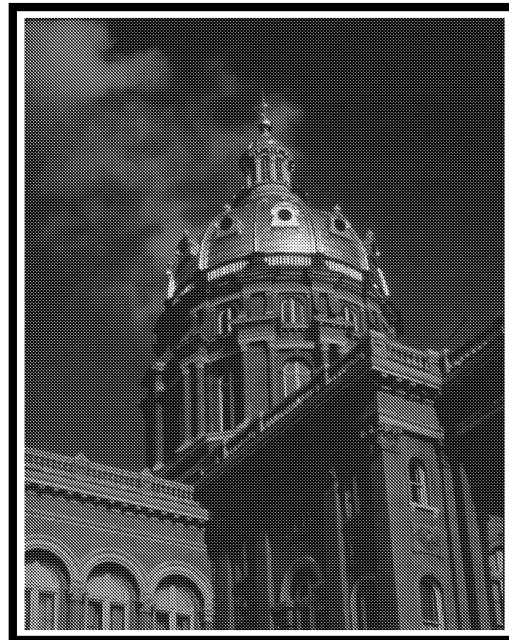


I o w a C a p i t o l C o m p l e x M a s t e r P l a n



STATE OF IOWA
DEPARTMENT OF GENERAL SERVICES
AND
CAPITOL PLANNING COMMISSION

I o w a C a p i t o l C o m p l e x
M A S T E R P L A N

ADOPTED:
APRIL 19, 2000

Prepared by:
BROOKS BORG SKILES ARCHITECTURE ENGINEERING
In association with:
ZIMMER GUNSUL FRASCA PARTNERSHIP

STATE OF IOWA
DEPARTMENT OF GENERAL SERVICES
AND
CAPITOL PLANNING COMMISSION

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Preface

Introduction

The Iowa State Legislature appropriated funds to the Department of General Services for the preparation of a master plan for physical facilities on the Iowa Capitol Complex. Funding for this plan was provided in the Transportation, Infrastructure, and Capital appropriation bill for fiscal year 1999. Brooks Borg Skiles Architecture Engineering, in association with Zimmer Gunsul Frasca Partnership, were selected by the Department as consultants to prepare this plan. SGS Group provided facilities planning and TDA Illinois, Inc. provided transportation planning. This plan has been presented to the Capitol Planning Commission for its consideration and acceptance.

What this plan is

The Iowa Capitol Complex Master Plan provides a design and strategy for the future physical development of the complex. In preparing a vision for its future, this plan considers the early development of the Capitol Complex to its present form. This plan is a resource for those making decisions concerning the restoration and preservation of existing buildings and grounds, additional buildings, landscaping, statues, fountains, and memorials. The plan is for the Capitol grounds as now defined, and as the expansion occurs.

This plan is also a resource for local jurisdictions and neighborhoods surrounding the Capitol Complex that are interested in complementary development. These interests include Des Moines Planning and Zoning Commission, Metropolitan Transit Authority, neighborhoods including East Village, Capitol Park and Capitol East, and businesses and associations such as the Des Moines Development Corporation.

What this plan is not

This plan did not study the needs of the Legislative or Judicial branches of state government. Information from studies performed by consultants for these branches is included in the plan.

The Iowa Capitol Complex Master Plan should not be construed as a directive as to what buildings, facilities and monuments shall be built. It does not direct growth, nor the provision programs.

How the Master Plan was Developed

The Department of General Services formed a consultant selection panel composed of members of the Legislative and Judicial branch staffs, the Capitol Planning Commission, and the Department of General Services. The panel interviewed several firms prior to selecting the consultants for this study.

A Steering Committee of approximately 40 individuals representing a broad cross section of people in the Capitol Complex, the surrounding neighborhoods, and area businesses was formed. The Steering Committee met regularly to review supporting data and elements of the plan as they were developed.

Committee members and consultants attended meetings to review the history of planning at the Capitol Complex and to identify the underlying design philosophies of the layout of the complex. The Masqueray Plan of 1913 was the most influential master plan of the Capitol Complex. It established the classical layout which still predominates.

Town meetings were regularly held in Des Moines to present information to interested persons and groups. All elements of the plan were presented at town meetings immediately after presentation to the Steering Committee.

All agencies of the Executive Branch were contacted to provide information on staffing levels and locations for the past six years, and projected changes during the next 20 years. The agencies identified a need to continue a moderate rate of growth. An analysis of space owned and leased by the State, combined with the needs of the Executive, Legislative and Judicial Branches, was used to identify the need for possible new buildings on the Capitol Complex.

How to use the Master Plan

This Plan contains a number of recommendations, primarily concerning land use and building locations. Decision-makers in facility planning should closely follow these recommendations.

This Plan also contains recommendations and guidelines for planning, architectural character, landscape features, parking, facility preservation, and maintenance. These recommendations have been coordinated with one-another and should generally be adhered to in all facility decisions.

This Plan includes recommendations for further studies to develop a three-part Site Development Implementation Plan. These include a landscape plan, a site amenities plan, and a monument guideline and location plan. These implementation plans should be undertaken as soon as possible and should be consistent with this Master Plan.

This Plan also includes recommendations regarding the design and construction of future buildings to meet needs identified in the planning process. These recommendations should be verified using data that is current at the time decisions are being made.

Most of the information and recommendations in this Master Plan will remain valid for many years. However, each addition and change to the Capitol Complex and its neighbors will influence future actions, so the plan should be reviewed on a regular basis and updated as needed. The Plan provides a framework and guidelines for the planning of future development in the Capitol Complex. It provides the linkage of the past through the present to the future for use of the complex.

one

The Vision

The Vision

The Capitol Building is a remarkable and magnificent statement by the State's founders of their vision for Iowa. Built at a time when statehood was still a new idea for many people, the statement made by the Capitol Building was clear and unequivocal: this State will stand and will lead for all time.

Today, that promise has been remade through painstaking restoration of the State's finest symbol. Today too, awareness has shifted to the complex of buildings and grounds that support the Capitol Building and its occupants in governing the State. The once magnificent grounds have been overlooked, and overrun by parking. The exceptional precedent for civic architecture set by the Capitol Building has been completely ignored by some of its companion buildings.

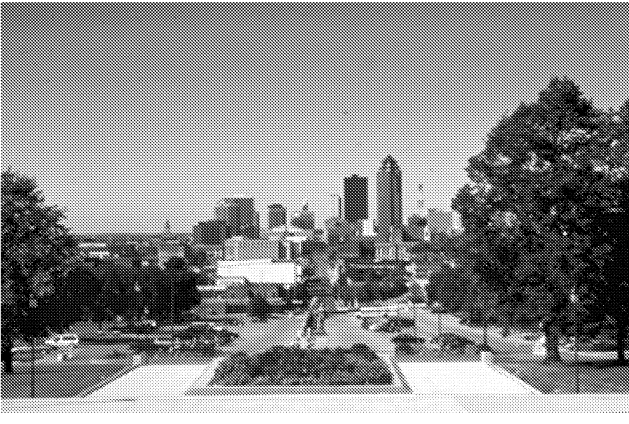
The vision set forth by this Master Plan is for a Capitol Complex that exemplifies in setting and function the dignity it embodies in spirit and purpose. Changing perspectives are evident in the jobs performed by state employees, and in the functions that the buildings of the Capitol Complex must fulfill. Revitalization of the built heritage of the past hundred years will enable government to work more effectively in the new century. Perception of the Capitol Complex, as a symbol or as the place where work proceeds on the behalf of citizens, remains vitally important.



The civic qualities of the Capitol grounds elicit feelings of pride in citizens of the state and awe in visitors to the Capitol Complex.

This vision is founded in historic precedent yet colored and substantiated by the real needs of the present and future. On one hand, it will address the economics and efficiencies of various configurations of workspace and location; on another, it will explore the relationship of the Capitol Complex to the City, as well as the internal configuration of the Capitol grounds.

These distinct visions call for community-based sponsorship of the Master Plan. A Steering Committee made up of state, local, and neighborhood representatives and public agencies brought a broad spectrum of viewpoints to the development of a vision for the Capitol Complex. Connections to downtown and the river have become tenuous and need to be reknit by drawing together the distinct visions of the Capital City and neighborhoods.



Having witnessed the growth and prosperity of the Capital City, the Capitol Complex continues to value its connections with the City of Des Moines.

Goals

The Steering Committee summarized these visions for the Capitol Complex in the following statements:

A Destination:

- A civic and urban presence in the city;
- A place that provides a sense of arrival through a sequence of events in the landscape;
- A place of gathering and celebration designed for people rather than for the storage of vehicles;

- An open and welcoming environment for citizens of the State and its employees;
- A place of civic pride that fosters a sense of ownership throughout the State;
- A place of clarity and aesthetic purpose; and
- A place of security.

A Sponsor of Connection and Interrelationship:

- Providing greater accessibility for the citizens of the State to their government;
- Attentive to adjacent neighborhoods and business communities;
- Forging public and private partnerships between the State, Capital City, and communities for growth and progress;
- Enabling efficient operations between various state agencies;
- Portraying symbolic relationship among the three core functions of government: Executive, Legislative, and Judicial;
- Extending the reach of the Capitol Complex to schools, citizens, nation, and world through enhancements in communications technology; and
- Leading preservation of the environment through sound and sustainable development planning.

An Image of Iowa:

- A place of cultural diversity;
- The food capital of the nation;
- Representative of the Iowa values of openness, friendliness, fiscal conservatism, genuineness, and pride in the work ethic;
- Efficient and economical;
- Committed to education;
- A symbol of pride and patriotism toward the state and nation;
- Beautiful in presentation; and
- Speaking to the pioneer spirit of independence and vision that built the Capitol Building.

A Vision for the Future:

- Stable, secure, optimistic, and confident in planning objectives.
- Source of inspiration for the future.

Purpose

The purpose of the Master Plan is to give form to the vision; to equip the Capitol Planning Commission with the tools it needs to guide physical improvements and new developments consistently towards fulfillment of the goals. It is a baseline against which complex proposals for action can be measured by the community and by those entrusted with decision-making. It provides a foundation for the formulation of public policy and the allocation of public resources. The Master Plan connects the visions and aspirations of the present with their realization in the future.

Background

Realization of the vision requires an understanding of issues that are rooted in past planning principles. The Master Plan builds upon these past efforts by providing a framework for action by the Capitol Planning Commission in its guidance of planning decisions. It sets forth explicit purposes and objectives and emphasizes urban design and development guidelines that make it a useful and productive guide. The Capitol Planning Commission issues regular progress reports in order to keep long-range plans up-to-date and recommends near-term actions. These efforts continue to be of utmost importance.

The Capitol Planning Commission takes the lead in overseeing project design and development. These responsibilities include:

- Providing a design context and architectural guidelines for individual projects so that each is a coordinated step toward making the Capitol a more vibrant, architecturally cohesive, and well-planned complex.
- Ensuring that future buildings contribute to the overall vision for the Capitol Complex and grounds.
- Encouraging public awareness of the Capitol Complex as a district unique in the State and an asset to the City of Des Moines.
- Shaping public space as a critical element of the urban infrastructure.
- Coordinating each new component of the public environment so that it contributes to a whole that is more than the sum of individual projects.

Community Planning Objectives

One goal of planned development is to create a Capitol Complex environment that is distinctive in civic quality and appearance, yet fully connected to the communities that surround it. This will require a broad-based advocacy originating in a vision shared by both City and State. The Master Plan acknowledges the value of community building and neighborhood interdependence, and seeks to produce a clear direction for a future that will be in tune with Des Moines aspirations. Clear and achievable objectives lay the groundwork for providing that vision.

Objectives for Planned Development:

- Preserve and enhance the dignity, beauty, and architectural integrity of the Capitol Building, other state office buildings, and the Capitol grounds.
- Rebuild those elements that constitute the public realm on the Capitol Complex: the streets, gardens, and public spaces.
- Protect, enhance, and increase the public open spaces within the Capitol Complex and City of Des Moines when deemed necessary and desirable for the improvement of the public enjoyment.
- Recognize the goals of adjacent neighborhoods and define the relationship of each to the Capitol Complex.
- Develop a compelling vision for future development in the Capitol Complex as an integral part of the development of Des Moines.
- Identify opportunities for future location of state government agencies, offices, and parking facilities in the Capitol Complex.
- Establish a flexible framework for additions to Capitol buildings that will remain in keeping with the spirit of the 1913 E.L. Masqueray Plan for the Capitol Complex.
- Reinforce connections of the Capitol Complex to its neighbors, downtown, and the Des Moines River.
- Develop circulation and formal approaches within the Capitol Complex for pedestrians, vehicles, and mass transit so that the conflicts are minimized and formal relationships between buildings and landscape are preserved.
- Protect important public views to and from the Capitol.

Approach and Concept

The Master Plan is guided by the historical context of development at the Capitol. A number of the Master Plan recommendations specifically address this context and its influence on future improvements.

- Apply garden planning principles within the Capitol Complex. The visionary design for the Capitol grounds as conceived by E.L. Masqueray distinctly acknowledged the importance of Capitol Building axes. Those axes remain relevant to all spatial relationships within the Capitol grounds and beyond.
- Treat the Capitol Complex as a destination that richly combines open spaces, cultural facilities, transportation systems, state services, and employment opportunities.
- Create connections to downtown Des Moines and the riverfront by identifying and planning Capitol approaches and key visual corridors. The plan includes guidelines for development of these approaches and visual corridors.
- Encourage a transportation strategy that will promote a strong pedestrian and transit component while providing for the needs of motorists and service traffic.

The Capitol Planning Commission strives to be cognizant of neighborhoods outside the Capitol Complex, aware of influences of each upon the other. Capitol Planning Commission staff should communicate with institutions and organizations outside its jurisdictional boundaries to avoid conflicting development efforts. Opportunities exist for the Capitol Complex to develop in conjunction with the City of Des Moines and neighborhoods of East Village, Capitol Park, and East Capitol.

Process

This Master Plan was developed through extensive contact with state and community representatives to solicit ideas, values, and goals for the Capitol Complex. Planning workshops provided legislators, state agencies, local government, neighbors, residents, and business leaders the opportunity to be involved in the planning process as well as provide guidance to the consultants. Carefully targeted conversations brought to surface the priorities among potential improvements. Regular presentations to the Steering Committee introduced coherent and relevant visions from which 10- and 20-year objectives were derived for the Capitol Complex. The result is an ambitious but realistic plan. Participants can be expected to have a vital role in the implementation of planning recommendations.

Organization of the Plan

This document begins with a description of the historical development and past planning efforts of the Capitol, and current visions of the neighborhoods. It then discusses the component parts of the Capitol Complex, where the vision will be applied to specific framework elements.

two

Principal Influences on the Plan

Historical Development



The history of planning at the Capitol Complex is nearly as rich as the civic art of the Capitol Building. Part of the legacy of these important plans survives; much more has been lost. After recent restoration, the Capitol Building has reclaimed its architectural preeminence. This, together with a complementary and essential restoration of the grounds, sets the course for planning the needs of the new century. If we succeed, the Capitol Building and grounds will again become a popular place where young and old learn what it means to be an Iowan.

Profoundly visionary planning has guided the physical form of the Capitol grounds and yet the harsh realities of accommodating the automobile have overtaken efforts to maintain the architectural heritage of the Capitol.



Relocation of the Capitol

The movement of American people west carried with it the successive locations of Iowa's seat of government. First established as a territorial capitol in Burlington, the seat of government moved to Iowa City in 1840, where Iowa made the transition to statehood. The Old Stone Capitol now serves the University of Iowa. With continued westward expansion, the endeavor for a more central location suitable for the support and organization of early settlers commenced with an official decision in 1846 to relocate the Capitol. The City of Des Moines, strategically located between the Mississippi and the Missouri rivers, received the great honor of being conferred the Capital City. The legacy of the first State Capitol in Iowa City as an icon for Iowa continues ever stronger in the present embodiment of the Capitol Building in the City of Des Moines today.

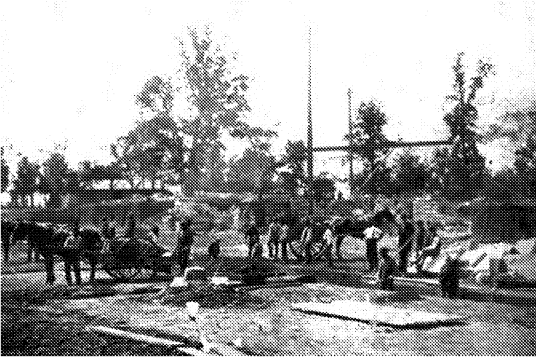


The concept and physical form of government has long been an important legacy for the people of Iowa. The present State Capitol Building is the culmination of this vision. (Top: Territorial Capitol, Burlington; middle: Old Stone Capitol, Iowa City; bottom: Old Brick Capitol, Des Moines.)

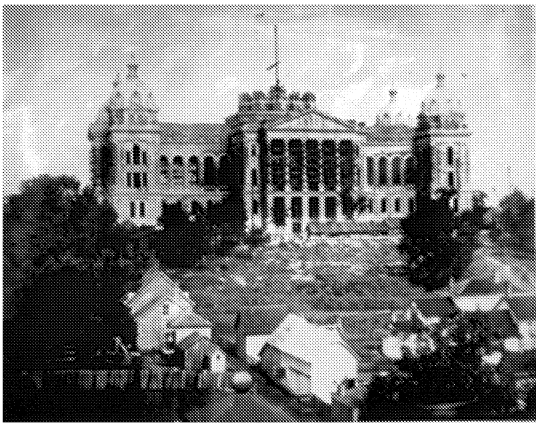
A donation of 9½ acres by Wilson Alexander Scott for the Capitol effort secured a site for the Capitol Building. In the short term, citizens of Des Moines enabled the construction of a temporary Capitol, now affectionately termed the Old Brick Capitol, on land just south of the present Capitol Building. The Old Brick Capitol supported the affairs of the state while planning proceeded for the Capitol Building. The Old Brick Capitol would serve Iowa for almost three decades until its destruction by fire in 1892.

New Capitol Building

In 1870, a Capitol commission designated John C. Cochrane and A.H. Piquenard architects of the Capitol Building. The architects had the impressive task of building a fitting home for a young state government and for a prideful and spirited pioneering community.

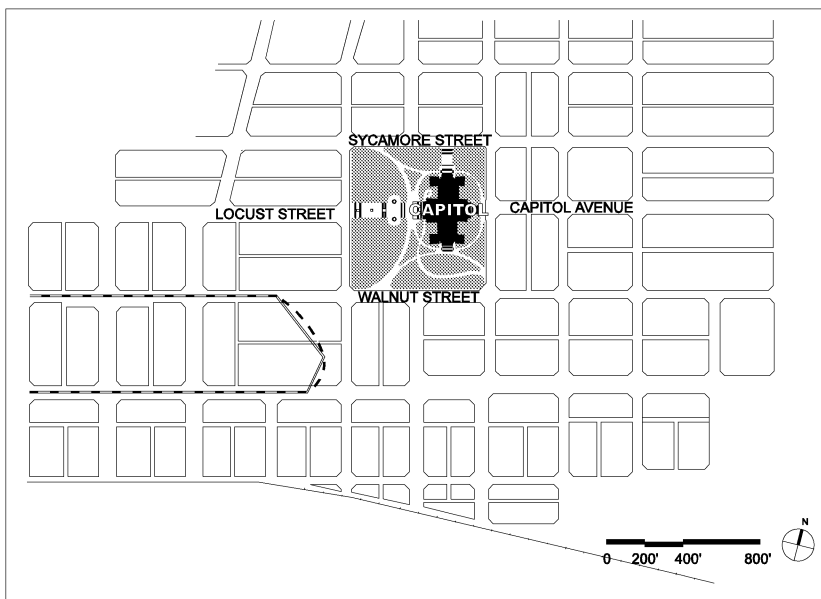


The project's first phase saw a setback with the failure of the first cornerstone laid in 1871, which succumbed to the moisture of a severe winter. Building resumed two years later and would continue under the successive guidance of Piquenard and his assistants M.E. Bell and W.F. Hackney. The General Assembly was in session in 1884, the governor took office in 1885, and the Supreme Court room was dedicated in 1886.

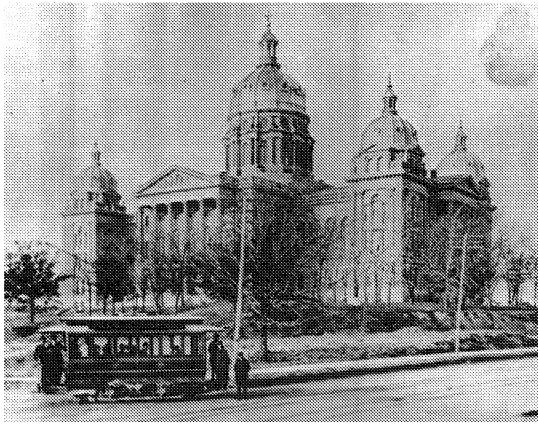


In keeping with the sentiment of the time, the design of the Capitol Building drew inspiration from the nation's Capitol and from classical models for a new expression of American civic identity. Piquenard's travels to Europe and observations of European structures may have motivated his gracious massing of the Capitol Building. He and Bell also found inspiration from the dome of Saint Peter's Cathedral in Rome. The Iowa State Capitol Building bears a magnificent central dome clad in 23 carat gold. Four smaller domes mark the four corners of the Capitol Building. The command of the golden dome in the landscape has become a symbol for Iowa's seat of government, and the splendor of interior ornament is another source of pride.

The building effort represents the aspirations of Iowa's people.



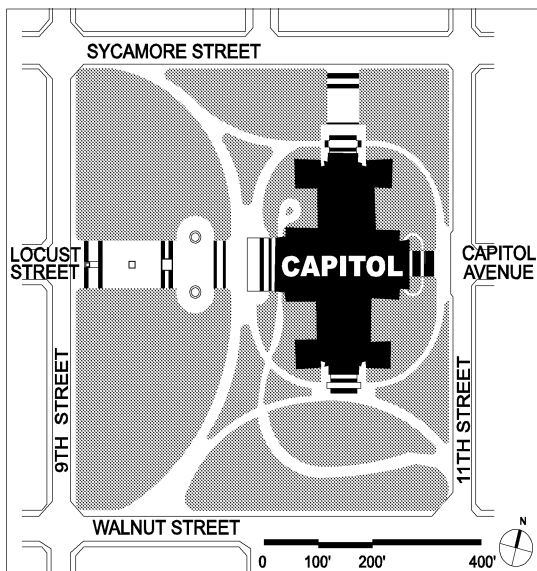
1884 map of Capitol Building and grounds.



A streetcar allowed easy connection between the West Mall and downtown Walnut Street via Court Avenue. Restoring connections to downtown is important to Capitol planning objectives.



Even a 1904 fire could not diminish the civic commitment of the State Capitol.



The Capitol property was generous enough to accommodate future creation of ceremonial civic approaches and appropriately scaled civic space for large gatherings at the Capitol Building. Early plans for the Capitol and grounds showed remarkable foresight and vision. John Weidenman's 1884 plan for Capitol Square established the principle of extending the Capitol steps into the landscape by creating the West Mall. The mall was an easy walk to the streetcar serving downtown Walnut Street and Court Avenue. Weidenman surrounded the Capitol with lawn and a Victorian knot of ornamental walkways to "furnish a setting worthy of the building." After the Weidenman plan was implemented, the Old Brick Capitol was demolished and the site donated to the Grand Army of the Republic for the Soldiers' and Sailors' Monument. The fact that this building was off axis to the new Capitol resulted in this monument's uneasy relationship to the building.

Extensive restoration of the Capitol Building and replacement of damaged works of art occurred after a 1904 fire in the north wing and illustrates the ongoing endeavor to preserve a civic place in tune with the aspirations of Iowa's people and their collective vision for the future.

The 1884 J. Weidenman Plan proposed a gracious civic setting for the Capitol Building.

E.L. Masqueray Plan

The most influential plan for the Capitol grounds was prepared in 1913 by E.L. Masqueray. This plan dramatically expanded the Capitol grounds from a single block to a 31-acre campus. Comprehensive and far-reaching, the plan restored the natural scenic value of the Capitol site, enhanced the view of the Capitol from the railroad, and sited future buildings and memorials. It

is one in which the grounds and approaches to this monumental civic building support its landmark status while at the same time looks to important aspects of the city. The Masqueray Plan extended the axes of the Capitol to all four compass points with ornamental walks, monuments, and gardens. A major feature of this plan was the siting of the Allison Memorial on the Capitol axis to the south. Formal gardens and a bridge extended the grounds over Court Avenue. Unfortunately, this



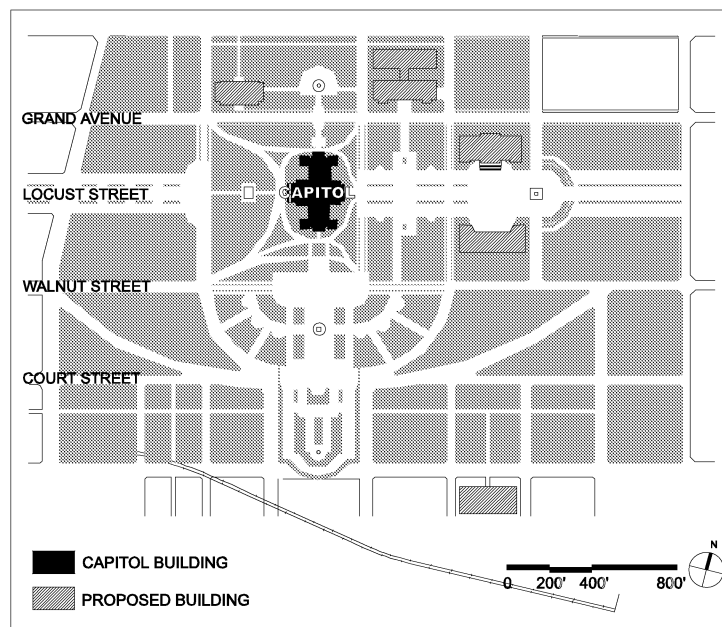
This Master Plan builds upon the organizational geometry of the 1913 Capitol Extension Plan by E.L. Masqueray.



bridge was recently found structurally unsound and demolished. The formal gardens of Masqueray's plan have been replaced with parking lots. Restoring the dignity and architectural heritage of the Maqueray plan should be a priority of the current plan. The Maqueray plan recommended relocation of the Soldiers' and Sailors' Monument to a location on axis east of the Capitol.



The clearing of modest structures and enhancement of the south axis greatly improved views from the trunk line trains.



The 1913 E.L. Masqueray Plan remains a source of inspiration for enhancements of the Capitol Grounds.

Recent Planning

After the Masqueray Plan, over 50 years elapsed before another plan for the Capitol grounds was undertaken. By this time the car, via the freeway to the north, not the railroad and streetcar, provided access to the Capitol. In 1965, the Capitol Planning Commission with the Iowa Chapter of the American Institute of Architects undertook a comprehensive 20-year plan for the Capitol grounds. This plan recommended underground parking for 250 cars and the relocation of surface parking east of the Capitol. This recommendation has been carried forward into Capitol plans for over 30 years and is a specific issue to be addressed in the current plan. In a stark departure from the Masqueray Plan, this plan recommended a building site which would terminate the Capitol axis to the east and recommended a building site slightly off axis to the north (now the Grimes Building). The area in front of the future Grimes Building, "Capitol Court," was the center of a pinwheel pattern of future building sites. The east, north, and west Capitol axes were reinforced by proposals for malls with lawns, fountains, and walkways. The plan proposed private apartment development north of the Capitol between Des Moines Avenue and the freeway.



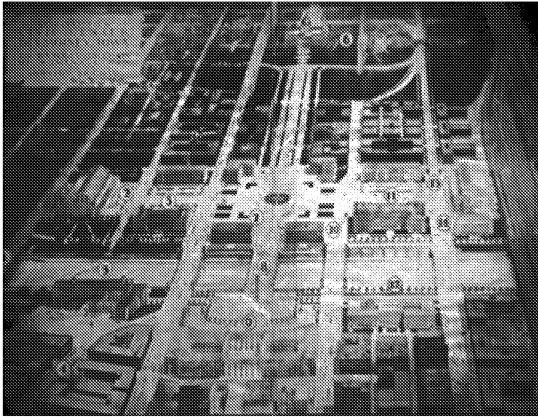
To the detriment of the Capitol grounds, the removal of parking to the periphery of the complex has been generally supported in theory, but not in practice.

In the 1970s and 1980s a series of plans were undertaken for the Capitol Complex to address office, legislative and parking needs. These plans included the following: Jon Crosse & Assoc. and Charles Herbert & Assoc. (1971); Barton-Aschman & Assoc. (1973); Hansen, Lind & Meyer and Sasaki, Dawson, DeMay (1974 & 1977); and Bussard Dikis Assoc. Plan (1988-89). In addition to looking at long range needs, location criteria, and enhancements to the grounds, these plans focused on the East Mall, including the replacement of surface parking with underground parking, landscaping, and space for legislative and office needs. In 1989, plans were submitted to the State by Bussard Dikis Assoc./BRW Architects for underground legislative offices, meeting rooms, services, cafeteria, and parking east of the Capitol. In this design, "the roof has been

carefully designed with planting and paved plaza areas to enhance the grandeur of the Capitol while serving as an entourage, or foreground, for the views of the east side of the Capitol" and surface parking is removed. Although these plans have sought to improve the quality of the grounds by providing peripheral and underground parking structures, these facilities have not been built and in the interim, ironically, the amount of surface parking has expanded near the Capitol. The search for state funding for added legislative space and parking is on going.

Planning for the Capitol grounds has also been influenced by downtown planning. Des Moines was one of the earliest cities to join the City Beautiful movement started by the 1893 Chicago Colombian Exposition. The 1907 Des Moines Plan called for reclaiming the industrial riverfront

for an impressive Civic Center. A 1911 plan called for the Civic Center to be connected to the Capitol by a grand boulevard and civic spaces. These plans, and 1927 and 1932 updates by Harland Bartholomew and the Des Moines Civic Center Architectural Commission, continue to influence planning between the river and the Capitol-most recently the *Capitol Gateway East Urban Design Plan*. This Master Plan should support the city's goal of strengthening the tie between the river and the Capitol along Locust Street.

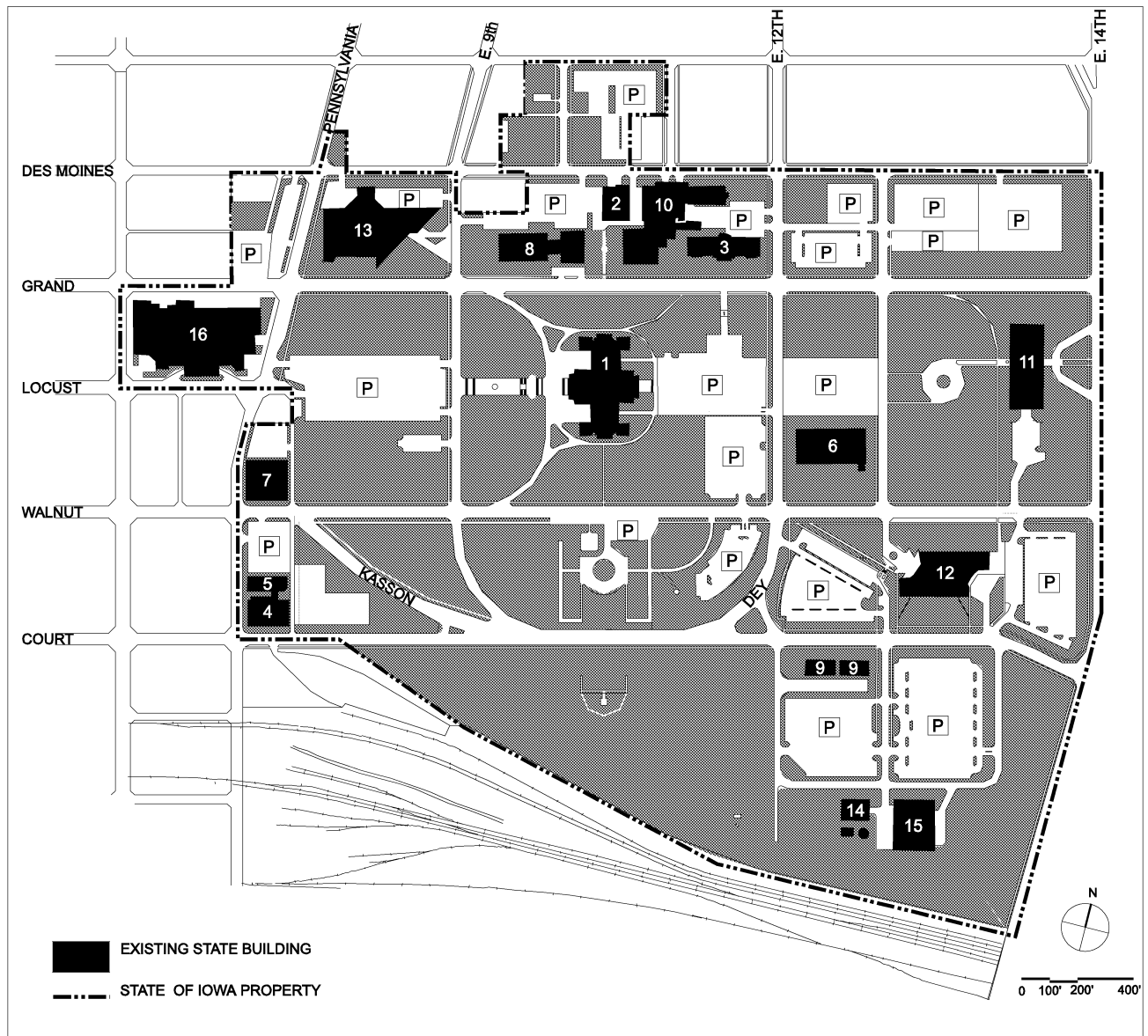


The civic centers of Des Moines have traditionally been important aspects of city and river planning.

Existing Capitol Complex *(See Map on opposite page)*

- 1 Capitol Building (1884) Cochrane and A.H. Piquenard, and Bell and Hackney
- 2 Carriage House
- 3 Ola Babcock Miller Building (1899), formerly State Historical Building, Smith & Gage
- 4 Records and Property Building (1915)
- 5 Micrographics (1947)
- 6 Lucas Building (1948) Burdette Higgins
- 7 Vehicle Dispatcher (1950)
- 8 Workforce Development Building (1963), formerly Job Service Building
- 9 Executive Hills (1965)
- 10 Parker Building (1967), formerly Vocational Rehabilitation Addition
- 11 Grimes Building (1968) Smith Voorhees Jensen
- 12 Hoover Building (1975) Brooks Borg Skiles Architecture Engineering
- 13 Wallace Building (1975) Durrant Deininger Dommer Kramer Gordon
- 14 Central Utilities Plant (1976) Brooks Borg Skiles Architecture Engineering
- 15 Maintenance Building (1980)
- 16 New Historical Building (1985) Brown Healy Bock

Existing Capitol Complex



Capitol Neighborhoods

The Capitol Building is a magnificent backdrop for community activities that take place on the Capitol grounds and in adjoining neighborhoods. A goal for the Capitol Complex is to be a destination that is also a good neighbor. The interaction of people with civic and retail services can enhance physical, visual, and activity-related connections between the Capitol Complex and neighborhoods. Capitol Complex and neighborhood connections can be achieved by internal improvements initiated by the City, and by neighborhood improvements buoyed by local activism.

The overall urban vision for the Capitol Complex recognizes the goals of its east Des Moines neighbors: East Village, Capitol Park, and Capitol East. The Capitol Complex Master Plan complements the action plans developed by each neighborhood. It recognizes that major arterials such as Grand Avenue and East 14th Street can employ landscaping, signage, and other streetscape elements to distinguish neighborhoods and connect them at transition areas. Implementation of pedestrian amenities and ground-floor building uses will increase street-level activity within and between neighborhoods. Preservation and expansion of housing in these neighborhoods could provide opportunities to live within walking distance of the Capitol Complex, reducing parking demand.

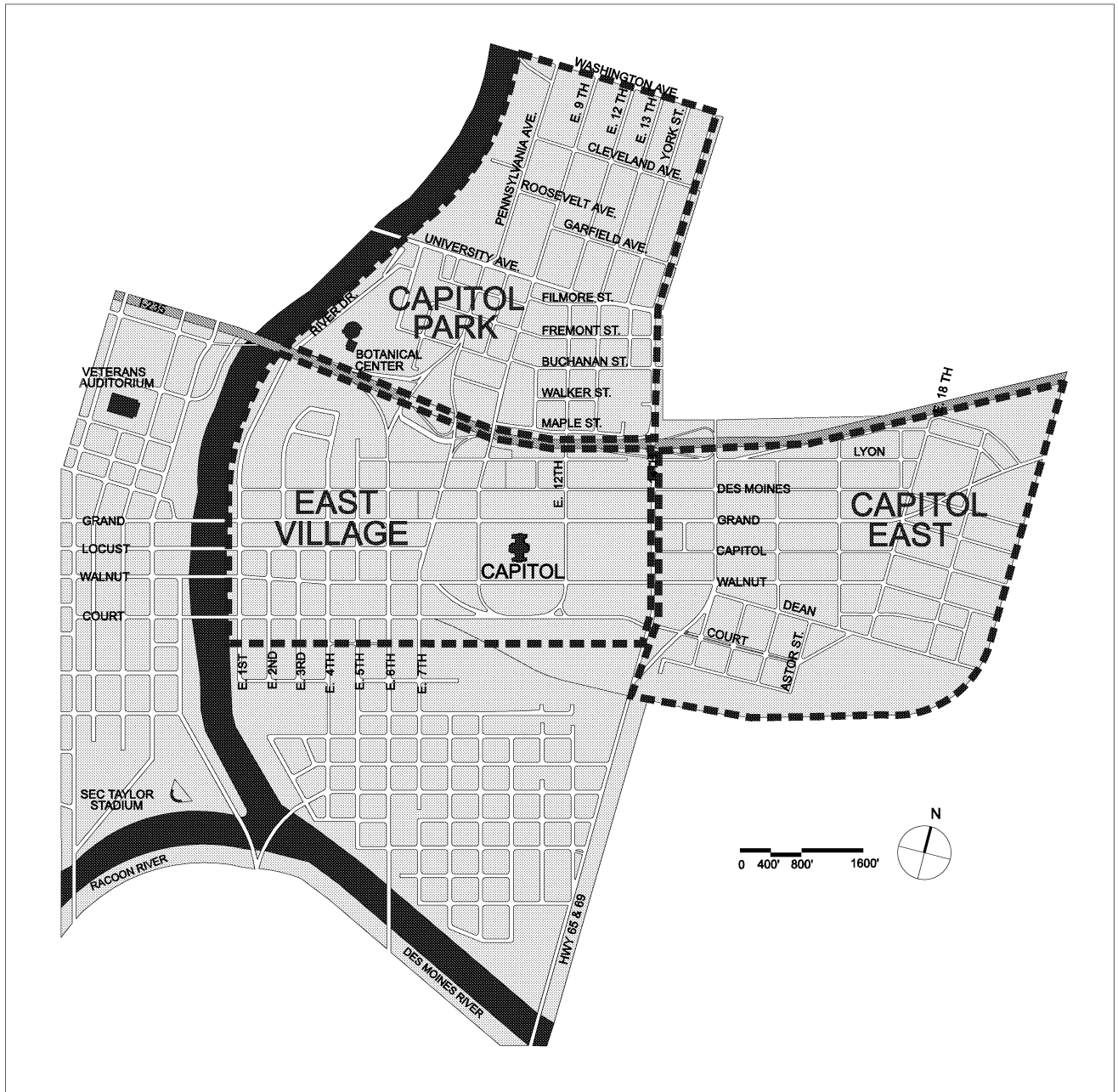
Capitol Neighborhood Image

Once known collectively as Lee Township, the neighborhoods surrounding the Capitol Complex grew apart without fully realizing their autonomy or establishing neighborhood centers. This condition was exacerbated by the construction of the MacVicar Freeway (I-235), by increasing numbers of parked cars, and by the changing face of the Capitol grounds, once a favorite play area for neighborhood children. Capitol Complex neighborhoods can achieve a sense of security and sustainability by strengthening neighborhood centers such as neighborhood commercial streets or parks. Public open space, a strong core, and clear edges would improve neighborhood image and visibility. Each neighborhood will share the additional value of proximity to the Capitol Complex.

Neighborhood planning areas have been identified by the City of Des Moines as follows:

- East Village (area west of, and including the Capitol Complex)
- Capitol Park (area north of the Capitol Complex and I-235 freeway)
- Capitol East (area east of the Capitol Complex).

Capitol Neighborhoods



The Capitol Complex should cultivate affinities with adjacent neighborhoods which will better serve all involved.

East Village

East Village lies on the east bank of the Des Moines River opposite Downtown West. It is bounded to the north by the MacVicar Freeway (I-235), south by Vine Street, west by the Des Moines River, and east by East 14th Street.

East Village contains a unique asset: a main street on axis with the Capitol Building. The axial importance of Locust Street as a gateway and approach to the Capitol Building gives East Village a unique role within the Capital City. Locust Street is envisioned as a public and historic street in the grandest sense.



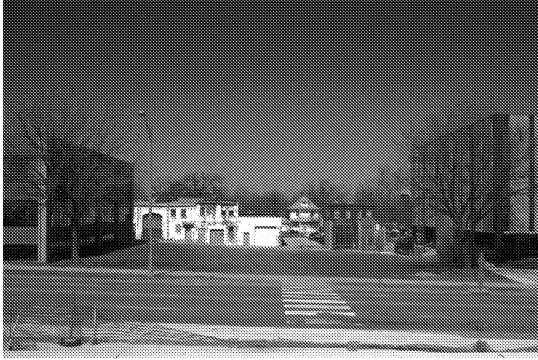
Development of urban living environments, similar to Brown Camp Lofts, would enrich the character of the East Village neighborhood.

A revitalization effort that builds upon the current mix of uses and introduces new complementary uses will help East Village meet a full range of urban activities: housing, employment, and retail. Recreational opportunities for East Village residents abound on the Capitol Complex and park systems, and from proximity to downtown and entertainment centers. The revitalization of Locust Street will cement its identity and enhance the experience of the Capitol Complex. Development of this main axis must be a fitting tie between downtown Des Moines and the cultural and civic centers east of the Des Moines River.

The urban issues of East Village are addressed in the Capitol Gateway East Urban Design Plan (September 1997). Infill development and the creation of public plazas will begin to mend the fragmentation in the area and generate the energy for further street and community improvements. East Village contains vital elements of the past in historic and architecturally significant commercial buildings. These elements can drive the resurgence of East Village by lending their rich history to the efforts of modern living. The inherent distinction of historical buildings will strengthen the identity of East Village.

A node at East 5th Street and Locust Street may act as a focus for the neighborhood and connect the neighborhood to the Riverfront and the Capitol Complex. Ground-level retail and upper-level residences are critical to the revitalization of the street and the livability of the neighborhood.

The urban living environment of East Village distinguishes itself from more traditional detached or duplex residential housing in Capitol East and Capitol Park. Residential areas in East Village were long displaced by the expansion of the Capitol Complex and light commercial districts. Infill housing and the opportunity to live and work in the Capitol area are desired goals for East Village. A variety of housing types and price ranges would introduce the density and activity required to sustain and draw services from the Capitol Complex and west downtown. Townhomes, condominiums, and lofts are among the preferred housing types for East Village. An urban live-work situation is appealing to people of different age groups and disciplines and can be an important amenity for the Capitol Complex and the City of Des Moines.



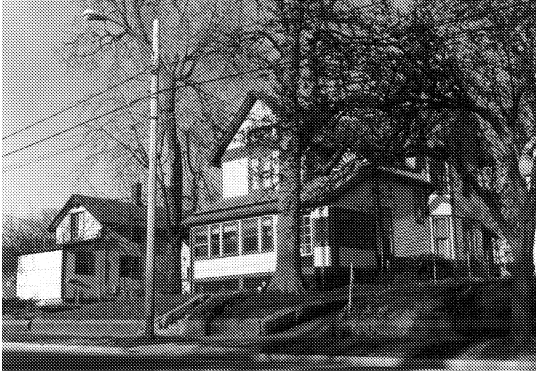
Residential areas between the Capitol and the freeway face continued decline.

The residential area north of Grand Avenue and south of the I-235 Freeway is part of East Village and yet is effectively cut off from the rest of the neighborhood by its location between four major roadways, including Pennsylvania Avenue and East 14th Street. The decline of residential property and the proliferation of Capitol-related parking, both in surface parking lots and on-street, suggests that this area may no longer be viable as a residential neighborhood. As part of its view preservation initiative, the State may seek to acquire north properties that encroach upon a desired North Mall view corridor for development of gardens and a pedestrian mall. This north side development would complete the set of visual axes that emerge from each face of the Capitol Building.

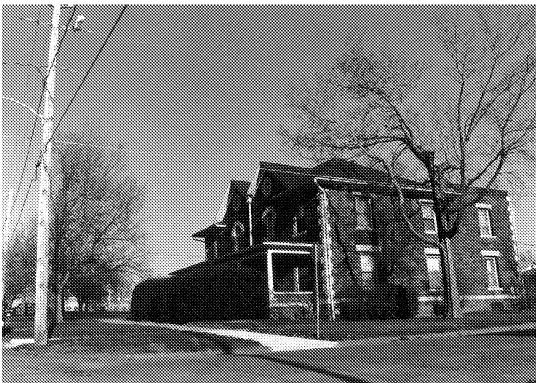
Street vacation outside the north garden corridor will be used for interim parking and future building sites. Location of associations, conference centers, and other civic uses in this area may benefit from proximity to the Capitol and visibility from I-235 off-ramps. When feasible, remaining viable structures in the area may be rehabilitated to accommodate such new uses. A number of churches and businesses are likely to continue operation. An exploration of these improvements will include dialogue with current residents and business owners.

Capitol Park

Capitol Park is a 48-block area northeast of Downtown. It is bounded to the north by Washington Avenue, south by the MacVicar Freeway (I-235), west by the Des Moines River, and east by East 14th Street. The central location and proximity to the Des Moines River originally attracted many fine estates to this neighborhood. Capitol Park has since seen many changes and challenges in its development including the construction and subsequent removal of a railway right-of-way, the construction of I-235, and the incorporation of large institutional uses such as the Iowa Lutheran Hospital.



Capitol Park has witnessed a general decline in housing conditions, if not housing occupancy. Although Capitol Park trails behind the city average in home ownership and housing conditions, an increase in family households as more housing units become available indicates a desire to live in Capitol Park. The rich architectural and development history of housing styles and buildings such as East High School and a strong family and school tradition make Capitol Park an attractive place to live and raise a family.



The pride demonstrated by well-maintained homes and structures in Capitol Park contributes to a positive neighborhood image.

Although visual connection with the Capitol Building recedes as one moves further north through Capitol Park, the physical proximity of the neighborhood to the Capitol Complex could make it an attractive housing alternative for both Capitol Complex and downtown workers. Higher density units in Capitol Park are envisioned on the southern edge of the neighborhood. The Capitol Park Neighborhood Association Action Plan (October 1995) states its goal to be a market-based self-sustaining neighborhood. This goal can be met by carrying out plan actions that improve neighborhood livability and security. These achievements would at once strengthen neighborhood identity.

City planned improvements to the East 14th Street Commercial Corridor should complement street improvements further south on East 14th Street between Capitol East and the Capitol Complex. The East University Beautification Project will enhance street amenities and will make University Avenue the neighborhood focus for families and businesses. Where possible, Capitol Park should pair open green space with residential occupancies. Burke Park, the Memorial Monument, and Filmore Park on East University Avenue connect the neighborhood to the Riverfront and greenway. Under the city's plan, Capitol Park bike trails and open space would join a greater urban park system of neighborhood squares and recreational areas that relate to the Des Moines River and the Capitol Complex.

Capitol East

Capitol East is a 50-block area beyond the Capitol Complex on the east side of Des Moines. It is bounded to the north by the MacVicar Freeway (I-235), south and east by railroad tracks, and west by East 14th Street. It is one of the oldest neighborhoods of Des Moines, traditionally made up of working class and middle class citizens.

Diverse in land uses, Capitol East lies on the east side of the Capitol Complex. Predominantly single-family houses and some multi-family units are folded in between institutional and remaining east side industrial uses. Street improvements are important to the integration of Capitol East. Consistent landscaping along neighborhood streets could visually tie different uses. More distinctive plantings could be used to emphasize neighborhood entrances at Grand Avenue and East 14th and East 15th streets. The Capitol East Neighborhood Action Plan (December 1990) identifies the blocks between East 14th and East 16th streets as a project area.

A revitalization of the neighborhood business areas on Grand Avenue and East 14th Street would provide services attractive to area residents and to Capitol Complex employees. An increase in density through mixed-use development along East 14th Street would also help sustain local businesses.



Stewart Square Park provides a neighborhood focal point for Capitol East. Adjacent residential developments support the vitality of the neighborhood.

Capitol East has a strategically placed open space, Stewart Square Park, that acts as a focus for the neighborhood and for its landscape framework. Annual neighborhood flower plantings continue to enhance neighborhood streets and parks. A new multi-unit residence near the park has begun a transformation to higher density uses and increased street-level activity.

The Capitol East Neighborhood Action Plan addresses many important housing issues. Sustaining and rebuilding the integrity of Capitol East means a commitment to rehabilitating existing housing, providing affordable housing, encouraging more density (particularly adjacent to the Capitol Complex), promoting new construction, and addressing vacant lots. City and neighborhood outreach programs for business, health care, youth, and security would also be great amenities for the Capitol East neighborhood.

Proposed Land Uses

Proximity to the Capitol Complex has led many property owners to assume the threat of eventual acquisition by the State. In areas of deferred maintenance and blight, state acquisition may be hoped for by many. The overall health of the Capitol Complex and neighborhoods depends on commercial, cultural, and residential vitality. The State therefore encourages the prosperity of its nearest neighbors. Future development at the Capitol Complex will occur within present property lines north of Grand Avenue, south of I-235 between East 6th and 14th streets.

Recommendations

The strong physical presence of the Capitol Complex conveys the indomitable spirit of democracy that, on a small scale, must also be attuned to the physical and human attributes of neighbors, visitors, and participants in state government. This demands a Capitol Complex that is an active and pedestrian-friendly environment for public access and gatherings.

The Capitol Complex should foster an integral relationship with the adjacent neighborhoods of East Village, Capitol East, and Capitol Park. If the adjoining neighborhoods are to be healthy and vibrant places, then the threat of imminent acquisition of properties by the State must be removed. Where there can be some certainty, long-term boundaries to accommodate Capitol Complex growth should be established. In areas where further acquisitions may occur, a clear strategy should be developed in partnership with the community, so that there too there will be some certainty, and the damaging effects of blight can be minimized.

Framework guidelines inspired by neighbors were incorporated into the Capitol Complex section of the Master Plan.

three

Capitol Complex

Concept

The concept for this Master Plan is founded in the historic plans and designs which made Iowa's Capitol and grounds so remarkable in their early conception. Noble aspects of the inherited complex are to be respected, while erosions of them are to be rectified. This approach will provide the Capitol with a solid foundation on which to move forward with its vision for the future.

Historic and Civic Architecture

The Capitol could have remained a stand-alone building, being of a self-sufficiently symmetrical configuration. The additions of the Historical Building, now called the Ola Babcock Miller Building, and the E.L. Masqueray plan for the gardens expanded the symmetry of the Capitol Building into an organizational geometry within which numerous other buildings could fit. The first components of the Capitol Complex set precedents for civic architecture and a formal system of relationships between buildings and their grounds. These qualities elicit pride and awe in visitors. By stark contrast, a number of buildings added in the second half of the twentieth century forsook all pretense of civic quality, some sinking to banal architectural clichés. Recommendations for future buildings do not call for an historicist revival, but for a return to the principles of civic quality and respect for the primacy of the Capitol Building.

Seat of State Government

The significance of the Capitol Complex as a symbol to the people of Iowa cannot be overstated. It represents the State's proud heritage and is a harbinger of greater things yet to come. As Iowa's civic garden, the grounds of the Capitol Complex bring people together to play, celebrate, and get to know their neighbors. As the seat of state government, the Capitol Complex demonstrates the commitment of the Legislature to Iowa's citizens.

Efficient and Accessible Government

State offices exist solely to serve the needs of Iowans, and so should be welcoming and easy to navigate. The efficiency with which state buildings support their civic duties and the clarity of organization that makes them accessible are critical components in providing citizens a positive overall experience. A strong sense of arrival at the Capitol Complex from each direction will convey an immediate sense of accessibility. It will provide visitors with an environment that fulfills their expectations and enhances their experience of state government.

As departments have grown and changed over the years, the original clarity of location has become obscured. Two related objectives of the Master Plan are to enable state employees to work more efficiently and to make their services more accessible to the public, their clients.

Good Neighbor

Civic buildings on the Capitol Complex constitute a strong physical presence for the State and a strong point of identity for the City of Des Moines. The physical transition between the Capitol Complex, surrounding neighborhoods, and the city beyond represents a symbolic association between the State and its citizens. Planning for a more coherent government center amidst existing neighborhoods offers an opportunity for an overall enhancement of the community. Each Capitol Complex development proposal provides an opportunity to form ties to a larger urban context. This relationship reflects the same qualities of stewardship and responsible action that are expected from state government.

Maintenance

Absent from the Capitol Complex for many years has been conscious maintenance of the principles of its conception. Piecemeal expansions of surface parking have slowly eaten away so much of the gardens that little of the original setting survives. Maintenance is not only about keeping buildings and equipment in running order; it is also about maintaining standards of civic quality worthy of the State's seat of government.

Development packages, whether they involve street improvements, landscaping, building, art, or signage, should each include as part of the criteria for approval a maintenance plan and the resources and authority to ensure its continued implementation. Maintenance plans should be formulated in consultation with professionals and those responsible for the execution of the plans. The endurance of a vital and healthy Capitol Complex requires awareness of present and future conditions through preventive maintenance.

Infrastructure and Energy Conservation

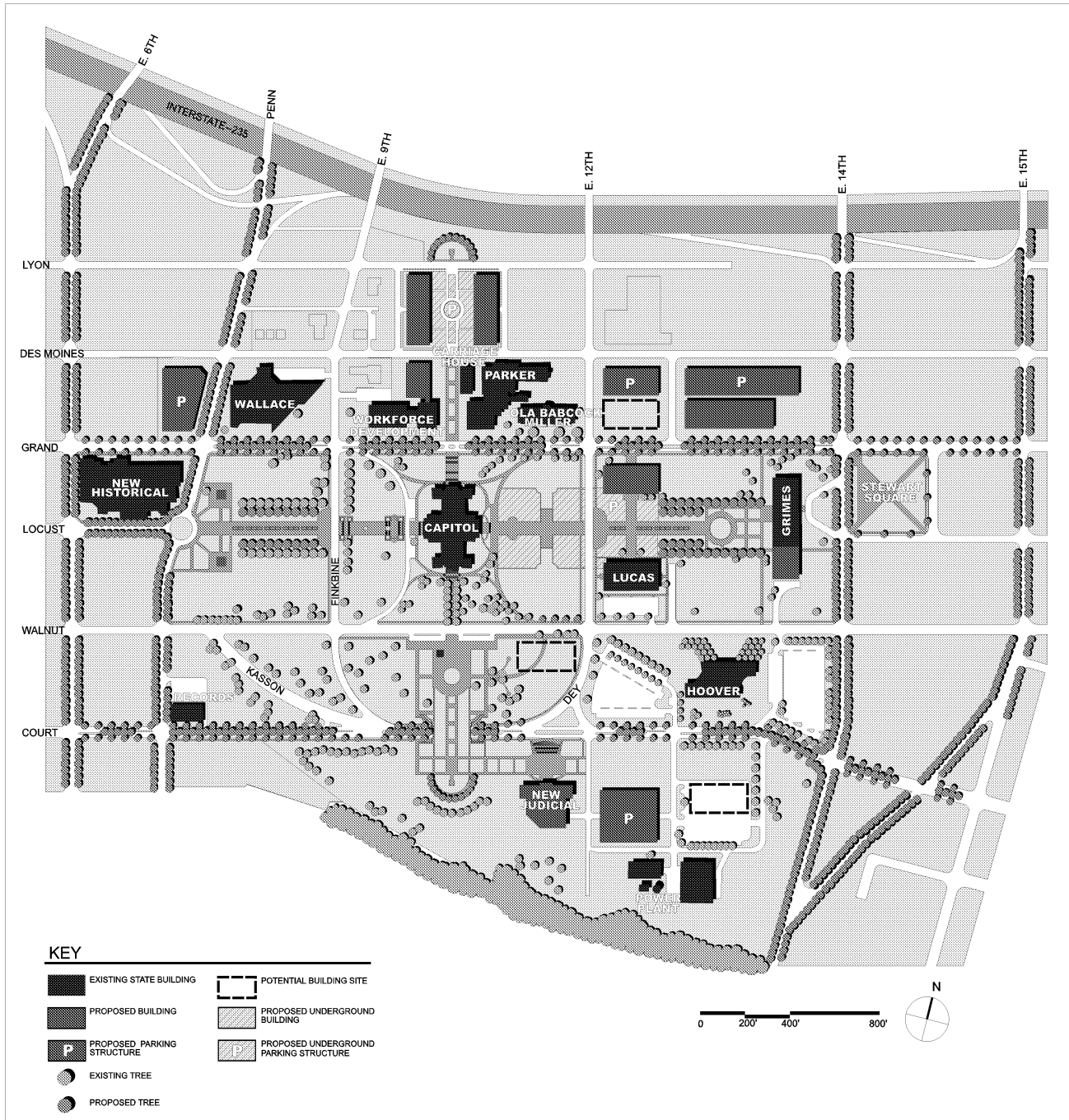
In the past, many decisions concerning accommodation for state employees have been driven primarily by considerations of minimizing capital costs. Experience has demonstrated that this is rarely fiscally responsible; that cheap leases often carry with them the burdens of high energy costs, reduced flexibility by poor space utilization, and heavy maintenance costs. An objective of the Master Plan is to guide decisions toward longer term economic benefits.

Attention to the working details of the Capitol Complex will add much to operating efficiency. Building services, grounds maintenance, security, communications (e-mail and internet), recycle programs, and energy conservation are growing priorities for an expanding state complex. The State needs to monitor and evaluate energy costs (which include the cost of capital, equipment, installation, maintenance, depreciation, and labor) on a continuing basis to insure the most beneficial system for heating, cooling, and other environmental needs. Additional efficiency can be achieved when state employees live close to the Capitol Complex and when they take advantage of technology that allows work from the home setting.

Sustainable Development

Applying sustainable development principles is a priority in the Master Plan to ensure environmentally sound development. Principles for sustainable development must preserve the civic design excellence and dignity of the Capitol Building and grounds, as viewed in the Master Plan. They may be applied on a case by case basis as a guide for renovation, restoration, and new development. The plan will address issues of sustainable site planning, energy efficiency, water safeguarding, material and resource conservation, indoor environment quality, and solid waste reduction.

Concept for the Capitol Complex

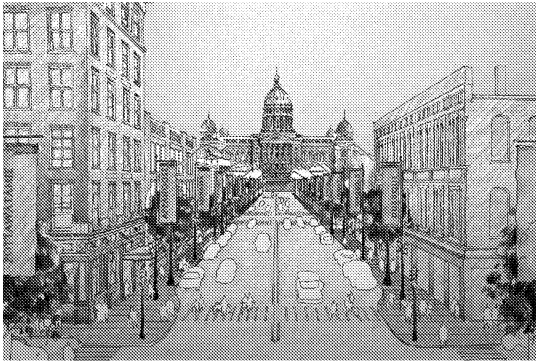


The Master Plan lays out a bold vision for the Capitol Complex, calling for the enhancement of the Capitol grounds and interconnection with city development objectives.

Approaches and Gateways

General

A civic responsibility of the Capitol Complex is to provide a well-defined edge, an introduction, and a reception for visitors and personnel.

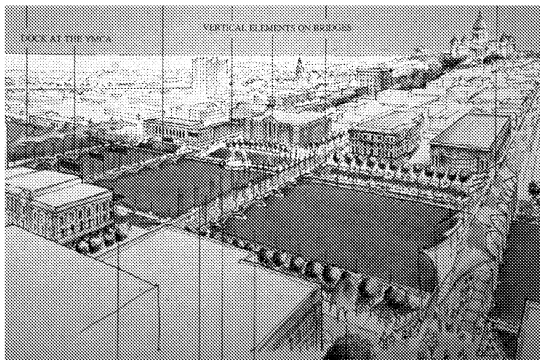


The Capitol Gateway East Urban Design Plan envisions Locust Street as the “Capitol Way,” the ceremonial approach to the Capitol Building.

Street improvements on the approaches to the Capitol Complex can strengthen the civic identity of the Capitol Building and its grounds. Locust Street has the potential to bind the Capitol Complex, East Village, Des Moines River, and Downtown more strongly together. Deteriorating and inconsistent building edges along Locust Street and large areas of parking diminish the visual effectiveness of the ceremonial approach to the Capitol Building. Re-definition of Locust Street as the “Capitol Way” could be a catalyst for redevelopment. It will generate reciprocal energy and support Capitol Complex planning objectives.

Grand and Court avenues are other significant gateways that could engage the Capitol grounds with perimeter landscaping and trees. The development of landscaping at the perimeters of the Capitol Complex is not a means of division but of union through shared civic amenities. The most effective gateways are those which announce arrival at a place of significance without resorting to signs or literal gateways. They achieve their purpose with visual and urban design cues that are supported but not supplanted by signage. The approach and passage into state grounds should be clearly announced in this way. The State may work with the City on these improvements.

The bridges across the Des Moines River also serve as means of physical passage and symbolic connection. They function effectively as gateways to both sides of the city because of the views afforded to their users as well as the sense of passage from one bank to the other. Bridge enhancement will further strengthen connections to the Capitol Complex. The bridges that span the Des Moines River provide the insignia for the City of Des Moines.



Bridges have the potential to be destinations as well as gateways within the Capital City. Capitol Gateway East Urban Design Plan.

Objective:

Work with the City of Des Moines to connect the Capitol to the City with distinct and comprehensible gateways into the Capitol Complex.

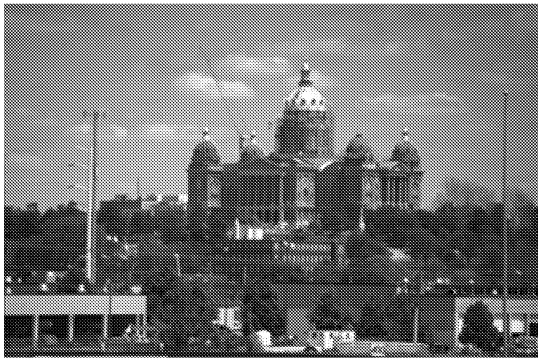
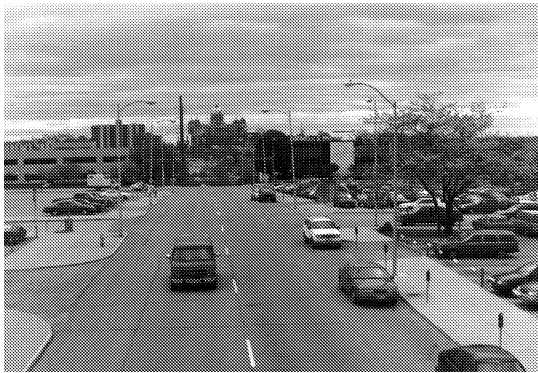
Guidelines:

- Seek inspiration from the visions of past plans, particularly the 1913 E.L. Masqueray Plan.
- Preserve and improve major approach routes to protect and enhance orientation and views of the Capitol Building and downtown landmarks.
- Develop height restrictions for buildings along Capitol approaches to preserve the preeminence of the Capitol Building.
- Define boundary locations and edge conditions to serve as gateways between state facilities, institutional complexes, and neighboring residential and retail areas.
- Use signage, streetscape, and art elements to mark gateways into the Capitol Complex.
- Capitolize on the visual prominence of the Capitol Building within Des Moines.
- Treat key intersections on the periphery of the Capitol Complex as secondary gateways.

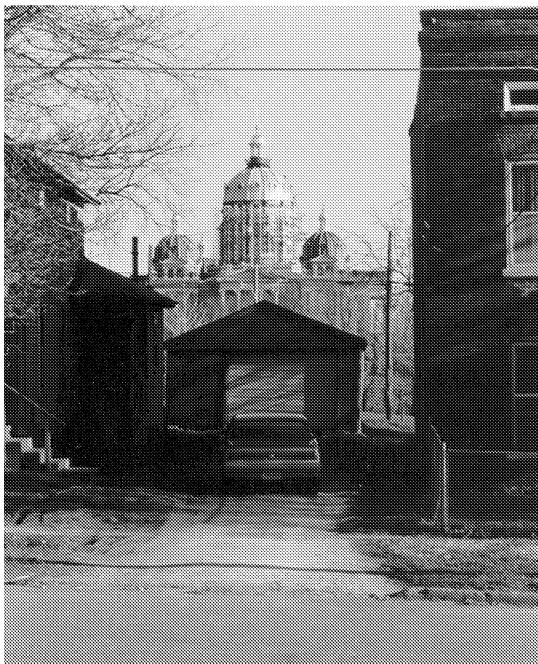
Specific Recommendations:

- Support orderly city development in keeping with Capitol Complex vision by active participation in a design advisory team for the City of Des Moines.
- Employ zoning and public improvement programs to preserve and enhance the Locust Street approach to the Capitol Building.
- Seek capital expenditures for improvements to Locust Street.
- Reconnect Locust Street corridor to the Capitol grounds by developing a new forecourt for the Capitol Building and a central pedestrian promenade from Locust Street at Pennsylvania Avenue to Finkbine.
- Support redevelopment of East Village as a mixed-used urban community and active transition between the Capitol Complex and downtown Des Moines.
- Consider East Village as a location for some new Capitol related development.
- Improve gateways at the intersections of Grand Avenue, Walnut Street, Court Avenue, and Des Moines Street with Pennsylvania Avenue and East 14th Street.
- Improve gateways east and west of the Capitol Complex at East 6th and 15th streets.
- Recognize Stewart Square Park as a gateway park.

View Corridors and Streets



The Capitol Building is an important landmark from certain public places such as the Veteran's Auditorium and Sec Taylor Stadium.



View Corridors and Capitol Views

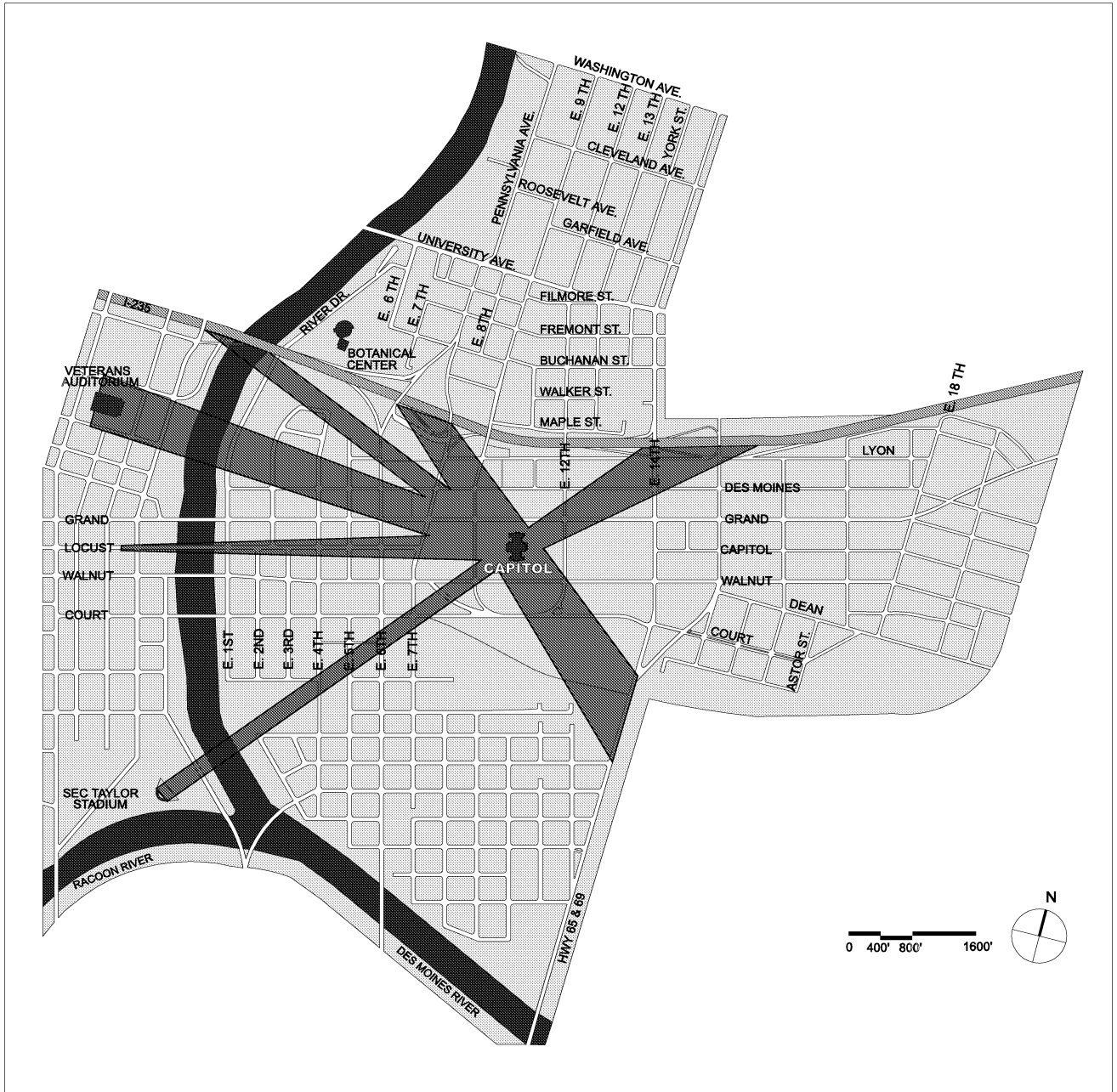
Splendid atop a grassy knoll, the Capitol Building is visible from many key points in the City of Des Moines. Noteworthy prospects include those from the Veterans Auditorium, Sec Taylor Stadium, the Des Moines River, South East 14th Street Bridge, Interstate freeway (at East 2nd Avenue, East 6th Street, Pennsylvania Avenue, and East 15th Street) and US highways. A variety of view opportunities exist from near and far, from the city's public landmarks, numerous streets, and public spaces.

Views of the Capitol Building from within the Complex itself have a pleasing sense of immediacy. The value of these, and partial views of the Capitol Building should not be overlooked; these add richness to the experience of moving through or near the Capitol Complex, and are as valuable in orienting people as are distant and complete views. Examples of such partial views include Capitol views at the terminus of a neighborhood street or between building structures and residences. Occasions for view appreciation also arise when pedestrians pause at the perimeter intersections of Grand Avenue, Pennsylvania Avenue, Walnut, and East 9th and 14th streets. Impressive Capitol views are encountered from unexpected places and illustrate the many opportunities to preserve as well as create Capitol views.

View corridors are oriented not only towards the Capitol Building but out toward downtown Des Moines and city neighborhoods as well. The view of the downtown skyline from the Capitol steps is particularly valued. The Iowa Capitol Complex Master Plan places a high value on the landmark status of the Capitol Building and encourages the City and State to continue collaboration on protection and enhancement of view corridors.

The separation of the Capitol Building and Capitol Park neighborhood by the freeway does not erase visual and symbolic connections.

View Corridors



Adoption of a Capitol Dominance District and View Corridor Protection will preserve the visual preeminence of the Capitol Building within the City of Des Moines.

Objective:

Work with the City of Des Moines to preserve the Capitol Building as the dominant landmark of the Capitol Complex.

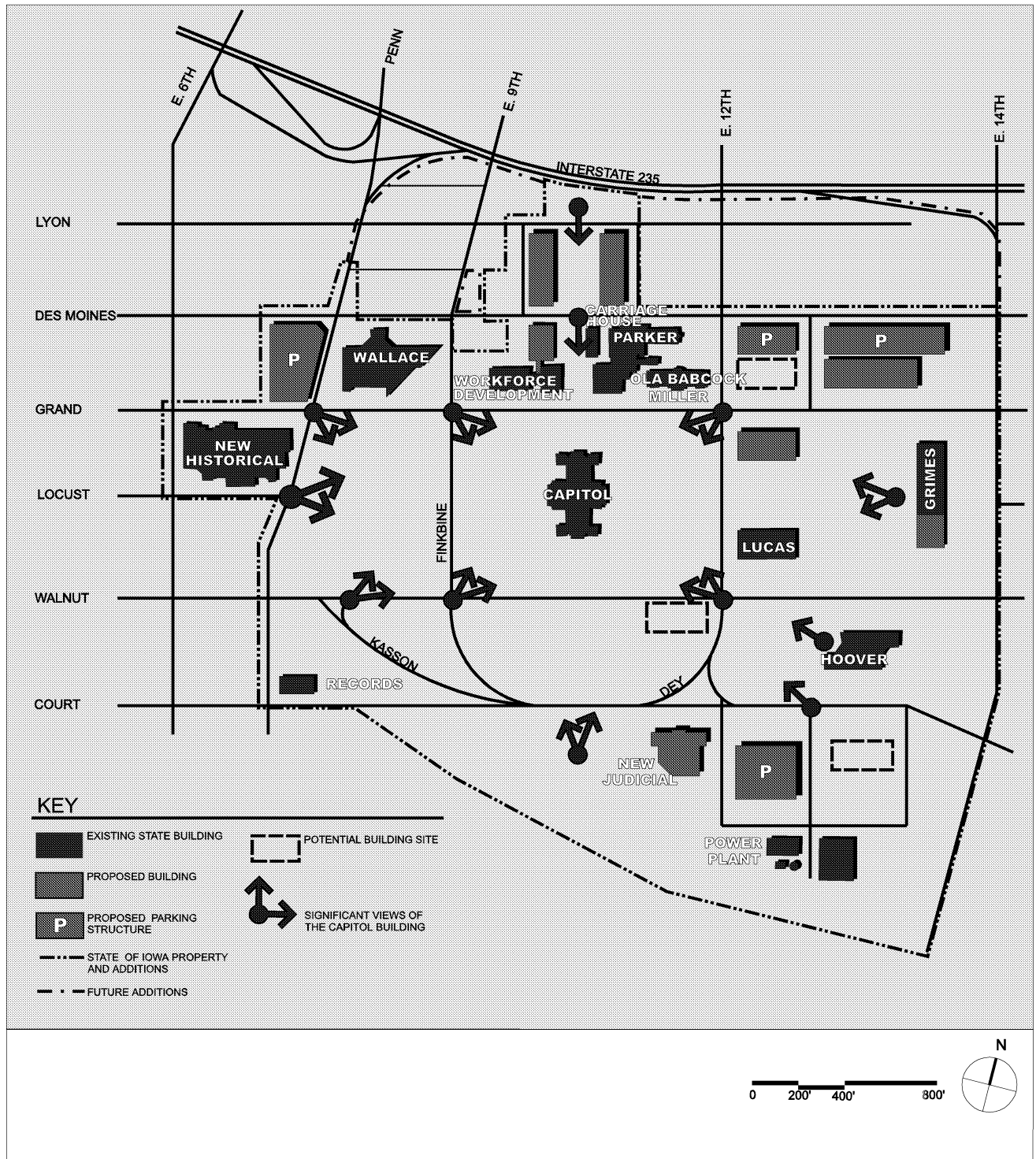
Guidelines:

- Preserve and define view corridors.
- Use the Capitol Building as a landmark for orientation within the Capital City.
- Preserve and enhance distant views to and from the Capitol Building, protecting views from public places.
- Protect view corridors in two directions when possible.
- Capture views of the Capitol Building from strategic gateways, approaches, and intersections.
- Enhance views of the Capitol Building with implementation of streetscape features that frame and articulate the view.
- Emphasize views of the Capitol Building as a terminal point of attraction for vehicular and pedestrian traffic from Locust Street.
- Locate and configure buildings to reinforce the dominance of the Capitol Building when viewed from within the Capitol Complex and the surrounding community.
- Restrict the storage of vehicles where they would impinge on important views.

Specific Recommendations:

- Protect Capitol views and vistas from encroachment of new development by working diligently with the City of Des Moines to adopt a city ordinance for Capitol Dominance District and View Corridor Protection through land use control.
- Establish Principal View Corridors to retain full views of the Capitol from key locations such as Locust Street, Fleur Drive, and Sec Taylor Stadium.
- Seek appropriate height restrictions under City of Des Moines jurisdiction to preserve and enhance Capitol views. Reflect the changes in topography from the river to the Capitol Building in determining appropriate building height.
- Protect and improve views from Walnut Street.
- Preserve views to the Capitol Building from the east neighborhoods where view opportunities are limited.
- Preserve views from the proposed Martin Luther King expressway, which is to be built south of the railroad. Protect the serenity of the Prairie Ridge view, the southernmost part of the Capitol grounds.

Capitol Views From Within the Complex



A person moving about the Capitol Complex will find many desirable view opportunities.

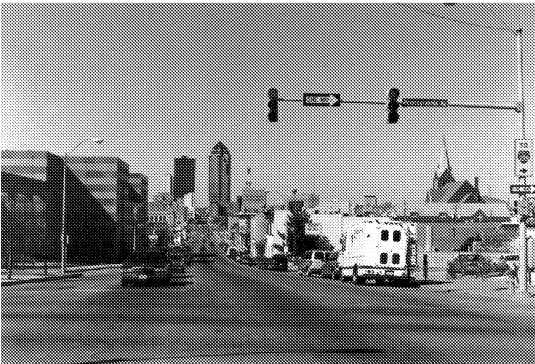
Streetscapes

The experience of a well-planned street can be a memorable one for drivers and pedestrians alike. Quality and continuity in street design unify disparate parts of a neighborhood. Maintenance of streets and properties prevents decline and contributes to people's pride of place. Capitol approaches and view corridors demand special attention to basic street features.



Formerly known as Sycamore or Keokuk, Grand Avenue was appropriately renamed when it achieved a connection from the state fair grounds across the Des Moines River to Downtown. Its role as a connector street is critical to the definition and accessibility of the communities that it touches.

The State should work with the City to evaluate improvement of Grand Avenue as a boulevard street in recognition of the special role it plays. The existing right-of-way could be expanded to incorporate a central landscaped median, one lane of travel in each direction, with left turn pockets, a landscape buffer at the curb and interior sidewalks. A median could provide refuge for pedestrians crossing the boulevard, and would signal passage through the Capitol Complex.



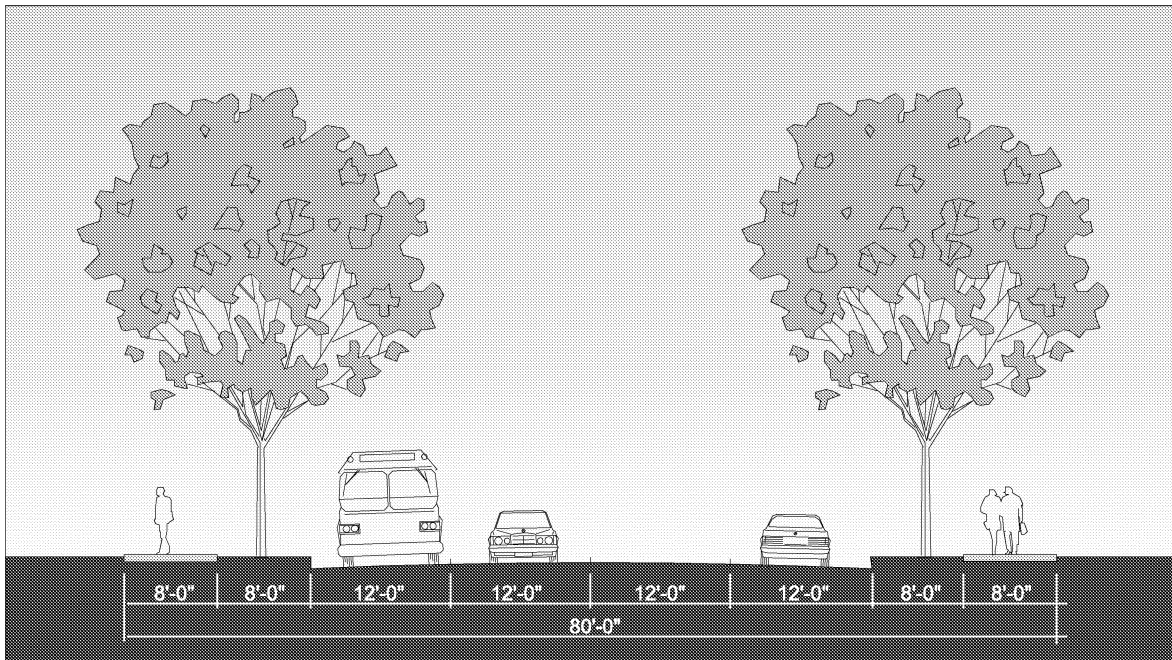
Boulevard development will bring distinction to Grand Avenue as it did to Polk Boulevard.

Streetscape enhancements to Grand Avenue could provide for safe and attractive pedestrian circulation along busy areas as well as creating dignified approaches to several state buildings: the New Historical Building, the Wallace Building, the Workforce Development Building, the Ola Babcock Miller Building, and proposed new structures north of Grand Avenue. Particular

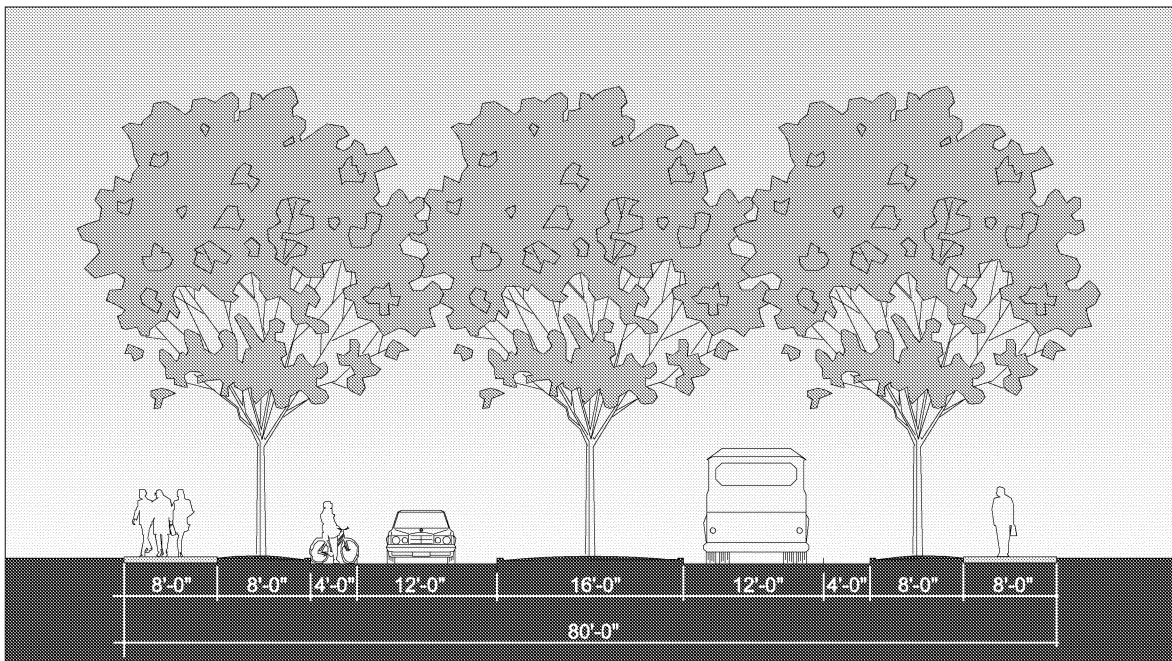
attention should be given to street corners and pedestrian crossings on Grand Avenue at Pennsylvania Avenue, East 9th and 12th streets, on the north Capitol axis, and to the Ola Babcock Miller Building.

Court Avenue could be developed in a similar manner for enhanced connection to new development to its south, an area now identified as Prairie Ridge. Landscaped medians on Court Avenue could be set back as appropriate for a proposed new Court Avenue bridge.

Grand Avenue Section



GRAND AVENUE EXISTING SECTION



GRAND AVENUE SECTION WITH MEDIAN

Boulevard development for parts of Grand Avenue near the Capitol Complex could accommodate a mix of uses: vehicular, transit, bicycle, and pedestrian.

Objective:

Work with the City of Des Moines to invest in improvements to the principal approaches leading to and from the Capitol.

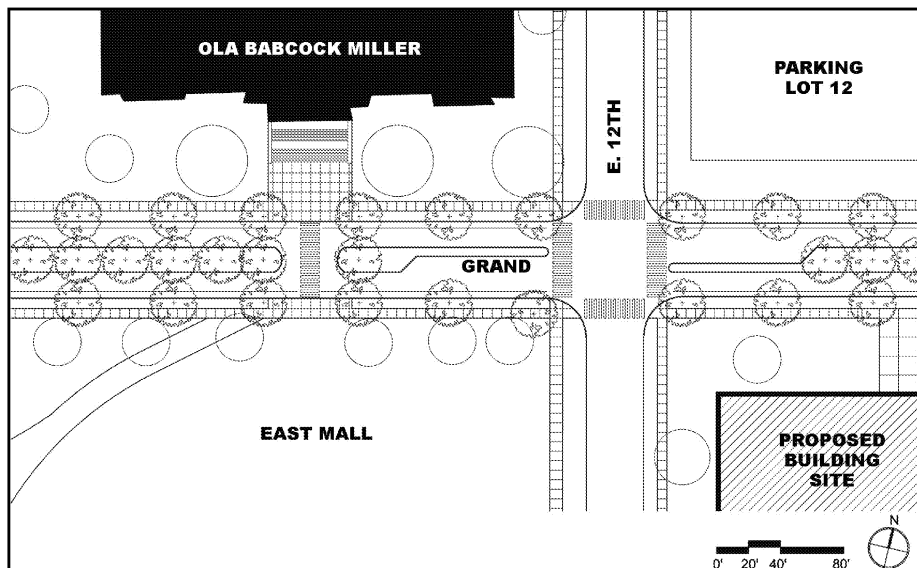
Guidelines:

- Reconfigure streets to accommodate a mix of modes: vehicular, transit, bicycle and pedestrian.
- Promote continuity of street furnishings, paving and plantings along the length of approaches and view corridors.
- Set standards for paving, landscape, lighting, signage, tree planting, benches, trash receptacles, bus shelters, and information systems on view corridors. Reflect historic themes of the Capitol Building.
- Maintain and prune street trees.
- Promote uniform pedestrian-scaled street lights with banner supports on Capitol approaches for Capitol Complex and neighborhood identity.
- Work with local neighborhood associations to devise a vision for improvements of commercial corridors near the Capitol Complex.
- Respect historic precedents for building lines, and architectural scale.
- Encourage a mix of active, street - oriented uses at ground level.
- Develop special paving treatments at crosswalks entering the Capitol Complex.
- Provide medians to moderate crossing distances and enhance pedestrian equity on the street.
- Provide pedestrian actuated signals to improve pedestrian safety and slow traffic.

Specific Recommendations:

- On the planned boulevard streets of Grand and Court avenues, create median strips planted with large scale deciduous trees except where they would obscure important views.
- Complete, and reconfigure as necessary, continuous sidewalks on both sides of Grand Avenue.
- Improve and landscape the north side of Grand Avenue to complement the prevalence of trees on the south side in accordance with boulevard development.
- Support Locust Street improvements as indicated by the Capitol Gateway East Urban Design Plan.
- Encourage the formation of a sequence of public spaces along Locust Street to extend the Capitol Terraces to downtown Des Moines.
- In cooperation with the City of Des Moines, make street improvements, including lighting, sidewalks, and tree canopies, along East 14th Street for safe and accessible pedestrian travel.
- Plant trees on the approach streets of East 6th Street, Grand Avenue, Pennsylvania Avenue, and East 14th and 15th streets.
- Improve pedestrian crossings on Grand Avenue at intersections with Pennsylvania Avenue, and East 9th and 12th streets.
- Provide pedestrian crossings with a median across Grand Avenue to the North Gardens and the Ola Babcock Miller Building.
- Provide pedestrian crossings at Des Moines Street and Lyon Street to link all parts of the North Mall through a north pedestrian pathway.

Grand Avenue and 12th Street Intersection



Street improvements and pedestrian crossings could greatly enhance the image of the Capitol Complex and area neighborhoods.



Retail and upper-level housing uses promote pedestrian activity along Capitol approaches and patronage of neighborhood businesses.

Street Level Activity

The vitality of the approaches depends on increased pedestrian movement between the Capitol Complex and surrounding neighborhoods. Active street-level activities such as retail and dining could draw patrons throughout the day. Continuous and transparent street frontages also give a sense of ‘eyes on the street’ which make pedestrians feel more secure. Locust Street, Grand Avenue west of the Capitol, and East 14th Street are active arteries of trade that can attract area residents and visitors from the Capitol Complex.

Objective:

Work with the City of Des Moines to promote pedestrian activity along approach streets.

Guidelines:

- Encourage businesses to locate on Capitol approach streets. Develop the Capitol Complex integrally with surrounding commercial development.
- Promote continuous pedestrian linkages along Capitol Complex view corridors.
- Make streets more attractive to pedestrians with improved civic amenities such as renewed paving, kiosks, seating, awnings, signage, artwork, and flowers.
- Encourage a sidewalk café zone in front of restaurant establishments where sidewalks are wide.
- Recognize the link between higher density developments and increased pedestrian activity.
- Promote a variety of uses, including upper-level housing.
- Encourage infill development of uses that attract pedestrians.
- Discourage ground floor uses that do not engage the public street.

Specific Recommendations:

- Convert Locust Street to two-way traffic to balance pedestrian, vehicular, and commercial needs.
- Promote Locust Street as a major visual and pedestrian connection between the Capitol Complex and the downtown area.
- Encourage street level activity (restaurants and cafés) on Locust Street, Grand Avenue west of Pennsylvania, and East 14th Street.
- Retain curbside parking on commercial streets wherever practicable for convenience of patrons and drivers.
- Encourage public or retail uses, such as gift shops, at the street frontage of proposed state buildings on Grand Avenue west of Pennsylvania.

Building Frontages

Consistent building edges along an approach street help frame views down that street. Achieving continuity in building frontages implies introducing a density of uses critical to commercial success and to an attractive pedestrian environment. Building frontages should actively engage the street for visibility and increased patronage. Off-street parking should be adjacent to and behind the buildings it serves, interrupting continuity of the active street frontage as little as possible. Shared use of parking facilities should be encouraged to minimize the proportion of land used for vehicle storage.

Objective:

Work with the City of Des Moines to provide interesting, diverse and commercially successful building frontages along approaches and view corridors, to engage pedestrians and motorists.

Guidelines:

- Organize a group to evaluate building frontages on a street-by-street basis, according to guidelines set forth in adopted neighborhood plans.
- Set building storefront facades to the property line and minimize interruptions to the active frontage.
- Encourage the expansion and rebuilding of street frontage on commercial corridors to reduce excessive setbacks.
- Encourage facade transparency at street level to promote pedestrian activity and safety. Avoid large areas of curtain wall, blank wall, or mirrored construction. The objective is to make sidewalk users aware of activity within the buildings and increase the ability of occupants to observe them.
- Assist and negotiate relocation of commercial activities that lack pedestrian-oriented frontages in favor of more active and visible uses.
- Encourage rehabilitation of storefronts that are in disrepair or lack a storefront character.
- Encourage buildings to have a height of at least one-half the width of the public right-of-way up to prescribed height limits.
- Encourage direct pedestrian access into buildings at frequent intervals, no greater than 50 feet.
- Improve the landscape of existing parking lots in nearby commercial areas.

Specific Recommendations:

- Replace ground floor uses or building frontage on Locust Street which are not open to the public. Assist with relocation of businesses within the area.
- Review and monitor the design of building frontages on Locust Street, Grand Avenue, and East 14th Street.

Capitol Drives and Footpaths

When integrated with a landscape plan, footpaths and access drives such as Finkbine (East 9th), East 12th, and Walnut streets reinforce the geometry of the malls and provide for the functional movement of vehicles and pedestrians.



Clear and attractive pathways enhance the experience of pedestrians moving through the Capitol Complex.

Footpaths and access drives should accommodate the individual in his or her variety of travel modes without compromise to the visual impression of the Capitol Complex. It is important to note that a reasonable detour for an automobile (around a super, block for example) may be unreasonably far for a pedestrian. Principles for supporting circulation should give primacy to pedestrian movement within the heart of the Capitol Complex, since it conflicts least with the efficiency of state government and the amenity of the place. It is not a suitable place to store automobiles or other private property. It is a place to walk, think, discuss; in other words, a place conducive to the business of state government.

Street Design

Attention to the human-scaled elements of each street will bring the monumental civic architecture of the Capitol Complex to a more familiar level of understanding. This suggests a Capitol Complex that supports active and pedestrian-friendly environments for public access and gatherings.

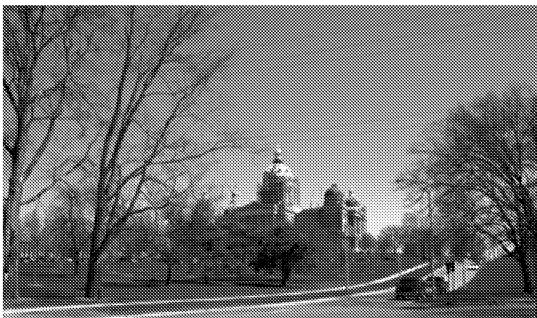
Streetscapes are comprised of building facades, sidewalks, landscaping, lighting, signage, and street furnishings. The pedestrian-scaled elements of the streetscape should also relate to the larger context of Capitol Complex site amenities, so that all parts of the Capitol Complex are unified. Visual connection between buildings, landscaping, drives, and footpaths relays the richness of Capitol Complex settings as places worthy of pause and reflection.

Objective:

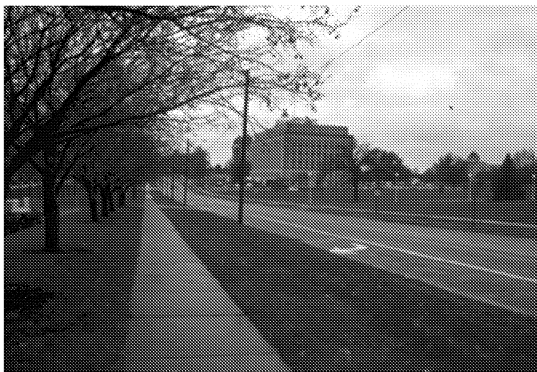
Establish design standards for Capitol Complex drives and footpaths that respond to people as well as to place. Work with the City of Des Moines on recommendations.

Guidelines:

- Reflect historic themes of the Capitol Building and grounds in the design of drives and footpaths.
- Improve drives and footpaths for efficient access to state buildings and safe travel to and within the Capitol Complex.
- Provide accessible routes for all users.
- Develop footpaths through the Capitol grounds that are integrated with landscape features.
- Connect formal and informal garden footpaths with utilitarian paths to parking areas.
- Where parking is allowed on-street within the Capitol Complex, provide adjacent sidewalks with direct connections to destination areas. Ensure unimpeded pedestrian connection from perimeter sidewalks and parking areas to state buildings.
- Provide shading over exposed pedestrian pathways to temper the heat of the summer sun.



- Provide special paving in garden areas.
- Improve pedestrian crossings and encourage their use.
- Implement lighting design standards on drives and footpaths in accordance with Capitol Complex standards, and update existing lighting that does not conform to lighting design standards.
- Minimize bus staging within the Capitol Complex and lessen conflicts with pedestrians.
- Provide pedestrian access to buildings from the garden side, rather than serving only those who arrive by vehicle.
- Plant trees along interior drives.

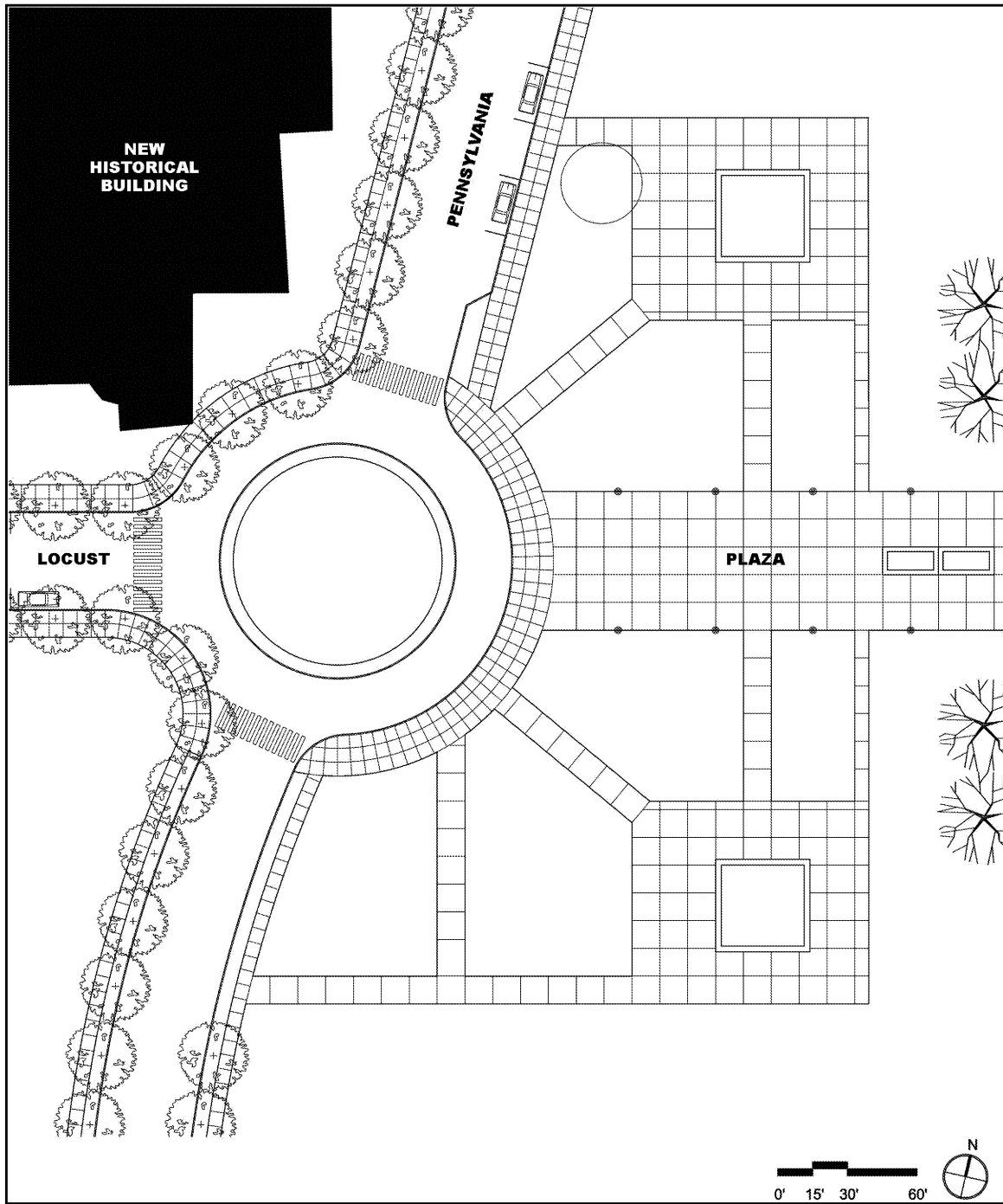


Street design and pedestrian connections should support the intimate character of Walnut Street.

Specific Recommendations:

- Provide a roundabout, a device which reflects the Beaux Arts design of the Capitol grounds to reconcile the irregular geometry of Pennsylvania Avenue near its intersection with Locust Street and to direct traffic rationally and efficiently.
- Add a sidewalk to the existing Wallace Building entrance plaza from the southwest to enhance the west approach.
- Develop an informal pedestrian pathway from the east entrance of the Capitol Building to Grand Avenue and Walnut Street. Design it as part of an overall circulation system which is integral with the landscape design for the Capitol grounds.
- With removal of parking on the East Mall, rebuild East 12th Street as a Capitol drive.
- Replace existing pedestrian lighting (white balls) on the East Mall with a fixture more appropriate to the historic nature of the Capitol Complex, consistent with design guidelines for site amenities. The selected fixture should be used consistently throughout the Complex, and preferably, along Locust Street.
- Make Walnut Street a two-way street consistent with plans by the City of Des Moines for the remainder of Walnut west of Pennsylvania Avenue. Coordinate with the City on all street modifications.
- Provide pathways connecting buildings on Prairie Ridge to a new Court Avenue bridge with vertical circulation.
- Provide a sidewalk at Dey, Court Avenue, East 12th Street, and wherever needed for unimpeded pedestrian connection to the new Judicial Building.
- Mediate the grade change from the South Mall with ramps and steps to connect with pedestrian crossings on Dey and Court Avenue to new developments on Prairie Ridge.
- Consider providing stoplights on Court Avenue for controlled crossing to the new Judicial Building.

Locust Street and Pennsylvania Avenue

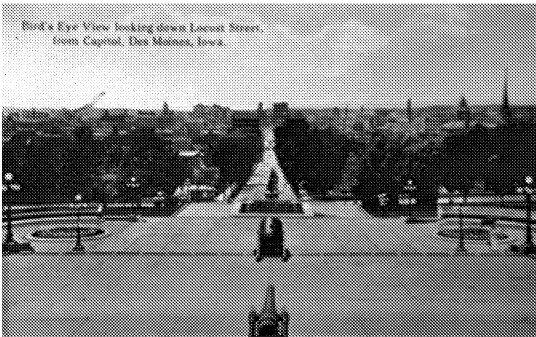


A plaza at the terminus of Locust Street would mark the transition from street to footpath and offer a place for public gathering.

Landscape Framework

Capitol Malls

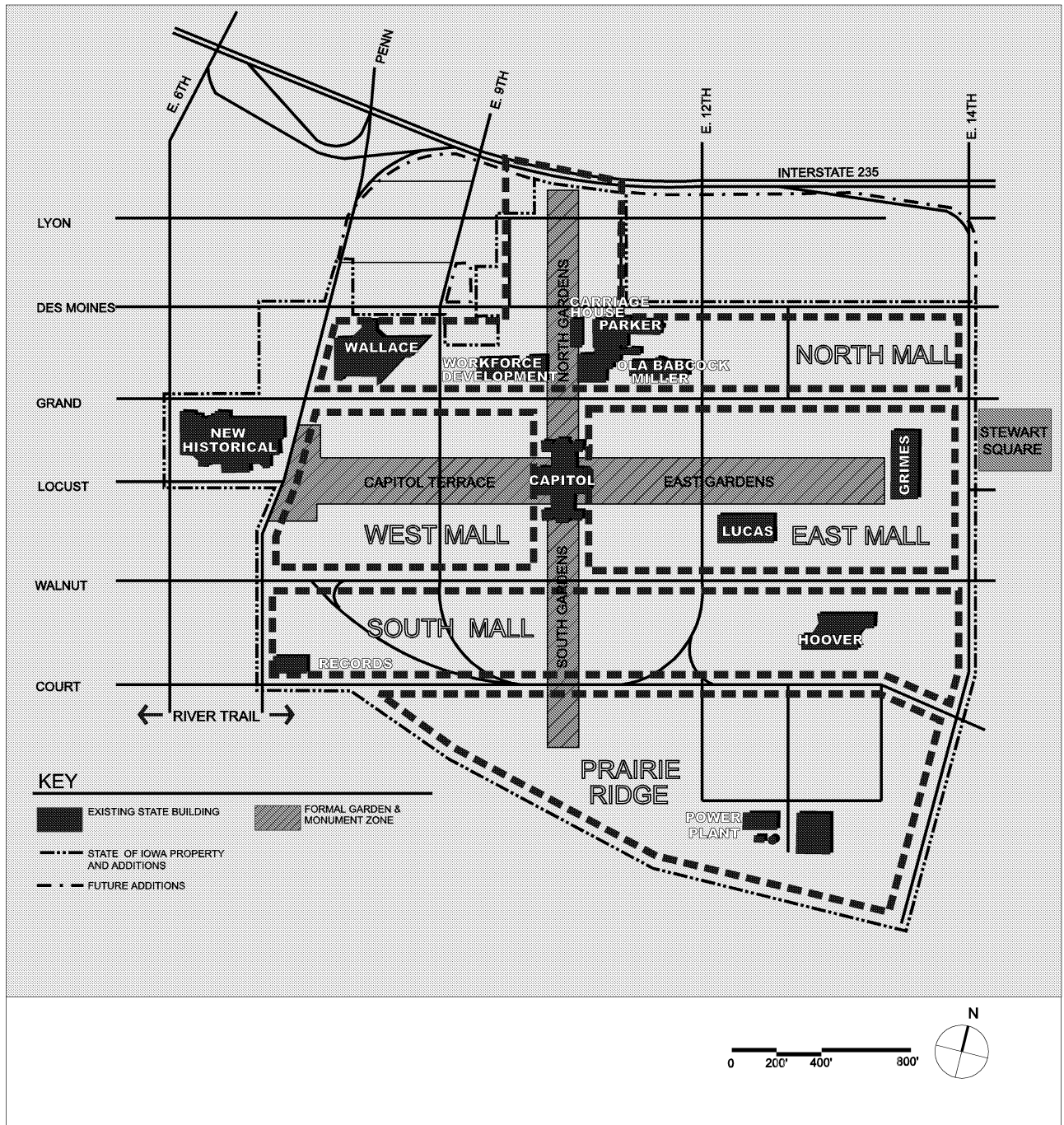
The Capitol Building is arguably the grandest building in Iowa and beyond. It was built on a constrained site, but with the clear intention that it would have an appropriately open and grand setting. In 1913 the State acquired that extra land, and the geometry of the preceding street grid was transformed into a Beaux Arts system of axes, views and curved driveways. The present landscaping and development of the Capitol grounds should complement the singular presence of the Capitol Building and benefit the role of the Capitol Complex as the seat of government and place of community.



The historic linear quality of the West Mall will be maintained in a new, central pedestrian approach.

The spaces which extend the presence of the Capitol Building into the grounds along each axis of symmetry, the Capitol malls, should be civic spaces that promote public use at all scales and levels, for both civic business and personal recreation. The perception of the Capitol grounds should be of an urban park setting disposed to social pleasures, thoughtful ambles, and quiet repose. Grand settings that respond to the individual can reduce personal intimidation and create an environment more likely to stimulate daily use. However, the character of each of the four Capitol malls should be distinct and different, since the configuration and specific uses of each is different. The east and west facades of the Capitol are clearly the dominant elevations, and make the east and west malls pre-eminent.

Capitol Malls



Each of the four Capitol malls and Prairie Ridge have unique attributes and civic responsibilities to the Capitol Complex Landscape Framework.

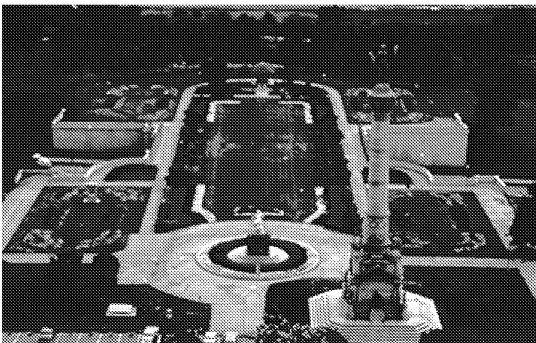
The **West Mall** is bounded by Grand Avenue, Walnut Street, Pennsylvania Avenue, and the west face of the Capitol Building. This ceremonial entrance should present the Capitol at its finest. Temporary structures at the west edge of the Capitol grounds should be replaced by forecourt features that frame the pedestrian approach to the Capitol Building. The Capitol

Terrace project will be a significant landscape design and construction effort that will result in a fitting threshold for the Capitol Building.



Removal of surface parking and attention to pedestrian amenities could restore the dignity of the East Mall landscape.

The **East Mall** is defined by Grand Avenue, Walnut Street, East 14th Street, and the east face of the Capitol Building. While the West Mall serves as a formal and ceremonial entrance for the Capitol Building, the East Mall provides an inward focus for state buildings east of the Capitol Building. A framework of open space and evergreens could bring intimacy and scale to the East Mall, replacing unsightly parking lots which inhibit pedestrian circulation and detract from the quality of the Capitol Complex. Recommendations for underground development have been proposed as a means to restore the visual clarity of the East Mall.



The original Court Avenue bridge reinforced the south Capitol axis with monuments and landscaping.

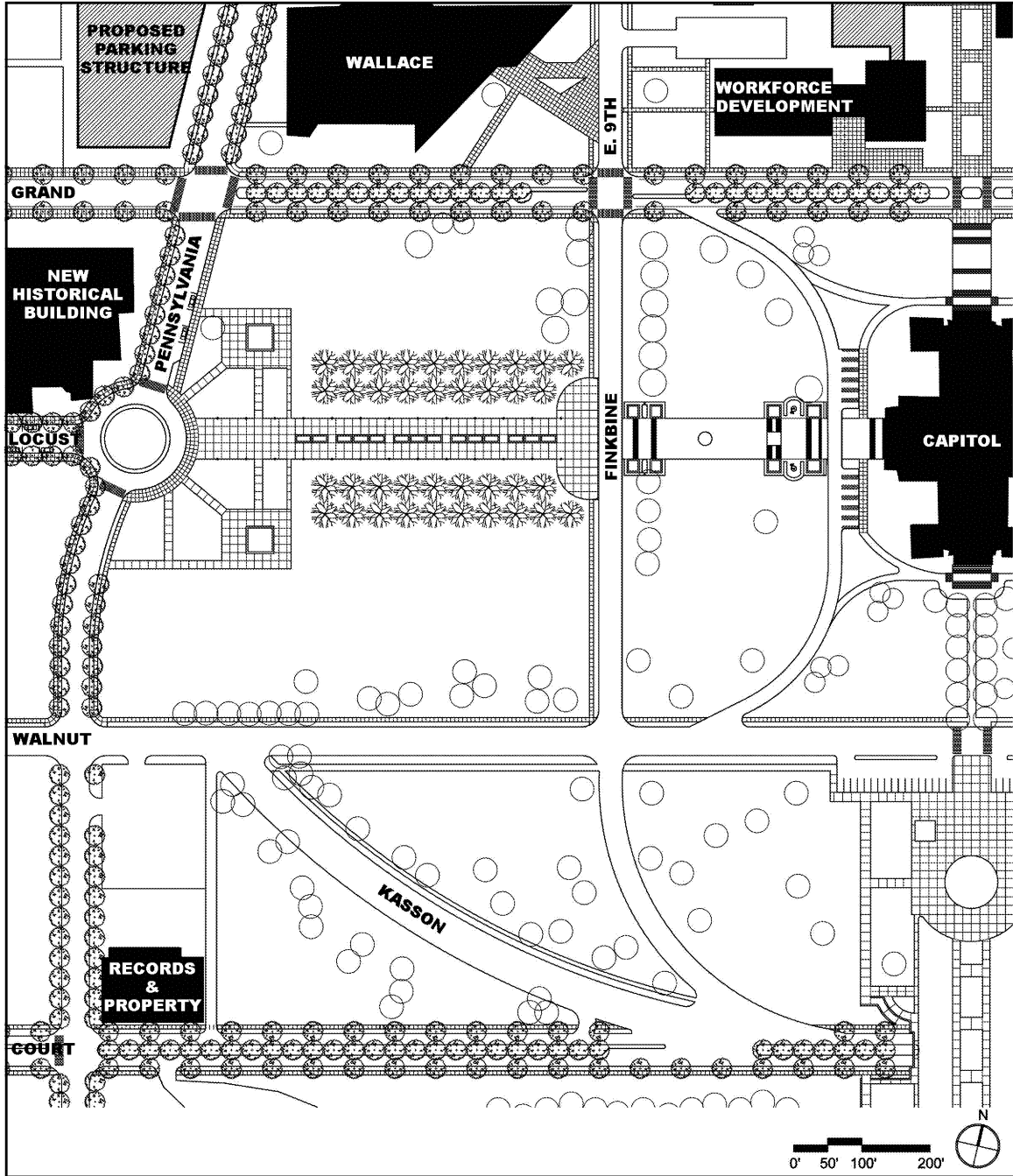
The **South Mall** encompasses land south of Walnut Street. It contains the bulk of memorials and monuments in garden environments, and has received the greatest attention of all the malls in the past. The off-axis siting of the first great monument set an interesting precedent and gives a particular informality to the space, although surface treatments adhere largely to the symmetry of the Capitol Building. The informal nature of South Mall, particularly on the west side, creates a serene, verdant setting at the Capitol Complex.

The **North Mall** extension to the freeway will be a key enhancement of the Capitol Complex grounds, since no recognizable spaces or relationships currently acknowledge the presence of the Capitol from the freeway. The I-235 freeway is sunken well below ground level around the Capitol Complex, hindering even passing views of the Capitol Building from the freeway. The expansion of the North Mall to the I-235 freeway and introduction of a terrace element visible to users of the freeway could assert the presence of the Capitol Complex. The importance of this visual presentation requires quality and thoughtfulness of design.



The development of a North Mall could extend Capitol presence to the freeway.

West Mall



The West Mall could be developed as a true civic garden for the citizens of Iowa.



Development on Prairie Ridge could begin to define the character of the landscape, with a goal of preserving its natural setting.

A fifth major element of the Capitol Complex landscape is largely independent of the malls. The **Prairie Ridge** area extends south from Court Avenue to the boundary of state lands along the railroad. Extensive landscape development and increased building density can be anticipated here. Imminent is the development of the new Judicial Building which will become the most prominent man-made feature on Prairie Ridge, introducing it as an active civic area on the Capitol Complex.

Definition of these major landscape areas is a first step in recognizing the unique attributes of each. It will define a number of specific objectives whose accomplishment will elevate the quality of these spaces to a level which begins to match the civic responsibilities incumbent on each.

Objective:

Provide grounds which are a suitable setting for the Capitol Building and a source of pride for the citizens of Iowa.

Guidelines:

- Reinforce the use of Capitol malls as urban parks.
- Expand the “buildings in the green” image of the West and East malls to the North and South malls.
- Integrate principles of sustainability in landscape development and maintenance. Favor drought-resistant and disease-resistant species to minimize watering and chemical use. Use deciduous shade trees and annual plantings to reduce loss of moisture by evaporation.
- Ensure the survival of plant life on Capitol Complex grounds through introduction of a comprehensive grounds maintenance program. Develop the grounds maintenance plan in consultation with professional groundskeepers.
- Encourage volunteer programs for garden maintenance as an exemplary way of involving the community in the beautification of the Capitol grounds. The Des Moines Men’s Garden Club formerly tended the gardens south of the demolished Court Avenue bridge. Participation in Capitol Complex goals promotes a sense of ownership and proprietorship of the Capitol Complex.
- Preserve existing trees and respect memorial plantings during Capitol Complex development where possible. Where disturbance is unavoidable, transplant memorial trees to a site consistent with the memorial’s location criteria.
- Provide deciduous trees in formal mall areas, planted in regular form and density, and complementary to existing dedicated trees.

- Cultivate prairie grass in formal areas for visual interest. Coordinate such plantings under a landscape implementation plan for the whole Capitol Complex.
- Use high-maintenance plantings, such as annuals, only as special features in high traffic areas such as the formal gardens. Elsewhere, use low-maintenance and predominantly native plantings.
- Encourage landscape elements that allude to Iowa's uniqueness, especially symbols of Iowa's heritage such as the state tree, plant, grain, and fish.
- Provide informal evergreen and deciduous tree groupings at informal garden areas for year-round richness of the landscape context.



The landscape framework strives to integrate spaces for gathering.

- Provide lawns and perimeter landscaping to soften the edges of the Capitol Complex and provide connection to area neighborhoods.
- Provide raised planters and flower beds containing seasonal plantings, for color and interest. Design the edges of raised planters to encourage informal seating.
- Provide some shade over terraces and hard surfaces to increase summer use.
- Remove ice and snow from building terraces during the winter.
- Integrate environments for gathering in the landscape framework.

- Provide picnic tables at informal lawn areas for public use.
- Ensure public safety in the layout and density of landscape features.

Specific Recommendations:

- Develop central promenades on building axes for pedestrian connection and garden development.
- Develop informal tree plantings at the east edge of the Capitol Complex near East 14th Street.
- Soften the freeway edge in the North Mall.
- Prune the sycamore trees on the south side of the Capitol Building to improve the view of the South Mall from the building.
- Consider an arboretum setting for parts of Prairie Ridge.
- Develop the Prairie Ridge grounds south of Court Avenue to the river valley with sustainable landscape plantings to celebrate its natural scenic views.

Capitol Gardens

Restoring the Capitol grounds as landscaped gardens will uphold the preeminence of the Capitol Building, and should be designed with this intent. Within the central space of each mall radiating from the Capitol Building will be formal gardens and planters, each distinct in character and arrangement. A broad pedestrian promenade will extend from the west side of the Capitol Building to a plaza at the terminus of Locust Street and from the east side to the WWII Memorial Plaza.

The formal garden concept will encourage use and enjoyment of the grounds and provide visual connection of buildings and other features of the Capitol Complex. Successful garden spaces will enhance the value and economic viability of neighborhoods surrounding the Capitol Complex, especially those to the east. Gardens and open spaces require much more than careful design and execution; they require ongoing commitment, reevaluation, and diligent management.

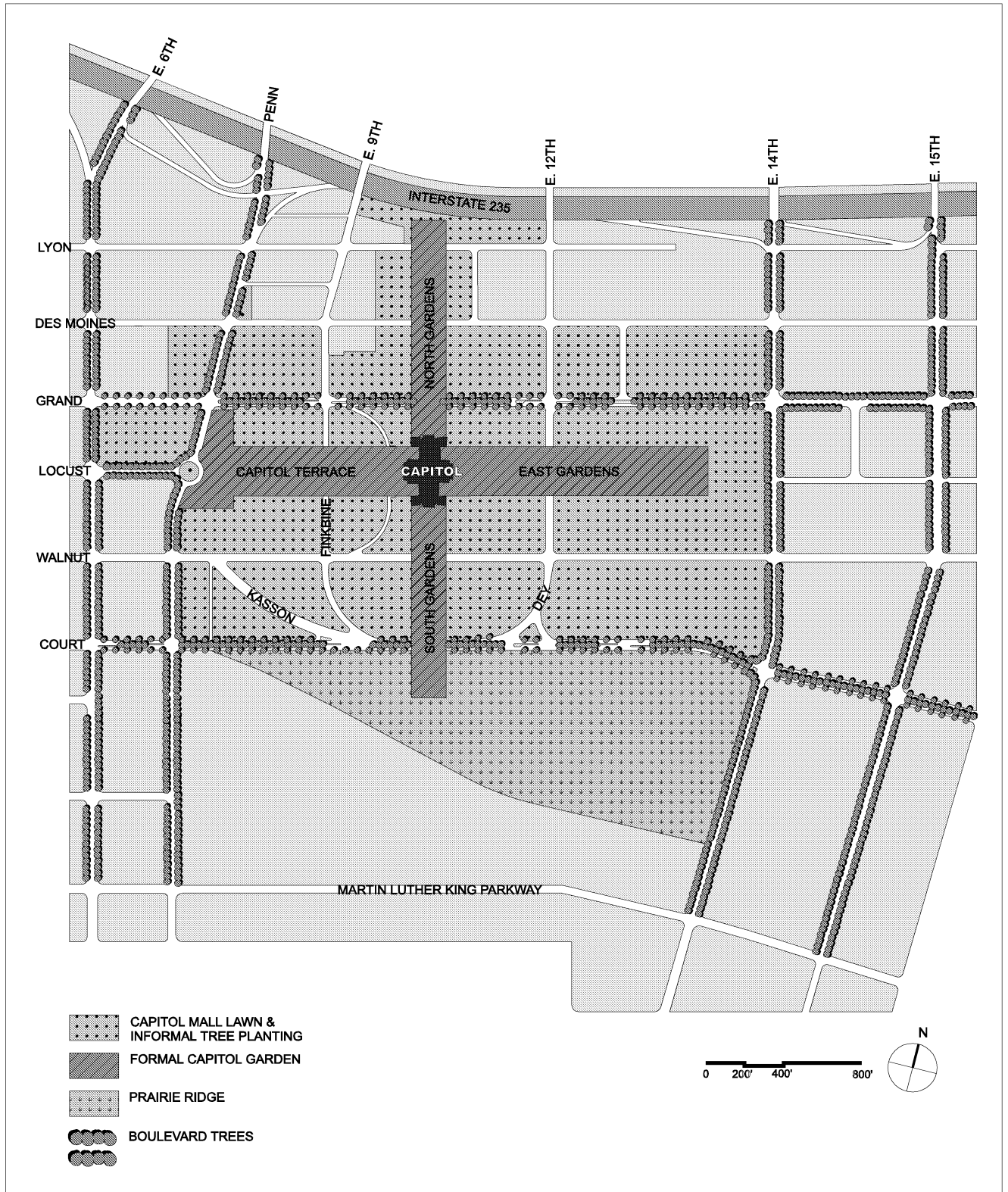
Objective:

Set the highest standards for civic space, providing for the protection, development, and enhancement of the public gardens and open space as a fitting setting for the Capitol Complex.

Guidelines:

- Extend the axes of the Capitol Building with formal public gardens: Capitol Terrace, East Gardens, South Gardens, and North Gardens. These gardens should provide intimate open spaces as well as formal approaches to the Capitol Building.
- Return Capitol gardens to the domain of pedestrians by creating a network of people-oriented spaces. Restrict vehicular access to essential trips.
- Provide public amenities that encourage people to linger. These could include seating, such as low walls or steps incorporated with landscaping where desirable, for rest, observation, and participation in public outdoor activities.
- Provide seating in shaded areas for summer respite.
- Develop focal features such as artworks and monuments at critical axes. Require endowments for the maintenance of all new monuments.
- Utilize the space and procession capabilities of the Capitol Complex for event planning.
- Design connecting streets and pathways as extensions of open spaces, reflecting a quality appropriate to the public realm at the Capitol Complex.
- Design landscaping features with personal safety in mind.

Capitol Gardens



The Landscape Framework complements the singular presence of the Capitol Building and enriches the experience of visitors to the Capitol grounds.

Capitol Terrace

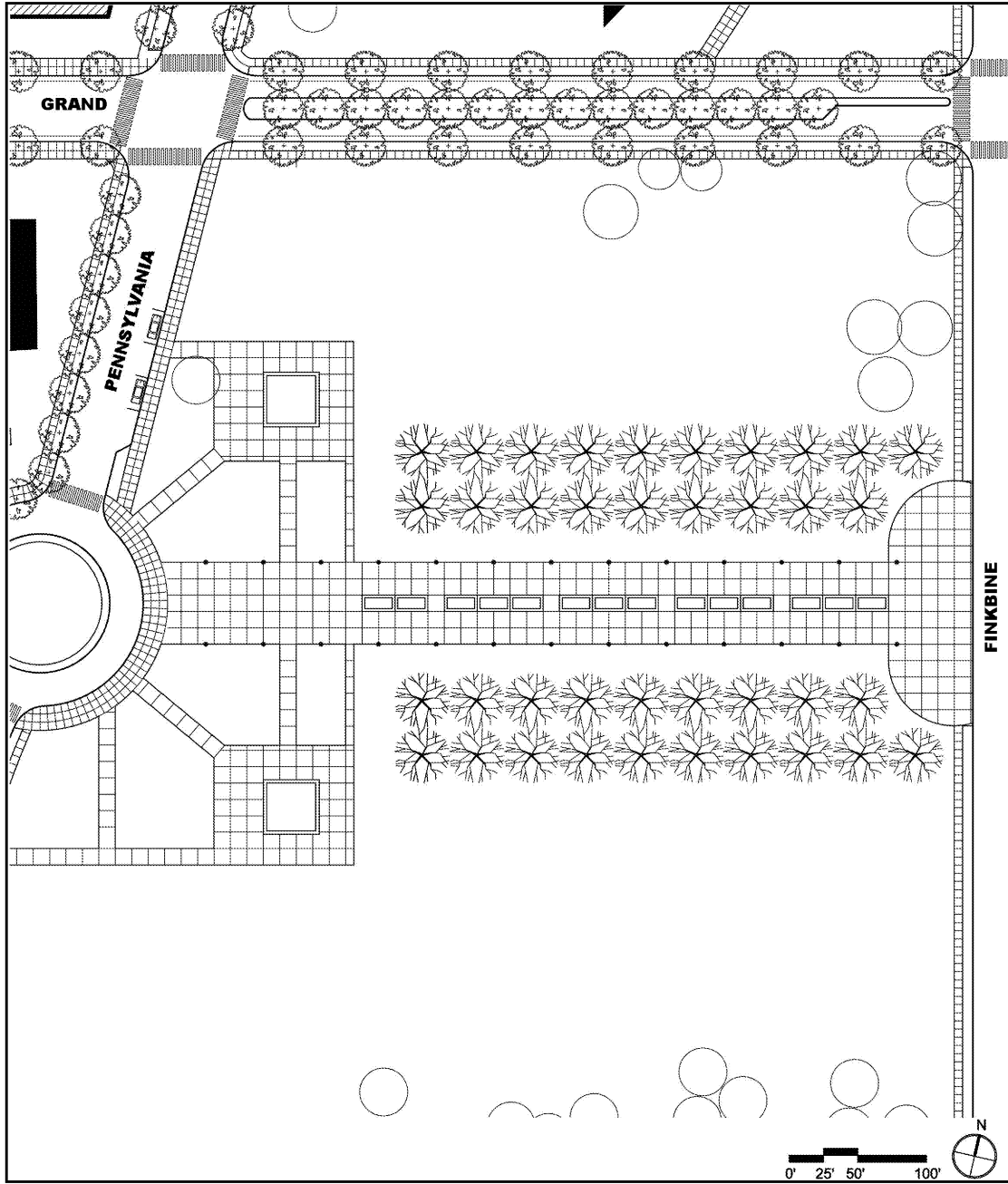
Also known as the West Gardens, Capitol Terrace is the forecourt across which the Capitol Building is viewed from Locust Street and downtown Des Moines. The Capitol Building shares its east-west axis of symmetry with Locust Street, and this relationship is fundamental to organization of Capitol Terrace. It is a place of celebration and congregation on special occasions, and as a passive park of greenery, a peaceful respite from the serious business of the legislature and other state functions.

At the beginning of the 21st century, encroachment of buildings in the Capitol is less of a threat than the insidious and rising tide of parked automobiles. Currently, they have taken over much of the Capitol Terrace and press against the east steps of the Capitol. These, together with most vehicular access, should be removed, and the graciousness of the landscape restored.

Dignified settings not only support the functional roles of buildings and circulation patterns but provide opportunities for programming, whether structured or unstructured, formal or casual. The natural slope of Capitol Terrace facilitates an amphitheater setting. The Capitol grounds could sponsor a variety of gatherings and audience configurations. The grounds could be designed to accommodate these, so that they can be staged, performed, and removed without damage. Occasions for public gatherings on the Capitol Complex promote community participation and require effective event management, appropriate staging areas, and parking strategies. Currently, community events include Music Under the Stars, Easter Egg Hunt, fairs, parades, and celebration of Martin Luther King, Jr., Day, Independence Day and other federal holidays.

A grove of memorial trees on Capitol Terrace near Walnut Street adds summer greenery and defines the southern edge. However, the location of these trees may conflict with an overall plan for Capitol Terrace, and relocation of some specimens may be appropriate.

Capitol Terrace Enlarged Plan

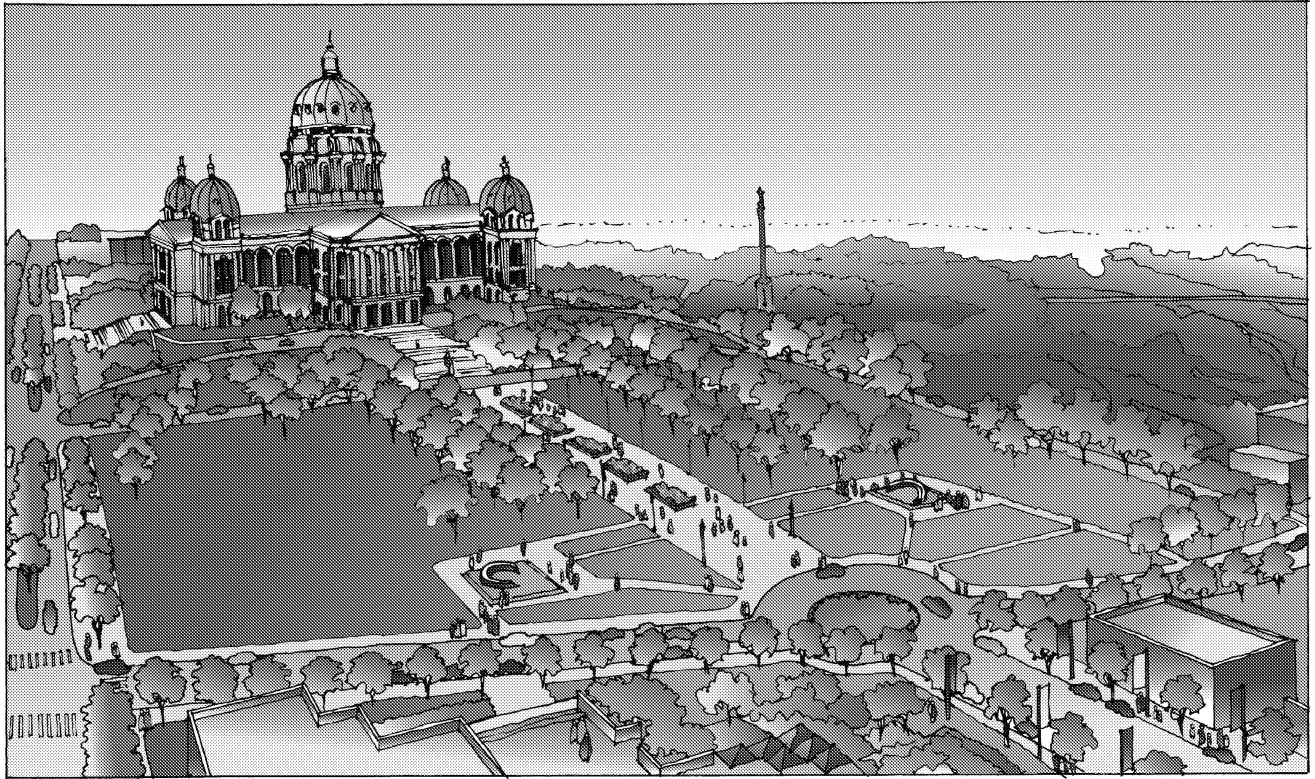


Removal of parked cars can restore the graciousness of the landscape and create a fitting forecourt to the Capitol Building.

Specific Recommendations:

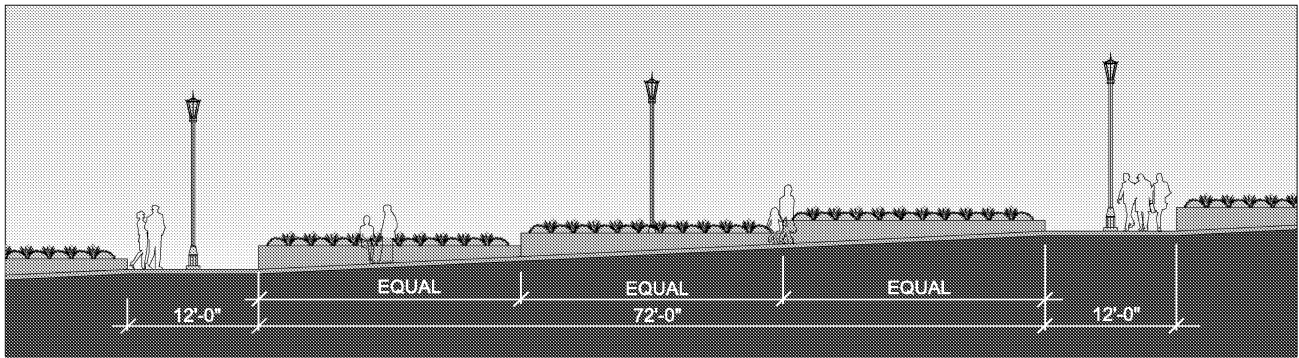
- Terminate vehicular access from Locust Street to Capitol Terrace at Pennsylvania Avenue. The Locust Street terminus should direct traffic safely and effectively.
- Develop a plaza as a fitting eastern terminus to Locust Street. The plaza marks the transition from street to footpath through an amphitheater or similar open, gregarious green space, and up to the Capitol Building.
- Clearly express the east-west axis of symmetry of the Capitol Building, coincident with the centerline of Locust Street, in the landscape treatment of the Capitol gardens which join them. Both landform and plantings are independent of this symmetry, but a strong visual connection between the Capitol Building and Locust Street should be evident.
- In place of current surface parking, develop a pedestrian promenade with raised planters that follow the centerline from East 7th Street to Finkbine for enhancement of the pedestrian approach. The linear quality of past plans also emphasize a central approach on axis with the Capitol Building.
- Preserve the avenue of mature trees parallel to the east-west axis of the Capitol Building as an important feature of the Capitol Terrace landscape.
- Develop accessible ramps integral with new and existing terrace steps to make the west side approach more equitable to all visitors of the Capitol Complex.
- Closely integrate the landscape plan for the area between the Capitol Building and Finkbine (East 9th) from Grand Avenue to Walnut Street with access driveways and even a few discrete and unobtrusive short-stay parking spaces at the west Capitol steps. Find inspiration in the 1884 Weidenman plan.
- In keeping with the cultural and educational theme of the New Historical Building, support development of public event use of the Capitol Terrace gardens.
- Accommodate a staging area and amphitheater setting on the Capitol Terrace for performances.
- During events, place portable toilets in locations that are convenient yet inconspicuous, such as the wooded area near Walnut Street.

View of Capitol Terrace

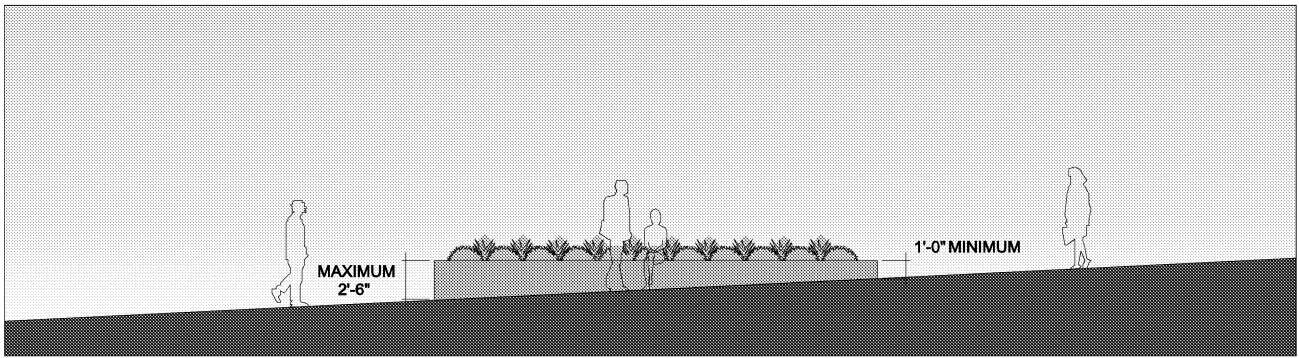


The Capitol Terrace can celebrate both the moment of arrival and the procession to the Capitol Building.

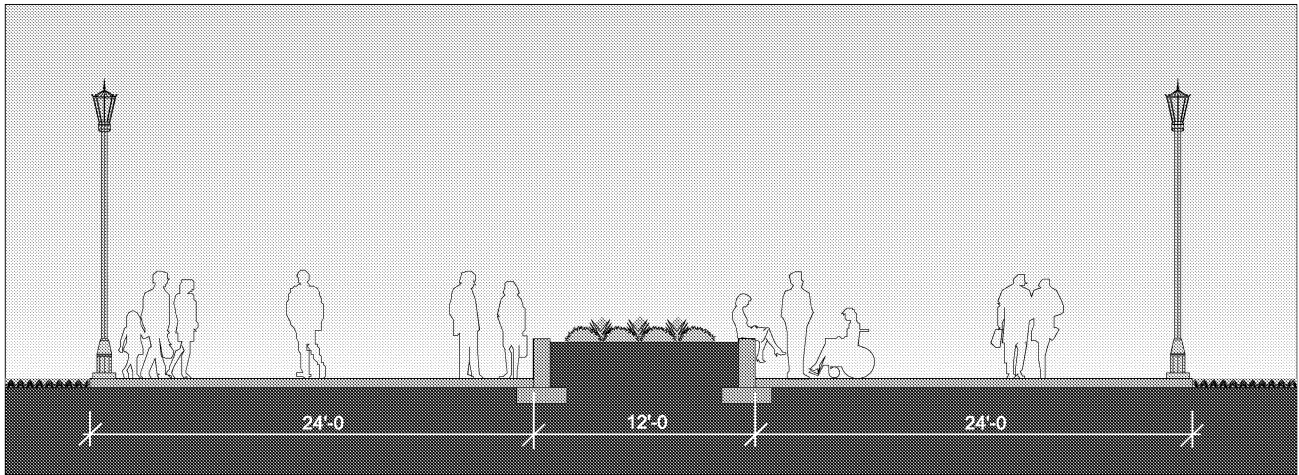
Capitol Terrace Planting



CAPITOL TERRACE EAST/WEST SECTION



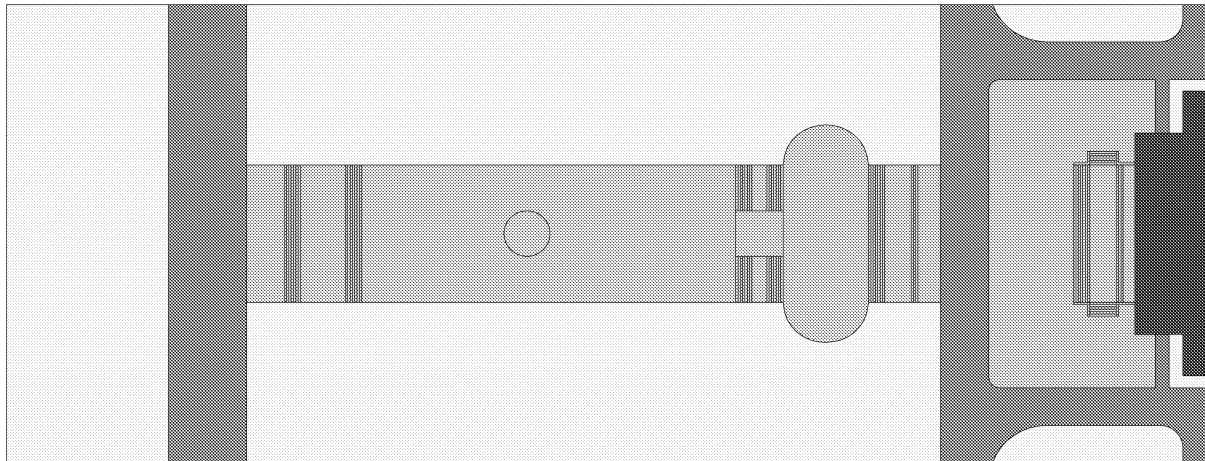
ENLARGED ELEVATION



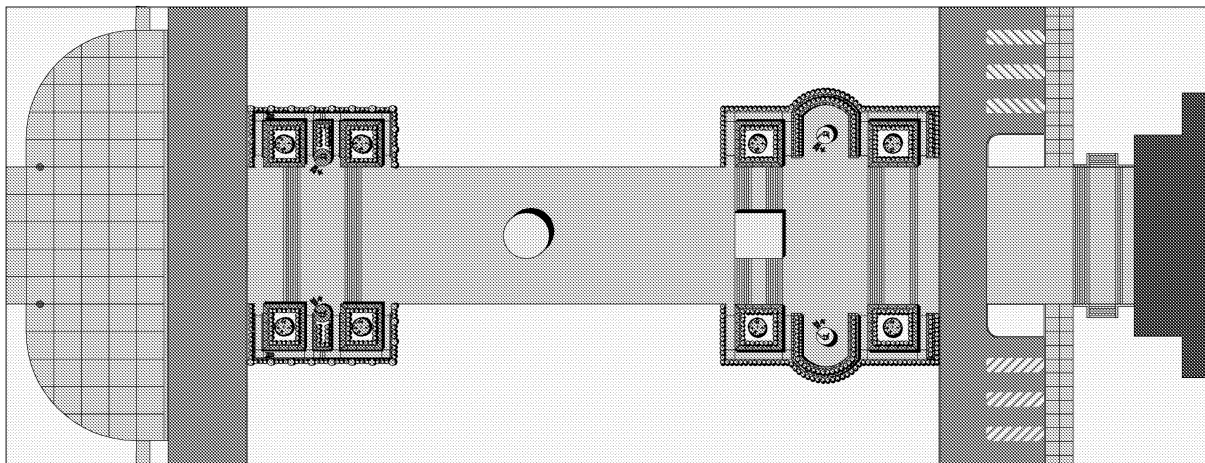
CAPITOL TERRACE NORTH/SOUTH SECTION

The edges of raised planters and flower beds can encourage informal seating.

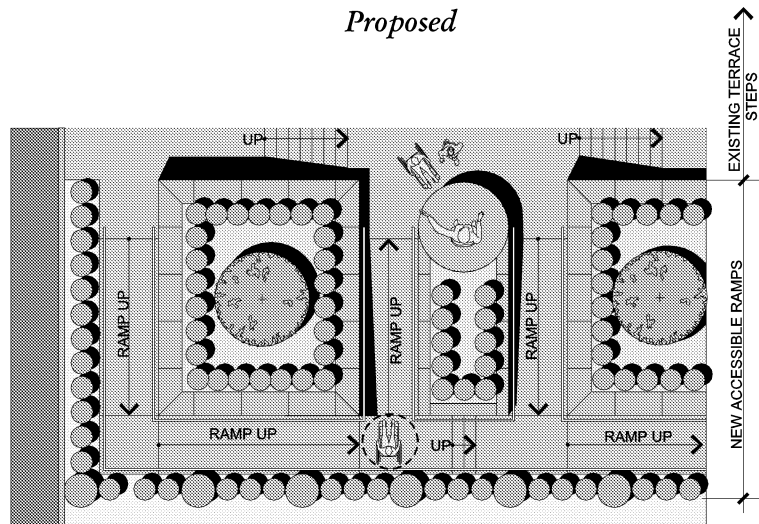
Capitol Terrace Steps



Existing



Proposed



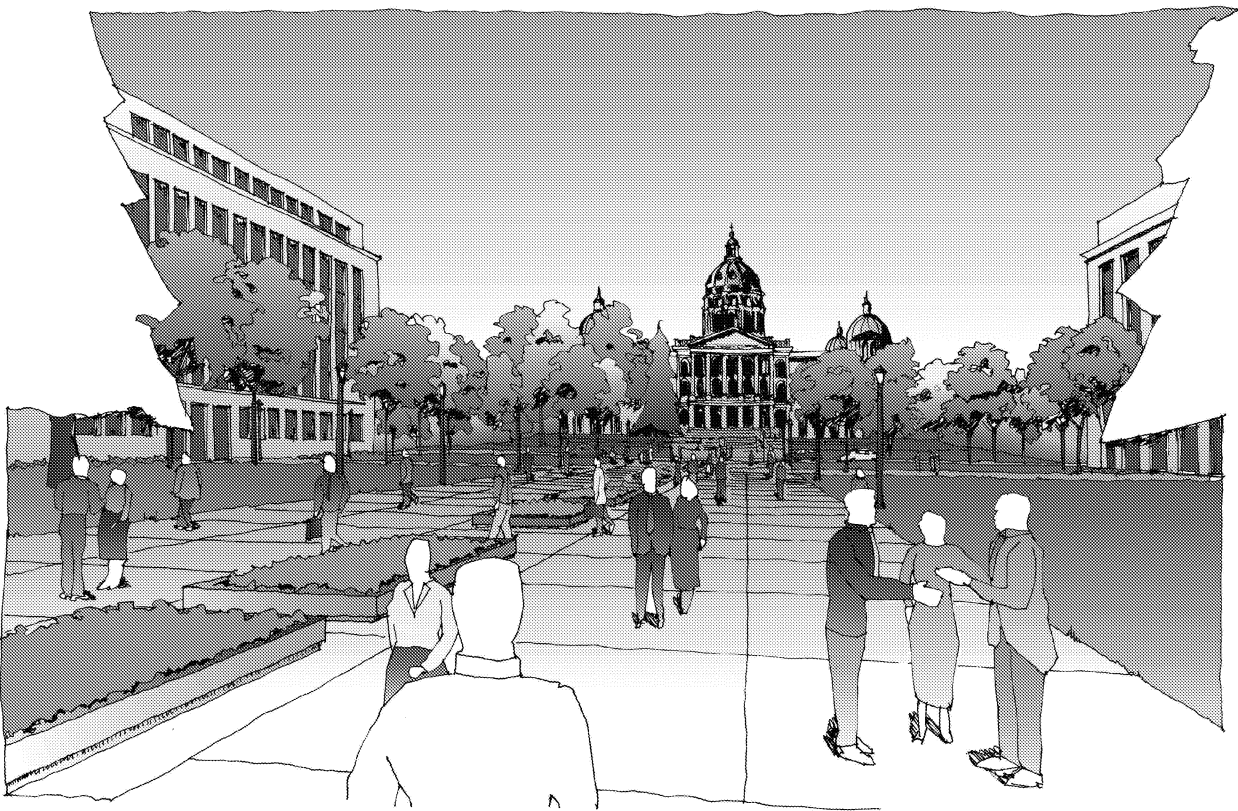
Developing accessible ramps integral with the existing east terrace steps will make the approach more equitable to all visitors to the Capitol Complex.

East Gardens

As in the West Gardens, parking currently compromises the dignity of the east entrance to the Capitol Building. In place of parking, a central pedestrian promenade from the Capitol steps could engage several formal gardens of distinct character. These gardens will serve as visual and spatial connectors between buildings to the north and south, whether on the mall itself such as the Lucas Building, or across a street such as the Ola Babcock Miller Building. These gardens will integrate the WWII Memorial Plaza and new evergreen trees on the East Mall. The East Gardens should be intimate in character and facilitate activities of the State.

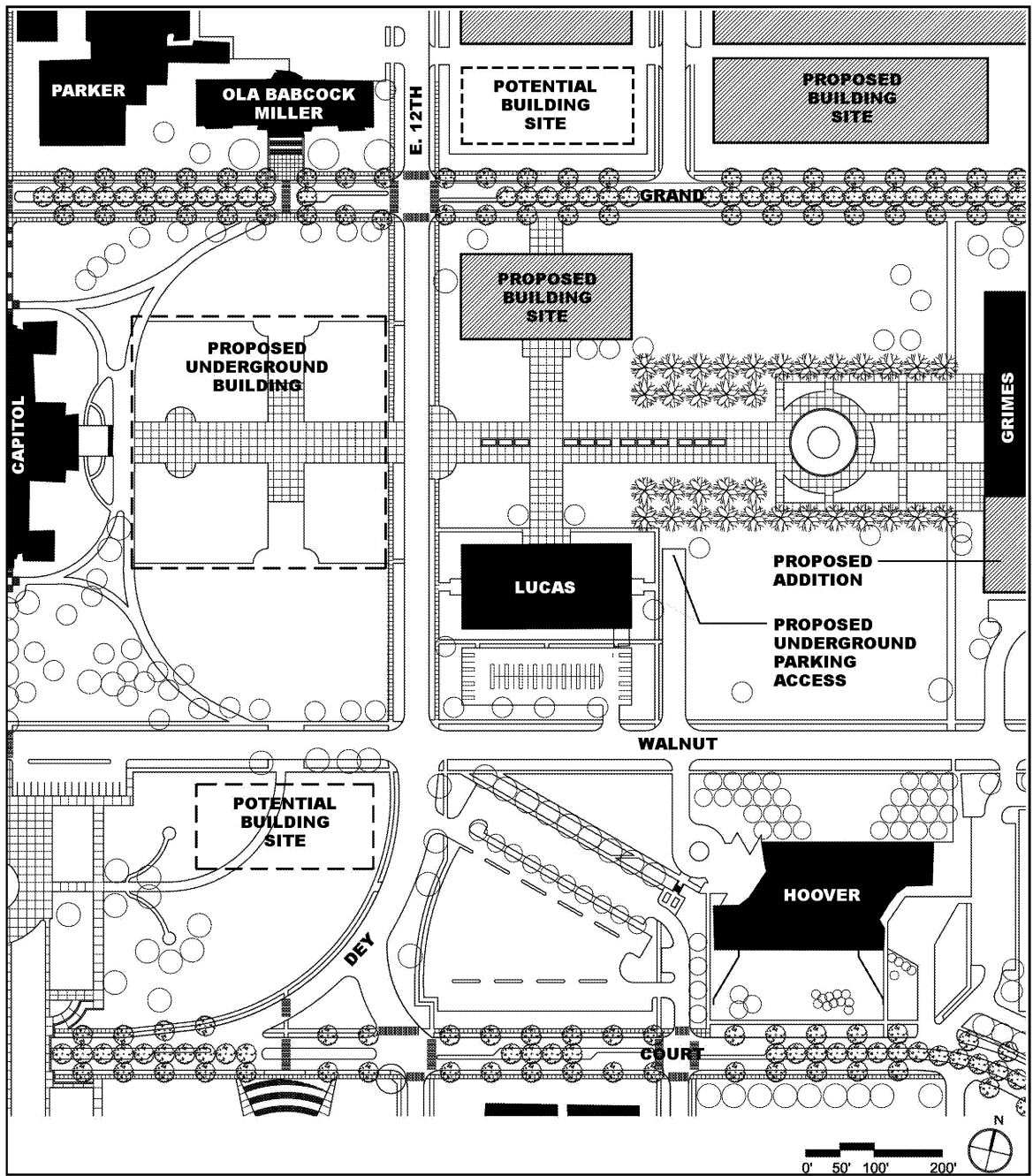
Specific Recommendations:

- Remove parking from the East Gardens.
- Provide formal gardens east of the Capitol Building that visually connect the Ola Babcock Miller Building with new development directly to the south, and the Lucas Building with new development just north of the East Gardens.
- Develop evergreen groves in the far East Mall to help define the edges of the East Gardens.
- Eliminate (for safety reasons) the below-grade service dock at Grimes Building. Identify alternative means of service.
- Study extension of the Grimes Building to the south over the former service yard.

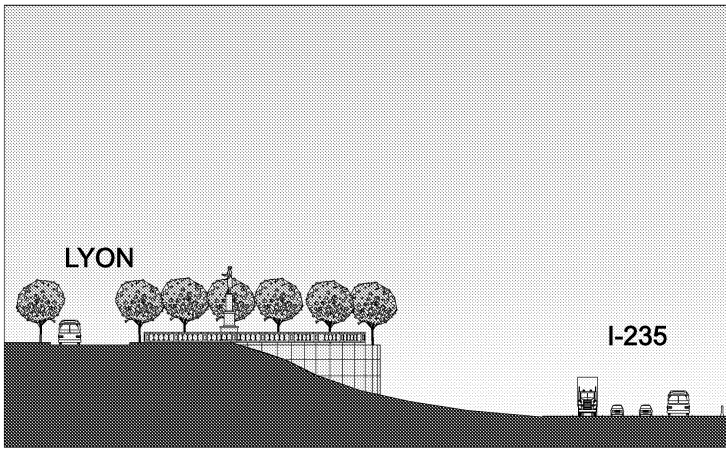


The East Gardens could become a gracious place for pedestrians.

East Gardens



The East Gardens will connect the Capitol Building with garden features along a central promenade.



A North Mall terrace on the freeway bank would terminate North Gardens and announce the Capitol's presence.

North Gardens

The North Gardens will introduce a new focal point for the Capitol Complex, acknowledging a north axis which to this point has been underdeveloped. A generous width should be maintained for gardens extending from Grand Avenue to the I-235 freeway. Future building developments on the west and east sides will provide enclosure for the North Gardens. They will also direct views north to a new terrace at the freeway terminus and frame views south toward the Capitol Building.

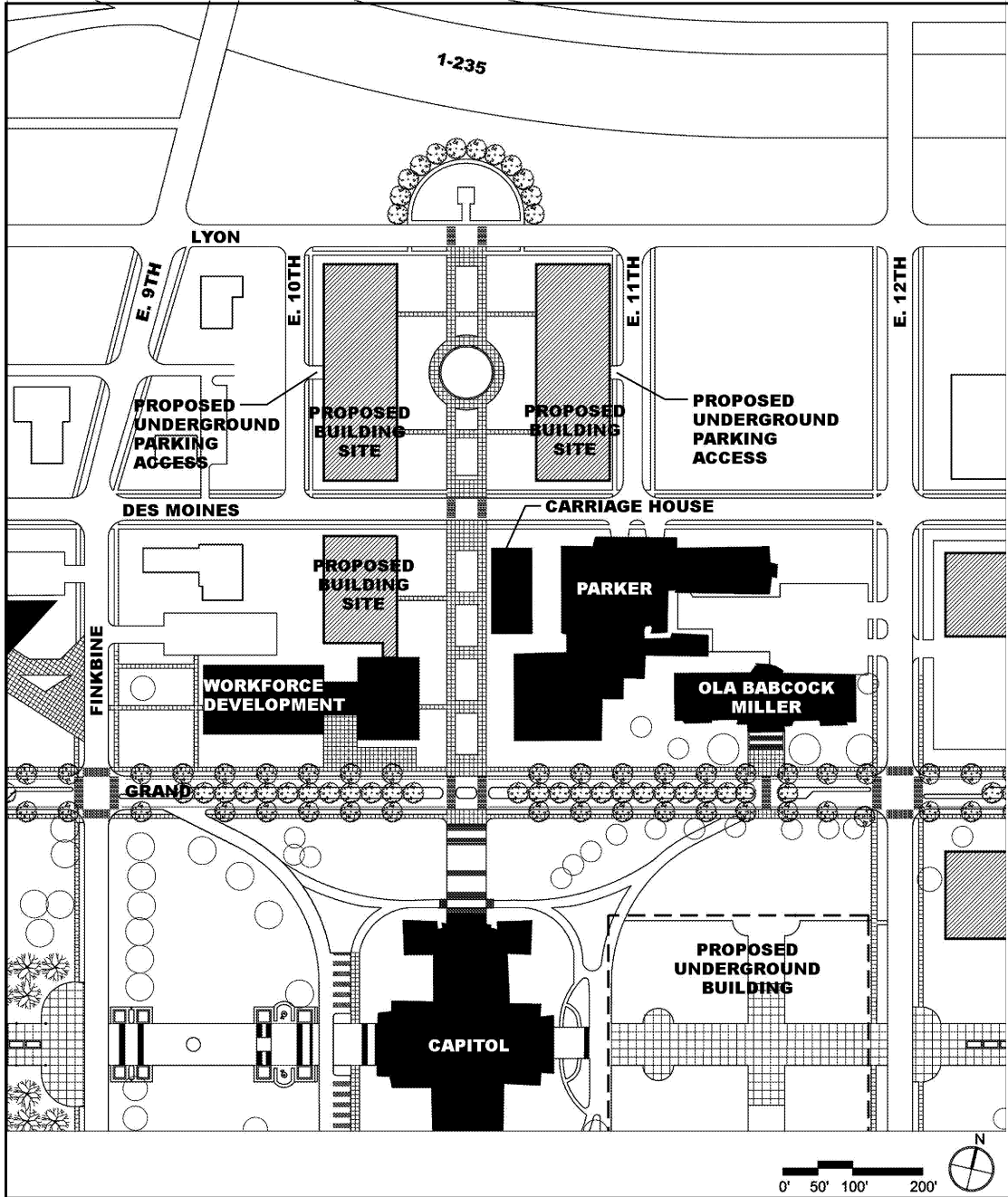
Specific Recommendations:

- Develop lawns and open space along the north axis from the Capitol Building to create public open spaces in the North Mall and extend the presence of the Capitol to the freeway.
- Develop a garden terrace element at the bank of the freeway to terminate the north visual axis and identify the Capitol Complex from the freeway.



The restored Capitol Building and Carriage House could bring historic presence to a new active civic center on the North Mall.

North Gardens



Bringing landscape elements to a North Mall could create many exciting opportunities for the Capitol.

South Gardens

The South Gardens serve as an important link across Walnut Street and Court Avenue. Once well-connected by the now demolished Court Avenue Bridge, new linkages should strive for similar landscape integration. The landscape between the Capitol and Judicial Building should be developed.

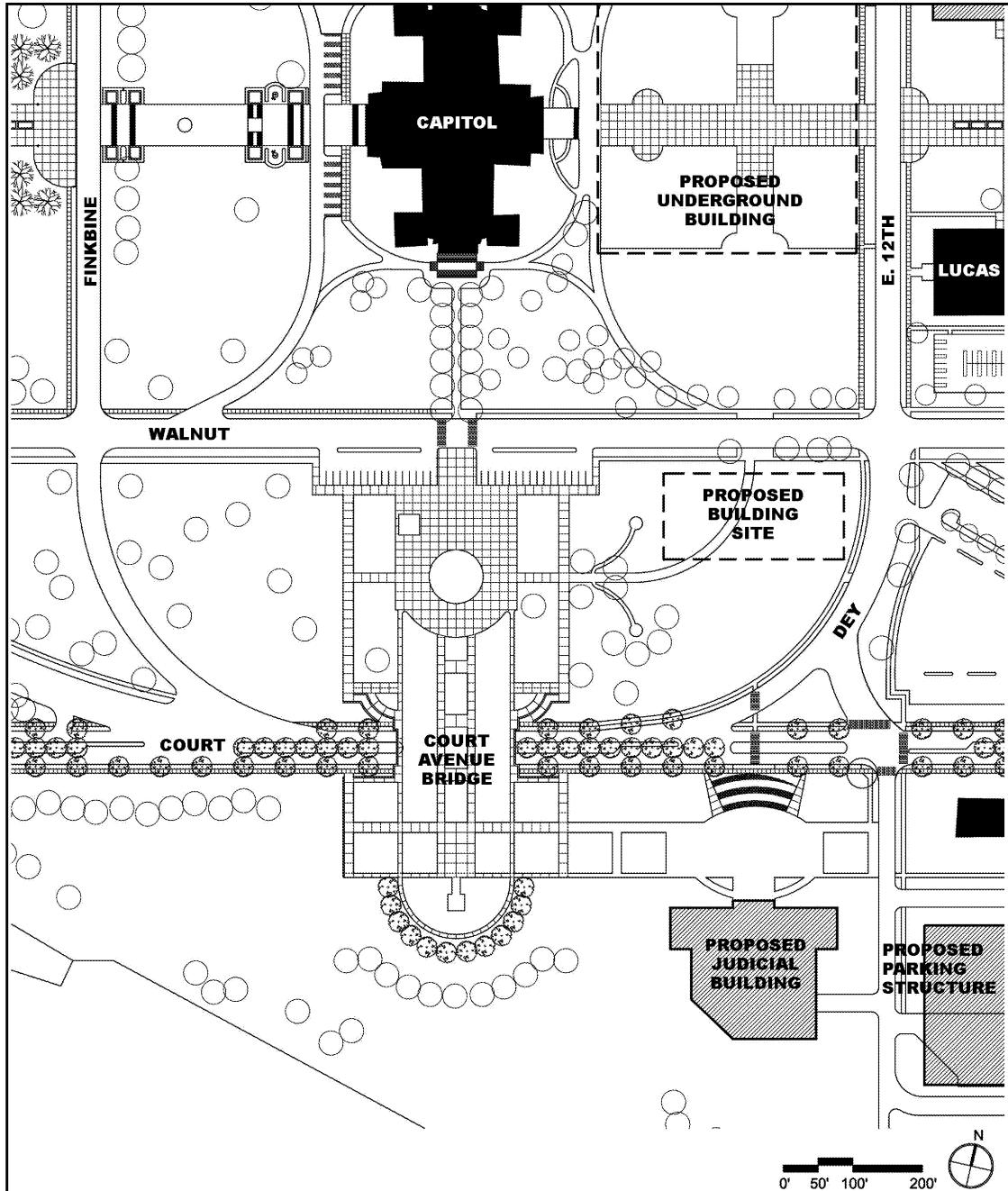
Specific Recommendations:

- Enhance the ties between the gardens south of Court Avenue and the rest of the Capitol Complex through a new Court Avenue bridge.
- Formalize the monument garden area south of the Capitol Building to engage a new Court Avenue bridge.

Court Avenue Bridge Design Guidelines

- Set a precedent for the restoration of the Capitol grounds.
- Locate a replacement bridge over Court Avenue on axis with the Capitol Building.
- Extend the formal gardens of the Capitol south across Court Avenue.
- Avoid obstructing views of Capitol Building.
- Provide vertical pedestrian access to sidewalks on Court Avenue.
- Provide ADA access over Court Avenue.
- Face the bridge structure with stone to blend with the Capitol steps.

South Gardens



Landscape integration has always been a worthy aspiration for Capitol Complex open spaces. A new Court Avenue bridge will reunite the malls with Prairie Ridge.

Monuments and Public Art



Public art enriches the built environment and can improve our understanding of a place in ways that buildings, landscape, and infrastructure do not. Public art at the Capitol Complex reflects state values, recognizes the achievements of citizens of Iowa, documents the milestones of a democratic institution, and records the historical development of the Capitol grounds.



The State commitment to developing the Capitol malls has produced memorials of significant civic importance. Monuments, memorials, and historical markers abound on the Capitol Complex. The continuation of both State and private funding for the implementation and maintenance of public art is critical to future efforts. However, enthusiasm for the installation of commemorative works should be tempered with the priority of maintaining the dignity of the Capitol malls.

Objective:

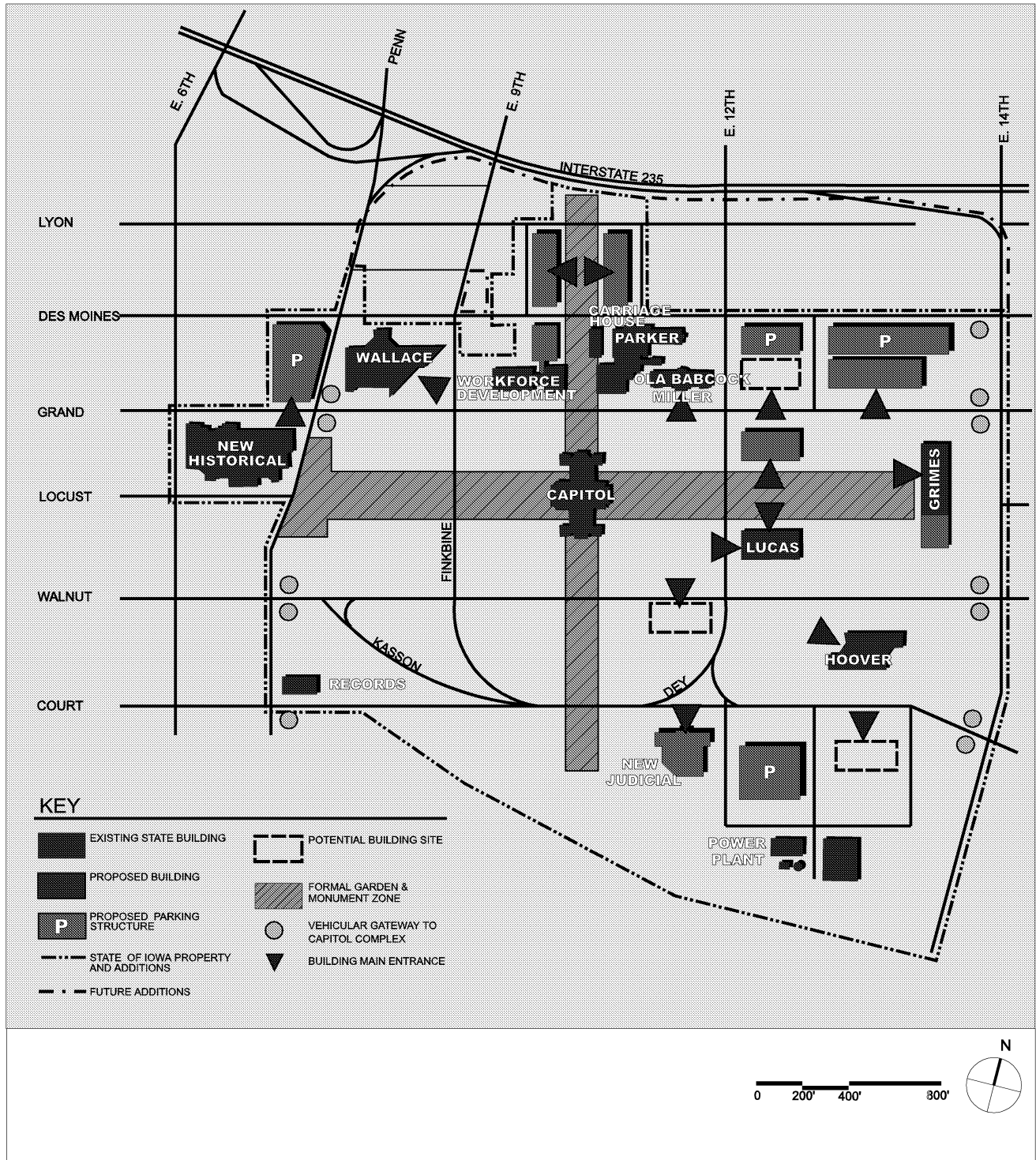
Honor Iowa's history with appropriate siting of selective works of art on the Capitol malls or elsewhere in the Capitol Complex.

Incorporation of monuments into garden areas and landscape elements have set precedents for future consideration.

Guidelines:

- Develop consistent criteria and a process for permitting and siting of new monuments on the Capitol Complex. Evaluate public works of art based on their ability to enhance public spaces, and the specific sites they are to occupy.
- Secure endowments for each new and existing monument and public art installation to pay for maintenance.
- Exercise discretion and restraint in authorizing additional artworks and monuments on the Capitol malls.
- Maintain the dignity of existing works of art and memorials.
- Assess the condition of existing monuments for restoration.

Monument and Public Art Zone



Formal gardens are appropriate locations for new monuments.

- Ensure accessibility of open spaces for appreciation of monuments and public art.
- Integrate new monuments and public art on the formal Capitol Gardens where they respond to visual and axial relationships of public spaces and entry points in the landscape framework. Art works may be used to orient visitors to the Capitol Complex.
- Respond to all approaches in the siting of monuments. Do not turn one's back to buildings and public spaces, such as the WWII Memorial Plaza.
- Ensure that each piece is appropriate to its setting. Consider relocation of monuments which do not meet accepted guidelines for setting and location.
- Preserve trees dedicated with plaques which lend their dignity to the Capitol grounds.
- Dedicate gardens of commemoration as an alternative to monuments.
- Encourage public art features that may become attractions for visitors such as fountains or garden terraces.

Specific Recommendations:

- Enhance the WWII Memorial Plaza as viewed from the Grimes Building.

Streets and Boulevards

The significance of streets as principal approaches to the Capitol Building, or as elements of orientation within the Capitol Complex, can be enhanced with judicious placement of public art.

Objective:

Increase the emphasis on expanding the Capitol Complex's monumental nature beyond the malls into other areas of the Capital City, especially along boulevard axes and visual corridors.

Guidelines:

- Promote public art works along major approaches to or visible from the Capitol Building to reinforce view axes and to facilitate the orientation of pedestrians and motorists.
- Integrate new monuments and public art with existing landmarks and entry points, both vehicular and pedestrian.
- Use landscaping to emphasize axes and view corridors.
- Strengthen links between the Capitol Building and the river with reciprocal monuments.
- Program temporary art installations in parks, squares, and plazas elsewhere in the City, such as Stewart Square Park or Burke Park.

Buildings

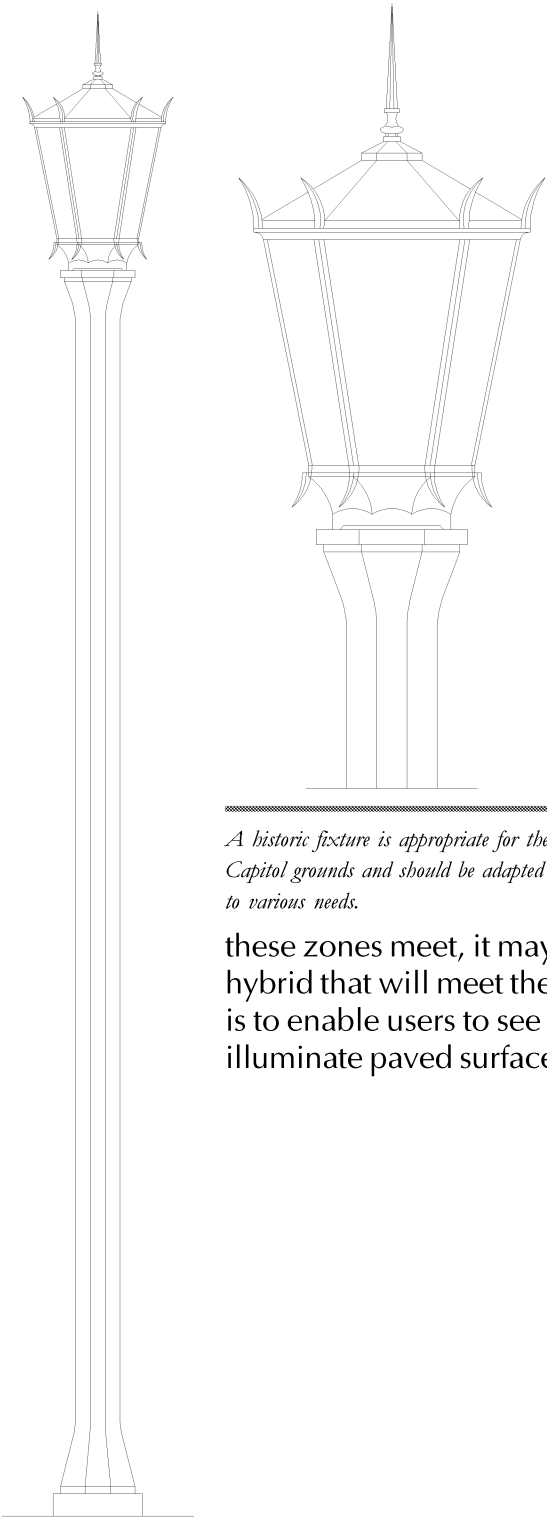
Public art has always been an important component of civic architecture. However, it must be consistent with the character of the building and the scale and use of the specific space it is to adorn.

Objective:

Plan buildings with provisions for public and commemorative art.

Guidelines:

- Memorialize significant persons and events by renaming existing features or buildings as an alternative to adding monuments.
- Integrate art in the design process of new construction. These may be indoors or outside building main entrances.
- Commission works of art for specific locations in new and existing buildings. These may be commemorative pieces.



A historic fixture is appropriate for the Capitol grounds and should be adapted to various needs.

Lighting

Implementation of a coordinated lighting, signage, and landscape plan could provide elements of continuity and compatibility between Capitol Complex buildings and clearly designate the civic boundaries of the Capitol Complex. Each state building on the Capitol grounds has been developed in an order and manner reflective of its time, bringing to the Capitol Complex a variety of lighting as well as signage. Lighting on the Capitol Complex should work within an overall lighting plan rather than be developed independently during each building project. Lighting standards should be capable of accommodating Capitol Complex expansion.

In order to create environments that are attuned to their predominant use, it is important to distinguish between the needs of vehicular, pedestrian, and building lighting, and address those special conditions where they intersect. Appropriate fixtures for illumination of roadways, access drives, and parking areas will be used in vehicular zones. Smaller pedestrian-scaled fixtures for illumination of garden areas, pedestrian pathways, and sidewalks may be used in pedestrian zones. Where these zones meet, it may be appropriate to employ several fixture types, or a hybrid that will meet the lighting distribution appropriate for the area. The purpose is to enable users to see one-another and ensure their safe passage; not to illuminate paved surfaces beyond required levels.

Objective:

Implement a comprehensive lighting standard for the Capitol Complex.

Guidelines:

- Select lighting fixtures that relate to the Capitol Complex as a whole.
- Select luminaires and optics that direct light where it is needed, and prevent glare, light trespass, and pollution of the night sky.
- Support design quality, energy, and maintenance efficiency in lighting choices.
- Provide lighting where it will improve Complex security, and the safety of pedestrians.
- Provide appropriate illumination levels: sufficient for recognition, but not so great as to create abrupt contrasts with unlit areas.
- Provide outlets for special occasion lighting and equipment for events.
- Provide feature lighting for special features and monuments to complement that of the Capitol Building.
- Provide lighting for roads, access drives and surface parking lots.
Design Character: Historic, cast iron pole, bracket arm and luminaire.
- Provide special pedestrian lighting for mall areas, pedestrian pathways and sidewalks.
Design Character: Historic, cast iron pole, mast arms for banners, luminaire.
- Provide for potential illumination of selected buildings on the Capitol Complex.



Pedestrian Amenities

Seating and waste receptacles are pedestrian amenities that work together with lighting and signage. The appearance of streets and open spaces can benefit from use of common design elements, colors, and materials to create a matching set of furnishings. This type of coordination produces visually cohesive and distinctive public spaces.

Objective:

Coordinate pedestrian amenities with lighting and signage systems.

Guidelines:

- Coordinate pedestrian amenities such as benches and waste receptacles, with use of common materials, colors, or styles.
- Provide supplemental seating in the form of planting ledges and benches that are integral to the landscape and lighting system.
- Use historic site furniture designs using quality, low-maintenance materials and sound construction.



A coordinated set of pedestrian amenities brings cohesion to disparate parts of the Capitol Complex.



- Use quality materials, colors and finishes to match historic pedestrian light fixtures and other site features.
- Use waste receptacles made of materials appropriate to the context, and of colors coordinated with the overall site amenities system.
- Provide removable bollards to designate predominantly pedestrian zones or pedestrian crossings.
- Adhere to sound sustainability guidelines in the selection of all products.

Signs and Visitor Information

Beyond the visible and physical presence of the Capitol Building, signage and visitor information provides the public with its initial impressions of the Capitol Complex. Well-integrated signage reinforces the State's commitment to its citizens by helping visitors feel that their time and comfort is valued. Visitors will feel welcomed upon entering the Capitol Complex when signs and visitor information help them find the services they seek.

Signage for staff and service personnel are likewise critical components of the Capitol Complex signage system. Operational efficiency supports the overall goals of the Capitol Complex.

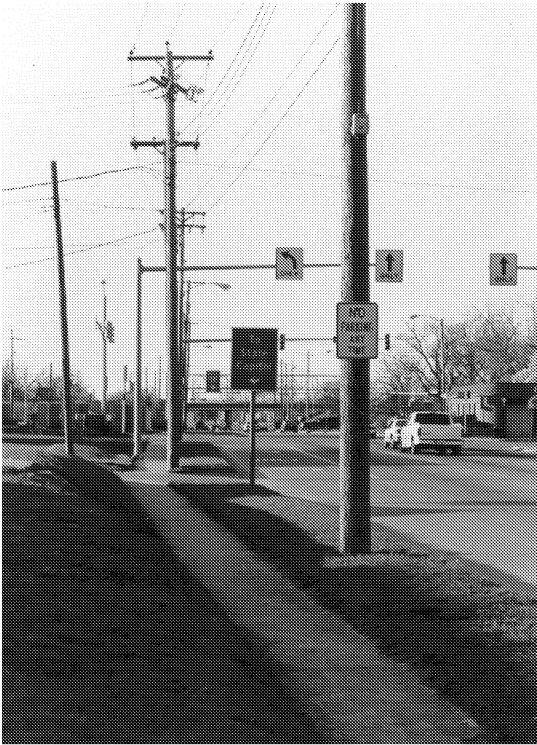
Objective:

Provide clear directional and identity signage for Capitol Complex buildings and features.

Guidelines:

- Develop a coordinated system of signage for all indoor and exterior applications at the Capitol Complex for progressive implementation.
- Use clear, distinctive, and consistent signage graphics.
- Size signs and lettering to be legible yet discreet. Adopt a type font appropriate to the civic character of the Capitol Complex.
- Develop an icon (such as a dome, building figure-ground image) to be used as a recognizable logo for possible city-wide use in directional signage to the Capitol Complex.
- Encourage cooperation of public and private agencies to use standard iconography on all signage, using International Graphic symbols when appropriate.
- Color code signage types for clarity (vehicular, pedestrian, restrictive, directional, identity), and coordinate interior, exterior, and tunnel signage.
- Locate signs consistently, so that visitors, staff, and service can anticipate where to find them.
- Coordinate signage design and placement with outdoor lighting to ensure legibility after dark.
- Respond to both automobile and pedestrian sign-reading requirements.
- Develop a structural support system reflecting the historical character of the Capitol Complex.

- Design and implement gateway markers at each major entrance to the Capitol Complex.
- Encourage maintenance of the signage system, including timely replacement of obsolete information and supply of new signs, meeting all requirements of the Americans with Disabilities Act (ADA).
- Eliminate unnecessary, confusing, or inappropriate signs.
- Promote Capitol Complex information via the Internet and other means.



The opportunity exists to develop distinct signage for the State Capitol. Signage should supplement visual and urban cues to the Capitol Building, without dominating or cluttering views.

Specific Recommendations:

- Develop a map that identifies state buildings and parking areas, and other Capitol Complex features and monuments.
- Provide “State Capitol” signage at freeway and parkway connections.
- Provide identity and directional signage to visitor parking areas at the intersection of key approaches (Des Moines Street, Grand and Court avenues with East 6th Street, Pennsylvania Avenue, and East 14th and East 15th streets).
- Provide “Capitol Visitor Parking Entrance” signage to lots and parking structures.
- Equip Capitol Facilities with a signage manual detailing standard fonts, colors and sizes etc.
- Provide the Maintenance Department with equipment for manufacturing indoor and exterior signs consistent with the signage manual, and the means to place and affix them appropriately.

Directional Signage

Directional signage should anticipate the movement of visitors and service providers unfamiliar with the Capitol Complex. Directional signage is necessary at gateways and along important approaches where it can efficiently guide visitors to parking areas, the Welcome Center, and other desired destinations within the Capitol Complex. Visual devices such as signs (with clear and attractive graphics), directory kiosks, and maps can be very helpful in moving people efficiently throughout a building or complex.

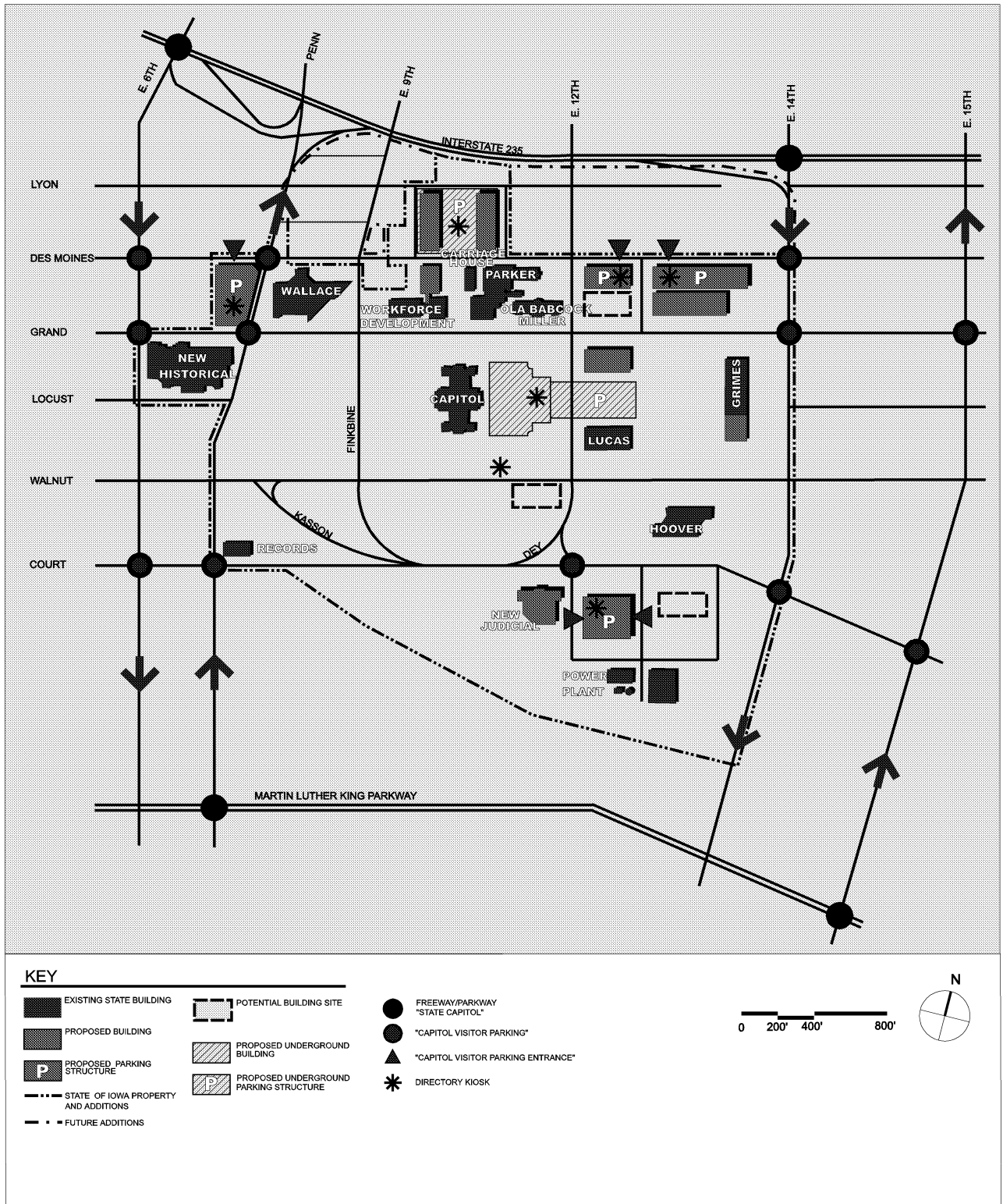
Objective:

Direct visitors to Capitol Complex destinations.

Guidelines:

- Coordinate use of a single Capitol signage system with city and state roadway agencies.
- Integrate traffic signs within the Capitol Complex with Capitol Complex standards.
- Improve signs at access points to create an information hierarchy for visitors and personnel. Clarify visitor parking locations and service access.
- Provide directory kiosks at key pedestrian entrances (Locust and Walnut streets) and from visitor parking areas. They should identify driving and walking directions to Capitol Complex buildings.
- Develop a map brochure of state services and destinations, including information on public transit, bike routes, visitor parking, accessible entrances to each building, and areas for disabled parking.
- Provide information on access to the Capitol by public transit with all printed materials sent to potential visitors. Include information on parking fees, locations of visitor parking, and bicycle facilities.
- Identify destinations and routes to attractions elsewhere in the Capital City.

Signs and Visitor Information



Signs and visitor information should be planned in accordance with vehicular and pedestrian movement.



Identity Signage

A visitor arriving at any building in the Capitol Complex should be able to identify it easily from an automobile or sidewalk. Identifying signage should be consistent with the architecture and with the civic qualities of the place as a whole. The Capitol itself needs no signage, but most other buildings need to be identified from at least one direction.

Objective:

Clearly identify Capitol buildings, grounds, and features.

Guidelines:

A comprehensive signage design package could reinforce the state's commitment to efficiency and accessibility.

- Ensure that identity signage is consistent with the scale and architecture of the building to which it relates.
- Design and locate identity signage with consistency.
- Coordinate identity signage with street design elements such as pedestrian lighting.
- Clearly identify agencies at single-tenant and multi-tenant buildings.
- Identify the year of dedication on identity signage for enhanced historical context.
- Standardize color and graphics for building interior signage throughout the Capitol Complex.
- Develop transit stop signage particular to Capitol routes using distinct logo and color, yet recognizable as part of the public transit system.

Interpretive Signage and Tours

Capitol Complex buildings and grounds offer great settings for historical displays and background information that tell the story of Iowa's State Capitol. However, signage and displays should not be permitted to clutter the Capitol Complex. Interpretive pieces should be designed as a cohesive system, coordinated with signage, lighting, and other features to be part of a discrete but effective visitor assistance program.

Objective:

Maximize the education value to visitors, particularly students.

Guidelines:

- Tell a relevant story through interpretive signage and exhibits.
- Provide story boards or interpretive markers for self-guided interpretive and monument tours of the Capitol Complex.
- Use interpretive signage in conjunction with public art and new monuments to tell the story of Iowa's State Capitol.
- Publish maps for self-guided tours via interpretive markers.
- Make explanatory text concise, to-the-point, and easy to read.
- Use quotes from famous Iowans to bring history to life. Instill pride in Iowa with "Heritage Tourism."
- Promote public and private school visitor programs. Tour guides may come under auspices of the Legislative Service Bureau.
- Promote summer docent programs.
- Create an educational exhibit at the Welcome Center.
- Develop a virtual tour of the Capitol Complex for remote access.
- Develop informational material about the archaeological resources of the grounds.
- Promote placement of information kiosks off-complex to promote walking tours and development of the pedestrian corridor between the Capitol Complex and the downtown area. Promote development of a guide sign program for walking tours both on and off the Capitol Complex.



A hope is for children to take away cherished memories of a visit to the Capitol Building.

Welcome Center

A most telling evidence of the attraction of the Capitol Building is the near constant presence of school children and other visitors. Visitors and constituents should receive the highest consideration at the Capitol Complex. Public and cultural institutions of all types recognize the value of providing visitor centers and information desks for the public. A Welcome Center for the Capitol Complex at a fitting location would meet the needs and enhance the overall experience of visitors to the Capitol Complex.

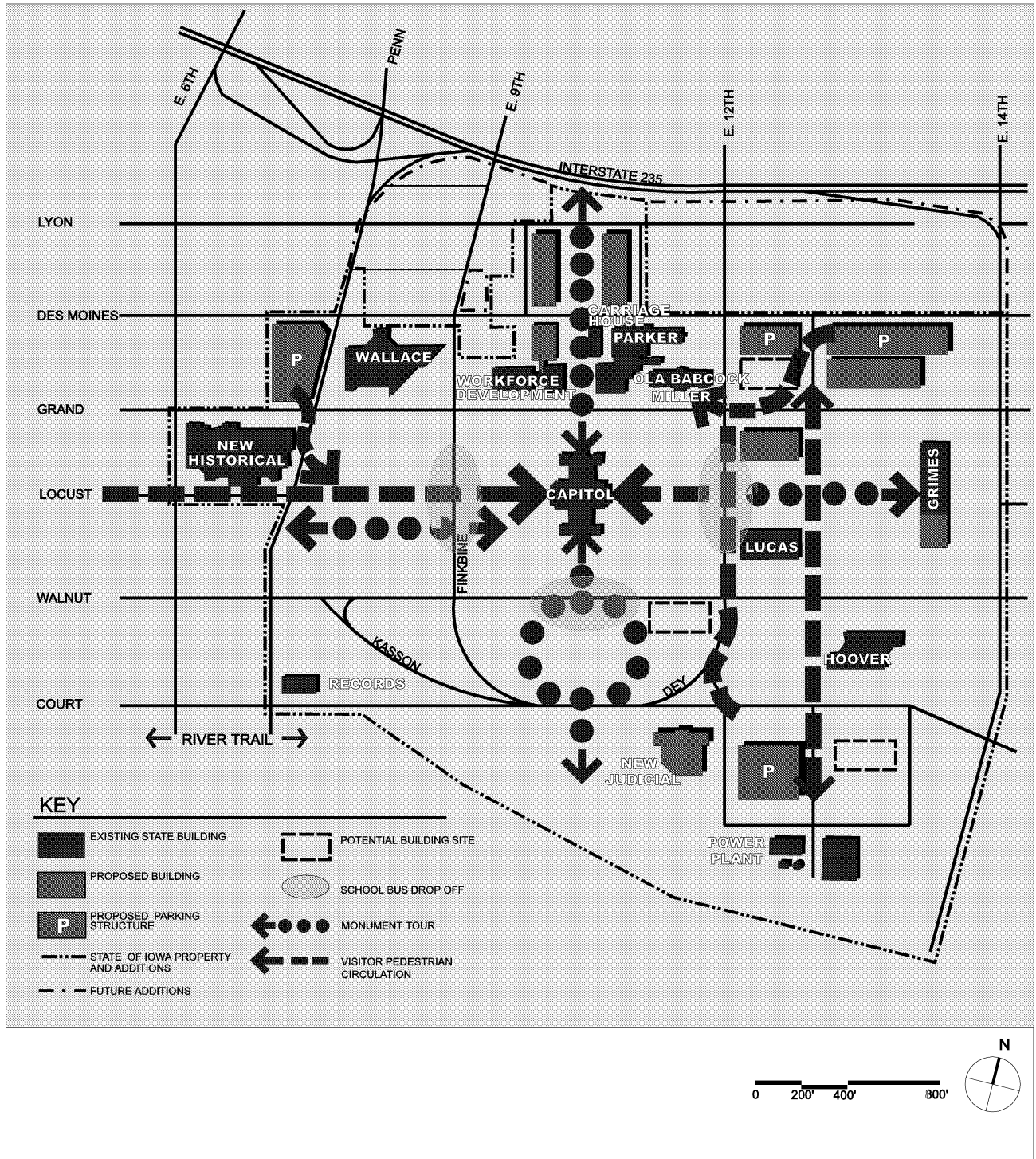
Objective:

Extend a welcome to Capitol Complex visitors and enhance the quality of their visit by providing helpful information.

Guidelines:

- Study locations for a Welcome Center that is accessible to all visitors. Seek operations support and other resources from public-private partnerships.
- Identify an organization charged with operating the Welcome Center for the Capitol Complex.
- Provide short-term and ADA parking near the Welcome Center.
- Provide audio-visual capabilities for public orientation and education.
- Incorporate an educational exhibit at the Welcome Center.
- Encourage development of visitor information on the Internet and through other means.
- Produce video documentation of Capitol Complex building and grounds development for public information and education.
- Provide adequate restrooms for the Welcome Center.
- Update educational exhibits at the Capitol Building.
- Make provision for tour buses to drop off and pick up visitors at the Welcome Center with parking located inconspicuously and away from the Malls.

Visitor Circulation



Visitor information is appropriate near destination areas on the Capitol Complex.

Buildings

The Capitol Building is the centerpiece that sets both the tone and standard for all buildings around it. Buildings housing the offices of government should strive to create an environment rich in tradition, inspirational for those who work in them, and memorable to those who visit them. Accomplishing this requires elevated civic aspirations, clarity of vision, and thoughtful planning. Each building is significant in how it contributes to or detracts from this effort.

Preservation, Renovation, and Redevelopment Planning

Under the direction of the Department of General Services, the Capitol Building restoration has been a worthy task with remarkable results. Renovations and relocation of state agencies should occur in a phased schedule that meets Capitol planning objectives.

Objective:

Preserve and enhance the dignity, beauty, and architectural integrity of the Capitol Building and other state buildings in the Capitol Complex.

Guidelines:

- Develop programs to ensure ongoing maintenance of building structure and appearance, emphasizing preventive maintenance and improved energy efficiency.
- Prohibit demolition or development that will diminish or obstruct views of significant buildings and sites.
- Ensure that the remodeling of existing buildings is consistent in scale, materials, quality, and execution with the Capitol and its neighbors.
- Update all state buildings to meet accessibility standards.
- Relocate state agencies from unsafe buildings.
- Bring ailing but viable Capitol Complex buildings into full code compliance.
- Remove temporary buildings and uses in a timely manner.
- Incorporate the existing tunnel system into the planning and design of new state facilities.
- Ensure that parking structures do not assume visual prominence.

Specific Recommendations:

- Complete restoration of the Capitol, Lucas, and Ola Babcock Miller buildings.
- Restore the original Carriage House building, removing subsequent additions to the structure. This would allow a more generous open space for gardens extending along the north axis of the Capitol.
- Evaluate the feasibility for renovation of other state buildings such as Wallace and Grimes.
- Remove the Executive Hills Building, deemed unfit for occupation and irreparable.
- Relocate the Motor Pool from the West Mall at East 7th Street to a convenient but separate location. The gas station and vehicle maintenance facilities should be removed to the same location.
- Provide curbs, sidewalks, and street trees to maintain the pedestrian network and to prepare for future development, particularly on the North and South malls.

New Buildings

New buildings must be amenable to the rapid changes in today's government and workplace that demand flexibility in a building's use over the course of its lifetime. Proposed government buildings should also reflect the symbolic themes associated with state and citizenry. Broad rather than user-specific assignments of buildings and site locations will enable planners and designers to continue to respond to changing needs in their design proposals. With the exception of some special purpose spaces, most new construction on the Capitol Complex should be of general office space, amenable to use by a variety of different departments and agencies as future needs may dictate.

There is significant opportunity in the North Mall to include new buildings and other uses along with existing state offices. Secondary uses may benefit state employees as well as neighboring communities and institutions. Proximity to local and regional transportation will promote the potential for such favorable public-private partnerships. Proposals for development in this area may require initiative by the State.

Objective:

Supplement the Capitol Complex with buildings that enable state government to serve with greater efficiency.

Guidelines:

- Provide facilities adaptable to changing needs. Exercise flexibility within design disciplines.
- Share resources and assembly space between adjacent state-occupied buildings.
- Recognize space needs for cultural and recreational purposes when planning state buildings. Support development of cultural uses that recall the rich heritage of the people and State of Iowa.
- Respond to the need for compatibility with various land uses in the surrounding community.
- Encourage nearby commercial services and other facilities to support the needs of state employees and visitors.
- Maintain space for wellness and childcare services near the Capitol Complex.

Specific Recommendations:

- Consider cultural uses such as an Agricultural Museum for development sites adjacent to the Locust Street corridor.
- Initiate a dialogue with neighboring institutions and businesses on possible shared use parking and wellness and childcare partnerships.
- Preserve existing businesses and institutions north of the Capitol Building that remain compatible with projected state uses there.
- Consider development of a training facility and conference center in the North Mall in conjunction with extended stay housing or parking structures.
- Identify other complementary uses in the North Mall.
- Consider agency storage opportunities on lower levels or in undesirable spaces on or near the Capitol Complex.

Potential Building Sites

Among the most compelling arguments for the consolidation of state offices in new or existing buildings in and around the Capitol Complex are:

- Increased contact between Legislative, Judicial, and Executive branches of government;
- Easy access to a comprehensive range of governmental services for local and state users;
- Shared amenities; and
- Overhead cost efficiencies associated with proximity which also take advantage of Complex-wide support services, including mail, reproduction, training, maintenance, fleet services, and security.

State government continues to deliver services which are important to the livelihood of the citizenry. Physical access to services provided on the Capitol Complex continues to be of prime importance, especially for those who do not have easy access to computers and cars.

Consolidation of state offices in the Capitol Complex would also increase the ability to develop a comprehensive traffic management program for state employees that would lead to reductions in traffic, air pollution and parking construction and operation costs.



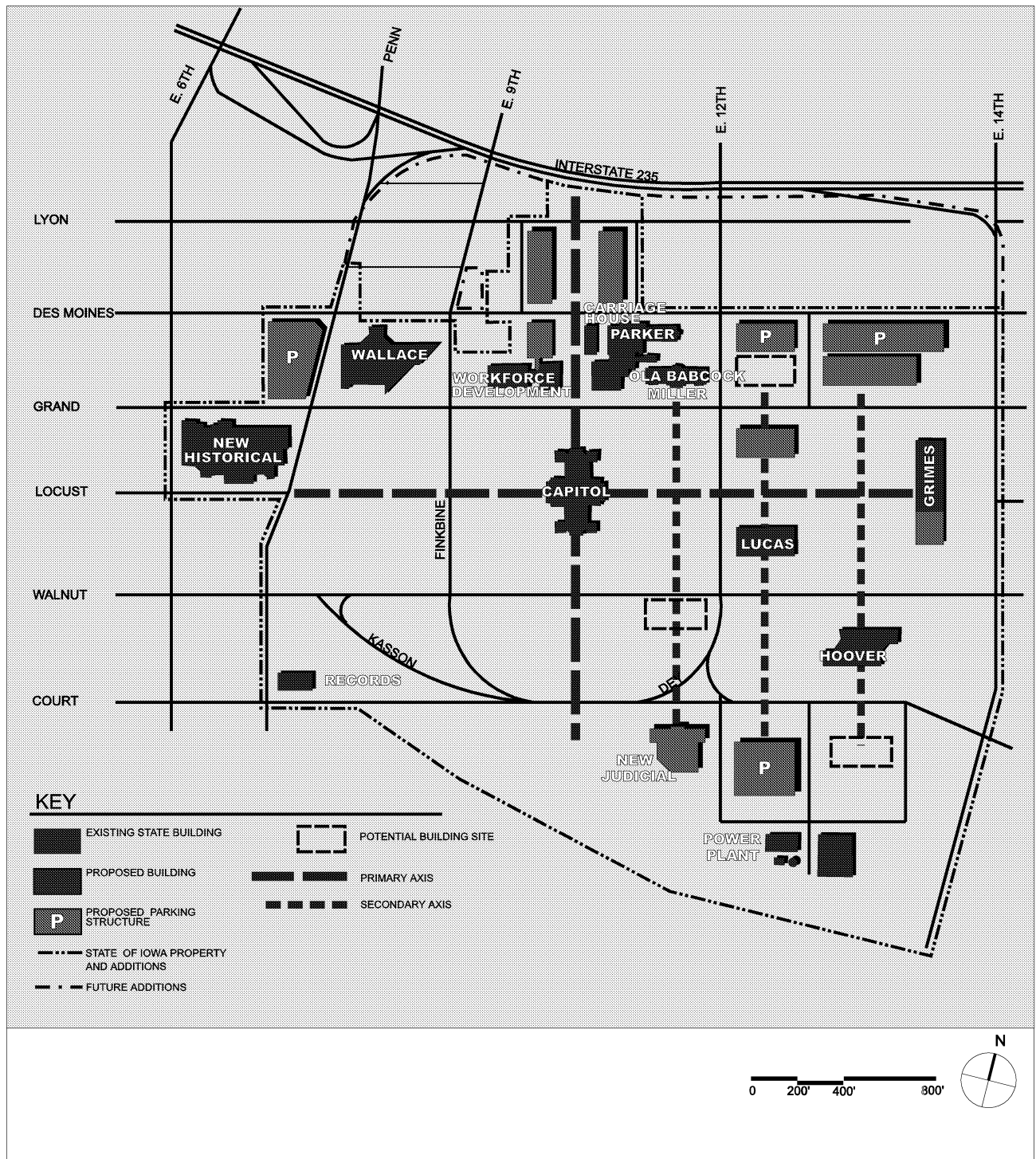
*Proposed building site at Grand Avenue and East 14th
Street must be sensitive to its location at an east approach
to the Capitol Building.*

Potential building sites warrant a density of development consistent with their surroundings. New buildings and associated parking should not erode public open space. Use of large areas for surface parking run counter to these principles.

The dominant position of the Capitol Building at the highest point of the Capitol grounds invokes strong axes of symmetry. However, many existing buildings have been placed in a more asymmetrical manner. Resolving this transition requires reinforcement of spatial and axial relationships through the careful siting and landscaping of new developments.

The east-west axis of the Capitol Building is a principal organizing element. New development sites are indicated where they frame views of the Capitol Building, or enhance a relationship with existing buildings. They also relate to vehicular and pedestrian circulation.

Major Axes



Axes of symmetry are clearly expressed in building development as well as landscape treatments.

Objective:

Support the established principles of civic design and a cohesive Capitol Complex in the siting of buildings.

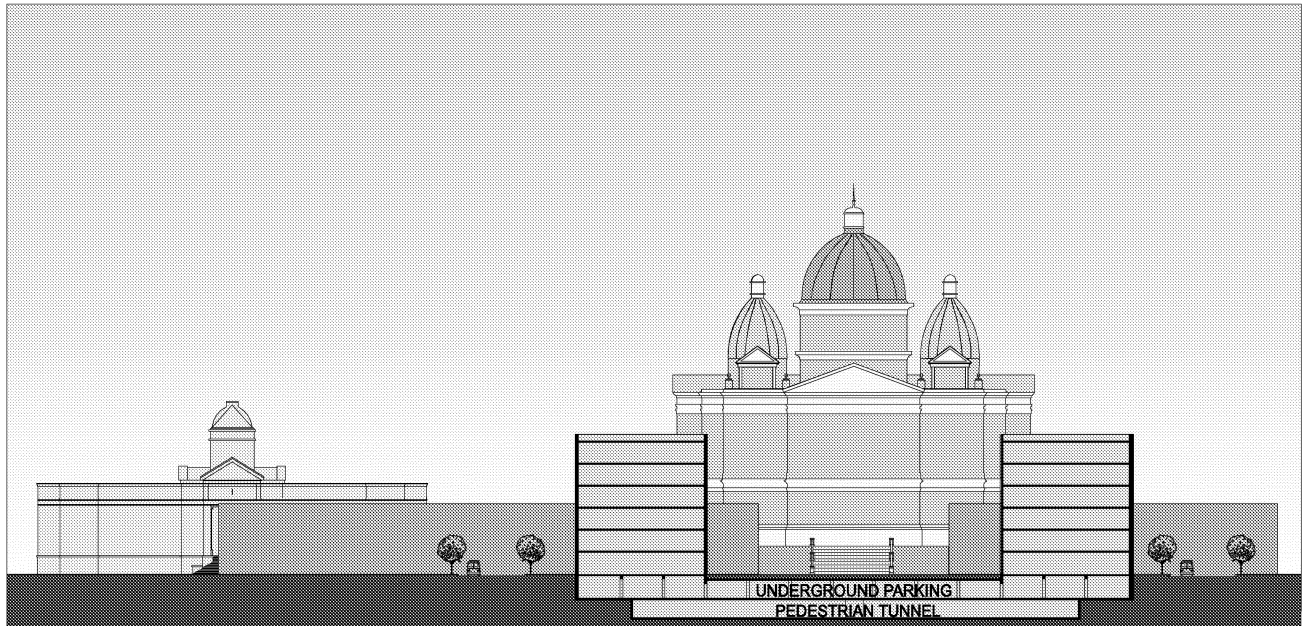
Guidelines:

- Maintain a strong symbolic relationship between the Capitol Building and the core functions of state government: the Legislative, Judicial, and Executive branches. These three uses are considered of highest importance in design considerations.
- Accommodate agency needs in the Capitol Complex and Capital City for a balanced approach that unites the Capitol Complex with the City.
- Acquire property critical to view protection and growth.
- Respond to the spatial relationships created by existing buildings and spaces on the Capitol Complex. New development should respect established axial relationships between buildings. Consider sites that create new gateways, define the edges of open space, and reinforce the dignity of the Capitol Building.
- Locate social service agencies on sites that are easily accessible by the public and coordinate transit stops at these destinations. Locate those facilities that have limited need for public access on sites that are least prominent.
- Redevelop surface parking lots for new state office buildings and civic spaces, consolidating displaced parking into structures.
- Only in exceptional circumstances consider siting a building underground in order to preserve important views of the Capitol Building, its open spaces and greenery.
- Locate all parking structures, except potential underground parking near legislative staff offices, on the periphery of the Capitol Complex.
- Evaluate the appearance and effects of potential development sites and parking structures on views from all directions.

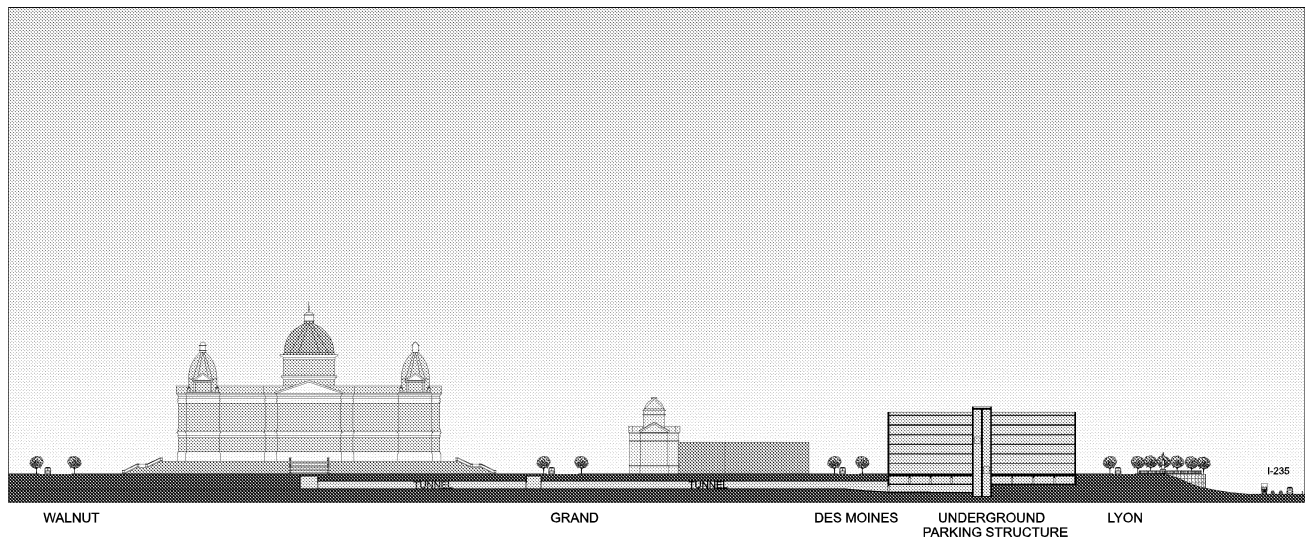
Specific Recommendations:

- Locate future buildings that directly serve the Legislative, Judicial and Executive branches on the Capitol Complex.
- Appropriate funds for land acquisition north of the Capitol Complex for development of a North Mall from Grand Avenue to I-235 freeway on the north axis of the Capitol Complex.
- Stabilize the North Mall area for new development.
- Identify those boundaries of the Capitol grounds that will not change.
- Consider long-term alternative locations for the Maintenance Building.

Building Development in the North Mall



Section looking South



Section looking West

Potential building developments build upon a strong axial relationship with the Capitol Building.

Currently Proposed Building Sites

- Develop a new Judicial Building south of Court Avenue on a distant north-south axis with the Ola Babcock Miller Building. Mediate elevation changes with a forecourt of terraced steps and incorporate pedestrian connections to gardens and a proposed new Court Avenue bridge.



The north face of the Capitol Building will provide visual connection from a North Mall.

- Develop an underground building for the legislative staff offices under the East Mall, for convenient access to the Capitol Building and minimal visual disruption of the East Mall space. However, this solution carries with it a substantial cost premium, so has not been used as a model for other buildings.
- Develop a state office building south of Walnut Street that responds to a north-south axial relationship with the Ola Babcock Miller Building. This development site would be an alternative location for legislative staff offices should the underground development in the East Mall prove unfeasible.
- Expand the Workforce Building to the north in line with North Mall building development.
- Develop a state office building north of Des Moines Street and east of East 10th Street to define the west edge of a North Mall garden on axis with the Capitol Building.
- Develop a state office building north of Des Moines Street, west of East 11th Street to define the east edge of a North Mall garden on axis with the Capitol Building, completing the North Mall extension to the freeway.
- Develop a state office building north of Grand Avenue that responds to a north-south axial relationship with the Hoover Building. Align the front facade with the Ola Babcock Miller Building. The appearance of this building will be significant for east side approaches.
- Develop a state office building north of the Lucas Building where originally envisioned by E.L. Masqueray's 1913 Plan for the Capitol Grounds Extension. This new building will pair with the Lucas Building to define the East Mall and frame internal views. The buildings should resemble each other in massing and materials, but need not be identical.

Potential Building Sites

- Develop a state office building directly east of the Ola Babock Miller Building. Align the front facade with the Ola Babock Miller Building.
- Develop a state office building south of Court Avenue on a north-south axis with the Hoover Building and to share the Judicial Building parking structure.

Architectural Design

The architectural character of Capitol Complex buildings should support the preeminence and civic qualities of the Capitol Building. This criterion has not been adhered to consistently in the past. In order to ensure consistent and appropriate quality in new and remodeled buildings in the Capitol Complex, a set of architectural design guidelines should be established and consistently implemented. These will also provide the Capitol Complex with a uniform basis for evaluating the suitability of proposed building designs. The Capitol Complex should also maintain a working relationship with design and build teams to ensure that Capitol Complex guidelines are not compromised by the need for increased efficiency in construction.

Objective:

Establish standards of architectural quality that are appropriate to the civic functions and longevity of the Capitol Complex.

Guidelines:

- Be responsive to the scale of the surroundings in the detailing and massing of buildings.
- Maintain building height restrictions to protect the visibility of the Capitol Building. New buildings should not exceed the shoulder of the Capitol Building in height.
- Provide civic spaces and forecourts to state buildings. Where two buildings front each other in an axial relationship, develop a dignified space for the expanse between them.
- Orient buildings that flank the Capitol gardens on the north and south sides to respect the primary east-west axis, although buildings need not be mutually symmetrical.
- Capitalize on the permanence of the landscape by providing buildings that do not draw attention away from the Capitol Building.
- Provide entries to public open space, gardens, or major approach streets, and accommodate disabled access.
- Ensure that state buildings on the perimeter of the Capitol Complex are compatible with neighborhood scale and views of the Capitol Building.
- Design for natural light into lower levels.
- Connect new buildings to the existing tunnel system wherever practicable.
- Adhere to principles of sustainable design.

Specific Recommendations:

- For proposed buildings with entrances off the north side of Grand Avenue, align the frontage with the existing Ola Babcock Miller Building.
- Reclad the expanded Grimes Building to correspond to the architecture of the Capitol Complex.

Building Design Criteria

New facilities developed for the State that would be on or adjacent to the Capitol Complex should be designed to have a functional life expectancy of 50 to 60 years. Although the integrity of the structure would be such that it would be of a “100-year” quality, experience suggests that electrical, mechanical and communications systems will wear out and require replacement, certainly within 30 years. One complete cycle of renovation would realistically provide the State with a 60-year life building. The quality level that would be required of a 60-year life building is described as a class B+ or A- building, as outlined below. These are substantial enhancements to the quality of facilities that the State generally leases which are classified as class B- or C+ buildings, with substantially reduced life cycle costs.

Important criteria for the design of buildings for the State, whether delivered through a traditional design/bid/build process or through a design/build delivery method, would comply with the following guidelines:

- Create civic architecture through appropriate design, quality materials, and creative use of color. Ensure the inherent design is as “timeless” as possible. Building composition and detailing should be consistent with the civic qualities of the Capitol Complex.
- Incorporate concepts such as symmetry in the facade of buildings to respond to visual axes, formal open spaces, building groupings and major entrances. Emphasize major pedestrian entrances with ceremonial architectural treatments.
- Emphasize selective use of natural stone for the building enclosure that is compatible with other buildings on the Capitol grounds. This could include pre-cast concrete facades to simulate stone. Avoid curtainwall construction typical of many developer buildings. Avoid highly reflective surfaces.
- Provide architectural elements that are small in scale (unlike the Wallace Building, where large surfaces of glass and masonry vie for attention with the Capitol Building).
- Design building systems to be highly efficient throughout their life cycle, including equipment installed costs, energy costs, maintenance cost, and replacement cost.
- Specify all materials and public area finishes to reduce maintenance costs and provide durable finishes capable of supporting active use.
- Specify the roof and other weather-tight enclosures to have at least a 20-year warranty.
- Select the structural system for a facility based on the space program, building proportions, and long-term economics to provide the State with the most functional and efficient space. Concrete systems have desirable vibration control characteristics. They are also highly durable and are well suited to specialized loading needs. Steel framing systems perform well for large open column spacing and can be erected quickly.

- Design floor structures to support a minimum uniform live load of 100 pounds per square foot, and a concentrated load of 1,000 pounds on a 2'-0" x 2'-0" area. The distance from a floor slab to the bottom of the structure above should accommodate suspension of cable infrastructure in the ceilings and flexibility in the rearrangement of HVAC and lighting delivery systems.
- For each workstation, provide a comprehensive vertical and horizontal telephone, data and electrical distribution system which can accommodate future changes in technology. Avoid the use of power poles and tombstones. Pre-wire walls and columns, and preset cable distribution boxes in the floor areas of open spaces.
- Specify elevators to provide a maximum cycle time of 24 seconds and provide highly dependable and timely service.
- In interior environments, promote use of demountable walls for flexibility and reuse of materials, substantial glazing to bring in natural light, a highly absorbent acoustical ceiling, and durable finishes. Higher quality finishes such as gypsum board ceilings and masonry, metal, or wood wall finishes should be considered at entry and public areas.
- Provide each facility with a comprehensive visual and electronic security system or the capability to install such a system if events in future years dictate.
- In other than specialized applications, promote use of open office space planning. Use standardized furniture systems in approximately 85% of the space.
- In some instances, specify facilities to have a raised floor for distribution of cabling systems and other utilities.
- Provide sufficient space in mechanical, electrical and communications/data rooms for equipment servicing and replacement.
- Unless other circumstances dictate, utilize the central energy distribution system for chilled water and steam for all new facilities.

Building Foundation Landscaping

The foundation plantings around each civic building should be engaged in the Capitol Complex landscape framework. Appropriate plantings help resolve the exposed bases of existing buildings. Plantings and the design of the ground plane should generally acknowledge the axial structure of the Capitol Complex around the Capitol, although many elements of the landscape may depart from this.



Building foundation landscaping should be integral with an overall landscape plan for the Capitol Complex.

Objective:

Provide a dignified setting for buildings that will enhance their civic qualities and strengthen their relationship to the landscape.

Guidelines:

- Allow for the proper spatial and functional relationship between open spaces and surrounding buildings.
 - Connect foundation landscaping with adjacent open spaces. Develop landscaped forecourts for buildings relating them to the overall landscape plan.
- Provide plantings along exposed bases of buildings that also provide seasonal color and interest.

Specific Recommendations:

- Provide base definition at the east side of the Capitol Building.
- Identify areas for foundation landscaping improvements in conjunction with a landscape master plan.

Utilities

Pedestrian/utility tunnels under the Capitol Complex grounds provide electrical, steam and condensate, chilled water supply and return, natural gas, telephone, security, communications, and television distribution.

Specific recommendations will be developed separately as a part of a vertical infrastructure assessment.

MECHANICAL SYSTEMS

Existing Heat Source and Chilled Water

Primary heating and cooling for Capitol Complex buildings is provided from a central energy plant. The central energy plant contains three dual fuel boilers and uses fuel oil as back-up to natural gas.

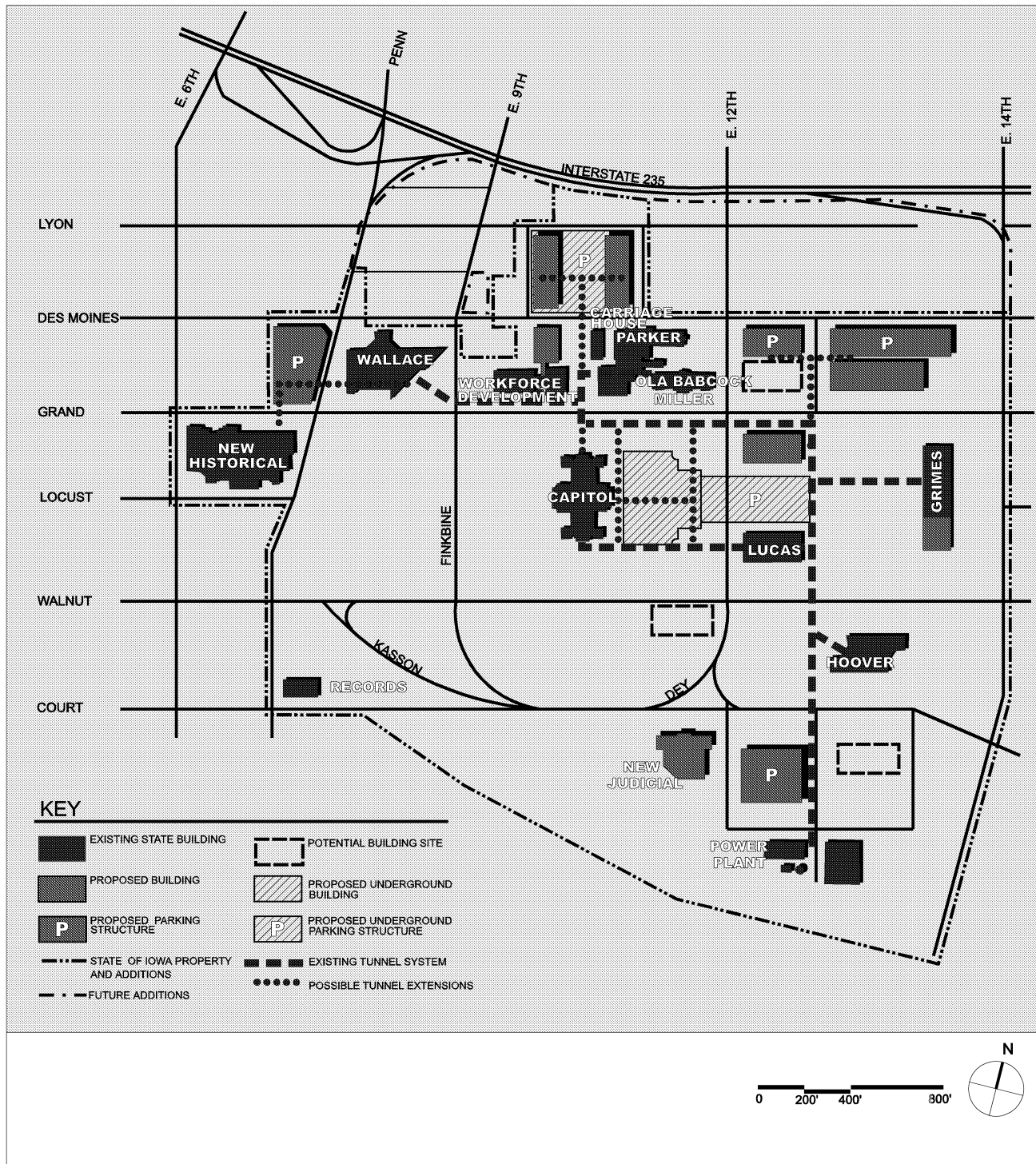
Most of the Capitol Complex receives chilled water from the energy plant which has a 600-ton chiller and two 750-ton chillers. Piping runs from the energy plant through the utility tunnels. Several buildings on the Capitol Complex contain individual chillers of varying tonnage. Some connect to the Capitol Complex loop, and some are independent.

The anticipated expansion of the Capitol Complex will require additional cooling capacity beyond the capacity of the energy plant, and so will be supplied separately.

Future Heat Source and Chilled Water

The existing boilers have some surplus capacity for future loads. When boiler replacement is scheduled, boiler size should be reviewed. Energy costs, cost of capital, equipment, installation, maintenance depreciation, and labor should be compared to ensure that the State chooses heating systems that are the most beneficial, both economically and environmentally.

Tunnel System



New building development should link to existing pedestrian tunnel systems when possible.

ELECTRICAL SYSTEMS

Existing Electrical Service

MidAmerican Energy provides utility feeders with a minimal level of redundancy. The existing utility tunnel system is used to distribute service to buildings. Buildings not adjacent to the tunnels have directly buried electrical service.

Emergency generators are located at several sites on the Capitol Complex. Provisions should be maintained for electrical back-up may be necessary and service to critical areas. Additional generation and battery back-up may be necessary and should be evaluated.

Proposed Electrical Service

In order to ensure adequate electrical service, utility feeders should be connected to the loop and the existing service should be upgraded to meet projected needs. Separate demand meters should be installed at each building to aid conservation efforts.

Telephone and Cable Systems

A central phone center for the Capitol Complex accommodates distribution to proposed state buildings. If telephone, fiber optic, and cable television distribution systems are desired within state buildings, it is the responsibility of the State, as a consumer, to incorporate them. Distribution may be simplified by routing through existing tunnels, and integrated into new tunnel connections for future building needs.

Iowa Communication Network

The Capitol Complex is provided with service from the Iowa Communication Network (ICN), which has installed a fiber loop to allow continued communication throughout the Capitol Complex.

CIVIL SYSTEMS

Sanitary Sewer and Storm Water Infrastructure

The Capitol Complex has separate sanitary and storm sewer networks, which achieve greater sanitary sewer capacity and accessibility than combined systems. There appears to be no constraint with respect to accessibility and capacity of either sanitary sewer or storm water infrastructure.

Storm Water Detention

Detention of storm water can be accomplished by rooftop, parking lot and landscape detention ponds and may be supplemented by underground storage. This issue will need to be addressed with the design of each building.

Water Demands and Pressure

Meeting the water demands for anticipated development over the next 10 to 20 years should not be a constraint. Water mains in close proximity to Capitol Complex buildings have water pressures that are adequate for potable water supplies. Each building will need adequate fire protection and water pressure. Each building has an independent fire protection service connected to the city water supply. State-owned fire hydrants are provided at the Capitol Building. Other facilities utilize city-owned hydrants for fire department connection.

Access and Circulation

Over the years, parking and vehicular circulation within the Capitol Complex have eroded the park-like quality of the Capitol grounds. This Master Plan provides for surface lots to be reclaimed by moving vehicle storage to structured parking. A hierarchy of streets reflects the role each plays in providing access to the Capitol area. Convenient parking should be easily accessible from major freeways and parkways. Vehicular circulation and parking within the pedestrian-oriented areas of the complex should be kept to a minimum.

Objective:

The State should work with the City of Des Moines to minimize circulation and parking within the Capitol Complex gardens and open spaces.

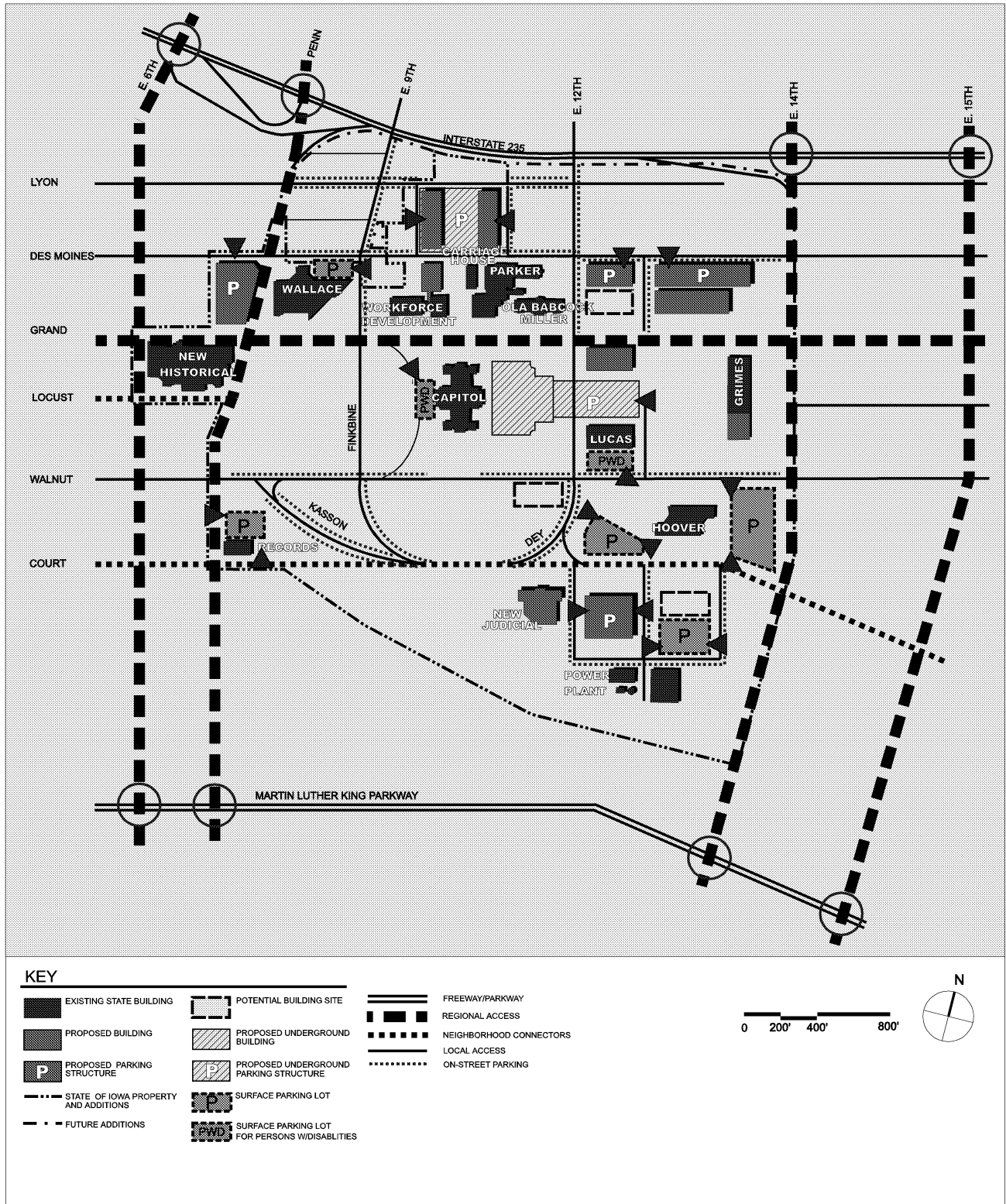
Guidelines:

- Provide clear regional access routes and directional signs to the Capitol Complex from the I-235 freeway and MLK parkway on East 6th and 7th streets/Pennsylvania Avenue and East 14th and 15th streets.
- Direct visitors to assigned parking structures at the perimeter of the Capitol Complex, easily accessible from the freeway and parkway.
- Designate Grand Avenue, East 6th and 7th streets/Pennsylvania Avenue, and East 14th and 15th Streets as regional access streets.
- Designate Locust Street and Court Avenue as neighborhood connectors.
- Designate other streets for local access and encourage on-street parking where it will not clutter views to the Capitol.
- Design and dimension streets to satisfy their vehicular and pedestrian circulation functions and to make them visually compatible with the entire Capitol Complex.

Specific Recommendations:

- Construct a raised landscaped median on Court Avenue from the current Lot 1 and Lot 4 driveway west to Dey Street (this could extend as far as Kasson). This would convert Court Avenue from four lanes to three bringing capacity in balance with its modest traffic volumes and improving pedestrian crossing conditions.
- Stripe Grand Avenue as a three lane street (it is now four lanes) between East 14th Street and Pennsylvania Avenue. The center lane would be a painted median with a left turn lane as needed at intersections. This provides a low-cost method to test its operating quality in advance of decisions about constructing a landscaped median. Pedestrians would face fewer lanes of traffic when crossing the street, and with the addition of designated crossings, safety would be further improved.
- Close vehicular access to East 13th Street from Grand Avenue. Retain service access from Walnut Street.

Access and Circulation



The Master Plan strives for efficient access and movement of vehicles through the Capitol Complex or to parking areas.

Parking

Capitol Complex Parking

The current location of parking lots in the forecourts of major Capitol Complex buildings diminishes the quality of the entire Capitol Complex by making parked vehicles a visual focus. Vehicles now intrude in what should be open landscape and a pedestrian precinct. Inequitable distribution of parking assignments is compounded by too little parking to meet demand, especially during the five-month legislative session. In order to reduce visual intrusion within the Capitol Complex and to satisfy current needs, new and relocated parking should be provided outside the Capitol gardens.

Objective:

Provide parking lots and structures that serve users well and maintain the qualities and aesthetics of the Capitol Building, its grounds, and surroundings.

Guidelines:

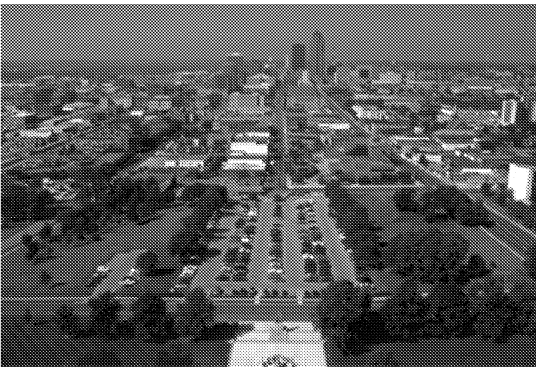
- Reduce the demand for employee and visitor parking within the Capitol Complex by implementing an effective transportation management plan. Promote parity in commuting costs between driving alone and using transit.
- Consolidate parking in structures and in less visible areas of the Capitol Complex which are nonetheless convenient to both visitors and employees.
- Develop parking in sufficient quantities to serve buildings within a walking distance of 500 to 800 feet.
- Avoid large surface lots that impede pedestrian passage.
- Develop adequate parking concurrently with building development. New office buildings should provide not more than 2.95 spaces per 1,000 gross square feet (the current demand ratio) with a long-term goal of reducing that ratio by five to ten percent through transportation management.
- Provide clear directional signage to parking entrances. Provide parking entrances from minor streets with visible signage from major streets. Allow sufficient queuing distance between garage entrance and adjacent intersections.
- Use consistent signage, lighting, and landscaping for parking areas, identifying them as parts of the Capitol Complex.
- Provide safe and clearly identifiable pathways for pedestrians from parking to building entries.
- Ensure that landscaping and lighting create safe parking lot environments during all hours.
- Minimize the negative effects of parking on adjacent residential areas.

Specific Recommendations:

- Monitor parking demand and employee travel trends through periodic surveys.
- Reduce the non-legislative session parking deficit by adding new spaces to the Capitol Complex perimeter.
- Remove surface parking from the Capitol gardens with the exception of parking for the disabled in specified locations.
- Provide disabled parking at the west steps of the Capitol Building and in a lot west of the Lucas Building for proximity and accessibility.
- Reconfigure the surface parking at existing Lot 16 near the south monument gardens. Parking should not visually dominate the entryway to the grounds.
- Maintain on-street parking where specified at the edges of the Capitol malls, excluding Grand Avenue.
- Relocate Wallace Building parking.

Parking Development:

- Develop a parking structure north of Grand Avenue, west of Pennsylvania Avenue, to serve state buildings. Provide tunnel connection to the Wallace Building. Provide for retail or training uses at ground floor.
- Develop an underground parking structure on Lot 17 to preserve the purity of the North Gardens on axis with the Capitol Building. Provide tunnel connection to the Capitol Building.
- Develop a parking structure on Lot 12 south of Des Moines Street, east of East 12th Street.
- Develop a concurrent underground parking structure for the legislative office staff with connection to the Capitol Building.
- Develop a parking structure south of Des Moines Street, west of East 14th Street, to serve buildings fronting Grand Avenue.
- Develop a parking structure on Court Avenue to serve the new Judicial Building and other parking needs. Provide minimum building setback per design guidelines for parking structures.



Surface Parking Lot Design Guidelines

Guidelines:

- Prohibit surface parking within North, South, East, and West Capitol gardens.
- Prohibit surface parking (with the exception of disabled parking) on East and West malls.
- Size parking lots so that the area they cover will be no greater than a future building site or parking structure at that location.
- Provide a setback from major streets equal to building setback of existing adjacent permanent buildings. Parking lot perimeters should not extend beyond adjacent building frontages.
- Provide ten feet minimum setback from minor streets.
- Maintain existing grades for surface parking lots. Prohibit the use of berms at the street frontage.
- Maintain large trees, low hedges, or shrubs on lot perimeter.
- Plant canopy trees to shade surface lots. Locate and protect them to minimize interference with snow plowing operations. Conserve existing mature trees within new surface lots.

Removal of surface parking from the Capitol gardens has been long overdue.

Structured Parking Design Guidelines

Guidelines:

- Evaluate retail or services at street level on Grand Avenue west of Pennsylvania Avenue for a minimum of 50% of the frontage and on Pennsylvania Avenue north of Grand Avenue for a minimum of 30% of the frontage. The parking structure and storefronts for retail or services should be built to the property line (zero setback) with sufficient floor to ceiling height to accommodate retail.
- Provide storefronts that have clear glass.
- Minimize unoccupied space at the base of parking structures adjacent to sidewalks.
- Use forms and materials, proportions and design elements that are sensitive to adjacent structures and complement the Capitol Complex.
- Provide one or more levels of parking below ground level to limit height of structure above ground level and to maximize views to the Capitol Building without loss of parking capacity. Parking structures should be less visually dominant than the Capitol buildings they serve.
- Limit parking structure size within the Capitol grounds to maintain appropriate scale and to minimize traffic congestion at entrances and exits.
- Connect parking structures to a secured pedestrian tunnel system where such opportunities exist.
- Provide pedestrian access to each parking facility as close to an intersection as possible to promote pedestrian crossing safety and convenience.
- Provide structured parking entirely below ground level if located within the Capitol gardens.

Transit

Public transit use by state employees and visitors reduces parking demand and vehicular circulation on the Capitol Complex. The plan encourages expanded use of public transit through incentives, promotions, and the enhancement of transit facilities and service. As Grand Avenue is a primary transit corridor, additional office development is encouraged in this corridor to take advantage of transit access.

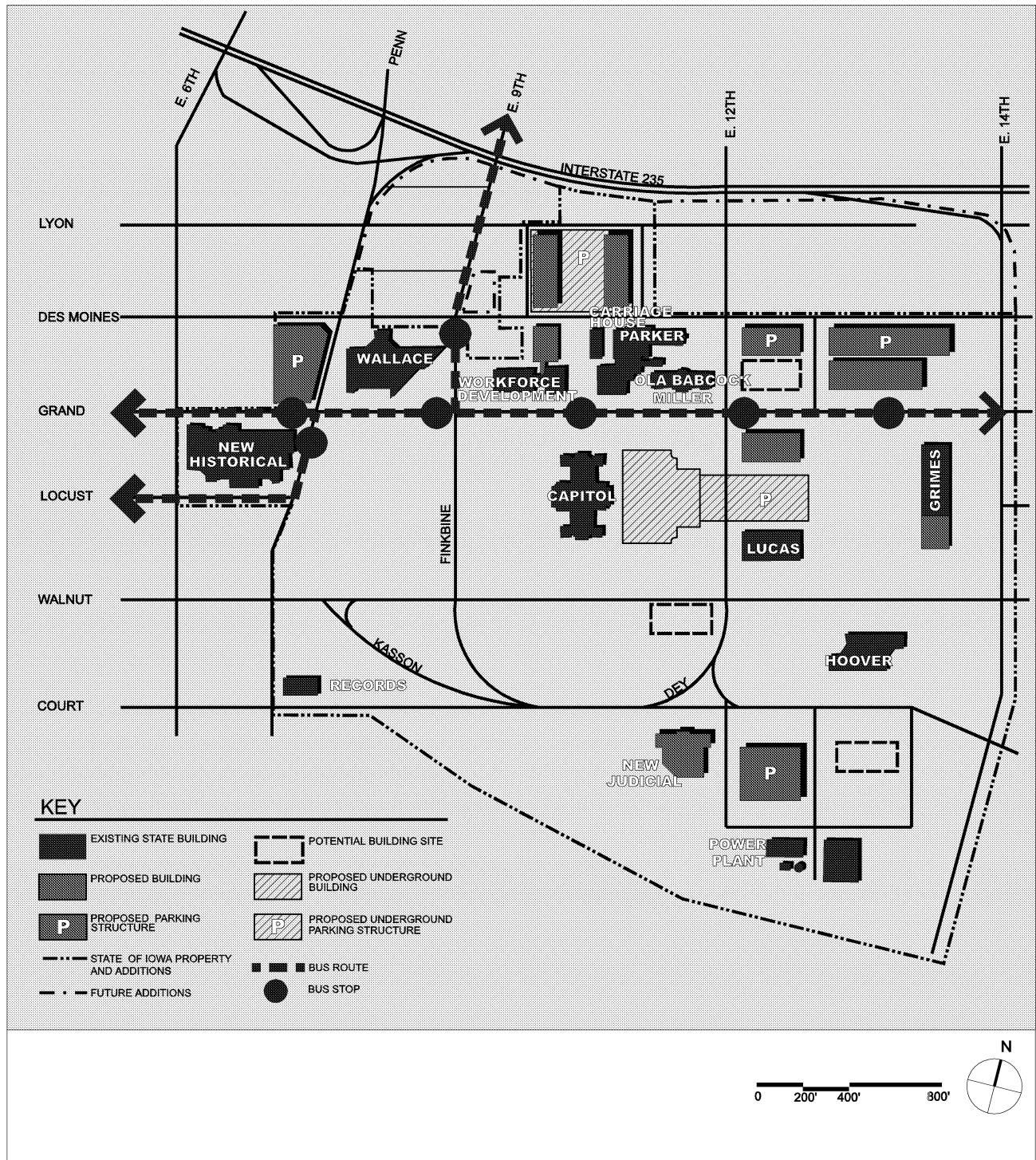
Objective:

Work with the City of Des Moines and the Metropolitan Transit Authority to expand transit service and make it an integral feature of the Capitol Complex.

Guidelines:

- Determine and respond to changes in the daily transit needs of both state employees and visitors to the Capitol Complex.
- Provide regular stops along well-traveled regional access streets such as Grand Avenue to enhance access to the Capitol Complex.
- Provide effective weather protection for riders, and post transit information at designated stops.
- Integrate transit and shuttle operations in common transit facilities along transit routes.
- Work with transit providers to create programs and incentives to promote the use of public transportation, including commuter rail, by state employees.
- Review the Transportation Management Plan to aggressively pursue alternative transportation such as transit, commuter rail, shuttles, and ride sharing. Implement a guaranteed-ride-home program and flexible pass options for pass-holders to allow choice in daily travel decisions.
- Encourage development of office space in the Capitol Complex close to major transit corridors.

Transit



Public transit is an important component of the Capitol Complex for convenient access by residents, visitors, and employees.

Shuttle

There is an opportunity to initiate shuttle service to link the Capitol area and downtown via Locust Street. The shuttle would create its own distinctive appearance using special vehicles, exclusive markings, and a notable name.

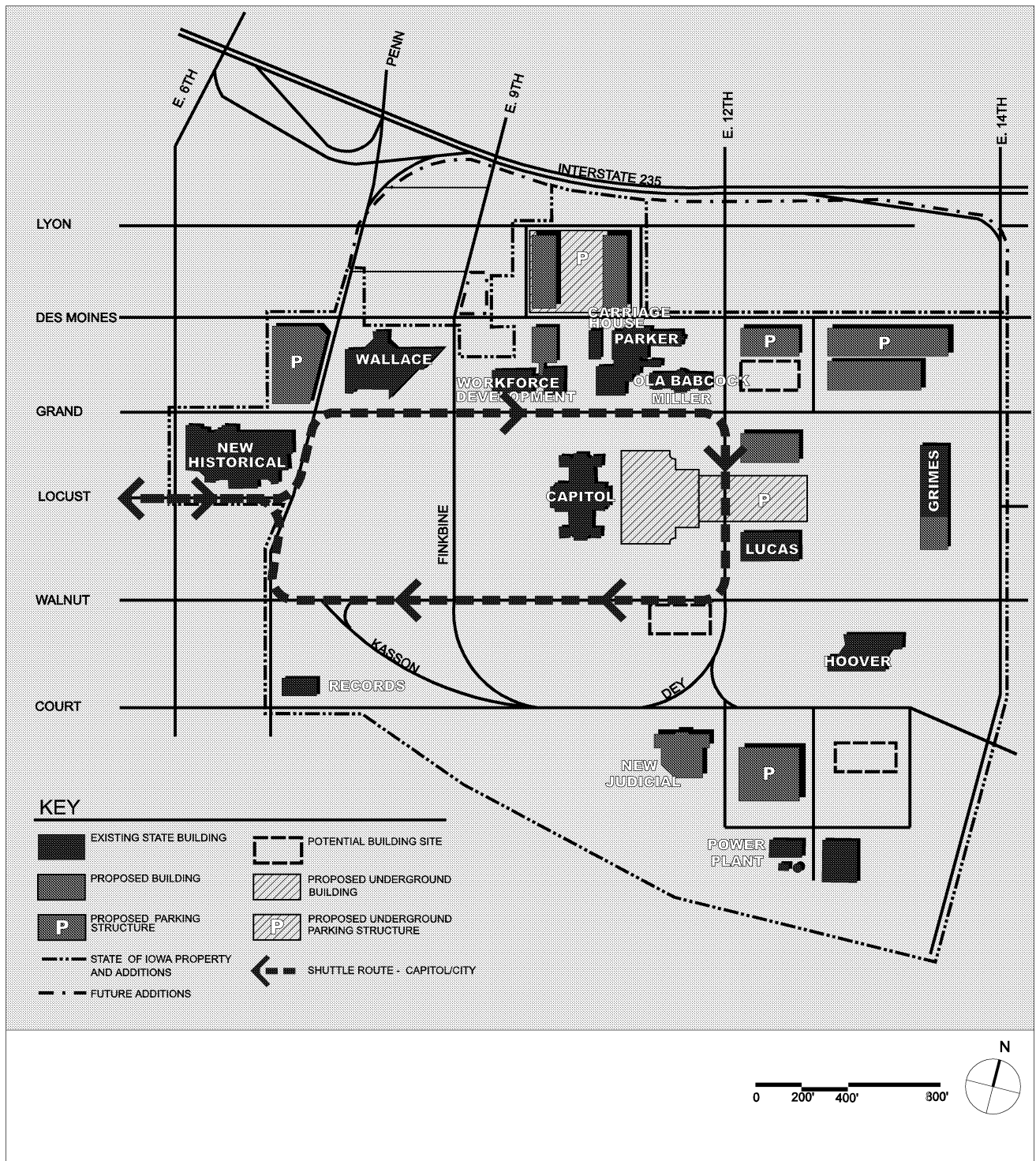
Shuttle service could effectively extend the walkable range for lunch trips and personal errands, as well as provide a convenient alternative to driving between downtown and the Capitol Complex for a variety of business-related trips. To meet anticipated peak demand, the shuttle would operate from 10:00 A.M. to 4:00 P.M.

Evaluating the potential benefit of a shuttle depends on identifying whether a market exists for its service. Completion of an employee transportation survey and other interviews will assist in quantifying that market. It is essential that a market be identified prior to initiating service so that a realistic shuttle operation is planned.

Service with headways of ten minutes or less are necessary to capture maximum ridership; a threshold at which schedules are not necessary for riders. However, the costs of frequent service are high, and must be evaluated against employee time savings, reduced parking provision costs, and other factors.

The potential route on Locust Street assumes that Locust will be converted to two-way traffic east of East 2nd Street. Within the Capitol area, the shuttle stops would be a one- to two-block walk from any state building. Similarly, within downtown, the route would bring passengers within one block of most major hotels, public offices, convention center, shopping destinations, and private office buildings, making it appealing to legislators and lobbyists as well as to employees and tourists. It is anticipated that the shuttle would stop every two blocks.

Shuttle



Shuttle service could increase the mobility of people between state buildings as well as between the Capitol Complex and downtown Des Moines.

Objective:

Increase mobility during the workday by initiating shuttle service to the Capitol Complex.

Guidelines:

- Operate a simple, clearly defined route. Users should have no doubt as to where the shuttle goes or about their ability to return to their starting point.
- Route the shuttle on Locust Street (when converted to two-way flow) east of East 2nd Street, then loop around the Capitol Complex on Pennsylvania Avenue north to Grand Avenue, east to East 12th Street, south to Walnut Street, and west to Pennsylvania Avenue, returning to Locust Street.
- Serve the route at approximately ten minute intervals by two vehicles, providing a third for a spare. Assume an operating scenario of two vehicles operating six hours each weekday, 250 days of service.
- Accept transit passes and consider promotional tokens. A nominal fare (\$0.25 for example) may discourage use of the shuttle for non-transportation purposes.
- Provide shelters at stops (may share public transit bus shelters at some locations).
- Develop a two-year demonstration service to test the shuttle and its market.

- Performance requirements include:
 - Frequent service (15 minute service at a minimum; 10 minute service preferred).
 - The vehicle's ability and durability to start and stop frequently in all weather conditions.
 - Stops at or within sight of major destinations. Key hotels, shopping centers, restaurants, landmarks, and public buildings should be on the route.
 - Convenient passenger boarding and alighting. This means wide doors and low floors, which in turn will minimize dwell time at individual stops. This also better serves people with disabilities.
 - Simplified fare payment system (if a fare is levied).
 - A high level of passenger comfort once inside. Easy-to reach-seating, ample standing room, and superior outward visibility are essential to meeting passengers' needs for short trips.
 - A relatively small vehicle (15-20 seats). With two 18-seat vehicles, the system could comfortably carry 450 riders per day and 100 people in the peak hour.

Pedestrian and Bicycle Circulation

Pedestrian Circulation

Pedestrian connections are and should continue to be an essential element of the Capitol Complex since they form the initial and final segment of any trip. To the extent that people both live and work in the area, pedestrian facilities take on an increased importance in serving all segments of a trip. Viewed in terms of energy efficiency or broader ecological compatibility, walking should be afforded the highest priority over other means of transport.

Within the complex, the Capitol gardens should be a pedestrian area where vehicles are only occasional intruders. Streets bordering the complex should provide convenient connections to this central pedestrian zone.

The proximity of the Capitol Complex to the neighborhoods of East Village, Capitol Park, and Capitol East offers many opportunities for state employees who live, seek services, or dine nearby. Nearby neighborhoods can provide services and restaurant choices that draw the patronage of both state employees and visitors to the Capitol Complex. From the Capitol Building, the walking time and distance to the center of adjacent neighborhoods averages 10 to 15 minutes or three quarters of a mile. (See "Pedestrian Walking Times and Distances", page 118.)

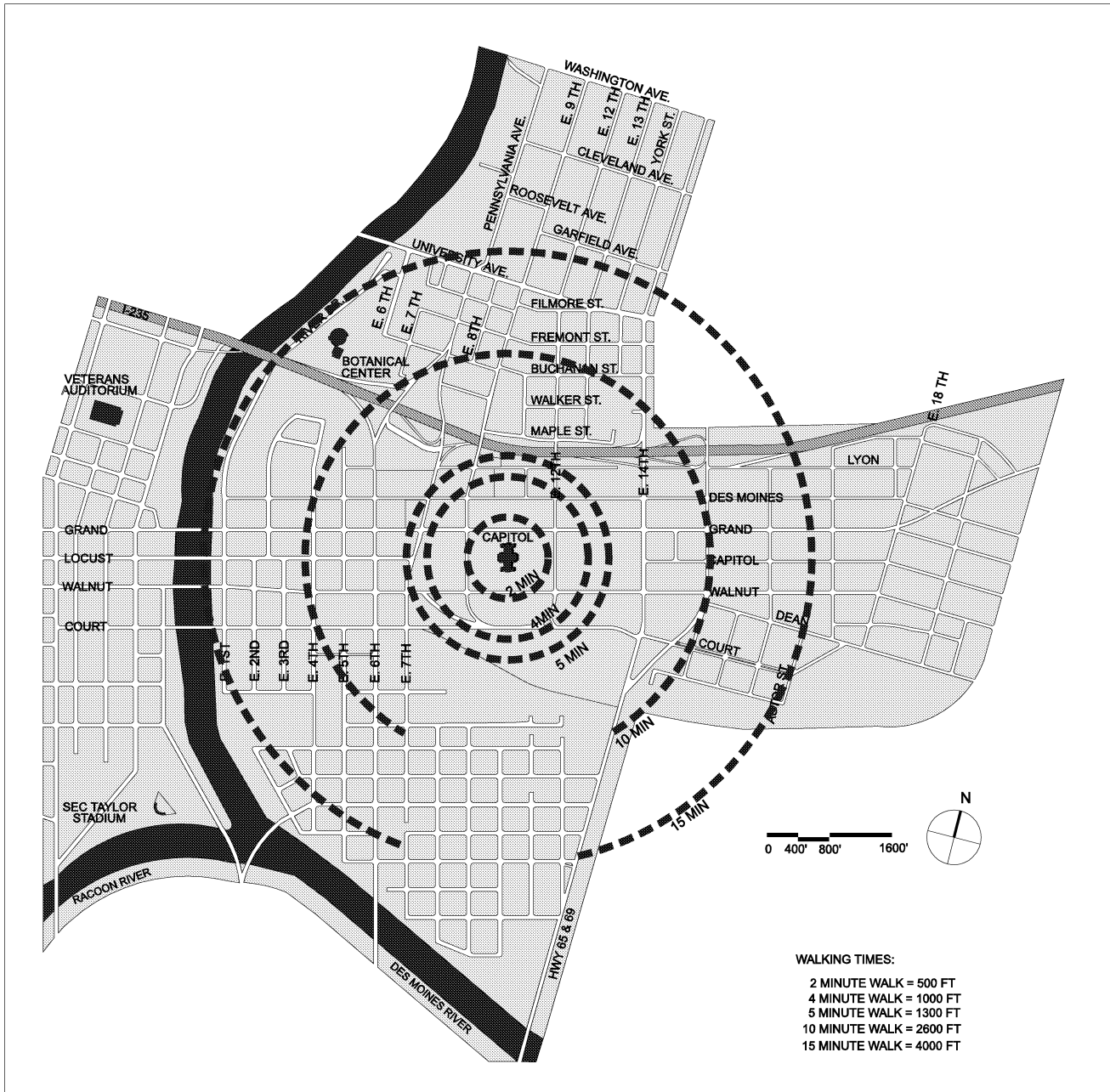
Objective:

Enhance the pedestrian environment throughout the Capitol Complex.

Guidelines:

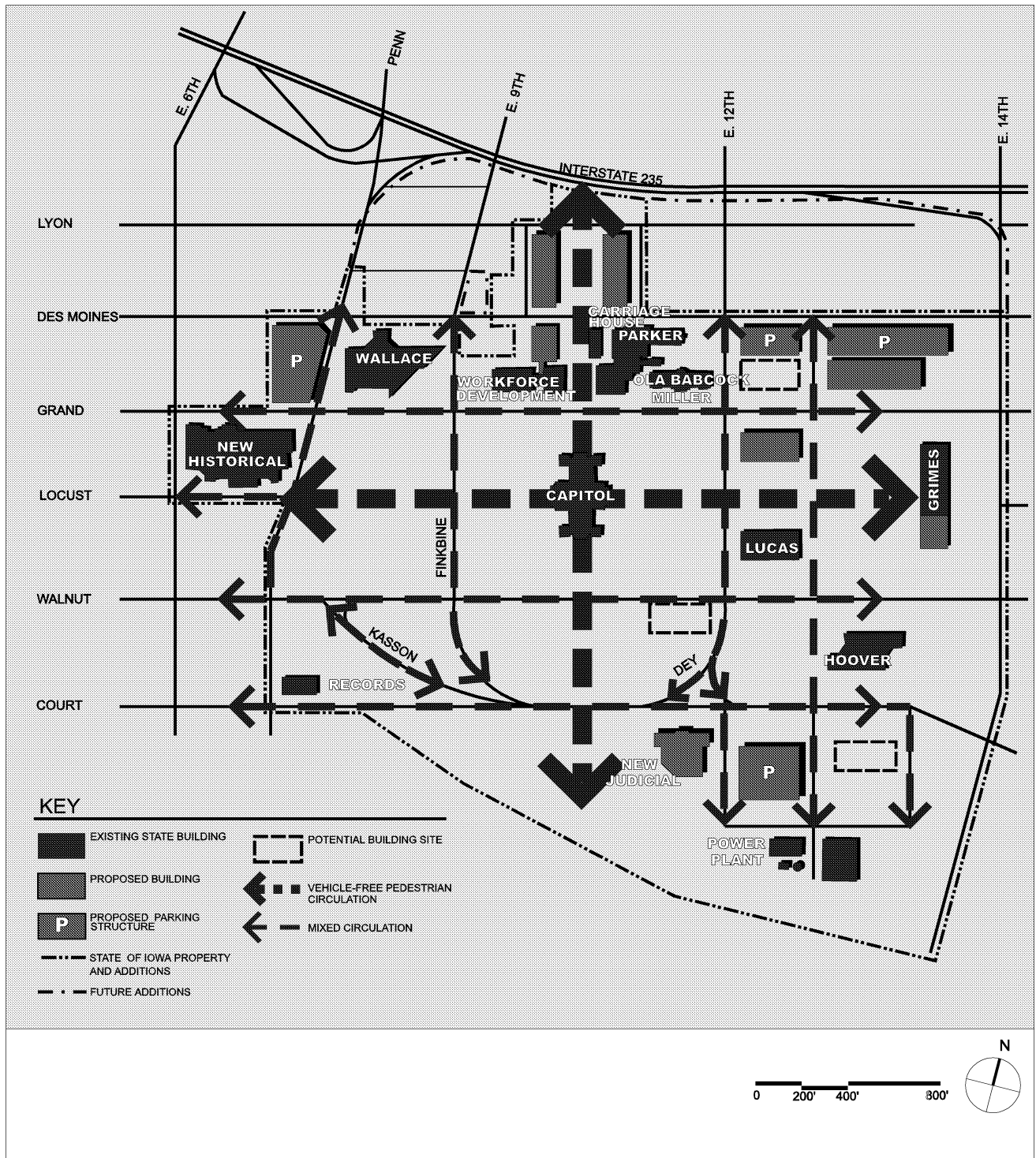
- Require sidewalks on all streets and install them wherever absent.
- Coordinate sidewalk design with lighting, signage, and traffic management.
- Maintain clean, safe, and attractive walkways throughout the Capitol Complex.
- Clarify circulation patterns through the Capitol Complex.
- Direct visitors from parking areas to places of interest within the Capitol Complex.
- Designate areas for tour bus drop-offs along Finkbine, East 12th Street, and Walnut Street.
- Minimize the number of traffic lanes pedestrians must cross on Capitol area streets, especially Grand and Court avenues. All intersections within and immediately surrounding the Capitol Complex should give priority to pedestrian crossings by design. Pedestrian detours and inappropriate add-on hardware (such as flashing lights) should be avoided.
- Review and revise design standards for walkways to assure generous width and good lighting, and wheelchair accessibility appropriate to the adjacent land use (residential, commercial, recreational).
- Provide new walkways through blocks if necessary to provide more direct connections between homes, shopping, employment and recreational areas. Walkways needn't only follow street patterns.

Pedestrian Walking Times and Distances



The integration of neighborhood and Capitol Complex planning objectives could create a more attractive pedestrian environment for these closely-related neighbors.

Pedestrian Circulation



The Capitol Gardens should be reserved primarily for pedestrian circulation, with sidewalk connections to all state buildings and parking areas.

Bicycle Routes

The Greater Des Moines region offers numerous trails that accommodate bicycle travel. In close proximity to the Capitol Complex is the East River Trail, 5.5 miles long, beginning at Hawthorn Park south of the Capitol Complex and following the east bank of the Des Moines River north to Big Creek Beach. The Capitol Complex is a mere six blocks from the southern terminus of this trail.

From the Capitol Complex, a 15 minute ride will take a cyclist through the adjacent neighborhoods of East Village, Capitol Park, and Capitol East, or easily link up to the East River Trail. Additional trails may be possible along rehabilitated railroad tracks. Bicycle travel provides important transportation and recreational opportunities for area employees and residents.

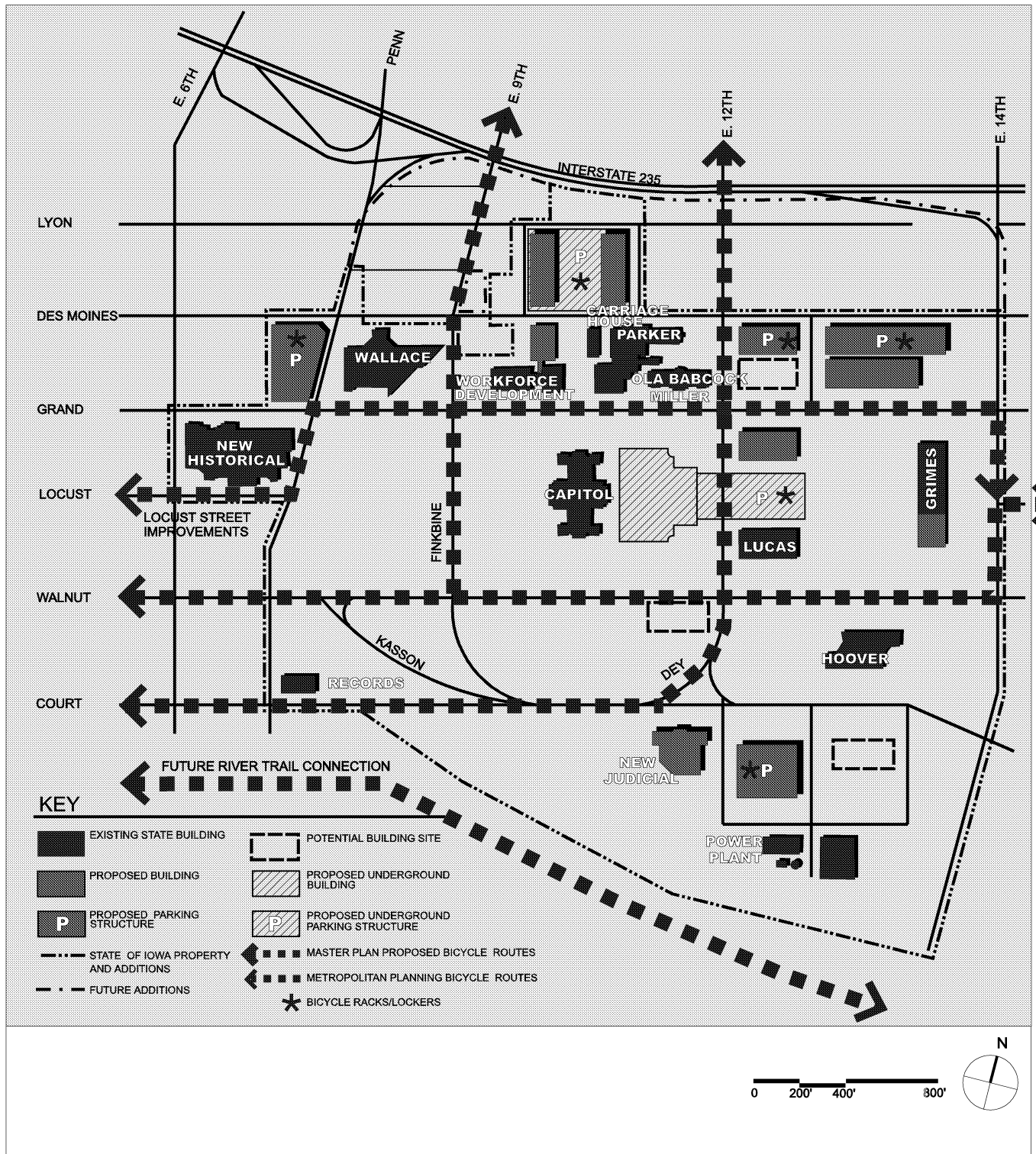
Objective:

Make bicycle facilities an integral feature of the Capitol Complex area circulation system.

Guidelines:

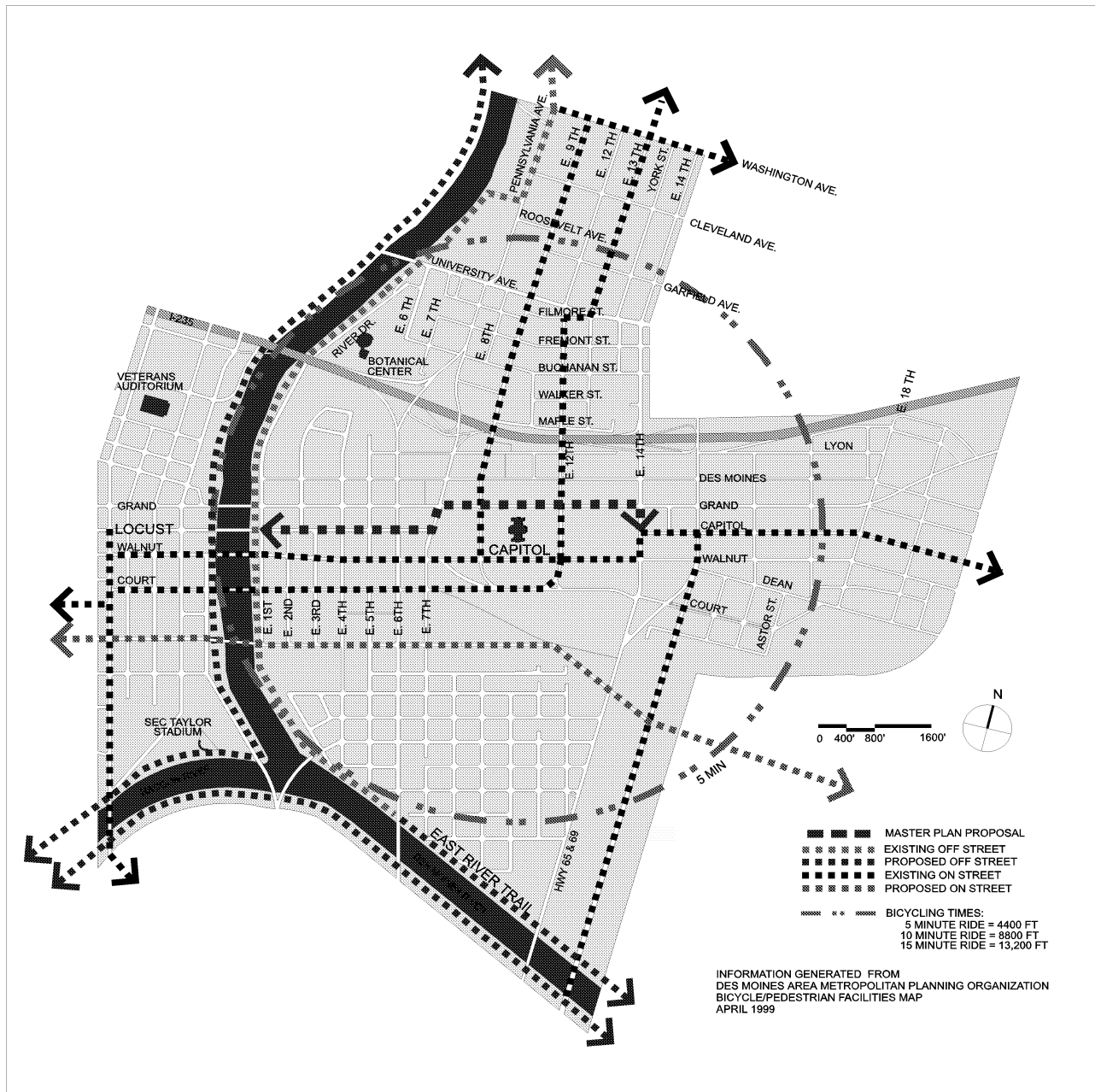
- Improve bicycle connections to the Capitol Complex to encourage bicycle commuting and use of Locust Street and the East River Trail as safe and attractive bicycle connections to the Capitol Complex. This will promote a recreational as well as civic experience of the Capitol.
- Cooperate with the City of Des Moines to implement bike lanes on selected streets and the bicycle plan of the Des Moines Area Metropolitan Planning Organization.
- Provide weather-protected bike racks, showers, and changing facilities at state buildings for employees.
- Work with transit authorities to facilitate transporting bicycles on buses.
- Accommodate safe bicycle travel on selected major streets.

Capitol Bicycle Routes



Bicycle travel provides significant transportation and recreational opportunities for area employees and residents.

Regional Bicycle Routes



A comprehensive network of parks and bike trails has the potential to link destination areas in the city and region.

Sustainable Development Principles

The Departments of Natural Resources (DNR) and General Services (DGS) share the vision of sustainability for the Capitol Complex by supporting efforts to achieve green building goals. Principles for sustainable development should guide plan objectives for the Capitol Complex and also preserve the dignity, character, and quality of the Capitol and grounds.

The sustainable development principles listed below are consistent with the US Green Building Council's LEED (Leadership in Energy and Environmental Design) Green Building Program. The US Green Building Council is a source for standards and detailed guidelines for the implementation of these principles. The following goals, actions, and specific implementation processes are to be implemented with the Plan:



Preservation of the verdant setting of Prairie Ridge calls for implementation of sustainable development principles.

Sustainable Site Planning

By creating a more sustainable landscape for the Capitol Complex within the existing landscape context, the State will reduce natural resource consumption (energy, water, chemical usage) and maintenance costs as well as enhance the livability of the Complex for visitors and employees alike.

Guidelines:

- Review landscape improvements for consistency with the Capitol Complex Master Plan and sustainability goals.
- Avoid development of previously undeveloped land, using instead surface parking lots and infill sites.
- Landscape to control erosion, reduce heat islands (shade trees, light color materials), and minimize habitat disturbance.
- Identify, replace, and repair habitat links.
- Utilize alternative transportation facilities (pedestrian, bicycle, carpools, shuttles, commuter rail, public transit).
- Efficiently site buildings (orientation to minimize energy consumption due to sun and wind exposure. Take advantage of natural topography and proximity to public transit).
- Encourage mixed land use (trip reduction, walk to work, errands, daycare).
- Support the local community in reclaiming their own sustainable goals.

Energy Efficiency

By implementing a comprehensive state building energy management initiative, the State will reduce public-sector energy consumption, reducing natural resource use and saving tax dollars. Energy improvements installed in state-owned facilities to date total \$19 million and are saving the State \$3.4 million annually (a payback period of less than six years). Under existing procedures, agencies receive engineering analyses of their facilities from an engineering consultant under contract to the DNR Energy Bureau, a project plan is established, and financing is arranged and managed through the Bureau's management.

Guidelines:

- Conduct comprehensive life cycle cost analyses of current energy usage and future needs for each building. Investigate possible economies through resource sharing with other state buildings.
- Review building systems controls.
- Exceed State energy codes, where possible.
- Consider natural ventilation, heating and cooling during portions of the year.
- Consider waste heat recovery systems.
- Consider renewable energy sources (wind, solar, geothermal).
- Design new buildings to take full advantage of natural daylight, thereby reducing energy consumption and costs.

Water Efficiency

Guidelines:

- Progressively replace existing fixtures with water-conserving fixtures.
- Introduce a water recovery system (gray water).
- Review feasibility of more efficient irrigation and gray water systems.
- Consider water-conserving cooling towers.
- Use water-efficient landscaping (utilize indigenous plant materials, mulching, and drought-resistant plants; limit high maintenance beds to special locations; design lawn areas to facilitate reduced mowing and greater organic maintenance).
- Where appropriate, consider "green" roofs for storm runoff detention and heat sink dampers.
- Reduce and filter water runoff. Limit impermeable surfaces, install oil grit separators, bio-filtration or detention ponds for parking lots, and consider retrofit pervious parking surfaces).

Materials and Resources Conservation

By choosing environmentally-friendly building materials the State will also reduce energy consumption and improve indoor air quality in buildings. The following guidelines are for issues that should be considered not in isolation, but in the overall design process with the objective of creating facilities that are functional, durable and economical as well as meeting the special aesthetic standards demanded of state buildings in the Capitol Complex.

Guidelines:

- Use materials low in volatile organic compound (VOC) content (limit VOC content in adhesives, sealants, paints and coatings).
- Use local materials, where possible (within 300 mile radius), to reduce transport-related costs and resource use.
- Use materials manufactured using environmentally sound planning and production processes (such as non-toxic materials) that minimize the use of natural resources and meet practical architectural and engineering design practices.
- Reuse resources (salvaged material) and recycle content materials whenever practical and consistent with life cycle design criteria.
- Select signs made from recycled-content materials.
- Select products that are durable and allow efficient end-of-life disposal (recyclable).
- Eliminate chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs) and halons in mechanical equipment and building materials.
- Rehabilitate buildings and reuse existing structural shells.
- Recycle organic materials (composting, mulching) or provide for their temporary storage and collection by others.
- Reclaim and recycle chemicals.
- Reduce chemical usage by using safer alternatives, such as insecticidal soaps and integrated pest management.

Protect Indoor Environmental Quality

Guidelines:

- Prepare an indoor air quality (IAQ) management plan.
- Establish a program for selection, location, management and maintenance of indoor plants. Plants can improve indoor air quality and enhance workspace ambiance.
- Protect ventilation system during construction.
- Consider a permanent air monitoring system (carbon monoxide, carbon dioxide, VOCs).
- Locate chemical storage areas away from ventilator intakes.
- Provide walk-off mats at entries.
- Make full and efficient use of daylight in workspaces.

Solid Waste Reduction

By seeking further efficiencies in the established recycling collection program, the State will increase recycling material revenues and decrease landfill disposal volumes and costs.

Guidelines:

- Prepare and implement construction waste management plans.
- Require building design to limit generation of waste construction materials.
- Review and improve construction waste recycling plans at all new construction and renovation sites.
- Review and improve salvage and waste recycling plans at all renovation and demolition sites.
- Review and improve building occupant recycling (dedicated chutes, recycling areas) and central recycling and waste compaction for the Capitol Complex. Dispose of trash efficiently and reduce unsightly litter.
- Review the feasibility of a centralized area on the Complex for recycling and trash, and provide for transportation of materials and containers to and from each building.
- Review recycling equipment needs for more efficient collection and processing of materials.

Environmental Quality (off-site, up- and downstream)

Guidelines:

- Encourage energy auditing by suppliers.
- Limit emissions (CO₂, SO₂ etc.).
- Utilize certified forest sources and certified wood products.
- Use outdoor furniture made from recycled-content materials.
- Minimize interference with natural habitats.
- Treat water-borne effluents before they leave state premises.

Performance Measurement

Review and update benchmarks to measure progress toward meeting the State's green building goals.

Guidelines:

- Incorporate performance measures, particularly in terms of indoor air quality and efficient use of energy.
- Determine comprehensive cost effectiveness and feasibility of all "green" building options. Use life-cycle costing for all materials and systems.

four

Making the Vision a Reality

Responsibility for the Plan

The mission of the Department of General Services includes maintaining and updating the Capitol Complex Master Plan. The Capitol Planning Commission is charged with the duty of supervising and advising on the type of architecture, location, and construction of buildings to be erected on the Capitol grounds. They are also responsible for directing the location of monuments, statues, and related memorials.

A principal function of the Capitol Complex Master Plan is to articulate a vision for the whole. Safeguarding and implementing this vision requires that the Capitol Planning Commission, through the Department of General Services, its staff and advisors, assume proactive roles with decision-makers, especially the Governor and Legislature. As the Capitol Planning Commission provides design review, it must take “ownership” of the Capitol Complex, promote the vision of the Master Plan, and enter into partnerships with the community for enhancement of the Capitol grounds and the adjoining neighborhoods.

Successful implementation of the Master Plan depends on developing advocacy from the Governor and the Legislature. Many projects, such as the Judicial Building, a proposed building for legislative state offices, and a new parking structure, are already at various stages of implementation. With the need to coordinate these projects, ***it is recommended that the Legislative and Executive branches of government endorse and adopt this plan to provide the framework for setting the course of the future of the Capitol Complex.***

Primary responsibility for advancing and implementing the Master Plan should rest with a designated office, such as the Governor. This office would oversee the efforts of the Department of General Services and the Capitol Planning Commission as they jointly carry out the directives issued from that office relative to the Master Plan.

Advancing the Plan

It is recommended that adequate staff of the Department of General Services be assigned the responsibility of monitoring and coordinating the progress and implementation recommendations of the Master Plan. Annual progress assessments should be made and reported to the Capitol Planning Commission and in turn to the Governor. The Master Plan should be a standing agenda item at each Capitol Planning Commission meetings.

An annual conference should be established with representatives of the Department of General Services, the Capitol Planning Commission, the Governor’s office, and the Legislature to review and discuss continued development and implementation initiatives. To maintain continuity of the Master Plan in relation to implementation initiatives, it is suggested that an Iowa Capitol Complex Master Plan consultant team be retained in an advisory capacity to guide the ongoing efforts.

Involving the Public

A successful feature of the Master Plan process has been public involvement through a variety of opportunities for participation such as work groups and public forums. The public has shown a desire to be involved in planning, siting, design and environmental issues, and this interest should be emphasized and encouraged. As the Master Plan moves ahead, continued public involvement will help to develop advocacy and “ownership” throughout the community.

Regular communication through newsletters, other media, and public forums will serve to inform interested people and provide opportunities to hear and address concerns. As parts of the Master Plan are carried out, it might be appropriate to form work groups made up of some of the same people who worked on creating this plan to address specific elements of the plan. Public meetings in conjunction with the work groups would provide an opportunity to inform and gather additional input and advocacy while keeping the plan fresh and active. A clear process will be necessary to record and act on public comment.

Surveys are another means of obtaining public input to the Master Plan implementation process and should be used to determine public preferences and important trends. Standardization of segments of the surveys will make it possible to compare important data from year to year.

Public - Private Partnerships

Realizing the progressive vision of the Master Plan will require effective partnering with the City of Des Moines, private businesses, and neighborhood groups. The State has recognized the value of investing in these partnerships, as evidenced by this planning effort and the earlier efforts of the Capitol Gateway East Urban Design Plan. In this same spirit of cooperation, continued partnership through implementation of the Master Plan will benefit the entire community through coordinated planning and concurrent revitalization of downtown Des Moines.

City of Des Moines

The Master Plan defines improvements to the Capitol grounds and adjacent neighboring areas that are in the domain and jurisdiction of the City of Des Moines. Implementing modifications and improvements to Grand Avenue, Court Avenue, and other adjacent city streets will require working closely with the City. Representatives of the City have been actively involved in the development of the Master Plan; continued involvement on their part is essential.

Development in the area adjacent to the North Mall between Pennsylvania Avenue and East 14th Street presents partnership opportunities with the City as a means of providing further definition to this neighborhood remnant south of the freeway. Parking structure development, such as the one planned for Lot 18, is also an opportunity to partner with the City and the private sector. Ground-level retail and other pedestrian-oriented uses included in state parking structures and other buildings may be privately operated, and would help to serve community needs for the east side of downtown. These structures should be integrated into the overall city parking system and connected to the city transit system.

Metropolitan Transit Authority

The Capitol Complex provides a workforce base which, with expanded transit and new shuttle service, could contribute to enlivening the retail business of the east and west commercial business district, especially during the noon hour. It could also ease the parking demand of the complex and the entire east side. Partnering with the MTA to share the cost of service would financially benefit both the State and the City.

Private Sector

In addition to the partnership potential of the Lot 18 parking structure, some functions of state government such as Commerce could work well in the central business district of the east side of Des Moines. This type of joint project could be a catalyst for the revitalization of the Gateway East business district. Continued participation and involvement of the east side Des Moines business leaders is encouraged. Participation in a shuttle demonstration program is also an opportunity for private sector involvement.

Neighborhoods

The east side neighborhood and business groups are key partners in advancing the Master Plan and in developing stronger connections between the Capitol and the community. The liveliness of the Capitol Complex could be enhanced by actively working with the neighbors and community leaders to program events and civic activities for the grounds. There is a strong sense of ownership of the Capitol grounds by these groups that could be further strengthened by continuing to reach out to them. Many neighbors remembered the days when the garden club would assist with the south gardens over the Court Avenue Bridge. The Capitol Planning Commission and Department of General Services should actively participate in a partnership with the adjacent neighborhoods for the revitalization and beautification of the collective east side neighborhood.

Facilities Development Sequencing Schedule

The Capitol Complex is a dynamic environment of construction and renovation projects. Restoration of the Capitol, the Ola Babcock Miller, and Lucas buildings continues. The new Judicial Building, a proposed legislative office building, and a new parking structure are at various stages of implementation.

A critical sequence of actions will be needed to enable these committed construction projects to proceed smoothly and without disruption of state business. Each construction project should be assessed in relation to other anticipated building projects and with consideration for temporary and future anticipated parking needs. It would be prudent to hold each project responsible for concurrent development of its near and long term employee and visitor parking needs.

A Facilities Development Sequencing Schedule should be prepared and updated. This should be viewed as a flexible and living schedule requiring quarterly updating to assess all currently funded and future anticipated projects and the consequences of all projects in relation to the whole.

Implementing the Strategic Consolidation Plan

The analysis conducted by the planning team resulted in a forecast requirement for up to one million square feet of additional space in and around the Capitol Complex over the next 20 years. This new space would support consolidation, increase government efficiency, accommodate modest growth and rearrangement of departments, and correct significant current space deficiencies. All of these adjustments are aimed at improving the overall cost effectiveness of government service delivery systems. Approximately 700,000 square feet may be needed by 2010.

The strategic plan acknowledges that new facilities for the Judicial and Legislative Branches of government will add approximately 125,000 gross square feet to the space inventory in the next few years. This still leaves a shortage of 560,000 square feet over the next decade. Over half of this space requirement is composed of lease terminations that would reduce costs by consolidating 312,000 square feet of leases into new state-owned buildings.

Recognizing that a facility development program that entails the development of 560,000 square feet of space requires significant funding likely to approach \$120 million and may take over four years to implement, it is important to establish a definitive process for deciding which agencies to consolidate, where to build the buildings, what size they should be, how they will be developed, and to provide an effective project delivery system.

Two new buildings are recommended for construction during the next decade:

- Building A would enable consolidation of a number of leases. They would be combined with a large agency that currently occupies space in existing state-owned facilities on the Capitol Complex. The new building would accommodate long-range growth for that agency, and vacated space would alleviate identified space deficiencies in other departments. The selection of the agencies that should be consolidated into Building A would be based on maximizing the reduction in rent paid for leasing space and maximizing flexibility to rearrange space on the complex to support the growth of other agencies. The primary departments that comprise a logical “grouping” should initially comprise between 50 and 70 percent of the building. The balance of the initial occupants can move elsewhere in future to allow expansion of primary tenants in Building A as their permanent location. Building A should be between 200,000 to 280,000 net square feet. The ultimate selection should be based upon the combination of departments that satisfy adjacency relationships of all state agencies while at the same time minimizing life cycle costs.
- Building A could be developed on the Capitol Complex or between the Des Moines central business district and the Capitol Complex, depending upon the mix of agencies selected for occupancy.
- Building B would trail implementation of Building A by one year. This project would be developed to accommodate other identified needs on the Capitol Complex.
- Selection of the agencies to occupy Building B would again be based upon selecting those that could most benefit by co-location in a building capable of accommodating long-range growth while at the same time satisfying the needs of other agencies on the Capitol Complex to expand into the space vacated.

The State should initiate studies to develop two or three different scenarios for co-locating agencies in Building A, develop occupancy scenarios for each, identify a site, estimate costs, and present a recommendation to the Legislature during the 2000 legislative session. The primary criteria for selecting agencies as candidates to occupy new facilities include:

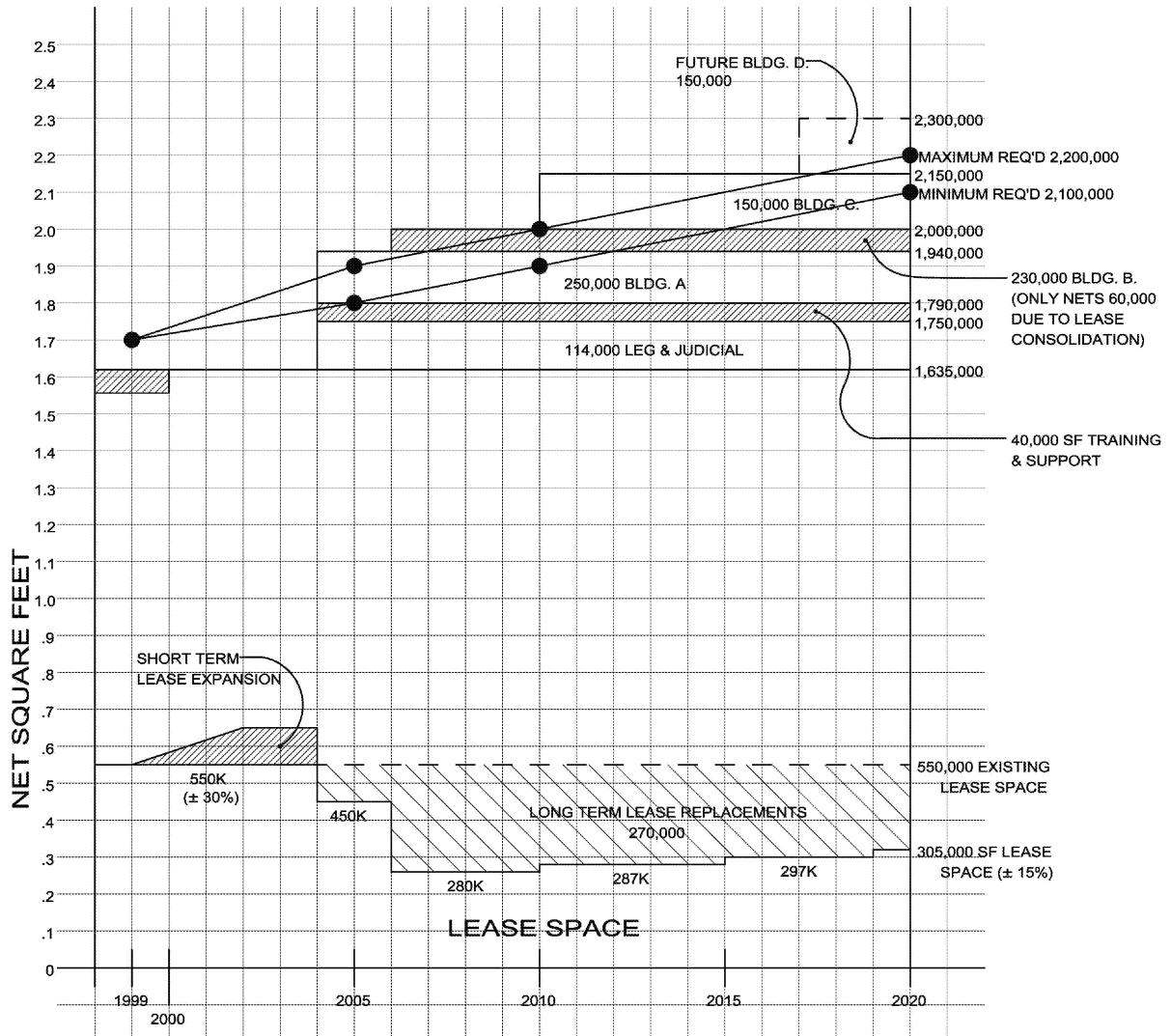
- Agency is currently in multiple locations;
- Agency is growing rapidly and needs additional space that cannot be accommodated in the current building, or;
- Agency, although stable, needs to relocate to make way for increasing space requirements of other departments continuing to occupy space in the current building;
- Existing space is inadequate in size or configuration.
- Agency has specialized needs that cannot be fulfilled in existing quarters; and
- Agency occupies a leased space at a cost that is greater than the break-even point indicating ownership would be more cost-effective than leasing.

Specific Study Sequence

Both Building A and Building B should follow a phased implementation process separated by one year. The five step process includes:

- Study the alternatives and identify which agencies should be located in the two facilities, where the buildings should be located, how the project should be implemented, and establish an overall budget and implementation time frame.
- The study should specifically address whether the buildings are to be developed using a traditional design/bid/build process or a design/build methodology.
- Presentations to the legislative session should seek approval of all important parameters of the project, including size, cost, location, and agencies to occupy the facility. Initial legislative approval should include an appropriate budget to allow for completion of a comprehensive pre-design study.
- The pre-design study for Building A would be conducted and would have as its product a comprehensive pre-architectural plan identifying performance characteristics, design criteria, building program, implementation, schedule, site issues, overall implementation strategy, and a comprehensive implementation budget for the proposal. This pre-design study would be presented to the Legislature.
- Design and construction would proceed with occupancy within 30 to 42 months, depending upon the implementation strategy selected.

Sample Implementation Sequence



NOTE: DATES, BUILDING PROGRAMS, AND LEASE SPACE QUANTITIES SUBJECT TO CHANGE.

Consolidating fragmented agencies in state-owned office space will realize economic benefits.

Site Development Implementation Plan

The Master Plan establishes the vision for definition, structure, and organization of the Capitol Complex, recommending improvements to the Capitol grounds that will restore their dignity. Design and implementation of a series of improvements to the Capitol grounds in relation to current and proposed facility development is outlined in the plan. A three-part Site Development Implementation Plan should be initiated to include proposed modifications and improvements to landscaping, monuments, and site amenities including signage, site lighting, and furnishings.

Landscape Plan

Realizing the strategic landscaping vision set forth by the Master Plan will require a more specific planning effort for the design of the Capitol grounds than is provided by the Master Plan. The Landscape Plan will include detailed designs for the various parts of the Capitol grounds, such as Capitol Terrace. The Landscape Plan should be developed in concert with the proposed Site Amenities Plan and should be coordinated with an updated and refined version of the Monument Guidelines and Location Plan. The final product will be landscape construction documents.

Site Amenities Plan

With the standards established by the Master Plan, and closely coordinated with the Landscape Plan, develop a Site Amenities Plan for the design, layout, and installation of signage, outdoor lighting, and site furnishings.

Monument Guidelines and Location Plan

A clear set of criteria is needed with which the Capitol Planning Commission can accept or reject applications for monuments and other objects on the Capitol grounds. Existing guidelines on location of such objects should be reviewed for consistency with the recommendations of the Master Plan, and should be coordinated with the Landscape Plan.

A Practical Plan

The Master Plan provides an opportunity to encourage and advance the efforts of environmentally responsible design and management practices. An allied effort is currently under way through the Department of Natural Resources to establish guidelines, standards, and strategies for sustainable design of state facilities. These efforts should be supported and integrated into the overall implementation of the Master Plan. Sustainable development principles are identified at the end of “Section 2-Capitol Complex” in this document.

Making the Vision a Reality

The Iowa Capitol Complex Master Plan proposes a vision for Iowa’s State Capitol of a future reflecting the spirit of the early pioneering visionaries of the Capitol Building. It is grand and optimistic, yet prudent and decisive in provisions for seeing the goals achieved. It sets the standard for preserving, enhancing, and restoring Capitol facilities and grounds to their originally intended dignity, befitting the seat of state government.

The Master Plan outlines and identifies sensible and efficient consolidation of state facilities in the Capitol area and sets the standard for sound growth management and community cooperation. It outlines a functional and practical workplace in which state employees can conduct the state’s business. It places ownership and responsibility for the Capitol Complex in the hands of the people of Iowa. Finally, it provides a plan for orderly and accessible open spaces, establishing the Capitol and grounds as a significant place of gathering and celebration designed for the constituents of government and all people of Iowa.

The objectives of the Capitol Complex Master Plan are ambitious and achieving them will require sincere commitment from the state’s Governor, Legislature, employees, businesses, and residents. This document confronts and addresses the needs of the future, beginning now, to develop and extend the Capitol of the State of Iowa; protecting its heritage and guaranteeing its place in the educational, cultural, and environmental life of the people of Iowa.

Keeping the Plan Current

The Master Plan should be kept current through steady reevaluation of the objectives and guidelines and should reflect progress of implementation. Under the direction of an office such as that of the Governor, the Master Plan should be revised and updated every five years in addition to the previously recommended annual internal progress assessments.

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Capitol Planning Commission (CPC)

Karen Polking, Chair
Jack Leaman, Vice-Chair*
Representative Donna Barry
Senator Dennis Black*
Scott Brown
Orville Crowley*
Ronald Feilmeyer
Terry Hopkins*
Senator John Jensen*
Loral Kirke
Marie Millard
Representative William Witt

**Indicates those who served on the Capitol Complex Master Plan Steering Committee*

Department of General Services Staff (DGS)

Richard Haines, Director*
Tom Johnson, Administrator, Design & Construction Division*
Stanley Kuhn, Administrator
Bill McKeag, Architect and Project Manager, Design & Construction Division *
Barbara Bendon, State Property Leasing Officer, Design & Construction Division*
Gary Forshee, Design & Construction Division*
Ed Mahlstadt, Capitol Complex Maintenance Division*
Patricia Schroeder, Division of Administration & Purchasing*

**Indicates those who served on the Capitol Complex Master Plan Steering Committee*

State of Iowa

Governor Thomas Vilsack
Lt. Governor Sally Pederson
Governor Terry Branstad
Lt. Governor Joy Corning
Senator Mike Gronstall*
Senator Stewart Iverson*
Senator Mary Kramer*
Cynthia Clingan, Acting Secretary of the Senate*
Representative John Connors *
Representative Ron Corbett*
Representative Chuck Gipp
Representative Libby Jacobs*
Representative Pam Jochum
Representative Pat Murphy*
Representative Dave Schrader*
Representative Brent Siegrist*

State of Iowa (*continued*)

Liz Isaacson, Chief Clerk of the House*
Mark Willemssen, Legislative Facilities Manager*
Diane Bolender, Legislative Service Bureau*
Joan Arnett, Legislative Service Bureau
Julie Livers, Legislative Service Bureau*
Bill O'Brien, Iowa Supreme Court Administrator
David Boyd, Iowa Supreme Court*
John Norris, Office of the Governor, Chief of Staff*
Elizabeth Buck, Office of the Governor*
Secretary of State Chet Culver
Auditor of State Richard Johnson
Treasurer of State Michael Fitzgerald
Deputy Treasurer Stefanie Devin
Attorney General Tom Miller
Eric Tabor, Chief of Staff, Office of Attorney General
Secretary of Agriculture Patty Judge
Daryl Frey, Director, Laboratory Division, Department of Agriculture & Land Stewardship
Cynthia Eisenhauer, Director, Department of Management
Steve Maslikowski, Department of Management
Gerald Bair, Director, Department of Revenue and Finance
Patricia Beal Snyder, Employee Resource Team, Department of Revenue & Finance
Cindy Morton, Internal Resource Management Division, Department of Revenue & Finance
Ken Brickman, Iowa Lottery, Department of Revenue & Finance
Linda Hanson, Director, Department of Personnel
Leon Schwartz, Department of Personnel*
Jim Youngblood, Information Technology Services (ITS)
John Nimmo, Information Technology Services (ITS)
Roger Halvorson, Director, Department of Commerce
Shari Fett, Assistant to the Director, Department of Commerce
David Lyons, Director, Department of Economic Development
Bob Henningsen, Department of Economic Development
Nancy Landess, Tourism Division, Department of Economic Development*
Deborah Dessert, Chief Financial Officer (acting director), Department of Workforce Development
Jacqueline Mallory, Bureau Chief Employee Services, Department of Workforce Development
Kevin Techau, Director, Department of Inspections and Appeals
Linda Scott, Department of Inspections and Appeals
Paul Johnson, Director, Department of Natural Resources
Monica Stone, Building Energy Management Section, Department of Natural Resources (DNR)
Beth Hicks, Department of Natural Resources (DNR)*
Jeff Geerts, Department of Natural Resources (DNR)
Mary Klemesrud, Department of Natural Resources (DNR)
Dan Lane, Department of Natural Resources (DNR)
David Cretors, Department of Natural Resources (DNR)
Diann Wilder-Tomlinson, Civil Rights Commission
Betty Grandquist, Department of Elder Affairs

State of Iowa (continued)

Almo Hawkins, Department of Human Rights
Jessie Rasmussen, Director, Department of Human Services
Betty Hamilton, Department of Human Services
Michelle Clark, Department of Human Services
Christopher Atchison, Director, Department of Public Health
David Fries, Deputy Director, Department of Public Health
Creig Slayton, Department for the Blind
Gary Nichols, College Student Aid Commission
Dan Hunter, Director, Department of Cultural Affairs*
Tom Morain, Historical Society, Department of Cultural Affairs
Judy McClure, Historical Society, Department of Cultural Affairs*
Jerome Thompson, Museum Bureau Chief, Department of Cultural Affairs
Ted Stilwill, Director, Department of Education
Dwight Carlson, Department of Vocational Rehabilitation
Harold Thompson, Director, Iowa Communications Network (ICN)
Paul Stuber, Telecommunications Engineer, Iowa Communications Network (ICN)
Harold Bowman, Iowa Communications Network (ICN)
W.L. Kautzky, Director, Department of Corrections
Mike Edwards, Department of Corrections
Richard George, Board of Parole
Warren G. Lawson, Department of Public Defense
Ellen Gordon, Emergency Management Division, Department of Public Defense
Dan Rogers, Department of Public Defense
David Rogers, Department of Public Defense
Penny Westfall, Director, Department of Public Safety
Royce Anthony, Capitol Police, Department of Public Safety*
Steve Bogle, Capitol Police, Department of Public Safety
Donna Bacus, Capitol Police, Department of Public Safety
Roger Baysden, Iowa Prison Industries*

**Indicates those who served on the Capitol Complex Master Plan Steering Committee*

City of Des Moines

Preston Daniels, Mayor
Eric Anderson, Manager
Rick Clark, Assistant Manager*
Jim Grant, Director of Community Development
Gary Lozano, Administrator of Planning and Urban Design
Debra Smith, Community Development Department*
Mary Neiderbach, Community Development Department
Erik Lundy, Community Development Department
Bruce Gates, Economic Development Department*
Gary Fox, Traffic & Transportation Department*
Don Tripp, Parks & Recreation Department

**Indicates those who served on the Capitol Complex Master Plan Steering Committee*

Neighborhoods and Other Interests

Jim Boyt, East Downtown Business Association*

Bill Dikis, Architect, RDG Bussard Dikis*

Nadine Hogate*

Jack Lashier, The Iowa Hall of Pride, Iowa High School Athletic Association*

Scott Newhard, East Des Moines Chamber of Commerce*

Susan Nixon, Capitol Park Neighborhood Association

Christine Paskins, East Village Neighborhood Association*

Linda Santi*

Rosa Snyder, (Historical consultant to the project team)

Steve Spade, Metropolitan Transit Authority, MTA

Maureen Van Syoc, Capitol East Neighborhood Association

Roy Wright, Des Moines General Hospital*

John Zeller

**Indicates those who served on the Capitol Complex Master Plan Steering Committee*

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East Des Moines Chamber of Commerce

East Des Moines Merchants Association

Des Moines City Council

East Village Neighborhood Association

Capitol Park Neighborhood Association

Capitol East Neighborhood Association

Consultants

BROOKS BORG SKILES ARCHITECTURE ENGINEERING (PRIME CONSULTANT)

Architects and Engineers

ZIMMER GUNSUL FRASCA PARTNERSHIP

Architects and Planners

THE SGS GROUP

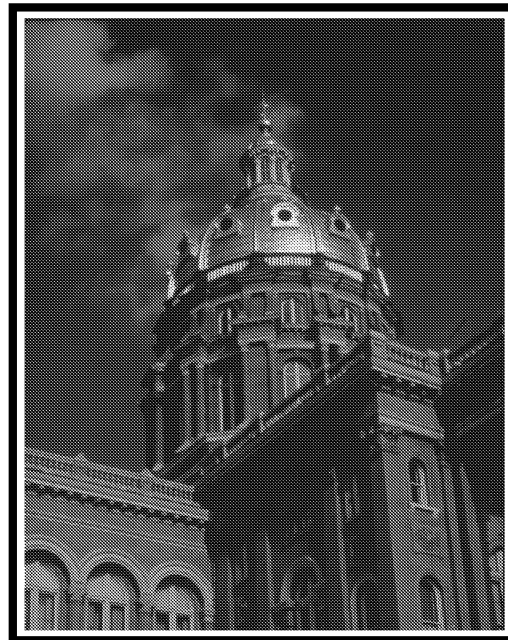
Facilities Programming

TDA ILLINOIS

Transportation Planning

I o w a C a p i t o l C o m p l e x
Strategic Parking Management Plan
& Transportation Supporting Documentation

A p p e n d i x A



STATE OF IOWA
DEPARTMENT OF GENERAL SERVICES
AND
CAPITOL PLANNING COMMISSION

I o w a C a p i t o l C o m p l e x

Strategic Parking Management Plan & Transportation Supporting Documentation

A p p e n d i x A

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Prepared by:
BROOKS BORG SKILES ARCHITECTURE ENGINEERING
In association with:
ZIMMER GUNSUL FRASCA PARTNERSHIP
TDA ILLINOIS

**STATE OF IOWA
DEPARTMENT OF GENERAL SERVICES
AND
CAPITOL PLANNING COMMISSION**

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Executive Summary

Executive Summary

So pressing were problems associated with parking in the Capitol Complex that work on the Master Plan was preceded by a separate study to critically examine parking facilities. The result of the study was a series of recommended actions for immediate, intermediate and long term implementation, completed March 1999.

The Problem

A 1996 PERK study had identified four significant problems:

- Too little parking to meet the needs of the Capitol Complex, especially during legislative sessions.
- Unsatisfactory assignment of parking locations to users; employee spaces often remote from their buildings.
- A virtually unenforceable system.
- Snow removal hampered by random overnight parking.

Observation and analysis revealed that occupancy of the 3340 spaces in the Capitol Complex was typically at or above 90% (its practical capacity), and exceeded 116% when the legislature was in session, indicating illegal parking of over 500 vehicles. 110 to 130 of the available spaces are typically occupied by state owned cars, many of which remain in lots overnight, contributing to the obstruction of snow clearing operations.

Goals

Five specific goals were established for improvement of parking conditions:

- Provide sufficient parking for employees and visitors in reasonable proximity to buildings. Supply and demand should be in balance for any given building or group of buildings.
- Achieve maximum typical walking distances from parking to buildings of 400 to 500 feet (equivalent to 2 to 3 minutes walk including wait time to cross streets). Walking distances in tunnels should be no longer than 800 feet, or 4 to 6 minutes.
- Create flexible parking arrangements to meet the needs of legislators and others visiting the Capitol during legislative sessions, with minimal disruption of the normal parking system.
- Provide for efficient snow removal from parking lots.
- Restore and maintain the physical dignity of the Capitol Mall and approaches bound by Grand Avenue, Walnut Street, Pennsylvania Avenue and East 14th Street. Parking should not intrude onto the grounds or streets in this area.

Actions

The Strategic Parking Management Plan (SPMP) recommended actions on three inter-related factors: supply, demand and price. Supply actions concern increasing or decreasing the number of parking spaces available at specific locations in the Capitol Complex. Demand actions concern use of incentives to change people's travel behavior, mostly aimed at reducing the number of single occupant vehicles driven to the Capitol Complex. Price actions relate fees charged for parking to the actual costs of its provision and administration; a major policy issue for the Capitol Complex.

Recommended immediate actions:

- Allow additional on-street parking during legislative sessions. [Adds up to 125 spaces.]
- Designate Lot 16 for fleet and pool vehicles and other specific locations for all other overnight parking. [Reduces overnight parking conflict with snow removal.]
- Mark gravel lots for efficient winter use. [Increases capacity by 5% to 10%.]
- Reassign employee parking closer to destination buildings. [Shorter walking distances.]

Recommended intermediate range action for one - to two - year implementation:

- Create a new lot for Grimes adjacent to Lot 16. [Adds 300 spaces.]
- Acquire land to expand Lot 17 to supplement Wallace parking. [Adds 165 spaces with a net gain of 70 spaces.]
- Expand Lot 12 onto the site of demolished Annex building. [Adds 60 spaces.]
- Create a new service center off the Capitol Complex for pool and fleet vehicles with space for private vehicle storage. [Removes 120 to 185 vehicles from existing spaces at the Capitol Complex.]
- Increase mileage reimbursement for private vehicle use to maximum Federal level to encourage greater use of private vehicles for business. [Could reduce fleet demand by 25%.]
- Allow employees to use fleet cars overnight. [Reduce overnight parking.]
- Charge employees for parking on the Capitol Complex. [Charge based on administrative costs of parking would reduce demand by encouraging alternative modes of travel instead of driving alone.]
- Provide free or discounted transit passes with guaranteed ride home program. [Reduce parking demand.]

Recommended long term action:

- Build new parking ramps at Lots 4, 17 and 18. [1150+ additional parking spaces.]
- Remove surface lots from within the Capitol Complex. [1063 spaces relocated to perimeter.]
- Construct sufficient parking for each new building to meet its parking needs. [Unknown.]
- Develop an aggressive program to expand employee travel choices. [Reductions in parking demand.]

Implementation

In formulating recommendations, the consultant team worked closely with Capitol police and City authorities to ensure improved enforcability as new parking management measures were introduced. Coordination with the City of Des Moines on transit improvements, including the possible introduction of a downtown shuttle, has a direct bearing on Capitol Complex parking issues. The increasing cost of providing each new parking space has added renewed importance to effective management of this resource.

two **Strategic Parking Management Plan**

State of Iowa Capitol Complex Strategic Parking Management Plan March 1999

Purpose Of This Plan

The purpose of this plan is to identify options for actions that can be undertaken almost immediately to begin to alleviate current parking problems. The plan also addresses longer range solutions that require additional policy consideration, funding or coordination with the Capitol Complex Master Plan.

Key Findings And Problems

A variety of complaints and problems about the parking system have been noted through the comments of parking coordinators, of employees, of legislators and of visitors in recent reports such as the Parking Efficiency Review Committee (PERK – this was a continuous quality improvement team) report prepared in 1996. The root causes of those problems include:

- Too little parking on the Capitol Complex to meet current needs, especially during the legislative session.
- Unequal distribution of parking relative to buildings. This leads to an over- and seemingly arbitrary assignment of parking for employees. Figure 1 shows existing parking locations, sidewalks and tunnels, and also illustrates areas of parking within a 500 foot radius from each major building. Clearly, a substantial competition occurs for parking between the Capitol and Lucas building, as well as for nearly all buildings north of Grand. In addition, Grimes has no parking lots available within 500 feet.
- A virtually unenforceable system. The consequences of too little parking and poorly located parking generate inevitable conflicts between employee, visitor and legislative needs which cannot be sufficiently policed to resolve problems. The practice of assigning lots is difficult to manage and is a significant administrative expense.
- Overnight parking that hampers snow removal and lot maintenance.

How much parking does the Capitol need?

To identify appropriate solutions, we have first estimated the amount of parking required to meet employee, visitor and legislative needs. This estimate is based on an actual observation of current parking occupancy, and discussions with legislative staff concerning attendance patterns during the legislative session. Demand for parking is estimated to be:

	Estimated Demand for Parking (# Spaces)	
	Non-Legislative Periods	Legislative Session
Employees	2960	2960
Visitors (estimated max.)	200	250
Legislature with staff	--	690
Total	3160	3900
Supply (spaces)	3341	3341
Peak Occupancy	94.5%	116.7%

Source: TDA Illinois Inc.

Sample field observations of parking reveal these conditions:

- Occupancy of parking lots on the Complex during our observations in late October, 1998 and early November, 1998 was 90%. This is based on Capitol Police counts and is consistent with data for access card use in gated-lots. This is a high level of use, approaching what is called “practical capacity” – the point at which, due to turnover or the difficulty in finding the last available spaces, the lots are effectively full. Days with maximum visitor demand pose very trying conditions for finding parking. We expect that peak demand is somewhat greater, approaching 95% occupancy.
- About 180 state employee and visitor vehicles park on streets in and around the Capitol Complex. This is due to greater convenience in location or frustration in trying to find a space in a full lot.
- From 110 to 130 state cars are parked on the Complex during the day.
- Overnight parking was observed to be from 170 to 185 vehicles, about half of which are state cars.
- Peak legislative demand adds 740 vehicles. This peak is estimated to occur on 30% of legislative session days.

The parking system as a whole is marginally adequate to handle total demand during non-legislative periods; it is clearly insufficient for the legislative session. In some areas of the Complex, parking is insufficient at all times.

Issues About Demand Estimates

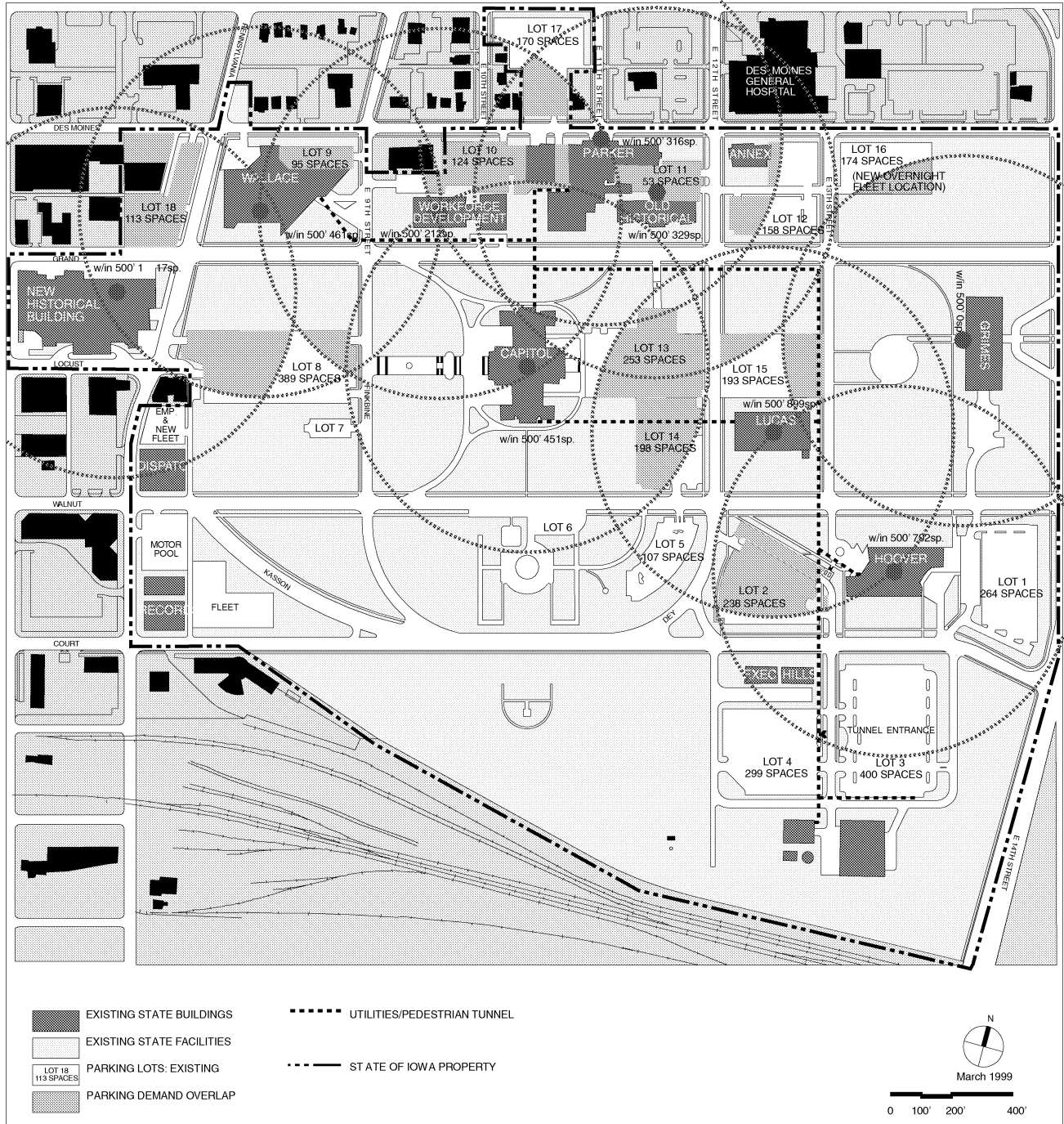
Observations of parking occupancy provide a useful picture of overall Complex parking demand. However, the observations alone do not readily distinguish the needs of employee from visitor parking demand, nor do they indicate whether people are parking where they ought to park or would prefer to park. The preferred approach is to gather information by survey or interview, on the number of employees, visitors, legislators and others in each building and to learn how they travel to the Complex. That allows a straightforward calculation of parking demand for each group of people and each building. However, due to the need to rely on available information obtained from the Department of Personnel and from the PERK Report, there were some differences which could not be reconciled. For example, information in the PERK report showed 5,189 employees, a figure derived from payroll records. Taking into account typical employee travel habits (in which 85% drive alone and 9.5% share rides), parking demand would total 4,600 spaces.

An essential task for the Capitol Complex Master Plan, scheduled for completion in 1999, will be to obtain an accurate count of employees, visitors and others in each building and to survey those people about their travel habits. That information will provide a clearer, more detailed picture of parking demand.

Parking for Persons with Disabilities

Numerous comments were received noting problems with the allocation of parking to persons with disabilities and insufficient numbers of spaces allocated. Due to the need to gather additional data on specific needs by location a recommendation is not included in this report. The Master Plan Study scheduled to be completed in 1999, will bear the responsibility of detailing appropriate solutions. It will be important to assess the need and compare it to typically required ratios of parking for persons with disabilities in order to make changes to accommodate actual need.

STRATEGIC PARKING MANAGEMENT PLAN



Information on this map was current and relevant to the SPMP report as of March 1999. Recommendations implemented since the report effectively change the map.

FIGURE 1
EXISTING CONDITIONS PLAN

This plan shows current existing conditions including parking lots, tunnels, walkways, and parking availability.

Planning Objectives

Listed below are objectives that were established to guide the development of parking options. These objectives represent the desirable or ideal possibilities and are qualitative measures to gauge the benefit of potential parking solutions.

- Provide sufficient parking in reasonable proximity to buildings for everyone using the Capitol Complex including: visitors, citizens who use state services, and employees. Supply and demand should be brought into balance for any given building or group of buildings.
- Achieve maximum typical walking distances from parking to buildings of 400-500 feet (equivalent to a 2 to 3 minute walk including wait time to cross streets). Walks in tunnels should be no longer than 800 feet, or 4 to 6 minutes. These walking distances are short compared to large governmental complexes in other regions of the country, but take into account local weather conditions and expectations.
- Create flexible parking arrangements to meet needs of legislators and others visiting the Capitol during legislative session with minimal disruption to the normal parking system.
- Provide for efficient snow removal and maintenance of parking lots.
- Maintain and restore the physical dignity of the Capitol Mall and its boulevards, along with the larger Capitol grounds bounded by Grand, Walnut, Pennsylvania and East 14th Street. Parking facilities should not intrude on the grounds of this area (other than on existing streets).

Recommended Solutions

The tables which follow summarize specific actions and their likely results.

Types of Options

Strategic parking management actions will address three interrelated categories:

- Supply – system management actions aimed at altering the supply at specific locations within the Capitol Complex.
- Demand – incentives to change people’s travel behavior, typically geared to expanding travel choices as a means of reducing single-occupant vehicle use.
- Price – clearly related to supply and demand, this is a major policy issue for the Capitol Complex.

STRATEGIC PARKING MANAGEMENT PLAN

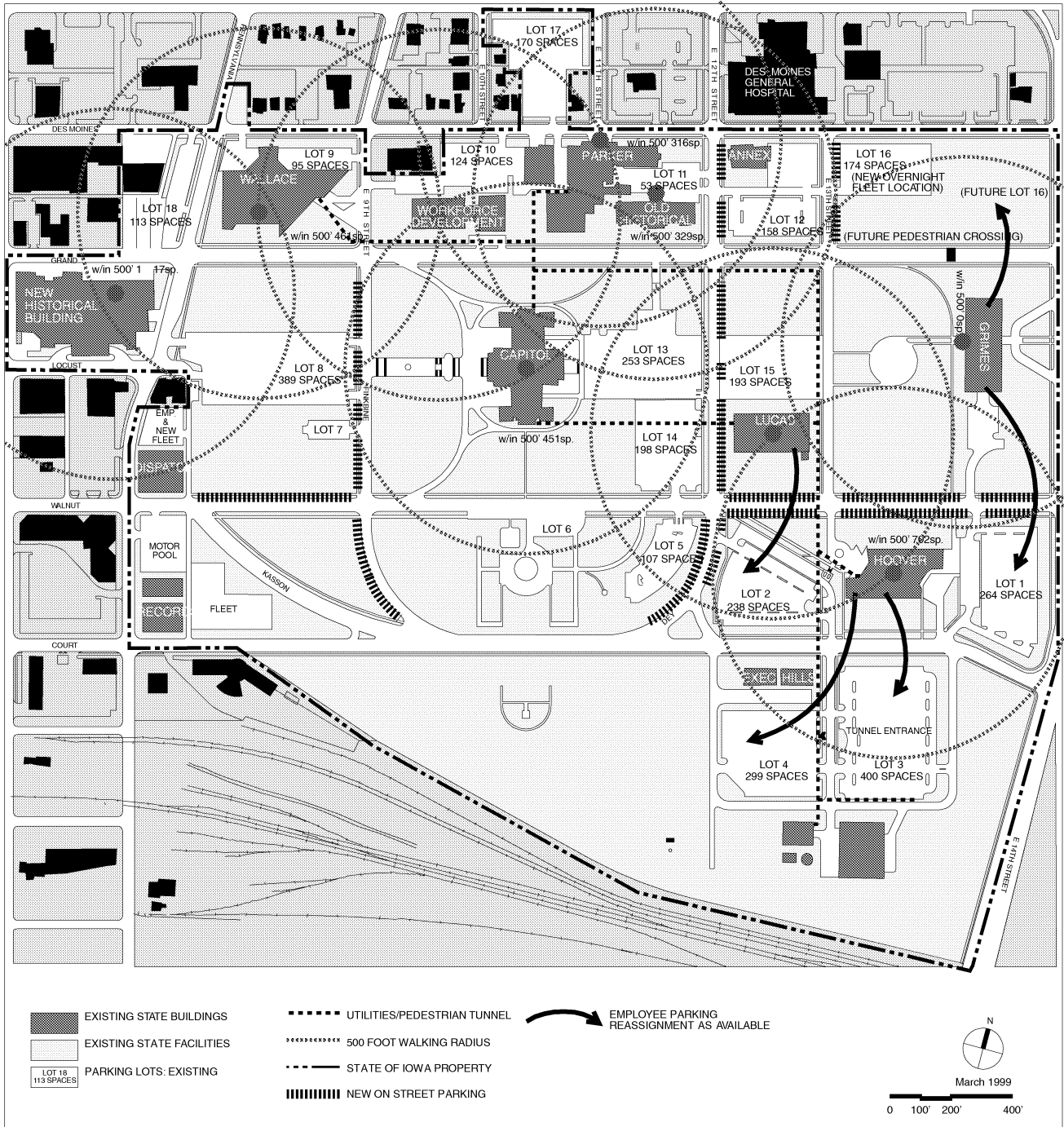


FIGURE 2
IMMEDIATE ACTIONS PLAN
IMPLEMENTABLE STARTING WINTER 1998-99

Information on this map was current and relevant to the SPMP report as of March 1999. Recommendations implemented since the report effectively change the map.

This plan shows locations for new or permissible parking.

Immediate Actions (implementable starting winter 1998-1999)

Immediate Actions *– Options Affecting Supply -- (See Figure 2) <i>(Options meeting planning objectives are shown. Strikethrough indicates options that do not meet planning objectives.)</i>			
Building/Location	Physical Options	Estimated Space Gain	Remarks
Lucas – Conflict with Capitol lots	<ul style="list-style-type: none"> • Allow additional on-street parking during legislative session. • Create temporary lot north of lot 15 (approx 200 spaces) • Create temporary lot east of Lucas (approx 200 spaces) • Create lot south of building adjacent to dock 	up to 150 spaces	<p>Primarily for visitor use during legislative session. Discourage employee use by regulating hours of use.</p> <p>Snow plowing and removal problems limit desirability of on-street spaces.</p>
Fleet/Pool Vehicle Storage	<ul style="list-style-type: none"> • Designate Lot 16 for Fleet/Pool use 	0	Reduces problem of overnight parking conflict with snow removal.
General Lots	<ul style="list-style-type: none"> • Mark gravel lots for maximum layout efficiency • Screen temporary lots with low plantings (bushes, hedges) and install plant islands in lots to minimize sense of expanse 	5-10% gain in individual lots during winter	Provide equal quality surfaces for all parkers at Capitol Complex.
Immediate Actions – Options affecting Demand			
Parking Assignments, if current practice of assigning lots is continued.	<ul style="list-style-type: none"> • Reassign Grimes employees to Lot 1 as available, else Lot 3 • Reassign Hoover employees from Lots 1 & 2 to Lots 3 & 4 • Reassign Lucas employees to Lot 2 as available, else Lot 4 	0	Brings better balance to buildings on east side of Complex.
General Lots (Alternate to assignment plan above)	<ul style="list-style-type: none"> • Allow open parking whereby employees may park in any lot currently assigned to employees. 	0	Allows employees a choice of parking options. If balance does not occur there may need to be a reclaiming of some spaces in Lots 1 & 2 for use by employees in the Lucas & Grimes buildings. Assign car pool lots for maximum convenience.
Visitor Parking	<ul style="list-style-type: none"> • Move construction contractors to a temporary area 		Provides additional visitor parking spaces
Snow Removal	<ul style="list-style-type: none"> • Designate overnight parking locations • Require all pool and fleet cars to use Lot 16 overnight. • Increase fines for parking in locations blocking snow plows. 	0	Improves efficiency of snow removal and allows full use of plowed lots following snow storms.
Totals		150 spaces	Occupancy remains unchanged; Legislative Session 112%

* Note: These actions do not address issues regarding accessible parking for people with disabilities.

Use of the State Fairgrounds for Parking

A potential resource for remote parking is the State Fairgrounds located approximately 2.5 miles east of the Capitol Complex. During the legislative session, for example, it would be possible for State employees to park there and take a shuttle to the Capitol Complex. This would provide additional relief to the overcrowded parking conditions in the Capitol area due to the legislative session. Also, the Fairgrounds could be the new location for the motor pool.

We considered this remote parking option but do not recommend it for these reasons:

- The Fairground's location at the eastern end of the metropolitan area limits its convenient accessibility for the majority of State employees. It appears unlikely that any more than 10-15% of employees could reasonably be expected to consider parking at the Fairground site.
- Added travel time for employees parking at the Fairgrounds would be substantial. Their journey would include:
 - Waiting time to board a shuttle bus. This is a function of the frequency of shuttle departures, and would easily average 5 minutes per employee if not more.
 - Transit time to the Capitol Complex. Assuming an average speed of 30 m.p.h., this 2.5 mile trip would add another 5 minutes.
 - Walk time from a shuttle stop to the employee's building. This depends on where the shuttle stops and on how many stops it makes. Either walk time or drop-off time will be extended adding roughly 2 to 5 minutes to the trip.
- At least 12 to 15 minutes would be added to employee's travel time to get to work. This may nearly double their travel time and discourage all but the most determined to drive directly to the Capitol. Thus, perhaps less than 5% of state employees would be likely to park at the Fairgrounds.
- High operating costs would be incurred to operate a reliable remote parking service. At least three shuttle buses would be needed to achieve a 20 minute frequency and would probably need to operate 6 hours per day (18 vehicle hours). Additionally, midday and emergency returns to the remote parking site would need to be accommodated, adding 6 extra vehicle hours of operation. Assuming that appropriate vehicles are available, operating costs would be in the range of \$30 - \$35 per hour. Over the 21 weeks of the legislative session, this would amount to about 2,520 hours of operation, costing from \$75,600 to \$88,200.

Given the costs and likely limited use of the Fairgrounds, it would be more economical to offer employees in the Capitol building and those in adjacent buildings where parking demand overlaps with the Capitol, free transit and taxi rides during the legislative session. This may achieve similar reductions in on-complex parking for much less cost.

While the Fairground site itself has very limited potential, remote parking is an appropriate consideration for relieving parking pressure during the legislative session. Successful remote sites would typically have these characteristics:

- Ready accessibility to many Capitol employees.
- Existing transit service for travel to the Capitol Complex.
- Close proximity to the Capitol (1-2 miles).
- Joint use by others which increases the perception of security by having more people present.

Intermediate Range Actions

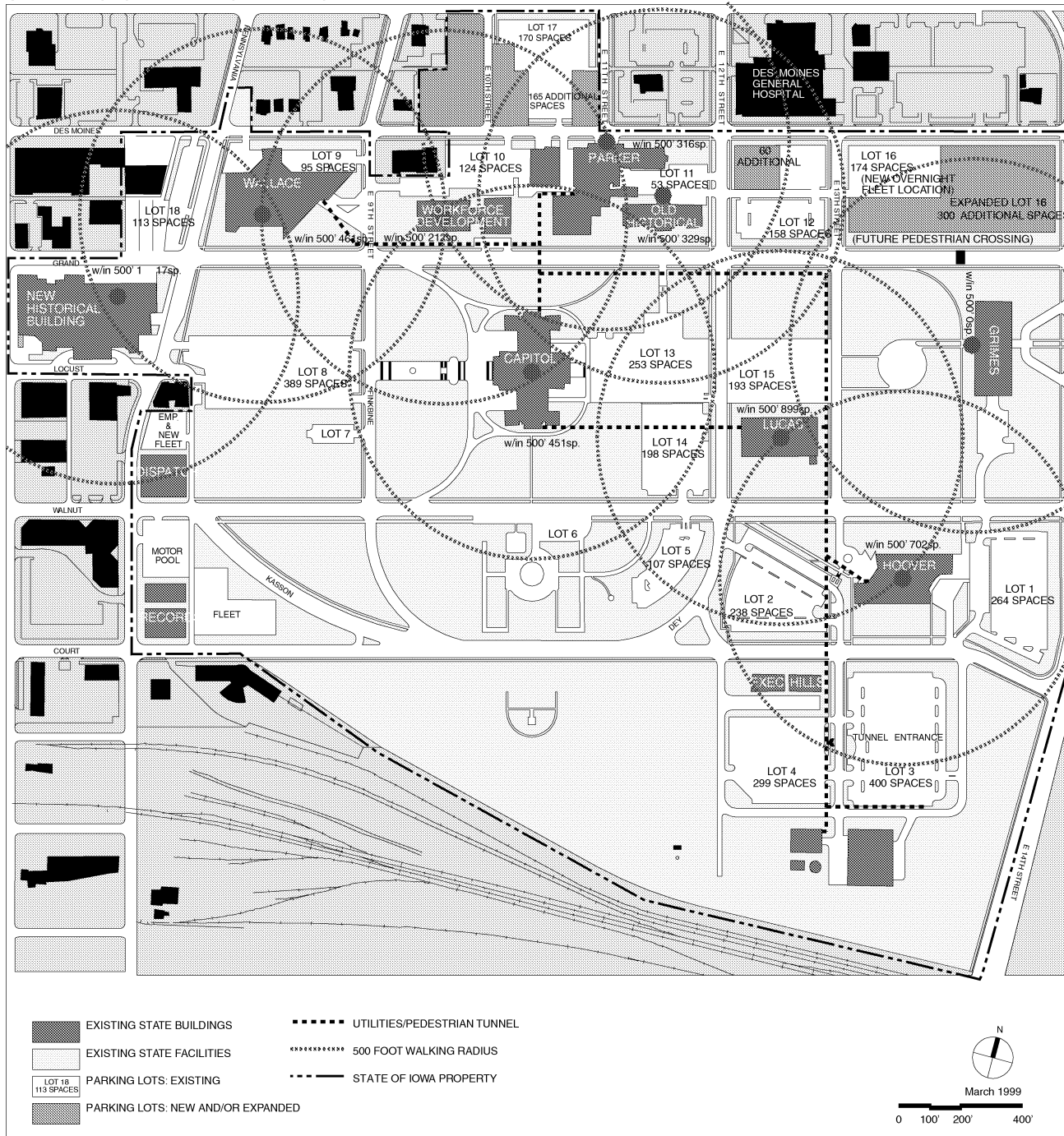
Intermediate Range Actions (1 to 2 years from now*)– Options Affecting Supply – (See Figure 3)			
Building/Location	Physical Options	Estimated Space Gain	Remarks
Grimes – No parking within 500’	<ul style="list-style-type: none"> • Create temporary lot adjacent to Lot 16 • Create temporary lot next to deck at south side of building 	300 spaces	Should share access with Lot 16 using existing curb cuts and gates. Must provide adequate lighting and security. In cooperation with the City of Des Moines, create new paved pedestrian path to Grand and create highly visible mid-block crossing.
Wallace – insufficient parking	<ul style="list-style-type: none"> • Acquire residential property adjacent to Lot 17 for temporary surface parking. • Create temporary lot adjacent to lot 8 (prior to construction of ramp on lot 18) 	165 spaces	Opportunity to improve layout of existing Lot 17 for greater efficiency, ease of snow removal.
Old Historical/Jesse Parker – Limited parking	<ul style="list-style-type: none"> • Use Annex site for additional parking in conjunction with Lot 12. 	60 spaces	Opportunity to improve layout of Lot 12 for greater efficiency.
Fleet/Pool Vehicle Storage	<ul style="list-style-type: none"> • Create service center for fleet vehicle pick-up/drop-off at location near but separate from the Capitol Complex. 	120-185 spaces (3-5% of current supply)	Would allow individuals to park personal vehicles in secure lot while using fleet vehicles. Limits redundant parking in other campus lots.
Totals		645 – 710 spaces	Occupancy would be 79%; Legislative Session 95%

***Timeframe is contingent on Legislative schedule & funding.**

Intermediate Range Actions

<ul style="list-style-type: none"> Intermediate Range Actions (1-2 years from now) Options affecting Demand and Price 			
Fleet/Pool Vehicle Use	<ul style="list-style-type: none"> • Increase mileage reimbursement to maximum Federal level to encourage greater use of private vehicles for state business. • Allow employee use of state cars overnight. 	Could be as high as 25% of fleet use.	Aimed at reducing fleet needs, and limiting redundant parking on campus.
Parking Price	<ul style="list-style-type: none"> • Charge employees for parking on Capitol Complex 	(see Transit)	Charge to recoup administrative costs to manage parking system
Transit Use	<ul style="list-style-type: none"> • Provide discounted or free transit passes to employees; • Create preferential carpool parking with discounted fee (carpool = 2 persons) • Guarantee ride home • Transit package to include limited parking access 	2 - 5 % of employee demand	To be combined with parking charges
Totals		100 – 200 spaces	Additional relief for Legislative Sessions

STRATEGIC PARKING MANAGEMENT PLAN



Information on this map was current and relevant to the SPMP report as of March 1999. Recommendations implemented since the report effectively change the map.

FIGURE 3
INTERMEDIATE RANGE ACTIONS PLAN
ONE-TWO YEARS FROM NOW

This plan shows areas for additional temporary parking which could be available in one-two years from present.

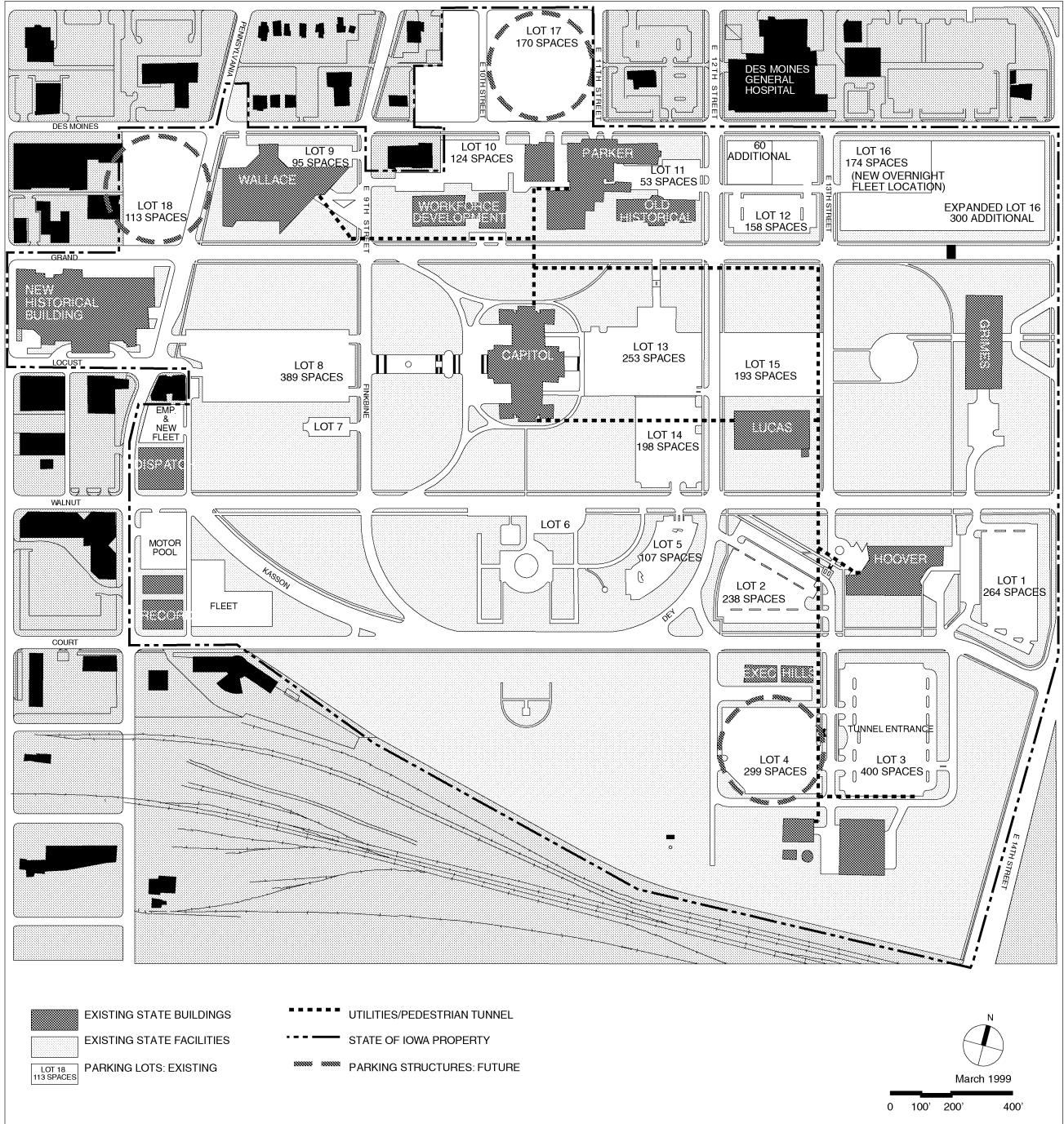
Long Term Actions

Long-Term Actions (greater than 2 years from now) Options affecting Supply – (See Figure 4)			
Issue	Options	Estimated Space Gain	Remarks
Wallace/Historical/Jesse Parker insufficient parking	<ul style="list-style-type: none"> • Build ramp at Lot 18 • Build ramp at Lot 17 • Build ramp at Lot 4 	900 150+ 250+	Adds parking to under-served area of Complex, and replaces spaces for lots eliminated from Capitol Mall. Lot 4 & 17 ramps dependent on future building locations and parking demand.
Restore Capitol Mall green space	<ul style="list-style-type: none"> • Replace existing lots 7, 8, 13, 14 & 15 with parking structures off the Mall and Capitol Terrace 	-1063	Walking distances will increase to Mall buildings. May need additional weather protection.
Development of New Buildings	<ul style="list-style-type: none"> • Add parking for new Justice, Hall of Pride, legislative building and other potential new construction 	Unknown	Supply should increase in proportion to demand.
Totals		Unknown (+247)	Net change depends on number of lots eliminated and buildings built.

**Long-Term Actions (greater than 2 years from now)
Options affecting Demand and Price**

Issue	Options	Estimated Space Gain	Remarks
Alternative Travel Choices	<ul style="list-style-type: none"> • Pursue more aggressive program to expand employee travel choices through: <ul style="list-style-type: none"> • flexible pass for carpool, occasional parking, bus, shuttle or taxi use. 	to be determined	Offering more travel choices may be as important as resulting reductions in parking demand.

STRATEGIC PARKING MANAGEMENT PLAN



Information on this map was current and relevant to the SPMP report as of March 1999. Recommendations implemented since the report effectively change the map.

FIGURE 4
LONG TERM ACTIONS PLAN
GREATER THAN TWO YEARS FROM NOW

This plan shows long range planning parking structures to replace and/or augment surface parking.

Additional Considerations

Parking Price

The purpose of charging a fee for employee parking is to establish that parking personal vehicles carries a direct cost. To date, this cost is hidden since parking is provided as a no-cost perk. Yet, the administration and maintenance of the parking system create substantial costs to State government and its taxpayers, not to mention the cost of constructing or reconstructing parking. This report strongly recommends that the State adopt parking fees for the Capitol Complex. Reasons for this include the inevitability of higher costs in the future, the need to manage costs associated with construction of new parking for additional buildings on the Complex, and the opportunity to create a more balanced transportation system aimed at meeting the needs of all employees and visitors. Covering the cost of parking personal vehicles but not the cost of transit passes is arguably inequitable, and certainly exacerbates parking supply problems at the Capitol.

It would be appropriate to set the fee so that it covers the administrative and maintenance costs of the parking system. It is unreasonable to expect that capital costs could be recovered. A full accounting of parking management, enforcement and maintenance costs will be necessary to determine an appropriate range for parking fees.

Options — A Transportation Allowance

The corollary to charging for parking is to offer realistic choices in traveling to the Complex, for which users do not suffer unreasonable economic penalties. Due to long-standing federal tax rules, free parking was not deemed a taxable benefit, although other transportation benefits (such as a transit pass) were taxable. Recent rule changes altered the taxable threshold for transit and other alternatives to \$65 benefit per month, increasing to \$100 per month in year 2002. This offers the opportunity to establish a transportation allowance in which a fixed monthly benefit is provided to employees. Employees may choose to use that benefit for parking, for transit, or simply to put in their pockets if they walk, get dropped off or otherwise do not park a car.

Enforcement

What is abundantly clear is that parking enforcement is understaffed to do the present job. Recognizing that the present system is indeed very difficult to enforce, it is clear that even modest changes in the near-term will create additional challenges including:

- New on-street parking will require additional staff time to see that those spaces are in fact being used by visitors.
- Expanded lots mean more spaces to monitor, again requiring more staff time and additional administrative time if current practices are continued.
- Snow removal policies that prohibit overnight parking will add enforcement duties at night, at least during late fall and winter months.

Extra staff will be needed to enforce the parking system.

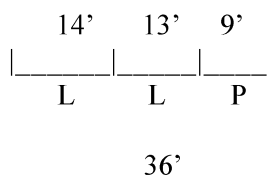
Additional considerations for enhancing enforcement include:

- Implementation of a graduated fine system for habitual violators. The current flat rate is not a sufficient deterrent
- Regulating time limits at loading docks. Given the important function of loading docks, it is essential that some spaces be available. Obviously, setting short limits requires additional monitoring by enforcement staff.
- Revising the parking ticket appeals process. When tickets are issued, violators have little reason not to appeal a ticket which places burdens on enforcement staff and administration. Though legitimate appeals must be provided for, the process can be improved to better serve its users and managers. Options could include imposition of administrative fees for unfounded appeals.

On-Street Parking

Use of on-street parking is intended to provide temporary additional parking during the legislative session. Parking on streets near the Capitol offers the closest parking opportunity short of creating new paved areas. Street widths vary, however, so these guidelines would apply to the designation of on-street parking:

- Though parallel parking on both sides of a two-way street can be accommodated in as little as 30 feet on a minor street, 38 feet is a reasonable and conservative standard until further study of the traffic loads occurs in the Master Plan Study.
- Parallel parking is recommended on one-side for streets narrower than 38 feet until further study.
- It may be useful to shift the centerline paint stripe on streets narrower than 38 feet. For example, a 36 feet wide street could be striped to provide sufficient parking and travel lanes in this way:



NOTE: Traffic changes on city owned streets will require coordination with the City of Des Moines.

Snow Management

Overnight parking needs to be restricted to allow for efficient snow removal. Typically, parking between midnight and 6:00 am would be prohibited except in specially designated locations. The specific time should be determined by past experience concerning the amount of time needed to clear lots, starting times for snow crews and other local considerations. A significant fine and towing for overnight parking would be required to achieve effective enforcement.

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Supporting Documentation

Empty Spaces by Lots

State of Iowa Capitol Complex
Strategic Parking Management Plan

Empty Spaces by Lot

Counted Wed. 4-Nov-98 and Thurs 5-Nov-98 by Capitol Police

Lot	Total # Spaces	Employee Spaces			Occupancy of Emp. Spaces	Visitor Spaces				Overall Occupancy	
		# Spaces for Employees	Empty Spaces	Occupancy of Emp. Spaces		# Spaces for Visitors/HC	Visitor Empty	Visitor HC Empty	HC Empty		Total Visitor Empty
1	264	221	20	91.0%	43	4	4	2	10	76.7%	88.6%
2	238	235	57	75.7%	56	3			3	94.6%	74.8%
3	400	400	10	97.5%	0				0	0.0%	97.5%
4	299	299	42	86.0%	2				0	100.0%	86.0%
5	107	107	1	99.1%	0				0	0.0%	99.1%
6	83	83	7		83				0	100.0%	91.6%
7	30	30	1		30				0	100.0%	96.7%
8	389	389	27	93.1%	1				0	100.0%	93.1%
9l		-2							2		
9u	95	95	10		95				0	97.9%	87.4%
10	124	123	14	88.6%	7				1	85.7%	87.9%
11	53	48	3		53				5	90.6%	84.9%
12	158	158	3	98.1%	14				0	100.0%	98.1%
13	253	253	88		253				0	100.0%	65.2%
14	198	198	42	78.8%	47				0	100.0%	78.8%
15	193	193	3		193				0	100.0%	98.4%
16	174	174	3	98.3%	0				0	0.0%	98.3%
17	170	170	4	97.6%	5				0	100.0%	97.6%
18	113	113	9		113				0	100.0%	92.0%
Total	3341	3287	344	89.5%	995	7	4	10	21	97.9%	89.1%

Source: Iowa Department of Public Safety, Division of Capitol Police; TDA Illinois Inc.

Overnight Parking

State of Iowa Capitol Complex Strategic Parking Management Plan

Overnight Parking

Counts of Parked Vehicles made 9:45-10:15 pm

Lot	Oct. 22 '98			Nov 2 '98		
	State Vehs.	Other Vehs.	Total	State Vehs.	Other Vehs.	Total
1	9	6	15	7	4	11
2	9	8	17	6	5	11
3	2	1	3	4	4	8
4	10	4	14	15	1	16
5	0	0	0	0	1	1
6	0	0	0	0	0	0
7	0	0	0	0	0	0
8	27	34	61	42	8	50
9	0	2	2	1	0	1
10	4	4	8	2	1	3
11	0	1	1	0	1	1
12	11	10	21	17	3	20
13	0	7	7	1	9	10
14	0	2	2	0	1	1
15	0	1	1	0	1	1
16	15	17	32	21	10	31
17	0	2	2	1	4	5
18	0	0	0	0	1	1
Total	87	99	186	117	54	171

Source: TDA Illinois Inc.

Access Card Use

State of Iowa Capitol Complex Strategic Parking Management Plan

Access Card Use

Lot	# Spaces	Entries prior to 10:00 am			
		18-Feb-98	Occup.	21-Oct-98	Occup.
1	264	233	88.30%	233	88.30%
2	238	183	76.90%	n/a	
3	400	n/a		362	90.50%
8	389	335	86.10%	312	80.20%
9U	40	32	80.00%	34	85.00%
9L	55	n/a		39	70.90%
10	124	n/a		136	109.70%
13	253	n/a		109	43.10%
14	198	224	113.10%	n/a	
Adj. Total	1129	1007	89.20%		
	1525			1225	80.30%

Source: Iowa Department of General Services; TDA Illinois Inc.

Count of State Vehicles Parked on Capitol Complex

State of Iowa Capitol Complex Strategic Parking Management Plan

Count of State Vehicles Parked on Capitol Complex Counted November 5 and 6, 1998

Lot	# State Vehicles		# State Vehicles	
	Thurs 5-Nov	Fri 6-Nov	Thurs 5-Nov	Fri 6-Nov
	10:00 AM		3:00 PM	
1	8	8	10	6
2	1	5	6	5
3	1	3	1	2
4	13	13	13	11
5	3	1	2	2
6	0	0	0	0
7	6	1	1	0
8	36	46	30	40
9	1	2	9	2
10	1	3	1	2
11	0	1	0	1
12	15	13	11	10
13	1	0	1	0
14	0	0	0	0
15	10	1	3	2
16	23	31	18	28
17	1	0	0	0
18	3	11	1	10
Total	123	139	107	121
Average	131		114	

Source: Brooks Borg Skiles; TDA Illinois Inc.

four

Parking Demand Update

Parking Demand Update March 15, 1999

MEMORANDUM

To: **Bill McKeag**
From: **Ross Tilghman**
Subject: **Transportation Update**

File: #1049

Demand Update

Field observations during February show that parking demand equaled or exceeded capacity in all but four Capitol campus lots (lots 9, 10, 11 and 16 averaged between 65% and 85% occupancy). Overall occupancy was 94%, peaking in the morning during the more active legislative periods. Total Capitol related parking was observed to be:

<u>Location</u>	<u>Number of Vehicles</u>
Lots	3123
Docks	38
<u>On-Street*</u>	<u>366</u>
Total	3527

* 458 vehicles counted. We assume that 20% are not state related.

More precise demand calculations will be made following completion of the employee transportation survey.

Surface Lot Replacement

Over the last 34 years, plans for the Capitol area have called for removal of surface parking from the mall. Most of the plans have promoted general use peripheral parking, as opposed to creating building-specific parking with the exception of legislative parking. While schemes have differed, each plan has embraced an underground garage east of the Capitol building for legislative use. Additional parking structures have been identified to provide for adequate amounts of parking and appearances more suitable to a Capitol setting. However, in light of other building, utility and restoration priorities, parking construction has understandably been relegated to an action of secondary importance. It should also be noted that land values appear to be significantly below the threshold needed support structured parking as a matter of economy.

While there is not at present a compelling economic reason to build parking garages, their functional and aesthetic benefits may still be reason enough to build them, not to mention the pride derived from creating a more beautiful Capitol Mall. If the commitment is made to remove surface parking, ***the sequence of its removal and replacement will be of paramount importance:***

- Replacement parking should be provided prior to removing surface lots. For example, removing lots 13 and 14 for construction of the legislative addition to the Capitol requires that at least 450 spaces be created elsewhere during construction (removing all surface parking in the Mall requires replacing 1063 spaces). That amount can not readily be accommodated even by temporary surface lots unless additional land is acquired. Therefore, the 900 space garage proposed at Grand/Pennsylvania should be completed before parking is removed from the Mall.
- New buildings and relocated buildings must be accompanied by appropriate amounts of additional parking. While not a building-specific parking program, balance must be maintained between supply and demand within the walking distance guidelines (500 feet from parking to building at the surface; 800 feet via tunnels). For instance, the new Judicial building should be accompanied by a ramp on Lot 4. That ramp would be sized to meet Judicial’s needs plus any extra spaces necessary to bring the Hoover and Lucas buildings into better balance.
- The Capitol’s legislative addition should include underground legislative parking (which is a building specific requirement). Otherwise, a net loss in parking is likely to result.

An example of the net effect of replacing Mall surface parking is shown below.

<u>Mall Parking Space Replacement</u>			
<u>Location</u>	<u>Remove</u>	<u>Construct</u>	<u>Net Change</u>
Mall*	1063	250	-813
Lot 18	113	900	787
<u>Lot 4**</u>	<u>0</u>	<u>300</u>	<u>300</u>
Totals	1176	1450	274

* Construct 250 underground spaces
 ** Assumes deck over existing lot concurrent with new Judicial Building

This example shows how vital construction of the legislative underground and Lot 4 deck will be to the parking program. Indeed, virtually all of the net increase is attributable to either project.

five

Street Design Recommendations

FAX - MEMORANDUM

To: Jeffrey Morgan, Brooks Borg Skiles

Fax 515-244-3813

cc: Don Miles, ZGF
Paddy Tillett, ZGF
Gary Fox, City of Des Moines

206-623-7868
503 224-2482
515-237-1640

From: Ross Tilghman

Date: June 11, 1999

Subject: Street Design Recommendations - Preliminary -

Attached are sketches for the Locust/Pennsylvania intersection roundabout and for Court Avenue.

Locust/Pennsylvania Intersection

This sketch represents the minimum radius and area for a modern roundabout as a solution to this existing "T" intersection. Its 55' radius allows for trucks and large buses (i.e., coaches with double rear axles) to navigate the intersection freely. Pennsylvania's shifting alignment and resulting corner dimensions on the west side of the intersection, a slightly elliptical shape is required with the center off-set to the east.

For planning purposes, it is assumed that Locust will be converted to two-way traffic as well as the section of Pennsylvania between Locust and Grand. While the conversion on Pennsylvania may not be required, this design allows for it. Were Pennsylvania to remain one-way, the roundabout's geometry could be somewhat simpler, though such a change would eliminate future conversion to two-way traffic.

Advantages of the roundabout include:

- Creation of a strong visual terminus to Locust at the base of the Capitol gardens. Not only does it alert drivers that the street ends there, but it can host attractive landscaping that complements the Capitol grounds. This reinforces the sense of arriving at a new and distinctively different place.
- Greater flexibility to carry peak and off-peak traffic. Roundabouts provide high capacity yet handle lower volumes with minimal delay since flow is self-metering. As a result, no extra lanes are required to store vehicles just for peak conditions.
- Given the high proportion of left turns due to the "I" configuration, the roundabout is ideally suited to meeting that demand with minimal delay and conflict. Reestablishing two-way traffic on Locust will introduce additional left turns from Pennsylvania which can easily be accommodated without auxiliary lanes.

Disadvantages include:

- Pedestrian crossing of Pennsylvania will be limited to the north side of the intersection, located approximately 25' back of the roundabout's edge.
- Some early confusion for drivers about how to navigate the roundabout. However, this has not proved to be a significant problem at other modern roundabout installations in the United States, even those with high levels of visitor traffic.

TDA Illinois Inc.

161 South Cherry Street, Suite 106
Galesburg, Illinois 61401
(306) 343-8971
Fax: (309) 343-4780

Accommodating the Hall of Pride's passenger loading area would best be done as a curb-side zone on Pennsylvania north of the intersection. This new lane would match the curb line of the existing right-turn lane further north on approach to Grand Avenue.

Court Avenue - 3 Lanes

Our proposed three lane cross-section is intended to:

- Improve pedestrian crossing conditions from Lots 3 and 4 as well as from the future Judicial Building. The present crosswalk in the 13th street alignment proves awkward for both pedestrians and drivers and has had safety problems.
- Bring balance to the street's capacity and its volume of traffic. The existing four lane capacity (on the order of 20,000 vehicles per day) vastly exceeds actual use (6,600) vehicles per day). The three-lane section would have a capacity of approximately 13,000 vehicles per day. The median treatment may also serve to slow those vehicles which now travel at excessive speeds.
- Make the street visually more a part of the Capitol Complex rather than a perceived border or barrier. The landscaped median would provide an appearance consistent with the Capitol's gardens.

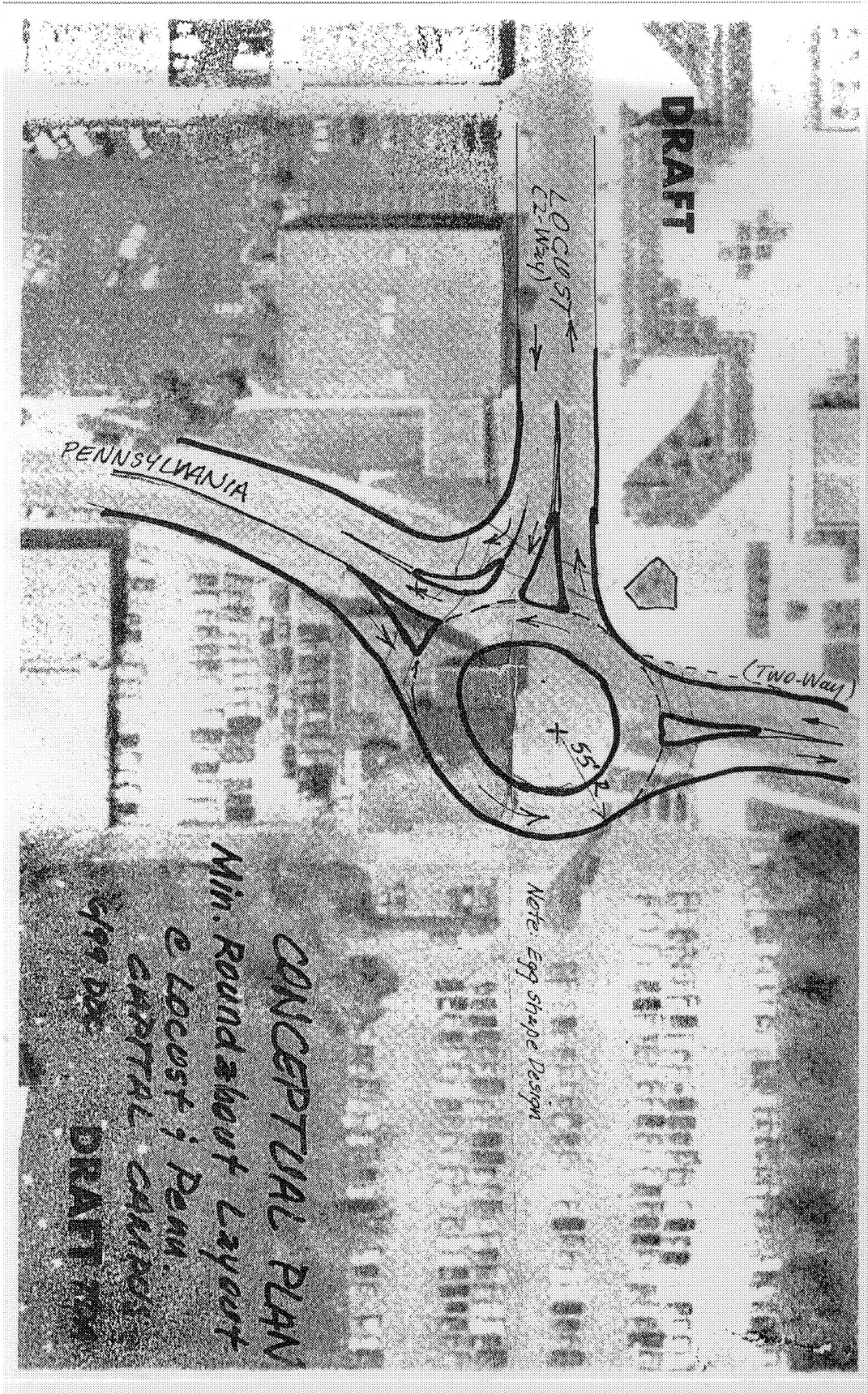
An essential element of this plan is the circulation scheme for parking Lots 3 and 4. The plan restricts left-turns at the central drive, reducing both vehicular and pedestrian conflicts at this location. It encourages use of the eastern and western driveways to form a ring-road around the parking areas. This provides a "back-fill" parking operation which better serves the first-come, first-served nature of employee and visitor arrivals, and reduces vehicle/pedestrian conflicts within the parking lots and future garage in which vehicles enter at one end and pedestrians exit at the other end. Also, this scheme captures vehicles at the first opportunity on Court, reducing circulation across the central pedestrian corridor.

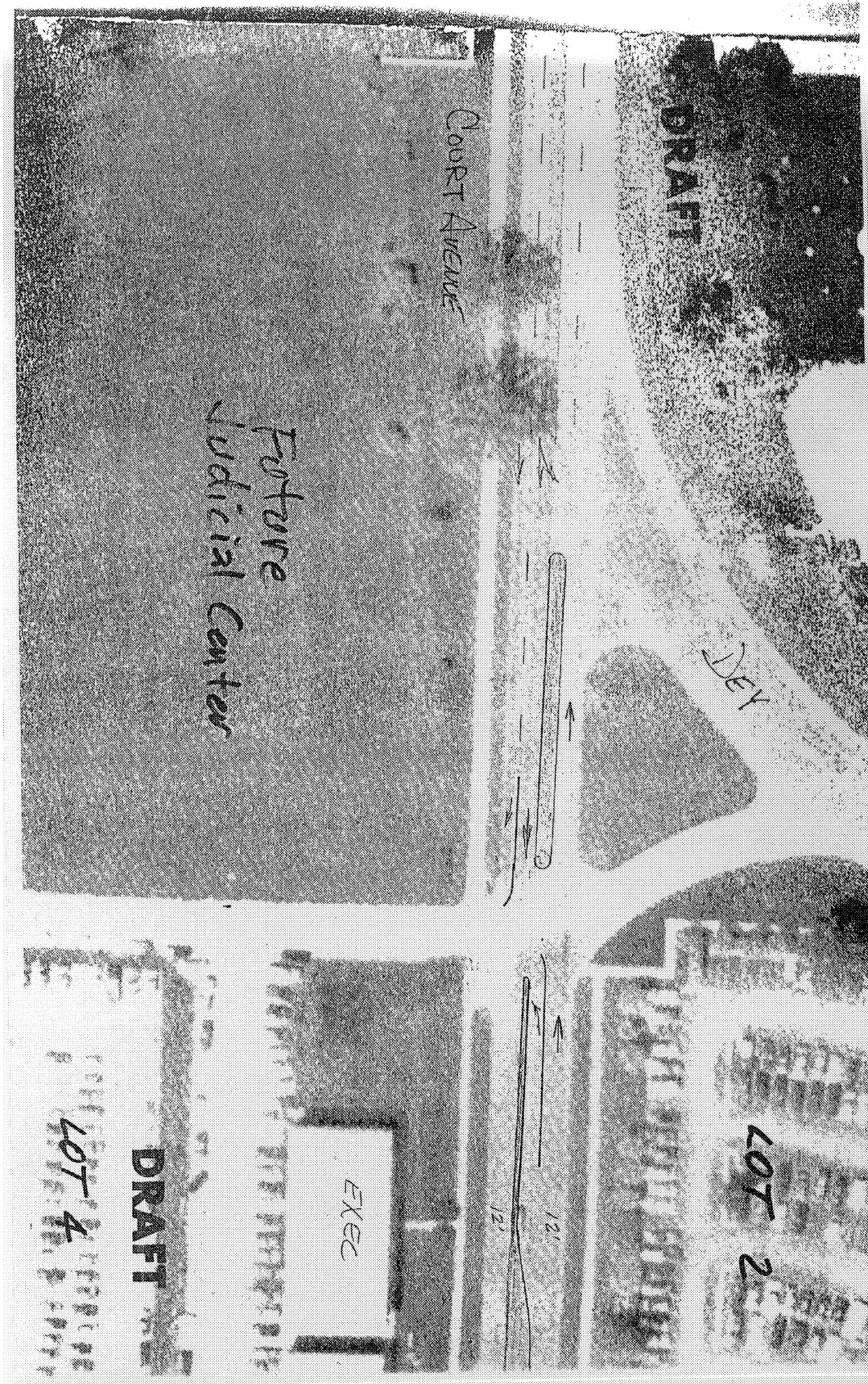
This approach addresses current and future circulation needs by design while providing adequate traffic capacity. It retains existing crosswalks which seem to serve pedestrian destinations such as the Hoover and Lucas buildings well. We recommend against relocating crosswalks as pedestrians destined for specific buildings tend not to divert from their chosen paths.

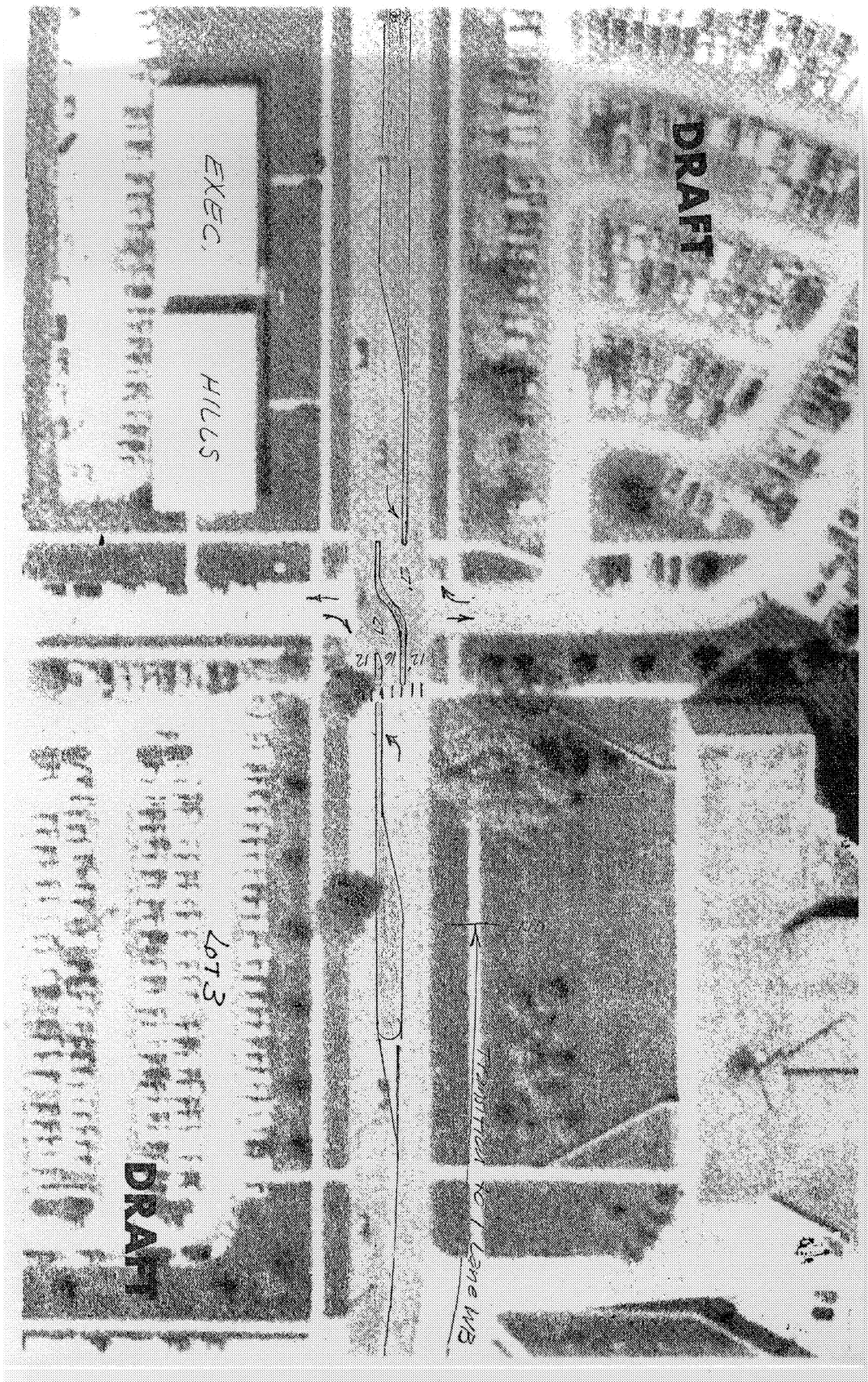
Based on data obtained from Lot 3's controlled gate system, in which 43% of the lot is filled between 7:00 a.m. and 8:00 a.m. and extrapolating this to lot 4, it appears that morning pedestrian volumes crossing Court Avenue are 335 persons in one hour, with a peak of 125 persons in the heaviest 15 minutes. Roughly similar volumes would occur in the afternoon between 4:00 p.m. and 5:00 p.m. (While some of those pedestrians now use the tunnel under Court, future tunnel use may be restricted bringing more pedestrians to the surface.) Such volumes may warrant a traffic signal at the Court/13th crossing. However, this seems an inappropriate introduction of hardware in a campus-like setting for handling crossings at a driveway and rather too much a spot-specific solution to a larger area circulation issue.

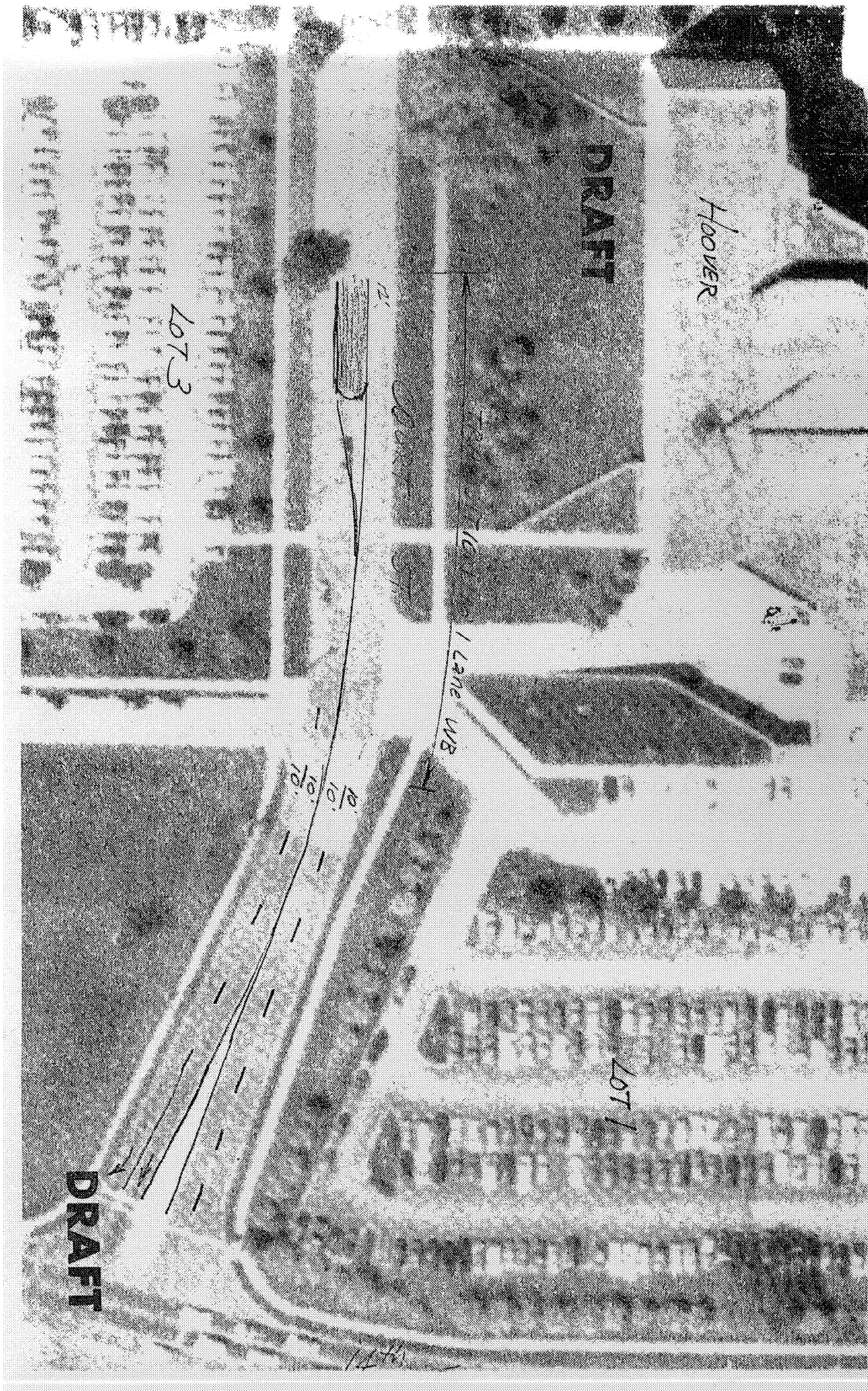
TDA Illinois Inc.

161 South Cherry Street, Suite 106
Galesburg, Illinois 61401
(306) 343-8971
Fax: (309) 343-4780









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Shuttle Operation

Memorandum

To: Bill McKeag
From: Ross Tilghman
Date: July 7, 2000
Subject: Transportation - Shuttle Operation

SHUTTLE OPERATION

Purpose

The purpose of this shuttle would be to increase mobility during the workday. It could effectively extend the walkable range for lunch trips and personal errands, as well as provide a convenient alternative to driving between downtown and the Capitol Complex for a variety of business related trips. Consequently, we assume the shuttle would operate during the midday, say from 10:00 a.m. to 4:00 p.m.

Route

A refined route is shown on the attached sketch. It assumes that Locust will be converted to two-way traffic east of 2nd Street. Within the Capitol area, the shuttle stops would be a one to two-block walk from any State building. Similarly, within downtown, the route would bring passengers within one block of most major hotels, public offices, convention center, shopping destinations and private office buildings. We anticipate that the shuttle would stop every two blocks.

Performance

This route can be served at approximately 10 minute intervals by two vehicles. In fact, that is the maximum frequency afforded by two vehicles. A third vehicle would be required as a spare. It is critical to the success of the operation that the vehicle be tailored to the purpose at hand – performance requirements include:

- The ability and durability to start and stop frequently
- Convenient passenger boarding and alighting. This means wide doors and low floors, which in turn will minimize dwell time at individual stops. This also better serves people with disabilities.
- Simplified fare payment system (if a fare is levied)
- A high level of passenger comfort once inside. Easy to reach seating, ample standing room, and superior outward visibility are essential to meeting passengers' needs for short trips.
- A relatively small vehicle (15-20 seats).

With two 18 seat vehicles, the system could comfortably carry 450 riders per day and 100 persons in the peak hour.

Fares

Given its mobility objective, the shuttle should be free to encourage the highest possible ridership. However, a nominal fare (\$0.25 for example) may be necessary to discourage use of the shuttle for non-transportation purposes. Transit passes should be accepted and promotional tokens or tickets should be considered.

Operating Cost

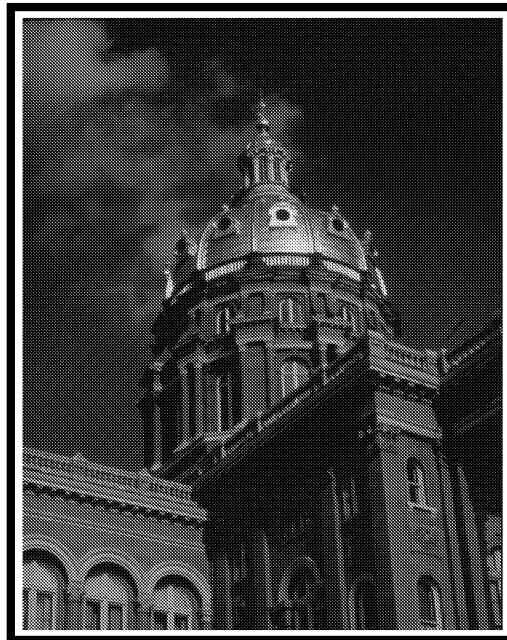
The annual operating and maintenance cost for the shuttle would be \$90,000. This assumes an operating scenario of two vehicles operating six hours each weekday, 250 days of service, and an operating cost of \$30 per hour.

Capital Cost

Vehicles and shelters at stops would total approximately \$655,000. Three vehicles are estimated at \$175,000 each, while 13 shelters are assumed to be \$8,000 each with two terminus stops at \$12,000 each.

I o w a C a p i t o l C o m p l e x
Facilities Needs Assessment
Supporting Documentation

A p p e n d i x B



STATE OF IOWA
DEPARTMENT OF GENERAL SERVICES
AND
CAPITOL PLANNING COMMISSION

I o w a C a p i t o l C o m p l e x

Facilities Needs Assessment Supporting Documentation

A p p e n d i x B

**ADOPTED:
APRIL 19, 2000**

Prepared by:
BROOKS BORG SKILES ARCHITECTURE ENGINEERING
In association with:
ZIMMER GUNSUL FRASCA PARTNERSHIP
SGS GROUP

**STATE OF IOWA
DEPARTMENT OF GENERAL SERVICES
AND
CAPITOL PLANNING COMMISSION**

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one

Executive Summary

Executive Summary

Facilities Needs Assessment Summary

An examination of past changes in staff, equipment and space requirements, and related factors such as state population growth rates and the levels of service provided by State agencies can help project future expectations. Similarly, a historical review of the costs and efficiencies associated with both owned and leased spaces occupied by state government can yield valuable information about the most cost effective and efficient options to pursue in the future.

As part of the master planning process, the consultant team undertook an abbreviated study of these issues to answer two important questions:

- What is the projected range of space requirements twenty years from now; and
- Should the State pursue ownership or lease space for its operations?

These two questions have enormous implications for the future of the Capitol Complex, as well as for the Capitol's relationship to the surrounding city.

A questionnaire was formulated, based on a review of available information on state facilities needs, and circulated to each department for first-hand estimates of probable changes in future service and personnel needs. The questionnaires also asked about adjacency needs between each department. Peer review of the assembled data was conducted, to gain a more holistic perspective of anticipated growth, and to identify any necessary adjustments.

Meanwhile, an analysis of the capital, lease, operational and maintenance costs associated with each space occupied by the State was undertaken. Leased space was found to be generally more expensive to the State than owned space by about 20%. Many state functions located outside the Capitol Complex may occupy leased space because that is all that is available to them. However, approximately 300,000 square feet of space was leased by default in the Capitol area and downtown Des Moines. That is to say, space was leased because no state-owned space was available to absorb growth, and no mechanism was in place to develop new, state-owned space. In addition to the cost consequences of leasing space away from the Capitol Complex, there is the hidden cost of operational inefficiencies due to separation from allied activities. There were also costs associated with increased travel by automobile, duplication of equipment and labor to operate it et cetera.

Although abbreviated in its scope, the conclusions of the space needs study were clear. State government has grown at an average annual rate of 1.1% over the preceding 30 years; a period during which state population averaged 0.06% growth each year. Projections to year 2020 for state staff and space needs suggest that they will grow in the range of 0.7% to 1.25% per annum, requiring between 963,000 and 1,182,000 square feet of new space over the years. This growth includes provisions for correcting the numerous existing space shortages that were identified.

The current strategy proposes that two new buildings be built on the Capitol Complex during the first years of the new century. These would be partially funded by bonds, by diverting funds used for lease payments, and from savings realized through the consolidation of leases. Departments suffering the greatest inefficiencies through fragmentation would be consolidated in new space, and the existing spaces vacated as a result of consolidation would provide needed expansion space for other occupants. The expiration of existing leases, and the design, construction and occupancy periods needed for each new building are critical factors in their development.

By 2020, the State would still occupy some leased space, giving it the flexibility to expand or contract various departments as needed. However, an increasing portion of state functions would be located on or near the Capitol Complex in state-owned buildings. These facilities would be sufficiently flexible to accommodate a variety of occupants over time, and would be designed to keep life cycle costs in check using materials and systems that will be economical to operate and maintain. New building candidates include:

Legislative Support	100,000 SF
Judicial Building	80,000 SF
Public Safety (In town, outside the Capitol Complex)	125,000 SF
Commerce & Related Functions	150,000 SF
Natural Resources & Related Functions	150,000 SF
Human Services	175,000 SF
Health	90,000 SF
[Long Term Expansion, Depending on Growth Rate]	Up to 310,000 SF

two

Supporting Documentation

Estimated Space Allocations and Requirements

Estimated Space Allocations and Requirements

SGS Group

STATE OF IOWA CAPITOL COMPLEX MASTER PLAN

April 5, 1999

STATE OF IOWA CAPITOL COMPLEX MASTER PLAN ESTIMATED SPACE ALLOCATIONS AND REQUIREMENTS

The attached spreadsheet inventories the current space allocated to each department occupying owned or leased space within the greater Des Moines, Iowa area. A total of approximately 7,970 job positions have been inventoried. Of this, approximately 5,205 positions occupy space owned by the state generally within the Capitol Complex. The balance, approximately 2,765 positions occupy lease space.

The study included all Executive Agencies except institutions and site specific components. Legislative and Judicial branch requirements were developed by these branches during 1998 and their projected requirements were incorporated into the analysis without modification.

Current Inventory of Space

The total space inventory is 1,635,000 occupied square feet. Of the total, 551,000 square feet is leased. Therefore, the state owns and occupies about 1,084,000 net or occupiable square feet of space. This is roughly analogous to previous statements that the state had about 1,900,000 square feet. The current inventory of leased and owned space is equivalent to 2,188,817 gross square feet of space which accommodates 8,000 staff at a current area factor (net square feet per person) of about 195 square feet per person. This takes into account not including vacant space or space under construction. Currently about 81,000 net square feet (NSF) of space is either vacant or under construction.

Current Space Utilization

The projection then develops an “adjusted area factor” which identifies the amount of space that should be allocated on a per person basis within the agency. This takes into account adjustments to correct current space deficiencies, to provide adequate circulation, to provide appropriate size workstations, and in some instances, to more fully utilized space. The space utilization adjustment that we recommend will increase the average space per person by between 7 and 10% for many agencies. Overall, a 13% adjustment is necessary to increase the current area factor of 192 NSF per person to 221 NSF per person. This, of course, is comprised of two components.

1. The first component is to simply occupy the vacant 81,000 SF of space which will occur through rearrangement and by providing significant expansion space within the Capitol Building for the legislature. This amounts to a 5% “increase.”

2. The additional space that is required, 7 to 10% is represented by adjustments due to enlarge currently undersized workstations, widening aisles that are too narrow for appropriate access, removing records storage material from hallways, adding more small conference rooms and meeting areas, and providing special support facilities for components that are currently significantly unfulfilled, such as training.

Staff forecasts were developed for each agency, either based on responses to the questionnaires which were provided by about 50% of the departments representing 55% of the overall staff levels, or, where no information was provided, assuming a minimum annual rate of growth of 0.7% and a maximum annual rate of growth of 1.25% over the 20 year planning horizon period. This was then applied with some sensitivity to the type of agency, whether that agency was an "administrative or overhead" function or whether it was a line function, which had responsibilities that might increase in response to increased population or service requirements. A forecast was made on an agency by agency basis. The minimum to maximum range of future staff is shown between 9,203 and 10,173 positions (up from the current baseline of 7,970 positions) through the year 2020. This represents an average, compound annual rate of growth ranging between .71% and 1.25% per year.

Future Space Needs

Applying the adjusted area factor to each agency results in a projected need in the year 2020 of between 2,032,389 NSF and 2,206,989 NSF. The current space inventory totals 1,084,000 NSF of owned space.

Consolidation of Lease Space

Of the total leased space inventory of 551,318 sq. feet, a review of the type of space, location and functional requirements indicates that a minimum of 185,389 sq. feet are appropriate for small, dispersed leased space. Typical would include client Human Services components that have extensive client contact, Public Safety components that are site specific, the Iowa Lottery, and other specialized types of spaces or locations. Over time, these spaces and the functions included within these spaces will ultimately increase to approximately 240,000 NSF. In addition, we have reserved an allowance for additional leased space so that the inventory of space that the State of Iowa leases in the greater Des Moines area is maintained at a minimum of approximately 15% of the total space inventory. Other studies conducted by the planning team identified that large state governments need the flexibility afforded by having a minimum of ten and a maximum of 20% of all space occupied in relatively short-term leases with varying and scattered lease expiration dates so that the total of space occupied by the State can be responsive to fluctuations in program size, new or terminated programs or services, and can assure the State that needed flexibility is available in their space management program.

In total, existing lease space of 551,000 NSF could be reduced by approximately 360,000 NSF over the next five to eight years as new State-owned buildings are brought on line.

The remaining 185,000 sq. feet would then slowly then begin to expand so that, by the year 2020 approximately 15% of all space would be leased. The inventory would then be about 305,000 NSF of lease space.

Additional Space Requirements

The total space deficit, after allowing for the 305,000 NSF of lease space forecast as appropriate in the year 2020, would require the availability of an additional 643,527 NSF that is not currently available. At a building efficiency of 80% (the ratio of net to gross area), this would require construction, over the next 20 years, of up to 804,409 GSF.

Should slightly higher annual staff growth rates be encountered (to achieve the 1.25% rate of growth suggested by the Steering Committee), then a total of 1,022,659 additional GSF would be required in the year 2020.

At the lower growth rate, requiring availability of 804,409 GSF for a number of near-term projects that should be considered between 1999 and the year 2008. This would include:

- Construction of a building of approximately 60,000 GSF adjacent to and contiguous with the Capitol Building to provide needed support space for the legislature and elected officials.
- Development of the Judicial building which is assumed to provide approximately 80,000 GSF.
- Provision of space in one or two buildings totaling approximately 312,000 GSF to allow consolidation of an estimated 270,000 NSF of space occupied by departments whose function would allow them to enjoy some economies and efficiencies by collocating in larger state-owned buildings on or very near the Capitol Complex.
- Development of additional space to accommodate growth over the next ten years, which is estimated at about 130,000 GSF.
- Development of a dedicated, centralized conference and training center to support all State agencies. This facility might also provide some support for the community on weekends and evenings. It is estimated that a requirement for approximately 15,000 GSF should be provided. This facility might be developed on the Capitol Complex in conjunction with a larger building providing accommodations for multiple agencies or in conjunction with a more public, museum, library, or other "civic" function.
- Expand receiving, storage, and archives support functions for 23,000 GSF.

- Correction of current space deficiencies across nearly 800,000 SF of space that would add 80,000 SF.

Long-range, between the year 2008 and 2018, additional growth 0.7% per year for ten years would require development of the facility at approximately 160,000 GSF. At the same time, the rearrangement of agencies from building to building and remodeling in existing facilities will produce a requirement to correct an estimated 8% space deficiency applied to 500,000 NSF that would be rearranged or relocated during the decade from 2008 to 2018. The total amount of space to be developed in that timeframe, thus, totals about 200,000 GSF.

The number of logical agencies or combinations of agencies that could be provided space in these new facilities that would be developed. Without being specific relative to the timing or prioritization of the development of facilities for any agency nor specifying a location, we can identify six projects that could fill the majority of the requirement. They are:

- A building to support the Legislature and elected officials is currently being discussed by the Legislature providing approximately 60,000 GSF.
- The proposed Judicial Building providing approximately 80,000 GSF.
- Consolidation of a number of public safety department components that now occupy owned and/or lease space in a number of locations. This project would likely be located in a somewhat suburban location where there is plentiful land for special operations related to Public Safety and not located on the Capitol Complex. This project might provide up to 125,000 GSF.
- The Department of Commerce and numerous “business” related oriented departments could benefit by collocation in a common facility some located on the Capitol Complex or between the Capitol Complex and the downtown business community. This facility might be as large as 250,000 GSF.
- Similar to above, Natural Resources, possibly Agriculture or other related departments could collocate in a building of 150,000 GSF developed on the Capitol Complex.
- The Health Department administrative functions (excluding outpatient clinical components) and possibly Human Service Agencies might be a candidate to occupy a building developed near the Capitol Complex. The space requirement could be as large as 250,000 GSF in the future.

Continuing Study

Further analysis is required to determine the most appropriate agencies to consolidate to maximize space utilization, reduce space through sharing of resources and staff, and to reduce expenditures for lease space. Decisions should be made based on criteria that include:

- Agency consolidation to achieve operational efficiencies
- Reduce space needs by improving space utilization
- Vacant space in state owned buildings to allow other agencies to grow, or consolidate
- Accommodate new programs and services, and
- Satisfy critical adjoining requests to increase synergism of all state agencies and reduce operating costs.

Estimated Space Allocations and Requirements March 22, 1999

BUILDINGS & OCCUPANTS	Staff	Gross SQ.FT.	Usable SQ.FT.	Occupied SQ.FT.	Area Factor Net SF/Staff	Adjusted Area Factor	Annual Growth Rate 1999-2020	STAFF FORECAST					Average Growth Rate	SPACE REQUIRED					
								1999	2000	2005	2010	2015		2020	2000	2005	2010	2015	2020
								811	814	818	821	825		RATE	109,615	109,615	109,615	109,615	109,615
State Capitol Building	610	330,950	109,615	135	145	103	0.00%	696	696	696	696	696	0.00%	71,875	71,875	71,875	71,875	71,875	71,875
Legislature	696		50,624	73	103														
Governor's Office	30		7,840	261	261	30	0.69%	30	31	32	33	35	0.70%	8,156	8,156	8,156	8,156	8,156	
Department of Management	28		6,150	220	220	28	0.69%	28	29	30	31	32	0.70%	6,203	6,203	6,203	6,203	6,203	
Auditor's Office	20		4,500	225	225	20	0.69%	20	21	22	22	23	0.70%	4,531	4,531	4,531	4,531	4,531	
Secretary of State	10		1,650	165	177	10	0.69%	10	10	11	11	12	0.70%	1,778	1,778	1,778	1,778	1,778	
Treasurer of State	10		2,550	255	255	10	0.69%	10	10	11	11	12	0.70%	2,568	2,568	2,568	2,568	2,568	
General Services	1		954	954	954	1	0.69%	1	1	1	1	1	0.70%	961	961	961	961	961	
Blind Commission	10		4,943	494	494	10	0.00%	10	10	10	10	10	0.00%	4,940	4,940	4,940	4,940	4,940	
Law Library	4		1,350	1,350	1,350	4	0.00%	4	4	4	4	4	0.00%	5,400	5,400	5,400	5,400	5,400	
Vacant	1		25,004	25,004	25,004	1	0.00%	1	1	1	1	1	0.00%	0	0	0	0	0	
Expansion space														3,477	2,651	1,797	914	0	
Judicial Building (New)	222	0	0	250	250	250	0.70%	224	231	239	248	257	0.70%	64,133	64,133	64,133	64,133	64,133	
Supreme & Appellate Courts	222	0	0	250	250	250	0.00%	224	231	239	248	257	0.00%	0	0	0	0	0	
Built-in expansion														0	0	0	0	0	
Legislative Office Building (New)	1	0	0	0	0	0	0.00%	0	1	1	1	1	0.00%	50,000	50,000	50,000	50,000	50,000	
Legislative Support	1	0	0	0	0	0	0.00%	0	1	1	1	1	0.00%	0	0	0	0	0	
Micrographics Building	14	6913	8161	583	624	624	0.70%	14	14	14	14	14	0.65%	8763	8916	9075	9240	9416	
215 E. 7th Street																			
Workforce Development	350	108,516	101,028	281	300	300	0.70%	367	371	376	382	388	0.70%	107,521	108,523	109,525	111,499	113,003	
1000 E. Grand Ave.																			
General Services	60		18,693	312	300	300	0.70%	60	63	65	67	69	0.69%	18,126	18,760	19,417	20,097	20,800	
Education	244		44,479	182	195	195	0.70%	249	252	259	264	269	0.69%	48,568	49,153	50,518	51,494	52,469	
Kitchen & Dining	8		4,775	597	597	8	0.70%	8	8	9	9	9	0.69%	4,809	4,809	4,809	4,809	4,809	
Information Technology Services	16		3,712	232	248	248	0.70%	16	17	17	18	18	0.69%	4,000	4,140	4,285	4,434	4,590	
Grimes Building	429	107,606	84,324	197	210	210	0.70%	432	442	455	467	479	0.70%	89,079	91,045	93,687	96,326	98,847	
E. 14th & Grand Ave.																			
Break Room			670		670	670	0.70%	0	0	0	0	0	0.70%	670	670	670	670	670	
General Services	60		18,693	312	300	300	0.70%	60	63	65	67	69	0.69%	18,126	18,760	19,417	20,097	20,800	
Education	244		44,479	182	195	195	0.70%	249	252	259	264	269	0.69%	48,568	49,153	50,518	51,494	52,469	
Auditor's Office	1		5,150	5,150	5,150	1	0.70%	1	1	1	1	1	0.69%	5,186	5,368	5,555	5,750	5,951	
Personnel	121		15,332	127	136	136	0.70%	122	128	131	135	140	0.69%	16,520	17,098	17,697	18,316	18,957	
Old Historical Building	65	66,956	53,107	315	379	379	0.70%	56	57	70	72	74	0.62%	56,439	56,968	58,753	60,539	62,346	
E. 12th & Grand Ave.																			
General Services Property Management	1		5,630	5,630	5,630	1	0.70%	1	1	1	1	1	0.69%	5,669	5,868	6,073	6,286	6,506	
Attorney General	1		1,800	1,800	1,800	1	0.70%	1	1	1	1	1	0.69%	1,813	1,876	1,942	2,010	2,080	
Board of Regents	30		6,700	223	270	270	0.70%	30	31	32	33	35	0.69%	8,157	8,442	8,738	9,043	9,360	
Education State Library	34		35,023	1,030	1,200	1,200	0.70%	34	34	35	36	37	0.39%	40,800	40,800	42,000	43,200	44,400	
Vacant			13,954											310	310	310	310	310	
Records and Property Center	6	66,248	57,635	3,606	10,278	10,278	0.70%	6	6	6	7	7	0.69%	62,101	64,275	66,524	68,853	71,262	
E. 7th & Court Ave.																			
General Services	1		42,365	42,365	45,331	45,331	0.70%	1	1	1	1	1	0.69%	45,648	47,246	48,899	50,611	52,382	
Revenue and Finance	3		13,460	4,487	4,487	4,487	0.70%	3	3	3	3	3	0.69%	13,555	14,030	14,521	15,029	15,555	
Agriculture	1		1,500	1,500	1,500	1,500	0.70%	1	1	1	1	1	0.69%	1,500	1,500	1,500	1,500	1,500	
Vending Area			310											310	310	310	310	310	
Vehicle Dispatch	57	32,606	30,259	531	568	568	0.70%	56	56	60	63	65	0.60%	34,013	32,863	34,013	35,204	36,436	
E. 7th & Walnut St.																			
General Services Vehicle Dispatcher	1		18,188	18,188	19,451	19,451	0.70%	1	1	1	1	1	0.69%	19,597	20,283	20,993	21,728	22,488	
Human Services Archives	18		2,257	125	125	125	0.70%	18	19	19	20	21	0.69%	2,266	2,345	2,427	2,512	2,600	
Revenue and Finance Archives	27		7,288	270	270	270	0.70%	27	28	29	30	31	0.69%	7,341	7,598	7,864	8,139	8,424	
Public Safety	10		2,526	253	253	253	0.70%	10	10	11	11	12	0.69%	2,548	2,637	2,729	2,825	2,924	

Estimated Space Allocations and Requirements March 22, 1999

BUILDINGS & OCCUPANTS	Staff	Gross SQ.F.T.	Usable SQ.F.T.	Occupied SQ.F.T.	Area Factor Net SF/Staff	Adjusted Area Factor	Annual Growth Rate					STAFF FORECAST					Average Growth Rate	SPACE REQUIRED				
							1999-2020					2000-2020						2000-2020				
							1999	2000	2005	2010	2015	2020	2000	2005	2010	2015		2020	2000	2005	2010	2015
Hoover Building E. 13th & Walnut St.	1259	276,250	207,861	207,861	165	177	0.70%	1,254	1,278	1,322	1,366	1,356	0.34%	230,962	235,347	243,320	251,644	251,448				
Blind Commission	2	2,632	2,632	2,632	1,316	1,316	0.70%	2	2	2	2	2	0.69%	2,632	2,632	2,632	2,632	2,632				
Information Technology	120	27,140	27,140	27,140	226	242	0.70%	121	125	129	140	150	1.12%	29,243	30,267	31,326	33,880	36,300				
DOT Liaison Office	2	310	310	310	155	166	0.00%	2	2	2	2	2	0.00%	332	332	332	332	332				
Attorney General	135	24,375	24,375	24,375	181	181	0.96%	135	135	148	156	164	0.96%	28,350	28,350	31,080	32,760	34,440				
General Services	47	15,014	15,014	15,014	319	300	0.70%	47	47	47	47	47	0.00%	14,100	14,100	14,100	14,100	14,100				
Human Services	414	57,400	57,400	57,400	139	160	0.88%	417	431	456	476	496	0.88%	66,704	69,038	72,960	76,160	79,360				
Public Defense Emergency Management	47	7,045	7,045	7,045	150	160	0.70%	47	47	47	47	47	0.00%	7,538	7,538	7,538	7,538	7,538				
Auditor's Office	4	600	600	600	150	161	0.70%	4	4	4	4	4	0.69%	648	669	693	717	742				
Treasurer's Office	18	2,500	2,500	2,500	139	149	0.99%	18	18	18	18	22	0.99%	2,675	2,675	2,675	2,675	2,675				
Vending Areas	32	5,685	5,685	5,685	190	204	0.70%	32	33	35	36	37	0.69%	6,562	6,792	7,029	7,275	7,530				
Secretary of State	438	58,760	58,760	58,760	134	155	-0.55%	429	434	434	438	384	-0.55%	66,495	67,270	67,270	67,890	69,520				
Revenue and Finance		310	310	310																		
Vacant																						
Lucas Building E. 12th Street	805	223,720	168,622	168,622	211	225	0.70%	811	839	868	899	930	0.69%	134,427	138,312	142,334	146,495	150,805				
General Services	12	1,302	1,302	1,302	1,302	1,302	0.70%	12	13	13	13	14	0.69%	15,622	15,622	15,622	15,622	15,622				
Capitol Police	10	1,440	1,440	1,440	144	144	0.70%	10	10	11	11	12	0.69%	1,450	1,450	1,450	1,450	1,450				
ICN	2	277	277	277	296	296	0.70%	2	2	2	2	2	0.69%	596	617	638	661	684				
Human Services	6	1,710	1,710	1,710	295	305	0.70%	6	6	6	7	7	0.69%	1,843	1,907	1,974	2,043	2,114				
Human Rights	65	11,144	11,144	11,144	171	183	0.70%	65	68	70	73	75	0.69%	12,008	12,428	12,863	13,313	13,779				
Emergency Management	4	450	450	450	113	120	0.70%	4	4	4	4	5	0.69%	485	502	519	538	556				
Legislative Service Bureau	42	4,358	4,358	4,358	104	111	0.70%	42	44	45	47	49	0.69%	4,696	4,860	5,030	5,206	5,388				
Legislative Computer	14	531	531	531	531	568	0.70%	14	15	15	16	16	0.69%	8,014	8,295	8,585	8,886	9,197				
Public Health	429	37,571	37,571	37,571	88	110	0.70%	432	447	463	479	496	0.69%	47,520	49,184	50,905	52,687	54,531				
Storage Cage		1,273	1,273	1,273			0.70%	0	0	0	0	0	0.69%	1,273	1,273	1,273	1,273	1,273				
Inspections and Appeals	209	31,785	31,785	31,785	152	163	0.70%	210	218	225	233	242	0.69%	34,248	35,447	36,687	37,971	39,300				
Governor's Alliance on Substance Abuse	11	1,484	1,484	1,484	135	144	0.70%	11	11	12	12	13	0.69%	1,599	1,655	1,713	1,773	1,835				
Hearing Rooms & Conference & Training		3,987	3,987	3,987			0.70%	0	0	0	0	0	0.69%	3,987	3,987	3,987	3,987	3,987				
Blind Commission Vending Area		272	272	272			0.70%	0	0	0	0	0	0.69%	272	272	272	272	272				
Under Construction		42,201	42,201	42,201			0.70%	0	0	0	0	0	0.69%	0	0	0	0	0				
Loading and Receiving Area		815	815	815			0.70%	1	1	1	1	1	0.69%	815	815	815	815	815				
Vacant		7,519	7,519	7,519										0	0	0	0	0				
Jessie M. Parker Building E. 9th & Grand Ave.	205	118,745	83,260	83,260	406	435	0.70%	247	255	264	274	283	1.70%	81,375	83,922	86,559	89,288	92,112				
Educational Vocational Rehabilitation Common Areas	245		74,667	74,667	305	295	0.70%	247	255	264	274	283	0.69%	72,781	75,328	77,965	80,694	83,516				
			8,594	8,594										8,594	8,594	8,594	8,594	8,594				
Wallace Building E. 9th & Grand Ave.	979	229,317	147,130	147,130	150	161	0.70%	949	982	1,016	1,052	1,089	0.50%	156,182	163,627	169,263	175,097	181,134				
Agriculture	37						0.70%	302	313	324	335	347	0.69%	51,235	53,028	54,884	56,805	58,793				
Iowa Hygienic Offices & Laboratories	300	47,550	47,550	47,550	159	170	0.70%	60	63	65	67	69	0.69%	11,637	12,044	12,466	12,902	13,354				
Public Safety	60	10,800	10,800	10,800	180	193	0.70%	247	255	264	274	283	0.69%	42,935	44,438	45,993	47,603	49,273				
General Services Printing / Mail	245	38,500	38,500	38,500	157	168	0.70%	40	42	43	45	46	0.69%	2,417	2,501	2,589	2,680	2,773				
Auditor's Office	40	2,380	2,380	2,380	60	60	0.70%	10	10	11	11	12	0.69%	1,293	1,338	1,385	1,434	1,484				
Department of Natural Resources	10	1,200	1,200	1,200	120	128	0.70%	289	299	310	320	332	0.69%	47,517	49,180	50,902	52,683	54,527				
Blind Commission (Vending)	287	44,100	44,100	44,100	154	164	0.70%	35	36	36	39	40	0.69%	2,600	2,600	2,600	2,600	2,600				
153 Des Moines St Workforce Development	35	25,000	22,000	22,000	629	673	0.70%	35	36	38	39	40	0.69%	23,705	24,534	25,393	26,282	27,202				
Central Services & Training (New Program Space Inc. Receiving & Storage)	1	0	0	0	0	0	0.00%	0	0	0	0	0	17.97%	0	0	10,000	10,000	10,000				
							0.00%	0	0	0	0	0	17.87%	0	0	36,469	36,469	36,469				

Estimated Space Allocations and Requirements March 22, 1999

BUILDINGS & OCCUPANTS	Staff	Gross SQ.FT.	Usable SQ.FT.	Occupied SQ.FT.	Area Factor Net SF/Staff	Adjusted Area Factor	Annual Growth Rate	STAFF FORECAST					Average Growth Rate	SPACE REQUIRED				
								1999-2020	2000	2005	2010	2015		2020	2000	2005	2010	2015
Lease Space (417,000)	1999	570,614	496,166	551,318				2,624	2,956	3,046	3,216	3,394	578,796	605,051	619,680	658,611	679,665	
Board of Parole	35	570,614	6,531	7,257	207	222	0.70%	35	36	38	39	40	7,819	8,093	8,376	8,669	8,973	
Board of Regents	25	4,972	4,972	5,524	221	210	0.70%	25	26	27	28	29	5,287	5,472	5,663	5,862	6,067	
Department of Corrections	38	9,203	9,203	10,225	269	288	0.70%	38	40	41	42	44	11,017	11,403	11,802	12,215	12,643	
Department of Public Health	38	10,163	10,163	11,292	297	318	0.70%	38	40	41	42	44	12,167	12,593	13,034	13,490	13,962	
Attorney General Offices	23	4,394	4,394	4,882	212	227	0.70%	24	24	24	24	24	5,451	5,451	5,451	5,451	5,451	
Revenue and Finance	1	1,594	1,435	1,594	1,594	1,706	0.70%	1	1	1	1	1	1,718	1,778	1,840	1,904	1,971	
Information Technology	14	4,500	4,500	5,000	357	382	0.70%	14	15	16	17	18	5,350	5,732	6,114	6,496	6,879	
Commerce (Maple & Grand)	293	55,307	55,307	61,452	210	224	0.26%	293	293	293	310	310	65,754	65,754	65,754	69,569	69,569	
Workforce Development (150 Des Moines Street)	93	2,250	2,250	2,500	27	29	0.365%	93	110	130	150	169	2,675	3,164	3,739	4,315	4,861	
Prison Industries	11	15,638	15,638	17,376	1,580	1,400	1.22%	11	13	14	14	14	15,400	18,200	19,600	19,600	19,600	
Inspections and Appeals	48	11,514	11,514	12,793	267	285	4.09%	60	70	80	88	92	17,111	19,962	22,814	25,096	26,236	
Natural Resources	120	24,249	24,249	26,943	225	240	0.74%	120	125	130	135	140	28,829	30,030	31,231	32,433	33,634	
Civil Rights	36	9,914	9,914	11,015	306	327	0.50%	38	40	40	40	40	12,441	13,096	13,096	13,096	13,096	
Human Services	228	33,953	33,953	37,703	165	177	0.88%	230	240	250	260	273	40,696	42,465	44,235	46,004	48,304	
Human Services (Client Contact)	300	49,684	49,684	55,204	184	217	0.00%	300	300	300	300	300	65,100	65,100	65,100	65,100	65,100	
Attorney General	36	3,870	3,870	4,300	119	210	0.70%	60	62	64	66	70	12,600	13,020	13,440	13,860	14,700	
Attorney General (310 Maple)	32	8,572	8,572	9,524	298	210	0.70%	32	33	35	36	37	6,767	7,004	7,249	7,503	7,765	
Natural Resources (Ingrahm Rd.)	58	17,852	17,852	19,836	342	366	0.70%	58	60	63	65	67	21,373	22,121	22,895	23,697	24,526	
College Student Aid	40	8,100	8,100	9,000	225	241	0.00%	40	40	40	40	40	9,630	9,630	9,630	9,630	9,630	
Public Safety	130	23,057	23,057	25,619	197	211	-1.41%	130	130	130	130	89	27,412	27,412	27,412	27,412	27,412	
Public Employment Board	27	4,051	4,051	4,501	165	165	0.70%	27	28	29	30	32	4,533	4,691	4,855	5,025	5,201	
Ethics & Campaign Disclosure Board	20	2,934	2,934	3,260	165	165	0.70%	20	21	21	22	23	3,283	3,398	3,517	3,640	3,767	
Agriculture	11	1,562	1,562	1,735	165	165	0.70%	11	11	11	12	12	1,747	1,808	1,872	1,937	2,005	
Elders Affairs	38	5,670	5,670	6,300	165	165	0.70%	38	40	41	43	44	6,344	6,566	6,796	7,034	7,280	
Justice, Consumer Advocate	58	8,572	8,572	9,524	165	165	0.70%	58	60	62	64	67	9,926	10,274	10,633	11,006	11,391	
Finance Authority	79	11,676	11,676	12,973	165	165	0.70%	79	82	85	88	91	13,064	13,521	13,994	14,484	14,991	
IPERS	114	16,988	16,988	18,875	165	165	0.70%	115	119	123	128	132	19,007	19,672	20,361	21,074	21,811	
Economic Development	220	32,596	32,596	36,218	165	165	0.70%	221	229	237	245	254	36,472	37,748	39,069	40,437	41,852	
Other Lease Space Not Included	600	107,004	107,004	118,893	198	180	2.00%	612	668	735	808	889	110,160	120,240	132,264	145,490	160,039	
Contingency Growth, New Programs	0	0	0	0	180	180		0	150	450	700	970	0	27,000	81,000	126,000	174,600	
TOTALS-BASE CASE	8056	2,188,817	1,580,189	1,635,322	192	207	0.63%	8,095	8,357	8,596	8,925	9,196	1,571,619	1,672,435	1,773,714	1,878,801	2,032,389	
TOTALS-HIGH RANGE	8056	2,188,817	1,580,189	1,635,322	192	207	1.17%	8,095	8,507	9,049	9,625	10,166	1,971,619	1,999,435	1,996,714	2,105,801	2,206,969	
Total in Capitol Complex (5,205)	5,205																	
Total in Lease Space	2,765																	
Total Employees	7,970																	
Space Inventory				1,084,004									1,084,004					
Occupied Space (Less Vacant/Construct)			1,546,644										1,084,004					
Lease Space to Remain			185,389										187,427					
New Lease Space To Hold 15% Level													63,316					
Total Lease Space													250,743					
Total Space Available													1,334,747					
Space Deficit (Net Area)													336,873					
Gross Building to Construct (80%)													421,091					
Annual Staff Growth Rate									0.47%	0.61%	0.59%	0.63%	0.62%					
Area Factor													207					
Percent Lease Space													0					
Gross Building Area to Construct (80%), High Range													421,091					
													688,208					
													0					
													906,033					
													783,816					
													1,022,659					

Projected Space Needs

Capitol Complex Master Plan

Projected Space Needs (Preliminary)

A. Research

- 17 of 33 questionnaires returned
- Representing 4,300 staff, about 55% of staff total of 8,000
- Staff increased 1.98% per year, 1994 to 1998
- Forecast staff growth 0.86% to 2008; 0.45% to 2018

B. Historical Data

- 1992 to 1997 State employment (less education and institutions) growth 1.70%/yr
- Contract, PEO, Temp Employees increased rate 2.10%/yr
- 1970 to 1999 State and local government growth1.10%/yr
- 1970 to 1999 Population growth0.06%/yr
- 1995 to 1998 Polk County State employment 8080 to 8472..... 1.6%/yr
- 1995 to 1999 Complex population stable at5,205

C. Projections to 2020

- Population increase at 0.34%/yr
- State and local government increase at 0.67%/yr
- State staff in Des Moines increase at 0.70%/yr

Capitol Complex Master Plan

D. Space Analysis

- Excludes Legislature, court, museum, library, and special areas (Lottery, Highway Patrol, Clinics, Aviation, Prison Industries)
- State owned space totals 1,084,000 Net SF
- Lease space totals 500,000 Net SF
- 7970 current employees occupy 1,554,000 Net SF (after deleting vacant space and space under construction)
- Current space deficiencies in general work areas (excluding Legislative and Judicial) is 7-10%
 - cramped work stations
 - narrow aisles
 - records and storage in hallways
 - need more small conference rooms
 - need for special support facilities (training)
- Current Area Factor 192 – increase to 221 when 88,000 vacant SF is occupied (5%) and when Legislative and Judicial space is constructed.

E. Projected Staff & Space Needs:(1999 – 2020)

- Minimum..... 0.70% = 9,203 Staff = 804,000 GSF
- Maximum 1.25% = 10,173 Staff = 1,022,000 GSF

Capitol Complex Master Plan

F. Future Space Needs (1999 – 2008)

- Legislative and Judicial space..... 140,000 GSF
- Consolidate lease space, 60% of 500,000 SF =
250,000, convert to GSF @ 80% 312,000 GSF
- Accommodate 0.70% growth for 10 years
8% x 1,635,000 NSF studied 130,000 GSF
- Provide needed training center 15,000 GSF
- Expand central receiving, storage, and
archive by..... 23,000 GSF
- Correct current deficiencies..... 40,000 GSF

Total Needed, Phase I **700,000 GSF**

G. Long Range Needs (2008 – 2018)

- Growth of 0.70%/yr for 10 years160,000 GSF
- Correct space deficiencies for remodeled
agencies = (8% of 500,000 SF)40,000 GSF

Total Needed, Phase II, minimum **200,000 GSF**

Total Needed, Phase II, maximum **350,000 GSF**

Capitol Complex Master Plan

H. Continuing Study

- Which leases to consolidate when they expire
- Which agency or combinations provide greatest benefits to State by consolidating in new building
- Where new building should be located
- Are additions to existing buildings possible?
 - functionally
 - aesthetically
 - economically

I. Basis of Determining Primary Tenants

- Agency consolidation operational efficiencies
- Reduce space needed
- Vacate space needed by others
- Accommodate large growth of department
- Satisfy critical adjacency needs

Capitol Complex Master Plan

J. Lease vs. Own Economic Analysis

- Ownership:
 - Development Cost.....\$150 to \$175/GSF (\$220/NSF)
(Including parking at 3 to 4 stalls/1000 GSF)
 - Financing for 25 yrs 5.1%
 - Residual Value, (\$25PV) 30.0%

- Leasing:
 - 296,057 RSF Candidates
 - Average \$14.84/RSF
 - 543 Parking Spaces included
 - Average \$9.84 RSF, net, net, net
 - Rates increase at 3%/yr

- Breakeven:
 - 1999 rental rate \$8.18 + \$5.00 = \$13.18/NSF
 - Conversion to rentable rate \$12.32/RSF

- Savings:
 - Consolidate 250,000 NSF for 15 years saves.. \$7,281,000

Capitol Complex Master Plan

K. New Building Candidates

- Legislative Support 60,000 GSF
- Judicial Building 80,000 GSF
- Public Safety (Off Complex) 125,000 GSF
- Commerce and related 150,000 GSF
- Natural Resources and related 150,000 GSF
- Human Services 175,000 GSF
- Health 90,000 GSF
- SUBTOTAL* **830,000 GSF**
- Plus Long Term Expansion 192,000 GSF

Gross Area Required (Maximum - YR 2020)... 1,022,000 GSF

Lease vs. Ownership

Memorandum

To: Bill McKeag
From: Jim Steinmann
Subject: Lease vs. Ownership Economic Analysis

LEASE VERSUS OWNERSHIP

The benefits and costs associated with leasing general office space for the State of Iowa versus owning that space is a central issue to developing a Facility Master Plan as the answer could add as much as 300,000 net square feet from the space required in and around the State Capitol Complex. The SGS Group specifically analyzed the economics associated with the variety of facility procurement alternatives for a number of states in similar master planning assignments during the past. The following material briefly revisits these earlier conclusions, incorporates 1999 data relevant to Des Moines area State space leases, and provides a specific recommendation that will help to resolve the question of whether it is better for the State to lease or own general office space in the metropolitan area.

This current analysis clearly indicates a preference for the State to own office space that it requires in and around the Capitol Complex and the City of Des Moines given certain conditions:

1. The need must be for large amounts of space to serve the needs of agencies that are likely to have a continuing life span for those services currently provided.
2. The scale and location of the buildings that are owned must fit into a long-range strategic facility master plan with the Capitol Complex area and produce the lowest life cycle cost.

Exceptions might exist in unusual instances where there is a building that could be leased at substantially below then-current market lease rates. Other exceptions would exist when the need for the space is erratic, temporary, or where significant flexibility might be required to support unusual levels of growth or reduction of the space requirement in future years. In these instances, a leasing strategy might be preferable to ownership.

Generally, in 1999, an initial lease rate of less than \$12.32 per rentable square foot would be necessary to equal the annual payment required to amortize a building with an initial construction cost of \$175 per square feet. This is the total project cost. This is calculated based on a 25-year mortgage (bond amortization) with financing at 5.1% annually. This \$12.32 payment must include any payment for property taxes which, of course, are not required in a building that the State owns.

Residual Value

Any comparison of the long-term value of a new building versus purchasing and renovating an existing facility or lease space must consider its residual value. The preceding analysis, in Section A needs to acknowledge that the total cost of purchasing and renovating an existing facility, must be somewhat lower than the costs associated with new construction to reflect the reduced future residual value of an older, renovated facility.

If, in 1999, we research buildings that are 40 years old (constructed in 1960), we would find that, in their current condition, without having had substantial renovation and upgrade over the years, these buildings would be worth about 30% of their current replacement value. For example, an office building that is 40 years old might have a current market value of approximately \$50 per square foot, or 30% of its current replacement value of approximately \$175 per square foot excluding the underlying value of land which varies considerably from location to location. A new facility built in 1999 at a projected cost of \$175 would have a residual value computed as follows:

1. First the construction cost of \$175 per GSF is based on costs for a suburban site, excluding furniture, fixtures and equipment, information systems, LAN/WAN, and relocation.
2. The replacement cost, 40 years in the future, would increase at an assumed long-term inflation rate of 3% per year. Forty years from now, it would cost \$580 per GSF to replace the building.
3. The residual value of this building 40 years in the future, represents about 30% of the future replacement cost. That residual value would be approximately \$175 in terms of a year 2040 value (30% x \$580).
4. Discounting a future residual value of \$175, back 40 years to the present value, utilizing a 5.1% discount rate (which is roughly equivalent to the State's long-term bond interest rate) indicates that the present value of the \$175 residual value found in the year 2040 would be \$25 in 1996.
5. Thus, the current replacement cost of the building (\$175 per SF), loses value or depreciates to the point where its future residual value is currently worth only \$25. Thus, the building loses a value of \$150 over a 40 year timeframe (\$175 - \$25).
6. The \$25/SF present value is a credit against initial construction costs – a savings or discount off of the initial construction cost.

The cost of leasing, of course, produces no residential value.

Cost of Leasing

Currently, the State of Iowa leases 296,057 rentable square feet in the Des Moines metropolitan area that are occupied by departments that may be candidates for consolidation on or near the Capitol Complex. The annual rent is \$4,104,300 per year and averages \$13.87 per rentable square feet per year. At an average 7% load factor from net to rentable area, this equates to an average current rental rate of \$14.84 per net square feet. This cost includes maintenance and operating costs and 543 parking spaces. This is a ratio of one “free” parking space per 545 net square feet. Comparisons to the cost of new construction must consider the value of the parking spaces provided in the lease.

A number of State leases were analyzed to determine the annual rate of income in lease rates and the current costs for maintenance, taxes, insurance, and operations. We estimate that the average lease cost, excluding maintenance, property taxes, and operating costs which average \$5.00 per square foot per year, is about \$9.84 per net square foot per year after deleting an allowance of \$5.00 per square foot for operating costs. This represents the contribution available to pay the mortgage and/or reimburse the owner for the cost of building the building and his/her profit.

Lease rates appear to be increasing at 3% per year for new Class B buildings in Des Moines. This includes an allowance for inflation and real estate appreciation. A lease rate of \$9.84 per square foot, increasing at 3% per year and discounted at 5.1% (the bond interest rate) has a present value of \$270 per net square foot over a 40 year timeframe.

Cost of Construction

The cost of constructing new State office spaces is calculated to include the following:

1. One (1) NSF equals 1.25 gross square feet at a building efficiency of 80%.
2. Construction costs for a Class B Building which compares to the quality of state occupied lease space, will be \$110 for the core and shell, and \$30 for the tenant interiors. The total cost of construction is \$140 per gross square foot.
3. Soft costs for design, permits, project management, construction interest, and inspection should add 25% for a project cost of \$175 per GSF.
4. Parking for one car per 545 net square feet (one per 681 GSF) as provided in the leases considered for consolidation, will cost \$10,000 per space or \$10,000 per 681 GSF—an average of \$14.68/GSF and \$18.35/GSF when 25% is added for soft costs. This allocates .68 spaces per 1000. A total of three to four spaces are required per 1000 square feet.
5. Although the Capitol Complex has abundant sites for the construction of a new office building, sites for parking will become limited. We believe it is appropriate to change the cost of all parking that must be provided to the cost of building a building at the cost of developing parking structures at \$10,000 per car for .68 cars/1000 GSF. This should be the same as the cost incorporated in the cost of leasing an equivalent amount of space.

6. However, land must be procured (or allocated) for the maximum additional parking that may be required. An additional 3.32 spaces (4 minus .68 = 3.32) per 1000 square feet would require 274 square feet of site area in a four level parking structure. (3.32 x 330 SF/car ÷ 4). At \$30 per square foot to construct a parking structure, this adds a cost of \$8217 per 1000 square feet of office space—a unit cost of \$8.22 per square foot of office space provided.
7. The total development cost is thus estimated to be \$175 + \$18.35 + \$8.22, less the residual value of \$25.00 = \$176.57 per GSF.
8. This cost per GSF must be converted to rentable square feet to compare to the life cycle cost of leasing space. When the total development cost of one additional GSF of space of \$176.57 is divided by 80% yields a life cycle cost of \$220 per NSF to construct and own space on the State Capitol Complex.

This cost is approximately 20% less than the \$270 per NSF present value cost of leasing space.

Breakeven Analysis

The “breakeven” lease rate that could produce a present value cost equal to the \$220 per NSF cost of ownership would be \$8.18 assuming a 3% annual rate of inflation and a 5.1% discount rate. Adding an allowance of \$5.00 for maintenance and operations results in a full service initial lease rate of \$13.18 per net square foot. Conversion to rentable square feet with an assumed 7% load factor equates to a \$12.32 per breakeven lease rate (\$13.18 divided by 1.07). This lease rate would have to include a \$7.32 per RSF fixed cost component and a \$5.00 maintenance and operating cost component that is capped at a maximum annual rate of increase of 3%. The “blended” annual rate of increase would have to be limited to 1.3% to “breakdown “ with costs anticipated in a new State owned building.

Similarly, an annual mortgage payment of \$7.32 per RSF (\$6.84/GSF) would finance a new building construction cost of over \$100 per GSF over 25 years at a 5.1% interest rate. Adding residual value increases this allowance to \$125 per GSF.

The conclusion is that it would require a current full service rental rate of less than \$12.32 per RSF per year to have a lower present value life cycle cost than the cost of constructing State owned space on or near the Capitol Complex would afford.

Lease Space Consolidation Savings

Using current lease rates of \$9.84 per NSF, increasing at 3% per year and an anticipated cost of constructing a new State office building of \$170/NSF, financed at 5.1% over 28 years, the total payments over a typical 15 year lease would be as follows:

Leasing	\$47,125,000
Mortgage payments	\$41,157,000

The net savings offered by construction is nearly \$6,000,000, or \$400,000 per year.

Savings by Consolidating Leases

SAVINGS BY CONSOLIDATING LEASES

- Cost of leasing space for 40 years = \$270/net sq. ft.
- Cost of constructing space:
 - \$200/net sq. ft. w/ traditional process (\$170/Gross S.F.)
 - \$170/net sq. ft. w/ Design/Build (\$150/Gross S.F.)
- Cost for 2000-2015 for 250,000 sq. ft. of lease space to consolidate.
- Lease @ \$9.84/nsf, increase at 3% for 15 years, the total cost is \$47,125,000.
- Construct @ \$170/net square feet and finance at 5.1% for 28 years, the total cost is \$39,844.00 (\$6.25/\$100 financed).

Savings potential = \$7,281,000

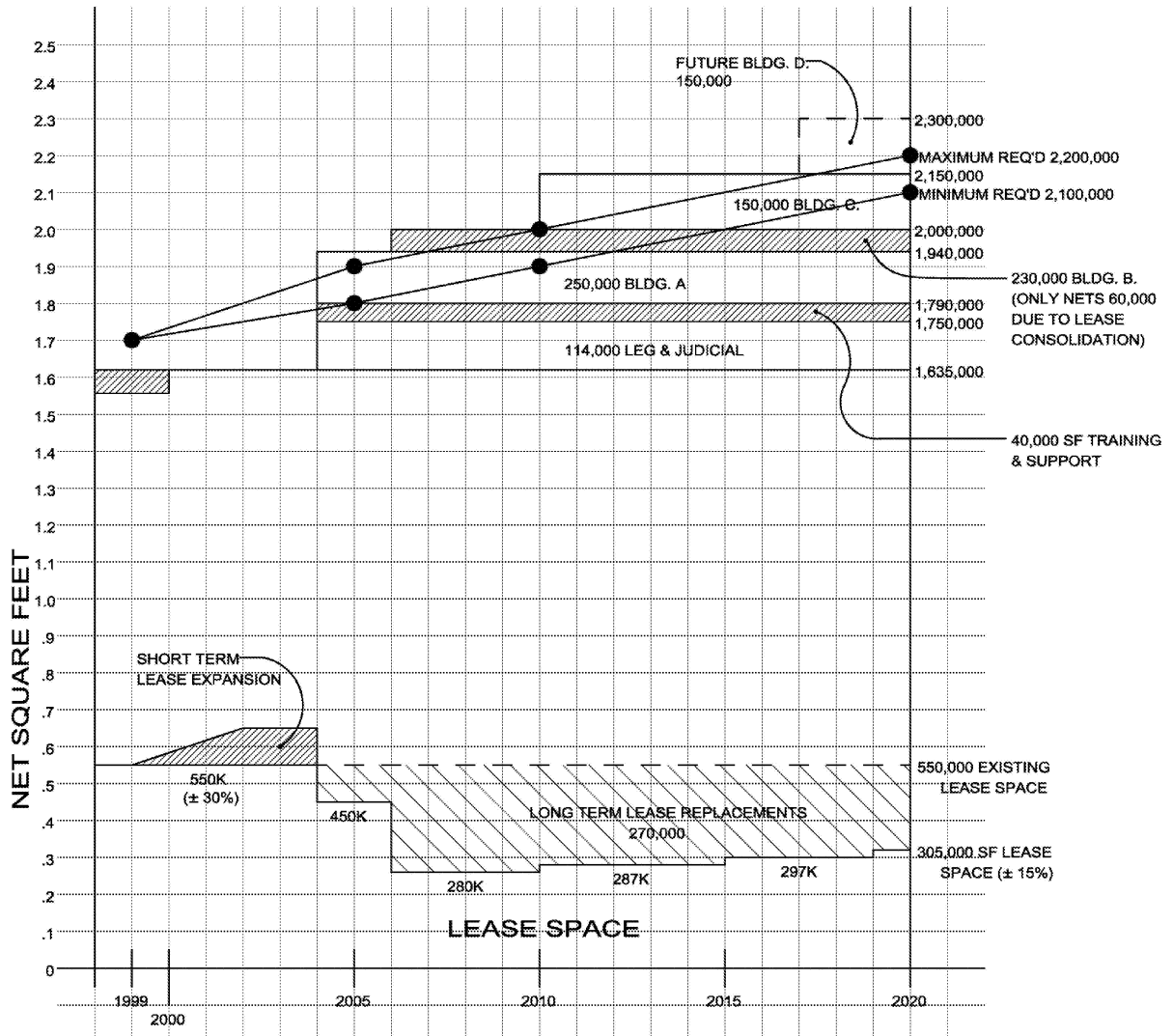
Alternative Occupancy Profiles

ALTERNATIVE OCCUPANCY PROFILES

Department	From	Net Area Provided (1000)	
		Initial	2020
A. Building A			
Human Services	Hoover	57	79
Human Services	(Lease)	38	48
Personnel	Grimes	19	
Auditor	Grimes	5	
Health	Lucas	38	54
Health	(Lease)	11	14
Small Lease Space		57	30
Total		225	225
B. Building B			
Commerce		61	69
Economic Development		36	42
Natural Resources		44	54
Natural Resources		45	57
Small Lease Space		64	28
Total		250	250

Sample Implementation Sequence

Sample Implementation Sequence



NOTE: DATES, BUILDING PROGRAMS, AND LEASE SPACE QUANTITIES SUBJECT TO CHANGE.