# Invitation for Expression of Interest (EOI) for Functional Design and Cost Assessment of Coworking Facility at TrEST Research Park and TrEST Extension Campus

# 1. New Coworking Space at TrEST Research Park:

TrEST Research Park is enhancing its collaborative ecosystem with the launch of a **new coworking space** designed to accommodate **30 seats**, thoughtfully integrated within the existing infrastructure. This vibrant addition aims to foster a **dynamic**, **flexible**, **and innovation-driven work environment**, specifically supporting startups, researchers, and industry professionals—particularly in the **EV and semiconductor sectors**.

# **Key Features**

# Capacity

 30 ergonomic seating arrangements designed to provide comfort, efficiency, and sustained productivity.

# Layout

• Open-plan configuration that encourages interaction and idea exchange, while maintaining ample personal workspace for individual focus.

# **Seamless Integration with Existing Facilities**

- Direct connectivity to conference rooms, discussion areas, and the TrEST Office.
- Convenient access to shared utilities and common resources, enhancing workflow and collaboration.

#### **Technology-Enabled Workstations**

- High-speed Wi-Fi and wired LAN connections to ensure seamless connectivity.
- Provision for dual-monitor setups and individual charging points at each workstation.
- Easy access to shared cloud storage and research databases for efficient project collaboration.

#### **Flexible Usage Options**

- Availability of hot desks, dedicated desks, and short-term leasing to suit varying work styles and project durations.
- Modular furniture and adaptable floor plans enable future expansion based on demand.

# **Ambience and Design**

The coworking space offers a modern, vibrant, and productivity-oriented atmosphere, featuring:

- Ample natural lighting and green indoor plants to cultivate a positive and refreshing workspace.
- Quiet zones and breakout spaces designed for focused work, casual discussions, and creative brainstorming.
- Thoughtfully curated interiors with **soft color palettes and collaborative seating clusters** that inspire creativity and teamwork.

# **Additional Amenities**

- Centralized air conditioning for all-day comfort.
- 24/7 secure access to support flexible work schedules.
- Easy access to the **common cafeteria and recreation areas** within the park.
- On-site support staff for facility management and prompt technical assistance.

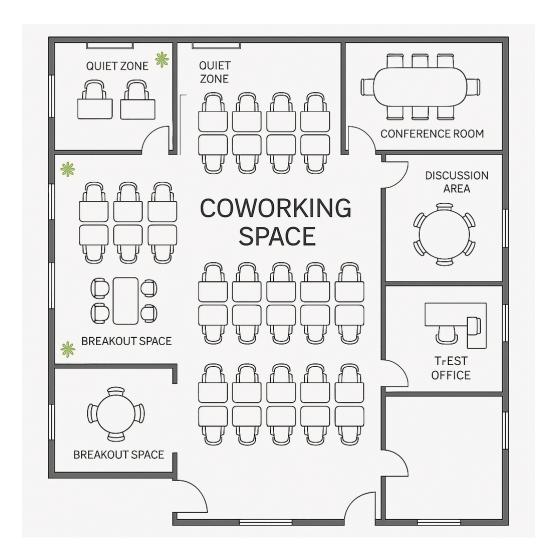


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# 2. TrEST Research Park Extension, 3124 sq. ft. Area

# **Objective:**

To design and develop an extension of TrEST Research Park within a 3124 sq. ft. area that accommodates:

- Desks for new applicants of TrEST Research Park
- Two modular labs for upcoming R&D projects
- A consolidated office zone for Chairman, CEO, and TrEST administration
- Common amenities for collaboration, productivity, and growth

# 1. Site Specifications

Total Area: 3124 sq. ft.Layout: Rectangular

- Location Access: Single main entry, optional rear exit

- Utilities: Provision for HVAC, LAN, high-speed internet, backup power, water

# 2. Functional Zoning and Space Allocation (Research Park Concept)

The extension follows a comprehensive research park model that is purposefully crafted to support an ecosystem of innovation, collaboration, and scalable growth. This model blends adaptive coworking environments with mission-driven research and development (R&D) facilities, executive leadership zones, and shared collaborative infrastructure. The goal is to facilitate seamless interactions between individual innovators, project-based teams, institutional stakeholders, and startup entities, all within a spatial framework that emphasizes operational efficiency and interdisciplinary synergy.

At the heart of this design is a flexible coworking environment that supports both dedicated and hot-desking arrangements. It encourages dynamic team formations and fosters a culture of knowledge exchange. Adjacent to this open space are two modular innovation labs specifically equipped for early-stage prototyping, experimental validation, and applied research. These labs are constructed with adaptability in mind—allowing reconfiguration based on project needs—and are enhanced with smart utilities such as plug-and-play instrument interfaces, sensor-enabled environmental controls, and writable collaborative surfaces.

Strategically located alongside these technical workspaces is the Combined Executive and TrEST Office Zone. This area not only accommodates the Chairman and CEO but also integrates the core administrative operations of TrEST. By doing so, it ensures constant alignment between strategic oversight and on-ground research execution. The proximity between leadership and innovation activities reduces bureaucratic lag and fosters a feedback-rich environment where decisions can be made in real-time with direct stakeholder input.

Architecturally, each zone is designed with human-centric principles: optimized natural lighting through glass partitions, sound attenuation through acoustic ceiling panels, and the use of ergonomic and sustainable materials to support long-term occupancy and wellbeing. This thoughtful integration of design and function transforms the space from a static workplace into a dynamic, living infrastructure that evolves with the aspirations of its users.

Ultimately, the research park model adopted in this extension is not merely about spatial distribution; it is about enabling a future-ready knowledge ecosystem. By fostering a physical environment that balances collaborative openness with functional zoning, the design supports scalable innovation, strategic leadership, and seamless operational flow within a compact 3124 sq. ft. footprint.

#### a. Seating Area (1050 sq. ft.)

The working zone serves as the central nucleus of the TrEST Research Park Extension, thoughtfully designed to accommodate 24\* ergonomic workstations. These desks are arranged with a focus on maximizing spatial efficiency while ensuring comfort, accessibility, and productivity for users engaged in diverse technical and administrative tasks. The layout strikes a balance between openness and structured segmentation, allowing for both collaborative exchanges and individual concentration. Strategic partitioning using low-height acoustic panels and planter dividers enhances visual clarity while reducing ambient noise, creating a calm and distraction-free working atmosphere.

Each workstation is provisioned with integrated power and data outlets, enabling seamless connection to high-speed internet and networked devices. Adjustable chairs and sit-stand compatible desks are provided to support long-duration use and promote user health, reducing the risk of repetitive strain injuries. Proper spacing between workstations maintains optimal ventilation and airflow, a critical consideration in shared working environments, especially post-pandemic.

To further streamline operations and reduce user dependency on external resources, a shared utilities section is incorporated within the coworking area. This includes a multifunctional print-copy-scan station, secure lockers for storing personal items and documents, and access to general-use stationery and office supplies. The availability of these resources within immediate reach reduces operational delays and promotes workflow continuity.

Human-centric design principles are further reinforced through the inclusion of biophilic elements—such as indoor potted plants, vertical green walls, and natural material finishes—that foster mental well-being, reduce stress, and increase cognitive performance. Daylight-optimized lighting and ambient-controlled LED fixtures simulate a natural light environment, aligning with circadian rhythms and enhancing user comfort.

In recognition of the need for occasional privacy within a collaborative environment, sound-insulated breakout booths are positioned strategically throughout the space. These serve as semi-private enclosures where individuals can conduct video calls, client meetings, or focused tasks without disruption. Overall, the coworking zone exemplifies a modern, tech-enabled workspace that caters to the evolving demands of research professionals, entrepreneurs, and knowledge workers, forming the operational backbone of the TrEST Research Park ecosystem.

# b. Innovation Labs (2 x 325 sq. ft. = 650 sq. ft.)

Configured as flexible, modular spaces, the two innovation labs within the TrEST Research Park Extension are meticulously designed to support early-stage research, rapid prototyping, and iterative experimentation across a variety of disciplines. Each lab spans 325 sq. ft. and is equipped with a range of adaptable infrastructure that empowers researchers, startups, and technical teams to transform ideas into tangible outputs within a safe, structured, and resource-rich environment.

A key design feature of the labs is the use of vibration-isolated workbenches. These are critical for performing precision tasks involving sensitive equipment such as microscopes, spectrometers, and optical sensors, where even minimal vibrations can compromise experimental integrity. The benches are modular in nature, allowing for rearrangement based on workflow requirements and project-specific configurations.

To ensure optimal environmental conditions for a wide range of research scenarios, the labs are integrated with IoT-enabled environmental control systems. These systems monitor and regulate temperature, humidity, and air quality in real time, ensuring that experiments are conducted under consistent and controlled conditions. Alerts and analytics from these smart systems also contribute to preventive maintenance and resource optimization.

One of the defining advantages of these labs is their plug-and-play infrastructure. Power and data lines are routed through overhead ceiling grids and floor raceways to facilitate quick setup and relocation of laboratory apparatus and computing units. This setup supports interdisciplinary work and allows seamless transitions between hardware-intensive and software-driven research projects.

The lab interiors are finished with writable surfaces—such as glass whiteboards and wall-mounted idea panels—encouraging real-time collaboration, brainstorming, and agile iteration cycles. These writable areas act as impromptu planning boards where teams can visualize data, sketch models, or refine hypotheses on the fly.

Importantly, the infrastructure has been designed to be wet-lab compatible. With minimal retrofitting, the space can accommodate chemical-resistant countertops, fume hoods, and drainage provisions for handling reagents and solvents. This ensures that the labs remain future-proof, supporting both dry (electronics/software) and wet (chemical/biological) research domains. Together, these innovation labs serve as a high-functioning, versatile engine room for the TrEST ecosystem, driving research, development, and innovation.

#### c. Combined Executive and TrEST Office Zone (675 sq. ft.)

This unified office zone is a strategically designed and functionally cohesive environment that brings together the leadership and administrative core of the TrEST Research Park. Occupying a consolidated space of 675 sq. ft., this zone seamlessly integrates the workspaces of the Chairman, CEO, and the TrEST administrative team, facilitating operational efficiency, high-level decision-making, and day-to-day management within a central, accessible location.

The zone is organized into three distinct but interconnected sub-sections. The first is a **private executive cabin**, assigned to the Chairman, which is equipped with a high-end workstation, executive seating, and a digital boardroom setup. This includes a large display panel, smart conferencing capabilities, and integrated AV controls, enabling seamless interaction with both in-house teams and external stakeholders. The cabin provides the Chairman with a focused environment for strategic planning, high-stakes negotiations, and institutional representation.

Adjacent to the Chairman's cabin is a **semi-formal leadership discussion area** designed for impromptu meetings, team briefings, and collaborative sessions among senior executives. Outfitted with a round discussion table, interactive whiteboard, and informal seating, this space encourages ideation and rapid alignment on key initiatives without requiring formal conference room scheduling.

The third sub-section is an **open-plan TrEST administrative cluster**, which houses two modular workstations allocated for support staff. These stations are equipped with ergonomic chairs, dual-monitor setups, and secure storage units to manage documentation, project coordination, and stakeholder communications. Shared filing cabinets and a digital resource board ensure centralized access to important materials and schedules.

Smart glass partitions define the boundaries of each sub-space, offering both visual openness and acoustic separation. These partitions can transition between opaque and transparent states, enhancing flexibility based on privacy needs while contributing to the modern, tech-forward aesthetic of the office zone.

Overall, this integrated office hub not only reflects the leadership structure of TrEST but also embodies the principles of transparency, agility, and collaboration. It bridges the executive and operational layers of the research park, ensuring that governance and innovation remain closely aligned in purpose and execution.

# d. Reception + Lobby (180 sq. ft.)

The **Reception and Lobby area** serves as the primary gateway into the TrEST Research Park Extension and plays a critical role in shaping the first impressions of visitors, partners, and stakeholders. Thoughtfully designed with a compact yet efficient layout, this 180 sq. ft. space integrates modern aesthetics with functionality to deliver a welcoming and secure entry experience.

Brand identity is prominently displayed through sleek signage, digital branding panels, and curated visual elements that reflect the innovation-driven ethos of the park. A centrally positioned **digital check-in kiosk** enables seamless visitor registration and generates temporary access credentials, eliminating the need for manual logbooks and enhancing operational efficiency.

The lobby is furnished with comfortable lounge seating, a low-profile coffee table, and informative literature about the facility's capabilities and ongoing projects. Warm ambient lighting and neutral color palettes create a professional yet inviting environment.

From a security standpoint, the layout is designed to regulate access to all internal zones. Access-controlled doorways branching from the reception ensure that only authorized personnel can enter sensitive areas such as labs, office spaces, and the server room. This controlled access mechanism

safeguards the integrity of the research and operations conducted within the facility while ensuring an efficient, user-friendly visitor experience.

#### e. Conference Room (225 sq. ft.)

The conference room is a 225 sq. ft. multifunctional meeting space designed to support both formal presentations and collaborative sessions. It is equipped with integrated audiovisual (AV) systems, including high-definition display panels and video conferencing capabilities, ensuring seamless remote and in-person communication. The room is acoustically treated with soundproof panels to maintain privacy and reduce external disturbances. Glass writing boards line the walls, offering ample space for brainstorming, diagramming, and planning. Ergonomic seating and a central conference table promote comfort and engagement, making the space ideal for strategic discussions, team reviews, and high-impact decision-making within the research park.

# f. Pantry + Dining Area (130 sq. ft.)

The pantry area includes essential kitchen appliances, a bar stool counter, and compact seating for quick meals. Designed for casual interactions, it serves as an informal networking space where staff and visitors can relax, refresh, and engage in spontaneous discussions, fostering a collaborative and community-oriented work environment.

# g. Server/Storage Room (45 sq. ft.)

The server and storage room is a compact, secured enclosure designed to house critical digital infrastructure, including servers, routers, and network switches. It also provides fire-resistant storage for sensitive documents, backup drives, and essential records. Access is restricted to authorized personnel, ensuring data integrity and operational security for the entire facility.

# h. Circulation & Buffer Areas (489 sq. ft.)

The circulation and buffer areas are strategically designed with wide pathways and acoustic partitions to facilitate smooth and quiet transitions between functional zones. These spaces minimize noise spillover from high-activity areas such as labs and meeting rooms. The modular layout ensures future scalability, allowing spatial reconfigurations without disrupting overall operational flow.

# 3. Design Philosophy

The design philosophy of the TrEST Research Park Extension is anchored in creating a functional, adaptable, and future-ready workspace that supports innovation, productivity, and well-being. Every aspect of the architectural and interior planning is rooted in five core principles: modular design, natural lighting, noise control, ergonomic comfort, and sustainability.

**Modular Design** lies at the core of the spatial strategy. The facility is planned with a high degree of flexibility, enabling dynamic reconfiguration of lab benches, workstations, and interior partitions. Modular furniture and demountable wall systems allow each zone—whether a lab, workstation, or office—to evolve in response to changing project needs, team sizes, or technological upgrades. This

adaptability ensures long-term utility and responsiveness to growth without requiring major structural changes.

**Natural Light** is leveraged not only for its energy-saving benefits but also for its profound impact on user wellness and productivity. The use of glass partitions and clerestory windows enhances daylight penetration, reduces dependence on artificial lighting, and fosters an open, transparent working culture. This creates a visually connected environment while maintaining distinct functional areas.

**Noise Control** is implemented through a combination of sound-absorbing materials and spatial zoning. Fabric-wrapped acoustic ceiling tiles, wall panels, and soft flooring materials like carpet tiles significantly reduce reverberation and cross-zone noise transmission. This is particularly critical in maintaining focus within coworking spaces and ensuring confidentiality in executive and meeting rooms.

**Ergonomics** are prioritized throughout the facility to support long working hours and reduce physical strain. All workstations are equipped with height-adjustable chairs, monitor stands at eye level, and optional sit-stand desks. Anti-fatigue mats are used in areas of prolonged standing, such as labs or pantry zones. These features promote physical comfort, minimize repetitive strain injuries, and contribute to overall staff well-being and performance.

**Sustainability** is woven into every layer of design and operation. The facility incorporates energy-efficient LED lighting, motion sensors, and daylight-responsive controls. Fixtures and materials used are BEE (Bureau of Energy Efficiency)-compliant and sourced from green-certified manufacturers. HVAC systems are zoned and programmable, and the layout anticipates potential integration of solar panels and rainwater harvesting systems.

Together, these principles shape a resilient, high-performance environment that reflects TrEST's commitment to innovation, environmental stewardship, and human-centered design.

# Floor Space Plan Description (for illustrative purpose only)

The rectangular floor space is arranged in a linear progression from front to back:

- The Reception + Lobby anchors the entrance.
- To its rear are the Seating Area and adjacent Pantry + Dining Area.
- The Combined Executive and TrEST Office Zone occupies a central node, bridging leadership and staff operations.
- The Conference Room sits nearby for strategic discussions.
- The Innovation Labs are at the back-left corner for noise isolation.
- The Server/Storage Room is embedded between labs and offices.
- Wide circulation areas interconnect all zones, ensuring clear movement and emergency compliance.

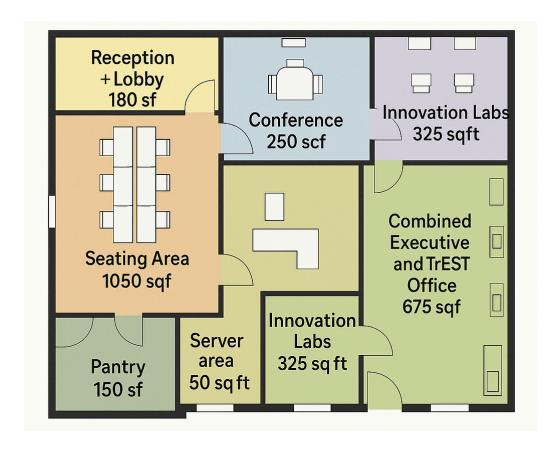


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