AEI Consultants

September 9, 2022

HUD MAP CAPITAL NEEDS ASSESSMENT

Property Identification:
Annapolis
52 Sumner Street
Dorchester, Massachusetts 02125

AEI Project No. 463356
Site Inspection Date: July 6, 2022

Prepared For:
Boston Housing Authority
52 Chauncy Street
Boston, Massachusetts 02111

Prepared By:
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AEI Main Contact: Karla King

Environmental Due Diligence

Building Assessments

Site Investigation & Remediation

Energy Performance & Benchmarking

Industrial Hygiene

Construction Risk Management

Zoning Analysis Reports & ALTA Surveys

Boston Housing Authority
52 Chauncy Street,
Boston, Massachusetts 02111

Subject: **HUD MAP CAPITAL NEEDS ASSESSMENT**
Annapolis
52 Sumner Street, Dorchester, Massachusetts 02125
AEI Project No. 463356

Dear Rick Jegorow:

AEI's Capital Needs Assessment (CNA) (the Physical Inspection Report) has been prepared for the above-mentioned asset (the Property). During the property assessment and research, our needs assessor met with agents representing the Property, or agents of the owner, and reviewed the property and its history. This assessment and Physical Inspection Report have been prepared in accordance with ASTM E2018-15 "Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process", and HUD protocols, including the use of MAP Guide, revised March 2021. This Physical Inspection Report is written to meet the Multifamily Accelerated Processing (MAP) guidelines pursuant to the U.S. Department of Housing and Urban Development (HUD) mortgage insurance programs.

The purpose for which this report shall be used shall be limited to the use as stated in the contract between the Client and AEI.

The CNA was performed at the Client's request using the methods and procedures consistent with good commercial or customary practice designed to conform to acceptable industry standards. The Report may be relied upon by Boston Housing Authority, their respective successors and assigns, and by the United States Department of Housing and Urban Development (HUD).

In expressing the opinions stated in this report, AEI has exercised the degree of skill and care ordinarily exercised by a reasonably prudent capital needs assessor in the same community and in the same time frame given the same or similar facts and circumstances. Documentation and data provided by the Client, designated representatives of the Client or other interested third

parties, or from the public domain, and referred to in the preparation of this assessment, have been used and referenced with the understanding that AEI assumes no responsibility or liability for their accuracy.

The independent conclusions represent our professional judgment based on information and data available to us during the course of this assignment. AEI's evaluations, analyses and opinions are not representations regarding the design integrity, structural soundness, or actual value of the property. Factual information regarding operations, conditions and test data provided by the Client or their representative has been assumed to be correct and complete. The conclusions presented are based on the data provided, observations and conditions that existed on the date of the on-site visit.

Should you have any questions or require additional information, please contact Jeb Bonnett at 804-955-8373 or jbonnett@aeiconsultants.com.

Sincerely,

Karla King
Executive Vice President
AEI Consultants

Jeb Bonnett
Vice President - HUD Building Assessments
AEI Consultants

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1.0 EXECUTIVE SUMMARY AND PROPERTY DESCRIPTION

AEI was retained by Boston Housing Authority on May 18, 2022 to conduct a Capital Needs Assessment (CNA) at Annapolis located at 52 Sumner Street in Dorchester, Massachusetts. The property features 56 dwelling units within 3 buildings, which were built in Circa 1950 and are situated on 1.268 acres. The property was observed in fair physical condition.

A summary of the Property improvements is provided in the following table.

Item	Description
Property Type	Senior apartments
Number of Floors	2
Number of Apartment Units	56
Total Number of Buildings	3
Number of Apartment Buildings	3
Ancillary Buildings	Not applicable
Parking	10 total spaces 8 regular spaces 2 accessible spaces of which 1 is a van-accessible space Source: Site Count
Gross Floor Area	41,961 sqft per Parcel records
Net Rentable Floor Area	24,766 sqft per Client provided
Site Area	1.268 acres per Assessor
Year of Construction	Circa 1950 per Assessor

1.1 Overall Condition Of The Property

Code Compliance and Design

Subject property improvements appear to have been carried out in compliance with contemporary building codes and standard building practices at the time of their construction. The Project Manager did not observe any obvious building code violations, nor did management or City report any violations. The quality of planning and design provided for site improvements appears to be suitable, reflecting a relatively efficient use of space and an acceptable use of building materials and systems.

Overall Condition of the Property

Based on AEI's observation of the Property and improvements, the Property appears to be in overall fair condition.

Assuming the level of maintenance currently being provided at the subject property is continued and deferred maintenance specified herein is corrected, the property should continue to retain its ability to perform and compete in the local market in the future.

Recommendations in this Report

The recommendations in this report are based upon ASTM guidelines and are limited to visual observations. Testing of systems was not performed and no invasive or destructive testing was undertaken. No recommendations for immediate, further investigation have been included in the Assessment and Recommendation sections of this report.

1.2 Remaining Useful Life

Based on the general condition of the Property reported above, it is AEI's opinion that the Remaining Useful Life (RUL) of the Property is estimated to be not less than 50 years barring any natural disasters. This opinion is based on its current condition and maintenance status, assuming any recommended Immediate Repairs or Replacement Reserves are completed and appropriate routine maintenance and replacement items are performed on an annual or as-needed basis. AEI's building RUL estimate is a subjective opinion based on observed and reported conditions obtained as part of the CNA assessment and is not an estimate of the Remaining Economic Life (REL) of the property.

AEI will identify items addressed as operating expenses as opposed to capital replacements that would be included in our Reserves for Replacement when sufficient documentation has been provided by the borrower.

No documentation regarding the differentiation between operating expenses and capital replacements was provided by the borrower.

1.3 List of Commonly Used Acronyms

ADA	The Americans with Disabilities Act

AHU	Air Handling Unit
ASTM	American Society for Testing and Materials
BOMA	Building Owners & Managers Association
BUR	Built-up Roof System
BTU	British Thermal Unit (a measurement of heat)
DWV	Drainage, Waste, Ventilation
EIFS	Exterior Insulation and Finish System
EMS	Energy Management System
EPDM	Ethylene Propylene Diene Monomer (rubber membrane roof)
EUL	Expected Useful Life
FCU	Fan Coil Unit
FEMA	Federal Emergency Management Agency
FFHA	Federal Fair Housing Act
FHA	Forced Hot Air
FHW	Forced Hot Water
FIRMS	Flood Insurance Rate Maps
FOIA	U.S. Freedom of Information Act (5 USC 552 et seq.) and similar state statutes.
FOIL	Freedom of Information Letter
GFI	Ground Fault Interrupt (circuit)
GPNA	Green Physical Needs Assessment
GWB	Gypsum Wall Board
HVAC	Heating, Ventilating and Air Conditioning
IAQ	Indoor Air Quality
IM / IR	Critical or Non-Critical Repair
MEP	Mechanical, Electrical & Plumbing
MDP	Main Distribution Panel
NA	Not Applicable
NFPA	National Fire Protection Association
PCA	Property Condition Assessment
PCR	Property Condition Report
PML	Probable Maximum Loss
PTAC	Packaged Through-wall Air Conditioning (Unit)
R&M	Repair and Maintain - Routine Maintenance
RR	Replacement Reserve
RTU	Rooftop Unit
SF	Square Feet
TPO	Thermoplastic Polyolefin Roof Membrane
VAV	Variable Air Volume Box
WDO	Wood Destroying Organisms

2.0 PURPOSE AND SCOPE

Cost Calculation Methodology

Estimates are based on construction costs developed by construction resources such as Marshall & Swift, RS Means, AEI's Commercial Inspectors' experience with past costs for similar projects, city cost indexes, consulting with local specialty contractors, client provided information, and assumptions regarding future economic conditions.

Actual costs may differ from AEI's cost estimates. Actual cost estimates are determined by many factors including but not limited to: choice and availability of materials, choice and availability of a qualified contractor, regional climate zone, quality of existing materials, site compatibility, and access to the subject property and buildings. Costs are solely based on material replacement and do not account for soft costs.

Critical Repairs

Items which will need to be performed as Critical Repairs (before loan closing) are included in the Critical Repairs Cost Estimate Table 7.2. Critical repairs are identified as either Life Safety or Accessibility. Those identified as "Life Safety" are needed to address hazards to life and health while those identified as "Accessibility" are needed to correct accessibility deficiencies. While these are not mutually exclusive, only one designation may be applied to each repair or alteration.

Life Safety repairs must be completed prior to Endorsement.

Accessibility repairs must be completed as soon as possible; and the CNA e Tool requires that the time estimated to complete each accessibility repair be identified as a number of months. If "as soon as" possible exceeds twelve months for any Accessibility repair, the corrective action plan must be referred to HUD headquarters to the attention of the Director of Technical Support in the Office of Multifamily Housing Production, who will determine whether the proposed corrective action plan is acceptable.

Non-Critical Repairs

Each of the Non-Critical (within 1 year of loan closing) Repair items noted during the survey is listed Table 7.3. Non-Critical Repairs are recommended for deferred maintenance that could result in physical depreciation or loss of property value. Non-critical repairs must be promptly and timely executed and completed within twelve months of endorsement, provided that the MF Regional Center/Satellite Office Director may approve an extended period not to exceed six additional months for unusual circumstances (e.g. work constrained by weather conditions or work requiring temporary relocation of elderly or disabled tenants.). A program of repairs and alterations which because of scale or quantity is reasonably expected to require more than a year to complete should be reconsidered as substantial rehabilitation.

Replacement Reserves

Items that will most likely need to be performed over the length of the evaluation period (20 years) such as repairs, replacements and significant maintenance items are listed in the Replacement Reserves Table (Table 7.4).

Items included in the Replacement Reserve Table are determined based upon the estimated useful life (EUL) of a system or component, the effective age (EA) of the system, and the remaining useful life (RUL) of that system. Factors that may affect the age and condition of a system include, but are not limited to, the frequency of use, exposure to environmental elements, quality of construction and installation, and amount of maintenance provided. Based on these factors, a system may have an effective age that is greater or less than its actual chronological age. Routine maintenance costs are not included as part of this assessment.

The Effective Useful Life (EUL) is the average amount of time in years that a system, component or structure is estimated to function when installed new and assuming that routine maintenance is practiced. It is based upon site observations, research, and judgment, along with referencing EUL tables from the United States Department of Housing and Urban Development guidelines. Accurate historical replacement records, if provided, are typically the best source of information. Exposure to the elements, initial quality and installation, extent of use, the quality and amount of preventive maintenance exercised, etc., are all factors that impact the effective age of a system or component. As a result, a system or component may have an effective age that is greater or less than its actual chronological age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its effective age.

The Remaining Useful Life (RUL) is a subjective estimate based upon observations, or average estimates of similar items, components, or systems, or a combination thereof, of the number of remaining years that it is estimated to be able to function in accordance with its intended purpose before requiring replacement. Such period of time is affected by the initial quality of the system or component, the quality of the initial installation, the quality and amount of preventive maintenance, climatic conditions, extent of use and other factors.

The RUL estimate is an expression of a professional opinion and is not a guarantee or warranty, expressed or implied. This estimate is based upon the observed physical condition of the property at the time of the visit and is subject to the possible effect of concealed conditions or the occurrence of extraordinary events such as natural disasters or other unforeseen events that may occur subsequent to the date of the site visit. The RUL estimate is made only with regard to the expected physical or structural integrity of the improvements on the Property. Based upon observations during our site visit and information received from our interviews with building management and service personnel, which for the purpose of the CNA was deemed reliable, AEI prepared general-scope, Opinions of Probable Cost based on appropriate remedies for the deficiencies noted. Such remedies and their associated costs were considered commensurate with the Property's position in the market and prudent expenditures. These opinions are for components of systems exhibiting significant deferred maintenance, and existing deficiencies requiring major repairs or replacement. Repairs or improvements that could be classified as (i) cosmetic, (ii) decorative, (iii) part or parcel of a building's renovation program or to reposition the asset in the marketplace, (iv) routine or normal preventative maintenance, or (v) that are the responsibility of the tenants were not included.

2.1 PURPOSE

The purpose of this survey and related report is to assist Boston Housing Authority and HUD in the evaluation of the physical aspects of the subject property and how its condition may affect the soundness of their financial decisions over time. For this assessment, the Project Manager has performed a reconnaissance assessment of the subject property and its improvements, evaluated the apparent physical conditions, reviewed available documentation, assessed the expected useful life (EUL), and estimated the cost for repairs, replacements, and significant maintenance items. The Project Manager assessed a representative sample of the building/s; the assessment typically included roofs, operational components, parking structures, and all common areas and exteriors.

The CNA is not, and should not be construed as, a warranty or guarantee about the condition of the improvements. Neither is the Assessment intended to assure clear title to the property in question. This investigation was prepared for the sole use and benefit of Boston Housing Authority and HUD. Neither this report, nor any of the information contained herein shall be used or relied upon for any purpose by any person or entity other than Boston Housing Authority and HUD.

We have performed our services and prepared this Report in accordance with applicable, generally accepted engineering, environmental or appraisal consulting practices. We make no other warranties, either expressed or implied, as to the character and nature of such services and product.

2.2 SCOPE OF WORK

AEI was retained by Boston Housing Authority on May 18, 2022 to conduct a Capital Needs Assessment (CNA) to fulfill the due diligence requirements of a pending real estate transaction. The CNA was performed in conformance with the scope and limitations of ASTM Standard Practice E2018-15 and the U.S. Department of Housing and Urban Development Multifamily Accelerated Processing (MAP) Guide, Chapter 5 and related Appendices, revised March 2021. The CNA was performed at Annapolis property located at 52 Sumner Street in Dorchester, Massachusetts. The scope of work included the following:

- The inspection of at least 25% of each unit type;
- The visual examination of the property's components, including MEP equipment, exterior walls, roofing, foundations, landscaping, utilities, and interior elements;
- The interviewing of property management and tenants;
- The information gathering from Freedom of Information request letters from the local Building, Zoning, and Fire departments;
- The data population of HUD's CNA E-Tool;

Any exceptions to, or deletions from, this practice are described in Section 7 of this report.

2.2.1 ASSESSMENT METHODOLOGY

The CNA meets the specifications of the lender and has included the following:

Preliminary Due Diligence
Prior to the site visit by the Property Evaluator, the pre-survey questionnaire was provided to the managers of the Property with a request that the questionnaire be completed prior to the visit.

Site Reconnaissance
The CNA findings are based on the visual, non-intrusive and non-destructive evaluation of various external and internal site and building systems and components as noted during a site walk-through survey conducted by AEI representatives. The survey included access and observation of representative tenant spaces and common areas.

Interviews and Research
AEI representatives conducted limited research to identify and review available maintenance procedures, available drawings, and other readily available documentation concerning the property. AEI representatives also conducted interviews with available management and maintenance staff. As conditions warranted, contractors for the property were contacted for pertinent information. AEI requested readily available records with public agencies familiar with the property to gather historical property information. A summary of findings have been included in the narrative sections of this report.

Report
The evaluation covered readily apparent conditions at the property. Upon completion of the site reconnaissance, interviews, and research, AEI produced this summary report. This report includes a discussion of topics related to the property condition and outlines the costs to correct the deficiencies noted. AEI formulates and presents the Critical Repairs, Non-Critical Repairs, and Replacement Reserves Schedule. The content in these tables is generated from the HUD CNA E-Tool.

Based upon observations during our site visit and information received from our interviews with building management and service personnel, which for the purpose of the CNA was deemed reliable, AEI prepared general-scope, Opinions of Probable Cost based on appropriate remedies for the deficiencies noted. Such remedies and their associated costs were considered commensurate with the Property's position in the market and prudent expenditures. These opinions are for components of systems exhibiting significant deferred maintenance, and existing deficiencies requiring major repairs or replacement. Repairs or improvements that could be classified as (i) cosmetic, (ii) decorative, (iii) part or parcel of a building's renovation program or to reposition the asset in the marketplace, (iv) routine or normal preventative maintenance, or (v) that are the responsibility of the tenants were not included.

It is the intent of the CNA to reflect material physical deficiencies and the corresponding opinion of probable costs that are (i) commensurate with the complexity of the Property and (ii) not minor or insignificant.

Standard Estimated Useful Life (EUL)
The EUL is the average amount of time in years that a system, component or structure is estimated to function when installed new and assuming that routine maintenance is practiced. HUD has hard coded an EUL associated with every component in the HUD CNA E-Tool. Neither AEI, nor any other provider can use different EULs for components in the CNA E-Tool.

Assessed Remaining Useful Life (ARUL)
This is the Needs Assessor's best professional judgment of the actual RUL of the Component ID based on observed conditions that may not agree with the auto-populated value in the Standard Remaining Useful Life field. Needs Assessors must provide a comment each time the ARUL field is populated in the CNA E-Tool.

Standard Remaining Useful Life (SRUL)
The SRUL Displays the RUL based on the Standard EUL less the current age of the component. This is an auto-populated field that is strictly math based.

2.3 Site Visit Information

Site Visit Facts

Date of Site Visit	July 6, 2022
Time of Site Visit	10:00 am
Weather Conditions	82° F and clear
Site Assessor	Juan Sequeira
Site Escorts	Mr. James Barner
Point of Contact	Mrs. Lynne Jones
Total Units Inspected	10

Dwelling Units Inspected

Building Identification	Unit Type	Unit Identification	Unit Status
Building 1	2 Bed / 1 Bath	4	Occupied
Building 1	2 Bed / 1 Bath	17	Occupied
Building 1	1 Bed / 1 Bath	18	Occupied
Building 1	1 Bed / 1 Bath	20	Occupied
Building 2	2 Bed / 1 Bath	24	Occupied
Building 2	1 Bed / 1 Bath	34	Occupied
Building 2	1 Bed / 1 Bath	35	Occupied
Building 2	1 Bed / 1 Bath	38	Occupied
Building 3	1 Bed / 1 Bath	45	Occupied
Building 3	1 Bed / 1 Bath	48	Occupied

2.4 Reliance

The CNA is not, and should not be construed as, a warranty or guarantee about the condition of the improvements. Neither is the Assessment intended to assure clear title to the property in question. The investigation was conducted on behalf of and for the exclusive use of Boston Housing Authority (Client) and HUD solely for use in a property condition evaluation of the subject property. The report has been prepared only for the purpose of securing mortgage

financing/re-financing and/or loan securitization. This report and findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party, in whole or in part without prior written consent of AEI. AEI acknowledges and agrees that the report may be conveyed to and relied upon by the Client, their successors and assigns, rating agencies and bond investors.

Reliance is provided in accordance with AEI's Proposal and Terms and Conditions executed by Boston Housing Authority on May 18, 2022. The limitation of liability defined in the Terms and Conditions is the aggregate limit of AEI's liability to the client and all relying parties.

3.0 OVERALL GENERAL DESCRIPTION

3.1 BUILDING AND UNIT SUMMARY

The Project Manager's findings are derived from a thorough review of all available resources, including but not limited to, construction drawings, rent rolls, interviews with property management, and field inspection observations. Please note that the building and unit matrices were populated in the CNA E-Tool and the Building Unit Mix report generated from that effort is attached below:

Unit Mix Breakdown

Unit Type ID	Square Feet	# of This Floorplan	Total Unit Square Footage
1 Bed / 1 Bath	440	50	22,000
2 Bed / 1 Bath	461	6	2,766
	Total:	**56**	**24,766**

Building Breakdown

Building Identifier	Number of Stories	Gross Square Feet
Building 1	2	14,215
Building 2	2	14,173
Building 3	2	13,573
	Total:	**41,961**

3.2 SITE

3.2.1 SITE TOPOGRAPHY

The property is generally flat with only minor variations in slope. There are no notable deficiencies or indications of deferred maintenance associated with the site's topography.

3.2.2 STORMWATER DRAINAGE

Item	Description	Action	Condition
Topography	Gentle slopes throughout Property	R&M	Good
Retaining Walls	Not applicable	NA	Not applicable
Adjoining Properties	Roughly at similar elevation to the Property.	R&M	Good
Storm Water Collection System	Underground municipal drainage system	R&M	Good
Landscape Drainage System	Landscaped areas sloped towards area drains	R&M	Good
Pavement Drainage System	Storm water area drains	R&M	Good
Foundation Drainage System	Rain leaders are attached to downspouts at the base of the building.	R&M	Good

ASSESSMENT / RECOMMENDATION

No notable deficiencies or indications of deferred maintenance of topography, drainage or retaining wall features were observed or reported.

Photographs

Stormwater Drainage: Typical topography found throughout the site.

Stormwater Drainage: Typical adjoining property found around the site.

Stormwater Drainage: Typical adjoining property found around the site.

Stormwater Drainage: Typical paving drainage found throughout site.

Stormwater Drainage: Typical downspout found throughout site.

Landscaping & Appurtenances: Damaged CMU wall found on the north perimeter of the property. (Non-Critical Repair)

3.2.3 Access & Egress

Items	Description	Action	Condition
Site Access	Provided by two entrances / exits from adjoining municipal streets:	R&M	Good
Signalization at Site Access	No traffic lights are provided at the entrances to the Property.	NA	Not applicable
Easement or Alley Way	Not applicable	NA	Not applicable

Photographs

Access & Egress: West access drive to the property.

Access & Egress: East access drive to the property.

3.2.4 Paving, Curbing, & Parking

Items	Description	Action	Condition
Asphalt Pavement	Asphalt pavement is provided for on-site parking and drive lanes	RR	Good

Items	Description	Action	Condition
Concrete Pavement	Not applicable	NA	Not applicable
Curbing	Concrete	RR	Good
Seal Coating	Recently applied	RR	Good
Striping	Pavement painted striping recently applied/ reapplied	RR	Good
Total Number of Parking Spaces	10 spaces in open lots	NA	Not applicable
Number of ADA Spaces	2	NA	Not applicable

Photographs

Paving, Curbing, & Parking: Typical asphalt pavement found throughout the site.

Paving, Curbing, & Parking: Typical concrete curving found throughout the site.

Paving, Curbing, & Parking: Typical accessible parking spaces found throughout the property.

Paving, Curbing, & Parking: Typical parking spaces found throughout the property.

Paving, Curbing, & Parking: Typical striping found throughout the property.

3.2.5 Flatwork (Walks, Plazas, Terraces, Patios)

Item	Description	Action	Condition
Sidewalks	Concrete	RR	Good
Ramps	Poured in place concrete	RR	Good
Exterior Steps	Concrete steps and landings at building entrances	RR	Good
Handrails	Steel handrails protect exterior steps and ramps.	R&M	Good
Loading Docks	Not applicable	NA	Not applicable

Photographs

Flatwork (Walks, Plazas, Terraces, Patios): Poured in place concrete ramp and sidewalks found at the property.

Flatwork (Walks, Plazas, Terraces, Patios): Concrete steps with steel handrails found at the property.

Flatwork (Walks, Plazas, Terraces, Patios): Typical concrete sidewalks found at the property.

3.2.6 LANDSCAPING & APPURTENANCES

The perimeter brick wall located on the north side of the property was observed damaged, with sections of plaster missing or falling off. AEI recommends repairing the perimeter wall to prevent further damage. (Non-Critical Repair)

Item	Description	Action	Condition
Landscaping	Trees, shrubbery, and lawn	R&M	Good
Irrigation	Not applicable	NA	Not applicable
Perimeter Fencing	Wrought iron fencing and Concrete Masonry Unit (CMU) wall	IM/RR	Poor
Entry Gates	Not applicable	NA	Not applicable
Patio Fencing	Not applicable	NA	Not applicable
Refuse Area Fencing	Dumpsters surrounded by chain-link fencing	R&M	Good
Site/Building Lighting	Exterior building mounted high intensity lights	R&M	Good
Parking Area Lighting	HID (high intensity discharge) lights mounted on building	R&M	Good
Signage	Monument sign	RR	Good/Fair
Water Features	Not applicable	NA	Not applicable

Photographs

Landscaping & Appurtenances: Typical landscaping found throughout at the property.

Landscaping & Appurtenances: Typical landscaping found throughout at the property.

Landscaping & Appurtenances: Typical landscaping found throughout at the property.

Landscaping & Appurtenances: Perimeter wrought iron fencing found on north of the property.

Landscaping & Appurtenances: Damaged CMU wall found on the north perimeter of the property. (Non-Critical Repair)

Landscaping & Appurtenances: Refuse area fencing found on the property.

Landscaping & Appurtenances: Typical building lighting found throughout the property.

Landscaping & Appurtenances: Typical parking area lighting found throughout the property.

Landscaping & Appurtenances: Monumental signage found on the property.

3.2.7 RECREATIONAL FACILITIES

Item	Description	Action	Condition
Swimming Pool Filtration Equipment	Not applicable	NA	Not applicable
Swimming Pool / Spa / Pool Decking	Not Applicable	NA	Not applicable
Barbecue	Not Applicable	NA	Not applicable
Picnic Areas	Not Applicable	NA	Not applicable
Sport Courts	Not Applicable	NA	Not applicable
Tennis Courts	Not Applicable	NA	Not applicable
Playground	Not Applicable	NA	Not applicable

Other Structures

Item	Description	Action	Condition
Garages	Not applicable	NA	Not applicable
Carports	Not applicable	NA	Not applicable

Item	Description	Action	Condition
Maintenance Shed	Not applicable	NA	Not applicable
Porte Cochere	Not applicable	NA	Not applicable
Landscaping Structures	Not applicable	NA	Not applicable

3.2.8 SITE UTILITIES

Utility Provider	Provider
Natural Gas	National Grid
Electricity	Eversource
Potable Water	Boston Water & Sewer
Sanitary Sewerage	Boston Water & Sewer
Storm Sewer	Municipal
Fuel Oil	Not Applicable

Photographs

Site Utilities: Central gas meter found at the site.

Site Utilities: Central electric meter found at the site.

Site Utilities: Central water meter found at the site.

Item	Description	Action	Condition
Domestic Water Supply Lines	Copper pipe	IM/RR	Fair/Poor
Waste Service Lines	PVC and Cast Iron pipes	RR	Good/Fair
Lift Stations	Not applicable	NA	Not applicable
Waste Water Treatment System	Not applicable	NA	Not applicable
Water Wells	Not applicable	NA	Not applicable
Emergency Generator	Not applicable	NA	Not applicable
Transformers	Utility-owned, pad-mounted electrical transformer(s)	R&M	Good
Alternative Energy Systems	Not applicable	NA	Not applicable

Photographs

Foundation: Typical basement found throughout the site.

Foundation: Typical cracks on basement walls and ceilings found throughout the site. (Critical Repair)

Foundation: Typical cracks on basement walls and ceilings found throughout the site. (Critical Repair)

Plumbing: Typical corroded pipes found throughout the property. (Non-Critical Repair)

3.3 STRUCTURAL FRAME & BUILDING ENVELOPE

3.3.1 FOUNDATION

Item	Description	Action	Condition
Foundation Type	Basement	IM	Poor
Foundation Walls	Masonry basement walls	IM	Poor
Building Slab	Concrete slab-on-grade	R&M	Good
Moisture Control	Pavement abuts the perimeter of the foundation.	R&M	Good
Uniformity	The foundation is considered to be generally uniform, but this could not be confirmed.	NA	Not applicable

ASSESSMENT / RECOMMENDATION

AEI observed significant concrete cracking and splitting at the basements throughout the site. This may be a sign of a structural problem with the concrete structure. AEI recommended having a structural engineer assess this issue for safety reasons. (Critical Repair)

Address findings by a structural engineer to prevent future damage to the buildings. (Non-Critical Repair)

Photographs

Foundation: Typical basement found throughout the site.

Foundation: Typical basement found throughout the site.

Foundation: Typical cracks on basement walls and ceilings found throughout the site. (Critical Repair)

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Foundation: Typical cracks on basement walls and ceilings found throughout the site. (Critical Repair)

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Foundation: Typical cracks on basement walls and ceilings found throughout the site. (Critical Repair)

3.3.2 FRAMING

3.3.2.1 FRAMING SYSTEM, FLOORS & WALLS

Item	Description	Action	Condition
Wall Structure	Solid masonry walls and Wood framing	R&M	Good
Secondary Framing Members	Steel lintels at window and door openings	R&M	Good
Mezzanine	Not applicable	NA	Not applicable
Walls and Floors Plumb, Level and Stable	No unusual problems were observed or reported.	R&M	Good
Significant Signs of Deflection, Movement	No unusual problems were observed or reported.	R&M	Good

3.3.2.2 Crawl Spaces, Envelope Penetrations

There are no crawl spaces in the apartment buildings.

3.3.2.3 Roof Frame & Sheathing

Item	Description	Action	Condition
Roof Design	Pitched with attic space	R&M	Good
Roof Framing	Pre-cast concrete planks and wood rafters	R&M	Good
Roof Deck or Sheathing	Plywood decking	R&M	Good
FRT Plywood	FRT plywood was not observed in the attic area.	NA	Not applicable
Significant Signs of Deflection, Movement	No unusual problems were observed or reported.	R&M	Good

3.3.2.4 Flashing & Moisture Protection

Roof flashing appeared to be in overall fair condition.

3.3.2.5 Attics & Eaves

The attics are ventilated by a combination of ridge vents and perforated eave vents. The ridge vent is aluminum and covered with shingles to match the rest of the roofing.

Photographs

Attics & Eaves: Typical perforated eaves vents found throughout the site (Non-Critical Repair)

Attics & Eaves: Typical ridge vents found throughout the site.

3.3.2.6 Insulation

The roofs are insulated with fiberglass batts.

The depth of the insulation could not be observed.

3.3.2.7 Exterior Stairs, Rails, Balconies/Porches, Canopies

Item	Description	Action	Condition
Balcony Framing	Not applicable	NA	Not applicable
Balcony Deck Material	Not applicable	NA	Not applicable
Balcony Railing	Not applicable	NA	Not applicable
Patio Construction	Not applicable	NA	Not applicable
Terraces	Not applicable	NA	Not applicable
Fire Escapes	Not Applicable	NA	Not applicable
Elevated Walkway	Not applicable	NA	Not applicable
Exterior Stairs	Not applicable	NA	Not applicable

3.3.2.8 Exterior Doors & Entry Systems

Item	Description	Action	Condition
Unit Entry Doors	Painted wood	RR	Good
Service Doors	Not applicable	NA	Not applicable
Sliding Glass Doors	Not applicable	NA	Not applicable
Overhead Doors	Not applicable	NA	Not applicable
Common Entrance Doors	Aluminum storefront	RR	Good

Photographs

Exterior Doors & Entry Systems: Typical unit door found throughout the site.

Exterior Doors & Entry Systems: Typical building access door found throughout the site.

3.3.3 Sidewall System

The wood trim on the soffits throughout the site was observed damaged, weathered, and rotted. Any damaged or weathered wood trim can be a source of water intrusion and allow pests to access the building. Therefore, AEI recommends addressing any damaged sections of wood trim to maintain the building's structural integrity. (Non-Critical Repair)

Large sections of cracked brick were observed at 52-56 Summer street and other sections throughout the site. Cracks on the brick can be a source of water intrusion and allow pests to access the building. Therefore, AEI recommends addressing any damaged brick sections to maintain the building's structural integrity. (Non-Critical Repair)

Item	Description	Action	Condition
Primary Exterior Wall Finishes and Cladding	Masonry Brick (Unpainted)	IM/RR	Fair
Trim Finishes	Painted wood	IM/RR	Poor
Soffits/Eaves	Exposed	IM/RR	Poor
Sealants	Sealants are used at control joint locations of dissimilar materials as well as at windows and doors.	R&M	Good
Painting	Last painted 15 year ago.	IM/RR	Poor

Photographs

Sidewall System: Typical sidewall unpainted brick found throughout the site.

Sidewall System: Typical sidewall unpainted brick found throughout the site.

Sidewall System: Typical sidewall unpainted brick found throughout the site.

Sidewall System: Typical sidewall unpainted brick found throughout the site.

Sidewall System: Typical cracked unpainted brick found throughout the site. (Non-Critical Repair)

Sidewall System: Typical weathered and damaged wood trim found throughout the site. (Non-Critical Repair)

Sidewall System: Typical weathered and damaged wood trim found throughout the site. (Non-Critical Repair)

Sidewall System: Typical weathered and damaged wood trim found throughout the site. (Non-Critical Repair)

Sidewall System: Typical weathered and damaged wood trim found throughout the site. (Non-Critical Repair)

Photographs

Sidewall System: Building 2 northeast corner facade.

Sidewall System: Building 2 east facade.

Sidewall System: Building 2 southeast corner facade.

Sidewall System: Building 2 south facade.

Sidewall System: Building 2 southwest corner facade.

Sidewall System: Building 2 west internal facade.

Sidewall System: Building 1 southeast corner facade.

Sidewall System: Building 1 southwest corner facade.

Sidewall System: Building 1 west facade.

Sidewall System: Building 1 west facade.

Sidewall System: Building 1 northwest corner facade.

Sidewall System: Building 1 northeast internal corner facade.

Sidewall System: Building 3 southwest corner facade.

Sidewall System: Building 3 southwest corner facade.

Sidewall System: Building 3 south corner facade.

Sidewall System: Building 3 west facade.

Sidewall System: Building 3 northwest corner facade.

3.3.3.1 WINDOWS

Item	Description	Action	Condition
Window Type	Single hung windows	RR	Good

Item	Description	Action	Condition
Window Frame	Aluminum frame	RR	Good
Window Panes	Double pane insulated	RR	Good

Photographs

Windows: Typical single-hung style double-pane aluminum windows found throughout the site.

Windows: Typical single-hung style double-pane aluminum windows found throughout the site.

3.3.4 ROOFING FINISH

Roof ID	Construction Type	Approx. Area	Reported Age	RUL	Warranty	Action	Condition
All	Pitched with asphalt shingles	22,342 SF	17 years	3 years	No	RR	Fair

Roof ID	Drainage	Coping (parapet)	Skylights	Action	Condition
All	Gutters and downspouts	Not applicable	Not applicable	RR	Fair

Photographs

Roofing Finish: Typical asphalt shingle roofing found throughout the site.

Roofing Finish: Typical asphalt shingle roofing found throughout the site.

Roofing Finish: Typical gutters and downspouts found throughout the site.

Roofing Finish: Typical gutters and downspouts found throughout the site.

3.4 MECHANICAL & ELECTRICAL SYSTEMS

3.4.1 PLUMBING

Sections of pipe corrosion were observed in the basement on 15-19 Basketfield st. The pipes showed signs of deterioration that will cause significant leaks in the short term. Therefore, AEI recommends addressing the issue causing the corrosion and replacing any damaged piping sections. (Non-Critical Repair)

Several tenants reported that the property has boiling water issues when turned low. Boiling hot water increases suddenly and burns the tenants while bathing or doing the dishes. AEI recommends having a certified plumber assess the system to ensure all valves are working correctly. (Non-Critical Repair)

Several tenants reported that the property has sewer issues. Tenants reported constant backing up and sewage coming out of the drains. AEI recommends having a certified plumber assess the system to ensure the sewer system is working correctly. (Non-Critical Repair)

Item	Description	Action	Condition
Hot and Cold Water Distribution	Copper pipe	IM/RR	Fair/Poor
Polybutylene Water Piping	No polybutylene piping was observed or reported.	NA	Not applicable
Sanitary Waste and Vent	Cast iron and PVC pipes	IM	Poor
Domestic Water Circulation Pumps	Four (4) water circulation pumps on site	RR	Good
Domestic Water Heaters	Not applicable	NA	Not applicable
Domestic Water Boilers	Central high-efficiency boiler with separate storage tank	IM/RR	Good
Boiler Peripherals	Not applicable	NA	Not applicable
Water Softening / Treatment	Not applicable	NA	Not applicable

Photographs

Plumbing: Typical cast iron and PVC waste pipes found throughout the property.

Plumbing: Typical cast iron and PVC waste pipes found throughout the property.

Plumbing: Typical cast iron and PVC waste pipes found throughout the property.

Plumbing: Typical corroded pipes found throughout the property. (Non-Critical Repair)

Plumbing: Typical corroded pipes found throughout the property. (Non-Critical Repair)

Plumbing: Typical corroded pipes found throughout the property. (Non-Critical Repair)

Central gas-fired boilers found on the property.

Plumbing: Storage tanks found on the property.

Plumbing: Circulation pumps found on the property.

3.4.2 HVAC Systems

Item	Description	Action	Condition
Cooling Equipment	Individual Window-mounted Air-Conditioners Tenant-owned.	R&M	Good/Fair
Heating Equipment	Central Hydronic Boiler with Radiator distribution	RR	Good/Fair
Cooling Tower	Not applicable	NA	Not applicable
Terminal Units	Baseboard radiant heaters	RR	Good/Fair
Tonnage of Cooling Equipment	1 condenser unit with a rated capacity of 3 tons	RR	Good/Fair
Distribution System	Plumbing lines for heating system	RR	Good/Fair
Controls	Individual controls on each mechanical unit	R&M	Good
Supplemental Systems	Not applicable	NA	Not applicable
Corridor and Stair-tower Ventilation	Not applicable	NA	Not applicable
Toilet Room Ventilation	Not applicable	NA	Not applicable

Photographs

HVAC Systems: Typical tenant owned window unit AC system found throughout the site.

HVAC Systems: Typical tenant owned window unit AC system found throughout the site.

HVAC Systems: Typical tenant owned window unit AC system found throughout the site.

HVAC Systems: 3 ton AC system found at the community room.

Central gas boilers found on the property.

Central gas boilers found on the property.

Central gas-fired boilers found on the property.

HVAC Systems: Typical hydronic radiant heater found in dwelling units throughout the property.

3.4.3 Electrical System

Item	Description	Action	Condition
Service Type	Underground lines to pad-mounted transformers	R&M	Good
Building Service	1600-Amp, 120/240-Volt, three-phase, four-wire, alternating current (AC)	R&M	Good
Typical Tenant Service Amperage	70 Ampere breaker panel	RR	Fair
Panel Manufacturer	Square D	RR	Fair
Overload Protection	Circuit breaker switches	R&M	Good
Service Wire	Copper wiring	R&M	Good
Branch Wiring	Copper wiring	R&M	Good
Ground Fault Circuit Interrupter	Observed in kitchen, bathrooms, and wet areas	R&M	Good

Photographs

Electrical System: Typical electric meter bank found throughout the site.

Electrical System: Central electric meter found at the site.

Electrical System: Typical master breaker found throughout the site.

Electrical System: Typical dwelling unit electric panel found throughout the site.

Electrical System: Typical dwelling unit electric panel found throughout the site.

ASSESSMENT / RECOMMENDATION

The power to the property was reportedly sufficient and no visible areas of concern were identified.

3.5 ELEVATORS

ASSESSMENT / RECOMMENDATION

There are no elevators at the subject property.

3.6 LIFE & FIRE SAFETY

A large portion of the apartment units were observed with 9-volt battery smoke detectors in the living room. The installation of HUD compliant 10-year life, tamper proof battery powered smoke detectors or hardwired smoke detectors is required. HUD additionally requires that smoke detectors be installed in all living areas. At the moment of the assessment, there were no smoke detectors in the bedrooms. Installation of HUD-compliant smoke detectors in all bedrooms is required. (Critical Repair)

During the assessment, AEI was informed that the emergency pull cords in the bathrooms were not functioning. Therefore, AEI recommends repairing any pull cords that are not performing correctly for the safety of the tenants. (Critical Repair)

Item	Description	Condition	Action
Fire Suppression Systems	Not applicable	Not applicable	NA
Fire Suppression System Inspection Date	Not Applicable	Not applicable	NA
Other Equipment and Devices	Illuminated exit signs Battery back up light fixtures Hard-wired and non-compliant battery powered smoke and CO detectors with battery back-up. Emergency pull-cords in the bedrooms and bathrooms.	Poor	IM
Fire Extinguishers	Mounted on common area walls Last inspection completed on February 2022	Good	R&M
Fire Alarms	Not Applicable	Not applicable	NA
Fire Alarm Inspection Date	Not Applicable	Not applicable	NA
Fire Hydrants	There are fire hydrants located along the drive lanes	Good	R&M
Fire Egress Stairs	The buildings feature interior staircase towers	Not applicable	NA

Photographs

Life & Fire Safety: Typical emergency lighting found throughout the site.

Life & Fire Safety: Typical illuminated exit sign found throughout the site.

Life & Fire Safety: Typical non-compliant smoke detector found throughout the site. (Critical Repair)

Life & Fire Safety: Typical non-compliant smoke detector found throughout the site. (Critical Repair)

Life & Fire Safety: Typical fire extinguisher found throughout the site.

3.7 Interior Elements

3.7.1 Common Area Interior Elements

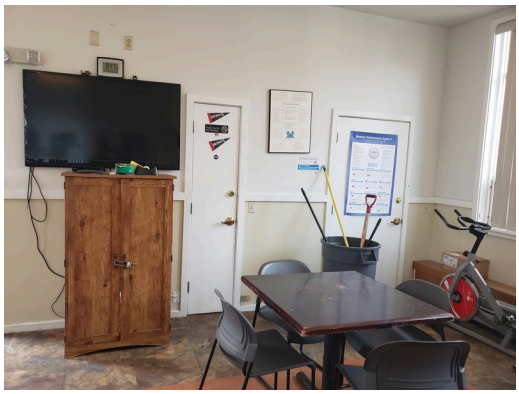
The majority of the hallway staircases were observed with worn down or damaged finishes. Therefore, sanding and repainting the railings and replacing all floor and wall finishes are recommended. (Non-Critical Repair)

Item	Description	Action	Condition
Community Room	A community room with numerous chairs, tables, and accessories is located in the community building. Finishes include vinyl flooring with painted drywall walls and ceilings.	RR	Good
Community Kitchen	A community kitchen with numerous appliances and accessories is located in the community building. Finishes include vinyl flooring with painted drywall walls and ceilings.	RR	Good

Item	Description	Action	Condition
Common Area Laundry	A common laundry room with numerous washers and dryers is located in the community building. Finishes include vinyl flooring with painted drywall walls and ceilings.	RR	Good

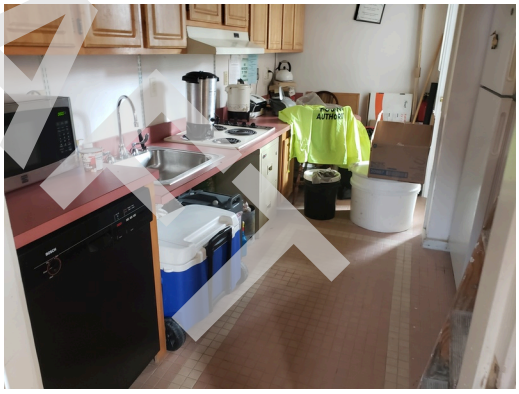
Photographs

Common Area Interior Elements: Community room.



Common Area Interior Elements: Community room.

Common Area Interior Elements: Common laundry room.



Common Area Interior Elements: Community Kitchen.

Common Area Interior Elements: Typical staircase with worn down finishes found throughout the site. (Non-Critical Repair)

Common Area Interior Elements: Typical staircase with worn down finishes found throughout the site. (Non-Critical Repair)

Common Area Interior Elements: Typical staircase with worn down finishes found throughout the site. (Non-Critical Repair)

3.7.2 DWELLING UNIT INTERIOR ELEMENTS

The flooring and some of the finishes in unit 35 were removed due to hazmat concerns after the death of a person occurred in the unit. AEI was informed that the property got the all-clear to address all repairs in the unit. Therefore, AEI recommends that the work be completed, and proof of occupancy be provided. (Critical Repair)

Units 4 and 20 were observed with damaged finishes ranging from damaged doors, wood flooring, vinyl flooring, and paint. The tenants reported that the damages were present when they moved in, and work orders had been issued. AEI recommends addressing this and any other work order that has not been addressed. (Non-Critical Repair)

Large areas of damaged sheetrock ceilings were observed in 2 Annapolis and 6-8 Annapolis. These damages were caused because of leaking pipes. The site ensures AEI that all repairs have been concluded. Therefore, AEI recommends replacing all the damaged sheetrock and installing a new ceiling where needed. (Non-Critical Repair)

Unit Finishes

Item	Description	Action	Condition
Carpet	Not applicable	NA	Not applicable
Resilient Flooring (vinyl)	Vinyl tile	IM/RR	Fair/Poor
Other	Wood laminate	IM/RR	Fair
Walls	Gypsum board with painted finish	R&M	Good/Fair
Ceilings	Gypsum board with painted finish	R&M	Good/Fair
Window Coverings	Window blinds are provided	R&M	Good/Fair

Photographs

Dwelling Unit Interior Elements: Typical wood laminate flooring and sheetrock finish found in dwelling units throughout the site.

Dwelling Unit Interior Elements: Typical vinyl flooring and sheetrock finish found in dwelling units throughout the site.

Dwelling Unit Interior Elements: Typical tile flooring and sheetrock finish found in dwelling units throughout the site.

Dwelling Unit Interior Elements: Removed flooring and finishes due to decomposing body removal. (Critical Repair)

Dwelling Unit Interior Elements: Damaged finishes observed in unit 4. (Non-Critical Repair)

Dwelling Unit Interior Elements: Damaged finishes observed in unit 4. (Non-Critical Repair)

Dwelling Unit Interior Elements: Damaged finishes observed in unit 4. (Non-Critical Repair)

Dwelling Unit Interior Elements: Damaged finishes observed in unit 4. (Non-Critical Repair)

Dwelling Unit Interior Elements: Damaged finishes observed in unit 20. (Non-Critical Repair)

Dwelling Unit Interior Elements: Damaged finishes observed in unit 20. (Non-Critical Repair)

Dwelling Unit Interior Elements: Damaged finishes observed in unit 20. (Non-Critical Repair)

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Dwelling Unit Interior Elements: Damaged finishes observed in unit 20. (Non-Critical Repair)

Dwelling Unit Interior Elements: Damaged finishes observed in unit 20. (Non-Critical Repair)

Dwelling Unit Interior Elements: Damaged finishes observed in unit 20. (Non-Critical Repair)

Dwelling Unit Interior Elements: Typical damaged sheetrock ceilings found throughout the site. (Non-Critical Repair)

Dwelling Unit Interior Elements: Typical damaged sheetrock ceilings found throughout the site. (Non-Critical Repair)

Appliances

Item	Description	Action	Condition
Refrigerators	Units vary in age and condition	RR	Good/Fair
Ranges	Units vary in age and condition	RR	Good/Fair
Range hoods	Not applicable	NA	Not applicable
Dishwashers	Not applicable	NA	Not applicable
Microwaves	Not applicable	NA	Not applicable
Garbage Disposals	Not applicable	NA	Not applicable
Dryers	Not applicable	NA	Not applicable
Washers	Not applicable	NA	Not applicable
Washer/Dryer Connection	Not applicable	NA	Not applicable

Photographs

Appliances: Typical range found throughout the site.

Appliances: Typical appliance package found throughout the site.

Cabinets & Fixtures

Item	Description	Action	Condition
Kitchen Sink & Countertop	Plastic laminated particle board	RR	Good/Fair
Bathroom Sink and Countertop	Wall mounted porcelain sink	RR	Fair
Kitchen Cabinetry	Wood frame with solid wood doors	RR	Good/Fair
Bathroom Cabinetry	Not applicable	NA	Not applicable
Bathtub/Shower and Enclosure	Enamel over steel bathtub with ceramic tile tub surround	RR	Fair
Toilet	Water saver toilet	RR	Fair
Accessories	Medicine cabinet Towel bars Wall mounted mirror	RR	Fair

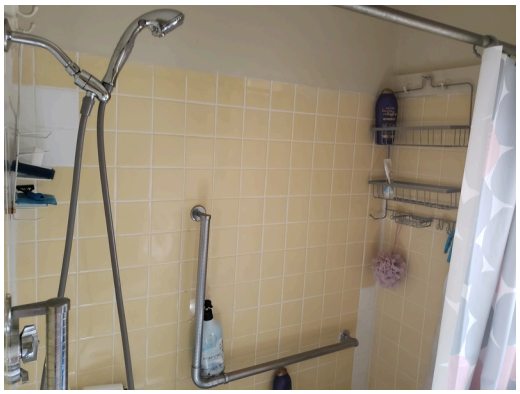
Photographs

Cabinets & Fixtures: Typical dwelling unit kitchen sink, countertop, and wood cabinets found throughout the site.

Cabinets & Fixtures: Typical dwelling unit kitchen sink, countertop, and wood cabinets found throughout the site.

Cabinets & Fixtures: Typical dwelling unit kitchen sink, countertop, and wood cabinets found throughout the site.

Cabinets & Fixtures: Typical dwelling unit porcelain sink and toilet found throughout the site.



Cabinets & Fixtures: Typical dwelling unit enamel tub and tile surround found throughout the site.

4.0 ADDITIONAL CONSIDERATIONS

4.1 MOISTURE AND MICROBIAL GROWTH

Microbial growth (e.g., mold or fungus) may occur when excess moisture is present. Porous building materials such as gypsum board, insulation in walls and ceilings, and carpeting retain moisture and become microbial growth sites if moisture sources are not controlled or mitigated. Potential sources of moisture include rainwater intrusion, groundwater intrusion, condensation on cold surfaces, and water leaks from building systems (e.g., plumbing leaks, HVAC system leaks, overflowing drains, etc.). Inadequate ventilation of clothes dryers and shower stalls may also result in excess moisture conditions. Microbial growth may be clearly visible (e.g., ceramic tile mortar in shower stalls) or may be concealed with no visible evidence of its existence (e.g., inside wall cavities). However, without proper tests, the existence of mold cannot be verified. Testing for mold is outside the scope of a base-line PNA.

AEI conducted a limited visual survey for the presence of microbial growth at the Property. Sampling or testing was not included in the scope of work for this survey. The assessment consisted of gaining entry to interior spaces, and visually evaluating the accessible areas.

ASSESSMENT / RECOMMENDATION

Suspect Mold growth was observed in a large number of pipes in many of the basements. Therefore, EAI recommends addressing any suspect Mold growth throughout the property for safety reasons. (Critical Repair)

Photographs

Moisture and Microbial Growth: Mold on water pipes observed throughout the site. (Critical Repair)

Moisture and Microbial Growth: Mold on water pipes observed throughout the site. (Critical Repair)

4.2 PEST MANAGEMENT

As part of the site and property assessment, AEI conducted limited, visual, non-intrusive observations to ascertain if there was evidence of wood destroying organism (WDO) activity on the physical structures at the Property during our site visit. Our WDO assessment process included visual observation of select interior and exterior building systems for noticeable signs of WDO activity, such as damaged or deteriorated wood, noticeable remnants of deceased WDO's (termites, beetles, ants, bees, etc.), and applying hand pressure (with a hard object tool) to reachable areas where these types of organisms generally attack to determine if there is any hidden damage to such surfaces (surfaces generally limited to trim work along baseboards and around windows).

Our WDO assessment process also included a limited visual and physical assessment of easily accessible and observable site conditions. The visual assessment included looking for noticeable signs of WDO activity on the Property, such as mud tubes on walls, round or oval holes, mounded soil around building perimeters, trace insect residue, and damaged wood. Our observations of exterior materials also include the application of hand pressure to reachable areas where these types of organisms generally attack, to determine if there is any hidden damage to such surfaces. This information is provided incidental to our standard PNA assessment. WDO observations, conducted by AEI, are not intended, and may not be interpreted as a professional pest inspection, and AEI makes no representation or warranty as to these activities or observations.

Our WDO assessment did not identify any unusual problems or concerns related to WDO activity on the property.

ASSESSMENT / RECOMMENDATION

No unusual problems or concerns with termites or wood destroying organisms were reported or observed.

No repair or reserve funding is recommended at this time.

4.3 SEISMIC ZONE

AEI reviewed the property location in order to determine whether or not the site is located in an area that may constitute a seismic hazard as determined by the ASCE/SEI Standard ASCE 41-13 "Seismic Evaluation and Retrofit of Existing Buildings. The determination employs output from design mapping with data provided from the US Geological Survey.

Per HUD MAP Guide (revised March 19, 2021), any detached or semi-detached structure where the calculated Design Earthquake Spectral Response Acceleration Parameter (S_{XS}) is less than .400g and any building where both Design Earthquake Spectral Response Acceleration Parameters (S_{XS} and S_{X1}) are less than .330g and .133g respectively, a detailed seismic hazard and building performance analysis is not required.

The values for S_{XS} and S_{X1} have been provided as output from a Design Maps Summary Report as derived from current USGS data.

A copy of the USGS data is included in the USGS Design Maps Appendix.

The value for S_{XS} was calculated at less than 0.330g.

The value for S_{X1} was calculated at less than 0.133g.

ASSESSMENT / RECOMMENDATION

There are no further recommendations.

4.4 WIND ZONE

AEI reviewed the property location in order to determine the wind zone in which the property is located. The Design Wind Speed measuring criteria are consistent with ASCE 7-05. Our judgement is that the property is located in Wind Zone IV. This map also indicates that the Property is also located in a Hurricane Susceptible Region.

Wind Zones are defined as follows:

Zone I (130 MPH)

Zone II (160 MPH)

Zone III (200 MPH)

Zone IV (250 MPH)

Special Wind Zone

Hurricane Susceptible Zone

4.5 FLOOD PLAIN

AEI reviewed FEMA flood zone maps to identify the flood zone in which the property is located. According to Panel No. 25025C0083J, dated 03/16/2016, this property is located within Flood Zone X (Non-shaded).

Flood Zones are described as follows:

Flood Zone A, defined as an area of 100-year flood; base flood elevations and flood hazard factors not determined.

Flood Zone AE, defined as an area of 100-year flood; base flood elevation determined.

Flood Zone B, defined as an area between limits of the 100-year flood and 500-year flood; an area subject to 100-year flooding with average depths less than one foot or where the contributing drainage area is less than one square mile; or an area protected by levees from the base flood.

Flood Zone C, defined as an area of minimal flooding.

Flood Zone D, defined as an area of undetermined, but possible flood hazards.

Flood Zone V, defined as an area of 100-year flood with velocity (wave action); base flood elevations and flood hazard factors not determined.

Flood Zone X (shaded area), defined as an area of 500-year flood; an area of 100- year flood with average depths of less than one foot or with drainage areas less than one square mile; or an area protected by levees from 100-year flood.

Flood Zone X (non-shaded area), defined as an area outside the 500-year flood plain.

This information is provided for reference purposes only. Further Study may be undertaken at the discretion of our client.

4.6 Known Problematic Building Materials

The following list of Known Problematic Building Materials has been developed by Fannie Mae and is typically referenced in CNA reports as a general summary of systems or organisms that have been part of a manufacturer recalled or have been specifically identified as problematic. If these items are identified through reports or observation, the topic will be further discussed in the report sections listed in the following table:

Red Flag Material or System	Identified	Action Recommended
Fire Retardant Treated Plywood (FRTP)	No	Not applicable
Compressed Wood or Composite Board Siding	No	Not applicable
Exterior Insulation and Finishing (EIFS)	No	Not applicable
Problem Drywall (aka "Chinese Drywall")	No	Not applicable
Unit electrical capacity less than 60 amps	No	Not applicable
Electrical Overload Protection - Fused Subpanels	No	Not applicable
Federal Pacific Electric Stab-Lok panels	No	Not applicable
Polybutylene Water Distribution Lines	No	Not applicable
Galvanized Steel Water Distribution Lines	No	Not applicable
Recalled fire sprinkler heads (Central, Omega, Gem, Star)	No	Not applicable
Recalled Cadet Brand Electric in-Wall Heaters	No	Not applicable
Recalled General Electric / Hotpoint dishwashers	No	Not applicable
Microbial Growth	Yes	Repair
Wood Destroying Organisms	No	Not applicable

5.0 DOCUMENT REVIEW & INTERVIEWS

5.1 DOCUMENTS REVIEWED

Document	Source / Author	Date
Construction Drawings	John M. Gray Co. Architects	02/17/1961
Rent Roll	Managment	Unknown

5.2 INTERVIEWS

Contact Name	Contact Title	Contact Phone	Information Source Provided
Mrs. Lynne Jones	Property Manager	(617)-438-1136	Provided interview and conducted the site visit
Mr. Mark Harris	Maintenance Supervisor	(617)-596-7983	Provided interview and conducted the site visit

5.3 BUILDING CODE COMPLIANCE

AEI requested a record of open violations on file for the Property from the City of Dorchester Building Department.

As of the date of this report, a written response has not been provided. AEI will continue to follow-up with the respective parties and will forward information received separately as soon as it has been received.

5.4 FIRE CODE COMPLIANCE

AEI requested a record of open violations on file for the Property from the City of Dorchester Fire Department.

As of the date of this report, a written response has not been provided. AEI will continue to follow-up with the respective parties and will forward information received separately as soon as it has been received.

5.5 ZONING COMPLIANCE

The property is zoned MFR: Multifamily Residential and based on online research.

5.6 HUD REAL ESTATE ASSESSMENT CENTER (REAC) INSPECTION

Information not provided.

6.0 ACCESSIBILITY & INTRUSIVE EXAMINATIONS

6.1 ACCESSIBILITY

Determination of ADA, UFAS, FHA Applicability

Application	Yes/No	Definition
Age: Was this property constructed after July 1992? (ADAAG Question)	No	Under Title III of the ADA, all "new construction" (construction, modification, or alterations) after the effective date of the ADA (approx. July 1992) must be fully compliant with the ADAAG.
Use: Does the property feature areas of public accommodation? (ADAAG Question)	Yes, leasing office	A public accommodation is a private entity that owns, operates, leases, or leases to a place of public accommodation. Places of public accommodation include restaurants, hotels, theaters, doctor's offices, pharmacies, retail stores, museums, libraries, parks, private schools, and day care centers, and entities that offer certain examinations and courses related to educational or occupational certification.
Use: Is the property classified as a historic structure? (ADAAG Question)	No	Properties listed or are eligible for listing in the National Register of Historic Places or properties designated as historic under state or local law should comply to the "maximum extent feasible" unless the changes would destroy the historic significance of a feature of the building.
Use: Is the property classified as a private club or religious structure? (ADAAG Question)	No	Properties classified as such are exempt from complying with the ADAAG.
Use: Does the property plan a significant renovation that is at least 20% of the value of the building? (If so, the renovation budget should include upgrades to correct all ADA issues). (ADAAG Question)	No	Alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historic restoration, changes or rearrangement in structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions. Normal maintenance, reroofing, painting or wallpapering, asbestos removal, or changes to mechanical and electrical systems are not alterations unless they affect the usability of the building or facility.
Use: Does the property feature federal financial assistance? (UFAS Question)	Yes	Section 504 of the Rehabilitation Act of 1973 states: No otherwise qualified individual with a disability in the United States. . .shall, solely by reason of her or his disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program, service or activity receiving federal financial assistance or under any program or activity conducted by any Executive agency or by the United States Postal Service. (29 U.S.C. 794). This

Application	Yes/No	Definition
		means that Section 504 prohibits discrimination on the basis of disability in any program or activity that receives financial assistance from any federal agency, including the U.S. Department of Housing and Urban Development (HUD) as well as in programs conducted by federal agencies including HUD.
Age: Was this property constructed prior to July 11, 1988? (UFAS Question)	Yes	While UFAS is still applicable for all project based properties; HUD has allowed for load bearing wall, financial, and administrative burden exceptions to retroactively achieving UFAS compliance.
Age: Was this property constructed after March 13, 1991? (FHA Question)	No	Multi-family properties constructed after March 13, 1991 should be in compliance with the Fair Housing Act Accessibility Guidelines. There are select exceptions.
Age: Was this property provided original building permits after June 15, 1990? (FHA Question)	No	Buildings where the last building permit was issued on or before June 15, 1990 are not covered by the design and construction requirements. Even if the last building permit was issued after June 15, 1990, if the property was occupied before March 13, 1991, it is not covered. HUD adopted these dates to allow time for the requirements to be considered during the design and construction phase of new properties.

Abbreviated Screening Checklist for ADAAG Compliance

	Building History	Yes	No	N/A	Comments
1.	Has an ADA survey previously been completed on the property?		✔		No previous ADA Survey for the property was provided or reported.
2.	Have any ADA improvements been made to the property?		✔		
3.	Does a Transition Plan / Barrier Removal Plan exist for the property?		✔		
4.	Has building ownership or management received any ADA-related complaints that have not been resolved?		✔		
5.	Is any litigation pending related to ADA issues?		✔		
Parking					
1.	Are there sufficient accessible parking spaces with respect to the total number of reported spaces?	✔			10 total spaces 2 designated accessible spaces
2.	Are there sufficient van-accessible parking spaces available (96" wide aisle for van)?	✔			1 van-accessible space is provided
3.	Are accessible spaces marked with the International Symbol of Accessibility? Are there signs reading "Van Accessible" at van spaces?	✔			

	Building History	Yes	No	N/A	Comments
4.	Is there at least one accessible route provided within the boundary of the site from public transportation stops, accessible parking spaces, passenger loading zones, if provided, and public streets and sidewalks?	✔			
5.	Do curbs on the accessible route have depressed, ramped curb cuts at drives, paths, and drop-offs?	✔			
6.	If required does signage exist directing you to accessible parking and an accessible building entrance?	✔			
Ramps					
1.	Do all ramps along accessible path of travel appear to meet slope requirements? (1:12 or less) Please note shorter ramps can be more steep than 1:12 if rise is less than 6-inches.	✔			
2.	Are ramps that appear longer than 6 ft complete with railings on both sides?	✔			
3.	Does the width between railings appear to be at least 36 inches?	✔			
4.	Are the cross slopes less steep than 1:48?	✔			
5.	Do the ramp runs rise no more than 30-inches?	✔			
6.	Are there level landings at the bottom and top of the ramp runs?	✔			
Entrances/Exits					
1.	Do all required accessible entrance doorways appear at least 32 inches wide and not a revolving door?	✔			
2.	If the main entrance is inaccessible, are there alternate accessible entrances?	✔			
3.	Is the door hardware easy to operate (lever/push type hardware, no twisting required and not higher than approximately 48 inches above the floor)?	✔			
Paths of Travel					
1.	Are all paths of travel free of obstruction and wide enough for a wheelchair (appear at least 36 inches wide)?	✔			
2.	Are wheelchair-accessible facilities (toilet rooms, exits, etc.) identified with signage?	✔			
3.	Is there a path of travel that does not require the use of stairs?	✔			

	Building History	Yes	No	N/A	Comments
Elevators					
1.	Do the call buttons have visual and audible signals to indicate when a call is registered and answered when car arrives?			✔	
2.	Are there visual and audible signals inside cars indicating floor change?			✔	
3.	Are there standard raised and Braille marking on both jambs of each hoist way entrance as well as all cab/call buttons?			✔	
4.	Do elevator doors have a reopening device that will stop and reopen a car door if an object or a person obstructs the door?			✔	
5.	Are elevator controls low enough to be reached from a wheelchair (appears to be between 15 and 48 inches)?			✔	
6.	If a two-way emergency communication system is provided within the elevator cab, is it usable without voice communication?			✔	
Toilet Rooms					
1.	Are common area public restrooms located on an accessible route?	✔			
2.	Are pull handles push/pull or lever type?	✔			
3.	Are toilet room access doors wheelchair-accessible (appear to be at least 32 inches wide)?	✔			
4.	Are public restrooms large enough to accommodate a wheelchair turnaround (appear to have 60"• turning diameter)?	✔			
5.	Are toilet stall doors wheelchair accessible (appear to be at least 32"• wide)?			✔	
6.	Are grab bars provided in toilet stalls?	✔			
7.	Are sinks provided with clearance for a wheelchair to roll under?	✔			
8.	Are sink handles operable with one hand without grasping, pinching or twisting?		✔		The common restroom sink was observed with knob-style hardware.
9.	Are exposed pipes under sink sufficiently insulated against contact?	✔			
Pools					
1.	Are public access pools provided? If the answer is no, please disregard this section.			✔	
2.	How many accessible access points are provided to each pool/spa? Provide number in comment field.			✔	

Abbreviated Screening Checklist for UFAS Compliance

	Building History	Yes	No	N/A	Comments
Common Area Paths of Travel					
1.	Are all paths of travel free of obstruction and wide enough for a wheelchair?	✔			
2.	Do the common laundry rooms have a front controlled washing machine?	✔			
3.	Is there a path of travel that does not require the use of stairs to get to all common areas?	✔			
Play Area					
1.	Are the common area playgrounds accessible by wheelchair?			✔	
Designated Handicapped Dwelling Units					
1.	Do the unit entrance doors as well as the bathroom and bedroom doors feature 32" clear openings and low entrance thresholds for wheelchair access?			✔	The property does not feature any mobility or sensory units.
2.	Do all accessible doors have adequate space provided at latch side of door (see UFAS Figure 25)?			✔	
3.	Are exterior balconies/decks <1/2" below interior floor level?			✔	
4.	Are all switches, controls and outlets located at between 15" and 54" above floor			✔	
5.	Accessible Kitchens: Is a 30x48 clear space provided at range/cooktop as well as front controls?			✔	
6.	Accessible Kitchens: Is 40" clearance provided between counters, cabinets, walls, or appliances and opposing item.Is a 60" turning radius available in U-shaped kitchens if sink or range/ cooktop is located at base of U? Are the sinks roll-under for a 30"x48" forward approach?			✔	
7.	Accessible Kitchens: Are the countertops and sinks lowered from 36" to approximately 34"?			✔	
8.	Accessible Bathrooms: Do the bathrooms feature adequate clear floor space to each of the fixtures?			✔	
9.	Accessible Bathrooms: Do the bathrooms feature accessible accessories (levered hardware, shower hoses, shower chairs or benches, lowered mirrors etc)?			✔	

	Building History	Yes	No	N/A	Comments
Fair Housing Act Accessibility Review					
1.	**Requirement 1. Are there accessible building entrances on an accessible route?** All covered multifamily dwellings must have at least one accessible building entrance on an accessible route unless it is impractical to do so because of the terrain or unusual characteristics of the site.			✔	
2.	**Requirement 2. Are the public and common use areas accessible?** Covered housing must have accessible and usable public and common-use areas. Public and common-use areas cover all parts of the housing outside individual units. They include -- for example -- building-wide fire alarms, parking lots, storage areas, indoor and outdoor recreational areas, lobbies, mailrooms and mailboxes, and laundry areas.			✔	
3.	**Requirement 3. Are the doors "Usable" (usable by a person in a wheelchair)?** All doors that allow passage into and within all premises must be wide enough to allow passage by persons using wheelchairs (32-inch nominal clearance).			✔	
4.	**Requirement 4. Is there an accessible route into and through the dwelling unit?** There must be an accessible route into and through each covered unit.			✔	
5.	**Requirement 5. Are the light switches, electrical outlets, thermostats and other environmental controls in accessible locations?** Light switches, electrical outlets, thermostats and other environmental controls must be in accessible locations.			✔	
6.	**Requirement 6. Are there reinforced walls in bathrooms for later installation of grab bars?** Reinforcements in bathroom walls must be installed, so that grab bars can be added when needed. The law does not require installation of grab bars in bathrooms.			✔	

	Building History	Yes	No	N/A	Comments
7.	**Requirement 7. Are the kitchens and bathrooms "Usable"?.** Kitchens and bathrooms must be usable - that is, designed and constructed so an individual in a wheelchair can maneuver in the space provided.			✔	

RECOMMENDATIONS

ADAAG Concerns:

- The common restroom sink was observed with knob-style hardware. Accessibility standards require all sink hardware to be levered style hardware. AEI recommended replacing existing sink hardware to comply with accessibility design standards. (Critical Repair)

UFAS/State Code Concerns:

- UFAS does apply but there are no dedicated mobility units or sensory units. It is AEI's understanding that the subject property is part of a portfolio of properties that, when added together, meet the requirement of 5% mobility and 2% sensory units as stipulated per section 504 requirements.

If the property were to be separate from the portfolio during a RAD transaction than a UFAS feasibility study would have to be performed at the property. There are steps leading into all sections of the building, as a result, it is not realistic that UFAS compliant could be achieved at the property.

FHA Design Concerns:

The property was built before March 13, 1991, and therefore FHA Design does not apply.

Photographs

UFAS Concern: Common accessible restroom without levered sin hardware. (Critical Repair)

6.2 Intrusive Examinations

6.2.1 Sewer Inspection

No sewer inspections were performed as part of this investigation.

6.2.2 Electrical Inspection

No electrical inspections were performed as part of this investigation.

6.3 Owner Proposed Improvements

There are no additional owner proposed improvements.

7.0 OPINIONS OF PROBABLE COST

7.1 FINANCIAL RECAP

Replacement Reserve Summary Table

Replacement Reserve Schedule Term/Inflation Status	Replacement Reserve Schedule Summary Costs	Replacement Reserve Schedule Summary Costs/Per Unit Per Annum
1-10 Year Un-Inflated Costs	$1,892,339	$3,379
1-10 Year Inflated Costs	$2,217,970	$3,961
11-20 Year Un-Inflated Costs	$1,433,005	$2,559
11-20 Year Inflated Costs	$2,047,958	$3,657
1-20 Year Un-Inflated Costs	$3,325,345	$2,969
1-20 Year Inflated Costs	$4,265,927	$3,809

7.2 CRITICAL REPAIRS

CRITICAL REPAIRS								
Need Category	**Component**	**Repair or Replacement Location**	**Classification of Work**	**Quantity**	**Unit of Measure**	**Unit Cost**	**Total**	**Comments**
CRITICAL REPAIRS (ACCESSIBILITY)								
Common area bath accessories (towel bars, grab bars, toilet stalls, etc.)	Accessible Common Restroom Sink Hardware (Critical Repair)	Common Accessible Restroom	Repair	1	Each	$ 150.00	$ 150.00	The common restroom sink was observed with knob-style hardware. Accessibility standards require all sink hardware to be levered style hardware. AEI recommended replacing existing sink hardware to comply with accessibility design standards.
CRITICAL REPAIRS (LIFE SAFETY)								
Residential smoke detectors	Install HUD Compliant Smoke Detectors (Critical Repair)	General Site	Repair	114	Each	$ 25.00	$ 2,850.00	A large portion of the apartment units were observed with 9-volt battery smoke detectors in the living room. The installation of HUD compliant 10-year life, tamper proof battery powered smoke detectors or hardwired smoke detectors is required. HUD additionally requires that smoke detectors be installed in all living areas. At the moment of the assessment, there were no smoke detectors in the bedrooms. Installation of HUD-compliant smoke detectors in all bedrooms is required.
Call station	Repair Emergency Call System (Critical Repair)	General Site	Repair	56	Each	$ 300.00	$ 16,800.00	During the assessment, AEI was informed that the emergency pull cords in the bathrooms were not functioning. Therefore, AEI recommends repairing any pull cords that are not performing correctly for the safety of the tenants.
Mold-treat-remediate	Treat Mold (Critical Repair)	Pipes in Basements	Repair	3	Each	$ 2,000.00	$ 6,000.00	Suspect Mold growth was observed in a large number of pipes in many of the basements. Therefore, EAI recommends addressing any suspect Mold growth throughout the property for safety reasons.
Cabinets & vanities	Refinish Down Unit (Critical Repair)	Unit 35	Repair	1	Each	$ 10,000.00	$ 10,000.00	The flooring and some of the finishes in unit 35 were removed due to hazmat concerns after the death of a person occurred in the unit. AEI was informed that the property got the all-clear to address all repairs in the unit. Therefore, AEI recommends that the work be completed, and proof of occupancy be provided.
Wood, timbers, dimensioned lumber, laminated beams, trusses	Hire Structural Engineer (Critical Repair)	Basements	Repair	1	Each	$ 6,000.00	$ 6,000.00	AEI observed significant concrete cracking and splitting at the basements throughout the site. This may be a sign of a structural problem with the concrete structure. AEI recommended having a structural engineer assess this issue for safety reasons.

Accessibility Subtotal:	**$**	**150.00**
Life Safety Subtotal:	**$**	**41,650.00**
Total:	**$**	**41,800.00**

7.3 NON-CRITICAL REPAIRS

NON-CRITICAL REPAIRS								
Need Category	**Component**	**Repair or Replacement Location**	**Classification of Work**	**Quantity**	**Unit of Measure**	**Unit Cost**	**Total**	**Comments**
Fascia, Wood, Vinyl	Repair Damaged Wood Trim (Non-Critical Repair)	General Site	Repair	1683	SF	$ 20.00	$ 33,660.00	The wood trim on the soffits throughout the site was observed damaged, weathered, and rotted. Any damaged or weathered wood trim can be a source of water intrusion and allow pests to access the building. Therefore, AEI recommends addressing any damaged sections of wood trim to maintain the building's structural integrity.
Retaining Walls, treated timber	Repair Brick Wall (Non-Critical Repair)	Brick Wall North Side of Property	Repair	283	SF	$ 10.00	$ 2,830.00	The perimeter brick wall located on the north side of the property was observed damaged, with sections of plaster missing or falling off. AEI recommends repairing the perimeter wall to prevent further damage.
Brick/block veneer	Repoint Brick Veneer (Non-Critical Repair)	General Site	Repair	2500	SF	$ 10.00	$ 25,000.00	Large sections of cracked brick were observed at 52-56 Summer street and other sections throughout the site. Cracks on the brick can be a source of water intrusion and allow pests to access the building. Therefore, AEI recommends addressing any damaged brick sections to maintain the building's structural integrity.
Drywall - Common	Replace Damaged Sheetrock Ceilings (Non-Critical Repair)	2 Annapolis and 6-8 Annapolis	Repair	2	Each	$ 4,000.00	$ 8,000.00	Large areas of damaged sheetrock ceilings were observed in 2 Annapolis and 6-8 Annapolis. These damages were caused because of leaking pipes. The site ensures AEI that all repairs have been concluded. Therefore, AEI recommends replacing all the damaged sheetrock and installing a new ceiling where needed.
Galvanized pipe, supply	Address Pipe Corrosion (Non-Critical Repair)	15-19 Basketfield St.	Repair	1	Each	$ 15,000.00	$ 15,000.00	Sections of plumbing pipe corrosion were observed in the basement on 15-19 Basketfield St. The pipes showed signs of deterioration that will cause significant leaks in the short term. Therefore, AEI recommends addressing the issue causing the corrosion and replacing any damaged piping sections.
Boilers, Oil/ Gas/ Dual Fuel, High MBH	Address Hot Water Issues (Non-Critical Repair)	Hot Water System	Repair	2	Each	$ 5,000.00	$ 10,000.00	Several tenants reported that the property has boiling water issues when turned low. Boiling hot water increases suddenly and burns the tenants while bathing or doing the dishes. AEI recommends having a certified plumber assess the system to ensure all valves are working correctly.
Cast iron sanitary waste	Address Sewer Lines (Non-Critical Repair)	Sewer System	Repair	3	Each	$ 8,000.00	$ 24,000.00	Several tenants reported that the property has sewer issues. Tenants reported constant backing up and sewage coming out of the drains. AEI recommends having a certified plumber assess the system to ensure the sewer system is working correctly.
Exterior Stairs-steel frame/stringer	Staircase Sanding and Painting (Non-Critical Repair)	General Site	Repair	32	Each	$ 1,400.00	$ 44,800.00	The majority of the hallway staircases were observed with worn down or damaged finishes. Therefore, sanding and repainting the railings and replacing all floor and wall finishes are recommended.
Hardwood floor (3/4" strip or parquet) - Common	Repair Damaged Unit Finishes (Non-Critical Repair)	Units 4 and 20	Repair	2	Each	$ 3,000.00	$ 6,000.00	Units 4 and 20 were observed with damaged finishes ranging from damaged doors, wood flooring, vinyl flooring, and paint. The tenants reported that the damages were present when they moved in, and work orders had been issued. AEI recommends addressing this and any other work order that has not been addressed.
Wood, timbers, dimensioned lumber, laminated beams, trusses	Address Structural Issues (Non-Critical Repair)	Structural Assessment Findings	Repair	1	Each	$ 50,000.00	$ 50,000.00	Address findings by a structural engineer to prevent future damage to the buildings.
						Total:	**$ 219,290.00**	

7.4 REPLACEMENT RESERVES

Need Category	Component	Quantity	Unit of Measure	Unit Cost	First Action Cost	Estimated Useful Life	Current Age	RUL	Year 00	Year 01	Year 02	Year 03	Year 04	Year 05	Year 06	Year 07	Year 08	Year 09	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
Asphalt Pavement	Overlay Asphalt Parking Lot	6062	SF	$ 3	$ 18,125	25	13	12	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 18,125	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Asphalt Seal Coat	Seal Coat Asphalt Parking Lot	6062	SF	$ 1	$ 3,031	5	3	2	$ -	$ -	$ 3,031	$ -	$ -	$ -	$ -	$ 3,031	$ -	$ -	$ -	$ -	$ 3,031	$ -	$ -	$ -	$ -	$ 3,031	$ -	$ -	$ -
Concrete	Replace Concrete Sidewalks	5479	SF	$ 6	$ 30,135	50	25	25	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fencing, chain-link	Chain-Link Fencing	300	LF	$ 32	$ 9,480	40	4	36	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fencing, wrought Iron	Wrought Iron Fencing	284	LF	$ 65	$ 18,460	60	30	30	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Signage, Entrance/Monument	Property Signage	1	Each	$ 5,688	$ 5,688	25	13	12	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,688	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Retaining Walls, reinforced concrete masonry unit (CMU)	Concrete Retaining Wall	1200	SF	$ 37	$ 44,004	40	20	20	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 14,668	$ 29,336
Slab, reinforced concrete	Concrete Foundation	22981	SF	$ 10	$ 229,810	100	72	28	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Common Exterior Door, solid wood /metal clad	Common Entry Doors	32	Each	$ 600	$ 19,200	25	22	3	$ -	$ -	$ 6,400	$ 6,400	$ 6,400	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Brick/block veneer	Brick Veneer - Replacement	33660	SF	$ 7	$ 218,790	60	30	30	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Aluminum	Aluminum Windows	288	Each	$ 667	$ 192,096	40	18	22	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Asphalt Shingle	Asphalt Shingle Roofing	22342	SF	$ 3	$ 73,729	20	17	3	$ -	$ -	$ 24,576	$ 24,576	$ 24,576	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Gutters/Downspouts, aluminum	Gutters and Downspouts	1683	LF	$ 8	$ 12,623	20	17	3	$ -	$ -	$ 4,208	$ 4,208	$ 4,208	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Soffits, Wood, Vinyl, Metal	Soffits and Fascia	1683	SF	$ 20	$ 33,660	20	17	3	$ -	$ -	$ 11,220	$ 11,220	$ 11,220	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Cast iron sanitary waste	Sewer Main	3	Each	$ 54,750	$ 164,250	75	38	37	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Domestic Cold Water Pumps	Water Circulation Pumps	4	Each	$ 1,657	$ 6,628	20	10	10	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,628	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
DHW storage tanks	Water Storage Tank	3	Each	$ 2,052	$ 6,156	15	4	11	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,052	$ 2,052	$ 2,052	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Boilers, Oil/ Gas/ Dual Fuel, High MBH	Domestic Water Boilers	2	Each	$ 40,000	$ 80,000	40	20	15	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 26,667	$ 26,667	$ 26,667	$ -	$ -	$ -	$ -
Boilers, Oil/ Gas/ Dual Fuel, High MBH - Centralized	Heating Water Boilers	2	Each	$ 420,000	$ 840,000	40	20	15	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 280,000	$ 280,000	$ 280,000	$ -	$ -	$ -	$ -
Hydronic/Water Circulating Pumps	Hydronic HVAC Circulation Pumps	2	Each	$ 1,750	$ 3,500	20	10	10	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Radiation-steam/hydronic (baseboard or freestanding radiator)	Hydronic Radiators	120	Each	$ 250	$ 30,000	50	40	10	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,000	$ 10,000	$ 10,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Electric AC condenser, pad or rooftop	3-Ton A/C Unit	1	Each	$ 2,492	$ 2,492	15	8	7	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,492	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Electric furnace/air handler	Electric Air Handler - Residential	1	Each	$ 1,800	$ 1,800	20	10	10	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,800	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Resilient tile or sheet floor (vinyl, linoleum) - Common	Vinyl Flooring - Common Floor	2691	SF	$ 7	$ 18,514	20	8	12	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,171	$ 6,171	$ 6,171	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Interior doors, solid core, wood, metal clad, fire rated	Solid Interior Doors - Common Area	8	Each	$ 600	$ 4,800	35	15	20	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,800
Cabinets & vanities - Common	Cabinet Upgrades - Common Area	1	Each	$ 6,500	$ 6,500	25	10	15	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,500	$ -	$ -	$ -	$ -	$ -
Refrigerator/freezer - Common	Standard Refrigerator - Common Area	1	Each	$ 650	$ 650	15	8	7	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 650	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Range, cook top, wall oven - Common	Range/Oven - Common Area	1	Each	$ 869	$ 869	25	10	15	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 869	$ -	$ -	$ -	$ -	$ -
Dishwasher - Common	Standard Dishwasher - Common Area	1	Each	$ 400	$ 400	15	5	10	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 400	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Common area bath accessories (towel bars, grab bars, toilet stalls, etc.)	Common/Public Restroom Accessories	2	Each	$ 2,875	$ 5,750	12	4	8	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,917	$ 1,917	$ 1,917	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,917	$ 3,833
Interior doors, solid core, wood, metal clad	Unit Entrance Doors	56	Each	$ 600	$ 33,600	35	17	18	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 11,200	$ 11,200	$ 11,200	$ -
Resilient tile or sheet floor (vinyl, linoleum)	Vinyl Flooring - Kitchens and Baths (Dwelling Units) (Older)	28	Each	$ 800	$ 22,400	20	17	3	$ -	$ -	$ 7,467	$ 7,467	$ 7,467	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Resilient tile or sheet floor (vinyl, linoleum)	Vinyl Flooring - Kitchens and Baths (Dwelling Units) (Newer)	28	Each	$ 800	$ 22,400	20	9	11	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 7,467	$ 7,467	$ 7,467	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Hardwood floor (3/4" strip or parquet) - Common	1-Bed Wood Flooring (Dwelling Units) (Older)	24	Each	$ 2,400	$ 57,600	50	42	8	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 19,200	$ 19,200	$ 19,200	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Hardwood floor (3/4" strip or parquet) - Common	1-Bed Wood Flooring (Dwelling Units) (Newer)	24	Each	$ 2,400	$ 57,600	50	27	23	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Hardwood floor (3/4" strip or parquet) - Common	2-Bed Wood Flooring (Dwelling Units) (Older)	3	Each	$ 2,400	$ 7,200	50	42	8	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,400	$ 2,400	$ 2,400	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Hardwood floor (3/4" strip or parquet) - Common	2-Bed Wood Flooring (Dwelling Units) (Newer)	3	Each	$ 2,400	$ 7,200	50	27	23	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Cabinets & vanities	Replace Cabinets/Tops (Dwelling Units)	56	Each	$ 5,062	$ 283,457	25	16	9	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 56,691	$ 56,691	$ 56,691	$ 56,691	$ 56,691	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Refrigerator/freezer	Standard Refrigerator (Dwelling Units) (Older)	28	Each	$ 650	$ 18,200	15	12	3	$ -	$ -	$ 6,067	$ 6,067	$ 6,067	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,067	$ 6,067	$ 6,067
Refrigerator/freezer	Standard Refrigerator (Dwelling Units) (Newer)	28	Each	$ 650	$ 18,200	15	6	9	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,067	$ 6,067	$ 6,067	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Range, cook top, wall oven	Range/Oven (Dwelling Unit) (Older)	28	Each	$ 869	$ 24,332	25	12	13	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 8,111	$ 8,111	$ 8,111	$ -	$ -	$ -	$ -	$ -	$ -
Range, cook top, wall oven	Range/Oven (Dwelling Unit) (Newer)	28	Each	$ 869	$ 24,332	25	9	16	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 8,111	$ 8,111	$ 8,111	$ -	$ -	$ -
Bath/kitchen vent/exhaust fans	Install Bathroom Exhaust Fans	56	Each	$ 1,000	$ 56,000	15	10	5	$ -	$ -	$ -	$ 11,200	$ 11,200	$ 11,200	$ 11,200	$ 11,200	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 11,200	$ 11,200	$ 33,600
Tenant electrical panel	Replace Electrical Panels	56	Each	$ 1,400	$ 78,400	50	42	8	$ -	$ -	$ -	$ -	$ -	$ -	$ 15,680	$ 15,680	$ 15,680	$ 15,680	$ 15,680	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Bath tubs & sinks, cast iron	Fully Remodel Bathrooms	56	Each	$ 17,500	$ 980,000	75	60	5	$ -	$ -	$ 140,000	$ 140,000	$ 140,000	$ 140,000	$ 140,000	$ 140,000	$ 140,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Copper Tube, supply	Plumbing Supply Line Replacement	56	Each	$ 2,400	$ 134,400	50	41	9	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 26,880	$ 26,880	$ 26,880	$ 26,880	$ 26,880	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Lighting- interior common space	Modernize Common Area Exterior/Interior Lighting	16	Each	$ 600	$ 9,600	30	6	24	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Paints, stains, clear finishes, interior - Common	Repaint Common Area Walls/Ceilings	3400	SF	$ 1	$ 3,400	20	6	14	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,133	$ 1,133	$ 1,133	$ -	$ -	$ -	$ -	$ -
Paints, stains, clear finishes, interior	Repaint Unit Walls/Ceilings	56	Each	$ 2,000	$ 112,000	15	5	10	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 22,400	$ 22,400	$ 22,400	$ 22,400	$ 22,400	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Closet/storage specialties, shelving	Replacement Tenant Unit Shelving Systems	56	Each	$ 450	$ 25,200	25	12	13	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,040	$ 5,040	$ 5,040	$ 5,040	$ 5,040	$ -	$ -	$ -	$ -	$ -
Lighting - Tenant Spaces	Modernize Existing Unit Lighting	56	Each	$ 537	$ 30,072	25	5	20	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,014	$ 6,014	$ 18,043
2 pipe/4 pipe hydronic distribution-above grade	Replace Hydronic HVAC Plumbing Lines	56	Each	$ 415	$ 23,240	50	41	9	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,648	$ 4,648	$ 4,648	$ 4,648	$ 4,648	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Building service panel	Building Service Electrical Mains	15	Each	$ 4,250	$ 63,750	50	40	10	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 12,750	$ 12,750	$ 12,750	$ 12,750	$ 12,750	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
								Total:	**$ -**	**$ -**	**$ 202,968**	**$ 211,137**	**$ 211,137**	**$ 151,200**	**$ 166,880**	**$ 284,769**	**$ 308,633**	**$ 178,633**	**$ 176,963**	**$ 154,099**	**$ 90,835**	**$ 20,455**	**$ 320,951**	**$ 328,320**	**$ 314,777**	**$ 28,408**	**$ 34,481**	**$ 51,066**	**$ 89,613**

7.5 INSURABLE VALUE - REPLACEMENT COST

Replacement Cost Per Building

Building Identifier	Replacement Cost of Building Per SF	Source of Replacement Cost	Replacement Cost of Building
Building 1	$219	RS Means	$3,113,085.00
Building 2	$219	RS Means	$3,103,887.00
Building 3	$219	RS Means	$2,972,487.00
		Total:	$ 9,189,459.00

8.0 ASSESSOR QUALIFICATIONS

I understand that my Capital Needs Assessment will be used by Boston Housing Authority to document to the U.S. Department of Housing and Urban Development that the MAP Lender's application for FHA multifamily mortgage insurance was prepared and reviewed in accordance with HUD requirements. I certify that my review was in accordance with the HUD requirements applicable on the date of my review and that I have no financial interest or family relationship with the officers, directors, stockholders, or partners of the Borrower, the general contractor, any subcontractors, the buyer or seller of the proposed property or engage in any business that might present a conflict of interest.

I am employed full time by the MAP Lender (underwriter) or under contract for this specific assignment (as Needs Assessor) and I have no other side deals, agreements, or financial considerations with the MAP Lender or others in connection with this transaction.

I hereby certify under penalty of perjury that all of the information I have provided on this form and in any accompanying documentation is true and accurate. I acknowledge that if I knowingly have made any false, fictitious, or fraudulent statement, representation, or certification on this form or on any accompanying documents, I may be subject to criminal, civil, and/or administrative sanctions, including fines, penalties, and/or imprisonment under applicable federal law, including but not limited to 12 U.S.C. § 1833a; 18 U.S.C. §§1001, 1006, 1010, 1012, and 1014; 12 U.S.C. §1708 and 1735f-14; and 31 U.S.C. §§3729 and 3802.

The site inspection was completed on July 6, 2022

A resume of the property evaluator and the senior reviewers are included in the appendix of this report.

DRAFT
Juan Sequeira, Assessment Project Manager

DRAFT
Jeb Bonnett, Senior Vice President - HUD Building Assessments

David Taylor, Accessibility Manager

DRAFT
Roy Anderson PE, Vice President

Warning: Title 18 U.S.C. 1001, provides in part that whoever knowingly and willfully makes or uses a document containing any false, fictitious, or fraudulent statement or entry, in any manner in the jurisdiction of any department or agency of the United States, shall be fined not more than $10,000 or imprisoned for not more than five years or both.

9.0 LIMITING CONDITIONS

Capital Needs Assessments performed by AEI Consultants are based upon, but not limited to, the scope of work outlined by ASTM Standard E2018-15. Our review of the subject property consisted of a visual inspection of the site, the structure(s) and the interior spaces. Technical Assessments were made based on the appearance of the improvements at the time of this Assessment. No destructive or invasive testing was included in the scope of this review.

The recommendations and conclusions presented as a result of this Assessment apply strictly to the time the Assessment was performed. Available documentation has been analyzed using currently accepted Assessment techniques and AEI believes that the inferences made are reasonably representative of the property.

No warranty is expressed or implied, except that the services rendered have been performed in accordance with generally accepted Assessment practices applicable at the time and location of the study.

This report should not be construed as technically exhaustive. This report does not warranty or guarantee compliance with any Federal, state or local stature, ordinance or regulation including but not limited to, building codes, safety codes, environmental regulations, health codes or zoning ordinances or compliance with trade/design standards or the standards developed by the insurance industry. Local, state and federal regulations, and codes change significantly over time from when the subject property was developed and the subject building was constructed. The subject property and subject building may not meet all current regulations, and code requirements put forth on a local, state, or federal level.

AEI Consultants has made reasonable efforts to properly assess the property conditions within the contracted scope of services; however, limitations during the assessment may be encountered.

AEI Consultants' findings and conclusions were based primarily on the visual assessment of the property at the time the site visit. In addition, the assessment value is based upon comparative judgments with similar properties in the property observer's experience. The Client is herewith advised that the conditions observed by AEI are subject to change. AEI's property observations included areas that were readily accessible without opening or dismantling secure areas or components. AEI's conclusions did not include any destructive or invasive testing, laboratory analysis, exploratory probing or engineering evaluations of structural, mechanical, electrical, or other systems with related calculations.

No assessment can wholly eliminate the uncertainty regarding the presence of physical deficiencies and performances of the building system. According to the ASTM guidelines, a property condition assessment is intended to reduce the risk regarding potential building system and component failure. The ASTM standard recognizes the inherent subjective nature of the assessment regarding such issues as workmanship, quality of care during installation, maintenance of building systems and remaining useful of the building system or components.

Assessments, analysis and opinions expressed within this report are not representations regarding either the design integrity or the structural soundness of the project.

No destructive or invasive testing was included in the scope of this Assessment.

APPENDIX A

Dwelling Unit Photo Documentation

1. Building 1; Unit: 4; Floor: 2; Style: 2 Bed / 1 Bath:

2. Building 1; Unit: 4; Floor: 2; Style: 2 Bed / 1 Bath: Kitchen.

3. Building 1; Unit: 4; Floor: 2; Style: 2 Bed / 1 Bath: Damaged kitchen finishes. (Non-Critical Repair)

4. Building 1; Unit: 4; Floor: 2; Style: 2 Bed / 1 Bath: Living room.

5. Building 1; Unit: 4; Floor: 2; Style: 2 Bed / 1 Bath: Damaged living room finishes. (Non-Critical Repair)

6. Building 1; Unit: 4; Floor: 2; Style: 2 Bed / 1 Bath: Bedroom 1.

7. Building 1; Unit: 4; Floor: 2; Style: 2 Bed / 1 Bath: Heater.

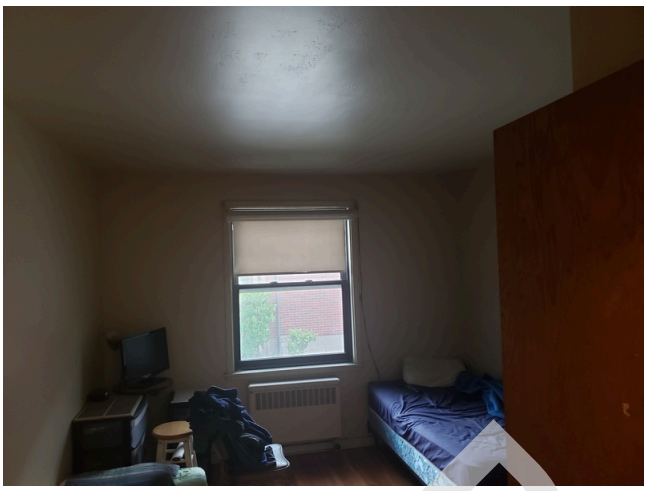
8. Building 1; Unit: 4; Floor: 2; Style: 2 Bed / 1 Bath: Bathroom.

9. Building 1; Unit: 4; Floor: 2; Style: 2 Bed / 1 Bath: Bathroom.

10. Building 1; Unit: 18; Floor: 2; Style: 1 Bed / 1 Bath

11. Building 1; Unit: 18; Floor: 2; Style: 1 Bed / 1 Bath: Kitchen.

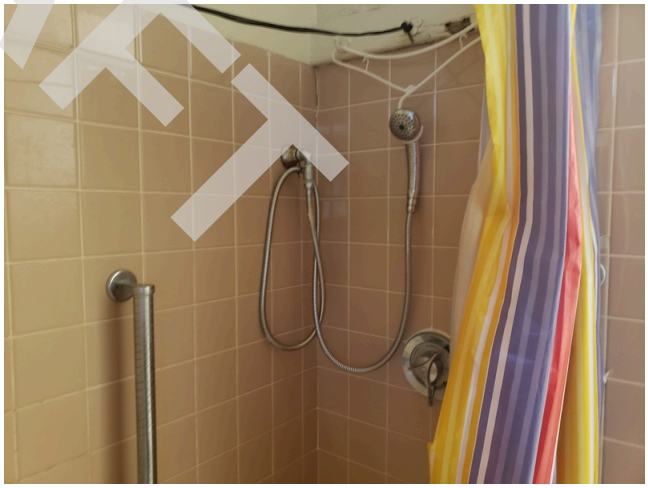
12. Building 1; Unit: 18; Floor: 2; Style: 1 Bed / 1 Bath: Living room.



13. Building 1; Unit: 18; Floor: 2; Style: 1 Bed / 1 Bath: Bedroom.

14. Building 1; Unit: 18; Floor: 2; Style: 1 Bed / 1 Bath: Bathroom.

15. Building 1; Unit: 18; Floor: 2; Style: 1 Bed / 1 Bath: Bathroom.



16. Building 1; Unit: 18; Floor: 2; Style: 1 Bed / 1 Bath: Bathroom.

17. Building 2; Unit: 35; Floor: 2; Style: 1 Bed / 1 Bath

18. Building 2; Unit: 35; Floor: 2; Style: 1 Bed / 1 Bath: Kitchen.

19. Building 2; Unit: 35; Floor: 2; Style: 1 Bed / 1 Bath: Living room with missing finishes. (Critical Repair)

20. Building 2; Unit: 35; Floor: 2; Style: 1 Bed / 1 Bath: Bedroom.

21. Building 2; Unit: 35; Floor: 2; Style: 1 Bed / 1 Bath: Bathroom.

APPENDIX B

General Photo Documentation

1. Stormwater Drainage: Typical topography found throughout the site.

2. Stormwater Drainage: Typical adjoining property found around the site.

3. Stormwater Drainage: Typical adjoining property found around the site.

4. Stormwater Drainage: Typical paving drainage found throughout site.

5. Stormwater Drainage: Typical downspout found throughout site.

6. Landscaping & Appurtenances: Damaged CMU wall found on the north perimeter of the property. (Non-Critical Repair)

7. Access & Egress: West access drive to the property.

8. Access & Egress: East access drive to the property.

9. Paving, Curbing, & Parking: Typical asphalt pavement found throughout the site.

10. Paving, Curbing, & Parking: Typical concrete curving found throughout the site.

11. Paving, Curbing, & Parking: Typical accessible parking spaces found throughout the property.

12. Paving, Curbing, & Parking: Typical parking spaces found throughout the property.

13. Paving, Curbing, & Parking: Typical striping found throughout the property.

14. Flatwork (Walks, Plazas, Terraces, Patios): Poured in place concrete ramp and sidewalks found at the property.

15. Flatwork (Walks, Plazas, Terraces, Patios): Concrete steps with steel handrails found at the property.

16. Flatwork (Walks, Plazas, Terraces, Patios): Typical concrete sidewalks found at the property.

17. Landscaping & Appurtenances: Typical landscaping found throughout at the property.

18. Landscaping & Appurtenances: Typical landscaping found throughout at the property.

19. Landscaping & Appurtenances: Typical landscaping found throughout at the property.

20. Landscaping & Appurtenances: Perimeter wrought iron fencing found on north of the property.

21. Landscaping & Appurtenances: Refuse area fencing found on the property.

22. Landscaping & Appurtenances: Typical building lighting found throughout the property.

23. Landscaping & Appurtenances: Typical parking area lighting found throughout the property.

24. Landscaping & Appurtenances: Monumental signage found on the property.

25. Site Utilities: Central gas meter found at the site.

26. Site Utilities: Central electric meter found at the site.

27. Site Utilities: Central water meter found at the site.

28. Foundation: Typical basement found throughout the site.

29. Foundation: Typical cracks on basement walls and ceilings found throughout the site. (Critical Repair)

30. Foundation: Typical cracks on basement walls and ceilings found throughout the site. (Critical Repair)

31. Plumbing: Typical corroded pipes found throughout the property. (Non-Critical Repair)

32. Foundation: Typical basement found throughout the site.

33. Foundation: Typical cracks on basement walls and ceilings found throughout the site. (Critical Repair)

34. Foundation: Typical cracks on basement walls and ceilings found throughout the site. (Critical Repair)

35. Foundation: Typical cracks on basement walls and ceilings found throughout the site. (Critical Repair)

36. Foundation: Typical cracks on basement walls and ceilings found throughout the site. (Critical Repair)

37. Attics & Eaves: Typical perforated eaves vents found throughout the site (Non-Critical Repair)

38. Attics & Eaves: Typical ridge vents found throughout the site.

39. Exterior Doors & Entry Systems: Typical unit door found throughout the site.

40. Exterior Doors & Entry Systems: Typical building access door found throughout the site.

41. Sidewall System: Typical sidewall unpainted brick found throughout the site.

42. Sidewall System: Typical sidewall unpainted brick found throughout the site.

43. Sidewall System: Typical sidewall unpainted brick found throughout the site.

44. Sidewall System: Typical sidewall unpainted brick found throughout the site.

45. Sidewall System: Typical cracked unpainted brick found throughout the site. (Non-Critical Repair)

46. Sidewall System: Typical weathered and damaged wood trim found throughout the site. (Non-Critical Repair)

47. Sidewall System: Typical weathered and damaged wood trim found throughout the site. (Non-Critical Repair)

48. Sidewall System: Typical weathered and damaged wood trim found throughout the site. (Non-Critical Repair)

49. Sidewall System: Typical weathered and damaged wood trim found throughout the site. (Non-Critical Repair)

50. Sidewall System: Building 2 northeast corner facade.

51. Sidewall System: Building 2 east facade.

52. Sidewall System: Building 2 southeast corner facade.

53. Sidewall System: Building 2 south facade.

54. Sidewall System: Building 2 southwest corner facade.

55. Sidewall System: Building 2 west internal facade.

56. Sidewall System: Building 1 southeast corner facade.

57. Sidewall System: Building 1 southwest corner facade.

58. Sidewall System: Building 1 west facade.

59. Sidewall System: Building 1 west facade.

60. Sidewall System: Building 1 northwest corner facade.

61. Sidewall System: Building 1 northeast internal corner facade.

62. Sidewall System: Building 3 southwest corner facade.

63. Sidewall System: Building 3 southwest corner facade.

64. Sidewall System: Building 3 south corner facade.

65. Sidewall System: Building 3 west facade.

66. Sidewall System: Building 3 northwest corner facade.

67. Windows: Typical single-hung style double-pane aluminum windows found throughout the site.

68. Windows: Typical single-hung style double-pane aluminum windows found throughout the site.

69. Roofing Finish: Typical asphalt shingle roofing found throughout the site.

70. Roofing Finish: Typical asphalt shingle roofing found throughout the site.

71. Roofing Finish: Typical gutters and downspouts found throughout the site.

72. Roofing Finish: Typical gutters and downspouts found throughout the site.

73. Plumbing: Typical cast iron and PVC waste pipes found throughout the property.

74. Plumbing: Typical cast iron and PVC waste pipes found throughout the property.

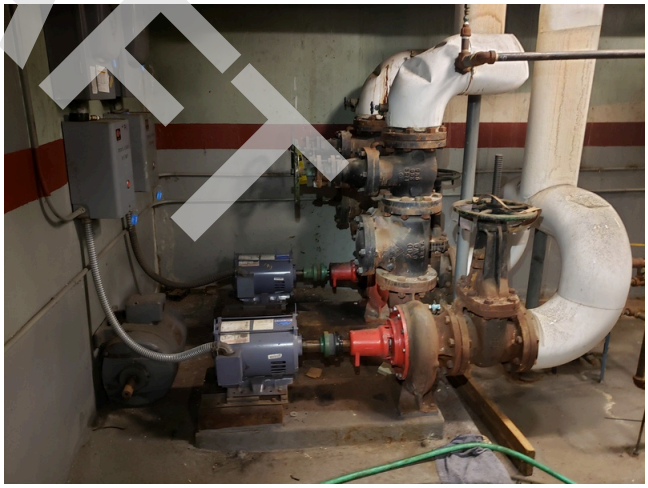
75. Plumbing: Typical cast iron and PVC waste pipes found throughout the property.

76. Plumbing: Typical corroded pipes found throughout the property. (Non-Critical Repair)

77. Plumbing: Typical corroded pipes found throughout the property. (Non-Critical Repair)

78. Central gas-fired boilers found on the property.

79. Plumbing: Storage tanks found on the property.



80. Plumbing: Circulation pumps found on the property.

81. HVAC Systems: Typical tenant owned window unit AC system found throughout the site.

82. HVAC Systems: Typical tenant owned window unit AC system found throughout the site.

83. HVAC Systems: Typical tenant owned window unit AC system found throughout the site.

84. HVAC Systems: 3 ton AC system found at the community room.

85. Central gas boilers found on the property.

86. Central gas boilers found on the property.

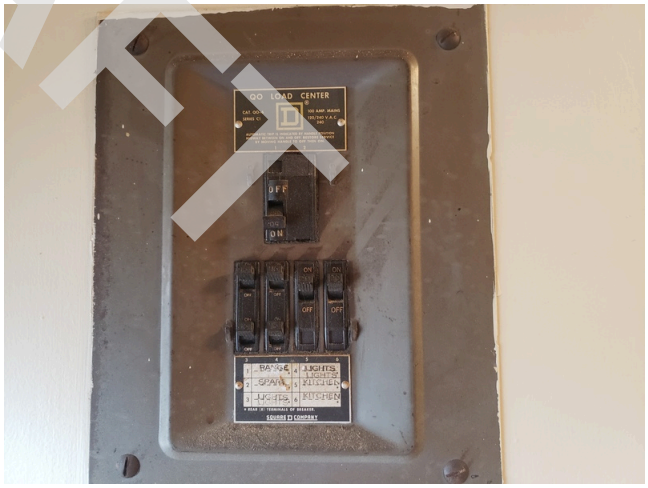
87. HVAC Systems: Typical hydronic radiant heater found in dwelling units throughout the property.

88. Electrical System: Typical electric meter bank found throughout the site.

89. Electrical System: Central electric meter found at the site.

90. Electrical System: Typical master breaker found throughout the site.

91. Electrical System: Typical dwelling unit electric panel found throughout the site.



92. Electrical System: Typical dwelling unit electric panel found throughout the site.

93. Life & Fire Safety: Typical emergency lighting found throughout the site.

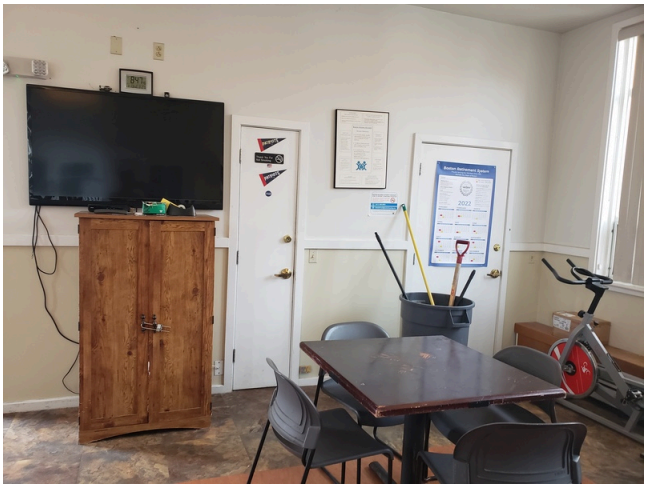
94. Life & Fire Safety: Typical illuminated exit sign found throughout the site.

95. Life & Fire Safety: Typical non-compliant smoke detector found throughout the site. (Critical Repair)

96. Life & Fire Safety: Typical non-compliant smoke detector found throughout the site. (Critical Repair)

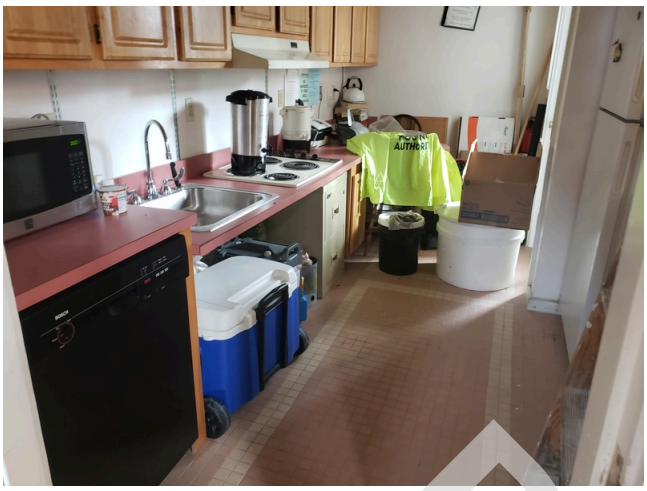
97. Life & Fire Safety: Typical fire extinguisher found throughout the site.

98. Common Area Interior Elements: Community room.



99. Common Area Interior Elements: Community room.

100. Common Area Interior Elements: Common laundry room.



101. Common Area Interior Elements: Community Kitchen.

102. Common Area Interior Elements: Typical staircase with worn down finishes found throughout the site. (Non-Critical Repair)

103. Common Area Interior Elements: Typical staircase with worn down finishes found throughout the site. (Non-Critical Repair)

104. Common Area Interior Elements: Typical staircase with worn down finishes found throughout the site. (Non-Critical Repair)

105. Dwelling Unit Interior Elements: Typical wood laminate flooring and sheetrock finish found in dwelling units throughout the site.

106. Dwelling Unit Interior Elements: Typical vinyl flooring and sheetrock finish found in dwelling units throughout the site.

107. Dwelling Unit Interior Elements: Typical tile flooring and sheetrock finish found in dwelling units throughout the site.

108. Dwelling Unit Interior Elements: Removed flooring and finishes due to decomposing body removal. (Critical Repair)

109. Dwelling Unit Interior Elements: Damaged finishes observed in unit 4. (Non-Critical Repair)

110. Dwelling Unit Interior Elements: Damaged finishes observed in unit 4. (Non-Critical Repair)

111. Dwelling Unit Interior Elements: Damaged finishes observed in unit 4. (Non-Critical Repair)

112. Dwelling Unit Interior Elements: Damaged finishes observed in unit 4. (Non-Critical Repair)

113. Dwelling Unit Interior Elements: Damaged finishes observed in unit 20. (Non-Critical Repair)

114. Dwelling Unit Interior Elements: Damaged finishes observed in unit 20. (Non-Critical Repair)

115. Dwelling Unit Interior Elements: Damaged finishes observed in unit 20. (Non-Critical Repair)

116. Dwelling Unit Interior Elements: Damaged finishes observed in unit 20. (Non-Critical Repair)

117. Dwelling Unit Interior Elements: Damaged finishes observed in unit 20. (Non-Critical Repair)

118. Dwelling Unit Interior Elements: Damaged finishes observed in unit 20. (Non-Critical Repair)

119. Dwelling Unit Interior Elements: Damaged finishes observed in unit 20. (Non-Critical Repair)

120. Dwelling Unit Interior Elements: Typical damaged sheetrock ceilings found throughout the site. (Non-Critical Repair)

121. Dwelling Unit Interior Elements: Typical damaged sheetrock ceilings found throughout the site. (Non-Critical Repair)

122. Appliances: Typical range found throughout the site.

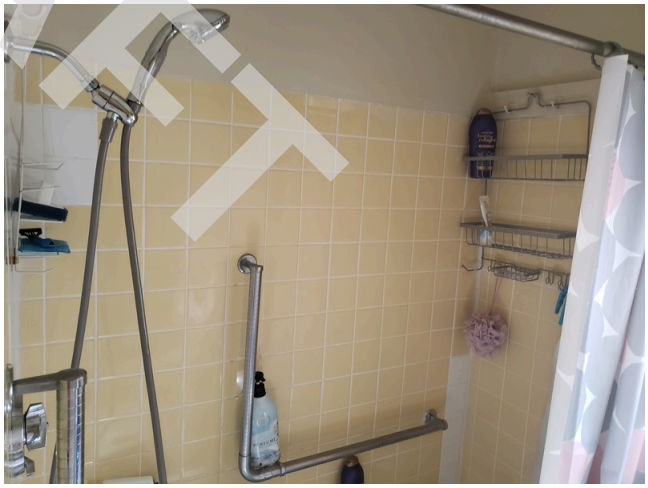
123. Appliances: Typical appliance package found throughout the site.

124. Cabinets & Fixtures: Typical dwelling unit kitchen sink, countertop, and wood cabinets found throughout the site.

125. Cabinets & Fixtures: Typical dwelling unit kitchen sink, countertop, and wood cabinets found throughout the site.

126. Cabinets & Fixtures: Typical dwelling unit kitchen sink, countertop, and wood cabinets found throughout the site.

127. Cabinets & Fixtures: Typical dwelling unit porcelain sink and toilet found throughout the site.



128. Cabinets & Fixtures: Typical dwelling unit enamel tub and tile surround found throughout the site.

129. Moisture and Microbial Growth: Mold on water pipes observed throughout the site. (Critical Repair)

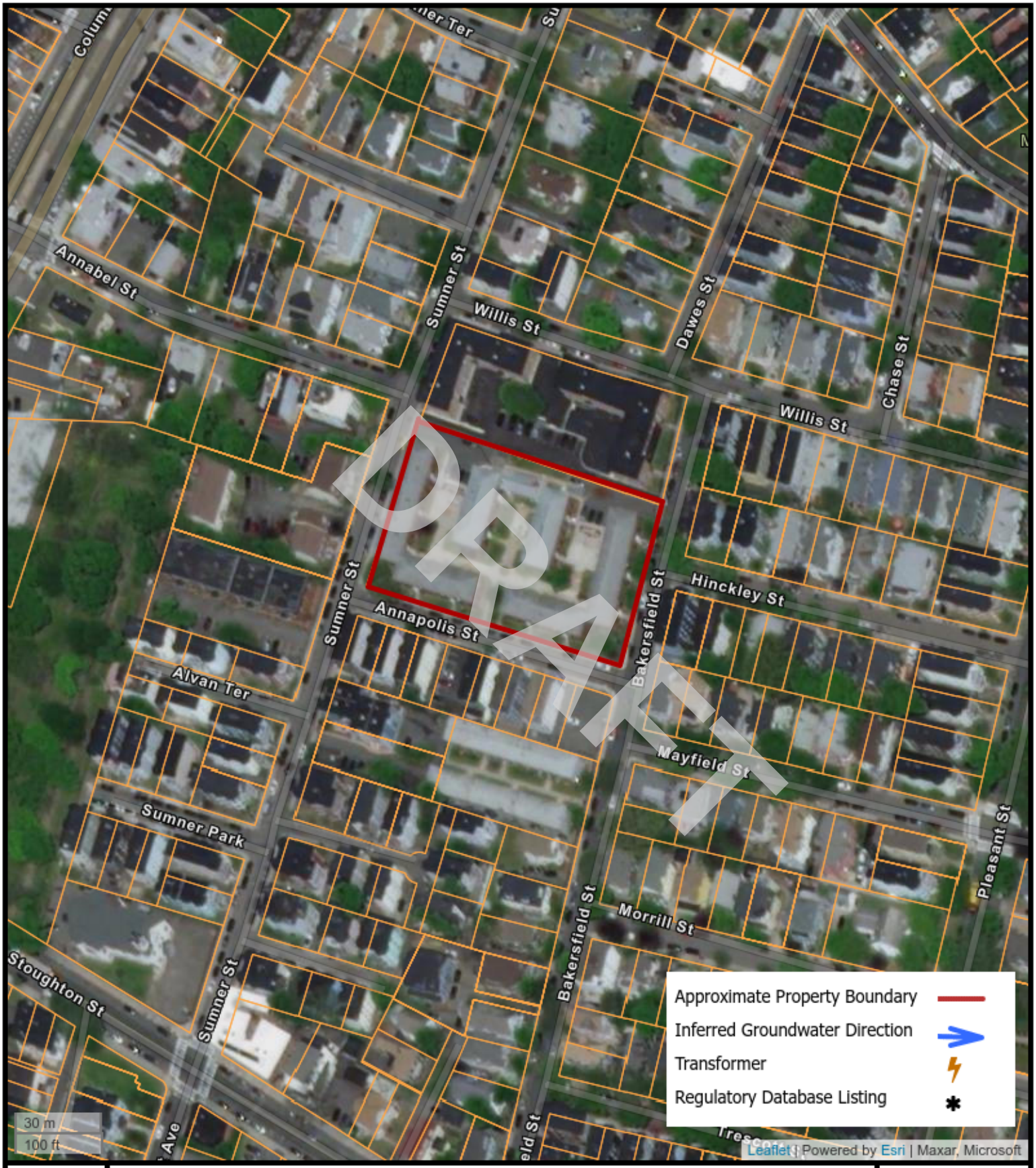
130. Moisture and Microbial Growth: Mold on water pipes observed throughout the site. (Critical Repair)

131. UFAS Concern: Common accessible restroom without levered sin hardware. (Critical Repair)

132. David Taylor signature

APPENDIX C

Street Map and Aerial Photo



N

SITE MAP

52 Sumner Street, Dorchester, Massachusetts 02125

AEI Project Number: 463356

AEI Consultants

N

STREET MAP

52 Sumner Street, Dorchester, Massachusetts 02125

AEI Project Number: 463356

AEI Consultants

APPENDIX D

USGS Seismic Design Map

OSHPD

52 Sumner St, Dorchester, MA 02125, USA

Latitude, Longitude: 42.3178178, -71.0617784

Date	7/25/2022, 6:23:30 AM
Design Code Reference Document	ASCE41-13
Custom Probability	
Site Class	D - Stiff Soil

Type	Description	Value
Hazard Level		BSE-2N
S_S	spectral response (0.2 s)	0.212
S_1	spectral response (1.0 s)	0.068
S_{XS}	site-modified spectral response (0.2 s)	0.339
S_{X1}	site-modified spectral response (1.0 s)	0.164
F_a	site amplification factor (0.2 s)	1.6
F_v	site amplification factor (1.0 s)	2.4
ssuh	max direction uniform hazard (0.2 s)	0.238
crs	coefficient of risk (0.2 s)	0.892
ssrt	risk-targeted hazard (0.2 s)	0.212
ssd	deterministic hazard (0.2 s)	1.5
s1uh	max direction uniform hazard (1.0 s)	0.076
cr1	coefficient of risk (1.0 s)	0.9
s1rt	risk-targeted hazard (1.0 s)	0.068
s1d	deterministic hazard (1.0 s)	0.6

Type	Description	Value
Hazard Level		BSE-1N
S_{XS}	site-modified spectral response (0.2 s)	0.226
S_{X1}	site-modified spectral response (1.0 s)	0.109

Type	Description	Value
Hazard Level		BSE-2E
S_S	spectral response (0.2 s)	0.128
S_1	spectral response (1.0 s)	0.044
S_{XS}	site-modified spectral response (0.2 s)	0.205
S_{X1}	site-modified spectral response (1.0 s)	0.105
f_a	site amplification factor (0.2 s)	1.6
f_v	site amplification factor (1.0 s)	2.4

Type	Description	Value
Hazard Level		BSE-1E
S_S	spectral response (0.2 s)	0.043
S_1	spectral response (1.0 s)	0.016
S_{XS}	site-modified spectral response (0.2 s)	0.069
S_{X1}	site-modified spectral response (1.0 s)	0.039
F_a	site amplification factor (0.2 s)	1.6
F_v	site amplification factor (1.0 s)	2.4

Type	Description	Value
Hazard Level		TL Data
T-Sub-L	Long-period transition period in seconds	6

DISCLAIMER

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APPENDIX E

Record of all Documents Reviewed, Interviews, and Supporting Information

From: Maggie Castelli
To: "sjccountyclerk@sjc.state.ma.us"
Cc: Gregory Banks
Subject: Public Records Request - 463341-463361
Date: Thursday, May 26, 2022 12:58:00 PM
Attachments: image001.png

Hello,

AEI Consultants has been commissioned to complete a Project Capital Needs Assessment and/or Phase I Environmental Site Assessment for the following properties:

Franklin Field	100 Ames Street	Dorchester	Suffolk	MA	02124
Peabody	1875 Dorchester Avenue	Dorchester	Suffolk	MA	02124
Joseph Malone	11 Gordon Avenue	Hyde Park	Suffolk	MA	02136
Highland Park	50 Highland Street	Roxbury	Suffolk	MA	02119
Commonwealth Elderly	35 Fidelis Way	Brighton	Suffolk	MA	02135
Commonwealth Family	35 Fidelis Way	Brighton	Suffolk	MA	02135
Bellflower	24 Bellflower Street	Dorchester	Suffolk	MA	02125
ML King	280 Martin Luther King Boulevard	Boston	Suffolk	MA	02119
JJ Meade	5 Melville Avenue	Boston	Suffolk	MA	02124
JJ Carroll	30 Chestnut Hill Avenue	Brighton	Suffolk	MA	02135
Washington Street	91 Washington Street	Brighton	Suffolk	MA	02135
Davison	101 Davison Street	Hyde Park	Suffolk	MA	02136
Groveland	15 Mary Moore Beatty Circle	Mattapan	Suffolk	MA	02126
Holgate	125 Elm Hill Avenue	Roxbury	Suffolk	MA	02121
Ashmont	374 Ashmont Street	Dorchester	Suffolk	MA	02124
Commonwealth Family	35 Fidelis Way	Brighton	Suffolk	MA	02135
Bellflower	24 Bellflower Street	Dorchester	Suffolk	MA	02125
ML King	280 Martin Luther King Boulevard	Boston	Suffolk	MA	02119
JJ Meade	5 Melville Avenue	Boston	Suffolk	MA	02124
JJ Carroll	30 Chestnut Hill Avenue	Brighton	Suffolk	MA	02135
Davison	101 Davison Street	Hyde Park	Suffolk	MA	02136
Groveland	15 Mary Moore Beatty Circle	Mattapan	Suffolk	MA	02126
Holgate	125 Elm Hill Avenue	Roxbury	Suffolk	MA	02121
Ashmont	374 Ashmont Street	Dorchester	Suffolk	MA	02124
Annapolis	52 Sumner Street	Dorchester	Suffolk	MA	02125
Margaret Collins (Pond St)	29 Pond Street	Jamaica Plain	Suffolk	MA	02130
Anne M Lynch Homes (Old Colony)	265 East 9th Street	South Boston	Suffolk	MA	02127
Alice Taylor	260 Ruggles Street	Roxbury	Suffolk	MA	02120

ME McCormack	10 Kemp Street	South Boston	Suffolk	MA	02127
Charlestown	55 Bunker Hill Street	Charlestown	Suffolk	MA	02129

Are these properties within your jurisdiction?

As part of this assessment, and due diligence, we are required to request the following information, including, but not limited to the following:

Fire Department for information on the storage, generation, usage, or spillage of hazardous substances, petroleum products, pollutants, or controlled substances, and any other environmental conditions for the property, records of fire inspections for the property, AND copies of any outstanding fire code violations.

Building Department for any copies of Certificates of Occupancy and building permits from the last 10 years (year, type of permit, and owner/applicant), as well as the following information regarding building codes:

1. Building code enforced at the time the property was constructed.
2. Additional building codes enforced at the property since construction.
3. Current building code enforced by the municipality.
4. Copies of any outstanding building code violations.

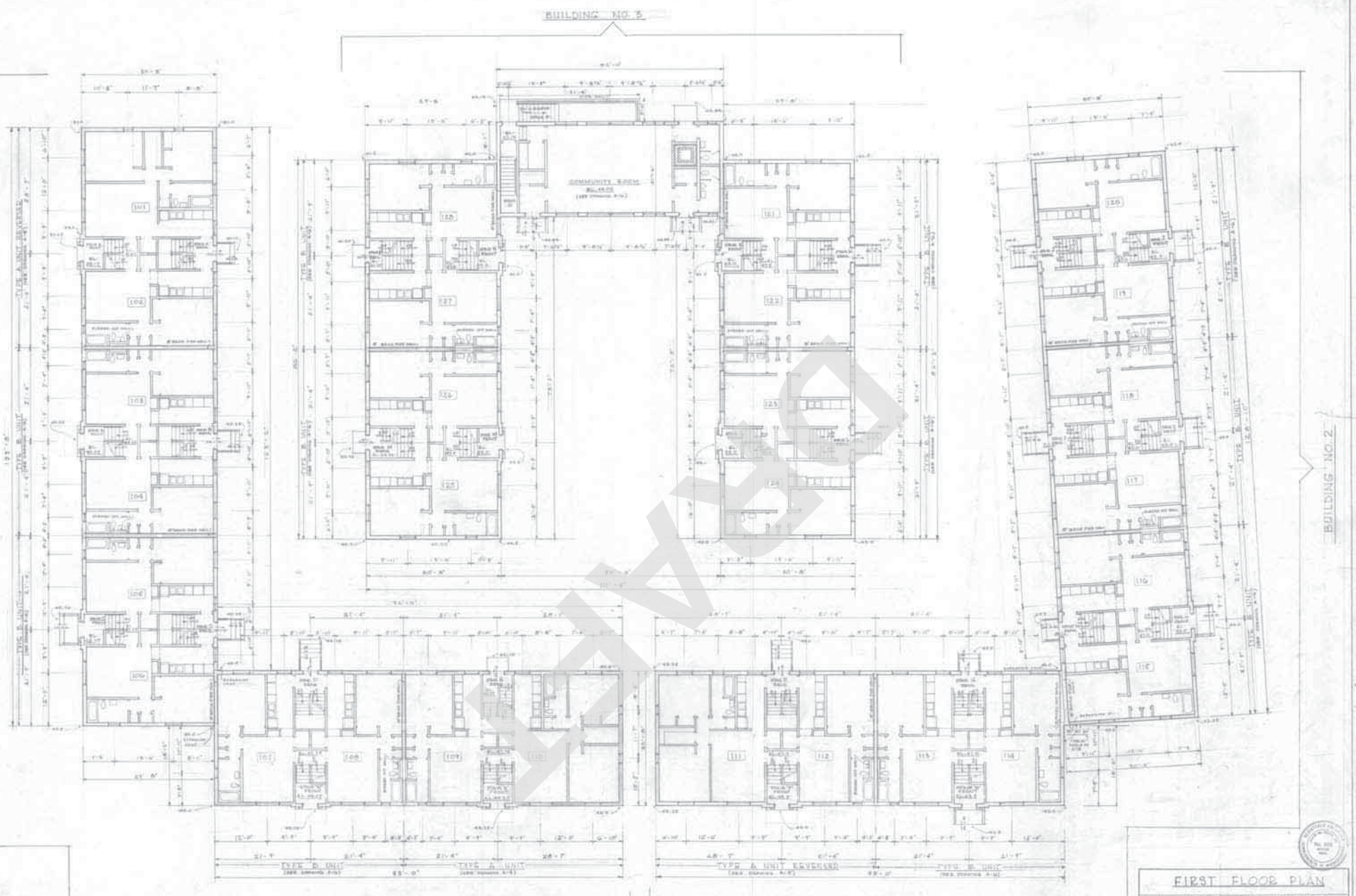
Planning and Zoning a zoning letter to identify if the property has Activity and Use Limitations (AULs), defined as legal or physical restrictions or limitations on the use of, or access to the property; the current zoning classification of the property; AND copies of any outstanding zoning code violations.

Who would be the appropriate contacts to provide all necessary information and documents? Please notify me in advance if the fees for this request are estimated to exceed $75.

Thank you in advance for your help,

Maggie Castelli (she/her)
Administrative Assistant – HUD Services Division
AEI Consultants
1525 Hugeunot Road, Suite 202
Midlothian VA, 23113

e. mcastelli@aeiconsultants.com
www.aeiconsultants.com



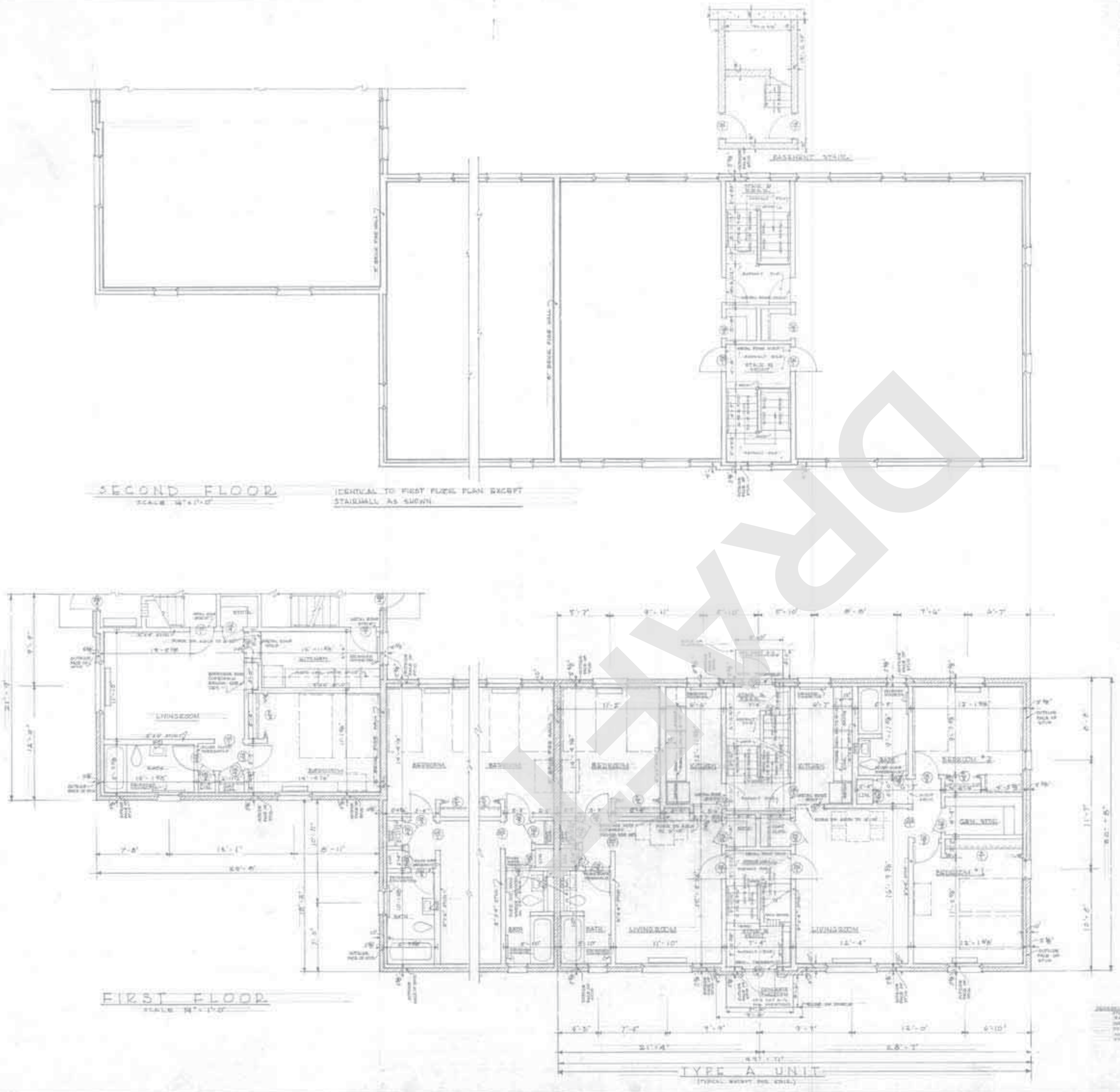
FIRST FLOOR PLAN

BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS — DORCHESTER, MASS.

DEVELOPED UNDER THE UNITED STATES HOUSING ACT
WITH THE ASSISTANCE OF THE
PUBLIC HOUSING ADMINISTRATION

JOHN M. GRAY CO.
ARCHITECTS
222 MILK STREET — BOSTON, MASS.

DRAWING NO. A-2



ROOM FINISH SCHEDULE

ROOM DESIGNATION	FLOOR	BASE	DADO	WALLS	CEILING	REMARKS
BEDROOMS	WOOD	WOOD	PAINTED PLASTER ON GYPSUM LATH	PAINTED PLASTER ON GYPSUM LATH	PAINTED PLASTER ON METAL LATH	[illegible]
LIVING ROOM	DO	DO	DO	DO	DO	[illegible]
[illegible] CLOSET	DO	DO	DO	DO	DO	SEE DET. FOR WOOD SHELVING
COAT CLOSET	DO	DO	DO	DO	DO	SEE DET. FOR WOOD SHELVING & METAL COAT RAIL
LINEN CLOSET	DO	DO	DO	DO	DO	SEE DET. FOR WOOD SHELVING
COAT CLOSET	DO	DO	DO	DO	DO	SEE DET. FOR WOOD SHELVING & METAL COAT RAIL
GENERAL STORAGE CLOSET	DO	DO	DO	DO	DO	SEE DETAIL FOR WOOD SHELVING
BATH	CERAMIC TILE [illegible]	CERAMIC TILE	PAINTED PLASTER ON METAL LATH	PAINTED PLASTER ON METAL LATH	DO	CERAMIC TILE ON WALL AROUND TUB [illegible] SEE DET.
KITCHEN	[illegible]	[illegible]	[illegible]	PAINTED PLASTER ON GYPSUM LATH	DO	[illegible] SEE DET. FOR CABINETS
FRONT STAIRHALL	DO	WOOD	[illegible]	[illegible]	DO	[illegible]
REAR STAIRHALL	DO	DO	DO	DO	DO	DO

TYPE "A" UNIT PLAN

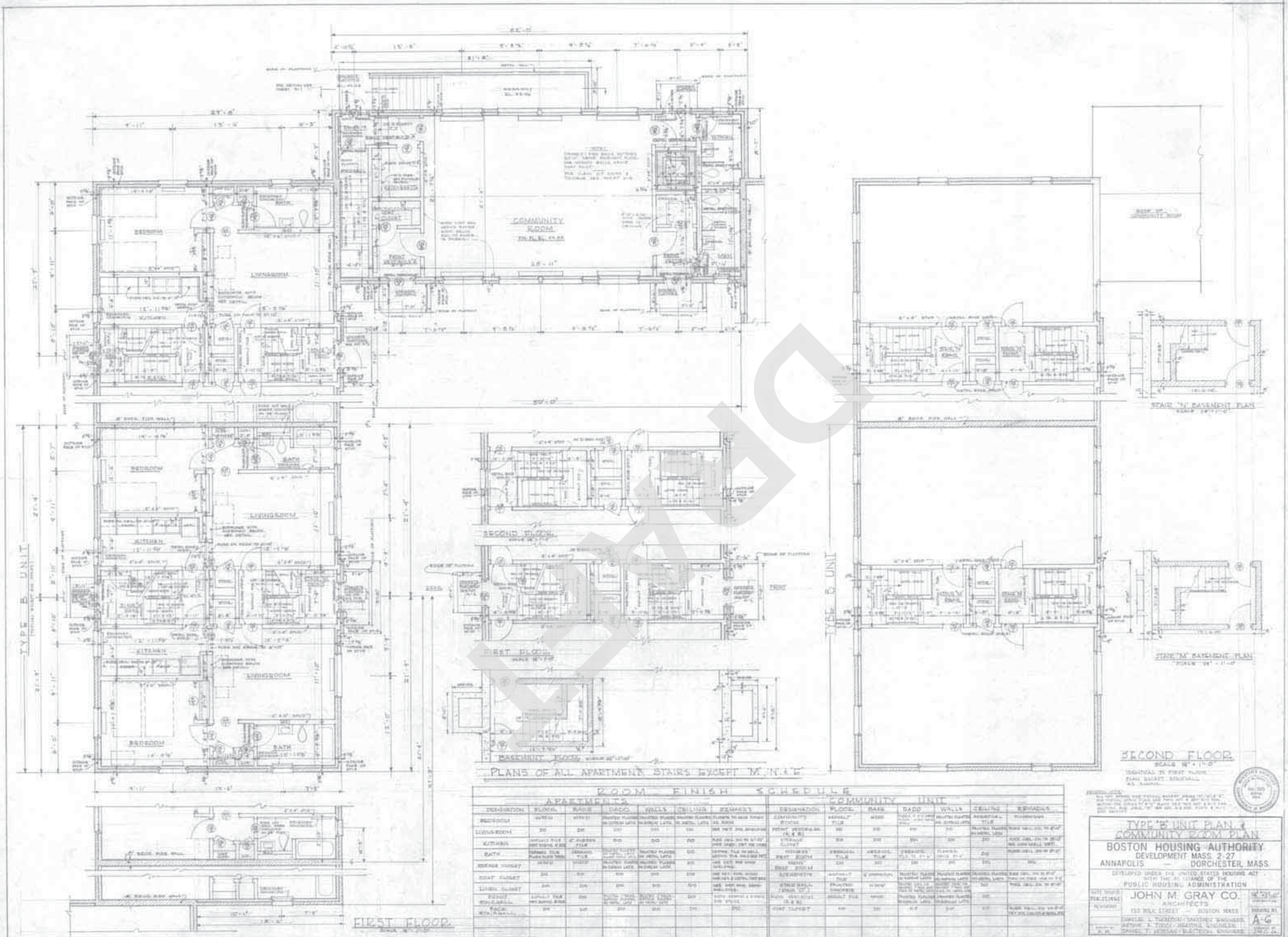
BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS — DORCHESTER, MASS.

DEVELOPED UNDER THE UNITED STATES HOUSING ACT WITH THE ASSISTANCE OF THE
PUBLIC HOUSING ADMINISTRATION

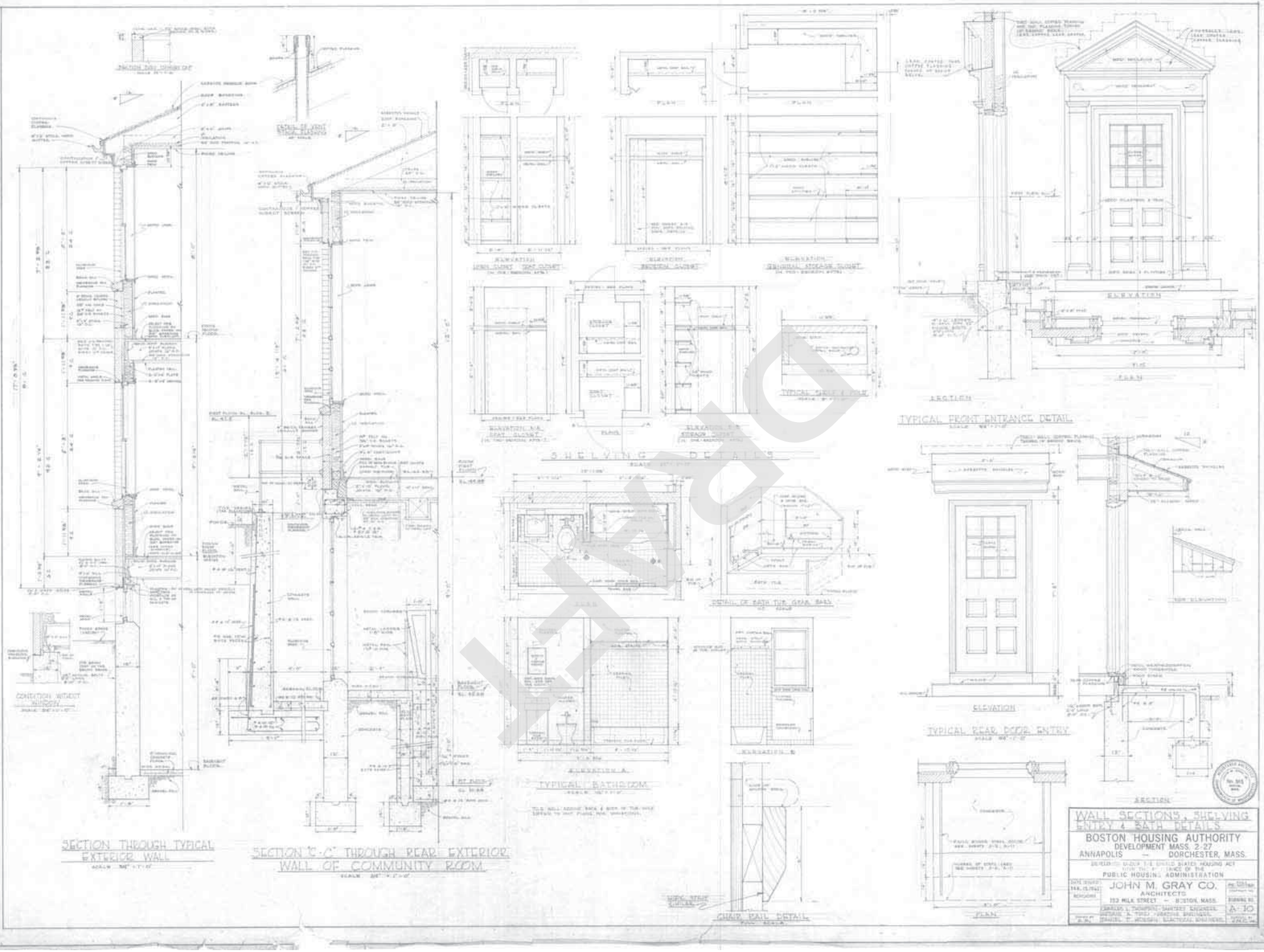
JOHN M. GRAY CO.
ARCHITECTS
153 MILK STREET — BOSTON, MASS.

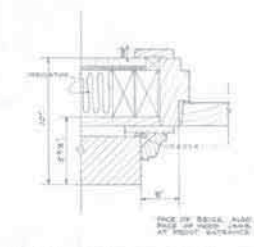
DRAWING NO. A-4

DRAFT



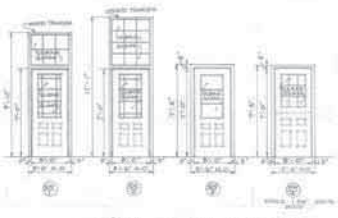
COMMUNITY ROOM
LIVINGROOM
BEDROOM
KITCHEN
BATH
TYPE B UNIT
SECOND FLOOR
FIRST FLOOR
BASEMENT FLOOR
PLANS OF ALL APARTMENT STAIRS EXCEPT "M", "N" & "L"
STAIR "N" BASEMENT PLAN
STAIR "M" BASEMENT PLAN
ROOM FINISH SCHEDULE
APARTMENTS
COMMUNITY UNIT
DESIGNATION
FLOOR
BASE
DADO
WALLS
CEILING
REMARKS
TYPE "B" UNIT PLAN & COMMUNITY ROOM PLAN
BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS — DORCHESTER, MASS.
PUBLIC HOUSING ADMINISTRATION
JOHN M. GRAY CO.
ARCHITECTS
BOSTON, MASS.
A-6
DRAFT


SECTION THROUGH TYPICAL EXTERIOR WALL
SECTION 'C-C' THROUGH REAR EXTERIOR WALL OF COMMUNITY ROOM
SHELVING DETAILS
TYPICAL BATHROOM
TYPICAL FRONT ENTRANCE DETAIL
TYPICAL REAR DOOR ENTRY
CHAIR RAIL DETAIL
WALL SECTIONS, SHELVING ENTRY & BATH DETAILS
BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS – DORCHESTER, MASS.
PUBLIC HOUSING ADMINISTRATION
JOHN M. GRAY CO.
ARCHITECTS
153 MILK STREET – BOSTON, MASS.
A-30

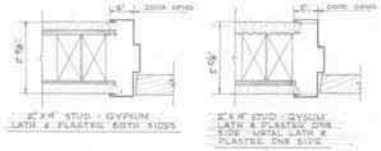


DETAIL IN BRICK VENEER & IN WOOD

DETAIL IN CONCRETE



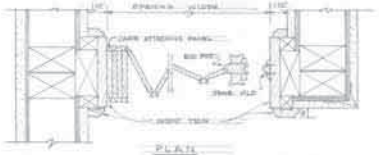
EXTERIOR WOOD DOOR FRAMES



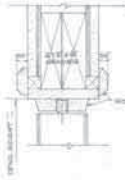
2"x4" STUD - GYPSUM LATH & PLASTER BOTH SIDES

2"x4" STUD - GYPSUM LATH & PLASTER ONE SIDE METAL LATH & PLASTER ONE SIDE

INTERIOR HOLLOW METAL DOOR FRAMES

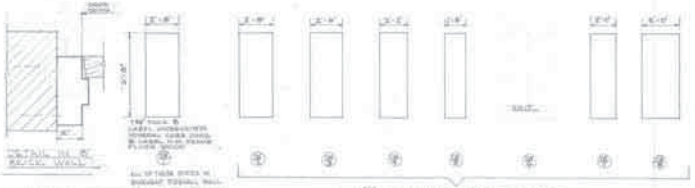


PLAN

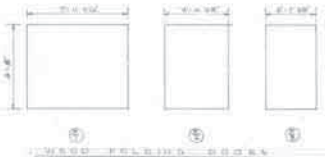


SECT THRU HEAD

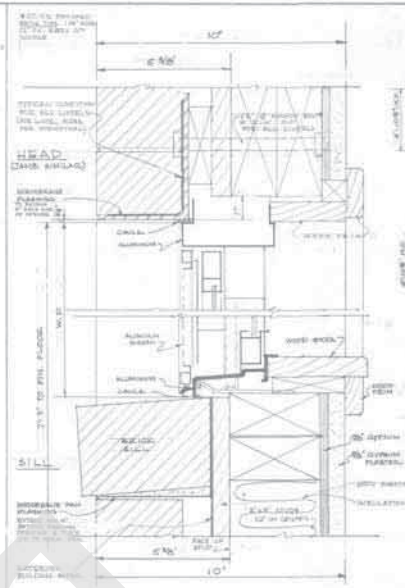
WOOD FOLDING DOORS IN B.R. CLOSETS



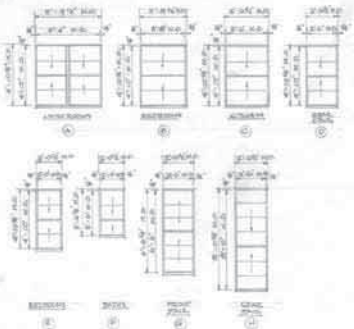
1⅜" THICK FLUSH WOOD INTERIOR DOORS



WOOD FOLDING DOORS

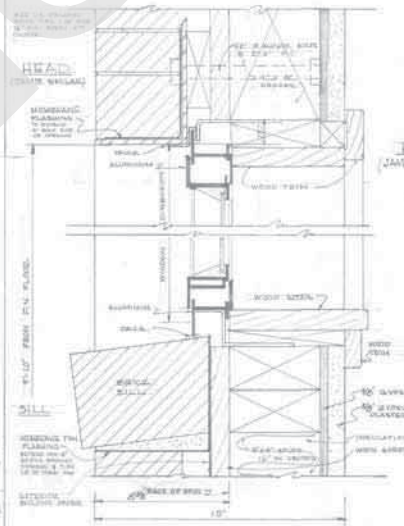


SECTION THRU ALUMINUM DOUBLE HUNG SASH ON 1ST & 2ND FLOORS

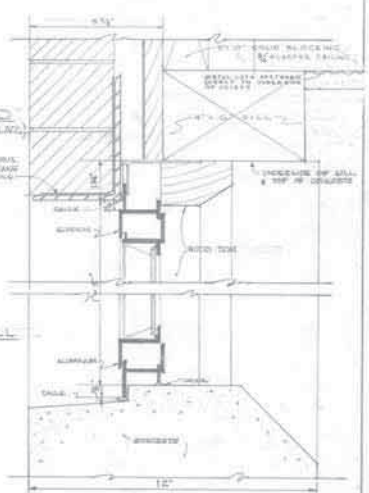


ALUMINUM DOUBLE HUNG SASH & FRAME

ALUMINUM PROJECTED SASH & FRAME

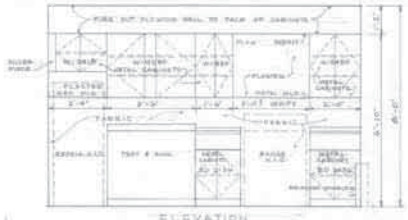


SECTION THRU ALUMINUM PROJECTED SASH IN COMMUNITY WING



SECTION THRU ALUMINUM PROJECTED SASH IN BASEMENT

DETAIL OF BOOKCASE IN ONE B.R. DW UNITS

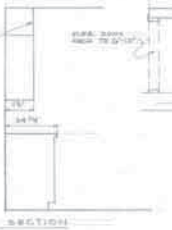


ELEVATION

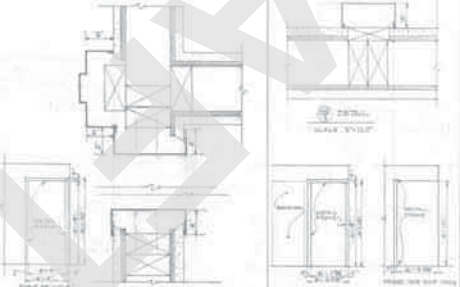
PLAN

DETAILS OF TYPICAL KITCHEN

NOTE: NUMBERS IN DRAWING REFER TO YOUNGSTOWN CATALOG & ARE USED TO SET A STANDARD ONLY

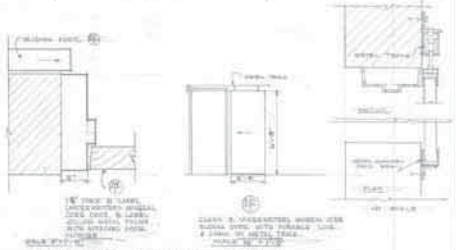


SECTION

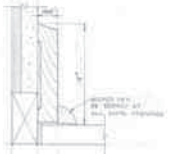


INTERIOR HOLLOW METAL FRAME BETWEEN LIVING ROOM & BEDROOM

HOLLOW METAL FRAMES BETWEEN LIVING ROOM & KITCHEN



BASEMENT FIREWALL DOORS



TYPICAL WOOD SASH

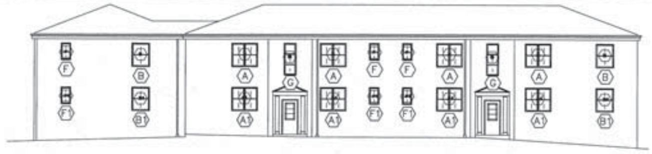
WINDOW & DOOR DETAILS

BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS — DORCHESTER, MASS.
DEVELOPED UNDER THE UNITED STATES HOUSING ACT OF 1937 AS AMENDED
PUBLIC HOUSING ADMINISTRATION

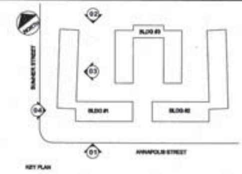
JOHN M. GRAY CO.
ARCHITECTS
153 MILK STREET — BOSTON, MASS.

DRAWING NO. A-9

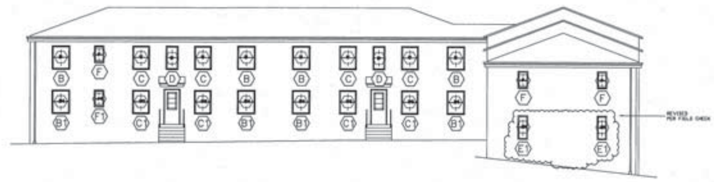
CHARLES L. THOMPSON - STRUCTURAL ENGINEER
ARTHUR A. TROCCI - HEATING ENGINEER
DANIEL E. MORAN - ELECTRICAL ENGINEER



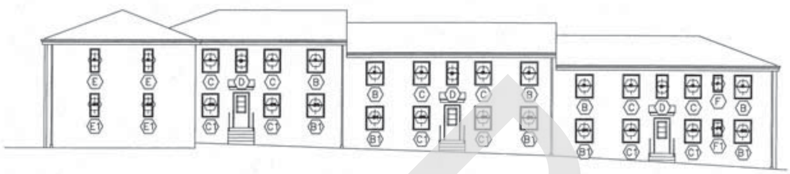
FRONT ELEVATION ANNAPOLIS STREET 01



ANNAPOLIS BUILDING 1



REAR ELEVATION 02



RIGHT SIDE ELEVATION 03

LEFT ELEVATION- SUMNER STREET 04

REV	BY	DATE	DESCRIPTION
1	M.F.	10-29-07	REVISED PER INFO RECEIVED

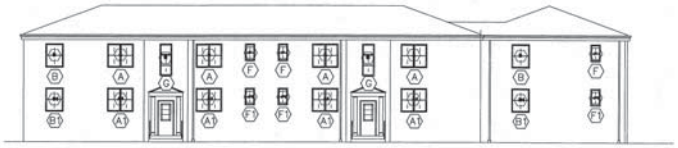
ATTENTION: PLEASE READ

Lockheed Window Corp. prepared these drawings for the exclusive use by Lockheed Window Corp. for the manufacture and installation of the material being supplied by Lockheed Window Corp. per our contract. These drawings are not to be used by any other trades during construction. Any trades using these drawings for the coordination of their work and/or work being performed by Lockheed Window Corp. is at their own risk. Lockheed Window Corp. will not accept or consider any liability and/or charges for corrective work deemed necessary for any errors or omissions these drawings may contain.

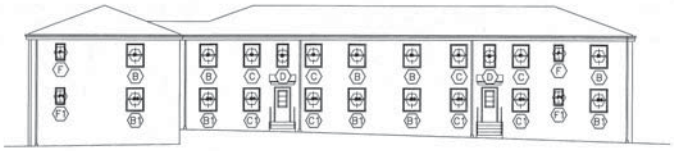
LOCKHEED WINDOW CORP.
P.O. BOX 166
ROUTE 100
PASCOAG, RI 02859
TEL: (401) 568-3061

PROJECT: BOSTON HOUSING AUTHORITY FIVE ELDERLY DEVELOPMENTS
ARCHITECT: JONES PAYNE
GENERAL CONTRACTOR: LOCKHEED WINDOW CORP.

JOB NO. 800715
DRAWN: M.F. DATE: 10/05/2007
SCALE: N/A
SHEET BE1 of BE9
ANNAPOLIS



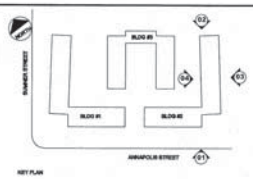
FRONT ELEVATION ANNAPOLIS STREET 01



REAR ELEVATION 02

RIGHT SIDE ELEVATION 03

LEFT ELEVATION 04



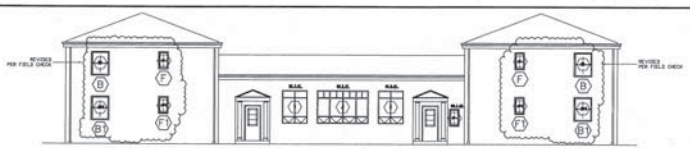
KEY PLAN

ANNAPOLIS BUILDING 2

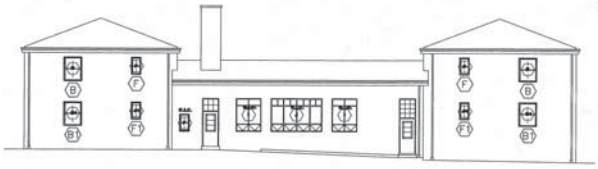
LOCKHEED WINDOW CORP.
P.O. BOX 166
ROUTE 100
PASCOAG, RI 02859
TEL: (401) 568-3061

PROJECT: BOSTON HOUSING AUTHORITY
THE DUDLEY SE-ALIGNMENTS
ARCHITECT: JONES PAYNE
GENERAL CONTRACTOR: LOCKHEED WINDOW CORP.

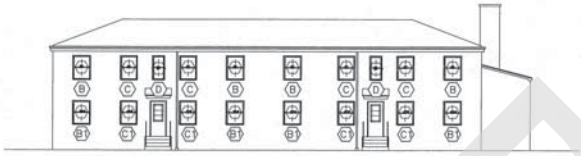
JOB NO. 800715
DRAWN: M.F. DATE: 10/05/2007
SCALE: N/A
SHEET: BE2 or BE9
ANNAPOLIS



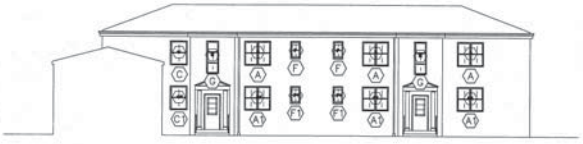
FRONT ELEVATION 03



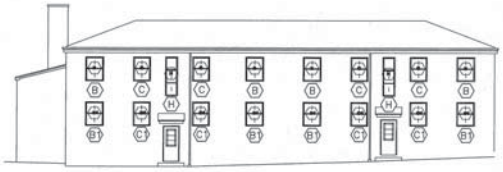
REAR ELEVATION 04



RIGHT SIDE ELEVATION 05

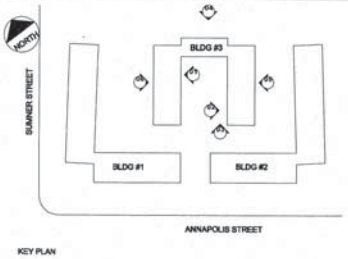


RIGHT COURTYARD SIDE ELEVATION 01



LEFT SIDE ELEVATION 06

LEFT COURTYARD SIDE ELEVATION 02



KEY PLAN

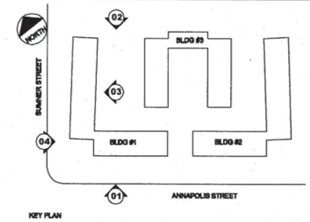
ANNAPOLIS BUILDING 3

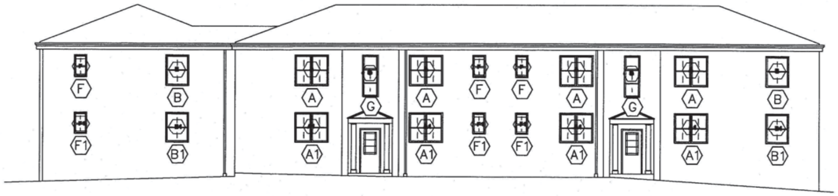
LOCKHEED WINDOW CORP.
P.O. BOX 166
ROUTE 100
PASCOAG, RI 02859
TEL: (401) 568-3061

PROJECT: BOSTON HOUSING AUTHORITY
FAIR ELDERLY DEVELOPMENTS
ARCHITECT: JONES PAYNE
GENERAL CONTRACTOR: LOCKHEED WINDOW CORP.

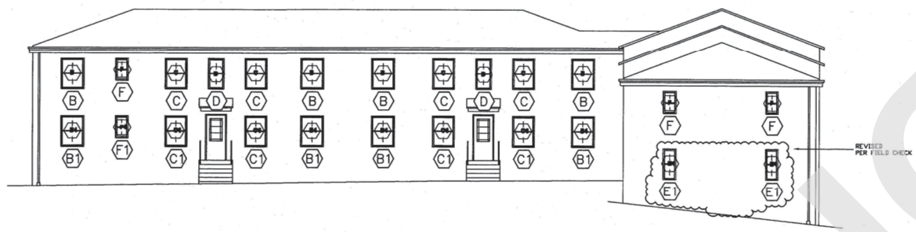
JOB NO. 800715
DRAWN: M.F. DATE: 10/05/2007
SCALE: N/A
SHEET BE3 OF BE9
ANNAPOLIS

ANNAPOLIS BUILDING 1

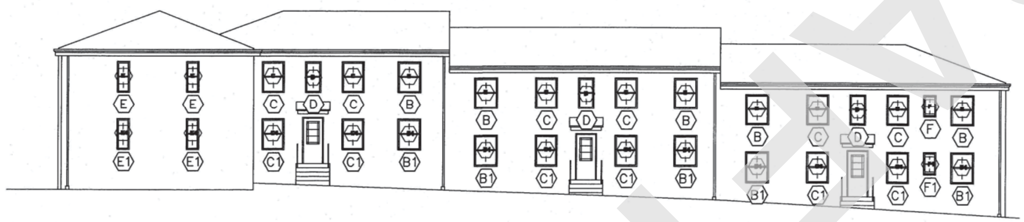




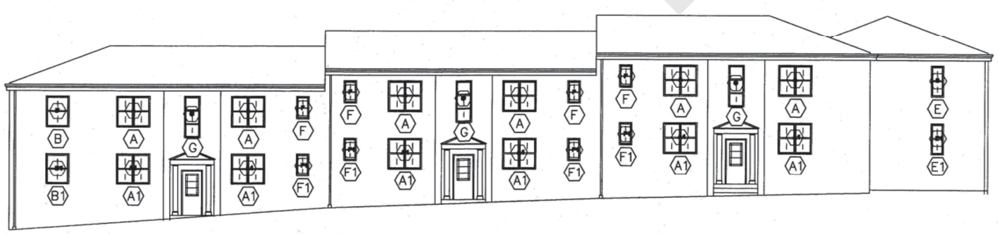
FRONT ELEVATION ANNAPOLIS STREET 01



REAR ELEVATION 02



RIGHT SIDE ELEVATION 03



LEFT ELEVATION- SUMNER STREET 04

DRAFT

REV	BY	DATE	DESCRIPTION
1	M.F.	10-29-07	REVISED PER INFO RECEIVED

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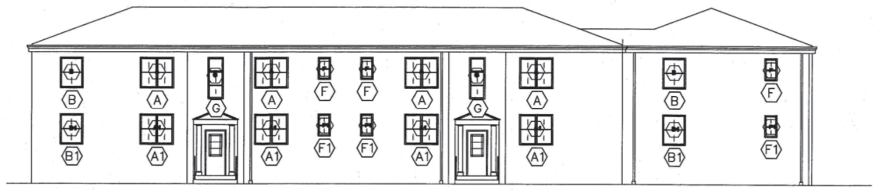
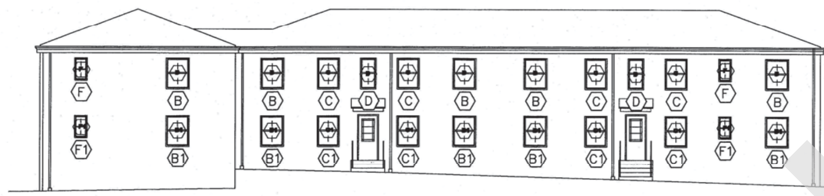
LOCKHEED WINDOW CORP.
P.O. BOX 166
ROUTE 100
PASCOAG, RI 02859
TEL: (401) 568-3061

PROJECT: BOSTON HOUSING AUTHORITY FIVE ELDERLY DEVELOPMENTS
ARCHITECT: JONES PAYNE
GENERAL CONTRACTOR: LOCKHEED WINDOW CORP.

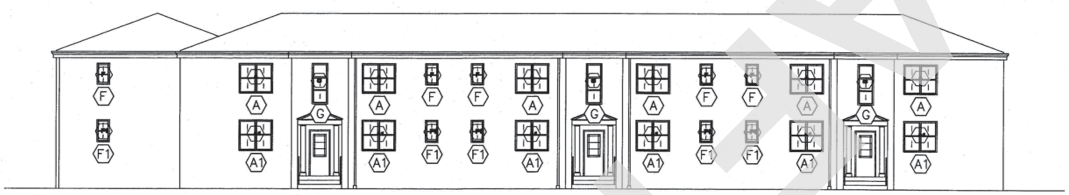
JOB NO. 800715
DRAWN: M.F. DATE: 10/05/2007
SCALE: N/A
SHEET BE1 OF BE9



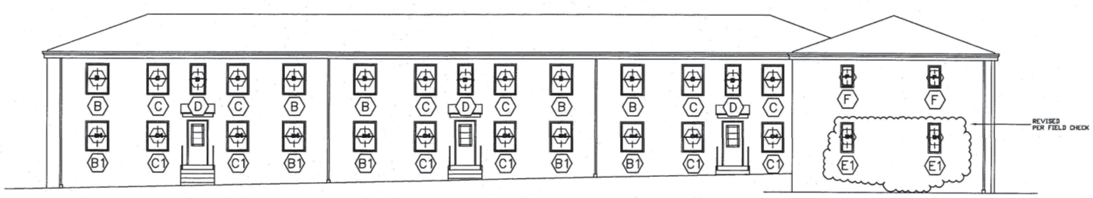
FRONT ELEVATION ANNAPOLIS STREET 01



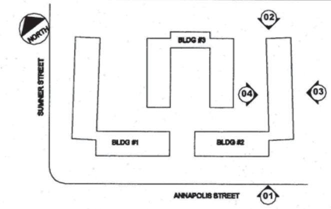
REAR ELEVATION 02



RIGHT SIDE ELEVATION 03



LEFT ELEVATION 04



KEY PLAN

ANNAPOLIS BUILDING 2

REV	BY	DATE	DESCRIPTION
1	M.F.	10-29-07	REVISED PER INFO RECEIVED

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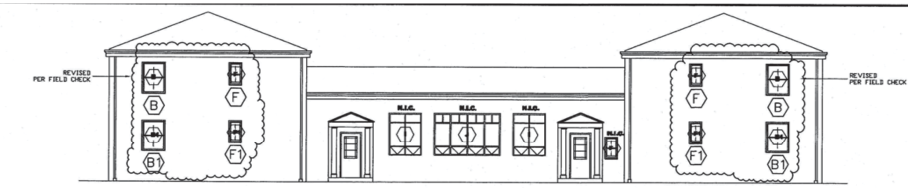
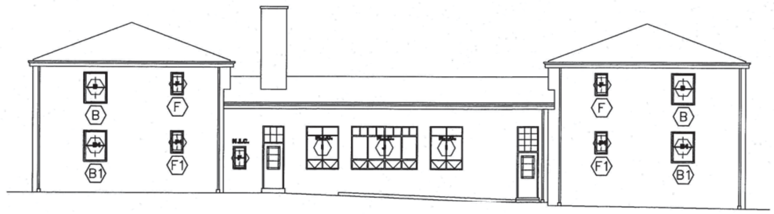
LOCKHEED WINDOW CORP.
P.O. BOX 166
ROUTE 100
PASCOAG, RI 02859
TEL: (401) 568-3061

PROJECT: BOSTON HOUSING AUTHORITY FIVE ELDERLY DEVELOPMENTS
ARCHITECT: JONES PAYNE
GENERAL CONTRACTOR: LOCKHEED WINDOW CORP.

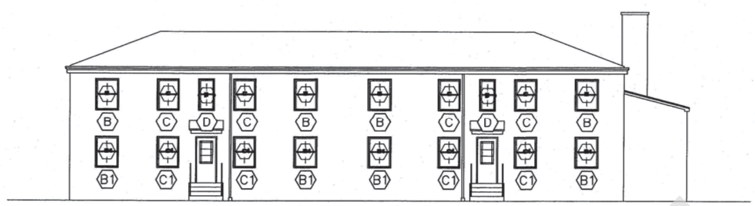
JOB NO. 800715
DRAWN: M.F. DATE: 10/05/2007
SCALE: N/A
SHEET BE2 OF BE9
ANNAPOLIS



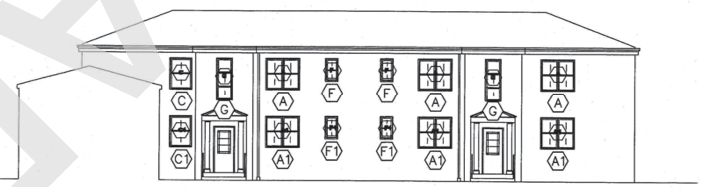
FRONT ELEVATION 03



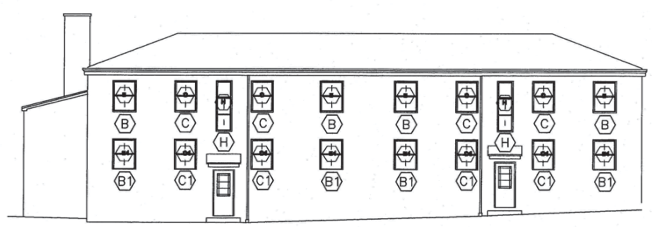
REAR ELEVATION 04



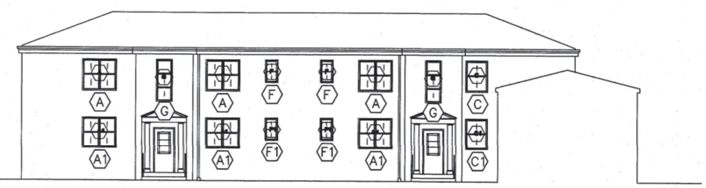
RIGHT SIDE ELEVATION 05



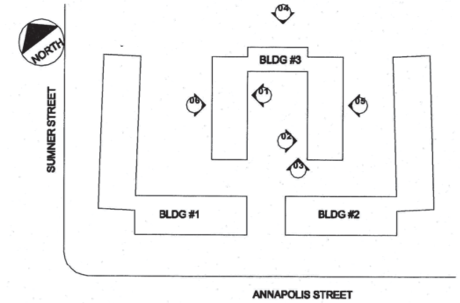
RIGHT COURTYARD SIDE ELEVATION 01



LEFT SIDE ELEVATION 06



LEFT COURTYARD SIDE ELEVATION 02



KEY PLAN

ANNAPOLIS BUILDING 3

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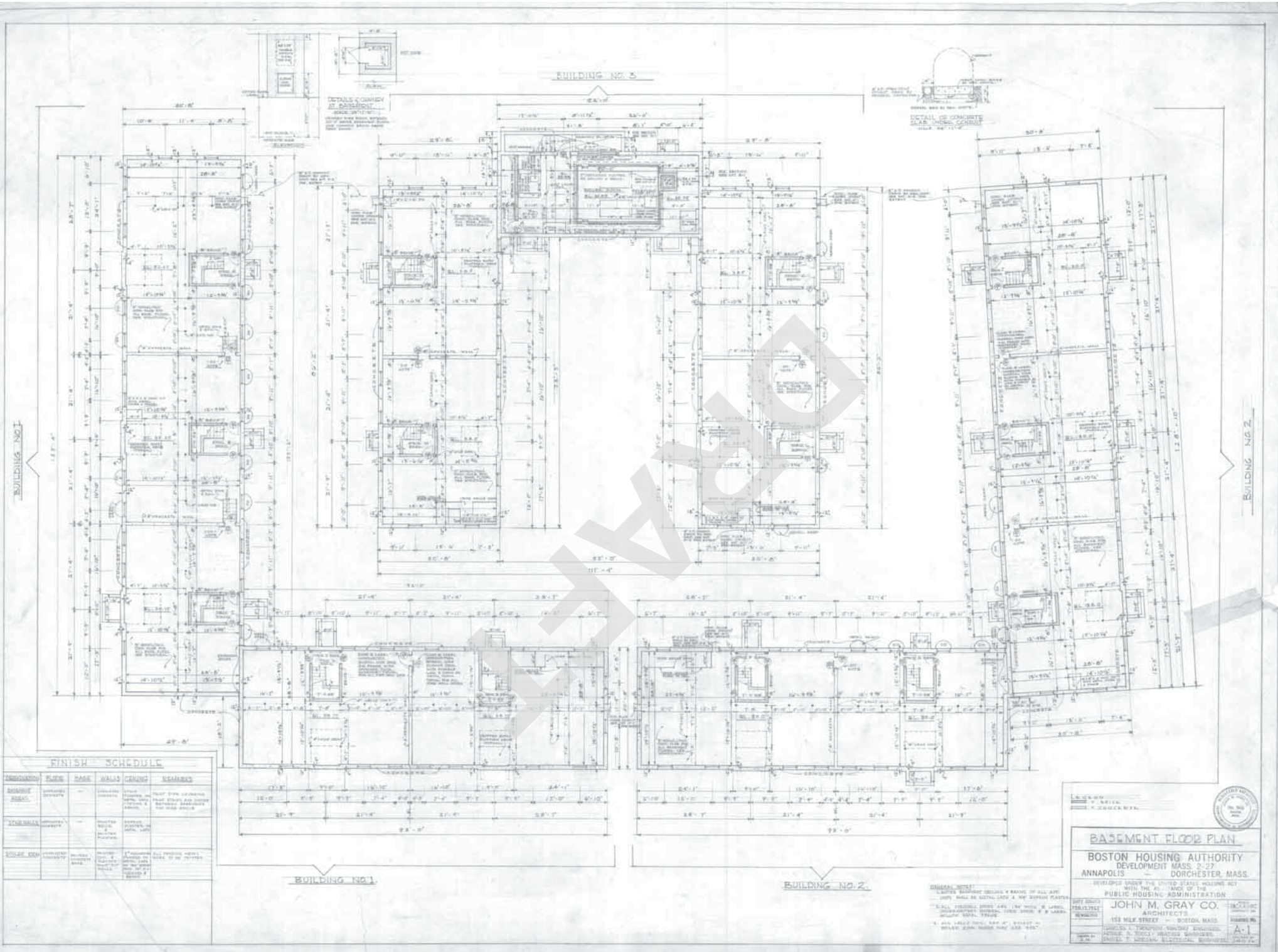
REV	BY	DATE	DESCRIPTION
1	M.F.	10-29-07	REVISED PER INFO RECEIVED

LOCKHEED WINDOW CORP.
P.O. BOX 166
ROUTE 100
PASCOAG, RI 02859
TEL: (401) 568-3061

PROJECT: BOSTON HOUSING AUTHORITY FIVE ELDERLY DEVELOPMENTS
ARCHITECT: JONES PAYNE
GENERAL CONTRACTOR: LOCKHEED WINDOW CORP.

JOB NO. 800715
DRAWN: M.F. DATE: 10/05/2007
SCALE: N/A
SHEET BE3 OF BE9



FINISH SCHEDULE

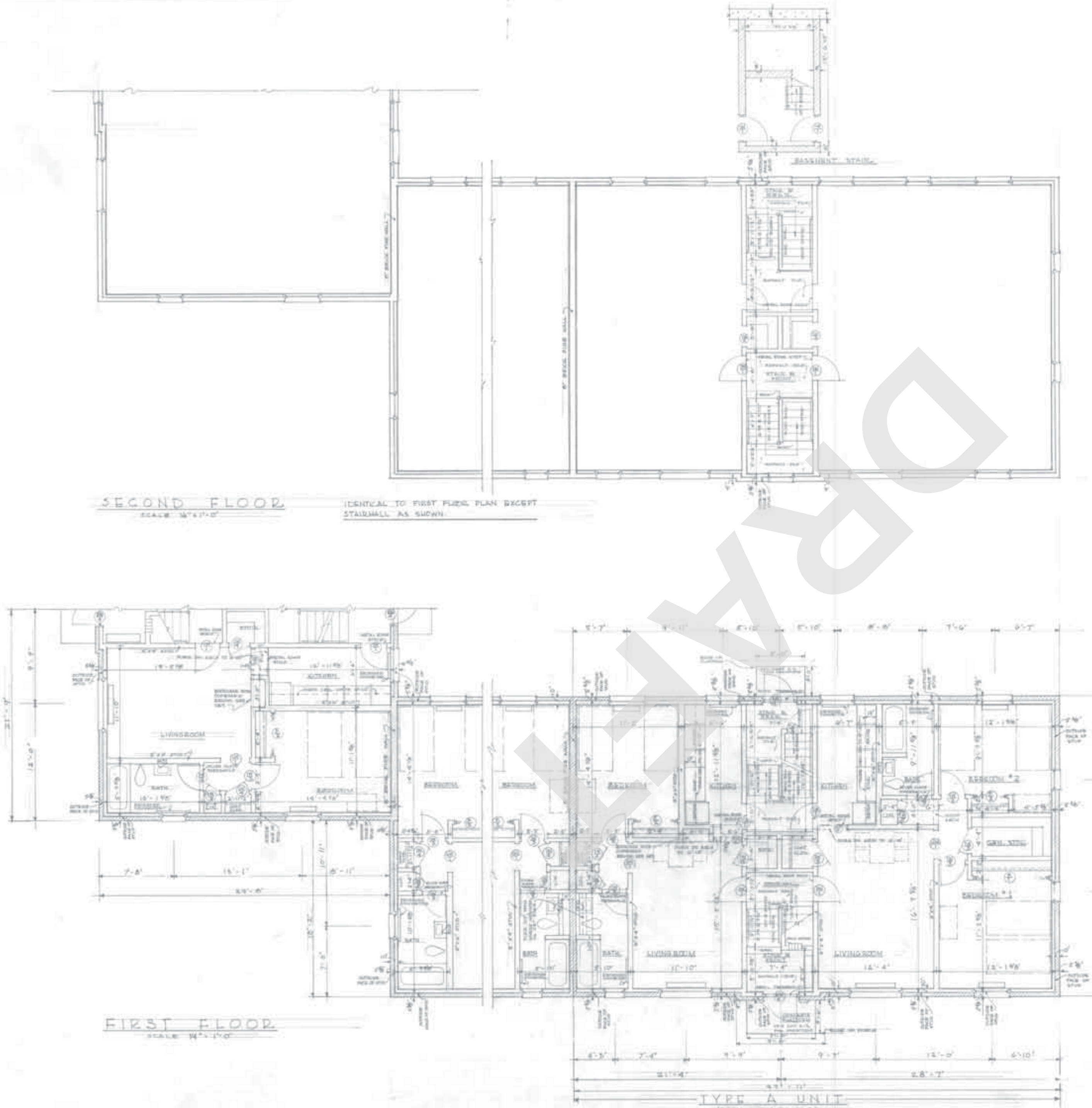
DESIGNATION	FLOOR	BASE	WALLS	CEILING	REMARKS
BASEMENT AREAS					
STORAGE					
BOILER ROOM					

BASEMENT FLOOR PLAN

BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS — DORCHESTER, MASS.
DEVELOPED UNDER THE UNITED STATES HOUSING ACT WITH THE ASSISTANCE OF THE PUBLIC HOUSING ADMINISTRATION

JOHN M. GRAY CO.
ARCHITECTS
153 MILK STREET — BOSTON, MASS.

A-1



ROOM FINISH SCHEDULE

ITEM, DESIGNATION	FLOOR	BASE	DADO	WALLS	CEILING	REMARKS
BEDROOMS	WOOD	WOOD	PAINTED PLASTER ON GYPSUM LATH	PAINTED PLASTER ON GYPSUM LATH	PAINTED PLASTER ON METAL LATH	[illegible]
LIVING ROOM	DO	DO	DO	DO	DO	[illegible]
STORAGE CLOSET [illegible]	DO	DO	DO	DO	DO	SEE DET. FOR WOOD SHELVING
COAT CLOSET [illegible]	DO	DO	DO	DO	DO	SEE DET. FOR WOOD SHELVING & METAL COAT RAIL
LINEN CLOSET	DO	DO	DO	DO	DO	SEE DET. FOR WOOD SHELVING
COAT CLOSET [illegible]	DO	DO	DO	DO	DO	SEE DET. FOR WOOD SHELVING & METAL COAT RAIL
GENERAL STORAGE CLOSET	DO	DO	DO	DO	DO	SEE DETAIL FOR WOOD SHELVING
BATH	CERAMIC TILE [illegible]	CERAMIC TILE	PAINTED PLASTER ON METAL LATH	PAINTED PLASTER ON METAL LATH	DO	CERAMIC TILE ON WALL AROUND TUB [illegible] SEE DET.
KITCHEN	ASPHALT TILE [illegible]	COMPOSITION	[illegible]	PAINTED PLASTER ON GYPSUM LATH	DO	[illegible] SEE DET. FOR CABINETS.
FRONT STAIRHALL	DO	WOOD	[illegible]	[illegible]	DO	[illegible]
REAR STAIRHALL	DO	DO	DO	DO	DO	DO

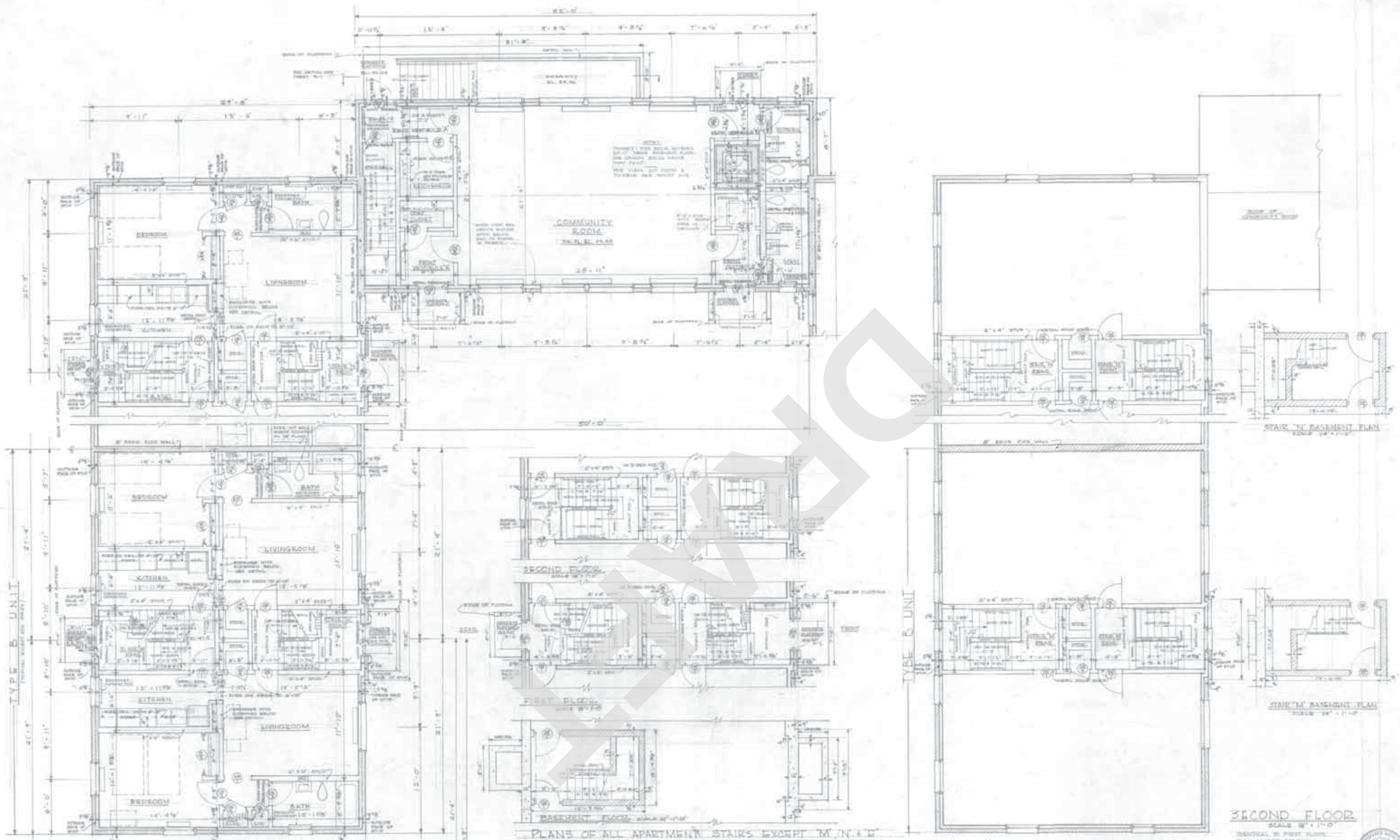
TYPE "A" UNIT PLAN

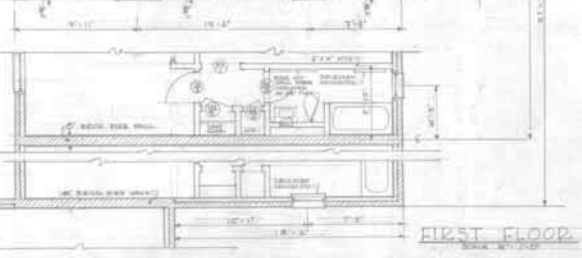
BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS — DORCHESTER, MASS.

DEVELOPED UNDER THE UNITED STATES HOUSING ACT WITH THE [illegible] OF THE PUBLIC HOUSING ADMINISTRATION

JOHN M. GRAY CO.
ARCHITECTS
[illegible] STREET — BOSTON, MASS.

DRAWING NO. A-4





FIRST FLOOR

PLANS OF ALL APARTMENT STAIRS EXCEPT "M", "N" & "E"

SECOND FLOOR

SCALE 1/8" = 1'-0"

ROOM FINISH SCHEDULE

APARTMENTS							COMMUNITY UNIT						
DESIGNATION	FLOOR	BASE	DADO	WALLS	CEILING	REMARKS	DESIGNATION	FLOOR	BASE	DADO	WALLS	CEILING	REMARKS
BEDROOM	WOOD	WOOD	PAINTED PLASTER ON GYPSUM LATH	PAINTED PLASTER ON GYPSUM LATH	PAINTED PLASTER ON METAL LATH	[illegible]	COMMUNITY ROOM	ASPHALT TILE	WOOD	[illegible]	PAINTED PLASTER ON GYPSUM LATH	ACOUSTICAL TILE	[illegible]
LIVINGROOM	DO	DO	DO	DO	DO	SEE DET. [illegible]	FRONT VESTIBULE (A & B)	DO	DO	DO	DO	PAINTED PLASTER ON METAL LATH	[illegible]
KITCHEN	ASPHALT TILE [illegible]	[illegible] TILE	DO	DO	DO	[illegible]	STORAGE CLOSET	DO	DO	DO	DO	DO	[illegible]
BATH	CERAMIC TILE [illegible]	CERAMIC TILE	PAINTED PLASTER ON METAL LATH	PAINTED PLASTER ON METAL LATH	DO	[illegible]	WOMEN'S REST ROOM	CERAMIC TILE	CERAMIC TILE	CERAMIC [illegible]	PLASTER [illegible]	DO	[illegible]
[illegible] CLOSET	WOOD	WOOD	PAINTED PLASTER ON GYPSUM LATH	PAINTED PLASTER ON GYPSUM LATH	DO	SEE DET. [illegible]	MEN'S REST ROOM	DO	DO	DO	DO	DO	DO
COAT CLOSET	DO	DO	DO	DO	DO	[illegible]	KITCHENETTE	ASPHALT TILE	[illegible]	PAINTED PLASTER ON GYPSUM LATH	PAINTED PLASTER ON GYPSUM LATH	PAINTED PLASTER ON METAL LATH	[illegible]
LINEN CLOSET	DO	DO	DO	DO	DO	[illegible]	STAIR HALL (STAIR "O")	PAINTED CONCRETE	WOOD	[illegible]	[illegible]	DO	[illegible]
FRONT STAIRHALL	ASPHALT TILE [illegible]	DO	[illegible]	[illegible]	DO	[illegible]	REAR VESTIBULE (A & B)	ASPHALT TILE	WOOD	PAINTED PLASTER ON GYPSUM LATH	PAINTED PLASTER ON GYPSUM LATH	DO	
BACK STAIRHALL	DO	DO	DO	DO	DO	DO	COAT CLOSET	DO	DO	DO	DO	DO	[illegible]

TYPE "B" UNIT PLAN & COMMUNITY ROOM PLAN

BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS — DORCHESTER, MASS.

DEVELOPED UNDER THE UNITED STATES HOUSING ACT WITH THE ASSISTANCE OF THE PUBLIC HOUSING ADMINISTRATION

JOHN M. GRAY CO.
ARCHITECTS
153 MILK STREET — BOSTON, MASS.

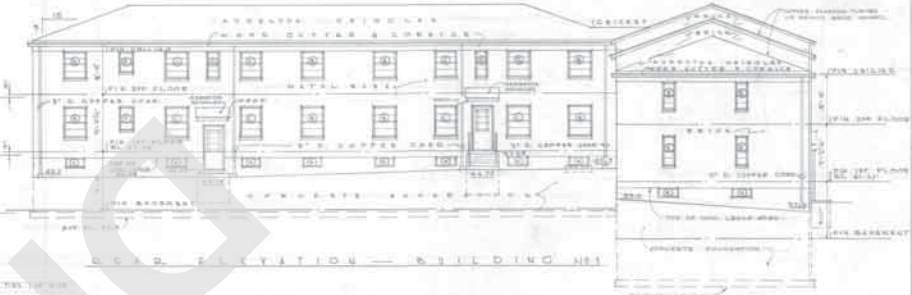
DRAWING NO. A-6

FRONT ELEVATION — BUILDING NO. 1

FRONT ELEVATION — BUILDING NO. 2

ANNAPOLIS STREET ELEVATIONS

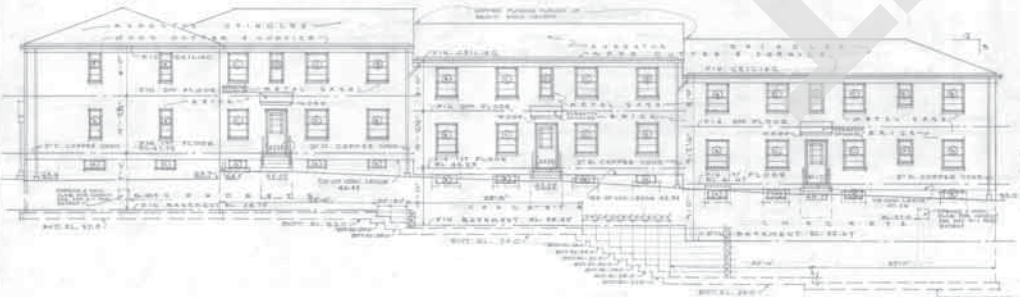
REAR ELEVATION — BUILDING NO. 2



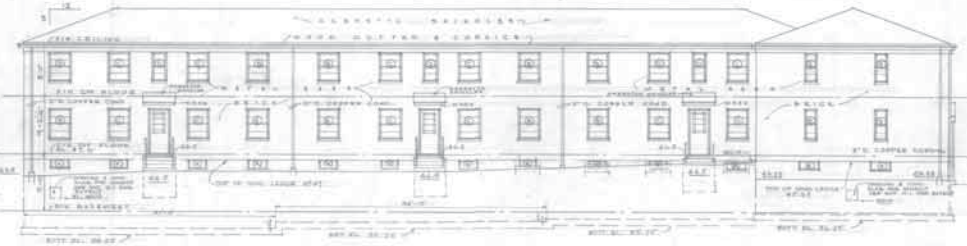
REAR ELEVATION — BUILDING NO. 1

LEFT SIDE - SUMMER STREET ELEVATION - BUILDING NO. 1

RIGHT SIDE — BAKERSFIELD STREET ELEVATION — BUILDING NO. 2

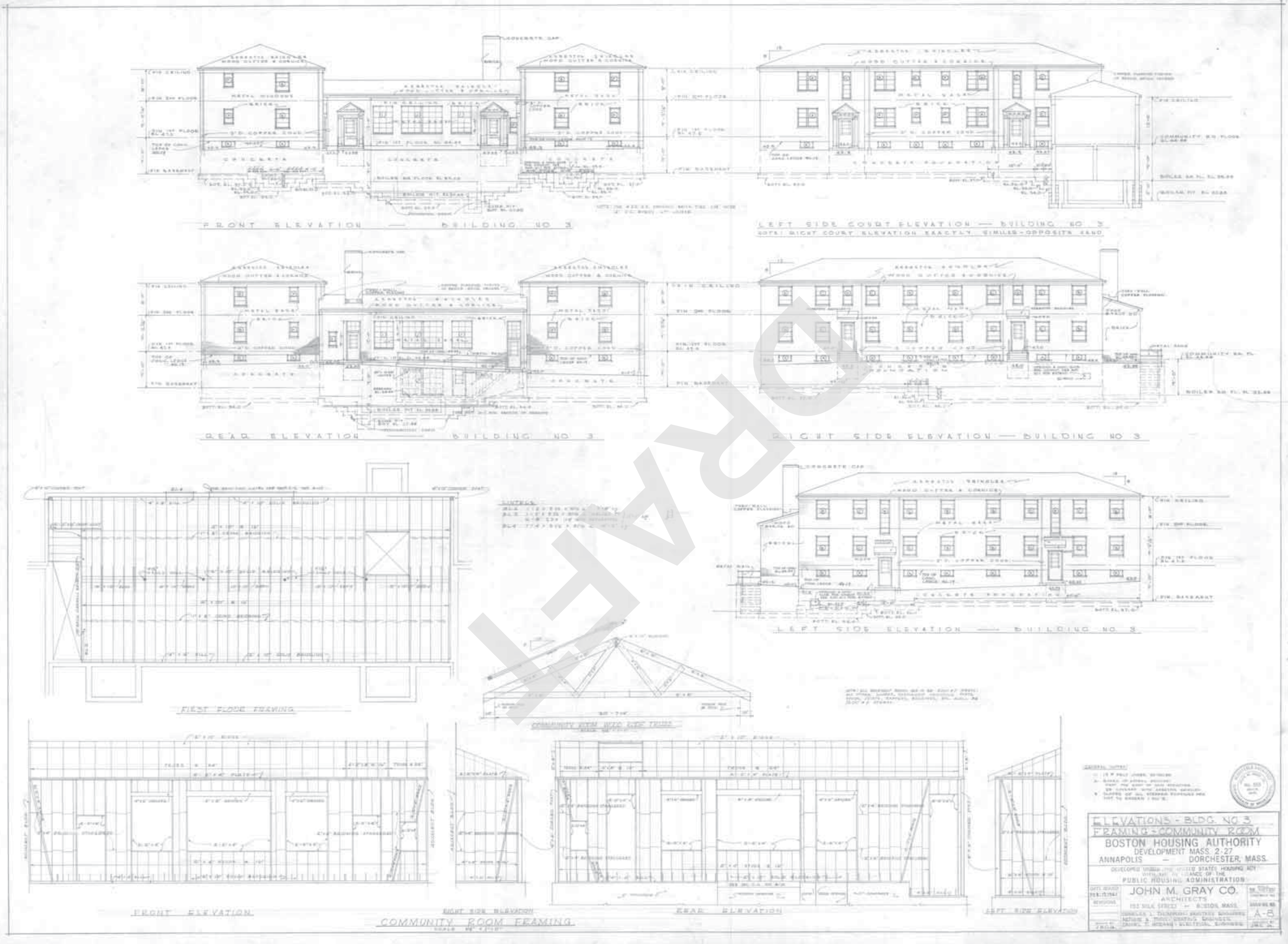


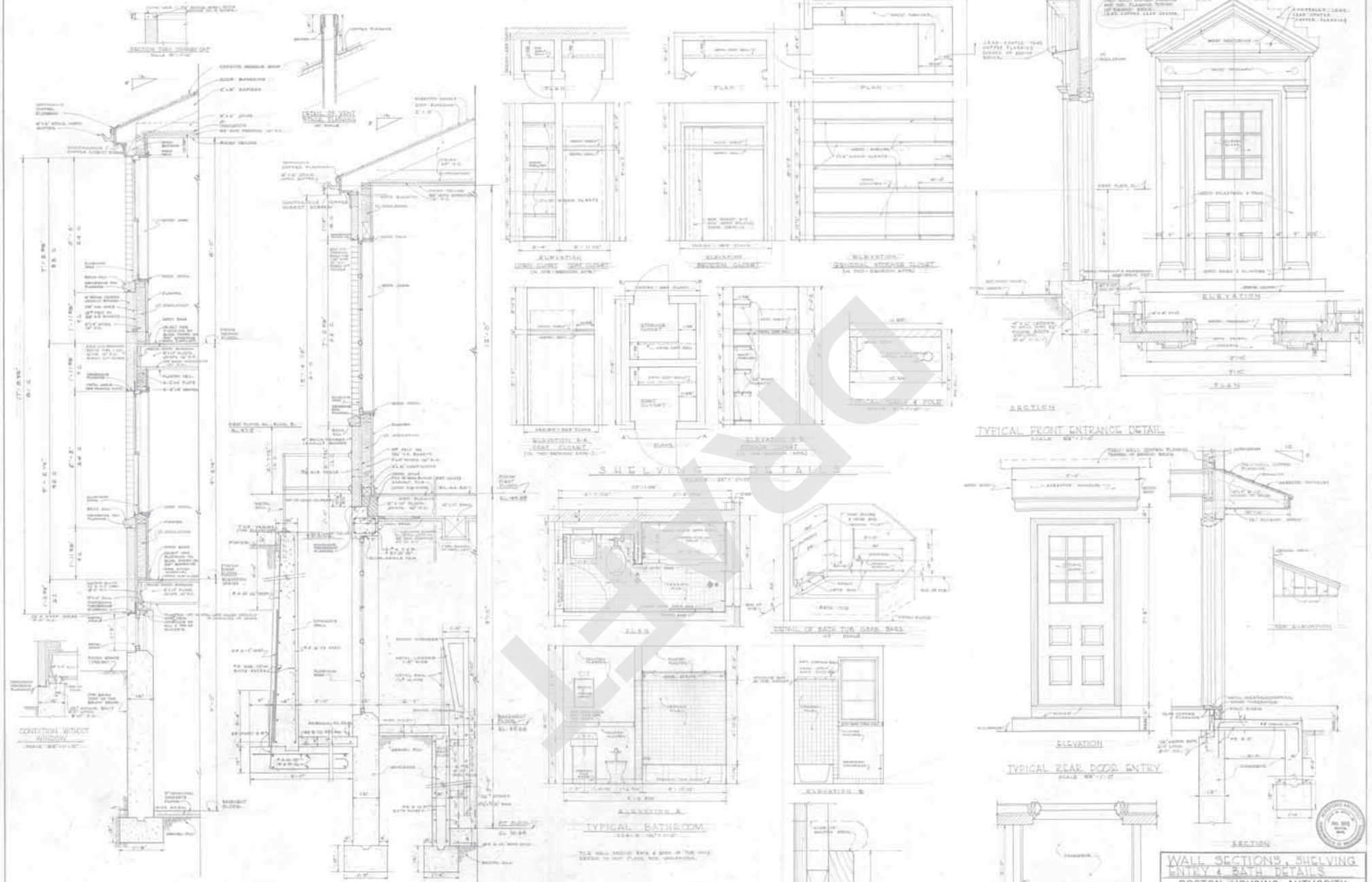
RIGHT SIDE ELEVATION - BUILDING NO. 1



LEFT SIDE ELEVATION — BUILDING NO. 2

ELEVATIONS
BUILDINGS NOS 1 & 2
BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS — DORCHESTER, MASS.
DEVELOPED UNDER THE UNITED STATES HOUSING ACT
WITH THE FINANCE OF THE
PUBLIC HOUSING ADMINISTRATION
JOHN M. GRAY CO.
ARCHITECTS
102 MILK STREET — BOSTON, MASS.
CHARLES L. THOMPSON, SANITARY ENGINEER
ARTHUR A. TYNES, HEATING ENGINEER
DANIEL T. MORGAN, ELECTRICAL ENGINEER
A-7


FRONT ELEVATION — BUILDING NO 3
LEFT SIDE COURT ELEVATION — BUILDING NO 3
NOTE: RIGHT COURT ELEVATION EXACTLY SIMILAR—OPPOSITE HAND
REAR ELEVATION — BUILDING NO 3
RIGHT SIDE ELEVATION — BUILDING NO 3
LEFT SIDE ELEVATION — BUILDING NO 3
FIRST FLOOR FRAMING
FRONT ELEVATION
RIGHT SIDE ELEVATION
REAR ELEVATION
LEFT SIDE ELEVATION
COMMUNITY ROOM FRAMING
ELEVATIONS - BLDG. NO 3
FRAMING - COMMUNITY ROOM
BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS — DORCHESTER, MASS.
PUBLIC HOUSING ADMINISTRATION
JOHN M. GRAY CO.
ARCHITECTS
A-8



SECTION THROUGH TYPICAL EXTERIOR WALL

SECTION "C-C" THROUGH REAR EXTERIOR WALL OF COMMUNITY ROOM

SHELVING DETAILS

TYPICAL BATHROOM

TYPICAL FRONT ENTRANCE DETAIL

TYPICAL REAR DOOR ENTRY

WALL SECTIONS, SHELVING ENTRY & BATH DETAILS

BOSTON HOUSING AUTHORITY

DEVELOPMENT MASS. 2-27

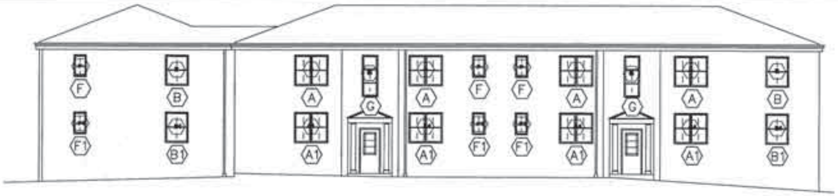
ANNAPOLIS — DORCHESTER, MASS.

DESIGNED UNDER THE UNITED STATES HOUSING ACT OF 1937, AS AMENDED, FOR THE PUBLIC HOUSING ADMINISTRATION

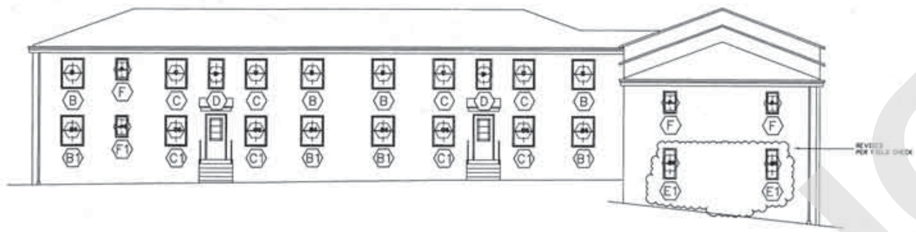
JOHN M. GRAY CO.
ARCHITECTS
153 MILK STREET — BOSTON, MASS.

CHARLES L. THOMPSON, SANITARY ENGINEER
ARTHUR A. TOSCI, HEATING ENGINEER
DANIEL T. MORRISH, ELECTRICAL ENGINEER

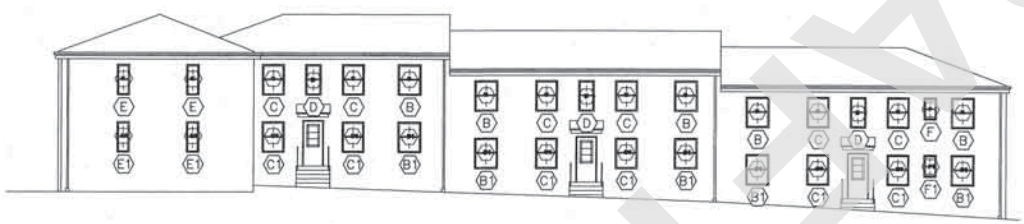
DRAWING NO. A-30



FRONT ELEVATION ANNAPOLIS STREET 01

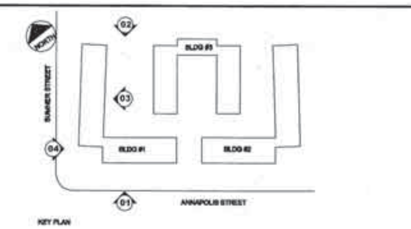


REAR ELEVATION 02



RIGHT SIDE ELEVATION 03

LEFT ELEVATION- SUMNER STREET 04



ANNAPOLIS BUILDING 1

REV	BY	DATE	DESCRIPTION
1	M.F.	10-29-07	REVISED PER INFO RECEIVED

ATTENTION: PLEASE READ

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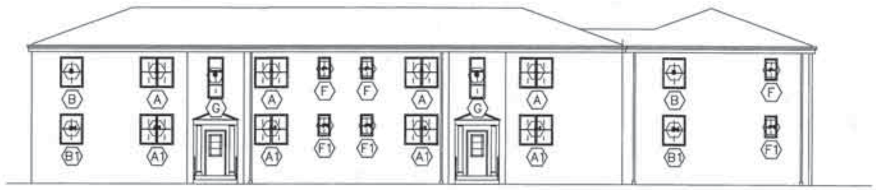
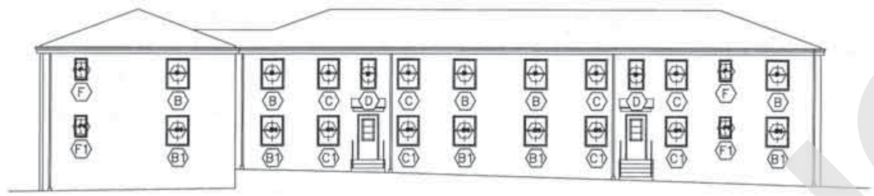
LOCKHEED WINDOW CORP.
P.O. BOX 166
ROUTE 100
PASCOAG, RI 02859
TEL: (401) 568-3061

PROJECT: BOSTON HOUSING AUTHORITY FIVE ELDERLY DEVELOPMENTS
ARCHITECT: JONES PAYNE
GENERAL CONTRACTOR: LOCKHEED WINDOW CORP.

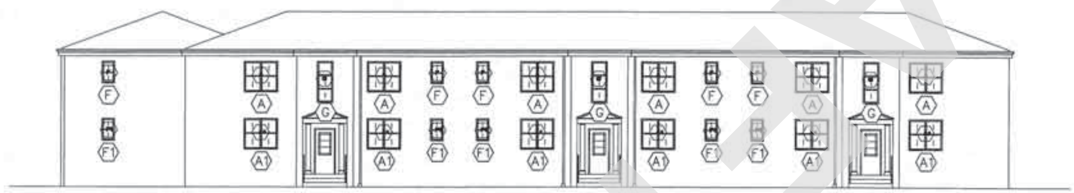
JOB NO. 800715
DRAWN: M.F. DATE: 10/05/2007
SCALE: N/A
SHEET BE1 OF BE9
ANNAPOLIS



FRONT ELEVATION ANNAPOLIS STREET 01

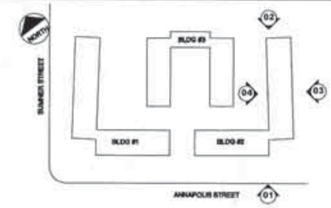


REAR ELEVATION 02



RIGHT SIDE ELEVATION 03

LEFT ELEVATION 04



KEY PLAN

ANNAPOLIS BUILDING 2

REV	BY	DATE	DESCRIPTION
1	M.F.	10-29-07	REVISED PER INFO RECEIVED

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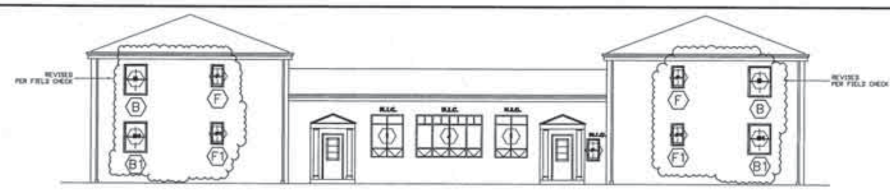
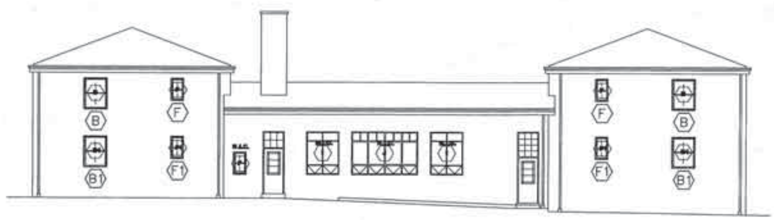
LOCKHEED WINDOW CORP.
P.O. BOX 166
ROUTE 100
PASCOAG, RI 02859
TEL: (401) 568-3061

PROJECT: BOSTON HOUSING AUTHORITY FIVE ELDERLY DEVELOPMENTS
ARCHITECT: JONES PAYNE
GENERAL CONTRACTOR: LOCKHEED WINDOW CORP.

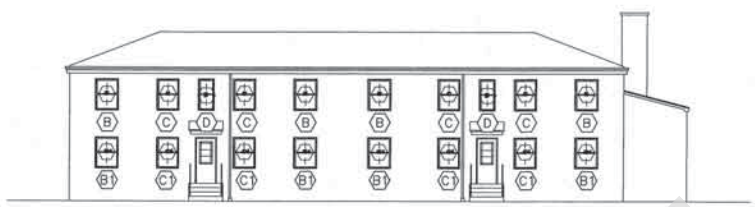
JOB NO. 800715
DRAWN: M.F. DATE: 10/05/2007
SCALE: N/A
SHEET BE2 OF BE9
ANNAPOLIS



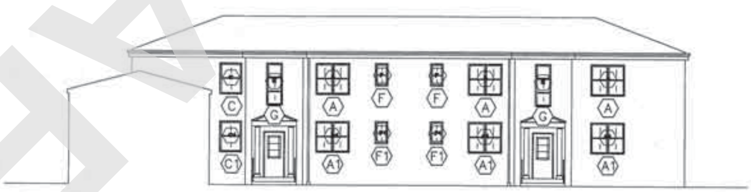
FRONT ELEVATION 03



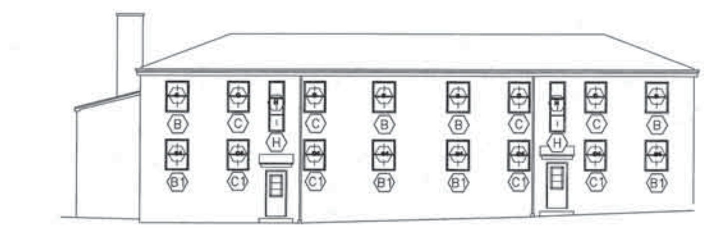
REAR ELEVATION 04



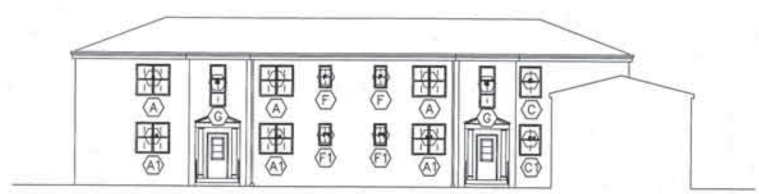
RIGHT SIDE ELEVATION 05



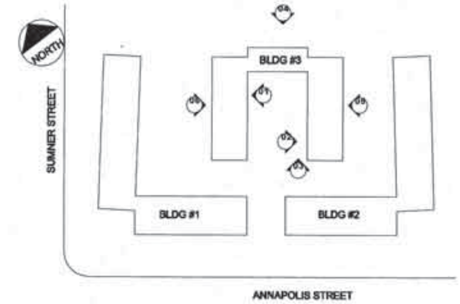
RIGHT COURTYARD SIDE ELEVATION 01



LEFT SIDE ELEVATION 06



LEFT COURTYARD SIDE ELEVATION 02



KEY PLAN

ANNAPOLIS BUILDING 3

REV	BY	DATE	DESCRIPTION
1	M.F.	10-29-07	REVISED PER INFO RECEIVED

ATTENTION: PLEASE READ
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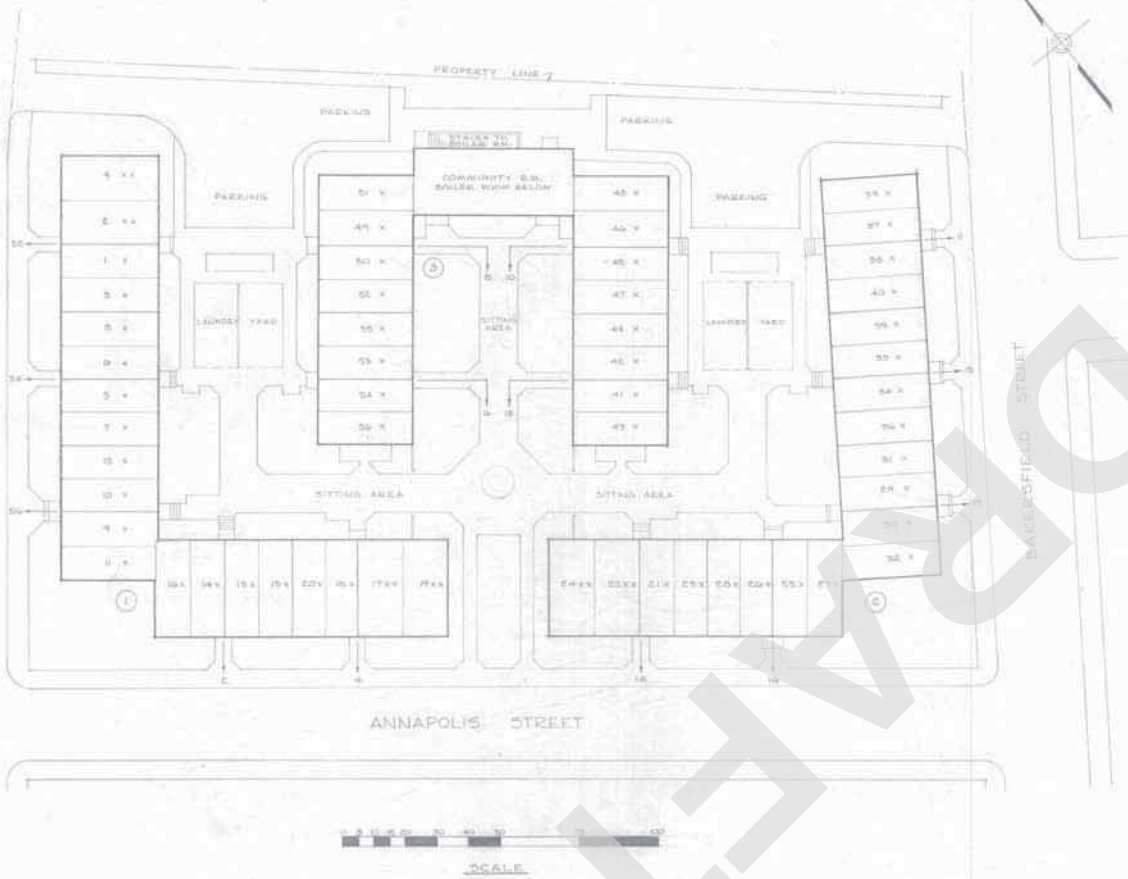
LOCKHEED
WINDOW CORP.
P.O. BOX 166
ROUTE 100
PASCOAG, RI 02859
TEL: (401) 568-3061

PROJECT: BOSTON HOUSING AUTHORITY
FIVE ELDERLY DEVELOPMENTS
ARCHITECT: JONES PAYNE
GENERAL CONTRACTOR: LOCKHEED WINDOW CORP.

JOB NO. 800715
DRAWN: M.F. DATE: 10/05/2007
SCALE: N/A
SHEET BE3 or BE9
ANNAPOLIS



DWELLING UNIT DISTRIBUTION

	1-B.R.	2-B.R.	TOTAL APTS.	TOTAL ROOMS
BLDG. NO. 1	16	4	20	36
BLDG. NO. 2	15	5	20	35
BLDG. NO. 3	19	0	19	38
TOTAL	50	9	59	109

PERCENTAGE AND COLOR KEY

3½ ROOM APT. = 84.3%
4½ ROOM APT. = 10.7%

RED — 1-BEDROOM
GREEN — 2-BEDROOM

APARTMENT NUMBERS

BUILDING (1) APARTMENTS NUMBERS 1 TO 20 INCLUSIVE
BUILDING (2) APARTMENTS NUMBERS 21 TO 40 INCLUSIVE
BUILDING (3) APARTMENTS NUMBERS 41 TO 59 INCLUSIVE

NOTE: — THE FIRST APARTMENT DOOR ON THE RIGHT OF THE FRONT ENTRANCE, HAS THE LOWEST NUMBER, AND ALL APARTMENT NUMBERS FOLLOWING IT RUN COUNTER CLOCKWISE.

THE NUMBER OF CROSSES AFTER EACH APARTMENT NUMBER INDICATES THE NUMBER OF BEDROOMS IN THAT APARTMENT.

LEGEND

STREET NUMBER
APT. NO. 19 WITH 2-BEDROOMS

STREET AND APARTMENT NUMBERING PLAN

BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS — DORCHESTER, MASS.

DEVELOPED UNDER P.L. UNITED STATES HOUSING ACT WITH THE ASSISTANCE OF THE PUBLIC HOUSING ADMINISTRATION

DATE ISSUED
REVISIONS

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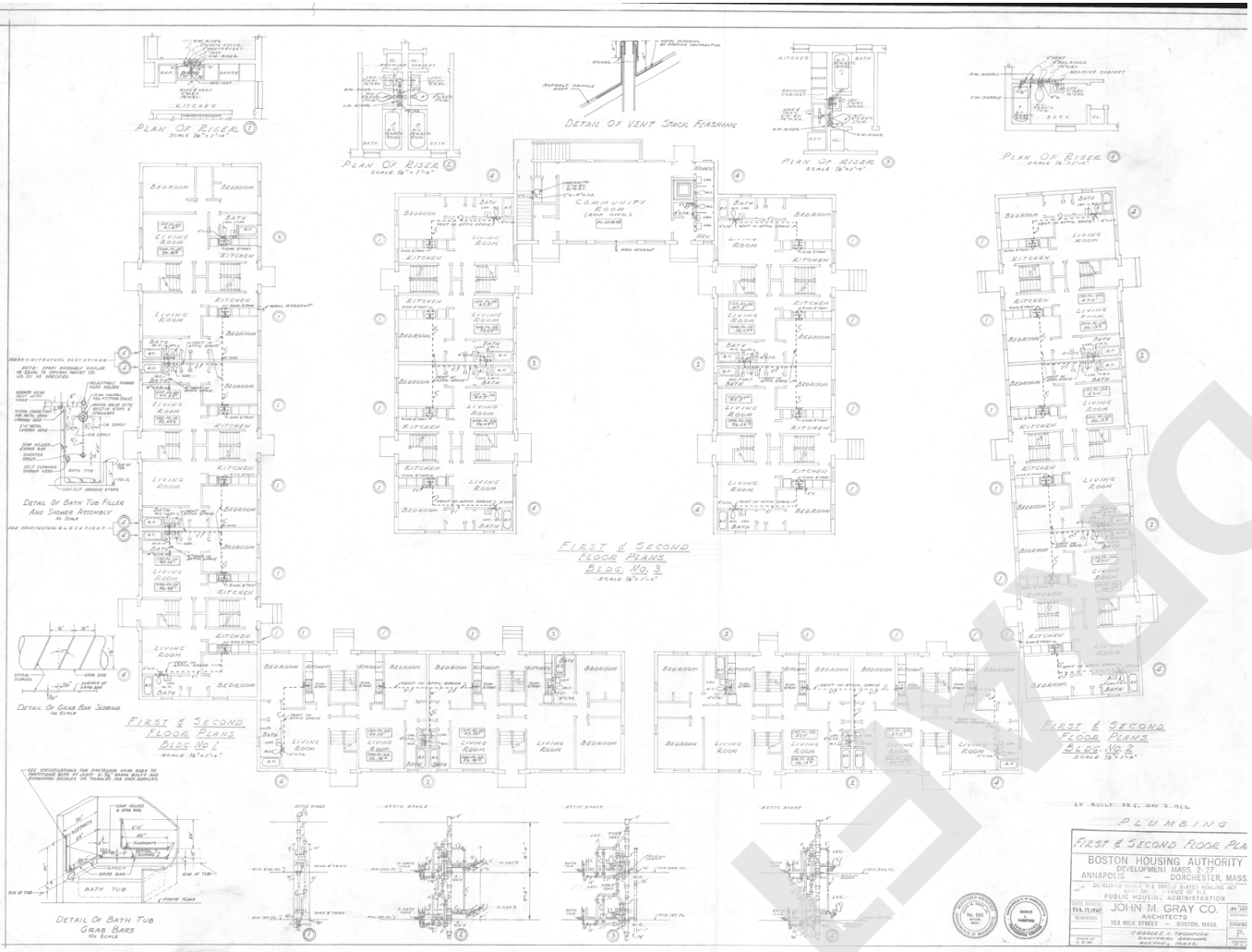
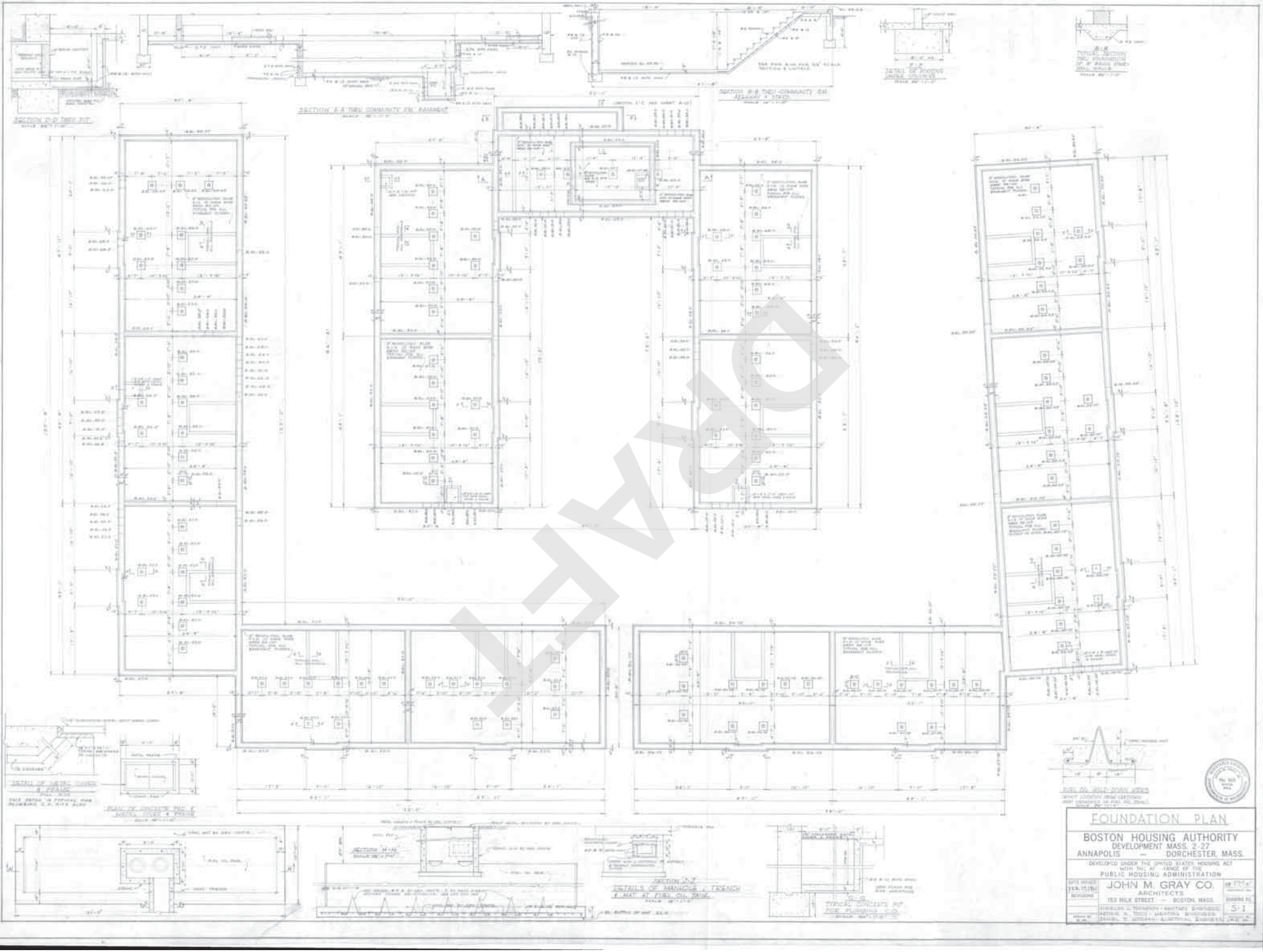
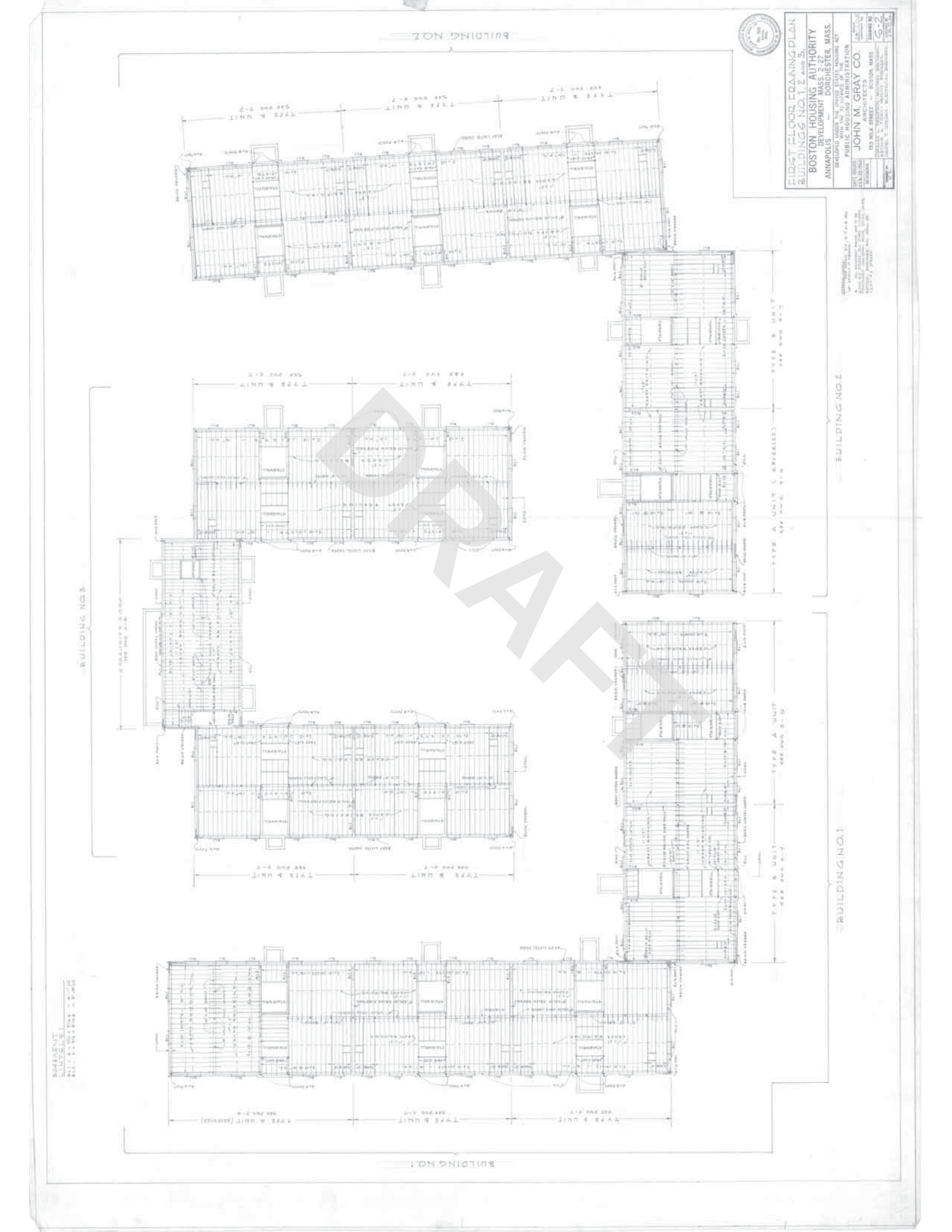
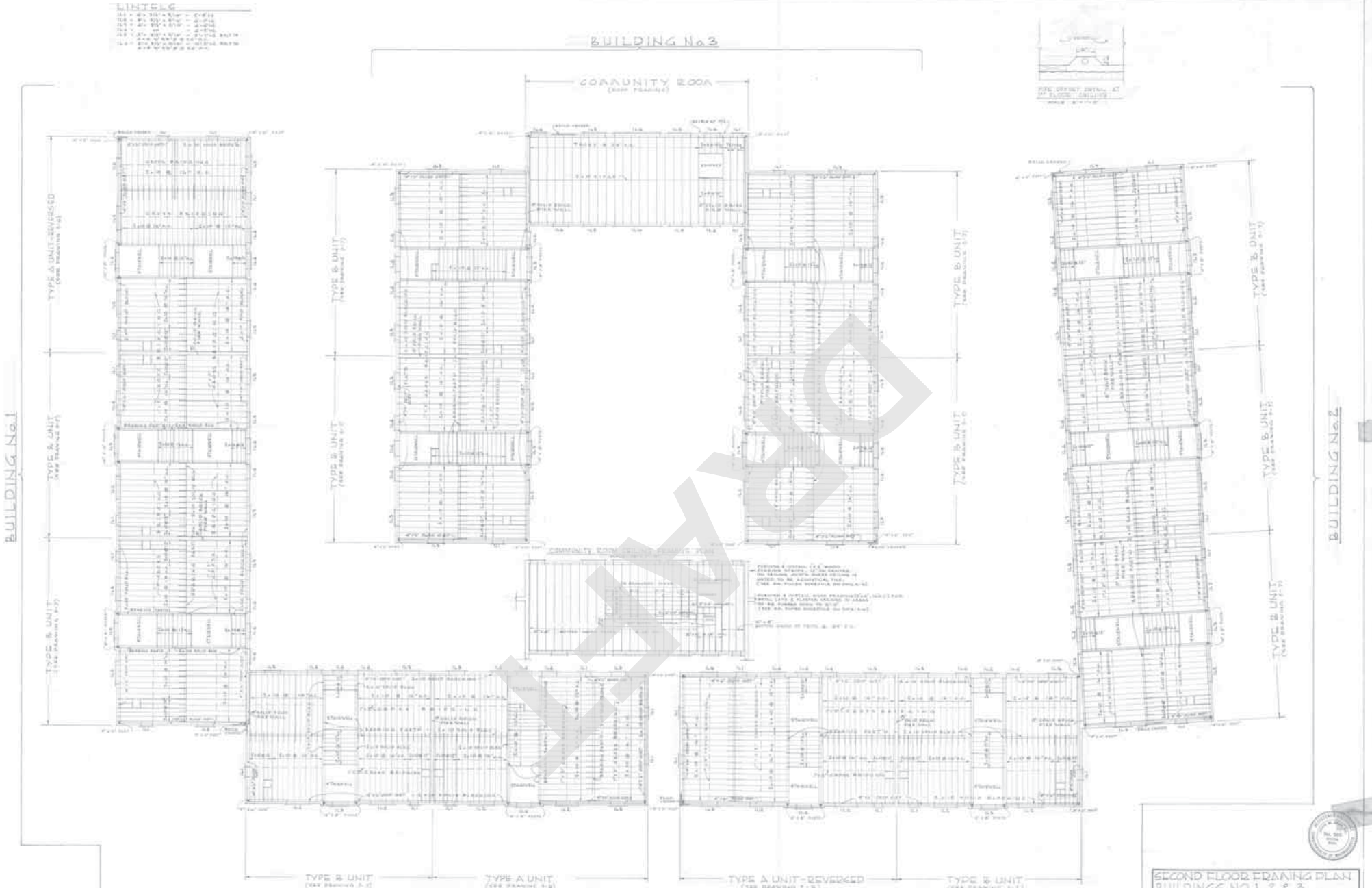
ARCHITECTS
153 MILK STREET — BOSTON, MASS.


PLAN OF RISER ①
PLAN OF RISER ②
DETAIL OF VENT STACK FLASHING
PLAN OF RISER ③
PLAN OF RISER ④
COMMUNITY ROOM
FIRST & SECOND FLOOR PLANS BLDG. NO. 3
DETAIL OF BATH TUB FILLER AND SHOWER ASSEMBLY
DETAIL OF GRAB BAR SCREWS
FIRST & SECOND FLOOR PLANS BLDG. NO. 1
FIRST & SECOND FLOOR PLANS BLDG. NO. 2
DETAIL OF BATH TUB GRAB BARS
ATTIC SPACE
PLUMBING
FIRST & SECOND FLOOR PLANS
BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS – DORCHESTER, MASS.
PUBLIC HOUSING ADMINISTRATION
JOHN M. GRAY CO.
ARCHITECTS
153 MILK STREET – BOSTON, MASS.
CHARLES L. THOMPSON
SANITARY ENGINEER
BOSTON, MASS.


SECTION D-D THRU PIT
SECTION A-A THRU COMMUNITY SPACE BASEMENT
SECTION B-B THRU COMMUNITY SPACE BASEMENT & STAIR
DETAIL OF POSITIVE VENTILATION
TYPICAL SECTION THRU FOUNDATION OF 8" BRICK VENEER WALL
DETAIL OF VENT, CLEAN-OUT & DRAIN
PLAN OF MANHOLE NO. 2 METAL COVER & FRAME
SECTION M-M
SECTION J-J
DETAILS OF MANHOLE & TRENCH & MAT AT FUEL OIL TANK
TYPICAL DETAILS FOR ROOF PLUMBING C.O.
FUEL OIL FILL POINT DETAIL
DRAFT
FOUNDATION PLAN
BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS — DORCHESTER, MASS.
DEVELOPED UNDER THE UNITED STATES HOUSING ACT WITH THE ASSISTANCE OF THE PUBLIC HOUSING ADMINISTRATION
JOHN M. GRAY CO.
ARCHITECTS
153 MILK STREET — BOSTON, MASS.
DRAWING NO. S-1


FIRST FLOOR FRAMING PLAN
BUILDINGS NO. 1, 2 AND 3.
BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS — DORCHESTER, MASS.
DEVELOPED UNDER THE UNITED STATES HOUSING ACT
OF 1937 AS AMENDED
PUBLIC HOUSING ADMINISTRATION
JOHN M. GRAY CO.
ARCHITECTS
153 MILK STREET - BOSTON, MASS.
S-2
BUILDING NO. 1
BUILDING NO. 2
BUILDING NO. 3
TYPE A UNIT
TYPE B UNIT
BASEMENT
DRAFT



SECOND FLOOR FRAMING PLAN
BUILDINGS NO. 1, 2 & 3.

BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS — DORCHESTER, MASS.

DEVELOPED UNDER THE UNITED STATES HOUSING ACT
WITH THE ASSISTANCE OF THE
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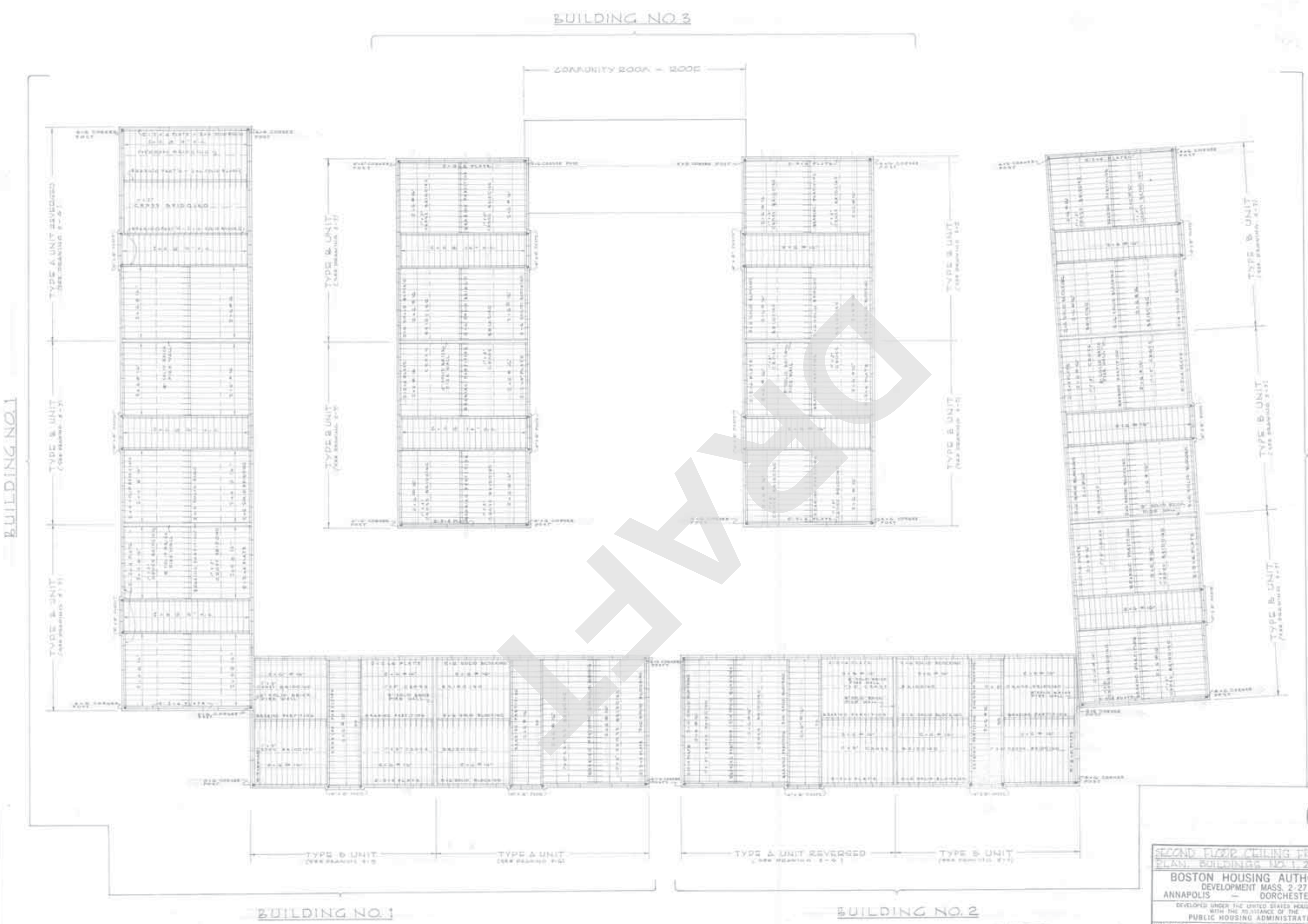
153 MILK STREET — BOSTON, MASS.

DRAWING NO.
S-3



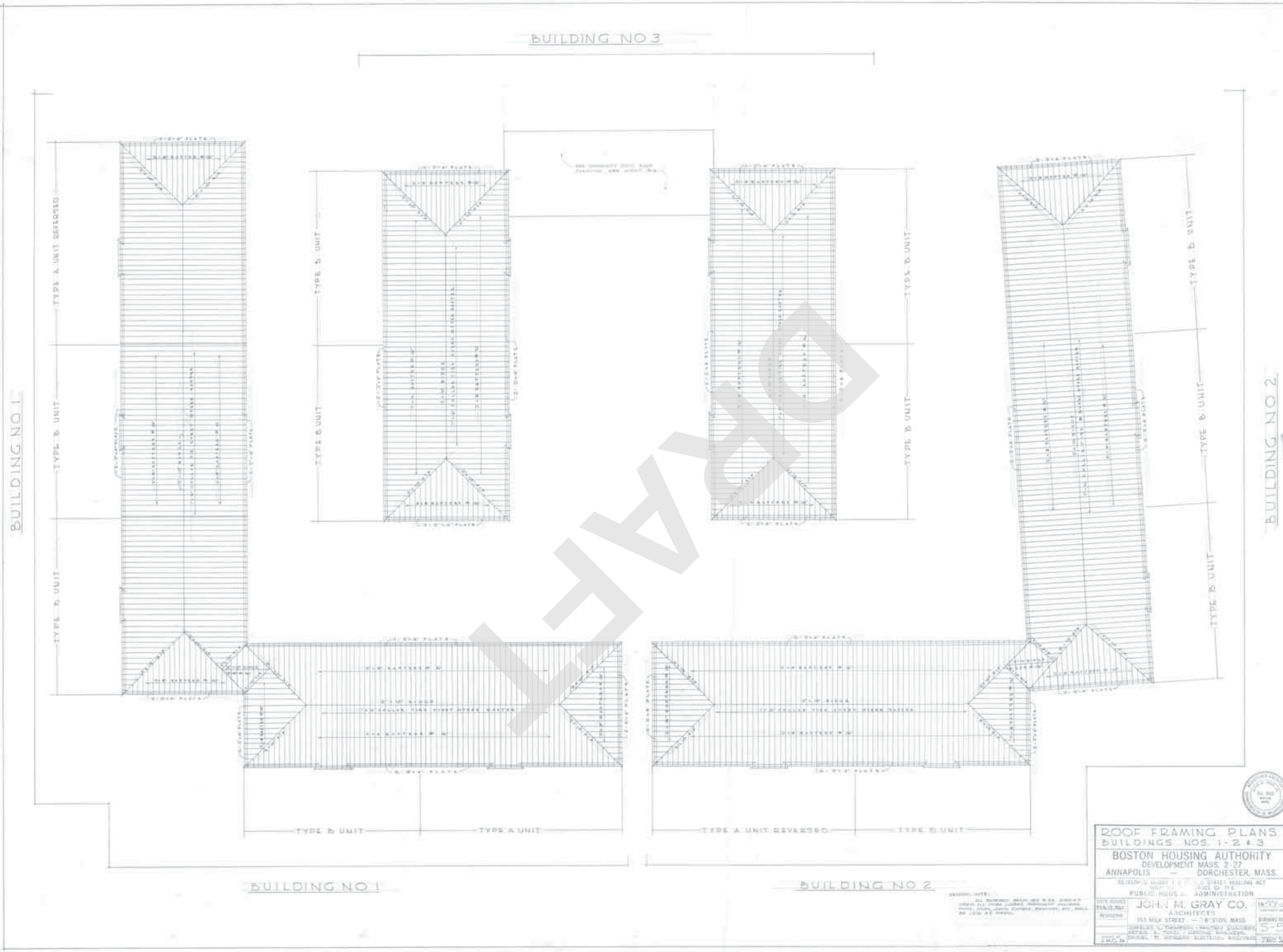
SECOND FLOOR CEILING FRAMING PLAN. BUILDINGS NO. 1, 2, & 3

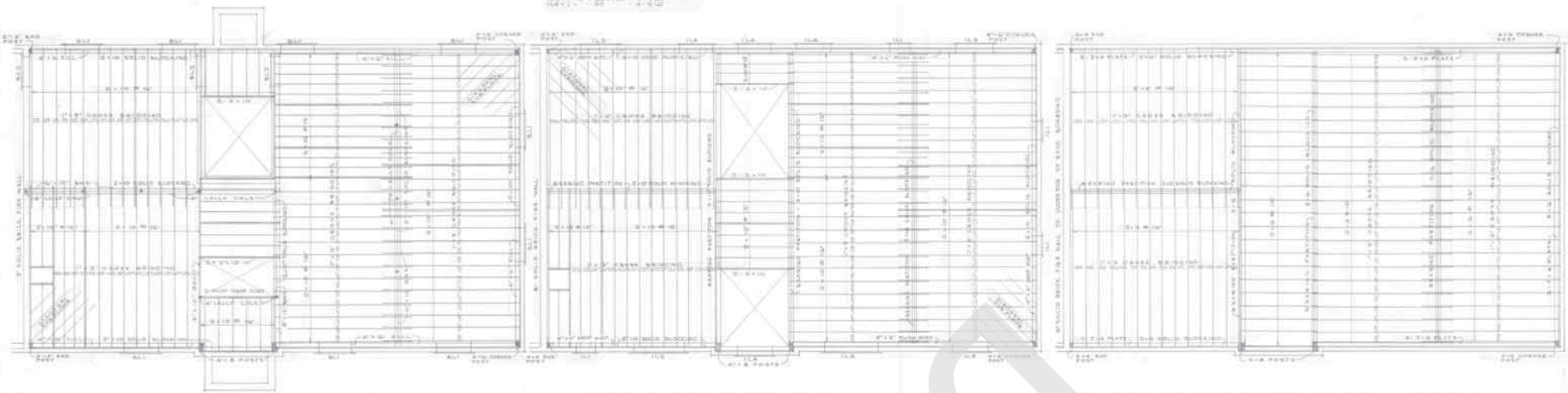
BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS — DORCHESTER, MASS.

DEVELOPED UNDER THE UNITED STATES HOUSING ACT WITH THE ASSISTANCE OF THE
PUBLIC HOUSING ADMINISTRATION

JOHN M. GRAY CO.
ARCHITECTS
153 MILK STREET — BOSTON, MASS.

DRAWING NO.
S-4


BUILDING NO 3
BUILDING NO 1
BUILDING NO 2
TYPE A UNIT REVERSED
TYPE B UNIT
TYPE B UNIT
TYPE B UNIT
TYPE B UNIT
TYPE B UNIT
TYPE A UNIT
TYPE A UNIT REVERSED
TYPE B UNIT
TYPE B UNIT
TYPE B UNIT
TYPE B UNIT
BUILDING NO 1
BUILDING NO 2
ROOF FRAMING PLANS
BUILDINGS NOS. 1-2 & 3
BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS — DORCHESTER, MASS.
PUBLIC HOUSING ADMINISTRATION
JOHN M. GRAY CO.
ARCHITECTS
5-5



FIRST FLOOR FRAMING PLAN - UNIT A

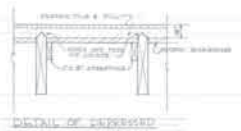
SECOND FLOOR FRAMING PLAN - UNIT A

SECOND FLOOR CEILING FRAMING PLAN - UNIT A

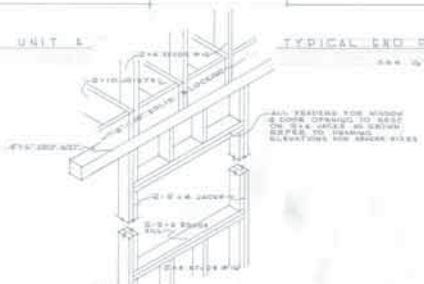
TYPICAL FRONT FRAMING ELEVATION - UNIT A

TYPICAL END FRAMING ELEVATION - UNIT A

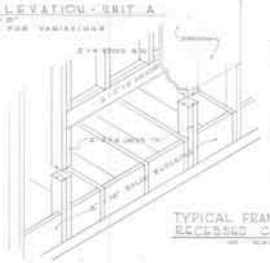
TYPICAL REAR FRAMING ELEVATION - UNIT A



DETAIL OF DEPRESSED FLOOR IN BATHROOMS



TYPICAL FRAMING FOR ALL OPENINGS ALL BUILDINGS



TYPICAL FRAMING FOR RECESSED CONVECTORS

TYPICAL DETAIL AT WOOD SILL

FRAMING DETAILS - UNIT "A"

FRAMING DETAILS FOR UNIT A REVERSED EXACTLY SIMILAR OPPOSITE HAND

BOSTON HOUSING AUTHORITY

DEVELOPMENT MASS. 2-27

ANNAPOLIS — DORCHESTER, MASS.

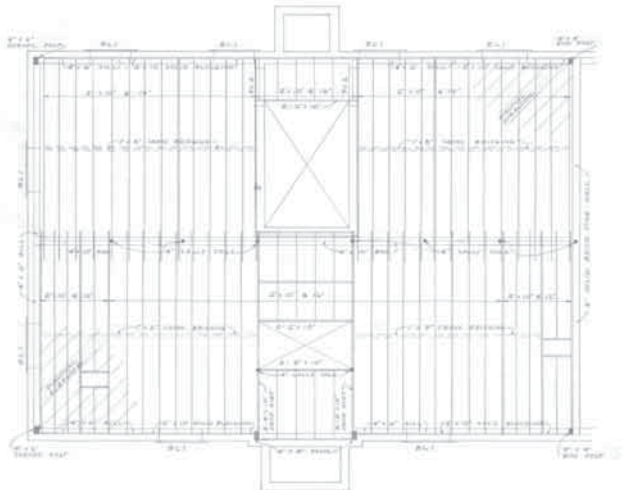
DESIGNED UNDER U.S. UNITED STATES HOUSING ACT OF 1937, AS AMENDED, FOR THE PUBLIC HOUSING ADMINISTRATION

JOHN M. GRAY CO.

ARCHITECTS

153 MILK STREET — BOSTON, MASS.

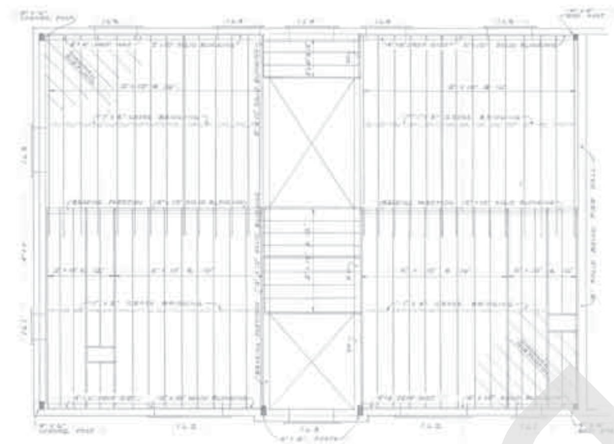
DRAWING NO. S-6



FIRST FLOOR FRAMING - UNIT B

SCALE 1/8" = 1'-0"

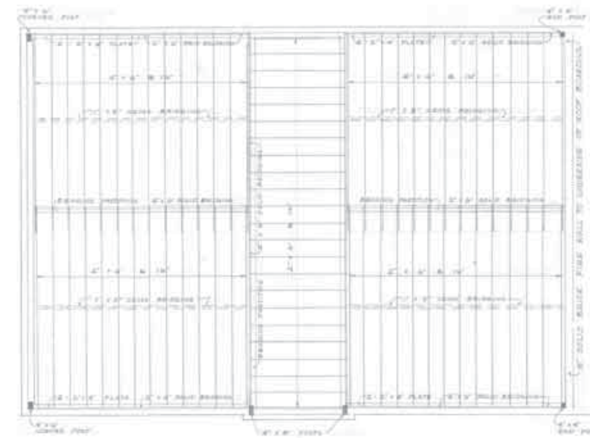
SEE 1/8" SCALE PLANS FOR VARIATIONS



SECOND FLOOR FRAMING - UNIT B

NOTE: ALL LUMBER SHALL BE 1200# f

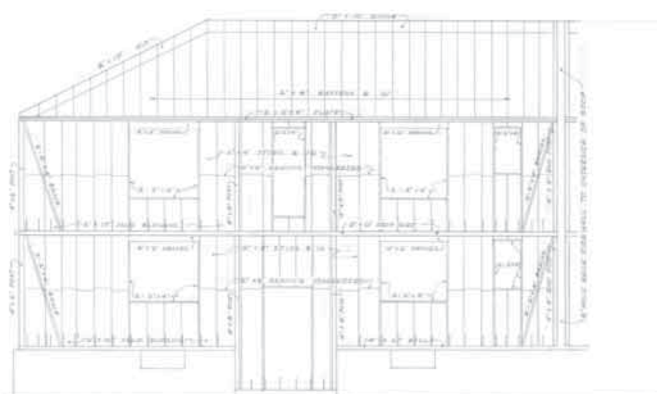
SEE 1/8" SCALE PLAN FOR VARIATIONS



SECOND FLOOR CEILING PLAN - UNIT B

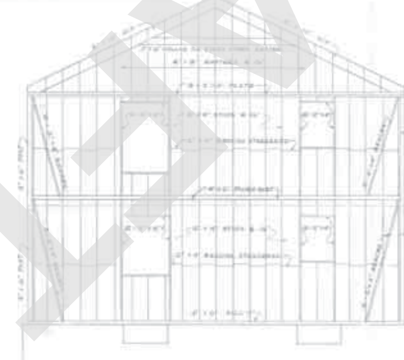
NOTE: ALL LUMBER SHALL BE 1200# f

SEE 1/8" SCALE PLAN FOR VARIATIONS



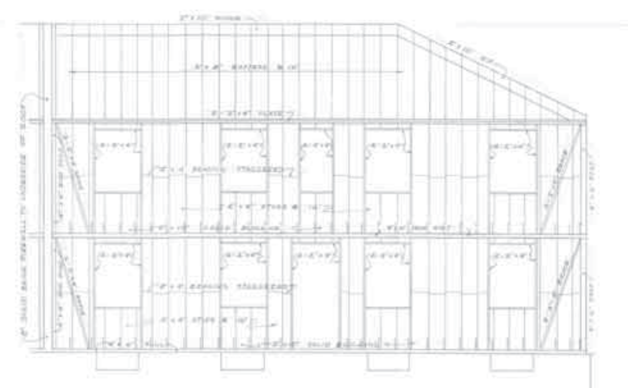
FRONT ELEVATION FRAMING - UNIT B

SEE 1/8" SCALE PLANS FOR VARIATIONS



END ELEVATION FRAMING - UNIT B

SEE 1/8" SCALE PLANS FOR VARIATIONS



REAR ELEVATION FRAMING - UNIT B

SEE 1/8" SCALE PLANS FOR VARIATIONS

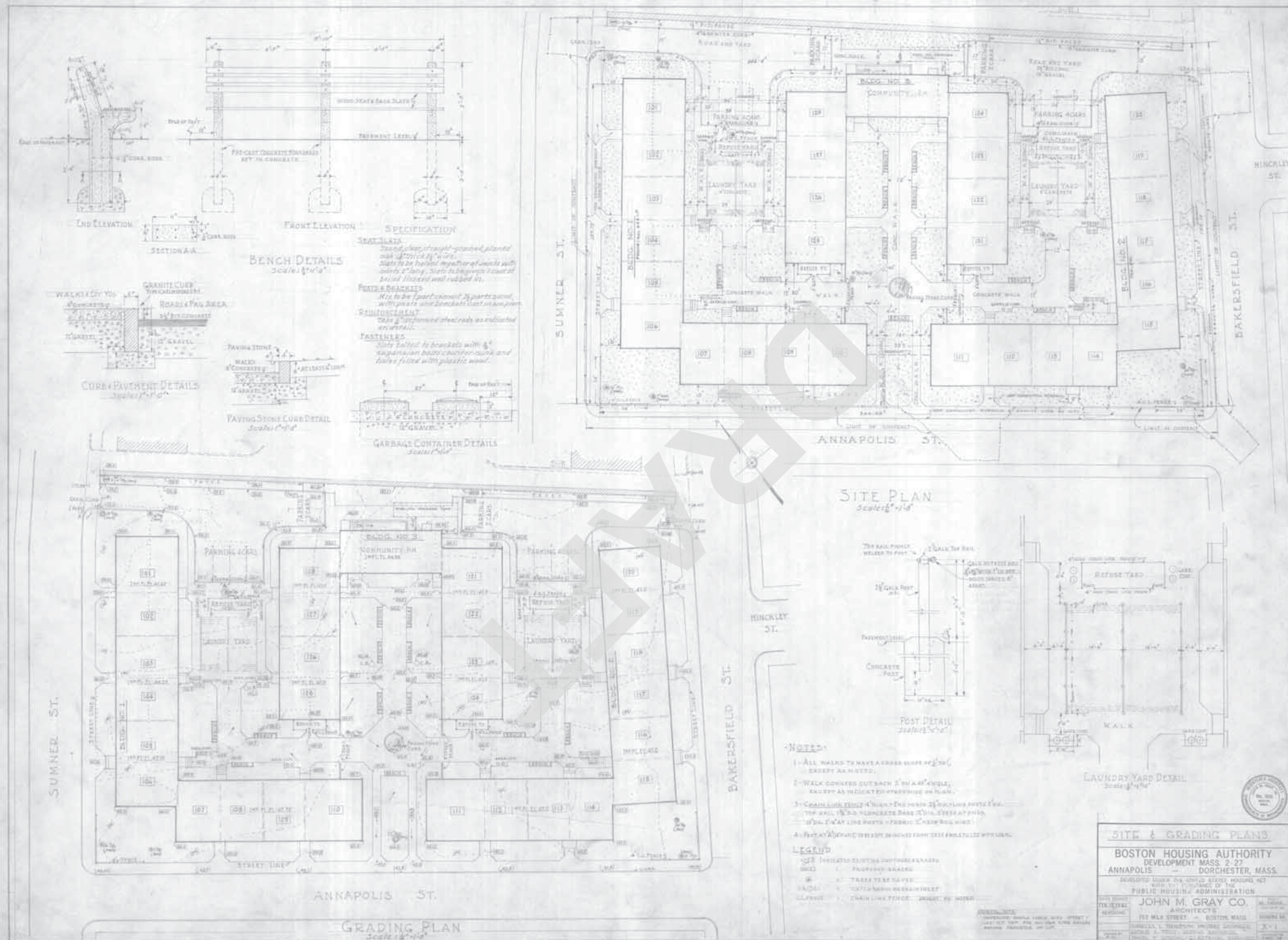
FRAMING DETAILS - UNIT 'B'

BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS — DORCHESTER, MASS.

DEVELOPED UNDER THE UNITED STATES HOUSING ACT WITH THE ASSISTANCE OF THE PUBLIC HOUSING ADMINISTRATION

JOHN M. GRAY CO.
ARCHITECTS
153 MILK STREET — BOSTON, MASS.

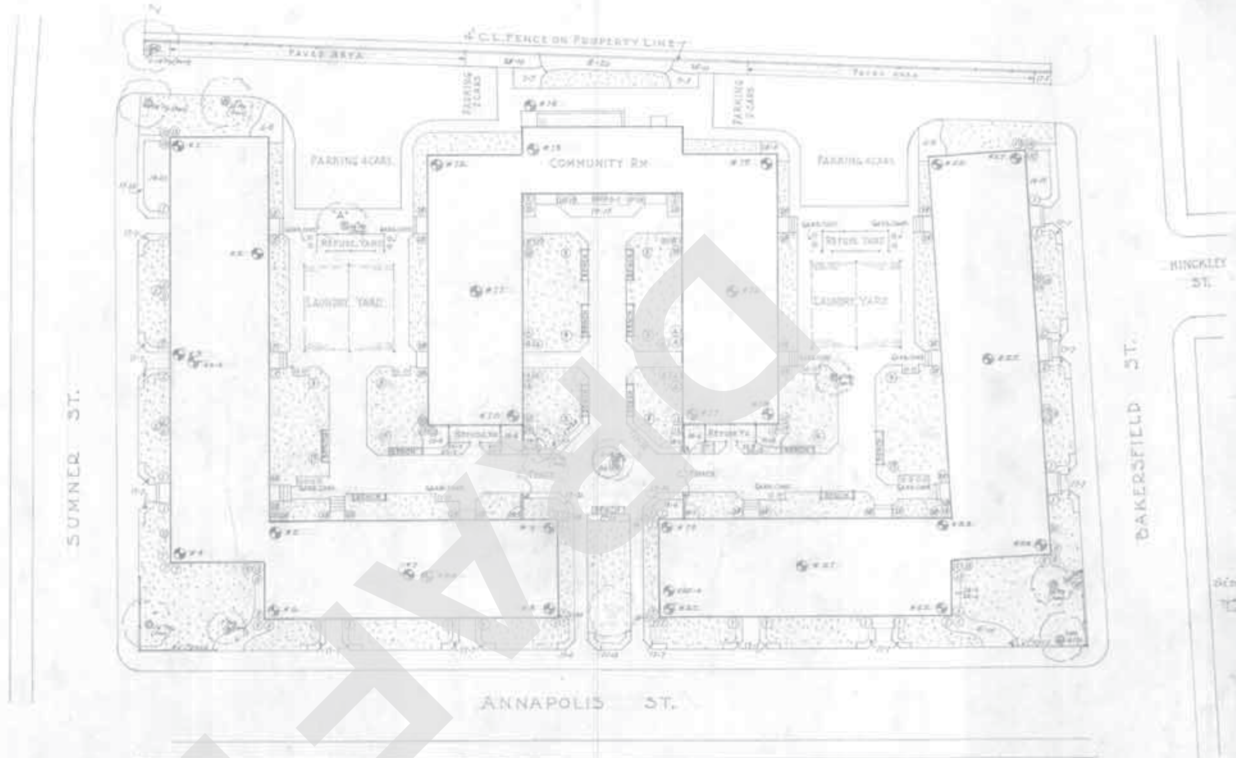
DRAWING NO. S-7

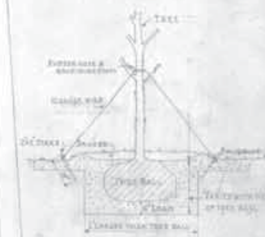

BENCH DETAILS
END ELEVATION
FRONT ELEVATION
SECTION A-A
SPECIFICATION
CURB & PAVEMENT DETAILS
PAVING STONE CURB DETAIL
GARBAGE CONTAINER DETAILS
SITE PLAN
GRADING PLAN
POST DETAIL
LAUNDRY YARD DETAIL
SUMNER ST.
ANNAPOLIS ST.
BAKERSFIELD ST.
HINCKLEY ST.
BLDG. NO. 1
BLDG. NO. 2
BLDG. NO. 3
COMMUNITY RM.
PARKING 4 CARS
LAUNDRY YARD
REFUSE YARD
NOTES
LEGEND
SITE & GRADING PLANS
BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS — DORCHESTER, MASS.
PUBLIC HOUSING ADMINISTRATION
JOHN M. GRAY CO.
ARCHITECTS
X-1
DRAFT

PLANT LIST

KEY NO.	QUAN.	SCIENTIFIC & COMMON NAME	HEIGHT IN FT.	HEIGHT TRUNK FT.	CAL. IN INCHES	B.B. R.	DIA. BALL OR ROOT SPD.
1	16	Thuja occidentalis nigra Darkgreen Arborvitae	5-6	—	2-2½	B.B.	28
2	6	Thuja occidentalis nigra Darkgreen Arborvitae	4-5	—	2	B.B.	21
3	3	Cornus florida White Flowering Dogwood	8-10	4	2½	B.B.	30
				HOOP CANES			
4	12	Evonymus al. compacta Dwarf Winged Evonymus	2-2½	4	—	R.	18
5	14	Forsythia int. spectabilis Showy Forsythia	3-4	6	—	R.	18
6	44	Viburnum dilatatum Linden Viburnum	3-4	6	—	R.	12
7	29	Philadelphus lemoinei Lemoine's Mockorange	3-4	6	—	R.	12
8	29	Philadelphus coronarius Sweet Mockorange	3-4	6	—	R.	12
9	7	Hydrangea arb. grandiflora Snowhill Hydrangea	1½-2	6	—	R.	12
10	31	Spiraea b. anthony waterer Rosy carmine Spiraea	2-3	4	—	R.	15
11	7	Kerria japonica Golden Yellow Kerria	2-3	6	—	R.	12
12	18	Syringa persica Persian Lilac	4-5	5	—	B.B.	16
13	13	Syringa vulgaris alba Common White Lilac	5-6 Clumps	—	—	B.B.	24
14	47	Ligustrum ib. regelianum Regel Privet	2-3	6	—	R.	12
15	1	Enkianthus campanulatus Redvein Enkianthus	5-6	5	—	B.B.	18
16	1	Hibiscus s. Boule de Feu Doublered Hibiscus	4-5	5	—	B.B.	18
17	281	Berberis thunbergi Japanese Barberry	1½-2	4	—	R.	12
18	14	Viburnum carlesi Mayflower Viburnum	1½-2	4	—	B.B.	15
19	15	Hosta pl. subcordata gr. fl. Giant White Plantain Lily	—	—	—	R.	12
20	14	Phlox-Enchantress Salmon Pink Phlox	—	—	—	R.	12
21	6	Phlox - Weston White Phlox	—	—	—	R.	12
22	8	Veronica lon. subsessilis Blue Speedwell	—	—	—	R.	15
23	11	Platycodon grandiflorum Blue Balloon Flower	—	—	—	R.	12
24	118	Convallaria majalis Lily of the Valley	—	—	—	R.	Clump
25	77	Ligustrum ibota Ibota Privet	3-4	6	—	R.	12

NOTE - 16-25 First figure in bed indicates kind of plant. Second figure shows number required to fill space.





TREE GUYING DETAIL

NOTE

"NOTES"

INDICATES GRASS AREAS

PLANTING & BORING LOCATION PLAN

BORING SCHEDULE

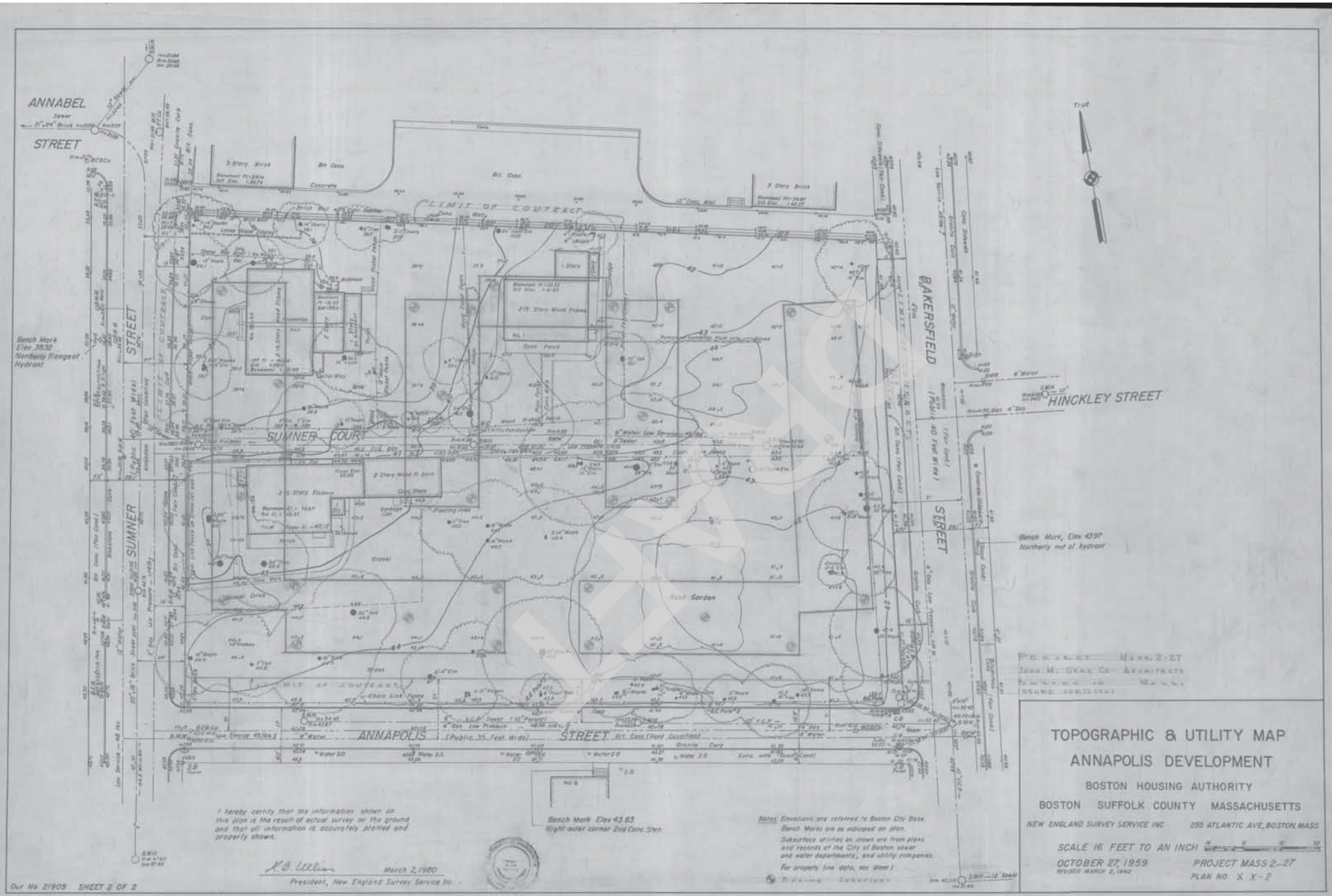
PLANT LIST & PLAN
BORING SCHEDULE & LOCATION PLAN

BOSTON HOUSING AUTHORITY
DEVELOPMENT MASS. 2-27
ANNAPOLIS — DORCHESTER, MASS.

DEVELOPED UNDER THE UNITED STATES HOUSING ACT WITH THE ASSISTANCE OF THE PUBLIC HOUSING ADMINISTRATION

JOHN M. GRAY CO.
ARCHITECTS
113 MILK STREET — BOSTON, MASS.

DRAWING NO. X-2



I hereby certify that the information shown on this plan is the result of actual survey on the ground and that all information is accurately plotted and properly shown.

March 2, 1960

President, New England Survey Service Inc.

Notes: Elevations are referred to Boston City Base. Bench Marks are as indicated on plan. Subsurface utilities as shown are from plans and records of the City of Boston sewer and water departments, and utility companies. For property line data, see sheet 1

TOPOGRAPHIC & UTILITY MAP
ANNAPOLIS DEVELOPMENT

BOSTON HOUSING AUTHORITY

BOSTON SUFFOLK COUNTY MASSACHUSETTS

NEW ENGLAND SURVEY SERVICE INC 255 ATLANTIC AVE, BOSTON, MASS

SCALE 16 FEET TO AN INCH

OCTOBER 27, 1959
REVISED MARCH 2, 1960

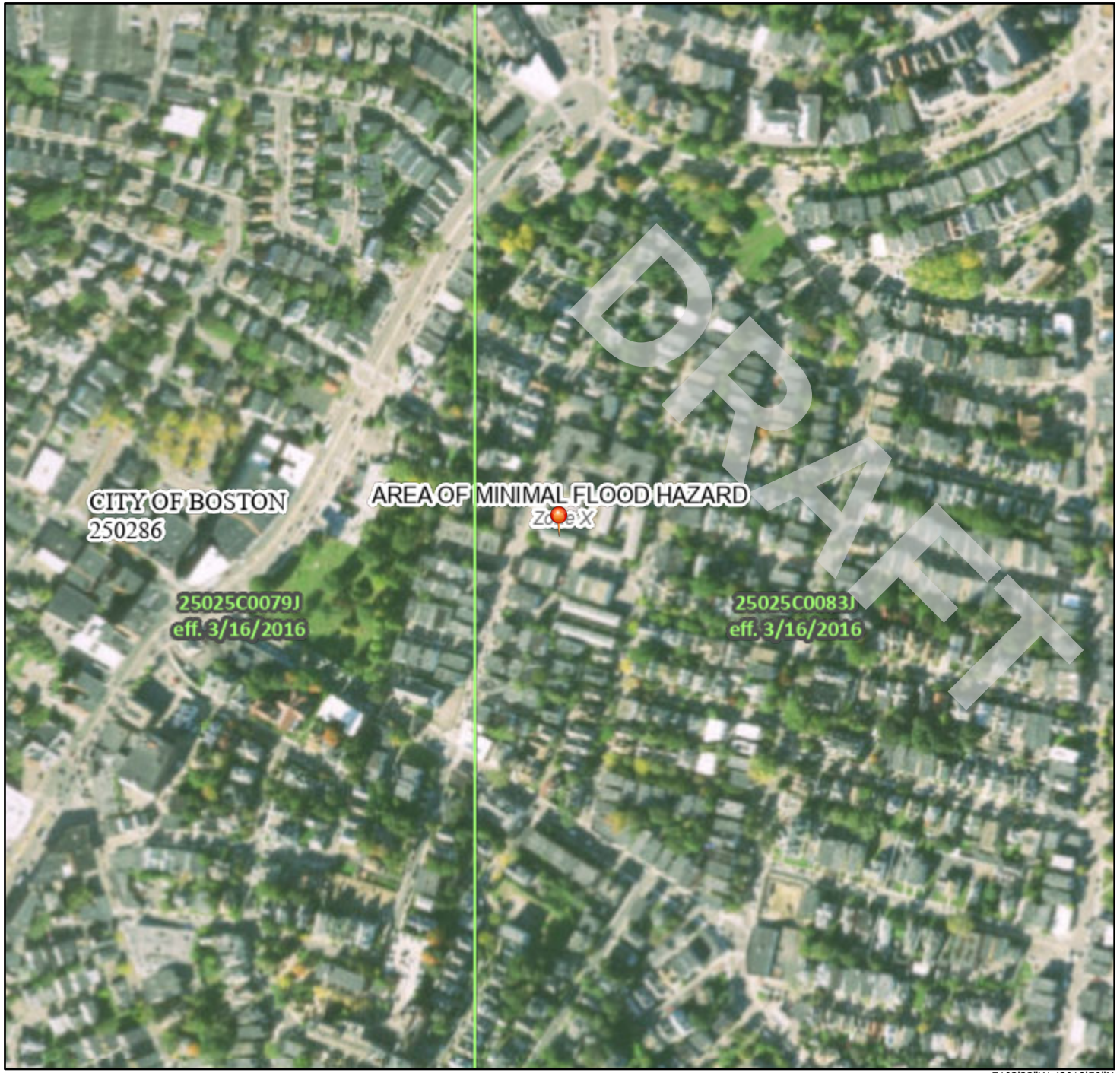
PROJECT MASS 2-27
PLAN NO. X X-2

Our No. 21909 SHEET 2 OF 2

National Flood Hazard Layer FIRMette

FEMA

71°4'1"W 42°19'16"N



71°3'23"W 42°18'50"N

Feet 1:6,000

0 250 500 1,000 1,500 2,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/25/2022 at 7:24 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Assessing On-Line

« New search Map

Parcel ID:	1301797000
Address:	11-19 BAKERSFIELD ST BOSTON MA 02125
Property Type:	Exempt
Classification Code:	0902 (Exempt Ownership / CITY OF BOSTON)
Lot Size:	55,218 sq ft
Gross Area:	41,961 sq ft
Year Built:	1950
Owner on Saturday, January 1, 2022:	BOSTON HOUSING AUTH
Owner's Mailing Address:	11 BAKERSFIELD DORCHESTER MA 02125
Residential Exemption:	No
Personal Exemption:	No

Value/Tax

Assessment as of Friday, January 1, 2021, statutory lien date.

FY2022 Building value:	$4,198,600.00
FY2022 Land Value:	$1,684,300.00
FY2022 Total Assessed Value:	$5,882,900.00

FY2022 Tax Rates (per thousand):

- Residential:	$10.88
- Commercial:	$24.98

FY2023 Preliminary Tax (Q1 + Q2):

Estimated Tax:	$0.00
Community Preservation:	$0.00
Total Tax, First Half:	$0.00

Abatements/Exemptions

Applications for Abatements for FY2023 are not yet available online. Applications will become available for download beginning 1/1/2022

This type of parcel is not eligible for a residential or personal exemption.

Current Owner

1 BOSTON HOUSING AUTH

Owner information may not reflect any changes submitted to City of Boston Assessing after December 28, 2021.

Value History

Fiscal Year	Property Type	Assessed Value *
2022	Exempt	$5,882,900.00
2021	Exempt	$5,851,900.00
2020	Exempt	$5,761,000.00
2019	Exempt	$5,466,500.00
2018	Exempt	$5,214,000.00
2017	Exempt	$4,913,500.00
2016	Exempt	$4,421,000.00
2015	Exempt	$3,863,500.00
2014	Exempt	$3,228,000.00
2013	Exempt	$2,850,000.00
2012	Exempt	$2,684,000.00
2011	Exempt	$2,634,500.00
2010	Exempt	$2,660,000.00
2009	Exempt	$2,797,500.00
2008	Exempt	$2,797,500.00
2007	Exempt	$2,769,000.00
2006	Exempt	$2,588,000.00
2005	Apartment Building	$2,317,000.00
2004	Apartment Building	$2,425,500.00
2003	Apartment Building	$1,921,500.00
2002	Exempt	$2,039,000.00
2001	Exempt	$1,826,000.00
2000	Exempt	$1,864,500.00
1999	Exempt	$1,698,000.00
1998	Exempt	$1,698,000.00
1997	Exempt	$1,741,000.00
1996	Exempt	$1,669,500.00
1995	Exempt	$1,596,000.00
1994	Exempt	$1,509,000.00
1993	Exempt	$1,508,000.00
1992	Exempt	$1,579,500.00
1991	Exempt	$2,060,000.00
1990	Exempt	$2,060,000.00
1989	Exempt	$1,998,000.00
1988	Exempt	$1,637,500.00
1987	Exempt	$1,387,500.00
1986	Exempt	$1,273,000.00
1985	Exempt	$1,169,000.00

* Actual Billed Assessments

View Quarterly Tax Bill and Payment Information for this parcel for FY2022 and FY2023.

View approved building permits associated with this parcel.

Questions? For CURRENT fiscal year tax bill Questions, contact the Taxpayer Referral & Assistance Center. For PRIOR fiscal year tax payments, interest charges, fees, etc. contact the Collector's office at 617-635-

4131.

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

The AE Zone category has been divided by a **Limit of Moderate Wave Action (LiMWA)**. The LiMWA represents the approximate landward limit of the 1.5-foot breaking wave. The effects of wave hazards between the VE Zone and the LiMWA (or between the shoreline and the LiMWA for areas where VE Zones are not identified) will be similar to, but less severe than those in the VE Zone.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Massachusetts State Plane Mainland Zone (FIPS zone 2001). The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM is derived from Massachusetts Geographic Information System (MassGIS) digital ortho-photography produced at 45 centimeter (2005) and 30 centimeter (2008) resolution. Aerial photography is dated Spring 2005 and Spring 2008.

The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data Tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map,** how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

Only coastal structures that are certified to provide protection from the 1-percent-annual chance flood are shown on this panel. However, all structures taken into consideration for the purpose of coastal flood hazard analysis and mapping are present in the DFIRM database in S_Gen_Struct.

LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% Annual Chance Floodplain Boundary
- 0.2% Annual Chance Floodplain Boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
- Limit of Moderate Wave Action
- Limit of Moderate Wave Action coincident with Zone Break
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

- A / A — Cross section line
- 23 / 23 — Transect line
- Culvert
- Bridge
- 45° 02' 08", 93° 02' 12" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
- 4989000 M — 1000-meter grid: Massachusetts State Plane Mainland Zone (FIPS Zone 2001), Lambert Conformal Conic projection
- 4889000mN — 1000-meter Universal Transverse Mercator tick values, zone 19N
- DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
September 25, 2009

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
March 16, 2016 - to change Base Flood Elevations and Special Flood Hazard Areas, to change zone designations, to update the effects of wave action, to update corporate limits, to add roads and road names, to incorporate previously issued Letters of Map Revision and to modify Coastal Barrier Resource System units.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'
250 0 500 1000 FEET
150 0 150 300 METERS

NFIP NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0083J

FIRM

FLOOD INSURANCE RATE MAP

SUFFOLK COUNTY, MASSACHUSETTS (ALL JURISDICTIONS)

PANEL 83 OF 176
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BOSTON, CITY OF	250286	0083	J

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER 25025C0083J
MAP REVISED MARCH 16, 2016

Federal Emergency Management Agency

OSHPD

52 Sumner St, Dorchester, MA 02125, USA

Latitude, Longitude: 42.3178178, -71.0617784

Date	7/25/2022, 6:23:30 AM
Design Code Reference Document	ASCE41-13
Custom Probability	
Site Class	D - Stiff Soil

Type	Description	Value
Hazard Level		BSE-2N
S_S	spectral response (0.2 s)	0.212
S_1	spectral response (1.0 s)	0.068
S_{XS}	site-modified spectral response (0.2 s)	0.339
S_{X1}	site-modified spectral response (1.0 s)	0.164
F_a	site amplification factor (0.2 s)	1.6
F_v	site amplification factor (1.0 s)	2.4
ssuh	max direction uniform hazard (0.2 s)	0.238
crs	coefficient of risk (0.2 s)	0.892
ssrt	risk-targeted hazard (0.2 s)	0.212
ssd	deterministic hazard (0.2 s)	1.5
s1uh	max direction uniform hazard (1.0 s)	0.076
cr1	coefficient of risk (1.0 s)	0.9
s1rt	risk-targeted hazard (1.0 s)	0.068
s1d	deterministic hazard (1.0 s)	0.6

Type	Description	Value
Hazard Level		BSE-1N
S_{XS}	site-modified spectral response (0.2 s)	0.226
S_{X1}	site-modified spectral response (1.0 s)	0.109

Type	Description	Value
Hazard Level		BSE-2E
S_S	spectral response (0.2 s)	0.128
S_1	spectral response (1.0 s)	0.044
S_{XS}	site-modified spectral response (0.2 s)	0.205
S_{X1}	site-modified spectral response (1.0 s)	0.105
f_a	site amplification factor (0.2 s)	1.6
f_v	site amplification factor (1.0 s)	2.4

Type	Description	Value
Hazard Level		BSE-1E
S_S	spectral response (0.2 s)	0.043
S_1	spectral response (1.0 s)	0.016
S_{XS}	site-modified spectral response (0.2 s)	0.069
S_{X1}	site-modified spectral response (1.0 s)	0.039
F_a	site amplification factor (0.2 s)	1.6
F_v	site amplification factor (1.0 s)	2.4

Type	Description	Value
Hazard Level		TL Data
T-Sub-L	Long-period transition period in seconds	6

DISCLAIMER

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APPENDIX F

Property Evaluator Qualifications

Juan C. Sequeira

Project Manager

EDUCATION

- Bachelor of Architecture – American University, 2008
- Minor in Finance – American University, 2010

SUMMARY OF PROFESSIONAL EXPERIENCE

Mr. Sequeira has more than 11 years of experience in the architectural design and inspection as project management of residential and hospitality projects domestic and abroad. He has performed building and property assessments for varying scopes and customer requirements for the commercial real estate, banking and insurance industries.

Currently, Mr. Sequeira is responsible for performing Property Condition Assessments that include identifying deficiencies, providing overall professional judgment of a property's condition and preparing cost estimates for repairs and projected replacement costs. He performs Property Condition Assessments of varying property types including retail, office, commercial, hospitality, industrial, multi-family, and senior living facilities throughout the United States.

Prior to joining AEI Consultants, Mr. Sequeira has worked on construction documents, schematic design, design development and project management for many different types of architecture fields including: Corporate, Commercial, Mixed-Use, Retail, Hospitality, and Residential. In addition, these assessments included formulating replacement costs, assessing property and liability risks and providing recommendations.

PROJECT EXPERIENCE

Project experience for Mr. Sequeira includes:

- Numerous multifamily assignments in accordance with Fannie Mae, Freddie Mac, and HUD requirements.
- Multi-Family – Tesora Apartments, Las Vegas, NV; 223(f) Refi-Acq and E-Tool.
- Multi-Family – Cherrydale Apartments, Baltimore, MD; 223(f) Refi-Acq and E-Tool.
- Multi-Family – Arella Forest at Woodland, Conroe, TX; 223(f) Refi-Acq and E-Tool.
- Multi-Family – Forrest Brook Apartments, York, SC; 223(f) Refi-Acq and E-Tool.
- Multi-Family – Lincoln Village Apartments, Lincoln, OR; 223(f) Refi-Acq and E-Tool.
- Multi-Family – Park Manor Apartments, Lebanon, OR; 223(f) Refi-Acq and E-Tool.

- Multi-Family – Willamalane Apartments, Milwaukee, OR; 223(f) Refi-Acq and E-Tool.
- Multi-Family – Pine Tree Apartments, Winston, OR; 223(f) Refi-Acq and E-Tool.
- Multi-Family – Parkside Village, Roseburg, OR; 223(f) Refi-Acq and E-Tool.
- Multi-Family – Primrose of Shadow Creek, Austin, TX; 223(f) Refi-Acq and E-Tool.
- Multi-Family – Ridge at Trinity, Dallas, TX; 223(f) Refi-Acq and E-Tool.
- Multi-Family – Friendship Haven Healthcare Center, Friendswood, TX; 223(f) Refi-Acq and E-Tool.
- Multi-Family – Heritage Square Fort Worth, Fort Worth, TX; 223(f) Refi-Acq and E-Tool.
- In depth experience with multifamily assessments that conform to all GSE (Fannie Mae & Freddie Mac) and HUD requirements for multifamily property condition assessments
- Multi-Family – Greenbriar Mansion, Fort Worth, TX; 223(f) Refi-Acq and E-Tool.
- Multi-Family – Regency Garden Apartments, Bryan, TX; 223(f) Refi-Acq and E-Tool.
- Multi-Family – The Duke Apartments, Victoria, TX; 223(f) Refi-Acq and E-Tool.
- Multi-Family – Castlewood Apartments, Houston, TX; 223(f) Refi-Acq and E-Tool.

William David Taylor – National Client Manager - HUD

Training/Licenses/Registrations:

International Code Council Certified Building Inspector
International Code Council Certified Commercial Building Inspector
International Code Council Certified Residential Building Inspector
International Code Council Certified Accessibility Inspector / Plan Examiner
Commonwealth of Virginia Certified Commercial Building Inspector
Commonwealth of Virginia Certified Residential Building Inspector
Integrated Pest Management in Multifamily Housing (Training)
International Code Council Accessibility & Usability for Residential Buildings (Training)
Integrated Pest Management in Multifamily Housing Course - National Healthy Homes Training Center
Property Maintenance Inspection, Electrical Inspection & Understanding Braced Walls Training by Virginia
Building Code Academy
Building Performance Institute (BPI) Certified Multifamily Building Analyst Professional
Basics of Elevator Inspections given by Sanjay Kamani, QEI, KP Property Advisors LLC
VHDA Universal Design Course

Education:

J. Sargent Reynolds Community College – Courses in Architectural Design

Experience:

Mr. Taylor has extensive experience with regards to commercial and residential construction, design, and inspection issues. Mr. Taylor has greater than fifteen (15) years' experience in the construction field. He was in the Building Inspections for the City of Richmond and did construction design for Virginia based construction and engineering firms. During his former employment he was responsible for design, review, and inspection for code compliance on multiple projects throughout the Commonwealth of Virginia. Mr. Taylor has attended specialized building classes and has in depth understanding regarding building construction and inspection. He has performed and multiple building assessment projects for HUD MAP, HUD LEAN, and Public Housing Authority clients. He is knowledgeable of HUD's Capital Needs Assessment guidelines and software. In addition, he has extensive experience and training on numerous accessibility standards, including, UFAS, ADA, ANSI, and the Fair Housing Act Guidelines.

As a Project Manager - HUD, Mr. Taylor is responsible for conducting and preparing Property Condition Reports, Project Capital Needs Assessments, and Phase I Environmental Site Assessments throughout AEI.

Mr. Taylor's HUD's industry experience includes:

- Performing RAD Physical Condition Assessments at more than 50 Public Housing Authority's
- More than 5 years' experience in multifamily assessments including numerous assignments for Freddie Mac, HUD, and Fannie Mae execution
- Performing over 200 HUD MAP 223(f) assessments.
- Preforming HUD Map 202 assessments in multiple states.
- Preforming over 100 HUD LEAN assessments.
- Preforming HUD MAP 223(a)(7) assessments.
- Preforming Tax Credit assessments in multiple states.
- Preforming HUD (SPRAC), HUD OAHP, Standard and Poor, ASTM, and Freddie Mac assessments.

INTERNATIONAL CODE COUNCIL

WILLIAM TAYLOR

The International Code Council attests that the individual named on this certificate has satisfactorily demonstrated knowledge as required by the International Code Council by successfully completing the prescribed written examination based on codes and standards then in effect, and is hereby issued this certification as:

Accessibility Inspector/Plans Examiner

Given this day October 19, 2021

Certificate No. 8076685

Cindy Davis, CBO
President, Board of Directors

Dominic Sims, CBO
Chief Executive Officer

This certificate is the property of ICC and must be returned to ICC in the event of suspension or revocation of the certificate.

Roy Anderson PE – Seismic Services Manager, Building Assessments

University of California, San Diego; BS Structural Engineering 1990

Professional Engineer, California, Civil 82059
California Licensed General Contractor, B641049, Inactive
ATC First Responder Training, California OES Volunteer
Redwood Empire Remodelers Association, Board Member, Past President
Appointed to the City of Santa Rosa Board of Building Regulations Appeals, Chairman
Committee Member ASTM WK55885 Seismic Risk Assessment of Real Estate Portfolios
American Society of Civil Engineers (ASCE)
Structural Engineers Association of Northern California (SEAONC)
Earthquake Engineering Research Institute (EERI)

Mr. Anderson has over 39 years of construction, construction management, structural design, seismic retrofit, structural assessment, and commercial due diligence experience. He owned and operated a successful structural design consulting firm for over 14 years. His project experience includes public infrastructure, public works, and private developments including both residential and commercial projects. He has acted as a regional manager for a national consulting services firm overseeing property and casualty and seismic risk assessment operations in the western states, performing over 2000 Seismic Risk Assessment (Probable Maximum Loss) assessments and reports in the seismically active United States, Europe, and Mexico, over 100 Property Condition Assessments, and over 400 Property Damage Assessments for the insurance industry in 38 states. He has investigated and assessed damage in the 2014 Napa 6.0, Virginia 5.8, Oklahoma 5.7, and Northridge 6.7 earthquakes.

Mr. Anderson currently oversees and manages the Seismic Services Division of AEI's Building Assessments Department. Responsibilities include Senior Assessment of Seismic Risk Assessment Reports, Conducting Peer Reviews, scheduling, Seismic Retrofit Design, interfacing with Clients, providing outreach and education to Clients and Building Owners.

Some of his specific areas of expertise include: forensic analysis of architectural and structural damage, seismic assessments of buildings, structural remediation and rehabilitation of properties (URM, Historic, seismic, tornado, hurricane, flood, and fire), and structural design of swimming pools, wood and timber framed structures, structural steel structures, reinforced concrete structures, reinforced masonry structures, and pre-manufactured light gage steel structures.

Key experience for Mr. Anderson includes:

- Structural Design since 1991
- Seismic Retrofit Design since 1991
- Seismic Risk Assessments since 1994
- Forensic Assessments since 2007

Publications: 2016 ASTM Seismic Standards Update, California Mortgage Finance News, Fall 2016

Jeb Bonnett

Director of Building Assessments - HUD

EDUCATION

- B.B.A - Finance, James Madison University
- Principles of Real Estate Program, James Madison University

CERTIFICATIONS

- HUD Multi-Family Accelerated Processing (MAP) Cost/A&E Seminar – New York City
- HUD Multi-Family Accelerated Processing (MAP) PCNA Workshop – Columbus
- Virginia Housing Development Authority – Universal Design Training
- Fair Housing Act Accessibility Training Course– Phillip Zook
- Fair Housing Act Accessibility Training Seminar– Fair Housing Act First
- Elevator Training Courses – Sanjay Kamani, QEI, KP Property Advisors LLC
- Building Performance Institute – Training Services
- Building Specs Training Institute, Building/Design Inspection Courses

SUMMARY OF PROFESSIONAL EXPERIENCE

Mr. Bonnett has worked exclusively in the niche HUD real estate due diligence consulting industry since 2005. He has performed and directed thousands of building assessment projects for HUD MAP, HUD LEAN, and Public Housing Authority clients. He has expert knowledge of HUD's Capital Needs Assessment guidelines and software reporting requirements. In addition, he has extensive experience and training on numerous accessibility standards, including, UFAS, ADA, ANSI, and the Fair Housing Act Guidelines.

As Director of Building Assessments - HUD, Mr. Bonnett is responsible for providing direction for the development of HUD Building Assessment services throughout AEI. Day to day responsibilities include, creating organizational process assets, training internal and external stakeholders, identifying and understanding industry guidelines for HUD Building Assessment services, senior reviewing, project oversight, business development and client management.

PROJECT EXPERIENCE

Project experience for Mr. Bonnett includes:

- Performing and directing the successful completion of over 3,000 HUD MAP and HUD LEAN compliant Capital Needs Assessments.
- Performing and directing the successful completion of RAD and GPNA projects for over 100 HUD Public Housing Authority AMPs.
- Leading the creation of software reporting platforms to efficiently populate HUD's CNA E-Tool, RAD Tool, and GPNA Tool software systems.
- More than 5 years' experience in multifamily assessments including numerous assignments for Freddie Mac, Fannie Mae and HUD execution.
- Creating and performing HUD E-Tool training seminars for HUD MAP lenders and internal staff.

Karla King, P.E., Esq., LEED AP

Executive Vice President

EDUCATION

- JD – Law, Concentration in Environmental Law, Massachusetts School of Law, Andover, MA
- MS – Engineering Management, Certificate in Environmental Management, Tufts University, Medford, MA
- BS - Civil/Environmental Engineering, Minor in Business Management, Northeastern University, Boston, MA

CERTIFICATIONS

- Professional Engineer, Licensed in MA, CT, RI, VT, NH, ME, NY, NC
- LEED AP BD+C (Leadership in Energy and Environmental Design Accredited Professional Building Design and Construction)
- State Bar of Massachusetts, Admitted June 2017
- Massachusetts Certified Public Purchasing Official (MCPPO) Program Certification for School Project Designers and Owner's Project Managers
- OSHA 10-Hour Construction Certificate
- Confined Space and First Aid Training

SUMMARY OF PROFESSIONAL EXPERIENCE

Ms. King is both an environmental engineer and an attorney specializing in navigating sustainability and regulatory compliance to ensure business continuity and operational objectives. Ms. King works across multiple markets including retail, healthcare, life science, industrial, aerospace, municipal, water, telecommunications, and education through the investigate, plan, design, construct, and operate stages of a project's life cycle. Ms. King holds a BS in Civil/Environmental Engineering from Northeastern, a MS in Engineering Management from Tufts, and a JD from Massachusetts School of Law. She is a Professional Engineer licensed in MA, CT, RI, VT, NH, ME, NY, and NC.

As Executive Vice President at AEI, Ms. King will leverage AEI's existing building assessment, capital planning, construction risk management, energy efficiency, industrial hygiene, environmental health & safety, zoning and permitting, and resilience consulting expertise to provide full-service sustainability services to our clients.

In her previous role, Ms. King managed the Environmental, Social, & Governance (ESG) business unit which consisted of four practices:

- Environmental, Social & Governance Services: Supporting clients with ESG initiatives and goals including ESG benchmarking, reporting, and supporting services to improve ESG scores.

- Energy & Sustainability Services: Energy Audits (ASHRAE Level 1-3), Retro-Commissioning, Commissioning, Mechanical Electrical Plumbing (MEP) assessments, ESG consulting, Carbon Footprint Evaluations, Energy & Water Benchmarking
- Building Sciences: Asbestos Management, Lead-based Paint Management, Mold and Radon Investigation and Remediation, Indoor air quality services, Safety services, Building Construction and Demolition Environmental services
- Environmental, Health & Safety Services: Environmental Health & Safety (EHS) on-site support services, industrial hygiene, environmental permitting and compliance, Stormwater Pollution Prevention Plans (SWPPP), Spill Prevention Control & Countermeasure Plans (SPCC), air permitting, tank registration, wastewater permitting, wastewater operations support.
- Owner's Project Management Services: Owner's Project Management/Representation services supporting clients through the full project life cycle including pre-deal approval, due diligence, entitlements and permitting, design, and construction.

PROJECT EXPERIENCE

Project experience for Ms. King includes:

- Fox Rock Properties, Environmental Health & Safety and Energy & Sustainability Services: Services included indoor air quality assessments, Mechanical Electrical Plumbing (MEP) assessment, energy audits.
- Newton Pavilion, DCAMM, Boston, MA, Environmental Health & Safety/ COVID-19: Ms. King serviced as Principal-In-Charge for DCAMM for the Newton Pavilion Hospital with COVID-19 rapid response efforts by reviewing and approving cleaning protocols, including recommendations for the decontamination process and how the selected contractor should develop their work scope and plan. EBI also provided post-decommissioning assessment services, on-site coordination and facilitation of cleaning services, a mold assessment, and a review of the post-cleaning verification sampling plan and report.
- 7 -11 Project Management Services, Nationwide: Ms. King served as Principal-In-Charge for 7-11 Stores in multiple states. Projects included portfolio management, ground-up with and without gas, tenant improvements, business conversion programs, and build-to-suit projects. 7- 11 required a Program Manager to help manage their portfolio of projects from site due diligence through store turnover within the Northeast, Mid- Atlantic, and Florida regions. Services included Owner's Representation for projects in their portfolios throughout these regions.
- Novartis Institutes for BioMedical Research, Inc., Cambridge, MA: Compliance and Commissioning Services: Ms. King served as Principal- In-Charge for Novartis services from 2014-2020. She oversaw all permitting and environmental health and safety compliance efforts associated with Novartis' existing facilities as well as the $600 Million Cambridge Campus Expansion Project. The Cambridge Campus Expansion project is a LEED Gold building consisting of two main biomedical buildings built upon a common below grade structure, vehicle parking garage, loading dock, building support spaces and central utilities trigeneration plant. Compliance and permitting services included stormwater, wastewater, health and safety, and laboratory safety. Services included full-time support throughout

the project to ensure compliance and health and safety program implementation with the new buildings as well as serving as the Commissioning Agent for the Cambridge Campus Expansion Project through Skanska.

- Steward Healthcare, Compliance and CMMS Services: Services included Joint Commission compliance mock surveys, indoor air quality assessments, mold remediation, asset management, and CMMS implementation and management services.
- EMD Serono, Compliance and Commissioning Services, Billerica, MA: Ms. King served as Principal-In-Charge for EMD Serono. She managed the teams supporting EMD Serono for environmental health and safety compliance for the existing facilities as well as for their Billerica Campus Expansion including the addition of the Sagamore building, a R&D facility that received both LEED Platinum certification from the U.S. Green Building Council as well as LEED Gold certification for New and Existing Buildings from the International WELL Building Institute. Services also included commissioning services and energy audits.
- Borrego Solar: Services included preparation of SPCCs and Tier II reports for several solar facilities.
- AT& T Environmental Compliance and Regulatory Services, Nationwide: Ms. King served as Client Manager for all Environmental, Health, and Safety (EHS) services. The entire portfolio consists of sites across 34 states, largely in the Midwest, for which EBI has been serving since 2016. EH&S Services to AT&T have included: Air assessment and permitting; tank assessment and permitting; industrial hygiene services; hazardous materials inventory forms; air emissions inventory and reporting; methane site assessment; Spill Prevention, Control, and Countermeasure (SPCC) planning, facilities' plans, and construction phase services; site-specific Health and Safety Plans (HASPs).
- McDonald's Restaurants, Multiple Locations, Multiple States: Ms. King served as Principal-In-Charge for McDonald's architectural and engineering services. Services included project and portfolio management to 273 locations across 14 states simultaneously. Additional tasks have included MEP, structural, ADA audits, asbestos surveys, permit plans, and existing conditions plans. This work is being done concurrently with other large portfolios. Services included both new construction as well as renovations, additions and modifications to existing restaurants.
- Interplex, Environmental Health & Safety Support: Services included EHS gap assessment, air permitting, SPCC planning, wastewater operations support.
- AJAX, Groundwater Discharge Permitting Services: Ms. King managed the review and provided consulting services to assist in the purchase of a MassDEP Groundwater Discharge Permit associated with real estate property.
- Emmanuel College, Wastewater and EHS Services: Services included EHS and wastewater operation and maintenance services for Industrial Wastewater Treatment System and prepared Tier II report for hazardous materials stored on-site.
- Good Start Genetics, Wastewater Operations & Maintenance: Services included wastewater operations and maintenance services for Industrial Wastewater Treatment System.
- GreenLight Biosciences: Services included preparation of MWRA Sewer User Discharge Permit Applications for Industrial Wastewater Treatment System (IWTS) for two new facilities in Medford, MA.

- Maverick Real Estate Partners LLC, Swansea Mall Wastewater Treatment Facility Assessment: As part of due diligence on retail mall property, Ms. King managed and prepared an assessment for a 90,000 gallon per day on-site wastewater treatment facility with groundwater discharge.
- Micron, Wastewater, SPCC, and SWPPP Services: Services included updates to Industrial Wastewater System Operations and Maintenance Manuals, Spill Prevention, Control and Countermeasure Plan and Stormwater Pollution Prevention Plan.
- Town of Milford, Site Development Water Peer Review: Services included peer review of the Water Distribution System Assessment for site development with significant water use.
- Belchertown NPDES Permitting Compliance: Services included management of the review of a draft National Pollutant Discharge Elimination System (NPDES) permit for the Belchertown Wastewater Treatment Facility.
- Marshfield Main Lift Station and Headworks Upgrade: Services included pump station upgrades and a headworks building for handling grit and screenings at a 2.1-mgd wastewater treatment facility in Marshfield, MA. Services included preparation of final design plans for the replacement of pumps at pump station, addition of building for the screenings and grit washing equipment, and addition of vortex grit removal system.
- Marshfield Avon Street and Central Street Pump Stations Upgrade: Services included design of a pump station upgrade for two pump stations in Marshfield, MA.
- Village Greens Wastewater Treatment Facility and Groundwater Discharge: Services included design and construction oversite of a 55,000 gallon per day on-site wastewater treatment facility system and on-site effluent disposal system in Littleton, MA. Services included preparation of a hydrogeologic report and corresponding permits for groundwater disposal and developed a set of permit plans for the design of a membrane bioreactor wastewater treatment facility.
- Madison Place Wastewater Treatment Facility and Groundwater Discharge: Services included design and oversite of the construction of a 22,000 gallon per day on-site wastewater treatment facility system and on- site effluent disposal system in Southborough, MA. Services included preparation of a hydrogeologic report and corresponding permits for groundwater disposal and developed a set of permit plans for the design of a membrane bioreactor wastewater treatment facility.
- Wayland Groundwater Discharge: Services included design of a wastewater effluent disposal area in Wayland, MA and completion of hydrogeologic reports and corresponding permits for groundwater disposal.
- Seabrook, NH MS4 and MSGP Stormwater Compliance Program : Services included coordination and completion of stormwater outfall mapping and investigations in Seabrook, NH as part of the Municipal Separate Storm Sewer Systems (MS4) permit program and the Multi-Sector General Permit (MSGP) at the Town's transfer station. MS4 permit program compliance included peer reviews of site developments and assessment for compliance with stormwater control measures.
- Westborough Wastewater Treatment Plant Upgrade: Services included design and management of upgrades to 7.68-mgd advanced treatment facility in Westborough, MA for phosphorus removal. As part of the preliminary design, coordinated pilot testing of four phosphorous treatment systems. Oversaw design and construction of the project including: tertiary treatment building for

phosphorus removal utilizing Kruger ActiFlo®; modifications to the headworks, primary treatment facilities, and activated sludge process to achieve biological phosphorus reduction; addition of a third secondary clarifier; rehabilitation of filters; and upgrade to UV disinfection.

- Glen Ellen Country Club Wastewater Treatment Facility: Services included preparation of a Preliminary design report and designed wastewater collection system and wastewater treatment facility for a 341-unit housing development and 9-hole golf course at Glen Ellen Country Club in Millis, MA. Initiated design utilizing membrane bioreactor technology with potential for effluent wastewater reuse for use as golf course irrigation with the remaining effluent being discharged to subsurface disposal beds beneath the golf course.
- Nantucket Downtown Sewer Replacement: Services included design and construction services for replacement of wastewater infrastructure in the downtown area of Nantucket, MA to eliminate surge charging, infiltration/inflow problems, and deteriorated structural integrity of the pipes. Designed and oversaw replacement of 2.4 miles of sewer using pipe bursting and open trench excavation due to numerous utilities, high tidal influenced groundwater conditions, narrow roadways, and difficult soil conditions.
- North Weymouth/ Mill River Infiltration Rehabilitation: Services included oversite of the construction phase of this project, which consisted of pipe cleaning, inspection, testing, and sealing; manhole coating and repairs; chemical root treatment; cured-in-place pipe repairs using short liner technology; sealing and testing service connections; and other repairs and replacements.
- Sea Quarters Sewer System : Services included design and construction oversite of gravity sewer, force mains, and pump stations in a new development in New Seabury, MA.
- Bayview Sewer Extension Design: Services included the design of 13,000 linear feet of 8- and 10-inch gravity sewer, 1,000 linear feet of low-pressure sewer, 6,750 linear feet of force main, and two package suction lift pump stations to eliminate failing septic systems and provide service to properties within a coastal flood hazard area in Dartmouth, MA.
- Logan International Airport BIF Sewer Lift Station Upgrade: Services included the design of the replacement of self-priming suction pumps with submersible pumps for Massachusetts Port Authority.

PRESENTATIONS:

CREW Coastal Virginia “February Luncheon: Due Diligence & Construction in 2021”, presentation on changes to the ASTM due diligence standard and the impacts of the pandemic on construction and transformation in the marketplace, February 2021.

Bisnow Boston “Health & Safety: What’s Next for Building Management”, a panel discussion on COVID-19 return to workplace, April 2020.