**To:** County Council

**From:** Council Member Steve McKay (District 2), Council Member Jerry Donald (District 1)

**Date:** 5 February 2025

**Subject:** Establishing a Critical Digital Infrastructure Floating Zone

**Issue:**

Should the Frederick County Council establish a Critical Digital Infrastructure Floating Zone, which would specify locations, approval criteria, and design requirements for Critical Digital Infrastructure?

**Background:**

Critical Digital Infrastructure (CDI) – commonly referred to as data centers – is an increasingly important feature of our modern society. CDI is also a uniquely intensive use that places significant demand on local and regional power and water resources, requiring careful consideration for where they are located and how they will be supported. In so doing, consideration must also be given to the impact that CDI development will have on adjoining uses, ensuring that these developments are compatible with surrounding properties, and that they are designed to minimize their impact on those properties and property owners.

In June 2023, the County Executive convened the Frederick County Data Centers Workgroup to examine existing laws and to provide thoughtful guidance on shaping the growth of this relatively new and rapidly changing technology industry poised for expansion in Frederick County. The Data Centers Workgroup was charged with examining lessons from Northern Virginia’s experience with data centers and to consider, among other topics: appropriate locations for data centers; taxation issues related to data centers; water, power, and other infrastructure needs of data centers; community benefits that can be derived from the data center industry; and potential amendments to the County’s existing critical digital infrastructure law.

Drawing from the final report of the Data Centers Workgroup, the Administration brought forward two bills for the County Council’s consideration during an 8 October 2024 workshop: a CDI Floating Zone bill and a CDI Design Requirements bill. During the workshop, there was extensive discussion of each bill, including recommendations for changes and additional language for the Administration to consider.

On 19 November 2024, the County Council held a second workshop with a revised version of the CDI Design Requirements bill, reflecting comments that were made by Council Members at the initial workshop. Staff also described comments that were received from stakeholders, industry representatives, residents, and citizen groups about the design requirements bill. At that time, Administration Staff advised the Council that they were working on alternative “zoning tools”, rather than the floating zone, to address CDI locational criteria. Staff noted that this was being done at the request of Council Leadership.

On 7 January 2025, at the request of the Administration, the Council had scheduled a First Reading for a new version of the CDI Design Requirements bill. In addition to other changes, the new bill now included locational criteria, and Staff reported that both the floating zone and other “zoning tools” were no longer under consideration. The result of these changes meant that CDI would remain a “by right” use in the General Industrial (GI) and Limited Industrial (LI) zones. By majority vote, the Council decided to delay the introduction of the bill until such time as another workshop could be scheduled with the Administration for the purpose of explaining these revisions and discussing the rationale for the new criteria. Subsequently, in a letter dated 16 January 2025, the County Executive informed the Council that she was withdrawing the CDI bill and that any further legislation would be the Council’s responsibility.

**What This Bill Will Do:**

This legislation will establish a new CDI Floating Zone in the County Code. In so doing, it will accomplish the following changes:

* Creates the CDI Floating Zone District (§ 1-19-10.1100);
* Enhances the design requirements for CDI facilities (§ 1-19-8.402);
* Enhances the design requirements for CDI electric substations (§ 1-19-8.403);
* Amends the Design Requirements for Specific Districts (§ 1-19-6.100), by altering required CDI lot width and setback distances; and
* Amends the Use Table (§ 1-19-5.310), by removing current references to CDI facilities and electric substations.

Of note, this bill will eliminate the “by right” use of CDI in the LI and GI zones for future CDI development, meaning that future CDI development (with the exceptions noted below) must be within a CDI Floating Zone.

**The CDI Floating Zone:**

Floating zones are important tools within the County Code. Currently, there are seven designated floating zones in the Code:

* Mineral Mining District (§ 1-19-10.400)
* Planned Unit Development (§ 1-19-10.500)
* Mixed Use Development (§ 1-19-10.500)
* Mobile Home Park District (§ 1-19-10.600)
* Solid Waste District (§ 1-19-10.800)
* Institutional Floating Zone District (§ 1-19-10.900)
* Open Space Recreation District (§ 1-19-10.1000)

Floating zones offer a discretionary approach to certain types of development that have the potential to significantly impact the surrounding area. They are discretionary because even if an applicant satisfies each condition and criterion in the code, the Council is not obligated to approve the request. In this way, floating zones provide an important balance to “by right” development uses in the code, reserved for the most potentially impactful uses – such as data centers.

During their deliberations, the Data Centers Workgroup was briefed by County staff on the different approaches to zoning and regulating development in the County Code, emphasizing the pros and cons of each. The Workgroup selected the floating zone concept upon which to focus their recommendations for locational limits on data centers because only the floating zone met all their needs.

Floating zones are also the correct approach because this is the only avenue that offers the most public and transparent review process, including public hearings before both the Planning Commission and the County Council. This ensures the maximum public awareness and participation in development decisions that can have as much impact as this use presents.

Lastly, as the County moves forward with the Investing in Workers and Workplaces (IWW) planning activity, there will likely be recommendations to increase the amount LI and GI zoning available for economic growth. Maintaining the “by right” use of LI and GI for CDI development poses a risk that this expansion of LI and GI zoning may be dominated by CDI development applications, and the Council would have no authority to ensure a more balanced approach to this economic growth – an authority that a CDI Floating Zone would provide.

**New Elements in this CDI Floating Zone Bill:**

The CDI Floating Zone proposed in § 1-19-10.1100 derives heavily from the Administration bill workshopped on 8 October 2024, with the following differences:

***Exemption for Certain Approved Development.*** Subsection (A)(2) of the proposed floating zone section exempts CDI Facilities and Electric Substations that have an approved site plan or an approved Adequate Public Facilities Letter of Understanding. It is not the intent of this bill to submit already approved development to a new approval process with substantially different requirements. For example, with this exemption, the current development at the former Eastalco site under the previous zoning conditions will not be required to resubmit under a floating zone application.

***Limiting CDI Locations to Within 2 Miles of a High-Voltage Electric Substation.*** The original CDI Floating Zone bill included a criterion for limiting the location of CDI development to within 2 miles of high-voltage transmission lines, following the similar recommendation by the Data Center Workgroup. High-voltage transmission lines are intended for long-distance conveyance of electric power. New development, regardless of how intense their electric need, cannot simply tap into those transmission lines. Instead, they must receive their power from a substation connected to those transmission lines which then step down the voltage for local distribution. Thus, it is far more relevant to limit new CDI development to within a certain distance to a high-voltage electric substation, as proposed herein.

***Expanding the List of Certain Uses in the Vicinity of CDI Development Which Must be Addressed in the Application.*** Subsection (D)(2) lists various uses (e.g., schools, churches, residences) that may be impacted by CDI development, and requires the applicant to mitigate those impacts to the maximum extent practicable. Based on discussion during the 8 October 2024 workshop, “colleges and universities” are added to the list of potentially impact nearby uses.

***Demonstration of Sufficient Electrical Capacity.*** The approval criteria in subsection (D) are enhanced under this bill with a requirement in (D)(6) that the applicant must demonstrate that there is sufficient electrical capacity in the local and regional network, that they will develop the needed capacity on-site, or a combination of the two. When evaluating new CDI development applications, it is critical that the Council understand whether there is sufficient power to service the development. We must learn the lessons of Northern Virginia’s data center experience and the current debate over the Maryland Piedmont Reliability Project.

***Demonstration of Minimizing Use of Potable Water for Cooling.*** The approval criteria are also enhanced with a requirement under (D)(7) that the use of potable water as a cooling solution will be minimized. It has become very clear that Frederick County cannot support extensive CDI development that relies upon potable water. While the details of the cooling plan are best left to be addressed under the requirements of the Adequate Public Facilities Ordinance, the issue is important enough for it to be addressed earlier, at the initial zoning decision.

***Demonstration of Planned Inclusion of On-Site Power Generation.*** The approval criteria are further enhanced by requiring the applicant to demonstrate planned inclusion of on-site power generation, through means other than diesel-powered back-up generators. As a matter of policy, Frederick County must insist that CDI development includes on-site power. You’ll note that this isn’t a requirement for all the needed power to be provided on-site – just that some it must be. This provides both flexibility to the applicant and discretionary criteria for the County Council.

***Demonstration that Current CDI Zoning is Being Utilized, and that Additional Zoning is Needed.*** The last proposed new approval criterion requires the applicant to show that existing land zoned for CDI development is being actively developed and, thus, it is desirable for the County to add additional zoned land. Frederick County must look toward the growth of CDI development with a measured and prudent approach. Excessive CDI development will tax our resources, including our limited LI and GI zoned land. Frederick County prides itself on our diverse business tax base and we must be wary of over-zoning land for CDI development, which may come at the exclusion of other equally beneficial employment development that requires LI and GI zoning.

**Design Requirements for CDI Facilities:**

This section (§ 1-19-8.402) draws heavily from the Administration bill that was proposed for workshop on 7 January 2025, which itself drew from the existing code. The Administration proposal benefited from both two prior Council workshops, as well as extensive comment from stakeholders, industry participants, and County citizens. In recognition of that input, this bill takes the Administration proposal “as is” with but three primary changes, reflecting how this section relates to the CDI Floating Zone defined in § 1-19-10.1100. Specifically, the bill removes the following subsections from the Administration proposal:

* Subsection (A) – Purpose and Intent;
* Subsection (B) – Size and Location; and
* Subsection (C) – Approval Criteria.

The reason for these deletions is straightforward – this language is now addressed in § 1-19-10.1100 – which is inclusive for all elements of the CDI Floating Zone. In other words, leaving the language in this section would be redundant and superfluous. It should also be noted that this change is consistent with the original construction of the revised § 1-19-8.402 that was presented at the 8 October 2024 workshop, because that proposal was also contingent on a new CDI Floating Zone proposal.

The bill also clarifies that the amended design requirements do not apply to CDI Facilities that have an approved site plan (final or conditional). Based on discussions with Staff, it was clear that the original CDI Design Requirement bills were intended to be applicable to all CDI Facilities that did not have site plan approval, including those in the former Eastalco site, but this was not stated in the bill language. The bill now clarifies both the applicability and exemption status of the amended requirements.

One final change is proposed in this section. In § 1-19-8.402(B)(6) is a reference to the Architectural Review Committee. The ostensible role of this committee is to review site plans for CDI Facilities and then to make recommendations to the Planning Commission prior to the site plan being scheduled for Planning Commission review. The problem is that this Committee has never been staffed, and the Planning Commission continues to conduct its own architectural review, regardless of the requirement in the code. Rather than removing the reference to the Architectural Review Committee, this bill inserts a clause that conditions this architectural review requirement upon whether “the Committee exists in good standing.”

**Design Requirements for CDI Electric Substations:**

The proposed language in this section also mirrors the language proposed by the Administration for First Reading on 7 January 2025. The same three subsections are deleted here for the same reasoning as noted above, and the same exemption and applicability statement is included.

**Amending CDI Development Lot Width and Setback Requirements:**

This bill proposes to amend the required lot width and the front, side, and rear yard setback distances for both CDI Facilities and CDI Electric Substations. The changes here are identical to the changes proposed by the Administration.

**Amending the Use Table:**

This bill addresses what I believe was a flaw in the original CDI Floating Zone bill that was workshopped by the Council on 8 October 2024. That bill proposed a new CDI Floating Zone, but did not alter the “by right” use of CDI in the LI and GI zones. That created a situation whereby CDI applicants would have no reason or benefit to propose a CDI development under a floating zone application and would prefer instead to go straight to site plan review with the Planning Commission. During that workshop, I addressed this issue with Staff, who acknowledged the validity of the observation, and this bill corrects the issue.