

Planning Department

Civic Center North 480 South Allison Parkway Lakewood, Colorado 80226-3127 303-987-7505 303-987-7057 TTY/TDD Lakewood.org/Planning

Enhanced Development Menu - Resource Guide -

Below you will find resources to help you comply with the Enhanced Development Menu (<u>Article 13</u> of the Lakewood Zoning Ordinance).

The Menu applies to developments with buildings with a gross square footage of more than 20,000 sq. ft. Developments with buildings between 20,000 and 50,000 sq. ft. (cumulative square footage of all buildings on site) must achieve 35 points from the Menu. Developments with buildings greater than 50,000 sq. ft. must achieve 50 points from the Menu.

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1. Energy efficient outdoor lighting

Points Possible: 2

Description

Use outdoor lighting fixtures and bulbs that are ENERGY STAR or equivalent.

Intent

Energy efficient lighting reduces energy consumption and associated energy costs, while helping the city achieve its community energy efficiency goals.

Documentation Required

1. Light bulb and fixture product specifications that have the ENERGY STAR seal or demonstrate equivalent energy savings.

Timeline

• Submit product specifications on details sheet in the site plan package

Resources

- Use the **ENERGY STAR** product finder to compare certified lighting products.
- If the type of lighting you need is not ENERGY STAR eligible, refer to the <u>Federal Energy Management Program efficiency requirements for outdoor lighting</u> or the <u>DesignLights Consortium (DLC) Qualified Product List.</u>

2. Passive solar design

Points Possible: 3

Description

Construct building to be elongated on an east-west axis, with south facing windows (50% minimum) that receive sunlight between the hours of 9:00 A.M. and 3:00 P.M. (sun exposure) during the heating season. This shall be coupled with the use of awnings or other shade structures on the east and west facing windows, appropriate use of glazing, use of daylighting, and other passive solar design techniques.

Intent

Passive solar design reduces energy demand and associated energy costs by using the sun's energy for heating, helping the city achieve its community energy efficiency goals.

Documentation Required

- 1. Plan drawing demonstrating (1) building orientation and (2) the winter path of the sun from 9 a.m.-3 p.m. in relation to the building
- 2. Calculation demonstrating (1) total window area and (2) south-facing window area and (3) percent of south-facing window area (50% min.)
- 3. Narrative and/or illustrations describing other solar passive design techniques

Sample Calculation

- Total window area: 250 sq. ft
- South-facing window area: 150 sq. ft.
- % window area that is south-facing:

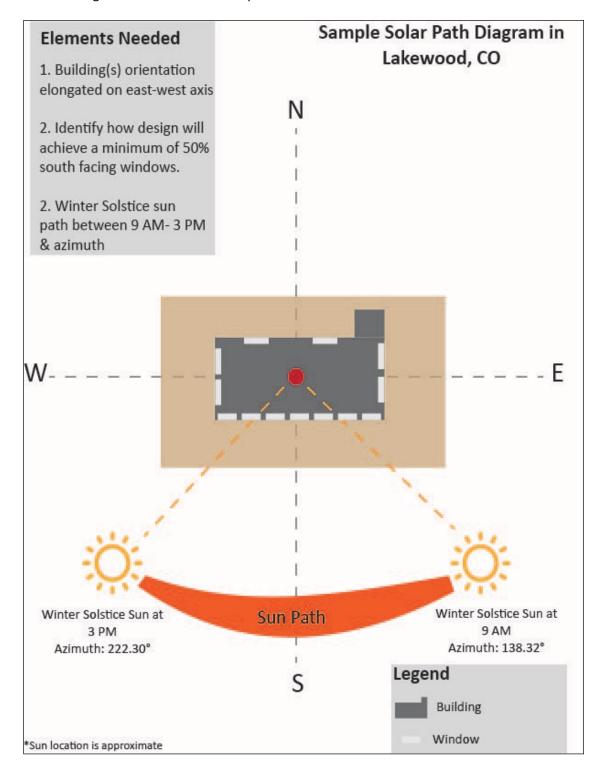
150/250 = 60%

Timeline

• Submit drawing, calculation, and narrative in the site plan package

Resources

- Refer to the <u>Whole Building Design Guide's passive solar heating resource page</u> for an overview of passive solar.
- Refer to the <u>Harvesting for Commercial Buildings publication</u> for and best practices on daylighting.
- Refer to the <u>NREL Passive Solar Design Technology Fact Sheet</u> for design techniques.
- Refer to the sample solar path diagram below as an example of how to demonstrate south facing window area and sun exposure.



3. Urban heat island reduction

Points Possible: 5-20 (5 pts. for 50% of hardscaped area covered by measures. Additional 3 pts. per additional 5%, up to 20 pts.)

Description

Use any combination of the following measures to reduce urban heat island effects for roof and hardscaped area: ENERGY STAR-compliant roofing; a "green" (vegetated) roof; reflective materials with minimum SRI (solar reflective index) of 29; open-grid pavement; or trees with a caliper size of 3" or greater.

Intent

By increasing vegetation and reflective materials, less heat is absorbed by pavements, reducing the surface and air temperature. This decreases summertime energy demand, air conditioning costs, air pollution, greenhouse gas emissions, and heat-related illnesses.

Documentation Required

(50% minimum)

- 1. Plan drawing demonstrating where the UHI measures are covering roof/hardscaped area
- 2. Calculation demonstrating (1) total roof/hardscaped area, (2) roof/hardscaped area covered with selected measures, and (3) percent of total roof/hardscape covered by selected measures
- 3. If applicable: List of selected vegetation (include caliper size for any trees)
- 4. If applicable: Product specifications of ENERGY STAR roofing, pavement, and/or reflective materials (minimum 29 SRI)

Sample Calculation

- Total roof/hardscaped area: 15,000 sq. ft.
 - Roof/hardscaped area covered by UHI measures: 12,000 sq. ft.
- % roof/hardscaped area covered by UHI measures: 12,000/15,000 = 80%

Timeline

Submit drawing, calculation, vegetation list, and product specifications in the site plan package

Resources

- Use the City and County of Denver street tree list or City of Westminster tree list to assist in the selection of trees with appropriate size canopies.
- Use the Cool Roof Rating Council directory or the Heat Island Group at Lawrence Berkeley National Laboratory's cool roof materials database for SRI ratings.

4. Renewable energy – offsite

Points Possible: 10-25 (10 pts. for 25% of energy use offset by renewable sources. Additional 1 pt. per additional 5%, up to 25 pts.)

Description

Procure renewable energy from off-site sources for electricity use.

Intent

Renewable energy procurement decreases air pollution and greenhouse gas emissions from fossil fuel combustion and increases community resilience in the event of severe weather or power outages.

Documentation Required

- Calculation demonstrating (1) total projected energy use of the site in kWh, (2) projected energy use offset by renewable sources in kWh, and (3) percent of total energy use offset by renewable sources (25% min.)
- Documentation of ownership or a signed lease agreement for a period of at least 15 years

Sample Calculation

- Total projected annual energy use*: 69,200kWh
- Projected annual renewable energy: 20,600 kwh
- % total energy use offset by renewable energy:
 20,600/69,200 = 30% = 11 points

*projected energy use based on ENERGY STAR Portfolio Manager source EUI for multifamily housing: 34.6kwh/ft² x 20,000 ft²

Timeline

• Submit calculation and ownership or agreement with building permits application

Resources

- Contact Chris Keller with Xcel Energy at 303-294-2849 or christopher.a.kelley@xcelenergy to request assistance with energy efficient building design, including projecting energy use and solar options.
- If you choose not to conduct energy modeling, use <u>CBECS</u> or <u>ENERGY STAR</u> data to determine average energy use intensity for your building type.

5. Renewable energy – onsite

Points Possible: 20-35 (20 pts. for 25% of energy use offset by renewable sources. Additional 1 pt. per additional 5%, up to 35 pts.)

Description

Provide on-site renewable energy generation for electricity or heating use.

Intent

Renewable energy procurement decreases air pollution and greenhouse gas emissions from fossil fuel combustion and increases community resilience in the event of severe weather or power outages.

Documentation Required

- 1. Calculation demonstrating (1) total projected energy use of the site, (2) projected energy use offset by renewable sources, and (3) percent of total energy use offset by renewable sources (25% min.)
- 2. Plan drawing demonstrating solar installation location
- Product specifications of installation and service agreement (include verification of capacity for projected energy output)

Sample Calculation

- Total projected annual energy use*: 69,200kWh
- Projected annual renewable energy: 20,600 kwh
- % total energy use offset by renewable energy: 20,600/69,200 = 30% = 21 points

*projected energy use based on ENERGY STAR Portfolio Manager source EUI for multifamily housing: 34.6kwh/ft² x 20,000 ft²

Timeline

- Submit drawing of the solar installation location on the site plan in the site plan package
- Submit calculation, product specifications, and service agreement with building permits application

Resources

- Contact Chris Keller with Xcel Energy at 303-294-2849 or christopher.a.kelley@xcelenergy to request assistance with energy efficient building design, including projecting energy use and solar options.
- If you choose not to conduct energy modeling, use <u>CBECS</u> or <u>ENERGY STAR</u> data to determine average energy use intensity for your building type.
- As an alternative to installing PV solar to offset electricity, you can propose an equivalent <u>solar</u> thermal system.

6. Hydrozones

Points Possible: 3

Description

Select plants appropriate to the climate and group them in hydrozones, according to water need.

Intent

Hydrozones connect plant selection and landscape design with irrigation systems in order to conserve water, helping the city to achieve its community water efficiency goals.

Documentation Required

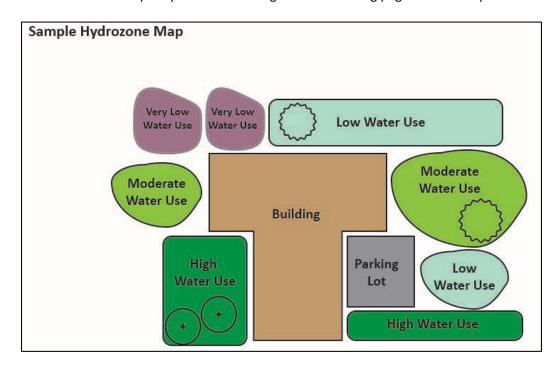
- 1. Landscape plans indicating hydrozones (see sample drawing below)
- 2. Planting schedule with selected plants and specific water requirements

Timeline

Submit documentation on the landscape plan and planting schedule in the site plan package

Resources

- Refer to the <u>City of Loveland plant list</u> to help you select plants with similar water requirements.
- Refer to the sample hydrozone drawing on the following page as an example.



6

7. Water budgeting

Points Possible: 5

Description

Provide landscape designs that meet or fall below Denver Water benchmark of 12 gallons per square foot (GPSF) of pervious area annually. Water used for community-serving food production is exempt.

Intent

Water budgeting conserves water, helping the city to achieve its community water efficiency goals.

Documentation Required

Projected outdoor water use of the site in GPSF of pervious area annually (maximum 12 GSFP) along with hydrozone plan

Timeline

• Submit documentation on the landscape plan in the site plan package

Resources

Download the EPA Water Budget Tool to help estimate landscape water requirement.

8. Recycling and composting enclosures

Points Possible: 5

Description

Designate space for recycling and composting collection (or other applicable waste stream) based on the building use. Recycling, compost, and trash space must be of equal size.

Intent

Providing recycling and composting enclosures enable future users to provide recycling and composting service in order to divert waste from landfills, helping the city achieve its community zero waste goals.

Documentation Required

- 1. Plan drawing demonstrating location and dimensions of trash, recycling, and compost enclosures
- 2. If applicable: Building plans showing internal waste infrastructure (trash and recycling chutes, etc.)

Timeline

• Submit drawing of enclosures location on the site plan in the site plan package (and on the building plans if using internal waste infrastructure)

9. Recycling and composting service contracts

Points Possible: 10

Description

Contract for recycling and composting collection services (or other applicable waste stream) based on the building use and management.

Intent

Providing recycling and composting service supports waste diversion from landfills, helping the city achieve its community zero waste goals.

Documentation Required

Signed 2-year minimum contract for a minimum of trash, recycling, and compost pick-up services (compost can be replaced with alternative waste stream services if applicant demonstrates sufficient volumes and diversion outlet)

Timeline

• Submit signed contract with building permits application

Resources

Use the list of licensed commercial waste haulers to find a hauler licensed in Lakewood.

10. Multimodal transportation assessment

Points Possible: 2

Description

Identify available pedestrian, bicycle, and transit connections to the site.

Intent

Identifying connections helps to inform wayfinding, connectivity with the existing transportation network, and other infrastructure improvements.

Documentation Required

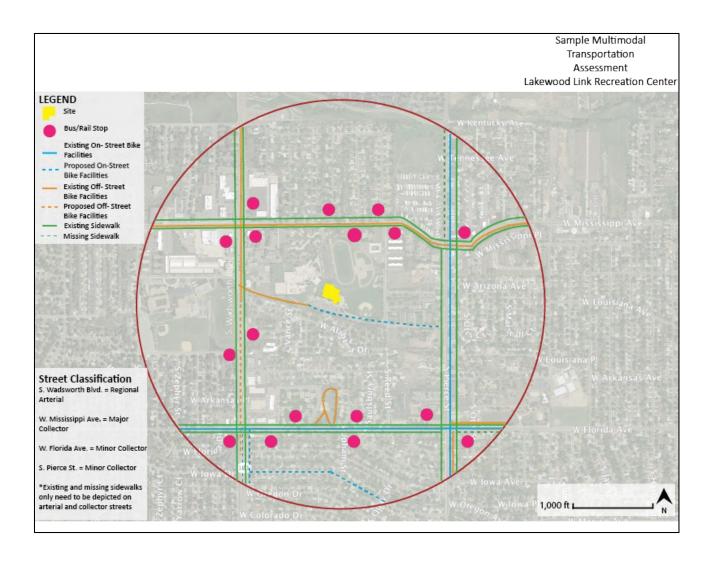
Plan drawing demonstrating (1) existing and missing sidewalks on collector and arterial roads, (2) existing and future on-street bicycle paths, (3) existing and future off-street bicycle paths, and (4) existing bus/rail stops within a 0.5-mile radius for suburban and urban contexts and a 0.2-mile radius for transit contexts

Timeline

Submit plan drawing as a separate exhibit in the site plan package

Resources

- Refer to sample drawing on the following page as an example
- Refer to the <u>Lakewood Bicycle System Master Plan</u> to identify existing and future bike paths.



11. Bike amenities

Points Possible: 2-5 (1 point per amenity)

Description

Provide bike amenities that are available to the community (fix-it stations with air pumps, bicycle vending machines, covered bicycle parking, designated space for dockless bike share parking). Amenities must be above the bicycle parking requirements in Article 8 of the Zoning Ordinance.

Intent

Bicycle amenities support bicycle commuting, which promotes healthy living and reduces air pollution, greenhouse gas emissions, and vehicle traffic.

Documentation Required

- Product specifications of bicycle amenities
- Plan drawing demonstrating amenities locations
- Narrative describing how amenities will be maintained over time

Timeline

• Submit product specifications, drawing of amenities location on the site plan, and narrative in the site plan package

12. Car share

Points Possible: 5

Description

Designate car share parking spaces and contract with a car share service provider.

Sample Calculation

- Minimum EV parking requirement*:
 2% x 5 = 0.08
- Number of public EV parking spaces: 1

Intent

Car share service provides an option for users who don't have access to their own vehicle, promoting multimodal transportation and helping the city to achieve its community health and emission reduction goals.

Documentation Required

- Plan drawing demonstrating car share spaces and signage location
- Calculation demonstrating (1) minimum number of parking spaces required and (2) number of car share spaces provided (minimum 2% of total in addition to total)
- Signed 2-year minimum contract with car share service provider

Timeline

- Submit drawing of spaces on the site plan in the site plan package
- Submit contract with building permits application

13. EV public parking spaces

Points Possible: 3 or 10 (3 points for level 2 charging infrastructure and 10 points for level 3 (fast charging) charging infrastructure)

Description

Install publicly available EV charging infrastructure and designated spaces. Charging infrastructure must be above electric vehicle charging requirements in Article 8 of the Zoning Ordinance.

Intent

EV charging infrastructure supports the use of fossil-fuel free vehicles.

Documentation Required

- 1. Plan drawing demonstrating publicly available EV spaces and signage location
- 2. Calculation demonstrating the infrastructure is beyond the minimum EV charging station parking requirements
- 3. Product specs of charging equipment (include level 2 or level 3 (fast charging))

Timeline

- Submit drawing of spaces on the site plan and calculation in the site plan package
- Submit product specifications with building permits application

Resources

• Refer to this Plug-In Electric Vehicle Handbook for Public Charging Station Hosts for guidance.

^{*20-}unit apartment in urban context

14. Transit station improvements

Points Possible: 5

Description

Improve adjacent transit stations (shelters, seating, wayfinding) in coordination with the city's multimodal transportation planning efforts.

Intent

Improved transit stations promote multimodal transportation, helping the city to achieve its community health and emission reduction goals.

Documentation Required

- 1. Plan drawing demonstrating improvement location
- 2. Product specs of station improvements (shelters, seating, wayfinding)
- 3. City of Lakewood Transportation Engineering approval
- 4. RTD approval
- 5. Narrative describing how improvements will be maintained over time

Timeline

Submit plan drawing, product specifications, approvals, and narrative in the site plan package

Resources

- Refer to the Jefferson County Wayfinding Guide and the RTD Design Guidelines and Criteria.
- Contact <u>RTD</u> to coordinate improvements.
- City of Lakewood Transportation Engineer: Toni Bishop, 303-987-7912, tonbis@lakewood.org

15. Social connection amenities

Points Possible: 10-20 (10 pts. per 0.5% of building permit valuation, up to 20 pts.)

Description

Provide amenities, above existing zoning standards, that support community interaction and are accessible by the general public (little free libraries, community bulletin boards, neighborhood meeting space, exercise equipment, play equipment, or equivalent).

Intent

Social connection amenities support community interaction and cohesion.

Documentation Required

- 1. Plan drawing demonstrating amenities locations
- 2. Product specs of amenities
- 3. Narrative describing how amenities will be accessible to the public and maintained over time
- Calculation demonstrating (1) building permit valuation and (2) amenities valuation (production and installation, min. 0.5% of building permit valuation)

Sample Calculation

- Building permit valuation: \$15,000,000
- Amenities valuation: \$100,000
- % amenity valuation of building valuation: \$100,000/\$15,000,000 =0.7%

Timeline

- Submit drawing of amenity location on the site plan, product specifications, and narrative in the site plan package
- Submit valuation with building permits application

16. Public art

Points Possible: 10-20 (10 pts. per 0.5% of building permit valuation, up to 20 pts.)

Description

Work with the City of Lakewood's Arts Programming Curator and Comprehensive Planning and Research staff (and the local business improvement district if relevant) to incorporate public art on the site.

Intent

Public art installations support the city's community public art goals and community identity.

Documentation Required

- 1. Plan drawing demonstrating art location
- 2. Specifications and commission of art piece
- 3. Lakewood Public Art Committee approval
- 4. Calculation demonstrating (1) building permit valuation and (2) art valuation (production and installation, min. 0.5% of building permit valuation)

Sample Calculation

- Building permit valuation: \$15,000,000
- Art valuation: \$200,000
- % art valuation of building valuation:\$200,000/\$15,000,000 = 1.3%

Timeline

- Submit drawing of amenity location on site plan and specifications in the site plan package
- Submit public art committee approval and valuation with building permits application

Resources

- City of Lakewood Arts Programming Curator: Laine Godsey, 303-987-7844, laigod@lakewood.org
- For projects in the 40W Arts District: City of Lakewood Principal Planner: Alexis Moore, 303-987-7503, alemoo@lakewood.org

17. On-site food production

Points Possible: 15

Description

Provide community-serving food plots for vegetable gardens and fruit trees.

Intent

Local food production supports the city's community health and local economy goals.

Documentation Required

- 1. Plan drawing demonstrating garden location, size, and number of garden plots, fruit trees, etc.
- 2. Narrative describing garden's accessibility, appropriate slope and soil, adequate sunlight, and available water source (exempt from water budget)
- 3. Calculation demonstrating (1) units or commercial equivalent (2) number of food plots (provided for min. 10% of units), and (3) combined area of plots (min. 20 sq. ft. per unit)

Sample Calculation

- Units: 60
- Food plots: 10
- % units with food plots: 60/10 = 17%
- Total area of plots: 250 sq ft.

Timeline

Submit plan drawing, narrative, and calculation in the site plan package

Resources

 Contact <u>Denver Urban Gardens</u> to request information and assistance with planning a community garden.

18. LEED Gold

Points Possible: 50

Description

Achieve LEED Gold certification.

Intent

LEED Gold buildings support the city's community energy, water, and green building goals.

Documentation Required

- 1. Documentation of a LEED AP on the project team, LEED registration, and pre-certification process completion
- 2. Documentation that LEED Gold is achievable

Timeline

• Submit documentation in the site plan package and with building permits application

Resources

• Learn more about LEED certification information.

19. Open Option

Points Possible: 2-50

Description

Provide enhanced amenities that are above requirements and approved by the Planning Director or Planning Commission.

Intent

The open option enables the applicant to propose creative and innovative community or sustainability features as part of the development.

Documentation Required

Proposal including a description, cost estimate, alignment with City goals and policies, points proposed and any documentation necessary to substantiate the claimed benefits.

Timeline

• Dependent on proposal