



LMU-DeBusk Veterinary Center Housing Master Plan

Housing Feasibility & Needs Study
Lee County, Va
January 4, 2021



HILL
STUDIO



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Chapter 1: *Introduction/Background*

Overview of Housing Study
Related Initiatives
Background & Planning Process

OVERVIEW OF HOUSING STUDY

EXECUTIVE SUMMARY

Lee County, DeBusk Veterinary Teaching Center, LENOWISCO Planning District Commission and Hill Studio have collaborated with citizens of western Lee County, including the veterinary college community, to create a conceptual master plan and feasibility strategy supporting the development of housing in Western Lee County, VA. This document provides a context-sensitive solution to guide housing development for student, staff, and faculty and friends of the DeBusk Veterinary Teaching Center (DVTC) who have identified lack of housing as a major issue in the region.

The included master plan can provide much more than just housing for DVTC. The scenic and historically-rich landscape can host an attractive place-based community that can be an asset to both the college community and local residents. By exploring mixed-use opportunities and avenues to incorporate outdoor recreation and community gathering spaces, we can contribute to a “sense of place” that serves the larger community.

Because the COVID19 pandemic raged through the period of this study, the design team invented and hosted a “virtual design workshop” process. This virtual studio implemented a community-tested master planning process for housing that incorporates the needs and wants of everyone in the community. Hosted on a website, it included a series of survey questionnaires, short videos explaining all aspects of the project, and included feedback loops.

The planning process tested several possible sites, and recommended a preferred site, which was master-planned to a more detailed extent. Following reviews, an implementation strategy is provided. The \$90 million project is recommended in a series of University-led and partnered ventures, which can contribute to the veterinary school, highlight, and extend the LMU brand, and contribute significantly to economic development while preserving the unique sense of place in western Lee County and the Cumberland Gap region.

OVERVIEW OF LOCAL HOUSING

The geography and culture of Lee County have preserved the area as a rural and rugged portion of Southwest Virginia, which includes many rural small towns, farmland, and preserved mountain woodlands. While Lee County and surrounding Appalachian communities face population and job decline that has impacted the local economy, many strengths exist in this region and have the potential to promote growth while increasing housing demand as well. The scenic landscape, strong community, and cultural amenities of Lee County, cultivated over generations, have brought attention to this area and deemed it as a great place to live and work, retire, and raise a family. Many Lee County residents have lived in their homes for decades.

Lee County has a shortage of rental and owner-occupied housing. Most low-to-moderate income, disabled and seniors live in the County’s rural outlying areas. Outlying areas can be the most expensive places to live, due to transportation costs (far removed from employment and services; unpaved roads). In addition, maintenance costs can be high, as houses tend to be older, in poor condition and/or poorly insulated, and utilities are self-serve with private well/septic systems.

OVERVIEW OF LOCAL HOUSING (CONT'D)

Recent growth of DVTC has increased demand for housing in Lee County, particularly in the western end of Lee County near Lincoln Memorial University and DeBusk Veterinary Teaching Center. The lower-cost rural housing is in demand for students, faculty, and staff. This additional demand further strains the supply of affordable, quality local housing.

It appears that the young and old, across the income spectrum, prefer to live immersed in scenery and would enjoy more amenities near properties that require less maintenance and driving. However, developers and property owners are reluctant to invest without solid numbers on specific markets and proven concepts. This project binds together community housing preferences along with economic insights on owner and rental options at various income thresholds.

Profile highlights of western Lee County demographics:

- 58% of the County’s labor force commutes out of the county to work
- 2,800 people who work within Lee have the lowest median household income in VA (\$629/wk)
- Lee County’s median rental rate over the past 5 years has been approximately \$540
- There are few home-ownership options for most local-wage earners

ECONOMIC BASIS OF HOUSING STUDY

The LMU – DeBusk Veterinary Center Housing Master Plan is based on the economics findings of a recent economics study, by the Virginia Tech Office of Economic Development (OED). Entitled “Western Lee County Economic Opportunity Analysis”, and published Spring, 2020, the Virginia Tech report is structured in the following format:

- I. Demographic Overview
- II. Housing Overview
- III. Economic/Market Analysis
 - i. Retail Trade
 - ii. Arts, Entertainment, and Recreation
 - iii. Accommodation and Food Service
- IV. Small Businesses and Entrepreneurship
- V. Tourism Market and Commuting Patterns

Virginia Tech OED identifies LMU as one of the County’s major economic assets. Specific paragraphs summarize economic needs and characteristics:

- Report provides existing conditions and emerging trends of the County for five core socio-economic characteristics and comparison for the surrounding region of Bell, KY and Claiborne, TN. The local and regional overviews may provide essential background information to better understand the current conditions in and around Lee, VA.
- Report suggests stabilization of the measured performance trends across each of these core data areas. The County’s existing unique assets may propel this rural economy forward by attracting investments, increasing tourism, and improving its resident’s prosperity, and attracting new talent into the County.

BACKGROUND & PLANNING PROCESS

INTRO

The Project Team sought and received input from groups and individuals for the engaged planning process. The first round of input was prior to developing any conceptual renderings and was conducted virtually; the second round was to share the survey results and focus group findings with some conceptual ideas of the four initial sites of interest; the third round presented the findings and aimed to collect final feedback.

This was a multi-pronged approach to receive input from LMU-DVTC stakeholders, community leaders, and housing experts.

SUMMARY OF GOALS

- Safe, clean, dependable
- Community resource
- Benefit to Lee County
- Affordable (~\$100,000 per unit)
- Integrate housing with the community
- Faculty involvement
- Regional investment
- Fits within the local context and character
- Business growth and economic development

FOCUS GROUP FINDINGS

To understanding the perspective of project stakeholders, Hill Studio hosted two virtual focus group sessions in March and April of 2020.

The first focus group included Lee County Economic Development Staff, County Officials, and Real Estate Professionals while the second included LMU stakeholders.

Below are the focus group's key takeaways and preferences:

Location:

- Ideal location is between LMU and the DeBusk Teaching Center
- Would like a housing development to be along Wilderness Road
- County would like to see Ewing redeveloped

Scale:

- The 2-year aim is for 200 students per class
- There are 600+ students who may need housing in 4-5 years
- Aim right now is to provide housing for about 250 students (with potential to expand)

Services and Amenities:

- Community:
 - Mixed development that allows opportunities for economic development and commercial growth
 - Shopping options
 - Restaurants
 - Childcare for students with children
 - Give businesses an incentive to be included
 - Close to the main road
 - Composting and recycling
 - Walkability or bikability to campus
- Units:
 - Reliable septic system
 - Central heat and air
 - Affordable energy efficiency
 - Composting and recycling
 - Pet-friendly
 - Home office
 - Internet

FOCUS GROUP FINDINGS (CONT'D)

Housing Types:

- Duplex, apartments, and cottages
- Mixed-used development

Community Involvement:

- Stakeholders feel that the local community would embrace a student housing development
- Stakeholders want to keep housing affordable as to not out price locals

Internet and Cell Service:

- A new cell tower is being considered along Wilderness Road
- Broadband may take a few years to improve
- DeBusk Teaching Center does have service

VIRTUAL WORKSHOP WEBSITE

Although the global pandemic has kept us apart, with resilience and perseverance we were able to still come together online. A virtual workshop was developed and deployed to gain real-time feedback on concepts and designs as they were created and posted by Hill Studio.

The virtual workshop will continue to house concepts, educational resource videos, design inspiration, and collaborative ideas from those involved that emerged from this project. We have used and will continue to use this tool to invite stakeholders into the planning process to make every voice heard and help Lee County and LMU-DVTC envision what this community could become.

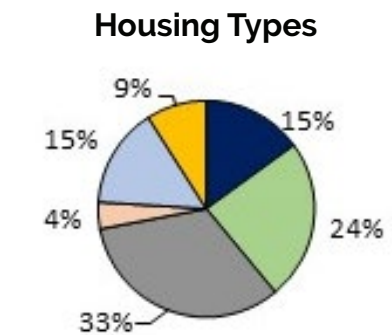
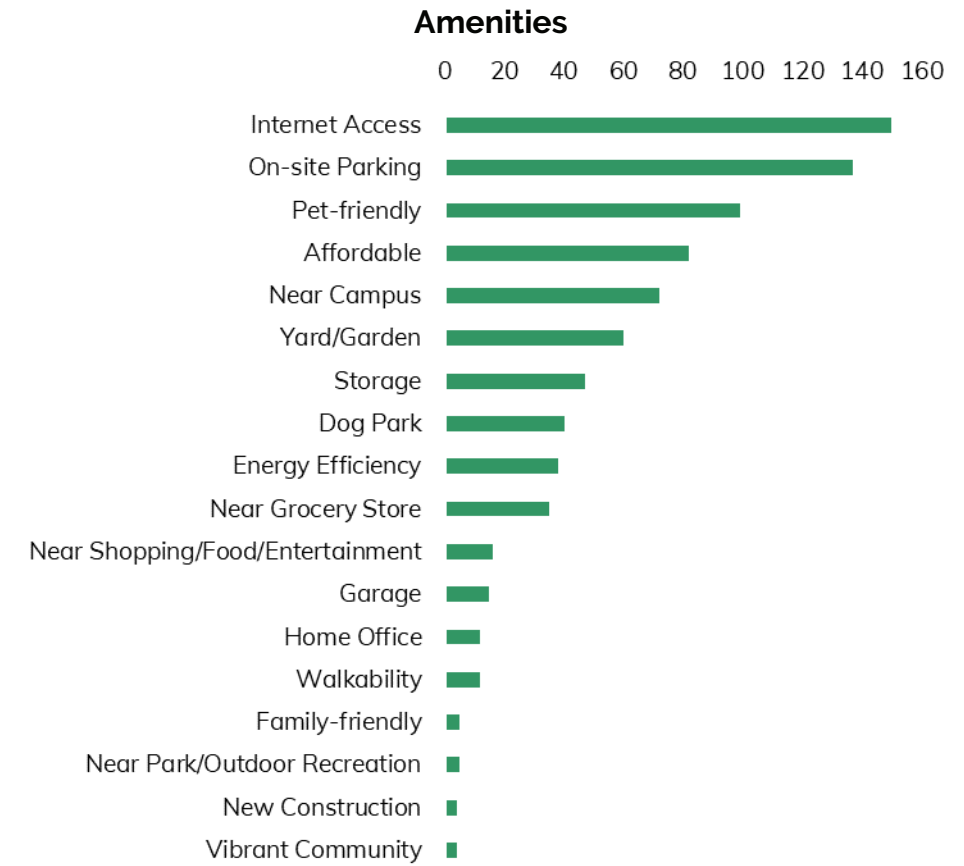
Visit the web pages at:
leevahousing.com
or
hillstudio.com/leeva-housing



BACKGROUND & PLANNING PROCESS

STUDENT/STAFF & COMMUNITY SURVEY FINDINGS SUMMARY

- Almost all (98%) agreed there is need for new housing options
- Internet, pet-friendly, affordability, and location were most important aspects
- Almost all (99%) say internet access is very important
- Most have animals, primarily dogs (80%)
- Cottages ranked highest housing type at one-third of the votes
- Apartments ranked 2nd highest at one-quarter of the votes
- Single rural units also ranked highly and was therefore considered in the site selection
- Majority of students and faculty (80%) prefer to live somewhere between both campuses
- Majority (75%) want to drive no more than 20 minutes driving to get to campus and to things like food, entertainment, shopping, etc.
- Majority (65%) of students do not want to share a unit with roommates
- More than half would like to have 2 rooms (guest, child, pet, storage, office, etc.)
- Almost all (90%) prefer to rent at this stage of their life
- Almost one-third would like rent to be less than \$600 a month while one-third were okay with paying slightly more
- Of the 170 survey participants, 110 (60%) were ages 18 to 25, 60 (35%) were 25 to 35, and less than 10 people (5%) were over the age of 35
- Majority (65%) do not have children or spouses, almost one-third live with a partner, and less than 10 have children





Chapter 2: *Development Overview*

Design Principles
Amenity Programming

DESIGN PRINCIPLES

GUIDING HOUSING DESIGN PRINCIPLES

Guiding principles for this study were derived from initial roundtable discussions with students and staff at DVTC, local residents, and county representatives as well as similar case studies.

Principle 1: Provide a choice of multiple housing styles

Provide students and community members a choice of multiple housing styles and orientations. This will give residents more flexibility when deciding which housing style will fulfill their needs and suit their lifestyle, but also give them a greater sense of autonomy when choosing where to live.

Principle 2: Conserve the land with context sensitive development

Set an example of efficient and responsible land use, situating the residences compactly on the site. Leave large buffers of protected rural land in the community, so the new housing development fits within the existing rural landscape. Provide larger parks and public trails within the development for use of both the housing community and the general public.

Principle 3: Organize the community in clusters of 8 to 12 houses

Build the larger housing development with smaller clusters of 8 to 12 households, each with their own common space. This allows for a sense of ownership over each common space and fosters the deeper connection among residents of each cluster.

Principle 4: Share public spaces and facilities

Each housing cluster should have a common public space that the residences grouped around. The larger aggregate communities, made up of several clusters, should have common facilities such as pavilions, garden tool sheds, community kitchens, shared laundry facilities, etc. These amenities are not only a benefit to each individual resident, but they also provide a place for social gatherings.

Principle 5: Separate pedestrian and vehicle travel

Locate parking areas and streets so that cars are away from the residences, and neighbors must walk through the shared spaces to get access their homes. This both removes the dangers of pedestrian and vehicle traffic crossing, but also promotes interaction amongst neighbors.

Principle 6: Layer public and private spaces

Residents should have the benefits of both community living and privacy. The housing clusters break down the community into smaller zones, where residents can feel more ownership over the public space. From there, a transition from shared greens to private yards can be achieved by fencing, enclosed plantings, gates etc. Covered porches looking onto the common space with vegetative buffers of railings and plantings will also help achieve privacy.

Principle 7: Face active rooms of the house towards public space

Each home must also have layers of public and private spaces. The more active rooms of the home, such as the kitchen, should look out onto the shared green spaces. The more private spaces, such as the bedrooms and study spaces, should be the rear of the home or in a loft. Windows should be located as to not look directly into a neighbor's residence.

RECOMMENDED PROGRAM AMENITIES

• Green Space/Recreational Areas:

Shared green space/recreational areas are essential to improving quality of life. Green spaces are typically comprised of vegetation and associated with natural elements. They can provide environmental benefits by offsetting greenhouse gas emissions and decreasing storm water impacts. They also provide direct health benefits by providing spaces for physical activity and social interaction. Green space using pastures and meadows relates directly to the cultural landscape of Western Lee County.



Ivy Creek Park and Recreation Area - Lynchburg, Virginia

• Connectivity/Site Walkability Access (Trails):

Pedestrian and bike-friendly trails can provide a package of benefits to a community – including benefits to public health, economics, transportation, and community identity. They create health recreational opportunities by providing people of all ages with low-cost places to walk, job, hike, or bike. Trails help people of all ages incorporate exercise into their daily routines which can improve overall public health and wellness. Trails often double as transportation corridors that link community amenities. They also help to preserve essential natural landscapes and offer opportunities for protecting plant and animal species. The preferred site is within reasonable walking and biking distance from DVTC via the Wilderness Road Trail.



Greenway Trail along Roanoke River - Roanoke, Virginia

• Gardens (Shared & Individual):

Gardens, both shared and individual, can contribute to a healthy community by providing fresh and affordable produce. They also provide a way to improve overall physical and mental health of community members, strengthen community ties, and reduce environmental impacts. Additionally, gardens help to improve air and soil quality, reduce transportation needs, offer the opportunity for composting, and can improve food security.



West End Community Garden - Roanoke, Virginia

DESIGN PRINCIPLES

RECOMMENDED PROGRAM AMENITIES (continued)

- **Play Areas:**

Especially for DVTC Students and Staff with families, play areas and playgrounds are essential to childhood development. They learn many types of skills – social, motor, critical thinking, etc. – That will benefit them for years to come. Children will also learn both verbal and non-verbal communication on a playground. They also help to improve physical health of younger generations and are a valuable asset for growing families.



Playground in Natural Area at Riverside Park - Lynchburg, VA

- **Shared Community Buildings:**

Community buildings can offer amenities that individual homes might not, such as laundry facilities, event spaces, commercial kitchens, and classrooms. When part of a community design, a shared community building can also foster a strong sense of community and pride. The community buildings provide commercial and job opportunities for local merchants and citizens. They serve to better integrate the college with the community.



Renderings of Community Buildings for Potential Lee Co. Site

RECOMMENDED ENVIRONMENTAL DESIGN MEASURES

- **Solar Energy:**

In recent years, there has been tremendous growth in the United States solar industry that is helping to pave the way for clean, renewable energy potential. Solar has become much more affordable and innovative. Solar power also lends itself to the theme of resiliency in the local community.



Solar Panels at nearby Mountain Empire Community College

- **Wind Turbines:**

A wind turbine converts wind's kinetic energy into electrical energy. Wind power is cost-effective and is growing in popularity. Wind energy is also a clean fuel source and helps to reduce greenhouse gas emissions of the energy sector. The United States has become an international leader in the wind energy industry. Micro turbines have proven very effective at nearby Mountain Empire Community College. They can be aesthetically arranged to provide a right-sized energy component to the project site.



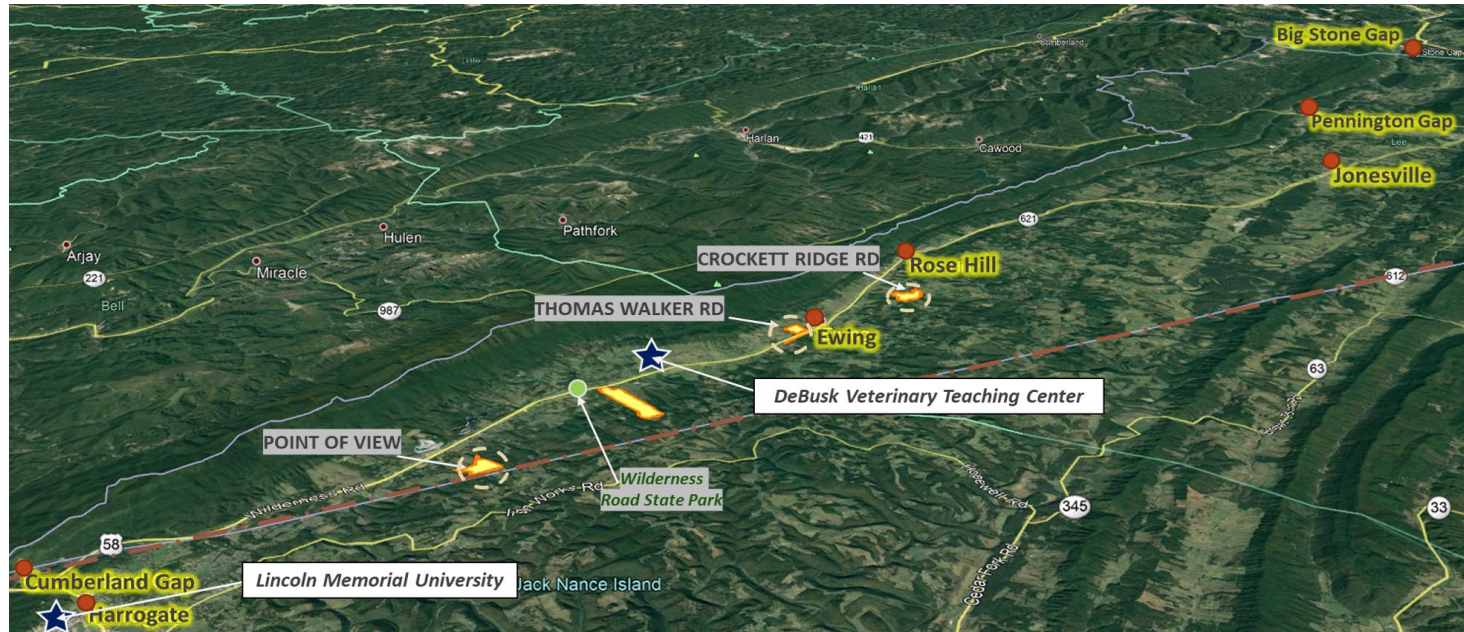
Micro Wind Turbines at Mountain Empire Community College



Chapter 3: *Site Selection Process*

Land/Site Characteristic Analysis
Conceptual Site Plans

SITE SELECTION PROCESS



Aerial image showing range of site selection and top 4 candidate sites

SITE SELECTION PROCESS

With findings from the student and community survey, a list of siting criteria was developed. This criteria included the following items:

- Proximity to both campuses
- Proximity to the County's primary corridor, Highway 58
- Proximity to existing businesses and entertainment
- Proximity to outdoor recreation attractions such as Wilderness Road Trail and State Park as well as Cumberland Gap National Historical Park
- Overall developability of land and including slope, size, land cover, etc.
- Cost of property acquisition

Initially, ten sites found on local reality sites were considered. These include:

- 605 Maggies Trl, Ewing, VA 24248
- 1167 Dr Thomas Walker Rd Ewing, VA 24248
- 1057 Crockett Ridge Rd, Rose Hill, VA 24281
- 819 Point Of View Dr Ewing, VA 24248
- 585 Trinity Dr, Ewing, VA 24248
- 352 Bethany Rd, Ewing, VA 24248
- 494 Mount Foggmore Trl Ewing, VA 24248
- 1010 Holiness Hollow Rd Ewing, VA 24248
- 5769 Wilderness Rd Ewing, VA 24248
- 932 Castene Rd. Ewing, VA 24248

The ten sites were winnowed to the top four and these were conceptualized during an intensely focused full-day in-house charrette with the design team. These designs included basic layout, site functions, and access via exiting or new road development. Upon creating these, local officials, community members, and those affiliated with the university furthered the choices. The site located at 605 Maggies Trail was selected for final conceptual plans and renderings. The following pages highlight the conceptual designs.

Dr. Thomas Walker Road Property



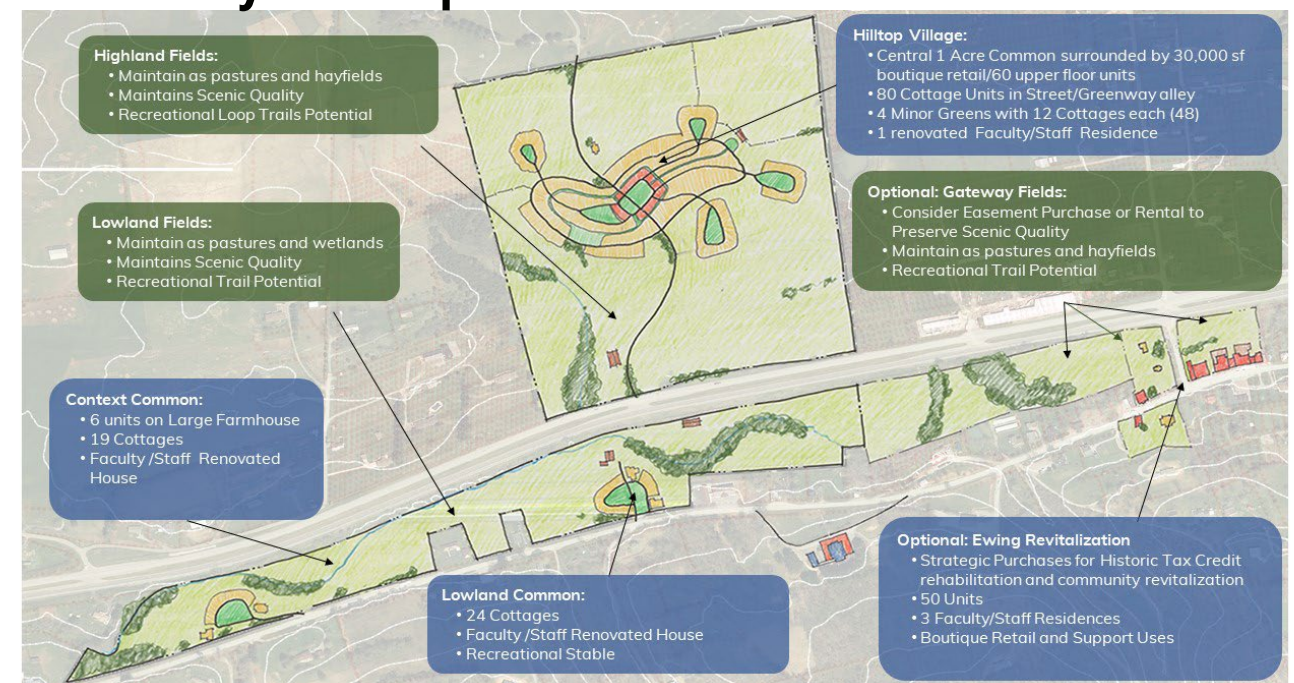
PROXIMITY & SIZE

Located along Dr. Thomas Walker Highway, this 92 acre site is directly adjacent to the small village of Ewing and is actually split by the highway. It is less than a mile from DVTC campus, however it is more than 20 minutes from LMU.

TOPO & LAND COVER

The property has a relatively flat grade with an average slope of 9% or approximately 5°. The southern end is mostly wetlands with existing homes. The northern end is generally pasture, making it suitable for development.

Preliminary Conceptual Plan



OTHER SITES OF INTEREST

Crockett Ridge Road Property



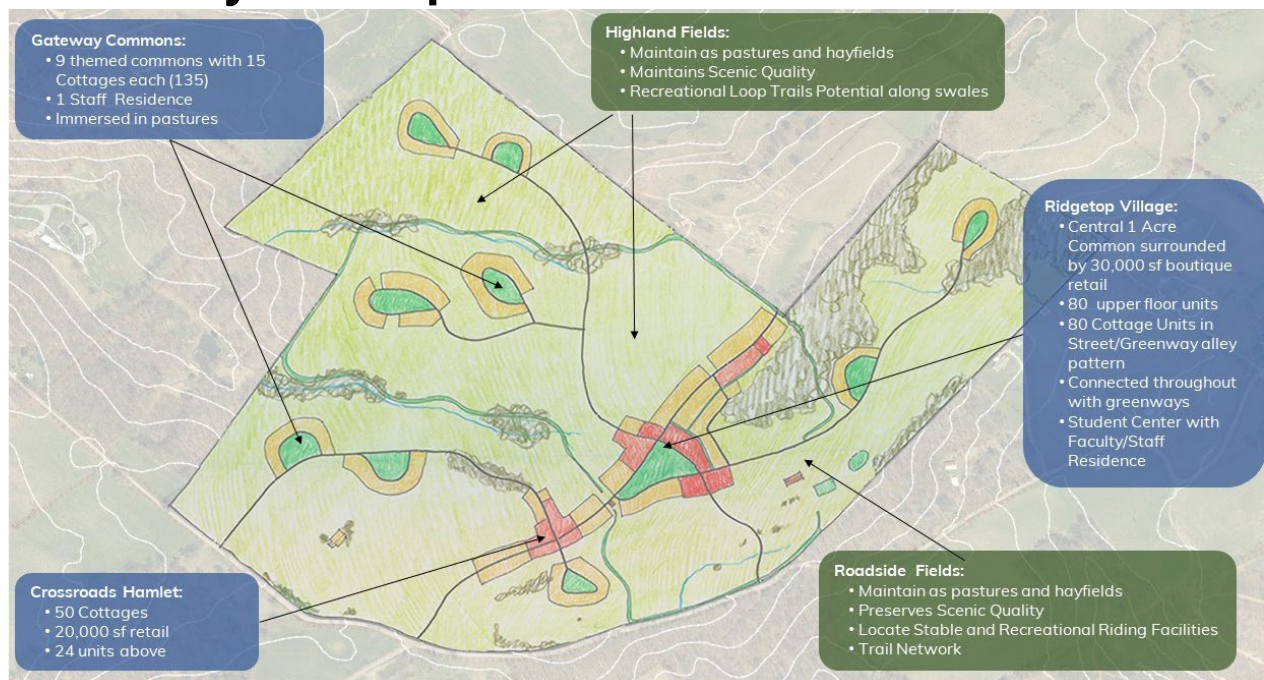
PROXIMITY & SIZE

This 144 acre site is one of the largest and is the furthest from both DVTC and LMU campuses. It is also the longest distance from the main highway at approximately 1 mile from the highway entrance at the village of Ewing.

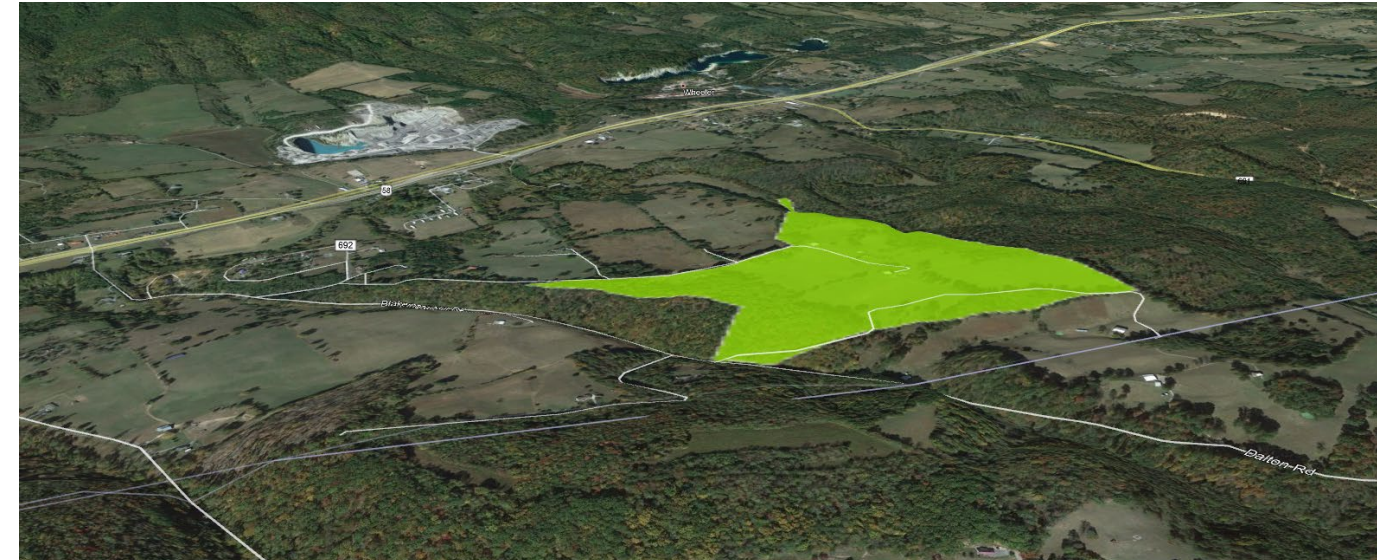
TOPO & LAND COVER

The property has a very steep, challenging grade with an average slope of 20% or approximately 13°. The northern end of the site has been recently cleared and is now mostly scrub with a small forested patch.

Preliminary Conceptual Plan



Point of View Road Property



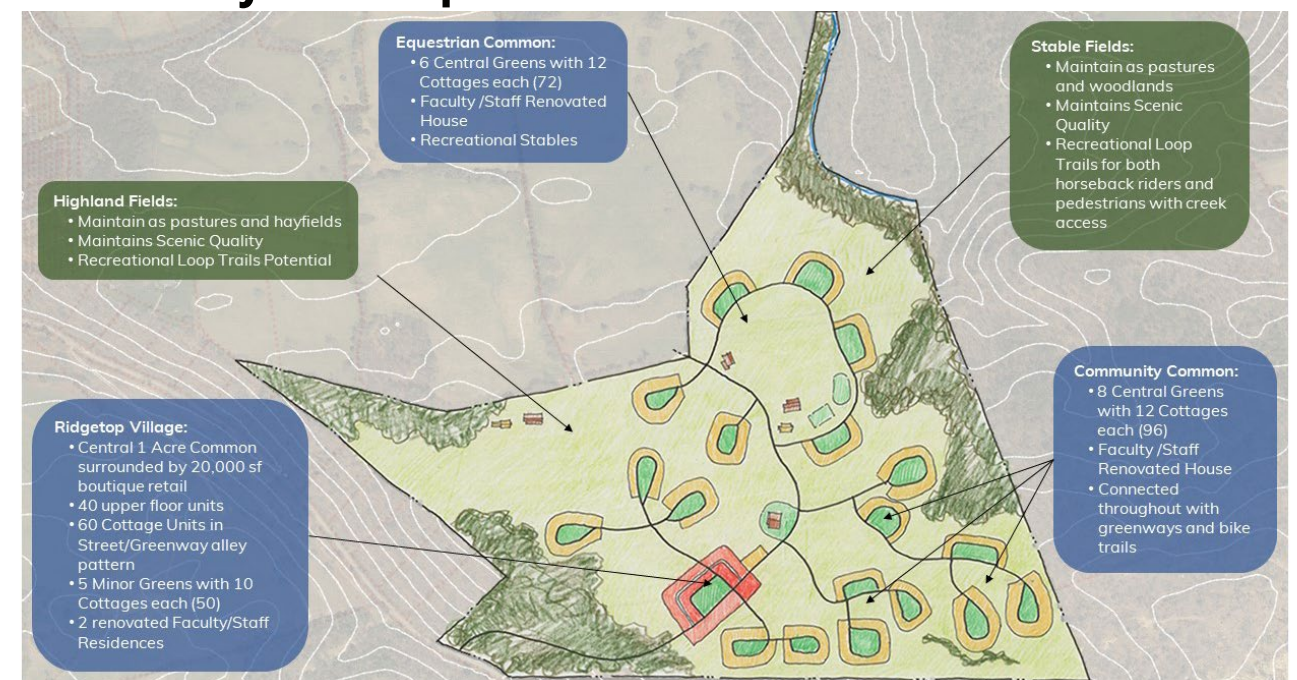
PROXIMITY & SIZE

This 112 acre site is the closest to LMU and has the shortest commute to many of the local towns containing entertainment features, however it is approximately 1 mile away from the highway on a winding, scenic mountain secondary road.

TOPO & LAND COVER

The property has a very steep, challenging grade with an average slope of 19% or approximately 12°. There are 3 existing buildings on the site including stables and barns. There is also a stream and small runoff pond on the property.

Preliminary Conceptual Plan





Chapter 4:
Preferred Site:
Maggie's Trail - Ewing, VA

Land/Site Characteristic Analysis
Conceptual Site/Floor Plans

SITE CHARACTERISTICS

Maggies Trail Property



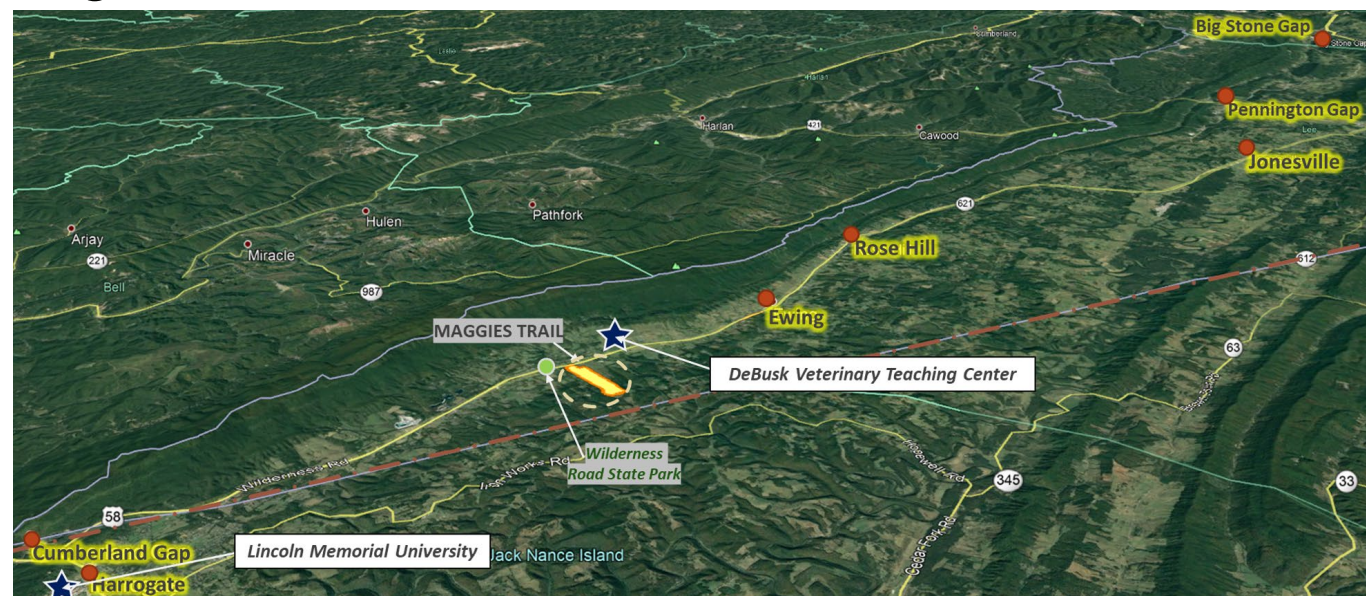
PROXIMITY & SIZE

Approximately 300 acres in size. This is the largest property of all the sites that were assessed for the conceptual design phase and is located next to Dr. Thomas Walker Highway on a private road named Maggies Trail less than a mile from the DVTC campus and across the road from Wilderness Road State Park.

TOPO & LAND COVER

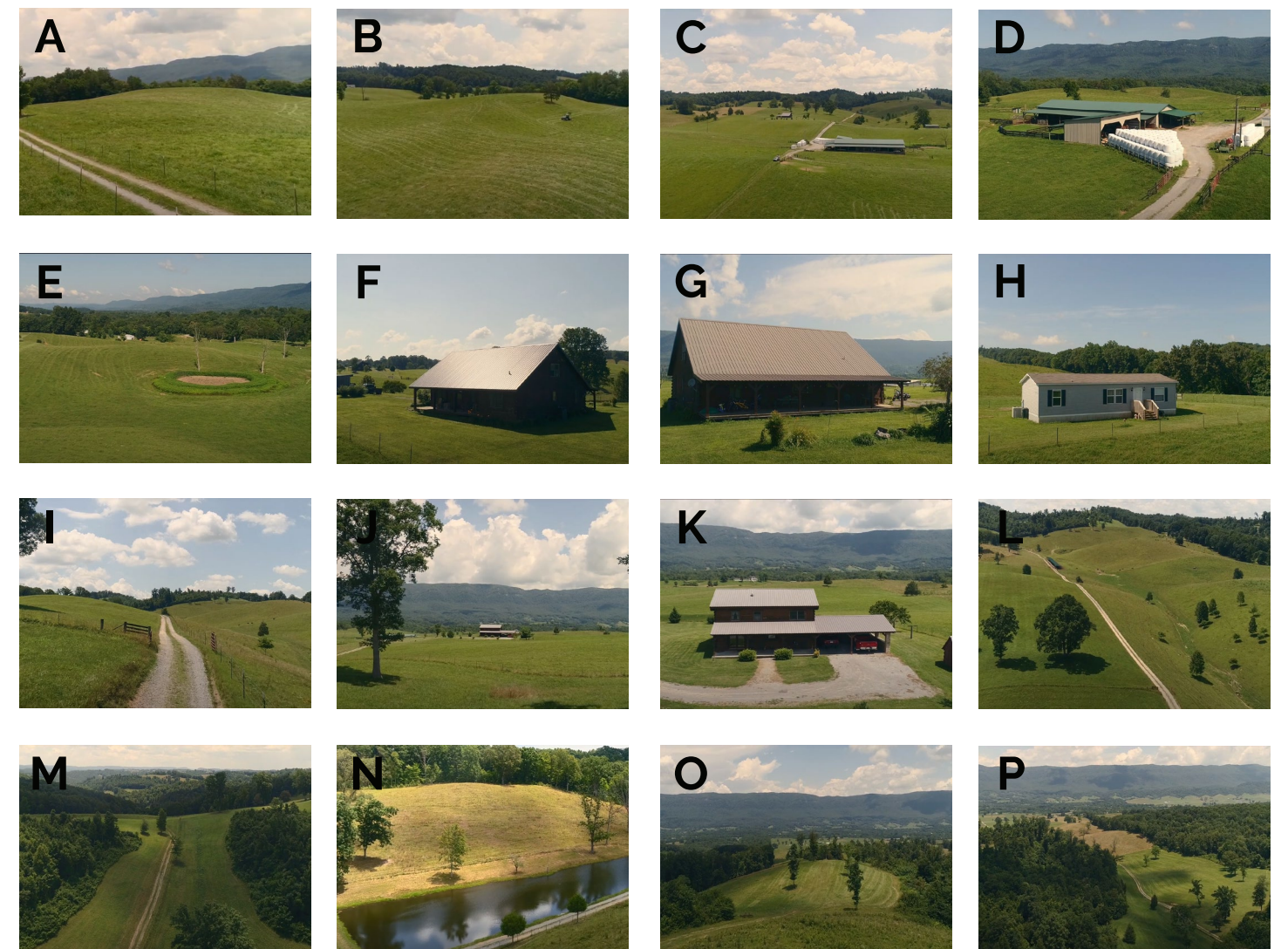
There are four existing buildings on this property, including two log-cabin style homes, a double-wide mobile home, and a barn. The land cover primarily consists of pasture with patches of forest to the south and includes a small lake. The property has a relatively consistent grade with an average slope of 15% or 9°.

Regional Location



AERIAL VIEWS OF SITE

AERIAL PHOTOS PROVIDED BY: CLINCH MOUNTAIN REALTY & AUCTION



CONCEPTUAL DESIGN

DESIGN FEATURES

The land plan for the Maggie's Trail property provides for 233 new residences, in several densities. All cottages are in designed arrangements around central features to achieve community spirit and harmony. Modeled on community designs of successful benchmarks, students may prefer more rural shamrock clusters, or prefer to live in the more amenity-packed Common. The following is a breakdown of the housing types and square footage featured on the property:

- 3 Existing Faculty / Staff Homes
- 8 F/S Apartments (1000 sf) in the Common
- 76 Student Apartments (900 sf) in the Common
- 8 F/S Cottages in Shamrocks (1200 sf)
- 100 Single Cottages (800 sf)
- 35 Two BR Cottages (1000 sf)
- 3 Tree houses (800 sf)
- **233 Total Residences**

The following pages describe each section in detail. Starting on page 32 Beginning with the entrance feature, the parkway and horse park. Then the residential village including The Common. Then the long meadow preserve with lake.

KEY ELEMENTS

- **COMMUNITY DESIGN:**
Multiple housing choices, in clusters of 12+/- houses. Active rooms of house toward public spaces. Layers of public and private spaces.
- **OPEN SPACE IMMERSION:**
Conserves the land with context-sensitive Development. Supplements the educational experience with equestrian center, agriculture and community gardens, trails dog parks, playgrounds, etc. Separated pedestrian and vehicular travel.
- **ECOLOGICAL PRESERVATION:**
Front and rear zones buffer more intensely developed center. About two thirds of site or approximately 200 acres of preserved land.

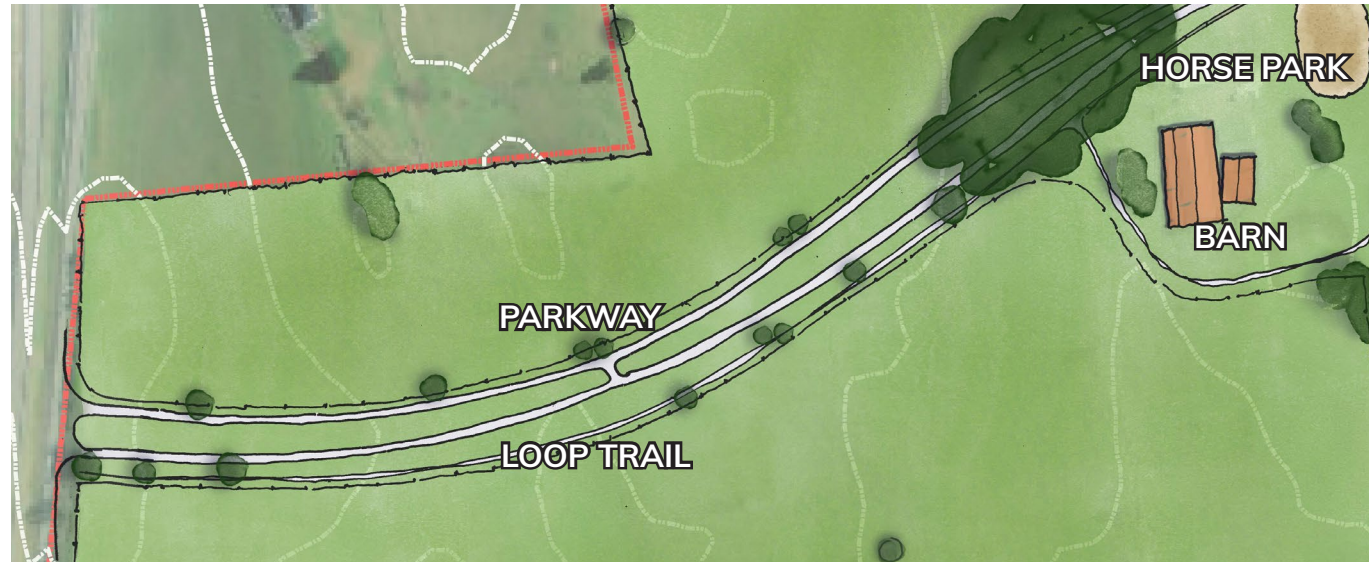


CONCEPTUAL SITE PLAN



PARKWAY & HORSE PARK

Parkway



DESIGN FEATURES

- Half-mile introductory experience through pastoral countryside – 1 lane each way + greenway tie to Wilderness Road trail
- All residences beyond primary ridge and past horse park
- Incorporates existing barn into service barn
- 3 Faculty/Staff residences are first residences reached
- 100 Acres of pasture consistent with existing land use patterns
- Allows for grazing of cattle within fenced area

Parkway Sections



Horse Park



DESIGN FEATURES

- Incorporates existing barn into service barn
- 3 Faculty/Staff residences
- 100 Acres of pasture consistent with existing land use patterns
- New Stable shown at 24 stalls
- Parking, Dressage Ring, Pleasure, Teaching Ring, potential for cross country course, trails
- Potential use of stables for larger LMU community, varsity equestrian team, or local outreach activities

Horse Stable



EXISTING UNITS



Primary Cabin/Proposed Faculty Residence
 This custom log home built by Old Virginia Hand Hewn Log Homes in 2008. This cabin is a 2,400 s.f. potential faculty or staff residence with 3 beds and 2 baths as well as a covered front and back porch and covered carport. The upper level is unfinished.



Secondary Cabin/Proposed Faculty Residence
 This custom log home built by Old Virginia Hand Hewn Log Homes in 2008. This cabin is 1,700 s.f. and contains a covered front porch with a detached carport. The upper level is unfinished and can be customized based on needs of faculty and staff.



Modular Home/Proposed Faculty Residence
 This 2017 modular double wide modular home is perfect for beginner faculty, staff or ranch hand who can tend to the 300 acre property. It contains a gravel, uncovered parking area as well as a fully functioning kitchen, living area, bathroom and bedroom.



Barn
 This 300x140 s.f. roofed barn with 50x60 s.f. shop containing a concrete floor, electricity, doors and insulated roof. The barn has a working cattle headgate and area for equipment storage. It is surrounded by feeding troughs and 7 miles of fencing.

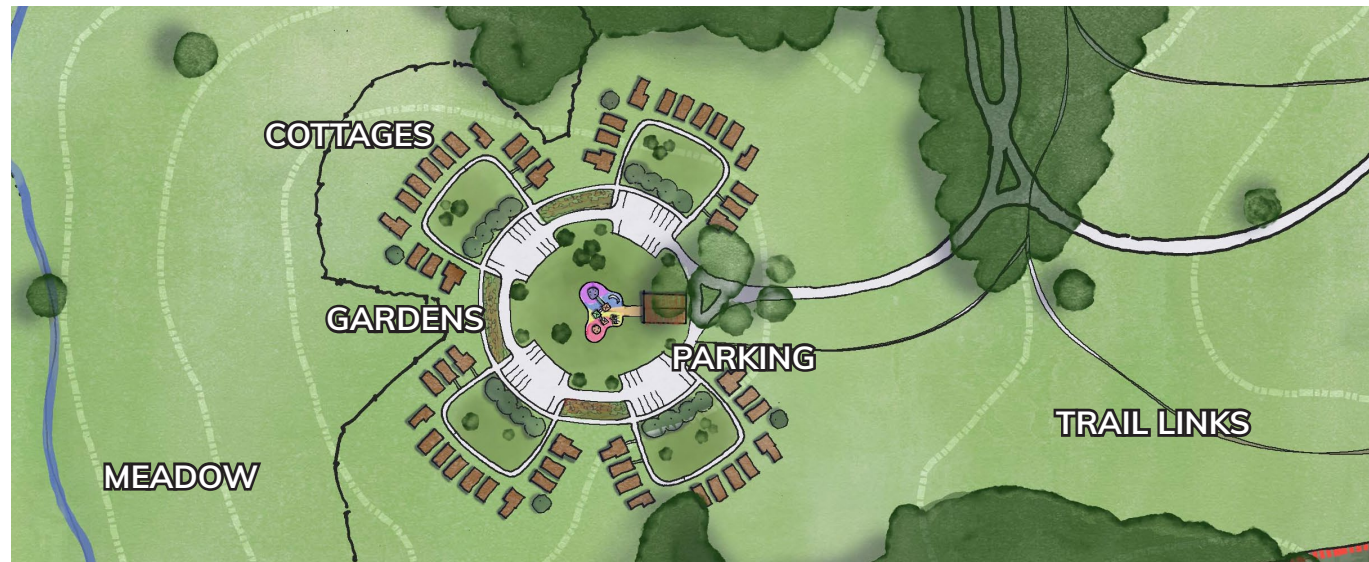


Based on the aerial view map shown previously. View Q shows the two cabin style homes and barn. Not seen in the picture is the double-wide modular home.

PHOTOS PROVIDED BY: CLINCH MOUNTAIN REALTY & AUCTION

RESIDENTIAL VILLAGE

Lower Shamrock



DESIGN FEATURES

- First Student / Faculty Housing Cluster
- 48 Student and 4 Faculty/Staff residences
- Approximately 8 acres
- Parking – 76 spaces
- Themed toward students or faculty with small children
- Playground in the center
- Community gardens between parking areas
- Half of houses oriented toward pasture; half toward meadows

Modular Cottage Example



Upper Shamrock



DESIGN FEATURES

- Second Student / Faculty Housing Cluster
- 48 Student and 4 Faculty/Staff residences
- Approximately 8 acres
- Parking – 76 spaces
- Themed toward students with dogs
- Dog Park in the center
- Community gardens between parking areas
- Half of houses oriented toward woods; half toward meadows

Perspective Drawing



RESIDENTIAL VILLAGE

Cloverleaf



DESIGN FEATURES

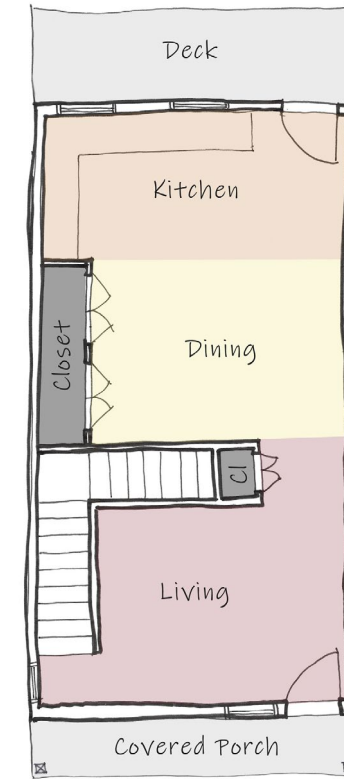
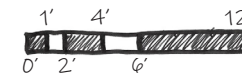
- Third Student / Faculty Housing Cluster
- Approximately 6 acres
- Parking – 48 spaces
- Themed toward outdoorsy students and single students
- Volleyball court in the center
- Community gardens between parking areas
- Half of houses oriented toward woods; half toward meadows
- 36 Student residences and 3 treehouse residences
- Tree houses are simply elevated cottages with ADA accessibility



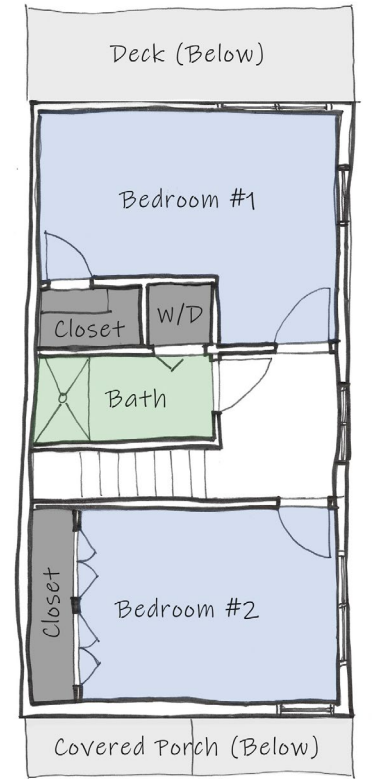
Cottage Floor Plans for Shamrocks and Cloverleaf

Concept 1

2 BR/ 1 Bath
1,000 SF



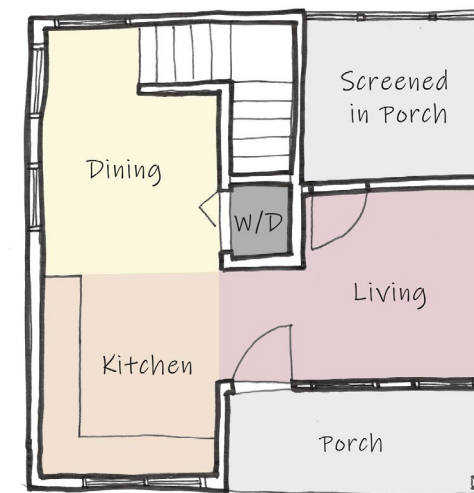
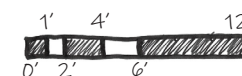
First Floor



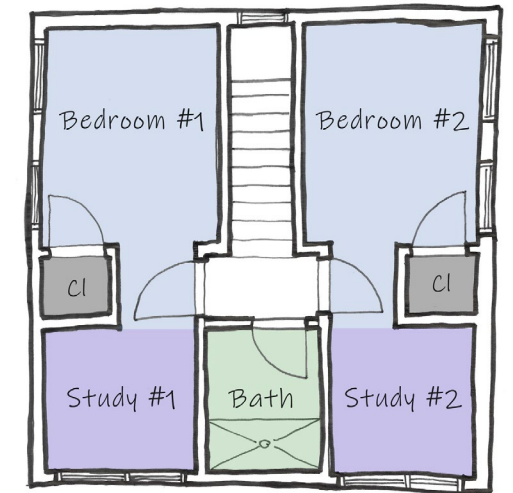
Second Floor

Concept 2

2 BR/ 1 Bath
1,050 SF



First Floor

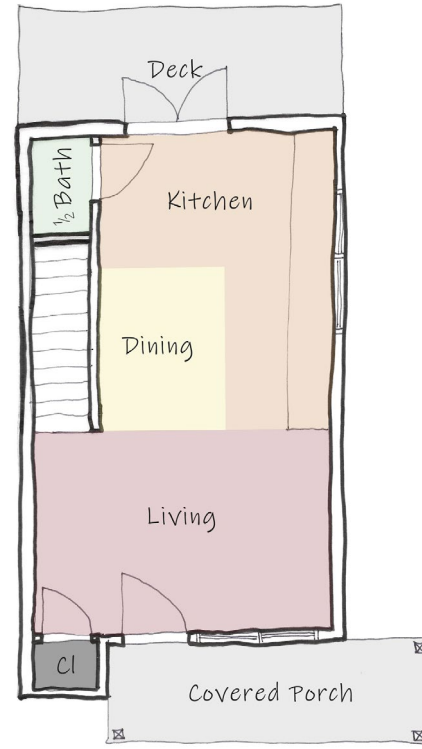
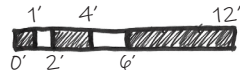


Second Floor

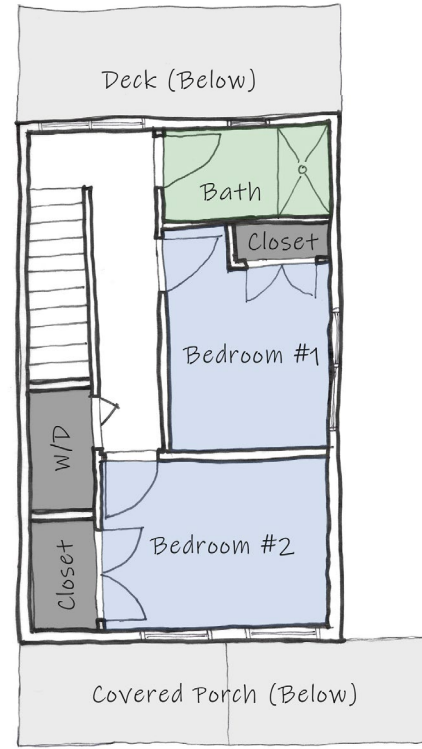
RESIDENTIAL VILLAGE

Cottage Floor Plans

Concept 3
2 BR/ 1.5 Bath
900 SF

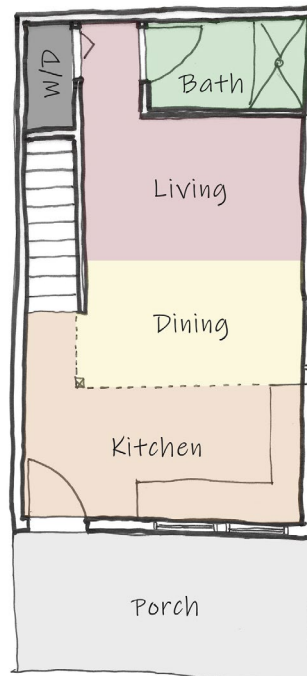
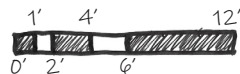


First Floor

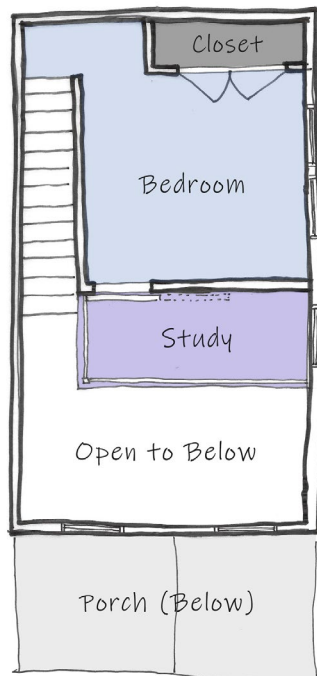


Second Floor

Concept 4
1 BR/ 1 Bath
700 SF



First Floor



Second Floor

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THE COMMON

Mixed-Use Village



OVERVIEW

The common is the central unifying design feature of the complex. It provides substantial opportunity for local business development; it helps to meet some community housing needs; and it provides support services to the veterinary teaching community.

A collage of the visual environment of the common, clockwise from top left: surrounding orchard, buildings with porches, utility bollards for food trucks, music and entertainment bandshell, central green for activity, active garden space and surrounding the center, 2-story mixed-use buildings. A larger version can be seen on page 44.

DESIGN FEATURES

- 2-story mixed-use development around 2-acre central open transitional space
- 76 Student and 8 Faculty/Staff residences mostly on second floors, with some first-floor accessible units (small communities in each building)
- About 12 acres including all open-space areas
- Dog Park for residents and community members to allow their pets to play
- Parking – 180 spaces
- Community gardens and orchard for shared use
- Festival green with surrounding parking for Food Trucks and a bandshell for live music

COMMERCIAL & SUPPORT SERVICES

- Community Kitchen (5,000 s.f.)
- Community Gardens (3.5 acres)
- Boutique Grocery Store (11,000 s.f.)
- Laundry (8,000 s.f.)
- Pet Shop (2,000 s.f.)
- Cyber Café (2,000 s.f.)
- LMU Book Store (5,000 s.f.)
- Fitness Center (12,000 s.f.)
- Child Care (10,000 s.f.)
- Coffee Shop (2,000 s.f.)
- Local Interest Market Stalls (11,000 s.f.)
- Local Interest Restaurant w/ Outdoor Dining Terrace (6,000 s.f.)
- Leasing Office (5,000 s.f.)

Mixed-Use Village Elements



THE COMMON



LONG MEADOW PRESERVES

Preservation Land



DESIGN FEATURES

- 100-acre Hiking Area at the back and 100-acre Pasture at the front of the site
- Enhanced lake with Nature Center
- 11,500 feet (over 2 miles) of Interconnected Backcountry Trails
- Green Energy (Micro Wind Turbine) Installation
- Picnic Shelters

Aerial View of Meadow



FRONT

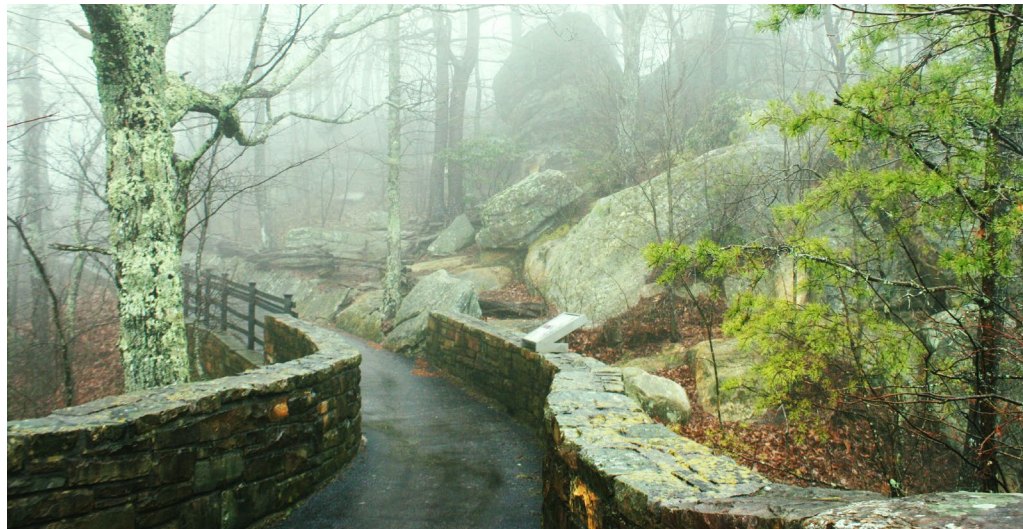


~100-acres

BACK



~100-acres



Chapter 5: *Implementation*

Funding Considerations
Phasing Timeline
Proposed Next Steps

FUNDING CONSIDERATIONS

INTRODUCTION

The proforma shows several places that incentives and partnerships are recommended to create a thriving and continuing housing community.

A VITAL COMPONENT FOR LINCOLN MEMORIAL UNIVERSITY

At the campus level, the property is recommended to be purchased by one of the foundations of Lincoln Memorial University, who will own the project. First step is to gain an option on this land, for due diligence studies. If found clear, the land resource of the property can be a logical extension of the LMU brand and can house several programs that provide extension to the resources of the Harrogate, TN main campus. For example, the land offers superior potentials for a horsemanship program, intercollegiate varsity equestrian sports, and/ or endurance or trail riding. Due to the timing of the project and the interest of the funding agencies, the land makes an exceptional home for alternative energy studies, and many cutting-edge energy generation components are wrapped into the design of the structures. Also, there are opportunities for agrarian-oriented, biological and forestry studies on the grounds, as well as opportunities for business and recreational studies and pursuits.

FUNDING STACK

To have the rich context-sensitive and amenity immersion desired for the housing mix, the land is proposed to be acquired in its entirety and more than 200 acres placed in a Conservation Easement. Virginia Conservations Easements allow for non-profits, such as LMU, to partner with a Conservation Trust and a Tax Credit buyer, who can benefit from the tax credits and return substantial amounts of investment to the project, and the university. Up to date information regarding this program is available at <https://www.dcr.virginia.gov/land-conservation/>

In addition to the land conservation partnership, Lee County and LMU can benefit from applying for and directing several grants toward the project over each of its four construction phases. Recurring applications are recommended for:

1. Virginia Housing Grants for Energy Demonstration Projects – these are granted by VH for innovative and exceptional housing examples. Up to \$400,000 per project.
2. CDBG Grants – Granted by Virginia DHCD to assist with utilities to LMI housing and to underserved areas, or alternatively for Economic Development. This project has both aspects. Would be a natural fit for CDBG resources. These funds are competitive and must win each time. \$1,000,000 is estimated as a reasonable negotiated ask. <https://www.dhcd.virginia.gov/cdbg-community-economic-development-fund>.

FUNDING STACK (CONT'D)

3. VDOT Recreation Access Program for Roads – depending on the general disposition of LMU regarding granting access to everybody, VDOT may be reasonable participant. Use of their funds, however, requires the roads and trails be build to their high standards, and open to everybody. If this is the route chosen, grants of up to \$250,000 for each phase of road and \$75,000 for each trail segment, as long as they open up a new public recreational area. http://www.virginiadot.org/business/resources/local_assistance/access_programs/RecrAccessGuide.pdf

4. VDOT TAP program for Trails – The Transportation Alternatives Program has been a very successful program. Its predecessor program (ISTEA) funded the nearby Wilderness Road Trail. The TAP program allows more flexibility than the Recreational Access Program, so is recommended as a source for trails and other enhancements development. Like the RAP, above, the TAP requires that everyone be allowed to use the completed transportation facilities, so this should be considered before applying. <http://www.virginiadot.org/business/prehancegrants.asp>

PNP DEVELOPMENT PARTNER

To assist with the development of the housing and village components, a Private-Non-profit (PNP) Development Partner is recommended. For example, a team including LMU, a design-build group of highly reputable local companies, and a finance partner, as well as the Lee County IDA, could be a dynamic force in delivering the project. There has already been interest shown by several of the private firms to create an entity to be the private partner.

PHASING

FOUR PHASES OF DEVELOPMENT

The plans were drawn and “right-sized” for delivery with a local design-build partnership to deliver four distinct and independent phases of development. These phases represent about 2/3 of the total development package, or roughly \$60 million in improvements. The work would correspond with parallel university-funded additional work being performed by the team, funded more specifically by LMU.

The four phases of work are segmented out to allow for management of the built resources to be undertaken by the PNP Development partner, for a period, if desired by the University. Beginning with one Cloverleaf, and substantial initial infrastructure, the phases are designed to be built in components, so improvements can be made with adjustments, as the next phase is considered. Shown on a map on page 54, the phases begin with establishing an identity at Route 58, and building back into the property to the south.

Total cost of each phase ranges in size from \$11 million to \$35 million, with PNP-financed and built components from \$7 to \$24 million.

1. Phase I includes the Parkway, much of the Horse Park and Lower Shamrock housing group. It also includes the first Common building.
2. Phase 2 includes additions to the Horse Park and Upper Shamrock housing group. It also includes the second Common building.
3. Phase 3 builds the remainder of the Common and its facilities, and extends the Parkway toward the preserve
4. Phase 4 builds the Cloverleaf cluster and Long Meadow Preserve.

The included cost estimate and proforma discusses with more detail the items in each Phase.

PROPOSED NEXT STEPS

Following the acceptance of this master plan by the Management team, the following steps are recommended:

Due Diligence Period (2021)

1. Get the concurrence of Lincoln Memorial University
2. Purchase an Option on the land for about a year, so that more in-depth due diligence studies can be performed:
 - Further Public Acceptance and Support, including Lee County and IDA levels
 - PSA – updated timing and capacity commitments of utilities
 - More work with Virginia Housing on the funding stack and loan commitments
 - Building a design build team to address project delivery methods
 - Zoning – consider VC – village Community district
 - VDOT – initial work on entrance permit
 - Septic suitability (for short-term)
 - Water connection availability
 - Secure Financing
 - Internet - fiber network and wireless broadband available, improvements necessary

Design and Construction Phases

These could begin as early as 2022. Phases can be staged to accommodate absorption, finance objectives, and could be stacked to occur concurrently, linearly planned so one starts right behind the other, or there could be short or long gaps, depending on a number of timing factors. Phases 1 and 2 are currently planned to proceed without public sewer, but if the planned public utilities can proceed these phases, it would result in some savings for the PNP partners and the University. Phase 3 depends on the public utilities.

PHASING



PROFORMA

SUMMARY OF COST ESTIMATE

SUMMARY	Total Cost	LMU	PNP
PHASE 1	\$25,297,830	\$8,283,901	\$14,026,486
PHASE 2	\$19,239,958	\$738,619	\$15,299,446
PHASE 3	\$35,277,154	\$5,776,542	\$24,414,293
PHASE 4	\$11,866,551	\$2,536,607	\$7,721,326
total project	\$91,681,492	\$17,335,669	\$61,461,550
Number of units	233		
Commercial SF	72,000		
Total SF	300,000		
Gross Cost per SF	\$306		

PNP SOFT COSTS DETAILED AND INCLUDED ON FOLLOWING PAGES

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PROFORMA

PHASE PROFORMA 1

PHASE 1 - PNP Component						
ITEM/DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST	FUNDING STACK / NOTES	
PROPERTY CHARACTERISTICS						
EXISTING PROPERTY						
Total Site	ac	300	5,333.33	1,600,000.00	predevelopment value	
Phase 1 Site	ac	100	5,333.33	533,333.00	predevelopment value	
BUILDING USES						
First Common building - 2 Story Walkup	sf	20800	sf		rental	
Retail / restaurant Space	sf	10400	sf		rental	
1 Faculty Apartment	1	1200	sf		rental	
3 Student Apartments - 1 BR	3	800	sf		rental	
7 Student Apartments - 2 BR	7	950	sf		rental	
Shamrock Cottages						
35 New 1 BR Units in place (800 sf)	sf	28800			rental	
13 New 2 BR Units in Place (1000 sf)	sf	20000			rental	
4 New Faculty Units in Place	sf	4800			rental	
3 Existing residences for Faculty	sf	2400			rental	
PROJECT COSTS						
TOTAL CONSTRUCTION BUDGET				14,026,485.60		
SELECTED SOFT COSTS						
Basic A&E Fees	%age	1	0.07	981,853.99		
Environmental assessment, appraisal, latent defect letter of credit	allow	1	1000	1,000.00		
Points on Financing	%age	1	0.05	701,324.28		
Permits	%age	1	70132	70,132.43	Review Refund by County or EDA	
Comprehensive Site Plan Review	%age	1	42079	42,079.46	Review Refund by County or EDA	
TOTAL SOFT COSTS				\$1,796,390.16		
TOTAL CONSTRUCTION AND SOFT COSTS				\$15,822,875.76		
INCENTIVES						
VH Grant for Innovation - Energy Demonstration Cottages	allow	1	400,000	400,000.00		
CDBG Grant - Sewer and Water	allow	1	1,000,000	1,000,000.00		
Recreational Access Program - Roads	allow	1	250,000	250,000.00		
TAP Program - Trails	allow	1	500,000	500,000.00		
TOTAL PROJECT COSTS FINANCED (not grant funded) DURING CONSTRUCTION				\$13,560,663.87		
OPERATING EXPENSES						
OWNER / LENDER CONTRIBUTION		\$2,500,000.00			Cash Contribution + Land costs	
BANK DEBT SERVICE per YEAR (30 YEARS, 2.5%)		\$11,060,663.87	0.0474	\$ 524,275.47		
SERVICES						
Building Management Fee	%	0.08	\$ 870,345.00	\$ 69,627.60		
Insurance (.1 / \$100)	yr	1	\$ 14,026.49	\$ 14,026.49		
Real Estate Taxes	yr	0.0125	1,600,000.00	\$ (LMU is a non-profit institution)		
Utilities	sf	0.83	160,000	\$ 132,800.00		
Other soft costs @4% Rents	yr	0.04	\$ 870,345.00	\$ 34,813.80		
				\$ 251,267.89		
INCOME						
POST CONSTRUCTION INCOME						
Retail / Restaurant Space	1	10400	\$16	\$ 166,400.00		
1 Faculty Apartment	1	1200	\$13	\$ 15,600.00		
3 Student Apartments - 1 BR	3	800	\$13	\$ 31,200.00		
7 Student Apartments - 2 BR	7	950	\$13	\$ 86,450.00		
Shamrock Cottages						
35 New 1 BR Units in place (800 sf)	35	800	\$13	\$ 364,000.00		
13 New 2 BR Units in Place (1000 sf)	13	1000	\$13	\$ 169,000.00		
4 New Faculty Units in Place	4	1200	\$13	\$ 62,400.00		
3 Existing residences for Faculty	3	2400	\$10	\$ 72,000.00		
Less vacancy	10%		\$ 967,050	\$ (96,705.00)		
GROSS RENTAL INCOME				\$ 870,345.00		
CASH FLOW						
POST CONSTRUCTION RENTAL COMPONENT pre-tax CASH FLOW				\$ 94,801.65		
Earnings before Taxes and Interest (EBITA)						
Combined Estimated Gross Income				\$ 870,345.00		
Combined Operating Expenses				\$ 251,267.89		
Net Income				\$ 619,077.11		
Debt Service				\$ 524,275.47		
Cash Flow				\$ 94,801.65		
Debt Coverage Ratio				1.18		

PHASE ESTIMATE 1

Phase 1						
ITEM DESCRIPTION	QTY	UNIT	UNIT PRICE	SUBTOTAL	LMU	PNP
CONTROL OF WORK						
Gen. conditions	1	lump sum	140,000.00	\$140,000	\$100,000	\$40,000
MOBILIZATION						
All Mobilization of equip. & crews	1	lump sum	90,000.00	\$90,000	\$60,000	\$30,000
SITE						
Allow for Field Restoration	1	allow	35,000.00	\$35,000	\$35,000	
Clear trees & brush	1	allow	10,000.00	\$10,000	\$10,000	
Allow for Fences Restoration	1	allow	15,000.00	\$15,000	\$15,000	
Misc Grading (Pads, sidewalks, foundation slopes, etc.)	1	allow	50,000.00	\$50,000	\$50,000	
Grading and prep - stable area	6	ac	15,000.00	\$90,000	\$90,000	
STORMWATER IMPROVEMENTS						
Rain Gardens and LID Methods	1	allow	15,000.00	\$15,000		\$15,000
Conventional Detention	1	allow	15,000.00	\$15,000		\$15,000
ROADWAYS						
New VDOT entry with decel lane	1	allow	450,000.00	\$450,000	\$450,000	
New 2-Lane Boulevard and Trail System in Place	4500	lin.ft.	587.17	\$2,642,243	\$2,642,243	
New 2-Lane road and Trail System in Place	1150	lin.ft.	373.39	\$429,399	\$429,399	
36" Culvert with Stone Headwalls	2	allow	50,000.00	\$100,000	\$100,000	
Gravel Roadways around Stables	1600	lin.ft.	55.00	\$88,000	\$88,000	
Parking Spaces	30	ea	1,500.00	\$45,000		
UTILITIES						
<i>(see also Roadway systems)</i>						
New Power into site	5000	lf	30.00	\$150,000	\$150,000	
Lighting - Stable Areas	1	allow	35,000.00	\$35,000	\$35,000	
Water and Septic System - Stable Areas	1	allow	15,000.00	\$15,000	\$15,000	
Sewer - Subsurface Detention/Pump and Haul Vaults	52	ea	3,000.00	\$156,000		\$156,000
Sewer - microsystem for first 2 Common buildings	1	allow	300,000.00	\$300,000	\$300,000	
Streetscape System - the Common	1500	sf	100.00	\$150,000		\$150,000
Lighting - the Common	0.2	allow	70,000.00	\$14,000		\$14,000
Utility Bollards	3	ea	3,500.00	\$10,500		\$10,500
BUILDINGS						
Shamrock Compound system	1	ea	1,136,244.00	\$1,136,244		\$1,136,244
35 New 1 BR Units in place (800 sf)	28000	sf	130.00	\$3,640,000		\$3,640,000
13 New 2 BR Units in Place (1000 sf)	13000	sf	130.00	\$1,690,000		\$1,690,000
4 New Faculty / Staff Residences (1200 sf)	4800	sf	140.00	\$672,000		\$672,000
1 New Faculty / Staff Residences (1200 sf) in Common	1200	sf	140.00	\$168,000		\$168,000
2 Story Walk-ups - First building fl whitebox first floor	20800	sf	190.00	\$3,952,000		\$3,952,000
SEEDING						
Seeding - Stable Areas	6	ac	1,500.00	\$9,000	\$9,000	
Pasture restoration	85	ac	1,000.00	\$85,000	\$85,000	
AMENITIES						
New 24 Stall Stable	9600	sf	100.00	\$960,000	\$960,000	
New Entrance Gateway feature	1	allow	75,000.00	\$75,000	\$75,000	
4-Board Fence along US 58	600	lf	24.00	\$14,400	\$14,400	
SUBTOTAL PHASE				\$17,446,779	\$5,713,035	\$11,688,738
Contingency @ 20%				\$3,489,356	\$1,142,607	\$2,337,748
Soft Costs @ 25%				\$4,361,695	\$1,428,259	
TOTAL PHASE BUDGET				\$25,297,830	\$8,283,901	\$14,026,486

PROFORMA

PHASE PROFORMA 2

PHASE 2 - PNP components					
ITEM/DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST	FUNDING STACK / NOTES
PROPERTY CHARACTERISTICS					
EXISTING PROPERTY					
Total Site	ac	300	5,333.33	1,600,000.00	predevelopment value
Phase 1 Site	ac	50	5,333.32	266,666.00	predevelopment value
BUILDING USES					
Second Common building - 2 Story Walkup	sf	26500	sf		rental
Retail / restaurant Space	sf	13250	sf		rental
4 Student Apartments - 1 BR	5	800	sf		rental
10 Student Apartments - 2 BR	15	950	sf		rental
Shamrock Cottages					
35 New 1 BR Units in place (800 sf)	sf	28800			rental
13 New 2 BR Units in Place (1000 sf)	sf	20000			rental
4 New Faculty Units in Place	sf	4800			rental
PROJECT COSTS					
TOTAL CONSTRUCTION BUDGET				15,299,445.60	
SELECTED SOFT COSTS					
Basic A&E Fees	%age	1	0.07	1,070,961.19	
Environmental assessment, appraisal, latent defect letter of credit	allow	1	1000	1,000.00	
Points on Financing	%age	1	0.05	764,972.28	
Permits	%age	1	76497	76,497.23	Review Refund by County or EDA
Comprehensive Site Plan Review	%age	1	45898	45,898.34	Review Refund by County or EDA
TOTAL SOFT COSTS				\$1,959,329.04	
TOTAL CONSTRUCTION AND SOFT COSTS				\$17,258,774.64	
INCENTIVES					
VH Grant for Innovation - Energy Demonstration Cottages	allow	1	400,000	400,000.00	
CDBG Grant - Sewer and Water	allow	1	1,000,000	1,000,000.00	
Recreational Access Program - Roads	allow	1	250,000	250,000.00	
TAP Program - Trails	allow	1	500,000	500,000.00	
TOTAL PROJECT COSTS FINANCED (not grant funded) DURING CONSTRUCTION				\$14,986,379.07	
OPERATING EXPENSES					
OWNER / LENDER CONTRIBUTION		\$3,500,000.00			Cash Contribution + Land costs
BANK DEBT SERVICE per YEAR (30 YEARS, 2.5%)		\$11,486,379.07	0.0474	\$	544,454.37
SERVICES					
Building Management Fee	%	0.08	\$	875,250.00	\$
Insurance (.1 / \$100)	yr	1	\$	15,299.45	\$
Real Estate Taxes	yr	0.0125	\$	0.00	\$
Utilities	sf	0.83	\$	133,100	\$
Other Soft costs @4% Rents	yr	0.04	\$	875,250.00	\$
				\$	230,802.45
INCOME					
POST CONSTRUCTION INCOME					
Retail / Restaurant Space	1	13250	\$16	\$	212,000.00
4 Student Apartments - 1 BR	4	800	\$13	\$	41,600.00
10 Student Apartments - 2 BR	10	950	\$13	\$	123,500.00
Shamrock Cottages					
35 New 1 BR Units in place (800 sf)	35	800	\$13	\$	364,000.00
13 New 2 BR Units in Place (1000 sf)	13	1000	\$13	\$	169,000.00
4 New Faculty Units in Place	4	1200	\$13	\$	62,400.00
Less vacancy	10%		\$	972,500	\$
GROSS RENTAL INCOME				\$	875,250.00
CASH FLOW					
POST CONSTRUCTION RENTAL COMPONENT pre-tax CASH FLOW				\$	99,993.19
Earnings before Taxes and Interest (EBITA)					
Combined Estimated Gross Income				\$	875,250.00
Combined Operating Expenses				\$	230,802.45
Net Income				\$	644,447.55
Debt Service				\$	544,454.37
Cash Flow				\$	99,993.19
Debt Coverage Ratio					1.18

PHASE ESTIMATE 2

Phase 2						
ITEM DESCRIPTION	QTY	UNIT	UNIT PRICE	SUBTOTAL	LMU	PNP
CONTROL OF WORK						
Gen. conditions	1	lump sum	100,000.00	\$100,000	\$20,000	\$80,000
MOBILIZATION						
All Mobilization of equip. & crews	1	lump sum	70,000.00	\$70,000	\$10,000	\$50,000
SITE						
Clear trees & brush	1	allow	5,000.00	\$5,000		\$5,000
Misc Grading (Pads, sidewalks, foundation slopes, etc.)	1	allow	25,000.00	\$25,000		\$25,000
STORMWATER IMPROVEMENTS						
Rain Gardens and LID Measures	1	allow	15,000.00	\$15,000		\$15,000
Conventional Detention	1	allow	15,000.00	\$15,000		\$15,000
ROADWAYS						
New 2-Lane road and Trail System in Place	1150	lin.ft.	373.39	\$429,399	\$429,399	
Parking Spaces	30	ea	1,500.00	\$45,000		\$45,000
UTILITIES						
<i>(see also Roadway systems)</i>						
Sewer - Subsurface Detention/Pump and Haul Vaults	52	ea	3,000.00	\$156,000		\$156,000
Streetscape System - the Common	1500	sf	100.00	\$150,000		\$150,000
Lighting - the Common	0.2	allow	70,000.00	\$14,000		\$14,000
Utility Bollards	3	ea	3,500.00	\$10,500		\$10,500
BUILDINGS						
Shamrock Compound system	1	ea	1,136,244.00	\$1,136,244		\$1,136,244
35 New 1 BR Units in place (800 sf)	28000	sf	130.00	\$3,640,000		\$3,640,000
13 New 2 BR Units in Place (1000 sf)	13000	sf	130.00	\$1,690,000		\$1,690,000
4 New Faculty / Staff Residences (1200 sf)	4800	sf	140.00	\$672,000		\$672,000
2 Story Walk-ups - Second building fl whitebox first floor	26500	sf	190.00	\$5,035,000		\$5,035,000
SEEDING						
Meadow Plantings	6	ac	1,800.00	\$10,800		\$10,800
AMENITIES						
2 Rings at Stable	1	allow	50,000.00	\$50,000	\$50,000	
SUBTOTAL PHASE				\$13,268,937	\$509,393	\$12,749,538
Contingency @ 20%	0.2		\$13,268,937	\$2,653,787	\$101,879	\$2,549,908
Soft Costs @ 25%	0.25		\$13,268,937	\$3,317,234	\$127,348	
TOTAL PHASE BUDGET				\$19,239,958	\$738,619	\$15,299,446

PROFORMA

PHASE PROFORMA 3

PHASE 3 - PNP Component						
ITEM/DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST	FUNDING STACK	NOTES
PROPERTY CHARACTERISTICS						
EXISTING PROPERTY						
Total Site	ac	300	5,333.33	1,600,000.00		predevelopment value
Phase 1 Site	ac	50	5,333.32	266,666.00		predevelopment value
BUILDING USES						
Remaining Commons Buildings - 2 Story Walkup	sf	95600				rental
Retail / restaurant Space	sf	47800				rental
10 Student Apartments - 1 BR	10	800				rental
30 Student Apartments - 2 BR	30	950				rental
3 New Faculty Units in Place	3	1000				rental
PROJECT COSTS						
TOTAL CONSTRUCTION BUDGET				24,414,292.80		
SELECTED SOFT COSTS						
Basic A&E Fees	%age	1	0.07	1,709,000.50		
Environmental assessment, appraisal, latent defect letter of credit	allow	1	1000	1,000.00		
Points on Financing	%age	1	0.05	1,220,714.64		
Permits	%age	1	122071	122,071.46		Review Refund by County or EDA
Comprehensive Site Plan Review	%age	1	73243	73,242.88		Review Refund by County or EDA
TOTAL SOFT COSTS				\$3,126,029.48		
TOTAL CONSTRUCTION AND SOFT COSTS				\$27,540,322.28		
INCENTIVES						
VH Grant for Innovation - Energy Efficient apartmtns	allow	1	400,000	400,000.00		
CDBG Grant - Sewer and Water	allow	1	1,000,000	1,000,000.00		
Recreational Access Program - Roads	allow	1	250,000	250,000.00		
TAP Program - Trails	allow	1	500,000	500,000.00		
TOTAL PROJECT COSTS FINANCED (not grant funded) DURING CONSTRUCTION				\$25,195,007.94		
OPERATING EXPENSES						
OWNER / LENDER CONTRIBUTION			\$8,500,000.00			Cash Contribution + Land costs
BANK DEBT SERVICE per YEAR (30 YEARS, 2.5%)			\$16,695,007.94	0.0474	\$	791,343.38
SERVICES						
Building Management Fee	%	0.08	\$ 1,157,490.00	\$		92,599.20
Insurance (.1 / \$100)	yr	1	\$ 24,414.29	\$		24,414.29
Real Estate Taxes	yr	0.0125	\$ 0.00	\$		(LMU is a non-profit institution)
Utilities	sf	0.83	\$ 95,600	\$		79,348.00
Other Soft costs @4% Rents	yr	0.04	\$ 1,157,490.00	\$		46,299.60
			\$			242,661.09
INCOME						
POST CONSTRUCTION INCOME						
Retail / Restaurant Space	1	47800	\$16	\$		764,800.00
10 Student Apartments - 1 BR	10	800	\$13	\$		104,000.00
30 Student Apartments - 2 BR	30	950	\$13	\$		370,500.00
3 New Faculty Units	3	1200	\$13	\$		46,800.00
Less vacancy	10%		\$	1,286,100	\$	(128,610.00)
GROSS RENTAL INCOME				\$		1,157,490.00
CASH FLOW						
POST CONSTRUCTION RENTAL COMPONENT pre-tax CASH FLOW				\$		123,485.53
Earnings before Taxes and Interest (EBITA)						
Combined Estimated Gross Income				\$		1,157,490.00
Combined Operating Expenses				\$		242,661.09
Net Income				\$		914,828.91
Debt Service				\$		791,343.38
Cash Flow				\$		123,485.53
Debt Coverage Ratio						1.16

PHASE ESTIMATE 3

Phase 3	QTY	UNIT	UNIT PRICE	SUBTOTAL	LMU	PNP
CONTROL OF WORK						
Gen. conditions	1	lump sum	400,000.00	\$400,000	\$40,000	\$360,000
MOBILIZATION						
All Mobilization of equip. & crews	1	lump sum	300,000.00	\$300,000	\$30,000	\$270,000
SITE						
New Dam Restoration - adding 10' height and storm prevention	1	allow	100,000.00	\$100,000	\$100,000	
Clear trees & brush	1	allow	10,000.00	\$10,000		\$10,000
Misc Grading (Pads, sidewalks, foundation slopes, etc.)	1	allow	50,000.00	\$50,000		\$50,000
the Common - common space	2	ac	50,000.00	\$100,000	\$100,000	
STORMWATER IMPROVEMENTS						
Wetlands creation below Dam	2	ac	15,000.00	\$30,000	\$30,000	
Rain Gardens and LID measures	1	allow	15,000.00	\$15,000		\$15,000
ROADWAYS						
New 2-Lane Boulevard and Trail System in Place	1400	lin.ft.	587.17	\$822,031	\$822,031	
New 2-Lane road and Trail System in Place	2300	lin.ft.	373.39	\$858,797	\$858,797	
Parking Spaces	120	ea	1,500.00	\$180,000		\$180,000
UTILITIES						
<i>(see also Roadway systems)</i>						
Streetscape System - the Common	5000	sf	100.00	\$500,000		\$500,000
Lighting - the Common	0.6	allow	70,000.00	\$42,000		\$42,000
Broadband - to the Common	1	allow	150,000.00	\$150,000	\$150,000	
Microcell Towers	2	ea	35,000.00	\$70,000	\$70,000	
Utility Bollards	10	ea	3,500.00	\$35,000		\$35,000
Allow for large Pump station	1	allow	500,000.00	\$500,000	\$500,000	
PUBLIC WATER						
Multi-Family Lateral	6	ea	\$750.00	\$4,500		\$4,500
Business Lateral	12	ea	\$750.00	\$9,000		\$9,000
PUBLIC SEWER						
Multi-Family Connection	6	ea	\$1,125.00	\$6,750		\$6,750
Business Connection	12	ea	\$1,500.00	\$18,000		\$18,000
BUILDINGS						
2 Story Walk-ups - All remaining Common whitebox first floor	95600	sf	190.00	\$18,164,000		\$18,164,000
Bandshell	1	allow	150,000.00	\$150,000	\$150,000	
3 New Faculty / Staff Residences (1200 sf)	4800	sf	140.00	\$672,000		\$672,000
SEEDING						
Seeding - connections and lawns	6	ac	1,500.00	\$9,000		\$9,000
AMENITIES						
Allow for Planting	1	allow	200,000.00	\$200,000	\$200,000	
Outdoor Plazas and Dog parks, gardens, etc	1	allow	900,000.00	\$900,000	\$900,000	
Trails connecting across parkway	600	lf	55.00	\$33,000	\$33,000	
SUBTOTAL PHASE				\$24,329,072	\$3,983,822	\$20,345,244
Contingency @ 20%				\$4,865,814	\$796,764	\$4,069,049
Soft Costs @ 25%				\$6,082,268	\$995,956	
TOTAL PHASE BUDGET				\$35,277,154	\$5,776,542	\$24,414,293

Assumptions: Public Sewer and Water available at the beginning of Phase 3.

PROFORMA

PHASE PROFORMA 4

PHASE 4 - PNP component					
ITEM/DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST	FUNDING STACK / NOTES
PROPERTY CHARACTERISTICS					
EXISTING PROPERTY					
Total Site	ac	300	5,333.33	1,600,000.00	predevelopment value
Phase I Site	ac	100	5,333.33	533,333.00	predevelopment value
BUILDING USES					
Cloverleaf					
30 Student Apartments - 1 BR	30	800	sf		rental
11 Student Apartments - 2 BR	11	1000	sf		rental
3 New Treehouse Units	3	1200	sf		rental
PROJECT COSTS					
TOTAL CONSTRUCTION BUDGET				7,721,325.60	
SELECTED SOFT COSTS					
Basic A&E Fees	%age	1	0.07	540,492.79	
Environmental assessment, appraisal, latent defect letter of cred	allow	1	1000	1,000.00	
Points on Financing	%age	1	0.05	386,066.28	
Permits	%age	1	38607	38,606.63	Review Refund by County or EDA
Comprehensive Site Plan Review	%age	1	23164	23,163.98	Review Refund by County or EDA
TOTAL SOFT COSTS				\$989,329.68	
TOTAL CONSTRUCTION AND SOFT COSTS				\$8,710,655.28	
INCENTIVES					
VH Grant for Innovation - Energy Efficient Treehouses	allow	1	400,000	400,000.00	
CDBG Grant - Sewer and Water	allow	1	1,000,000	1,000,000.00	
Recreational Access Program - Roads	allow	1	250,000	250,000.00	
TAP Program - Trails	allow	1	500,000	500,000.00	
TOTAL PROJECT COSTS FINANCED (not grant funded) DURING CONSTRUCTION				\$6,498,884.67	
OPERATING EXPENSES					
OWNER / LENDER CONTRIBUTION			\$0.00		Cash Contribution + Land costs
BANK DEBT SERVICE per YEAR (30 YEARS, 2.5%)			\$6,498,884.67	0.0474	\$ 308,047.13
SERVICES					
Building Management Fee	%	0.08	\$ 458,100.00	\$	36,648.00
Insurance (.1 / \$100)	yr	1	\$ 7,721.33	\$	7,721.33
Real Estate Taxes	yr	0.0125	0.00	\$	- (LMU is a non-profit institution)
Utilities	sf	0.83	0	\$	-
Other Soft costs @4% Rents	yr	0.04	\$ 458,100.00	\$	18,324.00
				\$	62,693.33
INCOME					
POST CONSTRUCTION INCOME					
30 Student Apartments - 1 BR	30	800	\$13	\$	312,000.00
11 Student Apartments - 2 BR	11	1000	\$13	\$	143,000.00
3 New Treehouse Units	3	1200	\$15	\$	54,000.00
Less vacancy	10%		\$	509,000	(50,900.00)
GROSS RENTAL INCOME				\$	458,100.00
CASH FLOW					
POST CONSTRUCTION RENTAL COMPONENT pre-tax CASH FLOW				\$	87,359.54
Earnings before Taxes and Interest (EBITA)					
Combined Estimated Gross Income				\$	458,100.00
Combined Operating Expenses				\$	62,693.33
Net Income				\$	395,406.67
Debt Service				\$	308,047.13
Cash Flow				\$	87,359.54
Debt Coverage Ratio					1.28

PHASE ESTIMATE 4

Phase 4						
ITEM DESCRIPTION	QTY	UNIT	UNIT PRICE	SUBTOTAL	LMU	PNP
CONTROL OF WORK						
Gen. conditions	1	lump sum	120,000.00	\$120,000	\$40,000	\$80,000
MOBILIZATION						
All Mobilization of equip. & crews	1	lump sum	80,000.00	\$80,000	\$20,000	\$60,000
SITE						
Clear trees & brush	1	allow	10,000.00	\$10,000	\$10,000	
Misc Grading (Pads, sidewalks, foundation slopes, etc.)	1	allow	25,000.00	\$25,000		\$25,000
ROADWAYS						
New 2-Lane road and Trail System in Place	1000	lin.ft.	373.39	\$373,390	\$373,390	
UTILITIES						
<i>(see also Roadway systems)</i>						
10 unit Microwind System	10	ea	7,000.00	\$70,000	\$70,000	
Line to Villlage	5000	lf	30.00	\$150,000	\$150,000	
BUILDINGS						
Cloverleaf Compound system	1	ea	1,136,244.00	\$1,136,244		\$1,136,244
30 New 1 BR Units in place (800 sf)	24000	sf	130.00	\$3,120,000		\$3,120,000
11 New 2 BR Units in Place (1000 sf)	11000	sf	130.00	\$1,430,000		\$1,430,000
3 Treehouse Residences (1200 sf)	3600	sf	160.00	\$576,000		\$576,000
SEEDING						
Meadow Plantings	4	ac	1,800.00	\$7,200		\$7,200
AMENITIES						
Back Country Trails System	11700	lf	20.00	\$234,000	\$234,000	
Nature Center	1	allow	700,000.00	\$700,000	\$700,000	
Parking	20	spaces	1,600.00	\$32,000	\$32,000	
Picnic Shelters	2	allow	60,000.00	\$120,000	\$120,000	
SUBTOTAL PHASE				\$8,183,828	\$1,749,384	\$6,434,438
Contingency @ 20%				\$8,183,828	\$1,636,766	\$349,877
Soft Costs @ 25%				\$8,183,828	\$2,045,957	\$437,346
TOTAL PHASE BUDGET				\$11,866,551	\$2,536,607	\$7,721,326

SYSTEMS COSTS

BOULEVARD SYSTEM - PER LF - 120' ROW

ITEM DESCRIPTION	QTY	UNIT	UNIT PRICE	SUBTOTAL
CONTROL OF WORK				
Field engineering & staking	0.00275	acre	\$6,000.00	\$17
EARTHWORK				
Clearing and Grubbing	0.00275	acre	\$8,500.00	\$23
Erosion and Sediment control	0.00275	acre	\$1,500.00	\$4
Overland Grading - 5' cut, 6' fill	5.5	cy	\$12.00	\$66
Culverts in place avg. 18" @ 200 lf	0.25	lf	\$48.00	\$12
6" Backfill, 300' haul, common earth from stockpile	2.2	cu.yd.	\$15.00	\$33
Compaction, 12" lifts, 2 passes	2	cu.yd.	\$2.00	\$4
PUBLIC WATER				
8" Main	1	lf	\$48.00	\$48
8" Valve @ 500'	1	ea	\$3.90	\$4
Fire Hydrant Assembly @500'	1	ea	\$8.60	\$9
PUBLIC SEWER				
8" Main (6' - 9' depth)	1	lf	\$80.00	\$80
4' Diameter Manhole @500'	1	ea	\$5.00	\$5
PAVING & SURFACING				
14' wide bitum. conc. road (2"+3"+6") for 1-way traffic	2	lin.ft.	\$55.00	\$110
Bituminous trail, . 5,' wide	1	lin.ft.	\$50.00	\$50
SOLAR SITE LIGHTING				
Pole in Place @150' oc alternating	0.0066	allow	\$3,500.00	\$23
SEEDING				
Fin. grading & topsoiling (2" from stockpile")	0.74	cu. yd.	\$6.00	\$4
Perm. seed'g, fertiliz'g & mulch'g rights-of-way	0.085	1000 sq.ft.	\$75.00	\$6
2x Temp. hydroseeding of bldg. lots & other disturbed areas	0.085	1000 sq.ft.	\$30.00	\$3
Topsoiling Median (6" stockpile)	0.55	cu. yd.	\$36.00	\$20
AMENITIES				
Tree and Shrub Planting	1	allow	\$30.00	\$30
4 Board Fence both sides	2	lf	\$18.00	\$36
Street and Traffic signs in Place	0.005	ea.	\$1,200.00	\$6
SUBTOTAL SYSTEM PER LF				\$587

2-LANE SYSTEM - PER LF - 50' ROW

ITEM DESCRIPTION	QTY	UNIT	UNIT PRICE	SUBTOTAL
CONTROL OF WORK				
Field engineering & staking	0.00115	acre	\$6,000.00	\$7
EARTHWORK				
Clearing and Grubbing	0.00115	acre	\$8,500.00	\$10
Erosion and Sediment control	0.00115	acre	\$1,500.00	\$2
Overland Grading - 4' cut, 5' fill	2.3	cy	\$12.00	\$28
Culverts in place avg. 18" @ 200 lf	0.12	lf	\$48.00	\$6
6" Backfill, 300' haul, common earth from stockpile	0.55	cu.yd.	\$15.00	\$8
Compaction, 12" lifts, 2 passes	1	cu.yd.	\$2.00	\$1
PUBLIC WATER				
8" Main	1	lf	\$48.00	\$48
8" Valve @ 500'	1	ea	\$3.90	\$4
Fire Hydrant Assembly @500'	1	ea	\$8.60	\$9
PUBLIC SEWER				
8" Main (6' - 9' depth)	1	lf	\$80.00	\$80
4' Diameter Manhole @500'	1	ea	\$5.00	\$5
PAVING & SURFACING				
22' wide bitum. conc. road (2"+3"+6") for 2-way traffic	1	lin.ft.	\$90.00	\$90
Bituminous trail, . 5,' wide	1	lin.ft.	\$50.00	\$50
SOLAR SITE LIGHTING				
Pole in Place @150' oc alternating	0.0066	allow	\$350.00	\$2
SEEDING				
Fin. grading & topsoiling (2" from stockpile")	0.22	cu. yd.	\$6.00	\$1
Perm. seed'g, fertiliz'g & mulch'g rights-of-way	0.03	1000 sq.ft.	\$75.00	\$2
2x Temp. hydroseeding of bldg. lots & other disturbed areas	0.03	1000 sq.ft.	\$30.00	\$1
AMENITIES				
Tree and Shrub Planting	1	allow	\$20.00	\$20
Street and Traffic signs in Place	0.005	ea.	\$1,200.00	\$6
SUBTOTAL SYSTEM PER LF				\$373

PROFORMA

CLOVERLEAF HOUSING SYSTEM - PER CLOVERLEAF - SITEWORK

ITEM DESCRIPTION	QTY	UNIT	UNIT PRICE	SUBTOTAL
CONTROL OF WORK				
Field engineering & staking	8	acre	\$6,000.00	\$48,000
EARTHWORK				
Clearing and Grubbing	8	acre	\$8,500.00	\$68,000
Erosion and Sediment control	8	acre	\$1,500.00	\$12,000
Overland Grading - 10' cut, 8' fill' fill	16000	cy	\$8.00	\$128,000
Culverts in place in parking areas	96	lf	\$48.00	\$4,608
6" Backfill, 300' haul, common earth from stockpile	5650	cu.yd.	\$15.00	\$84,750
Compaction, 12" lifts, 2 passes	5,650	cu.yd.	\$2.00	\$11,300
PUBLIC WATER				
8" Main	600	lf	\$48.00	\$28,800
8" Valve	3	ea	\$1,950.00	\$5,850
Fire Hydrant Assembly @500'	3	ea	\$4,324.00	\$12,972
8" Tap	1	ea	\$4,300.00	\$4,300
Single Family Lateral	52	ea	\$450.00	\$23,400
PUBLIC SEWER				
8" Main (3'- 6' depth)	400	lf	\$70.00	\$28,000
4' Diameter Manhole	6	ea	\$2,850.00	\$17,100
8" Tap	1	ea	\$3,750.00	\$3,750
Single Family Lateral	48	ea	\$450.00	\$21,600
PAVING & SURFACING				
22' wide bitum. conc. road (2"+3"+6") for 2-way traffic	500	lin.ft.	\$90.00	\$45,000
60' wide parking - bitum. conc. road (2"+3"+6") for 2-way traffic	78	ea	\$1,600.00	\$124,800
Concrete sidewalks 5' wide	3200	lin.ft.	\$50.00	\$160,000
SOLAR SITE LIGHTING				
Pole in Place	32	allow	\$3,500.00	\$112,000
SEEDING				
Fin. grading & topsoiling (2" from stockpile")	2580	cu. yd.	\$6.00	\$15,480
Perm. seed'g, fertiliz'g & mulch'g rights-of-way	348	1000 sq.ft.	\$75.00	\$26,100
2x Temp. hydroseeding of bldg. lots & other disturbed areas	348	1000 sq.ft.	\$30.00	\$10,440
AMENITIES				
Tree and Shrub Planting	1	allow	\$35,000.00	\$35,000
Garden Areas	1	allow	\$30,000.00	\$30,000
Signage in Place	1	allow	\$15,000.00	\$15,000
Central green Feature (playground, etc)	1	allow	\$25,000.00	\$25,000
Central green Barn	1	allow	\$35,000.00	\$35,000
SUBTOTAL SYSTEM PER CLOVERLEAF				\$1,136,244

FREQUENTLY USED SITEWORK

FREQUENTLY USED SITEWORK	QTY	UNIT	UNIT PRICE	SUBTOTAL
CONTROL OF WORK				
Site conditions	1	job	\$80,000.00	\$80,000
Field engineering & staking	1	acre	\$6,000.00	\$6,000
MOBILIZATION				
All Mobilization of equip. & crews	1	lump sum	\$50,000.00	\$50,000
SITE PREPARATION				
Erosion and Sediment control	1	allow	\$50,000.00	\$50,000
Clear trees & brush	7.15	acre	\$3,000.00	\$21,450
Stockpiling	17.15	acre	\$3,000.00	\$51,450
Stockpile topsoil, assume 1" deep over 11.5 acres	9000	cu.yd.	\$3.00	\$27,000
Permit hauling & disposal, haul to landfill	5700	cu.yd.	\$15.00	\$85,500
Dump charges	485	ton	\$90.00	\$44,050
Other (list)				
EARTHWORK				
Bulk excavation, 300' haul, common earth	44,900	cu.yd.	\$3.00	\$134,700
Bulk excise & stockpile excess soil on site, 12 cu.yd. truck	2600	cu.yd.	\$3.00	\$7,800
Backfill, 300' haul, common earth from stockpile	100	cu.yd.	\$22.50	\$2,250
Compaction, 12" lifts, 2 passes	41,400	cu.yd.	\$3.00	\$124,200
Maintain Stockpile beyond close out	12	month	\$600.00	\$7,200
Other (list)				
Misc Grading (Pads, sidewalks, foundation slopes, etc.)	1			No Bid
PUBLIC WATER				
8" Main	2340	lf	\$48.00	\$112,320
10" Main	775	lf	\$110.00	\$85,250
8" Valve	13	ea	\$1,950.00	\$25,350
Fire Hydrant Assembly	3	ea	\$4,324.00	\$12,972
8" Tap	1	ea	\$4,300.00	\$4,300
12" Tap	2	ea	\$11,175.00	\$22,350
Road Crossing	0	ea		
Multi-Family Lateral	21	ea	\$700.00	\$14,700
Single Family Lateral	31	ea	\$450.00	\$13,950
Other (list)				
PUBLIC SEWER				
8" Main (3' depth)	1070	lf	\$70.00	\$74,900
8" Main (6' depth)	1020	lf	\$65.00	\$66,300
4' Diameter Manhole	11	ea	\$2,850.00	\$31,350
8" Tap	1	ea	\$3,750.00	\$3,750
Multi-Family Connection	2	ea	\$1,125.00	\$2,250
Single Family Connection	39	ea	\$700.00	\$27,300
12" Road Crossing	1	ea	\$23,250.00	\$23,250
Road Crossing	1	ea	\$3,000.00	\$3,000
Other (list)				
STORMWATER IMPROVEMENTS				
18-inch Sewer (3' depth)	760	lf	\$42.00	\$31,920
24-inch Sewer (3' depth)	410	lf	\$60.00	\$24,600
36-inch Sewer (3' depth)	440	lf	\$100.00	\$44,000
Curb inlets with manhole	20	ea	\$4,500.00	\$90,000
Yard Inlets	9	ea	\$1,200.00	\$10,800
Rain Gardens	6	ea	\$1,125.00	\$6,750
Subsurface Detention/Retention Valves	23000	lf	\$15.00	\$345,000
Conventional Detention	1	allow	\$12,000.00	\$12,000
Other (list)				
PAVING & SURFACING				
Freestanding conc. curb (C10), steel formed, straight	2200	lin.ft.	\$24.00	\$52,800
Freestanding conc. curb (C10), steel formed, curved	270	lin.ft.	\$24.00	\$6,480
Conc. curb & gutter (C10), steel formed, straight	2200	lin.ft.	\$26.00	\$57,200
Conc. curb & gutter (C10), steel formed, curved	260	lin.ft.	\$26.00	\$6,760
Conc. driveway entrances, 7' deep w/3' gutter	165	lin.ft.	\$100.00	\$16,500
Conc. driveway entrances, 7' deep w/3' gutter	200	lin.ft.	\$100.00	\$20,000
12' wide bitum. conc. road (2"+3"+6") for 2-way traffic	500	lin.ft.	\$90.00	\$45,000
12' wide bitum. conc. road (2"+3"+6") for 1-way traffic	1365	lin.ft.	\$80.00	\$109,200
14' wide bitum. conc. road (2"+3"+6") for 1-way traffic	100	lin.ft.	\$50.00	\$5,000
12' wide bitum. conc. alley (2"+4") for 2-way traffic	450	lin.ft.	\$33.00	\$14,850
Conc. sidewalk, 4' wide	2270	lin.ft.	\$33.00	\$74,910
Historical Markers, Exposed Aggregate	22	ea	\$117.00	\$2,574
Other (list)				
Curb Backfill (No Topsoil)	3040	lin.ft.		No Bid
NON-AEP SITE LIGHTING				
Signage for entrance	1	allow	\$22,500.00	\$22,500
SEEDING				
Fin. grading & topsoiling (2" from stockpile) of Commons	800	cu. yd.	\$6.00	\$4,800
Perm. seed'g & topsoiling (2" of Commons & ROW)	800	cu. yd.	\$36.00	\$28,800
Perm. seed'g, fertiliz'g & mulch'g of Commons & rights-of-way	100	1000 sq.ft.	\$100.00	\$10,000
2x Temp. hydroseeding of bldg. lots & other disturbed areas	784	1000 sq.ft.	\$33.00	\$26,052
Topsoiling Medium (12" topsoil)	95	cu. yd.	\$30.00	\$2,850
AMENITIES				
Tree and Shrub Planting	1	allow	\$75,000.00	\$75,000
Concrete Foundations for stone walls, pillars, arches in place	70	cy	\$400.00	\$28,000
Stone Entrance Walls - Double sided random, Catalpa	2800	sf	\$36.00	\$100,800
Stone Entrance Pillars - 2" x 4" sided random, Catalpa	400	sf	\$35.00	\$14,000
Entrance Sculpture Fountain in Place	1	allow	\$90,000.00	\$90,000
Entrance Signage	1	allow	\$45,000.00	\$45,000
Street and Traffic signs in Place	25	ea	\$1,200.00	\$30,000
Other (list)				
SUBTOTAL SITEWORK				
				\$2,028,800
Contingency @ 10%				\$202,880
SITEWORK BUDGET				\$2,231,680
ALTERNATES				
Permit hauling & disposal, Contractor's Disposal Method (describe method)	5700	cu.yd.	\$15.00	\$85,500
Remove and dispose of Pad and Utilities for Montessori School	800	cy	\$11.00	\$8,800
Remove and dispose of Entire Montessori School	4800	cy	\$11.00	\$52,800
Stripping & removal of rock, bulk	100	cu. yd.	\$100.00	\$10,000
Stripping & removal of rock, in place benches	100	cu. yd.	\$300.00	\$30,000
Removal of Rock (Bulk or benches)	100	cu. yd.		No Bid
8" Any Granite curb in lieu of Freestanding conc. curb, straight	2200	lin.ft.	\$27.00	\$59,400
8" Any Granite curb in lieu of Freestanding conc. curb, curved	270	lin.ft.	\$37.50	\$10,125
8" Any Granite curb / Paving in lieu of Conc. curb & gutter straight	2200	lin.ft.	\$35.00	\$77,000
8" Any Granite curb / Paving in lieu of Conc. curb & gutter curved	260	lin.ft.	\$45.00	\$11,700
For each linear foot of utility under a public road (backfill 21A) add	1	lf	\$21.00	\$21.00
For each month project is delayed by others, general conditions	1	mo	\$11,250.00	\$11,250
Other (contractor recommendation list)				
Other (contractor recommendation list)				
Company Refer 20020204 (3)Code (3)Date (3)Date's Bid Comparison				

\$8,781,055