Supporting Information – H14-0904-24

This information is to be read in conjunction with the relevant information and plans submitted under the application H14-0904-25

Introduction

This proposal seeks permission for a purpose-built Reformer Pilates and Rider Wellness Studio with two treatment rooms, situated within the established equestrian facility at Middledene, Surfleet Road, Pinchbeck.

The development represents a logical and essential evolution of the existing equestrian business, which already provides horse livery, training and rider support services. The new building enables the delivery of integrated rider conditioning, therapy and biomechanics assessment - a service model directly supported by current research and aligned with top-tier facilities such as the Margaret Giffen Centre for Rider Performance at Hartpury College.

Purpose and Functionality

- The studio will deliver specialist Pilates programmes designed for horse riders, targeting balance, posture, core strength and symmetry - all scientifically proven to enhance riding performance and horse welfare.
- Treatment Room 1 will house a mechanical horse simulator, allowing riders to assess and correct biomechanical issues in a safe, controlled setting.
- Treatment Room 2 provides sports therapy and rehabilitation, complementing both Pilates and riding activities.
- The studio's size and configuration are essential to accommodate reformer equipment and group classes, neither of which can be relocated or housed within temporary premises.

Integration and Justification

- The location within the equestrian site allows seamless progression between horse training, rider assessment, Pilates conditioning, and therapy, forming a complete pathway for performance and rehabilitation.
- Riders already attend this site to keep or train their horses, creating a natural client base and minimising unnecessary transport or duplication of facilities elsewhere.
- The co-location of horse and rider services provides a regional centre of excellence, comparable in concept to Hartpury, and fills a current gap in Lincolnshire's equestrian and wellbeing provision.

Economic and Community Benefits

- The proposal sustains and expands a successful local business, providing new specialist employment opportunities.
- The facility strengthens South Holland's reputation for high-quality rural enterprise, contributing to local wellbeing and tourism potential through equestrian sport.

- Landscaping improvements (native hedging and pollinator planting) further support local biodiversity net gain objectives.

In summary, the development is functionally necessary for the continued growth of the equestrian business, supported by clear scientific evidence, and ideally located within the existing site where equestrian activity already occurs. The proposed studio is not an independent enterprise but the next stage in a holistic, evidence-based rider performance facility

1. Business & Growth Plan

Our vision is to establish a specialist equestrian wellness hub for rider conditioning, rehabilitation, and performance enhancement, integrated with the existing equestrian facility.

1 Year

- Launch and establish the dedicated studio on-site at the equestrian yard, offering targeted Pilates classes for riders and individual therapy/assessment treatment rooms including mechanical horse training.
- Consolidate our existing client base (riders who keep horses on site) and begin outreach to regional equestrian clients.
- Achieve occupancy of the studio space in line with group Pilates sessions for riders, one-to-one Pilates and therapy sessions, and rider assessments on the mechanical horse.
- Build brand positioning as the only facility in the region (Lincolnshire & surroundings) combining horse, rider and studio in one integrated location.

3 Years

- Grow into a structured rider development programme: e.g., annual packages for riders including Pilates, biomechanics assessment, therapy, then riding lessons.
- Expand client catch-area across the region (beyond immediate local) by promoting the integrated model.
- Use the proposed size of the studio to run specialist workshops, retreats such as “rider wellness weekends” combining horse riding, Pilates and recovery therapies.
- At this stage, the studio size and location enable multiple group sessions concurrently, individual treatment rooms (therapy, mechanical horse room) and parking/horse-access logistics to run at scale.

5 Years

- Position the studio as a nationally recognised destination for equestrian wellness - akin to the facility at Hartpury College (Performance Hub) in principle, offering advanced biomechanics, rider performance monitoring, recovery therapy and high-end Pilates programmes.

- Offer referral networks with equestrian clubs, riding schools, physiotherapists and sports therapists.
- Possibly host seminars, partner with equestrian sport performance bodies, and become the “go-to” studio for riders serious about performance and recovery.
- The following pathway envisions how the proposed site will be operating within 5 years:
- **Integrated Rider Development Cycle**
    - **1. Arrival & Preparation**
        - Rider brings horse to the existing equestrian yard.
        - Horse is stabled or tacked up for later session.
        - Rider checks in at studio reception.
    - **2. Assessment Phase – Treatment Room 1 (Mechanical Horse)**
        - Rider mounts mechanical horse for biomechanical analysis (seat alignment, weight distribution, pelvic control).
        - Objective data and video feedback identify asymmetries or postural issues.
    - **3. Conditioning Phase – Pilates Studio**
        - Based on assessment findings, the rider undertakes targeted Pilates exercises (mat or reformer).
        - Focus: core activation, pelvic stability, flexibility, coordination and breath control.
        - Group or 1:1 sessions depending on rider needs.
    - **4. Therapy Phase – Treatment Room 2**
        - **Sports therapy or massage** to address muscular tightness or recovery requirements identified during assessment.
        - May include rehabilitation exercises for injury prevention or recovery.
    - **5. Application Phase – Arena/Yard**
        - Rider immediately applies corrected body awareness and posture in a riding session on their own horse.
        - Coach observes and reinforces improvements, ensuring transfer from studio to saddle.
    - **6. Review & Development**
        - Ongoing monitoring through repeated simulator sessions and Pilates progression.

- Riders receive individual performance plans and ongoing support programmes.

Why size and location are key

- The proposed studio size, measuring 60.1m2 is necessary to accommodate both group Pilates classes (a maximum of 6 riders at a time) The reformer Pilates machines are fixed to the floor so need a permanent purpose-built, stable floor space. The machines measure 2460mm in length and are 640mm wide, with a minimum of a metre in between each machine on all sides for both health and safety reasons and also to allow for the highest levels of performance.
- Treatment room 1 measures 15.45m2 which will house the mechanical horse for rider assessment and coaching, this is also fixed in place and requires a minimum footprint of 2500mm length and 1360mm width, as well as space to move around the horse each side. A desk has been included in the space plan for accurate recording of the assessment in real-time and is essential for booking clients onto their services.
- Treatment room 2 measures 10.8m2 and shows a massage table/bed for sports therapy/massage and rehabilitation. The minimum size of a massage bed is 1950mm in length by 930mm in width, as shown on the space plan. There also needs to be sufficient room to move around the bed for treatment to take place. A desk has been included in the space plan for accurate recording of the assessment in real-time and is essential for booking clients onto their services.
- The entrance/reception area measures 17.2m2 and provides a waiting area for the clients who are using any of the proposed facilities. In adverse weather conditions this allows for space to leave outwear for the duration of the class or treatment. Lockers or alternative storage will be available in this area for clients to store personal possessions such as their car keys and mobile phones, as well as shelving where water bottles and other Pilates equipment can be purchased. A desk has also been included in the space plan to take bookings for future classes and allow for the day-to-day running of the business.
- The location at the equestrian facility is critical: riders already bring their horses; the incremental cost/time of moving to a different site would reduce integration, reduce convenience and thereby client uptake. The integrated model (horse in the yard → rider training/therapy in adjacent studio) is part of the competitive edge.
- The logistics (horse lorry parking, stabling, accessible site) are already present at the equestrian yard; building the studio on this site leverages existing infrastructure. Relocating or using an off-site studio would fragment the offering, reduce convenience and weaken the business model.

2. Operating Hours

- Pilates Classes (group rider-focused): evenings (18:00–21:00), to fit around riders' schedules (who may ride earlier or have other commitments).

- Treatment Rooms (individual therapy, biomechanical assessment, mechanical horse sessions): daytime 09:00–18:00, with flexibility to extend into evenings for special sessions or late bookings (for example until 20:00).
- As the business scales, operating hours may extend to early morning sessions (e.g., 07:30 start) to accommodate competitive riders or regional clients travelling in.
- By separating group class hours and therapy/assessment hours we optimise utilisation of space and equipment and maintain flow: riders can bring their horse early, attend a biomechanical or mechanical horse session in the treatment room, then move into a Pilates class or individual therapy in the same visit. These operating hours also ensure that vehicle movements during peak times are kept to a minimum so there will be no impact on traffic flow.

3. Treatment / Class Breakdown

The studio and treatment rooms will host a tailored suite of services, all designed to complement existing equestrian offerings:

a) Pilates for Riders (Group & Individual):

- Reformer- and mat-based Pilates sessions focused on rider-specific demands (core stability, posture, pelvic control, hip mobility, breathing) (see section 4 for science supporting Pilates for horse riders).
- Group sessions: 6 riders, enabling peer learning, group dynamics and efficient utilisation of studio space. These align with riding group lessons and can be scheduled before or after riding sessions.
- Individual sessions: one-to-one Pilates for riders with specific issues (asymmetry, injury history, performance goals) enabling bespoke programme design.
- These classes will be 45 minutes in length, with 15 minutes between classes to allow for a seamless client experience.

b) Mechanical Horse Training Room (Treatment Room 1):

- A mechanical horse simulator allows assessment of rider biomechanics off the actual horse, in a controlled environment.
- The simulator can provide feedback on seat, balance, weight distribution, asymmetry and alignment and allow targeted interventions.
- This is analogous to what top-level performance hubs provide (e.g., Hartpury's Rider Performance centre offers biomechanics and video analysis).
- The mechanical horse session is followed by tailored Pilates/therapy work to address identified weaknesses.
- The mechanical horse sessions will range in duration from 30-60 minutes depending on the client preferences.

c) Sports Therapy & Massage Room (Treatment Room 2):

- Muscular therapy, soft-tissue release, injury rehabilitation, pre-/post-ride recovery treatments. Riders often carry asymmetries, back or pelvic discomfort, hip tightness etc.
- Integrated with Pilates and mechanical horse work: e.g. rider attends mechanical horse session → identifies which side is weak/imbalanced → goes into therapy room for targeted release/treatment → follows up with Pilates session to build appropriate stability.
- Rehabilitation programmes: for riders returning from injury (own injuries or compensatory patterns from riding) the integrated approach ensures a holistic pathway - assessment → therapy → conditioning → return to ride.
- Treatments will range in duration from approximately 30-60 minutes depending on the treatment chosen.

d) Equestrian Rehabilitation & Performance Packages:

- Packages combining horse training/lessons, rider assessments (utilising the mechanical horse), Pilates conditioning, therapy sessions.
- For example: a half-day or full day "Rider Wellness" experience: ride session on your horse in the yard → mechanical horse assessment → Pilates class or individual session → therapy/massage.
- Periodic workshops/seminars for local riding clubs focusing on rider conditioning, performance posture, asymmetry, injury prevention.

Alignment with Hartpury-level quality
The proposed facility aspires to match, in principle, the quality and specialisation of Hartpury's Rider Performance services. Hartpury emphasises biomechanics, rider assessments, specialist equipment, integrations of horse and rider performance and is truly a one-of-a-kind venue in the South West. By combining Pilates, mechanical horse simulation and therapy in an equestrian facility, the business will echo that high-end model - making the site capable of being a destination for riders seeking performance and rehabilitation, not just standard Pilates.

4. Equestrian Focus – The Science Behind Pilates for Riders

Here's where the evidence comes in, and why our proposed studio truly meets an essential need for equestrians.

Core Stability, Posture and Rider Performance

- Research into equestrian / rider performance shows that core stability (control of the trunk/pelvis/hip complex) is beneficial for athletic performance and is relevant to horseback riding.
- For a rider, the base of support is their seat in the saddle; they must absorb movement of the horse, maintain alignment and apply subtle aids. If the rider's core/pelvis is unstable, there's increased movement, asymmetry or compensatory patterns, which can confuse the horse and increase risk of injury.

- One review states: “core stability training has a positive effect … and this can be acquired through Pilates training amongst other regimes.”

Postural Alignment, Seat Security and Rider-Horse Communication

- According to the UK magazine *Horse & Rider*, practising Pilates helps riders develop the body control needed to stay balanced, stable and mobile in the saddle, which leads to better seat and less shifting of weight that could confuse the horse.
- In any equestrian discipline, posture and alignment (of rider and horse) are crucial for effectiveness of aids and for horse welfare (to avoid compensations in the horse). Pilates emphasises posture, breathing and body awareness, making it well-suited to riders.

Flexibility, Mobility & Symmetry

- Riders often suffer from asymmetries (one hip more mobile than the other, one side stronger/tighter), which can lead to stuck aids, imbalance in the saddle, and can negatively impact the horse. Pilates improves flexibility, strengthens weaker sides and builds coordination.
- A recent article states: “Pilates is a total-body approach to movement … beneficial for equestrians of all disciplines and can help you regain your riding confidence following an injury.”

Body Awareness, Breath Control and Injury Prevention

- Pilates emphasises breath control, fluid movement, precision and body awareness. For riders this means improved ability to sense their body, correct their own position and respond to the horse’s movement rather than reacting.
- The Canadian Horse Journal highlights that riders are athletes who should consider themselves as such; improving posture, alignment and body awareness via Pilates will benefit riding ability and longevity.

Direct Relevance to Equestrian Facility Design

- Given that riders of all levels benefit from integrated conditioning (off-horse, as well as on-horse) and that facilities dedicated to riders are still relatively rare, the proposed studio fills a gap. The research suggests that off-horse training (core, mobility, body awareness) supports riding performance.
- By situating the studio at the equestrian yard, the logical pathway becomes clearer: horse session → rider assessment/training in the studio → therapy/rehab as needed. This aligns with best practice in rider development/rehabilitation and supports a high-quality offering.

5. Specialisation & Local Integration

- Our business is uniquely focused on the equestrian community (not just generic Pilates). We specialise in rider conditioning, rehabilitation and performance.

- The proximity of Bettertack and the strong local equestrian community in the region reinforce the logic of this location: riders already frequent the area, bringing horses and equipment, meaning the built-in audience is present.
- Our site is multi-use: riders bring their horses for lessons or use our equestrian yard; the studio complements that rather than being separate. This creates convenience, synergy and a competitive advantage.
- Because the facility is family-run and rooted in the equestrian environment, credibility and authenticity in the local equestrian network are strong. That helps client acquisition and retention.
- The mechanical horse element is a differentiator: many Pilates studios don't cater to equestrian biomechanics; this bespoke treatment room supports rider assessments in a very specific way, enhancing our specialism.
- All this means the location is not just "where we can get a studio" but is integral to the business model - it must be here to deliver what we promise.

6. Overall Justification

- The proposal is not simply a studio build - it is the physical manifestation of a strategic growth model for the equestrian-focused wellness business.
- The specific site is essential: its integration with the equestrian yard, the existing client base that already brings horses there, and the local infrastructure (horse parking, stabling, equestrian community) make this location uniquely suited. Relocating or using a non-equestrian site would undermine the integrated model, reduce convenience and likely increase cost or reduce uptake.
- The size and design of the studio (group class capacity, fixed equipment like reformers, mechanical horse room, treatment rooms) align with the growth plan and ensure scalability - from year 1 local hub to year 5 destination facility.
- The body of evidence supports the notion that riders require specialised off-horse conditioning (core stability, posture, mobility, body awareness) and that Pilates is a well-founded modality to address those demands. By providing this on-site, in synergy with horse-based training, the business meets a clear and unmet need.
- Given the local equestrian ecosystem (riders, horses, supporting services like Bettertack) and the facility's unique value proposition, the development will support local economic activity, add to amenity (wellness/fitness for riders), and leverage existing infrastructure.

To summarise, the proposed development is essential for the growth and continued development of the business, rather than simply desirable. It is integrally linked to the location, the equestrian context and the specialised rider-focused services we will deliver.

Key References

- **Clayton, H.M.** "Riders' Effects on Horses—Biomechanical Principles with Implications for Equestrian Practice." *Animals* (2023). (Open-access full text; discusses **off-horse testing and unmounted exercises** to improve rider performance.)
- **Clayton, H.M.** "The role of biomechanical analysis of horse and rider…" *Veterinary Journal* (2017). (Review; rider-horse interaction & welfare; supports increasing rider awareness and targeted training.)
- **Lam, N.H.K., et al.** "Effects of a 6-week core stabilisation training program on dynamic balance and trunk endurance of horse riders." *Sport Sciences for Health* (2021). (Improved **dynamic balance** and **back-extensor endurance** in riders.)
- **Clark, L., et al.** "Trunk Kinematics of Experienced vs Novice Riders on a Simulator." *Journal of Surgical Research* (2022). (Simulator detects meaningful differences; supports **mechanical horse** assessments.)
- **Hobbs, S.J., et al.** "Posture, Flexibility and Grip Strength in Horse Riders." *PLoS One* (2014). (Asymmetry prevalent; underscores need for corrective off-horse work.)
- **Prentice, J.A.A.** PhD thesis: "An investigation into the importance of off-horse exercise on rider performance." (Core stability training supports effective position; grounds case for Pilates-style conditioning.)
- **Hartpury University/College** — Rider Performance facilities & services. (Benchmarking the standard of integrated rider assessment and conditioning that your proposal seeks to provide regionally.)