

SPECIFICATIONS
FOR
RENOVATION OF SERVICE BUILDING
OF THE NATHANIEL RUSSELL HOUSE
51 MEETING STREET
CHARLESTON, S. C.

FOR
THE HISTORIC CHARLESTON FOUNDATIONS
OF CHARLESTON, S.C.

SIMONS AND LAPHAM AND HENRY P. STAATS
ASSOCIATE ARCHITECTS
17 BROAD STREET
CHARLESTON, S. C.

June 4, 1955

Addendum No. 4
Dated June 27, 1955

The following addendum is hereby made part of the specifications for the above project and all General Conditions, General Requirements and Special Conditions, Forms, Contracts set forth in the specifications apply equally in such force to this addenda as though included herein.

ADDENDUM NO. 2: All of Addendum No. 2 is hereby revoked and will hereafter be disregarded.

HEATING: The heating of the Service Building is hereby included which will be as follows:

Furnish and install a Crane gas fired boiler with 640 sq. ft. capacity, a Bell & Gossett circulating water pump, a flow control valve, an expansion tank, and a Thrush automatic feed and relief valve.

Use existing radiators in building, and install additional radiation that owner will furnish from main house, and insulate all exposed heating pipes underneath building. Job will be completely automatic with room thermostat, aquastat, and all necessary safety controls on burner. The entire job to be guaranteed as to defects in workmanship and material for one year from date of installation.

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June 4, 1955

ADDENDUM NO. 2

Dated June 13, 1955

The following addendum is hereby made part of the specifications for the above project and all General Conditions, General Requirements and Special Conditions, Forms, Contracts set forth in the specifications apply equally in such force to this addendum as though included herein.

EACH BIDDER SHALL REFER TO THIS ADDENDUM NO. 2 IN HIS BID
FAILURE TO DO SO MAY CONSTITUTE AN INFORMALITY IN THE BID.

CHANGES IN SPECIFICATIONS

Page 19 Plumbing: State deduction in Base Bid if water heater and transite flue are omitted and a 3/4" cold water line is run to boiler room No. 2 with 3/4" hot water line extended to Apartment kitchen and baths #1 and #2. All hot water lines to be insulated with air cell covering.

Instructions to Bidders: (1) Delete Five p.m. and change to read 4 p.m. 15 June 1955.

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CHARLESTON, S. C.

June 4, 1955

ADDENDUM NO. 1

Dated June 9, 1955

The following Addendum is hereby made part of the specifications for the above project and all General Conditions, General Requirements and Special Conditions, Forms, Contracts set forth in the specifications apply equally in such force to this addendum as though included herein.

EACH BIDDER SHALL REFER TO THIS ADDENDUM NO. 1 IN HIS BID
FAILURE TO DO SO MAY CONSTITUTE AN INFORMALITY IN THE BID.

CHANGES IN SPECIFICATIONS

Page 9. Finish Carpentry:

Provide Sampson spot sash cord for all double hung windows and hardware brackets where there are no weights and cords.

Page 9 Finish Carpentry (continued)

Sheathing over tub: In bathroom No. 2 over tub set sheathing flush with face of studs. Sheathing to be No. 1 yellow pine free from large or loose knots T & G 1" x 6 laid horizontally with tongue up. Over sheathing lay 30 building felt horizontally upper lapping over lower and secured with G. I. roofing nails.

Wall Panels over Tub: Wall surfaces over tub after they have been properly sheathed as previously called for will be covered with Marlite Panels with March mouldings at all joints and angles and caulked and cemented with March C-100 Adhesive, all as manufactured by March Wall Products, Inc., Dover, Ohio. Marlite panels to be of color, plain or scored as selected by the Owner with Hi-gloss finish. Panels to be thoroughly secured to sheathing with March C-300 rubber base adhesive. Top and bottom edges and all joints in panels to be secured with March Alumilited moulding. Recesses to be caulked with March C-100 caulking before setting panels in slots. Provide tub mouldings M 69-A and M 69-AC bent on $1\frac{1}{2}$ " radius to fit tub's end.

Page 11 Lathing:

Where new partitions or related old partitions join ceiling provide metal lath extending 6" on each side of angle.

Page 19 Plumbing:

Gas Piping: Provide gas outlet in Boiler Room No. 2 where directed by Heating Contractor.

Page 20 Plumbing Fixtures:

Bathroom No. 2 Delete word "without" - change to read with Shower complete with curtain rod, curtain hook and hold back.

Page 24 Electrical Outlets:

To economize on patching plaster receptacles will be located in baseboards.

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~~June 4th, 1955~~

omit

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INSTRUCTIONS TO BIDDERS

- (1) Sealed proposals will be received at 17 Broad Street, second floor, Charleston, S.C. until Five p.m., 15 June 1955 for Renovation of Service Building in the Rear of the Nathaniel Russell House, 51 Meeting Street, Charleston, for the Historic Charleston Foundation of Charleston, South Carolina *omit*
- (2) Bidders are to carefully examine drawings and specifications and conditions at the site and report any discrepancies with existing conditions.
- (3) The Owner reserves the right to reject any and all bids or to accept any bid.
- (4) Bidders submitting a bid in excess of \$12,500.00 shall be legally licensed as General Contractors in South Carolina as required by law. The number of the said license shall appear on the outside of the sealed proposal. *omit*
- (5) Bidders submitting a bid in excess of \$12,500.00 shall obtain a Bidders license as required by South Carolina law. The number of said license shall appear on outside of sealed proposal. *omit*
- (6) Each bidder will list his subcontractors for the following parts of the work: Sheet Metal and Roofing; Plumbing and Electric Wiring.

omit

PROPOSAL FORM

The Historic Charleston Foundation
17 Broad Street
Charleston, South Carolina

The undersigned having carefully examined the Instructions to Bidders, Proposal Form, General and Special Conditions of the Contract and Work; The Specifications for labor and materials for the building including the plumbing and electrical work and the drawings as well as the site and conditions affecting the work here by proposes to furnish all labor and materials and perform all work and services necessary for and incidental to the renovation to the Service Building in the rear of the Nathaniel Russell House, 51 Meeting Street, Charleston, S. C. as set forth in the above named documents for the lump sum amount of

_____ Dollars(\$ _____)

The contractor proposes to complete the contract in _____ calendar days.

The contractor agrees that if awarded the contract he will use the following sub-contractors (Name one of each only)

Sheet Metal and Roofing _____

Plumbing _____

Electric Wiring _____

In submitting this bid it is understood that the Owner reserves the right to accept any, or reject any and all bids.

If written notice of acceptance of this bid is mailed, telegraphed or delivered to the undersigned within 30 days after the date of opening of the bids, or any time thereafter before this bid is withdrawn, the undersigned, will, within ten days after the date of such mailing, telegraphing or delivering of such notice execute and deliver a contract on the A.I.A. Short Form for Small Construction Contracts, Agreement and General Conditions Between Contractor and Owner.

The undersigned designates as his office to which such notice of acceptance may be mailed, telegraphed or delivered:

omit

PROPOSAL FORM continued

This bid may be withdrawn at any time prior to the scheduled time for the opening of bids or any authorized postponement thereof.

ADDENDUM RECEIPT: The receipt of the following addenda to the specifications is acknowledged.

Addendum No. _____	Date _____
Addendum No. _____	Date _____
Addendum No. _____	Date _____
Addendum No. _____	Date _____
Addendum No. _____	Date _____

Dated _____ (Signed) _____

By _____

(Business Address)

S.C. Bidders License

S.C. Contractors License

NOTE: If Bidder is a corporation write State of Incorporation under signature, if a partnership give full name of all partners.

SCOPE OF THE WORK

WORK INCLUDED: THE Owner reserves the right to enter into contract for as much or as little of the work hereafter specified as available funds may permit. The items to be included to be designated in the contract agreement.

GENERAL CONDITIONS:

The General Conditions shall be those contained in A.I. A. Document No. 307 known as the "A.I.A. Short Form for Small Construction Contracts, Agreement and General Conditions between Contractor and Owner."

SPECIAL CONDITIONS:

Cleaning and Refitting: The building must be kept free from all surplus materials, dirt and rubbish at all times. At the completion of the work, all paint spots must be removed from floor and walls and windows and doors refitted where required. All windows must be cleaned by a professional window cleaner and such minor repairs and alterations made as may be necessary to make the building ready for occupancy. Also all conditions of Article 20 of General Conditions complied with.

Schedule of Materials and Prices: Within ten days after the contract has been signed by the contractor, he shall furnish the Owner with a satisfactory schedule of materials in itemized detail as to quantities and costs of the several parts of the work included in the contract, which schedule shall be the basis of all payments on account on the contract and for any extra work ordered by the Owner, and for deductions and omissions ordered.

Affidavit: Certificate for final payment of the balance (being 10% of the whole amount of the contract and any other amounts that may have been agreed upon) will be issued within 30 days after the completion of the work and its acceptance, provided, however, that the contractor shall file with the Owner the usual statutory affidavit declaring that all claims for labor and materials and all other claims resulting from the prosecution of the work have been paid and satisfied. No payment on account will operate as final acceptance of the work or of any part of the work.

"Or Equal" Where materials or equipment are specified with an "or equal" clause, it is understood that the approval of any substitute material or equipment is to be left to the decision of the architect, and his written approval must be secured before such substitution may be made.

Temporary Power, Water and Heat: The contractor will be responsible for and provide at his own expense such water, electrical power and temporary heat as are required. Temporary heat will be required after completion of plastering. *omit*

Sanitary Provisions: The contractor shall provide suitable and proper temporary privies for the use of employees about the building, acceptable to the Plumbing Inspector of the City of Charleston, and shall keep them clean and in good order and at the completion of the work, remove same. *omit*

Night Watchman: The services of a Night Watchman will not be required. *omit*

Foreman: The contractor shall keep on his work during its progress, a competent superintendent satisfactory to the architect. The superintendent shall represent the contractor in his absence and all directions given to him shall be as binding as if given to the contractor. *omit*

Examination of Premises. All contractors shall carefully examine site before submitting bids. No allowance will be made for lack of full knowledge of all conditions encountered at the site. *OK*

Co-ordination: The General Contractor and all sub-contractors shall co-ordinate their work with all adjacent work and shall co-ordinate with all other trades so as to facilitate the general progress of the work. Each division of the specifications, applying to the work of each sub-contractor is understood to include all cutting, patching and digging for that division, unless specifically stated otherwise. The General Contractor is held responsible for each and all of his subcontractors as set forth in Article 9, A.I.A. form mentioned in General Conditions. *OK*

Allowances: Proposals will include stated sums allowed by the specifications, for such items as electrical fixtures, hardware, etc. the difference between the sums allowed for these items and actual cost will be adjusted between the Owner and the Contractor after the items have been purchased, by additional payment or deduction from contract to the extent that Owner bears the actual cost of the purchase and delivery to the job. *OK*

Drawings and Specifications: All drawings and specifications are the property of the architect and are to be returned to him upon completion of the job. *OK*

Special Conditions (continued)

Measurements: Before ordering any materials or doing any work, the contractor shall verify all measurements at the building and shall be responsible for the correctness of same. No extra charge or compensation will be allowed on account of difference between actual dimensions and the measurements on the drawings; any differences which may be found shall be submitted to the architects for consideration before proceeding with the work. No scaling of the blueprints will be allowed. *OK*

SCOPE OF THE WORK:

The work consists of the complete renovation of the service building in the rear of 51 Meeting Street beginning behind the kitchen of the main house including boiler room and toilet 1st floor and all of the two story building on the second floor including roof of same. *omit*

WORK NOT INCLUDED:

No work shown on the drawings in the three story main building* is included nor for the kitchen of the main building. No Heating System is included in this contract. No movable equipment such as refrigerator or range is included in this contract. *omit*

REMOVALS:

The following items will be removed: Coal from boiler room and store where directed; present stairway to second floor; present fixtures in Bath #2; present fixtures in office; present outside toilet at west end of building and vent for same; Remove sink and drainboard from Dining Room and water heater and laundry trays from Living Room. Interior partitions shown by dotted lines on drawing; present floor covering from apt. kitchen, dining room and living room. Masonry to provide new opening from Dressing Room to Study on Second Floor. Iron gratings from above and below water heater; openings in present stud walls for new doors where shown. Remove by steaming present wallpaper from walls and ceilings of Dressing Room and Bathroom #1. Remove all outside blinds and store where directed. *omit*

EXCAVATION Excavate for foundations of new exterior steps. *omit*

* Except removal of plumbing fixtures from office on second floor. *omit*

CONCRETE WORK:

Concrete work will consist of concrete footings and carriage for new brick steps. Floor slabs for Boiler Room, Garden tools new Toilet and adjoining space. Concrete to be machine mixed 2500#. Slabs to be trowelled smooth. Repair concrete hearth in Living Room where broken.

MASONRY:

Masonry to consist of new brick steps at entrance to Living Room, new chimney with terra cotta flue lining for Boiler Room, slag block wall between boiler room and tool room, and partitions inclosing new Toilet.

Point up exterior mortar joints where erroded. Brick where exposed on steps and chimney above roof to be Old Charleston brick thoroughly cleaned. Unexposed brick to be all hard burned. Furnish and install T.C. flue lining and thimble set in fire clay as required by the Heating Contractor. Repair masonry in jambs and head of new opening. Set steel angles furnished under Misc. Iron and Steel over head of opening. Close openings where iron gratings have been removed with old Charleston brick bonding into existing work.

MISCELLANEOUS IRON AND STEEL:

Furnish two steel angles for new opening in masonry between Dressing Room and Study Second Floor. Furnish 1" diam. galvanized iron pipe rods for clothes closets. Furnish simple railing of Sweeds wrought iron for new steps, rail $3/8"$ x $1\frac{1}{4}"$, pickets $7/8"$ square set in brick treads with lead. Furnish Lucky tub supports and base secured to wall studding and floor set in mastic to make water tight connection where tub joins wall and floor.

CARPENTRY:

Rough Carpentry:

Framing: After present interior partitions, damaged lathing and plastering that are required to be removed have been removed, examine all existing floor and roof framing and partition studding. Note the presence of any decayed or termite infested timber and replace same.

Rough Carpentry (continued)

Build new stairway to second floor with new adjoining partitions as shown on the drawings, make closures in existing walls and partitions as shown, build steps as shown where changes in floor levels occur, frame in new opening in masonry wall cut between Dressing Room and Study.

All lumber for floor joists, headers and trimmers around stair well to be No. 1 dense yellow pine. All other framing lumber to be No. 1 Yellow Pine.

Finish Carpentry:

Finish new stairway and steps at changes of level in a simple and substantial manner. Newels, hand rail and pickets to match those now in place on second floor. Replace outside door to Guest Bedroom with new six panel door 1-3/4" thick of Douglas Fir. Furnish and install new doorway frames required, jamb lining for deep opening between Dressing Room and Study. Utilize existing doors and door frames removed in new positions. New doors and door trim where required will be stock design matching old as closely as possible.

All interior woodwork to be B and Better yellow pine thoroughly kiln dried.

New Window Frames and Sash: Provide new window frame and sash for new Toilet of nearest stock size. Retain present louver in place.

Door and Window Screens: Retain existing window screens repairing or replacing those that are damaged or missing. Use 16 mesh copper bronze and white pine frames.

Exterior Door Screens: Retain existing door screens repairing or replacing those that are damaged or missing. Note that door screen to exterior door of Guest Bedroom must be replaced. Screen wire to be 16 mesh copper bronze.

Screen door frames to be B and Better yellow pine. Wire cloth to be secured with splines. Screen frames to be dowelled together. Screen mouldings to be secured with brass nails.

Provide new window screen for new toilet window but not for toilet door nor for boiler room.

*Replace Sash Cord
where necessary*

Shelving: Closet shelving to be 3/4" and where width requires joints to be tongued and grooved and glued up. Set galvanized iron rods furnished under Miscellaneous Iron and Steel

Wood Floors: The present wood floors where decayed, otherwise damaged or marred by the removal of partitions or fixtures will be repaired and replaced with pine planks of the same width and thickness as existing flooring. Replacements to be jointed only over bearings and to break joint at each plank, no joints to be continuous.

WEATHERSTRIPPING:

Furnish weatherstripping for exterior door to Kitchen, Living Room and Guest Bedroom. Jambs and heads to be interlocking cross grain sheet zinc, Door sills to be aluminum 4 1/4 with 7/8" height with metal pan rain return type. Weatherstripping to be Chamberlain or equal.

INSULATION:

Entire ceiling over second story to be insulated with blown insulation. Rock wool, fiberglass or equal.

ROUGH HARDWARE:

The general contractor will furnish all rough hardware such as bolts, anchors, nuts, washers, nails, screws, etc.

FINISH HARDWARE:

The General Contractor will allow the sum of One Hundred (\$100.00) Dollars for the purchase of finish hardware by the Owner which the General Contractor shall install.

ROOFING AND SHEET METAL WORK

Scope: The work consists of the complete examination of all existing roofs, gutters, and downspouts, both of the two story building and of the one story building attached to rear of same. This does not include the detached frame building not shown on the 1/8" scale plans. All metal roofs will have all loose and scaling paint scraped off. All rusted places to be replaced with new 40 lbs. I.C. tin plate. Flash and counterflash where new chimney of heating plant and where new plumbing stacks project through roof or where old stack has been removed. Present copper gutters and downspouts appear to be in fair shape. Check grading of gutters and clean out any stoppage of downspouts with leaves. Check and resolder any open joints or leaks in gutters and downspouts. Provide copper wire strainers at all outlets from gutters to downspouts.

Note that gutter and downspouts of one story wing are galvanized. Check same as described above, all replacements to be with galvanized iron.

All metal roofs to be given one good coat of an approved metallic roofing paint of color approved.

Slate roof over mid section to have all loose or missing slate replaced with Buckingham Va. slate. All flashing for slate roof to be 16 oz. copper.

LATHING AND PLASTERING

Lathing: It is proposed to retain all existing lathing and plastering in sound condition. All loose, broken or cracked plaster, especially on the ceiling of the second story where leaks have occurred, and at all places where partitions have been removed will be removed and all damaged or loose lathing will be replaced with new lathing. Replaced lathing for ceilings and for narrow replacements on walls will be galvanized or copper bearing metal lath weighting 3/4# per square yard. Lathing for all new partitions or closures will be 3/8" U.S.G. perforated Rocklath. Provide galvanized metal corner beads at all external plaster angles the full height of the corner.

Plastering: All repair of damaged or defective plaster as well as all new plaster will be Gypsum or equal mixed with Perlite in accordance with the manufacturers directions. Plastering to be three coat work over metal lath and two coat over gypsum lath. Finish coat to be white coat plaster consisting of equal parts of lim putty and plaster of paris applied by skilled plasterers and trowelled to a smooth true surface. Scratch coat shall be well trowelled to form a perfect key. Brown coat shall be worked to screeds and floated true and plumb and well rodded. The finish coat to be smooth and uniform without waves or variations of texture. In patching plaster where partitions have been removed and elsewhere no patches will be on straight lines, but old plaster at edges will be removed along irregular wavy lines. Note cracks in west wall of Bathroom #1.

PAINTING

Conditions: The painting contractor shall be bound by the General and Special Conditions of these specifications and contract and shall apply all clauses of them to his work.

Scope of Work: The work includes all exterior and interior painting, reglazing, caulking, floor sanding and finishing as hereinafter described. Note Alternates 1, 2 and 3.

Materials: All materials to be used under this section of the work shall be the brand and quality specified and shall be delivered to the building in the original containers with labels intact and seals unbroken. All materials except as otherwise specified shall be of the "best grade" of "first line" paints made by reputable recognized paint manufacturers approved by the architect. The following brands of paint are considered acceptable standards.

Pittsburg
DuPont
Sherwin-Williams
Lucas
Devco
Pearlee Gaulbert

Sunniborne
Dutch Boy (exterior paint only)
Minnesota
Kyanize
Pratt and Lambert

Samples: After priming coat, contractor shall prepare samples of all colors in place and these must be approved by the architect and owner before any second coat work is started. Painter must provide an adequate selection of Harrison's colors ground in oil with a sufficient number of empty cans and clean brushes to save time in matching color.

Workmanship: All paint work shall be done by skilled mechanics in a workmanlike manner. All paints, stains, varnishes, etc. must be smoothly and evenly spread or flowed on and shall be free from runs, sags, crawling or other defects. All painting shall be done under favorable weather conditions suitable to the production of good durable work. No paint to be applied to a metal surface in temperature below forty degrees F. At least twenty-four hours shall be allowed between the coats under the most favorable conditions. All coats shall be of the proper consistency and well brushed out. If plaster surfaces are sprayed this shall be done by experienced workmen and all adjoining work shall be adequately protected. No succeeding coats shall be applied until the preceeding coat is thoroughly dry.

Preparatory Work: All old exterior woodwork retained will be hand scraped, to remove all loose and flaking paint, sandpapered with coarse and then with fine sandpaper to produce a smooth surface. Old interior woodwork will be similarly treated except that greater care must be exercised in using scrapers not to gouge beyond the paint into the wood surfaces.

All knots and sappy places shall be coated with aluminum varnish. All greasy and oily metal surfaces to be painted shall be cleaned with benzine or mineral spirits before paint is applied. No smoking shall be permitted in the vicinity of cleaning work. All necessary puttying of nail holes, cracks, open joints and other defects shall be done after the priming or first coat is dry and before the second coat is applied. The putty is to be a pure linseed oil, white lead and whiting putty colored to match the finish coat.

Protection: The painting contractor shall protect the work of all other trades against damage or injury by his employees or by his materials, tools or utensils used in connection with this contract. Any damage done by him shall be repaired at his own expense. Storage of paint cans, supplies, etc., will be in a place and in a manner as approved by the architect. Use adequate drop cloths under all work at all times and against surfaces requiring protection from paint spots. Paint spots, streaks and smears shall at once be cleaned off of adjacent work with a clean dry rag and then rubbed thoroughly clean with a thinning solution so as to prevent any oily marks and to remove every evidence of such spots, smears or streaks. Oily rags and waste must be removed from the building and premises every night. No smoking shall be permitted around inflammable materials and such materials shall be used only in open and well ventilated places.

Guarantee: The painting sub-contractor shall guarantee his work for a period of one year and shall repair any defects due to faulty materials or workmanship caused by him without compensation for the period of his guarantee.

Application: All mixing, tint, thinning and application of materials shall be done on the premises according to the manufacturers directions for the particular material being used and the surfaces being coated. All door and window frames, all louvers, and all doors and sash shall be thoroughly primed immediately upon delivery at the site. Frames to be primed on back as well as face.

Exterior Woodwork: On exterior woodwork use only approved best grade manufactured brand of ready mixed exterior paints containing lead, oil and zinc as follows:

- First coat: Apply a priming coat of exterior house paint or a special exterior house primer.
- Second Coat: Apply a coat of exterior house paint of the desired color tinted slightly darker than the desired shade for last coat.
- Third Coat: Apply a finish coat of exterior house paint of the desired color. Varnish all copper surfaces in contact with wood to prevent staining the paint finish.

Old Work: Where old paint is sound, apply only the third coat.

Exterior Iron and Steel To all exterior iron and steel unless shop primed already apply a priming coat of red lead or other approved rust inhibitive paint. If shop primed touch up scared or abraided spots. Second coat to be DuPont Dulux metal protective finish of color as selected.

Gutters and Downspouts: Galvanized iron gutters and downspouts to be primed with galvanun, then given a coat of lead and oil.

Interior Woodwork:

New work: Apply the following using only best grade manufactured brands of materials.

- First Coat: Apply a priming coat of interior wood primer.
- Second Coat: Apply a coat of enamel undercoat of the desired color.
- Third Coat: Apply a coat composed of 3 parts of enamel undercoat and 1 part of enamel of the desired color.
- Fourth Coat: Apply a finish coat of semi-gloss enamel except in kitchen and toilets which will be full gloss.

Sand each coat lightly with No. 00 sandpaper and clean free from dust before applying succeeding coats. Putty all nail holes and imperfections with white lead putty after first coat is applied. Apply parafin oil on all drawer slides, and shellac the tops of all shelves on cabinets and elsewhere.

Old Work: Where old paint is sound apply only the third and fourth coats as described above after thoroughly sanding all surfaces as called for.

Interior Plaster: No plaster walls or ceilings shall be painted until thoroughly dried. On all new plaster apply a sponge coat of zinc sulphate (2 lb. of zinc sulphate to 1 gallon of water). After zinc sulphate has dried, brush off crystals with soft cloth

For flat wall finish on all walls and ceilings except in kitchen and bathroom:

- First Coat: Apply a priming coat of a best grade manufactured brand of oil or varnish plaster primer (Wall-hide, Primer-sealer or equal)
- Second Coat: Apply a coat composed of one part best grade manufactured brand plaster primer and two parts best grade manufactured brand flat wall paint of the desired color
- Third Coat: Apply a finish coat of a best grade manufactured brand of flat wall paint of the desired color.

Note: If plaster is exceptionally porous and alkaline, the second coat should be one half flat wall paint and one half plaster primer.

For glossy wall finish on walls and ceilings of kitchen and baths:

- First coat: Priming as for flat finish.
- Second coat: Apply a coat of a best grade manufactured brand of ready mixed gloss paint of desired color.
- Third Coat: Apply a finish coat of best grade manufactured brand ready mixed gloss wall enamel of the desired color.

Interior Metal Work: All interior metal work such as heating registers or radiators shall be painted to match the adjoining plaster or wood surfaces. Present papering on wall and ceiling of Master Bedroom will be retained.

RE-GLAZING

All window panes and door panes that are now cracked and broken or may become broken or cracked before the completion of the job will be carefully replaced with double strength B glass well bedded in putty, back puttied and puttied with No. 1012 Dicks Pontius plastic glazing compound and held in place with metal sprigs; edges of muntins, stiles and rails of sash to be thoroughly cleaned and primed with lead and oil.

CAULKING

Caulk with Chamberlains' Caulking Compound applied with a caulking gun all doors and window openings. All caulking to be neatly pointed and any adjacent work that is soiled as a result of caulking operations shall be cleaned immediately.

WOOD FLOORS SANDING AND FINISH

Sanding Floors: All plank wood floors and stair treads throughout the building shall be thoroughly machine sanded using a large electric sanding machine for the open area of the floor and around the baseboard using a small electric machine followed by hand sanding in the direction of the grain to remove the circular sanding machine marks.

Finishing Floors: After being carefully sanded, floor and stair treads will be given a good coat of penetrating oil stain of color approved by Owner applied with a brush and wiped even with cheese cloth. If too dark, lighten by adding turpentine. When stain has thoroughly dried polish with electric waxing machine using Johnsons or Old English wax. Cover floors with building paper until after Owner moves in. Floors to be covered with tile will be sanded, but not finished. Stair treads will not be waxed.

SAND BLASTING

After outside toilet has been removed sand blast brick walls to remove white paint.

PLASTIC TILE:

Wood floors are to be sanded by General Contractor.

Plastic Tile: Furnish and install plastic tile with Flexible Cove base in Kitchen and in Bath #2. Plastic tile to be Kenflex Vinyl Plastic tile as manufactured by Kentile, Inc., Brooklyn 15, N. Y. or approved equal and installed by its approved flooring contractor. Retain present tile floor in Bath #1, but clean same.

Tile to be standard size 9" x 9" and standard gauge 1/16". On wood floor at right angles to floor boards lay a layer of 15 lbs. completely asphalt saturated paper with butt joints cemented down with linoleum paste. The felt paper shall be rolled with a 100 lb. 3 section iron roller. Ken Cove as manufactured by Kentile, Inc. shall be installed around all walls where called for. Base to be 4" and fastened to wall with adhesive as recommended by the manufacturer. After Kenflex flooring is installed it shall be cleaned with a cleanser as recommended by the manufacturer and then given two coats of wax as recommended by the manufacturer. Note cleaning and waxing should be postponed until just before occupancy of the building by the Owner.

Plastic Tile(Continued)

Samples: Submit samples of Kenflex Vinyl Tile and Ken Cove base to be selected by the Owner.

Protection: On completion protect all tile floors with clean building paper.

Guarantee: This contractor shall guarantee that all work executed under this section of the specifications will be free from defects in materials or workmanship, provided any such defect is brought to the attention of the flooring contractor in writing within one year after completion of the work. Upon such notice, the flooring contractor shall, at his own expense, make the necessary repairs or replacements of the defective work in question.

PLUMBING

The Plumbing Contractor shall be bound by the General Conditions and Special Conditions of these specifications and contract and shall apply all clauses of them to his work.

All plumbing shall be done in strict accordance with City Ordinances and shall meet and pass the requirements and inspection of the City Inspector.

It is understood that the bid of the Plumbing Contractor for this work is based on doing the same in accordance with the City Requirements and Code except as regards such requirements outlined herein that are of a stricter nature than the City Ordinances in which case these specifications shall govern. Should any unintentional non-conformity with minimum requirements of the City Code occur the contractor shall base his figure and bid on this work with those requirements of the Code complied with irrespective of the non-conformity of these specifications.

Scope of the Work: The work consists of the following removals: the present outside toilet by west entrance; the water heater and laundry trays in the Living Room, the sink and drain board in the Dining Room, the fixtures in Bathroom #2. The tub and water closet and lavatory from the office on the second floor of the main building.

Old supply and waste and vent lines will be properly capped below the floor or in the wall. The installation of a new water heater in a new location with cold water supply line and hot water distribution line, new gas line and transite flue to outside of the building, furnishing and installing new bath tub in Bath #2 with present water closet and lavatory from office on 2nd floor of main building. Present water closet and lavatory from Bath No. 2 to be installed in new toilet outside.

General: All fixtures will be properly connected, drained, trapped and vented to drain to sewer with all vents and soil stacks as required by city ordinances. All horizontal vent pipes to drain towards fixtures. Plumber will advise with brick-mason as to proper location of his lines and drains so there will be no cutting of chases afterwards in brickwork, footings, etc. Horizontal lines of piping to be supported every 10' by hangers from floor beams. No cutting of framework except by express consent of architect and general contractor. All pipe lines to be run concealed between hoists or between floors and ceilings. All horizontal pipe lines shall have fitting and trap screws on all ends for cleanout purposes and to be accessible. All other waste lines shall have Y branches and brass trap screws so located that the pipe can be easily cleaned.

General (continued)

All sewer and vent lines, traps and fittings to 5 ft. beyond the building shall be standard cast iron pipes. All joints well caulked with hemp and molten lead; all joints in short lead bends to be wiped joints and in galvanized wrought iron pipe to be standard screw joints set up in red lead. Water lines shall be copper tubing as manufactured by the Mueller Co., Revere Copper and Brass, Inc., Bridgeport Brass and Copper or Chase Brass and Copper Co. All copper tubing inside the building and not underground shall be type "L" hand drawn copper tube, outside the building and underground inside the building shall be type "K" of soft temper. Cast bronze solder type fittings of high copper content shall be used with copper tube. Joints to be made with the solder and soldering flux recommended by the manufacturer.

Where pipes extend through roofs they shall be provided with the proper flashing plates and lead aprons for the roofer to flash to.

Test all rough soil and waste pipes and vent lines when in place with branches extended, by capping all outlets and filling in with water in the presence of the plumbing inspector and architect, other tests as prescribed by city; the plumbing inspector to be the one under whose approval the certificates will be issued.

Water Supply: It is assumed that the present water line entering the building is in sound condition and of adequate size to serve the new requirements of this building. If present service line must be changed the cost of this will be adjusted before any new line will be authorized.

Within the building from nearest branch extend water line to boiler room as required by the heating contractor and for the fixtures in the new toilet. Extend hot and cold water lines to relocated fixtures in Bath #2.

Gas Piping: Provide gas piping for kitchen range and for domestic water heater. Gas for the service building to be separately metered from that for the main house. Confer with representative of S. C. Gas and Electric Co. for location of gas meter. Gas piping to be galvanized steel or wrought iron with screwed fittings. Test out gas lines and insure that there are no leaks.

Water Heater: Plumbing contractor will furnish and install one instantaneous gas water heater with 45 gallon porcelain or glass lined storage tank, Burkay P.G. Heater as made by A.O. Smith of Kankakee, Ill. Plumbing contractor to furnish a one year warranty on all controls and a fifteen year prorated warranty on tank. Warranty does not include freight, installation, labor or material costs. Relief valve to be connected to cast iron waste pipe run through floor construction. Furnish and install transite combustion flue through outside walls with waterproof hood over top of vent.

Stop and Waste Valves: Supply water stop and waste valves surrounded by terra cotta pipe with concrete cover and handle to be located on exterior of house where directed. Pitch all water pipes so that entire water pipe system in house will drain to this point.

Sewer: Present main sewer lines will be retained. They will be rodded out and put in good condition. Sewer lines from all new fixtures installed will be connected up to existing sewer system in conformity with the requirements of all city ordinances.

Existing street connections for sewer and drain will be continued in use, but will be thoroughly rodded and cleaned out and repaired if necessary before new connections are made to same.

Plumbing Fixtures: The following fixtures will be provided new and installed or repaired and reinstalled or repaired and retained in present locations as shown on the plans.

NEW TOILET

1 water closet: Install water closet removed from Bathroom #2; repair tank mechanism, renew float.

1 lavatory: Install lavatory removed from Bathroom #2; Repair faucets, install new washer, clean bath fixtures.

APARTMENT KITCHEN:

Existing sink and drain boards retained in place. Waste line cleaned out, faucets repaired, install new washers, sink cleaned.

BATHROOM #1:

Existing fixtures retained in place. Waste lines cleaned out; faucets repaired, install new washer; repair mechanism of water closet tank; install new float. Thoroughly clean all fixtures.

BATHROOM #2:

1 Water Closet: Install present watercloset removed from office, second floor main building.

1 lavatory: Install present lavatory removed from office, 2nd floor mail building. Recondition both fixture as described for Bath #1

Furnish and install 1 Standard Neo Angle recess built in apron type tub without shower, with left hand faucet and outlet. Standard trim chain and rubber stopper.

Old fixtures not used to remain the property of the Owner.

Bathroom Accessories: Furnish and install the following accessories as made by Hall-Mack except where noted otherwise.

Bathroom No. 2

- 3 towel bars No. 694 3/4" sq. chrome bars 18" long.
- 1 glass shelf No. 698 5" wide, 18" long.
- 1 toilet paper holder No. 671, black wood roller
- 1 double hook No. 682
- 1 soap and Grab bar #660 with crystal soap tray
- 1 seamless porcelain cabinet P 1626 16" x 26"

New Toilet

- 1 toilet paper holder No. 874
- 1 robe hook No. 881 on back of door.

ELECTRICAL

General: The work included under this heading shall be subject to the General Conditions of the entire operation. The sub-contractor for this portion of the work is required to refer especially thereto.

These specifications are intended to provide for a new and complete and perfect system of electrical wiring. Electric outlets are not shown on the plans at this time, but are hereinafter listed. No old wiring is to be reused or retained. Old fixtures to remain the property of the owner.

This contractor shall pay for all permits and connections, for all surveys and all inspector's fees.

He shall be responsible for any injury to his work from any cause, until accepted by the Architect. He shall comply with all requirements of the local authorities of the South Carolina Electric and Gas Co., and the Board of Fire Underwriters, National Electrical Code.

He shall place all necessary thimbles and outlet boxes which occur in masonry work, before this work is done, or shall do such cutting and repairing as may be necessary, at his own expense and to the approval of the architect. No cutting of joists or studs shall be done without first securing permission of the architect.

Sources of Power: The electric power for the house will be supplied by the S. C. Electric and Gas Co. from the nearest existing pole. The supply is 110-220 volts single phase, 3 wire. This service building shall be separately metered from the main building.

Heating Equipment: The wiring to the heating equipment and controls of same will be done by others. Electrical contractor shall provide a disconnect switch and outlet.

Tests: Upon completion the contractor shall test the system in the presence of the architect. The installation must be such that between the service switch and the most remote fixture not more than 2% drop may be found under full load.

Guarantee: The contractor shall guarantee his work in writing and make good without any cost to the Owner any defects in material or workmanship which may develop within one year after the completion and acceptance thereof.

Outlets: Wire for the following outlets:

Apartment kitchen

2 ceiling outlets
2 receptacles over counter
4 receptacles

Dining Room

1 ceiling outlet
3 receptacles

Living Room

1 ceiling outlet
4 receptacles

Garden Tools

1 drop cord

Boiler Room

1 drop cord
Disconnect switch and outlet for heating equipment

New Toilet

1 drop cord

Space adjoining new toilet

1 drop cord

Second Floor Stair Hall

1 ceiling outlet

Guest Bedroom

4 receptacles

Bathroom #2

Bracket outlet over lavatory
1 receptacle

Study

1 ceiling outlet
4 receptacles

Dressing Room

1 ceiling outlet
2 receptacles

Outlets (continued)

Bath #1

Bracket outlet over lavatory
1 receptacle

Master Bedroom

4 receptacles.

Unless noted otherwise receptacles to be located 18" above floor. All ceiling outlets, drop cords and all bracket outlets to be controlled by switches. In rooms where only receptacles occur one receptacle will be controlled by switch near door.

in Base Board?

Wiring and Circuits:

(a) All wiring except as otherwise noted, to be non-metallic cable. All receptacle circuits to be No. 12 wire, 20 amp. breakers. All lighting circuits to be No. 12 wire, 20 amp. breakers.

(b) Furnish separate circuit of No. 12 to ironing receptacle in kitchen, refrigerator, and kitchen fan and 4 duplex receptacles in kitchen on two separate circuits.

Panelboard: The panelboard shall be installed in the kitchen. It shall be Trumbull type NLTQ or square D type NMO 90 A 2 P main 16 branch circuits as follows:

Current Breaker Type?

- 1 - 20 A 1P for refrigerator
- 1 - 20 A 1P for ironing receptacle
- 2 - 20 A 1P for 4 receptacles in kitchen
- 2 - 20 A 1P for 2 receptacles in bathrooms
- 4 - 20 A 1P for receptacles
- 2 - 20 A 1P for ceiling outlets and kitchen fan
- 4 - 20 A 1P for spares.

Outlets: Wiring shall terminate at all outlets in stamped outlet boxes of approved make. Outlet boxes shall be located where directed, set so that the plates will be flush with the finish wall or baseboard and protected from injury by the plasterers or other workmen.

Where two or more switches are located side by side they shall be set in a gang box.

Boxes for fixture outlets shall have suitable studs for the support of the fixtures so arranged that the weight of the fixture will not come on the outlet box screws.

Outlets (continued)

All outlets occurring in panels or other architectural features shall be centered accurately. The location of outlets may be moved as much as 15 feet if desired by the architect, if so ordered before the outlet is installed, without additional cost. All outlets showing a dimension shall be set at that height above finished floor.

Joints and splices will only be permitted at junction or outlet boxes, never inside conduits. All joints shall be firmly soldered without acid, and taped, first with rubber tape and then with friction tape, equivalent in thickness to the insulation of the wire.

Switches: All wall switches shall be Arrow #Q-1 single pole or Q-3 3 way with Bakerlite plates. Switches must be of the highest quality in type and workmanship and must be approved by the architect. Where two or more switches are located side by side they shall have one single plate. Four way switches shall be Arrow Q-4.

Receptacles: Provide and install where called for above approved flush receptacles of the "Convenient" type with bakerlite plates. Receptacles to be Arrow #9260 or #5262 where grounding type is shown on plans.

Exhaust Fan: Fan for kitchen will be Broan 6W or an Emerson Junior built-in fan complete with wall box and automatic switch and weather shutter. Fan to be 10" size with a capacity of approximately 600 cu. ft. of free air per minute when handling air of 95 degrees F. and 100 degrees relative humidity.

Electric Fixture Allowance: Allow the sum of \$150.00 for the purchase of electric fixtures for outlets shown on the drawings. This contractor shall install all such fixtures without additional charge. It is understood that the Owner is under no obligation to purchase lighting fixtures or equipment from the electrical contractor.

Telephone System: This contractor shall install a complete system for telephone service, except for phone, wiring, etc. normally furnished by telephone company. System to be rigid conduit from outside weatherhead, furnished by this contractor to phone locations as shown on plans. Location of weatherhead shall be determined by local telephone company, and the system in general shall follow their recommendations and specifications. Telephone outlets will be located in the kitchen with branch outlet in Masters Bedroom.

Door Bells: This contractor shall furnish and install all wiring, push buttons, chime and transformer. The transformer shall be NuTone 320-OBS located in kitchen. A NuTone model K-15 recessed door chimes shall be installed where shown on plans. Front door push to be NuTone P-8-4 and for kitchen entrance P-B-1.