

OUTLINE SPECIFICATION

HARRISON PLAZA TOWER REHABILITATION

Harrison Plaza
1350 N 10th St
Philadelphia, PA 19134

Concept Design Submission:

Final: May 20, 2019
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K&A #18196

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DIVISION 1: GENERAL REQUIREMENTS

Surveys:

- An ALTA/ACMS land title survey is required of the contractor. Refer to PHFA requirements for optional survey responsibilities and specifications. Contractor responsible for legal separation of tower parcel from balance of land owned by Philadelphia Housing Authority.
- Contractor responsible for Phase I Environmental Review / Environmental Test results in accordance with PHFA Underwriting Application Tab 17.
- Contractor responsible for Project Capital Needs Assessment / Energy Audit in accordance with PHFA Underwriting Application Tab 34.

Codes and Standards:

- 10% of the dwellings shall be ICC/ANSI A117.1 Type A accessible units, which includes H&VI accessible devices.
- 2% of additional dwellings shall be H&VI accessible.
- All units on floors 1-2 shall be ICC/ANSI A117.1 Type B accessible (adaptable) units.

Work Area: Comprises an approximate 151 x 196 feet rectangle at the northeast portion of a block bounded by North 10th, Master, N 11th and Thompson Streets. This includes the existing 15-story Harrison Plaza Tower and an adjacent one story buildings and grounds storage garage. The functions of the garage will be relocated by PHA before it is demolished under this contract.

General Scope of Work: The preservation rehabilitation of the existing 15-story building, increasing the unit count from 112 units to 116 units, handicap accessibility improvements, kitchen and bath renovations, reconfiguration of the ground floor, full fire suppression coverage, heating and cooling improvements, new emergency generator, security systems, façade renovations, roofing, windows, exterior doors, sitework, landscaping, interior and exterior signage, new parking lot, fencing, site lighting.

The existing building is fully occupied. PHA will relocate the residents, belongings and furnishings to allow for the construction activities. PHA will provide the CCTV system equipment.

Special Warranties:

1. General Contractor – One (1)-year guarantee for all labor and materials for the entire project.
2. HVAC Contractor – One (1)-year guarantee for all labor and materials and manufacturer's standard guarantees for equipment within the scope of this contract.
3. Plumbing Contractor – One (1)-year guarantee for all labor and materials, and manufacturer's standard guarantees for all fixtures within the scope of this contract.
4. Electrical Contractor – One (1)-year guarantee for all labor and materials, and manufacturer's standard guarantees for all equipment and fixtures within the scope of this contract.
5. Paving – Two (2)-year guarantee minimum for sub-grade preparation, sub-base preparation, sub-base binder and wearing courses. (May be two or three separate 2-year guarantees each if portions of the work are done by separate Contractors.)
6. Landscaping – Guarantee for two (2) years' (minimum) for labor and materials.
7. Playground Equipment and Outdoor Furnishings – Manufacturer's standard guarantee for one (1)-year minimum.
8. Roofing:

A. *Built-up, EPDM and Modified* – Twenty (20)-year bond, or ten (10) - year guarantee labor and materials. (A ten (10)-year roof inspection and service contract is recommended.)

B. *Shingle* – Manufacturer’s twenty (20)-year (minimum) warranty for materials and Contractor’s one (1)-year guarantee for labor.

9. Wood and Hardboard Siding – Manufacturer’s standard guarantee, twenty (20)-year minimum.
10. Stucco Systems, EIFS and other Cementitious Exterior Finishes – Ten (10) year minimum.
11. Waterproofing and Sealant Applications – Contractor’s two (2)-year guarantee minimum.
12. Windows and Doors – Manufacturer’s standard guarantee, one (1)-year minimum.
13. Carpeting – Manufacturer’s standard material guarantee, plus one (1)-year minimum against faulty installation practice.
14. Major Appliances – Range, range hood, refrigerator, disposal, washer and dryer, thru-wall A.C. units, dishwashers, etc. – Manufacturer’s standard guarantees, one (1)-year minimum.
15. Kitchen Cabinets – Manufacturer’s standard guarantee, one (1)-year minimum and proof of conformance to KCMA Standards (and HUD Severe/Extreme Use Criteria in general occupancy developments).
16. Trash Compactor and Chute – Manufacturer’s standard guarantee, one (1)-year minimum.
17. Elevators – Manufacturer’s standard guarantee for labor and materials for one (1)-year minimum. A service contract is required.
18. Architectural Specialties – Varies with each project.
19. Compressors – Air conditioner and heat pump compressors shall be warranted for five (5) years.

Construction Waste Management: At least 25% of the total construction and demolition material from the project shall be recycled. Demolition material includes but is not limited to: bituminous pavement from milling all parking lots, concrete pavements where sidewalks are replaced, household appliances, wiring, light fixtures, drywall, asphalt shingles and lumber. Construction material includes but is not limited to: cardboard and paper packaging, wood pallets, lumber and wiring.

Operations or maintenance-building maintenance manual: The Architect, in collaboration with the other members of the development team including the Owner and Contractor, will develop a Building Operations & Maintenance Manual and Plan, which will explain the building’s features and how to use them efficiently, to be shared with residents, owners, and property managers.

Sustainability and Energy Efficiency per the most current PHFA Tab 8 certifications (including Energy Rebate Analysis) and Enterprise Green Communities Checklist for moderate rehabilitation. Scope ‘To Be Determined’. Achieving a LEED Certification, HERS rating or Energy Star Certification is not desired.

DIVISION 2: EXISTING CONDITIONS

Selective demolition includes but is not limited to:

- Plaster partitions
- Masonry partitions
- Flooring
- Exterior infill framed walls
- Windows and doors
- Toilet and bath accessories
- Site concrete
- Core drilling thru existing concrete slabs

- Cabinetry
- Plumbing fixtures
- Residential appliances
- Light fixtures

Salvage removed building materials and packaging for recycling.

DIVISION 3: CONCRETE

Building Concrete: 4” thick 2500PSI over 10 mil vapor barrier over 4” bed of crushed compacted stone subbase over compacted grade/earth. Dowel into existing remaining concrete. Finish: float.

Site Concrete: See Division 32

DIVISION 4: MASONRY

Masonry Restoration: Refer to “*Periodic Inspection Report of Exterior Walls and Appurtenances of Buildings*” prepared by Klein and Hoffman, June 30, 2013, for proposed scope of work.

- Repoint all brick
- Replace broken and damaged brick
- Replace missing concrete sills, repoint, repair damaged units, coat all concrete sills with elastomeric coating.
- Install thru-wall flashings, mortar control and weeps at lintels and shelf angles
- Cut-in expansion joints
- Scrape and paint all exposed steel
- Seal brick-to-window/door joints
- Clean brick masonry after restoration work completed.

Exterior masonry retaining wall: Full dimension bricks to match existing building over CMU backup, with cast stone cap. Mortar to match building.

Interior masonry partitions: 8x8x16 normal weight block.

DIVISION 5: METALS

Site railings and guardrails: Clear anodized 1-1/4” aluminum railing system with non-welded engineered connectors/fittings, similar to Julius Blum Aluminum Connectorail®. Railing systems shall conform to the performance requirements of the Building Code.

See Division 32 for architectural fencing.

Bollards: 6-inch diameter concrete filled galvanized steel bollards.

DIVISION 6: WOODS AND PLASTICS

Miscellaneous lumber:

- Solid Blocking for wall mounted cabinetry and toilet accessories
- Electrical panel backer board – fire treated plywood painted black

Finish lumber:

- Baseboard trim

- Windowsills

DIVISION 7: THERMAL AND MOISTURE PROTECTION

Weather barriers: Basis of Design Kingspan Rainguard System. www.kingspan.com/group

Siding: Fiber Cement boards/panels.

Roofing: Full tear-off and replacement. SBS Modified Bitumen

- Protection board
- Rigid insulation
- SBS Modified bitumen, white granule surface
- Metal copings, counterflashing, vent pipe flashing, curb flashing

Gutters/Downspouts: Basis of Design Amerimax aluminum downspouts and K-style aluminum gutters. Color selected by Owner.

Thru-penetration fire caulking (heating and cooling pipe floor penetrations plumbing shaft penetrations, ventilation shaft penetrations). Edge of slab fire caulking system.

Sealants: Exterior penetrations Basis of Design Bostik 915FS polyurethane, ASTM C920, type S, Grade NS, Class 35 Use NT, A and M.

DIVISION 8: DOORS AND WINDOWS

Doors:

- Exterior storefront: Basis of Design Kawneer Tri-fab 451. Insulated glazing.
- Exterior doors: HM insulated heavy duty doors and HM frames
- Exterior and interior automatic sliding doors: Thermally broken telescoping slide with break-out panels and center mullion. 42" minimum clear width when open. 5/8" thick double glazing. Keyed control switch. Provide standard full hardware package. Connect to emergency power. Basis of Design manufacturers: Stanley Dura-Glide 5300, Dorma ESA200, Horton Type 110, Besam.
- Apartment entry doors: Fire rated HM heavy duty doors and HM frames
- Apartment interior doors: SWC or tempered hardboard doors and HM frames.
- Interior commercial doors: SCW doors and HM frames.
- Interior commercial doors: Fire rated HM heavy duty doors and HM frames.
- Interior coiling curtain counter door: Fire rated hand crank operated galvanized steel slat, white or tan finish. Basis of Design: Cornell Iron Works model ERC10.

Exterior Windows:

- Aluminum Energy Star listed single-hung or fixed windows with Low-E, argon filled double glazing. (U-factor = 0.25, SHCG = 0.30). Provide screen.

Interior Windows:

- Hollow metal borrowed light, 1/4" safety glazing.
- Storefront: Basis of Design Kawneer Tri-fab 451 with single pane 1/4" safety glazing.

Curtainwall system:

- Aluminum thermally broken system engineered for the applicable wind loads, including transom panels, glazed-in laminated insulated spandrel panels, and double-glazed vision panels both

operable and fixed sections. Basis of Design Kawneer 1600 Wall System 5 Curtain Wall, 6" depth. Basis of Design Omega Foam-Ply Panel or Mapes-R spandrel panels.

Aluminum finish: PVDF 2-coat system, color selected by Owner.

Glazing: Low-E, gray tinted. (Not reflective): Basis of Design manufacturers: Cardinal, Guardian, PPG

Hardware: Basis of Design: Allegion (Schlage)

- Apartment exterior entry: dead bolt lockset, passage lever set and door knocker/viewer, weatherstripping, door stop.
- Accessible units: kickplates both sides of interior passage doors; one side of all other interior doors. Unit entry doors second peephole, kickplates on both sides.
- Apartment interior doors: lever set (passage or lock), wall door stop. No hinge stops.
- Common areas: Exterior entry doors kickplates on both sides, lever set, weatherstripping, door stop. Interior passage doors kickplate both sides, lever sets.
- Access control: provide card readers tied to electronic locks/latches at indicated doors.
- Hardware finish: Satin chrome

DIVISION 9: FINISHES

Drywall: 5/8" thick; core as required by wall sections for fire resistance, moisture resistance. Finish class IV for painted finishes. 1/2" thick for lamination onto existing substrates. (Alternate for laminated product: high impact thermoplastic panel; see division 10)

Non-loadbearing metal framing: Steel studs, runners, tracks, furring channels, as required.

Carpet: GreenScore certified. HUD UM-44D, Fed Standard DOCFF1-70 for flammability or Class II. Minimum 24 ounce residential use; minimum 28 ounce commercial use. Direct glue-down in all commercial spaces. Pads must be minimum of Class 2, 8.5 lb/cu.ft (32 ounces/sq yd) meeting HUD UM-72. Color selected by owner

Ceramic Tile:

- Public toilet rooms:
 - Floor basis of design Daltile Keystones 2x2 (color group 1) D200 desert gray speckle mosaic.
 - Wall basis of design Daltile 4x4 0061 matte white designer
 - Cove basis of design Daltile 4x6 0061 matte white designer
 - Bullnose basis of design Daltile 4x4 0061 matte white designer
 - Marble saddle accessible bevel threshold basis of design American Olean Bianco Carrara marble 2x36, double bevel
- Public areas: Floor and wainscot basis of design Crossville porcelain tile 12x12. Tile cove base 6x12. Wall bullnose cap 4x12. Colors either Crossville Vista Americana AV181 Dunes or Basalt AV292 Caldera.
- Ceramic tile to be installed over cementitious or masonry substrates. Moisture resistant gypsum board is not allowed as a substrate.

VCT/MCT: Non-residential spaces. 12 x 24 inch tiles. Colors selected by owner. MCT Basis of Design: Spartan Surfaces AVA SPRK.

LVT: Colors selected by owner. Residential Basis of Design: Floorfolio #436-419

Sheet Vinyl: Colors selected by owner.

- Apartments - bathrooms:
 - Floor basis of design. Armstrong Flooring – Vessa Travertine, ASTM F1913, 0.080 inch thick.
 - Heat welded seams. ASTM F1516
 - Adhesives shall have VOC content of 50 g/L or less.

Vinyl base: Solid color vinyl base, cove, 1/8” thick, in rolls or pre-cut strips. Color selected by owner.

Suspended ceiling system: 15/16 metal suspension grid with beveled tegular mineral fiber tile, 2x2 or 2x4, similar to Armstrong Cirrus Tegular.

Paint: Basis of design manufacturer: Sherwin Williams.

- Primer: SW Multipurpose Zero VOC Latex Primer.
- Finish coats (interior): SW ProMar 400 Zero VOC
- Semi-gloss shall be used in common laundry, maintenance storage and utility rooms. Also for apartment doors and trim.
- Semi-gloss, egg shell or equivalent high-quality washable latex: kitchens, bathrooms, public restrooms, public areas
- Low-luster or Egg shell: balance of dwelling units walls and ceilings.
- Provide accent walls in elevator lobbies and public spaces.
- Colors as selected by owner.
- Provide attic stock of one gallon each color and sheen utilized at the project.
- Paint colors:
 - Interior Doors and trim: SW7006 – extra white
 - Walls: SW764r3 - pussywillow

High performance coatings:

- Epoxy floor and base (in compactor room): Similar to Dur-A-Flex, Seal-Krete or Key-Lastic
- Brick coating: Elastomeric

DIVISION 10: SPECIALTIES

Signage:

- Apartment entry doors: Shall conform with ANSI A117.1 requirements for text, braille and symbols. Colors and design to be selected by Owner.
- Public area room signage: Shall conform with ANSI A117.1 requirements for text, braille and symbols. Colors and design to be selected by Owner.
- Elevator lobby signage: A floor identification sign opposite the elevator door on each floor.
- Site identification: Free standing. Contains development name, development phone number, TTY number, equal housing opportunity logo and the accessible housing logo.
- Building identification: Pin mounted street number as required by local ordinance, at both front and rear main entrances. Pin mounted lettering of building name on entry canopy.
- Parking lot DOT signage: Provide pole mounted metal signage at accessible parking stalls in compliance with ANSI A117.1 and state and local regulations.

Wall protection:

Cornerguards: 2x2 inch wing by 4 foot high plastic. Install at all outside corners within designated accessible dwelling units and all public spaces. In dwelling units, product direct attach. In public areas, provide metal retainer strip and snap-on cover. Color to be selected to match wall paint. Basis of Design manufacturers: InPro, C/S.

Lean rails: Basis of design: C/S Acrovyn HRBW-10CN. Locate on both sides of common area corridors. Railing ends must return to the wall.

Guide rails: Two rows 2x12 Douglass fir staggered joint bolted 32" on center to masonry walls on 1/2" neoprene spacers. Set height to accommodate dumpster protruding items and mid-point to floor. Install at loading dock masonry walls and trash compactor room (all walls)

High impact thermoplastic panels as manufactured by MDC (800-621-4006; mdswall.com), for direct adhesion to existing corridor wall substrates. Class A fire rating.

Toilet accessories:

- Apartments: two 24" long towel bars, toilet paper holder, shower rod (non-telescoping), 16x26 surface mounted medicine cabinet with mirror. Basis of design:
 - Toilet paper holder: ASI 7305
 - Soap Dish ASI 7320
 - Toothbrush/tumbler: ASI 7335
 - Shower rod: Proflo PFSCR/PSFRFCP, chrome
 - Towel bar: ASI 7355-24
 - Robe hook: ASI 7345
 - Medicine cabinet: Ketchum
- HC apartments additional hardware: channel framed mirror, toilet grab bars, tub grab bars, ADA compliant tub/shower seat, sink trap wrap kit. Basis of design:
 - Mirror: ASI 0620 24x36
 - Grab bars: ASI 3801
 - Tub seat: ASI 8358
 - Sink trap wrap: Truebro
- Public and staff restrooms: toilet paper holder, channel framed mirror, paper towel dispenser, soap dispenser, toilet grab bars, sink trap wrap kit. Basis of Design manufacturers: ASI, Bobrick or Bradley.

Manual fire suppression:

- Apartments: Store under kitchen sink, UL-rated 2-A:10B:C, 5-LB nominal capacity.
- Apartment ranges: dry chemical powder canisters, 2 per range, similar to Range Queen Stove Top Fire Stop.
- Public and Service areas: Wall bracket hung, UL-rated 2-A,10-B:C, 14-LB nominal capacity with pressure indicating gage. Provide wall mounted vertical signage. Mount bracket 50" AFF.
- Knox Box: Provide at main entrance. Coordinate with Philadelphia Fire Department.

Mailboxes: USPS-approved front load mailboxes, with parcel locker provided at ratio of 1:10. Basis of Design: Salisbury Industries. www.mailboxes.com

Closet shelving: Coated wire shelving units with full rod at coat closets. Shelves or rods 48 inches or longer must have center supports. Closet shelves: 12 inches deep. Linen and pantry closet shelving: 16 inches deep. Linen and pantry closets to receive five shelves. Basis of Design manufacturers: Schulte or ClosetMaid.

Front Canopy: Provide pre-engineered partial barrel vault canopy with standing seam roof and closed soffit extending from building where a flat-roof canopy is to replace the existing canopy. Provide engineered foundation design.

Rear Canopy: Provide pre-engineered flat metal canopy with closed soffit and drainage.

DIVISION 11: EQUIPMENT

Residential appliance package (typical): Basis of Design: GE

- Refrigerator (Energy Star). Minimum 15 cu.ft. Basis of Design: GE GTE15CTH.
- 30” gas range with range backsplash panel and anti-tip device
- Recirculating range hood (Energy Star) with light and fans
- Garbage Disposals: Basis of Design: Badger with wall switch control.

Residential appliance package (ADA units): Basis of Design: GE

- Refrigerator (Energy Star). Minimum 15 cu.ft.. ADA compliant. Basis of Design: GE GTE15CTH.
- 30” gas range with range backsplash panel and anti-tip device. ADA compliant.
- Recirculating range hood (Energy Star) with light and fans. Provide wall switch controls at ICC/ANSI A117.1 – Type A and Type B accessible units.
- Garbage Disposals: Basis of Design: Badger with wall switch control.

Community Room appliance package:

- Refrigerator (Energy Star). Minimum 18 cu.ft. ADA compliant. Basis of Design: Frigidaire FCRS181RQ B
- Microwave: Commercial grade; two units.
- Garbage Disposals: Basis of Design: Badger. Provide wall switch controls.

Break Room appliance package: Basis of Design: GE.

- Refrigerator (Energy Star). Minimum 12 cu.ft. ADA compliant. Microwave: Commercial grade.
- Garbage Disposals: Basis of Design: Badger. Provide wall switch controls.

Laundry Room appliance package

- One front load clothes washing machine (supplied by vendor). ADA compliant.
- One front load gas dryer (supplied by vendor). ADA compliant.
- Balance of equipment supplied by vendor.

Trash compactor: Compactor with appropriate hopper connecting to existing chute, hose wash station and insect zapper equipment. Compacts trash into specialized 2-cu yard dumpsters.

DIVISION 12: FURNISHINGS

Blinds for all windows: 1” wide slat, room darkening. Either Lead-free vinyl or aluminum. Color to Harrison Plaza Tower

match wall color. Basis of Design: Champion window coverings, 1” metal plus blind.

Cabinetry: Minimum KCMA Intense grade or better. Provide finished end panels as required by layout. Provided minimum (1) 15” drawer base cabinet in each kitchen. European 6-way adjustable hinges. Cushion-glide drawer guides. At Type A and B accessible dwellings, provide 4” wire loop pulls on all doors and drawers. Calk cabinets to soffits and end panels to walls. Basis of Design: Advanta Vista Birch with Newbury doors, Café’ stain, hardware S271-96SN; or Evans. www.advantacabinets.com , www.evanscabinet.com

Countertops:

- Apartment Kitchen: Plastic laminate, 180-degree Euro-edge. Provide back and sidesplashes, 4” high, as required by layout. Color selected by owner. Calk backsplash/sidesplash joint to wall. Basis of Design laminate: Formica or Wilsonart .
- Bathroom: Cultured marble with integral bowl; side and backsplashes; bowl depth compliant with barrier-free regulations. Basis of Design: www.lesscare.com
- Public area counters (Laundry, Security Desk, Leasing Office, Kitchenette): Acrylic solid surface. Backsplash and sidesplashes. Basis of Design: Meganite, Level 2-3. www.meganite.com
- Break room counters: Plastic laminate, 180-degree Euro-edge. Provide back and sidesplashes, 4” high, as required by layout. Color selected by owner. Calk backsplash/sidesplash joint to wall. Basis of design laminate Wilsonart Sable Soapstone 4883-38.

Outdoor furnishings: Commercial grade – lightweight fiberglass is not permitted. All hardware must be corrosion and vandal resistant.

DIVISION 13: SPECIAL CONSTRUCTION

NOT USED

DIVISION 14: CONVEYING SYSTEMS

Elevator upgrades: The two existing traction elevators shall be upgraded to include: CCTV camera within car, emergency phone, voice annunciator, operating panel, call button.

Trash chute: Replace chute hopper doors with product with lever-style operating hardware.

DIVISION 21: FIRE SUPPRESSION

Provide a new monitored isolation valve alarm check valve at the fire pump header to supply water to an NFPA 13 system on all floors of the building. A new wet-pipe sprinkler riser shall be centrally located within the stair tower and new sprinkler mains and branch piping shall be provided at each floor to supply water to sprinklers. Floor control valves shall be provided at each floor with a testing assembly and drain riser located within the stair tower. Sprinklers shall be semi-recessed type with exposed piping in common corridors and concealed piping within the dwelling units. Piping in dwelling units shall be concealed utilizing field built gypsum board soffits. Automatic sprinkler system components shall be rated to withstand water pressures generated by the fire pump and pressure reducing valves shall be provided as necessary for an economical system design.

Modify existing sprinkler head locations and associated piping in reconfigured ground floor spaces including office suite, community room, lobby, trash compactor room

DIVISION 22: PLUMBING

Piping: All water piping shall be located within the conditioned space.

Common Area Building Systems:

- Replace domestic water distribution as required. Piping shall be Type L copper with lead free solder fittings. Provide unit pricing for replacing 10 ft of piping per floor. Provide pricing for ¾", 1", 1-1/4", 1-1/2", and 2" pipe sizes.
- Replace damaged domestic water pipe insulation. Insulation shall be 1" thick, preformed fiberglass pipe insulation with all service jacket. Pipe insulation to be protected with PVC enclosure. Provide unit pricing for replacing 10 ft of insulation per floor.
- Replace sanitary riser piping as required. Piping shall be no-hub cast iron with stainless steel band couplings. Provide unit pricing for replacing 10 ft of piping per floor. Provide pricing for 4" pipe size.
- Extend sanitary, vent, and domestic water piping to new fixture locations in proposed community room and bathrooms serving the community room. Fixtures shall include two ADA, gravity flush water closets, two wall-hung lavatories, one single bowl drop-in kitchen sink, and drinking fountain.
- Provide condensate drain system for new fan coil HVAC systems proposed in Division 23. Condensate collection system shall consist of copper DWV or cast iron piping with open hub drains. Hub drains shall be provided with traps and membrane type trap seal. Condensate risers shall connect to the sanitary vent system at the top floor and to the sanitary building drain system at the ground floor or basement level.
- Provide hose bibb and floor drain in trash room if none present.

Dwelling Unit Building Systems:

- Replace domestic water distribution within dwelling units as required. Piping shall be Type L copper with lead free solder fittings. Provide unit pricing for replacing 10 ft of piping per floor. Provide pricing for ¾" pipe sizes.
- Replace damaged domestic water pipe insulation within dwelling units as required. Insulation shall be 1" thick, preformed fiberglass pipe insulation with all service jacket. Pipe insulation to be protected with PVC enclosure. Provide unit pricing for replacing 10 ft of insulation per floor.
- Replace sanitary piping within dwelling units as required. Piping shall be no-hub cast iron with stainless steel band couplings. Provide unit pricing for replacing 10 ft of piping per floor. Provide pricing for 4" pipe size.
- In Type A and Type B accessible units, install fixtures in new locations. Revise rough-in piping as necessary based on proposed floor plan. Extend existing piping to new fixture locations. Provide offset controls at bathtubs.
- Extend domestic water and sanitary piping to new fixture locations based on proposed 1st and 2nd floor plans. Domestic water piping shall be Type L copper with lead free solder fittings. Domestic water piping shall be insulated with 1" thick, preformed fiberglass pipe insulation with all service jacket. Pipe insulation to be protected with PVC enclosure. Connect domestic water to existing unit water distribution piping. Sanitary piping shall be no-hub cast iron with stainless steel band couplings. Connect sanitary piping to existing sanitary stack in each area. If existing stack location exceeds 12 ft distance to new fixtures (or 8 ft distance to new toilets), a 2" cast iron vent pipe to the roof shall be provided.

- While the updated Philadelphia Plumbing Code has not been published or adopted, it is in the process of being revised. Based on the Memorandum of Understanding issued by the Plumbers Union Local #690, in High Rise Buildings 150 Feet in Height or Less, domestic water distribution piping within dwelling units only may be an approved non-metallic material. If adopted, domestic water risers shall be copper and distribution within dwelling units shall be CPVC.

Residential fixtures: Faucet basis of design: Moen.

- Double-bowl stainless steel drop-in sink with lever faucet and basket drain. 1.5 gpm max. Provide shallow bowl for Type A and Type B accessible dwellings.
- Cultured marble vanity top with integral bowl and single handle faucet and pop-up drain. 0.5 gpm max.
- Toilet with seat and cover in ADA dwellings. 1.28 gpf max. Basis of Design: Niagara Stealth 0.8 gpf
- Floor drain not required if accessible unit only has tub.
- Fiberglass bathtub with apron, 60" x 30". Provide with three-piece fiberglass surround. Fiberglass surround shall allow for installation of shower valve and supply piping outside of wall behind surround. Provide new shower valve, control, shower head and tub spout. Tub/shower faucet anti-scald. Showerhead 2.0 gpm max.
- Fixture Basis of design:
 - Tub: American Standard #2390.202 ICH
 - Hand shower: Delta #T17TH155
 - Tub/shower faucet: Delta T13420 and T13420-SOS
 - Lav faucet: Delta #559LF-HGM-PP with pop-up drain
 - Kitchen faucet: Delta 400LF-WF

Commercial fixtures:

Replace janitor closet sinks and faucets and common area and staff restroom fixtures with low-flow fixtures and trim. Include replacement of traps, stop valves and supplies.

- Right-height accessible toilet with open front seat less cover. 1.28 gpf max.
- Wall hung porcelain lavatory with single lever faucet, grid drain. 0.5 gpm max. Provide shallow bowl for ADA compliance.
- Floor drain in restrooms. Stainless Steel Square strainer. Basis of Design: Sioux Chief.
- Janitor sinks shall be cast iron with standard trap.
- Dual-height ADA compliant electric water cooler.
- Double-bowl stainless steel drop-in sink with lever faucet and basket drain. 1.5 gpm max. Provide shallow bowl for ADA compliance
- Replace existing laundry tub with new ADA depth single bowl stainless steel sink. Extend existing domestic water and sanitary piping to new location. Blade-style mixing faucet.

DIVISION 23: HVAC

Central System shall be a two-pipe fan coil unit system and shall include the following:

- Approximately a 200 Ton air cooled chiller pad mounted at grade. The final cooling load requirement is to be verified.
- Variable speed primary duplex end-suction pumps floor mounted in basement mechanical room.
- Floor mounted fan coil units to replace existing hot water baseboard in each apartment unit.

- Replace hot water risers and distribution to the FCUs with new dual temperature piping system. Utilize existing piping as much as possible. First floor will have both heating and cooling loops.
- Condensate drain system shall be provided for new cooling systems. Refer to Division 22 for requirements.
- Tie chilled water and hot water piping system together at the basement level.
- Provide BAS system with web-based controls to monitor and control all central plant equipment, including, chiller, boilers, pumps and appurtenances.
- Basis of design manufacturers: Carrier, Trane or York

Camera inspect exhaust chases to determine that fire rating integrity is maintained throughout the height of the building. Repair as necessary.

Replace all toilet exhaust and kitchen exhaust grilles within units with new grilles, pre-balanced dampers and fire dampers.

Provide new rooftop air handling unit to provide heating, cooling and ventilation air for corridors at each level. Use existing corridor duct riser.

Where apartment units are reconfigured, provide new dual temperature piping connections off new dual temperature piping risers.

Provide heating and ventilation system for basement area. This system shall be an extension of the two-pipe fan coil unit system.

Provide heating, cooling and ventilation through two-pipe fan coil system for first floor maintenance shop areas. Maintain existing split system for the tenant office area. All equipment shall meet Energy Star requirements as an assembled system. Exposed refrigerant, power and control wiring from building to remote units must be protected. Piping must be bundled and covered with PVC split insulation jacket with cemented joints. Basis of Design manufacturers: Carrier or Trane

Trash compactor room shall have negative pressure ventilation system and cooling system set at 60 degrees F. No heating systems.

Ductwork: all heating/cooling ductwork must be located within the conditioned space. All duct joints and seams shall be sealed with mastic or similar product listed in SMACNA Manual N.

Piping: All piping shall be Type 'L' copper of schedule 40 Steel. Piping shall be sized at 4fhd/100ft at 4ft/sec in apartment units and 6 to 8ft/sec in risers and mechanical rooms. All piping shall be insulated per 2018 IECC code requirements.

Bath exhaust fans to comply with Energy Star and ASHRAE 62.2 standards: Basis of Design manufacturer: Panasonic

Electric resistance heat: UL-listed devices. Basis of Design: Q-mark

DIVISION 26: ELECTRICAL

Distribution: Electrical distribution for apartments units will be distributed from the Utility closet on each floor via tapping the existing 400 amp riser to connect a panel board which will provide metered power using Honeywell Energy Monitors (EMON).

Meters: All units shall be individually metered. Replace existing meter socket and distribution frame.

Panels: Replace existing panels in all units. In ANSI A117.1 Type A and Type B accessible dwelling units, install panel such that top breaker is within accessible reach range.

Wiring: Across existing solid plaster partitions and concrete ceilings install wires in Wiremold or equal. Provide Wiremold or equal boxes and fittings as required.

Devices:

At ANSI A117.1 Type A and Type B accessible dwelling units, provide arc fault devices in all areas except wet locations which require GFCI devices. In kitchens, space receptacles max 4'-0" OC at counters, and no more than 2'-0" from edge of sink or range. Mount devices off finish floor within barrier-free reach range and as indicated. Layout of devices in accessible units shall conform with NFPA 70.

Hearing & Visually Impaired Accessibility Devices:

This must include the following at a minimum:

- a. Strobic **visual** signal wired to the dwelling unit smoke detectors, visible in all rooms of the dwelling unit including the bathroom.
- b. Strobic **visual** signal wired to the central fire alarm system (if one is required by code), visible in all rooms of the dwelling unit including the bathroom. This signal must be distinguishable from that in paragraph "a", above.
- c. A doorbell at the dwelling exterior or corridor entrance door with a **visual** signaling device.
- d. TTY capable telephone in the unit.
- e. In buildings with a common entrance, a means for a hearing impaired individual to identify visitors without leaving his/her dwelling unit.
 - Basis of Design equipment package:
 - Multiple station combination smoke detector/alarm and visual alarm: BRK #7010BSL
 - Visual alarm: BRK #SL177
 - Doorbell: Sonic Alert #DB299
 - Remote receiver clock and bedshaker: Sonic #SB1000SS
 - Flashing Strobe: Sonic #BL300

Lightning protection:

Provide NFPA 780 lightning protection system at roof and penthouse. Provide ground wire as required. Connect roof-mounted mechanical devices to the system. Use blunt tipped devices.

Lighting - general:

Light lighting fixtures shall be shatter-resistant and tamperproof. Lamps shall be high efficiency design, low energy type (LED). Interior fixtures and apartment exterior fixtures Basis of Design manufacturer: Progress. Exterior area lighting fixtures Basis of Design manufacturer: Progress or Hubbell. All fixtures shall be hard wired; plug-in corded fixtures not permitted.

Interior lighting Basis of Design:

LIGHTING FIXTURE SCHEDULE									
PLAN SYMBOL	TYPE	MANUFACT.	CATALOG NUMBER	VOLT	LAMP			MOUNT.	REMARKS
					NO.	TYPE	WATT		
	A alt	DAYBRITE LIGHTING	1FXP45L835-4-DS UNV-DIM	UNIV	1	LED	39.2	RECESSED	DIMMABLE FOR USE WITH OCCUPANCY AND PHOTO SENSOR WHERE INDICATED
	A alt EM	DAYBRITE LIGHTING	1FXP45L835-4-DS UNV-DIM	UNIV	1	LED	39.2	RECESSED	DIMMABLE FOR USE WITH OCCUPANCY AND PHOTO SENSOR WHERE INDICATED; EMERGENCY BALLAST
	B	LIGHTOLIER LIGHTING	L4R10AE1VA L4R10835VA-L4RDW	UNIV	1	LED	10.4	RECESSED	DOWNLIGHT FIXTURE; FOR USE WITH OCCUPANCY SENSOR
	B-EM	LIGHTOLIER LIGHTING	L4R10AE1VA L4R10835VA-L4RDW-EM	UNIV	1	LED	10.4	RECESSED	DOWNLIGHT FIXTURE; FOR USE WITH OCCUPANCY; EMERGENCY BALLAST
	C	MERCURY LIGHTING	LW4-4-5000-35K-HTA U55-UNI-SR-XXXX (MOD FOR 2' 2700 LM)	UNIV	1	LED	25	SURFACE	1x4 LIGHTING FIXTURE; CONTROLLED BY OCCUPANCY SENSOR WHERE INDICATED
	C-EM	MERCURY LIGHTING	LW4-4-5000-35K-HTA U55-UNI-SR-XXXX (MOD FOR 2' 2700 LM)	UNIV	1	LED	25	SURFACE	1x4 LIGHTING FIXTURE; CONTROLLED BY OCCUPANCY SENSOR WHERE INDICATED; EMERGENCY BALLAST
	D	MERCURY LIGHTING	L455-4-4500-35K-HTA20-350-20UNI-EM12	UNIV	1	LED	40	SURFACE	7"x45" BI-LEVEL LIGHTING FIXTURE; W/ INTERGATED OCCUPANCY SENSOR AND EMERGENCY/STANDBY BATTERY/LED DRIVER
	E	MERCURY LIGHTING	MLS3-X-48-825-35K-HTA-A401-U	UNIV	1	LED	30.3	RECESSED	LINEAR TYPE FIXTURE; FOR USE WITH OCCUPANCY SENSOR
	E-EM	MERCURY LIGHTING	MLS3-X-48-825-35K-HTA-A401-U-EM12	UNIV	1	LED	30.3	RECESSED	LINEAR TYPE FIXTURE; FOR USE WITH OCCUPANCY SENSOR EMERGENCY BALLAST
	E1	MERCURY LIGHTING	MLS3-X-48-825-35K-HTA-A401-U (MOD FOR 400LF)	UNIV	1	LED	30.3	RECESSED	LINEAR TYPE FIXTURE; FOR USE WITH OCCUPANCY SENSOR
	E1-EM	MERCURY LIGHTING	MLS3-X-48-825-35K-HTA-A401-U-EM (MOD FOR 400LF)	UNIV	1	LED	30.3	RECESSED	LINEAR TYPE FIXTURE; FOR USE WITH OCCUPANCY SENSOR EMERGENCY BALLAST
	F-1	LOUIS POULSEN	WOHLER-WOP-13.7 22W LED-A21-MEDIUM	UNIV	1	LED	22	CANOPY	PROVIDE WITH PHILIPS LED LAMP 19 A21 MED.43221-1 1620 LUMENS
	F-2	LOUIS POULSEN	WOHLER-WOP-15.7 22W LED-A21-MEDIUM	UNIV	1	LED	22	CANOPY	PROVIDE WITH PHILIPS LED LAMP 19 A21 MED.43221-1 1620 LUMENS
	G	LIGMAN LIGHTING	UMV-30011-20LED-W-30-XXX-120/277-F	UNIV	1	LED	20	SURFACE	
	G-EM	LIGMAN LIGHTING	UMV-30011-20LED-W-30-XXX-120/277-F	UNIV	1	LED	20	SURFACE	PROVIDE WITH REMOTE EMERGENCY/STANDBY BATTERY MODULE AND CONTROL
	H	PHILIPS GRADCO	121-16L-530-WW-G3-3-UNV-PCB-FINISH	UNIV	1	LED	28	SURFACE	
	H-EM	PHILIPS GRADCO	121-16L-530-WW-G3-3-EBPC-UNV-PCB-FINISH	UNIV	1	LED	28	SURFACE	
	H1	PHILIPS GRADCO	121-32L-530-WW-G3-4-UNV-PCB-FINISH	UNIV	1	LED	52	SURFACE	
	X	LITHONIA LIGHTING	VR1C26DTT120LPI	120	1	DTT	26	SURFACE	PIT/SHAFT LIGHTING
	Y	LITHONIA LIGHTING	ELMLT HQ W LP06VS LTP SD	UNIV	2	LED	14	UNIV	HIGH OUTPUT LED EMERGENCY LIGHT WITH SELF TEST
	Z	LITHONIA LIGHTING	ELA T QWP L0309	UNIV	2	LED	5.5	UNIV	TWIN LED WEATHER-PROOF REMOTE HEAD
	EX1	LITHONIA LIGHTING	EDGR-1-R	UNIV	-	LED	2	UNIV	EDGE LIT EXIT SIGN; SELF POWERED; DIRECTIONAL ARROWS AS INDICATED ON PLANS; SINGLE FACE; RED ON CLEAR
	EX1	SURE LITES	ELX-7-1-R	UNIV	-	LED	2	UNIV	EDGE LIT EXIT SIGN; SELF POWERED; DIRECTIONAL ARROWS AS INDICATED; SINGLE FACE
	EX2	SURE LITES	ELX-7-2-R	UNIV	-	LED	2	UNIV	EDGE LIT EXIT SIGN; SELF POWERED; DIRECTIONAL ARROWS AS INDICATED; DOUBLE FACE

A	Sea Gull	75435EN-15	1	10W MAX	LED 2700K	120	Surface	14" round surface mount LED 2700k with white finish
A1	Sea Gull	75434EN-15	1	10W MAX	LED 2700K	120	Surface	11 1/2" round surface mount LED 2700k with white finish
A2	Sea Gull	5326EN-15	1	10W MAX	LED 2700K	120	Surface	7 3/4" round surface mount LED2700k with white finish

Site lighting:

- Parking lot: 20 foot square steel poles with LED-lamp head. CCTV cameras will be attached to the poles. Min 1 footcandle on ground surface.
- Site perimeter: 14 foot steel tapered fluted poles with an ‘acorn’ head with LED lamps. CCTV camera will be attached to the poles at the 12’ high mark.
- Canopy mounted: undermount LED box fixtures to provide 5 footcandles on walkikng surface.

Smoke detectors to be provided:

- In the areas adjacent to the sleeping area, one in each bedroom and one on each level. 120-volt with battery backup.
- H&VI units shall have strobe/horn type visual signaling devices wired to unit smoke detectors and must be visible in all rooms of the dwelling unit including bathrooms.
- Public areas
- Storage rooms
- Trash room
- Stair towers
- Mechanical and electrical rooms.
- Basis of Design manufacturer: Kidde or BRK

CO detectors must be installed in all dwelling units.

Heat detectors to be provided as required by City of Philadelphia.

Telephone and TV cable service: Units being altered for accessibility must be pre-wired for telephone and TV cable service. The building already has a service to each floor.

Emergency Generator: Provide 80KW diesel generator. Provide transfer switch and emergency panels. Connected loads to include:

- Elevator motors, elevator car lighting, emergency voice communication, fire alarm system, fire pump and controls.
- Hot water pumps, hot water heater controls, cold water pump, boiler pumps and controls
- Sump pump
- Emergency lighting in community room, all corridors and stair towers, security desk/fire command center, IT room, exterior lighting, boiler room lighting.
- Emergency power circuits to community room, IT room and Security desk/fire command center.

Transformer: Replace existing with a 500KVA exterior pad mounted transformer with 13.2 KVA Primary/208 volt 3 Phase 4 Wire Secondary. Replace the existing Main distribution board with a new 2500 Amp Main Distribution Board. This panel will provide power for (2) existing 400 ampere riser, Elevators and Mechanical room.

DIVISION 27: COMMUNICATION

Emergency call system: Locate pull stations in bedroom and bathroom within apartments and in public/staff area toilet rooms. Provide central monitoring station at Security Desk at main entrance. The system shall register an audible and visual signal at a central supervised location which identifies the call origination, or a location directly outside the dwelling unit entrance door. Wireless systems permitted. Provide all required equipment, recessed receptacles, junction boxes, data jacks and wiring for a complete system. Provide phone lines and hardware to provide direct contact to 911 during hours when Security Desk not monitored.

- Basis of Design: SilverSphere Atmos Emergency Call System. Includes WAPB wireless access points, HWNA wireless network router, WMCA wireless pull cord station, HCSA central station adapter.

Broadband infrastructure is required in compliance with Federal Register Citation 81 FR 31181, "Narrowing the Digital Divide Through Installation of Broadband Infrastructure."

DIVISION 28: ELECTRONIC SAFETY AND SECURITY

Access control intercom system: System connecting the two call boxes at the main entrance shall not rely on a connection to the telephone service. Each apartment will have a dedicated audio/video station that allows release of the main entry door. Provide all required equipment for a complete system.

- Basis of Design: Aiphone GT Series. GTU-DES202B call boxes with surface mount frames. GT1C-7 video tenant station.

DIVISION 31: EARTHWORK

Miscellaneous earthwork as required for sidewalks, ramps and retaining walls.

DIVISION 32: EXTERIOR IMPROVEMENTS

Site concrete: 4000psi to thickness indicated, minimum 4" with WWF 4x4xW1.4xW1.4 reinforcement or fiber over 4" bed of clean 2B stone base over compacted grade with maximum 2% drainage slope. Driveway aprons and service drives shall be 6" thick with WWF 4x4xW1.4xW1.4 reinforcement or fiber over 4" bed of clean 2B stone base over compacted grade. Provide ½" thick premolded expansion joint against existing building concrete, existing sidewalks, and every 25 LF. Coordinate elevations with civil drawings. Provide contraction joints every 5 LF of sidewalk and every 100SF of pads. Exterior finish of walk surface: broom finish. Exterior finish of vertical surfaces: trowel or sponge. Exterior concrete work includes but is not limited to:

- Sidewalks, curbs and pavements
- Cast in place stairs
- Exterior Utility pads

Bituminous pavements: Comply with PennDOT requirements.

- Traffic coat (Class 2): 1.5" compacted thickness (Superpave Mix, 9.5 mm)
- Base coat: 2.5" compacted thickness (Superpave Mix, 19 mm)
- Tack coat: PennDOT SP 408/2016
- Fine aggregate: PennDOT 408 Section 703.1. Limit natural sand to 20 percent by weight of the total aggregate mass.
- Coarse aggregate: PennDOT 408 Section 703.2

Barrier-free tactile warning: cast in place premolded pad. Basis of design: alertcast® by Detectable

Warning Systems.

Wheel stops: 6' long pre-cast concrete secured by two rebars.

Pavement markings: Provide as required for barrier-free parking stalls and aisles, parking stalls, stoop bars, international symbol of accessibility, and other painted warning signs. Colors to comply with PennDOT requirements (non-highway).

Architectural fence: Aluminum to match existing pattern and height along the streetfront and outdoor passive recreation areas, and 8' high around the mechanical equipment yard. Provide gates and hardware as required where indicated. No gates are to be provided at the parking lot vehicle entrance and at site entrances from North 10th St or Master St.

Lawns:

- Hydro seed: Contractor responsible for watering, feeding and mowing until mature growth is established.
- Sod: Contractor responsible for watering and feeding for 3 months after installation.

DIVISION 33: UTILITIES

Extend manholes, valves, catch basins and related frames and trim in loading dock area up to new finished grade.

Provide separate line item cost estimate for separation of natural gas utility from the tower building to the surrounding low-rise buildings. (PHA request)

Provide separate line item cost estimate for separation of domestic water utility from the tower building to the surrounding low-rise buildings. (PHA request)

END OF SECTION

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BUILDING ASSESSMENT HARRISON PLAZA TOWER

1350 N 10TH STREET
PHILADELPHIA, PA



PREPARED FOR: **PHILADELPHIA HOUSING AUTHORITY**
BUILDING DESIGN AND CONSTRUCTION
2013 RIDGE AVE, 4TH FLOOR
PHILADELPHIA, PA

PREPARED BY: **KITCHEN & ASSOCIATES SERVICES, INC.**

Kitchen & Associates Architecture • Engineering • Planning • Interiors



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SUBMITTED: DRAFT: February 21, 2019
REVISED: June 7, 2019
K&A #18196

**Building Assessment
Harrison Plaza Tower
Philadelphia, PA**

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EXHIBITS

PART 1 –Physical Assessment

1. Executive Summary

General Description:

Project Name:	Harrison Plaza Tower
Street Address:	1350 N 10 th Street, Philadelphia, PA 19122
Zoning Address:	1300-50 N 10 th Street
Property Type:	Income restricted apartments
Date of Construction:	1954
Last Renovation:	unknown, partial upgrades made during unit turns
UFAS Renovation:	2011-12, Units 1A, 1F, 2C, 3A, 3E, 3F, 4B, 4F, 5A, 5B, 5F, 5H, 6A 6B, 6F, (units not confirmed)
Zoning:	RM-2
Use Group:	Residential R-2 (apartment house)
Land size:	4.03 acres (existing – entire block)
Building Size/type:	1 Building / total gross area = 109,620 GSF
Number/Type Units:	(112) apartments; (8) 1-Bedroom, (96) 2-Bedroom, (8) 3-bedroom,
On-site Amenities:	Leasing office, laundry, passive recreation areas.
On-site Parking:	30 spaces in closest two surface lots
Building Construction:	Concrete, masonry infill.
Roof Construction:	BUR on concrete deck.
Exterior Finishes:	Brick and stucco.
HVAC:	Central baseboard heat. Leasing office and elevator machine room have split system cooling.
Life Safety:	Apartments: Interconnected smoke detectors and single station CO detectors and manual fire pull stations.
Overall condition:	Fair to good
Date of last visit:	January 14, 2019

General Physical Condition

The purpose of this report is to provide guidance to the building owner for renovation of the facility to upgrade the buildings and systems to extend building life 20 years without mid-term systems renovation needs. Base renovation year is 2020. The property is over 63 years old, and there was a limited UFAS renovation performed in 2011-12, fire pump replacement in 2009, and balcony enclosures in 2001, there has never been a comprehensive building rehabilitation. There have been some interim renovations, such as the boilers, removal of heating oil tank, site improvements, and new windows.

Work identified as “Critical Needs” includes conducting further investigations of certain building systems and immediate addressing of life safety deficiencies.

- Provide UL-listed exit signs on all residential floors
- Façade repair and stucco panel stabilization
- Provide 5lb ABC fire extinguishers within every apartment.
- Provide working smoke detectors in stair towers
- Replace damaged exposed heating pipe insulation
- Rehang/re-support piping where currently damaged

Work identified as “short term needs” includes the following:

Owner Requested Improvements:

- *Alter unit mix to eliminate all 3-BR units, retain 11 2-BR units, balance 1-BR units and add four 1-BR units. (Changes unit count from 112 to 116)*
- *Subdivide the tower property from the balance of the block.*
- *Provide separate line item cost estimate for separation of natural gas utility from the tower building to the surrounding low-rise buildings.*
- *Provide separate line item cost estimate for separation of domestic water utility from the tower building to the surrounding low-rise buildings.*
- *Provide new entry canopy*
- *Provide new rear door canopy*
- *Infill/raise the loading dock pavement and associated manholes and riser valve casings.*
- *Add additional ground floor exterior doors and windows based on new floor plan.*
- *Replace exterior infill stud wall and stucco finishes with curtainwall.*
- *Provide all utilities to newly created dwelling units*
- *Provide plumbing systems and fixtures as required for new ground floor design.*

Accessibility:

- Provide 12 (10%) ANSI A117.1 Type A accessible units
- Provide three (2%) units and all ANSI A117.1 Type A accessible units with H&VI accessible equipment packages
- Provide 16 (14%) ANSI A117.1 Type B “adaptable” units

Site work:

- Provide new dedicated parking lot, striped and signed appropriately
- Replace damaged sidewalks and concrete entry stairs
- Provide new sidewalks, curbs and curb cuts as required by new parking lot.
- Extend exterior concrete stair and railings to basement to the new service yard elevation.
- Replace building and site identification signage, street numbers, and regulatory signage
- Improve site lighting
- Camera scope all sanitary and storm lines from building to street main connection.
- *Replace decorative fencing and provide additional fencing along newly designated property limits*
- *Provide outdoor passive recreation area (Based on new program)*

Building structure:

- Demolish single story B&G storage shed

Building shell:

- Replace roofing system, copings and drainage systems
- Repoint selected areas
- Repair/replace damaged brick and cast stone sills.
- Replace EIFS coated walls in their entirety with curtainwall
- Repoint building masonry
- Clean all brick facades
- Replace windows
- Replace exterior doors

Common Area Building Systems:

- Replace HVAC systems serving ground floor offices as reconfigured.
- Camera scope vertical exhaust ducts.
- Provide negative pressure cooling system in trash compactor room.

- Replace stand-alone local hot water control valves
- Replace exhaust fans
- Replace automatic louver controls in elevator machine room
- Provide stair tower pressurization
- Upgrade building BAS system
- Pipe insulation to be protected with PVC jacket
- Replace damaged domestic water pipe insulation
- Replace domestic water distribution as required.
- Replace plumbing fixtures
- Revise power to duplex sump pump such that it is provided with emergency power from the generator.
- Replace Simplex sump pump in basement electrical room area. Revise power to Simplex sump pump such that it is provided with emergency power from the generator.
- Replace janitor closet sinks and faucets and common area and staff restroom fixtures with low-flow fixtures and trim. Include replacement of traps, stop valves and supplies.
- Allowance for sanitary riser replacement
- Replace meter disconnect switches
- Replace main switchboard
- Replace building transformer
- Upgrade power supply and meter frame in each Janitor's Closet
- Upgrade power supply to each apartment
- Provide emergency generator
- Provide lightning protection
- Upgrade lighting to LED (interior and exterior).
- Replace trash compactor and related equipment.
- Replace/upgrade trash chute system including hopper doors

Dwelling Unit Building Systems:

- Replace stand-alone local hot water control valves
- Pipe insulation to be protected with PVC jacket
- Replace domestic water distribution within units as required.
- Replace damaged domestic water pipe insulation
- Replace sanitary lines within units as required.
- Replace baseboard radiation units with fan coil units to include conditioned air (PHA request)
- Replace exhaust grilles and clean duct
- Upgrade lighting to LED (interior and exterior).
- Replace kitchen sink and faucet, lavatory and faucet, toilets, bathtubs, shower heads and controls, with low-flow fixtures and trim. Include replacement of traps, stop valves and supplies.
- Replace receptacles and switches
- Upgrade load center panels
- Upgrade lighting to LED

Life Safety:

- Upgrade fire suppression system
- Provide full automatic fire suppression system throughout the building (PHA request)
- Provide fire fighters 2-way communication system
- Provide emergency lighting system
- Provide emergency egress exterior lighting
- Provide emergency power to an elevator
- Replace smoke detection system and CO detection system.
- Replace fire alarm system and exit signs
- Replace access control system (badge readers) and extend system coverage.

- Provide building access control system call and release system.
- Provide apartment range hood dry powder fire extinguishers
- Provide door knockers
- Provide 'nurse call' system
- Upgrade CCTV coverage

Common Areas Interiors:

- *Reconfigure office suite and maintenance suite to incorporate community room and 'right-sized' leasing office (PHA request)*
- *Reconstruct/open guard desk to entry vestibule*
- *Reconfigure entry lobby to be more open (PHA request)*
- *Reconfigure rear door lobby to be more open (PHA request)*
- *Reconfigure trash compactor room to be more efficient (PHA request)*
- Replace finishes (wall, floor, ceilings). Provide drop ceilings to hide utilities.
- Provide lean rail all corridors
- Replace bath accessories.
- Provide ADA signage and ADA upgrades
- Upgrade appliances and fixtures in laundry room for accessibility
- Replace trash chute
- Replace mail boxes and add parcel lockers

Apartment Interiors:

- Replace flooring.
- Provide dropped ceilings/soffits to hide fire suppression and plumbing lines.
- Replace bathrooms
- Replace kitchens cabinetry and appliance packages
- Replace doors, frames and hardware
- Repaint all units
- Replace window blinds
- Replace shelving
- *Relocate non-bearing partitions to increase kitchen work area and to achieve bedrooms of PHFA minimum size.*

End of Section

2. Purpose and Scope

PHA has retained Kitchen & Associates Services (K&A) to provide a Needs Assessment of Harrison Plaza Tower located at 1350 N 10th Street, Philadelphia, PA. The purpose of this investigation is to evaluate the physical condition of the major building components and to provide an objective, independent, professional opinion of the potential repair and deferred maintenance costs associated with the subject property towards submitting a future LIHTC application. This report includes a description of the overall condition of the building components and systems, discussion on any conditions that may limit estimated useful life (EUL). The assessment process includes field visits, interviews of existing management and maintenance staff, and review of existing construction documents. Field observations by K&A architects and engineers are based on visual analysis; no destructive sampling was performed.

Field Reconnaissance:

Inspected were 10 of the 112 apartments, non-residential areas, building exteriors and the site.

Definitions:

Excellent: Component or system is in “as new” condition requiring no rehabilitation and should perform in accordance with expected performance.

Good: Component or system is sound and performing its function, although it may show signs of normal wear and tear. Some minor rehabilitation work may be required.

Fair: A component or system is of a capacity that is defined as enough for what is required, sufficient, suitable, conforms to standard construction practices, and/or is approaching end of expected performance/useful life. Replacement is anticipated in the near term of the loan.

Poor: Component or system falls into one or more of the following categories: (a) Evidence or previous repairs not in compliance with commonly accepted practices, (b) Workmanship not in compliance with commonly accepted standards, (c) Component or system is obsolete, (d) Component or system has either failed or cannot be relied upon to continue performing its original function as a result of having exceeded its expected performance, (e) Evidence of excessive deferred maintenance, or state of disrepair, and/or (f) Present condition could contribute to or cause the deterioration of other adjoining elements or systems. Repair or replacement is required.

Critical Repairs: Physical deficiencies that require immediate action as a result of existing potentially unsafe conditions, building code violations, poor or deteriorated conditions of a critical element or system, or a condition that if left “as is” would result in a critical element or system failure. Also included are issues that affect sustainable occupancy or ingress and egress to the property, as well as accessibility related deficiencies when applicable.

Short Term Needs (within 1 year): Physical deficiencies which include deferred maintenance, that may not warrant immediate attention, but requiring repairs or replacements that should be undertaken on a priority basis, taking precedence over routine preventative maintenance work within a zero to one-year time frame. Included are such physical deficiencies resulting from improper design, faulty installation, and/or substandard quality of original systems or materials. Components or systems that have exceeded their expected useful life that may require replacement within a zero to one-year time frame are also included. Short-Term Needs also include “useful repairs” construed to permit updating, modernization, and improvement of projects provided that proposed repairs improve marketability, efficient use of energy and resources, or reduce operating expenses, and when considered in the aggregate, do not propose a scope of work equivalent to substantial rehabilitation.

Estimate Period (1-20 years): All schedules for component replacement, major maintenance, cost estimates and related inflation adjustments must be for the lesser of 20 years or the remaining life of the mortgage plus 2 years (the Estimate Period)

Market Comparable Improvements:

The standard is a PHFA property standard.

Owner Provided Documentation:

Relevant documentation was requested that could aid in the knowledge of the subject property's physical improvements, extend and type of use, and/or assist in identifying material discrepancies between reported information and observed conditions. The review of submitted documents does not include comment on the accuracy of such documents or their preparation, methodology, or protocol. The following documents were provided for review:

- Davis, Dunlap & Carver (3/14/1954). *Harrison Plaza – As Builts. (partial set)*
- Philadelphia Housing Authority (8/24/2001). *Balcony Enclosure.*
- Costa and Rihl (3/31/2011). *Harrison Plaza Heating Upgrade As-Built (partial set)*
- Schneider Electric (8/26/2013). *Harrison Plaza – Multi-Site Security Improvements*
- Klein and Hoffman (9/20/13). *Water Penetration Repairs 100%*
- Philadelphia Housing Authority (7/18/2015). *Utility Meter Locations.*
- KSK (February 2017). *Harrison Plaza*
- PHY Engineers, Inc. (3/12/2010). *Mechanical & Electrical Systems Survey Report*
- PHY Engineers, Inc. (9/8/2010). *Energy Efficiency Upgrades for Philadelphia Housing Authority Harrison Plaza.*
- Klein and Hoffman (amended 6/30/2013). *Façade Inspection Report*
- Hunt Engineering Company (4/7/2017). *Preliminary Structural Engineering Condition Assessment Report for the PHA Harrison Plaza.*

3.1 Development Synopsis

Harrison Plaza Tower was constructed in 1954 as part of a larger urban renewal development spanning portions of four city blocks. The overall property is 100% affordable family and accessible housing. The tower contains 112 apartments and is located at the southwest corner of Master Street and N 10th Street.

The tower was constructed on reclaimed land, and the location is considered part of the North Central Philadelphia neighborhood. The surrounding properties are a mix of housing and educational venues. Public transit is available nearby. The 15-story tower contains 112 apartment units, with limited on-site parking. The unit mix is (8) 1-bedroom (570 SF average), (96) 2-bedroom (700-750 SF average), (8) 3-bedroom (950 SF) and no 4-bedroom. Several units are designated as UFAS (barrier-free), and there are no known hearing and visually impaired (H&VI) accessible units. All apartments are accessed from the building interior.



Arrangement of existing residential and non-residential spaces within the building is as follows:

Floor	1BR	2BR	3BR	4BR	Use/Amenity Description
B					Boiler Room, Elevator Pit, Utility Room
G					Management Office, Maintenance Office, Laundry, Mail
1	4		4		Eight apartments
2	4		4		Eight apartments
3		8			Eight apartments
4		8			Eight apartments
5		8			Eight apartments
6		8			Eight apartments
7		8			Eight apartments
8		8			Eight apartments
9		8			Eight apartments
10		8			Eight apartments
11		8			Eight apartments
12		8			Eight apartments
14		8			Eight apartments
Roof					Elevator Penthouse

This property has four basic apartment plan types: (1) 1-bedroom plans, (3) 2-bedroom plans, (1) 3-bedroom plan and (0) 4-bedroom plan. There are also accessible 1- and 2-bedroom plans. The basic plan types mirror image across the building. At time of the 2019 survey, the property was currently 82% leased. Summary of apartment types inspected:

Apartment	Size/Type	SF	Accessibility	Residency
1E	3BR	950		Vacant
4C	2BR	700		Vacant
10G	2BR	700		Vacant
5F	2BR	700	UFAS	Occupied

Apartment	Size/Type	SF	Accessibility	Residency
7A	2BR	750		Occupied
4F	2BR	700	UFAS	Occupied
1F	1BR	570	UFAS	Occupied
1B	1BR	570		Occupied
3D	2BR	750		Occupied
3F	2BR	700	UFAS	Occupied
11E	2BR	750		Occupied

Unit size inspection distribution summary: (2) 1-BR; (8) 2-BR; (1) 3-BR; (0) 4-BR; 10% of all apartments.

The apartments in the building are being compared to PHFA standard unit size ranges.

UNIT TYPE	PHFA NSF RANGE	EXISTING SIZE	PHFA COMPLIANT
1BR	550-850	570	YES
2BR CORNER	700-1100	750	YES
2BR INNER	700-1100	700	YES
3BR	950-1350	950	YES

The residential buildings are generally open to the public streets and internal pedestrian access.

The property is over 63 years old, and it has been over 20 years since the last comprehensive renovation.

The property has experienced moderate to heavy wear and tear based on its use and occupancy. Fixtures, finishes and furnishings within the dwelling units and common areas, in most cases, have exceeded their expected useful lives (EUL). Certain aspects of the site improvements such as parking lots, streets, sidewalk, lighting and exterior building elements should be replaced and/or repaired due to the age of the facility and potentially hazardous conditions caused by wear and tear.

3.2 Site Improvement Evaluation and Analysis

General:

Harrison Plaza Tower occupies the northeast corner of a 'superblock' measuring 4.03 acres. The current site is essentially level. Master Street is one way going west and 10th is one way going south. There is no on-site storm water management system. Registered Community Organizations in this neighborhood include 14th Ward Democratic Executive Committee, Temple Area Property Association (TAPA), and Asociacion Puertoriquenos En Marcha (APM).

The property topography and adjacent uses do not appear to present conditions detrimental to the property. No significant areas of erosion were observed affecting the property.

The property is currently Zoned RM-2, Residential Multi-Family-2. The site is also located in Overlay District subarea C/NCP; this overlay only applies to lots zoned RM-1. Multifamily developments are permitted. Parking is provided throughout the site in several surface parking lots within the property. According to the current zoning ordinance (Table 14-802-1), parking for multifamily is to be provided three stalls for every ten units. The ordinance has provisions to reduce the parking requirement for certain populations. Section 14-802(8)(c.1) states "The required minimum number of off-street parking spaces may be reduced by 33% for any group living use or multi-family use in which occupancy of at least 80% of the units is restricted for use by those 60 years of age and older.

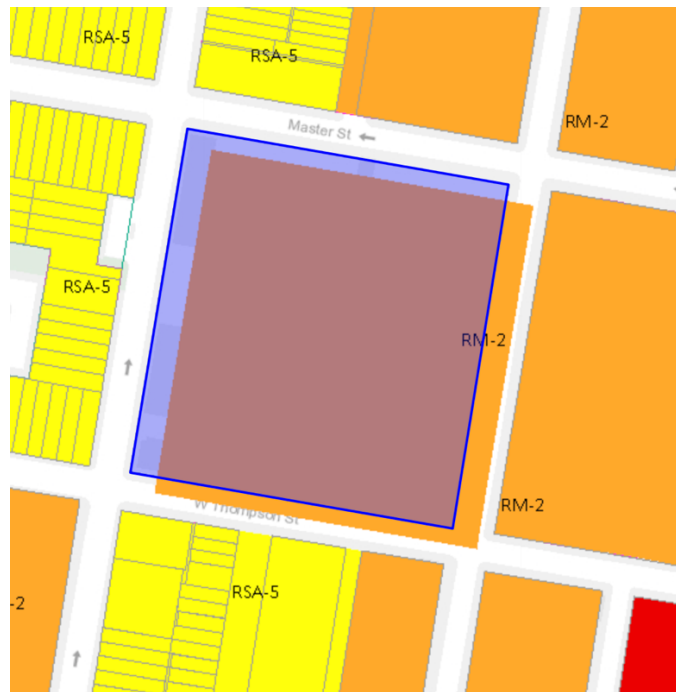


Figure 1 Zoning map excerpt



Figure 2: Recent aerial view before sidewalk bridges installed. Tower at right center.

Utilities:

Public utilities include water (separate domestic and fire suppression), sewer, gas, phone, electric, telephone and cable TV. Gas, Water and Sewer are underground; Electric, Phone/Data are underground. Electric service is delivered by PECO. Television, internet and telephone service is provided by either Comcast or Verizon.

Utility	Utility Provider
Water	PWD
Sewer	PWD
Electric	PECO
Telephone	Verizon
Cable TV	Comcast
Natural Gas	PGW
Oil	N/A
Propane	N/A
Solar	N/A
Wind	N/A

Tenants pay for cable, telephone/data. The property pays all other utilities.

The water, electric, gas, sewer, telephone and cable TV are assumed to be of sufficient capacity for the current usages and occupancy of these buildings.

Underground electrical service comes to the building from the open mall area between the buildings. Service runs to meter located in the basement utility room. Apartments appear to be sub-metered, but that function is not active.

Underground cable television service comes to the residential buildings from utility poles. Underground phone service comes to the residential buildings from utility poles.

Three natural gas services enter the building in basement utility rooms. Two low pressure services share a room with the domestic water service. The high pressure service enters the building in the adjacent room. One low pressure service supplies natural gas to domestic hot water and cooking appliances in the high rise. The other low pressure service supplies natural gas to domestic hot water, heating, and cooking appliances in the surrounding six low rise buildings in the area bounded by Thompson St., Master St., 11th St., and 10th St. The high pressure service supplies natural gas for the heating boilers located in the high rise building. An additional natural gas service tap at the public water main, utility meter(s) and reconfiguration of the site natural gas distribution piping will be required if the Harrison Plaza Tower is to be separated from the rest of the site as a separate lot. The housing authority has decided to not pursue separating the gas and water service lines at this time, which otherwise would have required a new tap on the main and a cross easement. Provide separate line item cost estimate for separation of natural gas utility from the tower building to the surrounding low-rise buildings. This scope of work would include removal of the low-pressure natural gas service from the basement utility room that supplies surrounding low-rise buildings, an additional natural gas service tap at the public main, new utility meter(s), reconfiguration of the site natural gas distribution piping, and associated street/sidewalk openings and repair.

A 4" domestic water enters the building in a basement utility room in the same area as the low pressure gas service. Based on available information, the domestic water meter located in the basement of Harrison Plaza Tower supplies water to the six other buildings bounded by Thompson St., Master St., 11th St., and 10th St. An additional domestic water tap at the public water main, utility meter(s), meter pits or vault, and reconfiguration of the site domestic water distribution piping will be required if the Harrison Plaza Tower is to be separated from the rest of the site as a separate lot. The housing authority has decided to not pursue separating the gas and water service lines at this time, which otherwise would have required a new tap on the main and a cross easement. Provide separate line item cost estimate for separation of domestic water utility from the tower building to the surrounding low-rise buildings. This scope of work would include reconfiguration of site water distribution, additional domestic water service tap from the public main, new utility meter, backflow preventer, vault, and associated street/sidewalk openings and repair.



Figure 3 Incoming water service

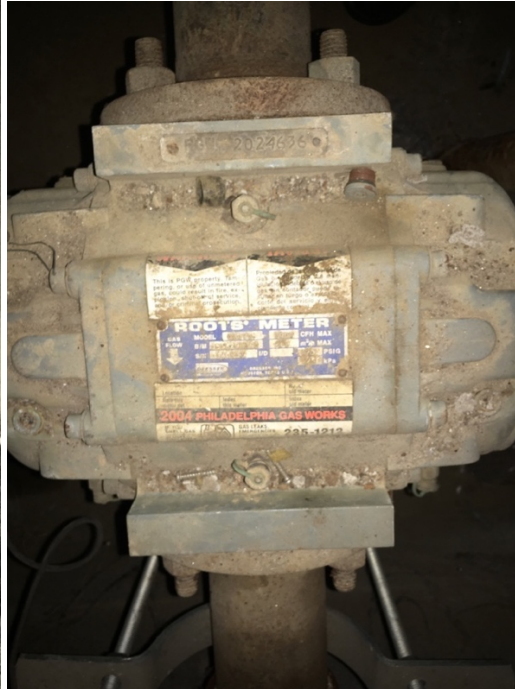


Figure 4 One of the three gas meters

A 6" fire suppression water service enters the building in a basement utility room that contains the fire pump.

Based on the age of the property, the sanitary service lines should be assessed to determine if repairs are warranted in the near term. Based on the age of the property, the storm water service lines should be assessed to determine if repairs are warranted in the near term. Natural gas service, based on the age of the installation, is assumed at this time to be in good condition.

Recommendations:

- Camera scope all sanitary and storm lines from the building to the street.
- Additional domestic water and natural gas utility connections at the public main in the street, additional utility meters, and reconfiguration of existing site water and natural gas distribution piping will be required if the Harrison Plaza Tower high rise building is to be separated from the rest of the site as a new lot. A civil engineer should be retained to determine the feasibility of bringing new utility services to the six buildings other than the tower either without utilizing any portions of the proposed tower lot as a utility easement or as a cross easement through the proposed subdivision.

Critical Repairs:

- None

Short-Term Needs:

- None

Parking:

The two closest internal site parking lots are along Master Street. One open lot has space for 16 vehicles. One 'fenced' lot has space for 14 cars including two designated accessible parking stalls. Both lots are bituminous with concrete curbs and sidewalks at the perimeter. Parking spaces are available to PHA employees and to residents.

Per the Zoning Ordinance, a 112-unit building should have 34 stalls (ratio of 3:10). With the allowable 33% reduction if the building is designated for seniors only, only 23 stalls are required. Of each of these totals, two stalls shall be reserved for accessibility in the former, and only one in the latter; per Table 14-802-4.

Because the building GSF is between 100,000 and 150,000, Zoning Ordinance Table 14-806-1 indicates one off-street loading stall be provided. The space shall be 11 feet wide by 60 feet long and 14 feet high. The Streets Department can allow the size to be reduced to 30 feet long, based on the cartway width.

All parking areas shall be restriped with regular spaces and barrier-free stall sizing per local jurisdiction requirements. Proper AASHTO signage should be provided at each designated handicap parking stall.

Consideration should be made to constructing a new dedicated parking lot for the tower at the location of the existing site buildings and grounds garage.

Critical Repairs:

- None

Short-Term Needs:

- Provide new dedicated parking lot for the tower and stripe and sign appropriately.

Paving:

The two closest internal site parking lots are along Master Street. The bituminous paving is in fair to good condition and should be milled and resurfaced. Storm drainage is handled through a series of inlets throughout the parking lots and lawn areas.

Consideration should be made to constructing a new dedicated parking lot for the tower at the location of the existing site buildings and grounds garage.

The service driveway leads to a loading dock on the north side of the building. The concrete drive slopes down from the sidewalk to about three feet below the floor plate. This dock is not used for tenant move-in, and the recessed pavement could be removed and raised up to meet the loading dock surface. In doing so, bollards are required to protect the building overhang from the service drive. The various utility manholes and the stair to the basement would have to be extended up to the new surface plane.



Figure 5 Loading dock and service drive

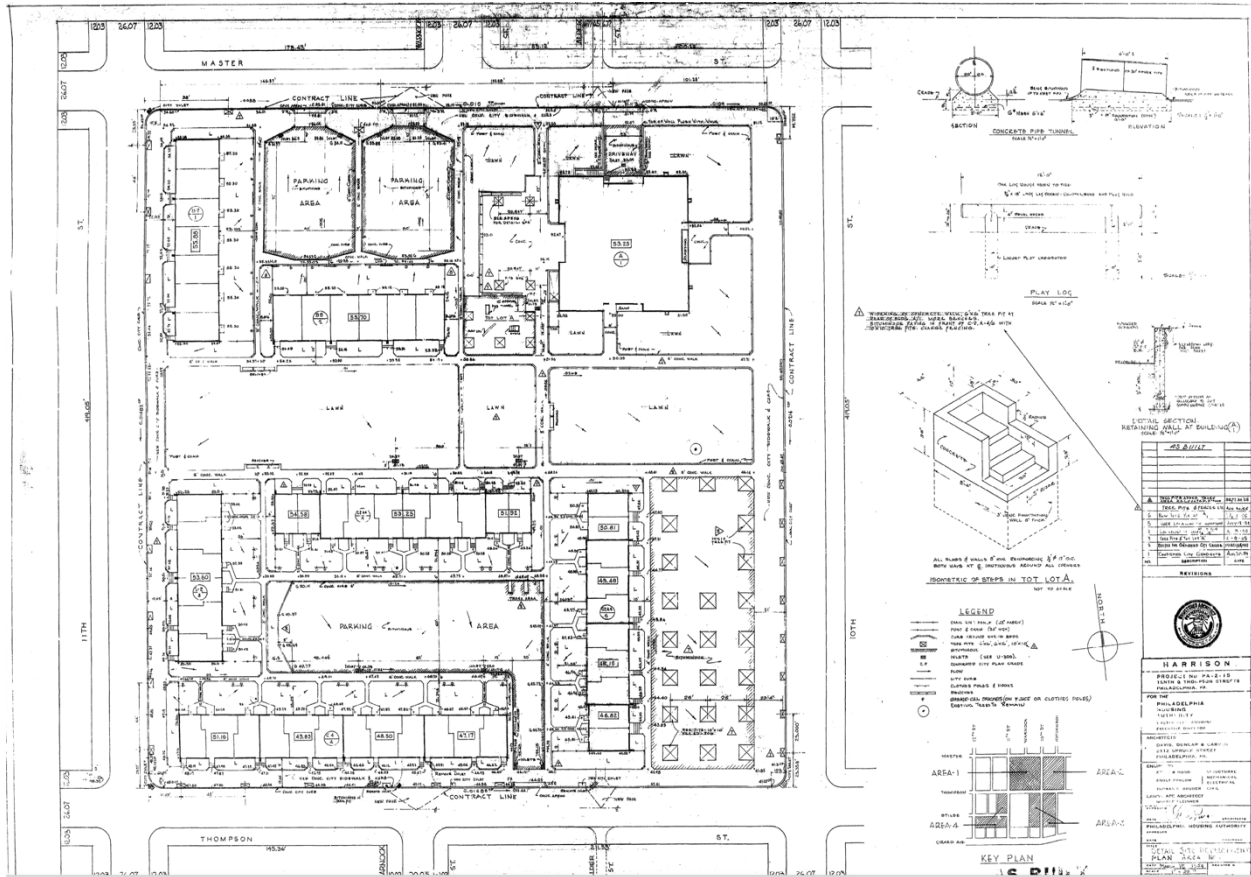


Figure 6: Original 1954 site plan of the block.

Recommendations:

- Raise service driveway flush with loading dock, add bollards, extend stair to basement.

Critical Repairs:

- None.

Short-Term Needs:

- Provide new dedicated parking lot.
- Replace service drive. See recommendations.

Sidewalks, Railings and Fences:

The streets fronts have concrete curbs and sidewalks, with a curb cut at the intersection. There are three driveway cuts along Master Street, one for each parking lot and one for the loading dock. The street corner curb cut does not comply with current ADAAG regulations regarding warning strips. The parking lots have concrete curb perimeter, and sidewalks that connect to the internal site network of sidewalks. The immediate sidewalks require replacement. The main entrance on N 10th Street has three sidewalks leading to it; one marked as handicap accessible, one has steps, and the other not being specifically designated. The rear and side emergency doors have concrete sidewalks. The loading dock has a concrete driveway sloping towards the building and a sidewalk leading to the door.

There is an architectural fence at the street sidewalk from the loading dock heading to N 10th, along the N 10th area, and turning west at the south edge of the planter. There are no operable gates in the decorative fence, just gaps where the three internal sidewalks connect to the City sidewalk. There is a full-height chain link fence with integral gate protecting the south stair emergency egress.



Figure 7 Sidewalk, fence and signage at corner of Master and N 10th St

Recommendations:

- Provide allowance to repair a percentage of the sidewalks that are failing within the work area..
- Provide allowance to repair a percentage of the concrete entry stairs that are failing within the work area.
- Provide additional fencing to surround the new property limits.

Critical Repairs:

- None

Short-Term Needs:

- Allowance to replace sidewalks
- Allowance to repair concrete stairs
- Extend existing concrete stair runs as required by site changes at the Loading Dock.
- Replace architectural fence and provide additional fencing.

Sewer and Drainage:

The site has a storm water system tied to the City's combined storm/sewer system on Master Street. Inlets and catch basins are provided along the streets and interior alleys within the site. There is no on-site storm water management system. The building has a combined sewer/sanitary discharge connecting to the City's combined storm/sewer system on Master Street. The recessed service yard and basement access areaway have drains.

Recommendations:

- Camera scope all sanitary and storm lines from the building to the street.
- Clean all exterior drains to discharge.

Critical Repairs:

- None

Short-Term Needs:

- None

Landscaping and Site Amenities:

The building is surrounded by lawn and sidewalks. There are two street trees.

There is a property sign located at the intersection. The sign should be replaced and should include the following information: property name, equal opportunity housing logo, barrier-free logo, phone number, and TTY number.

Above the main entrance attached to the marquis are cast letters of the name of the facility and the street number.

There are no site amenities. The housing authority has requested a passive recreation area be provided with access to the proposed community room.

Recommendations:

- Signage package.

Critical Repairs:

- None.

Short-Term Needs:

- Replace building identification signs and street numbers.
- Replace property sign.
- Provide regulatory and warning signage as required.
- Provide passive recreation area accessed from proposed Community Room



Figure 8 – Service entrance and loading dock

Trash enclosures:

There no trash container enclosures. At the loading dock area are three 2-CY rolling containers modified from compactor service, and two 5-yard containers.

Critical Repairs:

- None

Short-Term Needs:

- None.