

Transportation Supporting Data

The purpose of the Transportation Element is to plan for future motorized and non-motorized traffic circulation systems that ensure provision of adequate transit, circulation, and parking facilities to meet future University needs. Additionally, this element is to ensure the provision of adequate pedestrian and non-vehicular circulation facilities to meet the future needs of the University; and to coordinate the location of these facilities planned in the host community in the context area.

TRANSIT, CIRCULATION, AND PARKING SUB-ELEMENT

Introduction

To analyze the transportation element of the Florida State University Master Planning effort, the Florida Board of Regents in Guidelines for the Comprehensive Campus Master Plan System¹ outlines the effort to consist of the three primary parts: parking, transit, and circulation. This analysis follows the Guideline for both the Main and the Panama City Campuses.

1. Data Requirements

1.a.1 Inventory of Existing Campus Parking Facilities

Florida State University provides (in the 2009-10 academic year) over fifteen thousand parking spaces (up from nine thousand in 1993) for students, faculty, staff, visitors, and commercial vehicles. Parking within the University is divided into areas designated by certain permit categories.

Areas designated “R” or “Red” for faculty or staff parking with White (“W”) parking designated for student parking. Other categories of parking include motorcycle, handicap, state reserved, loading zone, service, and pay (visitor/metered).

The current location and quantity of parking by permit category and University quadrant is presented in **Table 11.1**, (Existing parking at FSU facilities at the Southwest Campus are shown on **Figure 11.2**.)

¹ Florida Board of Regents. *Guideline for the comprehensive Campus Master Plan System. Unpublished, 1993.*

Table 11.1 - Available Parking by Permit Category (2009-10)

Permit Type	Spaces
Faculty/Staff	4,343
Student	9,536
Other (Service, Disabled, Etc.)	1,590
Total	15,469

Source: Office of Parking & Transportation Services, 2010

In 1993, there were 8,921 spaces on campus, and this figure has increased to 15,469 spaces in the 2010-11 academic year. The largest gains in parking spaces occurred in the northwest and southwest quadrants of campus associated with the construction and opening of new parking garages.

1.a.2 Special Events Parking

The University handles special event parking at the University, for non-athletic events. For a fee, visitors may purchase a one-day University Parking pass to attend special events. The Seminole Boosters, Incorporated coordinates parking for sporting and other alumni events. Events that draw unusually large crowds use the Tallahassee/Leon County Civic Center parking lot.

Ancillary parking is also available by private landowners on vacant lots surrounding the University ranging in price from approximately five to twenty dollars per event. Price varies based upon location and total demand for parking.

1.a.3 Inventory of Surface and Multi-Level Parking (Context Parking)

Context parking contributes a significant amount of additional parking within the university campus area. Parking in each quadrant is either on street metered, on street unmetered, pay lots not maintained by the city or reserved for select fraternities/sororities.

Analysis of travel behavior by students, faculty, and staff of the University (conducted in 1995) suggests that context parking accommodates approximately four percent (4 %) of total parking demand. As land available for parking within the University is consumed, parking facilities provided by the surrounding community will likely increase on a “for profit basis.”

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A significant amount of non-campus parking is found in the southeastern quadrant, but context parking availability has declined somewhat from previous master plan updates in the area north of Tennessee Street. This is due to removal of some on-street parking and conversion of vacant lots once used as makeshift parking to other development or to enforce unauthorized parking. In the Southeast quadrant, Leon County Civic Center contains approximately 732 spaces, all of which are counted as context parking. Law school students may use these spaces with a valid I.D. during weekdays, and other students may use the Civic Center parking on paid basis.

Table 11.2 details the amount of context parking within each quadrant of the University. **Figure 11.3** depicts the location of context parking within each quadrant.

Table 11.2 - Context Parking (spaces)

Northwest Quadrant	30 spaces
Northeast Quadrant	61 spaces
Southwest Quadrant	8 spaces
Southeast Quadrant	1,102 spaces
Total	1,201 spaces

Source: Leon County Civic Center and November 2006 field inspections

It should be noted that in recent years, on-street metered parking has been removed from Jefferson Street (Copeland-Woodward), College Avenue (Copeland-Macomb), and Learning Way.

1.b Inventory of Off-Campus Parking

Florida State University does not have or use any off-campus lots for remote parking, other than the Civic Center parking described in 1.a. and lots on lands owned by Seminole Boosters, Inc. or other University affiliated organizations. New properties that have been added to the University from the State of Florida (see Map 4.3.2) contain parking that will serve those individual properties. These have not been added to the Context Parking nor the Existing Parking for the Main Campus.

1.c Inventory of Accident Location

Table 11.3A and **Table 11.3B** detail a comparison of automobile accident data for the context area and campus locations for the periods 1992 and 2002 (the latest year for

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which location data is available). As noted, some locations have experienced an increase in accidents, while others have seen a decrease in accidents. Crime statistics for incidents occurring on the Florida State campus(es) is maintained by the Florida State University Police Department. Information relating to these statistics can be found on the FSU Police Department webpage at the following address: <http://www.police.fsu.edu/>.

Table 11.3a - Context Area Accident Data Ten-Year Comparison (1992 vs. 2002)

Street	Segment	Mid-Block		Intersection	
		1992	2002	1992	2002
Brevard Street	Tennessee to Woodward	4	6	9	13
Stadium Drive	Tennessee to Call	5	1	0	0
Call Street	Bryan to Macomb	26	5	2	10
College Avenue	Copeland to Macomb	9	7	4	9
Copeland Avenue	Tennessee to Gaines	14	2	14	53
Gaines Street	Stadium to Macomb	31	9	16	20
Jefferson Street	Pensacola to Macomb	31	9	16	20
Macomb Street	Tennessee to Gaines	15	7	37	75
Madison Street	Woodward to Macomb	10	4	5	3
Park Avenue	Copeland to Macomb	2	4	9	6
Pensacola Street	Hayden to Macomb	24	38	24	57
St. Augustine Street	Stadium to Railroad	7	5	23	39
Tennessee Street	Bryan to Macomb	36	81	59	141
Woodward Avenue	Brevard to Gaines	20	11	8	63
Totals		236	203	233	537

Table 11.3B - FSU Main Campus Accident Data Ten Year Comparison (1992 vs. 2002)

Street	Segment	Mid-Block		Intersection	
		1992	2002	1992	2002
Antarctic Way	Academic to Woodward	0	0	1	1
Chieftan Way	Pensacola to Academic	6	4	9	11
Collegiate Loop	Collegiate Loop to Collegiate Loop	1	0	2	0
College Avenue	Woodward to Wildwood	0	0	0	0
Dewey Street	Tennessee to Call	0	1	0	31
Honors Way	Florida to Macomb	3	4	6	0
University Way	Jefferson to Dead End	2	0	4	1
Hull Drive	Academic to Dead End	1	0	0	0
Convocation Way	Call to Florida	2	2	2	0
Collegiate Loop	Florida to Collegiate	0	0	0	0

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Academic Way	Hull to Dewey	13	1	7	3
Park Avenue	Woodward to Wildwood	1	0	0	4
University Way	Loop	2	1	1	0
Varsity Drive	Wildwood to Dead End	2	1	1	2
Learning Way	Jefferson to Woodward	1	4	3	6
Woodward Avenue	Tennessee to Pensacola	2	3	30	40
Totals		36	21	66	99

Of note are the increases in accidents over the ten-year period along Copeland Street, Macomb Street, Tennessee Street, and Woodward Avenue. These increases are primarily at the intersections along the roadway segments.

1.d Existing Campus Roadway Classification

The existing campus roadway classifications as identified in the Tallahassee-Leon County 2020 Comprehensive Plan are shown in **Figure 11.4**.

1.e Existing Context Roadway Classification

The existing context roadway classifications as identified in the Tallahassee-Leon County 2020 Comprehensive Plan are shown in **Figure 11.5**. (The roadways at the Southwest Campus are depicted in **Figure 11.6**.)

1.f Level of Service

There are several roadways on the campus that exclusively serve University generated trips. Roadways in this category include Chieftain Way, Learning Way, Academic Way, Collegiate Loop, Honors Way, Convocation Way, University Way, and sections of Park Avenue, Call Street and College Avenue.

Chieftain Way is the primary north/south route devoted to the University. It provides connections between the sports complexes of the University and Doak Campbell Stadium. Parking for the Leach Center, the Stone Education Building and the Natural Science buildings are accessed from Chieftain Way.

Learning Way is a north/south road connecting Jefferson Street with Woodward Avenue. Learning Way serves as the access road for the Leach Center, the Student Life Building, parking lots, and the Mendenhall Maintenance Building. The intersection of Learning Way with Woodward Avenue has recently been closed to thru traffic.

Collegiate Loop provides access to the Strozier Library, Landis Green, Thagard Student Health Services and Montgomery Gymnasium. A two-way road at its southern end,

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Collegiate Loop becomes part of a one-way circle with Collegiate Loop to the west. Street parking as well as parking lots can be accessed via Collegiate Loop. Academic Way parallels Tennessee Street from Murphree Street to Dewey Street. Notable features of Academic Way include on-street parking, an underpass at Woodward Avenue, transit stop, and a pedestrian access tunnel under Tennessee Street.

The segments of Park Avenue and College Avenue that are within the campus are short and serve to connect Woodward Avenue with Learning Way on the west. On the east side of Woodward Avenue, Park Avenue provides access to Garage No. 2 with first and second floor access drives.

Honors and Convocation Ways are north/south routes connecting University Way with Call Street. Both roads travel through the oldest part of the campus with limited on-street parking. These roads provide the access for the center of the campus for service and deliveries as well.

Florida State University is bordered to the north by Tennessee Street, a six lane divided State/Federal principal arterial. The City of Tallahassee Comprehensive Plan establishes the level of service for Tennessee Street in the vicinity of the campus as LOS "E." The capacity of this roadway varies between 2,000-2,800 vehicles per hour per direction.

Macomb Street borders FSU to the east. Macomb has been widened to four lanes and connects to Old Bainbridge Road north of Brevard and to Railroad Avenue south of Pensacola Street. Current (March 2002) PM peak hour peak direction traffic volume is about 800 vehicles per hour per peak direction. The road is projected to carry higher traffic volumes in the future.

Six roads border the University to the south; Jefferson Street, Pensacola Street, Saint Augustine Street, Gaines Street, Lafayette Street, and Madison Street. Jefferson Street, the historical southern boundary of the campus, is a two-lane Minor Collector with an adopted level of service "E." Pensacola Street and Saint Augustine Street is a pair of one-way roads from Stadium Drive to Monroe Street in downtown Tallahassee and are classified as Minor Arterials (this included Madison Street east of Macomb Street.) Providing 2-3 through lanes each, both roads have an adopted level of service "E." Madison Street in the vicinity of the University is a two lane Minor Collector.

The southernmost road to border the University is Gaines Street. A Minor Arterial,

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Gaines Street is the subject of a recently completed City of Tallahassee/Florida Department of Transportation project development and environmental (PD&E) study and an extensive visioning project. These studies establish a redevelopment of Gaines Street, that includes bike lanes, wide sidewalks, and extensive landscaping to serve as a border between Florida State University and Florida A&M University, and to serve the university community commercial needs.

Bisecting the older section of the campus from the new, Woodward Avenue was recently closed to through traffic from Call Street to Park Avenue. Woodward currently serves as a means of access to Garage No. 1 located near Tennessee Street (for motorists north of campus) and Garage No. 2 located on Park Avenue (for motorists south of campus).

Stadium Drive begins at the Jefferson Street/Pensacola Street intersection, traversing the southern end of the Stadium and terminating at Call Street (Stadium Drive). This roadway was improved and widened as part of the Pensacola Street bridge closure. Stadium maintains six-lanes from Lake Bradford Road to Pensacola Street, and four-lanes from Pensacola Street to Tennessee Street, where it is called Stadium Drive north of Call Street. The adopted level of service for Stadium Drive is "E."

1.g Traffic Counts

An extensive count program around the University, consisting of twenty-four hour traffic counts, and 8-hour turning movement counts (TMCs) has been undertaken in recent years. The TMC are shown in **Figures 11.7 - 11.10 (updated for 2010 data)**. The City of Tallahassee, Leon County, and Florida Department of Transportation provide annual traffic counts on many roadways near campus and are presented in **Table 11.4**.

Table 11.4 - Existing Traffic Volume Count Summary

Roadway	Section	2002 Daily Volume	2003 Daily Volume	2006 Daily Volume
Tennessee Street	West of Wadsworth	49,690	51,687	55,662
	East of Copeland	41,189	40,705	41,022
Call Street	West of Convocation Way	6,612	5,702	7,084
College Avenue	East of Copeland	5,227	4,747	4,454
Copeland Street	North of Pensacola	4,871	4,474	4,418

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Roadway	Section	2002 Daily Volume	2003 Daily Volume	2006 Daily Volume
	North of Tennessee	3,909	3,666	4,195
Dewey Street	North of Call	6,757	7,422	7,159
	South of Virginia	7,611	6,629	5,637
Gaines Street	West of Gay	19,058	29,955	32,600
	East of Macomb	18,335	26,066	28,672
Jefferson Street	West of Gray	11,283	8,130	8,350
Macomb Street	South of Park	15,615	17,709	17,281
Madison Street	West of Gay	1,627	1,810	1,859
Pensacola Street	West of Haden	32,628	29,037	32,092
Pensacola Street	East of Copeland	11,751	7,628	6,801
Pensacola Street	West of Bronough	8,825	6,775	6,592
St Augustine Road	East of Stadium	12,897	7,062	7,823
	East of Lorene	12,469	7,652	8,165
Stadium Drive	North of St Augustine	15,311	10,355	14,073
	South of St Augustine	3,635	13,483	15,289
	South of Call	8,391	19,215	31,106
Woodward Avenue	South of St Augustine	9,765	5,997	6,689
	North of Jefferson	14,496	14,358	14,081

2002, 2003, 2006 COT and FDOT Traffic Counts

As detailed in Table 11.4, traffic volumes on several roadway segments near the campus edges have actually seen a decrease in total vehicles, while roadways such as Gaines Street have seen moderate to large increases. These changes are primarily the result of the Pensacola Street bridge closure, Woodward Avenue closure, and Stadium Drive widening projects. Additional changes will occur with the Gaines Street improvements under construction and the residual changes to the surrounding road network upon its completion.

1.h Existing University Trip Generation

Trip generation for the University is based on enrollment, employment, visitor, and service traffic calculations. Trip rates developed in the State University System Transportation Study (SUSTS) is the basis for calculating traffic generation for university campuses statewide. This study documented the trip generation and travel characteristics at 14 university campuses, including FSU.

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The primary results or products of the study were estimated auto trip rates (external), auto occupancies, and average trip lengths (external) for both students and employees (faculty/staff). At FSU, these characteristics are presented in **Table 11.5**.

Table 11.5 - External Auto Trip Characteristics (Daily)

Population	Auto Trip Rate ¹	Auto Occupancy ²	Average Trip Length ³
Students (Headcount)	1.52	1.27	2.96
Faculty/Staff	3.21	1.24	4.99
Dormitories	2.40	1.27	2.96

1 – Number of vehicle trip ends per day

2 – Persons per vehicle

3 – Miles

These FSU specific characteristics were based on personal interviews and daily trip logs administered to students and employees. The students and faculty/staff populations represent the independent variable regarding trip generation for the campus. Regarding on-campus housing or dormitories, the trip generation related to this land use is based on a Group Quarters land use from standard transportation models used throughout the state. A rate of 4.0 person trips/unit or bed is assumed, with a 60% person trips by auto usage rate. This yields the 2.40 auto trips/bed or 1.89-vehicle trips/bed after applying the auto occupancy rate of 1.27.

When the 1995 Master Plan was prepared, these trip rates and related traffic calculations were validated against traffic counts and a building size series of comparisons and calculations. In this validation, External Auto Trip Generation was estimated at 65,842 Daily Trips (1992-3) using trip generation rates applied to the known building sizes on campus, and 65,833 Daily Trips (1992-3) using the trip generation rates based on University population. This indicates that the population-based trip generation method correlates well to the building size method of trip generation.

To determine the total auto trip generation associated with the campus populations, a direct application of these rates to *population totals* (headcounts) was prepared. **Table 11.6** presents the Fall 2006 external auto trip generation for the FSU Campus. An update will be prepared as part of the next regular Master Plan Update.

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**Table 11.6 - External Auto Trip Generation:
By Population Totals (Fall 2006 Headcount Enrollment)**

Population	Size	Auto Trip Rate (Trips/Day)	Auto Occupancy (persons/auto)	Average Daily Trips
Students	35,985	1.52	1.27	43,069
Faculty/Staff	8,932	3.21	1.24	23,122
Dormitories	6,287	2.40	1.27	11,881
Visitor/Service				5,148
University Totals		83,220		

For comparison purposes, the Approved 2009-2010 (Table 11.10) totals for the above populations are as follows: Students=44,590; Faculty/Staff=26,040; Dormitories=11,970; Visitor/Service=5,729; and University Totals=88,329.

1.i Existing TAZ Identification

A map diagramming the existing Traffic Analysis Zones (TAZs) for the University is shown in **Figure 11.11**.

1.j Transit Route Identification

The Seminole Express Bus service consists of four routes: the Garnet and Gold shuttles provide alternate clockwise and counterclockwise circulation around the University. They travel from the University Center around the perimeter of campus, providing service every 10 minutes in each direction from 7:30 AM to 5:00 PM. The Garnet Shuttle also provides service every twenty minutes until 6:00 PM Monday to Thursday. These shuttles account for the majority of on-campus ridership. The Tomahawk Route runs from 7:30 AM to 4:45 PM every 20 minutes with a break in service from 1:10 PM to 1:50 PM. The Renegade Route runs from 7:30 AM to 5:00 PM every 20 minutes. **Figure 11.12** depicts the Seminole Express Bus routes.

Ridership

Maintained by StarMetro, Seminole Express ridership data was compiled for the latest available period, October 2005 through September 2006. Annual ridership for is presented in **Table 11.7**. Based on the figures presented, the impact of transit on internal campus automobile trip generation is quite substantial.

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Florida State University and StarMetro also provide a “fare-free” zone to students, faculty, and staff of the University. Faculty and staff with a current University identification card can ride from via a limited number of routes to or from the University. Students with a valid FSU ID may ride without charge on all city bus routes 7 days a week.

Ridership figures for this service continues to grow from 47,233 riders per year in 1990-1991 to 493,107 riders per year 2005-2006 (TalTran and StarMetro figures). A large part of this increase is due to an expansion of the number of routes covered by the fare-free zone.

**Table 11.7 - Seminole Express Annual Ridership
October 2005 - September 2006**

	Off-Campus Fare Free Zone	FSU Campus Routes	Total
Annual Ridership	493,107	1,091,533	1,584,640

Source: TalTran Unpublished Reports

For comparison purposes, the total ridership for the 2002-2003 period was 1,442,303 annual riders. For the three-year period since, an increase of 10% has occurred. The Fare Free Zone ridership alone increased from 407,708 to 493,107 riders, or approximately 20%. StarMetro and University staff members evaluate the individual routes and total service regularly in order to maximize the ridership and increase satisfaction.

2 Analysis Requirements

2.a. Future Parking Needs Analysis

Future parking facilities were calculated based on the *Final* master plan layout. **Table 11.8** presents a comparison of historical, existing parking as of periods 2010-11 (**Figure 11.1**), and future parking estimates for 2012. **Figure 11.13** depicts the Future Parking (2010) estimates by campus quadrant.

Table 11.8 – Main Campus Future Parking Inventory (spaces)

	YR 2010-11	YR 2015
Northwest Quadrant	5,472	5,933
Northeast Quadrant	2,782	2,787
Southwest Quadrant	5,368	5,441
Southeast Quadrant	1,847	3,042
TOTAL	15,469	17,203

Table 11.8a – Southwest Campus Additional Parking Needs

	Building	City Parking	Spaces
Additional Building:	Size (GSF)	Requirement	Req'd
First Five Year Planning Segment			
Materials Research Center	78,135	1 space per 250 sf	313
College of Engineering Addition	100,420	1.2 space per 1,000 sf	121
Research and Development Facility 4	85,000	1 space per 250 sf	340
Mag Lab Expansion	24,000	1 space per 250 sf	96
Intramural Sports Outdoor Complex Phase 1 & 2	*		900
Marine Science Teaching and Research Center	10,000	1.2 space per 1,000 sf	12
Subtotal			1,781
Second Five Year Planning Segment			
Research and Development Facility 5	85,000	1 space per 250 sf	340
Research and Development Facility 6	85,000	1 space per 250 sf	340
College of Engineering Addition (Phase 4)	99,500	1.2 space per 1,000 sf	119
FSU Research and Development Complex (Ph 1)	88,500	1 space per 250 sf	354
Subtotal			1,153
Total Southwest New Parking Demand Through 10 Year Planning Horizon			2,934

2.b Required Land Area Analysis

Table 11.9 details the net gain and land (acres) requirements for future parking facilities. The net gain in parking spaces between 2002-03 and 2010 is 5,000 spaces. Given the scarcity of land on the main campus, the addition of new parking space inventory is primarily in the form of parking garages, with a total of six parking garages planned for the campus, with existing surface lots being improved and locations for new surface lots being sought.

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Table 11.9 - Future Parking Acreage Requirement (2010)

Facility Type	Spaces Added by 2010	Spaces Per Area of Coverage	Land Area Required
Parking Garages	3,000	600 sp/acre	5 acres
Surface Parking	2,000	125 sp/acre	16 acres

It should be noted that the above parking inventory is based on estimated and generalized parking facility layouts. An average of 350 sf/space (surface lots) was assumed, however, actual parking facility size will vary based on parcel configuration, landscaping and other factors. However, these future space counts serve as a sound representation of the planned levels of parking.

2.c Assessment of Campus Capacity

The University campus is planned to contain sufficient land capacity to accommodate the construction of the additional 3,000 spaces beyond 2010. In addition to the five existing parking garages at the Woodward/Call intersection, the Woodward/Park intersection, the Stadium/Spirit Way intersection, and the Call/Macomb intersection, an additional garage is scheduled for construction in 2011 (the corner of Dunwoody / St. Augustine / Walker Streets) and a future garage (location yet to be identified). The surface lots are located throughout the campus in various lot configurations.

2.d Parking Reduction Analysis

It should be noted that FSU historically and continues to provide the fewest number of parking spaces per student than other campuses in the State University System. While the Master Plan includes the addition of five thousand spaces over the 2003 to 2010 period, the ratio of students per student permitted parking space is approximately three-to-one, or 0.3 spaces/student.

In regards to practical methods to reduce the amount of University parking needed, several goals, objectives and policies have been included to guide this outcome. Parking is dynamic in that *factors* such as supply, cost, auto ownership, transit service, lot location and access all play roles in determining the *demand*.

Policies contained in the Master Plan regarding these *factors* set a framework for addressing future parking at the University. Balancing the supply of parking with

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enhancements to alternative modes of travel (transit, bike, walking) is considered a key objective in the Master Plan. Policies for limiting parking supply within the campus core illustrate an approach to the *supply* side of the parking equation.

Regarding the demand side, policies supporting alternative modes of travel (Objective 1A) and Transportation Demand Management (TDM) techniques (Objective 1B) are also proposed. These objectives and related policies, combined with developing sound funding mechanisms (Objective 1C) strengthen the actual implementation of these policies, support pedestrian and bicycle policies, and further the University's vision for a walking and green space oriented campus.

2.e Analysis of Context Parking

As shown in **Figure 11.2**, approximately 1,201 spaces are currently available in the context area. The utilization rate of these spaces by university students, faculty/staff and visitors or the increase or decrease in supply is not quantified for future years. However, additional non-University "for fee" parking lots have been developed over the years near the campus. These lots generally provide proximate parking to the campus and do not consume University lands. In the future, lands currently used for parking lots are likely to be converted to higher and better land uses.

2.f Analysis of Off-Campus Parking to Context Area

As presented in the goals, objectives and policies, the university is not planning the addition of University parking outside of the campus limits.

2.g Future Traffic Volumes/Analysis

Future Traffic volumes, both University and non-University related were prepared for two (2) planning periods, which are the 2009-2010 academic year and the 2014-2015 academic year. As presented in the existing conditions section of this element (Section 1.h), University related trip generation was determined using *population based* estimates. **Tables 11.10 and 11.11** detail the *population based* trip generation for the Year 2009-2010 and 2014-2015 respectively.

**Table 11.10 - Approved External Auto Trip Generation:
By Population Totals (2009-2010)**

Population	Size	Auto Trip Rate (Trips/Day)	Auto Occupancy (persons/auto)	Average Daily Trips
Student	37,256	1.52	1.27	44,590
Faculty/Staff	10,059	3.21	1.24	26,040
Dormitories	6,334	2.40	1.27	11,970
Visitor/Services				5,729
University Totals				88,329

Table 11.11 details the external auto trip generation for University in the Year 2014-2015. It should be noted that the future year enrollment population projections are headcount projection rather than full-time equivalent (FTE) students. Faculty/staff totals represent a pro-rata ratio similar to existing student to faculty/staff ratios.

**Table 11.11 - Future External Trip Generation:
By Population Totals (2014-2015)**

Population	Size	Auto Trip Rate (Trips/Day)	Auto Occupancy (persons/auto)	Average Daily Trips
Student	39,640	1.52	1.27	47,443
Faculty/Staff	10,703	3.21	1.24	27,707
Dormitories	7,339	2.40	1.27	13,869
Visitor/Service				6,096
University Totals				95,115

Note: Visitor/Service trips are estimated at \pm 23% of Faculty/Staff trips.

In comparing the Approved 2010 trip generation levels (86,486 Daily Trips) from the 2005 Master Plan with the projected 2014-2015 level (95,115 Daily Trips), this represents a **9.9%** increase in traffic loads. This moderate increase is due in part to the relatively flat enrollment growth projected over the next 7-8 years of 3,655 students from Fall 2006 to 2014-2015.

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11 Transportation**2.h Future Roadway System**

The three components of the proposed FSU Master Plan roadway network are the *inner loop*, *loop connectors* and *perimeter loop*. These components are depicted in **Figure 11.14** and described as follows:

- Tier 1 – Inner Loop
- Tier 2 – Loop Connectors
- Tier 3 – Perimeter Loop

Tier 1 Inner Loop

The *Inner Loop* is the series of existing and improved roadways that encircle the main campus core. The function of Tier 1 roadways is to carry a low volume of traffic with university purposes exclusively. Tier 1 roadways will be used primarily by autos, service and transit vehicles. This loop system will serve as the spine of the university related transit service and a barrier between vehicular and non-vehicular modes of transportation inside the inner loop.

Tier 1 roadways include the following segments: **Jefferson Street** (Copeland Street-Pensacola Street); **Pensacola Street** (Jefferson Street-Chieftan Way); **Chieftan Way** (Pensacola Street-Academic Way); **Academic Way** (Chieftan Way-Dewey Street); **Dewey Street** (Academic Way-Call Street); **Call Street** (Dewey Street-Copeland Street); and **Copeland Street** (Call Street-Jefferson Street). The low to moderate volume of traffic on Tier 1 roadways will travel at low speeds with the aid of traffic calming devices, curves, and traffic control devices. The combination of low volume and low speed will make Tier 1 roadways pedestrian “friendly”.

Tier 2 Loop Connectors

The loop connector roadways are designed to function similarly to Tier 1 roadways in size and capacity, but will serve as links or *connectors* between Tier 1 and Tier 3 roadways. Loop connector roads will handle a mixture of host community traffic and campus traffic.

The primary function of these Tier 2 roads is to provide access to and from Tier 1, or *Inner Loop*, and Tier 3, or *Perimeter Loop*, for vehicles requiring access to the campus core. Examples of Tier 2 roadways are **Call Street** (Stadium-Chieftan); **Woodward Avenue** (Jefferson-Gaines); **College Avenue** (Copeland-Macomb); **Jefferson Street** (Copeland-Macomb) and **Copeland Street** (Jefferson-Gaines).

Tier 3 Perimeter Loop

The *Perimeter Loop* is the series of connected roadways serving as a general boundary for the FSU campus. Tier 3 roads are designed to carry a high volume of traffic to and around the University. These roads share functions with the host community and the University. The primary function of Tier 3 roads for the host community will be the efficient movement of traffic bypassing the University. Tier 3 roads will serve FSU by providing a conduit from the host community for University related traffic.

Tier 3 roadways include the following segments: **Gaines Street** (Macomb Street-Pensacola Street); **Stadium Drive** (Pensacola Street-Tennessee Street); **Tennessee Street** (Stadium Drive-Macomb Street) and **Macomb Street** (Tennessee Street-Gaines Street). Perimeter Loop roadways are designed as multi-lane arterials carrying a moderate to high volume of traffic at moderate overall speeds with traffic signals at major intersections.

2.i Analysis of Future Roadway System

The analysis for the future roadway system is being undertaken using the City of Tallahassee's QRS II traffic model set, which uses the location of the University's parking facilities as the primary means to determine traffic demands on area roadways. This traffic model is also used for transportation concurrency review of development projects in the city, and will be used to determine traffic assignment for purposes of negotiating a Campus Development Agreement (CDA) for the Master Plan.

For the purpose of this master plan update, the increase in University traffic from the this update has been determined and presented in **Section 2.g** for the projected levels of students, faculty/staff, on-campus housing, and visitor/service vehicles.

Improvements to roadways, intersections, transit service, and/or bicycle/pedestrian facilities will be examined during the Campus Development Agreement update as potential mitigation for the 2014-2015 traffic levels.

2.j Future Transit Service

As presented in **Section 1.j**, both campus level and local service level transit service exist today. In fact, ridership levels have continued to grow over the past years for both of these services. The *Goals, Objectives* and *Policies* of the FSU Master Plan outline a continued commitment and future enhancement to the existing transit service. Future transit concepts proposed in the FSU Master Plan are presented below and in **Figure**

Revised: 02 June 2011

11 Transportation

11.15. These concepts outline the intent and general service area for future transit systems and service.

Transit systems operating in the university environment are divided into four (4) levels of service. These systems are based on the following categories:

- Campus Circulator – Level 1
- Parking Express – Level 2
- StarMetro – Level 3
- Core Services – Level 4

Campus Circulator (Level 1)

Circulatory transit is the primary level of transit operating within the boundaries of the University. Level 1 transit is devised to transport or circulate students, faculty, and staff to/from perimeter campus activities to other campus locations and interface with other levels of transit service. This level of transit service will be routed over many Tier 1, Tier 2, and Tier 3 roadways, providing service to all aspects of the campus.

Remote Operations (Level 2)

The second level of transit service is direct transit between off-campus facilities and select campus locations. This system is designed to operate with minimal headways to specific, high demand campus destinations. The Heritage Grove shuttle service is an example of this level of transit. Level 2 transit will also service FSU remote activities (e.g., College of Engineering, Alumni Village, and shuttle services to FAMU).

TalTran (Level 3)

Unlike the on-campus transit levels that are university specific services, Level 3 is operated by StarMetro (formerly called TalTran) and is part of the transit system of the larger Tallahassee region. StarMetro should continue to operate "fare free" service to students, with an expansion to include faculty and staff and future area developments. Existing StarMetro stops will generally remain the same with penetration into the campus only to the *inner loop*. Level 3 service will continue as the main transit service from the host community to the campus.

Core Services (Level 4)

The Level 4 transit system is envisioned as a future option to enhance transit service on campus. Level 4 Core Services would incorporate small-scale transportation services or vehicles to enhance mobility for the disabled, improve local on-campus traffic

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related to special events, and provide for transportation on-campus for activities such as campus tours. These future transportation improvements can be planned for in the Master Plan through planning for expanded widths of existing paths to accommodate future transportation needs and looking for candidate pathways that could be added to the campus to accommodate vehicles such as electric golf cart type vehicles that

2.k Alternative Transportation Techniques

The FSU Master Plan outlines the envisioned future roadway, transit and parking systems. Initiatives regarding TDM strategies and other non-auto related travel options are also included in the plan. Objectives and policies detailing the coordination and joint participation activities (Objective 1B) are combined with policies regarding information exchange on TDM opportunities for student, faculty and staff set a framework to developed new programs and enhance existing University and host community initiatives.

Enhancements to transit systems (Objective 1A), roadway systems (Objective 2A and Objective 2B), and pedestrian/non-vehicular systems (Goal 4) are envisioned in the Master Plan. The development of detailed data regarding future housing locations, academic scheduling options, and monitoring programs are also considered important elements in the continued evaluation of University related travel characteristics and their interaction with the host community. An enhanced intergovernmental coordination initiative which includes community goal setting, data/resource sharing and area wide visioning between the City of Tallahassee, Leon County, State of Florida and Florida State University is considered important for the successful growth and enhancement of the University.

2.l Permit Description

Parking within the University is divided into areas designated by certain decal categories. Areas designated “R” or “Red” are for faculty or staff parking. White (“W”) parking designates student parking. Other categories of parking include, Handicap, State Reserved, Loading Zone, Service, and Visitor/Metered. Students, faculty and staff are permitted to park in their designated lots only. After 4:00 PM all lots are open to anyone with a valid parking decal.

2.m Fee Description

A limited number of metered parking spaces are provided at the campus. Approximately 367 metered spaces are available on the Main Campus for visitors or parking permit owners at a cost of twenty-five cents (\$0.25) per hour. In 2000, the

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University instituted a Student Activity Fee for Transportation on a per credit hour basis for all students.

Conclusion

Originally developed in the age of horse and buggies, Florida State University's Main Campus provides unique opportunities and challenges for transportation planning. The campus of 1851, once isolated at the perimeter of the city, has grown into the fabric of Tallahassee. Campus parking, transit and circulation are complex issues intertwined with the development of Tallahassee. The Main Campus must find ways to ameliorate the impacts the campus and host community have on each other. This can be addressed by recognizing the following set of guidelines:

- Context parking satisfies a small portion of the total demand for parking. As the University grows and land becomes scarce, the context area may provide a larger proportion of the parking demand for the University. Parking policies should compliment the development of a pedestrian and transit friendly campus.
- Transit provides a high level of mobility at Florida State University. It softens the impact of student, faculty and staff trips both within the campus and the host community. The University should promote policies to support increased use of transit services provided as well as policies that investigate transportation alternatives.
- Roadways surrounding and traveling through the University are heavily traveled, including some that are currently or are projected to operate at or near locally established level of service standards. Circulation routes within and surrounding the University should be evaluated with safety, both vehicular and non-vehicular, as the first concern. The University must coordinate with local and State transportation decision makers to assure roadways in or near the University support safety, community, and aesthetic requirements.

Florida State University presents unique circumstances regarding transportation. It is an objective of the University to build upon its success in the transportation arena. The concepts and goals of the Florida State University Master Plan enhance the commitment to achieving continued success.

Revised: 02 June 2011

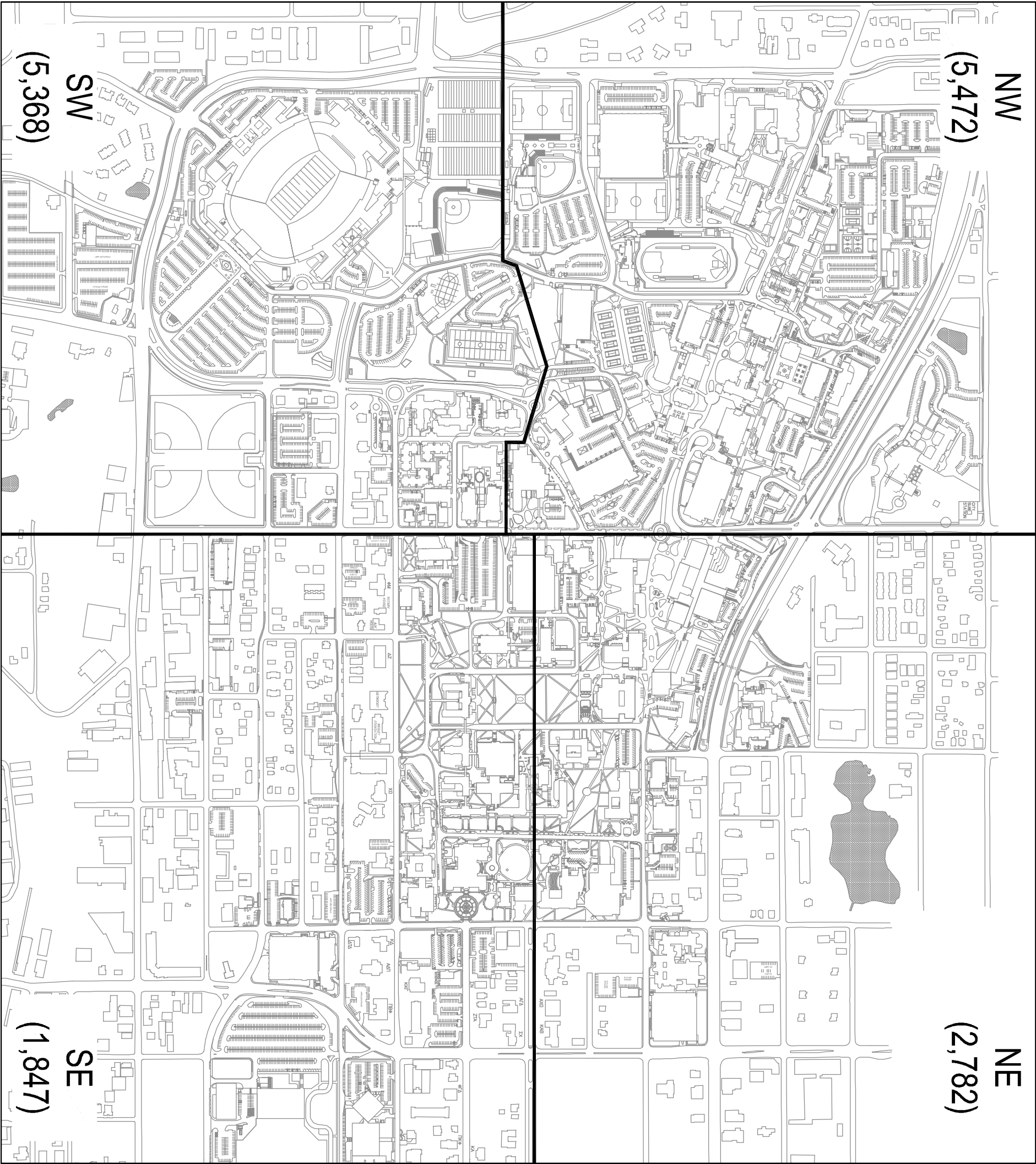


FIGURE 11.1

EXISTING PARKING SUPPLY

EXISTING CONDITIONS

NW QUADRANT	=	5,472
NE QUADRANT	=	2,782
SW QUADRANT	=	5,368
SE QUADRANT	=	1,847

TOTAL SPACES = 15,469*

LEGEND:

SE QUADRANT DESIGNATION

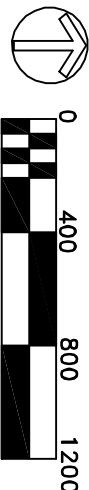
TOTAL PARKING SPACES IN QUADRANT (1,550)

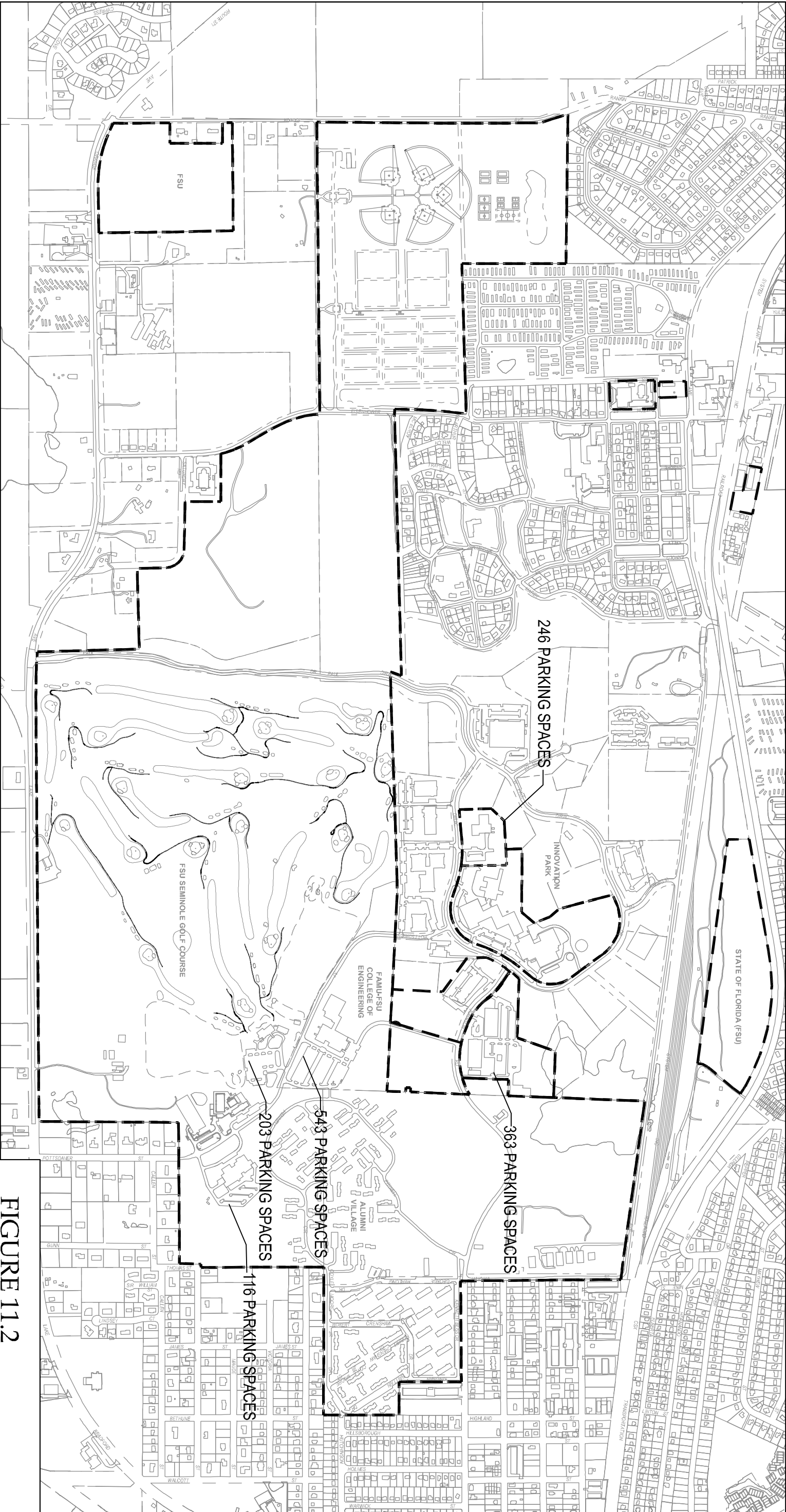
QUADRANT BOUNDARY

SOURCE:
FSU Parking Services
*Latest data available by quadrant is for the year 2010.

COMPREHENSIVE MASTER PLAN
FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLORIDA

SUPPORTING DATA
13 JUNE 2008
REV.: 02 JUNE 2011





LEGEND:

SOURCE:
BASEMAP BY FSU
MASTER PLAN BY PARSONS

COMPREHENSIVE MASTER PLAN
FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLORIDA

SOUTHWEST CAMPUS
SUPPORTING DATA

FIGURE 11.2
EXISTING PARKING

SD
13 JUNE 2008
REV.: 02 JUNE 2011



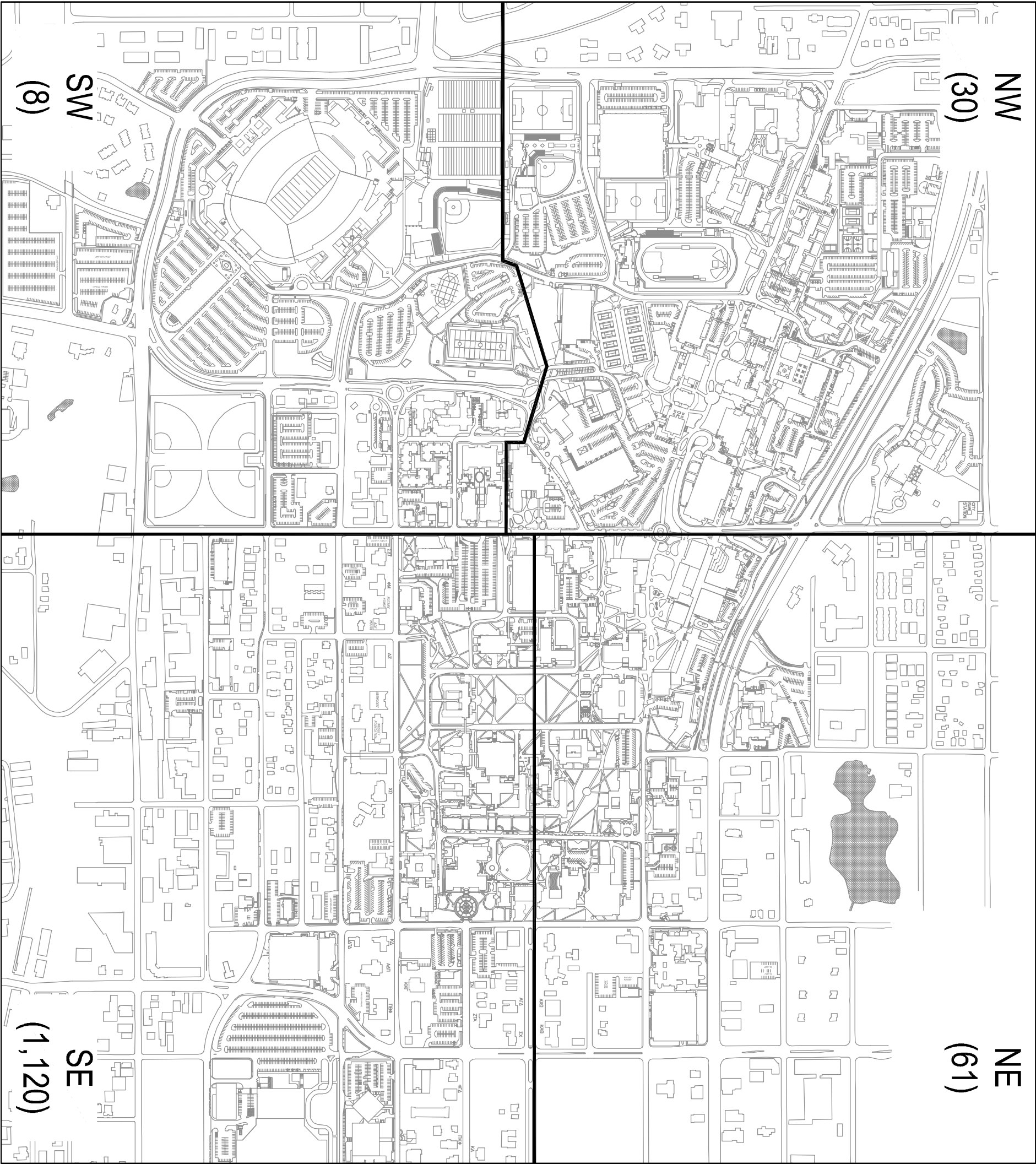


FIGURE 11.3

EXISTING CONTEXT
PARKING

EXISTING CONDITIONS

NW QUADRANT	=	30
NE QUADRANT	=	61
SW QUADRANT	=	8
SE QUADRANT	=	1,102

TOTAL SPACES = 1,201

LEGEND:

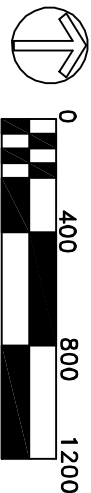
SE QUADRANT
DESIGNATION

(1,550)
TOTAL PARKING
SPACES IN
QUADRANT

QUADRANT
BOUNDARY

SOURCE:

COMPREHENSIVE MASTER PLAN
FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLORIDA
SUPPORTING DATA
13 JUNE 2008
REV.: 02 JUNE 2011



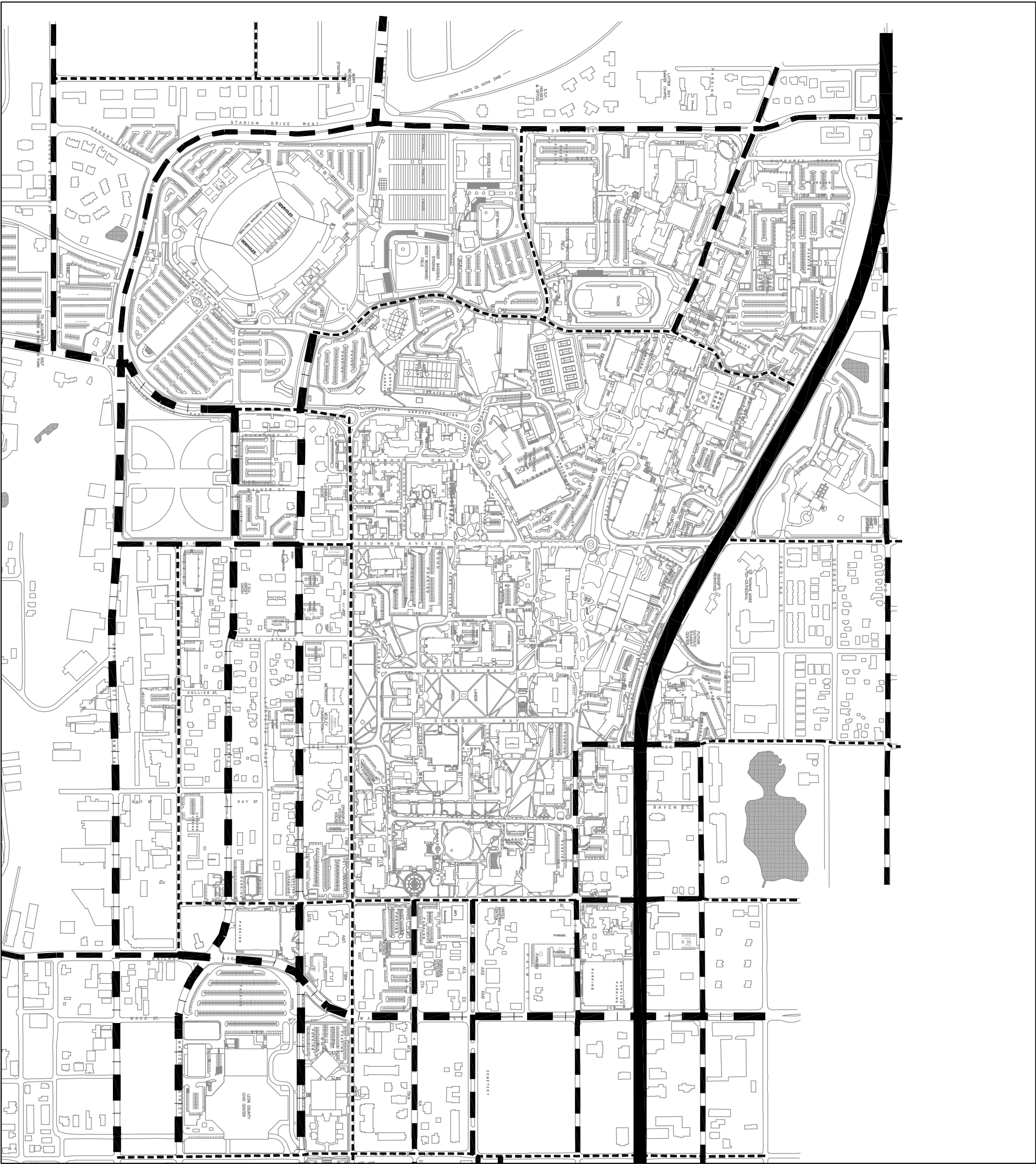


FIGURE 11.4

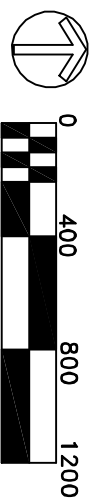
CAMPUS ROADS
FUNCTIONAL
CLASSIFICATION

LEGEND:

- MINOR COLLECTOR
- - - MAJOR COLLECTOR
- | — MINOR ARTERIAL
- PRINCIPLE ARTERIAL

SOURCE:
TALLAHASSEE, LEON COUNTY
PLANNING DEPARTMENT

COMPREHENSIVE MASTER PLAN
FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLORIDA
SUPPORTING DATA
13 JUNE 2008
REV.: 02 JUNE 2011



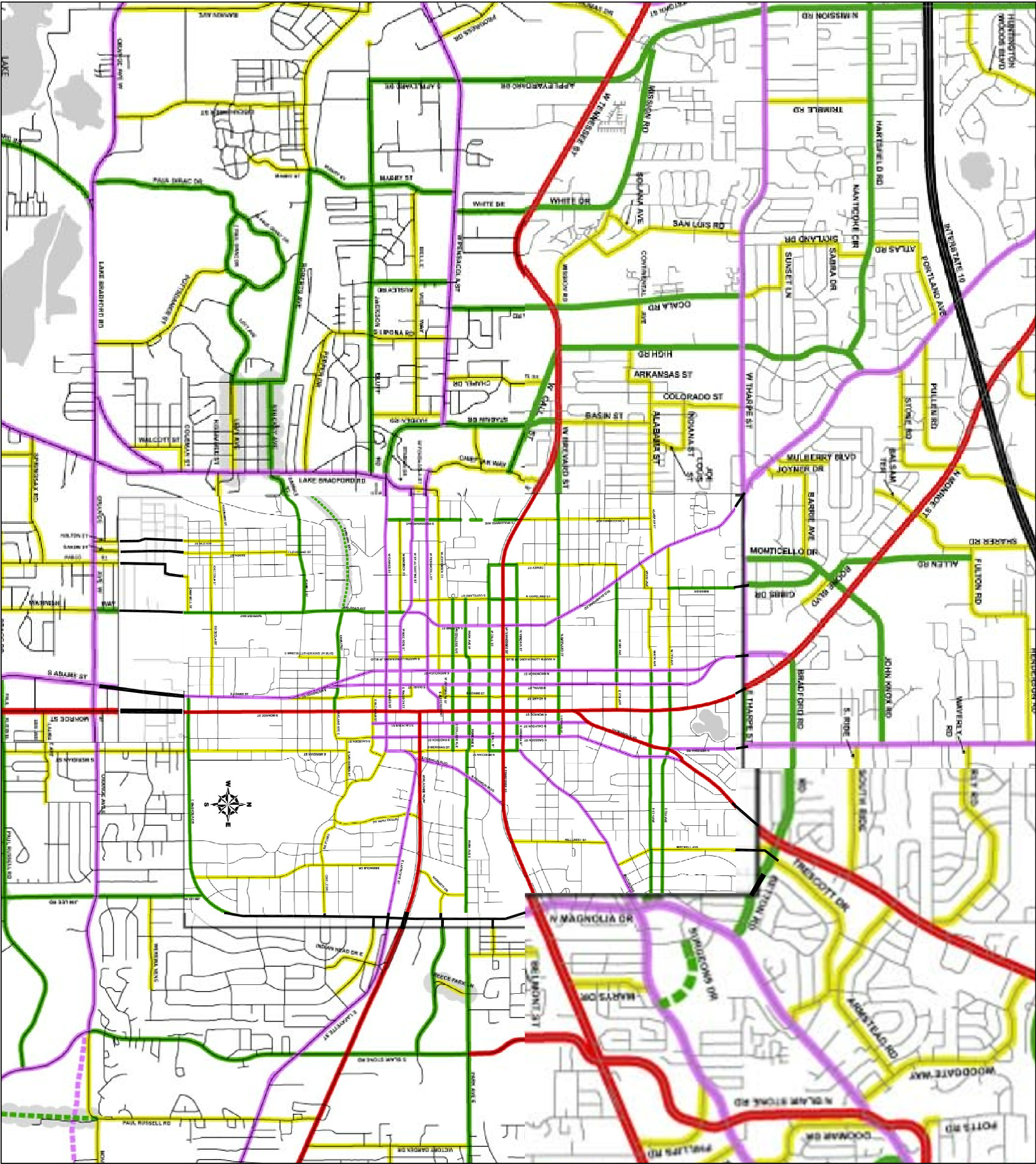
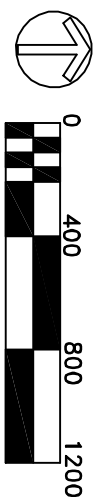


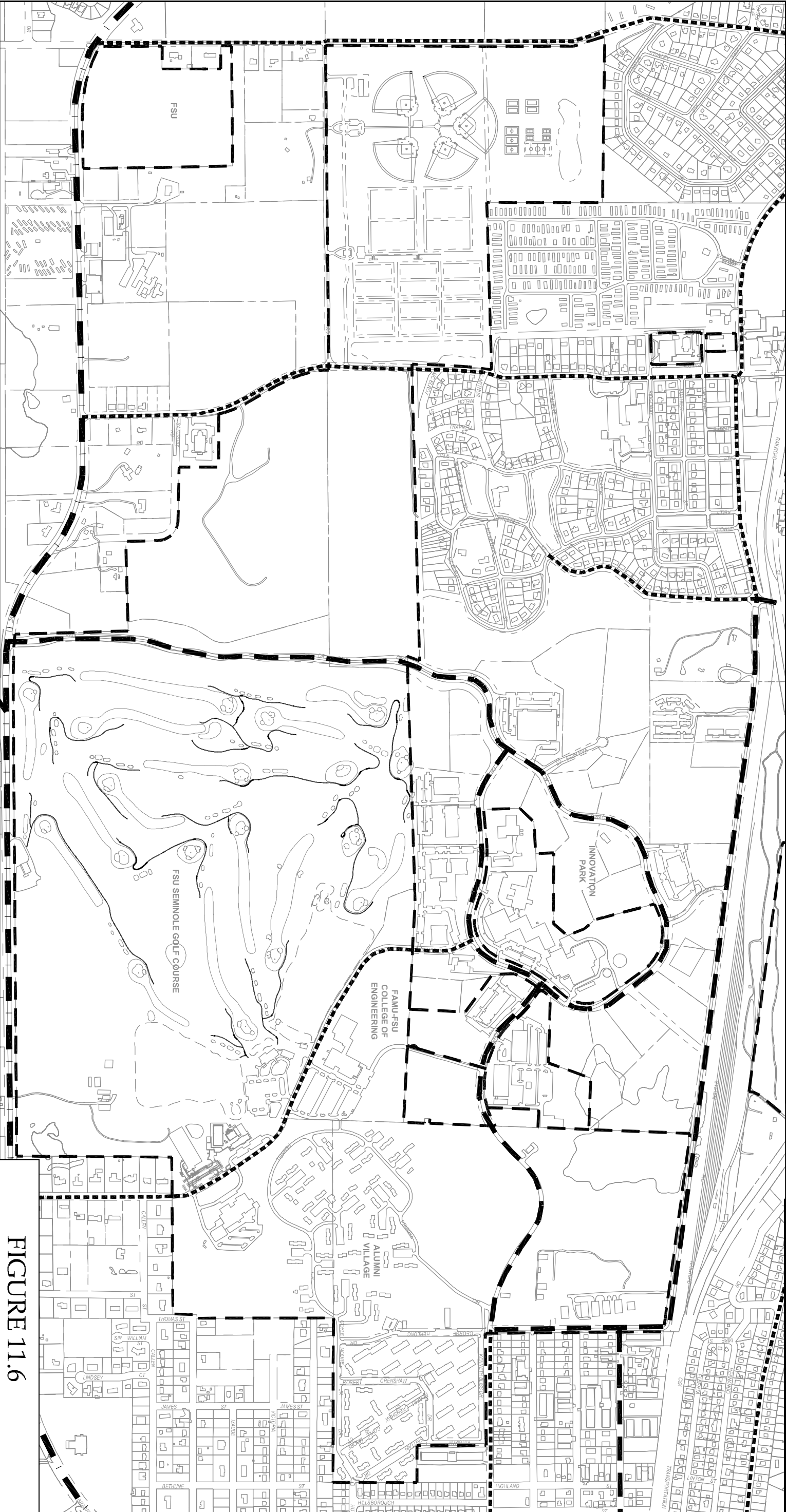
FIGURE 11.5
CONTEXT AREA
FUNCTIONAL
CLASSIFICATION

- Legend**
- LOCAL
 - MINOR COLLECTOR
 - MAJOR COLLECTOR
 - MINOR ARTERIAL
 - PRINCIPLE ARTERIAL
 - PA LIMITED ACCESS
 - FUTURE ROADWAYS

SOURCE:
TALLAHASSEE, LEON COUNTY
PLANNING DEPARTMENT

COMPREHENSIVE MASTER PLAN
FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLORIDA
SUPPORTING DATA
13 JUNE 2008
REV.: 02 JUNE 2011





LEGEND: - - - - - MINOR COLLECTOR
 - - - - - MAJOR COLLECTOR
 - - - - - MINOR ARTERIAL
 - - - - - PRINCIPLE ARTERIAL

ROADWAY FUNCTIONAL
CLASSIFICATION

FIGURE 11.6

SOURCE:
BASEMAP BY FSU
MASTER PLAN BY PARSONS
FEMA FIRM MAPS (2009)
(12073C0286F, 12073C0287F, 12073C0291F)

COMPREHENSIVE MASTER PLAN
FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLORIDA

SOUTHWEST CAMPUS
SUPPORTING DATA

SD
13 JUNE 2008
REV.: 02 JUNE 2011



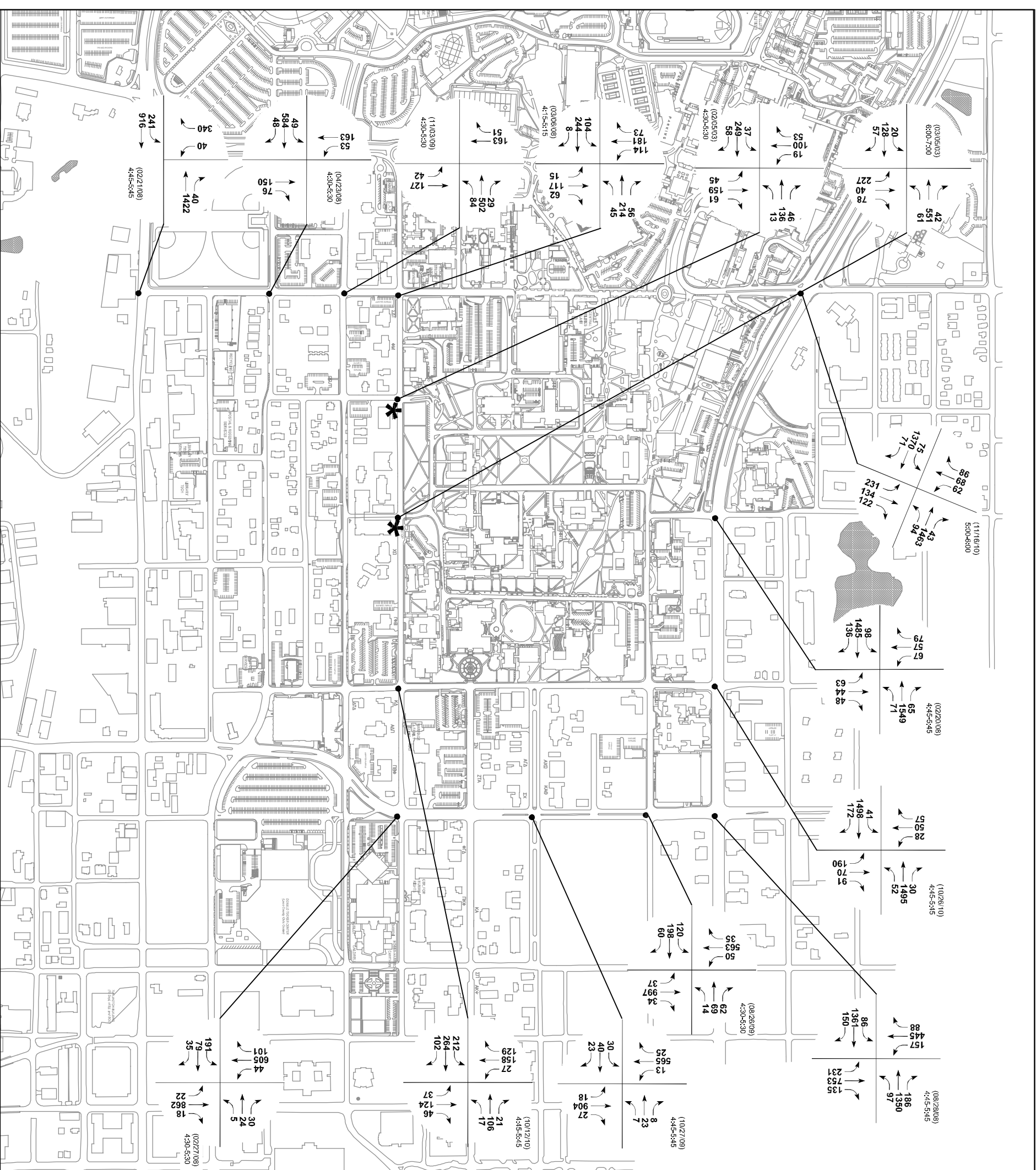
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1

CITY OF IALAHASSE

13 JUNE 2008

REV: 02 JUNE 2011



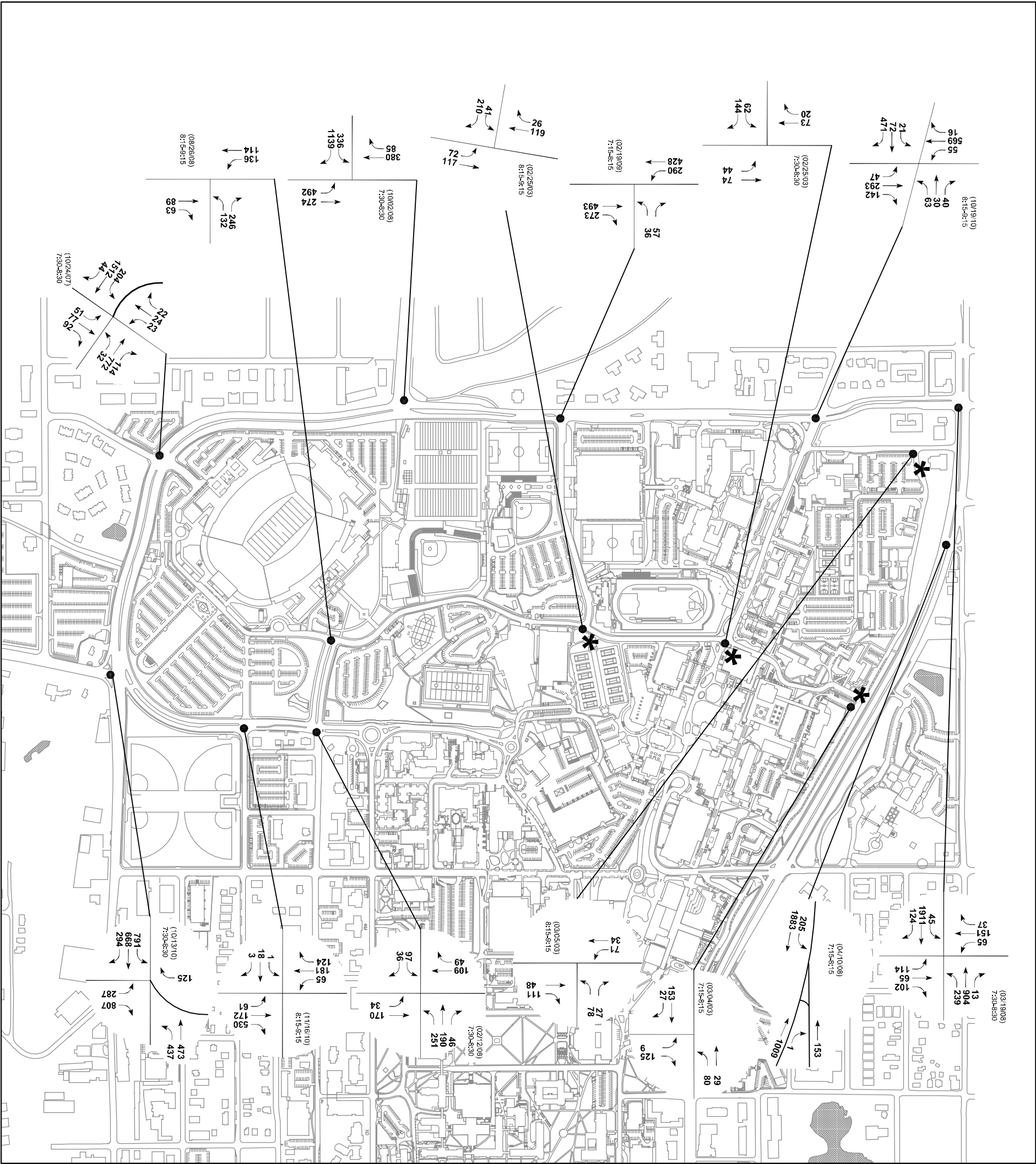


FIGURE 11.9

Existing AM Peak
Hour Traffic
West Campus

EXISTING CONDITIONS

LEGEND:

45 = Right Turns
180 = Thrus
63 = Left Turns

SOURCE:
CITY OF TALLAHASSEE
* DATA PER MOORE BASS CONSULTING
2003 TRAFFIC COUNTS

COMPREHENSIVE MASTER PLAN
FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLORIDA
SUPPORTING DATA
13 JUNE 2008
REV.: 02 JUNE 2011

0 400 800 1200

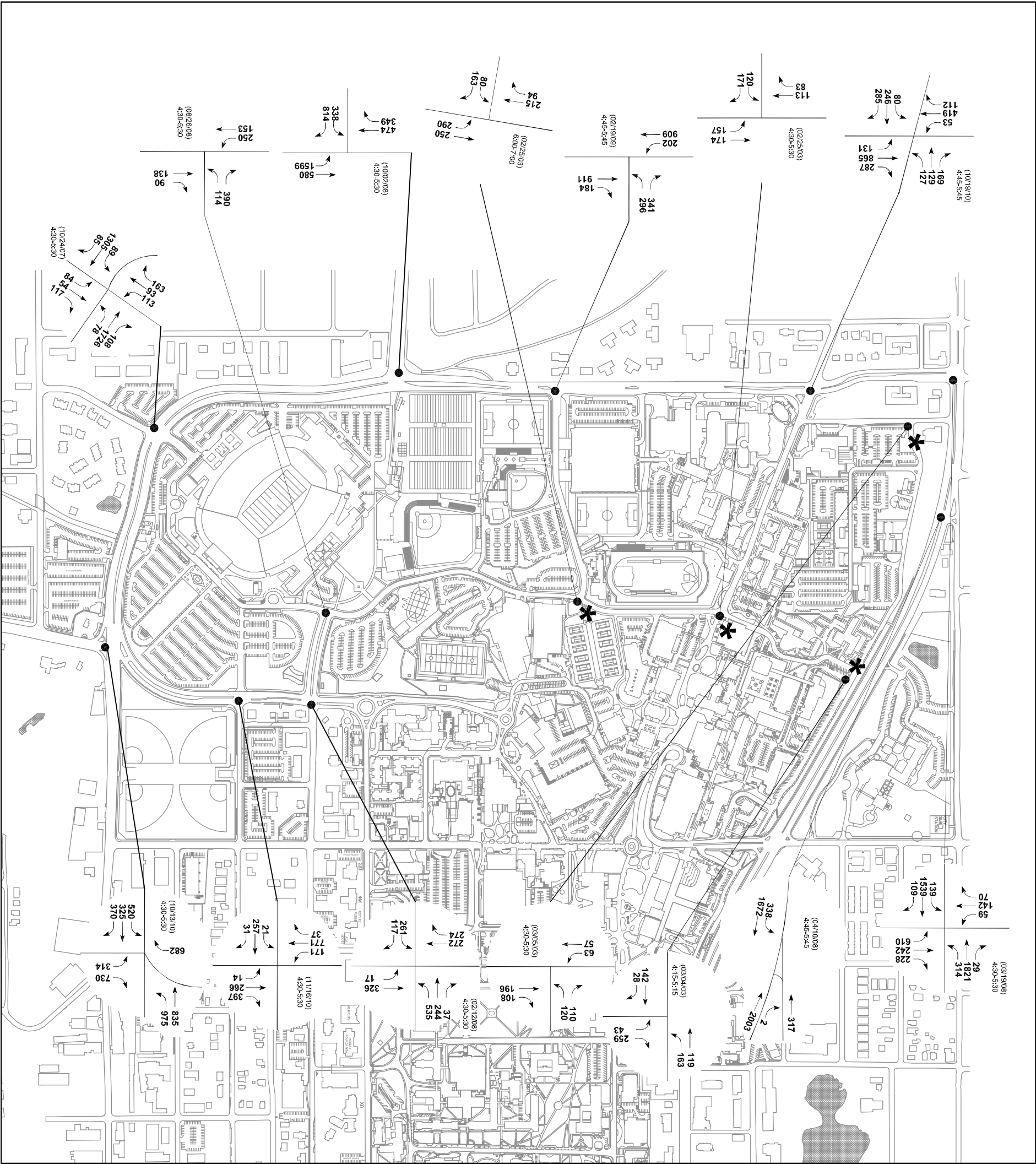


FIGURE 11.10

Existing PM Peak
Hour Traffic
West Campus

EXISTING CONDITIONS

LEGEND:

45 = Right Turns
180 = Thrus
63 = Left Turns

SOURCE:
CITY OF TALLAHASSEE
* DATA PER MOORE BASS CONSULTING
2003 TRAFFIC COUNTS

COMPREHENSIVE MASTER PLAN
FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLORIDA
SUPPORTING DATA
13 JUNE 2008
REV.: 02 JUNE 2011

0 400 800 1200

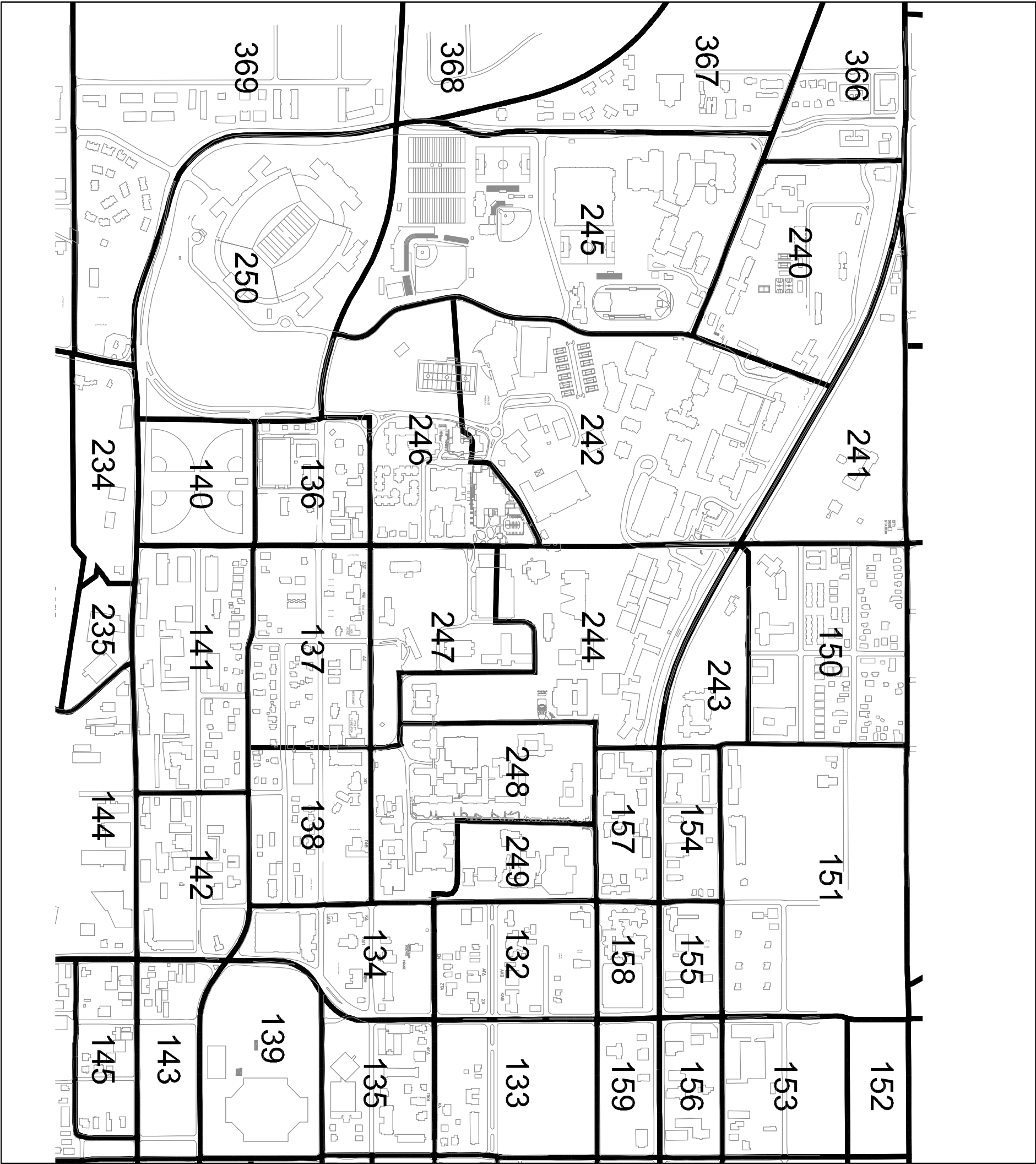


FIGURE 11.11

TRAFFIC ANALYSIS ZONES

LEGEND:

— TRAFFIC ANALYSIS
ZONE BOUNDARY

93 TRAFFIC ANALYSIS
ZONE DESIGNATION

SOURCE:
CAPITAL REGIONAL
TRANSPORTATION PLANNING
AGENCY

COMPREHENSIVE MASTER PLAN
FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLORIDA

SUPPORTING DATA
13 JUNE 2008
REV.: 02 JUNE 2011



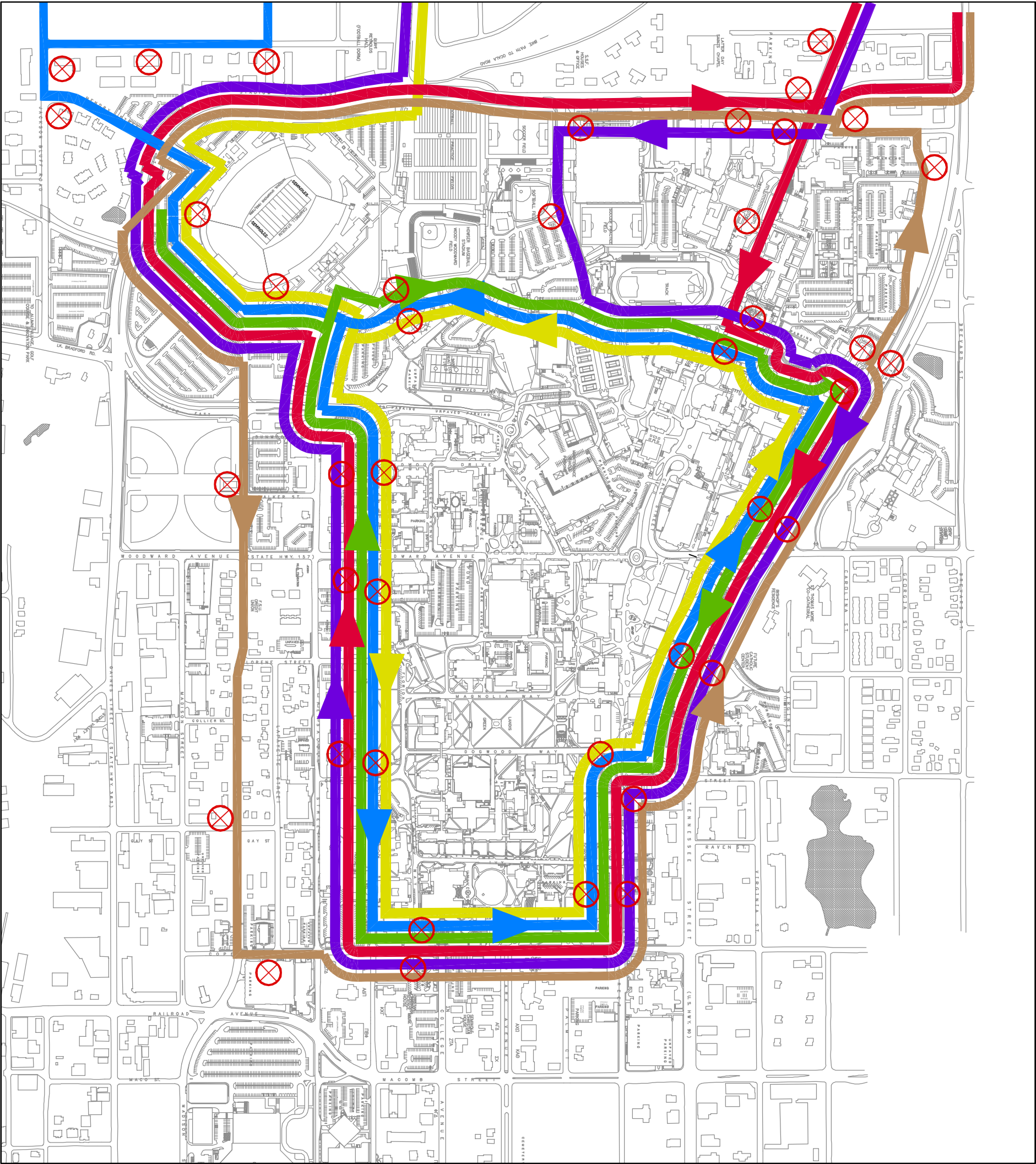


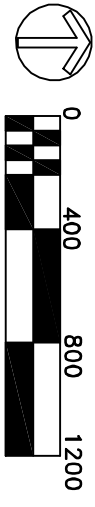
FIGURE 11.12

TRANSIT ROUTES
SEMINOLE EXPRESS

- LEGEND:
- GARNET (HIGH / OCALA)
SHUTTLE
 - GOLD (DIXIE / WHITE)
SHUTTLE
 - HERITAGE GROVE
SHUTTLE
 - TOMAHAWK (JACKSON
BLUFF) SHUTTLE
 - RENEGADE (CAMPUS
LOOP) SHUTTLE
 - OSCEOLA (APPLEYARD)
SHUTTLE
 - BUS STOP

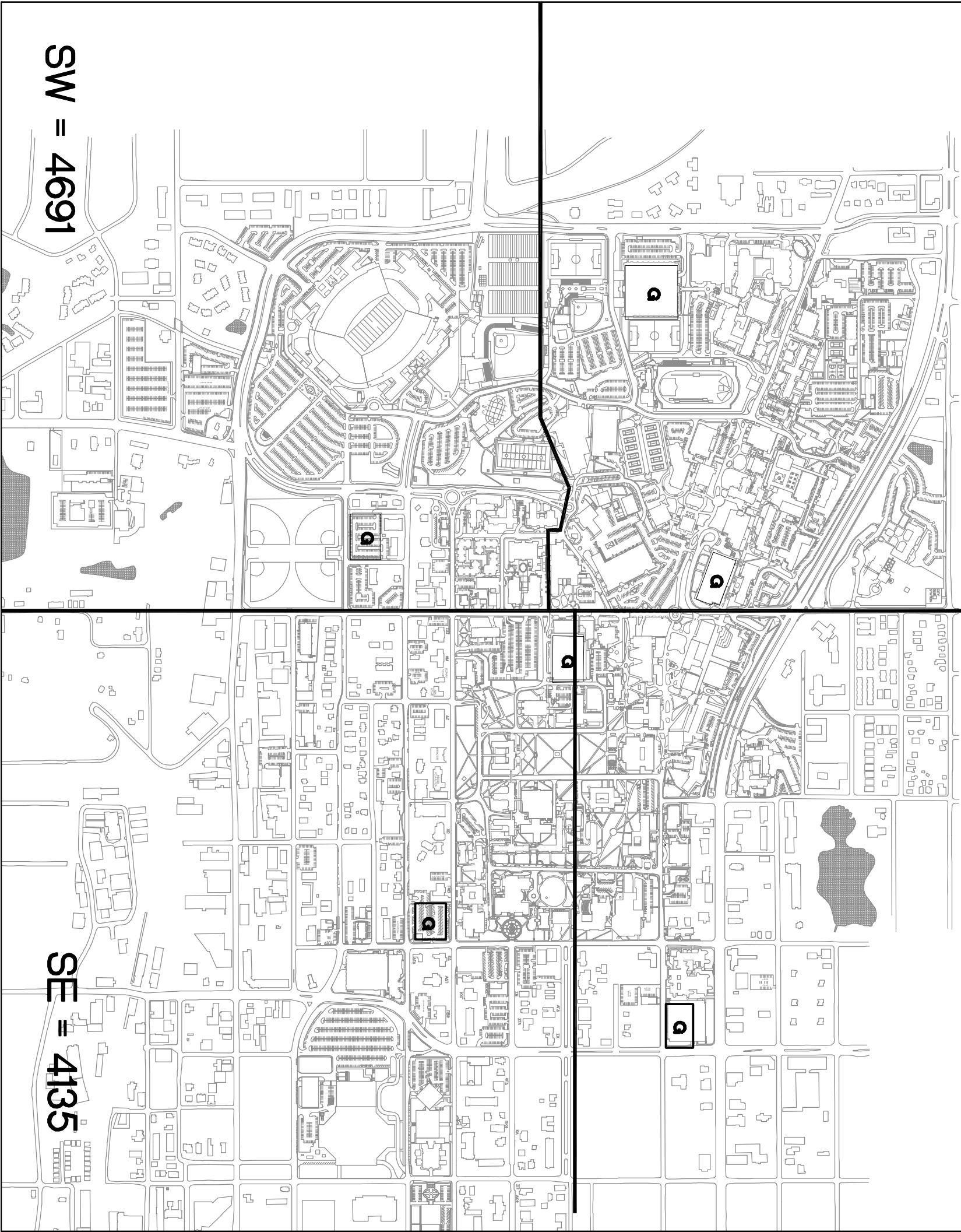
SOURCE:
FSU Parking Services
Star Metro Route Map

COMPREHENSIVE MASTER PLAN
FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLORIDA
SUPPORTING DATA
13 JUNE 2008
REV.: 02 JUNE 2011



NW = 5622

NE = 2755



SW = 4691

SE = 4135

FIGURE 11.13

FUTURE PARKING

NW QUADRANT	=	5622
NE QUADRANT	=	2755
SW QUADRANT	=	4691
SE QUADRANT	=	4135
TOTAL SPACES	=	17,203

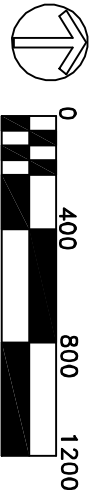
LEGEND:

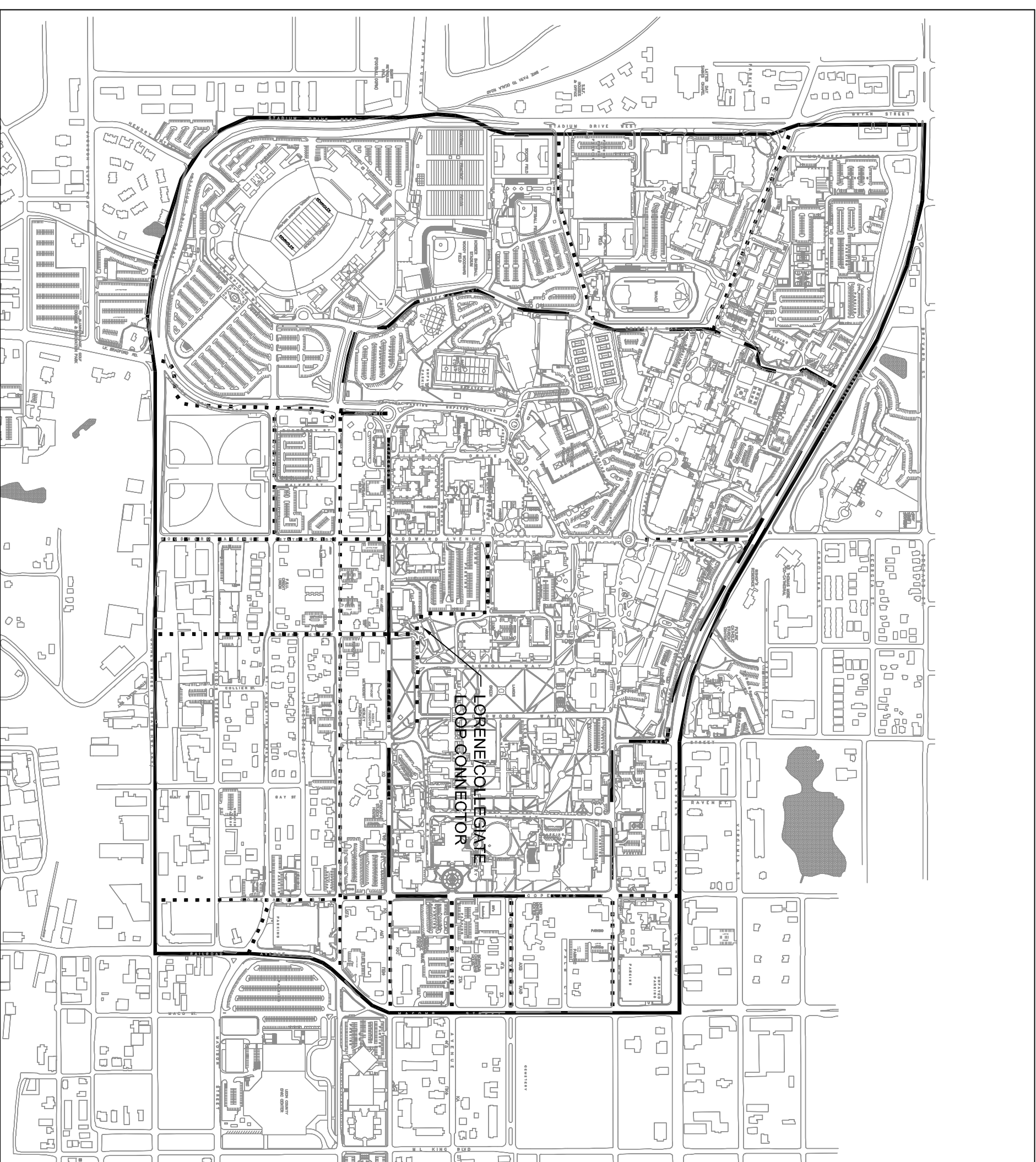
a Future Parking
Garage

SOURCE:

BASEMAP BY FSU
MASTER PLAN BY PARSONS

COMPREHENSIVE MASTER PLAN
FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLORIDA
SUPPORTING DATA
13 JUNE 2008
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LEGEND:

TIER 1
(INNER LOOP)

- • • •

TIER 2
(LOOP CONNECTORS)

TIER 3
(PERIMETER LOOP)

SOURCE:

COMPREHENSIVE MASTER PLAN
FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLORIDA
SUPPORTING DATA
13 JUNE 2008
REV.: 02 JUNE 2011

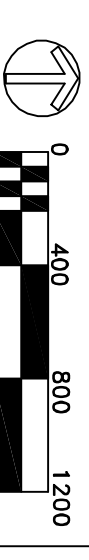
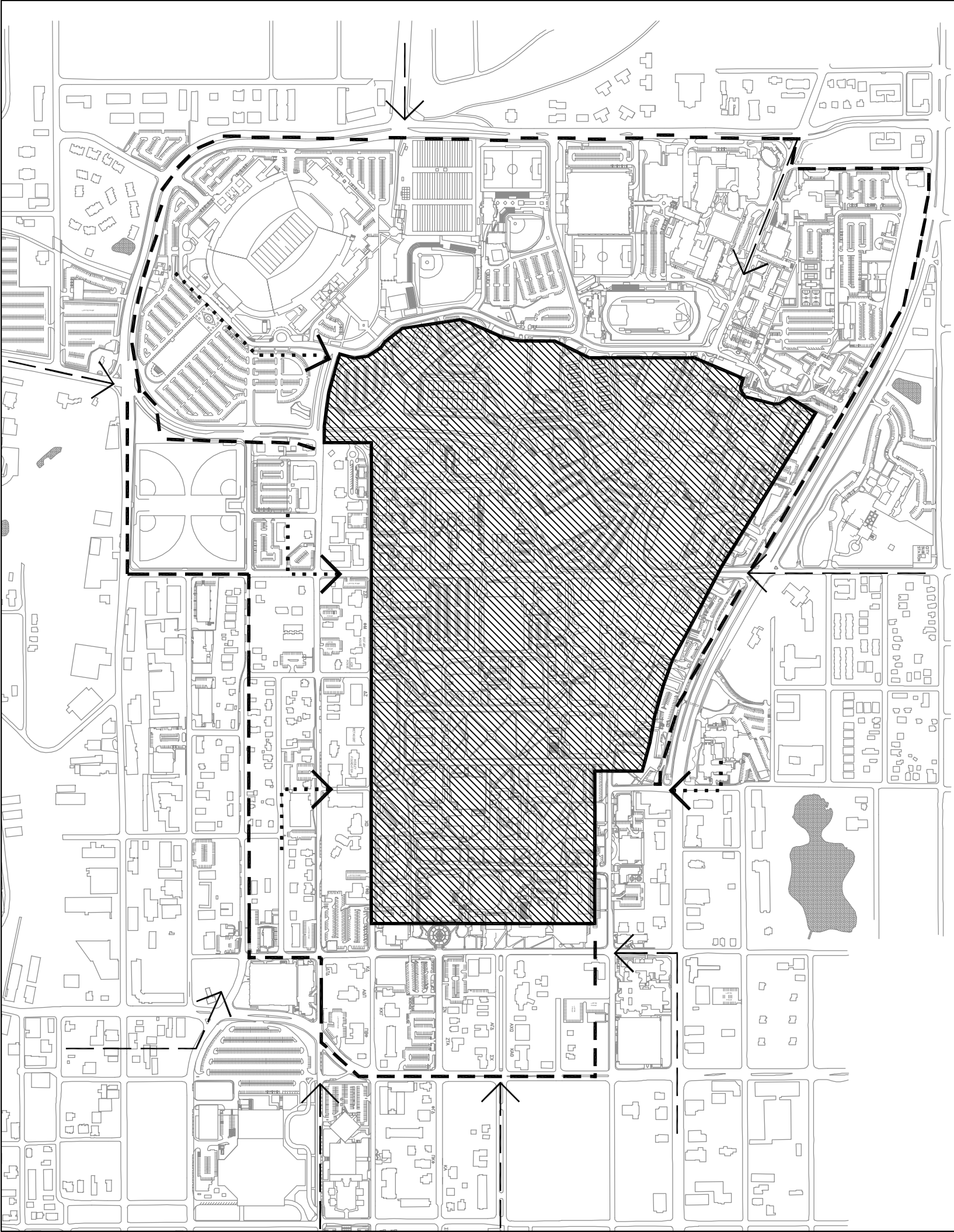


FIGURE 11.15

**FUTURE TRANSIT
CONCEPTS**

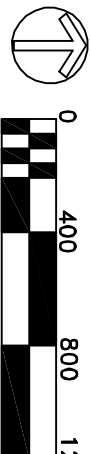


LEGEND:

- TRANSIT SPINE
(INNER LOOP)
- ▨ LEVEL 1
(CORE)
- - - LEVEL 2
(CIRCULATORS)
-> LEVEL 3
(EXPRESS)
- > LEVEL 4
(TAL TRAN)

SOURCE:

COMPREHENSIVE MASTER PLAN
FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLORIDA
SUPPORTING DATA
13 JUNE 2008
REV.: 02 JUNE 2011



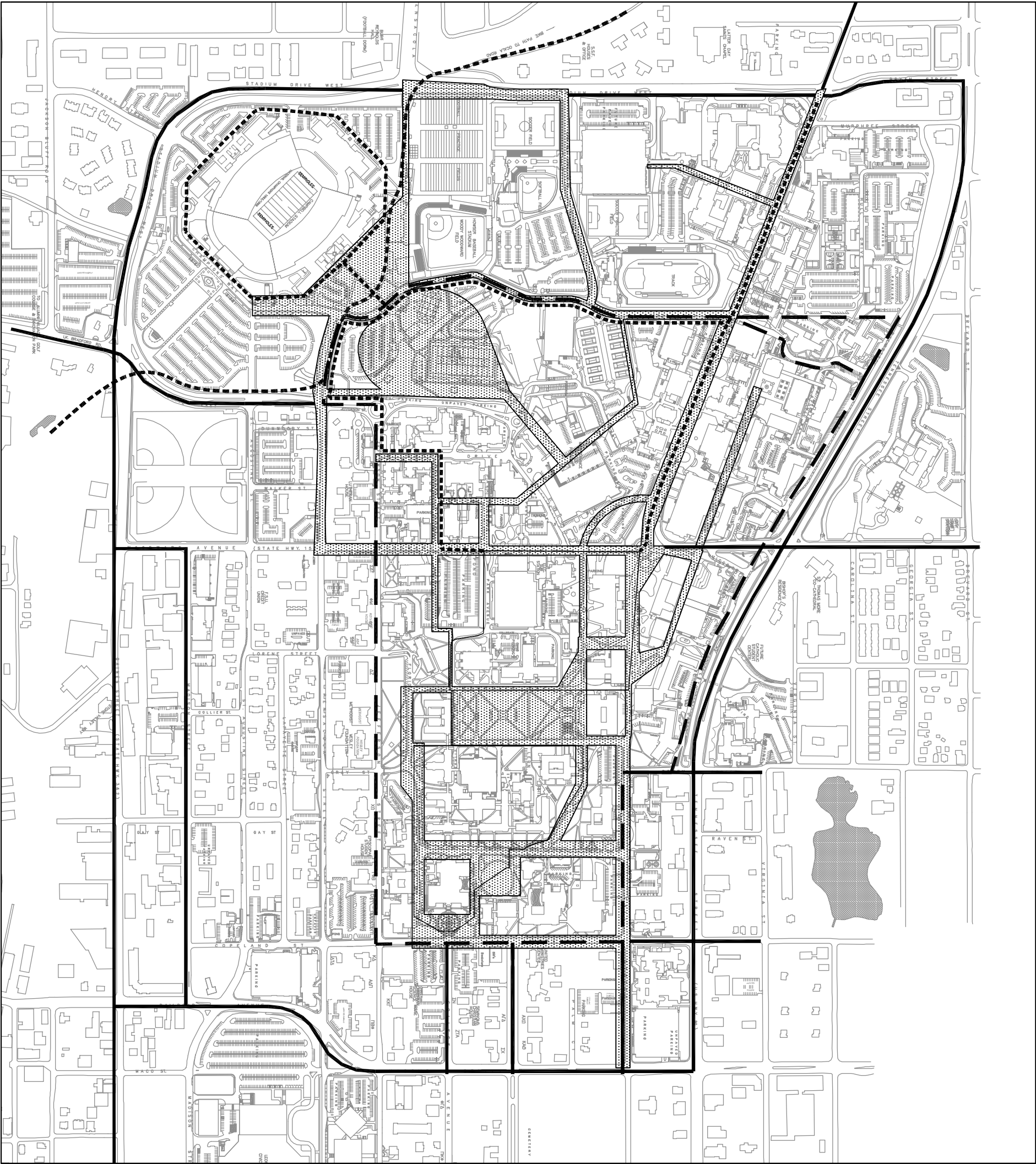


FIGURE 11.16

CAMPUS BICYCLE AND PEDESTRIAN CIRCULATION NEEDS

LEGEND:

- MAJOR BICYCLE/ PEDESTRIAN ZONES
- MAJOR PEDESTRIAN/ BICYCLE ROUTES
- BICYCLE ROUTE ON INNER LOOP SYSTEM
- LEGACY WALK EXISTING ROUTE
- LEGACY WALK FUTURE ROUTE
- ST. MARKS TRAIL

SOURCE:

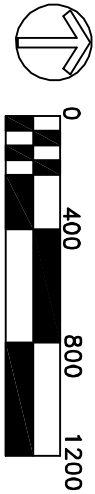
FSU Facilities Planning
2010–2011

COMPREHENSIVE MASTER PLAN
FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLORIDA

SUPPORTING DATA

13 JUNE 2008

REV.: 02 JUNE 2011



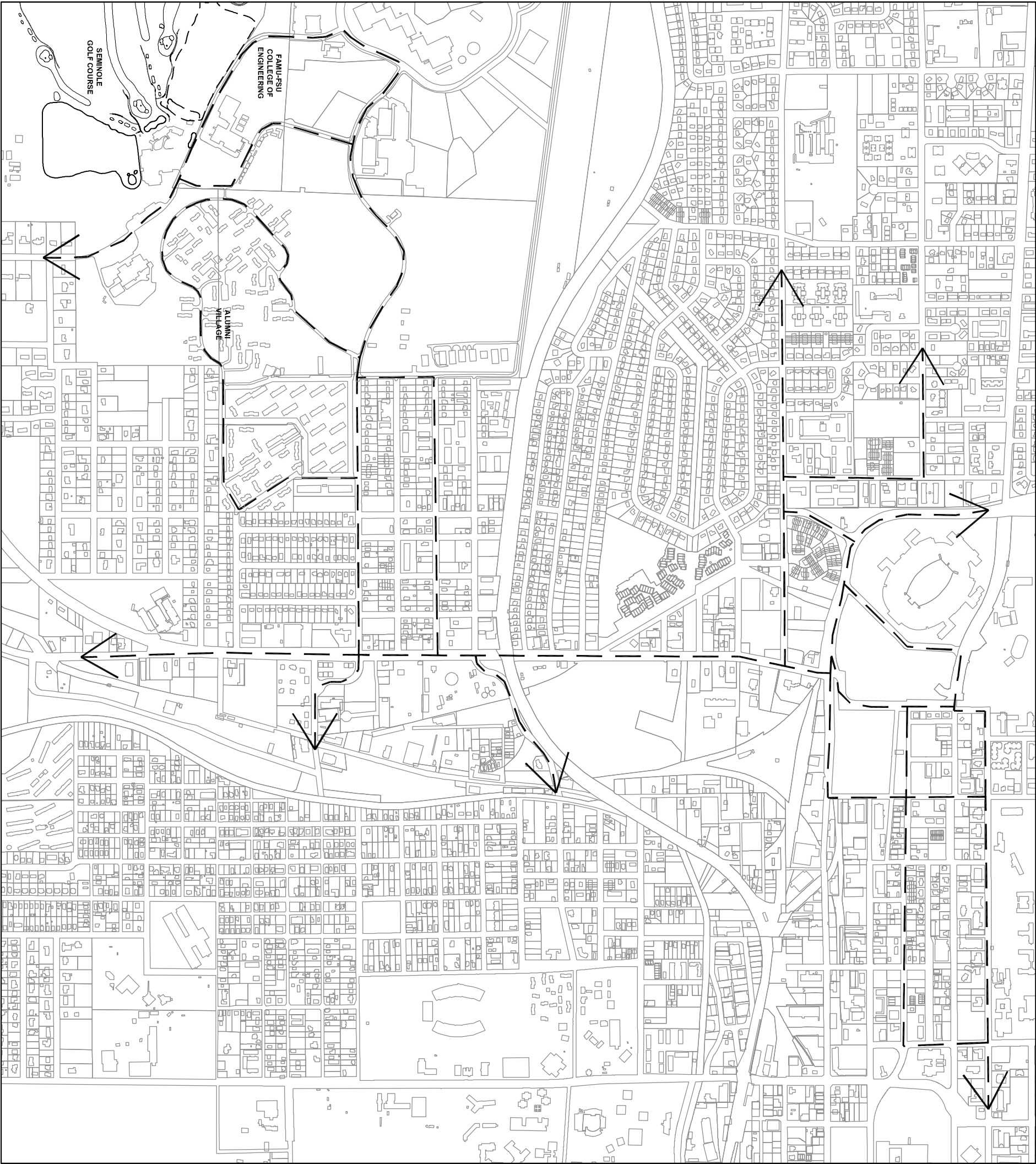


FIGURE 11.17

TRANSIT
LINKAGES
MAIN CAMPUS AND
SW CAMPUS

LEGEND:

— — TRANSIT SERVICE

SOURCE:
FSU PARKING SERVICES AND
CITY OF TALLAHASSEE TRAFFIC
ENGINEERING - STAR METRO

COMPREHENSIVE MASTER PLAN
FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLORIDA
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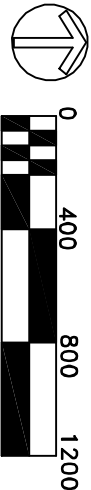
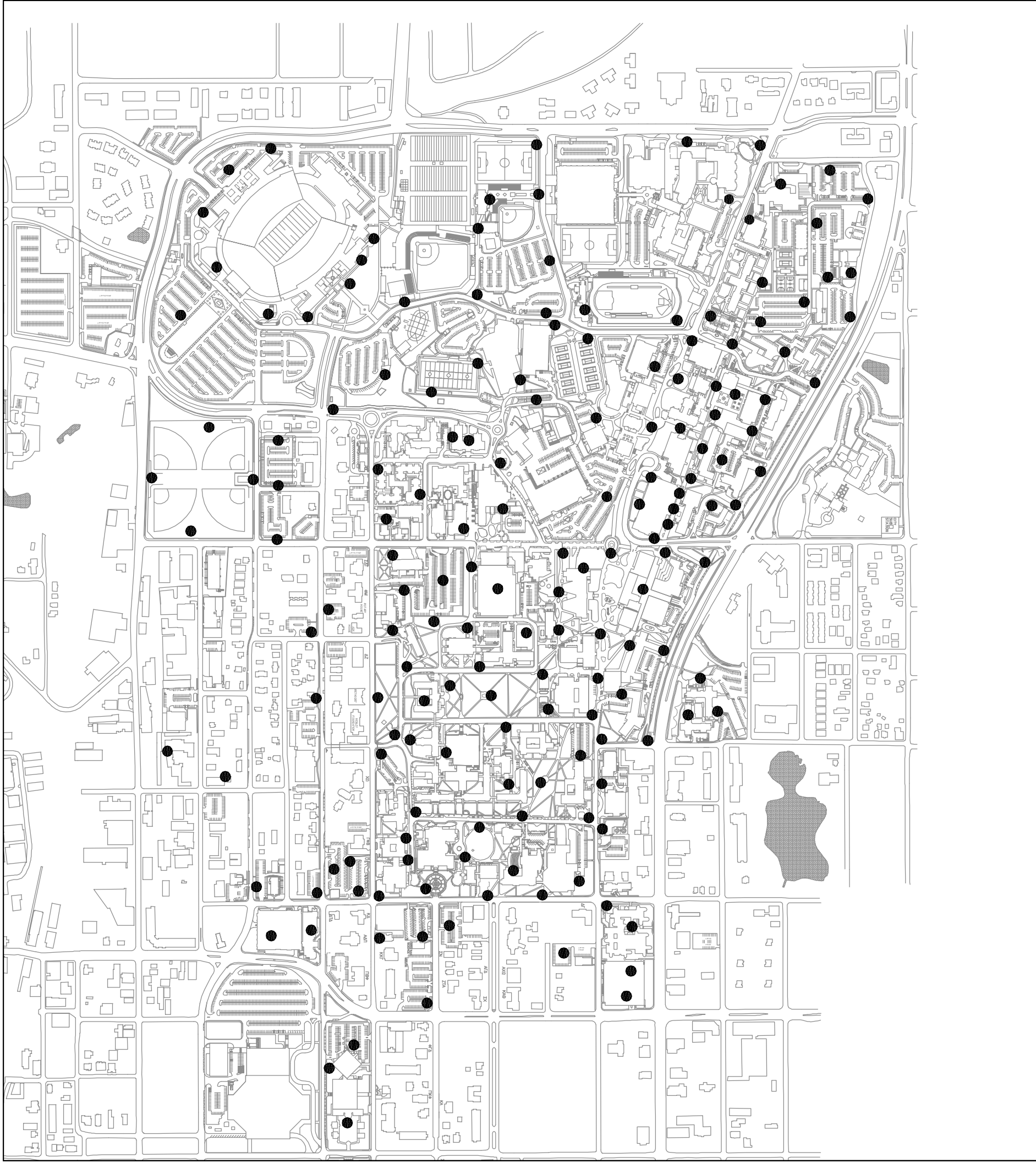


FIGURE 11.18

**SECURITY PHONE
FACILITIES**

LEGEND:

● EXISTING PHONE
LOCATIONS



SOURCE:
[www.its.fsu.edu/communications/
emergency-blueight-telephone-eblt](http://www.its.fsu.edu/communications/emergency-blueight-telephone-eblt)

**COMPREHENSIVE MASTER PLAN
FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLORIDA**
SUPPORTING DATA
13 JUNE 2008
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