Rental Assistance Demonstration (RAD): PART 1: PHYSICAL CONDITION ASSESSMENT

1020 – 1042 Pennsylvania Avenue, Ann Arbor, Michigan 48103

PREPARED FOR Norstar Development USA, LP
733 Broadway
Albany, NY 12207

PROJECT # 8359e-1-96

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Revised November 20, 2014

ON BEHALF OF The Ann Arbor Housing Commission
727 Miller Ave
Ann Arbor, MI 48103

PIC # MI064
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1.0 EXECUTIVE SUMMARY

1.1 Summary of Findings
AKT Peerless Environmental & Energy Services (AKT Peerless) was commissioned by NorStar Development USA, L.P. (NorStar) on behalf of the Ann Arbor Housing Commission (AAHC) to conduct a Rental Assistance Demonstration (RAD) Physical Condition Assessment (PCA) on the property referred to as "Hillside Manor" located at 1020 - 1042 Pennsylvania Avenue in Ann Arbor, Washtenaw County, Michigan (subject property).

The site visit was conducted on August 15, 2013. Since the site visit, AAHC has made improvements to the subject property. AKT Peerless has verified completion of these improvements by reviewing contractor invoicing, work orders and statements provided by AAHC. AKT Peerless did not conduct another site visit to verify completion of these improvements.

This low-rise residential complex consists of three, 2-story duplex buildings, housing a total of 6,282 gross SF and 6 apartments. The buildings were constructed in 1996. There are a total of six (6) three bedroom, one bathroom units at the site.

Generally, the property appears to have adhered to relevant building codes and industry standards at the time of construction. Given the limitations of facilities staff, the property appears to be properly maintained and is in fair-to-good overall condition.

Given the nature of the property’s use, AKT Peerless identified a list of “Critical Needs,” as defined by the Department of Housing and Urban Development (HUD)’s RAD PCA (RPCA) guidelines.

1.2 Critical Needs Summary
The RPCA Statement of Work defines critical items to include:

1) Remedies for exigent health and safety hazards or code violations;
2) Correction of conditions that adversely affect ingress or egress;
3) Correction of conditions preventing sustaining occupancy;
4) Correction of accessibility deficiencies.

Critical repair items were not identified at the subject property.

1.3 Professional Evaluation(s) Recommended for Further Investigation
No additional evaluations are recommended at this time.

1.4 Opinions of Probable Cost
The estimates for the repair, replacement and proposed modernizations can be found in the “Cap Needs Input” tab of RPCA tool, located in Appendix A of this report.

1.5 RAD PCA Considerations and Approach
Based upon site observations, research, professional judgment, along with referencing Expected Useful Life (EUL) criteria established through Fannie Mae and other industry standards, AKT Peerless expresses an opinion as to when a system or component will most likely necessitate replacement.
Typically, for standard components with standard maintenance, the EUL table, often provided by the Lender, is used to determine a system or a component’s Effective Remaining Life by deducting the age from anticipated EUL. However, this is not done automatically. AKT Peerless evaluates components with unusually good original quality or exceptional maintenance and occasionally estimates a longer useful life. Alternatively, if a component has been poorly maintained or was of below standard original quality, the useful life may be estimated to be shorter than expected. Consequently, the evaluator applies his or her professional judgment in making a determination of the Effective Remaining Life.

After a determination has been made on a system or a component’s Effective Remaining Life, it is input into the RPCA tool in the “Cap Needs Input” tab in the relevant line item. This tab directly populates corresponding tabs, which result in the outputs described throughout this report. The corresponding tabs, including (but not limited to) the 20 Year Detail, 20 Year Schedule, and Rehab Specifications, are attached to this report and can be found in Appendix A.

The evaluation period, per the RPCA tool and statement of work, is defined as 20 years.

The RPCA Statement of Work establishes five categories of repairs, replacements, maintenance items and items for improvement. AKT Peerless utilized these categories as a method for evaluating the facilities:

A) **Critical Needs**  
   a. See 1.2

B) **Repair/Rehab Items (Short Term Physical Needs)**  
   a. The cost of repairs, replacements, and significant deferred and other maintenance items that will need to be addressed within 12 months of closing  
   b. This category is not intended to include items that are not broken but may need replacement in the near future

C) **Market Comparable Improvements**  
   a. The PCA contractor may include repairs or improvements (based on discussion with Lender/Owner or Lender’s appraiser) that are necessary for marketability in the list of Repair/Rehab needs  
   b. The repairs/improvements should be necessary for the project to retain its market position as an affordable project in a decent, safe and sanitary condition

D) **Long-term Physical Needs/Reserve Items**  
   a. Major maintenance and replacement items that are required to maintain the project’s physical integrity over the next twenty (20) years

E) **Reserve Costs**  
   a. The Initial Deposit to the Reserve for Replacement Account based on the cost of “Near Term” replacement and major maintenance needs of the Project
2.0 INTRODUCTION

AKT Peerless Environmental & Energy Services (AKT Peerless) was commissioned by NorStar Development USA, L.P. (NorStar) on behalf of the Ann Arbor Housing Commission (AAHC) to conduct a Rental Assistance Demonstration (RAD) Physical Condition Assessment (PCA) on the property referred to as "Hillside Manor" located at 1020 - 1042 Pennsylvania Avenue in Ann Arbor, Washtenaw County, Michigan (subject property).

This PCA was conducted in accordance with: (1) guidelines established by the American Society for Testing and Materials (ASTM) in the Standard Guide for Property Condition Assessments: Baseline Property Condition Assessments (ASTM Standard Practice E 2018-08), (2) Fannie Mae document: Physical Needs Assessment Guidance to the Property Evaluator (Exhibit 1), and (3) the Department of Housing and Urban Development (HUD) Rental Assistance Demonstration (RAD): Physical Condition Assessment Statement of Work and Contractor Qualifications, Version 1, October 2012.

2.1 Purpose

The purpose of the RAD PCA (RPCA) is to complete a PCA that meets the RAD Physical Condition Assessment Statement of Work Issued by the US Department of Housing and Urban Development (HUD) on October 2012 and updated on December 2013. This included observation and documentation of the conditions and possible defects of readily visible materials and building systems which might significantly affect the value of the property, and to evaluate if conditions exist which may have a significant impact on the continued operation of the facility. The observations, findings, and conclusions within this report are based on professional judgment and information obtained during the course of this assessment. It is understood that AAHC will use the information provided in this Report to assist in decisions regarding the continued operation of the subject property.

2.2 Scope of Services

This RPCA was conducted in accordance with AKT Peerless' Proposal for a RPCA (Proposal Number PE-14790 dated June 26, 2013 and Proposal Number PE-14790 C-1 dated July 31, 2013) and is based on the Statement of Work Issued by the US Department of Housing and Urban Development (HUD) on October 2012. The RPCA Statement of Work has been updated by HUD on December 2013 and AKT Peerless’ scope of work will meet Version 2, December 2013. No deviations have been made from the scope of work.

This Report is based on a site visit, in which AKT Peerless performed a visual, non-intrusive and non-destructive evaluation of various external and internal building components, in addition to reviews of original and "as-built" plans and specifications for the subject property, and available information from trade physical element reports. Representative samples of the major building components were observed and physical conditions evaluated in general accordance with ASTM E2018-08. These systems include site development, building structure, building exterior and interior areas; mechanical, electrical, and plumbing systems, conveyance systems, life safety/fire protection, and general ADA compliance. Photographs were taken to provide a record of general conditions of the facility, as well as the specific deficiencies observed. The PCA report is not a building code, safety, regulatory or environmental compliance inspection.

AKT Peerless observed the interior spaces to determine their general character and condition. During the site visit we interviewed the available site personnel and/or property managers to add or confirm information. AKT Peerless reviewed available drawings or site documentation to confirm the general
character of the construction. AKT Peerless also made inquiries to the local building department, zoning department and fire department.

If any additional information is encountered concerning the facility, it should be forwarded to AKT Peerless for possible re-evaluation of the assumptions, conclusions and recommendations presented herein. The recommendations and opinions of cost provided herein are for observed deficiencies based on the understanding that the facility will continue operating in its present occupancy classification.

This Report is based on the evaluator's judgment of the physical condition of the components, their ages and their expected useful life (EUL). The conclusions presented are based upon the evaluator’s professional judgment. The actual performance of individual components may vary from a reasonably expected standard and will be affected by circumstances that occur after the date of the evaluation.

The Report does not identify minor, inexpensive repairs or maintenance items which are part of the property owner’s current operating budget so long as these items appear to be addressed on a regular basis. The report does identify infrequently occurring maintenance items of significant cost, such as exterior painting, deferred maintenance and repairs and replacements that normally involve major expense or outside contracting.

The following terms are used throughout the report and are defined as follows:

- **EXCELLENT**: New or like new
- **GOOD**: Average to above-average condition for the building system or material assessed, with consideration of its age, design, and geographical location.
- **FAIR**: Average condition for the building system evaluated. Satisfactory; however, some short term and/or immediate attention is required or recommended.
- **POOR**: Below average condition for the building system evaluated; requires immediate repair, significant work or replacement anticipated to return the building system or material to an acceptable condition.

Unless stated otherwise in this report, the systems reviewed are considered to be in good condition and their performance appears to be satisfactory.

### 2.3 Limitations and Exceptions

The information obtained from external sources, to the extent it was relied upon to form AKT Peerless' opinion about the condition of the site and structures, was assumed to be complete and correct. AKT Peerless cannot be responsible for the quality and content of information from these sources. However, based on a review of readily available and reasonably ascertainable information, AKT Peerless concluded that these limitations/data gaps should not materially limit the reliability of the report and that a thorough documentation of the subject site’s condition has been conducted.

Information regarding the cost schedules for any specific property feature is based on AKT Peerless' professional opinion. The precise costs associated with replacing or repairing any referenced building or property structure can vary by items including but not limited to owner selection of product or equipment, vendor, economic conditions, or competitive bidding process. AKT Peerless recommends that the client contact an entity specializing in a particular architectural or engineering discipline to develop precise material/equipment specifications and cost estimates.
2.4 User Reliance

This report was prepared solely for the benefit of NorStar, AAHC, and HUD and no other party or entity shall have any claim against AKT Peerless due to the performance or nonperformance of the services presented herein. Only AAHC and HUD may rely upon this report for the sole purpose of obtaining financing, providing refinancing, acquisition of the subject site, lease of the subject site, or sale of the subject site. Any other parties seeking reliance upon this report must obtain AKT Peerless prior written approval. AKT Peerless specifically renounces any and all claims by parties asserting a third party beneficiary status.
3.0 APPLICABLE CODES, GUIDELINES, AND ACCESSIBILITY STANDARDS

3.1 Building and Fire Code Compliance

During this assessment, AKT Peerless conducted a review of City of Ann Arbor Building Department records available through the City's website. The review of City records did not reveal any documentation for past or open building code violations.

AKT Peerless also contacted the City of Ann Arbor Fire Department to obtain information on fire code, life safety, or environmental issues pertaining to the subject property. A response received indicated the fire department does not possess files associated with the subject property.

3.2 Americans with Disability Act (ADA) and Section 504 UFAS Compliance

The subject property is defined as a multi-family residential facility, providing “affordable” and “federally-assisted” housing. As such, there are accessibility requirements that must be adhered to for these types of facilities. Considerations include the following guidelines, standards, and/or requirements:

- The Fair Housing Act design and construction requirements
- Section 504 of the Rehabilitation Act of 1973
- The Americans with Disabilities Act of 1990

The Fair Housing Amendments Act (FHA) of 1988, prohibits discrimination in housing on the basis of race, color, religion, sex, handicap, familial status, or national origin. The Act also requires reasonable modification to dwellings, reasonable accommodation in policies or handicapped people, and the design and first construction of certain new, multi-family dwellings scheduled for first occupancy after March 13, 1991, meet certain adaptability and accessibility requirements.

Section 504 of the Rehabilitation Act of 1973 applies to all Federally assisted programs, facilities and housing and establishes accessibility standards per HUD requirements in 24 CFR Part 8, which generally follows the Uniform Federal Accessibility Standard (UFAS).

Buildings completed and occupied after January 23, 1993 are required to fully comply with ADAAG. Existing facilities constructed prior to this date are held to a lesser standard of complying, to the extent allowed by structural feasibility and the financial resources available, or a reasonable accommodation must be made.

The subject property was first occupied in 1996. As such, it is required to comply with provisions for existing buildings in Section 504/UFAS, under the FHA, and relevant sections of the ADA. AKT Peerless believes that this property is in compliance with these standards. AKT Peerless conducted a limited visual observation for ADA and accessibility compliance. Provisions appear to have been made to the property to account for ADA and accessibility requirements. The property has taken Readily Achievable Measures to remove barriers from the property, including accessible path of travel from handicap parking spaces to areas deemed to be relevant interior spaces. Regardless of age, these areas and facilities must be maintained and operated to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

In this case, the facility’s leasing office (offsite) must at least comply with ADA provisions, and it appears to do so. The property includes one handicap accessible parking space and provisions appear to have
been made to one of six units at the property (Unit #1020) to account for ADA requirements. In general, accessibility improvements have been made to the extent possible to comply with relevant accessibility standards.

3.3 Floodplain
AKT Peerless reviewed a Flood Insurance Rate Map (FIRM), published by the Federal Emergency Management Agency (FEMA), to determine if the subject property is located within a 100-year flood zone. According to review of Panel 244 of 585, Community Panel 26161C0244E, dated April 3, 2012, the subject property is located in an area determined to be outside of the 500-year floodplain. A copy of the Flood Insurance Rate Map of the general project area is provided as Appendix D.

3.4 Seismic Zone
The subject site has been determined to be in Seismic Zone 1, on a scale of 0 to 4, with 0 representing the least severity, and 4 the greatest in terms of ground acceleration as compared to gravity. Zone 1 has a one in ten chance of experiencing an earthquake that will achieve a peak acceleration of one-tenth the acceleration of gravity within the next 50 years.

3.5 Environmental Concerns
AKT Peerless conducted a limited visual survey during the walk-through and no directly observed potential on-site environmental hazards were observed. No documented lead-based paint (LBP) or asbestos testing had been identified prior to conducting this PCA.

An environmental survey and professional evaluation of the entire site was conducted by AKT Peerless. Because the subject building was not constructed prior to 1978, a LBP inspection of the subject property was not completed. However, AKT Peerless completed an asbestos identification survey of the subject property, which can be provided under separate cover. No asbestos was detected in tested material (drywall, base molding and flooring). However, one material was not tested and is therefore required to be assumed to contain asbestos, which included roofing material. It is recommended further testing be completed for the roofing material prior to any renovation or demolition to confirm or refute the presence of asbestos.

Refer to Appendix E for a copy of Form 4.4 Environmental Restrictions Checklist.

3.6 Green Building Standard(s)
AKT Peerless investigated opportunities to improve energy efficiency, maximize water efficiency, use reused and recycled materials where practical, safeguard the indoor air quality of the property, be of less harm to the environment generally, and remove/re-use replaced materials and construction debris appropriately.

Specifically, AKT Peerless worked with the project team to utilize and reference the Enterprise Green Communities green building standard as a guideline and framework for making decisions on goal setting, areas to make green improvements, and overall implementation strategy.

The Enterprise Green Communities Criteria Checklist is referenced throughout this document.
4.0 PROPERTY DESCRIPTION

The following sections summarize the site description and physical setting of the subject property.

4.1 Subject Property Location

The subject property is located at 1020 – 1042 Pennsylvania Avenue in Ann Arbor, Washtenaw County, Michigan. The subject property is owned by AAHC and is improved with three, 2-story buildings. The site area is approximately 0.99 acres. Construction of the property was completed in 1996.

Refer to Figure 1, Subject Property Location Map and Figure 2 Topographic Location Map. Photographs of the subject property and significant features are included in Appendix B.

4.2 Subject Property Characteristics

The subject property includes three, 2-story affordable housing residential apartment buildings commonly known as Hillside Manor. The interior of the subject property consists of six three-bedroom apartment units. The vacancy rate for this property over the period March 2012 -March 2013 was 0%.

4.3 Description of Structures and Other Improvements

General information regarding the on-site buildings (the subject buildings) is presented in the following table:

<table>
<thead>
<tr>
<th>Total Leasable Area</th>
<th>6,282 square feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure</td>
<td>Standard wood frame construction</td>
</tr>
<tr>
<td>Exterior Wall</td>
<td>Vinyl siding and brick veneer</td>
</tr>
<tr>
<td>Roof</td>
<td>Asphalt shingle roofs</td>
</tr>
<tr>
<td>Foundation</td>
<td>Cement masonry units (block) – crawlspace</td>
</tr>
<tr>
<td>HVAC</td>
<td>Individual gas fired furnaces; no AC at tenant units</td>
</tr>
<tr>
<td>Electrical</td>
<td>Pad-mounted transformer</td>
</tr>
<tr>
<td>Vertical Transportation</td>
<td>None</td>
</tr>
</tbody>
</table>
Table 4-2 Subject Buildings: Apartment Unit Types and Mix

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Type</th>
<th>Gross Floor Area (Square Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>3 Bedroom / 1 Bathroom</td>
<td>1,047</td>
</tr>
</tbody>
</table>

No additional structures are located on the subject property.

Table 4-3 Subject Buildings: Apartment Units Observed

<table>
<thead>
<tr>
<th>Type</th>
<th>Units Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Bedroom / 1 Bathroom</td>
<td>1020, 1022, 1030, 1032, 1040, 1042</td>
</tr>
</tbody>
</table>
5.0 SITE ELEMENTS

The following sections summarize the physical conditions associated with the exterior portions of the subject property.

5.1 Topography

According to the USGS’ Topographic Map of the Ann Arbor West, Michigan Quadrangle, which was published in 2011, the subject property is situated at approximately 950 feet above the National Geodetic Vertical Datum (NGVD). The subject property’s topography slopes to the southeast.

5.2 Storm Water Drainage

The storm water system is managed through Washtenaw County. Storm water runoff from the roof is directed through roof drains into downspouts that feed a mixture of splash blocks, pop up drains, and underground piping connected to the municipal system. Storm water catch basins, which are also connected to the municipal system, are located within the parking lot and landscaped areas on the subject property.

Green Building Alternatives/Considerations:

<table>
<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Recommended (for Study)</th>
<th>Already Exists</th>
<th>Appears Infeasible</th>
<th>Comments/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Site Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2b</td>
<td>Surface Stormwater Management</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Undue financial burden - Partial may be feasible</td>
</tr>
</tbody>
</table>

5.3 Ingress and Egress

Description:

Ingress and egress for the subject property is provided via three concrete driveways off Pennsylvania Avenue which lead to asphalt parking pads. Each lower tenant unit has two entrances, located on the front and side of the respective building. Each upper tenant unit has one entrance off the front exterior deck. The threshold entries to each unit are elevated. Cast-in-place concrete walkways connect the front decks of the subject buildings to the sidewalk in front.

Assessment:

The existing vehicle ingress and egress location is in poor condition where the asphalt-paved parking areas exist and has signs of aging and wear. Concrete walkways throughout the property appear to be in generally fair condition. The number and location of the site access points appear to be sufficient relative to the size and use of the property.

Recommendation:

Repair and maintenance of the asphalt pavement, concrete walkways, and entrance doors are discussed further in Sections 5.4 and 6.3. Please refer to the attached Capital Needs Input, 20 Year Detail, 20 Year Schedule and Rehab Specifications for additional information on condition, rehab costs and capital reserves.
Green Building Alternatives/Considerations:

<table>
<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Recommended (for Study)</th>
<th>Already Exists</th>
<th>Appears Infeasible</th>
<th>Comments/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Integrative Design</td>
<td>1.2b Universal Design (Substantial and Moderate Rehab only)</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Undue financial burden - 10% not feasible</td>
</tr>
<tr>
<td>2: Location + Neighborhood Fabric</td>
<td>2.9 Walkable Neighborhoods: Connections to Surrounding Neighborhood - Rural/Tribal/Small Towns</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Explore addl pathway(s)</td>
</tr>
</tbody>
</table>

5.4 Paving, Curbing, and Parking

Description:
The main access drives and parking lot consist of three concrete driveways off Pennsylvania Avenue which lead to asphalt parking pads. Each of the three separate parking pads has a total of three parking spaces, one (for Unit #1020) is designated as a handicap accessible parking space and appears to meet this criteria. Concrete walkways connect the front decks of the subject buildings to the sidewalk in front. The date of the most recent seal coating and re-striping was unknown.

Assessment:
Overall, the concrete drive areas appear to be in fair condition. However, the asphalt parking pads are deteriorated and are in poor condition. It was also noted that the accessible path of travel requires maintenance and repair.

Recommendation:
Approximately 1/3 of the asphalt parking area is in need of patching and repair. Seal coating and re-striping of the entire asphalt pavement area is recommended as a rehab item. Repairing and rebuilding accessibility ramp to ensure proper transitions and barrier free travel is recommended as a rehab item. Continued maintenance of paved areas is recommended. In addition, capital reserves should be considered for future expansion, maintenance, and/or replacement and repair of paved areas. Please refer to the attached Capital Needs Input, 20 Year Detail, 20 Year Schedule and Rehab Specifications for additional information on condition, rehab costs and capital reserves.

Green Building Alternatives/Considerations:

<table>
<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Recommended (for Study)</th>
<th>Already Exists</th>
<th>Appears Infeasible</th>
<th>Comments/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6: Materials Beneficial to the Environment</td>
<td>6.9b Reduced Heat-island Effect: Paving</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Any new areas could be high albedo</td>
</tr>
</tbody>
</table>
5.5 Flat Work

_Description:_

The pedestrian walkways associated with the subject property consist of cast-in-place concrete construction. Three foot high wooden handrails exist along sidewalk approach.

_Assessment:_

The flat work surrounding the building was observed to be in fair condition. Handrails appear to need repair or replacement.

_Recommendation:_

Approximately 20% of the existing flatwork is recommended for patching and repair. Replace handrails along sidewalk approach. Repair and maintain broken concrete walkways around the subject property to avoid continued degradation and possible trip hazards.

_Green Building Alternatives/Considerations:_

<table>
<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Recommended (for Study)</th>
<th>Already Exists</th>
<th>Appears Infeasible</th>
<th>Comments/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>6.9b Reduced Heat-island Effect: Paving</td>
<td>X</td>
<td></td>
<td></td>
<td>May be possible to replace certain sidewalks w/open grid; could be financially infeasible</td>
</tr>
</tbody>
</table>

5.6 Landscaping and Appurtenances

_Description:_

Landscape features include grass and deciduous trees. Mulched areas with decorative shrubs are located near the buildings at the subject property.

_Assessment:_

Vegetation appeared to be in a normal, mid-summer state of growth.

_Recommendation:_

Site re-grading away from the buildings is recommended in some areas. These additional catch basins should be connected to the existing catch basin in the parking lot. Continued maintenance of landscaping as part of normal facility operations is also recommended. In addition, capital reserves should be considered for tree removal and future landscaping maintenance (i.e., tree trimming, landscape improvements). Please refer to the attached Capital Needs Input, 20 Year Detail, 20 Year Schedule and Rehab Specifications for additional information on condition, rehab costs and capital reserves.
### Green Building Alternatives/Considerations:

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<tr>
<th>#</th>
<th>Item</th>
<th>Recommended (for Study)</th>
<th>Already Exists</th>
<th>Appears Infeasible</th>
<th>Comments/Notes</th>
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</tr>
<tr>
<td>3</td>
<td><strong>Site Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4</td>
<td>Landscaping</td>
<td>X</td>
<td></td>
<td></td>
<td>Replace only those areas with site work being done (50% native)</td>
</tr>
<tr>
<td>6</td>
<td><strong>Materials Beneficial to the Environment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4</td>
<td>Recycling Storage for Multifamily Project</td>
<td>X</td>
<td></td>
<td></td>
<td>Provide permanent area for collection and storage of recyclable materials</td>
</tr>
</tbody>
</table>

### 5.7 Recreational Facilities

There are no recreational facilities associated with the property.

### 5.8 Utilities

**Description:**

The following utilities and are associated with the subject property. Utilities associated with the subject property are located underground.

- Water and sanitary sewer are provided by the City of Ann Arbor.
- Enclosed storm water drains are provided by Washtenaw County.
- Electric service is provided by DTE Energy Company through below-ground lines.
- Natural gas is provided by DTE Gas Company.
- Telephone service is available to the subject property through several providers.

**Assessment:**

All utilities appear to be adequately servicing the subject property. The main electrical disconnects are located on the exterior of the buildings, adjacent to the meters. These disconnects are locked with padlocks.

**Recommendation:**

It is recommended that main breakers are added to the electrical panels that are located in the tenant units. Continued maintenance of utilities associated with the subject property as part of normal facility operations is recommended.
6.0 STRUCTURAL FRAME AND BUILDING ENVELOPE

The following sections summarize the physical conditions associated with the building envelope and structural elements of the subject buildings.

6.1 Foundation

Description:

Observations of the subject property indicate the foundations of the subject buildings consists of a trench footing with cement masonry unit (CMU) foundation walls. There are also CMU piers on spread footings that support a beam in the middle of the building. The piers were noted to not be grouted solid.

The subject buildings are equipped with crawl spaces that are accessible through floor hatches located in the utility rooms.

Assessment:

Overall, the foundations of the subject buildings appeared to be in good condition.

Recommendation:

The CMU piers should be grouted solid as specified in the original construction documents. The building foundations should be observed as routine building operations.

Green Building Alternatives/Considerations:

<table>
<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Recommended (for Study)</th>
<th>Already Exists</th>
<th>Appears Infeasible</th>
<th>Comments/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>7.14 Integrated Pest Management</td>
<td>X</td>
<td></td>
<td></td>
<td>Seal all wall, floor, joint penetrations to prevent pest entry. This should include repair of all damaged or missing vent screens to the crawl space.</td>
</tr>
</tbody>
</table>

6.2 Building Frame

Description:

Each of the three buildings located on the subject property are wood-framed.

Assessment:

No evidence of structural failure or deficiencies was noted, and all framework, floors, and decks appeared to be in fair to good condition.

Recommendation:

The building exterior and interior structural supports should be observed as routine building operations for indications of frame issues. The contractor onsite may recommend additional supports.
Green Building Alternatives/Considerations:

<table>
<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Recommended (for Study)</th>
<th>Already Exists</th>
<th>Appears Infeasible</th>
<th>Comments/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.8</td>
<td>Certified, Salvaged, and Engineered Wood Products</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Only minor replacements/upgrades required</td>
</tr>
</tbody>
</table>

6.3 Exterior (Above Grade) Walls

*Description:*

The exterior walls of the subject buildings consist of vinyl siding on the upper story and brick veneer on the lower story. The exterior windows are dual-paned vinyl windows and exterior doors are insulated hollow core metal doors with aluminum storm doors. Aluminum gutters and combined PVC and aluminum downspouts are used for storm water removal.

*Assessment:*

The vinyl siding and brick veneer generally appeared to be in fair condition. The majority of the window screens are torn or missing. New double-paned, low E windows were installed in October 2013. The exterior doors were determined to be in fair condition, however at least 3 appear to be in poor condition. At least 20% of aluminum gutters and corresponding fascia appears to need repair and replacement. At least 40% of the aluminum and PVC downspouts appear to need repair and replacement.

*Recommendation:*

Caulk and seal openings at vinyl siding/exterior envelope is recommended as a rehab item. Replacement of 20% of the gutters and 40% of the downspouts is recommended as a rehab item. Replacement of exterior doors and frames in 3 units is recommended as a rehab item. Control air leakage through air sealing, as specified in the Energy Audit, is recommended as a rehab item.

Prepare, prime and paint all exposed steel lintels over windows with rust preventative paint to protect lintels from further corrosion is recommended as an on-going maintenance item. Continued maintenance of windows and doors is recommended. In addition, capital reserves should be considered for future, cleaning and/or re-caulking of the building exteriors.

Please refer to the attached Capital Needs Input, 20 Year Detail, 20 Year Schedule and Rehab Specifications for additional information on condition, rehab costs and capital reserves.

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<tr>
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<th>Comments/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1c</td>
<td>Building Performance Standard: Single family and Multi-family (three stories or fewer)</td>
<td>X</td>
<td></td>
<td></td>
<td>Must be equivalent to a Home Energy Rating System (HERS) Index score of 85</td>
</tr>
</tbody>
</table>
5.2 Additional Reductions in Energy Use | X | Add R-Value and increase building tightness for higher performance

6: Materials Beneficial to the Environment

6.6 Recycled Content Material | X | Composite and Recycled Content materials available for exterior use and insulation

6.7 Regional Materials Selection | X | Should be pursued when feasible

6.4 Roofing

Description:
The roofs are gabled type, with one main gable and two small gables on the back of each building. The roofing system is asphalt shingles, and these appear to be original. The roofing system has surpassed its expected useful service life and the existing shingles show signs of deterioration; including cupping and breakdown of granular coating. This deterioration is more pronounced on the south side of the building, where it is exposed to more direct UV and heat radiation from the sun.

The interior side of the roof was observed from the attic. Roof sheathing appears to be 5/8” oriented strand board (OSB) and determined to be in fair condition.

The roofs slope to aluminum gutters affixed to the buildings as part of the aluminum covered facia and soffit assembly.

Assessment:
The asphalt shingle roof system has surpassed its expected useful service life.

Recommendation:
Re-roof existing roofing system. Please refer to Section 3.5 regarding environmental concerns. Please refer to the attached Capital Needs Input, 20 Year Detail, 20 Year Schedule and Rehab Specifications for additional information on condition, rehab costs and capital reserves.

Green Building Alternatives/Considerations:

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</thead>
<tbody>
<tr>
<td>5: Energy Efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1c</td>
<td>Building Performance Standard: Single family and Multi-family (three stories or fewer)</td>
<td>X</td>
<td></td>
<td></td>
<td>Must be equivalent to a Home Energy Rating System (HERS) Index score of 85</td>
</tr>
<tr>
<td>5.2</td>
<td>Additional Reductions in Energy Use</td>
<td>X</td>
<td></td>
<td></td>
<td>Add R-Value and increase building tightness for higher performance</td>
</tr>
<tr>
<td>6: Materials Beneficial to the Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.6</td>
<td>Recycled Content Material</td>
<td>X</td>
<td></td>
<td></td>
<td>Composite and Recycled Content materials available for exterior use and insulation</td>
</tr>
</tbody>
</table>
6.7 Regional Material Selection

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<th>Comments/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1</td>
<td>Low/No VOC Paints and Primers</td>
<td>X</td>
<td>X</td>
<td></td>
<td>When stairs are refinished, use low/no VOC paints and stains</td>
</tr>
<tr>
<td>6.7</td>
<td>Regional Material Selection</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Should be pursued when feasible</td>
</tr>
<tr>
<td>6.8</td>
<td>Certified, Salvaged, and Engineered Wood Products</td>
<td>X</td>
<td>X</td>
<td></td>
<td>At time of replacement</td>
</tr>
</tbody>
</table>
7.0 INTERIOR ELEMENTS

The following sections summarize the physical conditions associated with the interior of the subject building.

7.1 Unit Types and Unit Mix/Building Area

Description:

Hillside Manor has 6 three-bedroom, one bathroom apartments. One of the six dwelling units (unit 1020) has been renovated for handicap accessibility (i.e. grab bars in the bathrooms, wheelchair accessible, etc.). All six dwelling units were occupied as of the date of the site inspection.

Interior finishes vinyl/composite material in bathtub surround areas, wood trim, 4-inch vinyl cove base, one-foot by one-foot resilient VCT floor tiles in the kitchens, ceramic floor tile or VCT in the bathrooms, and carpet. Vinyl dual-paned windows were present throughout the dwelling units. New double-paned, low E windows were installed in October 2013.

According to site representatives, interior renovations have occurred in units when they are turned over including carpet replacement, painting, and cabinet re-facing/repair in some situations.

Each unit contains a series of appliances including:

- a refrigerator
- a gas range and oven
- an under-sink garbage disposal

The individual units also have kitchen cabinetry, which primarily consists of wood veneer and laminate counter tops, and bathrooms are fitted with vanity and medicine cabinets. Kitchen sinks are stainless steel, bathroom fixtures are generally enamel coated steel or porcelain. Bathroom and kitchen flooring includes resilient floor tiles or ceramic tile. The walls of the tub stalls are covered with a vinyl material.

Each individual tenant unit is fitted with insulated hollow metal entry doors. Closet doors and interior doors are solid core wood and generally have a painted finish.

Assessment:

The entry doors, interior doors, closets, kitchen cabinets, garbage disposals, range hoods, sinks, refrigerators, ranges, and medicine cabinets were observed to be in generally fair condition. Most of the bathroom exhaust fans, flooring, and countertops, although functional, are at or beyond their EUL and show wear and tear due to use and age. New Energy Star rated refrigerators were installed in 5 units in December 2013.

The painted surfaces in Units 1020, 1030, 1032 and 1042 need repainting and the majority of the updating.

Recommendation:

Replacement or repair of the following items is recommended as an immediate cost:

- Repair / replace bathroom ceiling in unit #1020 and resolve moisture issue.
• Replace existing bathroom exhaust fans with high-efficiency exhaust fans in each unit
• Tenant Unit Cabinets - Wall and Base (1042, 1032, 1020)
• Tenant Unit Cabinets - Base (1030)
• Counter Tops, Sinks + plumbing attachments (Units 1020, 1030, 1032, and 1042)
• Kitchen floor covering (1030, 1020) - 167 SF each
• Range Hood - recirculating (1042, 1030, 1020)
• Bath Counter Tops and Sinks (1042, 1032)
• Bathroom Floor Resilient (Rubber) Tile (1030) - 44 SF each
• Bathroom Ceramic Floor Tile (1032) - 44 SF each
• Bath Vanities (1042, 1032)
• Bath Tub Surround (1042)
• Plastic Medicine Cabinet (1032, 1042)
• Living Room Carpets (1032) - 216 SF each - Hall 102 SF ea
• Bedroom Carpet (1032, 1020) - 400 SF each
• Interior Solid Core Doors - 15%
• Living Area Resilient Floor Tile (1020) - 318 SF each
• Prep and paint surfaces in Units 1020, 1030, 1032, and 1042
• Bedroom Resilient Floor Tile (1030) - 400 SF each unit
• Laundry Room Floorcovering – all units, 58 SF each
• Hardware and track replacement for 12 bi-fold closet doors

Continued maintenance of finishes and fixtures in dwelling units is recommended. In addition, capital reserves are included for future maintenance and/or replacement of remaining finishes and fixtures. Please refer to the attached Capital Needs Input, 20 Year Detail, 20 Year Schedule and Rehab Specifications for additional information on condition, rehab costs and capital reserves.
### Green Building Alternatives/Considerations:

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td><strong>Energy Efficiency</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.4</td>
<td>ENERGY STAR Appliances</td>
<td>X</td>
<td></td>
<td></td>
<td>For all applicable appliances</td>
</tr>
<tr>
<td>6</td>
<td><strong>Materials Beneficial to the Environment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.1</td>
<td>Low/No VOC Paints and Primers</td>
<td>X</td>
<td></td>
<td></td>
<td>On all paintable surfaces</td>
</tr>
<tr>
<td>6.2</td>
<td>Low/No VOC Adhesives and Sealants</td>
<td>X</td>
<td></td>
<td></td>
<td>Should be pursued when feasible</td>
</tr>
<tr>
<td>6.6</td>
<td>Recycled Content Material</td>
<td>X</td>
<td></td>
<td></td>
<td>Composite and Recycled Content materials available for many interior components - cost may limit product selection</td>
</tr>
<tr>
<td>6.7</td>
<td>Regional Material Selection</td>
<td>X</td>
<td></td>
<td></td>
<td>Should be pursued when feasible</td>
</tr>
<tr>
<td>6.8</td>
<td>Certified, Salvaged, and Engineered Wood Products</td>
<td>X</td>
<td></td>
<td></td>
<td>Applicable to Kitchen and Bath improvements and replacements</td>
</tr>
<tr>
<td>7</td>
<td><strong>Healthy Living Environment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.1</td>
<td>Composite Wood Products that Emit Low/No Formaldehyde</td>
<td>X</td>
<td></td>
<td></td>
<td>Applicable to Kitchen and Bath improvements and replacements</td>
</tr>
<tr>
<td>7.2</td>
<td>Environmentally Preferable Flooring</td>
<td>X</td>
<td></td>
<td></td>
<td>Strategic/limited use of carpet</td>
</tr>
<tr>
<td>7.3</td>
<td>Environmentally Preferable Flooring: Alternative Sources</td>
<td>X</td>
<td></td>
<td>X</td>
<td>Non-vinyl, non-carpet floor coverings on all floors - may be cost prohibitive and difficult for sound control</td>
</tr>
<tr>
<td>7.9b</td>
<td>Mold Prevention: Surfaces</td>
<td>X</td>
<td></td>
<td></td>
<td>Use materials w/durable, cleanable surfaces in Kitchens and Bathrooms</td>
</tr>
<tr>
<td>7.9c</td>
<td>Mold Prevention: Tub and Shower Enclosures</td>
<td>X</td>
<td></td>
<td></td>
<td>Use moisture resistant drywall (non-paper faced)</td>
</tr>
</tbody>
</table>

#### 7.2 Common Areas

There are no interior common areas associated with the subject property.
8.0 MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS

The following sections summarize the physical conditions associated with the mechanical and electrical systems at the subject building.

8.1 Plumbing

*Description:*

Potable water supply piping is copper, while drainage appears to be PVC and/or cast iron. Piping associated with the subject buildings was installed during construction in 1996.

Domestic hot water is supplied by individual, gas-fired, 40-gallon, hot water tanks located in the mechanical rooms of the tenant units. These tanks have been replaced as necessary from approximately the mid-2000s to present, and replacements are typically power vent models.

Individual tenant units have porcelain toilets, sinks, and tubs. Tub surrounds are vinyl. Kitchen fixtures include stainless steel sinks. The faucet fixtures are generally chrome plated steel.

*Assessment:*

The plumbing system is operational, with sufficient water pressure at the time of inspection. Low flow faucet aerators and low flow shower heads were installed in all units by DTE Energy following the site visit.

No evidence of significantly obsolete equipment, evidence of leaking or deteriorated piping or sewage backup problems was noted or reported. No evidence of polybutylene, ABS, or lead supply piping was observed.

The hot water tank is at its EUL in several units. Following the site visit, new 40 gallon hot water tanks were installed in units 1032 and 1020 and a new high-efficiency On-Demand hot water heater was installed in unit 1022.

As stated previously, Unit 1020 has had accessibility upgrades. Additional bathroom accessibility upgrades (i.e. pipe insulation, call buttons, etc.) will be necessary to provide a barrier free environment.

*Recommendation:*

Replacement or repair of the following items is recommended as rehab items:

- Upgrade bath tub surround (unit 1042)
- Insulation of hot water lines
- Replace toilets to low flow units

Upon upgrade, continued maintenance of plumbing systems is recommended. Clean and re-caulk tub surrounds is recommended as an immediate and on-going maintenance item.
Green Building Alternatives/Considerations:

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</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Water Conservation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1</td>
<td>Water-Conserving Fixtures</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Use low flow Toilets, Showerheads, Kitchen and Bathroom faucets</td>
</tr>
<tr>
<td>4.2</td>
<td>Advanced Water-Conserving Appliances and Fixtures</td>
<td>X</td>
<td></td>
<td></td>
<td>Should be pursued when feasible; flow rates more aggressive</td>
</tr>
<tr>
<td>4.3</td>
<td>Water Reuse</td>
<td>X</td>
<td></td>
<td>X</td>
<td>Treatment on site would create undue financial burden at this location</td>
</tr>
<tr>
<td>5</td>
<td>Energy Efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.7b</td>
<td>Photovoltaic/Solar Hot Water Ready</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Site, building orientation and decentralized system design may prohibit use of solar thermal</td>
</tr>
<tr>
<td>7</td>
<td>Healthy Living Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.8</td>
<td>Combustion Equipment</td>
<td>X</td>
<td></td>
<td></td>
<td>Specify power-vented or direct vent</td>
</tr>
<tr>
<td>7.9b</td>
<td>Mold Prevention: Water Heaters</td>
<td>X</td>
<td></td>
<td>X</td>
<td>Adequate drainage; may require replacement of floor drains</td>
</tr>
</tbody>
</table>

8.2 Heating

Description:

At the time of the original site visit, each apartment was equipped with a natural gas-fired furnace, located in the laundry / mechanical room each unit. The majority of these furnaces (5 of 6) were installed in 2011, and have an input capacity of 45 kBTU/hr and a 90% efficiency rating. The furnace in unit #1030 was installed in 1997, and has an input capacity of 60 kBTU/hr and a 90% efficiency rating. Heated supply air is generated from the furnace and distributed through insulated ducts located in the attic for upper units and in the crawl space for lower units. Each furnace was controlled by a non-programmable thermostat.

Fresh air appears to be supplied by operable windows and natural infiltration. Mechanical exhaust is limited to the bathrooms, with overhead exhaust fans ducted to the outside.

Assessment:

The return air chases located in the joist bays of the crawl space for all lower units have failed. The fiber board insulation attached to the underside of the joists, to create the chase, has detached and created a direct connection between the return air path and the crawl space. The AAHC has repaired ductwork at each crawl space and insulated the crawl space following the site visit.

Recommendation:

The following is recommended as a rehab item:

- Identify and close/seal abandoned exhaust vents at each building
• Install a right-sized high efficiency natural gas fired furnace in one unit
• Install programmable thermostats to allow for night setbacks

Installation of ground source heat pumps for heating and cooling was analyzed. Installing a ground source heat pump for heating was compared against existing efficiency furnaces. Ground source heat pumps are not recommended due to an extended simple payback.

New units installed should comply with Air Conditioning Contractors of America (ACCA) Manual J sizing requirements. Please refer to the Energy Audit for more detail regarding the ground source heat pump analysis and completed ACCA Manual J calculations. Please refer to the attached Capital Needs Input, 20 Year Detail, 20 Year Schedule and Rehab Specifications for additional information on condition, rehab costs and capital reserves.

*Green Building Alternatives/Considerations:*

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<tbody>
<tr>
<td>5</td>
<td><strong>E</strong>nergy <strong>E</strong>fficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1</td>
<td>Building Performance Standard: Single family and Multifamily</td>
<td>X</td>
<td></td>
<td></td>
<td>Must be equivalent to a Home Energy Rating System (HERS) Index score of 85 - high efficiency furnaces</td>
</tr>
<tr>
<td></td>
<td>(three stories or fewer)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2</td>
<td>Additional Reductions in Energy Use</td>
<td>X</td>
<td></td>
<td></td>
<td>Install high efficiency heating equipment - 95% or better AFUE</td>
</tr>
<tr>
<td>5.3</td>
<td>Sizing of Heating and Cooling Equipment</td>
<td>X</td>
<td></td>
<td></td>
<td>Size equipment to ACCA Manual J</td>
</tr>
<tr>
<td>7</td>
<td><strong>H</strong>ealthy <strong>L</strong>iving <strong>E</strong>nvironment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.8</td>
<td>Combustion Equipment</td>
<td>X</td>
<td></td>
<td></td>
<td>Specify power-vented or direct vent</td>
</tr>
</tbody>
</table>

**8.3 Air Conditioning and Ventilation**

*Description:*

At the time of the original site visit, central air conditioning is not provided to the subject buildings. Several units had at least one air window air-conditioning unit and the residents supply the window air-conditioning units.

*Assessment:*

Many of the AAHC commission residents are disabled and elderly or have health issues that are exacerbated by hot and humid weather.

The Great Lakes Adaptation Assessment for Cities estimates that the number hot days reaching 90 degrees or more in Southeast Michigan will increase to 30-50 days per year due to global climate changes.

Therefore, the AAHC wants to ensure each unit has air conditioning.
**Recommendation:**

Installing a high-efficiency conventional split-system for cooling is recommended. This will meet the needs of the AAHC and residents. In addition, replacement of manual thermostats with energy management thermostats is recommended.

Installation of ground source heat pumps for heating and cooling was analyzed. The cooling was compared against a standard efficiency central air-conditioning system for each unit. Ground source heat pumps are not recommended due to an extended simple payback.

New units installed should comply with Air Conditioning Contractors of America (ACCA) Manual J sizing requirements. Please refer to the Energy Audit for more detail regarding the ground source heat pump analysis and completed ACCA Manual J calculations. Please refer to the attached Capital Needs Input, 20 Year Detail, 20 Year Schedule and Rehab Specifications for additional information on condition, rehab costs and capital reserves.

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<td></td>
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<tr>
<td>5.1c</td>
<td>Additional Reductions in Energy Use</td>
<td></td>
<td></td>
<td></td>
<td>Install high efficiency cooling equipment with a 14.5 or greater SEER rating</td>
</tr>
<tr>
<td>5.2</td>
<td>Sizing of Heating and Cooling Equipment</td>
<td></td>
<td></td>
<td></td>
<td>Size equipment to ACCA Manual J</td>
</tr>
<tr>
<td>7</td>
<td>Healthy Living Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.8</td>
<td>Combustion Equipment</td>
<td></td>
<td></td>
<td></td>
<td>Specify power-vented or direct vent</td>
</tr>
</tbody>
</table>

**8.4 Electrical**

**Description:**

The subject building is provided electricity by DTE through underground service. Each unit has its own circuit breaker panel with 100-amp service. Facility wiring is copper and overload protection is provided by circuit breakers. Main disconnects are located on the exterior of the building at the meter location; disconnects are locked.

Interior tenant unit lighting is provided by standard socket fixtures.

Exterior lighting consists of 50 watt high pressure sodium wall-mounted light (15 total). HID technology is considered standard efficiency and can be upgraded. The exterior lighting is reported to be operated by photo-sensors.
Assessment:

In general, the electrical systems for the subject building, including switchboards, panel boards, lighting and wiring systems, appear to be in good condition and sufficiently sized for the structure and use.

Exterior lighting was not visible during the daylight hours.

Recommendation:

Addition of main circuit breaker within the tenant space electrical panel is recommended. Replace standard efficiency lamps/non-functioning with Compact Fluorescent Lamp (CFL) lamps throughout the tenant units. Replace standard efficiency fixtures at kitchen sinks with high-efficiency fixtures and lamps. Replace exterior wall mount HID fixtures with LED fixtures.

Continued maintenance of electrical systems is recommended. Replacement of fixtures to high-efficiency CFL pin-type fixtures throughout the tenant units should be considered. Please refer to the attached Capital Needs Input, 20 Year Detail, 20 Year Schedule and Rehab Specifications for additional information on condition, rehab costs and capital reserves.

Green Building Alternatives/Considerations:

<table>
<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Recommended (for Study)</th>
<th>Already Exists</th>
<th>Appears Infeasible</th>
<th>Comments/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.2</td>
<td>Additional Reductions in Energy Use</td>
<td>X</td>
<td></td>
<td></td>
<td>Install high efficiency equipment</td>
</tr>
<tr>
<td>5.5a</td>
<td>Efficient Lighting: Interior Units</td>
<td>X</td>
<td></td>
<td></td>
<td>Follow Energy Star MFHR guidance</td>
</tr>
<tr>
<td>5.5b</td>
<td>Efficient Lighting: Common Areas and Emergency Lighting</td>
<td>X</td>
<td></td>
<td></td>
<td>Follow Energy Star MFHR guidance</td>
</tr>
<tr>
<td>5.5c</td>
<td>Efficient Lighting: Exterior</td>
<td>X</td>
<td></td>
<td></td>
<td>Follow Energy Star MFHR guidance</td>
</tr>
<tr>
<td>5.7a</td>
<td>Renewable Energy</td>
<td>X</td>
<td>X</td>
<td></td>
<td>On site electric generation likely financially infeasible - site, orientation and scale issues</td>
</tr>
<tr>
<td>5.7b</td>
<td>Photovoltaic/Solar Hot Water Ready</td>
<td>X</td>
<td>X</td>
<td></td>
<td>On site electric generation likely financially infeasible - site, orientation and scale issues</td>
</tr>
</tbody>
</table>
9.0 VERTICAL TRANSPORTATION
There is no vertical transportation at the subject property.

10.0 LIFE SAFETY AND FIRE PROTECTION

Description:
Each tenant unit is equipped with a smoke detector located in the laundry/mechanical room, hallways and each bedroom.

Assessment:
In general, the smoke detectors were observed to be in good condition. No carbon monoxide detectors were observed in the tenant units. Carbon monoxide detectors have been installed in all units following the site visit in October 2013. Smoke detectors at the end of useful life have been replaced following the site visit in October 2013.

Recommendation:
Please refer to the attached Capital Needs Input, 20 Year Detail, 20 Year Schedule and Rehab Specifications for additional information on condition, rehab costs and capital reserves.

11.0 ADDITIONAL CONSIDERATIONS
No additional considerations were included as part of this RPCA.
12.0 DOCUMENT REVIEW AND INTERVIEWS

The following subsections document information associated with the subject property obtained by AKT Peerless during document reviews and interviews.

12.1 Document Review
AKT Peerless was able to obtain property information from City of Ann Arbor and AAHC property management. This information included general building construction components (blueprints), some limited facility diagrams, information on several building permits, building photographs, and a previous capital improvement summary. Copies of select building permits are provided in Appendix C. Additional records reviewed are provided under separate cover.

12.2 Interviews
During the course of this assessment, AKT Peerless interviewed Mr. Lance Mitchell, the Facilities & Maintenance Property Manager, for AAHC. Mr. Mitchell has been associated with the subject property for approximately one year. Information provided by Mr. Mitchell is referenced throughout this report.

13.0 OPINIONS OF PROBABLE COST
Refer to Appendix A for the RPCA tool including the Capital Needs Input, 20 Year Detail, 20 Year Schedule and Rehab Specifications for additional information on condition, rehab costs and capital reserves.

14.0 SIGNATURES

Henry McElvery
Technical Director of Energy Services
AKT Peerless Environmental Services
Illinois Region
Phone: 773.426.5454
Fax: 248.615.1334
Building Analyst Professional No. 5023902
Building Performance Institute

Jason Bing, RA, LEED AP
Senior Energy Analyst
AKT Peerless Environmental Services
Illinois Region
Phone: 734.904.6480
Fax: 248.615.1334
R.A. Certificate No. 1115311
Figures
FIGURE 2

ANN ARBOR WEST QUADRANGLE
MICHIGAN - WASHTENAW COUNTY
7.5 MINUTE SERIES (TOPOGRAPHIC)

IMAGE TAKEN FROM 1965 U.S.G.S. TOPOGRAPHIC MAP

TOPOGRAPHIC LOCATION MAP

1020-1042 PENNSYLVANIA AVENUE
ANN ARBOR, MICHIGAN
PROJECT NUMBER: 8359E-1-196
Appendix A

RAD PCA Tool
Appendix B

Reconnaissance Photographs
PHOTOGRAPH NO. 1: TYPICAL VIEW OF TENANT UNIT BUILDING

PHOTOGRAPH NO. 2: TYPICAL VIEW OF REAR OF TENANT BUILDING
PHOTOGRAPH NO. 3: TYPICAL VIEW OF LANDSCAPING AND FLATWORK THROUGHOUT SUBJECT PROPERTY

PHOTOGRAPH NO. 4: TYPICAL VIEW OF SUBJECT PROPERTY PARKING LOT
PHOTOGRAPH NO. 5: CLOSE UP OF DETERIORATED AREA IN PARKING LOT

PHOTOGRAPH NO. 6: TYPICAL VIEW OF ROOFS (SOUTH FACING)
PHOTOGRAPH NO. 7: TYPICAL VIEW OF DECK COMPONENTS

PHOTOGRAPH NO. 8: VIEW OF HOT WATER HEATER IN UNIT 1030
PHOTOGRAPH NO. 9: TYPICAL VIEW OF FURNACES IN TENANT UNITS (31022)

PHOTOGRAPH NO. 10: TENANT UNIT 1020 KITCHEN (ADA)
PHOTOGRAPH NO. 11: ADA UNIT BATHROOM

PHOTOGRAPH NO. 12: CEILING MOISTURE PROBLEM (UNIT 1020)
PHOTOGRAPH NO. 13: TYPICAL VIEW OF CRAWL SPACE

PHOTOGRAPH NO. 14: TENANT UNIT 1042 TUB AND ASSOCIATED VINYL ENCLOSURE
PHOTOGRAPH NO. 15: TYPICAL VIEW OF TENANT UNIT THERMOSTAT

PHOTOGRAPH NO. 16: VIEW OF OPEN RETURN AIR CHASE (TYPICAL)
Appendix C

Municipal Records
August 23, 2013

Ms. Deanna Hutsell, P.E.
Senior Environmental Consultant
22725 Orchard Lake Road
Farmington, MI 48336
Via Email: hutselld@aktpeerless.com

Subject: Freedom of Information Act Request received August 23, 2013
13-262 Hutsell

Dear Ms. Hutsell:

I am responding to your request under the Michigan Freedom of Information Act received August 23, 2013 for Fire Department file records for 3681 to 3689 Platt, 221 to 253 S. Seventh, 1020 to 1042 Pennsylvania and 2670 to 2680 S. Main. Your request is denied. Your request is denied to the extent that the records do not exist.

If you receive written notice that your request has been denied, in whole or in part, under Section 10 of the Act, you may, at your option either: (1) submit to the City Administrator a written appeal that specifically states the word "appeal" and identifies the reason(s) for reversal of the disclosure denial; or (2) file a lawsuit in the circuit court to compel the City’s disclosure of the record. If after judicial review, the circuit court determines that the City has not complied with the Act, you may be awarded reasonable attorneys’ fees and damages as specified under the Act.

If you have any questions concerning this response, please contact Jennifer Alexa, Deputy Clerk, at 734-794-6140.

Sincerely,

Jacqueline Beaudry
City Clerk
Search Results

<table>
<thead>
<tr>
<th>Permit Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>MECH1-0529</td>
</tr>
<tr>
<td>PE070275</td>
</tr>
<tr>
<td>ROW08-4463</td>
</tr>
<tr>
<td>CR6447</td>
</tr>
</tbody>
</table>

Permit #ROW08-4463

- **Type:** ROW SIDEWALK
- **Subtype:**
- **Description:** remove and replace sidewalk
- **Status:** FINALED
- **Applied Date:** 11/5/2008
- **Issued Date:** 11/5/2008
- **Approved Date:** 11/5/2008
- **Finaled Date:** 11/18/2008
- **Expiration Date:**
- **Notes:**

The City of Ann Arbor, MI makes every effort to produce and publish the most current and accurate information possible. No warranties, expressed or implied, are provided for the data herein, its use, or its interpretation. Utilisation of this website indicates understanding and acceptance of this statement.
Permit Search

Search By: Address  Contains  1020 pennsylvania

Search Results

Permit #MECH11-0529

Type: MECHANICAL
Subtype: MECHANICAL
Description: REPLACE 5 FURNACES #1022, 1032, 1040, 1042
Status: FINALED
Applied Date: 3/21/2011
Issued Date: 3/21/2011
Approved Date: 3/21/2011
Finaled Date: 5/5/2011
Expiration Date: 11/1/2011
Notes:

The City of Ann Arbor, MI makes every effort to produce and publish the most current and accurate information possible. No warranties, expressed or implied, are provided for the data herein, its use, or its interpretation. Utilization of this website indicates understanding and acceptance of this statement.
**Permit Search**

**Search Results**

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Type</th>
<th>Subtype</th>
<th>Description</th>
<th>Status</th>
<th>Applied Date</th>
<th>Issued Date</th>
<th>Approved Date</th>
<th>Finaled Date</th>
<th>Expiration Date</th>
</tr>
</thead>
</table>

**Attachments:**
- application.pdf
- 1042pennsylvania.pdf

The City of Ann Arbor, MI makes every effort to produce and publish the most current and accurate information possible. No warranties, expressed or implied, are provided for the data herein, its use, or its interpretation. Utilisation of this website indicates understanding and acceptance of this statement.
Permit Search

Search By: 
Address  
Contains  
1020 pennsylvania  
SEARCH

Search Results

Permit #PE070275

- Permit Info
- Site Info
- Contacts (3)
- Inspections (1)
- Reviews

Type: ELECTRICAL
Subtype: ELECTRICAL
Description: AT & T cabinet.
Status: FINALED
Applied Date: 2/27/2007
Issued Date: 2/27/2007
Approved Date: 
Finaled Date: 3/27/2007
Expiration Date: 9/23/2007
Notes: 

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Appendix D

FEMA Floodplain Map
Appendix E

Form 4.4 Environmental Restrictions Checklist
# Mark-to-Market Environmental Restrictions Checklist

**Project Name and Location (Street, City, County, ST, Zip Code):**  
Hillside Manor  
1020-1042 Pennsylvania  
Ann Arbor, MI 48103

**Owner Name, Address (Street, City, ST, Zip Code), and Phone:**  
Ann Arbor Housing Commission  
727 Miller Avenue, Ann Arbor MI 48103  
(734) 794-6720

**Project Description:**  
Completion of a Rental Assistance Demonstration (RAD) Property Condition Assessment (PCA) to determine repairs, replacements, maintenance items and items for improvement at the property.

### ENVIRONMENTAL REVIEW FINDINGS

<table>
<thead>
<tr>
<th>Environmental Findings</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FLOOD PLAIN</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the project located in a FEMA Special Flood Hazard Area? (Current flood plain maps should be found in each HUD field office or call FEMA at 1-877-FEMA-MAP, FEMA’s web site URL is <a href="http://www.fema.gov/FHM/">www.fema.gov/FHM/</a>)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Identify Map Panel and Date</td>
<td>Panel 244 of 585, Community Panel 26161C0244E, dated April 3, 2012</td>
<td></td>
</tr>
<tr>
<td>Does the project currently carry Flood Insurance?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do any structures appear to be within or close to the floodplain? (If yes and if the project does not currently carry flood insurance, flood insurance is required.)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>HISTORIC PRESERVATION</strong> (If yes, identify relevant restrictions below.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the property listed on the National Register of Historic Places?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Is the property located in a historic district listed on the National Register of Historic Places?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Is the property located in a historic district determined to be eligible for the National Register?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>AIRPORT HAZARDS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the project located in the clear zone of an airport? (24 CFR Part 51 D. If yes, Notice is required.)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>HAZARDOUS OPERATIONS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is there any evidence or indication of manufacturing operations utilizing or producing hazardous substances (paints, solvents, acids, bases, flammable materials, compressed gases, poisons, or other chemical materials) at or in close proximity to the site?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Is there any evidence or indication that past operations located on or in close proximity to the property used hazardous substances or radiological materials that may have been released into the environment?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>EXPLOSIVE/FLAMMABLE OPERATIONS/STORAGE (24 CFR Part 51C)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is there visual evidence or indicators of unobstructed or unshielded above ground storage tanks (fuel oil, gasoline, propane etc.) or operations utilizing explosive/flammable material at or in close proximity to the property?</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**FOR YES RESPONSES, SUMMARIZE RESTRICTIONS BELOW:**
### TOXIC CHEMICALS AND RADIOACTIVE MATERIALS

#### Petroleum Storage

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there any evidence or indication of the presence of commercial or residential heating activities that suggest that underground storage tanks may be located on the property?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>If yes, are any such tanks being used? If yes, indicate below whether the tank is registered, when it was last tested for leaks, the results of that test, and whether there are any applicable state or local laws that impose additional requirements beyond those required under federal law.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Are there any out-of-service underground fuel storage tanks? If yes, indicate whether the tank was closed out in accordance with applicable state, local and federal laws.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Is there any evidence or indication that any above ground storage tanks on the property are leaking?</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

#### Polychlorinated Biphenyls (PCB)

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there any evidence or indication that electrical equipment, such as transformers, capacitors, or hydraulic equipment (found in machinery and elevators, installed prior to July 1, 1884) are present on the site?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>If yes, is any such equipment (a) owned by anyone other than a public utility company; and (b) not marked with a “PCB Free” sticker?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>If yes, indicate below whether such equipment has been tested for PCBs, the results of those tests, and (if no testing has been performed) the proposed testing approach. (Electrical equipment need not be tested but will be assumed to have PCBs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If PCBs are found in non-electrical equipment over 50ppm it must be replaced or retrofitted, otherwise any equipment with PC Bs or assumed to have PC Bs require an O&amp;M Plan.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Asbestos Containing Materials (ACM)

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there any evidence or indication of ACM insulation or fire retardant materials such as boiler or pipe wrap, ceiling spray, etc. within the buildings on the property? If yes, the property is required to have an Operations and Maintenance Plan for asbestos containing materials.</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

#### Lead Based Paint

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there residential structures on the property that were built prior to 1978?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>If yes, has the property been certified as lead-free?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If property has not been certified as lead-free, has a Risk Assessment been completed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If yes, has the owner developed a plan including Interim Controls to address the findings of the Risk Assessment including Tenant notifications and an Operations and Maintenance plan?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If yes, has a qualified Risk Assessor reviewed the Owner’s plan and O&amp;M plan for compliance with 24 CFR 35?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### EASEMENT AND USE RESTRICTIONS

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there easements, deed restrictions or other use restrictions on this property? (e.g. oil and gas well pumping, transformer boxes/units, navigation, microwave, rights of way (ROW), for hi-voltage power transmission lines, interstate/intrastate gas and liquid petroleum pipelines, etc.)</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

#### FOR YES RESPONSES, SUMMARIZE RESTRICTIONS BELOW:

- **Installation date of the electrical transformer is unknown and "PCB Free" stickers were not observed on the transformer; however, it is owned by DTE Energy.**
- **With the exception of the electrical transformer located on the property, no easements, deed restrictions, or other use restrictions exist on the property.**

---

**If you have questions, please call or E-mail the HUD Housing Environmental Clearance Officer, Eric Axelrod at (202-708-1104 x 2275)**
Appendix F

Tier II: Abbreviated Accessibility Checklist
### Tier II: Abbreviated Accessibility Survey

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Building History</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has an ADA survey previously completed for this property?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Have any ADA improvements been made to the property?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Does a Barrier Removal Plan exist for the property?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Has the Barrier Removal Plan been reviewed/approved by an arm's-length third party such as an engineering firm, architectural firm, building department, or other agency, etc.?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Has building ownership or building management reported receiving any ADA-related complaints that have not been resolved?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Is any litigation pending related to ADA issues?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td><strong>B. Parking</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there sufficient accessible parking spaces with respect to the</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>total number of reported spaces? (See Table X2-1)</td>
<td></td>
<td></td>
<td></td>
<td>1:2: total</td>
</tr>
<tr>
<td>Are accessible spaces marked with the International Symbol of</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Accessibility? Are there signs reading &quot;Van Accessible&quot; at van spaces?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is there at least one accessible route provided within the boundary of</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>Needs improvement</td>
</tr>
<tr>
<td>the site from public transportation stops, accessible parking spaces,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>passenger loading zones, if provided, and public streets and</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sidewalks?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do curbs on the accessible route have depressed, ramped curb cuts</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>at drives, paths and drop-offs?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does signage exist directing you to accessible parking and an</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>accessible building entrance?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C. Ramps</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If there is a ramp from parking to an accessible building entrance,</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>~ 1:11</td>
</tr>
<tr>
<td>does it meet slope requirements? (1:12 slope or less)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are ramps longer than 5 ft complete with railings on both sides?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Is the width between railings at least 36 in?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Is there level landing for every 36 ft horizontal length of ramp, at</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>the top and at the bottom of ramps and switchbacks?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D. Entrances/Exits</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the main accessible entrance doorway at least 36 in. wide?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>If the main entrance is infeasible, are there alternate accessible</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>entrances?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can the alternate accessible entrance be used independently?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>5'0.5' Step</td>
</tr>
<tr>
<td>Is the door hardware easy to operate (i.e. push type hardware, no</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>twisting required, and not higher than 48 in. above floor)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are main entry doors other than revolving doors available?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Are there two main doors in series, is the minimum space between</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>the doors 48 in. plus the width of any door swinging into the space?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FIG. X2.1 Abbreviated Accessibility Survey**

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## Tier II: Abbreviated Accessibility Survey

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is the main path of travel free of obstruction and wide enough for a wheelchair (at least 36 in. wide)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. Does a visual scan of the main path of travel reveal any obstacles (phones, fountains, etc.) that protrude more than 4 in. into walkways or corridors?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. Is at least one wheelchair-accessible public telephone available?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4. Are wheelchair-accessible facilities (toilet rooms, exits, etc.) identified with signage?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5. Is there a path of travel that does not require the use of stairs?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>1. Do the call buttons have visual signals to indicate when a call is registered and answered?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. Is the &quot;UP&quot; button above the &quot;DOWN&quot; button?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. Are there visual and audible signals inside cars indicating floor change?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4. Are there standard raised and Braille markings on both sides of each hoist way elegance?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5. Do elevator doors have a reopening device that will stop and reopen a car door if an object or person obstructs the door?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6. Do elevator lobbies have visual and audible indicator of car arrival?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7. Are elevator controls low enough to be reached from a wheelchair (48 in. front approach/64 in. side approach)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>8. Are operator control buttons designated by Braille and by raised standard alphabetical characters (mounted to the left of the button)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>9. Is a two-way emergency communication system is provided within the elevator cab, is it usable without voice communication?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

### G. Toilet Rooms

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are common-area public toilet rooms located on an accessible route?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. Are door handles push/pull or lever types?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. Are there audible and visual fire alarm devices in the toilet rooms?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4. Are corridor access doors wheelchair-accessible (at least 32 in. wide)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5. Are public toilet rooms large enough to accommodate a wheelchair turn around (60 in. turning diameter)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6. In unisex toilet rooms, are there safety alarms with pull cords?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7. Are toilet stall doors wheelchair-accessible (at least 32 in. wide)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>8. Are grab bars provided in toilet stalls?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>9. Are sinks provided with clearance for a wheelchair to roll under (28 in. clearance)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>10. Are sink handles operable with one hand without grasping, pinching, or twisting?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>11. Are exposed pipes under sinks sufficiently insulated against contact?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

### H. Guestrooms

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are there sufficient reported accessible sleeping rooms with respect to the total number of reported guestrooms? (See Table X2.2)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. Are there sufficient reported accessible rooms with roll-in showers with respect to the total number of reported accessible guestrooms? (See Table X2.2)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>