Perkasie Borough
Planning Commission Meeting
June 24, 2026

AGENDA- Revised June 24, 2026

1. Meeting Convenes – 7:00 PM
2. Pledge of Allegiance
3. Approval of Minutes from March 25, 2026
4. Public Forum
5. Old Business
6. New Business
    - Review SALDO Application:
        - Perkasie Place LLC. / 505 Constitution Ave. Preliminary Plans – Recycling Facility – Continued to July 22, 2026 Meeting

7. Other Business
    - Discussion Item: Draft Data Center Ordinance Regulations and Recommendations
8. Adjournment

BOROUGH OF PERKASIE

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MEMORANDUM

To: Perkasie Borough Planning Commission

From: Cassandra L. Grillo, CZO, BCO, Zoning Officer

Date: June 24, 2026

Re: Draft Data Center Ordinance Review and Discussion

At the Planning Commission meeting held on May 27, 2026, the Commission did not have a quorum and was therefore unable to formally review or make a recommendation regarding a proposed Data Center Ordinance. However, an informal discussion took place among Planning Commission members and staff who were present.

Following that discussion, staff reviewed model ordinances from neighboring municipalities, planning guidance documents, and comments received during the meeting. Using that information, staff prepared a draft Data Center Ordinance for consideration.

The draft ordinance was provided to Borough Council at its June 15, 2026, meeting for review and future discussion at the July 10, 2026, Council meeting.

The Planning Commission is requested to review the draft ordinance, along with the comments provided by the Borough Utility Engineer, and discuss any recommended revisions. Feedback and recommendations from the Planning Commission will be forwarded to Borough Council for consideration as part of the ordinance review process.

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MEMORANDUM

Date:	June 5, 2026
To:	Cassandra Grillo
Cc:	Linda Reid Jeff Garton
From:	Judith Stern Goldstein and Stacy Yoder
Reference:	Data Centers Zoning Ordinance Amendment

As requested, we have prepared the following zoning ordinance amendment to address data center use:

Section 1. The provisions of Chapter 186, Zoning, Article II, Definitions, Section 186-5.C shall be amended to add the following terms:

DATA CENTER - A facility primarily used for housing and operating computer systems and associated equipment, including servers, data storage and processing systems, and accessory infrastructure such as cooling systems, power generators, electrical substations, and network hardware.

DATA CENTER ACCESSORY USE - Ancillary uses or structures secondary and incidental to a Data Center use, including but not limited to: administrative, logistical, fiber optic, storage, and security buildings or structures; electrical substations; utility lines; domestic and non-contact cooling water and wastewater treatment facilities; water holding facilities; pump stations; water towers; environmental controls (air conditioning or cooling towers, fire suppression, and related equipment); security features, provided such data center accessory uses/structures are located on the same tract or assemblage of adjacent parcels developed as a unified development with a Data Center.

Section 2. The provisions of Chapter 186, Zoning, Article IV, Use Regulations and Restrictions, Section 186-18.G, Industrial Uses, shall be amended to add the following:

(14) Data center. Such use shall include, but is not limited to, facilities primarily used for housing and operating computer systems and associated equipment, including servers, data storage and processing systems, and accessory infrastructure such as cooling systems, power generators, electrical substations, and network hardware, subject to the following provisions:

(a) Minimum lot area. The minimum lot area shall be 3 acres.
(b) Building height. The maximum building height shall be 45 feet not to exceed three stories, inclusive of associated roof-top equipment and Data Center Accessory Uses.
(c) Setbacks. The Data Center and Data Center Accessory Uses and associated equipment and structures shall be setback 50 feet from the property line of all other adjoining properties and road rights-of-way, and if abutting a residential district or residential use, the required setback shall be 100 feet from the property line that abuts such residential district or use.

(d) Buffers and screening. The perimeter buffer shall comply with Zoning §§ 186-20.L(2) and 186-54. Data Center Accessory Uses, including ground level and roof top mechanical equipment used for cooling, ventilating, or otherwise operating the facility, shall be screened from view on all sides with a visually solid screen. Such screen may be provided by a visually solid fence, screen wall, parapet wall, or other visually solid screen. Such screen may incorporate perforated surfaces on it as necessary to permit ventilation of the equipment.

(e) Barbed wire, razor wire, electrified fences, fence spikes or other types of hazardous fencing are prohibited.

(f) Noise and vibration.

[1] The applicant shall submit a pre-construction noise and vibration study with the conditional use application prepared and sealed by a qualified professional. Such qualified professional shall be an engineer licensed in the Commonwealth of Pennsylvania or other environmental or technical professional with demonstrated education, training and experience in acoustical noise or vibration analysis applicable to the scope of work being performed (defined herein as "Qualified Professional") to include the predicted noise and vibration levels from the operation of the Data Center.

[2] Simultaneous operation assumption. All noise evaluations, studies, modeling, and compliance determinations shall assume the concurrent operation of all generators, cooling systems, mechanical equipment, and other noise producing devices operating at maximum rated capacity, unless a more restrictive operating condition is required by approval.

[3] Within 180 days following issuance of a use and occupancy certificate and commencement of operations at the Data Center, the applicant shall submit to the Borough an as-built post-construction noise and vibration study. The study shall:

[a] Be conducted by a Qualified Professional using applicable ANSI standards and generally accepted criteria.

[b] Demonstrate compliance with all applicable noise regulations set forth in the Data Center Noise Standards Tables at the end of this section. Compliance shall be demonstrated using objective sound level limits expressed in A-weighted decibels (dBA), measured and evaluated in accordance with standardized methodologies acceptable to the Borough.

[c] Include sound measurements taken at all property lines.

[d] Include measurements taken during normal operations, peak cooling load, and during operation of emergency generators under load.

[e] Address low-frequency noise impacts, including compliance with applicable dBC limits set forth in the Data Center Noise Standards Tables.

[f] Vibration Standards to be used in the study. Vibration shall be evaluated using two distinct criteria: (a) Building Damage: Ground vibration shall not exceed 0.2 to 0.5 inches per second peak particle velocity (PPV), measured in accordance with USBM RI 8507 or successor standard; and (b) Human Perception: Vibration levels shall not exceed 65 VdB, measured in accordance with ISO 2631-1 or successor standard.

[g] Identify all measurement locations, instrumentation used, calibration documentation, testing methodology, operational conditions during testing, and meteorological conditions.

[h] The timing of the post construction noise and vibration study shall not preclude enforcement by the Borough at any time upon identification of a violation. The applicant shall provide reasonable access to monitoring data,

equipment specifications, and operating conditions to the Borough Engineer, designee or other consultant acting on behalf of the Borough.

[4] If the post construction study demonstrates non-compliance with any applicable noise or vibration standard, the applicant shall, within 30 days of written notice from the Borough, submit a corrective action plan prepared by a Qualified Professional. All violations shall be fully remediated within a timeframe approved by the Borough, but in no event later than 90 days following Borough notice of non-compliance, unless extended by the Borough for good cause shown.

[5] If the pre-construction noise study establishes a baseline sound level in excess of the maximum sound level permitted under Data Center Noise Standards Tables, the post-construction study shall demonstrate that operations of the proposed use do not increase baseline ambient sound levels. Sound levels with 1 dBA of ambient sound levels will meet this requirement.

[6] Objective Noise Standards. Noise limits shall be established by land use category, measurement location, time-of-day, and averaging period, and shall include provisions for instrumentation and low-frequency noise evaluation.

[7] The Borough may require additional noise and vibration testing upon receipt of substantiated complaints or following material modification, replacement, or addition of mechanical equipment, cooling systems, generators, or other vibration-generating equipment.

[8] If initial monitoring or complaints indicate a probable violation, the Borough may require interim mitigation measures, which may include operational modifications, equipment limitations, or temporary curtailment of specific noise producing activities until compliance is demonstrated.

[9] Data Center Noise Standards Tables.

Table 1: Data Center Noise Limits, Measurement, and Compliance Requirements

Category	Requirement
Applicable Uses	Data Centers, including all accessory mechanical equipment, generators, cooling systems, and substations
Measurement Basis	A-weighted sound levels (dBA), unless noted otherwise for low-frequency noise
Receptor Locations	Measurements and modeling shall be conducted at the nearest property line to receptors
Operating Condition Assumption	All compliance evaluations shall assume simultaneous operation of all generators, cooling equipment, and other noise-producing devices at maximum rated capacity

Table 2: Numeric Noise Limits by Zoning Use

Receiving Land Use	Daytime (7:00 AM – 10:00 PM)	Nighttime (10:00 PM – 7:00 AM)
Residential	55 dBA Leq (1-hour)	45 dBA Leq (1-hour)
Mixed-Use / Commercial	60 dBA Leq (1-hour)	50 dBA Leq (1-hour)
Industrial	65 dBA Leq (1-hour)	55 dBA Leq (1-hour)

Short term tonal or impulsive noise exceeding the above limits by 5 dBA or more shall constitute a violation.

Table 3: Low Frequency Noise Criteria

Parameter	Requirement
Frequency Sensitivity	C-weighted sound levels (dBC), capturing enhanced sensitivity to low-frequency noise
Measurement Metric	Equivalent continuous sound level (Leq, 1-hour) in dBC
Measurement Locations	At the nearest property line
Daytime Limit (7:00 AM – 10:00 PM)	70 dBC Leq (1-hour)
Nighttime Limit (10:00 PM – 7:00 AM)	60 dBC Leq (1-hour)
Tonal / Narrowband Noise	Clearly perceptible low-frequency tonal noise shall require mitigation regardless of overall dBC compliance, as determined by the Qualified Professional or the Borough based on clearly perceptible tonal characteristics
Applicability	Limits apply under simultaneous operation of all generators, cooling systems, and mechanical equipment

Table 4: Modeling and Study Requirements

Requirement	Standard
Pre-construction Study	Required with conditional use application
Post-construction Verification	Required within 180 days of commencement of operations
Prepared By	Qualified Professional with demonstrated noise expertise
Modeling Methodology	ISO 9613-2, CadnaA, SoundPLAN, or equivalent accepted industry model
Meteorological Assumptions	Downwind propagation, ISO-conservative conditions
Equipment Data	Manufacturer sound power levels and octave-band spectra
Low-Frequency Evaluation	Required where large generators or cooling systems are used

Table 5: Measurement Procedures

Element	Requirement
Instrumentation	Type 1 or Type 2 ANSI-certified sound level meter
Calibration	Pre- and post-measurement field calibration required
Measurement Duration	Minimum 15 minutes per location unless otherwise specified. Sound level limits expressed as hourly equivalent levels (Leq, 1-hour) may be evaluated using shorter-duration measurements, including the minimum durations identified in this table, where such measurements are conducted under steady-state operating conditions and are representative of normal operations.
Operating Conditions	Measurements shall include peak cooling load and generator operation under load

Background Noise	Baseline ambient levels documented prior to construction

Table 6: Compliance

Item	Requirement
Material Increase Definition	An increase of **≥ 3 dBA** above baseline ambient sound level
Violation Determination	Exceedance of numeric limits or material increase
Retesting Authority	Borough may require additional testing following substantiated complaints or equipment changes

[10]Water and sewer.

[a] All data center facilities shall be served by public water systems and public sewer systems.

[b] Applicant shall provide detailed estimates of daily and annual water usage.

[c] Applicant shall provide documentation from the public water provider that there is sufficient water available to serve the Data Center without impacting water pressure or availability of water to other users in Borough.

[d] Applicant shall be required to utilize air-cooled or closed-loop water systems or similar high-efficiency systems in order to protect local water resources.

[e] No Data Center shall be approved unless the applicant demonstrates that the anticipated water supply yield is sufficient for the Data Center and will not adversely impact water pressure or availability of water to other users in the Borough.

[11]Power supply.

[a] If the applicant proposes to connect the Data Center to the electric grid used by the public, the applicant shall provide documentation from the applicable electric service provider (the "Utility Provider") certifying that that the necessary capacity is available and that the Utility Provider will be able to serve the Data Center. Applicant shall submit detailed plans which describe and depict the manner and design by which power will be provided (including location of substations) by the Utility Provider.

[b] If feasible and can reasonably be obtained, the Applicant shall provide an analysis of potential ratepayer impacts, including projected effects on public electric rates or service reliability. Known impacts on electric rates or availability for other uses directly attributable to the data center project shall be noted.

[c] Applicant shall provide documentation of working with the Utility Provider to provide site design to enable future technology which aid in the Data Center being more energy self-sufficient such as incorporation of microgrid elements, advance conductors to connect the site, and the possibility of a separate, underground HVDC grid for the Data Center.

[12]Power generation facilities.

[a] Any energy generation system designed or used to supply power directly to a Data Center during normal operations, including solar, wind, or fossil fuel, shall not be considered part of the Data Center use but shall be subject to existing municipal or utility regulations. Such systems shall be considered a separate principal use and shall be approved according to all applicable

state and federal regulations along with municipal zoning regulations applicable to such use. The applicant shall select, design and locate the energy generation systems to limit noise, emissions, and visual impacts to adjacent and nearby uses as much as possible.

[b] Electric Utility Substations on the same property as the Data Center they serve must be located on the side or rear of a Data Center principal building so they are screened from public view and shall not be located in a required front yard. On-site substations do not require a buffer or screening between the Data Center Principal Building and the substation.

[c] Data Center electric utility substations visible from an arterial roadway must include a combination of year-round opaque landscaping and screening walls to minimize visual impact.

[d] Burying power lines serving the property is strongly encouraged. On-site power lines of 34.5 kV and below must be buried.

[e] Substations abutting a district boundary other than Limited Industrial and/or a parcel containing a sensitive receptor shall be set back a minimum of 800 feet from the property line. If abutting another Limited-Industrial zoned parcel and use, substations shall meet the requirements for accessory uses in the underlying zoning district.

[f] The Data Center electric utility substation shall be subject to applicable zoning district setback requirements. Setbacks shall be measured from the edge of the enclosure containing the substation to the property boundary of the lot it occupies.

[g] No nuclear energy generating system shall be permitted as part of the Data Center use.

[13] Backup power generators are only to be used to provide backup electrical supply during a power outage or similar emergency situations, or for testing purposes. Only Tier IV generators shall be utilized. If the Data Center operator intends to use backup power generators, the operator shall maintain a public website announcing the times when the generators will be in operation. Any operation of the backup generators, for testing purposes, shall be announced on the website at least 24 hours in advance. The operator shall also notify the Borough at least 24 hours in advance of a test. Upon request by the Borough, the Data Center operator shall provide the address of the website where the notices required by this Section are published.

[14] Emergency management.

[a] The applicant shall submit an Emergency Response Plan (ERP) prepared by a qualified professional. The ERP shall:

[i] Be reviewed and accepted by the local fire department and emergency management services as part of the conditional use process;

[ii] Include detailed procedures for fire suppression, containment, ventilation, and evacuation;

[iii] Include an evaluation of the access roads and hydrant locations within the site to ensure suitable access for emergency equipment within the site;

[iv] [Ensure that all first responders receive adequate training specific to the installed system; and

[v] Include provisions for annual fire safety inspections demonstrating compliance with fire safety standards to be performed by a qualified professional on behalf of the Data Center.

[b] Costs incurred, including specialized training for fire and EMS personnel, shall be reimbursed by the applicant, including future ongoing training specific to the Data Center's ERP.

[c] Any Data Center proposing battery storage or any other device or group of devices capable of storing energy in order to supply electrical energy at a later time, whether the energy is stored for use on-site or off-site, shall demonstrate compliance with National Fire Protection Association (NFPA) Standard 855, Installation of Stationary Energy Storage Systems, or similar standards and must include fire suppression systems designed specifically for battery storage.

[d] No Data Center shall be approved unless the applicant demonstrates that procedures for fire suppression, containment, ventilation, and evacuation are sufficiently protective of public health, safety and welfare.

[15] Decommissioning. At the time of application, the operator shall submit a Decommissioning Plan prepared by a qualified professional. The plan shall outline the procedures for safe shutdown, removal of equipment, disposal or recycling of materials, and site restoration. The Borough may require financial security (with related agreements) to be posted to cover the full cost of decommissioning and site restoration if not done in a timely fashion by the operator/owner of the Data Center

Section 3. The provisions of Chapter 186, Zoning, Article V, Zoning Districts, Section 186-20.L(1) shall be amended to add the following:

(c) Uses by conditional use. The following uses shall be permitted when authorized as a conditional use by Council in accordance with Article XII.

G(14) Data center

Section 4. The provisions of Chapter 186, Zoning, Article V, Zoning Districts, Section 186-20.L(3)(a) shall be amended to add the following:

[4] Data center: one off-street parking space per 8,000 s.f. of floor area designed and intended to be accessible regularly by employees.

Section 5. The provisions of Chapter 186, Zoning, Article VIII, Off-Street Parking and Loading, Section 186-61.C shall be amended to add the following:

Land Use	**Required Off-Street Parking**
Data center	One space per 8,000 s.f. of floor area designed and intended to be accessible regularly by employees

Section 6. Attachment 2, Table of Uses by District shall be amended to read as follows:

Use	**R1A**	**R1B**	**R2**	**R3**	**A**	**C-1**	**C-2**	**I-1**	**I-2**	**I-3**	**TC**
G. Industrial Uses											
14 Data Center										C	

I reviewed the draft ordinance. Overall, I think it does a good job addressing noise and water consumption. I recommend protections against *noise pollution, light pollution, excessive water use, and excessive power use*.

- Light Pollution Is Largely Missing
  - I would recommend adding provisions such as:
    - All exterior lighting shall be full-cutoff/downward directed.
    - Maximum property-line illumination limits (e.g., 0.1 foot-candles at residential boundaries).
    - Prohibit uplighting except for security purposes.
    - Motion sensors or dimming after hours.
    - Shielding of rooftop mechanical equipment lighting.
    - Generator test lighting restrictions.
    - Compliance with DarkSky standards.
- Power Consumption Is Addressed Indirectly, But Not Controlled
  - Section 11 requires documentation from the utility and discussion of future technologies. It does not actually limit electrical demand.
  - If the Borough's intent is to discourage extremely power-intensive AI campuses, I would consider requiring disclosure of:
    - Ultimate build-out load (MW).
    - Initial load and phased expansions.
    - Coincident peak demand.
    - PUE (Power Usage Effectiveness).
    - Annual energy consumption (MWh).
  - You can also consider requiring:
    - Load management plans.
    - Demand response participation where available.
    - Waste heat recovery evaluation.
    - Capability for future microgrid integration.
    - Annual reporting of actual power consumption.
  - Explicitly note that future approvals will be required for:
    - Load increase >10%.
    - Water increase >20%.
    - Generator increase >20%.
    - Additional cooling equipment.
    - Additional substations.
    - Building expansions.
    - Additional utility feeds.

- Water Requirements
    - Section 10 requires public water and encourages air-cooled or closed-loop systems. Consider adding:
        - Water Use Effectiveness (WUE) Rules
            - Require reporting and approval on:
                - WUE.
                - Annual gallons consumed.
                - Maximum annual water withdrawal.
                - Drought contingency plans.
        - Cooling Technology
            - Evaporative cooling systems shall not be permitted unless the applicant demonstrates that no reasonably feasible air-cooled alternative exists.
    - Noise Provisions Are Very Strong
        - The noise section is probably the strongest part of the ordinance (that's good). There are some good pre-construction studies, post-construction verification, low-frequency limits, generator testing requirements, and provisions for corrective action – good job on this part.
        - One addition I would make:
            - Tonal Noise Penalty
                - Any tonal noise shall be subject to a 5 dBA penalty.
                - Some fans can produce tonal noise that residents find more objectionable than broadband noise.
    - Generator Requirements
        - The draft requires Tier IV generators and public notification of testing.
        - I recommend adding a limit on testing hours:
            - Generator testing shall occur:
                - Monday-Friday
                    - 9 AM – 4 PM
                    - No weekends or holidays except emergencies.
        - Cap annual testing hours
            - Routine testing shall not exceed 50 hours per generator annually.
    - Substation screening requirements looks great, but 800 foot might be tough.
- Heat Pollution Requirements
    - Consider requiring:

        - Evaluation of waste heat recovery.
        - Exhaust orientation away from residences.
        - Thermal plume studies for campuses over a certain size.
        - Prohibition of cooling tower drift onto neighboring properties.
- Construction Impacts
    - In order to address construction nuisances, consider adding”
        - Dust control plans.
        - Truck routing requirements.
        - Construction hours.
        - Erosion and sediment controls.
        - Construction noise limits.
    - Expansion Controls
        - Any increase in connected electrical load exceeding 10%, any increase in water consumption exceeding 10%, or any addition of major cooling or generation equipment shall require a new conditional use approval.
- Overall Annual Compliance Reporting
    - Require annual submission of:
        - Water consumption.
        - Electrical consumption.
        - Generator operating hours.
        - Major equipment modifications.
        - Complaints received.
        - Noise measurements if requested by the Borough.