

**DESIGN STANDARDS
OF RAETA SUBDIVISION**
(SINGLE-FAMILY RESIDENCE COMMUNITY)

A RESIDENTIAL COMMUNITY DEVELOPED BY
CORE INVESTMENTS, LLC
A KANSAS CORPORATION

DOCUMENT NO. 2
April 8, 2005

SINGLE-FAMILY RESIDENTIAL DESIGN STANDARDS

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INTRODUCTION

Preservation of the natural areas and scenic views within Raeta Subdivision is more than a priority, it is a philosophy. Raeta Subdivision has created, through detailed and sensitive planning, a quality residential development with an estate environment. The splendor of the landscaping, natural settings and views of the Wakarusa River valley, combined with the picturesque rolling hills of Eastern Kansas, has created the finest environmentally sustainable residential neighborhood for generations to come.

To ensure Raeta Subdivision's quality, this Design Standards document has been prepared. These Design Standards recognize that the concept of architectural control has a long and successful history in helping to preserve the value and character of residential communities. Upon reading these Design Standards, understanding their philosophy, and implementing their requirements, each owner will become participant in achieving the Raeta Subdivision tradition of quality.

The vision of the developer is to create a community of well-designed, healthy, comfortable homes that are energy efficient and respectful of the environment. The guidelines are flexible enough to allow for a variety of approaches to environmental construction. There are twelve categories in environmental design that cover site planning, energy efficiency, resource efficiency, waste management, indoor air quality, water conservation, homebuyer education, and builder operation. To be approved to build in the Raeta subdivision you must meet the mandatory environmental standards. A list of suggested environmental guidelines is provided as a blueprint for environmental design. And, to further encourage homeowners to incorporate these suggested environmental guidelines, the developer has also established a rebate program. Refer to the Rebate checklist at the end of this document.

These Design Standards explain certain standards pertaining to the development of the single-family residential community within Raeta Subdivision, outline useful information for the design and construction of single-family residences, and explain the architectural review process. Careful planning, adherence to and enforcement of these Design Standards will ensure orderly, attractive, and lasting development, all of which will serve to compliment and enhance the value of your property. To assure that these Design Standards and the general site guidelines serve their intended purpose, they may be modified or supplemented, from time to time.

These Design Standards provide for the preliminary and final review and approval of all site plans, building plans and specifications by the Design Review Committee (DRC) of Raeta Subdivision Single-Family Residence Community Association. By reviewing site and building designs, the DRC intends to assure that a high quality of compatible design and development is consistently achieved. The design of any home will involve unique issues of taste and judgment which cannot be completely reduced to measurable standards of size, setback, roof pitch, etc, and, therefore, **a home may be unacceptable for Raeta Subdivision if its overall aesthetic impact is unacceptable in the judgment of the DRC.**

The DRC is also charged with the responsibility of exercising judgment as opposed to simply enforcing rules. The general guidelines may be modified or waived by the DRC, from time to time, to recognize the special circumstances of a given situation. Such exceptions or variances in no way diminish the enforceability of the guideline(s) in any other situation. The DRC will do its best and exercise its judgment to balance the long-term interests of the overall development.

The Declaration of Easements, Covenants, Conditions and Restrictions for the Single-Family Residence Community ("**Community Declaration**") deals with a variety of subjects, including building type, quality, and other development standards. These Design Standards explain and further develop these requirements into more easily understandable terms to facilitate the design and review process for property owners, architects and the builder. The Community Declaration provides the basis for reviewing and accepting new building and construction proposals within the Raeta Subdivision Single-Family Residence Community ("**Community**").

DESIGN & REVIEW

1.1 Design Review Committee

The Design Review Committee (“DRC”) is the architectural reviewing body established to review and conform plans with the desired aesthetics, maintenance, facility operation, community acceptance and overall appearance of the Community. It is the responsibility and purpose of the DRC to review and approve plans for site and architectural improvements, based on the provisions of the Community Declaration and these Design Standards.

The DRC is composed of professionals, well informed as to intent and standards of the Raeta Subdivision. The DRC consists of at least three members and no more than five members who will review all plans for single-family residences. Raeta Subdivision, Inc. (the “Developer”) may delegate the authority to appoint members of the DRC to the members of the Community Association.

When questions of judgment or interpretation arise, an owner may appeal a decision of the DRC to the Developer. The decision of the Developer is final. In order to meet special situations which may not be foreseen, the DRC may, from time to time, allow variances from certain requirements. Any variance granted shall relate only to the specific situation and shall not be considered precedent setting. Each decision will be made with the welfare of the overall development in mind.

1.2 Review Process

Signed approval of final plans by the DRC is required prior to the undertaking of the construction or installation of any site improvements, landscaping, etc. Such approval simply means that the proposed plans meet Raeta Subdivision’s aesthetic and functional requirements. APPROVALS FROM THE CITY OF LECOMPTON ARE ALSO REQUIRED PRIOR TO COMMENCING CONSTRUCTION. Submission of plans to the City should not be made until final DRC approval is secured.

The City’s approval process is completely separate from Raeta Subdivision’s DRC review and focuses on many construction codes and safety issues not addressed by the DRC. It is incumbent on the builder to satisfy all governmental requirements and secure all required approvals, permits and inspections. Final legal approvals permitting development and occupancy of the property will be made by the City of Lecompton, Kansas. The remainder of this section refers only to Raeta Subdivision’s DRC process without further reference to the review process of the City of Lecompton.

To help ensure compliance with design guidelines, and to attempt to maximize coordination with the DRC, the following review procedure has been developed and should be adhered to:

1. Preliminary Design Conference
2. Preliminary Plan Review
3. Final Plan Review
4. Preliminary Landscape Conference
5. Landscape Plan Review
6. Compliance Reviews
(Other Reviews, as needed)

The DRC will generally review submissions within 15 business days of receipt. If the plans are approved, written notification will be promptly provided along with any changes being recommended by the DRC.

The homeowner is responsible for, and assumes all liability with respect to, (1) structural and soil engineering decisions, (2) soil stability and load-bearing capacity, and (3) compliance with zoning and building ordinances. By approving plans and specifications, neither the DRC nor any member thereof, nor the Developer, assumes any liability or responsibility therefore, or for any defect in any structure constructed from such plans and specifications. Upon request, the homeowner shall provide the DRC and developer with a release of liability.

1.3 **Preliminary Design Conference**

Upon purchasing a lot in Raeta Subdivision, a preliminary design conference will be held (generally within two weeks) with a Raeta Subdivision representative to review the Raeta Subdivision building process. At that conference, the DRC process, the overall design guidelines and the environmental design guidelines and rebate program will be explained. A timetable for the design and construction of your home will be discussed. If the builder and / or architect has been selected, they should also attend, especially if they have not previously constructed any homes in the Raeta Subdivision. Your architect and builder (including all subcontractors) must also be expressly approved by the DRC before proceeding.

In addition to covering the DRC approvals, various other items relating to the building process are covered, for example: deposit requirements, lot contract provisions, Raeta Subdivision's declaration and restrictions, etc. At this meeting, you will be given a complete orientation to the Raeta Subdivision's building process.

An Environmental Consultant has been retained by the Developer to meet with each homeowner (and contractor) for 1 hour to review various environmental features that can be included in the home. This meeting can be scheduled in coordination with the Preliminary Design Conference or at the homeowner's convenience. Further consultations can be arranged directly with the consultant at the owner's expense. More information on the consultant and the services he provides, refer to Exhibit "C".

1.4 **Preliminary and Final Plan Reviews**

Once you and your architect have agreed upon a home design, three (3) copies of the plans must be submitted to the DRC for review. Although the plans need not be completely detailed construction documents, they must clearly portray exactly what will be constructed and how it will be positioned on the lot.

These plans will be reviewed to make sure (1) the home is in compliance with Raeta Subdivision's design standards, (2) architectural treatments are pleasant and appropriate to the neighborhood, (3) the home is compatible with adjacent homes and is well situated on the lot, (4) drainage issues have been adequately addressed, (5) mandatory environmental design standards have been met and (6) the proposed building materials are acceptable. Raeta Subdivision homes are not limited to a single type of architecture; to the contrary, a diversity of architectural styles is contemplated and welcomed, as long as the quality of architecture is good and the home presents a pleasant appearance.

Generally, the DRC will offer specific suggestions to correct the design problems they find. However, the DRC can reject an application based on the professional judgment of its members. Reasons for rejection of an application may include, without limitation, the following:

1. Insufficient information to adequately evaluate the design or design intent.
2. Inadequate or unacceptable overall design quality.
3. Incompatible design elements.
4. Inappropriate design concept or design treatment.
5. Adverse effect on the character of the Community or its residents.

1.5 **Preliminary Landscape Conference**

A preliminary landscape conference will be held within a few weeks of commencement of the construction on your home. At that conference, the DRC will more fully explain design process. Although it is not required, you are encouraged to contract with a landscape architect for the design of your landscape plan. If a landscape architect is hired, the landscape architect should attend this preliminary landscape conference with you. A landscape plan must be submitted to the DRC.

The Raeta Subdivision places an emphasis on landscape conservation, preservation of trees and new landscaping designed in harmony with the existing environment. Mature trees and other vegetation should be preserved and incorporated into the landscape plan, whenever practical.

1.6 Compliance Bond

To ensure that the home is constructed in accordance with the approved plans and all required landscaping and that the lawn irrigation system is installed properly and in a timely manner, a Compliance Bond in the amount of \$10,000.00 must be placed on deposit with the Developer at the time of lot closing. The Compliance Bond may be in cash or in the form of a letter of credit with terms acceptable to the Developer. Simple interest will be paid to anyone who deposits the Compliance Bond in cash. The Compliance Bond will be returned after the DRC makes its final inspection of the home and issues a Certificate of Compliance. Compliance Bond funds can be used by the Developer to remedy any deficiencies in the construction, landscaping, or lawn irrigation system identified by the DRC.

1.7 Compliance Review

A representative of the DRC may review the progress of construction from time to time to make sure construction is proceeding as set forth in the approved plans. In any event, the builder should notify the DRC when final grading has been performed so that the grading can be inspected to ensure all grading problems are solved before sod and landscaping are installed.

Upon completion of construction and installation of the lawn irrigation system and all landscaping, the homeowner may make application for a Certificate of Compliance. This should be done after a Use and Occupancy Permit from the City of Lecompton has been secured. The application, which must be signed by the applicant, contains a checklist indicating among other things: (1) a final occupancy permit has been issued, (2) the environmental design checklist has been completed (3) site improvements including paving, walls, tree preservation and plantings have been provided in accordance with the approved plans and (4) the home is of approved architectural design and materials. A copy of this application (Form D) is included in this booklet in **Exhibit A**. Once a Certificate of Compliance is issued, the Compliance Bond (described above) will be released.

1.8 Subsequent Modification

Occasionally, the owner, builder or architect wishes to make changes affecting the exterior elevation of the home or design of decks, patios, etc. during the construction. **These changes cannot be made without first securing DRC approval.** Even after the home has been finished and occupied for a period of time, or resold, DRC approval is still required prior to undertaking any changes or additional construction affecting the exterior of the home. No outdoor sculpture, lighting, or lawn ornamentation (over 3' in any dimension) may be added at any time without specific DRC Approval.

CONSTRUCTION

2.1 Construction Requirements

During the period that a site and / or building is under construction, certain minimum measures will be required to minimize disturbance to adjacent sites. **No lot is to be cleared or construction, otherwise started without prior written approval of the plans for that lot by the DRC.** Before approval is given, the builder and applicant must sign the Raeta Subdivision Building Construction Agreement in which the builder and proposed homeowner agree: (1) to submit any changes to the approved plans to the DRC, (2) that they are responsible for sewer and water hookup fees, and (3) that the homeowner is responsible for any damages to the lot caused by the contractor. A copy of the Agreement (Form A) is enclosed in **Exhibit A** of this booklet.

Additionally, no construction work, site prep, or construction staking shall be performed on any lot prior to lot closing as this could void your mechanic's lien coverage. There will be no trespassing across adjoining lots or common ground. Contractors must take measures to protect curbs and streets when crossing with excavation grading equipment and concrete trucks, and must keep dirt, mud, silt, sand, gravel and all building materials off of the streets. No dumping of construction materials, waste or trash shall occur in the Community. Regular trash removal must be provided. No loud music is allowed on any job site. Contractors will assume complete responsibility for the actions of their workers as well as those of their sub-contractors. **No construction work will begin before 7:00 a.m. or continue after 7:00 p.m.** To alleviate the noise factor and preserve the tranquility of the

area, exterior construction work on new homes (i.e., foundations, framing, siding, or roofing) **is not permitted on Sundays**. Interior work in new homes and normal maintenance on existing structures is permitted on Sundays.

2.2 **Environmental Construction**

The Developer has defined a list of mandatory Environmental Design Standards required to build a home in the Raeta Subdivision. If the homeowner is interested in applying for the Environmental Rebates or simply wants to build an environmentally responsible home for comfort and saving on energy bills, the developer has also included list of items that may be incorporated. The Suggested Environmental Guidelines gives the homeowner and builder great flexibility by allowing you to choose the measures most practical for a specific home. There are many ways to reduce pollution and the waste of natural resources when building. It is understood that environmental building products and techniques constantly change, the builder is also encouraged to submit measures which are not included to be reviewed by the Design Review Committee. Bonus points are given for innovative design. These guidelines are intended to illustrate broad design and construction guidelines and are not to be used as design or construction specifications. These guidelines are not intended to substitute for manufacturer's installation, or use recommendations, or building codes. However, these guidelines may exceed the minimum requirements of a product manufacturer, installer or building code. Refer to Section 6.0 Environmental Design in this document for a detailed description of the Mandatory and Suggested Environmental Guidelines and Exhibit "B" for the Worksheets delineating the point and rebate system. If the Homeowner elects to request an Environmental Rebate, the Environmental Checklists must be completed and submitted with the Final drawing submittal to the Design Review Committee (some items requiring testing will not be confirmed until the house is complete). The house must score at least 80 points on the Suggested Environmental Guidelines checklist to qualify for the Rebate program. The point scoring equivalency to dollars is described further in the Rebate Checklist.

If the Homeowner is applying for Environmental Rebates, the Final Environmental Checklist along with documentation and certificates of compliance must be submitted prior to the Final Inspection. The builder shall include any testing documentation or modifications that were made during construction. If the home does not pass the final inspection, the builder must schedule a re-inspection in order to receive approval on the house.

2.3 **Erosion Control Plan**

All lots shall be maintained in a clean and orderly manner during construction periods. Builder shall submit documentation of a site plan for erosion and sedimentation control before site is cleared or graded including contours of slopes to be cleared, location and type of erosion control measures, storm water and sediment management systems, and a vegetative plan for temporary and permanent stabilization. Additional erosion control measures (including redundant mulch, compost, or straw bale berms or blankets) shall be installed on steep slopes, locations where silt fences do not hold up, and around storm drains.

2.4 **Excavation**

No excavation will be made except in conjunction with the construction of an improvement. When such improvement is completed, all exposed openings must be properly backfilled and graded. Excavated topsoil shall be protected from erosion.

2.5 **Grading**

It is encouraged that the grading of each site will be undertaken in a sensitive fashion. The natural landforms should be preserved and enhanced; therefore, all new construction should work with the land. Property line grade conditions should gracefully meet adjacent grades. Finished grades must also be sensitive to the adjacent properties, with particular regard to drainage and views.

2.6

Builder Operations

The builder shall include each subcontractor in the environmental building process by providing an environmental checklist and review the relevant environmental measures planned to ensure their compliance with the guidelines.

2.7 Unfinished Work

Once commenced, construction will be diligently pursued to the end, and it may not be left in a partially finished condition for more than 30 days without prior written approval from the DRC.

2.8 Destroyed Homes

Houses destroyed by fire or natural disaster must be demolished and / or removed from the premises within three months and new construction started expeditiously, weather permitting. The same standards and procedures as for new construction shall apply. Partially burned or damaged property shall follow the same rules and standards.

ARCHITECTURAL PLANS

3.1 Preliminary Plan Review

Before proceeding, the architect must be expressly approved by the DRC. Upon approval of the architect and agreement between the owner and architect upon a home design, three (3) copies of the plans must be submitted to the DRC for review. Although the plans need not be completely detailed construction documents, they must clearly portray the dwelling (and all other improvements) to be constructed and how the dwelling will be positioned on the lot. At a minimum, the preliminary plans must include:

1. **Site Plans:** An accurately **surveyed** site plan reflecting elevations and contours (two foot intervals); easements; all trees of at least a 4 inch caliper, a tree preservation plan; site preservation plan (identifying areas on the lot that will be replanted as well as minimally or undisturbed zones); storm drainage outlets, and the proposed placements of the home, driveways, sidewalks, pool, patio, deck, retaining walls, etc. The concept for site drainage and berming should also be clearly indicated. If the preliminary plans are being developed before the streets and utilities in the area are completed, it may not be possible to accurately survey the lot. In these cases only, preliminary plans will be reviewed without accurately surveyed contours; however, surveyed contours will be required prior to acceptance of the final plans.
2. **Floor Plans:** Floor plans of each floor showing all windows, doors, cased openings, cabinets, shelves, bath fixtures, stairs, etc. All rooms should be labeled and square footage of living areas for each floor reflected (show square footage of garage and unfinished space separately). Identify renewable energy concepts (i.e. Passive solar heating, active solar panels, geothermal heat pump) if they are to be included in the design.
3. **Elevations:** All elevations should be drawn to scale and floor lines, windows, doors, chimneys, retaining walls, steps, railings, decks, patios, etc. should be shown. Roof pitches and overall dimensions should also be reflected. These elevations must accurately depict the look of the home in sufficient detail to reflect the proportions and alignment of all of its elements. Building material types should also be specified.

PRELIMINARY PLANS THAT DO NOT CONTAIN ALL OF THE ABOVE ITEMS WILL BE DEEMED INCOMPLETE, AND WILL NOT BE APPROVED, IF AT ALL, BY THE DRC UNTIL SUCH TIME AS COMPLETE INFORMATION IS PROVIDED.

3.2

Final Plan Review

Once the DRC has approved the preliminary plans, final plans should be prepared by the homeowner's architect. Construction Documents of **professional quality** must be completed in sufficient detail to fully-explain the intent of the structural and architectural design, as well as the materials and finishes involved. Drawings at a scale of not less than 1/4" = one foot are required. Refer to Exhibit "A" Form C for a list of information to include.

The DRC may approve the final plans, **subject of submission of color selections and materials prior to the installation of any finish materials**. All proposed construction systems shall meet or exceed the requirements of state and local codes (Uniform Building Codes, latest edition) and be appropriately designed for local climatic conditions, soil stability, and load-bearing capacity.

LANDSCAPE PLANS

4.1 Landscape Design

The existing topography at Raeta Subdivision is one of its best assets. The land within the Community rolls in a fashion which gives the Raeta Subdivision an estate character special to the Midwest landscape, which the Developer has strived to preserve. Consequently, all new construction should be sensitive to the topography of the land and conform to it. Fills and cuts should be kept to a minimum. When cutting is necessary, the resultant wall or well should be integrated into the grade through the use of indigenous materials. Building elements must be well proportioned to their site, and site construction should not result in fragmentation of the continuous green landscape. The Community at Raeta Subdivision should appear as a whole, with harmony among all elements.

Landscape zones and restrictions include the following:

- A. Home site area [including up to 100' from house perimeter and 25' on either side of driveway]
The home site area (as identified on the plat) allows for tree removal and grading incorporating the new home and amenities. Construction activity (including vehicles and materials storage) is allowed in this zone with restrictions near defined tree or landscape save areas.
- B. Landscape zone [including up to 200' from house]
This zone is intended for transitional landscaping from the home site area into the natural landscape. Storage of construction materials are not allowed in this zone. Only small landscape construction vehicles and activity are allowed. No irrigation systems and therefore native plantings shall be installed, no turf grass is allowed. Watering is allowed during initial plant/tree stabilization period.
- C. Natural Landscape Area [The undisturbed area of lot that has been designated to be left natural.]
Minor modifications allowed in this area include: safety/maintenance of existing native landscaping, introduction of new native landscape plantings to enhance the existing.

For an environmentally responsible landscape design, you are encouraged to install xeriscape landscaping design and at a minimum contain low, medium and high use water areas, minimal turf grass areas, and extensive use of drought tolerant plantings.

4.2 Conservation and Preservation of Trees

The landscape design for the Raeta Subdivisions employs two basic considerations: (1) landscape conservation, and (2) minimized environmental impact of the new construction and landscaping. **Permission** is required from the DRC before removing any trees 4" or over in caliper. Appropriate construction procedures should be followed to protect and preserve desirable trees and plant material which may exist on the construction site. Those trees identified to be saved by the DRC shall be protected from construction damage by barricades or fencing. Mature vegetation should, whenever practical, be saved to give the design and established feeling. Street trees or front yard shade trees will be required on all lots that do not have existing front yard trees. Each lot shall install a minimum of 6 hardwood shade trees per acre (three of which must be in the front yard) of at least 3-1/2" to 4" caliper. Ornamental trees will not be included in the count toward shade trees.

The developer encourages participation in the Building With Trees program developed by the National Arbor Day Foundation in cooperation with NAHB. This includes compliance in planning and design, tree protection during construction, and maintenance/long-term care.

4.3 **Irrigation/Watering**

If an irrigation system is used it must be approved by the Design Review Committee and shall include a timer and rain sensor. Collected water (from rain or greywater) and drip irrigation systems are encouraged. Irrigation systems shall be installed so that the trenching takes into account the root systems (beneath the drip line) of existing trees to be saved. During construction, existing trees to be saved should be hand watered.

4.4 **Lawns**

All disturbed areas not in planting beds, or not approved by the DRC to be returned to its natural state shall be sodded or seeded. The DRC may require the homeowner to sod specific areas under certain circumstances (e.g., to control highly erodible areas)

4.5 **Landscape Plan Review**

Landscaping will be reviewed for its overall appropriateness, environmental sustainability, as well as determining whether it presents a sense of cohesiveness and thoughtful composition for the particular home and the community. Appropriate plantings are strongly encouraged to encompass the entire foundation.

4.6 **Preliminary Landscape Plan**

Three (3) copies of the preliminary landscape plan must be submitted to the DRC showing the following in detail:

1. Landscape zones a) Home site, b) Landscape & c) Undisturbed delineated.
2. Existing trees on the lot and along the street (4" minimum caliper). Xeriscape and naturally preserved landscape areas identified.
3. Location of sidewalks, driveway, streets and curbs.
4. Existing easements.
5. Location of exposed air-conditioning units and utility meters, and their screening.
6. Existing and proposed contours for grading, swales, and berms.
7. Plant material type and proposed installation size, including height or caliper and container type and size (3 gallon minimum).
8. Irrigation plan with recycled water (rainwater and/or greywater) integration, if included.
9. Exterior lighting-type, fixture type, light color and material.
10. Monuments, fountains, and lawn ornamentation (not allowed in front yards).
11. Walls and planters, including design, size, material type and facing.
12. Location of pool and pool fencing.
13. Location of decks, gazebos, cabanas, lattices and retaining walls.
14. Location and types of all ground cover material (hardwood mulch is preferred).

4.7 **Landscape Construction and Maintenance**

The preliminary landscape plan, which is submitted and approved by the DRC, must be completed within six (6) months after the completion of the dwelling. All ordinances and regulations of the City of LeCompton, Kansas concerning general lawn and landscape maintenance apply.

Trees that are marked to be preserved on a site plan and for which utilities must pass through their root zones shall not have surface-dug trenches. Tunnels shall be dug through the root zone in order to minimize root damage. No soil from clearing, grading, or construction activity shall be placed on top of any root zone for trees that are designated on a site plan to be preserved. Trees must be fenced around the drip line throughout the

construction process. Fences must be firmly set—if wood fence posts are used, they must be a minimum of 2x2 lumber.

GENERAL SITE/BUILDING GUIDELINES

5.1 Minimum Construction Standards

All homes in the Raeta community shall have 2,500 square feet minimum finished square footage. The lower level (basement area) and garage shall not be considered finished for purposes of these square footage requirements. Variances to this construction standard may be granted by the DRC. Different requirements can be established for each phase, and future phases may have different minimum square footage requirements.

5.2 Easements

Within utility easements, no structure, planting or other material shall be placed or permitted to remain which may damage or interfere with the maintenance of utilities, or which may change the direction of flow of drainage channels in the easements. Maintenance of the easement and right-of-way areas of each lot shall be the responsibility of the lot owner, except for those improvements for which is public authority or utility company is responsible. Approval of the landscape design within such areas must be obtained from the DRC, and all such areas shall be maintained by the lot owner or by the appropriate homeowner's association.

5.3 Utilities

All utilities will be underground to the fullest extent possible.

5.4 Fencing/Walls/Gates

Fences are not encouraged because they fragment the landscape of the Community. Property line fencing is discouraged, and fencing will not be allowed which has the effect of creating unmaintainable areas. All fencing, regardless of when installed, must be approved by the DRC. All fencing and walls (including the composition and location thereof) shall be subject to the approval of the DRC. No chain link fence, wire, wood picket, wood panel, brick or stockade fencing shall be permitted. Wrought iron and natural stone fencing are suggested. Privacy fencing/screens of other materials around pools, patios and decks may also be permitted by the DRC, provided they are appropriately consistent with the architecture of the dwelling, but in no instance shall such fences/screens penetrate the building setback lines.

Retaining walls shall be made of natural limestone and approved by the DRC. Entry gate structures (optional) are subject to the approval of the Design Review Committee. These walls are limited to 120 s.f. and cannot exceed 10' high, they shall be made of natural materials or faced with quality materials approved by the Design Review Committee. Gates (optional) shall be constructed of wrought iron or metal providing a minimally obstructed view and compliant with Douglas County Fire code for emergency access.

5.5 Decks and Gazebos

All decks and gazebos must be approved by the DRC, and their design should be included in the preliminary and final plans submitted for the dwelling. Such designs should reflect the details of the decking, structure, railings, and stairs. Where decks are close to the grade, appropriate termite and insect protection should be afforded, and drainage should be maintained away from the dwelling. If the deck is well off the ground but it too low to walk under, the space under the deck should be screened with lattice work, plantings, or other appropriate material. All gazebos and decks should be appropriately tied to the architecture and composition of the dwelling.

5.6 Paved Surfaces

All paved surfaces shall be of a high quality finish such as asphalt, sculptured concrete, brick, manufactured durable pavers (environmentally friendly permeable pavers are encouraged), exposed aggregate or other high quality permanent material. Large expanses of paving are not encouraged. If asphalt is used, it is

recommended that it be contained within a concrete or steel edging. Long straight driveways should be avoided and driveway flairs should be standardized of a curved design.

5.7 **Signage**

Signage limitations have been developed in an effort to preserve the visual quality of the Community. No permanent freestanding signs are allowed on any residential lot. Temporary signs shall be allowed for a period approved by the DRC and must not exceed five (5) square feet in effective area nor three (3) feet in height. Such signs may only advertise the property for sale or the property during construction. All signs must conform to the standards set forth herein, will be reviewed and approved by the DRC, and are subject to further rules and regulations of the City of LeCompton, Kansas. The Developer and the Community Association has the right to remove any sign which violates these sign conditions and to remove signs erected on the right-of-way or on private property.

5.8 **Ornamentation in Yards**

Ornamentation, like signage can become visual clutter in the Community and destroy the feeling of the continuous green park. No lawn ornaments (e.g., sculptures, birdbaths, fountains, etc.) over 3 foot in any dimension will be permitted in yards visible from the street without specific written approval of the DRC.

5.9 **Swimming Pools**

No aboveground level swimming pool may be installed on any lot. All swimming pools will be designed and engineered in compliance with applicable codes and are subject to DRC approval.

5.10 **Basketball Goals and Playground Equipment**

Basketball goals must be glass in construction (clear), free-standing (i.e., attached on separate poles) and positioned behind the front building line of the home. All playground equipment, to the extent practical, must be constructed of wood and in colors that blend with the natural surroundings. Basketball hoops/goals attached to the dwelling or garage are prohibited. All playground equipment must be placed to the rear of the house. All basketball goals and playground equipment must be approved by the DRC.

5.11 **Tennis Courts**

Tennis courts are permitted when lot size is sufficient and conducive, but placement and lighting must be approved by the DRC. Generally, at least partial evergreen screening will be required for all tennis courts.

5.12 **Antennas/Dishes and Solar Panels**

All antennas and satellite dishes should, to the extent reasonably possible, be installed in attic space or other enclosed area of the dwelling. No antenna or satellite dish larger than two feet in diameter may be erected on any property for any purpose, and shall not be visible from the streets, without the prior approval of the DRC. Solar panels/systems shall be incorporated within the building architecture. Notwithstanding anything to the contrary, homeowners must obtain the prior approval of the DRC for all antennas, satellite dishes, and solar systems.

5.13 **Landscape Lighting**

All outdoor lighting shall be directed so as to avoid glare and excessive light spillage on adjacent property and fronting streets. Tennis court lighting is not allowed. No lighting of a patio, pool, or other recreation area will be installed without being designed so as to buffer surrounding residences from excessive light. Except for seasonal decorative lights, which may be displayed between November 15 and January 15 only, and which do not unreasonably interfere with the enjoyment of adjoining Lots nor constitute a nuisance, all lighting must have DRC approval prior to installation. No exterior light will be maintained on any lot which is found to be objectionable by the DRC. Upon being given notice by the DRC that any exterior light is objectionable, the owner of the lot on which the light is located will immediately remove the light or have it shielded in such a way that it is no longer

objectionable. Exterior lighting shall have concealed sources of illumination and maintain light levels consistent with the recognized standards of the lighting industry. Accepted white color shall be in the color range of 2700-4500 degrees K. Golden, yellow, blue, or reddish light sources are not allowed. Temporary lighting shall follow standards of permanent lighting as described in this handbook. Security lights that are controlled by motion sensors will be permitted, subject to the approval of the DRC.

5.14 Garages

Garages are to be given the same architectural treatment and constructed of the same materials as the main structure. Each dwelling must have a private, fully enclosed garage. All “attached” garages shall be side-entry. Garages shall have a minimum of space for two (2) cars, and garages for more than four (4) cars are discouraged. The interior walls of all garages must be finished in a quality material (i.e., no open framing allowed). No garage will be permitted to be enclosed for living or used for purposes other than storage of automobiles and related normal use.

5.15 Pets and Animals

No animals or other domestic farm animals, fowl or poisonous reptiles of any kind may be kept, bred, or maintained, on any Lot, and no more than three (3) dogs or cats (or combination thereof) shall be kept or maintained on any lot. No animals shall be kept, bred or raised on any lot for commercial purposes. In no event shall any domestic pet be allowed to run free away from its owner’s lot. If an animal creates a nuisance or endangers the safety or welfare of any resident of the community, such animal shall be removed from the subdivision by the owner thereof. In the event the owner fails or refuses to remove the animal the Board of Directors may cause the animal to be removed. Community members are permitted to have and breed horses that will remain within the Common Area, corral & stables with the prior written permission of the Community Association. Care and maintenance of horses will be provided through a service approved by the Community Association.

5.16 Screening, Vents, Etc.

The public views from the streets are to be protected and considered in all that is done. Screening must be compatible with the architecture of the dwelling and planting concepts. No screening of a patio or area may occur beyond the building setback of the dwelling unless approved by the DRC. **The following items should be appropriately screened** from adjacent lots and the streets with landscape materials, permanent fences, etc., and shall be located behind the front building lines and as far from property lines as reasonably possible: Storage areas and trash containers, all mechanical, electrical, and electronic equipment and meters, areas under decks, Tennis Courts and Swimming Pools.

No window or wall air conditioning/heating units will be permitted. Heating, air conditioning, and plumbing vents shall not penetrate the roof on the street-side of the dwelling, unless determined to be absolutely necessary, and approved, by the DRC.

5.17 Use Limitation and Accessory Structures

Certain uses are forbidden in the Community. This list has been formulated to help maintain a quiet, residential quality, to minimize traffic volumes, noise and visual intrusions, and to create a safer neighborhood.

- * No structure of a temporary character, recreational vehicle, mobile home, pickup camper, trailer, boat trailer, tent, shack, garage, barn or other outbuilding will be used on any lot at any time as a residence, either temporarily or permanently.
- * No permanent clotheslines or exterior storage tanks may be maintained on any lot provided, however, that temporary, retractable clotheslines approved by the DRC are permitted.
- * No driveway, public street, or parking area that may be in front of, adjacent to, or part of any lot may be used as a habitual parking place for trucks, trailers, mobile homes, recreational vehicles, boats, motorcycles or commercial vehicles, except in specially designed areas approved by the DRC. The term “commercial

vehicle” will include all automobiles, station wagons, trucks, and vehicular equipment which bear signs or have printed on the sides of same reference to any commercial undertaking or enterprise.

- * No noxious or offensive activity shall be carried on upon any site, nor shall anything be done which might cause embarrassment, discomfort, annoyance or nuisance.
- * No burning leaves, trash, or construction materials shall be allowed on any lot at any time.
- * No portion of the Community shall be used in any manner to explore for or remove any water, oil or other hydrocarbons, minerals, or earth substance of any kind. The exception is a geothermal energy system used for the house.
- * Accessory structures and detached buildings, such as lawn sheds, tool sheds, playhouses, and dog houses, will be permitted, provided, however, that they must be architecturally compatible with the residence and approved by the DRC. All such structures must be screened, to the extent practical, from view from surrounding properties.

Each Owner shall maintain and keep his Lot as all times in a safe, sound and sanitary condition and repair, including lawn mowing and landscape maintenance, and shall correct any condition or refrain from any activity which might interfere with the reasonable enjoyment by other Owners of their respective Lots. All improvements on a Lot which are damaged by or destroyed by fire or other casualty shall be repaired and restored by the Owner thereof with due diligence.

5.18 **Building Design**

The overall theme of the Raeta Subdivision is one of understated elegance and sensitivity to the surrounding environment. Each individual dwelling, regardless of style, must represent these qualities. The dwelling must be of proper proportion with each of its components in relationship to the whole. Roof lines are particularly important in the relationship of proportion and scale to the design. There should be no unnecessary additions, and the pitches on each elevation must be consistent and appropriate to the style. Roofs must not be over scaled so as to overwhelm the dwelling. Windows and door openings must be appropriately located, balanced and sized. Window shutters are appropriate when sized to match window openings and mounted to appear functional. Details, such as cornices and fascias, must be of the particular style and appropriate to the overall composition. Materials and colors shall be representative of the style chosen for the dwelling.

5.19 **Site/Building Relationships**

It is intended that a basic harmony of architecture will prevail among the dwellings so that no dwelling will detract from the positive impact of the overall environment. Colors, materials, finishes, and building forms should be sensitively integrated with the landscape and topographical character of each lot. The site dimensions must be adequate to accommodate the proposed improvements, including the dwelling, parking, drives and screening.

5.20 **Setbacks**

Many Raeta Subdivision lots will have setbacks more stringent than standards established by the City of Lecompton. These will be set as a means to control the overall visual impact from the street. Setbacks for unique lots may vary from typical standards. The Developer reserves the right to impose setbacks more stringent than standards established by the City of Lecompton.

5.21 **Colors and Materials**

Colors and materials allowed in the Community will be restricted as a means of ensuring the quality and harmony of the overall environment. No individual shall detract from the others or cause a distraction to a neighborhood. All exterior colors and materials are subject to review and approval by the DRC. Colors should be suitable to the neighborhood and appropriate to the architecture and style of the dwelling. Colors should blend well with other exterior material such as stonework. Window frames other than wood will be either anodized or

electrostatically painted. Wood frames will be painted, sealed or stained. Buildings will be faced on all sides with quality facing materials such as brick, stone, wood, custom metal or stucco as approved by the DRC. The following materials are generally not allowed: exposed standard concrete block; simulated brick, stone or wood; board and batt. Prefabricated metal buildings are not allowed. Exposed foundations must be painted and those exceeding twelve (12) inches will be covered with the same quality facing material as the dwelling. The DRC will allow the use of high quality masonite lap siding on certain dwellings where it determines the aesthetic impact will not be compromised and maintenance will be reduced. In such cases, the material must be appropriately applied to a boxing material equal to ½ inch plywood. Roof materials approved by the DRC include cedar, shake, dimensional cedar wood shingles, slate, custom metal or tile.

ENVIRONMENTAL DESIGN GUIDELINES

The developer's goal is to incorporate environmental thinking at all levels of design and construction. There are three levels of Environmental Guidelines.

A. Mandatory Environmental Guidelines: These items must be incorporated in the design and construction in order to build in the Raeta Subdivision.

B. Suggested Environmental Guidelines: This is a list of guidelines that are suggested for design and construction of an environmentally respectful home. Although you are not required to incorporate any of these items, if you do include a minimum of **80 points** (points are listed adjacent the item) you can qualify for the Environmental Rebates.

C. Environmental Rebate Guidelines: Once you have incorporated at least **80 points** of the Suggested Environmental Guidelines you can incorporate environmental design elements from this section to receive up to \$7,500.00 in rebates from the Developer. Refer to Exhibit 'B' for further information for the point system and dollar equivalency.

6.1 **Mandatory Environmental Guidelines**

A. Site Planning

1. Use of redundant mulch, compost or straw bales for erosion control. In addition to required silt fencing, builder shall install mulch, compost, or straw bale berms or blankets. These additional measures shall be installed on steep slopes, locations where silt fences do not hold up, and around storm drains.
2. Tree Preservation Plan. A tree expert (certified arborist or individual with a professional degree in forestry, landscape architecture or related field) shall develop a site plan prior to clearing, grading, or construction that identifies existing trees with diameter at breast height dimensions exceeding 2 inches and which designates trees to be protected during all construction activities. Tree root zones (area extending in all directions from trunk) must be protected with physical barrier. Tree Preservation Plan shall be reviewed with subcontractors and posted on job site.
3. Utilities in tree root zones tunneled or hand dug. Trees that are marked to be preserved on a site plan and for which utilities must pass through their root zones shall not have surface-dug trenches. Tunnels shall be dug through the root zone in order to minimize root damage.
4. Individual trees fenced at drip line. No soil from clearing, grading, or construction activity shall be placed on top of any root zone for trees that are designated on a site plan to be preserved. Trees must be fenced around the drip line throughout the construction process. Fences must be firmly set—if wood fence posts are used, they must be a minimum of 2x2 lumber.
5. Protected tree save area. A minimum of 80% of the lot must be protected from all grading and tree clearing.
6. Tree planting. Site plan shall document that a minimum of 6 trees per acre are planted.

B. Energy Measures

1. Air Sealing Measures

a) Housewrap (sealed at plates, seams, and openings): An exterior housewrap shall be applied to the exterior walls according to manufacturer's specifications. The housewrap must be installed in as continuous a manner as possible, and be sealed with housewrap tape, caulk or other sealant to the framing at top plates, all overlapped seams, rough openings for windows and doors, all subcontractor-made penetrations, band joist areas, and at the foundation wall below the bottom plate.

b) Chases sealed and insulated: Framed spaces that connect conditioned areas to unconditioned attics, basements or crawl spaces shall be sealed with sheet material and sealant. These areas include chases for plumbing, ductwork, chimneys and flues. For chases with high temperature heat sources, noncombustible sheet materials, such as sheet metal and high temperature caulk, shall be used. Where the code prohibits sealing this gap (such as with fireplace flues) manufacturer-supplied sheet metal shall be used that fits the flue pipe as closely as allowed. Breaks in framing and interior finish materials, such as for dropped soffits and changing ceiling heights, that connect unconditioned and conditioned areas shall be sealed with blocking or sheet material and sealant.

2. Insulation Minimums:

a) Slab Insulation: Install 2" rigid insulation (R10), 4'-0" wide along slab perimeter.

b) Basement walls (R8): Both masonry and framed basement walls shall have complete insulation coverage from floor to ceiling equal to or greater than R8.

c) Cantilevered floors (R24): Floors with conditioned area over unconditioned open areas, the floor joist cavity shall be sealed with sheet material or blocking and insulated to R24.

d) Wall Insulation (R15): the total R-value of an exterior wall shall be: R15 or greater for occupied spaces.

e) Band joist insulated (R19)-: The band joist connecting two conditioned floors shall be insulated to R19 or greater.

f) Ceiling Insulation (R30): Ceilings with unconditioned attic space above shall have complete coverage of attic insulation equal to or greater than R30.

3. Heating and Cooling Equipment

a) Cooling equipment sized within 6,000 btu/h of Manual J: The size of all heat pump equipment shall be within 6,000 btu/h of the cooling load as determined by the Air Conditioning Contractors Association (ACCA) and American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) Manual J guidelines. Builder must submit documentation of Manual J sizing with scoring worksheet.

b) Heating equipment sized within 25,000 btu/h of Manual J: All furnaces and heat pump equipment shall be within 25,000 btu/h of the heating load as determined by the Air Conditioning Contractors Association (ACCA) and American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) Manual J guidelines. Builder must submit documentation of Manual J sizing with scoring worksheet.

c) 90% AFUE furnaces: A minimum of 75% of all furnace heating system output shall have an Annual Fuel Utilization Efficiency (AFUE) greater than or equal to 90%.

d) SEER 12 cooling equipment: A minimum of 75% of all cooling system output shall have a Seasonal Energy Efficiency Ratio (SEER) of 12 or greater.

e) HSPF 7.8 heat pump: Although not a mandatory requirement, if installed, a minimum of 75% of all air source heat pump output shall have a Heating Seasonal Performance Factor of 7.8 or greater.

f) Cooling equipment has non-CFC and non-HCFC refrigerant: All cooling equipment shall be charged with refrigerants not containing CFC's or HCFC's.

4. Ductwork / Air Handler

a) Air handler located within conditioned space: All air handlers are located within conditioned space. Vented combustion closets are not considered conditioned space. Furnaces using room air for combustion (including unfinished basements) are not eligible.

b) Duct seams and air handler sealed with mastic: All transverse seams in supply and return ducts, including supply and return plenums and leakage sites in the air handler, shall be sealed with duct mastic and fibrous reinforcing mesh according to SMACNA specifications. Duct tape is not a suitable sealant for ducts but may be used for sealing leakage sites at the air handler's removable access panels and at filter access panels.

5. Windows

a) NFRC rated windows: Windows shall be rated by the National Fenestration Ratings Council and have a U-factor of 0.56 or less (or an R-value of 1.8 or greater).

6. Durability

a) Roofing (30-year warranty): Shingle or other exterior roofing material shall have a minimum 30-year manufacturer's warranty. Warranty documentation must be provided to the homebuyer.

7. Moisture Control

a) Gravel bed beneath slab & vapor barrier: A minimum four-inch deep gravel bed shall be installed beneath all concrete floor slabs. A 6 mil polyethylene vapor barrier shall be installed on top of gravel/beneath all concrete floor slabs and over all exposed earth in crawl spaces.

8. Water-Outdoors

a) Timer on hose bibs or irrigation system: Each outdoor hose bib shall have a timer to control irrigation, or if an irrigation system is installed, it shall have a timer and rain sensor.

6.2 **Suggested Environmental Guidelines**

A. Site Planning- Wildlife habitat.

The site shall have a wildlife habitat area that is approved by the Kansas Wildlife Federation and certified by the National Wildlife Federation. Wildlife habitats can be established by planting native Kansas plants or by leaving tracts of land undisturbed and protected. Native plant lists can be obtained from the Kansas Wildlife Federation. 2 points

B. Energy Efficient Building Envelope and Systems

The building envelope defines the conditioned and unconditioned spaces in the house. The building envelope consists of two parts: a thermal barrier (insulation) and an air barrier (any number of materials

and approaches). For instance, an unfinished basement (without carpet, drywall, etc.) where the exterior walls are insulated and air sealed shall be considered “conditioned space”. An unfinished basement where the insulation and air barrier are in the ceiling is considered “unconditioned space.”

1. Air Sealing Measures

a) Floor penetrations between unconditioned and conditioned space. All holes in the floor assembly for plumbing, wiring, ductwork, and other purposes connecting conditioned and unconditioned (and exterior) areas shall be sealed. Penetrations for flues and other heat-producing items shall be sealed with noncombustible sheet materials and high temperature sealant. 2 points

b) Cantilevered floors sealed above supporting wall: For floors with conditioned area over unconditioned open areas, the floor joist cavity shall be sealed with sheet material or blocking and sealant above the top plate of the supporting wall. These points are available only for homes with cantilevered floors. 2 points

c) Fireplace air sealing package: For pre-fab fireplaces on exterior walls, the exterior wall stud cavities shall be covered with OSB, drywall or other acceptable sheet material prior to installation of fireplace unit, or the insert cavity and chase shall be sealed and isolated from the conditioned space. Flue penetrations between conditioned and unconditioned space must be sealed with noncombustible sheet material and high temperature sealant. Fireplace units must have an outside source of combustion air, operable damper and glass doors. Sealed combustion, direct-vent units are eligible for these points in addition to combustion safety points. 2 points

d) Exterior wall sheathing sealed at plates and seams: Caulk, gaskets, tape or other appropriate sealant shall be applied to the exterior wall sheathing to create an airtight connection to the framing. All holes and penetrations (such as those created by subcontractors) shall be sealed. 4 points

e) Window and door rough openings: The space between the framing for window or door rough openings and the installed units shall be sealed with nonexpanding spray foam sealant, closed cell foam backer rod, spray applied insulation, or other suitable sealant. Fiberglass or rock wool batt insulation is not acceptable as a sealant but can be used as a backing for a sealant (such as caulk). Thresholds for exterior doors shall be sealed to the subfloor. 2 points

f) Airtight IC recessed lights or no recessed lights in insulated ceilings: Recessed lights in ceilings with an unconditioned area above must meet the Kansas Energy Code specification (1995 MEC section 502.3.4 section 1 or 3-revise for KS) for air tightness and must be Insulation Contact (IC) rated. These points are available for homes which do not have recessed light fixtures connecting conditioned to unconditioned areas. 3 points

g) Ceiling drywall sealed to top plate: For all exterior and interior walls, edges of the ceiling drywall between conditioned and unconditioned areas shall be sealed to top plate with gaskets, caulk, spray foam, or other sealant. 2 points

h) Ceiling penetrations sealed between unconditioned and conditioned space: All holes in the ceiling assembly for plumbing, wiring, ductwork, and other purposes connecting conditioned and unconditioned areas shall be sealed. This includes holes made through the ceiling (such as caulking light fixture boxes to the drywall) as well as holes made through all wall top plates. Penetrations for flues and other heat producing items shall be sealed with noncombustible materials and high temperature sealant. 2 points

i) Band joist between conditioned floors sealed: All band joist areas between conditioned floors shall be sealed with gaskets, caulk or spray foam. Band joists shall also be insulated. 3 points

2. Insulation

**Homes with multiple foundation types must use foundation type of greatest area for points*

a) Basement walls (R10): Both masonry and framed basement walls shall have complete insulation coverage from floor to ceiling equal to or greater than R10. 3 points

b) Cantilevered floor (R30): For floors with conditioned area over unconditioned open areas, the floor joist cavity shall be sealed with sheet material or blocking and sealant above the top plate of the supporting wall and insulated to R30, either with batt insulation between floor joists or with a combination of joist insulation and insulated sheathing on underside of floor joist. 2 points

c) Spray applied wall insulation-: Spray applied insulation shall be applied to a minimum of 80% of exterior wall stud cavities (plus walls adjacent to unconditioned spaces), including band joist areas between floors. 4 points

d) Insulated headers-: Exterior walls featuring headers (over windows and door openings) shall be framed with at least ½ inch of rigid foam insulation between the 2x members. Other methods of achieving insulated headers, such as boxed headers with insulation batts, are also acceptable. 2 points

e) Insulated corners-: The intersecting corner of two outside walls shall be framed such that insulation is continuous in the external wall (corners with unnecessary 2x4's are not permitted). A "California corner" or two stud corner with drywall clips are methods of achieving this. 2 points

f) Insulated T-walls-: The intersection of an interior wall and an outside wall shall be framed such that insulation is continuous in the external wall. A "ladder" type intersection is one method of achieving this. 2 points

g) Insulated wall sheathing (R5 or greater)-: If the exterior wall sheathing is equal to or greater than R5. 3 points

h) Energy heel trusses or raised top plates-: To ensure full depth of attic insulation above exterior wall top plates, energy trusses with raised top chord or raised top plate for joist/rafter assemblies shall be used. 2 points

i) Flat & Vaulted ceilings (R38)-: Ceilings with unconditioned attic space above shall have complete coverage of attic insulation equal to or greater than R38. A maximum of 5% of ceiling area shall be R25 or greater to accommodate elevated attic flooring for storage and mechanical equipment. 4 points

j) Ceiling radiant heat barrier-: A radiant heat barrier must be installed over at least 80% of the vented attic space. The radiant barrier must have a reflective surface facing down towards a minimum 1 inch vented air space and have an emissivity rating of 0.05 or less. 2 points

k) Attic kneewall with insulated sheathing (R5)-: Insulated sheathing equal to or greater than R5 shall be installed to the kneewall. 5 points

l) Attic kneewall doors (R19)-: Doors in kneewalls that connect conditioned space to unconditioned attic areas shall be insulated to R19 or greater. 2 points

m) Attic access doors (R19)-: Pull-down attic stairs located in conditioned space shall have an insulated box equal to or greater than R19. Scuttle holes that are located in conditioned space shall be insulated with batt insulation or rigid foam insulation to R19 or greater. 2 points

3. Windows

a) Solar Heat Gain Coefficient: Windows facing east, west, and south shall have a Solar Heat Gain Coefficient of 0.4 or less. 4 points

4. Heating and Cooling Equipment

a) SEER 14 cooling equipment: A minimum of 75% of all cooling system output shall have a Seasonal Energy Efficiency Ratio (SEER) of 14 or greater. 2 points.

b) HSPF 8.0 heat pump: A minimum of 75% of all air source heat pump output shall have a Heating Seasonal Performance Factor of 8.0 or greater. 2 points

c) Measured airflow to within 15% of manufacturer's specifications: Forced-air cooling systems shall have total airflow certified by independent third party inspection to be within 15% of manufacturer's specifications. Builder must submit documentation with scoring worksheet. 3 points

d) Sensible Heat Fraction:- All air conditioners and heat pumps shall have a cooling Sensible Heat Fraction of 0.7 or less. Builder must submit documentation of Sensible Heat Fraction with scoring worksheet. A specification sheet on the installed equipment can be used for documentation. 2 points

5. Ductwork / Air Handler

a) Ducts located within conditioned space: At least 90% of all supply and return ducts are located within conditioned space. 6 points

b) Duct design complies with Manual D: Ductwork design shall comply with the ACCA Manual D guidelines. Builder must submit documentation of Manual D design with final worksheet. 5 points.

c) Airflow for each duct run measured and balanced: Airflow for each duct run shall be measured and balanced to comply with Manual D specifications. Builder must submit documentation of airflow measurement by independent third party testing agent. 4 points.

d) No ducts in exterior walls or vaulted ceiling:- No supply or return ducts, boots or registers shall be located in exterior walls. This includes vaulted ceilings and insulated walls between conditioned and unconditioned space such as the common wall between the garage and the rest of the house. 4 points

e) Rigid supply trunk: All duct systems shall feature at least one long supply trunk with multiple take-offs. An "octopus" system with all duct runs originating at the supply plenum is not acceptable. 2 points

f) Multiple return ducts-Each bedroom shall have a dedicated return duct. 3 points

g) Transfer grilles-For homes with no return ducts located in bedrooms, all supply air shall have a direct path back to a return grille even when doors are closed. This path shall be through transfer grilles, houses with undercut doors do not qualify for these points. 2 points

h) Duct trunk lines that are outside conditioned space insulated to R8: All duct trunk lines located outside conditioned space shall be insulated to a minimum of R8. 3 points

C. **Energy Efficient Lighting and Appliances**

1. Lighting

a) Indoor fluorescent fixtures: Interior lighting shall include a minimum of 200 watts of fluorescent lighting fixtures. These may include the kitchen overhead fixtures; undercounter fixtures do not

qualify. The lighting fixtures must be hard-wired and have the ballast integrated into the fixture to ensure that the fluorescent lighting will remain permanent. 2 points.

b) Recessed light fixtures are compact fluorescents: At least 80% of all recessed light fixtures shall be compact fluorescent. 2 points.

c) Outdoor lighting control: All exterior lighting shall have automatic photocell, motion or timer controls. 2 points

d) High efficiency exterior lighting: All exterior lighting shall be high-pressure sodium, fluorescent, or equivalent high efficiency. A maximum of 100 watts of outdoor incandescent or halogen lighting shall be permitted. 2 points

D. Resource Efficient Design

1. Floor plan adheres to 2-ft dimensions-. The perimeter of the house shall comply with 2-ft dimensions to minimize material waste. 2 points

2. Interior living spaces adhere to 2-ft dimensions-. At least 50% of interior rooms and living spaces shall comply with 2-ft dimensions to minimize material waste. 2 points

3. Wall studs at 24-inch centers-. All non-load and load bearing wall studs shall be spaced at 24 inches on center. 3 points

4. Window rough openings eliminate jack stud. Framing shall not include jack studs to support header. Header hangers or other support as required by code shall be used. 2 points

5. Non-structural headers in non-load bearing walls. Non-load bearing walls shall not have structural window and door headers. 2 points

6. Single top plate with stacked framing. Roof rafters and ceiling joists shall align within 2 inches of exterior wall studs such that a single top plate can transfer loads to the wall framing. 3 points

7. 2-stud corners with drywall clips or alternative framing. Corner framing shall eliminate non-structural studs and allow for full corner insulation through the use of drywall clips, horizontal nailers or other means to support drywall. 3 points

8. T-walls with drywall clips or alternative framing. The intersection of exterior and interior walls shall eliminate non-structural studs and allow for full exterior wall insulation through the use of advanced ladder T-wall framing or other technique. 3 points

E. Resource Efficient Building Materials

1. Recycled and Natural Content Materials

a) Concrete with fly ash.: A minimum of 25% of the cement in all concrete used for footings, foundation and basement walls, and slabs shall be replaced with fly ash. 3 points

b) Renewable/Recycled Flooring: Home shall contain at least 500 square feet of cork, bamboo (rapidly renewable materials) or recycled wood flooring. 2 points

c) Recycled content tiles: A minimum of 50% of the tile floors shall contain a minimum of 30 % recycled material content. 2 points

2. Advanced Products

a) Engineered floor framing: A minimum of 80% of floor joist framing shall be non-dimensional (engineered) structural wood, such as trusses or I-beams, or non-wood material. 4 points.

b) Engineered roof framing: A minimum of 80% of roof framing shall be nondimensional (engineered) structural wood, such as trusses or I-beams, or non-wood material, such as steel. 2 points.

c) Engineered wall framing (80% of studs): A minimum of 80% of the total wall framing shall be manufactured from non-solid sawn wood, such as laminated or finger jointed studs. Exterior steel studs are not eligible for this credit unless the entire exterior surface of the studs is covered with a minimum R10 insulated sheathing. 2 points.

d) Structural Insulated Panels (roof): A minimum of 80% of all roof area shall be structural insulated panels with a minimum of R30. Structural insulated panels must be installed according to manufacturer's specifications. 3 points.

3. Durability

a) Roofing (40-year warranty): Shingle or other exterior roofing material shall have a minimum 40-year manufacturer's warranty. Warranty documentation must be provided to the homebuyer. 2 points.

b) Light roof color (tile or metal): Metal roofing or white tile roofing shall have a solar reflectance of 60% or more. 2 points.

c) Covered entryways: Home shall be designed with covered entryways above every exterior door. 2 points

F. **Indoor Air Quality**

1. Combustion Safety

Prerequisite: No unvented combustion fireplaces or space heaters are permitted.

a) Detached garage: The garage shall be completely isolated by a minimum of 6 inches from the exterior walls or floor of any conditioned area of the house. Any connecting breezeway shall be sealed at both ends to prevent fire-spread. 6 points

b) Attached garage—air sealing: The bottom plate and all penetrations (such as plumbing or electrical lines) in the connecting wall between an attached garage and house shall be sealed with caulk, spray foam, gasket or construction adhesive to prevent air movement. 4 points

c) Direct vent, sealed combustion fireplace: All fuel-burning fireplaces shall be sealed combustion, direct vent units, as rated by the American Gas Association (AGA), that draw in combustion air from outdoors and vent combustion by-products directly outdoors. AGA is on the web at www.aga.org 3 points.

d) Furnace combustion closet isolated from conditioned area: All furnaces shall be installed in isolated contained closets or outside the building envelope. Closets shall be sealed between the bottom plate and subfloor, contain drywall covering the interior walls, and have a solid (non-louvered) access door that has weather-stripping and a threshold. Combustion air for closets shall be provided from outside the house in compliance with the mechanical code. 4 points

e) Water heater combustion closet isolated from conditioned area or power vented: If an atmospheric combustion water heater is located within conditioned space, the water heater shall have power venting or be installed in an isolated, contained closet. The closet shall be sealed between the bottom plate and subfloor, contain drywall covering the interior walls, and have a solid (non-louvered) access door that has weather-stripping and a threshold. Combustion air for the closet shall be provided from outside the house in compliance with the mechanical code. 4 points

Water heaters in unconditioned spaces such as garages and attics are eligible for these points.

f) Backdraft depressurization test: A “worst case house depressurization test” shall be performed by an independent third party. The test shall verify that house mechanical equipment, including exhaust fans, clothes dryer, power vented water heater, and air handler, does not create negative indoor pressures (with respect to outdoors) of more than 3 Pascals. Differing atmospheric conditions or additional exhaust appliances may alter the results of this test. 4 points

2. Moisture Control

a) Foundation drain at outside edge of footing (not on top of footing): Foundation drain shall be installed flush with the bottom of the footing and covered with silt protection fabric, gravel, or both. All drain lines shall be connected away and downhill from the foundation. 2 points

b) Drainage board for below grade walls: All below grade walls shall be damp-proofed and feature a drainage plane material that channels water down to the drain tile. 4 points

3. Ventilation

a) Radon/soil gas vent system: A passive radon vent system shall be installed in compliance with EPA guidelines for “Model Standards and Techniques for Control of Radon in New Residential Buildings.” 3 points

b) Energy Star bath fans: All bath fans shall be Energy Star rated. This rating requires that fans 75 cfm or smaller be no louder than 2.0 sones and move a minimum of 1.4 cfm/watt. Fans 76 cfm or larger must be no louder than 1.5 sones and move a minimum of 2.8 cfm/watt. 3 points

c) Whole house fan: Whole house fan shall be installed with an insulated cover. A cover shall be constructed to air seal and insulate whole house fan. Homeowner shall be instructed to remove cover before operating the fan and replace cover during seasons when not in use. Attic ventilation must provide at least one square foot of net free vent area per 750 CFM of fan air flow (CFM= Whole House Fan ACM Capacity x Volume of House). 2 points

d) Controlled house ventilation: A controlled ventilation system shall provide for continuous whole house ventilation of at least 15 cfm per person (# persons = # of bedrooms plus one). 4 points

e) Dehumidification system: A vapor compression, desiccant, or similar system shall be installed to remove moisture from all conditioned areas and be designed to maintain interior relative humidity at or below 50% at 75 degrees Fahrenheit. 3 points

f) Outside air intake with or without dampers: An outdoor air intake duct shall be connected to the return side of each air handler to bring in fresh outside air for ventilation. The air shall be filtered and a damper (barometric or motorized) should close automatically when the air handler fan is not operating. The intake duct shall be sealed and insulated when run through unconditioned space (such as attic or crawl space). The inlet must have a screen to deter birds, squirrels, etc. Finally, the duct must have a manual damper to control the amount of fresh. With damper 3 points/without dampers 2 points.

4. Materials

a) Cabinets, shelves, countertops and subfloor to be urea-formaldehyde free: All shall not contain urea-formaldehyde. 3 points

b) Low VOC paints, wood floor stains and finishes: All shall have a maximum VOC (Volatile Organic Compound) content of 250 g/l. Low VOC: 3 points

c) Alternative termite treatment: Acceptable termite soil treatments include termite baiting, stainless steel mesh, or basaltic sand. Homeowner shall be educated to type of system installed and maintenance or monitoring requirements. 2 points

d) Filter/air cleaner with minimum 30% dust spot efficiency: The installed air filter/cleaner shall have a minimum atmospheric dust spot efficiency of 30% according to ASHRAE standard 52-76. (Ozone generators are not permissible as air cleaners.) 2 points

e) Ducts protected until construction completed: All duct boots shall be protected from contamination during construction, including during sheetrock, finish floor installation, and painting. 2 points

G. Water Efficiency -Indoor

1. High efficiency showerheads, bathroom and kitchen faucets: At least 80% of all showerheads and faucets in the home must exceed the National Energy Policy Act (NEPA) by a minimum of 10% less flow. The NEPA requires flow of 2.5 gal/minute or less, so showerheads and faucets with 2.25 gal/minute or less qualify for this point. 3 points

2. High efficiency water heater: Tank type water heaters shall meet Energy Star standards or have an Energy Factor rating equal to or greater than 0.62 for natural gas, 0.62 for propane, or 0.92 for electric resistance. 2 points

3. Heat pump water heater. 2 points

H. Water-Outdoors

1. Xeriscape plan & installation: A drought tolerant landscape plan developed by a landscape architect, horticulturist or other professional. The installed landscape shall meet the requirements of a xeriscape as detailed in the K-State Cooperative Extension Service's, "Low Maintenance Landscaping" publication #MF1046, July 1992 and at a minimum contain low, medium and high use water areas, minimal turf grass areas, and extensive use of drought tolerant plantings. 20 points

2. Irrigation System

a) Drip irrigation system: A minimum of 50% of landscape planting beds shall have a drip irrigation system. 3 points

b) Greywater irrigation system: A greywater irrigations system shall be approved by local building and/or health departments, and at a minimum shall have a dedicated clothes washer box with a 2 inch drain connected to a subterranean drain field. A separate clothes washer box shall be provided that connects to the sanitary drain system. 10 points

c) Rainwater harvest system: A minimum of 50% of the rain from the roof shall be collected and stored for irrigation use. 10 points

I. Homeowner Education

1. Environmental Checklist. Builder shall provide the homebuyer a list of the selected environmental features of the new home. 5 points.

6.3 Environmental Rebate Guidelines

The developer will provide rebates based on including these environmental features in the design and construction of your home. Refer to Exhibit 'B' point schedule and cost equivalents.

A. Site Planning

1. Building with Trees Program.

Builder shall participate in the Building With Trees program developed by the National Arbor Day Foundation in cooperation with NAHB. Builder shall complete the Build With Trees Pledge and comply with Planning and Design, Tree Protection During Construction, and Maintenance/ Long-term Care requirements of the program. 15 points

B. Energy Efficient Building Envelope and Systems

1. Energy Star. The home must be certified Energy Star in compliance with guidelines set by the U.S. Environmental Protection Agency and U.S. Department of Energy. Builder must provide verification of Energy Star certification upon completion of construction. House must be rated “5 star” by a certified HERS rater; this evaluation requires a blower door and a duct pressurization test plus a certified software rating. Certified HERS raters can be found on the web at www.natresnet.org. 65 points

2. Air Leakage Test. Building envelope air leakage test: Certify that house has a maximum of 0.35 air changes per hour natural using standard blower door testing protocol set forth by ASTM for house pressurization testing at 50 Pascals. Builder must submit verification of third party testing upon completion. Certified testers can be found on the web at Residential Energy Services Network, www.natresnet.org. 20 points

C. Windows:

1. Low emissivity glazing: Windows shall have a minimum of two glazing layers and the inner surface of one layer contain a low emissivity coating. 5 points

2. Inert gas filled double glazed units: Double paned windows must have an insulating gas, such as argon or krypton, between the two panes. 5 points

D. Certified passive solar design:

1. Builder certifies that passive solar heating contribution shall reduce heating loads by 25% or greater and not increase cooling loads by more than 10%. Certification shall be based on Energy 10 or similar modeling program and included with scoring worksheet. 15 points

E. Heating & Cooling Equipment

1. Geothermal heat pump. All geothermal heat pumps shall have a cooling Energy Efficiency Ratio (EER) of 11.0 or greater and a heating Coefficient of Performance (COP) of 2.5 or greater as determined by the Air Conditioning and Refrigeration Institute (ARI). ARI on the web at www.ari.org. 30 points

2. Zone control. For multi-zoned (3 or more zones) HVAC systems, each zone must have a separate temperature control. 5 points

F. Duckwork /Air Handler

1. Certify duct leakage less than 5%: Certify that ducts have a maximum leakage cubic feet per minute (cfm) value of no more than 5% of the total floor area using standard duct testing protocol set forth by ASTM for duct pressurization testing at 25 Pascals. As an example, a 1000 ft² house may have up to 5% or 50 cfm of duct leakage at 25 Pascals. This test measures duct leakage lost to unconditioned spaces and so may be run in conjunction with a blower door fan. Builder must submit verification of third party testing. 15 points

G. Resource Efficient Design

1. Floor joists at 24-inch centers. A minimum of 80% of all floor joists shall be spaced at 24 inches on center. 5 points

2. Outdoor decking and porches: A minimum of 80% of outdoor floor decking shall have a minimum of 40% recycled material content. Recycled content must be certified by Scientific Certification Systems. 5 points.

H. Advanced Products:

1. Structural Insulated Panels (exterior walls): A minimum of 80% of all exterior walls shall be structural insulated panels with a minimum of R15. Structural insulated panels must be installed according to manufacturer's specifications. 10 points

2. Precast Autoclaved Aerated Concrete: A minimum of 80% of above grade exterior area shall be precast autoclaved aerated concrete. Walls must be installed according to manufacturer's specifications. 10 points

3. Insulated Concrete Forms: A minimum of 80% of exterior walls shall be insulated concrete forms with a minimum of R14. Walls shall be installed according to manufacturer's specifications and meet termite protection guidelines of State of Kansas for ground contact insulation. 10 points

I. Indoor Air Quality:

1. Carbon monoxide detector: If the house has an attached garage or combustion appliance, a carbon monoxide detector shall be installed at a minimum of one per floor. 3 points.

2. Kitchen range hood or downdraft vented to exterior: All kitchen range or downdraft hoods shall be vented directly to the outdoors. Intentional make-up air shall be provided for any kitchen vent fan rated at greater than 150 cfm. 3 points

J. Water Efficiency

1. High efficiency clothes washer: Installed clothes washer shall consume less than 27 gallons of water per use. 2 points

2. Water heater tank insulation: Water heater tank shall have an insulating jacket equal to or greater than R5. Jacket must be installed according to manufacturer's recommendations. Water heater pipe insulation: The first two feet of cold and hot water pipe closest to the water heater tank shall be insulated with a minimum of ½ inch foam, preferably through the heat traps installed in the hot and cold water pipes. Heat traps on water heater: Convective check valves, loops, or inverted "U" piping shall be plumbed within two feet of the inlet and outlet of the water heater to serve as heat traps and prevent standby convective losses. 2 points.

3. Solar domestic water heating. 10 points.

K. Homeowner Education

1. Built-in recycling center. The builder shall provide built-in/ commercially manufactured recycling containers for newspapers/magazines, aluminum, and at least one other material. 2 points

L. Waste Management

1. Job site framing plan with stud locations, joist locations, and roof structure and cut list: A plan that designates all structural framing for the roof, walls, and floors shall be prepared and reviewed with framing crew to ensure minimization of unnecessary framing. Builder must submit documentation of framing plan with scoring worksheet. 10 points

M. Guaranteed energy bills.

1. The builder, utility or third party shall certify that the energy bills for a minimum two-year period shall not exceed a baseline level. The guaranteed level shall be less than 30% of the energy use predicted for a home built to the standards of the current state energy code. 15 points

N. Solar electric system.

1. Bonus points shall be awarded for a solar electric system which is capable of producing 20% of the home's electrical load. All electrical inspections must meet the National Electric Code. The solar array must remain unshaded year round, be oriented to within 15 degrees of true south, and be angled horizontally within 15 degrees of latitude. 30 points

O. Alternative vehicles.

1. Bonus points shall be awarded for a home equipped with an electric charging station or natural gas pump for refueling alternative fuel vehicles. 20 points

P. American Lung Association Health House.

1. Bonus points shall be awarded for homes built according to the criteria and performance standards set forth by the American Lung Association® for the Healthy House Project. 10 points

Q. Innovation points.

1. Builder can submit specifications for innovative products or design features to qualify for rebates. Points vary

EXHIBIT "A"

FORM A

**RAETA SUBDIVISION SINGLE-FAMILY RESIDENCE COMMUNITY
DESIGN REVIEW COMMITTEE CONSTRUCTION AGREEMENT
(FOR NEW CONSTRUCTION)**

As a Raeta Subdivision prospective property owner and / or home builder we, the undersigned, have read the current Raeta Subdivision Single-Family Residence Community Design Standards and Application Form, and fully understand the construction requirements described therein, as the same shall apply to the homesite described as follows:

Lot # _____, Block # _____, Raeta Subdivision.

We understand that any changes in the exterior from an approved submittal must be submitted to the DRC for approval.

We understand that we are responsible for the sewer and water hook-up fees.

We assume responsibility for any and all injury and damages by the contractor (and subcontractors) to persons and property, subject to any rights that we may have against the contractor (and / or subcontractors).

SIGNATURES

(Prospective Owner's Signatures)

Date

Date

Date

(Contractor's Signature)

Date

Date

Date

EXHIBIT "A"

FORM B

**RAETA SUBDIVISION SINGLE-FAMILY RESIDENCE COMMUNITY
DESIGN REVIEW COMMITTEE CONSTRUCTION AGREEMENT
(FOR ALTERATION/REMODEL/LANDSCAPING)**

As a Community homeowner(s) requesting approval for an alteration / remodel or landscaping to a single-family home, I/we, the undersigned, have read the current Design Standards and Application Form, and fully understand the construction requirements described therein, as the same shall apply to the homesite described as follows:

Lot # _____, Raeta Subdivision

SIGNATURES

(Homeowner's Signatures)

Date

Date

Date

(Contractor's Signature)

Date

Date

Date

EXHIBIT "A"

FORM C

**RAETA SUBDIVISION SINGLE-FAMILY RESIDENCE COMMUNITY
DESIGN REVIEW COMMITTEE (DRC)
SUBMITTAL FORM AND APPLICATION**

() Schematic/Preliminary
Date Submitted_____

() Construction Documents
Date Submitted_____

Project Location: Lot #_____

Property Owner(s): _____

Address: _____

Telephone: () _____ () _____

Architect/Designer: _____

Address: _____

Telephone: () _____ () _____

Type of Submittal: () New Construction () Alteration () Landscape

Square footage finished living space of home: _____ Square Feet (excluding basement area and garage)

When constructing a home or remodeling an existing home, application must be made to the DRC using this form. The following pages will provide the DRC with information necessary to review the proposed construction for compliance with the Design Standards and Regulations of the Community. For information and assistance, please contact a representative of the Raeta Subdivision.

Procedure for Obtaining and Design Review Committee Approval:

- 1) Complete and submit this application no later than two weeks before the next scheduled meeting of the DRC. Notice of action taken by the DRC will be mailed to applicants as soon as possible after each meeting.
- 2) Submit three sets of construction documents as outlined on the following pages.
- 3) Submit a signed contract for purchase of your homesite.
- 4) Stake-out and string the proposed construction, and identify and flag trees that are to be removed.

The following is a list of items which MUST be included in DRC submittals and will be considered by the DRC prior to approval of any proposed construction:

CHECK LIST FOR DOCUMENTS REQUIRED FOR SITE REVIEW PLAN:

- _____ * Minimum scale: 1"-20'-0"
- _____ * Building locations (house, garage, deck, adjacent homes and structures)
- _____ * Line of proposed roof overhangs
- _____ * Property Lines
- _____ * Direction of primary views
- _____ * Natural site topography
- _____ * Existing trees, shrubs, and other natural features, such as rock outcroppings

- _____ *
- _____ * Proposed removal of trees (See note below)
- _____ * Privacy screening and / or service yard
- _____ * Outdoor lighting layout
- _____ * North arrow
- _____ * Setbacks and easements – sideyard, front and rear (Note: Dimension of the common area surrounding the lot must be noted on the site plan).
- _____ * Construction staging and access areas
- _____ * Temporary structures
- _____ * Proposed landscape plan and description of plant material and berm locations (if planned). May be submitted at a later date for approval.

TREE CUTTING PERMIT:

A **RAETA SUBDIVISION TREE CUTTING PERMIT** will be required with all plan submittals when cutting trees other than those necessary for removal within the building/home envelope and driveway area. This requirement has been determined necessary to assure compliance with RAETA SUBDIVISION conservation and preservation concerns. A permit may be arranged through the DRC.

ARCHITECTURAL PLANS REQUIRED

_____ * Environmental Checklist & data

Floor Plans

- _____ * Minimum scale: 1/4" = 1'-0"
- _____ * North arrow
- _____ * Overall exterior dimensions
- _____ * Door and window openings
- _____ * Walls, partitions and stairways
- _____ * Decks and porches
- _____ * Type and location of outdoor heating and cooling units

Elevations

- _____ * Building elevations showing all views
- _____ * Scale: Front elevation 1/4" = 1' - 0". Other elevations can be 1/8" = 1'0".
- _____ * Door and window openings
- _____ * **ALL** exterior building features
 - * roof materials
 - * types of materials (samples may be required)
 - * siding
 - * fireplaces
 - * railings
 - * trims and faces (note sizes)
 - * house numbers
 - * solar panels and / or mechanical units
 - * lights
 - * decks
 - * cornice and fascia details

[IMPORTANT: Show the proposed structure's floorlines, wall heights, overall building height, foundation lines and the finish grade. Submit sample chip of exterior paint color.]

EXHIBIT "A"

FORM D

**RAETA SUBDIVISION SINGLE-FAMILY RESIDENCE COMMUNITY
APPLICATION FOR CERTIFICATE OF COMPLIANCE**

APPLICANT: _____

LOCATION: LOT # _____, Raeta Subdivision

A Certificate of Compliance is issued to an owner by the DRC upon completion of construction. The Certificate of Compliance states to the Developer that the requirements of the Design Standards (or applicable variances approved by the DRC) have been met.

No unit shall be occupied until final inspections are performed by the City of Lecompton Building Inspector and the Design Review Committee Compliance Inspector.

I/We agree that the following items have been completed and are ready for inspection by the DRC.

- _____ Evidence of Final Occupancy Permit
- _____ Environmental Checklist and data required
- _____ Site improvements, including paving, walls, walks, tree preservation, outside lighting, and plantings have been completed and provided in accordance with the approved plans.
- _____ Building is of approved architectural design, materials, and color.

Applicant Signature

Date

Date

_____ I certify that the above items have been completed according to the standards established (or applicable variances approved by the DRC).

_____ DRC Chairman Date

_____ DRC Landscape Chairman Date

_____ The following items are not considered complete at the time of inspection,

_____ DRC Chairman Date

_____ DRC Landscape Date

EXHIBIT "B"

FORM E

ENVIRONMENTAL CHECKLIST

This checklist is only required if the Homeowner has elected to apply for Environmental Rebates from the Developer. Homeowner must document a minimum of **80** points from the Suggested Environmental Guidelines to qualify. Then the Homeowner may complete the attached Environmental Rebate Guidelines checklist to tally points that can be converted into Rebates. (Refer to page 13 in the Design Guidelines for a complete description of design and construction guidelines)

Suggested Environmental Guidelines

	Points	Score	Documentation
SITE PLANNING			
Wildlife habitat registered with Kansas Wildlife Federation	2		Confirm. letter
(2 possible points) Site Planning Total			
ENERGY EFFICIENT BUILDING ENVELOPE & SYSTEMS			
Air Sealing Measures			
Floor penetrations between unconditioned and conditioned space	2		
Cantilevered floors sealed above supporting walls	2		
Fireplace air sealing package (all units)	2		
Exterior wall sheathing sealed at plates, seams, and openings	4		
Window and door rough openings	2		
Airtight IC recessed lights or no recessed lights in insulated ceilings	3		
Ceiling drywall sealed to top plate	2		
Ceiling penetrations sealed between conditioned and unconditioned space	2		
Band joist between conditioned floors sealed	3		
(22 possible points) Air Sealing Subtotal			
Insulation			
Concrete or masonry basement walls (continuous floor to clg. R10)	3		Prod. Literature
Cantilevered floor (R30)	2		Prod. Literature
Spray applied wall insulation	4		Prod. Literature
Insulated headers	2		Prod. Literature
Insulated corners	2		Prod. Literature
Insulated T-walls (exterior/interior wall intersection)	2		Prod. Literature
Insulated wall sheathing (R5 or greater)	3		Prod. Literature
Energy heel trusses or raised top plate	2		Prod. Literature
Flat & Vaulted ceilings (R38)	4		Prod. Literature
Ceiling radiant heat barrier	2		Prod. Literature
Attic kneewall with insulated sheathing (R5)	5		Prod. Literature
Attic kneewall doors (R19)	2		Prod. Literature
Attic pull-down or scuttle hole (R19)	2		Prod. Literature
(35 possible points) Insulation Subtotal			
Windows			
Solar heat gain coefficient (max 0.4)	4		Window label
(4 possible points) Windows Subtotal			
Heating and Cooling Equipment			
SEER 14 cooling equipment.	2		Prod. Literature
HSPF 8.0 heat pump	2		Prod. Literature
Measured airflow within 15% of manufacturer's specifications	3		Test results
Sensible heat fraction less than or equal to 0.7 (all air conditioners)	2		Prod. Literature
(9 possible points) Heating and Cooling Subtotal			
Ductwork/Air Handler			
Ducts located within conditioned space (min 90%)	6		drawings
Duct design complies with ACCA Manual D guidelines	5		Sizing calculation
Airflow for each duct run measured and balanced	4		Test results
No ducts in exterior walls or vaulted ceilings	4		drawings

Rigid supply trunk	2		drawings
Multiple return ducts (min 1 in each bedroom)	3		drawings
Return Air Transfer grilles	2		drawings
Duct trunk lines outside conditioned space insulated to R8	3		drawings
(29 possible points) Ductwork/Air Handler subtotal			
Energy Efficient Building Envelope and Systems Total			
ENERGY EFFICIENT LIGHTING & APPLIANCES			
Indoor fluorescent fixtures (min 200 watts) (80 % of total)	2		Prod. Literature
Recessed light fixtures are compact fluorescents (80% of total)	2		Prod. Literature
Automatic outdoor lighting controls (eg. Motion sensor)	2		Prod. Literature
High efficiency exterior lighting	2		Prod. Literature
(8 possible points) Energy Efficient Lighting /Appliances Total			
RESOURCE EFFICIENT DESIGN			
Floor plan adheres to 2-ft increment dimensions	2		drawings
Wall studs @24-in. centers	3		drawings
Window rough openings eliminate jack stud	2		drawings
Non-structural headers in non-load bearing walls	2		drawings
Single top plate with stacked framing	3		drawings
2-stud corners with drywall clips or alternative framing	3		drawings
t-walls with drywall clips or alternative framing	3		drawings
(18 possible points) Resource Efficient Design Total			
RESOURCE EFFICIENT BUILDING MATERIALS			
Recycled and Natural Content Materials			
Concrete with fly ash (min 24% fly ash)	3		Content print-out
Renewable/Recycled flooring	2		Prod. Literature
Recycled content tile flooring	2		Prod. Literature
(7 possible pts.) Recycled and Natural Content Materials Subtotal			
Advanced Products			
Engineered floor framing (all floors)	4		Prod. Literature
Engineered roof framing	2		Prod. Literature
Engineering wall framing (80% of studs)	2		Prod. Literature
Structural insulated panels (roof)	3		Prod. Literature
(11 possible points) Advanced Products Subtotal			
Durability			
Roofing (min 40-year warranty)	3		warranty
Light roof color (tile or metal)	2		Prod. Literature
Covered entry ways (all doors)	2		drawings
(7 possible points) Durability Subtotal			
Resource Efficient Building Materials Total			
INDOOR AIR QUALITY			
Combustion Safety			
Detached garage	6		drawings
Attached garage-seal bottom plate and penetrations to conditioned space	4		drawings
Direct vent, sealed combustion fireplace (all units)	3		Prod. Literature
Furnace combustion closet isolated from conditioned area (all units)	4		drawings
Water heater combustion closet isolated and power vented	4		drawings
Backdraft depressurization test	4		Test results
(25 possible points) Combustion Safety Subtotal			
Moisture Control			
Foundation drain at outside perimeter edge of footing	2		drawings
Drainage board for below grade walls	4		drawings
(6 possible points) Moisture Control Subtotal			
Ventilation			
Radon/soil gas vent system	3		Prod. Literature

Radon test of home prior to occupancy	2		Test results
Energy Star bath fans (all units)	3		Prod. Literature
Whole house fan	2		Prod. Literature
Controlled house ventilation (0.35 ACH)	4		Prod. Literature
Dehumidification system	3		Prod. Literature
Outside air intake without damper	2		drawings
Outside air intake with dampers	3		drawings
(22 possible points) Ventilation Subtotal			
Materials			
All cabinets, shelves, countertops and subfloor urea-formaldehyde free	3		Prod. Literature
Low VOC paints (less than 250 g/L), stains and finishes on cabinetry, doors, windows, trim and wood floors	3		Prod. Literature
Alternative termite treatment	2		Prod. Literature
Filter/air cleaner with minimum 30% dust spot efficiency (e.g. pleated filter)	2		Prod. Literature
Ducts protected until construction is completed	2		
(12 possible points) Materials Subtotal			
Indoor Air Quality Total			
WATER-INDOOR			
High efficiency showerheads (max 2.25 gal/min), bathroom faucets (max 2.35 gal/min) and kitchen faucets (max 2.25 gal/min)	3		Prod. Literature
High efficiency water heater (min Energy Factor: gas 0.62 electric 0.92)	2		Energy guide label
Heat pump water heater	2		Prod. Literature
(7 possible points) Water-Indoor Total			
WATER-OUTDOORS			
Xeriscape plan and installation	20		Xeriscape plan
Drip irrigation system	3		drawings
Greywater irrigation	10		drawings
Rainwater harvest system	10		drawings
(43 possible points) Water-Outdoors total			
HOMEBUYER EDUCATION			
Environmental features checklist for walk through	5		checklist
(5 possible points) Homebuyer Education Total			
BONUS POINTS			
Innovative points: builder submits specification for innovative products or design features to qualify for additional points			documentation
Bonus Points Total			
(272 possible points, 80 minimum points for Rebate Program) HOUSE TOTAL*			

*House Total must have minimum of **80** points in the Suggested Environmental Guidelines to qualify for the Environmental Rebate Program.

Environmental Rebate Checklist

	Points	Score	Documentation
Site Planning			
Registered Building <i>With</i> Trees (NAHB Program) development	15		Confirmation letter
Energy Efficient Building Envelope and Systems			
Energy Star: Certify house as Energy Star.	65		Certificate or computer print-out
Air Leakage Test: Certify maximum 0.35 air changes/hour or earn points for air sealing measures	20		Test results
Windows:			
Low emissivity glazing	4		Window label
Inert gas-filled double glazed units (eg. Argon gas filled)	4		Window label
Certified passive solar design (25% load reduction)	15		Computer printout
Heating and Cooling Equipment			
Geothermal heat pump (75% total capacity)	30		Prod. Literature
Zone control-one system services multiple zones (3 zones required)	5		Prod. Lit./plan
Ductwork/Air Handler			
Certify duct leakage less than 5%	15		Test results
Resource efficient Design & Materials			
Floor joists & wall studs @ 24-in centers (all floors & walls)	10		drawings
Outdoor decking and porches (min 40% recycled)	4		Prod. Literature
Advanced Products			
Structural insulated panels (exterior walls)	10		Prod. Literature
Precast autoclaved aerated concrete	10		Prod. Literature
Insulated concrete forms	10		Prod. Literature
Indoor Air quality			
Carbon monoxide detector (one per floor required)	3		Prod. Literature
Kitchen range hood or downdraft vented to exterior	3		drawings
Water Efficiency			
High efficiency clothes washer	2		Product label
Water heater tank insulation, pipe insulation on first two feet of pipe and heat traps.	2		
Solar domestic water heating	10		Prod. Literature
Homeowner Education			
Built-in recycling center	2		drawings
Waste Management			
Job site framing plan with locations of studs, joists, and roof structure with cut list	10		Frame plan + cut list
Bonus Points			

Guaranteed energy bills	15		Energy bill guarantee & documentation
Solar Electric System	30		Prod. Literature
Alternative vehicles	20		Prod. Literature
American Lung Association Health House	10		certificate
Innovation Points	varies		
(324 points possible/75 Max. allowed Rebate) GRAND TOTAL		75	

Rebate Point Conversion

After qualifying for 80 points in the Suggested Environmental Guidelines, homeowners are able to qualify for up to 75 points that can be converted into a rebate that is applied to the cost of the Raeta building lot purchase. 1 point = \$100.00.

Conversion Chart

10 points = \$1,000

20 points = \$2,000

40 points = \$4,000

60 points = \$6,000

75 points = \$7,500(Maximum rebate)

RESOURCES

SITE PLANNING

National Arbor Day Foundation

Build With Trees Program
211 North 12th St.
Suite 501
Lincoln, NE 68508
(402) 474-5655
www.arborday.org

Kansas Wildlife Federation

www.nwf.org/habitats
Information on backyard wildlife habitats

National Association of Home Builders

Water and Wetlands Division
1201 15th St. NW
Washington DC 20005-2800
1-800-368-5242
www.nahb.org
Storm Water Runoff & Nonpoint Source Pollution Control - A Guide for Builders and Developers

ENERGY EFFICIENT BUILDING ENVELOPE AND SYSTEMS

Air Conditioner Contractors Association

Vendor of residential duct design and HVAC system
sizing software (Right D and Right J)

1712 New Hampshire Ave NW
Washington DC 20009
(202)483-9370
www.acca.org

Air Conditioning and Refrigeration Institute

4301 N Fairfax Dr., Suite 245
Arlington, VA 22203
(703) 524-8800
www.ari.org
Trade association for info on CFC's, HCFC's, performance standards, product certification programs, consumer information brochures

Alliance to Save Energy

1200 18th St. NW
Suite 900
Washington DC 20036
(202) 857-0666
www.ase.org
www.efficientwindows.org

Resource for homeowner factsheets, energy efficiency guidelines/products

American Society of Heating, Refrigeration, and Air Conditioner Engineers (ASHRAE)

1791 Tullie Circle NE
Atlanta, GA 30329
1-800-527-4723
www.ashrae.org

Built Green

Colorado Green Building Program
Metro Denver HBA
1400 South Emerson St.
Denver, CO 80210
(303) 778-1400
www.builtgreen.org

Cellulose Insulation Manufacturers Association

136 South Keowee St.
Dayton, OH 45402
(937)222-2462
www.cellulose.org
Industry association for cellulose insulation

Energy Efficient Building Association

470 Concordia Ave
St. Paul, MN 55103-2441
(651) 268-7585
info@eeba.org
www.eeba.org

Gas Appliances Manufacturers Association (GAMA)

1901 North Moore St. Suite 1100
Arlington, VA 22209
(703) 525-9565
www.gamanet.org

Geothermal Heat Pump Consortium

701 Penn Ave.
Washington DC 20004
1-888-ALL-4-GEO
www.ghpc.org

Ground Source Heat pumps/Geothermal Heat pumps

Waterfurnace International, Fort Wayne, IN 1800-222-5667 (www.waterfurnace.com)
Climate Master Inc. Oklahoma City, OK 1405-745-6000 (www.climatemaster.com)
A ground-source heat pump extracts solar heat stored in the upper layers of the earth, the heat is then delivered into the house.
Reduce energy use and therefore atmospheric emissions, reduces operation and maintenance costs, quiet operation.

Insulation Contractors Association of American (ICAA)

1321 Duke St., Suite 303
Alexandria, VA 22314
(703) 739-0356
www.insulate.org

KC HBA

Build Green Kansas City program
www.buildgreenkc.com

NAHB Research Center

400 Prince George's Boulevard
Upper Marlboro, MD 20774-8731
1-800-638-8556
www.nahbrc.com

NAHB

National Association of Home Builders
(800) 368-5242
www.nahb.org

National Fenestration Rating Council

1300 Spring St., Suite 500
Silver Spring, MD 20910
(301)589-NFRC
www.nfrc.org

North American Insulation Manufacturers Association (NAIMA)

44 Canal Center Plaza, Suite 310
Alexandria, VA 22314
(703) 684-0084
www.naima.org

Industry association for manufacturers of fiber glass, rock wool, and slag wool insulation products

Residential Energy Services Network (RESNET) and Home Energy Raters (HERS)

PO Box 4561
Oceanside, CA 92052-4561
www.natresnet.org

RESNET is a national network of mortgage companies, real estate brokers, builders, appraisers, utilities, and energy professionals working towards improving the energy efficiency of the nation's housing stock

Solar Energy Industries Association

122 C Street NW, 4th Floor
Washington DC 20001
(202) 383-2600
www.seia.org

Structural Insulated Panels (SIPs)

Eliminates the need for conventional framing through a structural envelope and integral insulation. Better overall air tightness and thermal performance than conventional wood framing, less construction waste, faster installation
Thermasteel Corporation
www.thermasteelcorp.com

Sustainable Buildings Industry Council

1331 H Street, Suite 1000
Washington DC 20005
(202) 628-7400
www.sbicouncil.org
Energy-10 passive solar design software, information on sustainable building

U.S. Environmental Protection Agency

Energy Star Program
1-888-STAR-YES
www.epa.gov/homes

U.S. Green Building Council

(202) 828-7422
www.usgbc.org

**ENERGY EFFICIENT LIGHTING/
APPLIANCES**

American Council For An Energy Efficient Economy (ACEEE)

The Most Energy Efficient Appliances (1999)
1001 Connecticut Ave. NW
Suite 801
Washington DC 20036
(202) 429-0063
www.aceee.org
Online information on the most energy efficient home appliances

U.S. Environmental Protection Agency

Energy Star Program
1-800-STAR-YES
www.energystar.gov
Online resource for energy star rated appliances

Occupancy Sensors

Pass & Seymour,
Concord ON, Canada,
1905-738-9195
www.passandseymour.com
Electrical sensors that detect occupancy and turn lights off or on according to pre-set levels.
Reduces electrical costs, increases building security.

RESOURCE EFFICIENT DESIGN

Natural Resources Defense Council
Efficient Wood Use in Residential Construction
40 West 20th St.
New York, NY 10011-4211
www.nrdc.org

**RESOURCE EFFICIENT BUILDING
MATERIALS**

American Concrete Institute International
PO Box 9094
Farmington Hills, MI 48333
(248) 848-3700
www.aci-int.org

Autoclaved Aerated Concrete
Portland Cement Association
www.concretehomes.com/sys.acc.htm
Short list of AAC manufacturers

Engineered Wood Association
American Plywood Association
www.apawood.org

Insulating Concrete Form Association
1807 Glenview Rd, Suite 203
Glenview, IL 60025
(847) 657-9730
www.forms.org

Scientific Certification Systems
1939 Harrison St
Suite 400
Oakland, CA 94612
(510)832-1415
www.scs1.com
Product certification and testing organization

Structural Insulated Panel Association
(253) 858-7472
www.sips.org

**RESOURCE AND ENERGY
EFFICIENT BUILDING MATERIALS**

Structural Insulated Panel Systems
The SIP system is a key component in building construction that will **reduce energy costs** and provide a strong, secure building envelope.
Morley Builders Inc.
700 Mississippi Street
Lawrence, KS 66044

785-843-7007
morlinc@sunflower.com
www.sipsmart.com

Engineered Wood Products

Building joists, beams and framing made from wood fibers or strands held together with a binder.
Also called LVS or LVL.
Conserves forest resources, reduces construction waste, less shrinkage and warping.
Trus Joist Macmillan Corporate
Boise, ID
1-800-388-0515
www.tjm.com

Environmental Building News

EBN Product Catalog
122 Birge St, Suite 30
Brattleboro, VT 05301
(802) 257-7300
www.buildinggreen.com
Comprehensive listing of environmental/resource efficient building materials

Green Builder's Catalog

Positive Energy Conservation Products
PO Box 7568
Boulder, CO 80306
1-800-488-4340
www.positive-energy.com

Iris Communications

Resources for Environmental Design Index (REDI)
PO Box 5920
Eugene, OR 97405-0911
(541)484-9353
www.oikos.com
Listing by product, company - updated on the internet frequently

John Hermansson - AIA

Green Building Resource Guide
Taunton Press
63 S Main St.
PO Box 5506
Newtown, CT 06470-5506
www.greenguide.com
Environmental building materials - listed by
construction division, includes price index

Lineoleum Flooring

Forbo Resiliates, Inc.
Concord ON 1-416-661-2351.
www.forbo-resilients.com
Johnsonite

Waterloo, ON, Canada

1-519-884-2602

www.johnsonite.com

Lineoleum flooring utilizes renewable resources, emits no harmful pollutants, increases floor durability.

Shelter Supply

17725 Juniper Path

Lakeville, MN 55044-9482

(612) 898-4500

Supplier of energy efficient & healthy home products; including drywall clips

Tamko Roofing Products

220 W. 4th Street

Joplin, MO 64802

1-800-641-4691

Asphalt roof shingles that look like slate or cedar shake.

Timber Grass, LLC

Seattle, WA

(800)929-6333

www.timbergrass.com

Bamboo flooring a rapidly renewable resource.

Syndecrete

Syndesis, Inc.

www.syndesisinc.com

Pre-cast cement based solid surface composite, incorporating 41% recycled content for countertops, sinks, tiles/wall panels.

Terra Green Ceramics, Inc.

Richmond IN,

(765) 935-4760

www.terragreenceramics.com

Ceramic tile made with 58% recycled auto glass.

Venteak

(785)749-5476

www.venteak.com

Local Lawrence company offers environmentally friendly exotic hardwood floors: teak, Caribbean Koa, Jatoba (Brazilian Cherry) and Ipe (Brazilian Walnut).

WASTE MANAGEMENT

NAHB Research Center

Residential Construction Waste Management: A Builder's Field Guide

400 Prince George's Boulevard

Upper Marlboro, MD 20774

(301) 249-4000

www.nahbrc.com

INDOOR AIR QUALITY

American Gas Institute (AGA)

www.aga.org

Carpet and Rug Institute (CRI)

Dalton, Ga

1-800-882-8846

www.carpet-rug.com

Industry association which has an indoor air quality testing program for adhesives, carpets, and carpet pads

Health House Project

American Lung Association of MN

490 Concordia Ave.

St. Paul, MN 55103-2441

(651) 227-8014

www.healthhouse.org

Lipidex Corporation

50 Franklin Terrace

Duxbury, MA 02332

(781)834-1600

Manufactures the Fan Recycler - a control unit for operating the blower on an HVAC unit for fresh air ventilation

Low-Emission Adhesives (Low VOC)

Low VOC products for flooring, wallcoverings and woodworking that do not off-gas harmful emissions. Improves indoor air quality. Improved worker and occupant safety

Roberts Company Canada Ltd.

Bramalea, ON Canada.

416-791-4444.

Roberts Corporation makes a full line of solvent-free adhesives that emit no harmful vapors..

Includes products for linoleum, vinyl flooring, carpet tiles, and contact cement suitable for plastic laminates, particleboard, sheet metal, wood veneers.

Meditate Corporate

Medford OR.

1-800-676-3339

www.sierrapine.com

Formaldehyde-free MDF. Decreases off-gassing of formaldehyde, reduces potential for water damage.

National Environmental Health Association

1-800-269-4174

www.radongas.org

Lists certified contractors for radon gas testing and mitigation, by state

Recycled Plastic Lumber

Trex Company, Winchester, VA

(800) BUY-TREX (www.trex.com),
US Plastic Lumber, Boca Raton, FL
(561) 394-3511 (www.usplasticlumber.com)
Recycled landscaping product for decks.

Durable, weather-resistant, low-maintenance alternative to solid wood. Does not leach chemicals into ground or surface water or soil as treated wood can. Does not require painting or staining and will not crack, splinter or chip.

Southface Energy Institute

241 Pine St.
Atlanta, GA 30308
(404) 872-3549
info@southface.org
www.southface.org

Straw Particleboard

PrimeBoard
Wahpeton, ND
1-701-642-9700
www.primeboard.com

Construction particleboard manufactured from wheat straw instead of wood fibers. Reduces forest exploitation, provides a secondary farm income, utilizes an agricultural waste product, eliminates formaldehyde emissions from particle board, reduces manufacturing emissions.

Sustainable Wood Products

Use woods that are from certified, sustainably managed forests.

The Forest Stewardship Council (FSC) logo appears on wood that meets standards for sustainable production. 1-877-372-5646. info@foreststewardship.org and www.fscus.org

Locate suppliers through the Certified Forest Products Council Website at www.certifiedwood.org or (888) 737-3877.

Forest World Group (www.forestworld.com) a US-based importing and distribution company committed to buying tropical wood products from certified sustainably managed forests.

U.S. Environmental Protection Agency

Division of Indoor Air Quality
1-800-55-RADON

Distributes publication “Model Standards and Techniques for Control of Radon in New Residential Buildings”

WATER

Environmental Building News

122 Birge St, Suite 30
Brattleboro, VT 05301
(802) 257-7300
www.buildinggreen.com

Articles on rainwater harvesting, xeriscaping

Oasis Design

Guide to Greywater
5 San Marcos Trout Club

Santa Barbara CA 93105
(805) 967-3222

Xeriscape

Low Maintenance Landscaping handbook #MF-1046
Kansas State Cooperative Extension Service
www.oznet.ksu.edu/library/hort2/samplers/MF1046.asp

OTHER RESOURCES

Environmental Design & Construction

299 Market St., Suite 320
Saddle Brook, NJ 07663
(201) 291-9001
www.edcmag.com
Subscription is free

Home Energy

2124 Kittredge St #95
Berkeley, CA 94704
(510) 524-5405
homeenergy@anl.gov
www.homeenergy.org

Pardigm Design

1311 Prairie Avenue
Lawrence, Kansas 66044
(785) 840-0313
Paradigm Design provides environmental friendly finishes, flooring and bathroom products

As Astra Associates, Inc.

Agriboard Industries
1516 Alvamar Drive
Lawrence, Kansas 66047
(785) 830-9899
Agriboard Industries manufactures Fire/Blast/Wind Resistant "Green"
Structural Insulated Panels (SIPs).