High-Density Library Storage Facility for the SUS

presentation to the
Council of State University Libraries

September 6, 2012

Judith Russell
Dean of University Libraries

Howie Ferguson, P.E.
Asst. Director & Sr. Project Manager
UF Facilities Planning & Construction

Jack Ponikvar, RA
Principal and Lead Architect
Ponikvar & Associates
Topics

- Project background, overview, purpose
- Pre-Design efforts
- Special HDF considerations
- Site and master plan
- Building interior
- Building exterior
- Budget/Costs
- Schedule
Location

SE corner of Waldo Road and 39th Ave. (~5 miles from UF)

Early 1970s FDOT warehouse acquired by UF in 2003

Ideal location at mid-point of State

Currently offsite storage for UF with modest staffing
Project Purpose

~30,000 GSF high-density addition will serve as remote archival storage for all (12) State universities ... with the capacity to expand in the future.

Storing materials by size (retrieved via bar code) allows for greater density.

Renovation & expansion of existing ~42,000 GSF facility will:

- provide loading dock, processing, and support for the new HDF
- co-locate digital, conservation, and preservation services
- retain storage for UF-only materials
Goals & Requirements

- Preserve FLARE shared collection and allow for efficient retrieval and use of collection
- Maintain environment through storms or power loss
- Maximize energy efficiency and strive for LEED cert’n
- Design for future expansion
- Create secure, comfortable, safe work environment
- Beautify north façade
- Be “shovel ready” for 2013/2014 funding
Pre-Design Efforts
Programming

- Preliminary vision & goals, space allocation, schedule, budget, etc.
- Based on input from library staff, colleagues, peer facilities
- Reviewed and approved by UF committees, administration, others
Pre-Design Efforts
Consultant Selection

- Design team includes experience with both UF/SUS facilities and HD storage facilities
- Construction manager’s PM/Supt built National Archives facility (St. Louis)
- Now selecting commissioning consultant for quality assurance
Pre-Design Efforts

Benchmarking

- NARA 1571 standard and benchmarking confirmed some assumptions, revealed others – e.g., particulate filtration
Special HDF Considerations
NARA 1571 – Archival Storage Standards

- 50°F, 35% RH for optimum preservation environment
- Gas/carbon filtration to eliminate airborne contaminants
- Redundancy for air handling, dehumidification system, and chiller plant
- Early Suppression Fast Response fire sprinkler system
- Emergency generator for mechanical system
- “Superflat” slab for high shelving and order picker
- Hardened, insulated, and waterproof envelope
- Card reader access control plus cameras
- Considering provisions for future solar on HDF roof
Site and Master Plan

Efficient flow of materials, with delivery traffic separated from other traffic

Ultimate build-out would house 20.8M volumes
Exterior Design
North (Front) Façade
Exterior Design
South (Rear) Façade – Loading Dock
Interior Design
Interior Design – HDF

- 10 aisles – 5.2M volumes
- 35’ high static shelving
- ‘Raymond’ order picker
- ‘MFL’ provisions (300 cf)
- Dedicated, redundant HVAC
- Fire-rated partitions
- East rollup door – shelving load & future expansion
Interior Design – Loading & Processing

- Efficient flow of materials
- Flexible space
- Multiple loading bays
Budget / Costs

- Original CIP request (2007) was for $11.3M construction / $18.3M project (50,000 GSF)
- Facilities Program (2011) estimated $12.7M construction / $19.6 project (72,000 GSF)
- Current estimate is $16M construction / $23M project (~82,000 GSF) based on 7/1/13 start and 15-month duration
  - Difference includes HD shelving, equipment, book prep, fees
- Cost impacts include:
  - NARA standards
  - Mechanical systems
  - Soils & structure for rigid settlement criteria
  - More new SF than predicted (processing & loading)
Status & Schedule

- Complete design in January/February 2013
- Defer final bid documents, permitting, and bidding until funds appropriated
- Earliest start = 7/1/13; earliest completion = 10/1/14
- Complicated logistics plan is TBD ... must keep ALF in operation
- Evaluating (2) HD shelving manufacturers
High-Density Library Storage Facility for the SUS

QUESTIONS?

Judith Russell
Dean of University Libraries

Howie Ferguson, P.E.
Asst. Director & Sr. Project Manager
UF Facilities Planning & Construction

Jack Ponikvar, RA
Principal and Lead Architect
Ponikvar & Associates