

CONFIDENTIAL

Restoration Prospectus

W.W. Kimball • Opus 7119

Memorial Auditorium

Worcester, Massachusetts

Nelson Barden Associates, Inc.
17 Bellevue Street
Newton, Massachusetts 02158
617 • 964•0336

PHASE ONE • CLEANING, CONSERVATION AND FUTURE PRESERVATION

Good restoration achieves two goals: it puts the organ in top-notch condition, and it facilitates future restoration. The Auditorium organ is one of the finest we have ever seen, but Kimball did not lay out the organ in a way that encouraged maintenance and servicing. Our dual objectives are to achieve a first-class restoration while also producing a maintainable instrument that can be readily restored 50 years from now.

1. Presently, the mechanism of the organ is impossible to restore because access doors inside the organ are too small. These will be enlarged to make the restoration possible and to provide improved access for future maintenance.
2. Cleanliness in an organ is not a luxury but a necessity, otherwise the tone and mechanism are seriously affected. We will install a permanent, commercial-quality, built-in vacuum system with outlets throughout the organ to enable us to clean the entire instrument of 55 years of dirt.
3. Lighting in the organ chambers is inadequate and wiring capacity needs to be increased. This upgrading must be done by Auditorium electricians.
4. To preserve the look and feel of the instrument, interior wooden surfaces will be refinished in the original clear lacquer, and ductwork repainted in "Kimball yellow." Chamber floors and walls will be repainted.
5. Pipes up to eight feet in length will be cleaned, refurbished and relacquered. After being replaced on the windchest, the pipes will be regulated and fine-tuned.

Reed pipes up to eight feet in length will be cleaned, refurbished and relacquered, burnishing the reeds and shallots. The ties that hold the pipes upright will be replaced. After being returned to the windchests, the pipes will be regulated and fine-tuned.

207,000

PHASE TWO • WIND SYSTEM

The wind system supplies pressurized air through a maze of pipe, varying in size from three inches to two feet. There are 23 different pressure regulators and 25 pressure stabilizers. All are seriously deteriorated. The air leakage, which can be heard in the auditorium, is caused by rotted, blown-out leather.

These regulators are cumbersome and heavy. The layout makes all of them difficult to remove. The silver plaster organ grilles on either side of the proscenium arch will have to be cut out and the units hoisted. The cutting, patching and replacing of the grille work from scaffolding is a delicate operation. It would be better to sufficiently improve access within the instrument so that components could be hoisted inside.

1. All the regulators will be sanded down and refinished in original clear lacquer. All hardware and springs will be refurbished. Deteriorated materials and parts will be made like-new. Units will be reassembled, reinstalled, and pressures set and checked.
2. All the concussion bellows and tremolos will be refurbished, including hardware. All deteriorated parts will be renewed using the highest quality materials. Units will be reassembled, reinstalled, and pressures set and checked against regulators.

180,600

PHASE THREE • EXPRESSION CONTROL

The organ "speaks" through expression. Most of the instrument is sealed behind sets of giant wooden Venetian blinds. These shades open at the touch of a toe, making the organ grow louder and softer. Inside the chamber, a whole wall opens and shuts in a second. The mechanism that achieves this -- individual pneumatic motors for each of 78 shades -- entails 172 blow and bumper pneumatics and 188 primary-secondaries, a total of 360 action units. All have failed.

1. Blow pneumatics and double-stage pneumatics will be recovered in soft chrome-tanned kangaroo or elk skin finished with gluteraldehyde. Primary-secondaries will be recovered in hair-sheep leather with high chrome content.
2. Pivots, bushings and all joints will be refurbished for smooth, silent operation. The shades should be encouraged to open as far as possible, while not altering the speed of operation.

80,000

PHASE FOUR • CONSOLE AND COMBINATION ACTION

The console is the control center for the almost 7,000 pipes of the organ. Over the years, the auditorium staff has carefully protected the console, and it is in surprisingly good condition. Interior deterioration is not far advanced. The major part of the pneumatic action is in excellent condition. The knob pneumatics and coupler switches were recently repaired, and do not appear to need attention. All key, stop and piston contacts are solid silver and in excellent condition.

The console shell, music rack and bench will be refinished. Ivory knobs and keys will be cleaned and restored. Touch on all manuals and pedal will be regulated, as well as toe studs and pistons. Swell pedals and contacts will be cleaned and adjusted, as well as knob and coupler motors.

The combination action is a mechanical memory system. Groups of stops set during practice are recalled in performance at the touch of a button. A large instrument cannot be properly played without them. Present-day concert artists expect virtually unlimited memory capacity. The present Kimball combination action will be restored, as it is one of the most reliable designs ever produced in this country. With no alteration to the original mechanism, an electronic memory system with multiple levels will be added.

The combination action machine will be disassembled, sanded down and refinished in original clear lacquer. The pneumatics will be recovered in the highest-quality leather and synthetics. It will then be reassembled and regulated for speed and maintainability.

125,000

PHASE FIVE • SILVER EAGLE TRUMPET

One stop on the organ was never installed -- the Tuba Magna. This stop was meant to be the commanding voice of the organ, louder than all the rest combined. Instead of being with the main sections of the organ, this stop had a special, separate location: the flourish of trumpets was to come through the wings of the silver eagle high in the center proscenium arch. The Kimball Company made every preparation, both in the wiring and in the wind supply, but the Tuba was unfortunately never installed. While a stop of this nature hasn't been built since the Second World War, we would hope to recreate a set of these magnificent pipes as the crowning glory of the organ.

45,000

COSTS AND OTHER CONSIDERATIONS

Phase I	\$207,000
Phase II	\$180,600
Phase III	\$ 80,000
Phase IV	\$125,000
Phase V	\$ 45,000
Total	\$637,600

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Now that the Minneapolis Auditorium Kimball has been dismantled, the Worcester organ is the largest remaining municipal Kimball in the world. Restored and rejuvenated, it will again take its place at the forefront of magnificent instruments built for public enjoyment.

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4. To preserve the look and feel of the instrument, interior wooden surfaces will be refinished in the original clear lacquer, and ductwork repainted in "Kimball yellow." Chamber floors and walls will be repainted.
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PHASE TWO • WIND SYSTEM

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These regulators are cumbersome and heavy. The layout makes all of them difficult to remove. The silver plaster organ grilles on either side of the proscenium arch will have to be cut out and the units hoisted. The cutting, patching and replacing of the grille work from scaffolding is a delicate operation. It would be better to sufficiently improve access within the instrument so that components could be hoisted inside.

1. All the regulators will be sanded down and refinished in original clear lacquer. All hardware and springs will be refurbished. Deteriorated materials and parts will be made like-new. Units will be reassembled, reinstalled, and pressures set and checked.
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PHASE THREE • EXPRESSION CONTROL

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The console shell, music rack and bench will be refinished. Ivory knobs and keys will be cleaned and restored. Touch on all manuals and pedal will be regulated, as well as toe studs and pistons. Swell pedals and contacts will be cleaned and adjusted, as well as knob and coupler motors.

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The combination action machine will be disassembled, sanded down and refinished in original clear lacquer. The pneumatics will be recovered in the highest-quality leather and synthetics. It will then be reassembled and regulated for speed and maintainability.

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COSTS AND OTHER CONSIDERATIONS

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Phase IV	\$125,000
Phase V	\$ 45,000
Total	\$637,600

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17 Bellevue Street
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.....

Mr. Stephen Long
73 Merriam Street
Worcester, Massachusetts 01609

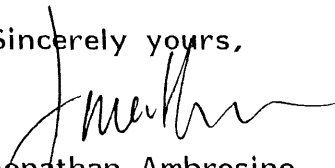
September 14, 1988

Dear Steve,

Enclosed is the revised prospectus for the restoration of the Auditorium Kimball. I wanted to get this to the committee as soon as possible so any changes could be made in time for the September 26 Auditorium Trustees meeting.

Please let me know about any modifications the committee wishes to make, and I will be sure to get a final, revised copy out as soon as possible.

Sincerely yours,



Jonathan Ambrosino
Nelson Barden Associates, Inc.

JEA/al

Y

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1. Presently, restoration is impossible because passageways inside the instrument are too small to remove the mechanism. Access must be improved to make the present restoration possible and assist in maintenance and future restorations.

There are two possibilities. Doors may be cut through the stage-facing brick walls of each organ chamber at middle and upper levels. Or the trap doors between the levels of each chamber may be enlarged to accept the necessary mechanisms. In either case, a winch must be provided to lower components to ground level. This work must be handled by outside contractors, and we will take every precaution to insure that debris does not enter the organ.

2. Cleanliness in an organ is not a luxury but a necessity, otherwise the tone and mechanism are seriously affected. We will install a permanent, commercial-quality, built-in vacuum system with outlets throughout the organ to enable us to clean the entire instrument of 55 years of dirt. It will also encourage regular future cleaning.
3. Lighting in the organ chambers is inadequate. Fluorescent fixtures should be installed throughout the instrument. To meet this electrical need, plus that of the vacuum systems, wiring capacity needs to be increased by 50 amps in each chamber. This upgrading must be done by licensed electricians.
4. To preserve the look and feel of the instrument, interior wooden surfaces will be refinished in the original clear lacquer, and ductwork repainted in "Kimball yellow." Chamber floors and walls will be repainted.
5. Pipes up to eight feet in length will be cleaned, refurbished and refinished. After being replaced on the windchest, the pipes will be regulated and fine-tuned.

Reed pipes up to eight feet in length will be cleaned, refurbished and refinished, burnishing the reeds and shallots. The ties that hold the pipes upright will be replaced. After being returned to the windchests, the pipes will be regulated and fine-tuned.

All pipes from eight to 32 feet in length will be wiped down and cleaned in place, and checked for regulation and speech.

PHASE TWO • WIND SYSTEM

The wind system supplies pressurized air through a maze of pipe, varying in diameter from three inches to two feet. There are 23 different pressure regulators and 25 pressure stabilizers. All are seriously deteriorated resulting in air leakage which can be heard in the auditorium.

These regulators are cumbersome and heavy. The layout makes many of them impossible to remove. Their restoration depends on the improved access mentioned in Phase One.

1. All the regulators will be refinished in original clear lacquer. All hardware and springs will be refurbished. Deteriorated materials and parts will be made like-new. Units will be reassembled, reinstalled, and pressures set and checked.
2. All the pressure stabilizers and tremolos will be refurbished, including hardware. All deteriorated parts will be renewed using the highest quality materials. Units will be reassembled, reinstalled, and pressures set and checked against regulators.

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The console is the control center for the almost 7,000 pipes of the organ. Over the years, the auditorium staff has carefully protected the console, and it is in remarkably good condition. Interior deterioration is not far advanced. The major part of the pneumatic action is in excellent condition. The knob pneumatics and coupler switches were recently repaired, and do not appear to need attention. All key, stop and piston contacts are solid silver and in excellent condition.

The console shell, music rack and bench will be refinished. Ivory knobs and keys will be cleaned and restored. Touch on all manuals and pedals will be regulated, as well as toe studs and pistons. All controls and contacts will be cleaned and adjusted, as well as knob and coupler motors.

The console platform is mounted on an elevator, which is tilting slightly. The platform and elevator should be checked and, if necessary, overhauled. Any required work must be carried out by Auditorium personnel or outside contractors.

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COSTS AND OTHER CONSIDERATIONS

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Phase II	\$180,600
Phase III	\$ 80,000
Phase IV	\$125,000
Phase V	\$ 45,000
Total	\$637,600

These prices are the best estimates we can give at this time, prior to the detailed planning of the restoration. They represent 1988 costs of doing the work all at once.

These prices do not include the following:

- Bonding or any special insurance requirements
- Access improvement (Phase I)
- Electrical upgrading (Phase I)
- Possible console elevator repair (Phase IV)

The work can be done either in phases or in one step. You will pay a 20-25 percent premium if the job is spread out, due to the separate execution of phases and multiple start-up costs. Also, there is the possibility of inflation eating into the budget. Other points in favor of doing the work in one shot are consistency of approach, less interruption of the Auditorium schedule, and a tremendous psychological impact on the public when the instrument is unveiled all at once.

Our work crew is presently six people, including voicer, cabinetmaker and three skilled craftsmen. We work 10 hour days, Monday through Thursday from 7:00 to 5:00. We carry full Workmen's Compensation and liability insurance.

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*Additional Cost : Insurance
cutting doors*