

City of Longmont Park Design Guidelines

The purpose of these guidelines is to provide general direction to staff and consultants when designing a City of Longmont project. Staff shall send these guidelines to design consultants and utilize them as basic direction. Consultants shall incorporate these guidelines into their design.

1. General

- (a) All park elements shall comply with most current ADA, ASTM, AASHTO, CPSC, MUTCD, local and international building codes; and other industry guidelines.
- (b) All designs shall follow City of Longmont Public Improvement Design Standards and Construction Specifications – most current update and current approved materials lists.
- (c) Confirmation of and variances to these standards must be requested specifically in writing. The form, in Appendix A, must be submitted with each design to confirm adherence to standards and list items requesting variance.
- (d) Cut sheets of all manufactured equipment (components and colors) to be submitted to Natural Resources for approval as part of the design. Where multiple models/specifications are listed on a cut sheet, those installed must be clearly indicated.

2. Playgrounds

a) GENERAL

- i) All designs shall meet General Requirements (above) and provide IPEMA product certificates where available. When IPEMA certification is not available, 3rd party inspection and certification to ensure that they meet ASTM and CPSC requirements is required. Specify only IPEMA member manufacturers and components not being phased out.
- ii) REGULATORY – All designs shall meet CPSC and ADA regulations current at the time of design.
- iii) INSTALLER REQUIREMENTS: All playground equipment and surfacing installers shall be Certified Playground Safety Inspectors (CPSI) from the National Playground Safety Institute (NPSI) with a minimum of 5 years' experience. Provide certifications with Bid. Installation shall meet manufacturer's specifications, ADA

regulations, CPSC and ASTM requirements whichever is more stringent.

Construction shall include an inspection of play equipment staking certifying fall zone compliance is met prior to installation of play equipment. The inspection is to be performed jointly with the Contractor's CPSI and the City's CPSI, however the Contractor's CPSI is responsible for the certification. A notarized letter shall be provided from the Contractor to the City documenting the inspection and certification.

Turn over items: include in specifications for the contractor to provide a written warranty; touch up paint and special tools if needed at the end of construction. Provide equipment compliance showing ASTM F1487, CPSC handbook and IPEMA certificate(s) or third party certificate(s).

Design turn over shall include a plan that shows the ADA accessible route(s) including those from the parking lot, identifies ADA compliant components and of what type. A chart is also to be included on that plan sheet showing total size of playground, total number of components of each type (ground level, elevated), number of each type of component required to be compliant, and number that are ADA compliant in the design. *(Note: the playground design supplied by the playground representative is not always sufficient to ensure compliance. Ensure that the plans and charts required above include routes to the playground as well as within the playground, include natural components, components from other manufacturers, site furniture, sand play areas, etc. If a Landscape Architecture firm is involved in the design, it's best to get these ADA plans and charts from the LA firm as opposed to the playground representative).*

Playgrounds must include 3-D and plan view drawings of the proposed area and list of all component parts.

b) DESIGN:

- i) Playground designs shall have a diversity of play elements and serve all ages and abilities. Designs should consider the following developmental categories and experiences and incorporate as wide a variety as possible to maximize developmental opportunities and create exciting and inclusive play areas.

- a. Physical: Spinning; Sliding; Rocking; Swinging; Climbing, Crawling, Strengthening; Balance; Jumping, Bouncing; Walking, Running, Rolling.
 - b. Sensory: Tactile; Auditory; Visual; Interaction with Natural Features; Cozy Places.
 - c. Social: Cooperative Play; Social Interaction; Dramatic & Imaginative Play; Manipulative (Loose Parts) (where appropriate).
- ii. Specific Equipment Restrictions:
General Restrictions: wood components; metal slide beds; vinyl or other plastic coated chain; and fiberglass play elements
Swings: Slash proof seats with cushion edges; galvanized steel (as opposed to steel plated) lock hangers shall be used for swing hangers; top rails shall not have welded attachment.
ADA/Adaptive Swings: ADA/Adaptive swings with straps of any kind are not allowed.
Climbers: 4" post size minimum;
Freestanding: Spring toys to be minimized—if using, a C type spring, not coiled is required; digger toys to be minimized; steering wheels only with direct attachment to structure – not to a panel; panels: no gear driven panels without specific approval and panels to be durable and interactive; overhead track rides should have replaceable end cap; and no tetherball.
 - iii. Specific Equipment Encouraged: Spiral slides; freestanding spinners; swings (and especially those with higher top rail); climbing feature (walls). Water and sand play areas (see below).
 - iv. Landscaping: Keep shrubs out of traffic zones in and around playgrounds to the extent possible; eliminate or greatly minimize small shrub beds or small tree rings within hardscape areas; use railings or other means to discourage traffic through shrub beds.
 - v) Site Amenities in and around playgrounds: Fabric shade canopies are not allowed. Provide ample and a variety of seating opportunities. Place benches outside play curbing on concrete pads with ADA access as needed. Boulders may also be used for seating.
 - vi) Water splash grounds are to be designed to maximize access to components for ease of long term maintenance and safety. Straight sleeved runs of piping to nozzle locations are required. Provide sauna tube cold joints around each nozzle to assist repair

and future access. Use reputable manufacturer with highly durable products (in particular bollard activator buttons). Surfacing shall mediate slip and fall issues – stained + sealed concrete not allowed. Use low flow components / nozzles and use only where waste water can be intercepted downstream for irrigation use in a park site.

Sand Play Areas: Sand play areas are to be in self-contained located away from rubber resilient surfacing due to surfacing abrasion potential. Also locate sand areas (and EWF surfacing areas) away from water splash grounds

Use standard colors for all equipment. City shall select colors from manufacturers list.

- vii) Surfacing: Playground surfacing allowed must meet ADA, ASTM, and CPSC. Non- ADA compliant surfacing types must be combined with compliant surfacing types to provide overall ADA compliance for the playground. Accepted materials include:
 - a. Poured in place resilient with PIP top course to incorporate 50% black into the color & shall have an aliphatic binder for all bright colors.
 - b. Rubber resilient tiles (limited products)
 - c. Engineered Wood Fiber shall include mats under all swinging equipment and at all slide exits.
- viii) Curb wall: All playgrounds to have a concrete curb wall to hold resilient surfacing. Curb wall height to be adequate to keep material from tracking or blowing outside play area (adjust wall height or look at other means to contain material and shall be approximately 4” above resilient surface elevation as needed for loose materials.
- ix) Drainage: All playgrounds with loose fill surfacing to have a perforated pipe underdrain wrapped with fabric and gravel with cleanouts (located outside curbing and inside a valve box for access). Drain to an outlet pipe or storm sewer is preferred. Sump pits are discouraged.

3. Shelters

(a) GENERAL:

- i) Shelter manufacturer shall provide a 1-year minimum warranty against defects in materials and workmanship.
- ii) Turn over documents – shop drawings with all colors specified. Written warranties from installer, shelter manufacturer and roofing manufacturer (if different from shelter).
- iii) Concrete pad shall meet City of Longmont Public Improvement Design Standards and Construction Specifications and Approved Materials List.

(b) DESIGN:

- i) Materials: Steel, stone or masonry columns (or combination); standing seam pre-finished, galvanized metal roof with tongue and groove sub-roof.
- ii) 8' minimum to the bottom of the eave. Design to eliminate any structures or objects that can be climbed to access the roof within 10' of the roof edge.
- iii) Exposed beams & tops of columns or ornamentation to eliminate bird roosting areas. Avoid column base design and locating next to structures that could assist climbing onto roof.
- iv) Top of concrete footings to be flush with surrounding shelter pad around entire footing. Concrete pad to extend 12" minimum beyond eave drip edge. Drainage outside of shelter must sheet flow away from high use areas
- v) Roofing: Wrap fascia w/ pre-finished metal to match roofing including drip edge. Raised lip or snow guards on shelters generally not needed.

Where shelters and restrooms (or other roofed buildings) occur on the same site – a common roofing type is to be used so color and configuration can be matched.

- vi) Exposed wood shall be treated with a clear stain to preserve. Compatible graffiti sealer shall also be applied in addition to the wood stain.
- vii) Electrical: Include GFI outlets with non-lockable exterior metal covers (over each outlet box) in one shelter per park minimum. Face of GFI outlet boxes to be installed so they are flush with column face. Electric panel shall have separate circuits for each shelter's gfi outlets and timer to set hours of power availability. See electrical for more detail.

Lighting is optional but generally is not included inside shelters. Adjacent pedestrian pole lights may be used to light general area of shelter. Where directed to have lighting within the shelter, conduit shall be run interior to the columns with a sweep through the concrete footing. Minimize exposed conduit. See Electrical.

- viii) Colors to be approved by Project Manager. Standard pre-finished colors to be used.
- ix) Cupolas, solar tubes or skylights are encouraged for natural light & ventilation.

4. Buildings

(a) GENERAL

- i) A minimum 1-year warranty against defects in materials and workmanship shall be provided on all buildings. More extensive warranty requirements may be necessary for specific projects.
- ii) Green building products to be suggested where warranted. Cost and durability information to be provided for City review and consideration as part of the project design.
- iii) All buildings to meet building codes and ADA.
- iv) Turn over documents include: shop drawings, as-built drawings, color chart, 1 gallon of each paint type & color, roof color; roof type, finishes (flooring, tile etc.), fixtures schedule, Operations & maintenance manuals for all finishes and systems, warranties (general contractor warranty as well as roof, flooring and any other specialty products).

(b) DESIGN

- i) Uni-sex design is typical for most restrooms except in community parks.
- ii) Provide port-a-john enclosure and concrete pad with access for servicing for high use / year round areas as directed by the Project Manager. One option is to provide a space directly outside the restroom. Accommodate maintenance access for servicing.
- iii) Structure Materials: Masonry, steel, (stucco & dryvit are not allowed). The following materials are suggested: Ground faced concrete unit masonry with integral color; glaze-face concrete unit masonry with integral color; split face concrete unit masonry with

integral color; stone; brick or glazed brick, (discuss surface texture options with Project Manager).

Minimize exposed wood in public areas except as specifically noted or obtain approval from Project Manager.

- iv) Roofing: Pre-finished standing seam metal roofing system is standard per Approved Materials List. Use snow guards only over access doors or landscaping beds. Roofing shall eliminate raised lip at soffit line. Wrap fascia with metal roofing including drip edge. Match other existing roofing type and color found on site to the extent possible and where desired. Gutters are to be used only in high traffic, plaza areas like sports complexes, etc.
- v) 8' ceiling and exterior soffit height minimum is required.
- vi) Flooring: Epoxy quartz seamless integral poured in-place flooring with 6" – 8" coving is required in all bathrooms unless otherwise directed. Floor drain is required in all building rooms unless otherwise directed.
- vii) Walls and Ceilings (in publicly accessible spaces): Painted Hardisoffit with plywood backing; Painted cement board with plywood backing; glazed CMU or durable floor tile (for walls) with narrow grout joints required.
- viii) Provide a plumbing chase room where all piping, valves and controls are located. Buildings in community parks may include a small maintenance area. Discuss heated chase rooms at the time of design with Project Manager. Where used see Mechanical / Electrical.
- ix) Discuss during design if buildings should include a storage area sufficient to include an EZ-Go cart or similar equipment. Durable double leaf door to be used in these areas. Include exterior pad and hose bib for cleaning carts.
- x) Changing tables are to be a pre-cast, stained and sealed concrete table. Changing tables are required in all uni-sex and in both gender segregated restrooms. Tables are to be attached to the wall with heavy duty brackets.
- xi) Designer to recommend partitions that are durable and municipal grade. Eliminate partitions where possible such as uni-sex restrooms. Restroom stalls are to be attached securely to both floor and ceiling.
- xii) Natural light is strongly encouraged. Vandal resistant solar tubes or skylights (non-opening) are encouraged.

- xiii) Doors: Doors to be all steel doors (14 gauge) with continuous laser welded seam. Exterior (staff only) access doors to be protected using a lock guard. Doors to also include a kick plate at the bottom. Locate public access door towards street or parking lot for enhanced surveillance and public safety (CPTED practice), but not facing south if possible to minimize door expansion. Doors are to open out.

Doors to not exceed ADA limits for operation.

- xiv) Door locks: All exterior public access doors to include an electromagnetic door lock – see Mechanical / Electrical. Magnetic door lock is to be enclosed in a metal framed enclosure.

Include privacy lock in door handle that allows locking when door is in closed position (only). Best Access system locks are to be used for exterior door locks and winter shut down, blank face plate on interior.. Designer to include notes that the contractor is to provide construction cores with permanent cores provided by the City.

Discuss during design door locking and which staff or public groups might need access. In general, doors that will be accessed by Recreation Services are to be keyed for their access. Doors that will be accessed by outside user groups to have key pad entry lock.

- xv) Finishes: Interior spaces to be painted with commercial grade epoxy based paint. Paint and finish colors to be approved by Project Manager.

Graffiti coating is not to be used. A “sacrificial” clear sealant or unsealed block or concrete is preferred for masonry or concrete.

- xvi) Vines and/ or thorny shrubs to be planted on exterior of buildings to prevent vandalism where possible. Architect to coordinate with landscape architect regarding planting areas.

- xvii) Downspouts & Gutters: Most areas do not require use of downspouts of gutter systems. Where needed in community parks use Electrical Metal Conduit (EMC) piping painted to match roofing for gutters and downspouts where needed and include access for cleaning. Downspouts to extend below concrete flatwork and be piped into storm drainage system.

In most situations use snow guards (where needed) over access points and to eliminate drainage onto high use walkways. For most situations sheet flow off the roof is acceptable with snow guards and/ or roof extensions over access points per roofing (above).

4. Restroom Accessories

(a) GENERAL

See approved materials list – Appendix C.

(b) DESIGN

- i) No mirrors or soap dispensers are to be used in public restrooms.
- ii) No paper towel dispensers or trash cans—use semi-recessed electric dryer.
- iii) Locate trash & recycling receptacles on exterior of restroom, not in interior.

5. Plumbing and Fixtures

(a) GENERAL

See approved materials list – Appendix C.

(b) DESIGN

- i) Sanitary service is to be cast iron from inside the building to the clean-out outside the building
- ii) Hot water is not provided in park restrooms.
- ii) Drinking Fountains: Exterior wall mount fountains at ADA heights including barrier railing. Pedestal mounted, freeze-resistant fountains are allowed when a building is not available. Color to be brown or other color as selected by Project Manager. Include dog bowl, bottle or jug fillers (with fountain or as separate fixture) where directed by the City – include floor drain below these fillers. Free standing fountains to tie into sanitary sewer or where allowable, into detention/ bio-filtration basins.
- iii) All restroom plumbing fixtures to be stainless steel. Top spud to be plumbed to route valve into chase room with all mechanisms concealed.
- iv) Commercial hose bib (1-1/2" size) to be provided outside stadium seating, concessions and restroom areas for maintenance use in

community parks, 3/4" size to be provided outside restrooms in other park and trail areas.

- vi) Water supply curb stop is to be installed directly outside restroom or in other visible location. Provision for winterization of plumbing systems via nipple for compressor is required.

7. Mechanical / Electrical

(a) GENERAL – See approved materials list – Appendix C.

(b) DESIGN

- i) Heating / Venting: Hard wired heating system required in heated building chase ways to maintain ambient temperature above 40 degrees F but not greater than 49 degrees F in community park restroom buildings (only). No heated chase room is to be provided in other buildings. Coordinate with Project Manager to confirm need for heated chase.

Any venting between restroom and chase to be secured and screened to prevent viewing into restroom.
- ii) Fan in restrooms to be activated to turn on with motion sensor and off with separate timer for adjustable run time during open hours. Fan in pump houses to be of sufficient size to eliminate heat damage to pumps.
- iii) Appliances: Energy star appliances and other green building products to be suggested where warranted. Provide cost and durability information to Project Manager for review during design.
- iv) Outlets: GFI outlets in shelters are to have individual dedicated circuits to each outlet (25 amp minimum). Power circuit options: GFI outlets to shelters could be controlled through a timer to activate that circuit housed with the electric panel for the site or tied into the irrigation controller for remote use (coordinate with Project Manager at the time of design). Designer to advise the City on current technologies that might aid remote powering of these outlets.

No outlets are to be included inside restrooms but provide power in chase room.

No plastic or aluminum covers allowed on any outlet.

- v) Electric hand dryers: to be used instead of paper towels.

- vi) Electric door locks: electro-magnetic type and shall also include a privacy lock. See Approved materials list in Appendix C. Assembly is to be specified along with any other necessary appurtenances. Lock to be connected to motion sensor, time clock and power supply including other appurtenances required for a complete and functional installation so that doors can be locked on a specific schedule. In case of power failure lock is to default open and include a panic bar for exiting.

Protect magnetic lock in metal framed enclosure (see Buildings).

- vii) Electrical system will be cold sequenced at the meter.
- viii) Discuss potential locations for surveillance camera installation, if any, and provision for mounting and electrical supply at the time of the design

8. Lighting:

- i) Lighting is generally needed in parking lots, restrooms and may be required on some trails. It is not generally provided at shelters, (confirm with Project Manager at the time of design).
- ii) Safety lighting circuit: exterior light at restroom entry doors and a single light in parking lot near the entry are to be wired separately and are to remain on all night. Other lights in parking are not considered part of safety circuit. Safety circuit lights are to be night activated using photo cell only. Other lights to be set to go off completely after park closing via timer & photocell.
- iii) Park lighting and exterior lights: Interior restroom lights to be activated by motion sensor. Exterior lights shall be photo cell activated and timer deactivated. Timers to be digital systems (see Approved Materials List).
- iv) Lighting Materials: LED lighting is encouraged where appropriate.

Fixtures to utilize standard list stocked by the City, if applicable. Use standard fixtures for underpass lighting in all cases. Other lighting should match previous projects where possible to minimize stocking and replacement issues. Designer to check with manufacturer to make sure specified fixtures and equipment are not due for discontinuation in foreseeable future. Specify only products that have individual replacement parts to eliminate need to replace entire fixture (no integral fixtures allowed).

Use higher wattage, low energy bulbs in restroom interior to obtain good light coverage. Specify fixtures with low cost / extended life / low energy use for bulb replacement. All lighting to be fully shielded to meet City development code 15.05.140.

Lighting shall have polycarbonate lens. Up lights (flagpoles and signs) shall be water tight and also include a rock guard. Light fixtures within public reach to include vandal cage around fixture. All guards to be stainless steel (not cast aluminum). Lighting in high vandalism areas such as underpasses to include supplemental cage to protect lens from vandalism.

Light fixtures shall have individual components replaceable; no integral fixtures.

- v) Pedestrian free standing light poles to have lens above bat reaching height (15' +/-).
- vi) Sports lighting to have full light pollution cut-off features. Sports lighting to have ballast at accessible (ladder) height and shall have main shut off controls accessible to sports groups via an exterior control box mounted for ground level access. Sports lighting to include remote control operation.

Some sports courts (and other special use areas) to include a push-button activation timer including an alarm prior to shut down.

8. Dumpsters

a) DESIGN

- i) Enclosures are to be provided at Community Parks (only) as directed by the Project Manager. Most situations do not require a dumpster.
- ii) Enclosures to accommodate current dumpster dimensions—check with Sanitation Division for current dimensions and type to be used at that location.

Dumpster interior slab to include bumper stops for wheels and to have 5% maximum graded apron on service side.

Dumpster location to provide for accessibility of trash trucks and discourage illegal dumping. Roofing is required along with visual screening.

Heavy duty locking gate required.

9. Walks / pads

a) GENERAL:

- i) Work shall meet or exceed City of Longmont Public Improvement Design Standards and Construction Specifications and Approved Materials List.
- ii) Design shall meet ADA and AASHTO guidelines.

b) DESIGN:

- i) All paths to be 8' minimum width for maintenance access – some areas may need to be 10' width or greater – and some secondary paths, which are not maintenance access routes, may be reduced to 6' width. Paths with Jet truck access are required to be 10' min.
- ii) Design a driving route through park site for maintenance and trash pick-up in coordination with Parks Operations. Access for patrol and maintenance vehicles is needed from roads and shall include adequate path clearance for turning movements and vehicle size.
- iii) Control joints are to be provided in concrete at sufficient intervals to eliminate or minimize cracking. Joints are required at all corners of structures. Tooled joints to be utilized as dictated by the design in plaza areas and larger pads. As per City of Longmont Public Improvement Design Standards and Construction Specifications, saw cut joints are to be used for all trails.
- iv) Concrete is to be used for all picnic table and grill pads to allow for washing. Pad to match adjacent path surfacing material for benches and trash cans.
- v) Mow Bands: Concrete mow bands are to be installed under all fencing except where adjacent surface is crusher fines and where a crusher fines mow band can be used.
- vi) Crusher fines are to be comprised of 3/8" minus material with 6% passing a 200 mesh sieve. Angular material is required. Color may be site specific and to be approved by the Project Manager.

Crusher fines to include hex (poultry) wire with 1" maximum opening in prairie dog areas. Crusher fines to be installed at 6" minimum compacted depth over poultry wire (where needed) and cross sloped at maximum slope of 2% for drainage. Pin wire and fabric to soil as needed to prevent any lifted areas. Excavate 6" depth of site soils and form edges of path using concrete forms, compact subgrade to 95% standard proctor and install crusher fines in two, 3" minimum lifts wetting and compacting with each lift. Finish surface should be firm and compact. Remove form boards carefully while backfilling to prevent spill onto crusher fines path.

10. Railing, Fence & Gates

a) GENERAL: All materials and installation to meet ADA guidelines.

b) DESIGN:

- i) Chain-link fence & gates – 9 gauge galvanized with top and bottom rail. No vinyl coating allowed. Closures to use ADA compliant pad-lockable U latches.

Chain link fencing standard is 8' height in most areas, with 10' height for ball field outfield fencing and other areas as directed. All fence posts to be set in concrete.

Chain link maintenance gates (fence height) to have standard locking "U" latches and kick plates.

- ii) Ball field Backstops – 9 gauge chain link fabric in top 16' of fencing and hood; and 6 gauge fabric in bottom 10' section of fencing. Provide three horizontal 2-3/8" fabric support rails in lowest section of fencing and 1" thick recycled plastic (trex or equal) or pressure treated wood boards at bottom of backstop. Bolt the boards to the three horizontal rails (covering all rails and fencing to the bottom of the backstop) to eliminate fence deformation.

- iii) Post and Wire fence & gates – high tensile smooth wire with wood wire spacers, and tensioners. Staple wire to pressure treated wood posts. Use 7 strands to prevent dogs beyond fence, and use 5 strand with wildlife clearance in habitat areas as directed. Wildlife areas shall include 1/2" white PVC pipe sleeving all top wires for improved visibility.

Set gate posts, corner posts and end posts in concrete with cross bracing as needed.

- iv) Dog park fence: Post and dowel fencing with wire mesh on inside (detail is available). Posts are to be set in concrete as per post and wire fence types above. Use heavy gauge LONG staples or screws with oversized washers to attach fabric to posts, rails and gates. Wire mesh shall be trenched in slightly below finish grade affording no gaps between finish grade and the bottom of the mesh. If seeding or sod is applied to finish grade adjacent to the fence, install mesh first, so the bottom of the mesh is set lower than the top of the turf.

Dog park gates shall include steel kick plate over mesh at bottom of gate (both sides) and heavy-duty two part ADA compliant U latch.

Include one 4' gate at each side of vestibule per entry area and one 10' minimum maintenance access gate as directed. See Maintenance & Pedestrian Gates below.

Dog park entrances to include a vestibule with concrete surfacing. Concrete pad to be sloped for drainage and to allow full gate swing.

- v) Stain wood fence posts and rails gray (Sherwin Williams #3013 Gray Birch semi-transparent stain).
- vi) Prairie dog enclosures – 4' high cedar picket fencing with 6' widths of 1" mesh poultry wire, or metal roofing panels 4' high with 5' T-posts and 6' width apron of 1" mesh poultry wire.

Install fencing over smoothed grade with pickets meeting grade level as close as possible or metal panels trenched in 12" below leveled grade.

Cedar fencing option: Install poultry wire to cedar fence and flatten over smoothed and leveled grade on the prairie dog colony side of the fencing. Staple the poultry wire to the cedar pickets 12" up the fencing with the remaining 5' of wire spread flat across the grade in front of the fence. Bend wire at 90 degree angle at the bottom of the fence. Use a minimum of 6" landscape pins or staples at 36" maximum spacing to secure fabric to grade. Add additional staples as needed so mesh lies flat and is completely secured to grade with no raised or loose edges. Staple pattern on cedar fencing to secure the wire completely to the pickets with no gaps or loose edges.

Metal roofing panel option: Dig a 12" deep trench in the fence alignment after generally smoothing the grade in the area. Metal panels should be overlapped at a minimum of one ridge and fastened to one another using sheet metal screws with appropriately sized pilot hole. Install the metal panels to the t posts at 8' centers using bailing wire and so that 1' of the panels is below grade and 3' above. Drill holes only large enough to thread the wire through. Sink t-posts 2' into the ground with the top of post at, or as close as possible, to the top of the panels and on the side away from the colony. Bury the bottom of the panels in the trench and backfill and again smooth the grade. Attach the poultry wire to the panels using sheet metal screws with washers or bailing wire with 12" attached to the panel and a 60" apron on the prairie dog colony side of the enclosure. Secure the poultry wire to the metal panels by drilling an appropriately sized pilot hole and inserting sheet metal screws and appropriate sized washer to hold the mesh tightly against the metal panels. If using bailing wire to affix mesh, drill holes at a maximum

size large enough to thread bailing wire through panel. Secure the mesh completely to the fence with no gaps or loose edges. Bend wire at 90 degree angle at the bottom of the fence. Use a minimum of 6" landscape pins to staples at 36" maximum spacing to secure poultry wire apron flat across the grade on the colony side of the fence. Add additional staples as needed so mesh lies flat and is completely secured to grade with no raised or loose edges. In areas where there is public access, install 1" corrugated tubing on the top edge of the metal panels to provide protection to the sharp edge of the panel. The color of the metal panels should be matched to that of existing metal barriers in the area if relevant. The colored side of the panel should face the direction most visible to the public.

- vii) Maintenance & Pedestrian Gates: Use standard agricultural steel gates painted black. Gates exceeding 4' width to have a stability wheel and post to lock in open position. Pedestrian gates to have a two way gate ADA accessible U- latch. Spring self-closure meeting ADA closure limits is required for pedestrian gates. Install steel kick plate at bottom of gate.

- viii) Steel Barriers and Railings: Steel safety railing (barrier) to be provided where drop exceeds 18". Steel to be finished with zinc rich primer (in wet areas such as fishing piers) and epoxy paint (black semi-gloss) or galvanized elsewhere except at bridge abutments where it should be cor-ten steel to match bridge materials. Openings to not exceed

AASHTO standards for spacing or playground safety standards if near a playground.

- ix) Flood gates: Galvanized steel pipe gate mounted on steel post with steel receiving post per detail.

11. Site furnishings

(a) GENERAL: Meet ADA for all site furnishings.

- i) Concrete pads to meet City of Longmont Public Improvement Design Standards and Construction Specifications.

(b) DESIGN:

- i) For all site furnishings use surface mounts where possible on concrete pad. Use in-ground mount for use within crusher fines areas. Concrete pads to have a 6" pad thickness typical.

Use stainless bolts to secure site furnishings to pads.

- ii) Bike racks: U type racks only – See Approved Materials List. Bike racks to be placed at buildings, near large shelters and at restrooms, as well as at other areas where congregation will likely occur. Place racks within view of use area.
- iii) Dog stations: Per detail in Longmont Parks & Greenways Sign System Manual. Dog pick up station to be placed at trail and park entries, at dog park vestibule areas and other areas as directed by the Project Manager.
- iii) Benches, Trash Receptacles and Picnic Tables - Thermoplastic coated seats and backs with powder-coated frames, expanded steel furnishings– see Approved Materials List.

Black site furnishings are the standard color for benches and picnic tables. Other colors may be suggested with City approval based on individual design needs.

Benches are to be placed around playgrounds as needed. Include benches in dog parks. Include benches along trails at approximately ¼ mile +/- spacing and at view areas or other logical points.
- iv) Trash and recycling receptacles: See Approved Materials List. Color: black for trash, blue (with matching lid) for recyclables. Trash can to include black plastic domed lid. Lid to be attached to receptacle by chain. Plastic coated, expanded steel trash receptacles to have 30 gallon galvanized standard trash cans without lids as liners. No plastic liners accepted.

Trash and recycling locations are to be consolidated to minimize cans; it is typical to create trash (and recycling per Project Manager’s direction) areas at trailheads, park or trail main entries and high use areas. Include a trash receptacle on exterior side of dog park fence near a dog pick up station and provide cans for dog waste near dog stations.

Place cans no closer than 15’ to table or bench pads and downwind of playgrounds, benches or picnic tables.

Use Pack your Trash signs where needed.
- vi) Bbq grills to be placed on downwind side of shelter to minimize smoke and outside the roof line to eliminate climbing onto shelter roofs.
- vii) Metal cigarette receptacles – See Approved Materials List. To be used outside main entry to buildings (not restrooms) and other areas as directed by Project Manager.

- viii) Sports storage areas and containers. Coordinate with Project Manager at the time of design. Where needed they shall be designed into project plans and placed on a concrete pad.

12. Sports Equipment

- a) GENERAL – Discuss storage needs for recreational venues at the time of design with Recreation Services.
 - i) Sports Equipment – Recreation Services shall specify sports equipment including goals, pads, scoreboards, etc. at the time of design.
 - ii) Storage areas – See Site Furnishings for storage boxes.

13. Irrigation

- (a) GENERAL: See City of Longmont Design Standards and Construction Specifications Approved Materials List.

- (b) DESIGN

- i) Pump houses –Pre-stressed concrete buildings or Strongbox enclosure per Project Manager direction.
- ii) PUMPS: Raw water delivery to be used where possible. Potable backup system required for raw water systems and shall be from nearby fire hydrant to fill pond or tied directly to irrigation system with removable jump bar and backflow device. Locate fire hydrant to accommodate this need.

Design pump systems to allow for limited on-going watering window per City direction while providing ample pressure and flow. Establishment watering for the first year should not be included in the watering window calculations, however must be feasible within a 24 hour cycle.

Pump systems to be single phase if possible and where economical with long term power use.

Variable speed pumps with Variable Frequency Drives (VFD) are required to accommodate drip zones and low water supply. See Approved Materials List for approved vendors.

Pumps to have self-flushing device for intake screen.

SCADA Control and Data system is required – See Approved Materials List for products.

- iii) Head-to-head coverage required for all irrigated areas, except in native grass areas where 70% coverage is allowed. Zone grass types (native/dry land vs. turf) separately. All trees & shrubs in native/dry land areas and shrub beds to get drip.
- iv) Sub-surface irrigation in general is not allowed. Where approved as an exception excavate entire area to 6" depth (no individual line trenching allowed); install pipe network and test in presence of Project Manager, backfill with amended topsoil. Alternate is to triple rip and amend soil, then trench in lines. Design to include provision for supplemental irrigation using a quick coupler(s) in close proximity to the subsurface irrigation zones for establishment purposes.
- v) Fertigation: Provide fertigation systems for community park areas or as directed by the City. Tank to be in close proximity to the pump house and sized to adequately fertilize the park; eliminating excessive refilling of tank. Tank to include secondary containment and stability in windy conditions.
- vi) Locate quick couplers at the head of the system as part of a winterization assembly. Also include quick couplers near ball field infields for watering and in native areas (where there is less than head to head coverage) for supplemental irrigation and per Project Manager direction.
- vii) Provide sufficient gate valves throughout the system to allow for maintaining an active system as much as possible while during repairs.

13. Landscape

(a) GENERAL: See City of Longmont Design Standards and Construction Specifications and Approved Materials List (Plant Materials List).

- i) Follow species recommendations from forestry agencies, if any exist, for Hazard tree species selection when locating trees near target areas such as playgrounds, benches and picnic tables.

(b) DESIGN

- i) Edging: See Approved Materials List. Shrub beds to have spade cut or steel edging only. In general use spade cut edges in naturalized areas and around tree rings, and use steel edging for beds in turf areas.

- ii) Mulch: See Approved Materials List. Use bark mulch for most landscape beds. Rock mulch may be used in in windy areas such as road medians. Depth of mulch is to be per Chapter 600 of the City of Longmont Design Standards and Construction Specifications.
- iii) Native plants are to be used along greenway trails and in habitat areas. Native plants or hardy adapted plants are to be used elsewhere to the extent possible. Increase forb species in grass mix for pollinators per the direction of the Project Manager.
- iv) Naturalized hardy introduced species may be used in park areas.
- v) Minimize perennial beds, and eliminate annual beds due to higher maintenance concerns. Project Manager to provide direction for exceptions to this standard.

14. Signage

a) GENERAL:

- i) Signage to comply with Parks & Greenways Signage System, or signs specific to the existing park signage plan (Sandstone Ranch & Dry Creek). See Signage System information at L:\Natural Resources\Parks Signs\Parks GreenwaySignage System
- ii) See User Guide and Standard Operating Procedure (SOP) for Signs in the Parks and Greenways Sign System package.

15. Turn over Items

(a) AS-BUILT DRAWINGS:

- i) City As-Built Mapping: GIS As-Built Mapping. Project Manager shall coordinate with GIS Division in Business Services to field map utilities, irrigation mainlines, laterals and equipment.

Trees As-Built - Coordinate with Forestry Services when the project is complete so they can pick up GPS locations and GIS assets data for trees. Provide landscape plan with species list to the City.

Signs As-Built – Coordinate with Project Manager or Parks Operations when project is complete to map GPS locations and GIS assets data for signage.

Trail As-Built – horizontal and vertical verification of trails. Confirm ADA has been met.

ii) Contractor As-Built Mapping:

Irrigation As-built drawings - See City of Longmont Public Improvement Design Standards and Construction Specifications for irrigation as-built requirements.

Playground As-Built – plan of final layout and assets. Completely fill out Playground Site Information - see Appendix B. All information on equipment and installation are to be as-built.

Utility As-Built - For projects that have a Construction Inspection Services inspector, they will do their own as-built mapping. For projects that do not have that inspector, Project Manager should ensure that an as-built drawing showing utilities is prepared. That drawing should include GPS locations and GIS assets data for all underground utilities including services, valves and clean-outs for secondary electrical, sanitary and storm sewer, potable and raw water, underdrains, pull boxes, manholes, etc. Project Manager is to provide the as-built drawing to GIS staff in Business Services for inclusion in the City GIS assets map.

(b) TURN OVER ITEMS:

- i) Other turn over items from the Contractor are to include: list of equipment and model numbers (for ordering) including size and style for all components organized by category of work (irrigation, building, etc.), testing equipment, remote hand-held radio control unit for irrigation, specialized tools, touch up paint, 1 gallon of each building paint color, roofing color model & manufacturer, spare parts and tools, keys to control boxes & water keys, seed tags.
- ii) Operations and Maintenance manual customized to each project including unique installations, unique soil conditions and on-going treatments, irrigation schedules for establishment and on-going situations.
 - 1. Playgrounds and resilient surfacing: include equipment manufacturer, manufacturer representative and their

City of Longmont Park Design Guidelines

Appendix B

Approved Materials List

Buildings

1. Roofing: Berridge standing seam pre-finished metal. Standard colors.
2. Door Lock Guard:
 - a. Model LG-1 with specified finish & material to match building / door.
Robert Brooke & Associates (supplier)
PO Box 2010, Birmingham, MI 48012-2010.
1-800-642-2403.
3. Door Handles & Locks:
 - a. Public areas: Best Access System 9K Series
 - a. Chase room door: D function chassis storeroom lock
 - b. Unisex single user restroom door: K (CS) function thumb turn deadbolt with concealed screws
 - c. Multiple user restroom door (used with separate deadbolt including flip lock on interior): N function chassis passage lock.
 - b. All locks to be Best 'Access System' with removable cores. Contractor is to provide construction cores. City will install permanent cores.
4. Grab bars: Bobrick model B-6806 (36" or 42"), or approved equal.
5. Toilet paper holder: Aslin, double roll, white, slow-rolling model TPD0200SR w/ friction sleeve.
6. Drinking Fountains: (Exterior wall mount) —Murdock model M-33 (ADA wall mount with stainless drain pan) is standard.
(Pedestal mount freeze resistant) - Murdock model M-43. Color to be brown or other color as selected by Project Manager.
7. Toilet fixtures: Acorn Penal-Ware Model 1685 (stainless steel)
8. Barrier Railings – BuyRailings.com - #1833 Drinking Fountain Barriers (stainless steel)
9. Toilet valves to be Sloan Regal or Zurn equivalent. Model number to be appropriate to specific installation. All valves to be equipped with Sloan B73A

handle, ADA compliant with less than 5# actuating pressure or Zurn equivalent.

10. Urinal fixtures
 - a. Acorn Penal-Ware Model 1702 (stainless steel)
 - b. Falcon Waterfree Urinal MAY be allowed (waterless)
 - c. Valves to be Sloan Regal or Zurn equivalent. Model number to be appropriate to specific installation. All valves to be equipped with B73A handle, ADA compliant with less than 5# actuating pressure or Zurn equivalent.
11. Sink fixtures: Acorn Penal-Ware 1652 Series – 18” Lavatory w/ Oval Bowl – ADA Compliant – Lav Filler Bubbler – w/ Lavatory Overflow
 - a. (if applicable) Sink escutcheon plate model 99457. With grid drain, use braided stainless steel water supply lines with stop, 1-1/4” cast brass offset tailpiece and P-trap, Truebro Model 103 ADA protective pipe cover kit. Cold water only is typical.
12. Jug filler: MDF is suggested manufacturer.
13. Electric hand dryer: World Model RA-5.
14. Electric door locks - electro-magnetic type. Assembly has three main parts including: 1) Door lock - MagForce 390+ high security lock by Schlage / Ingersoll. (single doors), 392+ for double doors including mullion, or 391+ for split armature doors without mullion, 2) Locknetics Series 510 12/24 VDC power supply. Lock to include power door bypass - circuit breaker using a motion detector or mechanical circuit breaker to release door for egress while in lock mode , and 3) Tork #DG100 7-day electronic programmable clock with battery back-up and auto daylight savings adjustment timer. Assembly is to be specified along with any other necessary appurtenances.
15. Timers - Tork #DG100 7-day electronic programmable clock with battery back-up and auto daylight savings adjustment timer. Timer to be digital.

Lighting

16. Sports lighting: Musco or approved equal with Control Link remote control feature.

Site Amenities

17. Webcoat bench, picnic table & trash receptacles – see City of Longmont Design Standards and Construction Specifications Approved Materials List.

Picnic table hold-down kit: Playworld Systems, Model: ZZXX1409 or approved equal.

18. BBQ grills: Jamestown Advanced Products – Fire View Camp Ring or ADA Swivel Grill, or approved equal.
19. Cigarette receptacles: Penn ash tower #PN5 powder coated black or Pilot Rock Smoker's stack powder coated black #SS/P/CY-1.

Irrigation (See City of Longmont Design Standards and Construction Specifications – Section 600 Approved Materials List)

20. Subsurface irrigation: Netafim where specifically approved for use by Project Manager.

Landscape Materials

21. Landscape Mulch: See City of Longmont Design Standards and Construction Specifications Approved Materials List.

Recycled rubber mulch may be approved for use in high wind areas.

Signs

22. See Parks and Greenways Sign System at L:\Natural Resources\Parks Signs\Parks GreenwaySignage System.

Building signs to comply with ADA requirements.

contact information and insurance certificate showing product liability limits.

- a. Also include: maintenance instructions, list of play equipment and colors, natural elements (boulders etc.), list of surfacing material(s) and colors, manufacturers installation drawings & instructions and compliance letters for the following:
 - b. Fall zone compliance (from playground installer); Installation compliance (ASTM F1487 & CPSC handbook); Surfacing compliance (ASTM F1292, ASTM 1951 and IPEMA certificate(s)); and Impact Attenuation test results.
- iii) Warranty documents needed: Overall project warranty. Specific warranty documents needed from each manufacturer of the following at a minimum to include: roofing, flooring, plumbing & mechanical fixtures, lighting, irrigation pump systems, phenolic resin signs, playground equipment, playground surfacing, and any custom feature.

Appendix A

Park Development Designer Certification and Variance Request

_____	Park Name
_____	Consultant
_____	Consultant Signature
_____	Date

This variance request and a copy of the above Design Standards list (marked up with notations as to exceptions) must be filled out completely and submitted with 50% CDs (or as otherwise requested by Natural Resources).

Design Standards Certification Statement:

I _____ certify that the above Parks Development Standards have been used in the design of this project. I certify that only the items notated on the list below for variance, do not comply with the above standards. All other items comply with the Parks Development Standards in all respects.

Variance Request and Justification

List all items by section number, letter and description and provide justification on why a variance is needed for this project. Attach additional sheets if needed.
