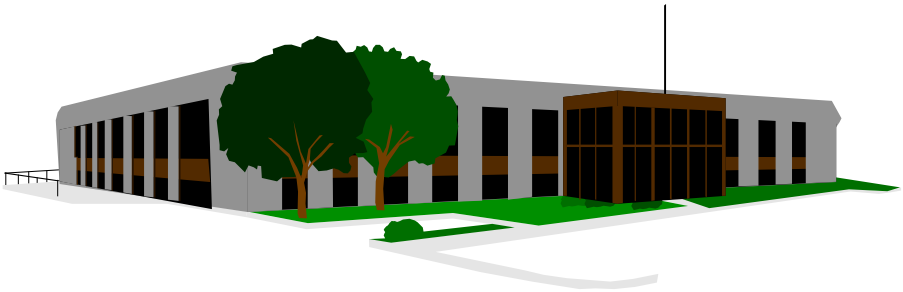
University of Missouri Technology Park

at

Fort Leonard Wood



PROTECTIVE COVENANTS

AND

DESIGN GUIDELINES

June 5, 2001
University of Missouri System
Columbia, Missouri

U.S. Army Maneuver Support Center
Fort Leonard Wood, Missouri

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PROTECTIVE COVENANTS
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1.0 DEVELOPMENT OBJECTIVES FOR THE TECHNOLOGY PARK

The Technology Park is being developed pursuant to a lease issued in accordance with 10 USC. 2667 between the Department of the Army and the Curators of the University of Missouri. These Protective Covenants and Design Guidelines are a supplement to the Use Agreement that accompanies the Lease. Should any conflict exist between these Protective Covenants and Design Guidelines and any provision(s) of the Lease or Use Agreement, the provisions of the Lease and Use Agreement shall control.

The University of Missouri System (the University) will be the representative of The Curators of the University of Missouri, for the development, operation, maintenance and management of the Technology Park. The University will be responsible for compliance with the terms and conditions of the Department of Army Lease and for coordination to meet Department of the Army installation requirements.

The controls and guidelines described in the Protective Covenants and Design Guidelines are intended to:

1. Preserve confidence that the overall quality of development within the Technology Park will be permanently protected,

2. Maintain a consistently high quality of architectural and landscape design, integrated into a carefully preserved and sensitively enhanced natural settings, and

3. Ensure that all building and land uses within the Technology Park are consistent with the Lease, the Use Agreement, and the provisions of Section 172.273 of the Revised Statutes of Missouri (1986).

2.0 LAND AND BUILDING USES

The University and Fort Leonard Wood have established the following criteria for defining land and building uses appropriate to the mission and environment of the Technology Park:

2.1 PERMITTED ACTIVITIES

1. Offices and related facilities to be utilized by businesses, agencies, and organizations that support or enhance the missions, strategic goals, and activities of Fort Leonard Wood and the University of Missouri.

2. Corporate and professional training facilities, provided that these facilities maintain ongoing cooperative relationships with Fort Leonard Wood and/or the University.

3. Laboratories and related facilities intended for basic and applied research, development of technology-based products and services, or testing of technology-based products and services.

4. Facilities intended for production or assembly of products that support or enhance the missions, strategic goals, and activities of Fort Leonard Wood and the University of Missouri.

5. Pilot plants in which prototype production processes can be tested and used for assembly of products of a technological nature.

6. Corporate, regional and divisional headquarters of companies and organizations that support or enhance the missions, strategic goals, and activities of Fort Leonard Wood and the University of Missouri.

7. Technology-dependent or computer-based facilities dedicated to the processing of data or analysis of information.

8. Distribution or warehouse operations that support or enhance the missions, strategic goals, and activities of Fort Leonard Wood and the University of Missouri.

9. Incidental operations required to maintain or support any uses permitted, such as maintenance shops, hazardous-materials handling facilities, water-treatment facilities, and machine shops.

10. Consumer services or operation of retail sales establishments, such as conference/hotel centers, restaurants, banking facilities, and recreational facilities, which support the tenants and employees of the technology park and are operated with the approval of Fort Leonard Wood.

11. Any other facilities reasonably related to the intended mission of the Technology Park, provided these uses are pursuant to the provisions of Section 172.273 of the Revised Statutes of Missouri (1986) and approved by Fort

Leonard Wood.

2.2 EXCLUDED ACTIVITIES

No building or land in the Technology Park shall be used for:

1. Gambling activities.

2. Facilities of the type that could cause an operational nuisance, such as excessive noise, noxious odors, or emission of environmentally hazardous effluents or gases.

3.0 DESIGN REVIEW PROCEDURES

3.1 DESIGN REVIEW COMMITTEE

The Design Review Committee is assigned by the University of Missouri and consists of three or more members. In accordance with the review procedures described in this section and applying its judgment on the intent of the Master Development Plan, the Committee will review and advise the University of Missouri of all development proposals. As the design for the building and site evolves, each development proposal will be reviewed by the Design Review Committee and the Directorate of Public Works, Fort Leonard Wood (DPW). At the University of Missouri's discretion, the Committee may retain the services of professional technical advisers in the fields of engineering, architecture, landscape architecture and/or planning to assist in evaluating submissions on the basis of design and other technical considerations.

The University of Missouri shall be responsible for coordinating the review and approval process for the Technology Park. This coordination includes receipt of submittals, communication of Committee responses and comments, coordination of meetings, and monitoring of and compliance with the Protective Covenants and the Master Development Plan before, during and after construction.

The DPW will respond to review requests from the University of Missouri within five working days. If the University of Missouri does not receive input from the DPW within five working days, an approval will be assumed.

3.2 PRE-DESIGN CONFERENCE

Before the design for a proposed development is initiated, representatives of the Design Review Committee will meet with the applicant, the applicant's architect, other consultants, and the DPW to clarify mutual design objectives, the characteristics of the particular lot, and technical issues related to design review procedures. At this meeting, the applicant will be provided with a topographical survey at the scale of one-inch equals forty feet and an out-boundary plat of the subject parcel. The preliminary planning survey, which is not intended for construction, will contain the following information:

1. Property boundaries, including relationship to adjacent land and access roads.
2. Topography within site boundaries, shown by two-foot contour intervals.
3. Locations of existing utilities, easements, and other existing improvements on or adjacent to the site.

3.3 DEVELOPMENT AND SUBMITTAL OF PRELIMINARY PLANS

Prior to submitting the Preliminary Plans for approval, the applicant should submit conceptual and schematic drawings for review by the University as they evolve. Submittal of Preliminary Plans by the applicant should consist of three (3) sets of drawings, outline specifications, photographs or other materials detailing the lot, site and building information described below. Each drawing shall include the project name, name of consulting firm(s), date (latest revision); scale (where appropriate) and north arrow (where appropriate). Preliminary plans shall be submitted at 50% and 100% complete.

The drawings to be submitted include:

1. Site Plan showing building(s), walks, parking areas, service areas and screening devices, entrance drive, and signage. Dimensions and other related site development information and calculations should also be included.

2. Floor Plan showing proposed typical wall section.

3. Clearing, grading and drainage plans showing proposed clearing limits, existing and proposed contours at two (2) foot intervals, existing vegetation to be protected or removed, and drainage plan with erosion-control measures indicated, including percentage of slope for side slopes and flow lines of proposed drainage swales.

4. Landscape and irrigation plan showing preliminary massing and type of plant material (e.g., evergreen, shade trees) and areas to be fully irrigated.

5. Elevations of building(s) from all sides at an appropriate scale to indicate the placement and massing of the building(s). The following building details should be provided: a) height of all improvements, b) location of all exterior building openings, and c) notation of exterior building materials, colors and textures.

6. Cross sections of the site at a minimum scale of 1" - 16' in longitudinal and transverse directions, indicating the relationship of the building and site grades to the street, adjacent properties and edges of wooded areas, sufficiently complete and accurate to permit analysis of visual screening, tree protection and landscape architectural design.

7. Signage plans for the major entrance sign and building identification sign, if any, including dimensioned location, materials, format, lettering, color and informational lighting, and elevations of the prototype for on-site directional signs showing format, letter face and colors.

8. Expansion plans identifying initial and ultimate improvements, including buildings, paved areas, grading and landscaping.

The following additional material should also be provided:

1. Calculations for building density, site coverage and parking, showing basis for determining the number of parking spaces (use/floor area or number of employees).

2. A description of proposed operating characteristics in sufficient detail to identify the extent of noise, odor, glare, vibration, smoke, traffic, dust, gases, radiation, hazardous wastes or liquid wastes that may be created.

3. Use and occupancy, classification/type of construction (refer to International Building Code 2000).

3.4 REVIEW AND APPROVAL OF PRELIMINARY PLANS

After review of 100% Preliminary Plans, the Design Review Committee and the DPW will meet with the applicant and architect/engineering consultants to discuss the design of the project. The applicant will receive written notification of the approval of the Preliminary Plans by the Design Review Committee.

3.5 DEVELOPMENT AND SUBMITTAL OF CONSTRUCTION DOCUMENTS

After approval of 95% Preliminary Plans, sealed Construction Documents are to be developed and submitted for approval by the University and the DPW. As the Construction Documents are being developed, the applicant should notify the University in writing in the event of any changes in the approved design concept, as illustrated in the Preliminary Plans, or of any changes in the project scope. Information provided by the Construction Documents should include construction drawings and specifications describing all proposed improvements to the site.

3.6 REVIEW AND APPROVAL OF CONSTRUCTION DOCUMENTS

Approval or rejection of the Construction Documents by the University and the DPW will be based on a review of their compliance with the Master Development Plan, the Protective Covenants and Design Guidelines, and applicable codes and regulations as listed in Section 4.0. The University and the DPW (upon request) will meet with the applicant and the applicant's architect to discuss the Construction Documents.

The University will return to the applicant one complete set of the approved Construction Documents signed by the Executive Director and Chief, Engineer Design Branch, DPW. Grading and construction shall not begin prior to written approval from the University and the DPW.

Construction documents submitted for approval shall include the following statement signed by the responsible professional consultant:

"I hereby certify these drawings and/or specifications have been prepared by me, or under my supervision. I further certify that to the best of my knowledge these drawings and/or specifications are as required by and in compliance with the Building Codes of the University of Missouri and the International Building Codes."

_____

Signature and Registration Number

4.0 CODES AND STANDARDS

4.1 SCOPE AND JURISDICTION

All projects shall be designed and constructed per the codes and standards of the University. In case of conflict, the most restrictive code shall apply unless otherwise specified by the University. All design and construction activities must also be in full compliance with all applicable Federal, state and Army environmental laws and regulations.

The University, as "Park Developer", has established the codes and standards for Technology Park to be those provisions contained in the latest, revised editions of the NFPA Code and IBC basic codes, and all other codes, referenced therein, including, but not limited to:

1. International Building Code.
2. International Plumbing Code.
3. International Mechanical Code.
4. National Fire Protection Association (NFPA) Code.
5. American National Standards Institute (ANSI) A117.1.
6. National Electrical Code (NEC).

The University may waive any code requirements with the approval of the DPW. The University's general policy is to not grant code variances.

Facility designs shall not build in barriers for disabled individuals. Provisions for disabled accessibility shall be designed per ANSI 1117.1 or the Americans with Disabilities Act (ADA) "Accessibility Guidelines for Building and Facilities", whichever provides the greatest degree of accessibility for the disabled or physically challenged.

The tenant is responsible to design and construct the facility in conformance with the University Building Codes. Further, the tenant's professional design consultant shall certify the facility has been designed and constructed in conformance with the University Building Codes (See Section 3.6).

4.2 CONSTRUCTION PROCEDURES AND APPROVALS

4.2.1 **Trenching or Blasting**. No site user shall use explosives for the purpose of constructing foundations, trenches, etc

4.2.2 **Project Supervision**. The applicant agrees to allow the University's project construction manager and the University's agents and the DPW's agents free access onto the site for the purpose of assuring the University and Fort Leonard Wood that the facility is being constructed in accordance with the approved Construction Documents.

4.2.3 **Maintenance Escrow and Contractor Responsibility.** Prior to commencing construction, the General Contractor or Construction Manager will be required to submit a Cashier's Check in the amount of $10,000.00 made payable to the Curators, University of Missouri. This money will be held in escrow, and, if necessary, be used for repairs in the event the contractor or subcontractors are responsible for damage done to either common ground (e.g., streets, berms, existing utilities, landscaping) or adjacent sites.

During construction, it will be the responsibility of the contractor and all subcontractors to maintain siltation control devises along the main road of the park, and in any other areas that are determined necessary through review and approval by the DPW and Missouri Department of Natural Resources (DNR).

It will be the responsibility of the contractor to maintain a clean work site, including the maintenance of the access roads leading to the site.

During construction, DNR officials will make periodic inspections, and notification of deficiencies will be sent to the contractor. The contractor will be given a reasonable time to remedy deficiencies; however, should the contractor fail to respond accordingly, the corrective work will be completed by others and payment for this work will come from the funds available in escrow.

At the completion of the project, and upon final inspection and approval by Technology Park officials, all remaining moneys in escrow will be promptly refunded.

4.2.4 **Construction Parking.** All construction parking must remain on the site under construction. It will be the responsibility of the contractor to provide adequate space for and maintenance of a suitable area for parking of workers. Material and vehicles will not be located or parked within the drip line of existing trees. It is recommended that tree drip lines be fenced to prevent damage and compaction. Unless prior approval is given by the DPW, no parking will be permitted offside or on the street. Any vehicle parked in violation of these conditions will be subject to towing.

4.2.5 **Site Cleanup.** It will be the responsibility of the contractor to maintain a clean work environment on the entire site. Appropriate cleanup should be performed daily to prevent trash from spreading to adjacent sites. Proper trash containment is required.

During all stages of construction, especially grading, the contractor must maintain the cleanliness of roads. To this end, it will be expected that at least once per week a thorough cleaning of roads be done either by washing or broom cleaning, and that at least once per month a power sweeping of roads be completed. During the grading phase of the contract, the contractor must clean roads at the completion of each and every workday.

4.2.6 **Issuance of Certificate of Compliance.** Upon final inspection and approvals by the University and the DPW, the University shall issue temporary or final

Certificates of Compliance. No building shall be occupied without these Certificates of Compliance.

Prior to issuance of a final Certificate of Compliance, the University will require a certified copy of the Architect's Final Inspection List of items to be completed or corrected. Inspection list must specify that all items have been duly inspected and approved by Architect.

5.0 STANDARDS FOR DEVELOPMENT OF INDIVIDUAL LOTS

5.1 MINIMUM LOT SIZE

The minimum lot size for development is two acres (87,120 square feet).

5.2 SETBACKS

Unless otherwise specified in these standards, no structure of any kind and no part thereof, may be sited within these setback lines described below. Dimensions are from the legal lot line as illustrated on the property plat.

5.2.1 **Front Setbacks.** A building must be set back a minimum of thirty (30) feet from any public street right-of-way. An additional five (5) feet setback should be added for each story above the first story or a building. As an alternative, the minimum thirty (30) feet set back line can be maintained if each story above the first floor is stepped back a minimum of five (5) feet from the floor below it.

5.2.2 **Side Setbacks.** The side yard of each lot must be a minimum of fifteen (15) feet from the property line of the adjacent lot.

5.2.3 **Rear Setbacks**. The rear yard of each lot must be a minimum of fifteen (15) feet from the property line of the adjacent property.

5.2.4 **Setbacks from Designated Wooded Area.** All proposed construction shall minimize the disturbance of existing wooded areas.

5.2.5 **Exceptions**. The following improvements are expressly excluded from these setback restrictions:

1. Steps, walks and driveway access to the site.
2. Landscaping, including landscaped earthen berms.
3. Planters not to exceed four (4) feet in diameter or two (2) feet in height where they should interfere with visual safety at site access points.
4. Illumination.
5. Identification graphics.

5.3 DENSITY OF DEVELOPMENT

The density of development will be subject to design review by the University. It will be evaluated with the objective of creating a campus-like environment. A floor area ratio (FAR) of .25 will be used as a general guideline for proposed projects, computed as follows:

$$\text{Floor Area Ratio} = \frac{\text{Gross Building Area (all floors)}}{\text{Total Site Area}}$$

This ratio may be changed for a particular project by the Design Review Committee with the approval of the DPW.

5.4 MINIMUM OPEN SPACE AND LANDSCAPED AREAS

The amount of undeveloped open space and developed landscaped areas (including plazas or similar type areas) will be subject to design review by the University and the DPW. Landscape plans will be evaluated with the objective of creating a campus-like environment. As a goal, a minimum of 30% of the site (preferably 35%) should be open for landscaping and, therefore, should not be covered by buildings or paving for access, circulation, loading and parking. It could be anticipated that larger lots would exceed these goals.

5.5 ARCHITECTURAL CONSIDERATIONS

5.5.1 **Size.** Building height will be subject to design review by the University and the DPW and evaluated in concert with the overall architectural character of each building and the relationship of the building to existing and proposed development within the Technology Park.

5.5.2 **Siting.** Buildings that have many off-post visitors should be designed with entry courts.

5.5.3 **Service Areas and Screening.** Service areas shall be located to avoid direct view from entry courtyards or access roads. Screening of service areas is required and should be accomplished with materials to match the building or with a cedar fence between 5' and 6' tall.

Major systems requiring large components (e.g., air-conditioning, storage tanks, etc.) should be located in mechanical rooms within the buildings. Alternatives, including those required to meet mandated health and safety standards, might include an exterior location at, or depressed below, ground level, as necessary to limit heights to a maximum eight feet overall above grade, with screening on all sides. Surface-mounted roof equipment should not be considered, unless screening is low profile and completely integral with the overall architectural design of the building.

Vertical roof projections, such as vents, stacks or roof-mounted equipment must be organized and screened in a manner integral to the architectural form of the building. Where screening is clearly inappropriate, stacks, etc., shall be painted to match the color of the roof.

Of particular concern is the complete concealment from visual impact –from on or off the site – of: 1) storage tanks, 2) air conditioning or other mechanical equipment, 3) duct work, 4) cooling towers, 5) generators, 6) transformers, 7) all but small flues and vents, 8) temporary buildings and 9) any other non-architectural appurtenance

5.5.4 **Surfaces.** The architectural standard for the Technology Park at Fort Leonard Wood is red brick with special pattering and bonding. Accent materials may

consist of split faced block units, limestone of EIFS. All brick shall be the same size, color and texture. Sloped roofs are the standard roofing design for the Technology Park. Sloped roofs shall be factory finished bronze metal. All trim elements shall be factory finished and maintenance free. All exterior ferrous metal shall be painted. Concrete should not be painted. All elevations shall have detailing to provide relief from large plain surfaces. Glass windows and detailing surrounding the openings are preferable to blank walls. Upon review and acceptance by the design review committee, buildings greater than 25,000 square feet in gross area may be constructed utilizing alternative materials and roofing designs. Prefabricated buildings or similar "stock" structures are not acceptable.

5.5.5 **Scale.** New construction next to adjacent buildings should be of compatible scale.

5.5.6 **Style.** The Architectural character of each proposed building or structure shall be contemporary, rather than traditional in style, e.g., gothic or colonial will not be permitted. Architectural designs will be evaluated in terms of the sensitive integration of form, textures and colors with the particular landscape and topographical character of each site and adjacent site.

5.5.7 **Auxiliary Buildings.** Mechanical equipment and auxiliary buildings, if otherwise acceptable, should not be located within the building setback lines. Proper spacing for landscaping is important. Auxiliary building design shall be correlated with design of main building(s). Metal prefabricated or similar "stock" structures are not acceptable. Portable storage containers may be considered on a temporary basis only.

5.6 UTILITIES

5.6.1 **Underground Utilities.** Water mains, sanitary sewers, gas mains, electric and telecommunications service will be located underground in the street right-of-way or easements provided in the open space system and either adjacent to or within the lot area.

5.6.2 **Utility Contacts.** The site user must coordinate hookups with the utility companies. The utility contacts responsible for coordinating development in the Technology Park area:

Water and Sanitary Sewers: Operations Branch, DPW, 573-596-0946

Electric and Telecommunications: Park Management Office: 573-364-8570

5.6.3 **Responsibility for Damage to Utilities.** The site user is responsible for utility location, for prompt and proper repair of damages caused by his project work, and for all work, coordination and payment for the repair, movement or alteration of any portion of the existing Technology Park infrastructure. The site user shall obtain a Digging Permit, FLW Form 364, from the DPW, 573-596-1790.

5.7 PARKING AND LOADING AREAS

5.7.1 **Parking Ratios.** The number of acceptable parking spaces and loading spaces per building will be approved by the University and the DPW on an individual basis. All parking, loading and unloading areas must be sufficient to serve the activities being conducted on the parcel. If parking requirements increase as a result of a change in use or in number of employees, additional off-street parking shall be provided to satisfy the intent of this section. However, general minimum guidelines are as follows:

1. Three (3) spaces per 1,000 s.f. of gross building area (GBA) for service center/high tech buildings.

2. Four (4) spaces per 1,000 s.f. of GBA for office buildings.

3. Four and one-half (4.5) spaces per 1,000 s.f. of GBA for retail/commercial buildings.

In cases where activities cannot be classified in the categories listed above, parking will be calculated on the following basis:

1. One parking space for 1.5 general office, manufacturing, technical or research persons.

2. One parking space for each management person.

3. One visitor space per ten employees.

5.7.2 **Location of Parking and Loading Areas**. Parking and loading will not be permitted on adjacent streets. Each site will provide adequate off-street parking for employees, visitors and company vehicles. Parking areas should be located at the sides or rear of building. However, where appropriate, parking may be allowed in the front of the building if set back a minimum of fifteen (15) feet from public street right-of-way and if landscaping provisions are made to screen parking from view from street.

Service areas should be located at rear or side of a building and should allow for easy access, while minimizing travel through parking areas or access drives.

5.7.3 **Screening.** Parking and service areas should be screened from view from any adjacent property, street or public way by use of earth berms, landscape plants, suitable fencing or designs combining these elements.

5.7.4 **Layout of Parking Areas.** Parking areas must be designed and landscaped so as to break up the monotony of a single large paved area, and to provide for stacking plowed snow. All contiguous open parking area will exceed one-half acre without being subdivided with islands containing trees and other landscape materials, using a minimum ratio of one (1) 180 square foot planting area per 20 parking spaces. The following additional criteria should be applied to the layout of parking areas:

1. All parking areas and drives shall be paved with concrete, asphalt, brick or other approved materials, have a concrete curb, and be properly marked. The top of curbs shall be at natural grade.

2. No parking will be permitted closer than 10 feet to a building.

3. Lighting of parking and walkways is to be done in a manner such that there is minimal glare. Indirect methods of illumination that highlight the structures and landscape elements, such as up lighting or down lighting of trees, light washes across building facades and indirect source luminaries are recommended. (Lighting requirements are in Section 5.12).

4. Roadways accessing parking areas should be separated from internal drives and parking lots using landscaped areas, raised walls, or other visual dividers.

5. Adequate loading, trash storage and maneuvering areas will be provided for each building and separated from the parking areas with appropriate screening or planting.

6. The suggested parking module is at least 180 square feet per space (10' x 18' or 9' x 20'), with aisles of 24 feet for a 90-degree system. An equivalent layout as appropriate to site conditions and landscaping concept may be acceptable.

7. The number of access drives per building is subject to design review, with the intent to minimize the number of drives provided.

8. Disabled parking shall be located as near to the main building entrance as possible. The number and width of disabled parking spaces should meet the ADA Accessibility Guidelines for cars and vans.

5.8 DISABLED ACCESSIBILITY

All sites and buildings should be accessible to disabled individuals in compliance with ADA Accessibility Guidelines for new buildings.

5.9 SIGNS

5.9.1 **General.** All exterior signs will be subject to design review and must be designed in keeping with the architectural character of the Technology Park.

5.9.2 **Technology Park Identification Signs.** One identification sign may be erected at each main entrance to the park. The signs will be constructed of brick with precast concrete caps. Signs will be approx. 5' high x 16' long with cast aluminum letters (style: Helvetica). Continuous exterior lighting will be provided. No flashing, oscillating or otherwise moving elements will be permitted.

In addition to an identification sign, a directory sign may be erected at each main entrance to the park. The sign will use exterior lighting. The sign will be located such that motorists or pedestrians stopping to read the sign will not impede traffic.

5.9.3 **Site Identification Signs.** One identification sign may be erected at the

entrance to each lot in an area to be approved by the University and the DPW. The design, format and materials of the sign will be consistent with the lot design and building architecture. No flashing or moving elements shall be permitted. All illuminated signs shall be subject to approval.

5.9.4 **Directional Traffic and Parking Control Signs.** Any directional, traffic or parking control signs on the lot will be reviewed by the University and the DPW with the intent that the signs will be restricted to the minimum necessary, will be visually unobtrusive and will be consistent with other Technology Park signage in format, lettering and coloring. Traffic and parking signs shall use the international pictographic system, as modified for consistency with the design concept.

5.9.5 **Construction Signs.** One construction sign denoting the architect, engineer, contractor and other related professionals will be permitted on a lot upon the commencement of construction. Maximum size shall be 96 s.f. (8.92 square meters), and shall not be more than 12' (3.66 meters) above ground level. Location of the construction sign is to be shown on the site plan and approved by the University and the DPW.

5.9.6 **Limitations.** Signs containing moving devices, flashing lights, or banners are prohibited. No portable or temporary signs, other than construction signs will be allowed.

5.9.7 **Flags.** Flags may be installed only as follows: The flag of the USA; State of Missouri; official government or corporate seal.

5.10 STORM DRAINAGE

On-site storm-water drainage and/or detention plans will be subject to design review and must be approved by the University and the DPW.

5.11 LANDSCAPE DESIGN

5.11.1 **General Design Guidelines.** Landscape designs should adhere to the following criteria:

1. All unpaved ground (excluding vacant lots) will be landscaped in a manner that is complementary to the architecture, provides the required screening and forms an attractive transition to the natural landscape features of the site. Landscaping will consist of an effective combination of street trees, trees, grass, ground cover and shrubs.

2. Landscape elements shall relate to architectural design elements. Landscape materials are considered to be a strong unifying element and, therefore, should reflect the physical, functional and aesthetic qualities of the site. A naturalistic scheme is preferred over a formal layout.

3. Landscape treatment shall not interfere with sight line requirements at street or driveway intersections.

4. Use of plants known to produce materials that interfere with modern mechanical devises (such as cottonwood or sycamore) or which cause other maintenance problems should be avoided. Deciduous hardwoods, native to this area, are preferred for large or tall tree needs.

5.11.2 **Preservation of Existing Vegetation.** A premium will be placed on preservation of natural vegetative cover. It is desirable to preserve the intrinsic environmental values and continuity of existing mature native tree cover wherever possible. Disturbance of existing vegetation during construction should be limited to the immediate construction area to minimize erosion, destruction of wildlife habitat or damage to existing trees, and ground cover.

5.11.3 **Lot Grading and Erosion Control.** The plan for lot grading and erosion control should take into consideration the following criteria:

1. Grades, berms, channels and swales should be an integral part of the grading and paving design.

2. Sediment-control provisions should be incorporated in the planning or preliminary engineering stage of all projects. These erosion and siltation-control measures must be approved and in place before construction can begin. Landscaping plans will incorporate provisions for erosion control on all graded sites that will remain vacant prior to building construction.

3. In all cases, the smallest practical area of land should be exposed at any one time during development or construction, and exposed soil should be replanted at the earliest possible date. Erosion and siltation-control devices should be regularly inspected and maintained during development.

4. Where fill is necessary to attain the approved finish grade of any lot in the Technology Park, it shall be free of waste materials and shall not contain noxious materials that will give off odors of any kind.

5. No topsoil shall be allowed to be stripped from any lot within the Technology Park. Topsoil shall be stripped, stockpiled on the site and redistributed in landscaped areas before seeding and planting.

5.12 SITE LIGHTING

5.12.1 **General.** Site lighting should create safe lighting conditions for visibility, accent important elements of the landscape, create clear visual nighttime order to the site, and distinguish between various site uses such as roads, parking, walkways, recreation spaces, etc.

5.12.2 **Type of Lighting.** Color corrected lighting, mercury vapor, metal halide, or incandescent light sources are to be used in “people oriented” places – plazas, walks, etc. Well-designed soft wash light of buildings is permitted.

5.12.3 **Minimum Lighting Requirements.** The minimum light levels accepted are the following:

Building entrances	-	5 FC (foot candles)
Collector roads/drives	-	1 FC
Walks	-	1 FC
Parking areas	-	0.5 FC

All wiring for lighting shall be underground.

5.13 STORAGE AREAS AND FENCES

No outside storage or operations of any kind will be permitted in any lot area unless properly screened. Screening must be approved by the University and the DPW. All fire and hazard regulations must be followed regarding inside and outside storage.

Screening fences, walls and vegetative buffers, at mature height, shall be at least 6' high or rise 2' above material or equipment being stored, whichever is greater. If vegetation materials are used, they must provide total visual screening. In no location on the site, may the tenant utilize an open-mesh chain-link fence. Storage or materials of 8' in height or more must be screened by a wall built of similar material to those of the building. The placement of all fences and the design and materials utilized shall be subject to the approval of the University and the DPW.

6.0 IMPLEMENTATION

6.1 MAINTENANCE AGREEMENTS

In order to ensure that the high quality of development planned for the Technology Park is achieved, the University and Fort Leonard Wood retains the following rights:

1. The University shall have the right to maintain all designed common areas and roadways, and, for this purpose, to enter into contracts for maintenance and replacement of landscaping, snow removal, and the repair of improvements within the common areas. The University shall also have the right to enter into contracts for trash collection, fire protection, security, and other services that it deems beneficial to all tenants in the development.

2. The University shall bill a pro-rata share of the cost of such services to the site user, plus an administrative service fee of fifteen percent (15%) of the amount billed to offset the cost incurred in negotiating and administering these service contracts.

3. Each site user may contract with the University's service contractor(s) for landscape, snow removal and other maintenance services.

4. In the event that the obligations for meeting the standards of these guidelines are not kept by the site user, the University shall have the right, thirty (30) days after written notice of intent to do so has been mailed to the site user, to enter the property, perform the required maintenance and upgrading, including, but not limited to, replacement of dying landscape materials, building repairs, removal of non-conforming signs and lighting standards. The University may assess the site user for the cost of such work on the basis described in paragraph 2 (above).

5. Unpaid financial obligations of the site user with respect to maintenance charges shall become a lien on the real and personal property of the site user within the leasehold.

6.2 RIGHTS-OF-WAY/EASEMENTS

Each site user hereby agrees to cooperate with the University in the planning and granting of all easements necessary and reasonable for the further development of the Technology Park. In addition, all lots within the Technology Park shall dedicate a 15-foot utility easement in favor of the Technology Park, along all property lines.

6.3 GENERAL MAINTENANCE BY SITE USER

Each site user shall at all times keep his lot, buildings and improvements in a safe, clean, neat and sanitary condition and shall comply with all laws, ordinances and regulations pertaining to health and safety. Each site user shall provide for the timely mowing of lawn areas, as well as removal of trash and rubbish from his lot.

During construction, it shall be the responsibility of each site user to ensure that, while improvements are under construction, lots, common roadways and common areas are kept free of unsightly accumulations of rubbish and scrap materials; that construction materials, trailers and the like are kept in a neat and orderly manner; and roads are free of debris, mud and other potential road hazards.

7.0 VARIANCE

The Design Review Committee and the DPW may modify or authorize variance to all provisions of these Protective Covenants when the following circumstances apply:

1. When the strict application of requirements in these Protective Covenants would impose unforeseen practical difficulties or particular hardship.

2. The granting of a variance will not be detrimental to the interest of the owner and the tenants of the Technology Park.

In granting variances the Design Review Committee and the DPW may require such conditions, as in their judgment, secure the obligations of these Protective Covenants.

The University is responsible for coordination with Department of the Army, as necessary, for clarification, exceptions, and compliance with Army requirements.