

**Post Tour Report for Tallahassee Thomasville Road**  
**Taken Wednesday, October 25, 2000**  
**Application for Temporary Waiver**  
**Submitted November 14, 2000**

The following post tour report is submitted in accordance with Florida Public Service Commission's Physical Collocation guidelines adopted by Order Nos. PSC-1744-PAA-TP and PSC-99-2393-FOF-TP. Sprint Florida, Inc. ("Sprint") is requesting a Temporary Waiver for Physical Collocation for the Tallahassee Thomasville Road Central Office ("CO") until Sprint completes the building addition for this office. The addition is due for completion in the second half of 2001.

**Building Assessment Methodology**

Sprint uses various factors to evaluate space in its central offices throughout Florida. These factors fall into five categories: existing building configuration, space and forecast demand, building codes and regulatory constraints, Sprint design requirements, and equipment vendor's design instructions. Each category will be discussed below.

Existing Building Configuration

The existing building configuration must be considered when evaluating a central office for available physical collocation space. This entails consideration of the existing location of doors, hallways, stairs, air handling equipment, the building outline, and the physical capacity of the structure.

Space Usage and Forecasted Demand

Space usage and forecasted demand must also be considered when evaluating an office for the availability of physical collocation space. There are several steps in this category of review of the central office. This review contains the following steps:

- A. Determine the gross building space. This is the total space contained in the central office.
- B. From the gross building space number, unavailable space is subtracted. Unavailable space consists of building support components required to support the building and its occupancies such as air handling rooms, pump rooms, transformer and cable vaults, restrooms, stair towers, janitor closets, main corridors, vestibules, and light shafts.
- C. Occupied space is then determined and subtracted from the answer determined in step B above. Occupied space is that physically occupied by:
  1. Switching equipment, which provides dial tone and calling ability to customers;
  2. Transmission (toll & circuit) equipment, which provides transport of customer services from one switch to another;
  3. Frame space assigned to the main distribution frame in the office, which provides interconnect points for switch, toll or outside plant; and
  4. Power space assigned to the DC power plant and standby emergency generator necessary to support all equipment in the building.
- D) Reserved space is determined and subtracted from the answer determined in step C. Generally, reserved space is held for the various space usages described in step C with

DOCUMENT NUMBER-DATE

14659 NOV 14 8

FPSC-RECORDS/REPORTING

forecasted needs for the next 18 months. There is one exception. There are several types and families of equipment requiring fixed layouts. That is, this equipment cannot be split up into several different locations in the central office without degrading service or capping the size or customer service levels for that type equipment. Examples of this type of equipment are switch processor frames for digital central offices and control points, the Digital Signal Cross Connect (DSX) family of cross connect panels, the Digital Access and Cross Connect Systems (DACS) family of digital toll cross connect systems, and remote testing and monitoring systems. Therefore, Sprint keeps these equipment families together to provide the best service.

- E) Vacant space/unusable space is determined and subtracted from the answer determined in Step D. Space is not usable due to configuration problems, lack of exits, the fact the building will be demolished, etc.
- F) The net space possibly available for collocation is then determined by subtracting any existing physical collocation, leased space, or 3<sup>rd</sup> party customer space from the answer determined in step D.

Sprint considers administrative space as any space not directly supporting the installation or maintenance of both telephone equipment or customer service. Examples of this space are storerooms, lounges, shipping-receiving rooms, and training areas. These rooms are necessary to meet code, life safety, or contractual requirements. Administrative space can also include regular office space used by work groups performing company functions outside of the equipment support described above. Sprint allocates space to these administrative groups in response to changes in the regulatory environment, increases or decreases in company manpower requirements, or in response to new service offerings.

#### Building Codes and Regulatory Constraints

In evaluating space for physical collocation in a given central office, Sprint must also consider the building codes and regulatory considerations placed on Sprint. There are building codes at national, state, and local levels that affect space allocations. For example, the National Fire Protection Act provides minimum requirements, with due regard to function, for the design, operation, and maintenance of buildings and structures for safety to life from fire and similar emergencies. The Standard Building Code defines types and methods of construction for various functions to protect the occupants of the structure. Counties and municipalities adopt the National Fire Protection Act and Standard Building Code, adding new regulations, restrictions, and interpretations to the existing legal framework.

Local codes may govern the type of construction necessary to separate the physical collocation space from Sprint occupancy. Local code officials are the final interpreters of the codes. They govern the width of fire aisles, heights of walls, sizes and amounts of lighting, landscaping, air conditioning duct design, exterior access, interior corridors, exits, etc. Local codes may also affect work on the outside of the building. Landscaping, Americans with Disability Act provisions, building setback, height, stormwater retention, and maximum site usable for development are all regulated by local building officials.

#### Sprint Design Practices

Sprint design practices act as another set of codes specifying space allocations that meet the safety needs for employees and vendors, as well as customer service needs provided by the building and its occupants. These practices detail maximum equipment-lineup length, travel distances to exits, front and rear equipment aisle widths, and the size of various support components (such as air conditioning, house service panels, duct, conduit, ceiling rack heights, size and number of toilet facilities, lounges, storerooms, etc.) These practices also dictate the separation distances necessary to prevent service outages caused by grounding violations. Individuals working on one type of equipment and touching another type usually cause grounding violations. The solution is to separate the equipment by the type of grounding path required. This is referred to as integrated and isolated grounding plane separation.

## Vendor Equipment Design Instructions

Finally, Sprint uses equipment vendor's (manufacturer's) detailed design instructions on where and how much space is necessary for a particular family or group of equipment.

## **Equipment Forecast Methodology**

Sprint utilizes its Regional Network planning personnel with input from Regional Engineering personnel to determine the equipment requirements for forecasted growth for its offices. In the past, the network was relatively stable, primarily used for voice traffic, and Sprint relied heavily on forecasts received for Sprint line growth and interexchange carrier access growth. There was a direct correlation between the interoffice trunk growth and the access line growth. However, due to the following reasons that have occurred over the past 24 to 36 months, Sprint is revising its process for projecting equipment requirements. Those changes include: 1) the dramatic increase in data traffic caused primarily by the exponential growth of Internet use and the resulting increased demand on the network; 2) the introduction of ALEC networks and the need to interconnect those networks; and, 3) the increased demand for wireless interconnection. The demand on the network is no longer stable or predictable. Therefore, a lack of a forecast from these influences has forced Sprint personnel to rely heavily on trended demand in conjunction with available line and trunk forecasts to determine capacity exhaust and equipment relief.

Sprint has several levels of forecasts. There are State, District, Wire Center, Serving Device, and Carrier Serving Area forecasts. As it pertains to this specific situation, the forecasts being described for this central office are known as Serving Device forecasts used in conjunction with the Wire Center Level forecast. These forecasts are a prediction of growth for future years of individual products or groups of products with a serving area and wire center. This group of products includes both residential and business lines. Non-switched and High Speed units are forecasted in addition to these forecasts. The intended use of the serving device and wire center forecasts are for inventory and capacity management.

Sprint's Regional Network Planning Department includes a forecasting group that is responsible for preparing forecasts, including the Serving Device and Wire Center Level forecasts. These forecasts are developed by analyzing internal historical product data, such as residential and business lines, applying external economic indicators, such as Gross Domestic Product (GDP) growth and Consumer Price Index (CPI), Unemployment Rates, and any promotional efforts, such as Additional Line sales campaigns, that might alter historical trends. Any local knowledge (such as a new factory or large business locating in a given wire center, or a new subdivision being developed) that might alter past trends is also applied to the forecast. Forecasters usually use only the past two to three years of historical data when building a forecast because the recent past is usually a better indicator of the future. These forecasts are made for eleven years, current year plus ten years. In addition, individual wire center and/or serving device forecast validations are provided upon request in the event that the current forecast is several months old.

The data is kept in a forecast system Sprint calls the Demand Forecast System (DFS). In addition to being a repository of historical data, DFS contains applications and statistical tools that are used to analyze the data and project future demands. Sprint's forecasters constantly monitor the historical data against the forecasted demands, and if a serving device's or wire center's actual units seem to be veering out of range and appear to put the annual forecasts in jeopardy, they revise the forecast and notify the appropriate planners of the revised forecast.

When the forecast is completed and loaded into DFS, Demand and Facility (D&F) charts are generated by DFS at the request of the planners. These charts show historical data plotted on a graph along with a plot of the forecasted demand. The planners use these charts to determine when to provide additional switching capacity and how much capacity to provide based on the forecast.

Currently, Sprint projects equipment requirements for the next two years. Sprint uses the forecast of network access lines to determine the line peripherals required, a trunking forecast to project trunk peripherals required, and a pair gain forecast to determine the required number of ports in the switch for pair gain terminations. The planners use their professional judgement and experience in applying the trended forecast to the equipment requirements when they are aware of an unusual occurrence that has, or will, take place. Although equipment requirements are projected for two years, floor space reservations are made for only the next eighteen months, according to the recent ruling by the Florida Public Service Commission.

### **Specific Building Analysis**

Building Name: Tallahassee Thomasville Road Central Office

Street Address: 5000 Thomasville Road

City: Tallahassee, FL

I. Building data: See Attachment 1 for Map.

The Tallahassee Thomasville Road DMS-100 Central Office is located on the east side of Thomasville Road, approximately 2.6 miles north of Interstate 10 in a fast developing mixed use section of Tallahassee. The site is approximately 20 minutes north of downtown Tallahassee, and 3 hours west of Jacksonville.

The building was originally constructed in 1978 in the front half of the property. There have been no additions to the building up until now. An addition to the first floor only is scheduled for 2001. It will be completed on the east side of the building. The existing building structure will not support a vertical addition.

II. Building Occupancy:

The following information details the space allocation for the Tallahassee Thomasville Road building as depicted in Attachments 2 and 3.

The current building contains 5655 gross square feet, 2852.9 square feet in the basement, and 2802.1 feet on the first floor.

There are 1824.1 square feet of unavailable space. This space includes 256.8 square feet on the first floor for restrooms, janitorial closet, and stairwell, and 1567.3 square feet in the basement for the cable vault, stairwell, a/c mechanical room, generator and building access area.

Sprint equipment occupies 2685.4 feet in the building. There is 1006.7 square feet of switching equipment on the first floor. There is 755.1 square feet of transmission (circuit and subscriber line carrier equipment) also on the first floor. The DC power plant occupies 390.1 square feet in the basement. The frame occupies 533.5 square feet on the first floor supporting all ILEC and ALEC equipment in this location.

There are no unregulated services in this facility.

There are 695.5 feet of administrative space in the basement of this building (administrative space is not directly related to the installation, maintenance, or servicing of the telephone equipment in this building). There are 16 administrative personnel assigned to this location. There is a supervisor, 11 Sprint employees, and 4 contractors that maintain the outside plant facilities that emanate from this building and provide telecommunication services to all the customers in this Exchange. There are also four personnel assigned to this structure that work on the equipment in the building.

III. Future Sprint space needs are based on forecasts for equipment going into service within 18 months of this application. In addition, there is the need to separate equipment by types, family

growth patterns, grounding, or size of cabinets. These needs also affect which spaces are available for collocation. All these factors are involved in making the following space allocations. Applying the practices to the customer needs in this area yields the following information.

Isolated Ground Plane Area:

Switch Growth: There are currently [REDACTED] vacant switch bay spaces. [REDACTED] are reserved for an approved project going in-service the first quarter of 2001. Sprint forecasts require at least [REDACTED] additional spaces in the next 18 months. Due to the Isolated Ground Zone (IGZ) and manufacturer's warranty considerations, no other types of equipment (Sprint or CLEC) can be placed in this area.

Integrated Ground Plane Area:

There are currently [REDACTED] transmission bay spaces reserved for growth. [REDACTED] are reserved for approved projects going in-service by the end of this year (2000). Sprint forecasts require at least [REDACTED] in the year 2001. Sprint must complete the building addition in the second half of 2001 to meet its own space needs.

Power Plant Area:

The 200 square feet of space reserved in the basement DC power room will allow for the necessary rectifier and battery string addition to support the expansion of the building in 2001.

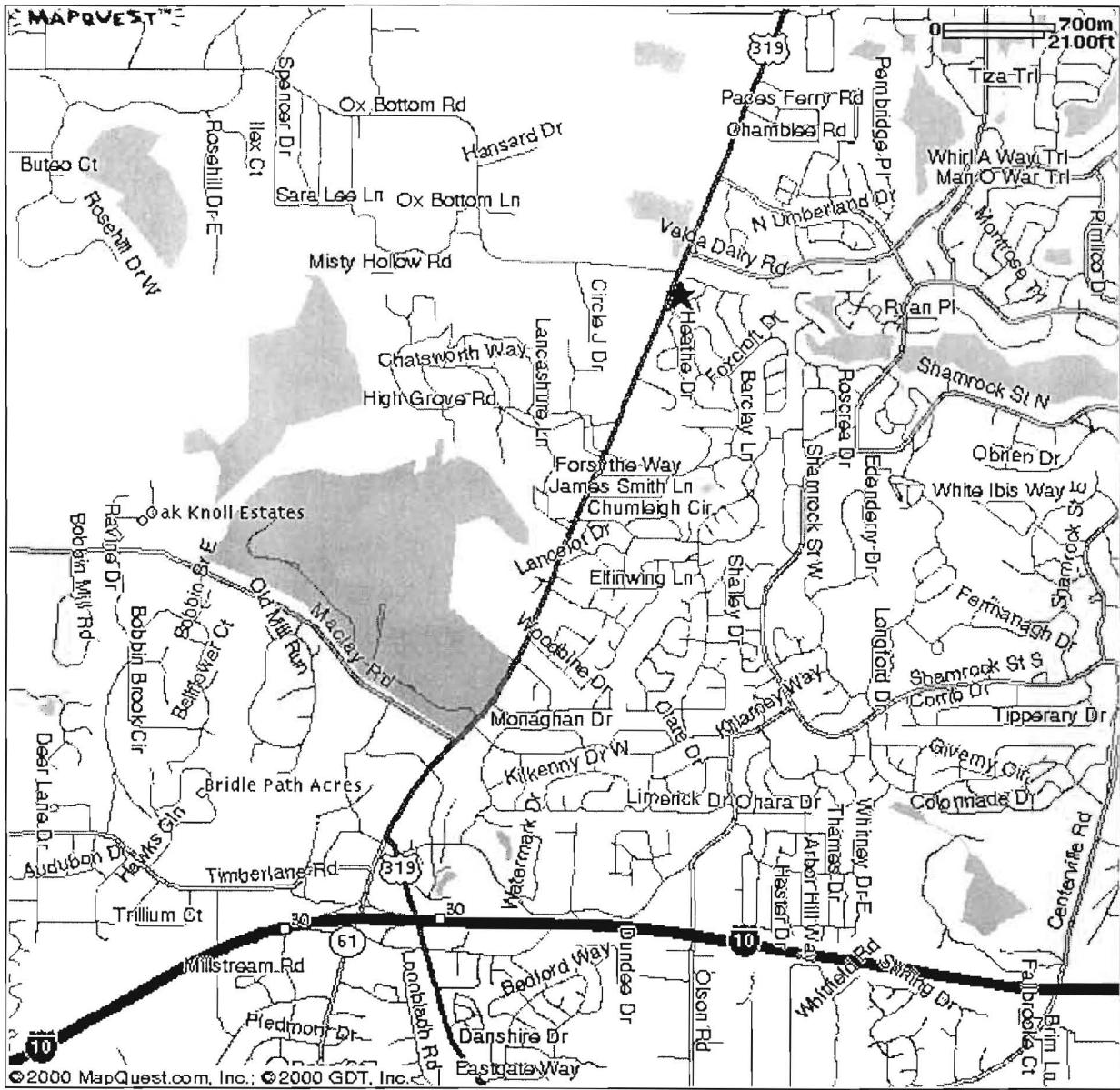
Frame Area:

The existing frame will serve the forecasted Sprint and ALEC growth for the next 18 months. The building addition will allow for frame expansion for future Sprint and ALEC requirements.

- IV. Collocation Occupancies  
There is 84 square feet of space on the first floor assigned to physical collocations in this office.
- V. Other Occupancies  
There is no square footage assigned to any 3<sup>rd</sup> party space.
- VI. Switched Turnaround Space  
There is no reservation for switch turnaround space.
- VII. Future Growth Plans: See Attachment 4  
A 1385 square foot addition to the first floor is planned for completion in the second half of 2001, as mentioned during the space tour. This addition will serve switch, transmission, and collocation requirements. There are currently two collocation applications pending that will be assigned space in this addition.
- VIII. Any Other Space Relief Plans  
There are no other published plans for relieving the space exhaust situation.
- IX. Special Conditions Noted on the Space Inspection Tour  
Families of equipment – Sprint reserves some growth spaces adjacent to existing equipment as specified by specific equipment vendors. Some types of equipment must be located together due to internal wiring considerations. Thus those spaces are not available for collocation even if not required in the forecasted interval. These types of situations are kept strictly to the necessary minimum. As these types of equipment generally serve both ALEC and ILEC requirements, it is in everyone's best interest to preserve the space allocations.
- X. Attachments  
Attachment 1 – Map of Area Locating Building  
Attachment 2 – Space Assessment Form Filed with Application for Waiver

Attachment 3 – Building Drawings Filed with Application for Waiver  
Attachment 4 – Building First Floor Drawing Showing Proposed Addition

5000 THOMASVILLE RD, TALLAHASSEE, FL, 32312-3804, US



ATTACHMENT I – MAP OF AREA

## ATTACHMENT 2 – SPACE ACCESSMENT WORK SHEET

### PETITION FOR WAIVER OF COLLOCATION REQUIREMENTS

11/06/00

1. CENTRAL OFFICE CLLI: TLHSFLXF
  
2. COLLOCATORS AND AMOUNT OF SPACE: [REDACTED]  
 (redacted available upon request)  
100 sf caged; revised to 8 – 24 sf cageless  
[REDACTED]  
 (redacted available upon request)  
20 sf cageless
  
3. TOTAL GROSS SQ. FT. 5655 sf
  
4. FLOOR PLANS – INCLUDING DIMENSIONS – ATTACHED
  - a. SFI occupied equipment space 2685.4 sf  
 Nonregulated services 0 sf  
 Administrative offices – not related to installing, repairing,  
 maintaining CO equipment 695.5 sf
  - b. Retired equipment 0 sf
  - c. Future SFI space reservations 366 sf
    - Switch 126
    - Circuit 40
    - Power 200
    - Frame
  - d. Collocation space (already allocated) 84 sf
  - e. Other 3<sup>rd</sup> party space 0 sf  
 What is the occupancy \_\_\_\_\_
  - f. Switch turnaround space \_\_\_\_\_  
 Service Yr \_\_\_\_\_ 0 sf
  - g. Remaining space 1824.1 sf  
 Unavailable space 1824.1 sf  
 Space available for collocation 0 sf
  - h. Central office growth plans
    - Forecast completion
    - Yr \_\_\_\_\_
    - Addition 2001 1385 sf
    - Renovation      0 sf
  - i. Any other plans for relieving space exhaust \_\_\_\_\_
  
5. Floor loading
 

All space	150#sf	<u>5655</u> sf
Power rooms only	350#sf	<u>    </u> sf



NAME OF PERSON FILLING OUT FORM

Gardner C. Preedy – Senior Architecture Planner

TEL. NO. 407-889-6131

PRIVATE

THE INFORMATION CONTAINED HEREIN SHOULD NOT BE DISCLOSED TO UNAUTHORIZED PERSONS. IT IS MEANT SOLELY FOR USE BY AUTHORIZED SPRINT EMPLOYEES.

## CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing has been served by U.S. mail this 14<sup>th</sup>  
day of November, 2000 to:

Ms. Tamika Watts  
Florida Public Service Commission  
Division of Competitive Services  
2540 Shumard Oak Blvd.  
Tallahassee, FL 32399-0850

Mr. Wayne Knight  
Florida Public Service Commission  
Division of Legal Services  
2540 Shumard Oak Blvd.  
Tallahassee, FL 32399-0850

Mr. Tom Whitaker  
Broadslate Networks Inc.  
675 Peter Jefferson Parkway  
Charlottesville, VA 22911

Mr. Eric Larsen  
Tallahassee Telephone Exchange  
1367 Mahan Drive  
P.O. Box 11042  
Tallahassee, FL 32302-3042



---

Susan S. Masterton