SITE & ENGINEERING PLAN

Laramie County Master Gardeners (LCMG)

Demonstration Garden Project — Five (5) Geodesic Dome Greenhouses

Cheyenne Regional Airport Property | Airport Parkway, Cheyenne, Wyoming 82001

Submitted to: City of Cheyenne Planning & Development Department | March 2026

Required Submittal Component	Status	Location in Document
Property Owner Signature / Letter of Authorization	**Included**	*Section 2 — signed authorization from Airport Board*
Site & Landscape Maps — 'Top View'	**Included**	*Section 4 — site plan narrative & landscape plan*
Proposed Building Elevations / Photos — 'Side View'	**Included**	*Section 5 — structural description & elevation data*
Civil Engineering (or Deferral Request)	**Deferred**	*Deferral requested — 1st submittal; see Section 6*
Drainage Study or Worksheet	**Included**	*Section 7 — full LID stormwater system described*
Traffic Study or Worksheet	**Included**	*Section 8 — low-traffic use analysis provided*
Open Space / Civic Open Space Information Sheet	**Included**	*Section 9 — open space approach described*
Exterior Lighting Plan	**Included**	*Section 10 — no new exterior lighting proposed*
Process Acknowledgements	**Included**	*Section 11*
Review Criteria Acknowledgements	**Included**	*Section 11*
Requested Relief from Regulations	**Included**	*Section 12 — fee waiver request and rationale*

SECTION 1: Project Identification & Applicant Information

Project Name	LCMG Demonstration Garden — Five Geodesic Dome Greenhouses
Project Type	New Construction — Agricultural / Educational Structures (Greenhouses)
Site Address	Airport Parkway, Cheyenne, WY 82001 (Cheyenne Regional Airport Property)
Legal Description / Parcel	Lot 1 and 2, Block 1, Morrie Avenue Parkway
Zoning District	Airport District
Total Site Area	Lot #1: 9,951 sq ft | Lot #2: 12,491 sq ft | Right-of-way: 9,015 sq ft Combined: 31,457 sq ft
Property Owner	City of Cheyenne Regional Airport Board Timothy Bradshaw, Director of Aviation tbradshaw@cheyenneairport.com
Lease Holder / Applicant	Laramie County Master Gardeners (LCMG) 501(c)(3) Nonprofit — Federal EIN: 87-0751489 Wyoming Nonprofit Lease term through June 2055 with optional extension
Primary Contact	[Kormakur Hognason, LCMG Vice-President 307-761-1584] | VP@LCMG.ORG [5316 Constitution Dr., Cheyenne, WY 82001]
Permit Applicant	Laramie County Master Gardeners (same as above)
Licensed general contractor	Ryan Magrum
Date of Submittal	March 2026

SECTION 2: Property Owner Letter of Authorization

NOTE TO APPLICANT: *A signed Letter of Authorization from the Cheyenne Regional Airport Board must be attached as Exhibit A. The template language below should be completed, signed, and returned on Airport Board letterhead.*

SECTION 3: Existing Site Conditions

3.1 Site Context

The project site consists of two adjacent lots (Lot #1 and Lot #2) and a Right-of-Way (RoW), located on land owned by the Cheyenne Regional Airport along Airport Parkway in Cheyenne, Wyoming. The site is currently vacant, unimproved land with one unconnected frost-free hydrant located at the intersection of the lots and the RoW, and a concrete platform 8' by 12 in the NW corner of Lot#2. The lots are bounded to the west by Airport Parkway and its associated gutter and sidewalk infrastructure. South of Airport Court, East boundary is Bradley Avenue.

3.2 Existing Site Data

Current Use	Vacant / Unimproved
Existing Impervious Surface	Existing site is pervious, except for 100' by 3' (half) of the paved alley east of Lot 2 = 300 sq ft.
Adjacent Land Uses	North: Vacant land | South: greenstormwater capture infrastructure | East: Eastridge residential neighborhood West: Airport Parkway
Topography / Grade	Level topography, slight slope from NW to SE
Existing Utilities	No existing water, sewer, or electrical connections on site, new connection to frost-free hydrant to be established. New irrigation water service to be established. No sanitary sewer connection proposed, at this time.
Existing Vegetation	Native turf grasses and low vegetation typical of southeastern Wyoming high plains
Soil Type	Clay loam surface with clay subsoil
Flood Zone	Flood Zone X (minimal flood risk)
Airport Influence Area	Site is located on Airport Board property; any height restrictions or avigation easement limitations confirmed with Airport Board

NOTE TO APPLICANT: *A boundary survey and topographic survey should be attached as Exhibit B. Confirm flood zone designation and any Airport Influence Area overlays with the City Engineer and Airport Board prior to final submittal.*

SECTION 4: Site Plan and Landscape Plan ('Top View')

The following describes the proposed site layout. A scaled site plan drawing (minimum 1" = 20') must be attached as Exhibit C and must include all elements described below.

4.1 Site Layout — Lot #1 (Primary Dome Site)

Lot #1 is the primary construction lot containing all five geodesic dome greenhouses and associated site improvements. The layout from west to east (Airport Parkway toward the site interior) is organized as follows:

Setback from Sidewalk (W)	Juniper windshield row at approximately 10–15 feet from sidewalk, West and North of Lot #1
Wind Protection Buffer	Austrian Pine wind diffusion row, providing vertical wind disruption and microclimate moderation North of Lot #2
Rain water harvesting & Primary Swale / Swaddle	10-foot-wide, 12-inch-deep infiltration swale at approximately 25–35 feet from sidewalk, runs for 100 ft parallel to Airport Parkway and Lot #1 see Exhibit C1 for details.
Dome Cluster	Five (5) 22-foot diameter geodesic domes (380 sq ft each) Peak height of each dome is 10.98 feet. The domes are arranged in a pentagon; minimum clearance between domes: 3 feet between each dome except 8 feet between dome #2 and #3.
Climate Battery Access	Three-layer ground-to-air heat exchange system buried beneath each dome floor. Pipes at 1.0 ft, 2.5 ft, and 4.0 ft below grade in a 17 ft × 17 ft square pit, 4.5 ft deep. Two vertical 18-inch manifold

	risers provide fan access and airflow distribution in each dome. Climate batteries are only planned for domes #1, #2 and #3 at this time. See Exhibit C1.
Tool Shed / Storage	One (1) tool shed — [dimensions 8 feet wide by 12 feet long and 8.5 feet high] — located at NW corner of Lot #2
Permeable Pathways	Permeable gravel pathways connecting dome entries and tool shed; no impervious hardscape proposed
Raised Vegetable Beds	Raised beds located [describe position]; funded by Feeding Laramie Valley grant
Curb Harvest Inlets	4-inch aperture curb-core inlets along Airport Parkway gutter (western boundary); exact count and spacing shown on Exhibit C1
Irrigation System	Drip irrigation system throughout dome interiors and raised beds; fed from proposed water tap

4.2 Site Layout — Lot #2 (Forest Sink)

Lot #2 functions as a vegetated Forest Sink to receive overflow stormwater from Lot #1 via a vegetated spillway channel.

Vegetated Spillway Entry	100-foot stone-and-grass overflow channel connecting Lot #1 to Lot #2
Tree Planting	Approximately 30 trees (native/xeric species — see Section 4.4)
Shrub Planting	Approximately 60 shrubs (native/xeric species — see Section 4.4)
Function	Evapotranspiration of diverted stormwater; regional windbreak; soil stabilization
Impervious Surface	The area of the geodesic domes 22’ dia = 380 SF, each, so the minimum additional impervious area is approximately 1900 SF. 8 F by 12 F wood tool shed = 96 SF

4.3 Setbacks and Lot Coverage

NOTE TO APPLICANT: *Confirm required setbacks for the applicable zoning district with City Planning & Development. The following are project estimates pending zoning confirmation.*	
Front Setback (Airport Pkwy)	[22.5 feet proposed] **|** [Required: 25 feet — confirm with City]
Side Setbacks	[22.5 feet proposed north and south] **|** [Required: 25 feet]
Rear Setback	[22.5 feet proposed east] **|** [Required: 25 feet]
Total Lot Coverage — Structures	5 domes × 380 sq ft = 1,900 sq ft + tool shed [96 sq ft] = approximately [1,996 sq ft] total
Lot Coverage Percentage	[6.35 %] of total site area **|** [Maximum allowed: X%]
Impervious Surface Added	None — all domes sit on permeable footing design; no new impervious paving proposed

4.4 Landscape Plan — Water-Wise and Native Plantings

All proposed landscaping is designed to meet or exceed the City of Cheyenne water-wise and native plant recommendations. No traditional turf grass is proposed. The landscape plan is attached as Exhibit D. Plant species are selected from the City of Cheyenne's Wyoscape Xeric Garden Plant List, Recommended Trees for Wyoming, and the Water-Wise Wyoming Gardens guidance.

Landscape Zone	Proposed Species / Type
Juniper Windshield (Lot #1 — West and North edge)	Rocky Mountain Juniper (Juniperus scopulorum) — xeric, native
Austrian Pine Wind Diffusion Row (Lot #2 – North edge)	Austrian Pine (Pinus nigra) — established in Wyoming; wind and snow capture
Forest Sink Overstory (Lot #2)	Native trees per Recommended Trees for Wyoming list — [species TBD based on soil survey]
Forest Sink Understory (Lot #2)	Native/xeric shrubs per Wyoscape Xeric Garden Plant List — approx. 45 plants
Swale / Infiltration Areas	Native grasses and sedges per Native Seed Specifications — no mowing required
Spillway Channel	Native grass / stone channel — non-erosive, no additional irrigation
Dome Surrounds	Permeable gravel mulch; no turf
Irrigation Method — All Zones	Drip irrigation within domes and raised beds only; all landscape plantings to be established with minimal temporary water then transitioned to xeric/rain-fed

Item / Variety	Qty
Canopy Fruit Trees (25 specimens)	
Haralson / Zestar Apple (3 trees)	3
Montmorency / Carmine Jewel Sour Cherry (2)	2
American / Stanley Plum (2)	2
Nanking Cherry (2)	2
Dolgo Crabapple (2)	2
Ure Pear / Golden Spice Pear (2)	2
Toka Plum / Pembina Plum (2)	2
Mount Royal Plum (2)	2
Evans Bali Sour Cherry (2)	2
Autumn Brilliance Serviceberry (4)	4
Subtotal — Canopy Trees	**25**
Berry Shrubs (50 specimens)	
Golden / Buffalo Currant 'Crandall' (6)	6

Gooseberry 'Pixwell' / 'Hinnomaki Red' (6)	6
Raspberry 'Heritage' / 'Boyne' (8 canes)	8
Serviceberry 'Regent' Saskatoon (5)	5
Elderberry 'York' / 'Adams' (4)	4
American Black Currant 'Consort' (5)	5
Red Currant 'Red Lake' (5)	5
Honeyberry 'Borealis' / 'Aurora' (5)	5
Sea Buckthorn M + F (6)	6
Subtotal — Berry Shrubs	**50**

A Native Seed Specification sheet for all seeded areas is attached as Exhibit E, consistent with City of Cheyenne Native Seed Specifications.

SECTION 5: Proposed Building Elevations ('Side View') and Structural Description

Scaled elevation drawings for all five geodesic dome greenhouses and the tool shed are attached as Exhibit F. The following describes key structural and elevation data.

5.1 Geodesic Dome Greenhouses — Structural Data

Structure Type	Geodesic dome — triangulated hub-and-strut geometry 2V (2 frequency)
Number of Structures	Five (5) identical domes
Diameter (each)	22 feet
Floor Area (each)	Approximately 380 square feet
Total Enclosed Area	Approximately 1,900 square feet (all five domes)
Apex Height (each)	[10'10"; confirm with construction manual]
Eave / Base Height	[16 inches]
Design Standard	University of Wyoming Extension geodesic dome construction manual (Dr. Jeff Edwards, UWY Extension) https://wyoextension.org/agpubs/pubs/B1387.pdf
Wind Resistance	Structural engineering principles of geodesic domes, originally developed by R. Buckminster Fuller and widely documented in dome engineering literature. Triangulated geometry distributes structural stress evenly; designed to withstand exposure Category C per Cheyenne building requirements. The dome's triangulated geometry is the engineering reason the structure can meet or exceed that requirement.
Snow Load Design	30 psf ground snow load (per Cheyenne design data); dome geometry provides exceptional snow-load distribution.
Frost Line / Foundation	Perimeter footing to minimum 36-inch frost depth as required by City of Cheyenne; [foundation engineer to confirm design]. Climate battery Layer 1 pipe at 4.0 ft (48 in) below grade — at conservative Cheyenne frost depth (42–48 in per ASCE 7). 2-inch XPS rigid foam (R-10) on all four pit walls provides lateral thermal insulation. See Exhibit C1.
Primary Frame Material	[Wood and PVC water pipe cut into 31/2-inch sections as hubs — specify]
Glazing / Skin Material	[Polycarbonate panels on dome #1 and #2, greenhouse-grade polyethylene on domes #3-5]
Occupancy Classification	Group U — Agricultural Greenhouse (IBC 2021); [confirm with Building Official]
Stamped Engineering	Foundation plans will be prepared by a Wyoming-registered design professional as required by the City of Cheyenne Plan Review requirements; to be submitted with final civil engineering set (see Section 6) See Exhibit D
Statewide Precedent	At least 35 identical 22-ft domes have been permitted across Wyoming since 2018, all based on the UWY Extension manual. All have passed local building inspection.

5.2 Subterranean Climate Battery

System Type	Ground-to-air heat exchange (GAHT) — subterranean climate battery
Applicable Domes	Minimum 3 of the 5 domes (funded by Farm Credit Services of America grant)
Description	A network of underground tubes is installed beneath the dome floor. Hot, moist air from the dome interior is circulated through the tubes; the surrounding earth absorbs and stores heat. Stored heat is released back into the dome when ambient temperatures drop, reducing or eliminating the need for supplemental heating.
Depth of Installation	Three-layer system: Layer 1 at 4.0 ft below grade, Layer 2 at 2.5 ft, Layer 3 at 1.0 ft. Pit depth 4.5 ft (below OSHA 5-ft shoring threshold — no shoring required). See Exhibit C1.
Tube Material	Layer 1: 4-inch perforated corrugated drain tile (ASTM F405). Layers 2 & 3: 4-inch perforated HDPE tubing (ASTM F405 or equiv.). All pipe wrapped in AASHTO M288 Class 2 non-woven polypropylene geotextile pipe sock. 60/40 washed gravel/native soil thermal medium throughout (273,387 BTU storage capacity). 2-inch XPS rigid foam (R-10) + 6-mil polyethylene moisture film on all four pit walls. See Exhibit C1.
Fan / Blower	Two low-voltage DC inline axial fans, 400–600 CFM rated capacity each, weatherproof enclosure, one per 18-inch corrugated metal culvert manifold riser. Differential temperature and humidity controller; fan activates when dome-to-battery ΔT threshold is met. See Exhibit C1.
Impact on Dome	17 ft × 17 ft square pit centered under dome floor. Dome base ring bears on undisturbed native soil with a 2.5 ft positive margin between pit edge and bearing ring at all side midpoints — no undermining of footings. Pit corners beyond 10 ft radius from dome center are not excavated to full depth. See Exhibit C1.

5.3 Tool Shed

Structure Type	Accessory storage shed
Dimensions	[8 Ft by 12 FT — funded via Feeding Laramie Valley grant for raised beds, irrigation, and tool shed]
Height	[8 Ft]
Material	[Wood]
Location on Lot	See Exhibit C — Site Plan

SECTION 6: Civil Engineering — First Submittal Deferral Request

In accordance with the City of Cheyenne Site Plan submittal requirements, LCMG requests a deferral of the complete civil engineering package for this first submittal. LCMG acknowledges that later submittals including the full civil engineering set may take longer to review and accepts this condition.

The following civil engineering documents are intended for preparation and submission with the second submittal:

- Stamped structural drawings for dome framing, consistent with the UWY Extension construction manual (Dr. Jeff Edwards)
- Subterranean climate battery installation drawings and specifications
- Utility plan showing water service connection, irrigation system routing, and any electrical service (if applicable)
- Right-of-way permit documents for curb-core inlet work on Airport Parkway (separate permit required per City requirements)

LCMG understands that a Wyoming-licensed design professional must provide stamped drawings for foundation plans. LCMG will coordinate with a licensed structural or civil engineer in Cheyenne to complete this package prior to second submittal.

NOTE TO APPLICANT: *A separate Right-of-Way permit must be obtained for any curb-core inlet work within the Airport Parkway right-of-way. This is distinct from the building permit. Contact the City Engineer's office at engineering@cheyennecity.org to initiate that process in parallel.*

SECTION 7: Drainage Study — Low Impact Development (LID) Stormwater Management System

The LCMG Demonstration Garden site incorporates a comprehensive Low Impact Development (LID) stormwater management system designed in alignment with the City of Cheyenne Stormwater Management Manual. The system is organized in three sequential phases that collectively capture, infiltrate, and evapotranspire stormwater that would otherwise enter the City's municipal storm sewer system.

7.1 Site Hydrological Baseline

Annual Rainfall (Cheyenne)	Approximately 15 inches/year
Design Storm Event	100-year storm event (primary design standard for detention basin sizing)
Existing Runoff Coefficient	[To be calculated by civil engineer; site is currently unimproved pervious land]
Post-Construction Impervious Area Added	Zero — no new impervious surfaces proposed; all dome footprints and pathways are pervious
Stormwater Outfall	Site is designed to retain and infiltrate all captured stormwater on-site; no increase in peak flow discharge to Airport Court storm sewer or culvert system

7.2 Phase I — Active Curb Harvesting and First Flush Capture (Lot #1)

A. Airport Parkway Curb Inlet System

1. Curb-Core Inlets: 4-inch aperture openings drilled through the existing gutter on Airport Parkway to intercept street runoff before it reaches the Airport Court storm sewer
2. Bored Conveyance: Gravity-fed 4-inch Schedule 40 PVC pipes bored beneath the sidewalk, directing captured runoff into the site
3. Junction Box / Sediment Baffle: PVC junction boxes installed at the property line to capture street grit and debris, protecting soil porosity on-site and keeping the City right-of-way undisturbed
4. Cleanout Access: All junction boxes designed for routine volunteer maintenance (sediment removal)

B. Primary Infiltration Swale ('The Swaddle')

1. Dimensions: 10 feet wide, 6 inches deep, running parallel to Airport Parkway at 25–35 feet from the sidewalk
2. Function: Captures the 'first flush' of storm events; provides zero-cost passive irrigation for adjacent domes and wind-buffer plantings
3. Overflow: Designed to fully infiltrate within 24–48 hours for storm events up to the 100-year event; no standing water beyond 48 hours
4. Mosquito Prevention: Drainage within 24–48 hours prevents mosquito egg hatching, meeting LID vector control standards
5. Infrastructure Setback: All deep basin features are set back 25 feet or more from the sidewalk; 2-foot-deep vertical root barriers installed to prevent subsurface migration toward sidewalk or utilities

C. Vegetated Spillway

- A 100-foot stone (river rock)-and-grass overflow channel connects Lot #1 to the Forest Sink on Lot #2
- Non-erosive design; sized to convey overflow from Lot #1 swale without channel scour

7.3 Phase II — Tiered Bio-Filtration Wind Buffer (Lot #1)

Layer 1 — Juniper Windshield	Rocky Mountain Juniper row at 10–15 ft from sidewalk; structural wind protection, snow deposition control, root uptake of shallow infiltrated water
Layer 2 — Swale / Swaddle	Primary infiltration zone (described in 7.2B above)
Combined Function	Tiered system slows wind, intercepts precipitation, and provides successive infiltration opportunities before any runoff reaches the dome cluster

7.4 Phase III — Forest Sink and Regional Infiltration (Lot #2)

Inflow Source	Overflow from Lot #1 via vegetated spillway channel
Layer 21— Austrian Pine Row	Vertical wind diffusion; snow capture; particulate filtration; long-term microclimate moderation for dome cluster
Vegetation — Trees	Approximately 30+ native/xeric trees — species per Recommended Trees for Wyoming
Vegetation — Shrubs	Approximately 45+ native/xeric shrubs — species per Wyoscape

	Xeric Garden Plant List
Primary Mechanism	Evapotranspiration: combined plant transpiration and soil evaporation of diverted stormwater
Secondary Benefits	Regional windbreak for entire site; soil stabilization; wildlife habitat
Impervious Surface	None

7.5 Operations and Maintenance Plan

LCMG will provide a recorded Operations & Maintenance Plan (O&M Plan) as a condition of approval and will assume full operational responsibility for the LID system. The O&M Plan will include:

1. Semi-annual inspection and cleanout of curb inlet sediment baffles and junction boxes
2. Annual inspection of conveyance pipes for blockage or displacement
3. Monitoring of swale infiltration rates; vegetation maintenance to prevent blockage
4. Inspection and maintenance of root barrier integrity
5. Annual inspection of spillway channel for erosion or blockage
6. Annual reporting of O&M activities to the City Stormwater Division

NOTE TO APPLICANT: *A formal Drainage Worksheet using the City of Cheyenne Stormwater Management Manual calculation methodology will be completed and attached as Exhibit G with the second submittal civil engineering package. The civil engineer of record will verify all basin sizing and infiltration rates against current City standards.*

SECTION 8: Traffic Study / Worksheet

The proposed Demonstration Garden is a low-intensity, volunteer-operated agricultural and educational facility. Based on the nature of the use, a full traffic impact study is not anticipated to be required. The following worksheet documents projected trip generation and site access conditions. Any vehicle parking will be on Bradley Ave only.

Primary Use	Greenhouse propagation, volunteer gardening, educational programming
Hours of Operation	Daylight hours, primarily weekdays and weekends during growing season (approximately March–October); limited winter access for maintenance
Number of Employees	Zero — all activities are volunteer-based
Daily Volunteer Visits (estimated)	2–10 volunteers per day during active season; up to 20–30 during organized educational events
Educational Group Visits	Periodic — middle school, high school, and LCCC groups; visits coordinated in advance; groups arrive by school bus or carpool
Delivery Traffic	Occasional material deliveries (soil, gravel, compost, irrigation supplies) — estimated 1–2 delivery vehicles per month during construction/setup; minimal thereafter
Site Access — Vehicles	Access from Airport Parkway — existing curb cut or to be established; [describe proposed access point] See Exhibit C2
Parking	Volunteers park vehicles on Bradley Avenue only — no new parking lot construction proposed. [Confirm adequacy with City Transportation and Airport Board]
Bicycle / Pedestrian Access	Site is adjacent to Airport Parkway sidewalk; pedestrian access from sidewalk via site entry path.
Trip Generation ITE Category	ITE Land Use Category 880 (Greenhouse/Nursery) or comparable low-intensity agricultural use — [civil engineer to confirm ITE rate if required by City]
Traffic Impact Conclusion	The proposed use generates minimal vehicular traffic. No signalization, turn lanes, or roadway improvements are required or proposed.

NOTE TO APPLICANT: *If the City Traffic Engineer determines a formal Traffic Impact Study (TIS) is required based on this worksheet, LCMG will commission a TIS from a qualified traffic engineer and submit it with the second submittal package.*

SECTION 9: Open Space Approach — Civic Open Space Information

The LCMG Demonstration Garden is designed as an entirely open, publicly accessible educational and agricultural demonstration site. The site does not include fencing that restricts public access during programming hours. The open space approach is consistent with the project's civic mission.

Total Site Open Space	Substantially all of the site excluding dome footprints and tool shed and half of paved alley path east of site constitutes open, pervious space
Civic Open Space Type	Community agricultural / demonstration garden — publicly accessible educational open space
Public Access	Open to general public during operating hours; educational programming open to all Laramie County residents
Enclosure / Fencing	No perimeter fencing proposed. Individual dome entries may be secured when unattended for equipment protection.
Enclosure / Fencing	If perimeter fencing is added in the future, a separate exterior fencing plan compliant with City of Cheyenne standards will be submitted for review and approval prior to installation.
Lot #1 Open Features	Windbreak planting corridor; infiltration swale/swaddle; permeable gravel pathways; raised vegetable beds accessible to program participants
Lot #2 Open Features	Forest Sink — entirely open vegetated space; functions as passive park/naturalized open space visible from Airport Parkway
Hardscape / Impervious	None — all pathways are permeable gravel; no concrete walks, parking lots, or paved surfaces
Amenities	Educational signage (to be installed identifying plant species, LID system components, and LCMG programs); [Seating / picnic area if planned]
Relationship to City Open Space Goals	Site advances City goals for water-wise landscaping, civic beautification, LID demonstration, and community food security in an open, publicly visible setting

SECTION 10: Exterior Lighting Plan

No new exterior lighting is proposed as part of this project. The Demonstration Garden is intended for daytime use only. All volunteer activities and educational programming will occur during daylight hours.

Proposed Exterior Lighting	None
Rationale	Site is operated exclusively during daylight hours. No security lighting, pathway lighting, or dome flood lighting is proposed at this time.
Future Lighting	If exterior lighting is added in the future, a separate exterior lighting plan compliant with City of Cheyenne standards will be submitted for review and approval prior to installation. If interior growth lighting is added in the future, a separate interior lighting plan compliant with City of Cheyenne standards will be submitted for review and approval prior to installation.
Interior Dome Lighting	Minimal low-voltage interior lighting may be installed inside dome interiors for early morning or late afternoon winter use. Interior lighting is not subject to this exterior lighting plan requirement.

SECTION 11: Process and Review Criteria Acknowledgements

11.1 Process Acknowledgements

By submitting this Site & Engineering Plan application, the Laramie County Master Gardeners (LCMG) acknowledge and agree to the following:

1. All documents submitted as part of this application are visible to the public in accordance with the City of Cheyenne OpenGov portal requirements.
2. Reviews will not begin until the application fee is paid in full. LCMG will submit the required application fee concurrent with this submittal. [Note: LCMG has separately requested a fee waiver — see Section 12. If the waiver is not granted prior to review initiation, LCMG will pay the required fee to avoid delay.]
3. Civil engineering documents have been deferred from this first submittal. LCMG understands that later submittals including detailed civil plans may take longer to review.
4. LCMG will respond to all plan review comments within a reasonable timeframe and will coordinate directly with the City's Building Safety Department, Planning & Development Department, City Engineer, and Stormwater Division as needed.
5. A separate Right-of-Way permit will be obtained for any work within the Airport Parkway right-of-way prior to construction of curb-core inlets.
6. All contractors and subcontractors engaged on this project will be properly licensed in accordance with the City of Cheyenne Contractor Licensing Regulations. [Note: LCMG intends to use a licensed general contractor to oversee volunteer labor and will confirm with the Building Official what components require licensed contractor oversight.]
7. LCMG will provide a recorded Operations & Maintenance Plan for the LID stormwater system as a condition of approval.

11.2 Review Criteria Acknowledgements

LCMG acknowledges the following applicable review criteria and confirms that the proposed project is designed to meet or exceed each standard:

Review Criterion	LCMG Response / Confirmation
Compliance with Zoning District Standards	Site is on Airport/Public land. LCMG will confirm applicable zoning designation and required standards with City Planning & Development prior to second submittal.
Compliance with Cheyenne Unified Development Code (UDC)	All proposed improvements designed to comply with UDC. Any variances will be identified and addressed in Section 12.
Compliance with IBC 2021 / IRC 2021	Dome structures designed per UWY Extension manual; stamped structural and foundation plans by WY-licensed engineer to be submitted with civil package.
Stormwater Management	Full LID system designed to reduce — not increase — stormwater burden on City infrastructure. See Section 7.
Water-Wise Landscaping	All proposed landscaping uses native or xeric species. No turf grass. Drip irrigation only within domes and raised beds. See Sections 4.4 and 7.
Traffic and Circulation	Low-intensity use with minimal trip generation. No roadway improvements required. See Section 8.

Exterior Lighting	No exterior lighting proposed. See Section 10.
Open Space	Substantially all of site is open, publicly accessible. See Section 9.
Public Benefit / Nonprofit Use	501(c)(3) non-profit and 509(a)(2) educational and charitable organization; all output serves public benefit — food security, education, civic beautification. See Section 12.

Applicant Signature (Authorized LCMG Representative): _____

Printed Name: Kormákur Högnason_____ Title: Vice-president_____

Date: _____

Property Owner Signature (Airport Board): _____

Printed Name: _____ Title: _____

Date: _____

SECTION 12: Requested Relief from Regulations — Fee Waiver Petition

LCMG respectfully requests the following fee waivers and/or reductions in connection with this Site & Engineering Plan application and the associated building permit process. This request constitutes a petition for relief from standard fee obligations based on LCMG's status as a 501(c)(3) public benefit organization, the charitable and governmental nature of the proposed use, and the project's demonstrated public benefit to the City of Cheyenne.

12.1 Fees for Which Waiver Is Requested

Administrative Relief	See associated application for Administrative adjustment
Building Permit Fees	Full waiver requested; or in the alternative, fees calculated based solely on cost of materials (consistent with Wyoming statewide precedent for volunteer-built geodesic dome projects). Estimated material cost per dome: $4,800.
Building Plan Review Fees	Full waiver requested; or reduced commensurate with building permit fee waiver.
Stormwater Utility Fees	Full waiver requested based on LID system that reduces — not increases — stormwater burden on City infrastructure; or reimbursement upon demonstrated proof of concept.
Water Tap Fees	Full waiver requested based on nonprofit status, charitable use (food security), and municipal beautification function.
Water Rate Charges	Full waiver or charitable rate requested; water used exclusively for propagation of food crops donated to local food pantries and native plants for civic beautification.

12.2 Legal and Policy Basis for Relief

A. 501(c)(3) Charitable Organization on Tax-Exempt Public Land

LCMG is a federally recognized 501(c)(3) and a 509(a)(2) public support organization. The project is located on land owned by the Cheyenne Regional Airport, a governmental entity. Under Wyoming Statute §39-11-105, property owned by a governmental entity and used for a governmental purpose — including public education and civic beautification — may qualify for exemptions from certain fees and charges.

B. Volunteer Labor — No Commercial Activity

All construction of greenhouse domes is performed under the oversight of a licensed general contractor and ongoing operations are performed by trained volunteers. No paid labor is employed. No commercial products are sold. Standard building permit fees calculated using imputed volunteer labor values are inconsistent with Wyoming statewide precedent: more than 35 identical 22-ft geodesic domes have been permitted across Wyoming since 2018, all assessed solely on material cost, with no imputation of volunteer labor. All passed local building inspection. None required a licensed contractor for dome erection.

C. Stormwater — Net Positive System

The LID system actively intercepts and infiltrates stormwater runoff from Airport Parkway that would otherwise enter the municipal storm sewer. The site functions as a public stormwater management asset. Imposing a stormwater utility fee on a site that reduces the City's stormwater burden is inconsistent with the fee's public purpose. LCMG offers to document the LID system's performance and provide proof-of-concept data in support of a reimbursement arrangement.

D. Water for Emergency Food Relief and Municipal Beautification

Water used in the dome irrigation system directly supports two charitable functions: (1) propagation of food crops donated entirely to Laramie County food pantries, directly addressing food insecurity for the 1 in 7 Laramie County residents currently experiencing food hardship; and (2) propagation of native flowering plants donated for civic beautification of public spaces throughout Cheyenne, a function that would otherwise require City expenditure. Charging market water rates for water used to produce free food and maintain City aesthetics effectively taxes charitable service delivery. LCMG requests classification of this water use as a charitable service input consistent with Wyoming's nonprofit exemption framework.

E. Alignment with Cheyenne's Development Incentivization Program

Cheyenne's existing Development Incentivization Program waives fees for projects benefiting low-income populations. LCMG's food security undertaking directly serves Laramie County's food-insecure population. LCMG respectfully submits that this project meets or exceeds the public benefit threshold established by that program.

F. Grant Funding at Risk

LCMG has secured $54,393 in competitive grants for this project: $10,000 from Feeding Laramie Valley (raised beds, irrigation, tool shed and a security fence); $29,393 from the Wyoming Department of Agriculture (dome construction materials and irrigation); and $15,000 from Farm Credit Services of America (climate batteries). Further material contributions; windbreak consisting of Juniper trees and Austrian pines and an irrigation system is being contributed by Laramie County Conservation District. A food forest orchard, consisting of fruit trees and berry shrubs and professional educational signage is contributed by Wyoming State Forestry. Total monetary value of these contributions is about $19,000. Standard fees calculated on volunteer labor would divert these limited grant funds from essential program materials — seeds, plants, irrigation components, and pathway gravel — effectively taxing a project that has already attracted outside public investment for the City's benefit.

12.3 Summary of Relief Requested

LCMG respectfully requests that the City of Cheyenne grant one or more of the following forms of relief:

1. Full waiver of building permit and plan review fees; or in the alternative, fees calculated solely on material cost consistent with Wyoming statewide geodesic dome permitting precedent
2. Full waiver of stormwater utility fees; or reimbursement upon documented proof that the LID system reduces net stormwater discharge
3. Full waiver of water tap fees and water rate charges for irrigation water used exclusively for charitable food production and civic plant propagation; or classification of this use under a charitable/nonprofit rate structure

LCMG thanks the City of Cheyenne for its consideration of this request and for its continued commitment to supporting community-serving organizations that reduce the burden on municipal services while advancing the City's public benefit goals.

EXHIBITS LIST

The following exhibits are attached to this Site & Engineering Plan submittal. Items marked [PENDING] are to be submitted with the second submittal civil engineering package.

Exhibit	Description	Status
Exhibit A	Property Owner Letter of Authorization (Airport Board)	*Attach signed original*
Exhibit B	Boundary Survey and Topographic Survey	*[PENDING — 2nd submittal]*
Exhibit C	Scaled Site Plan Drawing — Top View (1" = 20' min.)	*Attach scaled drawing*
Exhibit D	Zoning and Land-Use Justification: Geodesic Greenhouse Domes as Temporary Agricultural Accessory Structures	*Attach signed original*
Exhibit E	Native Seed Specifications for seeded areas	*Attach per City specifications*
Exhibit F	Climate Battery Installation Drawings — see Exhibit C1 for complete technical description, layer depths, pit geometry, materials list, and installation sequence	
Exhibit G	Drainage Worksheet / Stormwater Calculations	*[PENDING — 2nd submittal]*
Exhibit H	Stamped Structural / Foundation Plans (WY-licensed engineer)	*[PENDING — 2nd submittal]*
Exhibit I	LCMG 501(c)(3) Determination Letter and Lease Agreement	*Attach copies*
Exhibit J	LCMG Grant Award Letters (Feeding Laramie Valley, WY Dept of Ag, Farm Credit)	*Attach copies*
Exhibit K	List of Wyoming Geodesic Dome Projects (35+ domes since 2018)	*Attach supporting documentation*
Exhibit L	LCMG Beautification Project List and Community Impact Documentation	*Attach as available*
Exhibit M	Landscape Plan with Species List	*Attach landscape plan*
Exhibit N	Exhibit E Wyoming Dome Registry v2	*Attach copies*