2010

Disaster Recovery Manual (2010)

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DISASTER RECOVERY MANUAL

Source file for this manual saved to:
< G:\LIB\Shared\Acquisitions & Cataloging\Preservation\Disaster Planning>
Revised: DJS, April 2010

SYRACUSE UNIVERSITY LIBRARY DISASTER MANUAL

INTRODUCTION

The Syracuse University Library Disaster Recovery Plan for library materials outlines procedures for salvaging a wide variety of library materials in the event of a disaster of minor emergency. We have designed this plan to help library staff cope with and recover materials from minor emergencies that typically involve 500 or less items. The majority of these emergencies will be caused by interior flooding due to leaky pipes (or water coming in from other vulnerable areas in library buildings) or from patron mishaps. The resultant wet books and other objects, such as photographs, microfilm, and sound recordings, can usually be dried on location and returned to service with minimal effort. Please note that this document takes effect after the safety and security of library staff and patrons has been secured.

We designed the plan to move the reader first to the immediate actions required and then through the steps involved in recovering material from a minor emergency. We formatted it so that the user can click to the appropriate section without scrolling through the whole document.

We wish to give credit to Betty Walsh, Conservator, Provincial Archives of British Columbia for information borrowed from her Salvage Operations for Water Damaged Collections (reprinted from the Western Association for Art Conservation Newsletter, May 1988, vol. 10, no. 2). http://cool-palimpsest.stanford.edu/waac/wn/wn19/wn19-2/wn19-207.html

We are committed to ensuring that the Library's Disaster Response Plan remains dynamic and current. To this end, we will hold regular staff training sessions on basic recovery techniques to provide staff members with a foundation of knowledge that will be invaluable in the event of a disaster. Let us hope we will NEVER need to use this document, but if we do, we can take comfort in the fact that we will be able to respond as a well-prepared library team.

David Stokoe, Conservation Librarian and Disaster Response Team (DRT) Leader. 315-443-9937
Peter Verheyen, Head, Preservation and Conservation. 315-443-9756
Thomas House, Security/Facilities Coordinator. 315-443-1896

Table of Contents

Call the Preservation Department @ 315-443-9756/4560/9937 for help in recovery.

For emergencies involving Syracuse University Library facilities, call one of the above numbers until you reach someone (if no response, call SU Security @ 711):

WATER EMERGENCIES

Take the following steps in response to an incident that does not pose a threat to staff or patron safety, and where recovery of damaged library materials can be handled on the premises.

Immediate Actions

1. First Call: Library Security
   - Thomas House Office: 315-443-1896/9754
   - Colleen Woodward Office: 315-443-9754

If Tom House or Colleen Woodward are unavailable, call SU PHYSICAL PLANT @ 315-443-1234 (daytime); 315-443-2224 (after hours & weekends).

Describe the location and nature of the emergency. Stay at location until help arrives.
Library Security will coordinate with Physical Plant to:
- Turn off the water supply if water is flowing from pipes.
- Disconnect electricity (if necessary).

2. Second Call: Library Disaster Response Team and describe the location and nature of the emergency. The team member contacted will meet you at the emergency site, assess the situation, and coordinate recovery efforts.

WARNING

DO NOT ENTER AN AREA THAT IS FLOODED UNTIL ELECTRICITY HAS BEEN DISCONNECTED!

MEANWHILE, until help arrives...

For water coming from above:

- Cover affected stacks with plastic sheeting from the emergency supplies located in your department.
- Carefully move wet material off shelves to a clean, dry area.

For water coming from below:

- Remove books from affected shelves to another location OR move books onto higher shelves.

Estimate the number of wet volumes in order to:

- Determine amount of space needed for air drying the wet materials.
- Help the DRT member(s) calculate the number of recovery volunteers you will need.
- As a rule, it takes approximately 30 minutes for 2 volunteers to wrap and box 100 volumes (@ 10 volumes per box).

Locate Space:

- Find a clean, dry, secure area which has good air circulation, using fans to keep air moving,
- and the lowest possible temperature and relative humidity readings (optimum is below 70 degrees F and 50% RH). The space should meet the following criteria:
- Accessibility (e.g., for wheeled trucks, frames).
- Clear path to a loading area (in case the damaged books need to be re-located).
- Proximity to affected materials.
- Availability of open, flat, surfaces (reading rooms are good, but consider the impact on readers, since they may be excluded from the area for sever
- Availability for approximately one week (air drying can take from one day up to a week and the area chosen should be able to accommodate this range of time).

PROCEDURES FOR RECOVERING PRINT MATERIALS AND AIR DRYING BOOKS

Books that are thoroughly wet:

- Place absorbent paper on table or floor where books will be dried (unprinted newspaper works well). Change paper on the table/floor as it becomes wet.

- Lay book at edge of table with foredge pointing off edge and gently, but firmly apply pressure from spine to foredge, pushing out excess water. Gently open book and insert paper towels every 20-25pp. Change when the paper towels are wet.
- If cover is bleeding or coming off, remove and put aside to a place where it can be found again. In many cases book will need to be rebound.
- Use fans to generate air circulation in room. Books should be dry enough for the next step: books that are partially wet.

CAUTION:

Do not attempt to fan leaves. Do not remove covers unless they are bleeding. Leather and vellum bindings will present problems. When leather gets wet, especially red-rotted leather, it will turn black and take on a slimy consistency. These covers should be removed and put aside (inside to inside) with pieces of freezer paper between them to prevent transfer of discoloration. Likewise vellum bindings will need special attention because they will warp severely upon getting wet. Contact the Preservation Department @ 3-4560/9937/1947 for help in recovery.

Leather covered boards from the same book depicting water damage and subsequent blackening to the board on the right; the leather became extremely brittle on drying and also suffered some degree of shrinkage. This type of damage is irreversible and will necessitate rebinding.

Books that are partially wet

- Open book partially (at a fairly shallow angle) and interleave with absorbent paper (paper towels work well).
- Begin at the back of the book and interleave every 20 or so leaves (i.e., pages).
- Leave book flat until paper towels have absorbed some of the water--i.e., in about one hour. Change paper towels periodically until book is only very slightly damp, then go to the next step: books that are damp.

Books that are damp

- Stand damp books on edge, lightly fanned, and dry in front of fans. If the cover is damper than the text, place absorbent paper between the boards and the book, changing them as needed. When almost dry, go to the next step: books that are almost dry.

Books that are almost dry

- Lay the book flat, push the back and boards gently into position, and place under a light weight. Leave in this position until book is thoroughly dry.
- When books are dry to the touch at the gutter, stack from largest to smallest and fore-edge to spine with a board on top and underneath. Place weights on board to help flatted.

NOTE: The drying time for a book can range from 1 to 7 days.

NOTE: Coated Paper (shiny paper)

- If this paper is allowed to dry with pages stuck to each other, it will NOT be possible to separate them. For this reason it is important that they be interleaved between every page with paper towels. Change as often as necessary and then follow steps from "Books that are almost dry."
- Pages should be carefully separated. If uncertain contact contact the Preservation Department @ 315-443-9756/1947/4560 for help in recovery.

PROCEDURES FOR AIR DRYING PAPER DOCUMENTS OR PAMPHLETS

- Hang documents/pamphlets over clothesline to dry. Lines may be strung close together and items laid across them to dry.
- Lay out small stacks of documents and/or single leaves on tables, floors, and other flat surfaces. Spread paper towels or unprinted newspaper on tables, etc.
- Use fans to circulate air in recovery location.
- Change newsprint/paper towels as necessary, i.e. when towels become damp.

CAUTION

- Do not attempt to separate leave that are very wet or that are sticking together unless you have been trained to do so.
- Do not attempt to air dry manuscripts, drawings, or material with water-soluble colors except under the advice of a conservation specialist.

NOTE: Make sure that contents of folders and boxes are not separated from each other.

SPECIAL PROBLEMS

- Water soluble inks or media (manuscripts, drawings, watercolors, maps).
- Framed prints and drawings.

PROCEDURES FOR RECOVERING NON-PRINT AND PHOTOGRAPHIC MATERIALS

This plan shall be a guide for the recovery of photographic and non-print materials. The procedures are located with the media in order to facilitate the process.

Daguerreotype and Collodion Photographs

Should immediate recovery not be possible, daguerreotypes should be **air dried immediately**, and collodion photographs should be frozen immediately.

Collodion photographs (ambrotypes, tintypes, pannotypes, collodion glass negatives) and daguerreotypes are often mounted in cases.

Case photographs

Under the direction of a specialist:-

- Remove the assembly from the case.
- Carefully fold back the preserver frame, cut the sealing tape (if present) and take the assembly apart.
- Place daguerreotypes face up on blotters with the case components beside them.
- Dry collodion photographs emulsion side up on blotters.

<u>Collodion glass negatives and unmounted case photographs</u>

- Dry emulsion side up on blotters.

NOTE! Do NOT immerse or freeze as this will destroy the emulsion.

Nitrate-based photographs with soluble emulsions

Should immediate recovery not be possible, freeze or freeze dry immediately.
THEN

- Contact the Library Supplies Office @ 315-443-1271 for help in locating freezer space.
- If no answer, call the Preservation Department @ 315-443-9756\1947\4560.
- After hours and during weekends, call Library Security @ 315-443-1896/9754
- Call the Preservation Department for help in locating a conservator.

Photographic prints, negatives, and transparencies

- Freeze or dry within 72 hours if immediate attention cannot be given.
- Salvage order:
    1. Color photographs
    2. Prints
    3. Negatives and transparencies

Other Prints, negatives, and transparencies

- Keep photographs wet by immersing in containers of fresh cold water prior to air drying or freezing.
- Do NOT allow them to partially dry while unseparated (they will stick together).
- If photographs have been immersed in dirty water, clean them before air drying or freezing (time and facilities may modify the following procedures)

Recovery of color prints

- Recover within 48 hours (otherwise freeze).
- Wash for approximately 15 minutes in changes of cold water.
- Gently swab off stubborn dirt from the surface.
- Rinse with Kodak Photo Flo solution.
-

Recovery of black and white prints and negatives

- Recover within 72 hours (otherwise freeze).
- Wash for 1/2 hour in changes of cold water.
- Gently swab off stubborn dirt from the surface.
- Rinse with Kodak Photo Flo solution.

Recovery of color negatives and transparencies

- Wash for 1/2 hour in changes of cold water.
- Gently swab off stubborn dirt from the surface.
- Rinse with Kodak Photo Flo solution.
- Prior to drying:
    1. Rinse color negatives for 1 minute using Kodak E6 stabilizer.
    2. Rinse Ektachrome transparencies for 10-15 seconds in Kodak E6 stabilizer.
    3. Kodachrome: no stabilizer required
    4. Eastman Color Film: send to a Kodak laboratory.
- Air dry (preferred recovery technique) emulsion side up on blotters, paper, or nylon screen.

NOTE: They can be frozen. When thawing, immerse photographs in cold water if it appears that they could dry and stick together during thawing.

Aperture cards

If not able to immediately recover, freeze or air dry within 48 hours.
Under direction of a specialist:-

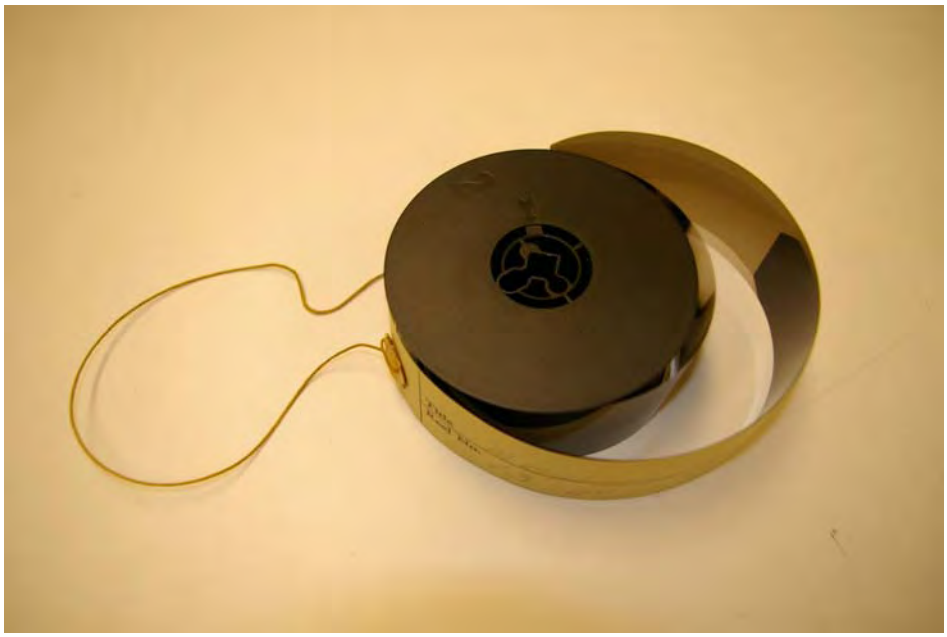
- Remove the film chips from their mounts.
- Wash the chips, air dry, and remount them.

Microfilm rolls

These should be rewashed and dried within 72 hours, by a microfilm processor

- Do NOT remove the films from their boxes.
- Hold cardboard boxes (and labels) together with rubber bands.
- Fill boxes with water.

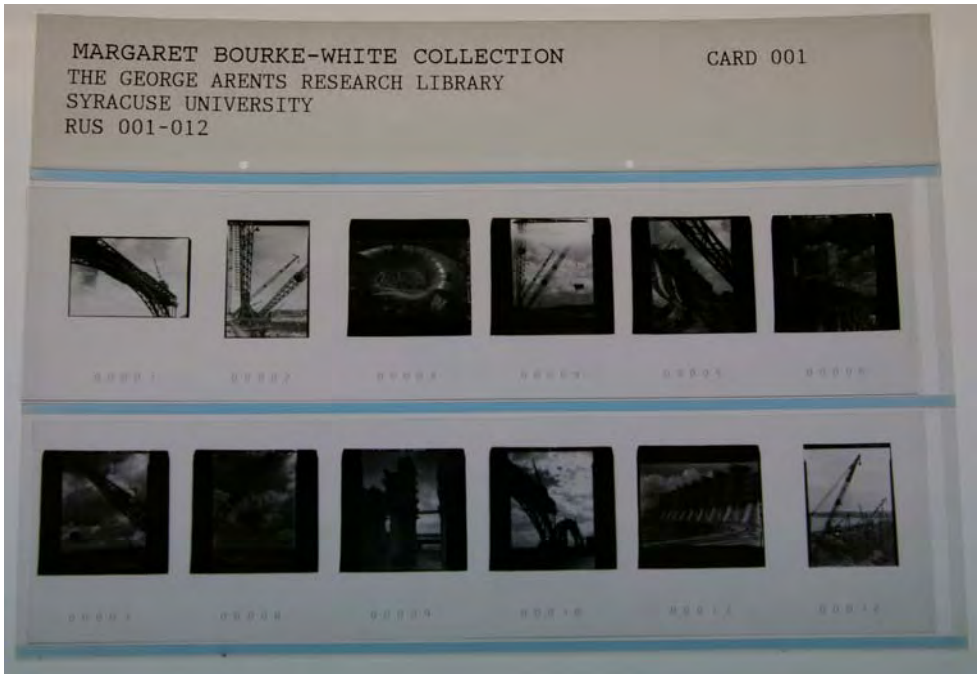
- Wrap 5 cartons of film into a block with plastic wrap.
- Pack the blocks into a heavy duty cardboard box lined with garbage bags.
- Label as wet film and ship to microfilm processor.



Jacketed microfilm

If not able to immediately recover, freeze or air dry within 72 hours.

- Cut the strips from the jackets with sleeve cutters.
- Wash and dry film.
- Insert into new jackets.



Diazo fiche

- Check for readability: if photograph has blistered, discard.
- If it has not delaminated, wash in cool water and dry on blotters or a lint-free cloth.

Motion pictures

- Rewash and dry within 72 hours (done by a film processor).
- Open film can, fill it with water, and replace lid.
- Pack into plastic pails or cardboard cartons lined with garbage bags.
- Ship to film processor for rewashing and drying.


BAY 2
1980 Highlights
1980 Highlights
1980 Highlights

Paintings

- Drain and carry horizontally.
- Set up tabletops padded with blotters and covered with plastic.
- Separate paintings showing structural damage from those that are merely wet. Signs of structural damage are:
    - Tears in the canvas.
    - Flaking, lifting, and dissolving of paint and ground layers.
- Dry the structurally-damaged paintings face up in a horizontal position, on the tables.
- Dry structurally sound paintings as follows:-
    - Set up several more layers of blotters on each table.
    - Add a layer of tissue paper on top of the blotters.
    - Unframe the painting, but do not remove it from its stretcher.
    - Lay the painting face down on this surface, making sure the tissue is not wrinkled.
    - Cut blotters to the inside dimensions of the stretcher frame.
    - Cut a sheet of plywood or thick masonite to the same dimensions, or smaller to fit inside the stretcher keys.
    - Cover the back of the canvas with a blotter (if the canvas is large and more than one blotter is necessary, butt the blotters end-to-end), then the board, and finally weights.
    - Change the blotter until the canvas is dry.
    - If the tissue on the front is sticks to the paint layer, leave it in place.

A qualified conservator should be called and consulted if unsure about the procedure of drying paintings. Contact SU Art Collections for advice on 315-443-4097.

PROCEDURES FOR RECOVERING AUDIO AND SOUND RECORDING MATERIALS

Phonodiscs

- Remove discs from their sleeves and jackets (if labels have separated, mark the center of disc with a grease pencil and keep track of the label).
- Air dry jackets, sleeves, and labels.
- If dirt has been deposited on discs, wash them in a 10% solution of Kodak Photo Flo in distilled water.
- Blot excess moisture with a lint-free cloth; then air dry discs on supports that permit free circulation of air.

Wax Cylinders

- Gently remove cylinders from containers, making sure to provide support to bottom "cap" so cylinders don't drop out.
- Blot as completely dry as possible making sure to remove as much adhesive, dirt, etc. as possible. This is easiest to do when still wet.
- Set cylinders on end and allow to air-dry completely. Place in extra empty containers or wrap in tissue.

Magnetic Media

Reel to reel tapes

- If the exterior of the tape is dirty, wash it (while still on the reel) with lukewarm water,
- Blot excess moisture and air dry (place tapes on sheets of newsprint spread over plastic covered tables).
- Air dry the box.
- If the reels are dirty, remove the tape and wash the reel with detergent and water (or replace the reel).

Audio cassettes

- If there are no master copies, dismantle the cassette.
- Blot excess moisture and air dry (place tapes on sheets of newsprint spread over plastic covered tables).
- If no master copy is available, re-assemble housing and re-record the tape after drying.

Video cassettes

- Dismantle the cassettes.
- Blot excess moisture and air dry (place tapes on sheets of newsprint spread over plastic covered tables).
- If no master copy is available, re-assemble housing and re-record the tape after drying.

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DISASTER REPORT FORM

Please use this form to describe any disaster that occurs in the library. Please see Library Disaster Plan for details of actions to be taken in the event of an emergency/disaster.

1. Date of disaster: Approximate time of disaster:

2. Person completing this form: Date:

3. Location/Area of disaster:

4. Describe the nature of the disaster (caused by leaking roof? burst/leaking pipe? fire? Accidental spill?

5. What type of material was damaged or affected? Please indicate the quantity of material affected.

Books:	Photographs:	Manuscripts:
Bound serials:	Unbound serials:	Boxed serials:
Microfilm:	Microfiche:	Catalog cards:
Video tapes:	Audio Tapes:	Computer equip:

Furniture, describe:

Other:

6. Describe the type and degree of damage to the materials. Were items slightly dampened? Soaked? Charred? Moldy?

7. Who reported the disaster?

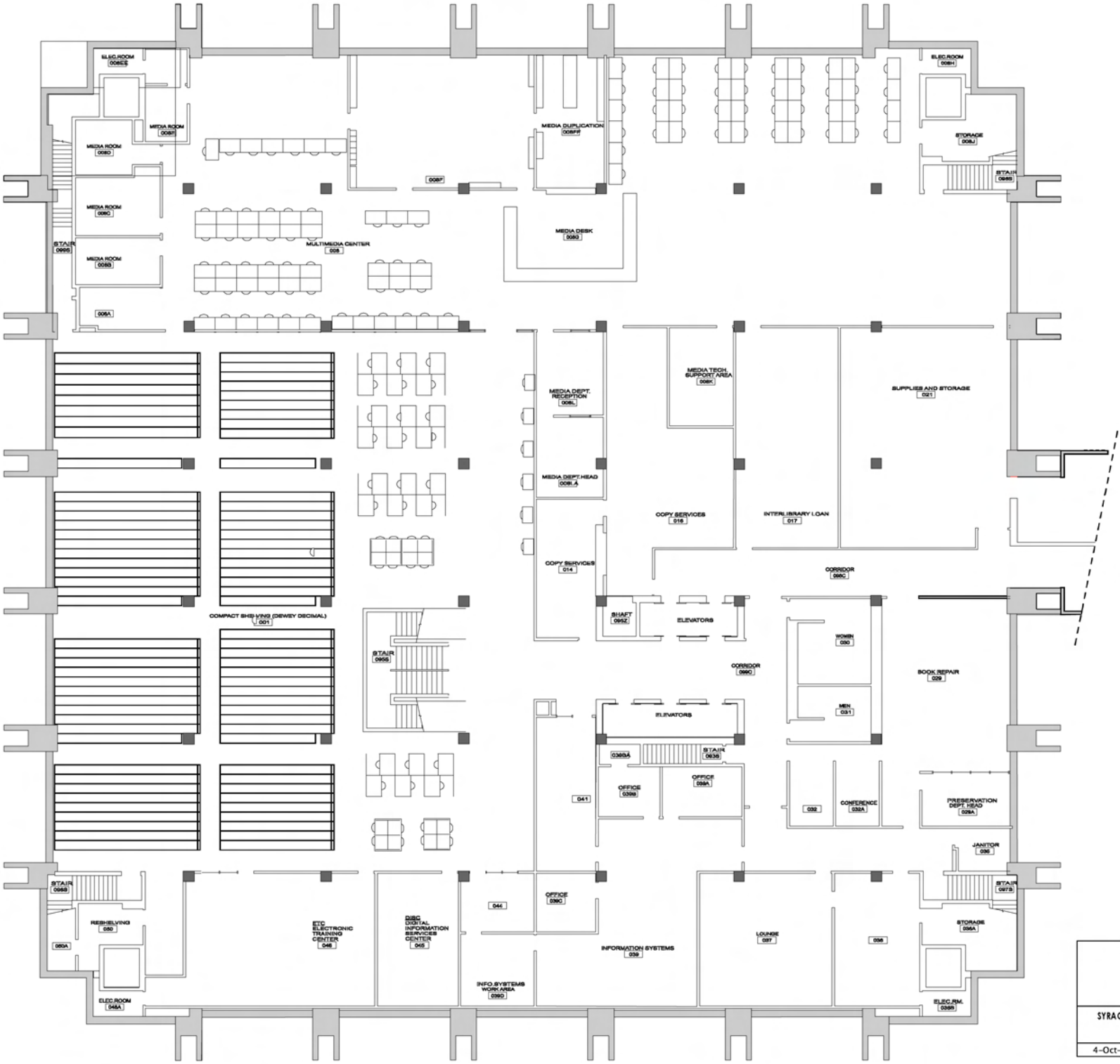
8. What action was taken by Facilities?

9. What action did Library staff take?

10. What follow-up is necessary? Completed?

Copies to: -
Peter Verheyen -Preservation Administrator
David Stokoe – Conservation Librarian
Tom House - Director of Facilities
Suzanne Thorin – Dean of Libraries
Library Administrative Office File

G:\LIB\Shared\Academic Resources\Preservation\Disaster Planning\Disaster Report Form



The following in the Tunnel, not shown:
Rm. 022 – Mail Room
Rm. 023 – Gift Storage
Rm. 024 – Gift Storage
Rm. 025 – Belfer Storage
Rm. 026 – Belfer Storage
Elevator to Belfer and Loading Dock

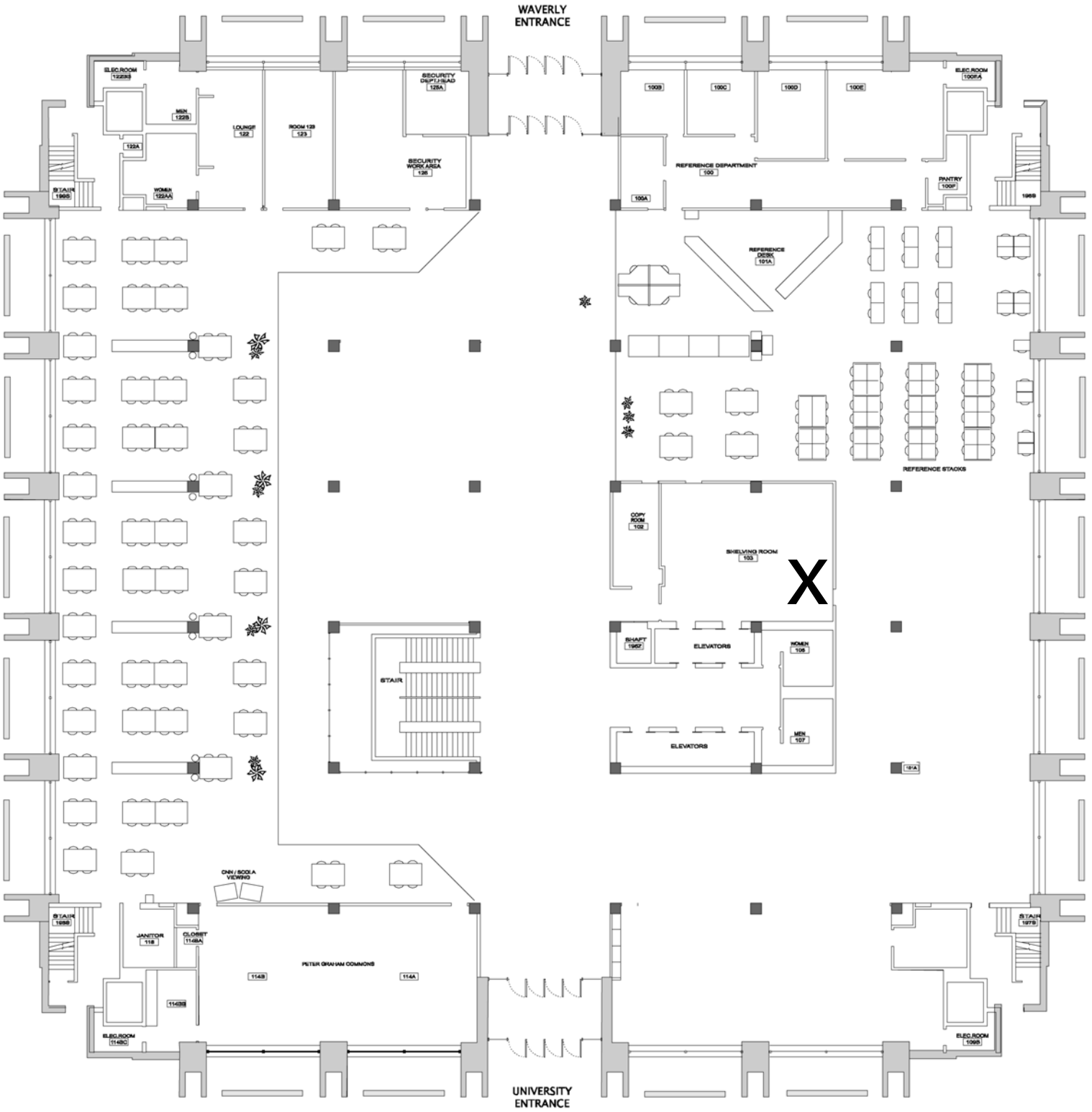
X

BASEMENT FLOOR

B

SYRACUSE UNIVERSITY LIBRARY
E.S. Bird Library

4-Oct-2005 | T. House

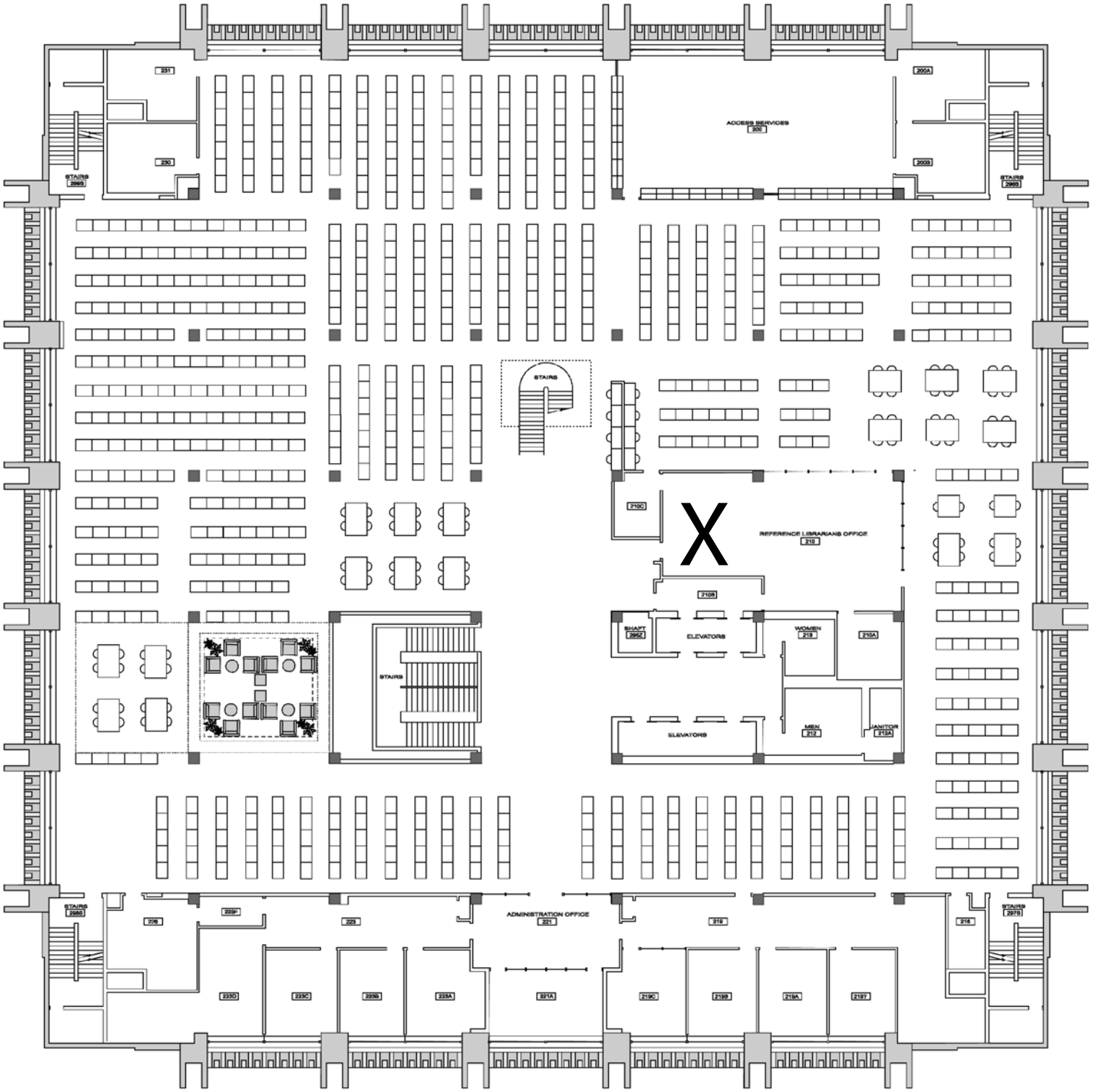


FIRST FLOOR

1

SYRACUSE UNIVERSITY LIBRARY
E.S. Bird Library

4-Oct-2005 | T. House



SECOND FLOOR

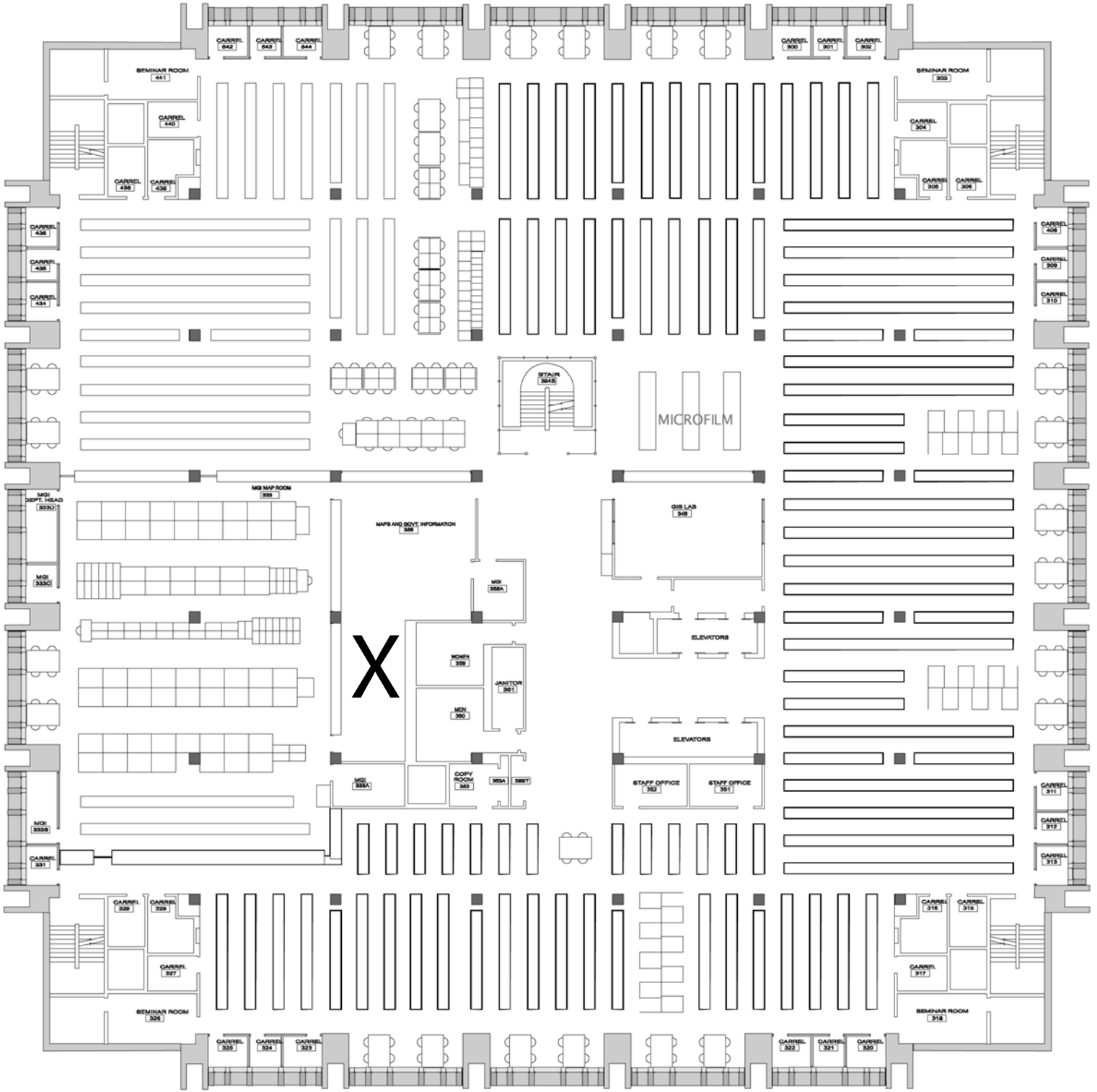
2

STACKS PLANNING

SYRACUSE UNIVERSITY LIBRARY

E.S. Bird Library

4-Oct-2005 | T. House

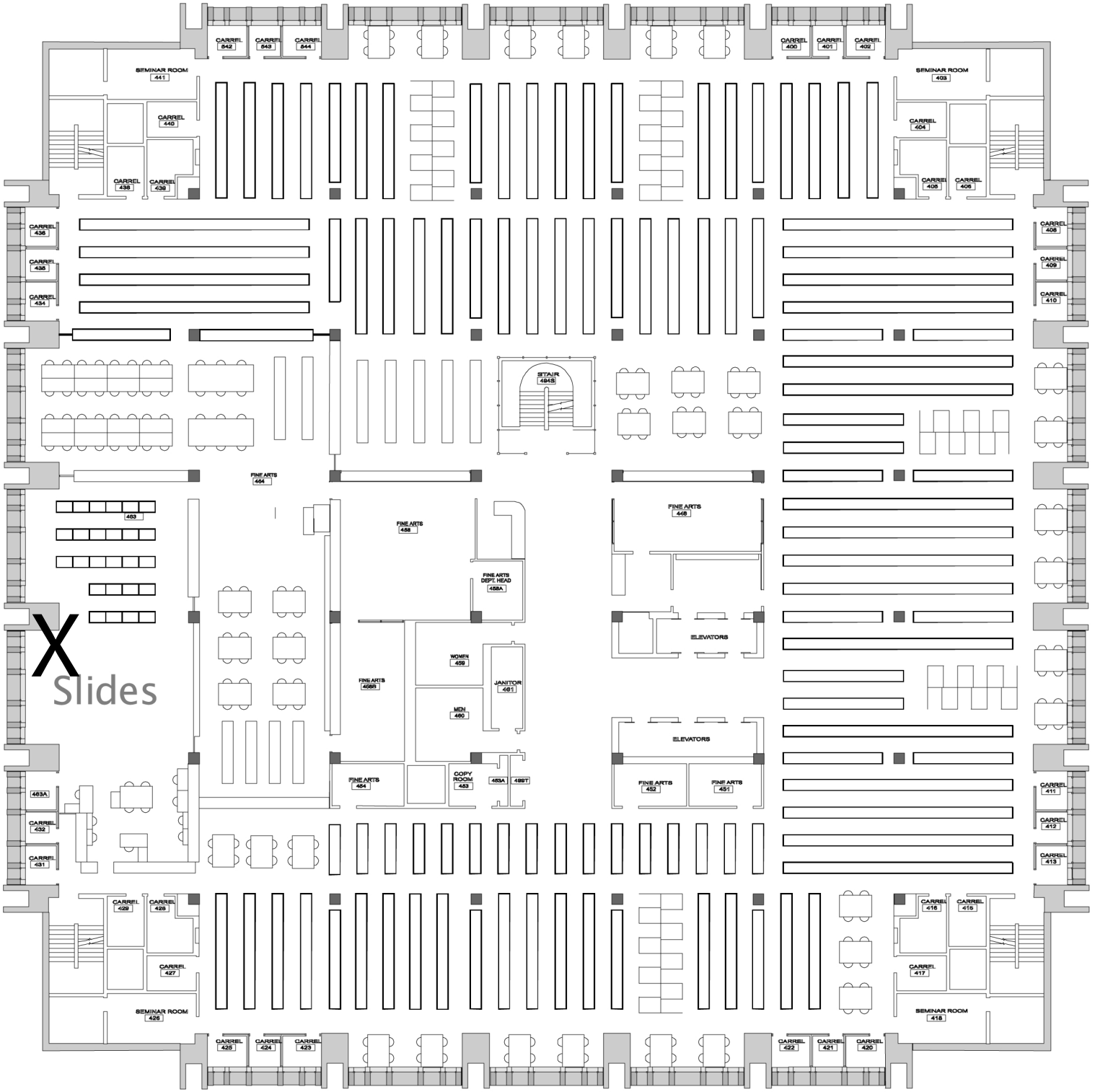


THIRD FLOOR

3

SYRACUSE UNIVERSITY LIBRARY
E.S. Bird Library

4-Oct-2005 | T. House



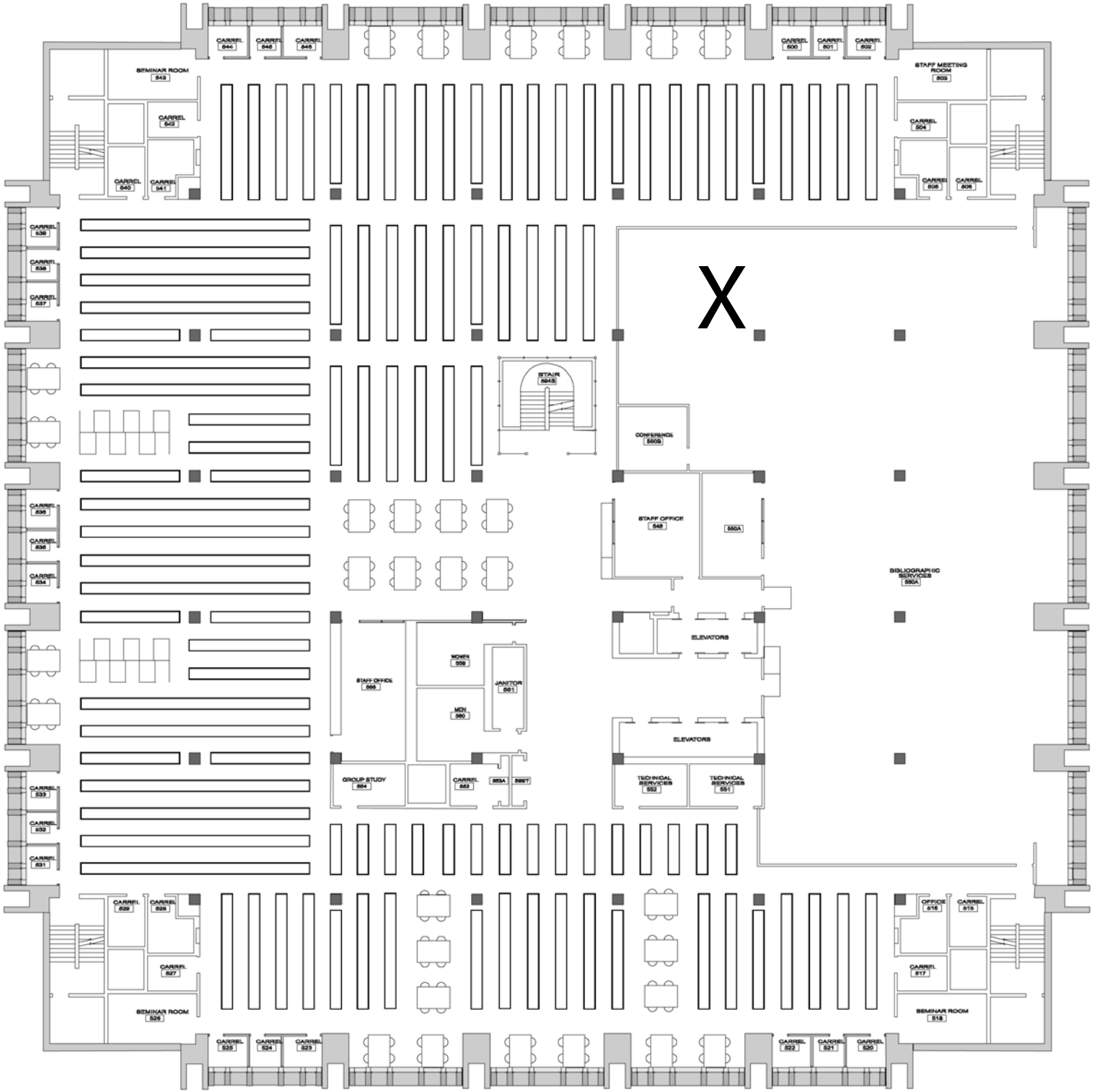
FOURTH FLOOR

4

SYRACUSE UNIVERSITY LIBRARY

E.S. Bird Library

4-Oct-2005	T. House

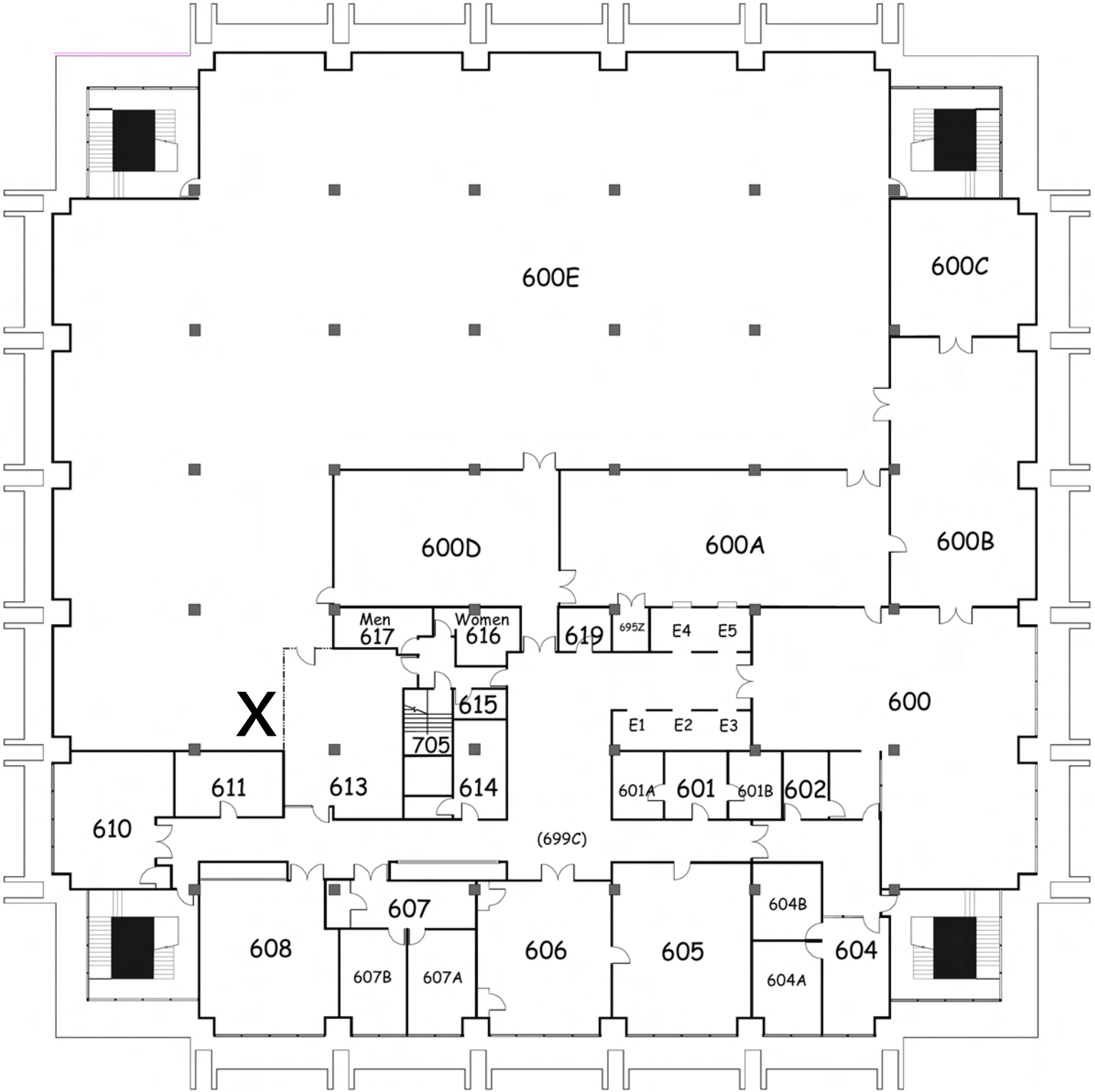


FIFTH FLOOR

5

SYRACUSE UNIVERSITY LIBRARY
E.S. Bird Library

4-Oct-2005 | T. House


600E
600C
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6th Floor