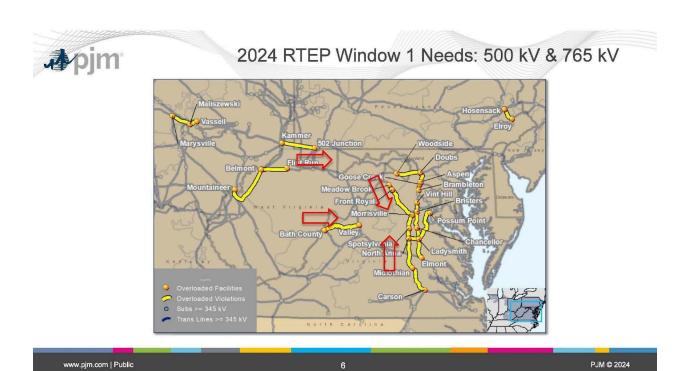


Exhibit F: Noise

