

THREE SISTERS MOUNTAIN VILLAGE

ALTERNATIVE DEVELOPMENT GUIDELINES

APRIL 2013

SUPPORTING DOCUMENT
THREE SISTERS AREA STRUCTURE PLAN

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Preface

These Alternative Development Guidelines (Guidelines) describe the architectural traditions, aesthetic guidelines and sustainability approaches for all improvements at Three Sisters Mountain Village (TSMV) including building additions, site work and landscaping. The Guidelines are intended to outline an approach so that buildings and landscape designs are innovative, sustainable and compatible with the site and the policies outlined in the Three Sisters Area Structure Plan (ASP). This document is to be utilized to craft project design guidelines for development in the ASP.

I.0 DESIGN APPROACH

Preserving the natural beauty and drawing on the rich history surrounding and the Bow Corridor and the Canadian Rocky region is the TSMV's foremost priority. The vision for the development focuses on preserving and enhancing its natural resources and encouraging more sustainable approaches in the following ways:

- **Respect and preserve the environment.** The vision begins with a strong respect for the natural environment. Development areas have been carefully planned with regard to resource assets to minimize impacts to the land. All Improvements (buildings, roads, trails and related structures) are to blend in with, rather than dominate, the natural surroundings.
- **Design buildings to fit the mountain environment.** The environment surrounding Plan Area calls for architecture that responds to the mountain climate and forested landscape. The rich architectural traditions of the Canadian Rockies should be used to create structures that emphasize the use of rustic timber finishes, natural stone and weathered metal accents. The particular concepts of these traditions as applicable to TSMV are described throughout these Guidelines. Refer to Section I.2 – Design Themes for further information regarding these traditions.
- **Incorporate sustainable design concepts and practices in site, building and infrastructure designs.** TSMV emphasizes environmental responsibility and the importance of incorporating sustainable approaches in all aspects of envisioning, building and implementing the project. The built environment has a profound impact on our natural environment, economy, health and productivity. A sustainable approach focuses on treating the existing community, land and resources responsibly and protecting what we are here to enjoy. Consequently, this creates an ecologically healthy, richer living environment that evolves into a lasting, long-term community.

I.1 DESIGN THEMES

The design themes reflect the main principles of providing a place that evokes a sense of retreat—a place to relax and enjoy the dramatic mountain setting and connect to the environment. Site, landscape and architectural treatments are to work in concert to continue to reinforce the following design themes:

- **Merge architecture with the landscape.** Careful site planning is to retain existing trees and minimize site disturbance. Architecture may then be blended with landscape areas through the use of transitional outdoor spaces, such as porches, decks, patios and terraces.
- **Maintain a human scale of architecture.** Buildings are to be broken down into a collection of masses to create a more personal and intimate environment. A clear hierarchy of building masses is to be used with “primary” building masses surrounded by “secondary” masses by stepping down wings and utilizing elements that express a size and scale consistent with the functions they enclose. Additive

elements such as porches, bay windows, dormers, balconies and doorways are to be used to create a rich and varied architecture.

- **Utilize natural and rustic building materials to create contemporary buildings suited to today's lifestyle.** Buildings and landscape Improvements are to use authentic, natural, or natural appearing construction materials, such as stone, wood and patinaed metals that are indigenous to the region and create contemporary mountain architecture that is inspired by the Canadian Rocky setting.
- **Express care and craftsmanship in detailing.** Diversity of design and individual expression is encouraged while still adhering to the design objectives described herein. Custom detailing at exterior walls, timber trusses, railings, beams, rafters, corbel braces and other details provide the opportunity to enrich the built setting and give buildings their own unique “personality.”
- **Take advantage of climatic influences.** The climate in the mountains exhibits a dynamic pattern of changing conditions throughout the year. Buildings and outdoor spaces are to be designed to respond to these patterns. Roofs may provide welcome shade at porches during the summer and a protected entryway during winter snowfalls. Outdoor rooms are to be designed with their potential use and weather constraints in mind.
- **Reinforce the “green infrastructure” system as the organizing element.** Building masses, landscape plantings and outdoor areas are to work together to reinforce the “green infrastructure” system. Buildings, outdoor treatments and streetscapes should be designed with the person and the car in mind, not just the car. Careful site planning, landscaping and massing design are to address the neighborhood streetscape, open space corridors and trail systems as well as individual buildings.
- **Foster interaction and connection.** Buildings and related Improvements are to be designed with a strong sense of connection to the outdoors and the rest of the Plan Area. The close relationship with the natural environment fosters interaction among the TSMV development and the Town. In addition to outdoor rooms located in more private and intimate areas of the development, porches, terraces and other outdoor living areas may be oriented towards streets to reinforce the streetscape. These semi-private places augment the livability and vitality of these areas while allowing casual interaction within the development.

1.2 THREE SISTERS MOUNTAIN RESORT ARCHITECTURAL STYLE – THE ROCKY MOUNTAIN AESTHETIC

Architecture for the Plan Area may use two general styles, defined broadly in these Guidelines as “Rustic” and “Arts and Crafts.” These styles draw from prevalent Canadian Rocky Mountain architectural traditions and themes to create Building designs that are well-suited to the mountain environment. These styles are generally defined as:

- **Rustic Style:** This style emphasizes the use of rusticated, weathered, “native” materials often combined with oversized structural components on battered stone

bases that root the structure to the ground. Materials include timber, logs, and stone with bulky metal hardware accents to create structures with textural and tonal qualities that fit naturally into the mountain landscape.

- **Arts and Crafts Style:** This style is similar to the Rustic Style in that it also emphasizes the use of “native” materials, oversized components and rugged stone bases that ground the architecture to the site. This style, however, centers on the concepts of incorporating a more hand crafted, refined approach in creating more “organic” details that directly relate to the forms found in nature.

Designs are to draw on the concepts of the Rustic and Arts and Crafts stylistic approaches as noted below and as referred to throughout these Guidelines:

- Buildings and landscape elements are to respond to the existing site topography. Building foundations and ridgelines should step to follow the land’s natural slope and unique site conditions.
- Natural building materials should be used, such as stone and timber that appear to be local to the region. Building materials are to create a rich, natural texture consistent with that of the surrounding environment.
- Emphasis should be placed on well-proportioned, informal building masses with a hand-crafted or custom finished exterior appearance. Custom details are encouraged in order to add variety and uniqueness to outdoor areas and neighborhoods.
- Roof designs should utilize simple gable forms with deep overhangs that provide shade at windows, entries and porches. Minimizing the amount of roof types, steps and shapes are critical in creating a simple structure that is subordinate to the landscape.
- Building siting should emphasize the indoor-outdoor relationship by using clusters of room-sized volumes, outdoor rooms and/or separate building wings for easy access to the outdoors from every area in the building. Separate building wings may be detached and/or attached by arcades or breezeways.
- The careful selection of building materials should focus on utilizing those options that are more sustainable while adhering to the overarching concepts of the Rustic and Arts and Crafts styles. Using reclaimed or salvaged wood, regional quarried stone, and/or local artisans for metalwork all support the underlying themes of creating a more authentic architecture that “belongs” in this setting.

I.3 THE COMMITMENT TO ENVIRONMENTAL STEWARDSHIP

TSMV is committed to fostering sustainable building approaches and concepts in the planning and development of all Improvements within the Plan Area. Sustainable design and environmental stewardship are philosophies that include all aspects of site planning, building programming and design, and construction to minimize the impacts on economic, cultural and

environmental resources. The sustainable measures dispersed throughout this document are highly encouraged; some of these sustainable measures, as noted below in Section 1.4.1, are intended to be implemented as requirements. By incorporating the sustainable design concepts described in these Guidelines, Owners actively engage in the ongoing Stewardship and “ownership” of the environment they live in.

1.3.1 Design Measures

As part of the overall commitment to sustainable design for the Plan Area this section outlines sustainable measures that are required. The following guidelines are described further in applicable sections. This is in addition to all sustainable measures required by the Town of Canmore.

- Installation of ENERGY STAR® appliances (or similar rating) for dishwashers, refrigerators, clothes washers and ceiling fans.
- Utilization of natural gas in the home for clothes dryers, cooking stoves, heating stoves, central air furnaces, water heaters and/or boilers.
- Utilization of high performance windows, such as ENERGY STAR® windows with a maximum window U-factor of 0.65.
- Utilization of certified low volatile organic compound (VOC) paints for interior applications.
- Utilization of drip irrigation systems with rain/moisture sensors rather than standard sprinkler systems for all landscape applications with the exception of turf areas.
- Residential construction will use the appropriate Built Green level that would achieve a minimum EnerGuide score of 80.

1.3.2 Stewardship Principles

A building’s design and siting determines its overall ecological impact. The following Section summarizes overall design strategies and fundamental site planning concepts that utilize Low Impact Development techniques (LID) to meet sustainable goals. The essential goal of the Stewardship Plan for residential and commercial Improvements is to maintain or replicate the predevelopment hydrologic functions of the site through the use of design techniques. These techniques are to be utilized to the greatest extent possible in stormwater management and site planning design. The following principles are described further in applicable sections.

- Site buildings to minimize grading and earthwork. This reduces construction materials and disturbance, such as those associated with retaining systems and drainage redirection, and minimizes soil erosion and downstream water impacts.
- Reduce hydrologic impacts by minimizing impervious surfaces, graded areas, and vegetation clearing.
- Allow for a distributed control of stormwater methods by using a network of smaller, simple solutions throughout the site. This includes finding increased opportunities for infiltration (utilizing pervious surfaces) or containment on-site, depression storage, bioswale applications and vegetated swales, which mimic the natural hydrologic functions of the site while adding aesthetic value.
- Control stormwater at the source rather than only using end-of-pipe solutions. Minimizing or mitigating hydrologic impacts of land use activities closer to the source of generation by infiltration, interception, retention ponds, and/or depression storage decreases the need for pipe and protects the landscape and

water quality.

- Decrease the utilization of typical engineering materials such as concrete and/or steel. By using materials such as native plants, soil, crushed rock applications and/or water features, a more integrated “natural” landscape will result. The design of all Improvements focuses on integrating these concepts into site designs in order to preserve and enhance the site’s unique quality and character.

2.0 SITE AND LANDSCAPE PLANNING GUIDELINES

The following chapter sets forth Guidelines for all site work relating to all built Improvements, including grading, planting, siting of structures, design of outdoor areas, and preservation and enhancement of the landscape and views.

2.1 SITE AND LANDSCAPE OBJECTIVES

Incorporate site-specific design solutions that are responsive and subordinate to the site topography, climate and environment. Buildings are to be sited to minimize grading and maintain a low, subordinate profile against the backdrop of the surrounding trees. Outdoor areas are to take advantage of sunlight, provide wind protection and capture views.

- ***Preserve, protect and enhance the existing forest and natural environment.*** Buildings are to be sited to minimize tree removal and preserve the integrity of the surrounding forest. A natural buffer is to be maintained between buildings and streets, neighboring building sites and other off-site areas.
- ***Design courtyards, decks and outdoor spaces to emphasize the outdoor-oriented lifestyle.*** Natural/existing landscape features such as rock outcroppings, vegetation and topography are to be incorporated into landscape designs to achieve a gradual transition between the built and natural environments.
- ***Use natural and indigenous stone and wood building materials for landscape structures, site walls and outdoor areas.*** Building materials should be focused on using finishes that have a more natural and weathered look so that exterior materials appear to be closer to their natural state.
- ***Build upon, enhance and extend the open space system that knits the Resort together.*** All building Improvements and landscapes are to take their cue from the overall landscape setting and connections to the open space system. Designs should focus on and respond to the pedestrian environment, rather than solely on the automobile environment. Trails and paths are to be incorporated to connect and continue the overall trail network.
- ***In multi-family areas, each “neighborhood” is to be designed as a pedestrian-oriented “mountain enclave” that is distinguishable from other neighborhoods by building location, planting and architectural detailing.*** Townhouses, Condominium buildings and similar multi-family neighborhoods are to be nestled into the surrounding landscape to create enclaves that are distinct yet consistent with the overarching principles of the Rustic and Arts and Crafts styles.

2.2 SITING CONSIDERATIONS

Objectives:

- *Integrate built Improvements with natural landforms, vegetation and other landscape characteristics that are unique to the setting.*
- *Minimize the visual impact of buildings and related structures.*

- *Minimize site disturbance to the greatest extent possible.*

Guidelines:

- The long axis of the buildings and principle building masses are to be oriented parallel to existing contours.
- Structures built on sloping sites are to utilize stepped foundations and fragmented roof forms to mirror the profile of the natural topography.
- Existing features, such as trees or rock outcroppings are to be protected and integrated into the design of buildings and their setting.
- All Improvements, driveway turnaround areas, site disturbance associated with construction of buildings, and grading around the buildings are to be located to minimize disturbance to the greatest extent feasible.
- Site buildings to take advantage of solar orientation, prevailing breezes, natural daylighting and ventilation to decrease the reliance on energy.

2.3 GRADING

Objectives:

- *Protect and preserve existing vegetation.*
- *Blend site Improvements by utilizing natural land forms that mimic the natural topography.*

Guidelines:

- Flatpad grading is discouraged. All cuts, fills and retaining walls are to create smooth transitions at the top and bottom of slopes that appear as extensions of the natural landform. Grading designs are to protect and retain as many existing trees, vegetation and rock outcroppings as possible.
- Slopes are generally not to exceed 3:1. Slopes in excess of 3:1 may be considered provided the stabilization treatment and design is consistent with the best management practices (BMP's) laid out in related project documentation. Natural slopes are to be used instead of structures wherever feasible.
- Grading is to be the minimum necessary to accommodate the development of buildings, patios, driveways, parking areas, trails and other needed Improvements.
- Cut and fill slopes are to be re-vegetated with plantings appropriate to the site.
- Cut and fill quantities are to be balanced on-site to the extent feasible.

2.4 RETAINING AND SITE WALLS

Objectives:

- *Minimize disturbance to the site.*
- *Integrate retaining walls into the existing topography to reinforce the connection of the architecture with the landscape.*
- *Use stone that appears to be local to the site and constructed with traditional dry-stack*

and/or boulder methods to reinforce the Rustic and Arts and Crafts aesthetic.

Guidelines:

- Retaining walls should not exceed 6 feet (1.8 meters) in height. Retaining walls over 6 feet in height may utilize a terraced wall design with ample planting pockets (minimum 4 feet wide, or 1.2 meters).
- Tops of retaining walls are to blend with natural contours. Walls are not to end abruptly, but are to transition naturally into existing landforms, rock outcroppings and vegetation.
- Vegetation should be planted at the base and top of walls to blend them with the site.
- Retaining walls in excess of 2 feet or 60 centimeters in height are to be designed with a batter.
- All walls should be built of native-appearing stone laid to appear structural and not veneered.
- Boulders are to appear native to the site. At least 1/3 of boulder diameters are to be set into the ground and laid horizontally. Boulder walls may not be arranged in formal, rigid alignments and should be grouped together in naturalistic patterns.
- Site walls are to appear as extensions of the architecture to create outdoor rooms and visually tie buildings to the site. Site wall height should not exceed 8 feet or 2.4 meters.

2.5 DRIVEWAY AND PARKING REQUIREMENTS

Objectives:

- *Minimize visibility of garage doors, paving and parking areas.*
- *Blend driveways with the existing landforms.*
- *Preserve the natural features of the landscape setting.*
- *Reduce impervious pavement to the extent practicable.*

Guidelines:

- Driveways should be a minimum of 12 feet or 3.7 meters and a maximum of 14 feet or 4.3 meters wide, except where they provide a turnaround at garages. Every effort is to be made to minimize paved areas of driveways, turnarounds and parking areas while still conforming to required safety and parking needs.
- Asphalt is the preferred material for use on driveways. Stone and concrete pavers may be used within autocourts, focal entry areas and to direct pedestrian movement (such as trail crossings). When used, concrete pavers are to be integrally-colored in muted tones that blend with the landscape.
- Driveways are generally to be constructed without curbs. Where curbs are required to direct drainage, they should be made of stone or colored concrete. Colors of finished paving materials are to blend with surrounding landscape earth

tones.

- Parking space requirements are to comply with all applicable governing documents while employing shared parking approaches as applicable to help reduce paved areas and increase reliance on alternative modes of transportation.
- Parking spaces are to be screened from adjacent roads and neighboring building sites by using a combination of careful siting, planting, grading and/or walls.
- Driveways and parking designs are to consider snow shedding and provide for adequate snow storage.
- Driveways, in general, should not to exceed a 12% gradient, but may go up to 16% for short runs. Heated driveways may be used as feasible.
- The use of concrete and asphalt paving material containing recycled content is strongly encouraged as is the use of pervious types of paving.

2.6 DRAINAGE SYSTEMS AND STRUCTURES

Objectives:

- *Utilize fundamental stewardship concepts to preserve and/or mimic the natural hydrologic functions of the site.*
- *Minimize disturbance of the site to protect downstream water quality.*
- *Control stormwater at the source, to the greatest extent possible, by utilizing on-site detention and infiltration techniques.*

Guidelines:

All drainage Improvements are to utilize the concepts and Best Management Practices (BMP's) outlined in the Master Drainage Plan (MDP) for Three Sisters to create a "multi-functional" landscape.

- Identify and preserve all sensitive areas that affect hydrology, including drainages, wetlands, steep slopes, and mature vegetation, to minimize hydrologic impacts.
- Existing drainage courses are to be protected and drainage patterns maintained to the extent feasible.
- Headwalls, lined ditches, and similar drainage structures are to be consistent with Resort-wide community Improvements. Where visible from other off-site areas, they are to be built of, or lined with, an approved stone. Metal and concrete pipes are to be concealed.
- Drainage across or under driveways is to be incorporated into driveway and apron design and concealed with stone headwalls similar to those used as part of the Resort infrastructure.
- Drainage design is to minimize any potential for erosion and consequent downstream water quality impacts.
- Installing above and/or below-ground stormwater collection cisterns that may be used for irrigation of landscaped areas is encouraged. Above-ground cisterns are to be constructed of high-quality, durable materials and are to be screened from off-

site views.

2.7 FENCES AND GATES

Objectives:

- *Allow for privately fenced areas that maintain views and minimize off-site visibility.*
- *Minimize disturbance to the natural vegetation.*

Guidelines:

- In order to maintain the visual quality of an open and natural wooded landscape, fences and site walls are to be minimized.
- Fences are not to exceed 6 feet or 1.8 meters in height.
- Fences and gates are to be constructed of natural or natural appearing wood, treated and stained to match adjacent buildings or left to weather naturally.
- Fences and gates are to utilize Rustic and Arts and Crafts inspired designs.
- Plant materials should be woven in and around fences to help fences merge with the landscape.
- Fences may not be used to define or enclose property boundaries.

2.8 EXTERIOR HARDSCAPE DESIGN – PATHS, OUTDOOR STAIRS AND TERRACES

Objectives:

- *Integrate outdoor site features with the natural topography and vegetation.*
- *Utilize natural materials that are consistent with materials found locally.*
- *Design outdoor terraces and spaces as natural extensions of the indoors to create a sequence of outdoor meeting spaces that gradually transition to the adjacent trail network and open space areas.*

Guidelines:

- Appropriate paving materials for exterior hardscape areas include:
 - *Local stone*
 - *Faux stone that has the appearance of natural stone*
 - *Colored, stamped and/or patterned concrete*
 - *Pre-cast concrete pavers*
- Inappropriate paving materials include:
 - *Clay tile*
 - *Non-colored, unpatterned concrete*
 - *Asphaltic concrete*
- The use of permeable hardscape surfaces is strongly encouraged to increase on-site stormwater percolation.
- The design of buildings and related outdoor rooms should blur the line between

indoors and outdoors.

- Paths, outdoor stairs and terraces should follow the natural topography and respond to existing vegetation patterns.
- On-grade paved terrace areas are to be designed using informal shapes, irregular edges and natural materials so that a gradual transition from the built to the natural landscape occurs. Formal, rigid shapes are not appropriate.

2.9 LANDSCAPING AND PLANT MATERIALS

Objectives:

- *Revegetate disturbed areas with native and naturalized plant material to obscure the line of demarcation between the new and existing landscape.*
- *Preserve, enhance and extend the surrounding forest pattern.*
- *Use plant materials and tree groupings to anchor buildings to the site while connecting to the larger overall open space corridors.*
- *Preserve and enhance views to and from open space areas.*

Guidelines:

- In general, the planting design of each parcel or lot area is to take its cue from the existing regional plant palette. Group or cluster shrubs to create swatches of the same species, rather than scattering or mixing them throughout the site. Refer to the *Flowering Landscapes of TSMV* (Stantec 2004a) and the *Woody Plants of TSMV* (Stantec 2004b) which include native, naturalized and revegetation planting materials.
- Planting clusters are to be planted between individual buildings to provide privacy and to subordinate buildings to the landscape.
- Landscape materials are to define outdoor spaces and entries, frame desirable views, buffer against prevailing winds and provided seasonal shade.
- Planting materials should be planted in informal, natural patterns. Planting of trees or shrubs in straight lines, circles or other unnatural patterns is not permitted.
- Landscape Improvements are to incorporate, rehabilitate and enhance existing vegetation, utilize indigenous and/or regional species, and minimize areas of intensive irrigation.
- An approved slope stabilization seed mix should be used in all disturbed areas where slopes are 4:1 or steeper.
- Sun intensity and penetration should be considered when locating plant materials. Trees and shrubs may be placed in areas where summer shade will be beneficial and avoided in areas that require winter sun.

2.10 IRRIGATION

Objectives:

- *Minimize irrigation requirements by using native or naturalized plant materials that reduce water consumption needs.*
- *Utilized high efficiency irrigation systems.*

Guidelines:

- Group plant materials according to their water consumption needs.
- Irrigation or supplemental watering, whether in the form of temporary irrigation, drip irrigation, or spray irrigation, may be used to minimize the impact upon the site, while providing enough moisture to ensure healthy plantings.
- All shrub and ground cover plant material should be drip-irrigated with a permanent automatic system. All non-native planting areas shall receive soil amendments within the root zone per local suggested practices.
- Conventional spray irrigation should be limited to defined lawn areas. These systems are to be fully automatic and in conformance with any local regulations.

2.11 FOREST PRESERVATION

Objectives:

- *Ensure the long-term health and vigor of the forest through implementation of proper forestry techniques.*
- *Remove vegetation as necessary for proper forest management and fuel modification.*
- *Minimize native tree and shrub removal to provide filtered views into and out of the site.*

Guidelines:

- Building Improvements are to be designed around existing trees to the extent feasible.
- The removal of trees on building sites is to be minimized and should be concentrated at areas to be cleared for driveway and building construction.
- Tree protection and fertilization measures should be taken on all large trees (12 inches or 30 centimeter caliper DBH or greater) within 30 feet of construction activity.

2.12 WILDFIRE MITIGATION

Objectives:

- *Minimize potential landscape fuels around structures.*
- *Maintain a fire-retardant landscape.*

Guidelines:

As in other Rocky Mountain regions, the Plan Area is susceptible to wildfires. In order to mitigate this risk, all construction will comply with the policies set out in the ASP, including a Wildfire Risk Management Report. General requirements for being a “fire

smart community” include a fuel modification plan whose criterion is listed below.

- Eliminate ladder fuels and lower limbs of trees.
- Remove lower branches up to at least 1/3 of the tree height when understory vegetation and small trees are present.
- When understory vegetation is not present, remove lower branches to a minimum of 6 to 8 feet or 1.8 to 2.4 meters above the ground.
- The lower branches of shrubs are to be removed to provide for at least 12 inches or 30 centimeters of clearance from ground fuels.
- Remove dead vegetation and break up the continuity of brush species.
- Replace shrubs with low ground cover.
- Reduce continuous brush field to individual plants or small clusters at least 15 feet or 4.6 meters apart.
- Use driveways, paths and trails to break up plant continuity.

2.13 EXTERIOR LIGHTING

Objectives:

- *Maintain the dark nighttime sky.*
- *Establish a warm, inviting character.*

2.13.1 Lighting Fixture Design

- Lighting fixture designs should be consistent with the buildings’ architectural style.
- Light design reflects the Rustic and Arts and Crafts styles.

2.13.2 Location of Light Fixtures

- Lighting locations should be designed to minimize impacts on adjacent properties. Light sources may not be visible from off-site.
- In order to minimize glare and exterior light spill, interior lighting is to be concentrated at activity areas and minimized adjacent to windows. Lighting adjacent to windows is to be directed towards the buildings’ interior and baffled with architectural or decorative devices, such as deep roof overhangs and curtains.
- Light fixtures at pathways, where required for safety, are to be a maximum height of 48 inches or 1.2 meters.

2.13.3 Light Emission

- Exterior night lighting is to be kept to an absolute minimum as required for safety and address identification at entrances, driveways and buildings. All light fixtures are to be activated for short-term use only.
- Light sources are to be a warm, soft color that accurately renders true color.

Lights that emit harsh, glaring white light are not permitted.

- Exterior lighting should use downward facing, horizontal cut-off fixtures, which hide the light source.
- Lanterns are to use low intensity (25 watt or less) light sources with translucent or frosted glass lenses.
- Guardrails and/or posts with reflectors may be used to help mark driveways.
- Security lighting for emergency purposes may be permitted if not visible from off-site, are fully shielded, and are set on a timer or motion detector.
- The use of compact fluorescent bulbs (CFB) is encouraged for their energy conserving characteristics.

2.14 EXTERIOR SERVICE AREAS

Objectives:

- *Design exterior service areas consistent with the buildings' architecture.*
- *Screen service areas from off-site views.*

Guidelines:

- Trash disposal, outdoor work areas, utility meters and connections, transformers, air conditioning units, pool/spa equipment and similar above-ground devices are to be completely screened from off-site views by the use of architectural devices and/or plant materials. Where feasible, these areas are to be integrated into the building's architecture. Noise emission from such devices is to be contained.
- In order to minimize site disturbance, all utility lines are to be located underground, and when feasible, under or along driveways. Utility alignments are to minimize grading and tree removal.
- Service, trash and storage areas are to be completely enclosed as part of the building's architecture (such as within the garage).
- Designing trash enclosures to provide sufficient room for recycling program bins is required.

2.15 UTILITIES

Objectives:

- *Screen utilities from off-site views.*
- *Design utility connections with future technology and energy conservation principles in mind.*

Guidelines:

- Utilities are to be installed underground on alignments that minimize grading, vegetation removal and other disruption of the land. Long, straight cuts through existing vegetation are to be avoided.
- Utility boxes, including meters, are to be attached to or incorporated into the building's architecture and screened from off-site views. All exposed metal related

to utilities (meters, outlet covers, etc.) is to be painted to match adjacent natural and/or building materials.

- Garage areas should be designed to incorporate electrical service access that would permit the future installation of car recharger outlets.

2.16 ENVIRONMENTAL INITIATIVES

Green building practices and environmental initiatives are encouraged in the Three Sisters Mountain Village. In addition to the requirements of the Town of Canmore Land Use Bylaw, the following requirements apply:

1. Rain barrels will be permitted in Three Sisters Mountain Village provided they are located on the sides of the homes only. All rain barrels should be of an earthtone colour.
2. Solar panels will be permitted in Three Sisters Mountain Village and must receive approval from the Architectural Coordinator. All solar panels must be mounted on one side of the principal building or detached garage. Freestanding solar panels are not permitted in any yard space. Solar panels may be black in colour only and the total area of all panels combined may not exceed 8.5 square metres (91.5 square feet) in area.
3. All other solar initiatives including the use of solar shingles must be approved by the Architectural Coordinator.
4. Compost bins will only be permitted in rear or side yards. Compost bins are to be made from prefinished materials not unfinished wood. All compost bins will require a gravel base or concrete pad so they are not resting directly on the lawn area.
5. Electricity generation using small wind turbines is not permitted unless approved by the Architectural Coordinator and the Town of Canmore.
6. Greenhouses will be permitted provided they are professionally designed and built and the plans must be approved by the Architectural Coordinator and the Town of Canmore.
7. Construction waste recycling will be established for all development sites throughout the project.

Details on operating waste diversion will be determined at the Development Permit stage. Notwithstanding, it is expected at a minimum, that recycling facilities, such as the Town of Canmore's blue bin system, will be located throughout the project. Commercial and multi-unit residential buildings will contain their own recycling facilities and will be compatible with any future collection programs.

8. In terms of residential construction, the appropriate Built Green level would be adopted to achieve a minimum Energuide score of 80.

3.0 ARCHITECTURAL GUIDELINES

The following chapter sets forth Guidelines for all work relating to the renovation, alteration or addition to the exterior finish of an existing structure and/or new construction of building(s), including building heights, massing, color and materials.

3.1 ARCHITECTURAL DESIGN OBJECTIVES

- **Draw from the region’s architectural traditions to create contemporary, custom building designs that reflect the local climate and utilize locally-available building materials.** Designs are to draw inspiration from the Rustic and Arts and Crafts traditions. Buildings are to be constructed of natural or natural appearing wood, stone and patinaed metals to blend into the surrounding environment.
- **Design buildings that evoke the outdoor lifestyle of the region.** Buildings are to take advantage of the mountain setting, by bringing the outdoors in through ample amounts of windows and by extending indoor living spaces to the outside to create a series of “outdoor rooms” (decks, terraces and other exterior areas).
- **Design buildings that are set into the landscape and respond to the surrounding forest, climate and landforms.** All buildings should respond to existing trees, rock outcroppings and/or landforms. Buildings are to step with the natural topography and/or include walk-out levels where the terrain falls away.
- **Incorporate energy conserving measures in design.** Size and orientation of windows and doors should be designed to take advantage of sun, shade and wind conditions to minimize the buildings’ requirement for mechanical heating and cooling systems.
- **Incorporate custom detailing to distinguish buildings and give them a unique personality.** Custom detailing is encouraged, with particular attention given to doors, windows, railings and structural support systems.

3.2 BUILDING FORMS

Building forms are to be designed with three main elements:

1. **Foundation walls** are to merge with the ground plane and be expressed as structural masonry walls generally one story or less in height. Where grades drop off, foundation walls may extend up to one and one half stories in height and may include habitable spaces requiring large openings. In order to further integrate buildings with their setting, walls should be battered at highly visible corners and columns and/or banked into the site’s topography and linked to rock outcroppings. The intent is to obscure the line of demarcation between structures and natural features.
2. **Building walls** are expressed with wood textured siding or stone.

3. **Roof forms**, which include slopes, gable ends, and dormers, are to be the dominant element of the building.

In summary, buildings are to reflect the scale and drama of their mountain setting, characterized by large sheltering roofs supported by vertical and horizontal structural elements such as beams, columns, or stone piers that rest on foundations merging with the land.

3.3 BUILDING MASS, SCALE AND COMPOSITION

Objectives:

- *Create simple building forms and masses that respond to existing terrain and are in scale with the surrounding landscape.*
- *Avoid large, obtrusive building forms by breaking large buildings into smaller wings and additions with discernible accent elements.*
- *Utilize building offsets and projections that create strong shadow lines to let buildings recede into the landscape.*

Guidelines:

- Building masses should use simple volumes comprised of a primary building mass surrounded by smaller “additions” or secondary masses. Building elements are to avoid rigid symmetry and/or formality, while maintaining a balance of well-proportioned forms and masses.
- Building masses in multi-family areas should be composed of clusters of building forms so that they appear to be a collection of individual masses and not rows and/or stacks of essentially “identical” buildings.
- Breaking up building masses by utilizing breezeways, trellises and/or other architectural connections is encouraged.
- Dormers, bay windows, porches, porticos and other architectural extensions should be designed to provide shadow and texture, particularly at elevations of more than 2 stories.
- Primary building masses are to be located towards the center of structures, and secondary masses should step down at the edges to avoid the appearance of large, flat “boxes.”
- The massing of any building is to be responsive to the site’s size, setting and environmental characteristics.

3.4 BUILDING HEIGHT AND STORIES

Objectives:

- *Minimize the visual impact of buildings in order to blend Improvements into the surrounding setting.*

Guidelines:

- Building Height for the Town of Canmore is defined as:
“the vertical distance from the highest point of a structure to the average of the highest and lowest points where the exterior walls touch natural grade.”
- Refer to the ASP for maximum Building Height and Story information for land use areas.

3.5 ROOFS

Objectives:

- *Utilize simple, gabled roof forms to create a “cluster” of sheltering roofs.*
- *Express traditional roof structural systems.*
- *Use natural roof materials and colors to help blend buildings into the surrounding landscape.*

Guidelines:

- Roofs should convey a sense of shelter and protection for the buildings.
- Roofs are generally to be simple gable forms and are to avoid complex intersections, awkward pitches and ungainly angles. Shed roofs may be used at porches and other minor roof elements.
- Roof structures should be designed to express traditional timber construction. Traditional trusses, braces, brackets and column spacing are to be used where they are needed to keep the appearance of unsupported spans and cantilevers consistent with the structural properties of the visible timbers.
- Long roof overhangs (minimum of 24 inches) should be incorporated to give a sense of shelter and enclosure. Deeper overhangs should be used above large window openings.

3.5.1 Roof Pitches

- In general, primary roofs should have a pitch between 4:12 and 10:12. Secondary roofs over building components such as porches and dormers may have shallower pitches, down to a minimum of 2:12.
- Roof pitches and forms may vary to add interest and to reinforce the separation of building masses.
- Roofs are to have large overhangs that reduce glass reflectivity, offer protection at outdoor patios, decks and terraces, and provide summer shade while still allowing for penetration of winter sunlight.

3.5.2 Roof Materials

- Approved roof materials include:
 - *Natural slate*

- Cedar shakes, class-A fire rated
- Standing seam metal roofs, including copper, corten steel and terne metal, with a natural patina
- Cementitious shakes (resembling a naturally weathered cedar shake using traditional shapes and patterns)

- Inappropriate roofing material includes:

- Galvalume
- Box batten metal roofs

3.5.3 Snow Considerations

- Roofs may be designed with metal eaves to reduce damage from ice damming.
- Roof forms should consider snow and rain shedding to ensure safety for adjacent walkways, driveways, utilities and other outdoor areas. Roof plans should be designed in concert with site and landscape plans to avoid conflicts with drainage plans.
- Properly-placed snow guards may be used to retain snow on the roof to avoid dangerous snow shedding.
- Snow guard braces and rails made of steel are to be painted to match or relate to the primary or secondary roof color. Snow guard rails may also be constructed of timber.

3.5.4 Dormers

- Dormers should be used to break up long ridgelines and are encouraged for both their functional and aesthetic aspects of breaking up long roof ridgelines and augmenting natural daylighting.
- Placement, shape, and size of dormers should be in scale to the proportions of the primary building as well as interior spaces and functions.

3.5.5 Chimneys, Flues, and Roof Vents

- Chimneys are to be finished with stone or natural appearing stone treatment to match that used elsewhere on the building.
- Flues and vents should be consolidated and enclosed within chimney-like enclosures, in particular on larger scale building such as condominiums.

3.5.6 Gutters, Downspouts, and Flashing

- The overall design and strategic placement of roof forms is to be the primary method of managing water run-off and snow-shedding. Gutters and downspouts may also be used to divert water from entries and outdoor rooms toward surface

drainage or water capture systems.

- Gutters, downspouts and flashing should be fabricated from copper that will weather over time.

3.6 EXTERIOR WALLS

Objectives:

- *Utilize a blend of natural wood and indigenous stone materials to tie buildings with their natural surroundings.*
- *Design exterior walls with Rustic and Arts and Crafts inspired detailing.*
- *Utilize texture and color for different components of the building to bring a diversity and richness to exterior walls.*

Guidelines:

- A variety of exterior wall types may be incorporated into building designs. At least two and no more than three exterior wall materials/finishes may be used on any one building. Exterior wall materials should predominately use authentic, indigenous and rustic appearing materials, such as local stone, rough-sawn wood and hammered metal.
- Where changes in wall material occur, there should be a clear break in the surface plane. Materials are to be consistently applied to all building elevations.

3.6.1 Stone Walls

- The use of native stone is encouraged at building foundations and to define full-height, three-dimensional elements, such as entries and singular “pop-out” accent elements or room-sized volumes.
- Stone used for exterior walls is to be, or appear to be, indigenous to the Bow Valley area.
- Stone surfaces should have a structural, dry-laid appearance. Mosaic patterns are not permitted and should incorporate a mix of sizes and shapes with larger stones predominantly at lower levels. Natural bedding planes should be laid horizontally, and horizontal and vertical joints are to be frequently interrupted.
- Stone is to turn corners and may not be used only on one wall facade.
- Large boulders may be integrated with foundation walls, especially at corners, in order to tie buildings to the land.
- Stone walls should be battered (12:1 minimum pitch). Battered walls should flare out at the bottom at corners, columns and other prominent areas.

3.6.2 Concrete

- Concrete may be used as a foundation and/or wall exterior treatment to lend buildings a more contemporary feel. Warm wood treatments (window trim, upper wall exterior finishes) are to be used in concert with concrete walls that are

textured and finished to complement the overall appearance.

- Concrete foundation walls are to be crafted, textured and/or combined with native rock at their bases to anchor the building to the site.

3.6.3 Wood

- Appropriate wood wall treatments include:
 - *Shakes and shingles*
 - *Board and batten*
 - *Timber with chinking*
 - *Timber framing with glass*
- Engineered lumber or composite wood (such as Hardiboard or Hardiplank) must have a natural and “weathered” appearance and closely resemble authentic wood.
- The use of reclaimed and/or salvaged wood is encouraged. This reduces the number of trees harvested for building construction and reinforces the objectives of creating structures with a more informal, rustic, natural appearance consistent with the Rustic and Arts and Crafts traditions.
- A structural frame of timber may be infilled with glass to create an exterior wall. The individual components of the frame should be sized to represent their true or apparent structural loading.
- Various sizes and profiles of wood siding may be used in horizontal or vertical patterns. Diagonal siding is not appropriate.

3.6.4 Metal

- Metal siding may be used in a limited manner to accent building forms. When used, metal materials, such as corten steel, are to have a natural patinaed appearance that blends with the subtle earth tones of the site.

3.7 DOORS AND WINDOWS

Objectives:

- *Design custom Rustic and Arts and Crafts inspired window and door patterns.*
- *Window and door placement is to take advantage of views and emphasize the connection to the outdoors.*
- *Minimize reflectivity, glare and nighttime light emission.*

Guidelines:

- Custom door and window designs should be incorporated to give each building a unique personality. Entry portals and enclosures should exhibit a high level of craftsmanship in the detailing of structural connections, doors, windows and trim.
- Numerous windows and doors, opening to exterior spaces from main living areas, should be incorporated to reinforce the connection to the outdoors.

- Individual windows and lites should be primarily rectangular in form, vertically oriented, with larger, undivided panes surrounded by smaller, divided windows. Irregular shapes, such as circles, ellipses and trapezoids are not appropriate.
- Divided lites are to be authentic or simulated to appear authentic, using internal spacer bars to simulate true divided lites.
- Large expanses of glass may be used to capture views when set within a structural frame. Deep roof overhangs (minimum 24 inches or 60 centimeters) should be placed above large areas of glass to provide shade and minimize glare.
- Windows and doors set within stone walls should be recessed a minimum of 6 inches or 15 centimeters, and should include keyed arches and/or headers to express structural support.
- Windows and doors set within wood and shingle walls should be trimmed on all sides.
- Highly-reflective glass is not permitted. Stained glass may be considered if not visible from public areas.
- Appropriate window types include double-hung, casement and fixed windows.
- Windows and doors should be wood, metal clad with a natural finish, or metal with a bronze anodized finish. Unfinished aluminum or other metal windows are not permitted.
- Operable windows that allow natural ventilation are encouraged to reduce both heating and cooling loads.
- Windows, clerestories and dormers should be located and designed to maximize natural daylight and reduce reliance on electrical needs.
- ENERGY STAR® windows (or similar rating) are required to reduce energy needs.

3.8 BALCONIES, DECKS, PORCHES AND RAILINGS

Objectives:

- *Incorporate custom railing designs to add individuality and personal expression to the building.*
- *Design decks and porches as extensions of the indoors.*

Guidelines:

- Porches that front public areas, such as the open space network, a pathway, street, or open spaces, should be incorporated into building designs. Porch designs should consider potential impacts on natural light penetration into buildings.
- Balconies, decks and porches should be constructed of stone, wood or patterned concrete, as appropriate to the building style and exterior finishes.
- Porches and decks should have a minimum depth of 6 feet or 1.8 meters, with deep, overhanging roofs to provide weather protection.

- Custom column and railing designs are encouraged. Detailing should be consistent with that of the building, using simple, refined wood forms and/or stone. Metal accents at railings are appropriate provided they are treated for a dark, non-reflective appearance. Highly decorated or ornate railing styles are inappropriate.
- Two to three variations of railing designs may be used on condominium buildings to reinforce the impression of the building as a “collection” of related structures rather than one large building.
- Appropriate rail materials include rough sawn timber, hand hewn, milled or carved and/or metal detailing. Inappropriate rail materials include glass and plastic.

3.9 COLOR

Objectives:

- *Select field and accent colors to blend buildings into the natural surroundings.*

3.9.1 Wall Color

- Exterior colors are to utilize earthtones rather than bright, light-reflective hues.
- Stone color is to relate to existing rock outcroppings around the site (typically gray and brownish-gray in color). Bright, reflective stone, such as white or buff limestone is not appropriate.
- Wood is to be treated or stained to let natural grains show through, and dark enough to recede into the surrounding forest landscape.
- Green Seal certified products and/or other products with low levels of volatile organic compounds (VOCs) are encouraged for use on all painted and stained surfaces.

3.9.2 Roof Color

- Roof colors should be weathered and include variegated greens, dark grays and/or browns. Roof treatments are to be rich in texture rather than “flat” to blend buildings into the forest landscape. Monotone colored roofs are not appropriate.
- Metal roofing should weather to a natural color.

3.9.3 Details and Trim

- Trim and detail colors are to be subtle variations of colors found on the site, including trees, flowers and other vegetation (browns, brick/brown reds, off-whites, warm grays, sage grays/greens, beiges and light grays/blues).