

# AVENEL FARM

*Equestrian Facility*



**QUARRY VIEW**<sup>®</sup>  
BUILDING GROUP



**WSSC**WATER  
DELIVERING THE ESSENTIAL

**Date:** September 6, 2024

**WSSC Water Procurement Team**

10000 Oaklyn Dr  
Potomac, MD 20854

**Subject:** Response to RFI 48334 for Rehabilitation and Rebuilding Services for Equestrian Facilities and Amendment 48334,1

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Dear WSSC Water Procurement Team,

Thank you for the opportunity to respond to your Request for Information (RFI) 48334 and Amendment 48334,1 regarding the rehabilitation/rebuilding of equestrian facilities at your property within the Avenel Community in Potomac, Maryland. Quarry View Building Group is highly interested in this project, and we believe our extensive experience and expertise in constructing and rehabilitating equestrian facilities align well with your objectives.

**Company Overview**

2603 Lincoln Highway E  
Ronks, PA 17572  
<https://quarryviewbuildinggroup.com/>  
717-656-3018

Founded in 2008, Quarry View Building Group is a leading general contractor specializing in equestrian construction, restoration and adaptive reuse, commercial projects, and mass/heavy timber construction. With over 16 years of experience, we have built a strong reputation for delivering high-quality craftsmanship, innovative design solutions, and dependable construction management services.

Our company was established by Ben King, Levi King, Chris King, and Ben Stoltzfus, who initially focused on equestrian and agricultural construction. Growing up in the Amish community, they spent much of their youth around horses and in barns, gaining invaluable firsthand experience with equestrian life. This background gave them a deep understanding of the unique challenges equestrian facilities face and the functional requirements necessary to support daily operations.



**Ben King**



**Levi King**



**Chris King**



**Ben Stoltzfus**



Additionally, Jane Delbianco, our Equestrian Construction Lead, brings over 20 years of experience in the equine industry. She owns and operates a small farm in Bucks County, PA, and is actively involved in the equestrian community, frequently attending major horse shows in the region. Jane has designed numerous therapeutic riding facilities and private equestrian facilities, contributing valuable expertise to our team.

While Quarry View Building Group has expanded into various markets—including restoration and adaptive reuse, commercial construction, and mass/heavy timber projects—equestrian construction remains a core part of our business. We are proud to be a family-owned company, with all founders actively involved in day-to-day operations. Additional relevant experience can be found at the end of this proposal.

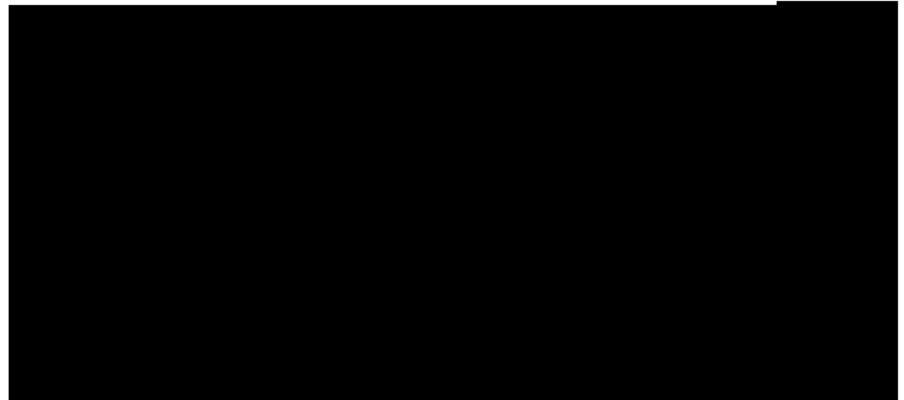
Our team is composed of 14 dedicated internal professionals who bring a diverse range of skills and expertise to each project. While many of our team members specialize in project management, preconstruction planning, and accounting, we also maintain a highly skilled self-perform team capable of executing specialized tasks. In addition to our internal self-perform crew, we consistently partner with a network of thousands of subcontractors across the Mid-Atlantic region. This blend of management expertise and hands-on experience allows us to deliver comprehensive construction services tailored to the specific needs of each client. We pride ourselves on our collaborative approach, ensuring that every project benefits from the combined knowledge and skills of our entire team.



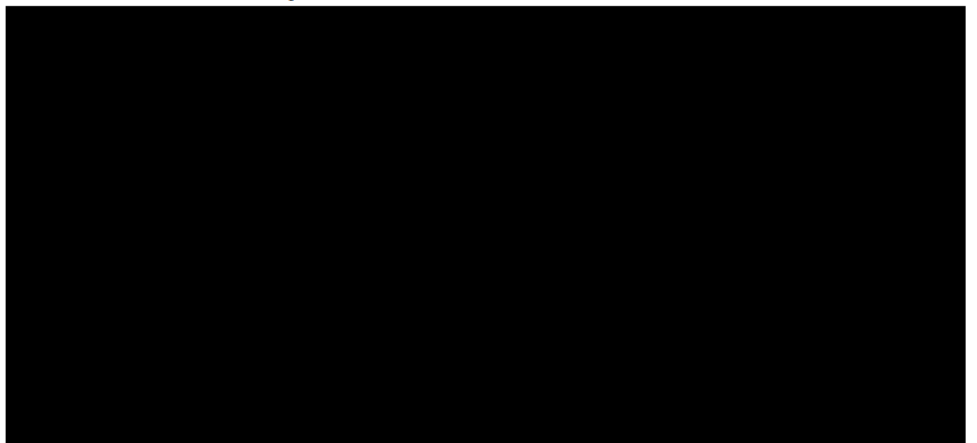
## Key Team Members for Your Project



**Levi King - Chief Operations Officer**



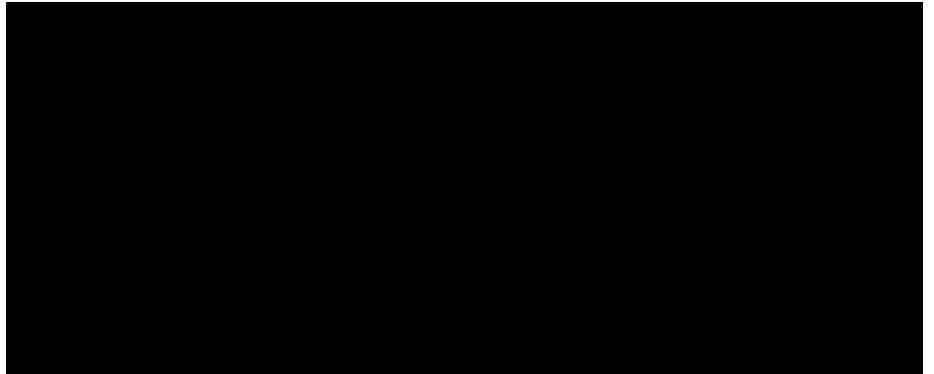
**Jane DelBianco - Equestrian Construction Lead**



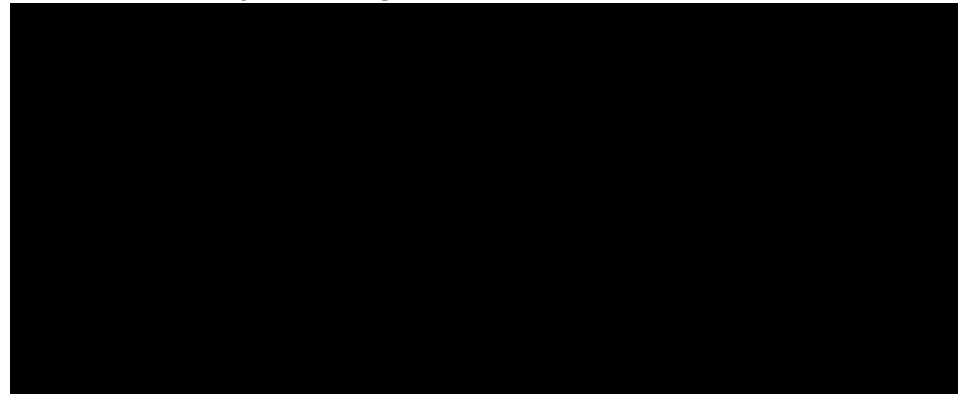




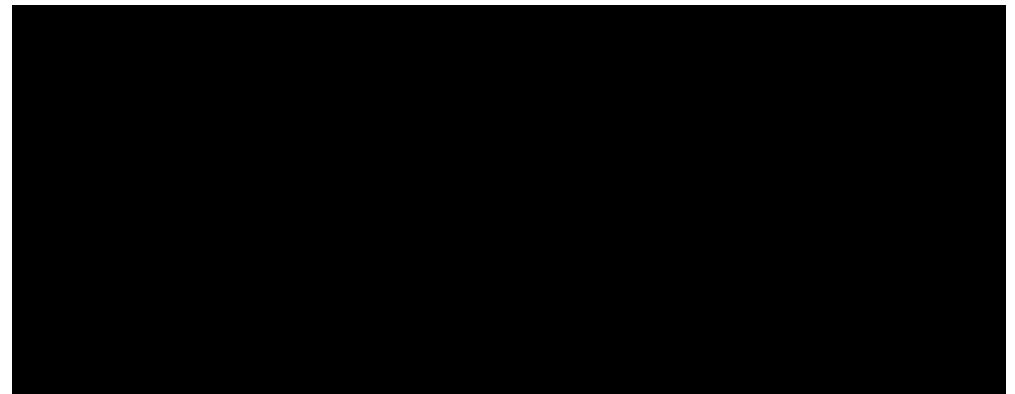
**Christine Hines - Lead Estimator**



**Ron Peters - Project Manager**



**Ben Stoltzfus - Superintendent**



## **Project Approach and Methodology**

We utilize a comprehensive and collaborative approach to determine whether to rehabilitate an existing equestrian facility or construct a new one. Our focus is on understanding the unique needs and goals of your organization to ensure the best possible outcome. Our process includes several key steps:

### **Listening Sessions: Understanding Your Priorities**

Our first step involves conducting listening sessions with key stakeholders to understand your organization's priorities and vision for the facility. These sessions help us gather critical information, such as:

- What is the intended long-term use of the facility? (e.g., boarding, therapeutic riding, competitive hunter/jumper, dressage, cross country, trail riding etc.)
- Are there specific operational needs or constraints that must be addressed? (e.g., hay and feed management, waste management, parking, tack storage/management, spectator viewing areas)
- What is the desired maintenance program?
- What is the desired timeline for the project?
- How important is preserving the history of the barn?
- What budgetary considerations must be taken into account?

By engaging with your team, we can tailor our approach to align with your strategic objectives, ensuring that the decision to rehabilitate or build new is based on a thorough understanding of your needs.

### **Site Visit: Assessing Current Conditions**

To enhance our understanding, we will conduct a thorough site visit to evaluate the existing facility and surrounding environment. This allows us to assess current conditions, ensuring our approach is well-informed and aligned with your program's needs and long-term goals.

### **Education and Assessment**

After understanding your priorities, we move into the education and assessment phase. During this step, we provide your team with information on the potential benefits and challenges of both rehabilitation and new construction, as well as a hybrid approach if applicable. We will also provide budgetary cost proposals for both options.

### **\$ - New Construction: Benefits and Challenges**

- Ability to create a functional space tailored to your program's needs
- Opportunity to design with abundant natural light and ventilation

- Ability to install a new, efficient drainage system
- Use of better quality materials
- Less expensive than rehabilitation
- Shorter construction timeline
- Potential loss of the historical aspects of the barn

### **\$\$ - Hybrid Approach: Benefits and Challenges**

We believe a hybrid approach could be the most effective solution for your needs, where we dismantle the existing barn and rebuild it using as many of the original materials as possible. This approach offers several advantages:

- Ability to create a functional space tailored to your program's specific requirements
- Opportunity to design with ample natural light and proper ventilation
- Installation of a new, efficient drainage system
- Use of higher-quality materials in critical high-traffic areas
- Lower cost and shorter construction timeline compared to a full rehabilitation
- Preservation of some historical elements, maintaining the barn's heritage
- A sustainable and responsible approach, which is important to the community

### **CASE STUDY: Barn Adaptive Reuse | Restored Bank Barn & Horse Barn | Quakertown, PA**

The barns on this property were dismantled due to structural instability. Our team re-erected the barns re-using the timbers where possible and supplementing with similar reclaimed material as needed. The barn will serve as living quarters, and the 8-stall horse barn is a working horse stables.







### \$\$\$ - Rehabilitation: Benefits and Challenges

- Preserves the historical character of the barn
- Existing loft space may require compromises on ventilation, natural light, and cleanliness
- Existing conditions may require compromises on drainage
- More expensive than new construction
- Longer construction timeline

## Environmental Considerations

Environmental impact is a critical consideration in both rehabilitation and new construction. Our approach includes:

- **Minimizing Waste:** In rehabilitation projects, we focus on reusing and recycling materials whenever possible to reduce waste.
- **Sustainable Materials:** We prioritize the use of sustainable and locally sourced materials in both rehabilitation and new construction to minimize the environmental footprint.
- **Energy Efficiency:** We incorporate energy-efficient systems and designs, such as natural lighting and ventilation, to reduce operational costs and environmental impact.
- **Site Impact:** We assess the impact of construction activities on the surrounding environment, including soil preservation, water management, and wildlife protection, and implement best practices to mitigate these impacts.

## Materials and Construction Quality

**Our most common and cost-effective approach to equestrian facility construction:**

- Continuous poured wall or CMU perimeter foundation
- Wood stud frame walls
- Wood rafter frame roof (vaulted ceiling)
- Concrete slab with rubber mats in aisleways, tack rooms, and wash stalls
- Rubber stall mattress systems on compacted stone base
- Roof insulation for condensation; minimal wall insulation
- Corrugated metal roofing
- Fiber cement siding
- Custom made powder coated aluminum windows & doors
- Custom made zinc coated, powder coated stall stall fronts

*\*Recently completed project similar to the above description*



### **Custom-built or prefabricated:**

A facility like the one shown above is custom-built, with materials varying based on the facility's use. For high turnover or stressed animal environments, we recommend more durable materials. In contrast, private facilities may use more aesthetically pleasing wood finishes. There are substantial limitations to the prefabricated approach to achieve a good quality barn. We do not recommend that approach for a project of this size.

### **Additional material recommendations for Equestrian Construction:**

For new construction, we recommend CMU walls at least 4 feet high on the perimeter and stall partitions, coated for ease of cleaning. For the remainder of the wall finishes, PVC Trusscore panels are ideal for cleaning purposes and provide a utilitarian feel, while tongue-and-groove wood above the CMU adds warmth. For stall fronts, we recommend metal, zinc-coated, and powder-coated materials. Exterior windows and doors should be powder-coated aluminum to withstand dust and dirt common in equestrian environments. Residential and some commercial windows are not suitable for equestrian facilities due to high maintenance requirements.





### Considerations for Equine Safety:

- Redundant gates and latches to prevent escape
- Strategically placed features inside stalls to avoid horses getting cast
- No objects that could potentially catch a halter
- Each stall should have egress to ensure safe evacuation in case of fire
- Slip-resistant rubber flooring
- Appropriately sized doors and aisleways to prevent panic
- Protective grills over all windows

## Budget and Pricing

### Rehabilitation Budget

Enhancements to consider for your facility:

- Add an outdoor or indoor riding arena
- Install a spectator seating area
- Construct new wash stalls with coated CMU for easier cleaning
- Add hair trap system at wash stall
- Build a climate-controlled tack room
- Build a climate-controlled feed room
- Implement a composting waste management system

- Install a rubber flooring system for safety
- Increase natural lighting
- Add more windows, doors, and exhaust fans for improved ventilation
- Add automatic waterers or hydrants
- Add Equine friendly hard-wired fans
- Ensure egress at each stall for fire safety
- Optimize Hay & feed storage
- Add outdoor shelters if horses remain outdoors during inclement weather

#### 00. Procurement and Contracting Requirements

- Permitting
- Bonding
- Design fees
- Land use attorney fees

#### 01. General Requirements

- Project management and coordination
- Vehicular access and parking
- Temporary security barriers
- Temporary facilities
  - Office trailer
  - Portable toilets
  - Waste management

#### 02. Existing Conditions

- Surveys
- Hazardous material assessment
- Hazardous material remediation
- Selective demolition
- Recycling of materials

#### 03. Concrete

- New concrete floor/repair
- Foundation repair/replacement

#### 04. Masonry

- Masonry repair/replacement

#### 05. Metals

- Steel reinforcement of timber connections
- Steel columns
- Metal railings

#### 06. Wood, Plastics, and Composites

- Restoration of existing timbers
- Sourcing reclaimed timbers to replace existing members as needed

#### 07. Thermal and Moisture Protection

- Add roof and wall insulation
- Insulate conditioned rooms
- New roofing
- New siding
- Sandblasting & repainting soffits and rafter tails

#### 08. Openings

- New Equine windows & doors. <https://www.sunsetvalleymetalcraft.com/barn-doors/>

#### 09. Finishes

- Repair/replace wood wall and ceiling finishes throughout
- Add rubber flooring in aisles

#### 10. Specialties

#### 11. Equipment

- Repair/replace stall dividers and stall doors throughout.  
<https://www.sunsetvalleymetalcraft.com/custom-work/>
- Install new stall mattresses throughout <https://stablecomfort.com/>

#### 12. Furnishings

- Tack lockers
- Blanket racks
- Bridle hooks
- Saddle racks
- Feed bins

#### 13. Special Construction

#### 14. Conveying Equipment

#### 21. Fire Suppression

- Fire suppression

#### 22. Plumbing

- New plumbing
- Automatic waterers

#### 23. Heating, Ventilating, and Air Conditioning (HVAC)

- Heating & air conditioning in tack rooms and feed rooms
- Exhaust fans for the main stable area

#### 25. Integrated Automation



## 26. Electrical

- Replace electrical throughout

## 27. Communications

## 28. Electronic Safety and Security

## 31. Earthwork

- Sitework for programming changes
  - Outdoor riding arena
  - Walking trails
  - Additional parking

## 32. Exterior Improvements

- Outdoor/Indoor riding arena
- Walking trails
- Paving/stone for additional parking
- Landscaping
- Add/repair fencing

## 33. Utilities

- Upgrade Electrical service
- Update Septic
- Test well capacity and quality
- Water treatment system

Overhead

Fee

## **Maintenance**

If the barn is rehabilitated using in-kind materials, some maintenance will be required to keep the exterior wood siding protected. Exterior wood siding should be repainted every 5-7 years. Any exposed wood surfaces on the interior, particularly in high-traffic areas, should be refinished every 7-10 years. Rubber flooring systems generally have a lifespan of about 20 years, depending on the product. Outdoor and indoor riding surfaces need daily maintenance to ensure safe footing.

## **New Construction Budget**

Enhancements to consider for your facility:

- Add an outdoor or indoor riding arena
- Install a spectator seating area
- Construct new wash stalls with coated CMU for easier cleaning
- Add hair trap system at wash stall
- Build a climate-controlled tack room
- Build a climate-controlled feed room
- Implement a composting waste management system
- Install a rubber flooring system for safety

- Increase natural lighting
- Add more windows, doors, and exhaust fans for improved ventilation
- Add automatic waterers or hydrants
- Add Equine friendly hard-wired fans
- Ensure egress at each stall for fire safety
- Optimize Hay & feed storage
- Add outdoor shelters if horses remain outdoors during inclement weather

#### 00. Procurement and Contracting Requirements

- Permitting
- Bonding
- Design fees
- Land use attorney fees

#### 01. General Requirements

- Project management and coordination
- Vehicular access and parking
- Temporary security barriers
- Recycling of materials
- Temporary facilities
  - Office trailer
  - Portable toilets
  - Waste management

#### 02. Existing Conditions

- Demolition and salvage of existing building

#### 03. Concrete

- Concrete floor
- Cooncrete Foundation

#### 04. Masonry

- CMU walls, 2' below grade 4' above grade

#### 05. Metals

- Fasteners
- Metal railings

#### 06. Wood, Plastics, and Composites

- Heavy timber framing
- Stick framing

#### 07. Thermal and Moisture Protection

- Cellulose wall insulation

- Polyiso roof insulation
- Insulate conditioned rooms
- Metal roofing
- Fiber cement siding

#### 08. Openings

- New Equine windows & doors. <https://www.sunsetvalleymetalcraft.com/barn-doors/>

#### 09. Finishes

- Pre-finish wood wall and ceiling finishes throughout
- PVC trusscore panels in select areas
- Add rubber flooring in aisles

#### 10. Specialties

#### 11. Equipment

- Pre-manufactured stall fronts, dividers, and stall doors. Zinc primed, powder coated. <https://www.sunsetvalleymetalcraft.com/custom-work/>
- Stable comfort stall mattresses throughout. <https://stablecomfort.com/>

#### 12. Furnishings

- Tack lockers
- Blanket racks
- Bridle hooks
- Saddle racks
- Feed bins

#### 13. Special Construction

#### 14. Conveying Equipment

#### 21. Fire Suppression

- Fire suppression

#### 22. Plumbing

- Plumbing for wash stalls, bathroom, shower
- Automatic waterers

#### 23. Heating, Ventilating, and Air Conditioning (HVAC)

- Heating & air conditioning in tack rooms, feed room and bathroom
- Exhaust fans for the main stable area

#### 25. Integrated Automation



## 26. Electrical

- Replace electrical throughout

## 27. Communications

## 28. Electronic Safety and Security

## 31. Earthwork

- Sitework for programming changes
  - Outdoor riding arena
  - Walking trails
  - Additional parking

## 32. Exterior Improvements

- Outdoor/Indoor riding arena
- Walking trails
- Paving/stone for additional parking
- Landscaping
- Add/repair fencing

## 33. Utilities

- Upgrade Electrical service
- Update Septic
- Test well capacity and quality
- Water treatment system

Overhead

Fee

## **Maintenance**

Any exposed wood surfaces on the interior, particularly in high-traffic areas, should be refinished every 7-10 years. Rubber flooring systems generally have a lifespan of about 20 years, depending on the product. Outdoor and indoor riding surfaces need daily maintenance to ensure safe footing.

## **Compliance and Legal Considerations**

Horse facilities open to the public need to be licensed. There is more information on the operators licensing listed in Subtitle 16 found from the Maryland Horse Board:

[https://mda.maryland.gov/horseboard/pdf/Subtitle16\\_HorseIndustryBoard.pdf](https://mda.maryland.gov/horseboard/pdf/Subtitle16_HorseIndustryBoard.pdf)

We must obtain building permits from The Montgomery County Department of Permitting Services. They will ensure plans meet local building codes & safety standards. The facilities will need to comply with health and safety codes, which might cover aspects such as ventilation, fire safety, and sanitary conditions for both animals and humans.

If the property is not in a zone where equestrian facilities are a permitted use, we may need to apply for a special exception or conditional use permit from Montgomery County. This process involves submitting a detailed application and often requires a public hearing. The goal is to ensure that the facility won't adversely impact the surrounding area.

Montgomery County has specific setback requirements for structures, including barns and stables. Setbacks are the minimum distances that buildings must be set back from property lines, roads, and other structures. This would need to be taken into consideration as we plan the project.

Other aspects to consider would include:

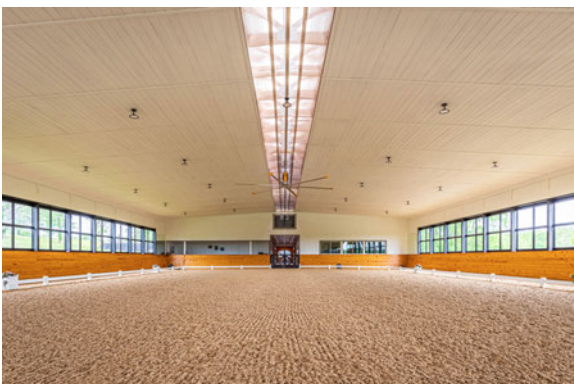
- Adequate parking & access requirements for emergency vehicles
- Preventing pollution and proper disposal of animal waste
- Address noise and lighting issues if neighboring properties would be affected
- Stormwater runoff and measures to protect nearby water sources
- Implementing erosion and sediment control measures
- Environmental impact assessments for effects on local ecosystem
- Endangered species protection, if applicable
- Sustainable building materials + practices

## **Additional Relevant Experience**

### **PROJECT PORTFOLIO**

- **Bolinvar Farm Equestrian Center | Horse Barn, Service Barn, Indoor Arena | Middleburg, VA:**

Built on historical land, this facility features a 16-stall barn, service barn, indoor arena, and amenities for both horses and riders, maintaining a balance between historical homage and modern functionality.



- **Barn Home | Horse Barn + Living Quarters | Bluemont, VA:**

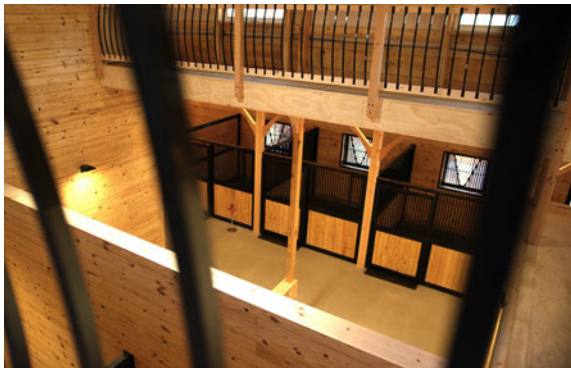
This barndominium houses both animals and humans, with a lower level for equestrian

use and a living space above, designed to meet building codes and provide a comfortable, integrated living environment.



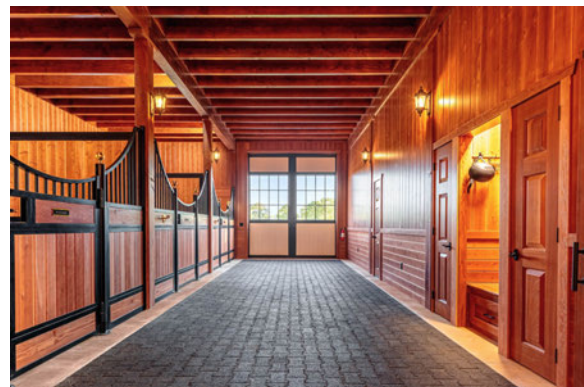
- **Elmwood Acres | Barn & Indoor Arena | Mansfield, MA:**

The facility features optimal light and airflow, providing a superior training environment for riders and horses.



- **Timber Frame Horse Barn | 4,869 SF Horse Barn | Boyce, VA:**

On a 100-acre estate, this barn reflects the owner's desire for organization and beauty, complementing the estate's meticulous gardens.





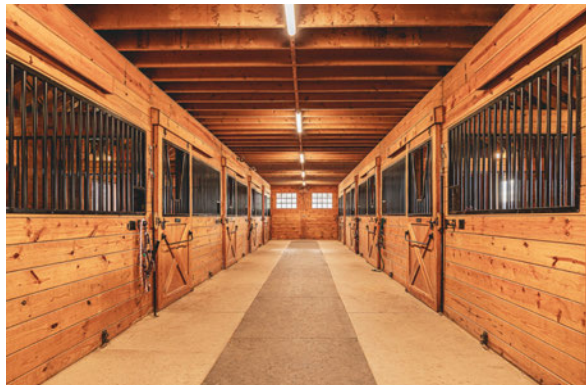
- **Jolee Farm | Private Equestrian Arena | Middleburg, VA:**

A well-insulated, beautifully designed arena with 39 stunning windows, providing an ideal riding environment year-round.



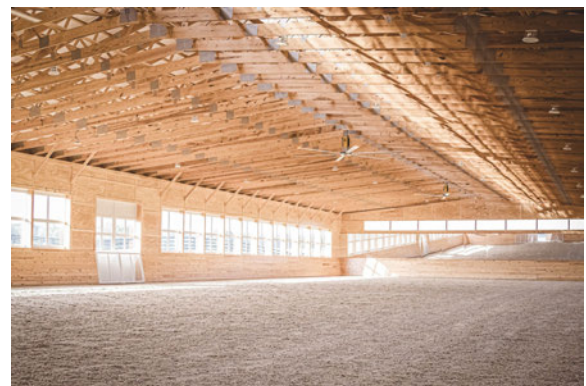
- **Ivy Hill Therapeutic Equestrian Center | Barn & Indoor Arena | Perkasie, PA:**

A custom-built barn equipped with a riding arena, horse stalls, ramps, and more, designed to meet the needs of a therapeutic equestrian center.



- **Kelvedon Farm | Private Equestrian Arena | Marshall, VA:**

Designed to provide the feeling of riding outdoors while being indoors, with enhanced height and expansive windows for natural light.





- **Westfield Farm at the Tulyeries | Equestrian Training Center | White Post, VA:**  
A light-filled training facility under construction, designed to be a jewel of Clarke County for dressage and eventing. (Under construction)



- **Ambrosia Stables | Private Equestrian Arena | Littleton, MA:**  
A New England-style training arena with ample natural light, staying warm in winter and cool in summer.



- **1800's Barn Restoration | Adaptive Reuse Bank Barn | Blue Bell, PA:**  
Restoration of a historical barn for residential use, preserving its original charm and structure.





- **Schwenkfelder Library and Heritage Center | Barn Restoration and Adaptive Reuse | Pennsburg, PA:**

Relocation and restoration of an early 19th-century barn to serve as an educational center, using reclaimed wood and historical techniques.



- **Quarry View Campus | Farmstead Restoration and Adaptive Reuse with a Timber Frame Addition | Ronks, PA:**

Restoration of an old farmstead to serve as our headquarters, honoring old-world craftsmanship and the property's history.





- **Restored Barn | 6 Stall Horse Barn Renovation | Middletown, MD:**  
Major renovations to create a more functional and personalized barn space.



- **Adaptive Reuse Storage Barn | Barn Restoration and Adaptive Reuse | New Hope, PA:**  
A former storage barn transformed into a facility for housing animals.





- Cedar Rock Farm | 12 Stall Horse Barn | Mattapoisett, MA:**  
 A custom-built 12-stall barn with a unique design, incorporating graceful arches and detailed woodwork.



## Additional Notes

Our team brings over 60 years of combined experience in owning and caring for horses. We maintain a strong network of friends and clients within the equestrian community, including riders competing at the Olympic level and members of local hunts. We are committed to supporting safe and exciting experiences in equestrian sports, sponsoring major events and being actively involved in the equestrian community.

Choosing Quarry View Building Group means partnering with an award-winning team dedicated to excellence and community impact. We look forward to the opportunity to work with WSSC Water on this project, contributing to the revitalization of local landmarks and providing safe, functional, and beautiful equestrian facilities.

Sincerely,

A handwritten signature in cursive script that reads "Levi King". The letters are fluid and connected, with a prominent capital 'L' and 'K'.

Levi King

Chief Operations Officer

Quarry View Building Group

LKing@quarryview.net

717-283-4511