Music Department CSU San Bernardino 5500 University Pkwy. San Bernardino, CA 92407-2397

Mar. 29.2012

Proposal-Piano Rebuild

Piano: Steinway (NY) model D concert grand, ser. nr. 450469 (1977).

Location: Recital Hall.

A. Current condition, based on our evaluation:

- 1. Piano has Renner-USA action, hammers and keyframe felts, Tokiwa replica backchecks. Original, inferior quality action flange screws re-used, hammer rail insulator material not correct version. Letoff screws and buttons replaced (appear ok). Action parts are wearing prematurely and unevenly due to incorrect spacing and alignment of parts to each other and inferior quality action regulation work.
- 2. Damper system (heads-wires-felts, guide rails, underlever system and sostenuto) is original Steinway Teflon system, obsolete since ca 1983. Original damper felts were replaced. Damper guide rail bushings failing, damper wires unstable in bushings, damper lifting and seating inconsistent and out of synchronization with keys, sustain and sostenuto mechanisms.
- 3. Strings and Plate Hardware: Strings replaced by previous rebuilder, but without replacing agraffes and duplex scale bars, resulting in poor string termination, distortion of overtone production and fundamental tone frequency production. Pinblock replaced by previous rebuilder (tested ok).

- 4. Soundboard: Original 1977 soundboard, producing poor tone quality, especially lower treble range to note 88. Soundboard crown 8mm maximum at center of longest rib; soundboard crown nonexistent in treble sections, as discovered through actual underside measurement of soundboard surfaces by us.
- 5. Plate: Refinished previously, original agraffes and duplex bars reused. Plate hardware buffed and/or replated. Capo'dAstro bar surface ok, but must be checked for burrs/inconsistencies, and corrected.

B. Proposal:

- 1. Replace soundboard, including bridge recapping, notching and pinning, Check and resurface Capo'dAstro bar and front duplex segments, restring piano with new treble wire, bass strings, agraffes, duplex bars and stringing felts/cloths. Chip and tune new strings ten times, or until stable A-440Hz. is achieved. Terminate and level all strings in conjunction with damper system installation and tone regulation procedures.
- 2. Lyre/pedals/trapwork: Original, with some felt and leather replacement. Dismantle and overhaul and upgrade entire system with new Steinway correct parts, in conjunction with damper system replacement and sostenuto overhaul.
- 3. Replace entire damper system with new version underlever and tray assembly, new damper heads-wires-felts, guide rails and guide rail bushings, in conjunction with lyre-pedal-trapwork overhaul and upgrading. Regulate dampers for precise lifting, seating and damping, in synchronization with keys, sustain and sostenuto mechanisms and pedals.
- 4. Action and Keys: Dismantle entire action and keyboard assembly, inspect and correct all action part alignment and spacing inconsistencies, replace all prematurely worn backchecks, check all key bushings and remove and rebush if necessary. Check all key rail pins and rail felts and cloths and either leave as is, or renew or replace if necessary. Replace all action flange screws with correct new version screws. Check shift lever-to key frame connection points and rework if necessary. Refit and rebed key frame into key bed, set key height and level keys

and set key dip to factory specs. Regulate action first on work bench, then in piano, then once again after hammers have been tone regulated and voiced. Measure touchweight(up and down), and correct/refine to current specifications.

PRICE(Incl. parts and labor. Moving extra) \$22,000.000

Options: Replace action w/genuine Steinway action and hammers: Add \$6,000.00

Work includes a one-year guarantee, plus a one year post-completion follow up call.

Prices good to 12.31.12, excluding price increases in parts/materials which will be added without additional labor charges.

Music Department CSU San Bernardino 5500 University Pkwy. San Bernardino, CA 92407-2397 3.29.12

Proposal: Piano Overhaul

Pianos: 4 Steinways(NY) model M- ebony. Ser. nrs. 451627(rm. 223), 451657(rm.221), 451643(rm. 221), 451652 (?)(rm. 217). Year of manufacture for all pianos: 1977.

A. Results of Evaluations of all four pianos:

1. All pianos are original and completely intact, except for some possible restringing which was done years ago. All pianos contain the now obsolete Steinway Teflon action and damper system, no longer in use or available. All ebony finishes are original. No structural deficiencies or failures found. All soundboards are original, and have retained a minimum of 3-9mm crown, thus rendering these soundboards reusable, and not requiring replacement.

B. Proposal for Overhaul:

- 1. Remove piano plates and inspect soundboards and bridges. Do any and all soundboard and bridge renewal and/or repair work at this time. Check and test pinblocks in each piano, and reuse and/or replace pinblocks as necessary.
- 2. Plates and hardware: Refinish and reletter plates, check and resurface Capo d'Astro bars, replace agraffes and duplex bars. Clean/buff all plate bolts and screws. Reinstall plates and prepare for stringing, with new felts and cloths.

- 3. Strings: Restring pianos with highest quality treble wire and bass strings, on new tuning pins. Level and terminate strings. Tune pianos ten times, or until stability is reached at A-440hz.
- 4. Lyres/Pedals/Trapwork: Dismantle, inspect, overhaul and upgrade entire system with newest version factory parts and materials. Upgrading to be done in conjunction with new damper system, and sustain and sostenuto mechanisms.
- 5. Damper Systems: Replace entire damper systems with new version underlever and tray system, damper heads-wires-felts, guide rails and guide rail bushings. Configure underlever tray pitman to new version configuration, in conjunction with pedal/trapwork overhaul and upgrading. Regulate dampers for precise lift-seating-damping and synchronization with keys, sustain pedal and sostenuto mechanisms, to current factory specs.
- 6. Keys and Key frames: Dismantle, inspect, polish and/or replace all key rail pins, replace all key rail punchings and rail cloths, inspect Accelerated Action Balance rail bearings and replace if necessary. Check keyframe to shift lever connection points and rework/overhaul if necessary. Overhaul keys with new bushings(front and center), key end lifter felts and backchecks. Refit and rebed keyframe into keybed, reset key height, key level and key dip to current factory specs.
- 7. Actions: Replace obsolete Steinway Teflon actions with new-version genuine Steinway repetitions, hammer shanks and flanges and hammers. Check let off buttons and overhaul and/or replace in conjunction with action replacement. Check hammer rail insulator felt and renew or replace as necessary. Replace all obsolete action rail flange screws. Align and space all action parts relative to strings, for maximum power on full shift and maximum left string clearance with una chorda shift pedal. Regulate action on work bench, then again in piano, and possibly a third time after hammers have been tone regulated and voiced. Measure touchweight(up and down), and correct/refine to current specs. Tone regulate and voice hammers for highest volume consistent with best tone.

Options: New Soundboard: Add \$5000.00

Refinishing: Add \$5500.00

Work includes a one year guarantee, plus a one year post-completion service call. Prices good until 12.31.12, except for parts/materials price increases, which will be added without add'l labor charges.

Department of Music CSU San Bernardino 5500 University Pkwy. San Bernardino, CA 92407-2397 3.29.12

Proposal: Piano Overhaul

Piano: Baldwin model F grand, ser. nr. 182132(1968). Located in Band rm. Flyleaf missing!

Evaluation: Piano 99% original and intact, except top lid flyleaf is missing. Music Dept will first look for this missing part, and we will reinstall or replace/reinstall. No structural failures or deficiencies found. Original strings, intact Renner/Baldwin OEM action and damper system, ivory/ebony key tops. Soundboard intact without any cracks or failures.

Proposal:

- 1. Reinstall missing flyleaf, if found. If not found, this should be replaced.
- 2. Remove plate and inspect soundboard/bridges/pinblock. Do any repairs/renewing of soundboard/bridges/pinblock at this time.
- 3. Keys and Key frame: overhaul keyframe with new rail felts and cloths, polish key rail pins, refit and rebed keyframe into keybed. Overhaul keys with new bushings(front-center), key end lifter felts and backchecks if necessary. Set key height, key level and key dip to current Baldwin specs.
- 4. Action: dismantle and inspect all original Renner parts. Replace and upgrade to newest version Renner hammer heads, shanks/flanges. Space and align all action

parts relative to strings, then regulate action first on workbench, then in piano, then once again after hammer voicing and tone regulation. Measure touch weight and correct/refine to current Baldwin specs. Tone regulate and voice hammers for highest volume consistent with best tone.

- 5. Damper System: Dismantle and overhaul Renner damper system with new bushings, felts, grommets, leathers, as necessary. Regulate dampers for precise lift-seating and damping, and for synchronization with keys, sustain and sostenuto mechanisms.
- 6. Lyre/Pedals/Trapwork: Dismantle, inspect and overhaul with new leathers, bushings, grommets, etc..
- 7. Plate and Strings: Clean plate, install new agraffes, resurface Capo d'Astro bar, replace stringing cloths and felts. Restring piano to Baldwin stringing schematic, using highest quality treble wire and bass strings. Level and terminate strings. Tune piano ten times or until strings stabilize at A-440hz.

PRICE(Incl. parts/labor, moving extra).

\$11,800.00

Option: New Flyleaf est. \$1500.00

Work guaranteed for one year, and includes a one-year post-completion follow up service call.

Price good until 12.31.12, except for part/material price increases, which will be added without additional labor charges.

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Proposal: Piano Overhaul

Piano: Kawai KG-5C, ser. nr. 707113(1973), located in Choral Rm.

A. Evaluation Results: Piano completely original and intact, but worn, due to decades of rehearsal/accompanist playing. No structural failures or deficiencies found.

B. Proposal:

- 1. Plate/Soundboard/Strings: Remove strings and plate, inspect plate, soundboard, bridges and pinblock. Perform any cleaning, renewal/repair of these components at this time, except for strings, which will be replaced. Reinstall plate, prepare for stringing with new felts, cloths, etc., and restring piano with highest quality treble wire and bass strings, on new tuning pins. Level and terminate strings. Tune piano ten times or until stable A-440 hz is achieved.
- 2. Pedals/lyre/trapwork/Damper System: Overhaul all systems with new felts, leathers, bushings, grommets, etc., as necessary. Regulate damper system for precise lifting-seating-damping, in conjunction with sustain and sostenuto mechanisms.

- 3. Keys and Key frame: Overhaul keys and key frame with new bushings, rail cloths and punchings, key end lifter felts and backchecks as necessary. Refit and rebed keys/frame into piano, set key height, key level and key dip.
- 4. Action and Hammers: dismantle and inspect entire action assembly. Replace hammers with new version hammers for KG-5C. Space and align all action parts relative to strings, then regulate action once on work bench, then in piano, then again after voicing and tone regulation of hammers.

Measure key touchweight(up and down), and correct and refine to current Kawai specs. Tone regulate and voice hammers for highest volume consistant with best tone.

Price(Incl. parts/labor. Moving Extra):

\$7500.00

Work guaranteed one year, and includes a one year post-completion service call.

Price guaranteed until 12.31.12, except for parts/materials, the cost of which will be added without additional labor charges.

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Proposal: Piano Overhaul

Piano: Yamaha C7SE grand, ser. nr. 4548030(1988), located in Band Rm.

A. Evaluation: Piano intact and original. Showing much wear and deterioration due to heavy use since 1989. No structural or tonal failures or deficiencies found.

B. Proposal:

- 1.Restring piano with highest quality treble wire and bass strings, either with existing tuning pins or with new tuning pins, as necessary. Level and terminate strings. Tune piano ten times or until tuning stabilizes at A-440 hz.
- 2. Lyre/Pedals/Trapwork/Damper System: Dismantle, inspect and overhaul as necessary, with new felts, bushings, grommets, etc.. Reinstall and regulate damper system according to Yamaha 37 Steps procedure for precise lift-seat-damping, synchronization with keys, sustain and sostenuto mechanisms.
- 3. Keys and Keyframe: Overhaul keys and keyframe with new bushings, rail cloths, key end lifter felts and backchecks as necessary. Polish all key frame pins. Refit keys/frame into piano and rebed keyframe into keybed. Set key height, key level and key dip to Yamaha specs.

4. Action and Hammers: Dismantle and inspect all action parts. Replace old version Yamaha type E hammers, either with same, or with new version C7 hammer/shank/flange assemblies. Regulate action using Yamaha 37 steps procedure, tone regulate and voice hammers for highest volume consistent with best tone. Check and measure touchweight(should have little to no variance).

PRICE(Incl. parts/labor)

\$10,800.00

Includes one year guarantee, plus a one year post-completion follow up service call. Price increases for parts/materials added, but without additional labor charges.