

GENERAL SERVICES DEPARTMENT



ITD Enhanced Computer Room Project

**Betteravia Government Center Building C
Santa Maria, CA**

Presented By:

**Grady Williams, PE
Manager**

3/9/2010

CAPITAL PROJECTS GROUP

Project Location



[Background]

- County IT needs outgrew existing computer room long ago
- Computer equipment was added as needs grew
- Additional computer equipment required additional support
 - More cooling capacity
 - More weight and power capacity

[Background - (continued)]

- Roof unable to support weight of needed HVAC
- Weight capacity of equipment cabinets exceeded load capacity of 3rd floor
- Expensive structural modifications required

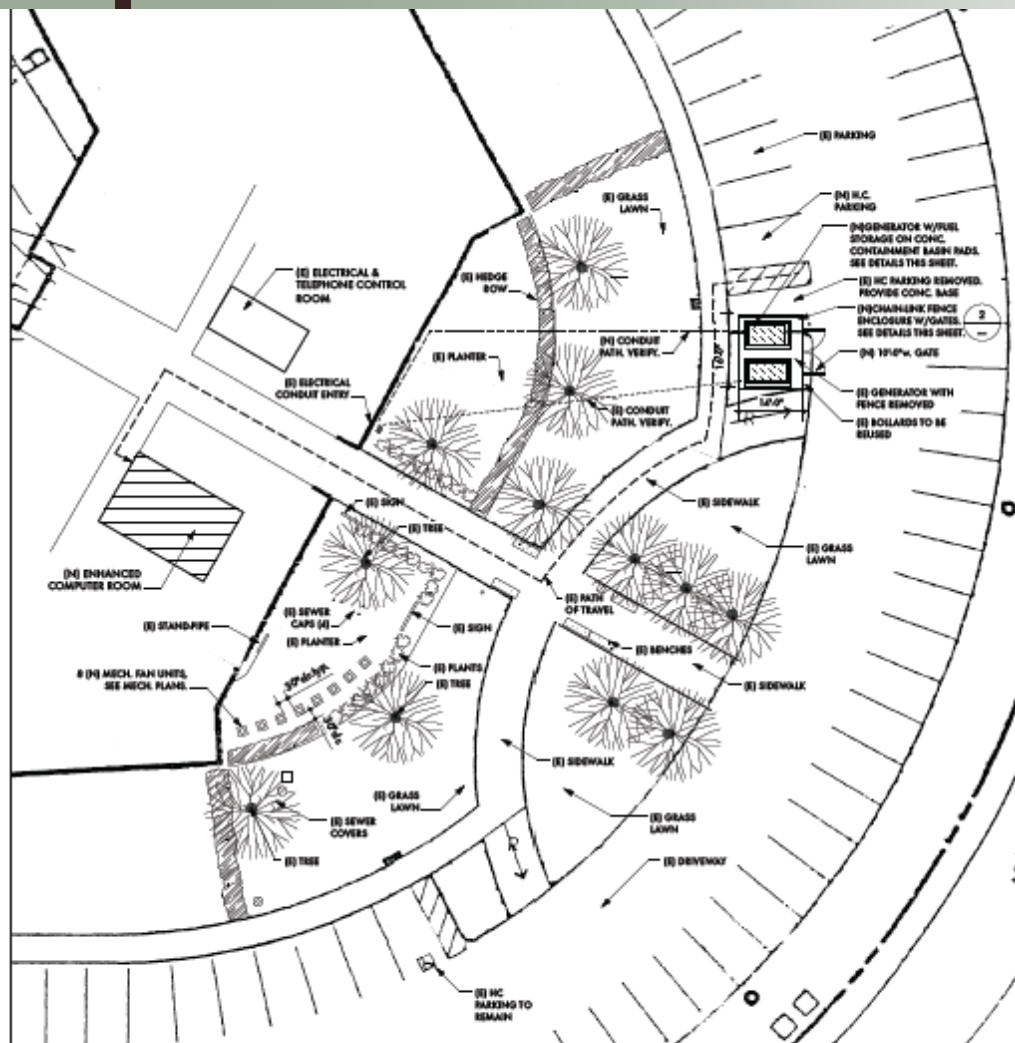
[Project Purpose]

- Create a new Enhanced Computer Room
 - Provide Backup IT Services for all of County
 - Enhance IT support to North County
 - Avoid structural modifications
 - Provide room for growth

[Design Factors]

- Centralized Location
- 100 kW Electrical Load
- 192,000 BTU cooling load
- Utilizes existing space in DSS building
- No structural enhancements required

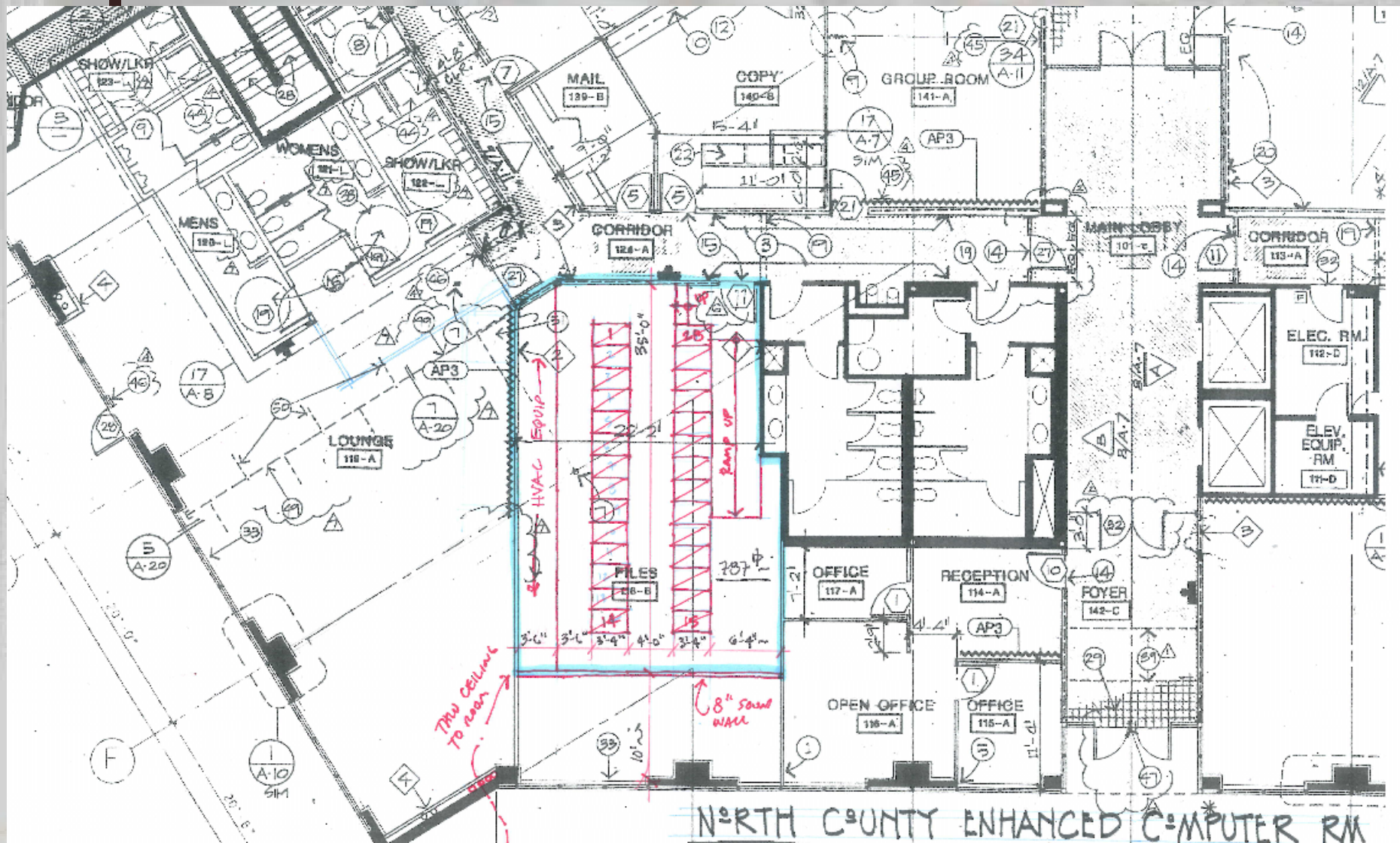
General Plan



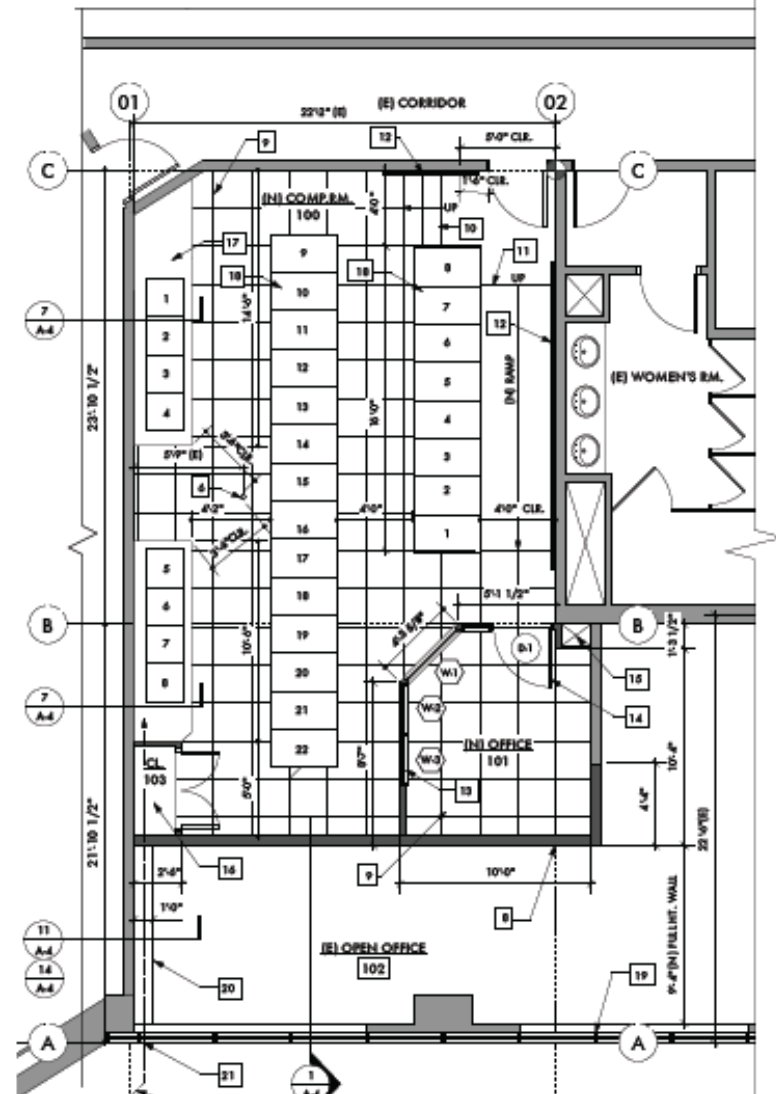
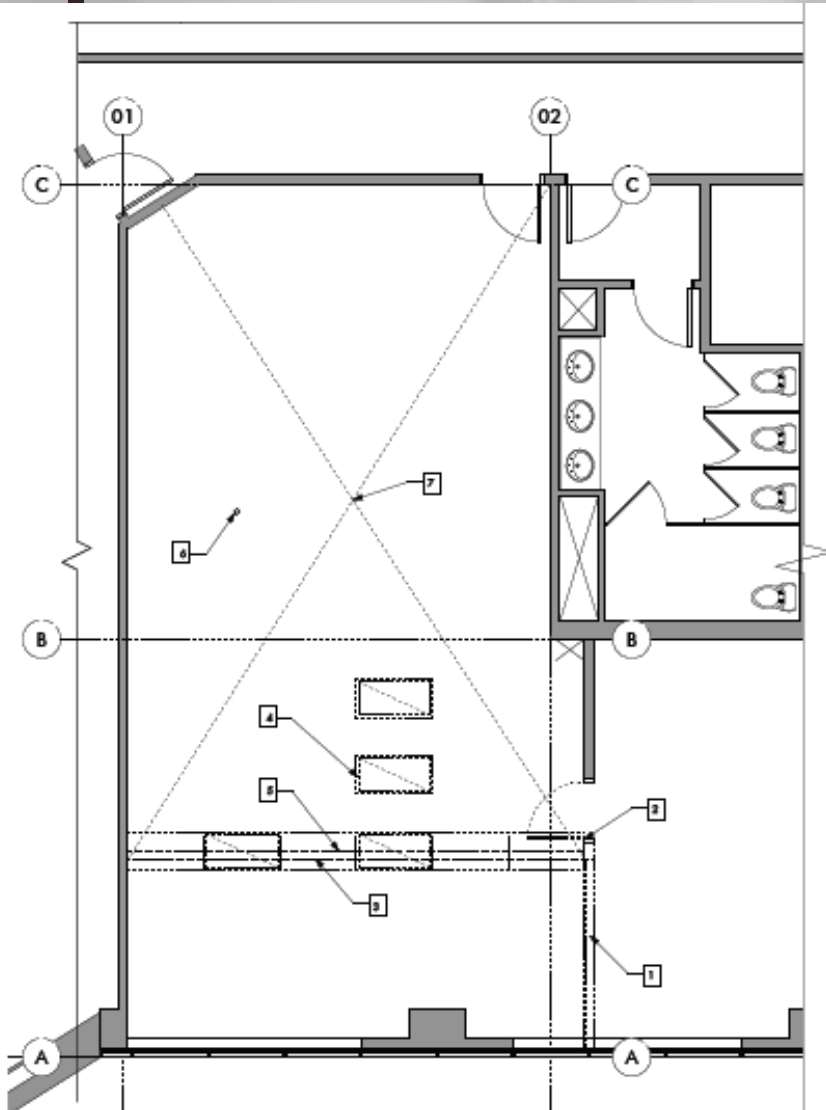
1 Partial Site Plan
Scale: 1/8" = 1'-0"

- Near Elec/Equip Room
- Exterior HVAC equipment
- Minor landscaping
- Upgrade Generator
- Relinquish 3rd Floor IT Room

Proposed Remodel



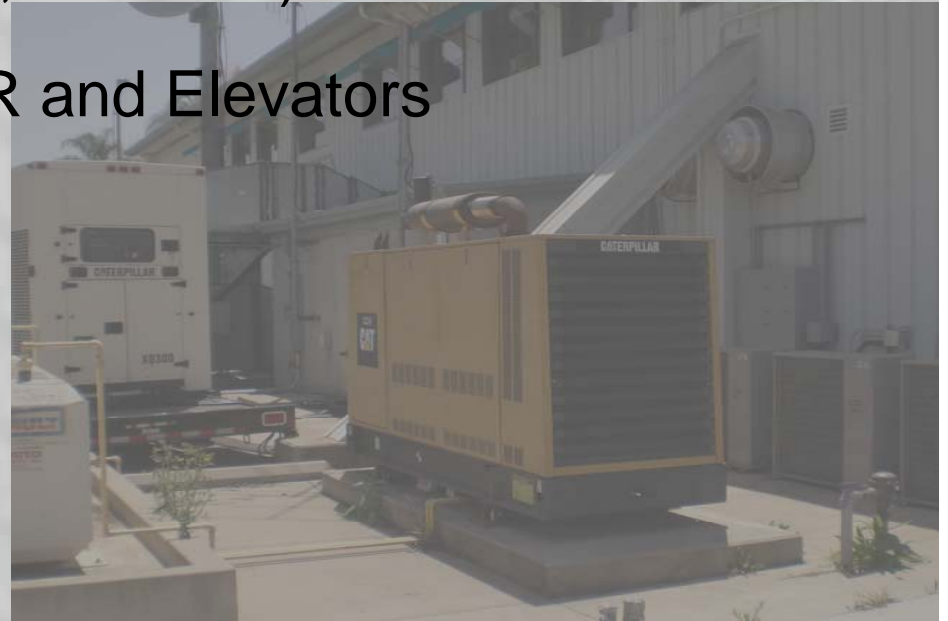
Demo & Proposed Floor Plans



Private-Public Partnership Opportunity

- Donated generator and fuel by Cox Communications, Inc.
- New Generator Capacity is 225kW (now 65kW)
- Fuel Storage now 1,000 gallons (none before)
- \$78,000 value to project (\$140,000 retail)
- Provides backup power to ECR and Elevators

3/9/2010



[Project Budget]

Total Project Cost \$350,000

Source of Funds: Information Technology
Department
Retained Earnings

[Project Schedule]

Event

Projected

Award Construction
Contract

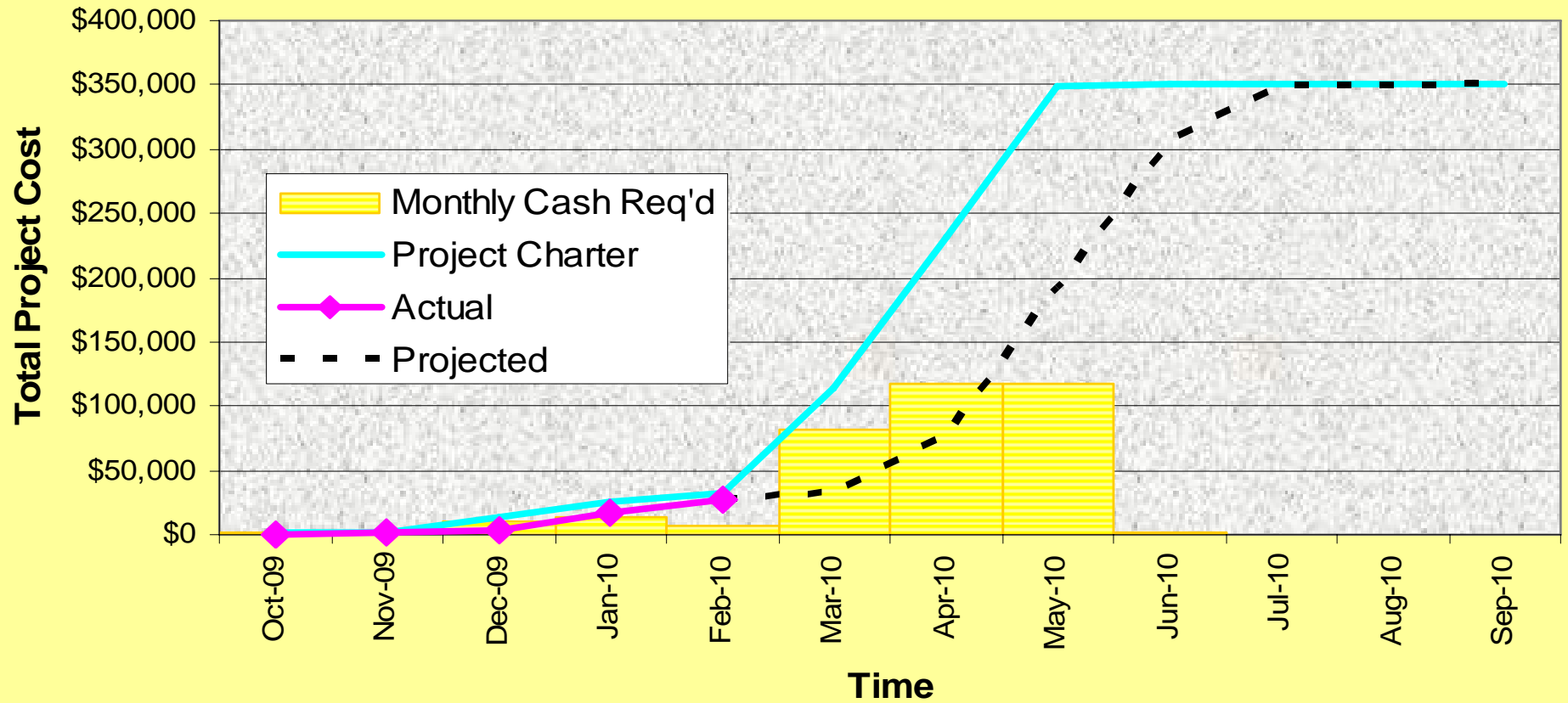
April 27, 2010

Ready for Occupancy

August 2010

Project Cost vs. Time

ITD Enhanced Computer Room BGC Bldg C



Current North County Machine Room History

- North County EU Training Classroom became ITD's North County machine room (10 years ago)
 - It was available
 - Fiber terminated at this location
 - Adequate for the needs at the time
- Temperature increased with time, eventually reaching 100+ degrees
 - Not able to handle current workload or any future growth

Current North County Machine Room History

- Emergency power circuits were pulled from 1st floor and conduits were full
- First portable AC unit was able to handle initial load but temperatures continued to stay constant and high at ~97degrees
- Second AC was added in the room to carry the excess heat. Temperatures dropped to ~80degrees (still inadequate)

Why Do We Need a New Machine Room?

- Ability to continue to meet departmental needs and other business drivers such as business continuity and recovery in case of an emergency
- Ability to handle growth - Number of servers (weight) and cooling requirements (temperature controls)

Who Will Benefit?

- Move mission critical network and communications components
- Right-size infrastructure to build the necessary redundancy to support business continuity and recovery
- Move DSS servers from closet to machine room
- Move DA, CARE, Probation, Planning and Public Health servers and applications currently housed in impacted machine room to new room
- Create additional rack space and offer to move all mission critical equipment (Sheriff's IBM Blade Center and others)

Before



3/9/2010

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After



3/9/2010



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