INTRODUCTION

This district section is one of ten portions of the AESTHETIC GUIDELINES FOR CAMPUS DEVELOPMENT of the University of Maryland and focuses on issues particular to the district. Descriptions of the overall Campus, University-wide issue and solution discussions, and Urban Design, Landscape Architecture and Architecture principles are included in the first section, entitled CAMPUS; it is intended to be used in concert with this volume. Where topics are shared by adjacent districts, such as at district edges, those district sections should be referenced for supplemental information.

AESTHETIC GUIDELINES FOR CAMPUS DEVELOPMENT

In 10 volumes:
- Campus
- East District
- Golf Course District
- Historic Core District
- North District
- Northeast District
- Northwest District
- Outlying Properties
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Summary
**PROLOGUE**

From the continuous façade of the Physics, Mathematics and Engineering buildings northwards, engineering and scientific disciplines, including agricultural interests which recall the origins of the Campus, fill this district. Open public space is limited, and sidewalks hug roadways. During class-hours, the area is densely populated and traffic from Paint Branch and Stadium drives adds to the congestion. In contrast to the bustling pavement, Paint Branch and Campus creeks provide a quiet, natural refuge.

**DISTRICT DEFINITION**

**DESCRIPTION**

The Northeast District possesses the most 'urban' character of any of the districts: diverse structures are grouped closely together within a nine-square-grid street pattern (fig. ne-5b). Narrow sidewalks are located along the streets, and urban space is composed of small plazas and courtyards, compared to the more-generous lawns and quadrangles in the other districts. Paint Branch Drive bisects the district and is a heavily-used traffic connector between Metzerott Road / University Boulevard and Paint Branch Parkway / Baltimore Avenue. The terrain is generally flat, gently sloping towards the adjacent creeks. Due to the nature of activities within the facilities, the buildings solely house academic and research functions.

**BOUNDARIES** (fig. ne-5e)

- The **NORTH DISTRICT** (Campus Creek) on the North;
- Properties bordering the University along Paint Branch Creek and Baltimore Avenue / US Route 1 on the East;
- The **HISTORIC CORE DISTRICT** (Campus Drive) on the South;
- The **NORTHWEST DISTRICT** (Regents Drive) on the West.

**DISTRICT BUILDING TYPES**

- Structures within the **NORTH EAST DISTRICT** are primarily one type: academic buildings.

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*æsthetic guidelines for campus development*
EXISTING AERIAL VIEW
aesthetic guidelines for campus development

fig. ne-3: rendering of northeast district in 2020

NE-3
DISTRICT DEFINITION

ADJACENT CONTRIBUTING BUILDINGS & FEATURES

- Plant Sciences Building (036)
- The Cambridge Residential Community (096-99)
- The Campus Farm (102-119)
- The Geology Building (237)
- The Engineering Intramural Fields along Campus Drive, Founders' Gate (295), the "M" traffic circle; Memorial Chapel Steeple is visible in the distance
- The Comcast Center (360)
- College Park Fire Station (802)
- Campus Creek Natural Area
- Paint Branch Creek Natural Area
In contrast with other portions of the Campus, the NORTH EAST DISTRICT has the most “urban” or “downtown” feel. Concentrated Practical urban typology (buildings arranged in groups on grided blocks and located adjacent to the street edge with little front yard space). Some buildings form definite edges (especially the former Glenn Martin Institute / Mathematics – Engineering building complex), monumental primary entrances punctuate some façades, and the Mathematics Dome and proposed Kim Building tower serve as landmark structures; Regents Drive, connecting the Comcast Center with the HISTORIC CORE DISTRICT and shared with the NORTHWEST DISTRICT, fails to meet its potential, both as a processional route and as a defining and welcoming edge. The north and east district boundaries are non-rectilinear, in that they follow the streambed: buildings located alongside them do not make full use of this resource. Within the nine-square grid, front- and back-yards are underdeveloped or non-existent and pedestrian circulation regularly conflicts with service. East-west streets offer off-campus views, the exaggerated arches of the COLLEGE PARK FIRE STATION (802) on Route 1 (fig. ne-4g), viewed through the C-SIC bridge portal from Stadium Drive, being the most dramatic. The Comcast Center and Cambridge Community overlook the District. The JH Kim Building (fig. ne-7b), with its plaza and bosk, receives the axis from Founders’ Gate and shifts it to the proposed pedestrian boulevard through the tower / entry and internal Nolli sequence (fig. ne-16e). As indicated in the FACILITIES MASTER PLAN 2001-2020 (FMP), a site adjacent to Founders’ Gate should continue the district edge of the Engineering Building, assist in forming the district gateway straddling Paint Branch Drive, and address Baltimore Avenue without upstaging the domed entry of the Mathematics Building (fig. ne-15d). Axial (fig. ne-6e) Nolli connections through buildings should be strengthened.
Pedestrian linkages are not strong, sidewalks are narrow, bicycle paths non-existent, and roads unsafe for both automobiles and pedestrians (fig. ne-17a-d). Pedestrian movement should be enhanced throughout the District, especially along the streetscape and in the Nolli sequence leading from the west entry of the Engineering Building through the Kim Building and the pedestrian corridor to the pond and Campus Creek (fig. ne-6e). Paint Branch Drive serves as the Main Street for the District; gateways at Campus Drive and Campus Creek should be established and the routes meeting at the Kim Building Plaza should be emphasized. The intersection of Stadium and Paint Branch drives at the Kim Building Plaza deserves special treatment for the ground plane and the buildings fronting it. Regents Drive, along the northern edge of this district, axially connects the COMCAST CENTER (360) with the "M" traffic circle and the MEMORIAL CHAPEL (009) steeple, and the bend in the processional route at the CAMPUS FARM should be straightened (fig. ne-6e). Further discussion is included in the STREETS AND WALKS article. The relationship between the Animal Sciences and CAMPUS FARM complexes requires study. The North Gate Park proposal east of Paint Branch Creek will connect the Campus and District with the City of College Park along the Route 1 Corridor.

CONTRIBUTING FEATURES

- The Physics – Mathematics Engineering Building complex, with dome and linear front facade
- The Animal Sciences / Agricultural Engineering Building complex
- The nine-square grid pattern of district organization (fig. ne-5e).
**Aesthetic Guidelines for Campus Development**

**Northeast District**

**Visual Axes**

- **NE-7c** axis: stadium drive - eastward view
- **NE-7a** axis: paint branch drive to kim building
- **NE-7b** axis: paint branch dr. to kim building entry
- **NE-7e** landmarks, spaces & visual axis
- **NE-7d** axis: stadium dr. through c-sic bridge
- **NE-7f** axis: farm drive through animal sciences
- **NE-7g** axis: central animal resources facility

**Non-Contributing Features**

**Neutral**
- The Computer Science Instructional Center (C-SIC) Plaza

**Unsatisfactory**
- The obstruction of the axial / visual connection beneath the C-SIC bridge by mechanical equipment structures
- Buildings with no clear relation to adjacent context
- Surface parking lots
- The closing of Farm Drive by the Animal Sciences / Agricultural Engineering Building and obstruction of axial views by low-canopy trees
- Unscrened service areas adjacent to major building entrances / competing with pedestrian routes and vistas
- Central Animal Resources Facility building orientation, location, and materials palette

**Underdeveloped**
- Regents Drive processional route and district edge
- Paint Branch Drive district gateways and road-sidewalk condition
- The Mathematics–Engineering Building courtyards
- The Animal Sciences Agricultural Engineering Building courtyard and arena
- Campus Creek district edge
- Paint Branch district edge

**Visual Axiom**

- Existing visual axis
- Proposed visual axis
- Unobstructed visual axis
- Unscreened service areas
- Existing building to remain
- Building to be removed
- Existing building conversion
- Proposed building construction
- Campus boundary
- District boundary
- Existing motorized vehicles
- Existing pedestrian
- Proposed motorized vehicles
- Proposed pedestrian

**Northeast District**

**Regents Drive**

**Central Animal Resources Facility**

**Animal Sciences / Agricultural Engineering Building**

**Mathematics – Engineering Building Courtyards**

**Campus Creek**

**Paint Branch Drive**

**Central Animal Resources Facility**

**Northeast District**
This relatively flat urban zone has few landscaped spaces and many parking lots (about 40% of the district land area). An algae-covered storm-water retention pond abuts Campus Creek, and drainage channels/potentially-designated wetlands extend southward. The natural areas of Campus and Paint Branch creeks offer respite from the hardscape common to the rest of the District, but currently are underutilized. The creeks’ 100-year flood plain encroaches into the District on the northern and eastern edges (fig. ne-8d). The terraces and plazas of the Mathematics – Engineering building complex form smaller-scale portions of the Engineering Intramural Field as well as entrances to the buildings, in the best front-yard tradition (fig. ne-8e). Many existing plazas and courtyards are not maintained or landscaped properly even though they hold considerable potential.
The amenities of court- and back-yards, though few in number, should be embellished with additional planting (for shade and color) and furnishings (to promote use by building occupants). The FMP suggests the creation and linkage of these pedestrian-accessed spaces as an antidote to the congestion of the streets. Plazas and other front-yard methods should be investigated for each building. The show-rings and courtyards of the agricultural complex should be embellished. Landscape buffers (lawns, mulched areas and trees in the parkway) should be installed separating sidewalks from streets and promoting pedestrian safety. The landscape concepts of North Gate Park should be extended across the creek to ameliorate the parking lots adjacent to Founders' Gate and behind the C-SIC and AV Williams buildings. Natural options should be studied at the Regents and Paint Branch drive gateways.
The former Glen Martin Institute – JS Toll Physics complex terraces, plazas, and passages (1954), part of the Engineering Intramural Field [Romantic]

The portion of the Engineering Intramural Fields north of Campus Drive (197x) [Romantic]

The grove of mature trees at the northeast corner of the intersection of Paint Branch and Campus drives (1940s) [Romantic]
LANDSCAPE ARCHITECTURE

NON-CONTRIBUTING FEATURES

NEUTRAL
- The Computer Science Instructional Center (C-SIC) Plaza (2002) [Contemporary]
- Paint Branch footbridge (198x) [N/A]
- The water retention pond adjacent to Campus Creek (198x) [Remnant]
- The yard between the Chemical and Nuclear Engineering and JM Patterson buildings, with helicopter (197x) [Remnant]
- Building entries along Regents Drive [Remnant]

UNSYPATHETIC
- Surface parking lots [N/A]

UNDER-DEVELOPED
- The Mathematics Building courtyard and north entrance (1954) [Remnant]
- The Engineering Classroom Building circular (north) plaza (197x) [Urban]
- The Animal Sciences / Agricultural Engineering (AS/ AE) Building courtyard (1992) [Contemporary]
- The northern region of Founders’ Gate [Remnant]
- Front yard conditions along Regents Drive [Remnant]
- Campus Creek Natural Area [Rural]
- Paint Branch Natural Area [Rural]
ARCHITECTURE

GENERAL DESCRIPTION

The academic buildings are of no one particular style or period; additions or renovations to buildings often do not correspond with the original construction or other additions. The JS Toll Physics – Mathematics – Engineering Classroom Building complex provides a strong edge to the Engineering Intramural Fields to the south, and reflects the sparse Neo-Classicism of the 1930’s. This style of red-brick, flat-roofed elongated block buildings, with simplified limestone and cast stone surrounds at major entrances, is common throughout the District and is more prevalent than in any of the other districts. Contemporary styles, especially those expressing verticality or the regional vernacular, clad the rest of the structures. Care should be exercised to prevent using inappropriate materials or design strategies for proposed structures, and existing offenders should be replaced or reclad.

The FMP proposes completion of the nine-square grid, removing surface parking to garages. New facilities will create a naturalistic pedestrian boulevard through the center of the District. The JH Kim Building, with its tower, plaza and book, will join the dome of the Mathematics Building as major landmark structures of the District. Any building proposed for the prominent site at the intersection of Campus and Paint Branch drives should retain the grove of mature trees and fulfill the urban design challenges listed above in addition to meeting the building requirements and program. Expansion of SCUB IV and replacement / expansion of the Engineering Buildings will provide a solid edge along Paint Branch and Stadium drives: front-, court- and back-yard spaces should be co-ordinated into building programs and construction. The addition to the A.V. Williams Building will have the opportunity to provide a prominent façade on that structure and form a major edge of the Kim Building plaza. Other expansions and renovations should negotiate and contribute to the context of both district buildings and spaces.
Contributing Buildings

Significant
- Mathematics Building (084 – 1954; additions 1966, 1982) [originally the Glenn L. Martin Institute of Technology; Neo-Classical Revival + Contemporary addition]

Important
- Glenn Martin Hall / Engineering Classroom Building (088 – 1950; renovated 1985) [Stripped Classic (main façades) + Modernist (rear façade & additions)]

Non-Contributing Buildings

Neutral
- JM Patterson Building (083 – 1954; renovated 1978) [Neo-Classical Revival + Contemporary addition]
- Engineering Laboratory Building (089 – 1950; renovated 1974) [Modernist + minimal Contemporary addition]
- Chemical & Nuclear Engineering Building (090 – 1950; renovated 1974) [Modernist]
- Bio-chemistry Building, Chemistry Building (091 – 1952; additions 1975, 2003) [Striped Classic + minimal Contemporary addition]
- Potomac Building (092 – 1955; renovated 1991) [Neo-Colonial]
- Animal Sciences / Agricultural Engineering Building + Poultry Science Building (142 – 1970; addition 1988, 1992) [minimal + Contemporary major addition]
- Technology Advancement Program Building (387 – 1998) [Contemporary]
- Satellite Central Utilities Building (SCUB) # IV (392 – 2000) [Contemporary]

Unsympathetic
- Central Animal Resources Facility (087 – 1953) [mininal]
- Garage (095 – 1955; renovated 1991) [N/A]
- Classroom Building (106 – 1967) [minimal; N/A]
- AV Williams Building (115 – 195X) [Contemporary]
- Manufacturing Building (148 – 1992), Neutral Buoyancy Research Building (382 – 1990) [minimal; Prefabricated building]
- Agricultural / Life Science Surge Building (296 – 1991) [minimal Modernist]
- Computer Sciences Instructional Center (406 – 2002) [Contemporary]
ISSUES & OPPORTUNITIES

The FMP proposes to reinforce the district’s urban character by replacing surface parking lots and misaligned buildings with new structures, completing the nine-square grid. Streetscape improvements will separate pedestrians from vehicular traffic. The northern portion of Regents Drive will be straightened: the Comcast Center – “M” Circle processional route will become more direct. Relocate the Campus Farm as outlined in the Northwest District recommendations.

PROPOSALS AND SOLUTIONS: URBAN DESIGN AND LANDSCAPE ARCHITECTURE

- Develop gateway opportunities at the Paint Branch and Campus drives intersection (fig. ne-15a) including plantings and park structures as well as adjacent building masses.
- The intersection of Farm and Regents drives (fig. ne-15b) represents an opportunity to create a “gateway” connecting the Northeast and Northwest districts; the physical roadway is terminated and a pedestrian corridor extends through the district to Paint Branch Creek.
- The exterior arena and courtyard of the Animal Sciences Building (fig. ne-15f) should be embellished and maintained to fulfill its role as an important community asset.
- The low-branching trees obscuring the view along the Farm Drive axis west of the Animal Sciences Building (figs. ne-15h) should be pruned or replaced with higher-growing specimens.
- Pedestrian passage should be strengthened through wide sidewalks separated by a landscape strip from the street at Regents Drive.
Proposed structures should be sensitive to the ecological condition; develop Back Yard opportunities for facilities along the Campus Creek edge (fig. ne-16e).

Revitalization of the Paint Branch Creek (fig. ne-16f,g,h) is scheduled as part of the FMP recommendations; North Gate Park (directly across from the COLLEGE PARK FIRE STATION) is currently in the design and funding phases. Part of the reclamation process should include the development of backyard opportunities for facilities bordering this edge, and strengthening connections between campus and the City of College Park and the bikeway along the Paint Branch.

The implementation of the JH Kim Building plaza and bosk (figs. ne-17e) will create an important centering element at the heart of the District along the district’s Main Street.
Aesthetic guidelines for campus development

**Issues: Urban Design & Landscape Architecture**

- Fig. ne-17a: Low trees obstruct view: stadium drive
- Fig. ne-17b: Kim building construction
- Fig. ne-17c: Kim building preliminary site plan
- Fig. ne-17d: Proposed Kim bldg as center of N.E. district
- Fig. ne-17e: Kim building preliminary site plan
- Fig. ne-17f: Proposed Kim building to south of engineering building
- Fig. ne-17g: Kim building construction
- Fig. ne-17h: Paint branch drive
- ENE-17 northeast district
- NE-17 northeast district
Several important axial relationships exist in this District.

- **Regents Drive** (fig. ne-17a) from the "M" traffic circle to the Comcast Center.
- **Paint Branch Drive** (fig. ne-17g) from the **North District** culminating in the façade of the proposed addition to the Engineering Building.
- **Paint Branch Drive** (fig. ne-17h) from Campus Drive culminating at the drum of the JH Kim Building.
- A proposed pedestrian corridor (fig. ne-18e) between proposed buildings culminating in the JH Kim Building.
- **Paint Branch Drive** (fig. ne-17h) from Campus Drive culminating at the drum of the JH Kim Building.
- A proposed pedestrian corridor (fig. ne-18e) between proposed buildings culminating in the JH Kim Building.
- **Stadium Drive** (fig. ne-18a) through bridge of C-SIC Building to College Park Fire Station.
- **Farm Drive** (fig. ne-18b) through AS/AE Building.

These axes should be enhanced and re-enforced through:

- Creating building setbacks and raise the tree canopy to promote a clear line of vision along the axes.
- Allow for transparency wherever possible (use portals and gateways instead of opaque building masses).
- Strengthen pedestrian paths along these axes.
- Site iconographic building elements at the ends of these axes.
- Removal of mechanical units and screens along visual corridor at AV Williams - C-SIC buildings.
Proposals and Solutions: Architecture

- The Kim Building (figs. ne-17e) occupies a central position in the district; axes lead to it, the drum / tower is iconic, and the front yard composed of bosh and plaza will become a convenient strategic meeting place for all constituents of the District. Passage through the building should be encouraged through use of elements of transparency at building entrances on all four sides connecting to pedestrian corridors.

- A building site at the intersection of Baltimores Avenue / US Route 1 and Campus Drive (figs. ne-19a, b, c & d) is prominent, part of the university gateway and the Engineering Intramural Field at the Founders' Gate. Flood plane and tree-conservation issues prevent construction of structures streetside; therefore a primary building entrance could face the Engineering Intramural Fields or the northern portions of the site. Front yards can be developed on the northwest and south sides of proposed structures; back / court-yards are appropriate on the east side.

- Due to the research nature of the facilities in this district, the addition of residential functions should not be proposed; without 24-hour activities, other methods of security will have to be developed and maintained.

- The iconographic monumentality (the dome, pedimented portico and terraced entrances) of the Physics – Mathematics Building (fig. ne-19e) should be maintained and reinforced; develop proposed adjacent structures in harmony and visual continuity with the Glenn Martin Institute.

- Additions to existing buildings should consider context and not create the contradiction of styles evident in the competing north façades (fig. ne-19f) of the Engineering Classroom (088) and Laboratory (089) buildings and additions.

- Create covered primary entrances (figs. ne-19g,h,i) for proposed buildings, and encourage stylistically appropriate canopies for existing structures.

- Develop covered areas for secondary and service entrances (fig. ne-19).

- Flat roofs are more common than sloped roofs in this district. Use mansard screens to conceal mechanical equipment and vents, and create visual continuity with the rest of the Campus.

- Red brick in Common, English and Flemish bond patterns predominate; beige brick (fig. ne-19) at Central Animal Resources Facility (087) is not used elsewhere on Campus, and should be eliminated.

- Simplified stone, cast stone and concrete belt coursing and door surrounds (figs. ne-19 & j) are common elements in this district.

- Dominant vertical or horizontal stripping (figs. ne-19 & m) is not commonly used on campus buildings and should be avoided.

- Height of proposed buildings should be co-ordinated with adjacent structures and yards / plazas.

SUMMARY

Cogent landscape and building methods can transform blighted features into pleasant habitable spaces. The “downtown” urban character of this District should be celebrated and used to demonstrate sound Urban Design practices in reforming our urban centers. Creation of major public and semi-private spaces will enable the constituents of the Engineering and Science programs to conserve, use and be proud of their environment. The Kim Building and Plaza will become major landmarks, contributing richly to the pleasure experienced in the NORTHEAST DISTRICT. Thoughtful use of building form, landscape, artwork, and furnishings will provide effective gateways and non-graphic guides into and through the district. Diminution of traffic, reduction of congestion, and physical separation of pedestrians from vehicles through landscape means will increase safety and augment the quality of the district.