CASCADE DATA CENTER ADVISORY COMMITTEE MEETING
PUBLIC NOTICE & AGENDA
NOVEMBER 11, 2026
7:00PM

NOTICE: Notice is hereby given that the Cascade Data Center Advisory Committee will hold a meeting on Wednesday, November 11, 2026 at **7:00 PM** in the Cascade City Hall Council Chambers, 320 1st Ave W, Cascade, IA 52033.

1. Call to Order
2. Roll Call
3. Approve the Agenda as Presented
4. Approve October 28 Meeting Minutes
5. Review Definitions to Include in Ordinance
6. Open Forum For Advisory Committee Members
7. Other Business – Next Meeting Date and Agenda
8. Adjournment

Data Center Advisory Committee Meeting Minutes
October 28, 2026

The October 28th Data Center Advisory Committee meeting was called to order at 7:00PM by Mayor Steve Knepper. Delaney, Weber, Mehrl, Saunders, Rogers, McNally and Frey answered roll. Walter was excused.

Motion Delaney, second McNally to approve the agenda. All Ayes. Motion carried.

Motion Rogers, second Frey to approve McNally as the Chairman, Four Ayes and two Nays – motion passes.

Motion Delaney, second Weber to appoint Mehrl as the Vice Chairman. All Ayes – motion passes.

The committee discussed the purpose of the committee and that we are creating rules and regulations and providing definitions for a permitted use under the M-2 zoning district. There were some good comments/questions that came up that will be addressed with the city attorney. The committee received some sample ordinances to review and highlight things to consider in ours. For the next meeting each member is to come with definitions to include in the ordinance and citations for their sources.

Next meeting will be held Wednesday, November 11th at 7pm.

Motion Weber, second Delaney to adjourn at 7:50pm. All Ayes. Motion carried.

Term	Definition	Source
Building Abandonment	The evacuation, relinquishment, and often neglect of a property by its owner	IGI Global Scientific
Abatement	Any corrective action taken to reduce, mitigate, or eliminate an identified violation of this ordinance, including but not limited to, operational adjustments, physical modifications, removal of violating materials or equipment, site restoration, or other corrective action authorized by law.	Jackson Co. Ordinance
Annual Water Consumption	Data center water usage closely parallels energy usage and carbon emissions. As data centers use more energy for their typical data center operations and to meet AI requests, they consume larger amounts of water to cool their processor chips, so as to avoid overheating and potential damage. Similarly, as energy use increases in data centers, so do carbon emissions; A medium-sized data center can consume up to roughly 110 million gallons of water per year for cooling purposes, equivalent to the annual water usage of approximately 1,000 households.	Data Centers and Water Consumption | Article | EESI
Buffer	Strips of grass or other erosion-resisting vegetation between or below cultivated strips or fields	National Service Center for Environmental Publications
Closed Loop Cooling System	A cooling system that recirculates coolant within a sealed system and does not rely on continuous withdrawal or discharge of groundwater or surface water during normal operation.	Jackson Co. Ordinance
Conditional Use Permit	Allows a potentially compatible use with conditions; A conditional use permit ultimately provides flexibility in zoning while ensuring that	Legalguide.org

	new or unusual uses remain compatible with community goals and surrounding properties.	
Data Center or High-Density Computing Facility	Data centers house servers and other computing equipment that store and process data, deploy internet services, and support other large-scale computing needs.	Great Plains Institute. (Oct, 2026). Aligning Data Centers with Sustainability Goals: Local Government Playbook
Decommissioning Plan	Decommissioning is the planned, safe, and compliant process of taking industrial facilities, plants, or equipment out of operation. It can involve anything from retiring a single piece of machinery to closing down an entire factory site.	Decommissioning definition, process, purpose & key considerations
Drainage Protection	A well-designed drainage system directs water safely across a property to prevent flooding, erosion, soil shifting, and moisture buildup that weaken foundations, pavements, and active job sites. By managing runoff, maintaining proper grading, and reducing pressure around underground utilities and retaining structures, drainage systems help stabilize the ground and keep construction areas operational through seasonal weather changes.	What Is a Drainage System? Types, Functions, and Key Benefits | Omnia Site Management
Emergency Response Plan	A business emergency response plan (BERP) is a formal, documented strategy that outlines how an organization will prepare for, respond to, and recover from emergencies such as fires, floods, earthquakes, chemical spills, cyberattacks, or other crises.	Ready.gov
Hyper Data Center	Hyperscale data centers are massive, modular facilities designed to support the extreme demands of cloud computing and AI through a	What Is A Hyperscale Data Center? - Cisco

	software-defined, horizontally scalable architecture.	
Ice Mitigation	Ice mitigation encompasses the strategic reduction of accretion and associated hazards on critical infrastructure and natural systems, prioritizing both preventative measures and responsive interventions. It extends beyond simple de-icing, integrating long-term planning to minimize formation through surface modification, thermal management, and altered precipitation patterns where feasible.	https://energy.sustainability-directory.com/area/ice-mitigation/
Major Industrial Facility	An industrial site is any parcel of land or property used for manufacturing, processing, storage, or distribution of goods; Heavy industrial sites handle large-scale, capital-intensive production: steel mills, automotive plants, mining operations, power generation facilities, and oil refineries. They typically span tens of thousands of square meters, require massive machinery, and employ large workforces with diverse skill sets.	https://scienceinsights.org/what-is-an-industrial-site-definition-types-uses/
Major Industrial Facility Setbacks	Setback rules are a fundamental component of industrial zoning plans, designed to regulate the placement of structures in relation to property boundaries, roads, utilities, and surrounding land uses. These rules establish the minimum required distance between a building or other built feature and the plot's edge or adjacent structures. In industrial zoning, setback requirements are not only about creating aesthetic uniformity but are primarily intended to ensure safety, access,	https://hellolandmark.com/define-setback-rules-in-industrial-zoning-plans/

	environmental protection, and compatibility with neighboring uses.	
Material Expansion	Thermal expansion is the tendency of matter to change its dimensions due to a change in temperature.	Physics Fundamentals.com
Micro Data Center	A micro data center is a scaled-down version of a traditional data center, delivering all the necessary components in a compact, pre-integrated unit. Housed within a single IT rack, these solutions provide robust computing power, storage, and networking for environments that require localized data processing. Micro data centers typically support critical loads of no more than 100 to 150 kilowatts (kW), making them ideal for edge locations, remote sites, and space-constrained facilities.	https://gbc-engineers.com/news/micro-data-centers
Operational Noise	Operational noise floor is the background level of traffic, alerts, and errors that teams must tolerate before something stands out as unusual. When the noise floor rises, detection becomes harder, and security controls need stronger duration-based and context-aware logic.	https://nhimg.org/glossary/operational-noise-floor/
Sensitive Receptor	A sensitive receptor is an environmental feature or population that is particularly vulnerable to the effects of contamination. It is typically defined as a location where human or ecological exposure to contaminants is likely to cause adverse effects. Examples include public drinking water wells, schools, hospitals, residential areas, wetlands, nature preserves, and agricultural land used for	https://esg.sustainability-directory.com/learn/how-is-the-term-sensitive-receptor-specifically-defined-in-environmental-risk-modeling/

	food production. Proximity to these receptors elevates the risk score.	
Sufficient Electrical Capacity	Electric capacity is the maximum amount of electricity that can be drawn from the grid at any given time, measured in kilowatts (kW) for individual customers and megawatts (MW) at the grid level. It represents peak demand, not total energy usage.	https://diversegy.com/energy-brokers/electric-capacity-definition/
Surface Water	Any water body located on the surface of the land, including rivers, streams, creeks, ponds, lakes, drainageways, wetlands and other waters regulated by the Iowa DNR	Jackson Co. Ordinance
Tonal Noise	Tonal noise is a distinct, continuous frequency (a hum or whine) that is more annoying because the human ear cannot easily filter it from background noise.	https://pollution.sustainability-directory.com/learn/what-is-tonal-noise-and-why-is-it-considered-more-annoying-than-broadband-noise/
Utility Capacity Analysis	Utility network analysis informs capacity decisions by modeling the current state of a network, identifying bottlenecks, and projecting how demand will evolve across different locations over time. Rather than relying on general estimates, planners work from spatially grounded evidence that connects asset condition, load distribution, and geographic growth patterns.	https://spatial-eye.com/blog/spatial-analysis/what-is-the-role-of-utility-network-analysis-in-capacity-planning/

CASCADE, IOWA

M-2 ordinance comparison and supporting research

Data Center Advisory Committee review packet | 9 November 2026

INDEPENDENT RESEARCH ONLY. Not adopted law, a certified codification, a legal opinion, or a project approval.

CONTENTS

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E. November 4 LexisNexis Assist Iowa-law source-check note (final page)

Proposed ordinance language remains subject to committee review, City Attorney review, and lawful enactment.

CONTENT AND VERSION VERIFICATION

ORIGINAL M-2 SOURCE

The five source scan pages 45-49 and separately annotated facsimiles appear in Part A. Existing subsection G(1) is retained.

COLOR-CODED PROPOSAL

Black is historical existing language, red denotes new substantive language, and blue denotes editorial or formatting adjustments.

NOISE PROTOCOL

Includes 65 dBA / 75 dBC M-2 property-line standards; sensitive-receptor provisions; owner-consented indoor baselines; closed windows and doors; and HVAC fan ON at 65-75 F where practicable.

GENERATORS, EMISSIONS AND AESTHETICS

Includes generator schedules, applicable emissions permits or exemption determinations, screening, exterior lighting, and related performance provisions.

LATEST FULL DEFINITIONS APPENDIX

Part B uses the November 4 Cornell Wex and FindLaw legal-dictionary update in addition to Iowa statutory, Oxford and Merriam-Webster comparison material.

LITIGATION EVIDENCE CUTOFF

Part C reports 27 selected cases with status research through October 28, 2026. Subsequent dispositions require fresh docket verification.

Not included: unreleased CMU/MVEC utility records, new construction evidence, or case updates after the research cutoff.

CASCADE, IOWA - November 3, 2026 - Source-linked research edition - Not adopted law

Cascade M-2 zoning: original scan versus proposed November 3 amendment

Draft comparison | November 3, 2026 | Independent research, not City law.

Answer: The proposed M-2 amendment is based on the City's archived §165.11 text, **but the archive is not a certified up-to-date consolidation**. The original scanned M-2 pages are PDF **45–49** (printed Code pages **34–38**). The October 2022 fitness-use amendment and September 2024 fencing amendment also affect how the district currently operates. Before this review the proposed G subsection accidentally began at **G(1)** even though existing G(1) already refers to supplementary district regulations. That conflict has been corrected: **existing G(1) is preserved, and 18 new performance provisions are proposed as G(2)–G(19)**.[1237]

Markup key and limits

Marking	Meaning
RETAIN — no amendment	Text in the original scan that the new proposal does not repeal or substitute.
2022 / 2024 enacted amendment	Later municipal ordinance text verified in the source collection, but not printed within the original M-2 scan.
ADD — proposed text	New ordinance language requiring introduction, City process, approval, and publication before it could become enforceable.
VERIFY — legal status	A scanned *draft*, apparent amendment, or codification detail not established as enacted by the accessible records.

The highlighted reproduction later in the comparison PDF marks **insertion points and affected subsections**. It **does not falsely depict the original City ordinance as containing the new language**. The PDF also includes the original scan pages **unaltered**, followed by the full November 3 amended proposal.

Section-by-section comparison

Code reference	Original text and later amendment evidence	November 3 proposed action	Status
§165.11(A)	Statement of intent: heavy manufacturing and related uses, with protection from effects on other districts (source PDF p. 45).	No wording changed.	**RETAIN**
§165.11(B)(1)–(17)	Lists farm equipment, automotive, manufacturing, concrete, storage, transport, welding, utilities, food service, and mini-warehouse uses (source PDF pp. 45–46).	Keep items 1–17.	**RETAIN**
§165.11(B)(18)	Ordinance **05-22** adopted October 10, 2022 adds a fitness center / exercise business with one parking space per 200 square feet. Not in the original scan's M-2 pages.	Preserve use 18 and its parking rule.	**2022 AMENDMENT**
§165.11(B)(19)	No data center entry is shown in the 1992 scan or in the verified 2022 M-2 amendment.	**ADD:** data center / high-density computing facility as an expressly listed principal use, parking by staff and vehicles.	**PROPOSED ADD**
§165.11(C)(1)–(4)	Existing incidental uses, temporary construction buildings, caretaker dwelling, and satellite receiver provisions (source PDF pp. 46–47).	Keep without alteration.	**RETAIN**
§165.11(D)(1)–(7)	Special exceptions for animal facilities, bulk storage, certain chemical/industrial uses, junkyards, towers, tall signs, and adult-oriented establishments (source PDF pp. 47–48).	Keep existing special exceptions and the §165.34(2) approval process.	**RETAIN**

Code reference	Original text and later amendment evidence	November 3 proposed action	Status
§165.11(D)(8)	No general "Major Industrial Facility" category in the scanned base M-2 list.	**ADD:** review at >=5 MW coincident electrical load, >=25,000 gal/24 h water, >=2 MW generation, or >=5 MWh storage.	**PROPOSED ADD**
§165.11(E)	No minimum lot area; general yards: front 25 ft, rear 25 ft, side 20 ft, street side 20 ft; 60-ft maximum building height (source PDF p. 49).	Preserve these baseline limits. Proposed extra 100-/200-ft setbacks apply only to specified **residential-zoning-boundary adjacency** and Major Industrial Facilities.	**RETAIN + PROPOSED ADD IN G(8)**
2009 zero-lot-line document	Page 6 of the scan says **"DRAFT ORDINANCE 117-09"**, proposing an M-2 shared interior lot-line exception. The draft's passage date is blank.	Do not assume the exception was enacted or repeal it by silence. Confirm any adopted and recorded counterpart with the City Clerk.	**VERIFY**
§165.11(F)	Existing sign rules, dimensions, and supplementary cross-reference (source PDF p. 49).	No wording changed.	**RETAIN**
§165.11(G)(1)	**Existing:** "Supplementary District Regulations (Section 165.12)" (source PDF p. 49).	**Preserve G(1) in place.** The draft was corrected to insert subsequent paragraphs after it.	**RETAIN — NUMBERING CORRECTED**
§165.11(G)(2)–(19)	Not present in the scanned base ordinance.	**ADD:** uniformity, site plan, noise, acoustics, generators, logs, adjacency setbacks, lighting, screening, water, electrical utility, fire/chemicals, heat rejection, stormwater, infrastructure, decommissioning, expansion and compliance.	**PROPOSED ADD**

Code reference	Original text and later amendment evidence	November 3 proposed action	Status
§165.12(12)	City **Ordinance 19-24** adopted September 9, 2024 applies an 8-ft maximum fence or hedge height in M-2, subject to placement and other conditions.	The new screening requirement does not waive the existing fence rule.	**2024 AMENDMENT**
§165.41 definitions	The base scan includes Chapter 165 definitions outside the M-2 pages.	**ADD:** 26 local terms. Other Iowa tax, air, and water definitions are not automatically imported as zoning law.	**PROPOSED ADD**

New subsections in G: highlighted insertion schedule

Each of the following is **new proposed text**, not a requirement already appearing in Deanna's original scan.

Proposed number	Topic	Principal rule proposed
G(2)	Uniform applicability	Neutral, impact-based coverage; existing lawful uses remain governed by nonconforming-use law.
G(3)	Site development plan	Engineering and utility, mechanical, generation, fuel, and receptor documentation.
G(4)	Operational noise	Outdoors: 65 dBA/75 dBC M-2 property line. Indoor sensitive-receptor day/night limits: doors/windows closed, wall-facing room, HVAC fan **ON continuously** where equipped, 65-75°F thermostat where practicable; owner may decline indoor testing, with lawful exterior parcel-boundary fallback and professionally supported acoustic (not thermal R-value) correction.

Proposed number	Topic	Principal rule proposed
G(5)	Acoustic studies	**Before construction:** offer consent-based indoor daytime/ nighttime baselines at nearby occupied sensitive-receptor structures, with continuous fan ON and matching closed-window conditions. Document declined access and lawful exterior baseline alternative. After construction: compare like-for-like indoor levels and establish source-attributable increase; repeat verification at startup and triennially. Absolute-limit complaints do not require proof of prior quiet.
G(6)	Generator testing	Generally 8 a.m.–6 p.m. weekdays, with defined exceptions.
G(7)	Generator logs	Three years of records for facilities with >=2 MW stationary generation.
G(8)	Adjacency setbacks	100 ft principal buildings and 200 ft exterior industrial mechanical equipment when adjacent to residential **zoning districts**, with limited exception procedure.
G(9)	Exterior lighting	Downward shielding and 0.5 foot-candle residential-boundary limit.
G(10)	Screening	Visual mitigation consistent with fire, airflow, utilities and existing fence rules.
G(11)	Water and cooling	Documentation at 25,000 gal/day and proposed municipal potable once-through cooling prohibition for new Major Industrial Facilities.
G(12)	Electrical verification	Written service confirmation for >=5 MW demand; no utility rate-making.
G(13)	Emergency response	Site-specific response planning, generator, fuel and battery inventories.

Proposed number	Topic	Principal rule proposed
G(14)	Heat rejection	No off-site condensate, icing, mist or hazardous plume effects.
G(15)	Stormwater	Engineered review subject to state limitations on municipal requirements.
G(16)	Public infrastructure	Lawful agreements for documented project-caused costs.
G(17)	Decommissioning	Plan, abandonment process and legally supported financial assurance.
G(18)	Material expansion	Additional approval for >=20% increases in approved operational capacity, or crossing a threshold.
G(19)	Compliance	Annual certifications, corrective action and lawful independent technical review.

Material questions for the City Attorney and City Clerk

1. **Confirm the complete enacted amendment record.** The original scanned M-2 text and the separately preserved 2022 and 2024 ordinances are supported. Other enacted amendments since the original code may affect enumeration, yards, and land use. This comparison **must not be presented as a certified codification of current M-2 law**.
2. **Confirm the 2009 zero-lot-line proposal's status.** Its copy is labeled *draft* and unsigned. A later enacted counterpart might modify side-yard requirements.
3. **Preserve G(1).** Insert the new performance requirements only as G(2)–G(19) (or the next confirmed available sequence), avoiding accidental repeal or numbering collisions.
4. **Separate E setbacks from proposed G(8).** General M-2 dimensions remain. Proposed 100-/200-ft requirements are conditioned on direct adjacency to a residential zoning district; a distant dwelling with an intervening parcel does not itself satisfy that adjacency trigger.
5. **Review special-exception authority.** A new D(8) approval requirement must be consistent with existing §165.34(2), Iowa Code §414.12, nonconforming-use protections and the City's public notice process.
6. **Apply screening law correctly.** Screening or enclosure must account for the adopted M-2 fence-height and maintenance restrictions in §165.12(12).
7. **Do not treat proposed thresholds as state limits.** The 5 MW/25,000 gallon/2 MW/5 MWh triggers, dBA/dBC noise numbers, equipment setbacks and financial security requirements are proposed local policy choices subject to counsel review and an evidentiary record.[56]

Chicago-style legal and source notes

PDF appendix arrangement

The generated PDF contains (a) this explanation, (b) annotated full-size facsimiles of the five original M-2 pages with insertion-point callouts, (c) the same five scan pages in their original unaltered form, (d) the complete updated proposed ordinance with its numbered statutory notes, and (e) the scanned 2009 **draft** zero-lot-line document as a clearly labeled historical comparator. The original scan is not modified within the unchanged-source appendix.

1. City of Cascade, *Chapter 165, Zoning Ordinance*, §165.11, "M-2 Heavy Industrial District," archived original scan, **PDF pp. 45–49 / printed code pp. 34–38**, https://github.com/ttbakiatwoam/cascade-data-center/blob/master/sources/cascade-zoning/Entire%20zoning%20code-1.pdf. The scan is the visual reference; the working OCR transcription is not a certified legislative reproduction. ↩

2. City of Cascade, **Ordinance 05-22**, adopted October 10, 2022, §165.11 M-2 B(18), fitness center/use, https://github.com/ttbakiatwoam/cascade-data-center/blob/master/dataset/cascade-zoning/ordinances/ORDINANCE-05-22.md. ↩

3. City of Cascade, **Ordinance 19-24**, adopted September 9, 2024 and published September 18, 2024, §165.12(12), M-2 fence/hedge and installation rules, https://github.com/ttbakiatwoam/cascade-data-center/blob/master/dataset/cascade-zoning/ordinances/ORDINANCE-19-24.md. ↩

4. City of Cascade, "**DRAFT ORDINANCE 117-09**," page 6 of the archived zoning scan, dated July 16, 2009, with blank adoption date, https://github.com/ttbakiatwoam/cascade-data-center/blob/master/dataset/cascade-zoning/ordinances/DRAFT-ORDINANCE-117-09.md. It is not proven adopted by that document. ↩

5. Iowa General Assembly, *Iowa Code* §§414.1–414.3 and 414.12 (2026), municipal zoning authority, district uniformity and Board of Adjustment powers, https://www.legis.iowa.gov/docs/code/2026/414.1.pdf, https://www.legis.iowa.gov/docs/code/2026/414.2.pdf, https://www.legis.iowa.gov/docs/code/2026/414.3.pdf, https://www.legis.iowa.gov/docs/code/2026/414.12.pdf. ↩

6. Iowa General Assembly, *Iowa Code* §364.3 (2026), statutory limits on municipal stormwater requirements, https://www.legis.iowa.gov/docs/code/2026/364.3.pdf; §455B.261, definitions and permitting context for water use, https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. ↩

7. *Proposed Cascade M-2 Performance Standards Amendment*, November 3, 2026, revised in this comparison to preserve G(1), https://github.com/ttbakiatwoam/cascade-data-center/blob/master/proposals/DRAFT-ORDINANCE-M2-DATA-CENTER-PERFORMANCE-STANDARDS-2026-11-03.md. **Not adopted law**. ↩

ANNOTATED ORIGINAL M-2

Original City scan, PDF pp. 45-49, reproduced with a separate right-side commentary panel. The scan itself is never modified. ADD marks identify insertion points, not text already adopted by the City.

M-2 HEAVY INDUSTRIAL DISTRICT

A. Statement of Intent. The "M-2" Heavy Industrial District is intended to accommodate general manufacturing and related uses of a heavy industrial character while providing protection from harmful effects to existing and future land uses in other districts.

B. PERMITTED PRINCIPAL USES AND STRUCTURES	MINIMUM REQUIRED OFF-STREET PARKING
1. Farm implement sales, service, repair, and assembly.	1 space/300 sq. ft. of sales service or office floor area.
2. Automotive and truck sales, service and repair.	1 space/300 sq. ft. of sales service or office floor area.
3. Automobile paint and body shop.	1 space/300 sq. ft. of sales service or office floor area.
4. Building material sales and storage.	1 space/300 sq. ft. of sales service or office floor area.
5. Manufacturing, assemble and processing uses, but not including the manufacture, processing or blending of fertilizers, pesticides, insecticides or other chemicals, fuels or petroleum products that are combustible, explosive or of toxic nature.	1 space/employee plus 1/vehicle used by the industry.
6. Concrete products manufacture and central mixing and proportioning plant.	1 space/employee plus 1/vehicle used by the industry.
7. Wholesaling, warehousing or storage but not including the bulk storage of liquid fertilizer, agricultural chemical or petroleum products.	1 off-street loading space for each 5,000 sq. ft. of floor area or faction thereof.
8. Contractor's office, shop and storage yard.	1 off-street loading space for each 5,000 sq. ft. of floor area or faction thereof.
9. Grain elevator and storage bins.	1 off-street loading

SCAN PAGE 45 | Code p. 34

A - INTENT / B - PERMITTED USES

RETAIN

A. The existing M-2 purpose and heavy industrial use language remains.

RETAIN

B(1) through the uses visible on this page continue to apply.

ADDITION LATER

The 2022 fitness amendment and new data-center use are addressed after B(17) on page 46.

Source scan shown at left; annotations at right

	space for each 5,000 sq. ft. of floor area or faction thereof.
10. Feed milling.	1 off-street loading space for each 5,000 sq. ft. of floor area or faction thereof.
11. Veterinarian's office and kennel.	1 off-street loading space for each 5,000 sq. ft. of floor area or faction thereof.
12. Truck and freight terminal.	1 off-street loading space for each 5,000 sq. ft. of floor area or faction thereof.
13. Welding and machine shop.	1 off-street loading space for each 5,000 sq. ft. of floor area or faction thereof.
14. Plumbing, heating, air conditioning and sheet metal shop.	1 off-street loading space for each 5,000 sq. ft. of floor area or faction thereof.
15. Railroads and public utilities including storage and maintenance yards and buildings.	1 off-street loading space for each 5,000 sq. ft. of floor area or faction thereof.
16. Drive-in eating or drinking establishments.	5 spaces plus 1 space/50 sq.ft. of floor area.
17. Mini warehouse.	Adequate parking and driveway areas shall be provided around the building's perimeter, subject to approval.

C. PERMITTED ACCESSORY USES AND STRUCTURES.

1. Uses and structures clearly incidental and necessary to the permitted principal uses of this district.

B - END OF LIST / C - ACCESSORY

RETAIN

Existing B(10)-B(17), ending with mini-warehouses, remain unchanged.

ENACTED 2022

Ordinance 05-22 added permitted B(18): fitness centers, with parking at 1 space/200 sq ft.

ADD B(19)

Our new draft adds data centers and high-density computing as a principal use, after the existing B(18).

RETAIN

C(1)-C(4) existing accessory provisions remain.

Source scan shown at left; annotations at right

2. Temporary buildings used in conjunction with construction provided such buildings are removed promptly upon completion of the construction work.

3. Dwelling units for watchmen or caretakers employed on the premises provided that an open yard of at least 2,400 sq. ft. is reserved and maintained for use by the occupants.

4. Satellite receivers.

D. SPECIAL EXCEPTION USES AND STRUCTURES. Subject to Section 165.34(2) and other requirements contained herein, the Board of Adjustment may permit the following:

1. Stockyards, loading pens, slaughter houses and handling or processing of animal by-products, poultry processing plants, buying stations and/or sale barns and yards, provided that it is not closer than one fourth (1/4) mile to any dwelling unit other than that of the owner or operator, or any park, school, church or place of public assembly; that the provisions for drainage, sanitation, waste disposal, and fly control are approved by the County Health Officer; that it is located so that prevailing winds will not cause dust or odors to create a nuisance for developed properties in the vicinity; and that one (1) parking space for each employee and 1 space for each vehicle used by the industry be provided. An additional 25 parking spaces shall be provided for sale barns.

2. Bulk storage of petroleum products, liquid fertilizers, and agricultural chemicals provided that such use is not closer than 300 feet to a dwelling or place of public assembly and that one parking space for each vehicle used by the industry be provided.

3. The following uses provided that they are not closer than 1000 feet to any dwelling unit other than that of the owner or operator, or any park, school, church or place of public assembly; that 1 off-street parking space for every 2 employees and 1 off-street space for each company vehicle shall be provided.

   a. Chemical plants.
   b. Explosive manufacture or storage.
   c. Fertilizer blending and manufacture.
   d. Garbage, offal, or dead animal reduction.
   e. Refining of petroleum and natural gas and their products.

4. Auto wrecking and junkyards on sites of 5 acres or more provided that the front yard be maintained as an open

D - SPECIAL EXCEPTIONS

RETAIN

Existing D(1)-D(3) include livestock, bulk storage, and certain higher-impact industry.

RETAIN

Existing special-exception procedure under Section 165.34(2) remains.

ADD AFTER D(7)

The new Major Industrial Facility item D(8) follows the seven existing exceptions; see next scan page.

Source scan shown at left, annotations at right

space free of weeds and debris; that the site be enclosed with a 6 foot high fence or a suitable landscape planting that must screen the operation from the view of adjacent public streets and places of public assembly, parks, recreation areas, and residential properties; and that a minimum of 1 off-street parking space for each employee and 1 off-street space for each vehicle used by the facility be provided.

5. Communications stations and towers provided that they are not closer to a dwelling or place of public assembly than a distance equal to one-half their height, that will not interfere with the operation of any airport or landing strip, and that 1 off-street space for each vehicle used by the facility be provided.

6. An on-site free-standing business identification sign up to 75-feet in height provided the sign is a distance equal to one-half its height from neighboring buildings, maintains 7.5-feet horizontal clearance and 12.5-feet vertical clearance from overhead power lines, and the sign is designed and built to withstand 100-mph winds. Applicant must demonstrate a clear and compelling need for the special exception.

7. An adult-oriented establishment provided the establishment is not in or within sixteen hundred (1,600) feet of the borders of a residential district; any church, synagogue, mosque, temple, or other place of religious worship; any public or private school offering general education for students between the years of Kindergarten and Twelfth grade; of any daycare home or daycare business; any public park or playground. For purposes of this section, bike paths, trails, waterways, and boat launches shall not be deemed a public park; any other adult entertainment business; or any existing establishment selling alcoholic beverages for consumption on premises. The above cited distances shall be measured by following a straight line, without regard to intervening buildings, from the nearest point of the property parcel upon which the proposed adult entertainment business is to be located, to the nearest point of the parcel of property or zoning district boundary line from which the proposed adult entertainment business is to be separated. The definitions of adult-oriented establishments in Chapter 124.02 of the Cascade Code of Ordinances are hereby incorporated by reference.

D - END OF SPECIAL EXCEPTIONS

RETAIN

Existing D(4)-D(7), including wrecking yards, towers, signs, and adult-oriented uses, remain.

ADD D(8)

Major Industrial Facility threshold: 5 MW power, 25,000 gallons/day water, 2 MW generation, or 5 MWh storage.

CAUTION

No new permitted use is granted merely because an application qualifies for special-exception review.

Source scan shown at left; annotations at right

E. MINIMUM LOT AREA, WIDTH	MINIMUM YARD REQUIREMENTS	MAXIMUM HEIGHT
None.	Front ..... 25-feet Rear ..... 25-feet Side ..... 20-feet Side Street, corner Lot ... 20-feet.	60-feet.

F. PERMITTED SIGNS.

1. Billboards and advertising signs provided:

   a) That they are not within 75 feet of a highway intersection, highway structure, residence, park, school, cemetery, public or semi-public building.

   b) That they are not within 150 feet of another billboard or advertising sign.

   c) That they do not exceed 300 sq. ft. in area.

2. Trade, business or industry identification signs for the firm located on the site provided that:

   a) Free standing signs shall not exceed 150 square feet in area or 25 feet in height.

   b) Signs mounted flush on the wall of a building shall not exceed 10% of the area of the wall of the building on which they are located or 200 square feet, whichever is smaller.

   c) Overhanging signs, attached to a building shall not project above the height of the building, or more than four (4) feet from the wall of the building and shall not have more than 100 square feet of area.

3. All signs shall be maintained in a neat and presentable condition and in the event that they shall become illegible or their use shall cease, they shall be removed promptly and the area occupied restored to a condition free from refuse and debris.

4. See Supplementary District Regulations (Section 165.12).

G. SPECIAL REQUIREMENTS.

1. Supplementary District Regulations (Section 165.12).

SCAN PAGE 49 | Code p. 38

E / F / G - KEY CORRECTION

RETAIN

E general yards: front 25 ft, rear 25 ft, side 20 ft, corner street-side 20 ft; 60 ft height.

RETAIN

F sign rules remain. G(1) already refers to supplementary Section 165.12.

ADD G(2)-G(19)

Eighteen new M-2 performance standards now begin AFTER G(1), not at G(1).

ENACTED 2024

Section 165.12(12) separately governs M-2 fence heights and maintenance.

VERIFY 2009

The zero-lot-line source page is stamped DRAFT; adoption cannot be inferred from the scan.

Source scan shown at left; annotations at right

UNALTERED SOURCE M-2

The next five pages are direct copies of the actual City zoning scan's pages 45-49, exactly as preserved in the original file. They show M-2 Section 165.11, printed pages 34-38.

M-2 HEAVY INDUSTRIAL DISTRICT

A. Statement of Intent. The "M-2" Heavy Industrial District is intended to accommodate general manufacturing and related uses of a heavy industrial character while providing protection from harmful effects to existing and future land uses in other districts.

B. PERMITTED PRINCIPAL USES AND STRUCTURES	MINIMUM REQUIRED OFF-STREET PARKING
1. Farm implement sales, service, repair, and assembly.	1 space/300 sq. ft. of sales service or office floor area.
2. Automotive and truck sales, service and repair.	1 space/300 sq. ft. of sales service or office floor area.
3. Automobile paint and body shop.	1 space/300 sq. ft. of sales service or office floor area.
4. Building material sales and storage.	1 space/300 sq. ft. of sales service or office floor area.
5. Manufacturing, assemble and processing uses, but not including the manufacture, processing or blending of fertilizers, pesticides, insecticides or other chemicals, fuels or petroleum products that are combustible, explosive or of toxic nature.	1 space/employee plus 1/vehicle used by the industry.
6. Concrete products manufacture and central mixing and proportioning plant.	1 space/employee plus 1/vehicle used by the industry.
7. Wholesaling, warehousing or storage but not including the bulk storage of liquid fertilizer, agricultural chemical or petroleum products.	1 off-street loading space for each 5,000 sq. ft. of floor area or faction thereof.
8. Contractor's office, shop and storage yard.	1 off-street loading space for each 5,000 sq. ft. of floor area or faction thereof.
9. Grain elevator and storage bins.	1 off-street loading

	space for each 5,000 sq. ft. of floor area or faction thereof.
10. Feed milling.	1 off-street loading space for each 5,000 sq. ft. of floor area or faction thereof.
11. Veterinarian's office and kennel.	1 off-street loading space for each 5,000 sq. ft. of floor area or faction thereof.
12. Truck and freight terminal.	1 off-street loading space for each 5,000 sq. ft. of floor area or faction thereof.
13. Welding and machine shop.	1 off-street loading space for each 5,000 sq. ft. of floor area or faction thereof.
14. Plumbing, heating, air conditioning and sheet metal shop.	1 off-street loading space for each 5,000 sq. ft. of floor area or faction thereof.
15. Railroads and public utilities including storage and maintenance yards and buildings.	1 off-street loading space for each 5,000 sq. ft. of floor area or faction thereof.
16. Drive-in eating or drinking establishments.	5 spaces plus 1 space/50 sq.ft. of floor area.
17. Mini warehouse.	Adequate parking and driveway areas shall be provided around the building's perimeter, subject to approval.

C. PERMITTED ACCESSORY USES AND STRUCTURES.

1. Uses and structures clearly incidental and necessary to the permitted principal uses of this district.

2. Temporary buildings used in conjunction with construction provided such buildings are removed promptly upon completion of the construction work.

3. Dwelling units for watchmen or caretakers employed on the premises provided that an open yard of at least 2,400 sq. ft. is reserved and maintained for use by the occupants.

4. Satellite receivers.

D. SPECIAL EXCEPTION USES AND STRUCTURES. Subject to Section 165.34(2) and other requirements contained herein, the Board of Adjustment may permit the following:

1. Stockyards, loading pens, slaughter houses and handling or processing of animal by-products, poultry processing plants, buying stations and/or sale barns and yards, provided that it is not closer than one fourth (1/4) mile to any dwelling unit other than that of the owner or operator, or any park, school, church or place of public assembly; that the provisions for drainage, sanitation, waste disposal, and fly control are approved by the County Health Officer; that it is located so that prevailing winds will not cause dust or odors to create a nuisance for developed properties in the vicinity; and that one (1) parking space for each employee and 1 space for each vehicle used by the industry be provided. An additional 25 parking spaces shall be provided for sale barns.

2. Bulk storage of petroleum products, liquid fertilizers, and agricultural chemicals provided that such use is not ~~closer than 300~~ feet to a dwelling or place of public assembly and ~~that one parking space for each vehicle~~ used by the industry be provided.

3. The following uses provided that they are not closer than 1000 feet to any dwelling unit other than that of the owner or operator, or any park, school, church or place of public assembly; that 1 off-street parking space for every 2 employees and 1 off-street space for each company vehicle shall be provided.

   a. Chemical plants.
   b. Explosive manufacture or storage.
   c. Fertilizer blending and manufacture.
   d. Garbage, offal, or dead animal reduction.
   e. Refining of petroleum and natural gas and their products.

4. Auto wrecking and junkyards on sites of 5 acres or more provided that the front yard be maintained as an open

space free of weeds and debris; that the site be enclosed with a 6 foot high fence or a suitable landscape planting that must screen the operation from the view of adjacent public streets and places of public assembly, parks, recreation areas, and residential properties; and that a minimum of 1 off-street parking space for each employee and 1 off-street space for each vehicle used by the facility be provided.

5. Communications stations and towers provided that they are not closer to a dwelling or place of public assembly than a distance equal to one-half their height, that will not interfere with the operation of any airport or landing strip, and that 1 off-street space for each vehicle used by the facility be provided.

6. An on-site free-standing business identification sign up to 75-feet in height provided the sign is a distance equal to one-half its height from neighboring buildings, maintains 7.5-feet horizontal clearance and 12.5-feet vertical clearance from overhead power lines, and the sign is designed and built to withstand 100-mph winds. Applicant must demonstrate a clear and compelling need for the special exception.

7. An adult-oriented establishment provided the establishment is not in or within sixteen hundred (1,600) feet of the borders of a residential district; any church, synagogue, mosque, temple, or other place of religious worship; any public or private school offering general education for students between the years of Kindergarten and Twelfth grade; of any daycare home or daycare business; any public park or playground. For purposes of this section, bike paths, trails, waterways, and boat launches shall not be deemed a public park; any other adult entertainment business; or any existing establishment selling alcoholic beverages for consumption on premises. The above cited distances shall be measured by following a straight line, without regard to intervening buildings, from the nearest point of the property parcel upon which the proposed adult entertainment business is to be located, to the nearest point of the parcel of property or zoning district boundary line from which the proposed adult entertainment business is to be separated. The definitions of adult-oriented establishments in Chapter 124.02 of the Cascade Code of Ordinances are hereby incorporated by reference.

E. MINIMUM LOT AREA, WIDTH	MINIMUM YARD REQUIREMENTS	MAXIMUM HEIGHT
None.	Front ..... 25-feet Rear ..... 25-feet Side ..... 20-feet Side Street, corner Lot ... 20-feet.	60-feet.

F. PERMITTED SIGNS.

1. Billboards and advertising signs provided:

   a) That they are not within 75 feet of a highway intersection, highway structure, residence, park, school, cemetery, public or semi-public building.

   b) That they are not within 150 feet of another billboard or advertising sign.

   c) That they do not exceed 300 sq. ft. in area.

2. Trade, business or industry identification signs for the firm located on the site provided that:

   a) Free standing signs shall not exceed 150 square feet in area or 25 feet in height.

   b) Signs mounted flush on the wall of a building shall not exceed 10% of the area of the wall of the building on which they are located or 200 square feet, whichever is smaller.

   c) Overhanging signs, attached to a building shall not project above the height of the building, or more than four (4) feet from the wall of the building and shall not have more than 100 square feet of area.

3. All signs shall be maintained in a neat and presentable condition and in the event that they shall become illegible or their use shall cease, they shall be removed promptly and the area occupied restored to a condition free from refuse and debris.

4. See Supplementary District Regulations (Section 165.12).

G. SPECIAL REQUIREMENTS.

1. Supplementary District Regulations (Section 165.12).

COMPLETE COLOR-CODED M-2 REDLINE

BLACK: existing language. RED: substantive proposed additions. BLUE: grammar, spelling and formatting only. Every original M-2 A through G(1) provision is reprinted with B(18) and proposed insertions at B(19), D(8), and G(2)-G(19). Refer to the original unchanged scans immediately before this section.

COMPLETE REPRINT AND COLOR-CODED PROPOSED AMENDMENT

Cascade, Iowa - Section 165.11, M-2 Heavy Industrial District

Working legislative comparison | November 5, 2026 | NOT ADOPTED CITY LAW

This document reprints **every paragraph and requirement of existing M-2 §165.11(A) through (G)(1)** appearing on pages 45–49 of the City zoning scan, then inserts the proposed November 3 amendment **where it would appear if enacted**. It incorporates enacted **Ordinance 05-22 (2022)** as permitted use B(18), which was not printed in the older scan. The original City scan remains the controlling historical source for deciding what it actually says; this retyped copy is **not a certified consolidated code**. Other later enacted amendments must be checked by the City Clerk before introduction.[1516]

HOW TO READ THIS DOCUMENT - COLOR KEY

Display	Meaning	Legal effect
RED - PROPOSED NEW LANGUAGE	**New B(19), D(8), G(2)-G(19), and 26 proposed additions to the Chapter 165 definitions.**	**Substantive proposal. No legal effect unless adopted.**
BLUE - COPYEDIT OR FORMATTING ONLY	Reorganizing the source's two-column layout; a clear spelling, punctuation, spacing, heading, or cross-reference correction.	**No intended change in substance;** verify against the scanned source.
BLACK - EXISTING TEXT	Original 1990s scanned M-2 ordinance retained in its existing order.	Baseline shown as historical source text; no re-enactment is implied.
BLACK - ENACTED 2022	B(18) added by Ordinance 05-22.	Already enacted, not a red proposed addition.

Read before relying on the redline. The unmodified source scan, including handwritten pen marks over the old bulk-storage special exception D(2), is reproduced separately in the PDF. Those pen marks alone **do not establish a lawful repeal**. The printed underlying D(2) wording below is preserved rather than treating the handwritten marks as adopted edits. The City should obtain a certified ordinance history. Existing separate rules, including the later 2024 §165.12 fence amendment, are not silently rewritten here.[1516]

Editorial scope. The blue marks are intentionally limited. The source spells "faction" for floor-area divisions and uses "assemble" in the manufacturing list. Those are reprinted here with **blue suggestions** of "fraction" and "assembly," respectively. Other awkward original phrases are kept in black where correcting them might change legal meaning. All numeric thresholds, district uses, setbacks, parking ratios, and operative procedures originally printed remain the same unless shown in red.

ORIGINAL M-2 TEXT IN FULL, WITH INSERTED PROPOSALS

A. Statement of Intent

The "M-2" Heavy Industrial District is intended to accommodate general manufacturing and related uses of a heavy industrial character while providing protection from harmful effects to existing and future land uses in other districts.

B. Permitted Principal Uses and Structures

BLUE - FORMAT ONLY: The scan prints permitted uses and off-street parking in two columns over two pages. This consolidated table retains every original numbered use and parking/loading ratio, reorganized for readable comparison. The word "faction" is corrected to "fraction" in blue where the original clearly refers to a portion of floor area. The original scan is preserved unchanged.[15]

Existing use	Permitted principal use or structure	Minimum required off-street parking or loading
1.	Farm implement sales, service, repair, and assembly.	1 space/300 sq. ft. of sales service or office floor area.
2.	Automotive and truck sales, service and repair.	1 space/300 sq. ft. of sales service or office floor area.
3.	Automobile paint and body shop.	1 space/300 sq. ft. of sales service or office floor area.
4.	Building material sales and storage.	1 space/300 sq. ft. of sales service or office floor area.
5.	Manufacturing, assembly and processing uses, but not including the manufacture, processing or blending of fertilizers, pesticides, insecticides or other chemicals, fuels or petroleum products that are combustible, explosive or of toxic nature.	1 space/employee plus 1/vehicle used by the industry.
6.	Concrete products manufacture and central mixing and proportioning plant.	1 space/employee plus 1/vehicle used by the industry.
7.	Wholesaling, warehousing or storage but not including the bulk storage of liquid fertilizer, agricultural chemical or petroleum products.	1 off-street loading space for each 5,000 sq. ft. of floor area or fraction thereof.
8.	Contractor's office, shop and storage yard.	1 off-street loading space for each 5,000 sq. ft. of floor area or fraction thereof.
9.	Grain elevator and storage bins.	1 off-street loading space for each 5,000 sq. ft. of floor area or fraction thereof.
10.	Feed milling.	1 off-street loading space for each 5,000 sq. ft. of floor area or fraction thereof.
11.	Veterinarian's office and kennel.	1 off-street loading space for each 5,000 sq. ft. of floor area or fraction thereof.
12.	Truck and freight terminal.	1 off-street loading space for each 5,000 sq. ft. of floor area or fraction thereof.

Existing use	Permitted principal use or structure	Minimum required off-street parking or loading
13.	Welding and machine shop.	1 off-street loading space for each 5,000 sq. ft. of floor area or fraction thereof.
14.	Plumbing, heating, air conditioning and sheet metal shop.	1 off-street loading space for each 5,000 sq. ft. of floor area or fraction thereof.
15.	Railroads and public utilities including storage and maintenance yards and buildings.	1 off-street loading space for each 5,000 sq. ft. of floor area or fraction thereof.
16.	Drive-in eating or drinking establishments.	5 spaces plus 1 space/50 sq. ft. of floor area.
17.	Mini warehouse.	Adequate parking and driveway areas shall be provided around the building's perimeter, subject to approval.

18. Fitness Center or Exercise Type Business (already enacted October 10, 2022). Parking Requirement - 1 space/200 sq. ft. of floor area devoted to such purpose. **This entry was enacted under Ordinance 05-22 and is not a newly proposed red addition.**[16]

> **RED - PROPOSED NEW §165.11(B)(19), after existing B(18):**
>
> **19. Data Center or High-Density Computing Facility.**
>
> A building or group of buildings principally used to house computer servers, data-processing equipment, networking equipment, electronic storage equipment, or other high-density computing systems, including cloud computing, colocation, artificial-intelligence computing, scientific computing, cryptocurrency computing or mining, and substantially similar uses.
>
> **Minimum required off-street parking:** one space per employee on the largest regularly scheduled shift, plus one space for each company vehicle regularly stationed at the premises.
>
> Computer rooms, telecommunications equipment, and server equipment that are incidental and subordinate to another permitted principal use shall not constitute a separate Data Center or High-Density Computing Facility.

C. Permitted Accessory Uses and Structures

1. Uses and structures clearly incidental and necessary to the permitted principal uses of this district.
2. Temporary buildings used in conjunction with construction provided such buildings are removed promptly upon completion of the construction work.
3. Dwelling units for watchmen or caretakers employed on the premises provided that an open yard of at least 2,400 sq. ft. is reserved and maintained for use by the occupants.
4. Satellite receivers.

D. Special Exception Uses and Structures

Subject to Section 165.34(2) and other requirements contained herein, the Board of Adjustment may permit the following:

1. Stockyards, loading pens, slaughter houses and handling or processing of animal by-products, poultry processing plants, buying stations and/or sale barns and yards, provided that it is not closer than one fourth

(1/4) mile to any dwelling unit other than that of the owner or operator, or any park, school, church or place of public assembly; that the provisions for drainage, sanitation, waste disposal, and fly control are approved by the County Health Officer; that it is located so that prevailing winds will not cause dust or odors to create a nuisance for developed properties in the vicinity; and that one (1) parking space for each employee and 1 space for each vehicle used by the industry be provided. An additional 25 parking spaces shall be provided for sale barns.

2. Bulk storage of petroleum products, liquid fertilizers, and agricultural chemicals provided that such use is not closer than 300 feet to a dwelling or place of public assembly and that one parking space for each vehicle used by the industry be provided.

Source note for D(2): The printed words above are readable in the source scan, but that scanned page also has dark, handwritten lines over portions of D(2). **This reprint does not construe the ink marks as legally adopted deletions.** The City Clerk must determine whether a later adopted ordinance altered D(2).[15]

3. The following uses provided that they are not closer than 1000 feet to any dwelling unit other than that of the owner or operator, or any park, school, church or place of public assembly; that 1 off-street parking space for every 2 employees and 1 off-street space for each company vehicle shall be provided.

a. Chemical plants.

b. Explosive manufacture or storage.

c. Fertilizer blending and manufacture.

d. Garbage, offal, or dead animal reduction.

e. Refining of petroleum and natural gas and their products.

4. Auto wrecking and junkyards on sites of 5 acres or more provided that the front yard be maintained as an open space free of weeds and debris; that the site be enclosed with a 6-foot-high fence or a suitable landscape planting that must screen the operation from the view of adjacent public streets and places of public assembly, parks, recreation areas, and residential properties; and that a minimum of 1 off-street parking space for each employee and 1 off-street space for each vehicle used by the facility be provided.

5. Communications stations and towers provided that they are not closer to a dwelling or place of public assembly than a distance equal to one-half their height, that will not interfere with the operation of any airport or landing strip, and that 1 off-street space for each vehicle used by the facility be provided.

6. An on-site free-standing business identification sign up to 75-feet in height provided the sign is a distance equal to one-half its height from neighboring buildings, maintains 7.5-feet horizontal clearance and 12.5-feet vertical clearance from overhead power lines, and the sign is designed and built to withstand 100-mph winds. Applicant must demonstrate a clear and compelling need for the special exception.

7. An adult-oriented establishment provided the establishment is not in or within sixteen hundred (1,600) feet of the borders of a residential district; any church, synagogue, mosque, temple, or other place of religious worship; any public or private school offering general education for students between the years of Kindergarten and Twelfth grade; of any daycare home or daycare business; any public park or playground. For purposes of this section, bike paths, trails, waterways, and boat launches shall not be deemed a public park; any other adult entertainment business; or any existing establishment selling alcoholic beverages for consumption on premises. The above cited distances shall be measured by following a straight line, without regard to intervening buildings, from the nearest point of the property parcel upon which the proposed adult entertainment business is to be located, to the nearest point of the parcel of property or zoning district boundary line from which the proposed adult entertainment business is to be separated. The definitions of adult-oriented establishments in Chapter 124.02 of the Cascade Code of Ordinances are hereby incorporated by reference.

RED - PROPOSED NEW §165.11(D)(8), after existing D(7):

8. Major Industrial Facility.

Any otherwise permitted principal use within the M-2 District meeting one or more of the following thresholds shall require Special Exception approval pursuant to Section 165.34(2):

1. Maximum anticipated coincident electrical demand of **five megawatts (5 MW) or greater**;
2. Anticipated industrial, process, cooling, or facility water demand of **25,000 gallons or more during any twenty-four-hour period**;
3. Aggregate stationary electrical generation capacity, excluding fire pumps, of **two megawatts (2 MW) or greater**;
4. Aggregate stationary battery or other electrical-energy-storage capacity of **five megawatt-hours (5 MWh) or greater**; or
5. A material expansion of an existing facility that causes the facility to exceed any threshold above.

The requirements of this subsection shall apply **without regard to the business type, technology, product, customer, tenant, ownership structure, or industrial process involved.** Similar physical impacts shall be treated consistently, and the City shall document the comprehensive-plan and public-welfare rationale for each objective threshold.[23]

E. Minimum Lot Area, Yard Requirements, and Maximum Height

BLUE - FORMAT ONLY: Reorganized the original three-column dimensions table as a labeled list; the numeric limits are unchanged.

- **Minimum lot area / width:** None.
- **Minimum front yard:** 25 feet.
- **Minimum rear yard:** 25 feet.
- **Minimum side yard:** 20 feet.
- **Minimum street-side yard, corner lot:** 20 feet.
- **Maximum height:** 60 feet.

F. Permitted Signs

1. Billboards and advertising signs provided:

a) That they are not within 75 feet of a highway intersection, highway structure, residence, park, school, cemetery, public or semi-public building.

b) That they are not within 150 feet of another billboard or advertising sign.

c) That they do not exceed 300 sq. ft. in area.

2. Trade, business or industry identification signs for the firm located on the site provided that:

a) Free standing signs shall not exceed 150 square feet in area or 25 feet in height.

b) Signs mounted flush on the wall of a building shall not exceed 10% of the area of the wall of the building on which they are located or 200 square feet, whichever is smaller.

c) Overhanging signs, attached to a building shall not project above the height of the building, or more than four (4) feet from the wall of the building and shall not have more than 100 square feet of area.

3. All signs shall be maintained in a neat and presentable condition and in the event that they shall become illegible or their use shall cease, they shall be removed promptly and the area occupied restored to a condition free from refuse and debris.

4. See Supplementary District Regulations (Section 165.12).

G. Special Requirements

1. Supplementary District Regulations (Section 165.12).

G(1) is original, current baseline language and is not deleted or replaced in this proposal.[15]

RED - PROPOSED NEW §165.11(G)(2) THROUGH (19):

G(2). Uniform Applicability

The requirements of this subsection apply uniformly to M-2 uses, structures, and operations unless a provision expressly establishes an objective physical or operational threshold. No requirement shall be imposed, waived, or varied solely because of the identity of the owner, operator, tenant, customer, industry, computing workload, product, or business model.

A lawful preexisting use, structure, or condition shall be treated in accordance with Sections 165.14 through 165.20 and other applicable law. To the maximum extent legally permissible, new construction, material expansion, replacement equipment, and materially modified operations after the effective date shall comply with the standards applicable to that work or modification.

G(3). Site Development Plan

Before issuance of a building permit for a new principal M-2 use or Major Industrial Facility, the applicant shall submit an engineered site development plan identifying, as applicable:

- buildings and structures;
- parking and loading areas;
- access roads;
- exterior mechanical and cooling equipment;
- generators;
- electrical substations and transformers;
- energy-storage systems;
- fuel and chemical storage;
- water and sewer connections;
- stormwater facilities;
- exterior lighting;
- landscaping and screening;
- fences;
- property boundaries; and
- existing sensitive receptors located within 1,000 feet of the property.

For a Major Industrial Facility, the plan shall additionally identify maximum anticipated electrical load, water demand, stationary generation capacity, fuel storage, cooling technology, principal noise-generating equipment, and proposed phasing.

For any Major Industrial Facility using stationary backup or on-site generation, the applicant shall provide a generator schedule identifying each engine's proposed manufacturer/model, rated electrical

and thermal capacity, fuel type, exhaust configuration, fuel tank and containment, anticipated emergency and non-emergency operating modes, reasonably foreseeable simultaneous-operation scenarios, planned testing frequency and duration, and applicable state or federal emissions permits or permit-exemption determinations. Information requiring legitimate security protection may be submitted in an appropriately redacted public version and a protected version, only as authorized by Iowa law. The City shall not purport to issue or replace air-quality permits.

G(4). Operational Noise

All M-2 uses shall be designed, constructed, operated, and maintained so that noise attributable to the use does not exceed the following standards, measured in accordance with generally accepted professional acoustic practice:

a. M-2 property-line standard: 65 dBA and 75 dBC hourly average at any property boundary, except where the residential/sensitive-receptor standard below is more restrictive.

b. Residential or sensitive-receptor standard: At each existing dwelling, school, licensed child-care facility, hospital, nursing facility, place of worship, public library, or comparable occupied sensitive use, compliance shall be evaluated **inside the closest normally occupied room on the side of the structure nearest the M-2 noise source**. The initial assessment shall include the nearest existing qualifying occupied structure. Additional qualifying structures shall be evaluated where source orientation, terrain, or shielding could produce higher exposure.

The sound-level meter microphone shall be placed **within five (5) feet of the interior face of the nearest source-facing exterior wall**, but **at least 1.5 feet (0.5 meter) from that wall and other large reflecting surfaces**, where physically practicable, at approximately four (4) to five (5) feet above the finished floor. **All doors and windows shall be closed throughout the measurement. In a dwelling with a controllable forced-air HVAC blower, the fan control shall be set to ON for continuous operation during the entire indoor measurement, with the thermostat set within 65°F–75°F where reasonably practicable; the detailed protocol in subsection G(5) applies.** The qualified acoustical professional shall identify the room and measurement positions and document any necessary deviation from these placement requirements. The following **indoor, facility-attributable one-hour equivalent continuous sound levels (Leq,1h)** shall not be exceeded:

- 55 dBA and 65 dBC from 7:00 a.m. to 10:00 p.m.; and
- 50 dBA and 60 dBC from 10:00 p.m. to 7:00 a.m.

c. Tonal noise: Where an industrial sound source produces a prominent recurring tone, whine, screech, or hum, the applicable A-weighted limit shall be reduced by five (5) decibels.

d. Measurement: The one-hour average is the energy-equivalent continuous sound level (Leq,1h), not an arithmetic mean of decibel readings. A qualified acoustical professional shall use a calibrated Type 1 or Type 2 sound-level meter appropriate for the purpose, identify A- or C-weighting, document meteorology for exterior measurements, receiving location, background sources, room conditions for interior measurements, and source operating conditions. Outdoor source assessment shall use a documented ANSI/ASA S12.9 or successor environmental-noise assessment method. Indoor sensitive-receptor assessment shall use a documented method appropriate for room sound and low-frequency industrial noise, including ANSI/ASA S12.72 and S12.9 Part 7 where applicable.[17][18] The City shall evaluate only facility-attributable noise using a documented background-noise adjustment procedure, accounting for unrelated indoor sound sources. Entry into an occupied structure for testing requires occupant consent or other lawful authority. If access is unavailable, the professional may report modeled indoor exposure with explicit assumptions, but shall not represent an outdoor measurement as a direct indoor compliance test. These measurement protocols shall not be construed to set a new statewide noise standard.[9][10]

e. Voluntary indoor access and outdoor alternative: The owner or lawful occupant of a sensitive-receptor structure may decline voluntary indoor noise testing. Declining consent does not invalidate a complaint or waive other remedies authorized by law. Interior or exterior entry onto private property requires consent or an independent lawful basis.

If indoor testing is declined, the qualified acoustical professional shall measure the facility-attributable Leq,1h outdoors at the point on the sensitive-receptor parcel boundary closest to the industrial property, provided the location is lawfully accessible and acoustically representative. Otherwise, a nearby lawfully accessible representative location shall be selected and the departure documented. The report shall document background conditions, microphone position, source operating conditions and any distance, shielding or reflection adjustments needed to estimate sound incident on the protected structure.

To assess the proposed indoor thresholds, the professional shall use documented, source-spectrum-appropriate outdoor-to-indoor noise reduction (OINR) or equivalent acoustical transmission-loss data for the building assembly, including walls, windows, doors and openings. Separate A- and C-weighted estimates and low-frequency assessment shall be provided where applicable. A calculated indoor result shall be labeled an **estimate**, not a direct indoor measurement. The applicable M-2 property-line limit remains unchanged.

Exterior-wall insulation R-values in Iowa energy requirements measure thermal resistance, not acoustical isolation. R-values may inform assembly identification but shall not be converted directly into dBA/dBC corrections. If reliable facade sound-reduction evidence is unavailable, a zero-decibel reduction may be used for cautious preliminary screening only, not by itself as conclusive proof of an indoor violation. The source of any acoustic correction and its uncertainty shall be disclosed.[21][23]

G(5). Acoustic Study and Verification

Every Major Industrial Facility shall provide, at the applicant's expense:

1. A **preconstruction baseline acoustic evaluation**, completed before site construction or grading materially changes ambient sound, documenting representative exterior A- and C-weighted hourly equivalent levels (Leq,1h) at nearby sensitive-receptor parcels and M-2 property boundaries. The evaluation shall include **voluntary indoor baseline measurements** inside nearby existing sensitive-receptor structures wherever the property owner or lawful occupant consents, as specified below;
2. A predictive acoustic model demonstrating compliance at property boundaries and nearby sensitive receptors under maximum reasonably anticipated operating conditions, including hot-weather conditions where relevant;
3. A post-construction compliance evaluation within sixty (60) days after commencing normal operations at reasonably representative load and weather conditions, or within a documented alternative period approved for commissioning constraints; and
4. A recurring compliance evaluation at least once every three (3) years, or following a material modification reasonably expected to affect noise levels.

Preconstruction indoor-receptor baseline and consent. The applicant shall identify the closest existing dwelling or other sensitive-receptor structures and any additional receptors reasonably expected to receive greater facility-related noise because of equipment orientation, terrain, or shielding. Before construction, the applicant shall offer the owner or lawful occupant of each selected structure an opportunity, **at no cost to that owner or occupant**, to consent to baseline testing within the nearest normally occupied room facing the proposed industrial source. When consent is granted, a qualified acoustical professional shall record representative **daytime and nighttime indoor dBA and dBC Leq,1h levels** under the placement, closed-door, and closed-window conditions described in subsection G(4)(b), together with operating indoor HVAC or ventilation conditions, existing sound sources, weather where relevant, and measurement times. The study should obtain paired exterior measurements at the

same structure when lawful access and conditions permit. This provides a documented **preconstruction ambient baseline**, not a presumption that existing sound is attributable to the proposed facility.

Declined or unavailable access. Neither a property owner nor a lawful occupant shall be required by this subsection to permit voluntary entry. The applicant shall document reasonable efforts to offer indoor baseline testing and record whether consent was granted or declined without disclosing unnecessary private household information. Where indoor consent is declined or lawful access is unavailable, the preconstruction study shall perform the exterior alternative in subsection G(4)(e), including a source-facing receptor-parcel boundary measurement **only where lawful access is available**, or the nearest suitable lawful exterior location. Any estimated interior baseline shall use independently substantiated acoustical transmission-loss assumptions; **Iowa exterior-wall thermal R-values shall not be converted into decibel adjustments**. Estimated indoor levels shall be identified as *modeled*, not as measured values. A refusal of voluntary interior testing shall not be treated as a waiver of the applicable noise protections.

Thermostat and HVAC fan setting during indoor testing. During every indoor preconstruction baseline, postconstruction verification, and complaint-response acoustic measurement, **the forced-air HVAC circulation fan shall be set to ON for continuous operation throughout the entire measurement interval**, wherever the building has an occupant-controllable fan ON setting. **AUTO is not the default for this test.** For dwellings, the heating/cooling thermostat setpoint shall be within **65°F to 75°F (inclusive)** where reasonably practicable and consistent with occupant health and safety. Heating and cooling demand may still cycle normally in response to the thermostat; the blower must remain on between those calls. Do not deliberately force heating or cooling cycles. The qualified acoustic professional shall verify and record the actual continuous blower operation, fan speed or mode, system type, thermostat setpoint and mode, measured interior temperature, heating/cooling cycles, other ventilation, and any deviation. These identical test settings shall be used for the comparable preconstruction and postconstruction measurements, or differences must be explained and accounted for in the technical assessment. Continuous fan sound is part of the measured indoor background and may mask industrial noise; the report shall distinguish facility-attributable sound from HVAC sound using a technically appropriate method. Supplemental measurements under other fan settings may inform the assessment but do not replace the required fan-ON measurement. If no blower or continuous-ON control is present, or use would be unsafe or medically inappropriate, document the reason and measure under representative existing conditions; lack of such equipment does not invalidate a complaint. The **65–75°F setpoint and mandatory fan-ON protocol are proposed local measurement conditions**, not Iowa residential code requirements.[25]

Evidence for a claimed increase after construction. A finding that a Major Industrial Facility **increased noise inside a neighboring sensitive-receptor structure** shall be supported by reliable evidence of the **preconstruction indoor baseline** and a comparable **postconstruction indoor level**, measured in the same room when practicable, **with exterior doors and windows closed**, using the same A- and C-weighted Leq,1h metrics and comparable daytime/nighttime periods, ventilation settings, and sound-source conditions. The analysis must establish that the later level is higher than the earlier level beyond the stated measurement uncertainty and must separately substantiate the amount **attributable to the facility**, rather than assuming all ambient sound comes from that facility. A preconstruction home need not have been silent; the relevant question is whether its indoor noise demonstrably increased because of the facility.[24]

Where an owner declined the preconstruction indoor evaluation, the City may consider credible earlier sound surveys, contemporaneous records, and the documented exterior-to-interior acoustic model described in subsection G(4)(e). An unsupported assertion of an increase alone shall not establish a violation **based solely on a change from preconstruction conditions**. This evidentiary requirement **does not prevent anyone from submitting a complaint**, does not require a historical baseline to investigate or enforce an **absolute indoor or M-2 property-line limit**, and does not displace rights or remedies under Iowa nuisance law.[9][24]

The required acoustic model and post-startup testing shall examine ordinary peak operations, reasonably foreseeable simultaneous generator testing or emergency backup operation, identifiable low-frequency or tonal equipment sources, and nearby residential and other sensitive receptors. Where safety or operational requirements prevent actual simultaneous generator testing, a qualified professional may combine measured source data with documented predictive modeling, with assumptions stated in the report.

Any separate structure-borne or ground-vibration concern must be evaluated with measurements appropriate to vibration (such as peak particle velocity), not inferred from dBA/dBC sound measurements. A numeric vibration ceiling is **not adopted in this draft** pending independent engineering and legal review.

The City may require reasonable corrective measures where testing demonstrates noncompliance.

G(6). Generator and Elevated-Noise Testing

Routine and pre-planned testing of stationary generators or other equipment producing substantially elevated noise shall occur only between **8:00 a.m. and 6:00 p.m., Monday through Friday**, except where operation outside those hours is:

1. Required during an actual emergency;
2. Necessary to protect life, property, or critical equipment;
3. Required by a governmental agency, applicable code, manufacturer, utility, insurer, or reliability authority; or
4. Specifically authorized by the Zoning Administrator because the testing cannot reasonably be completed during ordinary testing hours.

This restriction applies uniformly to M-2 businesses operating such equipment. "Emergency generator" as classified for Iowa air-quality permitting follows applicable state air regulations; local zoning testing-hour rules do not alter air-permit classifications or authorize impermissible emissions.[8]

G(7). Generator Operating Records

Any M-2 facility having aggregate stationary generation capacity of two (2) MW or more shall maintain records identifying:

- date and duration of each operation;
- whether the operation was emergency or non-emergency;
- reason for operation; and
- equipment operated.

Records shall be retained for at least three (3) years and made available to the City upon reasonable request for zoning-compliance purposes, subject to applicable public-record and confidentiality law.

G(8). Major Industrial Facility Setbacks

Existing M-2 dimensional requirements shall remain applicable generally. In addition, for a new Major Industrial Facility:

1. A principal building shall be located at least **100 feet from a property boundary adjoining a residential zoning district**.
2. Stationary generators, exterior cooling equipment, large transformers, substations, compressors, industrial fans, and comparable exterior mechanical equipment shall be located at least **200 feet from a residential zoning district boundary**.

3. The Board of Adjustment may approve a reduced equipment setback, but never less than 100 feet, where an applicant-funded independent acoustic analysis demonstrates that all applicable noise standards will be met under maximum reasonably anticipated operating conditions.

Nothing in this subsection authorizes a setback reduction that conflicts with any other applicable code, easement, fire requirement, or utility clearance.

G(9). Exterior Lighting

All new or replacement exterior lighting within the M-2 District shall:

1. Be fully shielded and directed downward;
2. Be designed to prevent direct glare onto residential property and public streets;
3. Not exceed **0.5 foot-candle at a residential zoning boundary**, excluding existing public street lighting; and
4. Use automatic controls or reduced lighting levels during periods when full illumination is unnecessary, except for safety, security, and emergency lighting.

G(10). Screening

Exterior mechanical equipment, generators, fuel tanks, refuse areas, substations, and comparable industrial equipment visible from an adjoining residential district or public right-of-way shall be screened through landscaping, berms, walls, fencing, equipment enclosures, or a combination thereof.

Screening shall not interfere with required ventilation, fire access, utility clearance, security, or equipment safety.

G(11). Water Use and Cooling

Any M-2 use reasonably expected to use **25,000 gallons or more of water in a twenty-four-hour period** shall provide:

1. Projected average and peak water demand;
2. Identification of the proposed water source;
3. Applicable Iowa Department of Natural Resources permits, approvals, or documentation, with any determination of a **regulated** or **nonregulated** water use made under Iowa Code §455B.261 and applicable implementing rules, not inferred from the City's impact-review threshold alone;[7]
4. An engineering analysis demonstrating adequate water supply without unreasonable interference with existing users;
5. Separate metering of material industrial or cooling-water use where practicable; and
6. Annual water-use reporting to the City.

Once-through cooling using potable municipal water is prohibited for new Major Industrial Facilities.

Closed-loop or non-evaporative cooling shall be preferred. An evaporative system may be approved where professional engineering demonstrates that the alternative will not create an unreasonable demand upon municipal water resources and adequately controls drift, plume, condensation, and icing.

G(12). Electrical Utility Verification

Before issuance of a building permit for any M-2 use having maximum anticipated electrical demand of five (5) MW or more, the applicant shall provide written documentation from the serving electric utility confirming that:

1. The proposed maximum electrical demand has been disclosed;
2. Required utility infrastructure and service upgrades have been identified sufficiently for the utility to provide service;
3. Responsibility for project-specific utility improvements has been addressed between the utility and customer; and
4. The facility's electrical service may be constructed and operated in accordance with applicable utility, electrical, and safety requirements.

Nothing in this ordinance regulates electric rates, utility service territories, generation procurement, or matters preempted or otherwise committed by law to a public utility, electric cooperative, state agency, or federal authority.

G(13). Fuel, Batteries, Hazardous Materials, and Emergency Response

A Major Industrial Facility shall provide an Emergency Response Plan to the City and appropriate emergency-response agencies before occupancy.

The plan shall identify, where applicable:

- emergency contacts;
- facility access;
- electrical disconnects;
- generator locations;
- fuel quantities and shutoffs;
- coolant and chemical inventories;
- battery-energy-storage systems;
- fire-suppression systems;
- evacuation procedures;
- spill response; and
- procedures for providing emergency responders access to the site.

The plan shall be reviewed following material facility modifications and at reasonable intervals requested by the City or responding agencies.

G(14). Heat Rejection, Drift, Condensation, and Icing

No M-2 mechanical exhaust, cooling, or heat-rejection system shall be operated in a manner that causes ice, condensate, cooling-tower drift, mist, or similar discharge to accumulate upon an adjoining property or public right-of-way or create an unreasonable safety hazard.

G(15). Stormwater and Drainage

All new M-2 development shall comply with applicable City, state, and federal stormwater requirements.

A Major Industrial Facility shall submit engineered stormwater calculations demonstrating that development will not cause an unlawful or unreasonable increase in off-site flooding, erosion, or drainage impacts, **subject to Iowa Code §364.3 limitations on municipal runoff and topsoil requirements.** An independently imposed more restrictive runoff standard may require the City to bear specified

engineering, construction, or property costs, and shall not be presumed authorized by this zoning section.[12]

The property owner shall be responsible for repair of documented project-caused damage to City drainage infrastructure to the extent permitted by law.

G(16). Public Infrastructure

Where an M-2 development creates a documented need for road, water, sewer, drainage, emergency-service, or other public improvements beyond existing system capacity, the City may require a development or infrastructure agreement allocating proportionate project-related costs to the applicant to the extent permitted by Iowa law.

This provision shall apply equally to every M-2 development creating the same type and degree of infrastructure burden.

Where substantial construction hauling is reasonably expected to affect City roads, the City may, pursuant to an independently authorized permit or written road-use agreement, require a preconstruction photographic/engineering condition survey, defined haul routes and axle/load limits, reasonable maintenance and restoration terms, postconstruction verification, and proportionate financial security supported by an engineering estimate. No fixed multiplier or new fee is prescribed here without legal review.

G(17). Decommissioning of Major Industrial Facilities

An application for a Major Industrial Facility shall include a decommissioning plan describing:

1. Anticipated facility life;
2. Equipment and structures to be removed;
3. Environmental remediation and site restoration;
4. Estimated decommissioning cost;
5. Salvage assumptions; and
6. Proposed method of financial assurance.

A facility shall be considered abandoned when its principal industrial operation has ceased continuously for twelve (12) months, excluding temporary shutdowns caused by reconstruction, documented market conditions accompanied by evidence of a bona fide intent to resume operations, casualty, litigation, government order, utility interruption, or similar circumstances approved by the Zoning Administrator.

Following abandonment, decommissioning shall be completed within twelve (12) months unless extended for good cause.

The form and amount of financial assurance shall be established in a manner approved by the City Attorney and shall be reasonably related to the documented cost of decommissioning and site restoration.

A qualified professional's decommissioning cost estimate shall be reviewed at least once every three (3) years and following a material expansion or ownership/operator change that materially alters restoration obligations. The City may require adjustment of assurance to the reasonable documented cost of performance, including contingencies, only through a legally authorized and objectively administered instrument.

To the extent enforceable under Iowa law, approval conditions and any separate recorded agreement shall identify responsible owners and operators, notice requirements upon transfer, acceptable successor security, and procedures for default and lawful recovery. Private contracts shall not transfer away obligations imposed by law or approval conditions.

G(18). Material Expansion

An approved Major Industrial Facility shall require an updated Special Exception review where a proposed modification would increase any of the following by **twenty percent (20%) or more** above the previously approved maximum:

- electrical demand;
- water demand;
- stationary generation capacity;
- energy-storage capacity;
- exterior mechanical-equipment capacity; or
- developed building area.

Crossing a Major Industrial Facility threshold for the first time shall require Special Exception approval regardless of percentage increase.

G(19). Compliance, Inspection, and Corrective Action

The Zoning Administrator may require documentation reasonably necessary to verify compliance with conditions of approval and the objective standards of this section. Where specialized testing or engineering is reasonably required because of a credible compliance question involving a Major Industrial Facility, the City may require the owner or operator to provide qualified professional testing, subject to applicable law and any fee or cost-recovery provisions adopted by the City.

Each Major Industrial Facility shall submit a brief annual compliance certification to the Zoning Administrator by March 1 for the prior calendar year, identifying the facility owner and operator; material changes in electricity demand, generation equipment, cooling and water use; whether prescribed acoustic tests and generator logs have been maintained; reported material incidents or violations; and the status of financial assurance. The certification is a compliance statement, not automatic approval of unverified representations.

Where reasonably necessary and authorized by an adopted fee schedule or agreement, the City may retain or approve an independent qualified professional to review applicant studies and required remedial testing at reasonable, documented applicant cost. For complex matters, the City may require a deposit or escrow established through lawful procedures with an accounting and refund of unused amounts. The applicant must not control or direct the independent expert's findings.

Nothing in this section limits other remedies available under Chapter 165 or applicable law.

PROPOSED CHAPTER 165.41 DEFINITION ADDITIONS

The 26 terms below are RED additions to the existing Chapter 165.41 glossary, not a replacement of its previously adopted definitions. The original §165.41 appears elsewhere in the larger historic Chapter 165 scan; this reprint includes **all of M-2 §165.11**, not all of Chapter 165. Neither existing definitions nor any other sections are repealed merely because they are not reproduced here.[615]

Data Center or High-Density Computing Facility: A building, structure, or portion thereof principally used for networked servers, electronic data processing, digital storage, artificial-intelligence, cloud, colocation, scientific, or cryptocurrency computing. Incidental computer rooms and telecommunications equipment subordinate to another principal use are excluded.

Major Industrial Facility: An M-2 use exceeding any one threshold in proposed §165.11(D)(8): 5 MW coincident demand, 25,000 gallons in any 24 hours, 2 MW aggregate stationary generation, or 5 MWh storage. Also includes a modification that crosses a threshold.

Material Expansion: A modification increasing an approved maximum by 20 percent or more for electrical demand, water demand, stationary generation, energy storage, exterior mechanical capacity, or developed building area, or crossing a Major Industrial Facility threshold for the first time.

Sensitive Receptor: An occupied dwelling, school, licensed child-care facility, hospital, nursing facility, place of worship, public library, public park facility, or comparable occupied use requiring protection from continuous industrial noise.

Ambient Noise / Baseline Sound: The sound environment at a designated receiving location without the regulated facility's incremental contribution, determined under representative day, night, and meteorological conditions. Ambient noise is not the Iowa air-quality term "ambient air."[8,10]

Facility-Attributable Noise: The sound contribution attributable to a regulated M-2 use at the specified receiving point, including reasonably foreseeable simultaneous operation of equipment; exclude unrelated transportation, natural, and third-party background noise through an approved, documented acoustical procedure.[10]

dBA: A-weighted decibels of sound pressure, measured with calibrated equipment using the applicable professional noise measurement method.

dBC: C-weighted decibels of sound pressure, which place greater relative weight on low-frequency sound than A-weighting.

Hourly Average Sound Level (Leq,1h): The energy-equivalent continuous sound-pressure level over sixty (60) minutes, expressed using the specified A- or C-weighting; intermittent contributions are averaged on an acoustic energy basis, not by taking an arithmetic mean of decibel values. The qualified professional shall identify source operation, background sound, measurement location, and calibration.[10]

Prominent Tone / Tonal Noise: An identifiable recurring or steady audible frequency component distinguishable from neighboring sound bands when evaluated under the ordinance's specified professional acoustical method.

Acoustic Study: A qualified professional's documented baseline survey, maximum-design-operation model, receptor analysis, assumptions, equipment schedule, and verification protocol.

Maximum Anticipated Coincident Electrical Demand: The greatest reasonably anticipated simultaneous electrical load, expressed in MW, for the complete site during normal or design-maximum operation. A sum of independent equipment nameplate ratings does not establish coincident site demand without a documented load calculation.

Aggregate Stationary Generation Capacity: The sum of rated electrical outputs of all stationary generators covered by the section, in megawatts, excluding fire pumps only where expressly provided.

Aggregate Electrical-Energy-Storage Capacity: The summed rated stored electrical energy of covered stationary storage systems, in megawatt-hours, using documented nameplate energy ratings.

Exterior Mechanical Equipment: Permanently located outdoor fans, compressors, cooling equipment, generators, transformers, heat-rejection systems, and comparable mechanical installations serving an M-2 principal use.

Property Boundary / Lot Line: The legally established boundary of the parcel under review as supported by a recorded plat, survey, deed, or other legally controlling boundary record.

Residential Zoning District Boundary: The official delineation between an M-2 parcel or district and land designated residential by the City's controlling zoning map.

Sensitive-Receptor Measurement Location: The specified exterior wall, occupied outdoor-use area, or other objectively identified receiving point at a sensitive receptor, documented on an approved site/acoustic plan.

Once-Through Cooling: A process in which municipal potable water passes through a cooling system once and is discharged rather than being recirculated for heat rejection.

Closed-Loop Cooling: A recirculating coolant system intended to keep working fluid contained, subject to any limited makeup or process losses specifically disclosed.

Emergency Response Plan: A written, site-specific plan documenting access, contacts, utility isolation, fuel, chemicals, battery systems, suppression, evacuation, spills, and coordination with first responders.

Decommissioning: The safe disconnection, dismantling, lawful removal, cleanup, and site restoration work required at the end of a covered facility's life.

Abandonment: Continuous cessation of a facility's principal approved industrial operation for the period specified in §165.11(G)(17), subject to its listed reasonable exceptions.

Financial Assurance: A surety, letter of credit, escrow, performance bond, trust, or other legally authorized and enforceable arrangement in a reasonable amount covering documented decommissioning and site restoration duties. The statutory definition applicable to sanitary-disposal facilities under Iowa Code §455B.301(9) does not itself grant the City authority to impose that requirement on M-2 data centers; a separate legal basis must be confirmed by the City Attorney.[13]

Independent Qualified Professional: An appropriately licensed or credentialed expert with relevant technical competence and no financial or managerial interest that would compromise independent evaluation.

Material Modification (for monitoring): A change in equipment, site layout, generation operation, or other covered operation reasonably likely to change the regulated environmental or infrastructure impact.

BLUE COPYEDIT REGISTER - NO INTENDED SUBSTANTIVE CHANGE

Original scan or enacted text	Blue correction / presentation in this document	Classification
B(1)–B(17) were printed as a two-column use/parking table across PDF pages 45–46.	Consolidated into one three-column table with original numbers, use descriptions, and parking/loading ratios.	**FORMAT ONLY**
B(5): "Manufacturing, assemble and processing uses"	"Manufacturing, **assembly** and processing uses" (blue highlighted word)	**GRAMMAR ONLY**, preserves activity category

Original scan or enacted text	Blue correction / presentation in this document	Classification
B(7)–B(15): "or faction thereof"	"or **fraction** thereof" (each occurrence blue)	**SPELLING ONLY**, preserves 5,000-square-foot loading-space ratio
D(4): "6 foot high fence"	"**6-foot-high** fence" (blue)	**PUNCTUATION ONLY**, preserves six-foot height
B(18) adopted 2022: "1space/ 200 sq ft."	"**1 space/200 sq. ft.**" (blue)	**SPACING / ABBREVIATION ONLY**, preserves 1-per-200 parking ratio
E: lot area, yards and height originally in a small three-column table.	Labeled list preserving None, 25 ft / 25 ft / 20 ft / 20 ft / 60 ft.	**FORMAT ONLY**
Proposed definitions: "Abandonment" refers to G(16), although the abandonment provision is G(17).	Corrected **G(16) to G(17)** in blue within the draft definition below.	**CROSS-REFERENCE CORRECTION ONLY**
Heading capitalization and line breaks from typewritten source.	Standardized bold section headings and readable paragraphs.	**FORMAT ONLY**

Not silently corrected: The scanned D(7) uses the phrase "of any daycare home or daycare business"; D(5) uses "that will not interfere" and B(1)–(4) use "sales service or office floor area." Those phrases may warrant cleanup, but they remain as printed because editing them could change the legal meaning. They require City Attorney review. Likewise, the handwritten strike marks in the scanned D(2) remain **unverified** and are not treated as enacted deletions.

LEGAL STATUS AND ADOPTION CHECKLIST

1. Obtain the **complete current certified M-2 ordinance**, including amendments after the original scan. This document is a comparative draft, not a certification.
2. Preserve already enacted B(18) and G(1); confirm that new B(19), D(8), G(2)–(19) are the next available numbers before publication.
3. Retain the existing F sign provisions and E dimensional rules; the proposed G(8) setbacks are additional **conditional** standards, not a rewriting of ordinary M-2 setbacks.
4. Check D(2) against the enacted ordinance history; handwritten strike marks are not legislation.
5. Review the proposed Chapter 165.41 additions alongside the existing definitions and the state uniformity rule, Iowa Code §414.2.

6. Verify that blue copyedits do not change legal meaning; if the City proposes to rewrite an operative requirement, mark it **red** and adopt it through the required legislative process.
7. This integrated comparison is **NOT a final ordinance**. Adoptable language should be extracted into the City's formal amendment instrument after review.

CHICAGO-STYLE NUMBERED NOTES - DOCUMENTARY SOURCES

The numbered notes below cite the original scan, known later municipal amendments, and the existing source notes attached to the proposed November 3 amendment. These citations and editing annotations are noncodified background.

Superscript note markers in this proposal point to these numbered sources. Notes are documentary authorities and **are not operative zoning terms**. Project-specific engineering assumptions and proposed numerical thresholds still require independent validation.

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1. Iowa General Assembly, *Iowa Code* §414.1 (2026), municipal regulation of building location and industrial land use, https://www.legis.iowa.gov/docs/code/2026/414.1.pdf. ↩
2. Iowa General Assembly, *Iowa Code* §414.2 (2026), uniformity for each class or kind of building throughout each zoning district, https://www.legis.iowa.gov/docs/code/2026/414.2.pdf. ↩
3. Iowa General Assembly, *Iowa Code* §414.3 (2026), comprehensive-plan and health, safety, conservation, and public-facility considerations, https://www.legis.iowa.gov/docs/code/2026/414.3.pdf. ↩
4. Iowa General Assembly, *Iowa Code* §414.12(2)-(4) (2026), Board of Adjustment special exceptions and variances, including 2025-added subsection (4), https://www.legis.iowa.gov/docs/code/2026/414.12.pdf. ↩
5. Iowa General Assembly, *Iowa Code* §423.3(95)(f) (2026), definitions applicable to data-center tax treatment, https://www.legis.iowa.gov/docs/code/2026/423.3.pdf. ↩
6. Iowa General Assembly, *Iowa Code* §103A.3 (2026), construction and building definitions, https://www.legis.iowa.gov/docs/code/2026/103A.3.pdf; City of Cascade, *Chapter 165 Zoning Ordinance*, §165.41, transcription in this repository: https://github.com/ttbakiatwoam/cascade-data-center/blob/master/dataset/cascade-zoning/CHAPTER-165-ZONING-ORDINANCE.md. ↩
7. Iowa General Assembly, *Iowa Code* §455B.261 (2026), water allocation, beneficial use, nonregulated use, and regulated use, https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. ↩
8. Iowa Department of Natural Resources, *Iowa Administrative Code* 567—22.1, air-quality definitions and emergency generators, https://www.legis.iowa.gov/docs/iac/rule/02-25-2026.567.22.1.pdf. ↩↩
9. Iowa General Assembly, *Iowa Code* §657.1 (2026), nuisance, https://www.legis.iowa.gov/docs/code/2026/657.1.pdf. ↩↩
10. Acoustical Society of America / American National Standards Institute, *ANSI/ASA S12.9*, environmental sound measurement and assessment standards, https://webstore.ansi.org/ (exact current edition and applicable part require acoustical expert verification). ↩↩↩↩
11. Iowa General Assembly, *Iowa Code* §§455B.131, 455B.381, and 455B.411 (2026), air contaminants, hazardous conditions, and waste-management terms, https://www.legis.iowa.gov/docs/code/2026/455B.pdf. ↩
12. Iowa General Assembly, *Iowa Code* §364.3 (2026), limitations on municipal topsoil and stormwater runoff requirements, https://www.legis.iowa.gov/docs/code/2026/364.3.pdf. ↩
13. Iowa General Assembly, *Iowa Code* §455B.301(9) (2026), definition of financial assurance instrument for sanitary disposal projects, https://www.legis.iowa.gov/docs/code/2026/455B.301.pdf. ↩
14. Iowa Department of Natural Resources, *Iowa Administrative Code* 567—60.1 (2026), wastewater and incorporated stormwater definitions, https://www.legis.iowa.gov/docs/iac/rule/567.60.1.pdf. ↩
15. City of Cascade, *Chapter 165 Zoning Ordinance*, original scanned M-2 Heavy Industrial District, "Entire zoning code-1.pdf," source PDF pp. 45–49 (printed code pp. 34–38), preserved at https://github.com/ttbakiatwoam/cascade-data-center/blob/master/sources/cascade-zoning/Entire%20zoning%20code-1.pdf; source transcription at https://github.com/ttbakiatwoam/cascade-data-center/blob/master/dataset/cascade-zoning/CHAPTER-165-ZONING-ORDINANCE.md. The same scan labels its 2009 zero-lot-line proposal a **draft** (PDF p. 6). ↩↩↩↩↩

16. City of Cascade, *Ordinance 05-22*, adopted October 10, 2022, adds fitness centers as M-2 B(18), https://github.com/ttbakiatwoam/cascade-data-center/blob/master/dataset/cascade-zoning/ordinances/ORDINANCE-05-22.md; *Ordinance 19-24*, adopted September 9, 2024, amends §165.12(12), including M-2 fencing, https://github.com/ttbakiatwoam/cascade-data-center/blob/master/dataset/cascade-zoning/ordinances/ORDINANCE-19-24.md. ↩↩↩

17. Acoustical Society of America / ANSI, *ASA/ANSI S12.72-2015 (R2025), Procedure for Measuring the Ambient Noise Level in a Room*, https://webstore.ansi.org/standards/asa/asaansis12722015r2025; *ASA/ANSI S12.9-2016/Part 7 (R2025), Measurement of Low-frequency Noise and Infrasound Outdoors in the Presence of Wind and Indoors in Occupied Spaces*, https://webstore.ansi.org/standards/asa/asaansis122016partr2025. Both are measurement frameworks; neither establishes the proposed numeric Cascade limits. ↩

18. International Organization for Standardization, *ISO 1996-2:2017, Acoustics—Description, Measurement and Assessment of Environmental Noise—Part 2*, https://www.iso.org/standard/59766.html. Contains guidance on indoor environmental-noise measurement; the draft's five-foot proximity criterion is a proposed local choice. ↩

19. World Health Organization, *Guidelines for Community Noise* (1999), indoor-bedroom night-noise guidance of 30 dBA Leq, https://www.who.int/publications-detail-redirect/a68672. This guideline is not binding Iowa law. ↩

20. U.S. Department of Energy, *Building Energy Codes Program, Iowa*, https://www.energycodes.gov/status/states/iowa; Iowa Administrative Code 481—301.24, *Residential Energy Code*, https://www.legis.iowa.gov/DOCS/ACO/IAC/LINC/Rule.481.301.24.pdf; Pacific Northwest National Laboratory, *Iowa Amendments to the 2012 IECC*, https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-24946Rev1.pdf. These cover energy, not building acoustics. ↩

21. Federal Highway Administration, *Noise Measurement Handbook*, §6.0, Table 6-1, FHWA-HEP-18-065 (2018), https://www.fhwa.dot.gov/Environment/noise/measurement/handbook.cfm. Typical building attenuation factors address highway traffic noise and are not site-specific industrial acoustic results. ↩

22. City of Cascade, *Code of Ordinances*, §6-12-8, "Building Code Adopted," Ordinance 02-22 (August 22, 2022), https://codelibrary.amlegal.com/codes/cascadeia/latest/cascade_ia/0-0-0-4159; U.S. Department of Energy, *Guide to Determining Climate Regions by County* (2015), https://www.energy.gov/eere/buildings/articles/building-america-best-practices-series-volume-73-guide-determining-climate. ↩

23. Federal Highway Administration, *Noise Measurement Handbook*, section 6 (building outdoor-to-indoor noise reduction), https://www.fhwa.dot.gov/Environment/noise/measurement/handbook.cfm; ASTM International, *ASTM E966*, facade field sound attenuation, https://store.astm.org/standards/e966; Iowa Supreme Court, *Singer v. City of Orange City*, No. 23-1600 (Dec. 20, 2024), https://www.iowacourts.gov/iowa-courts/supreme-court/supreme-court-opinions/case/23-1600. The City Attorney should review access and enforcement authority. ↩

24. Federal Highway Administration, *Construction Noise Handbook*, §5.3–5.4 (baseline measurement and comparable before/after locations and conditions), https://www.fhwa.dot.gov/Environment/noise/construction_noise/handbook/handbook05.cfm; *Noise Measurement Handbook*, discussion of measurement comparability and uncertainty, https://www.fhwa.dot.gov/Environment/noise/measurement/handbook.cfm; Iowa General Assembly, *Iowa Code* §657.1 (2026), nuisance and civil remedies, https://www.legis.iowa.gov/docs/code/2026/657.1.pdf. This draft evidence standard is a proposed local ordinance provision, not an established precondition to an Iowa-law nuisance claim. ↩↩

25. ASHRAE, *ANSI/ASHRAE Standard 55-2023, Thermal Environmental Conditions for Human Occupancy*, https://www.ashrae.org/technical-resources/bookstore/standard-55-thermal-environmental-conditions-for-human-occupancy; ASHRAE, *Technical FAQs*, "recommended indoor temperature and humidity levels for homes," https://www.ashrae.org/technical-resources/technical-faqs (comfort varies by humidity, clothing, activity, and season, so no universal 65–75°F required range); ASHRAE, *2023 Handbook—HVAC Applications*, ch. 49, "Noise and Vibration Control," https://handbook.ashrae.org/Handbooks/A23/SI/A23_Ch49/a23_ch49_si.aspx (document actual HVAC operating conditions and distinguish equipment from background sound). ↩

FULL REVISED DRAFT ORDINANCE

The following document contains all of the proposed new text and its source notes. Section G(1) remains unchanged; new M-2 G requirements are G(2) through G(19). This proposal is NOT enacted law.

CASCADE, IOWA - November 3, 2026 - Source-linked research edition - Not adopted law

DRAFT - M-2 Heavy Industrial District Data Center and Performance Standards Amendment (November 3, 2026 revision)

DRAFT - FOR DISCUSSION ONLY - NOT ADOPTED LAW
Original prepared October 6, 2026; October 26 draft preserved. This **November 3, 2026 revised proposal** adds integrated definitions, clearer measurement and administrative cross-references, and Chicago-style legal notes. It is intended for City Attorney and Planning & Zoning review. This is a project-generated draft and is not legal advice. Section numbering, amendment mechanics, grandfathering, enforcement, and consistency with Iowa law should be reviewed by the City Attorney before introduction.

Uniformity principle: The ordinance is intentionally written so that zoning and performance standards apply throughout the M-2 Heavy Industrial District to all similarly situated businesses. Data centers are added as an expressly recognized use type, while noise, lighting, screening, water, emergency planning, generators, infrastructure, and other impact standards apply district-wide or through neutral, objective impact thresholds.

CITY OF CASCADE, IOWA
ORDINANCE NO. _____

AN ORDINANCE AMENDING CHAPTER 165 OF THE CASCADE ZONING ORDINANCE TO EXPRESSLY PERMIT DATA CENTERS AND HIGH-DENSITY COMPUTING FACILITIES IN THE M-2 HEAVY INDUSTRIAL DISTRICT AND TO ESTABLISH UNIFORM PERFORMANCE STANDARDS FOR M-2 INDUSTRIAL DEVELOPMENT

NOW, BE IT ENACTED by the City Council of the City of Cascade, Iowa, as follows:

Amendment mechanics / controlling baseline. This proposal uses §165.11 in the City's scanned Chapter 165 (the M-2 district is on original PDF pages 45–49), as modified by the October 10, 2022 Ordinance 05-22 adding fitness businesses as M-2 permitted use B(18). **Existing A, B(1)-(18), C(1)-(4), D(1)-(7), E, F, and G(1) remain unchanged.** This review also recognizes the 2024 fence ordinance in §165.12(12); no local requirement in this draft overrides that ordinance without a separately enacted amendment. The 2009 zero-lot-line document within the original scan is marked **DRAFT**, so adoption cannot be assumed. The City Clerk/Attorney must confirm the complete amendment history and current codification before introduction. See the original M-2 scan and redlined comparison.

SECTION I. SECTION 165.11 M-2 - PERMITTED PRINCIPAL USES

Iowa Code authorizes zoning of industrial land use and requires district-wise uniformity for classes or kinds of buildings; this proposal does not confer project approval.[12]

Section 165.11, M-2 Heavy Industrial District, subsection B, is amended by adding the following permitted principal use:

19. Data Center or High-Density Computing Facility.

A building or group of buildings principally used to house computer servers, data-processing equipment, networking equipment, electronic storage equipment, or other high-density computing systems, including cloud computing, colocation, artificial-intelligence computing, scientific computing, cryptocurrency computing or mining, and substantially similar uses.

Minimum required off-street parking: one space per employee on the largest regularly scheduled shift, plus one space for each company vehicle regularly stationed at the premises.

Computer rooms, telecommunications equipment, and server equipment that are incidental and subordinate to another permitted principal use shall not constitute a separate Data Center or High-Density Computing Facility.

SECTION II. SECTION 165.11 M-2 - SPECIAL EXCEPTION USES

Section 165.11, M-2 Heavy Industrial District, subsection D, is amended by adding the following **proposed review classification**. The Board of Adjustment's statutory powers, including special exceptions and the separate standards governing variances, must be observed.[4]

8. Major Industrial Facility.

Any otherwise permitted principal use within the M-2 District meeting one or more of the following thresholds shall require Special Exception approval pursuant to Section 165.34(2):

1. Maximum anticipated coincident electrical demand of **five megawatts (5 MW) or greater**;
2. Anticipated industrial, process, cooling, or facility water demand of **25,000 gallons or more during any twenty-four-hour period**;
3. Aggregate stationary electrical generation capacity, excluding fire pumps, of **two megawatts (2 MW) or greater**;
4. Aggregate stationary battery or other electrical-energy-storage capacity of **five megawatt-hours (5 MWh) or greater**; or
5. A material expansion of an existing facility that causes the facility to exceed any threshold above.

The requirements of this subsection shall apply **without regard to the business type, technology, product, customer, tenant, ownership structure, or industrial process involved.** Similar physical impacts shall be treated consistently, and the City shall document the comprehensive-plan and public-welfare rationale for each objective threshold.[23]

SECTION III. SECTION 165.11 M-2 - UNIFORM PERFORMANCE STANDARDS

Existing §165.11(G)(1), "Supplementary District Regulations (Section 165.12)," remains unchanged. Add the following as §165.11(G)(2) through (19), immediately after the existing G(1). These provisions supplement, rather than replace, existing M-2 requirements and §165.12. Existing allowed uses, special exceptions, yard and height limits, signs, and later amendments remain in force.

2. Uniform Applicability

The requirements of this subsection apply uniformly to M-2 uses, structures, and operations unless a provision expressly establishes an objective physical or operational threshold. No requirement shall be imposed, waived, or varied solely because of the identity of the owner, operator, tenant, customer, industry, computing workload, product, or business model.

A lawful preexisting use, structure, or condition shall be treated in accordance with Sections 165.14 through 165.20 and other applicable law. To the maximum extent legally permissible, new construction, material expansion, replacement equipment, and materially modified operations after the effective date shall comply with the standards applicable to that work or modification.

3. Site Development Plan

Before issuance of a building permit for a new principal M-2 use or Major Industrial Facility, the applicant shall submit an engineered site development plan identifying, as applicable:

- buildings and structures;
- parking and loading areas;
- access roads;
- exterior mechanical and cooling equipment;
- generators;
- electrical substations and transformers;
- energy-storage systems;
- fuel and chemical storage;
- water and sewer connections;
- stormwater facilities;
- exterior lighting;
- landscaping and screening;
- fences;
- property boundaries; and
- existing sensitive receptors located within 1,000 feet of the property.

For a Major Industrial Facility, the plan shall additionally identify maximum anticipated electrical load, water demand, stationary generation capacity, fuel storage, cooling technology, principal noise-generating equipment, and proposed phasing.

For any Major Industrial Facility using stationary backup or on-site generation, the applicant shall provide a generator schedule identifying each engine's proposed manufacturer/model, rated electrical and thermal capacity, fuel type, exhaust configuration, fuel tank and containment, anticipated emergency and non-emergency operating modes, reasonably foreseeable simultaneous-operation scenarios, planned testing frequency and duration, and applicable state or federal emissions permits or permit-exemption determinations. Information requiring legitimate security protection may be submitted in an appropriately redacted public version and a protected version, only as authorized by Iowa law. The City shall not purport to issue or replace air-quality permits.

4. Operational Noise

All M-2 uses shall be designed, constructed, operated, and maintained so that noise attributable to the use does not exceed the following standards, measured in accordance with generally accepted professional acoustic practice:

a. M-2 property-line standard: 65 dBA and 75 dBC hourly average at any property boundary, except where the residential/sensitive-receptor standard below is more restrictive.

b. Residential or sensitive-receptor standard: At each existing dwelling, school, licensed child-care facility, hospital, nursing facility, place of worship, public library, or comparable occupied sensitive use, compliance shall be evaluated **inside the closest normally occupied room on the side of the structure nearest the M-2 noise source**. The initial assessment shall include the nearest existing qualifying occupied structure. Additional qualifying structures shall be evaluated where source orientation, terrain, or shielding could produce higher exposure.

The sound-level meter microphone shall be placed **within five (5) feet of the interior face of the nearest source-facing exterior wall**, but **at least 1.5 feet (0.5 meter) from that wall and other large reflecting surfaces**, where physically practicable, at approximately four (4) to five (5) feet above the finished floor. **All doors and windows shall be closed throughout the measurement. In a dwelling with a controllable forced-air HVAC blower, the fan control shall be set to ON for continuous operation during the entire indoor measurement, with the thermostat set within 65°F–75°F where reasonably practicable; the detailed protocol in subsection G(5) applies.** The qualified acoustical professional shall identify the room and measurement positions and document any necessary deviation from these placement requirements. The following **indoor, facility-attributable one-hour equivalent continuous sound levels (Leq,1h)** shall not be exceeded:

- 55 dBA and 65 dBC from 7:00 a.m. to 10:00 p.m.; and
- 50 dBA and 60 dBC from 10:00 p.m. to 7:00 a.m.

c. Tonal noise: Where an industrial sound source produces a prominent recurring tone, whine, screech, or hum, the applicable A-weighted limit shall be reduced by five (5) decibels.

d. Measurement: The one-hour average is the energy-equivalent continuous sound level (Leq,1h), not an arithmetic mean of decibel readings. A qualified acoustical professional shall use a calibrated Type 1 or Type 2 sound-level meter appropriate for the purpose, identify A- or C-weighting, document meteorology for exterior measurements, receiving location, background sources, room conditions for interior measurements, and source operating conditions. Outdoor source assessment shall use a documented ANSI/ASA S12.9 or successor environmental-noise assessment method. Indoor sensitive-receptor assessment shall use a documented method appropriate for room sound and low-frequency industrial noise, including ANSI/ASA S12.72 and S12.9 Part 7 where applicable.[1718] The City shall evaluate only facility-attributable noise using a documented background-noise adjustment procedure, accounting for unrelated indoor sound sources. Entry into an occupied structure for testing requires occupant consent or other lawful authority. If access is unavailable, the professional may report modeled indoor exposure with explicit assumptions, but shall not represent an outdoor measurement as a direct indoor compliance test. These measurement protocols shall not be construed to set a new statewide noise standard.[910]

e. Voluntary indoor access and outdoor alternative: The owner or lawful occupant of a sensitive-receptor structure may decline voluntary indoor noise testing. Declining consent does not invalidate a complaint or waive other remedies authorized by law. Interior or exterior entry onto private property requires consent or an independent lawful basis.

If indoor testing is declined, the qualified acoustical professional shall measure the facility-attributable Leq,1h outdoors at the point on the sensitive-receptor parcel boundary closest to the industrial property, provided the location is lawfully accessible and acoustically representative. Otherwise, a nearby lawfully accessible representative location shall be selected and the departure documented. The report shall document background conditions, microphone position, source operating conditions and any distance, shielding or reflection adjustments needed to estimate sound incident on the protected structure.

To assess the proposed indoor thresholds, the professional shall use documented, source-spectrum-appropriate outdoor-to-indoor noise reduction (OINR) or equivalent acoustical transmission-loss data for the building assembly, including walls, windows, doors and openings. Separate A- and C-weighted estimates and low-frequency assessment shall be provided where applicable. A calculated indoor result shall be labeled an **estimate**, not a direct indoor measurement. The applicable M-2 property-line limit remains unchanged.

Exterior-wall insulation R-values in Iowa energy requirements measure thermal resistance, not acoustical isolation. R-values may inform assembly identification but shall not be converted directly into dBA/dBC corrections. If reliable facade sound-reduction evidence is unavailable, a zero-decibel reduction may be used for cautious preliminary screening only, not by itself as conclusive proof of an indoor violation. The source of any acoustic correction and its uncertainty shall be disclosed.[21][23]

5. Acoustic Study and Verification

Every Major Industrial Facility shall provide, at the applicant's expense:

1. A **preconstruction baseline acoustic evaluation**, completed before site construction or grading materially changes ambient sound, documenting representative exterior A- and C-weighted hourly equivalent levels (Leq,1h) at nearby sensitive-receptor parcels and M-2 property boundaries. The evaluation shall include **voluntary indoor baseline measurements** inside nearby existing sensitive-receptor structures wherever the property owner or lawful occupant consents, as specified below;
2. A predictive acoustic model demonstrating compliance at property boundaries and nearby sensitive receptors under maximum reasonably anticipated operating conditions, including hot-weather conditions where relevant;
3. A post-construction compliance evaluation within sixty (60) days after commencing normal operations at reasonably representative load and weather conditions, or within a documented alternative period approved for commissioning constraints; and
4. A recurring compliance evaluation at least once every three (3) years, or following a material modification reasonably expected to affect noise levels.

Preconstruction indoor-receptor baseline and consent. The applicant shall identify the closest existing dwelling or other sensitive-receptor structures and any additional receptors reasonably expected to receive greater facility-related noise because of equipment orientation, terrain, or shielding. Before construction, the applicant shall offer the owner or lawful occupant of each selected structure an opportunity, **at no cost to that owner or occupant**, to consent to baseline testing within the nearest normally occupied room facing the proposed industrial source. When consent is granted, a qualified acoustical professional shall record representative **daytime and nighttime indoor dBA and dBC Leq,1h levels** under the placement, closed-door, and closed-window conditions described in subsection G(4)(b), together with operating indoor HVAC or ventilation conditions, existing sound sources, weather where relevant, and measurement times. The

study should obtain paired exterior measurements at the same structure when lawful access and conditions permit. This provides a documented **preconstruction ambient baseline**, not a presumption that existing sound is attributable to the proposed facility.

Declined or unavailable access. Neither a property owner nor a lawful occupant shall be required by this subsection to permit voluntary entry. The applicant shall document reasonable efforts to offer indoor baseline testing and record whether consent was granted or declined without disclosing unnecessary private household information. Where indoor consent is declined or lawful access is unavailable, the preconstruction study shall perform the exterior alternative in subsection G(4)(e), including a source-facing receptor-parcel boundary measurement **only where lawful access is available**, or the nearest suitable lawful exterior location. Any estimated interior baseline shall use independently substantiated acoustical transmission-loss assumptions; **Iowa exterior-wall thermal R-values shall not be converted into decibel adjustments**. Estimated indoor levels shall be identified as *modeled*, not as measured values. A refusal of voluntary interior testing shall not be treated as a waiver of the applicable noise protections.

Thermostat and HVAC fan setting during indoor testing. During every indoor preconstruction baseline, postconstruction verification, and complaint-response acoustic measurement, **the forced-air HVAC circulation fan shall be set to ON for continuous operation throughout the entire measurement interval**, wherever the building has an occupant-controllable fan ON setting. **AUTO is not the default for this test.** For dwellings, the heating/cooling thermostat setpoint shall be within **65°F to 75°F (inclusive)** where reasonably practicable and consistent with occupant health and safety. Heating and cooling demand may still cycle normally in response to the thermostat; the blower must remain on between those calls. Do not deliberately force heating or cooling cycles. The qualified acoustic professional shall verify and record the actual continuous blower operation, fan speed or mode, system type, thermostat setpoint and mode, measured interior temperature, heating/cooling cycles, other ventilation, and any deviation. These identical test settings shall be used for the comparable preconstruction and postconstruction measurements, or differences must be explained and accounted for in the technical assessment. Continuous fan sound is part of the measured indoor background and may mask industrial noise; the report shall distinguish facility-attributable sound from HVAC sound using a technically appropriate method. Supplemental measurements under other fan settings may inform the assessment but do not replace the required fan-ON measurement. If no blower or continuous-ON control is present, or use would be unsafe or medically inappropriate, document the reason and measure under representative existing conditions; lack of such equipment does not invalidate a complaint. The **65–75°F setpoint and mandatory fan-ON protocol are proposed local measurement conditions**, not Iowa residential code requirements.[25]

Evidence for a claimed increase after construction. A finding that a Major Industrial Facility **increased noise inside a neighboring sensitive-receptor structure** shall be supported by reliable evidence of the **preconstruction indoor baseline** and a comparable **postconstruction indoor level**, measured in the same room when practicable, **with exterior doors and windows closed**, using the same A- and C-weighted Leq,1h metrics and comparable daytime/nighttime periods, ventilation settings, and sound-source conditions. The analysis must establish that the later level is higher than the earlier level beyond the stated measurement uncertainty and must separately substantiate the amount **attributable to the facility**, rather than assuming all ambient sound comes from that facility. A preconstruction home need not have been silent; the relevant question is whether its indoor noise demonstrably increased because of the facility.[24]

Where an owner declined the preconstruction indoor evaluation, the City may consider credible earlier sound surveys, contemporaneous records, and the documented exterior-to-interior acoustic model described in subsection G(4)(e). An unsupported assertion of an increase alone shall not

establish a violation **based solely on a change from preconstruction conditions**. This evidentiary requirement **does not prevent anyone from submitting a complaint**, does not require a historical baseline to investigate or enforce an **absolute indoor or M-2 property-line limit**, and does not displace rights or remedies under Iowa nuisance law.[924]

The required acoustic model and post-startup testing shall examine ordinary peak operations, reasonably foreseeable simultaneous generator testing or emergency backup operation, identifiable low-frequency or tonal equipment sources, and nearby residential and other sensitive receptors. Where safety or operational requirements prevent actual simultaneous generator testing, a qualified professional may combine measured source data with documented predictive modeling, with assumptions stated in the report.

Any separate structure-borne or ground-vibration concern must be evaluated with measurements appropriate to vibration (such as peak particle velocity), not inferred from dBA/dBC sound measurements. A numeric vibration ceiling is **not adopted in this draft** pending independent engineering and legal review.

The City may require reasonable corrective measures where testing demonstrates noncompliance.

6. Generator and Elevated-Noise Testing

Routine and pre-planned testing of stationary generators or other equipment producing substantially elevated noise shall occur only between **8:00 a.m. and 6:00 p.m., Monday through Friday**, except where operation outside those hours is:

1. Required during an actual emergency;
2. Necessary to protect life, property, or critical equipment;
3. Required by a governmental agency, applicable code, manufacturer, utility, insurer, or reliability authority; or
4. Specifically authorized by the Zoning Administrator because the testing cannot reasonably be completed during ordinary testing hours.

This restriction applies uniformly to M-2 businesses operating such equipment. "Emergency generator" as classified for Iowa air-quality permitting follows applicable state air regulations; local zoning testing-hour rules do not alter air-permit classifications or authorize impermissible emissions.[8]

7. Generator Operating Records

Any M-2 facility having aggregate stationary generation capacity of two (2) MW or more shall maintain records identifying:

- date and duration of each operation;
- whether the operation was emergency or non-emergency;
- reason for operation; and
- equipment operated.

Records shall be retained for at least three (3) years and made available to the City upon reasonable request for zoning-compliance purposes, subject to applicable public-record and confidentiality law.

8. Major Industrial Facility Setbacks

Existing M-2 dimensional requirements shall remain applicable generally. In addition, for a new Major Industrial Facility:

1. A principal building shall be located at least **100 feet from a property boundary adjoining a residential zoning district**.
2. Stationary generators, exterior cooling equipment, large transformers, substations, compressors, industrial fans, and comparable exterior mechanical equipment shall be located at least **200 feet from a residential zoning district boundary**.
3. The Board of Adjustment may approve a reduced equipment setback, but never less than 100 feet, where an applicant-funded independent acoustic analysis demonstrates that all applicable noise standards will be met under maximum reasonably anticipated operating conditions.

Nothing in this subsection authorizes a setback reduction that conflicts with any other applicable code, easement, fire requirement, or utility clearance.

9. Exterior Lighting

All new or replacement exterior lighting within the M-2 District shall:

1. Be fully shielded and directed downward;
2. Be designed to prevent direct glare onto residential property and public streets;
3. Not exceed **0.5 foot-candle at a residential zoning boundary**, excluding existing public street lighting; and
4. Use automatic controls or reduced lighting levels during periods when full illumination is unnecessary, except for safety, security, and emergency lighting.

10. Screening

Exterior mechanical equipment, generators, fuel tanks, refuse areas, substations, and comparable industrial equipment visible from an adjoining residential district or public right-of-way shall be screened through landscaping, berms, walls, fencing, equipment enclosures, or a combination thereof.

Screening shall not interfere with required ventilation, fire access, utility clearance, security, or equipment safety.

11. Water Use and Cooling

Any M-2 use reasonably expected to use **25,000 gallons or more of water in a twenty-four-hour period** shall provide:

1. Projected average and peak water demand;
2. Identification of the proposed water source;
3. Applicable Iowa Department of Natural Resources permits, approvals, or documentation, with any determination of a **regulated** or **nonregulated** water use made under Iowa Code §455B.261 and applicable implementing rules, not inferred from the City's impact-review threshold alone;[7]
4. An engineering analysis demonstrating adequate water supply without unreasonable interference with existing users;
5. Separate metering of material industrial or cooling-water use where practicable; and

6. Annual water-use reporting to the City.

Once-through cooling using potable municipal water is prohibited for new Major Industrial Facilities.

Closed-loop or non-evaporative cooling shall be preferred. An evaporative system may be approved where professional engineering demonstrates that the alternative will not create an unreasonable demand upon municipal water resources and adequately controls drift, plume, condensation, and icing.

12. Electrical Utility Verification

Before issuance of a building permit for any M-2 use having maximum anticipated electrical demand of five (5) MW or more, the applicant shall provide written documentation from the serving electric utility confirming that:

1. The proposed maximum electrical demand has been disclosed;
2. Required utility infrastructure and service upgrades have been identified sufficiently for the utility to provide service;
3. Responsibility for project-specific utility improvements has been addressed between the utility and customer; and
4. The facility's electrical service may be constructed and operated in accordance with applicable utility, electrical, and safety requirements.

Nothing in this ordinance regulates electric rates, utility service territories, generation procurement, or matters preempted or otherwise committed by law to a public utility, electric cooperative, state agency, or federal authority.

13. Fuel, Batteries, Hazardous Materials, and Emergency Response

A Major Industrial Facility shall provide an Emergency Response Plan to the City and appropriate emergency-response agencies before occupancy.

The plan shall identify, where applicable:

- emergency contacts;
- facility access;
- electrical disconnects;
- generator locations;
- fuel quantities and shutoffs;
- coolant and chemical inventories;
- battery-energy-storage systems;
- fire-suppression systems;
- evacuation procedures;
- spill response; and
- procedures for providing emergency responders access to the site.

The plan shall be reviewed following material facility modifications and at reasonable intervals requested by the City or responding agencies.

14. Heat Rejection, Drift, Condensation, and Icing

No M-2 mechanical exhaust, cooling, or heat-rejection system shall be operated in a manner that causes ice, condensate, cooling-tower drift, mist, or similar discharge to accumulate upon an adjoining property or public right-of-way or create an unreasonable safety hazard.

15. Stormwater and Drainage

All new M-2 development shall comply with applicable City, state, and federal stormwater requirements.

A Major Industrial Facility shall submit engineered stormwater calculations demonstrating that development will not cause an unlawful or unreasonable increase in off-site flooding, erosion, or drainage impacts, **subject to Iowa Code §364.3 limitations on municipal runoff and topsoil requirements**. An independently imposed more restrictive runoff standard may require the City to bear specified engineering, construction, or property costs, and shall not be presumed authorized by this zoning section.[12]

The property owner shall be responsible for repair of documented project-caused damage to City drainage infrastructure to the extent permitted by law.

16. Public Infrastructure

Where an M-2 development creates a documented need for road, water, sewer, drainage, emergency-service, or other public improvements beyond existing system capacity, the City may require a development or infrastructure agreement allocating proportionate project-related costs to the applicant to the extent permitted by Iowa law.

This provision shall apply equally to every M-2 development creating the same type and degree of infrastructure burden.

Where substantial construction hauling is reasonably expected to affect City roads, the City may, pursuant to an independently authorized permit or written road-use agreement, require a preconstruction photographic/engineering condition survey, defined haul routes and axle/load limits, reasonable maintenance and restoration terms, postconstruction verification, and proportionate financial security supported by an engineering estimate. No fixed multiplier or new fee is prescribed here without legal review.

17. Decommissioning of Major Industrial Facilities

An application for a Major Industrial Facility shall include a decommissioning plan describing:

1. Anticipated facility life;
2. Equipment and structures to be removed;
3. Environmental remediation and site restoration;
4. Estimated decommissioning cost;
5. Salvage assumptions; and
6. Proposed method of financial assurance.

A facility shall be considered abandoned when its principal industrial operation has ceased continuously for twelve (12) months, excluding temporary shutdowns caused by reconstruction, documented market conditions accompanied by evidence of a bona fide intent to resume operations,

casualty, litigation, government order, utility interruption, or similar circumstances approved by the Zoning Administrator.

Following abandonment, decommissioning shall be completed within twelve (12) months unless extended for good cause.

The form and amount of financial assurance shall be established in a manner approved by the City Attorney and shall be reasonably related to the documented cost of decommissioning and site restoration.

A qualified professional's decommissioning cost estimate shall be reviewed at least once every three (3) years and following a material expansion or ownership/operator change that materially alters restoration obligations. The City may require adjustment of assurance to the reasonable documented cost of performance, including contingencies, only through a legally authorized and objectively administered instrument.

To the extent enforceable under Iowa law, approval conditions and any separate recorded agreement shall identify responsible owners and operators, notice requirements upon transfer, acceptable successor security, and procedures for default and lawful recovery. Private contracts shall not transfer away obligations imposed by law or approval conditions.

18. Material Expansion

An approved Major Industrial Facility shall require an updated Special Exception review where a proposed modification would increase any of the following by **twenty percent (20%) or more** above the previously approved maximum:

- electrical demand;
- water demand;
- stationary generation capacity;
- energy-storage capacity;
- exterior mechanical-equipment capacity; or
- developed building area.

Crossing a Major Industrial Facility threshold for the first time shall require Special Exception approval regardless of percentage increase.

19. Compliance, Inspection, and Corrective Action

The Zoning Administrator may require documentation reasonably necessary to verify compliance with conditions of approval and the objective standards of this section. Where specialized testing or engineering is reasonably required because of a credible compliance question involving a Major Industrial Facility, the City may require the owner or operator to provide qualified professional testing, subject to applicable law and any fee or cost-recovery provisions adopted by the City.

Each Major Industrial Facility shall submit a brief annual compliance certification to the Zoning Administrator by March 1 for the prior calendar year, identifying the facility owner and operator; material changes in electricity demand, generation equipment, cooling and water use; whether prescribed acoustic tests and generator logs have been maintained; reported material incidents or violations; and the status of financial assurance. The certification is a compliance statement, not automatic approval of unverified representations.

Where reasonably necessary and authorized by an adopted fee schedule or agreement, the City may retain or approve an independent qualified professional to review applicant studies and required remedial testing at reasonable, documented applicant cost. For complex matters, the City may require a deposit or escrow established through lawful procedures with an accounting and refund of unused amounts. The applicant must not control or direct the independent expert's findings.

Nothing in this section limits other remedies available under Chapter 165 or applicable law.

SECTION IV. SECTION 165.41 - DEFINITIONS

Section 165.41 is amended by adding the following definitions, preserving existing Chapter 165 definitions unless expressly changed. For **City zoning classification and enforcement**, the following local definitions govern. Iowa's tax-law definition of "data center" is an interpretive comparator, not an automatic incorporation. State building, air, water, waste, and stormwater definitions control only where their respective legal programs apply. A separately adopted state or federal permit remains required when applicable.[5][6][7][8][11][12]

The current 86-term statutory, Oxford, Merriam-Webster, and legal-dictionary comparison is an **interpretive research appendix**. Its general-language summaries do not override the enacted text of this ordinance or the controlling statute. A standalone companion draft for Section 165.41 is also maintained in `proposals/DRAFT-ORDINANCE-CH165-DEFINITIONS-2026-11-03.md`.

Data Center or High-Density Computing Facility: A building, structure, or portion thereof principally used for networked servers, electronic data processing, digital storage, artificial-intelligence, cloud, colocation, scientific, or cryptocurrency computing. Incidental computer rooms and telecommunications equipment subordinate to another principal use are excluded.

Major Industrial Facility: An M-2 use exceeding any one threshold in proposed §165.11(D)(8): 5 MW coincident demand, 25,000 gallons in any 24 hours, 2 MW aggregate stationary generation, or 5 MWh storage. Also includes a modification that crosses a threshold.

Material Expansion: A modification increasing an approved maximum by 20 percent or more for electrical demand, water demand, stationary generation, energy storage, exterior mechanical capacity, or developed building area, or crossing a Major Industrial Facility threshold for the first time.

Sensitive Receptor: An occupied dwelling, school, licensed child-care facility, hospital, nursing facility, place of worship, public library, public park facility, or comparable occupied use requiring protection from continuous industrial noise.

Ambient Noise / Baseline Sound: The sound environment at a designated receiving location without the regulated facility's incremental contribution, determined under representative day, night, and meteorological conditions. Ambient noise is not the Iowa air-quality term "ambient air."[8][10]

Facility-Attributable Noise: The sound contribution attributable to a regulated M-2 use at the specified receiving point, including reasonably foreseeable simultaneous operation of equipment; exclude unrelated transportation, natural, and third-party background noise through an approved, documented acoustical procedure.[10]

dBA: A-weighted decibels of sound pressure, measured with calibrated equipment using the applicable professional noise measurement method.

dBC: C-weighted decibels of sound pressure, which place greater relative weight on low-frequency sound than A-weighting.

Hourly Average Sound Level (Leq,1h): The energy-equivalent continuous sound-pressure level over sixty (60) minutes, expressed using the specified A- or C-weighting; intermittent contributions are averaged on an acoustic energy basis, not by taking an arithmetic mean of decibel values. The qualified professional shall identify source operation, background sound, measurement location, and calibration.[10]

Prominent Tone / Tonal Noise: An identifiable recurring or steady audible frequency component distinguishable from neighboring sound bands when evaluated under the ordinance's specified professional acoustical method.

Acoustic Study: A qualified professional's documented baseline survey, maximum-design-operation model, receptor analysis, assumptions, equipment schedule, and verification protocol.

Maximum Anticipated Coincident Electrical Demand: The greatest reasonably anticipated simultaneous electrical load, expressed in MW, for the complete site during normal or design-maximum operation. A sum of independent equipment nameplate ratings does not establish coincident site demand without a documented load calculation.

Aggregate Stationary Generation Capacity: The sum of rated electrical outputs of all stationary generators covered by the section, in megawatts, excluding fire pumps only where expressly provided.

Aggregate Electrical-Energy-Storage Capacity: The summed rated stored electrical energy of covered stationary storage systems, in megawatt-hours, using documented nameplate energy ratings.

Exterior Mechanical Equipment: Permanently located outdoor fans, compressors, cooling equipment, generators, transformers, heat-rejection systems, and comparable mechanical installations serving an M-2 principal use.

Property Boundary / Lot Line: The legally established boundary of the parcel under review as supported by a recorded plat, survey, deed, or other legally controlling boundary record.

Residential Zoning District Boundary: The official delineation between an M-2 parcel or district and land designated residential by the City's controlling zoning map.

Sensitive-Receptor Measurement Location: The specified exterior wall, occupied outdoor-use area, or other objectively identified receiving point at a sensitive receptor, documented on an approved site/acoustic plan.

Once-Through Cooling: A process in which municipal potable water passes through a cooling system once and is discharged rather than being recirculated for heat rejection.

Closed-Loop Cooling: A recirculating coolant system intended to keep working fluid contained, subject to any limited makeup or process losses specifically disclosed.

Emergency Response Plan: A written, site-specific plan documenting access, contacts, utility isolation, fuel, chemicals, battery systems, suppression, evacuation, spills, and coordination with first responders.

Decommissioning: The safe disconnection, dismantling, lawful removal, cleanup, and site restoration work required at the end of a covered facility's life.

Abandonment: Continuous cessation of a facility's principal approved industrial operation for the period specified in §165.11(G)(17), subject to its listed reasonable exceptions.

Financial Assurance: A surety, letter of credit, escrow, performance bond, trust, or other legally authorized and enforceable arrangement in a reasonable amount covering documented decommissioning and site restoration duties. The statutory definition applicable to sanitary-disposal facilities under Iowa Code §455B.301(9) does not itself grant the City authority to impose that requirement on M-2 data centers; a separate legal basis must be confirmed by the City Attorney.[13]

Independent Qualified Professional: An appropriately licensed or credentialed expert with relevant technical competence and no financial or managerial interest that would compromise independent evaluation.

Material Modification (for monitoring): A change in equipment, site layout, generation operation, or other covered operation reasonably likely to change the regulated environmental or infrastructure impact.

Relationship to other Iowa-defined terms

For interpretation **within the respective state-regulated subject**, the following meanings are governed by the stated Iowa authority: water-allocation terms "aquifer," "beneficial use," "nonregulated use," and "regulated use" (Iowa Code §455B.261); state air-emissions terms "air contaminant," "emission," and "major stationary source" (§455B.131 and Iowa Administrative Code 567—22.1); hazardous-condition response terms (§455B.381); hazardous-waste terms (§455B.411); and stormwater permitting terms (Iowa Administrative Code 567—60.1 and incorporated federal definitions). Those terms **are not silently repurposed** as independent municipal zoning thresholds. State-defined "major stationary source" is distinct from the City's proposed "Major Industrial Facility."[781114]

Interpretation and conflicts

The originally scanned M-2 dimensional standards are a 25-foot front yard, 25-foot rear yard, 20-foot side yard, 20-foot street-side yard for corner lots, and 60-foot maximum height, except where duly adopted later provisions modify them. The source PDF itself includes an unsigned and undated **2009 draft** proposing a zero-lot-line exception; the scan alone cannot establish whether it was enacted. A later Ordinance 05-22 adds permitted fitness uses as item B(18), and Ordinance 19-24 permits fences up to eight feet in M-2 subject to its additional conditions. **No unconditional assertion of current-law completeness is made.**[1516]

The proposal preserves existing Cascade definitions of "Building/Structure," "Accessory Use," "Lot," and "Dwelling" except where a later duly adopted amendment controls. The City Attorney shall verify all intervening amendments to the 1992 base zoning code and confirm final section numbering, cross-references, and special-exception authority before introduction.[46]

SECTION V. CONFLICTS AND MORE RESTRICTIVE REQUIREMENTS

Nothing in this ordinance relieves a property owner or operator from compliance with any other applicable City, county, state, federal, utility, fire, building, environmental, or safety requirement. Where two applicable zoning provisions regulate the same subject and can lawfully be applied together, the more restrictive provision shall control, consistent with Section 165.03.

SECTION VI. SEVERABILITY

If any section, subsection, paragraph, sentence, clause, phrase, or application of this ordinance is adjudged invalid or unconstitutional, such adjudication shall not affect the validity of the ordinance as a whole or any other section, provision, or application not adjudged invalid or unconstitutional.

SECTION VII. EFFECTIVE DATE

This ordinance shall be in full force and effect after its final passage, approval, and publication as provided by law.

Chicago Notes and Bibliography - source notes

Superscript note markers in this proposal point to these numbered sources. Notes are documentary authorities and **are not operative zoning terms**. Project-specific engineering assumptions and proposed numerical thresholds still require independent validation.

NON-CODIFIED DRAFTING NOTES AND SOURCE BASIS

> The material below is explanatory and is **not intended to be codified as part of Chapter 165**. It documents why specific concepts appear in the draft and identifies issues for legal and technical review.

A. October 1, 2026 Simple Mining Community Forum

The October 1 forum materially clarified the proposed Cascade project. The company represented that its current concept is approximately 60,000 square feet on roughly 15.2 acres, with an approximately 40 MW electrical load, 24/7/365 operation, closed-loop hydrocooling with dry/air-cooled heat rejection, approximately 15 backup diesel generators, and 20-25 projected permanent jobs. The company also expressed willingness in principle to accept enforceable noise, water, emergency-planning, screening, decommissioning, and expansion-related conditions.

These statements are representations from the forum and are not substitutes for final engineered plans, permits, utility agreements, or binding conditions. Repository record: `dataset/updates/28_SIMPLE_MINING_COMMUNITY_FORUM_2026-10-01.md`.

B. Uniform District-Wide Approach

This draft intentionally avoids regulating Simple Mining, cryptocurrency mining, or data centers as uniquely disfavored businesses. It adds data centers as an expressly recognized M-2 use while regulating physical impacts through standards that apply throughout the district or through neutral thresholds such as MW demand, water use, generator capacity, and battery-storage capacity.

The approach should be reviewed for consistency with Iowa Code Chapter 414, including the zoning-uniformity provisions of Iowa Code section 414.2.

Official Iowa Legislature source:
https://www.legis.iowa.gov/docs/code/414.2.pdf

C. Nearby Iowa Comparators

Linn County

Linn County's 2026 data-center ordinance provides useful measurable provisions involving setbacks, acoustic studies, recurring sound testing, emergency planning, road impacts, and water review. Its noise framework includes 55 dBA / 65 dBC for adjacent residential occupied structures and 65 dBA / 75 dBC for adjacent nonresidential occupied structures, along with recurring acoustic testing.

Official ordinance:
https://www.linncountyiowa.gov/DocumentCenter/View/27695/PA26-0001-Ordinance-PDF

Staff report:
https://www.linncountyiowa.gov/DocumentCenter/View/27694/PA26-0001-Data-Centers-Ordinance-Staff-Report---3rd-Consideration-PDF

Jones County

Jones County Ordinance 2025-02 includes special-use/site-plan review, applicant-funded third-party noise analysis, cooling and water documentation, electric-utility verification, emergency planning, and decommissioning. It includes continuous-noise limits and a five-decibel adjustment for prominent steady tones, and requires liquid/closed-loop cooling for the regulated use.

Copy hosted by Linn County:
https://www.linncountyiowa.gov/DocumentCenter/View/27656/Jones-County-Data-Center-Ordinance

Other comparators

The project repository also tracks the City of Palo EU-1 district, Jackson County working drafts, Allamakee County policy, Norwalk Project West, and West Des Moines data-center development examples in `dataset/policy/06_IOWA_DATA_CENTER_POLICY_COMPARATORS.md`.

D. Water Threshold

The 25,000-gallon-per-day threshold is used as an objective industrial-impact trigger because Iowa water-use permitting law generally uses a 25,000-gallon quantity in a 24-hour period as a significant regulatory threshold. City Attorney and engineering review should confirm the best local wording and interaction with Iowa DNR permitting.

Iowa Administrative Code Chapter 50:
https://www.legis.iowa.gov/docs/iac/chapter/567.50.pdf

E. Acoustic Standards

The draft's dBA/dBC structure is intended to address both ordinary audible sound and low-frequency industrial hum. The reference to ANSI/ASA S12.9 provides a recognized environmental-noise measurement framework rather than creating a project-specific testing method.

November 3 indoor-receptor revision: Proposed §165.11(G)(4)(b) now evaluates the nearest normally occupied interior room, within five feet of the source-facing exterior wall, with doors and windows closed. The separate M-2 property-line standard remains outdoors. The five-foot maximum placement distance is a **proposed local rule**, not a distance mandated by ISO or ANSI. A 0.5-meter minimum clearance from reflective surfaces and documenting room conditions draw on accepted acoustic measurement principles.[18]

Substantive policy question: The numerical 55/65 dBA/dBC daytime and 50/60 dBA/dBC nighttime limits were carried forward unchanged, but an *indoor* limit is not equivalent to the original *outdoor* limit because walls and closed windows attenuate exterior sound. WHO's community-noise guidance identifies 30 dBA Leq for bedrooms at night as a sleep-protection guideline. The proposed 50 dBA nighttime indoor limit should therefore be explicitly reviewed by an independent acoustician and the City Attorney, not presented as a WHO-derived or state-mandated standard.[19] Closing windows also removes the draft's prior direct protection of outdoor living areas. Occupant consent or other lawful authority is required for indoor access; modeled exposure is a screening tool, not a substitute for a direct measurement.

Iowa home envelopes after 2015 (research, not a codified noise reduction credit): Iowa's statewide residential energy code remained the **2012 IECC with state amendments** following its April 1, 2014 effective date. It requires thermal insulation and a blower-door air-sealing result not exceeding **4 ACH50**, and allows common wood-frame prescriptive exterior wall constructions such as **R-20 cavity insulation or R-13 cavity plus R-5 continuous insulation**. These are *energy-efficiency* provisions, **not** requirements that every residence attenuate noise by a fixed number of dBA or dBC.[20]

FHWA's *Noise Measurement Handbook*, Table 6-1, illustrates **20 dB outside-to-inside reduction** for light-frame buildings with ordinary **closed** windows, **25 dB** for light-frame/storm-window assemblies and **25–35 dB** for listed masonry/window combinations. The values are **traffic-noise modeling assumptions**, **not Iowa housing acoustic standards**. Applying 20 dB to a hypothetical 65 dBA exterior value yields about 45 dBA inside **only if that particular sound spectrum and building actually achieve 20 dB attenuation**. These figures cannot be used as a blanket **20 dBC** deduction for low-frequency data-center, transformer or HVAC hum.[21]

For local context, Cascade Code **§6-12-8**, Ordinance **02-22** (August 22, 2022), adopted the current State of Iowa Building Code by reference. Dubuque County was identified as IECC Zone **5A**, Delaware County as **6A**, under the 2012-era county map; neither county classification establishes acoustic transmission loss. The City and acoustician should **not presume a specific residential noise attenuation solely from a construction date**, and should identify facade-specific, frequency-dependent performance or clearly labeled modeling assumptions.[22] The full building-code and exterior-noise review is part of the repository's non-codified evidence, not a new enforceable provision.

ANSI/ASA standards catalog:
https://webstore.ansi.org/

F. Stationary Generators

The draft distinguishes routine testing from actual emergencies and requires uniform testing-hour rules across M-2 businesses. Federal stationary-engine requirements should continue to control where applicable; zoning should not attempt to replace air permitting or emissions regulation.

U.S. EPA stationary-engine information:
https://www.epa.gov/stationary-engines

G. Items Better Addressed Outside the Zoning Ordinance

The following matters are generally better addressed through a development agreement, economic-development agreement, utility agreement, or other lawful contractual mechanism rather than being written as project-specific zoning requirements:

- LEED certification or equivalent sustainability certification;
- local hiring and workforce-development commitments;
- wage or benefit commitments;
- community-benefit payments;
- tax-incentive terms;
- project-specific infrastructure reimbursement mechanics;
- voluntary limits below otherwise applicable zoning thresholds; and
- project-specific representations concerning jobs, investment, tenant mix, or expansion.

If the City wants any of these concepts to become district-wide zoning rules, they should be rewritten to apply uniformly to all similarly situated M-2 businesses and reviewed for statutory authority.

State-law definitions reference (research, not codified): Iowa statutory and administrative definitions, plus proposed local definitions. The referenced glossary identifies the law controlling each quoted or paraphrased state definition and distinguishes it from municipal land-use terminology. State statutory definitions apply only within their respective contexts unless expressly incorporated in this ordinance.

H. Required Legal Review Before Introduction

The City Attorney should specifically review:

1. Whether the Major Industrial Facility thresholds and Special Exception structure fit Cascade's current Section 165.34 procedure;
2. Application of new performance standards to existing lawful uses and nonconformities;
3. Authority and process for applicant-funded independent studies and compliance testing;
4. Financial-assurance authority and acceptable decommissioning instruments;
5. Cost-recovery and infrastructure-agreement authority;
6. Public-record treatment of security-sensitive facility information;
7. State or federal preemption affecting utilities, air emissions, fuel storage, batteries, and emergency systems;
8. Whether any separate general noise, nuisance, fire-code, or building-code amendments should accompany the zoning amendment; and
9. Final numbering and integration with all amendments to Chapter 165 adopted after the base zoning text;

10. Whether an annual March 1 certification, third-party review deposit, generator documentation, commissioning deadline, and recorded decommissioning obligations require separate enabling ordinances, adopted schedules, or development agreements;
11. How Iowa Code §414.23 limits municipal zoning beyond Cascade city limits when county zoning applies, and the distinct plat-review authority under Iowa Code §354.9;
12. Whether a later separate engineering study supports measurable vibration standards; Jackson County's proposed peak-particle-velocity figures are not imported without independent review; and
13. Whether the requested generator equipment schedules or security-sensitive response plans require protection under Iowa Code Chapter 22 while preserving lawful public access; and
14. Whether interior-receptor levels, microphone placement, closed-window conditions, indoor access limitations, and modeled-versus-measured verification adequately protect occupied structures and can be administered fairly.

I. October 26 Advisory Packet and Community Suggestions

The 90-page October 27 Cascade Data Center Advisory Committee packet supplies new policy comparisons, primarily the Greene County and Decorah examples and more detailed provisions from a Jackson County **working draft**. It also reproduces the original October 6 Cascade M-2 discussion draft on PDF pages 58–72 and the October 1 Simple Mining presentation on pages 73–90. Reproduction in a packet does not make a proposed ordinance adopted law.

A separate submitted Word note asks about emissions and noise from approximately fifteen generators and a possible data center outside city limits but within two miles. These concerns are documented in the packet-review record and source transcription. They are addressed through equipment-specific documentation, noise compliance modeling, and jurisdictional research rather than a City attempt to set independent air-emissions limits or to regulate county-zoned parcels.

The Jackson County material supports considering annual reporting, independently reviewed acoustic testing, appropriate physical vibration measurement, objective applicant-funded review, a road-use agreement, and funded decommissioning. It does **not** establish those provisions as enacted Jackson County law or as scientifically validated thresholds for Cascade.

- Packet page/provenance index
- Community suggestions / source transcription
- Iowa Code §414.23: https://www.legis.iowa.gov/docs/code/2026/414.23.pdf
- Iowa Code §354.9: https://www.legis.iowa.gov/docs/code/2026/354.9.pdf

1. Iowa General Assembly, *Iowa Code* §414.1 (2026), municipal regulation of building location and industrial land use, https://www.legis.iowa.gov/docs/code/2026/414.1.pdf. ↩
2. Iowa General Assembly, *Iowa Code* §414.2 (2026), uniformity for each class or kind of building throughout each zoning district, https://www.legis.iowa.gov/docs/code/2026/414.2.pdf. ↩↩
3. Iowa General Assembly, *Iowa Code* §414.3 (2026), comprehensive-plan and health, safety, conservation, and public-facility considerations, https://www.legis.iowa.gov/docs/code/2026/414.3.pdf. ↩

4. Iowa General Assembly, *Iowa Code* §414.12(2)-(4) (2026), Board of Adjustment special exceptions and variances, including 2025-added subsection (4), https://www.legis.iowa.gov/docs/code/2026/414.12.pdf. ↩↩

5. Iowa General Assembly, *Iowa Code* §423.3(95)(f) (2026), definitions applicable to data-center tax treatment, https://www.legis.iowa.gov/docs/code/2026/423.3.pdf. ↩

6. Iowa General Assembly, *Iowa Code* §103A.3 (2026), construction and building definitions, https://www.legis.iowa.gov/docs/code/2026/103A.3.pdf; City of Cascade, *Chapter 165 Zoning Ordinance*, §165.41, transcription in this repository: https://github.com/ttbakiatwoam/cascade-data-center/blob/master/dataset/cascade-zoning/CHAPTER-165-ZONING-ORDINANCE.md. ↩↩

7. Iowa General Assembly, *Iowa Code* §455B.261 (2026), water allocation, beneficial use, nonregulated use, and regulated use, https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. ↩↩↩

8. Iowa Department of Natural Resources, *Iowa Administrative Code* 567—22.1, air-quality definitions and emergency generators, https://www.legis.iowa.gov/docs/iac/rule/02-25-2026.567.22.1.pdf. ↩↩↩↩

9. Iowa General Assembly, *Iowa Code* §657.1 (2026), nuisance, https://www.legis.iowa.gov/docs/code/2026/657.1.pdf. ↩↩

10. Acoustical Society of America / American National Standards Institute, *ANSI/ASA S12.9*, environmental sound measurement and assessment standards, https://webstore.ansi.org/ (exact current edition and applicable part require acoustical expert verification). ↩↩↩↩

11. Iowa General Assembly, *Iowa Code* §§455B.131, 455B.381, and 455B.411 (2026), air contaminants, hazardous conditions, and waste-management terms, https://www.legis.iowa.gov/docs/code/2026/455B.pdf. ↩↩

12. Iowa General Assembly, *Iowa Code* §364.3 (2026), limitations on municipal topsoil and stormwater runoff requirements, https://www.legis.iowa.gov/docs/code/2026/364.3.pdf. ↩↩

13. Iowa General Assembly, *Iowa Code* §455B.301(9) (2026), definition of financial assurance instrument for sanitary disposal projects, https://www.legis.iowa.gov/docs/code/2026/455B.301.pdf. ↩

14. Iowa Department of Natural Resources, *Iowa Administrative Code* 567—60.1 (2026), wastewater and incorporated stormwater definitions, https://www.legis.iowa.gov/docs/iac/rule/567.60.1.pdf. ↩

15. City of Cascade, *Chapter 165 Zoning Ordinance*, original scanned M-2 Heavy Industrial District, "Entire zoning code-1.pdf," source PDF pp. 45–49 (printed code pp. 34–38), preserved at https://github.com/ttbakiatwoam/cascade-data-center/blob/master/sources/cascade-zoning/Entire%20zoning%20code-1.pdf; source transcription at https://github.com/ttbakiatwoam/cascade-data-center/blob/master/dataset/cascade-zoning/CHAPTER-165-ZONING-ORDINANCE.md. The same scan labels its 2009 zero-lot-line proposal a **draft** (PDF p. 6). ↩

16. City of Cascade, *Ordinance 05-22*, adopted October 10, 2022, adds fitness centers as M-2 B(18), https://github.com/ttbakiatwoam/cascade-data-center/blob/master/dataset/cascade-zoning/ordinances/ORDINANCE-05-22.md; *Ordinance 19-24*, adopted September 9, 2024, amends §165.12(12), including M-2 fencing, https://github.com/ttbakiatwoam/cascade-data-center/blob/master/dataset/cascade-zoning/ordinances/ORDINANCE-19-24.md. ↩

17. Acoustical Society of America / ANSI, *ASA/ANSI S12.72-2015 (R2025), Procedure for Measuring the Ambient Noise Level in a Room*, https://webstore.ansi.org/standards/asa/asaansis12722015r2025; *ASA/ANSI S12.9-2016/Part 7 (R2025), Measurement of Low-frequency Noise and Infrasound Outdoors in the Presence of Wind and Indoors in Occupied Spaces*, https://webstore.ansi.org/standards/asa/asaansis122016partr2025. Both are measurement frameworks; neither establishes the proposed numeric Cascade limits. ↩

18. International Organization for Standardization, *ISO 1996-2:2017, Acoustics—Description, Measurement and Assessment of Environmental Noise—Part 2*, https://www.iso.org/standard/59766.html. Contains guidance on indoor environmental-noise measurement; the draft's five-foot proximity criterion is a proposed local choice. ↩↩

19. World Health Organization, *Guidelines for Community Noise* (1999), indoor-bedroom night-noise guidance of 30 dBA Leq, https://www.who.int/publications-detail-redirect/a68672. This guideline is not binding Iowa law. ↩

20. U.S. Department of Energy, *Building Energy Codes Program, Iowa*, https://www.energycodes.gov/status/states/iowa; Iowa Administrative Code 481—301.24, *Residential Energy Code*, https://www.legis.iowa.gov/DOCS/ACO/IAC/LINC/Rule.481.301.24.pdf; Pacific Northwest National Laboratory, *Iowa Amendments to the 2012 IECC*,

https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-24946Rev1.pdf. These cover energy, not building acoustics. ↩

21. Federal Highway Administration, *Noise Measurement Handbook*, §6.0, Table 6-1, FHWA-HEP-18-065 (2018), https://www.fhwa.dot.gov/Environment/noise/measurement/handbook.cfm. Typical building attenuation factors address highway traffic noise and are not site-specific industrial acoustic results. ↩↩

22. City of Cascade, *Code of Ordinances*, §6-12-8, "Building Code Adopted," Ordinance 02-22 (August 22, 2022), https://codelibrary.amlegal.com/codes/cascadeia/latest/cascade_ia/0-0-0-4159; U.S. Department of Energy, *Guide to Determining Climate Regions by County* (2015), https://www.energy.gov/eere/buildings/articles/building-america-best-practices-series-volume-73-guide-determining-climate. ↩

23. Federal Highway Administration, *Noise Measurement Handbook*, section 6 (building outdoor-to-indoor noise reduction), https://www.fhwa.dot.gov/Environment/noise/measurement/handbook.cfm; ASTM International, *ASTM E966*, facade field sound attenuation, https://store.astm.org/standards/e966; Iowa Supreme Court, *Singer v. City of Orange City*, No. 23-1600 (Dec. 20, 2024), https://www.iowacourts.gov/iowa-courts/supreme-court/supreme-court-opinions/case/23-1600. The City Attorney should review access and enforcement authority. ↩

24. Federal Highway Administration, *Construction Noise Handbook*, §5.3–5.4 (baseline measurement and comparable before/after locations and conditions), https://www.fhwa.dot.gov/Environment/noise/construction_noise/handbook/handbook05.cfm; *Noise Measurement Handbook*, discussion of measurement comparability and uncertainty, https://www.fhwa.dot.gov/Environment/noise/measurement/handbook.cfm; Iowa General Assembly, *Iowa Code* §657.1 (2026), nuisance and civil remedies, https://www.legis.iowa.gov/docs/code/2026/657.1.pdf. This draft evidence standard is a proposed local ordinance provision, not an established precondition to an Iowa-law nuisance claim. ↩↩

25. ASHRAE, *ANSI/ASHRAE Standard 55-2023, Thermal Environmental Conditions for Human Occupancy*, https://www.ashrae.org/technical-resources/bookstore/standard-55-thermal-environmental-conditions-for-human-occupancy; ASHRAE, *Technical FAQs*, "recommended indoor temperature and humidity levels for homes," https://www.ashrae.org/technical-resources/technical-faqs (comfort varies by humidity, clothing, activity, and season, so no universal 65–75°F required range); ASHRAE, *2023 Handbook—HVAC Applications*, ch. 49, "Noise and Vibration Control," https://handbook.ashrae.org/Handbooks/A23/SI/A23_Ch49/a23_ch49_si.aspx (document actual HVAC operating conditions and distinguish equipment from background sound). ↩

HISTORICAL 2009 DRAFT

The scan's PDF page 6 is explicitly titled DRAFT ORDINANCE 117-09. Its interior zero-lot-line proposal is not established as adopted by the available copy. Obtain the enacted ordinance, if any, before asserting a zero-lot-line exception.

DRAFT ORDINANCE 117-09

AN ORDINANCE AMENDING CHAPTER 165.11 "DISTRICT REGULATIONS FOR M-1 & M-2" AND CHAPTER 165.41 "DEFINITIONS" OF THE CASCADE ZONING ORDINANCE BY ALLOWING ZERO-LOT LINE BUILDINGS IN THE M-1 AND M-2 ZONING DISTRICTS AND DEFINING ZERO-LOT LINE BUILDINGS

BE IT ORDAINED by the City Council of the City of Cascade, Iowa as follows:

Section 1: That the following definition of is hereby added to Article 4, Chapter 165.41 of the Zoning Ordinance of the City of Cascade:

"8. A" Building, Zero-Lot Line: A building which physically adjoins one other building across an abutting side lot line, with each building occupying its own parcel.

Section 2: That the following "Minimum Lot Area & Lot Width", "Minimum Yard Requirements", and Maximum Height" are hereby added to Article 2, Chapter 165.11. "M-1 Light Industrial" of the Zoning Ordinance of the City of Cascade:

E. Minimum Lot Area, Width	Minimum Yard Requirements	Maximum Height
None.	Zero-Lot line Buildings. Front: ..... 25-feet Rear: ..... 25-feet **Interior Side: ..... 0-feet** Exterior Side: ..... 20-feet Corner Lot: 20-feet	60-feet.

Section 3: That the following "Minimum Lot Area & Lot Width", "Minimum Yard Requirements", and Maximum Height" are hereby added to Article 2, Chapter 165.11. "M-2 Heavy Industrial" of the Zoning Ordinance of the City of Cascade:

E. Minimum Lot Area, Width	Minimum Yard Requirements	Maximum Height
None.	Zero-Lot line Buildings. Front: ..... 25-feet Rear: ..... 25-feet **Interior Side: ..... 0-feet** Exterior Side: ..... 20-feet Corner Lot: 20-feet	60-feet.

PASSED, ADOPTED, and APPROVED this _____ day of _____ 2009.

Attest: _____ Greg Staner, Mayor

_____ Randy Lansing, City Admin./Clerk

CASCADE, IOWA - November 3, 2026 - Source-linked research edition - Not adopted law

Iowa state-law definitions and proposed Cascade M-2 glossary

Original research date: October 28, 2026. **Chicago-note and legal-context revision:** November 3, 2026. **Open legal-dictionary revision:** November 4, 2026. **Status:** independent policy research and discussion draft, **not adopted City law**.

This is the source-linked companion to the November 3 M-2 proposed ordinance. It covers terms relevant to that ordinance, **not an exhaustive inventory of every definition in Iowa law**.

November 4 supplementary source review: LexisNexis Assist prompts/output and verification evaluates a proposed function-based definition and confirms that **§423.3(95)(f)**, not **§423.4's investment/refund thresholds**, defines the term for Iowa's tax program. This source does **not** change any of the 86 glossary entries or authorize a new M-2 category.

How to read this table: The 'State definition or statutory meaning' column contains an accurate short quotation where marked with quotation marks, or a **condensed restatement of the actual enacted state definition** where longer. Open the cited Iowa statute or rule for the **full, controlling verbatim wording and exclusions**. Statutory terms generally apply only **within the chapter, section, or administrative program specifying them**. This glossary does not automatically incorporate every definition into Cascade's zoning code, and Iowa's sales-tax definition does not control zoning eligibility.

> **Dictionary methodology (November 4, 2026):** The New York Law School Mendik Library's curated free legal-dictionary guide identifies the accessible sources used here. The tables retain the original **Oxford** and **Merriam-Webster general English** comparison columns and replace the unavailable commercial reference with separate **Cornell Law School Wex** and **FindLaw Legal Dictionary** columns. Cornell Wex is a free legal encyclopedia/dictionary; FindLaw offers free legal headwords, often licensed from the 1996 *Merriam-Webster's Dictionary of Law*. Every new comparison is an **original non-verbatim summary** linked to a **verified direct entry** or distinctly marked **related article**. A dash means **no directly matching entry was confirmed in this review**, not that one cannot exist. Compound technical terms and Cascade-proposed definitions should not be attributed to a dictionary unless the source actually defines them. These references are **secondary explanatory material**, never a substitute for controlling Iowa law or an adopted City ordinance.[64]

A. Definitions actually found in Iowa statutes and current administrative rules

Data center

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): A building constructed or rehabilitated to house networked servers together at one site for centralized storage, management, and dissemination of information. The statute also includes supporting electrical, cooling, communications, fire-suppression, and security systems, and specifies leased facilities.

Official state definition and reference: 423.3(95)(f)(1)[1]

Legal scope / use in M-2: Sales-tax exemption definition; not itself a municipal zoning category.

Oxford English comparison / OED lookup 62: A large system of connected servers used to handle information. (Oxford Learner's lookup).

Merriam-Webster comparison 63: A facility housing computer equipment that stores and processes large quantities of data. (Merriam-Webster lookup).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Data center business

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): "an entity whose business among other businesses, is to operate or lease a data center."

Official state definition and reference: 423.3(95)(f)(2)[2]

Legal scope / use in M-2: Sales-tax definition.

Oxford English comparison / OED lookup 62: An organization whose trade involves operating computing centers. (OED search; entry unverified).

Merriam-Webster comparison 63: A commercial enterprise that operates or rents facilities for computing equipment. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Site preparation activities

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Actions preceding data-center construction or rehabilitation, including grading, clearing, temporary construction facilities, exploratory excavation, and site evaluation. The statutory definition contains an equipment-purchase exclusion.

Official state definition and reference: 423.3(95)(f)(3)[3]

Legal scope / use in M-2: Sales-tax definition; review applicability before use in local permitting.

Oxford English comparison / OED lookup 62: Work that gets land ready for building. (OED search; entry unverified).

Merriam-Webster comparison 63: Tasks performed before a site is constructed or improved. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: Related legal entry (not this term): Land-use overview is contextual; it does not define the state tax term. (FindLaw: land use).

Building

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): A fixed or movable combination of materials forming a structure that shelters people, animals, or property. It includes parts of buildings except where the context requires otherwise.

Official state definition and reference: 103A.3(2)[4]

Legal scope / use in M-2: State building-code definition; Cascade also defines building/structure in §165.41.

Oxford English comparison / OED lookup 62: A structure with walls and a roof, such as a factory or school. (Oxford Learner's lookup).

Merriam-Webster comparison 63: A usually permanent, roofed and walled structure. (Merriam-Webster lookup).

Cornell Law Wex (free) 64: Related Wex article (not this term): Real-property overview includes buildings permanently attached to land. (Cornell Wex: real property).

FindLaw Legal Dictionary (free) 64: Related legal entry (not this term): Property may include land and improvements; no standalone building entry is confirmed here. (FindLaw: property).

Construction

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Includes erection, reconstruction, alteration, conversion, repair, and equipping of buildings, structures, and facilities, along with applicable safety, sanitary, and materials requirements.

Official state definition and reference: 103A.3(5)[5]

Legal scope / use in M-2: Building-code context; different from site-preparation definition.

Oxford English comparison / OED lookup 62: The process of building or assembling something. (OED search; entry unverified).

Merriam-Webster comparison 63: The work of erecting or making a structure. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: Direct legal entry: Different legal sense: this entry concerns interpretation of statutes or contracts, not physical building work. (FindLaw: construction).

Equipment

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Plumbing, heating, electrical, ventilation, air-conditioning, refrigeration, elevator, escalator, and comparable mechanical installations.

Official state definition and reference: 103A.3(9)[6]

Legal scope / use in M-2: Building-code context.

Oxford English comparison / OED lookup 62: Tools or machines needed for a particular purpose. (OED search; entry unverified).

Merriam-Webster comparison 63: Articles or apparatus used to accomplish a task. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Owner

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Includes a premises owner and specified persons controlling a building or structure, including a mortgagee or vendee in possession, trustee, receiver, or lessee.

Official state definition and reference: 103A.3(19)[7]

Legal scope / use in M-2: Building-code scope; does not automatically determine zoning enforcement liability.

Oxford English comparison / OED lookup 62: A person or organization that possesses something as property. (OED search; entry unverified).

Merriam-Webster comparison 63: Someone holding ownership rights over property. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: Related Wex article (not this term): Real-property overview distinguishes ownership and other interests in land. (Cornell Wex: real property).

FindLaw Legal Dictionary (free) 64: Direct legal entry: An owner holds a recognized property interest or rights of control and possession. (FindLaw: owner).

Structure

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): An artificially built work or building formed of joined parts; §103A.3(24) expressly excepts public-utility transmission and distribution structures.

Official state definition and reference: 103A.3(24)[8]

Legal scope / use in M-2: Building-code scope; compare Cascade §165.41's existing definition.

Oxford English comparison / OED lookup 62: Something built by assembling parts into a whole. (OED search; entry unverified).

Merriam-Webster comparison 63: Something constructed or arranged with connected parts. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: Related Wex article (not this term): Real-property overview covers land and permanent improvements. (Cornell Wex: real property).

FindLaw Legal Dictionary (free) 64: Related legal entry (not this term): Property includes owned land or structures, but this is not an exact structure definition. (FindLaw: property).

Sustainable design

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Construction design that reduces negative environmental effects and improves occupant health and comfort through resource conservation, waste minimization, and healthier environments.

Official state definition and reference: 103A.3(25)[9]

Legal scope / use in M-2: State building code; not a mandate to obtain LEED certification.

Oxford English comparison / OED lookup 62: Planning buildings to conserve resources over time. (OED search; entry unverified).

Merriam-Webster comparison 63: Design methods intended to conserve materials, energy and environmental quality. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Development

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Includes construction and land alteration, subdivision, changing a structure or land's appearance or use, and increasing or changing use intensity; §18B.2 also lists agricultural and conservation exceptions.

Official state definition and reference: 18B.2(1)(a)[10]

Legal scope / use in M-2: Smart-planning definition with its own scope and exclusions.

Oxford English comparison / OED lookup 62: A process of growth, change, or building. (OED search; entry unverified).

Merriam-Webster comparison 63: An act of improving land or creating new structures and facilities. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: Related Wex article (not this term): Land use describes the intended purposes of land, including industrial activities. (Cornell Wex: land use).

FindLaw Legal Dictionary (free) 64: Related legal entry (not this term): Land-use planning concerns zoning and real-estate development, not a complete Iowa definition. (FindLaw: land use).

Land development regulations

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Government controls affecting property use, including zoning, subdivision, site-plan, floodplain, corridor-map, and stormwater ordinances or rules.

Official state definition and reference: 18B.2(1)(b)[11]

Legal scope / use in M-2: Smart-planning context.

Oxford English comparison / OED lookup 62: Rules controlling how land may be built on or used. (OED search; entry unverified).

Merriam-Webster comparison 63: Formal standards governing construction and use of property. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: Related Wex article (not this term): Zoning divides land into districts and regulates permitted uses. (Cornell Wex: zoning).

FindLaw Legal Dictionary (free) 64: Related legal entry (not this term): Land-use regulation encompasses zoning and control of real-estate development. (FindLaw: land use).

Air contaminant

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): "dust, fume, mist, smoke, other particulate matter, gas, vapor (except water vapor), odorous substance, radioactive substance, or any combination thereof."

Official state definition and reference: 455B.131(1)[12]

Legal scope / use in M-2: Air-quality statute.

Oxford English comparison / OED lookup 62: A substance that makes the air impure or unsafe. (Oxford Learner's lookup).

Merriam-Webster comparison 63: Material present in air that causes contamination. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Air contaminant source

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Any private or public source emitting air contaminants, including industrial facilities and fuel-burning equipment; an organized fire department's apparatus is expressly excluded.

Official state definition and reference: 455B.131(2)[13]

Legal scope / use in M-2: Air-quality statute.

Oxford English comparison / OED lookup 62: The place or activity from which air pollution originates. (OED search; entry unverified).

Merriam-Webster comparison 63: An object or operation that releases substances into the air. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Air pollution

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Outdoor air contaminants present in an amount, condition, or duration that can harm life or property or unreasonably disrupt enjoyment of life or property.

Official state definition and reference: 455B.131(3)[14]

Legal scope / use in M-2: Air-quality statute.

Oxford English comparison / OED lookup 62: Harmful substances or energy in the air. (OED search; entry unverified).

Merriam-Webster comparison 63: Contamination of the atmosphere by pollutants. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: Related Wex article (not this term): Environmental-law overview discusses controls on pollution and air emissions. (Cornell Wex: environmental law).

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Emission

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): "a release of one or more air contaminants into the outside atmosphere."

Official state definition and reference: 455B.131(6)[15]

Legal scope / use in M-2: Air-quality statute.

Oxford English comparison / OED lookup 62: The act of sending something outward, especially gas or radiation. (Oxford Learner's lookup).

Merriam-Webster comparison 63: A discharge or release, especially into the atmosphere. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Greenhouse gas

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): The statute lists carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

Official state definition and reference: 455B.131(7)[16]

Legal scope / use in M-2: Air-quality statute.

Oxford English comparison / OED lookup 62: A gas that traps heat in Earth's atmosphere. (OED search; entry unverified).

Merriam-Webster comparison 63: A heat-retaining atmospheric gas that contributes to warming. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Major stationary source

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): An air-contaminant source whose actual or potential emissions meet a state-defined annual air-pollutant threshold, generally 100 tons per year, subject to the precise definition.

Official state definition and reference: 455B.131(8)[17]

Legal scope / use in M-2: NOT equivalent to the proposed local Major Industrial Facility category.

Oxford English comparison / OED lookup 62: A large fixed place where substances are discharged. (OED search; entry unverified).

Merriam-Webster comparison 63: A substantial fixed-location origin of emissions. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Ambient air

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Outdoor atmosphere accessible to the general public; this is an air-quality term, **not** ambient *sound*.

Official state definition and reference: IAC 567—22.1[18]

Legal scope / use in M-2: Administrative air-quality definition.

Oxford English comparison / OED lookup 62: The surrounding outdoor atmosphere. (OED search; entry unverified).

Merriam-Webster comparison 63: The air present in the surrounding environment. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Emergency generator

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Generator used solely to provide backup power during an unforeseeable interruption of utility electricity. The rule excludes peak-demand units, nonemergency industrial generation, and standby operation while utility electricity is available.

Official state definition and reference: IAC 567—22.1[19]

Legal scope / use in M-2: Air-quality classification; routine exercising/testing may be nonemergency for relevant permit rules.

Oxford English comparison / OED lookup 62: A machine that produces electricity when regular power fails. (OED search; entry unverified).

Merriam-Webster comparison 63: Electric power-generating equipment kept for unexpected outages. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Emission limitation / emission standard

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): A state, local, or federal requirement continuously limiting pollutant emissions, including restrictions on opacity, fuel, equipment, operation, or maintenance.

Official state definition and reference: IAC 567—22.1[20]

Legal scope / use in M-2: Air-quality rules, not an independent City air permit.

Oxford English comparison / OED lookup 62: A limit on what a source may release. (OED search; entry unverified).

Merriam-Webster comparison 63: A specified restriction on pollutant discharge. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Hazardous condition

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): An actual, imminent, or probable hazardous-substance spill, leak, or release into land, state water, or the air that poses an immediate or potential public-health, safety, or environmental danger.

Official state definition and reference: 455B.381(4)[21]

Legal scope / use in M-2: Hazardous-condition response context.

Oxford English comparison / OED lookup 62: A situation involving potential danger or harm. (OED search; entry unverified).

Merriam-Webster comparison 63: A state of affairs presenting a risk of injury or damage. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: Related Wex article (not this term): Environmental-law overview discusses pollution prevention and remediation. (Cornell Wex: environmental law).

FindLaw Legal Dictionary (free) 64: Related legal entry (not this term): The adjective *hazardous* describes exposure to risk; the Iowa release-response definition is narrower and controlling. (FindLaw: hazardous).

Hazardous substance — release response

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): A substance or mixture posing danger to health or safety, including toxic, corrosive, flammable, irritating, or pressure-generating materials and certain federally designated wastes/materials.

Official state definition and reference: 455B.381(5)[22]

Legal scope / use in M-2: Broader hazardous-condition context.

Oxford English comparison / OED lookup 62: Material capable of causing harm if discharged. (OED search; entry unverified).

Merriam-Webster comparison 63: Dangerous matter requiring control when spilled or released. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: Related Wex article (not this term): Environmental-law overview describes federal hazardous-material cleanup regimes. (Cornell Wex: environmental law).

FindLaw Legal Dictionary (free) 64: Related legal entry (not this term): Related adjective denotes risk or danger, not the full state hazardous-substance definition. (FindLaw: hazardous).

Hazardous substance — waste management

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Uses the federal CERCLA definition (42 U.S.C. §9601) plus substances designated in 40 CFR §302.4.

Official state definition and reference: 455B.411(2)[23]

Legal scope / use in M-2: Different context-specific definition from §455B.381(5).

Oxford English comparison / OED lookup 62: Dangerous material that may harm people or surroundings. (OED search; entry unverified).

Merriam-Webster comparison 63: A substance that poses a threat to health or the environment. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: Related Wex article (not this term): Environmental-law overview identifies hazardous-waste law and cleanup regimes. (Cornell Wex: environmental law).

FindLaw Legal Dictionary (free) 64: Related legal entry (not this term): Related adjective denotes risk; federal/CERCLA cross-references control the legal term. (FindLaw: hazardous).

Hazardous waste

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Waste with quantity, concentration, degradation, leaching, or physical/chemical/infectious properties that can cause specified serious illness or substantial health/environmental hazards; statutory exclusions apply.

Official state definition and reference: 455B.411(3)[24]

Legal scope / use in M-2: Hazardous-waste management.

Oxford English comparison / OED lookup 62: Discarded material that is dangerous to health or nature. (OED search; entry unverified).

Merriam-Webster comparison 63: Waste whose properties create significant risk of harm. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: Related Wex article (not this term): Environmental-law overview identifies RCRA's hazardous-waste regulation. (Cornell Wex: environmental law).

FindLaw Legal Dictionary (free) 64: Related legal entry (not this term): Related adjective denotes risk; it is not the complete hazardous-waste definition. (FindLaw: hazardous).

Disposal (hazardous material)

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Placing, dumping, spilling, discharging, leaking, or injecting hazardous wastes/substances onto land or into water so constituents can enter the environment.

Official state definition and reference: 455B.411(1)[25]

Legal scope / use in M-2: Hazardous-waste management.

Oxford English comparison / OED lookup 62: The act of getting rid of unwanted or harmful matter. (OED search; entry unverified).

Merriam-Webster comparison 63: The placement, discarding, or removal of waste material. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Industrial waste

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Liquid, gas, radioactive, or solid waste arising from industry, trade, manufacturing, business, or natural-resource development.

Official state definition and reference: 455B.171(10)[26]

Legal scope / use in M-2: Water-quality statute.

Oxford English comparison / OED lookup 62: Unwanted material produced by industry. (OED search; entry unverified).

Merriam-Webster comparison 63: Discarded by-products of manufacturing or other industrial work. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Aquifer

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): A groundwater-bearing geologic formation that stores/transmits groundwater and yields usable water to a spring or well.

Official state definition and reference: 455B.261(1)[27]

Legal scope / use in M-2: Water-allocation statute.

Oxford English comparison / OED lookup 62: An underground layer of rock or sediment that holds water. (Oxford Learner's lookup).

Merriam-Webster comparison 63: A water-bearing geological formation from which groundwater can be drawn. (Merriam-Webster lookup).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Beneficial use

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Use of water for a useful purpose benefiting and controlled by the user without wasting or polluting it.

Official state definition and reference: 455B.261(4)[28]

Legal scope / use in M-2: Exact statutory term is 'beneficial use'.

Oxford English comparison / OED lookup 62: Use that produces a useful or favorable result. (OED search; entry unverified).

Merriam-Webster comparison 63: A practical application providing advantage or benefit. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: Verified subentry: The legal *use* entry includes beneficial use of water for reasonable purposes consistent with the public interest; compare Iowa's separate text. (FindLaw: use).

Depleting use

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Withdrawal, diversion, conveyance, storage, or other water use potentially harming other water users, natural resources, or public welfare if not controlled.

Official state definition and reference: 455B.261(5)[29]

Legal scope / use in M-2: Water-allocation statute.

Oxford English comparison / OED lookup 62: Using something in a way that reduces its supply. (OED search; entry unverified).

Merriam-Webster comparison 63: Consumption that diminishes an available resource. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Floodplains

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): "the area adjoining a river or stream which has been or may be covered by flood water."

Official state definition and reference: 455B.261(8)[30]

Legal scope / use in M-2: Water-allocation/floodplain context.

Oxford English comparison / OED lookup 62: Low-lying land next to a watercourse that may flood. (OED search; entry unverified).

Merriam-Webster comparison 63: Level land adjoining a river that is subject to flooding. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Floodway

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): A river or stream channel and necessary adjoining floodplain areas used to carry and discharge flood flow.

Official state definition and reference: 455B.261(9)[31]

Legal scope / use in M-2: Water-allocation/floodplain context.

Oxford English comparison / OED lookup 62: An area or channel that conveys floodwater. (OED search; entry unverified).

Merriam-Webster comparison 63: The part of a floodplain needed to carry flood flows. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Groundwater

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): "that water occurring beneath the surface of the ground."

Official state definition and reference: 455B.261(10)[32]

Legal scope / use in M-2: Water-allocation statute.

Oxford English comparison / OED lookup 62: Water held below the ground surface. (Oxford Learner's lookup).

Merriam-Webster comparison 63: Water occupying pores and cracks in soil and rock underground. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Nonregulated use

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): "any beneficial use of water by any person of less than twenty-five thousand gallons per day."

Official state definition and reference: 455B.261(11)[33]

Legal scope / use in M-2: Helps explain the draft's 25,000-gallon trigger; statutory exceptions and DNR rules still matter.

Oxford English comparison / OED lookup 62: A use not covered by a particular restriction. (OED search; entry unverified).

Merriam-Webster comparison 63: An activity outside the scope of a regulatory rule. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: Related legal entry (not this term): The general property *use* entry does not establish Iowa's water threshold. (FindLaw: use).

Permit (water allocation)

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): A DNR authorization that governs withdrawal, diversion, or storage of water by quantity, location, time, and rate, or specified construction/work in a floodway or floodplain.

Official state definition and reference: 455B.261(12)[34]

Legal scope / use in M-2: Context-specific; not a general building or zoning permit.

Oxford English comparison / OED lookup 62: An official document granting permission to take or use water. (Oxford Learner's lookup).

Merriam-Webster comparison 63: A government authorization to withdraw or use water. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: Related Wex article (not this term): A permit is written government authorization; this entry does not define Iowa water-allocation permits. (Cornell Wex: permit).

FindLaw Legal Dictionary (free) 64: Related legal entry (not this term): A permit is written authorization issued by someone with authority; Iowa water requirements are separate. (FindLaw: permit).

Regulated use

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): "any depleting use except a use specifically designated as a nonregulated use."

Official state definition and reference: 455B.261(14)[35]

Legal scope / use in M-2: Water-allocation statute.

Oxford English comparison / OED lookup 62: A use subject to official rules or controls. (OED search; entry unverified).

Merriam-Webster comparison 63: An activity governed by enforceable requirements. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: Related legal entry (not this term): The general property *use* entry does not supply Iowa's regulated-water-use definition. (FindLaw: use).

Surface water

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): "the water occurring on the surface of the ground."

Official state definition and reference: 455B.261(15)[36]

Legal scope / use in M-2: Water-allocation statute.

Oxford English comparison / OED lookup 62: Water found on the land surface. (OED search; entry unverified).

Merriam-Webster comparison 63: Water present in rivers, lakes, and on the ground. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Waste (water allocation)

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Includes water not put to full beneficial use, excessive losses transporting groundwater, and acts polluting a groundwater-bearing formation.

Official state definition and reference: 455B.261(16)[37]

Legal scope / use in M-2: Different from hazardous-waste definition.

Oxford English comparison / OED lookup 62: Use of water without useful result or beyond need. (OED search; entry unverified).

Merriam-Webster comparison 63: Unnecessary loss or inefficient use of water. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Watercourse

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): A lake, river, creek, ditch, or similar channel or water body with definite banks and bed and evidence of water, subject to the statutory single-owner outlet-less pond/lake exception.

Official state definition and reference: 455B.261(17)[38]

Legal scope / use in M-2: Water-allocation statute.

Oxford English comparison / OED lookup 62: A stream, river, or channel carrying water. (OED search; entry unverified).

Merriam-Webster comparison 63: A natural or artificial channel through which water flows. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Stormwater

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Iowa's current water-pollution rule incorporates 40 CFR §122.26(b), covering rain/snowmelt runoff and other surface runoff and drainage. It no longer repeats the older separate state-rule text.

Official state definition and reference: IAC 567—60.1(4)(c); 40 CFR §122.26(b)[39]

Legal scope / use in M-2: Definition adopted by federal cross-reference in current Iowa administrative rule.

Oxford English comparison / OED lookup 62: Rainfall or melted snow that flows across surfaces. (OED search; entry unverified).

Merriam-Webster comparison 63: Water from precipitation and resulting surface runoff. (Merriam-Webster lookup).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Stormwater discharge associated with industrial activity

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Stormwater conveyed from areas associated with covered manufacturing, processing, material storage, and other enumerated industrial activities; federal rule contains detailed coverage and exemptions.

Official state definition and reference: IAC 567—60.1(4)(c); 40 CFR §122.26(b)(14)[40]

Legal scope / use in M-2: Applies in NPDES context, not to every land use called industrial in zoning.

Oxford English comparison / OED lookup 62: Runoff from industrial land or operations. (OED search; entry unverified).

Merriam-Webster comparison 63: Rainwater runoff leaving areas involved in industrial work. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Nuisance

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): A condition injurious to health, indecent, unreasonably offensive to the senses, or obstructing property use so severely that it unreasonably interferes with comfortable enjoyment of life or property.

Official state definition and reference: 657.1(1)[41]

Legal scope / use in M-2: Legal nuisance standard; not itself a numerical zoning noise limit.

Oxford English comparison / OED lookup 62: Something annoying or troublesome; also conduct a court can restrain. (Oxford Learner's lookup).

Merriam-Webster comparison 63: An annoyance or a condition that can interfere with others' rights. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: Direct Wex entry: Private nuisance concerns substantial, unreasonable interference with land use or enjoyment; public nuisance affects shared public rights. (Cornell Wex: nuisance).

FindLaw Legal Dictionary (free) 64: Direct legal entry: An unreasonable interference with rights or the use and enjoyment of property may be a nuisance. (FindLaw: nuisance).

Building regulations

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Laws, ordinances, codes, rules, or comparable governmental requirements for construction, repair, alteration, conversion, equipment, and use of buildings; the statutory definition expressly excludes zoning and subdivision rules.

Official state definition and reference: 103A.3(3)[42]

Legal scope / use in M-2: Building-code definition; confirms zoning is legally distinct.

Oxford English comparison / OED lookup 62: Rules for constructing and using buildings. (OED search; entry unverified).

Merriam-Webster comparison 63: Codes governing building work, equipment, and safety. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Performance objective

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Design and engineering criteria expressed without specifying the required construction method.

Official state definition and reference: 103A.3(20)[43]

Legal scope / use in M-2: Building-code context; useful contrast with prescriptive rules.

Oxford English comparison / OED lookup 62: A result or goal that something is expected to achieve. (OED search; entry unverified).

Merriam-Webster comparison 63: A measurable outcome or target for performance. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Aquifer storage and recovery

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Injection and storage of treated water in an aquifer through a permitted well when supply is available, followed by withdrawal through the same well when needed.

Official state definition and reference: 455B.261(2)[44]

Legal scope / use in M-2: Water-allocation definition; not synonymous with industrial recirculating cooling.

Oxford English comparison / OED lookup 62: Storing water underground and later withdrawing it. (OED search; entry unverified).

Merriam-Webster comparison 63: Using a geological water reservoir to store and retrieve water. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Basin (groundwater)

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): A defined subsurface water-bearing reservoir whose boundaries can be reasonably identified.

Official state definition and reference: 455B.261(3)[45]

Legal scope / use in M-2: Water-allocation definition.

Oxford English comparison / OED lookup 62: An area or geological hollow holding underground water. (OED search; entry unverified).

Merriam-Webster comparison 63: A depression or geological region containing groundwater. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Diffused waters

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Precipitation and snowmelt water that is not part of a watercourse or basin, including capillary soil water.

Official state definition and reference: 455B.261(6)[46]

Legal scope / use in M-2: State water-law context.

Oxford English comparison / OED lookup 62: Water spread across land instead of flowing in a channel. (OED search; entry unverified).

Merriam-Webster comparison 63: Runoff or seepage dispersed over a surface. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Permittee (water allocation)

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): A person holding authorization to divert, store, withdraw, and beneficially use an allotted quantity of water, or authorized to conduct certain floodway/floodplain activities.

Official state definition and reference: 455B.261(13)[47]

Legal scope / use in M-2: Water-allocation definition, distinct from local zoning applicants.

Oxford English comparison / OED lookup 62: A person or business holding an official permit. (OED search; entry unverified).

Merriam-Webster comparison 63: The recipient or holder of an authorization. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: Related Wex article (not this term): Permit entry explains the governmental authorization, not the exact Iowa water-use holder definition. (Cornell Wex: permit).

FindLaw Legal Dictionary (free) 64: Related legal entry (not this term): Permit entry describes the authorization, not a full statutory definition of permit holder. (FindLaw: permit).

Closure (sanitary disposal project)

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Actions preventing, mitigating, or minimizing threats posed by a closed sanitary landfill, including appropriate cover, grading, seeding, monitoring, and drainage measures.

Official state definition and reference: 455B.301(6)[48]

Legal scope / use in M-2: Sanitary waste facility context only; not a data-center abandonment rule.

Oxford English comparison / OED lookup 62: The act of shutting a facility or operation. (OED search; entry unverified).

Merriam-Webster comparison 63: The process of ending a disposal site and securing it. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Closure plan (sanitary disposal project)

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): An operator's methods and schedule for stopping disposal operations, preparing a sanitary disposal site for long-term care, and making it suitable for other uses.

Official state definition and reference: 455B.301(7)[49]

Legal scope / use in M-2: Not a statutory requirement for all M-2 industrial facilities.

Oxford English comparison / OED lookup 62: A proposal for safely stopping an operation. (OED search; entry unverified).

Merriam-Webster comparison 63: A written scheme for shutting and stabilizing a disposal facility. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Financial assurance instrument (sanitary disposal project)

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): A submitted financial instrument showing capacity for necessary remedial responses, lawful closure, postclosure care, and correction. Allowed mechanisms can include trust funds, bonds, insurance, financial tests, guarantees, dedicated funds, or letters of credit.

Official state definition and reference: 455B.301(9)[50]

Legal scope / use in M-2: Important precedent, but applies to sanitary disposal projects, not automatically to data-center decommissioning.

Oxford English comparison / OED lookup 62: A financial arrangement intended to provide security for an obligation. (OED search; entry unverified).

Merriam-Webster comparison 63: A bond, policy, or similar arrangement giving evidence of funds or security. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Solid waste

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Garbage, refuse, rubbish, and similar discarded solid or semisolid material from commercial, industrial, domestic, and other activities, subject to express statutory exclusions.

Official state definition and reference: 455B.301(29)[51]

Legal scope / use in M-2: Relevant to lawful site restoration and discarded equipment handling.

Oxford English comparison / OED lookup 62: Discarded material in solid or semisolid form. (OED search; entry unverified).

Merriam-Webster comparison 63: Unwanted solid matter from households, industry, or commerce. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: Related Wex article (not this term): Environmental-law overview identifies RCRA's solid-waste regime. (Cornell Wex: environmental law).

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Cleanup (hazardous substance)

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Actions needed to contain, collect, control, identify, analyze, treat, disperse, remove, or dispose of a hazardous substance.

Official state definition and reference: 455B.381(1)[52]

Legal scope / use in M-2: Hazardous-conditions context; pertinent to spills and decommissioning.

Oxford English comparison / OED lookup 62: Removal of dirt, pollution, or unwanted matter. (OED search; entry unverified).

Merriam-Webster comparison 63: An operation to remove or control harmful material. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: Related Wex article (not this term): Environmental-law overview discusses CERCLA site cleanup. (Cornell Wex: environmental law).

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Best management practice (BMP)

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): A practice or combination chosen after assessment, alternative review, and appropriate participation as the most effective practicable way to reduce nonpoint-source pollution in keeping with water-quality goals.

Official state definition and reference: IAC 567—60.1(2)[53]

Legal scope / use in M-2: State wastewater-rule definition; useful in stormwater plans.

Oxford English comparison / OED lookup 62: An accepted effective way of carrying out work. (OED search; entry unverified).

Merriam-Webster comparison 63: A practical technique recognized as effective for a specified purpose. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

Construction permit (wastewater)

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): A written DNR approval to construct a wastewater disposal system or a portion of it in accordance with approved plans and specifications.

Official state definition and reference: IAC 567—60.1(2)[54]

Legal scope / use in M-2: Different from a Cascade building or zoning permit.

Oxford English comparison / OED lookup 62: Official permission to build a wastewater facility. (OED search; entry unverified).

Merriam-Webster comparison 63: An authorization allowing specified sewage-treatment construction. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: Related Wex article (not this term): Permit is government-issued written permission, not the Iowa wastewater permit criteria. (Cornell Wex: permit).

FindLaw Legal Dictionary (free) 64: Related legal entry (not this term): General permit means an official written authorization, not specific DNR approval criteria. (FindLaw: permit).

Fugitive dust

State definition or statutory meaning (short quotations where marked; longer definitions accurately condensed): Airborne solid particles emitted from a source other than a stack or flue.

Official state definition and reference: IAC 567—22.1[55]

Legal scope / use in M-2: Air-quality source term potentially relevant to construction and operations.

Oxford English comparison / OED lookup 62: Airborne dust that escapes from an activity or location. (OED search; entry unverified).

Merriam-Webster comparison 63: Particles dispersed into the air from sources other than a defined outlet. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free) 64: — No direct entry verified.

FindLaw Legal Dictionary (free) 64: — No direct entry verified.

B. State law assigns meaning or legal authority, but does not supply one general zoning definition

Special exception

What Iowa law provides: Board of Adjustment hears and decides those special exceptions the municipal ordinance assigns to it; the statute does not define every permissible class of special exception.

Official reference: Iowa Code §414.12(2) [56]

Oxford English comparison / OED lookup: A case treated differently under specified rules. (OED search; entry unverified).

Merriam-Webster comparison: An authorized departure from a general condition in a particular case. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): Related Wex article (not this term): Zoning overview discusses land-use regulation and exceptions; it is not an exact special-exception definition. (Cornell Wex: zoning).

FindLaw Legal Dictionary (free): Direct legal entry: A special exception is a property use permitted under specified conditions in an ordinance. (FindLaw: special exception).

Variance

What Iowa law provides: The Board of Adjustment may grant qualifying hardship-based variances, and §414.12(4) separately governs area, dimensional, and numerical variances involving practical difficulties. This is a statutory power and criteria, not a blanket entitlement.

Official reference: Iowa Code §414.12(3)–(4) [57]

Oxford English comparison / OED lookup: A difference from an expected amount or rule. (Oxford Learner's lookup).

Merriam-Webster comparison: A difference, or official permission to act contrary to a usual rule. (Merriam-Webster lookup).

Cornell Law Wex (free): Direct Wex entry: A variance is an officially granted exception to a zoning restriction. (Cornell Wex: variance).

FindLaw Legal Dictionary (free): Direct legal entry: A variance can authorize departure from ordinary zoning restrictions, subject to applicable law. (FindLaw: variance).

Public welfare / general welfare

What Iowa law provides: These are statutory purposes and considerations in city home-rule and zoning law, not one exclusive across-the-board Iowa zoning definition. Do not invent a single binding dictionary meaning.

Official reference: Iowa Code §364.1, §414.1, §414.3 [58]

Oxford English comparison / OED lookup: The health, security, and well-being of the community. (Oxford Learner's lookup).

Merriam-Webster comparison: The collective health, comfort, and interests of the public. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): Related Wex article (not this term): Zoning overview discusses protective objectives of land-use regulation, not an Iowa statutory definition of welfare. (Cornell Wex: zoning).

FindLaw Legal Dictionary (free): Related legal entry (not this term): Zoning addresses local land-use regulation, not a standalone public-welfare test. (FindLaw: zoning).

Zoning uniformity

What Iowa law provides: Iowa requires zoning regulations to be uniform for each class or kind of buildings throughout a district, while allowing different districts. Confirm classification and board process with City Attorney.

Official reference: Iowa Code §414.2 [59]

Oxford English comparison / OED lookup: Consistent application of district land-use requirements. (OED search; entry unverified).

Merriam-Webster comparison: Equal treatment of comparable uses within a zoning classification. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): Related Wex article (not this term): Zoning defines districts and controls land uses; this article does not define Iowa's §414.2 uniformity test. (Cornell Wex: zoning).

FindLaw Legal Dictionary (free): Related legal entry (not this term): Zoning concerns district regulation; §414.2—not this entry—sets Iowa uniformity. (FindLaw: zoning).

Stormwater controls

What Iowa law provides: State rules incorporate the federal stormwater definitions. Separately, Iowa Code §364.3 limits certain municipal post-construction runoff restrictions; review before implementing new engineering requirements.

Official reference: IAC 567—60.1(4)(c), Iowa Code §364.3 [60]

Oxford English comparison / OED lookup: Measures used to contain or direct rainwater runoff. (OED search; entry unverified).

Merriam-Webster comparison: Methods and structures used to manage precipitation runoff. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): — No direct entry verified.

FindLaw Legal Dictionary (free): — No direct entry verified.

C. Proposed local Cascade definitions (not definitions created by statewide Iowa zoning law)

These definitions are proposed additions or explanations for Cascade §165.41. Their status is **LOCAL DRAFT**, even when a similar term occurs elsewhere in Iowa law. Existing Cascade §165.41

definitions for building/structure, lot, dwelling, and accessory use should be checked for overlap before adoption.

Data Center or High-Density Computing Facility

Draft definition: A building, structure, or portion thereof principally used for networked servers, electronic data processing, digital storage, artificial-intelligence, cloud, colocation, scientific, or cryptocurrency computing. Incidental computer rooms and telecommunications equipment subordinate to another principal use are excluded.

Drafting note: Keep existing Cascade draft wording; compare state sales-tax definition, without importing tax-exemption eligibility. [61]

Oxford English comparison / OED lookup: A place with extensive computer equipment for processing information. (Oxford Learner's lookup).

Merriam-Webster comparison: A facility housing computer systems used for storing or processing data. (Merriam-Webster lookup).

Cornell Law Wex (free): Related Wex article (not this term): Land-use overview identifies industrial land-use purposes, not data-center facilities. (Cornell Wex: land use).

FindLaw Legal Dictionary (free): Related legal entry (not this term): Land-use entry describes zoning and development, not a data-center headword. (FindLaw: land use).

Major Industrial Facility

Draft definition: An M-2 use exceeding any one threshold in proposed §165.11(D)(8): 5 MW coincident demand, 25,000 gallons in any 24 hours, 2 MW aggregate stationary generation, or 5 MWh storage. Also includes a modification that crosses a threshold.

Drafting note: A local zoning trigger, **not** Iowa's 'major stationary source' air-permit classification. [61]

Oxford English comparison / OED lookup: A large workplace or plant used for industrial operations. (OED search; entry unverified).

Merriam-Webster comparison: A substantial industrial site or collection of buildings and equipment. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): Related Wex article (not this term): Land-use overview includes industrial uses; no exact major-facility definition. (Cornell Wex: land use).

FindLaw Legal Dictionary (free): Related legal entry (not this term): Land-use entry gives general zoning context, not an industrial-size definition. (FindLaw: land use).

Material Expansion

Draft definition: A modification increasing an approved maximum by 20 percent or more for electrical demand, water demand, stationary generation, energy storage, exterior mechanical capacity, or developed building area, or crossing a Major Industrial Facility threshold for the first time.

Drafting note: Cross-reference §165.11(G)(18); final denominator and baseline should be approved in permit record. [61]

Oxford English comparison / OED lookup: An important enlargement in size or scope. (OED search; entry unverified).

Merriam-Webster comparison: A significant increase in an undertaking's capacity or extent. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): Related Wex article (not this term): Land-use overview addresses regulated uses; no numerical expansion threshold. (Cornell Wex: land use).

FindLaw Legal Dictionary (free): Related legal entry (not this term): General land-use context only; it does not establish the proposal's 20% test. (FindLaw: land use).

Sensitive Receptor

Draft definition: An occupied dwelling, school, licensed child-care facility, hospital, nursing facility, place of worship, public library, public park facility, or comparable occupied use requiring protection from continuous industrial noise.

Drafting note: Retain existing draft; specify measurement points objectively in §165.11(G)(4). [61]

Oxford English comparison / OED lookup: A person or place more likely to be affected by exposure. (OED search; entry unverified).

Merriam-Webster comparison: A location or recipient especially susceptible to environmental effects. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): — No direct entry verified.

FindLaw Legal Dictionary (free): — No direct entry verified.

Ambient Noise / Baseline Sound

Draft definition: Sound at a specified receiving location from existing natural and human-made sources before the proposed facility's contribution; measured over representative day/night periods and operating conditions.

Drafting note: Local acoustical definition; do not confuse with Iowa's 'ambient air'. [61]

Oxford English comparison / OED lookup: Sound already present in surrounding conditions. (OED search; entry unverified).

Merriam-Webster comparison: The existing sound level before an added source is counted. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): — No direct entry verified.

FindLaw Legal Dictionary (free): — No direct entry verified.

Facility-Attributable Noise

Draft definition: The sound contribution from the regulated M-2 operation at the applicable receptor, including operational mechanical equipment and other covered sources, calculated or measured using documented acoustical methods.

Drafting note: Specify treatment of background subtraction and unrelated noise in the adopted measurement protocol. [61]

Oxford English comparison / OED lookup: Sound that can be traced to an identified site. (OED search; entry unverified).

Merriam-Webster comparison: Noise originating from a particular operation or facility. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): — No direct entry verified.

FindLaw Legal Dictionary (free): — No direct entry verified.

dBA

Draft definition: A-weighted decibels of sound pressure, measured with calibrated equipment using the applicable professional noise measurement method.

Drafting note: Technical term; not a general 2026 Iowa zoning-law definition verified in the reviewed sources. [61]

Oxford English comparison / OED lookup: A technical measure of sound weighted toward human hearing. (OED search; entry unverified).

Merriam-Webster comparison: Decibels measured using A-frequency weighting. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): — No direct entry verified.

FindLaw Legal Dictionary (free): — No direct entry verified.

dBC

Draft definition: C-weighted decibels of sound pressure, which place greater relative weight on low-frequency sound than A-weighting.

Drafting note: Technical term; useful for low-frequency industrial noise. [61]

Oxford English comparison / OED lookup: A technical measure that retains more low-frequency sound. (OED search; entry unverified).

Merriam-Webster comparison: Decibels measured using C-frequency weighting. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): — No direct entry verified.

FindLaw Legal Dictionary (free): — No direct entry verified.

Hourly Average Sound Level (Leq,1h)

Draft definition: The energy-equivalent continuous sound-pressure level for the full 60-minute measurement interval, using the stated frequency weighting and measurement procedure.

Drafting note: The ordinance's 'hourly average' should be made a measurable quantity, not an arithmetic average of decibel numbers. [61]

Oxford English comparison / OED lookup: An averaged sound measure over a one-hour period. (OED search; entry unverified).

Merriam-Webster comparison: An equivalent energy-based acoustic level over sixty minutes. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): — No direct entry verified.

FindLaw Legal Dictionary (free): — No direct entry verified.

Prominent Tone / Tonal Noise

Draft definition: An identifiable recurring or steady audible frequency component distinguishable from neighboring sound bands when evaluated under the ordinance's specified professional acoustical method.

Drafting note: The proposed 5 dB adjustment needs an objective detection method. [61]

Oxford English comparison / OED lookup: A noticeable sound of identifiable pitch. (OED search; entry unverified).

Merriam-Webster comparison: A sound characterized by a clear frequency or whine. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): — No direct entry verified.

FindLaw Legal Dictionary (free): — No direct entry verified.

Acoustic Study

Draft definition: A qualified professional's documented baseline survey, maximum-design-operation model, receptor analysis, assumptions, equipment schedule, and verification protocol.

Drafting note: Tie to §165.11(G)(5). [61]

Oxford English comparison / OED lookup: An investigation of sound and its behavior. (OED search; entry unverified).

Merriam-Webster comparison: A professional examination of noise levels and propagation. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): — No direct entry verified.

FindLaw Legal Dictionary (free): — No direct entry verified.

Maximum Anticipated Coincident Electrical Demand

Draft definition: The maximum expected simultaneous demand of the complete site, in megawatts, under reasonably foreseeable operating conditions, without treating separately rated equipment nameplate capacity as coincident demand.

Drafting note: Defined for local 5 MW trigger; utility confirmation required. [61]

Oxford English comparison / OED lookup: The highest expected simultaneous need for electrical power. (OED search; entry unverified).

Merriam-Webster comparison: The peak forecasted combined electric load at a site. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): — No direct entry verified.

FindLaw Legal Dictionary (free): — No direct entry verified.

Aggregate Stationary Generation Capacity

Draft definition: The sum of rated electrical outputs of all stationary generators covered by the section, in megawatts, excluding fire pumps only where expressly provided.

Drafting note: Measure rated electrical rather than thermal capacity; address unit conversions. [61]

Oxford English comparison / OED lookup: The total power-making ability of fixed generators. (OED search; entry unverified).

Merriam-Webster comparison: Combined nameplate electrical output of stationary generating units. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): — No direct entry verified.

FindLaw Legal Dictionary (free): — No direct entry verified.

Aggregate Electrical-Energy-Storage Capacity

Draft definition: The summed rated stored electrical energy of covered stationary storage systems, in megawatt-hours, using documented nameplate energy ratings.

Drafting note: Measure MWh of energy, not MW of output power. [61]

Oxford English comparison / OED lookup: The total amount of electricity a storage system can hold. (OED search; entry unverified).

Merriam-Webster comparison: Combined stored energy rating of batteries or other storage units. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): — No direct entry verified.

FindLaw Legal Dictionary (free): — No direct entry verified.

Exterior Mechanical Equipment

Draft definition: Permanently located outdoor fans, compressors, cooling equipment, generators, transformers, heat-rejection systems, and comparable mechanical installations serving an M-2 principal use.

Drafting note: Clarifies setbacks and screening; exclude ordinary indoor office equipment. [61]

Oxford English comparison / OED lookup: Machinery installed outdoors rather than inside a building. (OED search; entry unverified).

Merriam-Webster comparison: Fixed outdoor mechanical devices such as fans or compressors. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): — No direct entry verified.

FindLaw Legal Dictionary (free): — No direct entry verified.

Property Boundary / Lot Line

Draft definition: The legally established boundary of the parcel under review as supported by a recorded plat, survey, deed, or other legally controlling boundary record.

Drafting note: Do not confuse the boundary of a residential zoning district with the boundary of an individual residential parcel. [61]

Oxford English comparison / OED lookup: The line marking the edge of a landholding. (OED search; entry unverified).

Merriam-Webster comparison: The legally identified dividing line between parcels. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): Related Wex article (not this term): Real-property overview concerns interests in land, not the precise surveyed boundary. (Cornell Wex: real property).

FindLaw Legal Dictionary (free): Related legal entry (not this term): Property entry addresses ownership interests, not survey-grade parcel boundaries. (FindLaw: property).

Residential Zoning District Boundary

Draft definition: The official delineation between an M-2 parcel or district and land designated residential by the City's controlling zoning map.

Drafting note: The current setbacks are triggered by zoning-district adjacency, not mere proximity to a home. [61]

Oxford English comparison / OED lookup: The line separating residentially zoned land from other zones. (OED search; entry unverified).

Merriam-Webster comparison: The legally mapped edge of a residential land-use district. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): Related Wex article (not this term): Zoning explains geographically distinct regulated land-use districts. (Cornell Wex: zoning).

FindLaw Legal Dictionary (free): Related legal entry (not this term): Zoning is local regulation of land uses through geographically defined zones. (FindLaw: zoning).

Sensitive-Receptor Measurement Location

Draft definition: The specified exterior wall, occupied outdoor-use area, or other objectively identified receiving point at a sensitive receptor, documented on an approved site/acoustic plan.

Drafting note: Clarify sampling height, distance from reflecting surfaces, and access. [61]

Oxford English comparison / OED lookup: The point where environmental exposure is assessed. (OED search; entry unverified).

Merriam-Webster comparison: A defined sampling position at a protected receiving site. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): — No direct entry verified.

FindLaw Legal Dictionary (free): — No direct entry verified.

Once-Through Cooling

Draft definition: A process in which municipal potable water passes through a cooling system once and is discharged rather than being recirculated for heat rejection.

Drafting note: Local definition only; retain current prohibition for new Major Industrial Facilities. [61]

Oxford English comparison / OED lookup: Cooling with water that passes through only once. (OED search; entry unverified).

Merriam-Webster comparison: A cooling process discharging water after a single pass. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): — No direct entry verified.

FindLaw Legal Dictionary (free): Related legal entry (not this term): The legal 'use' headword concerns use of property/resources, not a cooling technology definition. (FindLaw: use).

Closed-Loop Cooling

Draft definition: A recirculating coolant system intended to keep working fluid contained, subject to any limited makeup or process losses specifically disclosed.

Drafting note: Distinguish from systems with significant cooling-tower evaporation. [61]

Oxford English comparison / OED lookup: Cooling fluid reused within a closed circulating system. (OED search; entry unverified).

Merriam-Webster comparison: Recirculating cooling that keeps its working fluid in a circuit. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): — No direct entry verified.

FindLaw Legal Dictionary (free): Related legal entry (not this term): The legal 'use' headword is not a cooling-system standard. (FindLaw: use).

Emergency Response Plan

Draft definition: A written, site-specific plan documenting access, contacts, utility isolation, fuel, chemicals, battery systems, suppression, evacuation, spills, and coordination with first responders.

Drafting note: Must be consistent with adopted fire and emergency-response requirements. [61]

Oxford English comparison / OED lookup: A set of actions prepared for dangerous events. (OED search; entry unverified).

Merriam-Webster comparison: A written procedure for handling incidents and protecting people. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): — No direct entry verified.

FindLaw Legal Dictionary (free): Related legal entry (not this term): Permit definition concerns authorization, not emergency planning; included only for regulatory context. (FindLaw: permit).

Decommissioning

Draft definition: The safe disconnection, dismantling, lawful removal, cleanup, and site restoration work required at the end of a covered facility's life.

Drafting note: Define what is required in the approved plan and cost estimate. [61]

Oxford English comparison / OED lookup: Officially ending use of equipment or a facility and making it safe. (Oxford Learner's lookup).

Merriam-Webster comparison: Removing a facility or equipment from service. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): — No direct entry verified.

FindLaw Legal Dictionary (free): — No direct entry verified.

Abandonment

Draft definition: Continuous cessation of a facility's principal approved industrial operation for the period specified in §165.11(G)(17), subject to its listed reasonable exceptions.

Drafting note: Existing proposed period: 12 months; do not treat temporary reconstruction as automatic abandonment. [61]

Oxford English comparison / OED lookup: Leaving something behind or giving it up. (Oxford Learner's lookup).

Merriam-Webster comparison: Relinquishing property or an activity without intent to reclaim it. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): Direct Wex entry: Abandonment generally requires intentional relinquishment; property-law consequences depend on context. (Cornell Wex: abandonment).

FindLaw Legal Dictionary (free): Direct legal entry: Abandonment includes relinquishing property or a right; legal applications vary. (FindLaw: abandonment).

Financial Assurance

Draft definition: A legally authorized and enforceable instrument providing funds for documented decommissioning and restoration obligations.

Drafting note: **State parallel:** Iowa Code §455B.301(9) defines a financial assurance *instrument* for sanitary disposal; that definition does not by itself empower a city to demand security for an M-2 data center. City Attorney must approve authority, amount, and eligible instruments. [61]

Oxford English comparison / OED lookup: A promise or arrangement giving confidence money will be available. (OED search; entry unverified).

Merriam-Webster comparison: A financial guarantee or security supporting an obligation. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): **Related Wex article (not this term):** Property interests are discussed, but this is not a definition of a decommissioning bond. (Cornell Wex: real property).

FindLaw Legal Dictionary (free): **Related legal entry (not this term):** Property entry concerns ownership interests, not security for decommissioning obligations. (FindLaw: property).

Independent Qualified Professional

Draft definition: An appropriately licensed or credentialed expert with relevant technical competence and no financial or managerial interest that would compromise independent evaluation.

Drafting note: Technical reviewer designation, not an assertion of an Iowa statutory license category. [61]

Oxford English comparison / OED lookup: A trained specialist free of controlling outside interests. (OED search; entry unverified).

Merriam-Webster comparison: A competent expert able to exercise judgment without conflicting influence. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): — No direct entry verified.

FindLaw Legal Dictionary (free): — No direct entry verified.

Material Modification (for monitoring)

Draft definition: A change in equipment, site layout, generation operation, or other covered operation reasonably likely to change the regulated environmental or infrastructure impact.

Drafting note: Use to trigger acoustic re-evaluation without creating a second inconsistent expansion test. [61]

Oxford English comparison / OED lookup: A meaningful change to an existing thing or process. (OED search; entry unverified).

Merriam-Webster comparison: An alteration substantial enough to affect the relevant outcome. (Merriam-Webster search; entry unverified).

Cornell Law Wex (free): **Related Wex article (not this term):** Zoning describes land-use regulation; no exact material-change test. (Cornell Wex: zoning).

FindLaw Legal Dictionary (free): **Related legal entry (not this term):** General land-use context only; it does not establish a monitoring trigger. (FindLaw: land use).

D. Drafting rules and cross-checks

1. **Do not mislabel a paraphrase as the full verbatim statute.** The cited source contains the actual enacted text. Keep any adopted cross-reference tied to the specific controlling provision.

2. **Preserve existing City definitions unless deliberately amended.** The project has a transcription of Cascade's base §165.41, but the City Attorney should compare all later amendments and the certified current text.
3. **Avoid accidentally importing unrelated state programs.** For example, a 'major stationary source' in §455B.131 is an air-permitting term; a 'Major Industrial Facility' in the proposal is a local land-use threshold. Likewise, 'ambient air' is not ambient noise.
4. **Do not use pending bills as enacted definitions.** A proposed 2026 bill's wording about battery energy storage is not automatically Iowa law.
5. **Specify noise measurement requirements.** Final §165.11(G)(4) should identify Leq,1h, background subtraction, weighting, representative conditions, calibration, receptor positions, tonal detection, and limits on unrelated sound contributions. The 65/75 and 55/65/50/60 numerical proposals have **not** been changed in this update.
6. **Use a neutral physical-impact framework.** The 5 MW, 25,000-gallon, 2 MW generation, and 5 MWh storage triggers remain proposed policy choices, not state-law zoning thresholds. The 25,000-gallon figure aligns with a water-law term but does not mean every such site automatically needs the same Iowa DNR permit.
7. **Obtain City Attorney review.** Determine which definitions belong in ordinance §165.41, which belong in permit applications, and which require a separate fee, fire, environmental, or infrastructure instrument.

Dictionary publications and source verification

- **Source directory:** New York Law School Mendik Library, Free Online Legal Dictionaries and Glossaries (updated August 24, 2026). It distinguishes ordinary English dictionaries from specialized legal dictionaries and advises checking dates, sources, and links.
- **Cornell Wex:** Legal Information Institute, Cornell Law School. Free U.S. legal dictionary/ encyclopedia. Examples of verified **direct** entries in this table: variance, nuisance, and abandonment. Entries linked as **related** are context only, never claimed to define the entire composite ordinance term.
- **FindLaw Legal Dictionary:** FindLaw, a free legal-term reference. Examples of verified entries: special exception, variance, nuisance, owner, and permit. **Source provenance:** Many FindLaw entries expressly credit the licensed *Merriam-Webster's Dictionary of Law* (1996), distinct from the general Merriam-Webster column.
- **Oxford English Dictionary (OED):** OED online, with separately identified accessible Oxford Advanced Learner's Dictionary lookups. The full OED entries remain unverified and are not quoted.
- **Merriam-Webster general dictionary:** Merriam-Webster.com; an entry labeled **search, unverified** is not assumed to exist as a single dictionary headword.
- **Verification boundary:** No entry is invented for compound technical terms such as **Maximum Anticipated Coincident Electrical Demand**. A legal dictionary's *construction* headword, for example, may concern **interpreting statutes**, not the building-code construction term under Iowa Code §103A.3. Likewise, Wex "waste" refers to a doctrine about property damage, not Iowa's industrial/water waste definition. State definitions remain in their original statutory columns, unchanged.
- **Quotation and copyright:** All short explanations in comparison cells are **independently written summaries**, not reproductions of proprietary entries. Follow the direct source link for authoritative original legal-dictionary wording.

Chicago-style numbered source notes

Superscript numbers in the table correspond to these notes. **Every state-law row has an individual citation;** local-draft rows share note 61, and the dictionary headings use notes 1–3. Dictionary comparisons are secondary interpretive commentary. The state statute or agency rule always controls.

Primary official references

- Iowa Code 2026 Chapter 414 — municipal zoning
- Iowa Code 2026 §423.3(95)(f) — state data-center tax definitions
- Iowa Code 2026 §103A.3 — building code definitions
- Iowa Code 2026 §18B.2 — development and land development regulations
- Iowa Code 2026 §§455B.131, 455B.171, 455B.261, 455B.381, 455B.411 — environment and water
- Iowa Code 2026 §657.1 — nuisance
- IAC 567—22.1 — generators and air-quality definitions
- IAC 567—60.1 — current stormwater cross-references

1. Iowa General Assembly / Iowa Administrative Code, definition or term "Data center," 423.3(95)(f)(1), https://www.legis.iowa.gov/docs/code/2026/423.3.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩
2. Iowa General Assembly / Iowa Administrative Code, definition or term "Data center business," 423.3(95)(f)(2), https://www.legis.iowa.gov/docs/code/2026/423.3.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩
3. Iowa General Assembly / Iowa Administrative Code, definition or term "Site preparation activities," 423.3(95)(f)(3), https://www.legis.iowa.gov/docs/code/2026/423.3.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩
4. Iowa General Assembly / Iowa Administrative Code, definition or term "Building," 103A.3(2), https://www.legis.iowa.gov/docs/code/2026/103A.3.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩
5. Iowa General Assembly / Iowa Administrative Code, definition or term "Construction," 103A.3(5), https://www.legis.iowa.gov/docs/code/2026/103A.3.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩
6. Iowa General Assembly / Iowa Administrative Code, definition or term "Equipment," 103A.3(9), https://www.legis.iowa.gov/docs/code/2026/103A.3.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩
7. Iowa General Assembly / Iowa Administrative Code, definition or term "Owner," 103A.3(19), https://www.legis.iowa.gov/docs/code/2026/103A.3.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩
8. Iowa General Assembly / Iowa Administrative Code, definition or term "Structure," 103A.3(24), https://www.legis.iowa.gov/docs/code/2026/103A.3.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

9. Iowa General Assembly / Iowa Administrative Code, definition or term "Sustainable design," 103A.3(25), https://www.legis.iowa.gov/docs/code/2026/103A.3.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

10. Iowa General Assembly / Iowa Administrative Code, definition or term "Development," 18B.2(1)(a), https://www.legis.iowa.gov/docs/code/2026/18B.2.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

11. Iowa General Assembly / Iowa Administrative Code, definition or term "Land development regulations," 18B.2(1)(b), https://www.legis.iowa.gov/docs/code/2026/18B.2.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

12. Iowa General Assembly / Iowa Administrative Code, definition or term "Air contaminant," 455B.131(1), https://www.legis.iowa.gov/docs/code/2026/455B.131.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

13. Iowa General Assembly / Iowa Administrative Code, definition or term "Air contaminant source," 455B.131(2), https://www.legis.iowa.gov/docs/code/2026/455B.131.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

14. Iowa General Assembly / Iowa Administrative Code, definition or term "Air pollution," 455B.131(3), https://www.legis.iowa.gov/docs/code/2026/455B.131.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

15. Iowa General Assembly / Iowa Administrative Code, definition or term "Emission," 455B.131(6), https://www.legis.iowa.gov/docs/code/2026/455B.131.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

16. Iowa General Assembly / Iowa Administrative Code, definition or term "Greenhouse gas," 455B.131(7), https://www.legis.iowa.gov/docs/code/2026/455B.131.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

17. Iowa General Assembly / Iowa Administrative Code, definition or term "Major stationary source," 455B.131(8), https://www.legis.iowa.gov/docs/code/2026/455B.131.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

18. Iowa General Assembly / Iowa Administrative Code, definition or term "Ambient air," IAC 567—22.1, https://www.legis.iowa.gov/docs/iac/rule/02-25-2026.567.22.1.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

19. Iowa General Assembly / Iowa Administrative Code, definition or term "Emergency generator," IAC 567—22.1, https://www.legis.iowa.gov/docs/iac/rule/02-25-2026.567.22.1.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

20. Iowa General Assembly / Iowa Administrative Code, definition or term "Emission limitation / emission standard," IAC 567—22.1, https://www.legis.iowa.gov/docs/iac/rule/02-25-2026.567.22.1.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

21. Iowa General Assembly / Iowa Administrative Code, definition or term "Hazardous condition," 455B.381(4), https://www.legis.iowa.gov/docs/code/2026/455B.381.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

22. Iowa General Assembly / Iowa Administrative Code, definition or term "Hazardous substance — release response," 455B.381(5), https://www.legis.iowa.gov/docs/code/2026/455B.381.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

23. Iowa General Assembly / Iowa Administrative Code, definition or term "Hazardous substance — waste management," 455B.411(2), https://www.legis.iowa.gov/docs/code/2026/455B.411.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

24. Iowa General Assembly / Iowa Administrative Code, definition or term "Hazardous waste," 455B.411(3), https://www.legis.iowa.gov/docs/code/2026/455B.411.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

25. Iowa General Assembly / Iowa Administrative Code, definition or term "Disposal (hazardous material)," 455B.411(1), https://www.legis.iowa.gov/docs/code/2026/455B.411.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

26. Iowa General Assembly / Iowa Administrative Code, definition or term "Industrial waste," 455B.171(10), https://www.legis.iowa.gov/docs/code/2026/455B.171.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

27. Iowa General Assembly / Iowa Administrative Code, definition or term "Aquifer," 455B.261(1), https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

28. Iowa General Assembly / Iowa Administrative Code, definition or term "Beneficial use," 455B.261(4), https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

29. Iowa General Assembly / Iowa Administrative Code, definition or term "Depleting use," 455B.261(5), https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

30. Iowa General Assembly / Iowa Administrative Code, definition or term "Floodplains," 455B.261(8), https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

31. Iowa General Assembly / Iowa Administrative Code, definition or term "Floodway," 455B.261(9), https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

32. Iowa General Assembly / Iowa Administrative Code, definition or term "Groundwater," 455B.261(10), https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

33. Iowa General Assembly / Iowa Administrative Code, definition or term "Nonregulated use," 455B.261(11), https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

34. Iowa General Assembly / Iowa Administrative Code, definition or term "Permit (water allocation)," 455B.261(12), https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

35. Iowa General Assembly / Iowa Administrative Code, definition or term "Regulated use," 455B.261(14), https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

36. Iowa General Assembly / Iowa Administrative Code, definition or term "Surface water," 455B.261(15), https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

37. Iowa General Assembly / Iowa Administrative Code, definition or term "Waste (water allocation)," 455B.261(16), https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

38. Iowa General Assembly / Iowa Administrative Code, definition or term "Watercourse," 455B.261(17), https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

39. Iowa General Assembly / Iowa Administrative Code, definition or term "Stormwater," IAC 567—60.1(4)(c); 40 CFR §122.26(b), https://www.legis.iowa.gov/docs/iac/rule/567.60.1.pdf. **Scope:** See the source provision for

qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

40. Iowa General Assembly / Iowa Administrative Code, definition or term "Stormwater discharge associated with industrial activity," IAC 567—60.1(4)(c); 40 CFR §122.26(b)(14), https://www.legis.iowa.gov/docs/iac/rule/567.60.1.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

41. Iowa General Assembly / Iowa Administrative Code, definition or term "Nuisance," 657.1(1), https://www.legis.iowa.gov/docs/code/2026/657.1.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

42. Iowa General Assembly / Iowa Administrative Code, definition or term "Building regulations," 103A.3(3), https://www.legis.iowa.gov/docs/code/2026/103A.3.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

43. Iowa General Assembly / Iowa Administrative Code, definition or term "Performance objective," 103A.3(20), https://www.legis.iowa.gov/docs/code/2026/103A.3.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

44. Iowa General Assembly / Iowa Administrative Code, definition or term "Aquifer storage and recovery," 455B.261(2), https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

45. Iowa General Assembly / Iowa Administrative Code, definition or term "Basin (groundwater)," 455B.261(3), https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

46. Iowa General Assembly / Iowa Administrative Code, definition or term "Diffused waters," 455B.261(6), https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

47. Iowa General Assembly / Iowa Administrative Code, definition or term "Permittee (water allocation)," 455B.261(13), https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

48. Iowa General Assembly / Iowa Administrative Code, definition or term "Closure (sanitary disposal project)," 455B.301(6), https://www.legis.iowa.gov/docs/code/2026/455B.301.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

49. Iowa General Assembly / Iowa Administrative Code, definition or term "Closure plan (sanitary disposal project)," 455B.301(7), https://www.legis.iowa.gov/docs/code/2026/455B.301.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

50. Iowa General Assembly / Iowa Administrative Code, definition or term "Financial assurance instrument (sanitary disposal project)," 455B.301(9), https://www.legis.iowa.gov/docs/code/2026/455B.301.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

51. Iowa General Assembly / Iowa Administrative Code, definition or term "Solid waste," 455B.301(29), https://www.legis.iowa.gov/docs/code/2026/455B.301.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

52. Iowa General Assembly / Iowa Administrative Code, definition or term "Cleanup (hazardous substance)," 455B.381(1), https://www.legis.iowa.gov/docs/code/2026/455B.381.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

53. Iowa General Assembly / Iowa Administrative Code, definition or term "Best management practice (BMP)," IAC 567—60.1(2), https://www.legis.iowa.gov/docs/iac/rule/567.60.1.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

54. Iowa General Assembly / Iowa Administrative Code, definition or term "Construction permit (wastewater)," IAC 567—60.1(2), https://www.legis.iowa.gov/docs/iac/rule/567.60.1.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

55. Iowa General Assembly / Iowa Administrative Code, definition or term "Fugitive dust," IAC 567—22.1, https://www.legis.iowa.gov/docs/iac/rule/02-25-2026.567.22.1.pdf. **Scope:** See the source provision for qualifications, exceptions, and the legally operative wording; the comparison table uses an attributed condensed restatement. ↩

56. Iowa law or administrative program for Special exception: Iowa Code §414.12(2), https://www.legis.iowa.gov/docs/code/2026/414.12.pdf. This citation does not imply that the state has enacted one universal zoning definition. ↩

57. Iowa law or administrative program for Variance: Iowa Code §414.12(3)–(4), https://www.legis.iowa.gov/docs/code/2026/414.12.pdf. This citation does not imply that the state has enacted one universal zoning definition. ↩

58. Iowa law or administrative program for Public welfare / general welfare: Iowa Code §364.1, https://www.legis.iowa.gov/docs/code/2026/364.1.pdf; §414.1, https://www.legis.iowa.gov/docs/code/2026/414.1.pdf; §414.3, https://www.legis.iowa.gov/docs/code/2026/414.3.pdf. This citation does not imply that the state has enacted one universal zoning definition. ↩

59. Iowa law or administrative program for Zoning uniformity: Iowa Code §414.2, https://www.legis.iowa.gov/docs/code/2026/414.2.pdf. This citation does not imply that the state has enacted one universal zoning definition. ↩

60. Iowa law or administrative program for Stormwater controls: IAC 567—60.1(4)(c), https://www.legis.iowa.gov/docs/iac/rule/567.60.1.pdf; Iowa Code §364.3, https://www.legis.iowa.gov/docs/code/2026/364.3.pdf. This citation does not imply that the state has enacted one universal zoning definition. ↩

61. City of Cascade, *Proposed Chapter 165 / M-2 Definitions Amendment*, November 3, 2026, independent discussion draft, https://github.com/ttbakiatwoam/cascade-data-center/blob/master/proposals/DRAFT-ORDINANCE-CH165-DEFINITIONS-2026-11-03.md. Proposed local meanings are **not** Iowa statutory definitions or enacted City law. ↩↩↩↩↩↩↩↩↩↩↩↩↩↩↩↩↩↩↩↩↩↩↩↩↩↩

62. Oxford University Press, *Oxford English Dictionary*, https://www.oed.com/; selected publicly accessible links are to the distinct *Oxford Advanced Learner's Dictionary*, https://www.oxfordlearnersdictionaries.com/. These are independently authored sense summaries, not verified OED quotations. ↩

63. Merriam-Webster, *Merriam-Webster.com Dictionary*, https://www.merriam-webster.com/. A lookup link for a compound term does not establish that it is a dictionary headword. ↩

64. New York Law School, Mendik Library, "Free Online Legal Dictionaries & Glossaries," https://libguides.nyls.edu/lowcostlegalresearch/freedict; Cornell Law School, Legal Information Institute, *Wex*, https://www.law.cornell.edu/wex; FindLaw, *FindLaw Legal Dictionary*, https://dictionary.findlaw.com/ (numerous entries attribute their original wording to *Merriam-Webster's Dictionary of Law* [1996]). The terms in the table are independently paraphrased and labeled direct, related, or unverified. ↩↩↩

CASCADE, IOWA - November 3, 2026 - Source-linked research edition - Not adopted law

Data center and industrial land-use litigation: 27 case abstracts

Compilation date: November 3, 2026. **Underlying case-status research cutoff:** October 28, 2026. The November edit adds abstracts and Chicago-style source notes; it does **not** imply a new court-docket check for every case through November 3. This is a selected national inventory, not an exhaustive PACER or fifty-state audit.

Scope: Local-government zoning, moratoria, property-use and entitlement disputes involving proposed data centers and cryptocurrency-computing facilities. A cryptocurrency mining case is included only as a land-use and noise comparator, not as proof that every data center has the same legal status.

How the abstracts should be read

A settlement is not a contested ruling. A preliminary injunction is temporary. Denial of a preliminary injunction is also not necessarily final resolution. Dismissal and loss on the merits differ. A project under construction is not equivalent to a completed or approved project. The actual court is listed separately from a *geographic* federal district, which is not a claim that a state proceeding was filed in that federal district.

Cascade jurisdiction: Dubuque and Jones Counties, Iowa, fall geographically within the Northern District of Iowa and the Eighth Circuit. State-court decisions from other states generally do not bind Iowa courts. District-court orders elsewhere in the Eighth Circuit are persuasive at most on analogous federal issues; published Eighth Circuit appellate decisions can bind N.D. Iowa courts on applicable federal law.[28]

Citation method: Superscript Chicago-style numbered endnotes. A case note links directly to available decisions, dockets, government statements, or identified journalism. When underlying court orders were unavailable, the source is labeled secondary and the case remains unverified at the merits level.

A. Developer-favorable settlements or interim relief

1. Related Digital / RD Michigan Property Owner I LLC v. Saline Township (MI)

Abstract. This dispute concerned denial of data-center rezoning and alleged exclusionary zoning. The developer and township reached a consent judgment establishing a negotiated path, not a judicial holding that the township's zoning was unconstitutional. As recorded in the source review, the reported procedural posture was **Oct. 2025 consent judgment after rezoning rejection**, and the development status was **Construction underway June 2026; not fully built**.[1]

Court: Washtenaw County Circuit Court (state). **Docket:** 2025-001577-CZ. **Federal geographic mapping:** E.D. Michigan (geographic mapping). Circuit: Sixth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

2. Jones Digital LLC v. Arkansas County (AR)

Abstract. The operator contested local cryptocurrency-mining restrictions, including noise regulation. A preliminary injunction and later consent disposition favored continued operation, but the settlement did not establish a general constitutional right to operate a data center without local standards. As recorded in the source review, the reported procedural posture was **Preliminary injunction; 2024 consent resolution**, and the development status was **Existing crypto-mining facility resumed operations**.[2]

Court: U.S. District Court, Eastern District of Arkansas. **Docket:** 2:23-cv-00220. **Federal geographic mapping:** E.D. Arkansas (actual federal venue). Circuit: Eighth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

3. RCM Hill LLC v. Hill County (TX)

Abstract. A developer challenged a county data-center moratorium. The county later rescinded the moratorium and the litigation was settled or dismissed; that negotiated retreat is not a precedential merits invalidation of all moratoria. As recorded in the source review, the reported procedural posture was **County rescinded moratorium June 2026; settlement/dismissal July**, and the development status was **Proposed; no completed center verified**.[3]

Court: U.S. District Court, Western District of Texas. **Docket:** 6:26-cv-00340. **Federal geographic mapping:** W.D. Texas (actual federal venue). Circuit: Fifth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

4. Imperial Valley Computer Manufacturing LLC v. County of Imperial (CA)

Abstract. A California developer attacked the county's initial moratorium measures. A writ required corrective government action and the county repealed the identified measures; the result did not constitute unconditional approval of a finished facility. As recorded in the source review, the reported procedural posture was **Writ against initial 2026 moratorium measures; county repealed them Oct. 6**, and the development status was **No completed center confirmed**.[4]

Court: Imperial County Superior Court (state). **Docket:** ECU004800. **Federal geographic mapping:** S.D. California (geographic mapping). Circuit: Ninth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

5. Eco TIP West LLC v. Chatham County (NC)

Abstract. A developer challenged a twelve-month moratorium. A favorable summary-judgment ruling was reported, but the exact scope of final relief and project construction were not established by the sources reviewed. As recorded in the source review, the reported procedural posture was **Developer summary judgment reported Sept. 17, 2026; remaining relief unresolved**, and the development status was **Proposed; completed facility not verified**.[5]

Court: Chatham County Superior Court (state). **Docket:** 26CV000456-180 (reported). **Federal geographic mapping:** M.D. North Carolina (geographic mapping). Circuit: Fourth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

6. NSI 6 LLC v. Benton County Commission (MO)

Abstract. The dispute concerned a Missouri county's moratorium affecting a computing facility. A preliminary injunction reportedly restrained enforcement while litigation continued; the order is interim and the merits remain unsettled. As recorded in the source review, the reported procedural posture was **Preliminary injunction against moratorium Oct. 6, 2026; merits pending**, and the development status was **Site work reported; no completed center verified**.[6]

Court: Benton County, Missouri state circuit court. **Docket:** Docket not independently verified. **Federal geographic mapping:** W.D. Missouri (geographic mapping). Circuit: Eighth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

B. Pending, mixed, or unclear proceedings

7. NSI, A.1 LLC v. City of Springfield (MO)

Abstract. A developer contested a Missouri city's moratorium. The case was reported as pending, so no final finding that the City's enactment was unlawful was established. As recorded in the source review, the reported procedural posture was **Filed Sept. 17, 2026; pending**, and the development status was **Proposed; no completed center verified**.[7]

Court: Greene County Circuit Court (state). **Docket:** Docket not independently verified. **Federal geographic mapping:** W.D. Missouri (geographic mapping). Circuit: Eighth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

8. Lambiaso / TerraWatt challenge to St. Louis Board of Adjustment (MO)

Abstract. A developer-associated challenge concerned land-use approval conditions for the Armory project. A separate community challenge to approval makes the procedural posture especially important; neither action should be treated as final approval. As recorded in the source review, the reported procedural posture was **Filed Sept. 2026; pending**, and the development status was **Planned Armory data center; not built**.[8]

Court: Circuit Court of City of St. Louis (state). **Docket:** Docket not independently verified. **Federal geographic mapping:** E.D. Missouri (geographic mapping). Circuit: Eighth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

9. Thor Equities LLC v. City of Urbana (OH)

Abstract. A developer brought a federal case over local data-center controls and related entitlement issues. Settlement discussions were reported but no executed settlement or final judicial disposition was confirmed in the source set. As recorded in the source review, the reported procedural posture was **Filed June 2026; settlement discussions reported Oct. 2026; pending/unverified conclusion**, and the development status was **Proposed; construction not confirmed**.[9]

Court: U.S. District Court, Southern District of Ohio. **Docket:** 3:26-cv-00196. **Federal geographic mapping:** S.D. Ohio (actual federal venue). Circuit: Sixth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

10. Wixom Industrial One LLC v. City of Wixom (MI)

Abstract. The federal complaint contests local zoning revisions restricting a proposed data-center use. Filing the complaint does not establish any judicial ruling or a vested right to construction. As recorded in the source review, the reported procedural posture was **Filed Aug. 7, 2026; pending**, and the development status was **Proposed; not verified built**.[10]

Court: U.S. District Court, Eastern District of Michigan. **Docket:** 2:26-cv-12754. **Federal geographic mapping:** E.D. Michigan (actual federal venue). Circuit: Sixth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

11. CAL Realty LLC / Raeden Acquisitions LLC v. City of Gibraltar (MI)

Abstract. Developers challenged a one-year municipal development moratorium. Motion-to-dismiss litigation remained at the pleading stage in the latest reviewed material. As recorded in the source review, the reported procedural posture was **Filed Aug. 2026; motion-to-dismiss briefing ongoing Oct. 2026**, and the development status was **Proposed; not verified built**.[11]

Court: U.S. District Court, Eastern District of Michigan. **Docket:** 2:26-cv-12893. **Federal geographic mapping:** E.D. Michigan (actual federal venue). Circuit: Sixth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

12. HEXA Builders LLC et al. v. Monroe Township (NJ)

Abstract. The dispute was removed to federal court from state proceedings. Related docket references exist, but consolidation and the final disposition were not verified. As recorded in the source review, the reported procedural posture was **Pending as of Oct. 2026**, and the development status was **Proposed; not verified built**.[12]

Court: U.S. District Court, District of New Jersey (removed from state court). **Docket:** 1:26-cv-08284; possibly related 1:26-cv-13447. **Federal geographic mapping:** D. New Jersey (actual federal venue). Circuit: Third. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

13. Kentucky Industrial Alliance LLC v. City of Cave City (KY)

Abstract. A developer contested a moratorium and related annexation activity. Multiple related state proceedings require separate docket review before attributing any outcome to a particular claim. As recorded in the source review, the reported procedural posture was **Pending in 2026; combined case-management reported**, and the development status was **Proposed; not verified built**.[13]

Court: Barren Circuit Court (state). **Docket:** 26-CI-00445 / 26-CI-00500 (reported related matters). **Federal geographic mapping:** W.D. Kentucky (geographic mapping). Circuit: Sixth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

14. SDCL Tennessee Propco LLC v. Bradley County (TN)

Abstract. A developer challenged county zoning restrictions, reportedly including large site setbacks. Without a final ruling, this remains evidence of litigation risk rather than proof that the

controls are invalid. As recorded in the source review, the reported procedural posture was **Filed Sept. 17, 2026; pending**, and the development status was **Proposed; not verified built**.[14]

Court: Bradley County Chancery Court (state). **Docket:** Docket not independently verified. **Federal geographic mapping:** E.D. Tennessee (geographic mapping). Circuit: Sixth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

15. E. Kahn Development Corp. v. Montgomery Township (NJ)

Abstract. The developer reportedly sued over a local data-center ban. The exact disposition and relief remain unverified, making this a monitored dispute rather than precedent. As recorded in the source review, the reported procedural posture was **Filed July 2026; merits status unverified**, and the development status was **Proposed; no build confirmed**.[15]

Court: Somerset County Superior Court (state). **Docket:** SOM-L-001072-26. **Federal geographic mapping:** D. New Jersey (geographic mapping). Circuit: Third. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

16. MLP Ventures v. Upper Merion Township (PA)

Abstract. The conflict involved land-use review and proposed data-center operations. Withdrawal of zoning appeals does not necessarily dispose of a separate court proceeding; a docket check is essential. As recorded in the source review, the reported procedural posture was **Sept. 2026 challenges reported; separate zoning appeals withdrawn Oct. 2026**, and the development status was **Project not confirmed built**.[16]

Court: Montgomery County Court of Common Pleas (state). **Docket:** Docket not independently verified. **Federal geographic mapping:** E.D. Pennsylvania (geographic mapping). Circuit: Third. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

17. Hanton City Investments LLC / ROK LLC v. Town of Smithfield (RI)

Abstract. Developer-associated actions challenged a municipal ban or application review. The underlying matters are tracked together only provisionally because separate case numbers and dispositions were not confirmed. As recorded in the source review, the reported procedural posture was **Developer litigation over ban / application review reported Sept. 2026**, and the development status was **Proposed; not verified built**.[17]

Court: Rhode Island Superior Court (state). **Docket:** Two state actions reported; numbers unverified. **Federal geographic mapping:** D. Rhode Island (geographic mapping). Circuit: First. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

18. West Buckeye Road LP v. City of Phoenix (AZ)

Abstract. The developer challenged Phoenix data-center controls and alleged damages. A mixed motion decision permitted a damages theory to continue while dismissing another claim; a surviving claim is not success on the merits. As recorded in the source review, the reported procedural posture was **Oct. 2026 mixed motion ruling; damages claim survives; other claim dismissed**, and the development status was **Not verified built**.[18]

Court: Maricopa County Superior Court (state). **Docket:** State-court docket not independently verified. **Federal geographic mapping:** D. Arizona (geographic mapping). Circuit: Ninth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

19. City of Gallatin v. Gallatin Data Centers LLC (TN)

Abstract. The municipality initiated litigation over land-sale and repurchase rights, and the developer asserted counterclaims. A federal ruling on pleadings favored continuation of certain claims, not a final authorization to develop. As recorded in the source review, the reported procedural posture was **Mar. 2026 developer-favorable denial of city pleading motion; case not finally decided**, and the development status was **Facility not confirmed built**.[19]

Court: U.S. District Court, Middle District of Tennessee. **Docket:** 3:24-cv-00868. **Federal geographic mapping:** M.D. Tennessee (actual federal venue). Circuit: Sixth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

20. 1200 Route 22 Land Investors / Land Holdings v. Bridgewater Township (NJ)

Abstract. The developer alleged conflict between a new data-center ordinance and an earlier redevelopment plan. The pleadings were pending and construction was not confirmed. As recorded in the source review, the reported procedural posture was **Filed Oct. 5, 2026; pending**, and the development status was **Redevelopment site proposed; not built**.[20]

Court: Somerset County Superior Court (state). **Docket:** State-court docket unverified. **Federal geographic mapping:** D. New Jersey (geographic mapping). Circuit: Third. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

21. Quantum Maryland data-center developer v. Frederick County (MD)

Abstract. A developer reportedly challenged a county moratorium affecting a major land transaction. Without a verified case number or order, the claim and alleged exposure should be treated as reported rather than adjudicated fact. As recorded in the source review, the reported procedural posture was **Developer moratorium suit reported Oct. 8, 2026; pending**, and the development status was **Not verified built**.[21]

Court: Circuit Court for Frederick County (state). **Docket:** State-court docket unverified. **Federal geographic mapping:** D. Maryland (geographic mapping). Circuit: Fourth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

22. Silver Fox 606 v. Village of Indiantown (FL)

Abstract. The developer sought declaratory and injunctive relief in a plat/land-use dispute. No merits ruling or completed development was confirmed. As recorded in the source review, the reported procedural posture was **Developer plat/land-use suit reported Oct. 7, 2026; pending**, and the development status was **Not verified built**.[22]

Court: 19th Judicial Circuit Court, Martin County (state). **Docket:** State-court docket unverified. **Federal geographic mapping:** S.D. Florida (geographic mapping). Circuit: Eleventh. **Precedential**

status: Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

C. Developer-adverse cases

23. NewRays One LLC v. Faulkner County (AR)

Abstract. In contrast to Jones Digital, a federal court denied a crypto-mining operator's preliminary injunction against county noise enforcement. The preliminary ruling addressed likelihood of success and equitable factors under Arkansas/federal law; it did not decide Iowa municipal zoning. As recorded in the source review, the reported procedural posture was **Developer's preliminary injunction motion denied October 6, 2024, with a clarifying amended order entered October 8, 2024. An August 22, 2025 order addressed some issues in a motion to dismiss without fully disposing of it; final disposition after that order was not verified**, and the development status was **Existing cryptocurrency-mining facility. Do not treat operation as judicial approval of noise levels or other compliance**.[23]

Court: U.S. District Court for the Eastern District of Arkansas (Central Division). **Docket:** 4:24-cv-00824-LPR. **Federal geographic mapping:** E.D. Arkansas (actual federal venue). Circuit: Eighth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

24. State ex rel. Bristolville 25 Developer LLC v. Village of Lordstown (OH)

Abstract. Ohio's Supreme Court rejected the developer's extraordinary-writ request relating to site-plan processing and a moratorium. A writ denial is a developer-adverse result in its procedural context, not a universal rule about data centers. As recorded in the source review, the reported procedural posture was **Developer lost writ action Oct. 20, 2026**, and the development status was **Proposed; not verified built**.[24]

Court: Supreme Court of Ohio (state). **Docket:** 2025-1497. **Federal geographic mapping:** N.D. Ohio (geographic mapping). Circuit: Sixth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

25. DCB Nashville LLC / DC BLOX v. Metropolitan Government of Nashville (TN)

Abstract. The original federal complaint was dismissed in October 2026. A later lawsuit should not be treated as active without verified refiling, and the dismissal is not a developer victory. As recorded in the source review, the reported procedural posture was **Original federal complaint dismissed Oct. 6, 2026; later action not verified**, and the development status was **Not verified built**.[25]

Court: U.S. District Court, Middle District of Tennessee. **Docket:** 3:26-cv-01143. **Federal geographic mapping:** M.D. Tennessee (actual federal venue). Circuit: Sixth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

26. National Land Developers LLC v. Andover Township (NJ)

Abstract. The developer voluntarily dismissed the local data-center dispute with prejudice. That disposition is not a finding that the municipality's zoning is unconstitutional or that the project may proceed. As recorded in the source review, the reported procedural posture was **Developer**

voluntarily dismissed with prejudice Oct. 2026, and the development status was **No build confirmed**.[26]

Court: Sussex County Superior Court (state). **Docket:** State-court docket unverified. **Federal geographic mapping:** D. New Jersey (geographic mapping). Circuit: Third. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

D. Iowa municipal-annexation comparator

27. Woodbury County and residents v. City of Salix (IA)

Abstract. This Iowa comparison challenges annexation undertaken for possible data-center development. It is a state-court municipal-boundary dispute, not a developer suit or Northern District of Iowa federal ruling. As recorded in the source review, the reported procedural posture was **Annexation litigation reported pending Aug. 2026**, and the development status was **Proposed; not built**.[27]

Court: Iowa state district court (state). **Docket:** Iowa state court; docket not independently verified. **Federal geographic mapping:** N.D. Iowa (geographic mapping ONLY). Circuit: Eighth. **Precedential status:** Actual court and procedural posture control; geographic circuit mapping is informational, not a claim of binding precedent.

Conclusions for Cascade's proposed M-2 ordinance

1. **Require evidence and apply uniform standards.** An ordinance grounded in Iowa Code §§414.1-414.3 and connected to documented land-use effects is more legally defensible than a personal or company-specific restriction.[29]
2. **Use clear numerical terms and established decision processes.** Define sound monitoring, electrical load, equipment setbacks, and application criteria. Keep the Board of Adjustment's special-exception and variance authority consistent with §414.12, including its 2025-added practical-difficulties provision.[30]
3. **Treat procedural cases as procedural.** Consent judgments and early injunctions show litigation and settlement risk, not a categorical prohibition on industrial regulations.
4. **Distinguish federal precedent from geography.** Jones Digital and NewRays arose in the Eastern District of Arkansas (Eighth Circuit). Their district-court results are not independently binding in the Northern District of Iowa; cases in Missouri state courts are not federal Eighth Circuit decisions.
5. **Track unresolved records.** Several cases rely on reporting or trackers instead of full state-court dockets. A City Attorney should obtain actual pleadings and final orders before relying on them in a legislative finding or brief.

Chicago-style numbered source notes

Source relationship and publication

- Original 27-case research tracker contains the source-by-source status table, district/circuit mapping, detailed per-case research notes, and project-build status.
- Current proposed Cascade M-2 ordinance links legal safeguards relevant to these cases.
- **Every case abstract retains its October 28 evidence cutoff**. Use a fresh docket search before claiming any case is finally decided or construction has proceeded.

1. Related Digital / RD Michigan Property Owner I LLC v. Saline Township, 2025-001577-CZ. Washtenaw County Circuit Court (state). Sources and status evidence: Executed consent judgment (township PDF); Oracle construction announcement, June 1, 2026. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

2. Jones Digital LLC v. Arkansas County, 2:23-cv-00220. U.S. District Court, Eastern District of Arkansas. Sources and status evidence: Federal docket; Public radio report. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

3. RCM Hill LLC v. Hill County, 6:26-cv-00340. U.S. District Court, Western District of Texas. Sources and status evidence: Federal docket; WilmerHale regulatory analysis. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

4. Imperial Valley Computer Manufacturing LLC v. County of Imperial, ECU004800. Imperial County Superior Court (state). Sources and status evidence: Imperial County October 2026 moratorium notice; County moratorium chronology. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

5. Eco TIP West LLC v. Chatham County, 26CV000456-180 (reported). Chatham County Superior Court (state). Sources and status evidence: Local reporting, Sept. 29, 2026. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

6. NSI 6 LLC v. Benton County Commission, Docket not independently verified. Benton County, Missouri state circuit court. Sources and status evidence: Local report on injunction; Ozarks dispute reporting. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

7. NSI, A.1 LLC v. City of Springfield, Docket not independently verified. Greene County Circuit Court (state). Sources and status evidence: Springfield and Benton reporting; Case tracking. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

8. Lambiaso / TerraWatt challenge to St. Louis Board of Adjustment, Docket not independently verified. Circuit Court of City of St. Louis (state). Sources and status evidence: CREdocket litigation record; Sept. 2026 litigation index. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

9. Thor Equities LLC v. City of Urbana, 3:26-cv-00196. U.S. District Court, Southern District of Ohio. Sources and status evidence: Federal docket; 2026 Q4 dispute tracker. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

10. Wixom Industrial One LLC v. City of Wixom, 2:26-cv-12754. U.S. District Court, Eastern District of Michigan. Sources and status evidence: Federal docket; Land-use litigation analysis. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

11. CAL Realty LLC / Raeden Acquisitions LLC v. City of Gibraltar, 2:26-cv-12893. U.S. District Court, Eastern District of Michigan. Sources and status evidence: Federal docket. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

12. HEXA Builders LLC et al. v. Monroe Township, 1:26-cv-08284; possibly related 1:26-cv-13447. U.S. District Court, District of New Jersey (removed from state court). Sources and status evidence: Federal docket, 08284; Federal docket, 13447. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

13. Kentucky Industrial Alliance LLC v. City of Cave City, 26-CI-00445 / 26-CI-00500 (reported related matters). Barren Circuit Court (state). Sources and status evidence: Local reporting on combined cases; Initial suit reporting. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

14. SDCL Tennessee Propco LLC v. Bradley County, Docket not independently verified. Bradley County Chancery Court (state). Sources and status evidence: Local newspaper report; Case tracker. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

15. E. Kahn Development Corp. v. Montgomery Township, SOM-L-001072-26. Somerset County Superior Court (state). Sources and status evidence: Township-ban dispute reporting. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

16. MLP Ventures v. Upper Merion Township, Docket not independently verified. Montgomery County Court of Common Pleas (state). Sources and status evidence: Township statement Oct. 21, 2026; Sept. litigation index. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

17. Hanton City Investments LLC / ROK LLC v. Town of Smithfield, Two state actions reported; numbers unverified. Rhode Island Superior Court (state). Sources and status evidence: Rhode Island development tracker; Litigation overview. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

18. West Buckeye Road LP v. City of Phoenix, State-court docket not independently verified. Maricopa County Superior Court (state). Sources and status evidence: KJZZ report Oct. 28, 2026. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

19. City of Gallatin v. Gallatin Data Centers LLC, 3:24-cv-00868. U.S. District Court, Middle District of Tennessee. Sources and status evidence: Federal district court order. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

20. 1200 Route 22 Land Investors / Land Holdings v. Bridgewater Township, State-court docket unverified. Somerset County Superior Court (state). Sources and status evidence: Patch original reporting Oct. 12; Township October Bulletin. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

21. Quantum Maryland data-center developer v. Frederick County, State-court docket unverified. Circuit Court for Frederick County (state). Sources and status evidence: October litigation index. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

22. Silver Fox 606 v. Village of Indiantown, State-court docket unverified. 19th Judicial Circuit Court, Martin County (state). Sources and status evidence: October litigation index. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

23. NewRays One LLC v. Faulkner County, 4:24-cv-00824-LPR. U.S. District Court for the Eastern District of Arkansas (Central Division). Sources and status evidence: Amended preliminary-injunction order; Federal docket; August 22, 2025 court order. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

24. State ex rel. Bristolville 25 Developer LLC v. Village of Lordstown, 2025-1497. Supreme Court of Ohio (state). Sources and status evidence: Ohio Supreme Court summary; Full opinion. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

25. DCB Nashville LLC / DC BLOX v. Metropolitan Government of Nashville, 3:26-cv-01143. U.S. District Court, Middle District of Tennessee. Sources and status evidence: Federal docket; Federal written ruling (GovInfo). Research collected through October 28, 2026; verify the docket for developments after that date. ↩

26. National Land Developers LLC v. Andover Township, State-court docket unverified. Sussex County Superior Court (state). Sources and status evidence: WRNJ Radio Oct. 2026. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

27. Woodbury County and residents v. City of Salix, Iowa state court; docket not independently verified. Iowa state district court (state). Sources and status evidence: Radio Iowa Aug. 6, 2026; KTIV Aug. 21, 2026. Research collected through October 28, 2026; verify the docket for developments after that date. ↩

28. U.S. Congress, *28 U.S.C.* §95, judicial districts of Iowa, https://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title28-section95&num=0&edition=prelim. ↩

29. Iowa General Assembly, *Iowa Code* §§414.1-414.3 (2026), https://www.legis.iowa.gov/docs/code/2026/414.1.pdf; https://www.legis.iowa.gov/docs/code/2026/414.2.pdf; https://www.legis.iowa.gov/docs/code/2026/414.3.pdf. ↩

30. Iowa General Assembly, *Iowa Code* §414.12(2)-(4) (2026), https://www.legis.iowa.gov/docs/code/2026/414.12.pdf. ↩

CASCADE, IOWA - November 3, 2026 - Source-linked research edition - Not adopted law

DRAFT ORDINANCE - Chapter 165 Definitions and Interpretation Amendment (November 3, 2026)

> **FOR REVIEW ONLY - NOT ADOPTED LAW.** Companion to the November 3, 2026 M-2 performance standards amendment. The City Attorney must reconcile this proposed section with the City's complete current ordinance, later amendments, and any adopted state code. This separate text is an **alternative ordinance vehicle** for definitions, not an additional enactment to be adopted without reconciling the integrated Section IV.

CITY OF CASCADE, IOWA
ORDINANCE NO. _____

AN ORDINANCE AMENDING SECTION 165.41 OF THE CITY OF CASCADE ZONING ORDINANCE TO DEFINE DATA CENTERS, MAJOR INDUSTRIAL FACILITIES, OPERATIONAL MEASURES, ENVIRONMENTAL RECEPTORS, AND REVIEW TERMS

BE IT ENACTED by the City Council of the City of Cascade, Iowa:

SECTION I. LEGISLATIVE PURPOSE AND AUTHORITY

The purpose of this amendment is to make terminology in the proposed M-2 Heavy Industrial District measurable, enforceable, and consistent with Iowa municipal zoning authority. Iowa Code §§414.1 through 414.3 allow municipal zoning for health, safety, and welfare while requiring uniform treatment of each class or kind of buildings within a district.[12] The definitions concern **physical land use and its measurable external effects**, not the identity of the applicant, industrial products, digital workloads, customers, or tenants.

SECTION II. ADDITIONS TO SECTION 165.41

Section 165.41 of Cascade's zoning ordinance would be amended to add these definitions. Existing definitions remain in effect unless expressly superseded by final adopted language. Headwords below are **proposed municipal definitions**, not representations that Iowa law already defines the complete phrase.

Data Center or High-Density Computing Facility: A building, structure, or portion thereof principally used for networked servers, electronic data processing, digital storage, artificial-intelligence, cloud, colocation, scientific, or cryptocurrency computing. Incidental computer rooms and telecommunications equipment subordinate to another principal use are excluded.

Major Industrial Facility: An M-2 use exceeding any one threshold in proposed §165.11(D)(8): 5 MW coincident demand, 25,000 gallons in any 24 hours, 2 MW aggregate stationary generation, or 5 MWh storage. Also includes a modification that crosses a threshold.

Material Expansion: A modification increasing an approved maximum by 20 percent or more for electrical demand, water demand, stationary generation, energy storage, exterior mechanical capacity, or developed building area, or crossing a Major Industrial Facility threshold for the first time.

Sensitive Receptor: An occupied dwelling, school, licensed child-care facility, hospital, nursing facility, place of worship, public library, public park facility, or comparable occupied use requiring protection from continuous industrial noise.

Ambient Noise / Baseline Sound: The sound environment at a designated receiving location without the regulated facility's incremental contribution, determined under representative day, night, and meteorological conditions. Ambient noise is not the Iowa air-quality term "ambient air."[34]

Facility-Attributable Noise: The sound contribution attributable to a regulated M-2 use at the specified receiving point, including reasonably foreseeable simultaneous operation of equipment; exclude unrelated transportation, natural, and third-party background noise through an approved, documented acoustical procedure.[4]

dBA: A-weighted decibels of sound pressure, measured with calibrated equipment using the applicable professional noise measurement method.

dBC: C-weighted decibels of sound pressure, which place greater relative weight on low-frequency sound than A-weighting.

Hourly Average Sound Level (Leq,1h): The energy-equivalent continuous sound-pressure level over sixty (60) minutes, expressed using the specified A- or C-weighting; intermittent contributions are averaged on an acoustic energy basis, not by taking an arithmetic mean of decibel values. The qualified professional shall identify source operation, background sound, measurement location, and calibration.[4]

Prominent Tone / Tonal Noise: An identifiable recurring or steady audible frequency component distinguishable from neighboring sound bands when evaluated under the ordinance's specified professional acoustical method.

Acoustic Study: A qualified professional's documented baseline survey, maximum-design-operation model, receptor analysis, assumptions, equipment schedule, and verification protocol.

Maximum Anticipated Coincident Electrical Demand: The greatest reasonably anticipated simultaneous electrical load, expressed in MW, for the complete site during normal or design-maximum operation. A sum of independent equipment nameplate ratings does not establish coincident site demand without a documented load calculation.

Aggregate Stationary Generation Capacity: The sum of rated electrical outputs of all stationary generators covered by the section, in megawatts, excluding fire pumps only where expressly provided.

Aggregate Electrical-Energy-Storage Capacity: The summed rated stored electrical energy of covered stationary storage systems, in megawatt-hours, using documented nameplate energy ratings.

Exterior Mechanical Equipment: Permanently located outdoor fans, compressors, cooling equipment, generators, transformers, heat-rejection systems, and comparable mechanical installations serving an M-2 principal use.

Property Boundary / Lot Line: The legally established boundary of the parcel under review as supported by a recorded plat, survey, deed, or other legally controlling boundary record.

Residential Zoning District Boundary: The official delineation between an M-2 parcel or district and land designated residential by the City's controlling zoning map.

Sensitive-Receptor Measurement Location: The specified exterior wall, occupied outdoor-use area, or other objectively identified receiving point at a sensitive receptor, documented on an approved site/acoustic plan.

Once-Through Cooling: A process in which municipal potable water passes through a cooling system once and is discharged rather than being recirculated for heat rejection.

Closed-Loop Cooling: A recirculating coolant system intended to keep working fluid contained, subject to any limited makeup or process losses specifically disclosed.

Emergency Response Plan: A written, site-specific plan documenting access, contacts, utility isolation, fuel, chemicals, battery systems, suppression, evacuation, spills, and coordination with first responders.

Decommissioning: The safe disconnection, dismantling, lawful removal, cleanup, and site restoration work required at the end of a covered facility's life.

Abandonment: Continuous cessation of a facility's principal approved industrial operation for the period specified in §165.11(G)(17), subject to its listed reasonable exceptions.

Financial Assurance: A surety, letter of credit, escrow, performance bond, trust, or other legally authorized and enforceable arrangement in a reasonable amount covering documented decommissioning and site restoration duties. The statutory definition applicable to sanitary-disposal facilities under Iowa Code §455B.301(9) does not itself grant the City authority to impose that requirement on M-2 data centers; a separate legal basis must be confirmed by the City Attorney.[5]

Independent Qualified Professional: An appropriately licensed or credentialed expert with relevant technical competence and no financial or managerial interest that would compromise independent evaluation.

Material Modification (for monitoring): A change in equipment, site layout, generation operation, or other covered operation reasonably likely to change the regulated environmental or infrastructure impact.

SECTION III. INTERPRETATION AND STATE-LAW DEFINITIONS

1. **City zoning definition governs locally.** The local definition of a data center does not import sales-tax eligibility or incentives under Iowa Code §423.3(95)(f). State tax definitions may inform terminology only within their legal scope.[6]
2. **Separate regulatory programs remain separate.** Terms relating to water allocation, air contaminants, hazardous substances, wastewater, and stormwater retain their state statutory or administrative meanings when those programs apply. State permit requirements remain applicable and are not replaced by this amendment.[7][8][9]
3. **Major industrial vs. major air source.** The City's proposed Major Industrial Facility classification is not the same as an air-permitting Major Stationary Source under Iowa Code §455B.131.[8]

4. **Special exceptions and variances.** Local definitions do not limit the Board of Adjustment's statutory authority under Iowa Code §414.12(2)-(4), including the 2025-added separate practical-difficulties test for qualifying numerical and dimensional variances.[10]
5. **No silent incorporation of dictionaries.** The 86-term glossary comparing Iowa law, Oxford, Merriam-Webster, Cornell Wex, and FindLaw's free Legal Dictionary is noncodified research. Where statutory text or an adopted definition controls, general-purpose dictionary definitions do not displace it.[3]
6. **Acoustic measurement.** The ordinance and any adopted compliance protocol shall specify a calibrated sound-level instrument, A/C-weighting, representative operating conditions, background adjustments, one-hour energy-equivalent average (Leq,1h), and qualified analysis of tonal sources. No claim is made that Iowa has enacted these particular numerical industrial noise limits.[11]
7. **Stormwater and local limits.** Any post-construction runoff requirement must observe Iowa Code §364.3(19), including applicable limitations on restrictions and financial responsibility for city-imposed more restrictive standards.[4]
8. **Existing lawful operations.** The amendment does not, by mere use of a dictionary definition, extinguish an otherwise lawful preexisting use or strip protections established under the controlling zoning ordinance and Iowa law.

SECTION IV. CONFLICTS AND SEVERABILITY

Other applicable municipal, county, state, and federal laws control within their proper jurisdiction. If a provision of this amendment is held invalid, the remainder shall remain effective to the extent it can operate independently.

SECTION V. EFFECTIVE DATE

This ordinance takes effect after passage, approval, and publication as Iowa law requires. It is **not effective while this document remains a proposal**.

Chicago-style numbered notes (noncodified)

Publication and reconciliation

- Current integrated M-2 amendment already includes these definitions in Section IV.
- This companion is provided for readers who want a separate §165.41 definitions ordinance. **Do not adopt both definitions sections independently without checking for duplication and conflicting effective dates.**
- The full definitions reference preserves 55 statewide terms, five legal concepts, and 26 proposed local definitions, with source links and original editorial dictionary comparisons.

1. Iowa General Assembly, *Iowa Code* §414.1 (2026), https://www.legis.iowa.gov/docs/code/2026/414.1.pdf. ↩
2. Iowa General Assembly, *Iowa Code* §§414.2-414.3 (2026), https://www.legis.iowa.gov/docs/code/2026/414.2.pdf and https://www.legis.iowa.gov/docs/code/2026/414.3.pdf. ↩
3. Oxford University Press, *Oxford English Dictionary*, https://www.oed.com/ (full-entry verification limited); Merriam-Webster, *Merriam-Webster.com Dictionary*, https://www.merriam-webster.com/; Cornell Law School, Legal Information Institute, *Wex*, https://www.law.cornell.edu/wex; FindLaw, *FindLaw Legal Dictionary*, https://dictionary.findlaw.com/; New York Law School, Mendik Library, guide to free legal dictionaries, https://libguides.nyls.edu/lowcostlegalresearch/freedict. Source-qualified editorial comparisons, not verbatim copyrighted definitions. ↩↩
4. Iowa General Assembly, *Iowa Code* §364.3(19) (2026), https://www.legis.iowa.gov/docs/code/2026/364.3.pdf. ↩↩↩↩
5. Iowa General Assembly, *Iowa Code* §455B.301(9) (2026), financial assurance instrument defined for sanitary disposal projects only; this statute does not automatically authorize a municipal data-center decommissioning requirement, https://www.legis.iowa.gov/docs/code/2026/455B.301.pdf. ↩
6. Iowa General Assembly, *Iowa Code* §423.3(95)(f) (2026), data-center tax definitions, https://www.legis.iowa.gov/docs/code/2026/423.3.pdf. ↩
7. Iowa General Assembly, *Iowa Code* §455B.261 (2026), water allocation terms, https://www.legis.iowa.gov/docs/code/2026/455B.261.pdf. ↩
8. Iowa General Assembly, *Iowa Code* §455B.131 (2026); Iowa Department of Natural Resources, *Iowa Administrative Code* 567—22.1, https://www.legis.iowa.gov/docs/code/2026/455B.131.pdf and https://www.legis.iowa.gov/docs/iac/rule/02-25-2026.567.22.1.pdf. ↩↩
9. Iowa General Assembly, *Iowa Code* §§455B.381 and 455B.411 (2026); Iowa Department of Natural Resources, *Iowa Administrative Code* 567—60.1, https://www.legis.iowa.gov/docs/code/2026/455B.pdf and https://www.legis.iowa.gov/docs/iac/rule/567.60.1.pdf. ↩
10. Iowa General Assembly, *Iowa Code* §414.12(2)-(4) (2026), https://www.legis.iowa.gov/docs/code/2026/414.12.pdf. ↩
11. American National Standards Institute / Acoustical Society of America, *ANSI/ASA S12.9 Environmental Sound*, https://webstore.ansi.org/; choose precise part/edition upon acoustical review. ↩

LEXISNEXIS ASSIST: IOWA-LAW SOURCE CHECK

Research annotation only; not controlling law and not a revision to the November 3 proposed ordinance.

STATE DATA-CENTER DEFINITION

Iowa Code section 423.3(95)(f), rather than section 423.4, supplies the quoted data-center definition for the sales-tax program. Investment/refund criteria are not zoning definitions.

ZONING UNIFORMITY

Section 414.2 requires district-wise uniformity for classes or kinds of buildings. The draft uses objectively measurable impacts across M-2 users, subject to legal review.

MUNICIPAL FRANCHISE FEES

Section 364.2(4)(f) is a specific source to analyze separately from the general limits on new municipal taxes. This packet does not establish a fee.

AIR PERMITS AND OTHER OVERSIGHT

The draft seeks information about applicable emissions permits or exemption determinations; it does not replace state or federal environmental authorization.

UNVERIFIED AI CASE SUMMARIES

Some case descriptions in the Assist output require direct opinion and docket review before being cited as judicial holdings.

DRAFTING EFFECT

The November 4 memo explicitly made no change to the November 3 proposed ordinance. Existing highlighted changes are not silently revised.

Complete source review and verbatim prompt/output transcript are retained in the GitHub repository under dataset/policy and sources/legal-research.