A. Investigation and Analysis

The design professional should:
1. Visit and thoroughly inspect the Project Site, including any structures and natural or man-made features to be modified;
2. Familiarize him/herself with the survey of the location of all existing buildings, utilities, conditions, streets, equipment, components and other attributes having or likely to have an impact on the Project;
3. Familiarize his/herself with the Owner's layout and design requirements, conceptual design objectives and target construction cost;
4. Familiarize his/herself with pertinent Project information and programming needs;
5. Review and analyze available Project geotechnical, hazardous substance, structural, chemical, electrical, mechanical and construction materials tests, investigations and recommendations, and advise the Owner of additional testing requirements;
6. Familiarize him/herself with, review and analyze local zoning restrictions and requirements including:
   a. Determining the proposed structures(s) compliance (or noncompliance) with the local municipality’s Planning and Zoning Codes;
7. Gather any other information necessary for a thorough understanding of the Project;
   a. If a Project involves modifications to any existing structure(s) or other man-made feature(s) on the Project site, the design professional should also review all available as-built and record drawings, plans and specifications; and thoroughly inspect the existing structure(s) and man-made feature(s) to identify existing deficiencies and ascertain the specific locations of pertinent structural components; and
8. Establish a basic Project strategy by addressing critical relationships among program elements, working closely with the Owner to address specific needs and requirements of the housing type, population, program design, and requirements of the involved funding agencies/programs.

B. Design Standards

While not intended to be comprehensive design standards, HHAC offers the following basic considerations in designing supportive housing projects:
1. As supportive housing, supportive services space and common areas must be functionally integrated into the design.
2. As publicly-funded projects operated by not-for-profit organizations for homeless people in poverty, often with multiple life challenges, the design must:
   a. Consider durability of materials, the cost of operations and maintenance, and the long-term sustainability of the project (e.g. green features that conserve water and energy usage; damage resistant hardware; avoidance of specialty materials for aesthetics which have high life-cycle costs).
   b. Be tailored and appropriate to the needs of the population to be served. The particular needs of the population must be considered (e.g. security features for victims of domestic violence; play and homework areas for families with children; tenant storage areas for emergency housing that are not conducive to vermin); and
   c. Be responsive to the programmatic aspects of a supportive housing (e.g. counseling areas that preserve confidentiality; access to computers for employment-related services; secure medication and/or file storage).
3. The design should provide a sense of home and community as opposed to having a commercial or institutional
character, provide security, and promote opportunities for socialization.

4. Accessibility and visitability should be emphasized and achieved beyond the legal minimums, as the incidence of disabilities is far greater among those who are homeless in comparison with the general population.

5. The design professional should consult other available resources with regard to supportive housing design including, but not limited to:
   d. US Department of Housing and Urban Development (HUD) - Affordable Housing Design Advisor (http://www.designadvisor.org).
   e. NYS Homes and Community Renewal (HCR) - Design Handbook (http://www.nyshcr.org/Publications/DesignHandbook/).

C. Cost Estimate

The cost estimate shall:
1. Be based upon measurement of physical characteristics, using costs appropriate for the type of work and design.
2. Be based upon experience and nationally recognized Construction Specifications Institute (CSI) based estimating systems such as R.S. Means®, or other generally accepted standard cost estimating system.
3. Include an appropriate design contingency, bidding contingency, contractor’s overhead and profit, escalation and trade contractor or construction manager general conditions costs.
4. Be reflective of the scope of work as illustrated in the narrative, drawings, and outline specifications as included in the technical application.

D. Design Submittal Requirements

The design details submitted with the application shall:

All Disciplines

1. Narrative
   a. Provide a written description of the overall scope and extent of the project.
   b. Include a general description of project indicating use, architectural concept, conformance to requirements, zoning, lot coverage, codes followed, material and methods of construction.
   c. Include general descriptions of all major building components and systems to be incorporated into the project as defined in each specific discipline section.

2. Codes, Standards and References
   a. Include a code analysis for major requirements, including a description of significant issues to be addressed and proposed solutions.
   b. Provide a detailed listing of all applicable codes, design guidelines and national standards.
   c. Provide a written summary of the code analysis for each applicable code or standard.
   d. Provide applicable information relevant to code compliance, including: occupancy classification (include primary and incidental occupancies), construction classification, seismic design category, fire protection requirements and systems, egress, exiting and separation requirements, etc.
e. Provide a preliminary energy analysis of building envelope system demonstrating compliance with the current edition of the New York State Energy Conservation Construction Code.

d. Detail any variance request(s) information made to all authorities having jurisdiction, as applicable to the project.

e. Minimally, demonstrate compliance with the Americans with Disabilities Act (ADA) and all applicable accessibility standards and requirements, and any local code or regulatory requirements applicable to the project.

3. **Drawings**
   a. Include, specific for each discipline, as applicable; a list of the drawings, general notes, abbreviations, legends, key notes, symbol keys, key plans, column lines, north arrow, and coordinated backgrounds.
   b. Include the following on the cover sheet and all typical drawings: Sponsor name, address and logo, consultant name(s) and address, Project name, project location, project title, project number, sheet name, sheet number, sheet date, drawing scale, graphic scale, revision block and block for seal and signature.
   c. Indicate on all drawings the scale to which they are drawn and shall be appropriate for the specific item being represented.
   d. Adhere to a maximum size of 30”h x 42”w (E size) for all drawings, unless otherwise approved by HHAC.
   e. Coordinate the drawings appropriately with all disciplines.

4. **Outline Specifications**
   a. Include a complete Table of Contents listing all anticipated sections to be used on the project.
   b. Include an outline scope of work description for each specification section. Provide manufacturer, product numbers and quality standards for proposed products.

**Architectural**

1. **Drawings**
   a. Include a Location Plan showing the project location at a scale of 1” = 100’.
   b. Include a Site Plan (1” = 40’ scale minimum) depicting the location of building or buildings in relation to the immediate area around it, all existing and/or proposed utility lines, grading, site improvement, lighting, walks, roads and parking, grade elevations, locations of storm water runoff and retention areas, and basic topography to the extent of existing information.
   c. Include Floor Plans (1/8” = 1’ scale minimum, unless otherwise approved by HHAC) which depict all required spaces, doors, windows, stairs, square footage, planned occupancies, elevators, exits, and major items of fixed equipment, and illustrate reasonable compatibility with routings of mechanical and electrical services.
   d. Include a Roof plan(s) indicating the approximate location of all equipment and accessories.
   e. Include applicable Sections (1/4” = 1’ scale minimum) depicting major cuts in two directions for all structures with basic vertical dimensions. Include key dimensions and material indications.
   f. Include Elevations (1/8” = 1’ scale minimum) depicting key dimensions and material indications.
   g. Indicate all accessible routes and entrances/exists.
   (Note that it is permissible to utilize the architectural drawings to illustrate items from other disciplines, as applicable).

2. **Outline Specifications**: See Requirements for All Disciplines section.

**Site**

1. **Narrative**
   a. Include a description of the site scope of work consistent with the requirements outlined in Exhibit E of the RFP.
   b. Include a general description of the site including its past and current uses, geotechnical features, site features, and current surface drainage patterns as applicable to the work to be performed.
2. Drawings
   a. Include a Site Plan(s), (1” = 40’ scale minimum) depicting: construction parking locations, all accessible routes and entrances, surface drainage, emergency and fire-fighting equipment routes, and access routes for trucks, buses, trash compactors and haulers, barriers, gates, sign locations, and any other information as applicable to the work to be performed.
   b. Identify the location of major site features including site lighting, exterior stairs, sidewalks, retaining walls, and preliminary planting types including site preparations and locations as applicable to the work to be performed.
   c. Identify existing grade contours and topographical survey data, surface drainage, existing paving and other features where applicable.
   d. Identify existing and preliminary utility locations and tie-in locations where applicable.
   e. Identify locations of storm water runoff and retention areas.

3. Outline Specifications: See Requirements for All Disciplines section.

Structural
1. Narrative
   a. Provide a written description of the basic structural systems to be used on the project (foundations, waterproofing, substructure, superstructure, lateral force resisting system, exterior cladding support, etc.). Provide enough detail to fully describe the system to an experienced engineer for review purposes.

2. Drawings
   a. Provide schematic drawing of foundation system including walls, footing, and pile locations.
   b. Provide schematic drawings for the typical steel frame layout including column, beam and girder locations.

3. Outline Specifications: See Requirements for All Disciplines section.

Demolition
1. Narrative
   a. Describe the demolition scope of work, including all disciplines as may be applicable.

2. Drawings
   a. Indicate the scope of all demolition work for the project, including site demolition and any other discipline, as applicable (may incorporate into architectural drawings).

3. Outline Specifications: See Requirements for All Disciplines section.

Electrical
1. Narrative
   a. Define and describe the proposed electrical systems for each of the following (as applicable, but not limited to):
      i) Electrical service and distribution.
      ii) Emergency and standby power.
      iii) A general description of interior and exterior lighting to be used, lighting levels, and controls.
      iv) Electrical requirements for fire alarm equipment (NYC only), telecommunications (voice, data, and CATV) outlets, pathways, backbones, and cable types.
      v) Security.
      vi) CCTV.
      vii) Paging and intercommunication.
      viii) Audiovisual.
      ix) Other alarm systems.
      x) Energy conservation/efficiency opportunities.
b. When tying into existing systems:
   i) Verify that the existing systems have sufficient capacity to support the new work.
   ii) Clearly describe the utility service connection points and how each service will be obtained from the electric,
       telephone, and CATV utilities.

2. **Drawings**
   a. Floor plans (can use architectural sheet) showing:
      i) Electrical, telecommunications, audiovisual, and security rooms and closets.
      ii) Major equipment such as switchgear, switchboards, and transformers.
   b. A Site Plan (can use architectural sheet) showing:
      i) Utility service connection points, routing of services to the building (new and existing), and the location of
         standby/emergency generator(s).

3. **Outline Specifications:** See Requirements for All Disciplines section.

**Environmental**
1. **Narrative**
   a. Identify all existing environmental conditions and hazardous materials including, but not limited to, asbestos
      containing materials (ACM), lead based paint, PCB’s, mold contaminated building materials, etc.
   b. Identify known and suspected underground storage tanks, contents, their size and approximate depth below grade,
      integrity or spill data, and registration status.
   c. Identify other subsurface contamination known or suspected to be present.
   d. Identify the testing that was conducted to verify these materials (including asbestos).
   e. Include a description of all proposed remedial actions to be taken as part of this project.
   f. Include a list of all variances and permits required to perform the work.
   g. Include a description of other environmental considerations including air emissions, ground water, waste water
      and storm water discharges, solid, hazardous or universal waste expected.
   h. Discuss disturbances of wetlands or natural resources that may require agency approvals.
   i. Provide a hazard assessment of environmental issues affecting the project, including SEQR impacts.

2. **Outline Specifications:** See Requirements for All Disciplines section.

**Fire Alarm**
1. **Narrative**
   a. Provide fire alarm design narrative describing the fire alarm systems to be incorporated into the project.
   b. Describe all code required fire alarm and fire/smoke detection systems and equipment.
   c. Include a description of the existing fire alarm system (if applicable) that will be utilized to provide service for the
      project.

2. **Outline Specifications:** See Requirements for All Disciplines section.

**Fire Protection**
1. **Narrative**
   a. Provide a narrative of the scope of fire protection work.
   b. Include general descriptions of all fire protection systems to be incorporated into the project.
   c. Identify anticipated systems:
i) Sprinkler.
ii) Standpipe.
iii) Kitchen hood suppression systems.
iv) Fire pumps.
v) Tanks.

d. Describe all code required fire protection systems and equipment.

2. **Outline Specifications**: See Requirements for All Disciplines section.

**HVAC**

1. **Narrative**
   a. Provide a narrative of the scope of HVAC work including the system design intent.
   b. Include general descriptions of all major building HVAC components and systems to be incorporated into the project.
   c. Describe consideration of energy conservation/efficiency opportunities.

2. **Outline Specifications**: See Requirements for All Disciplines section.

**Plumbing**

1. **Narrative**
   a. Delineate design intent.
   b. Identify the types of systems considered and reasons for selection.
   c. List fixtures and locations that will be accessible to the disabled.

2. **Outline Specifications**: See Requirements for All Disciplines section.