

DESIGN GUIDELINES FOR THE DANNI RANCH

SECTION I

INTRODUCTION

1.1 The purpose of these design regulations is to ensure that this carefully planned residential community be carried out according to the master plan. Those buildings or improvements which do not conform will not be accepted.

1.2 The intent of The Danni Ranch Association Documents is to have the improvements located on The Danni Ranch be compatible and blend with the natural environment, the climate and the surrounding residences.

1.3 The following sets forth the standards to be followed, the procedures for review and development of building on the lot, and assistance to owners of lots regarding design considerations. These design regulations may be amended from time to time and thus a property owner should obtain the most recent issue.

SECTION II

DESIGN REVIEW PROCESS

2.1 Choose an Architect. A licensed architect must design your residence at The Danni Ranch. The addition of specialized design skills and an understanding of site and environmental possibilities can be of major importance in realizing the special character and quality you want your residence to have. Be sure that your architect reads the design regulations and becomes familiar with this document. In addition your architect should be aware of and follow:

2.1.1 The Danni Ranch Declaration of Covenants, Conditions, Restrictions and Easements;

2.1.2 The Danni Ranch Rules;

2.1.3 The Uniform Building Code and all other applicable codes of Gunnison County;

2.1.4 All residences shall be designed for one hundred psf snow load, thirty-five psf wind load, and approximately nine thousand five hundred to ten thousand heating degree days; and

2.1.5 The Danni Ranch Design Review Board recommendation.

2.2 Pre-Design Meeting. You and your architect shall meet with the Design Review Board to discuss, among other things, your particular site, architectural theme and special design considerations, expectations of the Design Review Board, and the building program. A person desiring to construct improvements on a lot who is not the owner thereof

shall obtain the consent of the owner of such lot before meeting with the Design Review Board.

This meeting will be set up by the Design Review Board upon request.

2.3 Sketch Plan Review. Owner is to prepare and submit to the Design Review Board five copies of the sketch plan at least ten days before the next scheduled meeting of the Design Review Board and said plan shall include a conceptual description of the site plan, floor plans, elevations, roof design, exterior materials, character of the proposed structure, and landscape plans to include existing vegetation, temporary revegetation specifications for reseeding and mulching, and initial drainage and erosion control measures. The scale for said plan shall be a minimum of 1" = 20' for site and landscape plans. The scale for floor and elevation plans may be 1/16", 1/8" or 1/4" = 1'0". The sketch must also show that the building height is in accordance with the declarations pertaining to this particular lot.

2.4 A Preliminary Estimate of Construction Costs. The Design Review Board shall review the sketch plan and notify the owner in writing of its findings within seven days of the meeting. The owner shall have the option of resubmitting a sketch plan if the findings of the Design Review Board are negative. Upon approval of said plan, the owner shall submit the approved sketch plan to the Gunnison County Building Department.

2.5 Final Plan Review. The owner shall submit a final plan at least ten days before the next scheduled meeting of the Design Review Board. Said final plan shall include:

2.5.1 Site Plan (5 copies) (presented at minimum of 1" = 20', 1" = 16', 1" = 10' or 1" = 8'). Indicate proposed building "footprint", roof drip line, property boundaries and easements, utility locations, existing vegetation, existing and proposed one foot contours, areas of cut and fill, drainage, proposed roads, driveways, sidewalks, decks and any other proposed improvements. Indicate the building site, restricted scenic area and common areas. Indicate scale and north direction;

2.5.2 Footing and Foundation Plan (presented at 1/8" or 1/4" = 1');

2.5.3 Submit sketch showing that building height is in accordance with the Covenants, Conditions, Restrictions and Easements;

2.5.4 Floor Plans (5 copies) (presented at 1/8" or 1/4" = 1'). Include all room dimensions, floor and window locations and sizes, and location of mechanical and electrical systems;

2.5.5 Elevations (5 copies), indicate the exterior appearance of all views labeled in accordance with the site plan; height of chimney as compared with the ridge of the roof; nature and finish grade for elevations of all views. Describe all exterior materials, colors, and finishes (walls, roofs, trim, chimney, windows, doors, etc.). The elevation drawing should indicate shadow patterns and material textures;

2.5.6 Building Sections (presented at 1/8" or 1/4" = 1'). Indicate building walls, floors, interior relationships, finished exterior grade and any other information to clearly describe the interior/exterior relationships of the building;

2.5.7 Perspective Sketches. Provide a ground level perspective sketch(s) of the building from a location(s) representing a primary public exposure to the building. This sketch should indicate exterior shadow patterns, materials, textures, and trim details;

2.5.8 Model (1 copy). At the applicant's option, a model of site to include proposed building (can be mass model showing roofs, doors, and windows only), final contours at one (1) foot intervals, the building envelope, existing proposed and plant masses, all decks or terraces, site walls and driveway;

2.5.9 Details. Provide design details to sufficiently represent the visual expression of the building, exposed connections, and material interfaces;

2.5.10 Diagrams. Indicate areas of snow shedding and water removal, and anticipated chimney smoke dispersal;

2.5.11 Landscape Plan (5 copies) (presented at 1" = 20', 1" = 16', 1" = 10' or 1" = 8'). Indicate final landscape improvements to include:

2.5.11.1 Proposed grading plan with spot elevations at one foot contours for drainage control and rim and invert elevation for all drains and culverts;

2.5.11.2 Planting plan with proposed plant materials;

2.5.11.3 Existing plant materials by common and botanical names and size;

2.5.11.4 All plant materials by common and botanical names and size;

2.5.11.5 For seeded areas, rates and method of application for one thousand square foot increments, mulched type, rate and stabilization technique and fertilizer type and time of application are required for review;

2.5.11.6 Locate rock out-croppings, deck or patios, service yards, driveways, other free standing structures, etc.;

2.5.12 Final estimate of general construction costs (5 copies).

2.5.13 Specifications. Provide written specifications and color boards where necessary for the following items:

2.5.13.1 Exterior wall materials and colors which shall be earth tones, and have non-reflective materials.

2.5.13.2 Windows and exterior doors with colors which shall be earth tones, and have non-reflective materials.

2.5.13.3 Exterior trim materials and colors which shall be earth tones, and have non-reflective materials.

2.5.13.4 Fireplace;

2.5.13.5 Exterior lighting fixtures;

2.5.13.6 Installation and heat loss specifications with supporting calculations.

2.5.14 Erosion control and revegetation plan. Indicate the means and time schedule for which the prevention of erosion and stream sedimentation will be addressed during and after construction, including any of the following which are appropriate for this site in question:

2.5.14.1 Tree and vegetation protection;

2.5.14.2 Placement and type of perimeter filters;

2.5.14.3 Water control methods;

2.5.14.4 Vehicular access points;

2.5.14.5 Spoil storage and stabilization measures;

2.5.14.6 Siltation control devices;

2.5.14.7 Landscape methods;

2.5.14.8 Seed and fertilizer types, application rates and methods;

2.5.14.9 Mulch type, rate of application and stabilization methods;

2.5.14.10 Type and location of any permanent or temporary irrigation to be used.

2.5.15 Site Staking. An actual site staking of the building corners, driveways and other improvements. In determining the proper location for each improvement, the Design Review Board shall consider the location of existing and future improvements on adjacent sites and such other economical or aesthetic considerations as it may deem necessary. The following shall be complied:

2.5.15.1 The improvement shall be defined with four foot wood or steel stakes and shall be identified as N.E. N.W., S.E. and S.W. corners. The outline of the improvement may be required to be marked by connected string between corner stakes. Side and front parcel lines may also be required to be marked in a similar manner. The main floor elevation of the structure shall be clearly marked on all stakes;

2.5.15.2 All property corners shall be clearly marked;

2.5.15.3 Driveway locations will be staked at each side of the drive at ten foot intervals from the respective road to the sites;

2.5.15.4 In addition to the proposed residence, all other improvements shall be staked; and

2.5.15.5 Preservation fencing shall be in place or string provided to define any proposed fencing.

2.5.16 Construction Schedule; including starting and completion dates of residence and landscape.

The Design Review Board must, within ten days of the meeting, notify the owner and The Danni Ranch Association's Board of Directors of the Design Review Board's decision. Notification will also be posted in a conspicuous place at The Danni Ranch. The decision will become final if no action is taken by The Danni Ranch Board of Directors and no appeal is filed by the owner within thirty days of the Design Review Board's decision.

2.6 Design Review Board Appeal Process. The owner may submit an appeal in writing to the Design Review Board within thirty days of the Design Review Board's decision. The appeal shall be reviewed at the next scheduled meeting of the Design Review Board and it shall notify both the owner and The Danni Ranch Association in writing within seven days of said meeting of its decision.

2.7 The Danni Ranch Association Appeal Process. Applicant may within seven days following the notice of the appeal decision of the Design Review Board submit a formal appeal to The Danni Ranch Association Board of Directors, who shall within thirty days therefrom review the owner's appeal. An extension period of twenty days may be allowed should additional information be needed. If said Danni Ranch Association Board does not act within fifty days of said appeal, the appeal will be considered approved. The Danni Ranch Association Board of Directors shall document in writing reasons for any disapproval.

2.8 Final Plan Approval. Upon final plan approval the owner must submit the approved final plan to the Gunnison County Building Department to obtain a building permit. The Gunnison County Building Department has specific requirements which must be met and a copy of said requirements may be obtained from said building department.

2.9 Inspection. The owner, architect and the Design Review Board shall inspect the site to ensure compliance with the approved plan, examining the lot survey point, driveway location, building corners, cut and fill areas and protected vegetation. The Design Review Board shall issue site inspection approval to the owner within two working days of said inspection. The owner and/or contractor shall request inspections and obtain approvals for all phases of construction required by Gunnison County. When appropriate the owner and/or contractor shall request final inspection of landscaping and/or building, and the Design Review Board shall inspect building and/or landscaping and if approved issue a certificate of compliance as soon as possible thereafter. Upon the Design Review Board issuing a certificate of compliance, the owner can request a certificate of occupancy from Gunnison County.

SECTION III

SITE DESIGN GUIDELINES

A number of site and landscape guidelines have been prepared to help owners and architects design residential structures that are compatible with the project. These requirements must be addressed at the sketch plan stage; however, certain of these requirements may be modified if approved by the Design Review Board by owner and/or architect showing that said modifications will not effect the basic intent of The Danni Ranch.

3.1 Land Use Categories.

3.1.1 **Building Site.** This is an area designated on each lot that shall be for the exclusive use of the lot owner, within which building and landscaping may occur subject to the design regulations. Minor encroachments outside such building site may be permitted with prior written approval of the Design Review Board for roof overhangs, balconies, service areas, porches, patios, carports, and garages. The purpose of the building site is to reduce uncertainty of neighbors as to which view corridors might be impacted in the future by construction and to help ensure that structures blend with the surrounding landscape, rather than becoming a dominating figure of the neighboring community.

3.1.2 **Restricted Scenic Area.** The area designated on each lot shall be for the exclusive use of the lot owner, but in which all improvements are generally prohibited and major landscaping is strictly limited. This is the area which lies outside of the designated building site. If the building site is modified, the restricted scenic area will also be modified accordingly upon approval of the Design Review Board.

3.2 Views. The building site for each lot in The Danni Ranch has been developed around a series of views. In some cases the views are long-ranged (of mountains or ridge lines); in other cases views are shorter. Any changes in building site, and all architectural design and proposed improvements, shall be reviewed for the impact upon the identified views.

3.3 Building Site and Setbacks. For each lot in The Danni Ranch a building site has been designated. All lot improvements including buildings, accessory buildings, walls, fences, and recreational improvements must be placed within the building site unless a modification is approved by the Design Review Board.

3.4 Building Site Changes. Changes in designated building sites may be requested at the time of the pre-design meeting with the Design Review Board. The Design Review Board recognizes that some lots will have a greater impact on view corridors than others and, therefore, can more easily accommodate changes to the building site where views are not negatively impacted. If the Design Review Board believes that the request is worthy of consideration, the owner will be so informed and it will be the responsibility of the owner to justify the request graphically and in writing at the time of the sketch plan review. All lot owners will be notified by the Design Review Board of the time and place of the meeting to discuss the building site adjustment. In considering building site adjustment requests, the Design Review Board must find that the views and building potential of adjacent or nearby lots are not negatively affected by the requested change. In addition, Henry A. Gallin (or his

successor as developer of The Danni Ranch) may approve a change of the building site on any Ranch Estate owned by him, without the consent or approval of the Design Review Board.

3.5 Driveways. Driveways within a lot (including the construction of any culverts, landscaping, maintenance and snow plowing which may be necessary) are the responsibility of the owner. Maximum driveway grades shall not exceed ten percent without written approval of the Design Review Board. The use of common or shared driveways running along property lines a minimum of six feet on either side of the property line is encouraged when practical and appropriate. In cases where common access driveways are proposed, it will be the responsibility of adjacent property owners to work out the details for providing a perpetual shared - access easement between adjacent lots.

3.6 Garages and Parking Spaces. Garages must be integrated with the residential design. Generally, detached garages are discouraged. Trailers, mobile homes, trucks, boats, boat trailers, tractors, recreational vehicles, vehicles other than automobiles, campers whether or not on a truck, snow removal equipment and garden or maintenance equipment shall be kept in a closed structure or screened from view at all times except when in actual use.

3.7 Fences and Privacy Walls. Fences, walls and barrier devices may be used for privacy and screening purposes within the building site, but must be incorporated into the total residential structure design. The Design Review Board shall review the design, appropriateness, size, materials and construction of all fences in relation to the proposed residence and its neighboring sites.

3.8 Sprinkler System. Each residential unit is encouraged, but not required, to have a sprinkler system installed therein for the purpose of fire protection. Said system is to be approved by the Design Review Board.

3.9 Security System. It is suggested that each residential unit, including any guest houses, shall at the time of initial construction be wired to accommodate a central security system as to fire, low heat, or intrusion.

3.10 Swimming Pools and Tennis Courts. Swimming pools and tennis courts require the approval of the Design Review Board and must be placed within the building site. These improvements should be designed to compliment the residential structure and should be placed so to minimize impact on adjacent lots. If, in the opinion of the Design Review Board, the placement of a swimming pool or tennis court on a lot would negatively impact views or the use of the adjacent lots, applications will be denied.

3.11 Signs. All signs must have written approval of the Design Review Board. All residential units must have street number signs located at the driveway entry. Any light source must be concealed with minimum glare to pedestrians or automobiles. Signs shall be a minimum of one square foot and a maximum of four square feet. No additional signage that is detached from the house will be permitted.

3.12 Exterior Lighting. The key to exterior lighting is understatement. Lighting shall be used only in areas of pedestrian activity or vehicular traffic. Indirect lighting should be used wherever possible. Exterior lighting shall not be installed where its direct source is visible from neighboring properties, or where it produces excessive glare to

pedestrian or vehicular traffic. The use of other than white or pale yellow exterior lights will require written approval of the Design Review Board, except for colored lighting used as Christmas decoration. It is recommended that a professional lighting designer be consulted.

3.13 Natural Drainage. No owner or contractor shall interfere with or direct the natural course of any drainage and run-off, nor construct any improvement, place any landscaping, or allow the existence of any condition whatsoever which shall alter the drainage pattern or run-off from its natural flow to or across the land of another, except to the extent such alteration and drainage pattern or run-off is approved in writing by the Design Review Board. This includes all irrigation ditches now existing at The Danni Ranch. Run-off from impervious surfaces such as roofs and pavement areas shall be directed to natural or improved drainage channels or dispersed into shallow sloping vegetated areas.

3.14 Easements, Drainage, Irrigation and Utilities. Easements are located at various points within The Danni Ranch for installation and maintenance of utilities, drainage facilities and irrigation ditches. These, in addition to others, are reserved as shown on the recorded plat. Within these easements no grading, structure, planting, or other materials shall be permitted which may damage or interfere with the installation and maintenance of utilities, drainage or irrigation, which may change direction or flow or obstruct the flow of water in and through drainage channels and irrigation ditches in the easement. The easement shall be maintained by The Danni Ranch Association. All trunk utility lines and pipes in The Danni Ranch will be underground. Connections from trunk lines to individual structures must be underground. Sewage disposal systems shall be installed pursuant to the regulations of the Gunnison County Sanitation District. No exterior antennas or television dishes shall be erected without specific written approval of the Design Review Board.

SECTION IV

ARCHITECTURAL GUIDELINES

These guidelines apply to the design and construction of residences and other building improvements. The following architectural standards shall apply:

4.1 General Design Consideration. The Danni Ranch is a planned development and special consideration must be given to the siting of all improvements with emphasis on the relationship to existing grades, preservation of natural site features and trees, and a relationship to neighboring lots and vistas. All residences will have exterior elevations, roofs and detail that shall be coordinated consistent in their architectural treatment.

In some instances, specific design elements will be recommended for functional and/or aesthetic reasons. The design and construction of those elements are solely the responsibility of the lot owners, their architects, and their contractors. The Danni Ranch shall accept no liability incurred by the incorporation of these elements into the lot owner's design.

4.2 Foundations. Foundation walls shall not be exposed for more than eight inches in a vertical direction, unless they are faced with wood, plaster or rock as delineated in the section on Exterior Walls, or unless written approval is obtained from the Design Review Board for exposed foundation walls. Visually exposed concrete or black masonry foundations shall be stained or textured as required by the Design Review Board. Foundations shall be

designed by an architect or professional engineer to be consistent with the soil reports for the specific lot.

4.3 Exterior Walls and Finishes. Major exterior walls should convey a sense of mass through wood plaster, rock or glass.

Certain types of pre-cut log walls may be used as exterior walls and shall be compatible and blend with the natural environment, the climate, and the surrounding residences in the Development as required and approved by the Design Review board.

In contrast to the mass walls, vertical wood siding can be used as a sheathing, especially at gable ends and upper levels. Glass can also be used to contrast with the mass walls on southern exposures (see section on Solar Design Guidelines). Generally, the heavier rock and plaster surfaces shall be below, and visually supporting the lighter wood sheathed elements above.

Raw materials should respond to the orientation of the building, with the north closed off (small window openings) and the south opened to sun exposure (see section on Solar Design Guidelines).

The following materials shall be used for exterior walls, except with special approval of the Design Review Board:

4.3.1 Natural, painted, or stained wood .

4.3.2 Plaster (stucco or Drivit Suttef) in warm off-white colors.

4.3.3 Rock approved by the Design Review Board. Rock walls shall be laid in a random pattern.

4.4 Chimneys, Flues, and Roof Vents. Chimneys and flues shall be designed in such a manner so as not to cause fumigation of ground level areas or adjacent buildings during downslope wind conditions. Chimneys should be located high in the up-wind side of the building as the best means to ensure adequate disbursement.

Vents and flues shall not be exposed galvanized pipe, but rather attempts shall be made to group these roof projections and conceal them from public view. This can be done by enclosing them in forms compatible with the structure.

4.5 Roofs. In general, relatively low-profile buildings with a variety in massing and roof lines are desired. Large, expansive areas of unbroken roof lines and ridge lines are undesirable.

The roof pitch will be predominantly 6:12; it may be increased or decreased slightly at the discretion of the Design Review Board provided the applicant shows design benefits attributable to a greater or lesser roof pitch. Flat roofs and shed roofs as a prominent design feature are prohibited.

The only approved roof materials are natural sawn cedar shingles and fire-retardant simulated shake shingles; provided, however metal roofs will be allowed upon

approval by the Design Review Board and must conform to the overall design requirements of The Danni Ranch. Roof color shall conform with the color palate as approved by the Design Review Board. Additional specific roof requirements are listed below:

4.5.1 All roofs should be "cold roofs" with ridge vents constructed of the same material or "cold attics". The purpose for this requirement is to minimize ice-dam and icicle problems.

4.5.2 Snow guards, gutters, or other snowmelt devices should be incorporated at all entrances to avoid hazardous snow fall and protection from snowmelt;

4.5.3 All roof fence and exterior mechanical equipment shall be collected and centralized and screened from view. Wherever practical, incorporation within chimneys or masses is desirable;

4.5.4 All chimneys are to have roof saddles and down-draft preventors;

4.5.5 Roof skylights are permitted subject to the approval of the Design Review Board. Heated gutters at the bottom of skylights are recommended;

4.5.6 All flashing shall be painted to match roof colors;

4.5.7 Large roof or eave overhangs are encouraged with soffits of one-by-wood material or stucco. Plywood and masonite soffits are prohibited;

4.5.8 Fascias should be designed to minimize the heavy alpine look. Fascias should also be "stepped" to avoid cupping, and rapid deterioration from freeze/frost cycles.

4.6 Windows. Window casings shall be wood or dark non-reflective metal. Approved finishes are natural, stained, painted or clad. Exterior window trim shall relate to other building materials, either wood or masonry. The use of headers and sills designed integrally with the wall is encouraged.

Windows shall be used in combination to avoid large, uninterrupted glass areas. Windows shall have a double or triple glazing. Mirrored glass is not allowed. If shutters are used, they shall be operable and not used merely as an ornament.

4.7 Solid Waste Removal. To ensure that solid waste is collected, compacted and hauled away in a manner that ensures safety, reduces hauling costs, eliminates litter and spillage, and prevents odor and cross-contamination, waste collection spaces must be designed carefully, and equipment must be selected which meets approved design standards.

Specifically, solid waste collection systems in all Danni Ranch buildings and facilities must meet the following guidelines:

4.7.1 Trash compactors with standards approved by the National Solid Waste Management Association must be utilized and located in central waste

collection areas. Compactors should be selected which maximize compaction rates and thereby reduce hauling requirements.

4.7.2 Trash compactors must be integrated with closed, steel containers that meet The Danni Ranch Association hauling specifications.

4.7.3 Solid waste collection and reduction areas must be designed so that waste is not exposed to the atmosphere. If a vertical chute waste transport system is interfaced with a compactor, there must be sufficient head height, along with length or width to allow the bag or loose waste to drop into the compactor receiving chamber without bridging. The connection between the chute system and the compactor must be tight so that no waste can escape.

4.7.4 The space allowed for installing a compactor shall allow for proper servicing of the equipment. If the waste collection equipment is installed indoors or in a protected area, proper cleaning facilities (e.g., hose and outlets, floor drains) should be provided. Fire protection devices must also be provided.

4.7.5 Trash collection areas shall not conflict with pedestrian circular areas.

4.8 Energy Conservation. As a minimum, the following energy conservation measures shall be followed:

4.8.1 Roofs insulated to R-30;

4.8.2 Walls insulated to R-19;

4.8.3 Perimeter of slab on grade insulated to R-12 to a depth of four feet;

4.8.4 Openings and exterior walls and roofs caulked all around;

4.8.5 Windows double or triple glazed;

4.8.6 Windows and doors weather stripped.

4.9 Utility and Meter Connections and Treatment. Utility and meter locations shall be reviewed by the Design Review Board.

SECTION V

LANDSCAPE GUIDELINES

Each lot in The Danni Ranch is unique. It is the intent of the landscape guidelines to preserve those special attributes. Owners should realize that because The Danni Ranch is situated at and above 8,300 feet above sea level and experiences extreme differences in climate from season to season, the list of plants that can be expected to flourish is limited. It is the responsibility of the owner and his designer to respond accordingly in the landscape of each residence.

Within the area that is outside the building site, only limited landscaping may occur. Grading, planting, and construction of improvements require the approval of the Design Review Board, because of impacts on views from adjacent properties.

5.1 General Design Considerations. Within the building site, the owner is encouraged to use plant material to enhance the architecture, define outdoor spaces in a manner that preserves both on and off site views, and knit the structures to the site.

The functional uses of plant materials that should be considered include screening of the winds from the west, provision of seasonal shade with deciduous trees and screening of undesirable views.

The composition of the plant materials should consider present and mature size, enframement of certain views, background and foreground balance, relationship to the architecture and other site textures, and judicious use of color and texture.

Due to the relatively short growing season at The Danni Ranch, large-caliper deciduous trees and mature evergreens are strongly recommended.

5.2 Time of Installation. Because of limited construction periods in the mountains due to the weather, the Design Review Board may modify the review and approval of procedures to accommodate the timely installation of plant materials.

5.3 Maintenance. All trees, shrubs, ground covers, grasses and irrigation systems must be maintained at a level consistent with the rest of The Danni Ranch. All dead and dying plants or grasses shall be replaced immediately.

5.4 Erosion Control and Revegetation. An initial erosion control on temporary sites stabilization plan is required for each project prior to sketch plan approval. A detailed permanent erosion control and revegetation plan is required prior to final plan approval. These plans shall explain in detail the following:

5.4.1 Measures to control both ground water and surface water runoff;

5.4.2 Temporary measures to retain all eroded soil material on site during construction;

5.4.3 Measures to permanently stabilize all disturbed slopes and drainage features upon completion of construction.

The owner shall, for sketch plan approval, list and describe those techniques he plans to use during excavation and construction, and indicate on his site plan drawings their locations, construction details, and time of installation. The owner shall, for plan approval, list and describe on his landscape and planting plan those techniques he plans to use upon completion of the project to permanently revegetate and stabilize all disturbed areas and drainage features.

The major concerns addressed by both plans shall be the reduction of erosive potential and control of transported sediments.

5.5 Landscaping and Plant Materials. Landscape scale and overall landscape design shall be developed so that one senses that new vegetation is integral with the natural mountain landscape and the inherent, line, color and texture of the local plant communities. New planting should use plants that are indigenous to the Rocky Mountain Alpine and Sub-Alpine zones and should be located to extend existing canopy edges are planted in natural looking groups. Ornamental plants are recommended only for locations directly adjacent to building masses or in courtyards. Manicured or groomed yards shall be within areas defined by buildings, fences, walls or other defined edged modification so that the visibility of these yards are limited to the adjacent building.

Plant materials used for erosion control shall establish immediate surface stabilization to prevent soil erosion. Diverse, self-sustaining plant species will be used to provide an eighty percent surface cover within one growing season.

The following list of plant materials are indigenous to The Danni Ranch area and should be used according to micro-climate conditions.

Deciduous Trees:

Narrowleaf Cottonwood - *Populus Augustifolia*
Balsam Poplar - *Populus Balsamifera*
Quaking Aspen - *Populus Tremuloides*
Water Birch - *Betula Occidentalis*

Evergreen Trees:

Blue Spruce - *Picea Pungens*
Engelmann Spruce - *Picea Engelmannii*
Subalpine Fir - *Abies Lasiocarpa*
Douglas Fir - *Pseudotsuga Taxifolia*
Rocky Mountain Juniper - *Juniperus Scopulorum*
Lodgepole Pine - *Pinus Contorta*
Limber Pine - *Pinus Flexis*

Shrubs:

Thinleaf Alder - *Alnus Tenuifolia*
Chokecherry - *Prunus Virginiana*
Service-Berry - *Amelanchier sp.*
Mountain Juniper - *Juniper Communis Saxatilis*
Mountain Mahogany - *Cercocarpus Montanus*
Shrubby Cinquefoil - *Potentilla Dasiophora*
Wildrose - *Rosa sp.*
Raspberry - *Rubus Strigosus*
Sage - *Artemisia sp.*
Rabbit Brush - *Chrysothamnus sp.*
Red-berried Elder - *Sambucus Pubens*
Mountain Ash - *Sorbus Scopulina*
Willows - *Salix sp.*
Snowberry - *Symphoricarpos Oreophilus*
Goose or Current Berry - *Ribes sp.*
Subalpine Rock spirea - *Spiraea Densiflora*
Bitter Brush - *Purshia Tridentata*

Buffaloberry - Shepherdia Canadensis
 Mountain Maple - Acer Glabrun
 Lilac - Syringa sp.
 Thimbleberry - Rubus Deliciosus
 Mountain Mock Orange - Jamesia Americana
 Western Virgins Bower - Clematis Ligusticifolia
 Bearberry Honeysuckle - Lonicera Incolucrata
 Shiny-leaved Hawthorne - Crataegus Erythropoda
 Mountain Lover - Pachystima Myrsinite
 Creeping Holly Grape - Mahonia Reper

Vines:

Hop Vine - Humulus sp.
 Matrimonyvine - Lycium Halimifolium

Ground Cover:

Creeping Juniper - varieties:
 Bar Harbor, Plumosa, Wilton
 Mock Strawberry
 Wooly Yarrow
 Stonecrest
 Mountain Alyssum
 Pussytoes
 Alpine Rockcress
 Moss Sandwaort
 Common Thrift
 Snow-in-Summer
 Maiden Pink
 Cottage Pink or Grass Pink
 Creeping Penstemon
 Rock Soapwort
 American Germander
 Kinnikkinnick or Bearberry
 Spurge
 Stonecrop (sedum)
 Houseleek
 Coyote Bush

Grasses:

Seed mixes and seed rates should be adapted to specific locations and micro-climates. Elevations, aspect, slope, application method and mulching are critical to successful revegetation and selection of grass species and application rates. The following grasses are approved for use on The Danni Ranch.

<u>Type</u>	<u>Botanical Name</u>	<u>Variety</u>
Orchard Grass	Dactylis Glomerata	Potomac
Annual Rye Grass	Lolium Multiflorum	None

Perennial Rye Grass	Lolium Perenne	Pennfine
Smooth Brome	Bromus Inermis	Manchar
Hard Fescue	Festuca Ovina Duriscula	Durar
Slender Wheat Grass	Agropyron Trachycalumm	None
Canada Blue Grass	Poa Compressa	Canada
Creeping Red Fescue	Festuca Rubra	Pennlawn
Intermediate Wheat Grass	Agropyron Intermedium	Tegmar
Fairway Wheat Grass	Agropyrom Cristatum	None
Crested Wheat Grass	Agropyron Desertorum	Nordan
Timothy	Phleum Pratense	None

Sod varieties are available and selection should depend on the amount of sunlight and available water.

Some wildflowers that will do well and are often available through seed companies in a variety of mixes are:

<u>Species</u>	<u>Common Name</u>
Achillea Millefolium	Yarrow
Aquilegia Coerulea	Rocky Mountain Columbine
Cheiranthus Alliouii	Wallflower
Chrysanthemum Leucanthemum	Ox-Eye Daisy
Gilia Capitata	Globe Gilia
Linum Grandiflorum var. Rubrum	Scarlet Flax
Linum Lewisii	Blue Flax
Oenothera Lamarckiana	Evening Primrose
Oenothera Pallida	White Evening Primrose
Penstemon Strictus	Rocky Mountain Penstemon
Ratibida Columnarius	Upright Prairie Coneflower
Rudbeckia Hirta	Black-Eyed Susan
	Indian Paint
	Daisies

Avoid Morning Glory and Conkapor.

SECTION VI

CONSTRUCTION REGULATIONS

In order to ensure that lots will not be damaged during the period a residence is being built, the following construction regulations shall be enforced during the construction period. These regulations shall be a part of the construction contract document specifications for each residence, and all contractors and owners shall abide by these regulations:

6.1 Construction Area. The owner or contractor shall provide the Secretary of the Design Review Board with a detailed plan showing how the lot will be protected and the area in which all construction activity will be confined prior to construction, including size and location of construction material storage, limits of excavation, drive areas, parking,

chemical toilet location, temporary structures (if any), dumpsters, storage of debris, fire extinguisher, utility trenching and construction sign. This plan should identify the methods for protection, such as snow fencing, flagging, rope, barricades or other means to be set up prior to construction.

6.2 Improvements Survey. Prior to foundations being poured, a licensed surveyor is required to make a site inspection to certify that all improvements are located within the lot's building site and that they match all approved plans.

6.3 Construction Access. The only approved construction access during the time a residence is being built will be over the approved driveway for the lot unless the Design Review Board approves an alternate access.

6.4 Construction Trailers or Temporary Structures. Temporary structures must be located on the owner's property and must be approved by the Design Review Board as to size, configuration and location. All temporary structures shall be removed after the occupancy permit issuance.

6.5 Storage of Construction Material and Equipment. Storage areas shall be designated and fenced according to the approved "construction area" plan prior to construction. The contractor will be responsible for the maintenance of these areas.

6.6 Daily Operation. Daily working hours for each construction site shall be 7:00 a.m. to 9:00 p.m.

6.7 Blasting. Any plans to blast shall be brought to the attention of and approved by the Secretary of the Design Review Board before commencement. Proper safety and protective actions shall be used.

6.8 Restoration and Repair. Damage to any property, other than the owners, by contractors shall be promptly repaired at the expense of the property owner employing the person or entity causing the damage. (This includes damage done by cleaning out concrete trucks on-site or dumping chemicals anywhere in the Development.)

6.9 Dust and Noise. Every effort shall be made to control dust and noise emitted from a construction area. The contractor shall be responsible for controlling excessive dust and noise from the site.

6.10 Excavation. Excess excavation material shall be removed from The Danni Ranch. The material shall not be placed in common areas, road, or other lots on common property. Excavation, except from utility trenching, shall be done on the owner's site only.

6.11 Debris and Trash Removal. Proper disposal of refuse and storage of material is the owner's and the contractor's responsibility. Debris and trash shall be removed on a weekly basis and hauled to a designated site outside The Danni Ranch.

6.12 Vehicles and Parking. All vehicles will be parked so as not to inhibit traffic, and within the designated "construction area" so as not to damage the natural landscape.

Changing oil in vehicles and equipment without proper receptacles and removal procedures is forbidden.

6.13 Portable Toilets. Portable toilets shall be provided by the contractor and placed in an approved location.

6.14 Signage. Temporary construction signs shall be limited to one sign per site not to exceed six square feet of total surface area. The sign will be free standing and the design location of such a sign shall be approved by the Design Review Board.

6.15 Fire Extinguisher. A minimum of one serviceable 1016 ABC-rated dry chemical fire extinguisher shall be located on each construction site in a conspicuous location.

6.16 Flammable Items. Careless use or storage of cigarettes and flammable items will not be allowed.

6.17 Pets. Contractors, subcontractors and their employees are prohibited from bringing dogs and other pets to the construction site.

SECTION VII

SOLAR DESIGN GUIDELINES

7.1 The following design practices will both maximize the solar advantage that may be obtained, as well as improve the livability of the project and are encouraged to be utilized but are not required:

7.1.1 Elongate the building along the east-west access, exposing more surface area to the south for collection of solar radiation.

7.1.2 Locate living rooms, dining rooms, bedrooms, and other inhabited spaces along the south side of the structure for maximum sun light during winter months. Locate garages, storage rooms, closets, hall ways, bathrooms, utility rooms, etc. along the north side to act as a thermal buffer for the rest of the structure.

7.1.3 Avoid designing patios, decks and entry ways on the north side of the structure, due to shading from the building and northwest winter winds.

7.1.4 Place roof overhanging and deciduous trees (such as aspens) to the south of the structure to shade summer sun, and place berms and coniferous trees (such as spruce) to the north to protect the structure from the northwest winter winds.

7.1.5 Locate the majority of windows along the south, southeast and southwest walls of the building. Provide only a minimum number of windows, only as needed for through ventilation or particular views, along the north walls. Shade south facing windows from the summer sun with overhangs or operable devices.

7.1.6 Construct interior walls and floors out of thermal storage materials such as masonry and concrete. These materials will store excess heat during the day and radiate heat back into the room at night.

7.2 Passive Solar Systems. In addition to following these design practices, there are specific passive design systems that can be applied, and that are appropriate to The Danni Ranch climate. Each system has two basic elements: glazing and thermal storage. The amount and location of glazing will determine the amount of solar radiation that is collected.

The amount and the distribution of masonry storage will determine the amount of heat that can be stored for nighttime use. This second element, thermal storage, is particularly important in residential design at The Danni Ranch, where these buildings are most often only occupied during the colder evenings and nights, and left empty during the day. It should also be pointed out that given The Danni Ranch climate, it will be necessary to have back-up heating systems regardless which passive system (or combination of) is utilized. By following the methods described in the Passive Solar Handbook, Volume 2 of Two Volumes: Passive Design Analysis, the percentage of the total heating load that can be handled by solar (solar saving fraction) can be estimated at any given project. Although there are several combinations and variations, the following three systems will be briefly explained in this section: Direct Gain, Thermal Storage Walls, and Attached Sun Spaces.

7.3 The Direct Gain. The Direct Gain System is simply heating the actual living space directly by sunlight. Sun penetrates south facing glazing and is absorbed by masonry or concrete floors and/or masonry, concrete or water filled walls. At night the masonry or concrete radiates this absorbed heat back into the living space. The guidelines listed below should be followed when using a Direct Gain System at The Danni Ranch:

7.3.1 The use of substantial south facing glazed areas as a means to heat a living space will be negated by heat loss through the glazing at night unless: (1) the south glazing is double glazed and night installation is provided or, (2) the south glazing is comprised of either three or four layers of glass.

7.3.2 By increasing the square footage of the south facing glazed areas (night insulated or triple glazed), the percentage of the total heating load that can be handled by solar (solar savings fraction) is increased, providing that adequate thermal mass is provided.

7.3.3 The required amount of thermal storage depends on the fraction of building heat supplied by solar. For small values of solar heating savings (less than thirty percent, solar heating contributes principally to offsetting day-time heating requirements and little solar need be or can be stored. For values above thirty percent solar savings, solar heat must be stored during the day for use at night. The thermal mass must be in sunlight all day, and if masonry is used, only the first six inches of thickness are effective. The amount of thermal storage mass is determined by one of the following formulas: one pound of water required (per square feet of south glazing) = 0.6 times the estimated solar savings percentage; two pounds of masonry required (per square foot of south glazing) = 0.6 times the estimated solar savings percentage.

If insufficient thermal mass is provided, high temperature fluctuations will result. During the day-time living space will be uncomfortably warm, and later in the evening the thermal mass will too quickly radiate all its heat, resulting in cold temperatures later at night.

7.3.4 Direct sunlight should be diffused over the masonry surface area by using translucent glazing material, by placing a number of small windows so that they admit sunlight in patches, or by reflecting direct sunlight off a light colored interior surface first, thus defusing it throughout the space.

7.3.5 Masonry floors should be a dark color. Masonry walls may be any color. Paint or lightweight construction a light color. Avoid direct sunlight on dark colored masonry surfaces for long periods of time. Do not use wall to wall carpeting over masonry floors.

7.3.6 Shade south facing glazing from summer sun.

7.4 Thermal Storage Walls. The requirements for thermal Storage Wall System are south facing glazed areas for maximum winter solar gain and a thermal mass, located four inches or more directly behind the glass, which serves for heat storage and distribution. The thermal mass wall may be concrete, masonry, or water. A masonry storage wall works by absorbing sunlight through the glazing onto its outer face, and transferring this heat through the wall by conduction and finally distributing this heat to the living space by radiation. The outside surface of the wall is usually painted a dark color for best possible absorption of sunlight.

The guidelines listed below should be followed when using a Thermal Storage Wall System at The Danni Ranch:

7.4.1 The glazed area in front of a thermal wall should, as a minimum, be double glazed.

7.4.2 The efficiency of the Thermal Storage Wall System is largely determined by the wall's thickness and material. A space will overheat if more energy is transmitted through a thermal wall than is needed. This happens when a wall is either too thick or too thin. If a wall is too thick or not dark enough, it becomes inefficient as a heating source, since solar energy is transmitted through it. The following are recommended material thickness: Brick (common) - 8 to 14 inches; Concrete (dense) - 12 to 18 inches; Water - 6 or more inches.

7.4.3 The use of thermal-circulation vents at the top and bottom of a masonry wall are recommended only if the space to be heated will be used during the day-time. A residence will probably be better off saving the heat for radiation from the wall at night.

7.4.4 The percentage of the total heating load in a Thermal Storage Wall System that can be handled by solar (solar savings fraction) increases when (1) night installation is used; (2) triple glazing is used in lieu of double glazing; or (3) a special selective surface is added to the thermal mass wall which reduces the infrared radiation transmitted from the wall to the glass.

For example, assuming a Thermal Storage Wall System has been designed for a house using double glazing, and the resulting solar savings fraction is forty percent - (1) night installation will increase the solar savings fraction to approximately seventy percent; (2) triple glazing will increase it approximately fifty

percent; or (3) a special selective coating could increase to approximately fifty-five percent to sixty percent.

7.5 Attached Sun Spaces. Attached Sun Space System, or greenhouses, combine the element of a Direct Gain System with those of a Thermal Storage Wall System. A well designed south facing solar greenhouse can collect enough thermal energy to heat not only itself, but also a significant part of the building to which it is attached. The Attached Sun Space System is comprised of two thermal zones, accepting fairly large temperature swings in one zone in order to stabilize temperature in the other zone. In the first zone, which is a Direct Gain Sunspace, large temperature swings can be expected because there is a large excess of heat. Heat storage is in the thermal mass wall separating the zones and in the floor of the first zone. Large temperature swings in the first zone can be completely acceptable if it is used as a greenhouse, a sunroom, an atrium, a transit area, or vestibule. The second zone, which is the primary living space is therefore a buffered space, protected from the extremes of the first zone by the time delay and heat capacity effects of the thermal mass wall. A rock bed may be added to this system by actively taking heat from the greenhouse during the day and storing it in the building for use at night. Warm air taken from the greenhouse by fan is stored underneath the living space floor slab. This rock bed then radiates heat up through the floor of the living space.

The guidelines listed below should be followed when using an Attached Sun Space System at The Danni Ranch:

7.5.1 The sun space (greenhouse) should be double glazed.

7.5.2 The recommended thermal mass wall thicknesses are: brick - 10 - 14 inches; concrete 12 - 18 inches; water 8 or more inches.

7.5.3 The wall surface should be medium or dark color.

7.5.4 The addition of thermal mass located in the sun space, such as water filled drums, will reduce the temperature fluctuations within the sun space.

7.5.5 The rock bed with fan forced air should be added to this system only if: (1) the temperatures achieved in the sun space are appreciably higher than the desired temperature level in the living areas and (2) there is excess heat in the sunspace.

Design a complete fan forced air circuit by returning the air to the sun space after it has heated the rock bed. Lay out the rock beds with their inlet and exit plenums in such a way that all rock has air flowing through it. Use backdraft dampers to prevent reverse thermal circulation at night.

7.6 Sun Charts. In order to understand and be responsive to the effects of the sun on the location and design of places, it is necessary to note, at any given moment, the sun position in the sky. This information is necessary in order to calculate solar heat gain, and to locate buildings, outdoor spaces, interior room arrangements, windows, shading devices, vegetation and solar collectors. A cylindrical sun chart will provide an easy to understand and convenient way to predict the sun's movement across the sky for 38.45 north

latitude and 106.52 west longitude (which is The Danni Ranch's approximate latitude and longitude).

This chart enables one to estimate the position of the sun at any time of the day for any day of the year. To actually determine the times that direct sun is blocked from reaching any point on the site it is necessary to plot the obstructions as seen from that point. This is done by plotting the skyline directly on the sun chart by means of either a transit or a compass and a hand level. A hypothetical skyline will be plotted on the sun chart showing that the area above the plotted line is the time when the sun will reach the site.